

PARTS LIST MANUAL

J&M MODEL 3060

EARTH AUGER

WITH MODEL 310POWER UNIT

OM-3060-310-0701





PREFACE

This manual was prepared to acquaint the owner, operator and service man with the construction and servicing of the J&M Model 3060 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

J&M EQUIPMENT STANDARD WARRANTY

J&M warrants new products sold by it to be free from defects in material or workmanship for a period of 1 year after date of delivery to the first user and subject to the following conditions:

J&M's obligation and liability under this WARRANTY is expressly limited to repairing or replacing, at J&M's option, any parts which appear to 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 J&M or the authorized 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 J&M and which may carry the warranty of the manufacturer thereof, or to normal maintenance (such as engine tune-up) or to normal maintenance parts (such as oil filters). 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. J&M MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS, FOR ANY PARTICULAR PURPOSE.

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

NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY UNLESS SUCH CHANGE IS MADE IN WRITING AND SIGNED BY AN OFFICER OF J&M.



SAFETY INSTRUCTIONS

- 1. Read the manual thoroughly before operating or working on the equipment.
- 2. Read and follow any safety instructions in the CATERPILLAR engine operators manual.
- 3. Only well trained and experienced personnel should attempt to operate or maintain this equipment.
- 4. Never adjust, lubricate or repair the unit when it is in operation, or lifted above ground level.
- 5. Never remove, paint over or cover warning or safety labels. If labels become damaged or unreadable, replace immediately.
- 6. All personnel should wear approved safety clothing, including **HARD HATS**, **SAFETY SHOES**, **SAFETY GLASSES** and **HEARING PROTECTION** when in the vicinity of this machinery.
- 7. Do not stand any closer to this equipment than necessary when it is in operation. Parts may loosen and fall. Dirt and rocks may fall from flighting. Parts may loosen and fall. Never stand under operating, or elevated, equipment.
- 8. When maintaining or repairing the equipment, never substitute parts not supplied, or approved in writing, by J&M.
- 9. Do not weld, or flame cut, on this equipment.
- 10. Never use or store flammable liquids on or near the engine.
- 11. Insure that all lifting equipment, including cranes, wire rope, slings, hooks, shackles, etc., are properly sized for the worst case loads anticipated during operations.
- 12. If there are any questions about the weights, specifications, or performance of the unit, contact J&M before handling or operating the equipment.
- 13. If the equipment is to be used for anything other than drilling plumb holes, contact J&M before using the unit.
- 14. Check wire rope clips for tightness, and check wire ropes for wear, daily.
- 15. Insure that ground vibrations will not damage or collapse adjacent structures or excavations.
- 16. Remove all tools, parts and electrical cords before starting the unit.
- 17. When operating in an enclosed area, pipe exhaust fumes outside. Continued breathing of exhaust fumes may be fatal.
- 18. When servicing batteries, do not smoke or use open flames in the vicinity. Batteries generate explosive gas during charging. There must be proper ventilation when charging batteries.
- 19. When filling fuel tank, do not smoke or use open flame in the vicinity.
- 20. If abnormal equipment operation is observed, discontinue use immediately and correct the problem. Do not leave the equipment control pendant (radio control) unattended.
- 21. Store oily rags in approved containers, and away from engine exhaust system.
- 22. Make sure that the auger rotation switch is in NEUTRAL before starting the power unit engine.
- 23. Do not adjust, or set, hydraulic pressures higher or lower than those specified in the manual.
- 24. Never operate this equipment with hydraulic hoses that are damaged or "kinked". Replace damaged hoses immediately.
- 25. Do not lift, or support, hydraulic hoses with wire rope slings.
- 26. Never attempt to connect quick disconnects when the power unit is running.
- 27. Do not pull on, or attempt to move equipment, with hydraulic hoses.



