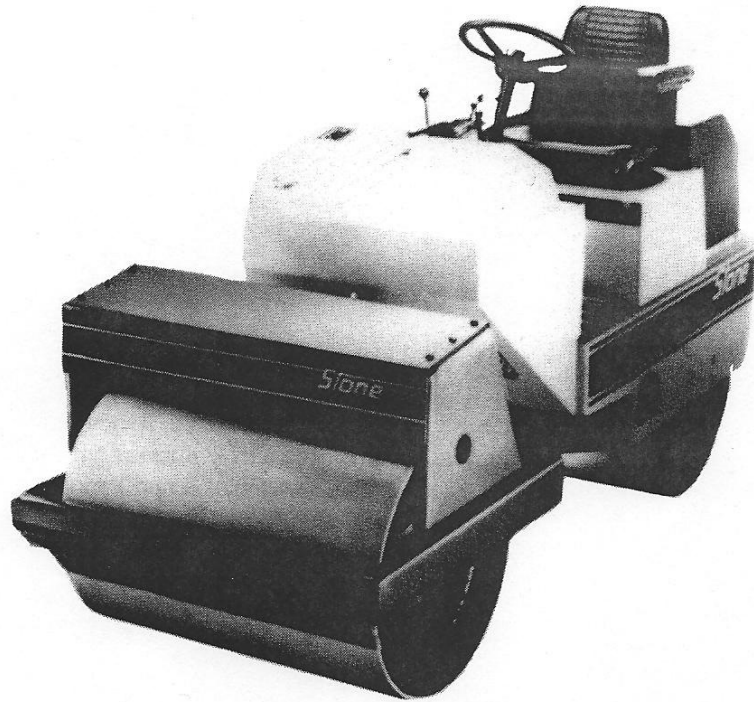




# OWNER'S MANUAL

## MODEL: AVR4000



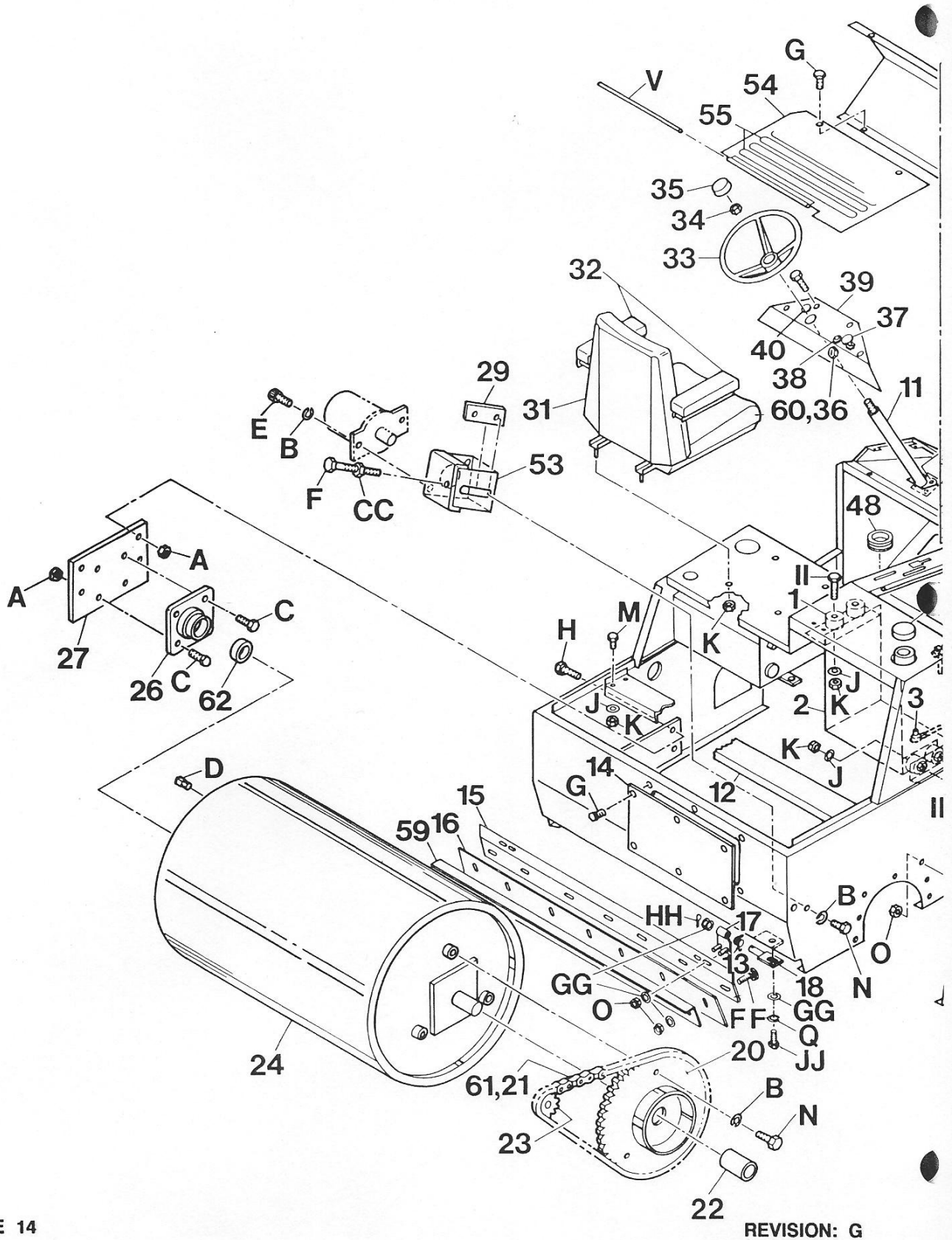
Stone Construction Equipment, Inc.  
P.O. Box 150, Honeoye, New York 14471  
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Brunswick, GA 912-264-5758

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REVISION: G 4/91

P/N 56046





## MAIN FRAME

ITEM	PART NO.	DESCRIPTION	QTY
1	37009	SHOCK MTG PUMPS	4
2	29300-2	TANK WELD GAS	1
3	46009	PET COCK	1
4	47250	HOSE URETHANE 1/4 ID X 1/16 W	2"
5	29745-2	PLATE ACCESS STARTER	1
6	47246	GROMMET RBR 1" ID X 1.25 GD	1
7	34486	FTG 90 EL 1/8 NPT X 1/4 BARB	1
8	38210	CAP FUEL	1
9	47257	GROMMET RBR .69 ID X 1.00 GD	1
10	22482-2	FRM WELD MAIN	1
11	47200	COLUMN STEERING	1
12	29311-2	PLT SPRT WTR TK	1
13	38191	SPR PKG GIBSON 1164-2 RED	2
14	29360-2	PLT COVER DR MTR	1
15	29388-2	PLT SCRAPER	4
16	29010	SCRAPER SLOTTED URETHANE (4)	4
17	29395-2	PIVOT SCRAPER	8
18	29389-2	ROD WELD SCRAPER	8
19	29296-2	PNL WELD SIDE AXCESS	1
20	29344	SPRKT WELD 72TH	1
21	38153	CHAIN SET NO. 80	1
22	28879-2	SPCR DRM RH REAR	1
23	38151	SPRKT H8012 X 1.00	1
24	22532-2	DRUM WELD REAR	1
25	29379	SPCR DRM FNT LH	1
26	32232	BRG BALL FLG 1-1/2 ID	1
27	29025-2	PLT BRG MTG LH REAR	1
29	29162-2	ADJ WELD DR MTR	1
30	47203	SHOCK MOUNT	4
31	47195	SEAT ASSY	1
32	38143	ARM REST (SET RH & LH)	1
33	47197	WHEEL STEERING	1
34	47217	NUT WHEEL STEERING	1
35	47218	CAP WHEEL STEERING	1
37	41002	CABLE STOP THROT	1
39	29743-2	PANEL STR COVER	1
40	36268	HOUR METER	1
41	29158-2	PNL FLR COMFORT ANGLE	1
42	29002-2	PNL FLR SIDE	1
43	29001-2	PNL WELD TOP AXCESS	1
44	38111	LATCH LVR ADJ	1
45	22472-2	PIN WELD PIVOT ART/OSC	2
46	22437-2	HNG WELD ART/OSC	1
47	22438-2	FRM WELD FRT	1
48	47247	GROMMET RBR 2" ID	2
49	29008-2	COVER ECC HSG	1
50	22475-2	FRM WELD ECC HSG	1
51	22531-2	DRUM WELD FNT	1

