



350 D

Parts Manual

594PN034



GARDNER-DENVER
PETROLEUM EQUIPMENT

PARTS ORDERING

Cooper Industries is very pleased to now include OPI with Gardner-Denver and Ajax in its line of high quality pumps for oil and gas industry requirements.

Listed below are addresses and phone numbers where you can obtain assistance, parts, and service for OPI pumps.

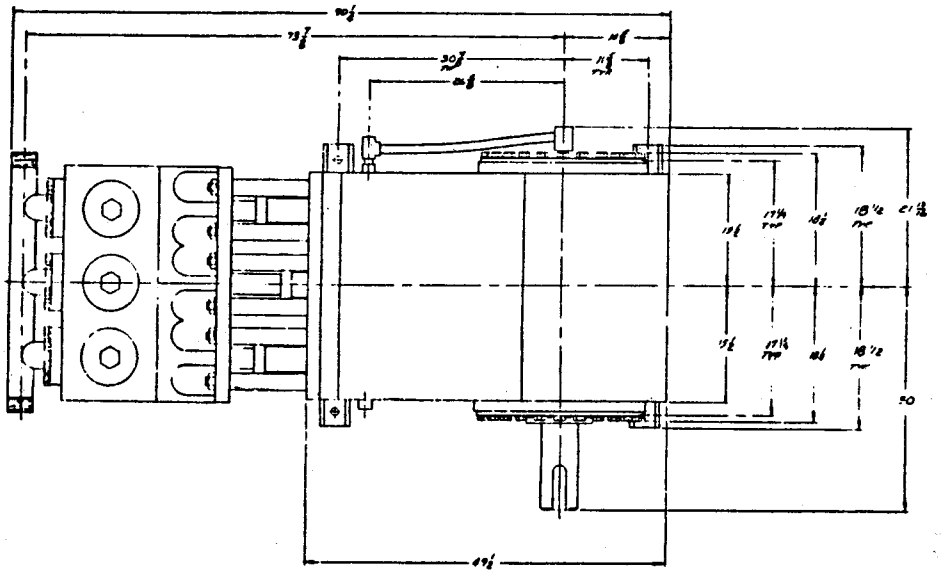
Gardner-Denver Petroleum Equipment
Cooper Industries
Master Distribution Center
Clay and Scyene Roads
P.O. Box 1226 Mesquite (75149)
Sunnyvale, TX 75182
Phone: (214) 226-1152

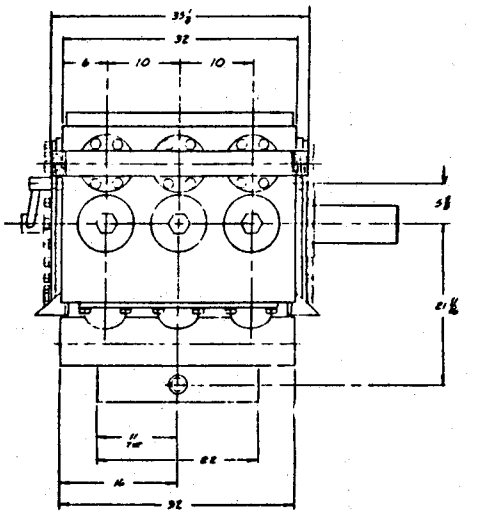
Gardner-Denver Petroleum Equipment
Cooper Industries
1810 Gardner Expressway
Quincy, IL 62305-4024
Phone: (217) 222-5400
Telex: 40-4332, Cable: Gardner

When placing an order for spare parts, you can speed up the process by having the following information when you place your call:

- The fluid end or power end model number and serial number — see identification tags on the pump.
- Pump model and fluid end size.
- OPI part number and description of part.
- The quantity of each part required.
- The name of your company.
- Name of person placing order.
- Your purchase order or requisition number.
- Complete shipping address (where the parts are to be shipped).
- Telephone number and contact person.
- Telephone number to call on arrival if a shipment is made to a different address.
- Complete billing address (where the invoice is to be sent).

350 D Dimensional Specifications





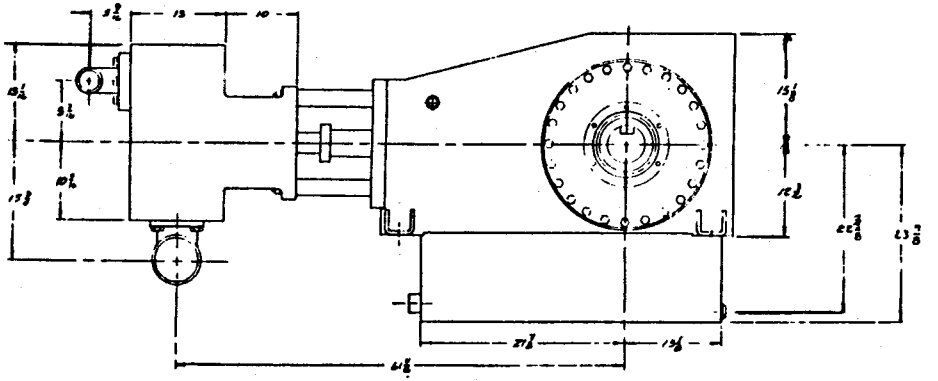
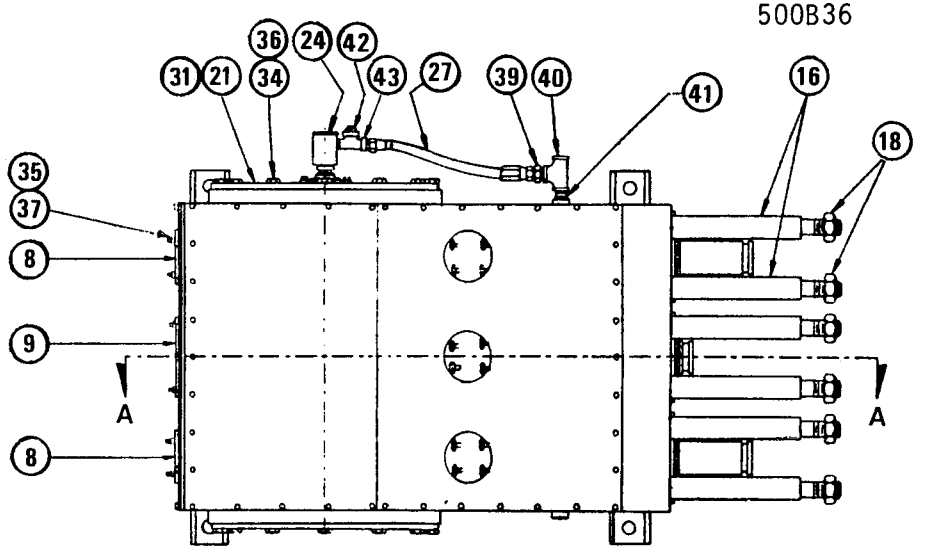


