

PARTS LIST MANUAL

J&M MODEL 5050

TOP DRIVE EARTH AUGER

WITH MODEL 325 POWER UNIT



**J&M FOUNDATION
EQUIPMENT, LLC**

OM-5050-0399

SPECIALIZING IN PILE DRIVING EQUIPMENT

PREFACE

This manual was prepared to acquaint the owner, operator and serviceman with the construction and servicing of the J&M Model 5050 Earth Auger. We strongly suggest that this manual be studied carefully and understood by all personnel involved in operating or performing maintenance work on the auger. J&M equipment is engineered to provide reliable operation and a long service life under normal operating conditions. Equipment reliability and service life can be improved by following the maintenance procedures in this manual.

Warranty

American Piledriving Equipment, Inc.

STANDARD WARRANTY

American Piledriving Equipment, Inc. (APE/J&M) warrants new products sold by it to be free from defects in material or workmanship for a period of one year after the date of delivery to the first user and subject to the following conditions:

APE/J&M's obligation and liability under this WARRANTY is expressly limited to repairing or replacing at APE/J&M's option, any parts which appear to APE/J&M upon inspection to have been defective in material or workmanship. Such parts shall be provided at no cost to the user, at the business establishment of APE/J&M or the authorized APE/J&M distributor of the product during regular working hours. This WARRANTY, shall not apply to component parts or accessories of products not manufactured by APE/J&M and which carry the warranty of the manufacturer thereof, or to normal maintenance (scraped and skived lube and fuel lines, worn cushion material in the drive base) or normal maintenance parts (such as fouled injectors, weakened check valve springs, damaged grease fittings caused by use over time).

Replacement or repair parts installed in the product covered by this WARRANTY are warranted only for the remainder of the warranty as if such parts were original components of said product. APE/J&M makes no other warranty, expressed or implied and makes no warranty of merchantability of fitness for any particular purpose.

APE's obligation under this WARRANTY shall not include any transportation charges, costs of installation, duty, taxes or any other charges whatsoever, or any liability for direct, indirect, incidental or consequential damage or delay. If requested by APE/J&M, products or parts for which a warranty claim is made are to be returned transportation prepaid to APE/J&M. Any improper use, including operation after discovery of defective or worn parts, operation beyond rated capacity, substitution of any parts whatsoever, or parts not approved by APE/J&M or any alteration or repair by others in such manner as in APE/J&M's judgment affects the product materially and adversely, shall void this warranty.

ANY TYPE OF WELDING ON EQUIPMENT WILL VOID THE WARRANTY

Refusal: Vibros: If the pile does not move one foot in 30 seconds of vibro operation (driving or pulling) at full speed. Resort to a larger vibro. APE/J&M equipment may exceed the refusal driving criteria for short periods of time as may be needed to penetrate hard soil layers or obstacles. In such cases, a heat gun is used to monitor the temperature of the bearings and related components to prevent use of the machine beyond 195 degrees F. Contact APE/J&M or your local APE/J&M distributor for special instructions when faced with refusal conditions.

Refusal: Diesels: Do not exceed 10 blows per inch or 120 blows per foot. In cases of setting of the pile it is permitted to increase the blow count to 250 blows per foot, but only for one foot of driving penetration. Pile inspectors should consult the APE factory for permission to exceed these limits. Failure to do so will void the warranty. This standard specification is accepted by the DFI (Deep Foundations Institute) and the PDCA (Pile Driving Contractors Association) and by all manufacturers of pile driving equipment.

SAFETY PRECAUTIONS

Safety is basically common sense. There are standard safety rules, but each situation has its own peculiarities which can not always be covered by rules. Therefore, your experience and common sense will be your best guide to safety. Be ever watchful for safety hazards and correct deficiencies promptly.

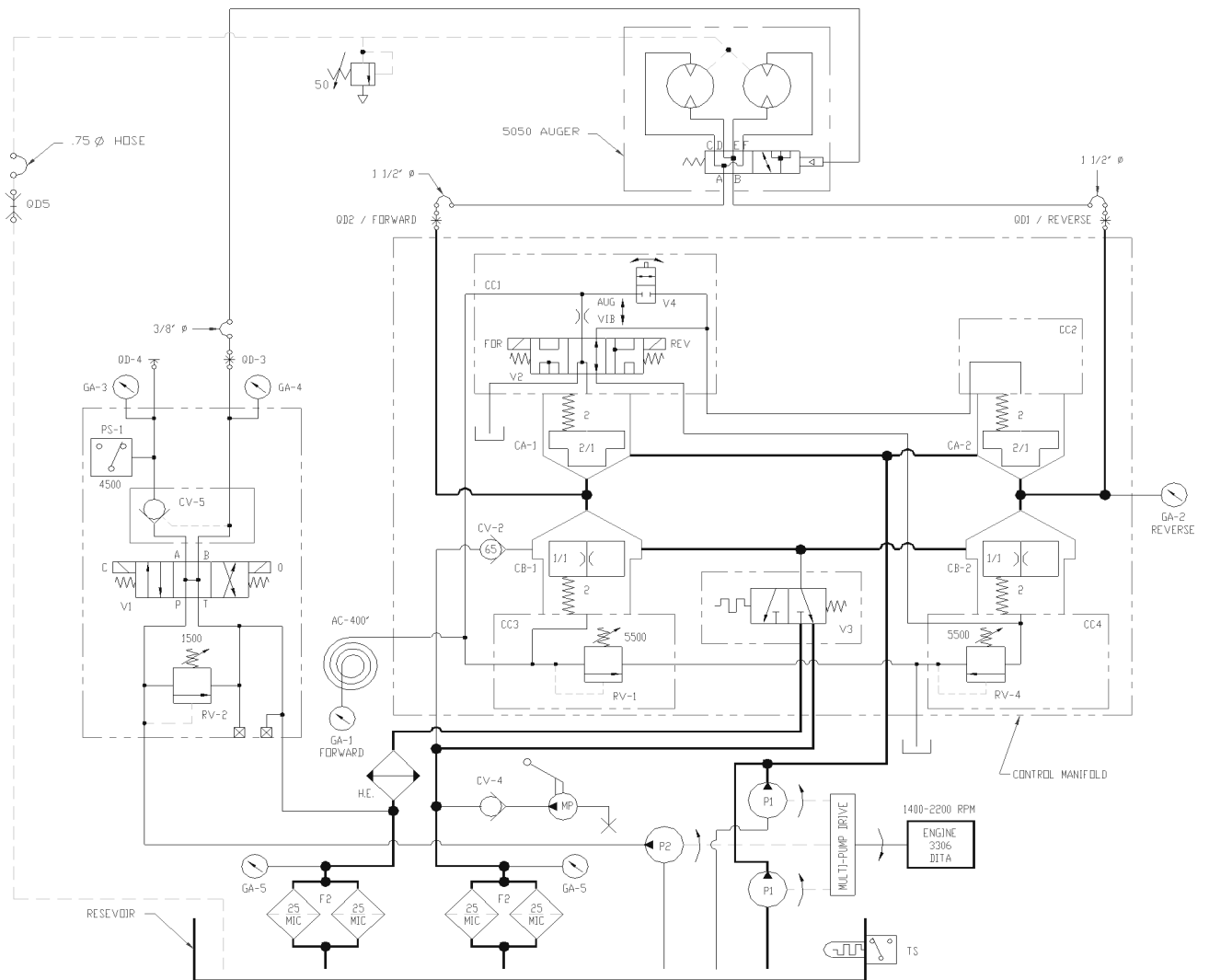
Use the following safety precautions as a general guide to safe operations:

1. When operating in a closed area, pipe exhaust fumes outside. Continued breathing of exhaust fumes may be fatal.
2. When servicing batteries, do not smoke or use an open flame in the vicinity. Batteries generate explosive gas during charging. There must be proper ventilation when charging batteries.
3. When filling fuel tank, do not smoke or use open flame in the vicinity.
4. Be extremely careful when using a carbon tetrachloride fire extinguisher in a closed area as it produces toxic vapor. Provide adequate ventilation before entering a closed area where carbon tetrachloride has been used.
5. Never adjust or repair the unit while it is in operation.
6. Never operate the diesel engine with the governor linkage disconnected to control the fuel rack.
7. Rounded or damaged bolt and screw heads and nuts should be replaced so proper torque values can be maintained. Refer to Torque Chart on page 32 for torque values.
8. Keep clear of auger and flighting when in operation in case a part would loosen and fall. Dirt and/or rocks may fall off the auger flighting. Wear a hard hat.
9. Frequently tighten wire rope clamps securing auger to crane line. Check wire rope for wear.
10. Keep auger, crane boom, leads, wire rope and other equipment at least 15Feet (5m) from electrical equipment, or at such distance as required by applicable safety codes.
11. Make sure that crane and leads have sufficient capacity to handle auger, flighting and dirt expected on the job. High downpull can be generated if the auger screws itself into the ground.
12. Remove all tools and electrical cords before starting.
13. Store oily rags in containers.
14. Never store flammable liquids near the engine.

REMEMBER, SAFETY IS EVERYONE'S BUSINESS.