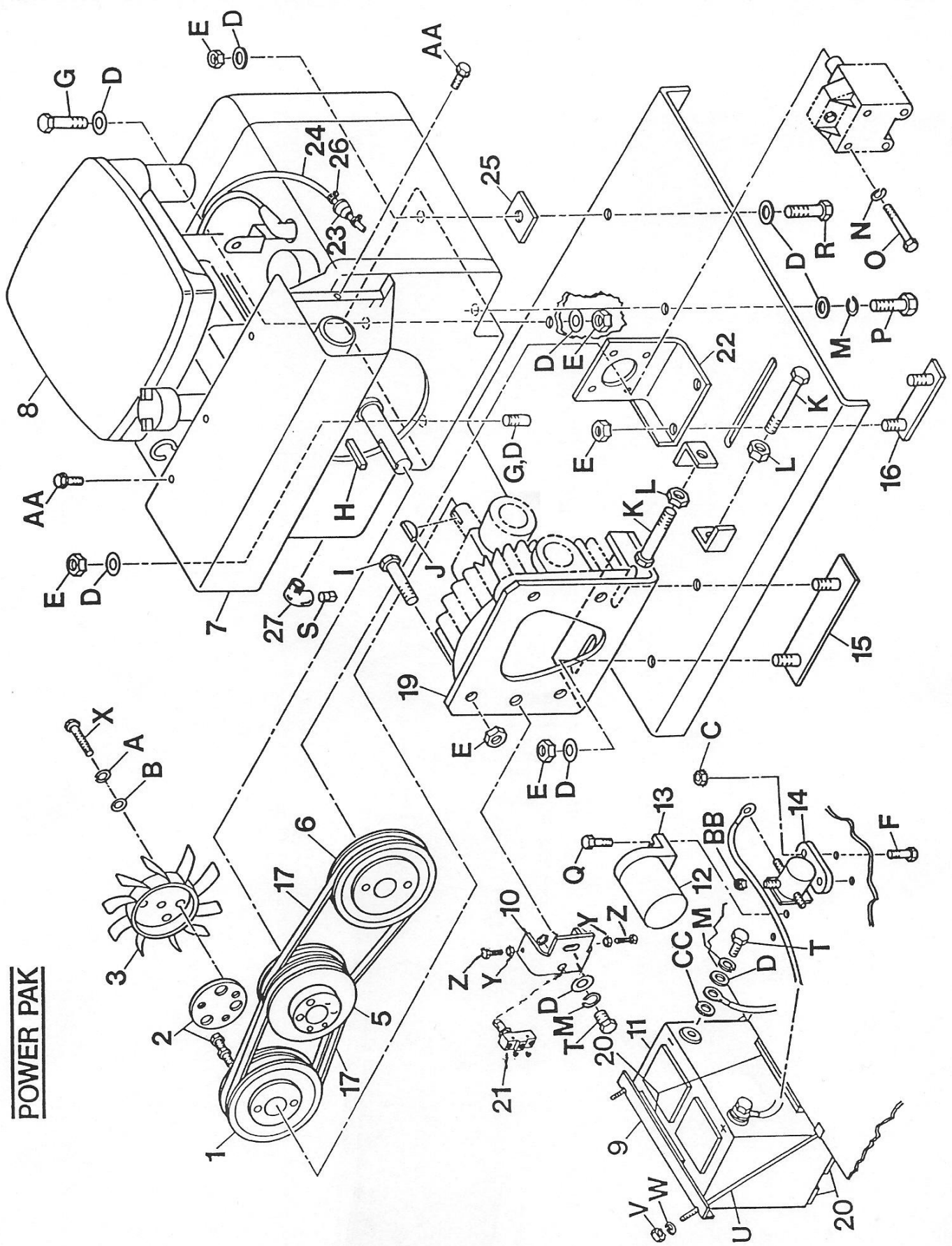
ITEM	PART NO.	DESCRIPTION	QTY
52	28986	SPCR DRM RH FNT	1
53	22470-2	MTG WELD DR MTR	1
54	29228-2	PNL WELD FLR AXCESS BAT	1
55	29298	SKID TRED MOD	1
56	32236	BRG BALL FLG 2" ID	2
57	46042	FITTING 1641B	8
58	47001	CAPLUG BLUE	8
59	29387-2 <i>4</i>	BACKER SCRAPER	4
60	42280	CONN ELEC FEMALE 5 CONN	1
61	34536	LINK HALF NO 80	1
	34537	LINK CONN NO 80	1
62	29124-2	SPCR DRUM REAR LH	1

*29388-2*

**HARDWARE**

ITEM	PART NO.	DESCRIPTION	QTY	TORQUE (FT.LBS)
A	80051	NUTNY 1/2-13	14	49
B	80117	WSHRL 1/2 MED SPLIT	9	-
C	80089	HHCS 1/2-13 X 1-3/4	4	49
D	46172	PLUG PIPE 1 NPT SKT HD	4	-
E	80569	SHCS 1/2-13 X 1-1/2	2	49
F	80551	HHTB 1/2-13-X 2.5	1	49
G	80085	HWHTB 5/16-18 X 1 THDFRM	10	11
H	80578	HHCS 1/2-13 X 3	4	49
I	80290	FHSCS 3/8-16 X 1-1/4	17	20
J	80348	WSHR 5/16 WROT USS ZINC	8	-
K	80114	NUTNY 5/16-18	12	11
L	80145	HHCS 3/8-16 X 1-1/4 GR 2	4	20
M	80456	FHSCS 5/16-18 X 1-1/4	4	11
N	80075	HHCS 1/2-13 X 1-1/2 GR 2	5	49
O	80056	NUTNY 3/8-16 ZN	51	20
P	80027	NUTFL 1-1/14	2	60
Q	80058	WSHRL 3/8 MED SPLIT	26	-
R	80102	HHCS 3/8-16 X 1 ZN	8	20
S	80539	SHCS 3/8-16 X 2-1/2	8	20
T	80031	HWHTB 1/2-13 X 1-1/2 THDFRM	4	49
U	29132	PIN HNG 3/16 X 19-1/2	1	-
V	29362	PIN HNG 3/16 X 18-1/4	1	-
W	80125	WSHR 17/32 X 1-1/16	6	-
Y	80577	HHCS 5/8-11 X 2	6	97
Z	80082	NUTNY 5/8-11 ZINC	8	97
AA	80338	SHR 1 IN WROT	2	-
BB	80585	SHCS 5/8-11 X 2	2	97
CC	80563	NUTJM 1/2-13ZN 1/2 HGTH	1	49
DD	80586	HWHTB 5/16-18 X 1/2	4	11
FF	80587	CRBLT 3/8-16 X 1	28	20
GG	80043	WSHR 3/8 SAE	52	-
HH	80424	PINCT 1/8 X 3/4	8	-
II	80163	HHCS 5/16-18 X 1-1/2	4	20
JJ	80088	HHCS 3/8-16 X 1-1/4 GR 8	8	44
KK	80517	FHSCS 5/26-28 X 3/4 BLK	2	-

