

GENERAL PETROLEUM MACHINERY

FLUID END MODULE & ACCESSORIES

NATIONAL

7-P-50.....	1
8-P-80.....	2
9-P-100.....	3
10-P-130.....	4
12-P-160.....	5

EMSCO

F-500/F-650.....	6
F-800/ F-1000.....	7
FB-1300/FB-1600.....	8

GARDNER DENVER

PZ-7/PZ-8/PZ-9.....	9
PZ-10/PZ-11.....	10

OILWELL

T-500/ T-800/ T-1000.....	11
T-1300/ T-1600.....	12
A-600-PT.....	13
A-850-PT/ A-1100-PT/ A-1400-PT/ A-1700-PT.....	14

LEWCO

LS 3NB-1300C/3NB-1600.....	15
----------------------------	----

FLUID END EXPENDABLE PARTS

NATIONAL

7-P-50.....	16
8-P-80.....	17
9-P-100.....	18
10-P-130.....	19
12-P-160.....	20
14-P-220.....	21
JWS-165L.....	22
JWS-400.....	23
C-250.....	24
C-350.....	25
K-380.....	26
K-500A.....	27

EMSCO-F

F-350.....	28
F-500.....	29
F-650.....	30
F-800.....	31
F-1000.....	32
FB-1300.....	33
FB-1600.....	34
D-300/500.....	35
D-375.....	36
DB-550/700.....	37

GARDNER DENVER

TEE.....	38
PAH.....	39
PZL.....	40
PZ-7.....	41
PZ-8.....	42
PZ-9.....	43
PZ-10.....	44
PZ-11.....	45
FXK.FXN.....	46
PEE-5.....	47

GENERAL PETROLEUM MACHINERY

FLUID END EXPENDABLE PARTS

IDECO T

T-500.....	48
T-800.....	49
T-1000.....	50
T-1300.....	51
T-1600.....	52

OILWELL

A-350-PT.....	53
A-600-PT.....	54
A-850-PT.....	55
A-1100-PT.....	56
A-1400-PT.....	57
A-1700-PT.....	58

OPI

OPI-350D.....	59
OPI-700.....	60
OPI-1000.....	61

BOMCO

F-1600.....	62
-------------	----

LS

3NB-1300C.....	63
3NB-1600.....	64

IDECO MM

MM-550/600/700.....	65
---------------------	----

SKYTOP BREWSTER

B-1000T/1100T.....	66
B-1300T/1600T.....	67
B-550F.....	68

ELLIS WILLIAMS

EW-440.....	69
EW-446.....	70
EW-447.....	71

LEWCO

15W-600/GA-550.....	72
9W-1000.....	73

WILSON

WILSON-600.....	74
-----------------	----

GASO

GASO 1740/1742.....	75
GASO 1743.....	76
GASO 2652.....	77

PULSATION DAMPENER DISCHARGE AND SUCTION MANIFOLD

.....	78
-------	----

BUTTERFLY VALVES & WASHPIPE ASSY

Wafer Butterfly Valve.....	79
Resilient Seated Eccentric Flanged Butterfly Valve.....	79
Double Butterfly Concentric Disc Butterfly Valve.....	80
Lug Butterfly Valve.....	80
Gear End Parts.....	81
Washpipe Assy.....	81
Air Chuck	82

GENERAL PETROLEUM MACHINERY

BUTTERFLY VALVES & WASHPIPE ASSY

Spilt Slips	83
Drill Collar Slips	83
Safety Slips.....	84
Drill Pipe Power Tongs (ZQ)	85
Tubing Power Tongs (YQ)	86
Casing Power Tongs (TQ)	87
Drilling Tongs (SDD)	88
Drilling Tongs (DB)	88
Workover Tongs (C)	89
Casing Tongs.....	89
Casing Stabbing Board.....	90
Reset Relief Valve.....	91
Opener.....	92
Drilling Wireline Guider (PSQ)	92
Roller Kelly Bushings	93