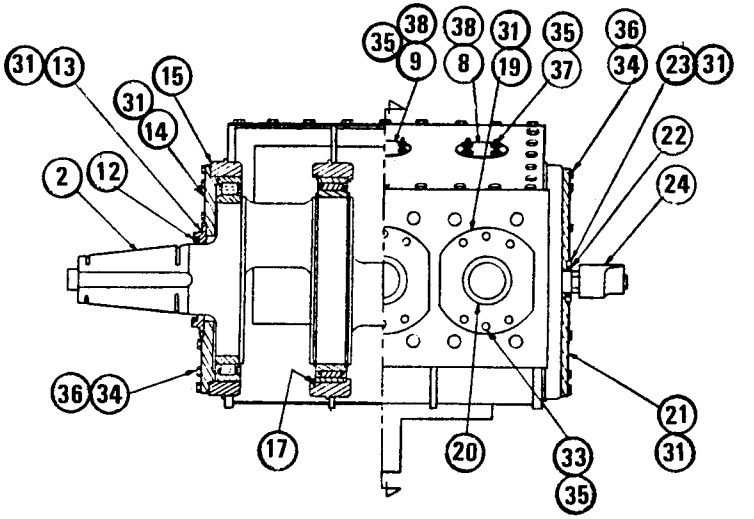
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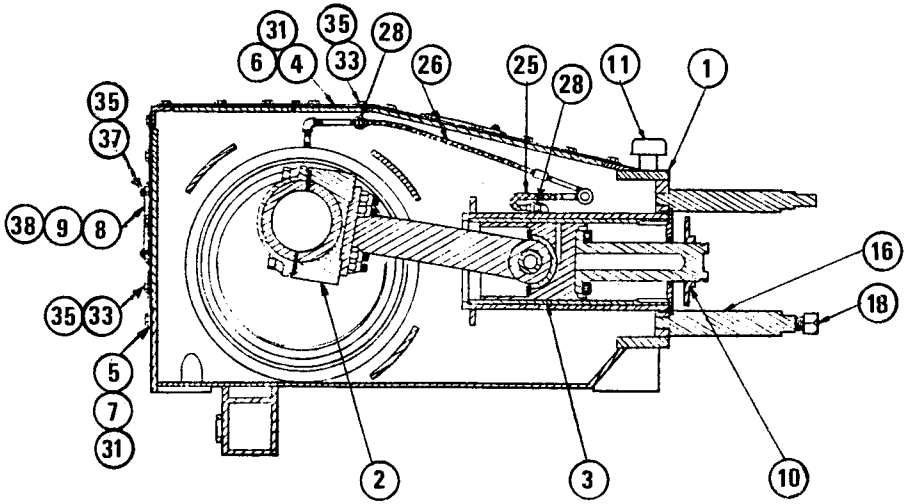
DESCRIPTION	PAGE NO.
Power End Assembly	1&2
Crankshaft Assembly	3
Crosshead Assembly	4
Plunger & Fluid End Assembly	5&6
Piston & Liner Assembly	7&8
Maintenance Tools	9&10
Optional Gear Box Assembly	11&12