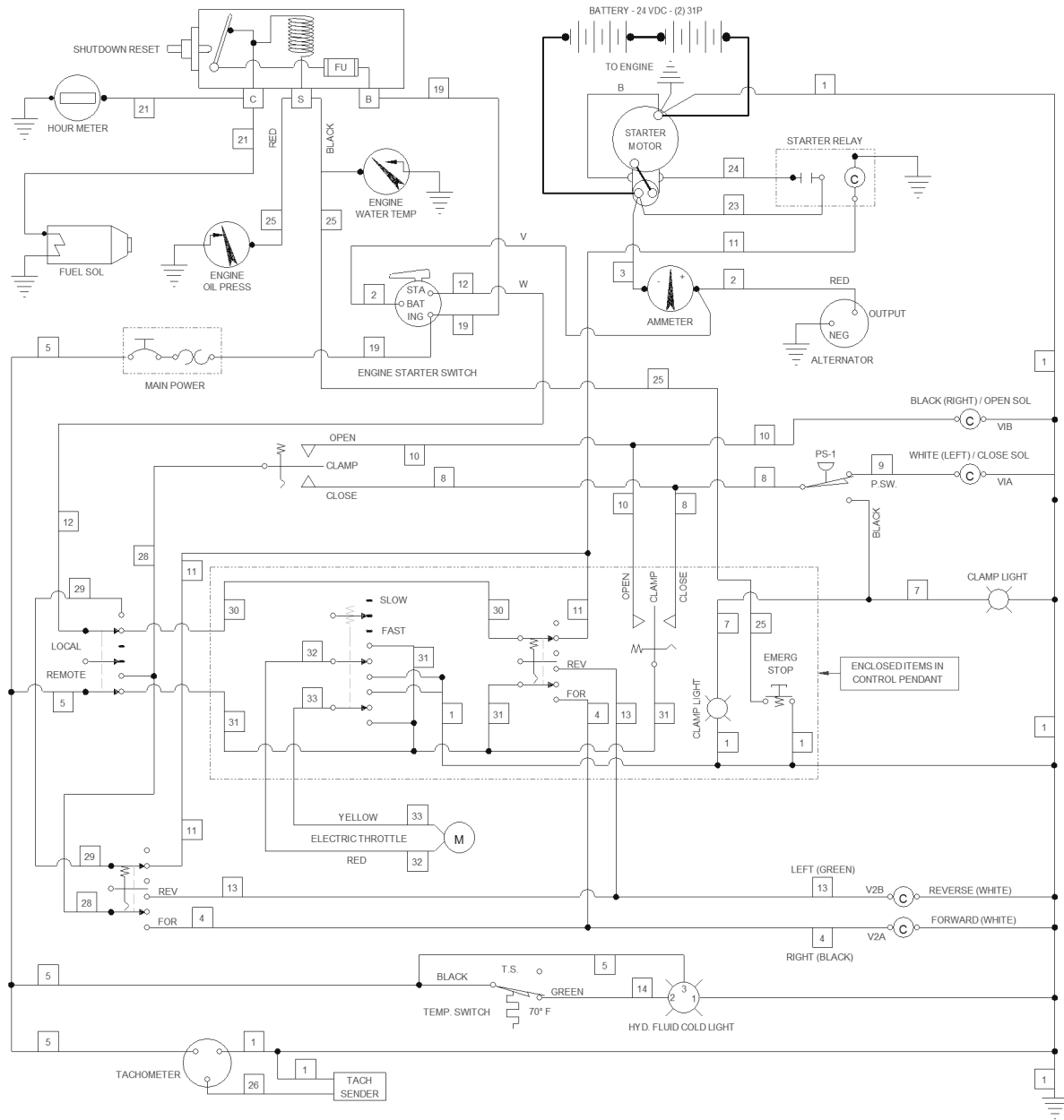
HYDRAULIC CIRCUITRY

HYDRAULIC SCHEMATIC



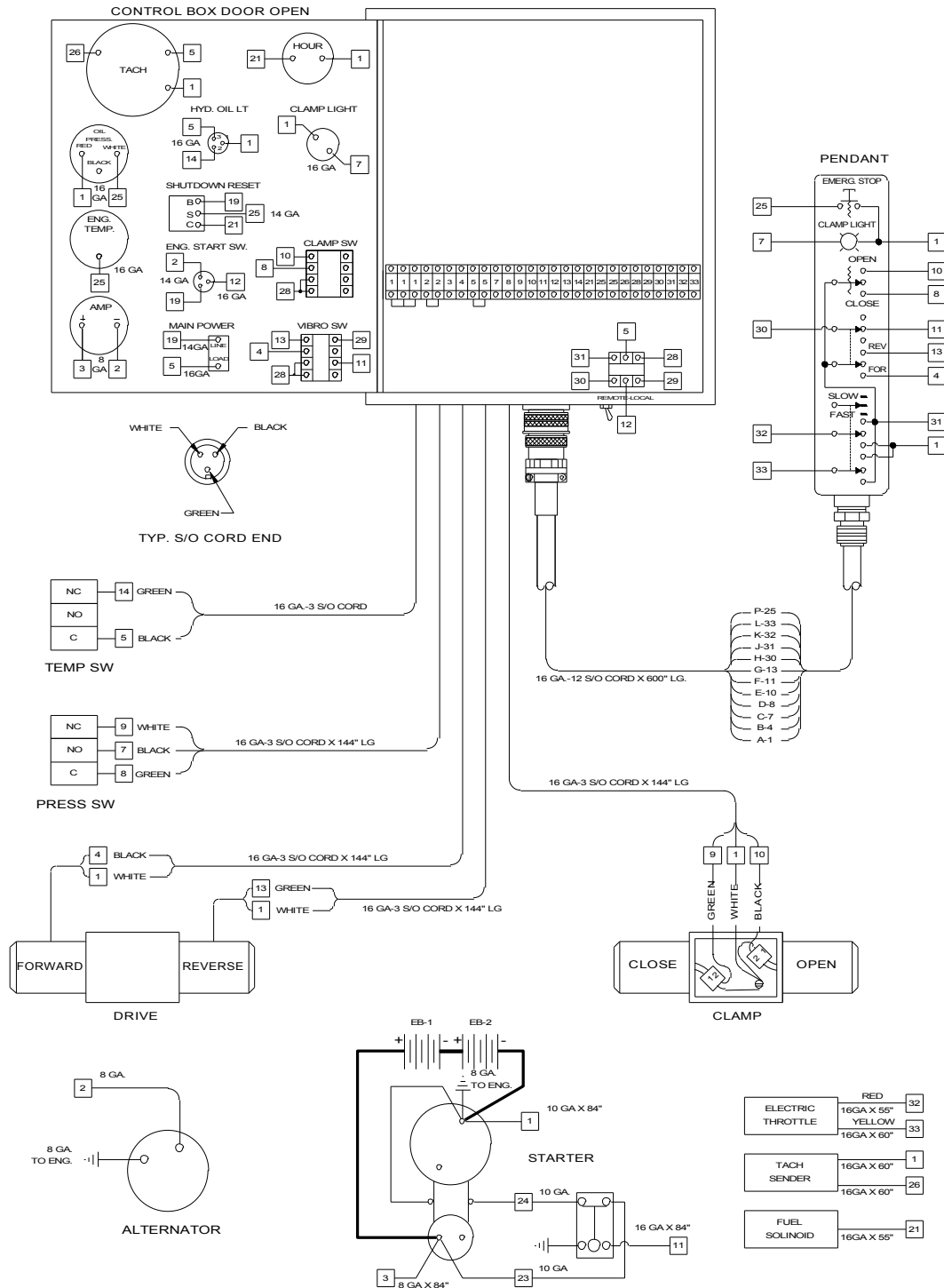
ELECTRICAL CIRCUITRY

ELECTRICAL SCHEMATIC



ELECTRICAL CIRCUITRY

ELECTRICAL DIAGRAM



GENERAL DATA

ABBREVIATIONS

The abbreviations shown below are used throughout the parts lists and various other parts of the manual.

ASM.	Assembly
BHCS	Button Head Cap Screw
Cyl.	Cylinder
DC	Direct Current
FHCS	Flat Head Cap Screw
FLCS	Flanged Head Cap Screw
Gr	Grade
HC	High Collar
HHCS	Hex Head Cap Screw
HHPP	Hex Head Pipe Plug
HSSS	Hex Socket Set Screw
Hyd.	Hydraulic
ID	Inside Diameter
Lg.	Long
mm	Millimeter
Mtg.	Mounting
NPT.	National Pipe Thread
OD	Outside Diameter
PHMS	Phillips Head Machine Screw
P/N	Part Number
Qty.	Quantity
RHMS	Round Head Machine Screw
Sch.	Schedule
SHCS	Socket Head (Allen) Cap Screw
SHPP	Socket Head Pipe Plug
SHSS	Socket Head Shoulder Screw
S/N	Serial Number
Sol.	Solenoid
UNF	Unified National Fine thread
UNC	Unified National Course thread

VII. GENERAL DATA

SCREWS AND BOLTS

1. Practically all connections on the unit are made with socket head (Allen) cap screws. These high-strength screws are available at most industrial supply houses.
2. Screws and bolts are designated in the PARTS LIST in abbreviated form. (Refer to the previous page, for specific abbreviations). Listed below is a typical screw description: .50 - 13 UNC x 1.50 Lg SHCS

.50 = Diameter
1.50 Lg = Length

13 UNC = Threads Per Inch
SHCS = Screw Type Abbreviation

SERIAL NUMBER LOCATIONS

1. The following J&M units are serial numbered separately:
 - a. Earth Auger
 - b. Power Unit
2. In addition to the serial number plate itself, the serial number is stamped into each unit in one or more places as follows:
 - a. Earth Auger stamped twice - once on the gear case cover between the planetary gear reducers, once on the gear case near the hose clamp plate.
 - b. Power unit stamped twice - once on the hydraulic oil reservoir, once on sub-base near the heat exchanger.

ORDERING PARTS

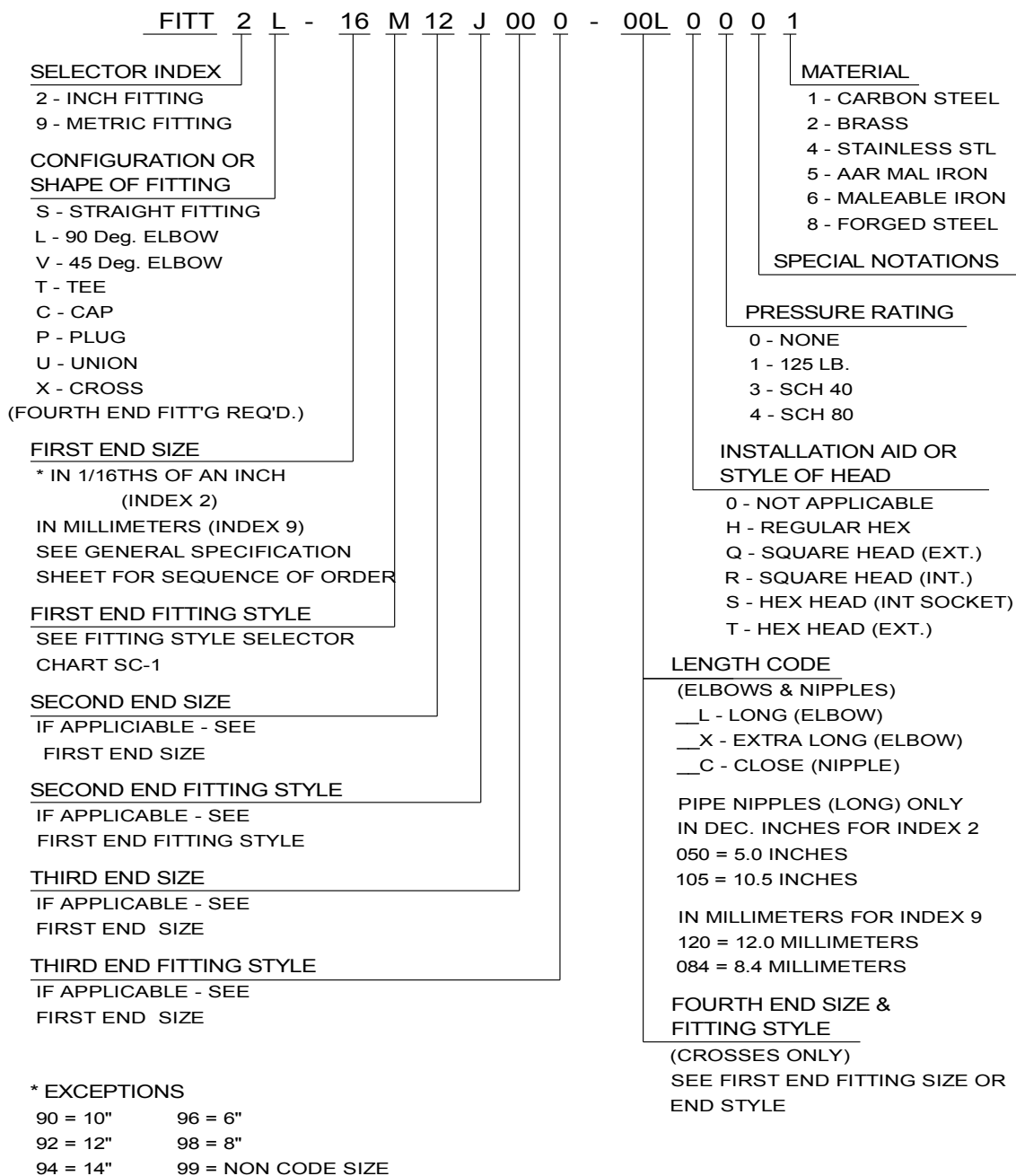
PROCEDURE

1. When ordering parts, be sure to include the model and serial number of the unit or component. Confirm all telephone orders immediately to avoid duplicating shipment.
2. ORIGINAL EQUIPMENT; Where component serial numbers are given, these apply only to equipment and components originally furnished with the unit. Where equipment has been changed or upgraded these numbers may not be an adequate description.
3. SHIPMENT; Specify shipping address, phone number, billing address and method of shipment. UPS and air express shipments must have street address for delivery. All shipments will be made freight collect unless instructed otherwise.
4. SHORTAGES; Claims for shortages, damage or errors should be made immediately upon receipt of parts. No responsibility will be assumed for delay, damage or loss of material while in transit. Broken, damaged or lost material should be refused or a full description made of damage or loss to the carrier agent on the freight or express bill.
5. RETURN OF PARTS; If for any reason you desire to return parts to the factory or to any distributor from whom these parts were obtained, you must first secure permission to return the parts. Shipping instructions will be given along with this permission. A fifteen percent handling charge must be assessed against the returned shipment unless an error is made by the factory or by the distributor when filling your order.

VIII. ORDERING PARTS

B. FITTING DESCRIPTION KEY

A Fitting Description code is used to describe all fittings in the Parts Identification section of this manual. The key below explains the structure of the code number in detail.



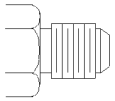
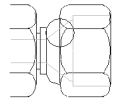
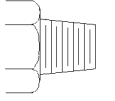

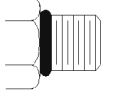
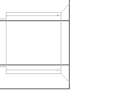
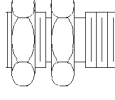
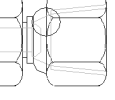
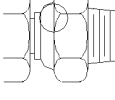
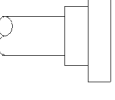
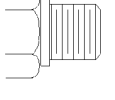
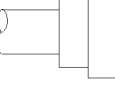
VIII. ORDERING PARTS

