

# TABLE OF CONTENTS

## Parts Manual

### VMC 15/15XT MODELS



COLUMN ASSEMBLY .....	2
7500 RPM HEAD ASSEMBLY .....	4
10,000 RPM HEAD ASSEMBLY .....	6
VMC 15XT BASE, SADDLE & TABLE ASSEMBLY .....	8
VMC 15 BASE, SADDLE & TABLE ASSEMBLY .....	10
DRAWBAR CYLINDER ASSEMBLIES.....	12
ORIENTATION BRIDGE ASSEMBLIES.....	14
IDLER ASSEMBLY .....	16
WAYLUBE PUMP ASSEMBLY .....	17
GENEVA DRIVE ATC ASSEMBLY .....	18
SERVO DRIVE ATC ASSEMBLY .....	20
7500 RPM SPINDLE ASSEMBLY .....	22
10,000 RPM SPINDLE ASSEMBLY .....	23
COOLANT THROUGH SPINDLE.....	24
CNC CABINET ASSEMBLY.....	25
CARD CAGE ASSEMBLY .....	26
POWER JUNCTION CABINET ASSEMBLY 7,500/10,000 RPM.....	27
CHILLER CABINET ASSEMBLY .....	28
MULTI PROCESSOR PENDANT ASSEMBLY.....	29
88HS PENDANT ASSEMBLY .....	30
FRONT DOOR ASSEMBLY .....	31
WAY COVER ASSEMBLY.....	32
VMC 15 SHEETMETAL HOUSING .....	33
VMC 15XT SHEETMETAL HOUSING .....	34
7500 RPM COOLANT TANK .....	35
7500 RPM COOLANT THROUGH TANK .....	36
10,000 RPM COOLANT TANK.....	37
10,000 RPM COOLANT THROUGH TANK ASSEMBLY.....	38



**This reference covers the following Fadal products:**

**Model VMC 15 and VMC 15XT**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

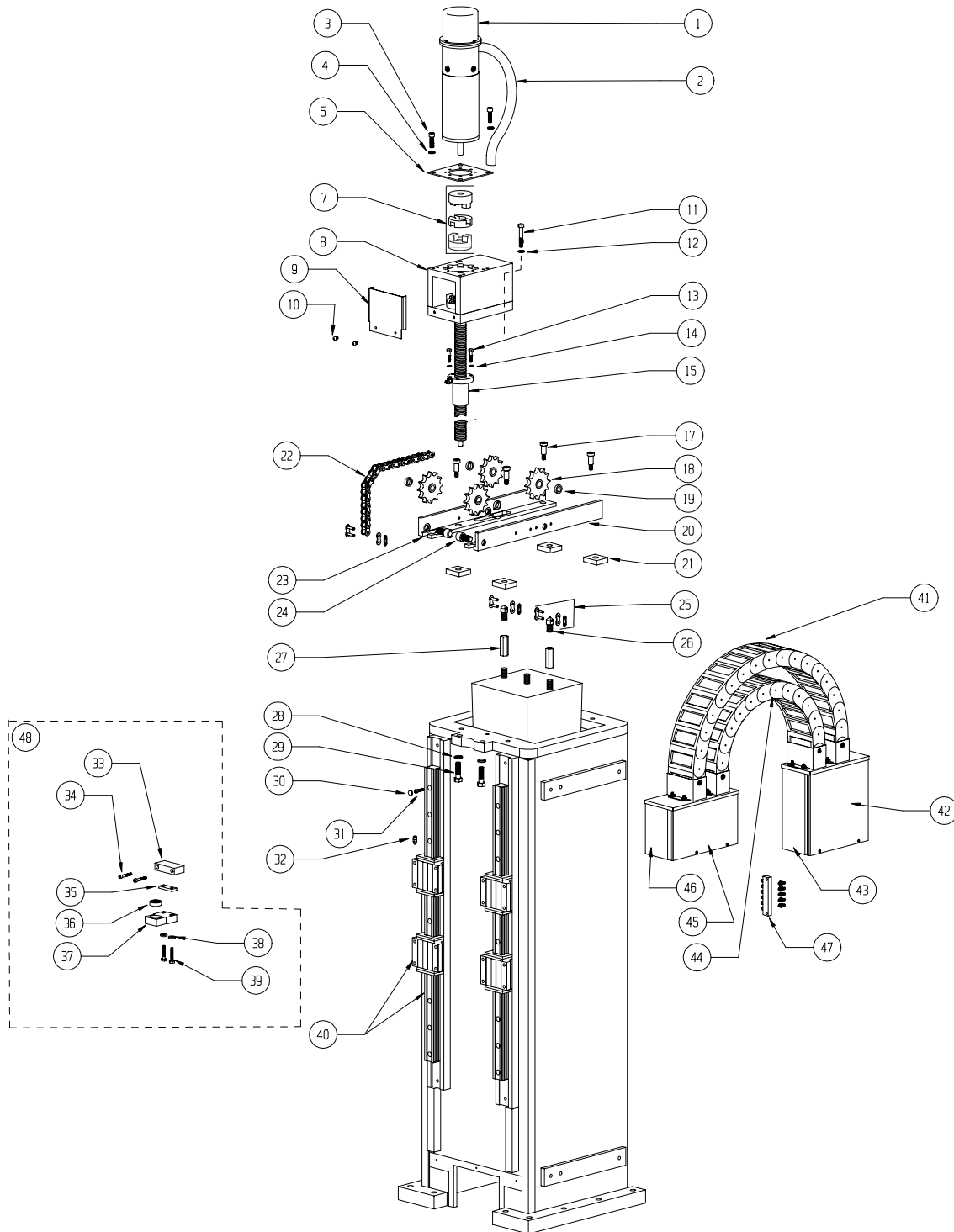
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY



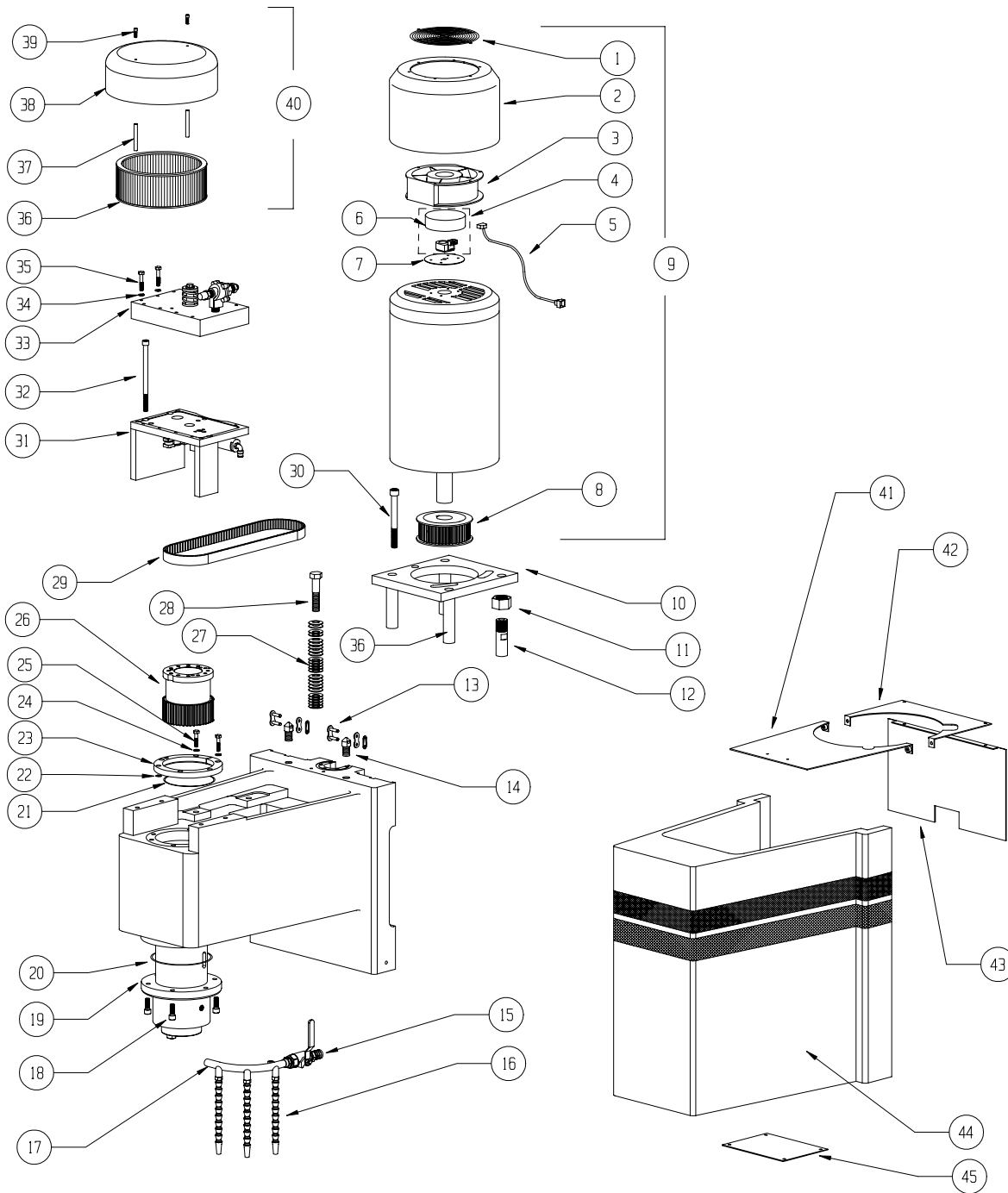
# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	MTR-0002	15	BLS-0008 <sup>(1)</sup> (20")	28	HDW-0655	41	CVR-0075
2	WIR-0089		BLS-0001 <sup>(1)</sup> (28")	29	HDW-0050	42	STM-0335
3	HDW-0475	17	HDW-0600	30	BRG-0032	43	STM-0334
4	HDW-0280	18	PUL-0034	31	HDW-0291	44	CVR-0073
5	STM-0041	19	CWT-0009	32	PLM-0039	45	STM-0300
		20	CWT-0007	33	BLS-0041	46	STM-0301
7	MTR-0154	21	HDW-0363	34	HDW-0297	47	LUB-0058
8	BLS-0009	22	HDW-0205	35	BLS-0206	48	BLS-0002
9	STM-0043		HDW-0206 (XT)	36	BRG-0030		
10	HDW-0347	23	CWT-0005	37	BLS-0396		
11	HDW-0475	24	HDW-0777	38	HDW-0048		
12	HDW-0048	25	HDW-0204	39	HDW-0317		
13	HDW-0568	26	CWT-0001	40	BRG-0031 (20")		
14	HDW-0281	27	HDW-0335		BRG-0142 (28")		

<sup>1</sup>Includes BLS-0009

# 7500 RPM HEAD ASSEMBLY



# 7500 RPM HEAD ASSEMBLY

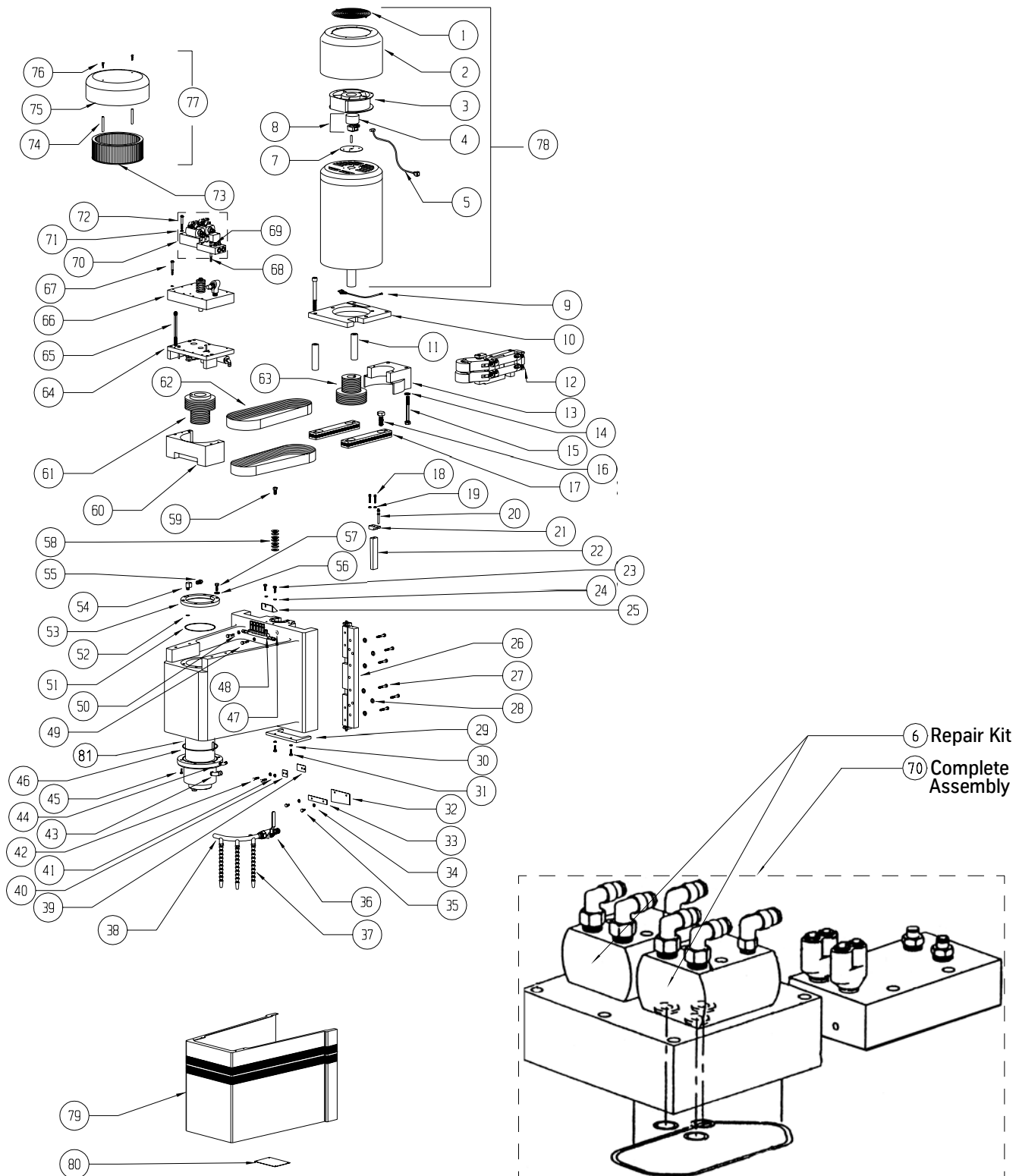
## 7500 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	13	HDW-0204	25	HDW-0568	37	SVT-0108
2	STM-0139	14	CWT-0001	26	PUL-0025	38	STM-0467
3	ELE-0124	15	VLV-0017	27	HDW-0194	39	HDW-0597
4	ENC-0007	16	PLM-0016	28	HDW-0560	40	MTR-0128
5	WIR-0168	17	CNT-0039	29	BEL-0006	41	STM-0627
6	MTR-0123	18	HDW-0470	30	HDW-0284	42	STM-0626
7	STM-0148	19	SPN-0037 <sup>(2)</sup>	31	ORB-0000	43	STM-0625
8	PUL-0024	20	HDW-0181	32	HDW-0279	44	STM-0226
9	MTR-0098 <sup>(1)</sup>	21	HDW-0148	33	DRB-0000	45	STM-0064
10	MTR-0075	22	HDW-0177	34	HDW-0279		
11	PLC-0042	23	SPN-0042	35	HDW-0320		
12	MTR-0090	24	HDW-0275	36	MTR-0076		

<sup>1</sup>MTR-0098 INCLUDES: PUL-0024.

<sup>2</sup>SPN-0037 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0025.

# 10K RPM HEAD ASSEMBLY





# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

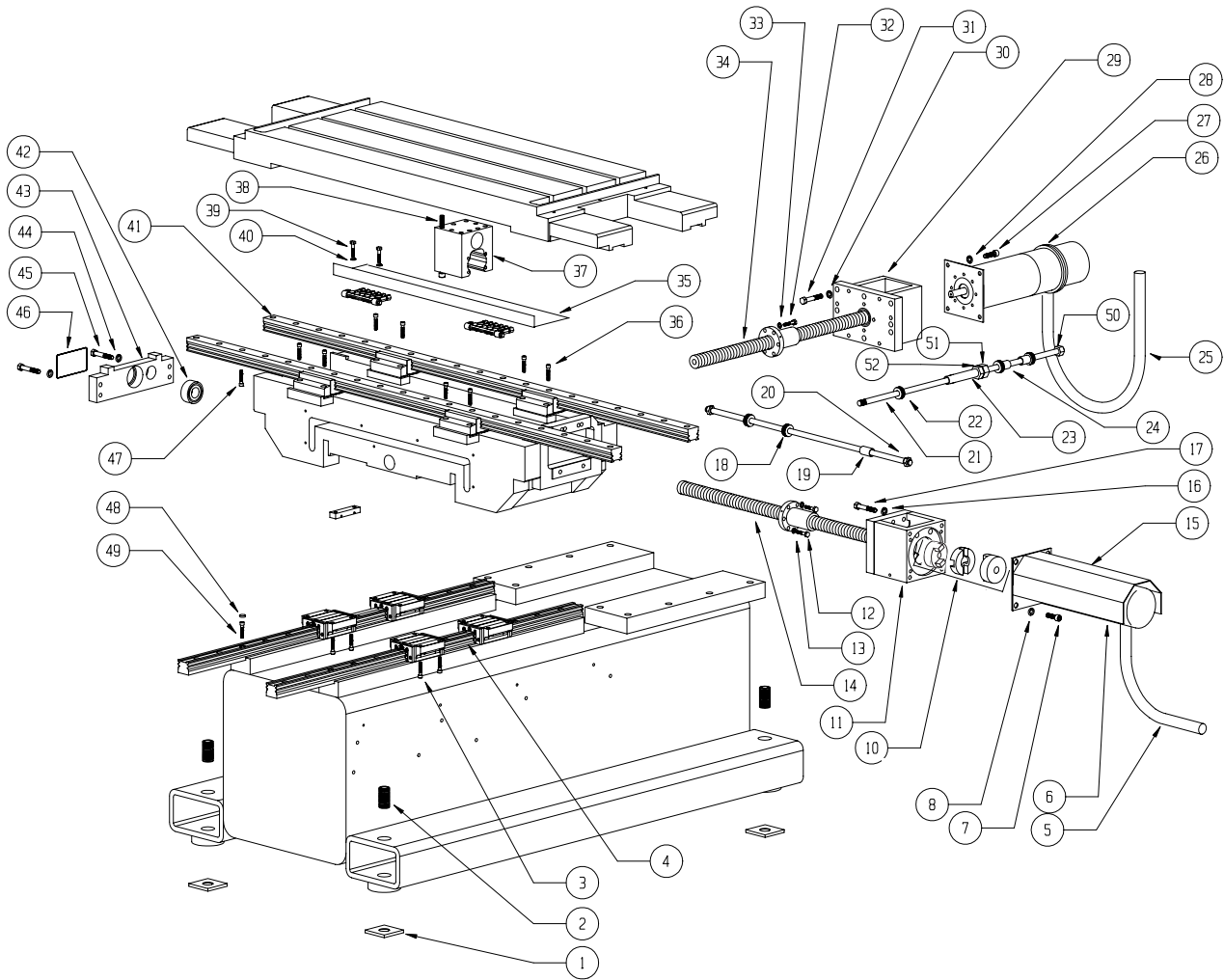
	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	HDW-0553
2	STM-0139	31	HDW-0322	60	BEL-0014
3	ELE-0124	32	HDW-0356	61	PUL-0018
4	MTR-0123	33	STM-0052	62	BEL-0024
5	WIR-0168	34	HDW-0279	63	PUL-0019
6	HYD-0018	35	HDW-0319	64	ORB-0001
7	STM-0148	36	VLV-0017	65	HDW-0290
8	ENC-0007	37	PLM-0016	66	DRB-0000
9	HDW-0369	38	CNT-0039	67	HDW-0320
10	MTR-0070	39	HDW-0294	68	HDW-0321 (HT)
11	MTR-0079	40	STM-0042	69	HDW-0279 (HT)
12	IDL-0002	41	HDW-0279	70	HYD-0017 (HT)
	IDL-0003(HT)				
13	BEL-0015	42	HDW-0294	71	HDW-0279 (HT)
14	HDW-0451	43	PLM-0112	72	HDW-0320 (HT)
15	HDW-0311	44	PLM-0034	73	MTR-0127
16	HDW-0283	45	HDW-0470	74	SVT-0108
17	MTR-0068	46	HDW-0181	75	STM-0467
	MTR-0064				
18	HDW-0294	47	HDW-0380	76	HDW-0597
19	HDW-0279	48	LUB-0045	77	MTR-0128
20	GIB-0013	49	HDW-0576	78	MTR-0045 <sup>(1)</sup>
21	GIB-0010	50	HDW-0279		MTR-0048 (HT)
22	GIB-0033	51	HDW-0169	79	CVR-0151
23	HDW-0320	52	HDW-0177	80	STM-0064
24	HDW-0279	53	SPN-0042	81	SPN-0007 <sup>(2)</sup>
25	STM-0141	54	PLM-0045		
26	GIB-0004	55	PLM-0088		
27	HDW-0569	56	HDW-0275		
28	HDW-0280	57	HDW-0568		
29	CVR-0048	58	HDW-0194		

<sup>1</sup>MTR-0045 INCLUDES: PUL-0019

<sup>2</sup>SPN-0007 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018.

(HT)=High Torque Option

# BASE, SADDLE & TABLE ASSEMBLY



# BASE, SADDLE & TABLE ASSEMBLY

## VMC 15XT BASE, SADDLE & TABLE ASSEMBLY

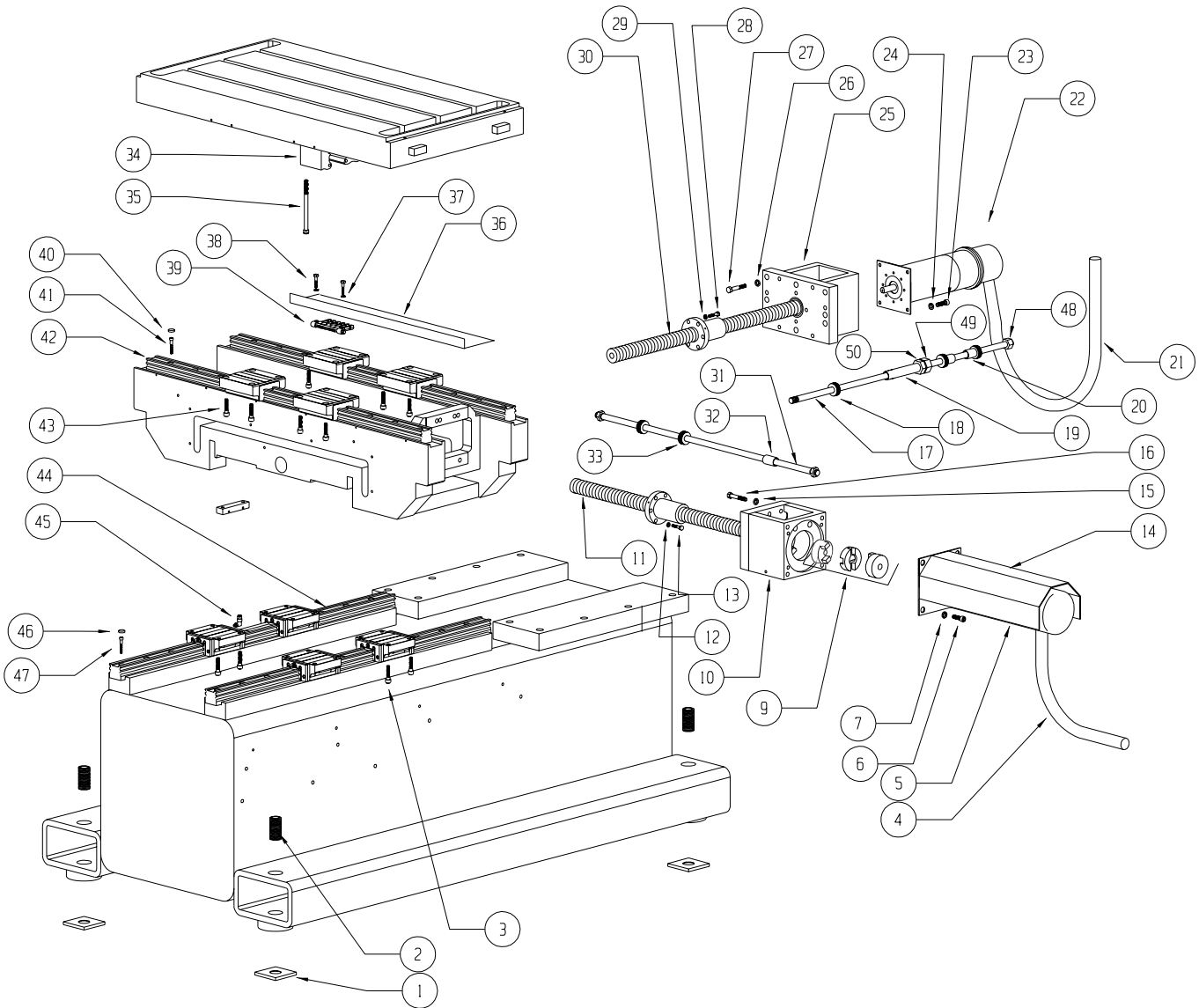
	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	13	HDW-0281	25	WIR-0088	37	BLS-0075	49	HDW-0279
2	HDW-0272	14	BLS-0118 <sup>(2)</sup>	26	MTR-0002	38	HDW-0572	50	HDW-0332
3	HDW-0481	15	STM-0230	27	HDW-0779	39	HDW-0587	51	HDW-0018
4	BRG-0031	16	HDW-0280	28	HDW-0286	40	HDW-0337	52	HDW-0637
5	WIR-0090	17	HDW-0481	29	BLS-0007	41	BRG-0089		
6	MTR-0002	18	HDW-0194	30	HDW-0048	42	BRG-0021		
7	HDW-0729	19	BLS-0142	31	HDW-0484	43	BLS-0139		
8	HDW-0280	20	HDW-0194	32	HDW-0291	44	HDW-0049		
		21	BLS-0187	33	HDW-0281	45	HDW-0286		
10	MTR-0154 <sup>(1)</sup>	22	HDW-0194	34	BLS-0000 <sup>(3)</sup>	46	STM-0163		
11	BLS-0005	23	HDW-0219	35	STM-0518	47	HDW-0279		
12	HDW-0568	24	HDW-0219	36	HDW-0572	48	BRG-0032		

<sup>1</sup>Part of X and Y axes.

<sup>2</sup>Includes BLS-0005

<sup>3</sup>Includes BLS-0007

# BASE, SADDLE & TABLE ASSEMBLY



# BASE, SADDLE & TABLE ASSEMBLY

## VMC 15 BASE, SADDLE & TABLE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	13	HDW-0568	25	BLS-0007	37	HDW-0337	49	HDW-0018
2	HDW-0272	14	STM-0230	26	HDW-0048	38	HDW-0587	50	HDW-0637
3	HDW-0481	15	HDW-0048	27	HDW-0484	39	LUB-0054		
4	WIR-0090	16	HDW-0481	28	HDW-0568	40	BRG-0032		
5	MTR-0002	17	BLS-0187	29	HDW-0281	41	HDW-0291		
6	HDW-0475	18	HDW-0194	30	BLS-0000 <sup>(3)</sup>	42	BRG-0031 <sup>(4)</sup>		
7	HDW-0280	19	HDW-0219	31	BLS-0065	43	HDW-0291		
		20	HDW-0566	32	BLS-0142	44	BRG-0031		
9	MTR-0154 <sup>(1)</sup>	21	WIR-0088	33	HDW-0194	45	PLM-0158		
10	BLS-0005	22	MTR-0002	34	BLS-0075	46	BRG-0032		
11	BLS-0004 <sup>(2)</sup>	23	HDW-0475	35	HDW-0572	47	HDW-0291		
12	HDW-0281	24	HDW-0280	36	STM-0518	48	HDW-0332		

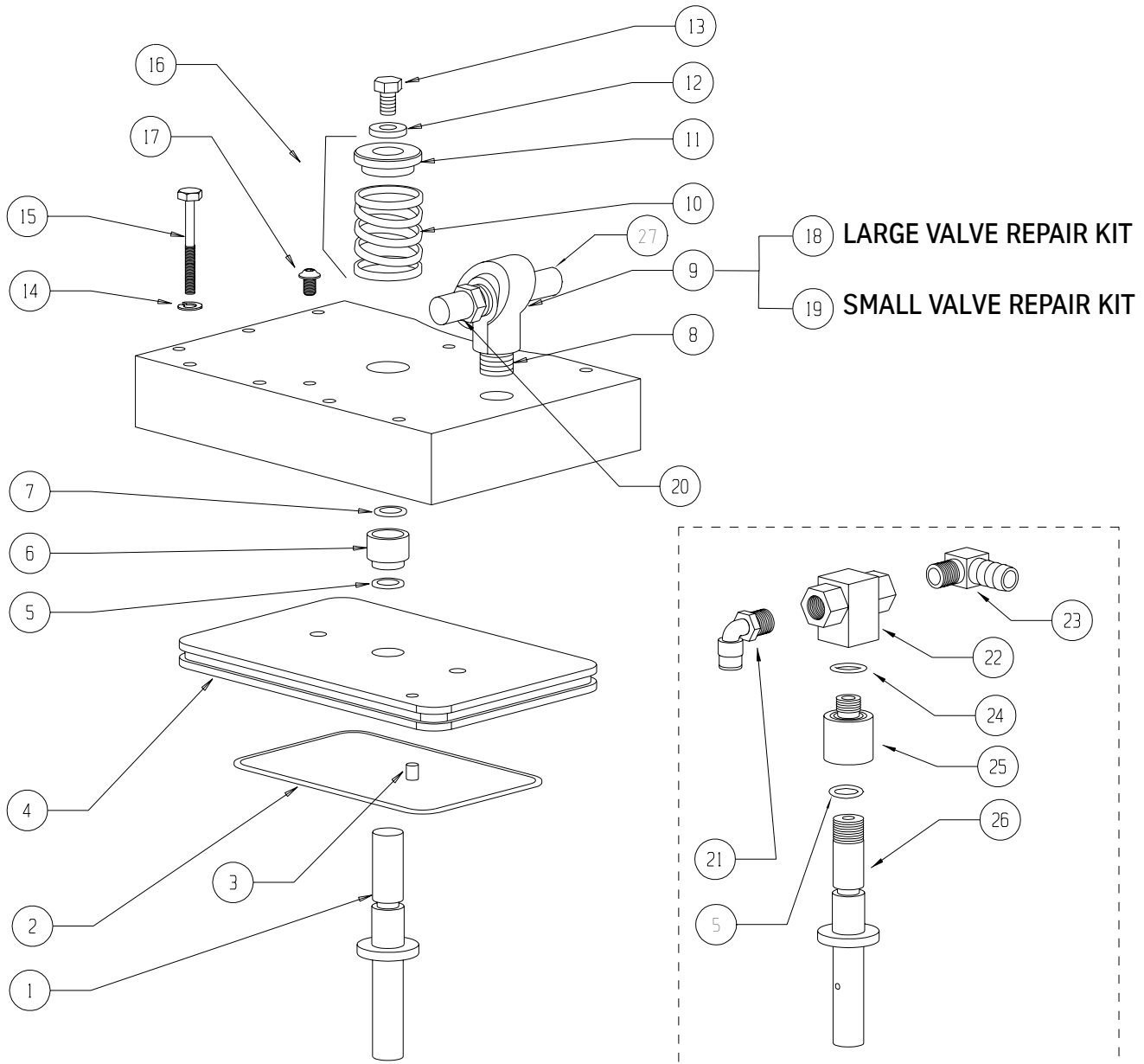
<sup>1</sup>Part of X and Y axes.

<sup>2</sup>Includes BLS-0005

<sup>3</sup>Includes BLS-0007

<sup>4</sup>Rails on 15XT (X-Axis Only) are longer (55")

# DRAWBAR CYLINDER ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

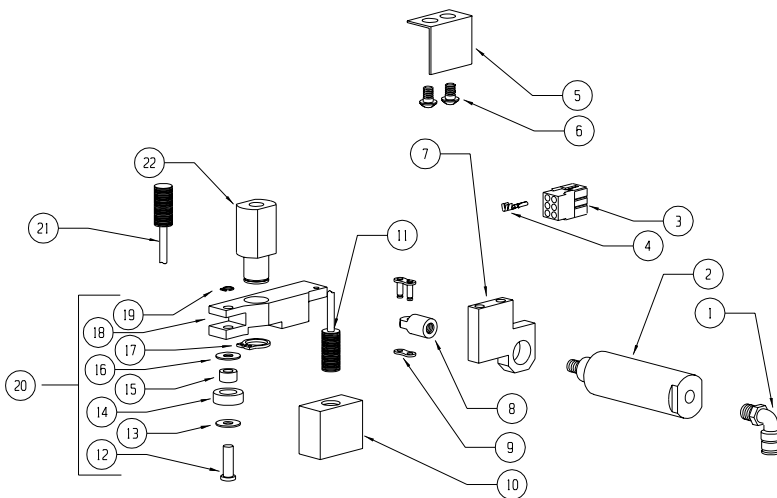
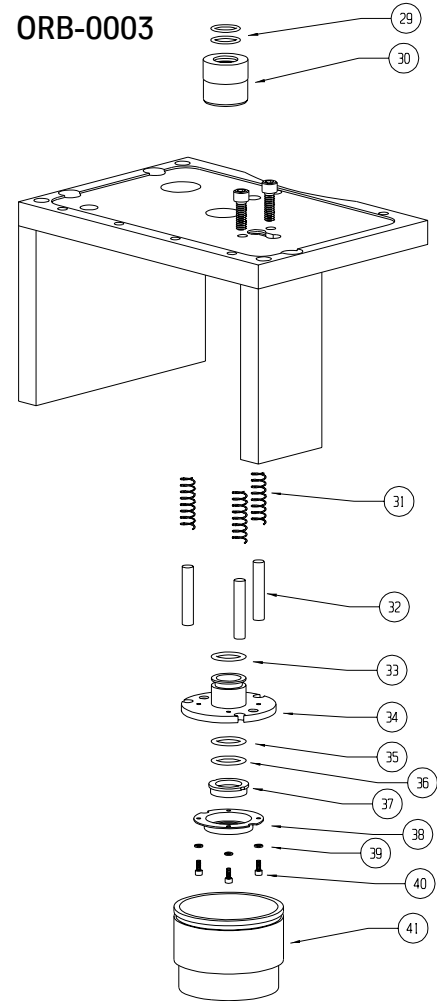
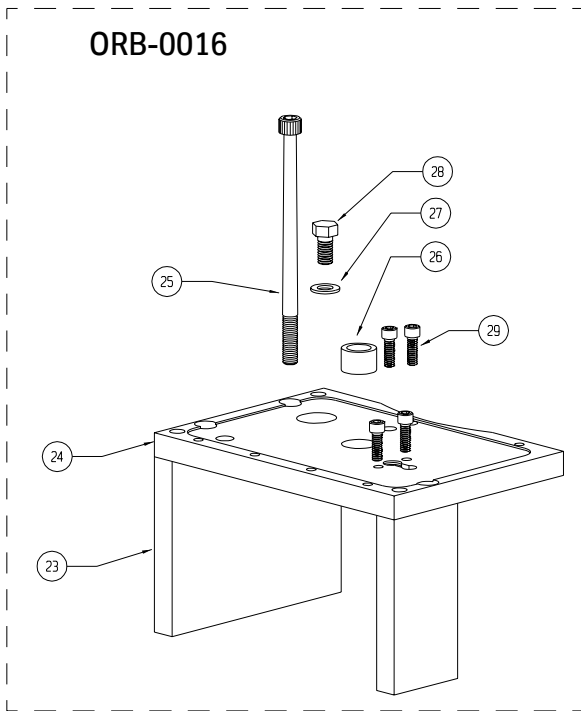
Coolant Thru Assembly DRB-0001

# DRAWBAR CYLINDER ASSEMBLY

## DRAWBAR CYLINDER ASSEMBLIES

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

# ORIENTATION BRIDGE ASSEMBLY



Seal Repair Kit CNT-0150



# ORIENTATION BRIDGE ASSEMBLY

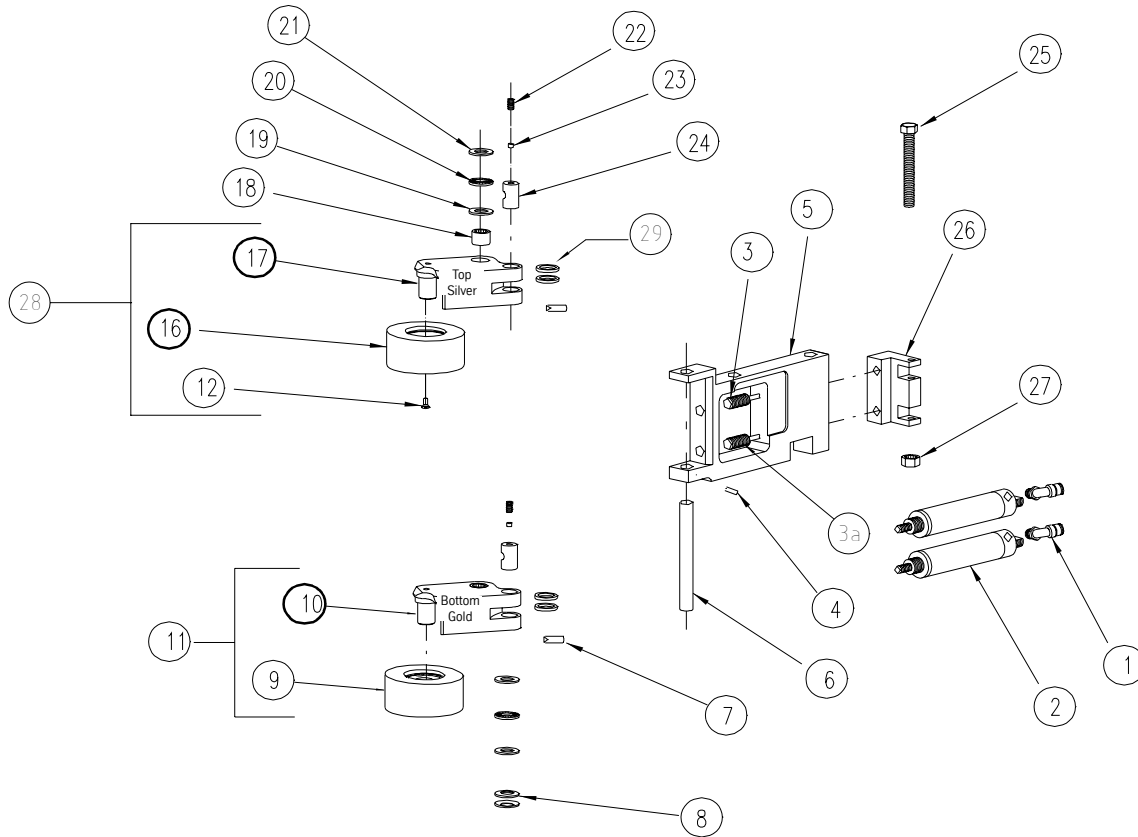
## ORIENTATION BRIDGE ASSEMBLIES

	PART #		PART #		PART #		PART #
1	PLM-0034	14	ORB-0009	27	HDW-0048	39	HDW-0453
2	CYL-0007	15	BRG-0014	28	HDW-0298	40	HDW-0308
3	WIR-0051	16	HDW-0515	29	HDW-0150	41	CNT-0140
4	WIR-0043 (16 AWG)	17	HDW-0725	30	CNT-0042		
	WIR-0044 (16 AWG)						
	WIR-0544 (22 AWG)						
	WIR-0056 (22 AWG)						
5	STM-0596	18	ORB-0031	31	HDW-0257		
6	HDW-0347	19	HDW-0726	32	HDW-0326		
7	ORB-0030 <sup>(1)</sup>	20	ORB-0004	33	HDW-1102		
8	ORB-0011	21	ELE-1202	34	CNT-0041		
9	HDW-0209	22	ORB-0013 <sup>(2)</sup>				
10	ORB-0014	23	ORB-0022	35	HDW-0917		
11	ELE-0145	24	ORB-0008	36	HDW-0917		
12	ORB-0007	25	HDW-0571	37	CNT-0033		
13	HDW-0515	26	BRG-0008	38	CNT-0045		

<sup>1</sup>VMCs with Non-Locking Drawbar require ORB-0029

<sup>2</sup>VMCs with Non-Locking Drawbar require ORB-0012

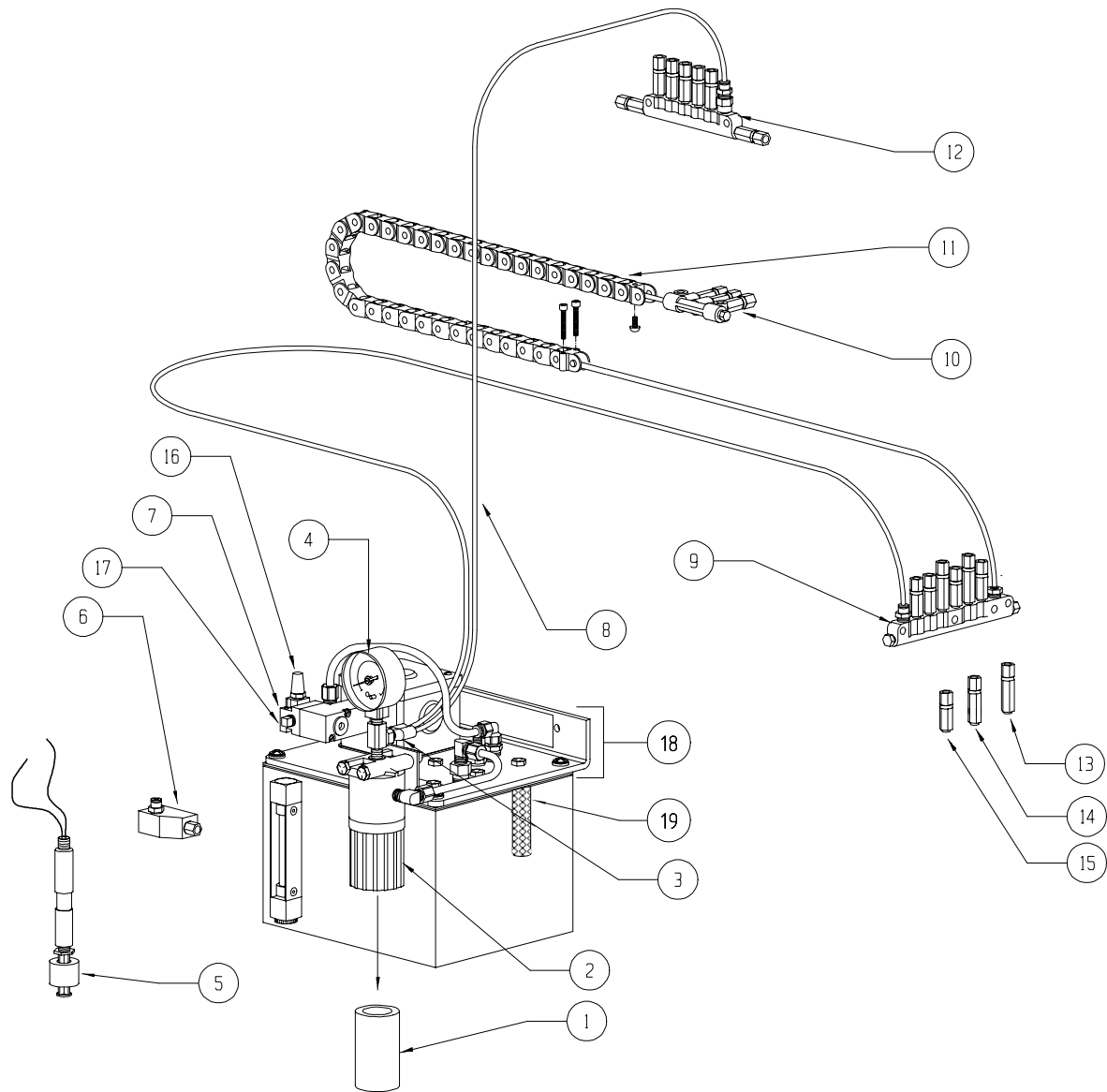
# IDLER ASSEMBLY



## IDLER ASSEMBLY

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

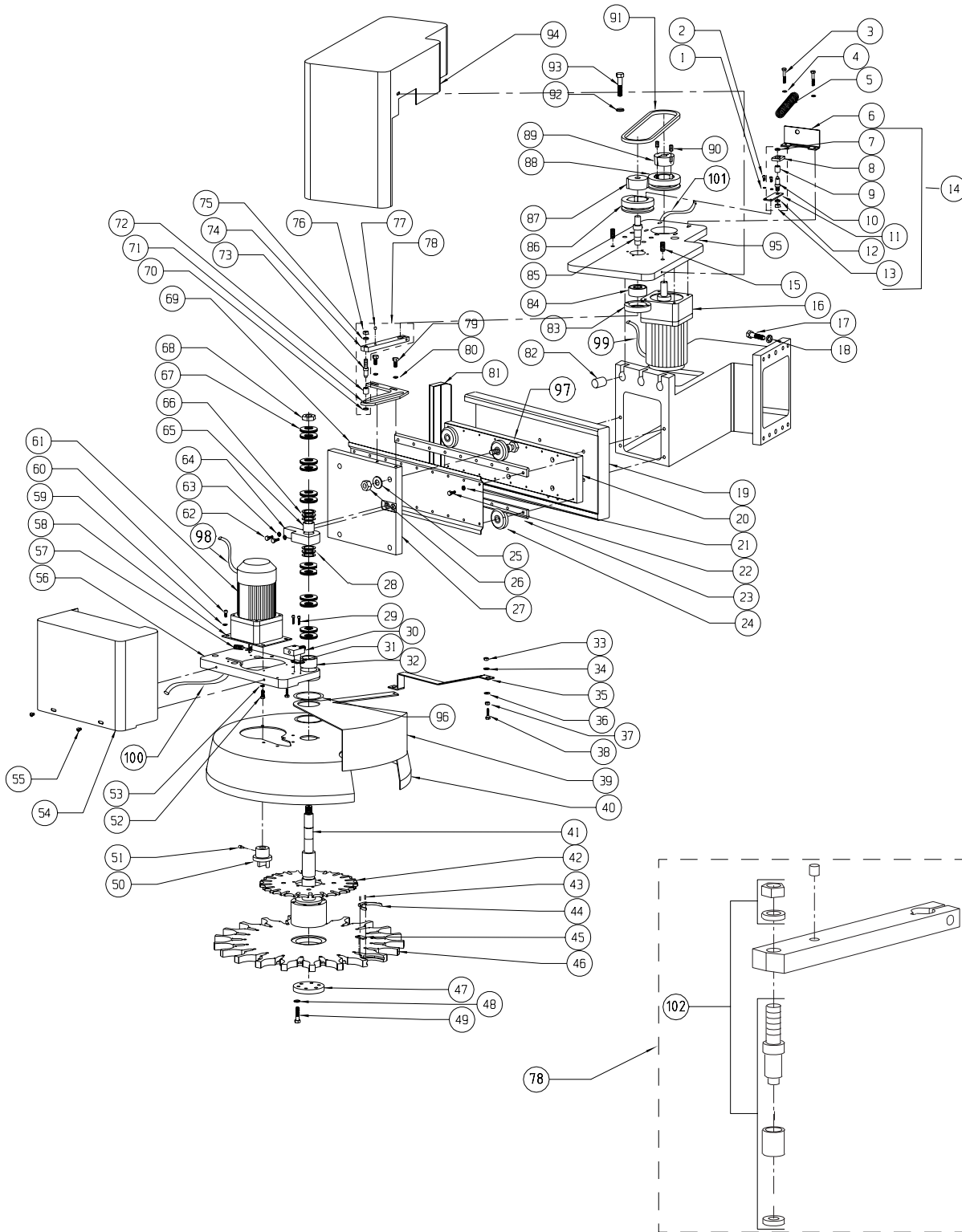
# WAYLUBE PUMP ASSEMBLY



WAYLUBE PUMP ASSEMBLY

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		

# GENEVA DRIVE ATC ASSEMBLY



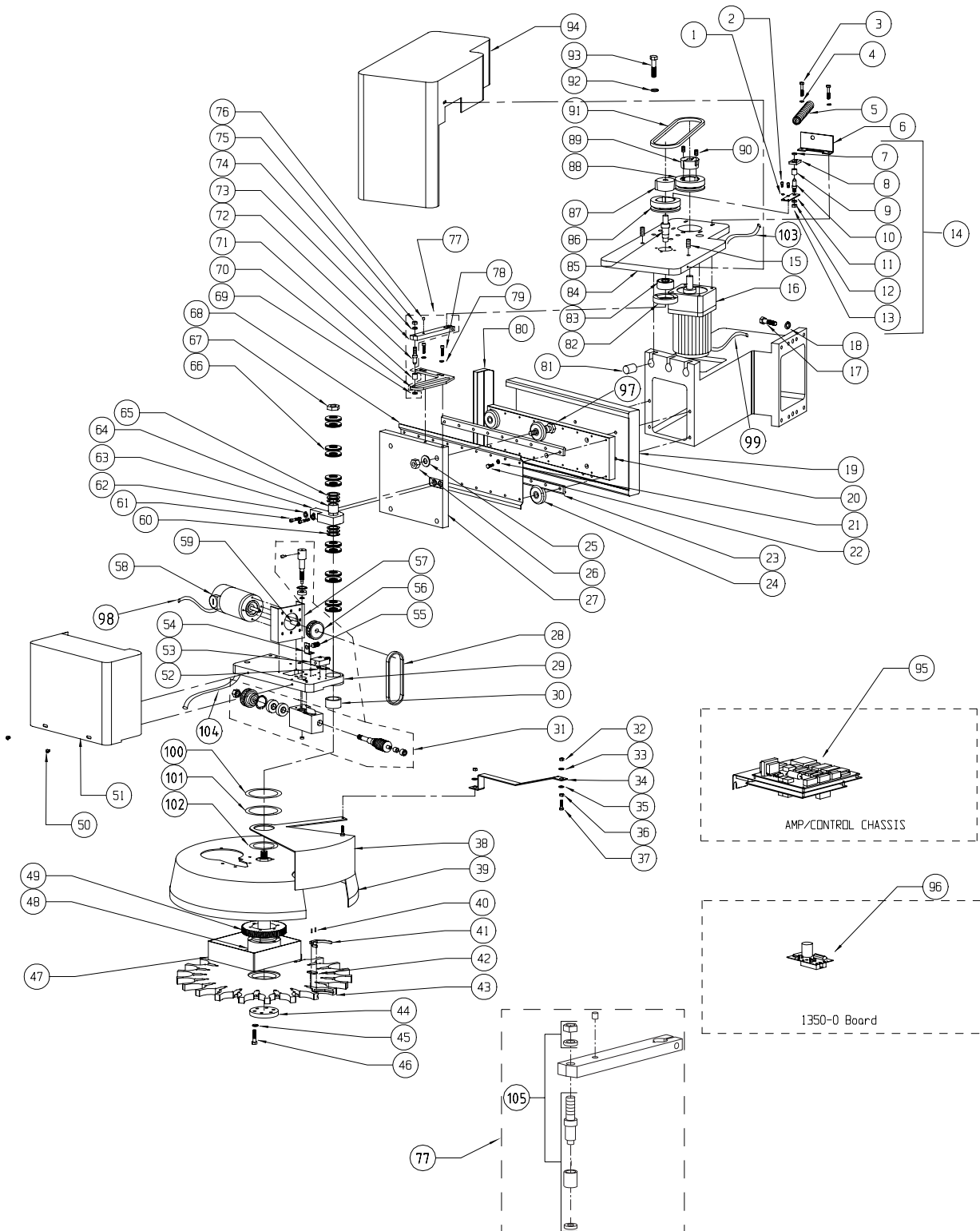
# GENEVA DRIVE ATC ASSEMBLY

## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)
					HDW-0295 (1)				ATC-0005 (30)
								102	ATC-0169

<sup>(1)</sup>Quick disconnect type.

# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

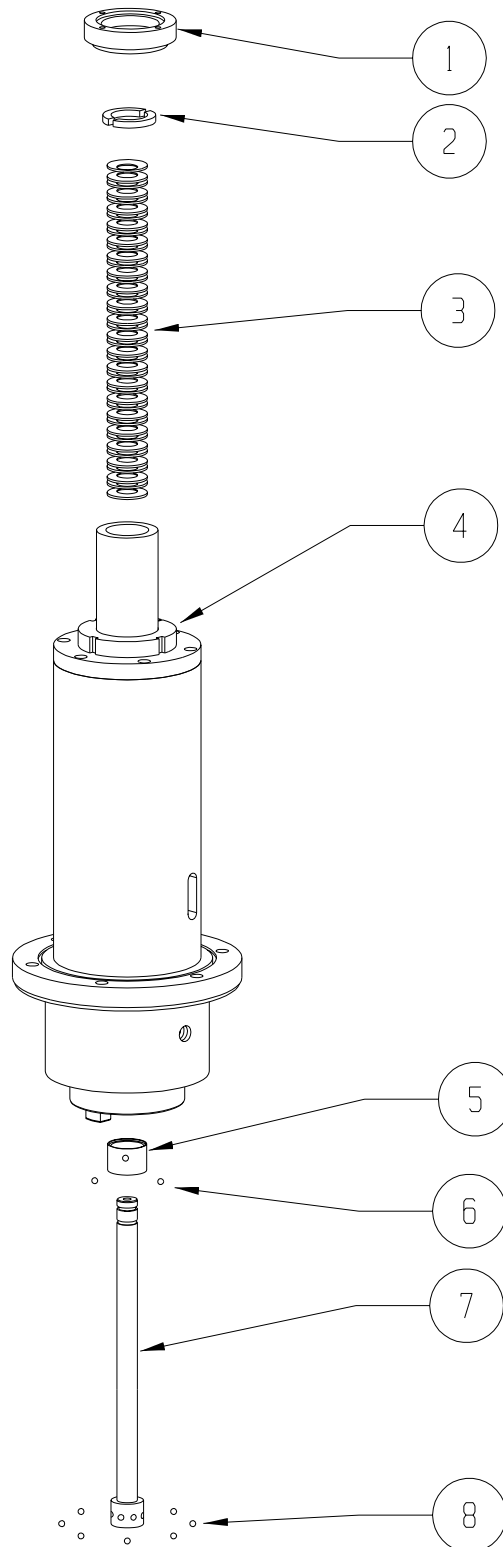
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025





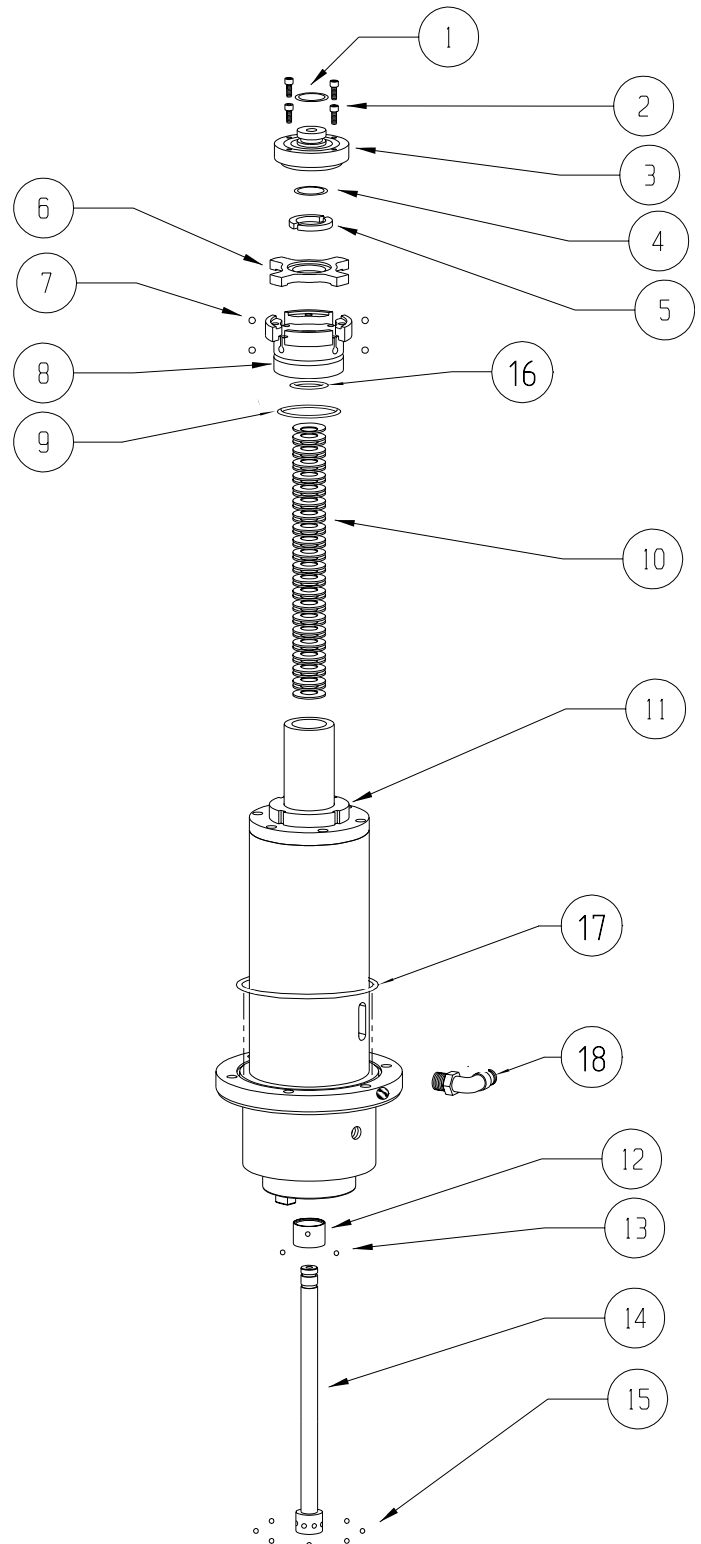
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

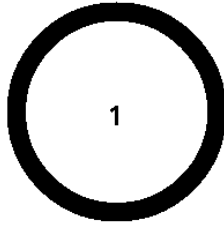
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

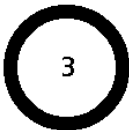
CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



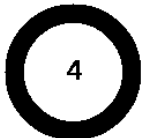
HDW-0158



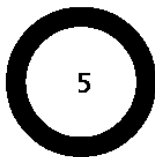
HDW-0177



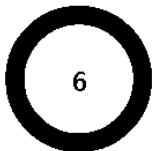
HDW-0150



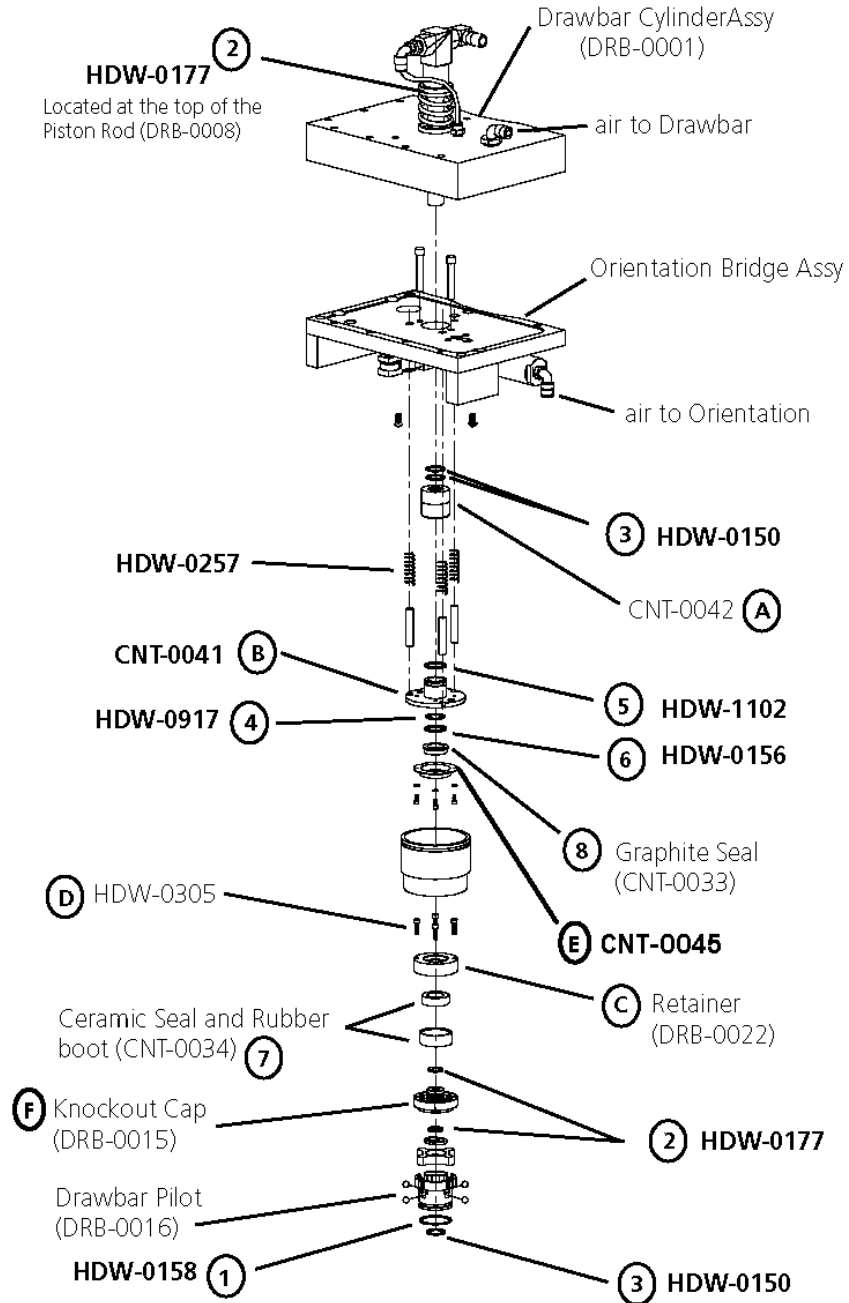
HDW-0917



HDW-1102

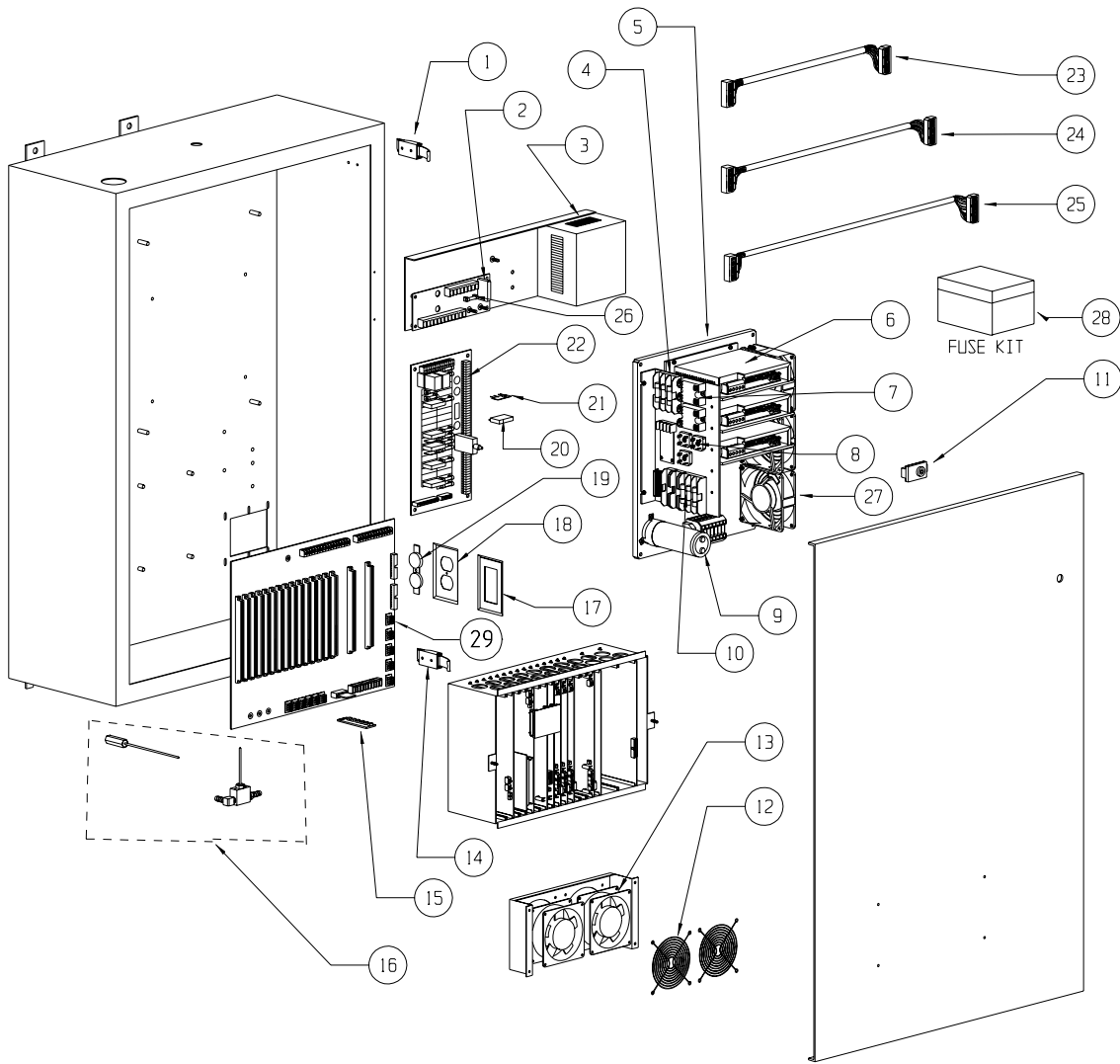


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

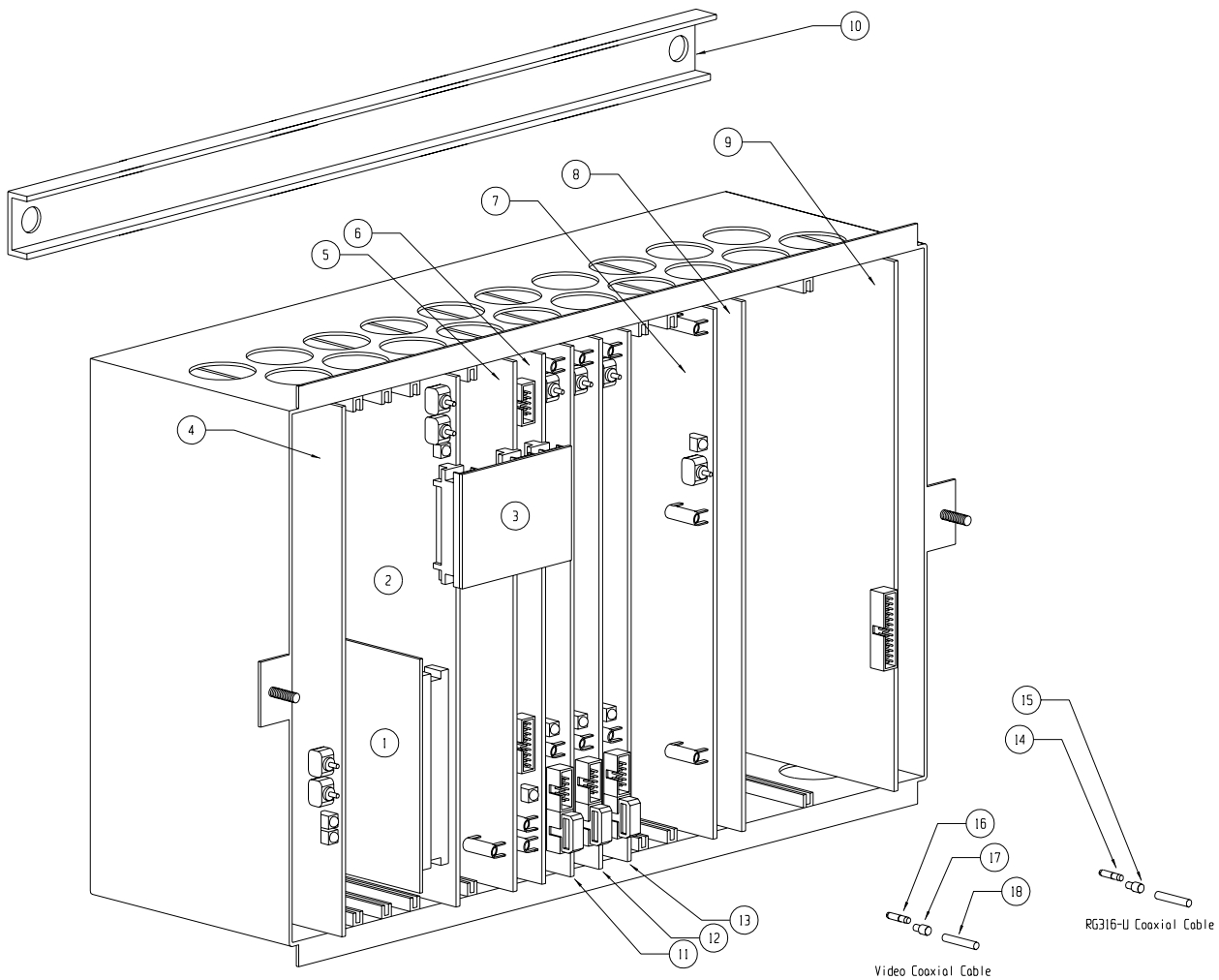
# CNC CABINET ASSEMBLY



CNC CABINET ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0005 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0012 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0006 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0014 (AMC)					29	PCB-0009
7	ELE-0074						

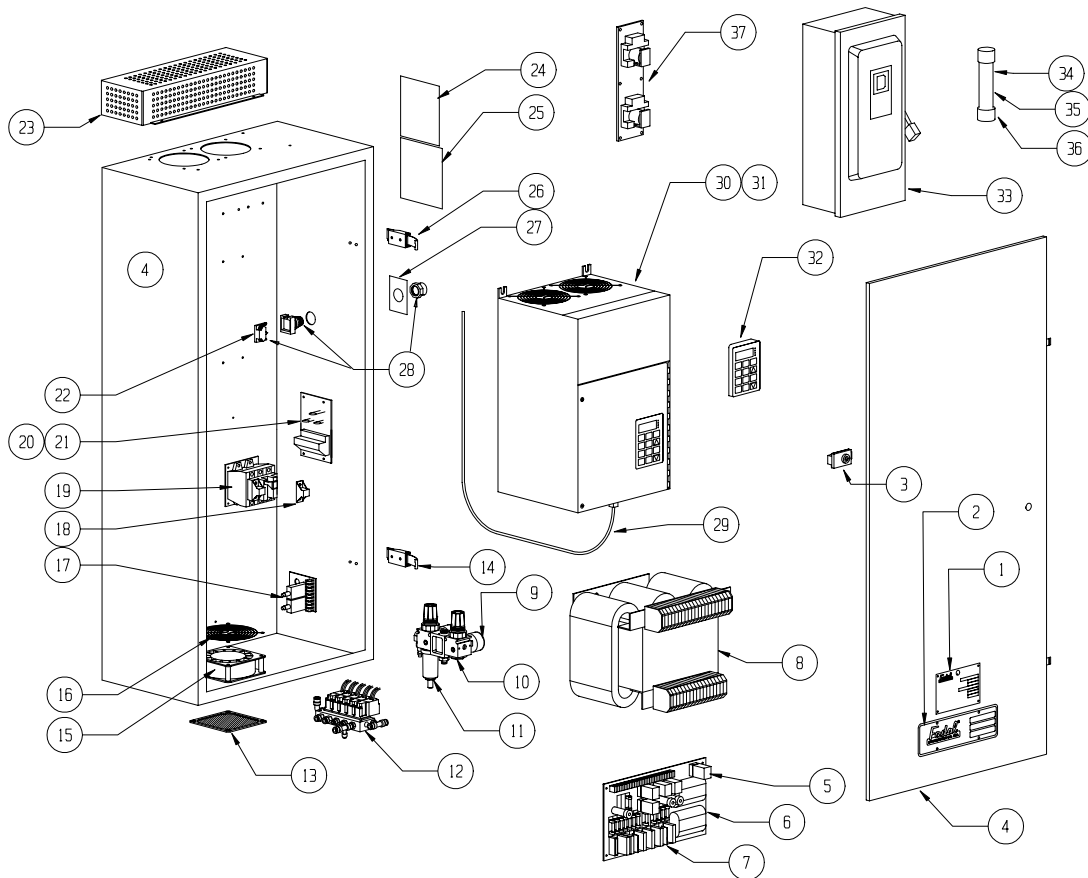
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

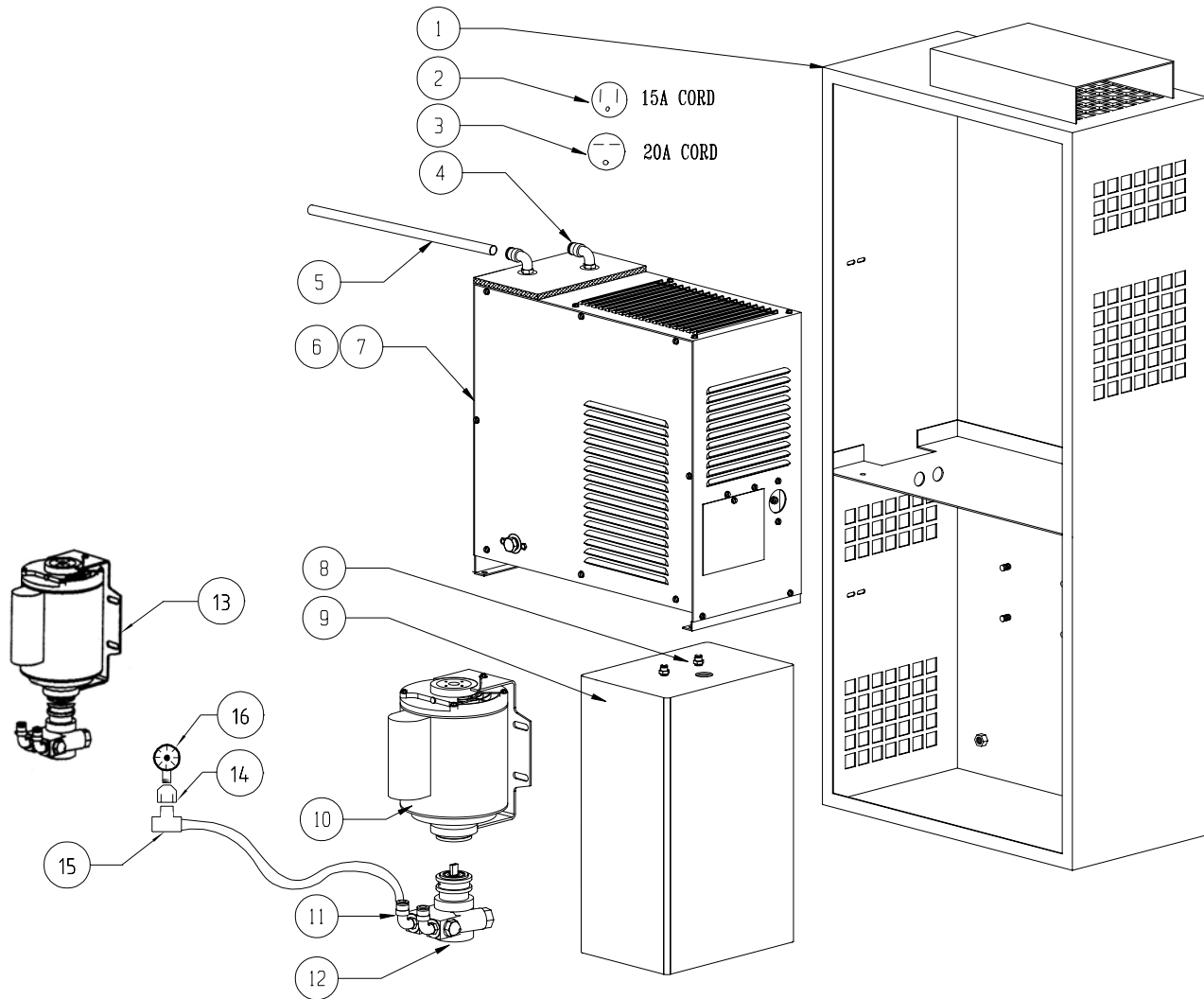
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY 7,500/10,000 RPM**

	PART #		PART #		PART #		PART #
1	LBL-0029	11	REG-0008	21	PCB-0146 (480V)	31	INV-0041
2	LBL-0106	12	VLV-0055 (7.5K)	22	ELE-0093		
			VLV-0054 (10K)			32	INV-0017
3	HDW-0221	13	HDW-0849	23	INV-0001	33	ELE-0139 (60AMP)
4	STM-0051	14	HDW-0216	24	LBL-0037		ELE-0141 (30AMP)
5	ELE-0072	15	ELE-0123	25	LBL-0040	34	ELE-0063 (45A 240V)
6	PCB-0015	16	HDW-0850	26	HDW-0219	35	ELE-0062 (30A 380V)
7	ELE-0070	17	N/A VMC 15/15XT	27	LBL-0038	36	ELE-0060 (20A 480V)
	ELE-0018	18	ELE-0136	28	ELE-0110	37	WIR-0073
	ELE-0019						
9	REG-0005	19	ELE-0132	29	WIR-0166		
10	REG-0009	20	PCB-0145 (240V)	30	INV-0045 (7.5K)		

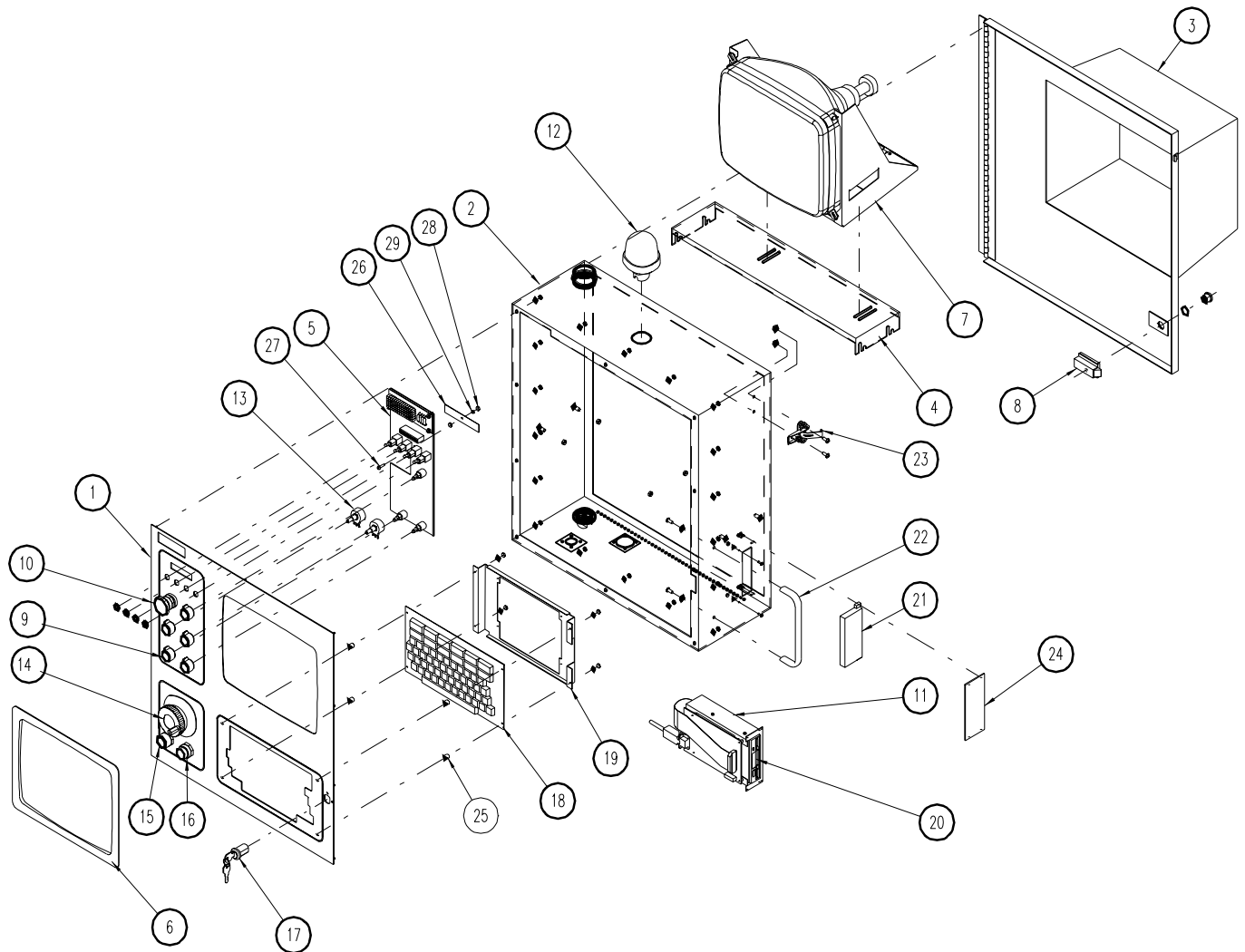
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PMP-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

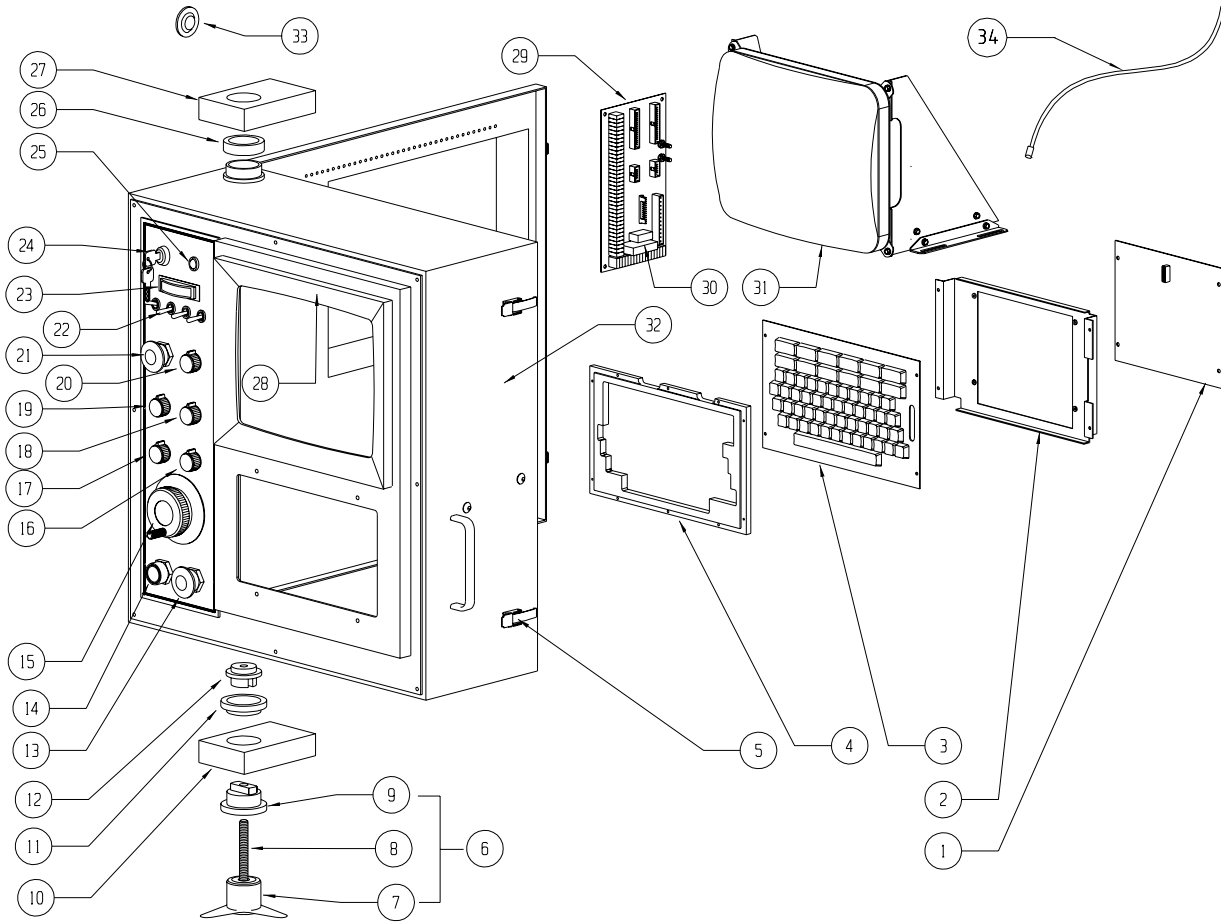
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

# 88HS PENDANT ASSEMBLY

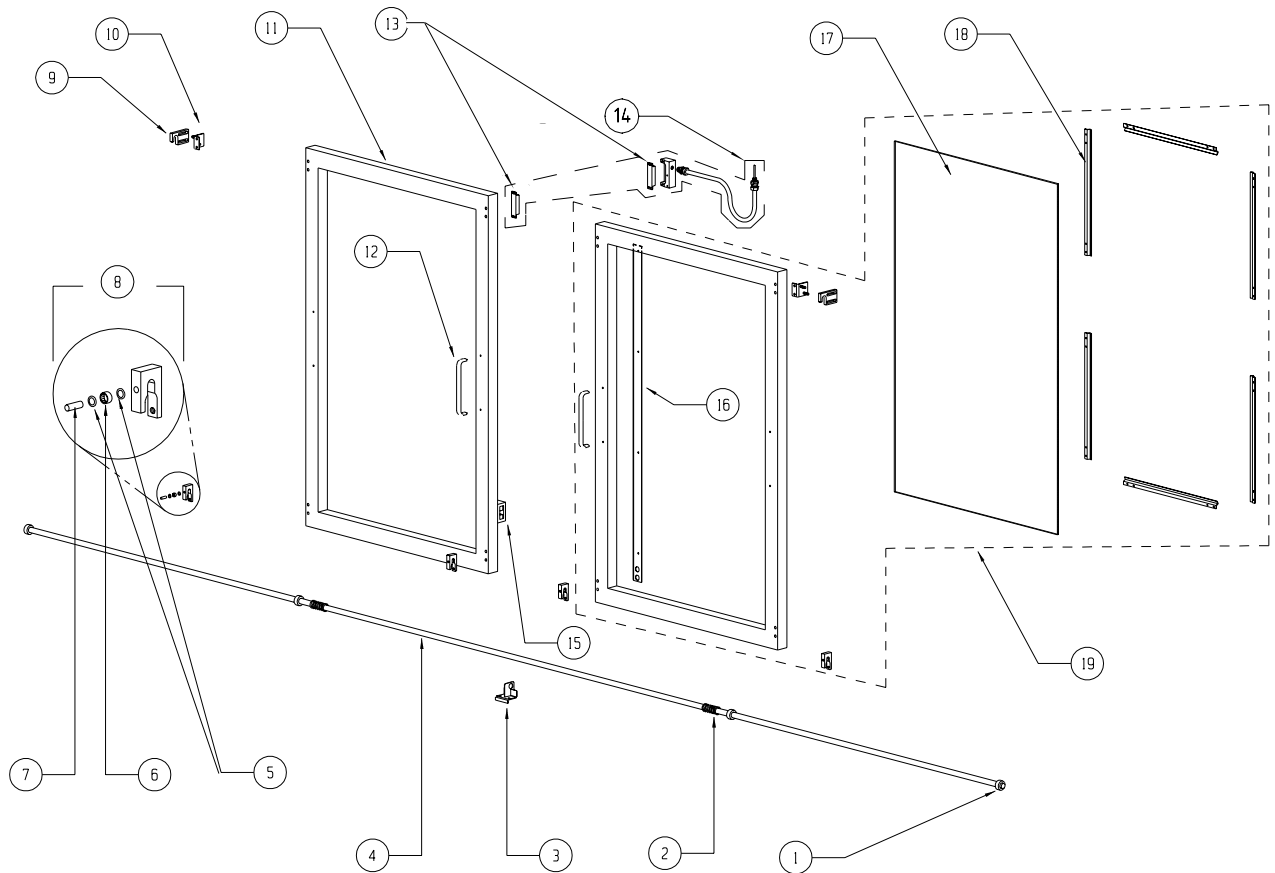


**88HS PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				



# FRONT DOOR ASSEMBLY



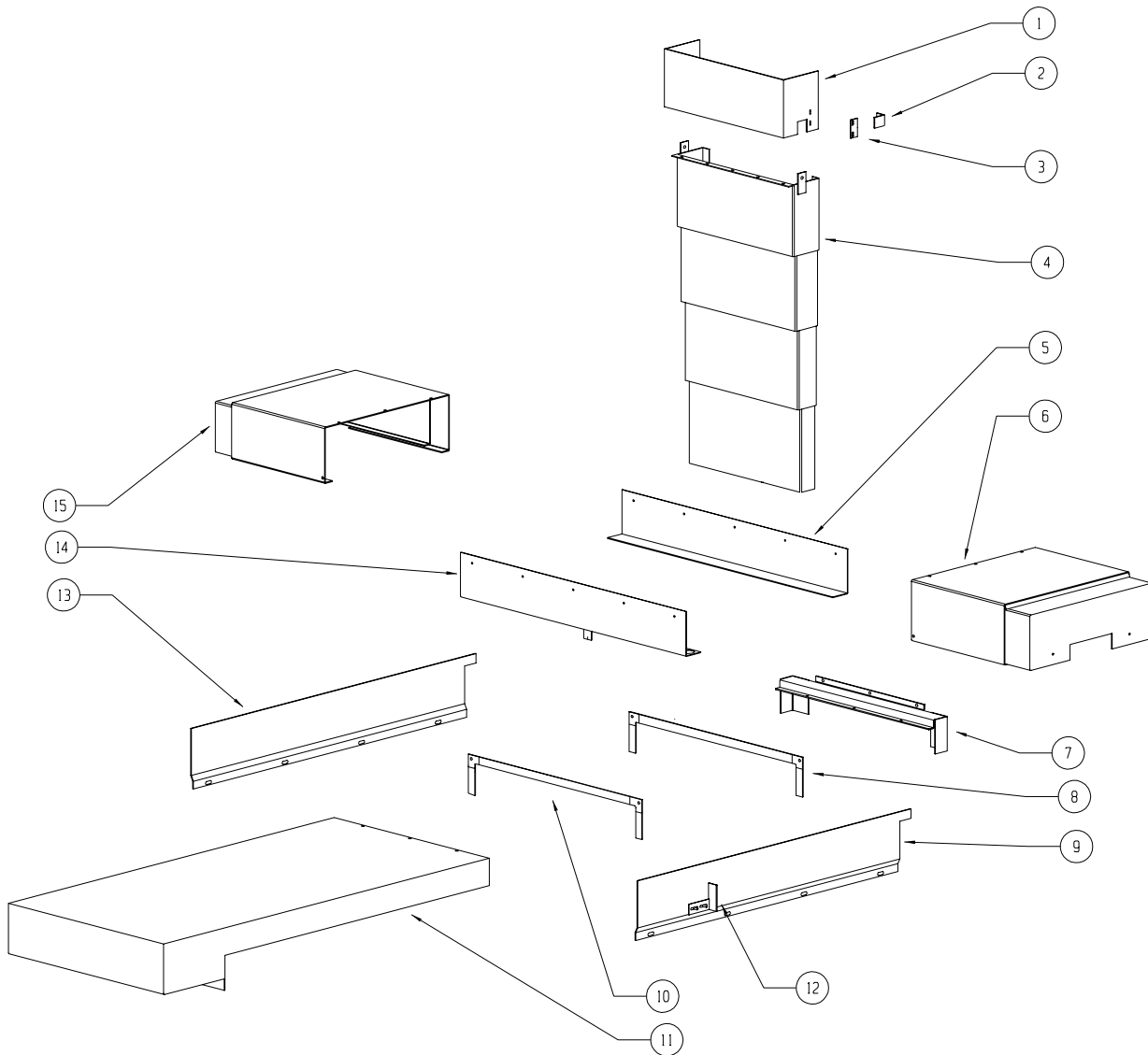
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0043	11	DOR-0002	18	STM-0084
	DOR-0054 (XT)				
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

# WAY COVER ASSEMBLY

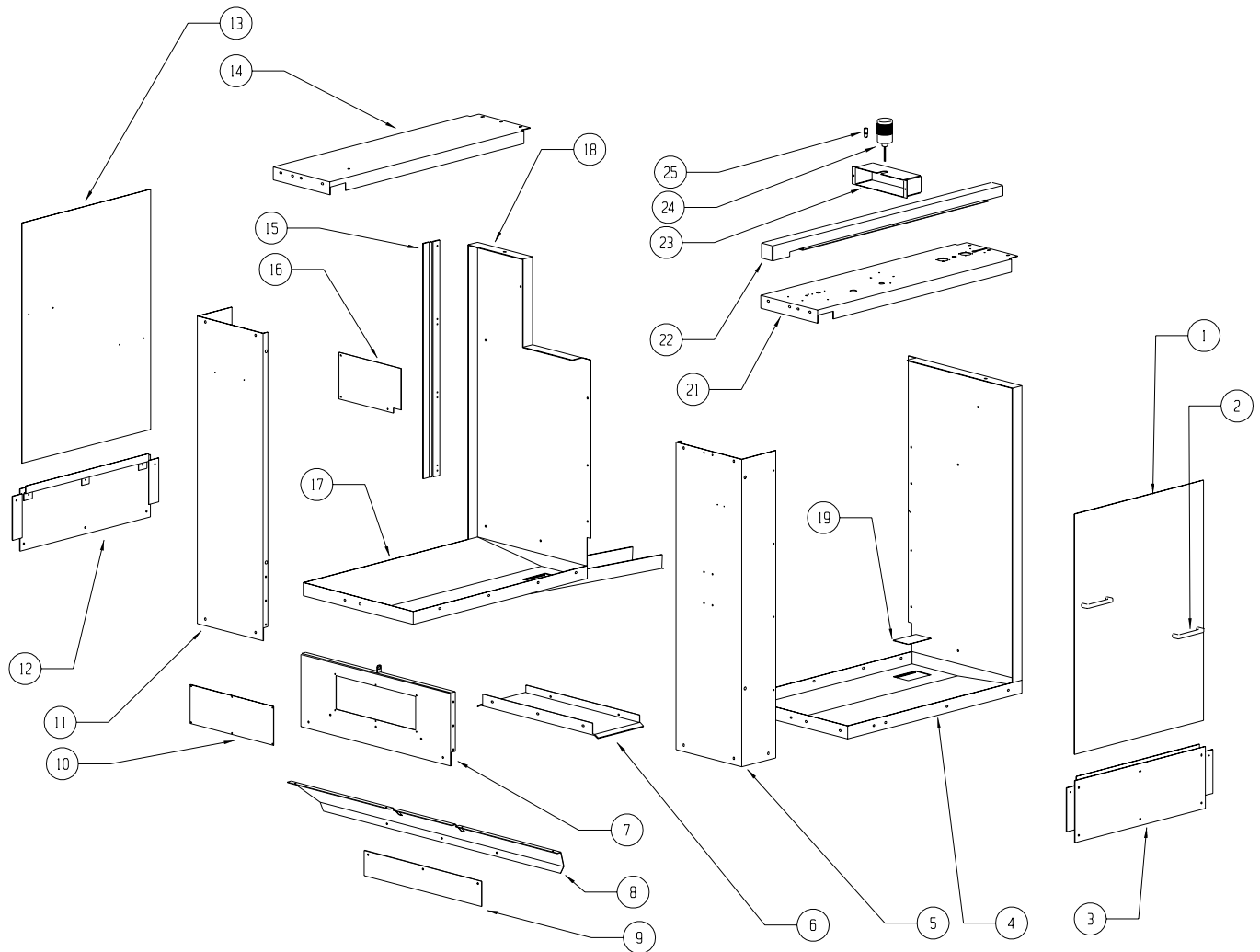


**WAY COVER ASSEMBLY**

	PART#		PART#		PART#		PART#
1	STM-0225	5	STM-0227	9	CVR-0085	14	STM-0468
2	STM-0048		STM-0670 (XT)	10	CVR-0091 <sup>(1)</sup>		STM-0671 (XT)
3	STM-0044	6	CVR-0016	11	CVR-0058	15	CVR-0016
4	CVR-0057 (20")		CVR-0092 (XT)	12	STM-0224		CVR-0092 (XT)
	CVR-0061 (28")	7	CVR-0084	13	CVR-0086		
		8	CVR-0091 <sup>(1)</sup>				

<sup>1</sup>CVR-0091 consists of an entire assembly for one side which includes: 1 long wiper HDW-0905, 2 short wipers HDW-0906, 2 clamps HDW-0628 and 2 screws HDW-0347.

# 15 SHEETMETAL HOUSING



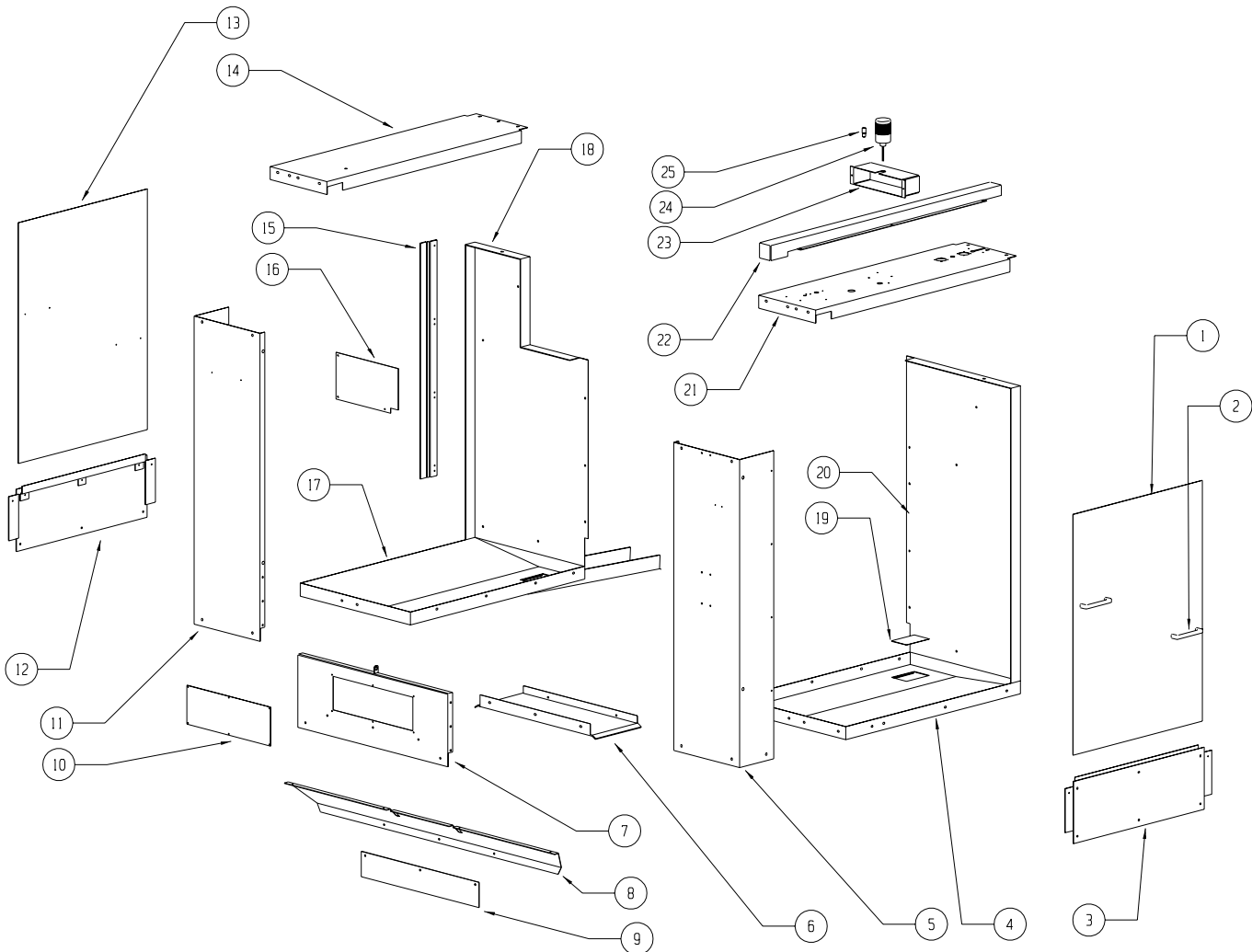
**VMC 15 SHEETMETAL HOUSING**

	PART #		PART #		PART #
1	STM-0241	10	STM-0082	19	STM-0110
2	HDW-0182	11	STM-0382	20	STM-0328
3	STM-0296 <sup>(1)</sup>	12	STM-0296 <sup>(1)</sup>	21	STM-0257
4	STM-0327	13	STM-0241	22	STM-0085
5	STM-0383	14	STM-0258	23	STM-0088
6	STM-0354	15	STM-0244	24	ELE-0121
7	STM-0081	16	STM-0282 <sup>(2)</sup>	25	ELE-0122
8	STM-0527	17	STM-0325	26	WIR-0114
9	STM-0228	18	STM-0326	27	ELE-0176

1 Assembly Includes:  
Rail: STM-0295  
Panel: STM-0240

2 For extended column  
models only.

# 15XT SHEETMETAL HOUSING



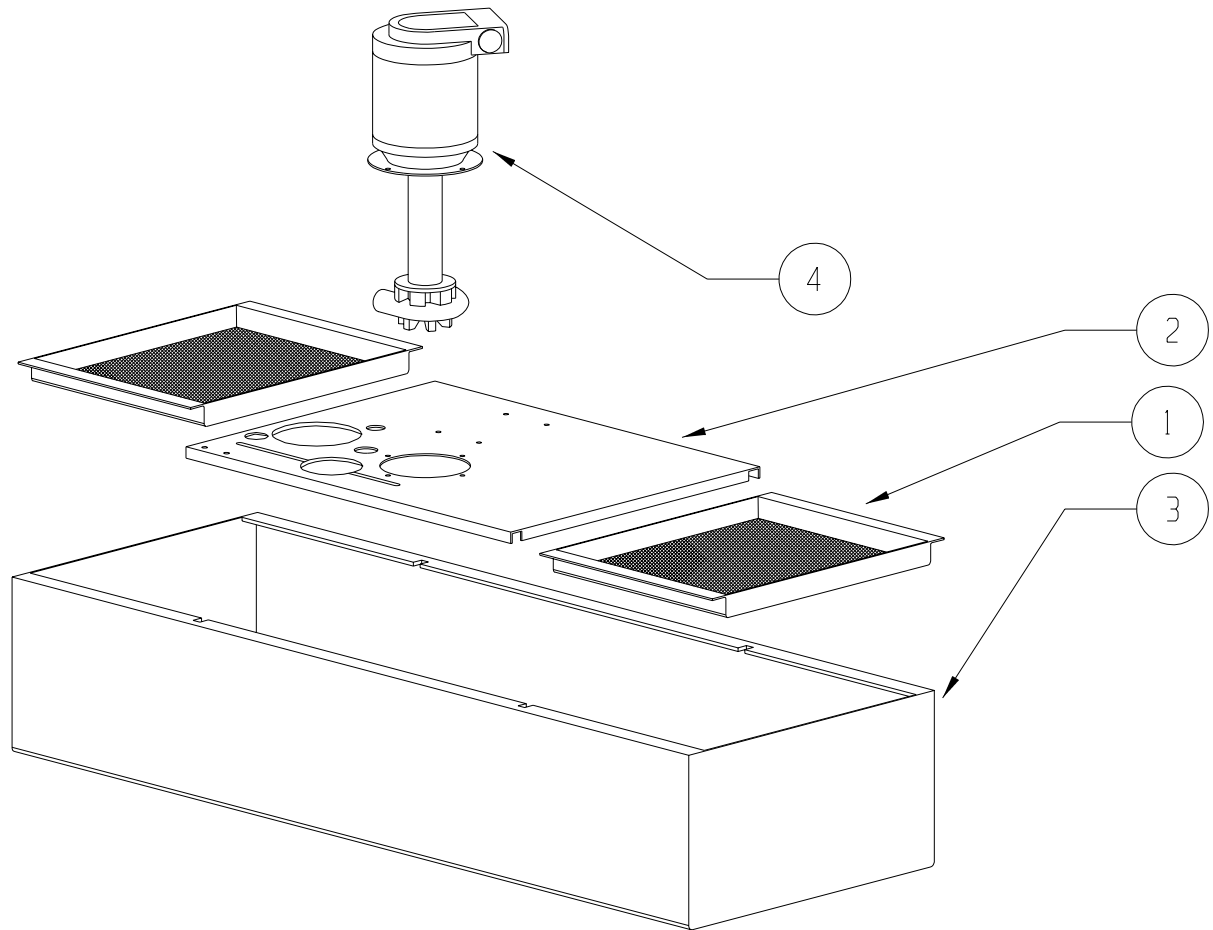
**VMC 15XT SHEETMETAL HOUSING**

	PART #		PART #		PART #
1	STM-0241	10	STM-0082	19	STM-0110
2	HDW-0182	11	STM-0349	20	STM-0332
3	STM-0296 <sup>(1)</sup>	12	STM-0296 <sup>(1)</sup>	21	STM-0269
4	STM-0331	13	STM-0241	22	STM-0085
5	STM-0350	14	STM-0259	23	STM-0088
6	STM-0354	15	STM-0244	24	ELE-0121
7	STM-0081	16	STM-0282 <sup>(2)</sup>	25	ELE-0122
8	STM-0527	17	STM-0329	26	WIR-0114
9	STM-0228	18	STM-0330	27	ELE-0176

1 Assembly Includes:  
Rail: STM-0295  
Panel: STM-0240

2 For extended column  
models only.

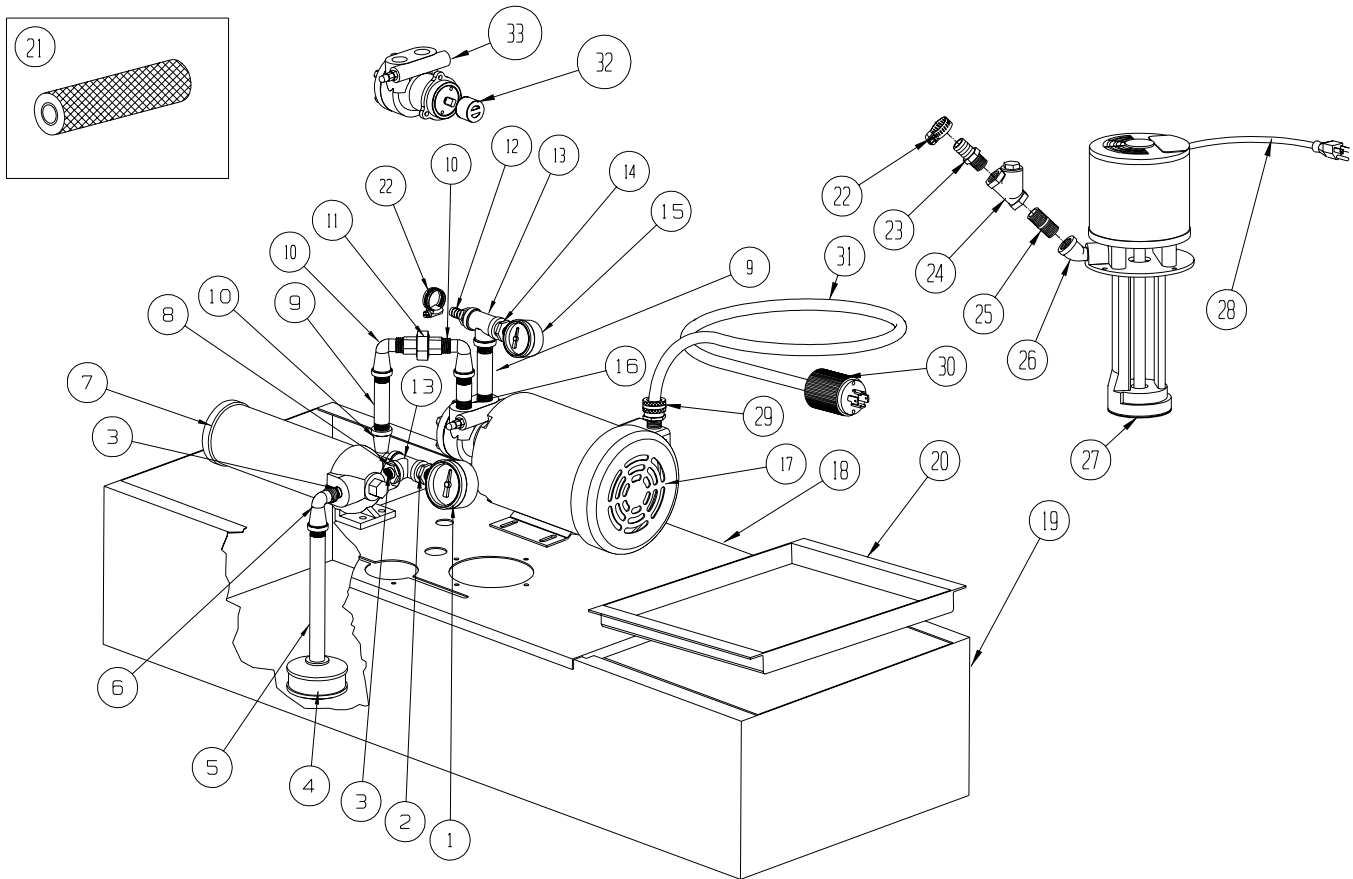
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

# 7500 RPM COOLANT THROUGH TANK

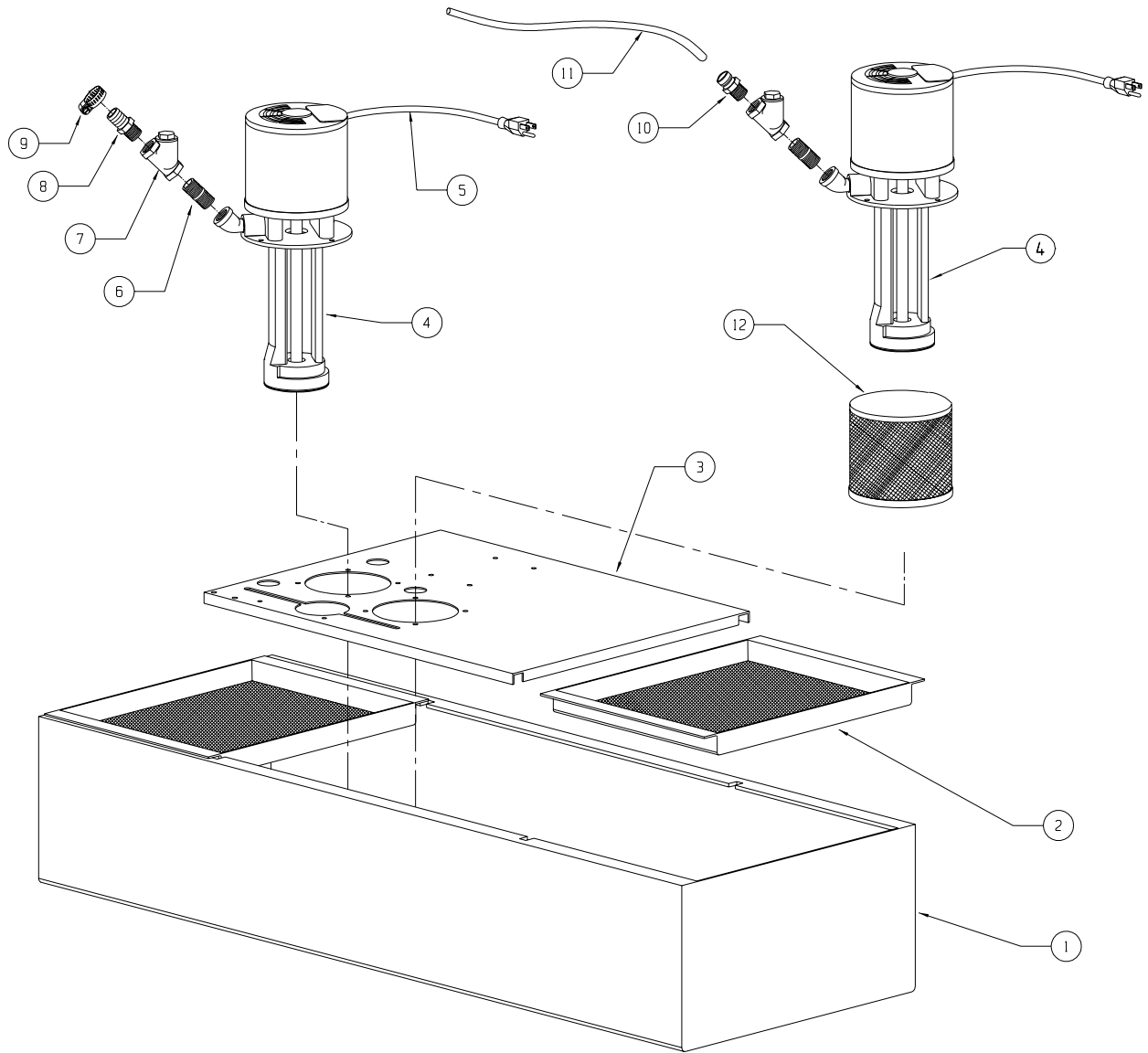


## 7500 RPM COOLANT THROUGH TANK

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

<sup>1</sup>Filter (CNT-0029) fits inside filter housing (CNT-0027).

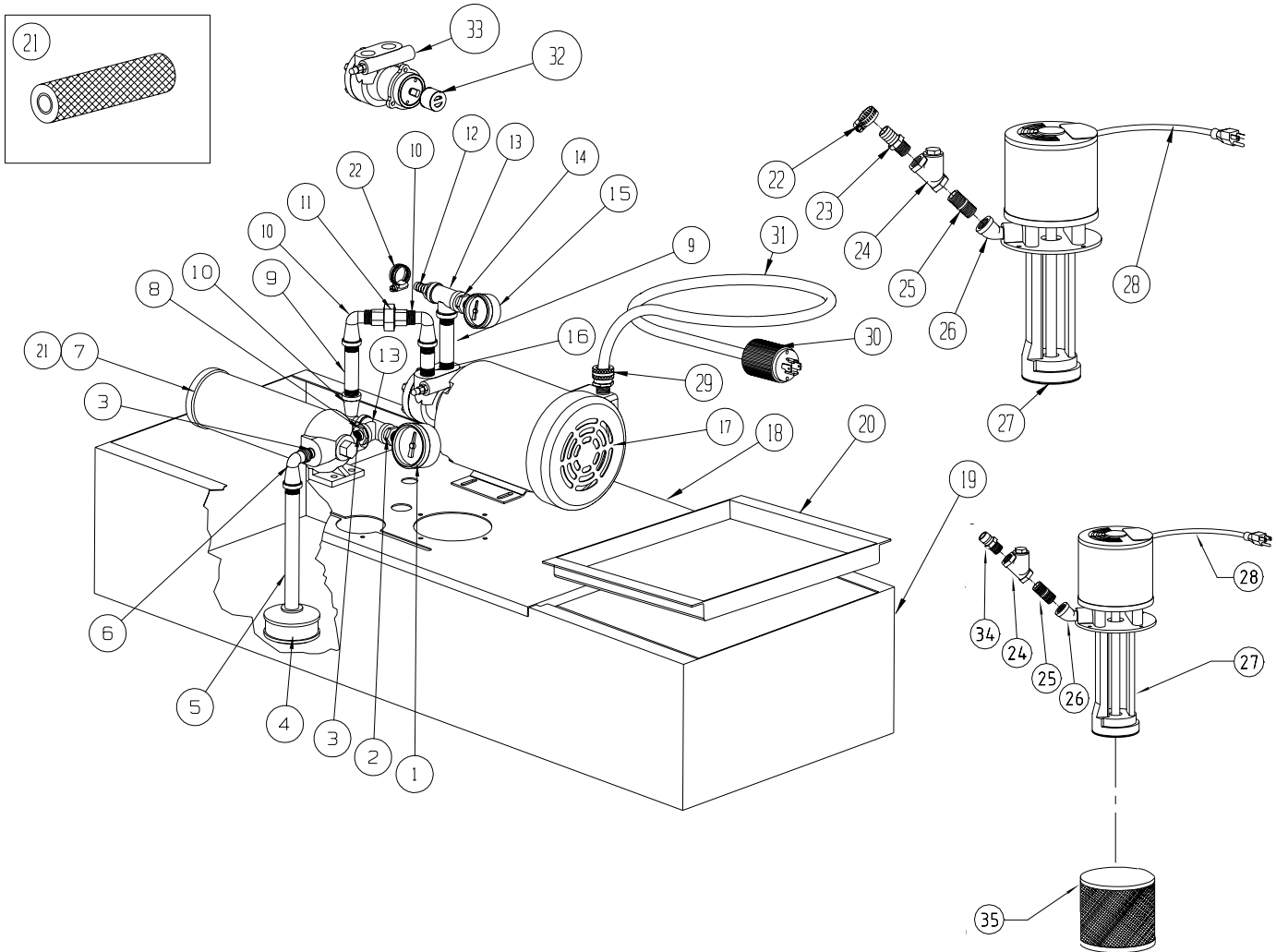
# 10K RPM COOLANT TANK



10,000 RPM COOLANT TANK

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# 10K RPM COOLANT THROUGH TANK



**10,000 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

<sup>1</sup>Filter (CNT-0029) fits inside filter housing (CNT-0027).



# TABLE OF CONTENTS

## Parts Manual VMC 2016L MODEL



COLUMN ASSEMBLY .....	2
7,500 RPM SPINDLE HEAD ASSEMBLY .....	4
10,000 RPM SPINDLE HEAD ASSEMBLY .....	6
BASE, SADDLE & TABLE ASSEMBLY .....	8
DRAWBAR CYLINDER ASSEMBLY .....	10
ORIENTATION BRIDGE ASSEMBLIES.....	12
IDLER ASSEMBLIES .....	14
WAY LUBE ASSEMBLY.....	16
GENEVA DRIVE ATC ASSEMBLY .....	18
SERVO DRIVE ATC ASSEMBLY .....	20
7500 RPM SPINDLE ASSEMBLY .....	22
10,000 RPM SPINDLE ASSEMBLY .....	23
COOLANT THROUGH SPINDLE.....	24
CNC CABINET ASSEMBLY.....	25
CARD CAGE ASSEMBLY .....	26
POWER JUNCTION CABINET ASSEMBLY 7500/10,000 RPM.....	27
CHILLER CABINET ASSEMBLY .....	28
MULTI-PROCESSOR PENDANT ASSEMBLY .....	29
88HS PENDANT ASSEMBLY .....	30
FRONT DOOR ASSEMBLY .....	31
WAY COVER ASSEMBLY.....	32
SHEETMETAL HOUSING.....	33
7500 RPM COOLANT TANK ASSEMBLY.....	34
7500 RPM COOLANT THROUGH TANK ASSEMBLY .....	35
10,000 RPM COOLANT TANK ASSEMBLY .....	36
10,000 RPM COOLANT THROUGH TANK ASSEMBLY.....	37



**This reference covers the following Fadal products:**

**Model VMC 2016L**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

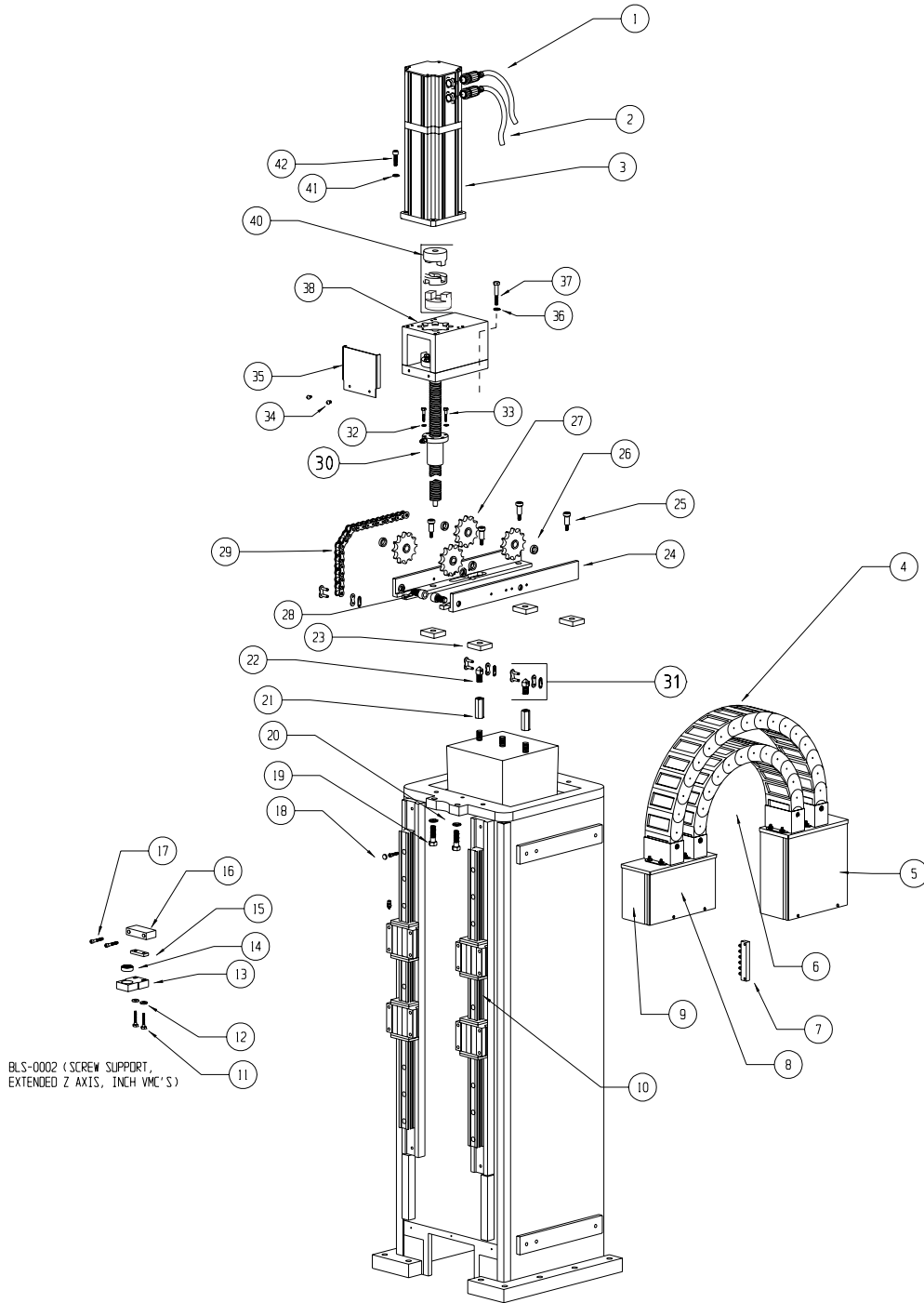
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY



# COLUMN ASSEMBLY

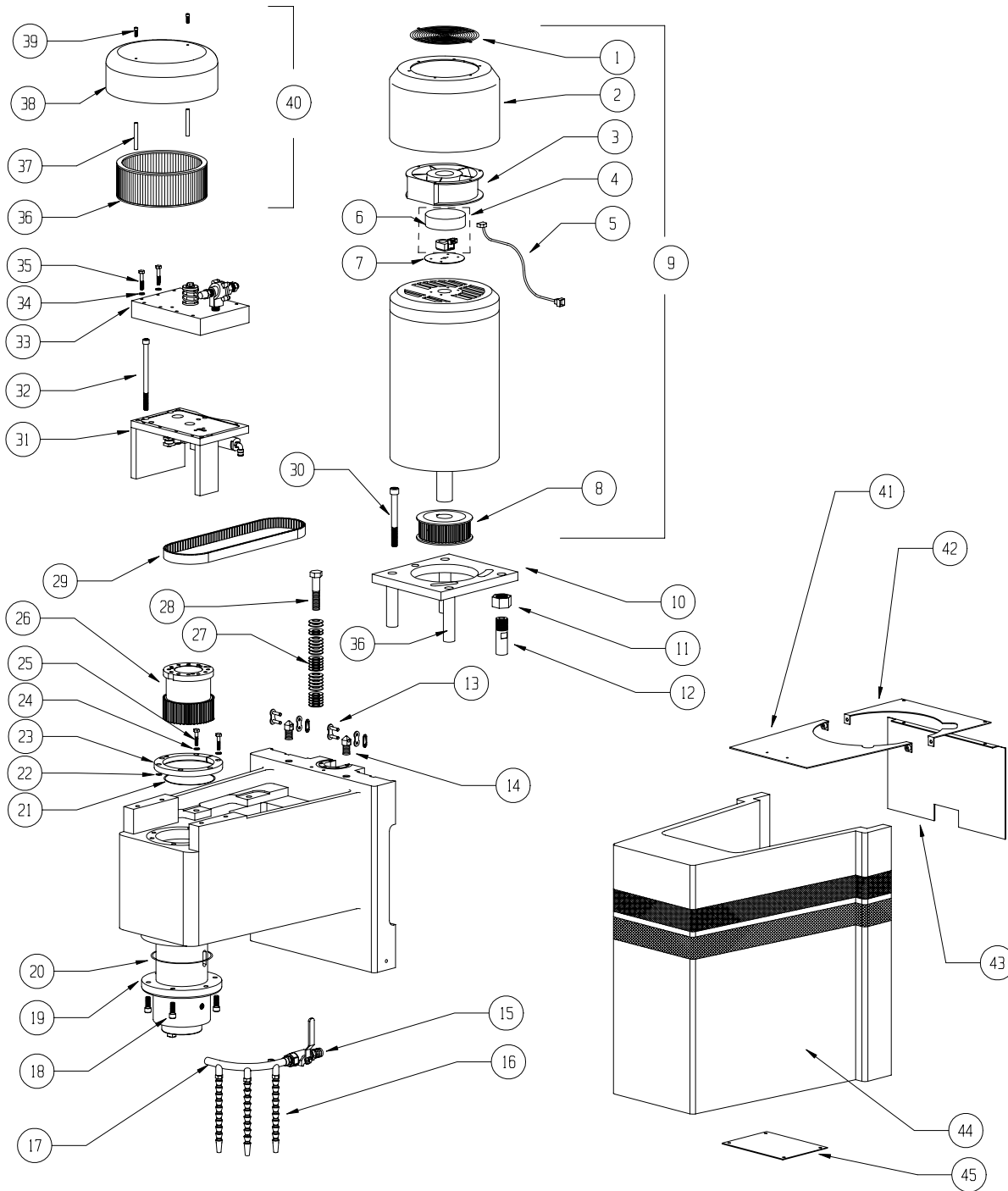
## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0610	12	HDW-0048	23	CWT-0005	33	HDW-0568
2	WIR-0609	13	BLS-0042	24	CWT-0005	34	HDW-0347
3	MTR-0139 (GTK) <sup>(1)</sup>	14	BRG-0023	25	HDW-0600	35	STM-0043
4	CVR-0074	15	BLS-0206	26	CWT-0009	36	HDW-0049
5	STM-0072	16	BLS-0041	27	PUL-0034	37	HDW-0315
6	CVR-0072	17	HDW-0297	28	HDW-0777	38	BLS-0009
7	LUB-0058	18	BRG-0031	29	HDW-0205	40	MTR-0154
8	STM-0300	19	HDW-0655	30	BLS-0008 <sup>(2)</sup> (20")	41	HDW-0280
9	STM-0301	20	CWT-0007		BLS-0001 <sup>(2)</sup> (28")	42	HDW-0779
10	BRG-0031	21	HDW-0335	31	HDW-0204		
11	HDW-0317	22	CWT-0001	32	HDW-0281		

<sup>1</sup>Baldor Motor (MTR-0141) may also be used.

<sup>2</sup>Includes BLS-0009.

# 7500 RPM HEAD ASSEMBLY



# 7500 RPM HEAD ASSEMBLY

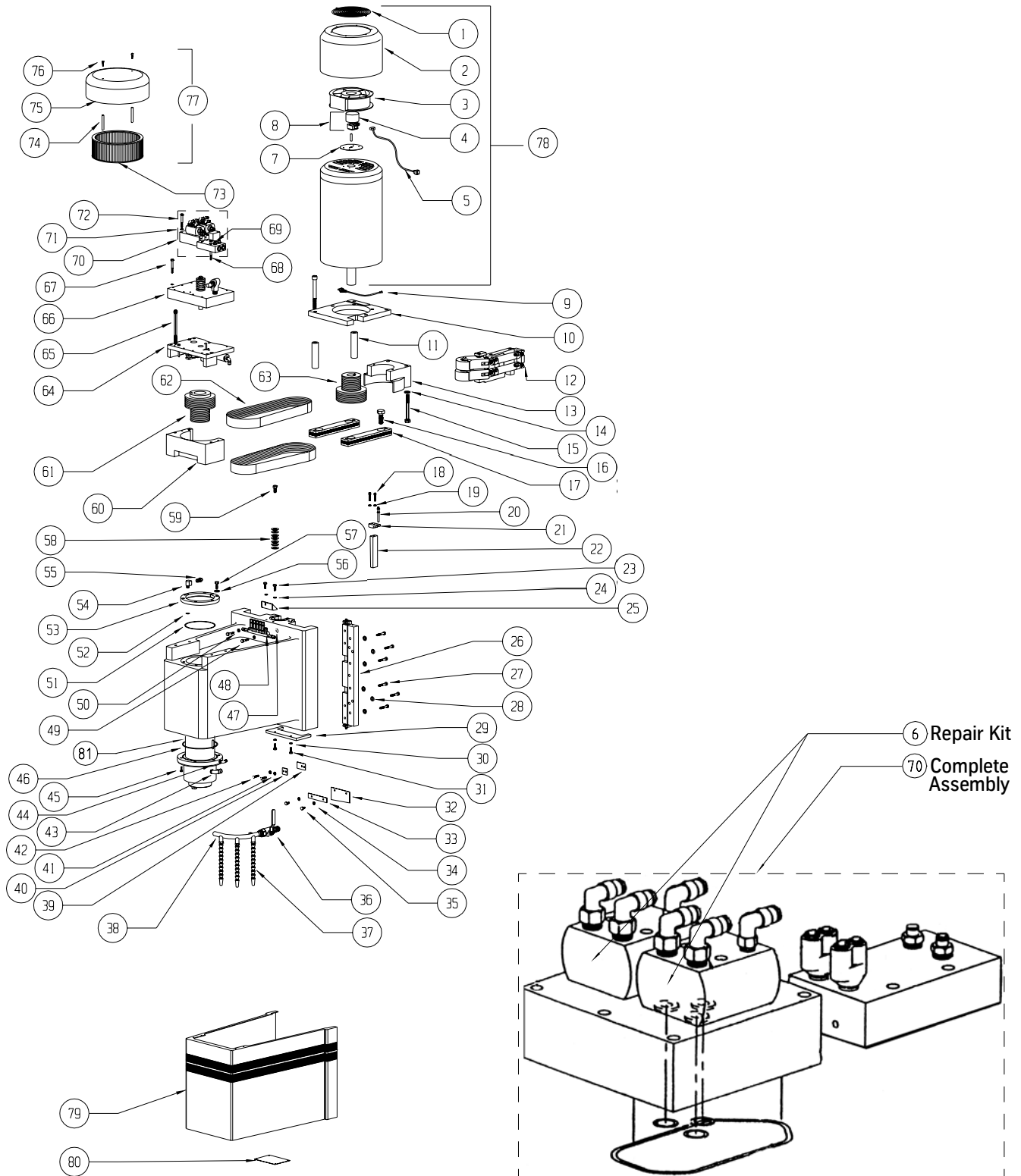
## 7500 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	13	HDW-0204	25	HDW-0568	37	SVT-0108
2	STM-0139	14	CWT-0001	26	PUL-0025	38	STM-0467
3	ELE-0124	15	VLV-0017	27	HDW-0194	39	HDW-0597
4	ENC-0007	16	PLM-0016	28	HDW-0560	40	MTR-0128
5	WIR-0168	17	CNT-0039	29	BEL-0006	41	STM-0627
6	MTR-0123	18	HDW-0470	30	HDW-0284	42	STM-0626
7	STM-0148	19	SPN-0037 <sup>(2)</sup>	31	ORB-0000	43	STM-0625
8	PUL-0024	20	HDW-0181	32	HDW-0279	44	CVR-0154
9	MTR-0098 <sup>(1)</sup>	21	HDW-0148	33	DRB-0000	45	STM-0064
10	MTR-0075	22	HDW-0177	34	HDW-0279		
11	PLC-0042	23	SPN-0042	35	HDW-0320		
12	MTR-0090	24	HDW-0275	36	MTR-0076		

<sup>1</sup>MTR-0098 INCLUDES: PUL-0024.

<sup>2</sup>SPN-0037 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0025.

# 10K RPM HEAD ASSEMBLY





# 10K RPM HEAD ASSEMBLY

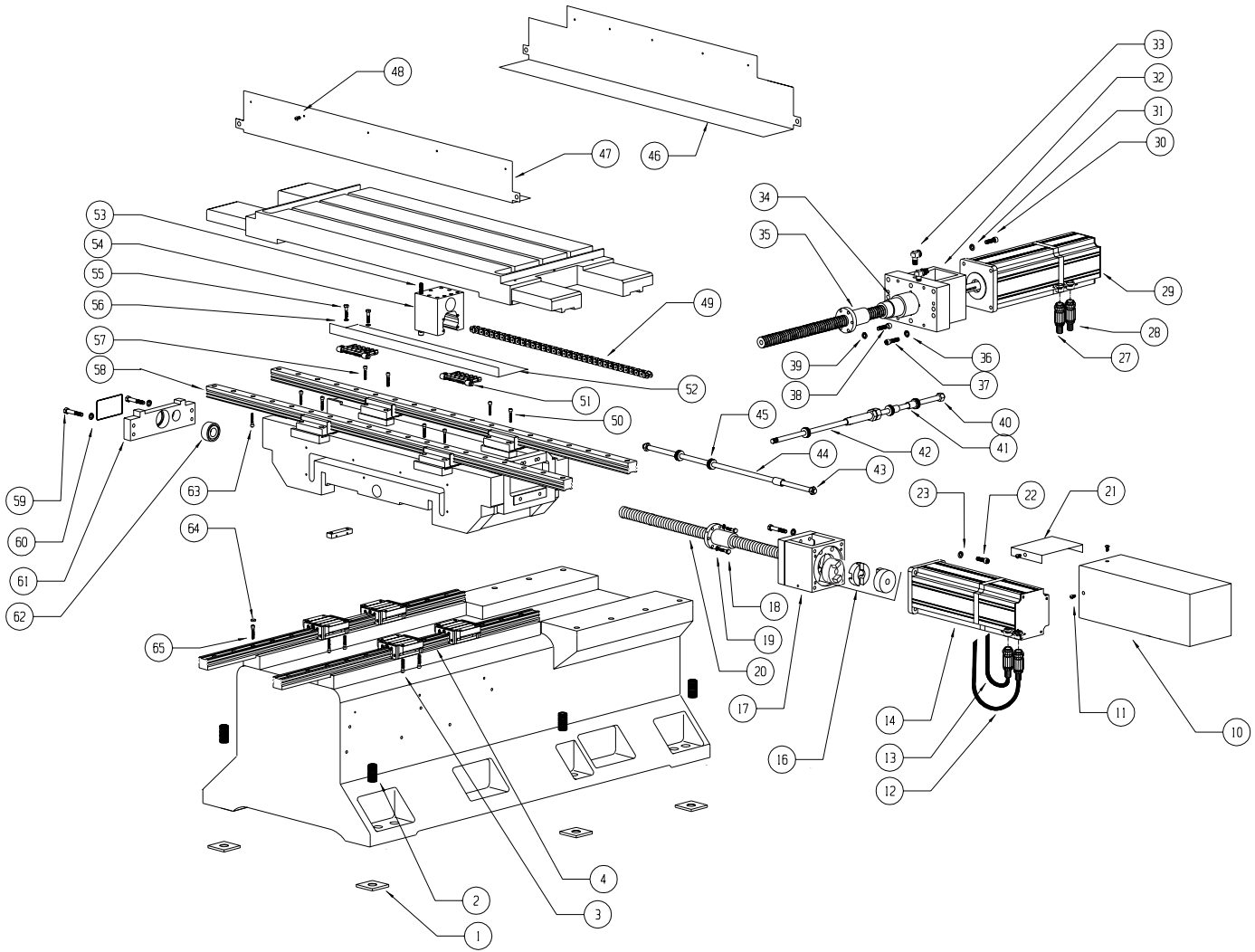
## 10K RPM HEAD ASSEMBLY

	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	HDW-0553
2	STM-0139	31	HDW-0322	60	BEL-0014
3	ELE-0124	32	HDW-0356	61	PUL-0018
4	MTR-0123	33	STM-0052	62	BEL-0024
5	WIR-0168	34	HDW-0279	63	PUL-0019
6	HYD-0018	35	HDW-0319	64	ORB-0001
7	STM-0148	36	VLV-0017	65	HDW-0290
8	ENC-0007	37	PLM-0016	66	DRB-0000
9	HDW-0369	38	CNT-0039	67	HDW-0320
10	MTR-0070	39	HDW-0294	68	HDW-0321 (HT)
11	MTR-0079	40	STM-0042	69	HDW-0279 (HT)
12	IDL-0002	41	HDW-0279	70	HYD-0017 (HT)
	IDL-0003(HT)				
13	BEL-0015	42	HDW-0294	71	HDW-0279 (HT)
14	HDW-0451	43	PLM-0112	72	HDW-0320 (HT)
15	HDW-0311	44	PLM-0034	73	MTR-0127
16	HDW-0283	45	HDW-0470	74	SVT-0108
17	MTR-0068	46	HDW-0181	75	STM-0467
	MTR-0064				
18	HDW-0294	47	HDW-0380	76	HDW-0597
19	HDW-0279	48	LUB-0045	77	MTR-0128
20	GIB-0013	49	HDW-0576	78	MTR-0045 <sup>(1)</sup>
21	GIB-0010	50	HDW-0279		MTR-0048 (HT)
22	GIB-0033	51	HDW-0169	79	CVR-0151
23	HDW-0320	52	HDW-0177	80	STM-0064
24	HDW-0279	53	SPN-0042	81	SPN-0007 <sup>(2)</sup>
25	STM-0141	54	PLM-0045		
26	GIB-0004	55	PLM-0088		
27	HDW-0569	56	HDW-0275		
28	HDW-0280	57	HDW-0568		
29	CVR-0048	58	HDW-0194		

<sup>1</sup>MTR-0045 INCLUDES: PUL-0019

<sup>2</sup>SPN-0007 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018.  
(HT)=High Torque Option

# BASE, SADDLE & TABLE ASSEMBLY



# BASE, SADDLE & TABLE ASSEMBLY

TABLE ASSEMBLY-AC DRIVE

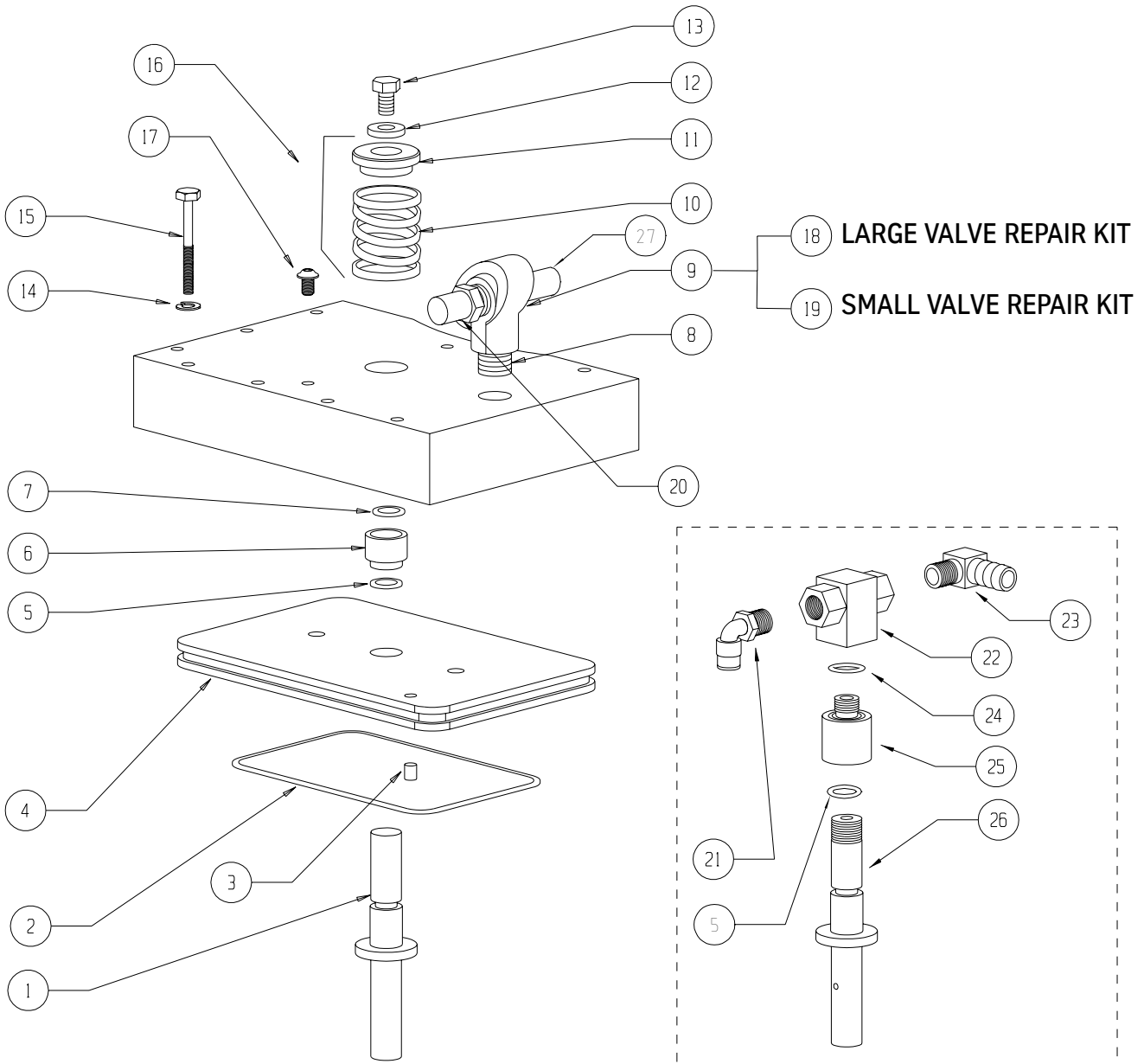
	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	17	BLS-0005	31	HDW-0280	43	HDW-0543	55	HDW-0347
2	HDW-0272	18	HDW-0483	32	BLS-0007	44	BLS-0187	56	OBSOLETE
3	HDW-0481	19	HDW-0281	33	PLM-0112	45	HDW-0194	57	HDW-0572
4	BRG-0031	20	BLS-0004 <sup>(3)</sup>	34	CVR-0000	46	STM-0227	58	BRG-0031
		21	STM-0163	35	BLS-0000 <sup>(3)</sup>	47	STM-0468	59	HDW-0286
10	STM-0590	22	HDW-0779	36	HDW-0444	48	HDW-0581	60	HDW-0049
11	HDW-0349	23	HDW-0280	37	HDW-0564	49	CVR-0038	61	BLS-0139
12	WIR-0608			38	HDW-0603	50	HDW-0572	62	BRG-0021
13	WIR-0607	27	WIR-0609	39	HDW-0472	51	LUB-0058	63	HDW-0279
14	MTR-0139 (GTK) <sup>(1)</sup>	28	WIR-0610	40	HDW-0543	52	STM-0518	64	BRG-0032
		29	MTR-0139	41	HDW-0136	53	HDW-0572	65	HDW-0279
16	MTR-0154 <sup>(2)</sup>	30	HDW-0779	42	BLS-0187	54	BLS-0075		

<sup>1</sup>Baldor Motor (MTR-0141) may also be used.

<sup>2</sup>Part of X and Y axes.

<sup>3</sup>Complete ballscrew assembly with bearing mount.

# DRAWBAR CYLINDER ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

Coolant Thru Assembly DRB-0001

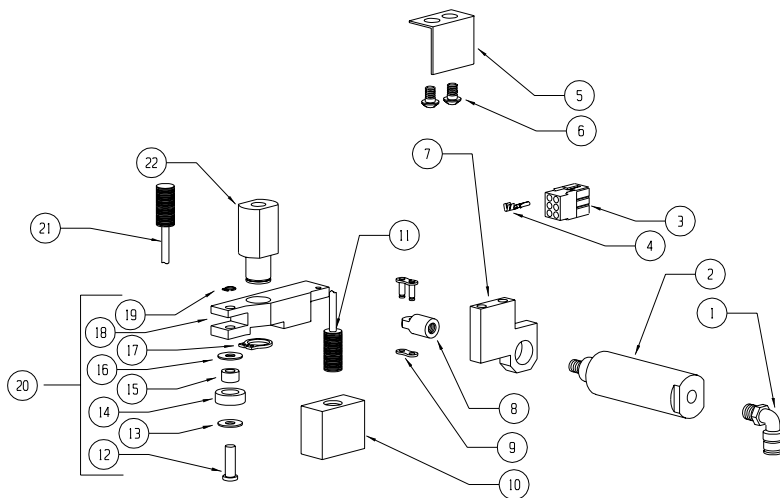
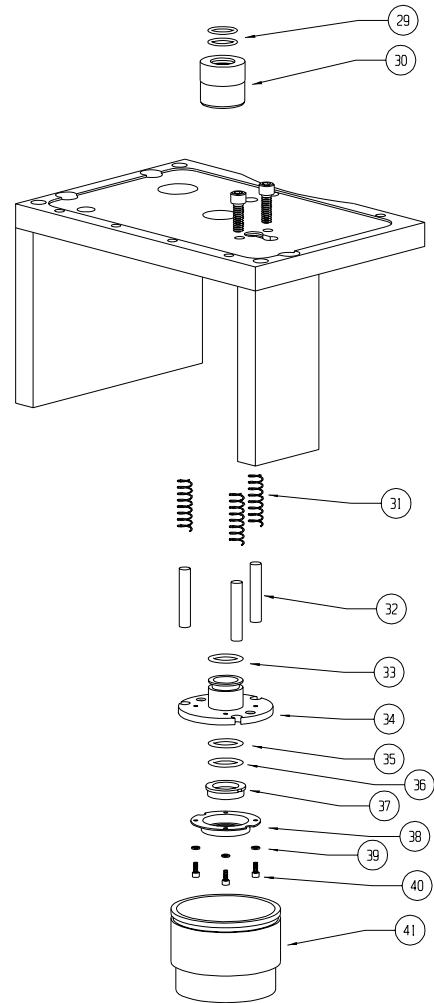
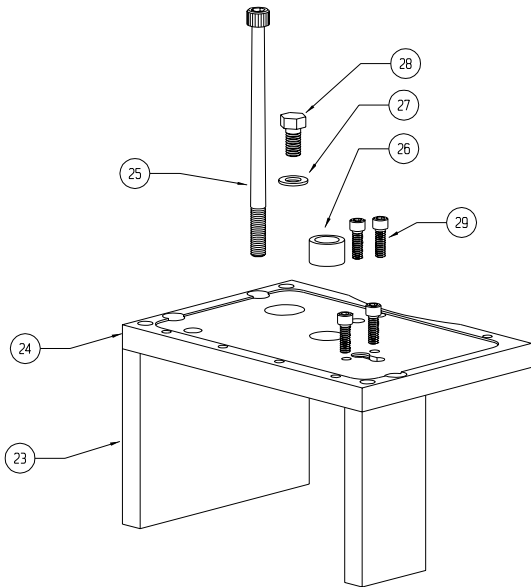
# DRAWBAR CYLINDER ASSEMBLY

## DRAWBAR CYLINDER ASSEMBLY

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

<sup>1</sup>Includes ELE-0147

# ORIENTATION BRIDGE ASSEMBLY



# ORIENTATION BRIDGE ASSEMBLY

## ORIENTATION BRIDGE ASSEMBLIES

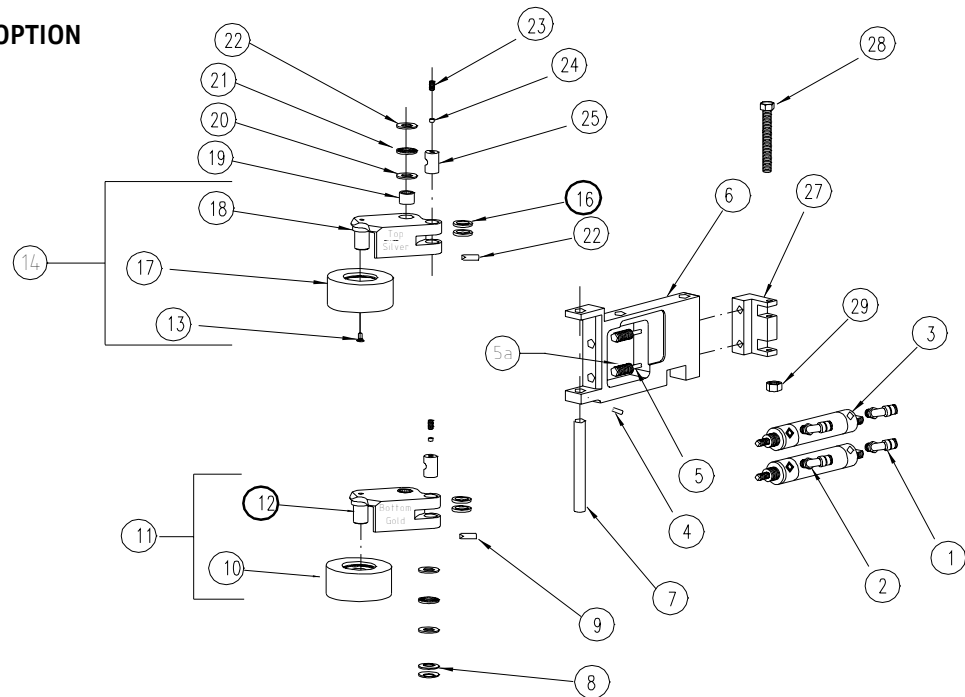
	PART #		PART #		PART #		PART #
1	PLM-0034	14	ORB-0009	27	HDW-0048	39	HDW-0453
2	CYL-0007	15	BRG-0014	28	HDW-0298	40	HDW-0308
3	WIR-0051	16	HDW-0515	29	HDW-0150	41	CNT-0140
4	WIR-0043 (16 AWG)	17	HDW-0725	30	CNT-0042		
	WIR-0044 (16 AWG)						
	WIR-0544 (22 AWG)						
	WIR-0056 (22 AWG)						
5	STM-0596	18	ORB-0031	31	HDW-0257		
6	HDW-0347	19	HDW-0726	32	HDW-0326		
7	ORB-0030 <sup>(1)</sup>	20	ORB-0004	33	HDW-1102		
8	ORB-0011	21	ELE-1202	34	CNT-0041		
9	HDW-0209	22	ORB-0013 <sup>(2)</sup>				
10	ORB-0014	23	ORB-0022	35	HDW-0917		
11	ELE-0145	24	ORB-0008	36	HDW-0917		
12	ORB-0007	25	HDW-0571	37	CNT-0033		
13	HDW-0515	26	BRG-0008	38	CNT-0045		

<sup>1</sup>VMCs with Non-Locking Drawbar require ORB-0029

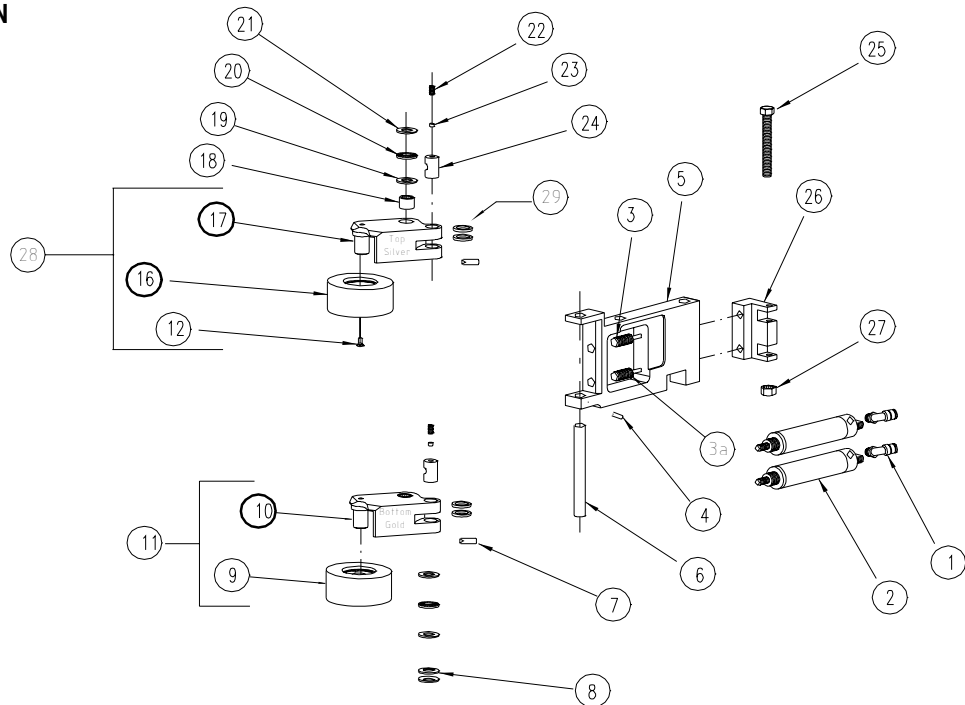
<sup>2</sup>VMCs with Non-Locking Drawbar require ORB-0012

# IDLER ASSEMBLY

## RIGID TAP/HIGH TORQUE OPTION



## 10,000 RPM OPTION





# IDLER ASSEMBLY

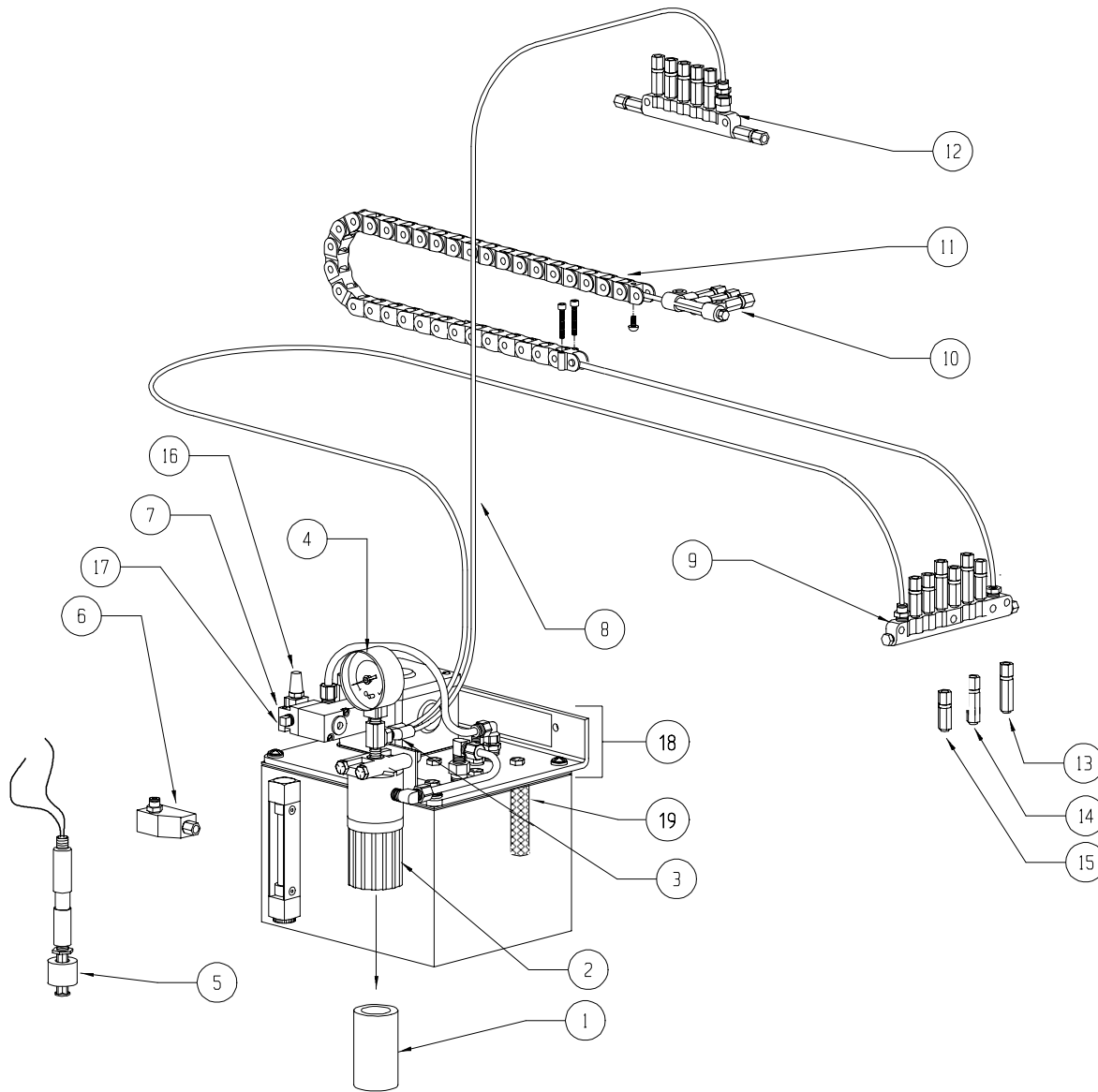
## RIGID TAP/HIGH TORQUE OPTION

	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

# WAY LUBE ASSEMBLY



**WAY LUBE ASSEMBLY**

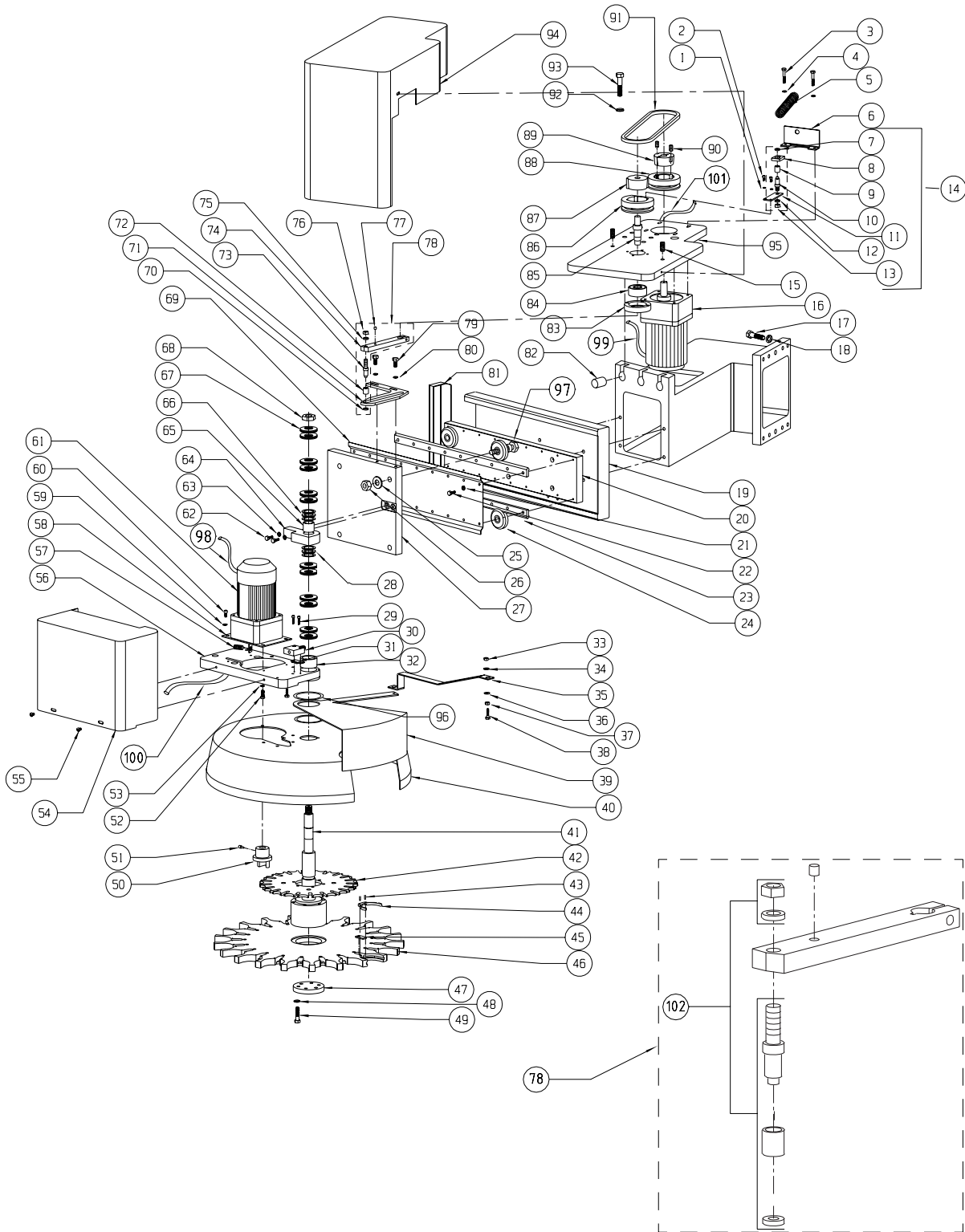
	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		



This page intentionally left blank.



# GENEVA DRIVE ATC ASSEMBLY



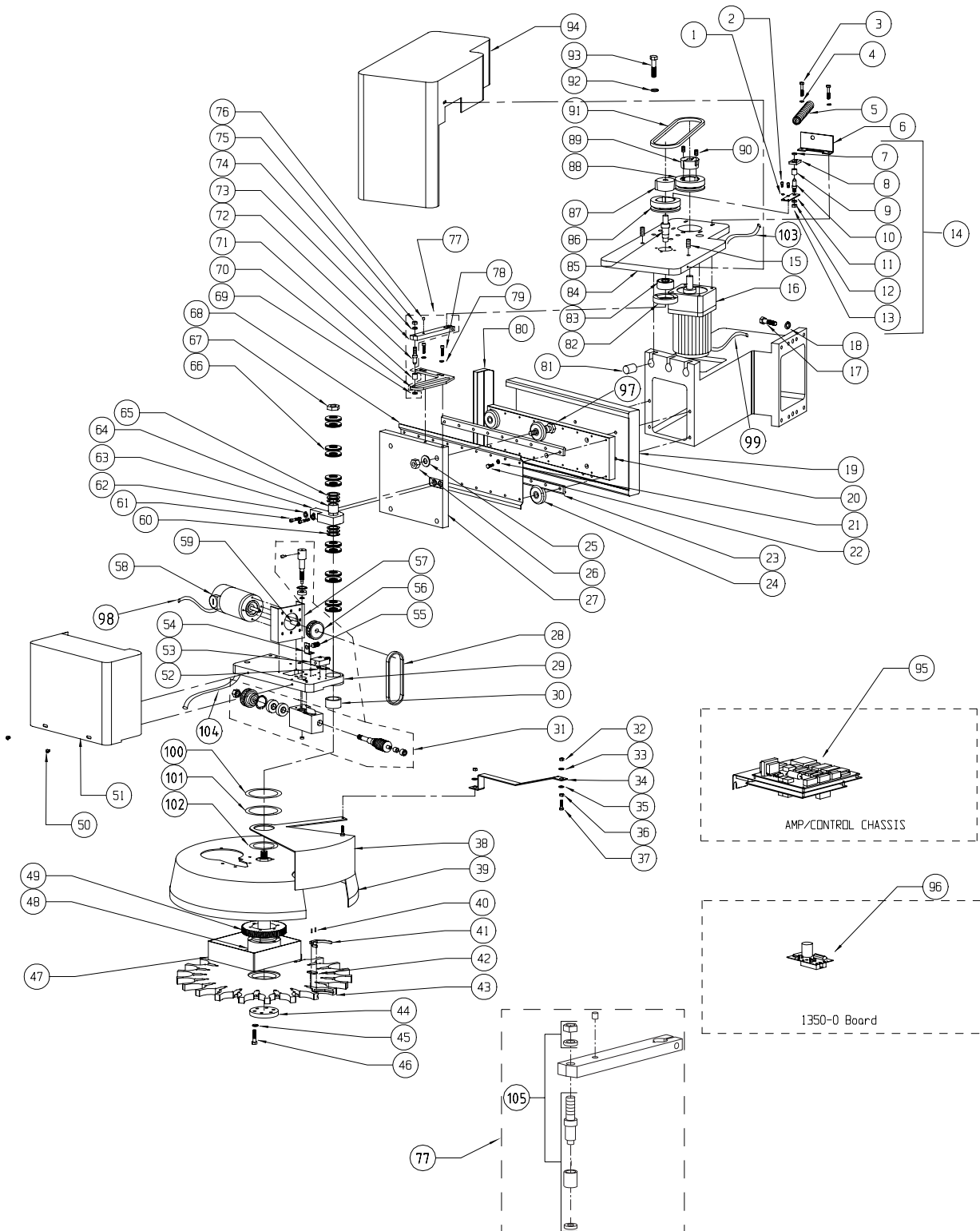
# GENEVA DRIVE ATC ASSEMBLY

## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)
					HDW-0295 (1)				ATC-0005 (30)
								102	ATC-0169

<sup>1</sup>Quick disconnect type.

# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

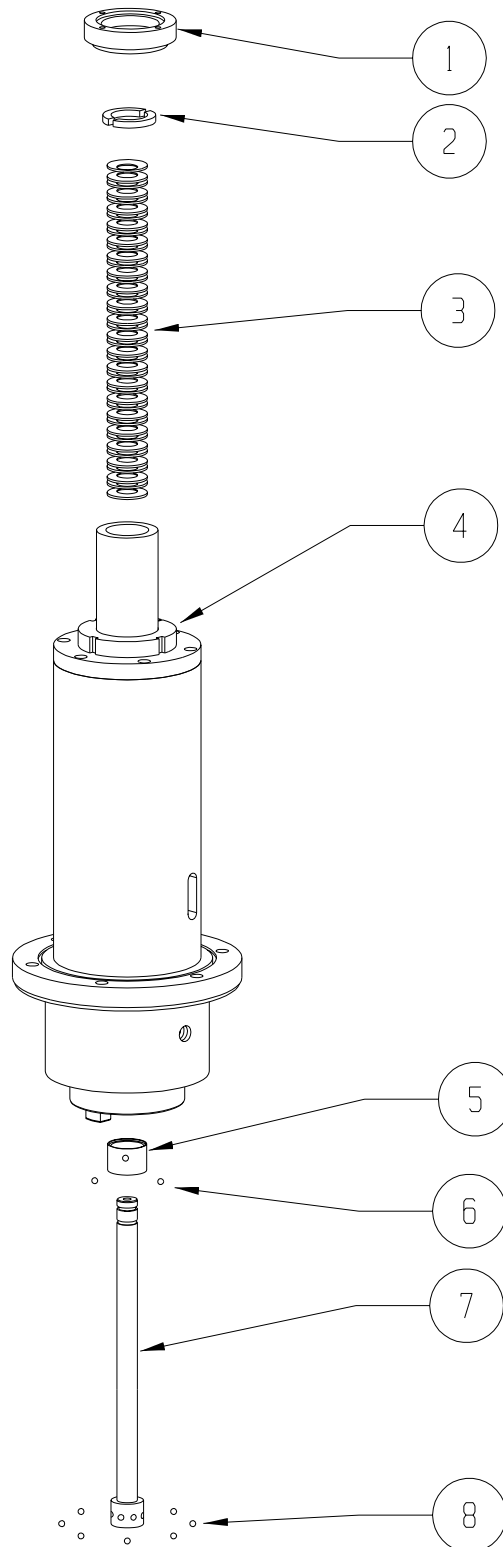
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025





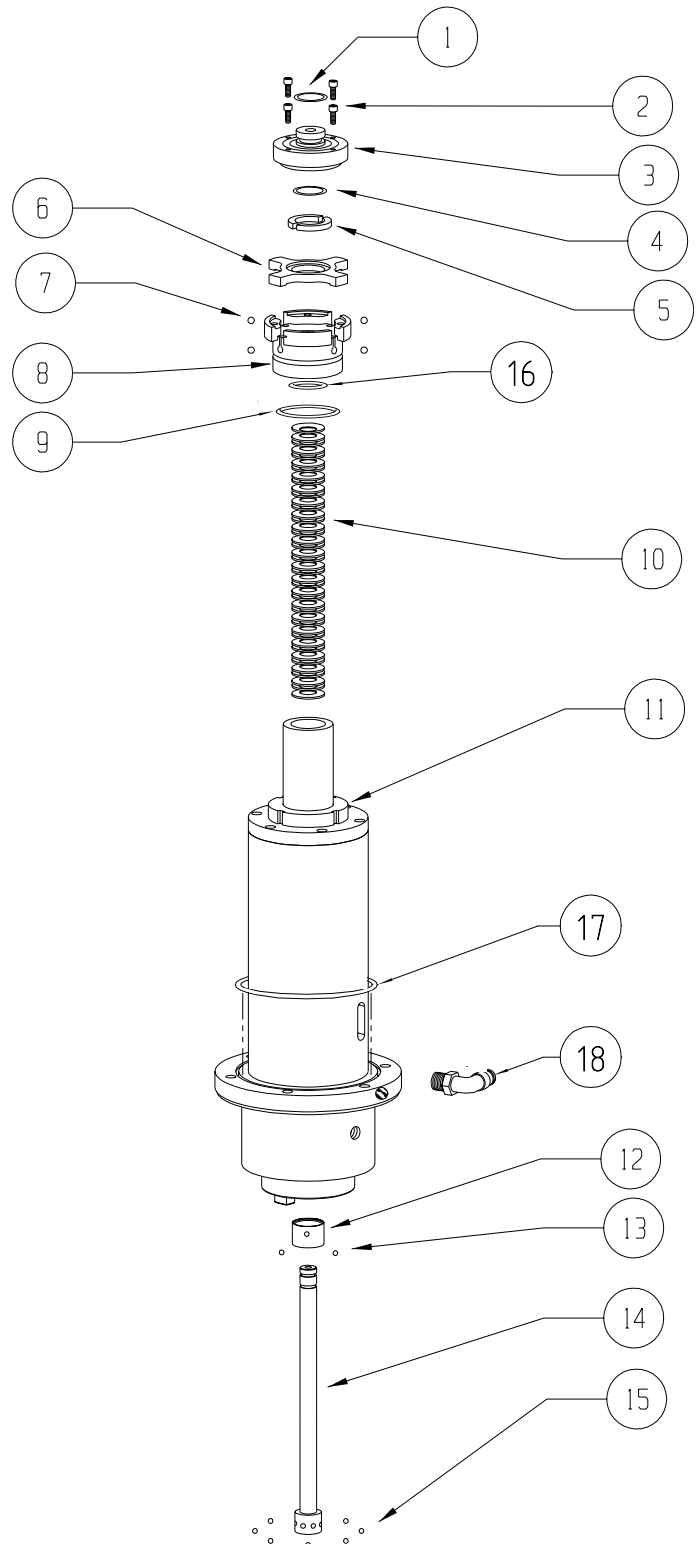
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

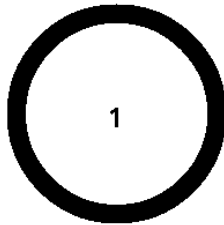
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



HDW-0158



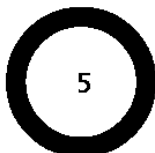
HDW-0177



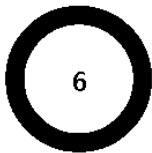
HDW-0150



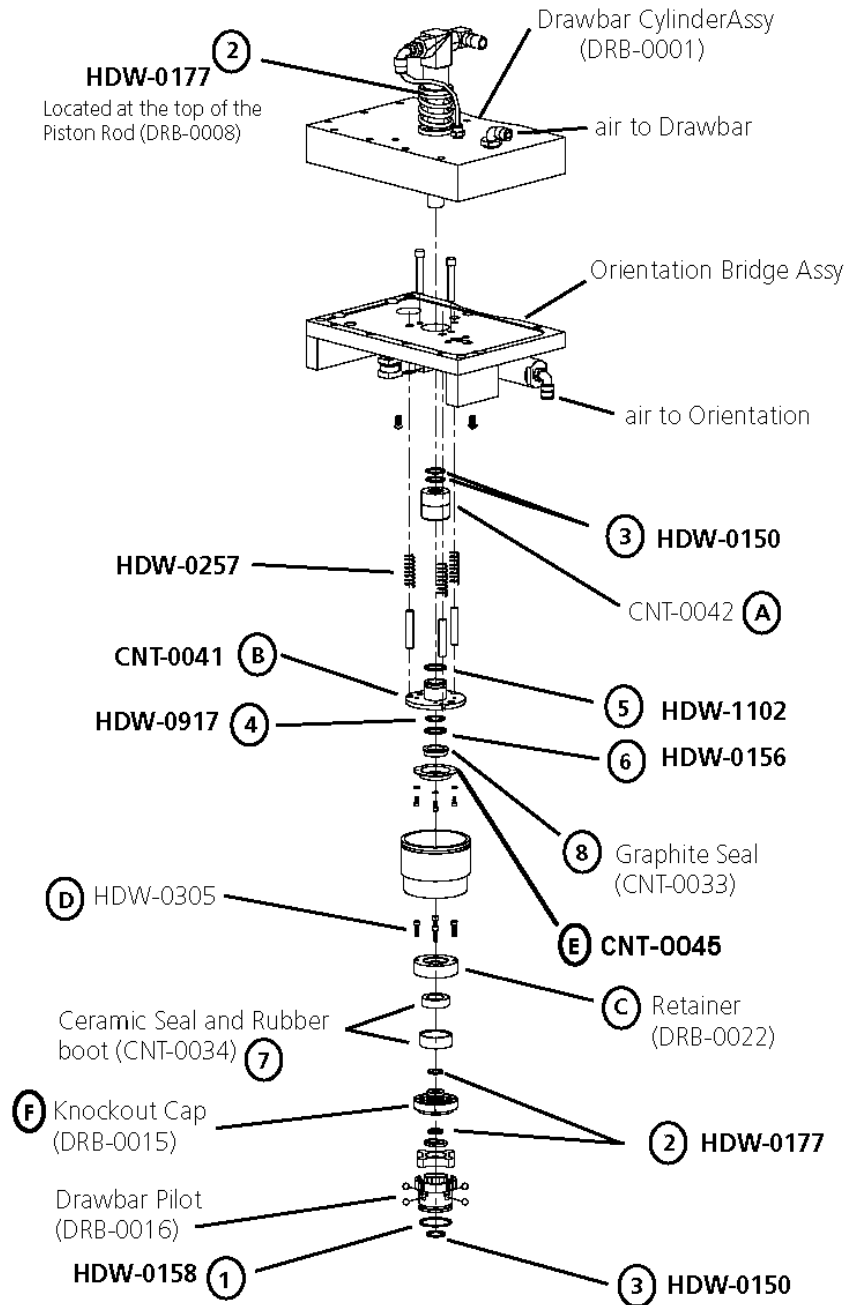
HDW-0917



HDW-1102

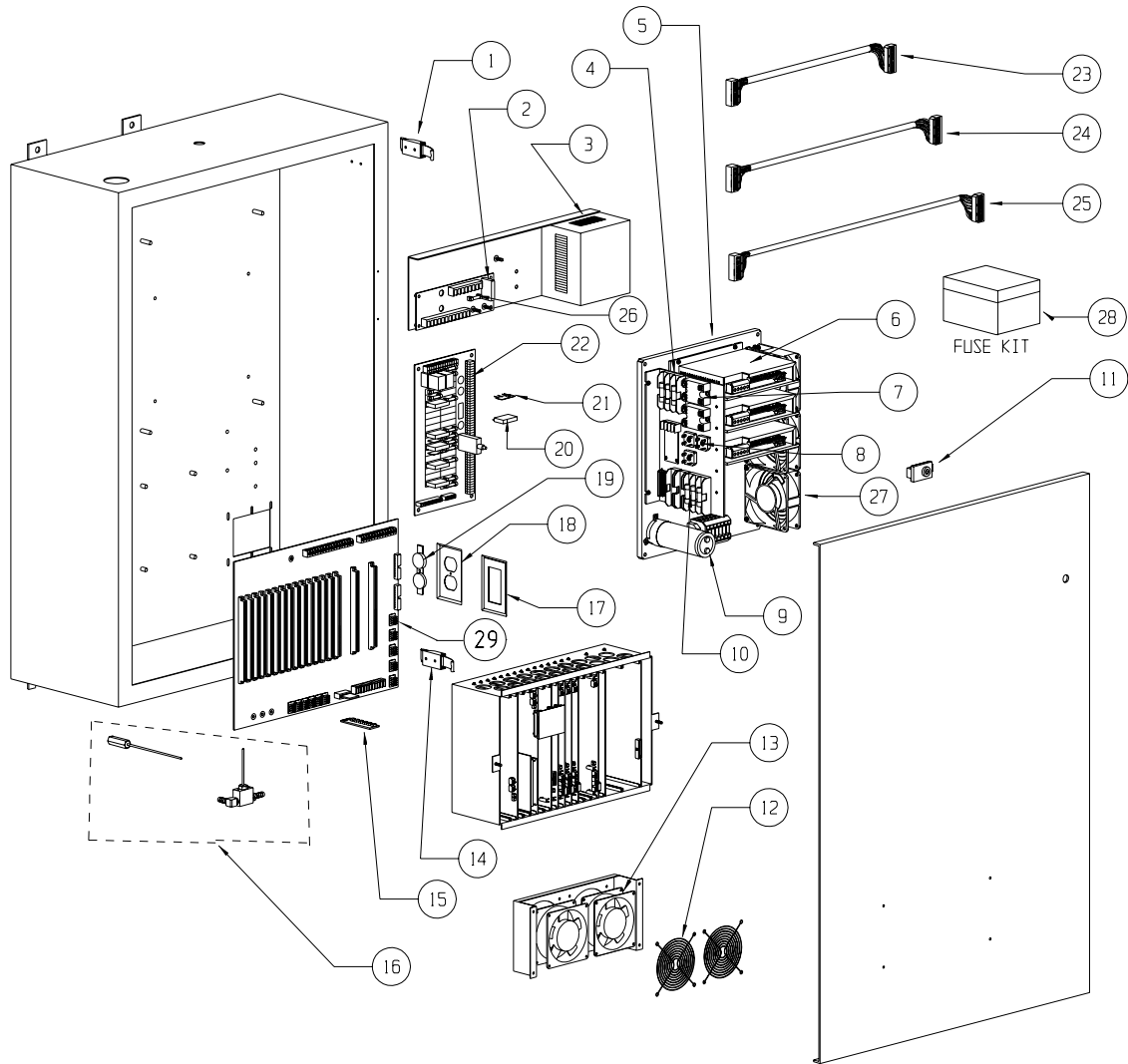


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

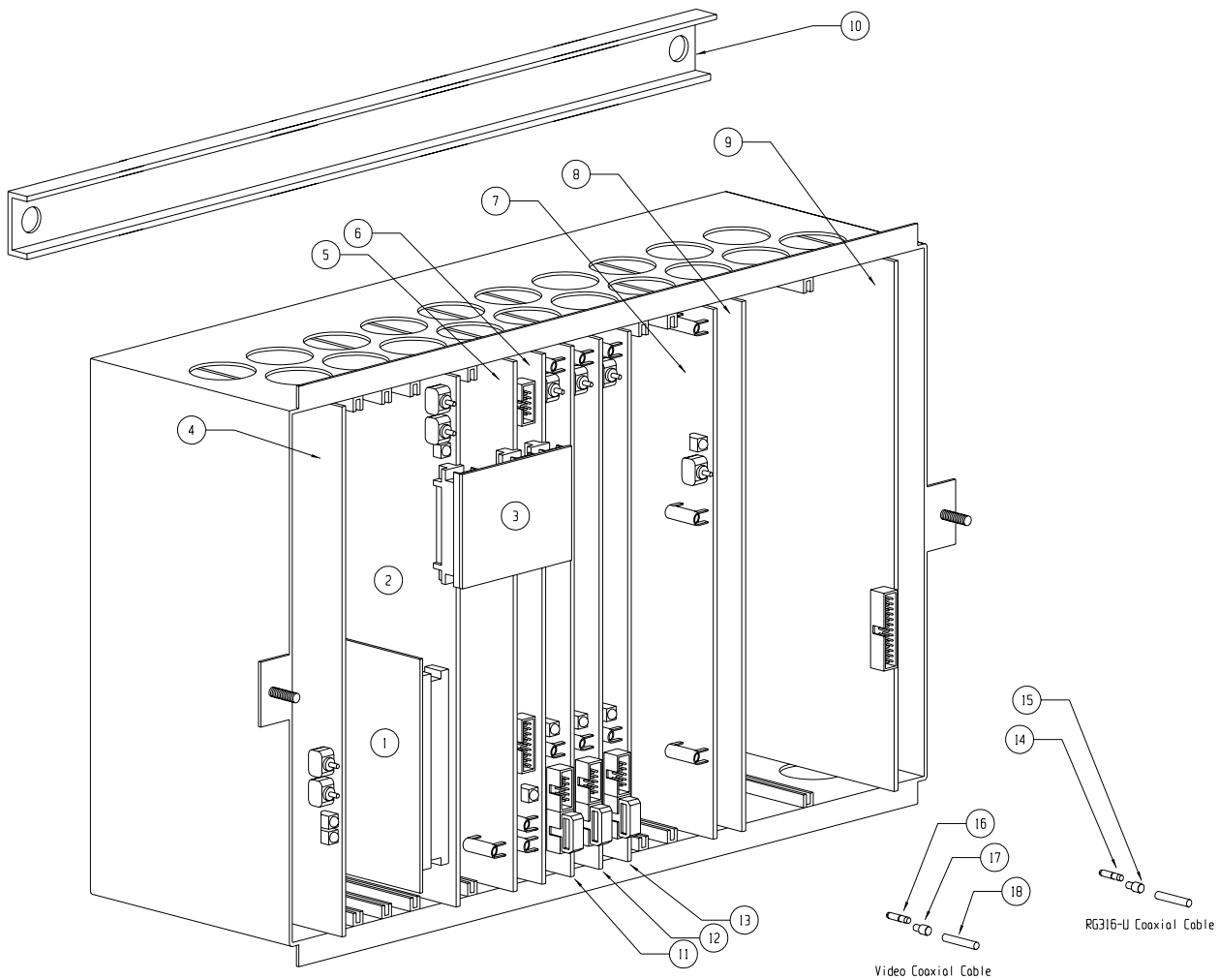
# CNC CABINET ASSEMBLY



CNC CABINET ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0028 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0033 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0029 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0034 (AMC)					29	PCB-0009
7	ELE-0074						

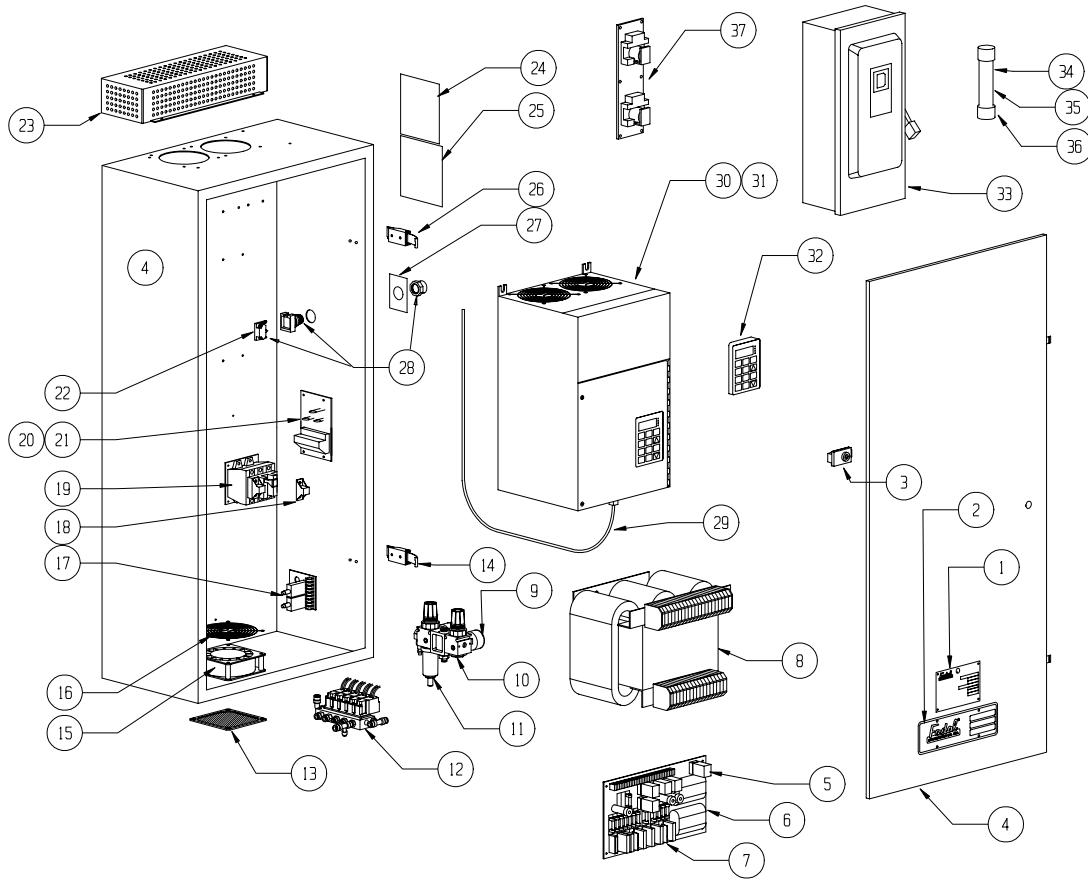
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

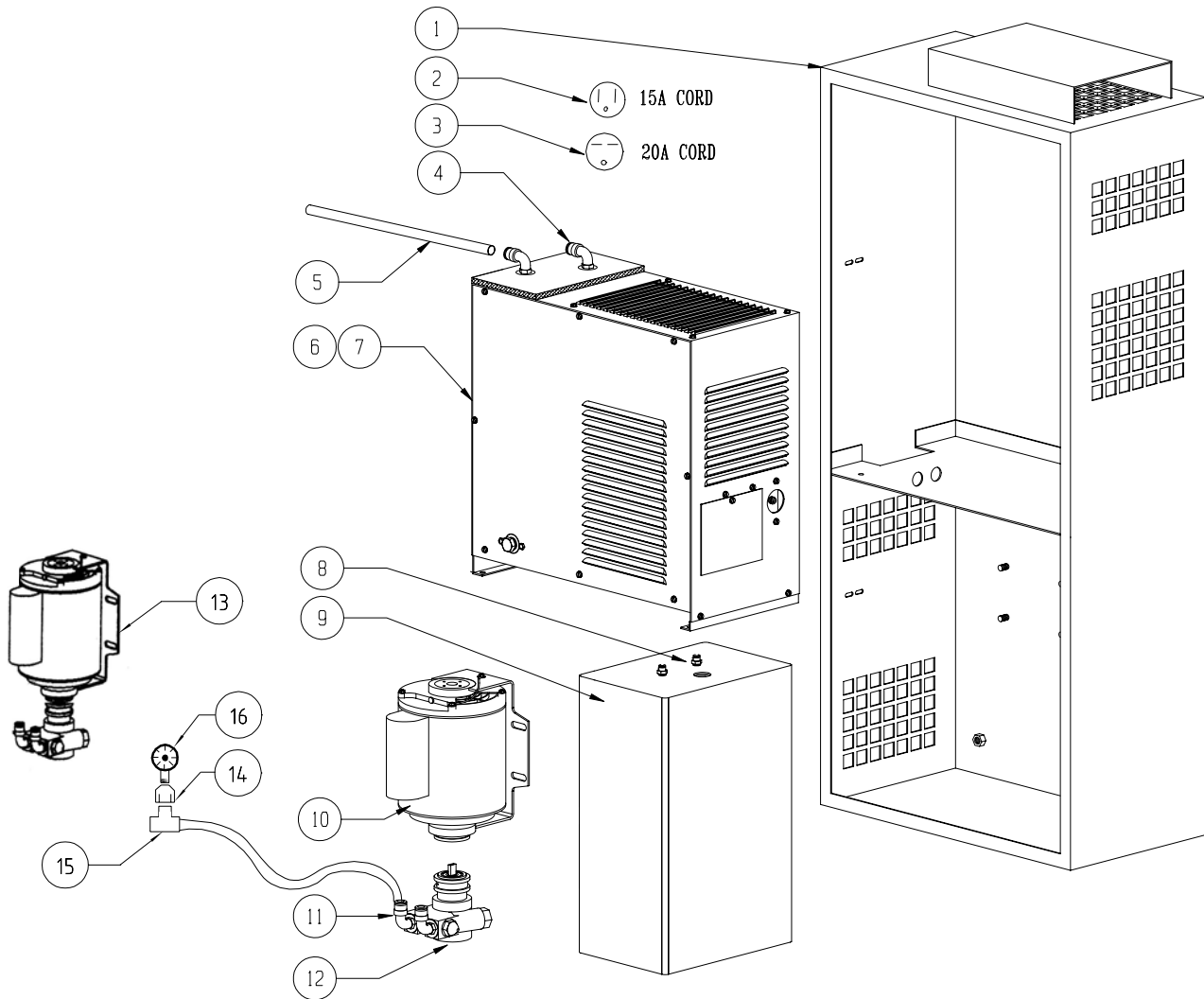
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY 7500/10,000 RPM**

	PART #		PART #		PART #		PART #
1	LBL-0029	11	REG-0008	21	PCB-0146 (480V)	31	INV-0041
2	LBL-0106	12	VLV-0055 (7.5K)	22	ELE-0093		
			VLV-0054 (10K)			32	INV-0017
3	HDW-0221	13	HDW-0849	23	INV-0001	33	ELE-0139 (60AMP)
4	STM-0051	14	HDW-0216	24	LBL-0037		ELE-0141 (30AMP)
5	ELE-0072	15	ELE-0123	25	LBL-0040	34	ELE-0063 (45A 240V)
6	PCB-0015	16	HDW-0850	26	HDW-0219	35	ELE-0062 (30A 380V)
7	ELE-0070	17	PCB-0046	27	LBL-0038	36	ELE-0060 (20A 480V)
8	ELE-0018	18	ELE-0136	28	ELE-0110	37	WIR-0073
	ELE-0019						
9	REG-0005	19	ELE-0132	29	WIR-0166		
10	REG-0009	20	PCB-0145 (240V)	30	INV-0045 (7.5K)		

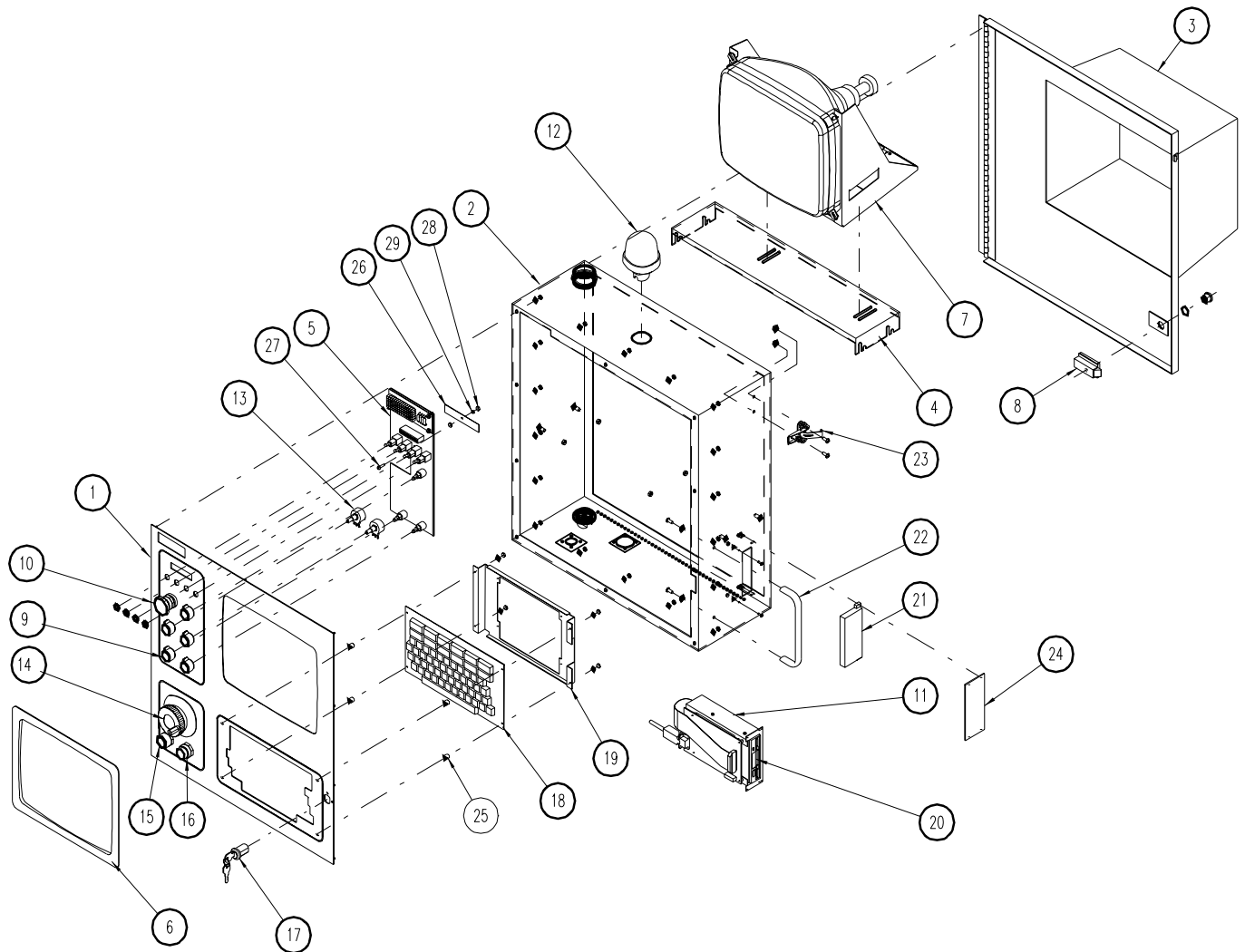
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PLM-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

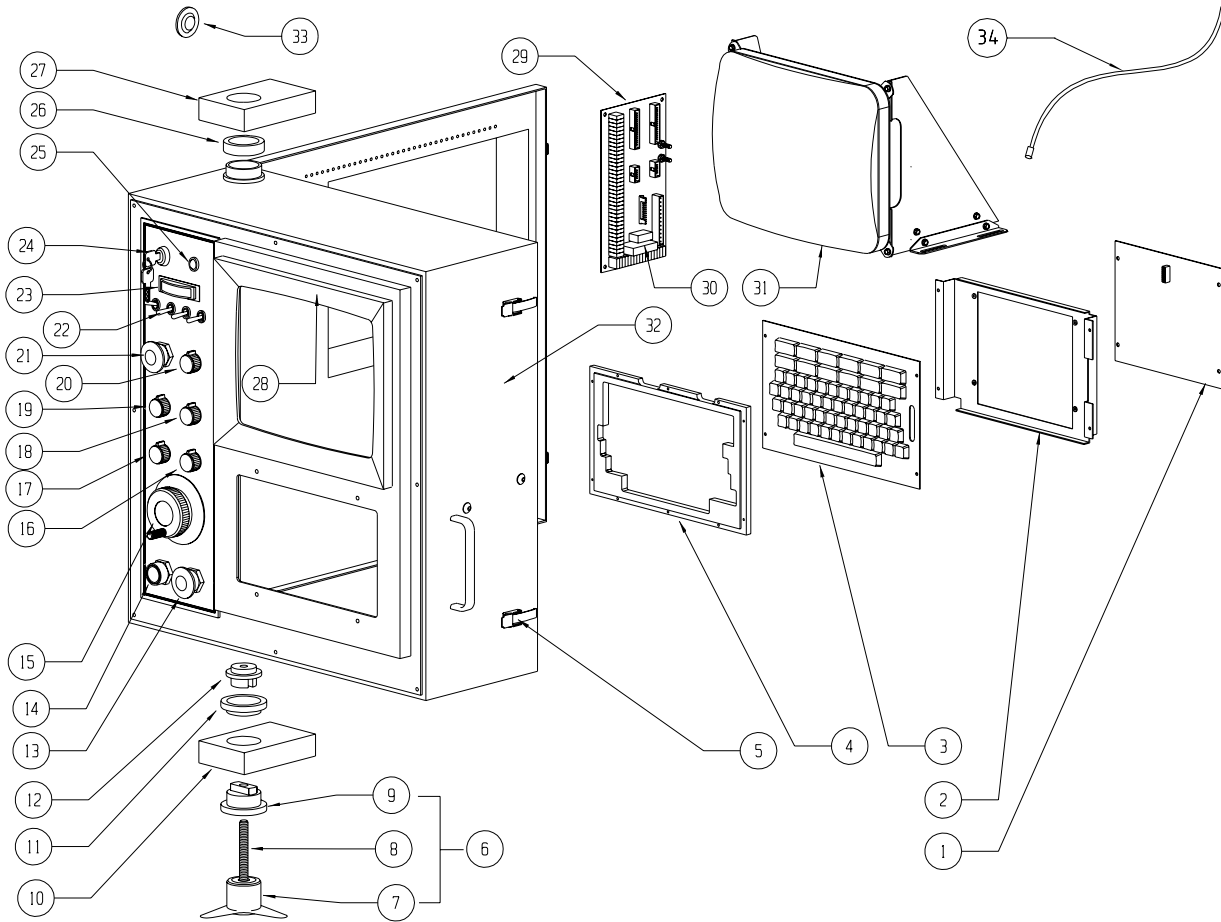
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

# 88HS PENDANT ASSEMBLY

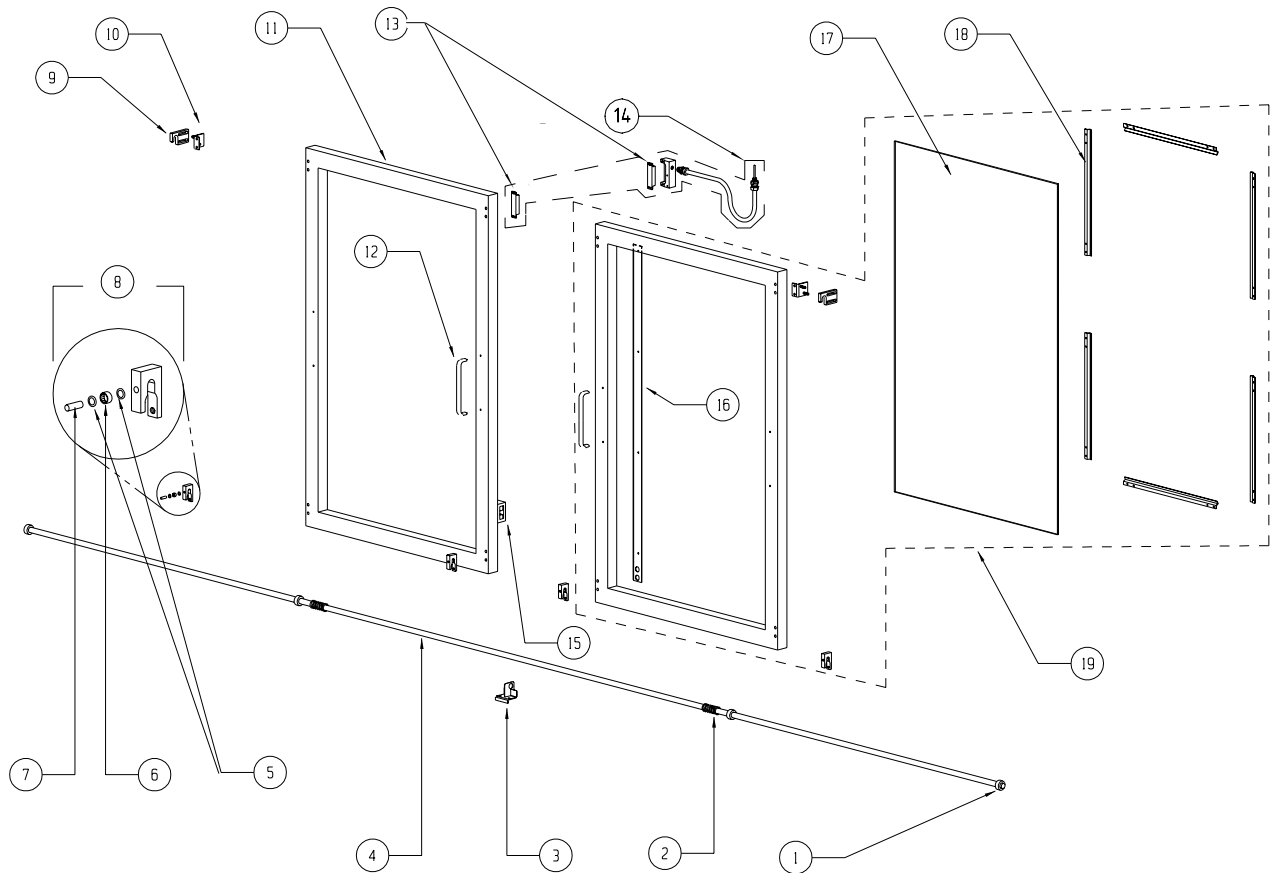


**88HS PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				



# FRONT DOOR ASSEMBLY



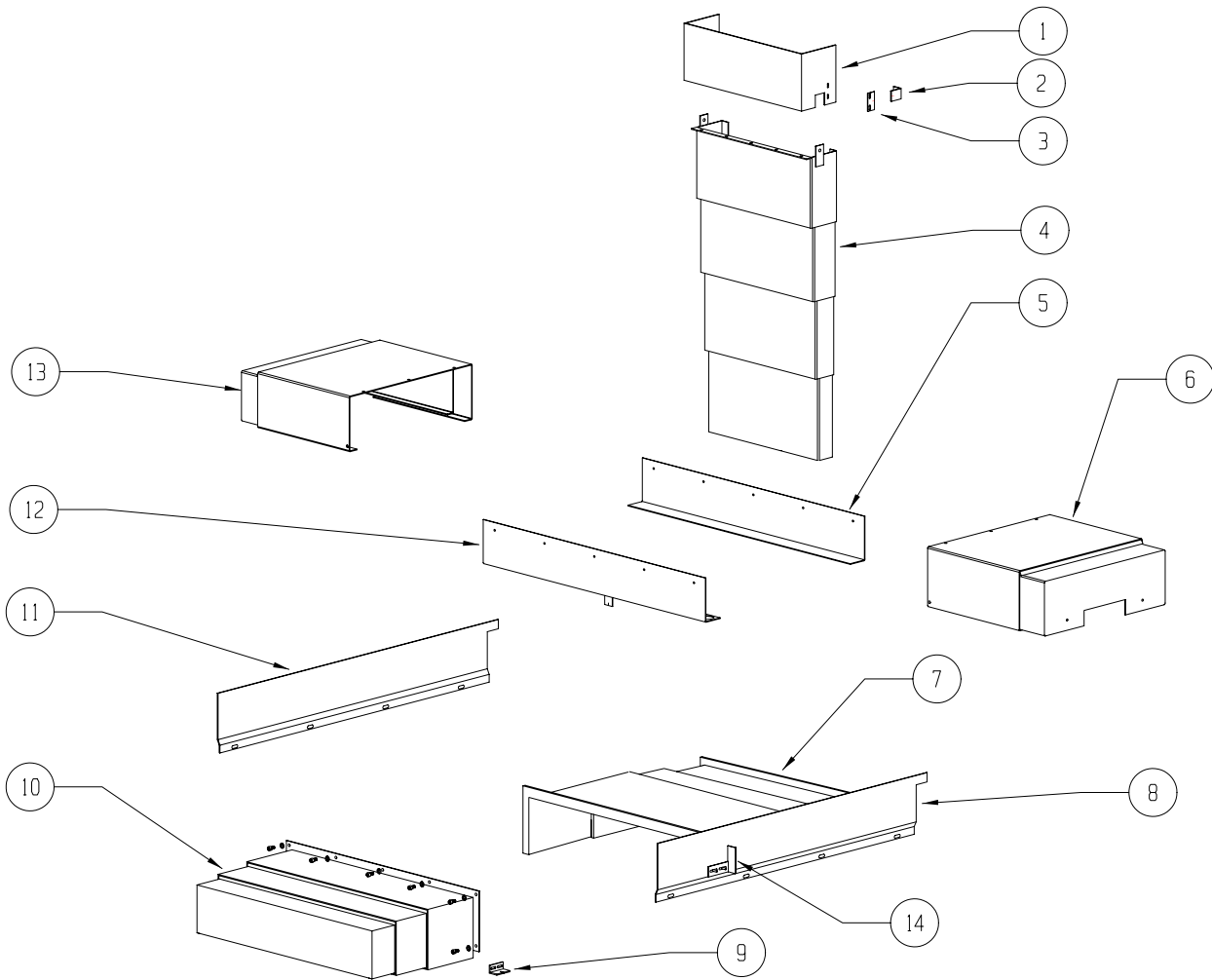
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0053	11	DOR-0002	18	STM-0084
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

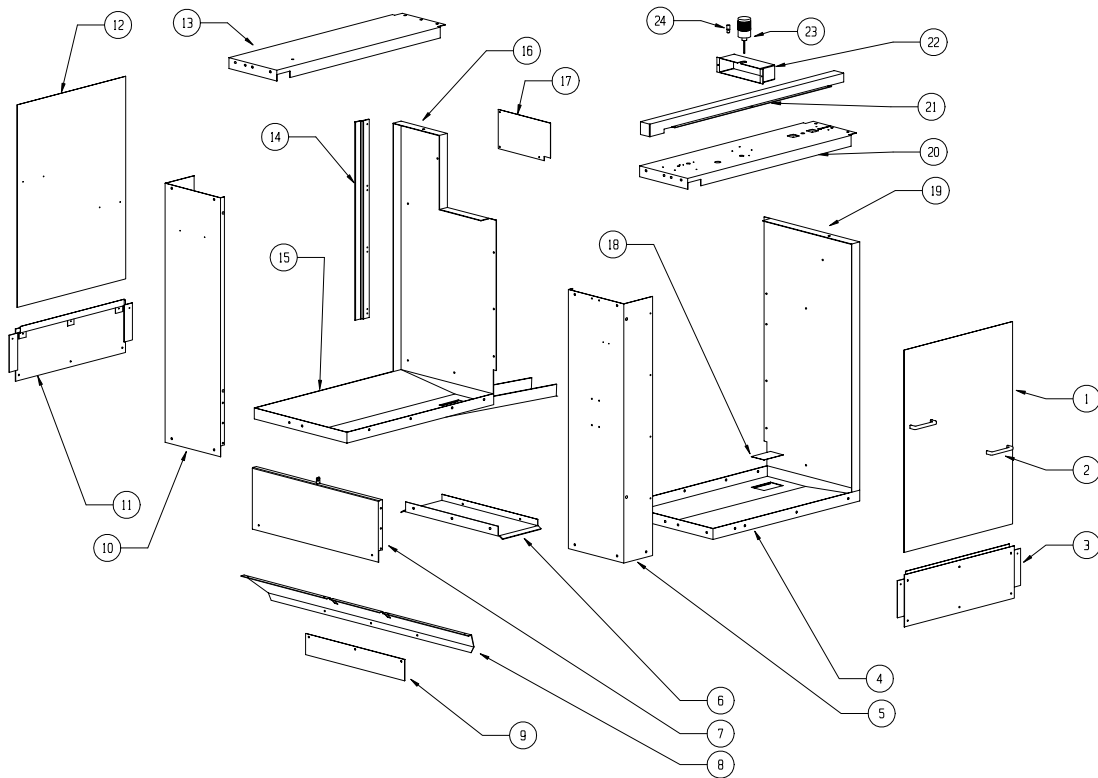
# WAY COVER ASSEMBLY



**WAY COVER ASSEMBLIES**

	PART #		PART #		PART #
1	STM-0225	5	STM-0227	10	CVR-0087
2	STM-0048	6	CVR-0016	11	CVR-0085
3	STM-0044	7	CVR-0088	12	STM-0468
4	CVR-0057 (20")	8	CVR-0086	13	CVR-0016
	CVR-0061 (28")	9	STM-0047	14	STM-0224

# SHEETMETAL HOUSING

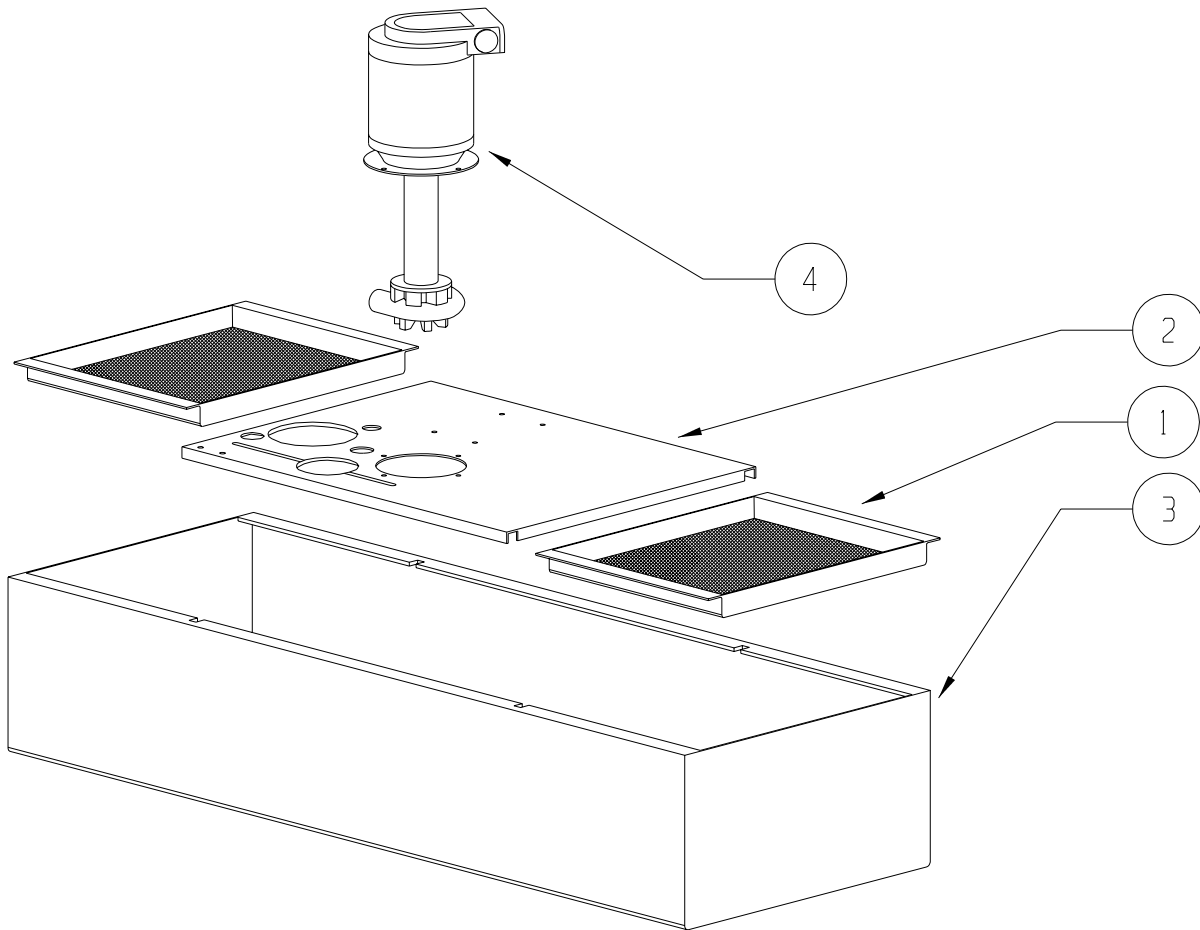


## SHEETMETAL HOUSING

	PART #		PART #		PART #		PART #
1	STM-0241	7	STM-0078	13	STM-0258	19	STM-0578
2	HDW-0182	8	STM-0527	14	STM-0244	20	STM-0257
3	STM-0296	9	STM-0228	15	STM-0325	21	STM-0085
4	STM-0327	10	STM-0382	16	STM-0577	22	STM-0088
5	STM-0383	11	STM-0296	17	STM-0282 <sup>(1)</sup>	23	ELE-0121
6	STM-0354	12	STM-0241	18	STM-0110	24	ELE-0122

<sup>1</sup>For extended column models only.