GENERAL PETROLEUM MACHINERY

NATIONAL 7-P-50

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-1294250	Module, Studded Fluid End Discharge(Includes Items #2-7)	3
2	G-1294251	Discharge Module, Only	3
4	G-2408042	Stud, Power Frame	24
5	G-2408043	Stud, Liner Bushing	24
7	G-2408041	Stud, Discharge To Suction Module	18
8	G-1294156	Suction Module, Only	18
10	G-1294165	Bushing, Liner	3
11	G-1290174	Retainer, Seal	3
12	G-1294172	Cover, Valve	6
13	G-1290178	Screw, Wedge Locking	6
15	G-1290315	Washer, Locking Wedge Screw	6
16	G-1290181	Spring, Wedge Assembly	6
17	G-1290376	Wedge Complete, Locking	6
18	G-1540126	Gasket, Valve Cover	6
19	G-1292140	Holder, Valve Guide Insert	6
20	G-1292141	Insert, Valve Guide	6
21	G-6511416	Pin, 7/8" x 2" Dowell	6
22	G-1294160	Plate, Wear	3
23	G-1294170	Connector, Discharge	2
24	G-700030510	Screw, 1/2" x 1 1/2" Hex Head	16
25	G-7602050	Washer, Spring Lock	16
26	G-1294171	Adapter, Discharge Connector	2
27	G-2410031348	Packing, Discharge Connector	2
28	G-2410031427	Packing, Discharge Adapter	4
29	G-1294166	Clamp Complete, Liner	3
30	G-700040310	Screw 5/8" x 3 1/2" Hex Head	6
31	G-6309100	Nut, 5/8" Lock Type	6
32	G-1294169	Pin, Liner Clamp	3
33	G-1294168	Connector, Liner Clamp	3
34	G-2402560	Stud, 1 1/4" x 6 1/4"	18
35	G-6300200	Nut, Discharge To Suction Module Stud, 1 1/4" Heavy Hex	18
36	G-1294192	Seal, Module & Wear Plate	6
37	G-1540142	Seal, Suction Manifold	3

GENERAL PETROLEUM MACHINERY

NATIONAL 8-P-80

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-1291280	Module, Studded Fluid End Discharge	3
2	G-1291281	Discharge Module, Only	3
3	G-6300180	Nut, Power Frame Stud	24
4	G-2408026	Stud, Power Frame	24
5	G-6300120	Nut, Liner Bushing Stud	18
6	G-2408025	Stud, Liner Bushing	18
7	G-6300241	Nut, Discharge To Suction Module Stud	18
8	G-2408034	Stud, Discharge Module To Suction Module	18
9	G-6300220	Nut, Threaded Ring Stud, 1 3/8" Heavy Hex	36
10	G-2408019	Stud, Threaded Ring	36
11	G-1290338	Module, Studded Fluid End Suction	3
12	G-6300220	Nut, Threaded Ring Stud, 1 3/8" Heavy Hex	36
13	G-2408019	Stud, Threaded Ring	36
14	G-1290339	Suction Module, Only	3
15	G-1291165	Bushing, Liner	3
16	G-1290174	Retainer, Seal	6
17	G-1290307	Cap, Valve Cover	6
18	G-1290178	Screw, Wedge Adjusting	6
19	G-6300160	Nut, Wedge Adjusting Screw	6
20	G-1290315	Washer, Wedge Adjusting Screw	6
21	G-1290308	Ring, Threaded	6
22	G-1290376	Assembly, Wedge	6
23	G-1540126	Gasket, Valve Cover	6
24	G-1292140	Retainer, Valve Guide Bushing	6
25	G-1292141	Bushing , Valve Guide	6
26	G-6511416	Pin, 7/8 x 2" Dowell	6
27	G-1290357	Plate Wear	3
28	G-1290342	Connector, Discharge	2
29	G-700030511	Cap Screw , Discharge Connector, 1/2 " x 1 1/2 " Hex Head	16
30	G-7619050	Washer, Discharge Connector Screw	16
31	G-1290343	Adapter, Discharge Connector	2
32	G-2410031348	Packing, Discharge Connector To Discharge Adapter	2
33	G-2410031427	Packing, Discharge Connector & Discharge Adapter	4
34	G-1291166	Clamp, Liner	3
35	G-700040311	Capscrew, Liner Clamp	6
36	G-6309100	Nut, Liner Cap Screw	6
37	G-1291169	Pin, Connector	3
38	G-1291168	Connector, Liner Clamp	3
39	G-2402560	Stud, Discharge Spacer	16
40	G-6300200	Nut, Discharge Spacer Stud	16
41	G-1290344	Seal, Module & Wear Plate	6
42	G-1590051	Seal, Suction Manifold	3
43	G-1291286	Spacer, Studded Discharge	2
44	G-1290345	Seal, Spacer To Fluid End	2