B. FITTING DESCRIPTION KEY (CONTINUED)

FITTING STYLE SELECTOR CHART

SC-1

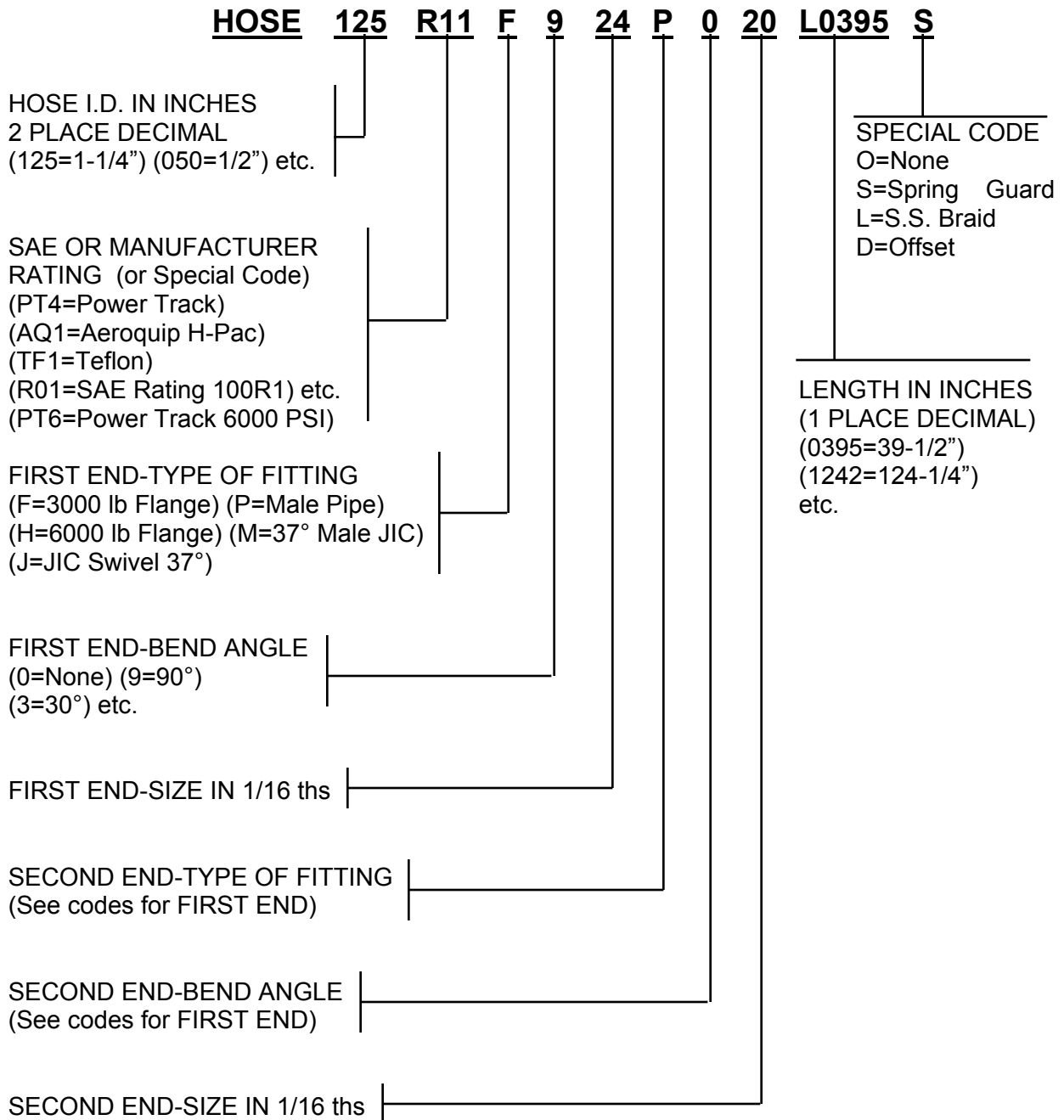
FOR END FITTING STYLE SELECTION

M		JIC MALE 37 Deg. FLARE	J		JIC FEMALE 37 Deg. FLARE (& SWIVEL)
P		MALE PIPE NPT	Q		FEMALE PIPE NPTF
R		S.A.E. MALE O-RING (& ADJUSTABLE)	K		S.A.E. FEMALE O-RING
B		JIC MALE 37 Deg. FLARE BULKHEAD	N		FEMALE PIPE NPSM-SWIVEL
D		MALE PIPE NPT SWIVEL	F		SPLIT FLANGE 3000 PSI. CODE 61
S		B.S.P. MALE PIPE	H		SPLIT FLANGE 6000 PSI. CODE 62

VIII. ORDERING PARTS

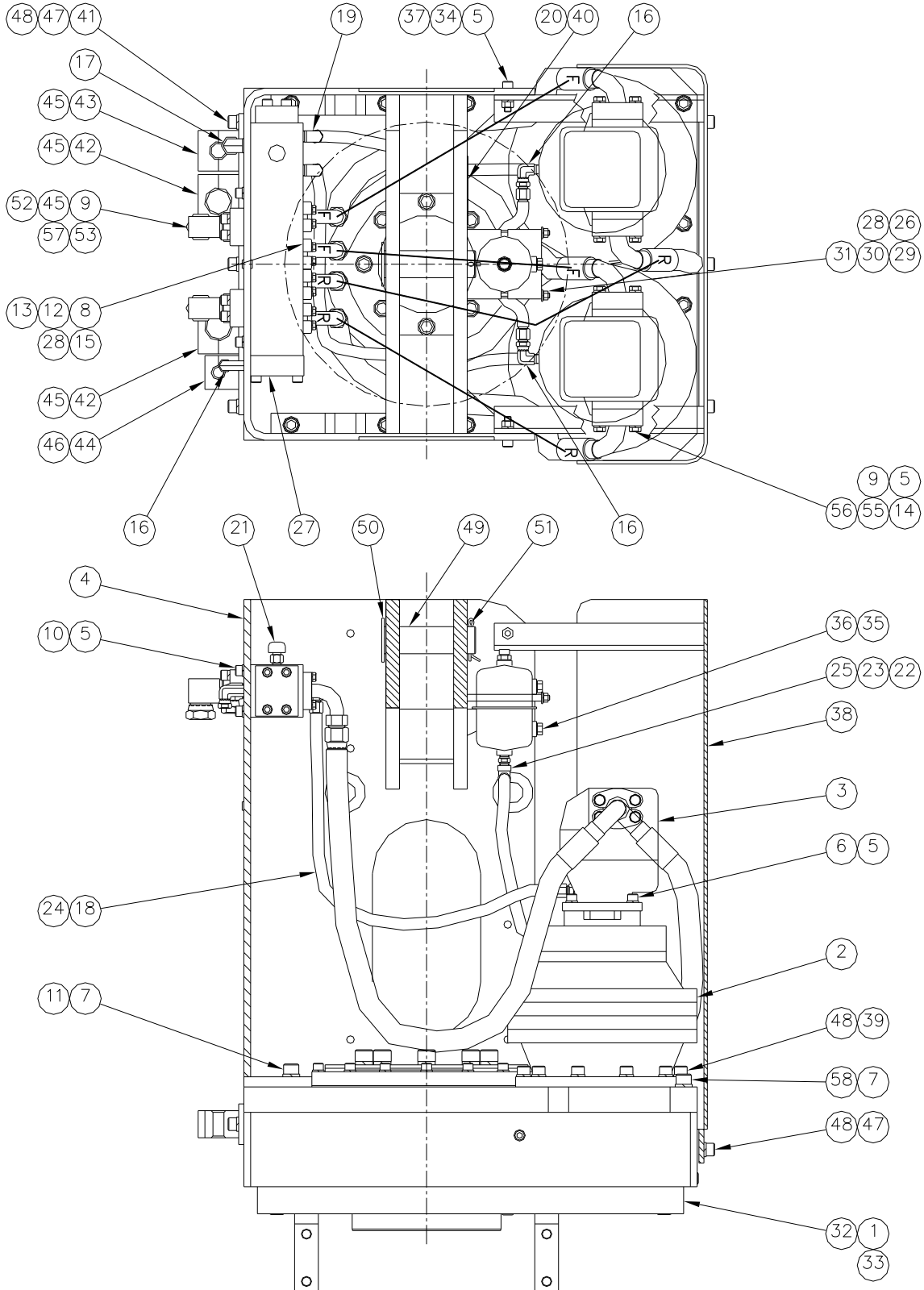
C. HOSE DESCRIPTION CODE

The HOSE DESCRIPTION CODE is a 24 digit number enabling easier and quicker identification whenever a hose replacement is desired. The key below explains the structure of the coded number in detail.



EARTH AUGER ASM

800259



EARTH AUGER ASM

800259

Item	Part Number	Qty.	Description
1	810421	1	5050 Auger Transmission Case
2	400655	2	Plantatary Gear Reducer "C"
3	400744	2	Hydraulic Gear Motors
4	400541	1	Lifting Bale
5	100121	30	.50 Flat Washer Medium
6	110735	8	.50-13 X 2.50 Lg SHCS
7	100069	16	.75 Flat Washer Medium
8	100089	8	#16 Split Flange Half
9	100037	6	2-222 O-Ring 90 Duro
10	100119	4	.50-13 X 1.25 Lg Shcs Loc Wel
11	140111	16	.75-10 X 4.0 Lg SHCS Loc Wel
12	100091	4	2-219 O-Ring 70 Duro
13	100700	16	.375-16 UNC X 1.25 HHCS
14	400851	4	HOSE100PT4J016H920L04000
15	400947	4	FITT2L-16F16M000-0000001
16	120525	3	FITT2L-06P06N000-00L000L
17	400873	1	FITT2L-12P12N000-00LH001
18	400716	2	HOSE050R01J008J008L03500
19	300063	2	FITT2L-08M08P000-0000001
20	130381	4	Rivet
21	100032	1	Relief Valve
22	400917	2	HOSE050R01P006P006L02000
23	110794	1	FITT2S-06P06P000-000H001
24	400714	2	FITT2S-08M04R000-000H001
25	400751	1	FITT2T-06Q06Q06Q-0000001
26	100535	2	.375 -16 Hex Nut
27	810503	1	Two Speed Valve
28	400149	18	.375 Flat Washer
29	400151	2	.375 Flat Washer
30	400923	2	.375-16 UNC X 7" Lg Allthread
31	400919	2	4" U-Clamp
32	100298	1	APE / J&M Yellow Paint/Gal
33	100299	1	Primer/Gal
34	100485	2	.50-13 Hex Nut
35	400915	1	Expansion Tank Assembly
36	110444	2	Transmission Oil / Gal.
37	100163	2	.50-13 X 1.75 Lg Shcs Loc Wel
38	400673	1	Motor Cover
39	140227	20	.625-11 X 2.0 Lg SHCS
40	400749	1	5050 S/N Plate

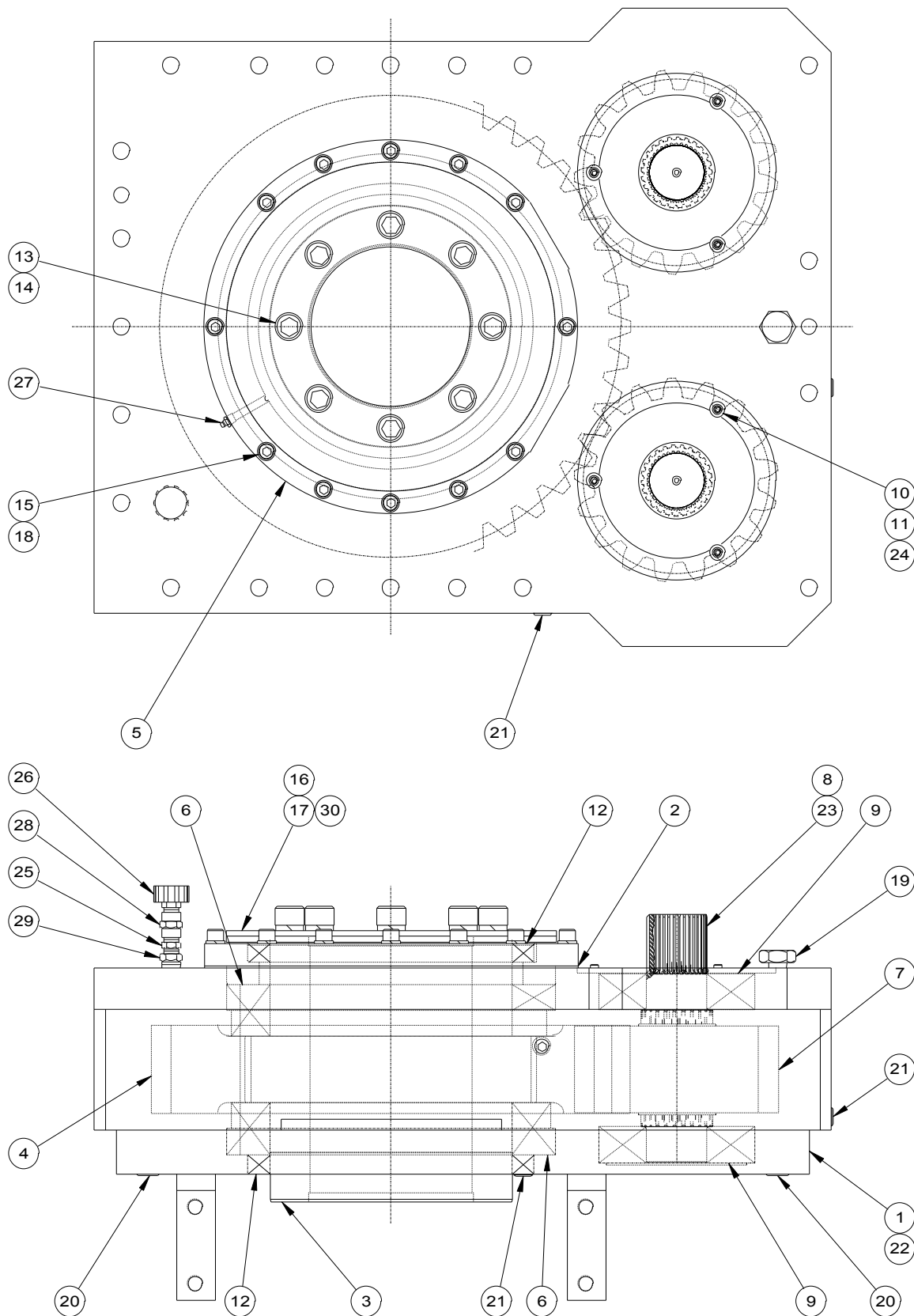
EARTH AUGER ASM

800259

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
41	400557	1	Hose Clamp Plate
42	100009	2	Hose Clamp
43	100013	1	Hose Clamp
44	100015	1	Hose Clamp
45	100011	14	.50-13 X 2.0 Lg SHCS
46	100017	2	.375-16 X 2.0 Lg Shcs Loc Wel
47	100575	6	.625-11 X 1.25 Lg SHCS
48	100007	23	.625 Flat Washer-Medium
49	400831	1	Lifting Pin
50	400833	1	2" Flat Washer
51	300375	1	.312 X 5 Lg Cotter Pin
52	400019	2	FITT2L-20P20N000-000H001
53	400835	2	20 Solid Threaded Flange
54	150083	8	.437-14 X 2.50 SHCS W/Loc Wel
55	110986	8	#20 Ph Split Flange Half
56	400739	16	.50-13 UNC X 2 Lg HHCS
57	100027	8	.50 Hi-Collar Flat Washer
58	400045	5	.75-10 X 3.50 Lg SHCS