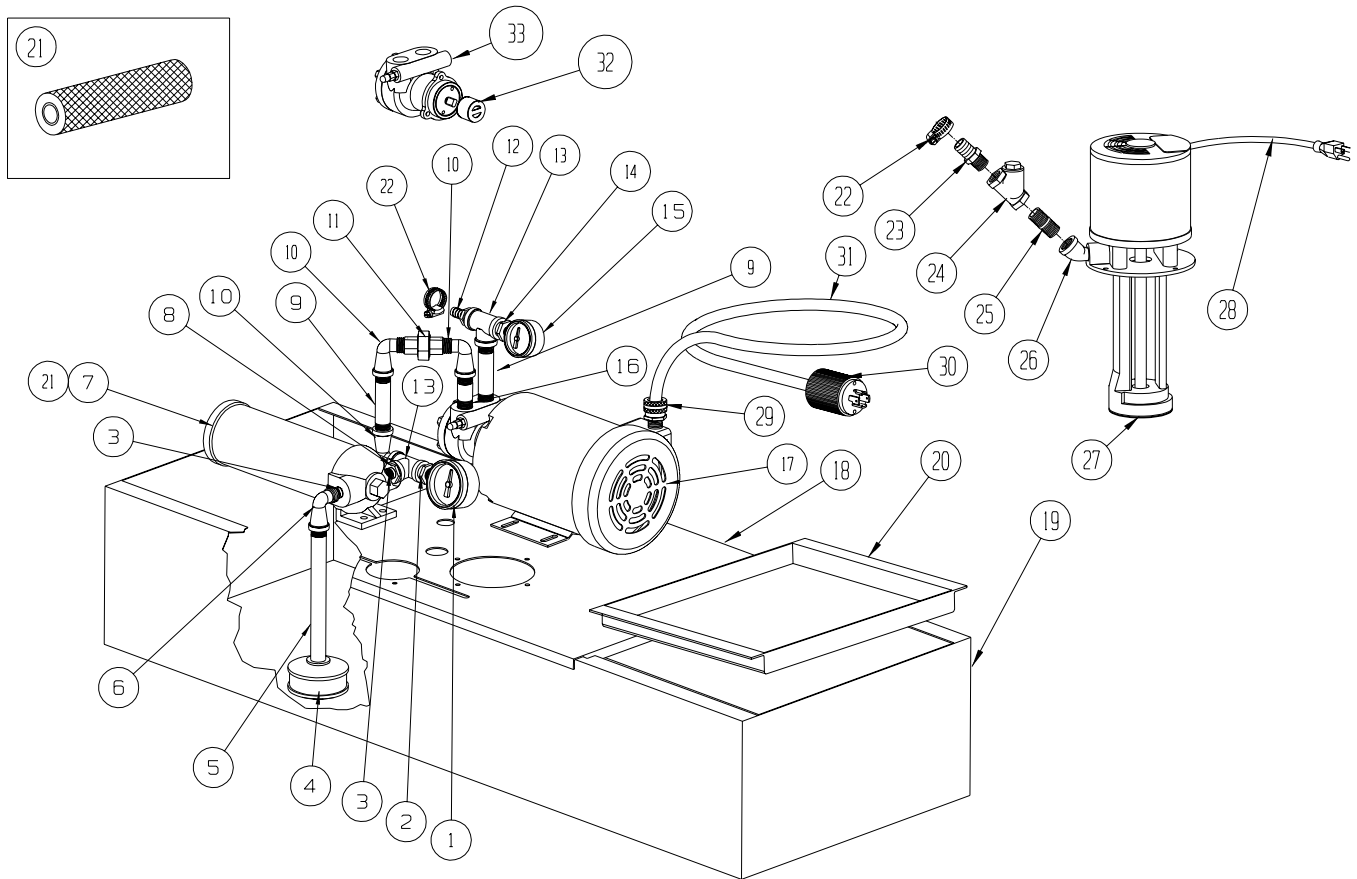
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

# 7500 RPM COOLANT THROUGH TANK

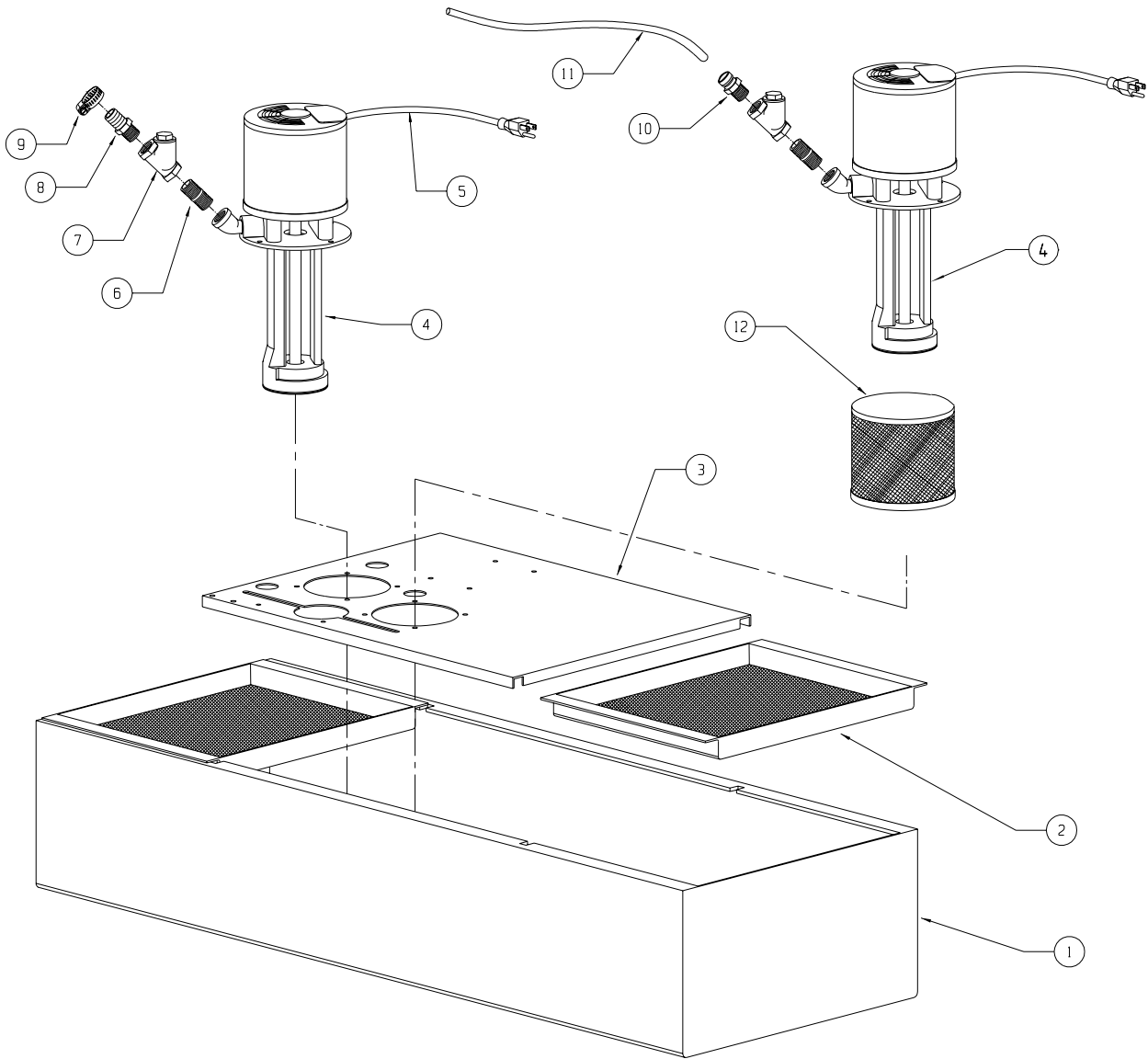


**7500 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

<sup>1</sup>Filter (CNT-0029) fits inside filter housing (CNT-0027).

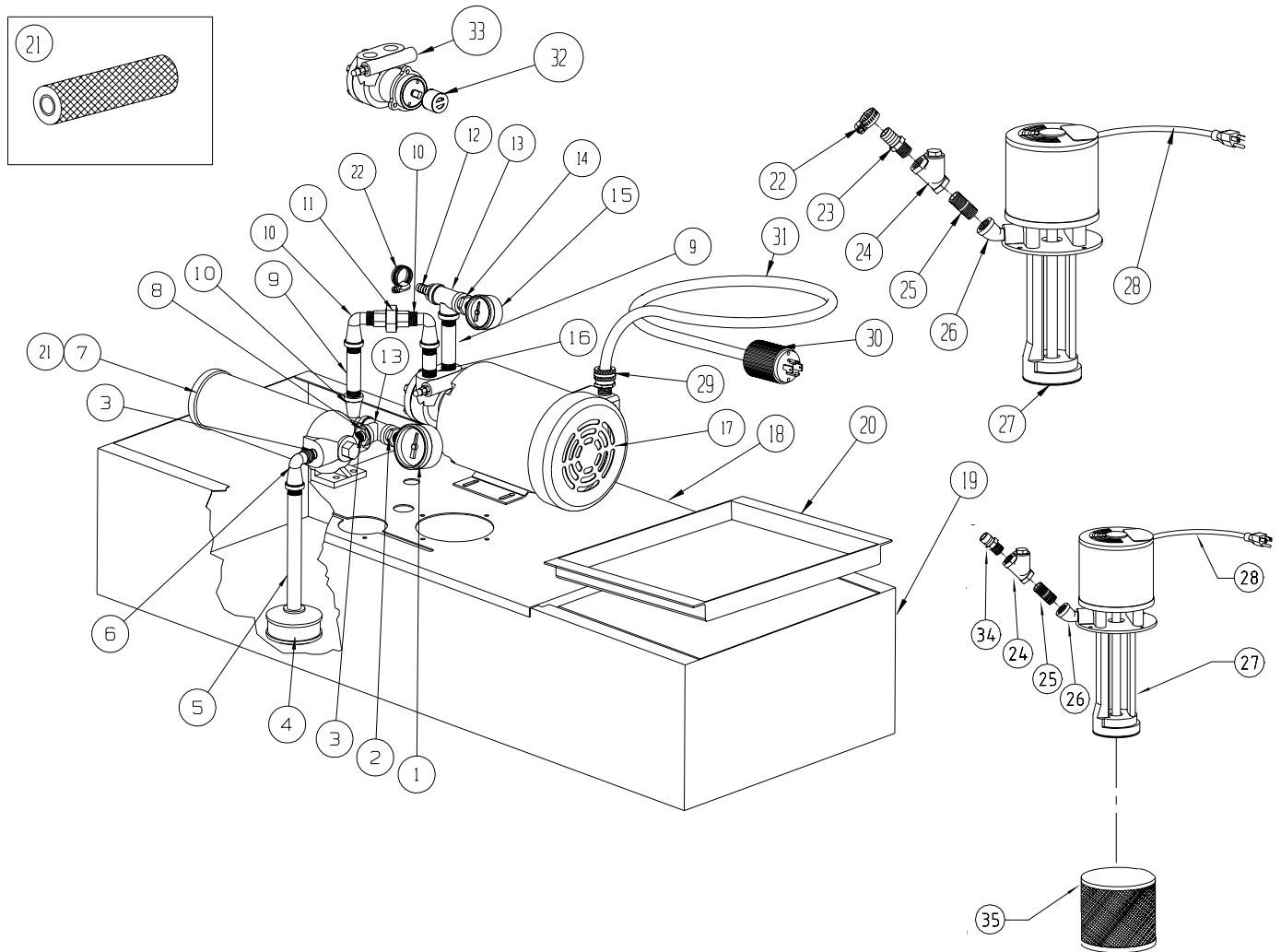
# 10K RPM COOLANT TANK



**10,000 RPM COOLANT TANK ASSEMBLY**

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# 10K RPM COOLANT THROUGH TANK



**10,000 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

<sup>1</sup>Filter (CNT-0029) fits inside filter housing (CNT-0027).

# TABLE OF CONTENTS

## Parts Manual VMC 2216 MODEL



COLUMN ASSEMBLY .....	2
10,000 RPM HEAD ASSEMBLY .....	4
BASE, SADDLE & TABLE ASSEMBLY .....	6
X-AXIS SCALE ASSEMBLY .....	8
Y-AXIS SCALE ASSEMBLY .....	9
DRAWBAR CYLINDER ASSEMBLIES.....	10
ORIENTATION BRIDGE ASSEMBLIES.....	11
IDLER ASSEMBLIES .....	12
WAY LUBE ASSEMBLY.....	14
GENEVA DRIVE ATC ASSEMBLY .....	16
SERVO DRIVE ATC ASSEMBLY .....	18
7500 RPM SPINDLE ASSEMBLY .....	20
10,000 RPM SPINDLE ASSEMBLY .....	21
COOLANT THROUGH SPINDLE.....	22
CNC CABINET ASSEMBLY.....	23
CARD CAGE ASSEMBLY .....	24
POWER JUNCTION CABINET ASSEMBLY .....	25
CHILLER CABINET ASSEMBLY .....	26
MP PENDANT ASSEMBLY .....	27
88HS PENDANT ASSEMBLY .....	28
FRONT DOOR ASSEMBLY .....	29
WAY COVER ASSEMBLIES .....	30
SHEETMETAL HOUSING.....	31
7500 RPM COOLANT TANK .....	32
7500 RPM COOLANT THROUGH TANK ASSEMBLY .....	33
10,000 RPM COOLANT TANK ASSEMBLY ASSEMBLY .....	34
10,000 RPM COOLANT THROUGH TANK ASSEMBLY.....	35





**This reference covers the following Fadal products:**

**Model VMC 2216**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

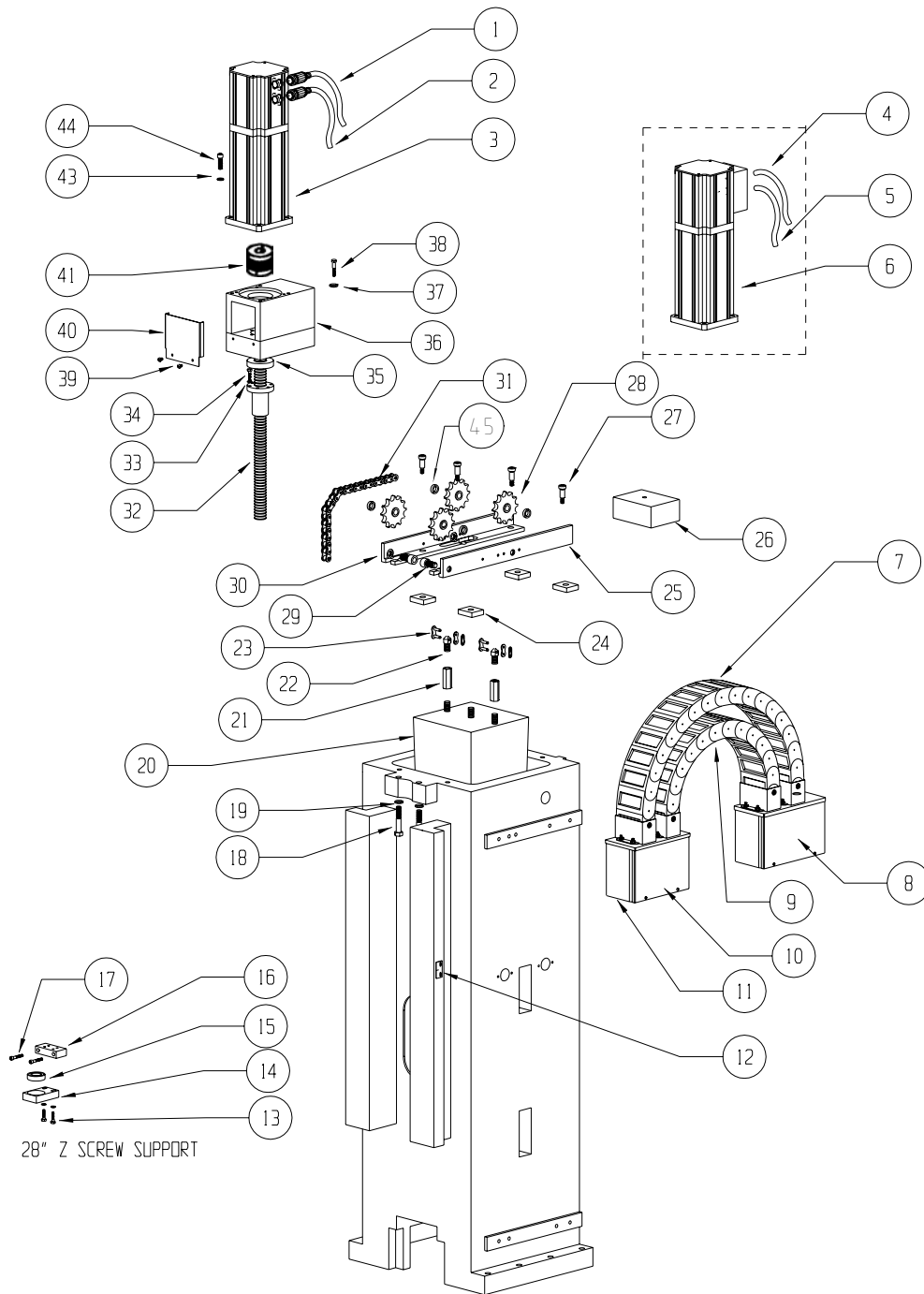
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

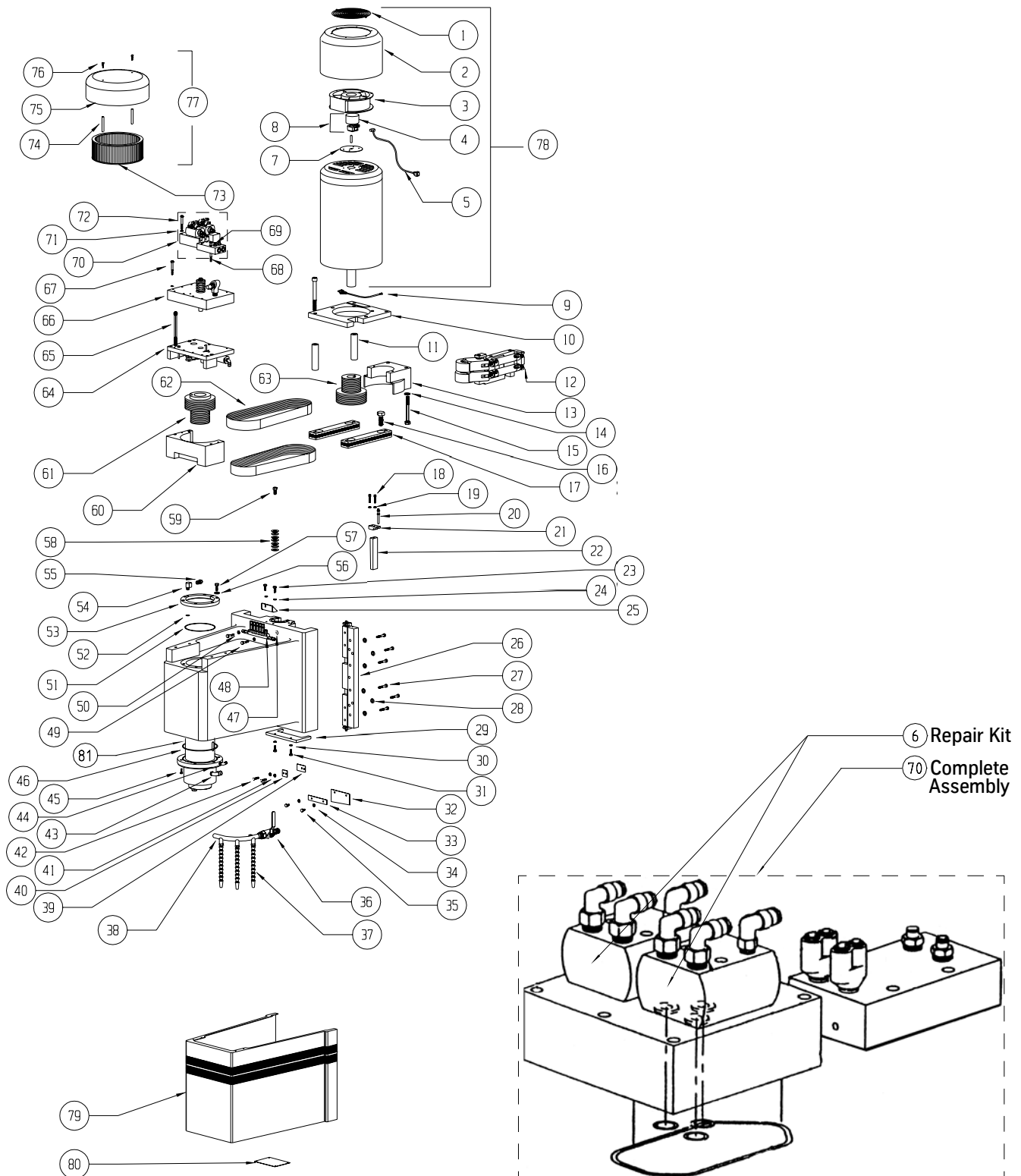


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	HDW-0317	24	HDW-0363	35	BLS-0105
2	WIR-0611		HDW-0048	25	CWT-0005	36	BLS-0032
3	MTR-0142	14	BLS-0042	26	CWT-0002	37	HDW-0049
4	WIR-0558	15	BRG-0023	27	HDW-0600	38	HDW-0315
5	WIR-0559	16	BLS-0041	28	PUL-0034	39	HDW-0347
6	MTR-0126	17	HDW-0297	29	HDW-0777	40	STM-0043
7	CVR-0074	18	HDW-0655	30	CWT-0007	41	MTR-0189
8	STM-0072	19	HDW-0050	31	HDW-0205	43	HDW-0280
9	CVR-0072	20	CWT-0018	32	BLS-0031 (20")	44	HDW-0779
10	STM-0300	21	HDW-0335		BLS-0024 (28")	45	CWT-0009
11	STM-0301	22	CWT-0001	33	HDW-0281		
12	STM-0044	23	HDW-0204	34	HDW-0319		

# 10K RPM HEAD ASSEMBLY



# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

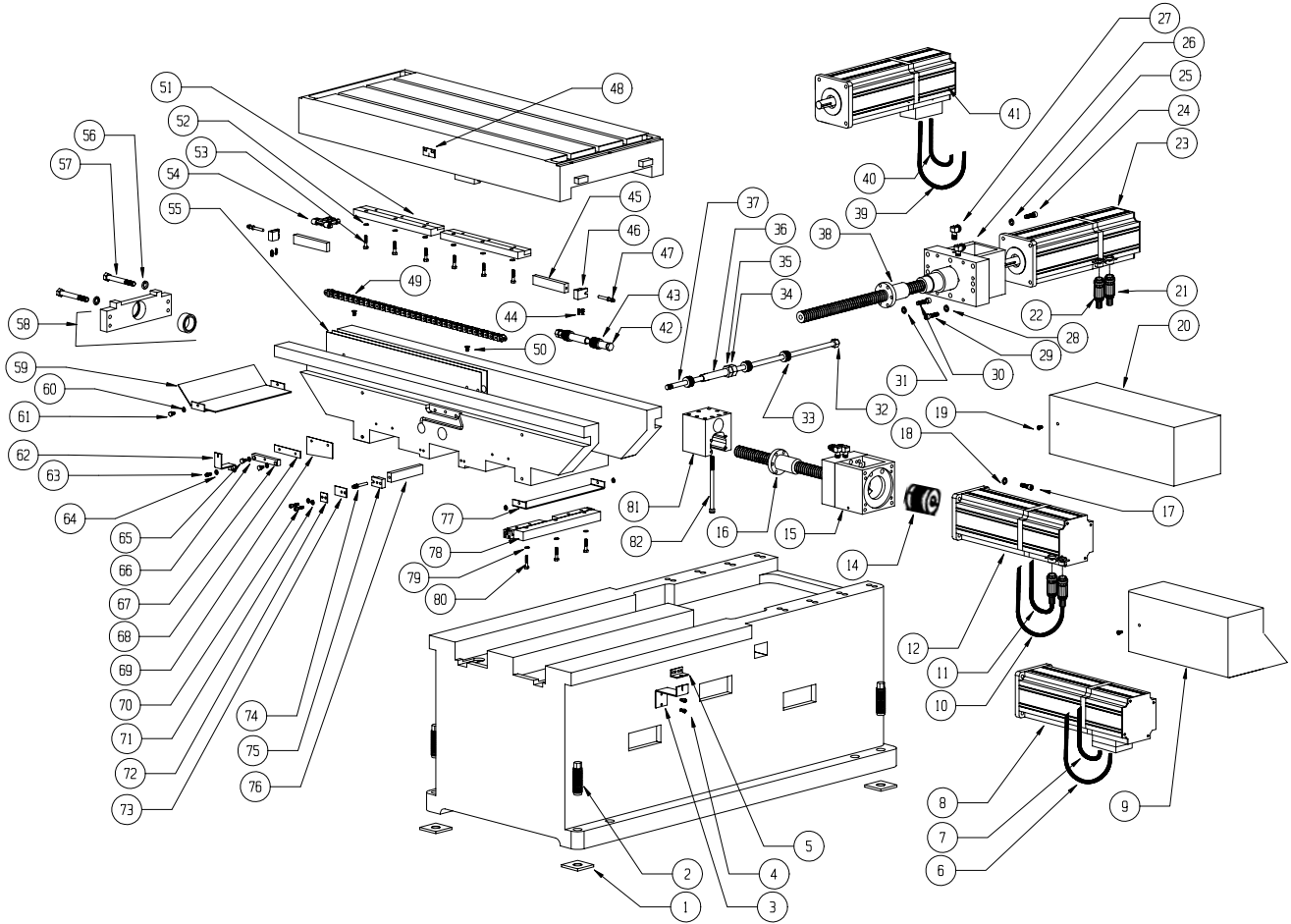
	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	HDW-0553
2	STM-0139	31	HDW-0322	60	BEL-0014
3	ELE-0124	32	HDW-0356	61	PUL-0018
4	MTR-0123	33	STM-0052	62	BEL-0024
5	WIR-0168	34	HDW-0279	63	PUL-0019
6	HYD-0018	35	HDW-0319	64	ORB-0001
7	STM-0148	36	VLV-0017	65	HDW-0290
8	ENC-0007	37	PLM-0016	66	DRB-0000
9	HDW-0369	38	CNT-0039	67	HDW-0320
10	MTR-0070	39	HDW-0294	68	HDW-0321 (HT)
11	MTR-0079	40	STM-0042	69	HDW-0279 (HT)
12	IDL-0002	41	HDW-0279	70	HYD-0017 (HT)
	IDL-0003(HT)				
13	BEL-0015	42	HDW-0294	71	HDW-0279 (HT)
14	HDW-0451	43	PLM-0112	72	HDW-0320 (HT)
15	HDW-0311	44	PLM-0034	73	MTR-0127
16	HDW-0283	45	HDW-0470	74	SVT-0108
17	MTR-0068	46	HDW-0181	75	STM-0467
	MTR-0064				
18	HDW-0294	47	HDW-0380	76	HDW-0597
19	HDW-0279	48	LUB-0045	77	MTR-0128
20	GIB-0013	49	HDW-0576	78	MTR-0045 <sup>(1)</sup>
21	GIB-0010	50	HDW-0279		MTR-0048 (HT)
22	GIB-0033	51	HDW-0169	79	CVR-0151
23	HDW-0320	52	HDW-0177	80	STM-0064
24	HDW-0279	53	SPN-0042	81	SPN-0007 <sup>(2)</sup>
25	STM-0141	54	PLM-0045		
26	GIB-0004	55	PLM-0088		
27	HDW-0569	56	HDW-0275		
28	HDW-0280	57	HDW-0568		
29	CVR-0048	58	HDW-0194		

<sup>1</sup>MTR-0045 INCLUDES: PUL-0019

<sup>2</sup>SPN-0007 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018.

(HT)=High Torque Option

# BASE, SADDLE & TABLE ASSEMBLY



# BASE, SADDLE & TABLE ASSEMBLY

## BASE, SADDLE & TABLE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	18	HDW-0280	35	HDW-0637	52	HDW-0312	69	HDW-0356
2	HDW-0374	19	HDW-0347	36	HDW-0219	53	HDW-0859	70	HDW-0295
3	STM-0112	20	STM-0609	37	BLS-0187	54	LUB-0044	71	HDW-0279
4	HDW-0295	21	WIR-0610	38	BLS-0029	55	STM-0075	72	STM-0042
5	STM-0047	22	WIR-0609	39	WIR-0557	56	HDW-0444	73	HDW-0355
6	WIR-0554	23	MTR-0142	40	WIR-0556	57	HDW-0311	74	GIB-0013
7	WIR-0555	24	HDW-0779	41	MTR-0126	58	BLS-0028	75	GIB-0010
8	MTR-0126	25	HDW-0280	42	HDW-0556	59	STM-0356	76	GIB-0001 <sup>(3)</sup>
9	STM-0575	26	BLS-0030	43	BLS-0142	60	HDW-0279	77	STM-0357
10	WIR-0608	27	PLM-0112	44	HDW-0296	61	HDW-0319	78	GIB-0005 <sup>(3)</sup>
11	WIR-0607	28	HDW-0444	45	GIB-0001 <sup>(3)</sup>	62	STM-0045	79	HDW-0279
12	MTR-0142	29	HDW-0564	46	GIB-0011	63	HDW-0319	80	HDW-0569
		30	HDW-0603	47	GIB-0013	64	HDW-0279	81	BLS-0077
14	MTR-0189 <sup>(1)</sup>	31	HDW-0472	48	STM-0044	65	HDW-0294	82	HDW-0572
15	BLS-0027	32	HDW-0332	49	CVR-0038	66	HDW-0279		
16	BLS-0026 <sup>(2)</sup>	33	HDW-0194	50	HDW-0319	67	SDL-0007		
17	HDW-0779	34	HDW-0018	51	GIB-0006 <sup>(3)</sup>	68	STM-0052		

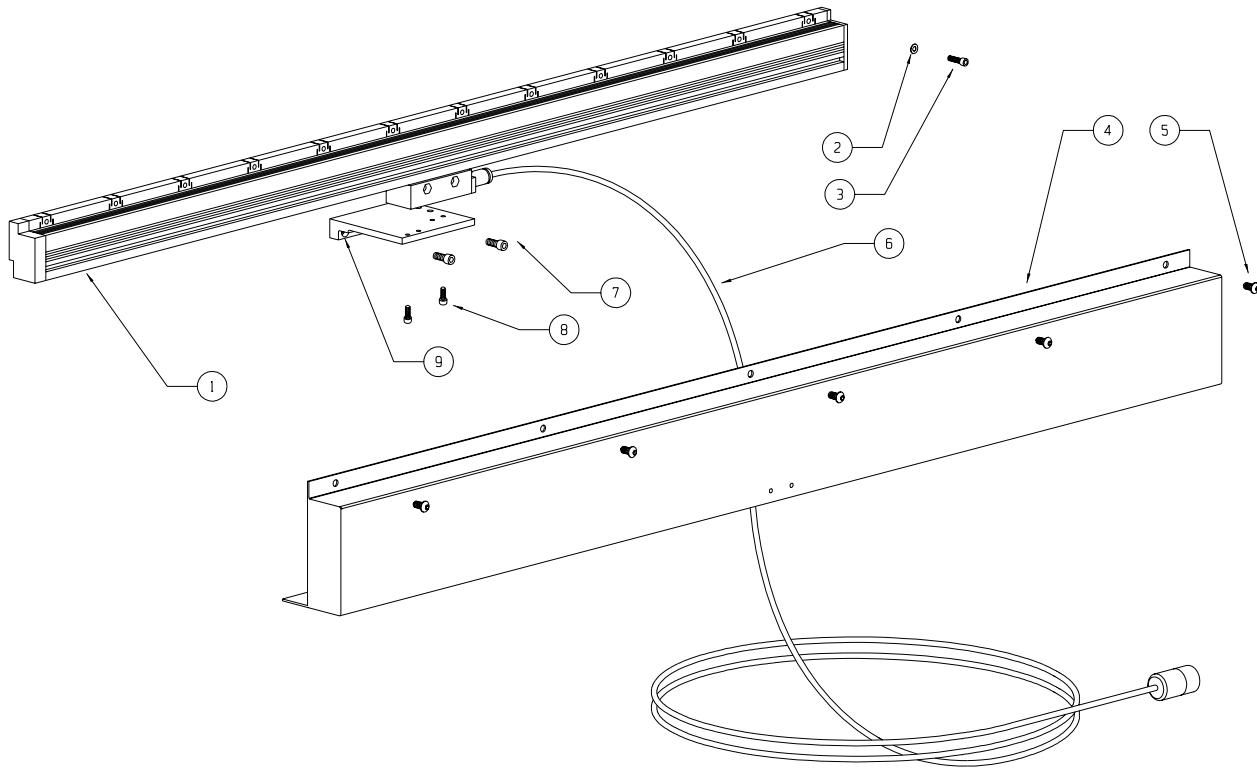
<sup>1</sup>Part of X and Y axes.

<sup>2</sup>Complete ballscrew assembly with bearing mount.

<sup>3</sup>Specify gib size when ordering.



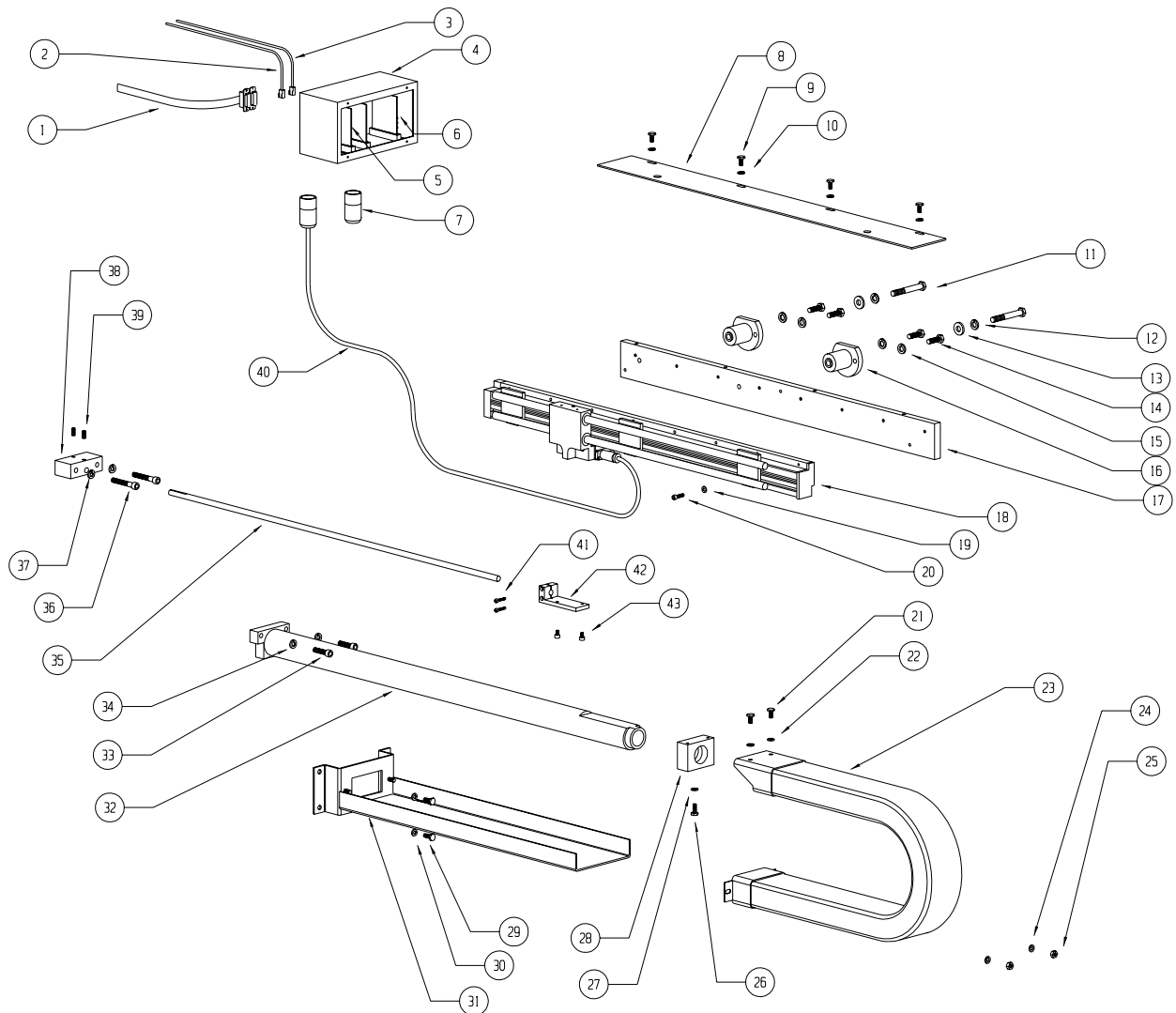
# X-AXIS SCALE ASSEMBLY



**X-AXIS SCALE ASSEMBLY**

	PART #		PART #
1	SCL-0025	6	SCL-0029
2	HDW-0281	7	HDW-0291
3	HDW-0797	8	HDW-0282
4	STM-0396	9	SCL-0036
5	HDW-0346		

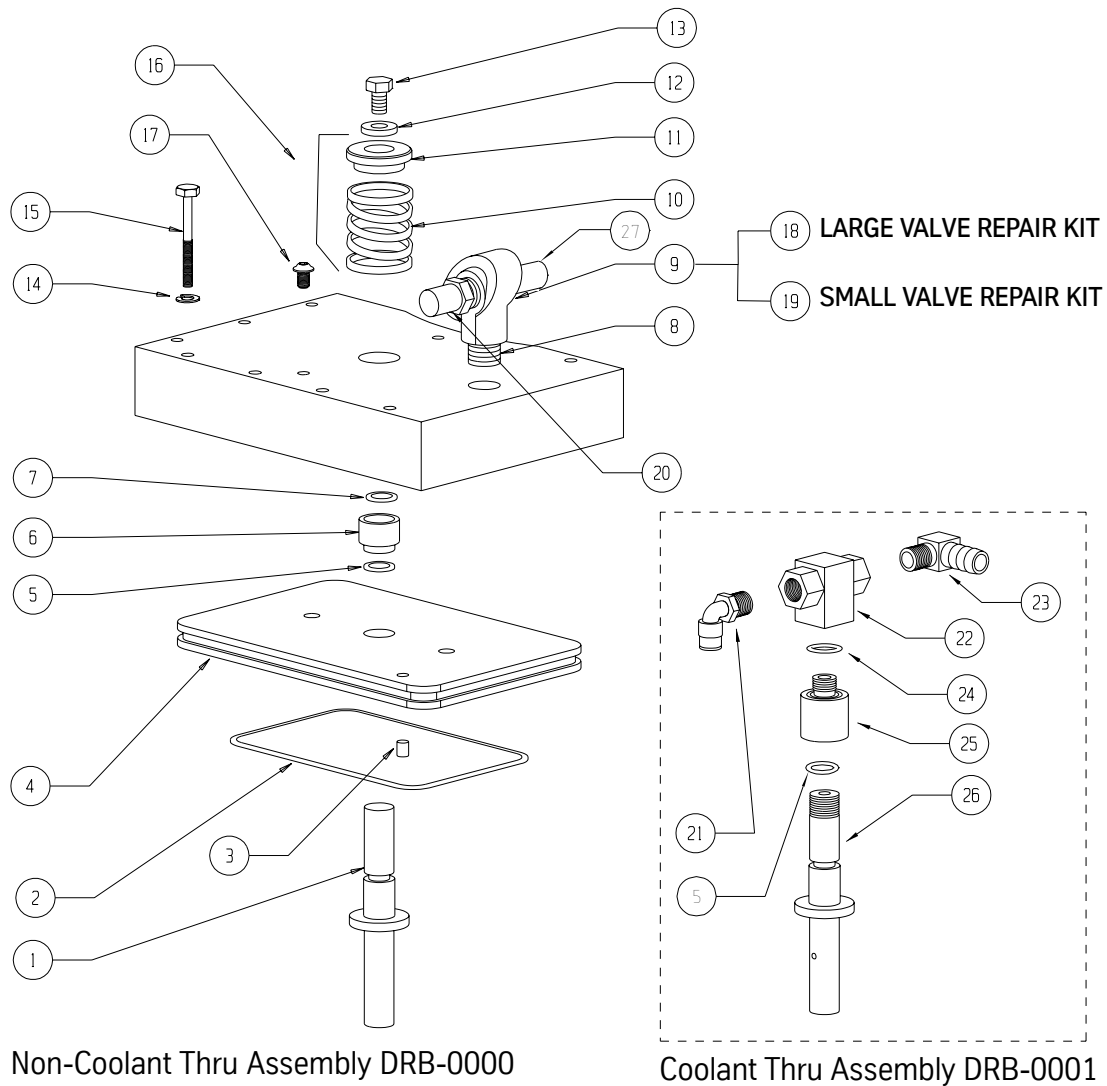
# Y-AXIS SCALE ASSEMBLY



Y-AXIS SCALE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	WIR-0509	9	HDW-0295	17	STM-0177	25	HDW-0581	33	HDW-0291
2	WIR-0506	10	HDW-0279	18	SCL-0002	26	HDW-0319	34	HDW-0279
3	WIR-0134	11	HDW-0311	19	HDW-0279	27	HDW-0281	35	SCL-0046
4	SCL-0006	12	HDW-0281	20	HDW-0297	28	SCL-0039	36	HDW-0488
5	PCB-0050	13	HDW-0444	21	HDW-0319	29	HDW-0482	37	HDW-0279
6	PCB-0170	14	HDW-0314	22	HDW-0279	30	HDW-0279	38	SCL-0045
7	SCL-0018	15	HDW-0281	23	CVR-0009	31	STM-0178	39	HDW-0408
8	STM-0179	16	SCL-0042	24	HDW-0281	32	SCL-0063	40	SCL-0029

# DRAWBAR CYLINDER ASSEMBLY



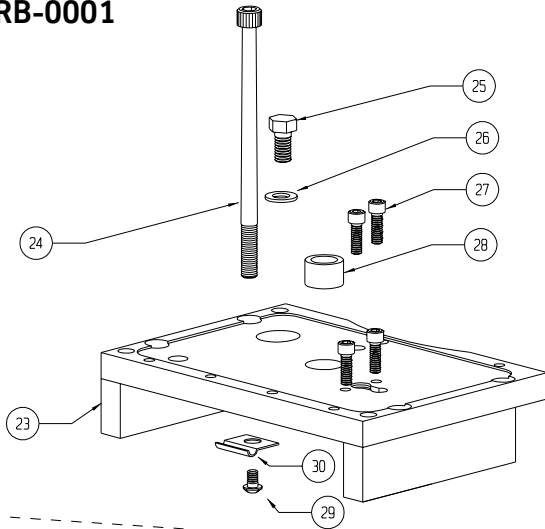
## DRAWBAR CYLINDER ASSEMBLIES

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

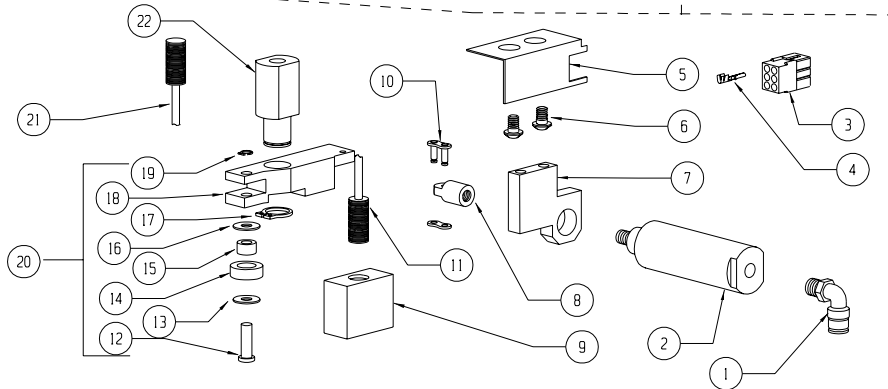
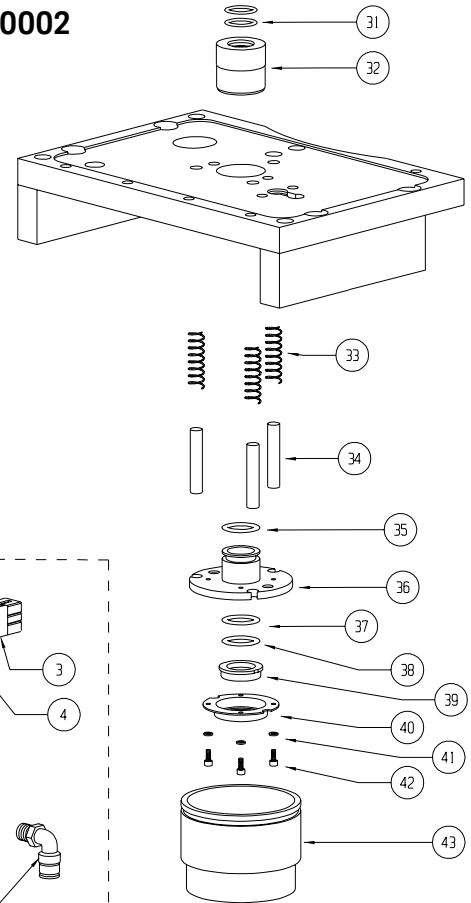
<sup>1</sup>Includes ELE-0147

# ORIENTATION BRIDGE ASSEMBLY

ORB-0001



ORB-0002



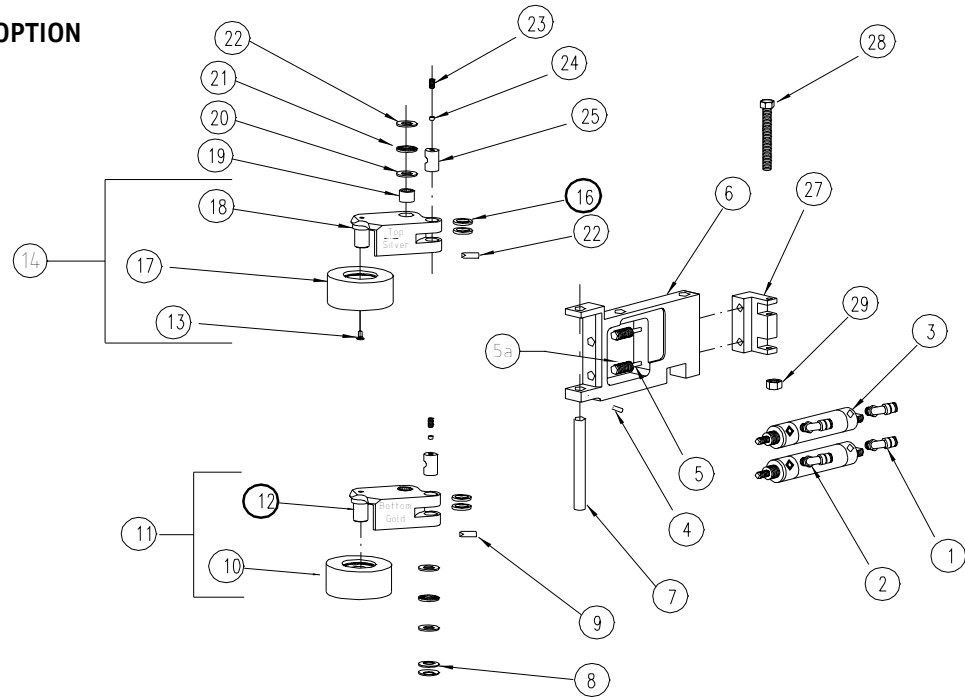
COMMON TO BOTH VERSIONS

## ORIENTATION BRIDGE ASSEMBLIES

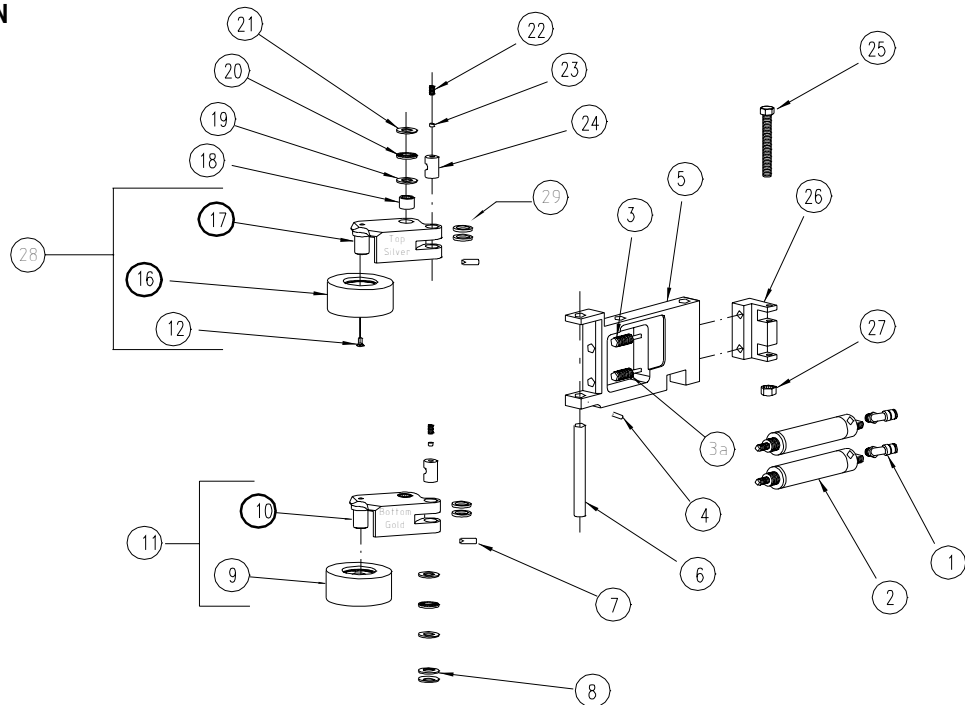
	PART#		PART#		PART#		PART#		PART#
1	PLM-0034	8	ORB-0011	18	ORB-0031	28	BRG-0008	38	HDW-0156
2	CYL-0007	9	ORB-0014	19	HDW-0726	29	HDW-0349	39	CNT-0033
3	WIR-0051	10	HDW-0209	20	ORB-0004	30	LUB-0077	40	CNT-0045
4	WIR-0043 (16 AWG)	11	ELE-0145	21	ELE-0145	31	HDW-0150	41	HDW-0453
	WIR-0044 (16 AWG)	12	ORB-0007	22	ORB-0013	32	CNT-0042	42	HDW-0308
	WIR-0544 (22 AWG)	13	HDW-0515	23	ORB-0008	33	HDW-0257	43	CNT-0140
	WIR-0056 (22 AWG)	14	ORB-0009	24	HDW-0285	34	HDW-0326		
5	STM-0596	15	BRG-0014	25	HDW-0571	35	HDW-0156		
6	HDW-0347	16	HDW-0515	26	HDW-0048	36	CNT-0041		
7	ORB-0030	17	HDW-0725	27	HDW-0298	37	HDW-0155		

# IDLER ASSEMBLY

## RIGID TAP/HIGH TORQUE OPTION



## 10,000 RPM OPTION



# IDLER ASSEMBLY

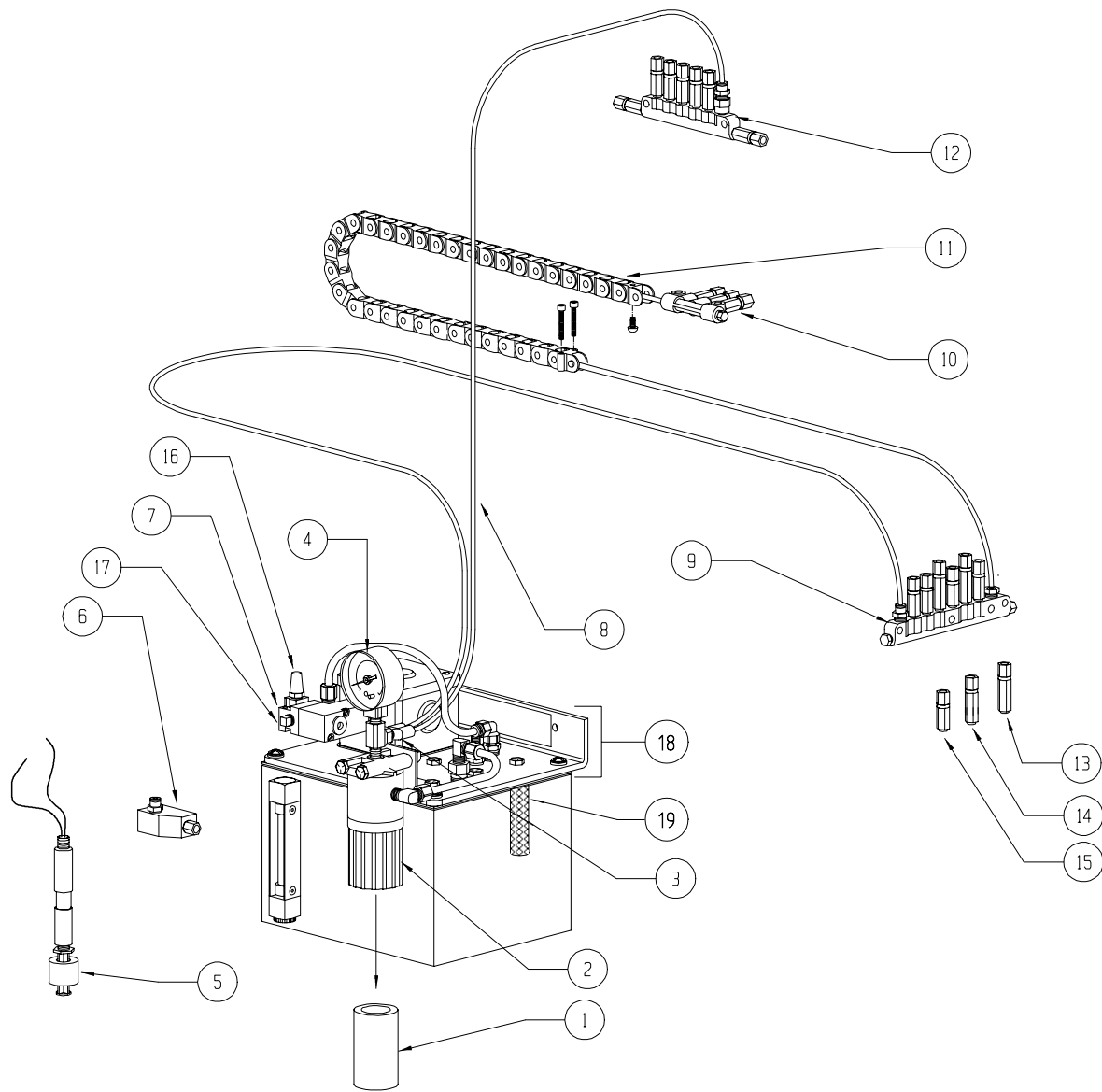
## RIGID TAP/HIGH TORQUE OPTION

	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

# WAY LUBE ASSEMBLY



**WAY LUBE ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		

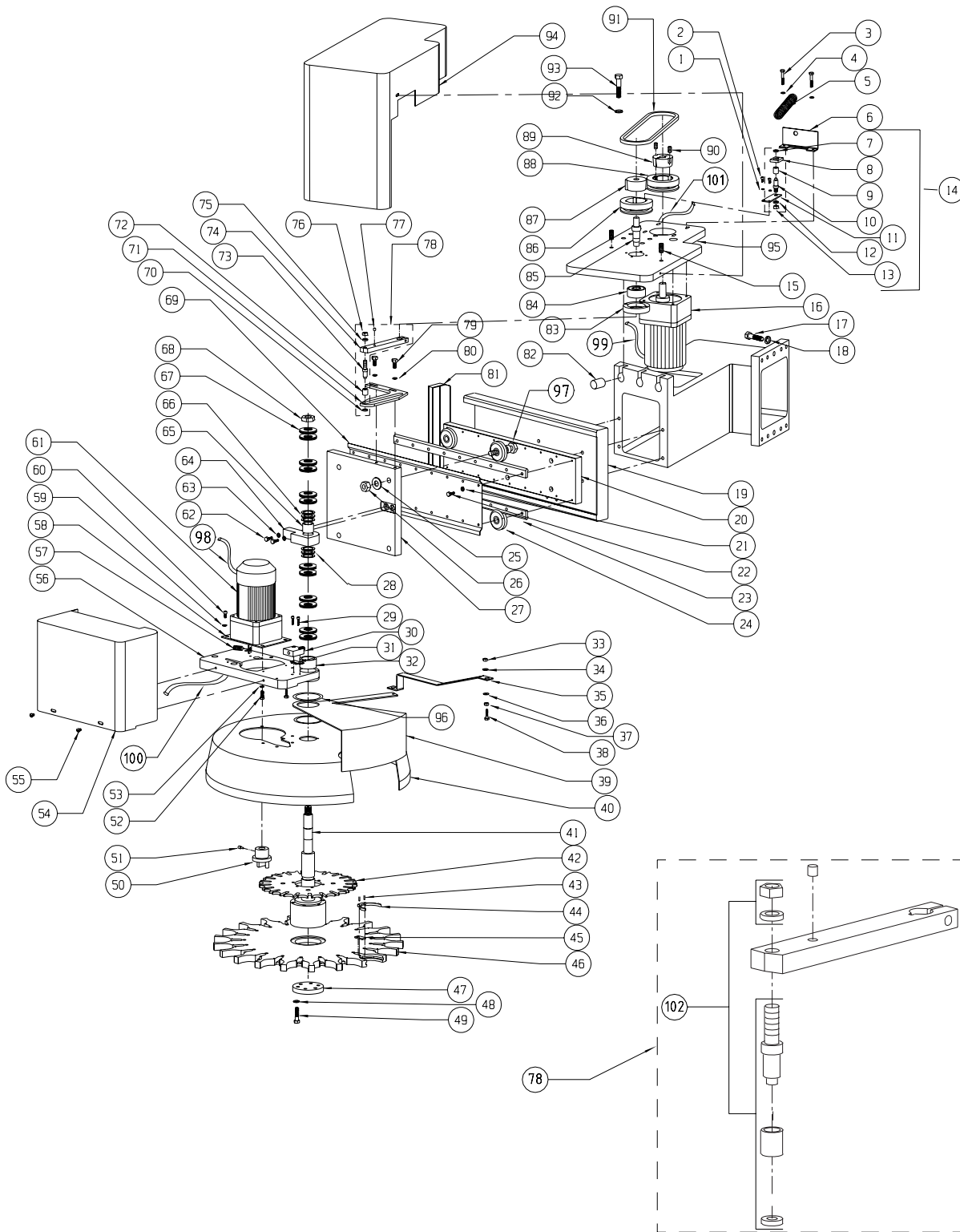


This page intentionally left blank.





# GENEVA DRIVE ATC ASSEMBLY



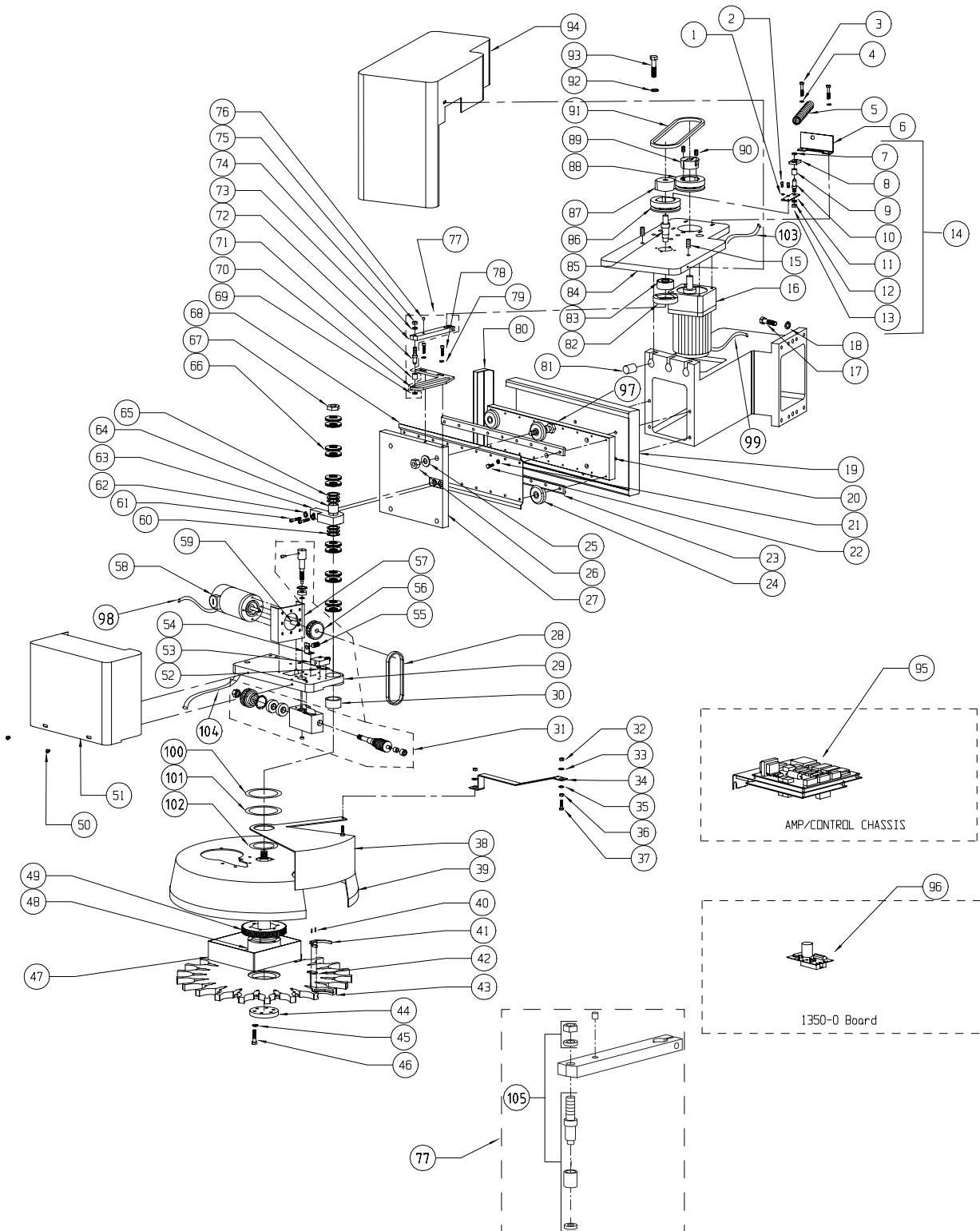
# GENEVA DRIVE ATC ASSEMBLY

## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0280	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0333	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0640	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
				59	HDW-0279			102	ATC-0169
				60	HDW-0319 (3)			*	Sold as Assembly
					HDW-0295 (1)				ATC-0004 (21)
									ATC-0005 (30)

<sup>1</sup>Quick disconnect type

# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

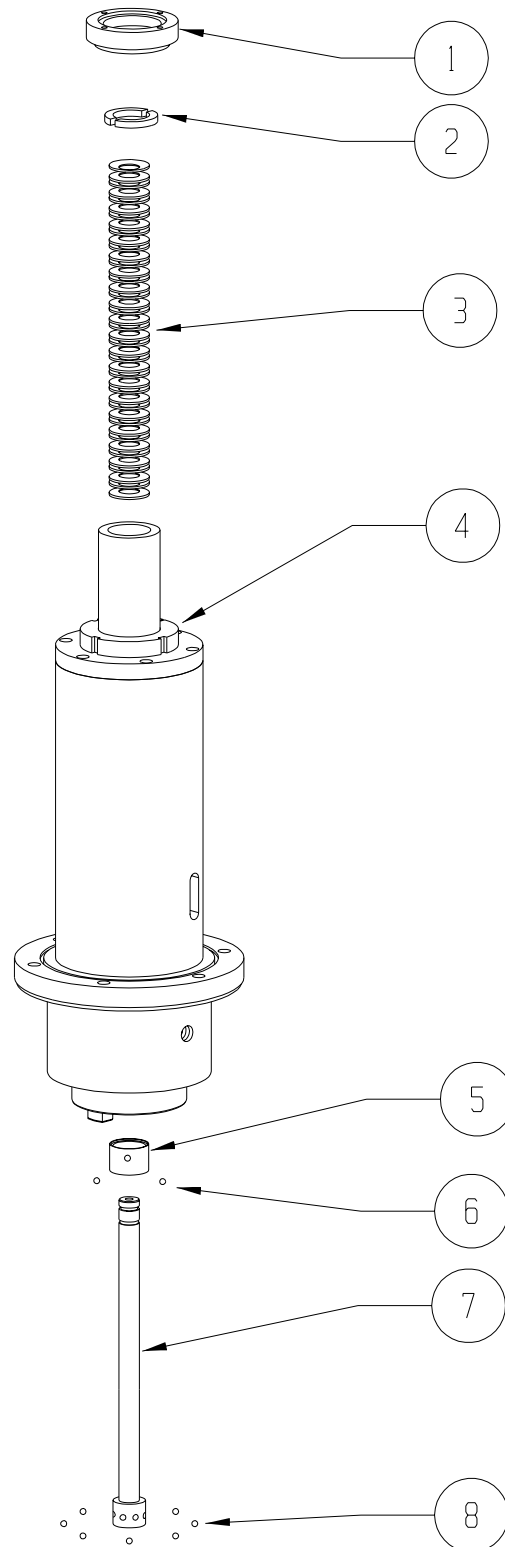
# 7500 RPM SPINDLE ASSEMBLY

### 7500 RPM SPINDLE ASSEMBLY

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



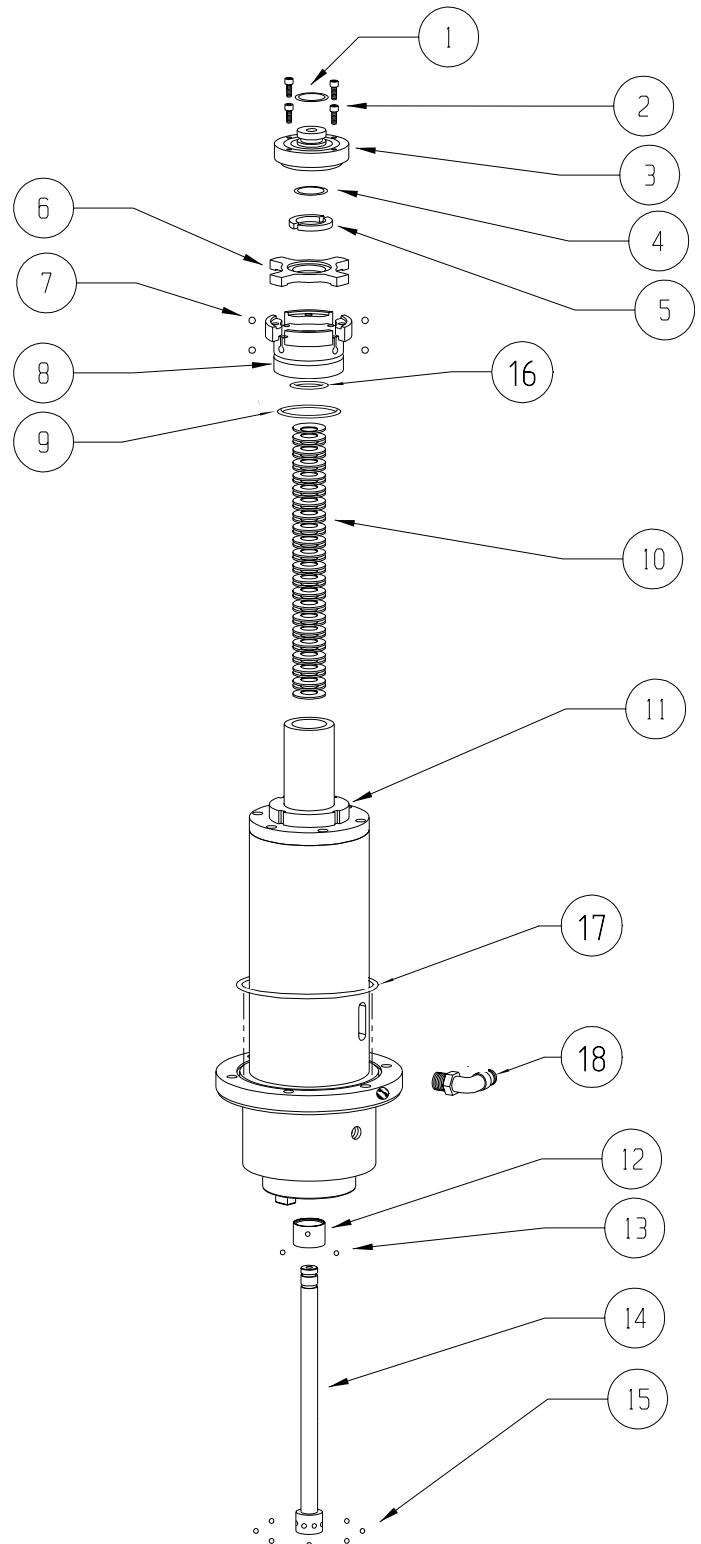
# 10K RPM SPINDLE ASSEMBLY

**10,000 RPM SPINDLE ASSEMBLY**

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

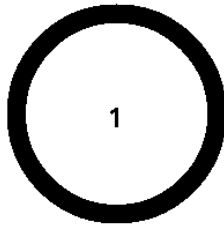
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



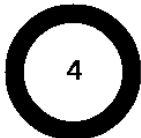
HDW-0158



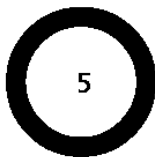
HDW-0177



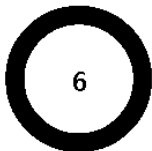
HDW-0150



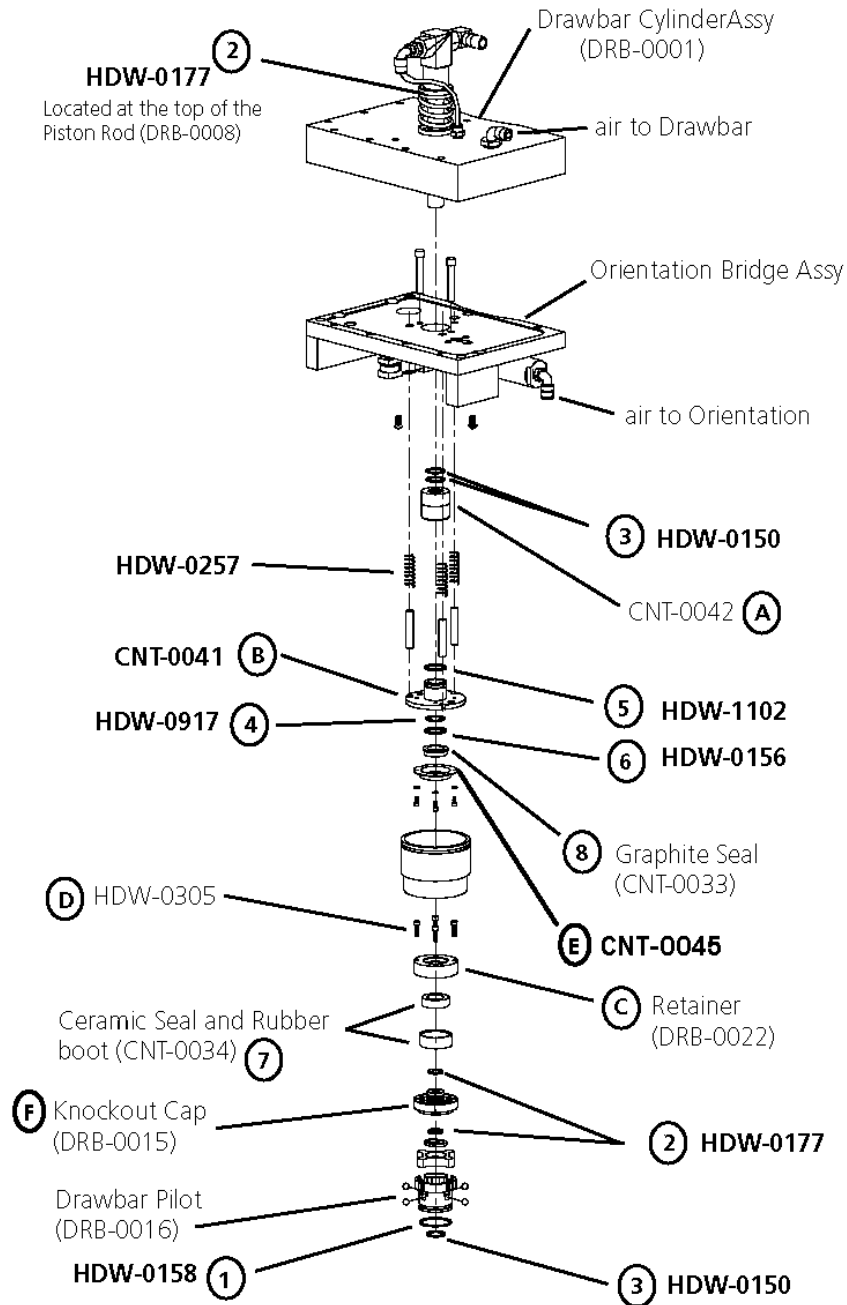
HDW-0917



HDW-1102

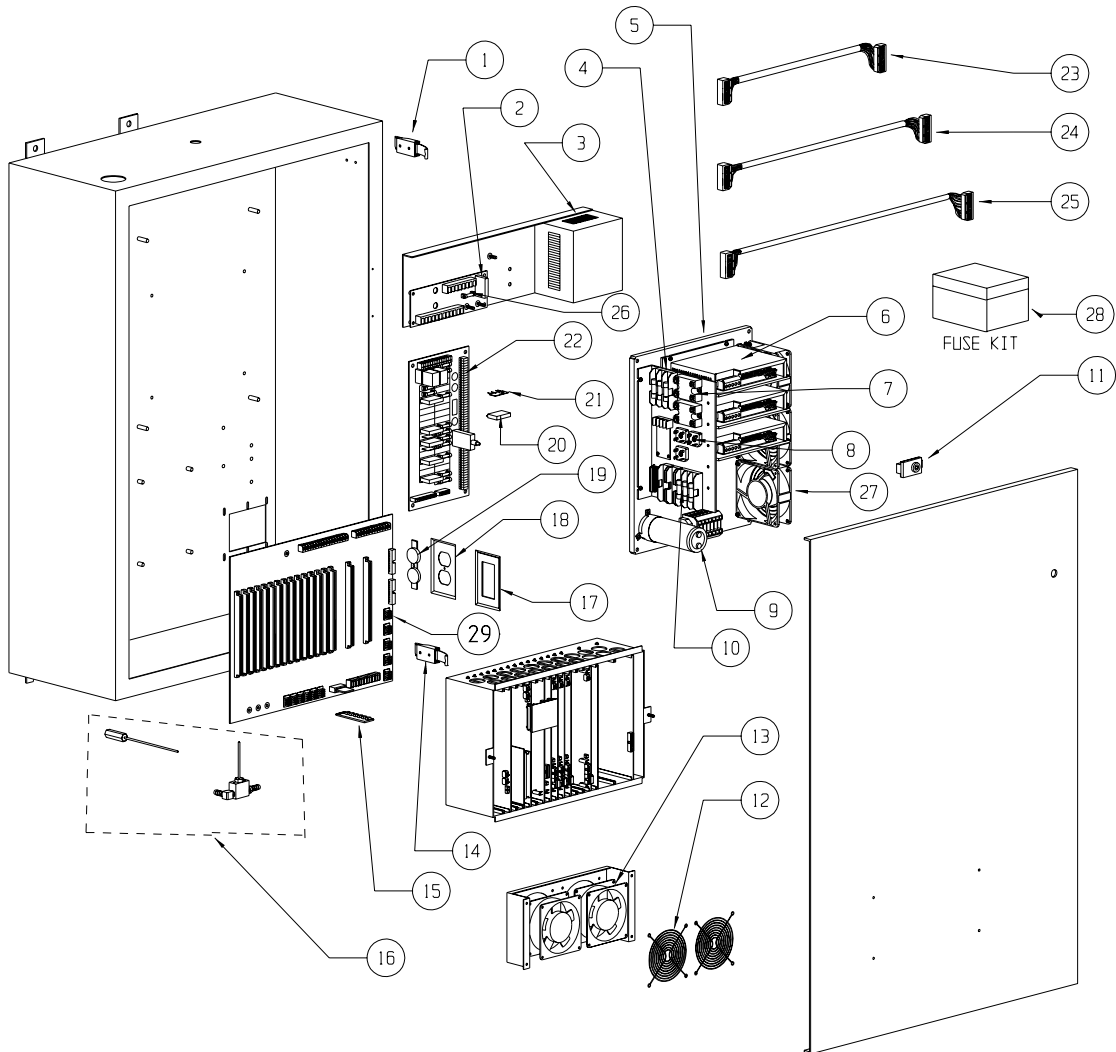


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8  
 AND A-F)

# CNC CABINET ASSEMBLY

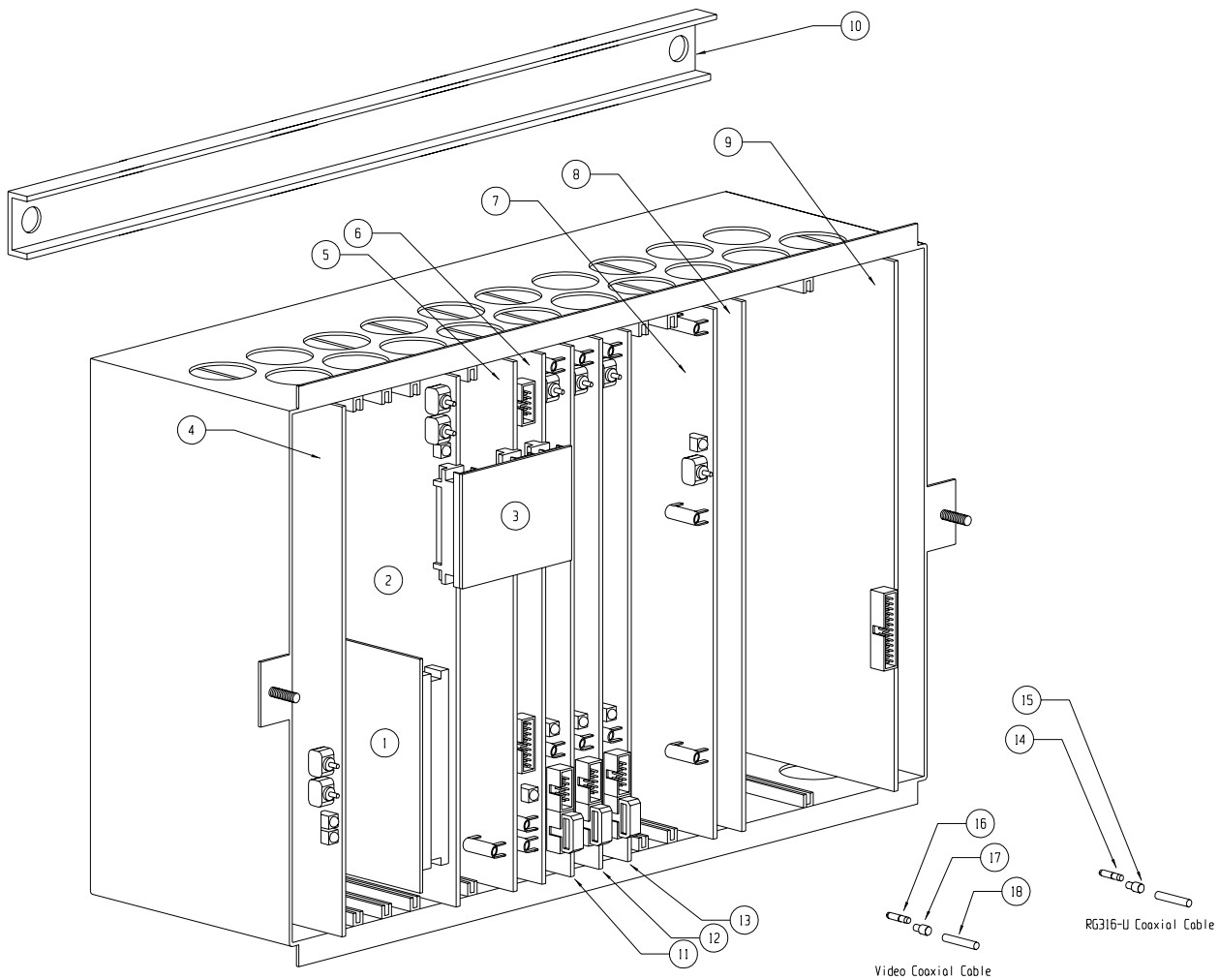


**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0028 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0033 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0029 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0034 (AMC)					29	PCB-0009
7	ELE-0074						



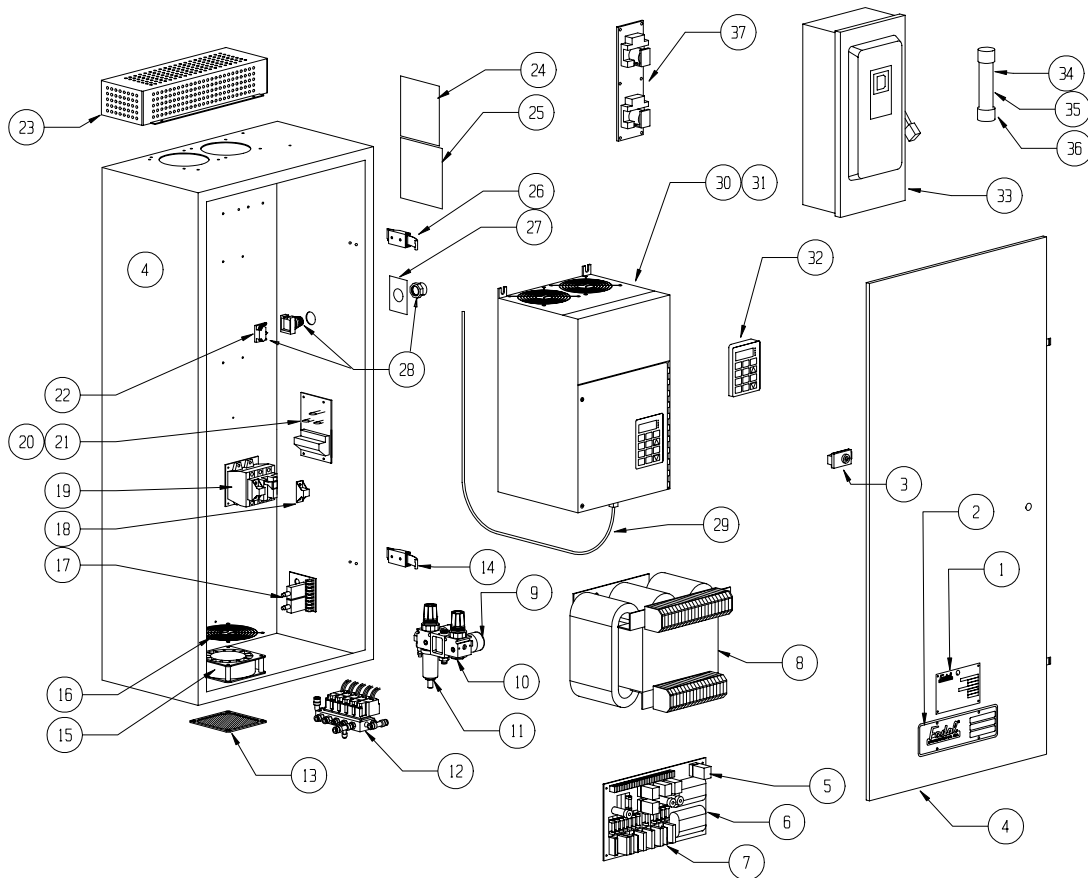
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

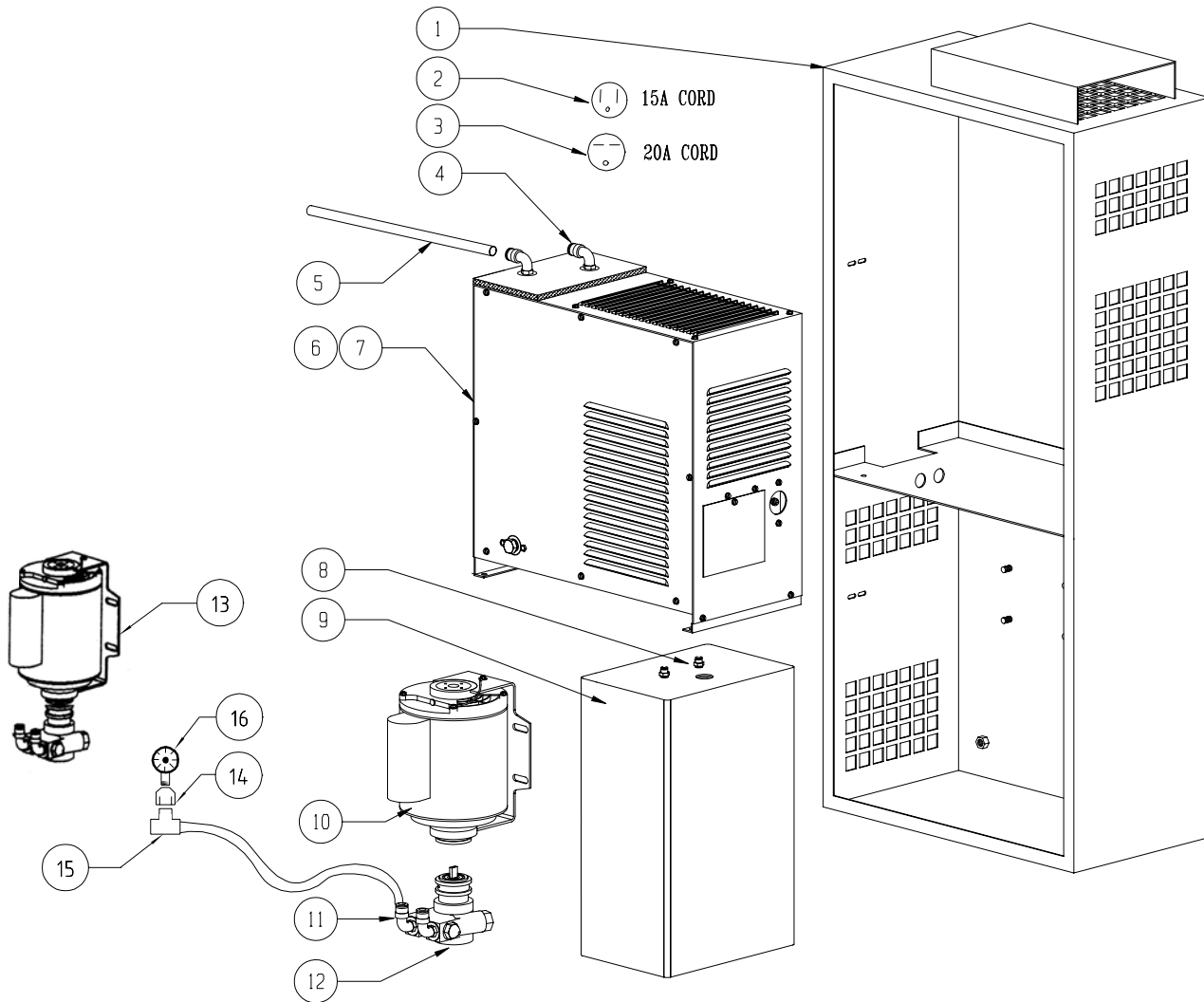
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LBL-0030	12	VLV-0055 (7.5K)	23	INV-0004	33	ELE-0139 (60AMP)
	LBL-0031 (HT)		VLV-0054 (10K)	24	LBL-0037		ELE-0140 (30AMP)
2	LBL-0106	13	HDW-0849	25	LBL-0040	34	ELE-0063 (45A 240V)
3	HDW-0221	14	HDW-0216	26	HDW-0219	35	ELE-0062 (30A 380V)
4	STM-0450	15	ELE-0123	27	LBL-0038	36	ELE-0060 (20A 480V)
5	ELE-0072	16	HDW-0850	28	ELE-0110	37	WIR-0073
6	PCB-0015	17	PCB-0046	29	WIR-0166		
7	ELE-0070	18	ELE-0138	30	INV-0020(HT)		
8	ELE-0200	19	ELE-0132		INV-0041 (Baldor)		
9	REG-0005	20	PCB-0145 (240V)	31	INV-0056 (AMC)		
10	REG-0009	21	PCB-0146 (500V)	32	INV-0017		
11	REG-0008	22	ELE-0093				

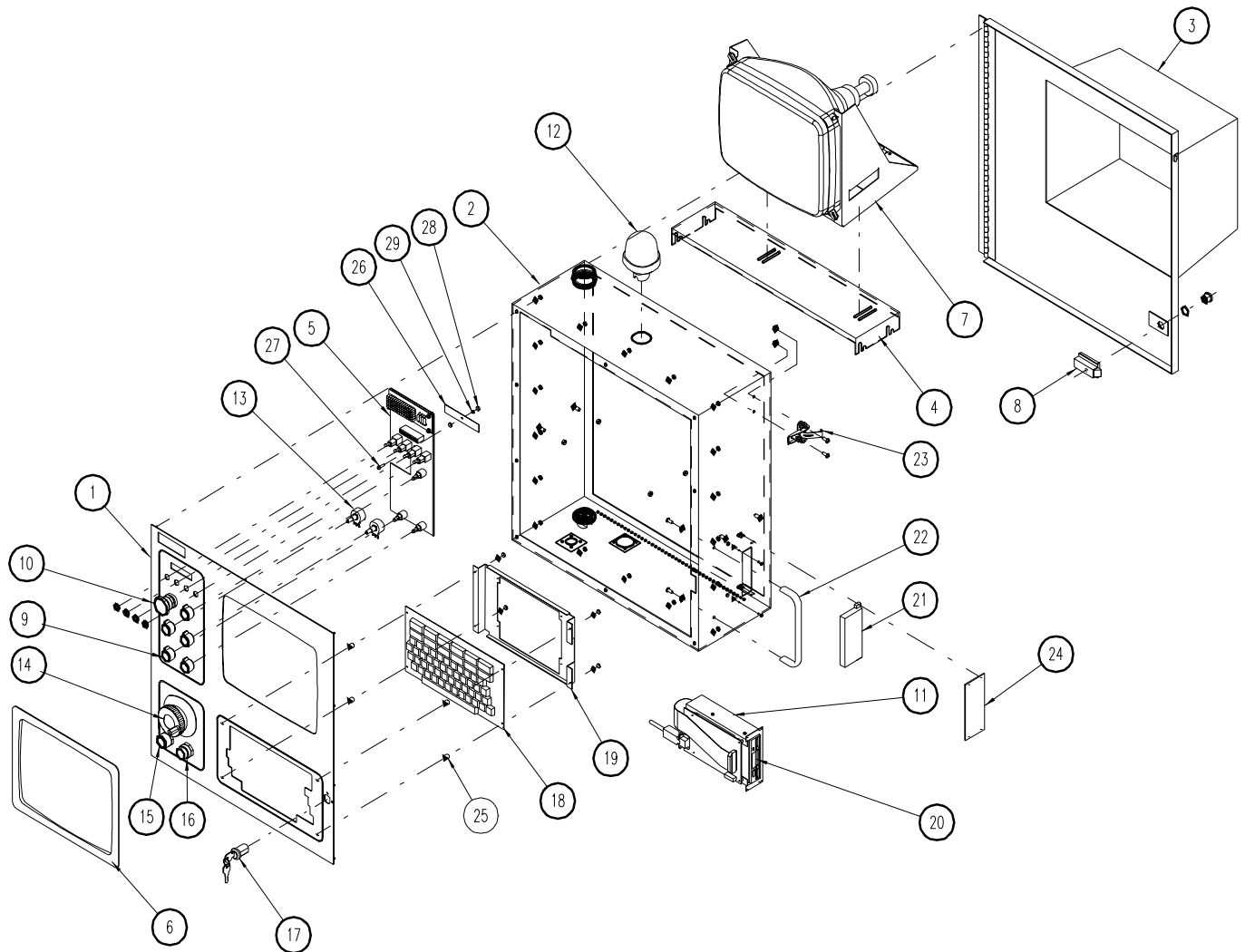
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PLM-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

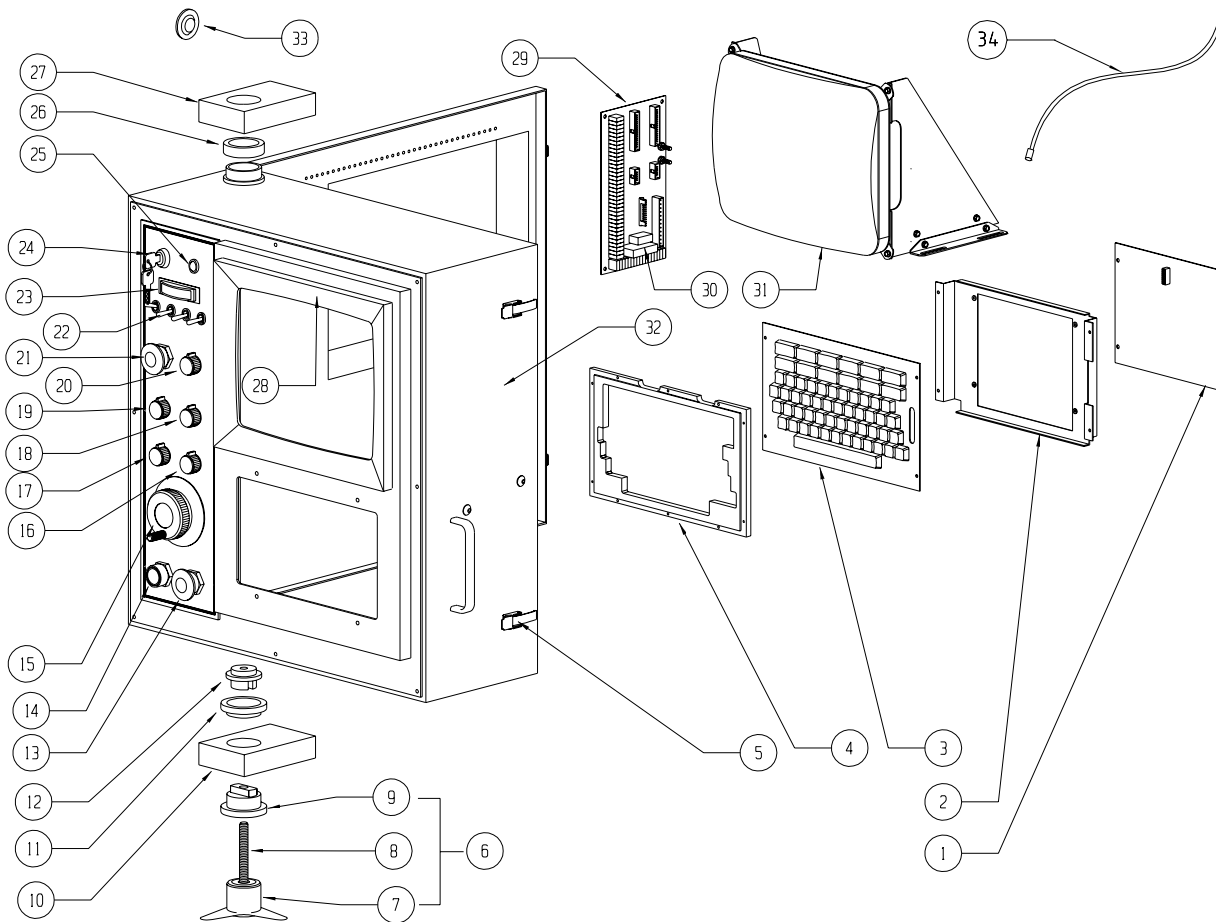
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

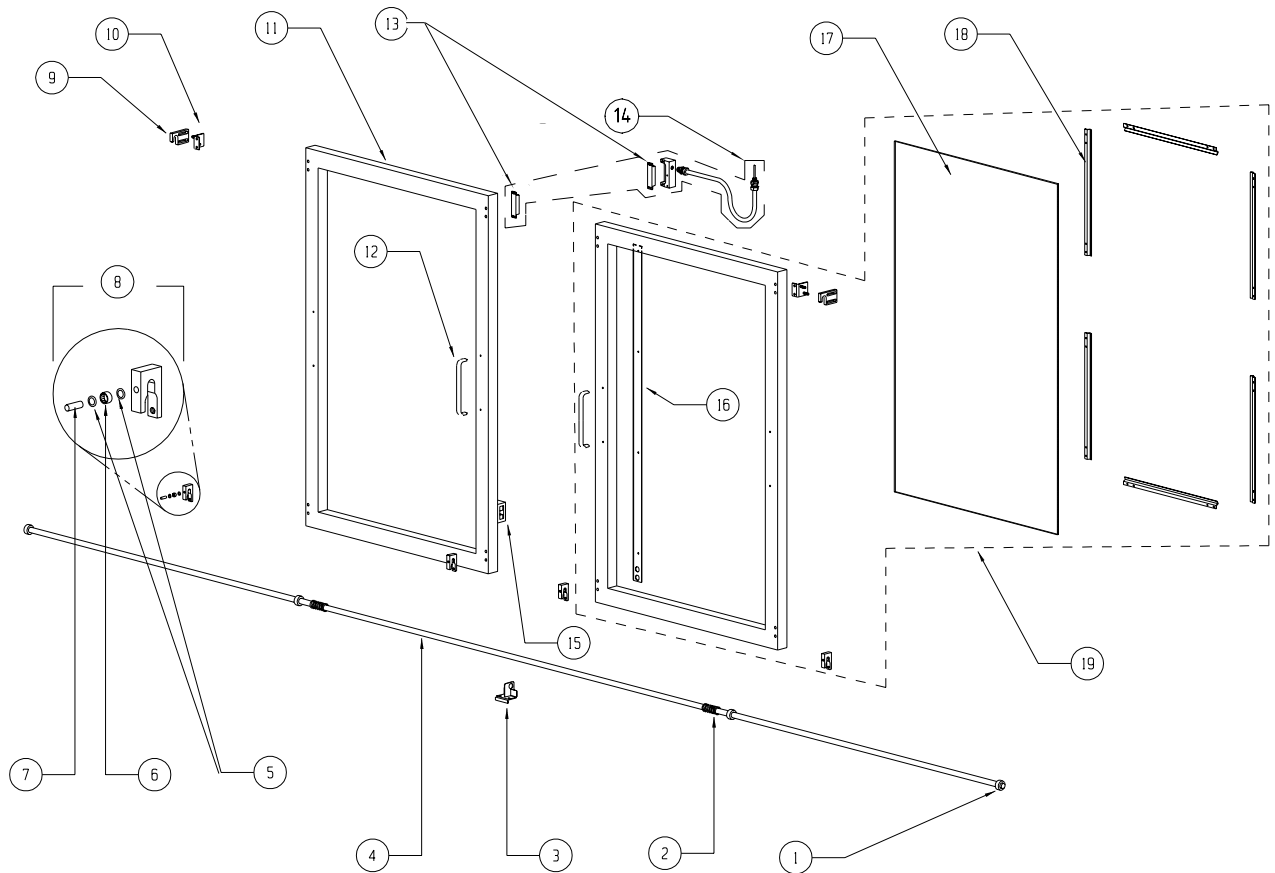
# 88HS PENDANT ASSEMBLY



## 88HS PENDANT ASSEMBLY

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

# FRONT DOOR ASSEMBLY



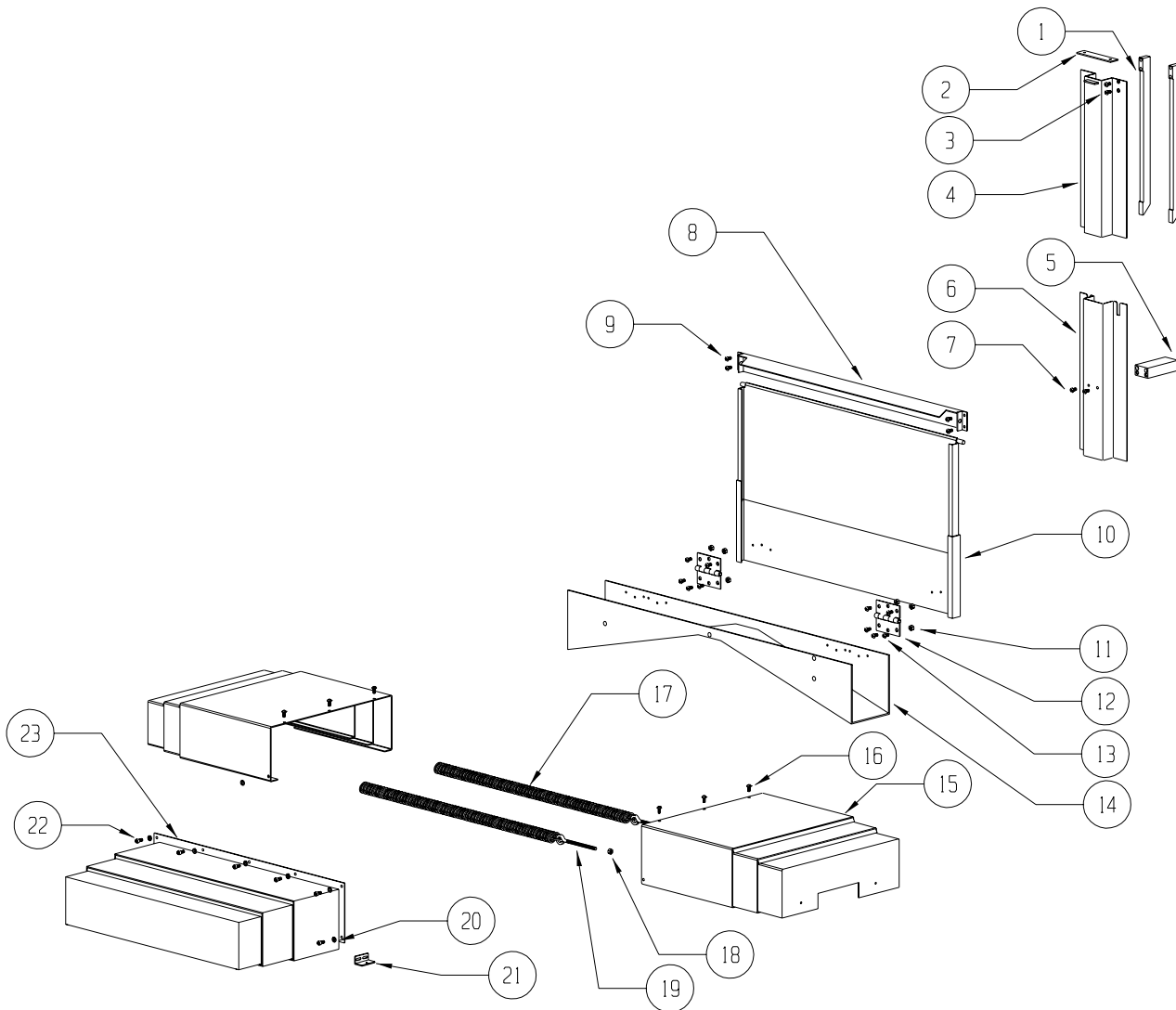
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0043	11	DOR-0002	18	STM-0084
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

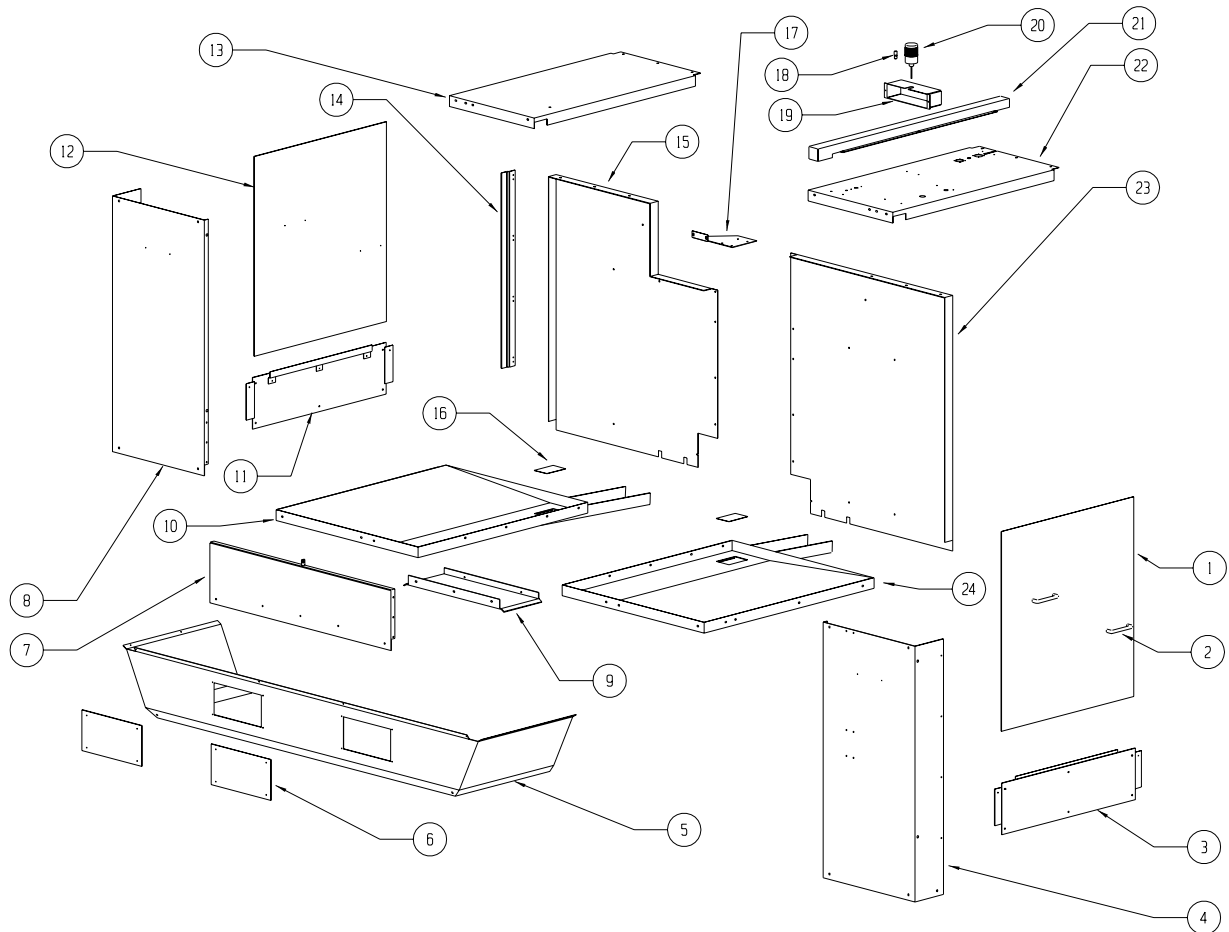
# WAY COVER ASSEMBLY



**WAY COVER ASSEMBLIES**

	PART #		PART #		PART #
1	CVR-0031	9	HDW-0346	17	HDW-0261
2	CVR-0030	10	CVR-0056	18	HDW-0336
3	HDW-0319	11	HDW-0339	19	HDW-0251
4	CVR-0034	12	HDW-0192	20	HDW-0279
5	CVR-0036	13	HDW-0324	21	STM-0047
6	CVR-0035	14	STM-0053	22	HDW-0482
7	HDW-0346	15	CVR-0017	23	CVR-0021
8	CVR-0066	16	HDW-0347		

# SHEETMETAL HOUSING

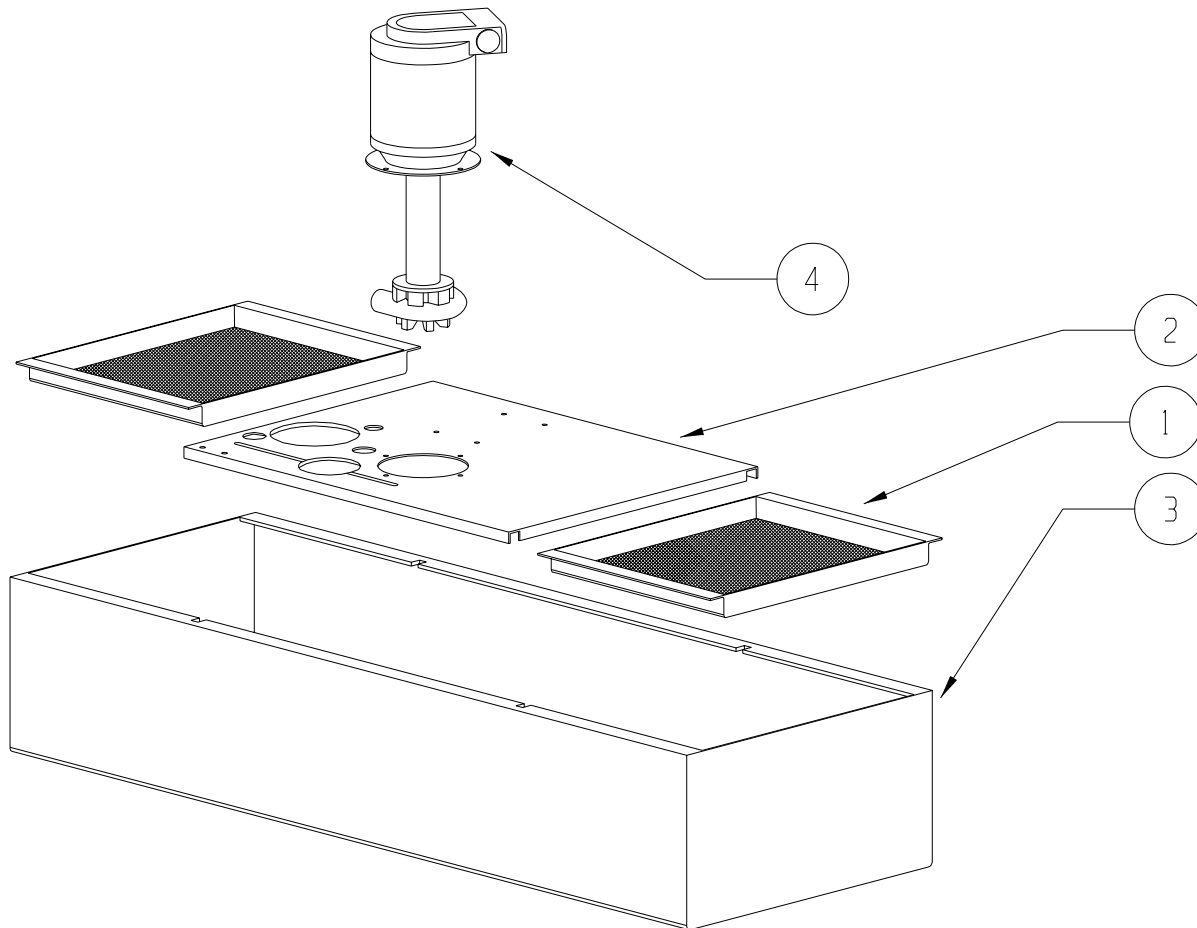


## SHEETMETAL HOUSING

	PART #		PART #		PART #
1	STM-0241	9	STM-0380	17	STM-0540
2	HDW-0181	10	STM-0309	18	ELE-0122
3	STM-0296	11	STM-0296	19	STM-0088
4	STM-0381	12	STM-0241	20	ELE-0121
5	STM-0238	13	STM-0256	21	STM-0085
6	STM-0299	14	STM-0244	22	STM-0255
7	STM-0078	15	STM-0310	23	STM-0312
8	STM-0108	16	STM-0110	24	STM-0311



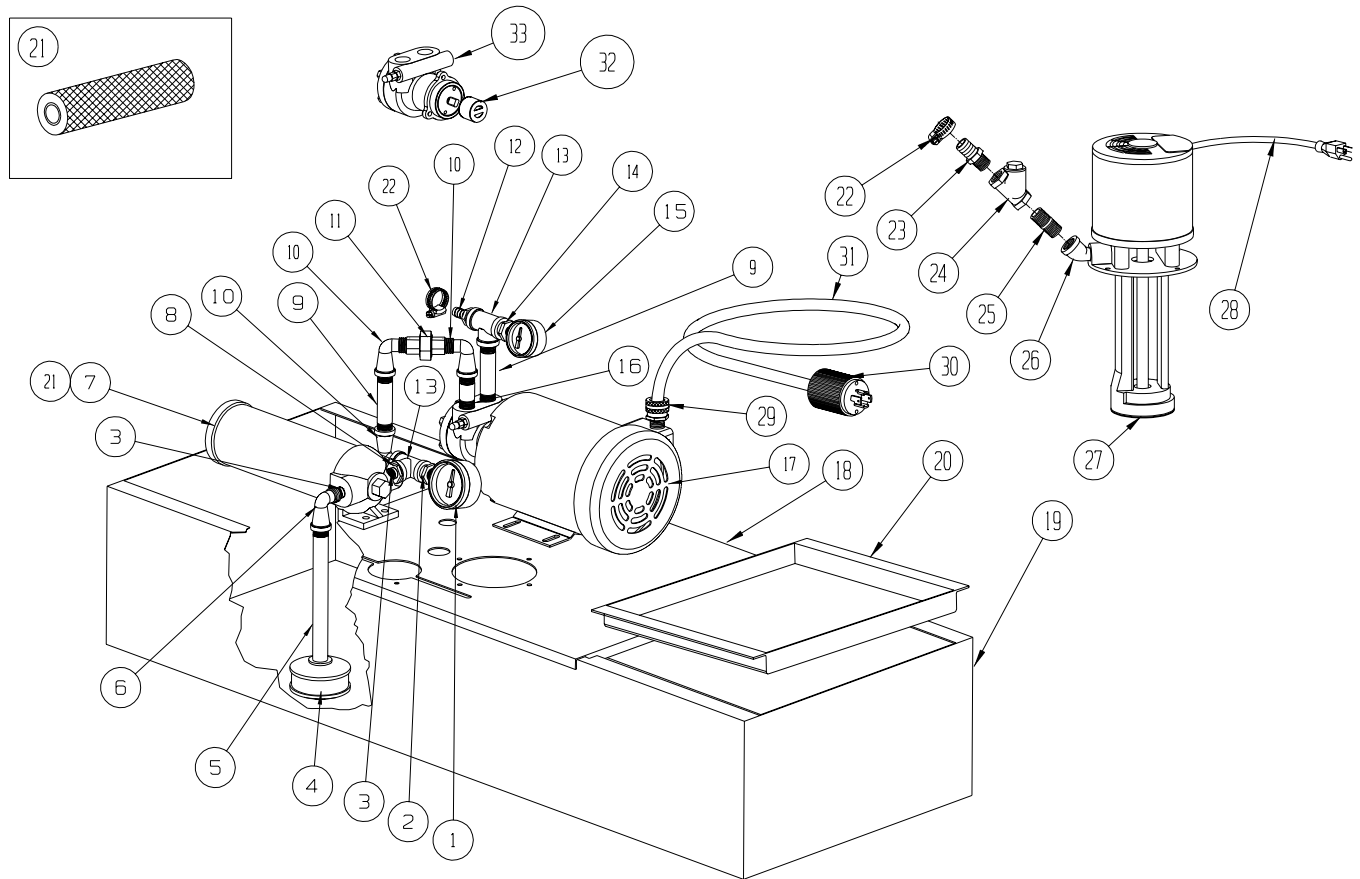
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

# 7500 RPM COOLANT THROUGH TANK

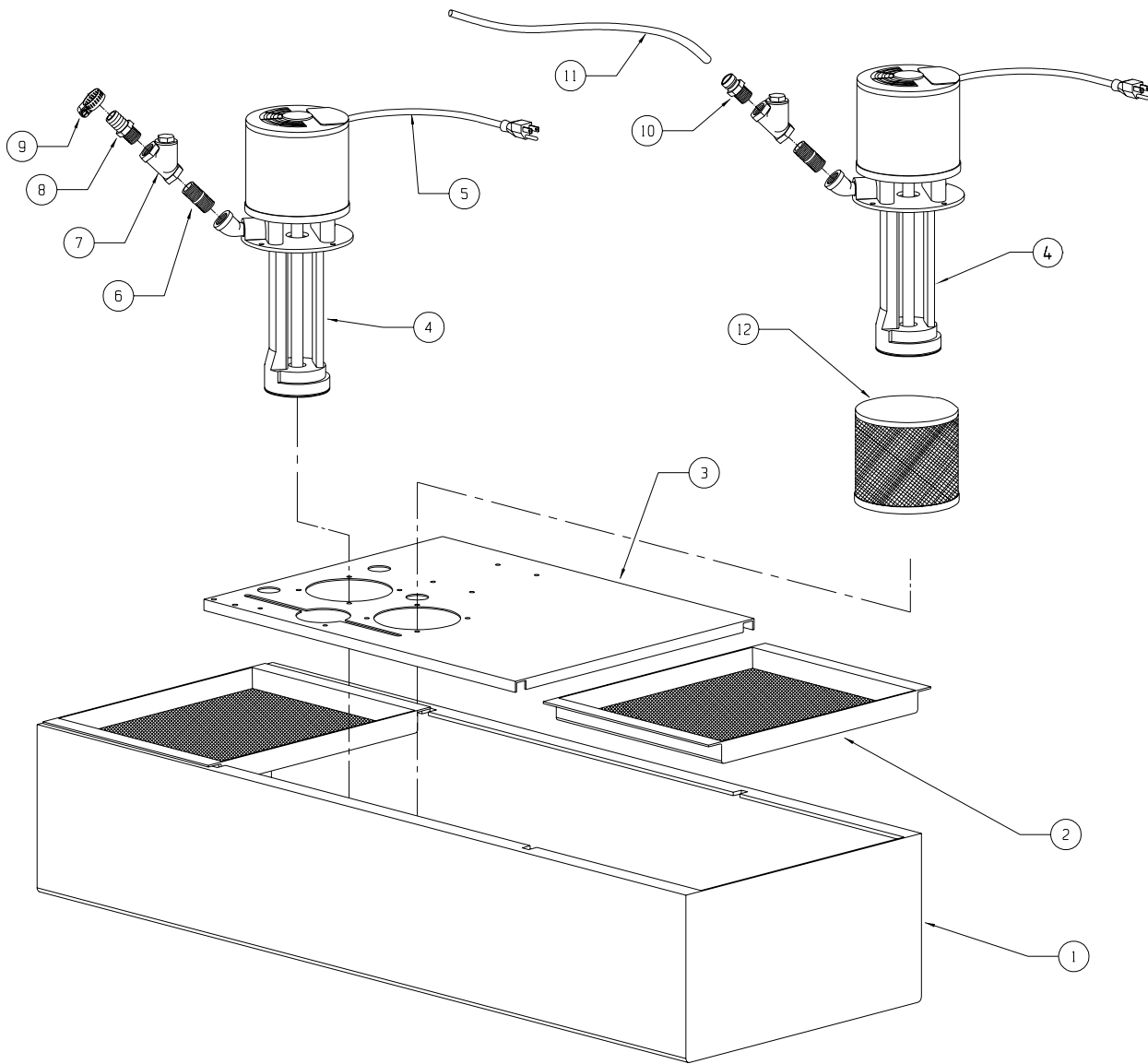


**7500 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

<sup>1</sup>Filter (CNT-0029) fits inside filter housing (CNT-0027).

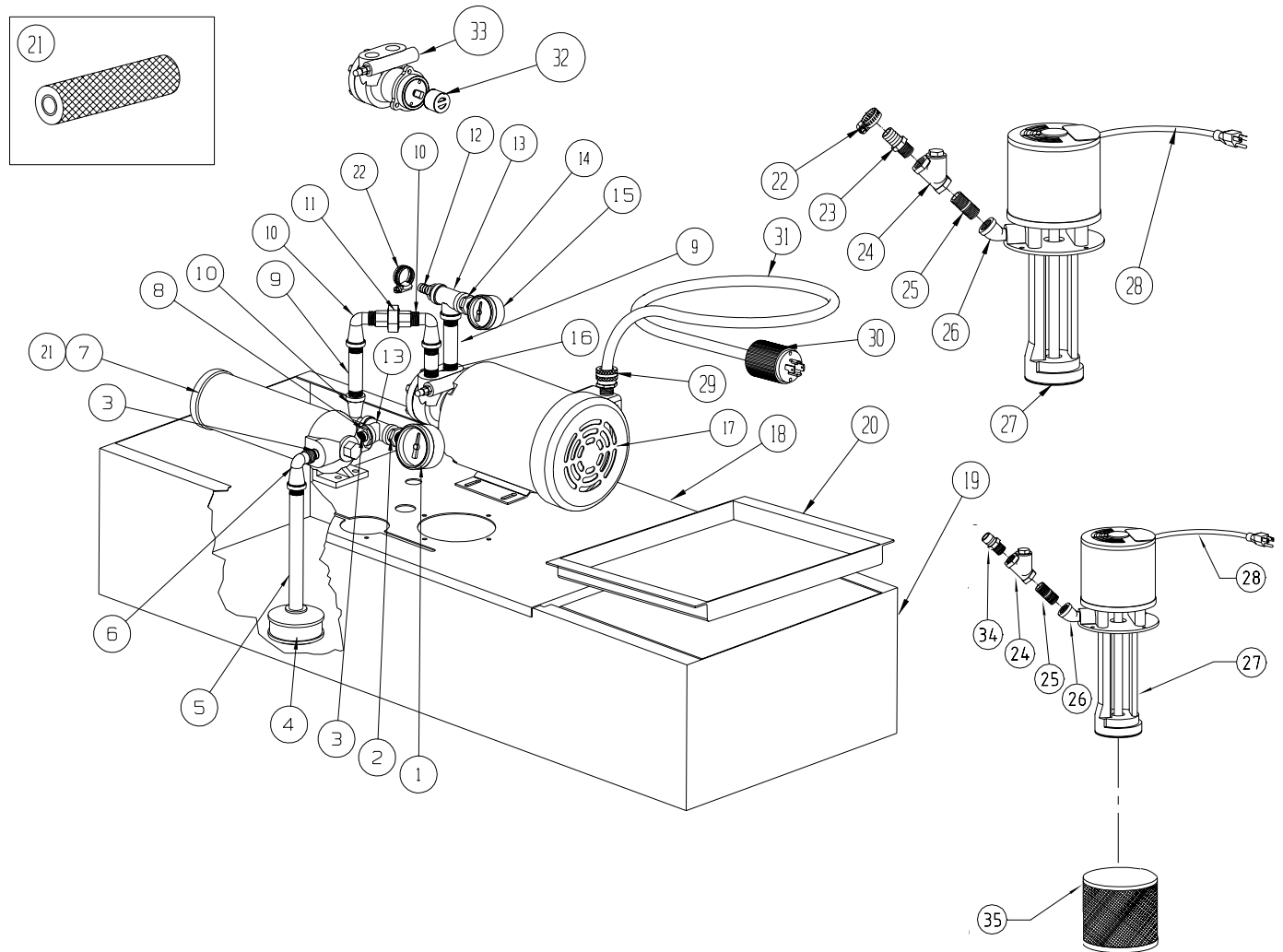
# 10K RPM COOLANT TANK



10,000 RPM COOLANT TANK

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# 10K RPM COOLANT THROUGH TANK



**10,000 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

<sup>1</sup>Filter (CNT-0029) fits inside filter housing (CNT-0027).

# TABLE OF CONTENTS

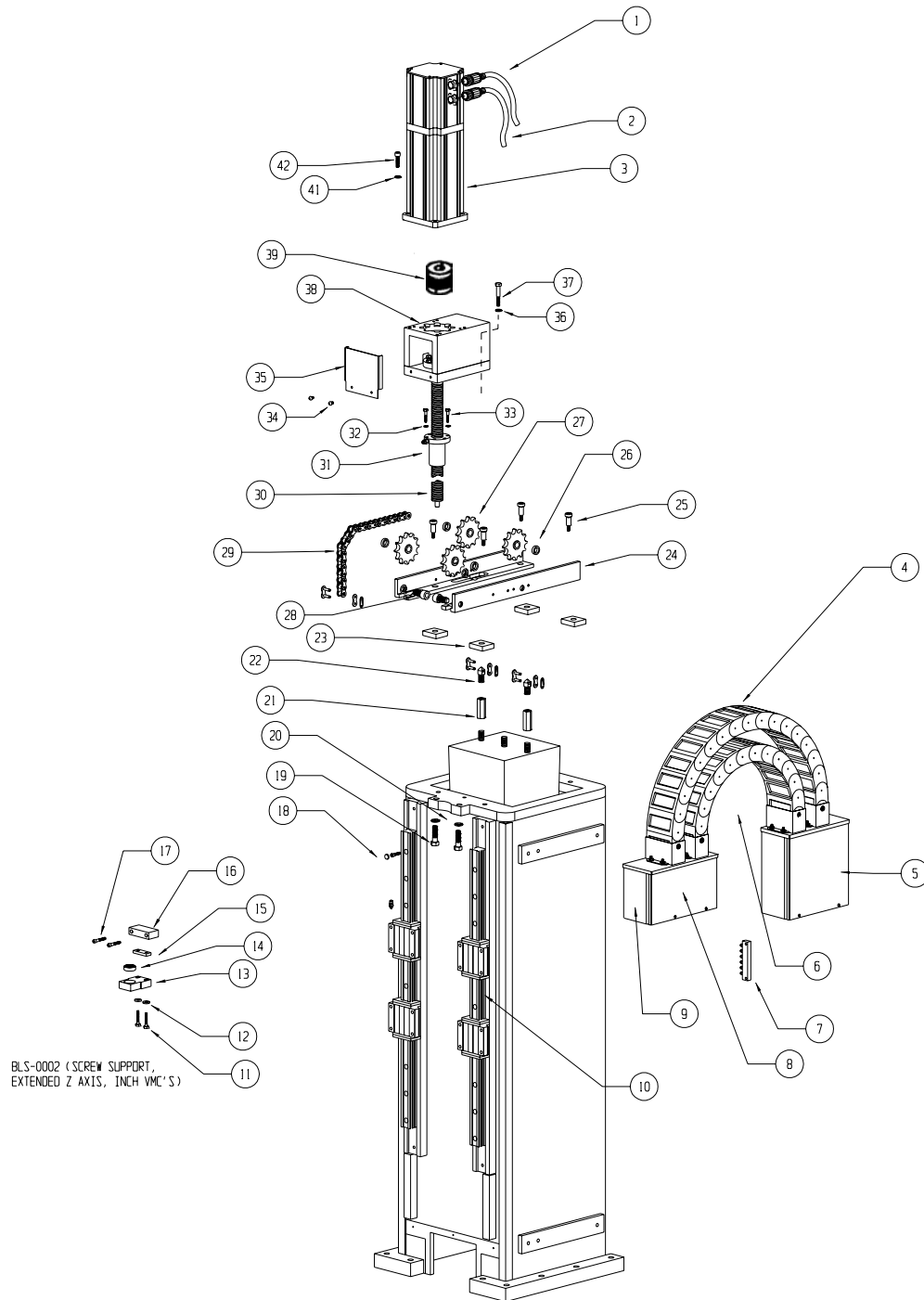
## Parts Manual VMC 3016L MODEL



COLUMN ASSEMBLY .....	1
7,500 RPM HEAD ASSEMBLY .....	3
10,000 RPM HEAD ASSEMBLY .....	5
BASE, SADDLE & TABLE ASSEMBLY .....	7
BALLSCREW ASSEMBLIES .....	9
DRAWBAR ASSEMBLIES .....	11
ORIENTATION BRIDGE ASSEMBLIES .....	12
WAY LUBE ASSEMBLY .....	16
GENEVA DRIVE ATC ASSEMBLY .....	17
SERVO DRIVE ATC ASSEMBLY .....	19
7,500 RPM SPINDLE ASSEMBLY .....	21
10,000 RPM SPINDLE ASSEMBLY .....	22
COOLANT THROUGH SPINDLE .....	23
CNC CABINET ASSEMBLY .....	24
CARD CAGE ASSEMBLY .....	25
POWER JUNCTION CABINET ASSEMBLY .....	26
CHILLER CABINET ASSEMBLY .....	27
MP PENDANT ASSEMBLY .....	28
88HS PENDANT ASSEMBLY .....	29
FRONT DOOR ASSEMBLY .....	30
WAY COVER ASSEMBLIES .....	31
SHEETMETAL HOUSING .....	32
7500 RPM COOLANT TANK .....	33
7500 RPM COOLANT-THROUGH TANK .....	34
10,000 RPM COOLANT TANK .....	35



# COLUMN ASSEMBLY



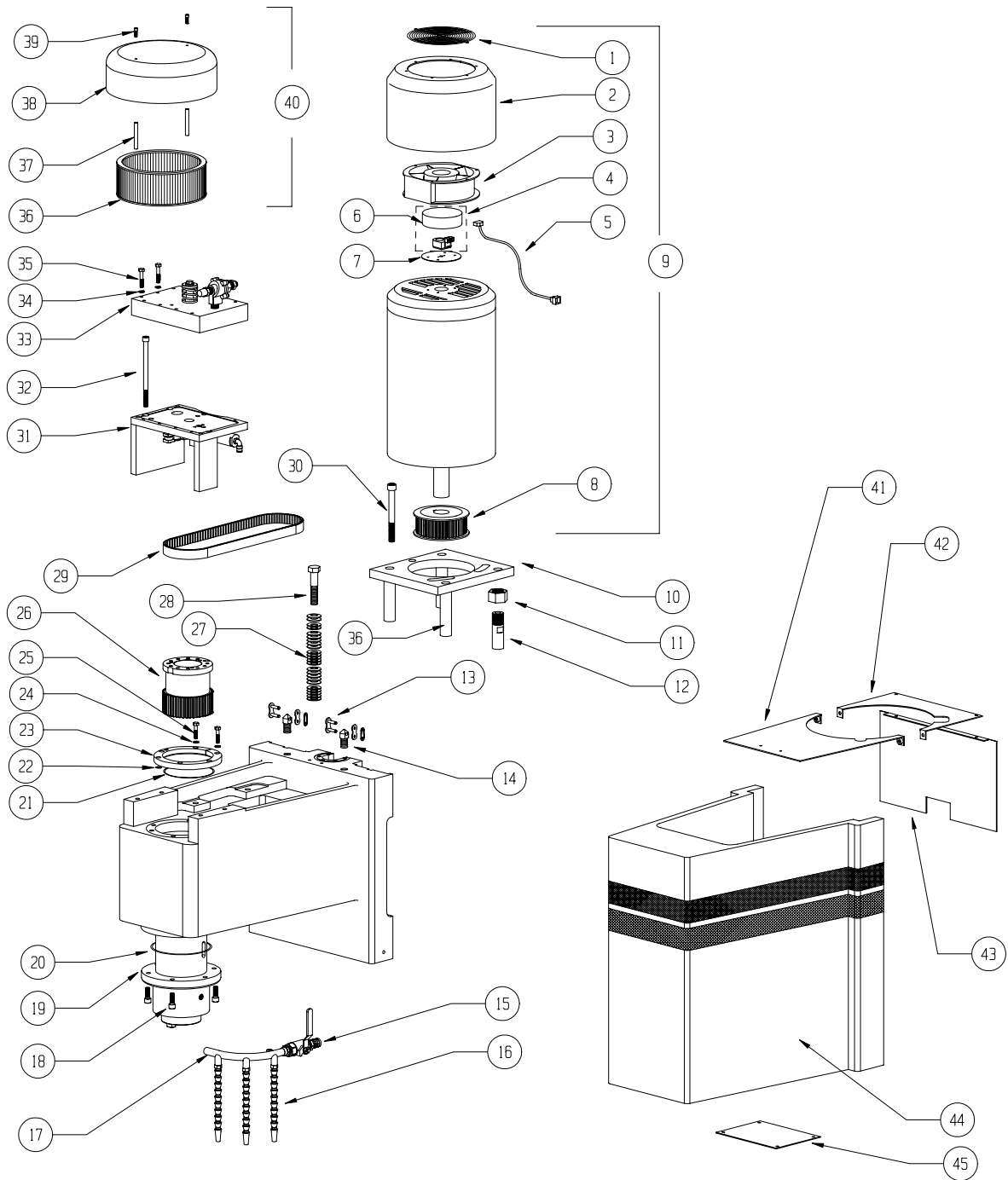
# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0610	12	HDW-0048	23	HDW-0363	33	HDW-0568
2	WIR-0609	13	BLS-0042	24	CWT-0005	34	HDW-0347
3	MTR-0139	14	BRG-0023	25	HDW-0600	35	STM-0043
4	CVR-0074	15	BLS-0206	26	CWT-0009	36	HDW-0049
5	STM-0072	16	BLS-0041	27	PUL-0034	37	HDW-0315
6	CVR-0072	17	HDW-0297	28	HDW-0777	38	BLS-0009
7	LUB-0058	18	BRG-0031	29	HDW-0205	39	MTR-0189
8	STM-0300	19	HDW-0655	30	BLS-0008 (20")		
9	STM-0301	20	HDW-0050		BLS-0001 (28")	41	HDW-0280
10	BRG-0031	21	HDW-0335	31	BLS-0163	42	HDW-0779
11	HDW-0317	22	CWT-0001	32	HDW-0281		



# 7500 RPM HEAD ASSEMBLY



# 7500 RPM HEAD ASSEMBLY

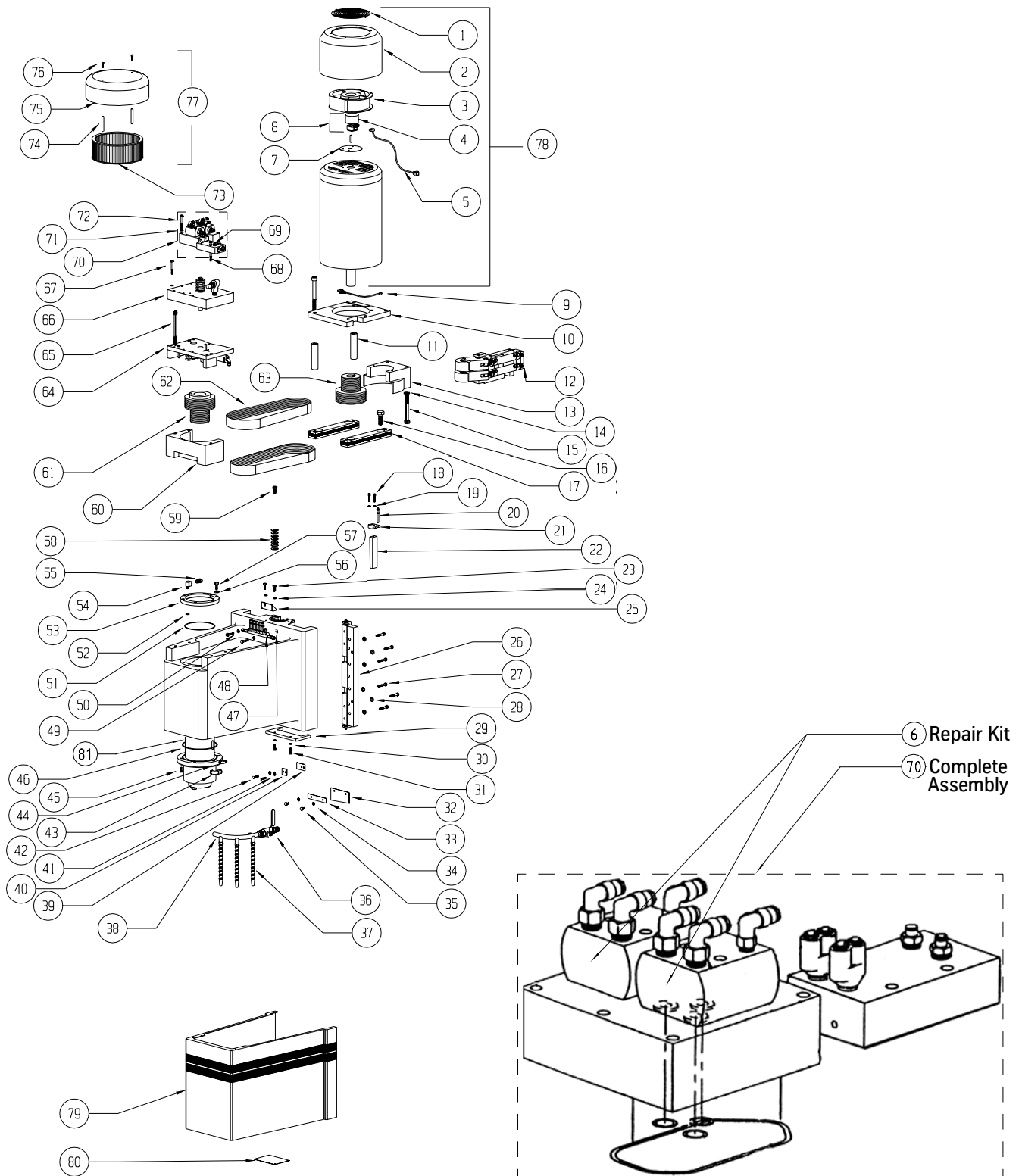
## 7500 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	13	HDW-0204	25	HDW-0568	37	SVT-0108
2	STM-0139	14	CWT-0001	26	PUL-0025	38	STM-0467
3	ELE-0124	15	VLV-0017	27	HDW-0194	39	HDW-0597
4	ENC-0007	16	PLM-0016	28	HDW-0560	40	MTR-0128
5	WIR-0168	17	CNT-0039	29	BEL-0006	41	STM-0627
6	MTR-0123	18	HDW-0470	30	HDW-0284	42	STM-0626
7	STM-0148	19	SPN-0037 <sup>(2)</sup>	31	ORB-0000	43	STM-0625
8	PUL-0024	20	HDW-0181	32	HDW-0279	44	STM-0226
9	MTR-0098 <sup>(1)</sup>	21	HDW-0148	33	DRB-0000	45	STM-0064
10	MTR-0075	22	HDW-0177	34	HDW-0279		
11	PLC-0042	23	SPN-0042	35	HDW-0320		
12	MTR-0090	24	HDW-0275	36	MTR-0076		

<sup>1</sup>MTR-0098 INCLUDES: PUL-0024.

<sup>2</sup>SPN-0037 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0025.

# 10K RPM HEAD ASSEMBLY



# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

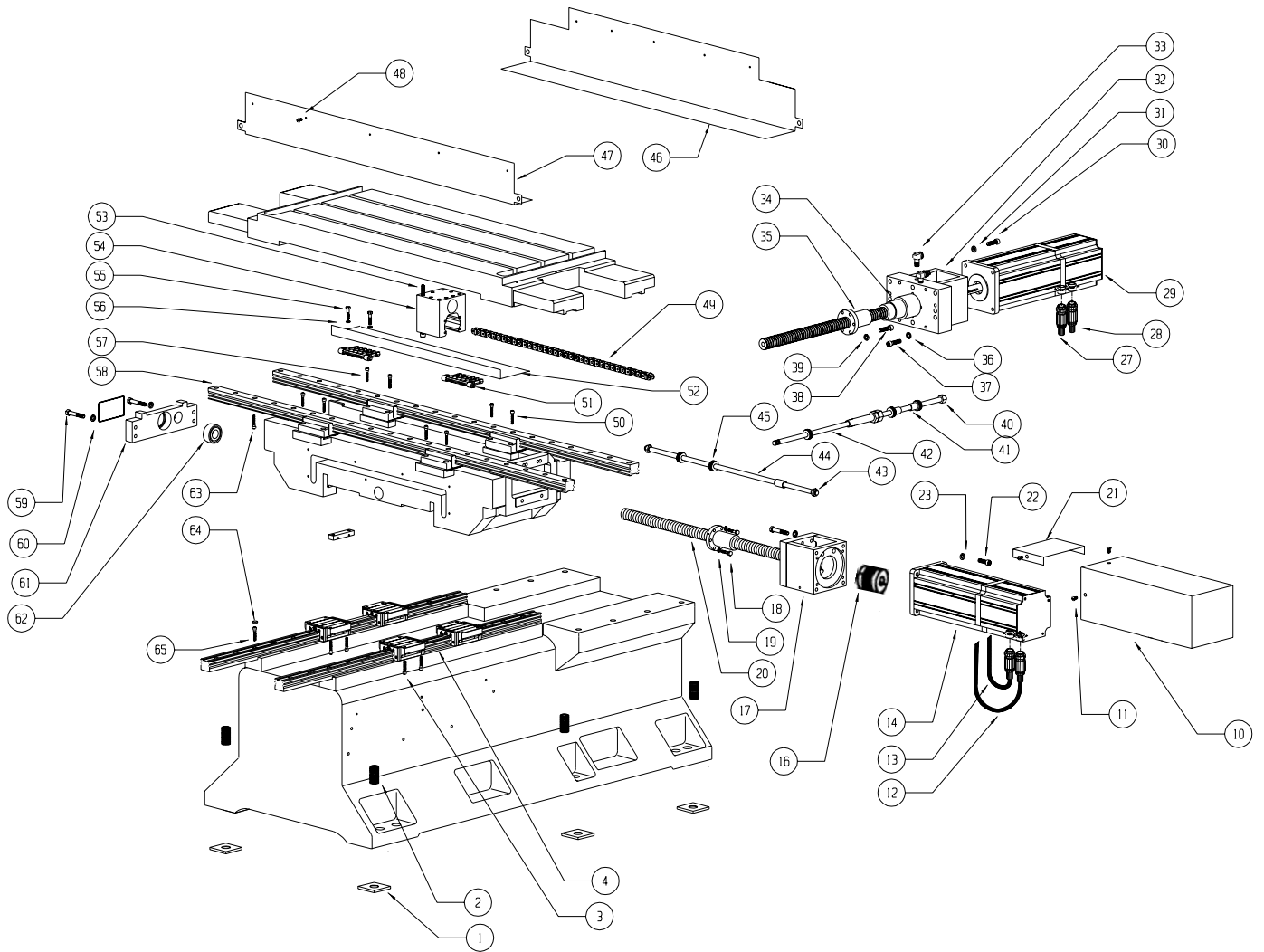
	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	HDW-0553
2	STM-0139	31	HDW-0322	60	BEL-0014
3	ELE-0124	32	HDW-0356	61	PUL-0018
4	MTR-0123	33	STM-0052	62	BEL-0024
5	WIR-0168	34	HDW-0279	63	PUL-0019
6	HYD-0018	35	HDW-0319	64	ORB-0001
7	STM-0148	36	VLV-0017	65	HDW-0290
8	ENC-0007	37	PLM-0016	66	DRB-0000
9	HDW-0369	38	CNT-0039	67	HDW-0320
10	MTR-0070	39	HDW-0294	68	HDW-0321 (HT)
11	MTR-0079	40	STM-0042	69	HDW-0279 (HT)
12	IDL-0002	41	HDW-0279	70	HYD-0017 (HT)
	IDL-0003(HT)				
13	BEL-0015	42	HDW-0294	71	HDW-0279 (HT)
14	HDW-0451	43	PLM-0112	72	HDW-0320 (HT)
15	HDW-0311	44	PLM-0034	73	MTR-0127
16	HDW-0283	45	HDW-0470	74	SVT-0108
17	MTR-0068	46	HDW-0181	75	STM-0467
	MTR-0064				
18	HDW-0294	47	HDW-0380	76	HDW-0597
19	HDW-0279	48	LUB-0045	77	MTR-0128
20	GIB-0013	49	HDW-0576	78	MTR-0045 <sup>(1)</sup>
21	GIB-0010	50	HDW-0279		MTR-0048 (HT)
22	GIB-0033	51	HDW-0169	79	CVR-0151
23	HDW-0320	52	HDW-0177	80	STM-0064
24	HDW-0279	53	SPN-0042	81	SPN-0007 <sup>(2)</sup>
25	STM-0141	54	PLM-0045		
26	GIB-0004	55	PLM-0088		
27	HDW-0569	56	HDW-0275		
28	HDW-0280	57	HDW-0568		
29	CVR-0048	58	HDW-0194		

<sup>1</sup>MTR-0045 INCLUDES: PUL-0019

<sup>2</sup>SPN-0007 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018.

(HT)=High Torque Option

# BASE, SADDLE & TABLE ASSEMBLY



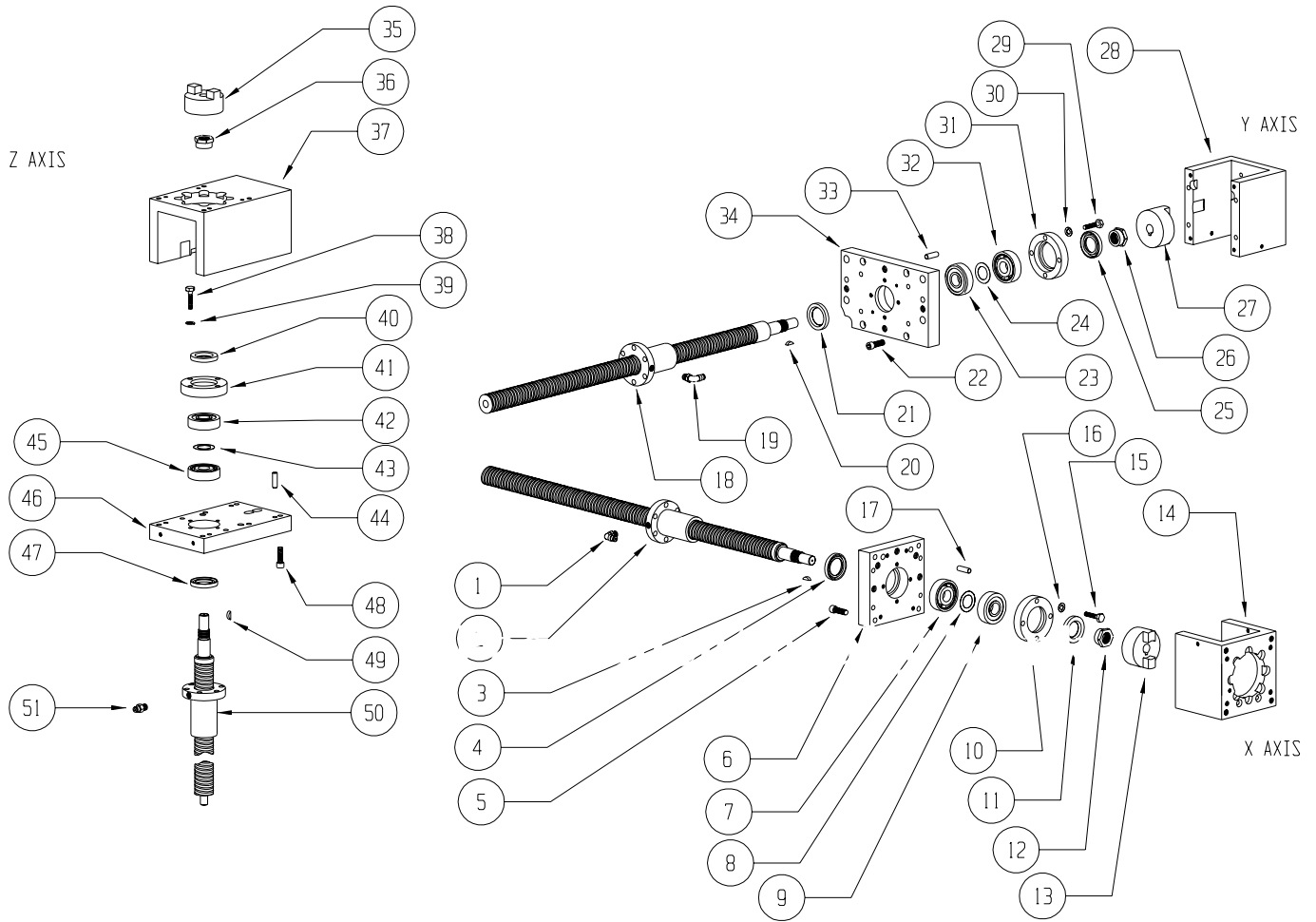
# BASE, SADDLE & TABLE ASSEMBLY

## BASE, SADDLE & TABLE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	17	BLS-0005	31	HDW-0280	43	HDW-0543	55	HDW-0347
2	HDW-0272	18	HDW-0483	32	BLS-0007	44	BLS-0187	56	OBSOLETE
3	HDW-0481	19	HDW-0281	33	PLM-0112	45	HDW-0194	57	HDW-0572
4	BRG-0031	20	BLS-0004	34	OBSOLETE	46	STM-0227	58	BRG-0031
		21	STM-0163	35	BLS-0000	47	STM-0468	59	HDW-0286
10	STM-0590	22	HDW-0779	36	HDW-0444	48	HDW-0582	60	HDW-0049
11	HDW-0349	23	HDW-0280	37	HDW-0564	49	CVR-0038	61	BLS-0139
12	WIR-0608			38	HDW-0603	50	HDW-0572	62	BRG-0021
13	WIR-0607	27	WIR-0609	39	HDW-0472	51	LUB-0058	63	HDW-0279
14	MTR-0139	28	WIR-0610	40	HDW-0543	52	STM-0518	64	BRG-0032
15	MTR-0073	29	MTR-0139	41	HDW-0136	53	HDW-0572	65	HDW-0279
16	MTR-0189 <sup>(1)</sup>	30	HDW-0779	42	BLS-0187	54	BLS-0075		

<sup>1</sup>Part of X and Y axes.

# BALLSCREW ASSEMBLIES



# BALLSCREW ASSEMBLIES

**BALLSCREW ASSEMBLIES**

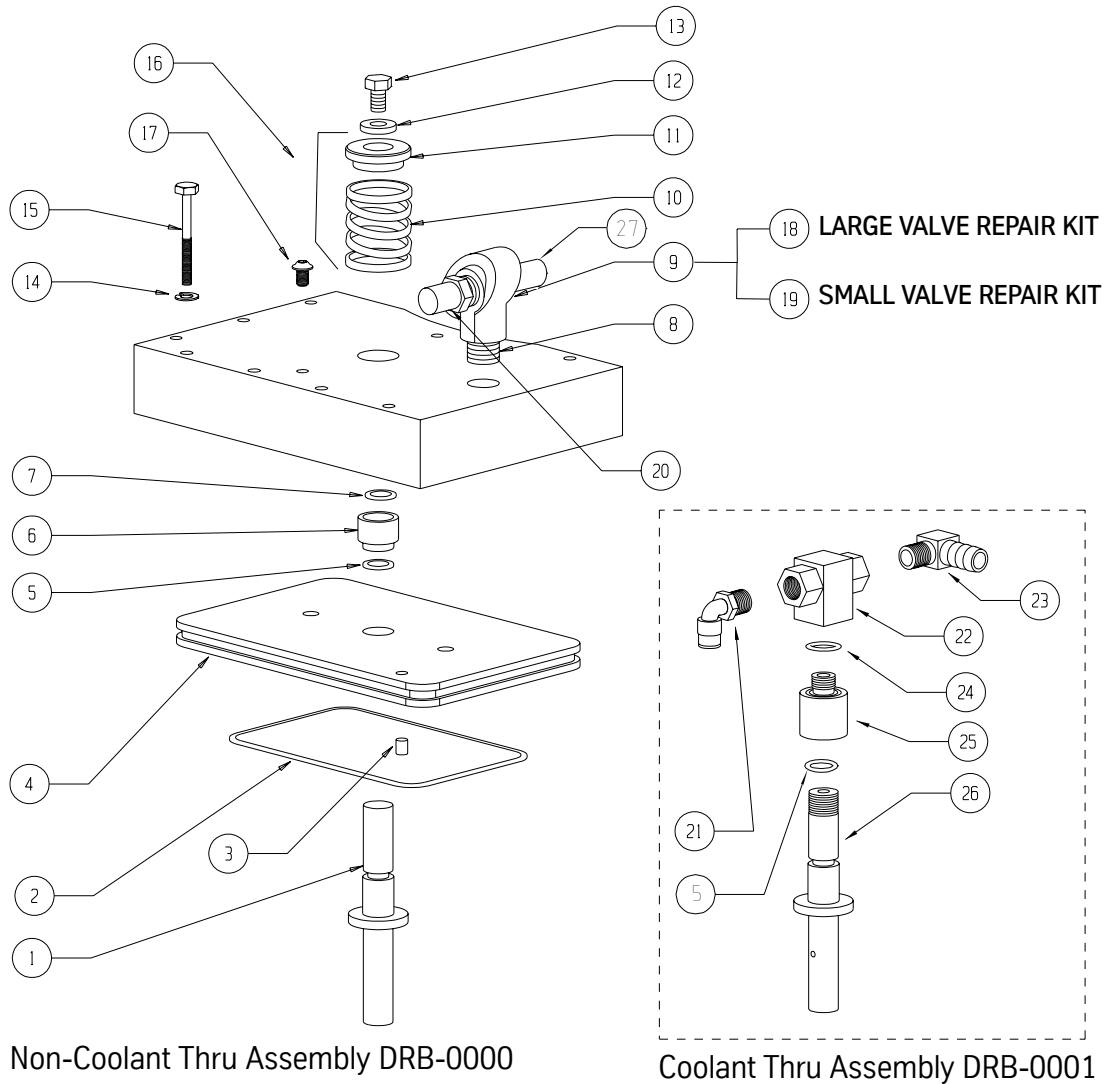
	PART #		PART #		PART #		PART #		PART #
1	PLM-0034	11	HDW-0210	21	HDW-0210	31	*	41	*
2	*	12	BLS-0047	22	HDW-0481	32	BRG-0024	42	BRG-0024
3	HDW-0382	13	MTR-0072	23	BRG-0024	33	HDW-0619	43	HDW-0730
4	HDW-0210	14	*	24	HDW-0730	34	*	44	HDW-0619
5	HDW-0481	15	HDW-0315	25	BRG-0024	35	MTR-0072	45	BRG-0024
6	*	16	HDW-0281	26	BLS-0047	36	BLS-0047	46	*
7	BRG-0024	17	HDW-0619	27	MTR-0072	37	*	47	HDW-0210
8	HDW-0730	18	*	28	*	38	HDW-0315	48	HDW-0481
9	BRG-0024	19	PLM-0034	29	HDW-0315	39	HDW-0281	49	HDW-0382
10	*	20	HDW-0382	30	HDW-0281	40	HDW-0210	50	*
								51	PLM-0040

\*Items sold as part of assemblies only.

	BEARING MOUNTS	BALLSCREW ASSEMBLIES
<b>X-AXIS</b>	BLS-0005	BLS-0004
<b>Y-AXIS</b>	BLS-0007	BLS-0000
<b>Z-AXIS</b>	BLS-0009	BLS-0008 (20")
		BLS-0001 (28")



# DRAWBAR CYLINDER ASSEMBLY

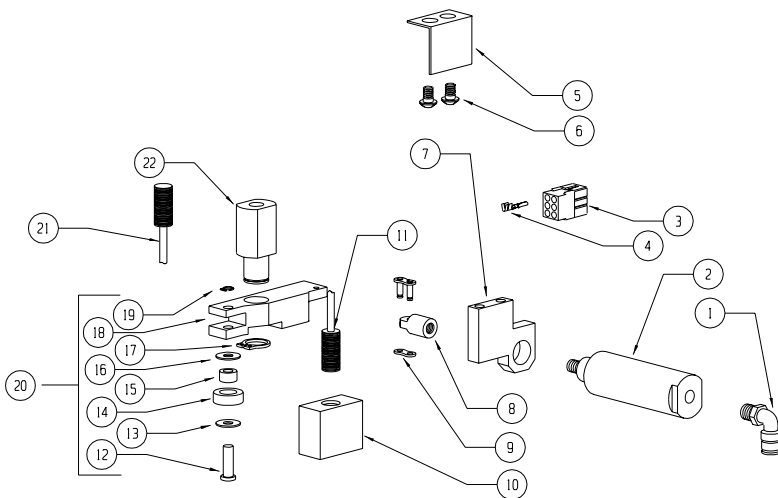
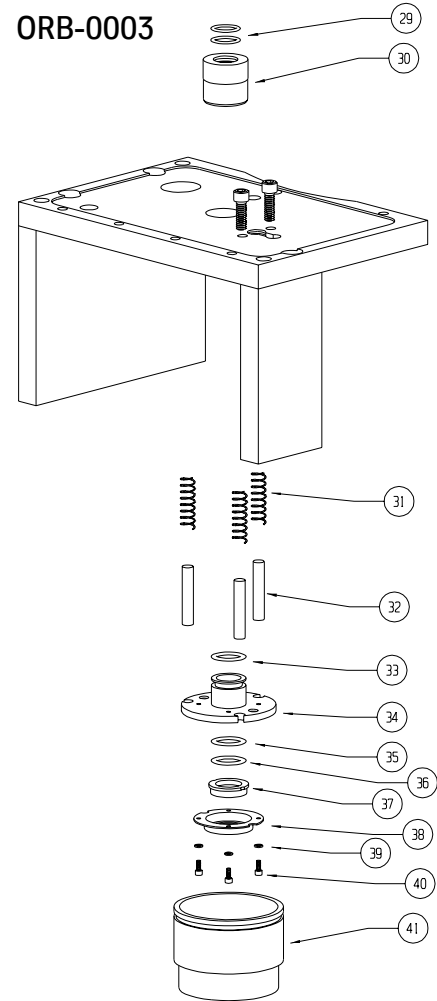
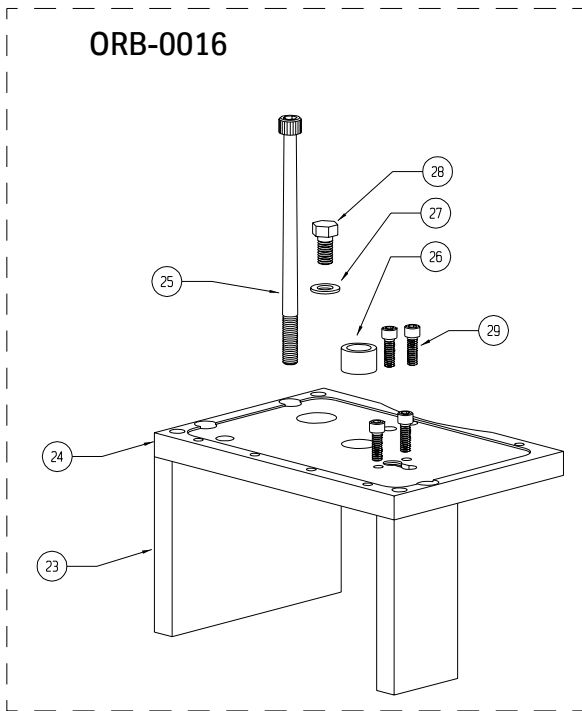


## DRAWBAR CYLINDER ASSEMBLIES

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

<sup>1</sup>Includes ELE-0147

# ORIENTATION BRIDGE ASSEMBLY



Seal Repair Kit CNT-0150

# ORIENTATION BRIDGE ASSEMBLY

## ORIENTATION BRIDGE ASSEMBLIES

	PART #		PART #		PART #		PART #
1	PLM-0034	14	ORB-0009	27	HDW-0048	39	HDW-0453
2	CYL-0007	15	BRG-0014	28	HDW-0298	40	HDW-0308
3	WIR-0051	16	HDW-0515	29	HDW-0150	41	CNT-0140
4	WIR-0043 (16 AWG)	17	HDW-0725	30	CNT-0042		
	WIR-0044 (16 AWG)						
	WIR-0544 (22 AWG)						
	WIR-0056 (22 AWG)						
5	STM-0596	18	ORB-0031	31	HDW-0257		
6	HDW-0347	19	HDW-0726	32	HDW-0326		
7	ORB-0030 <sup>(1)</sup>	20	ORB-0004	33	HDW-1102		
8	ORB-0011	21	ELE-1202	34	CNT-0041		
9	HDW-0209	22	ORB-0013 <sup>(2)</sup>				
10	ORB-0014	23	ORB-0022	35	HDW-0917		
11	ELE-0145	24	ORB-0008	36	HDW-0917		
12	ORB-0007	25	HDW-0571	37	CNT-0033		
13	HDW-0515	26	BRG-0008	38	CNT-0045		

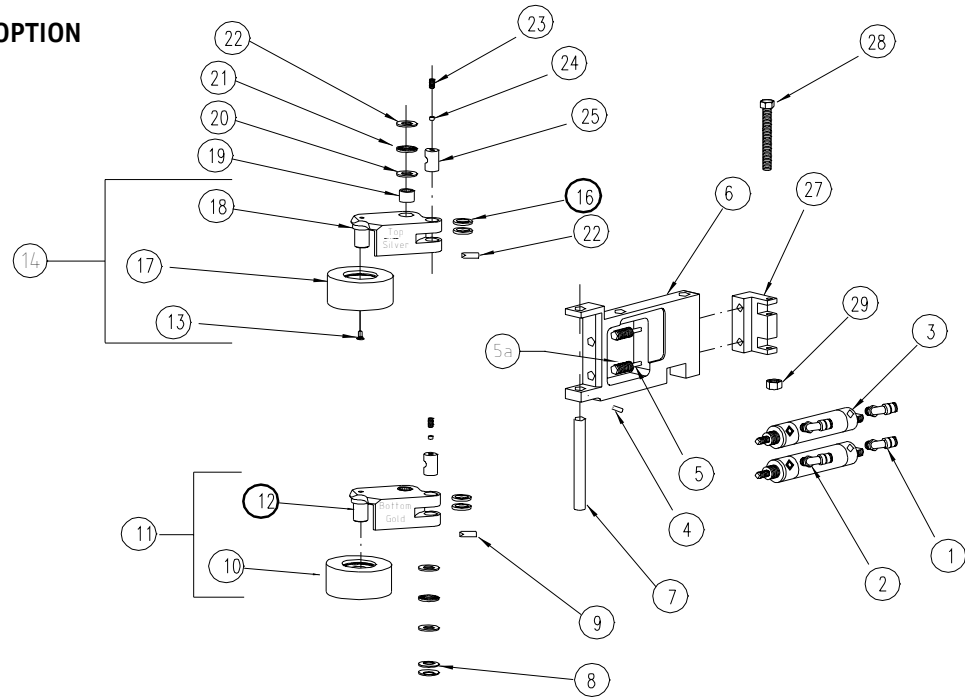
<sup>1</sup>VMCs with Non-Locking Drawbar require ORB-0029

<sup>2</sup>VMCs with Non-Locking Drawbar require ORB-0012

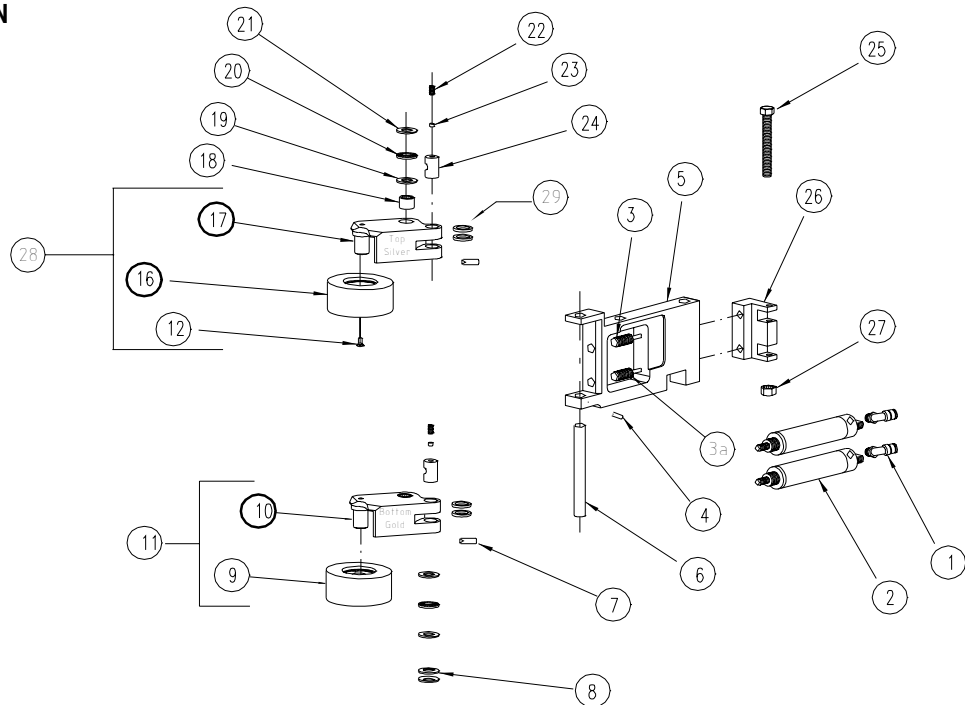
# IDLER ASSEMBLY

## IDLER ASSEMBLIES

### RIGID TAP/HIGH TORQUE OPTION



### 10,000 RPM OPTION



# IDLER ASSEMBLY

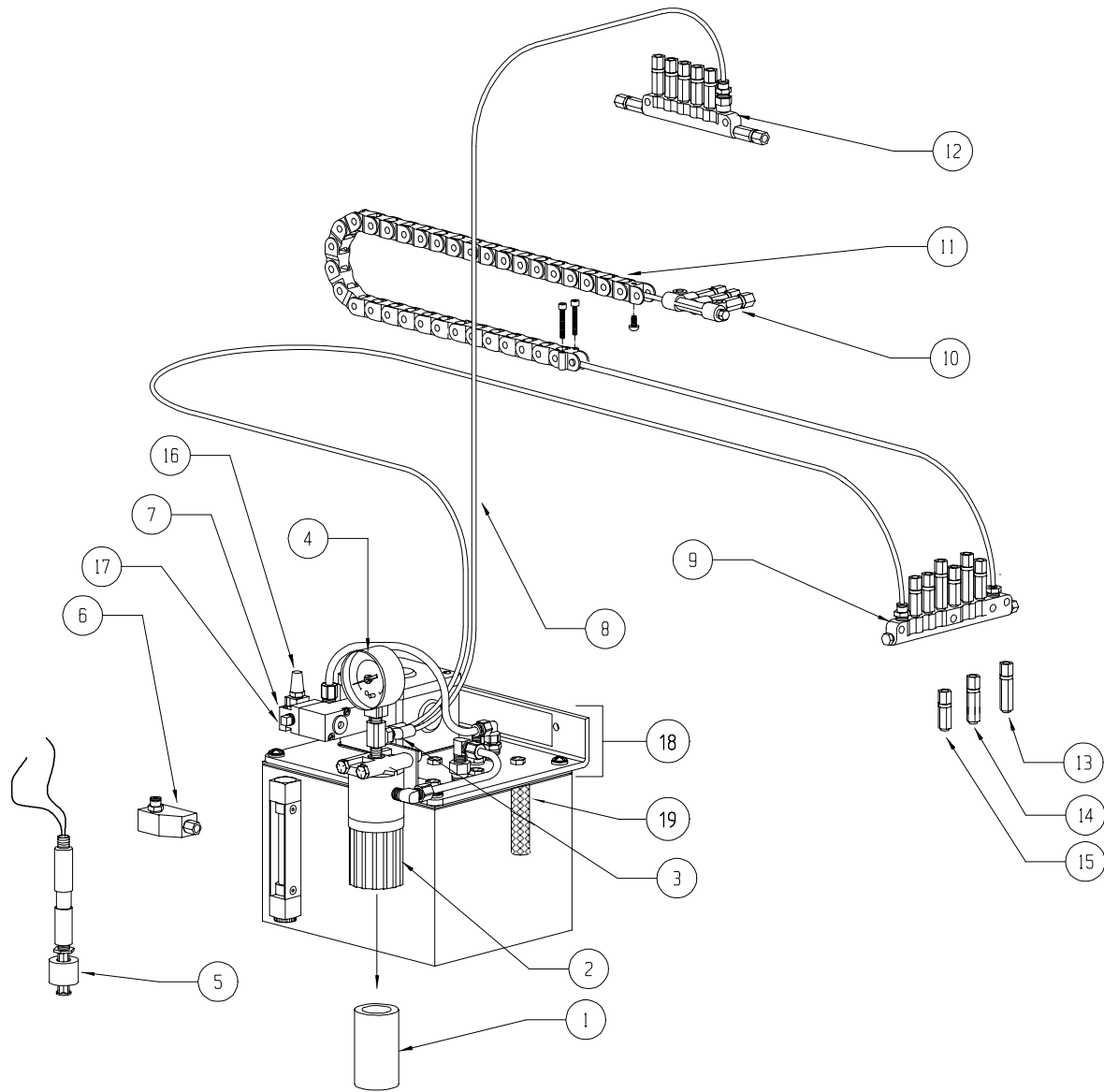
## RIGID TAP/HIGH TORQUE OPTION

	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

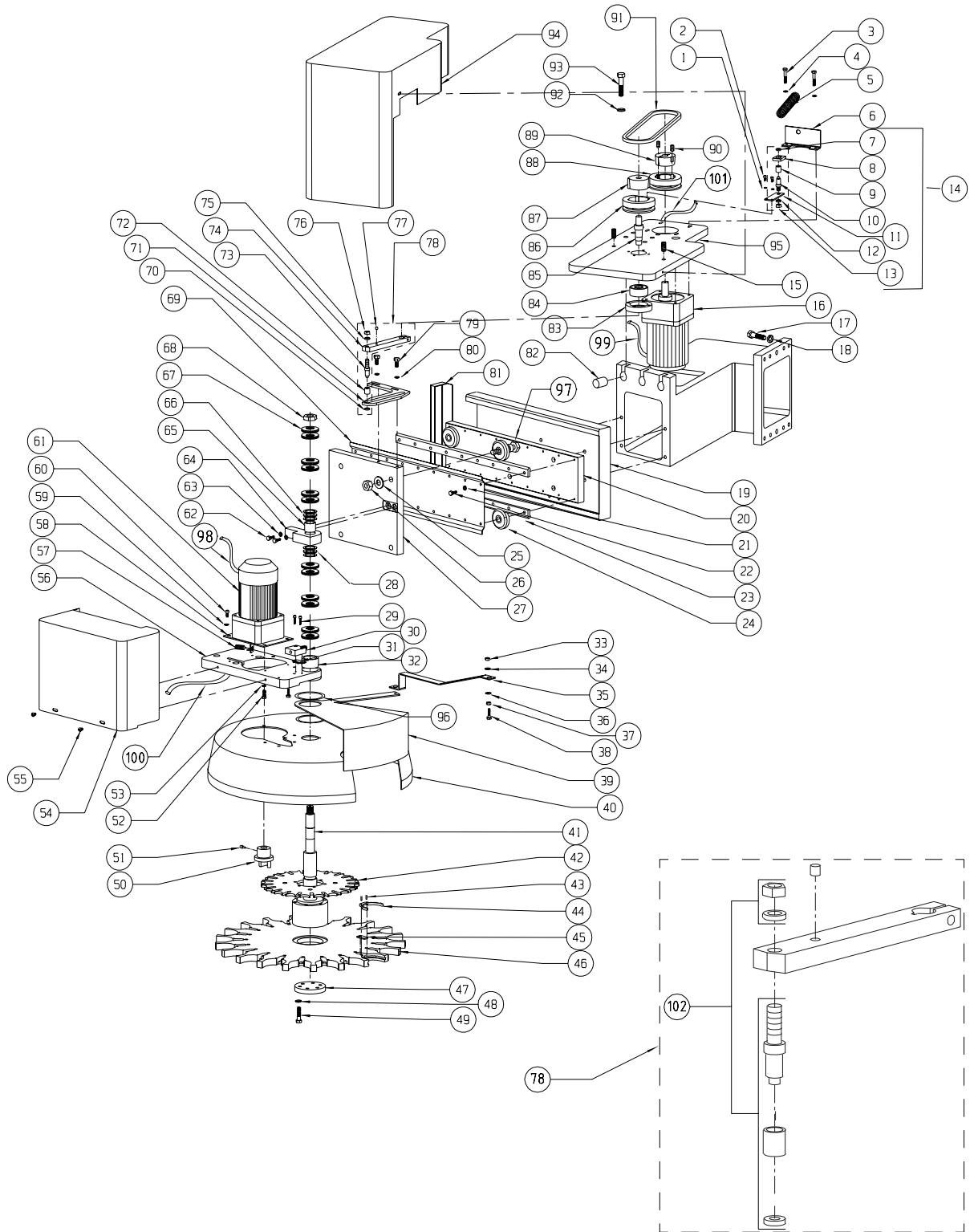
# WAY LUBE ASSEMBLY



**WAYLUBE PUMP ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		

# GENEVA DRIVE ATC ASSEMBLY



# GENEVA DRIVE ATC ASSEMBLY

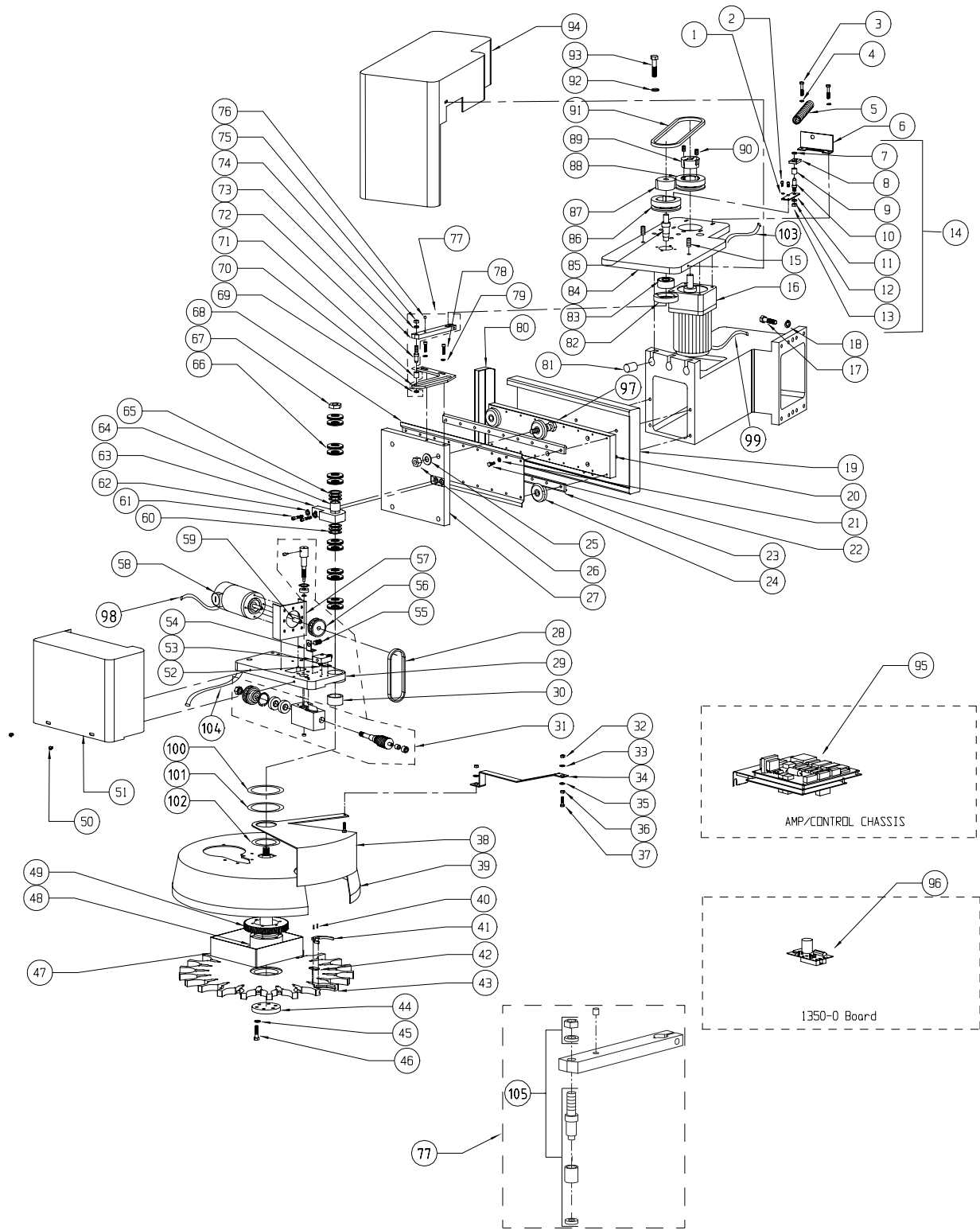
## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
								102	ATC-0169
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)
					HDW-0295 (1)				ATC-0005 (30)

<sup>1</sup>Quick disconnect type



# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0053 or	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
	MTR-0133	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
17	HDW-0310	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
18	HDW-0451		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
19	STM-0061	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
20	ATC-0030		STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

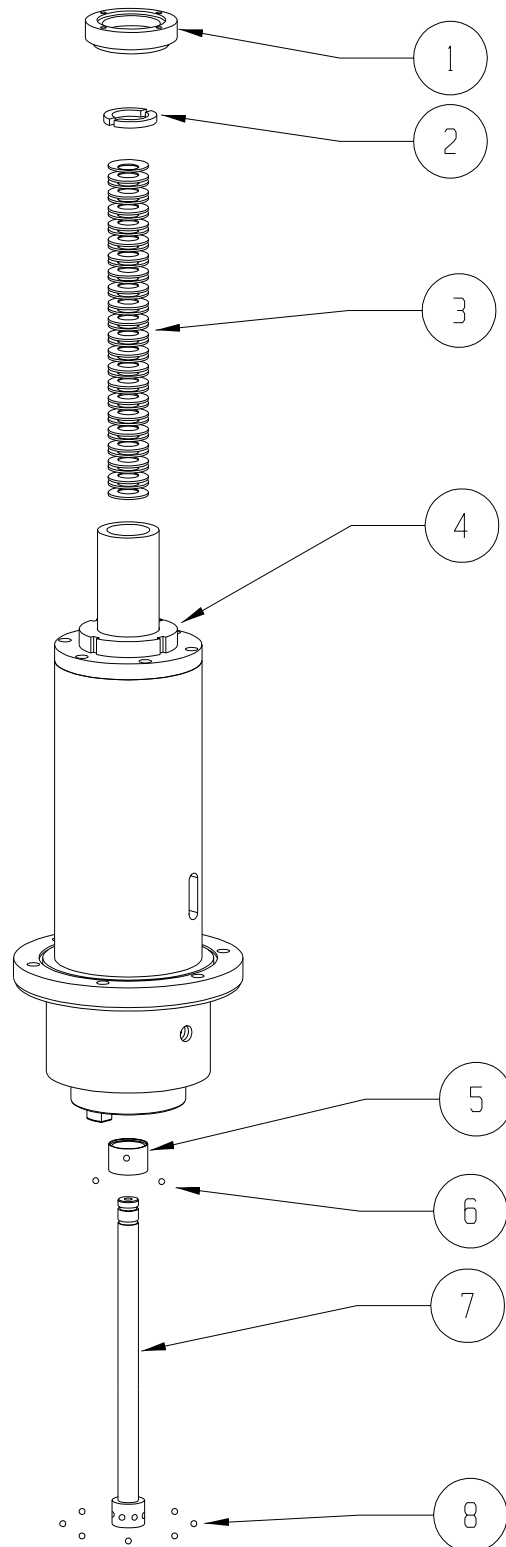
# 7500 RPM SPINDLE ASSEMBLY

### 7500 RPM SPINDLE ASSEMBLY

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



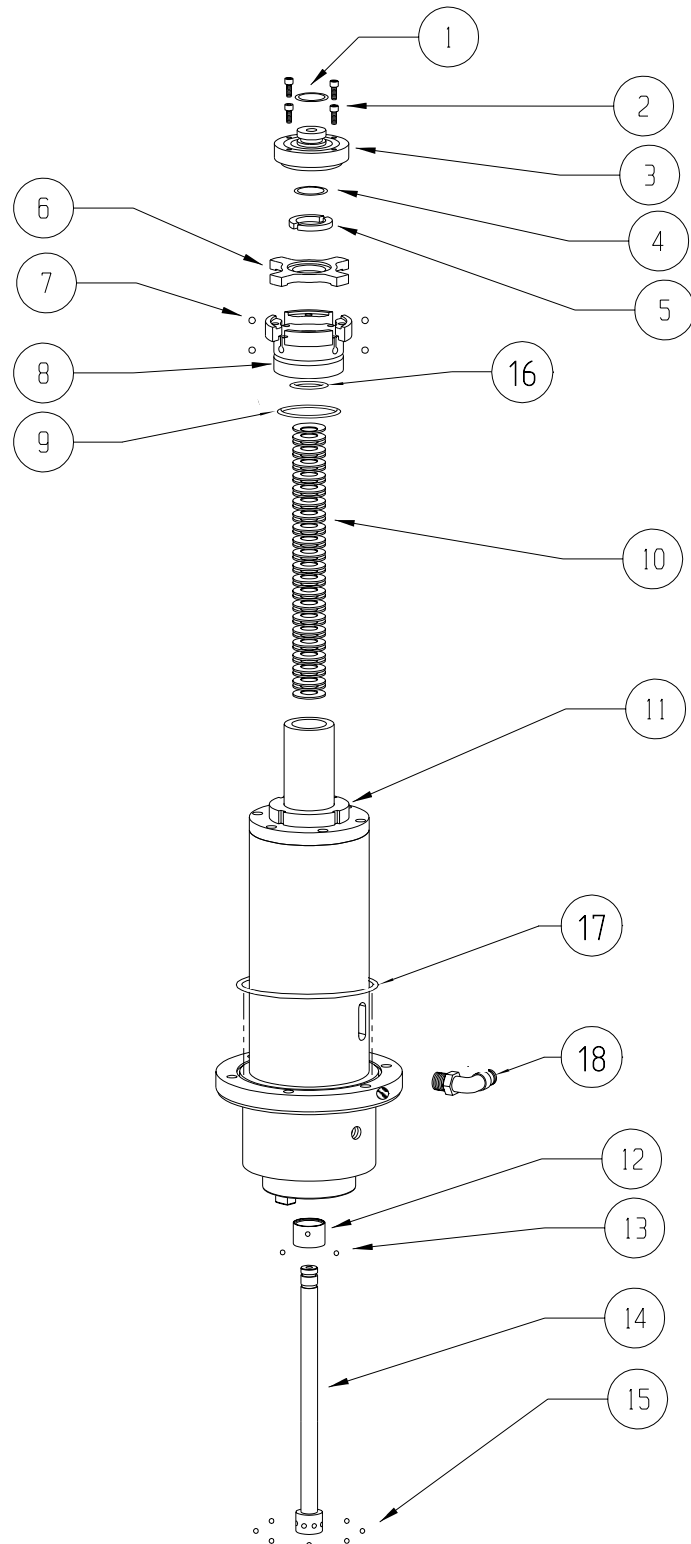
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

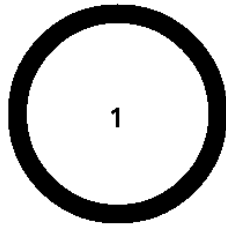
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

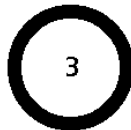
CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



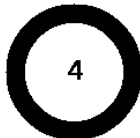
1  
HDW-0158



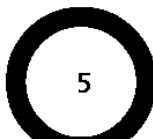
2  
HDW-0177



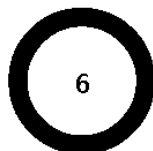
3  
HDW-0150



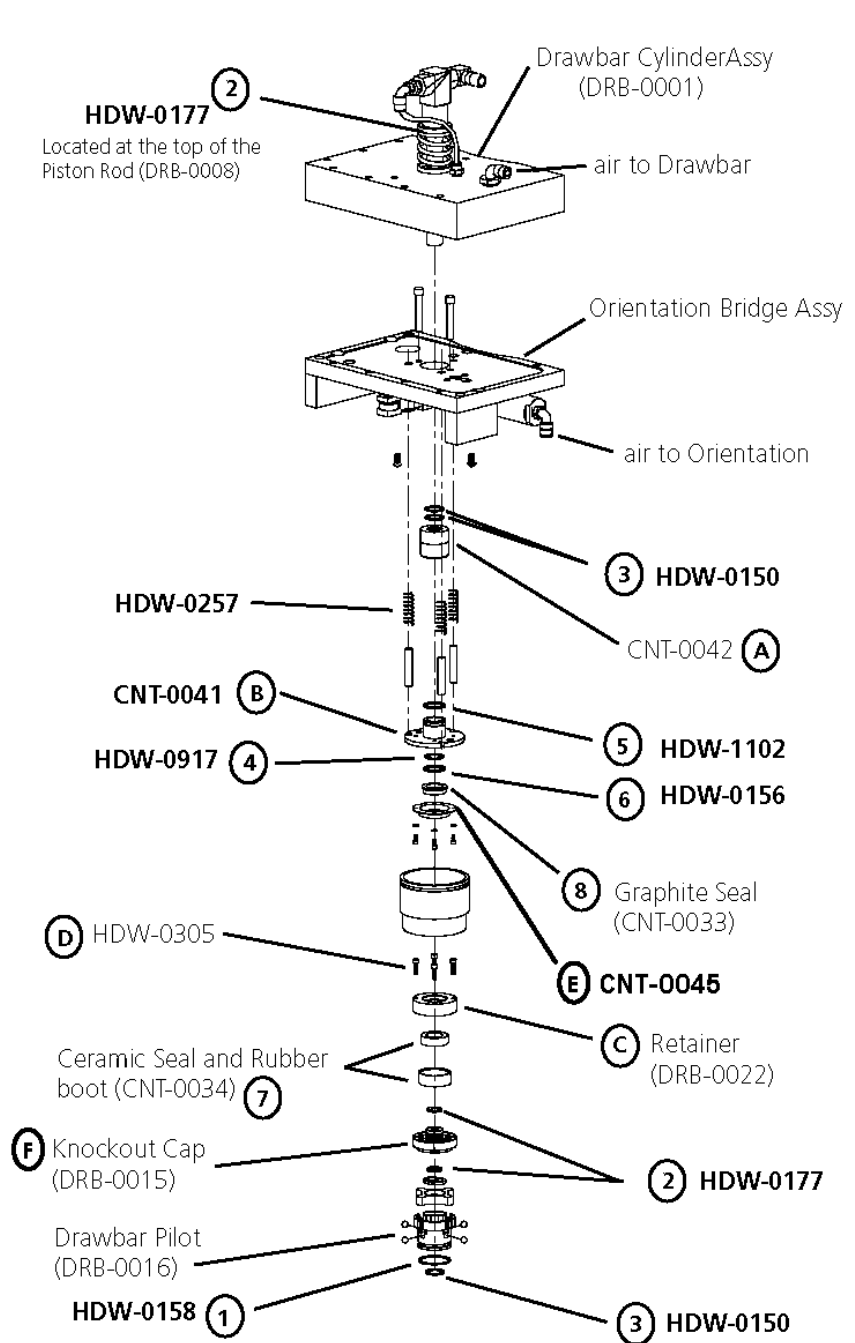
4  
HDW-0917



5  
HDW-1102

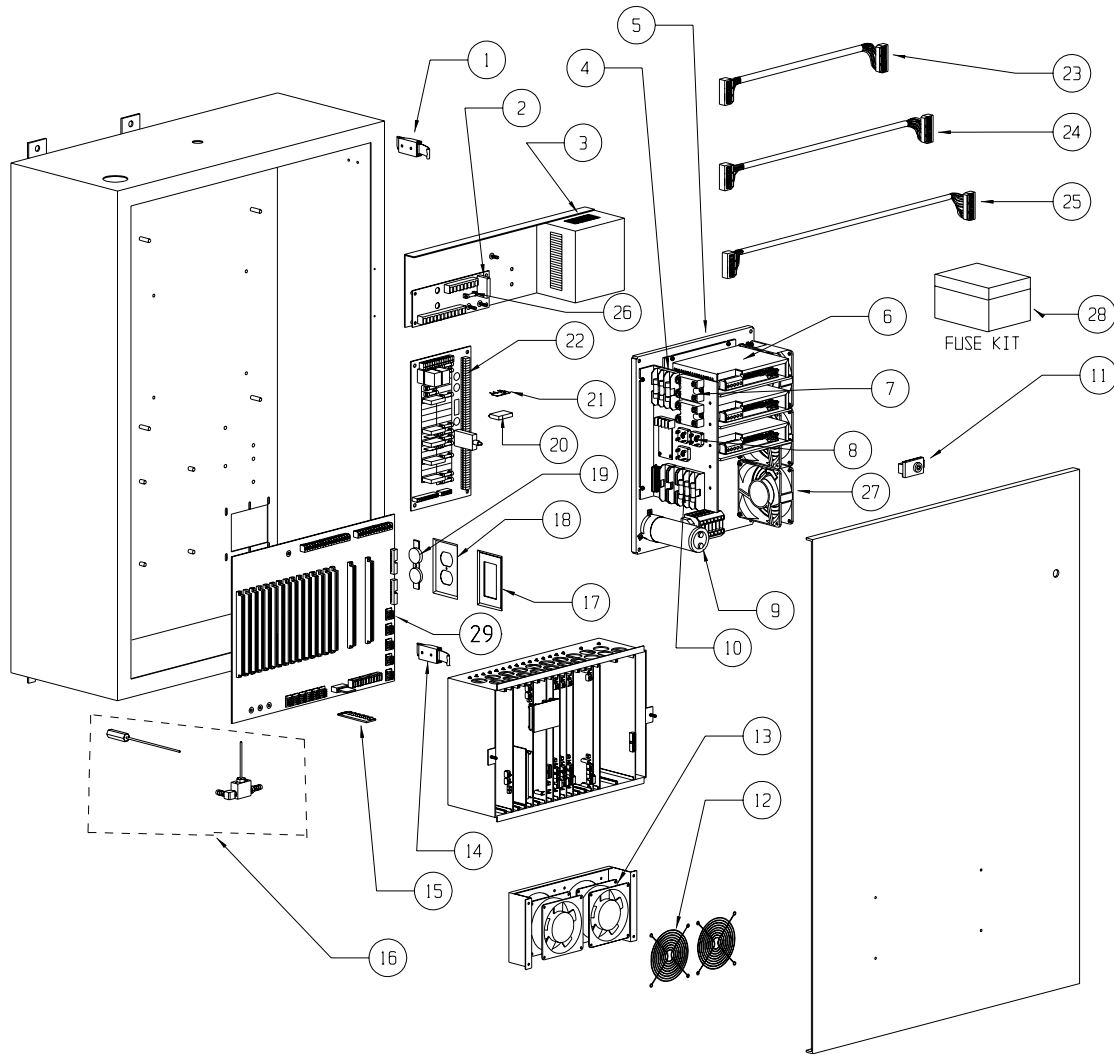


6  
HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

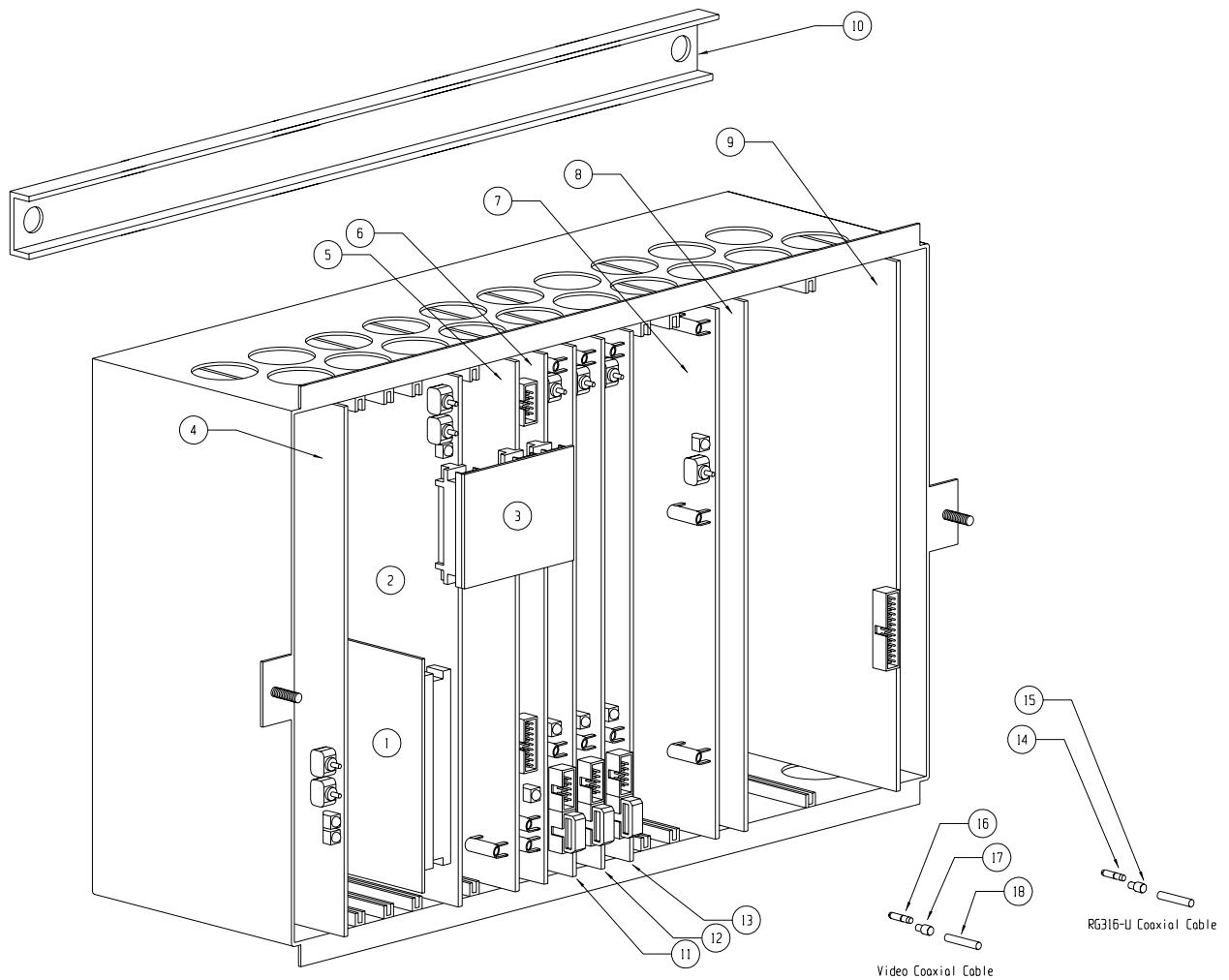
# CNC CABINET ASSEMBLY



**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0028 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0033 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0029 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0034 (AMC)					29	PCB-0009
7	ELE-0074						