GENERAL PETROLEUM MACHINERY

NATIONAL 9-P-100

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-1293240	Module, Studded Fluid End Discharge	3
2	G-1293241	Discharge Module, Only	3
3	G-6300200	Nut, Power Frame Stud	24
4	G-2408030	Stud, Power Frame	24
5	G-6300160	Nut, Liner Bushing Stud	18
6	G-2408018	Stud, Liner Bushing	18
7	G-6300241	Nut, Discharge To Suction Module Stud	18
8	G-2408034	Stud, Discharge Module To Suction Module	18
9	G-6300220	Nut, Threaded Ring Stud, 1 $\frac{3}{8}$ " Heavy Hex	36
10	G-2408019	Stud, Threaded Ring	36
11	G-1290338	Module, Studded Fluid End Suction	3
12	G-6300220	Nut, Threaded Ring Stud, 1 $\frac{3}{8}$ " Heavy Hex	36
13	G-2408019	Stud, Threaded Ring	36
14	G-1290339	Suction Module, Only	3
15	G-1293165	Bushing, Liner	3
16	G-1290174	Retainer, Seal	6
17	G-1290307	Cap, Valve Cover	6
18	G-1290178	Screw , Wedge Adjusting	6
19	G-6300160	Nut, Wedge Adjusting Screw	6
20	G-1290315	Washer, Wedge Adjusting Screw	6
21	G-1290308	Ring, Threaded	6
22	G-1290376	Assembly, Wedge	6
23	G-1540126	Gasket, Valve Cover	6
24	G-1292140	Retainer, Valve Guide Bushing	6
25	G-1292141	Bushing, Valve Guide	6
26	G-6511416	Pin, $\frac{7}{8}$ x 2 " Dowell	6
27	G-1290357	Plate, Wear	3
28	G-1290342	Connector, Discharge	2
29	G-700030511	Capscrew, Discharge Connector, $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " Hex Head	16
30	G-7619050	Washer, Discharge Connector Screw	16
31	G-1290343	Adapter, Discharge Connector	2
32	G-2410031348	Packing, Discharge Connector To Discharge Adapter	2
33	G-2410031427	Packing, Discharge Connector & Discharge Adapter	4
34	G-1293166	Clamp, Liner	3
35	G-700044811	Capscrew, Liner Clamp	6
36	G-6309120	Nut, Liner Capscrew	6
37	G-1290169	Pin, Connector	3
38	G-1290168	Connector, Liner Clamp	3
39	G-2402560	Stud, Discharge Spacer	16
40	G-6300200	Nut, Discharge Spacer Stud	16
41	G- 1290344	Seal, Module & WearPlates	6
42	G-1590051	Seal, Suction Manifold	3
43	G-1293243	Spacer, Studded Discharge	2
44	G-1290345	Seal, Spacer To Fluid End	2

5607 Campbell Road, Houston, TX 77041, U.S.A.

Tel: 713-791-9265, Fax: 713-791-9267, Email: gpmym@yaho.com, Web site: www.gpmintlus.com

GENERAL PETROLEUM MACHINERY

NATIONAL 10-P-130

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-1290335	Module, Studded Fluid End Discharge	3
2	G-1290336	Discharge Module, Only	3
3	G-6300240	Nut, Power Frame Stud	24
4	G-2408020	Stud, Power Frame	24
5	G-6300160	Nut, Liner Bushing Stud	18
6	G-2408018	Stud, Liner Bushing	18
7	G- 6300241	Nut, Discharge To Suction Module Stud	18
8	G-2408034	Stud, Discharge Module To Suction Module	18
9	G-6300220	Nut, Threaded Ring Stud, 1 $\frac{3}{8}$ " Heavy Hex	36
10	G-2408019	Stud, Threaded Ring	36
11	G-1290338	Module, Studded Fluid End Suction	3
12	G-1290339	Suction Module, Only	3
13	G-6300220	Nut, Threaded Ring Stud, 1 $\frac{3}{8}$ " Heavy Hex	36
14	G-2408019	Stud, Threaded Ring	36
15	G-1290165	Bushing, Liner	3
16	G-1290174	Retainer, Seal	6
17	G-1290307	Cap, Valve Cover	6
18	G-1290178	Screw, Wedge Adjusting	6
19	G-6300160	Nut, Wedge Adjusting Screw	6
20	G-1290315	Washer, Wedge Adjusting Screw	6
21	G-1290308	Ring, Threaded	6
22	G-1290376	Assembly, Wedge	6
23	G-1540126	Gasket, Valve Cover	6
24	G-1292140	Retainer, Valve Guide Bushing	6
25	G-1292141	Bushing, Valve Guide	6
26	G-6511416	Pin, $\frac{7}{8}$ " x 2" Dowell	6
27	G-1290357	Plate, Wear	3
28	G-1290342	Connector, Discharge	2
29	G-700030511	Capscrew, Discharge Connector, $\frac{1}{2}$ " x $1\frac{1}{2}$ " Hex Head	16
30	G-7619050	Washer, Discharge Connector Screw	16
31	G-1290343	Adapter, Discharge Connector	2
32	G-2410031348	Packing, Discharge Connector To Discharge Adapter	2
33	G-2410031427	Packing, Discharge Connector & Discharge Adapter	4
34	G-1290166	Clamp, Liner	3
35	G-700044811	Capscrew, Liner Clamp	6
36	G-6309120	Nut, Liner Capscrew	6
37	G-1290169	Pin, Connector	3
38	G-1290168	Connector, Liner Clamp	3
39	G-2402560	Stud, Discharge Spacer	16
40	G-6300200	Nut, Discharge Spacer Stud	16
41	G-1290344	Seal, Meal Module & Wearplate	6
42	G-1590051	Seal, Suction Manifold	3
43	G-1290348	Spacer, Studded Discharge	2
44	G-1290345	Seal, Spacer To Fluid End	2