350 D Power End Assembly

500B36







SECTION A-A

350 D POWER END ASSEMBLY

500-B-36

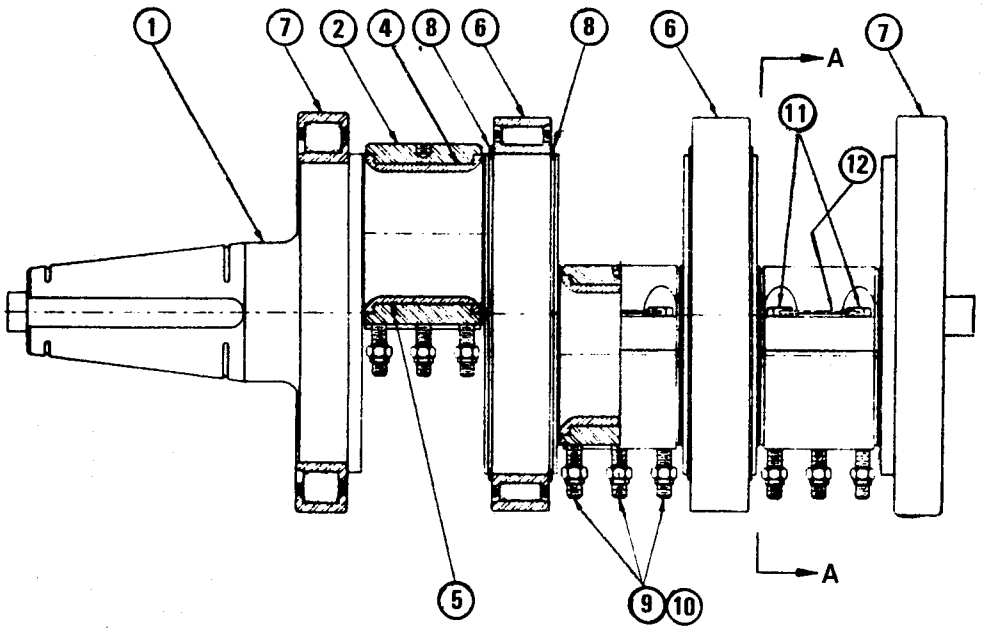
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1-1	330PN26	1	Power Frame, Dry Sump
-2	330PN27	1	Power Frame, 50 Gal Sump
2	473OL004	1	Crankshaft Assy., (See Page 3)
3	100AD02	3	Crosshead Assy., (See Page 4)
4	580PN08	1	Top Cover
5	580PN07	1	Rear Cover
6	565PN037	1	Gasket, Top Cover
7	565PN038	1	Gasket, Rear Cover
8	342-A-09	4	Inspection Cover
9	342-A-09A	2	Inspection Cover, w/OPI Insignia
10	946SH01-1	3	Pony Rod Baffle
11	910PN06	1	Breather Cap
12	901SH02-1	1	Seal, Crankshaft Drive End
13	500-B-29	1	Drive End Seal Retainer
14	500-B-14	1	Drive End Bearing Retainer
15	481SD037	AR	Shim Pack, Main Bearing Retainer
16	453PN03	12	Stay Rod
17	926SH01-7	2	Snap Ring
18	458PN01	12	Flange Nut
19	500-A-28	3	Pony Rod Seal Retainer
20	901SH02-3	3	Pony Rod Seal
21	500-B-15	1	Free End Bearing Retainer
22	901SH02-2	1	Seal, Crankshaft, Free End
23	500-A-18	1	Free End Seal Retainer

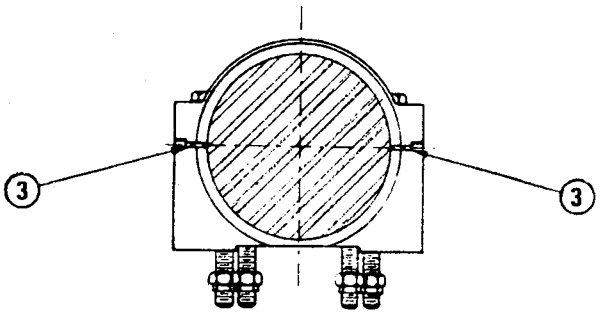
ITEM NO.	PART NO.	QTY.	DESCRIPTION
24	922PN01	1	Rotary Union
25	916VP005-120	3	Hose, Teflon
26	916VP005-260	4	Hose, Teflon
27	916VP006-240	1	Hose, Rubber
28	968VP001-004	7	Hose Adapter, Male Connecter, 1/4"
29*	968VP001-021	1	Hose Adapter, Male Connecter, 1/2"
30*	971VP002-006	2	Pipe Fitting, Plug, 1" NPT
31	509000000	AR	RTV Silicone
32*	634VP004-012	6	Dowell Pin
33	454VP003-006	80	Capscrew, HH, 3/8-16UNC-2A x 3/4"
34	454VP004-014	48	Capscrew, HH, 1/2-13UNC-2A x 1-1/2"
35	452VP003-004	80	Lockwasher, Ext.Tooth, 3/8"
36	452VP003-006	48	Lockwasher, Ext.Tooth, 1/2"
37	458VP004-003	24	Hex Nut, Hvy., 3/8-16UNC-2B
38	565PN032	6	Gasket, Inspection Cover
39	968VP001-018	1	Hose Adapter, Male Connection
40	971VP020-010	1	Reducing Tee, 1" NPT x 1/2" NPT
41	971VP026-014	1	Nipple, 1" NPT x Close
42	971VP002-004	1	Pipe Plug, 1/2" NPT
43	971VP076-004	1	Male Run Tee, 1/2" NPT

* Not Shown AR-As Required

350 D Crankshaft Assy.

473OL004



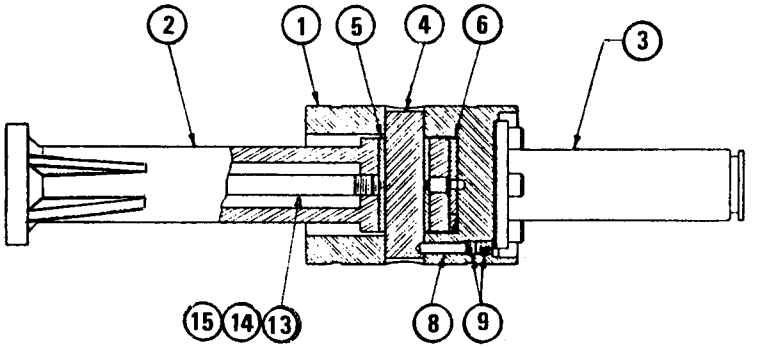


SECTION "A-A"
TYP 3 PLACES

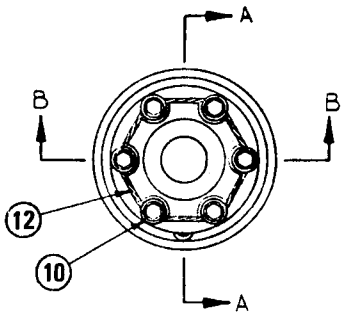
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1-1	500-C-01	1	Crankshaft, W/1-1/2" TPF Extension
-2	500-C-53	1	Crankshaft, W/4-15/16" Dia. Extension and 1-1/4" Keyway
2	500-C-12	3	Connecting Rod Bearing Housing
3	500-C-12-5	6	Shim, Rod Bearing
4	917PN08-1	3	Bearing,Lap Half
5	917PN08-2	3	Bearing, Rod Half
6	925SH01-2	2	Inner Main Bearing
7	925SH01-1	2	Outer Main Bearing
8	926SH01-1	4	Snap Ring
9	450VP003-034	18	Stud, 3/4-10UNCx3-1/2 LG.
10	458VP005-006	18	Flex Lock Nut, 3/4-10UNC
11	454VP017-034	12	Capscr., DHH, 3/4-10UNCx3-1/2 LG.
12	174000018	AR	Safety Wire, 18 GA.