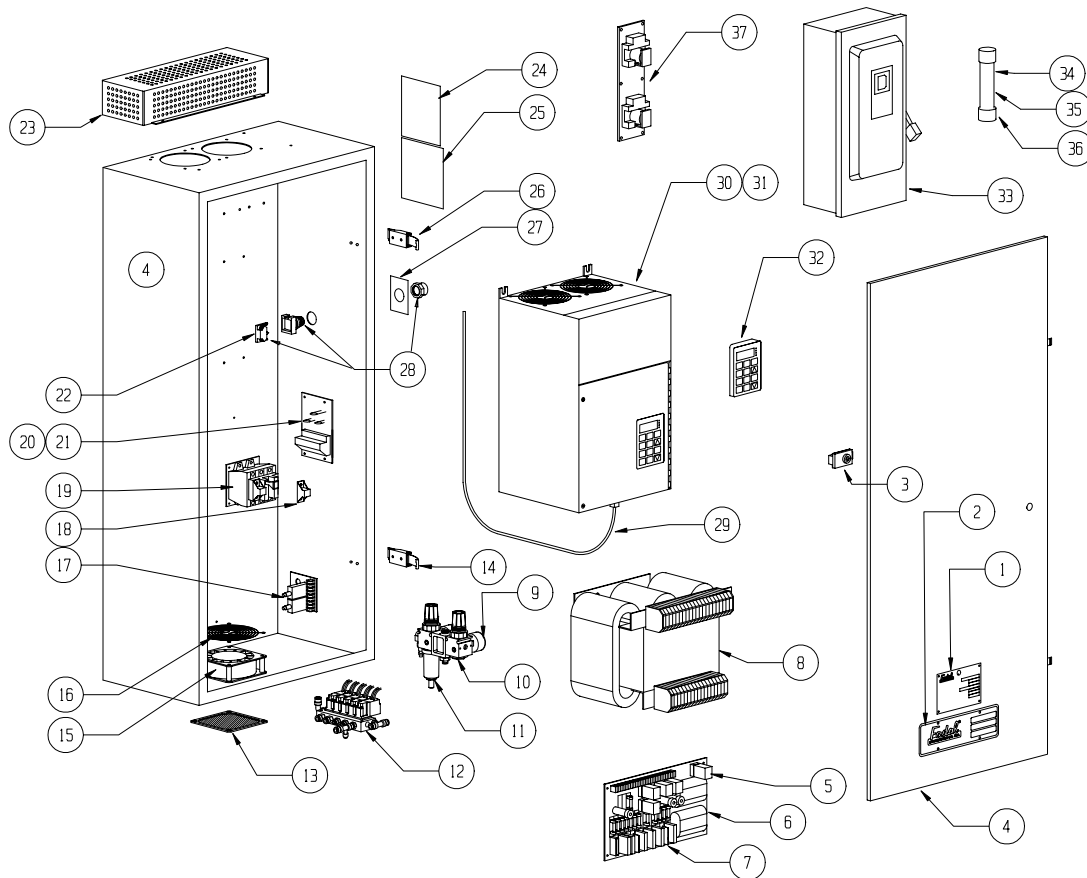
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

# POWER JUNCTION CABINET ASSEMBLY

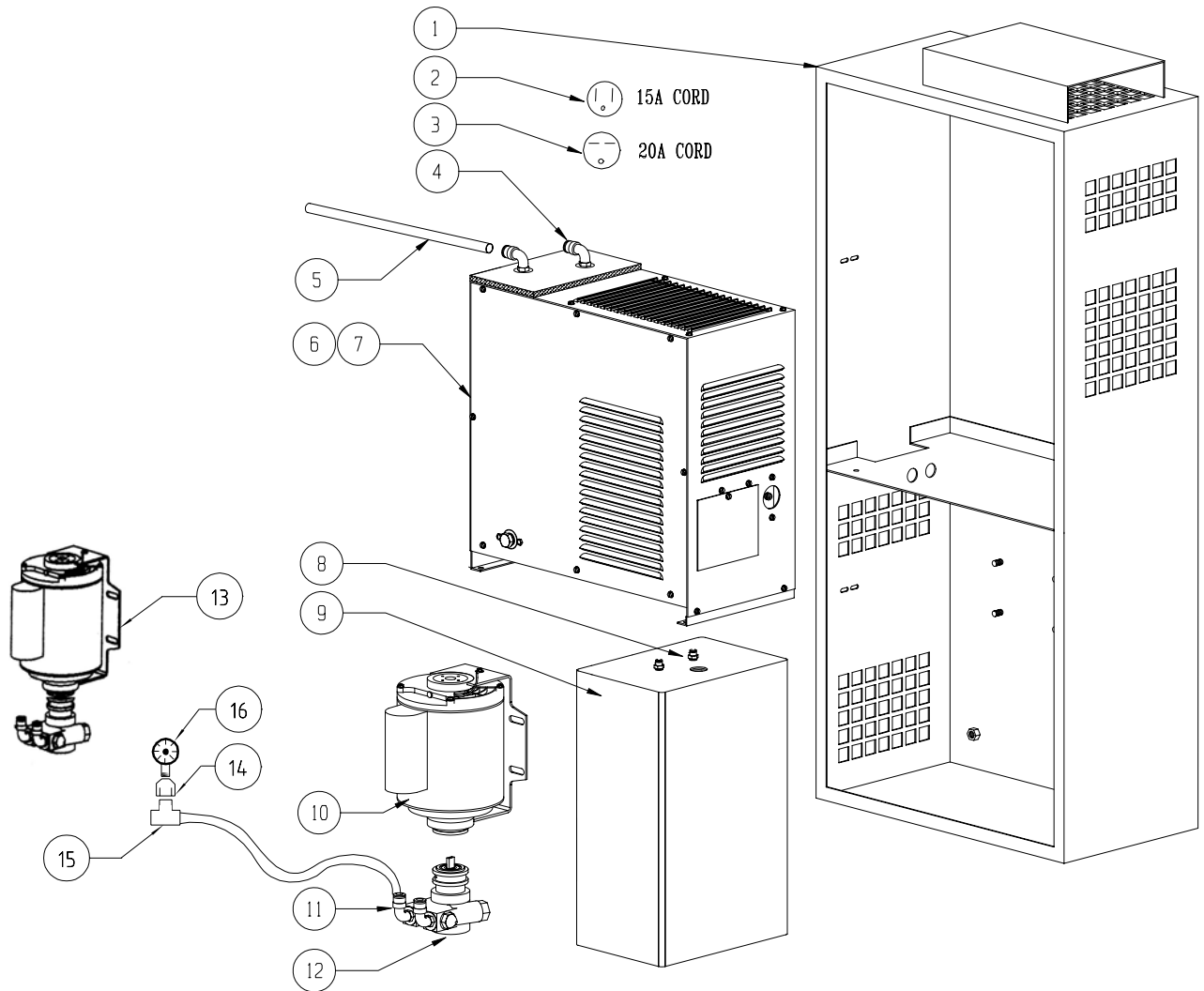


**POWER JUNCTION CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LBL-0030	12	VLV-0055 (7.5K)	23	INV-0004	33	ELE-0139 (60AMP)
	LBL-0031 (HT)		VLV-0054 (10K)	24	LBL-0037		ELE-0140 (30AMP)
2	LBL-0106	13	HDW-0849	25	LBL-0040	34	ELE-0063 (45A 240V)
3	HDW-0221	14	HDW-0216	26	HDW-0219	35	ELE-0062 (30A 380V)
4	STM-0450	15	ELE-0123	27	LBL-0038	36	ELE-0060 (20A 480V)
5	ELE-0072	16	HDW-0850	28	ELE-0110	37	WIR-0073
6	PCB-0015	17	PCB-0046	29	WIR-0166		
7	ELE-0070	18	ELE-0138	30	INV-0020(HT)		
8	ELE-0200	19	ELE-0132		INV-0041 (Baldor)		
9	REG-0005	20	PCB-0145 (240V)	31	INV-0056 (AMC)		
10	REG-0009	21	PCB-0146 (500V)	32	INV-0017		
11	REG-0008	22	ELE-0093				



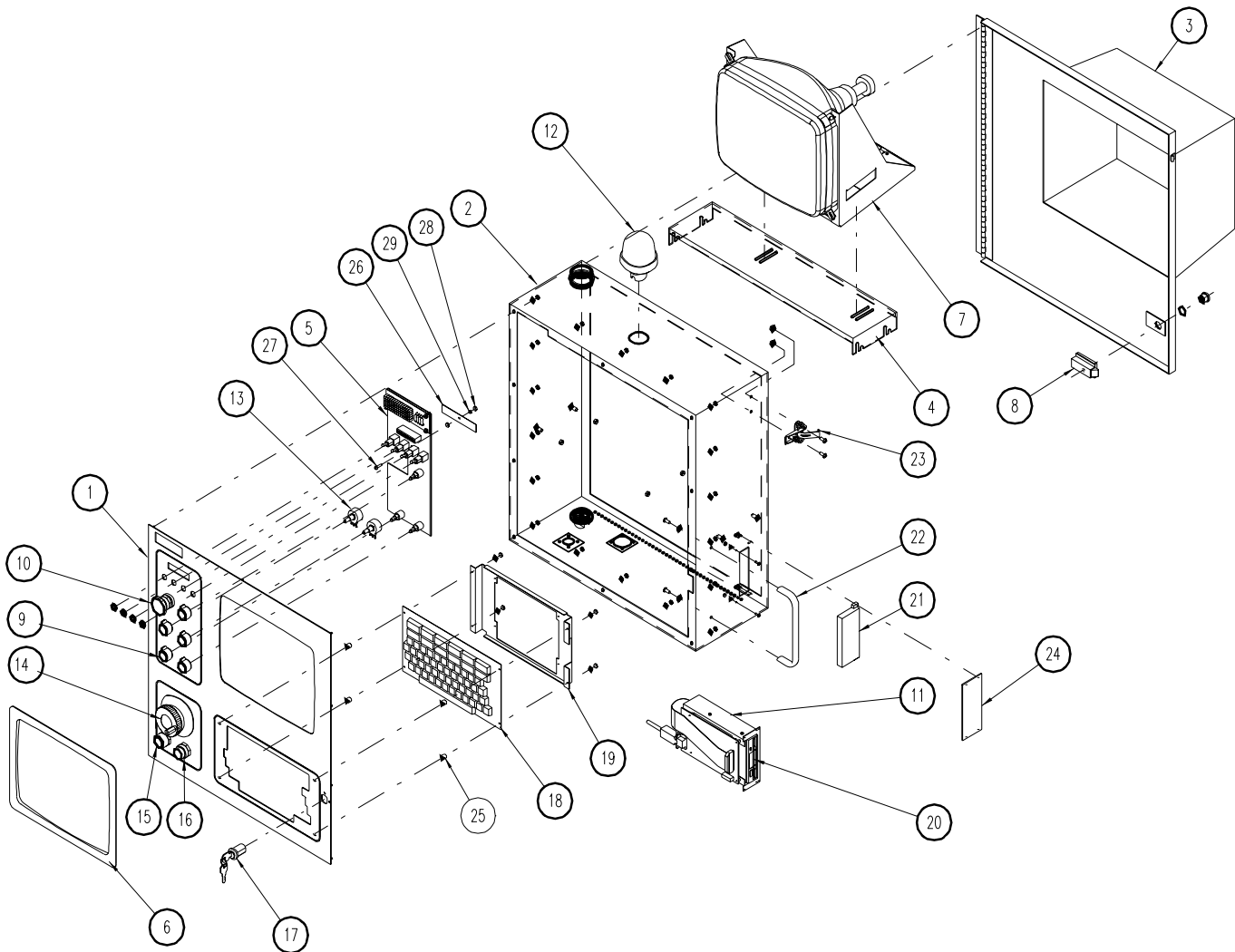
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PLM-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

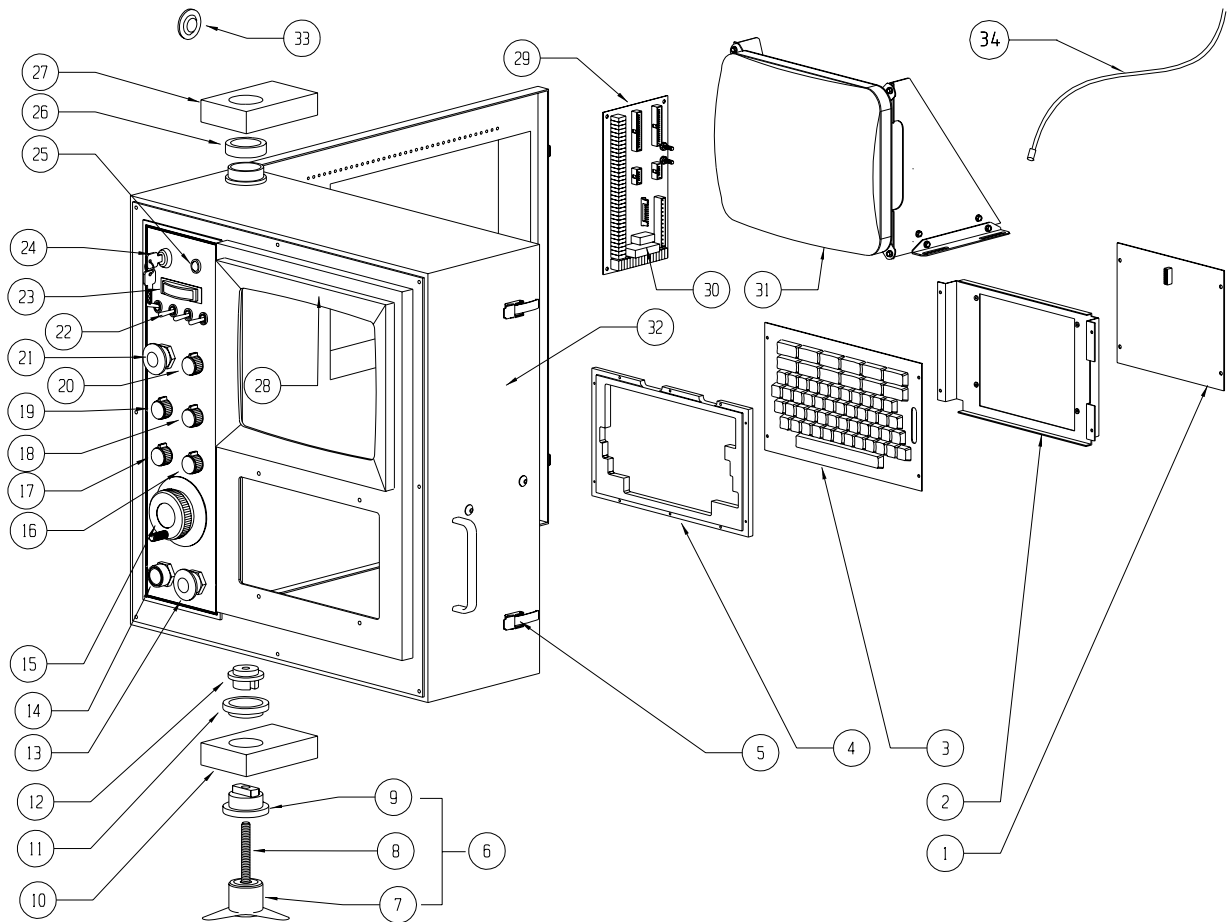
# MP PENDANT ASSEMBLY



### MP PENDANT ASSEMBLY

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

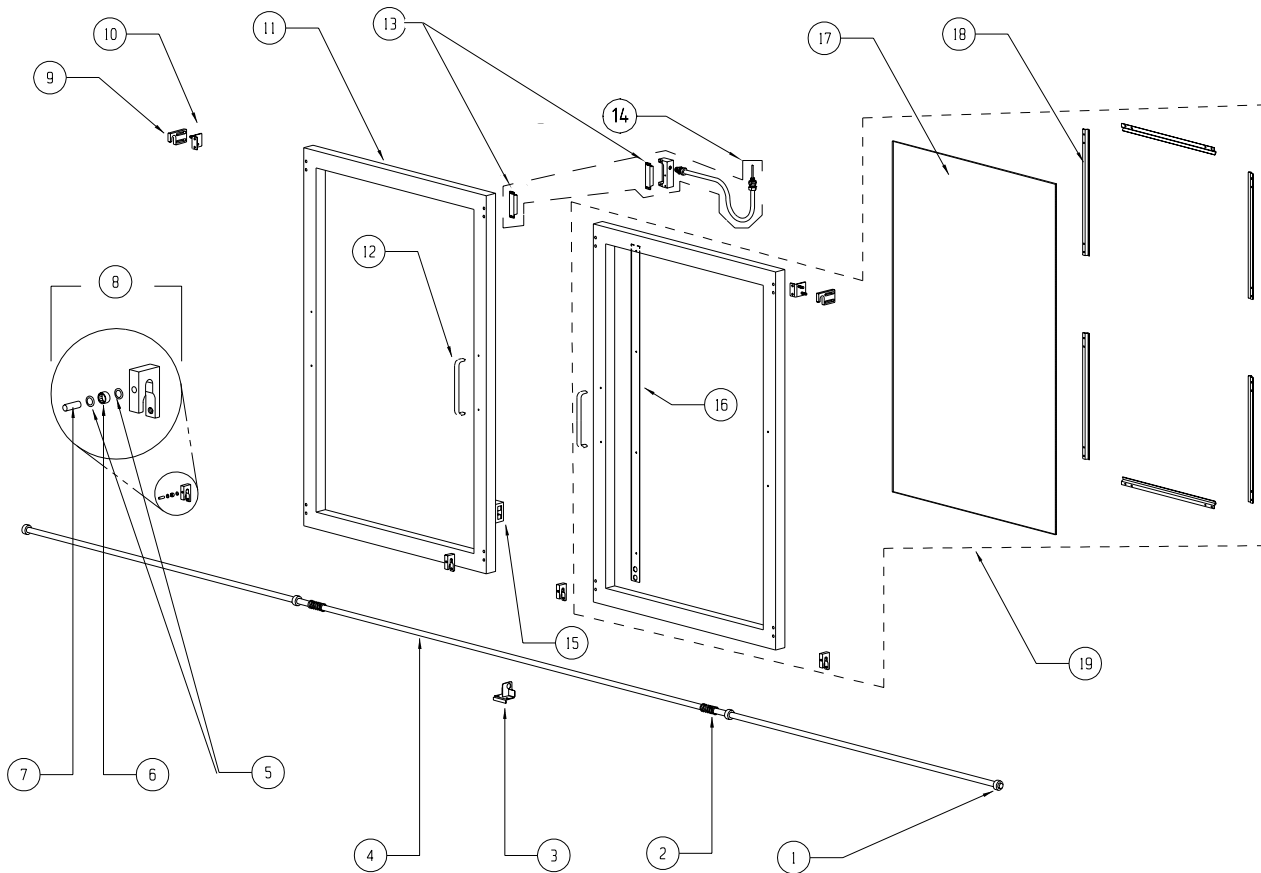
# 88HS PENDANT ASSEMBLY



**88HS PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

# FRONT DOOR ASSEMBLY



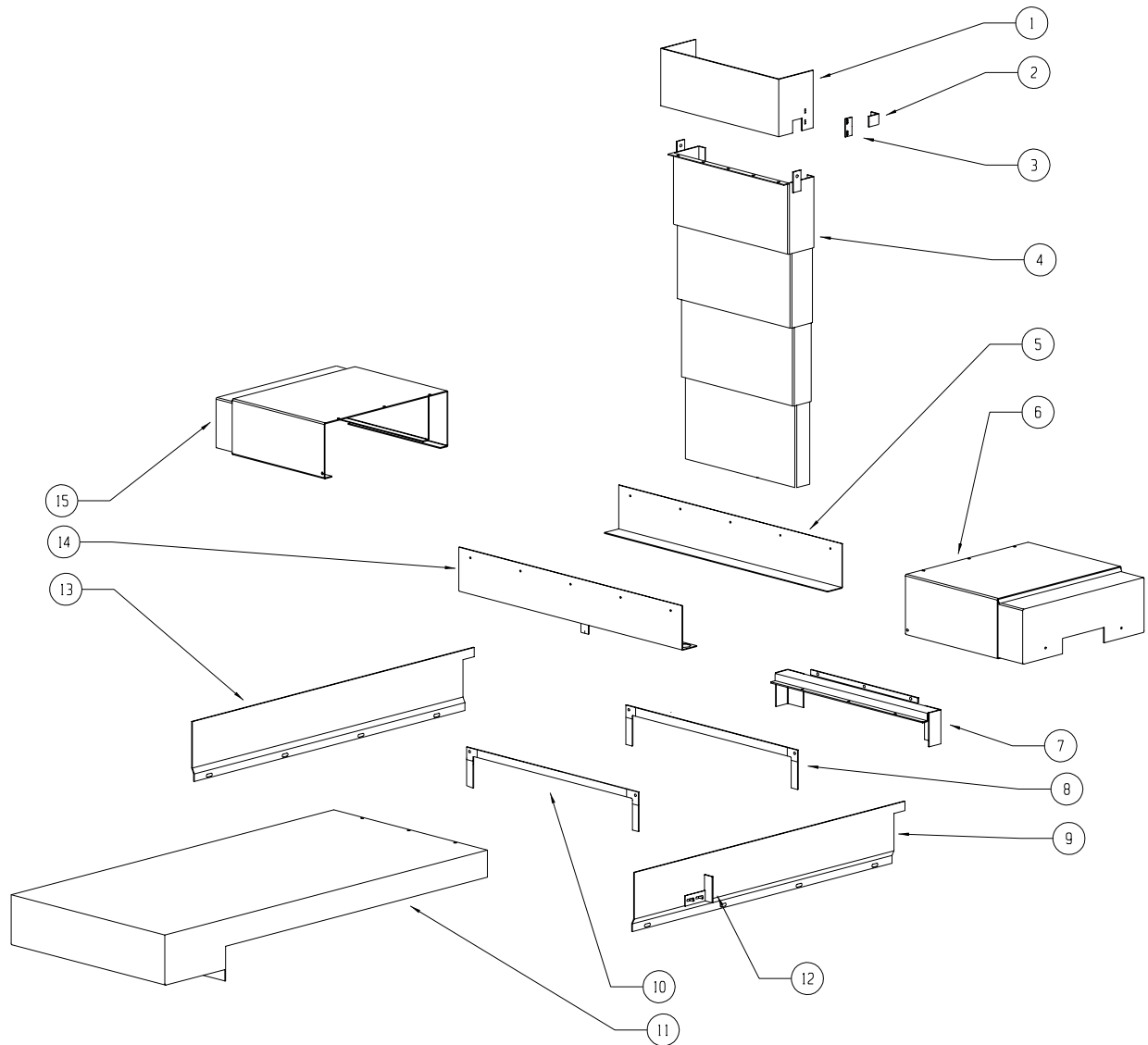
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0053	11	DOR-0002	18	STM-0084
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

# WAY COVER ASSEMBLY

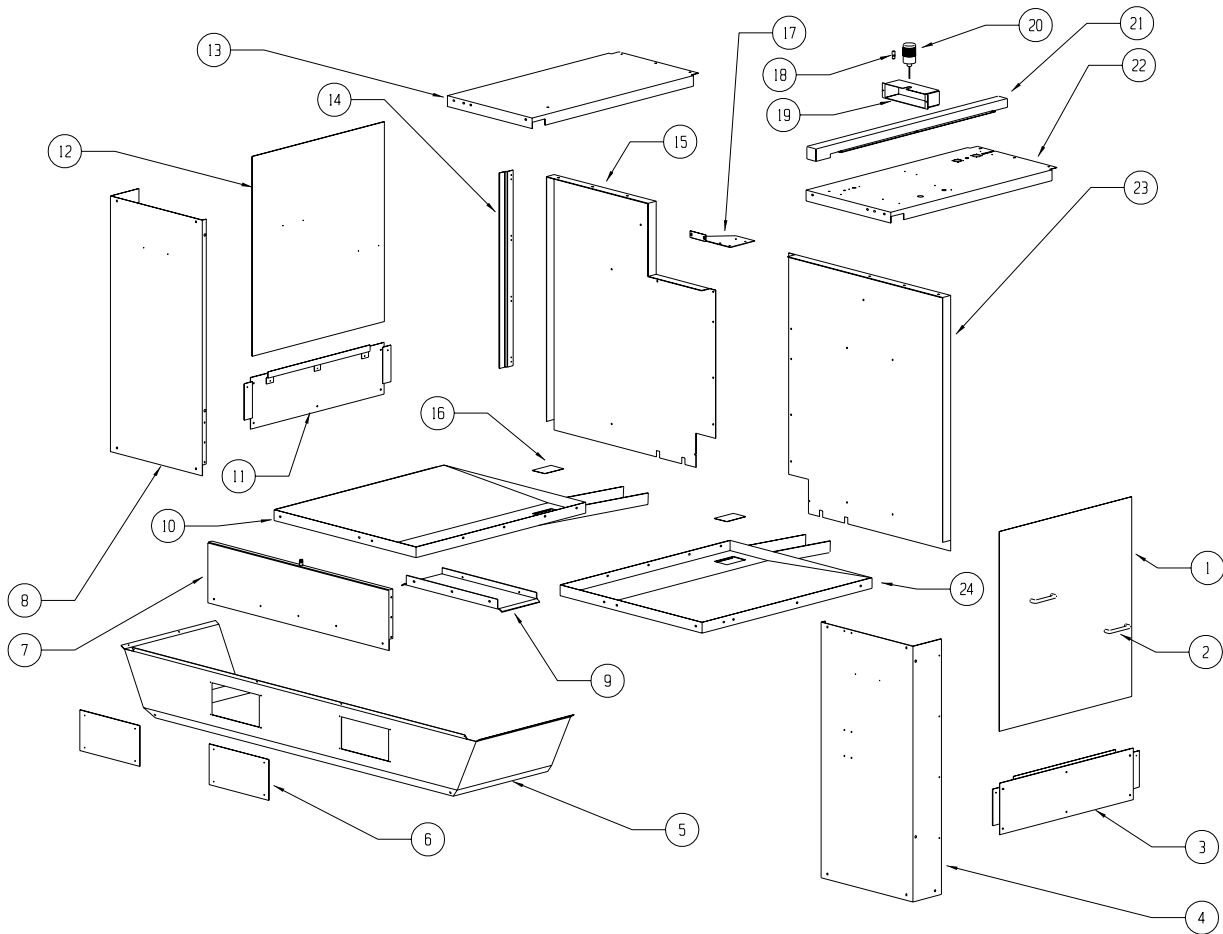


**WAY COVER ASSEMBLY**

	PART#		PART#		PART#		PART#
1	STM-0225	5	STM-0227	9	CVR-0085	14	STM-0468
2	STM-0048		STM-0670 (XT)	10	CVR-0091 <sup>(1)</sup>		STM-0671 (XT)
3	STM-0044	6	CVR-0016	11	CVR-0058	15	CVR-0016
4	CVR-0057 (20")		CVR-0092 (XT)	12	STM-0224		CVR-0092 (XT)
	CVR-0061 (28")	7	CVR-0084	13	CVR-0086		
		8	CVR-0091 <sup>(1)</sup>				

<sup>1</sup>CVR-0091 consists of an entire assembly for one side which includes: 1 long wiper HDW-0905, 2 short wipers HDW-0906, 2 clamps HDW-0628 and 2 screws HDW-0347.

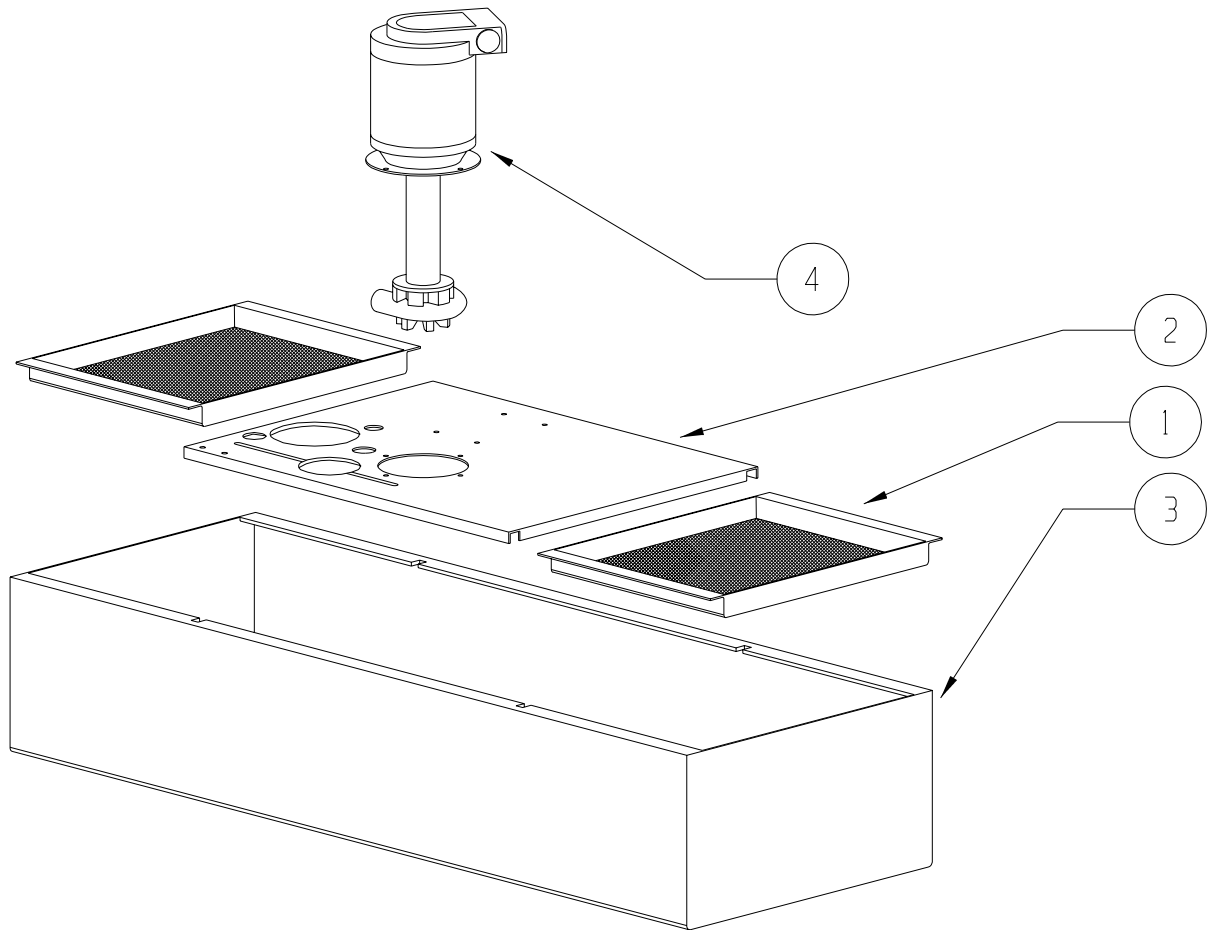
# SHEETMETAL HOUSING



## SHEETMETAL HOUSING

	PART #		PART #		PART #
1	STM-0241	9	STM-0118	17	STM-0540
2	HDW-0181	10	STM-0321	18	ELE-0122
3	STM-0240	11	STM-0240	19	STM-0088
4	STM-0247	12	STM-0241	20	ELE-0121
5	STM-0238	13	STM-0256	21	STM-0085
6	STM-0299	14	STM-0244	22	STM-0255
7	STM-0078	15	STM-0322	23	STM-0329
8	STM-0334	16	STM-0110	24	STM-0323

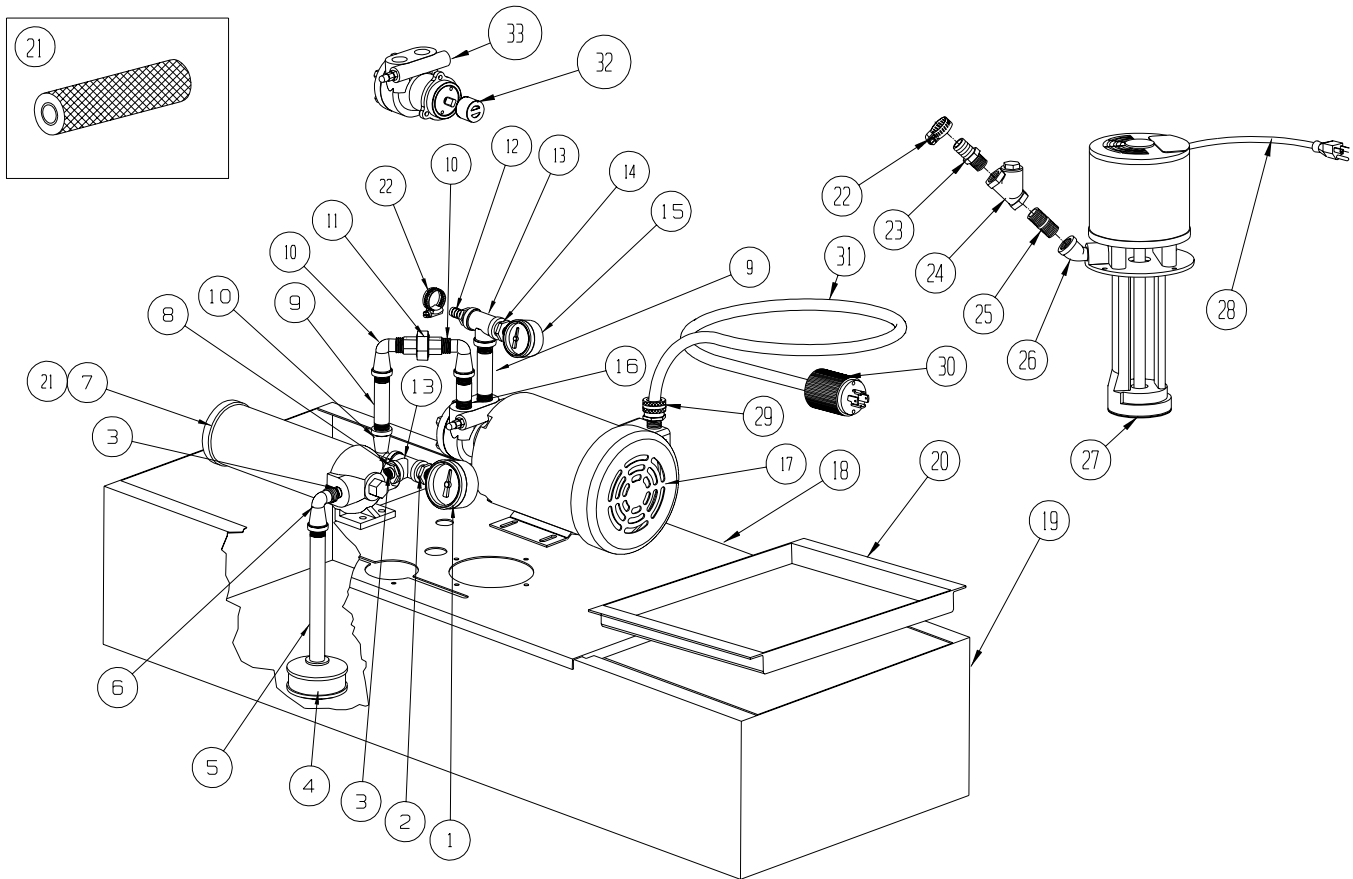
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

# 7500 RPM COOLANT THROUGH TANK

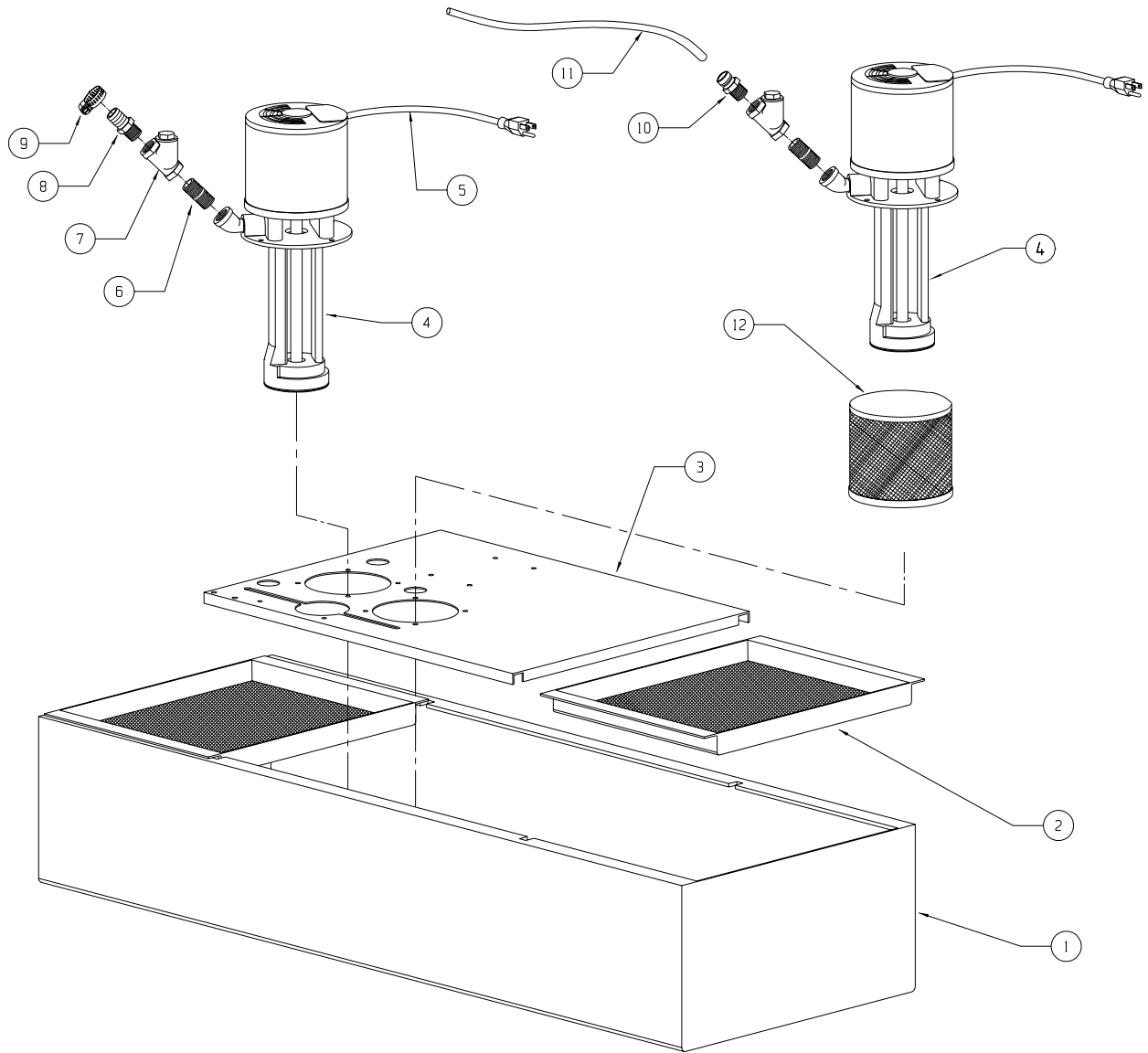


**7500 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		



# 10K RPM COOLANT TANK

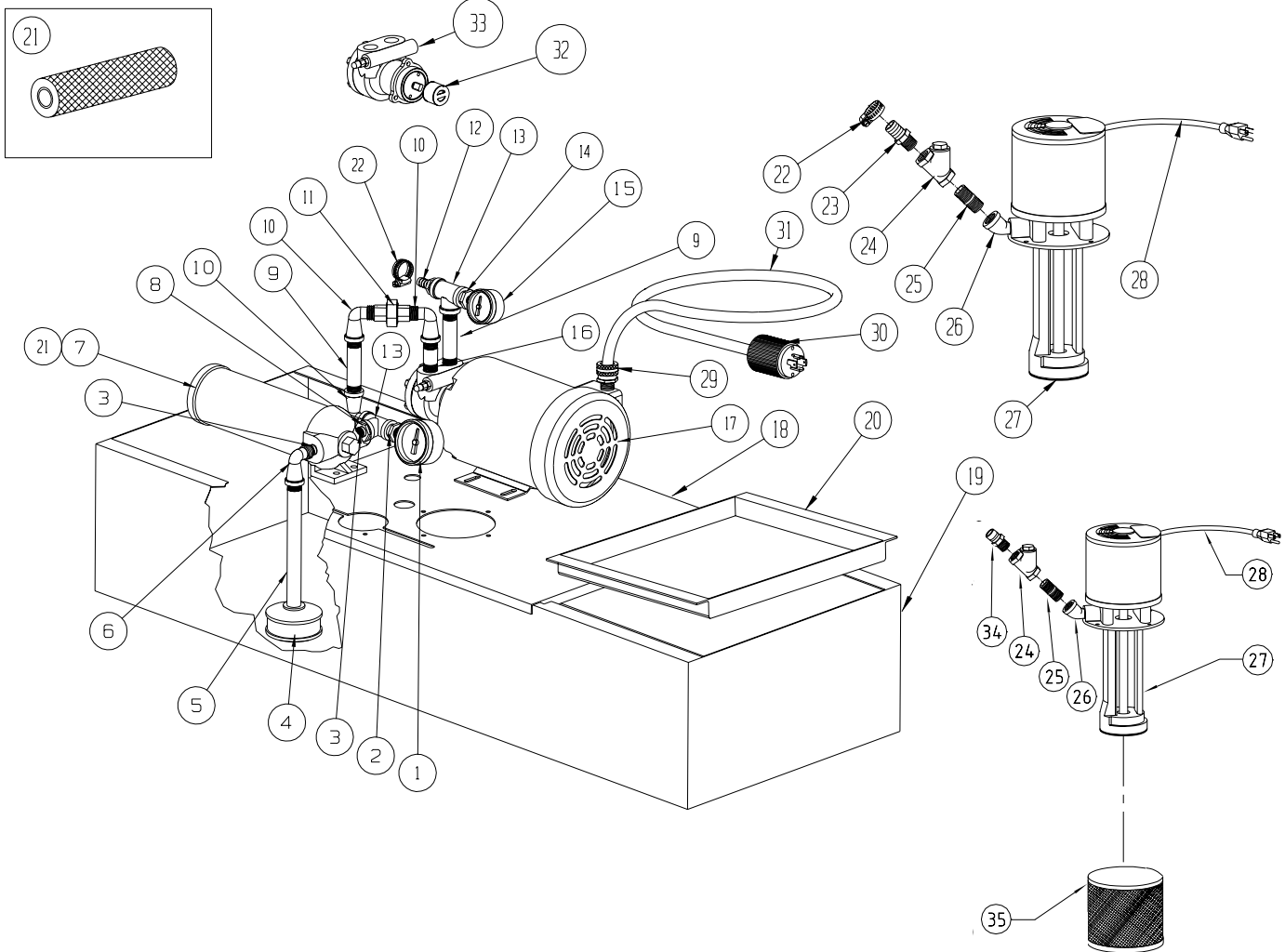


10,000 RPM COOLANT TANK

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# 10K RPM COOLANT THROUGH TANK

## 10,000 RPM COOLANT THROUGH TANK



**10,000 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

# TABLE OF CONTENTS

## Parts Manual VMC 3016 MODEL



COLUMN ASSEMBLY .....	2
10K RPM HEAD ASSEMBLY .....	4
BASE, SADDLE & TABLE ASSEMBLY .....	6
X-AXIS SCALE ASSEMBLY .....	8
Y-AXIS SCALE ASSEMBLY .....	9
DRAWBAR CYLINDER ASSEMBLIES.....	10
ORIENTATION BRIDGE ASSEMBLIES.....	11
IDLER ASSEMBLIES .....	12
WAY LUBE ASSEMBLY.....	14
GENEVA DRIVE ATC ASSEMBLY .....	16
SERVO DRIVE ATC ASSEMBLY .....	18
7500 RPM SPINDLE ASSEMBLY .....	20
10K RPM SPINDLE ASSEMBLY .....	21
COOLANT THROUGH SPINDLE.....	22
CNC CABINET ASSEMBLY.....	23
CARD CAGE ASSEMBLY .....	24
POWER JUNCTION CABINET ASSEMBLY .....	25
CHILLER CABINET ASSEMBLY .....	26
MP PENDANT ASSEMBLY .....	27
88HS PENDANT ASSEMBLY .....	28
FRONT DOOR ASSEMBLY .....	29
WAY COVER ASSEMBLIES .....	30
SHEET METAL HOUSING.....	31
7500 RPM COOLANT TANK .....	32
10K RPM COOLANT TANK .....	34
10K RPM COOLANT THROUGH TANK .....	35



**This reference covers the following Fadal products:**

**Model VMC 3016**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

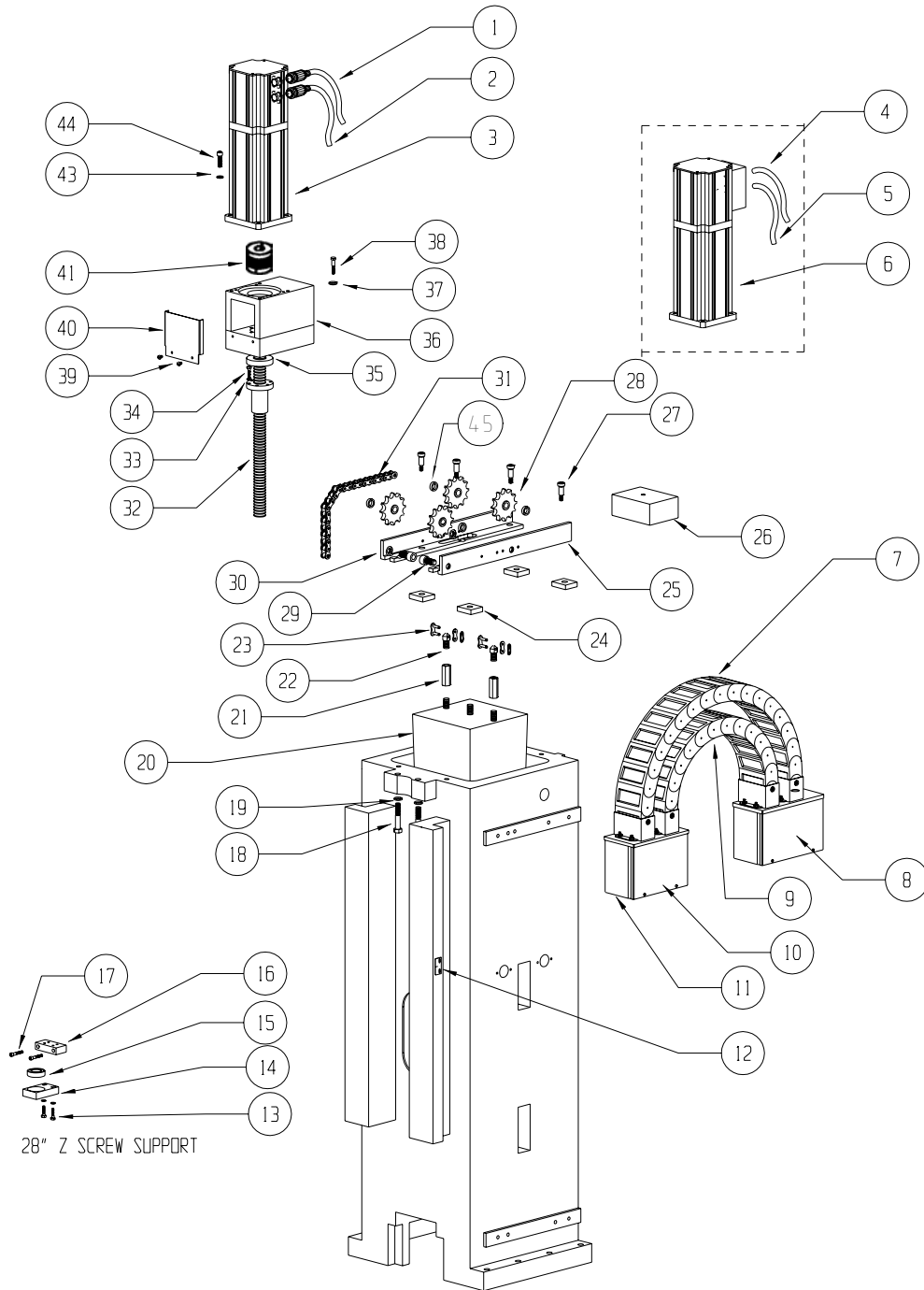
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

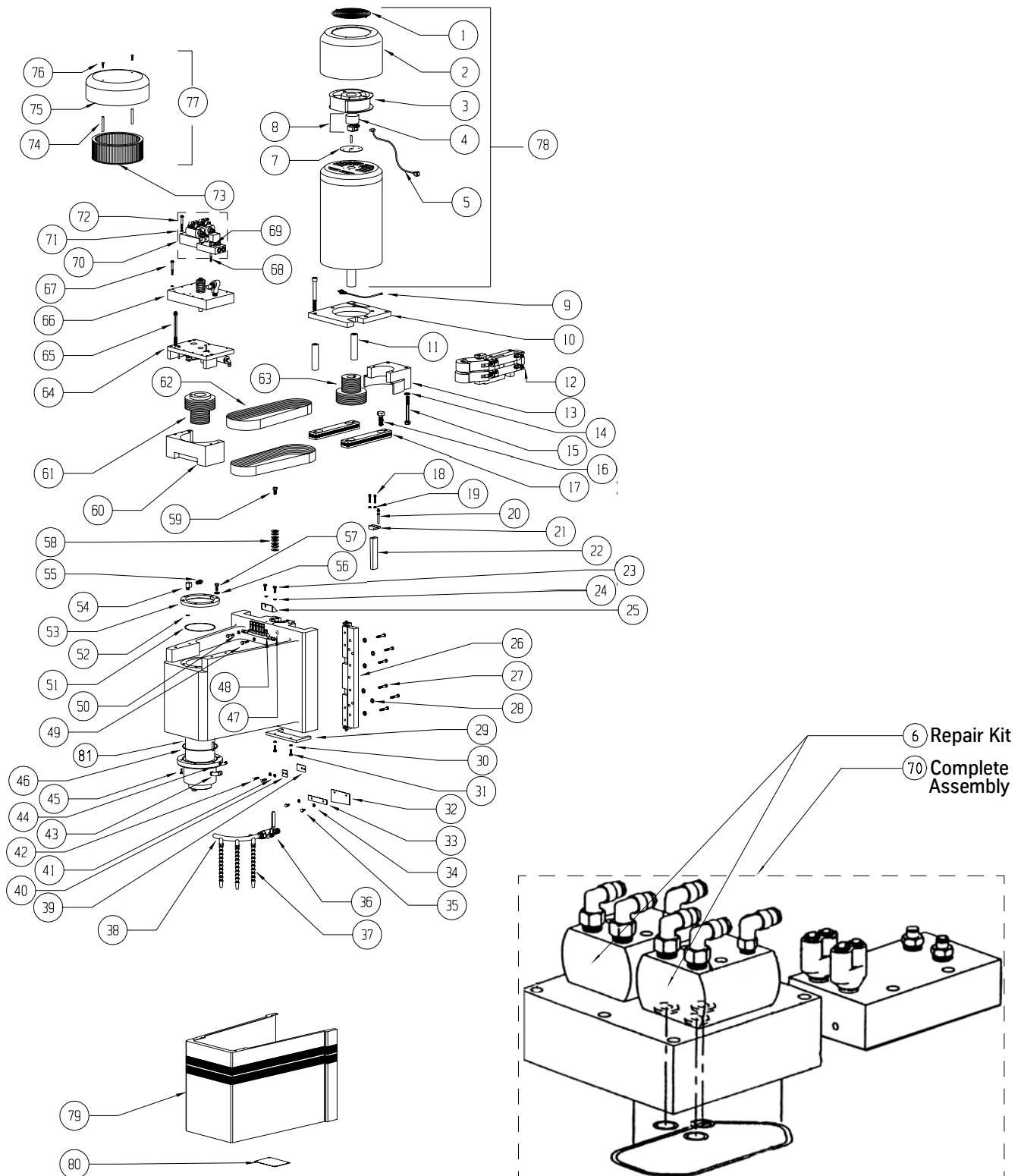


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	HDW-0317	24	HDW-0363	35	BLS-0105
2	WIR-0611		HDW-0048	25	CWT-0005	36	BLS-0032
3	MTR-0142	14	BLS-0042	26	CWT-0002	37	HDW-0049
4	WIR-0558	15	BRG-0023	27	HDW-0600	38	HDW-0315
5	WIR-0559	16	BLS-0041	28	PUL-0034	39	HDW-0347
6	MTR-0126	17	HDW-0297	29	HDW-0777	40	STM-0043
7	CVR-0074	18	HDW-0655	30	CWT-0007	41	MTR-0189
8	STM-0072	19	HDW-0050	31	HDW-0205	43	HDW-0280
9	CVR-0072	20	CWT-0018	32	BLS-0031 (20")	44	HDW-0779
10	STM-0300	21	HDW-0335		BLS-0024 (28")	45	CWT-0009
11	STM-0301	22	CWT-0001	33	HDW-0281		
12	STM-0044	23	HDW-0204	34	HDW-0319		

# 10K RPM HEAD ASSEMBLY





# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

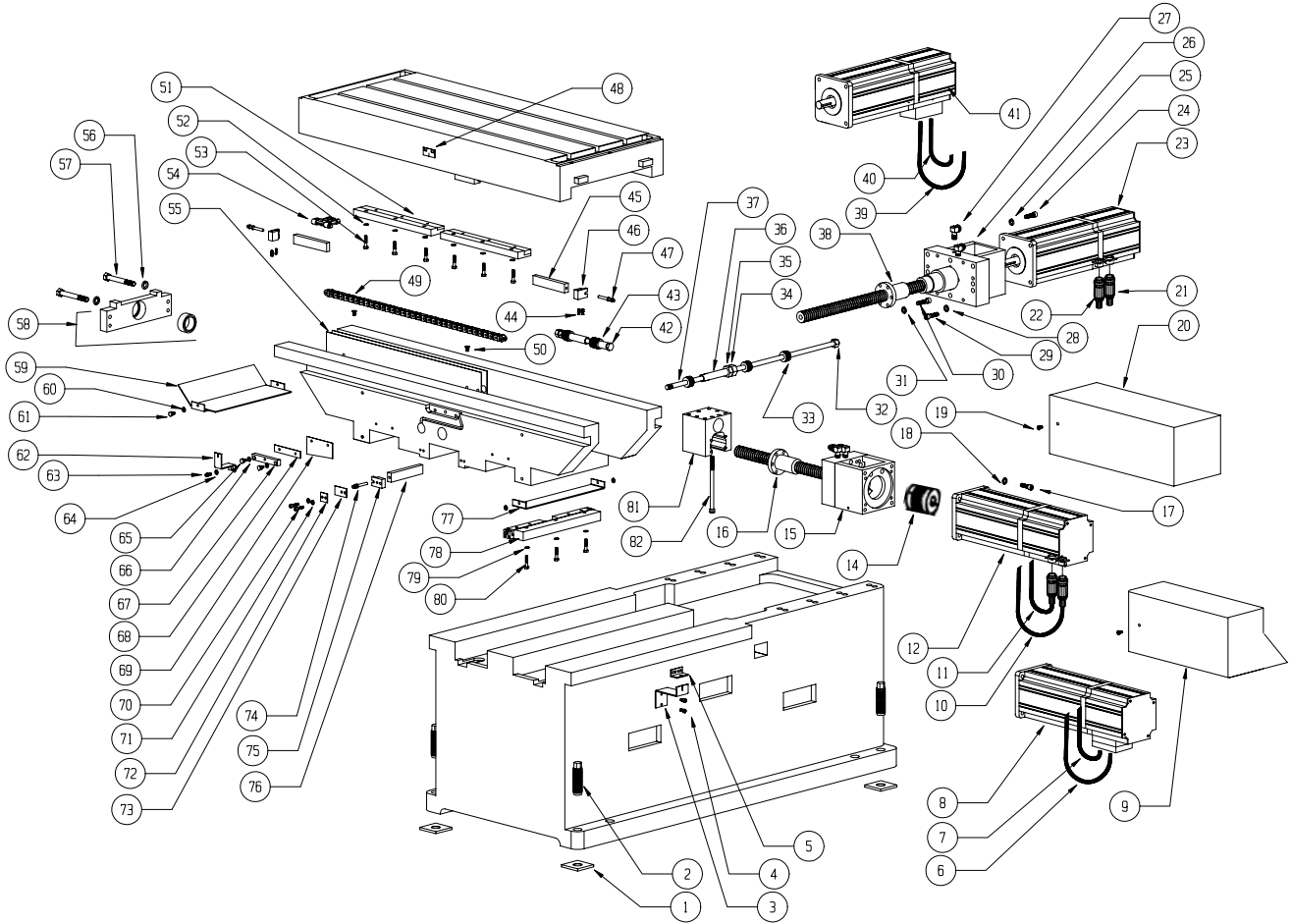
	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	HDW-0553
2	STM-0139	31	HDW-0322	60	BEL-0014
3	ELE-0124	32	HDW-0356	61	PUL-0018
4	MTR-0123	33	STM-0052	62	BEL-0024
5	WIR-0168	34	HDW-0279	63	PUL-0019
6	HYD-0018	35	HDW-0319	64	ORB-0001
7	STM-0148	36	VLV-0017	65	HDW-0290
8	ENC-0007	37	PLM-0016	66	DRB-0000
9	HDW-0369	38	CNT-0039	67	HDW-0320
10	MTR-0070	39	HDW-0294	68	HDW-0321 (HT)
11	MTR-0079	40	STM-0042	69	HDW-0279 (HT)
12	IDL-0002	41	HDW-0279	70	HYD-0017 (HT)
	IDL-0003(HT)				
13	BEL-0015	42	HDW-0294	71	HDW-0279 (HT)
14	HDW-0451	43	PLM-0112	72	HDW-0320 (HT)
15	HDW-0311	44	PLM-0034	73	MTR-0127
16	HDW-0283	45	HDW-0470	74	SVT-0108
17	MTR-0068	46	HDW-0181	75	STM-0467
	MTR-0064				
18	HDW-0294	47	HDW-0380	76	HDW-0597
19	HDW-0279	48	LUB-0045	77	MTR-0128
20	GIB-0013	49	HDW-0576	78	MTR-0045 <sup>(1)</sup>
21	GIB-0010	50	HDW-0279		MTR-0048 (HT)
22	GIB-0033	51	HDW-0169	79	CVR-0151
23	HDW-0320	52	HDW-0177	80	STM-0064
24	HDW-0279	53	SPN-0042	81	SPN-0007 <sup>(2)</sup>
25	STM-0141	54	PLM-0045		
26	GIB-0004	55	PLM-0088		
27	HDW-0569	56	HDW-0275		
28	HDW-0280	57	HDW-0568		
29	CVR-0048	58	HDW-0194		

<sup>1</sup>MTR-0045 INCLUDES: PUL-0019

<sup>2</sup>SPN-0007 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018.

(HT)=High Torque Option

# BASE, SADDLE & TABLE ASSEMBLY



# BASE, SADDLE & TABLE ASSEMBLY

## BASE, SADDLE & TABLE ASSEMBLY

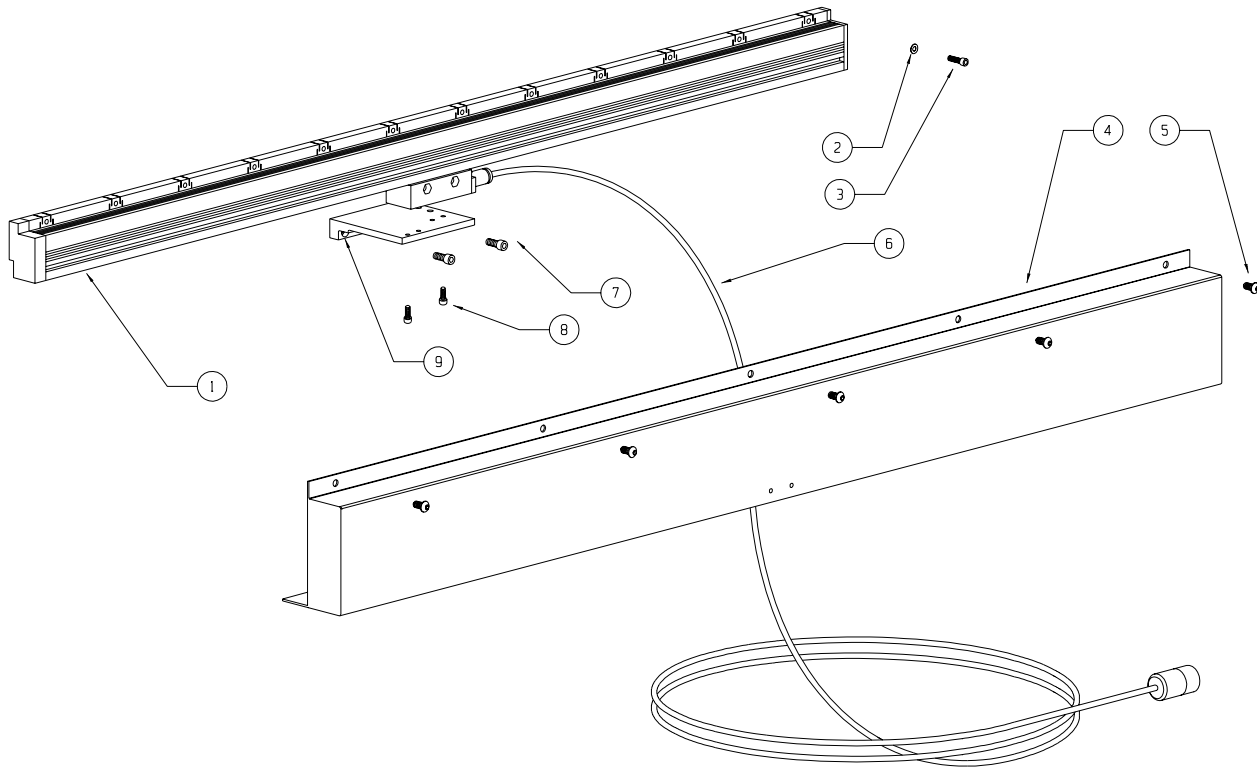
	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	18	HDW-0280	35	HDW-0637	52	HDW-0312	69	HDW-0356
2	HDW-0374	19	HDW-0347	36	HDW-0219	53	HDW-0859	70	HDW-0295
3	STM-0112	20	STM-0609	37	BLS-0187	54	LUB-0044	71	HDW-0279
4	HDW-0295	21	WIR-0610	38	BLS-0029	55	STM-0075	72	STM-0042
5	STM-0047	22	WIR-0609	39	WIR-0557	56	HDW-0444	73	HDW-0355
6	WIR-0554	23	MTR-0142	40	WIR-0556	57	HDW-0311	74	GIB-0013
7	WIR-0555	24	HDW-0779	41	MTR-0126	58	BLS-0028	75	GIB-0010
8	MTR-0126	25	HDW-0280	42	HDW-0556	59	STM-0356	76	GIB-0001 <sup>(3)</sup>
9	STM-0575	26	BLS-0038	43	BLS-0142	60	HDW-0279	77	STM-0357
10	WIR-0608	27	PLM-0112	44	HDW-0296	61	HDW-0319	78	GIB-0005 <sup>(3)</sup>
11	WIR-0607	28	HDW-0444	45	GIB-0001 <sup>(3)</sup>	62	STM-0045	79	HDW-0279
12	MTR-0142	29	HDW-0564	46	GIB-0011	63	HDW-0319	80	HDW-0569
		30	HDW-0603	47	GIB-0013	64	HDW-0279	81	BLS-0077
14	MTR-0189 <sup>(1)</sup>	31	HDW-0472	48	STM-0044	65	HDW-0294	82	HDW-0572
15	BLS-0027	32	HDW-0332	49	CVR-0038	66	HDW-0279		
16	BLS-0033 <sup>(2)</sup>	33	HDW-0194	50	HDW-0319	67	SDL-0007		
17	HDW-0779	34	HDW-0018	51	GIB-0006 <sup>(3)</sup>	68	STM-0052		

<sup>1</sup>Part of X and Y axes.

<sup>2</sup>Complete ballscrew assembly with bearing mount.

<sup>3</sup>Specify gib size when ordering.

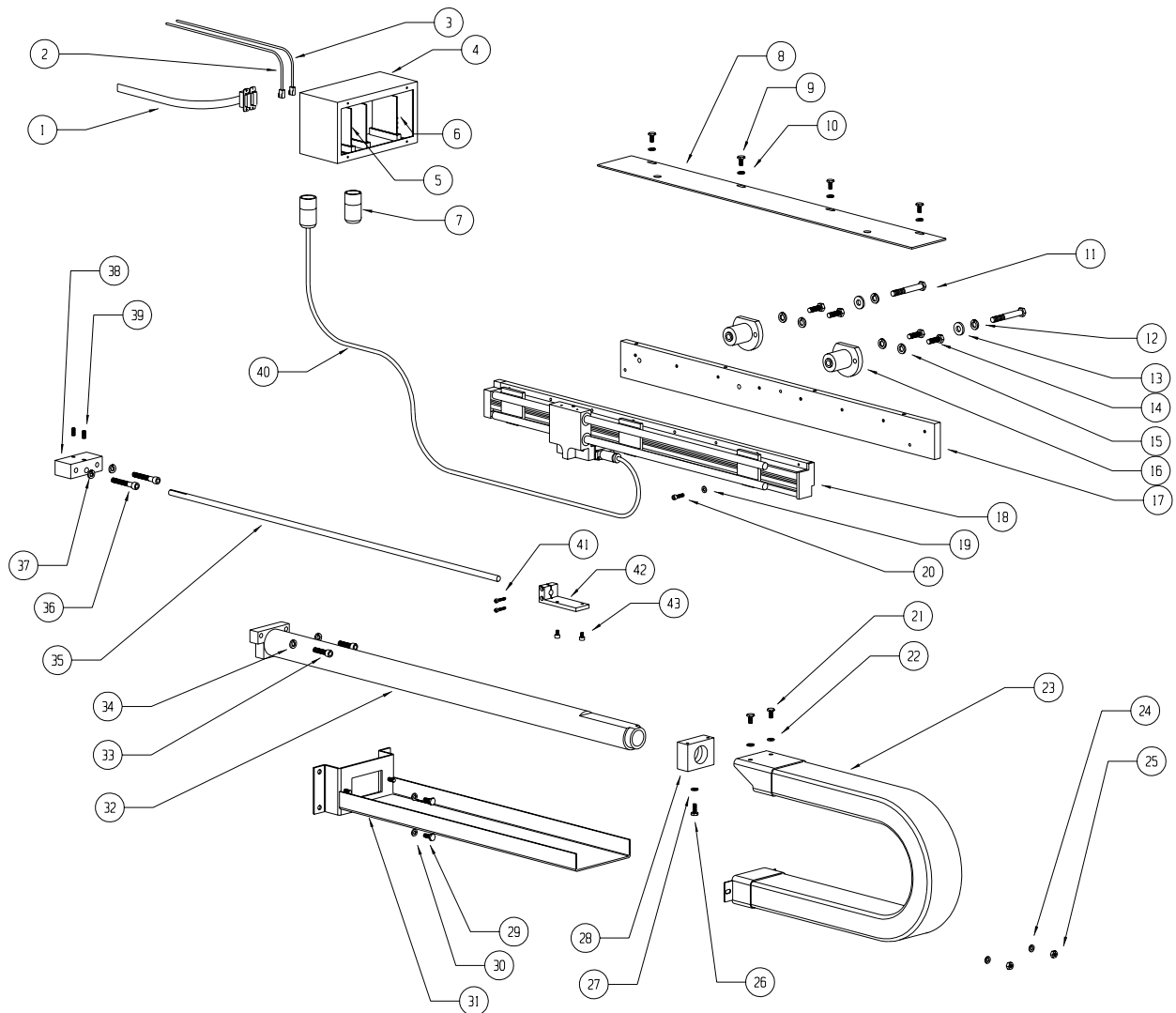
# X-AXIS SCALE ASSEMBLY



**X-AXIS SCALE ASSEMBLY**

	PART #		PART #
1	SCL-0025	6	SCL-0029
2	HDW-0281	7	HDW-0291
3	HDW-0797	8	HDW-0282
4	STM-0396	9	SCL-0036
5	HDW-0346		

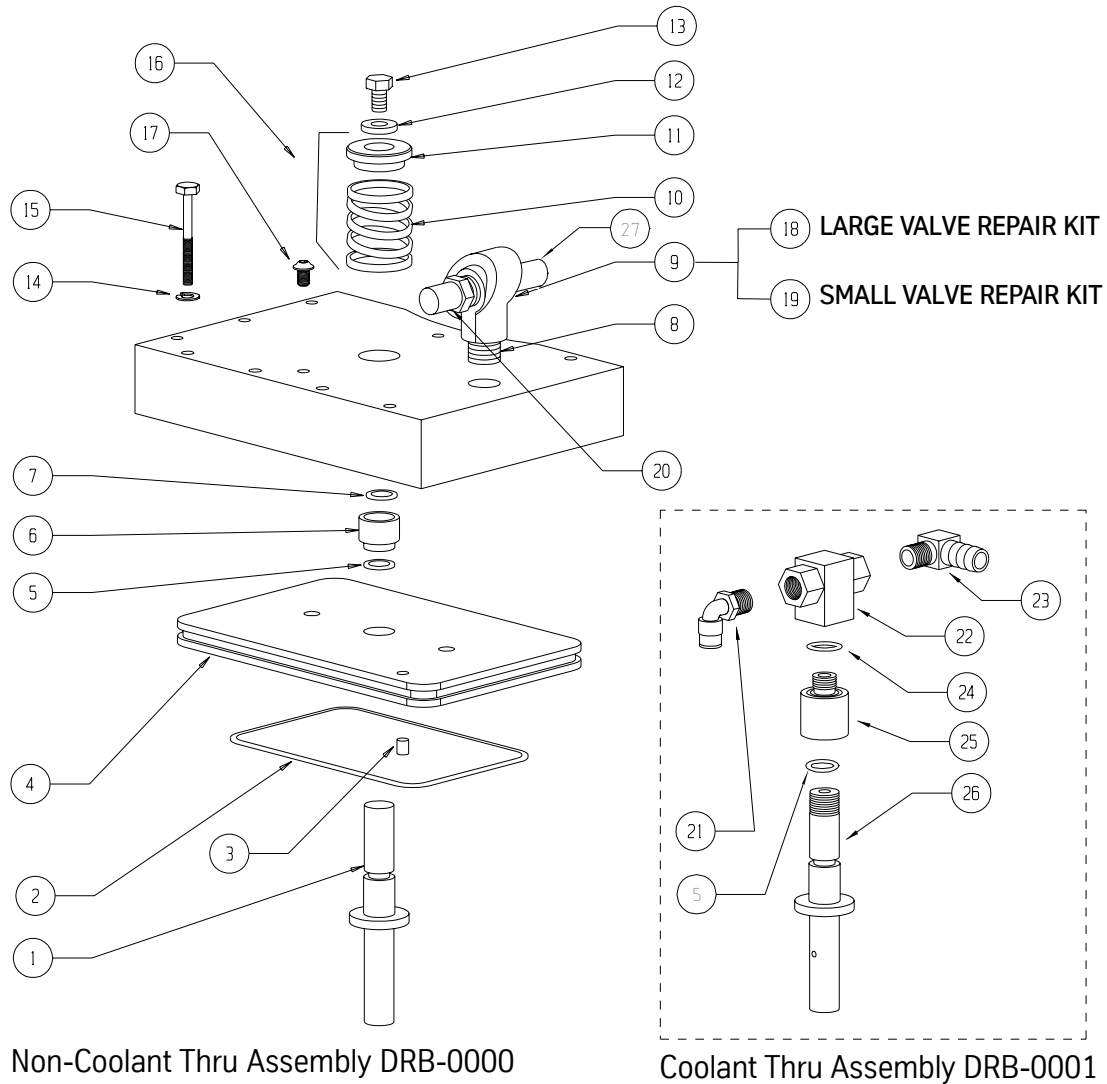
# Y-AXIS SCALE ASSEMBLY



Y-AXIS SCALE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	WIR-0509	9	HDW-0295	17	STM-0177	25	HDW-0581	33	HDW-0291
2	WIR-0506	10	HDW-0279	18	SCL-0002	26	HDW-0319	34	HDW-0279
3	WIR-0134	11	HDW-0311	19	HDW-0279	27	HDW-0281	35	SCL-0046
4	SCL-0006	12	HDW-0281	20	HDW-0297	28	SCL-0039	36	HDW-0488
5	PCB-0050	13	HDW-0444	21	HDW-0319	29	HDW-0482	37	HDW-0279
6	PCB-0170	14	HDW-0314	22	HDW-0279	30	HDW-0279	38	SCL-0045
7	SCL-0018	15	HDW-0281	23	CVR-0009	31	STM-0178	39	HDW-0408
8	STM-0179	16	SCL-0042	24	HDW-0281	32	SCL-0063	40	SCL-0029

# DRAWBAR CYLINDER ASSEMBLY

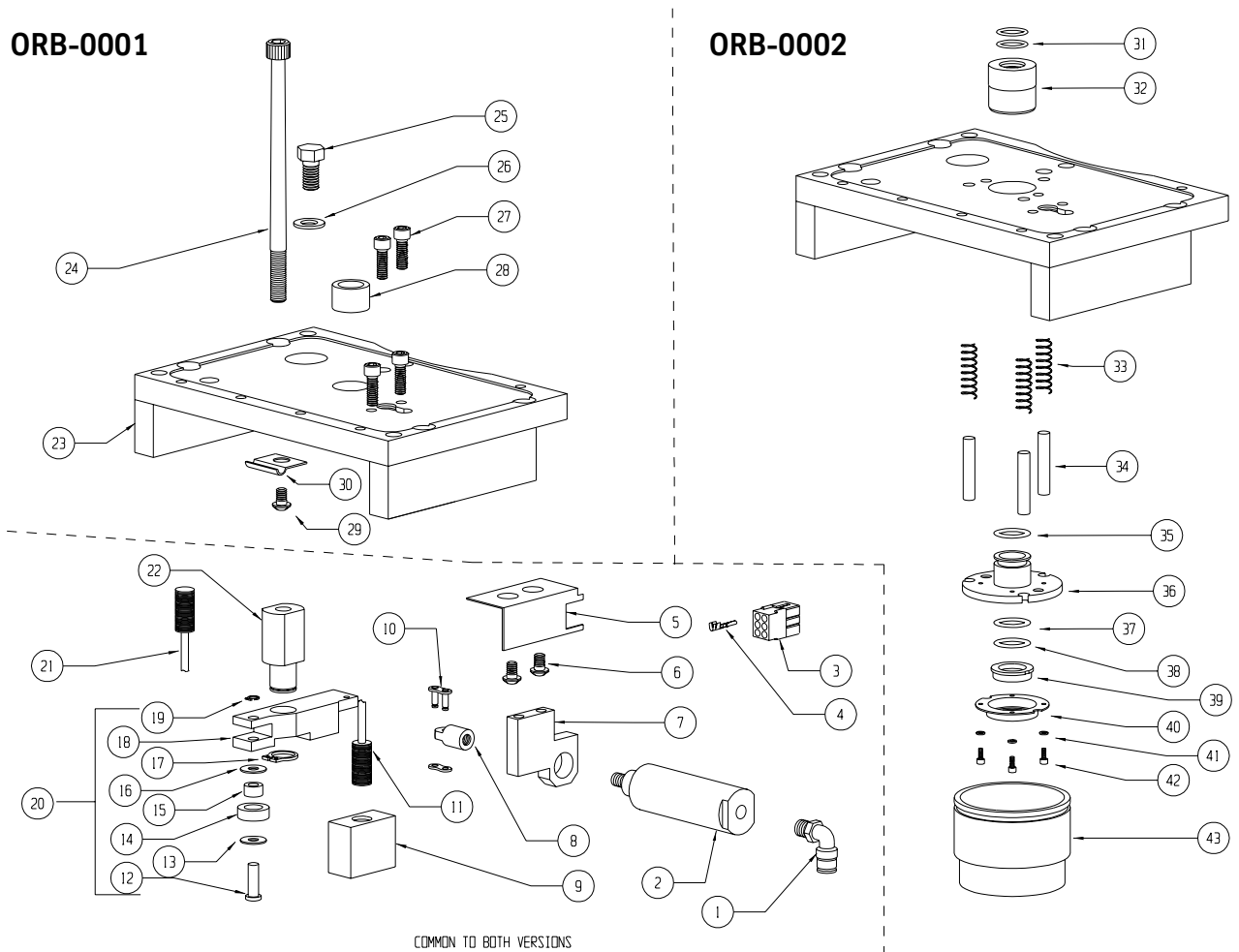


## DRAWBAR CYLINDER ASSEMBLIES

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

<sup>1</sup>Includes ELE-0147

# ORIENTATION BRIDGE ASSEMBLY



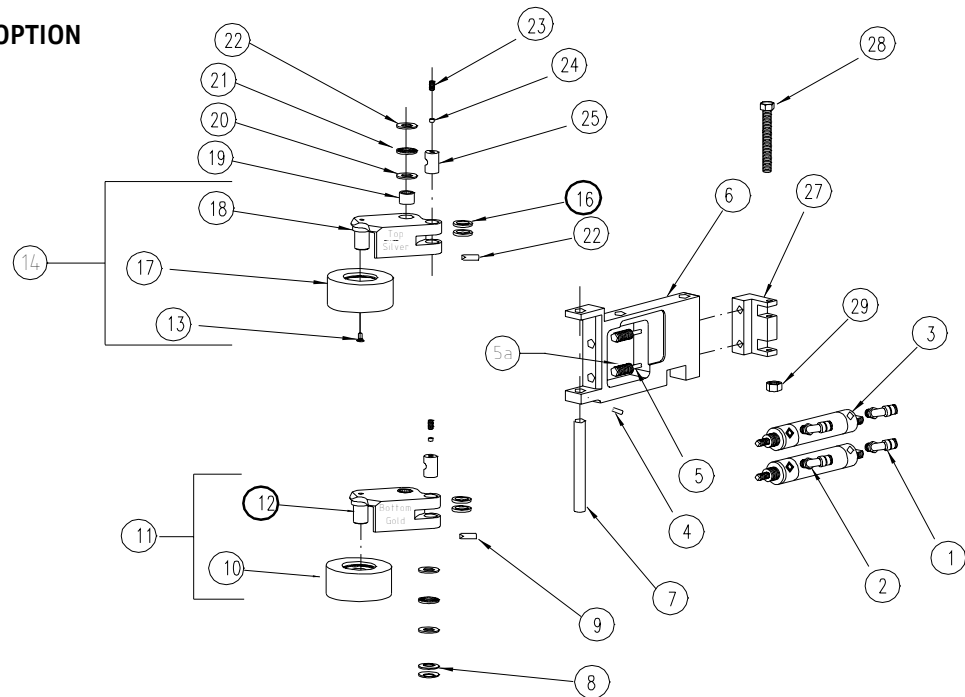
COMMON TO BOTH VERSIONS

## ORIENTATION BRIDGE ASSEMBLIES

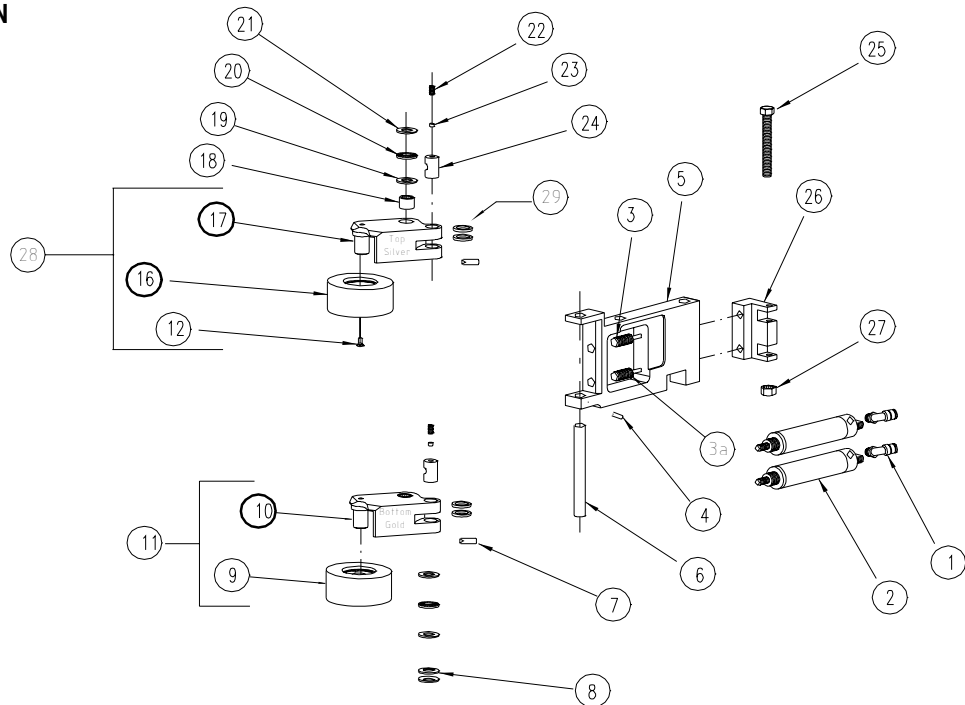
	PART#		PART#		PART#		PART#		PART#
1	PLM-0034	8	ORB-0011	18	ORB-0031	28	BRG-0008	38	HDW-0156
2	CYL-0007	9	ORB-0014	19	HDW-0726	29	HDW-0349	39	CNT-0033
3	WIR-0051	10	HDW-0209	20	ORB-0004	30	LUB-0077	40	CNT-0045
4	WIR-0043 (16 AWG)	11	ELE-0145	21	ELE-0145	31	HDW-0150	41	HDW-0453
	WIR-0044 (16 AWG)	12	ORB-0007	22	ORB-0013	32	CNT-0042	42	HDW-0308
	WIR-0544 (22 AWG)	13	HDW-0515	23	ORB-0008	33	HDW-0257	43	CNT-0140
	WIR-0056 (22 AWG)	14	ORB-0009	24	HDW-0285	34	HDW-0326		
5	STM-0596	15	BRG-0014	25	HDW-0571	35	HDW-0156		
6	HDW-0347	16	HDW-0515	26	HDW-0048	36	CNT-0041		
7	ORB-0030	17	HDW-0725	27	HDW-0298	37	HDW-0155		

# IDLER ASSEMBLY

## RIGID TAP/HIGH TORQUE OPTION



## 10,000 RPM OPTION





# IDLER ASSEMBLY

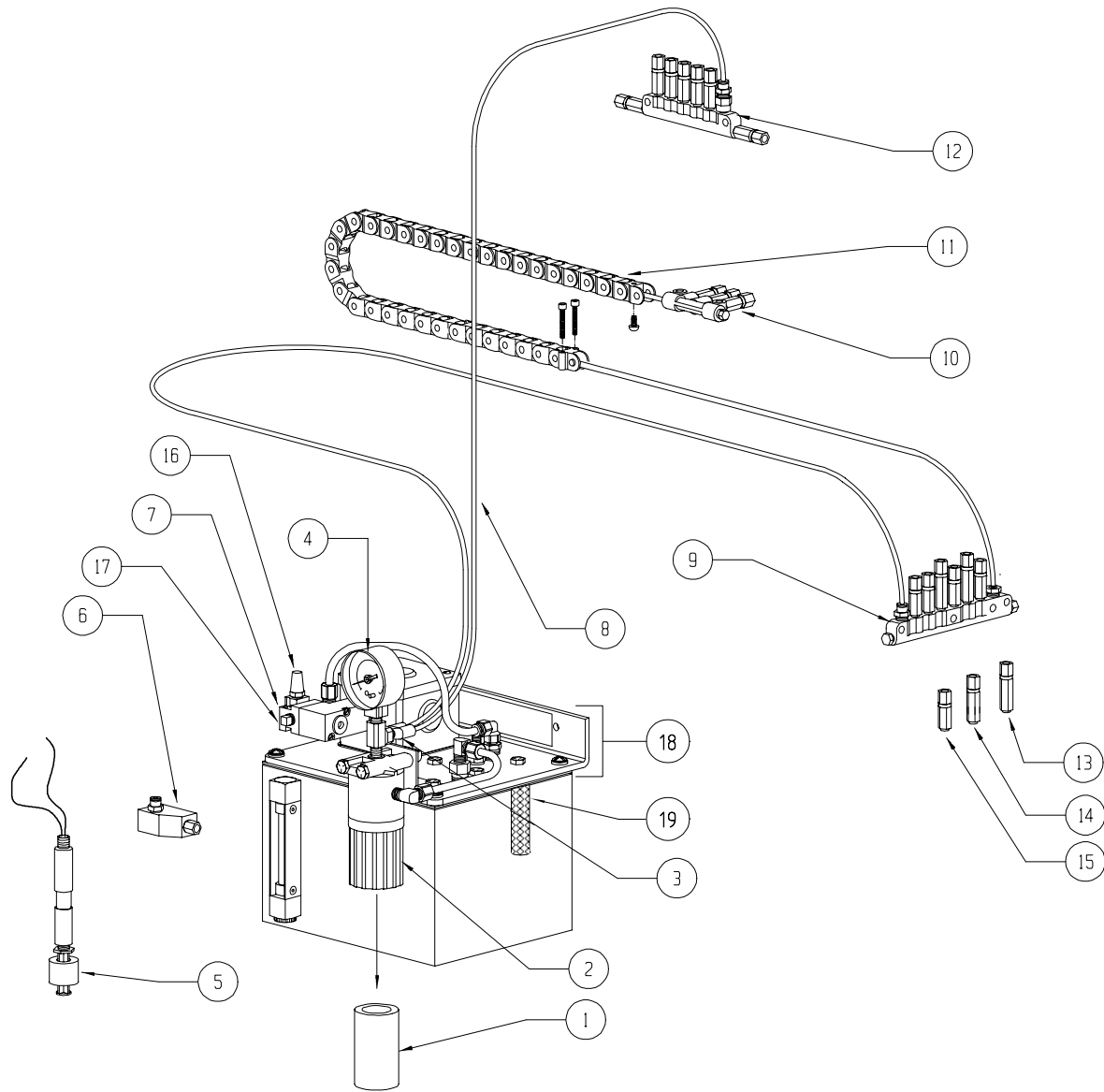
## RIGID TAP/HIGH TORQUE OPTION

	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

# WAY LUBE ASSEMBLY



**WAY LUBE ASSEMBLY**

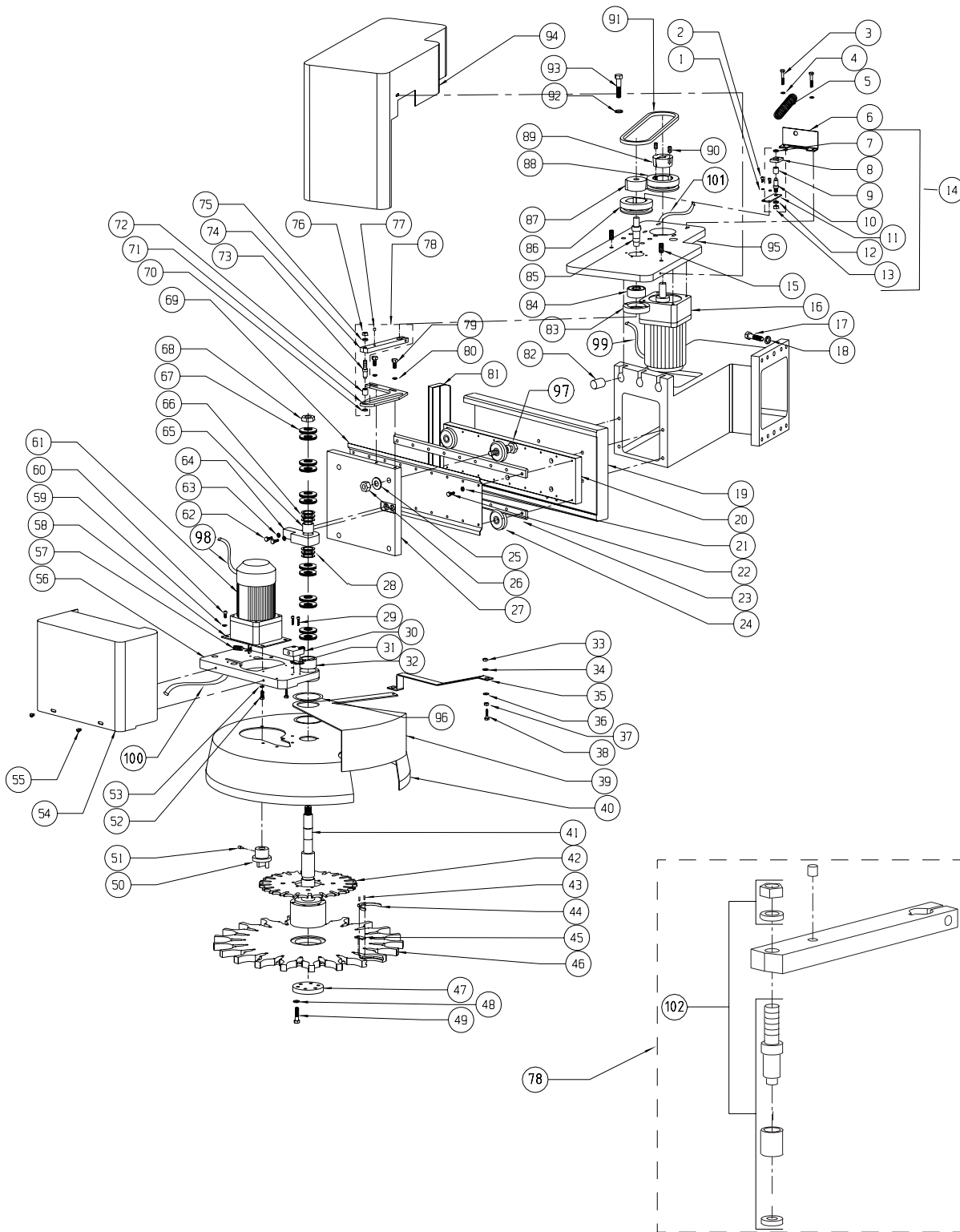
	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		



This page intentionally left blank.



# GENEVA DRIVE ATC ASSEMBLY



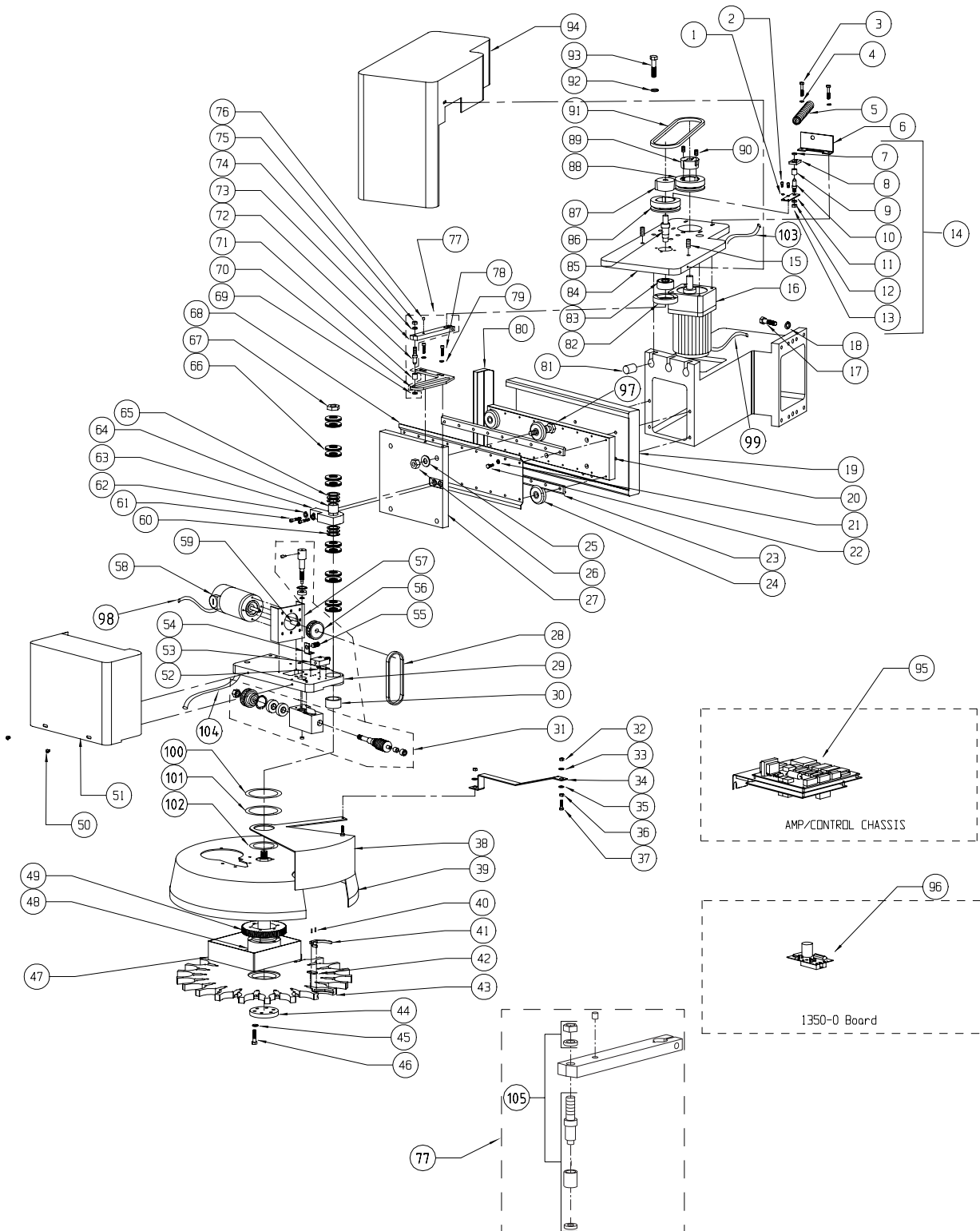
# GENEVA DRIVE ATC ASSEMBLY

## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
								102	ATC-0169
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)
					HDW-0295 (1)				ATC-0005 (30)

<sup>1</sup>Quick disconnect type

# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0053 or	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
	MTR-0133	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
17	HDW-0310	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
18	HDW-0451		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
19	STM-0061	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
20	ATC-0030		STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

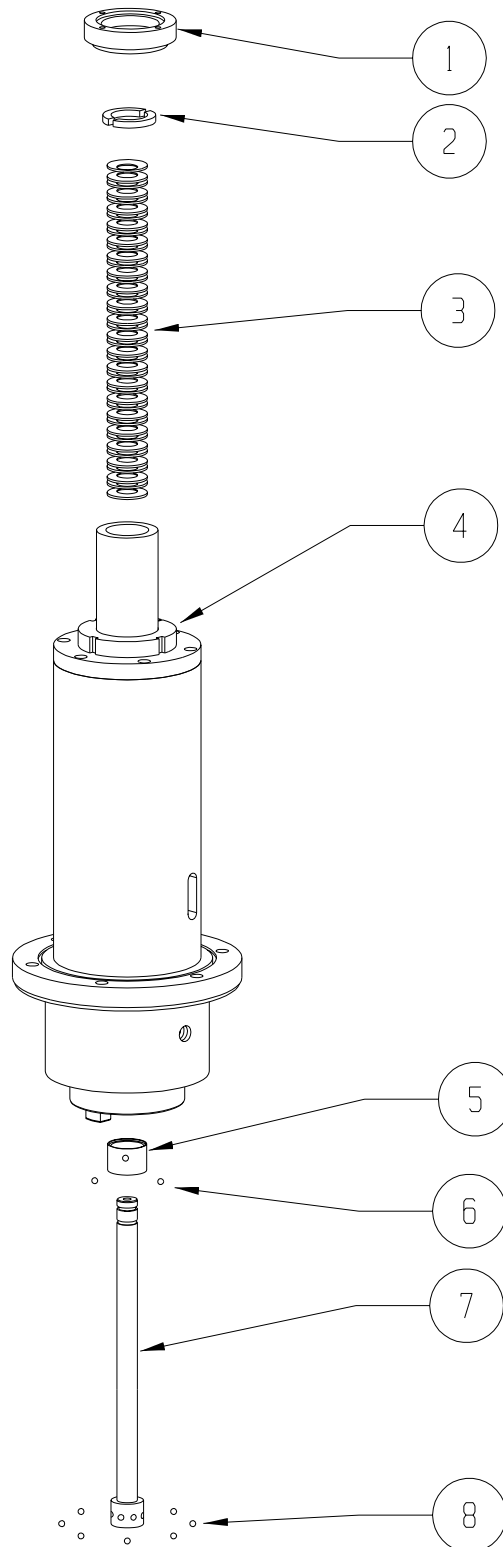
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025





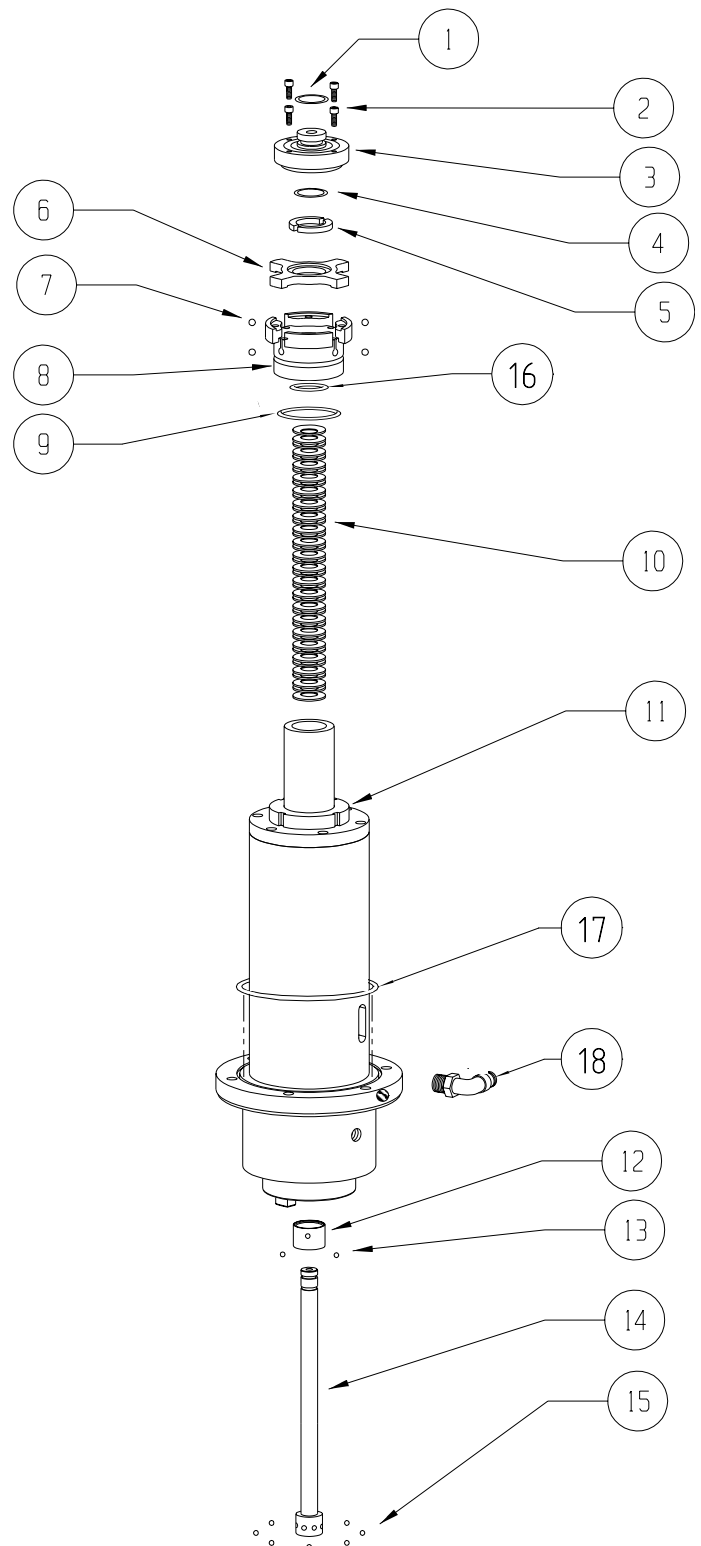
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

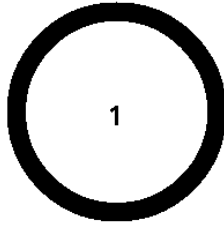
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



HDW-0158



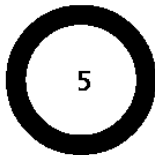
HDW-0177



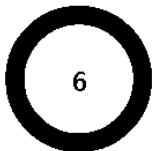
HDW-0150



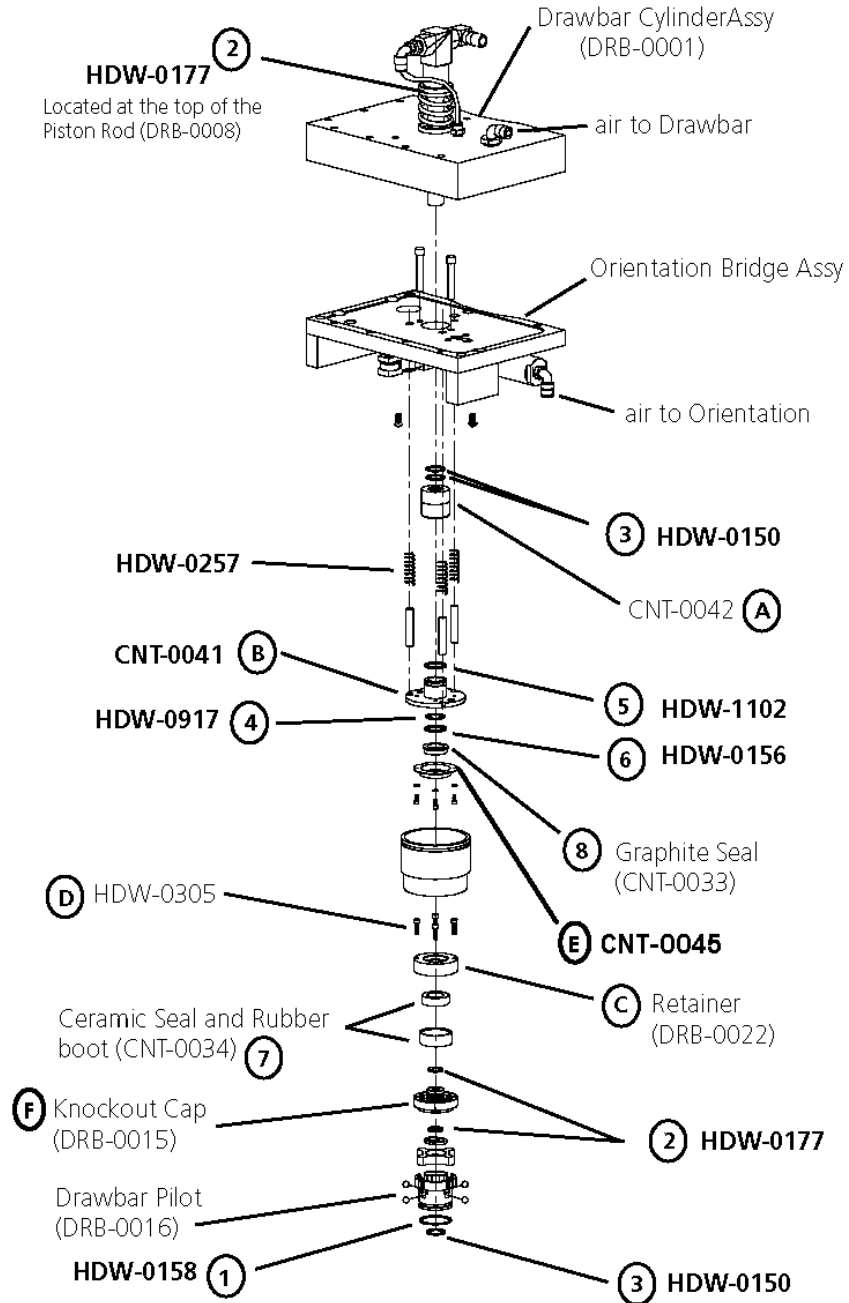
HDW-0917



HDW-1102

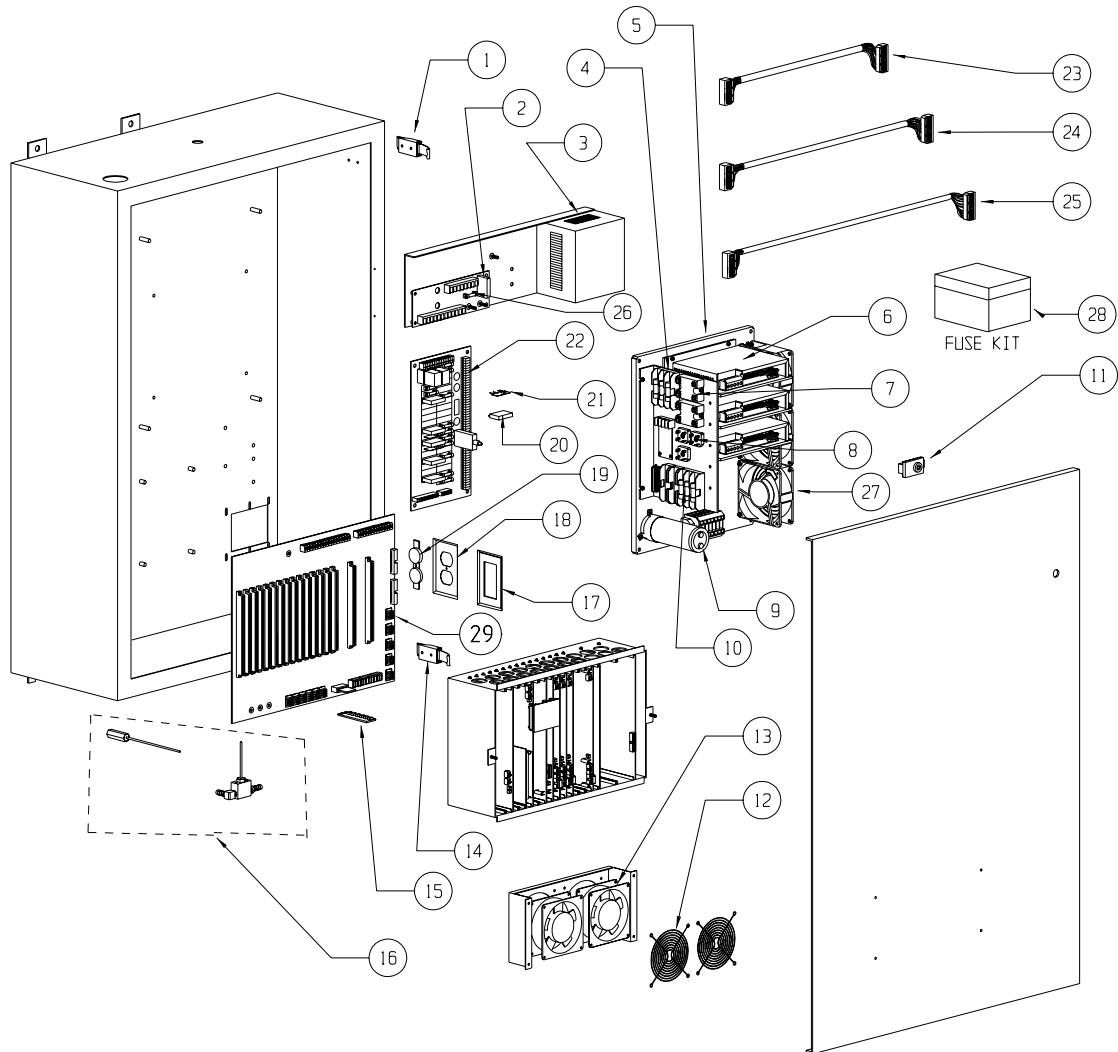


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8  
 AND A-F)

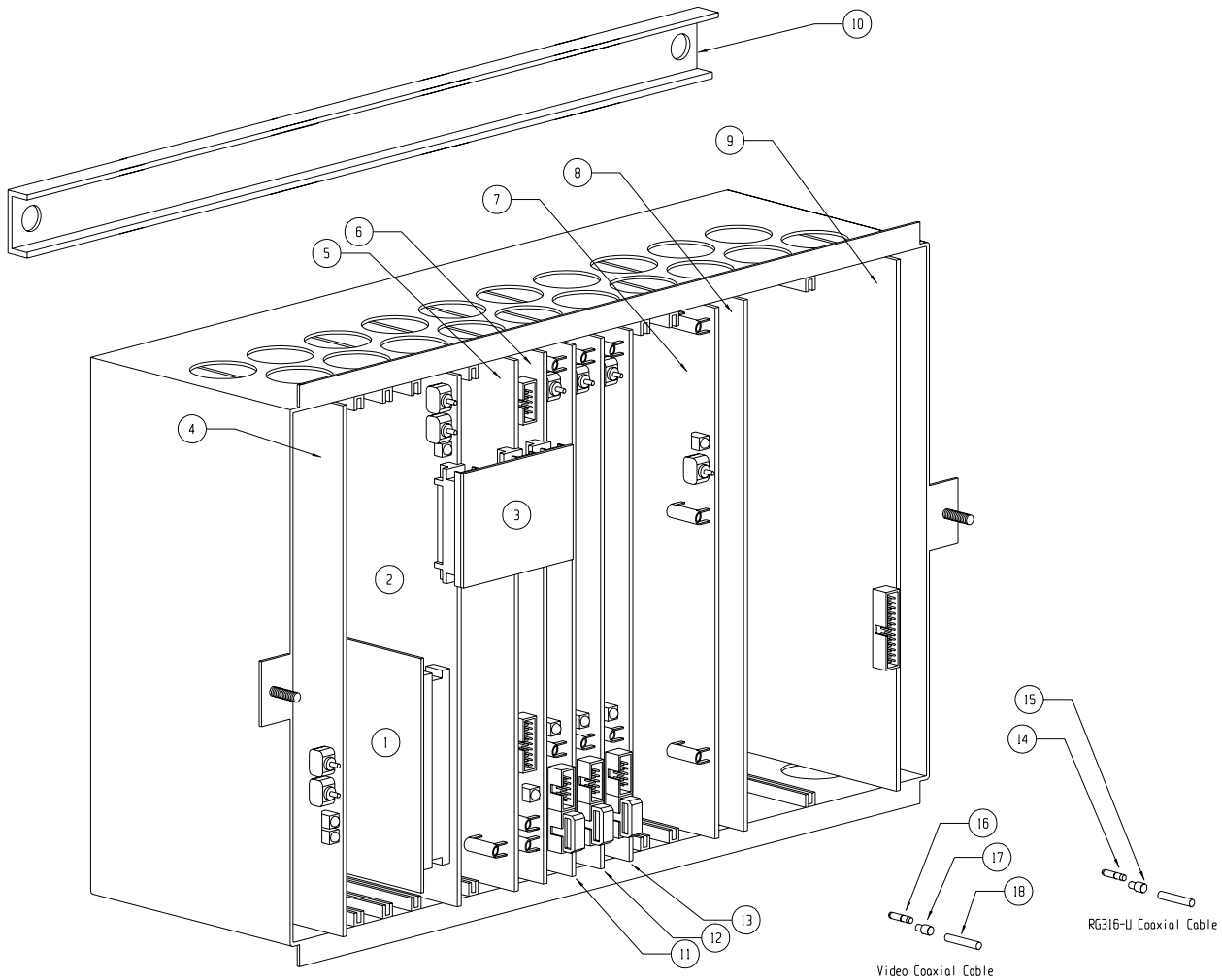
# CNC CABINET ASSEMBLY



**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0028 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0033 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0029 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0034 (AMC)					29	PCB-0009
7	ELE-0074						

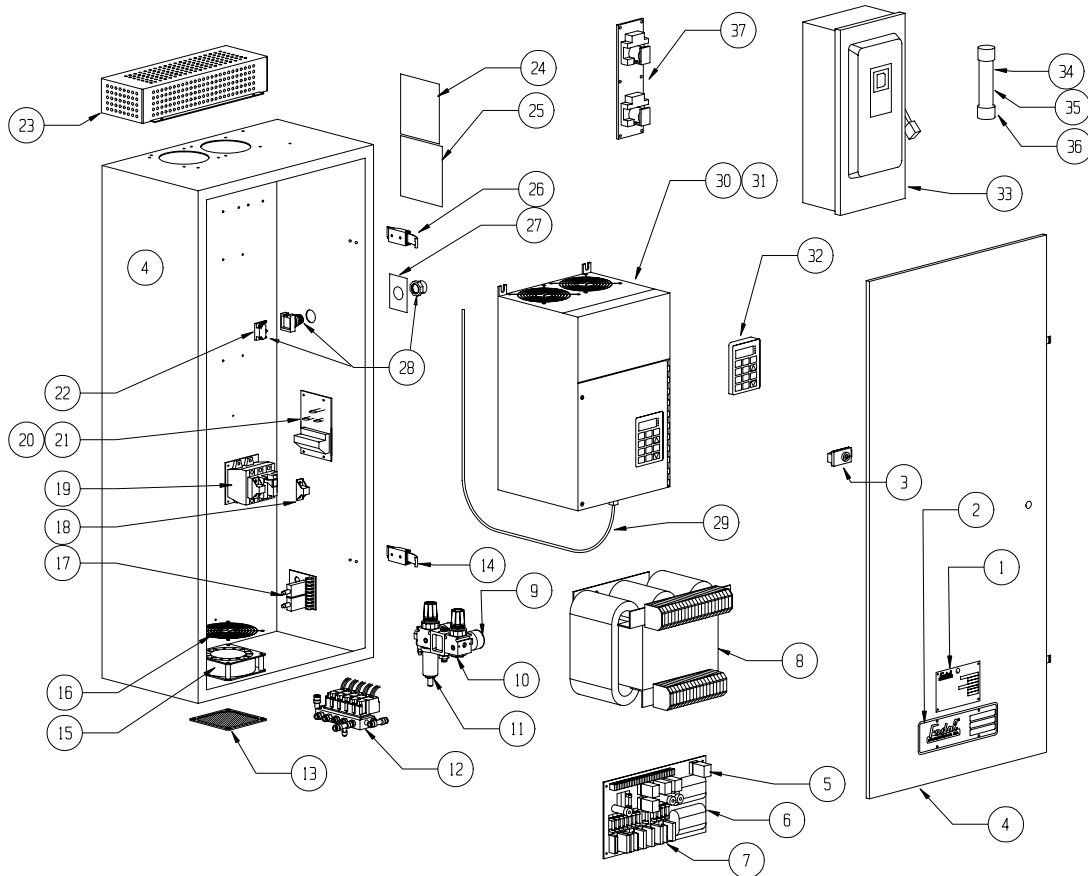
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

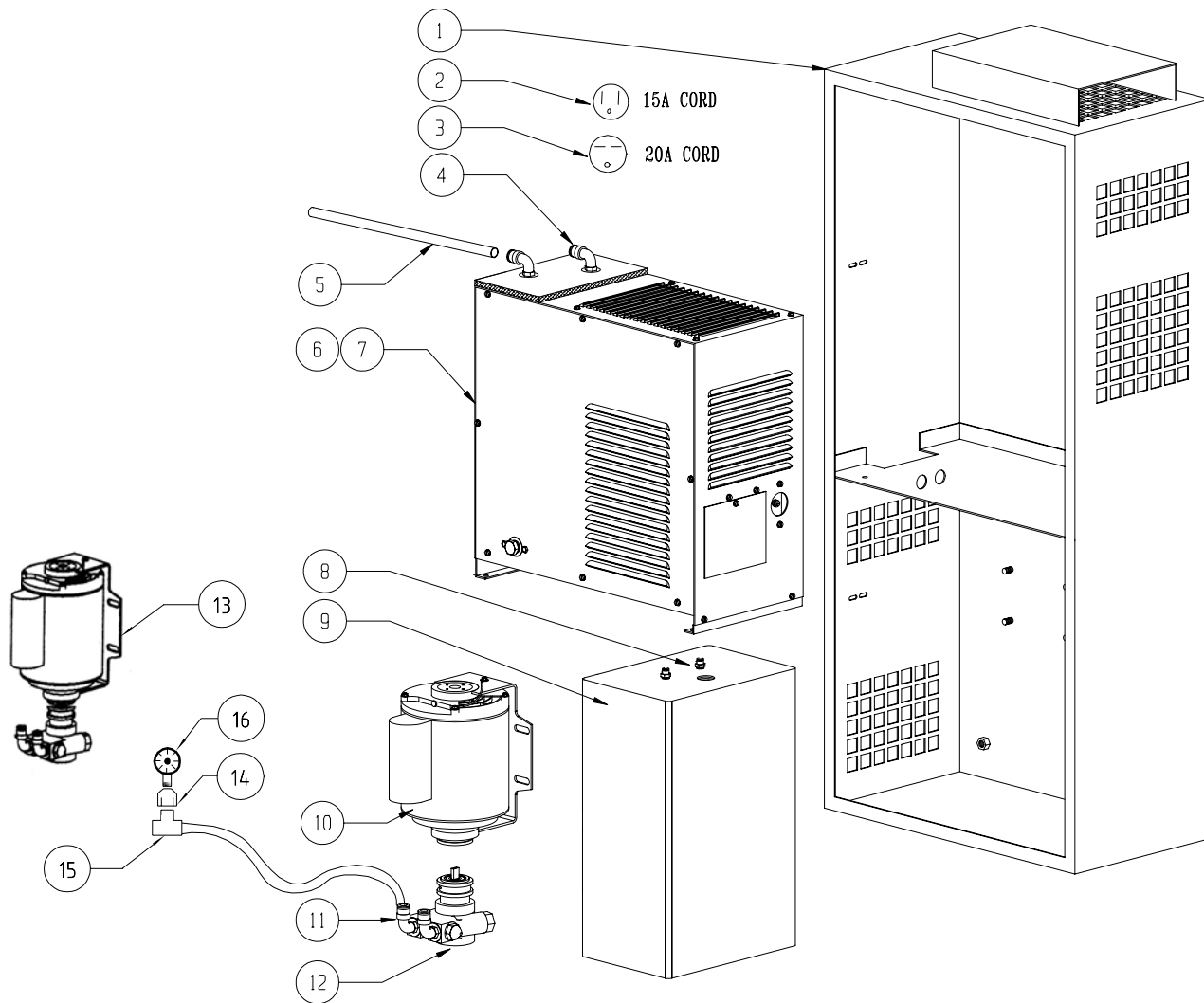
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LBL-0030	12	VLV-0055 (7.5K)	23	INV-0004	33	ELE-0139 (60AMP)
	LBL-0031 (HT)		VLV-0054 (10K)	24	LBL-0037		ELE-0140 (30AMP)
2	LBL-0106	13	HDW-0849	25	LBL-0040	34	ELE-0063 (45A 240V)
3	HDW-0221	14	HDW-0216	26	HDW-0219	35	ELE-0062 (30A 380V)
4	STM-0450	15	ELE-0123	27	LBL-0038	36	ELE-0060 (20A 480V)
5	ELE-0072	16	HDW-0850	28	ELE-0110	37	WIR-0073
6	PCB-0015	17	PCB-0046	29	WIR-0166		
7	ELE-0070	18	ELE-0138	30	INV-0020(HT)		
8	ELE-0200	19	ELE-0132		INV-0041 (Baldor)		
9	REG-0005	20	PCB-0145 (240V)	31	INV-0056 (AMC)		
10	REG-0009	21	PCB-0146 (500V)	32	INV-0017		
11	REG-0008	22	ELE-0093				

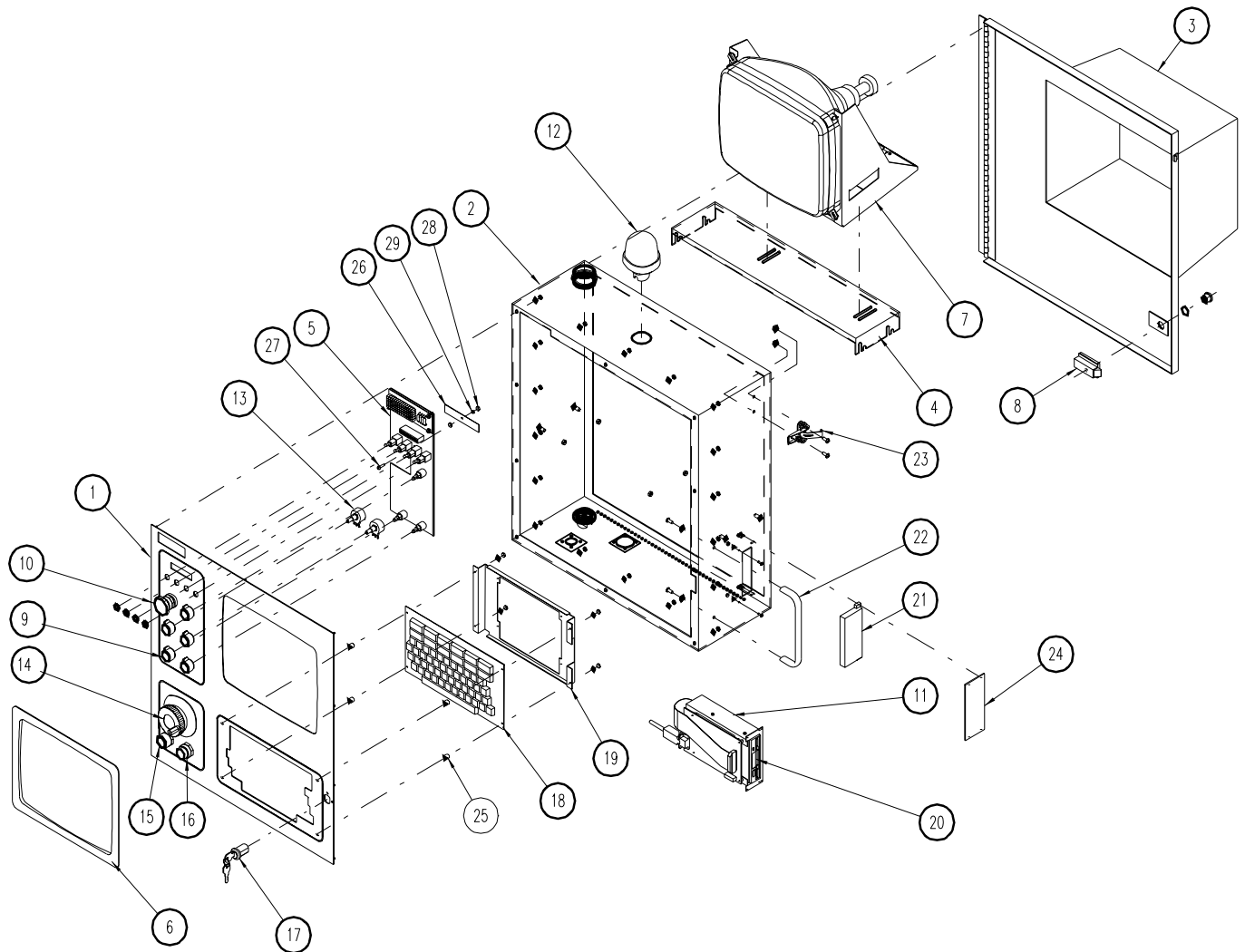
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PLM-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

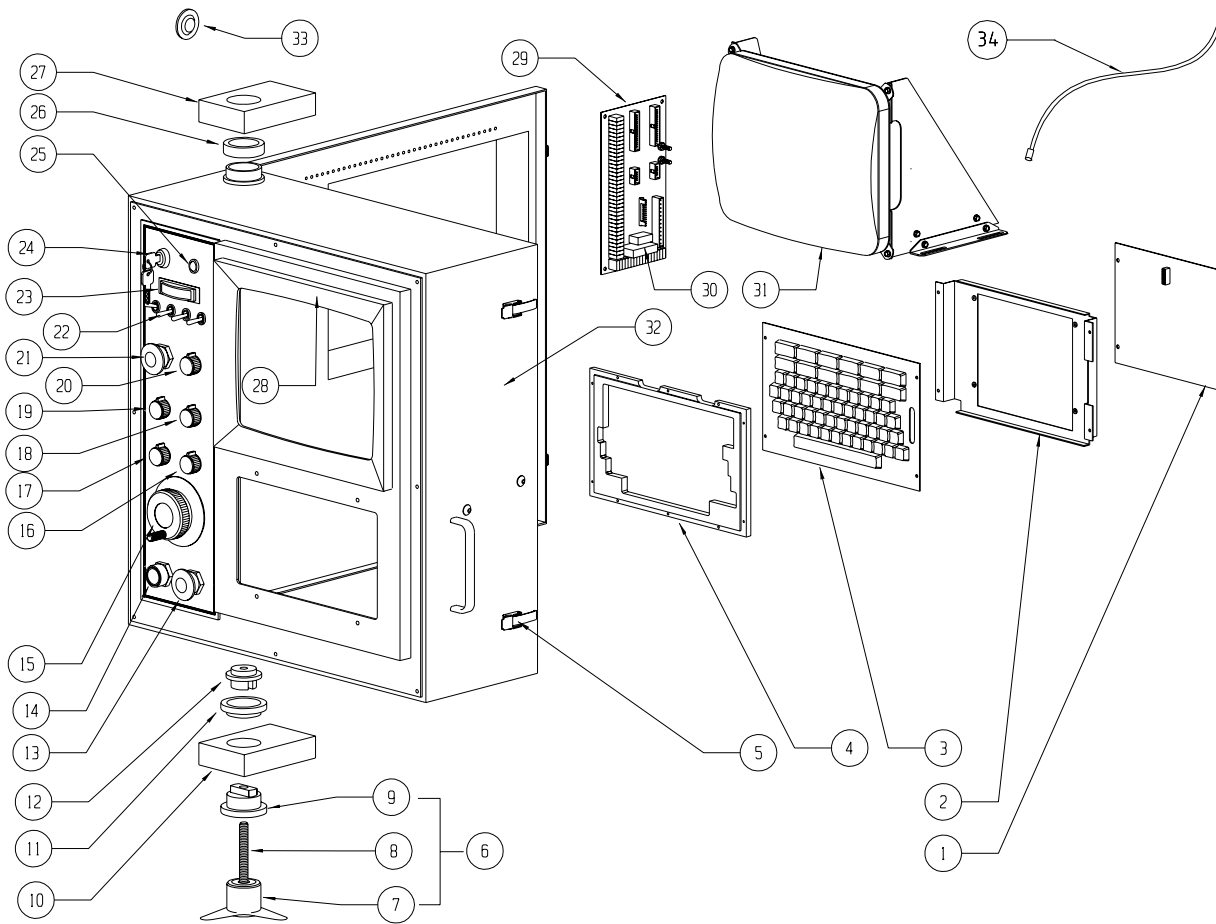
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

# 88HS PENDANT ASSEMBLY

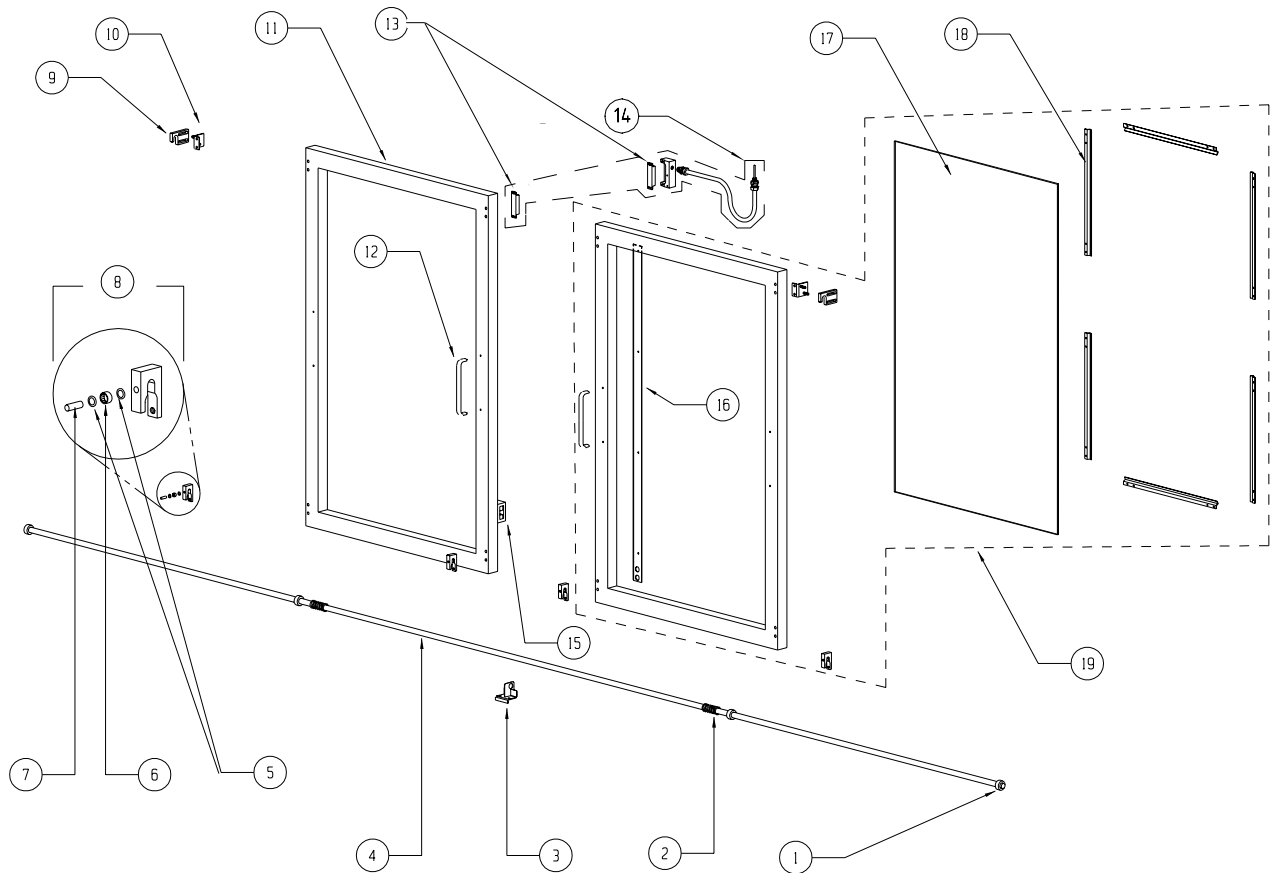


## 88HS PENDANT ASSEMBLY

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				



# FRONT DOOR ASSEMBLY



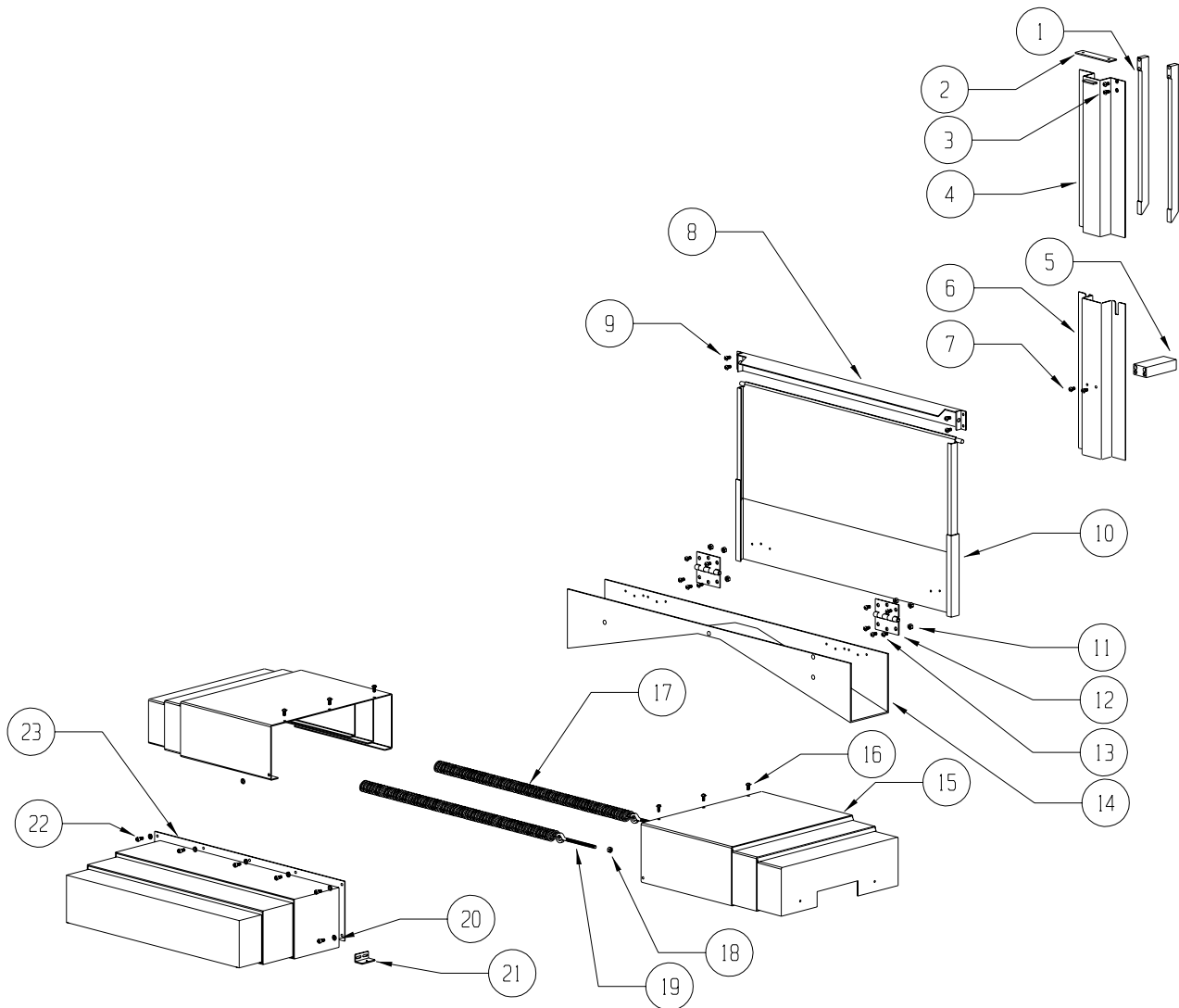
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0053	11	DOR-0002	18	STM-0084
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

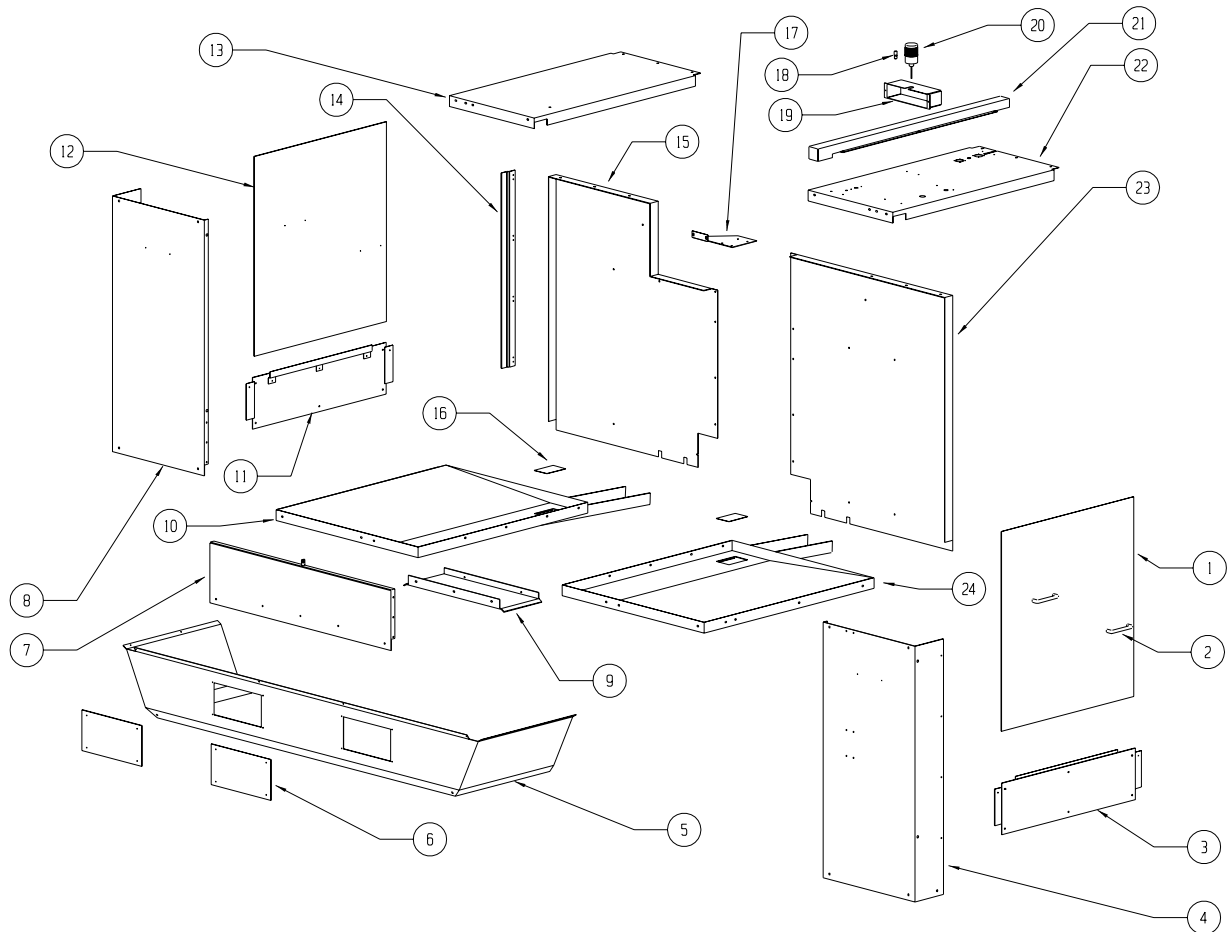
# WAY COVER ASSEMBLY



## WAY COVER ASSEMBLIES

	PART #		PART #		PART #
1	CVR-0031	9	HDW-0346	17	HDW-0261
2	CVR-0030	10	CVR-0056	18	HDW-0336
3	HDW-0319	11	HDW-0339	19	HDW-0251
4	CVR-0034	12	HDW-0192	20	HDW-0279
5	CVR-0036	13	HDW-0324	21	STM-0047
6	CVR-0035	14	STM-0053	22	HDW-0482
7	HDW-0346	15	CVR-0017	23	CVR-0021
8	CVR-0066	16	HDW-0347		

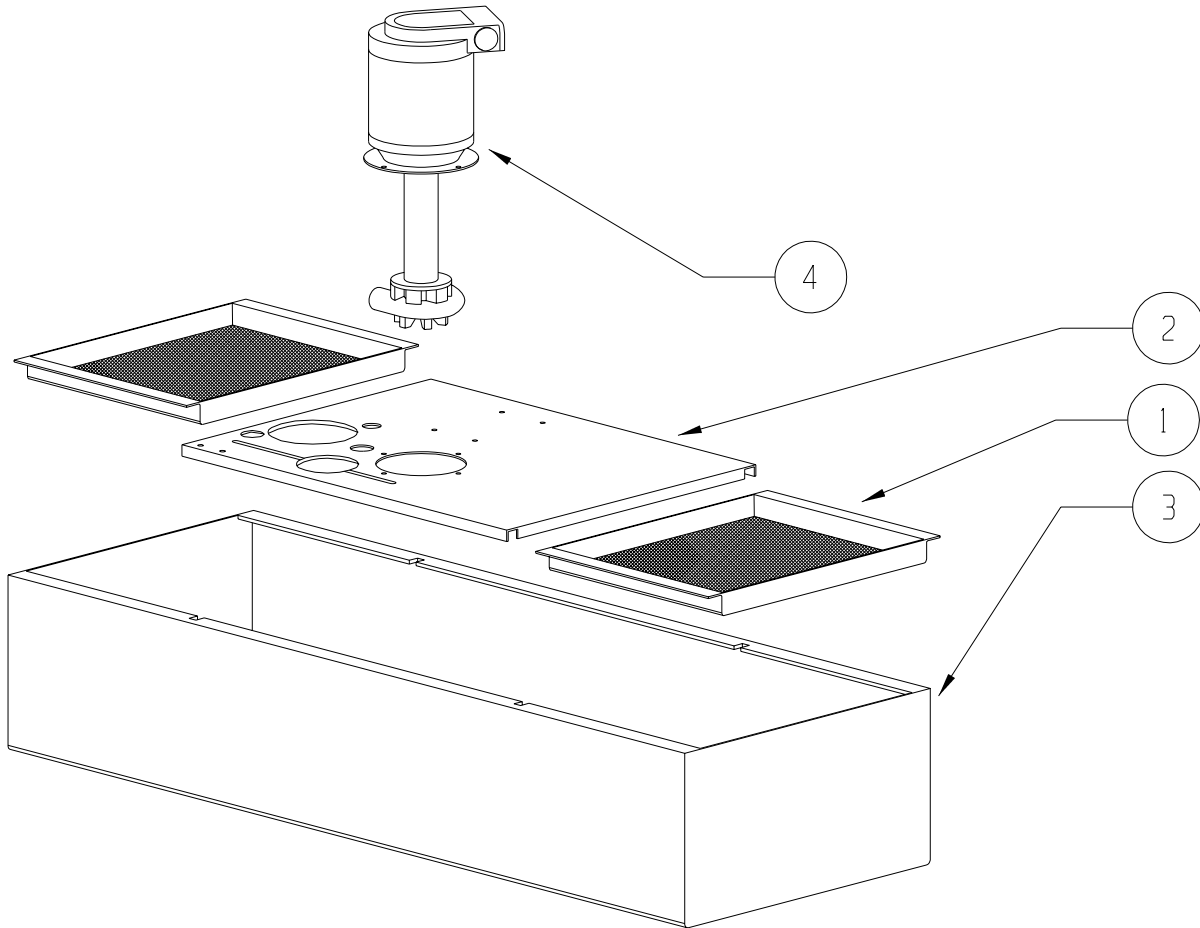
# SHEETMETAL HOUSING



## SHEETMETAL HOUSING

	PART #		PART #		PART #
1	STM-0241	9	STM-0118	17	STM-0540
2	HDW-0181	10	STM-0321	18	ELE-0122
3	STM-0240	11	STM-0240	19	STM-0088
4	STM-0247	12	STM-0241	20	ELE-0121
5	STM-0238	13	STM-0256	21	STM-0085
6	STM-0299	14	STM-0244	22	STM-0255
7	STM-0078	15	STM-0322	23	STM-0329
8	STM-0334	16	STM-0110	24	STM-0323

# 7500 RPM COOLANT TANK

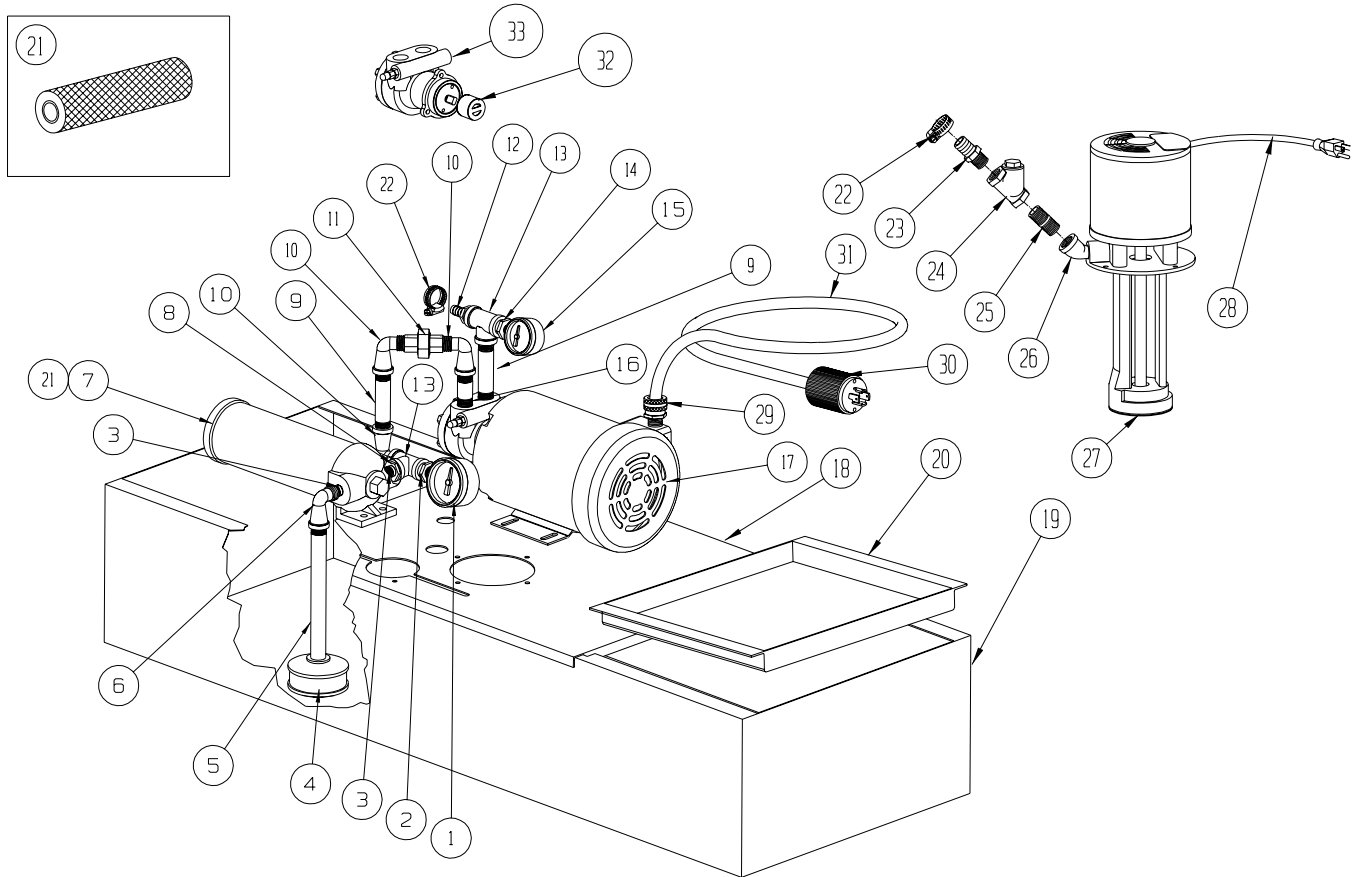


**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

# 7500 RPM COOLANT THROUGH TANK

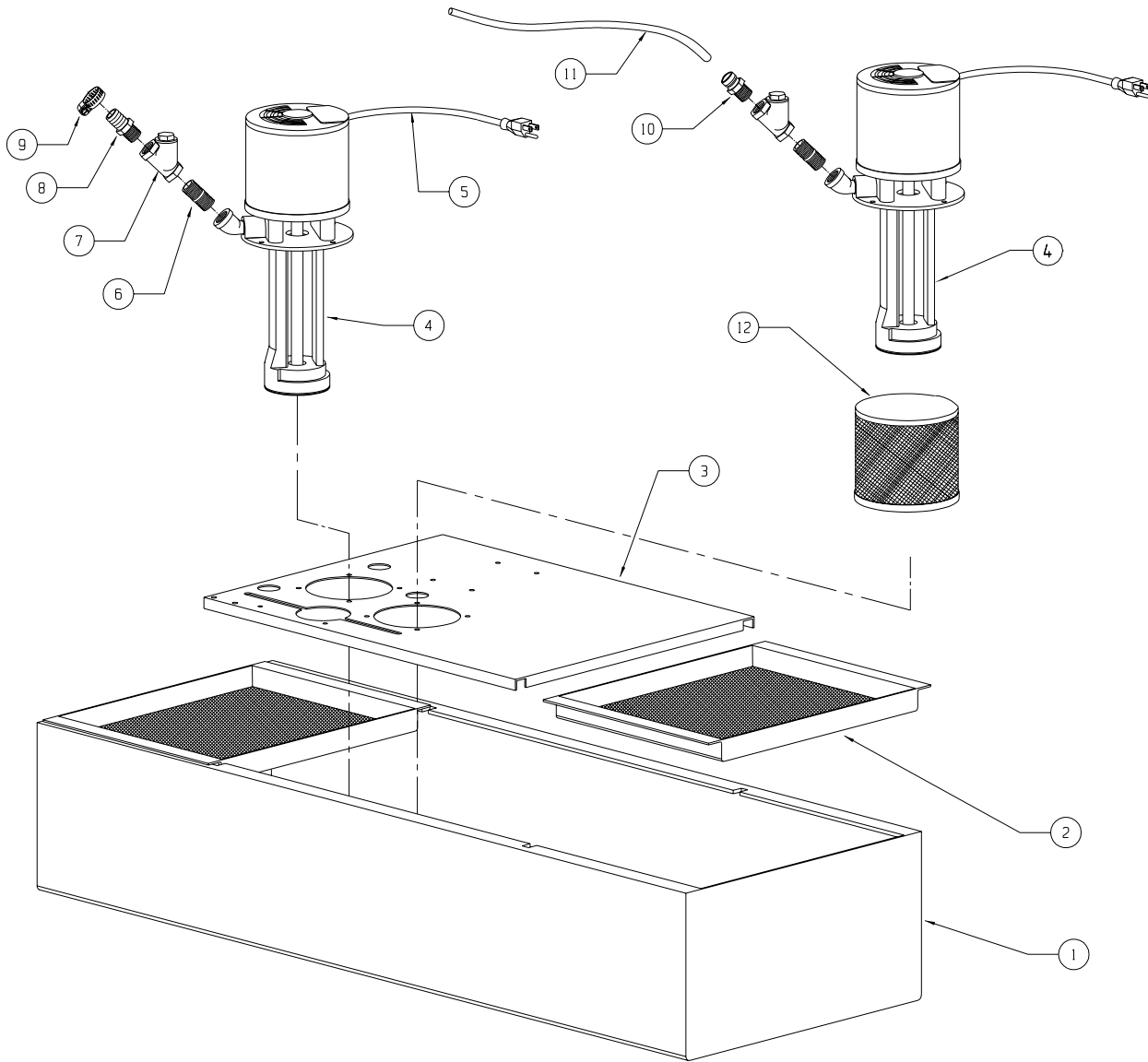
## 7500 RPM COOLANT THROUGH TANK ASSEMBLY



### 7500 RPM COOLANT THROUGH TANK ASSEMBLY

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

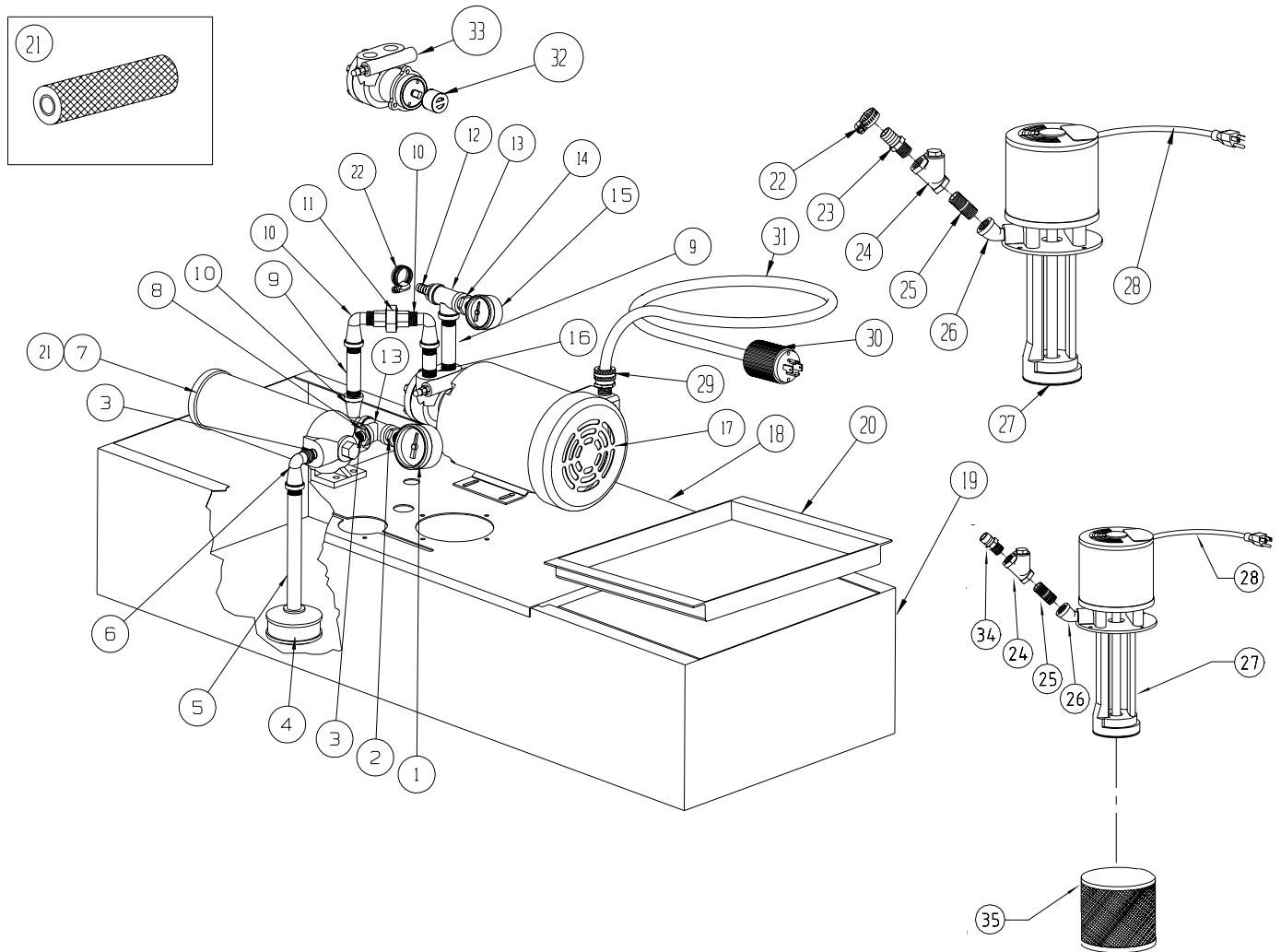
# 10K RPM COOLANT TANK



10,000 RPM COOLANT TANK

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# 10K RPM COOLANT THROUGH TANK



10,000 RPM COOLANT THROUGH TANK ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

# TABLE OF CONTENTS

## Parts Manual VMC 3020 MODEL



COLUMN ASSEMBLY .....	2
10K HEAD ASSEMBLY .....	4
BASE ASSEMBLY .....	6
SADDLE ASSEMBLY .....	8
DRAWBAR ASSEMBLY .....	10
ORIENTATION BRIDGE ASSEMBLY .....	11
IDLER ASSEMBLIES .....	12
WAYLUBE ASSEMBLY .....	14
DUAL ARM TOOL CHANGER .....	15
10K RPM SPINDLE ASSEMBLY .....	16
COOLANT THRU SPINDLE .....	17
CNC CABINET ASSEMBLY .....	18
CARD CAGE ASSEMBLY .....	19
JUNCTION BOX ASSEMBLY .....	20
CE CNC CABINET ASSEMBLY .....	21
CE JUNCTION BOX ASSEMBLY .....	22
MP PENDANT ASSEMBLY .....	23
88HS PENDANT ASSEMBLY .....	24
COOLANT TANK ASSEMBLY .....	25
SHEETMETAL ASSEMBLY .....	27





This reference covers the following Fadal products:

Model VMC 3020

Corporate Office .....voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts .....voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support .....voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street Chatsworth California 91311 U.S.A.

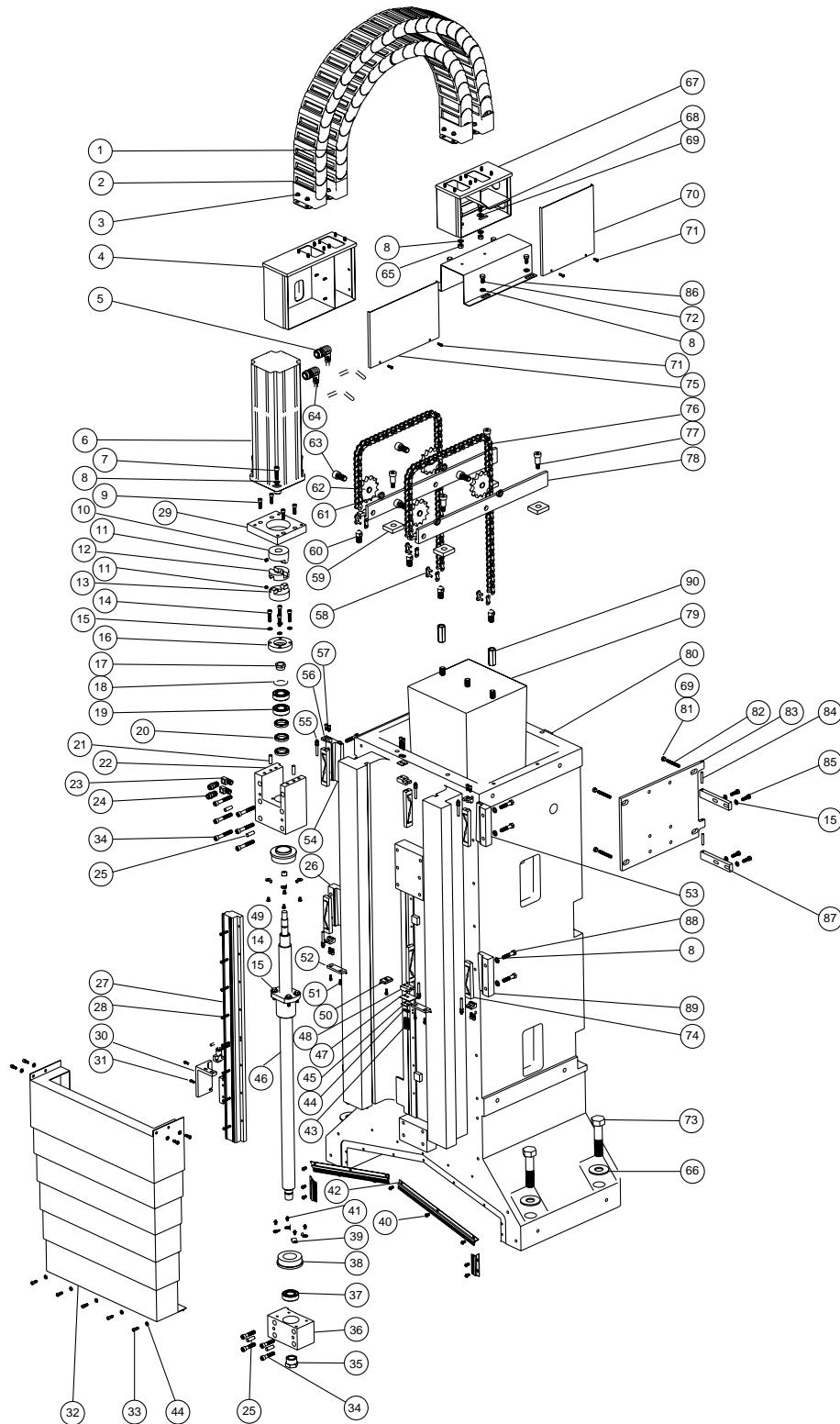
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

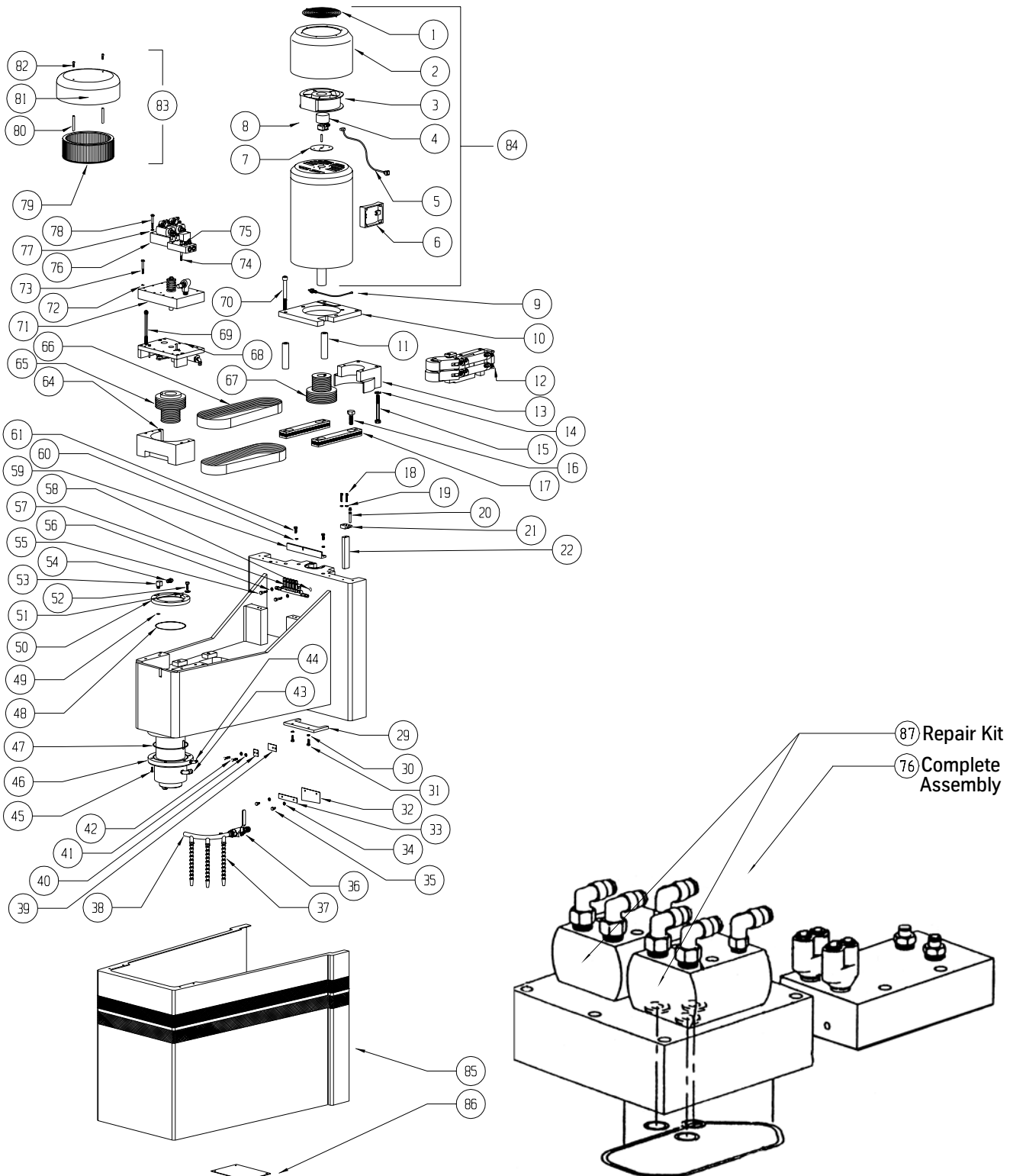


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	CVR-0106	26	GIB-0025	51	HDW-1016	76	HDW-0999
2	CVR-0107	27	SCL-0089	52	CVR-0123	77	HDW-0600
3	HDW-0337	28	HDW-0797	53	GIB-0029	78	CWT-0025
4	STM-0301	29	BLS-0245	54	GIB-0030	79	CWT-0020
5	WIR-0611	30	SCL-0086	55	GIB-0013	80	COL-0026
6	MTR-0142	31	HDW-0090	56	GIB-0012	81	HDW-0640
7	HDW-0779	32	CVR-0117	57	HDW-0295	82	HDW-0952
8	HDW-0280	33	HDW-0346	58	HDW-0204	83	STM-0705
9	HDW-0481	34	HDW-0474	59	HDW-0363	84	HDW-0330
10	MTR-0158	35	BLS-0049	60	CWT-0001	85	SHDW-0314
11	HDW-0419	36	BLS-0246	61	CWT-0021	86	STM-0919
12	MTR-0156	37	BRG-0022	62	PUL-0034	87	HDW-0931
13	MTR-0157	38	BLS-0197	63	HDW-0777	88	HDW-0569
14	HDW-0315	39	STM-0905	64	WIR-0612	89	GIB-0026
15	HDW-0281	40	HDW-0295	65	HDW-0333	90	HDW-0335
16	BLS-0240	41	HDW-0347	66	HDW-1010		
17	BLS0047	42	CVR-0110	67	STM-0334		
18	HDW-0210	43	HDW-0296	68	HDW-0562		
19	BRG-0024	44	HDW-0279	69	HDW-0049		
20	HDW-0213	45	STM-0042	70	STM-0335		
21	HDW-0619	46	BLS-0200	71	HDW-0633		
22	BLS-0247	47	HDW-0355	72	HDW-0576		
23	PLM-0073	48	GIB-0010	73	HDW-1019		
24	PLM-0088	49	PLM-0034	74	GIB-0001		
25	HDW-0330	50	CVR-0128	75	STM-0300		

# 10K HEAD ASSEMBLY



# 10K HEAD ASSEMBLY

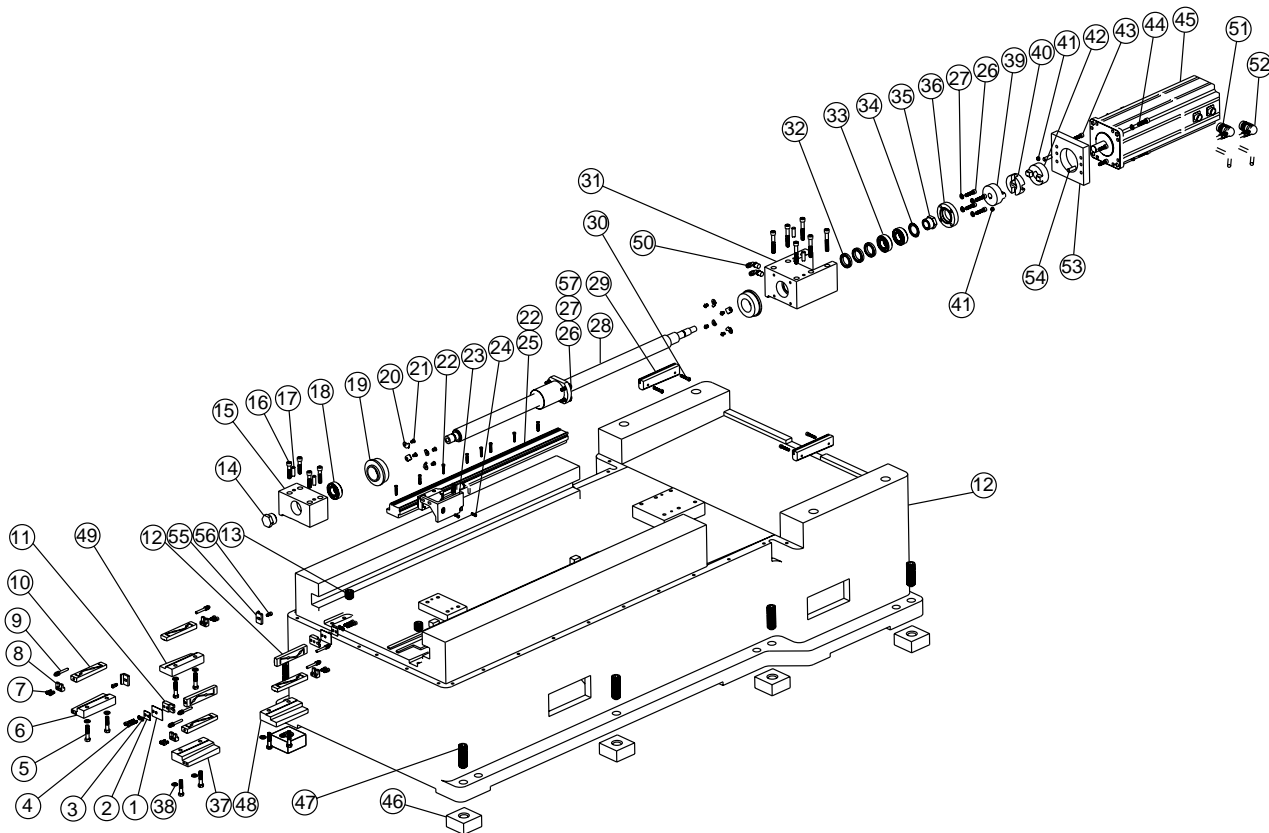
## 10K HEAD ASSEMBLY

	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	STM-0142
2	STM-0139	31	HDW-0322	60	HDW-0279
3	ELE-0124	32	HDW-0356	61	HDW-0322
4	MTR-0123	33	STM-0052	62	
5	WIR-0168	34	HDW-0279	63	
6	MTR-0059	35	HDW-0319	64	BEL-0014
7	STM-0148	36	VLV-0017	65	PUL-0018
8	ENC-0007	37	PLM-0016	66	BEL-0003
9	HDW-0370	38	CNT-0039	67	PUL-0019
10	MTR-0069	39	HDW-0355	68	ORB-0001
11	MTR-0149	40	STM-0042	69	HDW-0290
12	IDL-0003	41	HDW-0279	70	HDW-0284
13	BEL-0015	42	HDW-0294	71	DRB-0000
14	HDW-0451	43	PLM-0112	72	HDW-0279
15	HDW-0311	44	PLM-0034	73	HDW-0320
16	HDW-0283	45	HDW-0470	74	HDW-0321
17	MTR-0068	46	SPN-0008 <sup>(2)</sup>	75	HDW-0279
18	HDW-0294	47	HDW-0181	76	HYD-0017
19	HDW-0279	48	HDW-0148	77	HDW-0279
20	GIB-0013	49	HDW-0177	78	HDW-0320
21	GIB-0010	50	SPN-0042	79	MTR-0127
22	GIB-0001 <sup>(1)</sup>	51	HDW-0275	80	SVT-0108
23		52	HDW-0568	81	STM-0467
24		53	PLM-0075	82	HDW-0597
25		54	PLM-0088	83	MTR-0128
26		55	HDW-0576	84	MTR-0047
27		56	HDW-0279	85	STM-0888
28		57	LUB-0045	86	STM-0064
29	CVR-0048	58	HDW-0047	87	HYD-0018

<sup>(1)</sup>SPN-0008 Includes: HDW-0181, HDW-0177, HDW-0148, PUL-0018

<sup>(2)</sup>Specify gib size when ordering.

# BASE ASSEMBLY



**BASE ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0355	16	HDW-0474	31	BLS-0247	46	PLC-0063
2	STM-0042	17	HDW-0330	32	HDW-0213	47	HDW-0432
3	HDW-0279	18	BRG-0022	33	BRG-0024	48	GIB-0028
4	HDW-0296	19	BLS-0197	34	HDW-0210	49	GIB-0025
5	HDW-0569	20	STM-0905	35	BLS-0047	50	PLM-0112
6	GIB-0026	21	HDW-0347	36	BLS-0240	51	WIR-0663
7	HDW-0295	22	HDW-0797	37	GIB-0027	52	WIR-0664
8	GIB-0012	23	SCL-0085	38	HDW-0280	53	BLS-0245
9	GIB-0013	24	HDW-0090	39	MTR-0157	54	HDW-0619
10	GIB-0001	25	SCL-0088	40	MTR-0156	55	CVR-0128
11	GIB-0010	26	HDW-0315	41	HDW-0419	56	HDW-1016
12	BAS-0020	27	HDW-0281	42	MTR-0158	57	PLM-0034
13	HDW-0434	28	BLS-0199	43	HDW-0481		
14	BLS-0049	29	CVR-0114	44	HDW-0779		
15	BLS-0246	30	HDW-0296	45	MTR-0142		

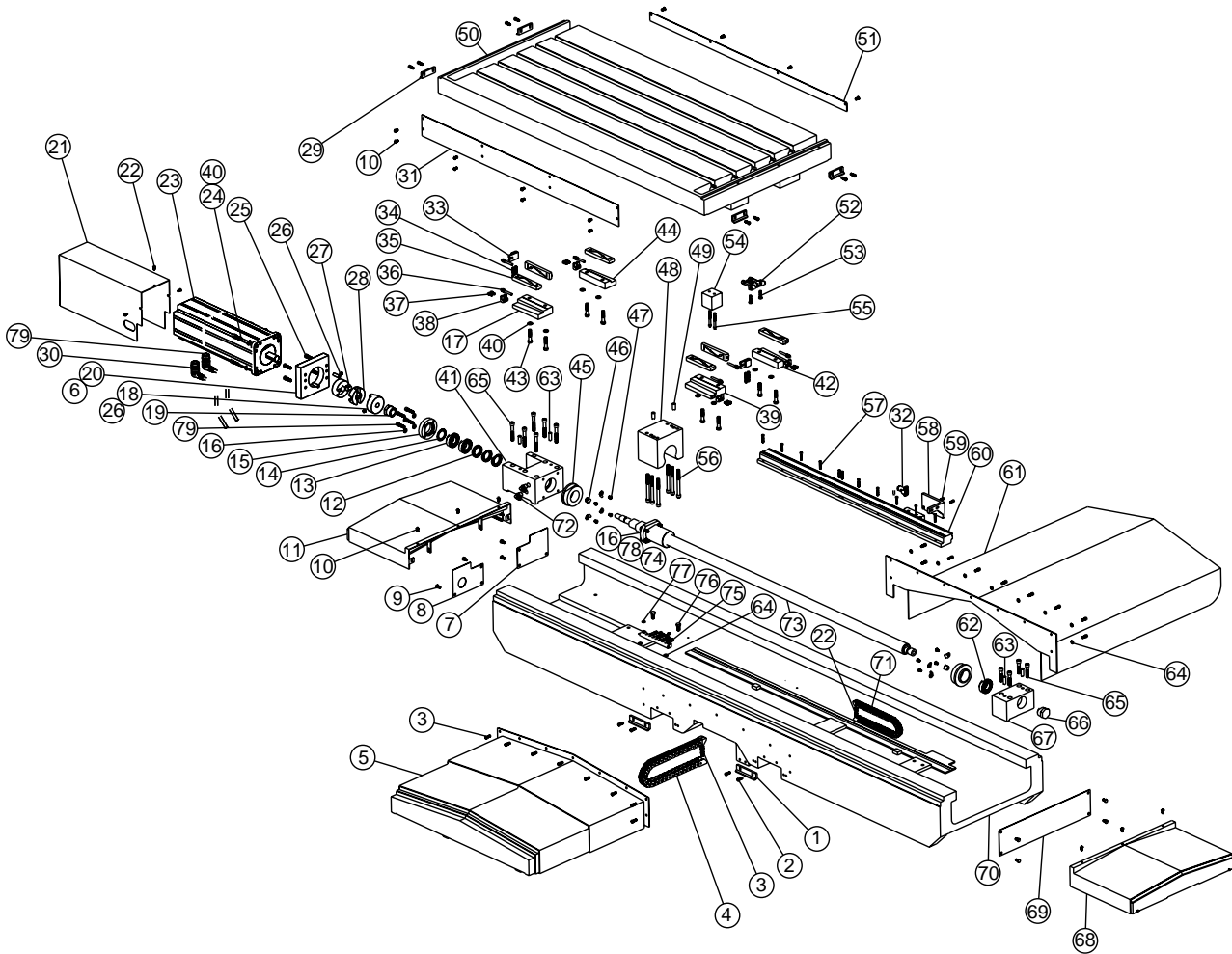


This page intentionally left blank.