**POWER PAK**



ITEM	PART NO.	DESCRIPTION	QTY
1	38076	SHV 2GR 4.12 x 3/4	1
2	29353	SPACER FAN MTG	1
3	35936	FAN HYD 7 IN 10 BLDCCW	1
4	38470	BELT 3V280	2
5	38075	SHV 3V 3GR 4 12 X 1-7/16	1
6	41000	SHV 1GR 4.75 X 7/16	1
7	29180-2	DUCT WELD ENG	1
8	30223	ENGINE GAS 20HP KOHLER	1
9	28543-2	CLAMP BATTERY	1
10	29758-2	BRKT WELD NEUT SW	1
11	38543	BATTERY	1
12	38644	MUFFLER WELD	1
13	38646	CLAMP MUFFLER	1
14	38645	MANIFOLD	1
15	47250	HOSE URETHANE 1/4ID 1/16W	2.6'
16	29604-2	PLT SPRT BRKT D6	1
17	38499	BELT 3V250	1
19	22478-2	BRKT WELD MTG MOD II	1
20	47244	RBR 60 DURO 1.5 X 6.75	5
21	36290	SWITCH NEUTRAL SAFETY	1
22	29463-2	BRKT WELD MTG D6	1
23	29459-2	BRKT MTG DECK	2
24	47272	HOSE FUEL LINE .25 OD	4'
25	29462-2	BRKT MTG FILTER	1
26	34089	CLAMP HOSE	2
27	46054	ELBOW STREET 90 3/8 NPT	1
	38456	AIR FILTER ELEMENT (not shown)	1
	38457	PRECLEANER (not shown)	1
	38532	SPARK PLUG (not shown)	1

ITEM	PART NO.	DESCRIPTION	QTY	TORQUE (FT LBS)
A	80116	WSHRL 1/4 MED SPLIT	3	-
B	80347	WSHR 1/4 WROT	3	-
C	26325	WSHR 3/8 X 1OD X 3/16T	2	-
D	80342	WSHR FLAT 3/8 SAE	18	-
E	80056	NUTNY 3/8-16	21	20
G	80176	HHCS 3/8-16 X 1-1/2	5	20
H	80121	KEY 3/8 X 3/8 X 1-1/2 (INCL. W/#5)	1	-
I	80181	HHCS 3/8-16 X 2-1/2	4	20
J	80444	KEY #9 WOODRUFF	1	-
K	80540	HHTB 3/8-16 X 3 GR 5	2	31
L	80042	NUTFX 3/8-16	2	20
M	80058	WSHRL 3/8 MED SPLIT	15	-
N	80086	WSHRL 5/16 MED SPLIT	4	-
O	80640	HHCS 5/16-18 X 3-3/4	4	11
P	80145	HHCS 3/8-16 X 1-1/4	1	20
Q	80085	HWHTB 3/8-16 X 1 THDFRM	2	11
S	46110	PLUG PIPE 3/8 (Incl. w/#8)	1	-
T	80374	HHCS 3/8-16 X 3/4	3	20
U	80630	THDRD 5/16-18 X 10-1/2"	2	-
V	80114	NUTNY 5/16-18	4	11
W	80348	WSHR 5/16 WROT USS	4	-
X	80154	HHCS 1/4-20 X 1-1/4	3	11
Y	80246	NUTKP 5/16-18	2	11
Z	80451	HHTB 5/16-18 X 1-1/4	2	-
AA	80567	HWHTB 1/4-20 X 3/8	6	5.5
BB	80256	NUTFX 10-32 ZINC	1	-
CC	26325	WSHR 3/8 X 1 OD	2	-