TRANSMISSION CASE ASSEMBLY

810421



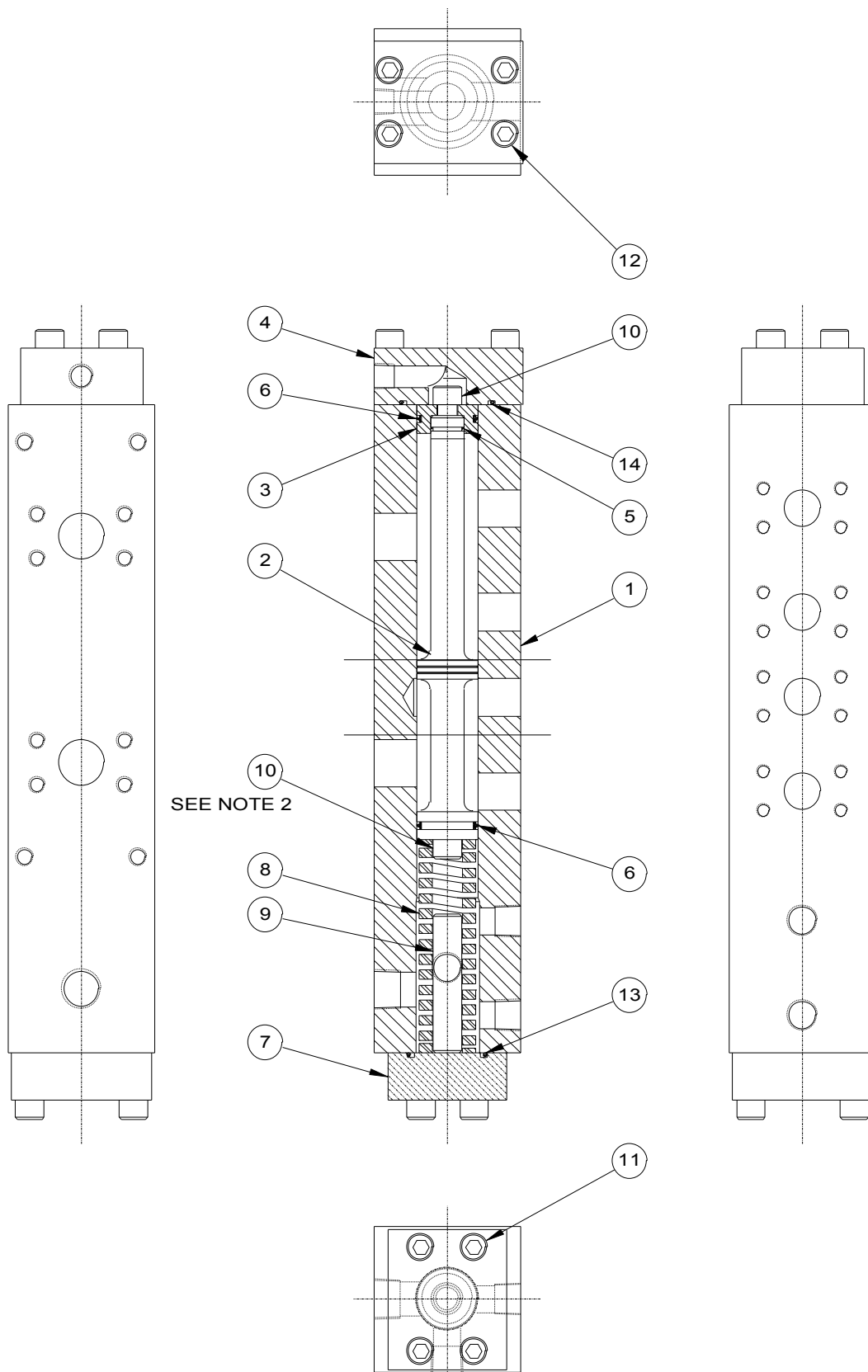
TRANSMISSION CASE ASSEMBLY

810421

Item	Part Number	Qty.	Description
1	810419	1	Gear Box Pin Assembly
2	400529	1	Shim Pack
3	400521	1	Output Shaft
4	400519	1	Gear
5	400525	1	Retainer Ring
6	400631	2	Tapered Bearings
7	400527	2	Pinion Gear
8	400523	2	Pinion Shaft
9	150017	4	Roller Bearing
10	100576	6	.25-20 X .625 Lg SHCS
11	100597	6	.25 Flat Washer
12	400635	2	Seal
13	400913	8	.875-9 X 1.50 Lg SHCS
14	400911	8	.875 Hi Collar Lock Washer
15	400043	12	.50-13 X 2.25 Lg SHCS
16	400766	1	Poly-Ring
17	400889	1	Grout Shield
18	100121	12	.50 Lock Washer Medium
19	400657	1	Dip Stick
20	100183	2	FITT2P-12P000000-000S007
21	100423	3	FITT2P-08P000000-000S007
22	110444	6	Transmission Oil / Gal.
23	400691	4	Retaining Ring
24	100559	6	.25 Lock Washer
25	130203	1	FITT2S-06P06P000-0300401
26	400845	1	Breather
27	100229	1	Grease Fitting
28	110143	1	FITT2S-06Q06Q000-000H001
29	400357	1	FITT2S-08P06Q000-000H001
30	400965	1	Shield Gasket

TWO SPEED VALVE ASSEMBLY

810503



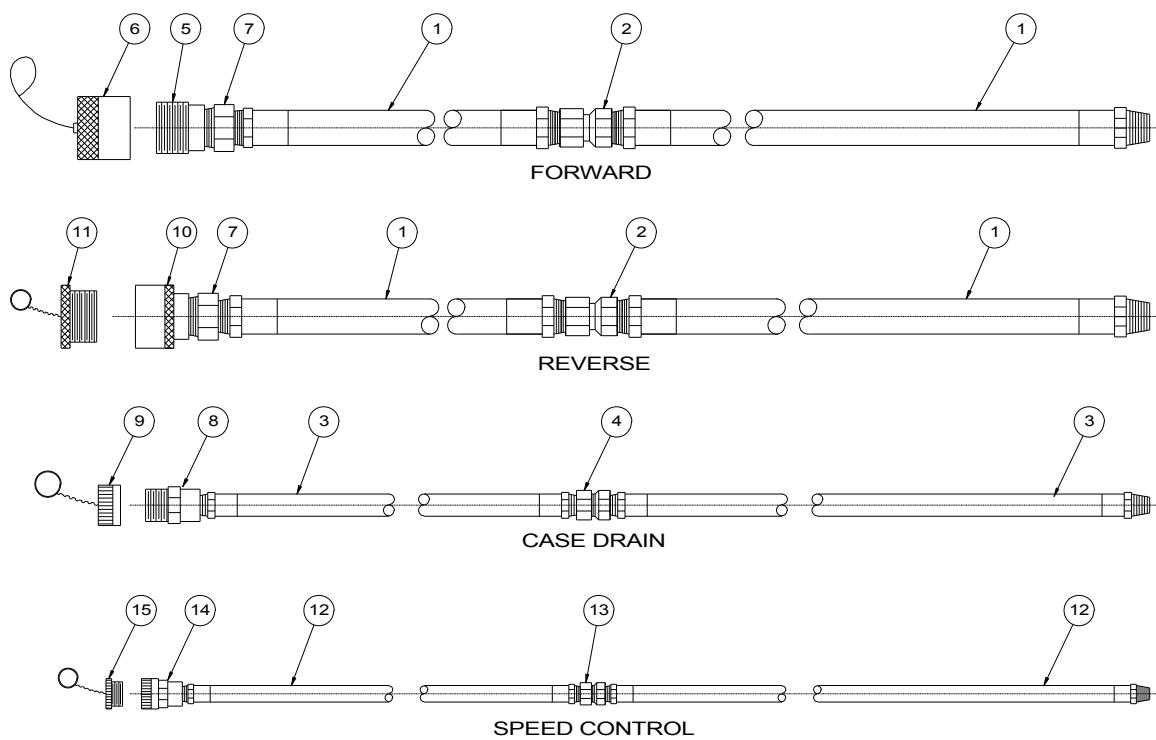
TWO SPEED VALVE ASSEMBLY

810503

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	400927	1	Two Speed Valve-Body
2	400929	1	Spool
3	400933	1	Spool End Cap
4	810501	1	Modified 2" Blank Flange
5	400939	1	2-018 O-Ring
6	400941	2	Tee Seal
7	400943	1	1.5 Blank Flange
8	400945	1	Spring
9	400931	1	Stop Pin
10	100445	2	.5-13 X 1.0 Lg SHCS Loc Wel
11	100163	4	.5-13 X 1.75 Lg SHCS Loc Wel
12	400043	4	.5-13 X 2.25 Lg SHCS
13	110119	1	2-225 O-Ring
14	140233	1	2-228 O-Ring 90 Duro
15	810565	1	T.S.V. Seal Kit

NOTES:

1. Install spool Item 2 from spring end. Do not pass port with seals. Assemble End Cap in place.
2. Loctite and primer.
3. Seal kit Item 15 includes Items 5, 6, 13 and 14.



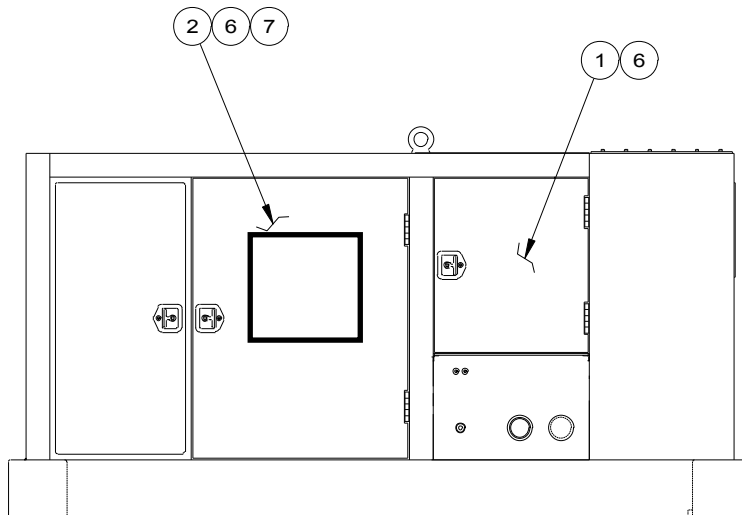
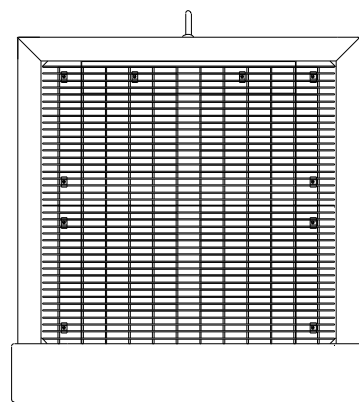
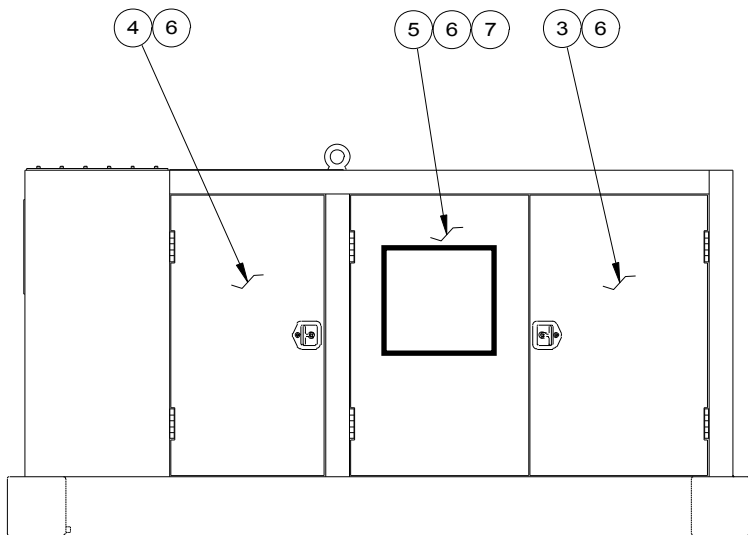
HOSE ASSEMBLIES - INTERCONNECTING

800271

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	100233	4	HOSE125PT6P020P020L60000
2	100235	2	FITT2S-20Q20N000-000H001
3	100241	2	HOSE075R09P012P012L62000
4	100243	1	FITT2S-12Q12N000-000H001
5	110690	1	1.50 Male Disconnect
6	110955	1	1.50 Dust Cap
7	400159	2	FITT2S-24P20Q000-000H001
8	400251	1	.75 Male Disconnect
9	400253	1	.75 Dust Cap
10	110692	1	1.50 Female Disconnect
11	110957	1	1.50 Dust Plug
12	100247	2	HOSE038R02P006P006L62000
13	100249	1	FITT2S-06Q06N000-000H001
14	100777	1	.38 Female Disconnect
15	100737	1	.38 Dust Plug