# SADDLE ASSEMBLY

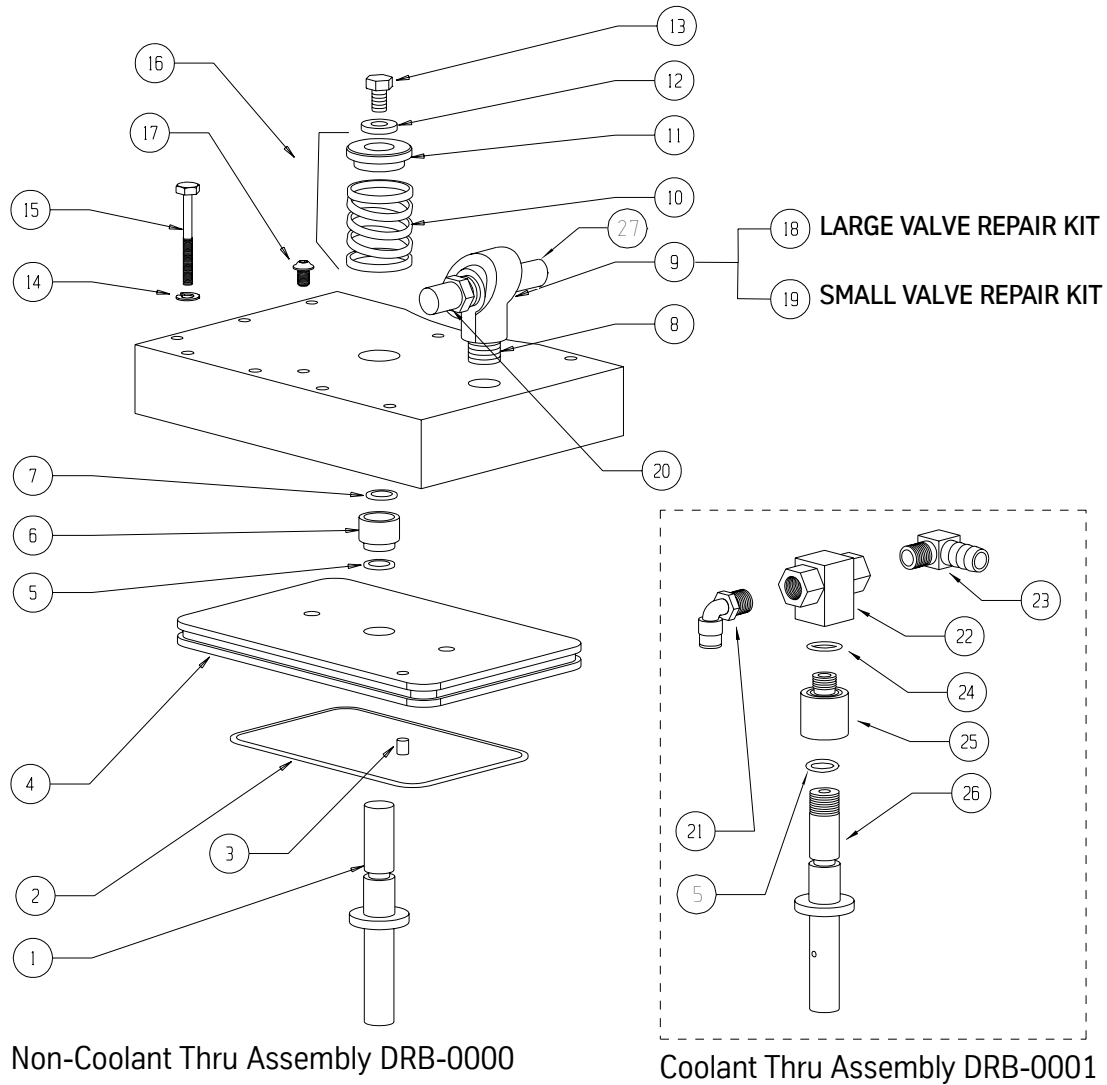


# SADDLE ASSEMBLY

## SADDLE ASSEMBLY

	PART #		PART #		PART #		PART #
1	CVR-0122	23	MTR-0142	45	BLS-0197	67	BLS-0246
2	HDW-1016	24	HDW-0779	46	STM-0905	68	CVR-0120
3	HDW-0581	25	HDW-0481	47	HDW-0347	69	CVR-0112
4	CVR-0116	26	HDW-0419	48	BLS-0244	70	SDL-0050
5	CVR-0118	27	MTR-0158	49	HDW-0622	71	CVR-0115
6	HDW-0619	28	MTR-0156	50	TBL-0029	72	PLM-0112
7	CVR-0121	29	CVR-0124	51	STM-0917	73	BLS-0198
8	CVR-0113	30	WIR-0676	52	LUB-0044	74	PLM-0034
9	HDW-0319	31	STM-0906	53	HDW-0318	75	LUB-0043
10	HDW-0346	32	SCL-0031	54	SCL-0084	76	HDW-0576
11	CVR-0119	33	GIB-0001	55	HDW-0489	77	HDW-0047
12	HDW-0213	34	HDW-0296	56	HDW-0477	78	HDW-0281
13	BRG-0024	35	GIB-0001	57	HDW-0797	79	WIR-0677
14	HDW-0210	36	GIB-0013	58	SCL-0085		
15	BLS-0240	37	HDW-0295	59	HDW-0090		
16	HDW-0315	38	GIB-0012	60	SCL-0025		
17	GIB-0027	39	GIB-0028	61	CVR-0125		
18	MTR-0157	40	HDW-0280	62	BRG-0022		
19	BLS-0047	41	BLS-0247	63	HDW-0330		
20	BLS-0245	42	GIB-0025	64	HDW-0279		
21	CVR-0126	43	HDW-0569	65	HDW-0474		
22	HDW-0349	44	GIB-0026	66	BLS-0049		

# DRAWBAR ASSEMBLY



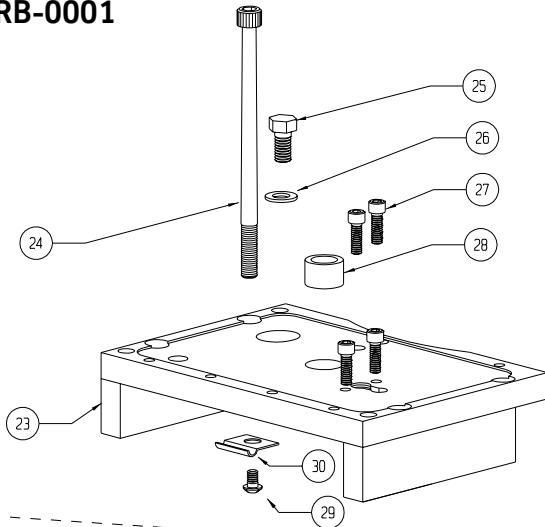
## DRAWBAR CYLINDER ASSEMBLIES

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

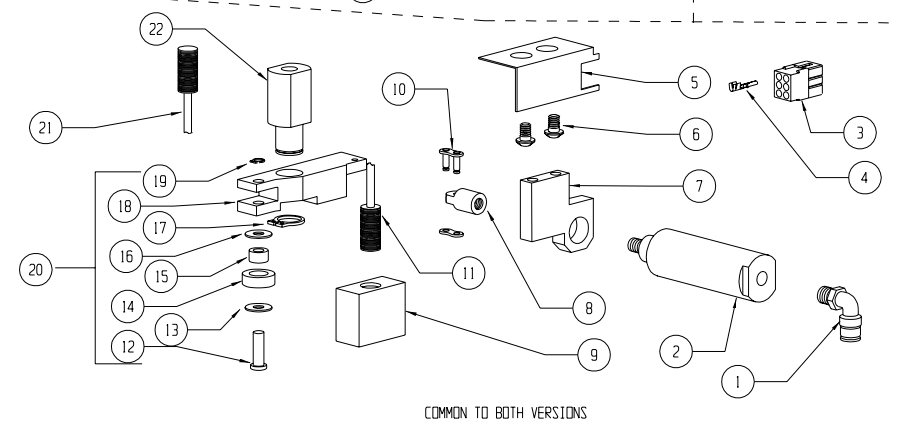
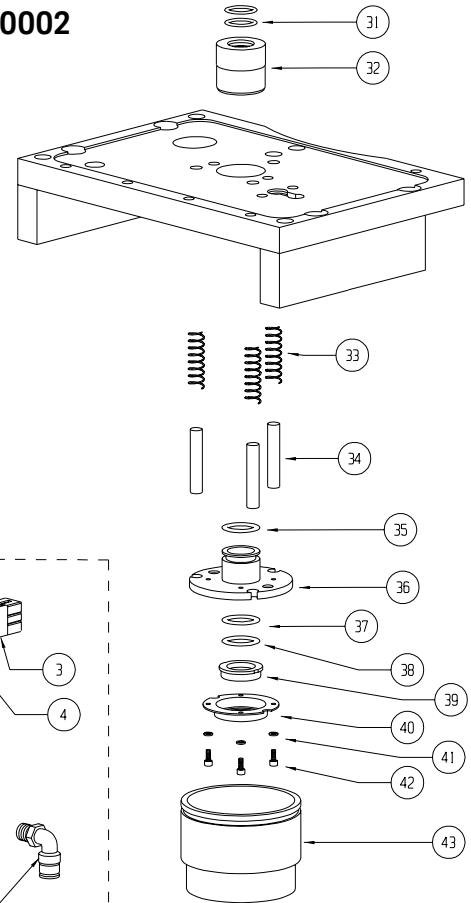
<sup>1</sup>Includes ELE-0147

# ORIENTATION BRIDGE ASSEMBLY

**ORB-0001**



**ORB-0002**

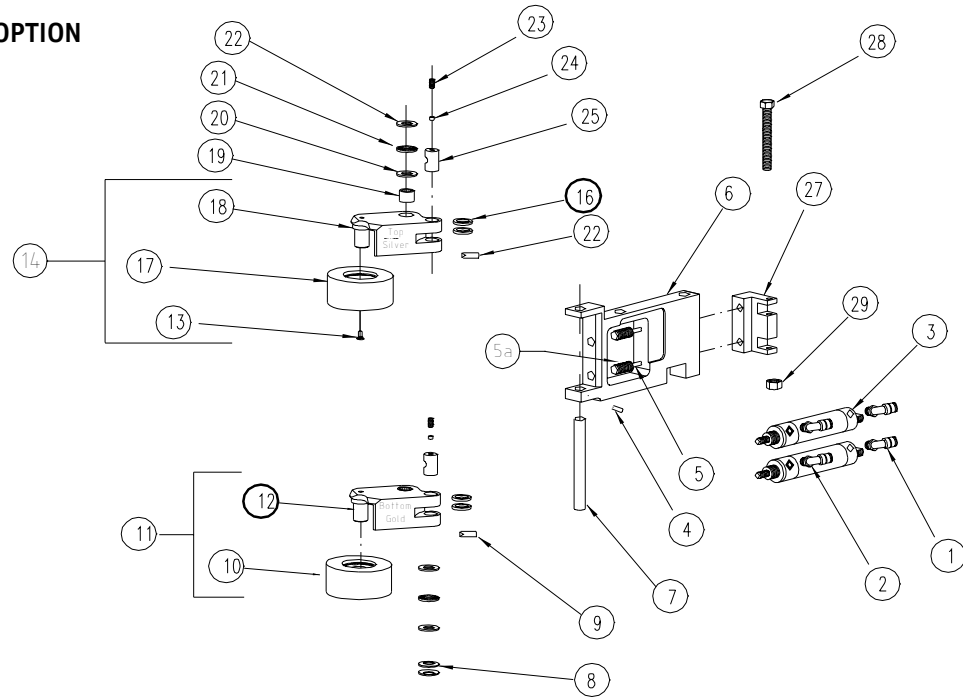


**ORIENTATION BRIDGE ASSEMBLIES**

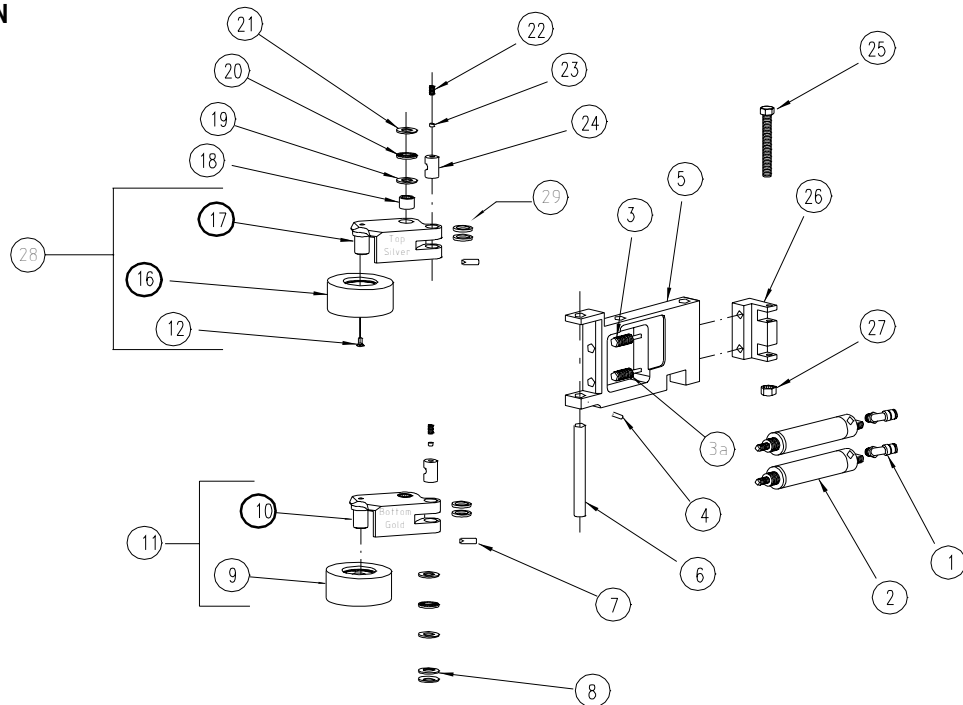
	PART#		PART#		PART#		PART#		PART#
1	PLM-0034	8	ORB-0011	18	ORB-0031	28	BRG-0008	38	HDW-0156
2	CYL-0007	9	ORB-0014	19	HDW-0726	29	HDW-0349	39	CNT-0033
3	WIR-0051	10	HDW-0209	20	ORB-0004	30	LUB-0077	40	CNT-0045
4	WIR-0043 (16 AWG)	11	ELE-0145	21	ELE-0145	31	HDW-0150	41	HDW-0453
	WIR-0044 (16 AWG)	12	ORB-0007	22	ORB-0013	32	CNT-0042	42	HDW-0308
	WIR-0544 (22 AWG)	13	HDW-0515	23	ORB-0008	33	HDW-0257	43	CNT-0140
	WIR-0056 (22 AWG)	14	ORB-0009	24	HDW-0285	34	HDW-0326		
5	STM-0596	15	BRG-0014	25	HDW-0571	35	HDW-0156		
6	HDW-0347	16	HDW-0515	26	HDW-0048	36	CNT-0041		
7	ORB-0030	17	HDW-0725	27	HDW-0298	37	HDW-0155		

# IDLER ASSEMBLIES

## RIGID TAP/HIGH TORQUE OPTION



## 10,000 RPM OPTION



# IDLER ASSEMBLIES

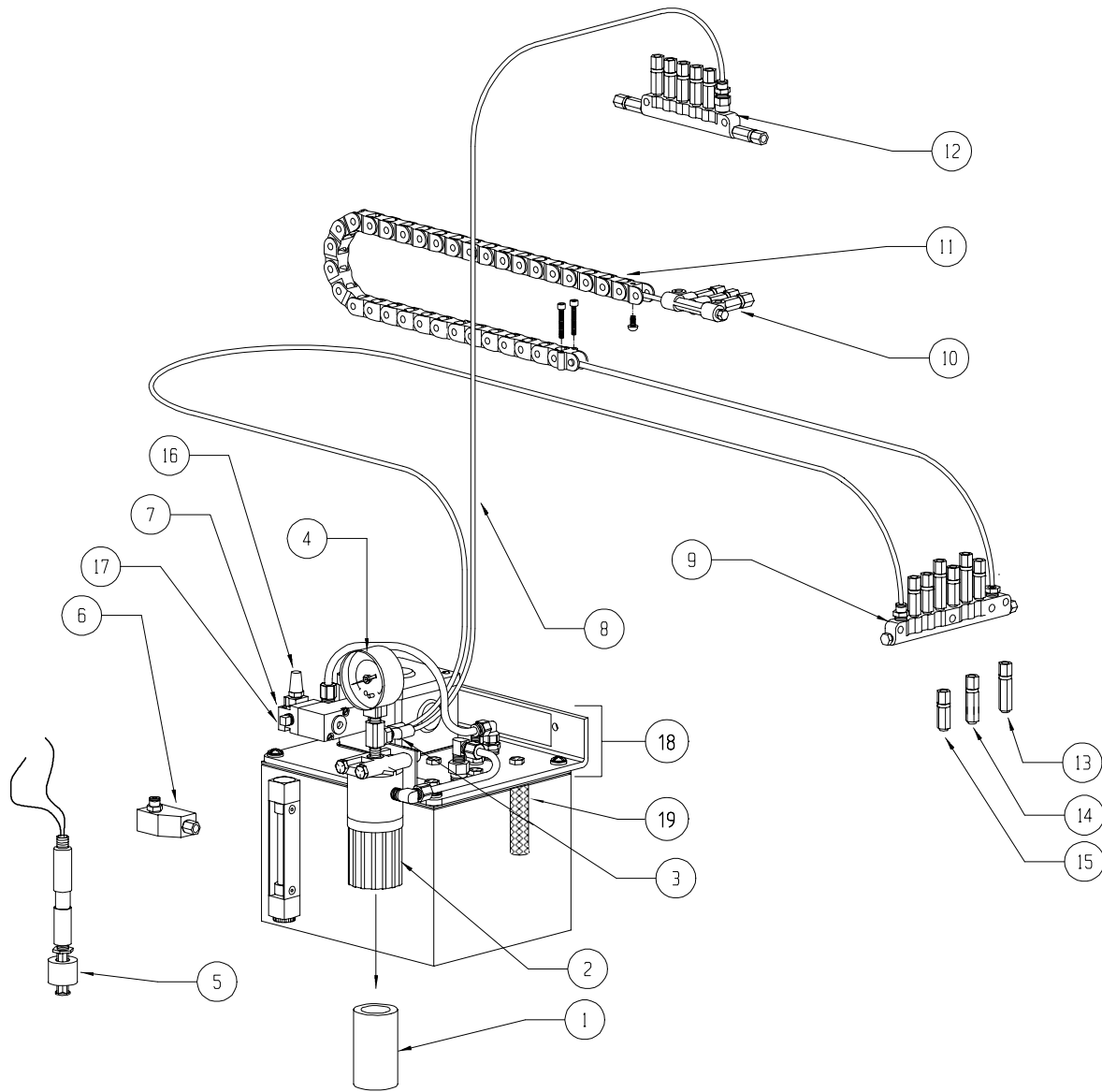
## RIGID TAP/HIGH TORQUE OPTION

	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

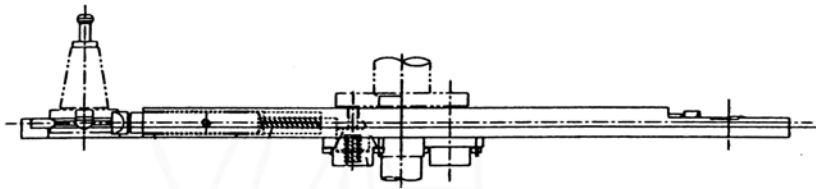
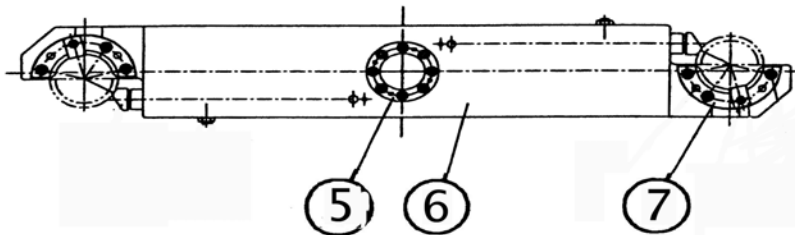
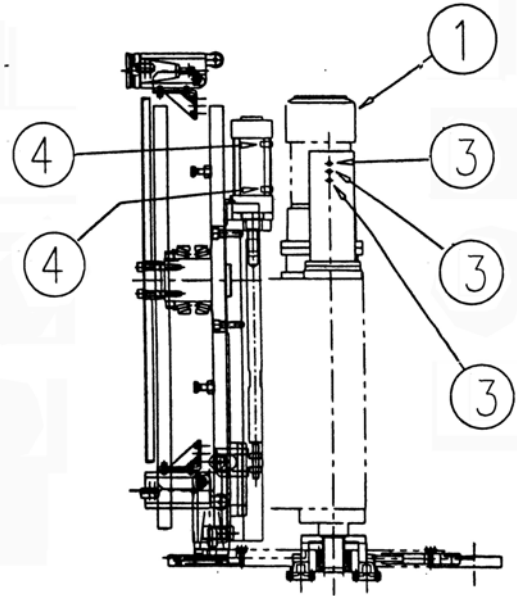
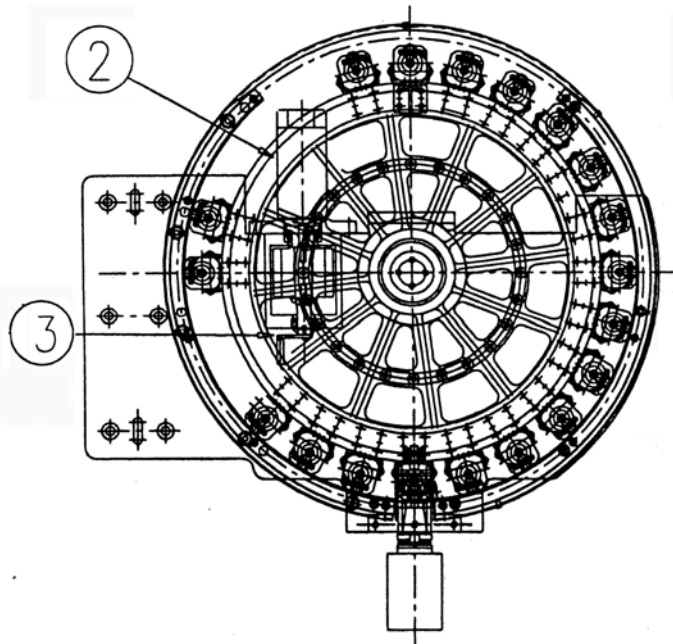
# WAYLUBE ASSEMBLY



**WAYLUBE PUMP ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		

# DUAL ARM TOOL CHANGER



**DUAL ARM TOOL CHANGER**

	PART #
1	MTR-0181
2	MTR-0180
3	ELE-1185
4	ELE-1186
5	ATC-0155
6	ATC-0164
7	(BT) ATC-0163
7	(BT) ATC-0165



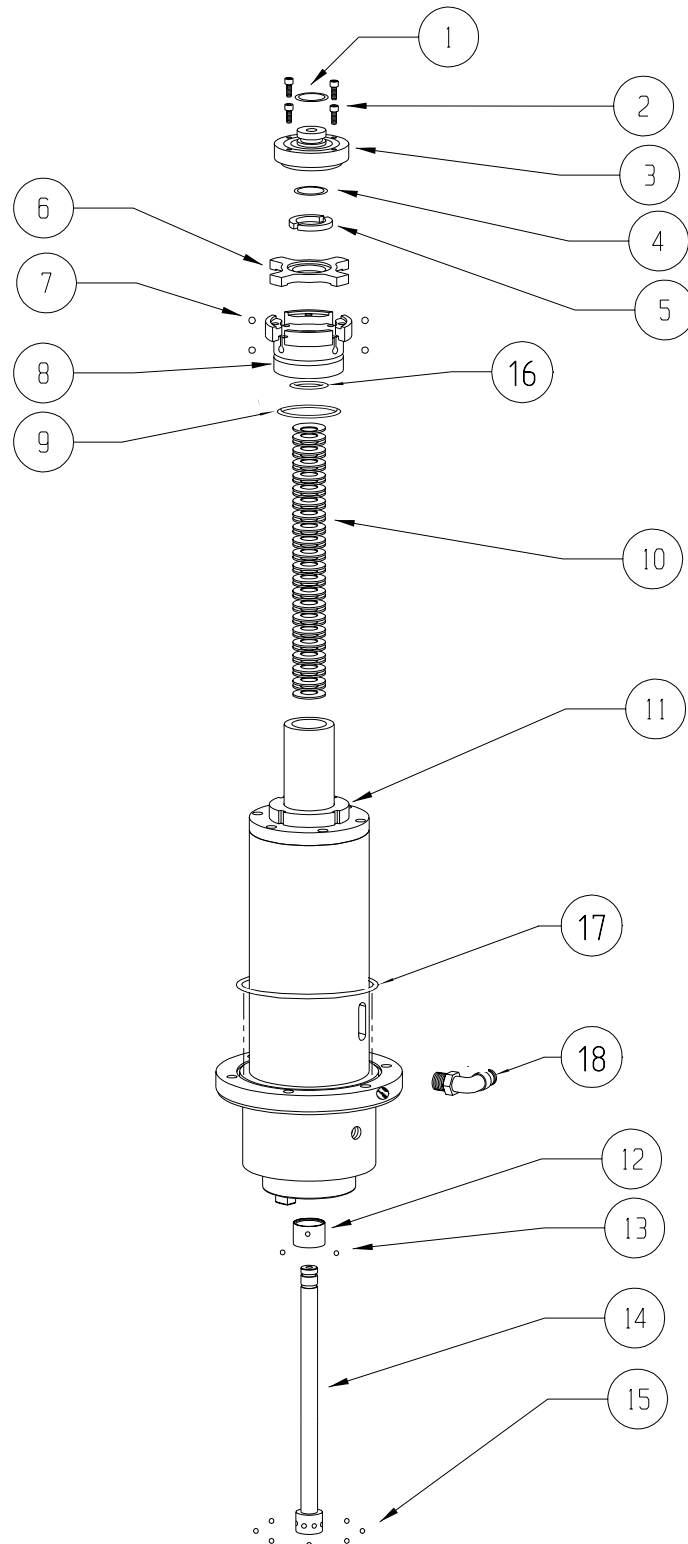
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

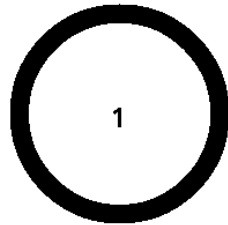
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THRU SPINDLE

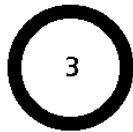
CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



1  
HDW-0158



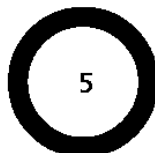
2  
HDW-0177



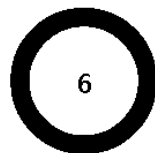
3  
HDW-0150



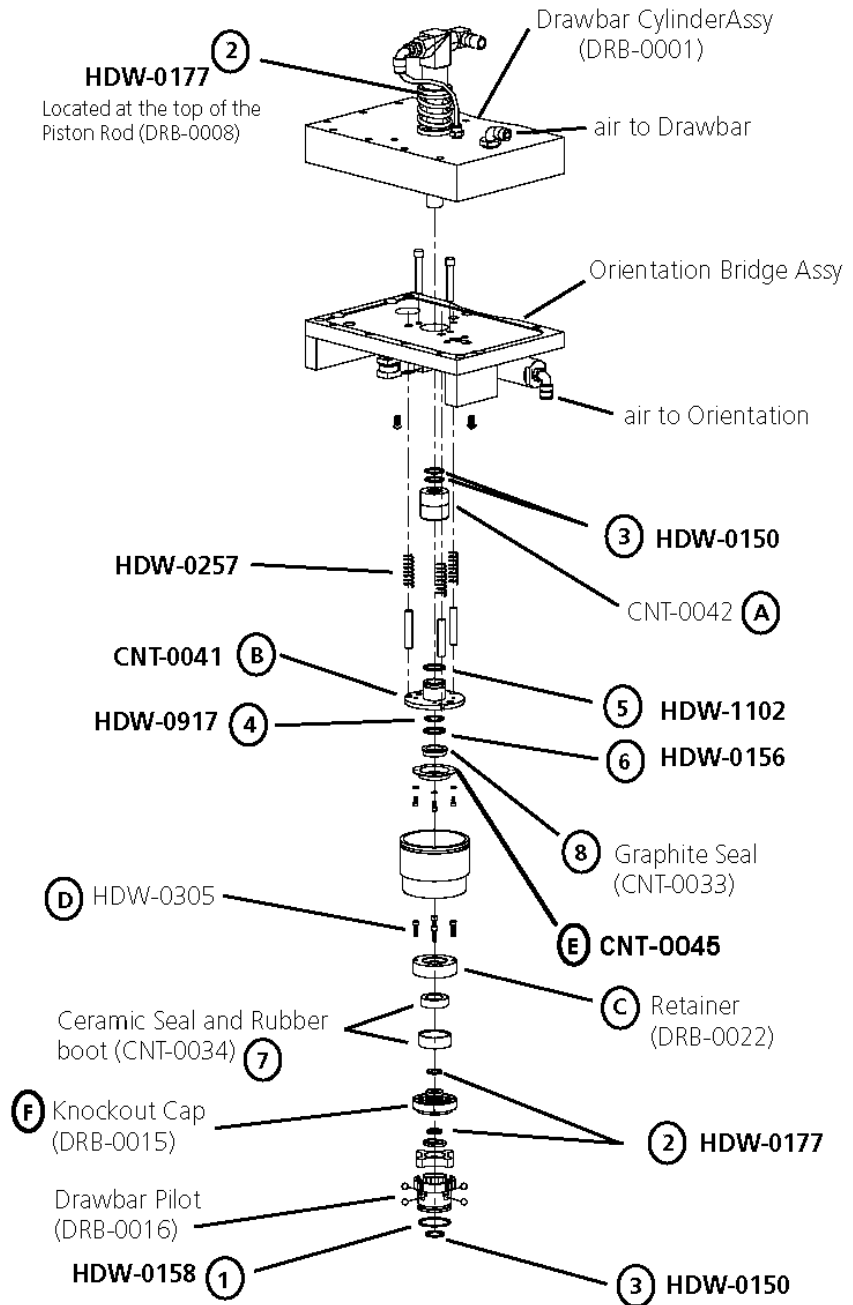
4  
HDW-0917



5  
HDW-1102

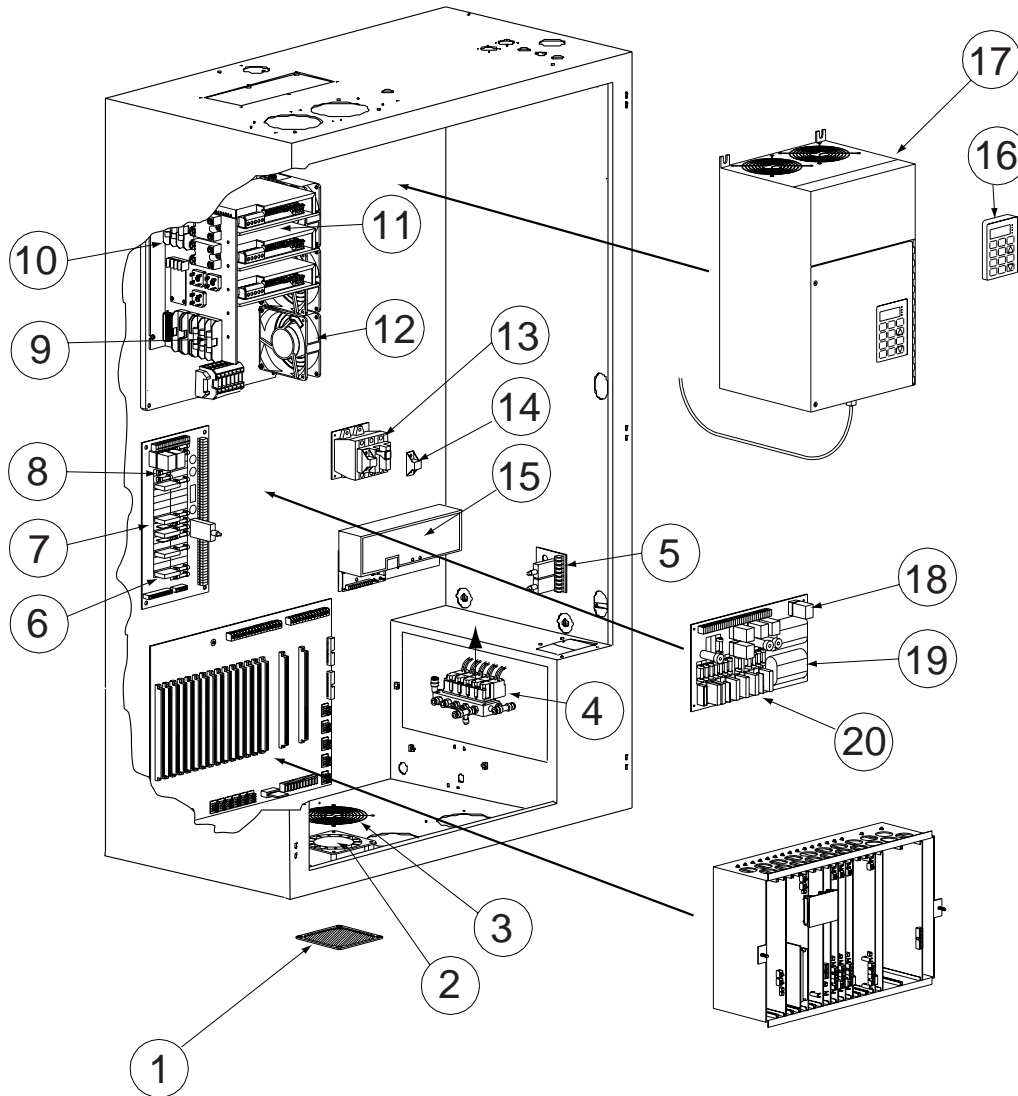


6  
HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

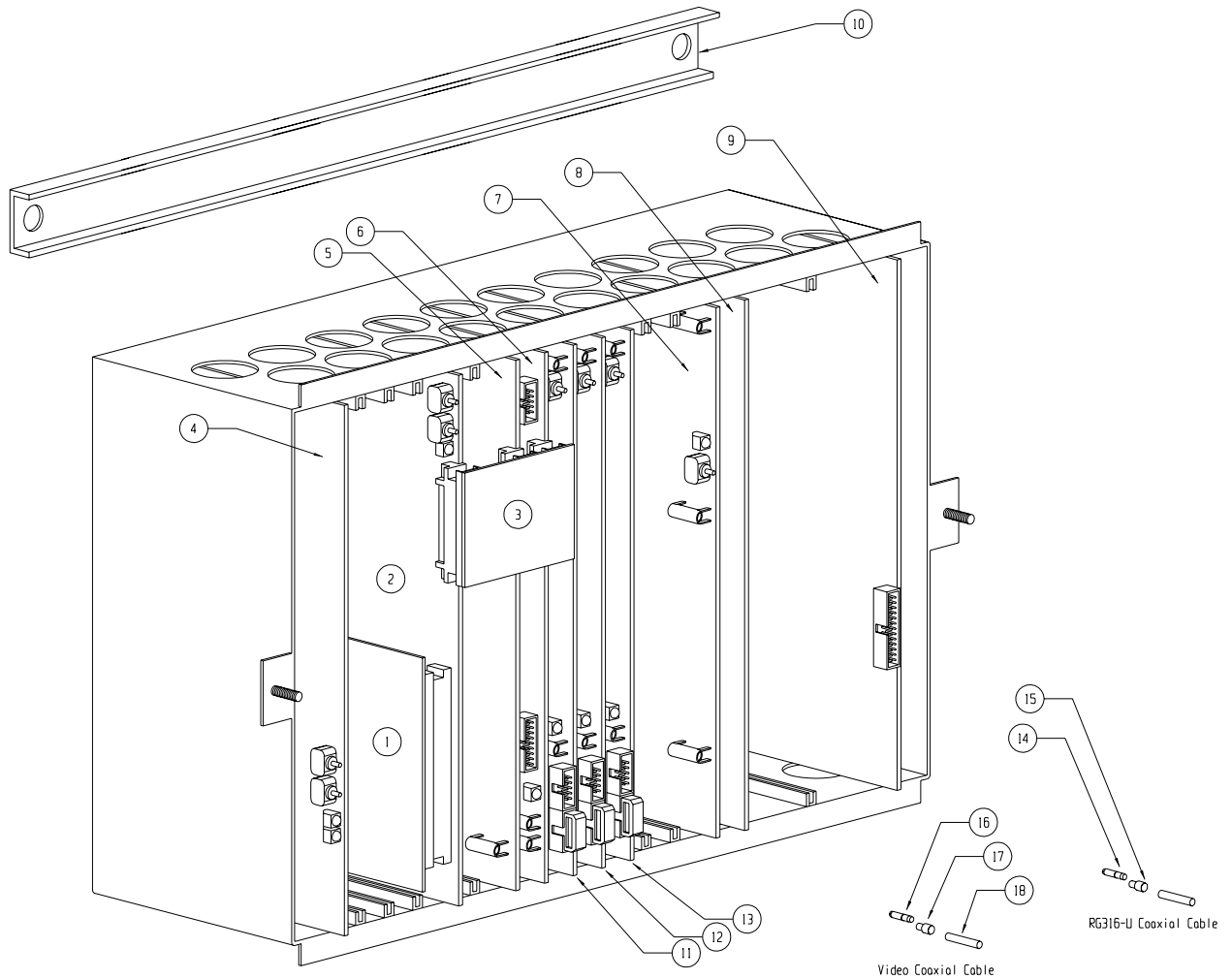
# CNC CABINET ASSEMBLY



**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0849	9	ELE-0840	17	INV-0056 (AMC)
2	ELE-0123	10	ELE-0837		INV-0041 (Baldor)
3	HDW-0850	11	AMP-0036		INV-0020 (HT)
4	VLV-0054	12	ELE-0123	18	ELE-0072
5	PCB-0046	13	ELE-0132	19	PCB-0195
6	ELE-0070	14	ELE-0138	20	ELE-0070
7	PCB-0194	15	ELE-0961		
8	ELE-0101	16	INV-0017 (Baldor)		

# CARD CAGE ASSEMBLY



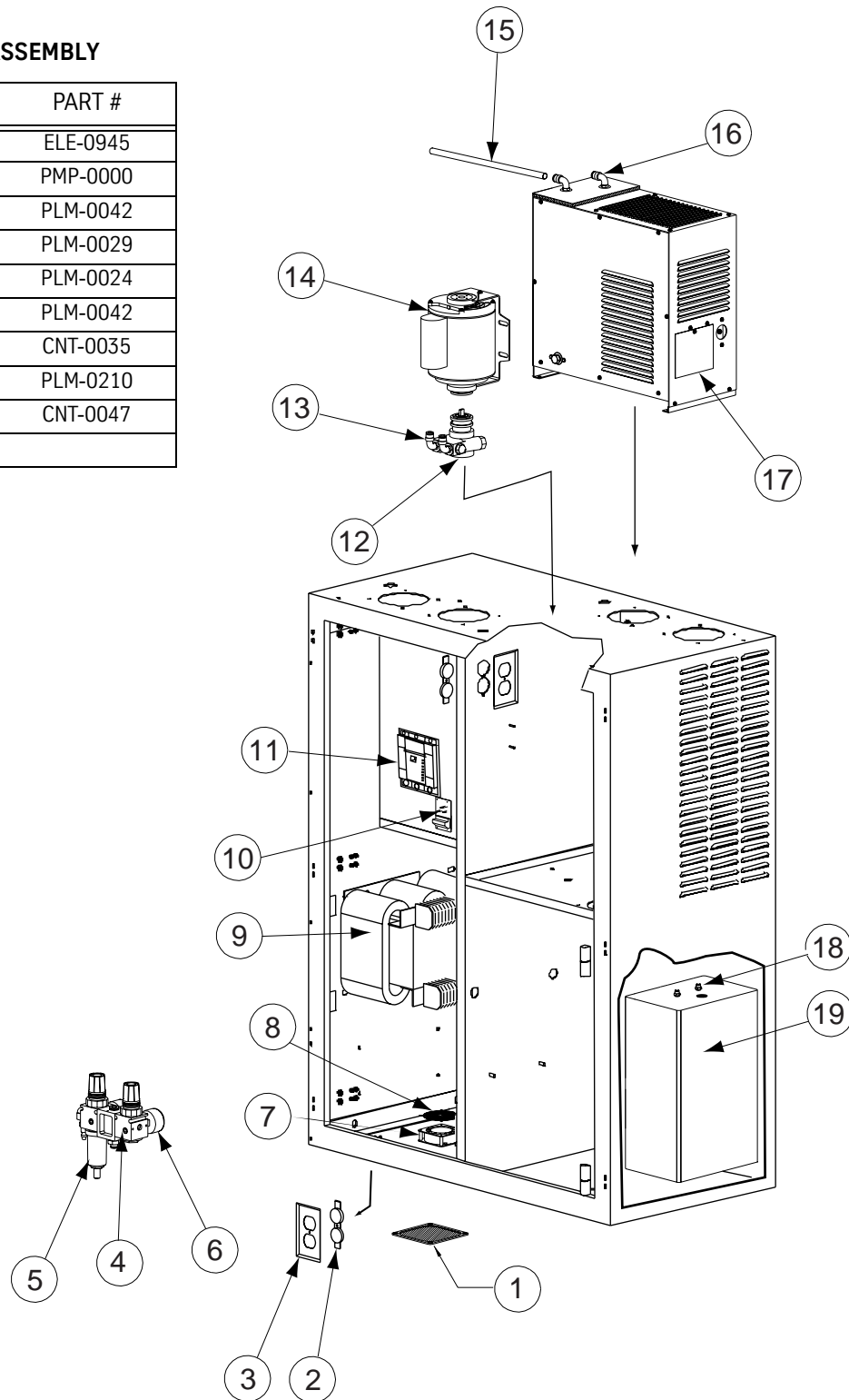
	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

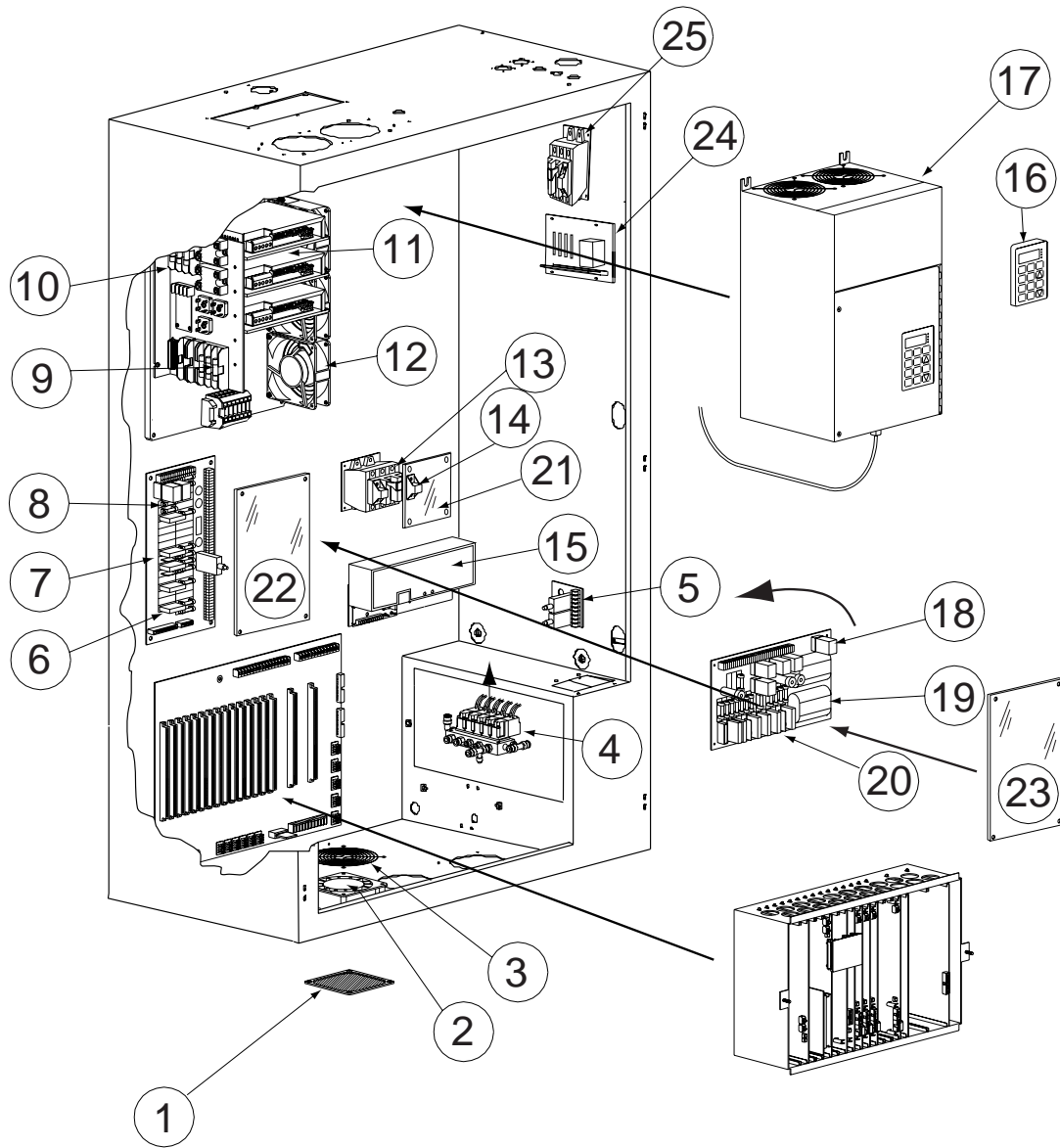
# JUNCTION BOX ASSEMBLY

## CHILLER CABINET ASSEMBLY

	PART #		PART #
1	HDW-0849	11	ELE-0945
2	WIR-0121	12	PMP-0000
3	WIR-0117	13	PLM-0042
4	REG-0009	14	PLM-0029
5	REG-0008	15	PLM-0024
6	REG-0005	16	PLM-0042
7	ELE-0123	17	CNT-0035
8	HDW-0850	18	PLM-0210
9	ELE-0200	19	CNT-0047
10	PCB-0020		



# CE CNC CABINET ASSEMBLY



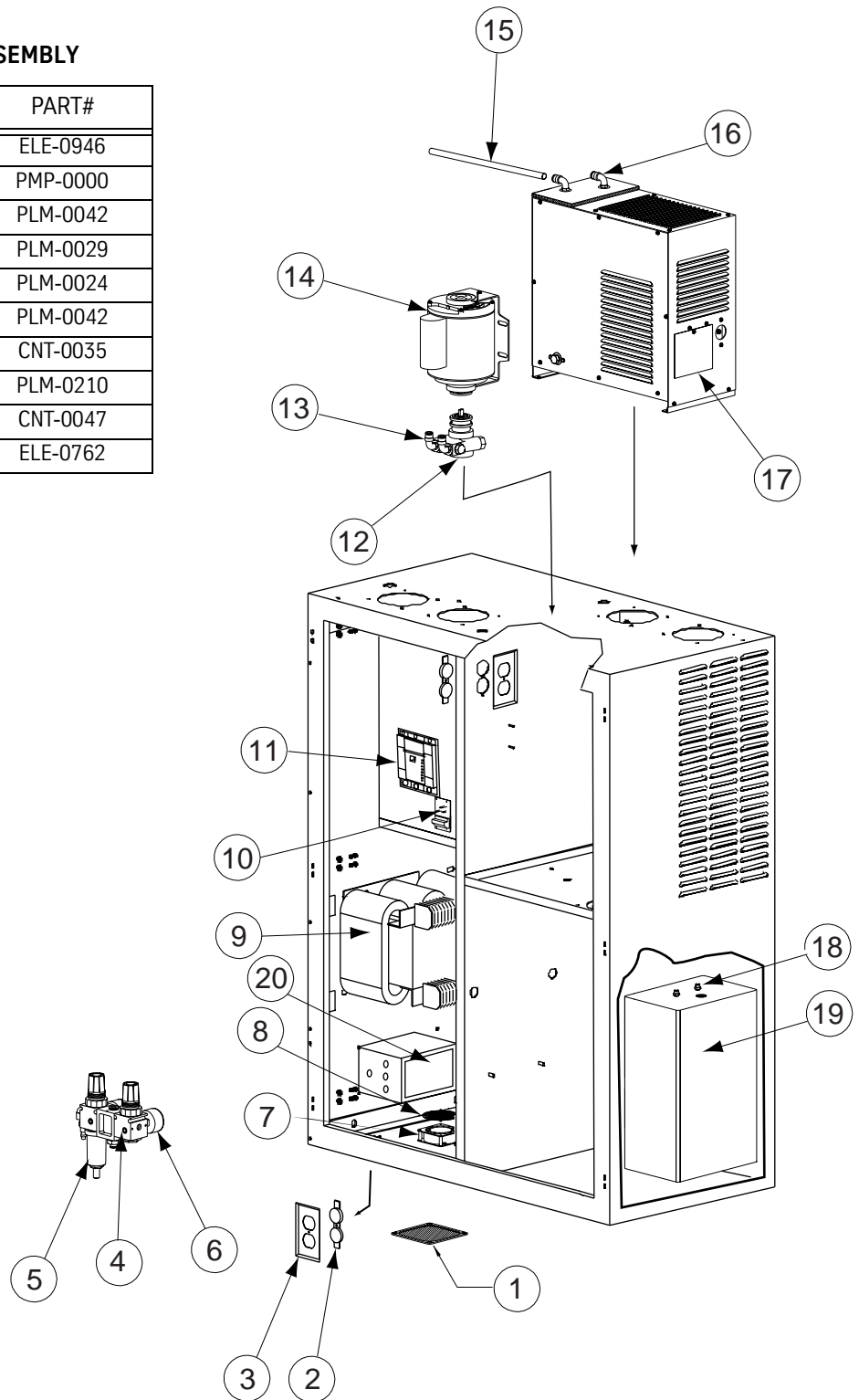
CE CNC CABINET ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0849	7	PCB-0194	13	ELE-0132	18	ELE-0072	24	PCB-0196
2	ELE-0123	8	ELE-0101	14	ELE-0138	19	PCB-0195	25	ELE-1025
3	HDW-0850	9	ELE-0840	15	ELE-0961	20	ELE-0070		
4	VLV-0054	10	ELE-0837	16	INV-0017 (Baldor)	21	ELE-0349		
5	PCB-0046	11	AMP-0036	17	INV-0056 (AMC)	22	ELE-0849		
6	ELE-0070	12	ELE-0123		INV-0041 (Baldor)	23	ELE-0848		

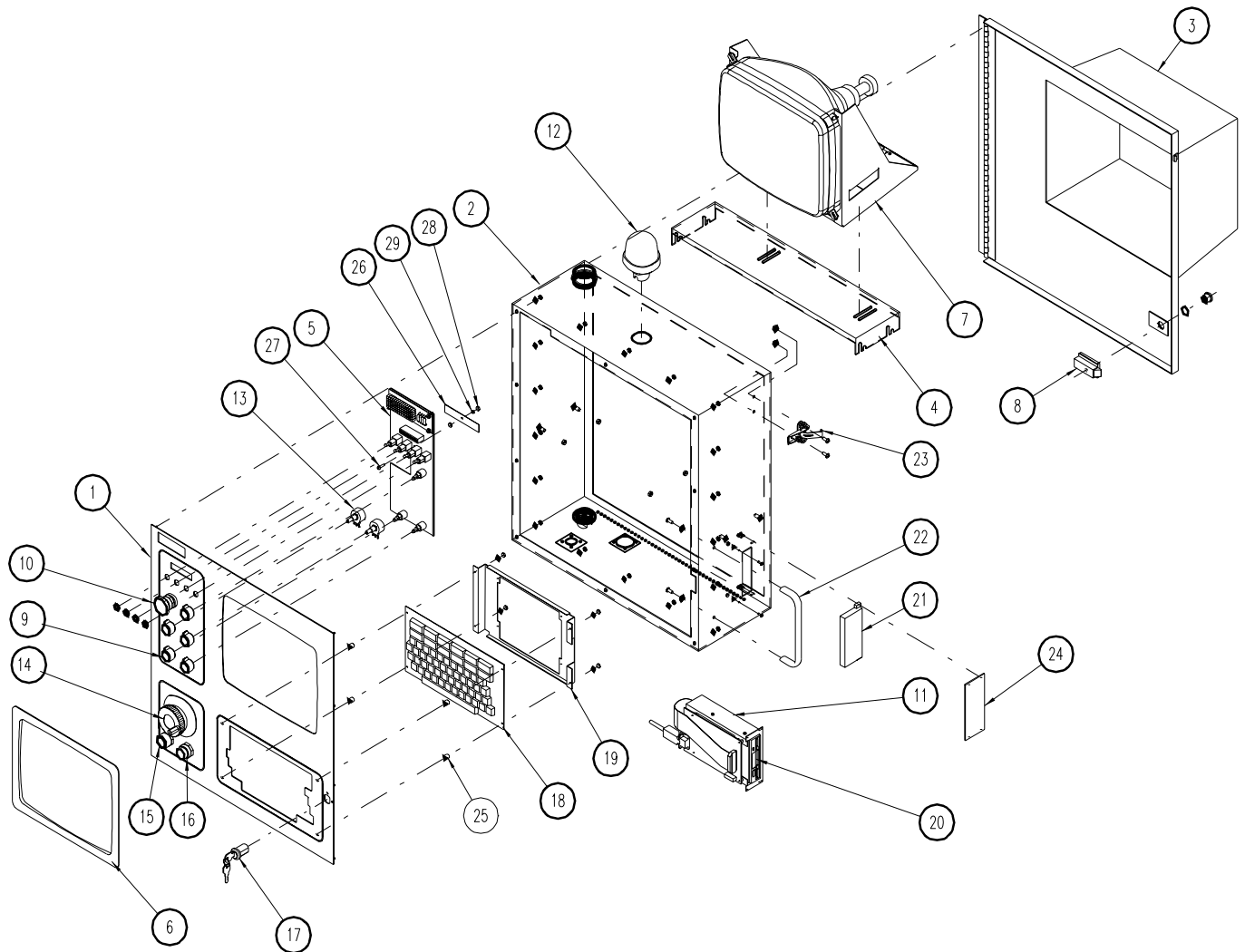
# CE JUNCTION BOX ASSEMBLY

**CE JUNCTION BOX ASSEMBLY**

	PART#		PART#
1	HDW-0849	11	ELE-0946
2	WIR-0121	12	PMP-0000
3	WIR-0117	13	PLM-0042
4	REG-0009	14	PLM-0029
5	REG-0008	15	PLM-0024
6	REG-0005	16	PLM-0042
7	ELE-0123	17	CNT-0035
8	HDW-0850	18	PLM-0210
9	ELE-0200	19	CNT-0047
10	PCB-0020	20	ELE-0762



# MP PENDANT ASSEMBLY

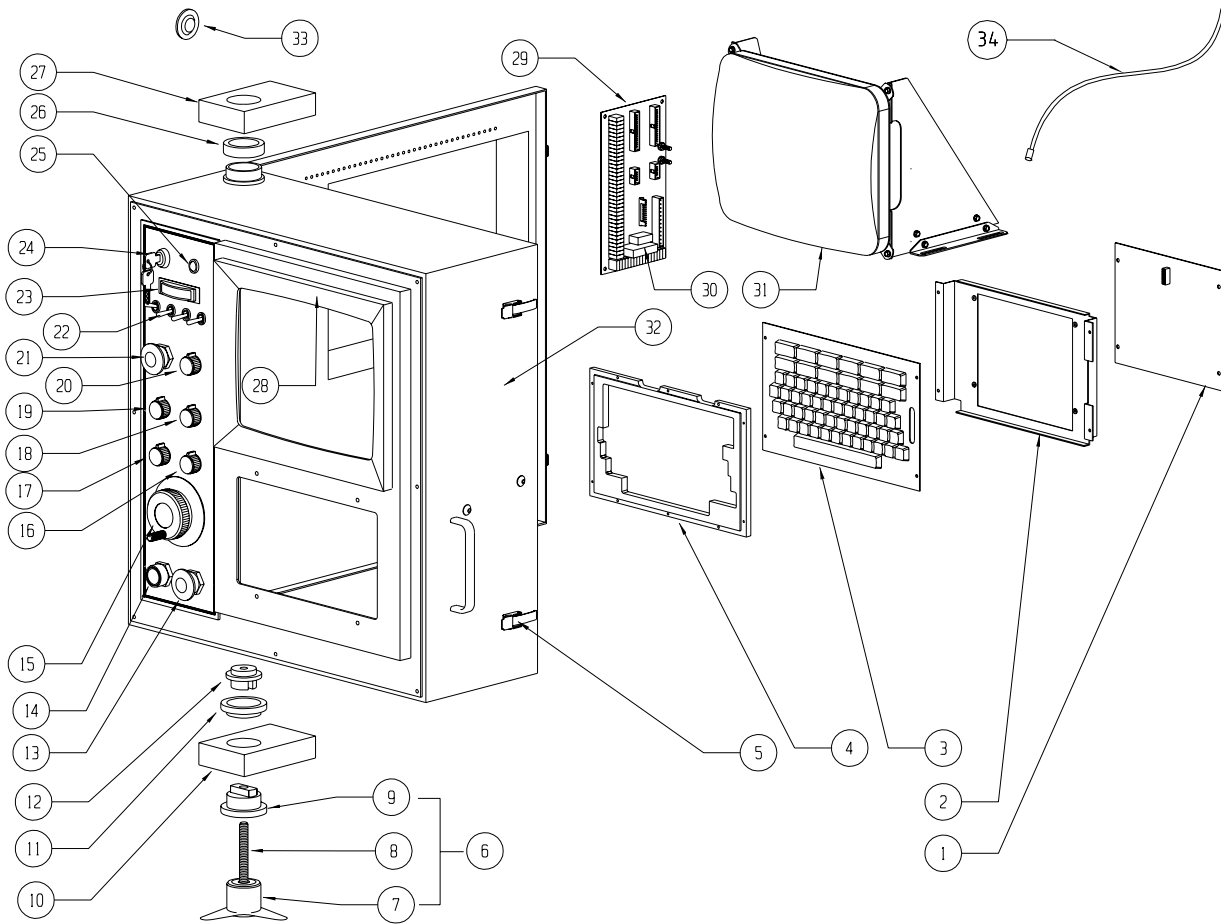


**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		



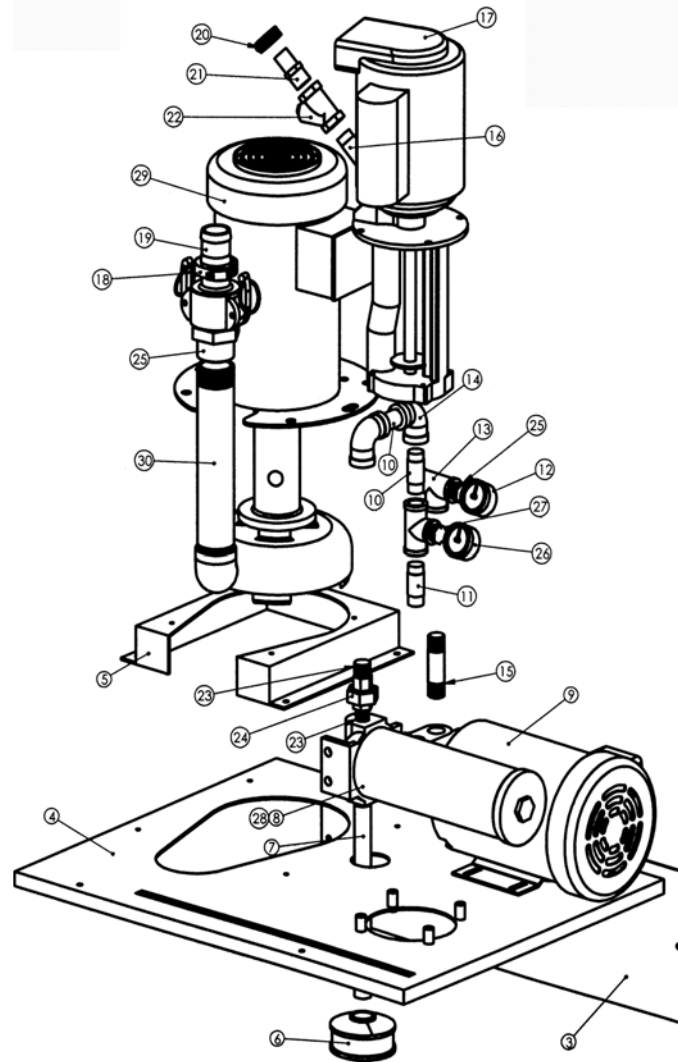
# 88HS PENDANT ASSEMBLY



**88HS PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

# COOLANT TANK ASSEMBLY



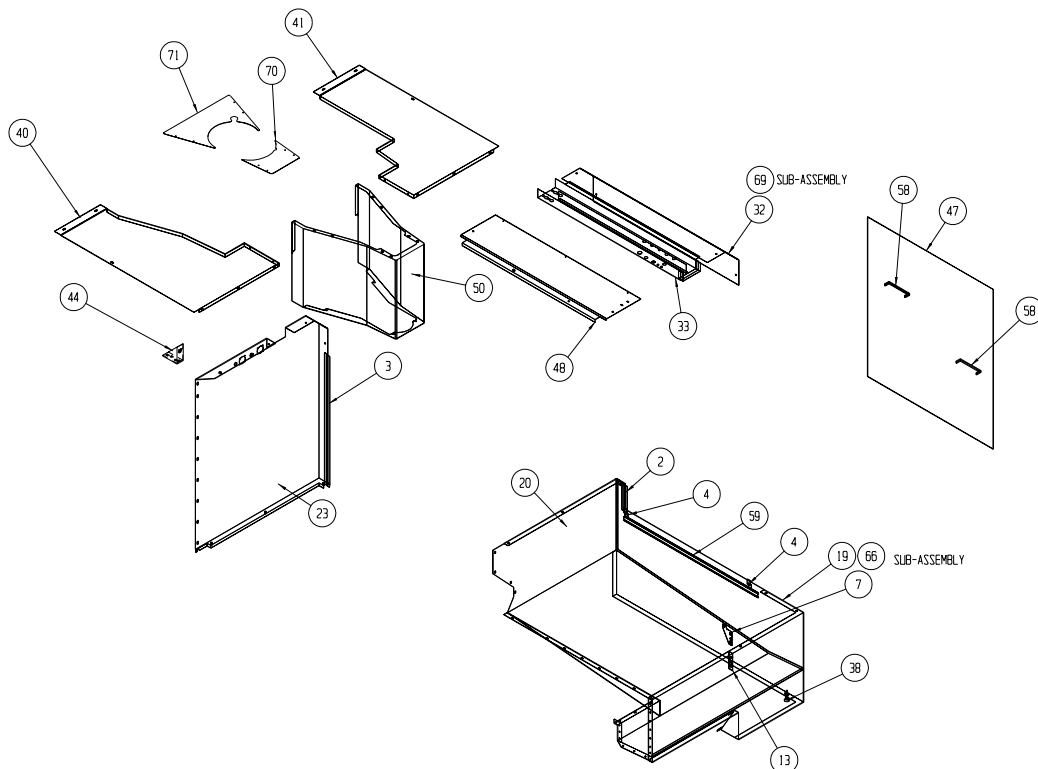
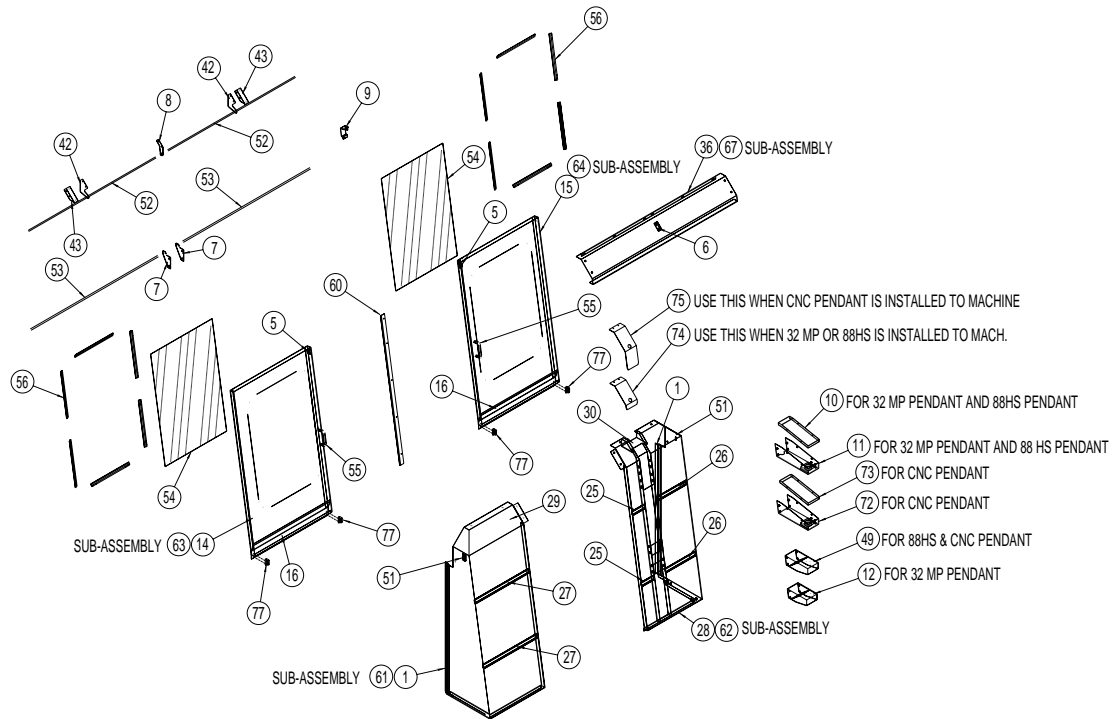
**COOLANT TANK ASSEMBLY**

	PART #		PART #		PART #		PART #
1		9	PMP-0008	17	PMP-0017	25	PLM-0217
2		10	PLM-0060	18	HDW-0764	26	PLM-0216
3		11	PLM-0094	19	PLM-0021	27	REG-0034
4		12	REG-0018	20	HDW-0252	28	CNT-0029
5	STM-1023	13	PLM-0089	21	PLM-0076	29	PMP-0010
6	CNT-0025	14	PLM-0067	22	VLV-0018	30	PLM-0065
7	PLM-0233	15	PLM-0214	23	PLM-0091		
8	CNT-0027	16	PLM-0007	24	PLM-0212		

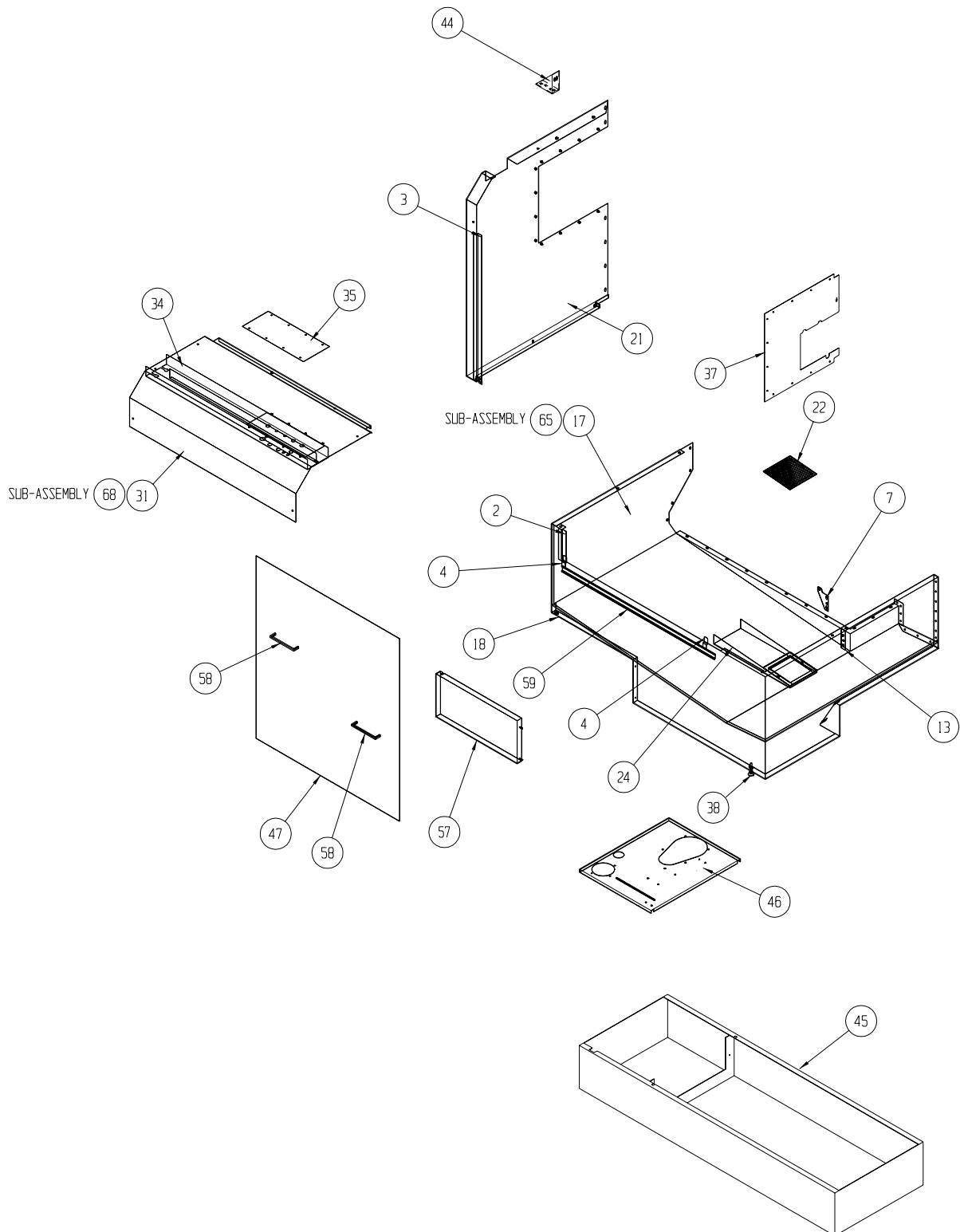
# COOLANT TANK ASSEMBLY

This page intentionally left blank.

# SHEETMETAL ASSEMBLY



# SHEETMETAL ASSEMBLY



# SHEETMETAL ASSEMBLY

## SHEETMETAL ASSEMBLY

	PART #		PART #		PART #		PART #
1	STM-0727	21	STM-0839	42	STM-0741	62	STM-0838
2	STM-0727	22	STM-0746	43	STM-0742	63	STM-0736
3	STM-0727	23	STM-0840	44	STM-0887	64	STM-0737
4	STM-0727	24	STM-0727	45	STM-0815	65	STM-0835
5	STM-0736	25	STM-0842	46	ASY-0025	66	STM-0836
6	STM-0847	26	STM-0842	47	STM-0243	67	STM-0847
7	STM-0740	27	STM-0842	48	STM-0912	68	STM-0843
8	STM-0743	28	STM-0838	49	STM-0885	69	STM-0841
9	STM-0738	29	STM-0842	50	STM-0888	70	STM-0904
10	STM-0749	30	STM-0838	51	STM-0739	71	STM-0903
11	STM-0750	31	STM-0843	52	DOR-0659	72	STM-0913
12	STM-0748	32	STM-0841	53	DOR-0067	73	STM-0914
13	STM-0835	33	STM-0841	54	DOR-0007	74	STM-0915
14	STM-0736	34	STM-0843	55		75	STM-0916
15	STM-0737	35	STM-0881	56	STM-0084	76	
16	STM-0736	36	STM-0847	57	STM-0892	77	DOR-0016
17	STM-0835	37	STM-0852	58	HDW-0182	78	STM-0879
18	STM-0835	39	STM-0846	59	STM-0842	79	
19	STM-0836	40	STM-0846	60	STM-0893	80	
20	STM-0836	41	STM-0849	61	STM-0842	81	

# TABLE OF CONTENTS

## Parts Manual VMC 4020 MODEL



COLUMN ASSEMBLY.....	2
10K RPM HEAD ASSEMBLY .....	4
BASE,SADDLE AND TABLE ASSEMBLY.....	6
X-AXIS SCALE ASSEMBLY .....	8
Y-AXIS SCALE ASSEMBLY .....	9
DRAWBAR CYLINDER ASSEMBLY.....	10
ORIENTATION BRIDGE ASSEMBLY.....	11
IDLER ASSEMBLIES.....	13
WAYLUBE ASSEMBLY .....	15
ATC GENEVA DRIVE ASSEMBLY .....	16
ATC SERVO DRIVE ASSEMBLY.....	18
DUAL ARM TOOL CHANGER.....	20
7500 RPM SPINDLE ASSEMBLY .....	21
10K RPM SPINDLE ASSEMBLY .....	22
COOLANT THROUGH SPINDLE .....	23
CNC CABINET ASSEMBLY .....	24
CARD CAGE ASSEMBLY .....	25
POWER JUNCTION CABINET ASSEMBLY .....	26
CHILLER CABINET ASSEMBLY.....	27
MP PENDANT ASSEMBLY .....	28
88HS PENDANT ASSEMBLY.....	29
FRONT DOOR ASSEMBLY .....	30
WAY COVER ASSEMBLY .....	31
SHEETMETAL HOUSING.....	32
SHEETMETAL HOUSING SLANT 98 .....	33
COOLANT TANK ASSEMBLY SLANT 98 .....	36
CE CNC CABINET SLANT 98.....	40
JUNCTION BOX SLANT 98 .....	42
7500 RPM COOLANT TANK.....	44
7500 RPM COOLANT THROUGH TANK.....	45
10K RPM COOLANT TANK.....	46
10K RPM COOLANT THROUGH TANK.....	47





**This reference covers the following Fadal products:**

**Model VMC 4020**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

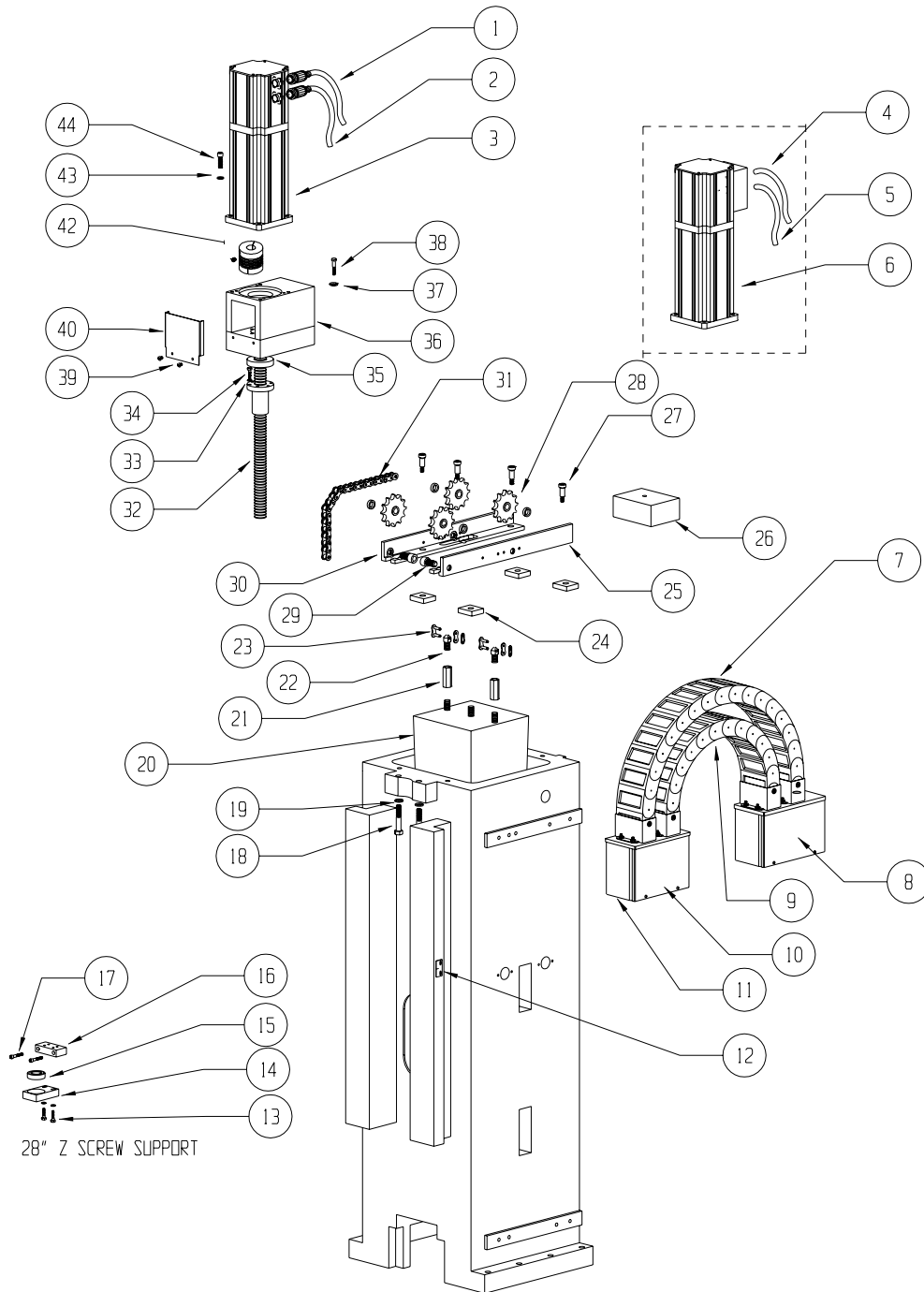
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

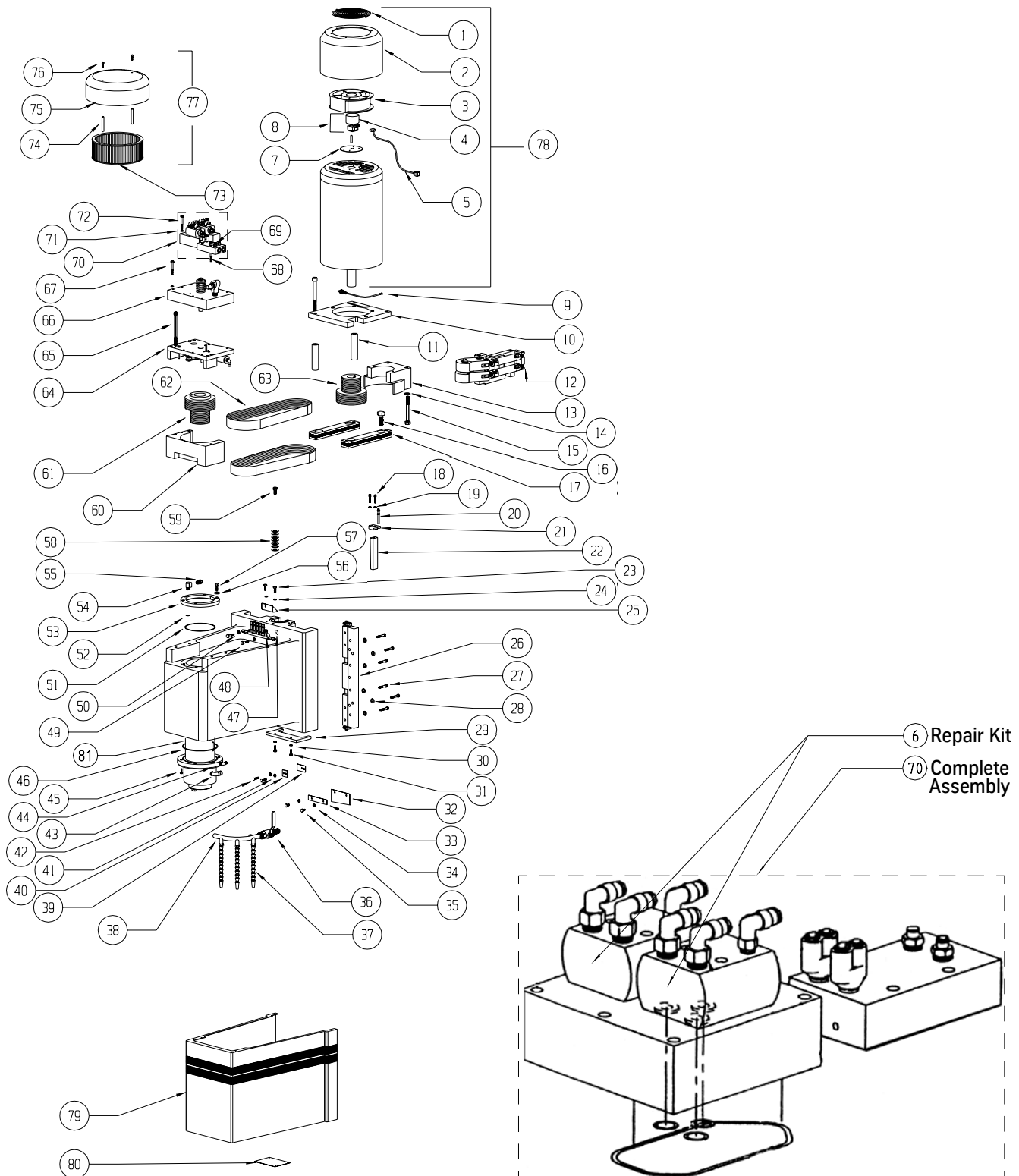


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	HDW-0317	24	HDW-0363	33	HDW-0281
2	WIR-0611		HDW-0048	25	CWT-0005	34	HDW-0319
3	MTR-0142	14	BLS-0042	26	CWT-0002	35	BLS-0105
4	WIR-0558	15	BRG-0023	27	HDW-0600	36	BLS-0032
5	WIR-0559	16	BLS-0041	28	PUL-0034	37	HDW-0049
6	MTR-0126	17	HDW-0297	29	HDW-0777	38	HDW-0315
7	CVR-0074	18	HDW-0655	30	CWT-0007	39	HDW-0347
8	STM-0072	19	HDW-0050	31	HDW-0205	40	STM-0043
9	CVR-0072	20	CWT-0018	32	BLS-0024 (28")	41	
10	STM-0300	21	HDW-0335		BLS-0031 (20")	42	MTR-0189
11	STM-0301	22	CWT-0001			43	HDW-0280
12	STM-0044	23	HDW-0204			44	HDW-0779

# 10K RPM HEAD ASSEMBLY



# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

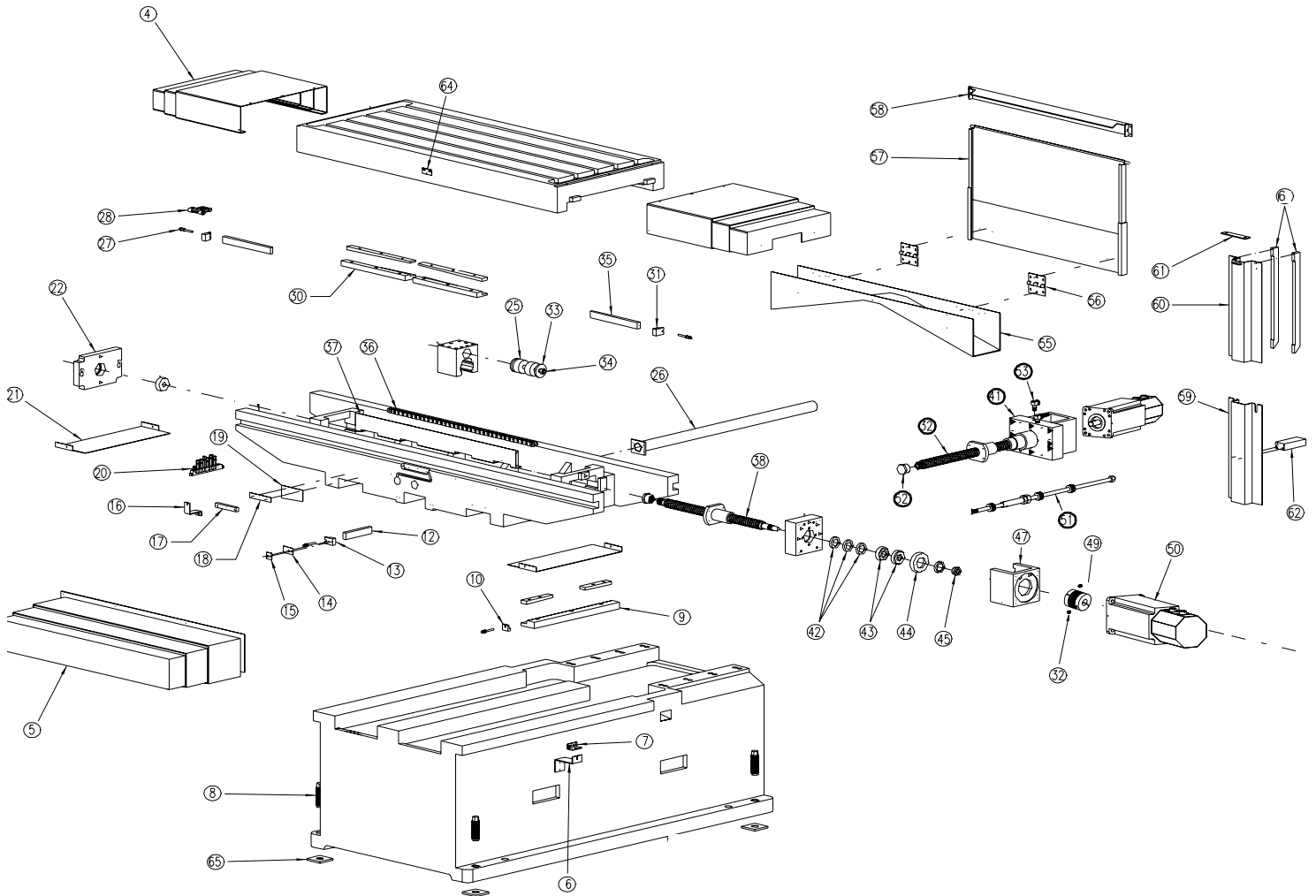
	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	HDW-0553
2	STM-0139	31	HDW-0322	60	BEL-0014
3	ELE-0124	32	HDW-0356	61	PUL-0018
4	MTR-0123	33	STM-0052	62	BEL-0024
5	WIR-0168	34	HDW-0279	63	PUL-0019
6	HYD-0018	35	HDW-0319	64	ORB-0001
7	STM-0148	36	VLV-0017	65	HDW-0290
8	ENC-0007	37	PLM-0016	66	DRB-0000
9	HDW-0369	38	CNT-0039	67	HDW-0320
10	MTR-0070	39	HDW-0294	68	HDW-0321 (HT)
11	MTR-0079	40	STM-0042	69	HDW-0279 (HT)
12	IDL-0002	41	HDW-0279	70	HYD-0017 (HT)
	IDL-0003(HT)				
13	BEL-0015	42	HDW-0294	71	HDW-0279 (HT)
14	HDW-0451	43	PLM-0112	72	HDW-0320 (HT)
15	HDW-0311	44	PLM-0034	73	MTR-0127
16	HDW-0283	45	HDW-0470	74	SVT-0108
17	MTR-0068	46	HDW-0181	75	STM-0467
	MTR-0064				
18	HDW-0294	47	HDW-0380	76	HDW-0597
19	HDW-0279	48	LUB-0045	77	MTR-0128
20	GIB-0013	49	HDW-0576	78	MTR-0045 (10HP) <sup>(2)</sup>
21	GIB-0010	50	HDW-0279		MTR-0048 (15HP)
22	GIB-0033	51	HDW-0169	79	
23	HDW-0320	52	HDW-0177	80	CVR-0152
24	HDW-0279	53	SPN-0042	81	SPN-0007 <sup>(2)</sup>
25	STM-0141	54	PLM-0045		
26	GIB-0004	55	PLM-0088		
27	HDW-0569	56	HDW-0275		
28	HDW-0280	57	HDW-0568		
29	CVR-0048	58	HDW-0194		

<sup>1</sup>MTR-0045 INCLUDES: PUL-0019

<sup>2</sup>SPN-0007 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018.

(HT)=High Torque Option

# BASE, SADDLE & TABLE ASSEMBLY



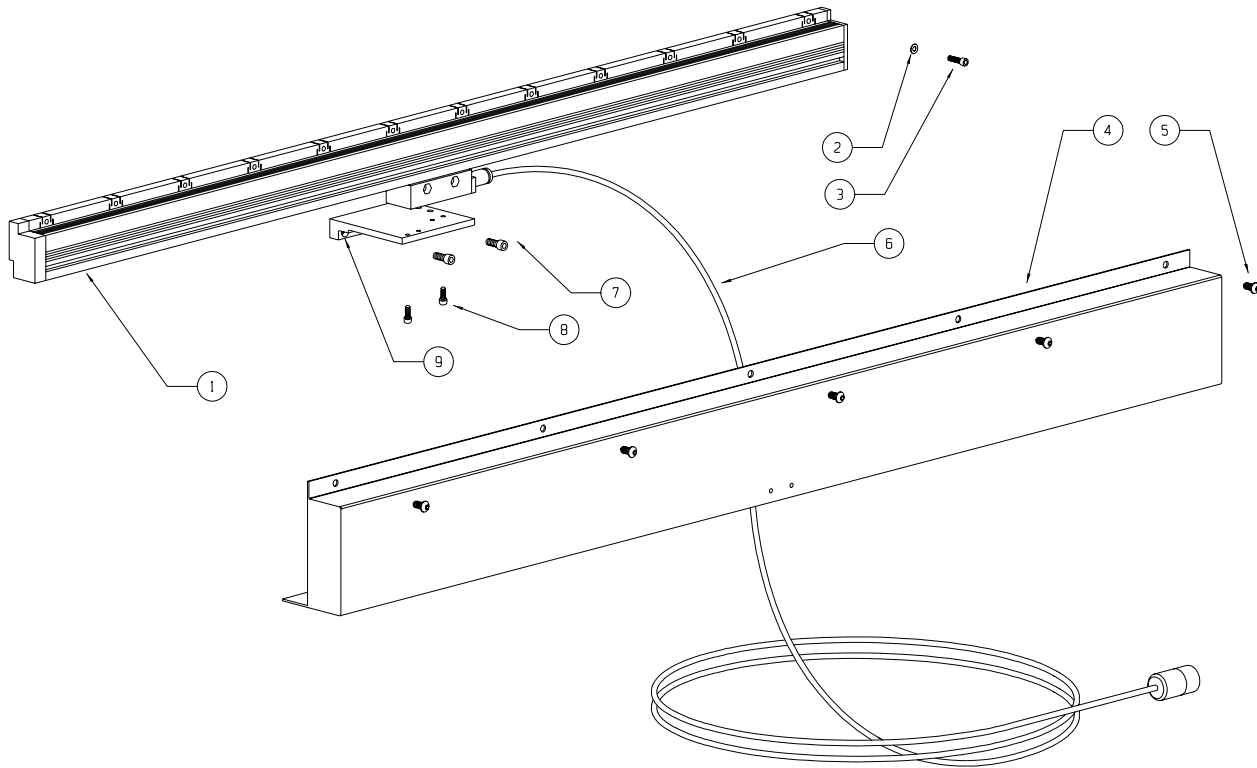
# BASE, SADDLE & TABLE ASSEMBLY

## BASE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1		14	HDW-0355	27	GIB-0013	40		53	PLM-0112
2		15	STM-0042	28	LUB-0044	41	BLS-0038	54	
3		16	STM-0045	29		42	HDW-0213	55	STM-0053
4	CVR-0043	17	SDL-0007	30	GIB-0016	43	BRG-0039	56	HDW-0192
5	CVR-0023	18	STM-0052	31	GIB-0011	44	BLS-0039	57	CVR-0042
6	STM-0112	19	HDW-0356	32	BLS-0037	45	HDW-0332	58	STM-0164
7	STM-0047	20	WIB-0043	33	HDW-0859	46		59	CVR-0035
8	HDW-0374	21	STM-0812	34	HDW-0312	47	BLS-0035	60	CVR-0034
9	GIB-0004	22	BLS-0036	35	GIB-0000	48		61	CVR-0030
10	GIB-0012	23		36	CVR-0039	49	MTR-0189	62	CVR-0036
11		24		37	STM-0075	50	MTR-0142	63	STM-0044
12	GIB-0010	25	HDW-0357	38	BLS-0034	51	HDW-0145	64	SHP-0002
13	GIB-0010	26	STM-0629	39	BLS-0174	52	BLS-0049	65	CVR-0031

\*Specify gib size when ordering.

# X-AXIS SCALE ASSEMBLY

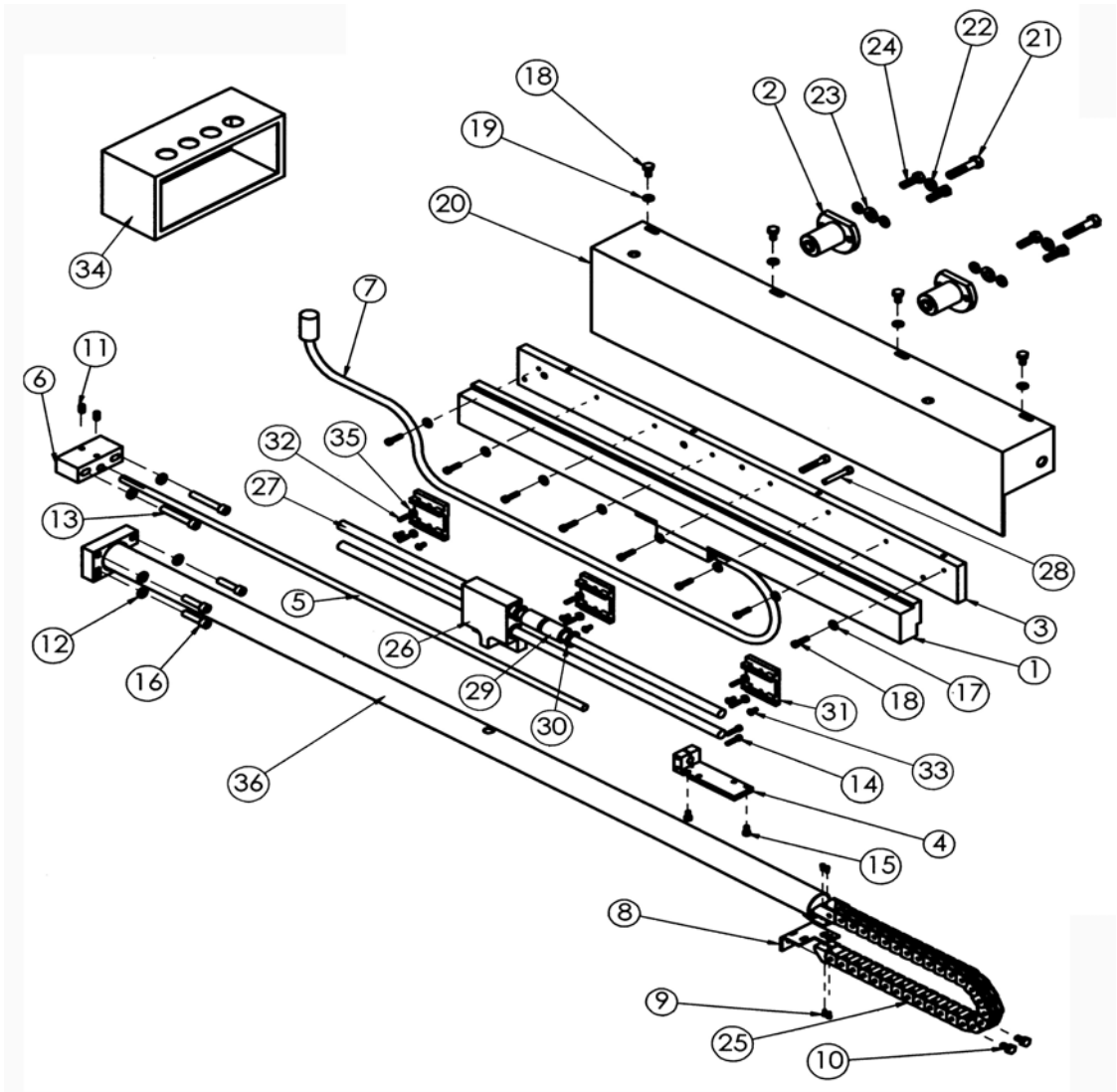


**X AXIS SCALE ASSEMBLY**

	PART #		PART #
1	SCL-0026	6	SCL-0030
2	HDW-0442	7	HDW-0295
3	HDW-0303	8	HDW-0282
4	STM-0177	9	SCL-0036
5	HDW-0347		



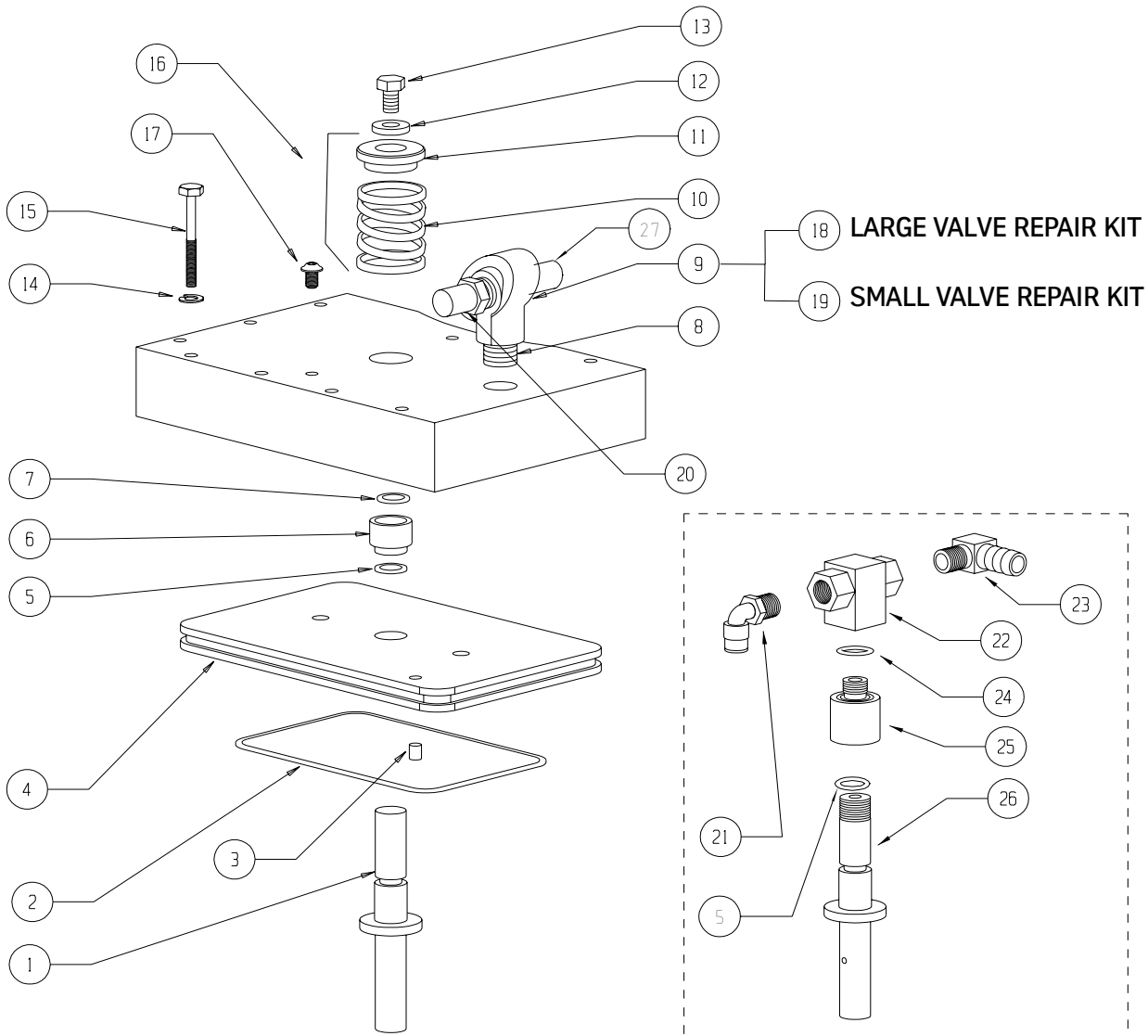
# Y-AXIS SCALE ASSEMBLY



Y-AXIS SCALE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	SCL-0002	9	HDW-0308	17	HDW-0449	25	CVR-0134	33	HDW-0383
2	SCL-0042	10	HDW-0319	18	HDW-0303	26	SCL-0078	34	STM-0179
3	SCL-0037	11	HDW-0408	19	HDW-0279	27	SCL-0065	35	HDW-0808
4	SCL-0044	12	HDW-0281	20	STM-0179	28	HDW-0297	36	SCL-0115
5	SCL-0046	13	HDW-0484	21	HDW-0656	29	BRG-0121		
6	SCL-0045	14	HDW-0505	22	HDW-0280	30	HDW-0759		
7	SCL-0019	15	HDW-0304	23	HDW-0452	31	SCL-0076		
8	CVR-0136	16	HDW-0483	24	HDW-0314	32	HDW-0430		

# DRAWBAR CYLINDER ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

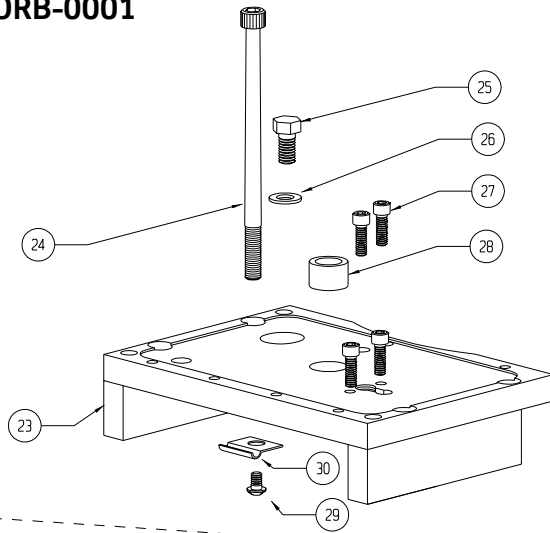
Coolant Thru Assembly DRB-0001

### DRAWBAR ASSEMBLY

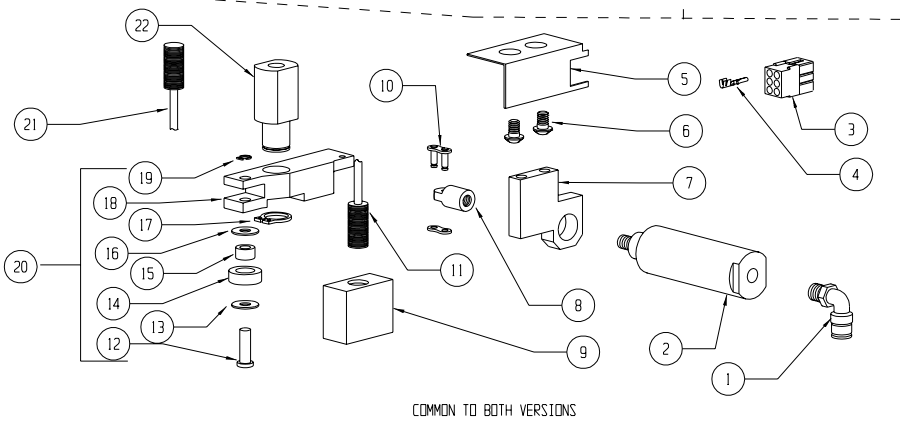
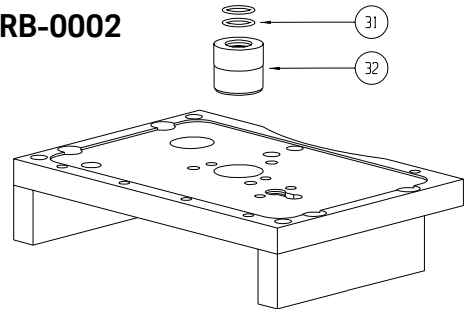
	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

# ORIENTATION BRIDGE ASSEMBLY

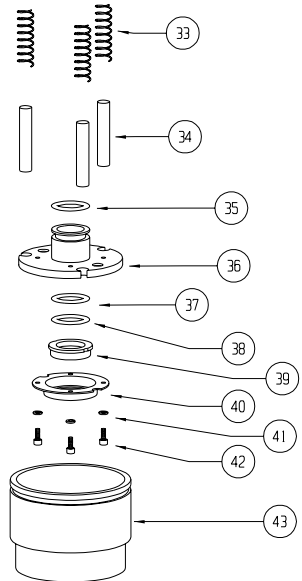
ORB-0001



ORB-0002



COMMON TO BOTH VERSIONS



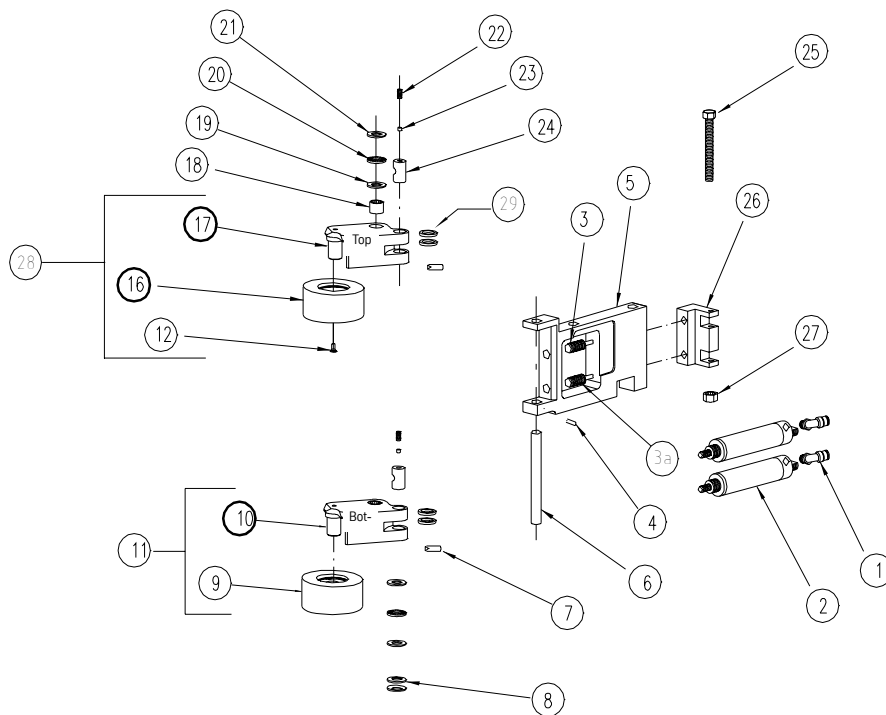
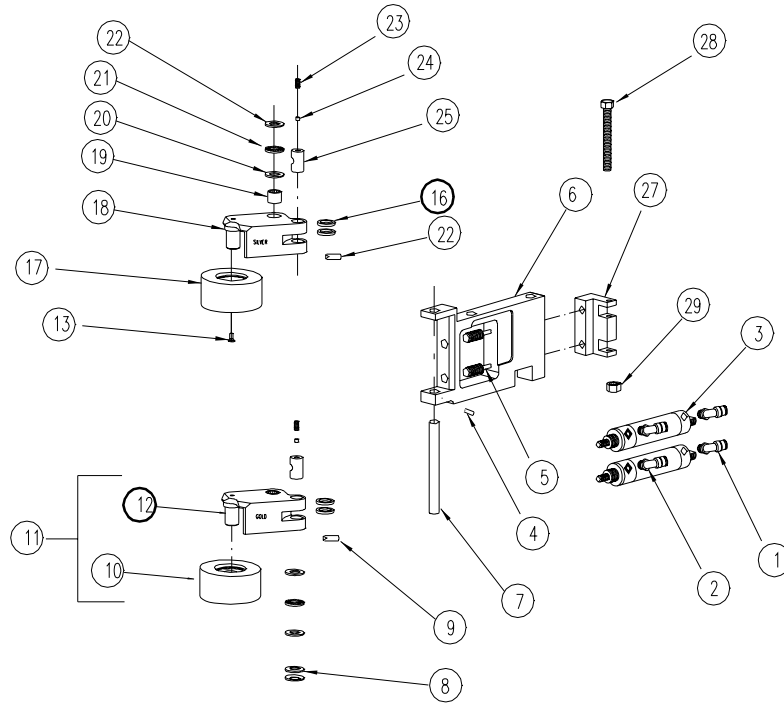
Seal Repair Kit CNT-0150

# ORIENTATION BRIDGE ASSEMBLY

## ORIENTATION BRIDGE ASSEMBLY

	PART #		PART #		PART #		PART #
1	PLM-0034	12	ORB-0007	26	HDW-0048	40	CNT-0045
2	CYL-0007	14	ORB-0009	27	HDW-0298	41	HDW-0453
3	WIR-0051	15	BRG-0014	28	BRG-0008	42	HDW-0308
4	WIR-0043 (16 AWG)	16	HDW-0515	29	HDW-0349	43	STM-0140
	WIR-0044 (16 AWG)	17	HDW-0725	30	LUB-0077		
	WIR-0544 (22 AWG)				LUB-0078		
	WIR-0056 (22 AWG)						
5	STM-0596	18	ORB-0031	31	HDW-0150		
6	HDW-0347	19	HDW-0726	32	CNT-0042		
7	ORB-0030	20	ORB-0004	33	HDW-0257		
7	ORB-0029	21	ELE-1202	34	HDW-0326		
8	ORB-0011	22	ORB-0013	35	HDW-0156		
9	ORB-0014	23	ORB-0008	36	CNT-0041		
10	HDW-0209	24	HDW-0285	37	HDW-0155		
11	ELE-0145	25	HDW-0571	38	HDW-0156		

# IDLER ASSEMBLY



# IDLER ASSEMBLY

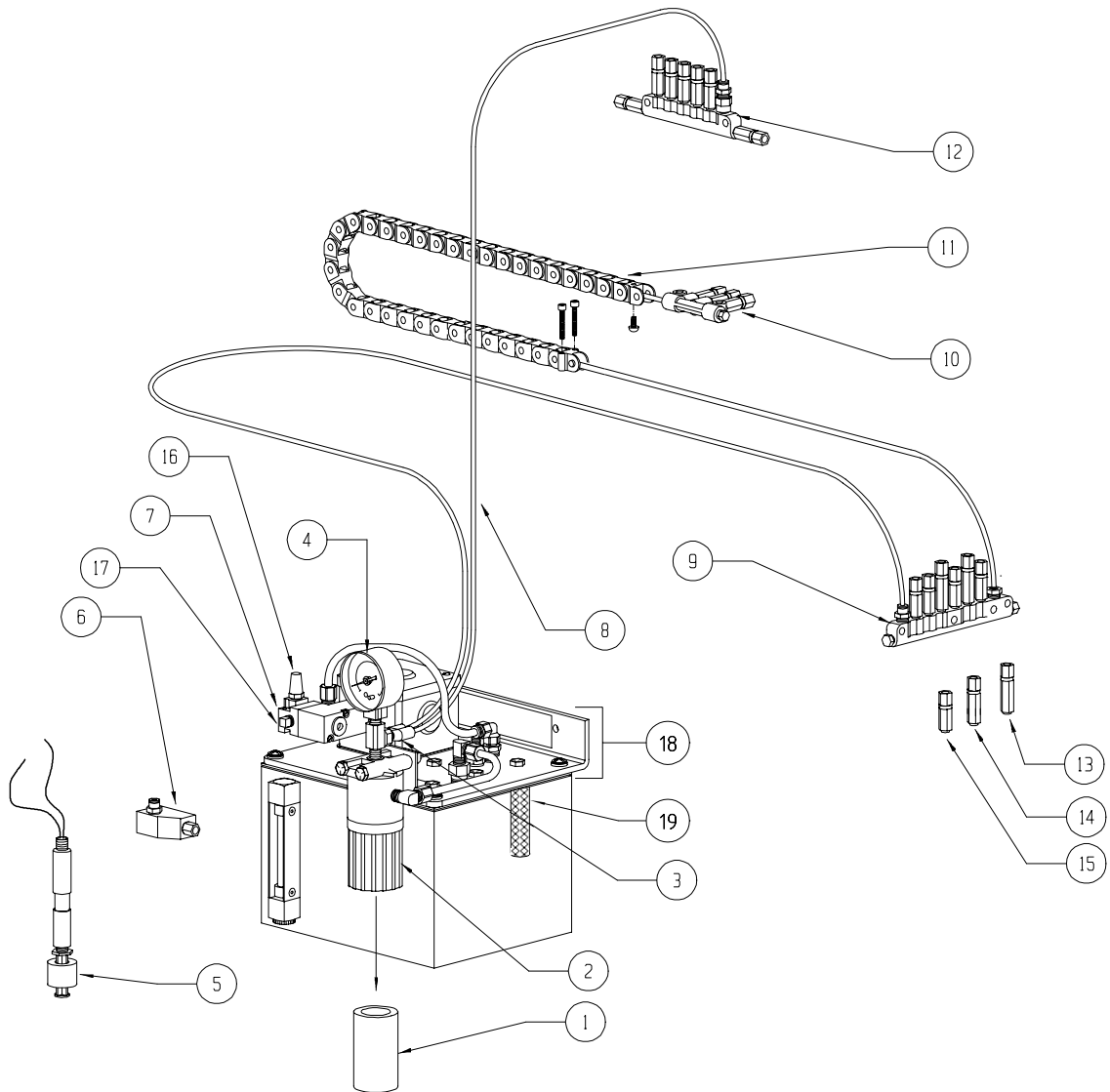
## IDLER ASSEMBLY - HT OPTION

	PART #		PART #		PART #
1	PLM-0034	11	IDL-0000	21	BRG-0015
2	PLM-0034	12	IDL-0004	22	ELE-0147
3	CYL-0005	13	HDW-0412	23	HDW-0412
4	HDW-0612	14		24	HDW-0412
5	ELE-0145	15		25	IDL-0010
6	IDL-0011	16	HDW-0277	26	
7	IDL-0006	17	BRG-0058	27	IDL-0009
8	HDW-0196	18	IDL-0005	28	HDW-0579
9	ELE-0147	19	BRG-0017	29	HDW-0643
10	BRG-0058	20	BRG-0016		

## IDLER ASSEMBLY

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

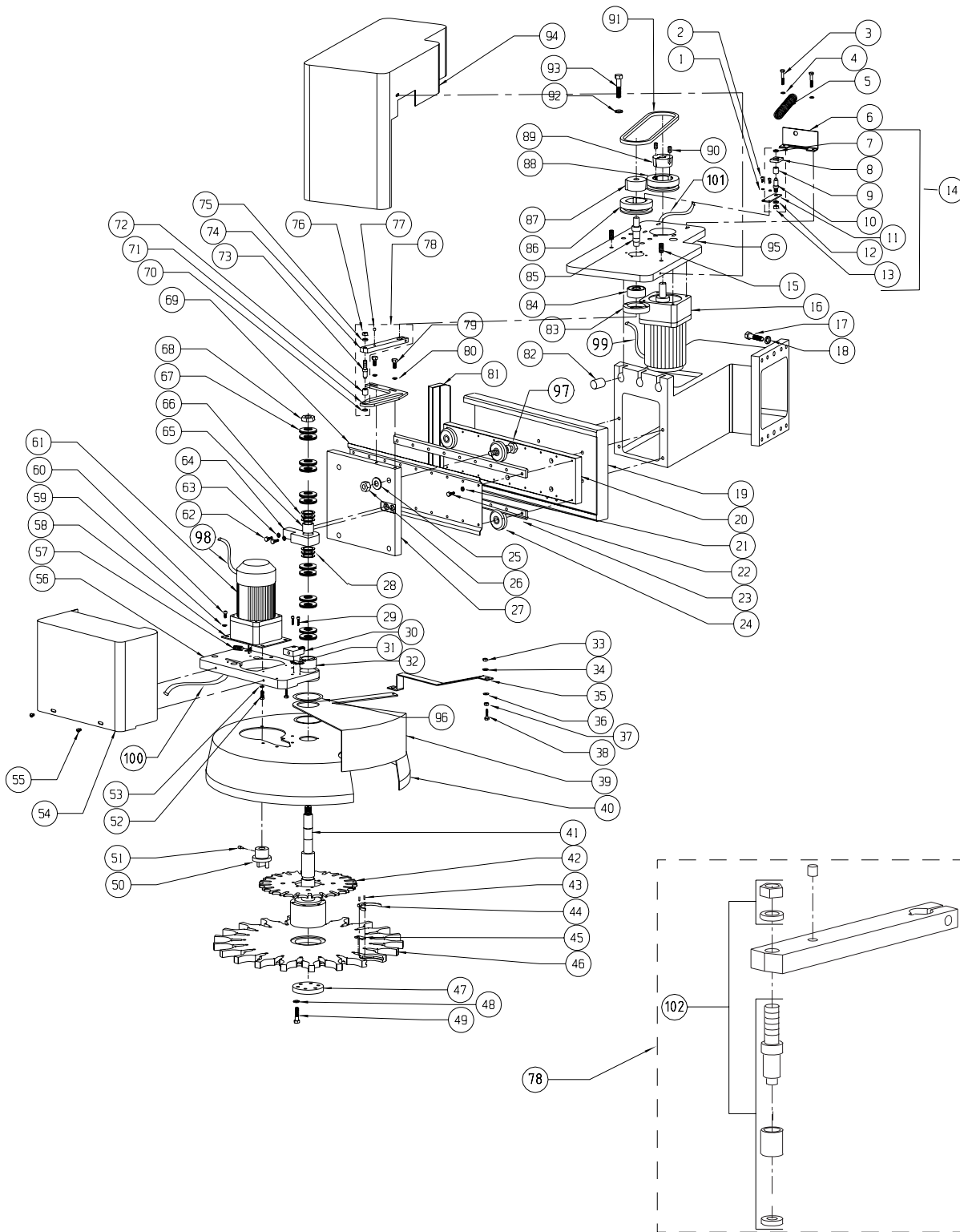
# WAYLUBE ASSEMBLY



**WAY LUBE ASSEMBLY**

	PART #		PART #		PART #
1	LUB-0049	8	PLM-0022	15	LUB-0083
2	LUB-0050	9	LUB-0041	16	PLM-0084
3	PLM-0049	10	LUB-0044	17	PLM-0084
4	REG-0018	11	CVR-0041	18	LUB-0038
5	LUB-0036	12	CVR-0041	19	HDW-1039
6	LUB-0036	13	LUB-0085		
7	VLV-0028	14	LUB-0084		

# ATC GENEVA DRIVE ASSEMBLY



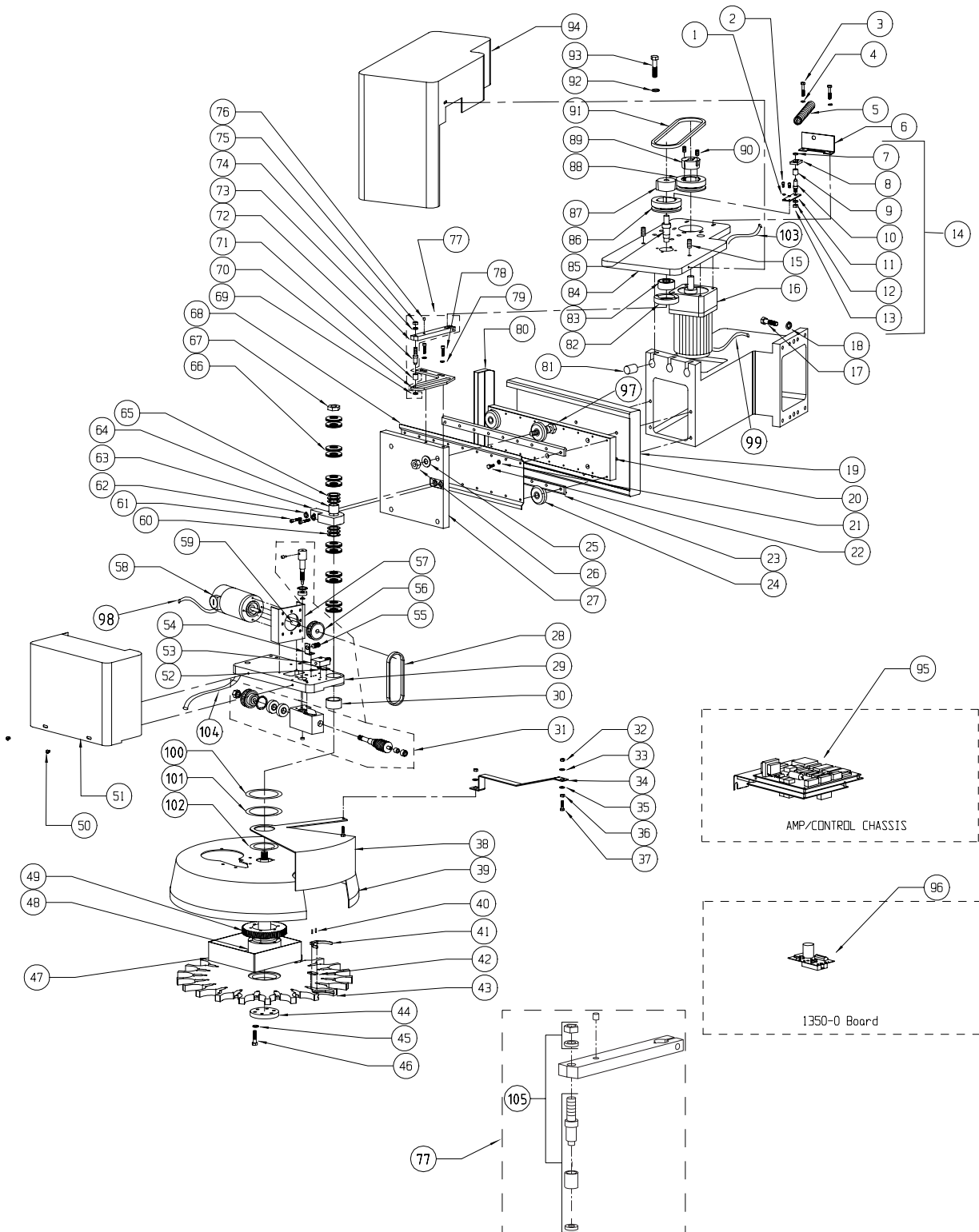


# ATC GENEVA DRIVE ASSEMBLY

## ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
								102	ATC-0169
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)

# ATC SERVO DRIVE ASSEMBLY

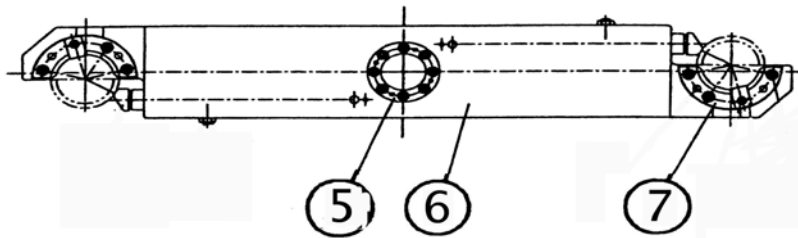
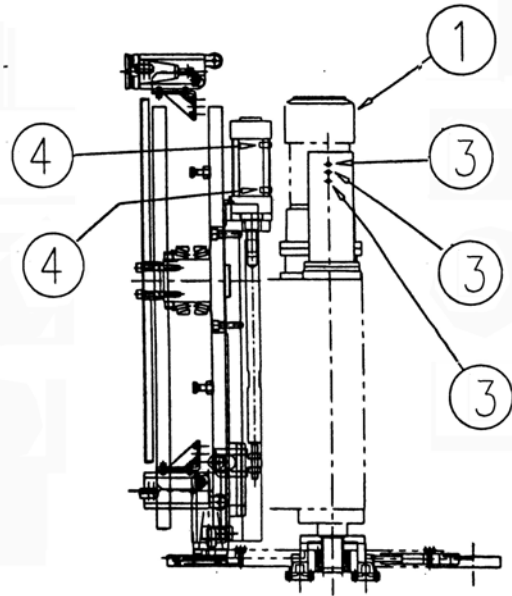
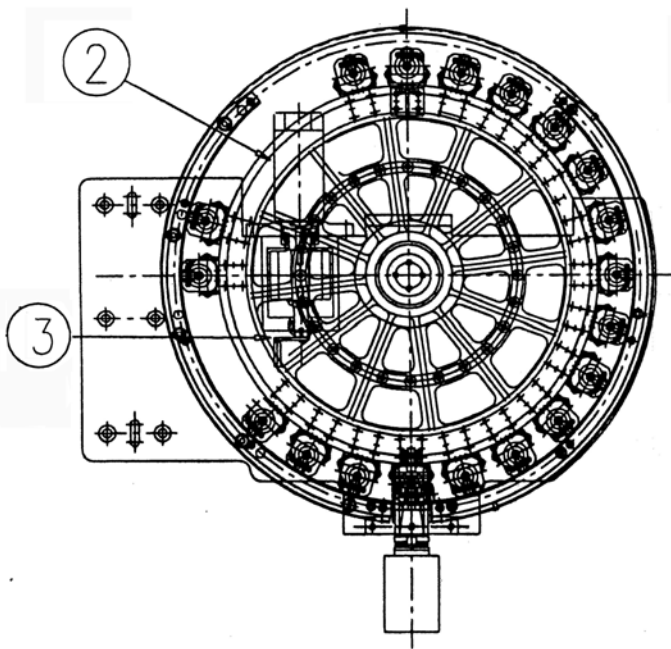


# ATC SERVO DRIVE ASSEMBLY

## ATC SERVO DRIVE ASSEMBLY

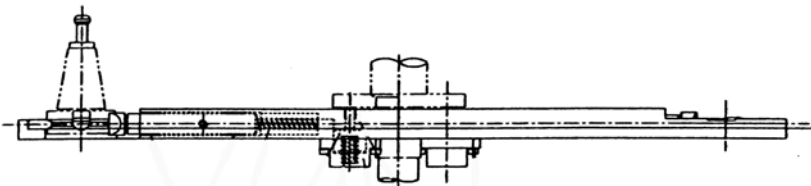
	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

# DUAL ARM TOOL CHANGER



DUAL ARM TOOL CHANGER

	PART #
1	MTR-0181
2	MTR-0180
3	ELE-1185
4	ELE-1186
5	ATC-0155
6	ATC-0164
7	(BT) ATC-0163
7	(BT) ATC-0165



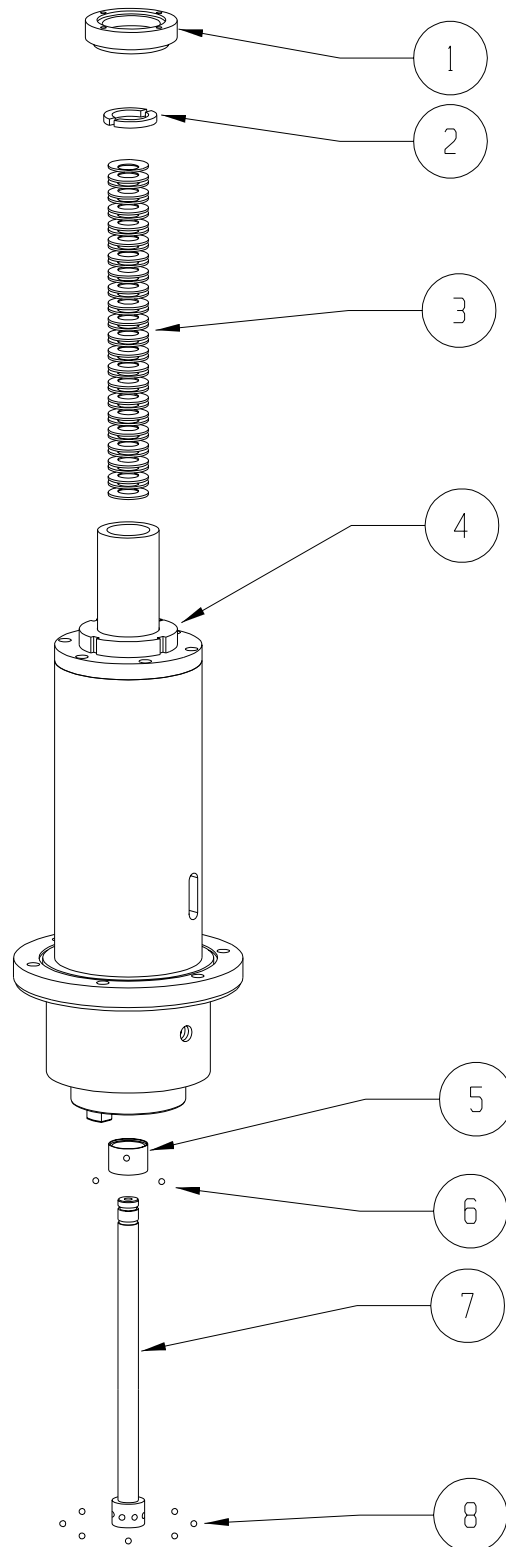
# 7500 RPM SPINDLE ASSEMBLY

### 7500 RPM SPINDLE ASSEMBLY

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



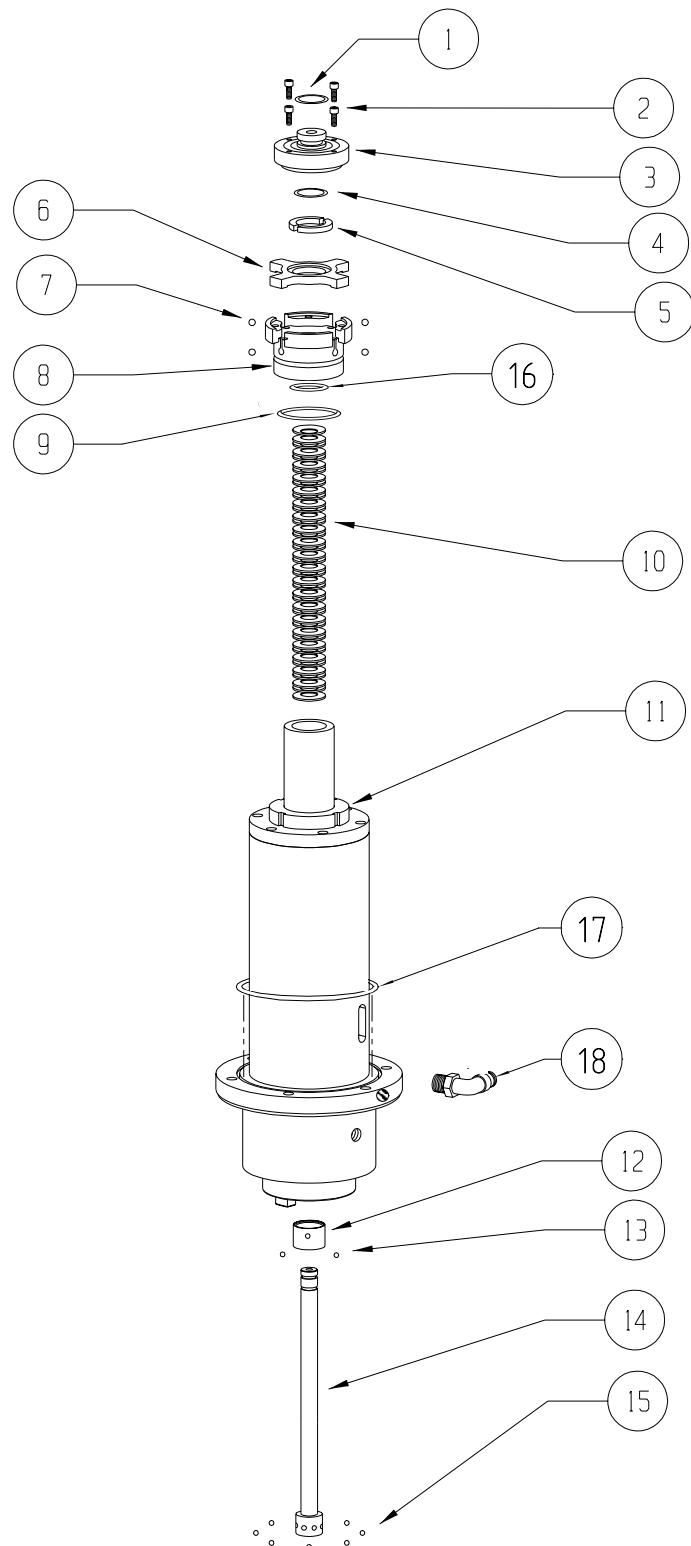
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

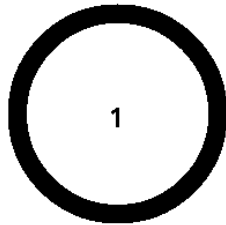
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

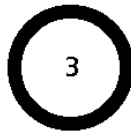
CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



HDW-0158



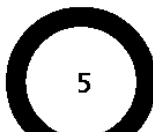
HDW-0177



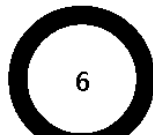
HDW-0150



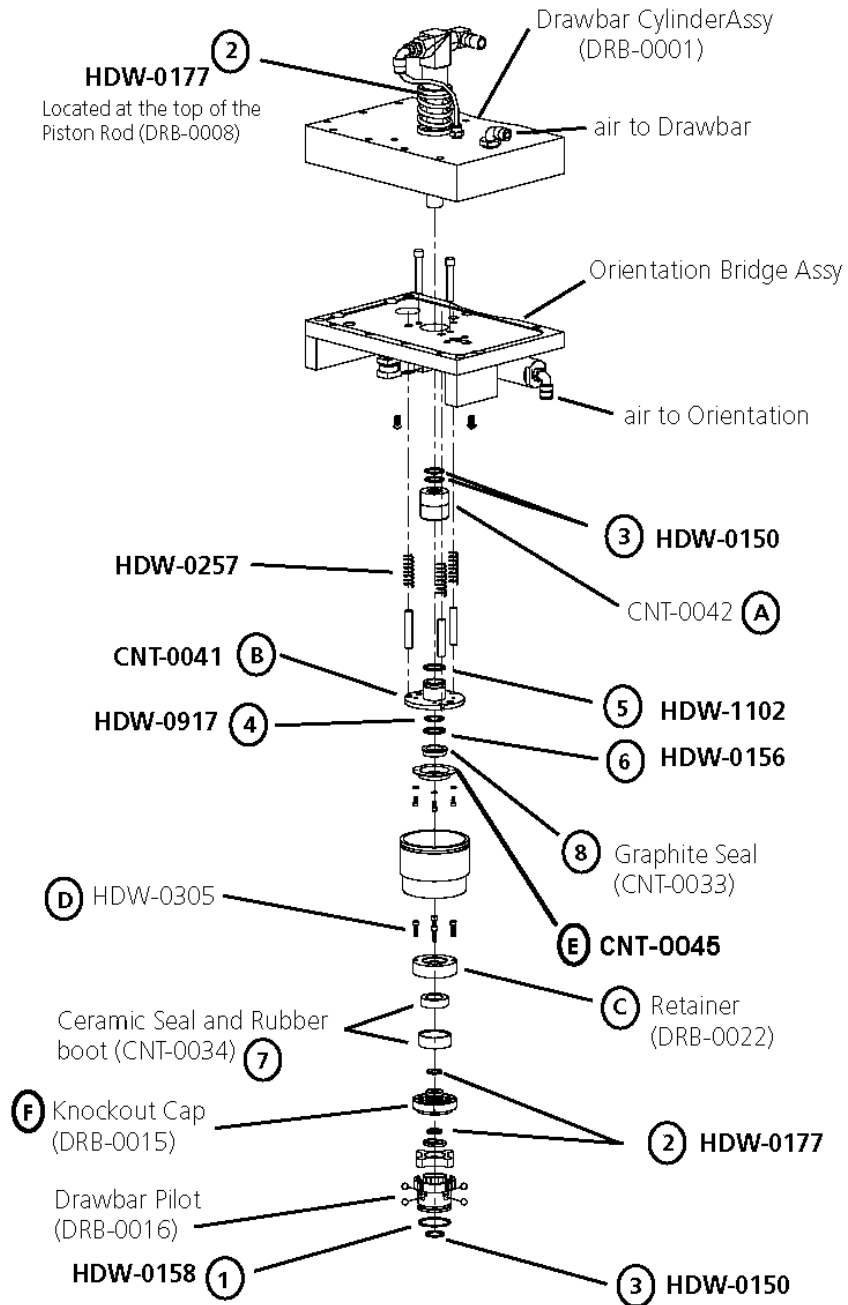
HDW-0917



HDW-1102

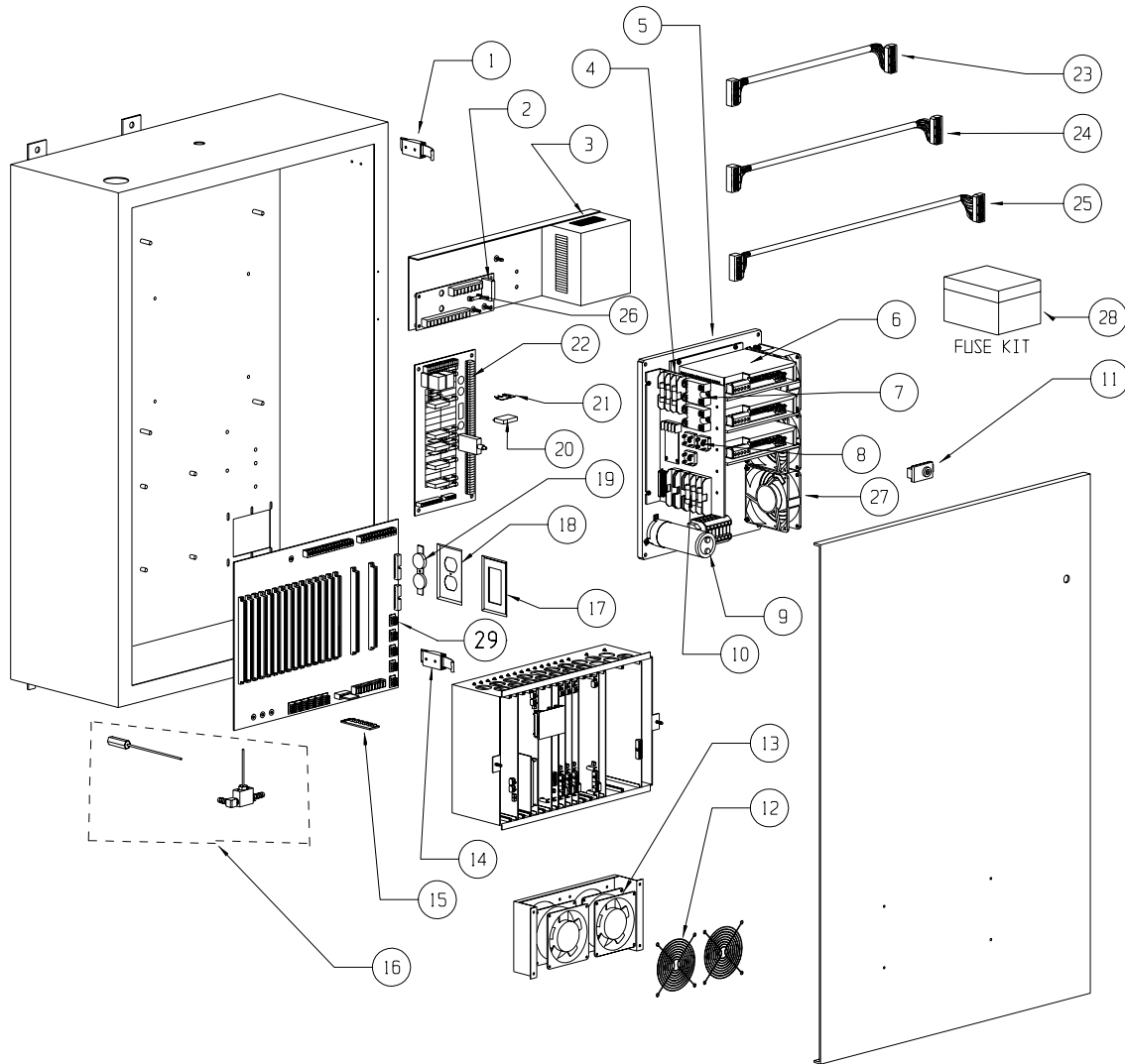


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

# CNC CABINET ASSEMBLY

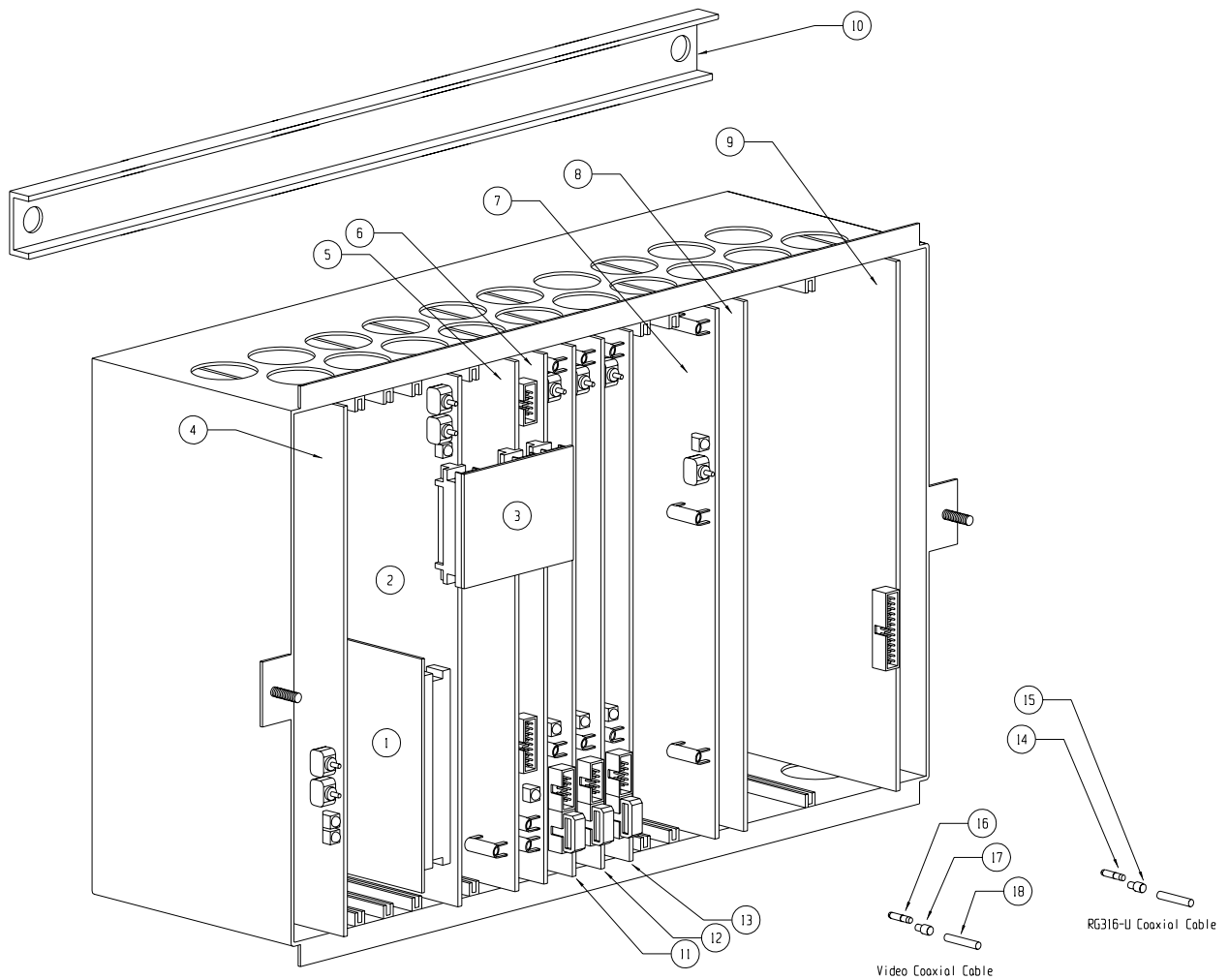


**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0034	15	PCB-0010	22	PCB-0014
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0172	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0117	25	WIR-0174
5	AMP-0028	12	HDW-0850	19	WIR-0121	26	ELE-0046
6	AMP-0029 (GTK)	13	ELE-0123	20	ELE-0070	27	ELE-0123
	AMP-0034 (AMC)						
7	ELE-0074	14	HDW-0217	21	ELE-0101	28	ELE-0106



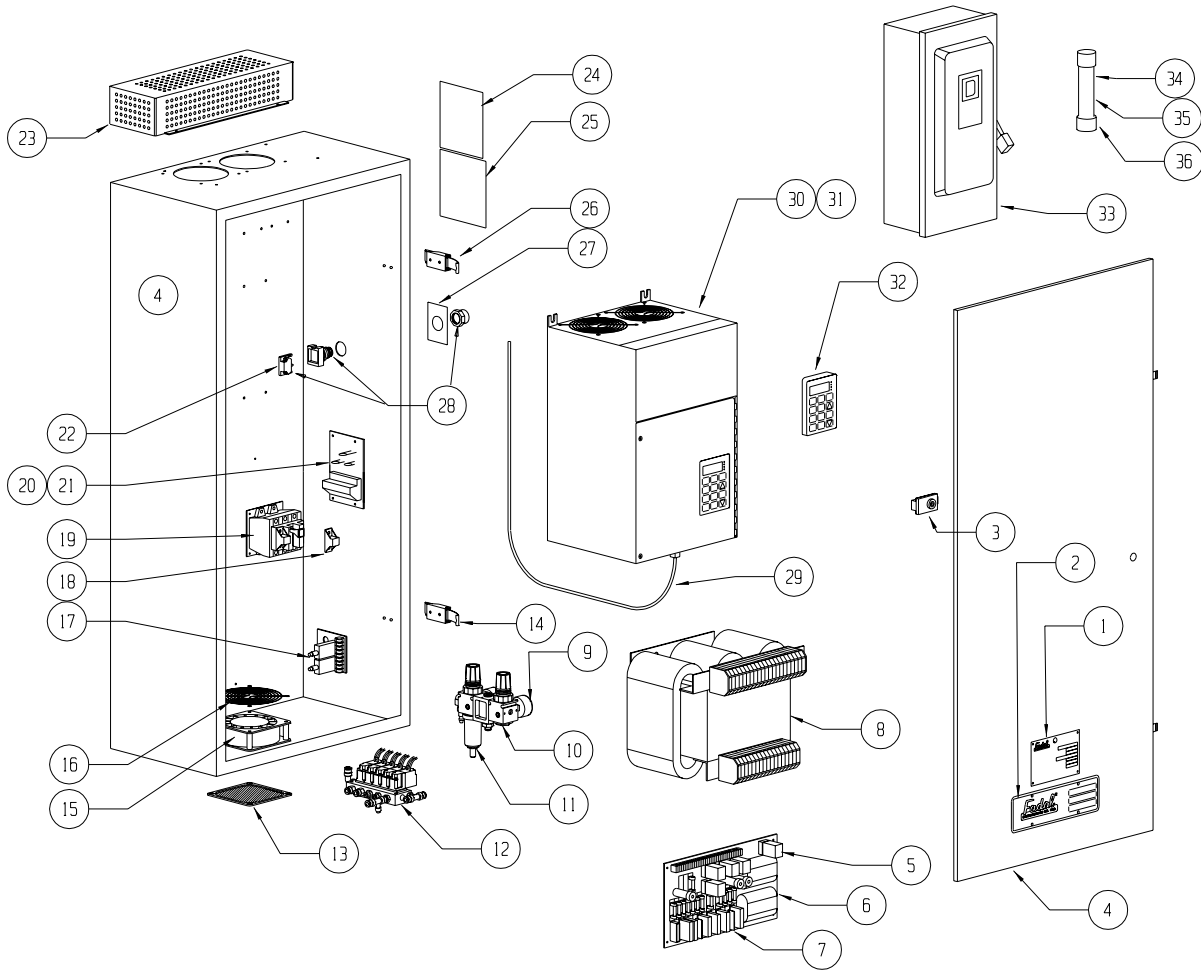
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	8	PCB-0000
2	PCB-0030	9	PCB-0009
3	PCB-0053	10	STM-0029
4	PCB-0045	11	WIR-0040
5	PCB-0032 (88HS)	12	WIR-0041
	PCB-0033 (32HS)	13	WIR-0038
6	PCB-0003	14	WIR-0039
7	PCB-0141	15	WIR-0086

SLOT	BOARD #	SLOT	BOARD #
1	PCB-0045	10	PCB-0037
2		11	PCB-
3		12	
4		13	
5	PCB-0030	14	PCB-0141
6		15	PCB-0000
7		16	PCB-0008
8	PCB-0003	17	PCB-0005
9	PCB-0037		

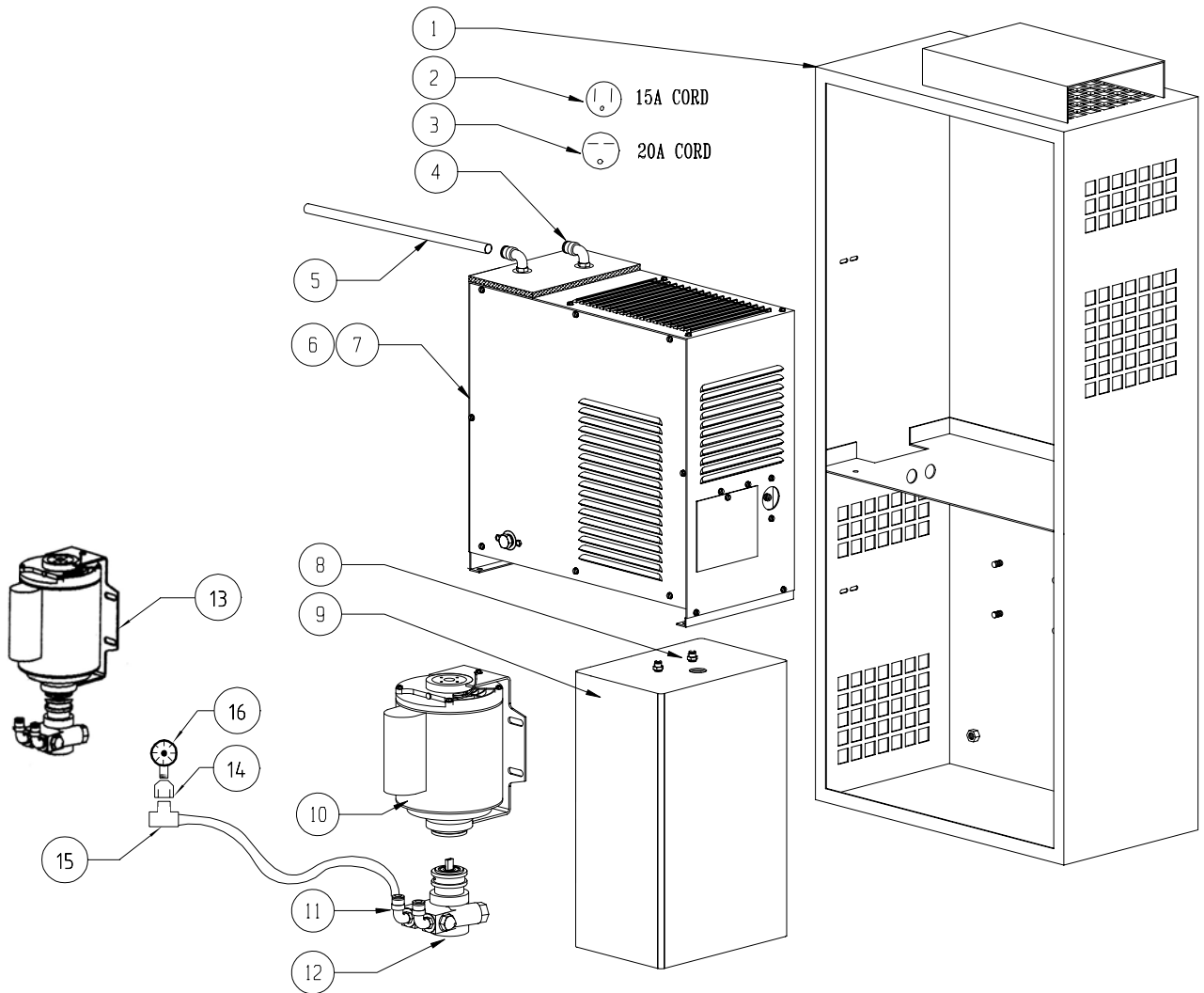
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY**

PART #	PART #	PART #	PART #	PART #	PART #	PART #	PART #		
1	LBL-0030	12	VLV-0054	22	ELE-0093	31	INV-0056	36	ELE-0060
	LBL-0031 (HT)	13	HDW-0	23	INV-0004		(AMC)		20A 480V
2	LBL-0106	14	HDW-			32	INV-0017		
3	HDW-221	15	ELE-0123	24	LBL-0037	33	ELE-0139		
4	STM-0450	16	HDW-	25	LBL-0040		(60 AMP)		
5	ELE-0072	17	PCB-0046	26	HDW-0219		ELE-0140		
6	PCB-0015	18	ELE-0138	27	LBL-0038		(30 AMP)		
7	ELE-0070	19	ELE-0132	28	ELE-0110	34	ELE-0063		
8	ELE-0200	20	PCB-0145	29	WIR-0166		45A 240V		
9	REG-0005		(240 VAC)	30	INV-0020 (HT)	35	ELE-0062		
10	REG-0009	21	PCB-0146		INV-0041		30A 380V		
11	REG-0008		(500 VAC)		(BALDOR)				

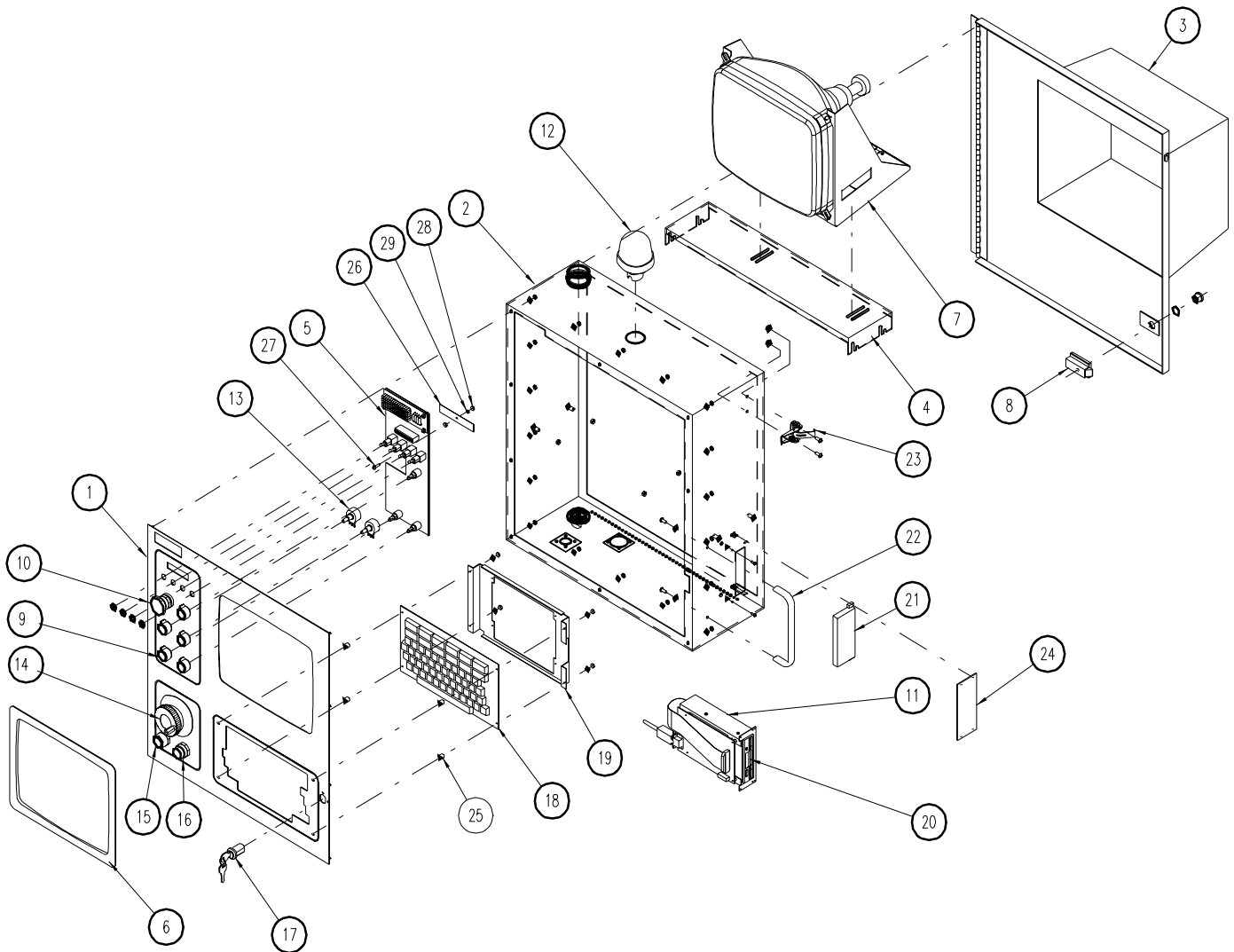
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0032
6	CNT-0035 (15A)	14	PMP-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210		

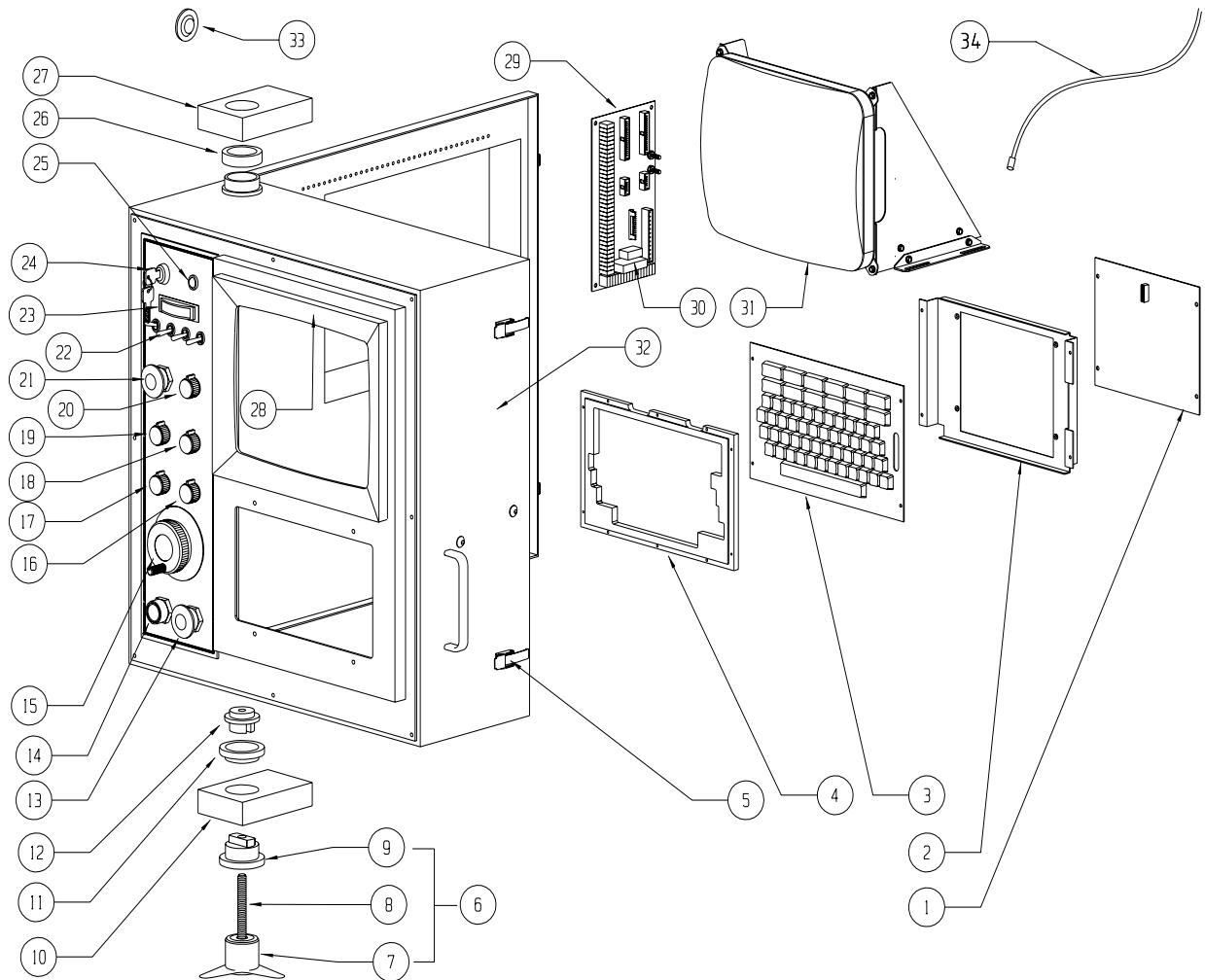
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 2 OF 4		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 3 OF 4	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0671	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072 1 OF 3	14	MPG-0020	23	HDW-0925		

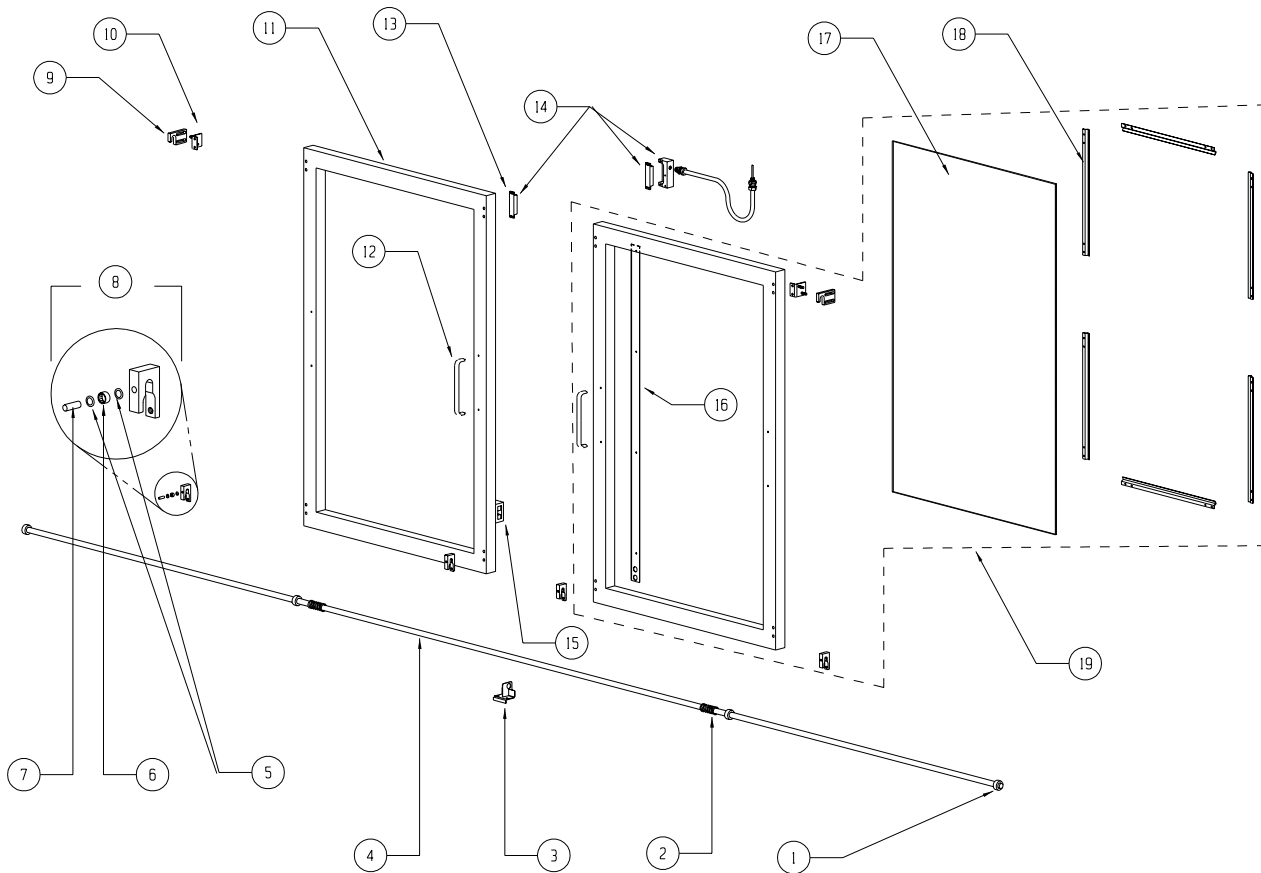
# 88HS PENDANT ASSEMBLY



## 88 HS PENDANT ASSEMBLY

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0077	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW--0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0009	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0012	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

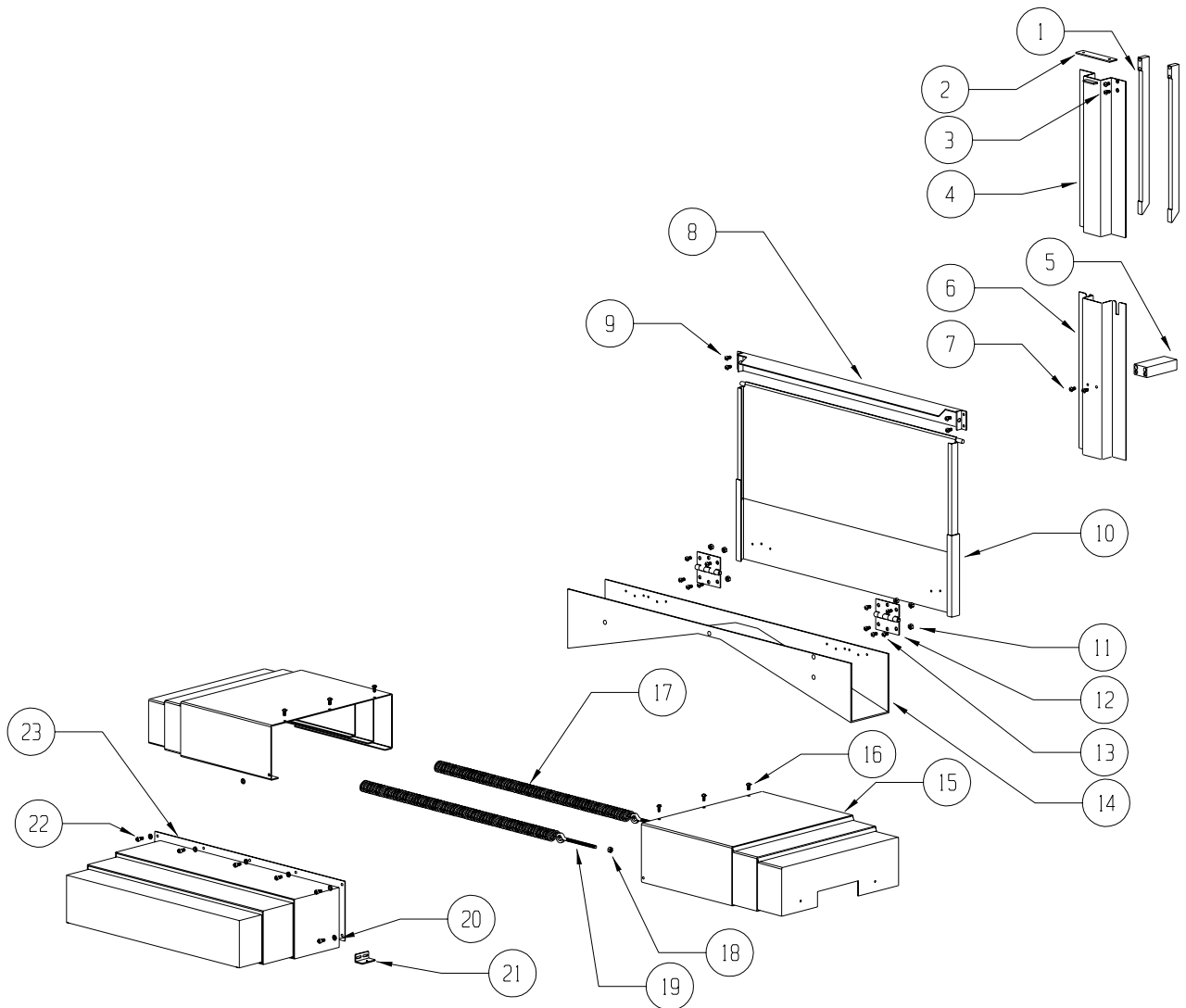
# FRONT DOOR ASSEMBLY



**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0215	6	BRG-0014	11	DOR-0002	16	STM-0083
2	HDW-0264	7	HDW-0327	12	HDW-0182	17	DOR-0007
3	DOR-0019	8	DOR-0015	13	ELE-0810	18	STM-0084
4	DOR-0023	9	DOR-0001	14	WIR-0069	19	DOR-0076
5	HDW-0149	10	DOR-0000	15	DOR-0035		
					(COMPLETE)		
					HDW-0863		
					(LATCH ONLY)		

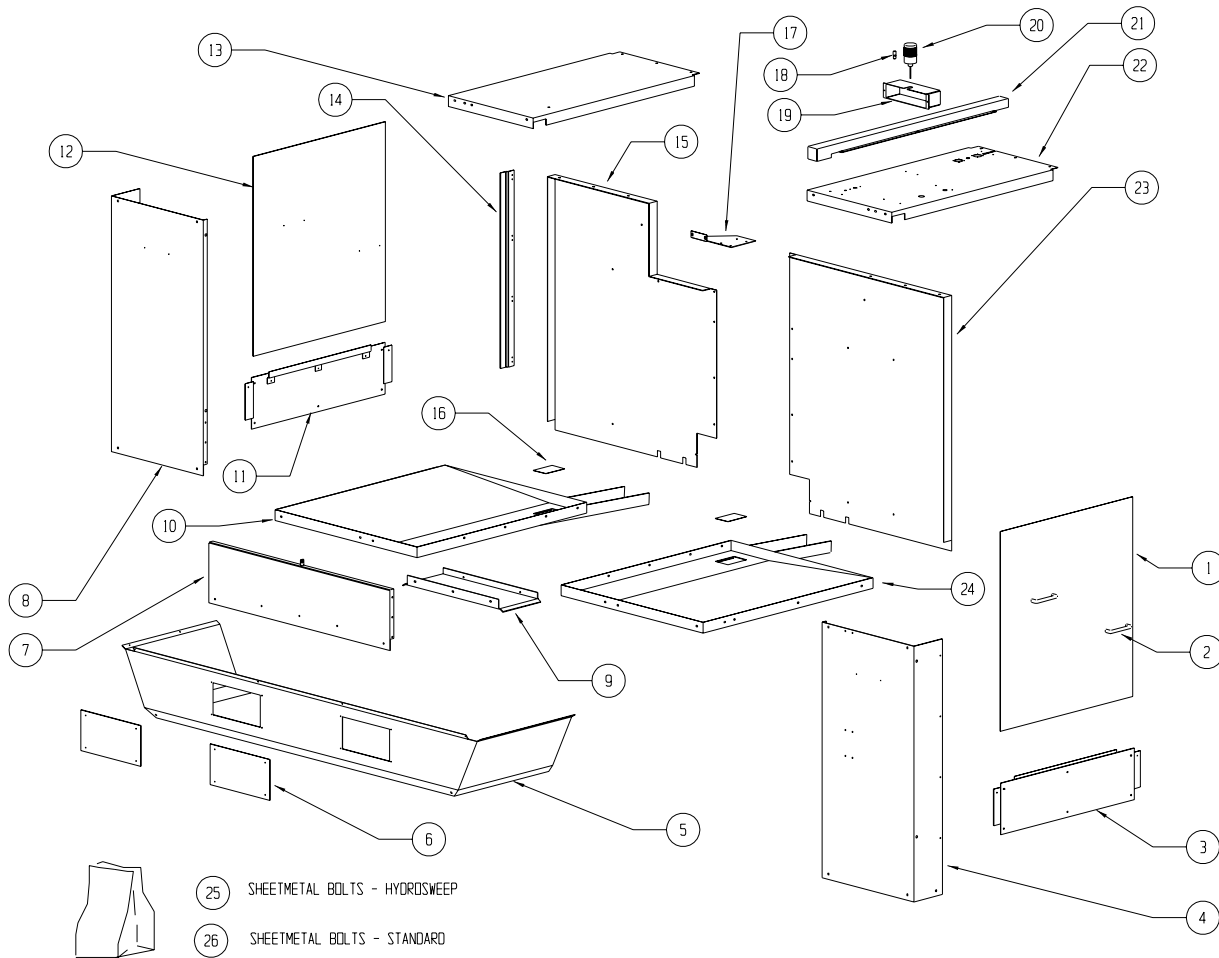
# WAY COVER ASSEMBLY



WAY COVER ASSEMBLY

	PART #		PART #		PART #
1	CVR-0031	9	HDW-0346	17	HDW-0261
2	CVR-0030	10	CVR-0042	18	HDW-0336
3	HDW-0319	11	HDW-0339	19	HDW-0251
4	CVR-0090	12	HDW-0192	20	HDW-0279
5	CVR-0036	13	HDW-0324	21	STM-0047
6	CVR-0035	14	STM-0053	22	HDW-0482
7	HDW-0603	15	CVR-0043	23	CVR-0023
8	STM-0164	16	HDW-0347		

# SHEETMETAL HOUSING

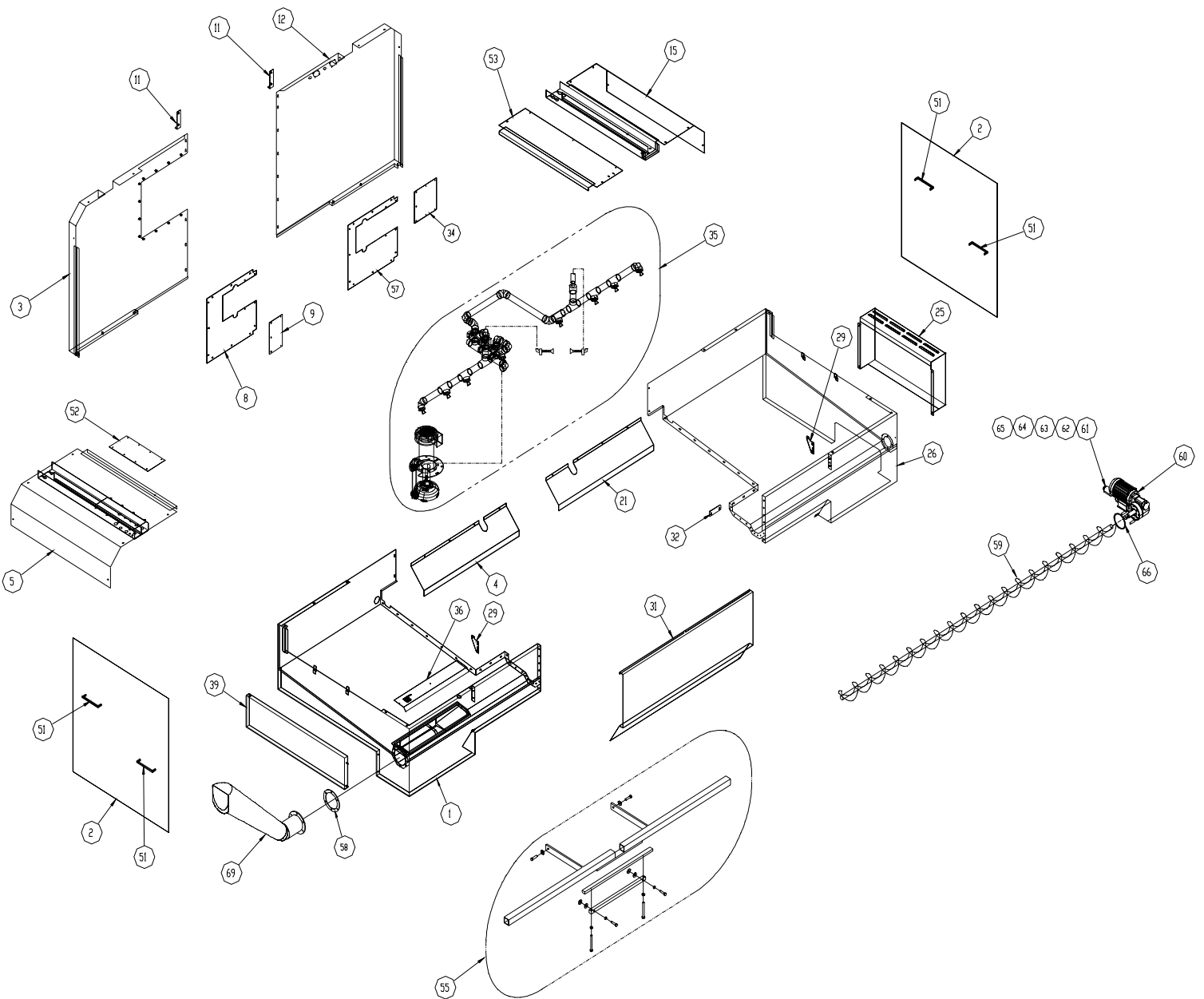


## SHEETMETAL HOUSING

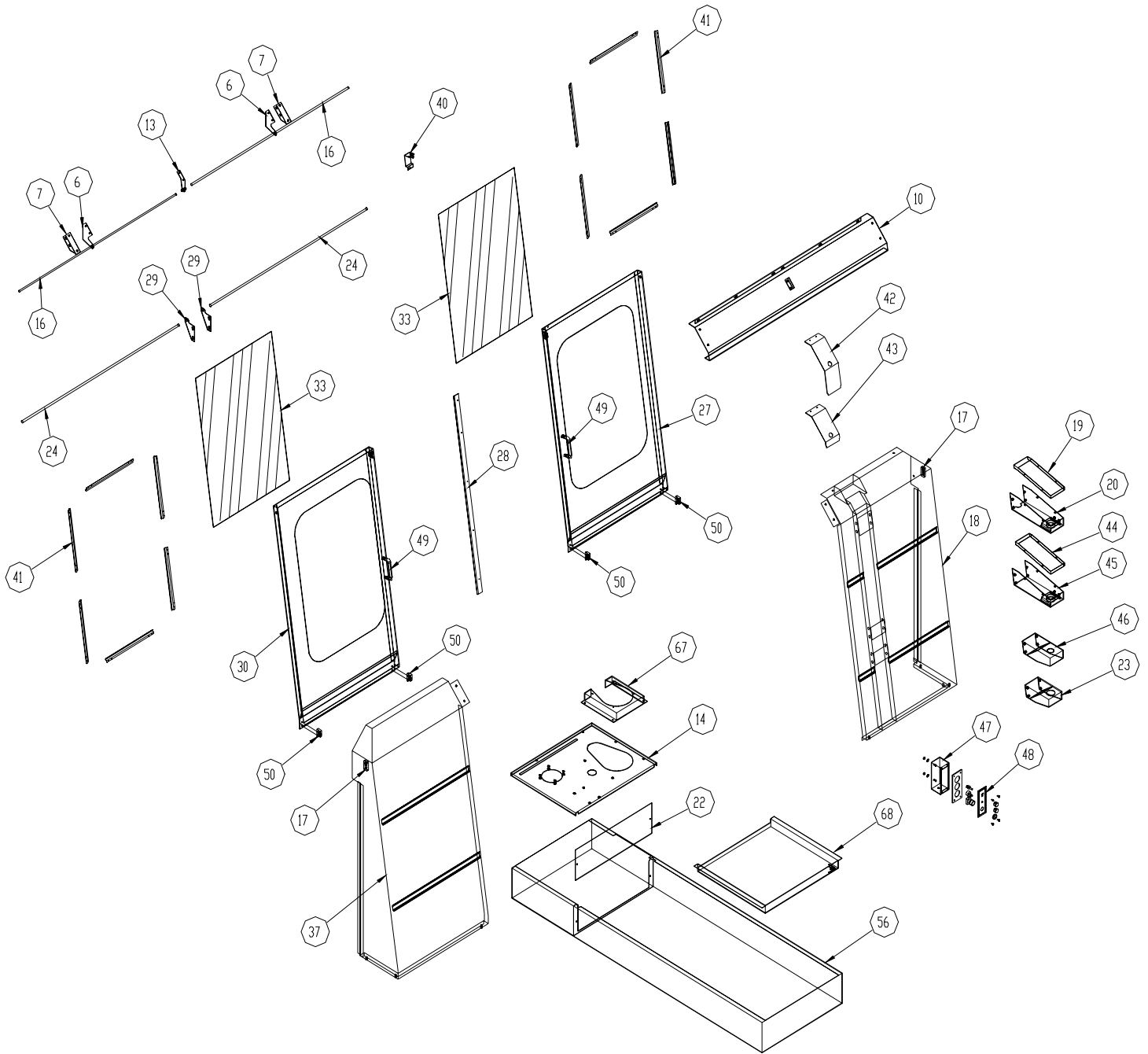
	PART #		PART #		PART #		PART #
1	STM-0243	9	STM-0108	17	STM-0540	25	HDW-0853
2	HDW-0182	10	STM-0076	18	ELE-0122	26	HDW-0907
3	STM-0242	11	STM-0242	19	STM-0089		
4	STM-0247	12	STM-0243	20	ELE-0121		
5	STM-0239	13	STM-0263	21	STM-0086		
6	STM-0299	14	STM-0244	22	STM-0262		
7	STM-0079	15	STM-0306	23	STM-0308		
8	STM-0344	16	STM-0110	24	STM-0307		



# SHEETMETAL HOUSING SLANT 98



# SHEETMETAL HOUSING SLANT 98

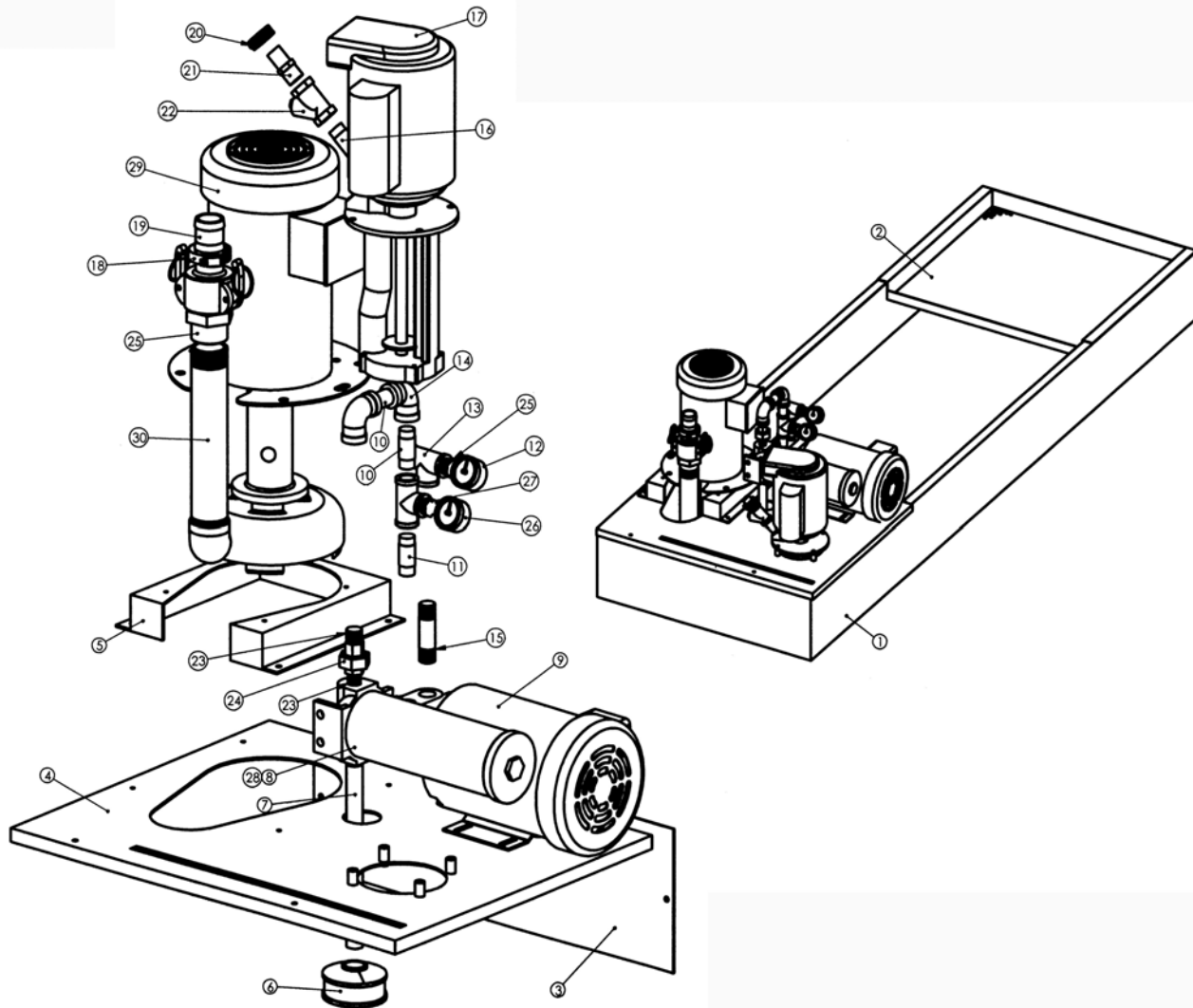


# SHEETMETAL HOUSING SLANT 98

## SHEETMETAL HOUSING SLANT 98 OPTION

	PART NO.		PART NO.		PART NO.		PART NO.
1	STM-0802	18	STM-0726	35	ASY-0020	53	STM-0751
2	STM-0243	19	STM-0749	36	STM-0804	55	ASY-0025
3	STM-0729	20	STM-0750	37	STM-0725	56	STM-0815
4	STM-0812	21	STM-0813	39	STM-0892	57	PA-6617
5	STM-0731	22	PA-9089	40	STM-0738	58	HDW-1018
6	STM-0741	23	STM-0748	41	STM-0084	59	AUG-0007
7	STM-0742	24	DOR-0040	42	DOR-0916	60	MTR-0187
8	STM-0734	25	STM-0805	43	STM-0915	61	WIR-0517
9	STM-0735	26	STM-0803	44	STM-0914	62	WIR-0536
10	STM-0847	27	STM-0737	45	STM-0913	63	WIR-0109
11	STM-0744	28	STM-0893	46	STM-0885	64	HDW-0713
12	STM-0730	29	STM-0740	47	STM-0405	65	WIR-0192
13	STM-0743	30	STM-0736	48	LBL-0264	66	HDW-0170
14	STM-0816	31	STM-0753	49	E937313	67	STM-1023
15	STM-0732	32	STM-0745	50	DOR-0016	68	STM-1024
16	DOR-0039	33	DOR-0007	51	HDW-0182	69	STM-1008
17	STM-0739	34	PA-6621	52	STM-0881		

# COOLANT TANK ASSEMBLY SLANT 98



## COOLANT TANK ASSEMBLY

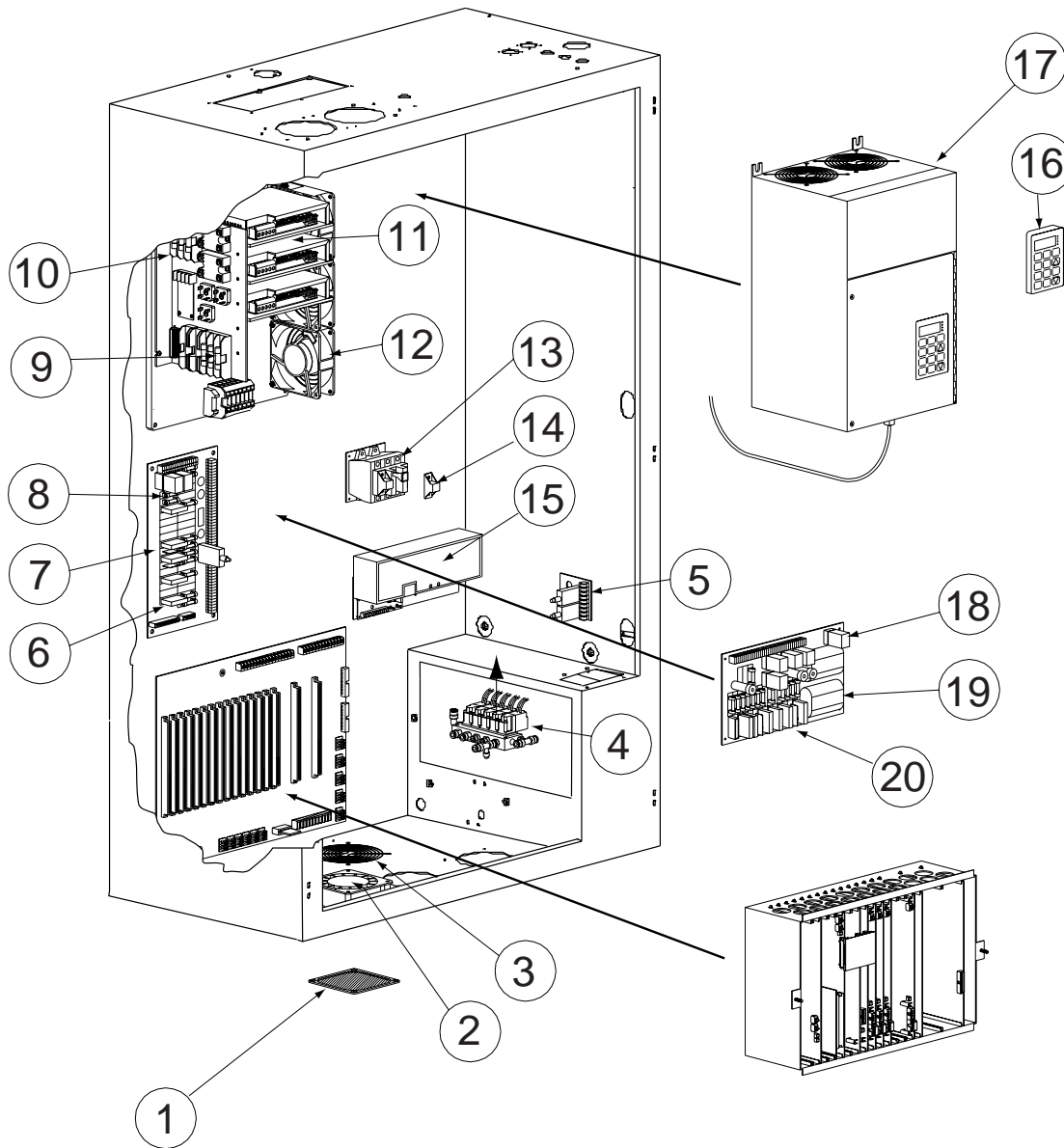
	PART #		PART #		PART #		PART #
1	STM-0815	9	PMP-0008	17	PMP-0017	25	PLM-0217
2	STM-1024	10	PLM-0060	18	HDW-0764	26	PLM-0216
3	STM-0879	11	PLM-0094	19	PLM-0021	27	REG-0034
4	STM-0816	12	REG-0018	20	HDW-0252	28	CNT-0029
5	STM-1023	13	PLM-0089	21	PLM-0076	29	PMP-0010
6	CNT-0025	14	PLM-0067	22	VLV-0018	30	PLM-0065
7	PLM-0233	15	PLM-0214	23	PLM-0091		
8	CNT-0027	16	PLM-0007	24	PLM-0212		



This page intentionally left blank.



# CNC CABINET SLANT 98

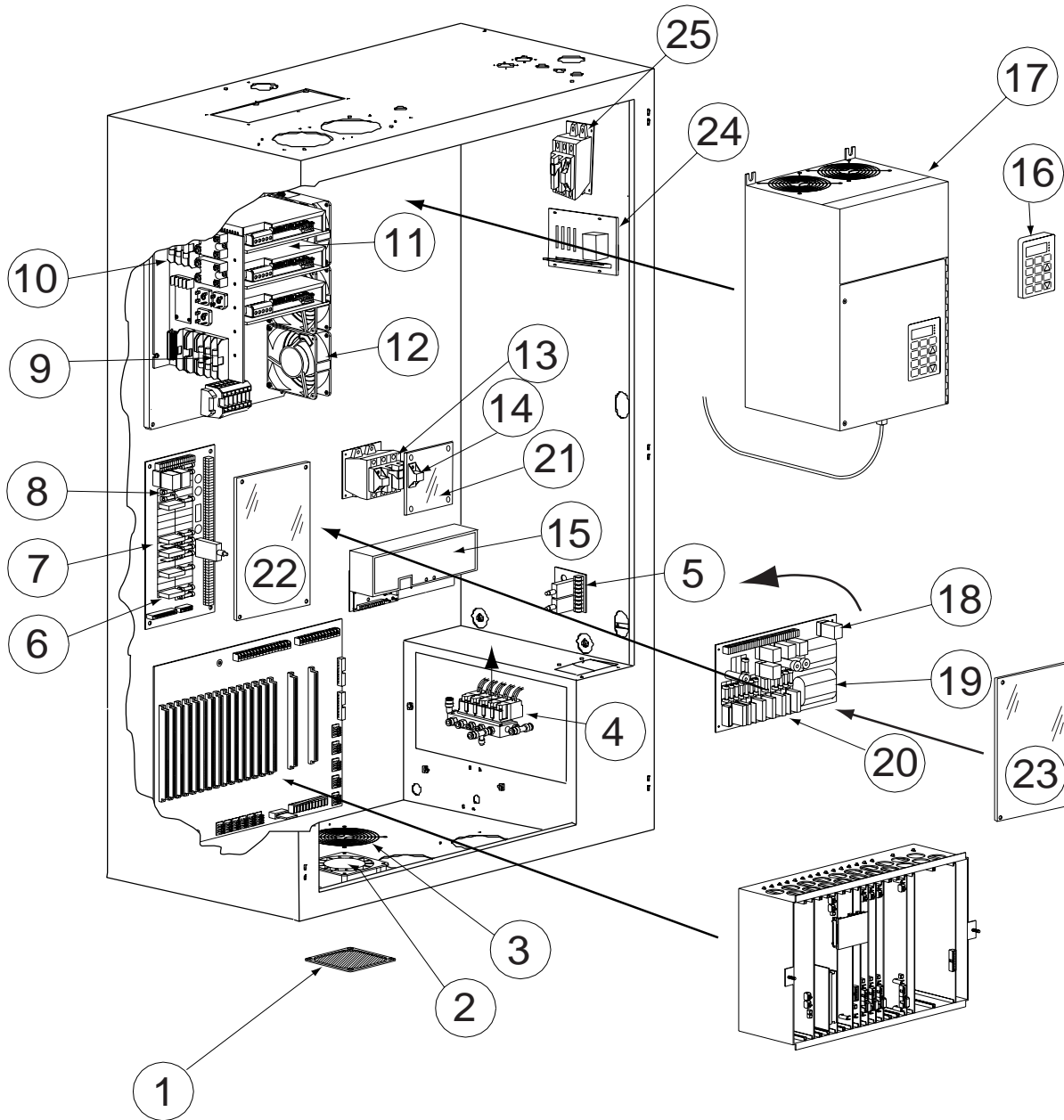


# CNC CABINET SLANT 98

## CNC CABINET SLANT 98

	PART #		PART #
1	HDW-0849	11	AMP-0036
2	ELE-0123	12	ELE-0123
3	HDW-0850	13	ELE-0132
4	VLV-0054	14	ELE-0138
5	PCB-0046	15	ELE-0961
6	ELE-0070	16	INV-0017 (BALDOR)
7	PCB-0194	17	INV-0056 (AMC)
8	ELE-0101		INV-0020 (HT)
9	ELE-0840		INV-0020 (HT)
10	ELE-0837	18	ELE-0072
		19	PCB-0195
		20	ELE-0070

# CE CNC CABINET SLANT 98



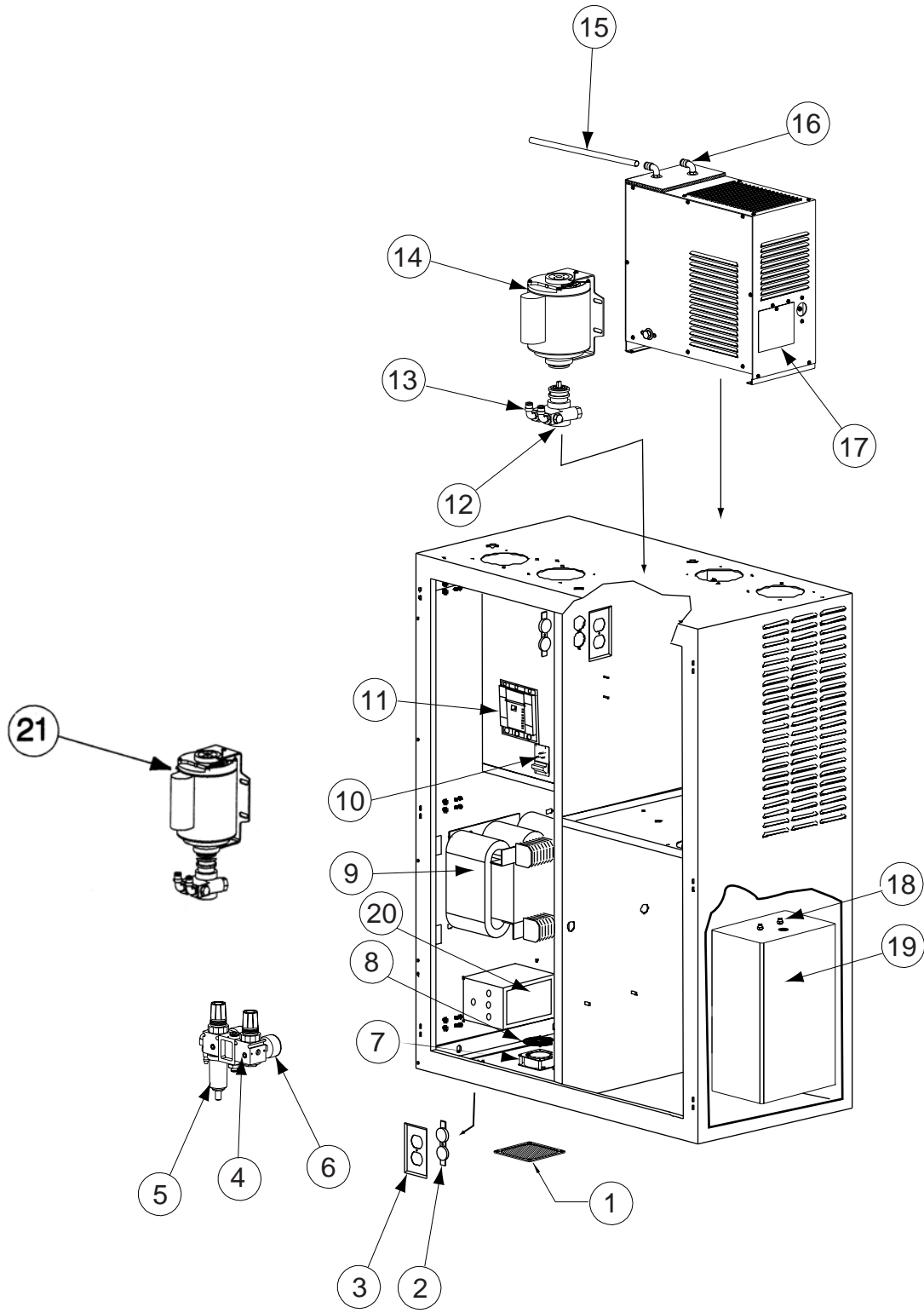


# CE CNC CABINET SLANT 98

## CE CNC CABINET

	PART #		PART #		PART #
1	HDW-0849	13	ELE-0132	24	PCB-0196
2	ELE-0123	14	ELE-0138	25	ELE-1025
3	HDW-0850	15	ELE-0961		
4	VLV-0054	16	INV-0017 (BALDOR)		
5	PCB-0046	17	INV-0056 (AMC)		
6	ELE-0070		INV-0041 (BALDOR)		
7	PCB-0194	18	ELE-0072		
8	ELE-0101	19	PCB-0195		
9	ELE-0840	20	ELE-0070		
10	ELE-0837	21	ELE-0349		
11	AMP-0036	22	ELE-0849		
12	ELE-0123	23	ELE-0848		

# JUNCTION BOX SLANT 98

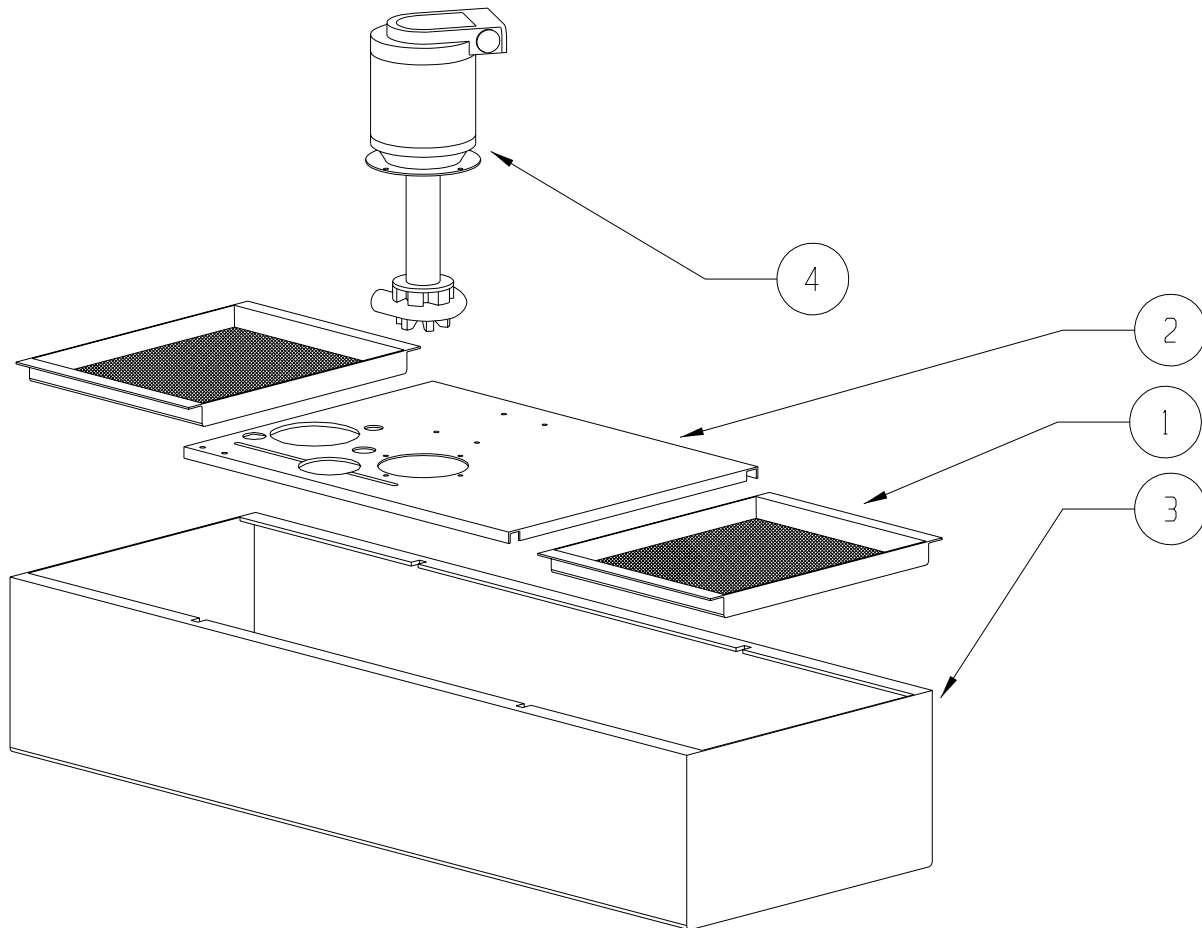


# JUNCTION BOX SLANT 98

## JUNCTION BOX

	PART #		PART #
1	HDW-0849	12	PMP-0000
2	WIR-0121	13	PLM-0042
3	WIR-0117	14	PMP-0029
4	REG-0009	15	PLM-0024
5	REG-0008	16	PLM-0042
6	REG-0005	17	CNT-0035
7	ELE-0123	18	PLM-0210
8	HDW-0850	19	CNT-0047
9	ELE-0200	20	ELE-0762*
10	PCB-0020	21	PMP-0034
11	ELE-0946		

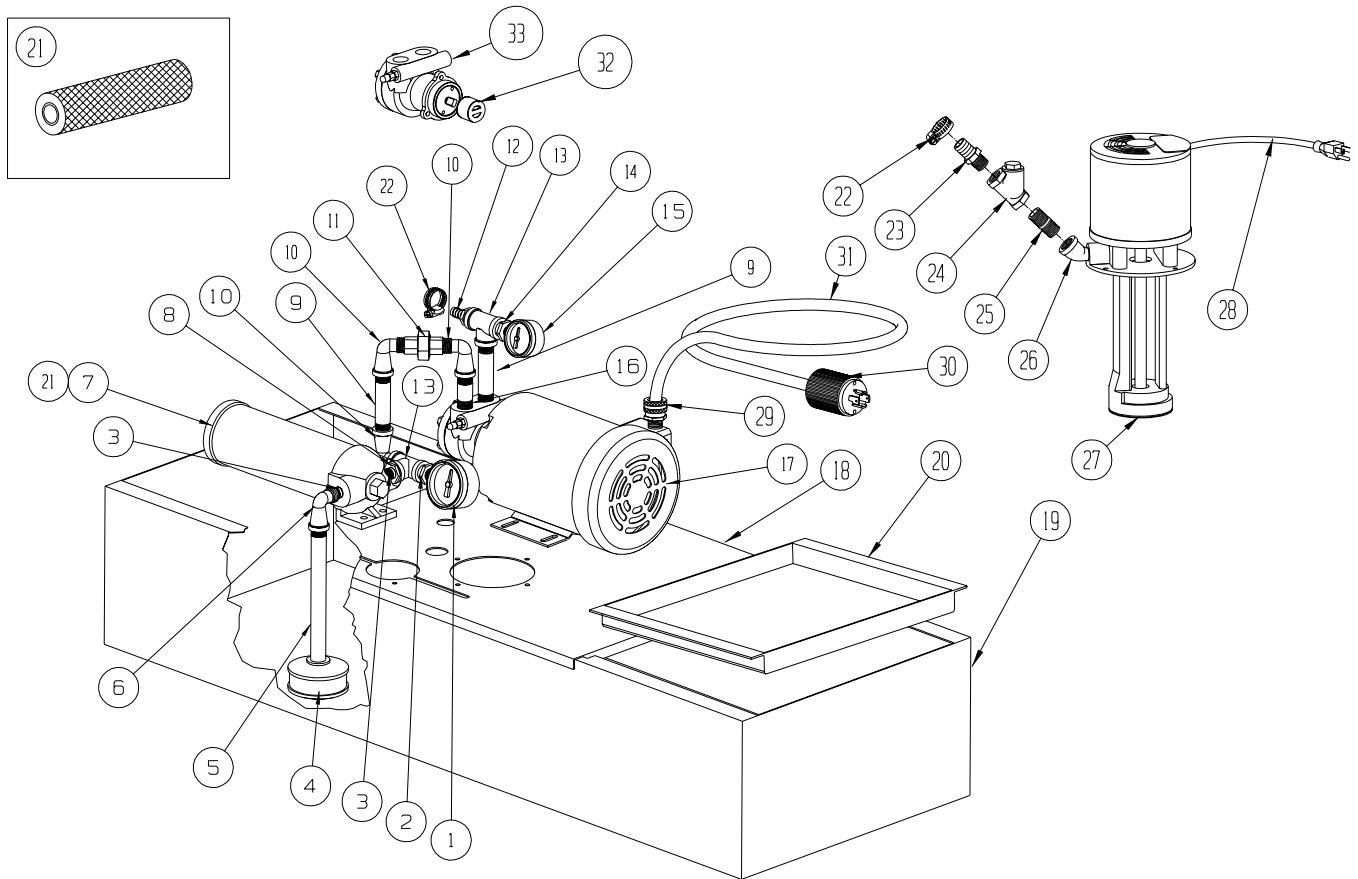
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

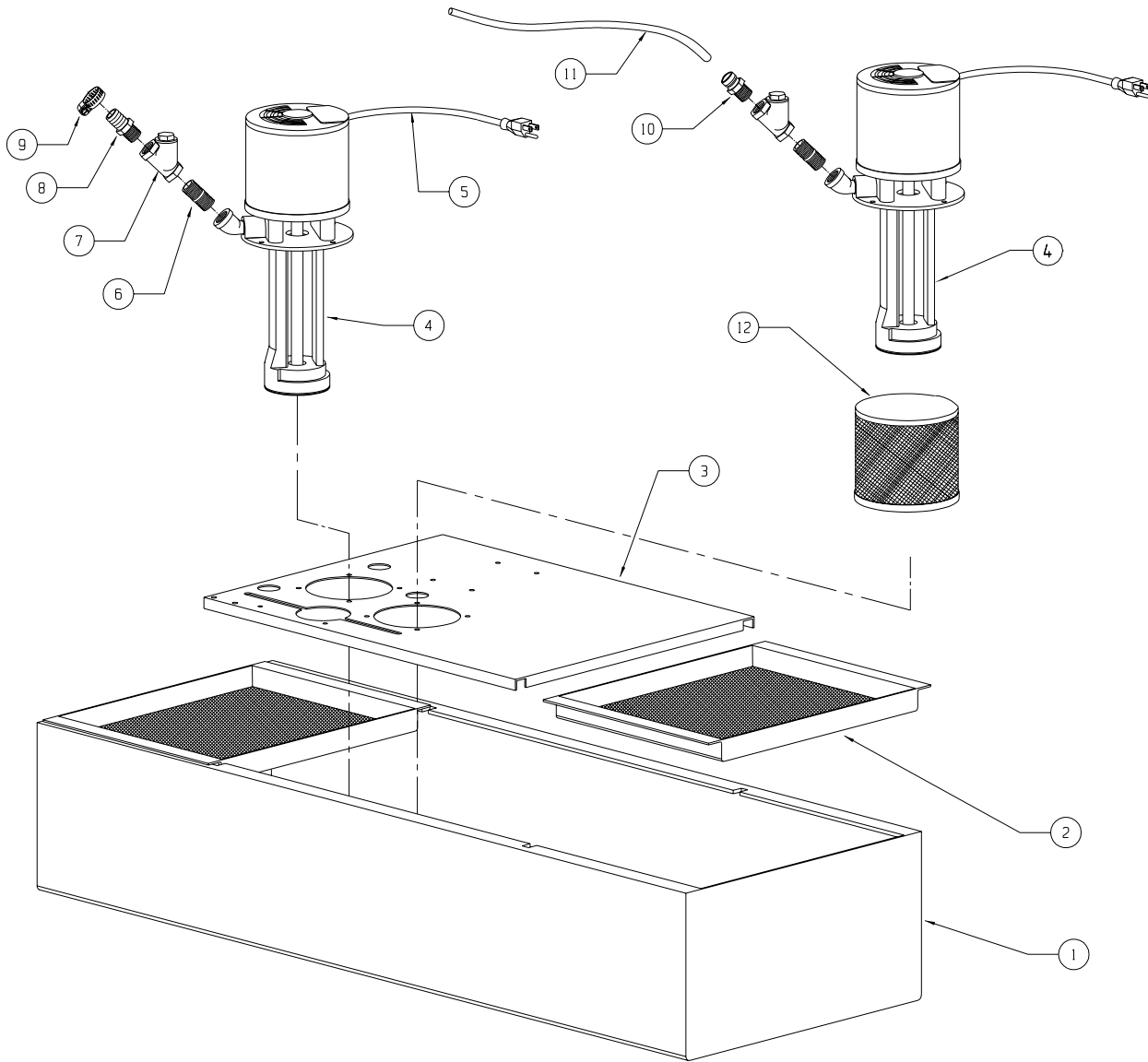
# 7500 RPM COOLANT THROUGH TANK



**7500 RPM COOLANT THROUGH TANK**

	PART #		PART #		PART #
1	REG-0034	13	PLM-0089	25	PLM-0092
2	PLM-0216	14	PLM-0217	26	PLM-0099
3	PLM-0117	15	REG-0018	27	PMP-0003
4	CNT-0025	16	PLM-0060		PMP-0002
5	PLM-0213	17	PMP-0008	28	WIR-0096
6	PLM-0100	18	STM-0594	29	WIR-0517
7	CNT-0027	19	STM-0287	30	WIR-535
8	HDW-0391	20	STM-0116	31	WIR-536
9	PLM-0061	21	CNT-0029	32	PMP-0019
10	PLM-0215	22	HDW-0252	33	PMP-0007
11	PLM-0212	23	PLM-0067		
12	PLM-0104	24	VLV-0018		

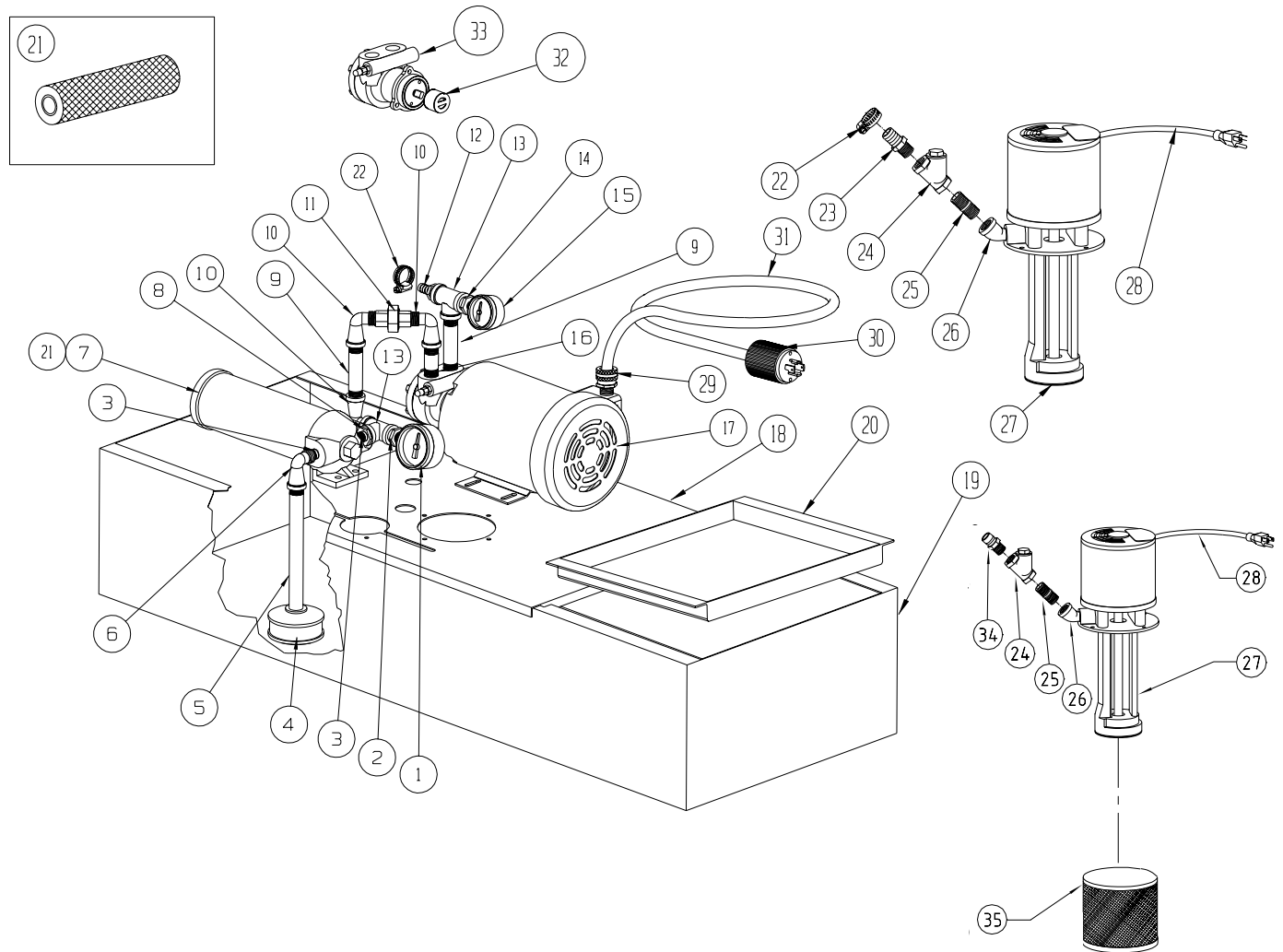
# 10K RPM COOLANT TANK



**10,000 RPM COOLANT TANK**

1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# 10K RPM COOLANT THROUGH TANK



10,000 RPM COOLANT THROUGH TANK ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

# TABLE OF CONTENTS

## Parts Manual VMC 4020A MODEL



COLUMN ASSEMBLY .....	2
7500 RPM HEAD ASSEMBLY .....	4
10,000 RPM HEAD ASSEMBLY .....	6
BASE, TABLE & SADDLE ASSEMBLY .....	8
DRAWBAR CYLINDER ASSEMBLY .....	10
7500 RPM ORIENTATION BRIDGE .....	11
10K RPM ORIENTATION BRIDGE ASSEMBLY .....	12
IDLER ASSEMBLIES .....	14
WAYLUBE PUMP ASSEMBLY .....	16
GENEVA DRIVE ATC ASSEMBLY .....	18
SERVO DRIVE ATC ASSEMBLY .....	20
7500 RPM SPINDLE ASSEMBLY .....	22
10K RPM SPINDLE ASSEMBLY .....	23
COOLANT THROUGH SPINDLE .....	24
CNC CABINET ASSEMBLY .....	25
CARD CAGE ASSEMBLY .....	26
POWER JUNCTION CABINET ASSEMBLY .....	27
CHILLER CABINET ASSEMBLY .....	28
MP PENDANT ASSEMBLY .....	29
88HS PENDANT ASSEMBLY .....	30
FRONT DOOR ASSEMBLY .....	31
WAY COVER ASSEMBLY .....	32
SHEETMETAL HOUSING .....	33
7500 RPM COOLANT TANK .....	34
7500 RPM COOLANT THRU TANK .....	35
10K RPM COOLANT TANK .....	36





This reference covers the following Fadal products:

Model VMC 4020A

Corporate Office .....voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts .....voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support .....voice (818) 727-2100 ..... fax (818) 407-0061

[support@fadal.com](mailto:support@fadal.com)

20701 Plummer Street Chatsworth California 91311 U.S.A.

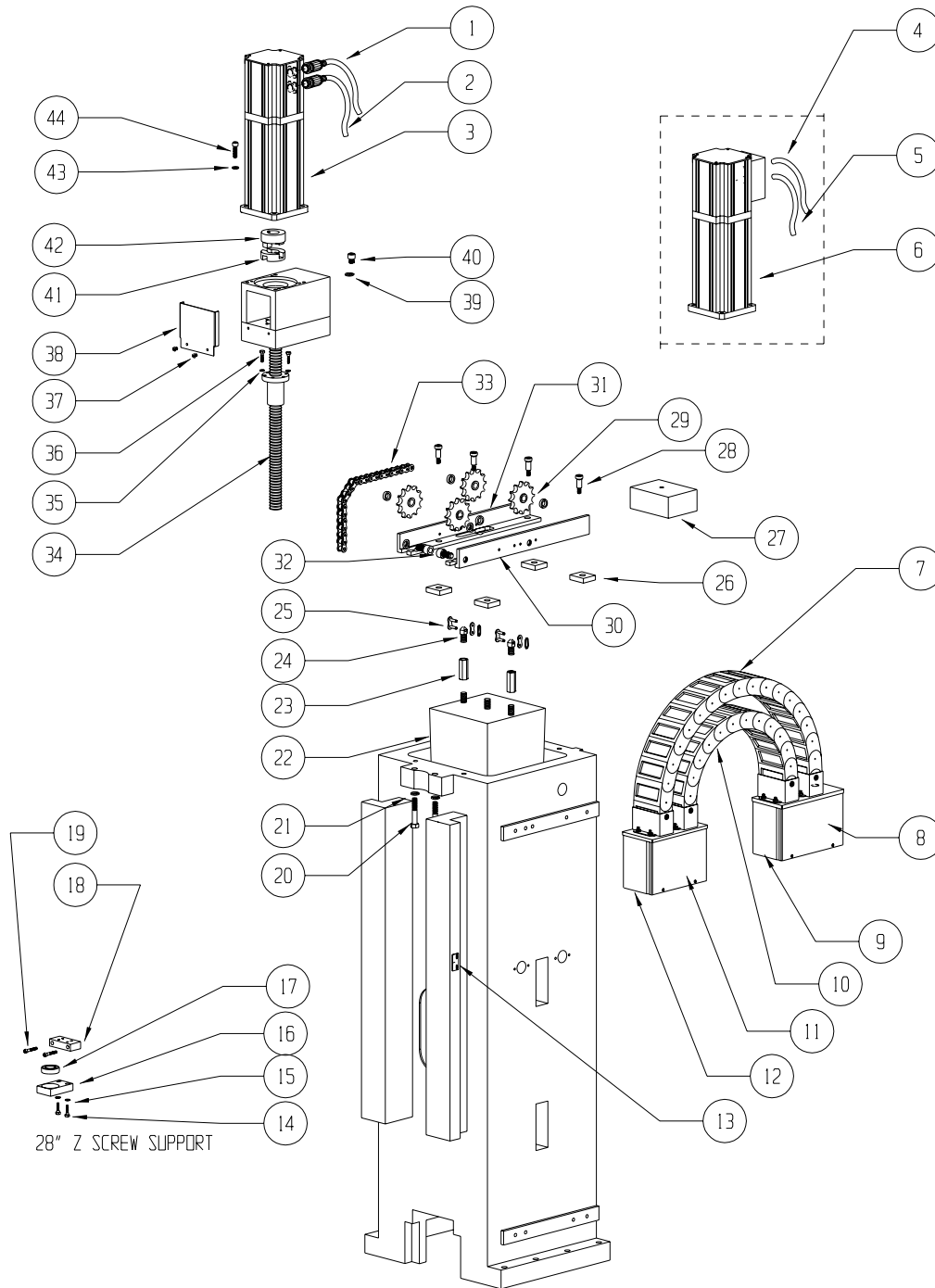
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

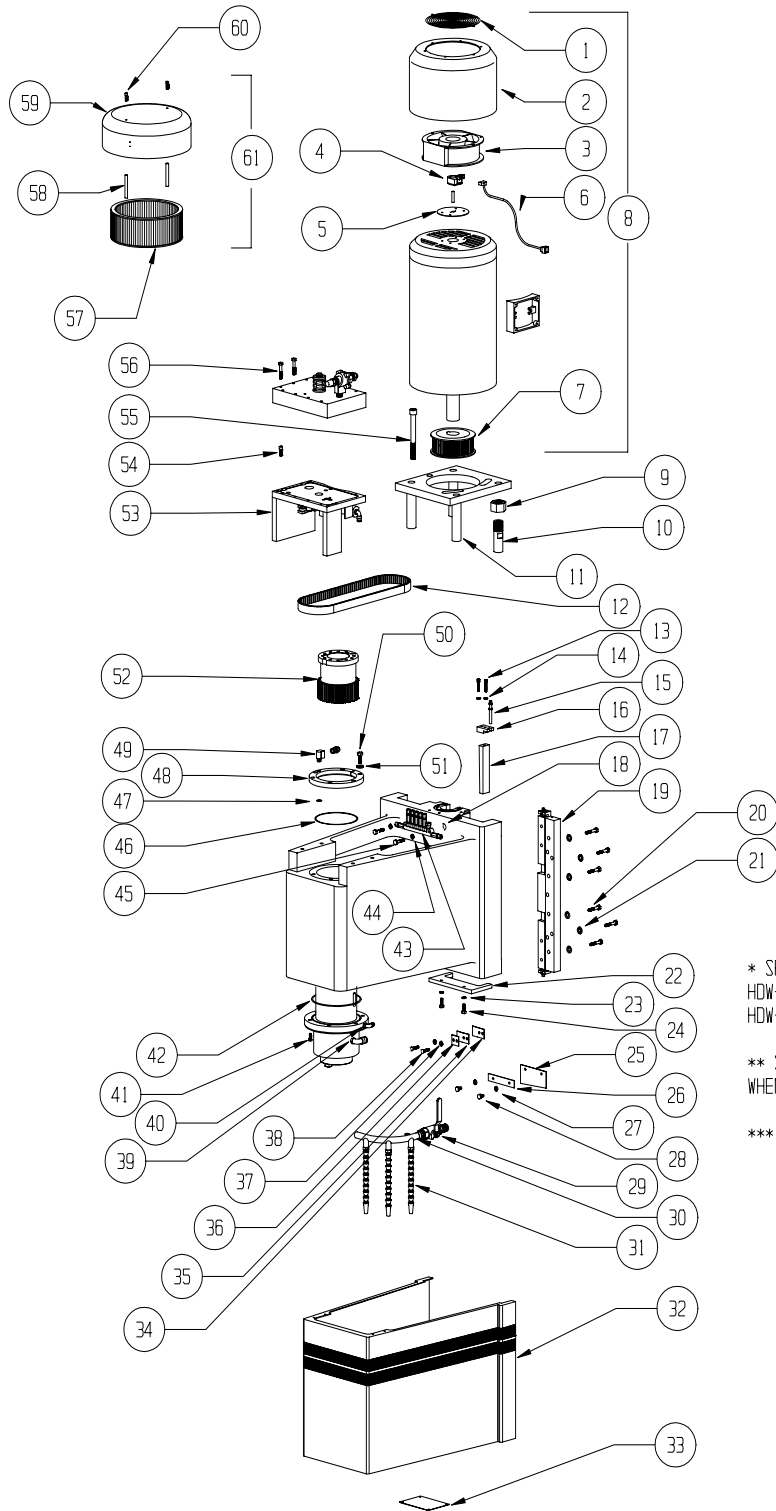


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	STM-0044	25	HDW-0204	36	HDW-0319
2	WIR-0611	14	HDW-0315	26	HDW-0363	37	HDW-0347
3	MTR-0142	15	HDW-0048	27	CWT-0002	38	STM-0043
4	WIR-0610	16	BLS-0042	28	HDW-0600	39	HDW-0451
5	WIR-0609	17	BRG-0023	29	PUL-0034	40	HDW-0465
6	MTR-0126	18	BLS-0041	30	CWT-0005	41	MTR-0071
7	CVR-0075	19	HDW-0577	31	CWT-0007	42	MTR-0073
8	STM-0333	20	HDW-0655	32	HDW-0461	43	HDW-0280
9	STM-0334	21	HDW-0050	33	HDW-0205	44	HDW-0779
10	CVR-0073	22	CWT-0018	34	BLS-0031 (20")		
11	STM-0300	23	HDW-0335		BLS-0024 (28")		
12	STM-0301	24	CWT-0001	35	HDW-0281		

# 7500 RPM HEAD ASSEMBLY



\* SPN-0008 INCLUDES  
HDW-0181, HDW-0177  
HDW-0148, PUL-0018

\*\* SPECIFY SIZE  
WHEN ORDERING

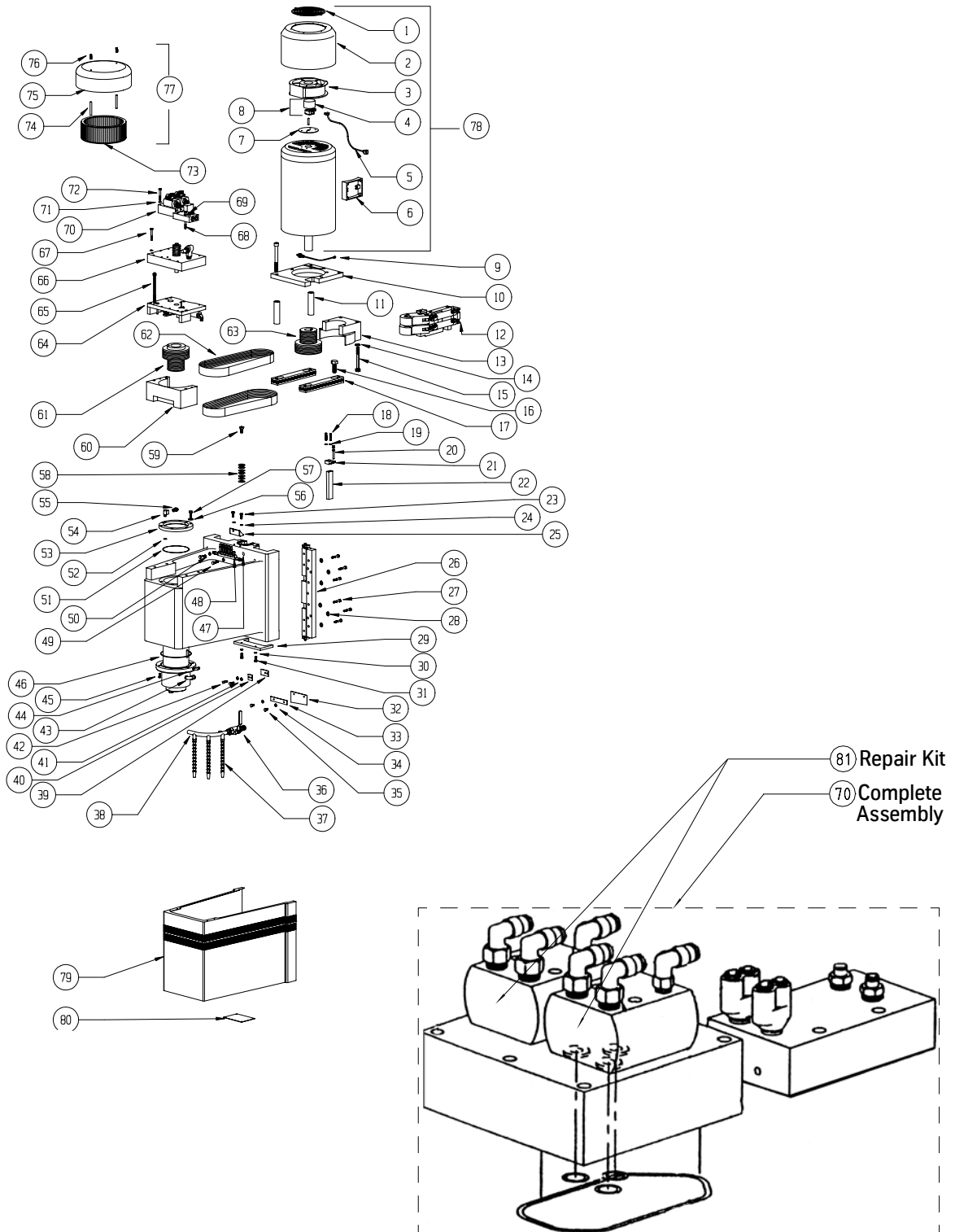
\*\*\* REPLACEMENT PART  
# HYD-0018

# 7500 RPM HEAD ASSEMBLY

## 7500 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	17	GIB-0001	33	STM-0064	49	PLM-0075
2	STM-0139	18	HDW-0380	34	GIB-0010	50	HDW-0568
3	ELE-0124	19	GIB-0023	35	HDW-0355	51	HDW-0275
4	ENC-0007	20	HDW-0569	36	STM-0042	52	PUL-0025
5	STM-0148	21	HDW-0280	37	HDW-0279	53	ORB-0019
6	WIR-0168	22	CVR-0048	38	HDW-0294	54	HDW-0298
7	PUL-0024	23	HDW-0279	39	PLM-0112	55	HDW-0469
8	MTR-0099	24	HDW-0327	40	PLM-0035	56	HDW-0320
9	PLC-0042	25	HDW-0335	41	HDW-0470	57	MTR-0127
10	MTR-0075	26	STM-0052	42	HDW-0181	58	SVT-0108
11	MTR-0076	27	HDW-0279	43	LUB-0045	59	STM-0467
12	BEL-0006	28	HDW-0319	44	HDW-0280	60	HDW-0597
13	HDW-0294	29	VLV-0017	45	HDW-0576	61	HDW-0128
14	HDW-0279	30	CNT-0039	46	HDW-0169		
15	GIB-0013	31	PLM-0016	47	HDW-0177		
16	GIB-0010	32	STM-0057	48	SPN-0042		

# 10,000 RPM HEAD ASSEMBLY



# 10,000 RPM HEAD ASSEMBLY

## 10,000 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	21	GIB-0010	42	HDW-0294	63	PUL-0019
2	STM-0139	22	GIB-0001 <sup>(1)</sup>	43	PLM-0112	64	ORB-0001
3	ELE-0124	23	HDW-0320	44	PLM-0034	65	HDW-0290
4	MTR-0123	24	HDW-0279	45	HDW-0470	66	DRB-0000
5	WIR-0168	25	STM-0141	46	HDW-0181	67	HDW-0320
6	MTR-0058	26	GIB-0004 <sup>(1)</sup>	47	HDW-0380	68	HDW-0321 (HT)
7	STM-0148	27	HDW-0791	48	LUB-0045	69	HDW-0279 (HT)
8	ENC-0007	28	HDW-0280	49	HDW-0576	70	HYD-0017
9	HDW-0369	29	CVR-0048	50	HDW-0279	71	HDW-0279 (HT)
10	MTR-0069	30	HDW-0279	51	HDW-0169	72	HDW-0320 (HT)
11	MTR-0149	31	HDW-0322	52	HDW-0177	73	MTR-0127
12	IDL-0003	32	HDW-0356	53	SPN-0042	74	SVT-0108
13	BEL-0015	33	STM-0052	54	PLM-0045	75	STM-0467
14	HDW-0451	34	HDW-0279	55	PLM-0088	76	HDW-0597
15	HDW-0311	35	HDW-0319	56	HDW-0275	77	MTR-0128
16	HDW-0283	36	VLV-0017	57	HDW-0568	78	MTR-0047 <sup>(2)</sup> (HT)
17	MTR-0068	37	PLM-0016	58	HDW-0194		MTR-0043 <sup>(2)</sup>
	MTR-0064	38	CNT-0039	59	HDW-0553	79	STM-0057
18	HDW-0294	39	HDW-0355	60	BEL-0014	80	STM-0064
19	HDW-0279	40	STM-0042	61	PUL-0018	81	HYD-0018
20	GIB-0013	41	HDW-0279	62	BEL-0003		

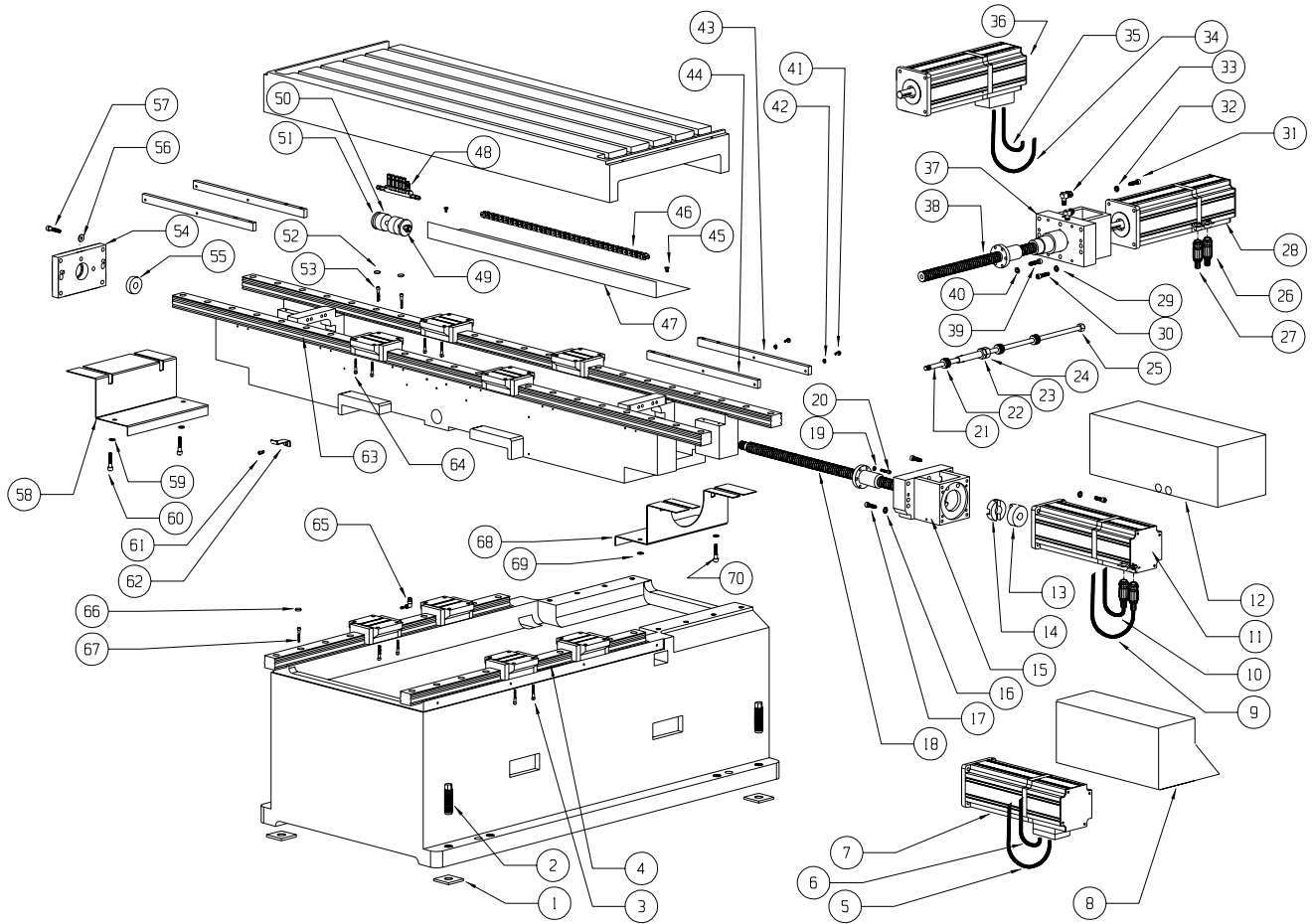
<sup>1</sup>Specify gib size when ordering.