GENERAL PETROLEUM MACHINERY

NATIONAL 12-P-160

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-1292240	Module, Studded Fluid End Discharge	3
2	G-1292241	Discharge Module, Only	3
3	G-6300220	Nut, Power Frame Stud	24
4	G-2408029	Stud, Power Frame	24
5	G-6300180	Nut, Liner Bushing Stud	18
6	G-2408028	Stud, Liner Bushing	18
7	G-6300281	Nut, Discharge To Suction Module Stud	18
8	G-2408033	Stud, Discharge Module To Suction Module	18
9	G-6300240	Nut, Threaded Ring Stud, 1 3/8" Heavy Hex	36
10	G-2408027	Stud, Threaded Ring	36
11	G-1292243	Module, Studded Fluid End Suction	3
12	G-1292244	Suction Module, Only	3
13	G-6300240	Nut, Threaded Ring Stud, 1 3/8" Heavy Hex	36
14	G-2408027	Stud, Threaded Ring	36
15	G-1292165	Bushing, Liner	3
16	G-1292174	Retainer, Seal	6
17	G-1292172	Cap, Valve Cover	6
18	G-1292178	Screw, Wedge Adjusting	6
19	G-6300182	Nut, Wedge Adjusting Screw	6
20	G-1292171	Washer, Wedge Adjusting Screw	6
21	G-1292176	Ring, Threaded	6
22	G-1292268	Assembly, Wedge	6
23	G-1540127	Gasket, Valve Cover	6
24	G-1292140	Retainer, Valve Guide Bushing	6
25	G-1292141	Bushing, Valve Guide	6
26	G-6511416	Pin, 7/8" x 2" Dowell	6
27	G-1292266	Pate, Wear	3
28	G-1292252	Connector, Discharge	2
29	G-700030511	Capscrew, Discharge Connector, 1/2" x 1/2" Hex Head	16
30	G-7619050	Washer, Discharge Connector Screw	16
31	G-1292253	Adapter, Discharge Connector	2
32	G-2410031433	Packing, Discharge Connector To Discharge Adapter	2
33	G-2410031437	Packing, Discharge Connector & Discharge Adapter	4
34	G-1292166	Clamp, Liner	3
35	G-700049110	Capscrew, Liner Clamp	6
36	G-6309140	Nut, Liner Capscrew	6
37	G-1292169	Pin, Connector	3
38	G-1292168	Connector, Liner Clamp	3
39	G-2408015	Stud, discharge Spacer	16
40	G-6300240	Nut, Discharge Spacer Stud	16
41	G-1292257	Seal, Module & Wear plate	6
42	G-1540851	Seal, Suction Manifold	3
43	G-1292246	Spacer, Studded Discharge	2
44	G-1292258	Seal, Spacer To Fluid End	2