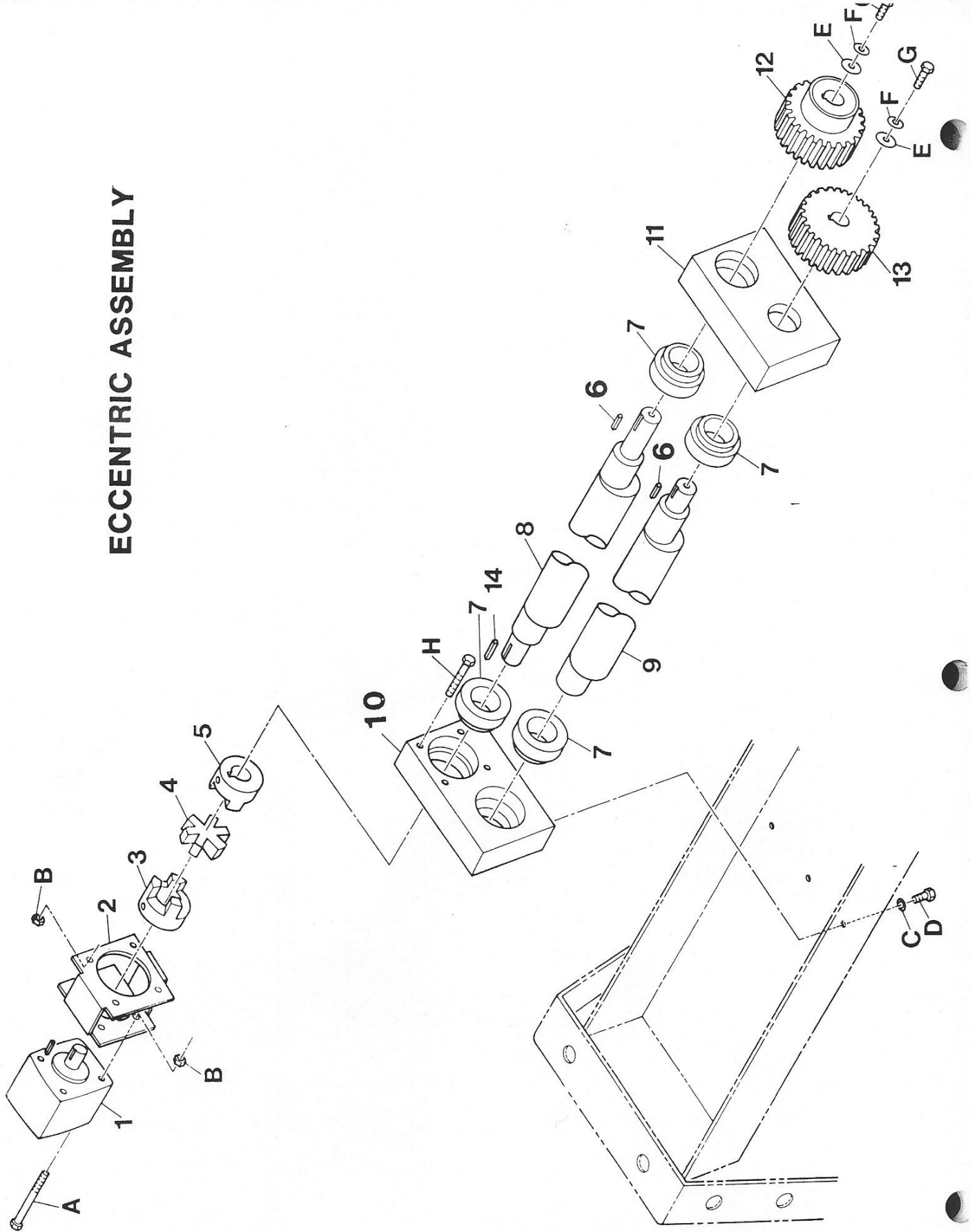
## CONTROL LEVERS

ITEM #	PART NO.	DESCRIPTION	QTY
1	38136	CONT MORSE THROT	1
2	38171	CONT FOR/REV	1
3	29760-2	LVR WELD FOR/REV	1
4	29164-2	ROD LINK FOR/REV	1
5	29347-2	LEVER OUTPUT FOR/REV	1
6	35925	CLEVIS	1
7	38095	LEVER BK CONT	1
8	47240	COVER SLOT RBR	2
9	41003	CABLE ASSY BRK	1
10	41007	CLAMP CONDUIT	1
11	41006	COLLAR STOP	1
12	41005	CABLE .078 STRAND 46 IN	1
13	41004	CONDUIT 30 L THROT 46 IN	4'

### HARDWARE

ITEM #	PART NO.	DESCRIPTION	QTY	TORQUE (FT LBS)
A	80434	HHCS 1/4-20 X 3/4	2	5.5
B	80236	NUTKP 1/4-20 ZINC	2	5.5
D	80086	WSHRL 5/16-MED SPLIT ZN	4	-
E	80567	HWHTB 1/4-20 X 3/8	2	11
F	80163	HHCS 5/16-18 X 1-1/2	4	11
G	80342	WSHR 3/8 SAE	4	-
H	80051	NUTNY 1/2-13	1	4.9
L	80015	KEY WOODRUFF #10 HARD	1	-
M	80461	HWTB 10-32 X 1/2 THDFRM	5	3.5
N	80169	HHCS 5/16-18 X 2 GR 2 ZN	2	11
O	80114	NUTNY 5/16-18	2	11
P	80312	PINCT 3/32 X 3/4	2	-
Q	80609	RHSMS 8-32 X 5/16	1	-

# ECCENTRIC ASSEMBLY



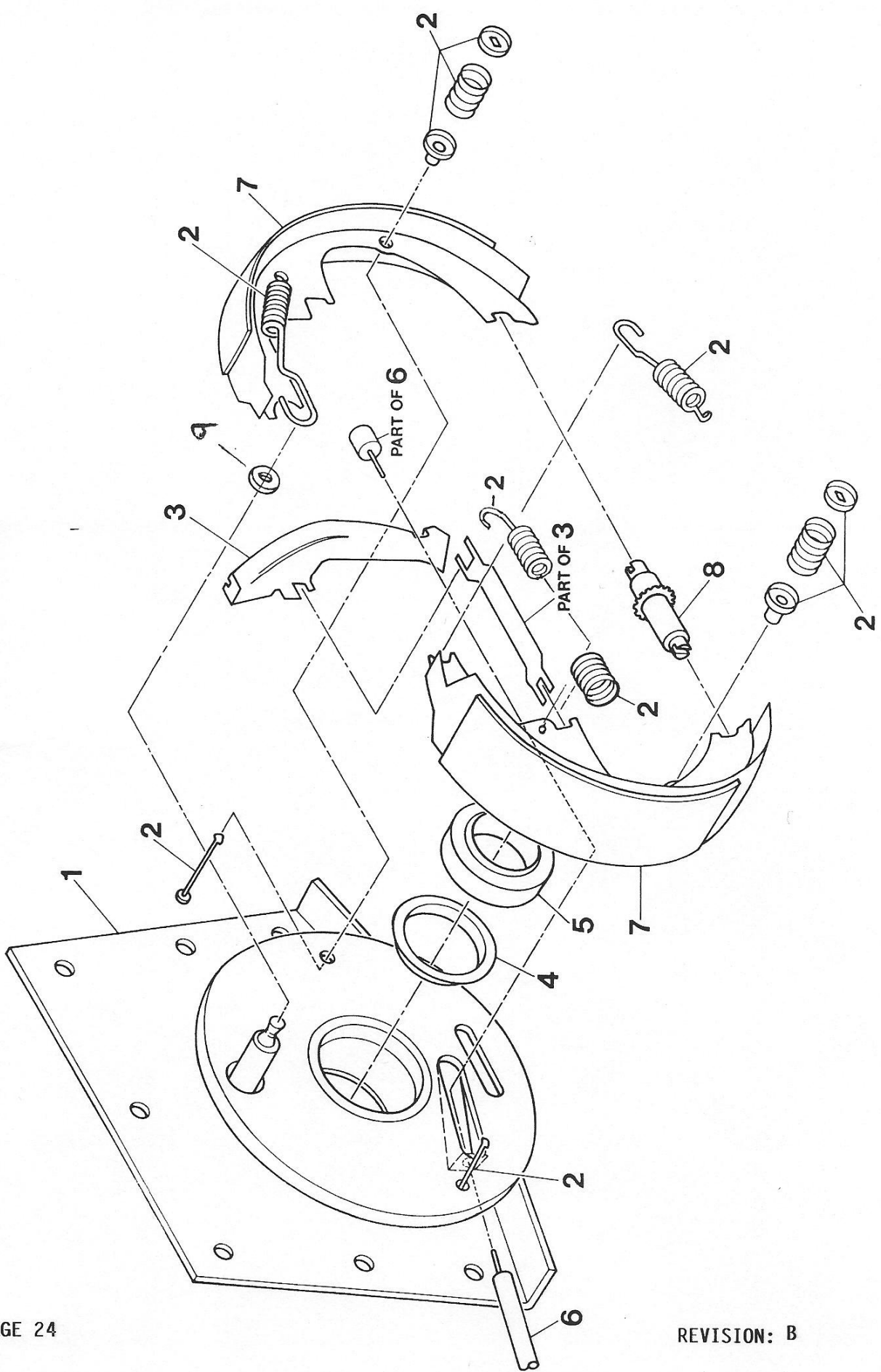
## ECCENTRIC ASSEMBLY

ITEM #	PART NO.	DESCRIPTION	QTY
1	38082	MOT HYD DM4	1
2	22471-2	MTG WELD DM4	1
3	38079	CPLG JAW L-090 X .437	1
4	38081	INSERT SOX LO90	1
5	38080	CPLG JAW L-090 X .750	1
6	80100	KEY 1/4 X 1/4 X 1	2
7	32003	BEARING RA108CZRSAW	4
8	22527-2	ECC WELD/MACH	1
9	22528-2	ECC WELD/MACH	1
10	29341-2	HSG BRG ECC LH	1
11	29342-2	HSG BRG ECC RH	1
12	38077	GEAR STL ECC	1
13	38078	GEAR FIB ECC	1
14	80060	KEY 3/16 X 3/16 X 1	1