<sup>2</sup>MTR-0047 and MTR-0043 include PUL-0019.

HT=High Torque



# BASE, TABLE & SADDLE ASSEMBLY

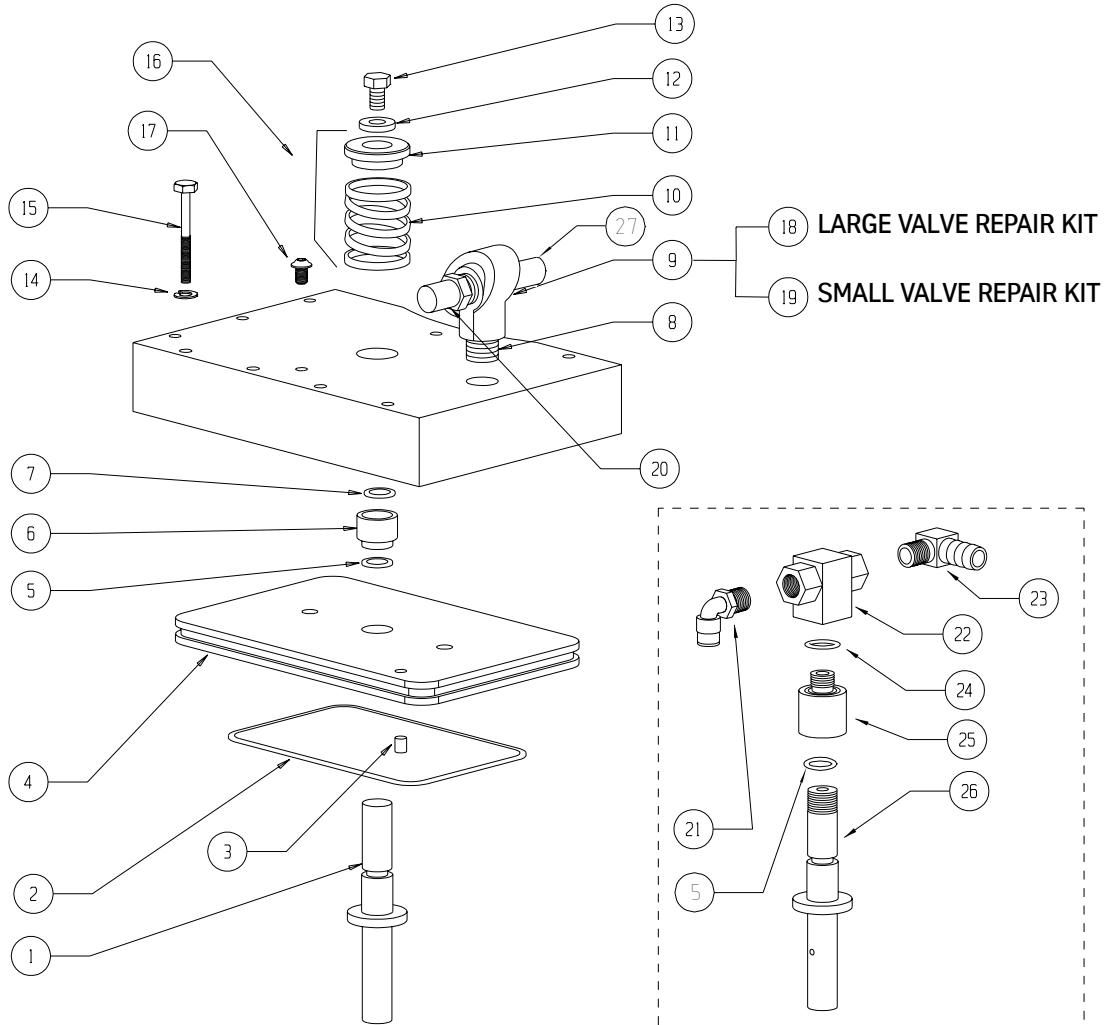


# BASE, TABLE & SADDLE ASSEMBLY

## BASE, TABLE & SADDLE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	17	HDW-0485	33	PLM-0112	49	HDW-0562	63	BRG-0095
2	HDW-0432	18	BLS-0172	34	WIR-0556		HDW-0341	64	HDW-0012
3	HDW-0779	19	HDW-0281	35	WIR-0557	50	HDW-0375	65	PLM-0028
4	BRG-1228	20	HDW-0025	36	MTR-0126	51	HDW-0858	66	BRG-0106
5	WIR-0606	21	BLS-0214	37	BLS-0038	52	BRG-0106	67	HDW-0012
6	WIR-0605	22	HDW-0194	38	BLS-0174	53	HDW-0012	68	STM-0500
7	MTR-0126	23	HDW-0637	39	HDW-0291	54	BLS-0217	69	HDW-0050
8	WIR-0561	24	HDW-0018	40	HDW-0281	55	BRG-0022	70	HDW-0012
9	WIR-0566	25	HDW-0332	41	HDW-0296	56	HDW-0381		
10	WIR-0605	26	WIR-0610	42	HDW-0279	57	HDW-0407		
11	MTR-0142	27	WIR-0609	43	CVR-0099		HDW-0485		
12	STM-0609	28	MTR-0142	44	CVR-0099	58	STM-0502		
13	MTR-0073	29	HDW-0281	45	HDW-0319	59	HDW-0050		
14	MTR-0071	30	HDW-0291	46	CVR-0082	60	HDW-0017		
15	BLS-0027	31	HDW-0779	47	STM-0518	61	HDW-0319		
16	HDW-0281	32	HDW-0280	48	LUB-0045	62	STM-0767		

# DRAWBAR CYLINDER ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

Coolant Thru Assembly DRB-0001

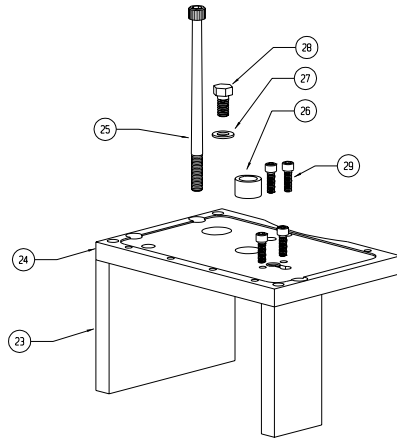
**DRAWBAR CYLINDER ASSEMBLIES**

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

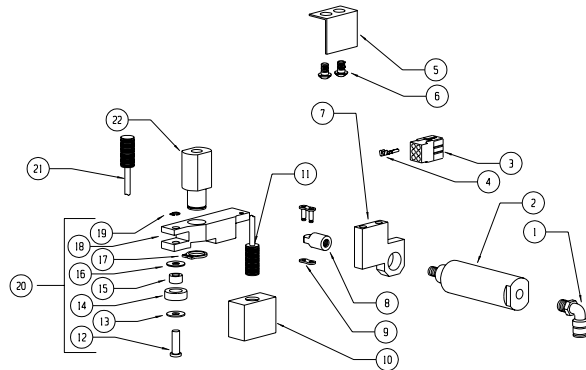
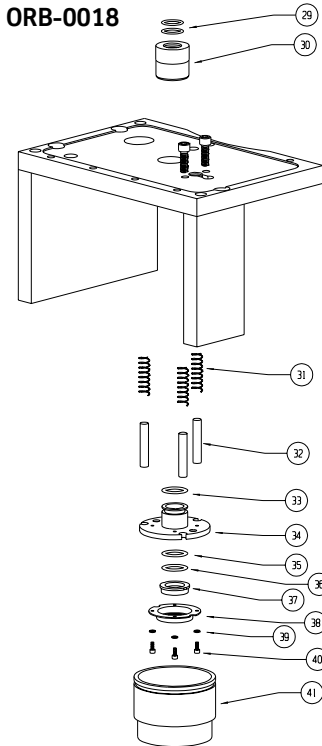
<sup>1</sup>Includes ELE-0147

# 7500 RPM ORIENTATION BRIDGE

ORB-0015



ORB-0018



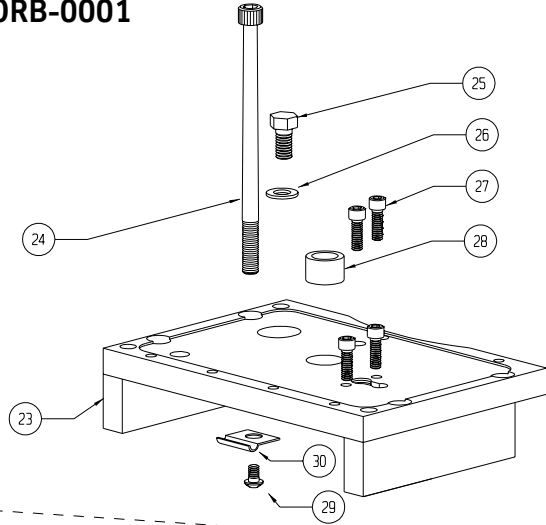
SEAL REPAIR KIT CNT-0150

## 7500 RPM ORIENTATION BRIDGE

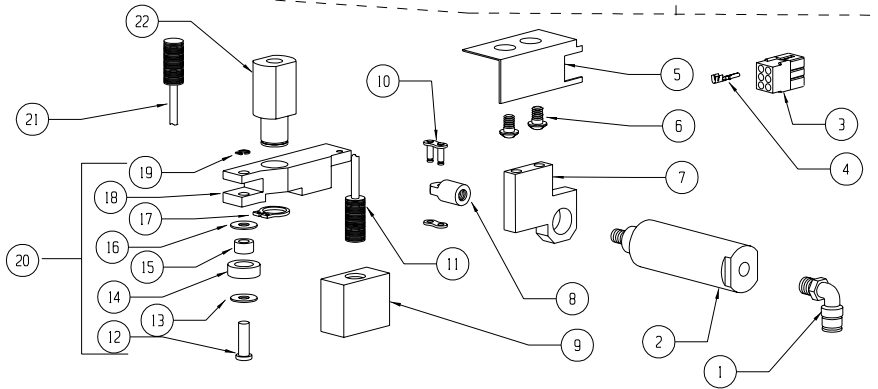
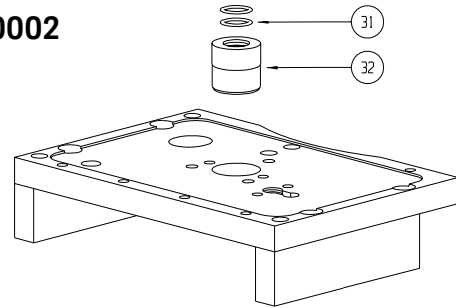
	PART #		PART #		PART #		PART #
1	PLM-0034	10	HDW-0209	22	ORB-0013	34	HDW-0156
2	CYL-0007	11	ELE-0145	23	ORB-0008	35	CNT-0041
3	WIR-0051	12	ORB-0007	24	HDW-0285	36	HDW-0155
4	WIR-0043 (16 AWG)	13	HDW-0515	25	HDW-0571	37	HDW-0156
	WIR-0044 (16 AWG)	14	ORB-0009	26	HDW-0048	38	CNT-0033
	WIR-0544 (22 AWG)	15	BRG-0014	27	HDW-0298	39	CNT-0045
	WIR-0056 (22 AWG)	16	HDW-0515	28	BRG-0008	40	HDW-0453
5	STM-0684	17	HDW-0725	29	HDW-0349	41	HDW-0308
6	HDW-0347	18	ORB-0031	30	HDW-0150	42	CNT-0140
7	ORB-0030	19	HDW-0726	31	CNT-0042		
8	ORB-0011	20	ORB-0004	32	HDW-0257		
9	ORB-0014	21	ELE-0145	33	HDW-0326		

# 10K RPM ORIENTATION BRIDGE

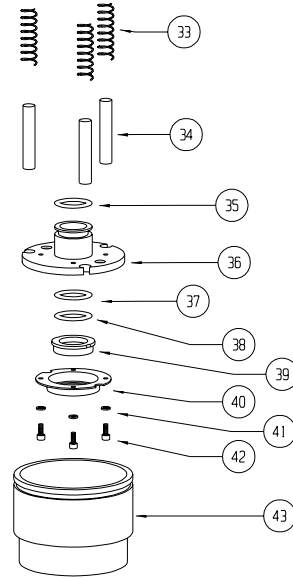
**ORB-0001**



**ORB-0002**



COMMON TO BOTH VERSIONS



**ORIENTATION BRIDGE ASSEMBLIES**

	PART#		PART#		PART#		PART#		PART#
1	PLM-0034	8	ORB-0011	18	ORB-0031	28	BRG-0008	38	HDW-0156
2	CYL-0007	9	ORB-0014	19	HDW-0726	29	HDW-0349	39	CNT-0033
3	WIR-0051	10	HDW-0209	20	ORB-0004	30	LUB-0077	40	CNT-0045
4	WIR-0043 (16 AWG)	11	ELE-0145	21	ELE-0145	31	HDW-0150	41	HDW-0453
	WIR-0044 (16 AWG)	12	ORB-0007	22	ORB-0013	32	CNT-0042	42	HDW-0308
	WIR-0544 (22 AWG)	13	HDW-0515	23	ORB-0008	33	HDW-0257	43	CNT-0140
	WIR-0056 (22 AWG)	14	ORB-0009	24	HDW-0285	34	HDW-0326		
5	STM-0596	15	BRG-0014	25	HDW-0571	35	HDW-0156		
6	HDW-0347	16	HDW-0515	26	HDW-0048	36	CNT-0041		
7	ORB-0030	17	HDW-0725	27	HDW-0298	37	HDW-0155		

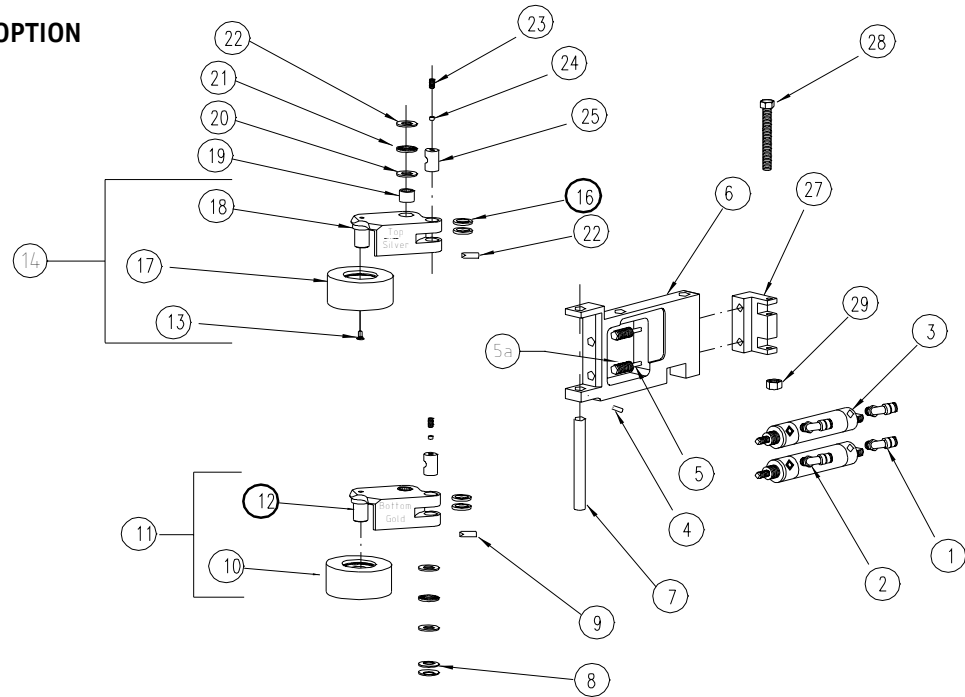


This page intentionally left blank.

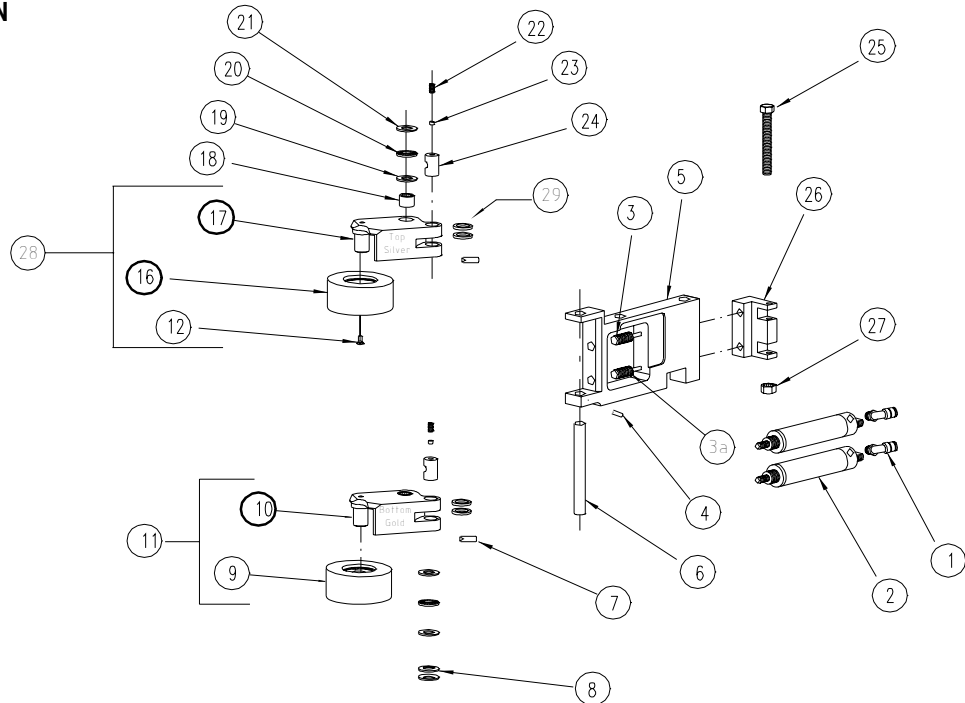


# IDLER ASSEMBLIES

## RIGID TAP/HIGH TORQUE OPTION



## 10,000 RPM OPTION



# IDLER ASSEMBLIES

## RIGID TAP/HIGH TORQUE OPTION

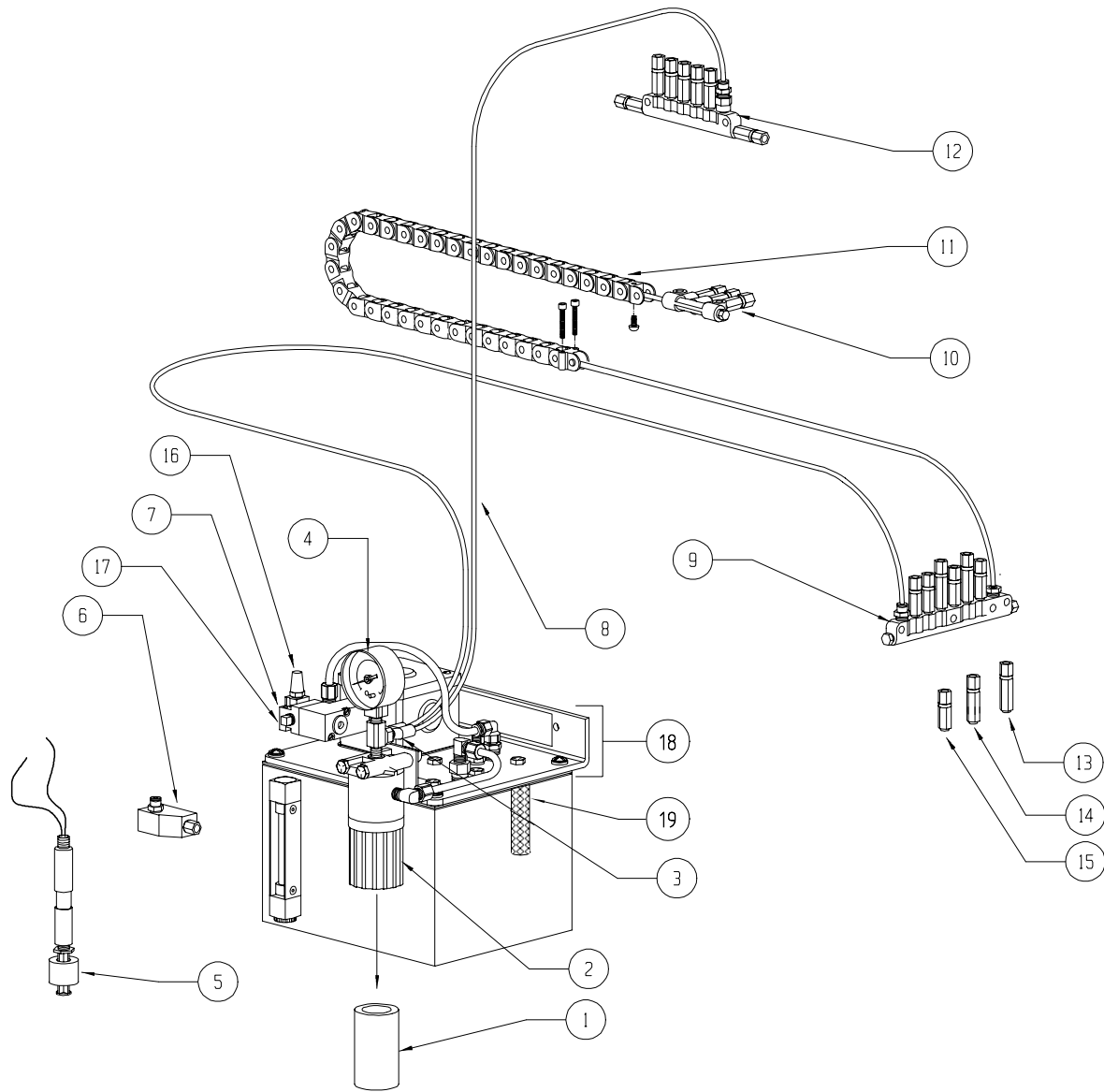
	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		



# WAYLUBE PUMP ASSEMBLY



**WAYLUBE PUMP ASSEMBLY**

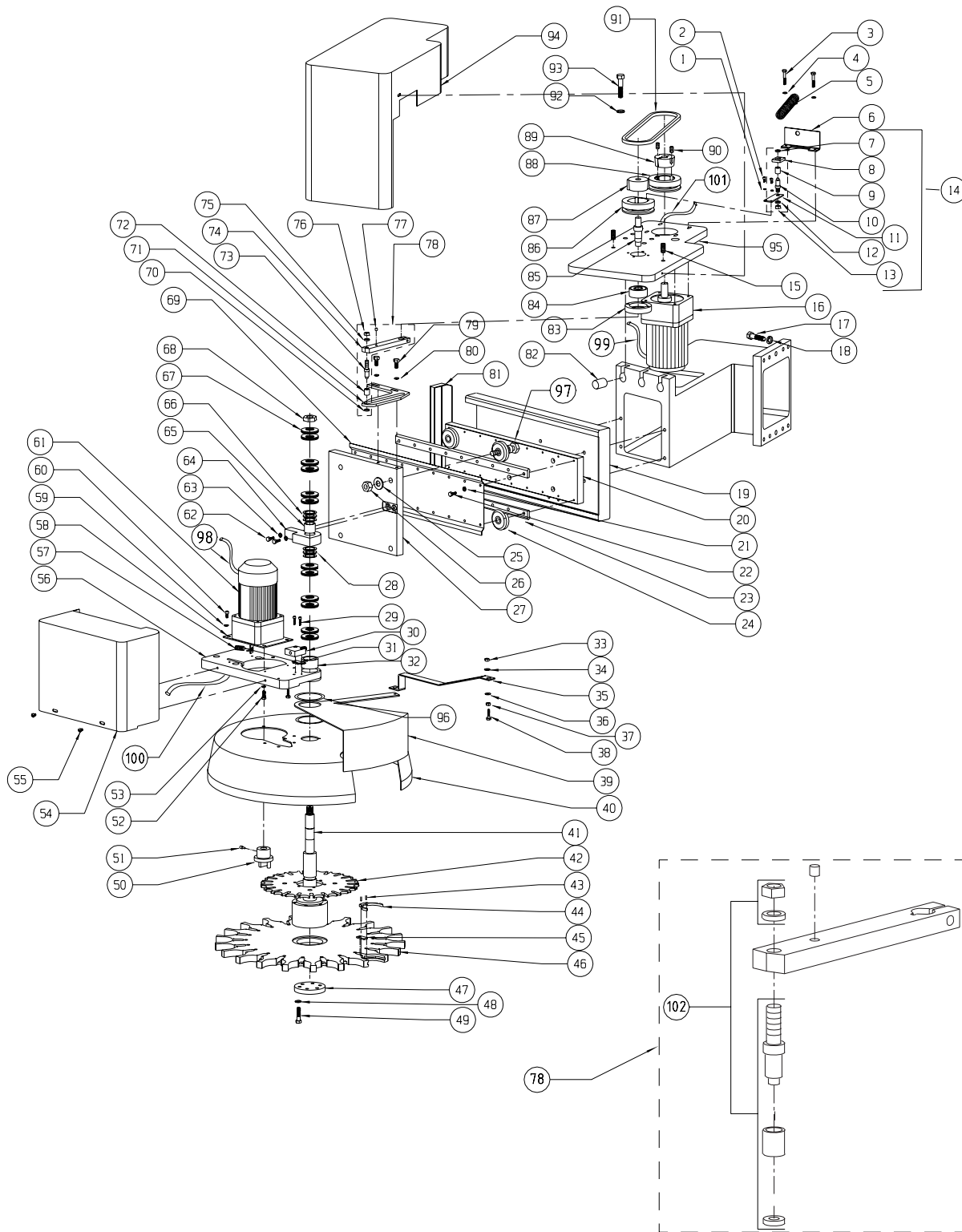
	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		



This page intentionally left blank.



# GENEVA DRIVE ATC ASSEMBLY



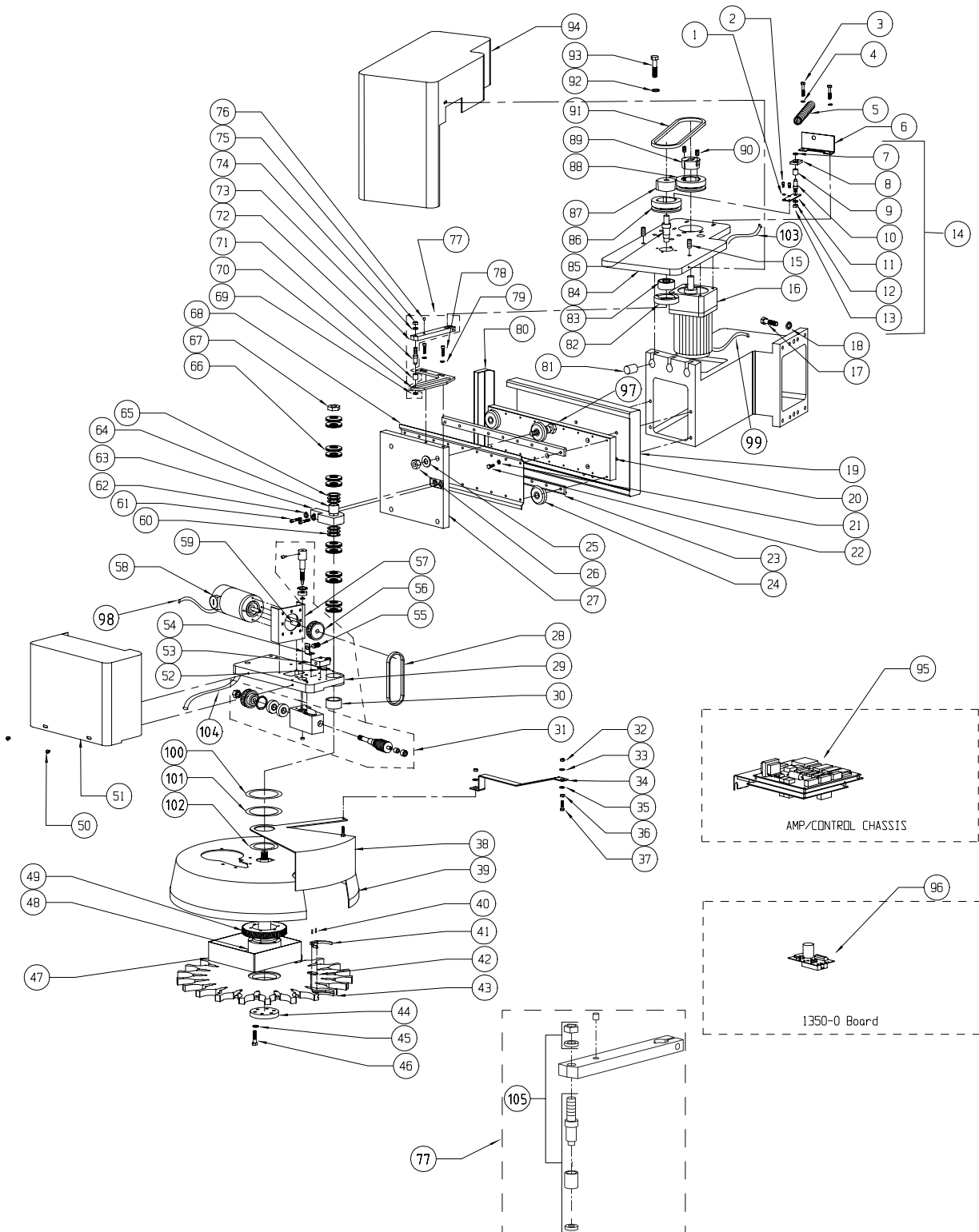
# GENEVA DRIVE ATC ASSEMBLY

## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)
					HDW-0295 (1)				ATC-0005 (30)
								102	ATC-0169

<sup>(1)</sup>Quick disconnect type.

# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

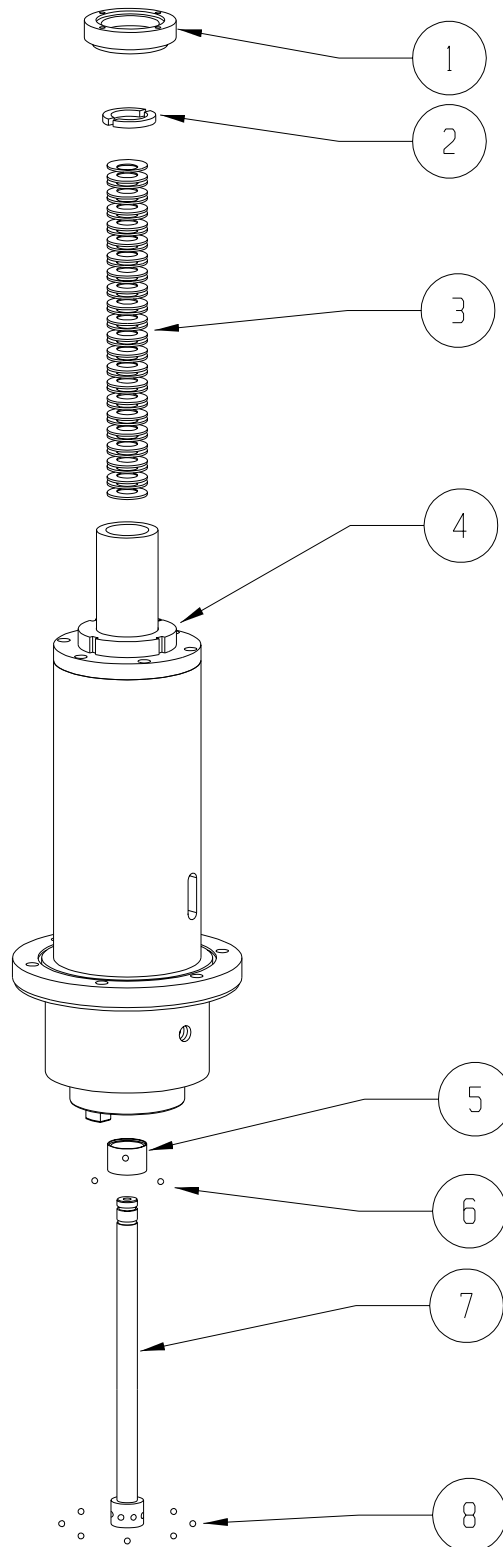
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



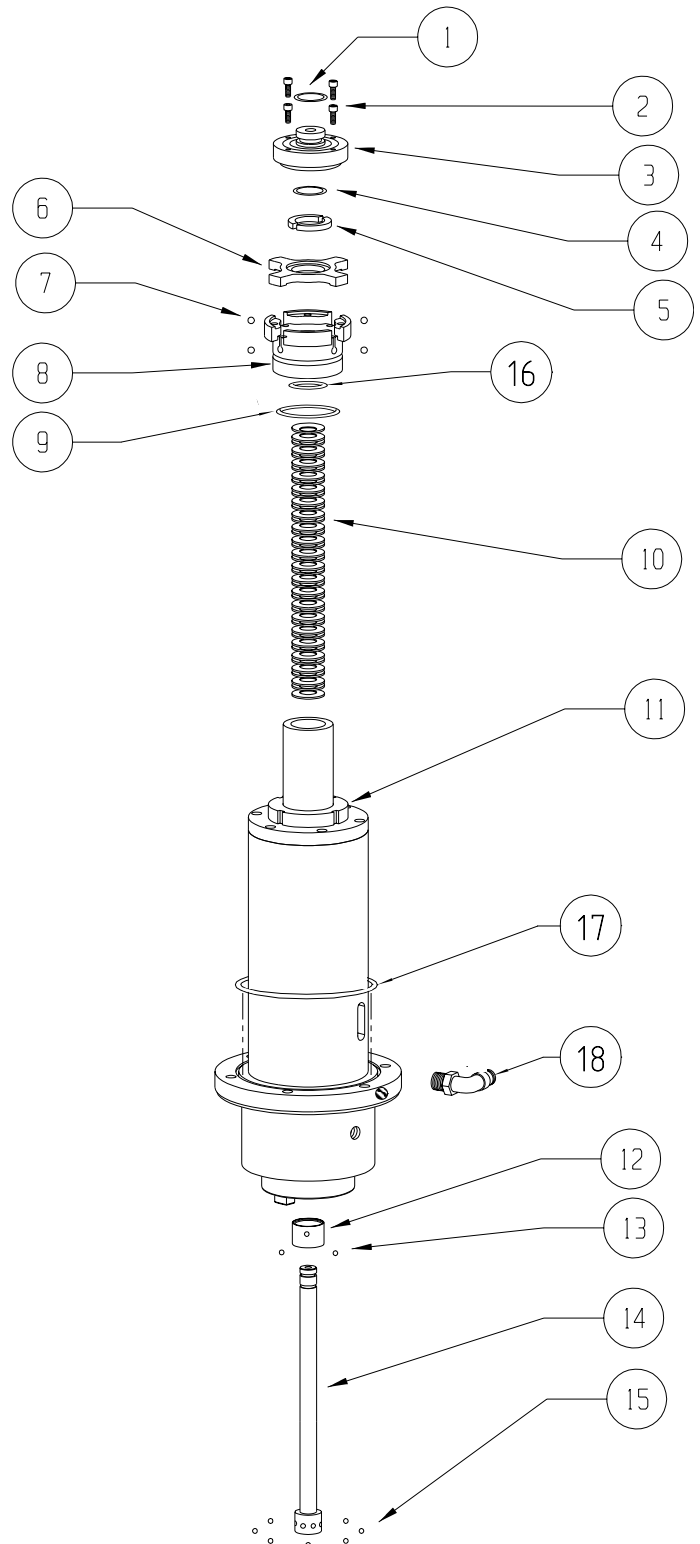
# 10K RPM SPINDLE ASSEMBLY

**10,000 RPM SPINDLE ASSEMBLY**

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

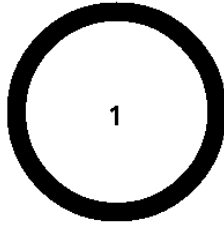
<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.





# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



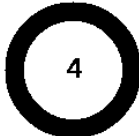
HDW-0158



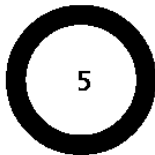
HDW-0177



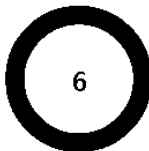
HDW-0150



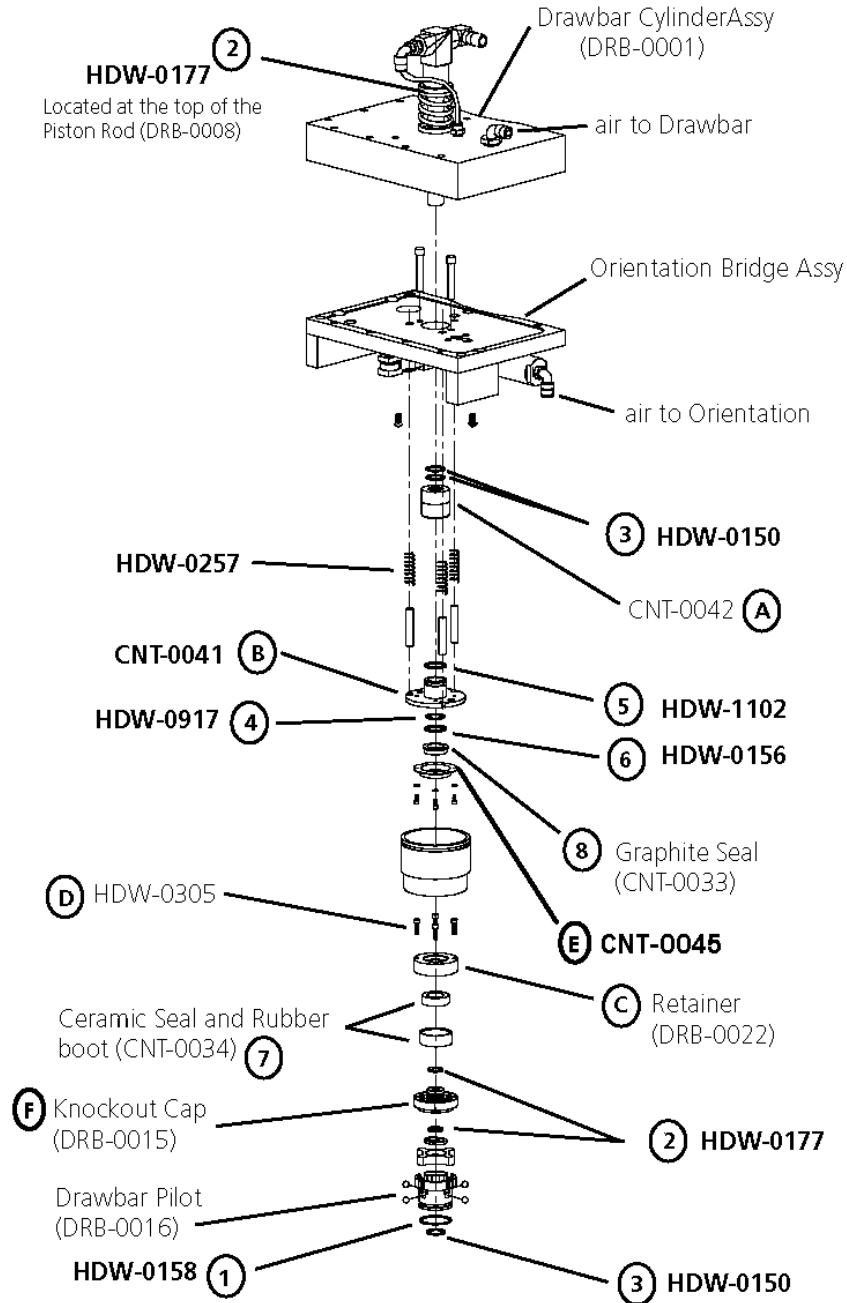
HDW-0917



HDW-1102

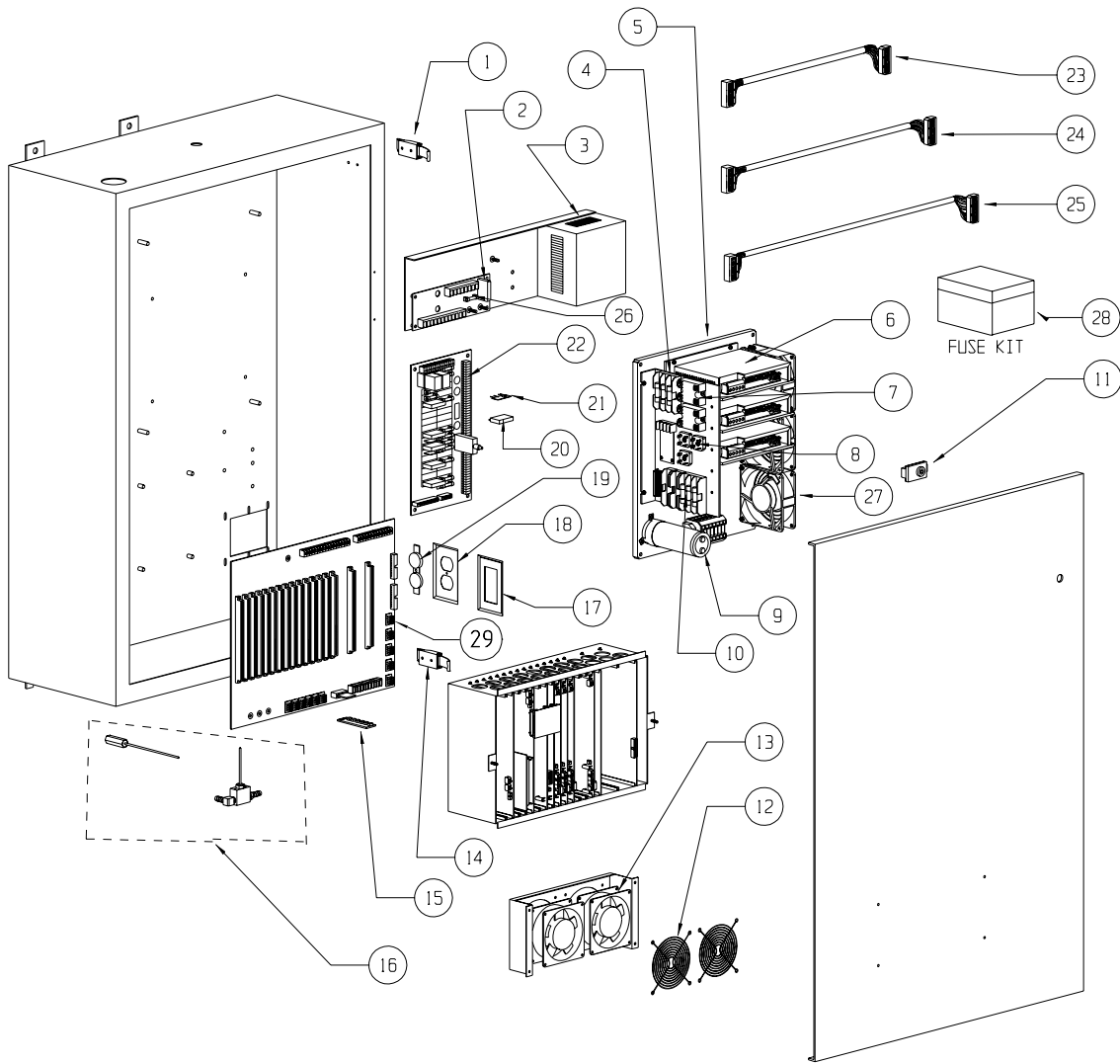


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

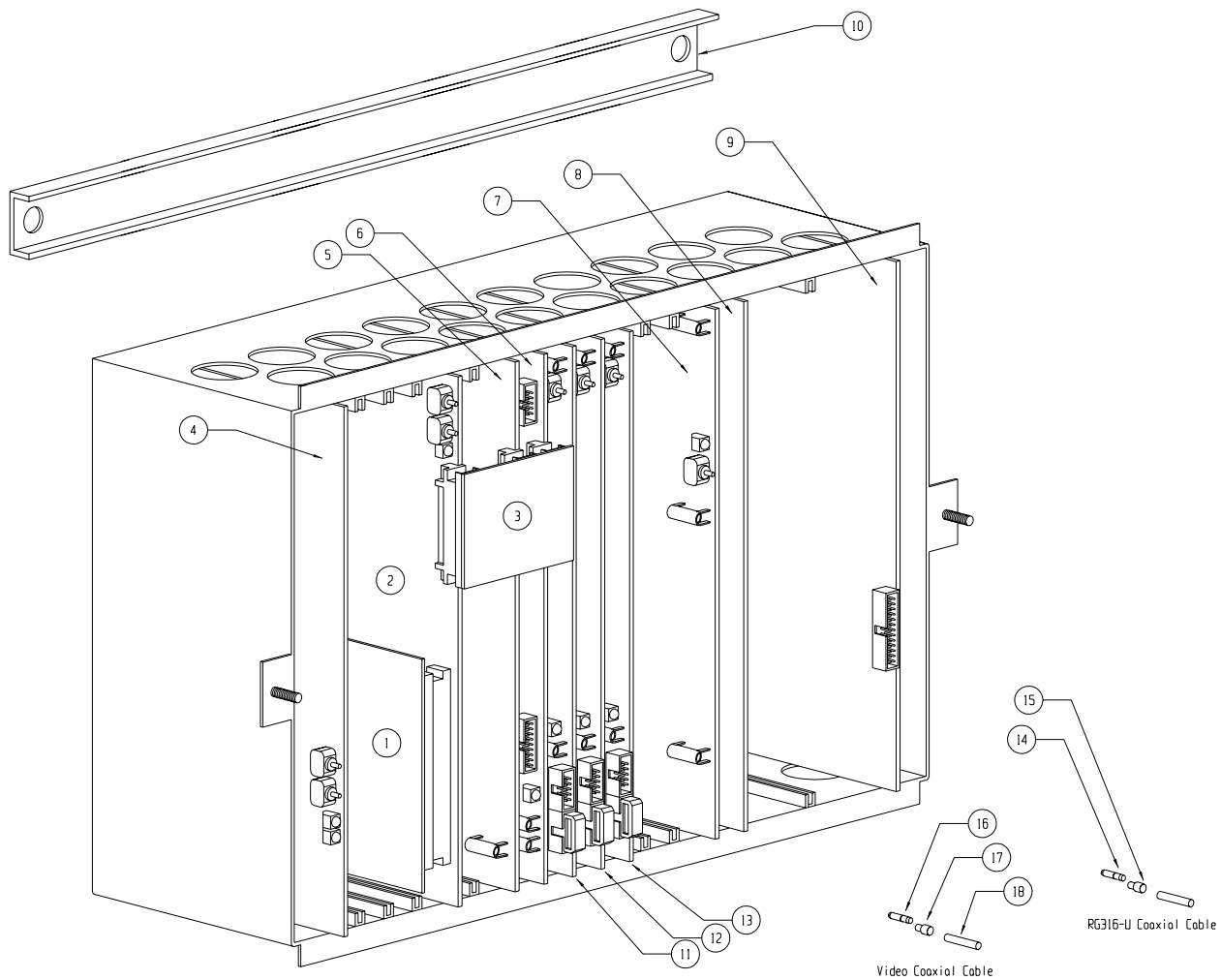
# CNC CABINET ASSEMBLY



**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0005 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0012 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0006 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0014 (AMC)					29	PCB-0009
7	ELE-0074						

# CARD CAGE ASSEMBLY

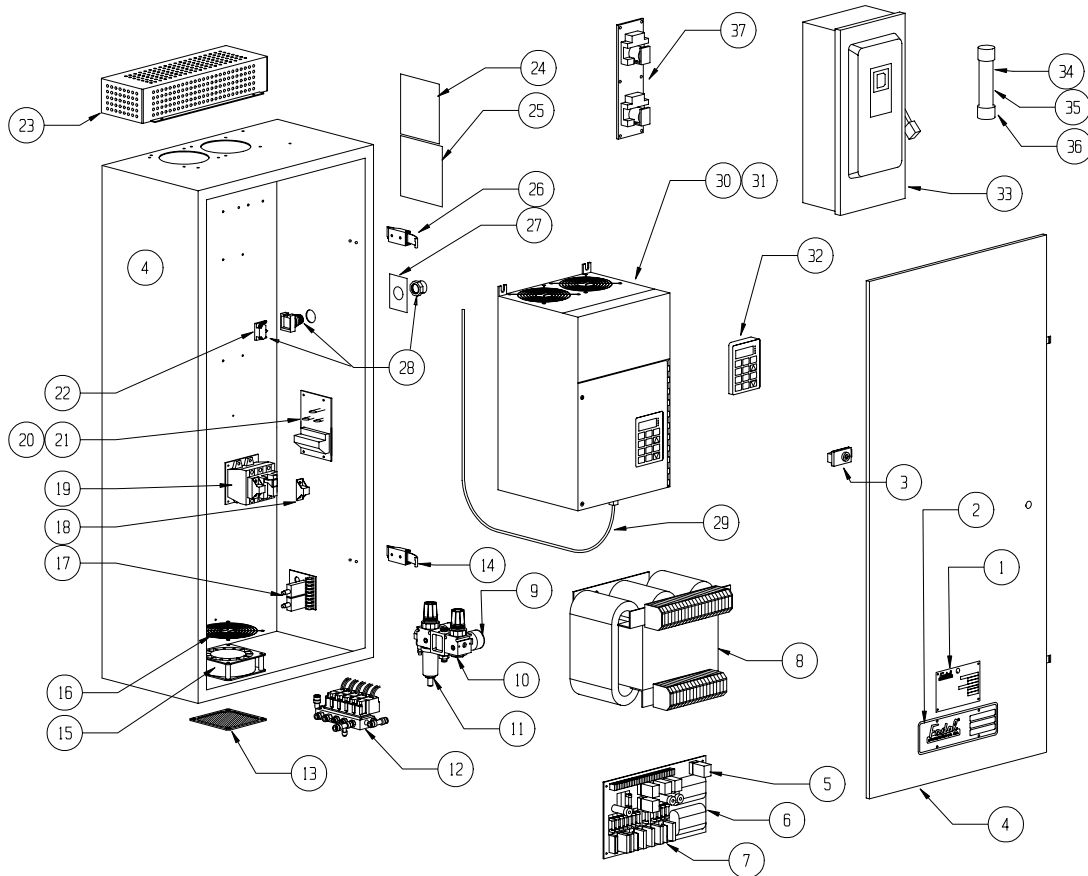


	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

# JUNCTION BOX CABINET ASSEMBLY

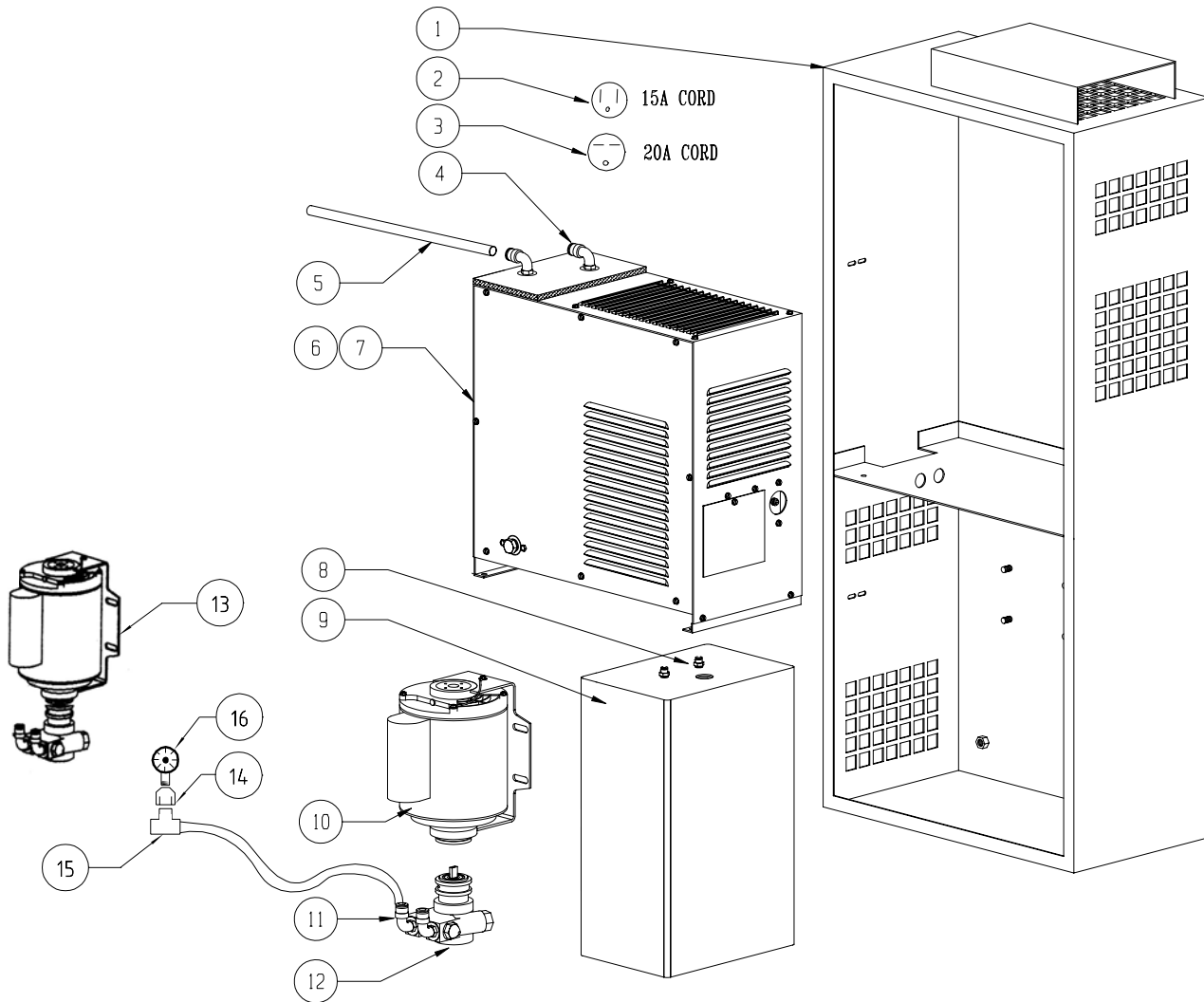
## JUNCTION BOX CABINET ASSEMBLY



## JUNCTION BOX CABINET ASSEMBLY

	PART #		PART #		PART #		PART #
1	LBL-0029	11	REG-0008	21	PCB-0146 (480V)	31	INV-0041
2	LBL-0106	12	VLV-0055 (7.5K)	22	ELE-0093		
			VLV-0054 (10K)			32	INV-0017
3	HDW-0221	13	HDW-0849	23	INV-0001	33	ELE-0139 (60AMP)
4	STM-0051	14	HDW-0216	24	LBL-0037		ELE-0141 (30AMP)
5	ELE-0072	15	ELE-0123	25	LBL-0040	34	ELE-0063 (45A 240V)
6	PCB-0015	16	HDW-0850	26	HDW-0219	35	ELE-0062 (30A 380V)
7	ELE-0070	17	N/A VMC 15/15XT	27	LBL-0038	36	ELE-0060 (20A 480V)
8	ELE-0018	18	ELE-0136	28	ELE-0110	37	WIR-0073
	ELE-0019						
9	REG-0005	19	ELE-0132	29	WIR-0166		
10	REG-0009	20	PCB-0145 (240V)	30	INV-0045 (7.5K)		

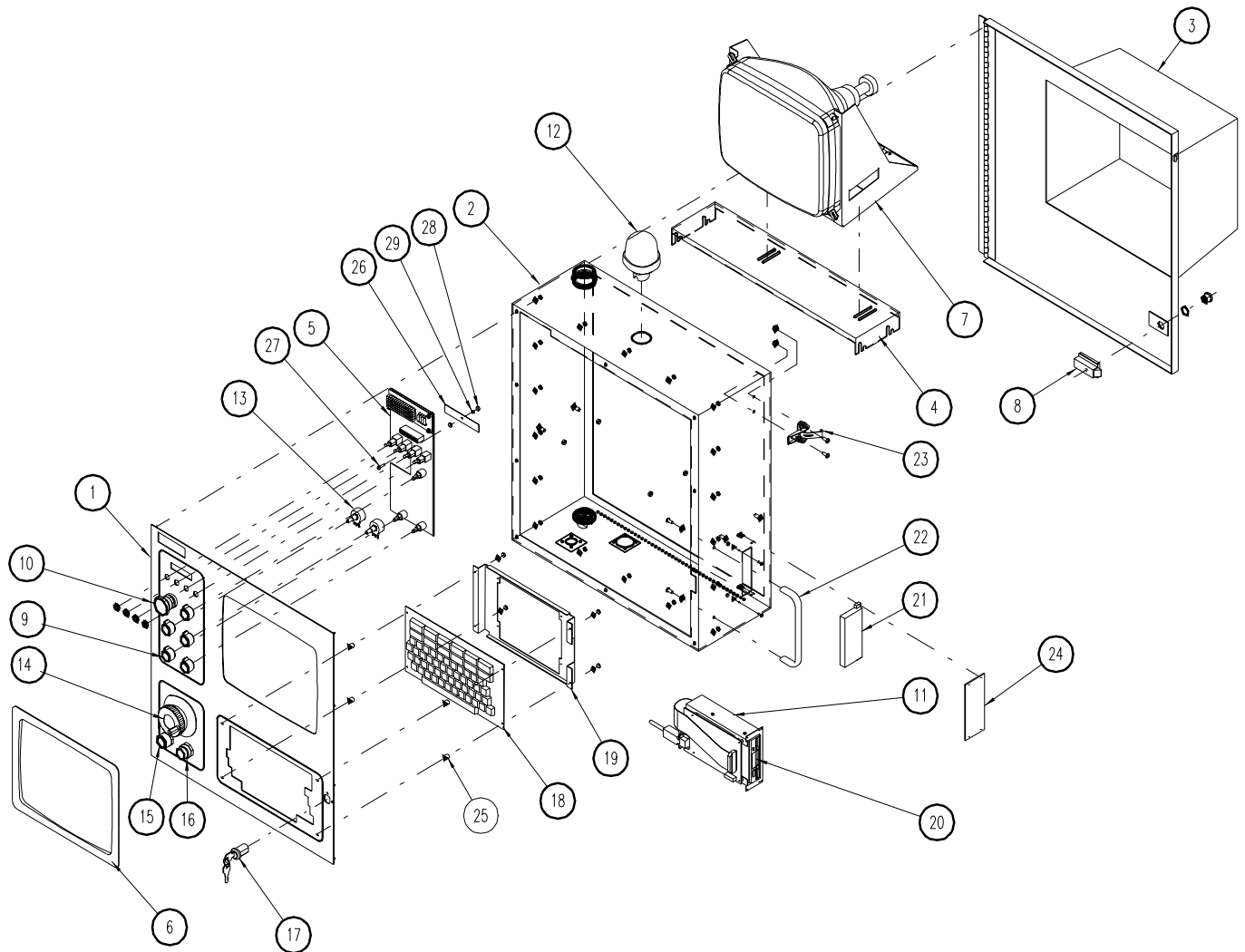
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PMP-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

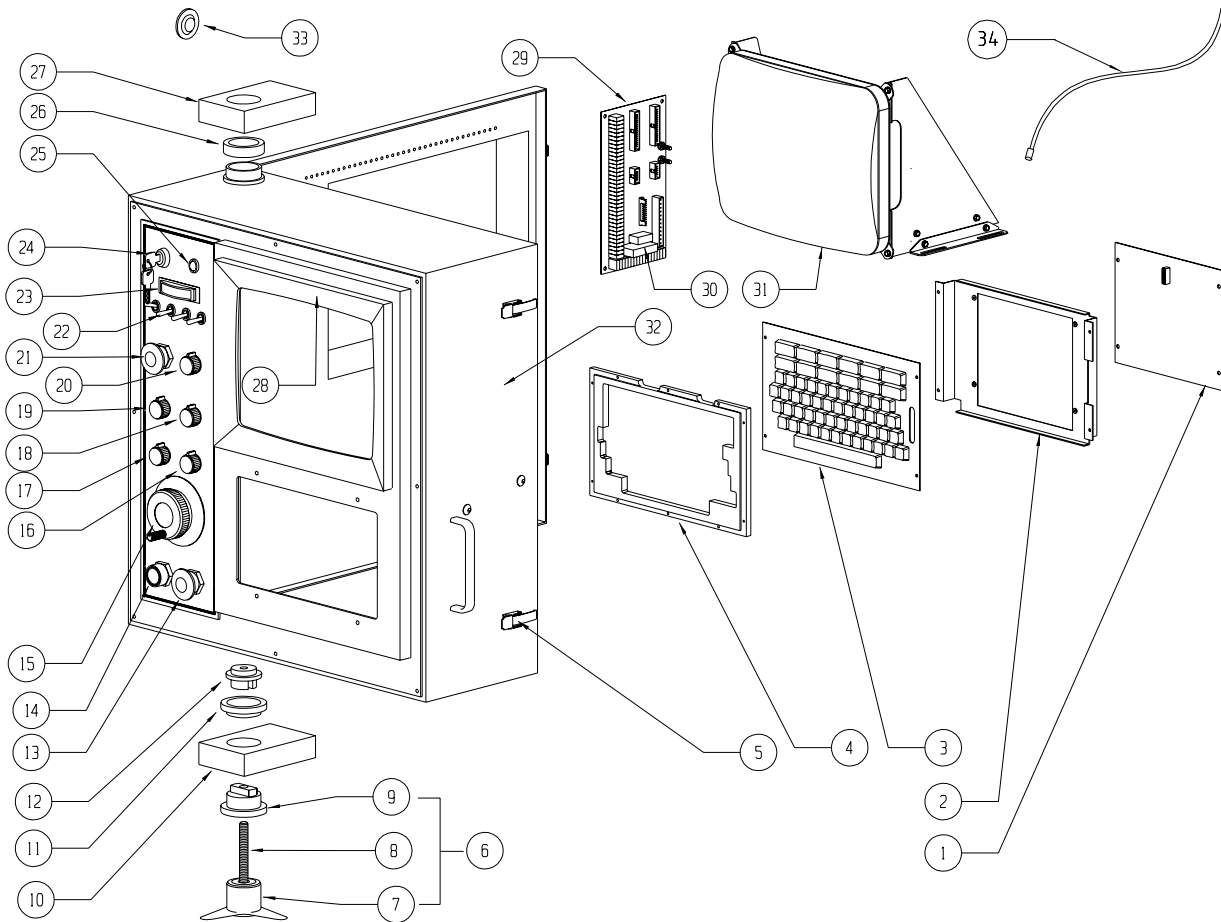
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

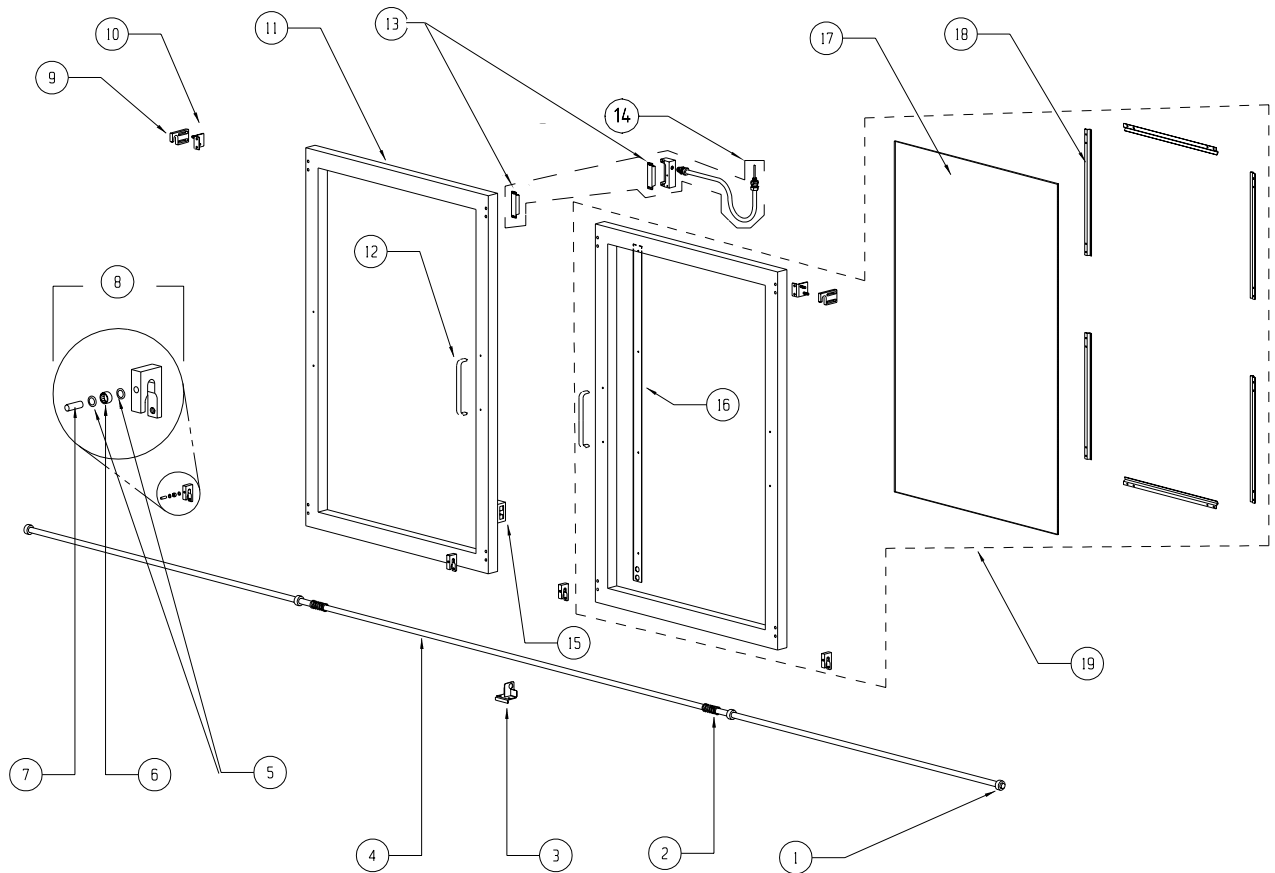
# 88HS PENDANT ASSEMBLY



**88HS PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

# FRONT DOOR ASSEMBLY



## FRONT DOOR ASSEMBLY

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0015	15	DOR-0035 <sup>(3)</sup>
2	HDW-0264	9	DOR-0001		HDW-0863 <sup>(4)</sup>
3	DOR-0019	10	DOR-0000	16	STM-0083
4	DOR-0043	11	DOR-0002	17	DOR-0007
5	HDW-0149	12	HDW-0182	18	STM-0084
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>	19	DOR-0076
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

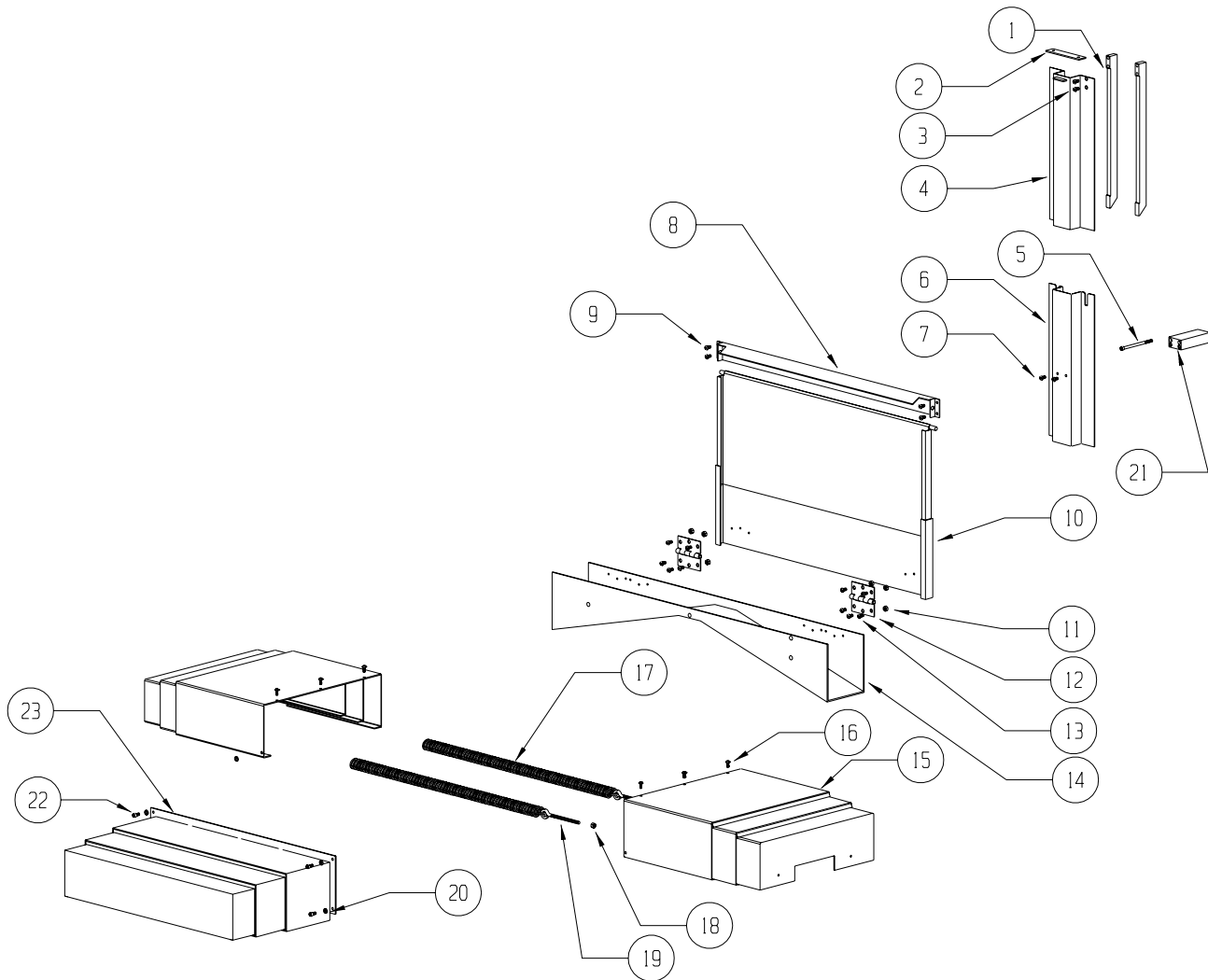
<sup>2</sup>Includes set of two sensors and one block cable

<sup>3</sup>Complete assembly

<sup>4</sup>Latch only



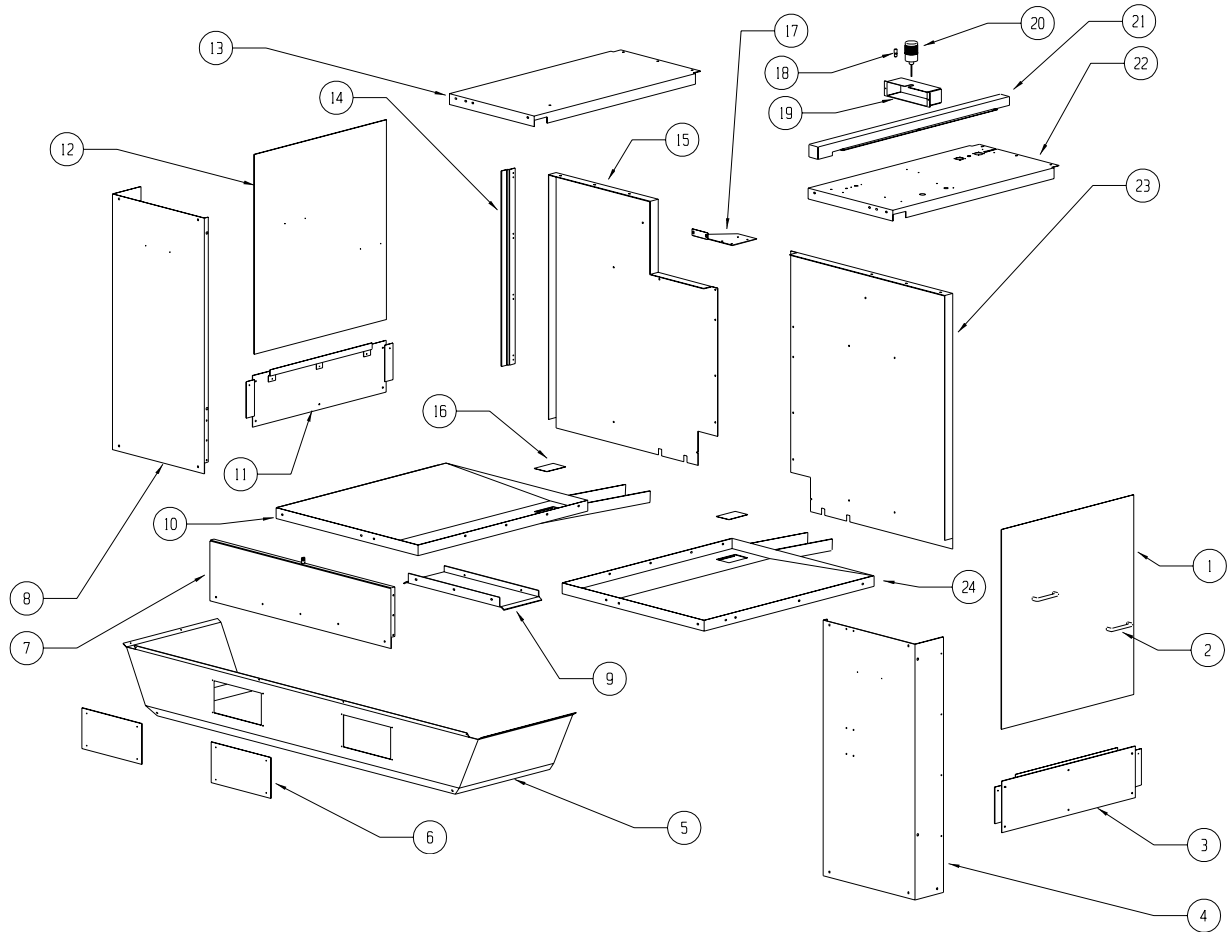
# WAY COVER ASSEMBLY



**WAY COVER ASSEMBLY**

	PART #		PART #		PART #
1	CVR-0031	10	CVR-0042	19	HDW-0016
2	CVR-0030	11	HDW-0337	20	HDW-0279
3	HDW-0324	12	HDW-0192	21	CVR-0036
4	CVR-0034	13	HDW-0346	22	HDW-0281
5	HDW-0490	14	STM-0305	23	CVR-0093
6	CVR-0035	15	CVR-0066		
7	HDW-0603	16	HDW-0346		
8	STM-0164	17	HDW-0261		
9	HDW-0346	18	HDW-0336		

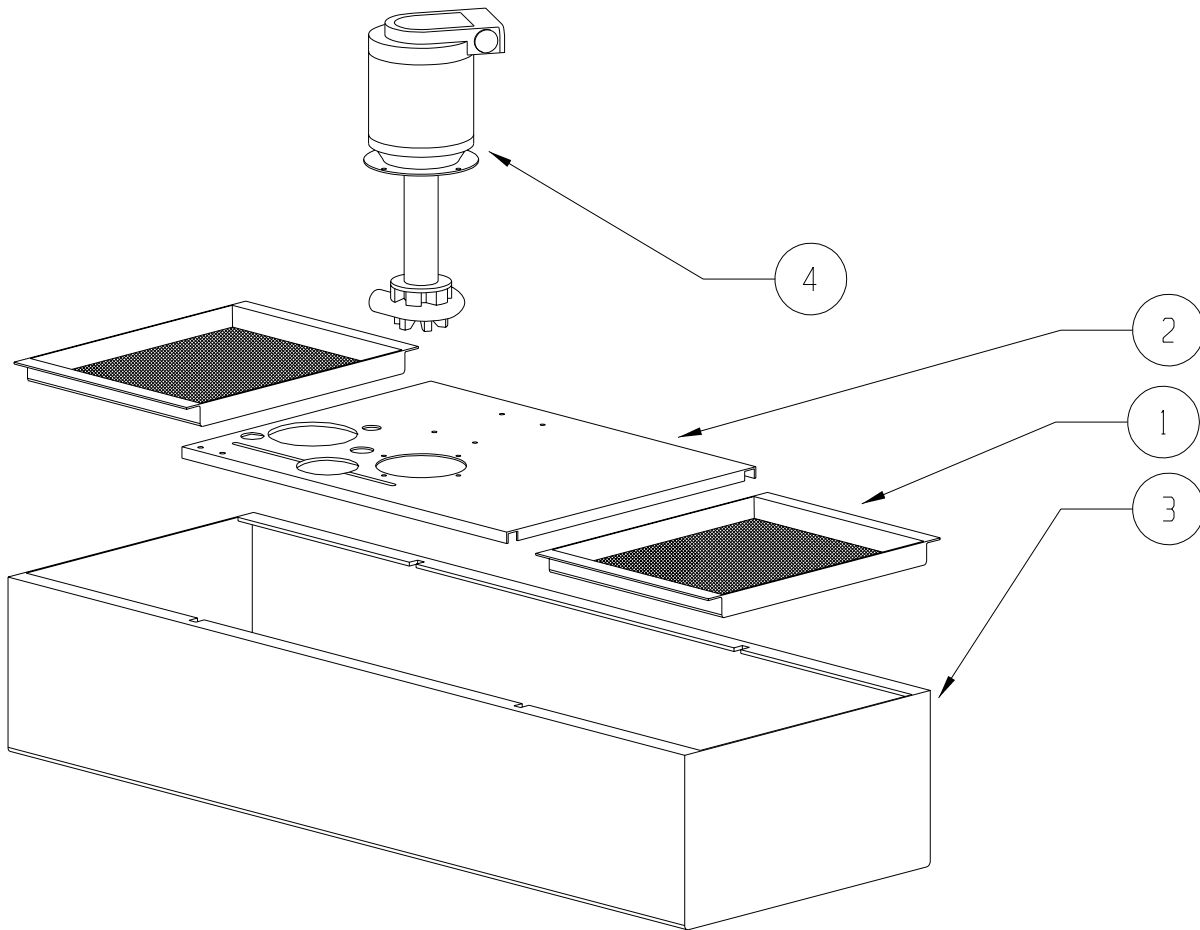
# SHEETMETAL HOUSING



## SHEETMETAL HOUSING

	PART #		PART #		PART #
1	STM-0243	9	STM-0108	17	
2	HDW-0182	10	STM-0076	18	ELE-0122
3	STM-0242	11	STM-0242	19	STM-0342
4	STM-0247	12	STM-0243	20	ELE-0121
5	STM-0239	13	STM-0263	21	STM-0086
6	STM-0228	14	STM-0244	22	STM-0262
7	STM-0079	15	STM-0351	23	STM-0352
8	STM-0247	16	STM-0110	24	STM-0076

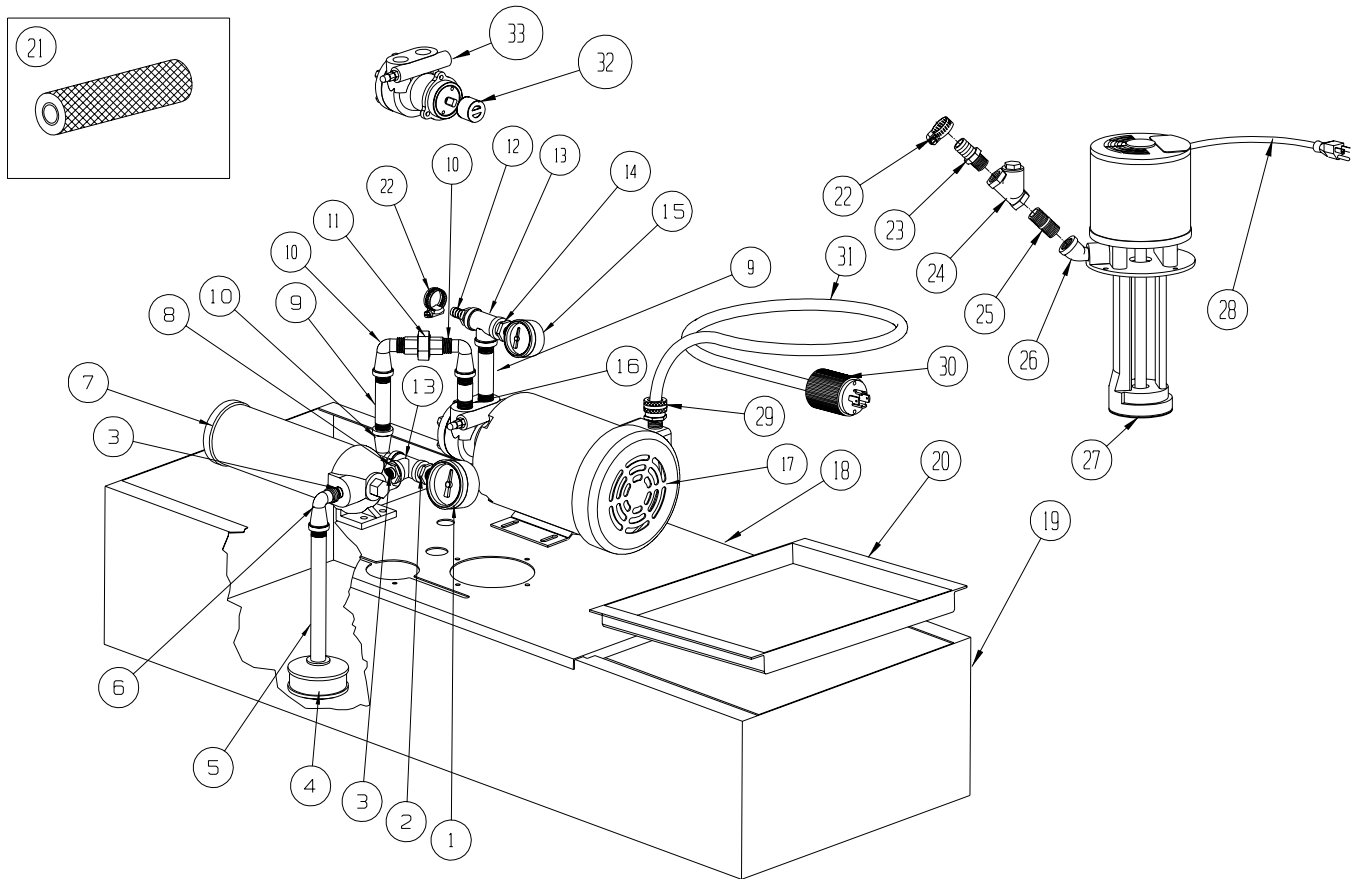
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

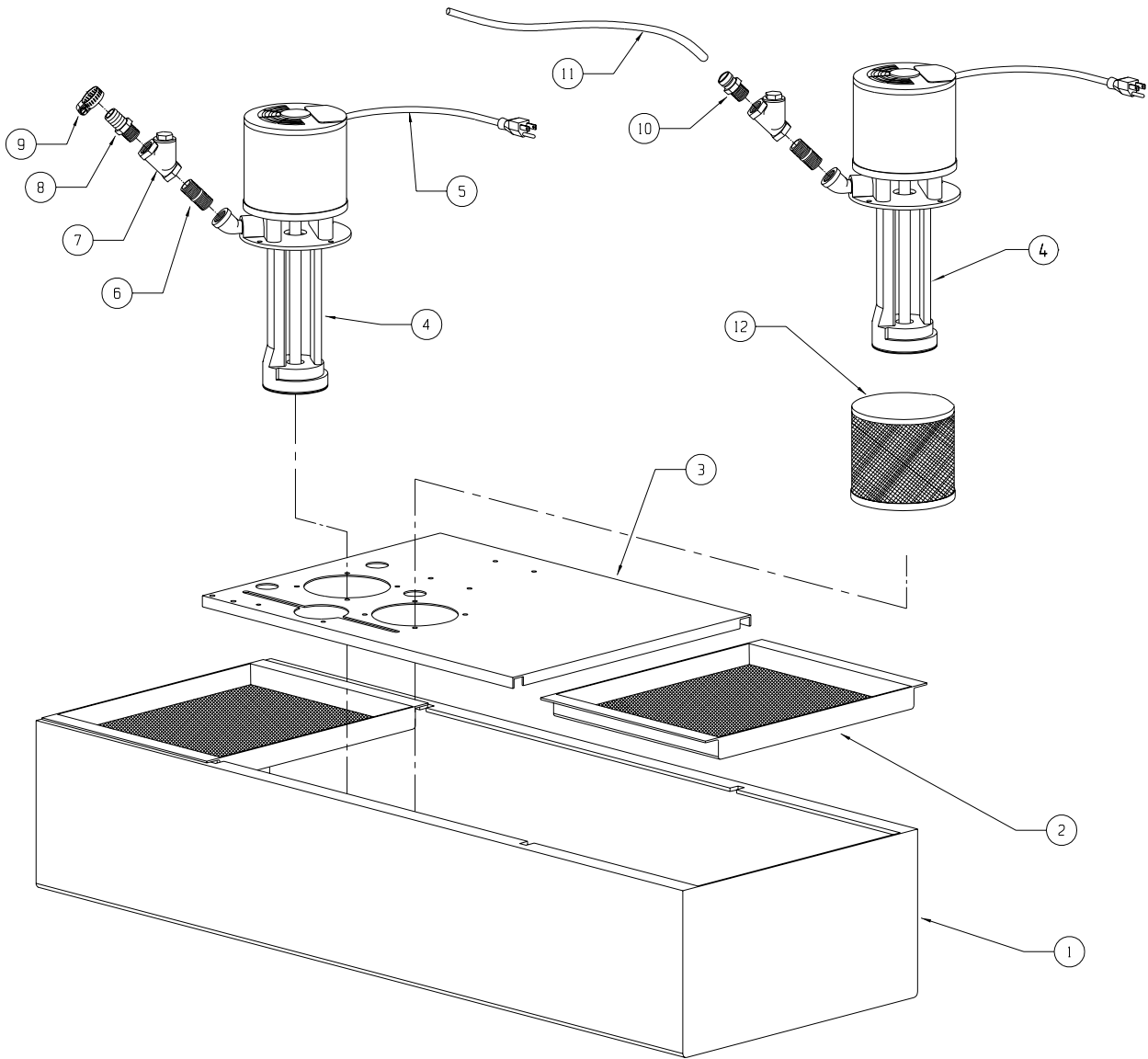
# 7500 RPM COOLANT THRU TANK



**7500 RPM COOLANT THROUGH TANK**

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

# 10K RPM COOLANT TANK



**10,000 RPM COOLANT TANK**

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# TABLE OF CONTENTS

## Parts Manual VMC 4525 MODEL



COLUMN ASSEMBLY .....	2
BASE ASSEMBLY .....	4
SADDLE ASSEMBLY.....	6
10K HEAD ASSEMBLY.....	8
DRAWBAR CYLINDER ASSEMBLY .....	10
ORIENTATION BRIDGE ASSEMBLY .....	11
IDLER ASSEMBLIES .....	12
WAYLUBE PUMP ASSEMBLY .....	13
DUAL ARM TOOL CHANGER .....	14
10K RPM SPINDLE ASSEMBLY .....	15
COOLANT THROUGH SPINDLE.....	16
COOLANT TANK ASSEMBLY .....	18
CARD CAGE ASSEMBLY .....	20
CNC CABINET ASSEMBLY .....	22
CE CNC CABINET .....	24
JUNCTION BOX.....	26
SHEETMETAL ASSEMBLY .....	28



This reference covers the following Fadal products:

Model VMC 4525

Corporate Office .....voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts .....voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support .....voice (818) 727-2100 ..... fax (818) 407-0061

[support@fadal.com](mailto:support@fadal.com)

20701 Plummer Street Chatsworth California 91311 U.S.A.

The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

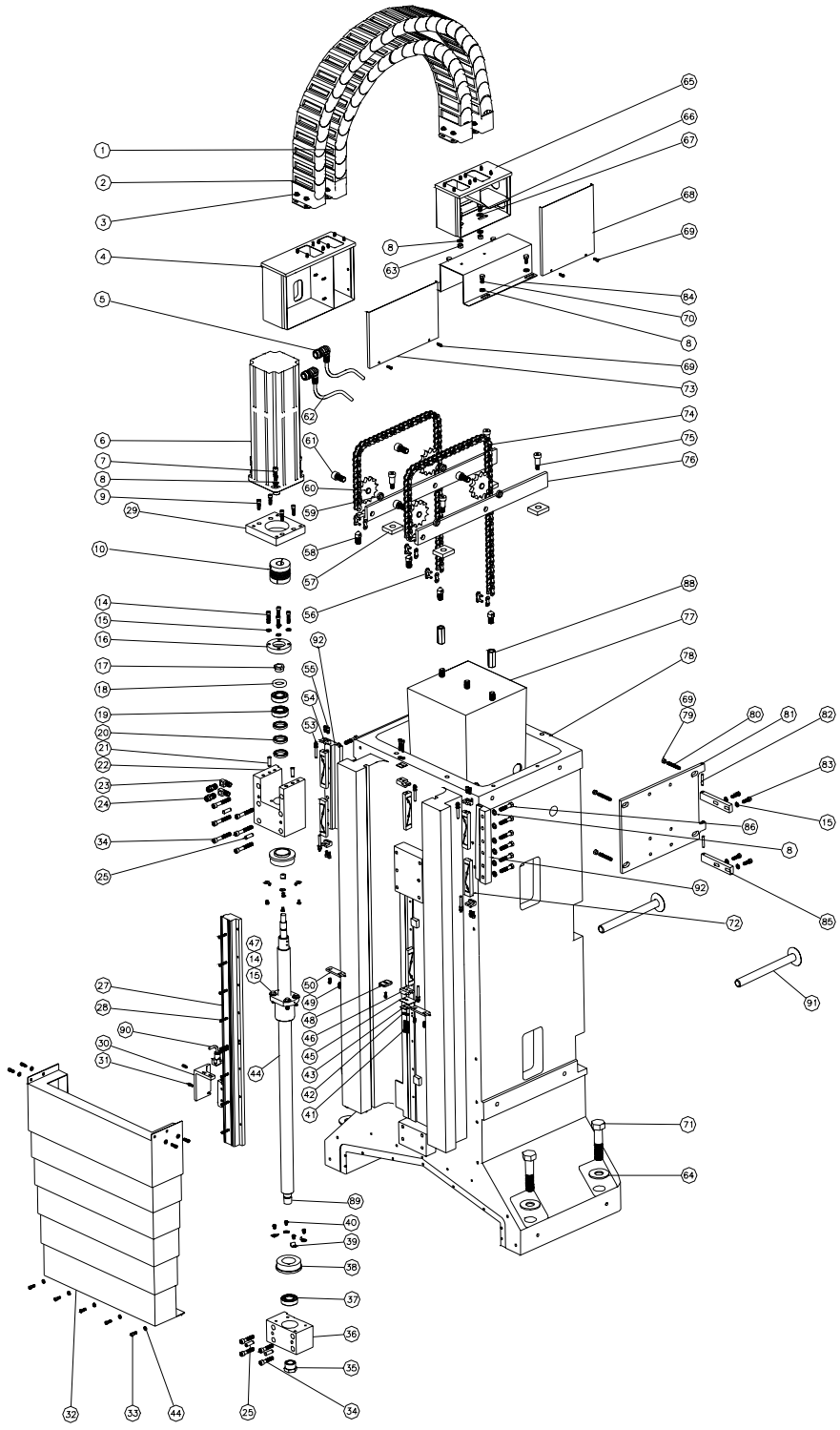
Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.



# COLUMN ASSEMBLY

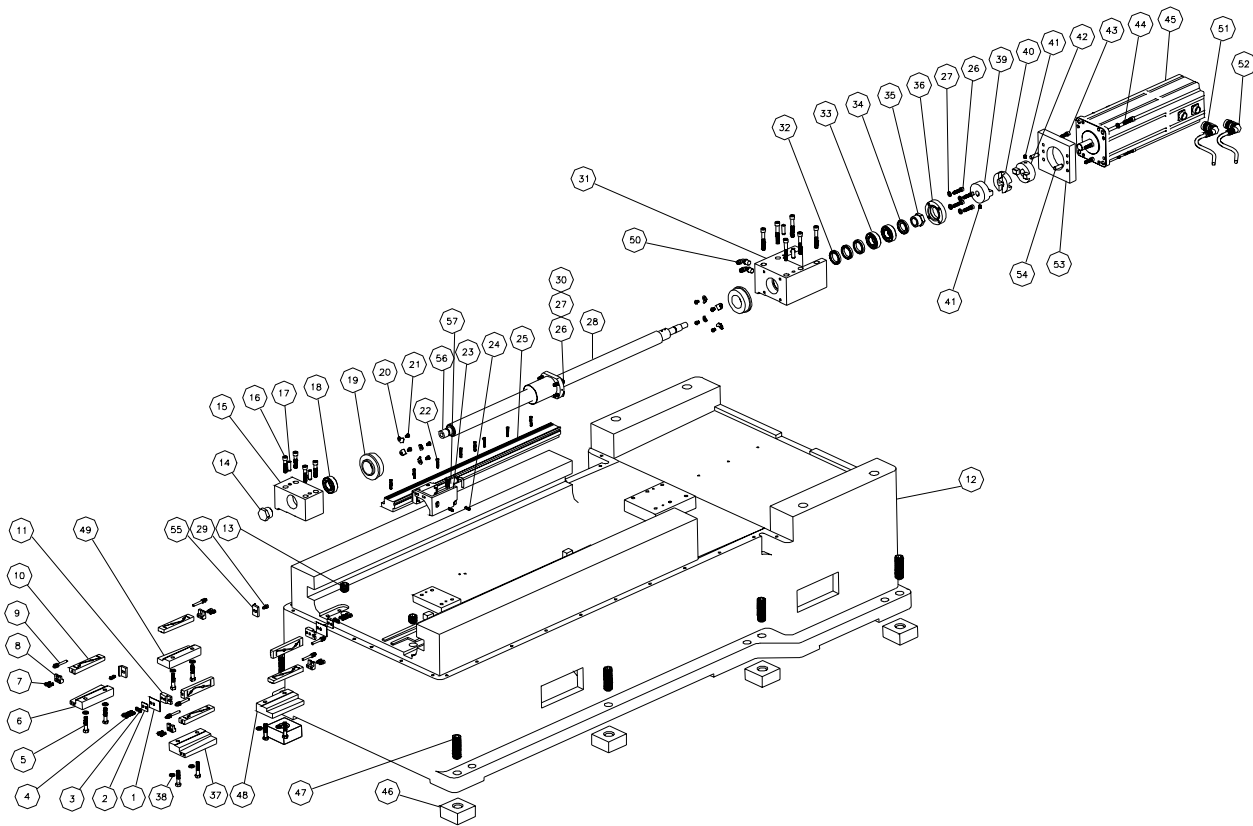


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	CVR-0106	22	BLS-0247	43	STM-0042	64	HDW-1010	85	HDW-0931
2	CVR-0107	23	PLM-0073	44	BLS-0200	65	STM-0334	86	HDW-0570
3	HDW-0337	24	PLM-0088	45	HDW-0355	66	HDW-0562		
4	STM-0301	25	HDW-0330	46	GIB-0010	67	HDW-0049	88	HDW-0335
5	WIR-0611			47	PLM-0034	68	STM-0335	89	BLS-0243
6	MTR-0142	27	SCL-0089	48	CVR-0128	69	HDW-0633	90	SCL-0031
7	HDW-0779	28	HDW-0797	49	HDW-1016	70	HDW-0576	91	HDW-0100
8	HDW-0280	29	BLS-0245	50	CVR-0123	71	HDW-1009	92	GIB-0038
9	HDW-0481	30	SCL-0086			72	GIB-0037		
10	MTR-0189	31	HDW-0090			73	STM-0300		
		32	CVR-0117	53	GIB-0013	74	HDW-0999		
		33	HDW-0346	54	GIB-0012	75	HDW-0600		
		34	HDW-0474	55	HDW-0295	76	CWT-0025		
14	HDW-0315	35	BLS-0049	56	HDW-0204	77	CWT-0020		
15	HDW-0281	36	BLS-0246	57	HDW-0363	78	COL-0026		
16	BLS-0240	37	BRG-0022	58	CWT-0001	79	HDW-0640		
17	BLS-0047	38	BLS-0197	59	CWT-0021	80	HDW-0952		
18	HDW-0210	39	STM-0905	60	PUL-0034	81	STM-0705		
19	BRG-0024	40	HDW-0347	61	HDW-0777	82	HDW-0330		
20	HDW-0213	41	HDW-0296	62	WIR-0162	83	HDW-0314		
21	HDW-0619	42	HDW-0279	63	HDW-0333	84	STM-0919		

# BASE ASSEMBLY



**BASE ASSEMBLY**

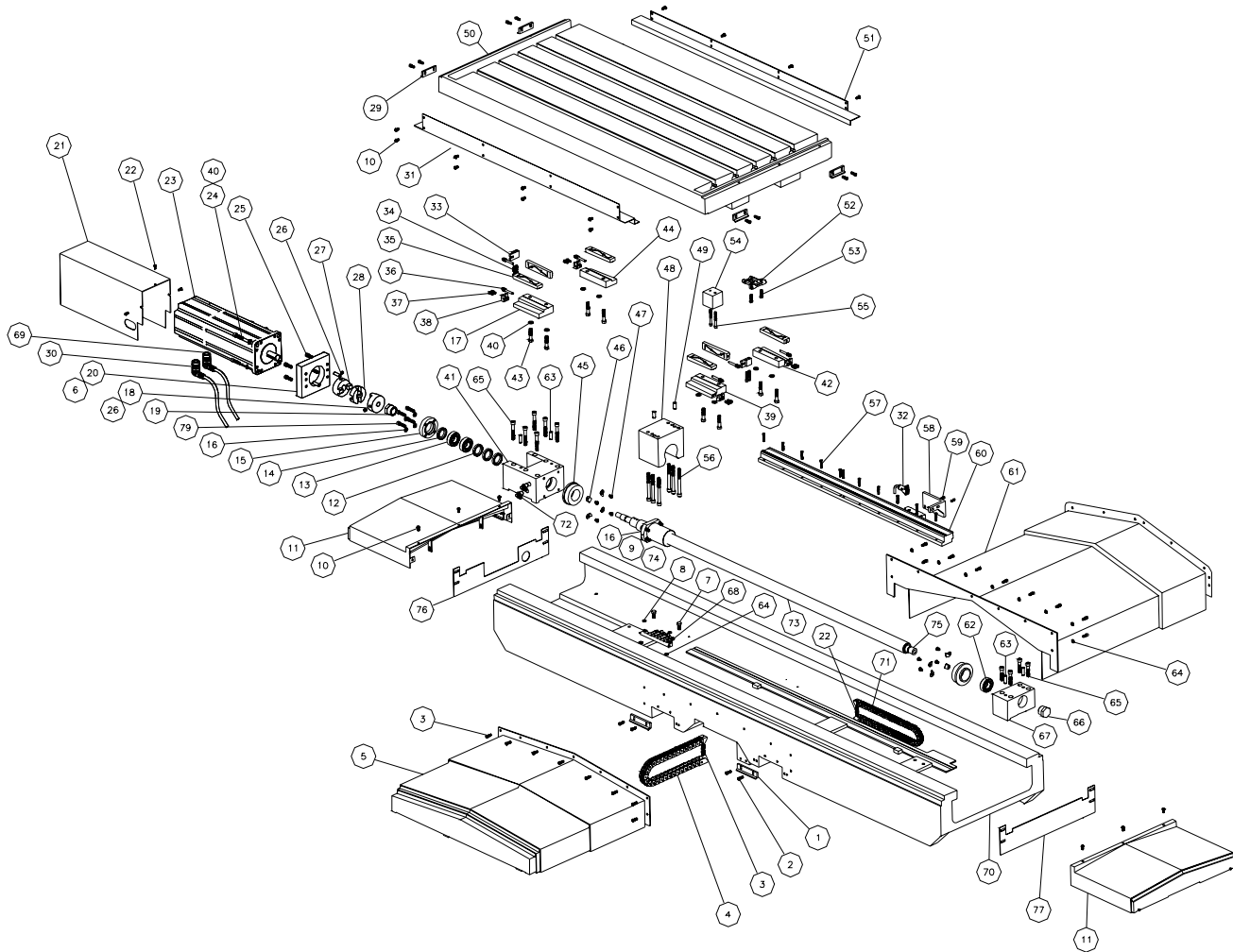
	PART #		PART #		PART #		PART #		PART #
1	HDW-0355	13	HDW-0434	25	SCL-0096	37	GIB-0027	49	GIB-0025
2	STM-0042	14	BLS-0049	26	HDW-0315	38	HDW-0280	50	PLM-0112
3	HDW-0279	15	BLS-0246	27	HDW-0281	39	MTR-0157	51	WIR-0663
4	HDW-0296	16	HDW-0474	28	BLS-0261	40	MTR-0156	52	WIR-0664
5	HDW-0569	17	HDW-0330	29	HDW-1016	41	HDW-0419	53	BLS-0245
6	GIB-0026	18	BRG-0022	30	PLM-0034	42	MTR-0158	54	HDW-0619
7	HDW-0295	19	BLS-0197	31	BLS-0247	43	HDW-0481	55	CVR-0128
8	GIB-0012	20	STM-0905	32	HDW-0213	44	HDW-0779	56	BLS-0266
9	GIB-0013	21	HDW-0347	33	BRG-0024	45	MTR-0142	57	SCL-0031
10	GIB-0033	22	HDW-0797	34	HDW-0210	46	PLC-0063		
11	GIB-0010	23	SCL-0085	35	BLS-0047	47	HDW-0432		
12	BAS-0032	24	HDW-0090	36	BLS-0240	48	GIB-0028		



This page intentionally left blank.



# SADDLE ASSEMBLY

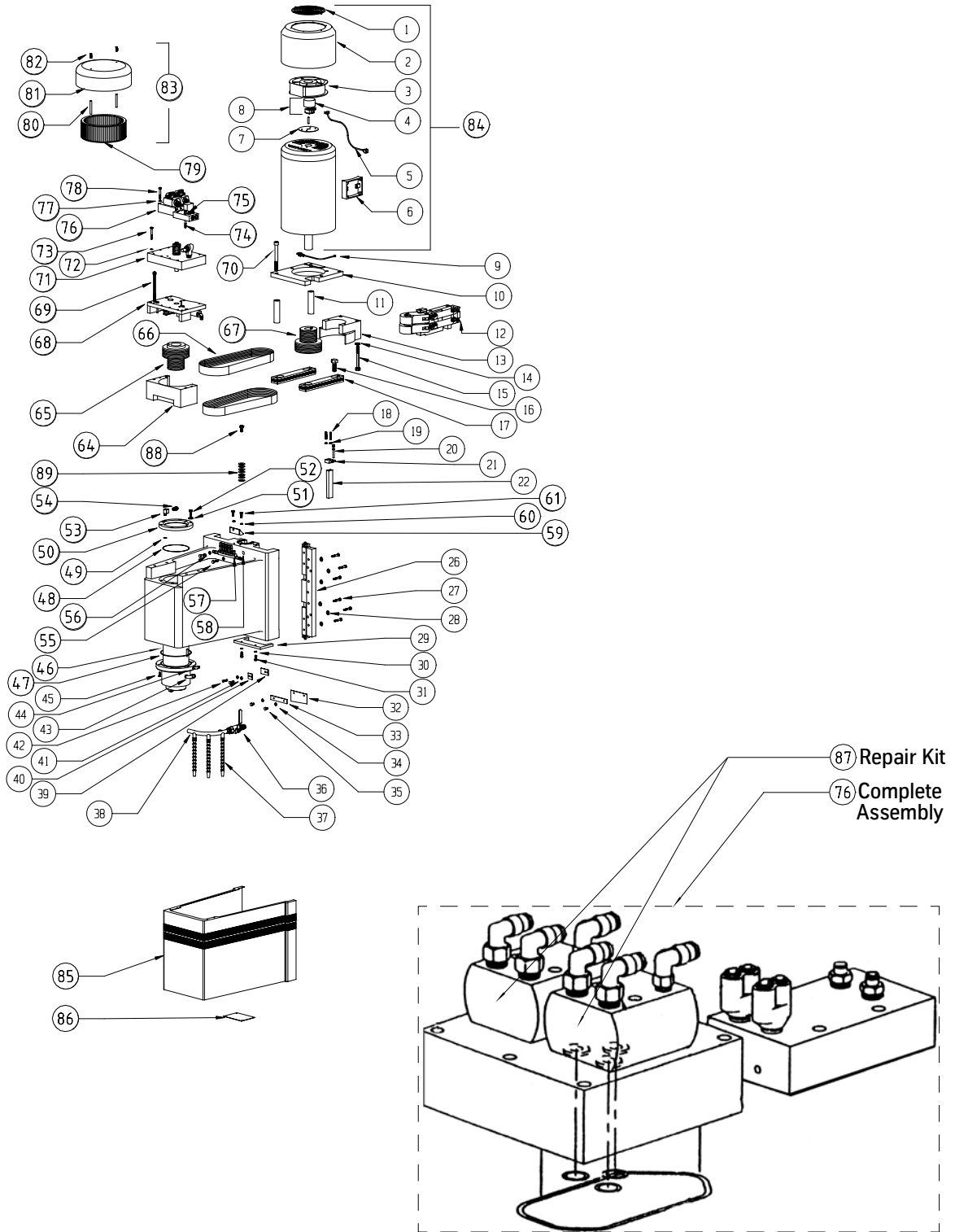


# SADDLE ASSEMBLY

## SADDLE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	CVR-0122	17	GIB-0027	33	GIB-0011	49	HDW-0622	65	HDW-0474
2	HDW-1016	18	MTR-0157	34	HDW-0296	50	TBL-0032	66	BLS-0049
3	HDW-0581	19	BLS-0047	35	GIB-0033	51	STM-1036	67	BLS-0246
4	CVR-0116	20	BLS-0245	36	GIB-0013	52	LUB-0044	68	LUB-0043
5	CVR-0143	21	CVR-0126	37	HDW-0295	53	HDW-0318	69	WIR-0677
6	HDW-0619	22	HDW-0349	38	GIB-0013	54	SCL-0084	70	SDL-0059
7	HDW-0576	23	MTR-0142	39	GIB-0028	55	HDW-0489	71	CVR-0176
8	HDW-0047	24	HDW-0779	40	HDW-0280	56	HDW-0477	72	PLM-0112
9	HDW-0281	25	HDW-0481	41	BLS-0247	57	HDW-0797	73	BLS-0260
10	HDW-0346	26	HDW-0419	42	GIB-0025	58	SCL-0085	74	PLM-0034
11	CVR-0142	27	MTR-0158	43	HDW-0569	59	HDW-0090	75	BLS-0265
12	HDW-0213	28	MTR-0156	44	GIB-0026	60	SCL-0097	76	STM-1040
13	BRG-0024	29	CVR-0124	45	BLS-0197	61	CVR-0144	77	STM-1041
14	HDW-0210	30	WIR-0676	46	STM-0905	62	BRG-0022		
15	BLS-0240	31	STM-1035	47	HDW-0347	63	HDW-0330		
16	HDW-0315	32	SCL-0095	48	BLS-0244	64	HDW-0279		

# 10K HEAD ASSEMBLY



# 10K HEAD ASSEMBLY

## 10,000 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	22	GIB-0001 <sup>(1)</sup>	47	HDW-0181	71	DRB-0000
2	STM-0139	26	GIB-0004 <sup>(1)</sup>	48	HDW-0148	72	HDW-0279
3	ELE-0124	27	HDW-0791	49	HDW-0177	73	HDW-0320
4	MTR-0123	28	HDW-0280	50	SPN-0042	74	HDW-0321
5	WIR-0168	29	CVR-0048	51	HDW-0275	75	HDW-0279
6	MTR-0058	30	HDW-0279	52	HDW-0568	76	HYD-0017
7	STM-0148	31	HDW-0322	53	PLM-0075	77	HDW-0279
8	ENC-0007	32	HDW-0356	54	PLM-0088	78	HDW-0320
9	HDW-0369	33	STM-0052	55	HDW-0576	79	MTR-0127
10	MTR-0069	34	HDW-0279	56	HDW-0279	80	SVT-0108
11	MTR-0149	35	HDW-0319	57	LUB-0045	81	STM-0467
12	IDL-0003	36	VLV-0017	58	HDW-0047	82	HDW-0597
13	BEL-0015	37	PLM-0016	59	STM-0142	83	MTR-0128
14	HDW-0451	38	CNT-0039	60	HDW-0279	84	MTR-0047 <sup>(3)</sup>
15	HDW-0311	39	HDW-0355	61	HDW-0322	85	STM-0888
16	HDW-0283	40	STM-0042	64	BEL-0014	86	STM-0064
17	MTR-0068	41	HDW-0279	65	PUL-0018	87	HYD-0018
	MTR-0064	42	HDW-0294	66	BEL-0003	88	HDW-0553
18	HDW-0294	43	PLM-0112	67	PUL-0019	89	HDW-0194
19	HDW-0279	44	PLM-0034	68	ORB-0001		
20	GIB-0013	45	HDW-0470	69	HDW-0290		
21	GIB-0010	46	SPN-0007 <sup>(2)</sup>	70	HDW-0284		

<sup>1</sup>Specify gib size when ordering.

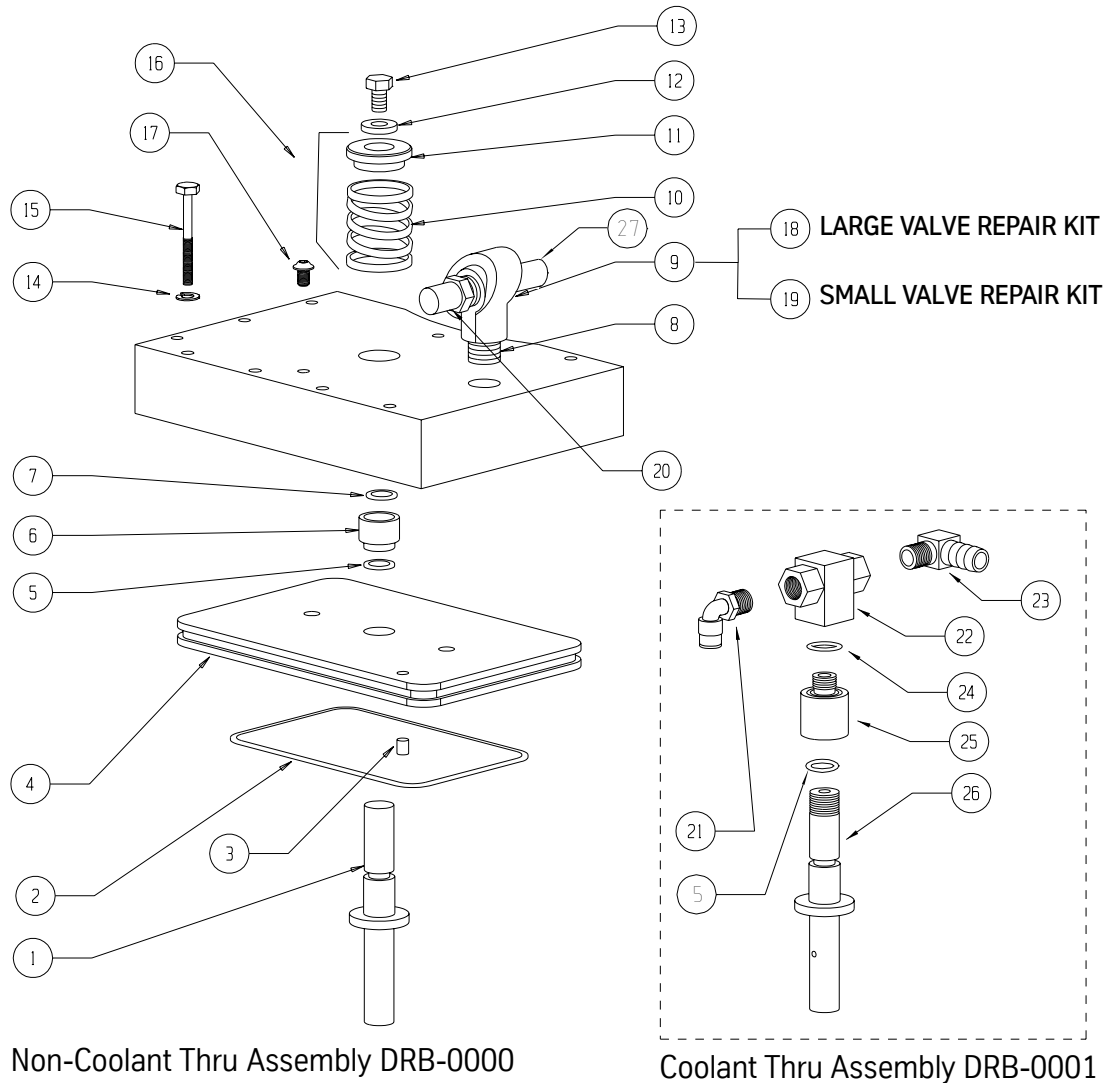
<sup>2</sup>SPN-0007 Includes: HDW-0181, HDW-0177, HDW-0148, PUL-0018.

<sup>3</sup>MTR-0047 and MTR-0043 include PUL-0019.

HT=High Torque



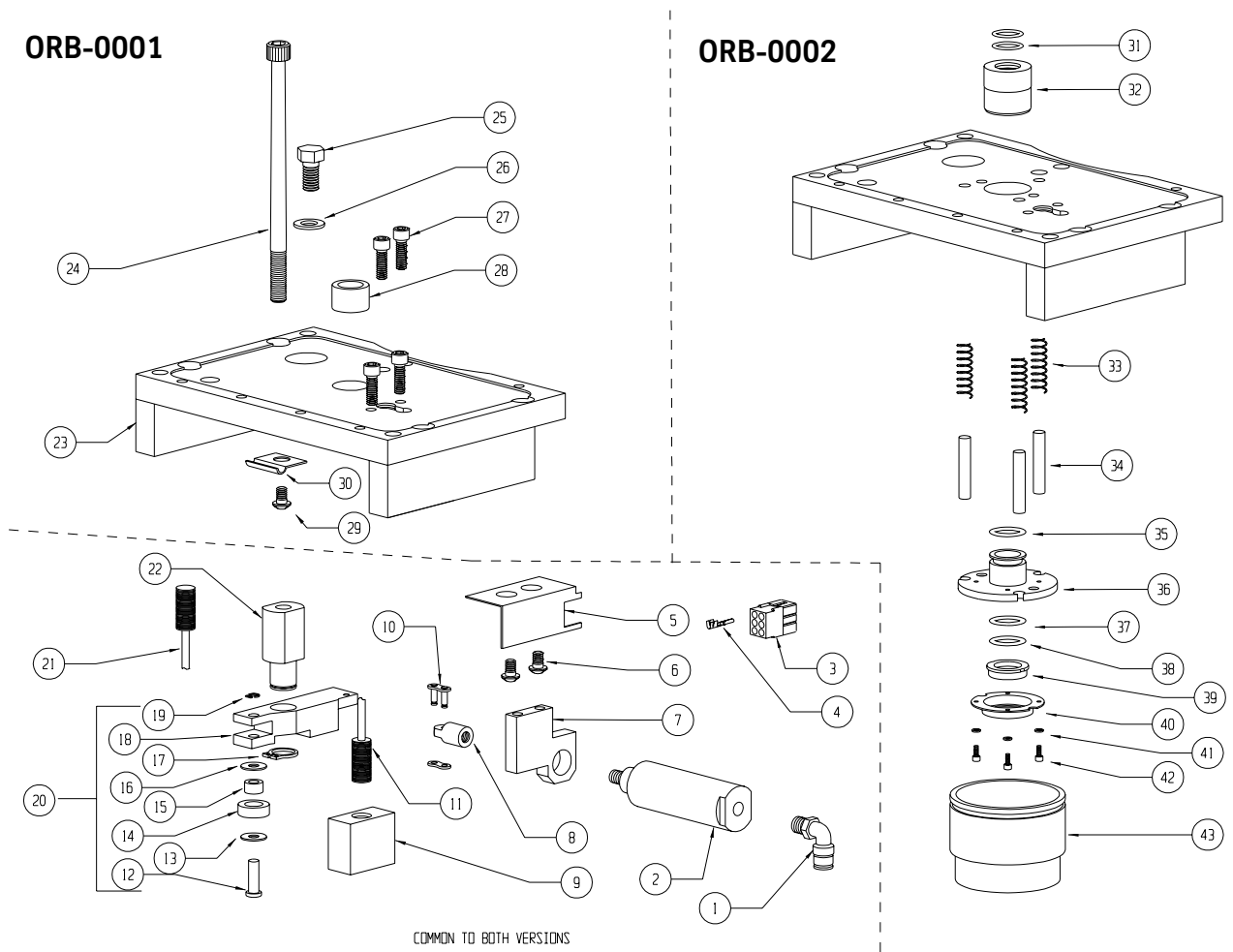
# DRAWBAR CYLINDER ASSEMBLY



## DRAWBAR CYLINDER ASSEMBLIES

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

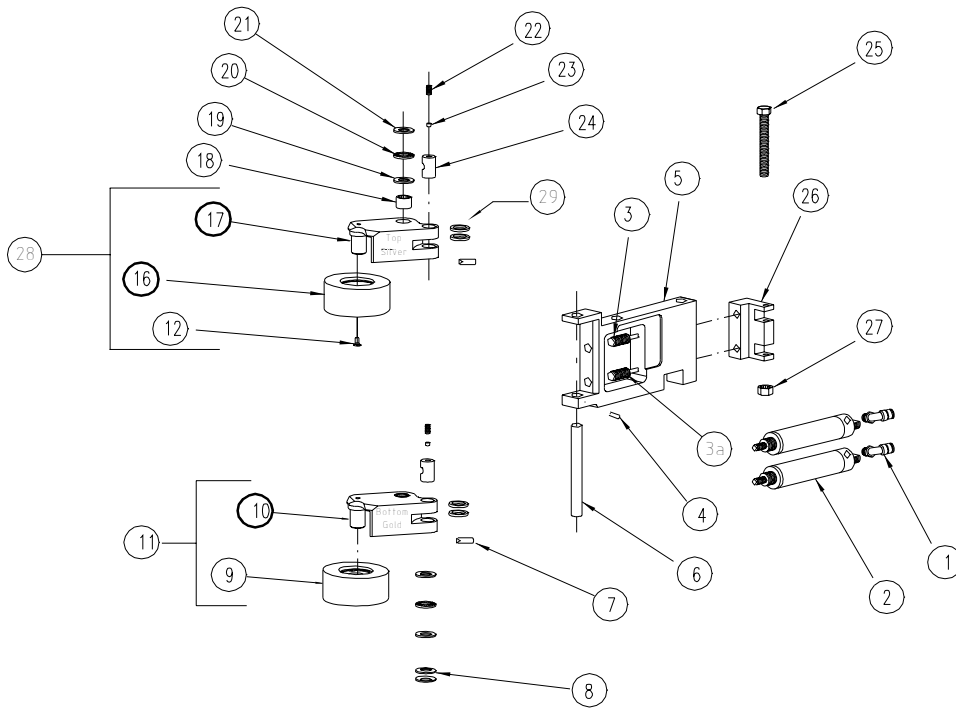
# ORIENTATION BRIDGE ASSEMBLY



### ORIENTATION BRIDGE ASSEMBLIES

	PART#		PART#		PART#		PART#		PART#
1	PLM-0034	8	ORB-0011	18	ORB-0031	28	BRG-0008	38	HDW-0156
2	CYL-0007	9	ORB-0014	19	HDW-0726	29	HDW-0349	39	CNT-0033
3	WIR-0051	10	HDW-0209	20	ORB-0004	30	LUB-0077	40	CNT-0045
4	WIR-0043 (16 AWG)	11	ELE-0145	21	ELE-0145	31	HDW-0150	41	HDW-0453
	WIR-0044 (16 AWG)	12	ORB-0007	22	ORB-0013	32	CNT-0042	42	HDW-0308
	WIR-0544 (22 AWG)	13	HDW-0515	23	ORB-0008	33	HDW-0257	43	CNT-0140
	WIR-0056 (22 AWG)	14	ORB-0009	24	HDW-0285	34	HDW-0326		
5	STM-0596	15	BRG-0014	25	HDW-0571	35	HDW-0156		
6	HDW-0347	16	HDW-0515	26	HDW-0048	36	CNT-0041		
7	ORB-0030	17	HDW-0725	27	HDW-0298	37	HDW-0155		

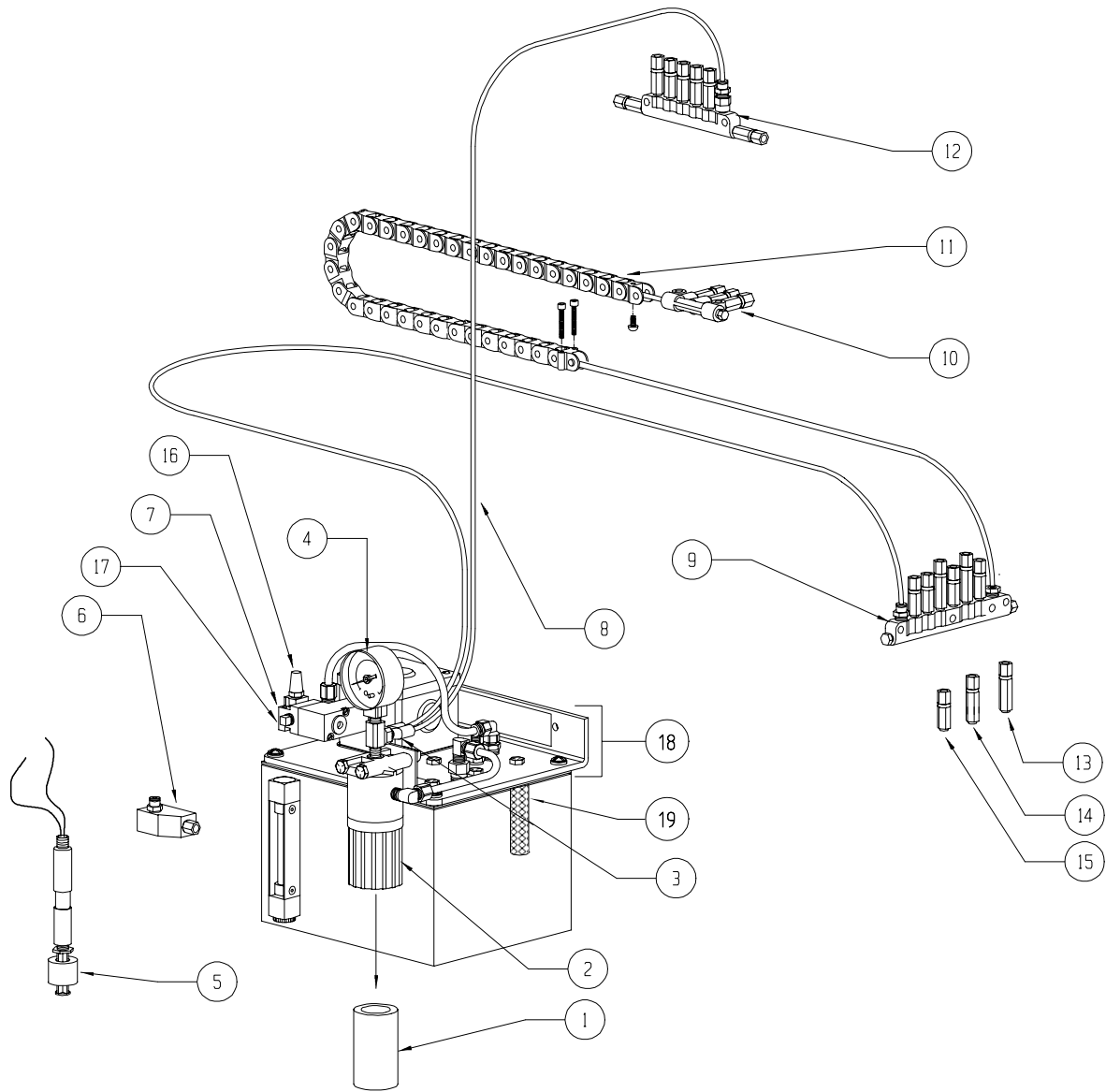
# IDLER ASSEMBLIES



**10,000 RPM OPTION**

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

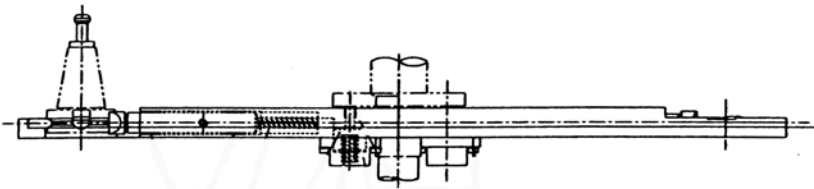
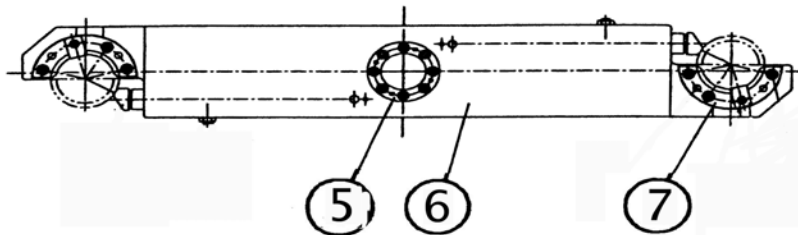
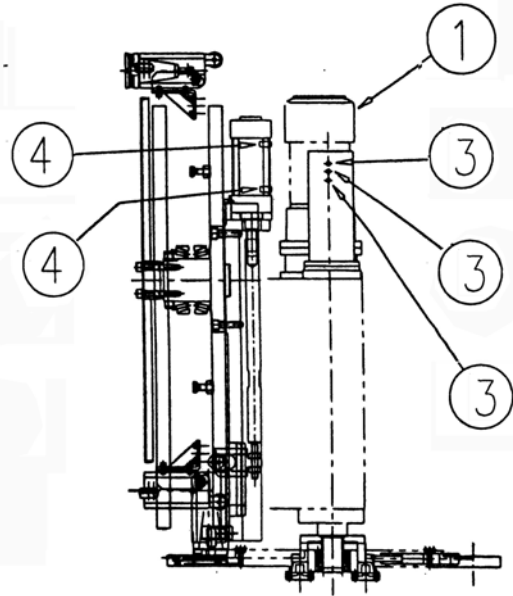
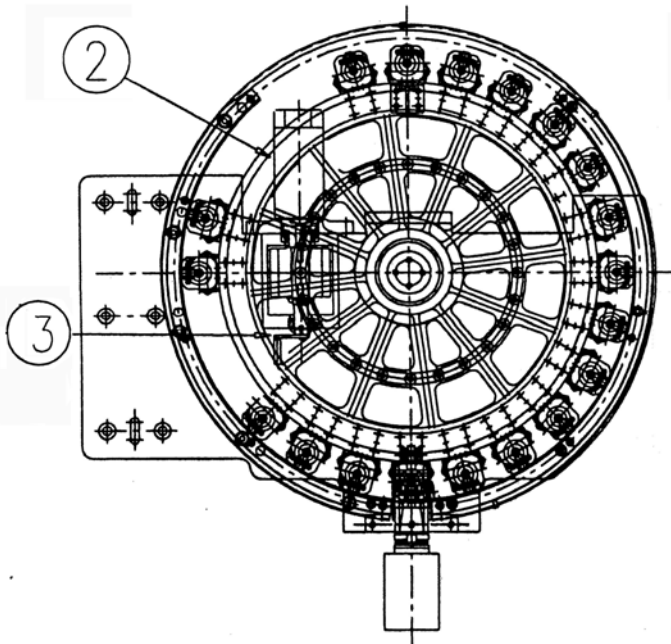
# WAYLUBE PUMP ASSEMBLY



**WAYLUBE PUMP ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		

# DUAL ARM TOOL CHANGER



### DUAL ARM TOOL CHANGER

	PART #
1	MTR-0181
2	MTR-0180
3	ELE-1185
4	ELE-1186
5	ATC-0155
6	ATC-0164
7	(BT) ATC-0163
7	(BT) ATC-0165

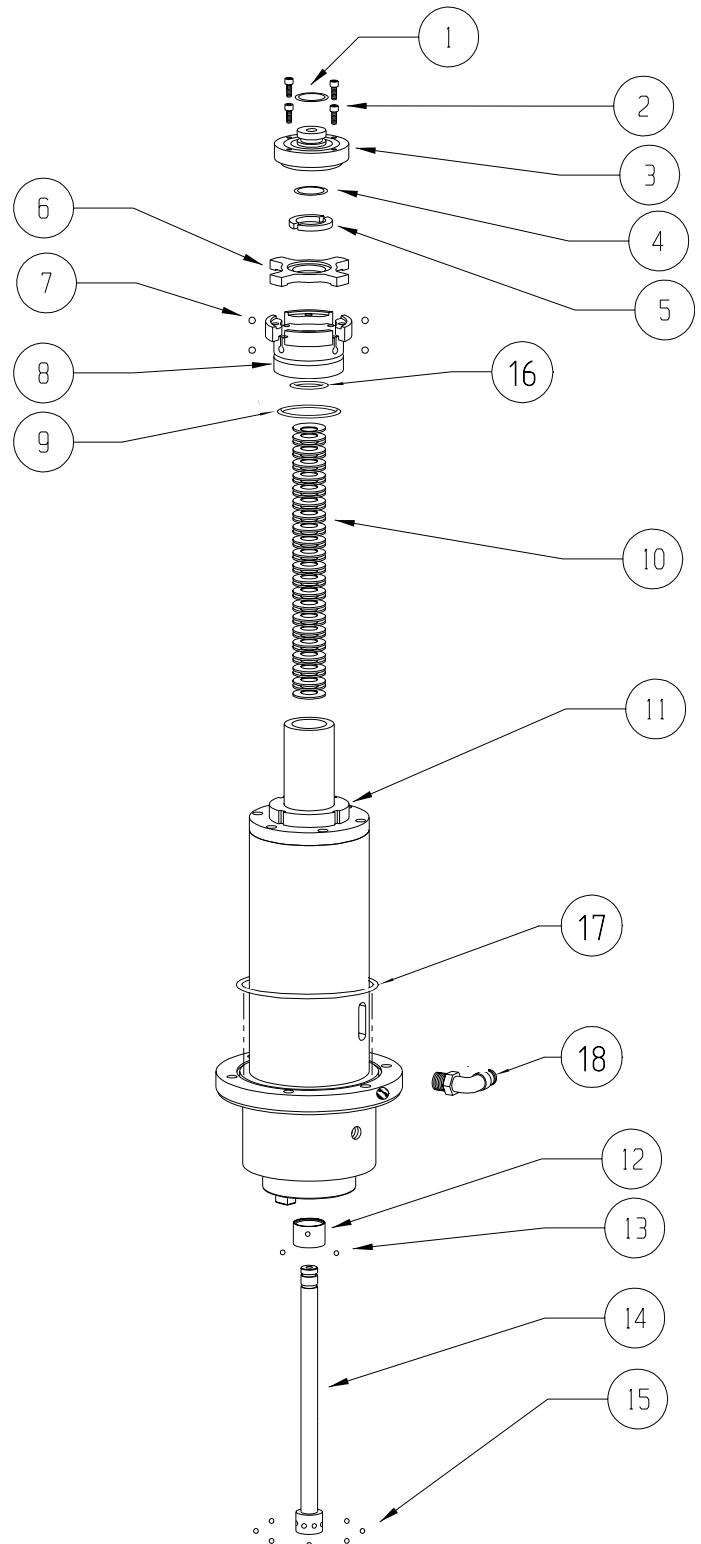
# 10K RPM SPINDLE ASSEMBLY

**10,000 RPM SPINDLE ASSEMBLY**

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

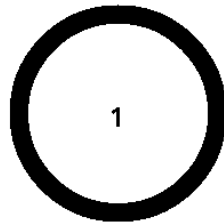
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



1  
HDW-0158



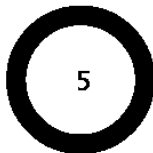
2  
HDW-0177



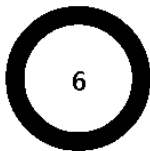
3  
HDW-0150



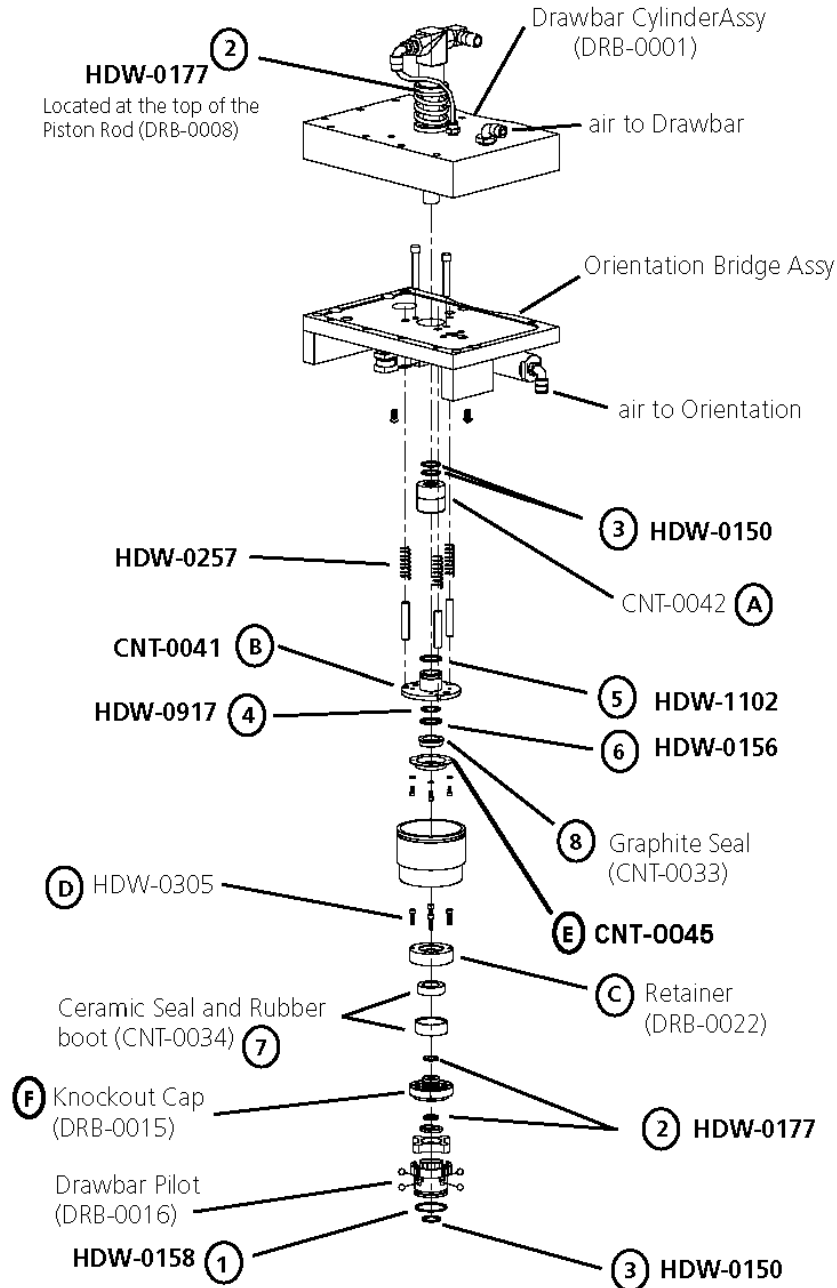
4  
HDW-0917



5  
HDW-1102



6  
HDW-0156



CNT-0150 O'RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8  
 AND A-F)

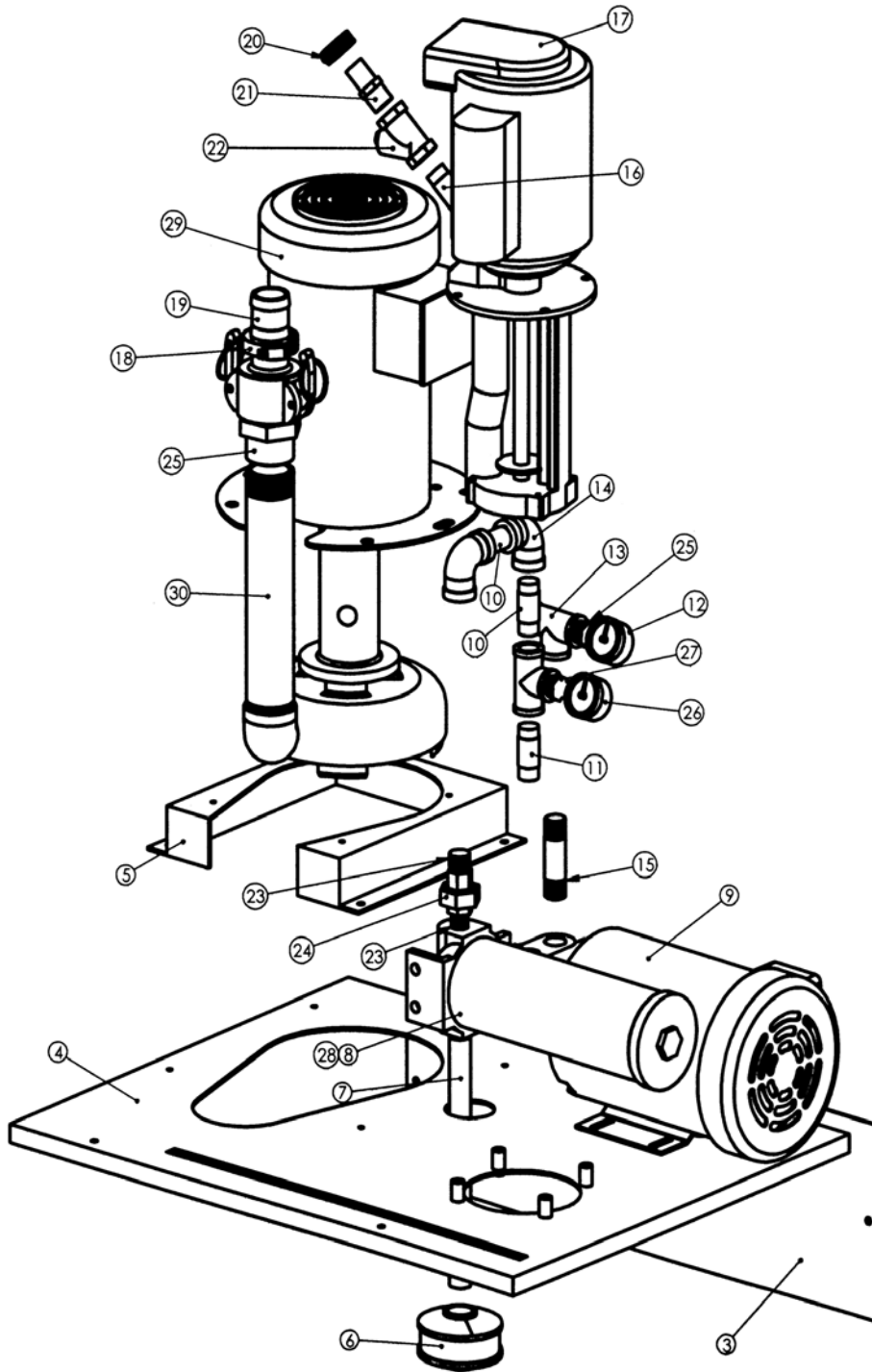


This page intentionally left blank.





# COOLANT TANK ASSEMBLY

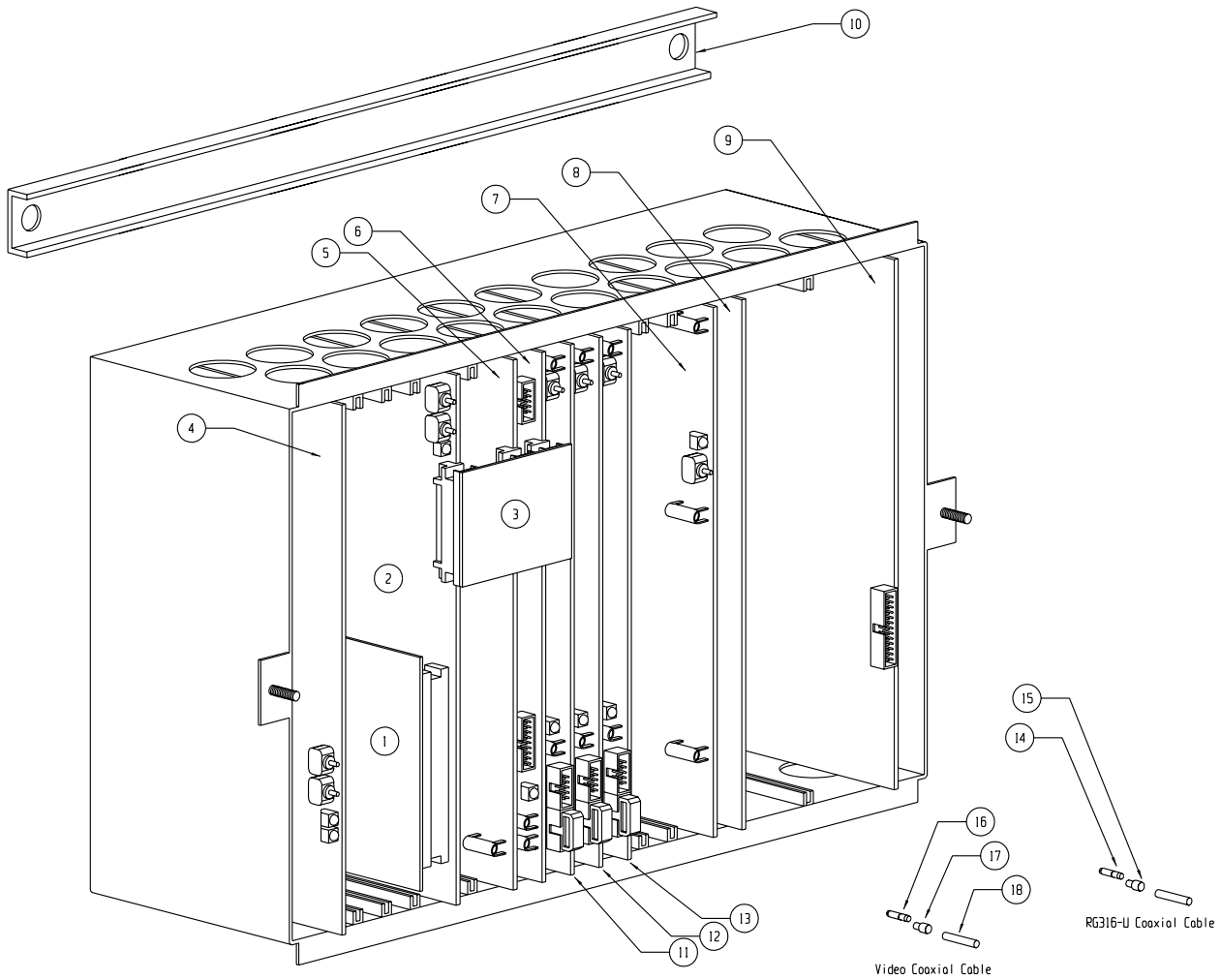


# COOLANT TANK ASSEMBLY

## COOLANT TANK ASSEMBLY

	PART #		PART #		PART #		PART #
1		9	PMP-0008	17	PMP-0017	25	PLM-0217
2		10	PLM-0060	18	HDW-0764	26	PLM-0216
3		11	PLM-0094	19	PLM-0021	27	REG-0034
4		12	REG-0018	20	HDW-0252	28	CNT-0029
5	STM-1023	13	PLM-0089	21	PLM-0076	29	PMP-0010
6	CNT-0025	14	PLM-0067	22	VLV-0018	30	PLM-0065
7	PLM-0233	15	PLM-0214	23	PLM-0091		
8	CNT-0027	16	PLM-0007	24	PLM-0212		

# CARD CAGE ASSEMBLY



# CARD CAGE ASSEMBLY

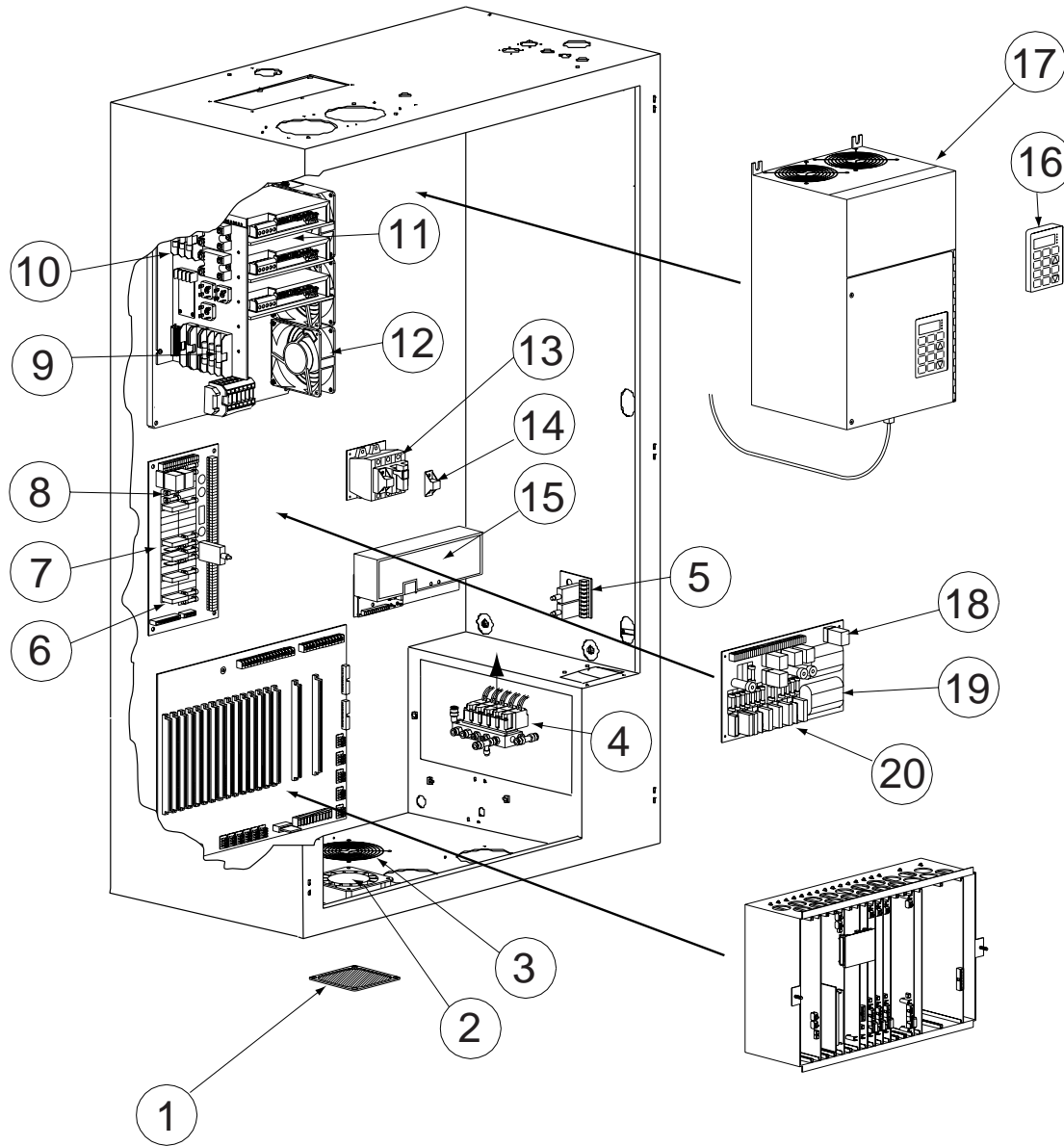
## CARD CAGE ASSEMBLY PARTS

	PART #		PART #
1	PCB-0094	8	PCB-0000
2	PCB-0030	9	PCB-0009
3	PCB-0053	10	STM-0029
4	PCB-0045	11	WIR-0040
5	PCB-0032 (88HS)	12	WIR-0041
	PCB-0033 (32MP)	13	WIR-0038
6	PCB-0003	14	WIR-0039
7	PCB-0141	15	WIR-0086

## SLOTS & BOARDS

SLOT	BOARD #	SLOT	BOARD #
1	PCB-0045	10	PCB-0037
2		11	PCB-0037
3		12	
4		13	
5	PCB-0030	14	PCB-0141
6		15	PCB-0000
7		16	PCB-0008
8	PCB-0003	17	PCB-0005
9	PCB-0037		

# CNC CABINET ASSEMBLY

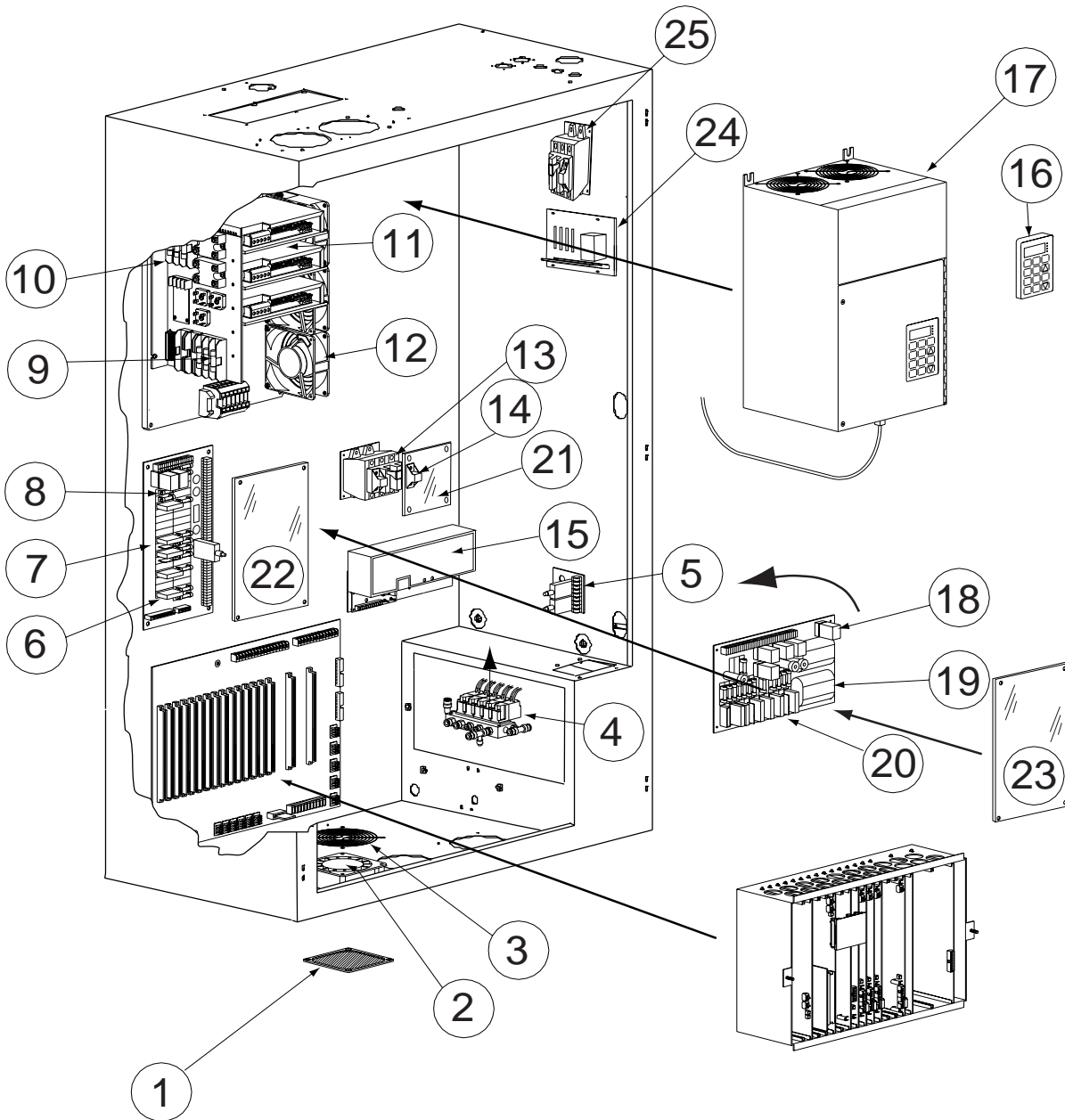


# CNC CABINET ASSEMBLY

## CNC CABINET

	PART #		PART #
1	HDW-0849	11	AMP-0036
2	ELE-0123	12	ELE-0123
3	HDW-0850	13	ELE-0132
4	VLV-0054	14	ELE-0138
5	PCB-0046	15	ELE-0961
6	ELE-0070	16	INV-0017 (BALDOR)
7	PCB-0194	17	INV-0056 (AMC)
8	ELE-0101		INV-0020 (HT)
9	ELE-0840		INV-0020 (HT)
10	ELE-0837	18	ELE-0072
		19	PCB-0195
		20	ELE-0070

# CE CNC CABINET



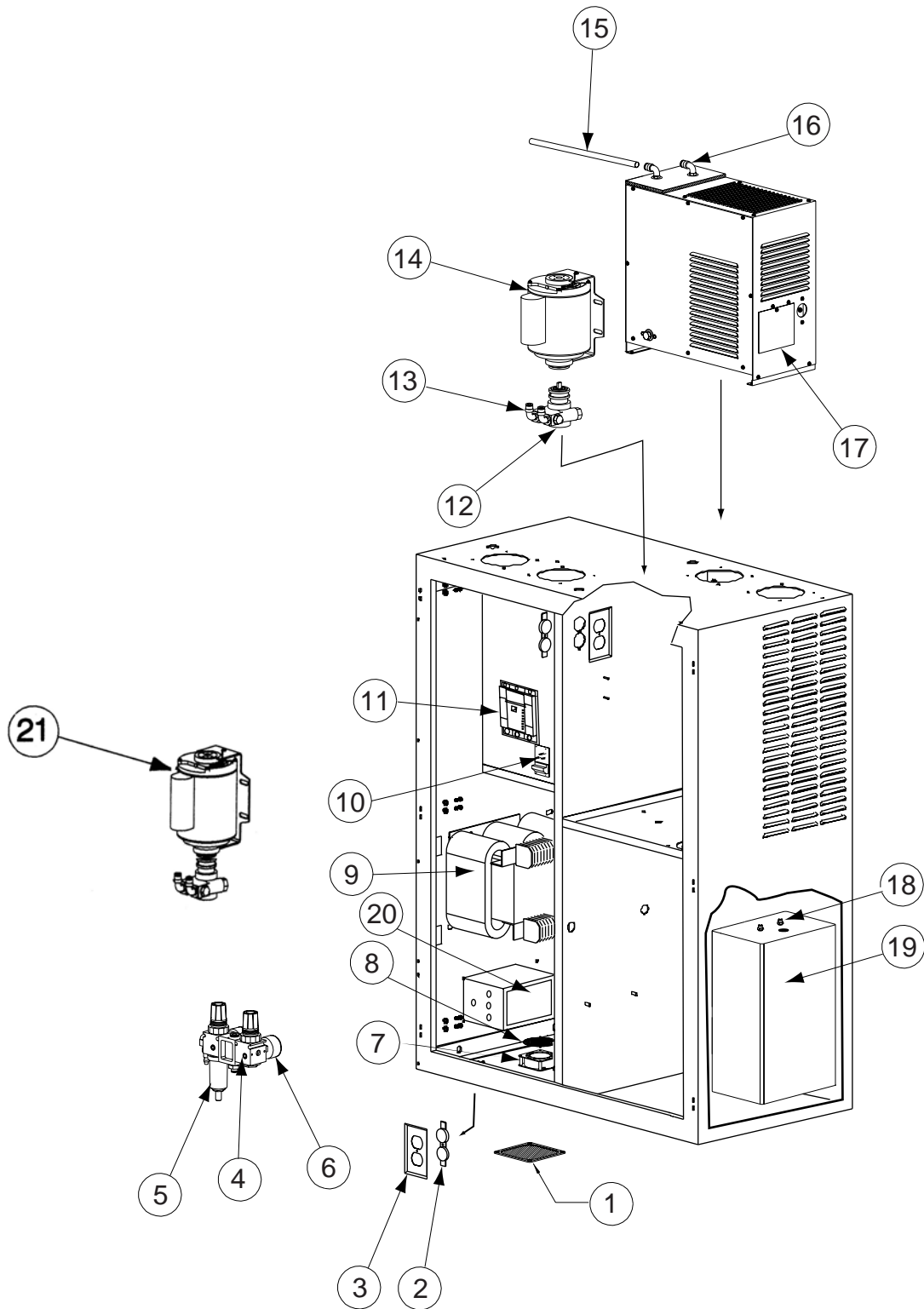
# CE CNC CABINET

## CE CNC CABINET

	PART #		PART #		PART #
1	HDW-0849	13	ELE-0132	24	PCB-0196
2	ELE-0123	14	ELE-0138	25	ELE-1025
3	HDW-0850	15	ELE-0961		
4	VLV-0054	16	INV-0017 (BALDOR)		
5	PCB-0046	17	INV-0056 (AMC)		
6	ELE-0070		INV-0041 (BALDOR)		
7	PCB-0194	18	ELE-0072		
8	ELE-0101	19	PCB-0195		
9	ELE-0840	20	ELE-0070		
10	ELE-0837	21	ELE-0349		
11	AMP-0036	22	ELE-0849		
12	ELE-0123	23	ELE-0848		



# JUNCTION BOX

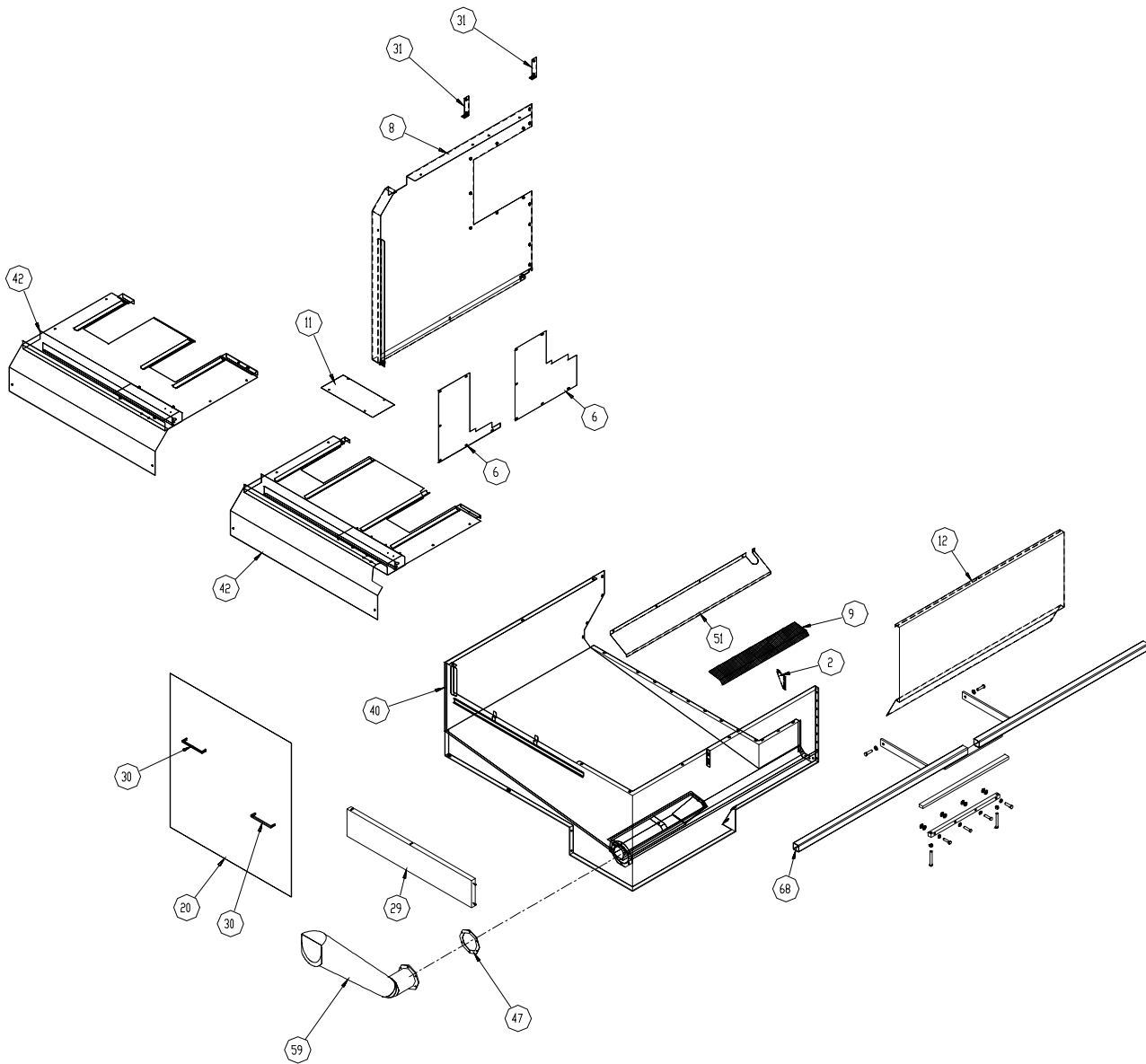


# JUNCTION BOX

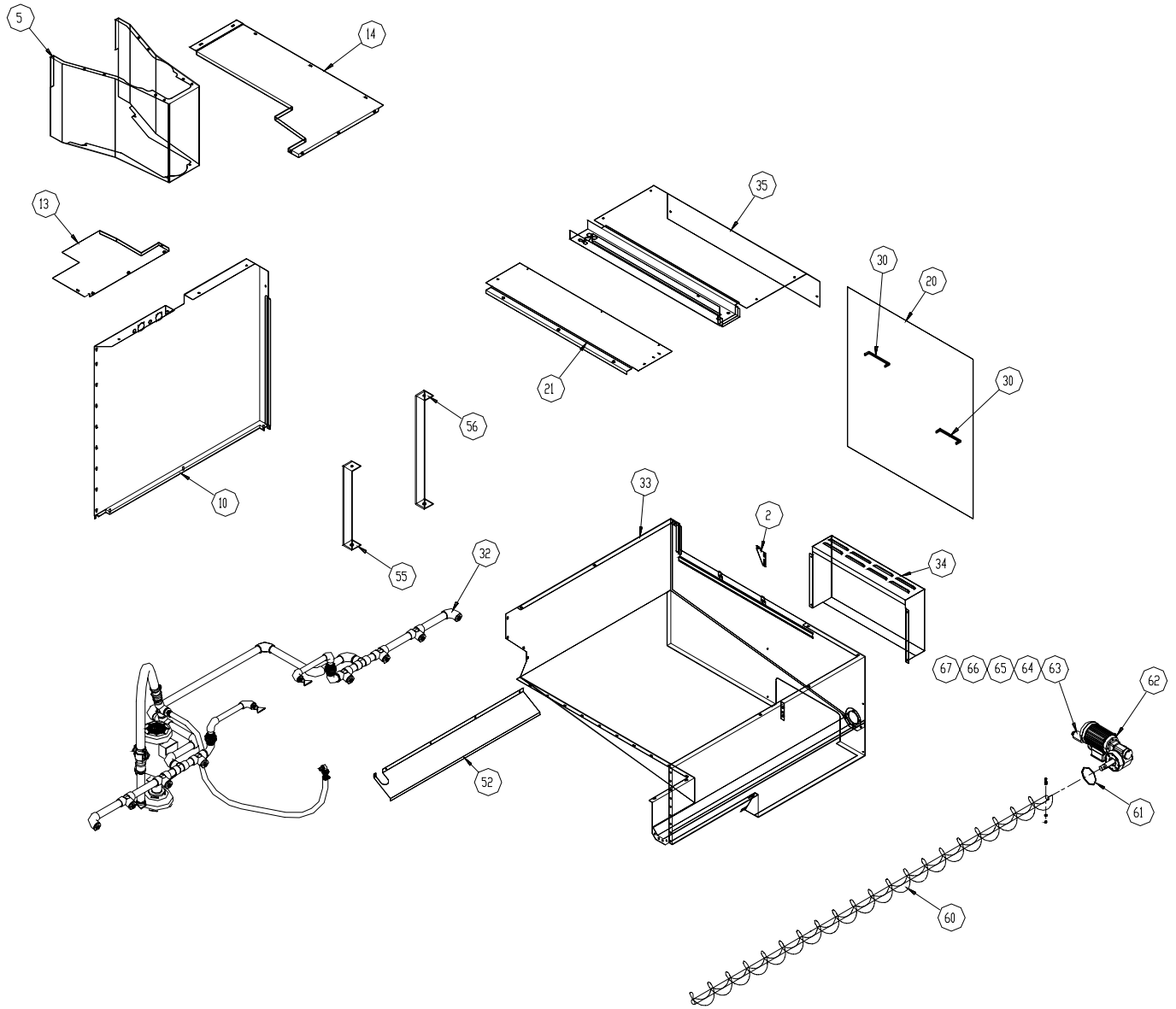
## JUNCTION BOX

	PART #		PART #
1	HDW-0849	12	PMP-0000
2	WIR-0121	13	PLM-0042
3	WIR-0117	14	PMP-0029
4	REG-0009	15	PLM-0024
5	REG-0008	16	PLM-0042
6	REG-0005	17	CNT-0035
7	ELE-0123	18	PLM-0210
8	HDW-0850	19	CNT-0047
9	ELE-0200	20	ELE-0762*
10	PCB-0020	21	PMP-0034
11	ELE-0946		

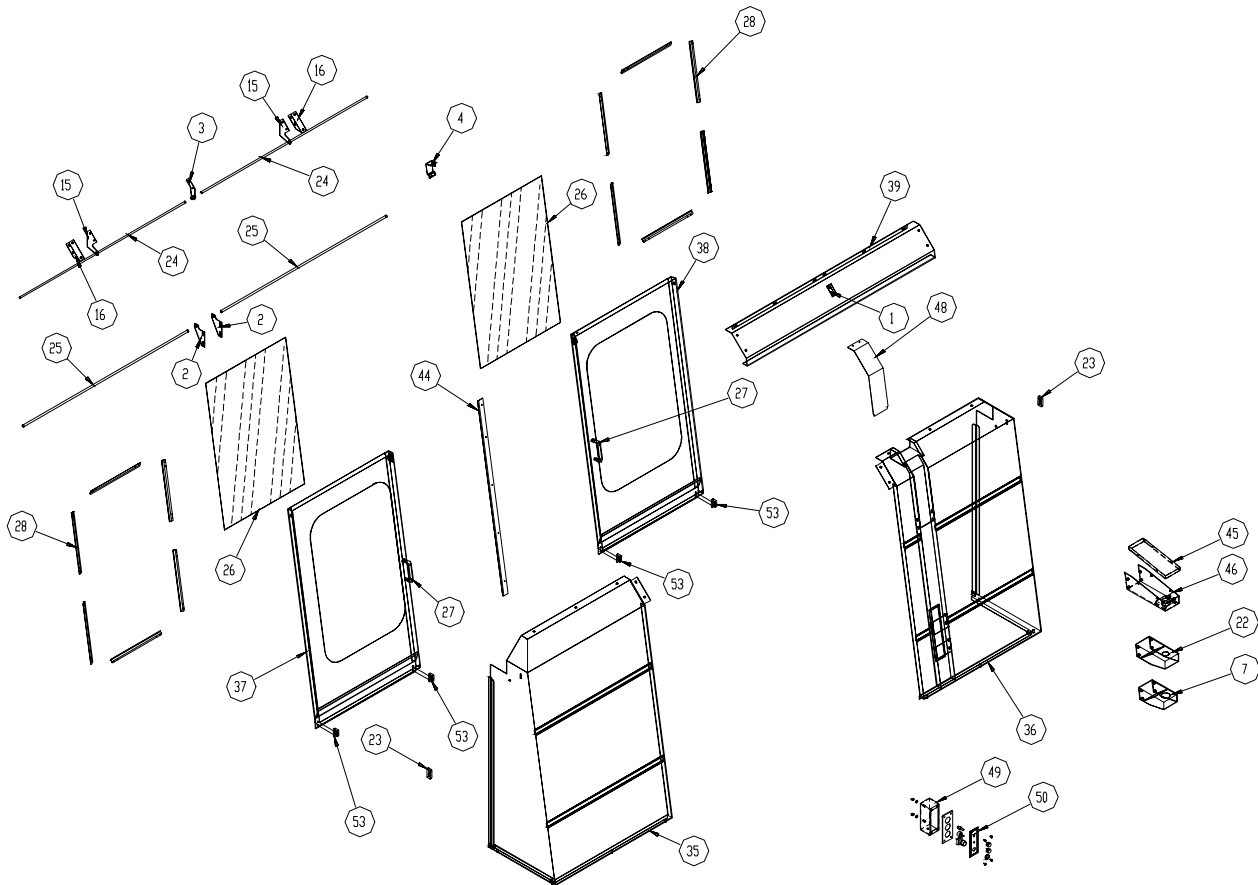
# SHEETMETAL ASSEMBLY



# SHEETMETAL ASSEMBLY



# SHEETMETAL ASSEMBLY



**SHEETMETAL ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	STM-0847	14	STM-0997	29	STM-0892	43	STM-0991	56	SHP-0114 (STD)
2	STM-0740	15	STM-0742	30	HDW-0182	44	STM-0893		SHP-0115 (EXT)
3	STM-0743	16	STM-0806	31	STM-0887	45	STM-0914	57	STM-1023
4	STM-0738	18	STM-0815	32	ASY-0088	46	STM-0913	58	STM-1024
5	STM-1002	19	STM-0816	34	STM-0805	47	HDW-1018	59	STM-1008
6	STM-1081 (STD)	20	STM-0243	35	STM-0991	48	STM-0998	60	AUG-0009
	STM-1080 (EXT)	21	STM-0993	36	STM-0990	49	STM-0405	61	HDW-0170
7	STM-0748	22	STM-0885	37	STM-0736	50	LBL-0264	62	MTR-0187
8	STM-1003	23	STM-0739	38	STM-0737	51	STM-1000	63	WIR-0517
9	STM-0995	24	DOR-0064	39	STM-0847	52	STM-1001	64	WIR-0536
10	STM-0995	25	DOR-0065	40	STM-0987	53	DOR-0016	65	WIR-0109
11	STM-0881	26	DOR-0007	41	STM-0988	54	STM-0879	66	HDW-0713
12	STM-0994	27	HDW-0967	42	STM-1004 (STD)	55	SHP-0011	67	WIR-0192
13	STM-0996	28	STM-0084		STM-1077 (EXT)				

# TABLE OF CONTENTS

## Parts Manual VMC 5020A MODEL



COLUMN ASSEMBLY .....	2
7500 RPM HEAD ASSEMBLY .....	4
10K RPM HEAD ASSEMBLY .....	6
BASE, TABLE & SADDLE ASSEMBLY .....	8
DRAWBAR CYLINDER ASSEMBLY .....	10
7500 RPM ORIENTATION BRIDGE .....	11
10K RPM ORIENTATION BRIDGE .....	12
IDLER ASSEMBLIES .....	13
WAY LUBE PUMP ASSEMBLY .....	15
GENEVA DRIVE ATC ASSEMBLY .....	16
SERVO DRIVE ATC ASSEMBLY .....	18
7500 RPM SPINDLE ASSEMBLY .....	20
10K RPM SPINDLE ASSEMBLY .....	21
COOLANT THROUGH SPINDLE .....	22
CNC CABINET ASSEMBLY .....	23
CARD CAGE ASSEMBLY .....	24
JUNCTION BOX CABINET ASSEMBLY .....	25
CHILLER CABINET ASSEMBLY .....	26
MP PENDANT ASSEMBLY .....	27
88HS PENDANT ASSEMBLY .....	28
FRONT DOOR ASSEMBLY .....	29
WAY COVER ASSEMBLY .....	30
SHEETMETAL HOUSING .....	31
7500 RPM COOLANT TANK .....	32
10K RPM COOLANT TANK .....	33



This reference covers the following Fadal products:

Model VMC 5020A

Corporate Office .....voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts .....voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support .....voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street Chatsworth California 91311 U.S.A.

The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

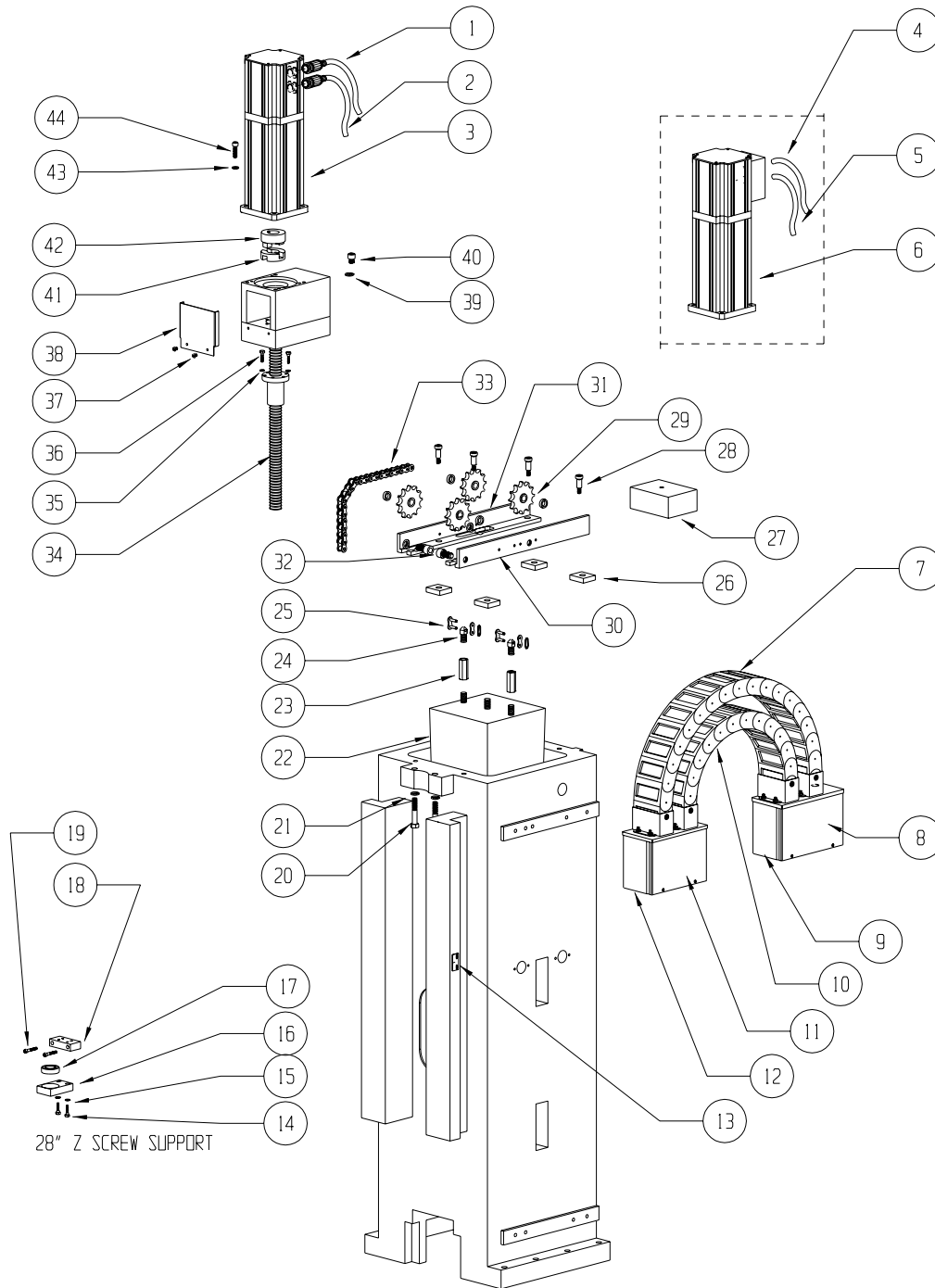
Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.



# COLUMN ASSEMBLY

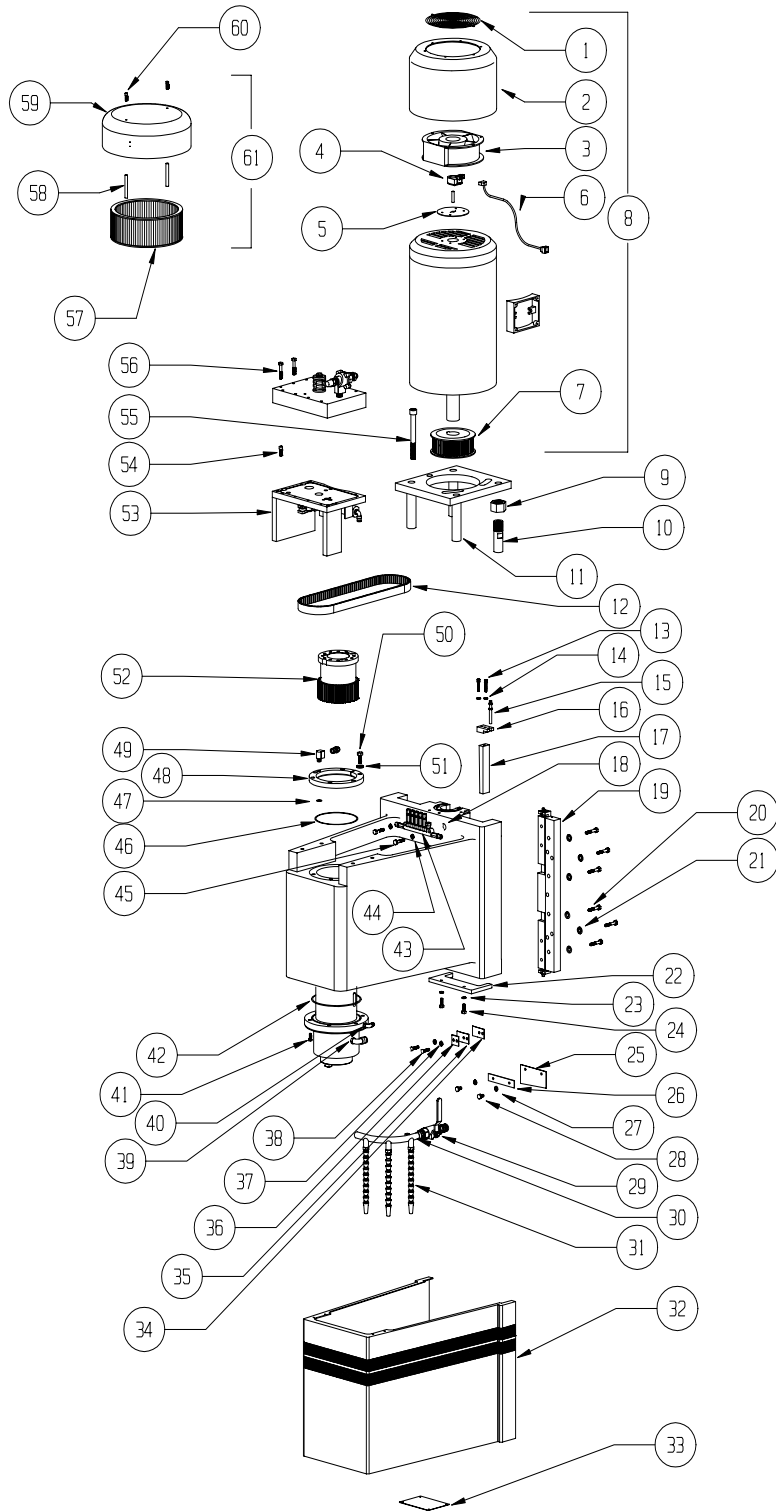


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	STM-0044	25	HDW-0204	36	HDW-0319
2	WIR-0611	14	HDW-0315	26	HDW-0363	37	HDW-0347
3	MTR-0142	15	HDW-0048	27	CWT-0002	38	STM-0043
4	WIR-0610	16	BLS-0042	28	HDW-0600	39	HDW-0451
5	WIR-0609	17	BRG-0023	29	PUL-0034	40	HDW-0465
6	MTR-0126	18	BLS-0041	30	CWT-0005	41	MTR-0071
7	CVR-0075	19	HDW-0577	31	CWT-0007	42	MTR-0073
8	STM-0333	20	HDW-0655	32	HDW-0461	43	HDW-0280
9	STM-0334	21	HDW-0050	33	HDW-0205	44	HDW-0779
10	CVR-0073	22	CWT-0018	34	BLS-0031 (20")		
11	STM-0300	23	HDW-0335		BLS-0024 (28")		
12	STM-0301	24	CWT-0001	35	HDW-0281		

# 7500 RPM HEAD ASSEMBLY

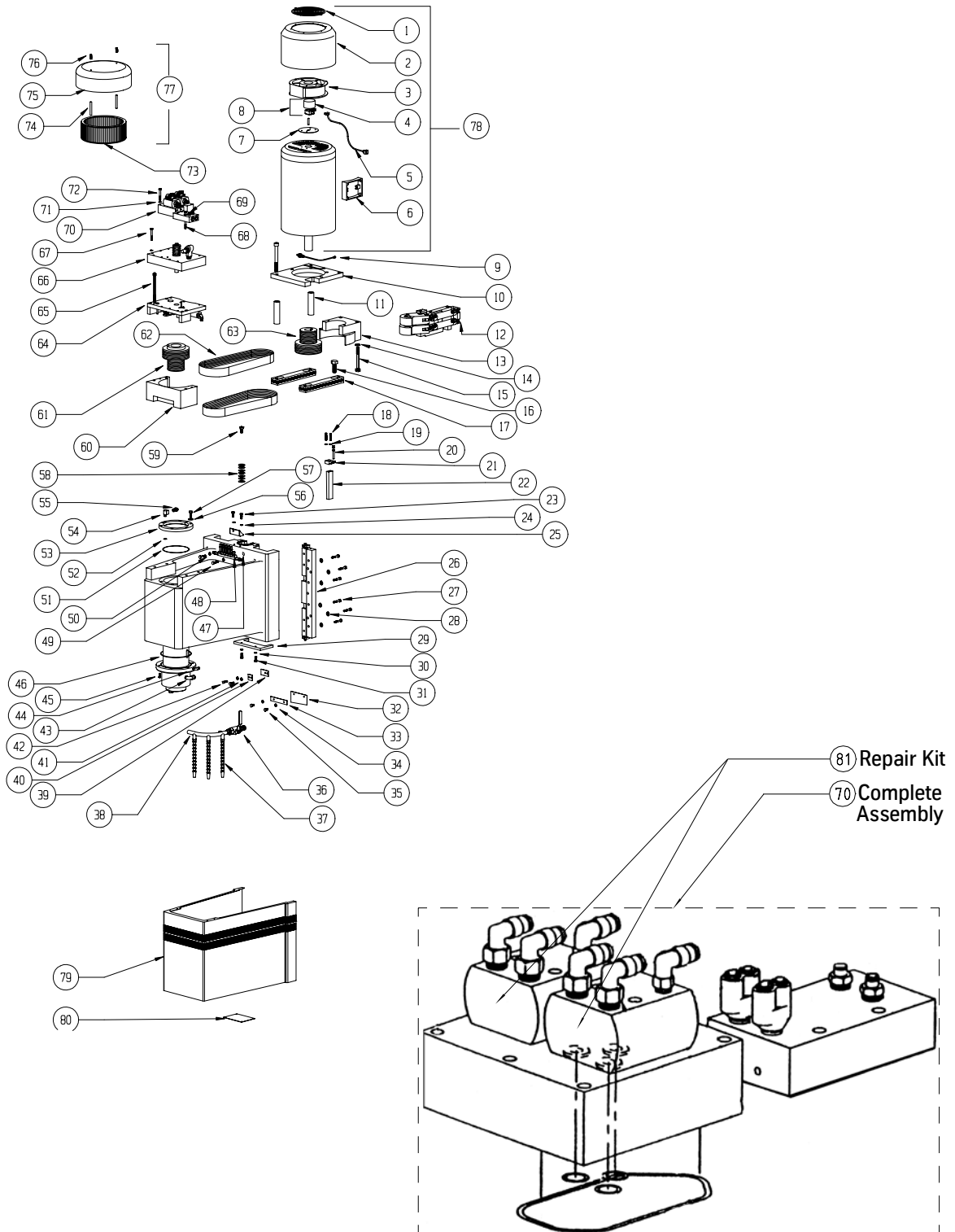


# 7500 RPM HEAD ASSEMBLY

## 7500 RPM HEAD ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0851	17	GIB-0001	33	STM-0064	49	PLM-0075
2	STM-0139	18	HDW-0380	34	GIB-0010	50	HDW-0568
3	ELE-0124	19	GIB-0023	35	HDW-0355	51	HDW-0275
4	ENC-0007	20	HDW-0569	36	STM-0042	52	PUL-0025
5	STM-0148	21	HDW-0280	37	HDW-0279	53	ORB-0019
6	WIR-0168	22	CVR-0048	38	HDW-0294	54	HDW-0298
7	PUL-0024	23	HDW-0279	39	PLM-0112	55	HDW-0469
8	MTR-0099	24	HDW-0327	40	PLM-0035	56	HDW-0320
9	PLC-0042	25	HDW-0335	41	HDW-0470	57	MTR-0127
10	MTR-0075	26	STM-0052	42	HDW-0181	58	SVT-0108
11	MTR-0076	27	HDW-0279	43	LUB-0045	59	STM-0467
12	BEL-0006	28	HDW-0319	44	HDW-0280	60	HDW-0597
13	HDW-0294	29	VLV-0017	45	HDW-0576	61	HDW-0128
14	HDW-0279	30	CNT-0039	46	HDW-0169		
15	GIB-0013	31	PLM-0016	47	HDW-0177		
16	GIB-0010	32	STM-0057	48	SPN-0042		

# 10K RPM HEAD ASSEMBLY



# 10K RPM HEAD ASSEMBLY

## 10,000 RPM HEAD ASSEMBLY

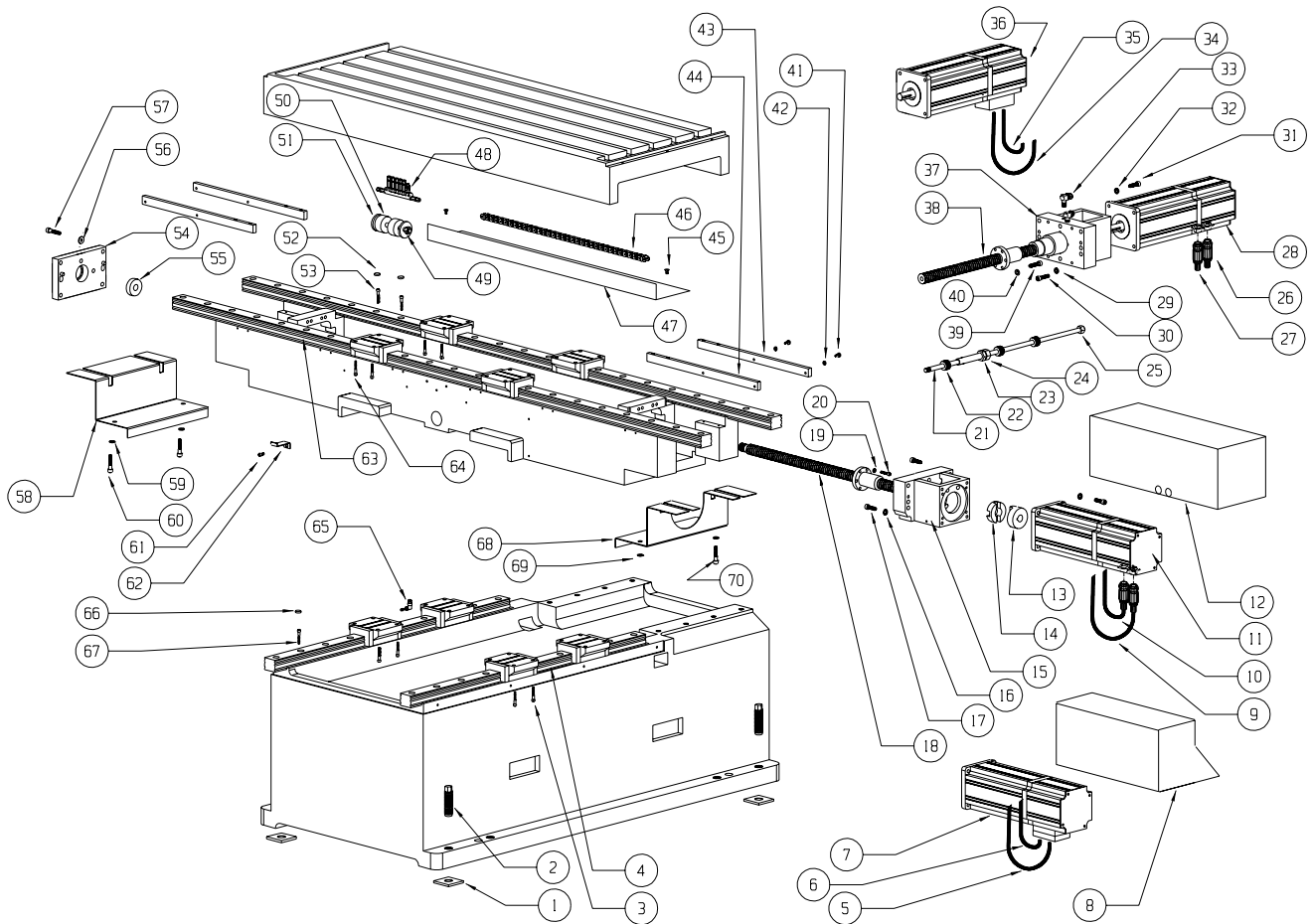
	PART #		PART #		PART #		PART #
1	HDW-0851	21	GIB-0010	42	HDW-0294	63	PUL-0019
2	STM-0139	22	GIB-0001 <sup>(1)</sup>	43	PLM-0112	64	ORB-0001
3	ELE-0124	23	HDW-0320	44	PLM-0034	65	HDW-0290
4	MTR-0123	24	HDW-0279	45	HDW-0470	66	DRB-0000
5	WIR-0168	25	STM-0141	46	HDW-0181	67	HDW-0320
6	MTR-0058	26	GIB-0004 <sup>(1)</sup>	47	HDW-0380	68	HDW-0321 (HT)
7	STM-0148	27	HDW-0791	48	LUB-0045	69	HDW-0279 (HT)
8	ENC-0007	28	HDW-0280	49	HDW-0576	70	HYD-0017
9	HDW-0369	29	CVR-0048	50	HDW-0279	71	HDW-0279 (HT)
10	MTR-0069	30	HDW-0279	51	HDW-0169	72	HDW-0320 (HT)
11	MTR-0149	31	HDW-0322	52	HDW-0177	73	MTR-0127
12	IDL-0003	32	HDW-0356	53	SPN-0042	74	SVT-0108
13	BEL-0015	33	STM-0052	54	PLM-0045	75	STM-0467
14	HDW-0451	34	HDW-0279	55	PLM-0088	76	HDW-0597
15	HDW-0311	35	HDW-0319	56	HDW-0275	77	MTR-0128
16	HDW-0283	36	VLV-0017	57	HDW-0568	78	MTR-0047 <sup>(2)</sup> (HT)
17	MTR-0068	37	PLM-0016	58	HDW-0194		MTR-0043 <sup>(2)</sup>
	MTR-0064	38	CNT-0039	59	HDW-0553	79	STM-0057
18	HDW-0294	39	HDW-0355	60	BEL-0014	80	STM-0064
19	HDW-0279	40	STM-0042	61	PUL-0018	81	HYD-0018
20	GIB-0013	41	HDW-0279	62	BEL-0003		

<sup>1</sup>Specify gib size when ordering.