GENERAL PETROLEUM MACHINERY

Emsco F-500/F-650

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-6318-0151-00	Module, Studded Fluid End	3
2	G-7507-2207-00	Stud, Power Frame	18
3	G-7601-0630-17	Nut, Power Frame Stud	18
4	G-7507-3402-00	Stud, Threaded Ring	30
5	G-7601-0630-26	Nut, Threaded Ring Stud	30
6	G-7507-3407-00	Stud, Discharge Manifold	12
7	G-7601-0630-26	Nut, Discharge Manifold Stud	12
8	G-6318-0148-00	Cage, Liner	3
9	G-6318-0177-00	Guide, Lower Valve	3
10	G-6318-0153-00	Clip, Locking	3
11	G-7602-2200-34	Seal, Liner	6
12	G-6318-0158-00	Plug, Cylinder Head	3
13	G-6318-0130-00	Ring, Threaded Cylinder Head	3
14	G-6318-0157-00	Cap, Threaded Cylinder Head	3
15	G-6310-0084-00	Seal, Valve Pot Cover	3
16	G-7501-0051-00	Screw, Retainer	12
17	G-6397-0603-00	Retainer Plate	3
18	G-6397-0602-00	Guide, Upper Valve	3
19	G-6310-0016-02	Cover, Valve Pot	3
20	G-7602-1600-23	Seal, Discharge Manifold	3
21	G-7602-1600-38	Seal, Suction Manifold	3
22	G-6318-0155-00	Bushing, Lower Valve Guide	3

-

GENERAL PETROLEUM MACHINERY

EMSCO F-800/ F-1000

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-6999-0086-02	Module, Studded Fluid End	3
2	G-6999-0087-02	Fluid Module, Only	3
3	G-7507-2108-00	Stud, Discharge Manifold	12
4	G-7601-0630-24	Nut, Power Frame Stud	12
5	G-7507-2205-00	Stud, Power Frame	18
6	G-7601-0630-17	Nut, Power Frame Stud	18
7	G-7507-2150-00	Stud, Threaded Ring	30
8	G-7601-0630-28	Nut, Threaded Ring Stud	30
9	G-6319-0026-00	Cage, Liner	3
10	G-6999-0089-00	Ring, Threaded Cylinder Head	3
11	G-6319-0090-00	Cap, Threaded Cylinder Head	3
12	G-6319-0027-00	Cover, Valve Pot	3
13	G-6319-0031-00	Plug, Cylinder Head	3
14	G-6397-0575-00	Guide, Upper Valve	3
15	G-6397-0603-00	Retainer Plate	3
16	G-7602-1610-46	Seal, Discharge Manifold	3
17	G-6319-0076-00	Seal, Valve Cover	3
18	G-7501-0051-00	Screw, Retainer	3
19	G-7602-1600-61	Seal, suction Manifold	3
20	G-6316-0096-00	Bushing, Lower Valve Guide	3
21	G-6319-0089-00	Clip, Locking	3
22	G-6319-0087-00	Guide, Lower Valve	3
23	G-7602-2200-32	Seal, Liner, Cylinder Head Plug	3

GENERAL PETROLEUM MACHINERY

EMSCO FB-1300/FB-1600

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-6316-0357-00	Module, Studded Fluid End	3
2	G-6316-0356-00	Fluid Module, Only	3
3	G-7507-2210-00	Stud, Power Frame	30
4	G-7507-2201-00	Stud, Cylinder Head Threaded Ring	18
5	G-7601-0630-17	Nut, Cylinder Head Threaded Ring Stud	48
6	G-7507-2013-00	Stud, Liner Threaded Ring	36
7	G-7601-0610-18	Nut, Liner Threaded Ring Stud	36
8	G-7507-2108-00	Stud, Discharge Manifold	12
9	G-7601-0630-24	Nut, Discharge Manifold Stud	12
10	G-6397-0603-00	Plate, Retainer	3
11	G-6397-0575-00	Guide, Upper Valve	3
12	G-6316-0039-00	Cover, Valve Pot	3
13	G-6316-0362-90	Cap, Threaded Cylinder Head	3
14	G-6316-0361-00	Ring, Threaded Cylinder Head	3
15	G-6316-0360-00	Lockbolt, Lower Valve Guide	3
16	G-6316-0364-90	Plug, Cylinder Head	3
17	G-6316-0354-00	Guide, Lower Valve	3
18	G-6316-0363-00	Alignment Ring	3
19	G-6316-0367-20	Liner Lock	3
20	G-6316-0366-00	Ring, Liner Threaded	3
21	G-6316-0373-00	Seal, Wear Plate/ Liner	3
22	G-7602-1600-25	Seal, Discharge Manifold	3
23	G-7602-1600-61	Seal, Suction Manifold	3
24	G-7501-0051-00	Screw, Retainer	12
25	G-6316-0369-00	Seal, Headed Seal	3
26	G-6316-0092-00	Seal, Valve Pot Cover	3
27	G-6316-0096-00	Bushing, Lower Valve Guide	3
28	G-6316-0365-00	Plate, Wear	3