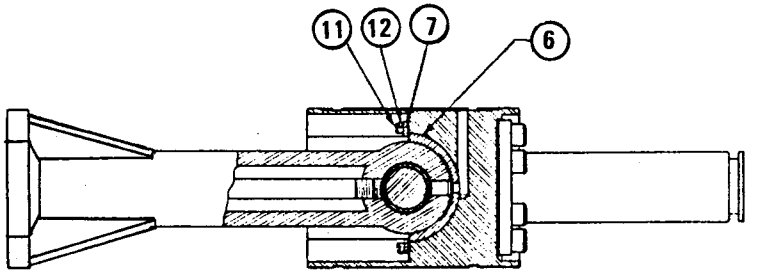
350 D Crosshead Assy.

100AD02



SECTION "A-A"



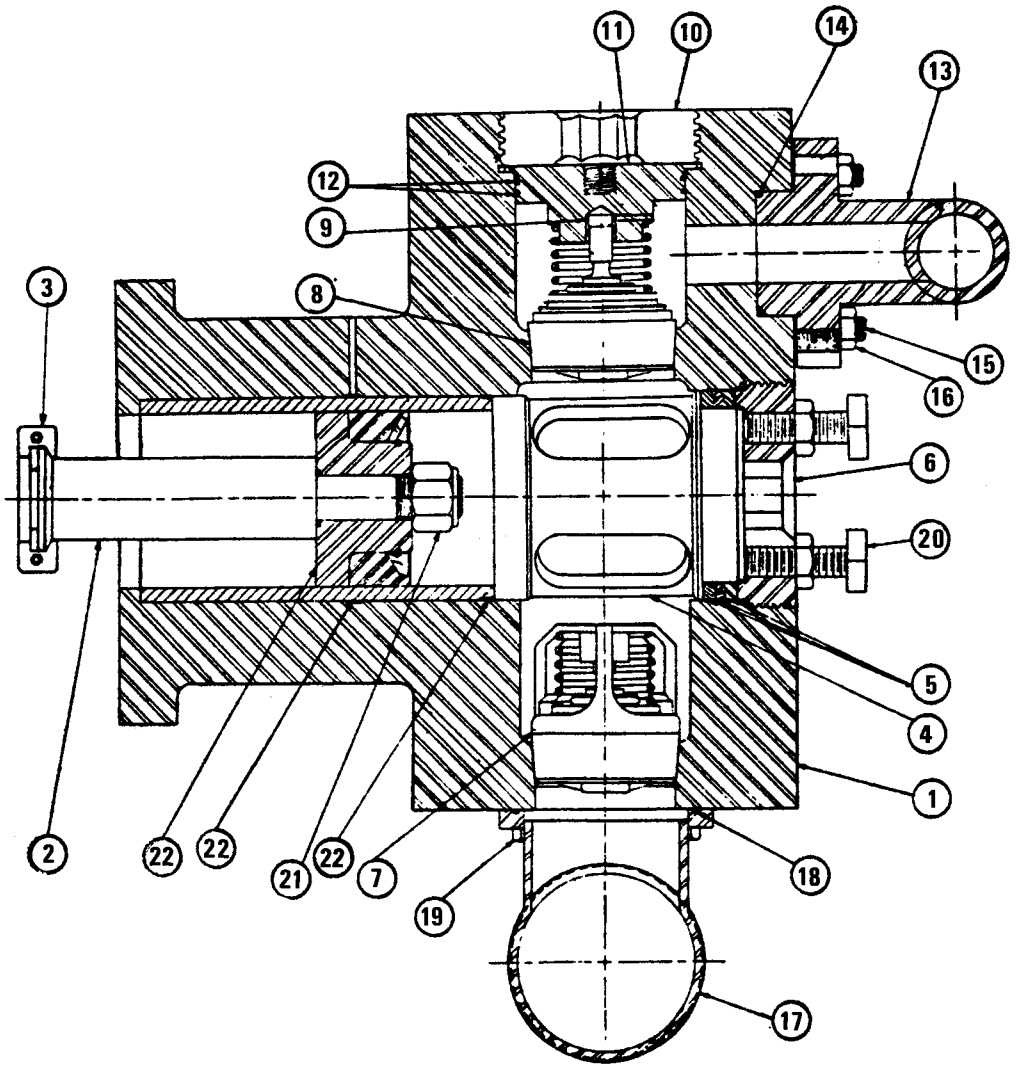


SECTION "B-B"
ROTATED 90° CLOCKWISE

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	500-C-02	1	Crosshead
2	551PN02	1	Connecting Rod
3	286PN009	1	Pony Rod
4	630PN004	1	Wrist Pin
5	500-A-03	1	Wrist Pin Bushing
6	917PN12	1	Bronze Thrust Seat
7	500-A-27	2	Thrust Seat Keeper
8	635PN04	1	Bar Plug
9	451VP002-004	2	Set Screw, Hex Soc, 5/8-11UNCx1/2 LG.
10	454VP038-014	6	Capscrew, DSH, 3/4-10UNCx1-1/2 LG.
11	454VP034-006	8	Capscrew, DSH, 5/16-18UNCx3/4 LG.
12	174000018	AR	Safety Wire, 18 GA.
13	450PN08	1	Connecting Rid Tension Stud
14*	480PN12	1	Connecting Rod Anchor Washer
15*	458VP008-001	1	Hex Nut, HVY, 1-14UNS-2B