<sup>2</sup>MTR-0047 and MTR-0043 include PUL-0019.

HT=High Torque

# BASE, TABLE & SADDLE ASSEMBLY



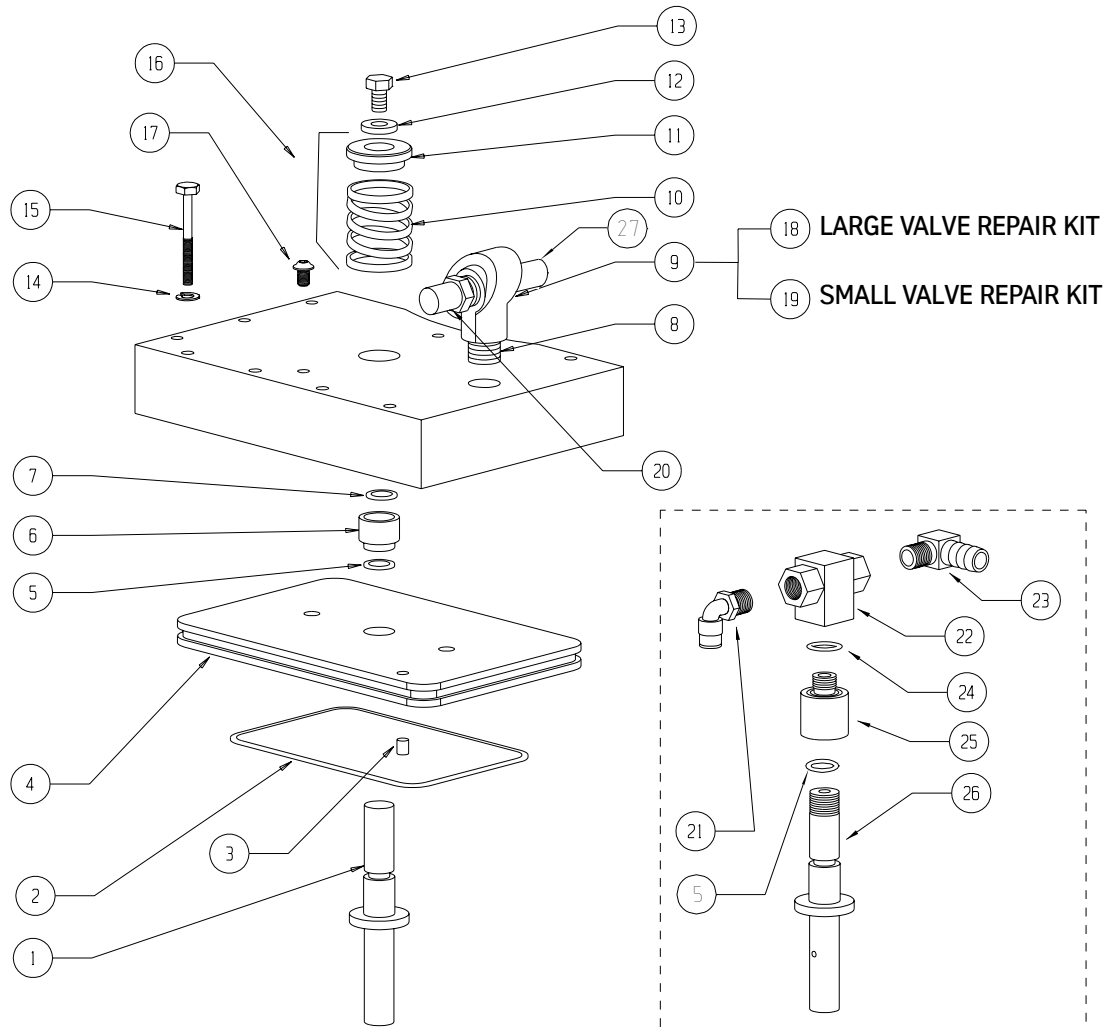
# BASE, TABLE & SADDLE ASSEMBLY

## BASE, TABLE & SADDLE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	SHP-0002	17	HDW-0485	33	PLM-0112	49	HDW-0562	63	BRG-0095
2	HDW-0432	18	BLS-0172	34	WIR-0556		HDW-0341	64	HDW-0012
3	HDW-0779	19	HDW-0281	35	WIR-0557	50	HDW-0375	65	PLM-0028
4	BRG-1228	20	HDW-0025	36	MTR-0126	51	HDW-0858	66	BRG-0106
5	WIR-0606	21	BLS-0214	37	BLS-0038	52	BRG-0106	67	HDW-0012
6	WIR-0605	22	HDW-0194	38	BLS-0174	53	HDW-0012	68	STM-0500
7	MTR-0126	23	HDW-0637	39	HDW-0291	54	BLS-0217	69	HDW-0050
8	WIR-0561	24	HDW-0018	40	HDW-0281	55	BRG-0022	70	HDW-0012
9	WIR-0566	25	HDW-0332	41	HDW-0296	56	HDW-0381		
10	WIR-0605	26	WIR-0610	42	HDW-0279	57	HDW-0407		
11	MTR-0142	27	WIR-0609	43	CVR-0099		HDW-0485		
12	STM-0609	28	MTR-0142	44	CVR-0099	58	STM-0502		
13	MTR-0073	29	HDW-0281	45	HDW-0319	59	HDW-0050		
14	MTR-0071	30	HDW-0291	46	CVR-0082	60	HDW-0017		
15	BLS-0027	31	HDW-0779	47	STM-0518	61	HDW-0319		
16	HDW-0281	32	HDW-0280	48	LUB-0045	62	STM-0767		



# DRAWBAR CYLINDER ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

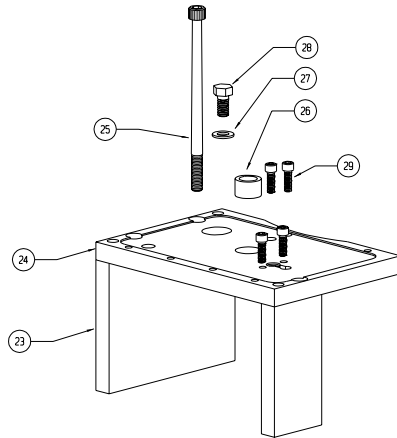
Coolant Thru Assembly DRB-0001

**DRAWBAR CYLINDER ASSEMBLIES**

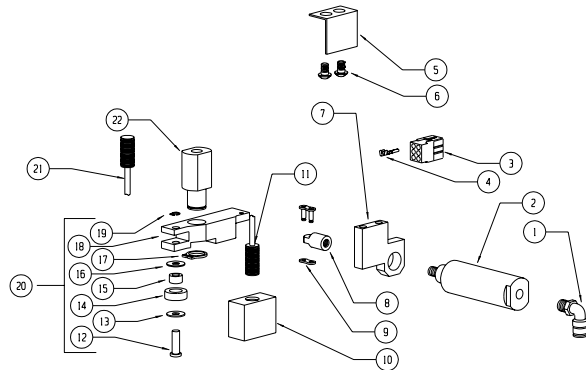
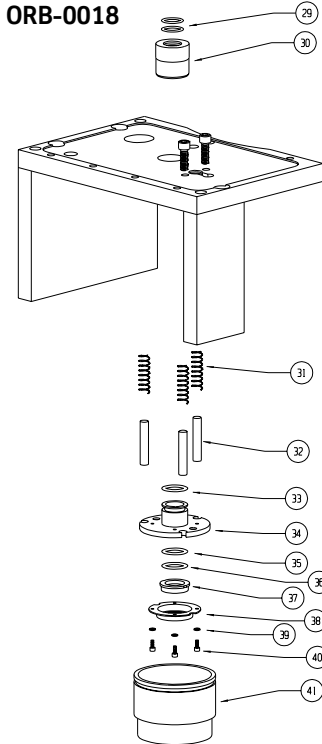
	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009 <sup>(1)</sup>	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

# 7500 RPM ORIENTATION BRIDGE

**ORB-0015**



**ORB-0018**



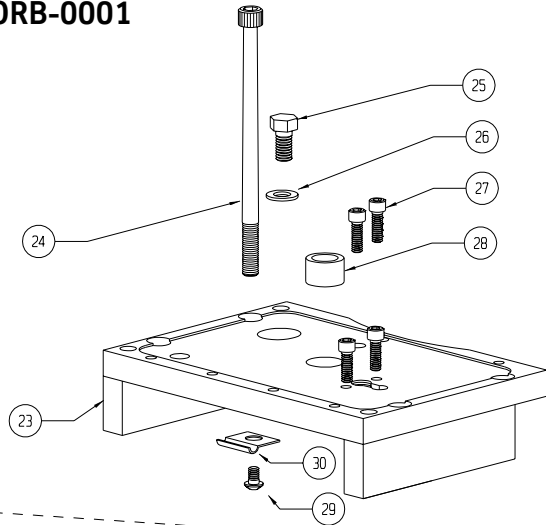
**SEAL REPAIR KIT CNT-0150**

**7500 RPM ORIENTATION BRIDGE**

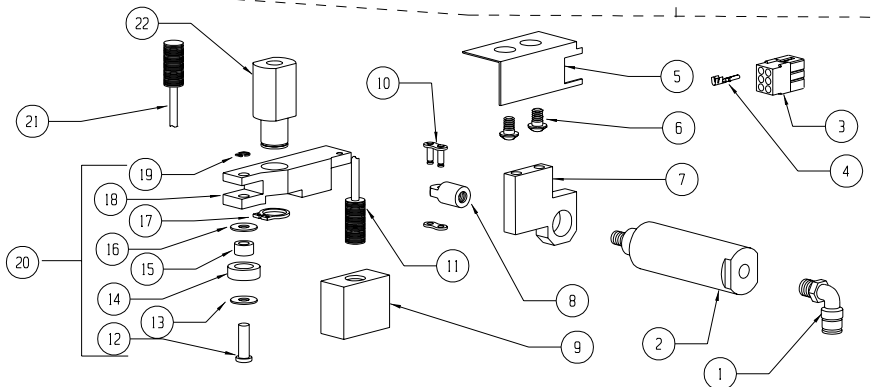
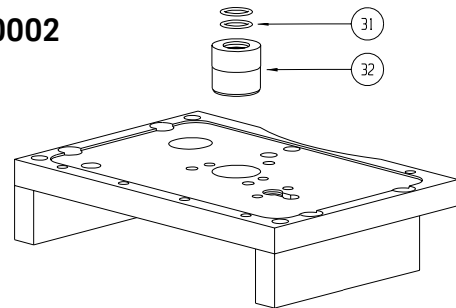
	PART #		PART #		PART #		PART #
1	PLM-0034	10	HDW-0209	22	ORB-0013	34	HDW-0156
2	CYL-0007	11	ELE-0145	23	ORB-0008	35	CNT-0041
3	WIR-0051	12	ORB-0007	24	HDW-0285	36	HDW-0155
4	WIR-0043 (16 AWG)	13	HDW-0515	25	HDW-0571	37	HDW-0156
	WIR-0044 (16 AWG)	14	ORB-0009	26	HDW-0048	38	CNT-0033
	WIR-0544 (22 AWG)	15	BRG-0014	27	HDW-0298	39	CNT-0045
	WIR-0056 (22 AWG)	16	HDW-0515	28	BRG-0008	40	HDW-0453
5	STM-0684	17	HDW-0725	29	HDW-0349	41	HDW-0308
6	HDW-0347	18	ORB-0031	30	HDW-0150	42	CNT-0140
7	ORB-0030	19	HDW-0726	31	CNT-0042		
8	ORB-0011	20	ORB-0004	32	HDW-0257		
9	ORB-0014	21	ELE-0145	33	HDW-0326		

# 10K RPM ORIENTATION BRIDGE

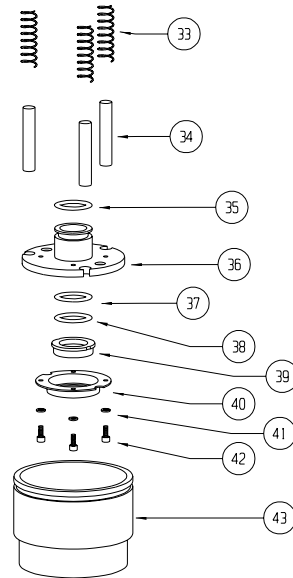
ORB-0001



ORB-0002



COMMON TO BOTH VERSIONS



## ORIENTATION BRIDGE ASSEMBLIES

	PART#		PART#		PART#		PART#		PART#
1	PLM-0034	8	ORB-0011	18	ORB-0031	28	BRG-0008	38	HDW-0156
2	CYL-0007	9	ORB-0014	19	HDW-0726	29	HDW-0349	39	CNT-0033
3	WIR-0051	10	HDW-0209	20	ORB-0004	30	LUB-0077	40	CNT-0045
4	WIR-0043 (16 AWG)	11	ELE-0145	21	ELE-0145	31	HDW-0150	41	HDW-0453
	WIR-0044 (16 AWG)	12	ORB-0007	22	ORB-0013	32	CNT-0042	42	HDW-0308
	WIR-0544 (22 AWG)	13	HDW-0515	23	ORB-0008	33	HDW-0257	43	CNT-0140
	WIR-0056 (22 AWG)	14	ORB-0009	24	HDW-0285	34	HDW-0326		
5	STM-0596	15	BRG-0014	25	HDW-0571	35	HDW-0156		
6	HDW-0347	16	HDW-0515	26	HDW-0048	36	CNT-0041		
7	ORB-0030	17	HDW-0725	27	HDW-0298	37	HDW-0155		

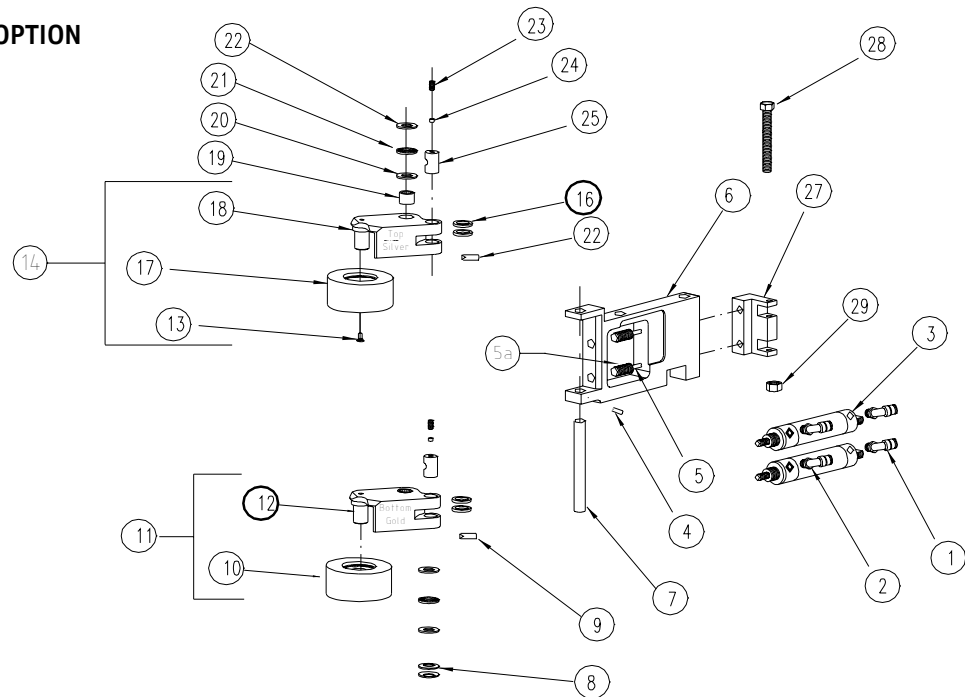


This page intentionally left blank.

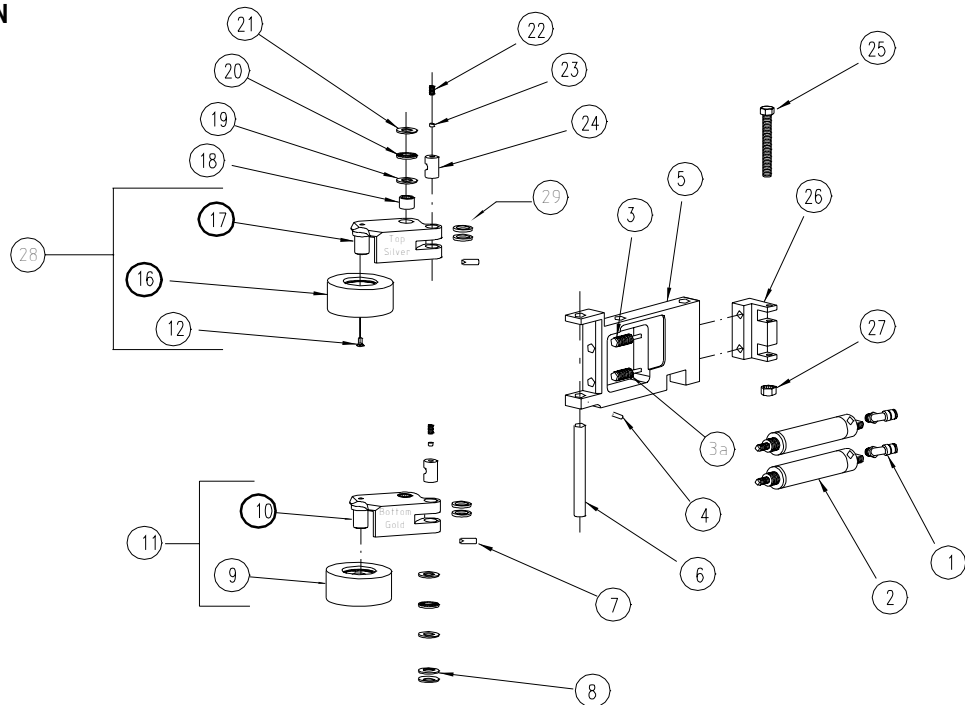


# IDLER ASSEMBLIES

## RIGID TAP/HIGH TORQUE OPTION



## 10,000 RPM OPTION



# IDLER ASSEMBLIES

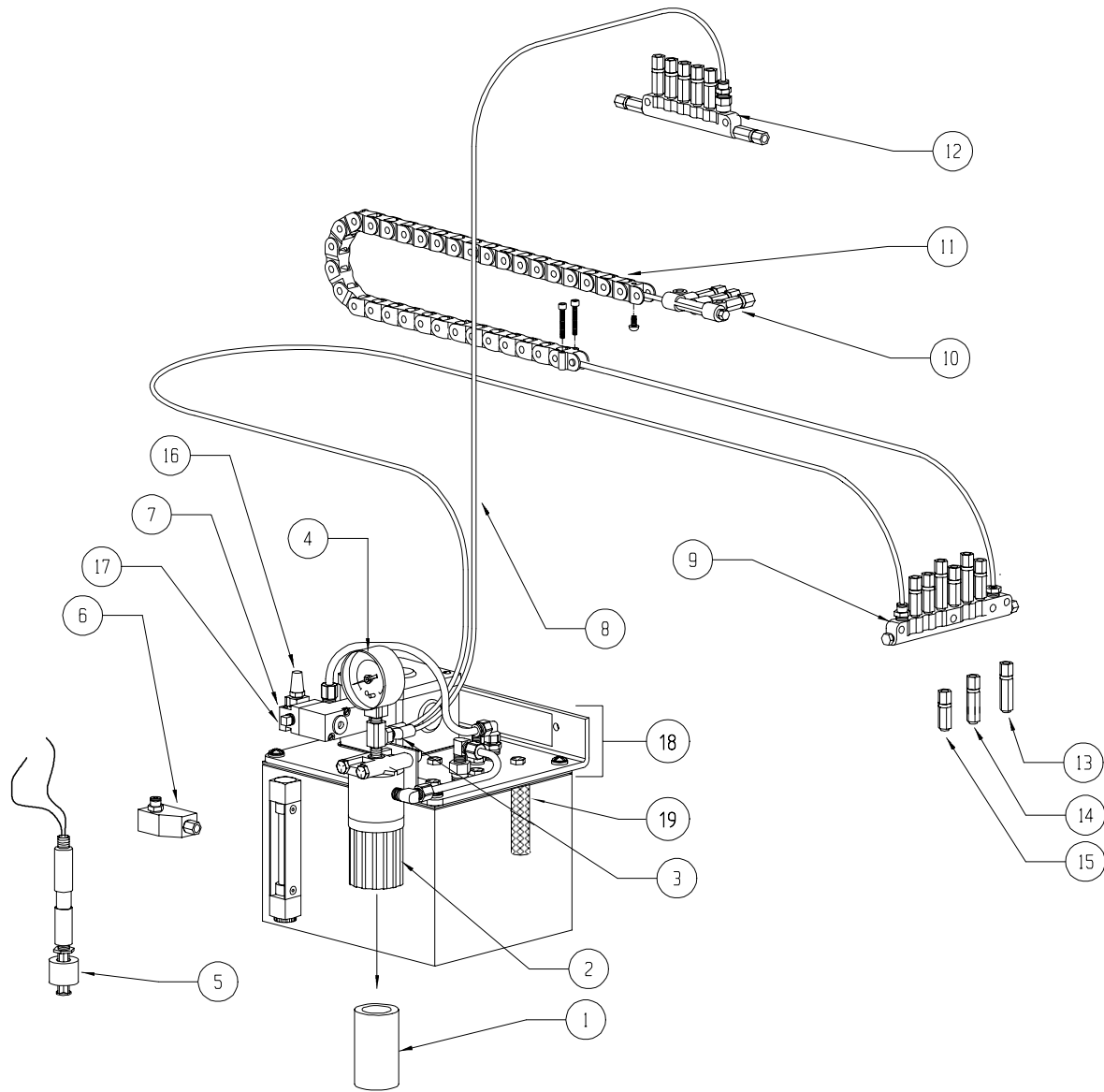
## RIGID TAP/HIGH TORQUE OPTION

	PART #		PART #		PART #
1	PLM-0034	10	BRG-0058	21	BRG-0015
2	PLM-0034	11	IDL-0000	22	ELE-0147
3	CYL-0005	12	IDL-0004	23	HDW-0412
4	HDW-0612	13	HDW-0412	24	IDL-0010
5	ELE-0145	14	IDL-0018	25	IDL-0012
5a	ELE-1202	16	HDW-0277		
6	IDL-0011	17	BRG-0058	27	IDL-0009
7	IDL-0006	18	IDL-0005	28	HDW-0579
8	HDW-0196	19	BRG-0017	29	HDW-0643
9	ELE-0147	20	BRG-0016		

## 10,000 RPM OPTION

	PART #		PART #		PART #
1	PLM-0034	10	IDL-0004	21	BRG-0016
2	CYL-0006	11	IDL-0000	22	HDW-0412
3	ELE-0145	12	HDW-0605	23	IDL-0010
3a	ELE-1202			24	IDL-0012
4	HDW-0612			25	HDW-0579
5	IDL-0011	16	BRG-0058	26	IDL-0008
6	IDL-0006	17	IDL-0005	27	HDW-0643
7	ELE-0147	18	BRG-0017	28	IDL-0018
8	HDW-0196	19	BRG-0016	29	HDW-0277
9	BRG-0058	20	BRG-0015		

# WAY LUBE PUMP ASSEMBLY



**WAYLUBE PUMP ASSEMBLY**

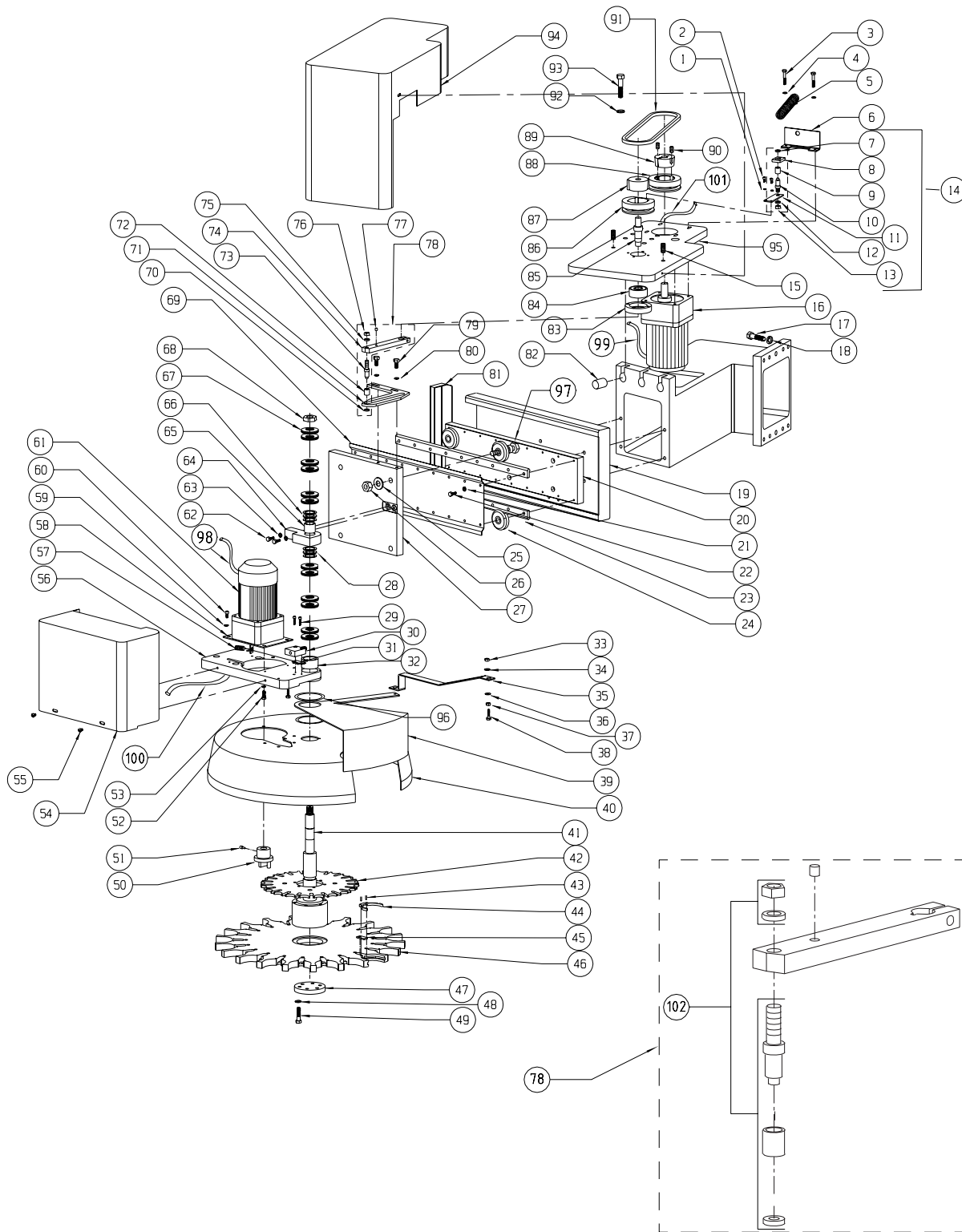
	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		



This page intentionally left blank.



# GENEVA DRIVE ATC ASSEMBLY



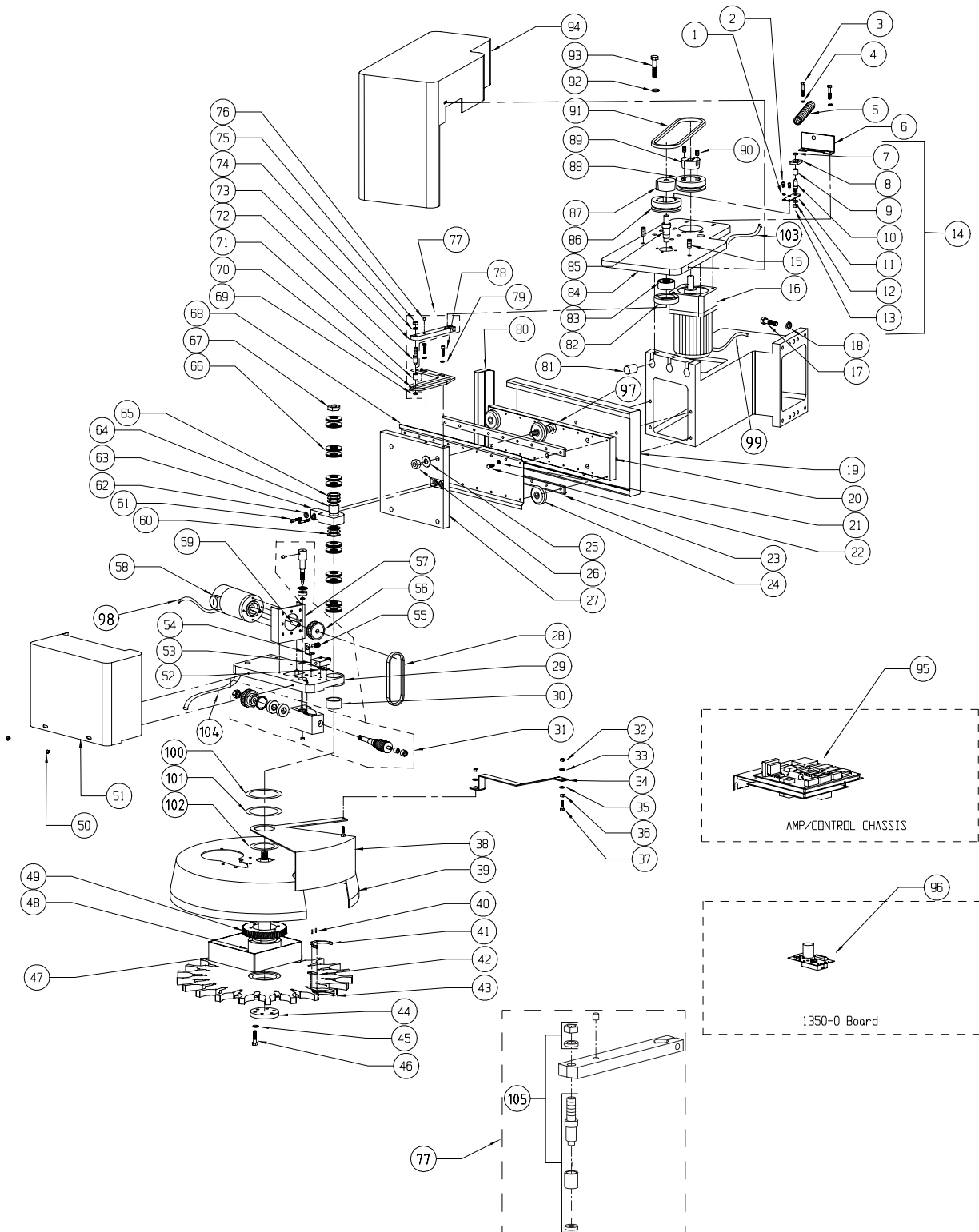
# GENEVA DRIVE ATC ASSEMBLY

## GENEVA DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)
					HDW-0295 (1)				ATC-0005 (30)
								102	ATC-0169

<sup>(1)</sup>Quick disconnect type.

# SERVO DRIVE ATC ASSEMBLY



# SERVO DRIVE ATC ASSEMBLY

## SERVO DRIVE ATC ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

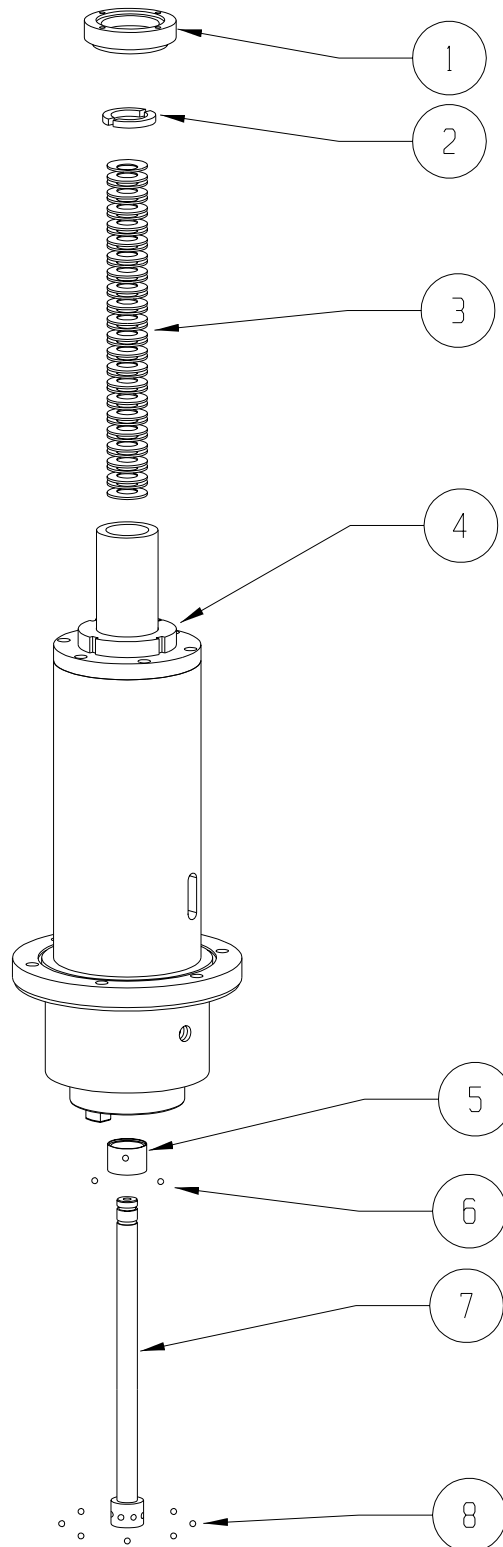
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



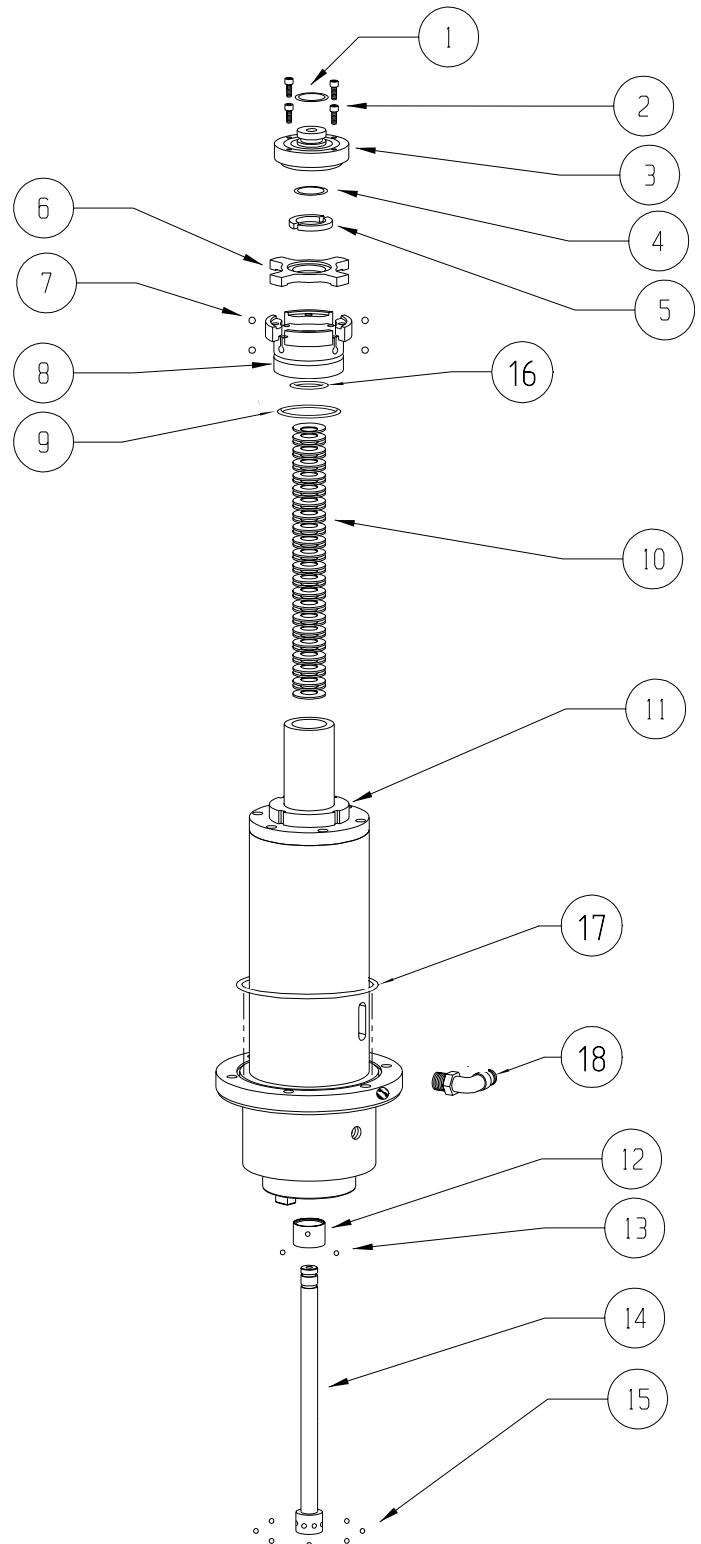
# 10K RPM SPINDLE ASSEMBLY

**10,000 RPM SPINDLE ASSEMBLY**

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

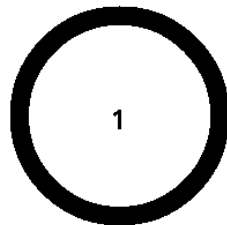
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

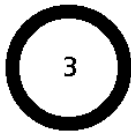
CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



HDW-0158



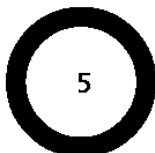
HDW-0177



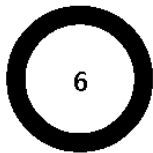
HDW-0150



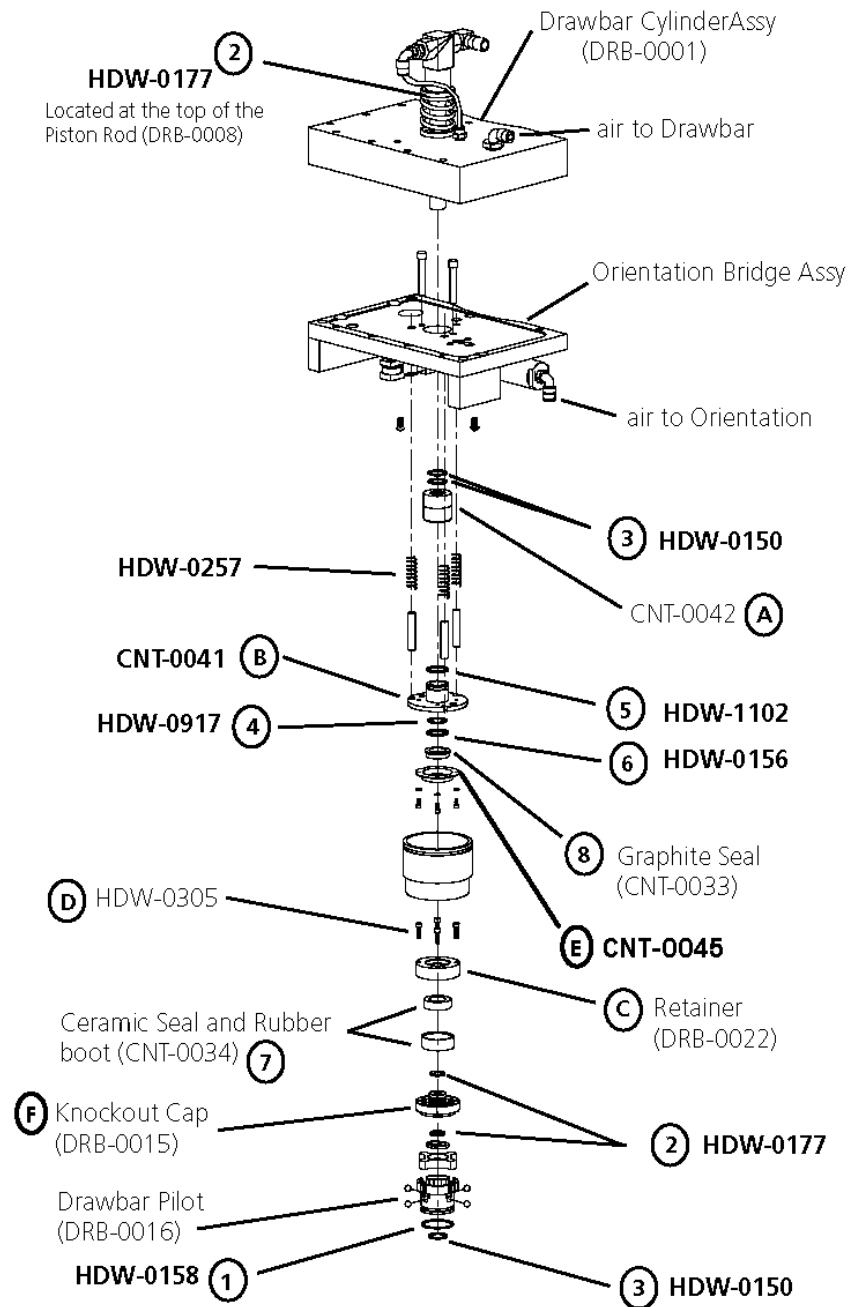
HDW-0917



HDW-1102

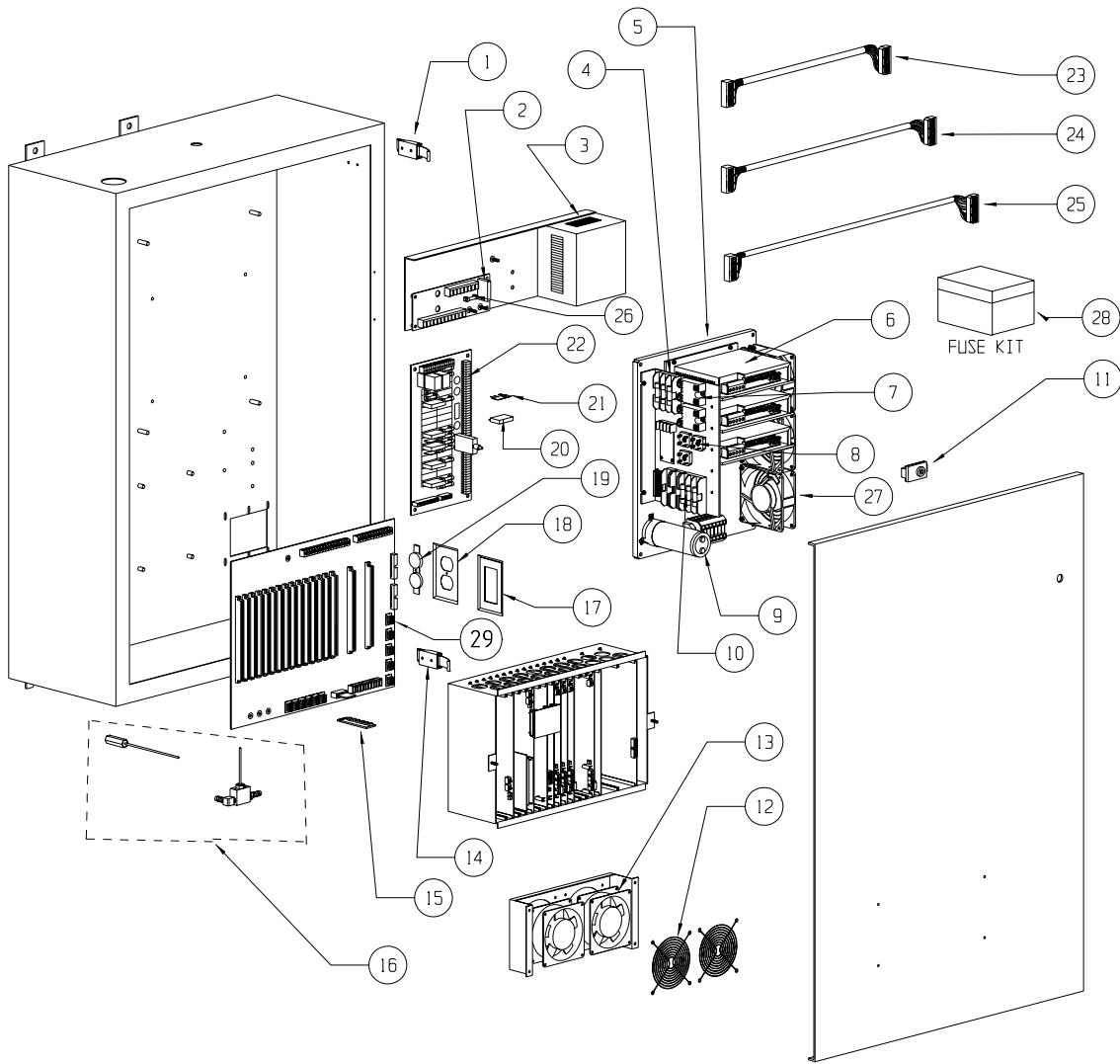


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

# CNC CABINET ASSEMBLY

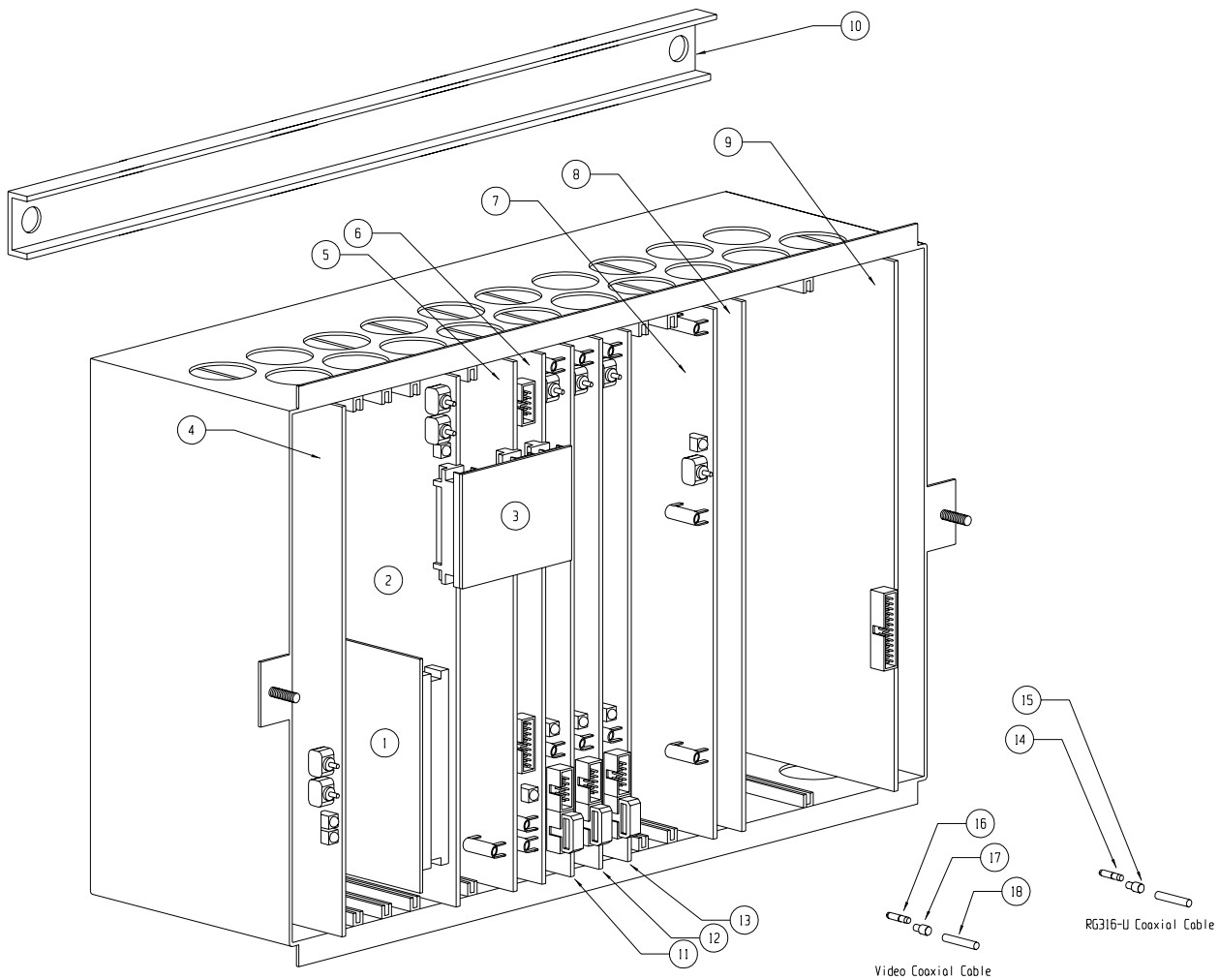


**CNC CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0828	15	PCB-0010	22	PCB-0194
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0961	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0120	25	WIR-0174
5	AMP-0005 (GTK)	12	HDW-0850	19	WIR-0121	26	ELE-0046
	AMP-0012 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
6	AMP-0006 (GTK)	14	HDW-0217	21	ELE-0101	28	ELE-0106
	AMP-0014 (AMC)					29	PCB-0009
7	ELE-0074						



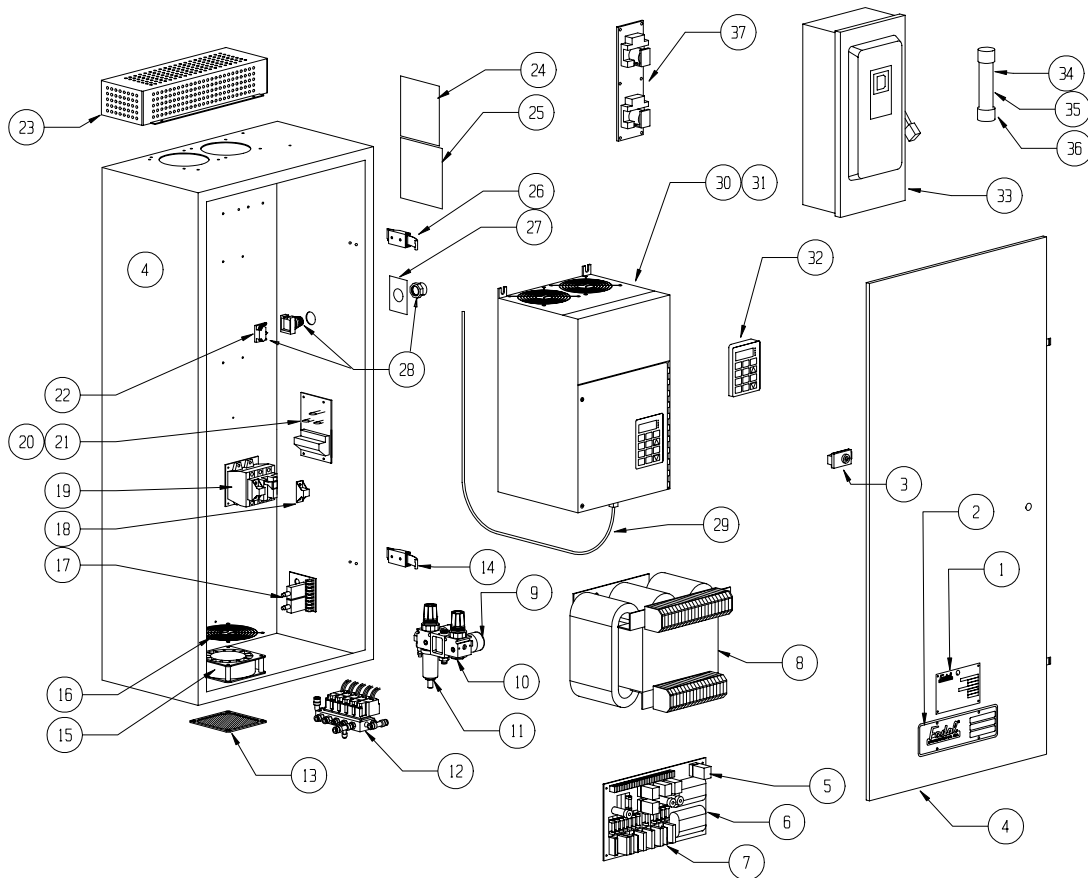
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	10	STM-0029
2	PCB-0030	11	PCB-0217
3	PCB-0189	12	PCB-0217
4	PCB-0209	13	PCB-0217
5	PCB-0032 (88HS)	14	WIR-0040
	PCB-0033 (32MP)	15	WIR-0041
6	PCB-0206	16	WIR-0038
7	PCB-0141	17	WIR-0039
8	PCB-0000	18	WIR-0086
9	PCB-0009		

SLOT	PART #	BOARD #	SLOT	PART #	BOARD #
1	PCB-0209	1550-2B	10	PCB-0217	1010-6
2			11	PCB-0217	1010-6
3			12		
4	PCB-0189	1730-5	13		
5	PCB-0030	1400-5	14	PCB-0217	1010-6
6			15	PCB-0000	1020
7	PCB-0032	1420-4	16	PCB-0008	1050-3
8	PCB-0206	1030-1	17	PCB-0005	1040
9	PCB-0217	1010-6			

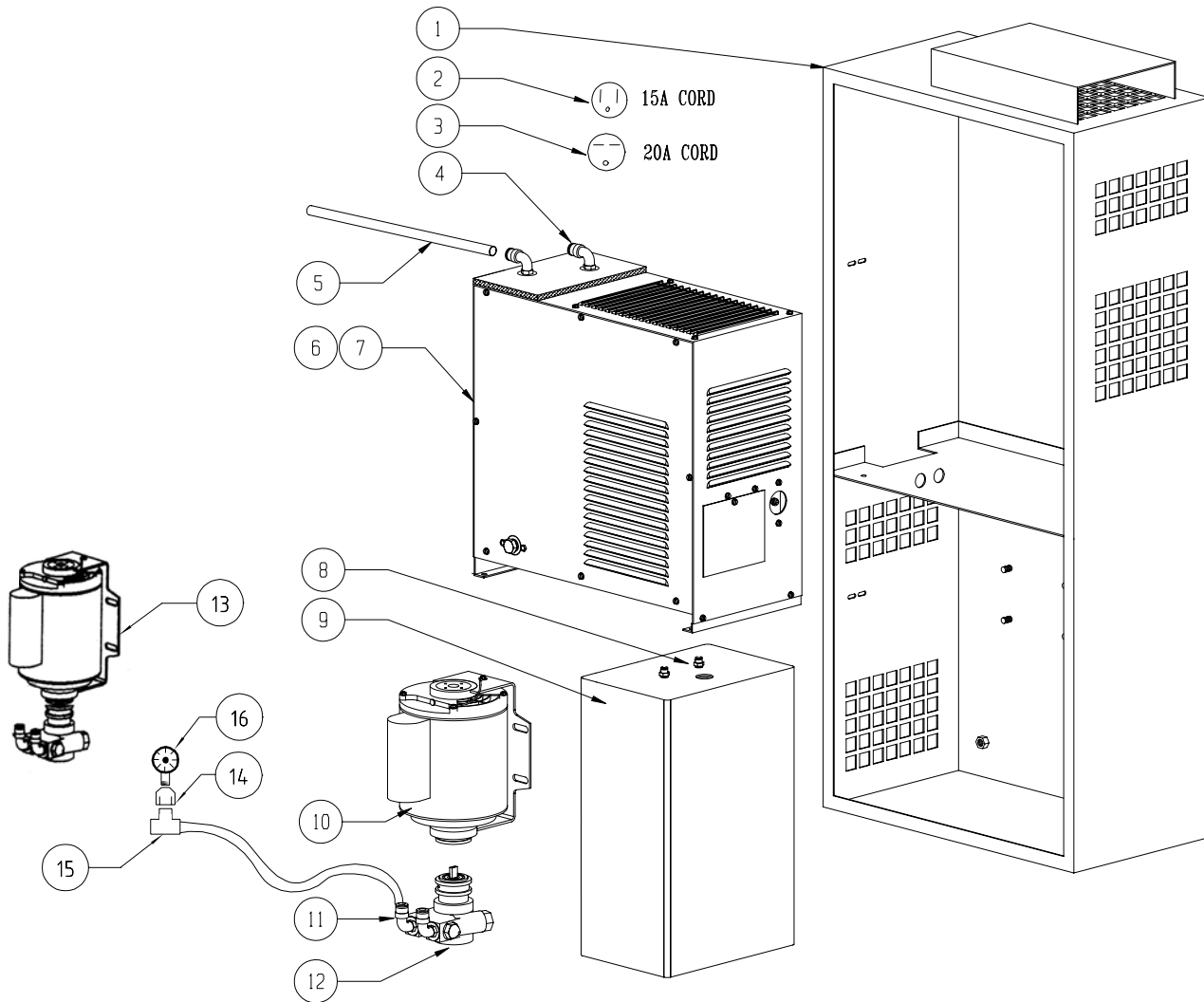
# JUNCTION BOX CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY 7500/10,000 RPM**

	PART #		PART #		PART #		PART #
1	LBL-0029	11	REG-0008	21	PCB-0146 (480V)	31	INV-0041
2	LBL-0106	12	VLV-0055 (7.5K)	22	ELE-0093		
			VLV-0054 (10K)			32	INV-0017
3	HDW-0221	13	HDW-0849	23	INV-0001	33	ELE-0139 (60AMP)
4	STM-0051	14	HDW-0216	24	LBL-0037		ELE-0141 (30AMP)
5	ELE-0072	15	ELE-0123	25	LBL-0040	34	ELE-0063 (45A 240V)
6	PCB-0015	16	HDW-0850	26	HDW-0219	35	ELE-0062 (30A 380V)
7	ELE-0070	17	N/A VMC 15/15XT	27	LBL-0038	36	ELE-0060 (20A 480V)
8	ELE-0018	18	ELE-0136	28	ELE-0110	37	WIR-0073
	ELE-0019						
9	REG-0005	19	ELE-0132	29	WIR-0166		
10	REG-0009	20	PCB-0145 (240V)	30	INV-0045 (7.5K)		

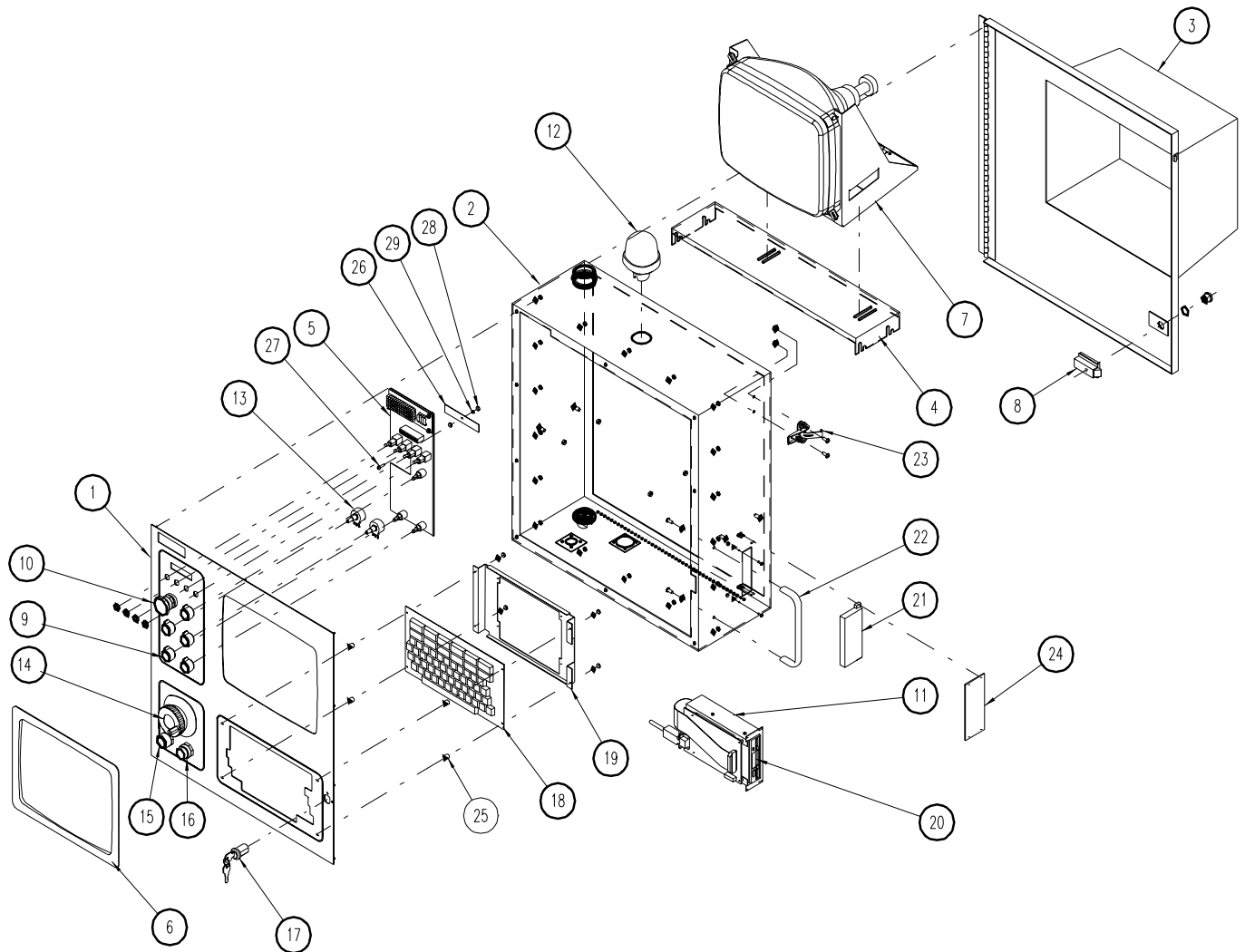
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PMP-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

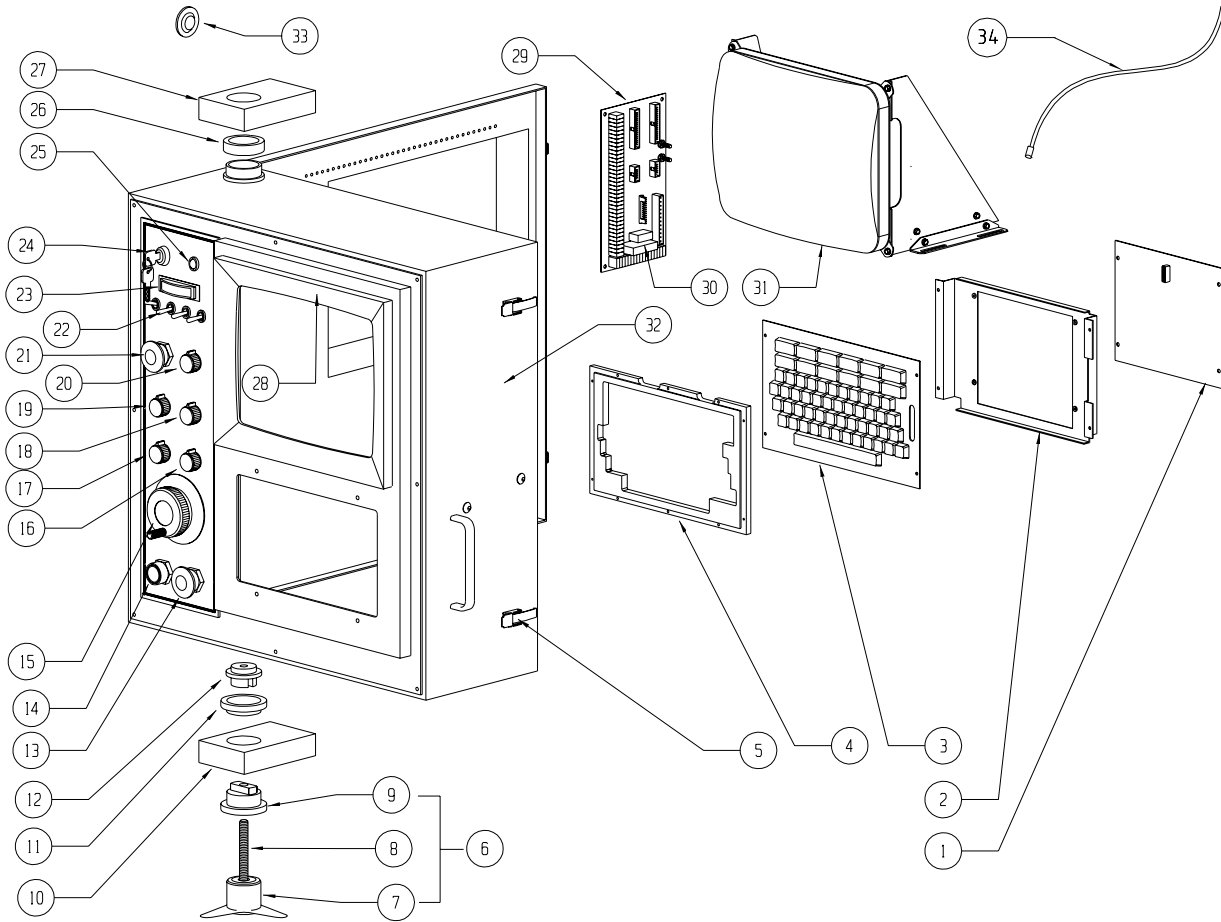
# MP PENDANT ASSEMBLY



**MP PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 (2 of 4)		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 (3 of 4)	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0621	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072	14	MPG-0020	23	HDW-0925		

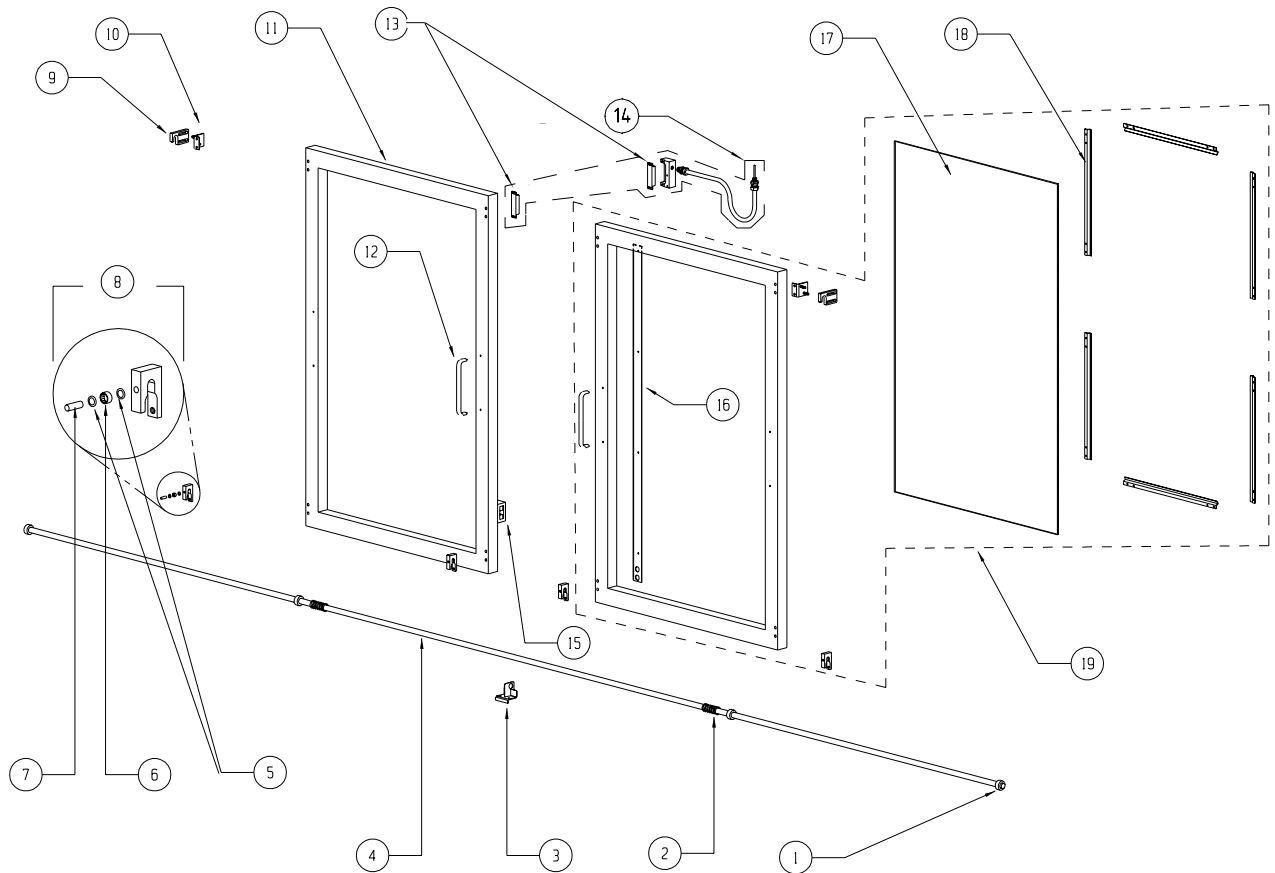
# 88HS PENDANT ASSEMBLY



**88HS PENDANT ASSEMBLY**

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

# FRONT DOOR ASSEMBLY



## FRONT DOOR ASSEMBLY

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0015	15	DOR-0035 <sup>(3)</sup>
2	HDW-0264	9	DOR-0001		HDW-0863 <sup>(4)</sup>
3	DOR-0019	10	DOR-0000	16	STM-0083
4	DOR-0023	11	DOR-0002	17	DOR-0007
5	HDW-0149	12	HDW-0182	18	STM-0084
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>	19	DOR-0076
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

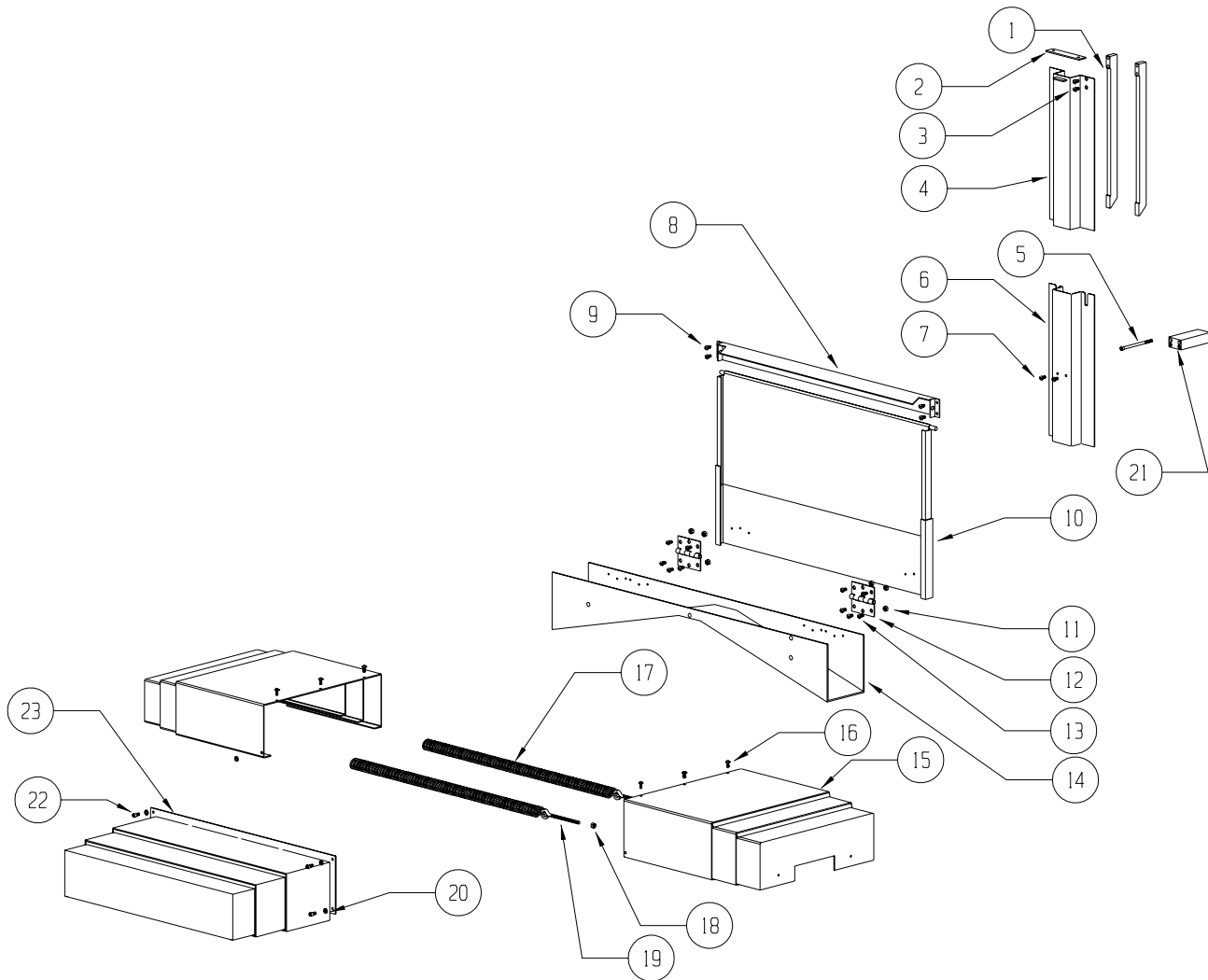
<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

<sup>3</sup>Complete assembly

<sup>4</sup>Latch only

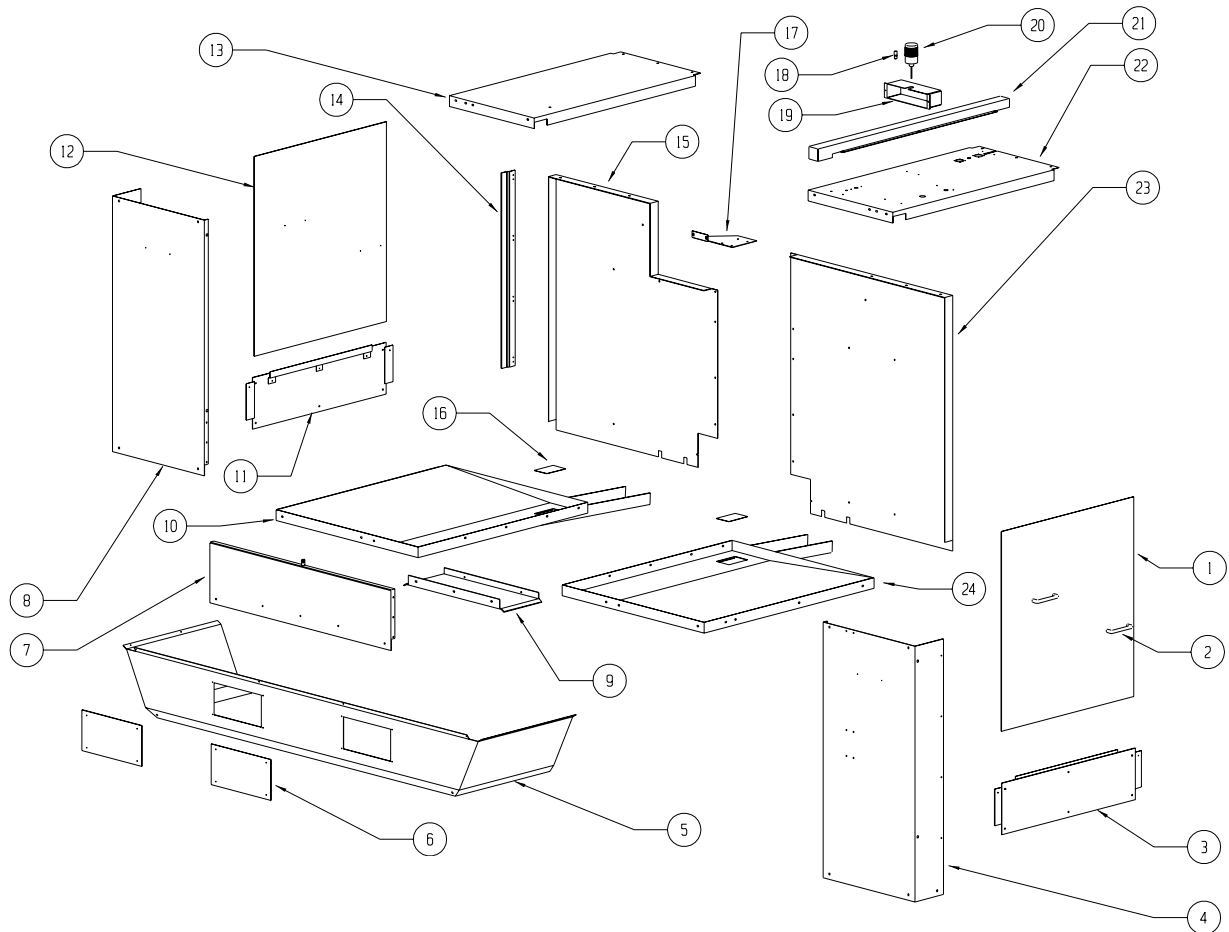
# WAY COVER ASSEMBLY



**WAY COVER ASSEMBLY**

	PART #		PART #		PART #
1	CVR-0031	10	CVR-0042	19	HDW-0016
2	CVR-0030	11	HDW-0337	20	HDW-0279
3	HDW-0324	12	HDW-0192	21	CVR-0036
4	CVR-0034	13	HDW-0346	22	HDW-0281
5	HDW-0490	14	STM-0305	23	CVR-0093
6	CVR-0035	15	CVR-0066		
7	HDW-0603	16	HDW-0346		
8	STM-0164	17	HDW-0261		
9	HDW-0346	18	HDW-0336		

# SHEETMETAL HOUSING

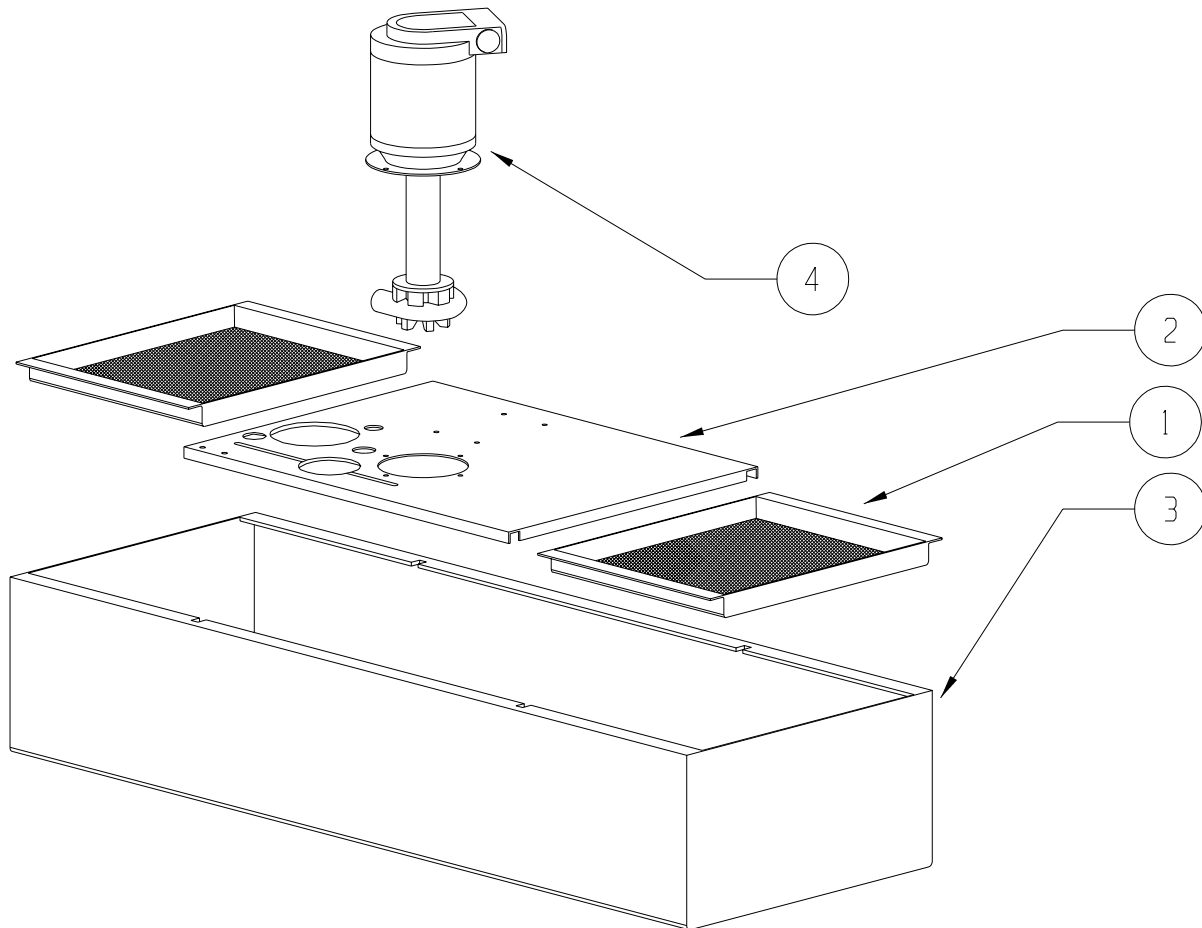


## SHEETMETAL HOUSING

	PART #		PART #		PART #
1	STM-0243	9	STM-0108	17	
2	HDW-0182	10	STM-0076	18	ELE-0122
3	STM-0242	11	STM-0242	19	STM-0342
4	STM-0247	12	STM-0243	20	ELE-0121
5	STM-0239	13	STM-0263	21	STM-0086
6	STM-0228	14	STM-0244	22	STM-0262
7	STM-0079	15	STM-0351	23	STM-0352
8	STM-0247	16	STM-0110	24	STM-0076



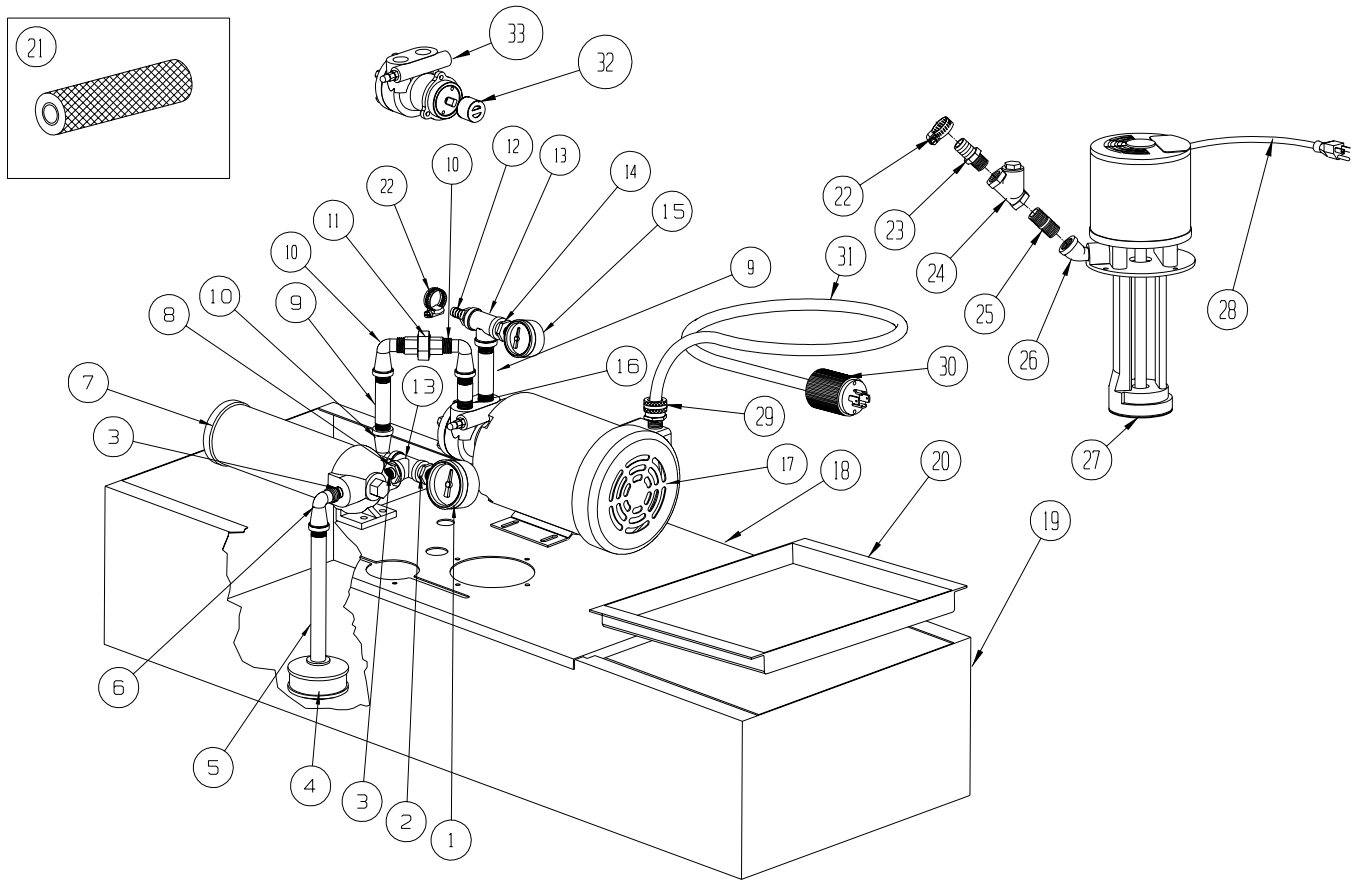
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

# 10K RPM COOLANT TANK



**10,000 RPM COOLANT TANK**

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

# TABLE OF CONTENTS

## Parts

## Manual

## VMC 6030 MODEL



COLUMN ASSEMBLY .....	2
BASE, TABLE & SADDLE .....	4
10K RPM HEAD ASSEMBLY .....	6
X AXIS SCALE ASSEMBLY .....	8
Y AXIS SCALE ASSEMBLY .....	9
DRAWBAR ASSEMBLY .....	10
ORIENTATION BRIDGE ASSEMBLY .....	12
10K IDLER ASSEMBLY .....	14
WAY LUBE ASSEMBLY .....	15
ATC GENEVA DRIVE ASSEMBLY .....	16
ATC SERVO DRIVE ASSEMBLY .....	18
7500 RPM SPINDLE ASSEMBLY .....	20
10K RPM SPINDLE ASSEMBLY .....	21
COOLANT THROUGH SPINDLE .....	22
CNC CABINET ASSEMBLY .....	23
CARD CAGE ASSEMBLY .....	24
POWER JUNCTION CABINET ASSEMBLY .....	25
CHILLER CABINET ASSEMBLY .....	26
88HS PENDANT ASSEMBLY .....	27
MULTI PROCESSOR PENDANT .....	28
FRONT DOOR ASSEMBLY .....	29
WAY COVER ASSEMBLY .....	30
SHEETMETAL HOUSING .....	31
7500 RPM COOLANT TANK .....	32
7500 RPM COOLANT THROUGH TANK ASSEMBLY .....	33
10K RPM COOLANT TANK .....	34
10K RPM COOLANT THROUGH TANK .....	35
DUAL ARM TOOL CHANGER .....	36



**This reference covers the following Fadal products:**

**Model VMC 6030**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

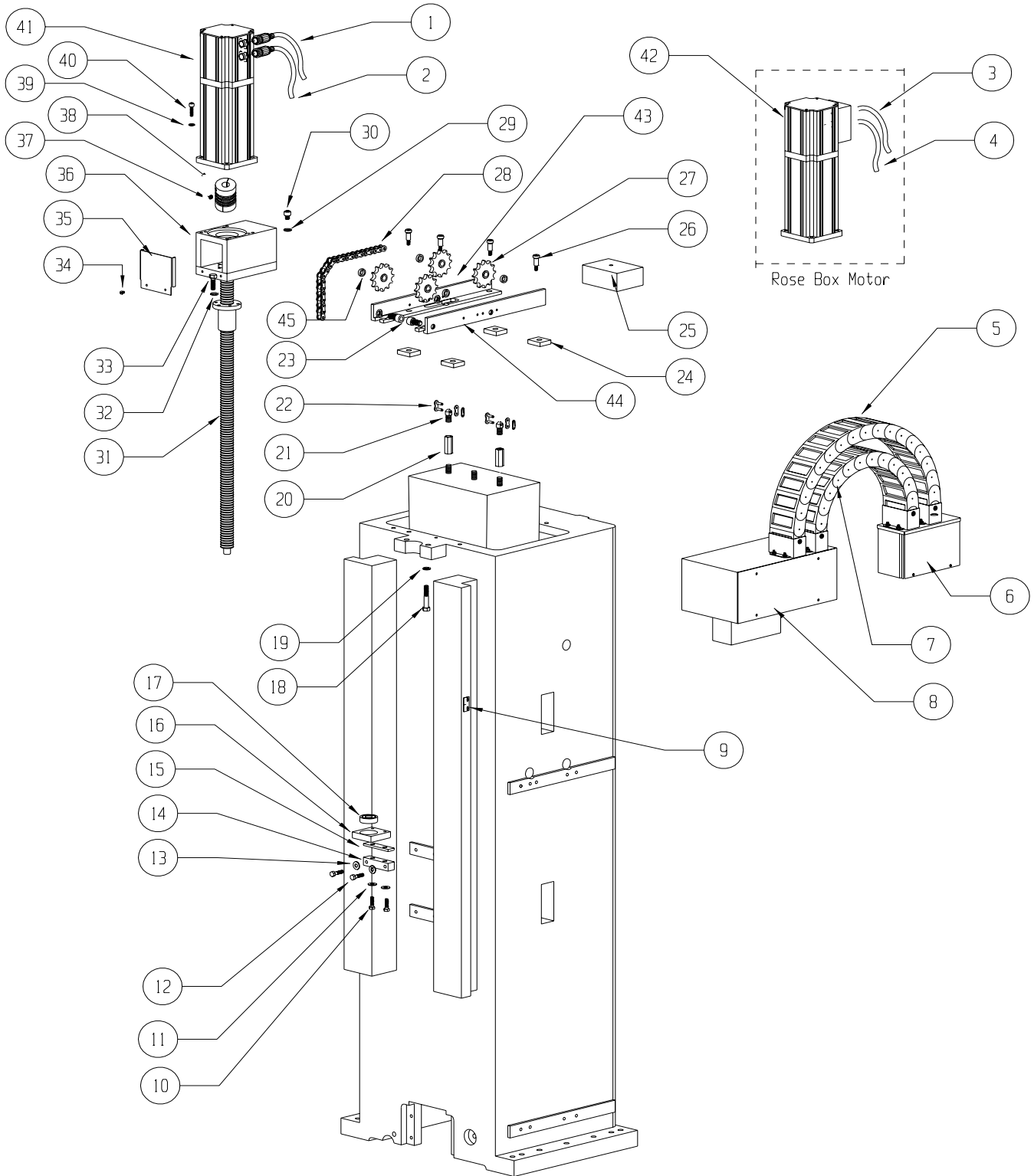
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

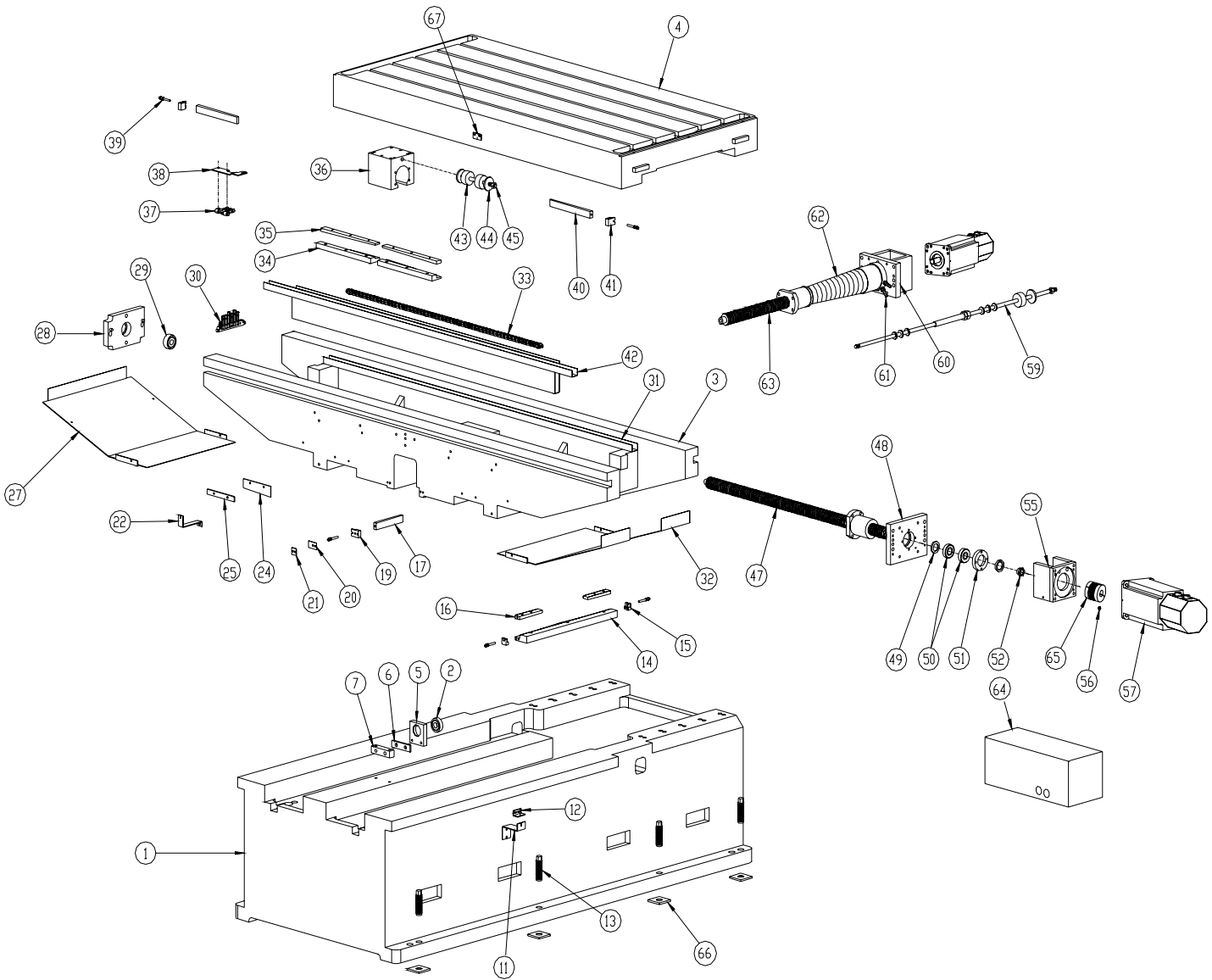


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	HDW-0049	25	CWT-0002	37	MTR-0071
2	WIR-0611	14	BLS-0052	26	HDW-0600	38	MTR-0189
3	WIR-0572	15	BLS-0143	27	PUL-0034	39	HDW-0280
4	WIR-0573	16	BLS-0053	28	HDW-0207	40	HDW-0779
5	CVR-0006	17	BRG-0021	29	HDW-0451	41	MTR-0142
6	STM-0067	18	HDW-0655	30	HDW-0465	42	MTR-0126
7	CVR-0005	19	HDW-0451	31	BLS-0021	43	CWT-0005
8	STM-0172	20	HDW-0355	32	HDW-0451	44	CWT-0007
9	STM-0044	21	CWT-0001	33	HDW-0558	45	CWT-0009
10	HDW-0569	22	HDW-0204	34	HDW-0347		
11	HDW-0049	23	HDW-0777	35	STM-0043		
12	HDW-0313	24	HDW-0363	36	BLS-0022		

# BASE , TABLE & SADDLE





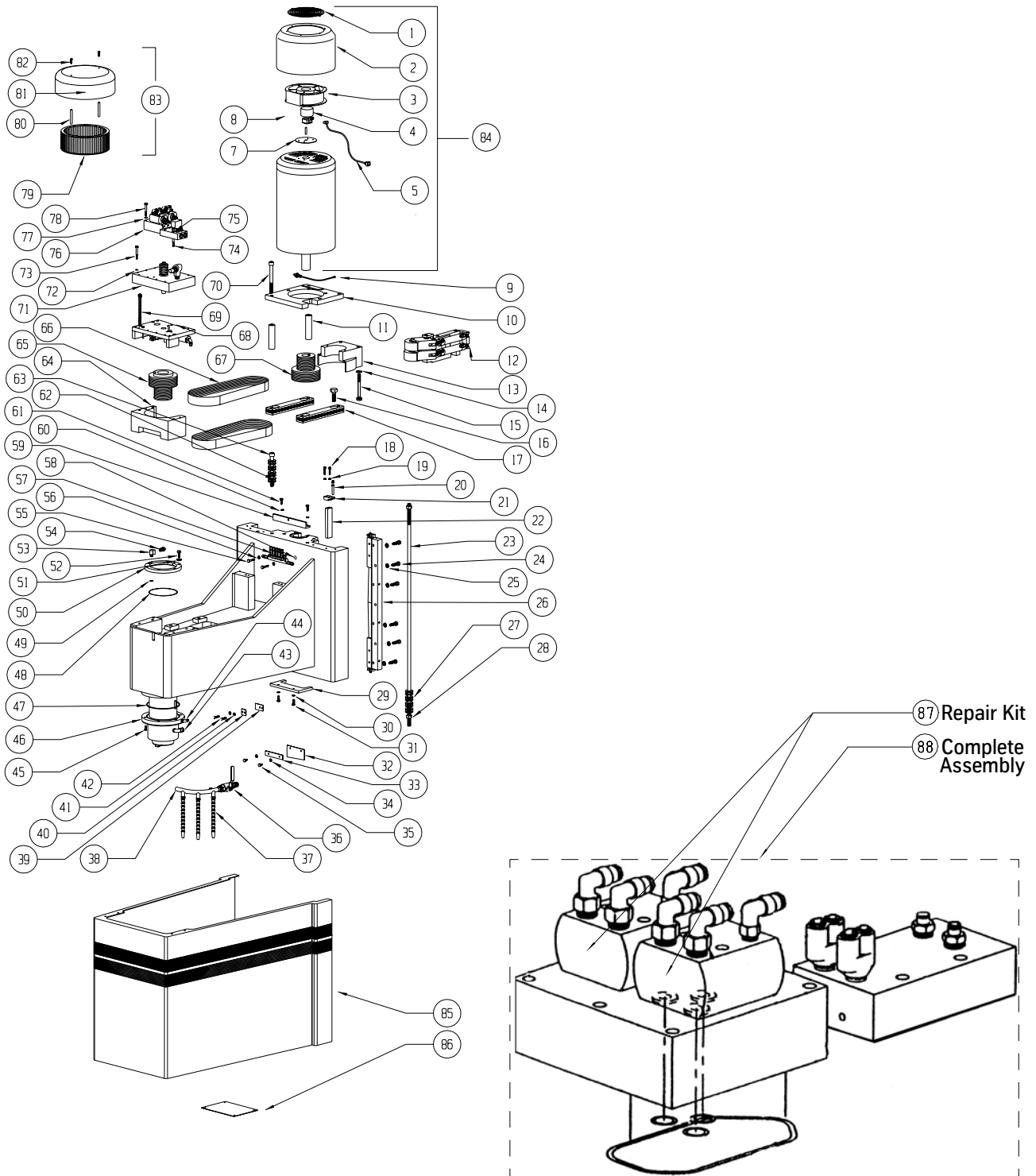
# BASE , TABLE & SADDLE

## BASE, TABLE & SADDLE

	PART #		PART #		PART #
1	BAS-0015	27	STM-0512	53	MTR-0183
3	SDL-0040	28	BLS-0128	54	
4	SDL-0018	29	BRG-0022	55	BLS-0207
5	BLS-0021	30	LUB-0043	56	HDW-0419
6	BLS-0143	31	STM-0173	57	MTR-0142
7	BLS-0052	32	STM-0511	58	
8		33	CVR-0040	59	BLS-0066
9		34	GIB-0016	60	BLS-0211
10		35	GIB-0015*	61	PLM-0196
11	STM-0113	36	BLS-0054	62	CVR-0001
12	STM-0047	37	LUB-0044	63	BLS-0182
13	HDW-0374	38	STM-0293	64	STM-0609
14	GIB-0024	39	GIB-0013	65	MTR-0189
15	GIB-0012	40	GIB-0000*	66	SHP-0002
16	GIB-0019*	41	GIB-0011	67	STM-0044
17	GIB-0003	42	STM-0523		
18		43	HDW-0375		
19	GIB-0010	44	HDW-0859		
20	HDW-0355	45	HDW-0566		
21	STM-0042	46			
22	STM-0046	47	BLS-0179		
23		48	BLS-0210		
24	HDW-0377	49	HDW-0213		
25	STM-0171	50	BRG-0039		
26		51	BLS-0039		
		52	HDW-0332		

\*Specify gib size when ordering.

# 10K RPM HEAD ASSEMBLY



# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	STM-0142
5	WIR-0168	34	HDW-0279	63	HDW-0462
		35	HDW-0319	64	BEL-0014
7	STM-0148	36	VLV-0017	65	PUL-0018
8	ENC-0007	37	PLM-0016	66	BEL-0003
9	HDW-0370	38	CNT-0039	67	PUL-0019
11	MTR-0149	40	STM-0042	69	HDW-0290
12	IDL-0003	41	HDW-0279	70	HDW-0284
13	BEL-0015	42	HDW-0294	71	DRB-0000
14	HDW-0451	43	PLM-0112	72	HDW-0279
15	HDW-0311	44	PLM-0034	73	HDW-0320
16	HDW-0283	45	HDW-0470	74	HDW-0321 (HT)
17	MTR-0068	46	SPN-0008 <sup>(1)</sup>	75	HDW-0279 (HT)
18	HDW-0294	47	HDW-0181	76	HYD-0017 <sup>(2)</sup> (HT)
19	HDW-0279	48	HDW-0148	77	HDW-0279 (HT)
20	GIB-0013	49	HDW-0177	78	HDW-0320 (HT)
21	GIB-0010	50	SPN-0042	79	MTR-0127
22	GIB-0001*	51	HDW-0275	80	SVT-0108
23	BLS-0196	52	HDW-0568	81	STM-0467
24	HDW-0569	53	PLM-0075	82	HDW-0597
25	HDW-0280	54	PLM-0088	83	MTR-0128
26	GIB-0008*	55	HDW-0576	84	MTR-0047 <sup>(3)</sup>
27	HDW-0194	56	HDW-0279	85	STM-0058
28	HDW-0543	57	LUB-0045	86	STM-0064
29	CVR-0048	58	HDW-0047	87	HYD-0018
				88	HYD-0017

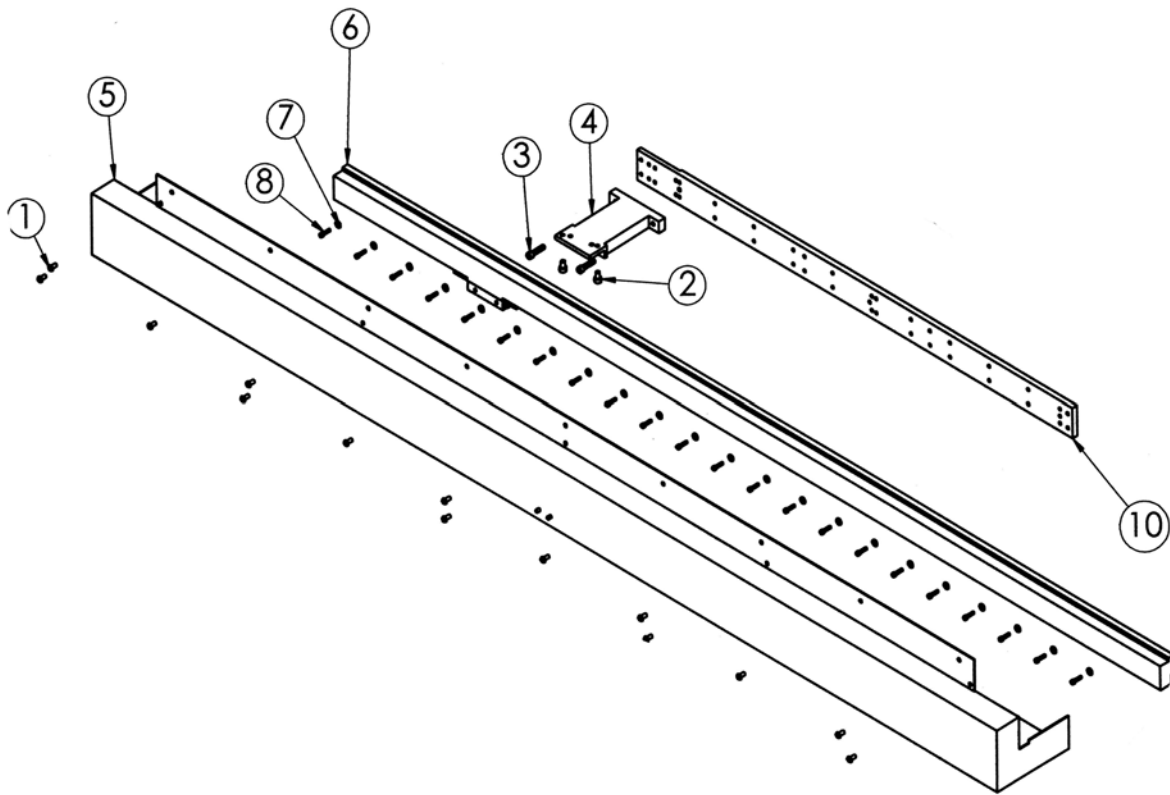
\* Specify gib size when ordering.

<sup>(1)</sup>SPN-0008 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018

<sup>(2)</sup>HYD-0017 REPLACEMENT PART HYD-0018

<sup>(3)</sup>MTR-0047 INCLUDES: PUL-0019

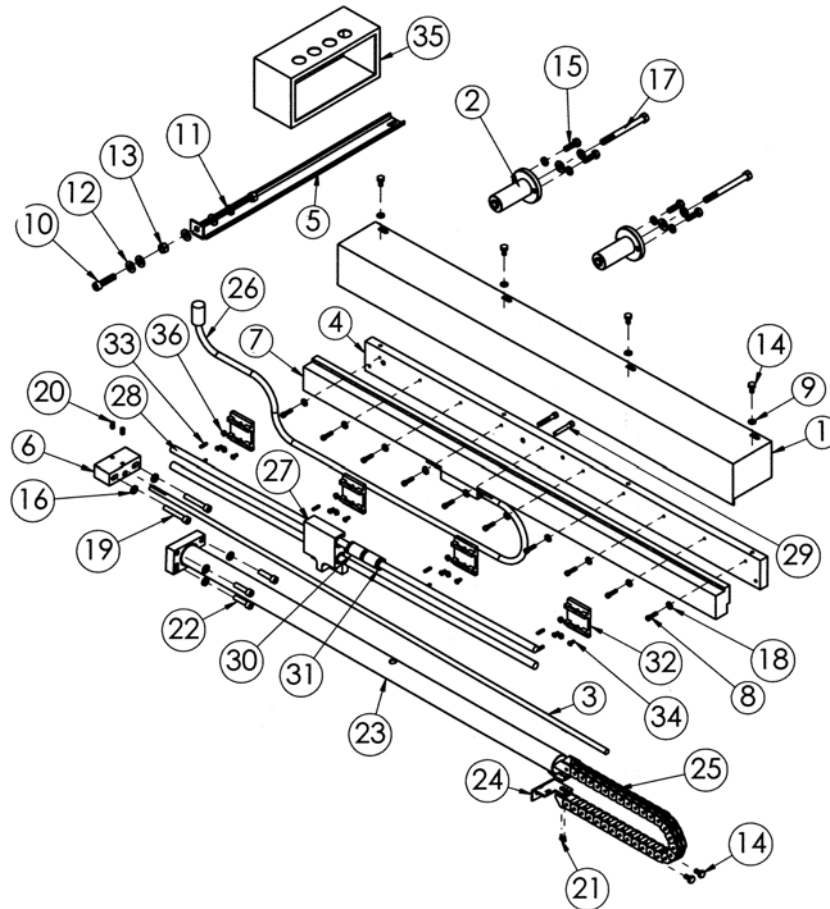
# X AXIS SCALE ASSEMBLY



X AXIS SCALE ASSEMBLY

	PART #		PART #
1	HDW-0346	6	SCL-0027
2	HDW-0090	7	HDW-0449
3	HDW-0295	8	HDW-0303
4	SCL-0048		
5	STM-0183	10	SCL-0052

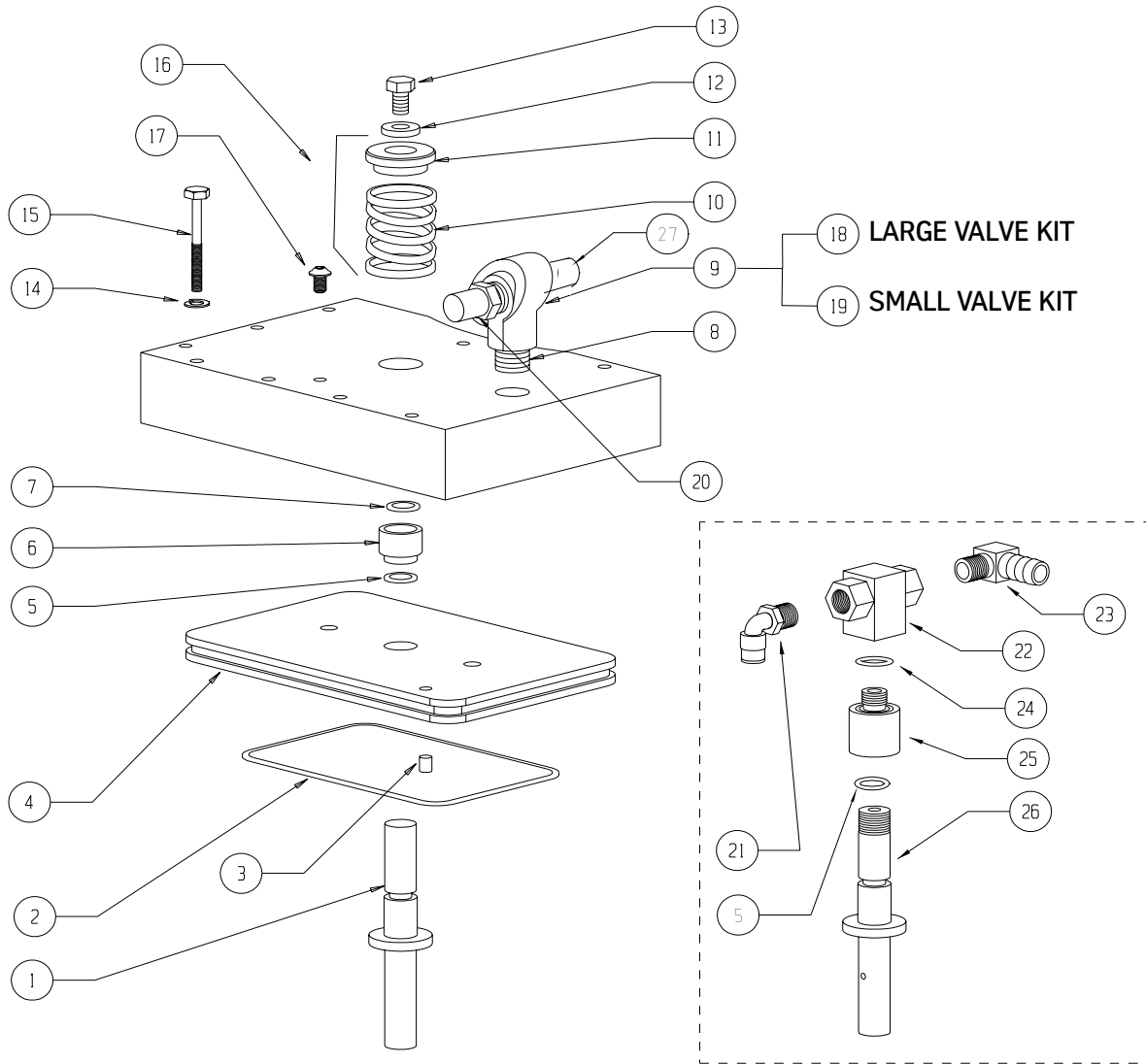
# Y AXIS SCALE ASSEMBLY



Y AXIS SCALE ASSEMBLY

	PART #		PART #		PART #
1	STM-0180	13	HDW-0333	25	CVR-0135
2	SCL-0043	14	HDW-0319	26	SCL-0029
3	SCL-0047	15	HDW-0314	27	SCL-0078
4	SCL-0038	16	HDW-0281	28	SCL-0066
5	STM-0184	17	HDW-0572	29	HDW-0297
6	SCL-0045	18	HDW-0449	30	BRG-0121
7	SCL-0001	19	HDW-0484	31	HDW-0759
8	HDW-0303	20	HDW-0408	32	SCL-0076
9	HDW-0279	21	HDW-0308	33	HDW-0430
10	HDW-0313	22	HDW-0483	34	HDW-0383
11	HDW-0280	23	SCL-0116	35	STM-0179
12	HDW-0452	24	CVR-0136	36	HDW-0808

# DRAWBAR ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

Coolant Thru Assembly DRB-0001

**DRAWBAR ASSEMBLY**

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	PLM-0117	17	HDW-0347	24	HDW-0150
4	DRB-0009	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0571	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

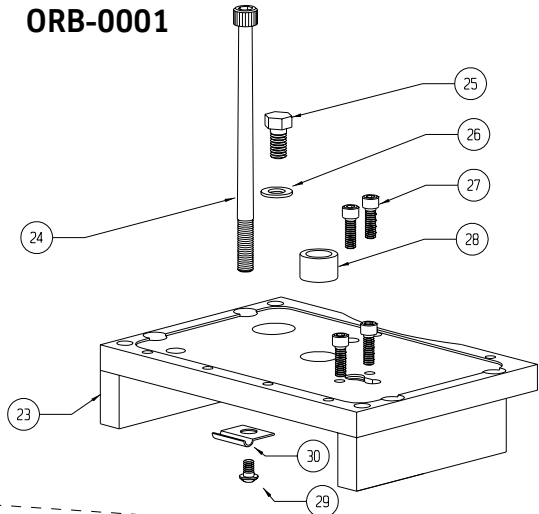


This page intentionally left blank.

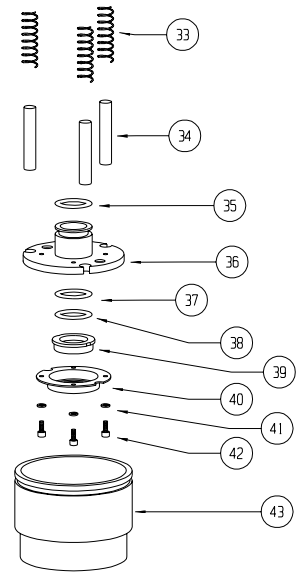
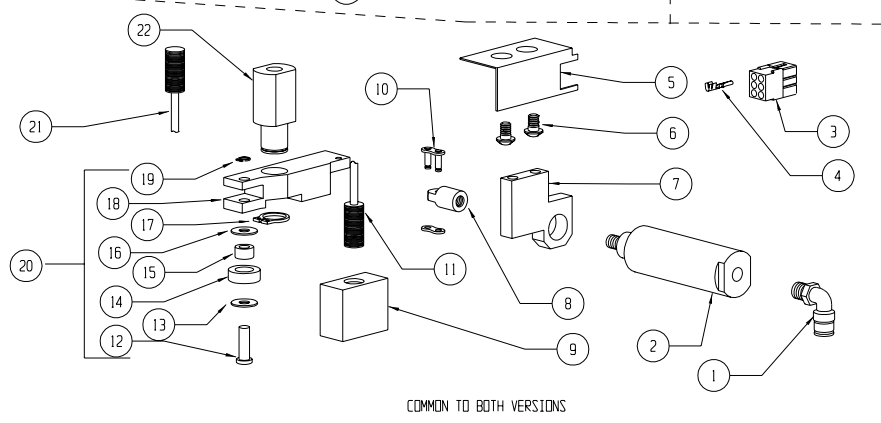
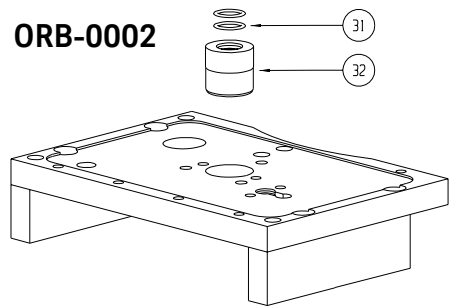


# ORIENTATION BRIDGE ASSEMBLY

ORB-0001



ORB-0002



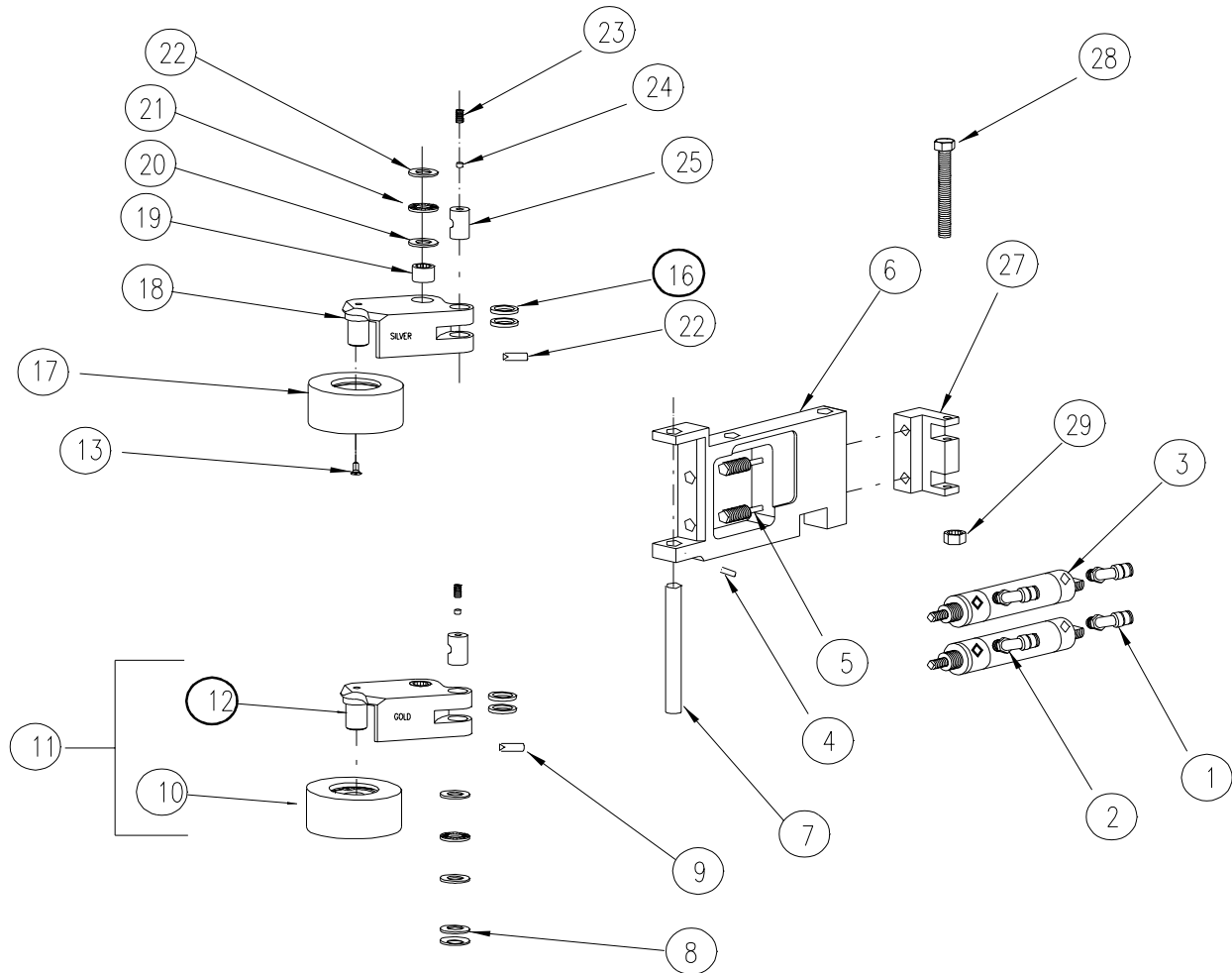


# ORIENTATION BRIDGE ASSEMBLY

## ORIENTATION BRIDGE ASSEMBLY

	PART #		PART #		PART #
1	PLM-0034	14	ORB-0009	30	LUB-0077
2	CYL-0007	15	BRG-0014		LUB-0078
3	WIR-0051	16	HDW-0515	31	HDW-0150
4	WIR-0043 (16 AWG)	17	HDW-0725	32	CNT-0042
	WIR-0044 (16 AWG)	18	ORB-0031	33	HDW-0257
	WIR-0544 (22 AWG)	19	HDW-0726	34	HDW-0326
	WIR-0056 (22 AWG)	20	ORB-0004	35	HDW-0156
5	STM-0596	21	ELE-0145	36	CNT-0041
6	HDW-0347	22	ORB-0013	37	HDW-0155
7	ORB-0030	23	ORB-0008	38	HDW-0156
8	ORB-0011	24	HDW-0285	39	CNT-0033
9	ORB-0014	25	HDW-0571	40	CNT-0045
10	HDW-0209	26	HDW-0048	41	HDW-0453
11	ELE-0145	27	HDW-0298	42	HDW-0308
12	ORB-0007	28	BRG-0008	43	STM-0158
13	HDW-0515	29	HDW-0349		

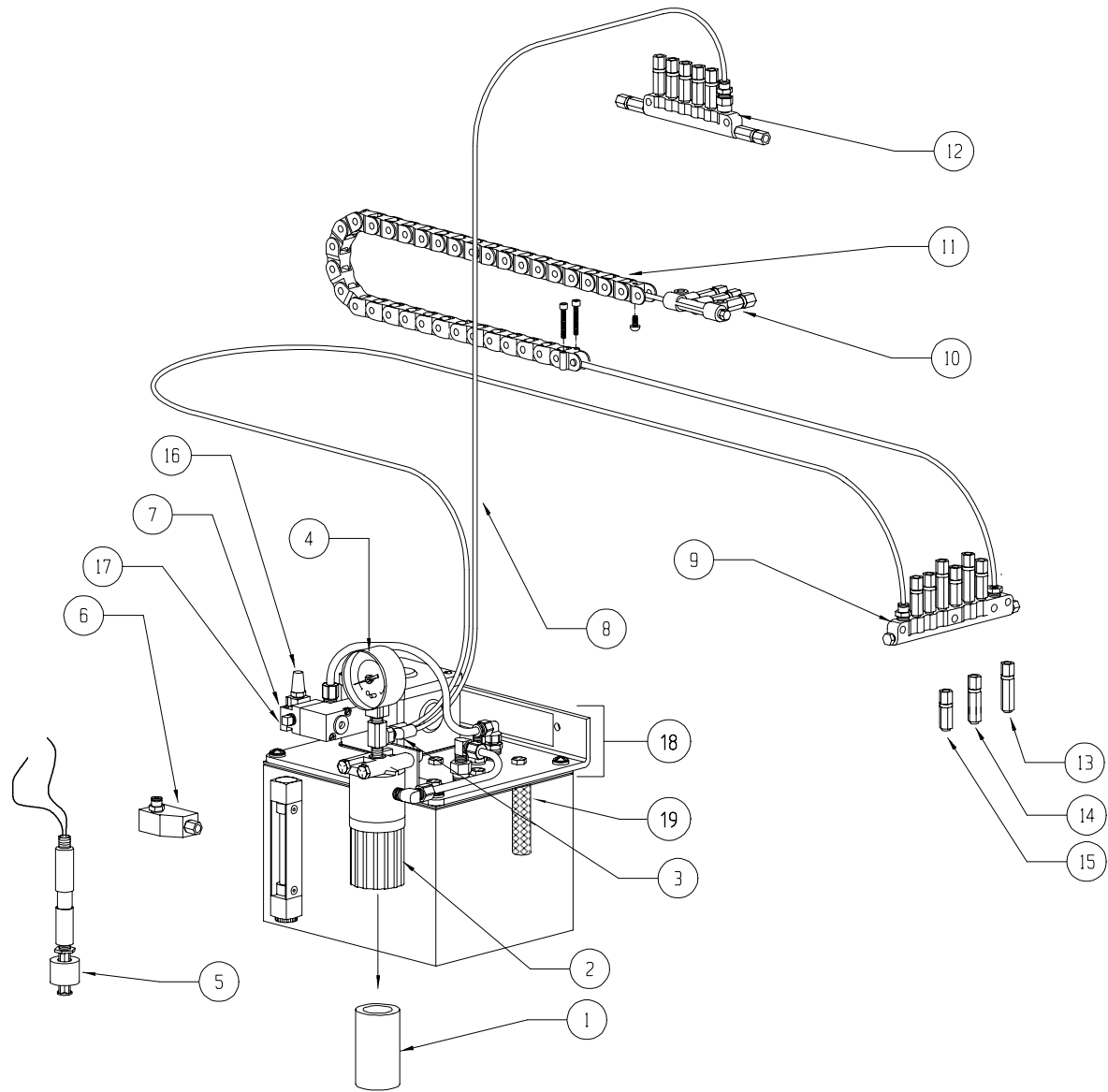
# 10K IDLER ASSEMBLY



**10K IDLER ASSEMBLY**

	PART #		PART #		PART #
1	PLM-0036	11	IDL-0000	21	BRG-0015
2	PLM-0034	12	IDL-0004	22	BRG-0016
3	CYL-0006	13	HDW-0605	23	HDW-0412
4	HDW-0612	14		24	IDL-0010
5	ELE-0145	15		25	IDL-0013
6	IDL-0011	16	HDW-0277	26	
7	IDL-0006	17	IDL-0017	27	IDL-0008
8		18	IDL-0015	28	HDW-0579
9	ELE-0147	19	BRG-0017	29	HDW-0643
10	IDL-0007	20	BRG-0016		

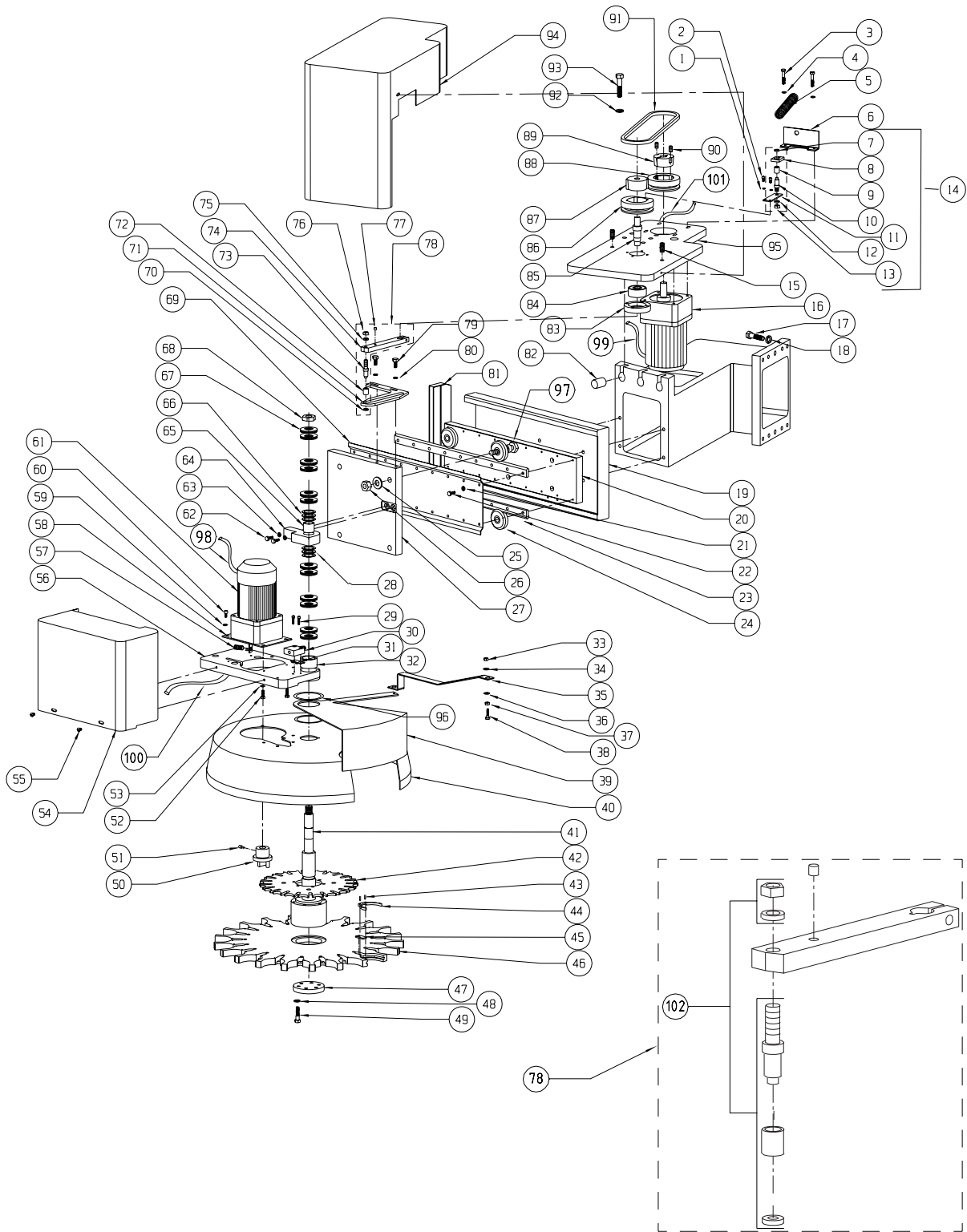
# WAY LUBE ASSEMBLY



**WAY LUBE ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		

# ATC GENEVA DRIVE ASSEMBLY

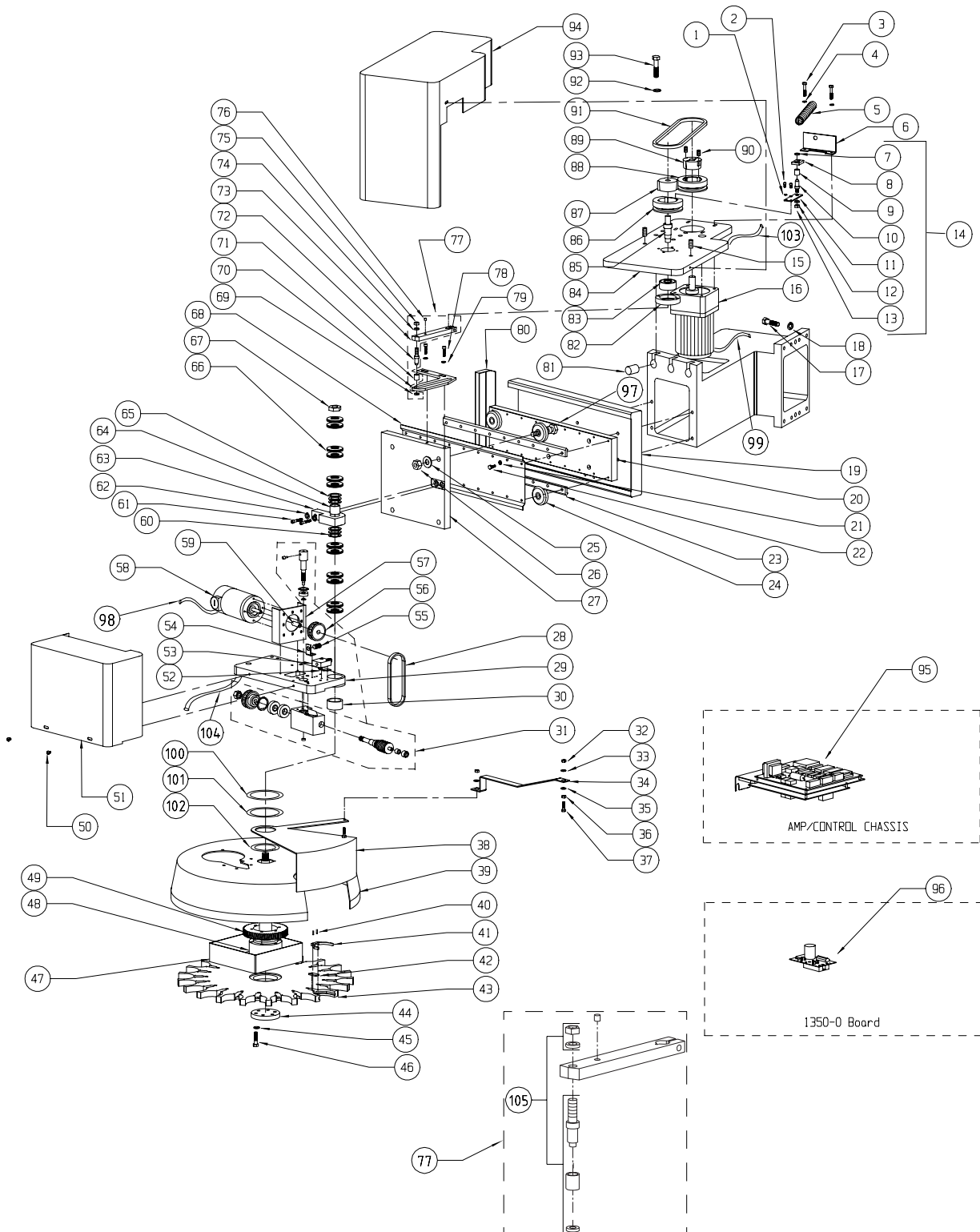


# ATC GENEVA DRIVE ASSEMBLY

## ATC GENEVA DRIVE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
								102	ATC-0169
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)

# ATC SERVO DRIVE ASSEMBLY



# ATC SERVO DRIVE ASSEMBLY

## ATC SERVO DRIVE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

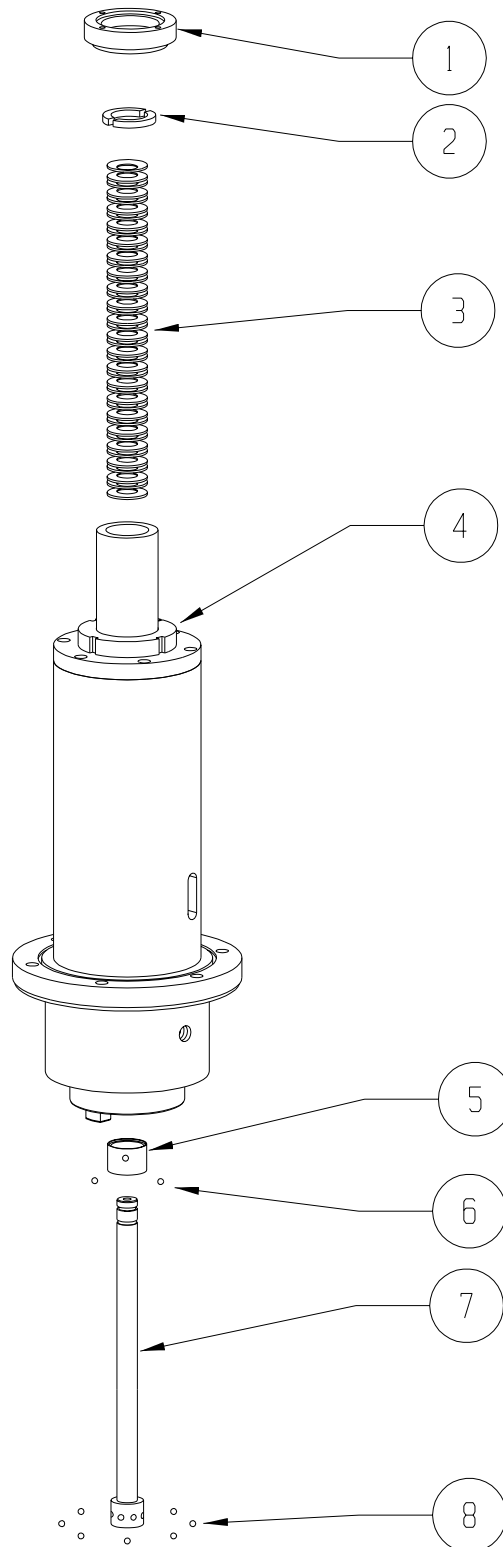
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025





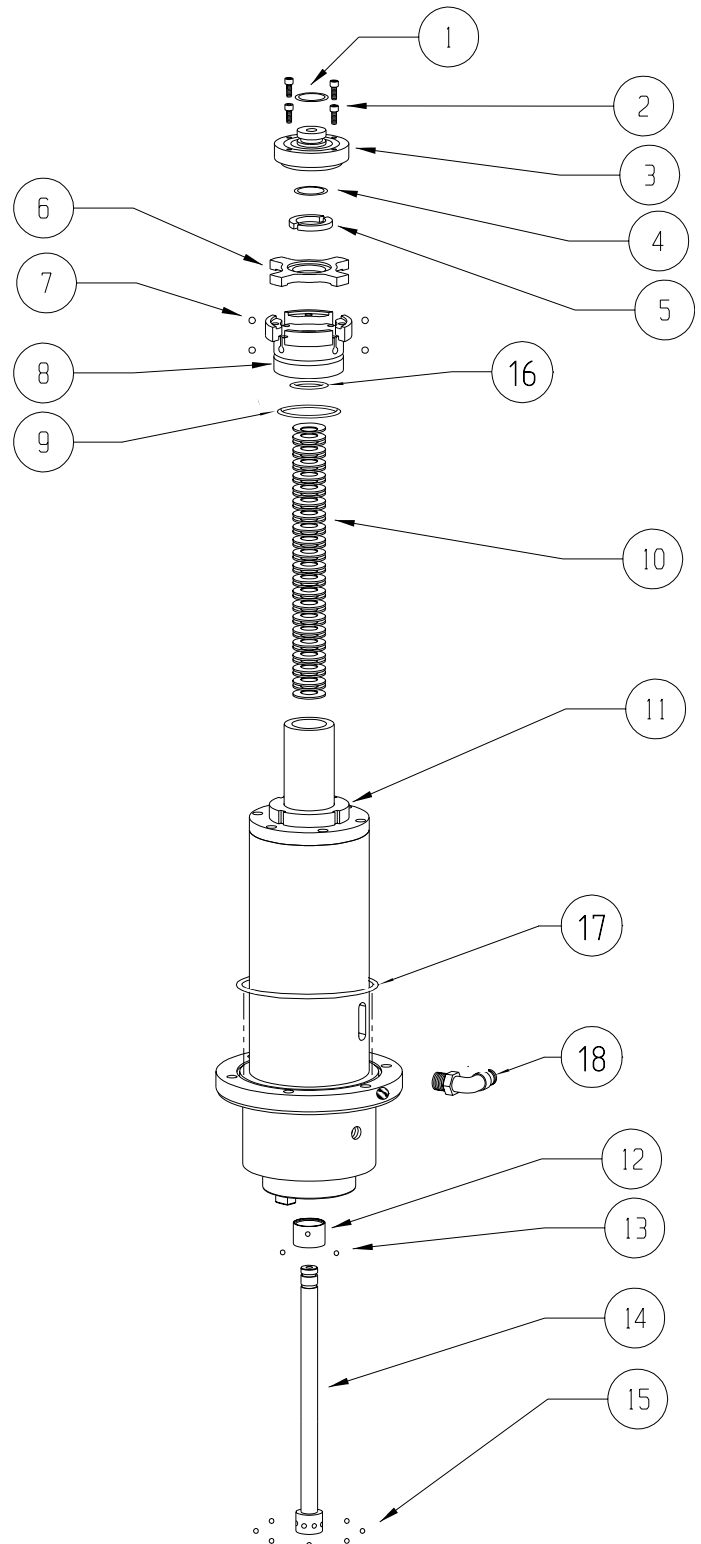
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

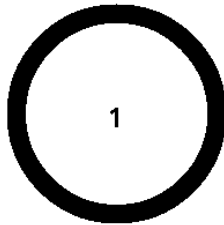
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

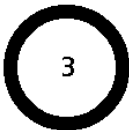
CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



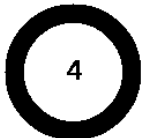
HDW-0158



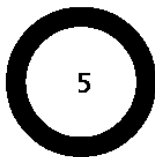
HDW-0177



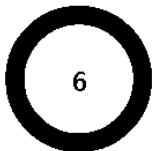
HDW-0150



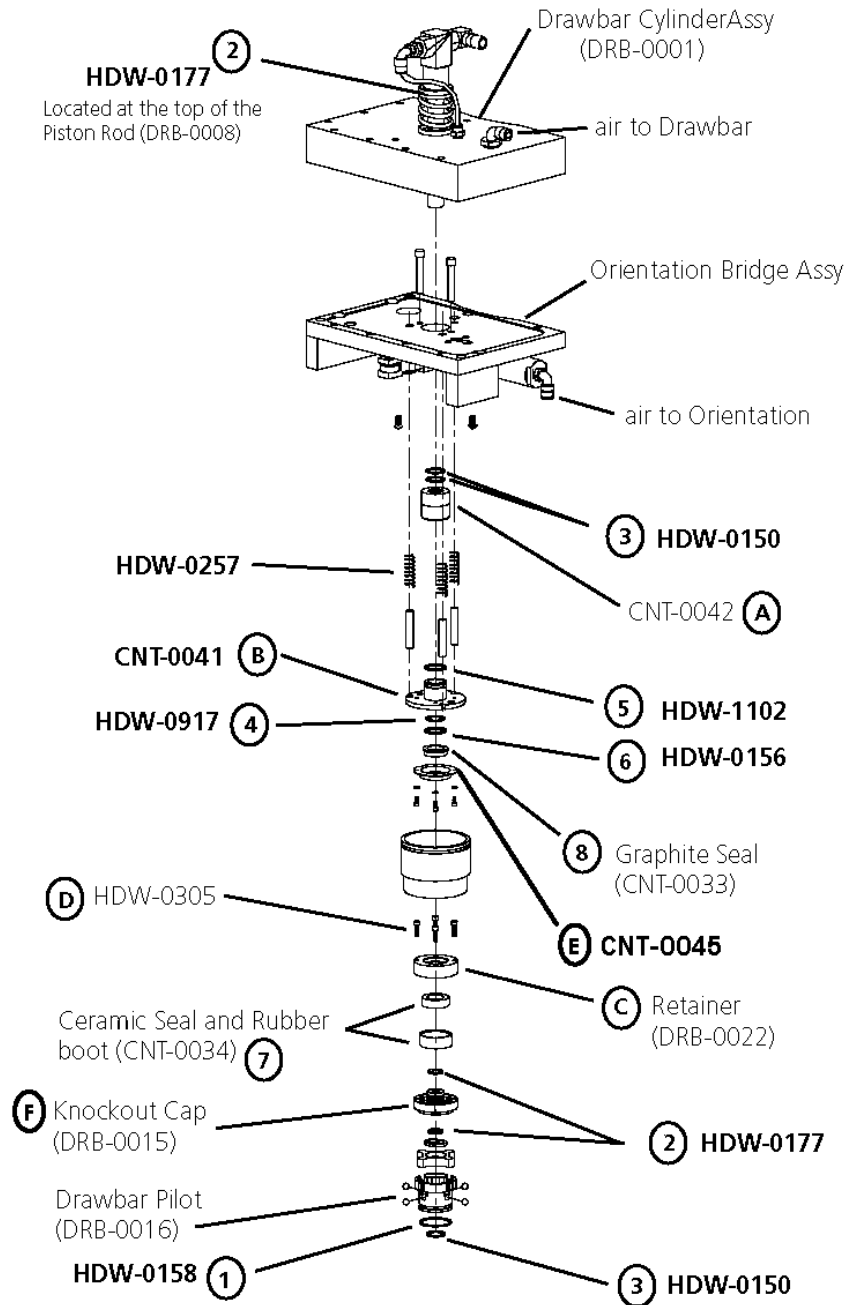
HDW-0917



HDW-1102

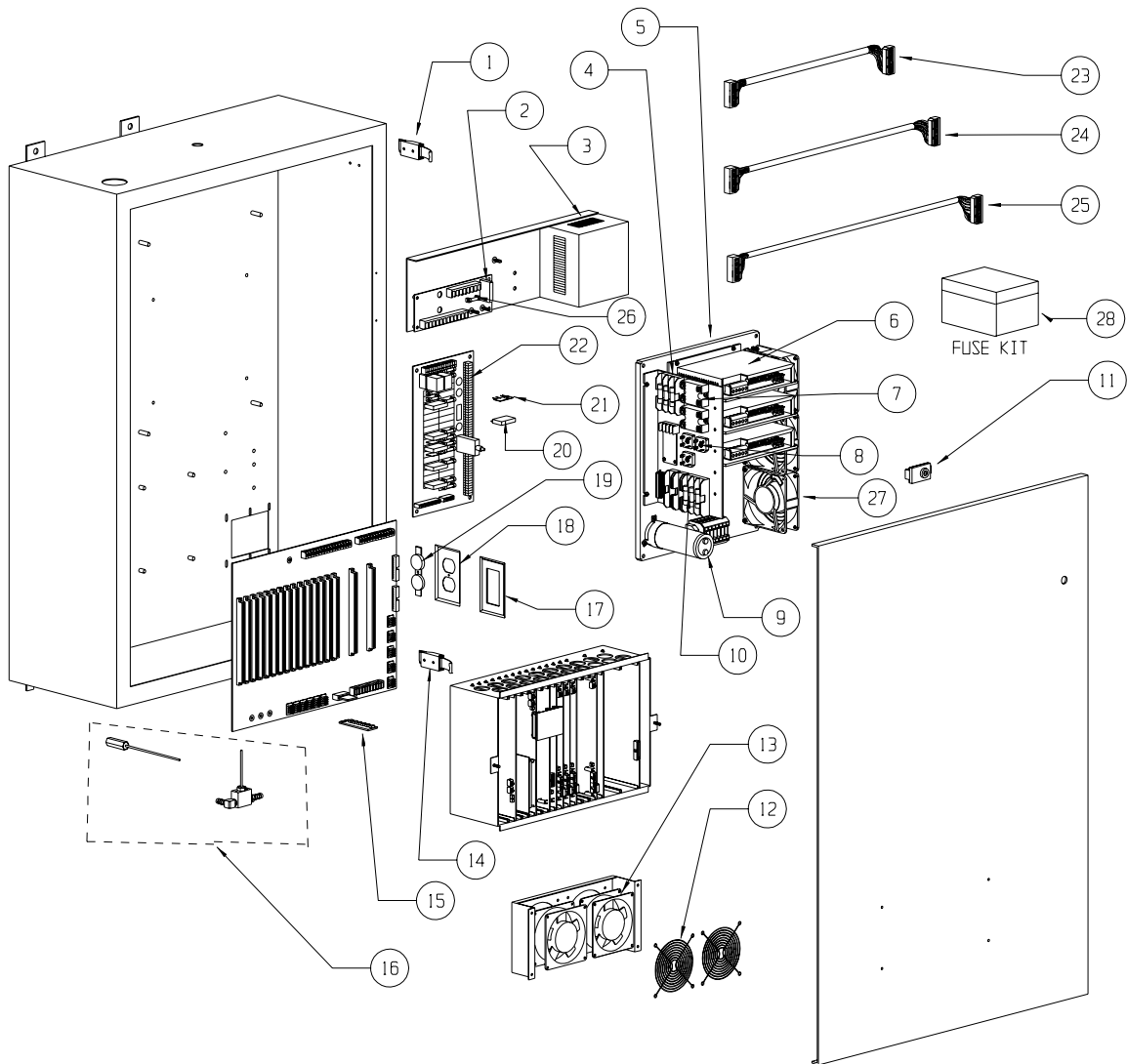


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8 AND A-F)

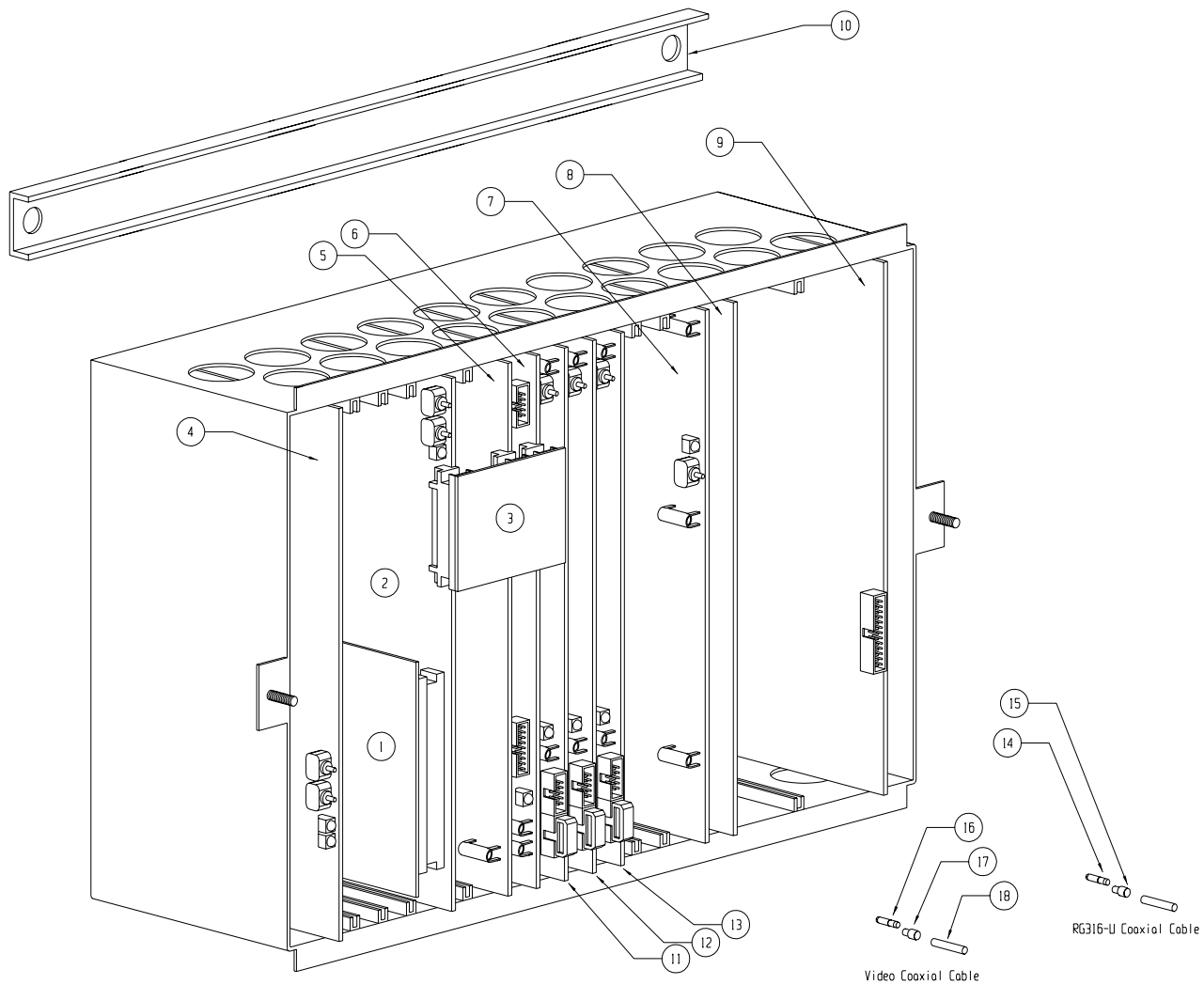
# CNC CABINET ASSEMBLY



## CNC CABINET ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0034	15	PCB-0010	22	PCB-0014
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0172	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0117	25	WIR-0174
5	AMP-0028	12	HDW-0850	19	WIR-0121	26	ELE-0046
6	AMP-0029 (GTK)	13	ELE-0123	20	ELE-0070	27	ELE-0123
	AMP-0034 (AMC)						
7	ELE-0074	14	HDW-0217	21	ELE-0101	28	ELE-0106

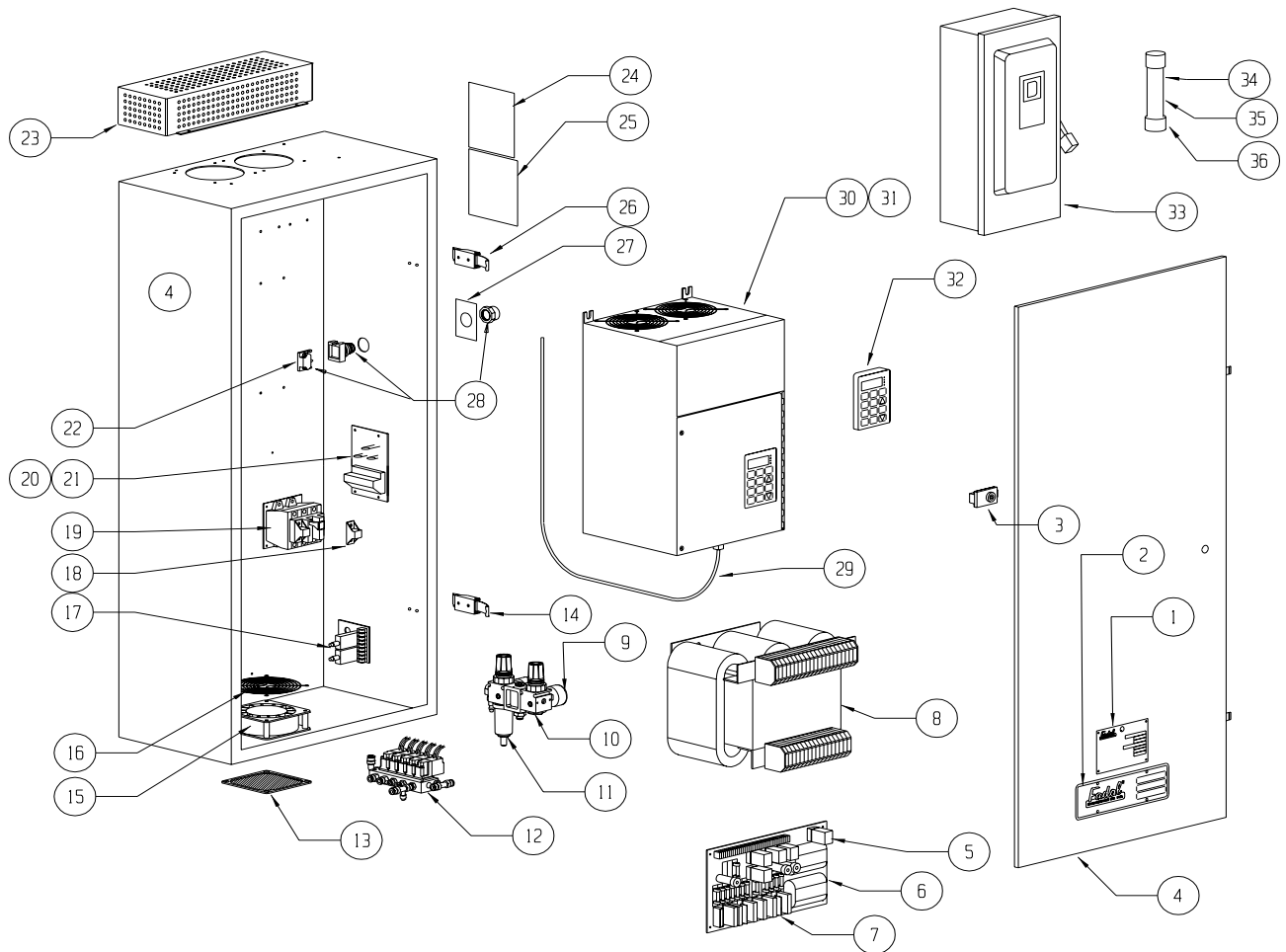
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	8	PCB-0000
2	PCB-0030	9	PCB-0005
3	PCB-0053	10	STM-0029
4	PCB-0045	11	WIR-0040
5	PCB-0032 (88HS)	12	WIR-0041
	PCB-0033 (32HS)	13	WIR-0038
6	PCB-0003	14	WIR-0039
7	PCB-0141	15	WIR-0086

SLOT	BOARD #	SLOT	BOARD #
1	PCB-0045	10	PCB-0037
2		11	PCB-
3		12	
4		13	
5	PCB-0030	14	PCB-0141
6		15	PCB-0000
7		16	PCB-0008
8	PCB-0003	17	PCB-0005
9	PCB-0037		

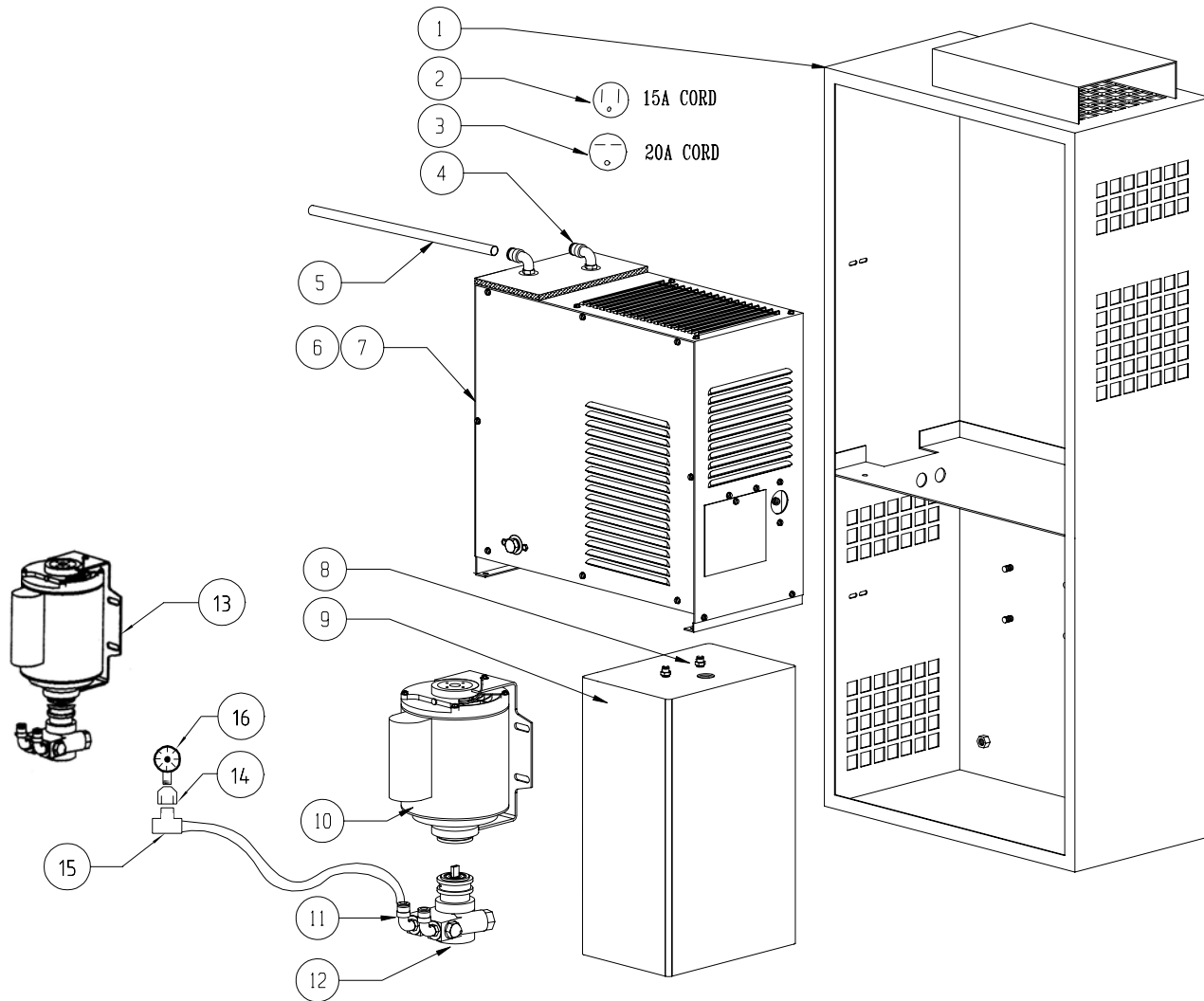
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	LBL-0030	12	VLV-0054	22	ELE-0093	31	INV-0056	36	ELE-0060
	LBL-0031 (HT)	13	HDW-0	23	INV-0004		(AMC)		20A 480V
2	LBL-0106	14	HDW-			32	INV-0017		
3	HDW-221	15	ELE-0123	24	LBL-0037	33	ELE-0139		
4	STM-0450	16	HDW-	25	LBL-0040		(60 AMP)		
5	ELE-0072	17	PCB-0046	26	HDW-0219		ELE-0140		
6	PCB-0015	18	ELE-0138	27	LBL-0038		(30 AMP)		
7	ELE-0070	19	ELE-0132	28	ELE-0110	34	ELE-0063		
8	ELE-0200	20	PCB-0145	29	WIR-0166		45A 240V		
9	REG-0005		(240 VAC)	30	INV-0020 (HT)	35	ELE-0062		
10	REG-0009	21	PCB-0146		INV-0041		30A 380V		
11	REG-0008		(500 VAC)		(BALDOR)				

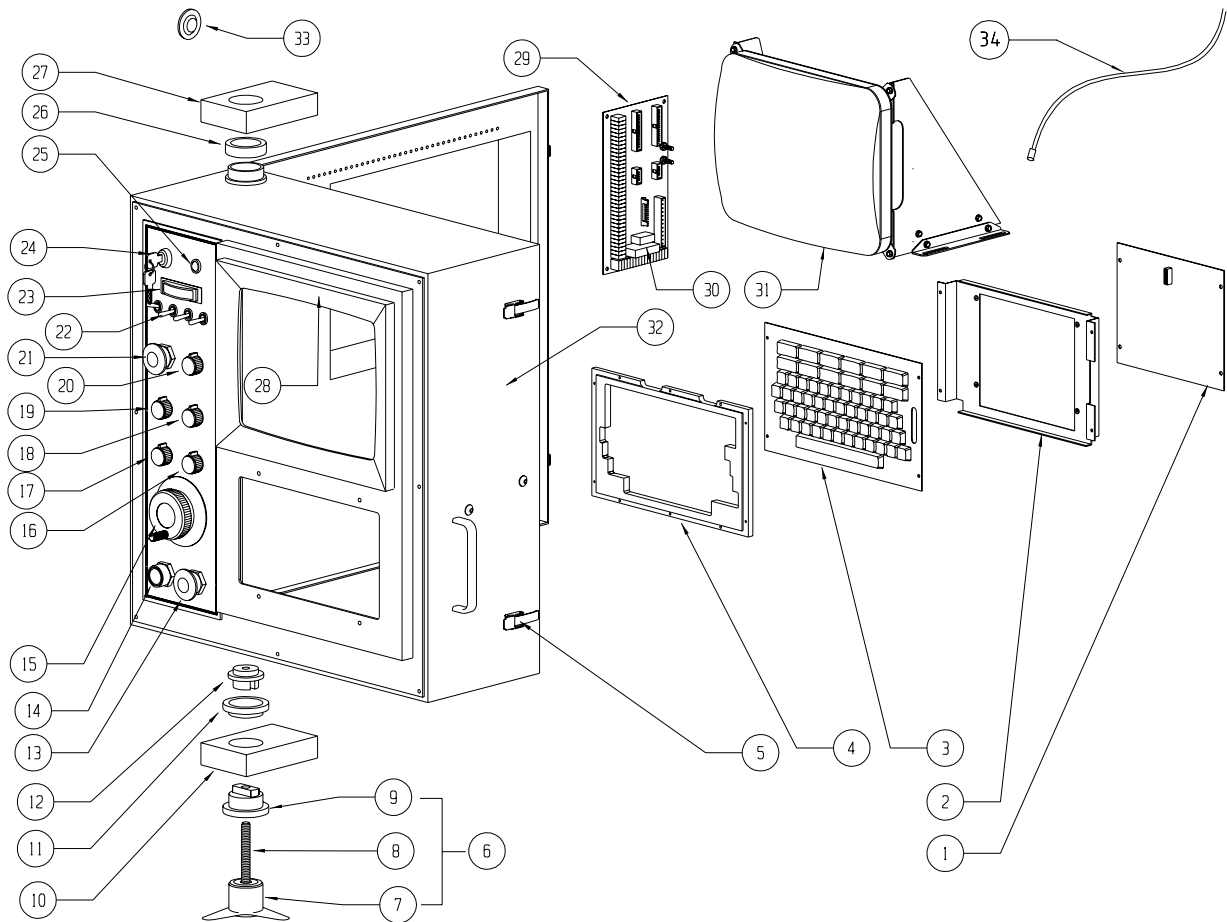
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PLM-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

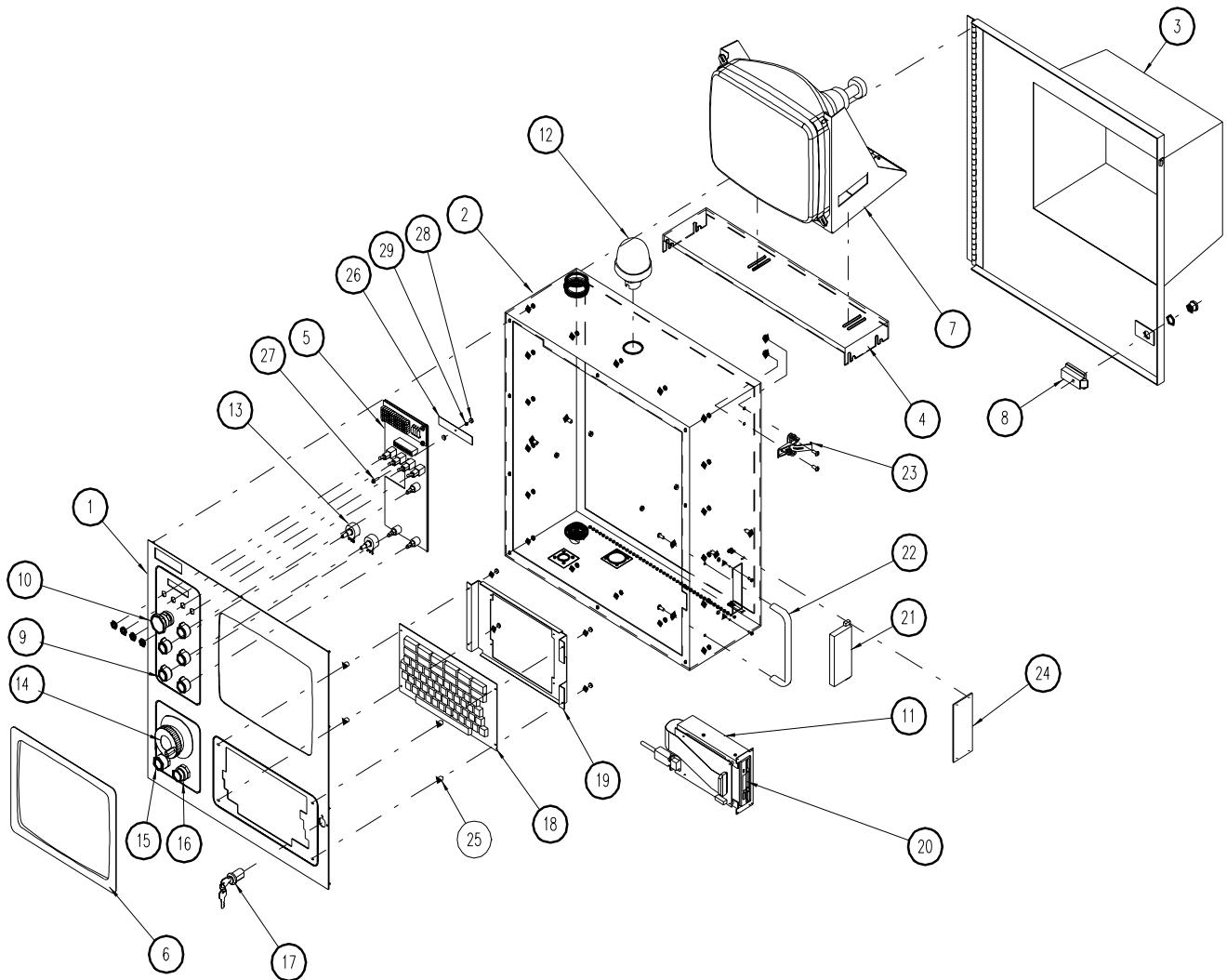
# 88HS PENDANT ASSEMBLY



## 88HS PENDANT ASSEMBLY

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

# MULTI PROCESSOR PENDANT

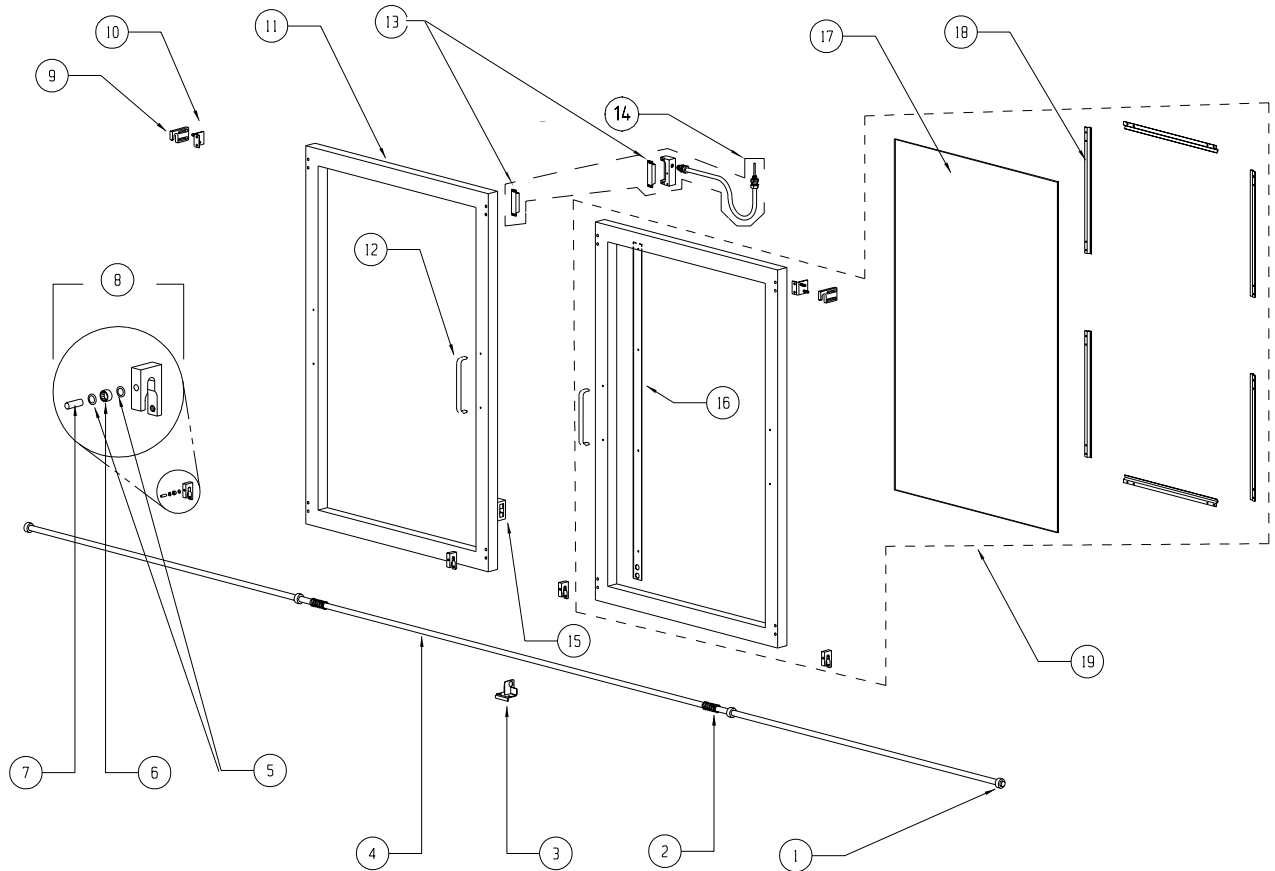


MULTI PROCESSOR PENDANT

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 20F4		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 30F4	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0671	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072 10F3	14	MPG-0020	23	HDW-0925		



# FRONT DOOR ASSEMBLY



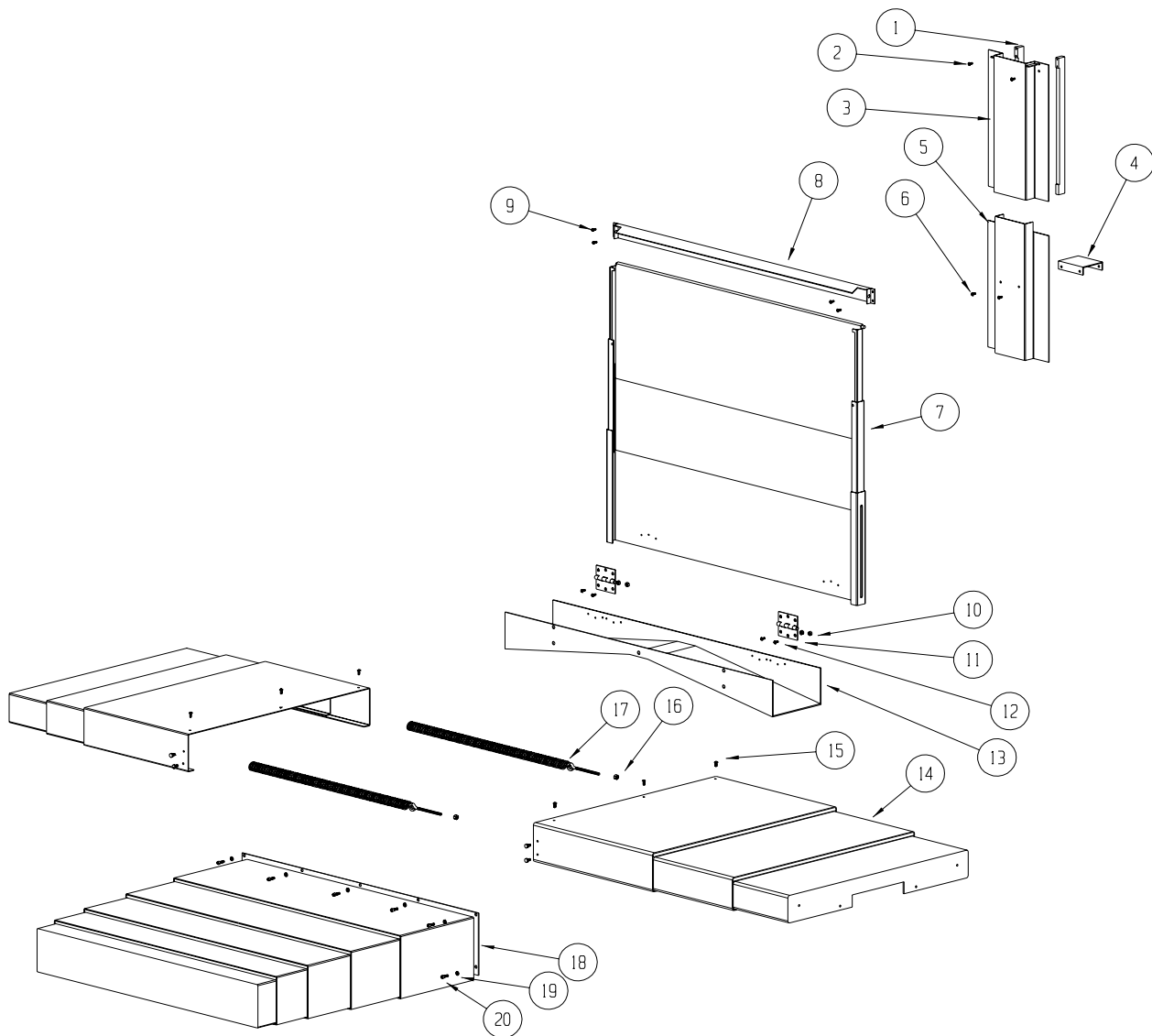
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0053	11	DOR-0002	18	STM-0084
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

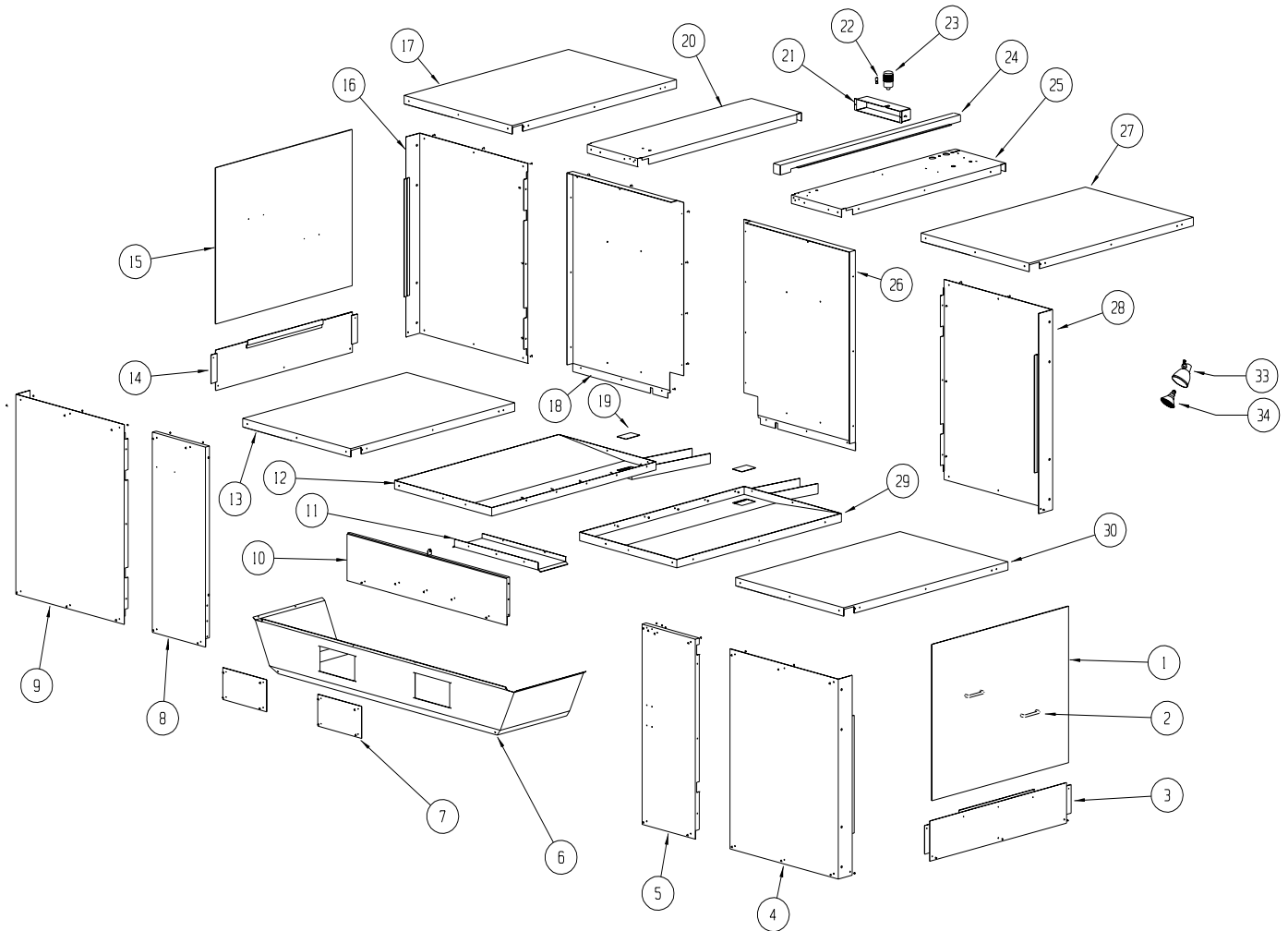
# WAY COVER ASSEMBLY



**WAY COVER ASSEMBLY**

	PART #		PART #		PART #
1	STM-0168	8	STM-0165	15	HDW-0346
2	HDW-0346	9	HDW-0346	16	HDW-0336
3	CVR-0046	10	HDW-0338	17	HDW-0261
4	CVR-0047	11	HDW-0192	18	CVR-0055
5	CVR-0045	12	HDW-0348	19	HDW-0279
6	HDW-0346	13	STM-0054	20	HDW-0295
7	CVR-0049	14	CVR-0053	21	HDW-0319

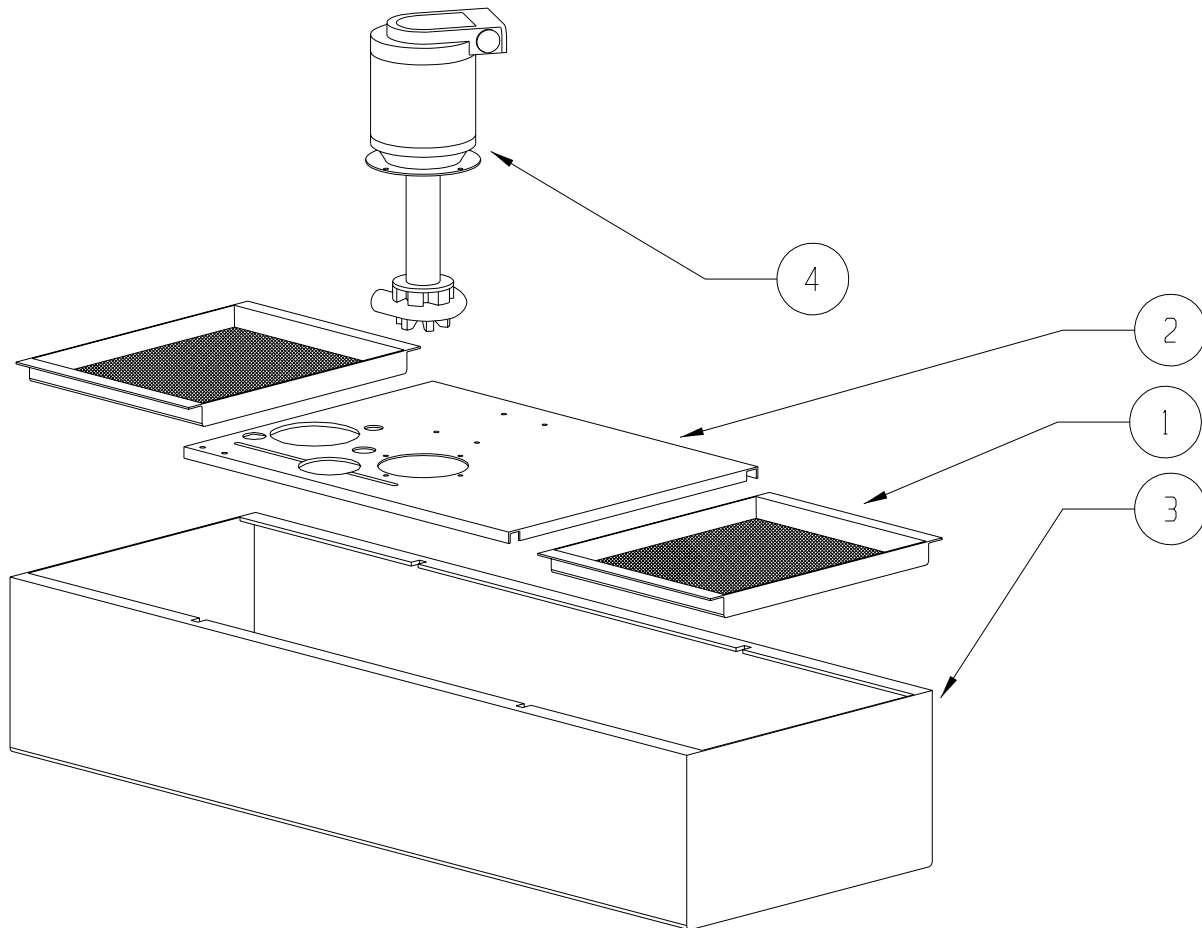
# SHEETMETAL HOUSING



## SHEETMETAL HOUSING

	PART #		PART #		PART #		PART #
1	STM-0298	11	STM-0109	21	STM-0091	31	HDW-0907
2	HDW-0182	12	STM-0313	22	ELE-0122	32	HDW-0853
3	STM-0245	13	STM-0418	23	ELE-0121	33	WIR-0114
4	STM-0169	14	STM-0245	24	STM-0774	34	ELE-0176
5	STM-0249	15	STM-0298	25	STM-0268		
6	STM-0239	16	STM-0169	26	STM-0316		
7	STM-0238	17	STM-0416	27	STM-0416		
8	STM-0248	18	STM-0314	28	STM-0169		
9	STM-0169	19	STM-0110	29	STM-0315		
10	STM-0080	20	STM-0252	30	STM-0418		

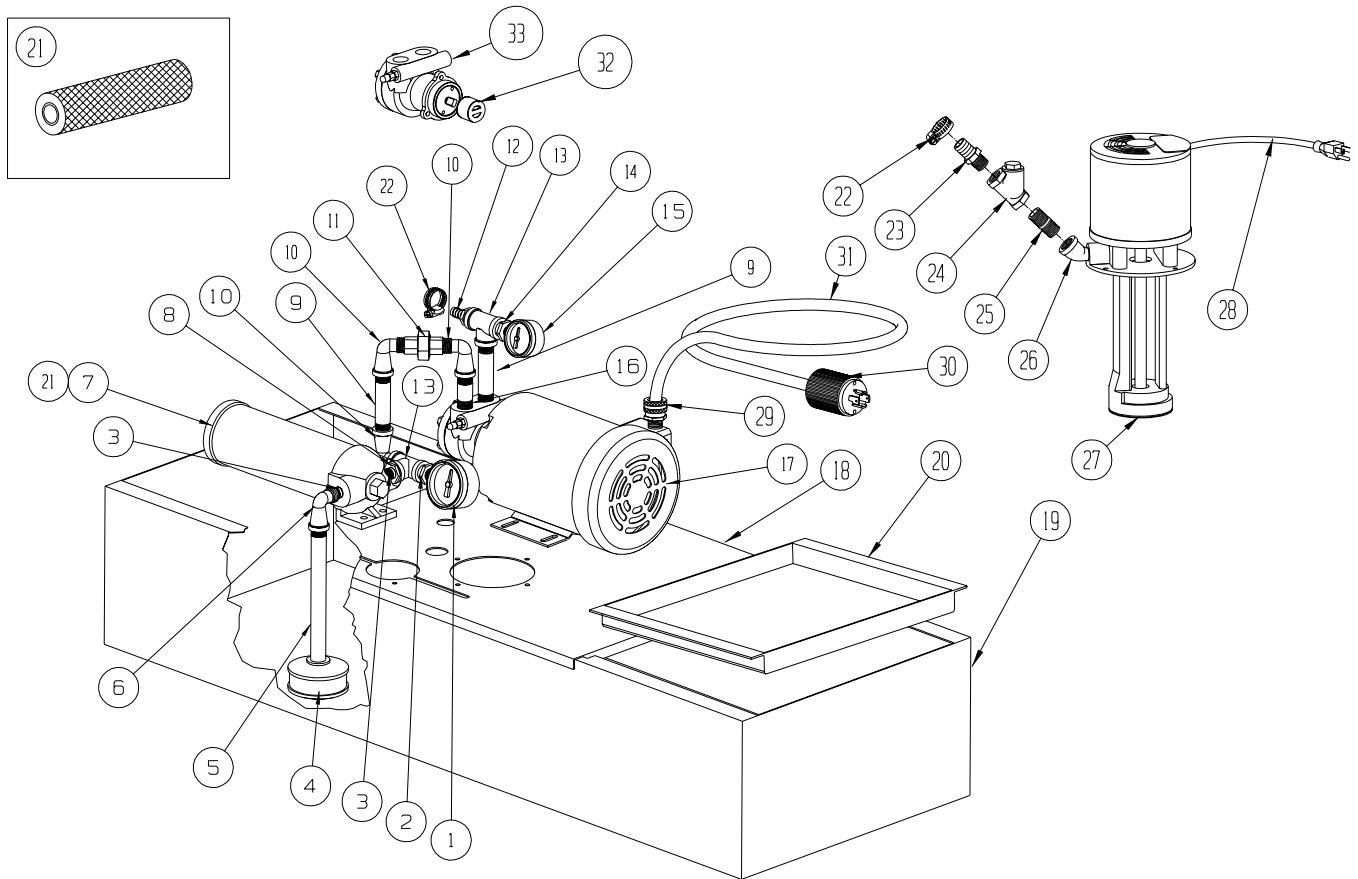
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

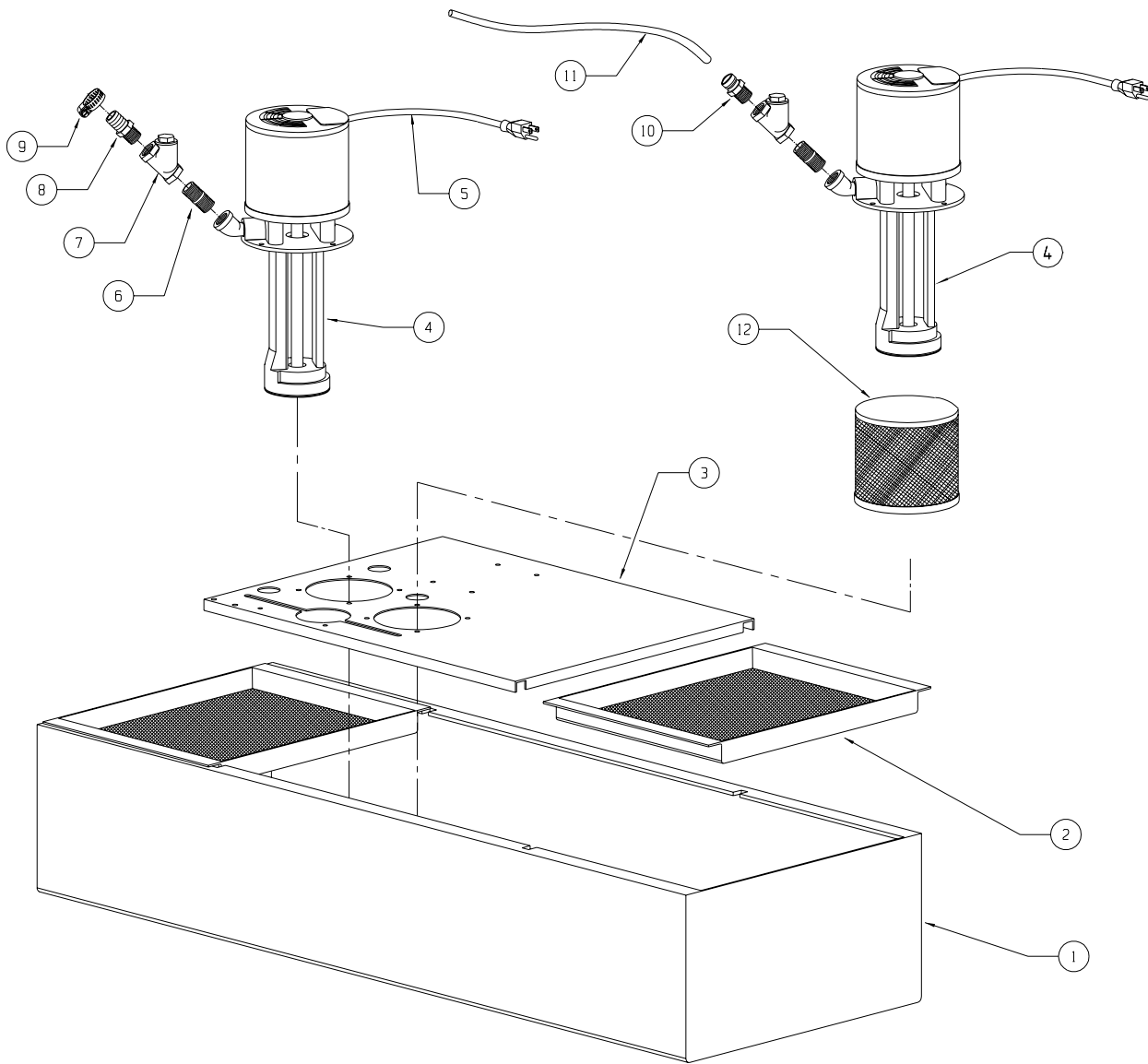
# 7500 RPM COOLANT THROUGH TANK



**7500 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

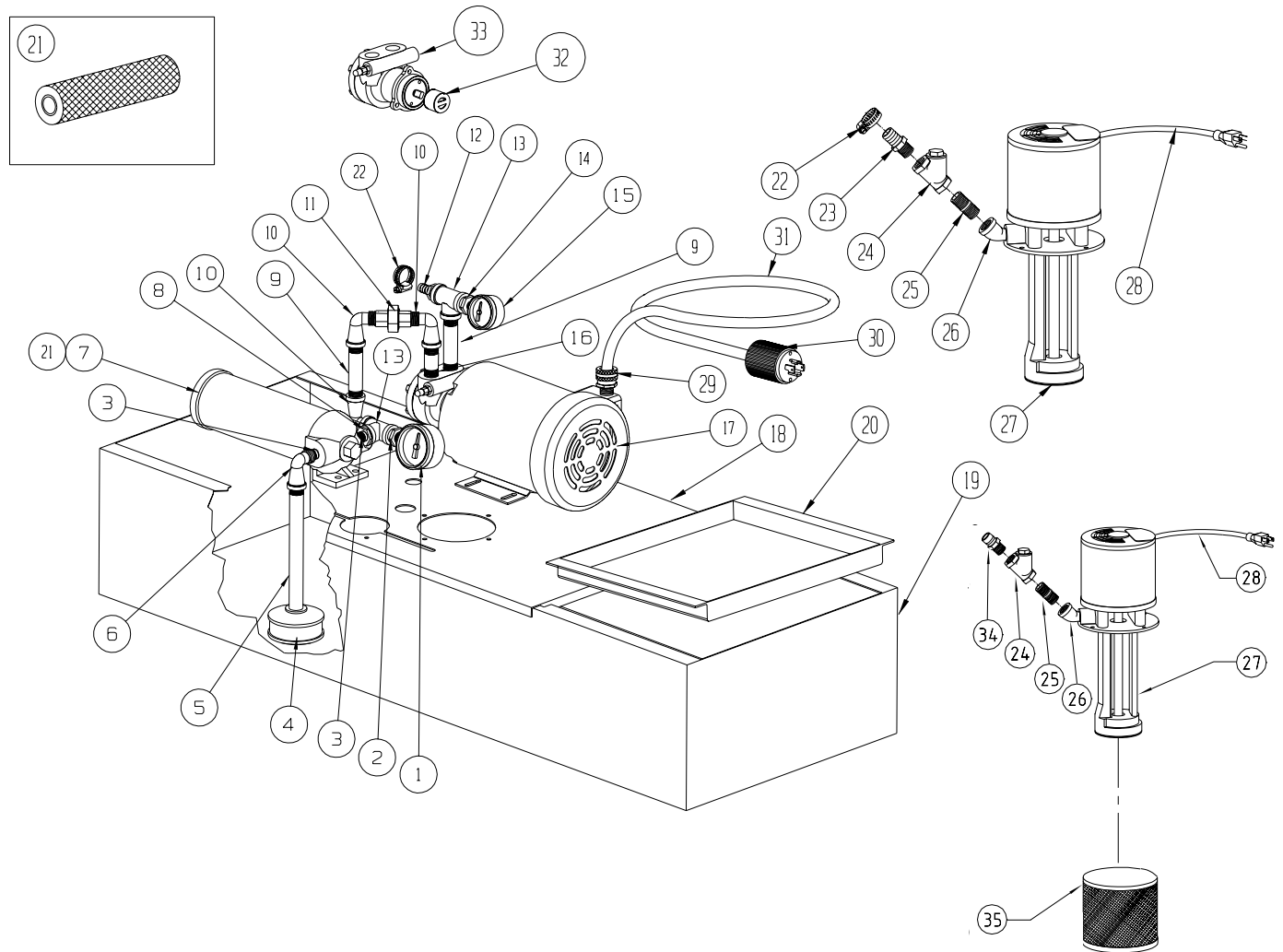
# 10K RPM COOLANT TANK



10,000 RPM COOLANT TANK

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

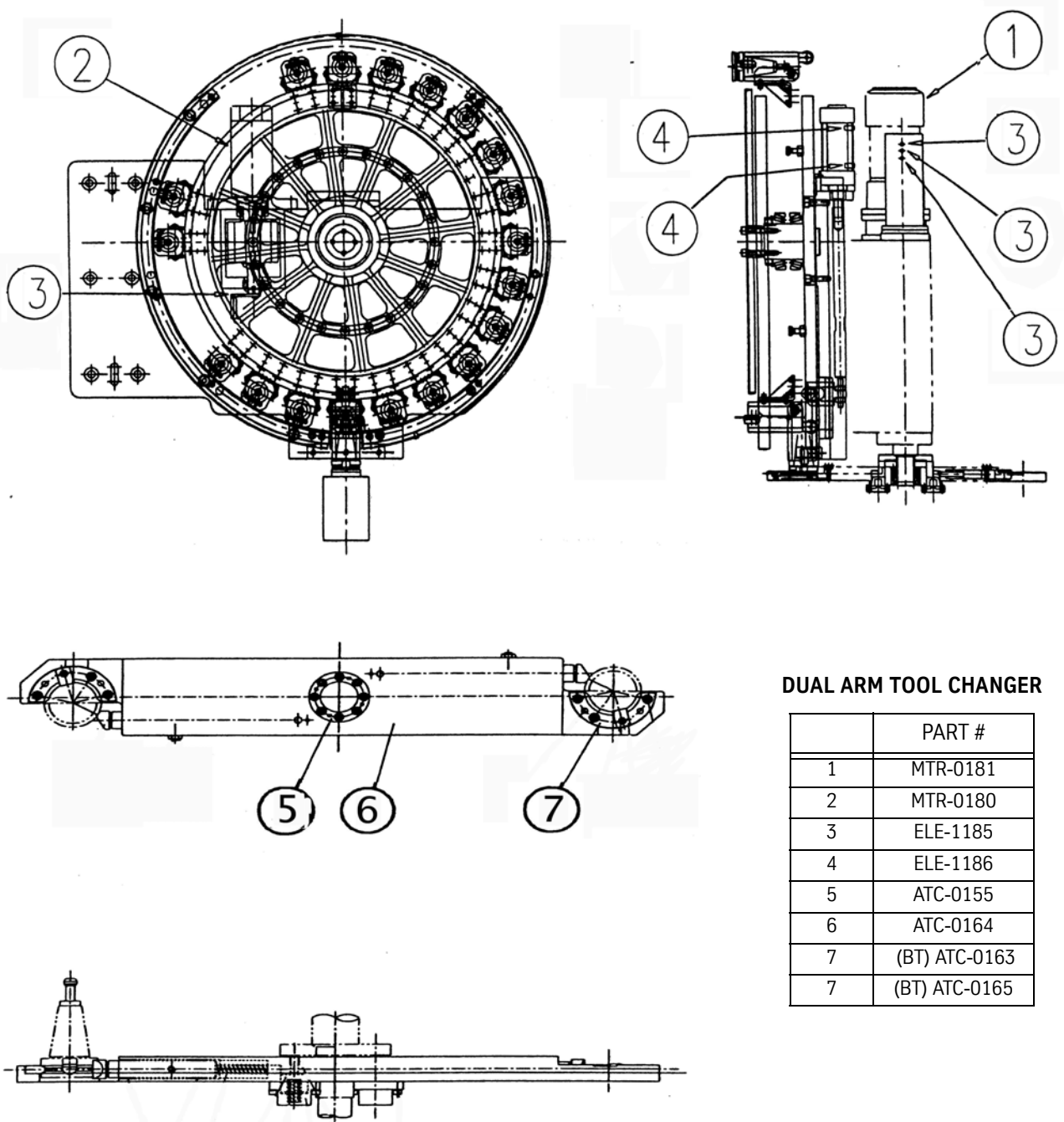
# 10K RPM COOLANT THROUGH TANK



10,000 RPM COOLANT THROUGH TANK ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

# DUAL ARM TOOL CHANGER



DUAL ARM TOOL CHANGER

	PART #
1	MTR-0181
2	MTR-0180
3	ELE-1185
4	ELE-1186
5	ATC-0155
6	ATC-0164
7	(BT) ATC-0163
7	(BT) ATC-0165



# TABLE OF CONTENTS

## Parts Manual VMC 6535 MODEL



COLUMN ASSEMBLY .....	3
COLUMN ASSEMBLY PART NUMBERS .....	5
BASE ASSEMBLY .....	6
BASE ASSEMBLY PART NUMBERS .....	7
SADDLE ASSEMBLY .....	8
SADDLE ASSEMBLY PART NUMBERS .....	11
SHEET METAL ASSEMBLY .....	12
SHEET METAL ASSEMBLY PART NUMBERS .....	15
10K IDLER ASSEMBLY .....	16
MULTI PROCESSOR PENDANT .....	18
MULTI PROCESSOR PENDANT PART NUMBERS .....	19
LEFT CABINET ASSEMBLY .....	21
RIGHT CABINET ASSEMBLY .....	22
LEFT & RIGHT CABINET ASSEMBLY PART NUMBERS .....	23
10K HEAD ASSEMBLY .....	24
10K HEAD ASSEMBLY PART NUMBERS .....	25
10K DRAWBAR ASSEMBLY .....	26
10K DRAWBAR ASSEMBLY PART NUMBERS .....	27
ORIENTATION BRIDGE ASSEMBLY .....	28
ORIENTATION BRIDGE ASSEMBLY PART NUMBERS .....	29
WAY LUBE ASSEMBLY .....	30
WAY LUBE ASSEMBLY PART NUMBERS .....	31
7500 RPM SPINDLE .....	32
10,000 RPM SPINDLE .....	33
COOLANT THROUGH SPINDLE .....	34
DUAL ARM TOOL CHANGER .....	35
COOLANT TANK ASSEMBLY .....	36
COOLANT TANK ASSEMBLY PART NUMBERS .....	37
CARD CAGE ASSEMBLY .....	38
CARD CAGE ASSEMBLY PART NUMBERS/SLOTS & BOARDS .....	39
CNC CABINET ASSEMBLY .....	40
CNC CABINET PART NUMBERS .....	41
CE CNC CABINET ASSEMBLY .....	42
CE CNC CABINET PART NUMBERS .....	43
JUNCTION BOX ASSEMBLY .....	44
JUNCTION BOX PART NUMBERS .....	45



This reference covers the following Fadal products:

Model VMC 6535

Corporate Office .....	voice (818) 407-1400 .....	fax (818) 407-0020
Service / Parts .....	voice (818) 727-2100 .....	fax (818) 407-1004
Programming Support .....	voice (818) 727-2100 .....	fax (818) 407-0061

support@fadal.com

20701 Plummer Street Chatsworth California 91311 U.S.A.

The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

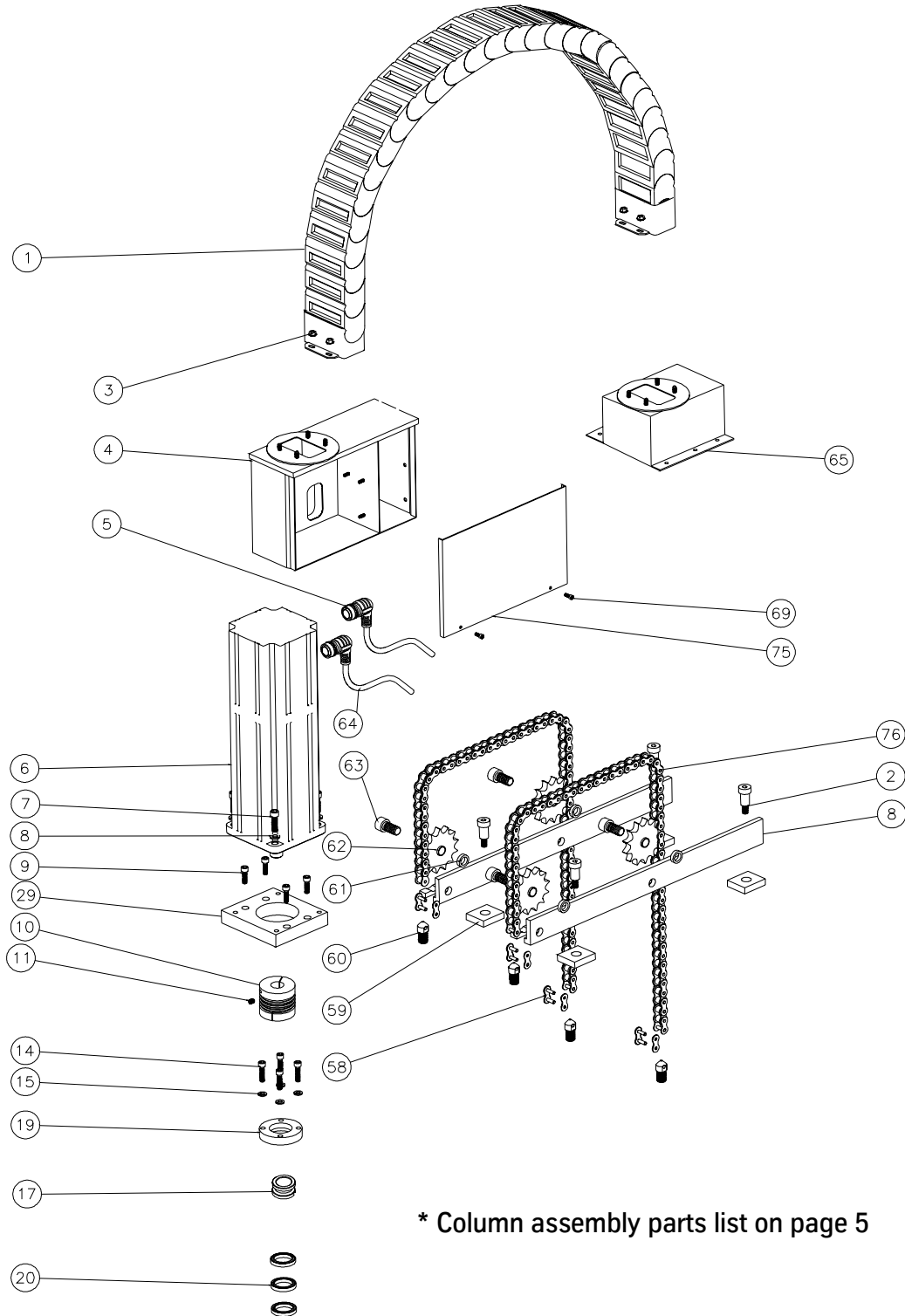
Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

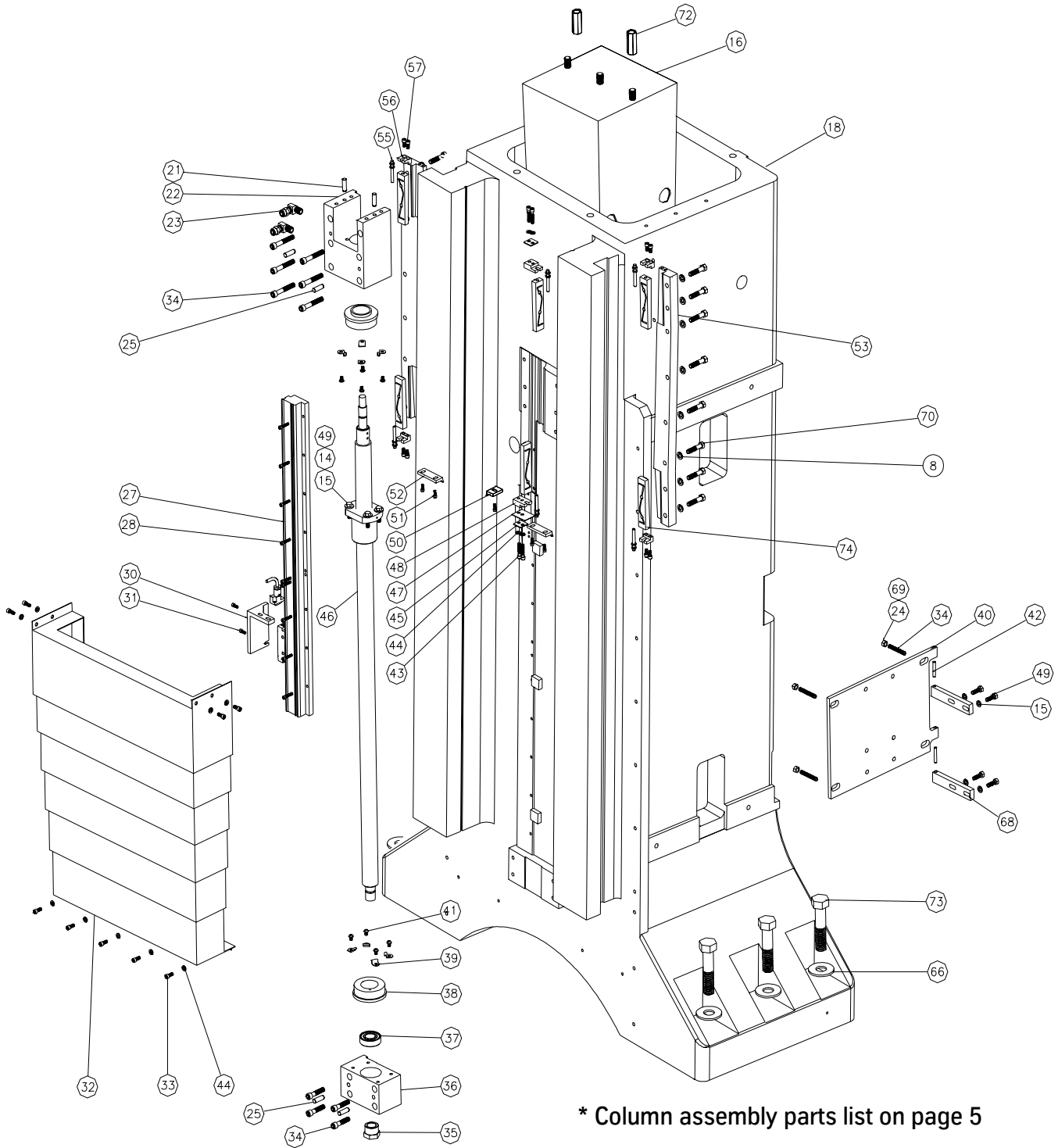
This page intentionally left blank.