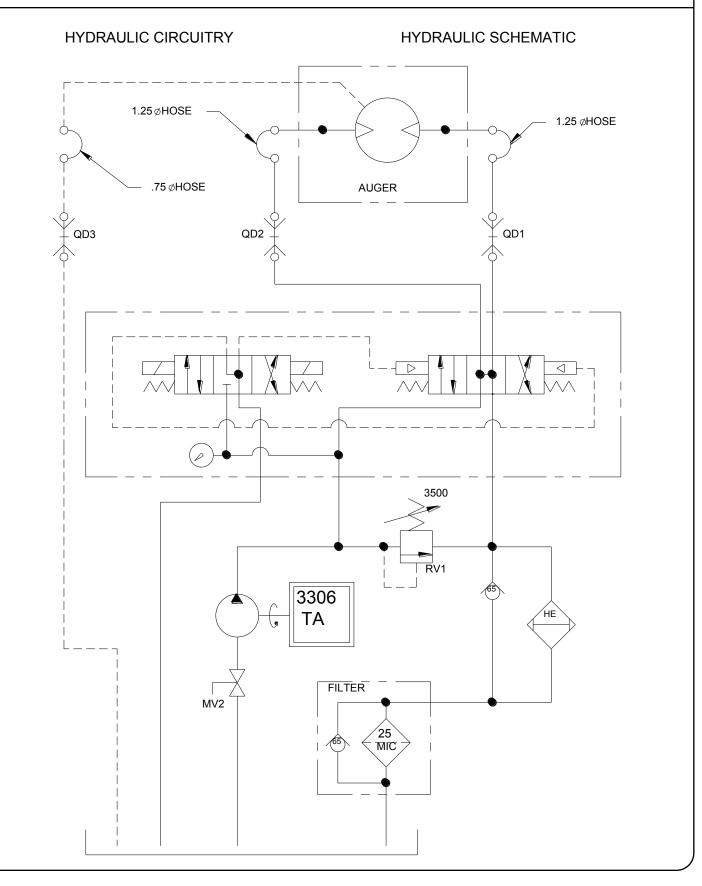
SAFETY INSTRUCTIONS

- 28. Do not attempt to locate hydraulic leaks with your hands. High pressure hydraulic leaks can penetrate the skin, causing severe damage, blood poisoning and infection. Do not attempt to repair leaks while the equipment is in operation.
- 29. Do not attempt to tighten, or loosen, fittings or hoses when the machine is in operation.
- 30. Power unit must always be placed on level, stable, ground.
- 31. Do not remove power unit heat shields, or operate power unit without heat shields. Severe fires may result.
- 32. A properly maintained fire extinguisher, suitable for oil fires, must be kept in the immediate vicinity of equipment operations.
- 33. When moving or transporting this equipment, insure that the vehicle or vessel is of sufficient capacity to handle the load, and that the equipment is properly tied down.
- 34. When moving or transporting this equipment, be sure that quick disconnect dust caps are tight, and that cap safety cables are in place. Be sure that all equipment parts are tight, or properly secured, before shipment. Unsecured parts may vibrate loose and fall, during transport, causing injury or property damage.
- 35. Keep crane boom, flighting, leads, wire rope and other equipment at least 15' (5M) from electrical power lines, transformers and other electrical equipment, or at such distance as required by applicable safety codes.
- 36. Rounded or damaged bolt heads or nuts should be replaced so that proper torque values may be obtained. Proper torque values are necessary to prevent parts on this equipment, leads and crane boom from loosening and falling. Refer to Torque Chart, in the manual, for proper values.
- 37. Make sure that the crane and leads have sufficient capacity to handle the auger, flighting and dirt expected on the job. High down pull forces can be generated if the flighting screws itself into the ground.
- 38. Insure that the leads are adequately secured against rotation before starting drilling operations.
- 39. When extracting flighting from ground, check crane load/radius tables to be sure crane capacity is adequate for maximum allowable extraction pull.
- 40. When extracting flighting, or any other drilling operations, always be sure that the crane line is aligned with the centerline of the flighting. Do not side load crane boom or auger. Dangerous crane boom, or auger, damage may result.
- 41. When extracting flighting, do not exceed the rated capacity of the auger.
- 42. Keep hands away from rotating flighting, auger shaft and rotary joint.
- 43. Keep hands, feet and tools well clear of flighting guides.
- 44. API flighting connectors must be secured to prevent unscrewing during reverse (ccw) rotation. Flighting may fall.
- 45. Do not allow clothing, hoses, ropes, etc. to become entangled in, or wrap around, rotating flighting, auger shaft or rotary joint.
- 46. When drilling angled or horizontal holes, insure that the leads, and crane boom, have sufficient bending strength to handle the worst case load. Consult J&M.

REMEMBER, SAFETY IS EVERYONE'S BUSINESS.

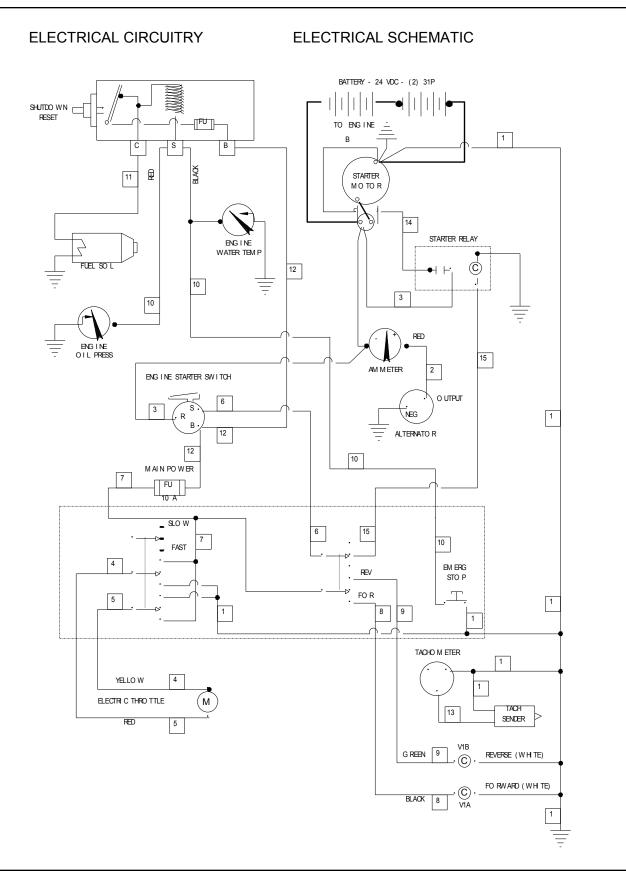














PARTS LIST

GENERAL DATA

ABBREVIATIONS

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

ASM. BHCS Cyl. DC FHCS FLCS Gr	Assembly Button Head Cap Screw Cylinder Direct Current Flat Head Cap Screw Flanged Head Cap Screw Grade
HC	High Collar
HHCS HHPP	Hex Head Cap Screw 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



PARTS LIST

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.
- 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	13 UNC = Threads Per Inch
1.50 Lg = Length	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, once on the gear case near the hose clamp plate.
 - b. Power unit stamped twice once on the upper side of 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.