### HARDWARE

ITEM #	PART #	DESCRIPTION	QTY	TORQUE (FT LBS)
A	80640	HHCS 5/16-18 X 3-3/4	4	11
B	80114	NUTNY 5/16-18	8	11
C	80117	WSHRL 1/2 MED SPLIT ZN	6	-
D	80104	HHCS 1/2-13 X 1-1/4 GR 2	6	49
E	80564	WSHR 3/8 X 1-1/4	2	-
F	80058	WSHRL 3/8 MED SPLIT	2	-
G	80374	HHCS 3/8-16 X 3/4	2	20
H	80579	HHCS 5/16-18 X 2-1/4	4	11

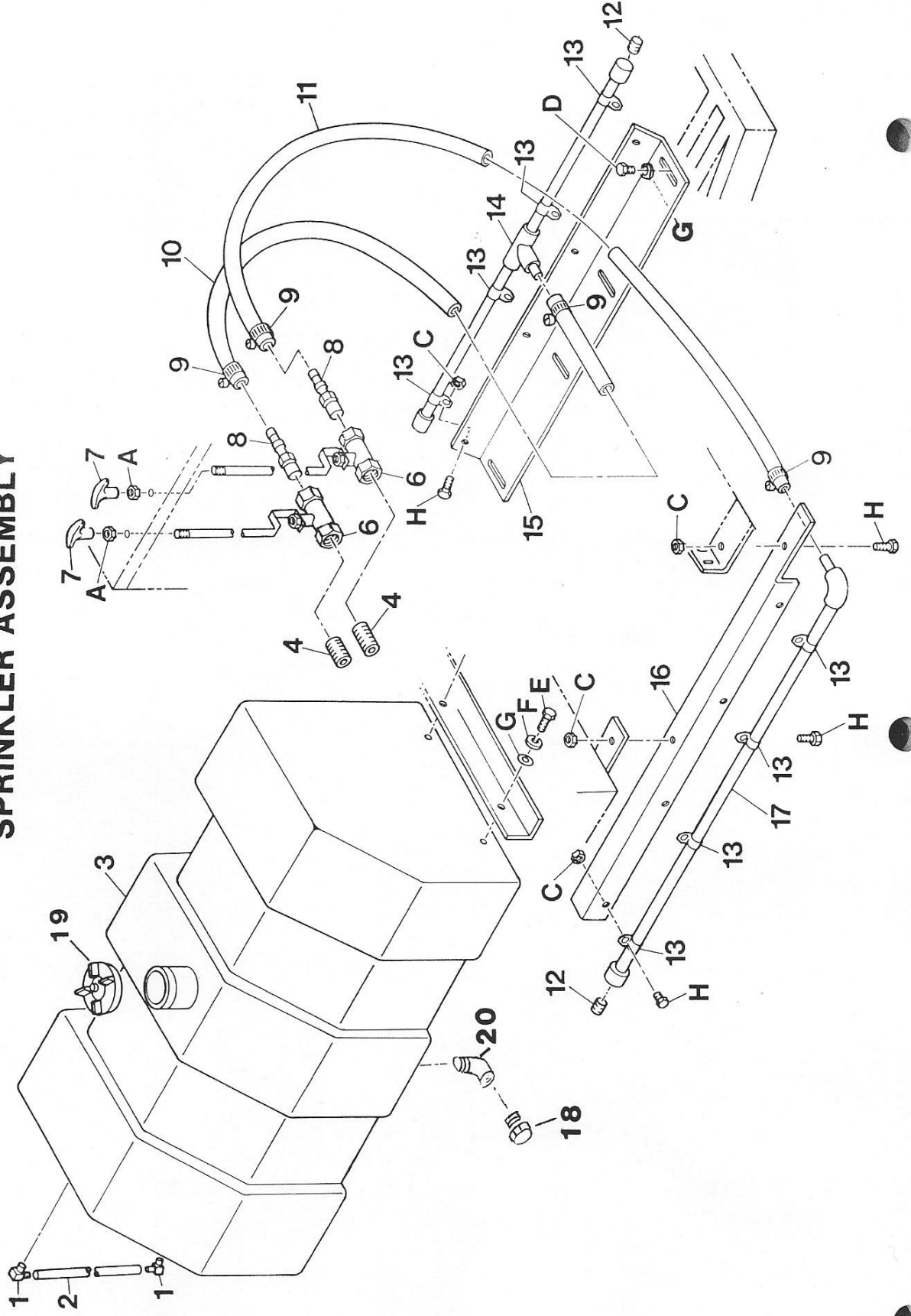
# BRAKE ASSEMBLY



BRAKE ASSEMBLY

ITEM #	PART NO.	DESCRIPTION	QTY
1	22441-2	PLT WELD BRAKE	1
2	22546	KIT GIBSON SPR & PIN	1
3	38101	LVR/BAR PRK BK	1
4	28898-2	CAP BRG BRK PLT	1
5	32003	BEARING RA 108C2RSAW	1
6	41003	CABLE ASSY BRAKE	1
7	22547	SHOES BRAKE SET	1
8	22548	KIT GIBSON STAR WHL	1
9	80342	WSHR FLAT 3/8 SAE	1