POWER UNIT ENCLOSURE

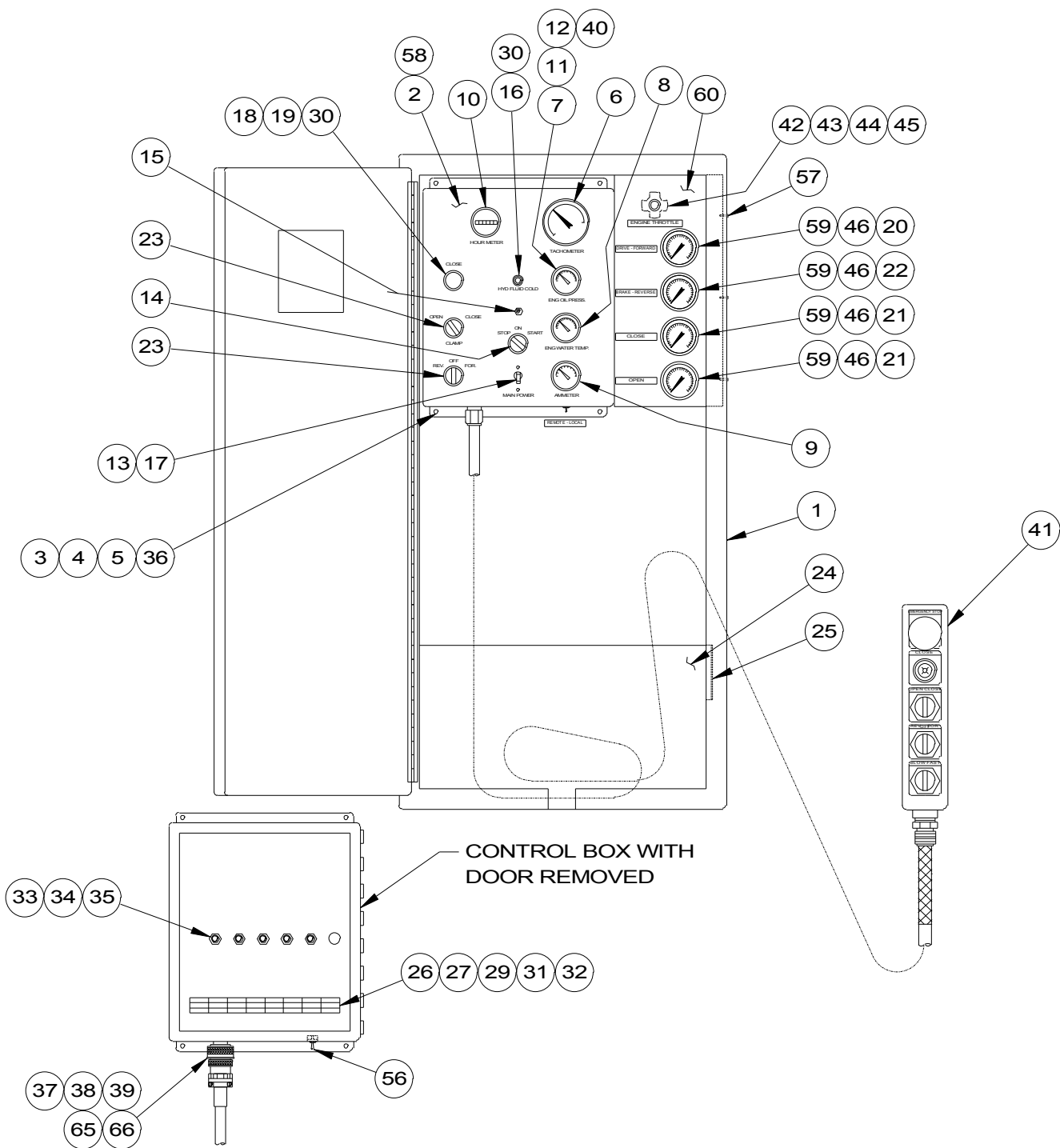
800379



POWER UNIT ENCLOSURE

800379

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	100550	1	Cover Door
2	100548	1	Cover Door
3	100546	1	Cover Door
4	100544	1	Cover Door
5	100542	1	Cover Door
6	100834	10	5" Door Hinge
7	100290	2	J&M Decal



CONTROL BOX

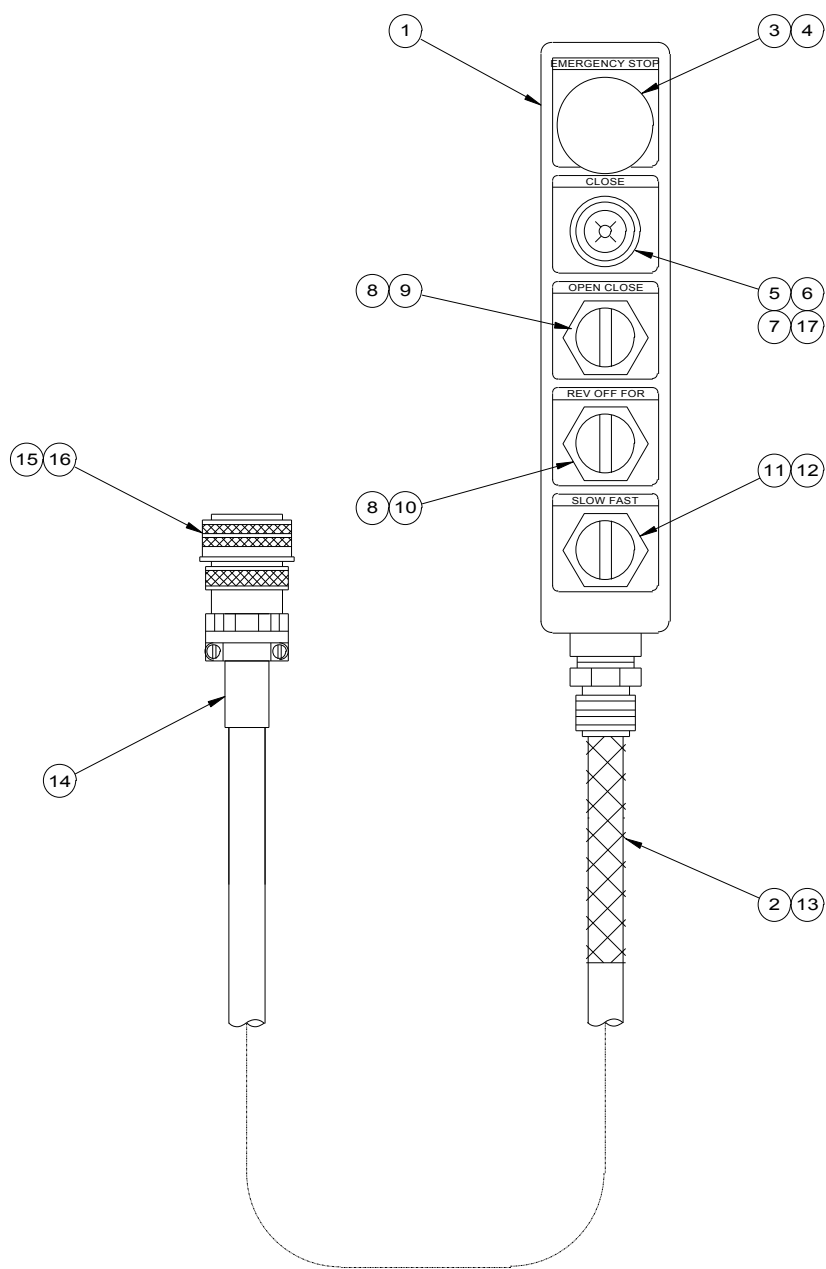
810585

Item	Part Number	Qty.	Description
1	130151	1	Control Box Enclosure
2	100740	1	250 Control Box
3	100576	4	.25-20 X .625 Lg SHCS
4	100559	4	.25 Lock Washer
5	100598	4	.25-20 Hex Nut
6	130465	1	175-250 Tachometer
7	100329	1	Oil Pressure Gauge
8	130251	1	Water Temp Gauge
9	110371	1	Ammeter
10	100343	1	Hourmeter
11	110415	5	.250 Oil Pressure Tube/Ft
12	100333	1	FITT2L-04E02Q000-000H002
13	400141	1	Circuit Breaker-10 A
14	130259	1	Start Switch
15	130257	1	Reset Button
16	100355	1	Dialight, Test
17	100331	2	#6-32 X .25 Lg BHCS
18	100359	1	Light, Pilot
19	100361	1	Lens, Clear-Pilot Lite
20	110680	1	HOSE019AQ1J004J004L40000
21	130205	2	HOSE019AQ1J004J004L09000
22	130393	1	HOSE019AQ1J004J004L11000
23	130155	2	Switch
24	130149	1	Box Panel
25	130387	1	Hose Bracket
26	400161	2	#10 Lock Washer
27	400163	2	#10-32 Hex Nut
29	110649	2	10-32 X .375 Lg PHMS
30	130305	2	Warning Light Bulb
31	110567	14	Terminal Block
32	110569	10	Terminal Mtg. Channel/In
33	100853	5	90 Deg S/O Comp Fitting
34	110841	5	.5 Plastic Bushing
35	110843	5	.5 Lock Nut
36	100597	4	.25 Flatwasher
37	110763	1	Female Amphenol Insert
38	100397	1	Amphenol Receptacle
39	110754	4	#6-32 X .375 Lg RHMS
40	110871	1	FITT2V-04P04E000-000H002

CONTROL BOX

810585

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
41	800393	1	175-325 Pendant Asm.
42	130255	1	Engine Throttle
43	100429	1	Throttle Cable Seal
44	110964	1	Throttle Cable Pivot
45	100577	1	Stop Cable Clamp
46	100321	4	FITT2L-04M04Q000-0000001
56	140361	1	Toggle Switch
57	100656	6	10-32 X .5 Lg PHMS-Self Tap
58	100468	1	300 Label Group
59	110600	4	0-6000 Psi Gage(GA1-4)
60	100738	1	Gage Panel
65	110696	4	#6 Lock Washer
66	110694	4	#6-32 Hex Nut



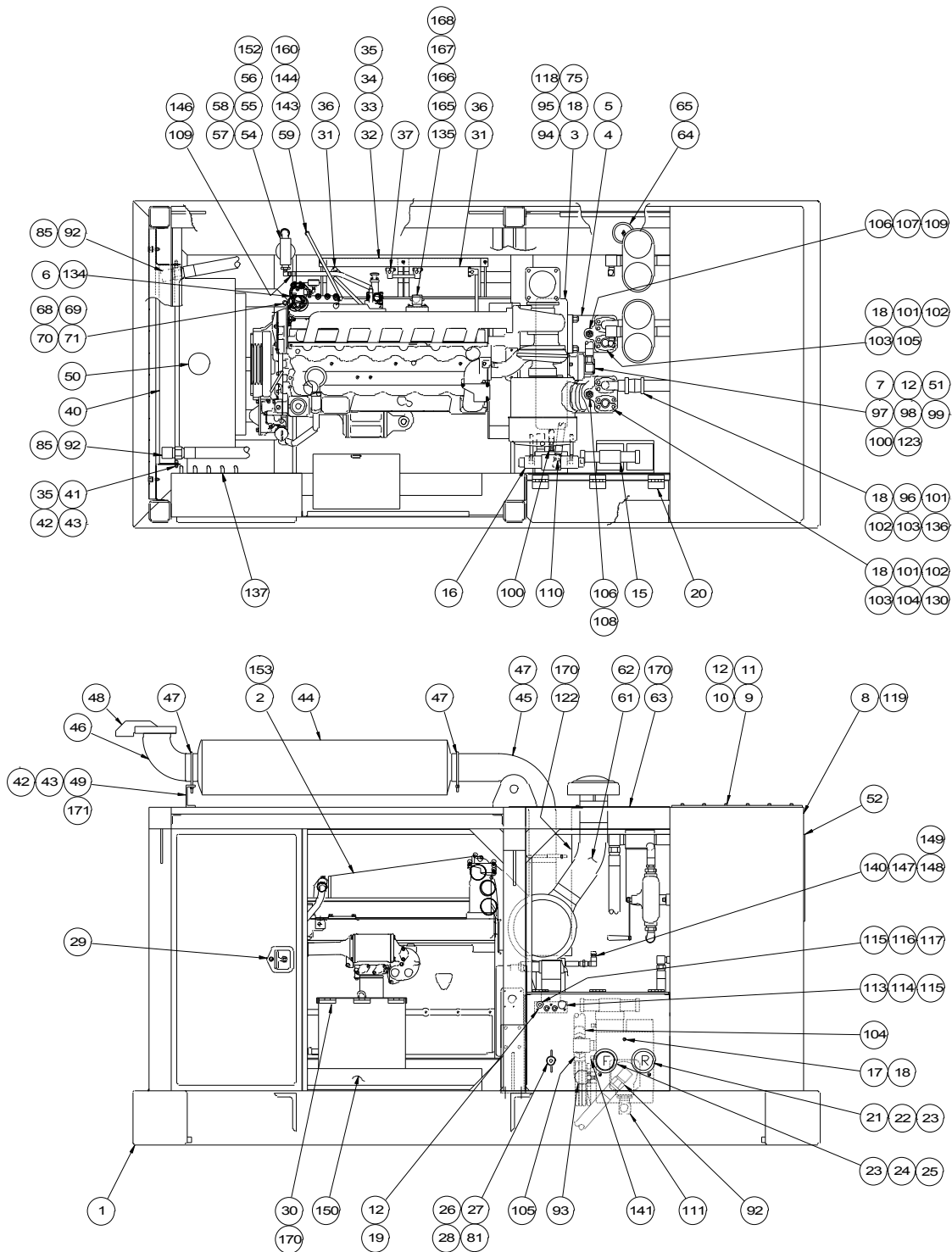
175-325 PENDANT ASSEMBLY

800393

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	130505	1	Pendant Box
2	110603	1	1.0 Strain Relief
3	130507	1	Emergency Stop Button
4	130509	1	Emergency Stop Label
5	100359	1	Light, Pilot
6	100361	1	Lens, Clear-Pilot Lite
7	100403	1	Close Nameplate
8	130155	2	Switch
9	100401	1	Open/Close Nameplate
10	100864	1	Rev-Off-For Namplate
11	100566	1	Switch
12	100562	1	Slow-Fast Nameplate
13	100560	50	Pendant Cable/Ft
14	100375	1	Strain Relief-Amphenol
15	110761	1	Male Amphenol Insert-Plug
16	100395	1	Amphenol Plug
17	130305	1	Clamp Light Bulb