PARTS LIST

VIII. ORDERING PARTS

B. <u>FITTING DESCRIPTION KEY</u>

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.

FITT 2 L - 16 M 12 J 00 0 -	00L 0 0 0 1
SELECTOR INDEX	MATERIAL
2 - INCHATTING	1 - CARBONSIEL
9 - MERCATTING	2 - BRASS
CONFIGURATION OR	4 - STAINLESS STL
SHAPE OF FITTING	5 - AARMALIFON
S-STRAGHT FITTING	6 - MALEABLE IFON
L-90 Dag, ELBOW	8 - FORGED STEEL
V - 45 Deg. ELBOW T - TEE	SPECIAL NOTATIONS
C-CAP	PRESSURE RATING
P-FLUG	0 - NONE
U-UNON	1 - 125 LB
X-GROSS	3 - S0H40
(FOURTHENDFITTG REQD)	4 - S0H80
FIRST END SIZE	INSTALLATION AID OR
* IN 1/16TH-SOFANINCH	STYLE OF HEAD
(INDEX 2)	0 - NOT AFFLICABLE
IN MILLIMETERS (INDEX 9)	H - FEGULAR HEX
SEE GENERAL SPECIFICATION	Q - SQUARE HEAD (EXT.)
SHEET FOR SEQUENCE OF ORDER	R - SQUARE HEAD (INT.)
FIRST END FITTING STYLE	S - HEX HEAD (INT SOCKET)
SEEFTING STYLE SELECTOR	T - HEX HEAD (EXT.)
GHARTISG1 SECOND END SIZE TFAFFUCABLE-SEE FIRSTENDSZE	LENGTH CODE (EBOWS & N FRES) _L - LONG (EBOW) _X- EXTRALONG (EBOW) _C- CLOSE (N FRE)
SECONDENDFITTINGSTYLE TFAFFLOABLE-SEE FIRSTENDFITTINGSTYLE	RIFE NIFRES (LONG) ONLY IN DEC INDERS FOR INDEX 2
THIRD END SIZE	060 = 5.0 NOHES 105 = 10.5 NOHES
FIRST END SZE	INMILLIMETERS FOR INDEX 9 120 = 12 0 MILLIMETERS
THIRDENDFITTINGSTYLE	084 = 8.4 MILLIMETERS
TFAFFLICABLE-SEE	FOURTH END SIZE &
FIRSTENDSZE	FITTING STYLE
* EXCEPTIONS	(GROSSES ONLY) SEER FST END RITTING SZE OR END STYLE
90 = 10' 96 = 6' 92 = 12' 98 = 8' 94 = 14' 99 = NON CODE S ZE	



PARTS LIST

VIII. ORDERING PARTS

B. <u>FITTING DESCRIPTION KEY (CONTINUED)</u>

FITTING STYLE SELECTOR CHART

<u>SC-1</u>

FOR END FITTING STYLE SELECTION

Μ		JICMALE 37 Deg.FLARE
Ρ		MALE PIPE NPT
R		S.A.E. MALE 0-RING (& ADJUSTABLE)
В	<u>ğığı</u>	JIC MALE 37 Deg. FLARE BULKHEAD
D		MALE PIPE NPT SWIVEL
S		B.S.P. MALE PIPE

	JIC FEMALE 37 Deg. FLARE (& SWIVEL)
	FEMALE PIPE NPTF
K	SAE. FEMALE O-RING
N	FEMALE PIPE NPSM-SWIVEL
F	SPLIT FLANGE 3000 PSI. CODE 61
Η	SPLIT FLANGE 6000 PSI. CODE 62