# COLUMN ASSEMBLY



\* Column assembly parts list on page 5

# COLUMN ASSEMBLY



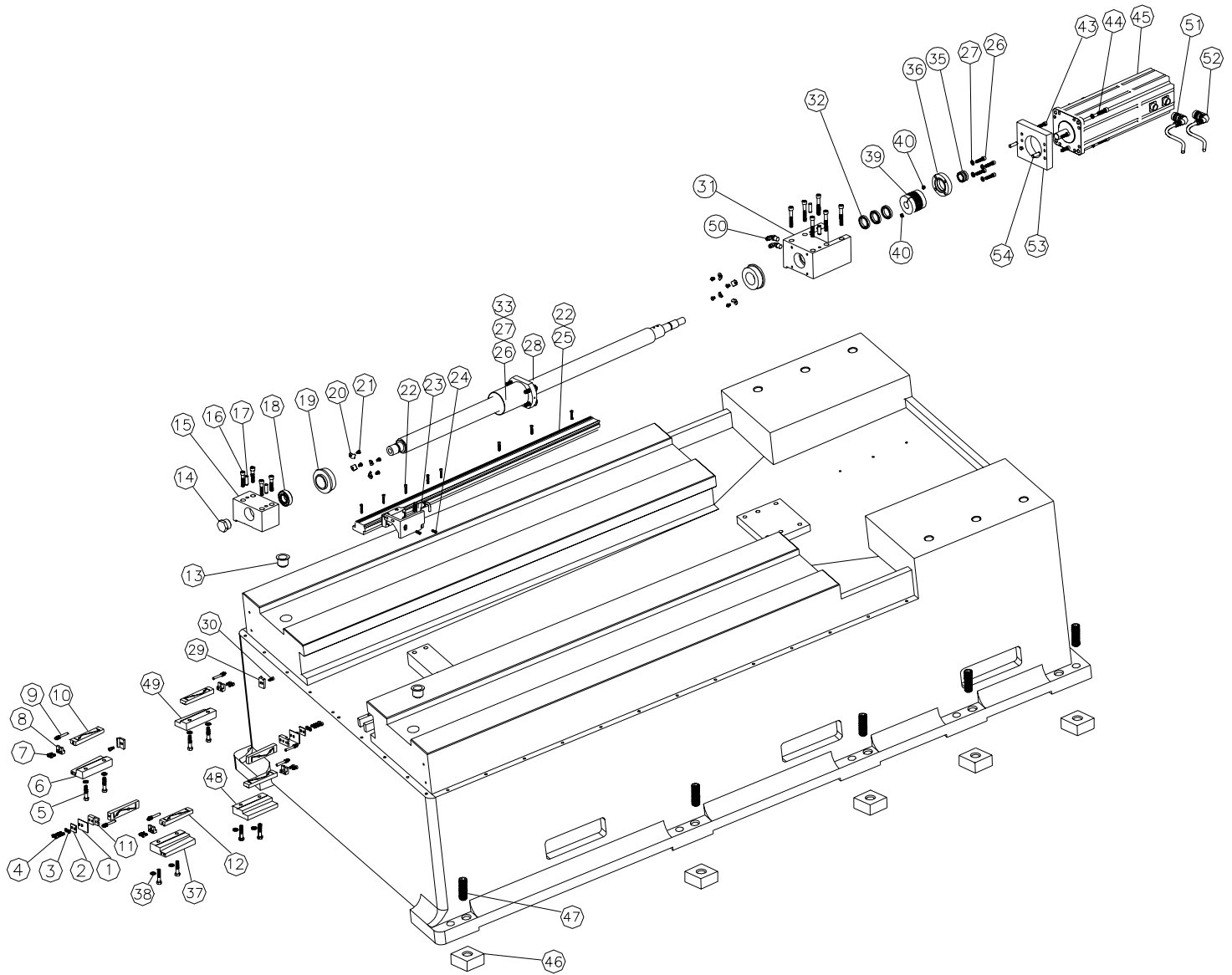
\* Column assembly parts list on page 5

# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	CVR-0205	26		51	HDW-1016	75	STM-0300
2	HDW-0600	27	SCL-0125	52	CVR-0196	76	CWT-0028
3	HDW-0337	28	HDW-0797	53	PA-14357		
4	STM-0300	29	BLS-0291	54			
5	WIR-0611	30	SCL-0086	55	GIB-0013		
6	MTR-0188	31	HDW-0090	56	GIB-0012		
7	HDW-1131	32	CVR-0185	57	HDW-0295		
8	CWT-0033	33	HDW-0346	58	HDW-0209		
9	HDW-0025	34	HDW-0330	59	HDW-0363		
10	MTR-0189	35	BLS-0284	60	CWT-0026		
11	HDW-0419	36	BLS-0288	61	CWT-0032		
12	MTR-0156	37	BRG-0022	62	PUL-0074		
13	MTR-0157	38	BLS-0271	63	HDW-1121		
14	HDW-0484	39	STM-0905	64	WIR-0803		
15	HDW-0397	40	STM-0705	64	WIR-0804		
16	CWT-0025	41	HDW-0347	65	STM-0919		
17	BLS-0047	42	HDW-0801	66	HDW-1010		
18	COL-0040	43	HDW-0296	67	STM-0333		
19	BRG-0015	44	HDW-0279	68	HDW-0931		
20	HDW-1124	45	STM-0042	69	HDW-0633		
21	HDW-0801	46	BLS-0286	70	HDW-0559		
22	BLS-0290	47	HDW-0355	71			
23	PLM-0112	48	GIB-0010	72	CWT-0031		
24	HDW-0640	49	HDW-0314	73	HDW-1019		
25	HDW-0330	50	CVR-0128	74	GIB-0036		

# BASE ASSEMBLY



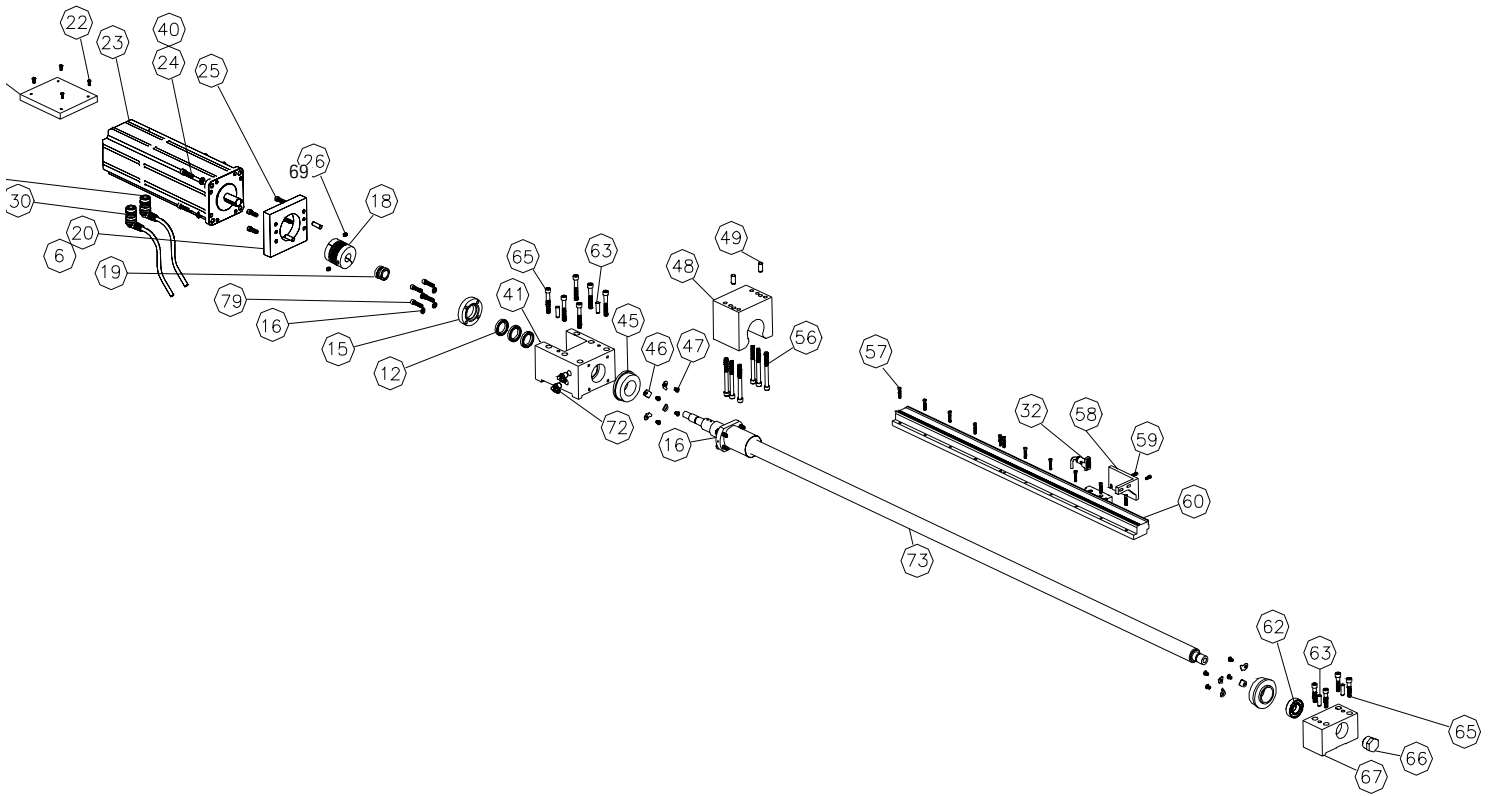


# BASE ASSEMBLY

## BASE ASSEMBLY

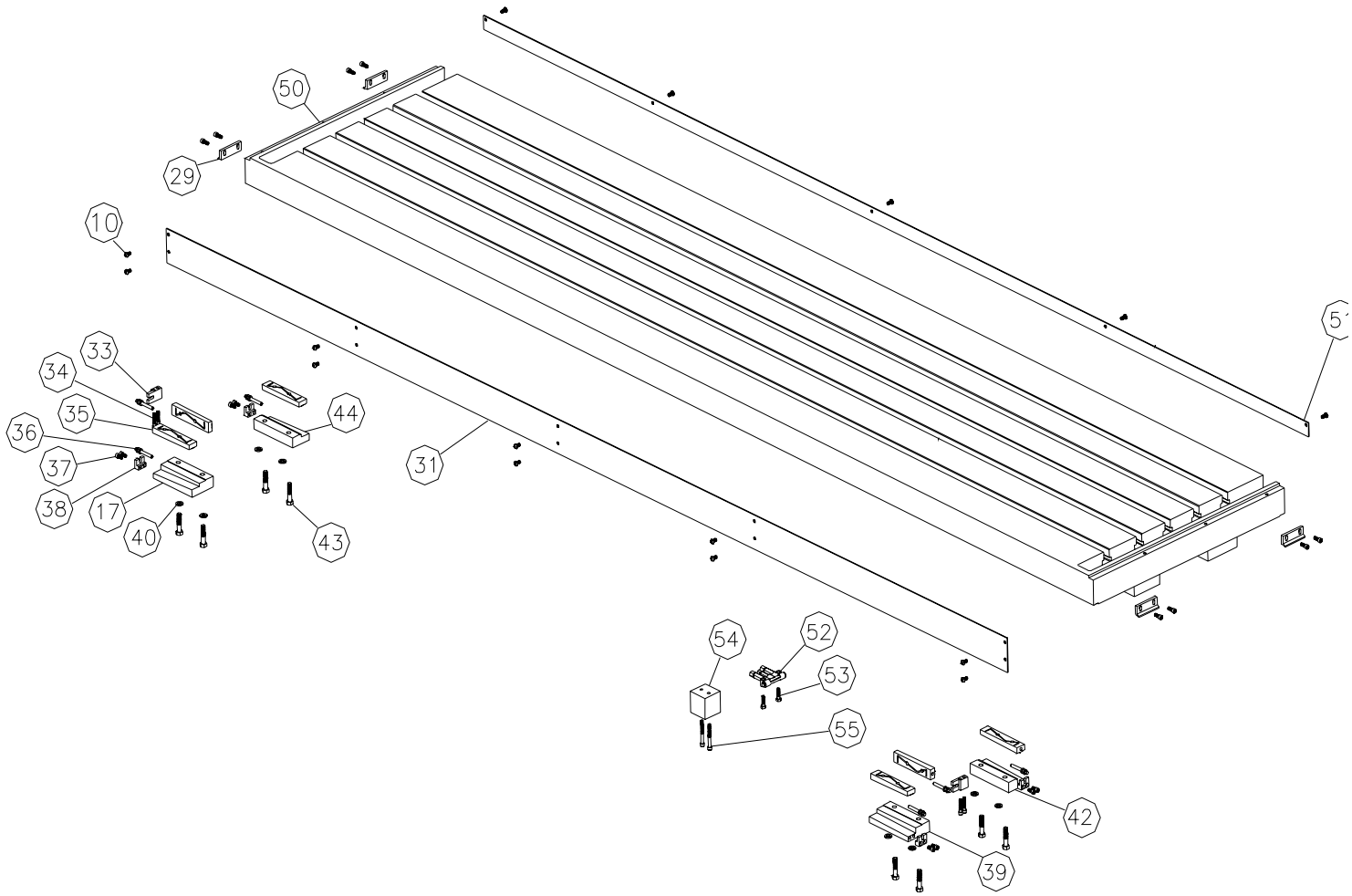
	PART #		PART #		PART #		PART #
1	HDW-0355	16	HDW-0468	31	BLS-0290	46	PLC-0063
2	STM-0042	17	HDW-0330	32	HDW-1124	47	HDW-0432
3	HDW-0279	18	BRG-0022	33	PLM-0034	48	GIB-0028
4	HDW-0296	19	BLS-0271	34	HDW-0210	49	GIB-0025
5	HDW-0569	20	STM-0905	35	BLS-0047	50	PLM-0112
6	GIB-0026	21	HDW-0347	36	BRG-0015	51	WIR-0803
7	HDW-0295	22	HDW-0797	37	GIB-0027	52	WIR-0804
8	GIB-0012	23	SCL-0085	38	HDW-0280	53	BLS-0291
9	GIB-0013	24	HDW-0090	39	MTR-0157	54	HDW-0801
10	GIB-0001	25	SCL-0121	40	HDW-0419		
11	GIB-0010	26	HDW-0484	41			
12	BAS-0039	27	HDW-0387	42	MTR-0158		
13	HDW-1132	28	BLS-0285	43	HDW-0481		
14	BLS-0284	29	CVR-0128	44	HDW-1131		
15	BLS-0288	30	HDW-1016	45	MTR-0188		

# SADDLE ASSEMBLY



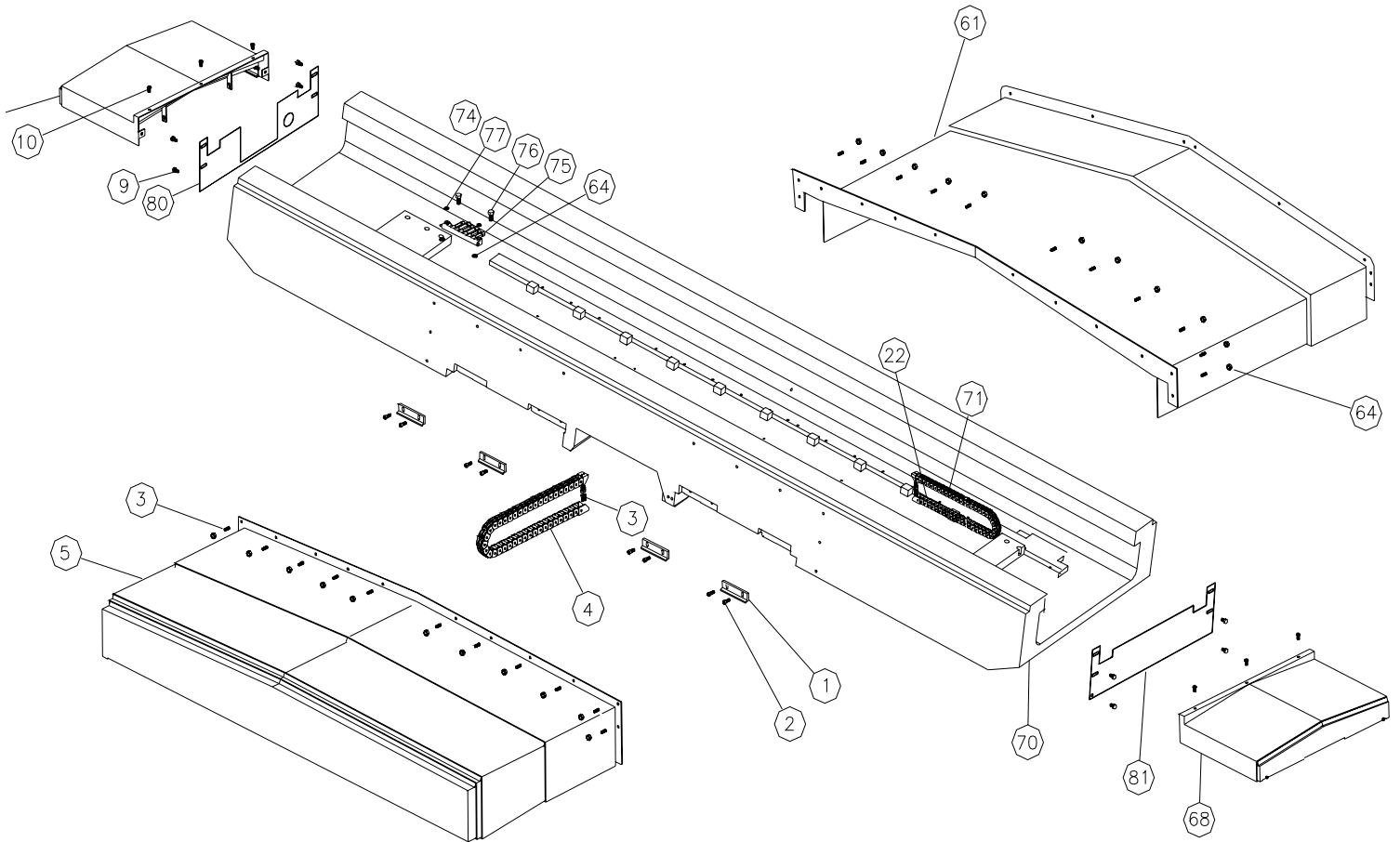
\* Saddle Assembly parts list on page 11

# SADDLE ASSEMBLY



\* Saddle Assembly parts list on page 11

# SADDLE ASSEMBLY



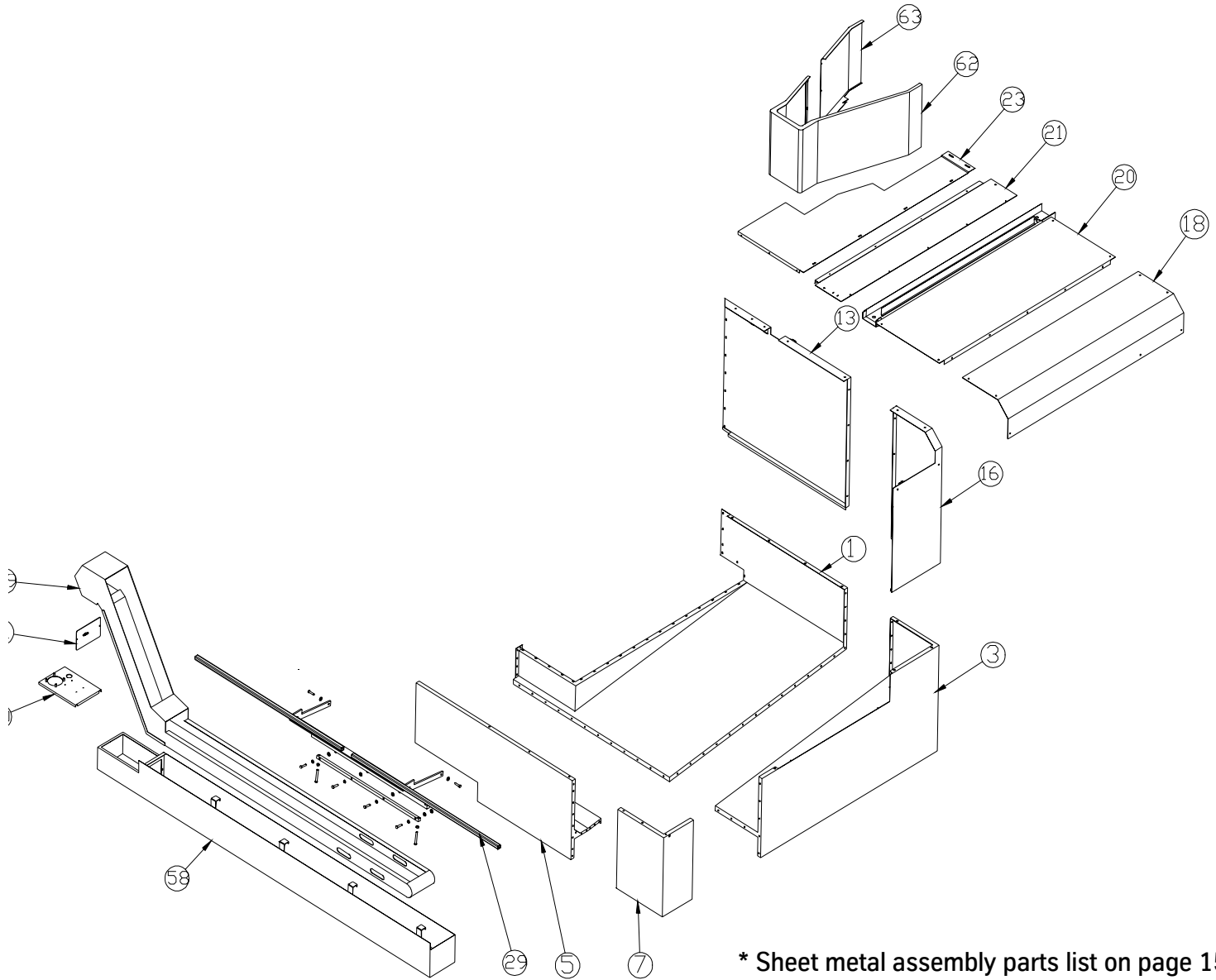
\* Saddle Assembly parts list on page 11

# SADDLE ASSEMBLY

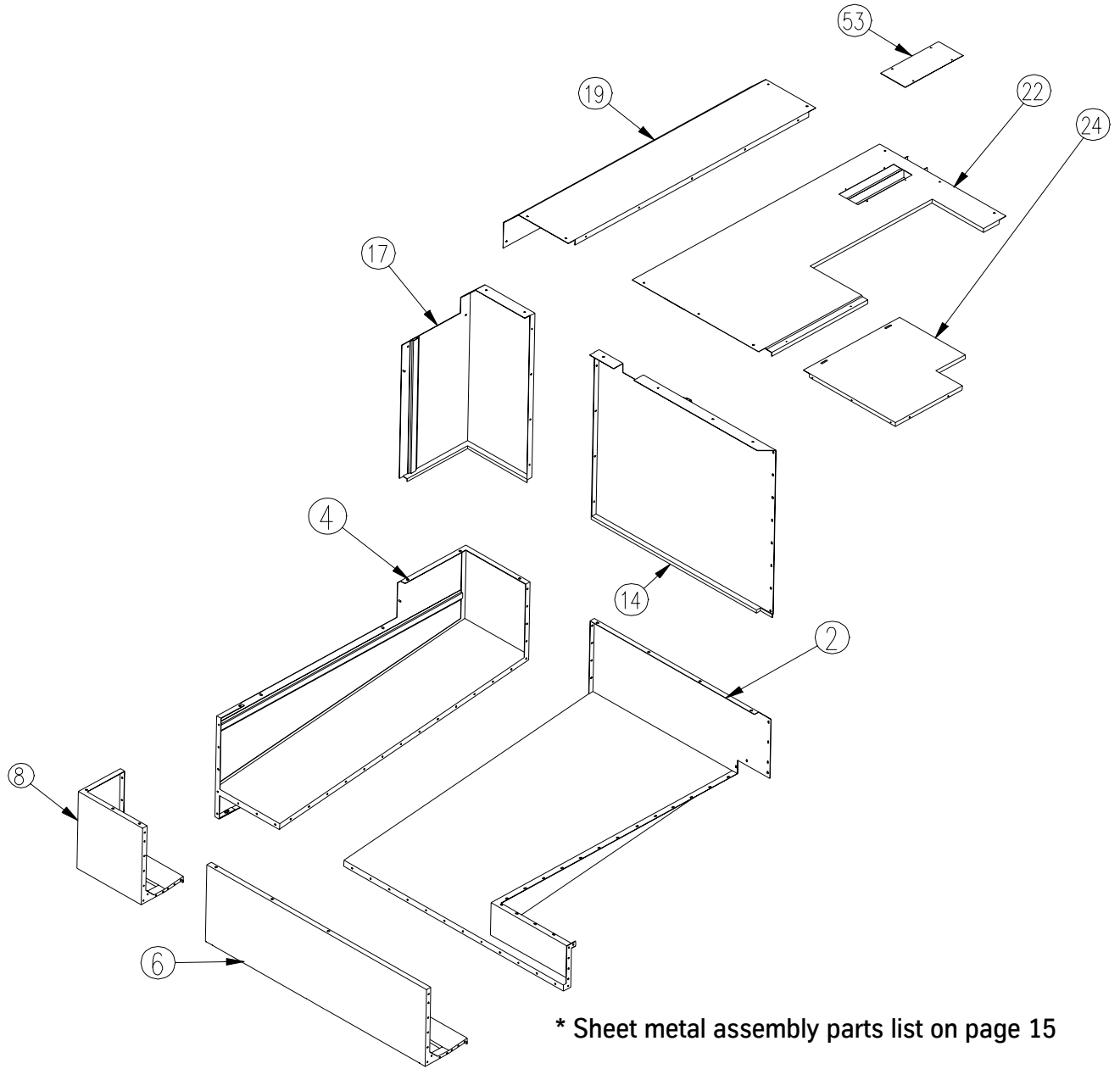
## SADDLE ASSEMBLY

	PART #		PART #		PART #		PART #
1	CVR-0122	23	MTR-0188	44	PA-14361	66	BLS-0284
2	HDW-1016	24	HDW-1131	45	BLS-0197	67	BLS-0288
3	HDW-0410	25	HDW-0481	46	STM-0905	68	CVR-0201
4	CVR-0205	26	HDW-0419	47	HDW-0347	69	WIR-0803
5	CVR-0187	27	MTR-0158	48	BLS-0244	70	SDL-0074
6	HDW-0619	28	MTR-0156	49	HDW-0330	71	CVR-0205
7		29	CVR-0200	50	TBL-0041	72	PLM-0112
8		30	WIR-0803	51	STM-1221	73	BLS-0287
9	HDW-0319	30	WIR-0804	52	LUB0044	74	PLM-0034
10	HDW-0346	31	PA-14345	53	HDW-0318	75	LUB-0043
11	CVR-0202	32	SCL-0095	54	SCL-0084	76	HDW-0576
12	HDW-1124	33	GIB-0011	55	HDW-0489	77	HDW-0047
13		34	HDW-0296	56	HDW-0477	78	
14		35	GIB-0001	57	HDW-0797	79	HDW-0484
15	BRG-0015	36	GIB-0013	58	SCL-0085	80	STM-1222
16	HDW-0384	37	HDW-0295	59	HDW-0090	81	STM-1223
17	PA-14364	38	GIB-0012	60	SCL-0120		
18	MTR-0189	39	PA-14363	61	CVR-0188		
19	BRG-0047	40	HDW-1131	62	BLS-0288		
20	BLS-0291	41	BLS-0247	63	HDW-0330		
21	CVR-02201	42	PA-14362	64	HDW-0279		
22		43	HDW-0569	65			

# SHEET METAL ASSEMBLY

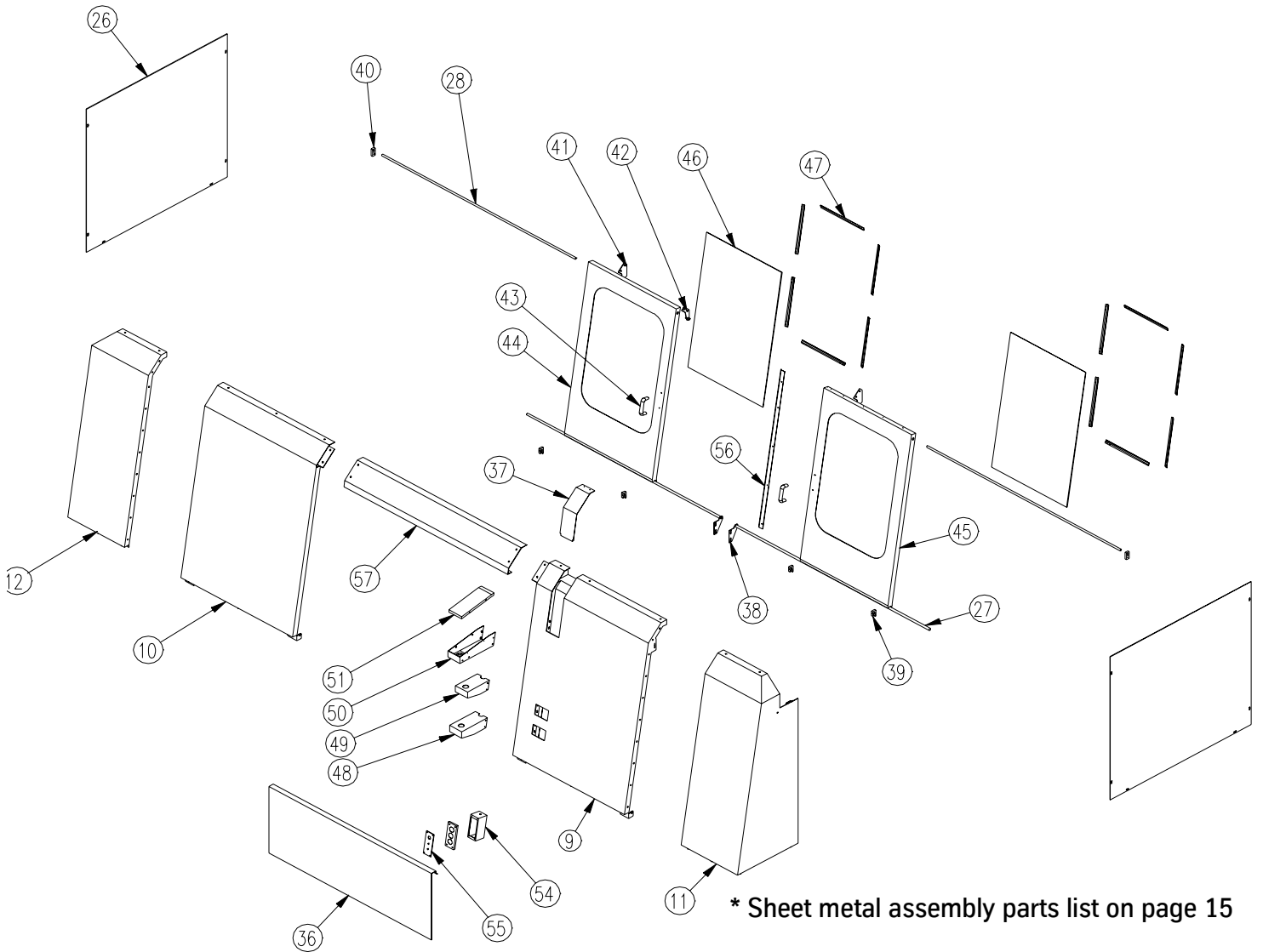


# SHEET METAL ASSEMBLY



\* Sheet metal assembly parts list on page 15

# SHEET METAL ASSEMBLY



\* Sheet metal assembly parts list on page 15

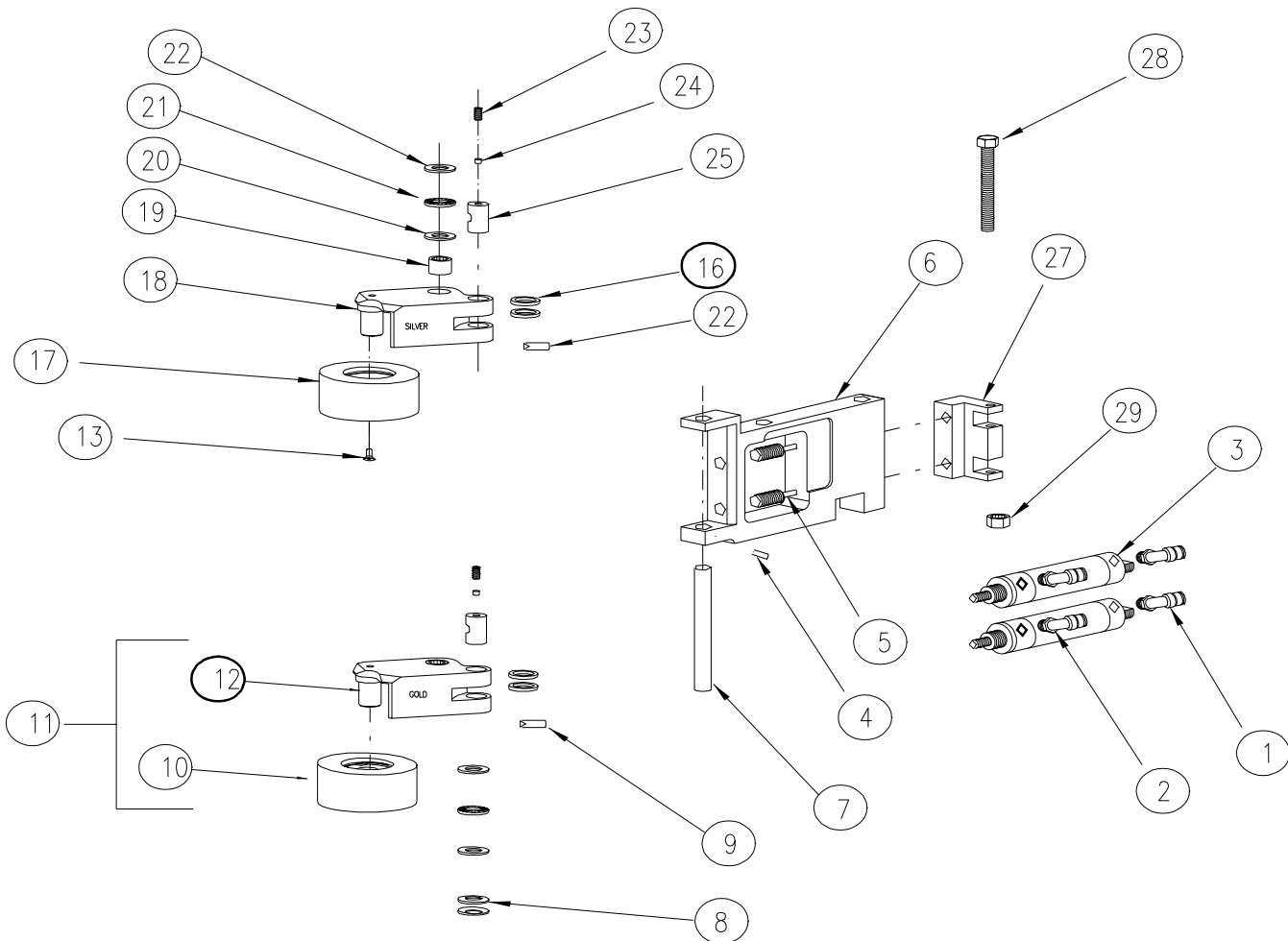


# SHEET METAL ASSEMBLY

## SHEET METAL ASSEMBLY

	PART #		PART #		PART #		PART #
1	STM-1186	17	STM-1196	32		48	STM-0748
2	STM-1187	18	STM-1197	33		49	STM-0885
3	STM-1188	19	STM-1242 10F3	34		50	STM-0913
4	STM-1189	20	STM-1243 10F3	35		51	STM-0914
5	STM-1190	21	STM-1303	36	STM-1241	52	
6	STM-1191	22	STM-1244 10F3	37	STM-0998	53	STM-0881
7	STM-1192	23	STM-1304	38	STM-0740	54	STM-0793
8	STM-1236	24	STM-1305	39	DOR-0016	55	LBL-0250
9	STM-1237 10F3	25		40	STM-0739	56	STM-0893
10	STM-1238 10F2	26	STM-1199	41	STM-0742	57	STM-1314 10F2
11	STM-1239 10F2	27	DOR-0071	42	STM-0743	58	STM-1232
12	STM-1240 10F2	28	DOR-0072	43	HDW-0967	59	STM-1231
13	STM-1193	29	ASY-0159	44	STM-1313 10F2	60	STM-1233
14	STM-1194	30		45	STM-1312 10F3	61	STM-1234
15		31		46	DOR-0007	62	STM-1302
16	STM-1195			47	STM-0084	63	STM-1315

# 10K IDLER ASSEMBLY

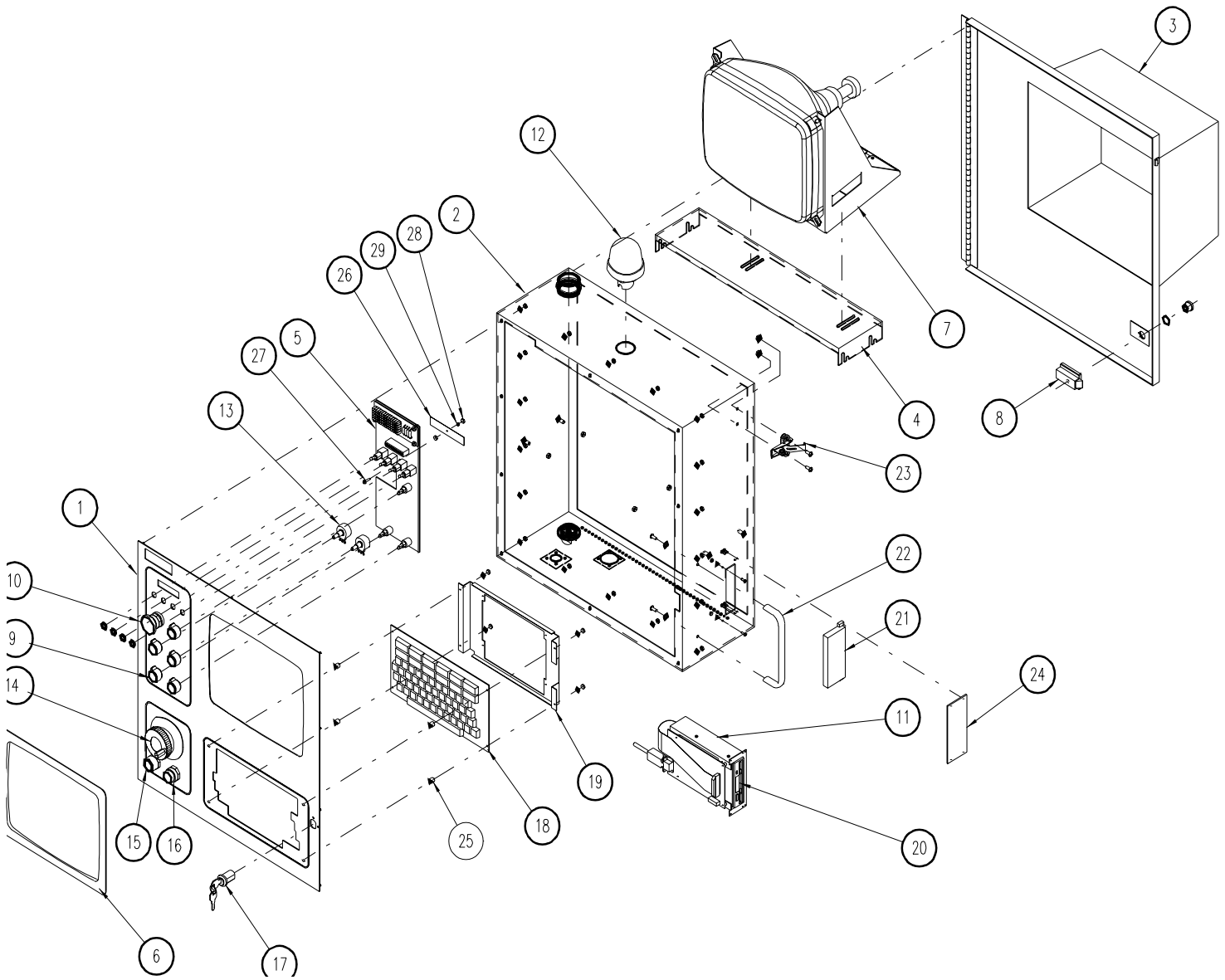


10K IDLER ASSEMBLY

	PART #		PART #		PART #
1	PLM-0036	11	IDL-0000	21	BRG-0015
2	PLM-0034	12	IDL-0004	22	BRG-0016
3	CYL-0006	13	HDW-0605	23	HDW-0412
4	HDW-0612	14		24	IDL-0010
5	ELE-0145	15		25	IDL-0012
6	IDL-0011	16	HDW-0277	26	
7	IDL-0006	17	IDL-0017	27	IDL-0008
8		18	IDL-0015	28	HDW-0579
9	ELE-0147	19	BRG-0017	29	HDW-0643
10	IDL-0007	20	BRG-0016		

This page intentionally left blank.

# MULTI PROCESSOR PENDANT



# MULTI PROCESSOR PENDANT

## MULTI PROCESSOR PENDANT

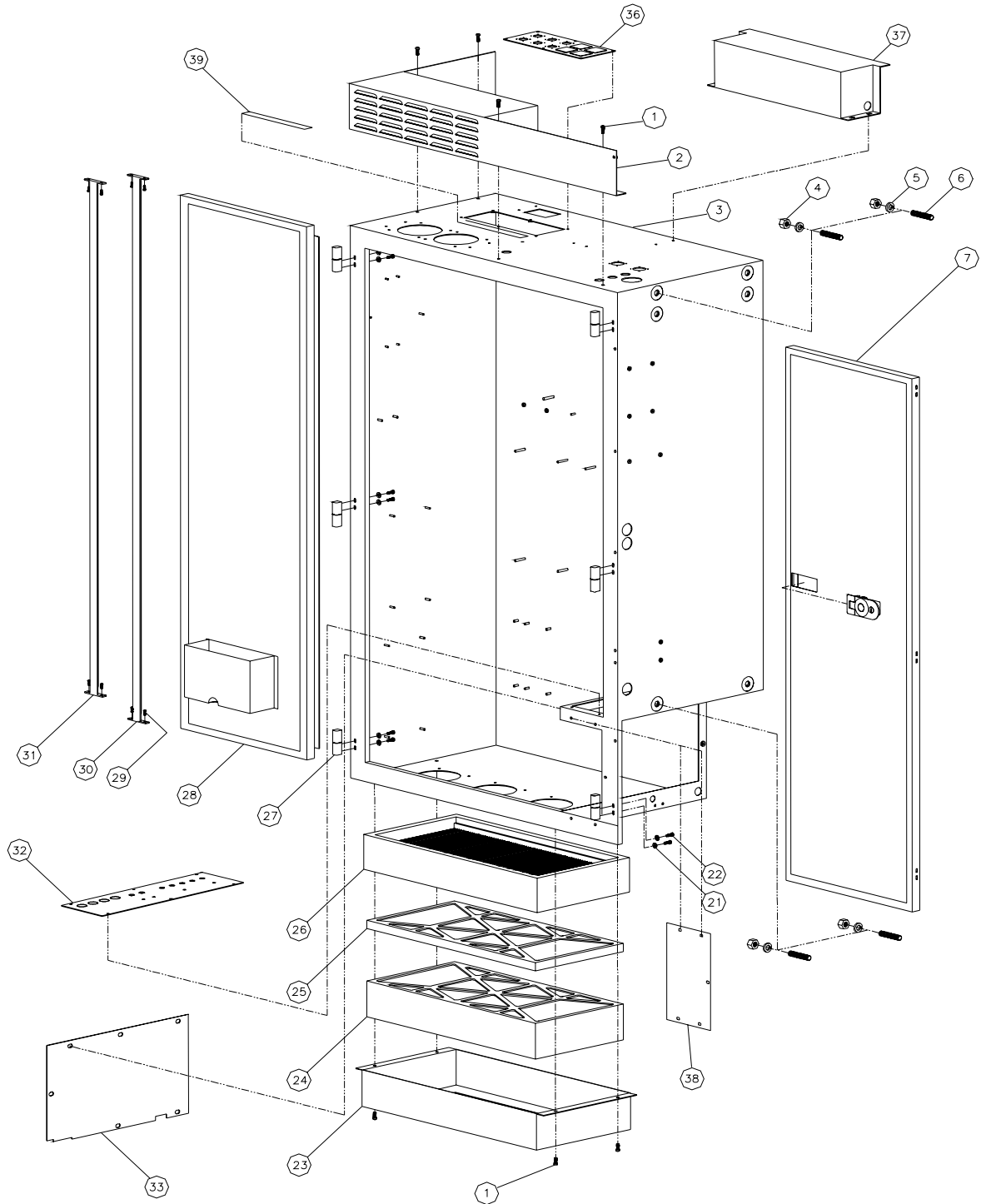
	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 2OF4		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 3OF4	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0671	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072 1OF3	14	MPG-0020	23	HDW-0925		



This page intentionally left blank.

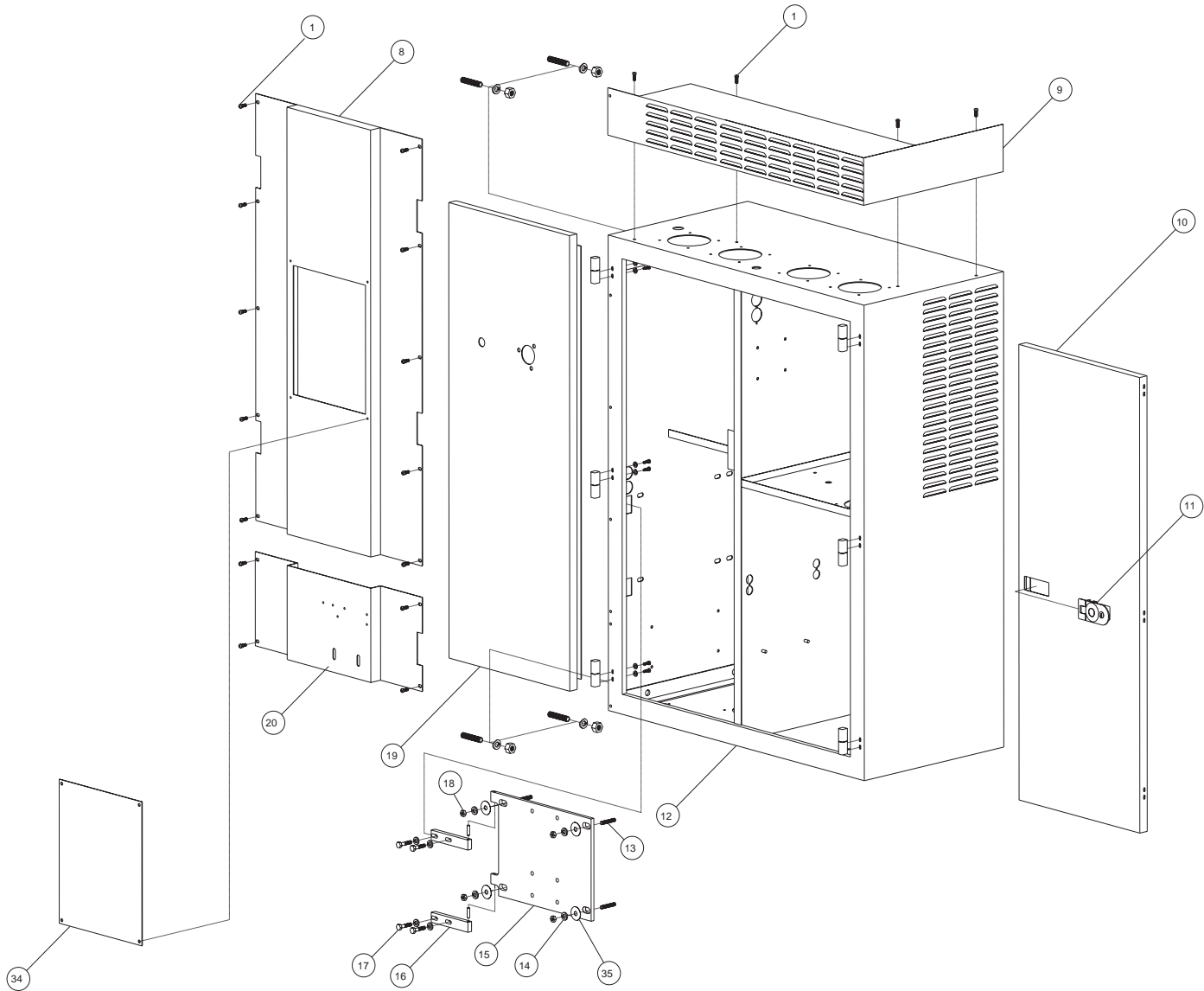


# LEFT CABINET ASSEMBLY



\* Left & right cabinet assembly parts list on page 23

# RIGHT CABINET ASSEMBLY



\* Left & right cabinet assembly parts list on page 23

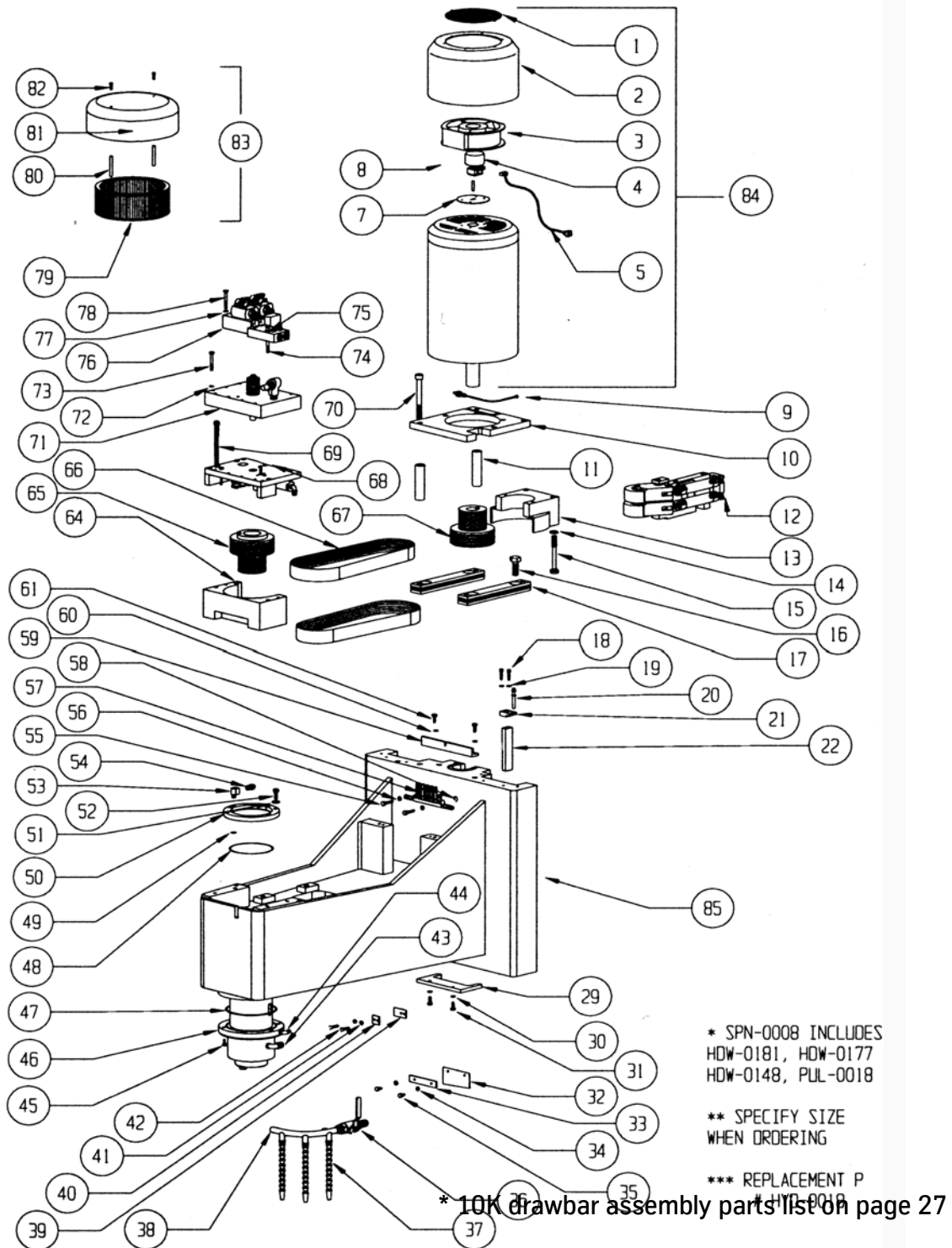


# LEFT & RIGHT CABINET ASSEMBLY

## LEFT & RIGHT CABINET ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0346	11	HDW-0948	21	HDW-0442	31	STM-0711
2	STM-0698	12	STM-0693	22	HDW-0952	32	STM-0694
3	STM-0692	13	HDW-0766	23	STM-0706	33	STM-0712
4	HDW-0543	14	HDW-0281	24	CNT-0165	34	
5	HDW-0451	15	STM-0705	25	CNT-0167	35	HDW-1002
6	HDW-0975	16	HDW-0931	26	CNT-0166	36	STM-0548
7	STM-0708	17	HDW-0314	27	HDW-0947	37	STM-0716
8	CVR-0197	18	HDW-0640	28	STM-0707	38	STM-0702
9	STM-0699	19	STM-0709	29	HDW-0349	39	LBL-0291
10	STM-0710	20	CVR-0199	30	STM-0700		

# 10K HEAD ASSEMBLY

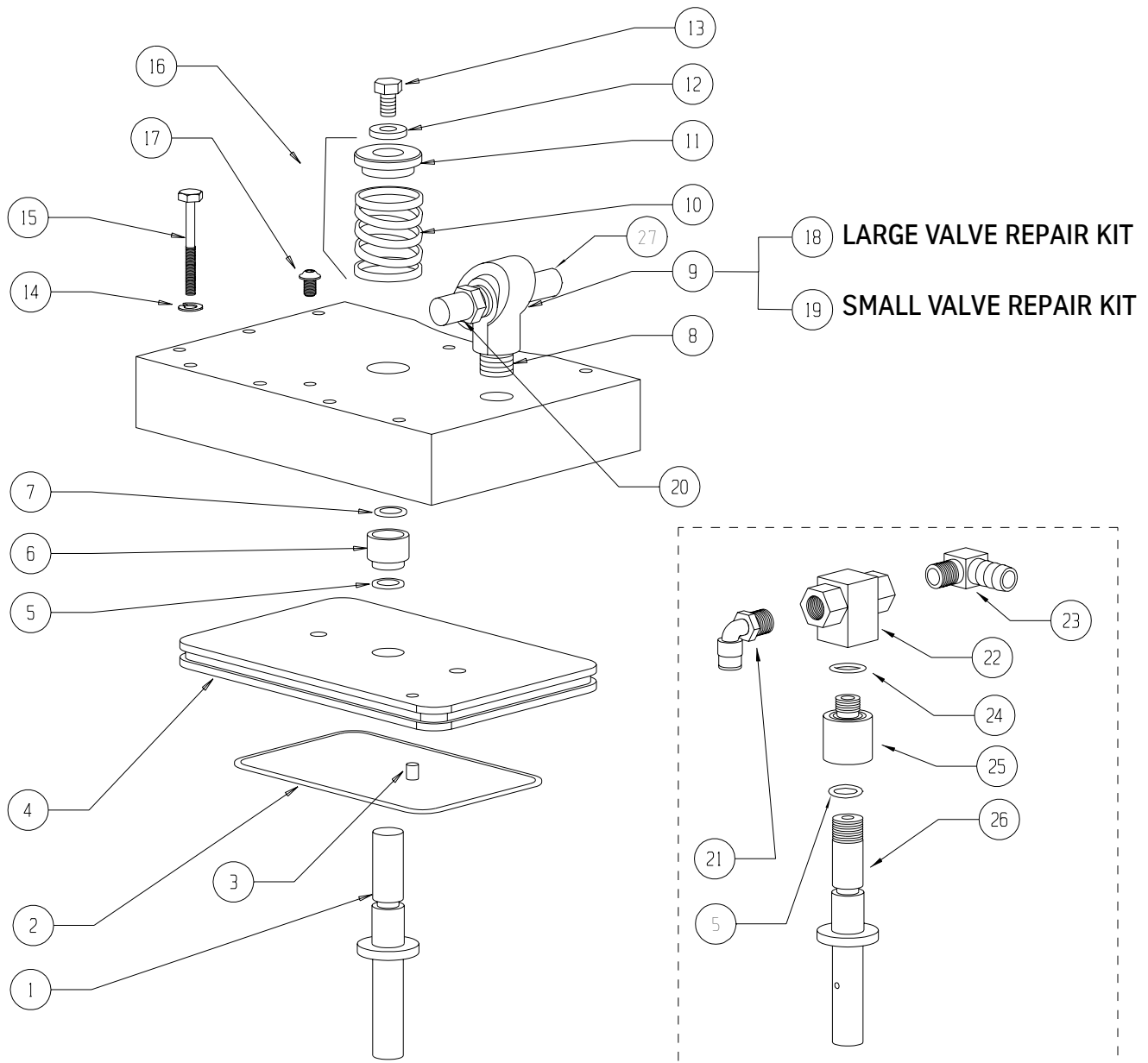


# 10K HEAD ASSEMBLY

## 10K HEAD ASSEMBLY

	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	PA-14354
2	STM-0139	31	HDW-0322	60	HDW-0279
3	ELE-0124	32	HDW-0356	61	HDW-0322
4	MTR-0123	33	STM-0052	62	
5	HDW-0168	34	HDW-0279	63	
6		35	HDW-0319	64	BEL-0014
7	STM-0148	36	VLV-0017	65	PUL-0018
8	ENC-0007	37	PLM-0016	66	BEL-0003
9	HDW-0370	38	CNT-0039	67	PUL-0019
10	MTR-0069	39	HDW-0355	68	ORB-0001
11	MTR-0149	40	STM-0042	69	HDW-0290
12	IDL-0003	41	HDW-0279	70	HDW-0284
13	BEL-0015	42	HDW-0294	71	DRB-0000
14	HDW-0451	43	PLM-0112	72	HDW-0279
15	HDW-0311	44	PLM-0034	73	HDW-0320
16	HDW-0283	45	HDW-0470	74	HDW-0321
17	MTR-0068	46	SPN-0008	75	HDW-0279
18	HDW-0294	47	HDW-0181	76	HYD-0017
19	HDW-0279	48	HDW-0148	77	HDW-0279
20	GIB-0013	49	HDW-0177	78	HDW-0320
21	GIB-0010	50	SPN-0042	79	MTR-0127
22	GIB-0001	51	HDW-0275	80	SVT-0108
23		52	HDW-0568	81	STM-0467
24		53	PLM-0075	82	HDW-05997
25		54	PLM-0088	83	MTR-0128
26		55	HDW-0576	84	MTR-0047
27		56	HDW-0279	85	PA-14321
28		57	LUB-0045		
29	CVR-0048	58	HDW-0047		

# 10K DRAWBAR ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

Coolant Thru Assembly DRB-0001

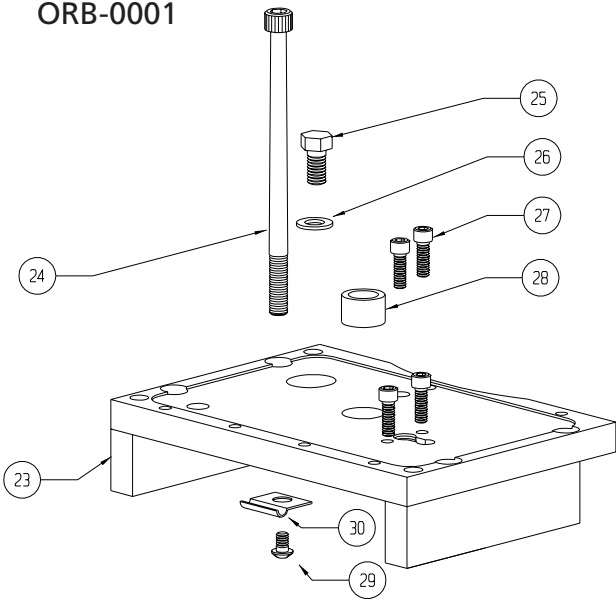
# 10K DRAWBAR ASSEMBLY

## 10K DRAWBAR ASSEMBLY

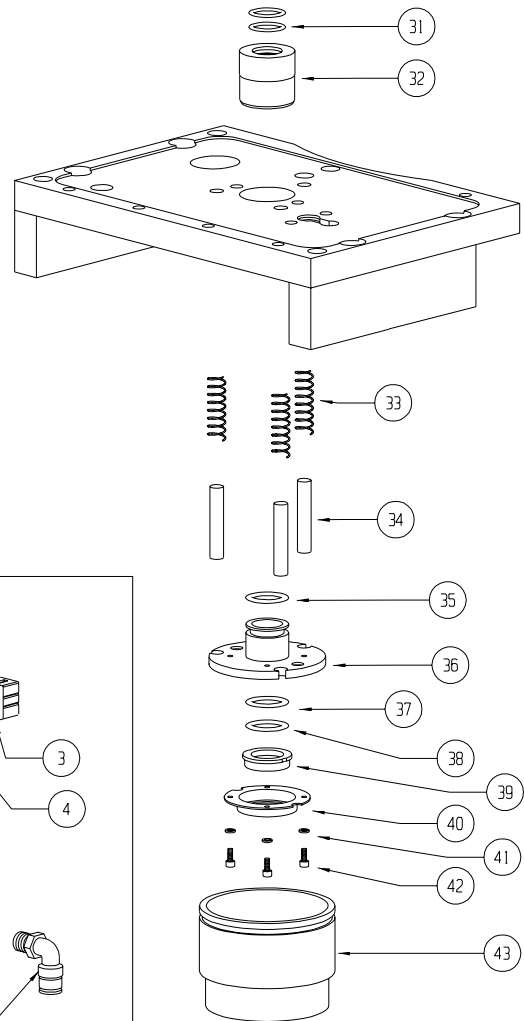
	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	HDW-0262	17	HDW-0347	24	HDW-0150
4	DRB-0009	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0575	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

# ORIENTATION BRIDGE ASSEMBLY

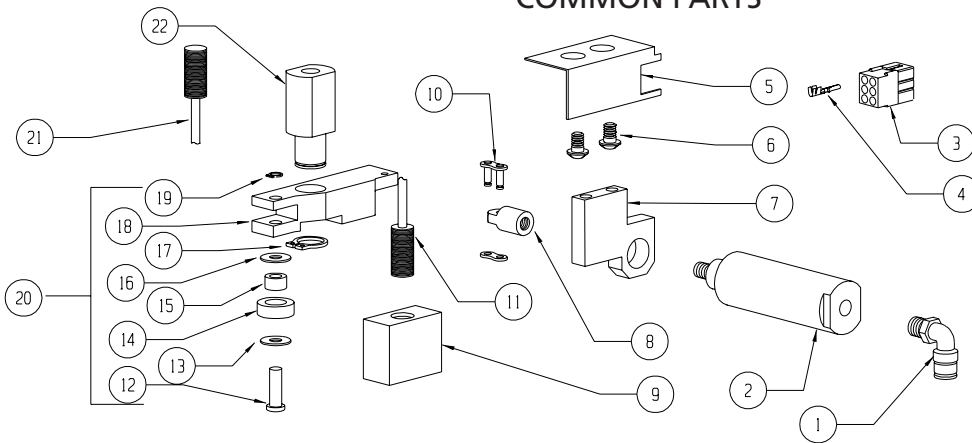
ORB-0001



ORB-0002



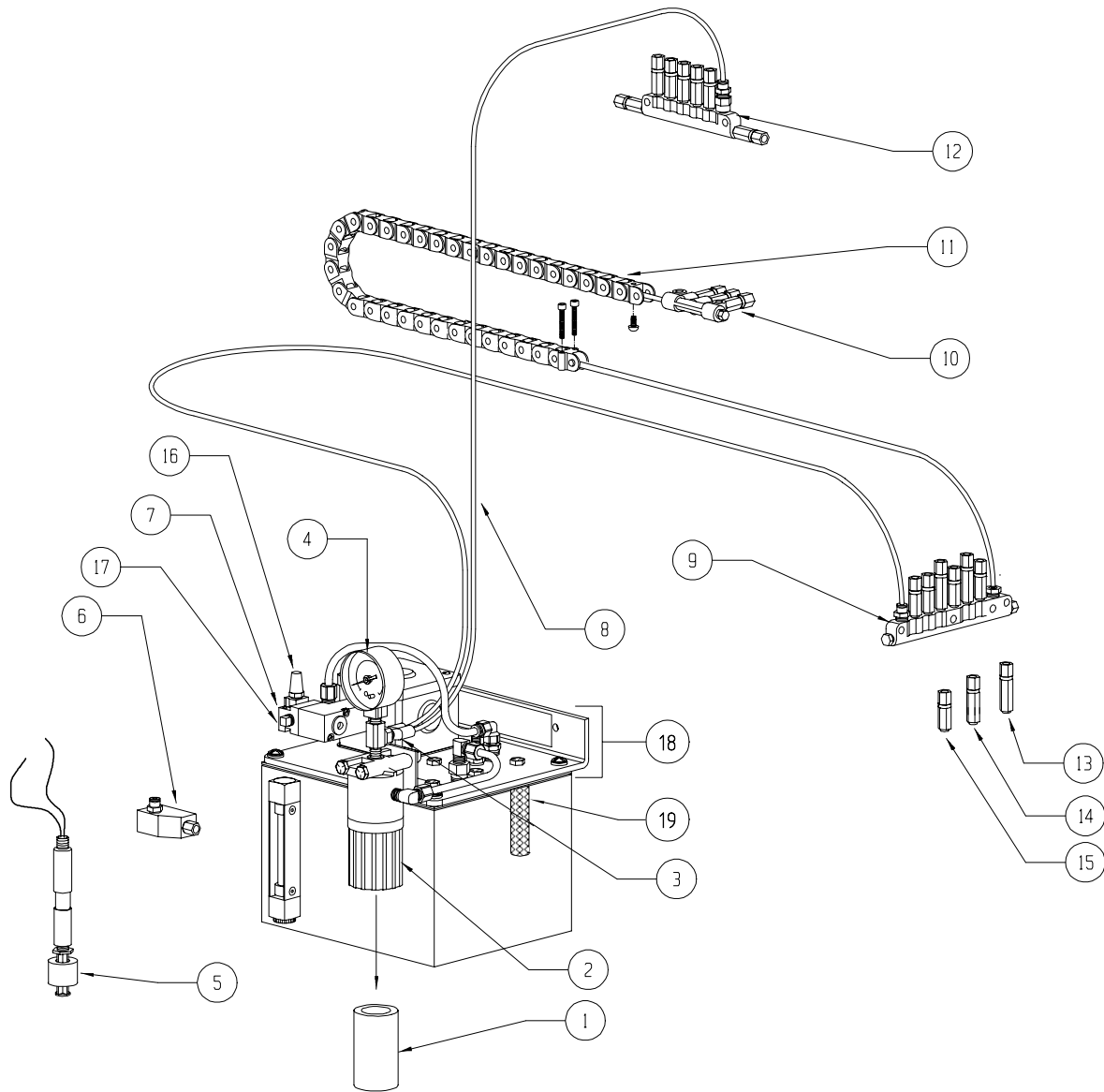
COMMON PARTS



# ORIENTATION BRIDGE ASSEMBLY

	PART #		PART #		PART #		PART #
1	PLM-0034	12	ORB-0007	26	HDW-0048	39	CNT-0033
2	CYL-0007	13	HDW-0515	27	HDW-0298	40	CNT-0045
3	WIR-0051	14	ORB-0009	28	BRG-0008	41	HDW-0453
4	WIR-0043 (16 AWG)	15	BRG-0014	29	HDW-0349	42	HDW-0308
	WIR-0044 (16 AWG)	16	HDW-0515	30	LUB-0077	43	STM-0158
	WIR-0544 (22 AWG)	17	HDW-0725		LUB-0078		
	WIR-0056 (22 AWG)	18	ORB-0031	31	HDW-0150		
5	STM-0596	19	HDW-0726	32	CNT-0042		
6	HDW-0347	20	ORB-0004	33	HDW-0257		
7	ORB-0030	21	ELE-0145	34	HDW-0326		
8	ORB-0011	22	ORB-0013	35	HDW-0156		
9	ORB-0014	23	ORB-0008	36	CNT-0041		
10	HDW-0209	24	HDW-0285	37	HDW-0155		
11	ELE-0145	25	HDW-0571	38	HDW-0156		

# WAY LUBE ASSEMBLY





# WAY LUBE ASSEMBLY

## WAY LUBE ASSEMBLY

	PART #		PART #		PART #
1	LUB-0049	8	PLM-0022	15	LUB-0083
2	LUB-0050	9	LUB-0041	16	PLM-0084
3	PLM-0049	10	LUB-0044	17	PLM-0036
4	REG-0018	11	CVR-0041	18	LUB-0038
5	LUB-0036	12	LUB-0045	19	HDW-1039
6	LUB-0051	13	LUB-0085		
7	VLV-0028	14	LUB-0084		

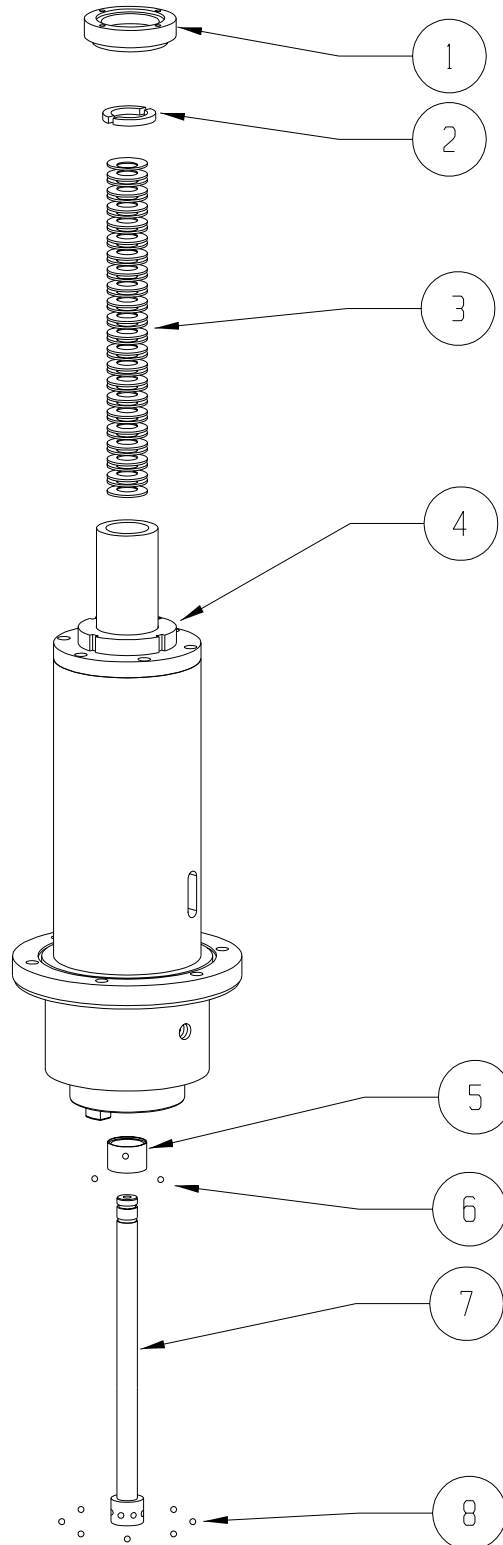
# 7500 RPM SPINDLE

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



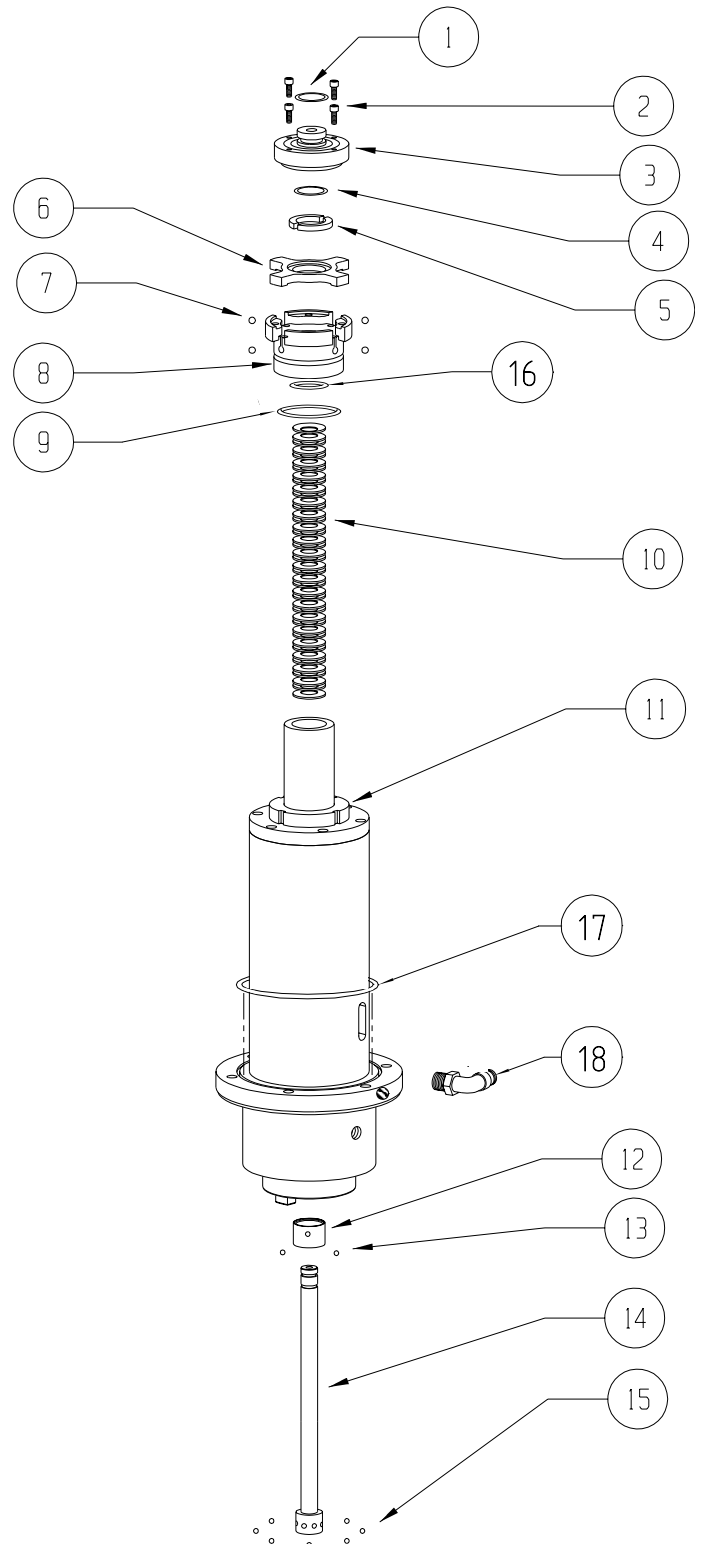
# 10K RPM SPINDLE

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

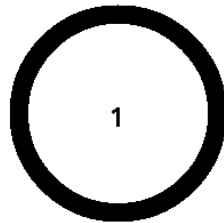
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



1  
HDW-0158



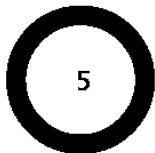
2  
HDW-0177



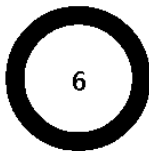
3  
HDW-0150



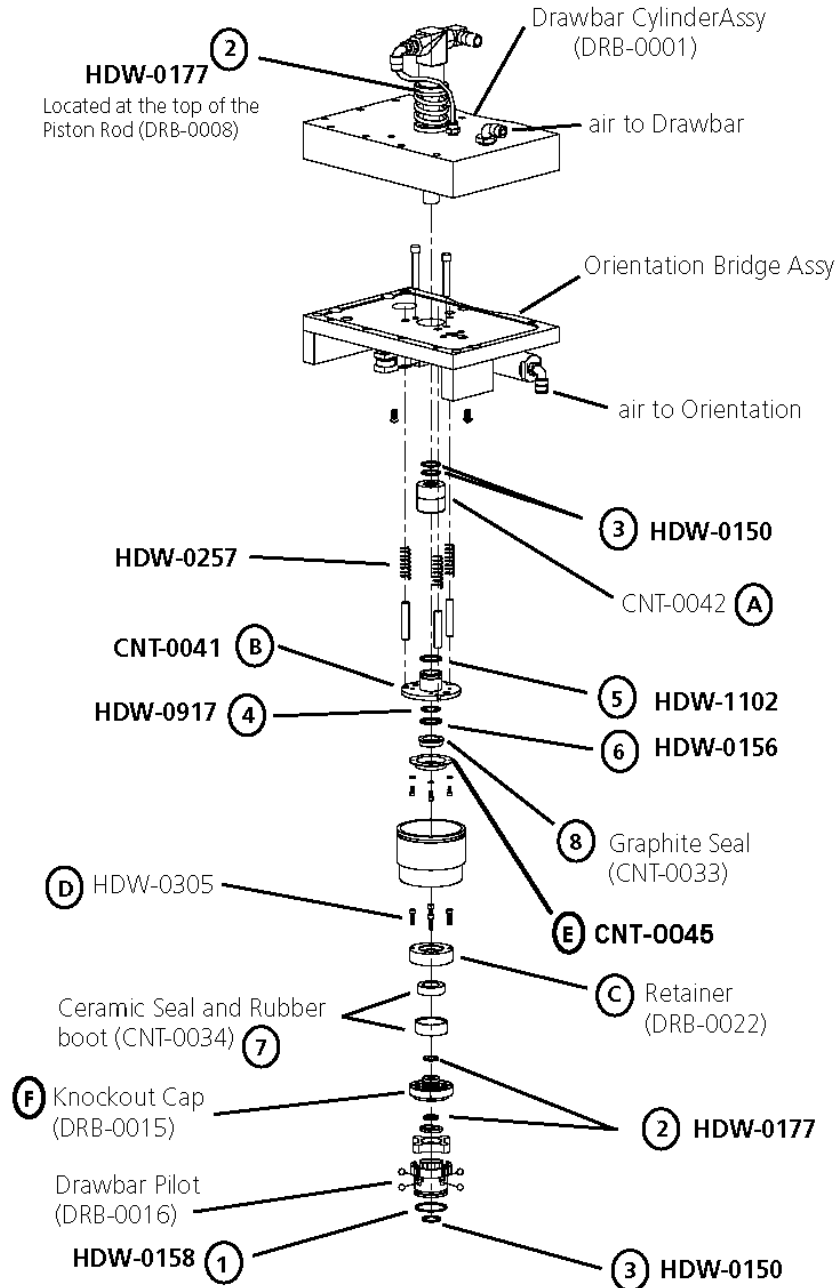
4  
HDW-0917



5  
HDW-1102

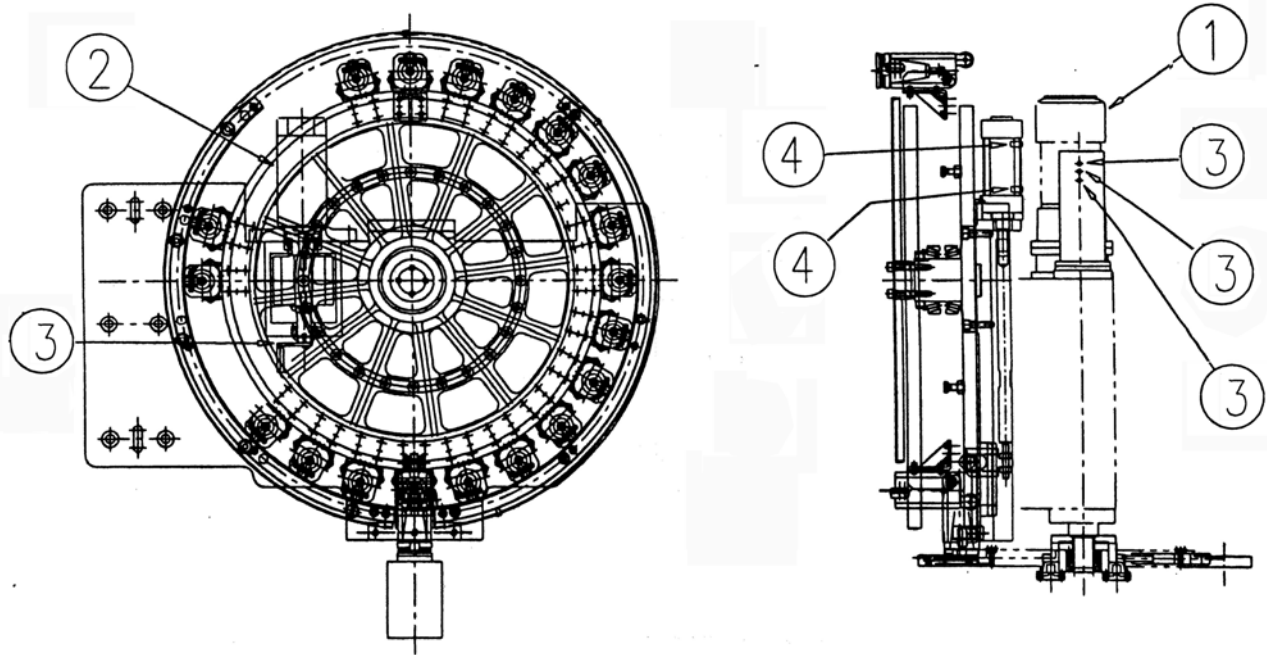


6  
HDW-0156



CNT-0150 O'RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8  
 AND A-F)

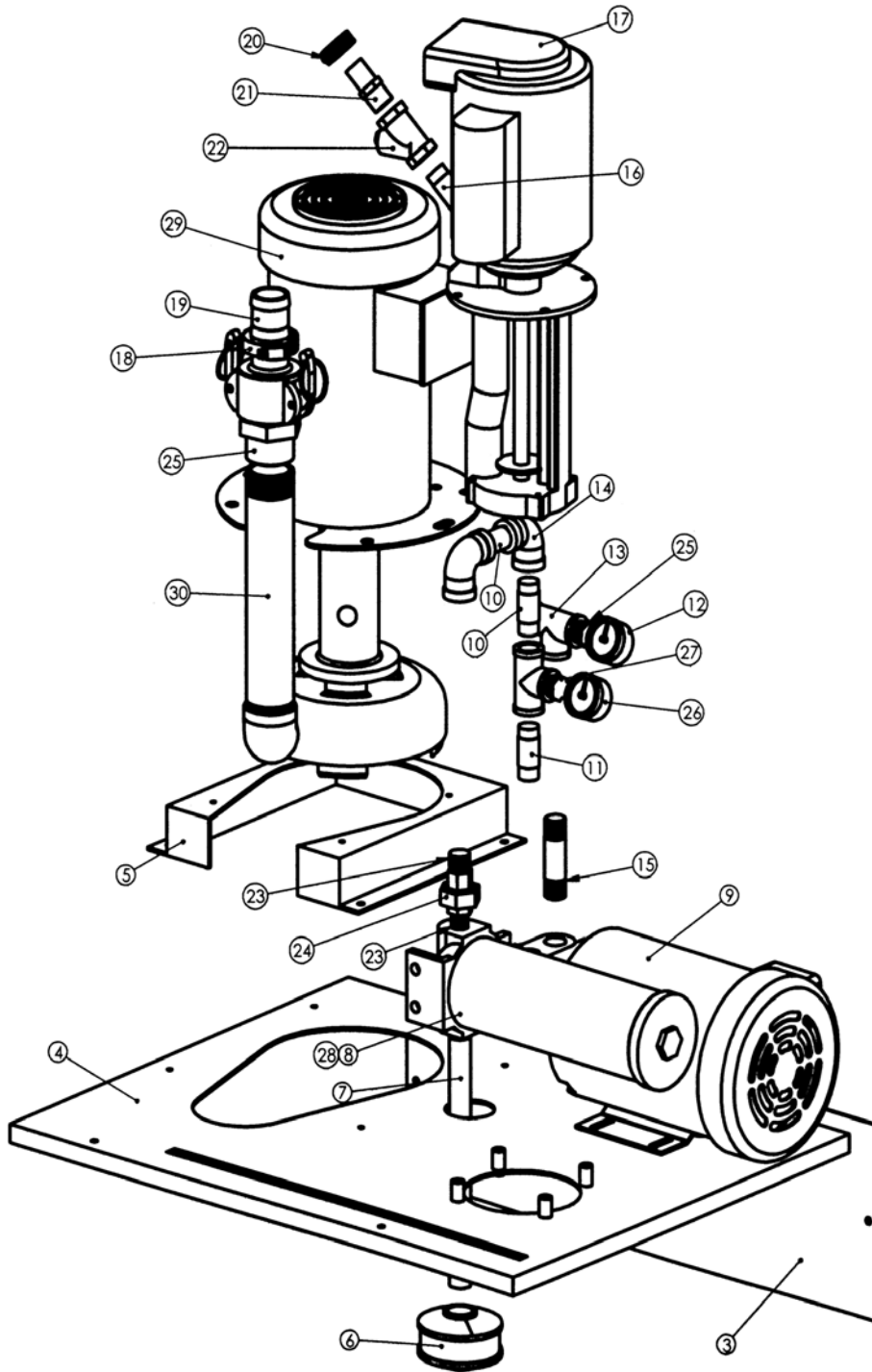
# DUAL ARM TOOL CHANGER



DUAL ARM TOOL CHANGER

	PART #
1	MTR-0181
2	MTR-0180
3	ELE-1185
4	ELE-1186
5	ATC-0155
6	ATC-0164
7	(BT) ATC-0163
7	(BT) ATC-0165

# COOLANT TANK ASSEMBLY

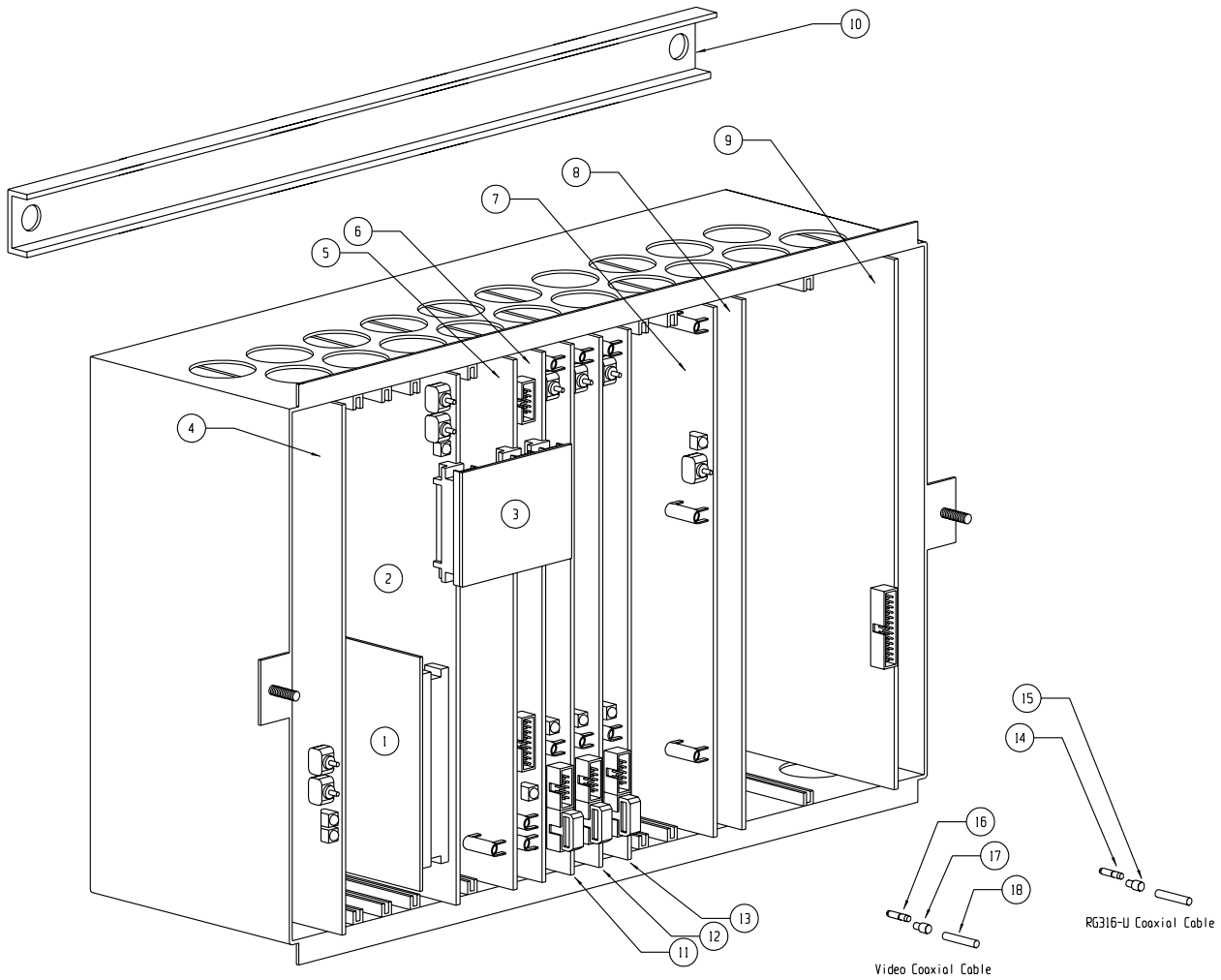


# COOLANT TANK ASSEMBLY

## COOLANT TANK ASSEMBLY

	PART #		PART #		PART #		PART #
1		9	PMP-0008	17	PMP-0017	25	PLM-0217
2		10	PLM-0060	18	HDW-0764	26	PLM-0216
3		11	PLM-0094	19	PLM-0021	27	REG-0034
4		12	REG-0018	20	HDW-0252	28	CNT-0029
5	STM-1023	13	PLM-0089	21	PLM-0076	29	PMP-0010
6	CNT-0025	14	PLM-0067	22	VLV-0018	30	PLM-0065
7	PLM-0233	15	PLM-0214	23	PLM-0091		
8	CNT-0027	16	PLM-0007	24	PLM-0212		

# CARD CAGE ASSEMBLY





# CARD CAGE ASSEMBLY

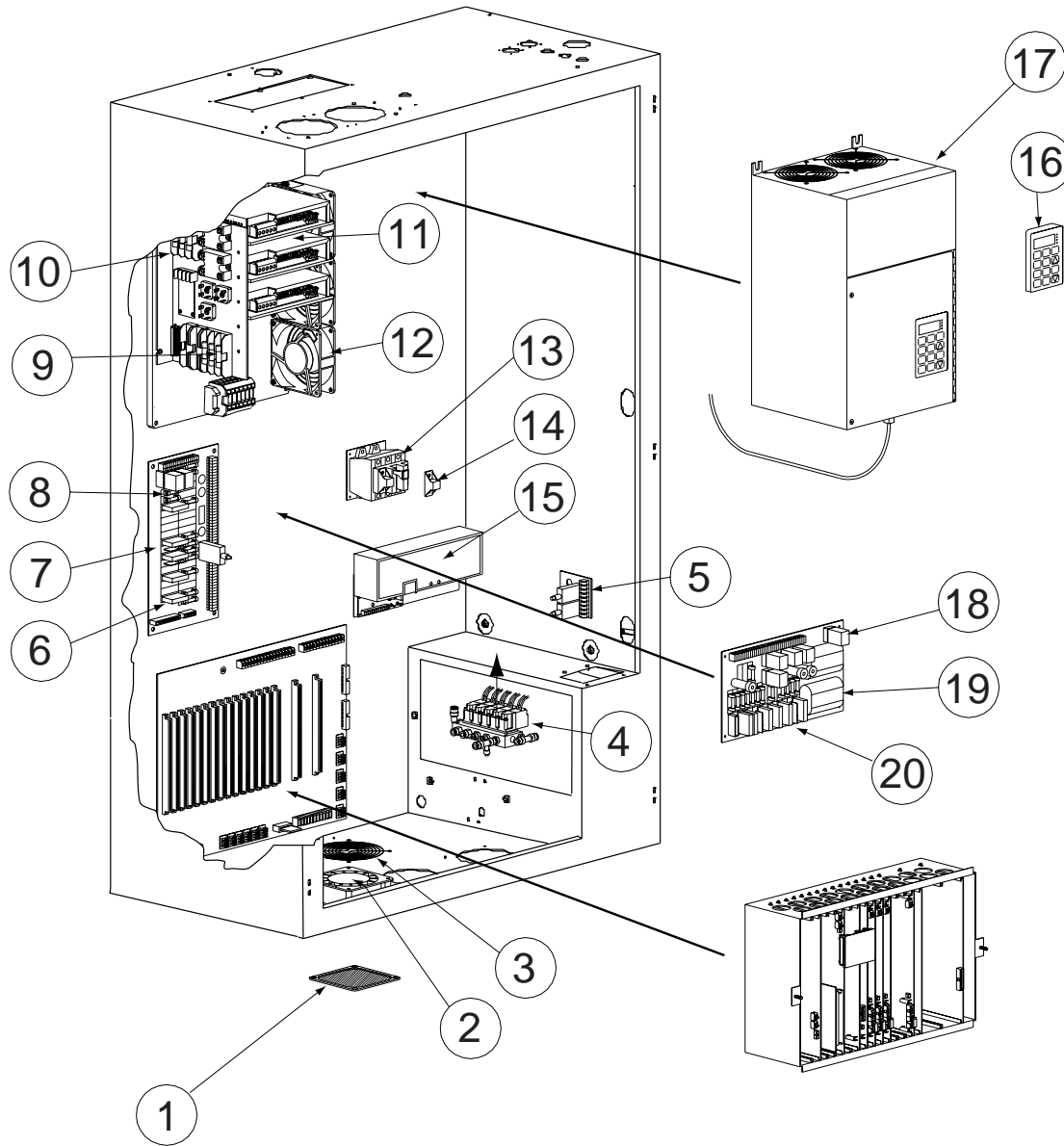
## CARD CAGE ASSEMBLY PARTS

	PART #		PART #
1	PCB-0094	8	PCB-0000
2	PCB-0030	9	PCB-0009
3	PCB-0053	10	STM-0029
4	PCB-0045	11	WIR-0040
5	PCB-0032 (88HS)	12	WIR-0041
	PCB-0033 (32MP)	13	WIR-0038
6	PCB-0003	14	WIR-0039
7	PCB-0141	15	WIR-0086

## SLOTS & BOARDS

SLOT	BOARD #	SLOT	BOARD #
1	PCB-0045	10	PCB-0037
2		11	PCB-0037
3		12	
4		13	
5	PCB-0030	14	PCB-0141
6		15	PCB-0000
7		16	PCB-0008
8	PCB-0003	17	PCB-0005
9	PCB-0037		

# CNC CABINET

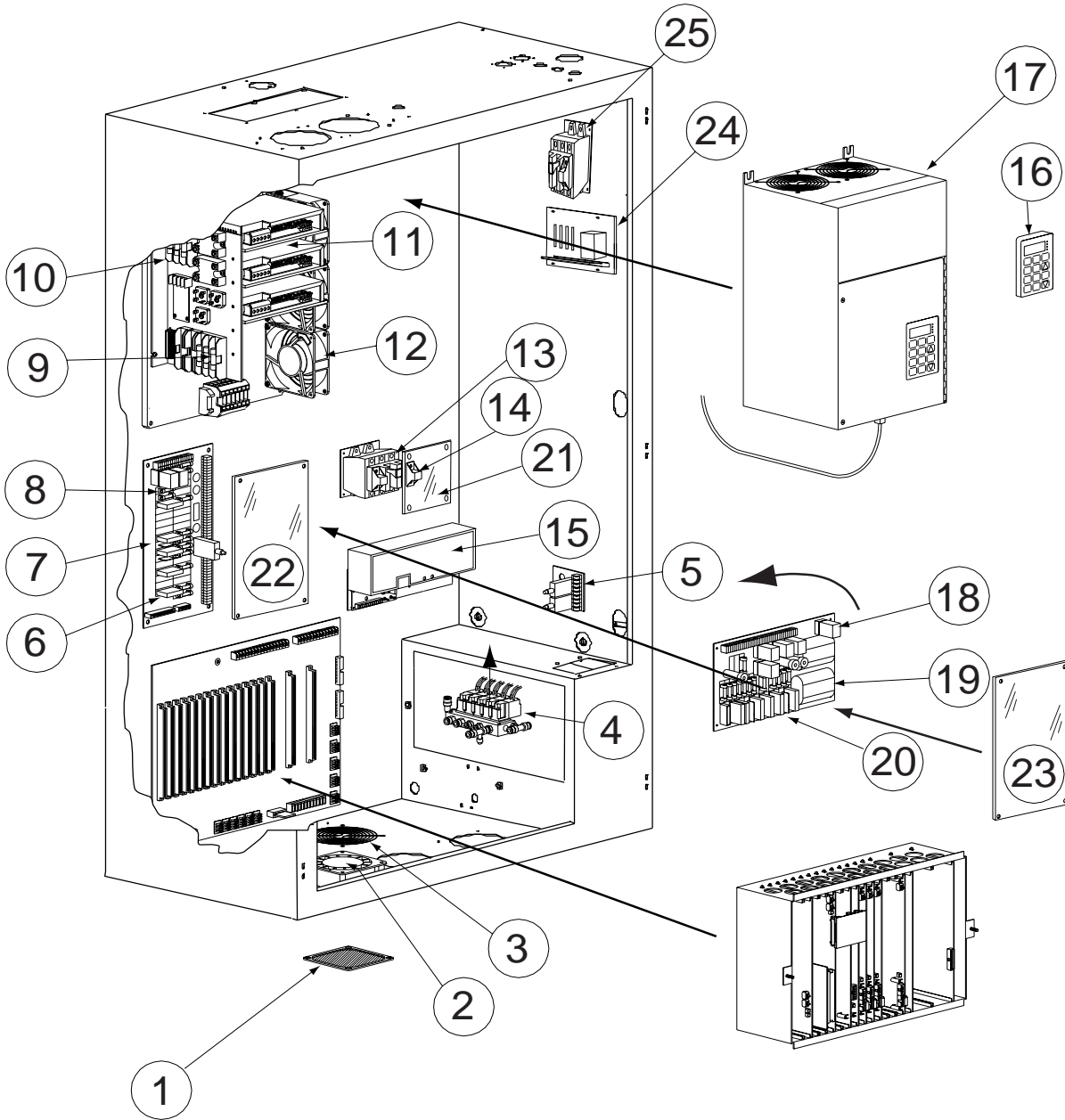


# CNC CABINET

## CNC CABINET

	PART #		PART #
1	HDW-0849	11	AMP-0036
2	ELE-0123	12	ELE-0123
3	HDW-0850	13	ELE-0132
4	VLV-0054	14	ELE-0138
5	PCB-0046	15	ELE-0961
6	ELE-0070	16	INV-0017 (BALDOR)
7	PCB-0194	17	INV-0056 (AMC)
8	ELE-0101		INV-0020 (HT)
9	ELE-0840		INV-0020 (HT)
10	ELE-0837	18	ELE-0072
		19	PCB-0195
		20	ELE-0070

# CE CNC CABINET

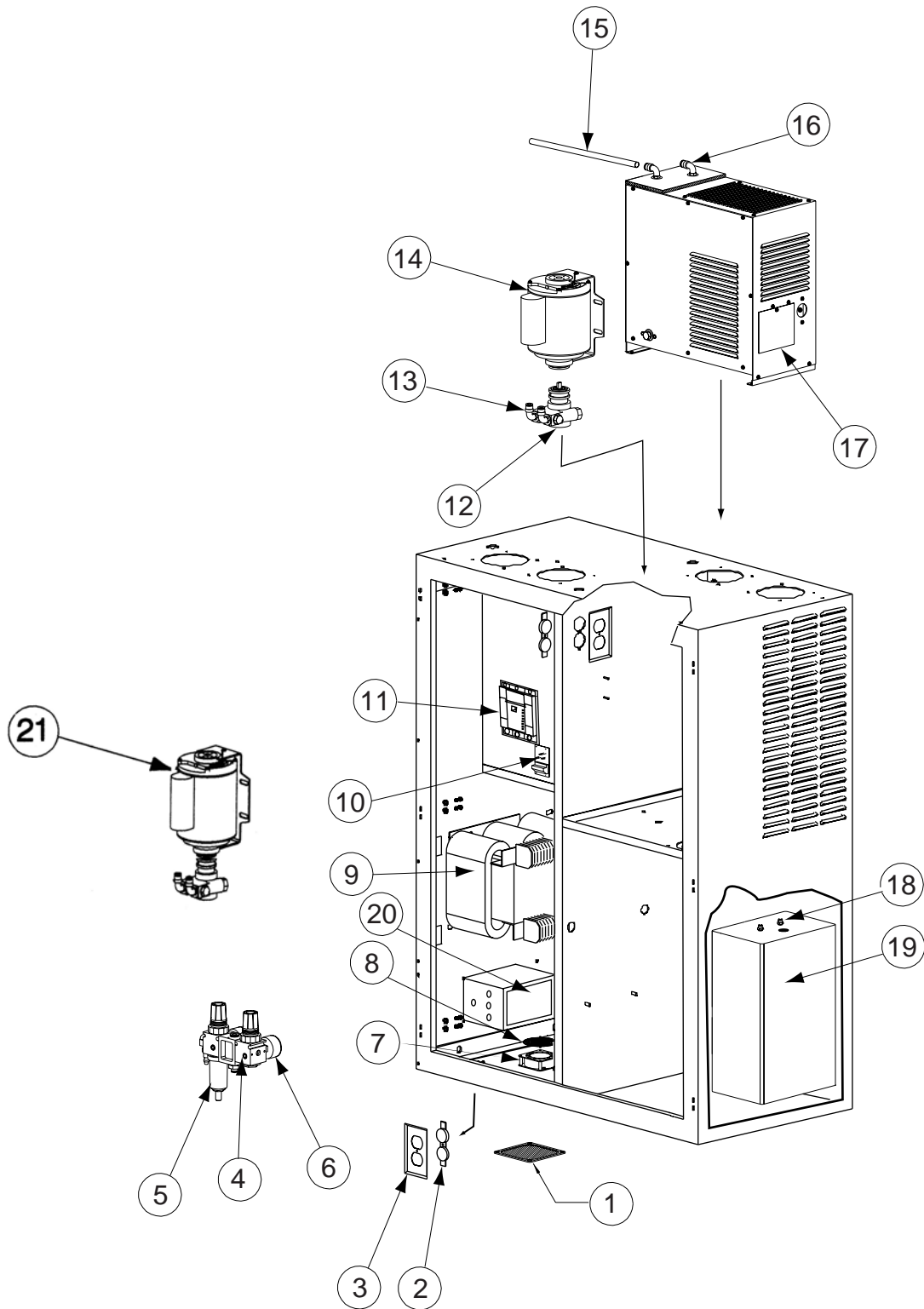


# CE CNC CABINET

## CE CNC CABINET

	PART #		PART #		PART #
1	HDW-0849	13	ELE-0132	24	PCB-0196
2	ELE-0123	14	ELE-0138	25	ELE-1025
3	HDW-0850	15	ELE-0961		
4	VLV-0054	16	INV-0017 (BALDOR)		
5	PCB-0046	17	INV-0056 (AMC)		
6	ELE-0070		INV-0041 (BALDOR)		
7	PCB-0194	18	ELE-0072		
8	ELE-0101	19	PCB-0195		
9	ELE-0840	20	ELE-0070		
10	ELE-0837	21	ELE-0349		
11	AMP-0036	22	ELE-0849		
12	ELE-0123	23	ELE-0848		

# JUNCTION BOX



# JUNCTION BOX

## JUNCTION BOX

	PART #		PART #
1	HDW-0849	12	PMP-0000
2	WIR-0121	13	PLM-0042
3	WIR-0117	14	PMP-0029
4	REG-0009	15	PLM-0024
5	REG-0008	16	PLM-0042
6	REG-0005	17	CNT-0035
7	ELE-0123	18	PLM-0210
8	HDW-0850	19	CNT-0047
9	ELE-0200	20	ELE-0762*
10	PCB-0020	21	PMP-0034
11	ELE-0946		

# TABLE OF CONTENTS

## Parts Manual VMC 8030 MODEL



COLUMN ASSEMBLY .....	2
BASE, TABLE & SADDLE .....	4
10K RPM HEAD ASSEMBLY .....	6
X AXIS SCALE ASSEMBLY .....	8
Y AXIS SCALE ASSEMBLY .....	9
DRAWBAR ASSEMBLY .....	10
ORIENTATION BRIDGE ASSEMBLY .....	12
10K IDLER ASSEMBLY .....	14
WAY LUBE ASSEMBLY .....	15
ATC GENEVA DRIVE ASSEMBLY .....	16
ATC SERVO DRIVE ASSEMBLY .....	18
7500 RPM SPINDLE ASSEMBLY .....	20
10K RPM SPINDLE ASSEMBLY .....	21
COOLANT THROUGH SPINDLE .....	22
CNC CABINET ASSEMBLY .....	23
CARD CAGE ASSEMBLY .....	24
POWER JUNCTION CABINET ASSEMBLY .....	25
CHILLER CABINET ASSEMBLY .....	26
88HS PENDANT ASSEMBLY .....	27
MULTI PROCESSOR PENDANT .....	28
FRONT DOOR ASSEMBLY .....	29
WAY COVER ASSEMBLY .....	30
SHEETMETAL HOUSING .....	31
7500 RPM COOLANT TANK .....	32
7500 RPM COOLANT THROUGH TANK ASSEMBLY .....	33
10K RPM COOLANT TANK .....	34
10K RPM COOLANT THROUGH TANK .....	35
DUAL ARM TOOL CHANGER .....	36





**This reference covers the following Fadal products:**

**Model VMC 8030**

Corporate Office..... voice (818) 407-1400 ..... fax (818) 407-0020  
Service / Parts ..... voice (818) 727-2100 ..... fax (818) 407-1004  
Programming Support ..... voice (818) 727-2100 ..... fax (818) 407-0061

support@fadal.com  
20701 Plummer Street, Chatsworth, California 91311 USA

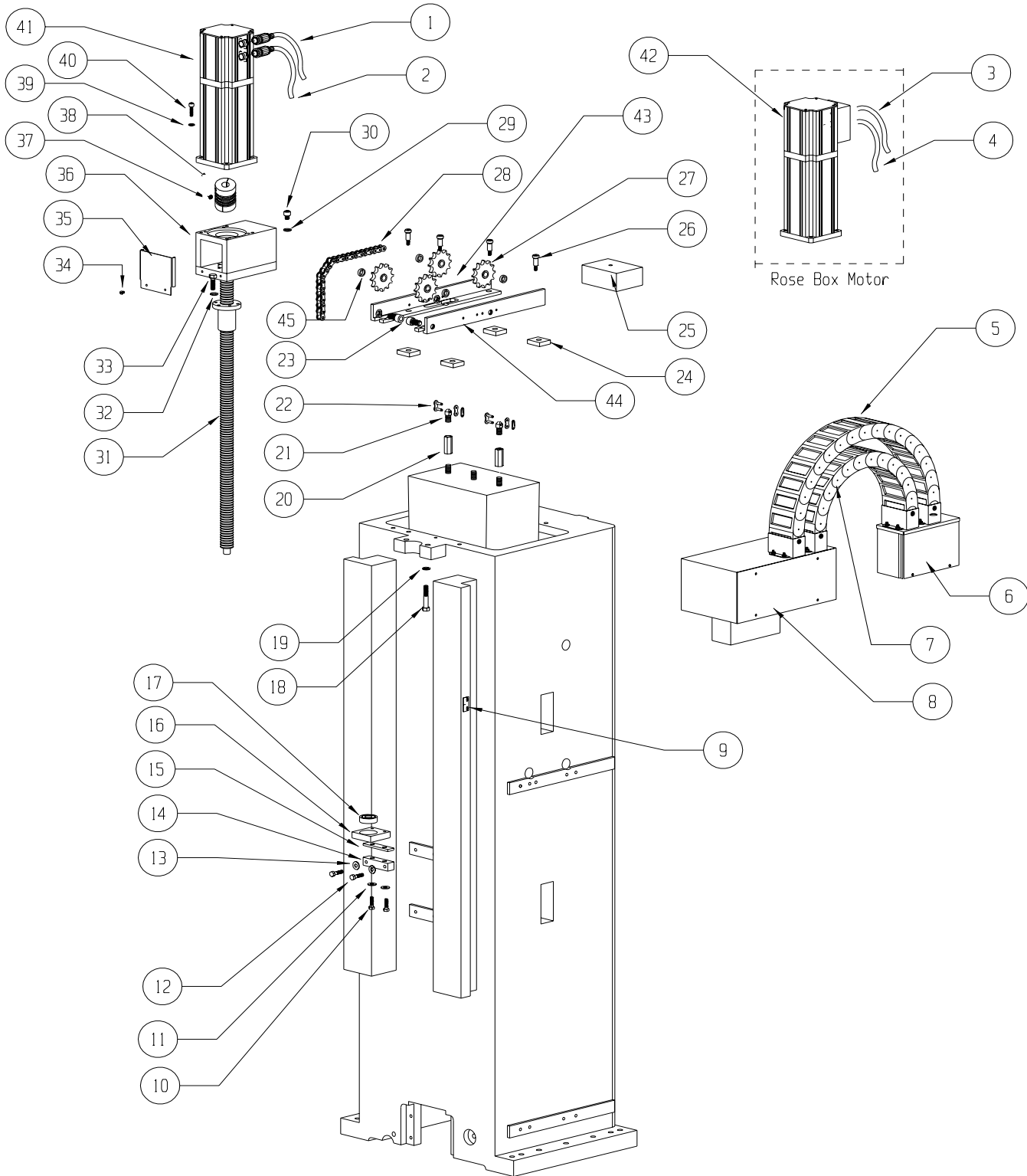
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 2001 Fadal Machining Centers.

# COLUMN ASSEMBLY

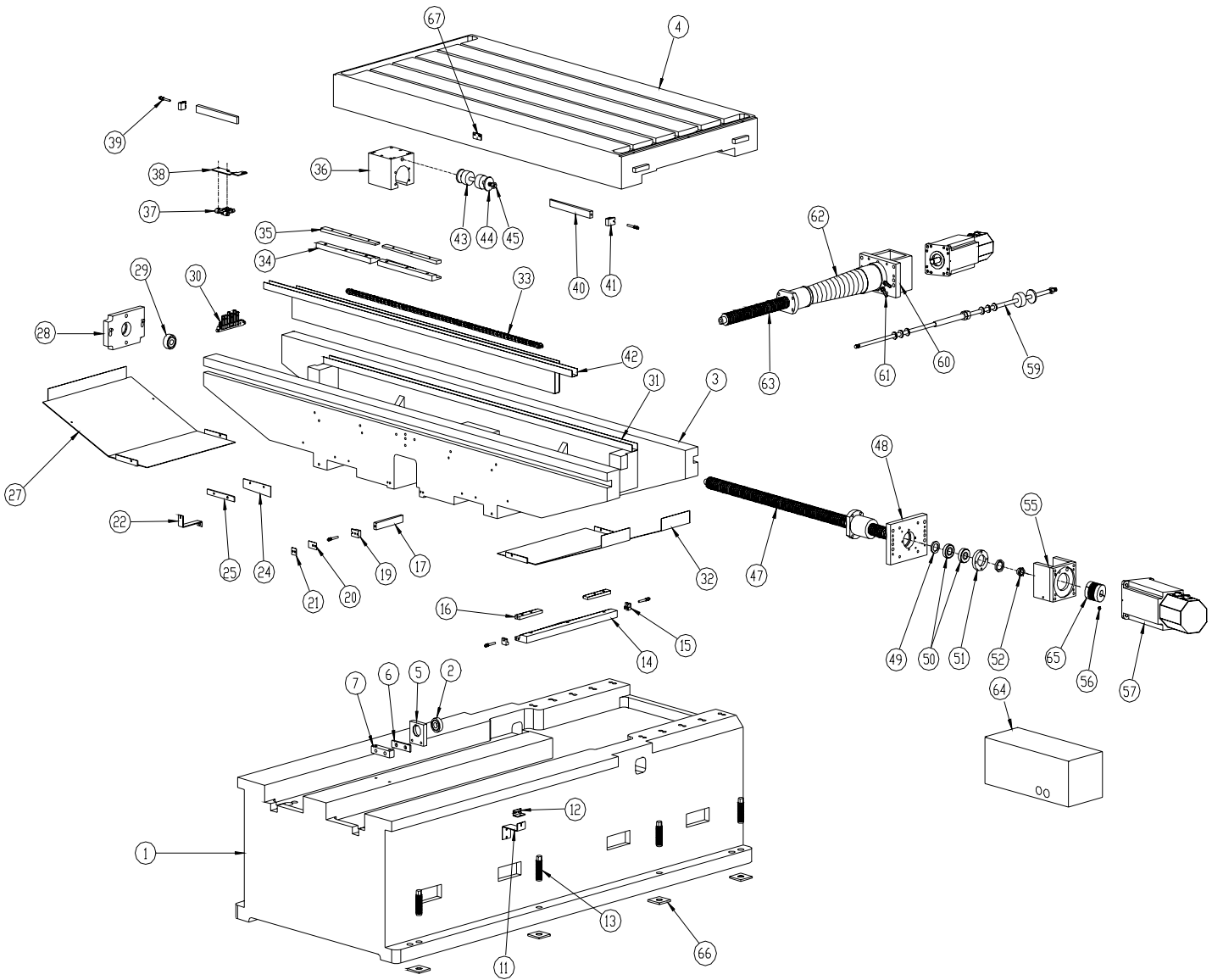


# COLUMN ASSEMBLY

## COLUMN ASSEMBLY

	PART #		PART #		PART #		PART #
1	WIR-0612	13	HDW-0049	25	CWT-0002	37	MTR-0071
2	WIR-0611	14	BLS-0052	26	HDW-0600	38	MTR-0189
3	WIR-0572	15	BLS-0143	27	PUL-0034	39	HDW-0280
4	WIR-0573	16	BLS-0053	28	HDW-0207	40	HDW-0779
5	CVR-0006	17	BRG-0021	29	HDW-0451	41	MTR-0142
6	STM-0067	18	HDW-0655	30	HDW-0465	42	MTR-0126
7	CVR-0005	19	HDW-0451	31	BLS-0021	43	CWT-0005
8	STM-0172	20	HDW-0355	32	HDW-0451	44	CWT-0007
9	STM-0044	21	CWT-0001	33	HDW-0558	45	CWT-0009
10	HDW-0569	22	HDW-0204	34	HDW-0347		
11	HDW-0049	23	HDW-0777	35	STM-0043		
12	HDW-0313	24	HDW-0363	36	BLS-0022		

# BASE , TABLE & SADDLE



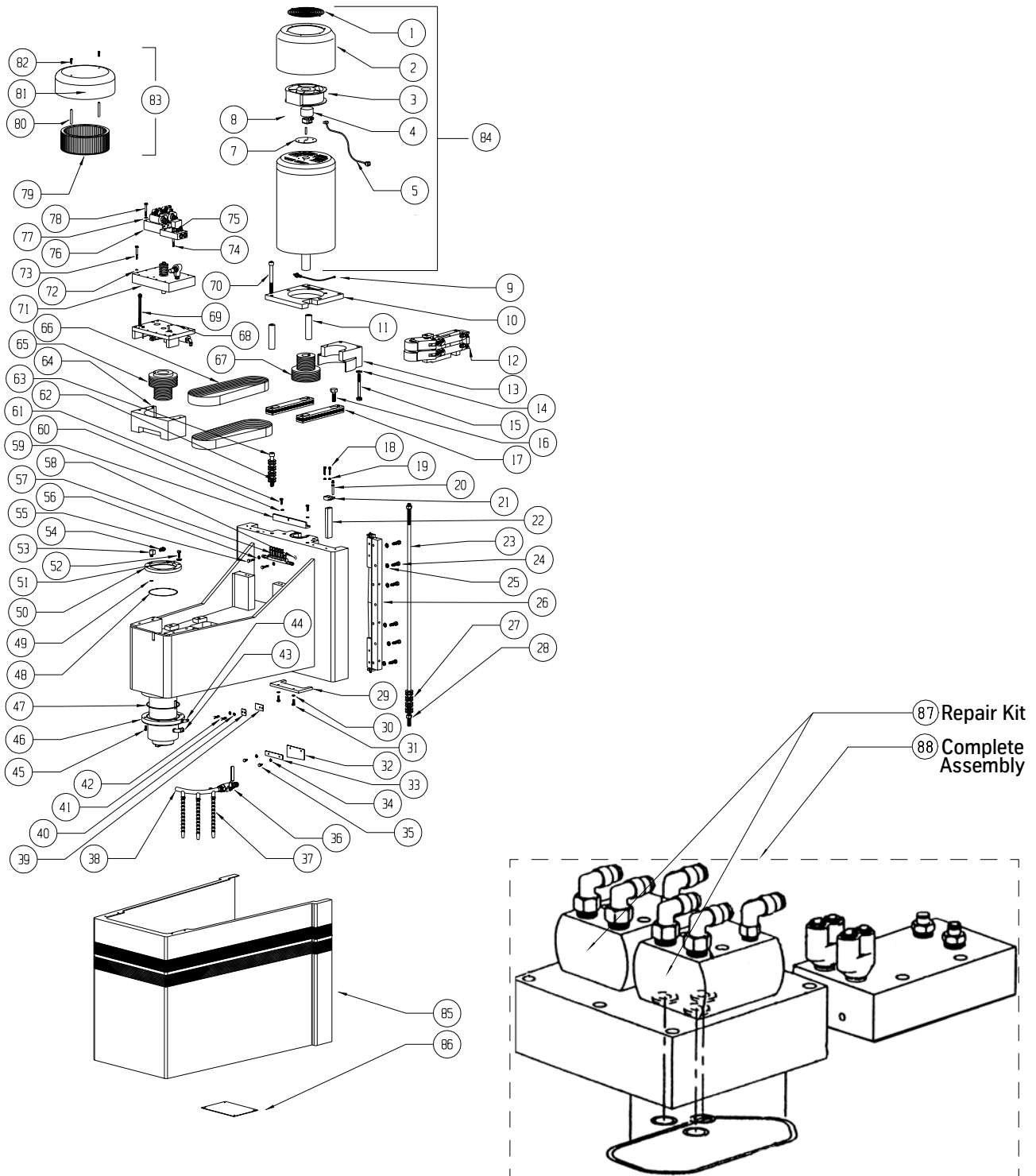
# BASE , TABLE & SADDLE

## BASE, TABLE & SADDLE

	PART #		PART #		PART #
1	BAS-0015	27	STM-0514	53	MTR-0183
3	SDL-0041	28	BLS-0128	54	
4	SDL-0019	29	BRG-0022	55	BLS-0207
5	BLS-0021	30	LUB-0043	56	HDW-0419
6	BLS-0143	31	STM-0790	57	MTR-0142
7	BLS-0052	32	STM-0513	58	
8		33	CVR-0041	59	BLS-0066
9		34	GIB-0016	60	BLS-0211
10		35	GIB-0015*	61	PLM-0196
11	STM-0113	36	BLS-0054	62	CVR-0001
12	STM-0047	37	LUB-0044	63	BLS-0182
13	HDW-0374	38	STM-0293	64	STM-0609
14	GIB-0024	39	GIB-0013	65	MTR-0189
15	GIB-0012	40	GIB-0000*	66	SHP-0002
16	GIB-0019*	41	GIB-0011	67	STM-0044
17	GIB-0003	42	STM-0524		
18		43	HDW-0375		
19	GIB-0010	44	HDW-0859		
20	HDW-0355	45	HDW-0566		
21	STM-0042	46			
22	STM-0046	47	BLS-0181		
23		48	BLS-0210		
24	HDW-0377	49	HDW-0213		
25	STM-0171	50	BRG-0039		
26		51	BLS-0039		
		52	HDW-0332		

\*Specify gib size when ordering.

# 10K RPM HEAD ASSEMBLY



# 10K RPM HEAD ASSEMBLY

## 10K RPM HEAD ASSEMBLY

	PART #		PART #		PART #
1	HDW-0851	30	HDW-0279	59	STM-0142
5	WIR-0168	34	HDW-0279	63	HDW-0462
		35	HDW-0319	64	BEL-0014
7	STM-0148	36	VLV-0017	65	PUL-0018
8	ENC-0007	37	PLM-0016	66	BEL-0003
9	HDW-0370	38	CNT-0039	67	PUL-0019
11	MTR-0149	40	STM-0042	69	HDW-0290
12	IDL-0003	41	HDW-0279	70	HDW-0284
13	BEL-0015	42	HDW-0294	71	DRB-0000
14	HDW-0451	43	PLM-0112	72	HDW-0279
15	HDW-0311	44	PLM-0034	73	HDW-0320
16	HDW-0283	45	HDW-0470	74	HDW-0321 (HT)
17	MTR-0068	46	SPN-0008 <sup>(1)</sup>	75	HDW-0279 (HT)
18	HDW-0294	47	HDW-0181	76	HYD-0017 <sup>(2)</sup> (HT)
19	HDW-0279	48	HDW-0148	77	HDW-0279 (HT)
20	GIB-0013	49	HDW-0177	78	HDW-0320 (HT)
21	GIB-0010	50	SPN-0042	79	MTR-0127
22	GIB-0001*	51	HDW-0275	80	SVT-0108
23	BLS-0196	52	HDW-0568	81	STM-0467
24	HDW-0569	53	PLM-0075	82	HDW-0597
25	HDW-0280	54	PLM-0088	83	MTR-0128
26	GIB-0008*	55	HDW-0576	84	MTR-0047 <sup>(3)</sup>
27	HDW-0194	56	HDW-0279	85	STM-0058
28	HDW-0543	57	LUB-0045	86	STM-0064
29	CVR-0048	58	HDW-0047	87	HYD-0018
				88	HYD-0017

\* Specify gib size when ordering.

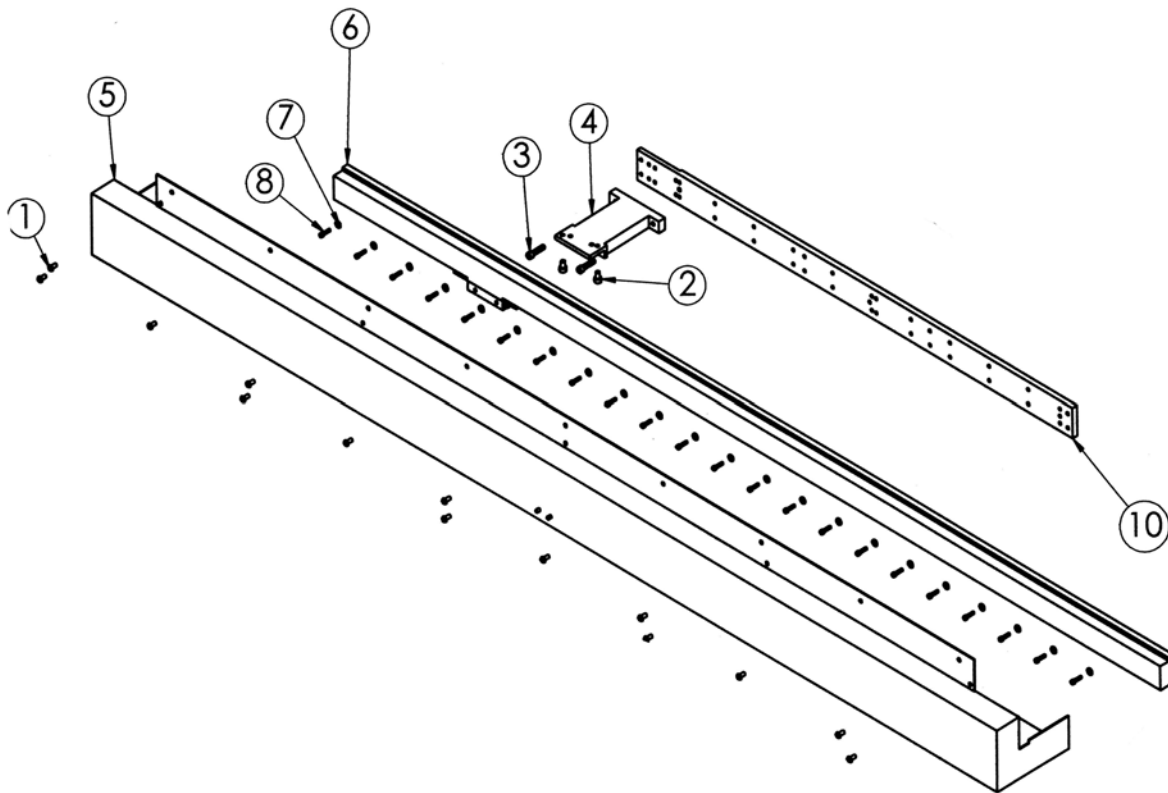
<sup>(1)</sup>SPN-0008 INCLUDES: HDW-0181, HDW-0177, HDW-0148, PUL-0018

<sup>(2)</sup>HYD-0017 REPLACEMENT PART HYD-0018

<sup>(3)</sup>MTR-0047 INCLUDES: PUL-0019



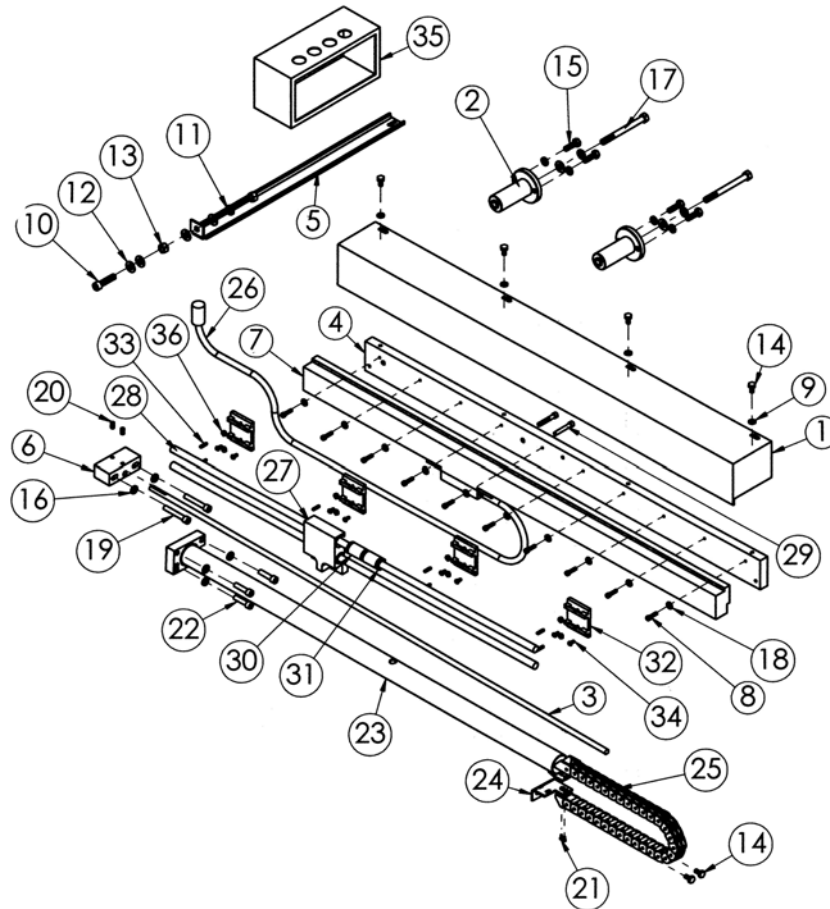
# X AXIS SCALE ASSEMBLY



**X AXIS SCALE ASSEMBLY**

	PART #		PART #
1	HDW-0346	6	SCL-0028
2	HDW-0463	7	HDW-0449
3	HDW-0295	8	HDW-0303
4	SCL-0048		
5	STM-0466	10	SCL-0062

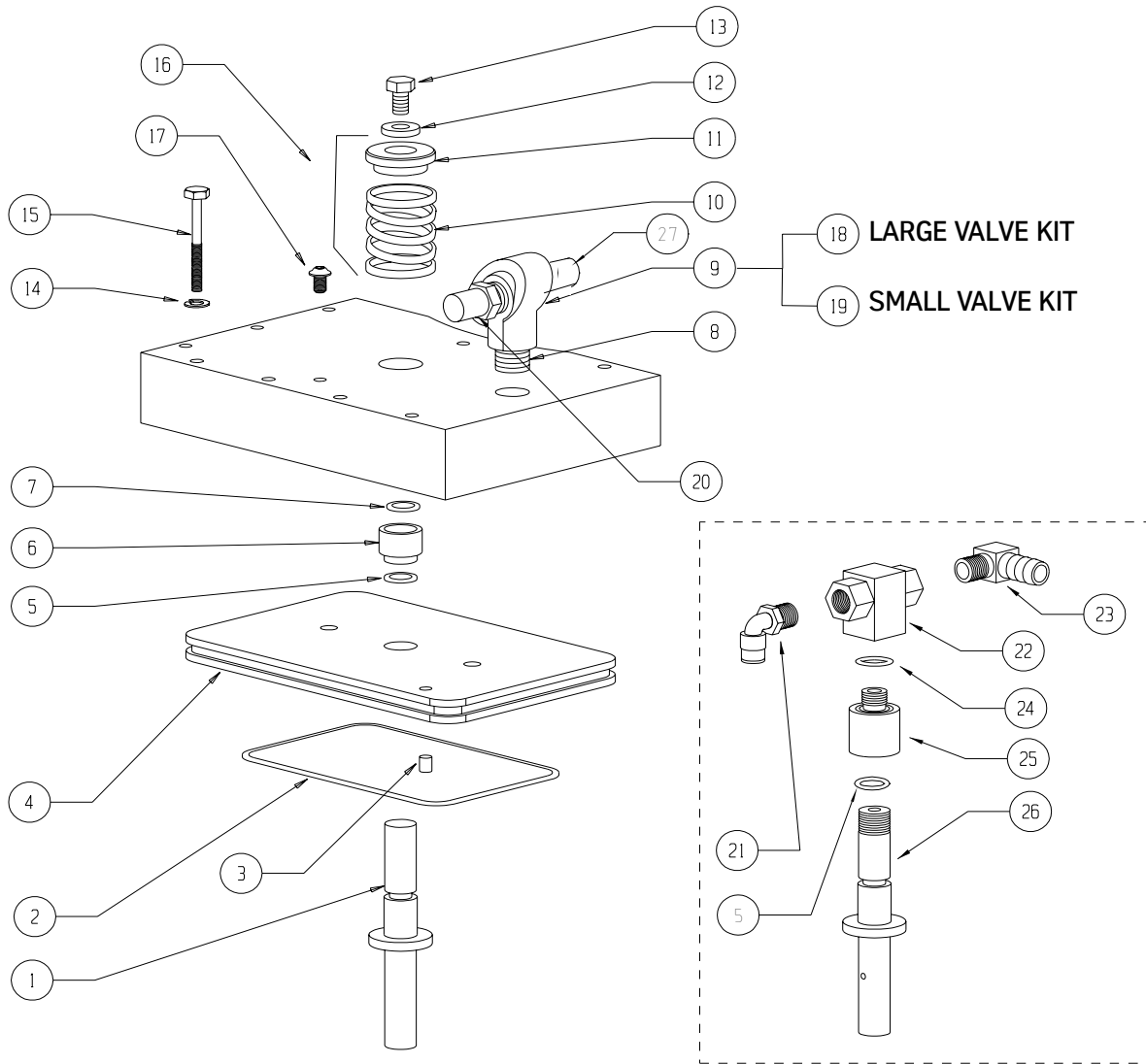
# Y AXIS SCALE ASSEMBLY



Y AXIS SCALE ASSEMBLY

	PART #		PART #		PART #
1	STM-0180	13	HDW-0333	25	CVR-0135
2	SCL-0043	14	HDW-0319	26	SCL-0029
3	SCL-0047	15	HDW-0314	27	SCL-0078
4	SCL-0038	16	HDW-0281	28	SCL-0066
5	STM-0184	17	HDW-0572	29	HDW-0297
6	SCL-0045	18	HDW-0449	30	BRG-0121
7	SCL-0001	19	HDW-0484	31	HDW-0759
8	HDW-0303	20	HDW-0408	32	SCL-0076
9	HDW-0279	21	HDW-0308	33	HDW-0430
10	HDW-0313	22	HDW-0483	34	HDW-0383
11	HDW-0280	23	SCL-0116	35	STM-0179
12	HDW-0452	24	CVR-0136	36	HDW-0808

# DRAWBAR ASSEMBLY



Non-Coolant Thru Assembly DRB-0000

Coolant Thru Assembly DRB-0001

**DRAWBAR ASSEMBLY**

	PART #		PART #		PART #		PART #
1	DRB-0007	8	PLM-0117	15	HDW-0320	22	VLV-0021
2	HDW-0178	9	VLV-0031	16	HDW-0197	23	PLM-0105
3	ELE-0147	10	PLM-0117	17	HDW-0347	24	HDW-0150
4	DRB-0009	11	DRB-0017	18	VLV-0032	25	CNT-0046
5	HDW-0177	12	HDW-0048	19	VLV-0033	26	DRB-0008
6	DRB-0023	13	HDW-0571	20	PLM-0083	27	PLM-0030
7	HDW-0917	14	HDW-0279	21	PLM-0037		

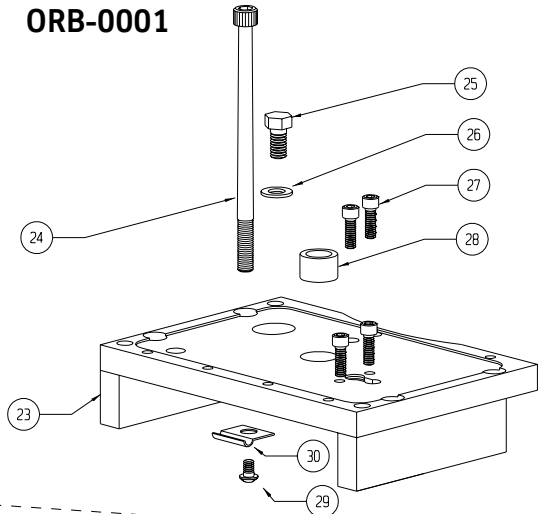


This page intentionally left blank.

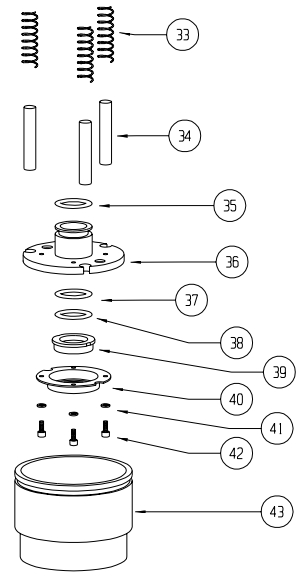
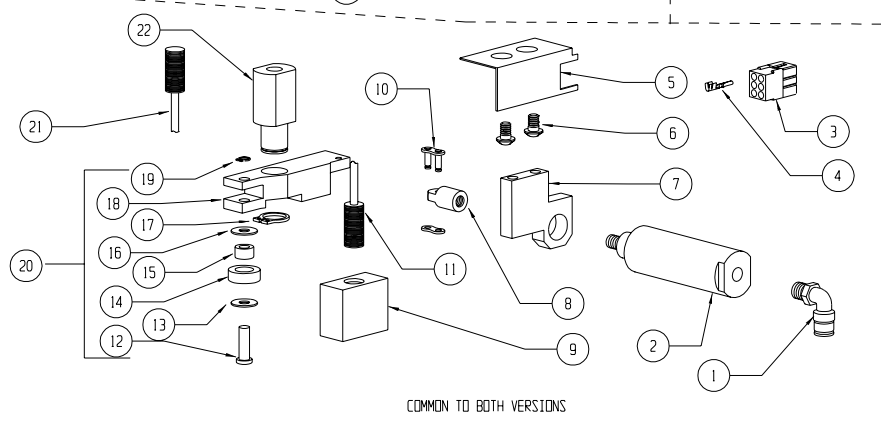
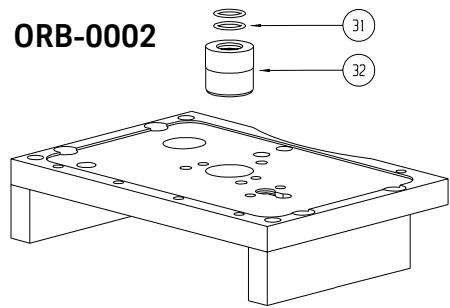


# ORIENTATION BRIDGE ASSEMBLY

ORB-0001



ORB-0002

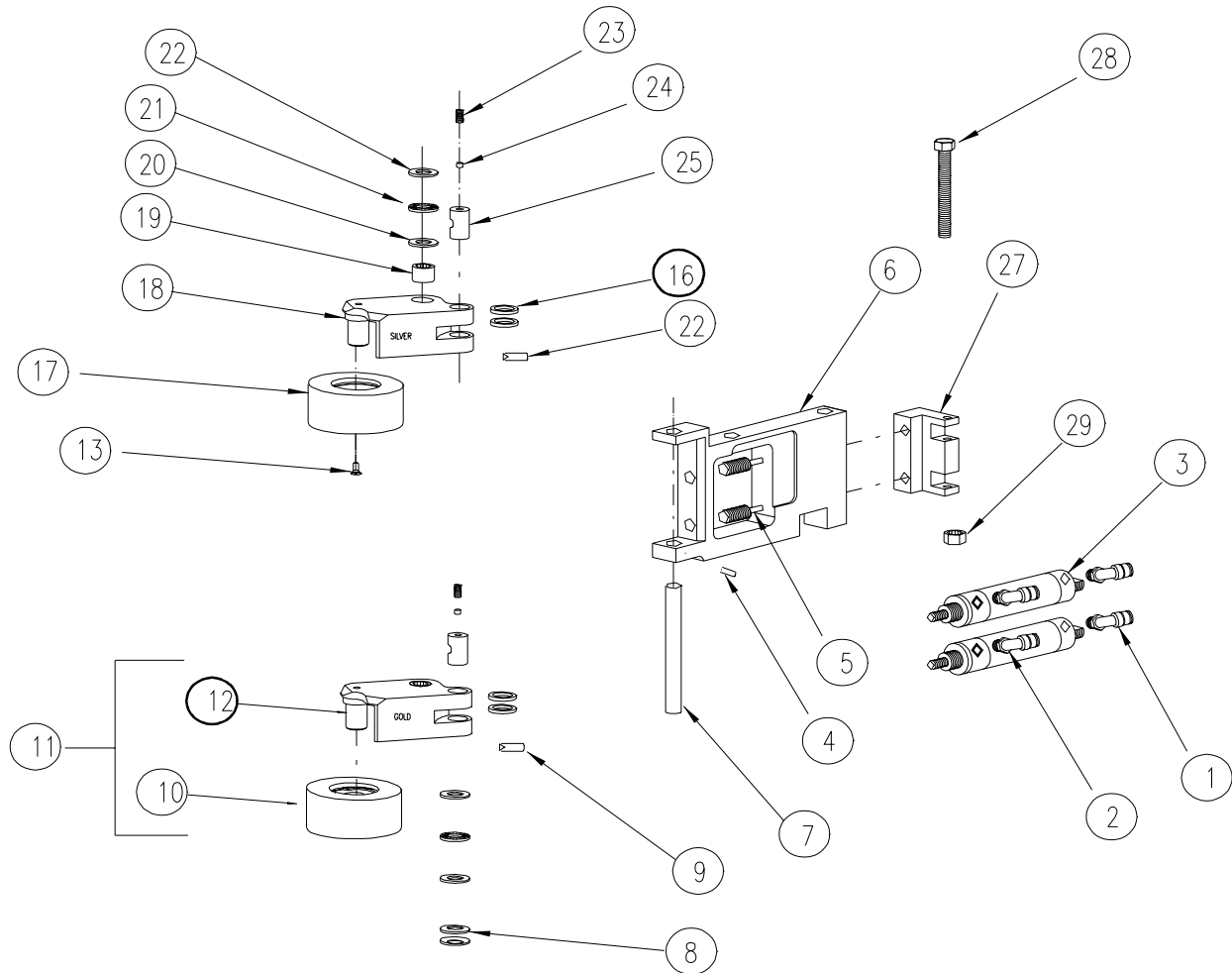


# ORIENTATION BRIDGE ASSEMBLY

## ORIENTATION BRIDGE ASSEMBLY

	PART #		PART #		PART #
1	PLM-0034	14	ORB-0009	30	LUB-0077
2	CYL-0007	15	BRG-0014		LUB-0078
3	WIR-0051	16	HDW-0515	31	HDW-0150
4	WIR-0043 (16 AWG)	17	HDW-0725	32	CNT-0042
	WIR-0044 (16 AWG)	18	ORB-0031	33	HDW-0257
	WIR-0544 (22 AWG)	19	HDW-0726	34	HDW-0326
	WIR-0056 (22 AWG)	20	ORB-0004	35	HDW-0156
5	STM-0596	21	ELE-0145	36	CNT-0041
6	HDW-0347	22	ORB-0013	37	HDW-0155
7	ORB-0030	23	ORB-0008	38	HDW-0156
8	ORB-0011	24	HDW-0285	39	CNT-0033
9	ORB-0014	25	HDW-0571	40	CNT-0045
10	HDW-0209	26	HDW-0048	41	HDW-0453
11	ELE-0145	27	HDW-0298	42	HDW-0308
12	ORB-0007	28	BRG-0008	43	STM-0158
13	HDW-0515	29	HDW-0349		

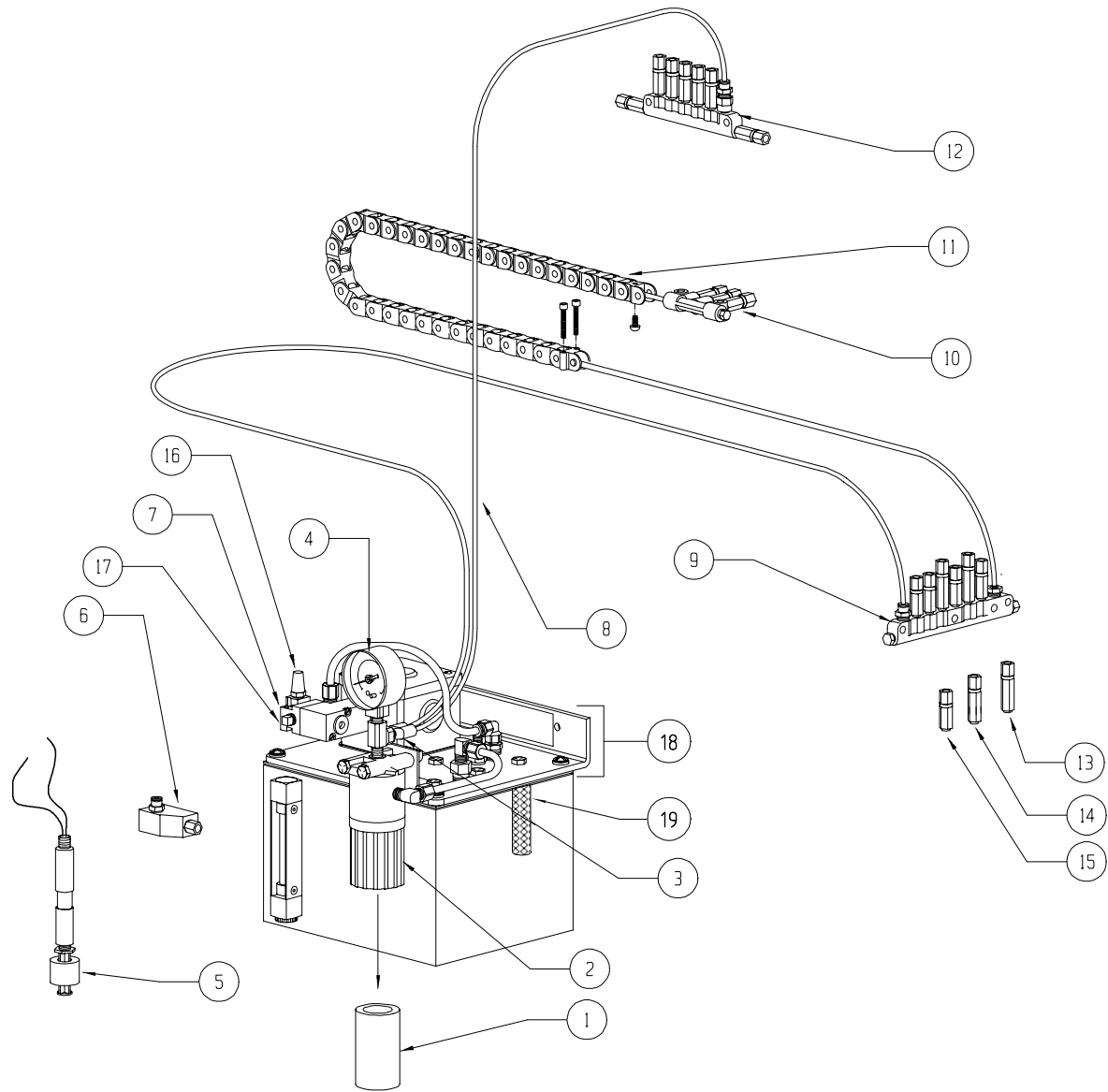
# 10K IDLER ASSEMBLY



**10K IDLER ASSEMBLY**

	PART #		PART #		PART #
1	PLM-0036	11	IDL-0000	21	BRG-0015
2	PLM-0034	12	IDL-0004	22	BRG-0016
3	CYL-0006	13	HDW-0605	23	HDW-0412
4	HDW-0612	14		24	IDL-0010
5	ELE-0145	15		25	IDL-0013
6	IDL-0011	16	HDW-0277	26	
7	IDL-0006	17	IDL-0017	27	IDL-0008
8		18	IDL-0015	28	HDW-0579
9	ELE-0147	19	BRG-0017	29	HDW-0643
10	IDL-0007	20	BRG-0016		

# WAY LUBE ASSEMBLY

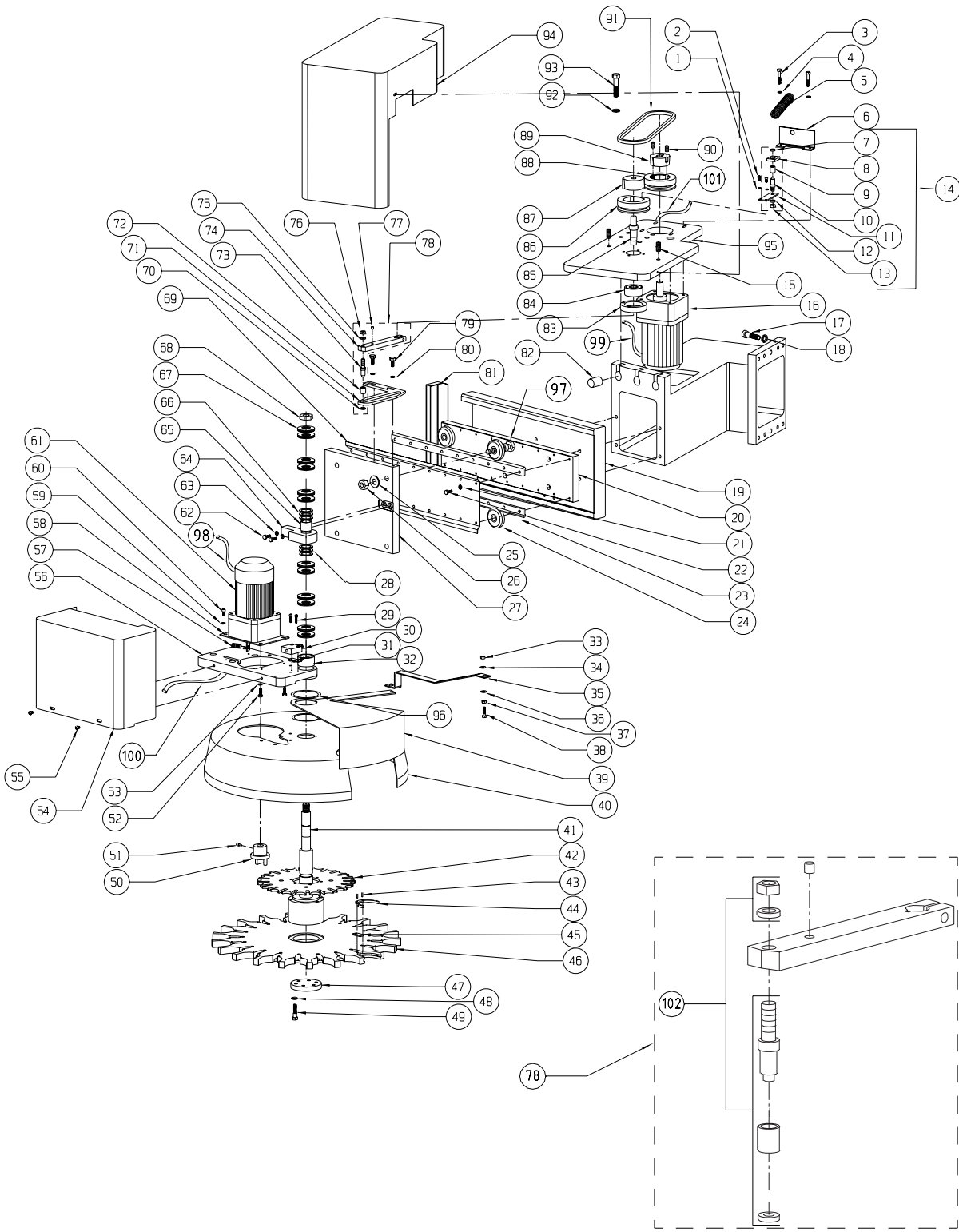


**WAY LUBE ASSEMBLY**

	PART #		PART #		PART #		PART #
1	LUB-0049	7	VLV-0028	13	LUB-0085	19	HDW-1039
2	LUB-0050	8	PLM-0022	14	LUB-0084		
3	PLM-0049	9	LUB-0041	15	LUB-0083		
4	REG-0018	10	LUB-0044	16	PLM-0084		
5	LUB-0036	11	CVR-0041	17	PLM-0036		
6	LUB-0051	12	LUB-0045	18	LUB-0038		



# ATC GENEVA DRIVE ASSEMBLY

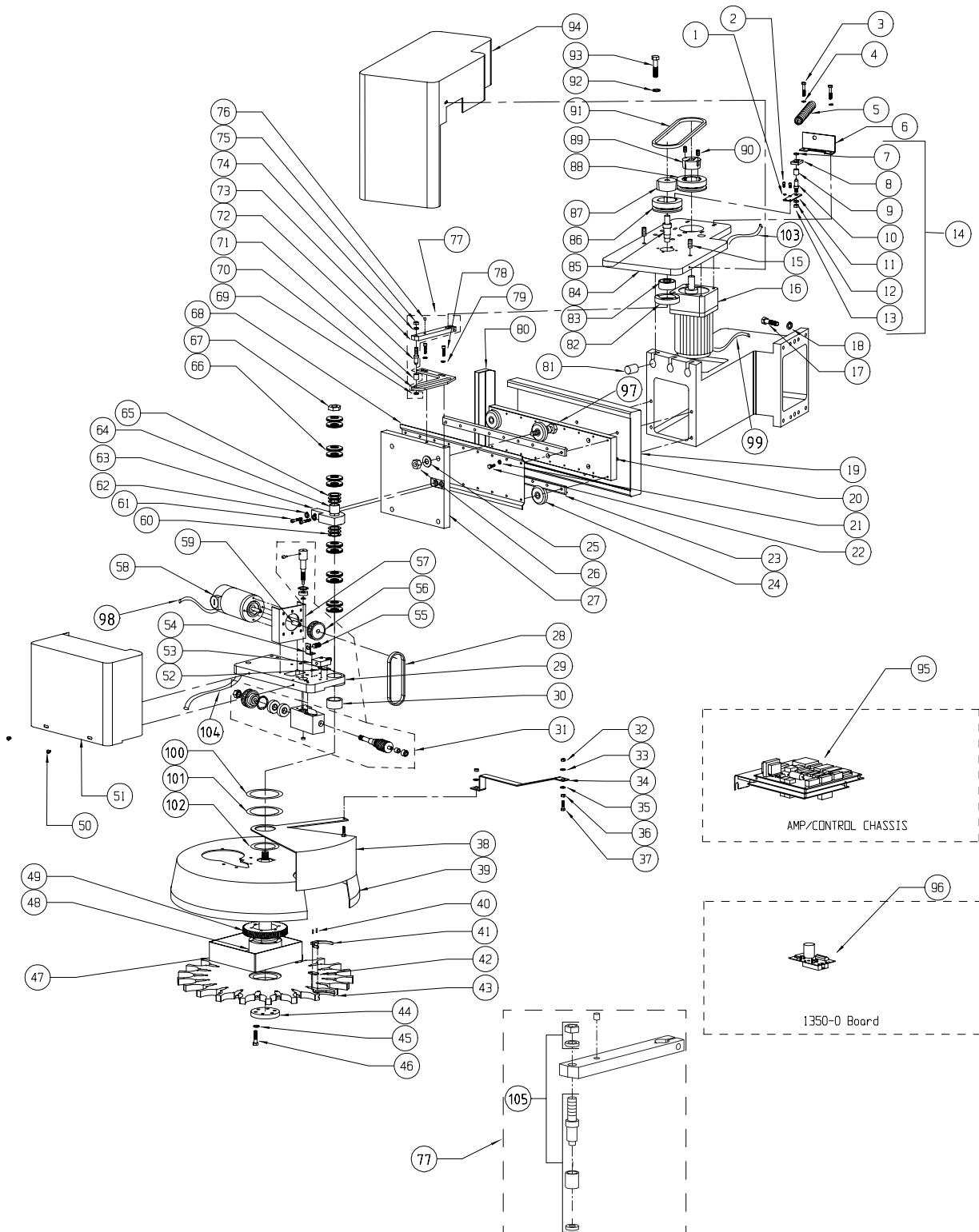


# ATC GENEVA DRIVE ASSEMBLY

## ATC GENEVA DRIVE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0027	61	MTR-0134	81	STM-0063
2	HDW-0304	22	HDW-0322	42	ATC-0025 (21)	62	HDW-0317	82	ATC-0035
3	HDW-0582	23	BRG-0034		ATC-0026 (30)	63	HDW-0281	83	BLS-0040
4	HDW-0279	24	BRG-0033	43	HDW-0328	64	*	84	BRG-0006
5	HDW-0259	25	HDW-0051	44	ATC-0028 (CAT)	65	BRG-0011	85	ATC-0076
6	STM-0291	26	HDW-0634		ATC-0029 (BT)	66	BRG-0010	86	PUL-0029
7	HDW-0443	27	*	45	ATC-0032	67	HDW-0193	87	PUL-0031
8	ATC-0077	28	BRG-0009	46	ATC-0009 (21)	68	HDW-0637	88	PUL-0002
9	BRG-0013	29	HDW-0771		ATC-0010 (21BT)	69	STM-0062	89	PUL-0003
10	ATC-0078	30	ELE-0385		ATC-0011 (30)	70	HDW-0047	90	HDW-0400
11	STM-0290	31	STM-0615		ATC-0012 (30BT)	71	ATC-0017	91	BEL-0001
12	HDW-0454	32	BRG-0012	47	ATC-0031	72	BRG-0013	92	HDW-0451
13	HDW-0640	33	HDW-0643	48	HDW-0280	73	ATC-0021	93	HDW-0786
14	ATC-0013	34	HDW-0443	49	HDW-0313	74	ATC-0020	94	STM-0302
15	ELE-1202	35	STM-0119	50	ATC-0023	75	HDW-0280	95	ATC-0059
16	MTR-0133	36	HDW-0443	51	ELE-0786	76	HDW-0333	96	HDW-0357 .062
17	HDW-0310	37	HDW-0336	52	HDW-0583	77	ELE-0147		HDW-0358 .005
18	HDW-0451	38	HDW-0318	53	HDW-0279	78	ATC-0006		HDW-0359 .010
19	STM-0061	39	STM-0033 (30)	54	STM-0292	79	HDW-0575	97	ATC-0033
20	ATC-0030		STM-0031 (21)	55	HDW-0347	80	HDW-0387	98	WIR-0724
		40	STM-0032 (30)	56	*			99	WIR-0723
			STM-0030 (21)	57	ELE-0145			100	WIR-0648 <sup>(1)</sup>
				58	ATC-0074			101	WIR-0647 <sup>(1)</sup>
								102	ATC-0169
				59	HDW-0279			*	Sold as Assembly
				60	HDW-0319 (3)				ATC-0004 (21)

# ATC SERVO DRIVE ASSEMBLY



# ATC SERVO DRIVE ASSEMBLY

## ATC SERVO DRIVE ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	HDW-0458	21	HDW-0279	41	ATC-0029 (BT)	61	HDW-0317	86	PUL-0029
2	HDW-0304	22	HDW-0322		ATC-0028 (CAT)	62	HDW-0281	87	PUL-0031
3	HDW-0582	23	BRG-0034	42	ATC-0032	63	*	88	PUL-0002
4	HDW-0279	24	BRG-0033	43	ATC-0009 (21)	64	BRG-0011	89	PUL-0003
5	HDW-0259	25	HDW-0051		ATC-0010 (21BT)	65	BRG-0010	90	HDW-0400
6	STM-0291	26	HDW-0634		ATC-0011 (30)	66	HDW-0193	91	BEL-0001
7	HDW-0443	27	*		ATC-0012 (30)	67	HDW-0637	92	HDW-0451
8	ATC-0077	28	BEL-0018	44	ATC-0031	68	STM-0062	93	HDW-0789
9	BRG-0013	29	*	45	HDW-0280	69	HDW-0047	94	STM-0302
10	ATC-0078	30	BRG-0012	46	HDW-0313	70	ATC-0017	95	PCB-0108
11	STM-0290	31	ATC-0016	47	STM-0144 (21)	71	BRG-0013	96	PCB-0173
12	HDW-0454	32	HDW-0643		ATC-0091 (30)	72	ATC-0021	97	ATC-0033
13	HDW-0640	33	HDW-0443	48	ATC-0027	73	ATC-0020	98	WIR-0724
14	ATC-0013	34	STM-0019	49	ATC-0036 (21)	74	HDW-0280	99	WIR-0723
15	ELE-1202	35	HDW-0443		ATC-0037 (30)	75	HDW-0333	100	HDW-0357 .062
16	MTR-0133	36	HDW-0336	50	HDW-0347	76	ELE-0147	101	HDW-0358 .005
17	HDW-0310	37	HDW-0318	51	STM-0292	77	ATC-0006	102	HDW-0359 .010
18	HDW-0451	38	STM-0033 (30)	52	STM-0615	78	HDW-0575	103	WIR-0647
19	STM-0061		STM-0031 (21)	53	ELE-0385	79	HDW-0387	104	WIR-0649
20	ATC-0030	39	STM-0032 (30)	54	STM-0147	80	STM-0063	105	ATC-0169
			STM-0030 (21)	55	ELE-0145	81	ATC-0035		
		40	HDW-0328	56	PUL-0008	82	BLS-0040		
				57	ATC-0088	83	BRG-0006		
				58	MTR-0144	84	ATC-0058 (21)	*	Sold as Assembly
				59	OBSOLETE		ATC-0059 (30)		ATC-0056 (21)
				60	BRG-0009	85	ATC-0076		ATC-0055 (30)

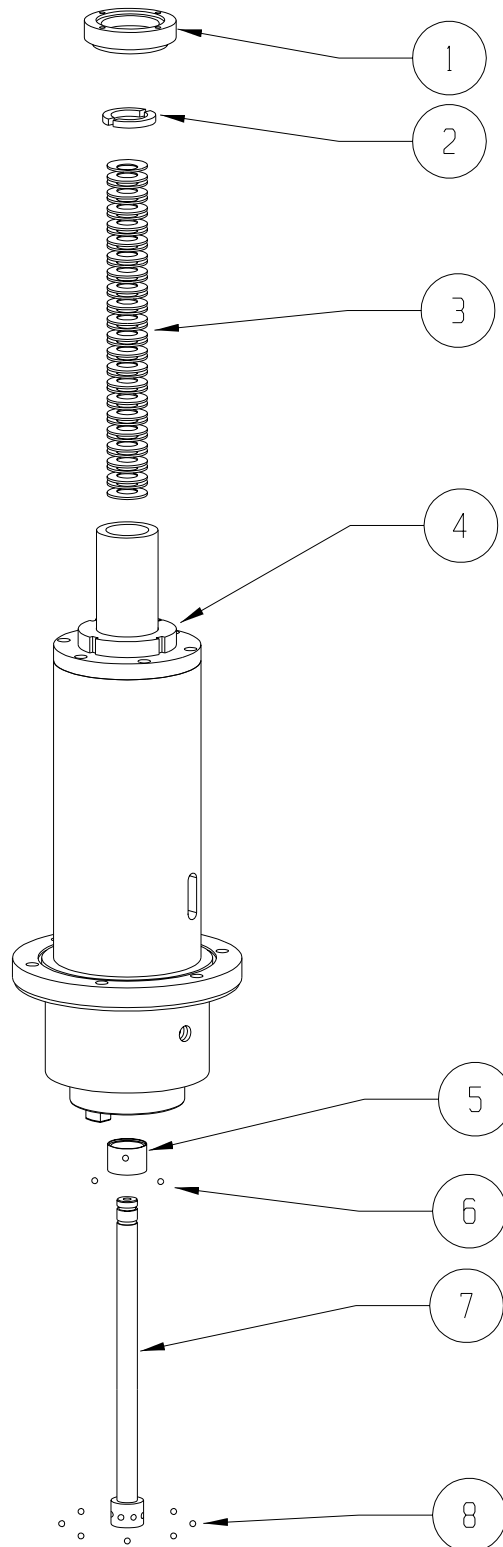
# 7500 RPM SPINDLE ASSEMBLY

**7500 RPM SPINDLE ASSEMBLY**

	PART #
1	SPN-0079
2	DRB-0019
3	HDW-0195
4	SPN-0084
5	DRB-0004
6	BRG-0005
7	DRB-0028 <sup>(1)</sup>
8	BRG-0005
ASSY SPN-0037 <sup>(2)</sup>	

<sup>1</sup>Not sold individually. Sold as assembly DRB-0030 (includes DRB-0028 and SPN-0079)

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0025



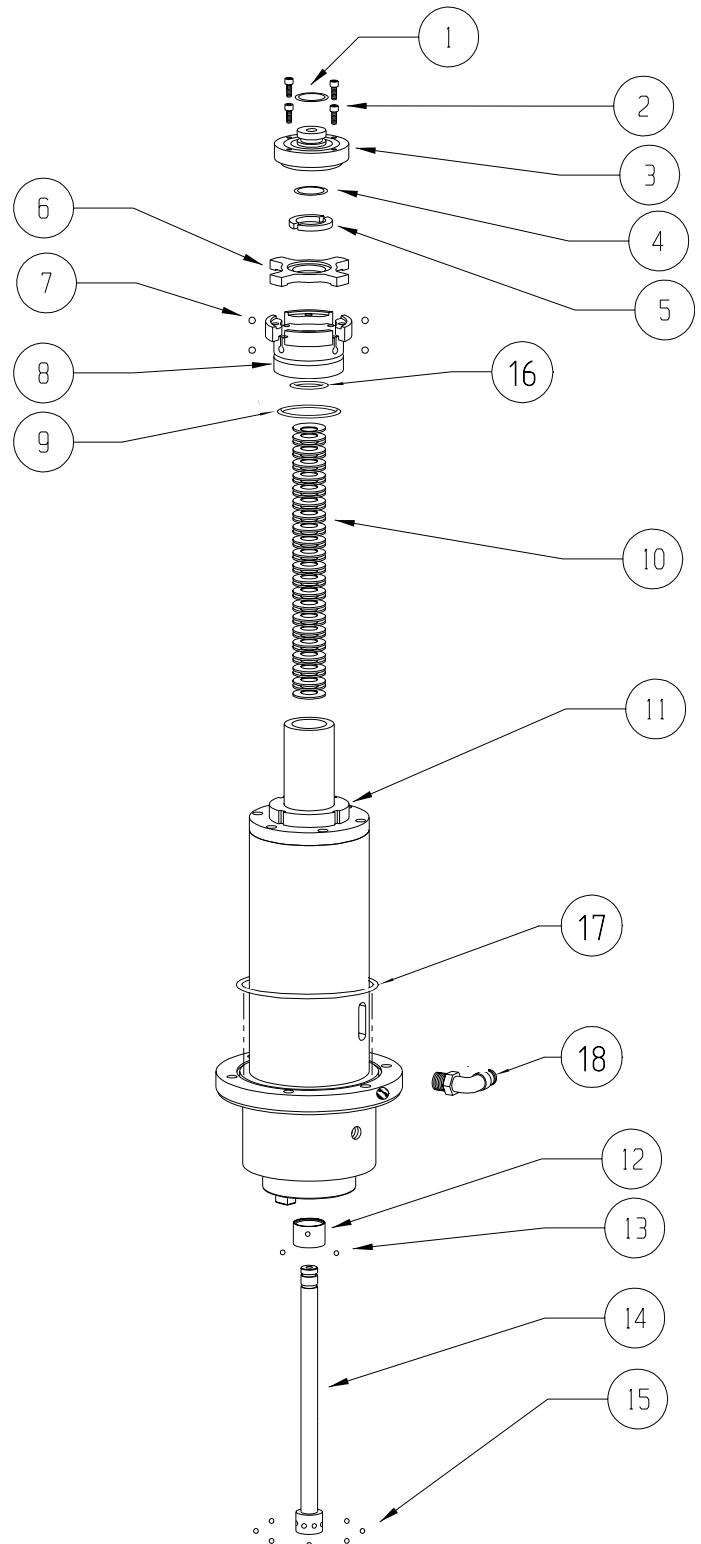
# 10K RPM SPINDLE ASSEMBLY

## 10,000 RPM SPINDLE ASSEMBLY

	PART #
1	HDW-0177
2	HDW-0307
3	DRB-0015
4	HDW-0180
5	DRB-0019
6	DRB-0014
7	BRG-0004
8	DRB-0016
9	HDW-0158
10	HDW-0195
11	SPN-0084
12	DRB-0004
13	BRG-0005
14	DRB-0026 <sup>(1)</sup>
15	BRG-0005
16	HDW-0155
17	HDW-0181
18	PLM-0034
ASSY SPN-0007 <sup>(2)</sup>	

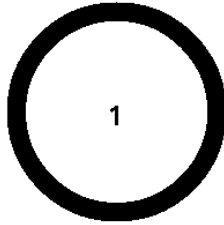
<sup>1</sup>Not sold separately. Sold with assembly DRB-0003 (includes pieces 1-9, 14 & 15).

<sup>2</sup>Assembly includes all parts listed on this page plus PUL-0020.