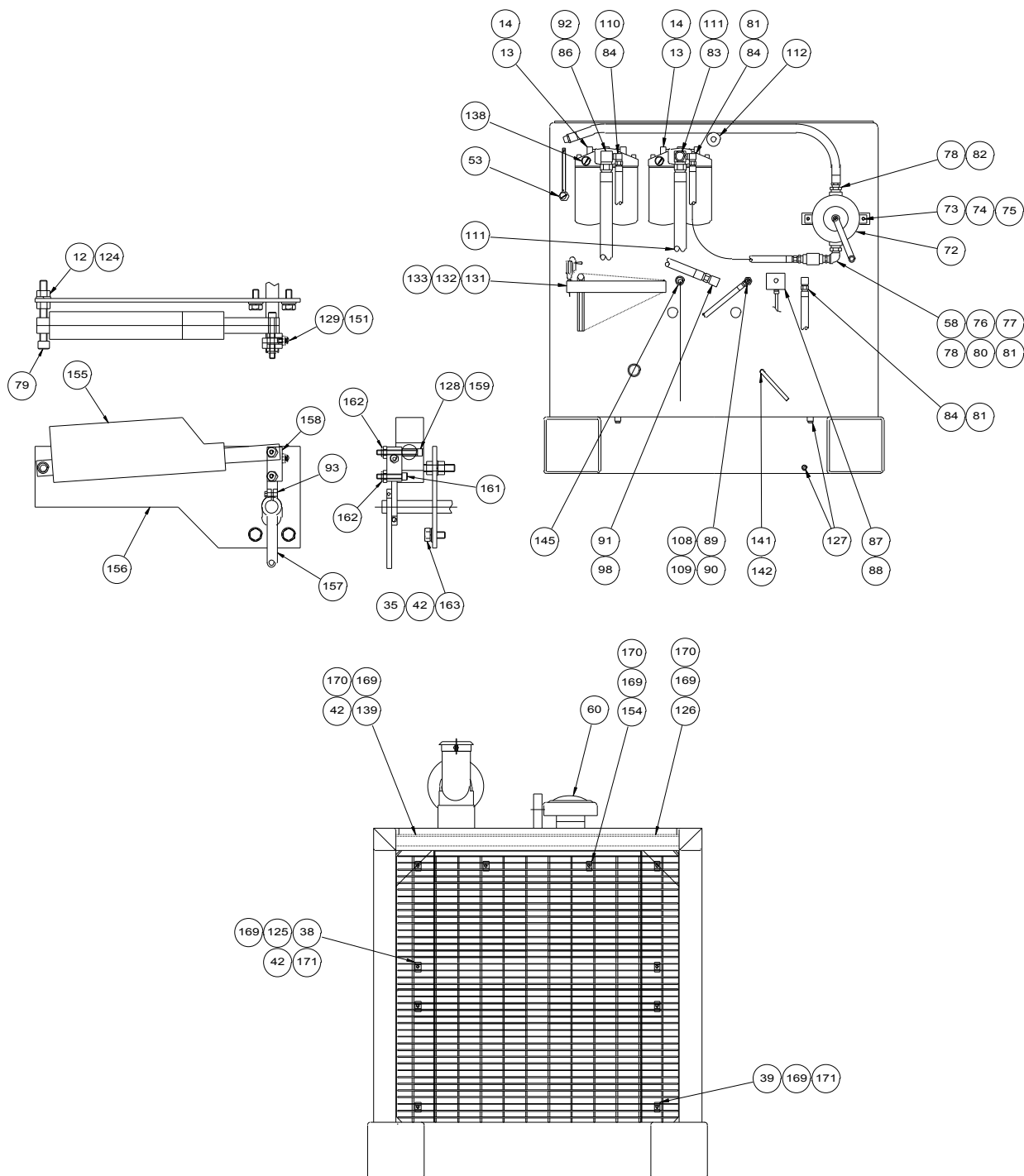
POWER UNIT ASSEMBLY

800377



POWER UNIT ASSEMBLY

800377



POWER UNIT ASSEMBLY

800377

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	810563	1	300 P.U. Fuel Base Asm.
2	100508	1	3306TA Diesel Engine (E)
3	100512	1	Multi-Pump Adapter
4	100406	2	Main Pump (P1)
5	100782	8	.75 Flanged Nut
6	100577	1	Stop Cable Clamp
7	100684	1	Clamp Pump (P2)
9	400129	1	Reservoir Cover
10	400225	1	Reservoir Gasket
11	100648	26	.375-16 X.875 Lg SHCS
12	400149	32	.375 Lock Washer
13	100520	2	Return Filter Asm. (F2)
14	100518	4	Return Filter Element
15	810571	1	300 Drive Manifold Asm.
16	810035	1	325 Clamp Manifold Assembly
17	100119	3	.5-13 X 1.25 Lg SHCS Locwel
18	100121	27	.5 Lock Washer Medium
19	100051	3	.375-16 X 1.0 Lg Shcs Locwel
21	110690	1	1.5 Male Disconnect (QD1)
22	110955	1	1.5 Dust Cap
23	110392	2	FITT2S-24R24P000-000H001
24	110692	1	1.5 Female Disconnect (QD2)
25	110957	1	1.5 Dust Plug
26	400095	1	.75 Female Disconnect (QD5)
27	400121	1	.75 Dust Plug
28	100387	1	FITT2S-12P12B000-000H001
29	810585	1	300 Control Box Asm.
30	100558	1	Tool Box
31	400890	2	Battery
32	400888	1	Battery Holddown
33	400231	3	Hold Down Stud
34	100831	3	.312 Wing Nut
35	100293	21	.312 Flat Washer
36	100537	2	Battery Cable-24"
37	110653	1	Battery Cable-6
40	400099	1	Heat Exchanger (HE)

POWER UNIT ASSEMBLY

800377

Item	Part Number	Qty.	Description
41	100105	8	.312-18 X 1.0 Lg SHCS Locwel
42	100287	21	.312 Lock Washer
43	100289	10	.312-18 Hex Nut
44	400898	1	Muffler
45	100516	1	Exhaust Elbow (5"-Lg.)
46	400894	1	Exhaust Outlet Elbow
47	140369	3	5 In. U-Clamp
48	140411	1	5.0 Rain Cap
49	100532	1	Muffler Support
50	100726	7	Antifreeze/Gal
51	100700	2	.375-16 UNC X 1.25 HHCS
52	400277	1	I C E Logo Plate
53	130179	1	Sight Gauge And Thermometer
54	120611	1	Water Seperator Asm.
55	120425	1	FITT2S-16P16P000-1200301
56	110706	1	FITT2S-16P08Q000-000H001
57	110173	1	FITT2S-08M08P000-000H001
58	110377	2	FITT2L-16P16Q000-0000306
59	110633	1	HOSE038R02J006J006L0370S
60	100514	1	Air Intake Bonnet
61	100951	20	Flexhaust/In
62	130237	2	Hose Clamp
63	100540	1	Unit Cover(300)
64	100417	1	FITT2C-48Q000000-0000306
65	100419	1	Petcock
68	100071	4	.625-11 X 2.5 Lg Shcs Locwel
69	130141	4	.625 Flat Washer
70	100007	4	.625 Lock Washer-Medium
71	100273	4	.625-11 Hex Nut
72	100447	1	Hand Pump (MP)
73	100439	2	.437-X1.75 Lg SHCS
74	400153	2	.437 Flat Washer
75	100443	14	.437 Lock Washer
76	100449	1	FITT2S-16P16P000-000H001
77	100451	1	Check Valve (CV4)
78	110089	2	FITT2S-20P16Q000-000H001
79	110913	1	.38-16UNC X 3.00 Lg SHCS
80	300119	1	FITT2S-16P12M000-000H001

POWER UNIT ASSEMBLY

800377

Item	Part Number	Qty.	Description
81	130201	2	HOSE075R01J012J012L04000
82	400215	1	HOSE100R01P016P016L08400
83	810573	1	Special Tee
84	100489	3	FITT2L-12M12P000-0000001
85	100588	2	FITT2L-24M24P000-0000001
86	810575	1	Special 90 Elbow
87	400115	1	Temperature Switch (TS1)
88	110237	1	Str S/O Cord Adapter
89	400409	1	FITT2S-12P08Q000-000H001
90	300401	1	FITT2T-08M08P08M-0000001
91	120055	1	FITT2L-16M16P000-0000001
92	100500	2	HOSE150R01J024J024L11800
93	810617	1	Modified Throttle Arm
94	100462	12	.437-14 UNC X 1.25 Lg HHCS
95	100445	8	.5-13 X 1.0 Lg SHCS Locwell
96	100454	2	2"Tube Flex Master
97	100938	1	FITT2L-16M12R000-000H001
98	100862	1	HOSE100R01J016J016L03300
99	300099	1	FITT2S-10R08M000-000H001
100	110461	1	HOSE050R09J008J908L04000
101	110986	8	#20 PH Split Flange Half
102	100037	4	2-222 O-Ring 70 Duro
103	400739	16	.5-13 UNC X 2.00 Lg HHCS
104	100492	1	HOSE100PT6J020H020L04000
105	100490	1	HOSE100PT6J020H920L06500
106	110325	2	FITT2S-12R08M000-000H001
107	100488	1	FITT2V-08M08J000-000H001
108	100486	1	HOSE050R01J008J008L01450
109	110265	2	HOSE050R01J008J008L02400
110	100484	1	HOSE075R01J012J012L08400
111	100482	2	HOSE150R02J024J024L07200
112	100455	1	Breather
113	100777	1	.375 Female Disconnect (QD3)
114	100737	1	.375 Dust Plug
115	110794	2	FITT2S-06P06P000-000H001
116	100245	1	.375 Male Disconnect (QD4)
117	100257	1	.375 Dust Cap
118	110444	2	Transmission Oil/Gal
119	140415	275	Hydraulic Fluid/Gal

POWER UNIT ASSEMBLY

800377

Item	Part Number	Qty.	Description
122	100536	1	Exhaust Shield
123	100682	1	2-042 O-Ring
124	100535	2	.38 Hex Nut
125	100404	2	Intake Grill (300)
126	100400	1	Left Exhaust Grill
127	100423	4	FITT2P-08P000000-000S007
128	110244	1	Tube
129	110827	1	10-32 X .75 BHCS S.S.
130	100680	2	2-258 O-Ring
131	810045	1	Hex Key Group
132	100651	1	24 V Test Light
133	100600	1	Hex Key Rack
134	100502	1	Throttle Brkt.
135	100504	1	24v Solenoid
136	100458	2	90 Deg. Flanged Adapter
137	110231	5	S/O Cord 12' Lg
138	100436	2	Gage (0-60 Psi.) (GA5)
139	100402	1	Right Exhaust Grill
140	100476	1	FITT2S-08P08P000-0300301
141	100478	1	HOSE038R01J006J006L02000
142	130399	1	FITT2S-06M04P000-000H001
143	400411	1	FITT2L-06M06J000-000H001
144	100936	1	FITT2S-06M04R000-000H001
145	100063	1	FITT2P-16P0000000000H001
146	100787	1	FITT2L-08M08R000-000H001
147	300443	1	FITT2S-08Q08Q000-000H001
148	300067	1	FITT2L-08P08Q00-000H001
149	100474	1	Breather
150	100524	1	Tube-4x4x11 Ga X 33
151	400163	1	#10-32 Hex Nut
152	120613	1	Water Seperator Element
153	400247	28	Engine Oil/Quart
154	100394	1	Top Air Baffle
155	110246	1	Electric Actuator(24V) (M)
156	110254	1	Electric Throttle Bracket
157	110446	1	Throttle Arm
158	110448	1	Adjustable Link
159	100631	1	.25-20 X 2.0 Lg SHCS
160	400203	1	FITT2S-06M06P000-000H001