* NOT SHOWN

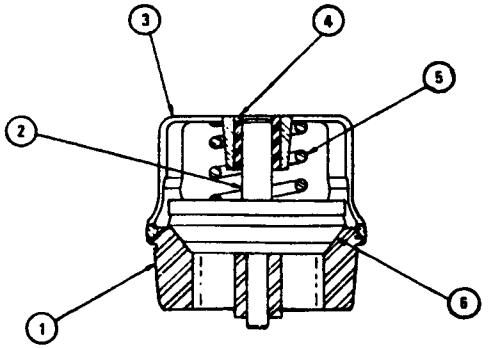
350 D Plunger & Fluid End Assy.



350 D PLUNGER & FLUID END ASSEMBLY

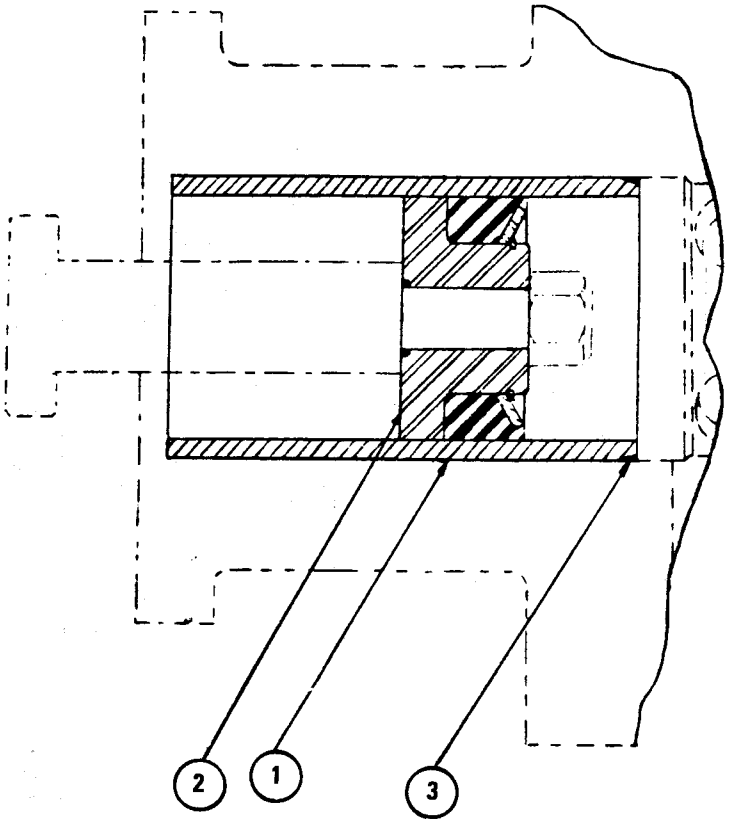
ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	500-D-02	1	Fluid End
2	040PN006	3	Piston Rod
3	170PN05	3	Pony Rod Clamp
4	500-B-03	3	Liner Cage
5	945PN03	3	Liner Cage Packing
6	50PN15	3	Liner Cage Retainer Nut
7	927SH06-1	3	Caged Vavle Assy. (See Figure at Right)
8	927AD015*	3	Vavle Assy. (See Figure at Right)
9	P-A-25	3	Vavle Guide Bushing
10	P-A-01	3	Discharge Nut
11	P-A-02	3	Discharge Cover
12	901SH05-356	6	O-Ring
13	101WD003	1	Discharge Manifold
14	901SH05-344	3	O-Ring
15	450VP003-034	18	Stud, 3/4-10UNC-2Ax3-1/2 LG.
16	458VP004-006	18	Hex Nut, HVY, 3/4-10UNC-2B
17	500-C-06	1	Suction Manifold
18	901SH05-258	3	O-Ring
19	454VP005-014	12	Capscrew, HH, 5/8-11UNC-2Ax1-1/2 LG.
20	921PN02	12	Liner Cage Bolt With Jam Nut
21	924PN03	3	Piston Rod Nut, 1-1/2", S/L
22	933OL004	Ref	(See Piston and Liner Assy.)