GENERAL PETROLEUM MACHINERY

NATIONAL PZ-7/PZ-8/PZ9

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-205PZL029D	Module, Studded Fluid End (Includes Items #2-9)	3
2	G-205-6651-18	Fluid Module, Only	3
3	G-79L188	Stud, Frame & Liner Clamp	24
4	G-50B36	Nut, Frame & Liner Clamp Stud	48
5	G-79L73	Stud, Frame	12
6	G-750AQ30	Nut, Frame Stud	12
7	G-79AL6	Stud, Valve Cover	48
8	G-50B34	Nut, Valve Cover Stud	60
9	G-202PZL110	Stud, Discharge Manifold	12
10	G-2011857	Cap, Valve Cover Lock	6
11	G-2011699-1	Ring, Valve Cover Threaded (2 1/2" thick)	6
11A	G-2011699-2	Ring, Heavy Valve Cover Threaded (3" thick)	6
12	G-2011860	Cover, Valve	6
13	G-2007674	Bushing, Valve Guide	3
14	G-2011862	Gasket, Valve Cover	6
15	G-2011861	Ring, Valve Cover Gasket Expander	6
	G-2011706	Assy, Lower Valve Guide (includes items #16-20)	3
16	G-2011701	Plate, Retainer	1
17	G-2011700	Guide, Lower Valve Suction	1
18	G-2007674	Bushing, Valve Guide	1
19	G-95W2	Washer, Valve Guide Lock	2
20	G-655EE06S	Screw 1/2" x 1 3/4" 316SS hx hd c/s	2
21	G-25AL35	Seal, Discharge Manifold	3
22	G-25G41	Seal, Suction Manifold	3
23	G-IPV14	Clamp, Liner	3

GENERAL PETROLEUM MACHINERY

NATIONAL PZ-10/PZ-11

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-202PZL029B	Module, Studded Fluid End (Includes Items #2-8)	3
2	G-202-6651-20	Fluid Module, Only	3
3	G-201PZL110	Stud, Frame & Liner Clamp Long	24
4	G-205PZL110	Stud, Frame & Liner Clamp Short	24
5	G-50B36	Nut, Frame & Liner Clamp Stud	60
6	G-204PZL110	Stud, Threaded Ring	72
7	G-50B34	Nut, Threaded Ring Stud	84
8	G-202PZL110	Stud, Discharge Manifold	12
9	G-200PZL587	Cap, Valve Cover Lock	6
10	G-200PZL147	Cover, Valve	6
11	G-2007674	Bushing, Valve Guide (discharge)	3
12	G-204PZL715	Gasket, Valve Cover	6
13	G-200PZL387	Ring, Valve Cover Threaded	6
	G-200PZL483A	Assy, Lower Valve Guide (includes items #14-18)	3
14	G-2011701	Plate, Retainer	1
15	G-200PZL483	Guide, Valve Suction	1
16	G-2007674	Bushing, Valve Guide (Suction)	1
17	G-95W2	Washer, Valve Guide Lock	2
18	G-655EE06S	Screw, Valve Guide To Retainer Plate	2
19	G-25AL35	Gasket, Discharge Manifold	3
20	G-25BE41	Gasket, Suction Manifold	3
21	G-200PZL455	Clamp, Liner	3

GENERAL PETROLEUM MACHINERY

OILWELL T-500/ T-800/ T-1000

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-551-458	Module, Studded Fluid End (Includes Items #1 - 5)	3
2	G-551-410-01	Stud, Power Frame	24
3	G- 551-410-02	Stud, Discharge Manifold	12
4	G- 551-410-03	Stud, Threaded Ring	48
5	G-IN-416	Nut, Power Frame/ Discharge Manifold/ Threaded Ring	84
6	G-551-405-04	Retainer, Threaded Plug	6
7	G-551-405-03	Ring, Threaded	9
8	G-551-422-02	Plug, Cylinder Head	3
9	G-551-422-03	Plug, Cylinder Head (top)	3
10	G-551-405-05	Retainer, Threaded Liner	3
11	G-551-405-07	Lower Valve Guide	3
12	G-551-422-04	Retainer, Lower Valve Guide	3
13	G-BMT-1669-63-09	Gasket, Valve Cover	9
14	G- IO-548	Seal, Discharge Manifold	3
15	G- IO-521	Seal, Suction Manifold	3
16	G- 551-405-09	Bushing, Valve Guide (Not Shown In Drawing)	6
17	G- 551-405-06	Upper Valve Guide ((Not Shown In Drawing)	3