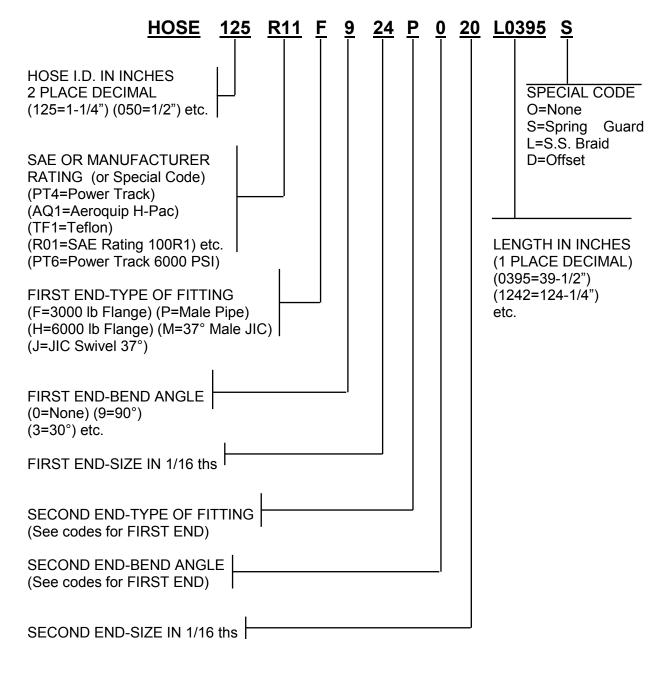


PARTS LIST

VIII. ORDERING PARTS

C. HOSE DESCRIPTION CODE

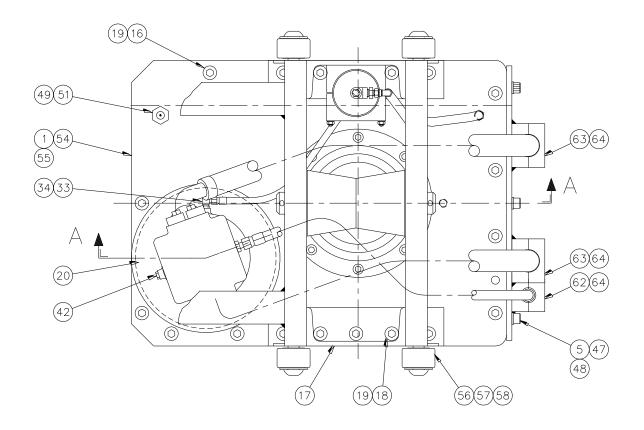
The HOSE DESCRIPTION CODE is a 24 digit number enabling easier and quicker identification whenever a hose replacement is desired. The key below explains the structure of the coded number in detail.



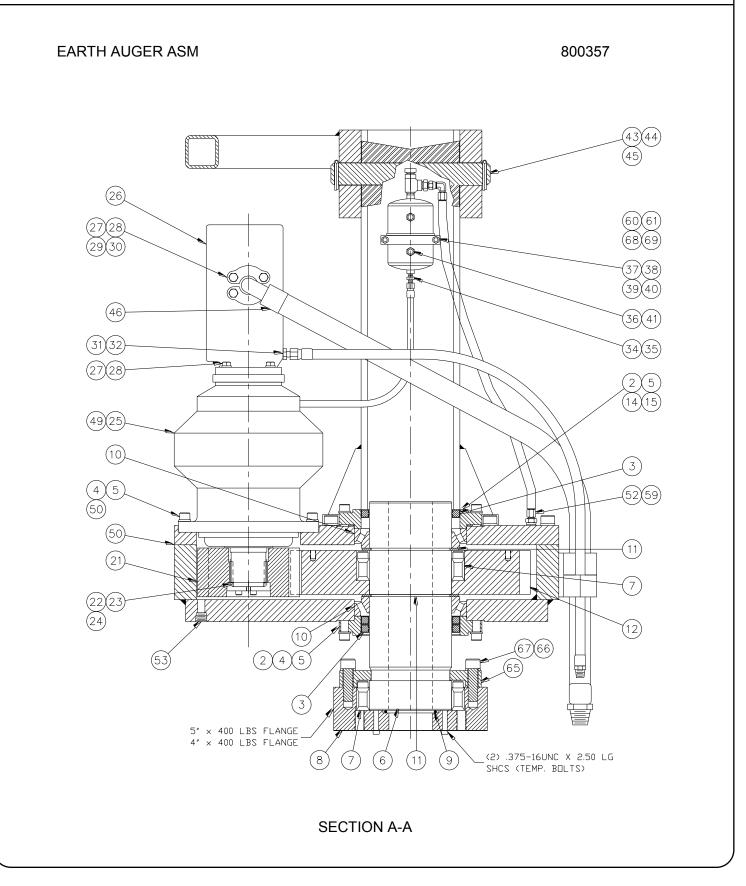


PARTS LIST

EARTH AUGER ASM









PARTS LIST

EARTH AUGER ASM

	Part		
Item	Number	Qty.	Description
4	940555	4	Coor Doy Din Asm
1	810555	1	Gear Box Pin Asm
2	400997	2	Retainer Ring
3	400948	3	
4	100085	17	.625-11 X 2.25 Lg SHCS
5	100007	29	.625 Lock Washer-Medium
6	400998	1	Output Shaft
7	400946	2 1	7.5 Ring Feder Clamp
8	400999		Drive Flange
9	400944	1	425-O-Ring
10	400942	2	Bearing
11	400940	2	Snap Ring (7.50 Dia)
12	400993	1	Gear
13	400824	1	3060 Auger S/N Plate
14	400936	1	Shim Pack
15	100071	8	.625-11 X 2.5 Lg Shcs Loc-Wel
16	400545	11	.75-10 UNC X 3 Lg SHCS
17	400978	1	Lifting Bale
18	140111	10	.75-10 X 4.0 Lg SHCS
19	100069	21	.75 Lock Washer Medium
20	130135	1	.625-11 X 3.5 Lg SHCS
21	400995	1	Pinion Gear
22	400970	1	Retainer
23	100051	3	.375-16 X 1.0 Lg Shcs Loc-Wel
24 25	400149	5 1	.375 Lock Washer
25 26	400934	1	Plantatary Drive Adapter
26 27	400932 100614	12	Drive Motor
28	100014	12	.5-13 UNC X 1.50 Lg HHCS .5 Lock Washer Medium
20 29	100596	4	
			#24 Split Flange Half
30 31	110119 400714	2 1	2-225 O-Ring FITT2S-08M04R000-000H001
32	400714	1	
			HOSE063R01J008P012L05600 FITT2L-06M06P000-0000001
33 34	400227	1 1	
34 35	400926 400203	1	HOSE038R01J006J006L02500 FITT2S-06M06P000-000H001
36		1	
36 37	400915 400919		Expansion Tank Assembly 4" U-Clamp
37	400919	2 2	.375-16 UNC X 7" Lg Allthread
30 39	100535	2	.375 -16 Hex Nut
39 40	400151	2	.375 Flat Washer
40	400131	2	.313 FIAL WASHE