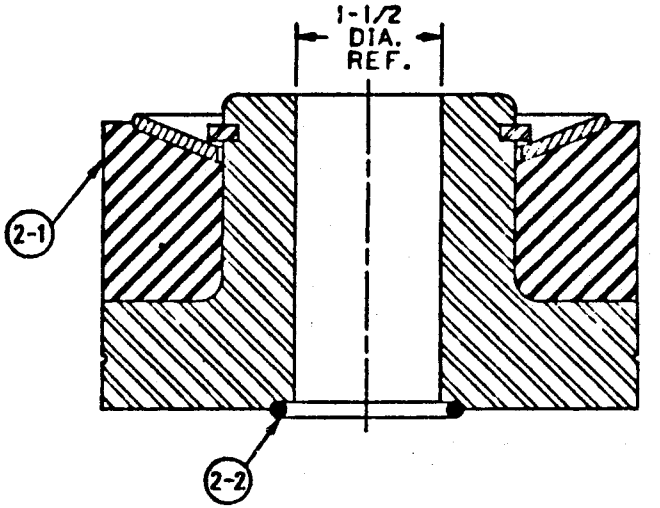
VAVLE ASSEMBLY



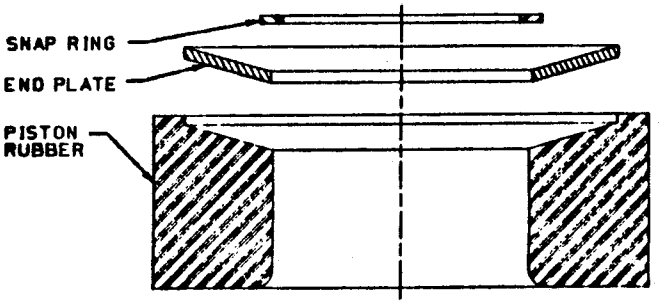
ITEM NO.	PART NO.	QTY.	DESCRIPTION
-----	927SH06-1 includes	3	Vavle Assembly
1	927SH06-2	3	Vavle Seat
2	927SH06-3	3	Vavle With Insert
3	927SH06-4	3	Cage
4	927SH06-5	3	Guide Bushing
5	918PN14	3	Vavle Spring
6	935SH01-11	Ref	Vavle Insert
-----	927AD015 includes	3	Vavle Assembly
1	927SH06-2	3	Vavle Seat
2	927SH06-3	3	Vavle With Insert
3	NOT USED		
4	NOT USED		
5	918PN14	3	Vavle Spring
6	935SH01-11	Ref	Vavle Insert

350 D Piston & Liner Assy.





(2) COMPLETE PISTON ASSEMBLY



(2-1) PISTON RUBBER ASSEMBLY

350 D PISTON & LINER ASSY.

(933AD018)
4-1/2" PISTON & LINER ASSY.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	934SH01-4	1	Liner
2	923VP002-002	1	Piston Assy.
2-1	924VP002-002	Ref	Piston Rubber Assy.
2-2	901SH05-223	Ref	O-Ring
3	901SH01-1	1	Liner Seal

(933AD019)
5" PISTON & LINER ASSY.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	934SH01-3	1	Liner
2	923VP002-003	1	Piston Assy.
2-1	924VP002-003	Ref	Piston Rubber Assy.
2-2	901SH05-223	Ref	O-Ring
3	901SH11-1	1	Liner Seal

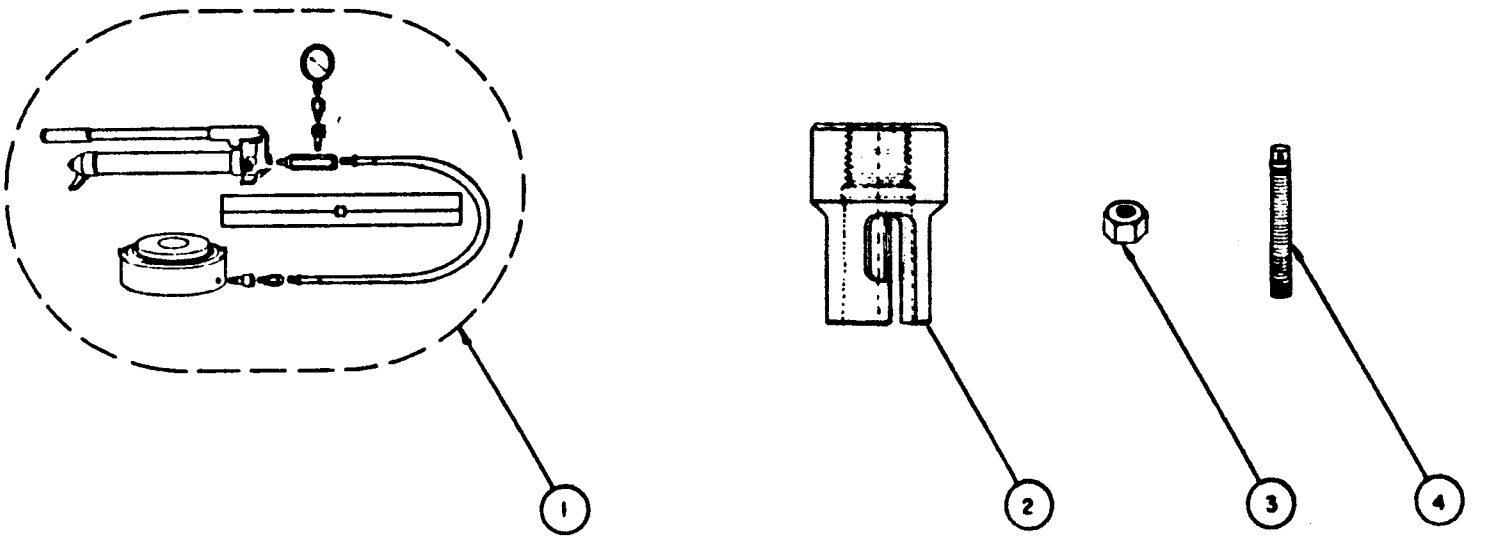
(933AD020)
5-1/2" PISTON & LINER ASSY.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	934SH01-2	1	Liner
2	923VP002-004	1	Piston Assy.
2-1	924VP002-004	Ref	Piston Rubber Assy.
2-2	901SH05-223	Ref	O-Ring
3	901SH11-1	1	Liner Seal