# SPRINKLER ASSEMBLY

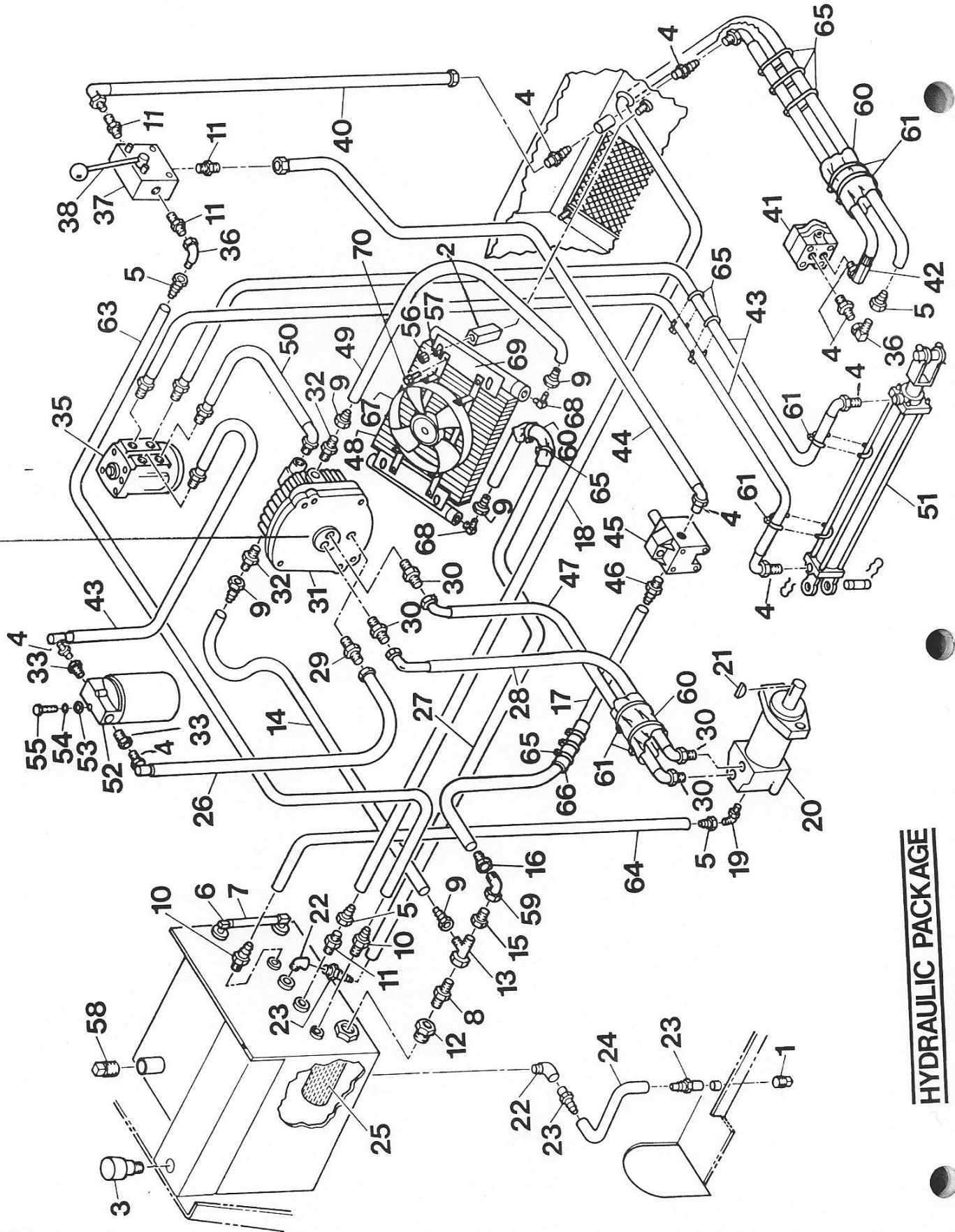


### SPRINKLER ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY
1	34486	FTG 90 EL 1/8 NPT X 1/4 BARB	2
2	47250	HOSE URETHANE 1/4 ID 1/16W	15"
3	47232	TANK WATER	1
4	46142	NIPPLE 1/2 NPT X 4-1/2 LG	2
6	29179-2	VALVE/ROD ASSY	2
7	47242	KNOB T-HANDLE	2
8	46146	ADAPTER 1/2 NPT POLY	2
9	35447	CLAMP WORM DRIVE 1 IN NOM	4
10	90359	HOSE WATER BLACK 5/8 ID	6'
11	90359	HOSE WATER BLACK 5/8 ID	2'
12	46113	PIPE PLUG 3/8	2
13	35449	CLAMP CABLE 3/4 IN	8
14	29169	SPRNK ASSY FNT	1
15	29173-2	PLT SPRNK MTG FNT	1
16	29174-2	BRKT SPRNK MTG REAR	1
17	29171	SPRNK ASSY REAR	1
18	38177	PLUG PVC 2 NPT	1
19	47241	CAP PLSTC 3-1/2 WTR	1
20	38181	ELBOW PVC 90 2IN SP X T	1

ITEM	PART #	DESCRIPTION	QTY	TORQUE (FT LBS)
A	80042	NUTFX 3/8-16	2	20
C	80114	NUTNY 5/16-18	10	11
D	80085	HWHTB 5/16-18 X 1 THDFRM	4	11
E	80145	HHCS 3/8-16 X 1-1/4 GR 2	4	44
F	80058	WSHRL 3/8 MED SPLIT	4	-
G	80342	WSHR FLAT 3/8 SAE	8	-
H	80161	HHCS 5/16-18 X 1	10	11