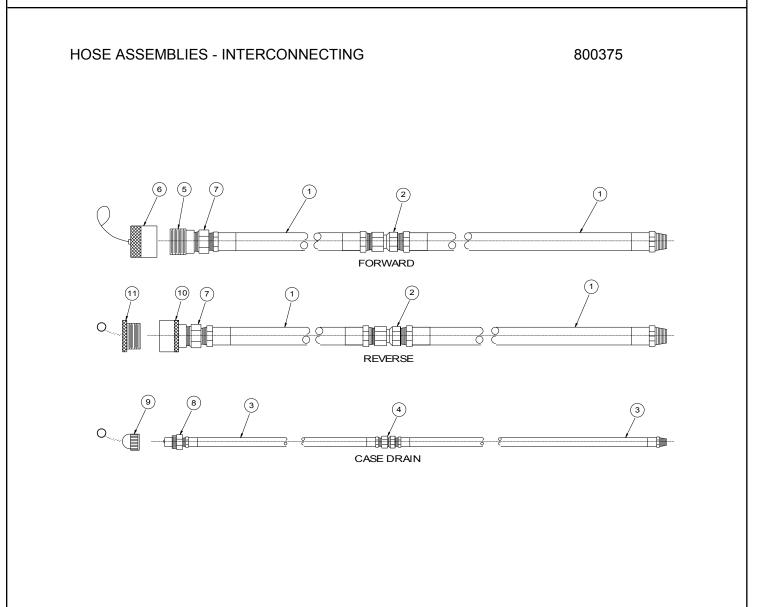


PARTS LIST

EARTH AUGER ASM

Item	Part Number	Qty.	Description
41	400827	1	Sight Gauge (included with 400915)
42	400925	1	Drain Plug (Planetary)
43	400976	1	Cable Bale
44	400974	1	Pin
45	300375	2	.312 X 5 Lg Cotter Pin
46	400924	2	HOSE125PT4P020F924L06200
47	400952	1	HOSE CLAMP PLATE
48	100575	3	.625-11 X 1.25 Lg SHCS
49	110444	8	Transmission Oil/Gal
50	100836	1	Silicone Sealant
51	400950	1	Dip Stick (3060)
52	110171	1	FITT2S-08P06M000-000H001
53	100183	1	FITT2P-12P000000-000S007
54	100299	1	Primer/Gal
55	110156	1	J&M Yellow Paint/Gal
56	400013	8	Cam Roller
57	400321	8	1.0-8 X 3.25 Lg BHCS
58	120299	8	1.00 H. S. Flat Washer
59	110633	1	HOSE038R02J006J006L03700
60	400203	1	FITT2S-06M06P000-000H001
61	400411	1	FITT2L-06M06J000-0300401
62	100013	1	Hose Clamp
63	100009	2	Hose Clamp
64	100011	6	.5-13 X 2.0 Lg SHCS
65	400764	1	Split Retainer
66	400760	8	.88-9UNC X 2.75 Lg SHCS
67	400911	8	.875 Hi Collar Lock Washer
68	110792	1	FITT2T-06Q06P06Q-0000306
69	400746	1	Breather (included with 400915)







PARTS LIST

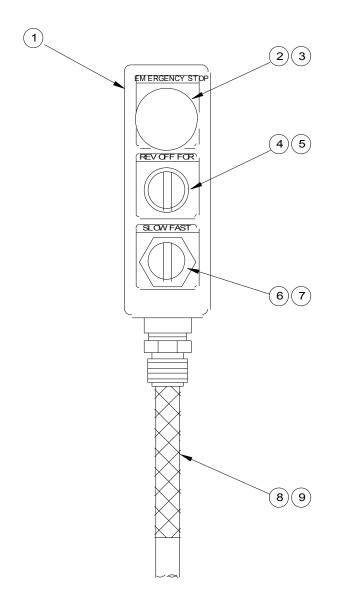
HOSE ASSEMBLIES - INTERCONNECTING

	Part		
Item	Number	Qty.	Description
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