GENERAL PETROLEUM MACHINERY

OILWELL T-1300/ T-1600

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-551-122-01	Module, Fluid End Studded (Includes Items #1 – 5/5A)	3
2	G-551-110-01	Stud, Power Frame	24
3	G-551-110-02	Stud, Discharge Manifold	12
4	G-551-110-03	Stud, Threaded Ring	48
5	G-IN-415	Nut, Power Frame/ Threaded Ring	72
5A	G-IN-416	Nut, Discharge Manifold Stud (Not Shown In Drawing)	12
6	G-551-105-04	Cap, Threaded	6
7	G-551-105-03	Ring, Threaded	9
8	G-551-122-02	Plug, Cylinder Head	3
9	G-551-122-03	Plug, Cylinder Head (Top)	3
10	G-551-105-05	Retainer, Threaded Liner	3
11	G-551-105-07	Guide, Lower Valve	3
12	G-551-105-08	Retainer, Lower Valve Guide	3
13	G-BMT-1669-63-08	Seal, Valve Cover	9
14	G-IO-548	Seal, Discharge Manifold	3
15	G-IO-507	Seal, Suction Manifold	3
16	G-551-105-06	Guide, Upper Valve (Not Shown In Drawing)	3
17	G-551-105-09	Bushing, Valve Guide ((Not Shown In Drawing)	6

GENERAL PETROLEUM MACHINERY

OILWELL A-600-PT

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-10-304-052	Discharge Module, Studded (Includes Items #2 - 6)	3
2	-	Discharge Module, Only	3
3	G-45-810-063	Stud, Discharge Manifold	12
4	G-16-700-025	Nut, Discharge Manifold	12
5	G-45-810-020	Stud, Power Frame	12
6	G-10-200-004	Nut, Power Frame Stud	12
7	G-10-305-110	Plate, Wear	6
8	G-20-100-014	Gasket, Liner Wear Plate	6
9	G-75-632-135	Cap Screw, Self Locking ½" – 13 x 1"	24
10	G-20-200-004	Bushing, Valve Guide	6
11	G-10-304-054	Guide, Valve	6
12	G-10-268-004	Gasket, Valve Cover	6
13	G-10-305-097	Valve Cover	6
14	G-10-305-020	Liner Adapter	3
15	G-10-305-037	Nut, Liner Adapter	3
16	G-10-305-103	Seal, Suction Manifold	3
17	G-08-568-023	Seal, Discharge Manifold	3

GENERAL PETROLEUM MACHINERY

OILWELL A-850-PT/ A-1100-PT/ A-1400-PT/ A-1700-PT

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-10-300-181	Module, Studded Fluid End (Includes Items #2 - 6)	3
2	-	Fluid Module, Only	3
3	G-49-001-292	Stud, Discharge Manifold	12
4	G-75-511-754	Nut, Discharge Manifold	12
5	G-49-002-837	Stud, Power Frame	12
6	G-75-510-126	Nut, Power Frame	12
7	G-10-300-184	Plate, Wear	6
8	G-20-100-008	Gasket, Liner Wear Plate	6
9	G-75-632-234	Cap Screw, Self Locking	24
10	G-20-200-004	Bushing, Valve Guide	6
11	G-10-300-004	Valve Guide	6
12	G-10-300-011	Gasket, Valve Cover	6
13	G-10-300-005	Valve Cover	6
14	G-10-300-183	Liner Adapter	3
15	G-10-303-092	Nut, Liner Adapter (A-850-PT, A-1100-PT, Only)	3
	G-10-300-182	Nut, Liner Adapter (A-1400-PT, A-1700-PT, Only)	3
16	G-10-300-185	Ring, Liner Spacer (A-850-PT, A-1100-PT, Only)	3
17	G-10-303-091	Sleeve, Liner Centering (A-850-PT, A-1100-PT, Only)	3
	G-10-300-186	Sleeve, Liner Centering (A-1400-PT, A-1700-PT, Only)	3
18	G-10-300-201	Seal, Suction Manifold	3
19	G-99-609-345	Seal, Discharge Manifold	3