SEE PAGE 37 FOR BY-PASS DIAGRAM



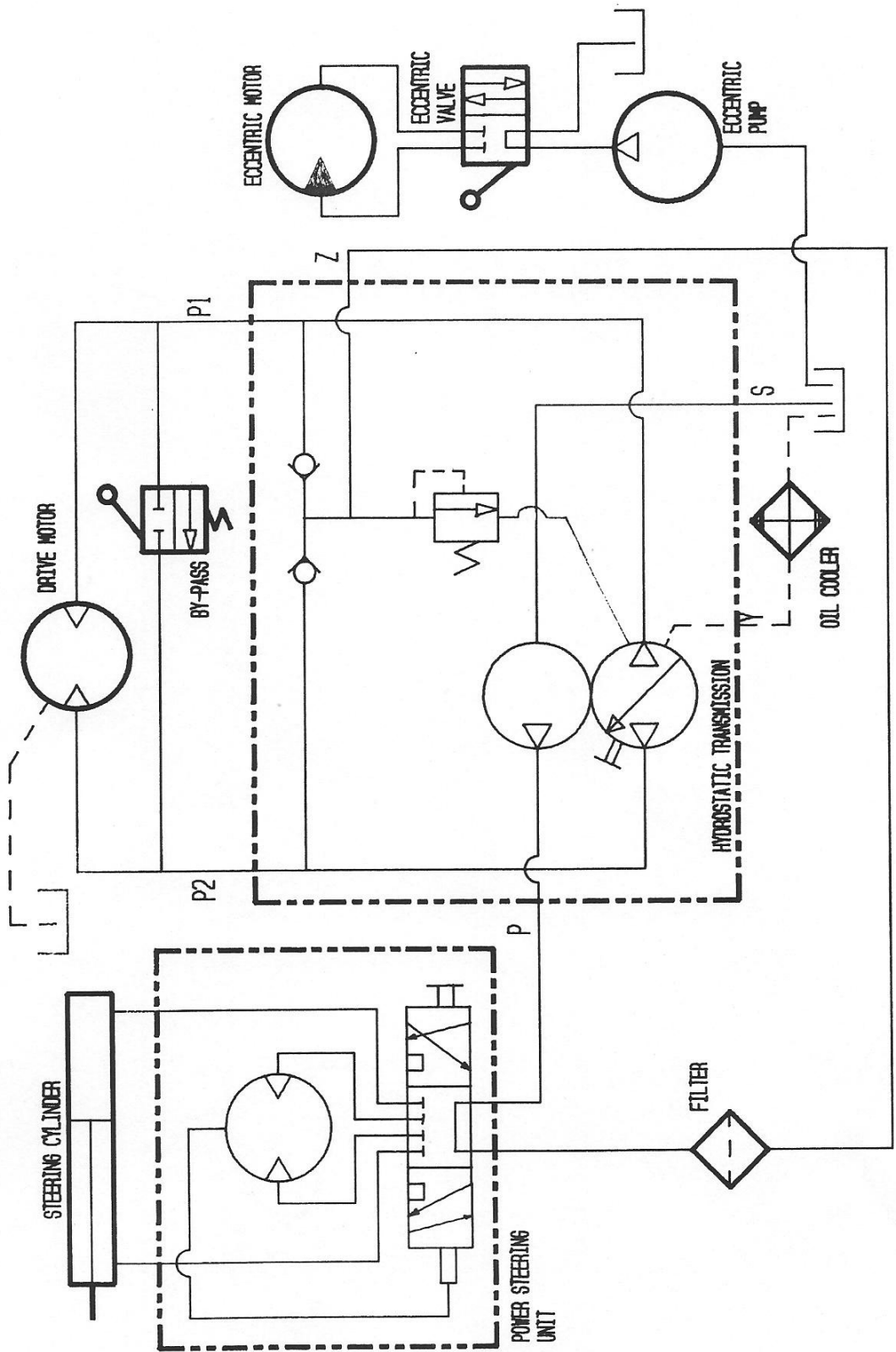
**HYDRAULIC PACKAGE**

## HYDRAULIC PACKAGE

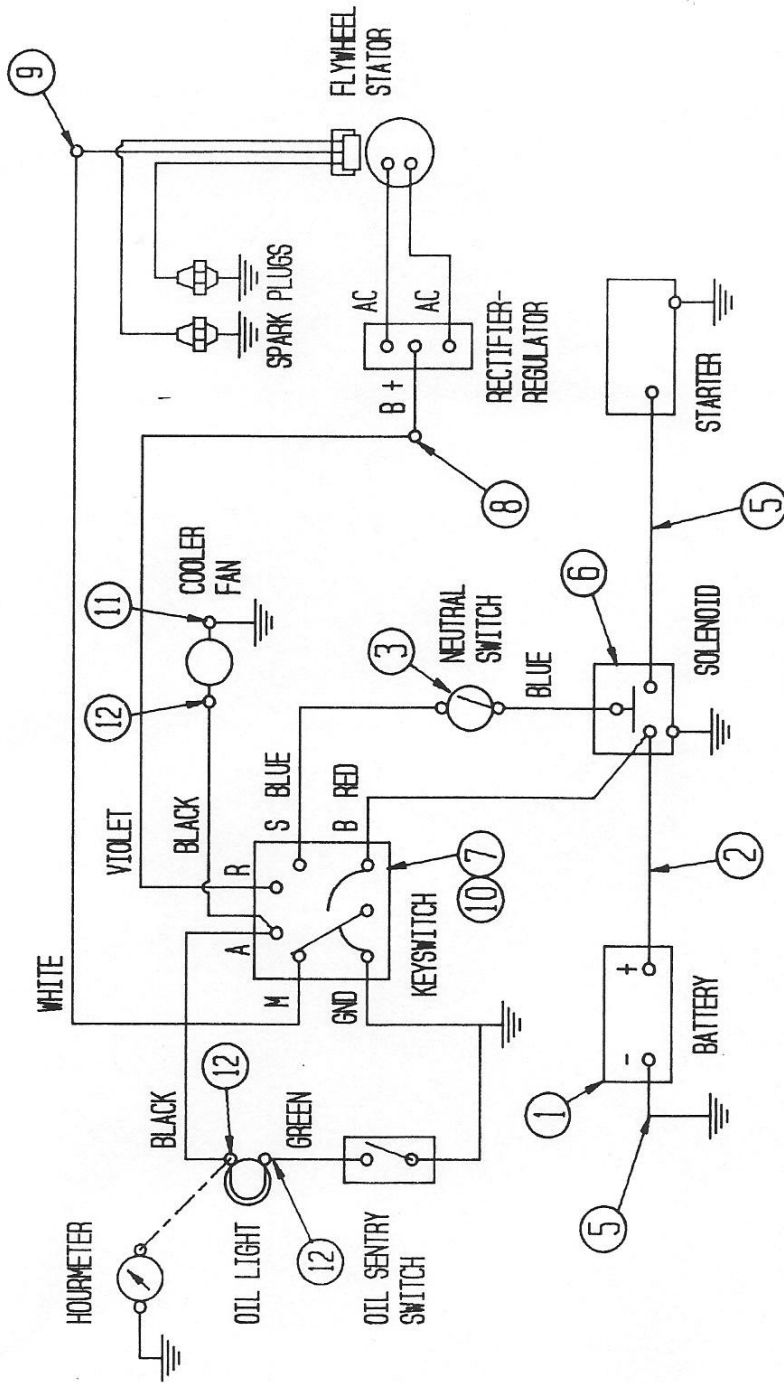
ITEM	PART NO.	DESCRIPTION	QTY
1	46107	PLUG PIPE 1/2 NPT SQ HD	1
2	38627	RUBBER MOUNT COOLER	4
3	35483	CAP BREATHER & FILLER	1
4	46181	FTG HYD ST 3/8 MPT 9/16 MF	9
5	46175	FTG HYD 9/16 FMSW X 3/8 H BARB	4
6	34486	FTG 90 EL 1/8 NPT X 1/4 H BARB	2
7	47250	HOSE URETHANE 1/4 ID 1/16 W	.55'
8	46179	FTG HYD ST 1/2 MPT 7/8MF	1
9	46125	FTG HYD 7/8 JSW X 5/8 H BARB	5
10	46136	FTG HYD 3/8 NPT X 3/8 H BARB	2
11	46174	FTG HYD STR 1/2 NPT X 9/16 J	4
12	46156	BSHG RDCR 1-1/4 NPT X 1/2 NPT	1
13	46180	FTG HYD TEE 7/8 FSW 7/8 MF	1
14	46131	HOSE HYD LOW PRESS 5/8 ID	1.5'
15	46178	FTG ADPT 7/8 FM X 3/4 ST J	1
16	47235	FTG HYD 3/4 JSW X 1/2 H BARB	1
17	47237	HOSE HYD LOW PRESS 1/2 ID	2'
18	46137	HOSE HYD LOW PRESS 3/8 ID	9'
19	46182	FTG HYD EL 7/16 OR X 9/16 J	1
20	38093	MTR HYD DR	1
21	80570	KEY WOODRUFF 1/4 X 1	1
22	46112	ELBOW ST 90 DEG 1/2 NPT	2
23	46132	FTG HYD 1/2 NPT X 5/8 H BARB	3
24	46131	HOSE HYD LOW PRESS 5/8 ID	1.5'
25	35482	STRAINER SL 25 GPM	1
26	46435	HOSE 3/8 NL X 9/16 FJ 31 IN	1
27	46131	HOSE HYD LOW PRESS 5/8 ID	4
28	46421	HOSE 3/4RJ X 3/4 RJL 52 IN	1
29	46115	FTG HYD STR 9/16 J X 9/16 OR	2
30	46197	FTG HYD STR 3/4 J X 7/8 OR	4
31	38746	PUMP HYF 1.15 CIR CW	1
32	46124	FTG HYD STR 7/8 J X 7/8 OR	2
33	46122	BSHG RDCR 3/4 NPT X 3/8 NPT	2
35	35439	STEERING CONTROL UNIT	1
36	46119	FTG HYD EL 9/16 JSW 9/16 J	2
37	46171	VALVE HYC ECC CONT	1
38	29150	HANDLE ECC CONTROL	1
40	46466	HOSE 9/16 RJJ X 9/16 RJ 48 IN	1
41	38082	MOT HYD DM4	1
42	46433	HOSE 9/16 RJ X 9/16 RJ 48 IN	1
43	46434	HOSE 9/16 RJ X 9/16 OS 70 IN	33
44	46377	HOSE 9/16 RJ X 9/16 FJ 40 IN	1
45	38550	PUMP HYD D6	1
46	47236	FTG HYD 3/8 NPT X 1/2 H BARB	1
47	46420	HOSE 3/4 RJ X 3/4 RJ 52 IN	1