# COOLANT THROUGH SPINDLE

CNT-0015, Coolant-thru Seal Conversion Kit  
 CNT-0150, Seal Repair Kit



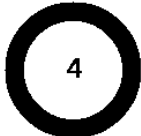
HDW-0158



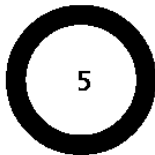
HDW-0177



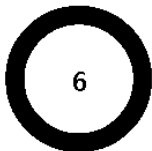
HDW-0150



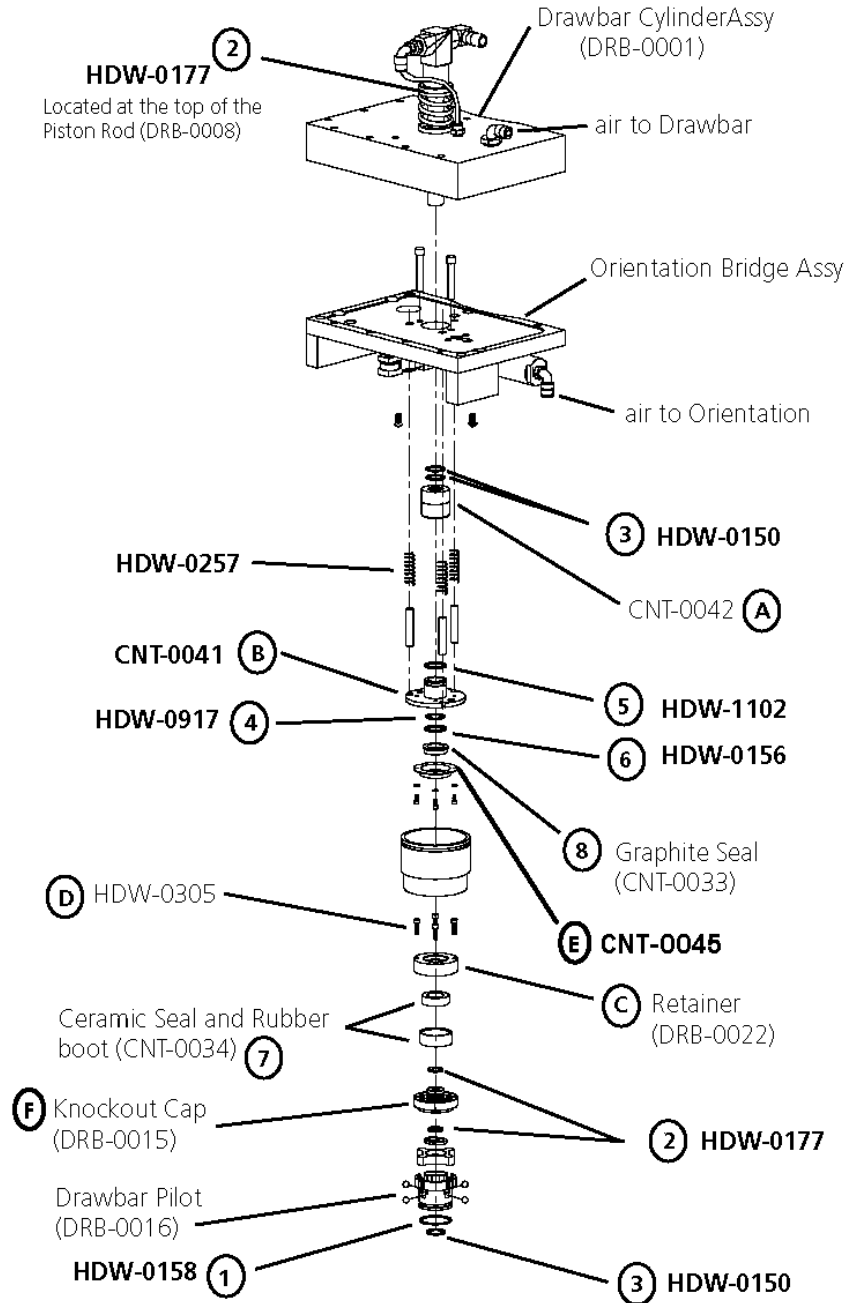
HDW-0917



HDW-1102

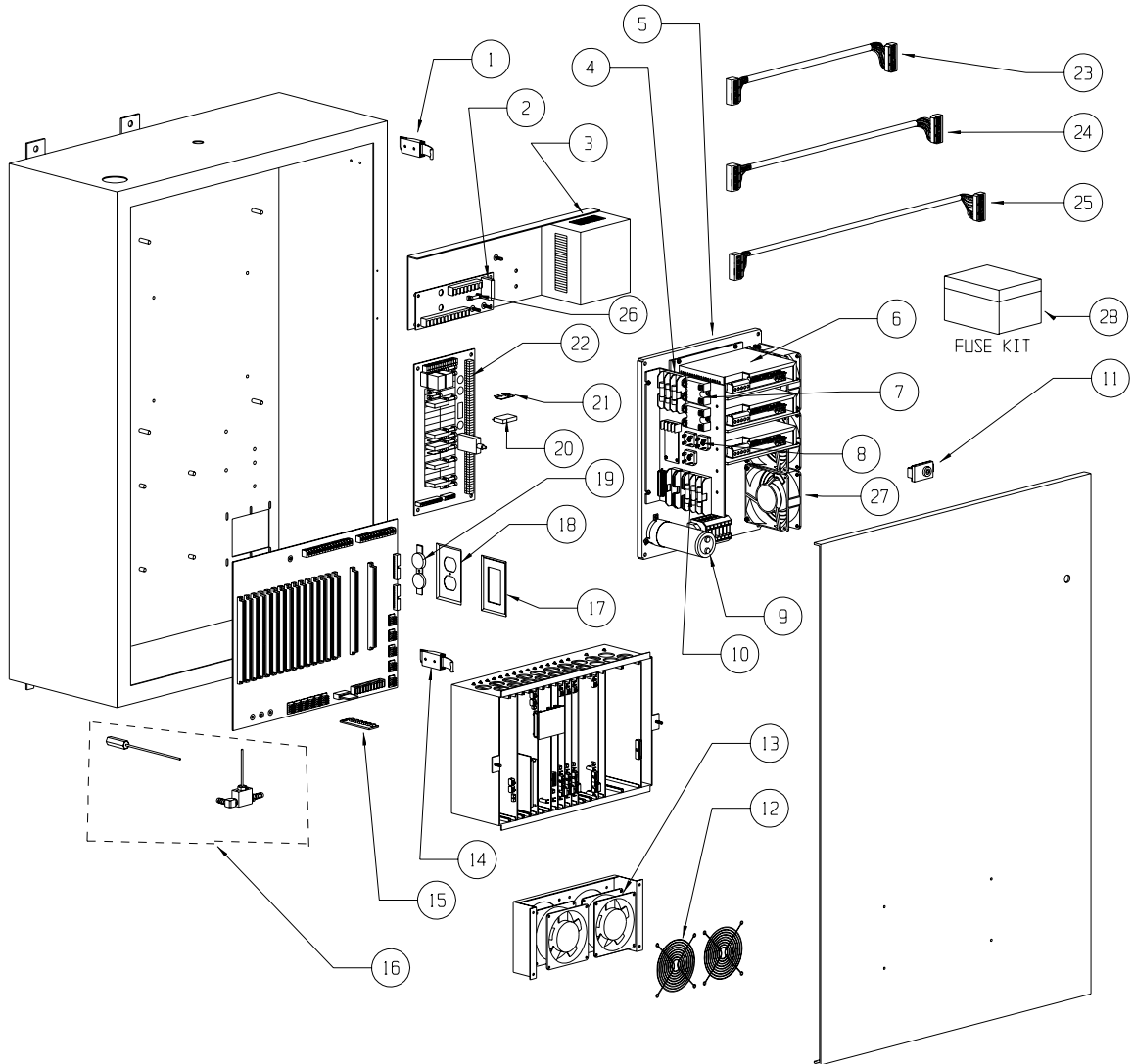


HDW-0156



CNT-0150 O-RINGS AND SEALS ONLY (1-8)  
 CNT-0015 FOR CONVERTING OLDER MODELS (1-8  
 AND A-F)

# CNC CABINET ASSEMBLY

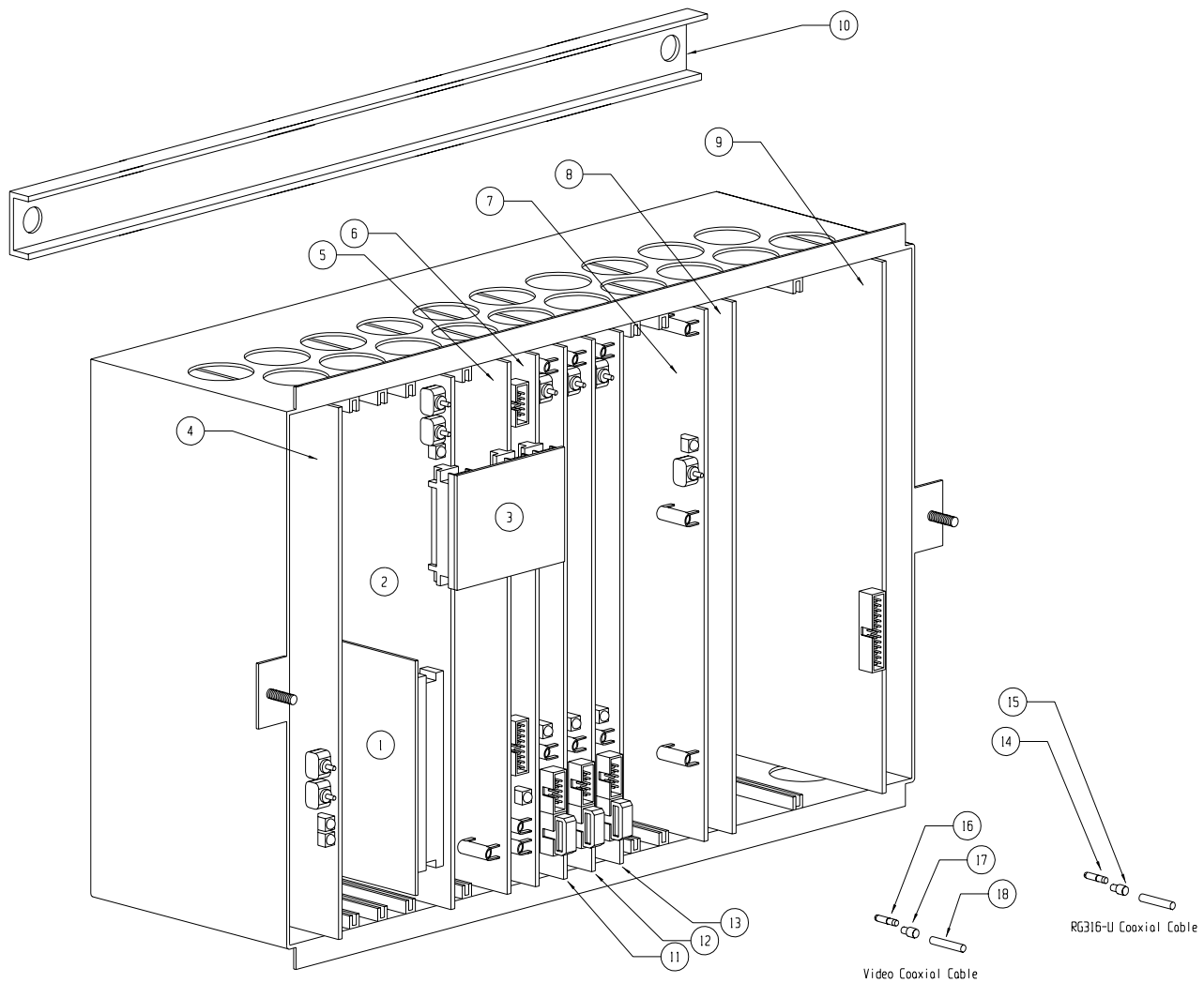


CNC CABINET ASSEMBLY

	PART #		PART #		PART #		PART #
1	HDW-0220	8	ELE-0034	15	PCB-0010	22	PCB-0014
2	ELE-0071	9	AMP-0036	16	CNT-0022	23	WIR-0161
3	ELE-0172	10	ELE-0840	17	WIR-0120	24	WIR-0163
4	ELE-0837	11	HDW-0221	18	WIR-0117	25	WIR-0174
5	AMP-0028	12	HDW-0850	19	WIR-0121	26	ELE-0046
6	AMP-0029 (GTK) AMP-0034 (AMC)	13	ELE-0123	20	ELE-0070	27	ELE-0123
7	ELE-0074	14	HDW-0217	21	ELE-0101	28	ELE-0106



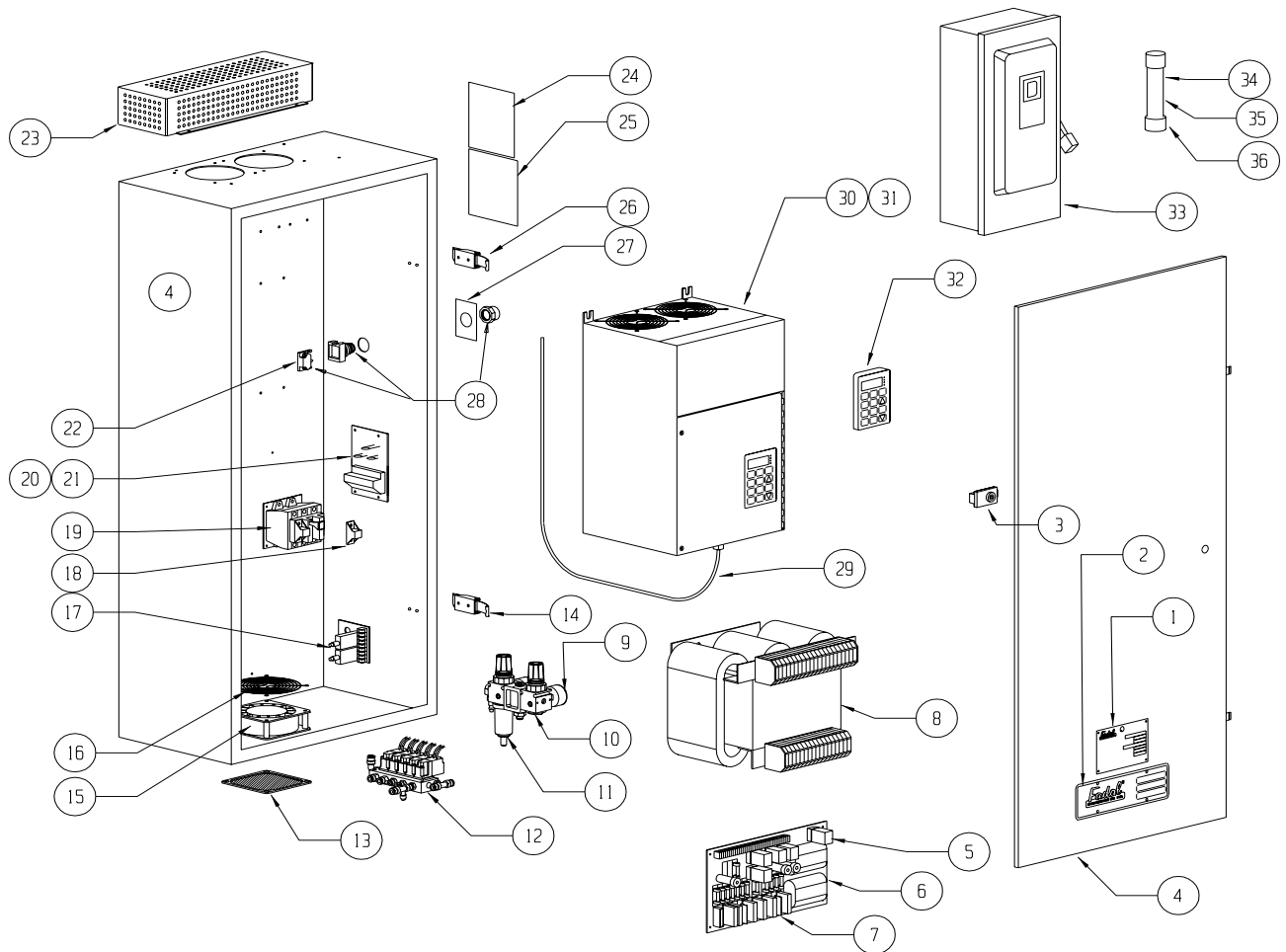
# CARD CAGE ASSEMBLY



	PART #		PART #
1	PCB-0094	8	PCB-0000
2	PCB-0030	9	PCB-0005
3	PCB-0053	10	STM-0029
4	PCB-0045	11	WIR-0040
5	PCB-0032 (88HS)	12	WIR-0041
	PCB-0033 (32HS)	13	WIR-0038
6	PCB-0003	14	WIR-0039
7	PCB-0141	15	WIR-0086

SLOT	BOARD #	SLOT	BOARD #
1	PCB-0045	10	PCB-0037
2		11	PCB-
3		12	
4		13	
5	PCB-0030	14	PCB-0141
6		15	PCB-0000
7		16	PCB-0008
8	PCB-0003	17	PCB-0005
9	PCB-0037		

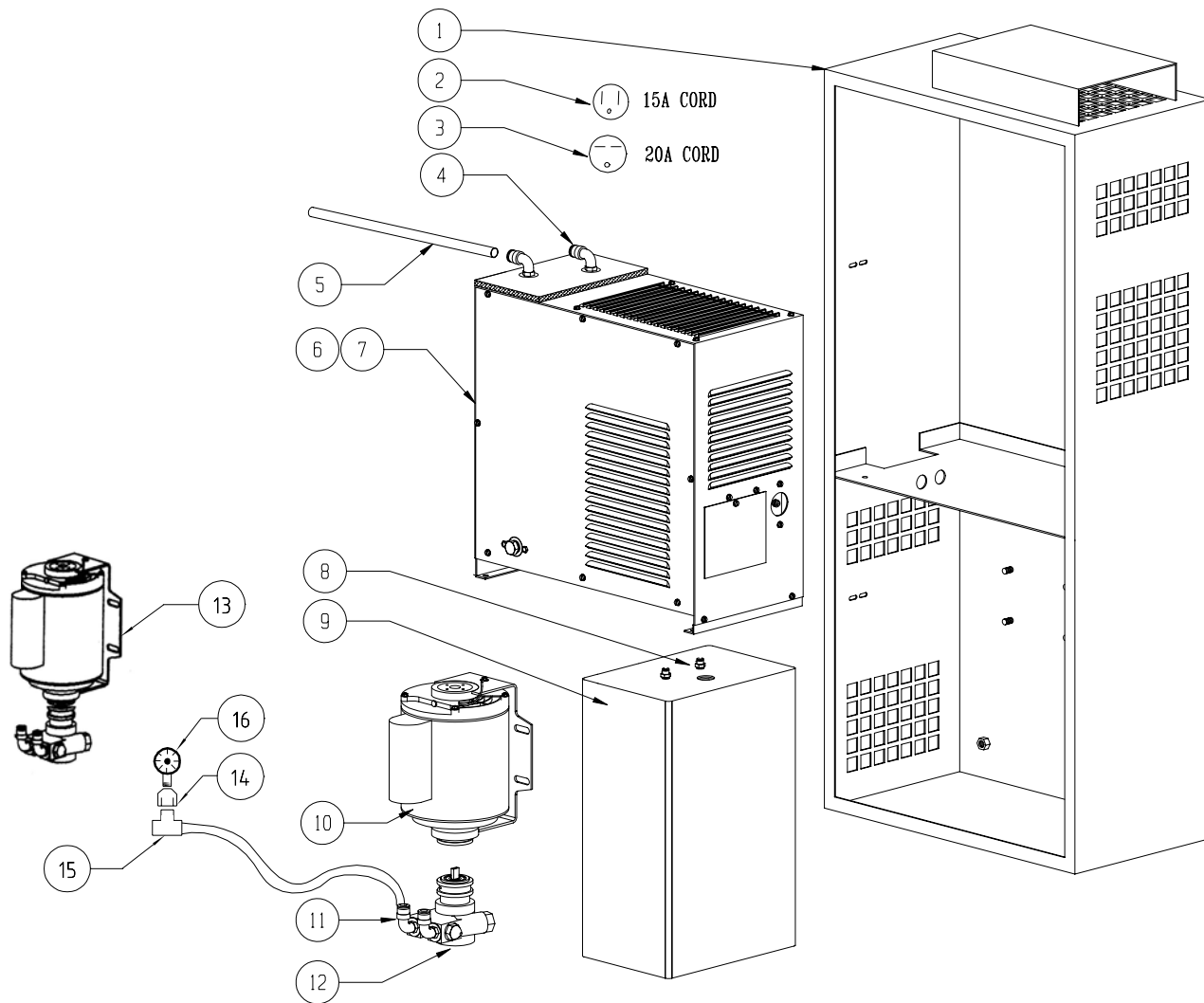
# POWER JUNCTION CABINET ASSEMBLY



**POWER JUNCTION CABINET ASSEMBLY**

	PART #		PART #		PART #		PART #		PART #
1	LBL-0030	12	VLV-0054	22	ELE-0093	31	INV-0056	36	ELE-0060
	LBL-0031 (HT)	13	HDW-0	23	INV-0004		(AMC)		20A 480V
2	LBL-0106	14	HDW-			32	INV-0017		
3	HDW-221	15	ELE-0123	24	LBL-0037	33	ELE-0139		
4	STM-0450	16	HDW-	25	LBL-0040		(60 AMP)		
5	ELE-0072	17	PCB-0046	26	HDW-0219		ELE-0140		
6	PCB-0015	18	ELE-0138	27	LBL-0038		(30 AMP)		
7	ELE-0070	19	ELE-0132	28	ELE-0110	34	ELE-0063		
8	ELE-0200	20	PCB-0145	29	WIR-0166		45A 240V		
9	REG-0005		(240 VAC)	30	INV-0020 (HT)	35	ELE-0062		
10	REG-0009	21	PCB-0146		INV-0041		30A 380V		
11	REG-0008		(500 VAC)		(BALDOR)				

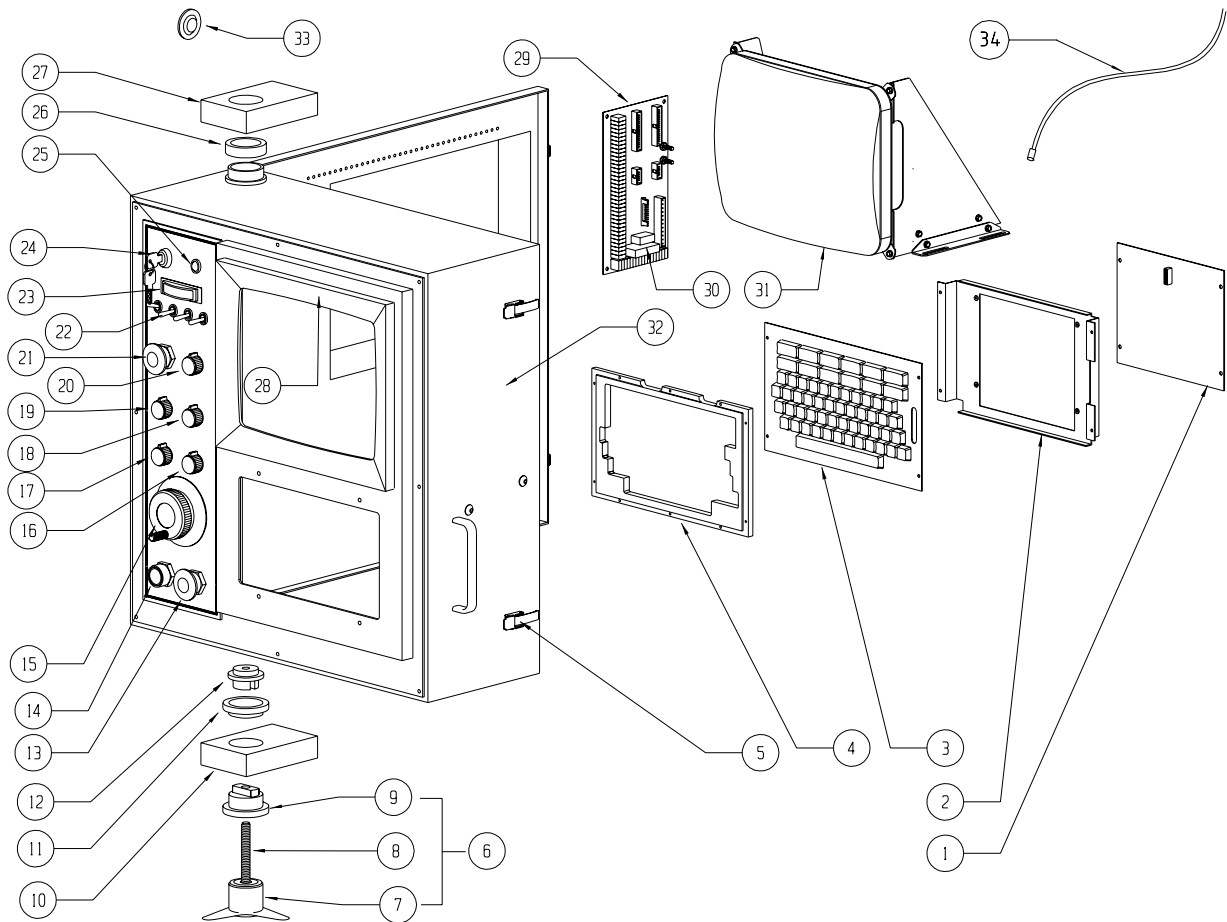
# CHILLER CABINET ASSEMBLY



**CHILLER CABINET ASSEMBLY**

	PART #		PART #
1	STM-0125	9	CNT-0047
2	WIR-0433	10	PMP-0029
3	WIR-0434	11	PLM-0042
4	PLM-0042	12	PMP-0000
5	PLM-0024	13	PMP-0034
6	CNT-0035 (15A)	14	PLM-0199
7	CNT-0144 (20A)	15	PLM-0166
8	PLM-0210	16	REG-0017

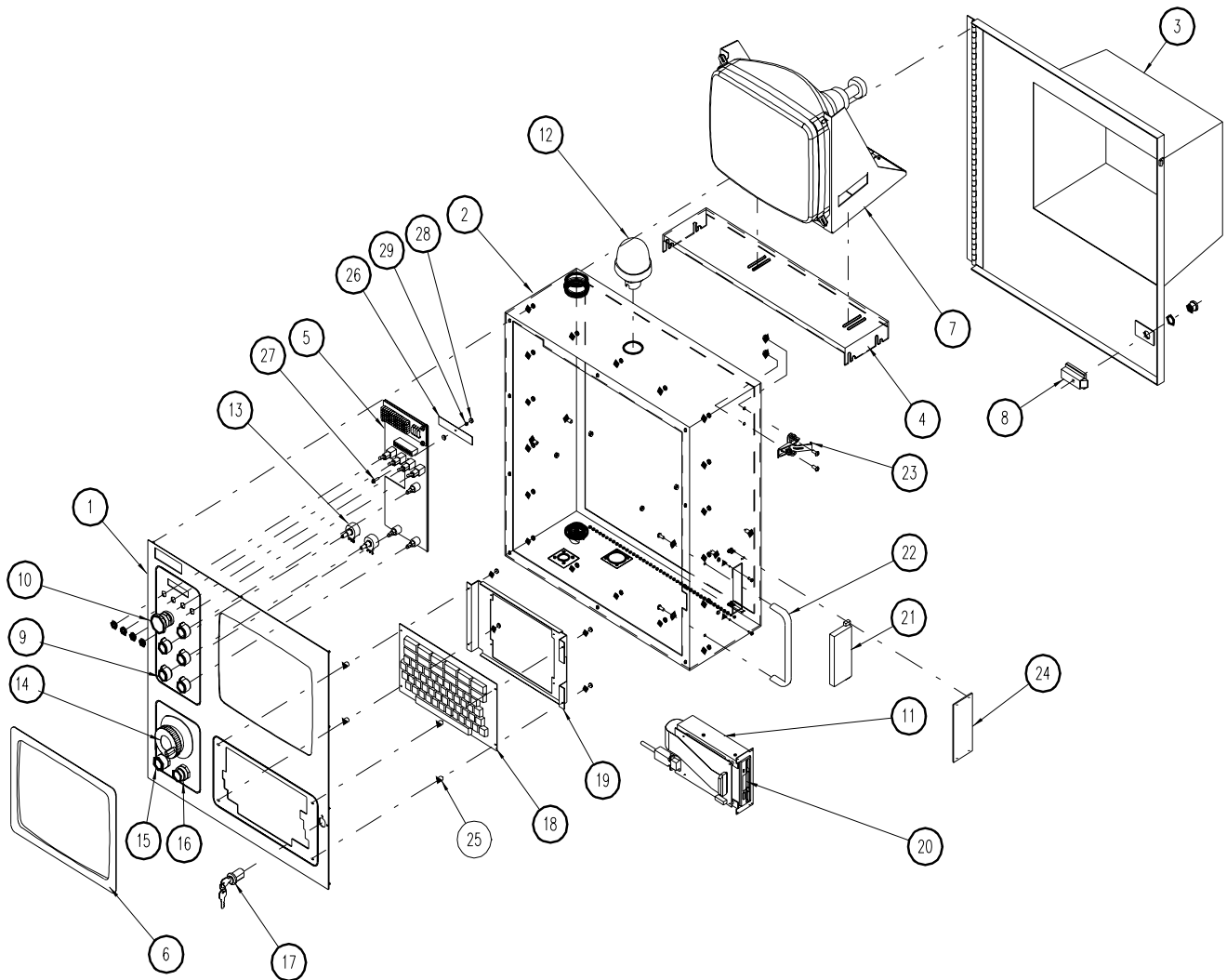
# 88HS PENDANT ASSEMBLY



## 88HS PENDANT ASSEMBLY

	PART #		PART #		PART #		PART #
1	PCB-0012	10	CTR-0009	19	ELE-0067	28	HDW-0847
2	STM-0128	11	BRG-0077	20	ELE-0078	29	PCB-0019
3	ELE-0083	12	CTR-0007	21	ELE-0112	30	ELE-0070
4	CTR-0009	13	ELE-0111	22	ELE-0095	31	ELE-0189
5	HDW-0216	14	ELE-0110	23	ELE-0108	32	CTR-0021
6	CTR-0022	15	MPG-0007	24	ELE-0096	33	HDW-0185
7	HDW-0675		MPG-0018	25	ELE-0090	34	WIR-0086
8	CTR-0018	16	ELE-0078	26	HDW-0724		
9	CTR-0008	17	ELE-0081	27	CTR-0006		
		18	ELE-0068				

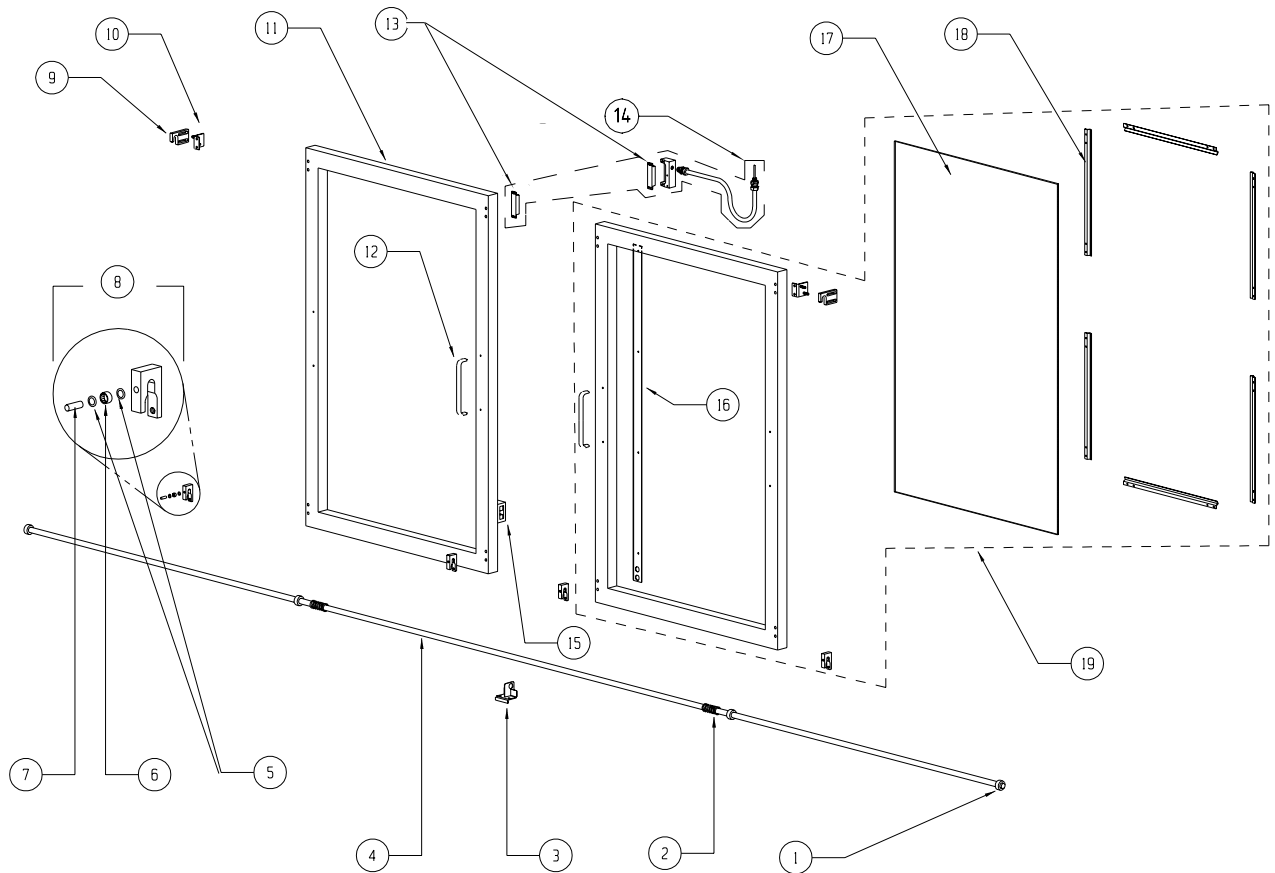
# MULTI PROCESSOR PENDANT



MULTI PROCESSOR PENDANT

	PART #		PART #		PART #		PART #
1	CTR-0134		ELE-0888	15	ELE-0093	24	STM-0547
2	STM-0945 20F4		ELE-0889	16	ELE-0091	25	HDW-1083
3	STM-0945 30F4	8	HDW-0221	17	ELE-0096	26	ELE-1184
4	STM-0951	9	HDW-0671	18	ELE-0083	27	HDW-1082
5	PCB-0200	10	ELE-0673	19	STM-0128	28	HDW-1081
6	CTR-0118	11	STM-0470	20	ELE-0913	29	HDW-0456
	CTR-0136	12	ELE-0969	21	CTR-0014		
	CTR-0135	13	ELE-0380	22	HDW-0182		
7	ELE-1072 10F3	14	MPG-0020	23	HDW-0925		

# FRONT DOOR ASSEMBLY



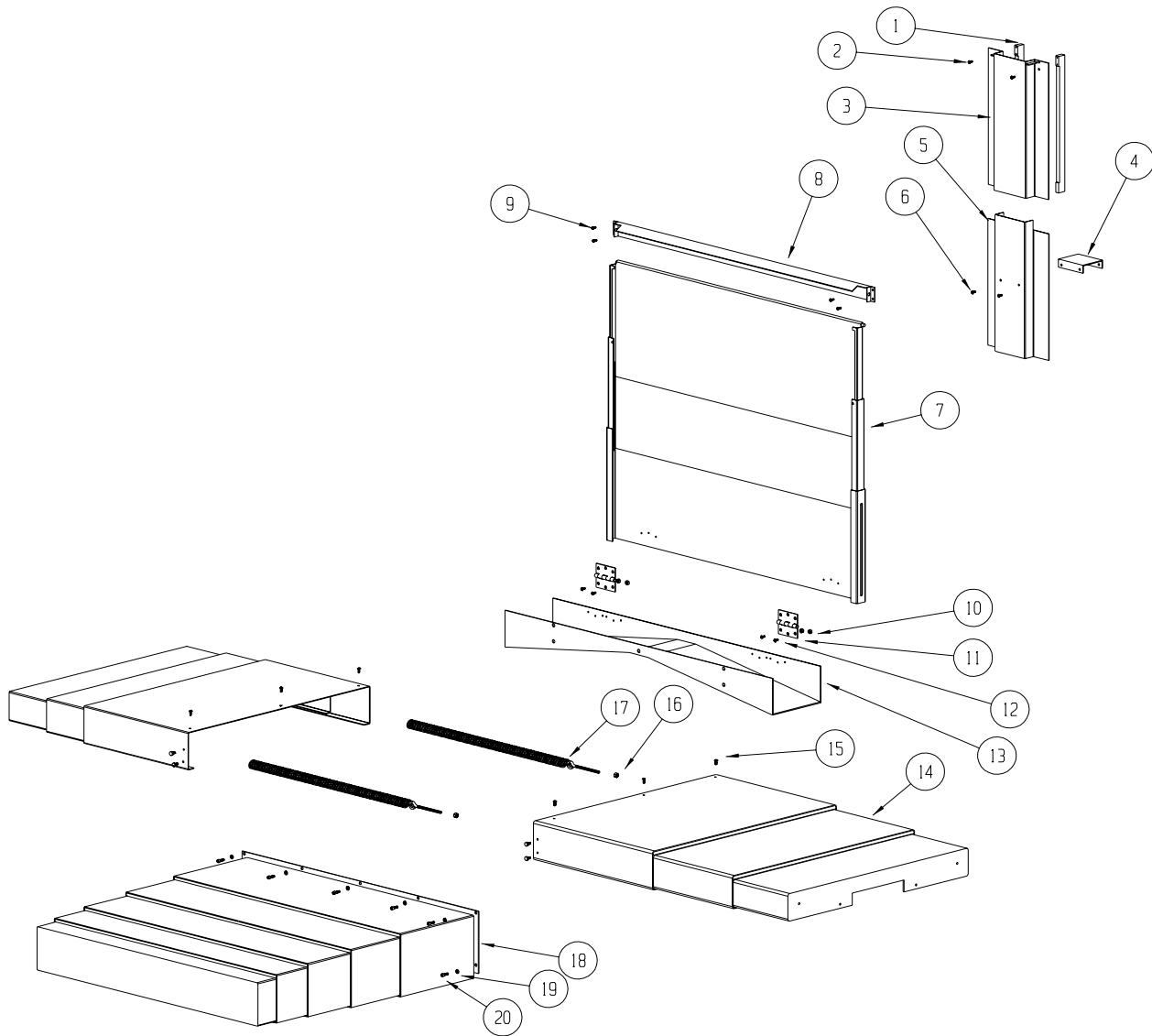
**FRONT DOOR ASSEMBLY**

	PART #		PART #		PART #
1	HDW-0215	8	DOR-0016	15	DOR-0035
2	HDW-0264	9	DOR-0001	16	STM-0083
3	DOR-0019	10	DOR-0000	17	DOR-0006
4	DOR-0053	11	DOR-0002	18	STM-0084
5	HDW-0149	12	HDW-0182	19	DOR-0027
6	BRG-0014	13	ELE-0810 <sup>(1)</sup>		
7	HDW-0327	14	WIR-0069 <sup>(2)</sup>		

<sup>1</sup>Set of two sensors

<sup>2</sup>Includes set of two sensors and one block cable

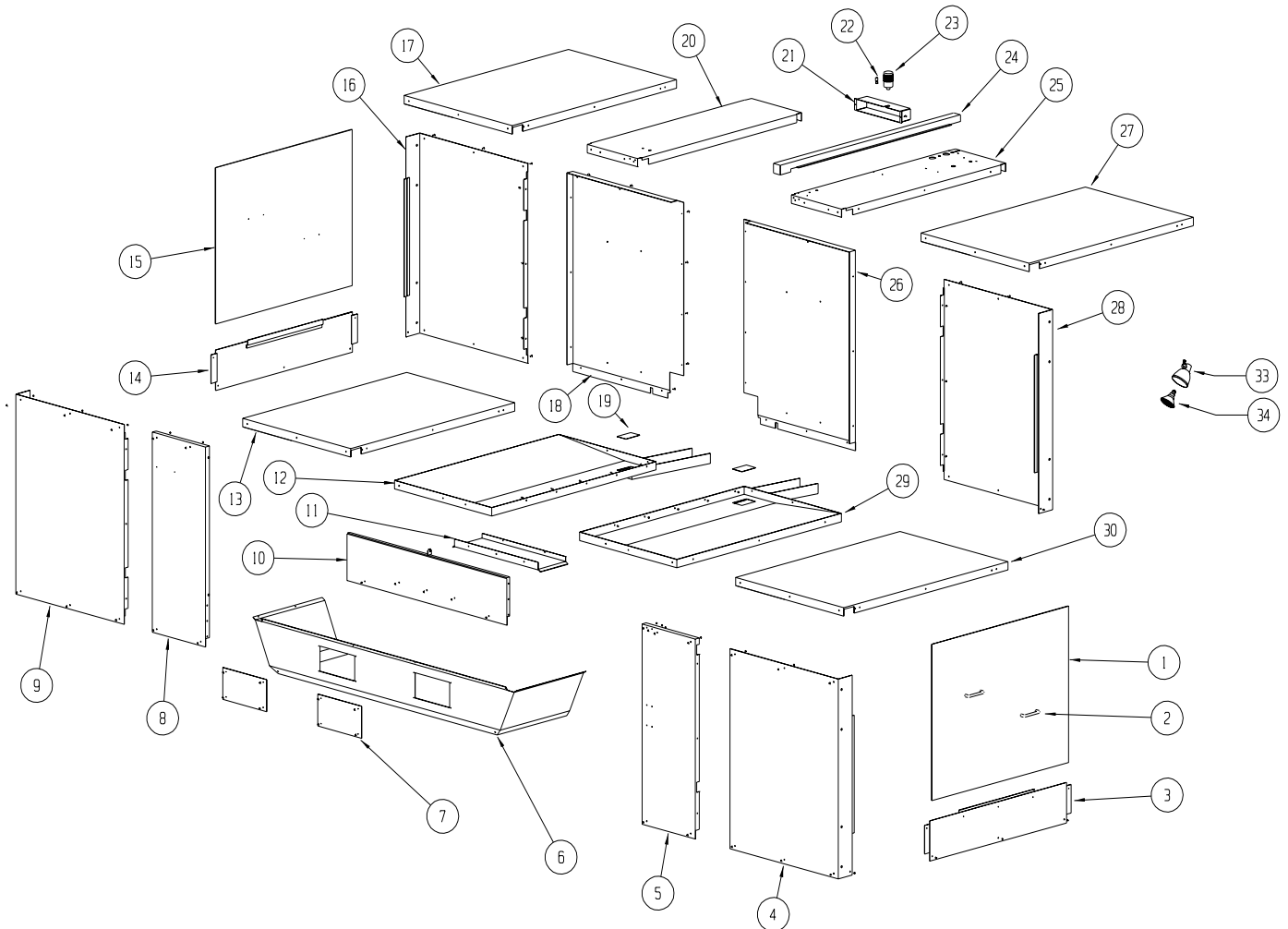
# WAY COVER ASSEMBLY



**WAY COVER ASSEMBLY**

	PART #		PART #		PART #
1	STM-0168	8	STM-0165	15	HDW-0346
2	HDW-0346	9	HDW-0346	16	HDW-0336
3	CVR-0046	10	HDW-0338	17	HDW-0261
4	CVR-0047	11	HDW-0192	18	CVR-0055
5	CVR-0045	12	HDW-0348	19	HDW-0279
6	HDW-0346	13	STM-0054	20	HDW-0295
7	CVR-0049	14	CVR-0053	21	HDW-0319

# SHEETMETAL HOUSING

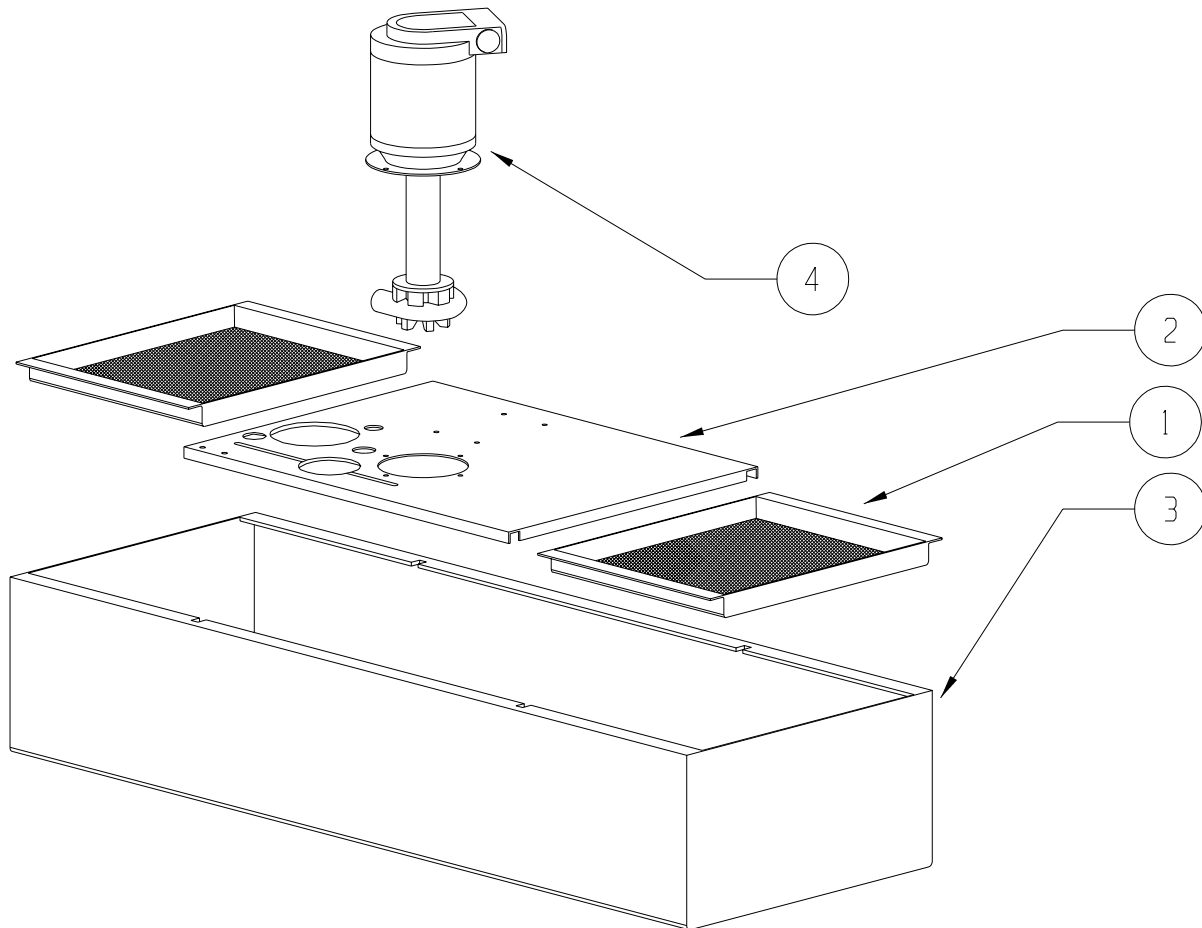


## SHEETMETAL HOUSING

	PART #		PART #		PART #		PART #
1	STM-0298	11	STM-0109	21	STM-0091	31	HDW-0907
2	HDW-0182	12	STM-0313	22	ELE-0122	32	HDW-0853
3	STM-0245	13	STM-0418	23	ELE-0121	33	WIR-0114
4	STM-0414	14	STM-0245	24	STM-0774	34	ELE-0176
5	STM-0249	15	STM-0298	25	STM-0268		
6	STM-0239	16	STM-0414	26	STM-0316		
7	STM-0238	17	STM-0416	27	STM-0416		
8	STM-0248	18	STM-0314	28	STM-0414		
9	STM-0414	19	STM-0110	29	STM-0315		
10	STM-0080	20	STM-0252	30	STM-0418		



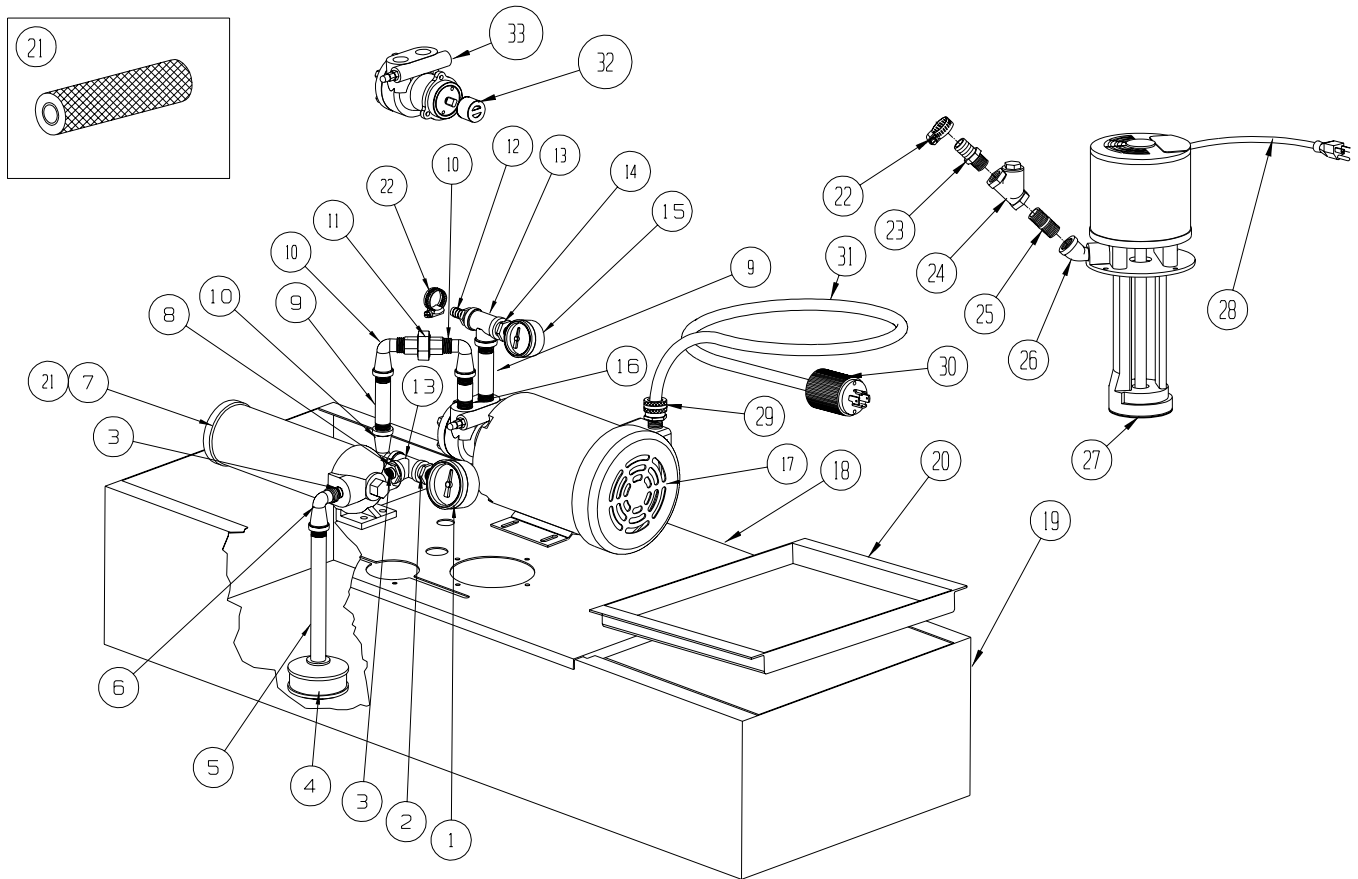
# 7500 RPM COOLANT TANK



**7500 RPM COOLANT TANK**

	PART #
1	STM-0116
2	STM-0594
3	STM-0287
4	PMP-0017

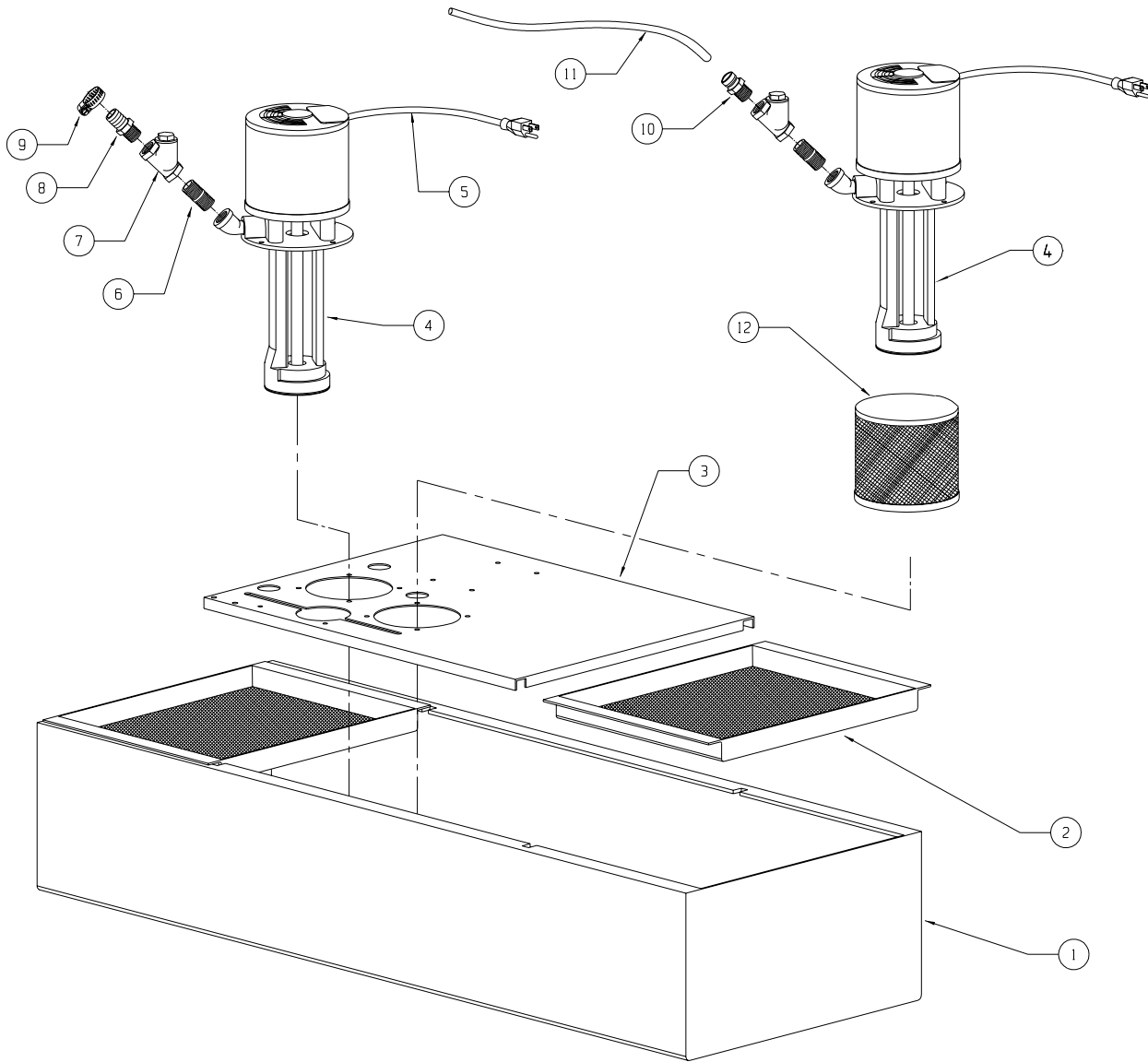
# 7500 RPM COOLANT THROUGH TANK



**7500 RPM COOLANT THROUGH TANK ASSEMBLY**

	PART #		PART #		PART #		PART #
1	REG-0034	11	PLM-0212	21	CNT-0029 <sup>(1)</sup>	31	WIR-0536
2	PLM-0216	12	PLM-0104	22	HDW-0252	32	PMP-0019
3	PLM-0117	13	PLM-0089	23	PLM-0067	33	PMP-0007
4	CNT-0025	14	PLM-0217	24	VLV-0018		
5	PLM-0213	15	REG-0018	25	PLM-0092		
6	PLM-0100	16	PLM-0060	26	PLM-0099		
7	CNT-0027 <sup>(1)</sup>	17	PMP-0008	27	PMP-0017		
8	HDW-0391	18	STM-0594	28	WIR-0096		
9	PLM-0061	19	STM-0287	29	WIR-0517		
10	PLM-0215	20	STM-0116	30	WIR-0535		

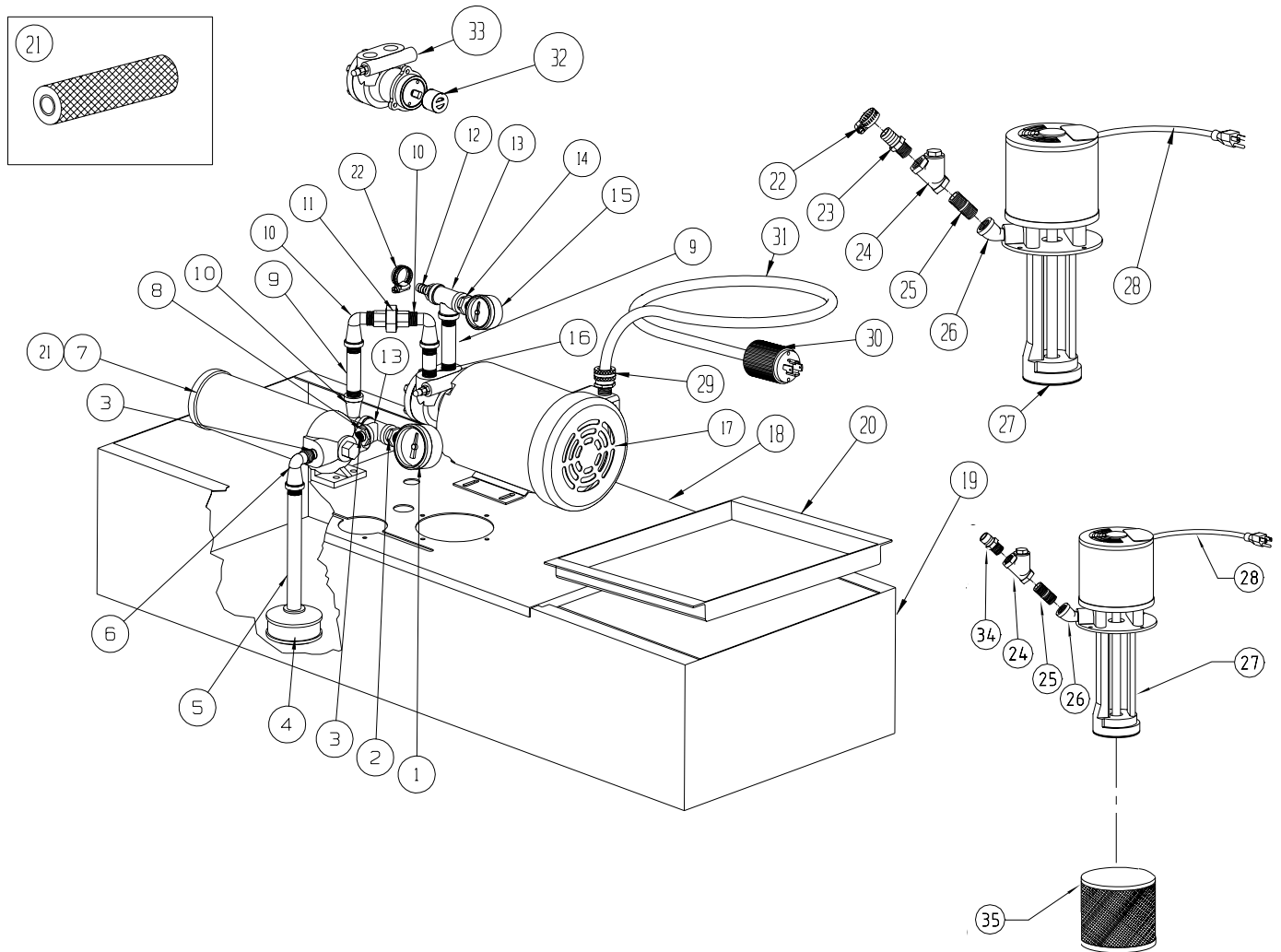
# 10K RPM COOLANT TANK



10,000 RPM COOLANT TANK

	PART #		PART #		PART #
1	STM-0287	5	WIR-0096	9	HDW-0252
2	STM-0116	6	PLM-0092	10	PLM-0043
3	STM-0594	7	VLV-0018	11	PLM-0023
4	PMP-0017	8	PLM-0067	12	CNT-0026

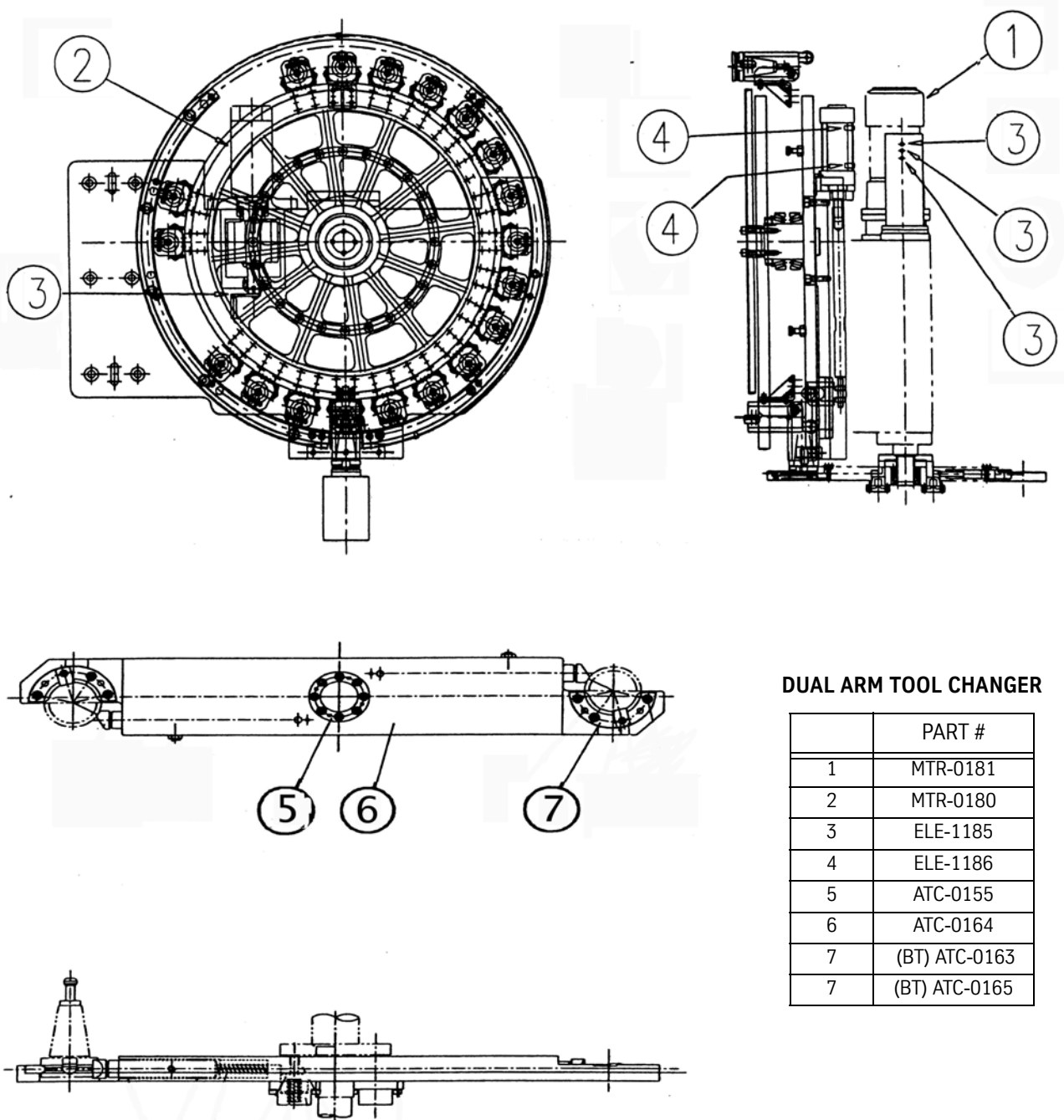
# 10K RPM COOLANT THROUGH TANK



10,000 RPM COOLANT THROUGH TANK ASSEMBLY

	PART #		PART #		PART #		PART #		PART #
1	REG-0034	9	PLM-0061	17	PMP-0008	25	PLM-0092	33	PMP-0007
2	PLM-0216	10	PLM-0215	18	STM-0594	26	PLM-0099	34	PLM-0043
3	STM-0594	11	PLM-0212	19	STM-0287	27	PMP-0017	35	CNT-0026
4	CNT-0025	12	PLM-0104	20	STM-0116	28	WIR-0096		
5	PLM-0213	13	PLM-0089	21	CNT-0029 <sup>(1)</sup>	29	WIR-0517		
6	PLM-0100	14	PLM-0217	22	HDW-0252	30	WIR-0535		
7	CNT-0027 <sup>(1)</sup>	15	REG-0018	23	PLM-0067	31	WIR-0536		
8	HDW-0391	16	PLM-0060	24	VLV-0018	32	PMP-0019		

# DUAL ARM TOOL CHANGER

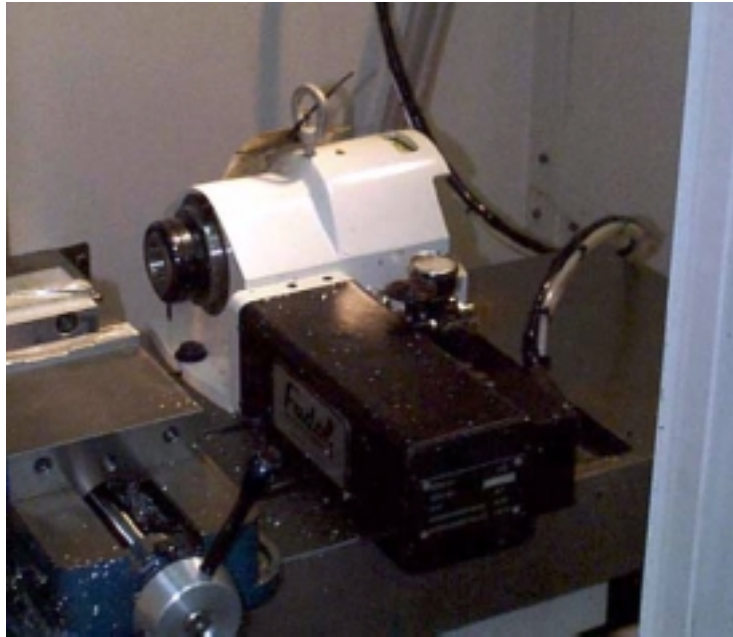


DUAL ARM TOOL CHANGER

	PART #
1	MTR-0181
2	MTR-0180
3	ELE-1185
4	ELE-1186
5	ATC-0155
6	ATC-0164
7	(BT) ATC-0163
7	(BT) ATC-0165

# Parts Manual

VMC OPTIONS VOLUME I



## CONTENTS

HYDRO SWEEP .....	1-3
PALLET CHANGER .....	4-8
15K AIR/OIL SPINDLE .....	9
VH5C ROTARY TABLE .....	10-12
VH65 ROTARY TABLE .....	13-15
TR-65 ROTARY TABLE .....	16-21
DUAL VH-65 ROTARY TABLE.....	22
ROTARY AXIS ACCESSORIES / TAILSTOCK .....	23
ROTARY AXIS ACCESSORIES.....	24
32MP PENDANT.....	25
HYDRAULIC BRAKE .....	26
REMOTE MPG .....	27
SERVO COOLANT .....	28
FLOPPY DISC/ZIP DRIVES.....	29

**This reference covers the following Fadal products:**

### **VMC Options Volume I**

Corporate Office . . . . . voice (818) 407-1400 . . . . . fax (818) 407-0020  
Service / Parts . . . . . voice (818) 727-2100 . . . . . fax (818) 407-1004  
Programming Support . . . . . voice (818) 727-2100 . . . . . fax (818) 407-0061

[support@fadal.com](mailto:support@fadal.com)

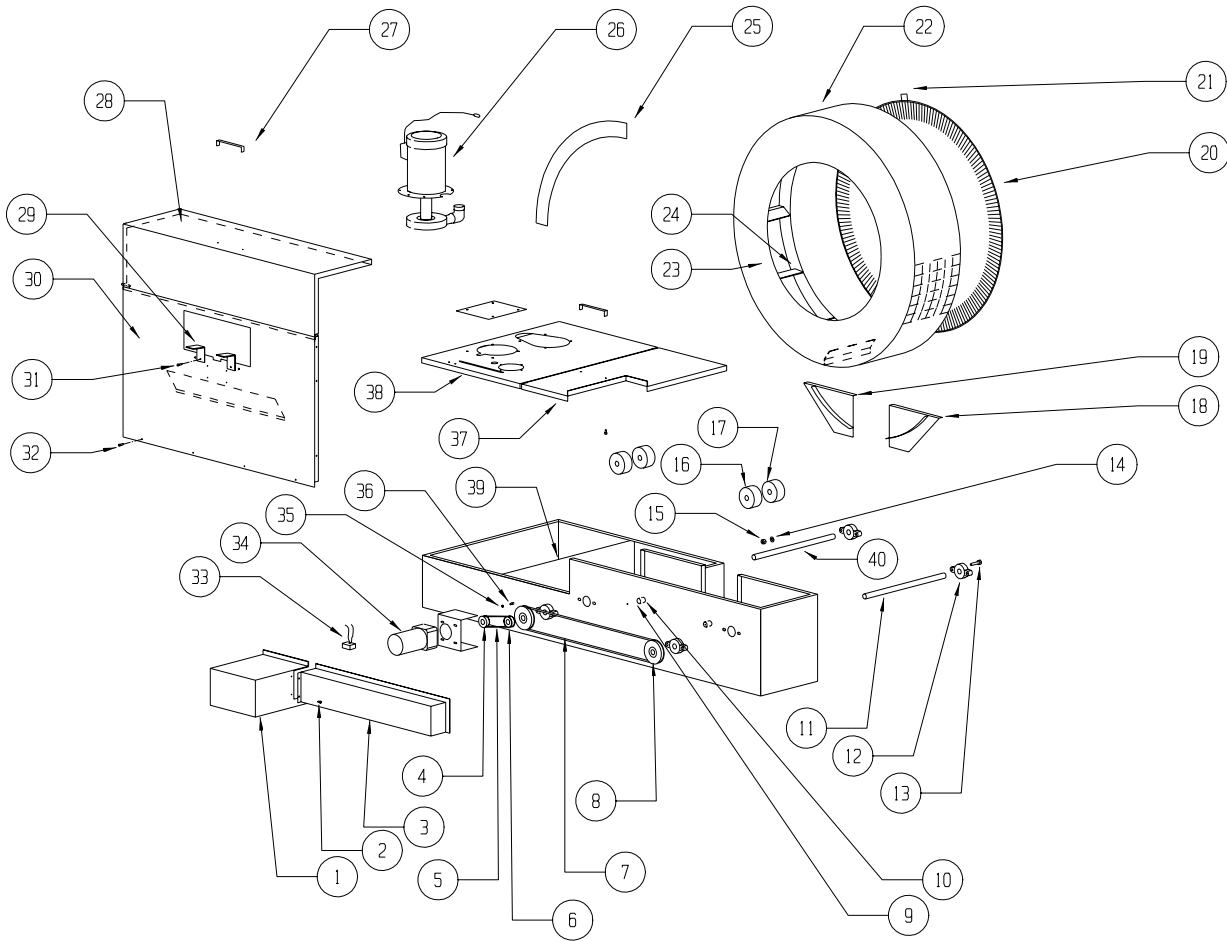
20701 Plummer Street Chatsworth California 91311 U.S. A.

The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 1999 Fadal Machining Centers.

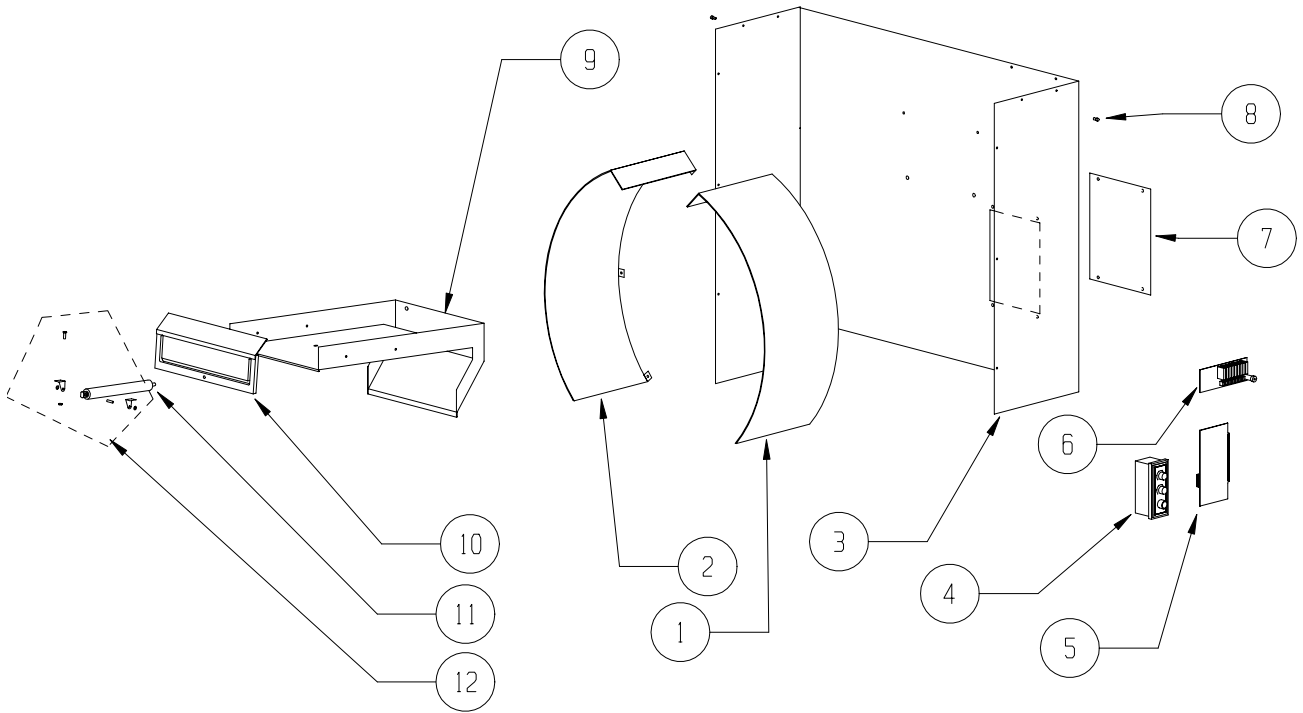


	PART #		PART #		PART #		PART #
1	STM-0665	11	HDW-0242	21	HDW-0244	31	HDW-0589
2	HDW-0346	12	BRG-0110	22	STM-0202	32	HDW-0346
					STM-0201		
3	STM-0064	13	HDW-0567	23	STM-0223	33	MTR-0062
4	PUL-0043	14	HDW-0276	24	HDW-0379	34	MTR-0061
5	BEL-0010	15	HDW-0636	25	STM-0203	35	HDW-0380
6	PUL-0042	16	HDW-0240	26	PMP-0010	36	HDW-0323
					PMP-0020		
7	BEL-0011	17	HDW-0240	27	HDW-0182	37	STM-0653
8	PUL-0037	18	STM-0219	28	STM-0206	38	STM-0652
9	HYS-0005	19	STM-0218	29	STM-0210	39	STM-0211
10	HDW-0294	20	HDW-0243	30	STM-0205	40	HDW-0241
Piece 22 Diamond plate 0202, Steel screen 0201							
Piece 26 3 hp pump 0010, 5 hp pump 0020							



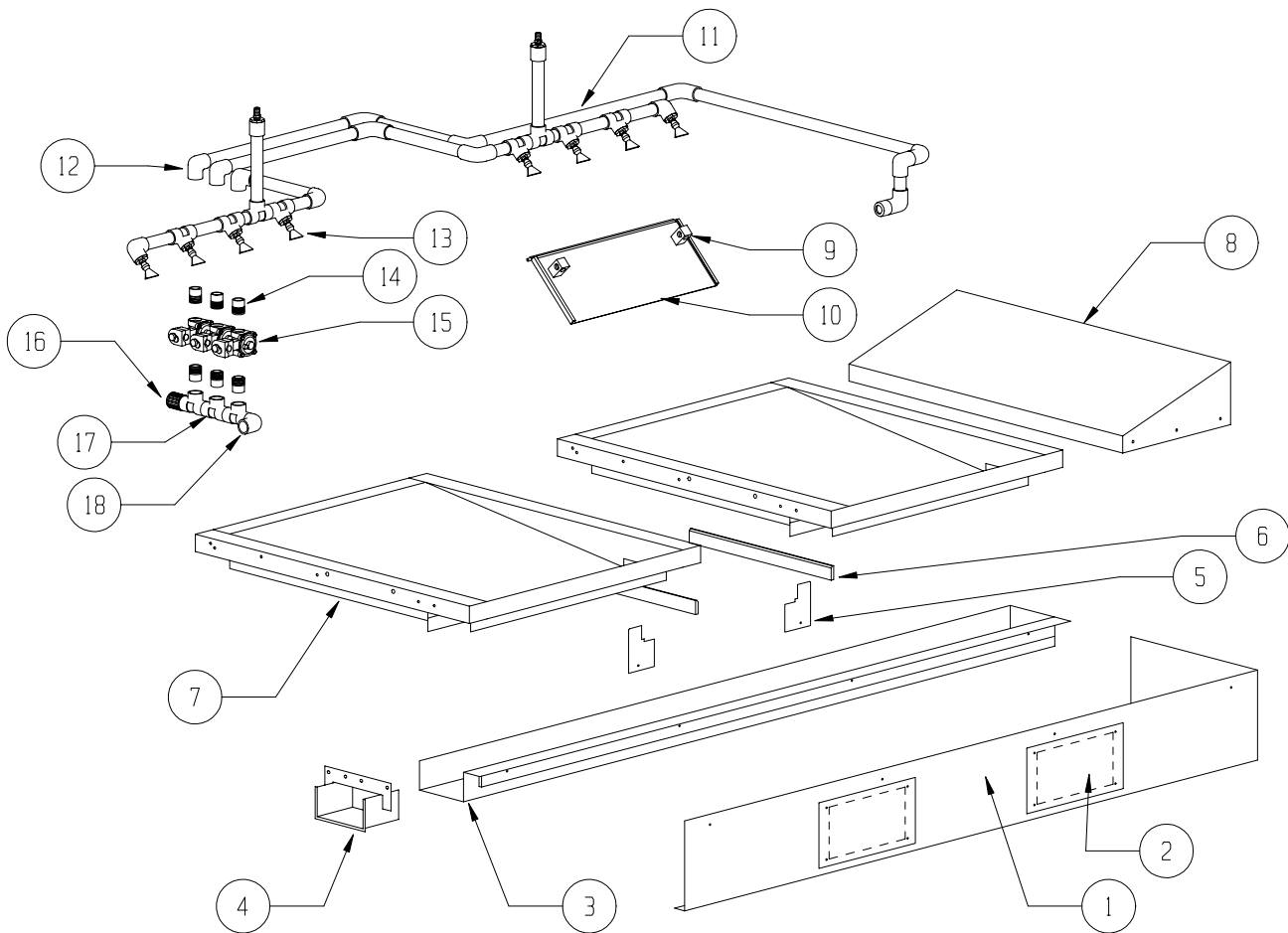
**HYDRO SWEEP**



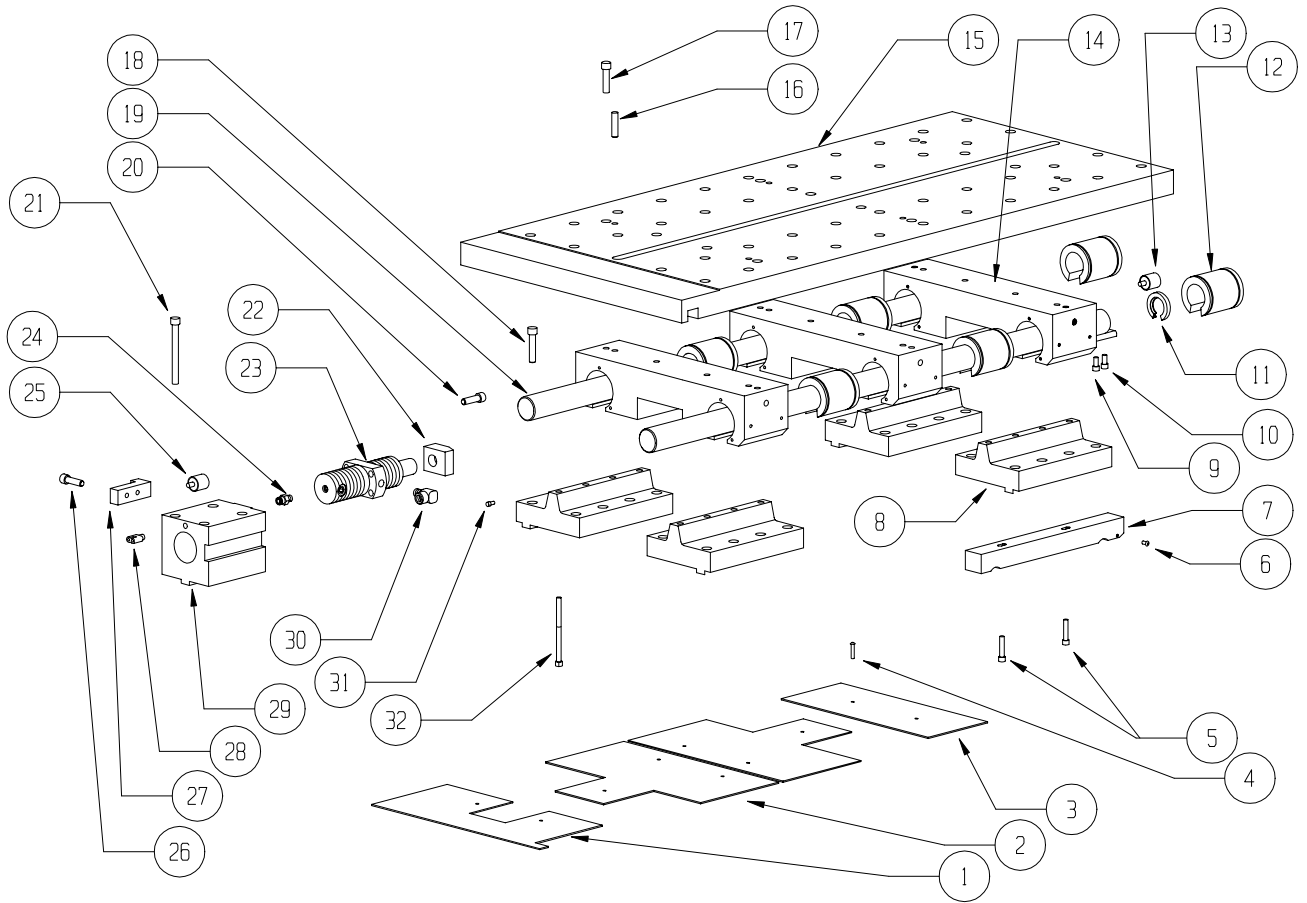


	PART #		PART #		PART #		PART #
1	STM-0761	4	HYS-0018	7	STM-0220	10	STM-0221
2	STM-0760	5	PCB-0005	8	HDW-0346	11	CYL-0019
3	STM-0654	6	PCB-0058	9	STM-0663	12	HDW-0339

**HYDRO SWEEP**



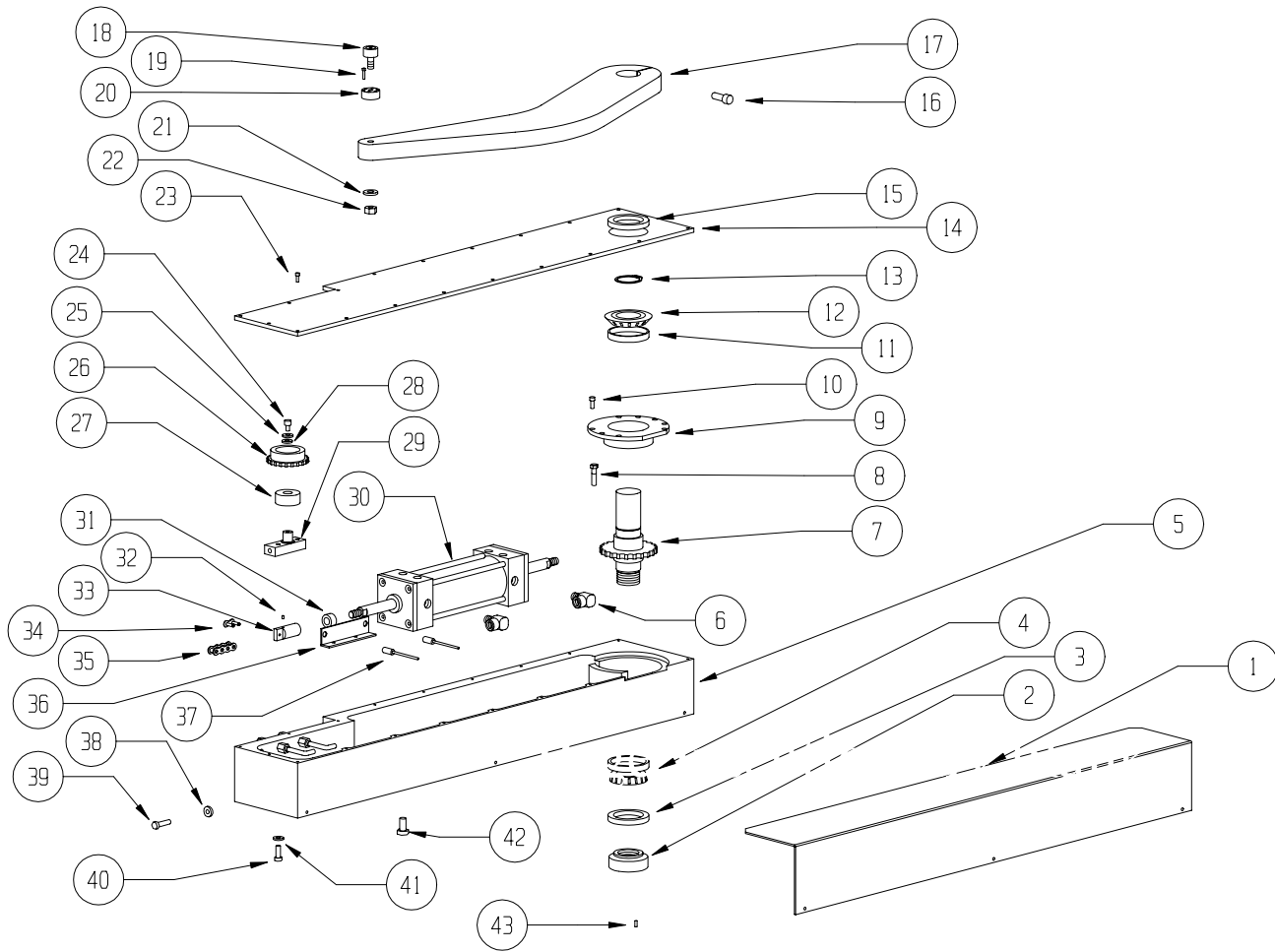
	PART #		PART #		PART #		PART #
1	STM-0672 (VMC 2216,3016)	6	912006	11	PLM-0131	16	PLM-0132
	STM-0666 (VMC 4020)	7	STM-0680 (VMC 2216,3016)	12	PLM-0125	17	PLM-0128
	STM-0213/0444 (VMC 6030)		STM-0204(VMC-4020)	13	PLM-0124	18	PLM-0129
	STM-0461/0462 (VMC 8030)		STM-0207 (VMC 6030,8030)	14	912054-1		
2	STM-0299	8	STM-0417 (VMC6030)	15	VLV-0022		
3	STM-0222 (VMC 2216,3016)		STM-0418 (VMC 8030)				
	STM-0200 (VMC 4020,6030,8030)	9	912053				
4	STM-0212 (VMC 2216,3016,4020)	10	CVR-0056 (2216/3016)				
	STM-0208 (VMC 6030)		CVVR-0042 (4020)				
	STM-0209 (VMC 8030)		CVR-0049 (6030/8030)				
5	STM-0458 (VMC 8030)						
	STM-0459 (ALL OTHERS)						



	PART #		PART #		PART #		PART #
1	STM-0193	9	HDW-0304	17	HDW-0472	25	HDW-0238**
2	STM-0194	10	HDW-0301	18	HDW-0472	26	HDW-0472**
3	STM-0195	11	HDW-0239	19	PLC-0011	27	PLC-0027**
4	HDW-0119	12	BRG-0046	20	HDW-0472	28	PLM-0034**
5	HDW-0570	13	HDW-0238	21	HDW-0477	29	PLC-0017**
6	HDW-0295	14	PLC-0070	22	910046**	30	HYD-0005**
7	PLC-0020	15	PLC-0009*	23	HYD-0001**	31	HDW-0295**
8	PLC-0010	16	HDW-0617	24	PLM-0039**	32	HDW-0289

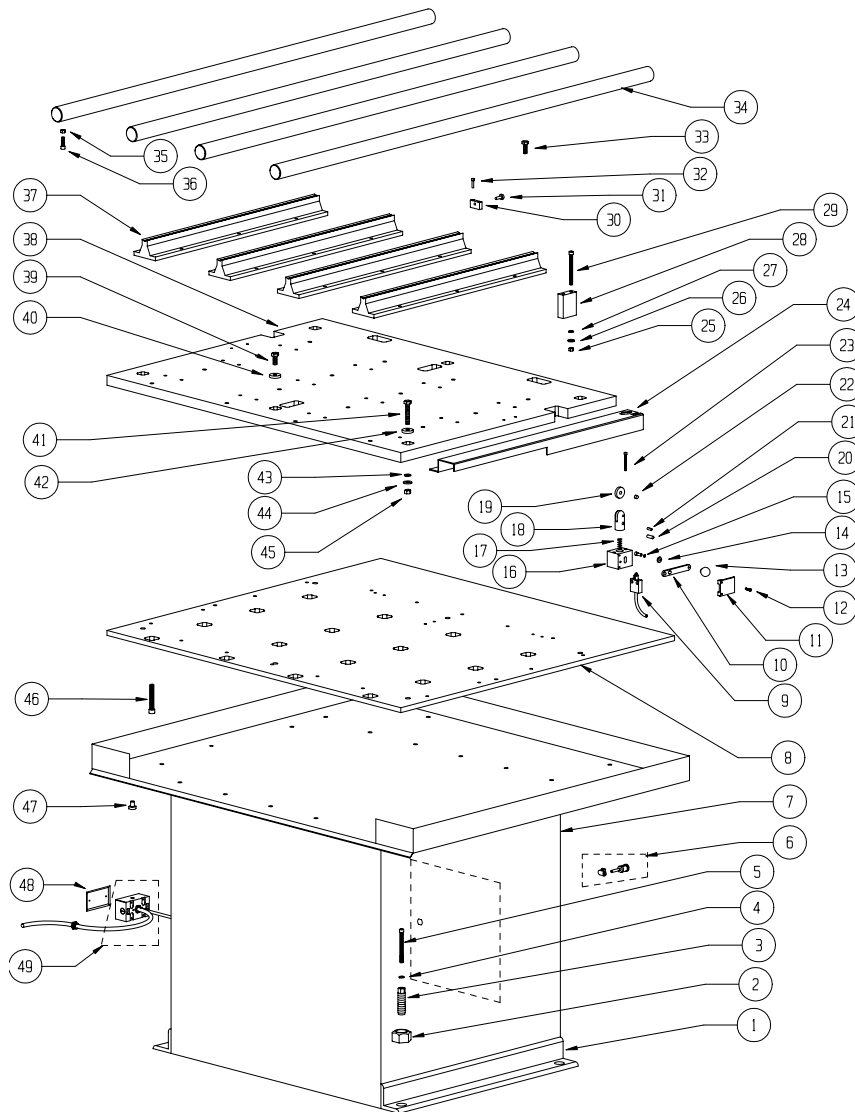
\*'PLC-0009 THREADED HOLES ALTERNATE UNTHREADED HOLES PLC-0039

\*\* ASSEMBLY PART # PLC-0005



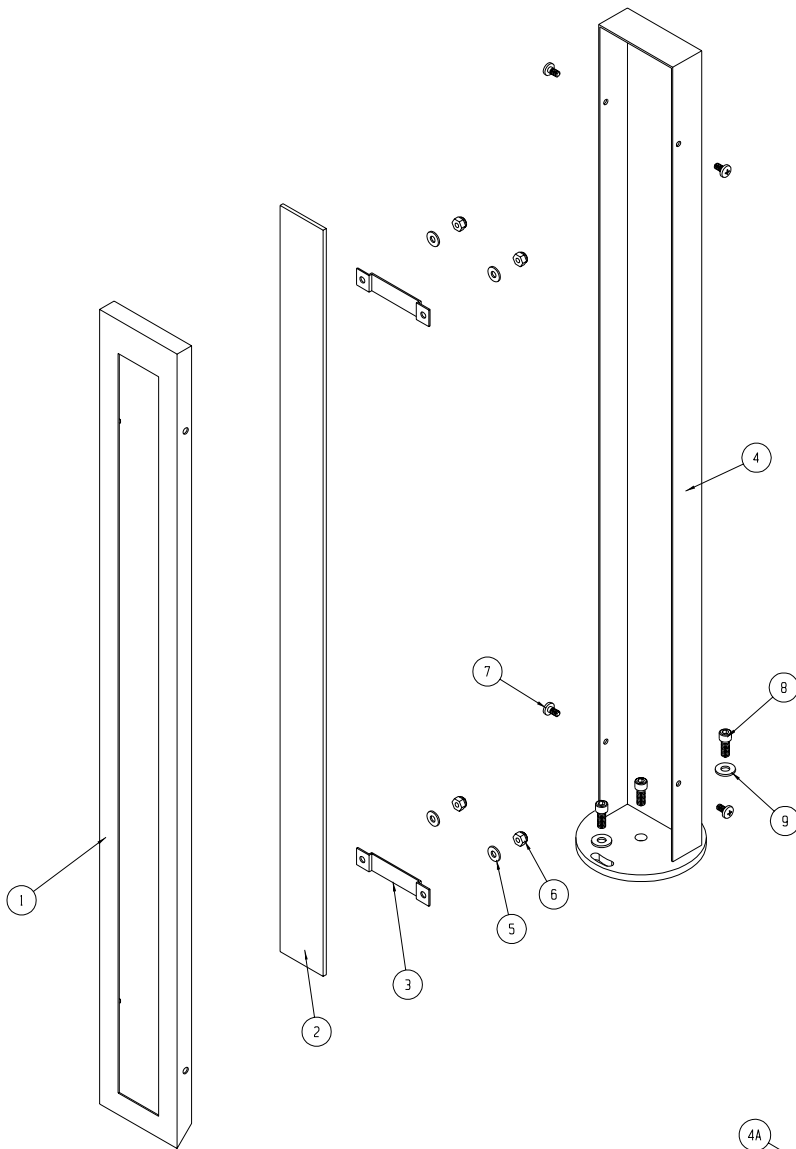
	PART #		PART #		PART #		PART #
1	STM-0272	12	BRG-0041	23	HDW-0348	34	HDW-0237
2	PLC-0073	13	HDW-0548	24	HDW-0575	35	HDW-0236
3	HDW-0235	14	PLC-0074	25	HDW-0381	36	PLC-0019
4	BRG-0041	15	HDW-0234	26	PUL-0035	37	ELE-0146
	BRG-0042						
5	PLC-0072*	16	HDW-0470	27	BRG-0044	38	HDW-0333
6	HYD-0023	17	PLC-0013	28	HDW-0273	39	HDW-0313
7	PLC-0018	18	BRG-0043	29	PLC-0015	40	HDW-0313
8	HDW-0472	19	HDW-0505	30	CYL-0010	41	HDW-0444
9	PLC-0008	20	PLC-0028	31	PLC-0025	42	HDW-0571
10	HDW-0304	21	HDW-0280	32	ELE-0786	43	HDW-0269
11	BRG-0042	22	HDW-0695	33	PLC-0016		
* COMPLET HYDRAULIC PALLET ARM HOUSING ASSY PLC-0002							





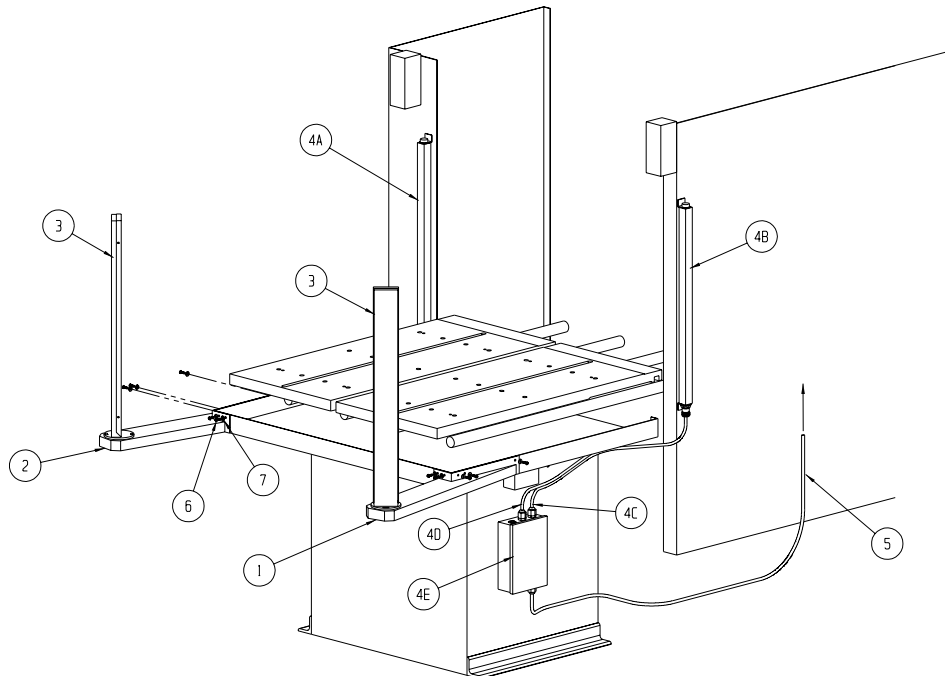
	PART #		PART #		PART #		PART #
1	PLC-0067	16	PLC-0023	31	HDW-0314	46	HDW-0476
2	PLC-0042	17	HDW-0393	32	HDW-0294	47	HDW-0791
3	HDW-0988	18	PLC-0022	33	HDW-0314	48	WIR-0112
4	HDW-0280	19	PLC-0021	34	PLC-0012	49	WIR-0113
5	HDW-0478	20	HDW-0329	35	HDW-0333		
6	HDW-0218	21	HDW-0327	36	HDW-0779		
7	STM-0669	22	BRG-0045	37	HDW-0304		
8	PLC-0058	23	HDW-0489	38	PLC-0041/40		
9	ELE-0386	24	STM-0379	39	HDW-0559		
10	PLC-0076	25	HDW-0333	40	PLC-0077		
11	PLC-0075	26	HDW-0280	41	HDW-0655		
12	HDW-0303	27	HDW-0444	42	PLC-0077		
13	HDW-0749	28	PLC-0024	43	HDW-0050		
14	HDW-0275	29	HDW-0479	44	HDW-0451		
15	HDW-0571	30	HDW-0050	45	HDW-0543		

▲  
▼  
**TOC**  
**EXIT**  
**PALLET CHANGER**



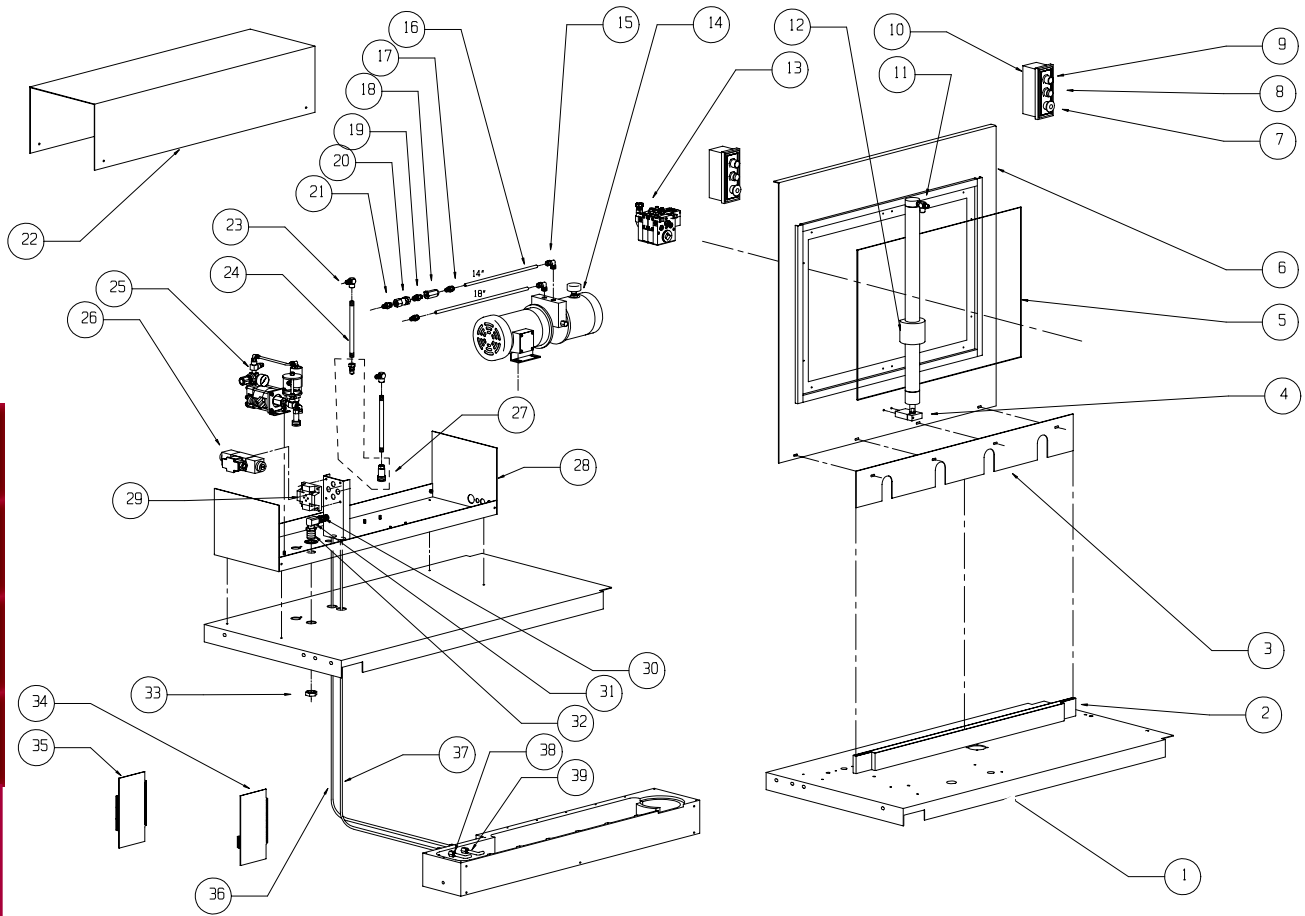
	PART #		PART #
1	STM-0660	6	HDW-0647
2	CNT-0151	7	HDW-0437
3	STM-0658	8	HDW-0299
4	STM-0659	9	HDW-0443
5	HDW-0442		

	PART #		PART #
1	STM-0662	6	HDW-0589
2	STM-0661	7	HDW-0443
3	PLC-0068		
ELE-0939 INCLUDES PIECES 4A, 4B, 4C, 4D, 4E AND 5			



◀  
▶  
**TOC**  
**EXIT**

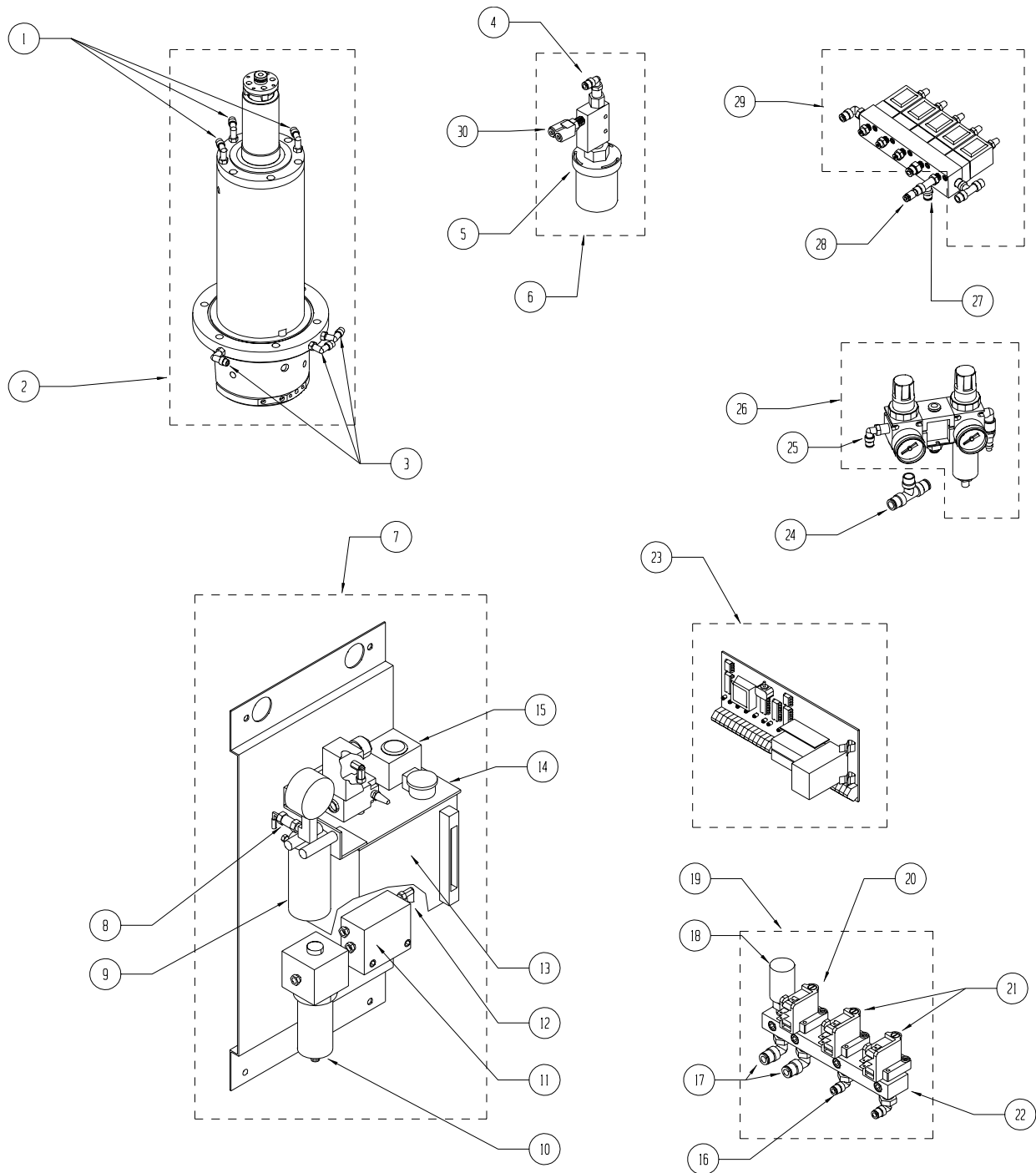
PALLET CHANGER



	PART #		PART #		PART #		PART #
1	STM-0191	11	CYL-0018	21	HYD-0005	31	PLM-0056
2	STM-0189	12	PLC-0014	22	STM-0791	32	PLM-0081
3	PLC-0060	13	VLV-0038	23	HYD-0005	33	PLM-0081
4	PLC-0072	14	PMP-0009	24	PLM-0001	34	PCB-0005
5	DOR-0018	15	PLM-0042	25	PMP-0012	35	PCB-0019
6	STM-0286	16	PLM-0151	26	HYD-0002	36	HYD-0006
7	ELE-0112	17	PLM-0088	27	HYD-0012	37	HYD-0007
8	ELE-0111	18	PLM-0003	28	STM-0791	38	HYD-0004
9	ELE-0110	19	PLM-0057	29	VLV-0030	39	HYD-0003
10	STM-0405	20	PLM-0054	30	PLM-0076		



# PALLET CHANGER

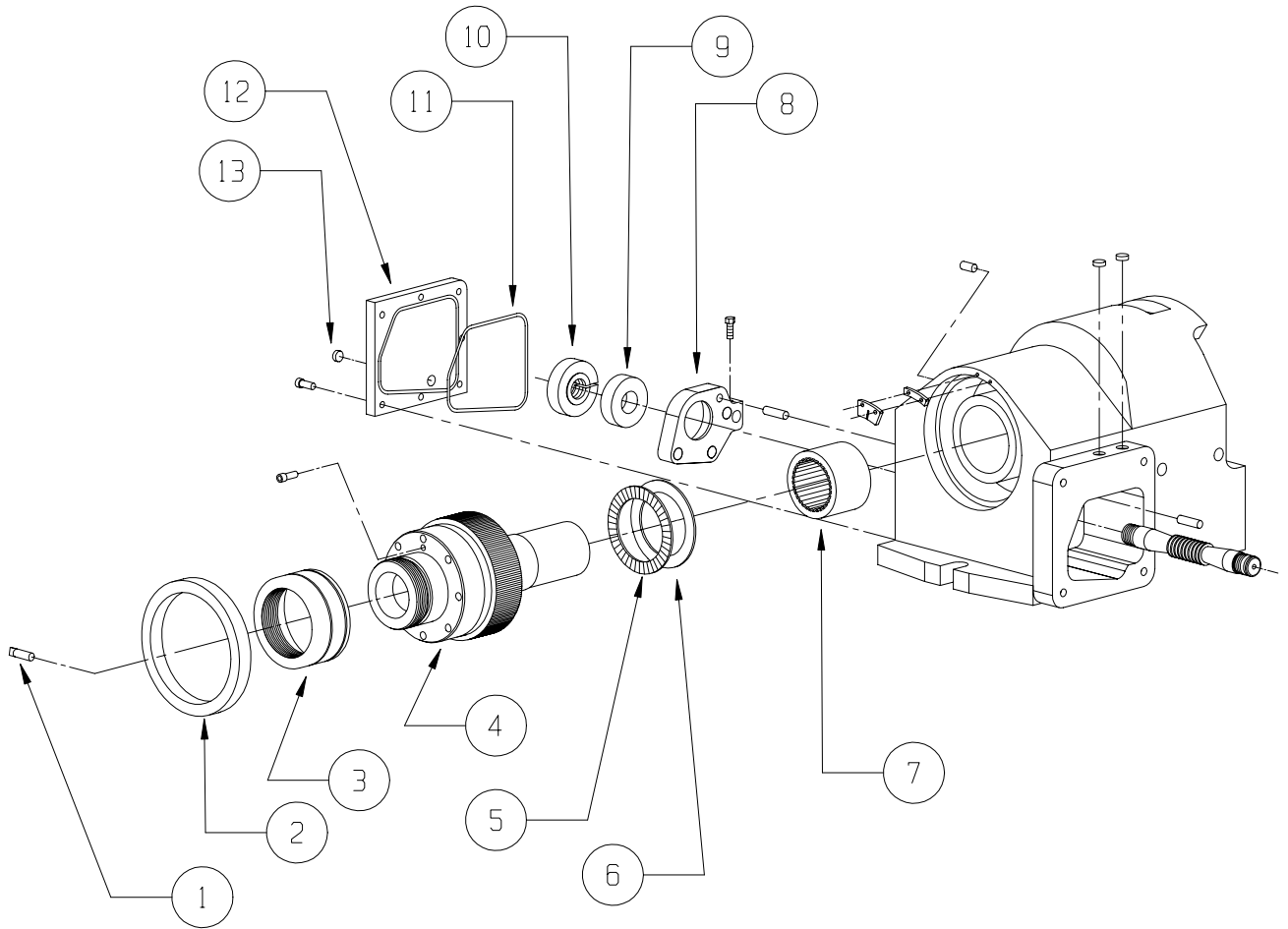


	PART #		PART #		PART #		PART #
1	PLM-0034	9	LUB-0049	17	PLM-0028	25	PLM-0036
2	SPN-0053	10	REG-0030	18	ELE-0901	26	REG-0033
3	PLM-0034	11	LUB-0091	19	LUB-0099	27	PLM-0024
4	PLM-0034	12	PLM-0028	20	ELE-0874	28	PLM-0038
5	PMP-0024	13	LUB-0051	21	ELE-0873	29	VLV-0054
6	LUB-0100	14	LUB-0036	22	LUB-0094	30	PLM-0048
7	LUB-0098	15	LUB-0090	23	PCB-0157		
8	LUB-0097	16	PLM-0034	24	PLM-0165		
SHEETMETAL BRACKET (NOT SHOWN) FOR PC #6 STM-0587							

◀  
▶  
**TOC**  
**EXIT**

15K AIR/OIL SPINDLE

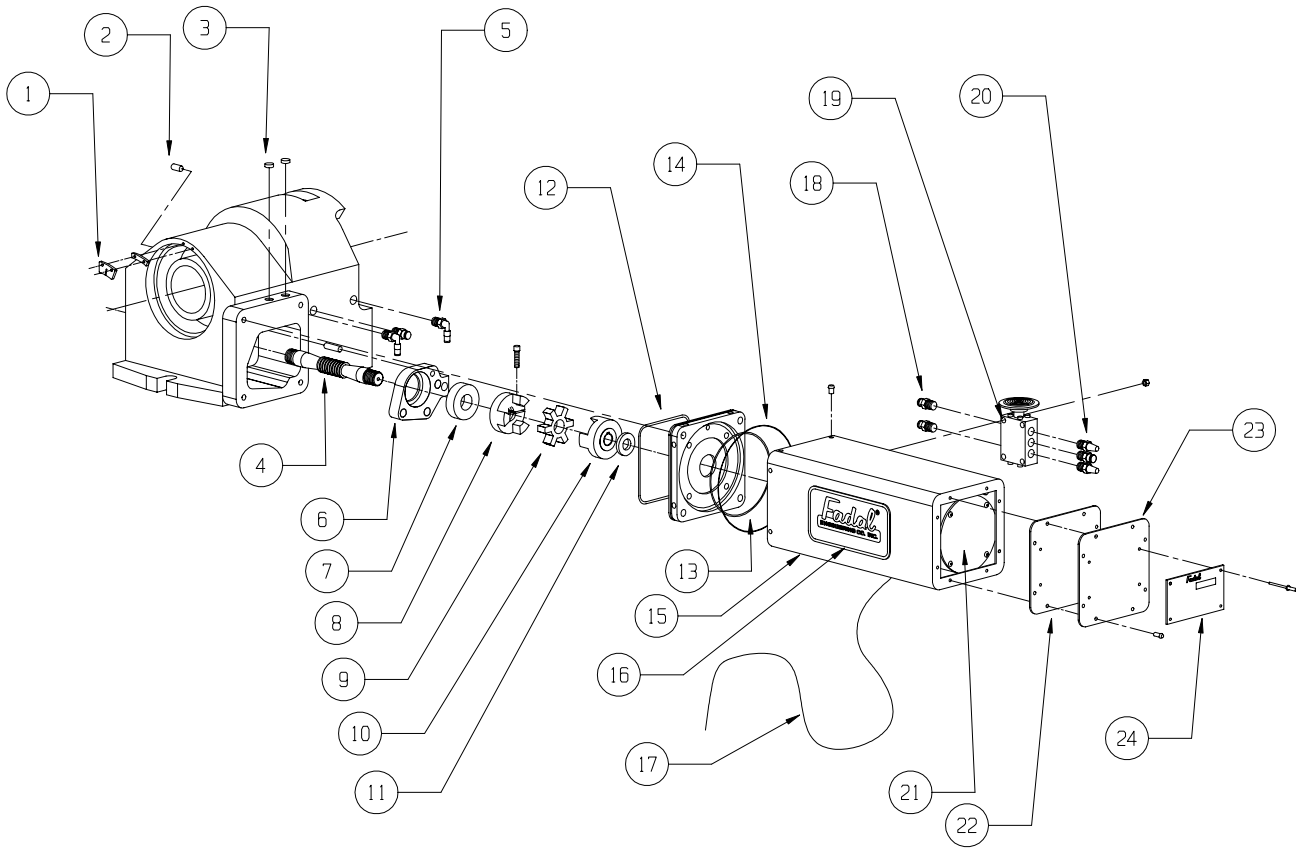




	PART #		PART #		PART #		PART #
1	ROT-0089	5	BRG-0049	9	BRG-0111	13	HDW-0422
2	HDW-0246	6	BRG-0050	10	ROT-0191		
3	ROT-0090	7	BRG-0051	11	HDW-0162		
4	ROT-0012	8	ROT-0296	12	ROT-0299		

▲  
▼  
TOC  
EXIT

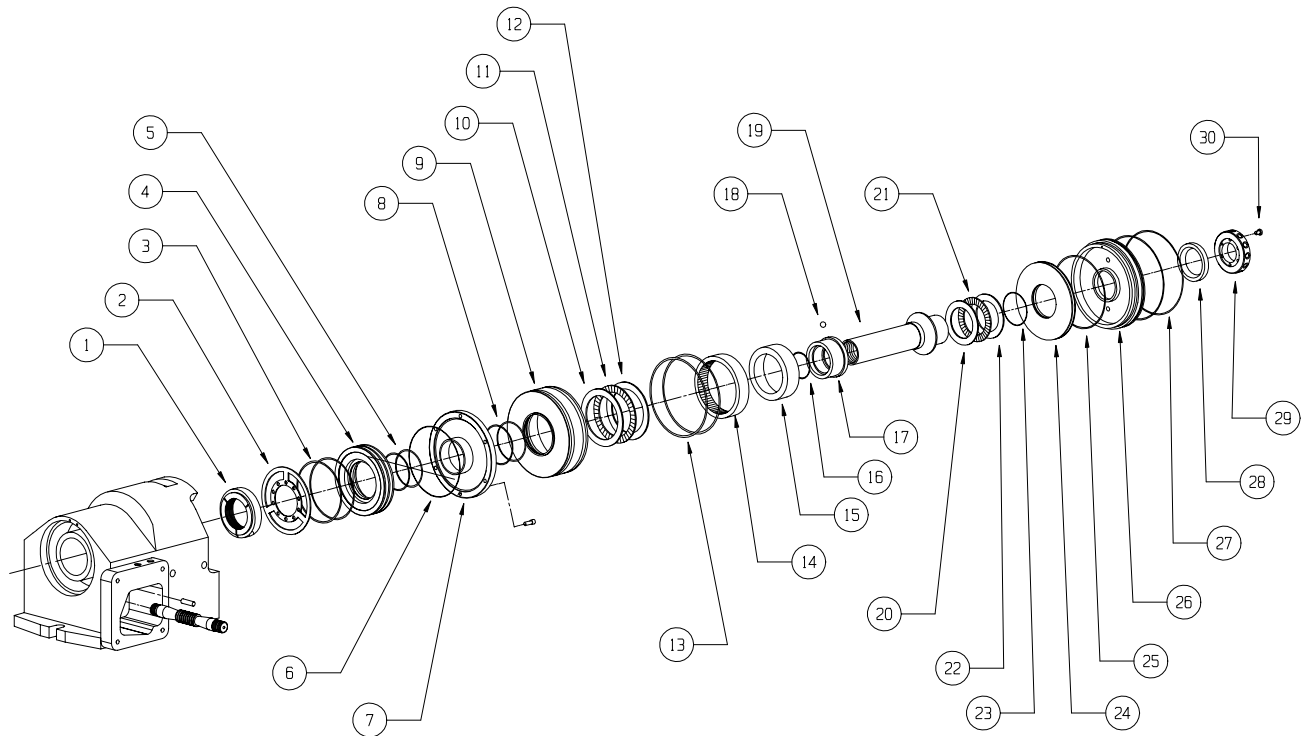
VH5C ROTARY TABLE



	PART #		PART #		PART #		PART #
1	ROT-0297	7	BRG-0111	13	HDW-0704	19	VLV-0026
2	HDW-0409	8	ROT-0273	14	HDW-0153	20	PLM-0040
3	HDW-0422	9	HDW-0752	15	STM-0199	21	MTR-0003
4	ROT-0152	10	ROT-0075	16	LBL-0179	22	HDW-0378
5	PLM-0034	11	HDW-0248	17	WIR-0177	23	STM-0433
6	ROT-0295	12	HDW-0162	18	HDW-0188	24	LBL-0178

▲  
▶  
**TOC**  
**EXIT**

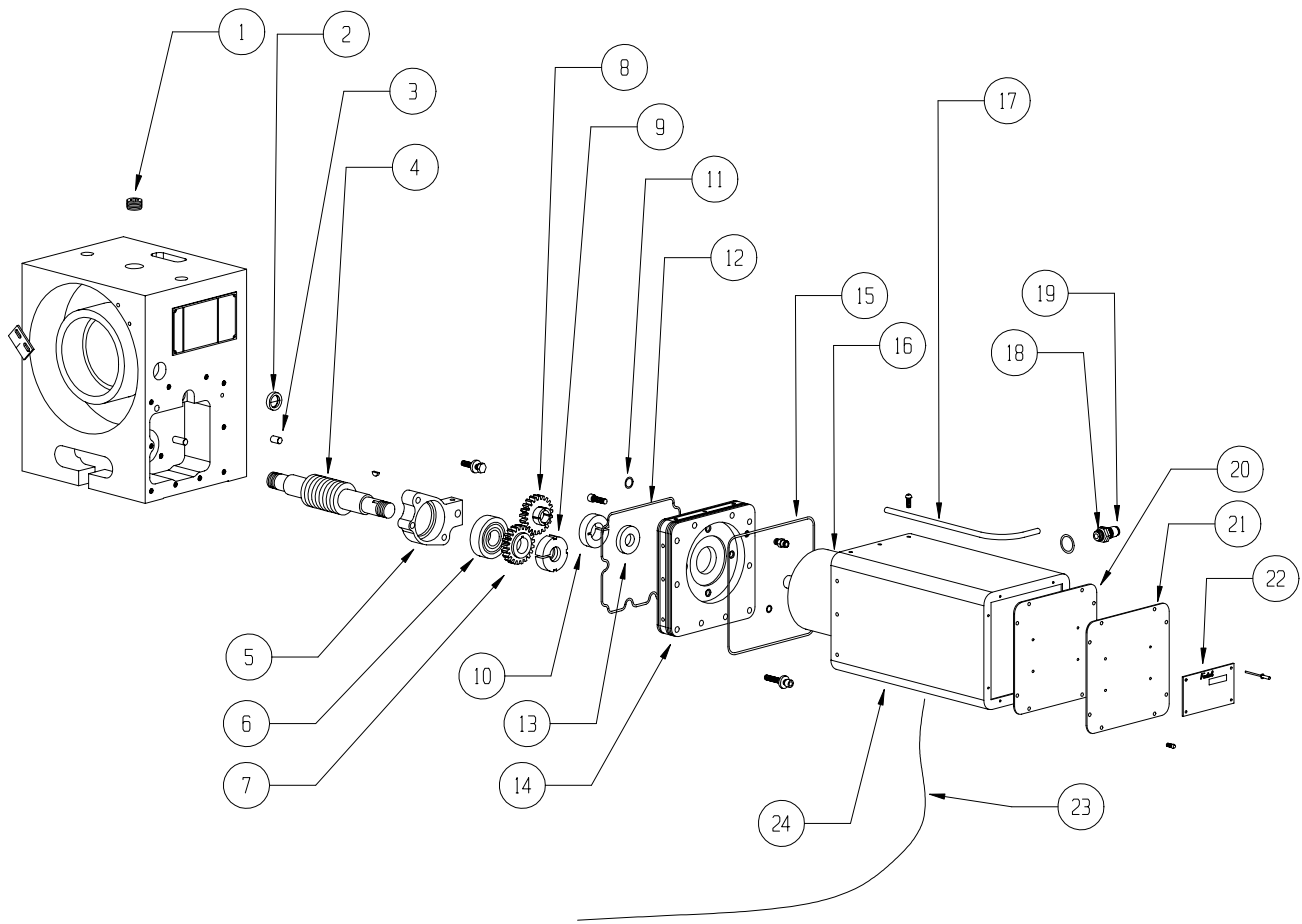
**VH5C ROTARY TABLE**



	PART #		PART #		PART #		PART #
1	ROT-0069	9	ROT-0070	17	ROT-0071	25	HDW-0168
2	STM-0197	10	BRG-0053	18	BRG-0003	26	ROT-0074
3	HDW-0174	11	BRG-0052	19	ROT-0072	27	HDW-0171
4	ROT-0067	12	BRG-0053	20	BRG-0055	28	HDW-0247
5	HDW-0165	13	HDW-0175	21	BRG-0056	29	ROT-0073
6	HDW-0152	14	BRG-0054	22	BRG-0057	30	HDW-0306
7	ROT-0068	15	BRG-0048	23	HDW-0151		
8	HDW-0166	16	HDW-0160	24	ROT-0077		



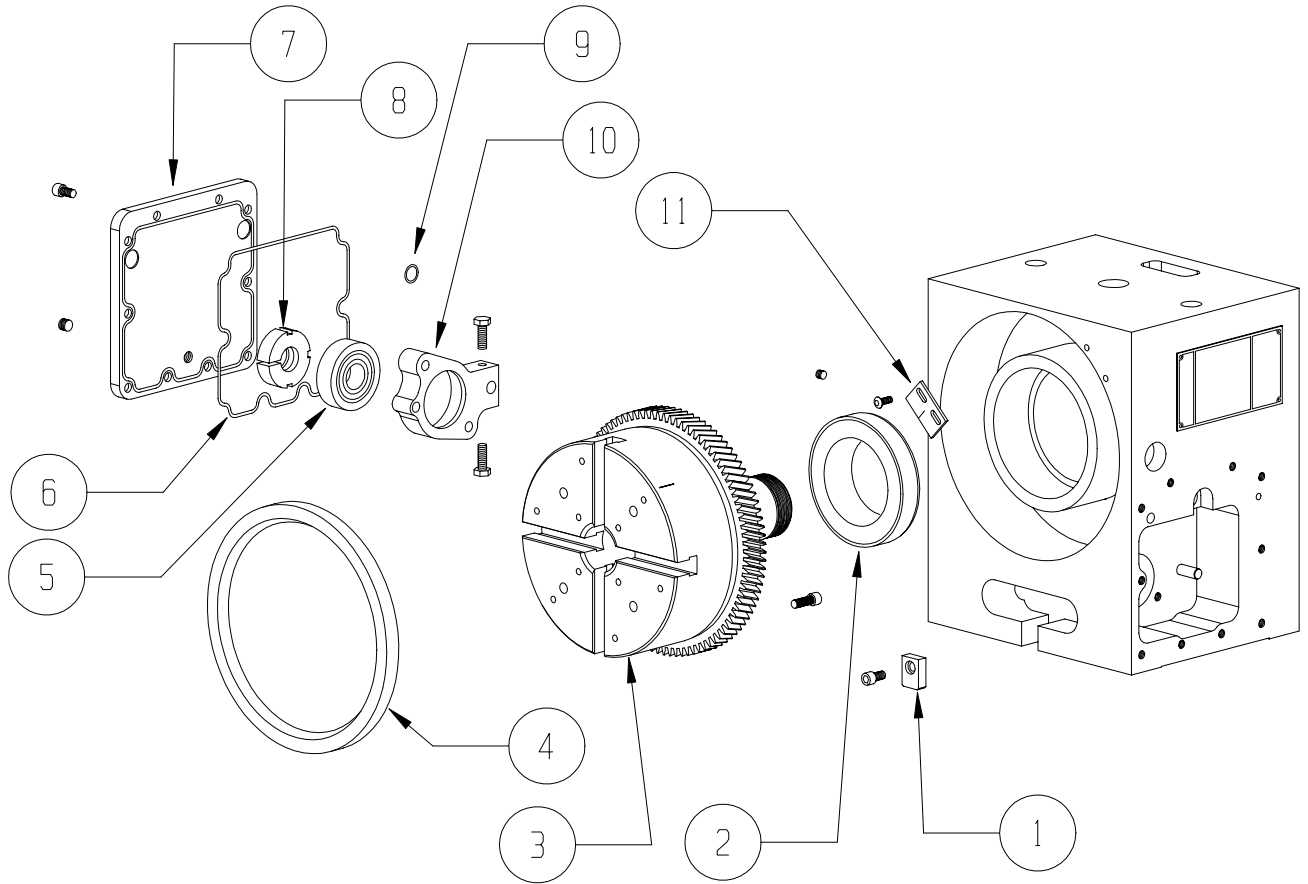
**VH5C ROTARY TABLE**



	PART #		PART #		PART #		PART #
1	HDW-0268	7	ROT-0280	13	HDW-0225	19	ELE-0065
2	HDW-0222	8	ROT-0050	14	ROT-0040	20	HDW-0365
3	HDW-0620	9	HDW-0230	15	HDW-0162	21	STM-0274
4	ROT-0037	10	HDW-0226	16	MTR-0003	22	LBL-0176
5	ROT-0043	11	HDW-0179	17	PLM-0023	23	WIR-0080(9FT)
6	BRG-0024	12	HDW-0162	18	ELE-0037		WIR-0081(6FT)
							WIR-0217(7.5FT)
						24	STM-0131

▲  
▶  
**TOC**  
**EXIT**

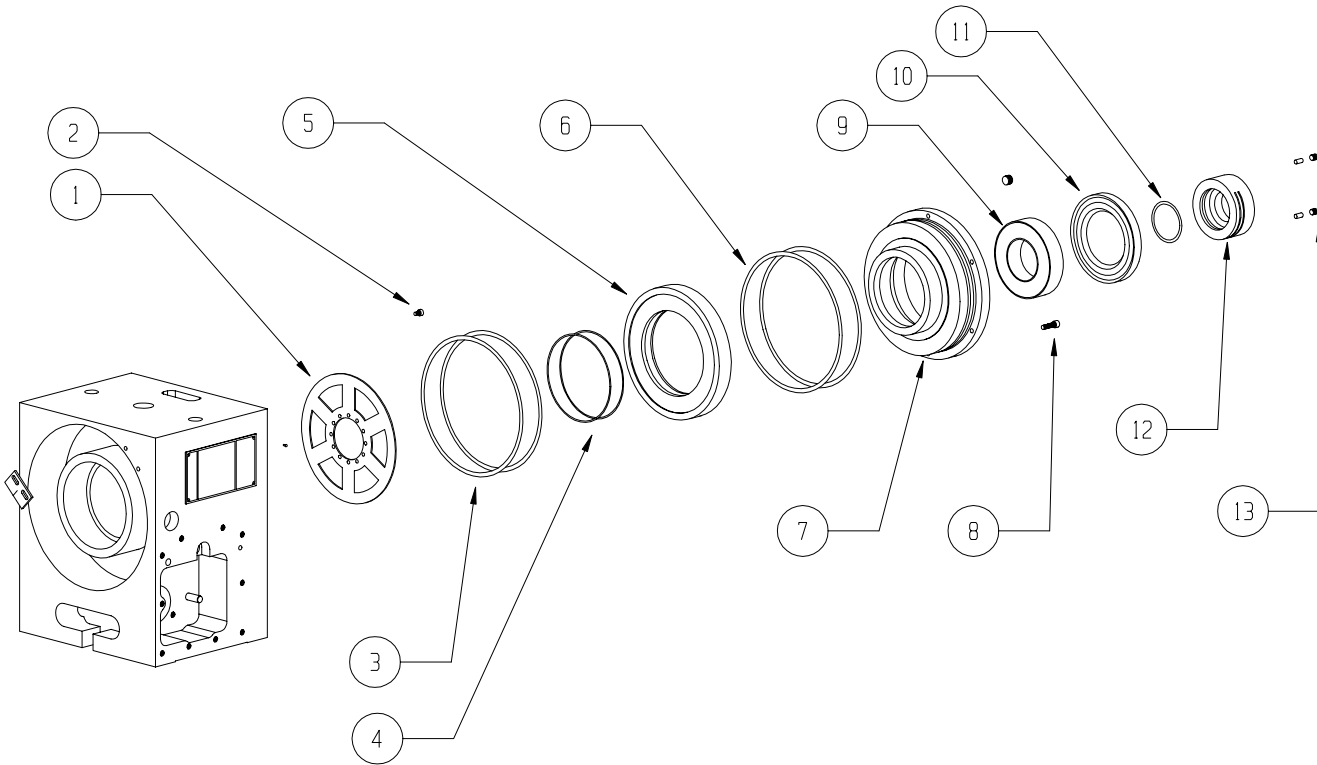
VH65 ROTARY TABLE



	PART #		PART #		PART #		PART #
1	ROT-0046	4	HDW-0224	7	ROT-0039	10	ROT-0044
	ROT-0047	5	BRG-0024	8	HDW-0230	11	STM-0044
2	BRG-0037	6	HDW-0162	9	HDW-0179		
	BRG-0038						
3	ROT-0000						

▲  
▼  
TOC  
EXIT

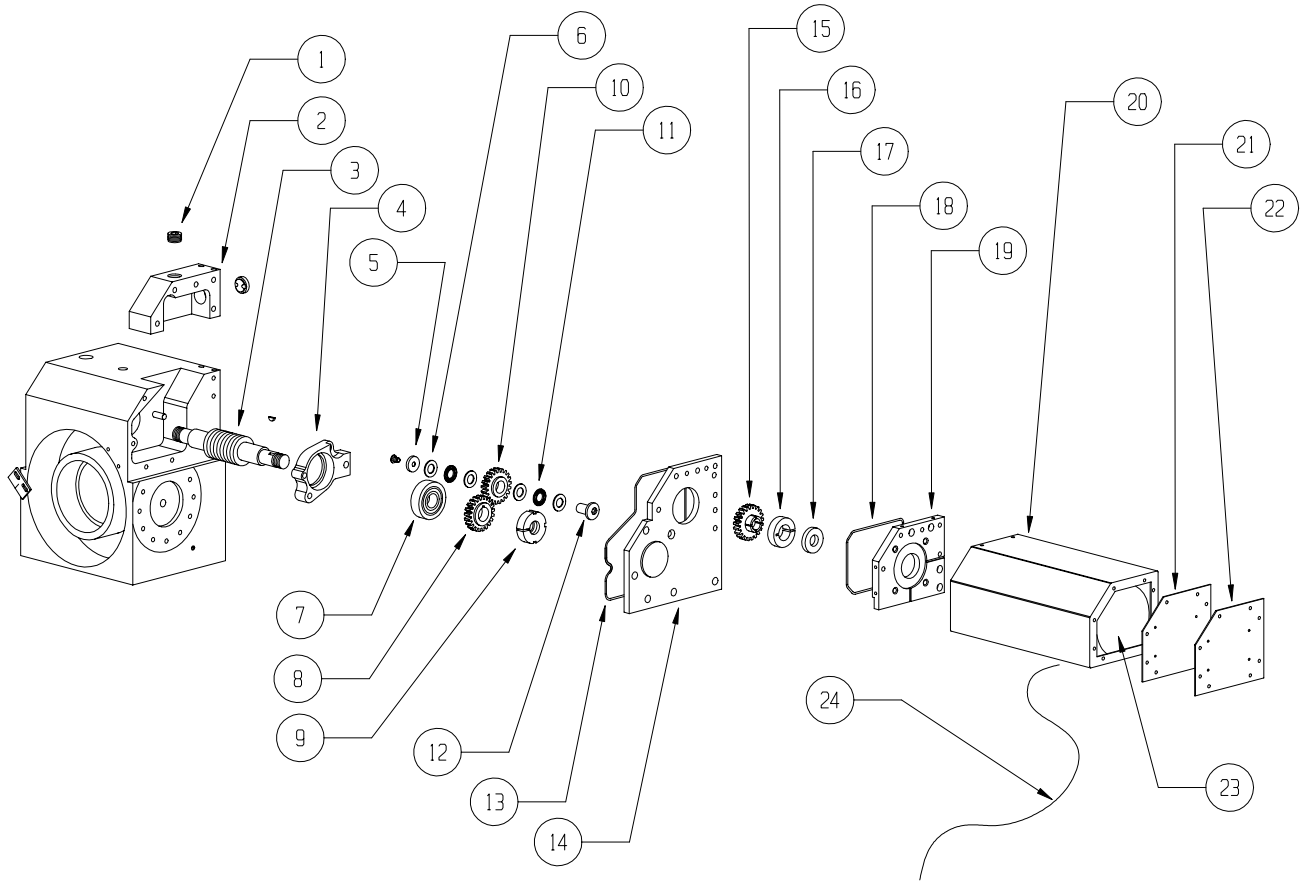
VH65 ROTARY TABLE



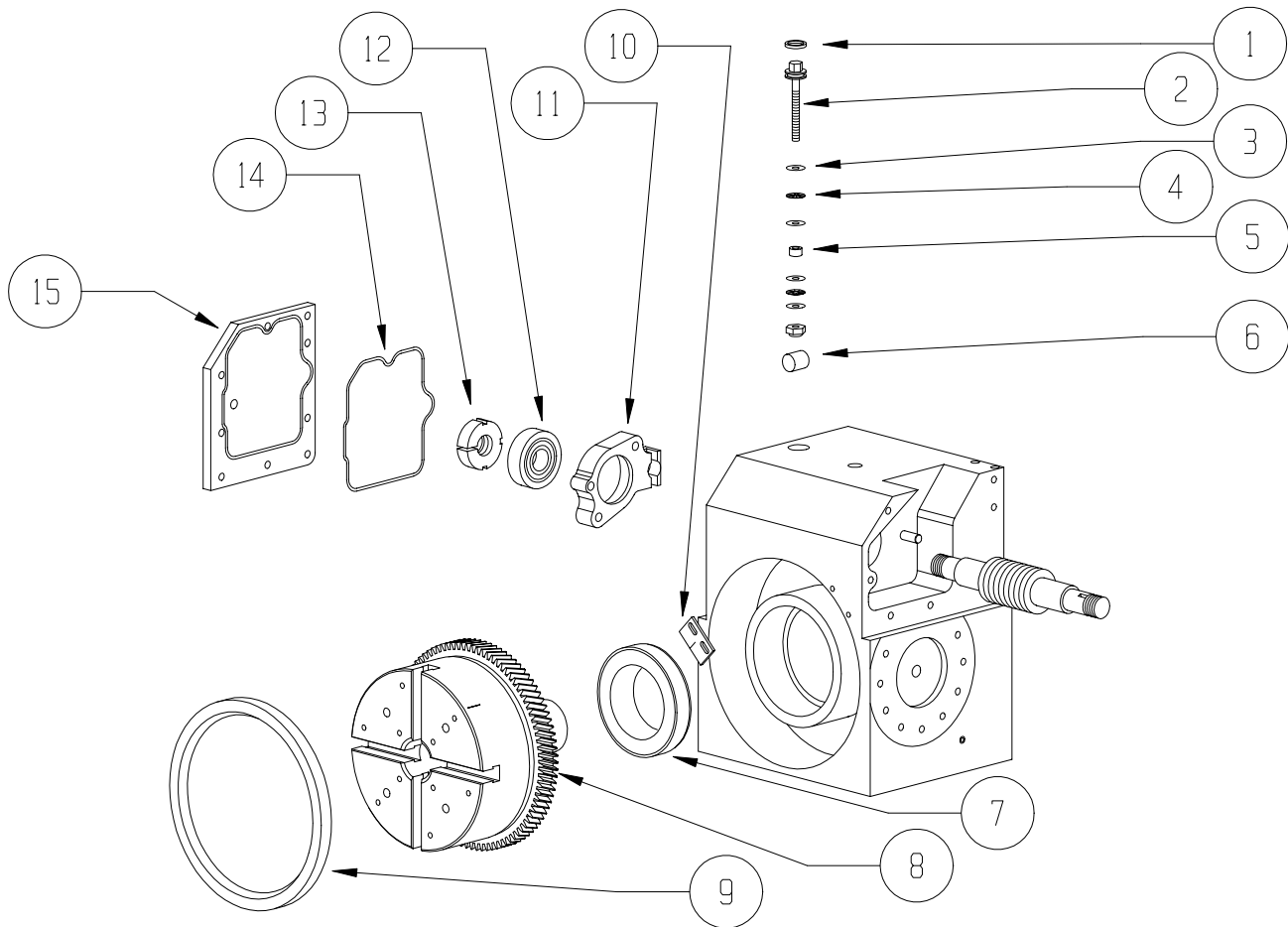
	PART #		PART #		PART #		PART #
1	ROT-0036	5	ROT-0034	9	BRG-0035	12	ROT-0035
2	HDW-0502	6	HDW-0172		BRG-0036	13	HDW-0426
3	HDW-0176	7	ROT-0033	10	HDW-0223		
4	HDW-0167	8	HDW-0303	11	HDW-0164		



**VH65 ROTARY TABLE**



	PART #		PART #		PART #		PART #
1	HDW-0268	7	BRG-0024	13	HDW-0163	19	ROT-0282
2	ROT-0287	8	ROT-0280	14	ROT-0230	20	STM-0506
3	ROT-0037	9	HDW-0226	15	ROT-0050	21	HDW-0366
4	ROT-0044	10	ROT-0281	16	HDW-0230	22	STM-0507
5	ROT-0302	11	BRG-0015	17	HDW-0727	23	MTR-0003
6	BRG-0017	12	ROT-0301	18	HDW-0161	24	WIR-0080(9FT)
							WIR-0081(6FT)
							WIR-0217(7.5FT)

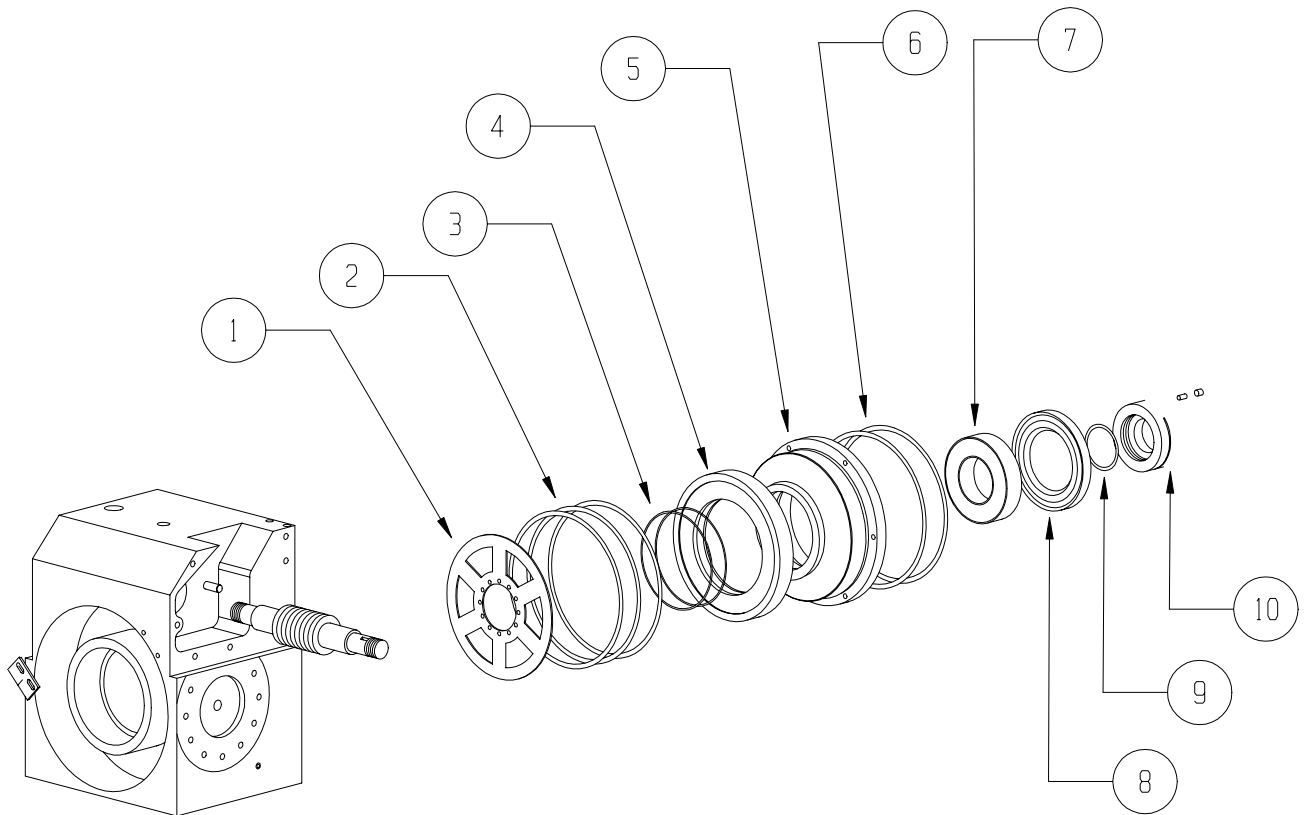


	PART #		PART #		PART #		PART #
1	HDW-0154	5	BRG-0045	8	ROT-0000	12	BRG-0024
2	ROT-0084	6	ROT-0085	9	BRG-0224	13	HDW-0226
3	BRG-0061	7	BRG-0038	10	STM-0044	14	HDW-0161
4	BRG-0062		BRG-0037	11	ROT-0045	15	ROT-0283



# TR65 ROTARY TABLE

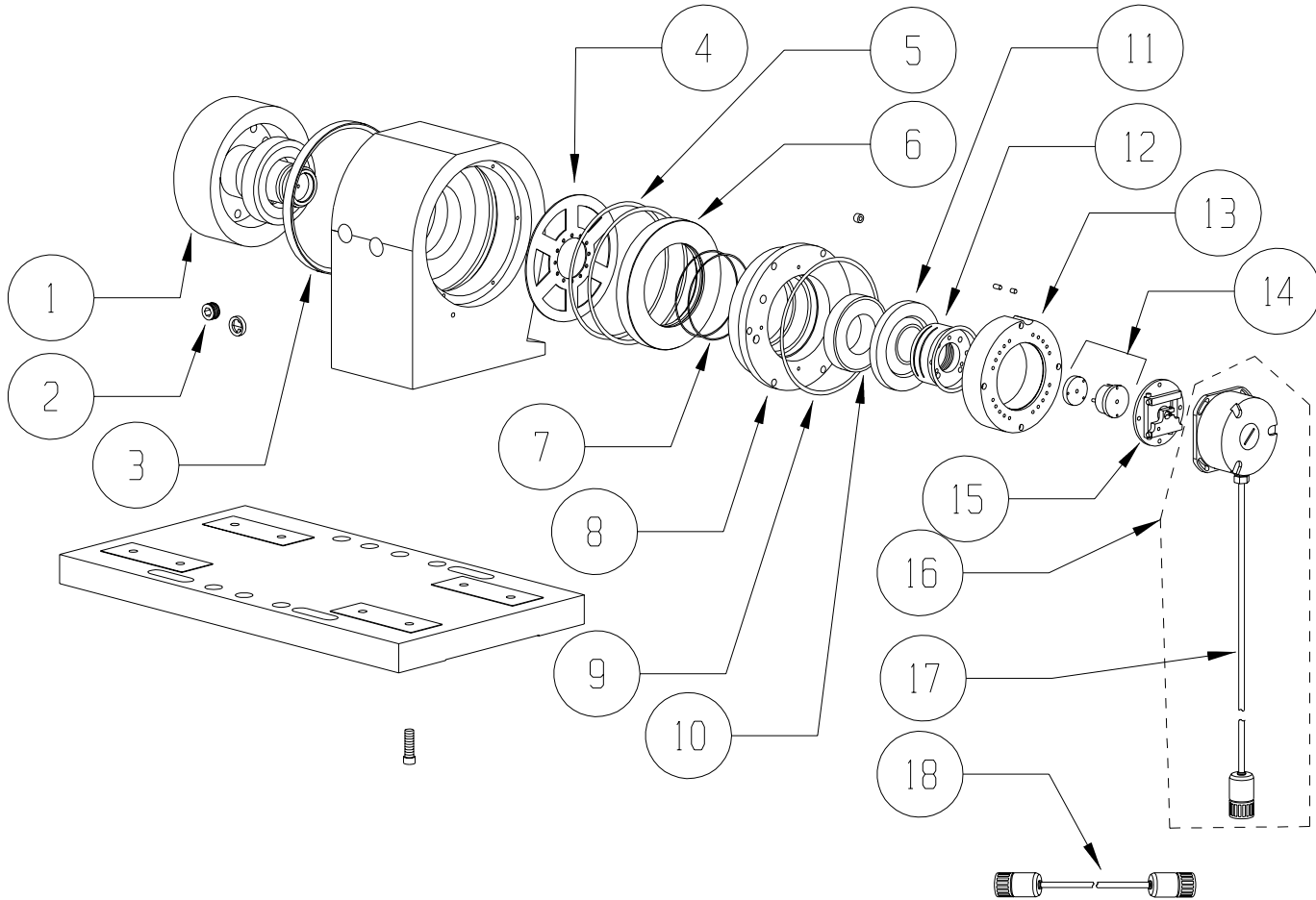




	PART #		PART #		PART #		PART #
1	ROT-0036	4	ROT-0034	7	BRG-0042	9	HDW-0173
2	HDW-0176	5	ROT-0033		BRG-0041	10	ROT-0035
3	HDW-0167	6	HDW-0172	8	HDW-0225		

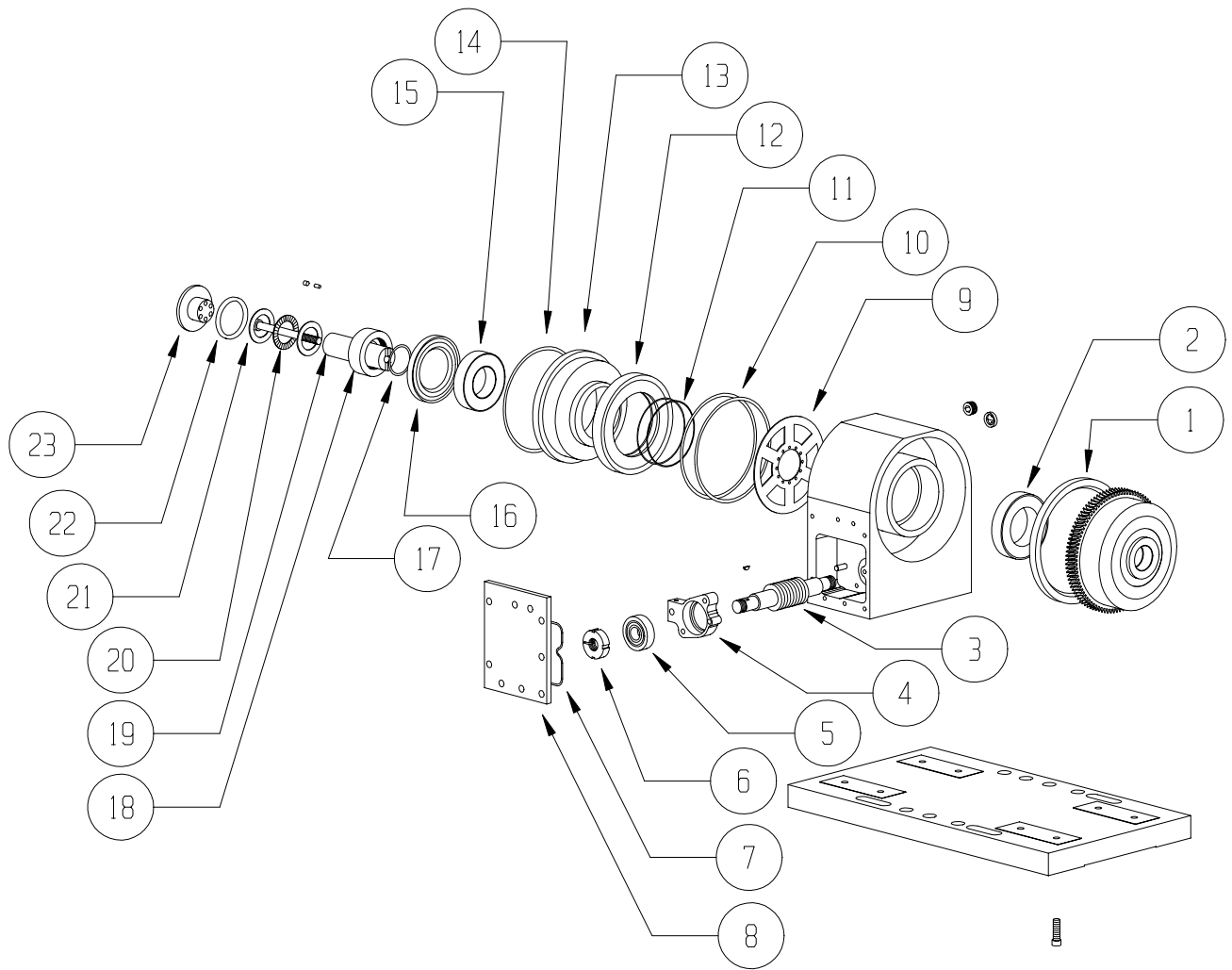
▲  
▼  
TOC  
EXIT

TR65 ROTARY TABLE

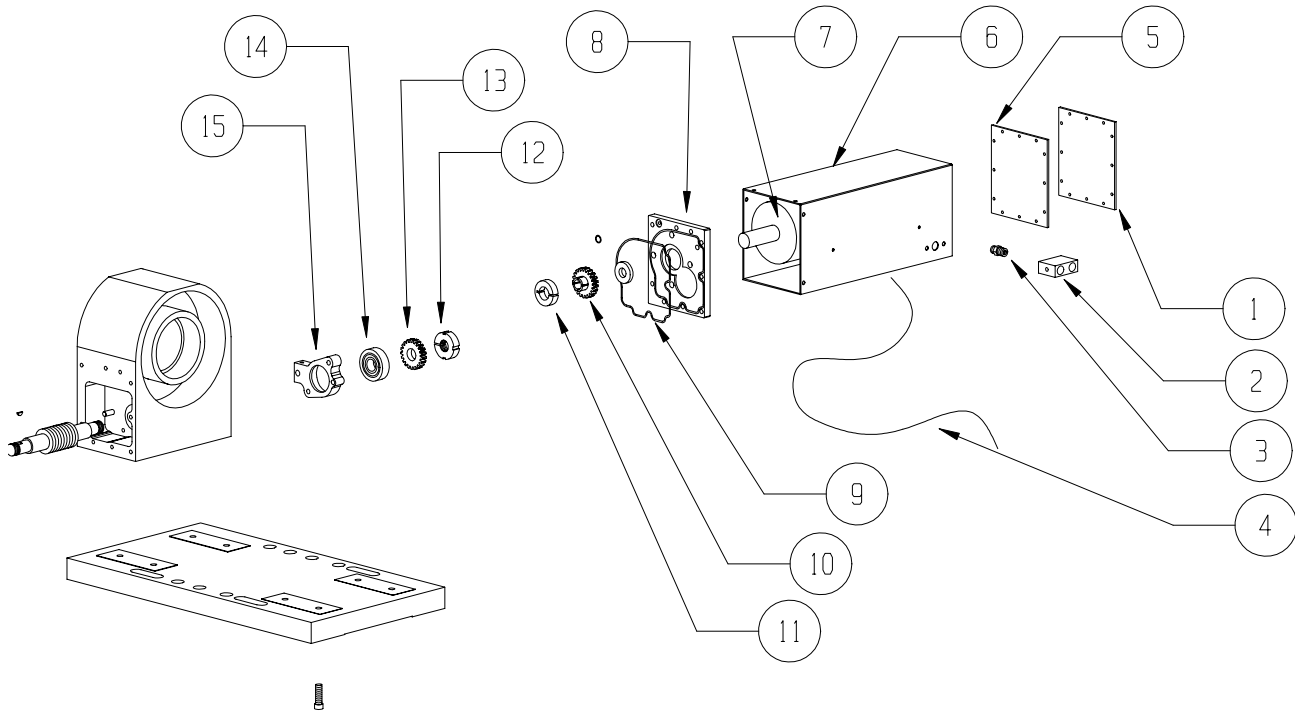


	PART #		PART #		PART #		PART #
1	ROT-0291	6	ROT-0034	11	HDW-0225	16	SCL-0023
2	HDW-0222	7	HDW-0167	12	ROT-0035	17	SCL-0087
3	HDW-0224	8	ROT-0033	13	ROT-0285	18	SCL-0016
4	ROT-0036	9	HDW-0172	14	ROT-0286		
5	HDW-0176	10	BRG-0036	15	SCL-0022		
			BRG-0037				





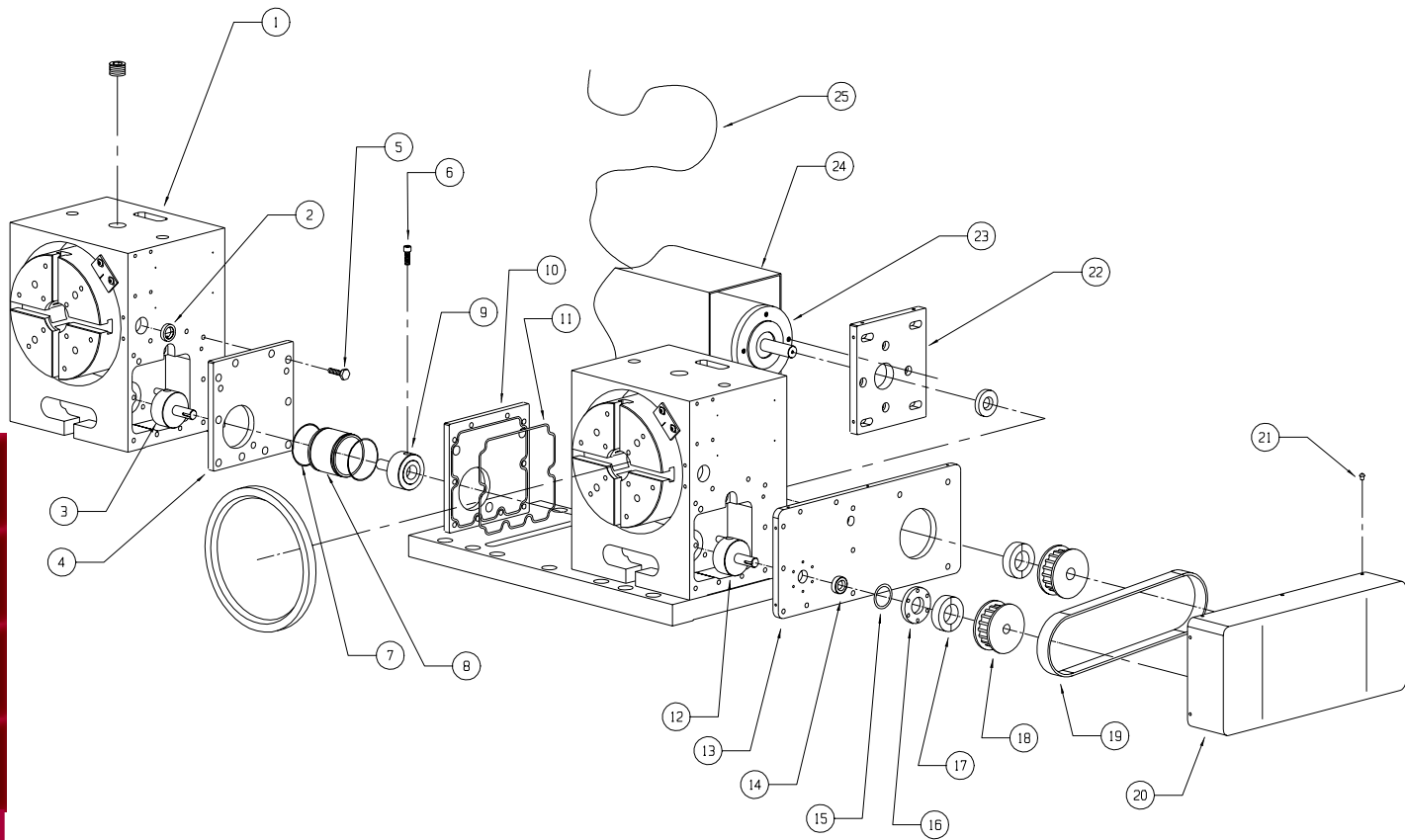
	PART #		PART #		PART #		PART #
1	HDW-0224	7	HDW-0161	13	ROT-0033	18	ROT-0035
2	BRG-0038	8	ROT-0288	14	HDW-0172	19	ROT-0058
	BRG-0037	9	ROT-0036	15	BRG-0036	20	BRG-0040
3	ROT-0037	10	HDW-0176		BRG-0035	21	BRG-0039
4	ROT-0043	11	HDW-0167	16	HDW-0225	22	HDW-0173
5	BRG-0024	12	ROT-0034	17	HDW-0164	23	ROT-0083
6	HDW-0226						



	PART #		PART #		PART #		PART #
1	STM-0508	5	HDW-0367	9	HDW-0181	13	ROT-0280
2	ROT-0325	6	STM-0509	10	ROT-0050	14	BRG-0024
3	PLM-0044	7	MTR-0002	11	HDW-0230	15	ROT-0033
4	WIR-0080(9FT)	8	ROT-0284	12	HDW-0226		
	WIR-0081(6FT)						
	WIR-0217(7.5FT)						



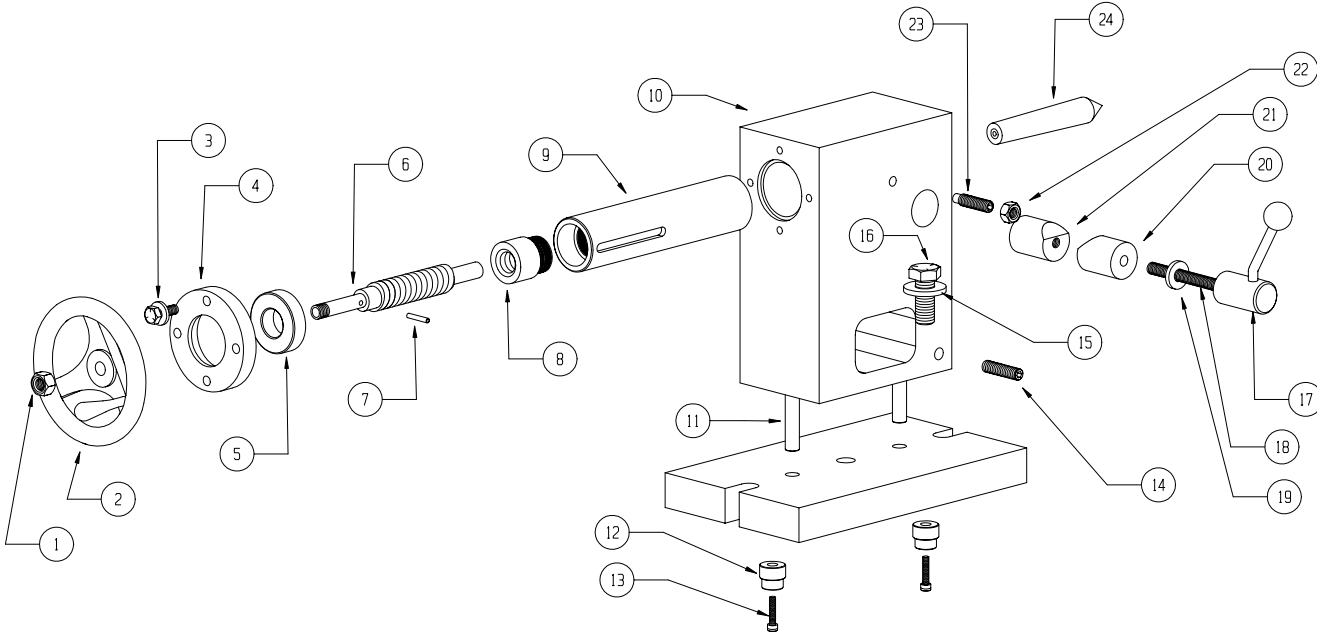
**TR65 ROTARY TABLE**



	PART #		PART #		PART #		PART #
1	ROT-0188	8	ROT-0134	15	ROT-0150	22	ROT-0329 (RH)
2	HDW-0222	9	ROT-0392	16	ROT-0311		ROT-0394 (LH)
3	ROT-0082	10	ROT-0312	17	PUL-0041	23	MTR-0125
4	ROT-0313	11	HDW-0162	18	PUL-0032	24	STM-0508
5	HDW-0295	12	ROT-0392	19	BEL-0025	25	WIR-0080 (9FT)
6	HDW-0497	13	ROT-0315	20	STM-0519		WIR-0081 (6FT)
7		14	HDW-0231	21	HDW-0593		WIR-0217 (7.5FT)



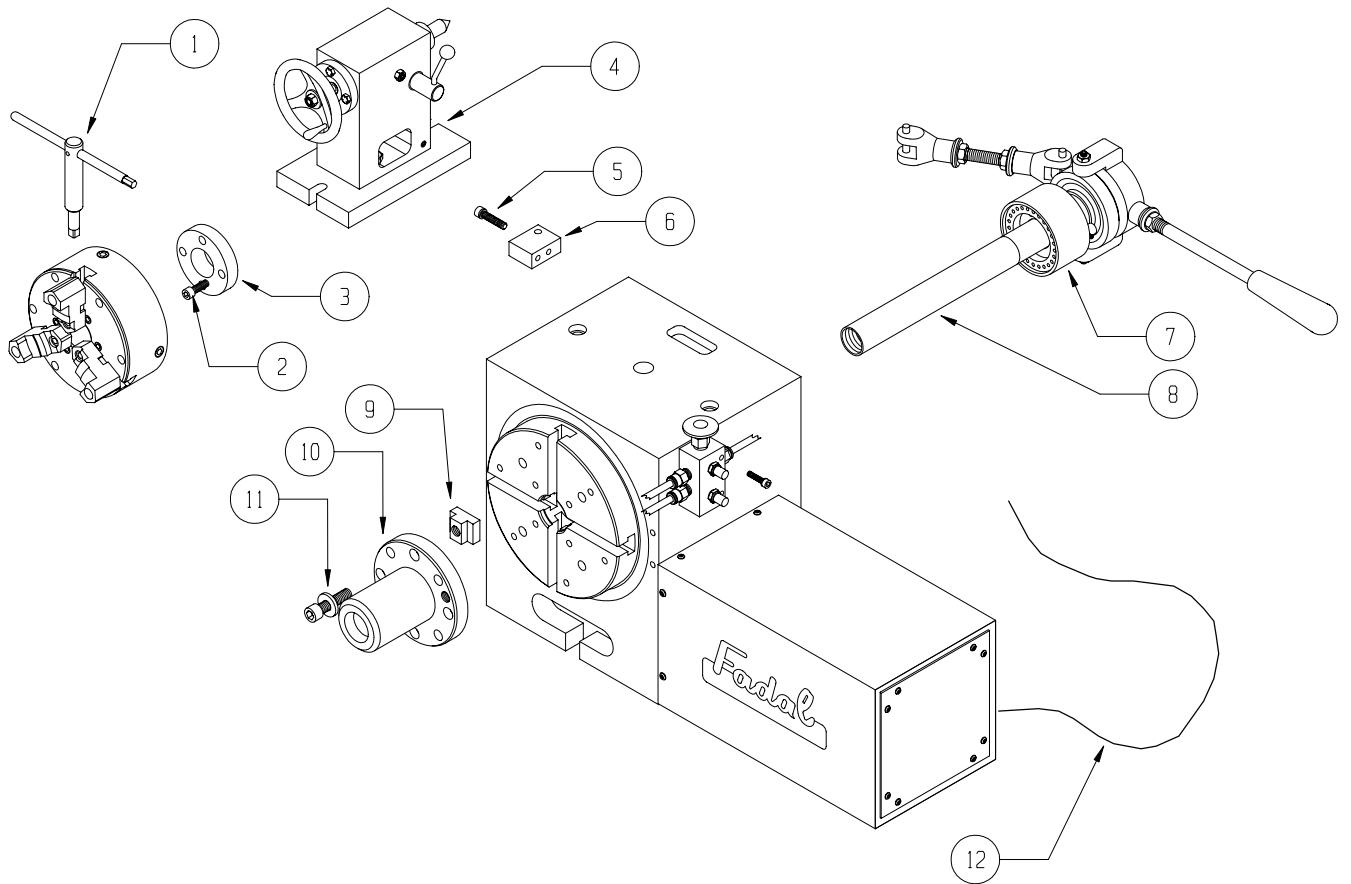
**DUAL VH65 ASSY**



	PART #		PART #		PART #		PART #
1	HDW-0645	7	7518-34RP	13	7132-1834	19	HDW-0381
2	ROT-0056	8	HDW-0228	14	HDW-0415	20	ROT-0334
3	HDW-0322	9	ROT-0054	15	HDW-0050	21	ROT-0334
4	ROT-0336	10	ROT-0330	16	HDW-0557	22	HDW-0646
5	BRG-0020	11	HDW-0616	17	ROT-0057	23	ROT-0335
6	ROT-0055	12	ROT-0053	18	6918-56325	24	HDW-0229

▲  
▶  
**TOC**  
**EXIT**

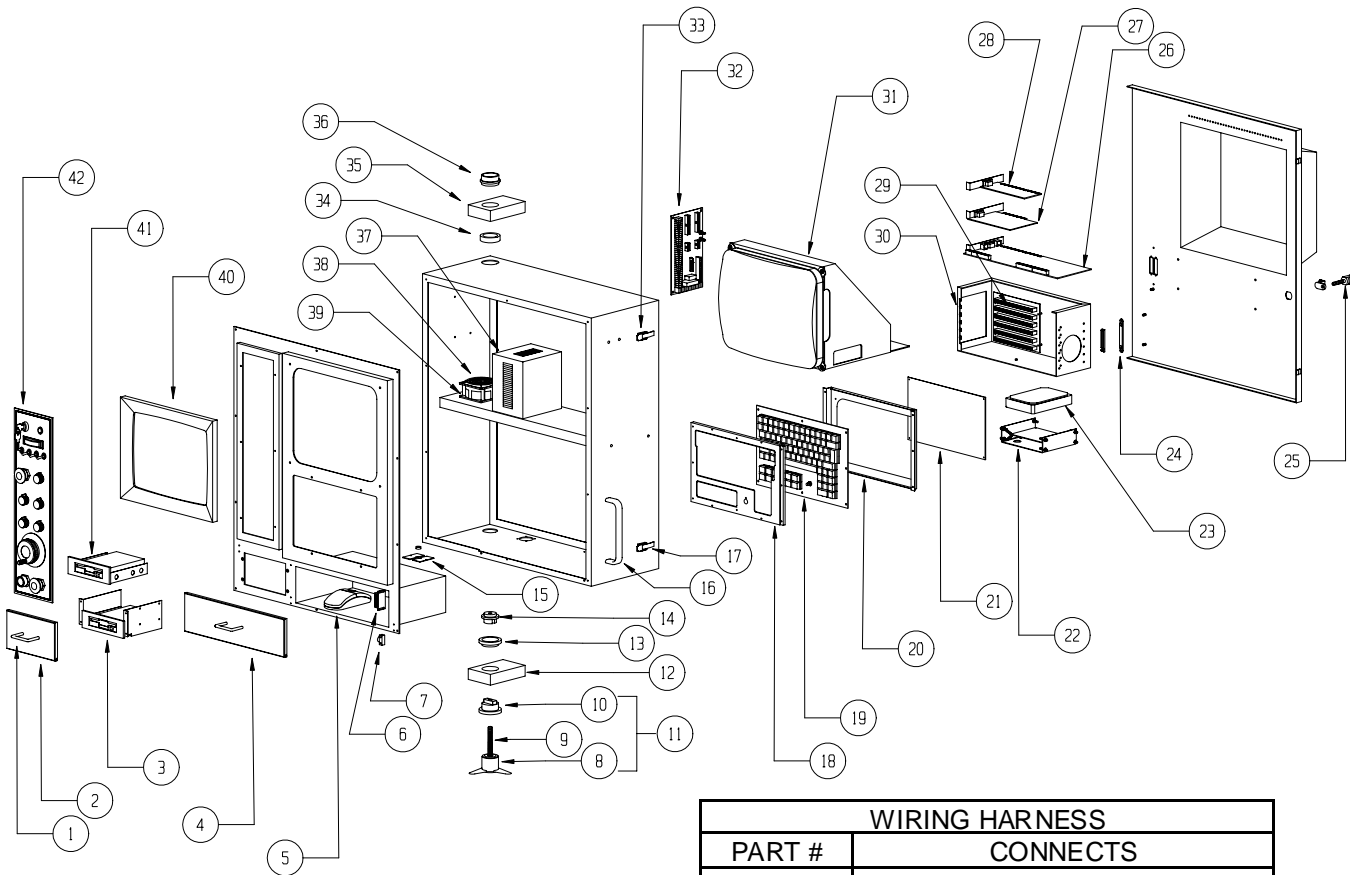
**DUAL VH65 ASSY**



	PART #		PART #		PART #		PART #
1	ROT-0153	5	HDW-0578	9	HDW-0227	12	WIR-0080(9FT)
2	HDW-0496	6	STM-0315	10	ROT-0014		WIR-0081(6FT)
3	ROT-0051	7	ROT-0017	11	HDW-0472		WIR-0217(7.5FT)
4	ROT-0026(VH65)	8	ROT-0016				
	ROT-0028(VH5C)						

▲  
▼  
**TOC**  
**EXIT**  
**ROTARY ACCESSORIES**

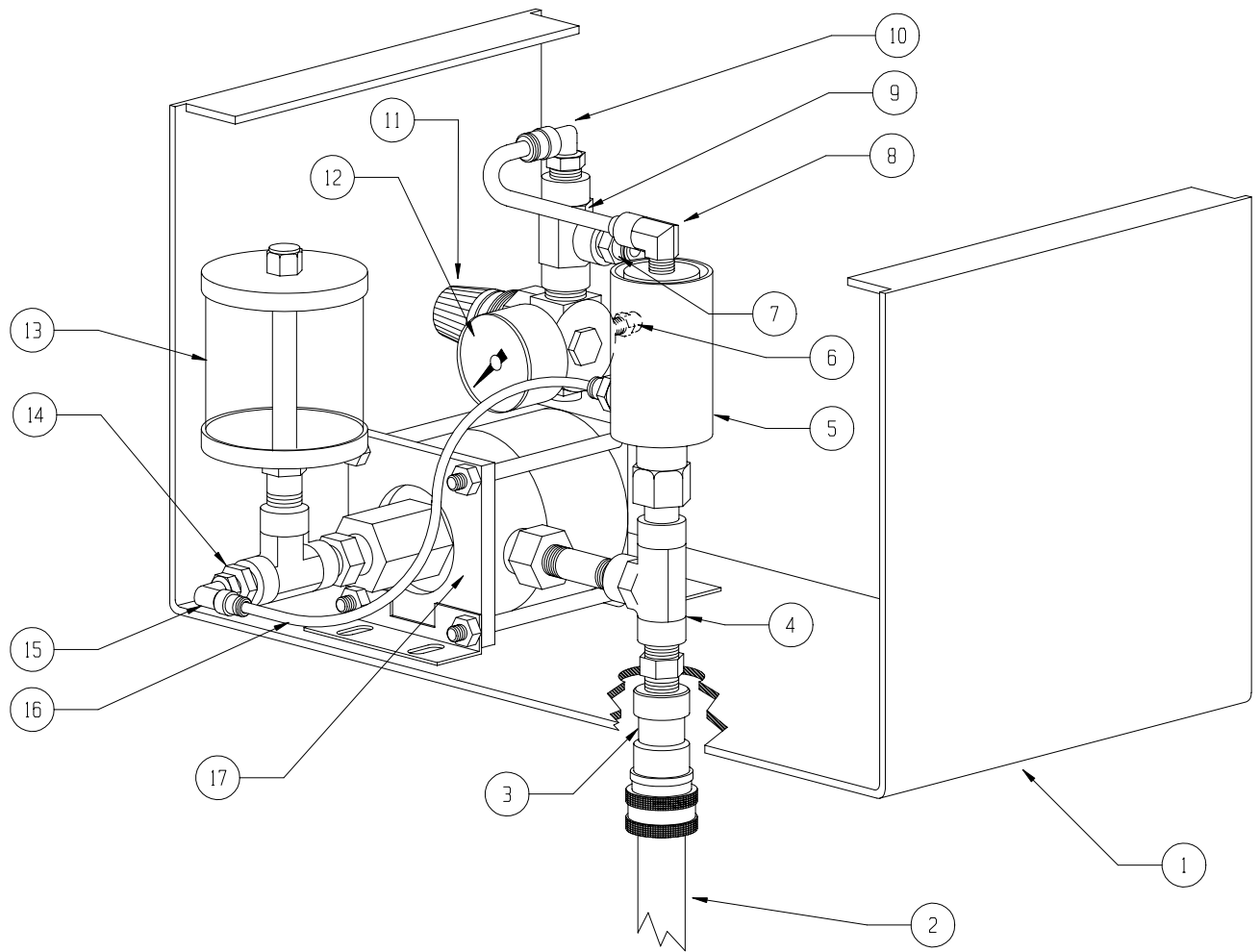
	PART #		PART #		PART #		PART #
1	HDW-0183	12	CTR-0005	23	ELE-0166*	34	HDW-0724
2	CTR-0014	13	BRG-0077	24	WIR-0444	35	CTR-0006
3	STM-0347	14	CTR-0007	25	HDW-0221	36	N/A
4	CTR-0013	15	STM-0533	26	PCB-0142	37	ELE-0173
5	ELE-0169	16	HDW-0182	27	PCB-0110	38	HDW-0852
6	HDW-0511	17	HDW-0216	28	OBSOLETE	39	ELE-0128
7	CTR-0012	18	CTR-0011	29	PCB-0057	40	HDW-0848
8	CTR-0002	19	ELE-0085	30	STM-0358	41	ELE-0168
9	CTR-0018	20	STM-0198	31	ELE-190	42	SEE STD
10	CTR-0008	21	PCB-0013	32	PCB-0019		PENDANT
11	CTR-0022	22	CTR-0000	33	HDW-0219		
					* ALT. ELE-0167		



WIRING HARNESS	
PART #	CONNECTS
ELE-0115	RS422 (1110-3 TO 1750-0)
WIR-0152	VGA 33" (1090-4 TO MONITOR)
WIR-0153	VGA 56" (VIDEO TO 1090-4)
WIR-0154	RS232 8" (I/O PCB TO COM2)
WIR-0157	FLOPPY (CPU TO 2508)
WIR-0159	HARD DRIVE 8" (CPU TO HDD)
WIR-0164	VIDEO 15' (1030-1C TO 1110-3)
WIR-0165	VIDEO 4' (1110-3 TO 1090-4)



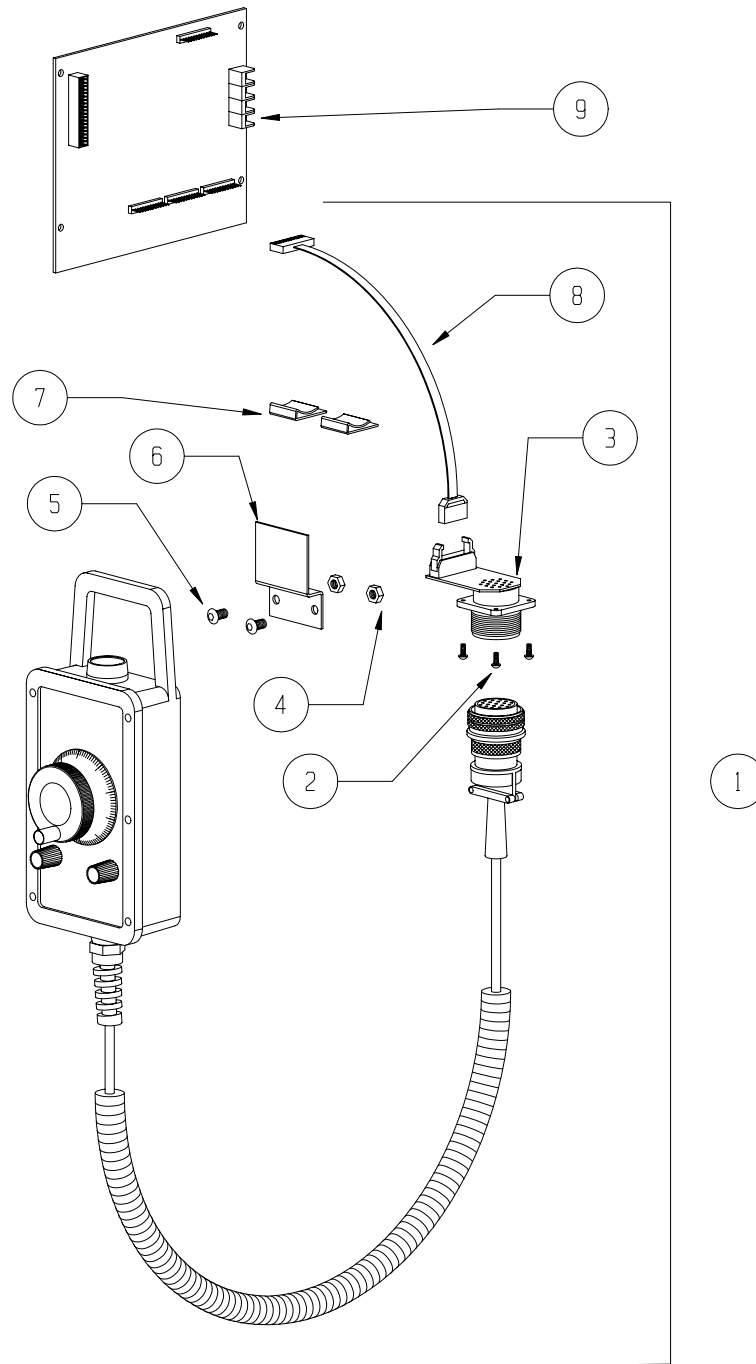




	PART #		PART #		PART #		PART #
1	STM-0129	6	PLM-0115	11	REG-0004	16	PLM-0022
2	HYD-0010	7	PLM-0044	12	REG-0017	17	HYD-0008
3	HYD-0012	8	PLM-0033	13	HYD-0013		
4	PLM-0056	9	PLM-0023	14	HDW-0392		
5	HYD-0009	10	PLM-0036	15	PLM-0034		



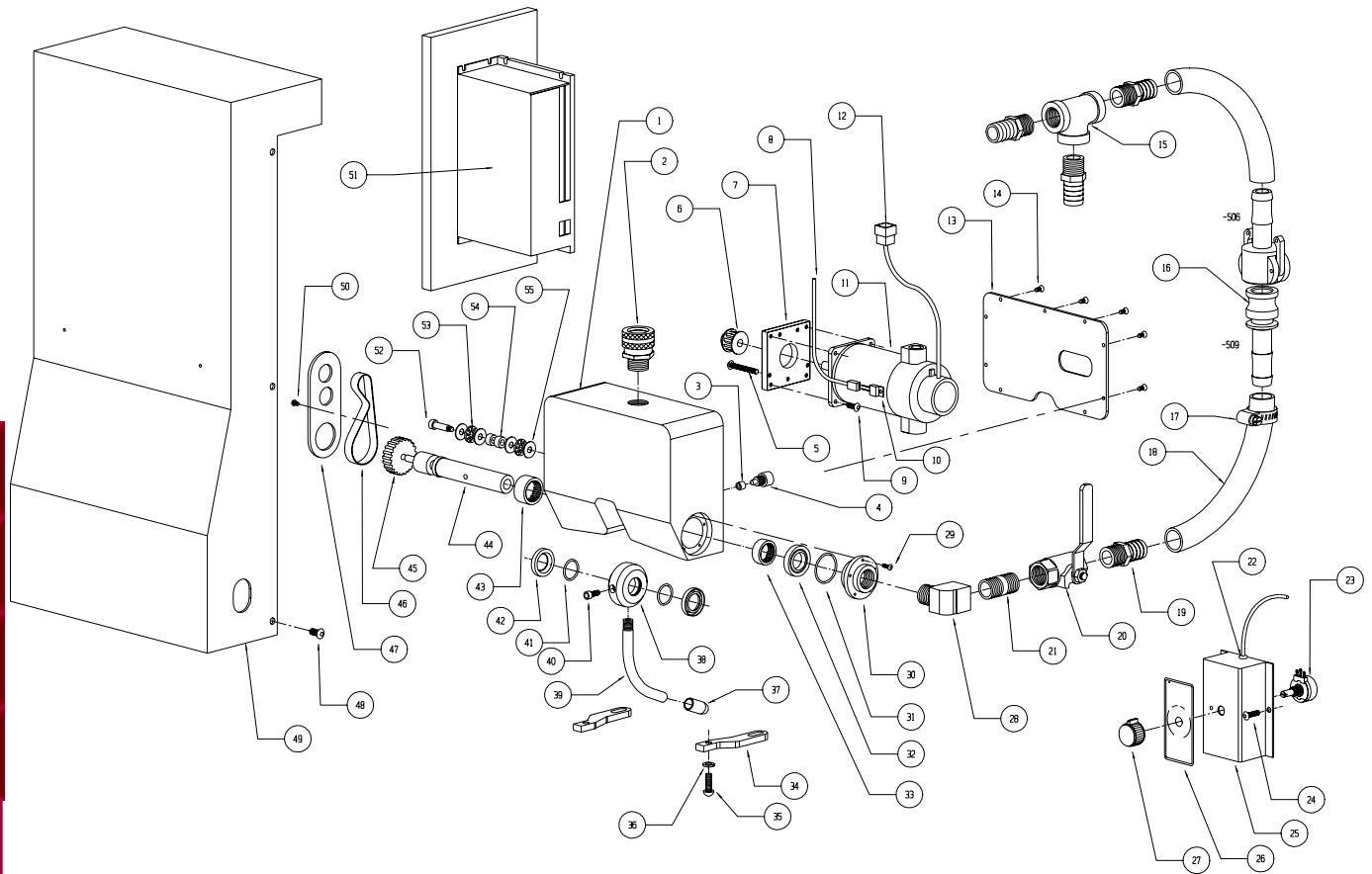
# HYDRAULIC BRAKE



	PART #		PART #		PART #		PART #
1	MPG-0005*	3	MPG-0002	5	HDW-0348	7	WIR-0446
2	HDW-0594	4	HDW-0366	6	STM-0138	8	WIR-0218
						9	PCB-0012
* SUB ASSEMBLIES MPG-0003 BOX AND CABLE ONLY,							
WIR -0538 REPLACEMENT CABLE							
ELE-0080 7 POSITION SELECTOR SWITCH FOR PENDANT (NOT SHOWN)							
SEE STD PENDANT DRAWING FOR LOCATION							



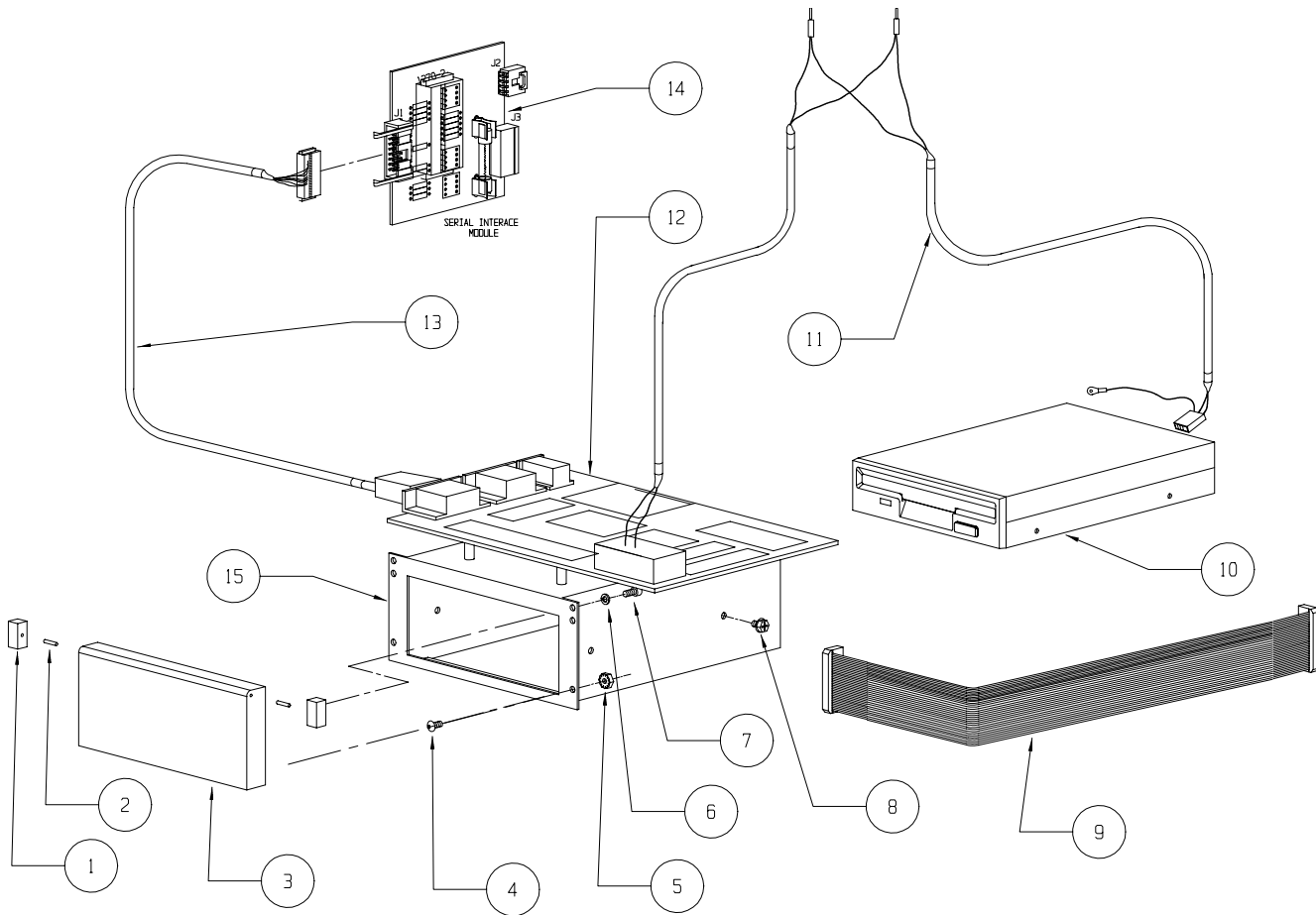
**REMOTE MPG**



	PART #		PART #		PART #		PART #
1	CNT-0138	16	PLM-0020 (FEM)	31	HDW-0697	46	BEL-0028
			PLM-0144 (MAL)				
2	WIR-0517	17	HDW-0253	32	HDW-0757	47	CNT-0158
3	CNT-0157	18	PLM-0014	33	BRG-0160	48	HDW-0346
4	CNT-0156	19	PLM-0104	34	904582	49	STM-0674(4020)
5	HDW-0591	20	VLV-0017	35	HDW-0589		STM-0675(6030)
6	PUL-0038	21	PLM-0092	36	HDW-0279	50	HDW-0593
7	CNT-0159	22	1569	37	CNT-0161	51	AMP-0013
8	WIR-0533	23	ELE-0380	38	CNT-0155	52	HDW-0800
9	HDW-0302	24	HDW-0348	39	CNT-0152	53	BRG-0120
10	ELE-0722	25	STM-0690	40	HDW-0436	54	BRG-0116
11	MTR-0055	26	LBL-0044	41	HDW-0696	55	BRG-0119
12	WIR-0048	27	HDW-0671	42	HDW-0758		
13	CNT-0137	28	PLM-0189	43	BRG-0117		
14	HDW-0325	29	HDW-0540	44	CNT-0153		
15	09199-1208	30	CNT-0154	45	PUL-0039		



**SERVO COOLANT**



	PART #		PART #		PART #		PART #
1	CTR-0078	5	HDW-0649	9	WIR-0659 (STD)	13	WIR-0657
					WIR-0658 (ZIP)		
2	HDW-0855	6	HDW-0453	10	ELE-0168 (STD)	14	PCB-0156
					ELE-0967 (ZIP)		
3	CTR-0079	7	HDW-0508	11	WIR-0660 (STD)	15	STM-0470
					WIR-0656 (ZIP)		
4	HDW-0594	8	HDW-	12	ELE-0966		

# Parts Manual

## VMC OPTIONS VOLUME II



<b>V300 (V400) Rotary Table</b> .....	<b>4</b>
<b>4020 Slant Sheet Metal</b> .....	<b>7</b>
<b>Auger Option</b> .....	<b>9</b>
<b>Auger Washdown System</b> .....	<b>10</b>

**This reference covers the following Fadal products:**

### **VMC OPTIONS VOLUME II**

Corporate Office . . . . . voice (818) 407-1400 . . . . . fax (818) 407-0020  
Service / Parts . . . . . voice (818) 727-2100 . . . . . fax (818) 407-1004  
Programming Support . . . . . voice (818) 727-2100 . . . . . fax (818) 407-0061

[support@fadal.com](mailto:support@fadal.com)

20701 Plummer Street Chatsworth California 91311 U.S. A.

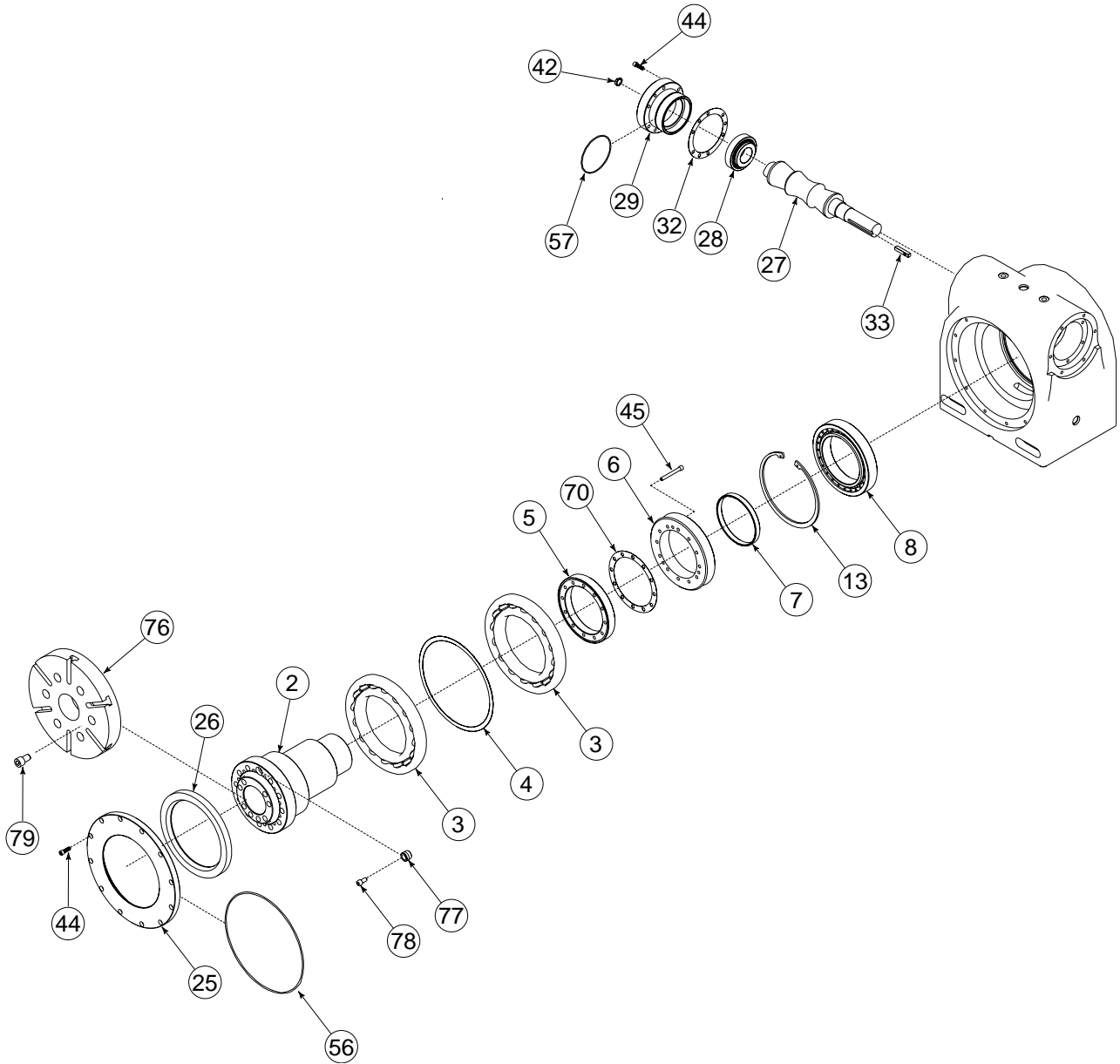
The content of this manual has been reviewed for accuracy and is applicable to current Fadal hardware and software products as described herein. Differences may exist and we cannot guarantee that they are completely covered in this document. The information in this document is reviewed regularly and any necessary changes will be incorporated in the next revision. We welcome any suggestions for improvement.

Material is subject to change without notice.

This manual is for the exclusive use of Fadal Customers and Distributors. The reproduction, transmission or use of this document or its contents is not permitted without the expressed written permission of Fadal Machining Centers. All rights, including rights created by patent grant or registration of a utility, model or design, are reserved.

© Copyright 1999 Fadal Machining Centers.

### 300/400 mm ROTARY TABLE GEAR BOX

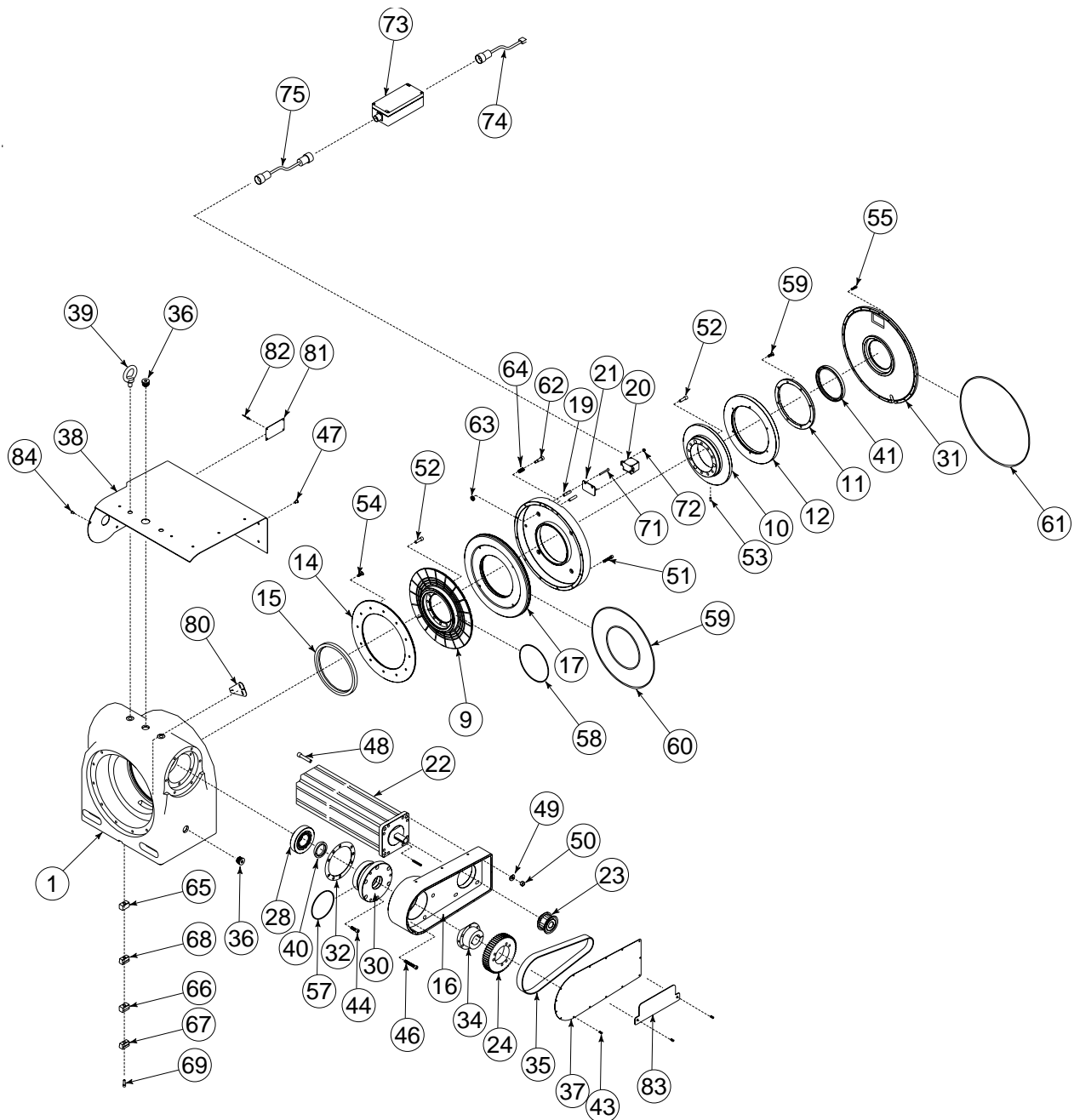


TOC

EXIT

300/400 mm ROTARY TABLE

### 300/400 mm ROTARY TABLE AC MOTOR AND SCALE



300/400 mm ROTARY TABLE



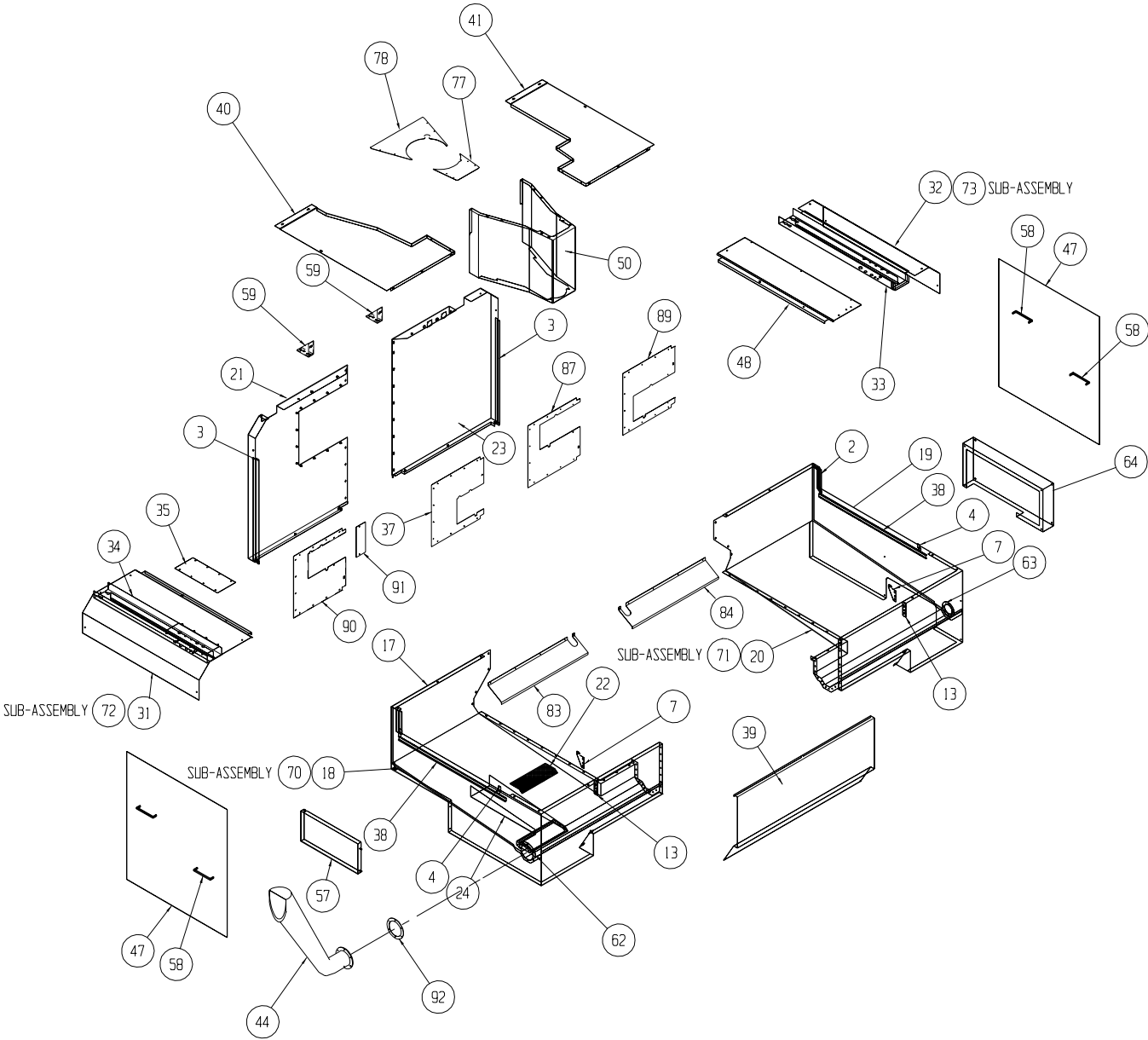
### 300/400mm ROTARY TABLE PART NUMBERS

	PART #		PART #		PART #		PART #
1	ROT-0360	23	PUL-0046	45	HDW-1011	67	ROT-0049
2	ROT-0347	24	PUL-0047	46	HDW-0484	68	ROT-0047
3	BRG-0135	25	ROT-0346	47	HDW-0347	69	HDW-0298
4	ROT-0364	26	HDW-0939	48	HDW-0473	70	HDW-0955
5	ROT-0348	27	ROT-0361	49	HDW-0049	71	HDW-1006
6	ROT-0361	28	BRG-0137,0138	50	HDW-0333	72	HDW-0657
7	ROT-0349	29	ROT-0350	51	HDW-0296	73	SCL-0041
8	ROT-0136	30	ROT-0357	52	HDW-0494	74	SCL-0081
9	ROT-0352	31	ROT-0355	53	HDW-0682	75	SCL-0083
10	ROT-0356	32	HDW-0945	54	HDW-0799	76	ROT-0397
11	ROT-0395	33	ROT-0370	55	HDW-0303	77	ROT-0402
12	SCL-0040	34	PUL-0056	56	HDW-0933	78	HDW-0475
13	HDW-0996	35	BEL-0031	57	HDW-0703	79	HDW-0461
14	ROT-0351	36	HDW-1005	58	HDW-0938	80	STM-0920
15	HDW-0940	37	STM-0723	59	HDW-0936	81	LBL-0286
16	ROT-0358	38	STM-0722	60	HDW-0937	82	SUP-0032
17	ROT-0353	39	HDW-0030	61	HDW-0935	83	LBL-0012
18	ROT-0354	40	HDW-0941	62	HDW-1006	84	HDW-0349
19	HDW-1004	41	HDW-0997	63	HDW-0998		
20	SCL-0040	42	HDW-0222	64	HDW-1007		
21	ROT-0369	43	HDW-0886	65	ROT-0046		
22	MTR-0139	44	HDW-0481	66	ROT-0048		



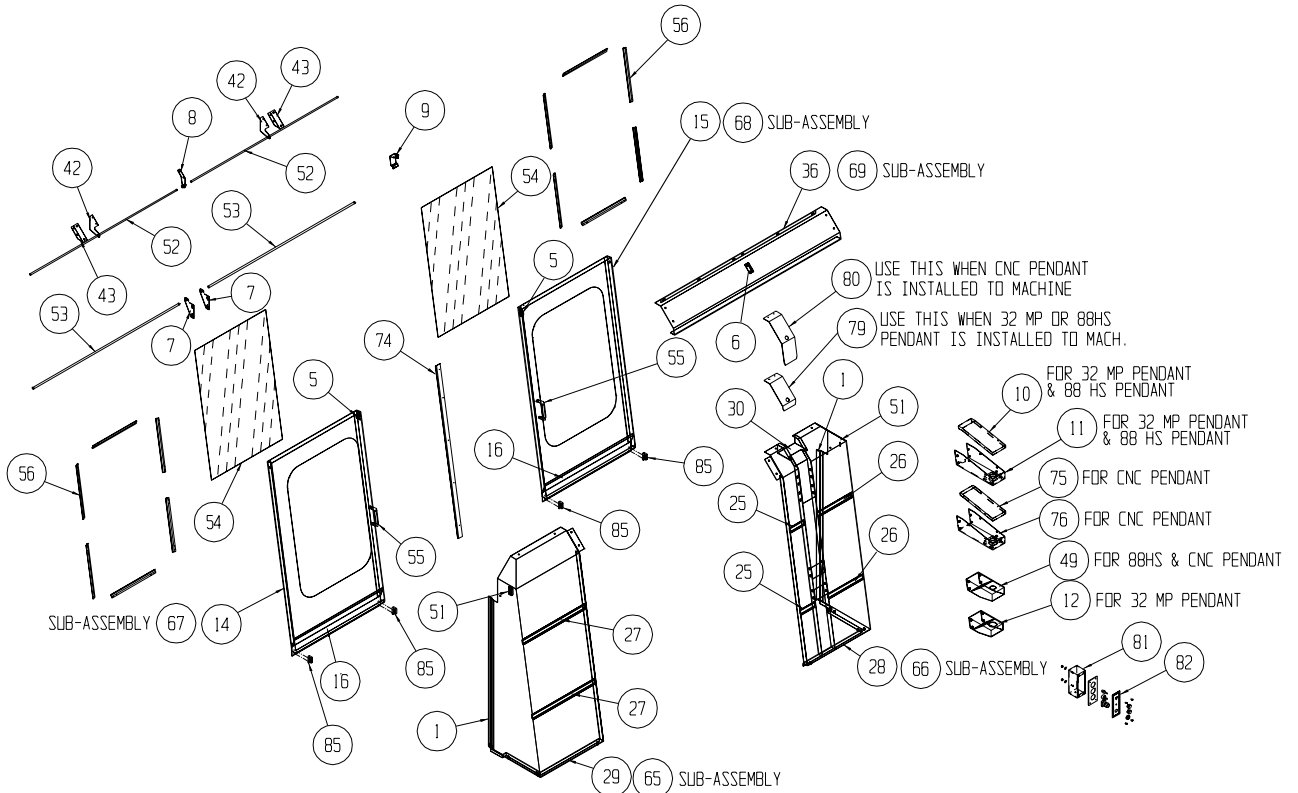
300/400 mm ROTARY TABLE

4020 SLANT SHEET METAL HOUSING



NEW SHEETMETAL

## SLANT SHEET METAL DOOR ASSEMBLY

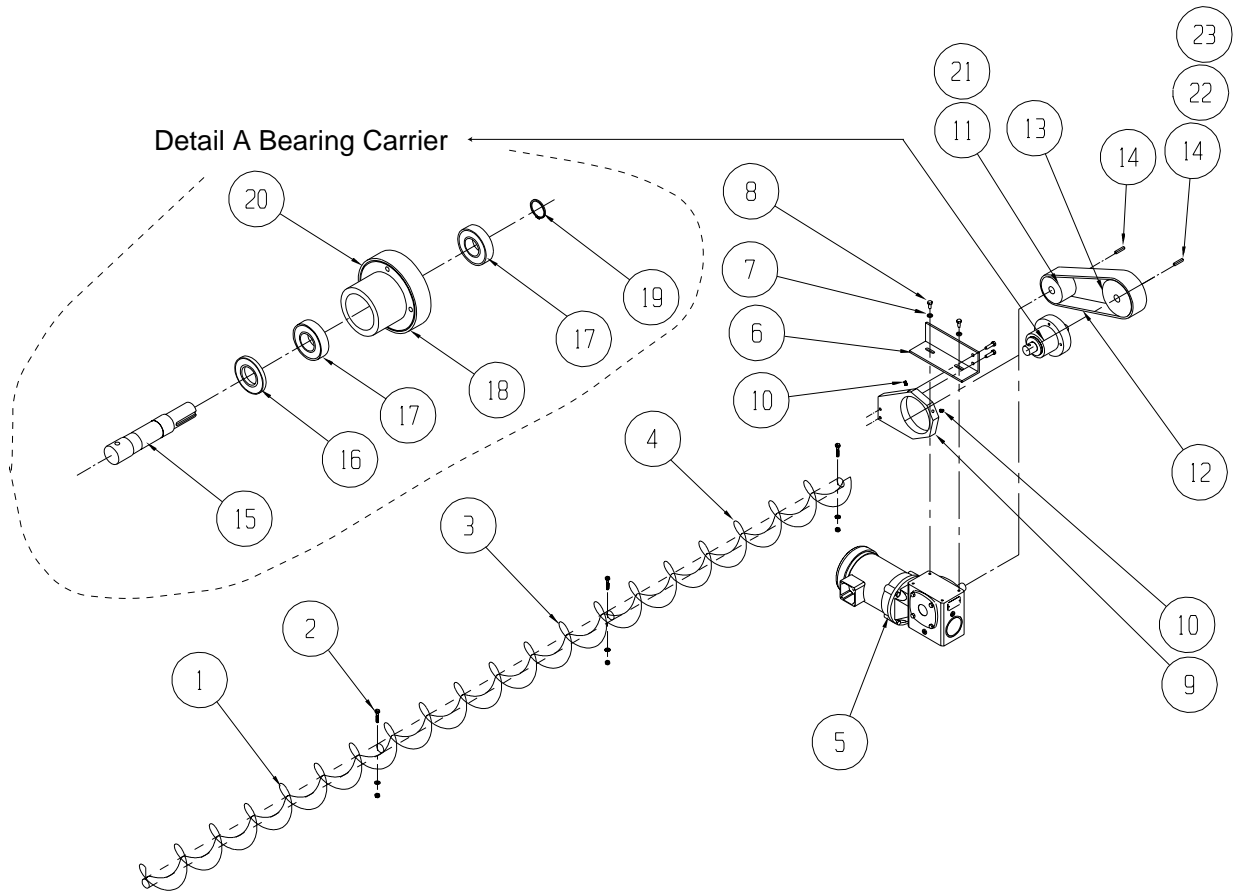


PART #	PART #	PART #	PART #
1 ROT-0360	23 PUL-0046	45 HDW-1011	67 ROT-0049
2 ROT-0347	24 PUL-0047	46 HDW-0484	68 ROT-0047
3 BRG-0135	25 ROT-0346	47 HDW-0347	69 HDW-0298
4 ROT-0364	26 HDW-0939	48 HDW-0473	70 HDW-0955
5 ROT-0348	27 ROT-0361	49 HDW-0049	71 HDW-1006
6 ROT-0361	28 BRG-0137_0138	50 HDW-0333	72 HDW-0657
7 ROT-0349	29 ROT-0350	51 HDW-0296	73 SCL-0041
8 ROT-0136	30 ROT-0357	52 HDW-0494	74 SCL-0081
9 ROT-0352	31 ROT-0355	53 HDW-0682	75 SCL-0083
10 ROT-0356	32 HDW-0945	54 HDW-0799	76 ROT-0397
11 ROT-0395	33 ROT-0370	55 HDW-0303	77 ROT-0402
12 SCL-0040	34 PUL-0056	56 HDW-0933	78 HDW-0475
13 HDW-0996	35 BEL-0031	57 HDW-0703	79 HDW-0461
14 ROT-0351	36 HDW-1005	58 HDW-0938	80 STM-0920
15 HDW-0940	37 STM-0723	59 HDW-0936	81 LBL-0286
16 ROT-0358	38 STM-0722	60 HDW-0937	82 SUP-0032
17 ROT-0353	39 HDW-0030	61 HDW-0935	83 LBL-0012
18 ROT-0354	40 HDW-0941	62 HDW-1006	84 HDW-0349
19 HDW-1004	41 HDW-0997	63 HDW-0998	
20 SCL-0040	42 HDW-0222	64 HDW-1007	
21 ROT-0369	43 HDW-0886	65 ROT-0046	
22 MTR-0139	44 HDW-0481	66 ROT-0048	

NEW SHEETMETAL

TOC  
EXIT

### AUGER CHIP REMOVAL SYSTEM

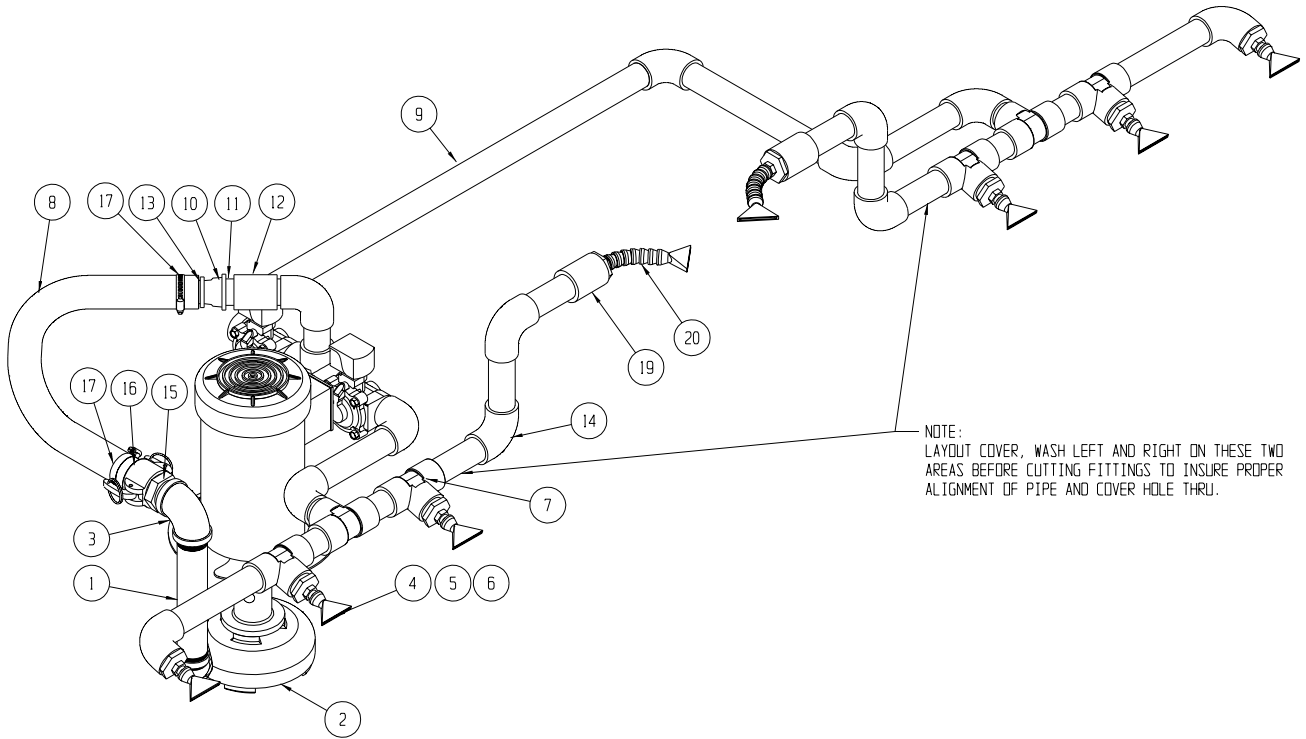


	PART #		PART #		PART #		PART #
1	STM-0910	7	HDW-0280	13	PUL-0053	19	HDW-0995
2	HDW-0317	8	HDW-0568	14	AUG-0001	20	HDW-0170
	HDW-0640	9	AUG-0002	15	AUG-0000	21	PUL-0054
	HDW-0281	10	HDW-0400	16	HDW-0994	22	PUL-0055
3	STM-0809	11	PUL-0052	17	BRG-0029	23	AUG-0001
4	STM-0809	12	BEL-0030	18	AUG-0005		
5	MTR-0152						
6	AUG-0003						



**NEW SHEETMETAL**

SLANT SHEET METAL AUGER WASHDOWN SYSTEM



	PART #		PART #		PART #		PART #
1	PLM-0065	6	PLM-0125	11	PLM-0062	16	PLM-0142
2	PMP-0010	7	PLM-0128	12	PLM-0132	17	HDW-0764
3	PLM-0188	8	PLM-0127	13	PLM-0074	18	VLV-0022
4	PLM-0124	9	PLM-0131	14	PLM-0129	19	PLM-0130
5	PLM-0123	10	PLM-0197	15	PLM-0021	20	PLM-0123

▲  
▼  
TOC  
EXIT

NEW SHEETMETAL