PARTS LIST

CONTROL PENDANT ASSEMBLY



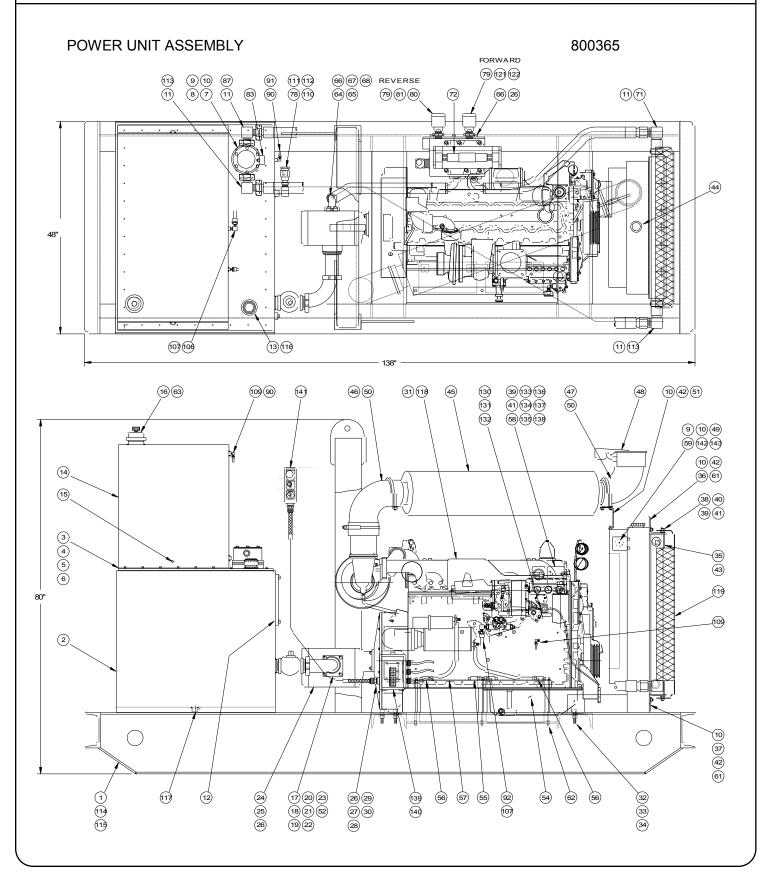


PARTS LIST

CONTROL PENDANT ASSEMBLY

	Part		
Item	Number	Qty.	Description
1	130153	1	Pendant Enclosure
2	130509	1	Emergency Stop Label
3	130507	1	Emergency Stop Button
4	100864	1	Rev-Off-For Nameplate
5	130155	1	Switch
6	100562	1	Slow-Fast Nameplate
7	100566	1	Switch
8	110603	1	1.0 Strain Relief
9	100560	50	Pendant Cable/Ft



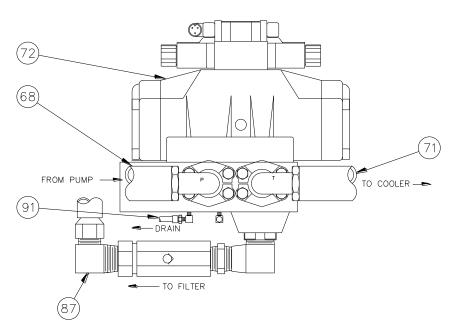




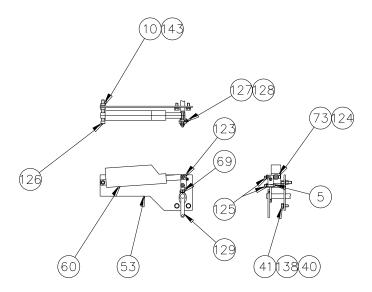
PARTS LIST

POWER UNIT ASSEMBLY

800365



REAR VIEW OF CONTROL MANIFOLD ON POWER UNIT



DETAILED VIEWS OF ELECTRIC THROTTLE





POWER UNIT ASSEMBLY

PARTS LIST

	Part		
Item	Number	Qty.	Description
	(000 - (
1	400954	1	Skid Subbase
2	400960	1	Reservoir (331)
3	400958	1	Reservior Cover
4	400956	1	Reservoir Cover Gasket
5	100595	39	.25-20 X 1.25 Lg SHCS
6	100559	38	.25 Lock Washer
7	400085	1	Return Filter Asm.
8	810119	2	K25 Element Assembly
9	100143	6	.375-16 X 1.25 Lg SHCS Loc Wel
10	400149	13	.375 Lock Washer
11	100588	4	FITT2L-24M24P000-0000001
12	400916	1	Sight Gage
13	300563	1	Breather/Filler
14	400914	1	Fuel Tank
15	100423	2	FITT2P-08P000000-000S007
16	100417	1	FITT2C-48Q000000-0000306
17	400117	1	Stop Cock
18	400808	1	FITT2S-40P000000-0900001
19	130119	1	FITT2S-40P000000-0450301
20	400195	1	2.5-90 Deg Flexible Coupling
21	400015	1	2.5 Solid Flange
22	110735	7	.5-13 X 2.5 Lg SHCS
23	400379	1	2-232 O-Ring 90 Duro
24	400904	1	Pump
25	400979	4	.5-20UNF X 1.50 Lg HHCS
26	100121	15	.5 Lock Washer Medium
27	400846	1	Pump Adapter
28	100851	12	.438-14 X 1.25 Lg SHCS
29	100443	12	.437 Lock Washer
30	100445	8	.5-13 X 1.0 Lg SHCS Loc Wel
31	100508	1	3306TA Diesel Engine
32	100085	6	.625-11 X 2.25 Lg SHCS
33	100086	6	.625-11 Esna Nut
34	100007	6	.625 Lock Washer-Medium
35	400099	1	Heat Exchanger
36	400922	1	Top Cooler Bracket
37	400920	1	Bottom Cooler Bracket
38	400900	8	.312-18 UNC X 1.50 Lg HHCS
39	100289	18	.312-18 Hex Nut
40	100293	34	.312 Flat Washer