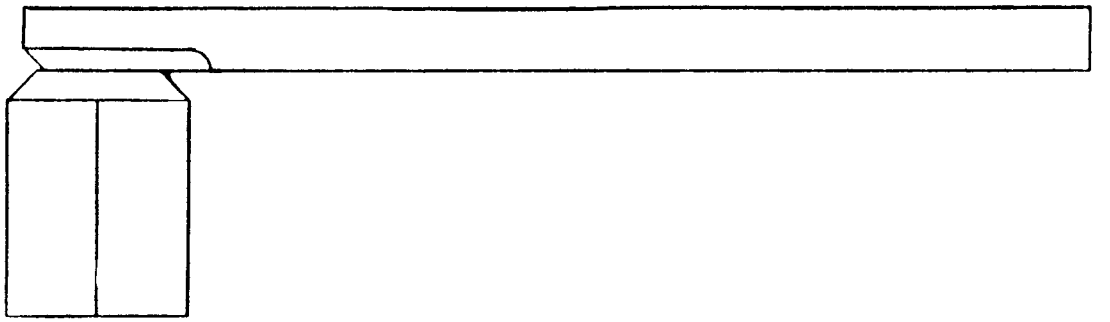
(933AD021)
6" PISTON & LINER ASSY.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	934SH01-1	1	Liner
2	923VP002-005	1	Piston Assy.
2-1	924VP002-005	Ref	Piston Rubber Assy.
2-2	901SH05-223	Ref	O-Ring
3	901SH11-1	1	Liner Seal

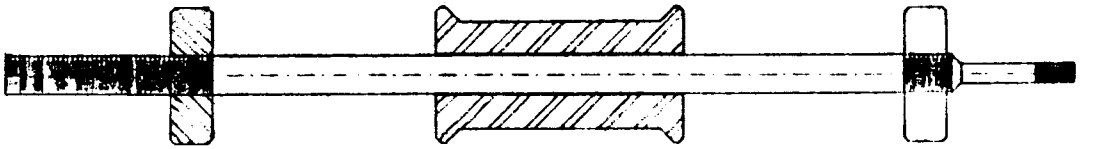
Valve Seat Puller (Optional)