ITEM	PART NO.	DESCRIPTION	QTY
48	38446	COOLER HYD DB	1
49	46131	HOSE HYD LOW PRESS 5/8 ID	4.5'
50	46163	HOSE 9/16 OS X 9/16 OL 52IN	1
51	38084	CYL HYD ART STR	1
52	35444	FILTER HYDRAULIC ASSY	1
	35445	CARTRIDGE HYD FILTER	1
53	80571	WSHR FLAT 1/4 SAE	1
54	80116	WSHRL 1/4 MED SPLIT ZN	2
55	80434	HHCS 1/4 - 20 X 3/4	2
56	80114	NUTNY 5/16-18 ZN	4
57	80348	WSHR 5/16 FLAT	4
58	46065	Plug Pipe 3/4 NPT	1
59	46123	FTG HYD EL 3/4 J X 3/4 JSW	1
60	38206	HOSE WRAP 2.5ID POLY	3 @ .5'
61	47198	TYTON TIE T40L	6
62	46345	FTG HYD EL 3/8 NPT 9/16 J	2
63	46137	HOSE HYD LOW PRESSURE 3/8 ID	1.5'
64	46137	HOSE HYD LOW PRESSURE 3/8 ID	6'
65	36254	WIRE TIE	10
66	90359	HOSE WATER BLACK 5/8 ID	1
67	38448	NTR/FAN COOLER	1
68	46346	FTG HYD EL 7/8 JIC X 3/4 NPT	2
69	29432	PLT MTG COOLER	2
70	80567	HWHTB 1/4-20 X 3/8	4

# AVR4000 HYDRAULIC SCHEMATIC

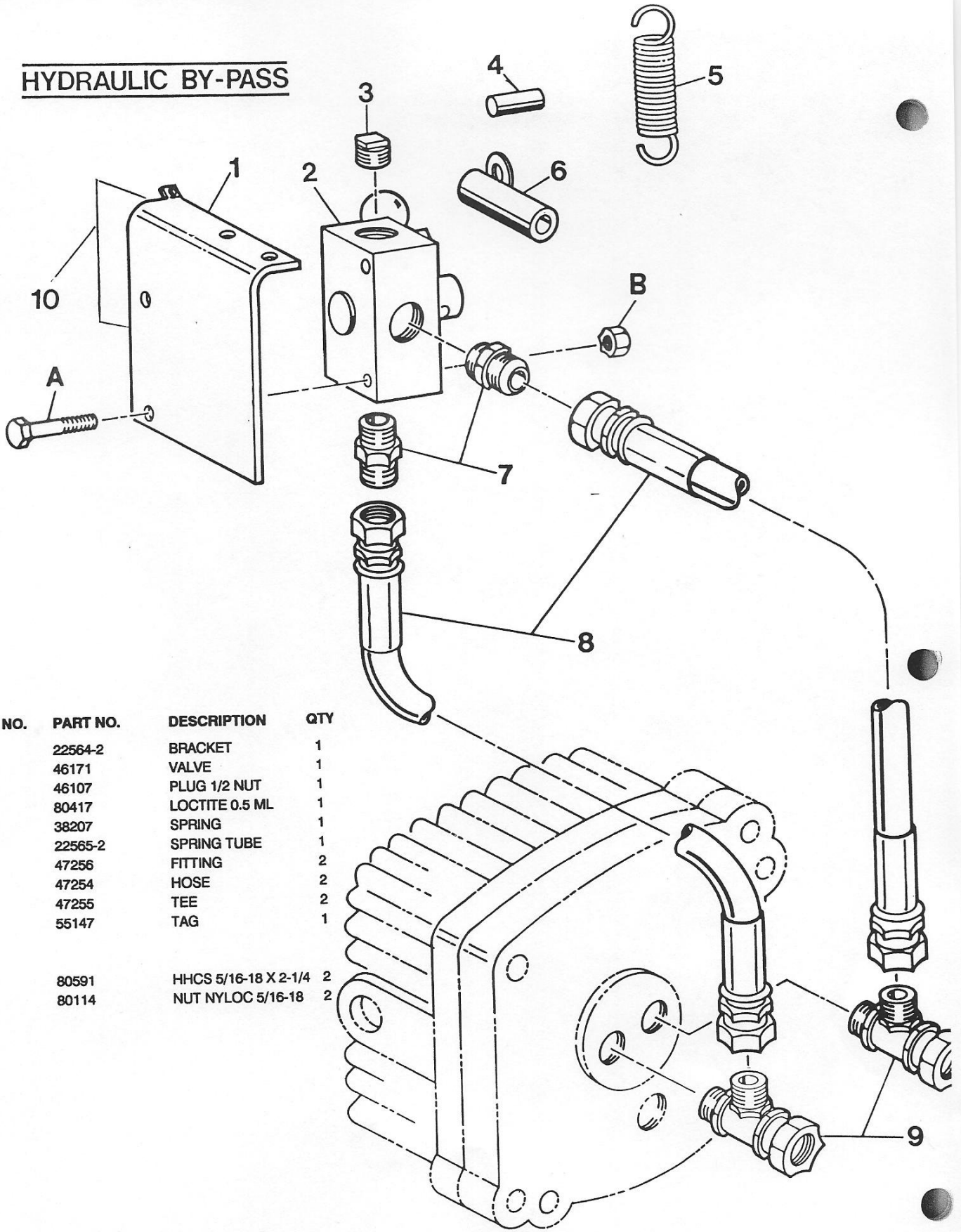


# AVR4000 20HP KOHLER WIRING DIAGRAM



ITEM	PART #	DESCRIPTION	QTY
1	38543	BATTERY 40 MONTH 350 CCA	1
2	48273	CABLE	1
3	48268	SWITCH NEUTRAL SAFETY	1
4	48286	WIRE HARNESS AVR	1
5	48284	CABLE BATTERY	2
6	48269	SOLENOID STARTER REMOTE	1
7	48279	SWITCH IGNITION	1
8	36270	TERM MALE N-INSUL 10-126A	1
9	36274	TERM MALE N-INSUL 14-166A	1
10	48280	CONN ELECT FEMALE	1
11	36115	TERM RING .31 INSUL 14-166A	1
12	48278	TERM FEM .25 F-INSUL 14-166A	3

# HYDRAULIC BY-PASS



ITEM NO.	PART NO.	DESCRIPTION	QTY
1	22564-2	BRACKET	1
2	46171	VALVE	1
3	46107	PLUG 1/2 NUT	1
4	80417	LOCTITE 0.5 ML	1
5	38207	SPRING	1
6	22565-2	SPRING TUBE	1
7	47256	FITTING	2
8	47254	HOSE	2
9	47255	TEE	2
10	55147	TAG	1
A	80591	HHCS 5/16-18 X 2-1/4	2
B	80114	NUT NYLOC 5/16-18	2