POWER UNIT ASSEMBLY

PARTS LIST

	Part	-	
Item	Number	Qty.	Description
41	100287	20	.312 Lock Washer
42	100207	6	.375-16 X 1.0 Lg Shcs Loc Wel
43	110055	1	FITT2P-20P000000-000S007
44	100726	7	Antifreeze/Gal
45	400898	1	Muffler
46	400896	1	Elbow (5"-90 Deg.)
47	400894	1	Exhaust Outlet Elbow
48	140411	1	5.0 Rain Cap
49	130255	1	Engine Throttle
50	140369	3	5 In. U-Clamp
51	400918	1	Muffler Bracket
52	100027	4	.5 Hi-Collar Lock Washer
53	110254	1	Elec Throttle Bracket
54	400890	2	Battery
55	110653	1	Battery Cable-6
56	100537	2	Battery Cable-24"
57	400888	1	Battery Holddown
58	110371	1	Ammeter
59	100429	1	Throttle Cable Seal
60	110246	1	Electric Actuator (24v)
61	400151	4	.375 Flat Washer
62	400231	3	Hold Down Stud
63	400845	1	Breather
64	100596	2	#24 Split Flange Half
65	110119	1	2-225 O-Ring
66	100119	7	.5-13 X 1.25 Lg SHCS Loc Wel
67	100688	1	Bent Stem Adapter
68	400792	1	HOSE150PT4J024F924L04900
69 70	810617	1	Modified Throttle Arm
70 71	100446	1	FITT2L-24P24Q000-0000001
71 72	400788	1	HOSE150R01J024F924L07700 331 Manifold Asm.
	810607		Tube .38od .28 ld X .88 Lg
73 78	110244 120049	1 1	FITT2S-12P12P000-000H001
78 79	110037	2	FITT2S-24P24P000-000H001
80	110690	1	1.50 Male Disconnect
81	110955	1	1.50 Dust Cap
83	100436	1	Gage (0-60 PSI.)
87	400790	1	HOSE150R01J024J024L06000
90	100145	1	FITT2L-04M04P000-0000001
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PARTS LIST

POWER UNIT ASSEMBLY

	Part		
Item	Number	Qty.	Description
91	110805	1	HOSE019R01J004J004L05500
92	100787	1	FITT2L-08M08R000-000H001
106	110173	1	FITT2S-08M08P000-000H001
107	400854	1	HOSE050R01J008J008L12000
109	100319	1	HOSE025R02J004J004L16000
110	400773	1	FITT2L-12P12Q000-0000306
111	400095	1	.75 Female Disconnect
112	400121	1	.75 Dust Plug
113	110586	1	HOSE150R01JO24J024L12900
114	100299	2	Primer/Gal
115	110156	2	J&M Yellow Paint/Gal
116	140415	232	Hydraulic Fluid/Gal
117	100183	1	FITT2P-12P000000-000S007
118	400247	28	Engine Oil/Quart
119	810561	1	Cooler Screen Guard
121	110692	1	1.50 Female Disconnect
122	110957	1	1.50 Dust Plug
123	110448	1	Adjustable Link
124	100631	1	.25-20 X 2.0 Lg SHCS
125	100422	2	.25-20 UNC Esna Nut
126	110913	1	.38-16 X 3.00 Lg SHCS
127	110827	1	10-32 X .75 BHCS S.S.
128	400163	1	#10-32 Hex Nut
129	110446	2	Throttle Arm
130	110964	1	Pivot
131	110676	1	Cotter Pin .093 X 1.0 Lg
132	100577	1	Stop Cable Clamp
133	400748	1	Switch Bracket
134	130259	1	Start Switch
135	130257	1	Reset Button
136	100329	1	Oil Pressure Gauge
137	130251	1	Water Temp Gauge
138	150179	4	.312-18 X .75 HHCS
139	810733	1	310 Engine Junction Box
140	110229	2	S/O Cord 6' Lg
141	810753	1	310 Control Pendant Asm.
142	400750	1	Throttle Bracket
143	100535	4	.375 -16 Hex Nut



PARTS LIST

CONTROL MANIFOLD ASSEMBLY 810607 (3)(4) ≖₽ ц (7)Ø 0 Ø \square 0 \bigcirc րողո ш Ъ 0) (12)(13)(14) (12)(13)(14) (5) (5) (22) (10) C Х (2) TO COOLER FROM PUMP (ų ų \Diamond Х TO FILTER (15) (11) (18) (16 9 (17) (13)(19) 20 21 (8) ſб 6 VIEW X-X