(1) VALVE SEAT PULLER	-	590AD004
(2) PULLER HEAD	-	P-B-03
(3) HEX NUT	-	458VP004-014
(4) CENTER STEM STUD	-	450VP014-003



VALVE COVER RETAINER NUT HEX WRENCH
Part No. P-A-09

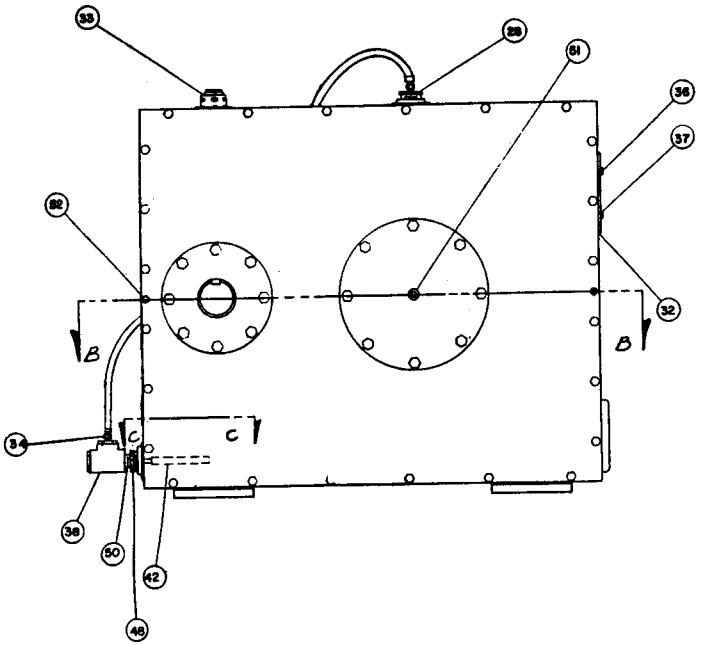


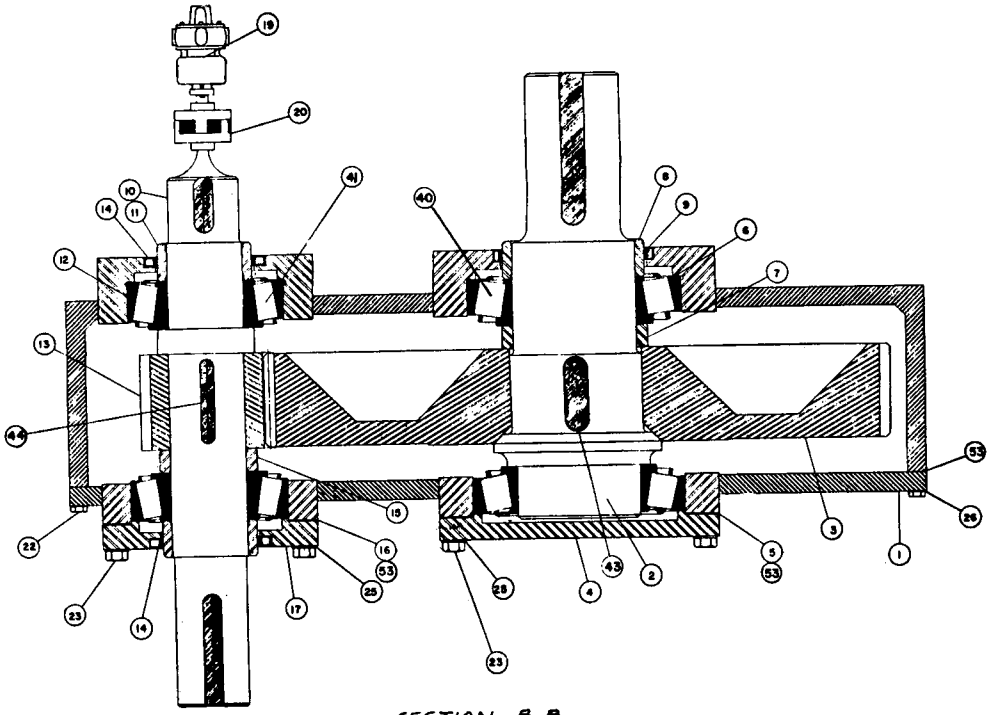
VALVE COVER PULLER
Part No. 590PN006

Maintenance Tools

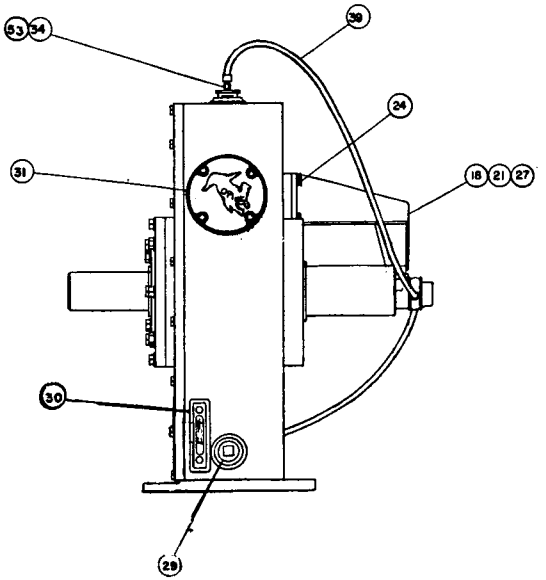
350 D Gear Box (Optional)

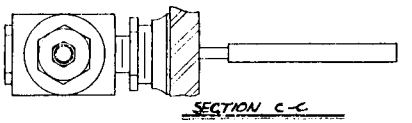
50AD01



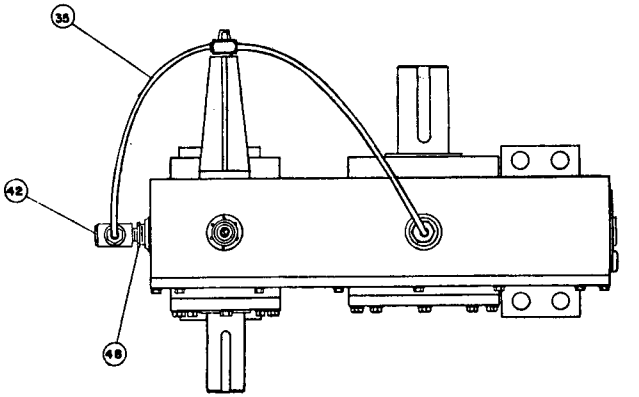


SECTION B-B





SECTION C-C



350 D GEAR BOX (OPTIONAL)

50AD01

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	332PN01	1	Gear Housing
2	472PN01	1	Gear Shaft
3	906PN01	1	Bull Gear
4	490PN01	1	Bearing Retainer
5	481PN02	1	Shim Pack
6	930SH01-6	2	Bearing Cup
7	480PN01	1	Gear Shaft Spacer
8	485PN01	1	Gear Shaft Seal Sleeve
9	901SH02-9	1	Oil Seal
10	471PN01	1	Pinion Shaft
11	485PN02	2	Pinion Shaft Seal Sleeve
12	930SH01-4	2	Bearing Cup
13	342-B-47	1	Pinion Gear
14	901SH02-18	2	Oil Seal
15	480PN02	1	Pinion Shaft Spacer
16	481PN03	1	Shim Pack
17	492PN01	1	Pinion Shaft Retainer
18	337PN02	1	Lube Pump Mounting Bracket
19	914PN03	1	Lube Pump
20	908PN04	1	Lube Pump Coupling
21	454VP002-010	4	Capscrew, HH, 5/16-18UNC-2Ax1 LG.
22	454VP015-020	24	Capscrew, DHH, 1/2-13UNC-2Ax2 LG.
23	454VP006-022	16	Capscrew, HH, 3/4-10UNC-2Ax2-1/4 LG.
24	454VP004-006	4	Capscrew, HH, 1/2-13UNC-2Ax3/4 LG.
25	452VP001-006	16	Lockwasher, 3/4
26	452VP001-004	28	Lockwasher, 1/2
27	452VP001-002	4	Lockwasher, 5/16

ITEM NO.	PART NO.	QTY.	DESCRIPTION
28	971VP001-031	1	Pipe Bushing
29	971VP002-009	1	Pipe Plug
30	911PN01	1	Oil Level
31	342-A-09A	1	Inspection Port Cover
32	565PN01	1	Inspection Port Cover Gasket
33	910PN01	1	Filler, Strainer Breather Cap
34	968VP001-018	2	Hose Adapter, Male
35	916PN015-300	1	Hose, Rubber
36	454VP003-010	4	Capscrew, HH, 3/8-16NC-2Ax1 LG.
37	452VP001-003	4	Lockwasher, 3/8
38	971VP015-007	1	Pipe Tee, 1-1/4 NPT
39	916PN015-300	1	Hose, Rubber
40	930SH01-5	2	Bearing Cone
41	930SH01-3	2	Bearing Cup
42	944SH01-2	1	Magnetic Cleaner
43	631PN010-040	1	Key
44	631PN008-044	1	Key
45*	919PN01	1	Name Plate
46*	454VP054-002	4	Round Head Drive Screw, No.4
47	517500000	AR	Gear Oil, EP 90
48	971VP001-028	1	Pipe Bushing
49*	971VP001-018	1	Pipe Bushing
50	971VP027-015	1	Pipe Nipple
51	971VP002-006	1	Pipe Plug
52	634VP007-014	2	Dowell Pin
53	509000000	AR	RTV Silicone Rubber

* NOT SHOWN

6C-1-86



GARDNER-DENVER
PETROLEUM EQUIPMENT

1810 GARDNER EXPRESSWAY • QUINCY, ILLINOIS 62305–4024 • (217) 222-5400

Specifications subject to change without notice.

Sales and Service Offices in all principal cities.

Litho in U.S.A.