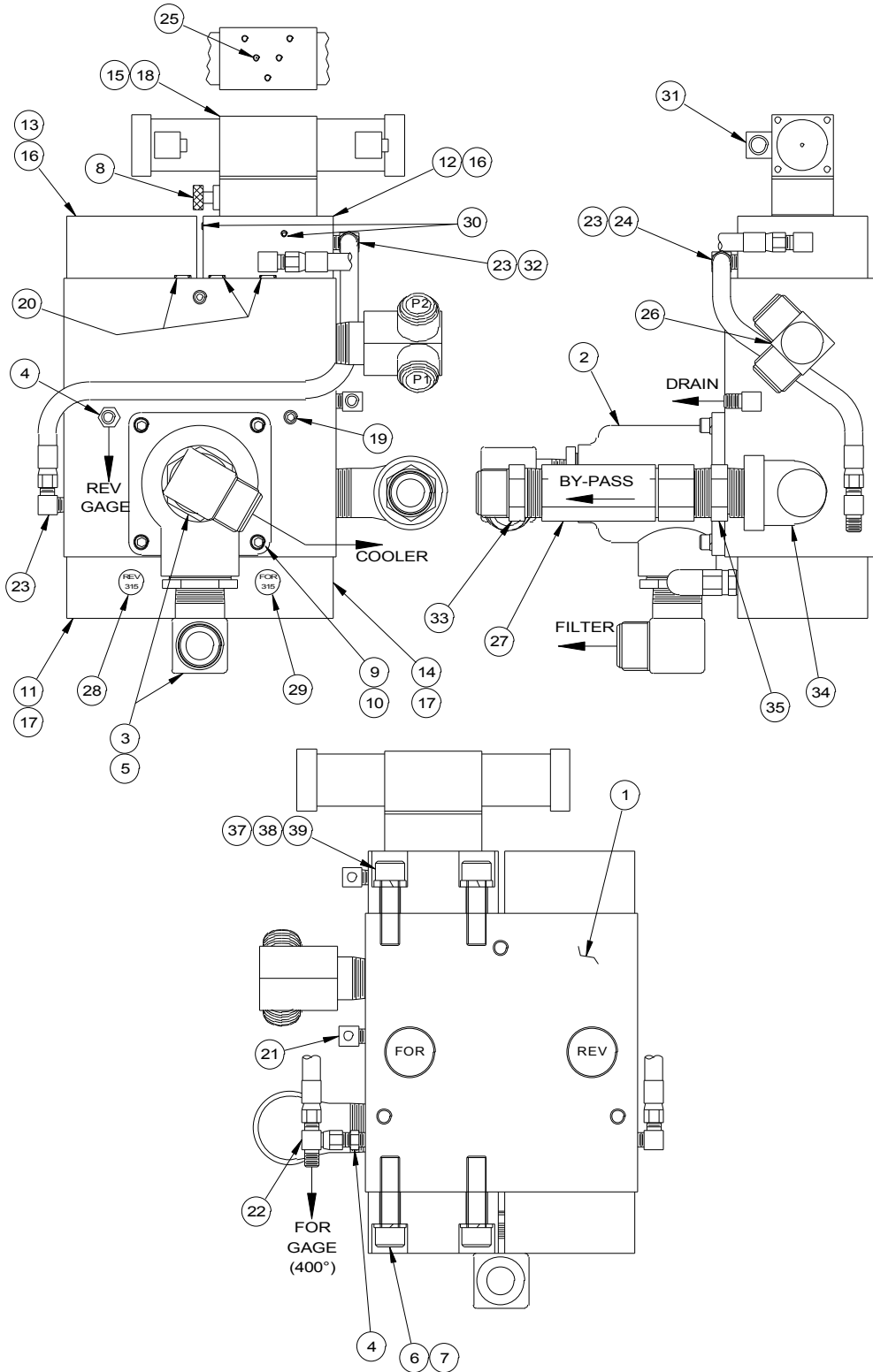
POWER UNIT ASSEMBLY

800377

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
161	100595	1	.25-20 X 1.25 Lg SHCS
162	100422	2	.25-20 UNC Esna Nut
163	150179	2	.312-18 X .75 HHCS
165	100428	1	Solenoid Bracket
166	130061	2	#10-32 x .5 BHCS STN STL
167	300671	2	#10 Flat Washer
168	400161	2	#10 Lock Washer
169	100398	20	Saddle Clip
170	110830	32	.25 X 2.00 Hex Tex Screw
171	100396	10	.312-18UNC X 1.50 Lg. SHCS

CONTROL MANIFOLD ASSEMBLY

810571



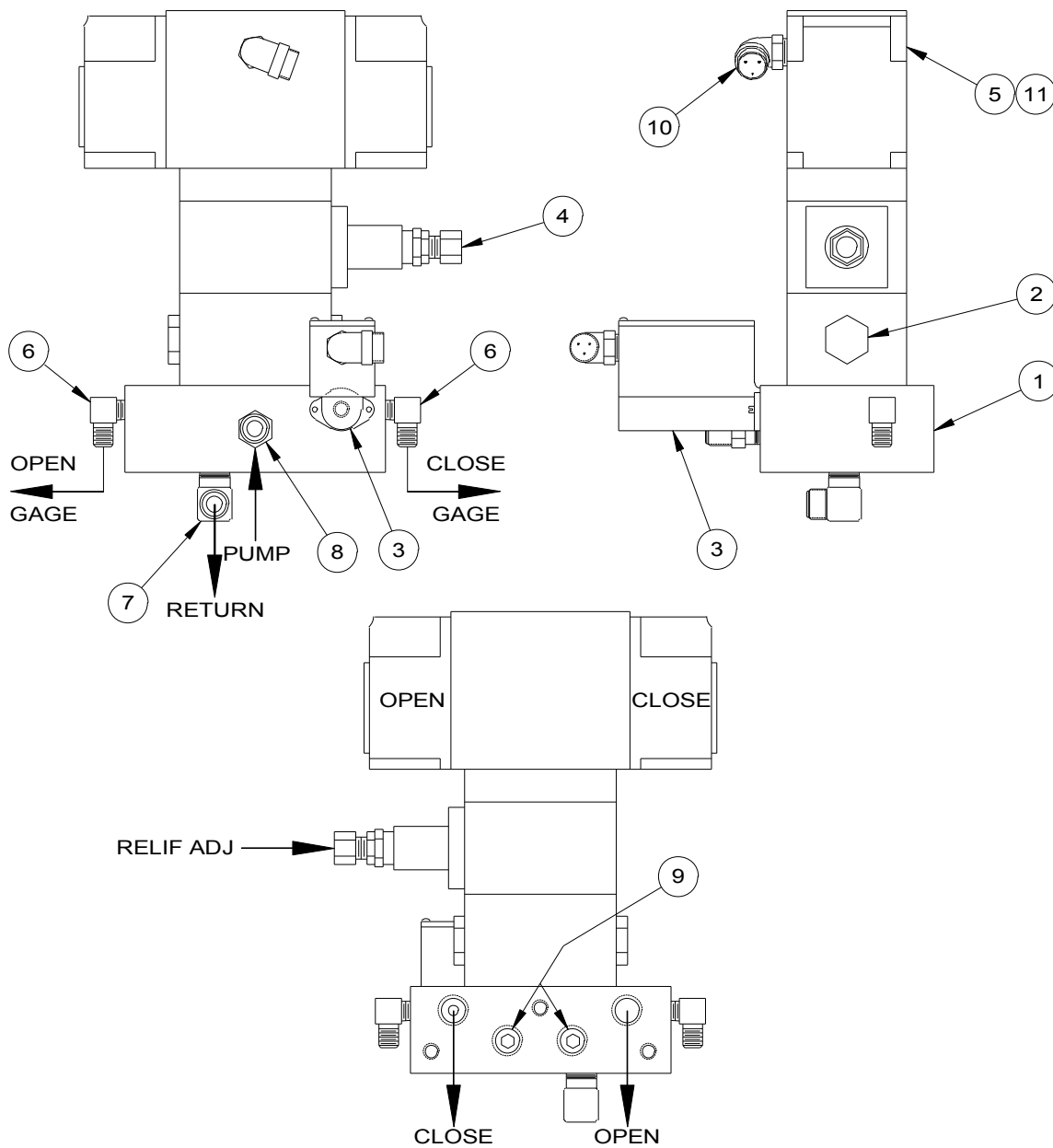
CONTROL MANIFOLD ASSEMBLY

810571

Item	Part Number	Qty.	Description
1	100758	1	300 Manifold Block
2	110628	1	Cooler Valve (V3)
3	100588	2	FITT2L-24M24P000-0000001
4	110203	2	FITT2S-04M04P000-000H001
5	100547	2	FITT2S-32P24Q000-000H306
6	400039	12	.75-10UNC X 2.75 Lg SHCS
7	100069	12	.75 Lock Washer Medium
8	100654	1	Sandwich Shut-Off Valve (V4)
9	100143	4	.375-16 X 1.25 Lg SHCS Locwel
10	400149	4	.375 Lock Washer
11	110544	1	Cartridge Cover (CC4)
12	110530	1	Cartridge Cover (CC1)
13	110606	1	Cartridge Cover (Blank) (CC2)
14	110546	1	Cartridge Cover (CC3)
15	100650	4	.25-20 UNC X 4.5 Lg SHCS
16	110624	2	Cartridge A (CA1 & CA2)
17	110622	2	Cartridge B (CB1 & CB2)
18	810519	1	Modified Spool Valve (24) (V2)
19	100845	2	FITT2P-04P000000-000S007
20	110602	3	111 O-Ring
21	140581	1	FITT2L-06M04P000-0000001
22	100556	1	FITT2T-04M04M04J-0000001
23	100145	3	FITT2L-04M04P000-0000001
24	100149	1	HOSE025R02J004J004L01900
25	140387	1	Orifice-.059
26	100608	1	Special Tee
27	130339	1	1.5 Check Valve (CV2)
28	100632	1	Rev. Cartridge (315) (RV4)
29	100632	1	For. Cartridge (315) (RV1)
30	100646	2	FITT2P-02P000000-000S007
31	100990	2	Electrical Connector
32	100719	1	HOSE025R02J004J004L03000
33	100565	1	FITT2S-24M24P000-000H001
34	100446	1	FITT2L-24P24Q000-0000001
35	110037	1	FITT2S-24P24P000-000H001
36	110237	1	Str S/O Cord Adapter
37	110616	1	.25 X .625 Lg Roll Pin
38	100067	4	.75-10 X 2.5 Lg SHCS Locwel
39	400727	4	.75 Hi-Collar Lockwasher

CLAMP MANIFOLD

810035



CLAMP MANIFOLD

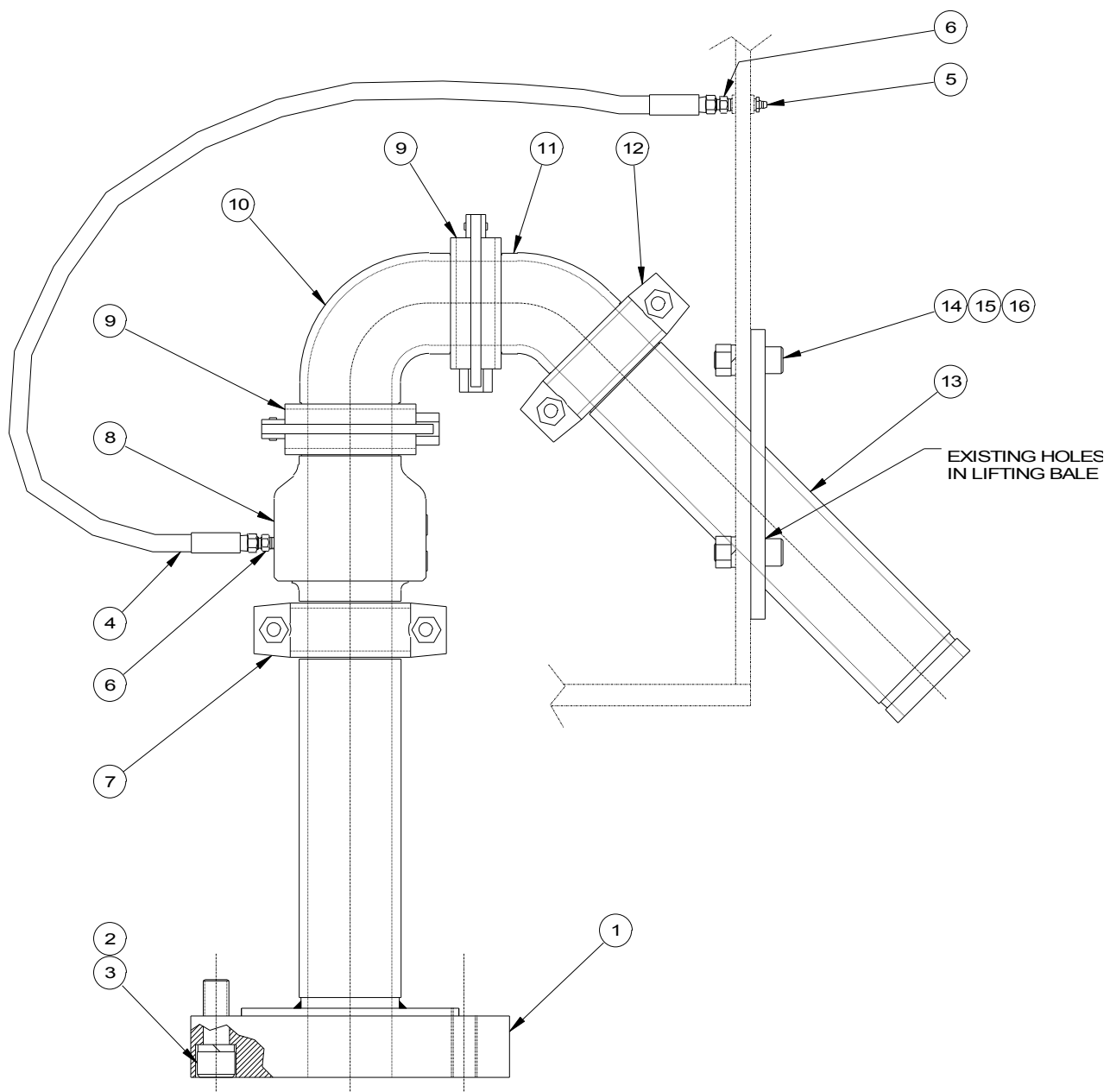
810035

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	110642	1	Clamp Manifold Block
2	110149	1	Check Valve (CV5)
3	810033	1	Pressure Switch Assembly (PS1)
4	100898	1	Sandwich Relief (RV2)
5	110147	1	Control Valve (V1)
6	140539	2	FITT2L-04M02P000-0000001
7	110632	1	FITT2L-12M06P000-000H001
8	110630	1	FITT2S-08M06P000-000H001
9	400213	2	FITT2P-06P000000-000S007
10	110235	1	90 Deg S/O Cord Adapter
11	110634	4	.25-20 X 7.5 Lg SHCS