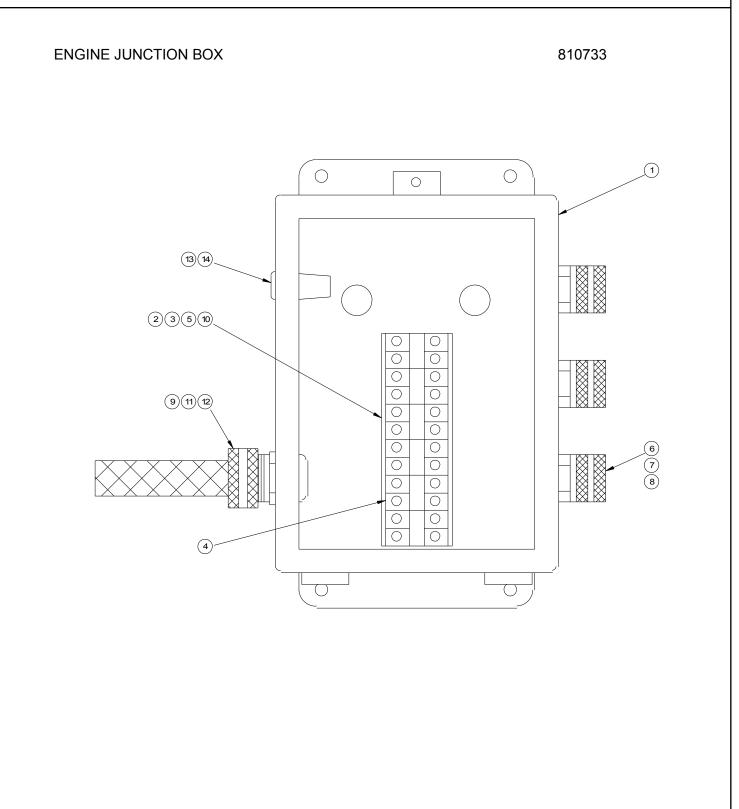


PARTS LIST

CONTROL MANIFOLD ASSEMBLY

	Part		
Item	Number	Qty.	Description
		-	
1	130501	1	175B Control Manifold
2	400786	1	4-Way Valve - 24V
3	400039	6	.75-10UNC X 2.75 Lg SHCS
4	100069	6	.75 Lock Washer Medium
5	100853	2	90 Deg S/O Comp Fitting
6	130503	1	Relief Cartridge
7	110055	1	FITT2P-20P000000-000S007
8	110600	1	0-6000 PSI Gage
9	100145	1	FITT2L-04M04P000-0000001
10	100838	1	FITT2L-02P04Q000-00L0001
11	100845	1	FITT2P-04P000000-000S007
12	100596	4	#24 Split Flange Half
13	110119	3	2-225 O-Ring
14	100119	8	.50-13 X 1.25 Lg SHCS Loc Wel
15	100588	1	FITT2L-24M24P000-0000001
16	130339	1	1.5 Check Valve
17	110037	1	FITT2S-24P24P000-000H001
18	100446	1	FITT2L-24P24Q000-0000001
19	100027	4	.50 Hi-Collar Lock Washer
20	110057	1	1.05 Solid Flange
21	100011	4	.50-13 X 2.0 Lg SHCS
22	110618	1	"Solenoid only" for Item 2







ENGINE JUNCTION BOX

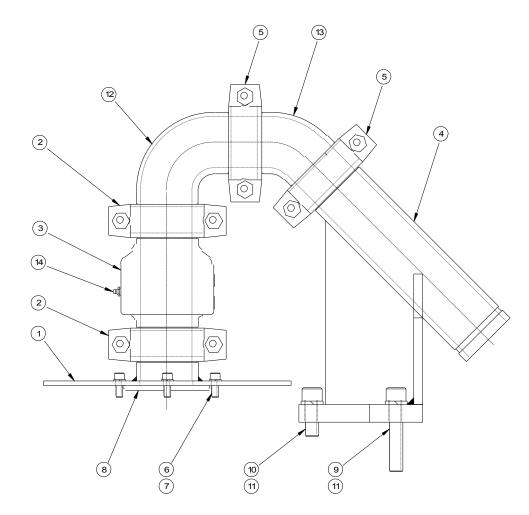
PARTS LIST

Item	Part Number	Qty.	Description
1	110699	1	Junction Box-Jic
2	400161	2	#10 Lock Washer
3	400163	2	#10-32 Hex Nut
4	110567	6	Terminal Block
5	110569	5	Terminal Mtg. Channel/In
6	100855	3	Straight S/O Comp Fitt
7	110843	3	.5 Locknut
8	110841	3	.5 Plastic Bushing
9	100371	1	Strain Relief
10	110649	2	#10-32 X .375 Lg PHMS
11	130409	1	.75 Lock Nut
12	130411	1	.75 Plastic Bushing
13	400834	1	In-Line Fuse Holder
14	400832	1	10 Amp Fuse



PARTS LIST

3" ROTARY JOINT ASSEMBLY





3" ROTARY JOINT ASSEMBLY

PARTS LIST

	Part		
Item	Number	Qty.	Description
1	400982	1	3" Swivel Adapter
2	400477	2	3" Victaulic Coupling
3	810551	1	3" Swivel Joint Asm.(J&M)
4	400972	1	Grout Pipe
5	400881	2	3" 75 Coupling
6	100051	6	.375-16 X 1.0 Lg SHCS Loc Wel
7	400149	6	.375 Lock Washer
8	400944	1	425-O-Ring
9	140111	2	.75-10 X 4.0 Lg SHCS Loc Wel
10	400069	1	.75-10 x 2.0 Lg SHCS
11	100069	3	.75 Lock Washer Medium
12	400877	1	3-90 Elbow
13	400879	1	3-45 Elbow
14	100229	1	Grease Fitting
			-





PARTS LIST

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.