3" ROTARY JOINT ASSEMBLY

800275

THIS IS AN OLDER OPTION



3" ROTARY JOINT ASSEMBLY

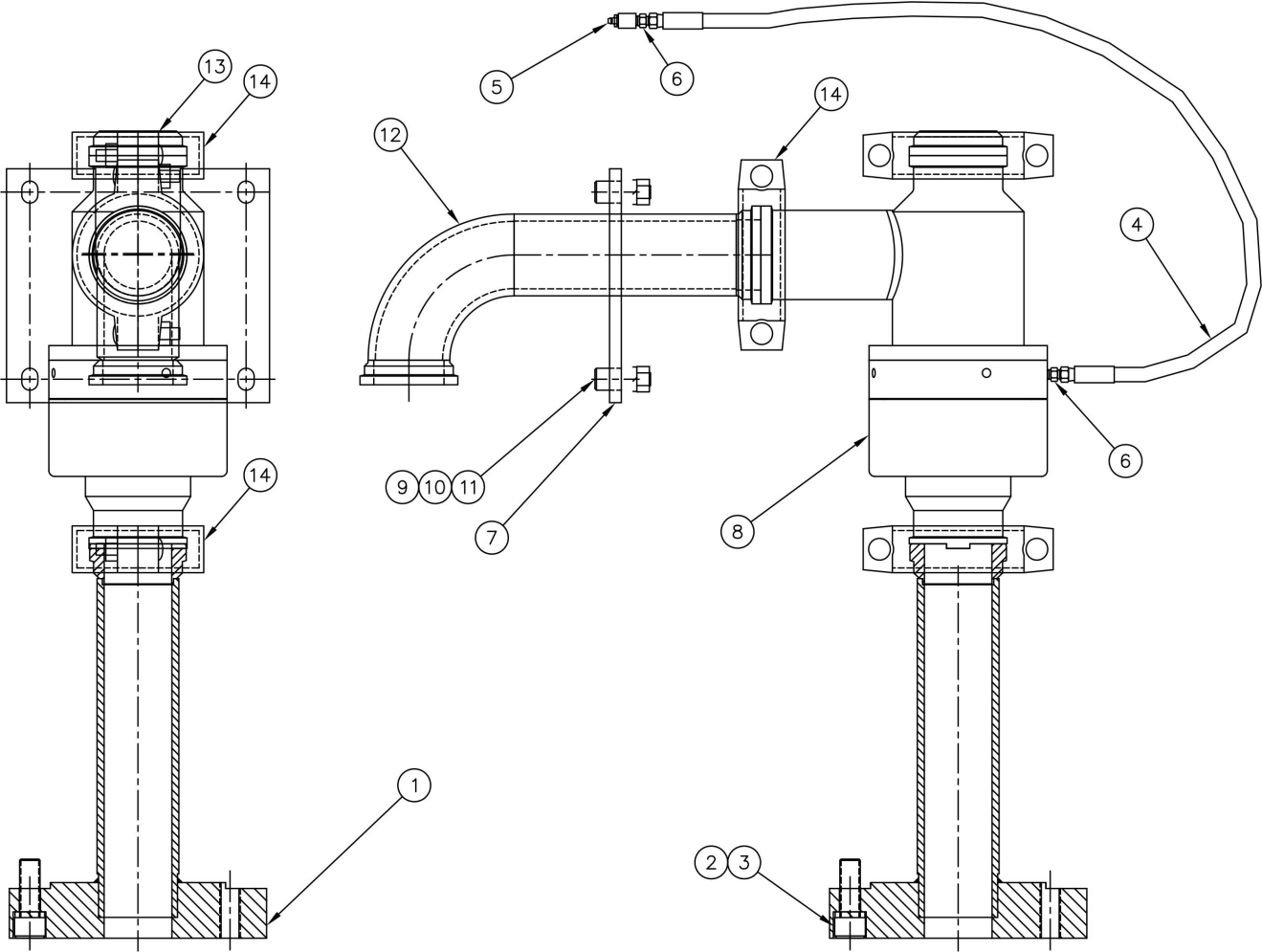
800275

THIS IS AN OLDER OPTION

<u>Item</u>	<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
1	400871	10	3" Adapter
2	400909	8	.875-9 X 2.50 Lg SHCS
3	400911	8	.875 Hi Collar Lock Washer
4	100719	1	HOSE025R02J004J004L03000
5	100229	1	Grease Fitting
6	140267	2	FITT2S-04M02P000-000H001
7	400477	1	3" Victaulic Coupling
8	810551	1	3" Swivel Joint Asm.(J&M)
9	400875	2	3" 78 Coupling
10	400877	1	3-90 Elbow
11	400879	1	3-45 Elbow
12	400881	1	3" 75 Coupling
13	400867	10	3" Grout Pipe W/Support
14	100005	4	.625-11 X 1.75 Lg SHCS Loc Wel
15	100273	4	.625-11 Hex Nut
16	100007	4	.625 Lock Washer-Medium

3" ROTARY JOINT ASSEMBLY

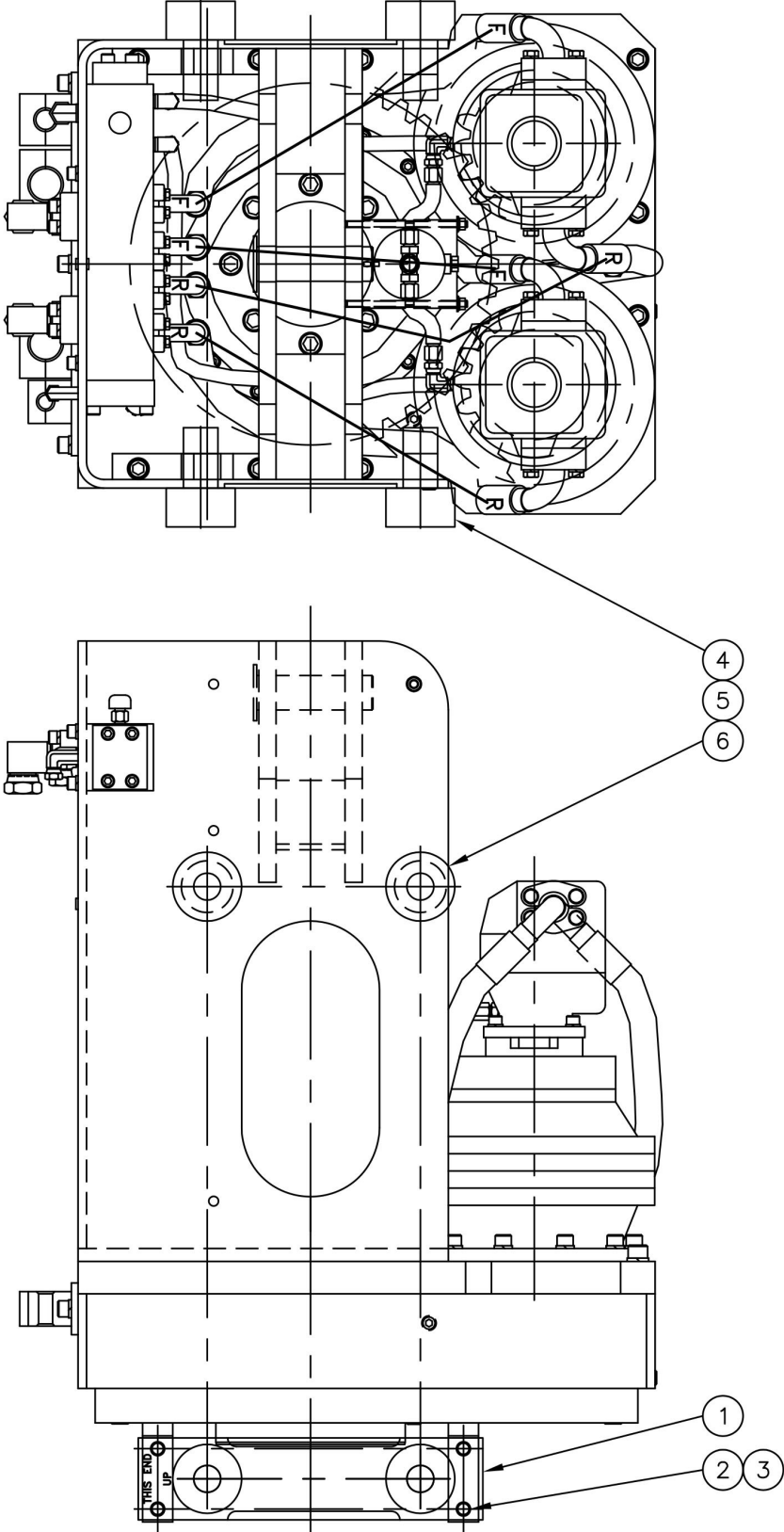
800611



3" ROTARY JOINT ASSEMBLY

800611

Item	Part Number	Qty.	Description
1	400600	1	3" ADAPTER
2	400909	8	.875-9 X 2.5 LG SHCS
3	400911	8	.875 HI COLLAR LOCK WASHER
4	100719	1	HOSE025R02J004J004L03000
5	100229	3	GREASE FITTING
6	140267	2	FITT2S-04M02P000-000H001
7	400602	1	BALE PLATE 3 INCH
8	400590	1	3 INCH KING OIL SWIVEL JOINT
9	100005	4	.625-11 X 1.75 LG SHCS LOC WELL
10	100273	4	.625-11 HEX NUT
11	100007	4	.625 LOCK WASHER MEDIUM
12	400596	1	INLET GROUTE TUBE
13	400594	1	PLUG
14	631057	3	3" COUPLING
	800077		3.00 HEX ADAPTER
	800079		3" API ADAPTER



ROLLER GUIDE ASSEMBLY

800269

Item	Part Number	Qty.	Description
1	400549	2	ROLLER ADAPTER
2	100639	8	0.75-10UNC X 2.50 LG SHCS
3	100069	8	.75 LOCK WASHER
4	400597	8	4 INCH CAM FOLLOWER
5	400725	8	1.50-12UNF HEX NUT
6	100195	8	1.50 LOCK WASHER HEAVY

RECOMMENDED TIGHTENING TORQUE

Nominal Screw Size	Nominal Socket Size	Tightening Torque Ft-Lbs. (Kg-M)	Nominal Screw Size	Nominal Socket Size	Tightening Torque Ft-Lbs. (Kg-M)
#10-24	5/32	6 Ft-Lbs. (.83 Kg-M)	#10-32	5/32	6 Ft-Lbs. (.83 Kg-M)
1/4-20	3/16	13 Ft-Lbs. (1.8 Kg-M)	1/4-28	3/16	15 Ft-Lbs. (2.1 Kg-M)
5/16-18	1/4	27 Ft-Lbs. (3.7 Kg-M)	5/16-24	1/4	30 Ft-Lbs. (4.2 Kg-M)
3/8-16	5/16	48 Ft-Lbs. (6.6 Kg-M)	3/8-24	5/16	55 Ft-Lbs. (7.6 Kg-M)
7/16-14	3/8	77 Ft-Lbs. (10.6 Kg-M)	7/16-20	3/8	86 Ft-Lbs. (11.9 Kg-M)
1/2-13	3/8	119 Ft-Lbs. (16.4 Kg-M)	1/2-20	3/8	133 Ft-Lbs. (18.4 Kg-M)
5/8-11	1/2	234 Ft-Lbs. (32.3 Kg-M)	5/8-18	1/2	267 Ft-Lbs. (36.9 Kg-M)
3/4-10	5/8	417 Ft-Lbs. (57.6 Kg-M)	3/4-16	5/8	467 Ft-Lbs. (64.5 Kg-M)
7/8-9	3/4	676 Ft-Lbs. (93.4 Kg-M)	7/8-14	3/4	742 Ft-Lbs. (102.5 Kg-M)
1-8	3/4	1,009 Ft-Lbs. (139.4 Kg-M)	1-12	3/4	1,126 Ft-Lbs. (155.6 Kg-M)
1-1/4-7	7/8	1,600 Ft-Lbs. (221.1 Kg-M)	1-1/4-12	7/8	1,800 Ft-Lbs. (248.8 Kg-M)
1-1/2-6	1	2,800 Ft-Lbs. (387 Kg-M)	1-1/2-12	1	3,000 Ft-Lbs. (414.6 Kg-M)

NOTE: These values are for Socket head cap screws only. Button heads, Flat heads and Set screws have different values. Check the Allen Hand Book for correct torque specifications.