GENERAL PETROLEUM MACHINERY

LS 3NB-1300C/3NB-1600

ITEM	PART NO.	DESCRIPTION	QTY PER PUMP
1	G-107.11.110.14-2	Module, Studded Fluid End (Including Item 2-7)	
2	G-107.11.110.14-2A	Fluid End Module, Only	
3	G-107.11.110.41-1	Studs, Liner Bushing	
4	G-107.11.110.06	Studs, Discharge Manifold	
5	G-107.11.110.02	Studs, Cylinder Head Ring	
6	G-107.11.110.17	Studs, Power End	
7	G-107.11.110.12-1	Studs, Module to Power End	
8	G-107.11.110.03	Threaded Ring	
9	G-107.11.110.01	Threaded Cap	
10	G-107.11.110.18-1	Liner Bushing	
11	G-107.11.330.00	Plug, Cylinder Head	
12	G-107.11.110.43	Wear Plate	
13	G-107.11.340.00	Valve Cover	
14	G-107.04.110.13	Seal, Suction Manifold	
15	G-107.10.110.03	Seal, Discharge Manifold	
16	G-107.11.110.52-1	Lower Valve Guide Assy	
17	G-107.11.110.65-1	Retainer, Lower Valve Guide	
18	G-107.11.110.67	Lower Valve Guide Bushing	
19	G-107.11.110.05	Gasket, Wear Plate	
20	G-107.11.110.40	Nut, Liner Bushing	
21	G-107.11.110.42	Liner (Wear Plate) Gasket	
22	G-107.11.110.68	Cylinder Head Gasket	
23	G-107.11.110.05	Valve Cover Gasket	
24	G-107.11.110.39	Piston Rod	
25	G-107.11.01.02	Pony Rod(Extension Rod)	
26	G-107.11.114.00	Piston Rod Clamp	
27	G-107.12.20.42	Crosshead(Left)	
28	G-107.12.20.43	Crosshead (Middle, Right)	
29	G-107.05.20.16	Crosshead Pin	
30	G-107.11.90.05	Crosshead Guide(Upper)	
31	G-107.11.90.03	Crosshead Guide(Lower)	
32	G-NNAL6036X2-2M/W33X	Crosshead Bearing	

GENERAL PETROLEUM MACHINERY

NATIONAL 7-P-50

6 1/4" x 7"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0257-40HP	G-0257-40Z	G-272	VALVE ASSY-URETHANE	G-U5-B5	G-5-V1
4 1/2"	G-0257-44HP	G-0257-44Z	G-274	VALVE ASSY-URETHANE HT	G-U5-B5-HT	G-5-V1-HT
5"	G-0257-50HP	G-0257-50Z	G-276	VALVE SEAT	G-5DD-B3	G-5-S3
5 1/2"	G-0257-54HP	G-0257-54Z	G-278	VALVE SPRING	G-5710-115	G-5710-115
5 3/4"	G-0257-56HP	G-0257-56Z	-	INSERT-URETHANE	G-5-WI	G-5-FI
6"	G-0257-60HP	G-0257-60Z	G-280	INSERT-URETHANE HT	G-5-WI-HT	G-5-FI-HT
6 1/4"	G-0257-62HP	G-0257-62Z	G-268	SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-5	G-5-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 5/8"	G-1294147	G-1294083	G-1294085	G-1294146	G-50V14

GASKET

VALVE COVER GASKET	G-788Z	CYLINDER HEAD GASKET	-
--------------------	--------	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL 8-P-80

6 1/2" x 8 1/2"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-0256-40HP	G-0256-40Z	G-272
4 1/2 "	G-0256-44HP	G-0256-44Z	G-274
5"	G-0256-50HP	G-0256-50Z	G-276
5 1/2 "	G-0256-54HP	G-0256-54Z	G-278
5 3/4 "	G-0256-56HP	G-0256-56Z	-
6"	G-0256-60HP	G-0256-60Z	G-280
6 1/4 "	G-0256-62HP	G-0256-62Z	G-268
6 1/2 "	G-0256-64HP	G-0256-64Z	G-268

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-6-EH	G-6-V1
VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
VALVE SEAT	G-6ADD-B4	G-6-S4
VALVE SPRING	G-5710-115	G-5710-115
INSERT-URETHANE	G-6-WI	G-6-WI
INSERT-URETHANE HT	G-6-WI-HT	G-6-WI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-6	G-6-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLED UROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-B15	G-62B-KIT	LL-62-B15	LLU-62-B15	LLU-62-B15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-B15	G-64B-KIT	LL-64-B15	LLU-64-B15	LLU-64-B15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 5/8"	G-1291277	G-1291083	G-1291085	G-1291276	G-50V14

GASKET

VALVE COVER GASKET	G-768Z	CYLINDER HEAD GASKET	-
--------------------	--------	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL 9-P-100

6 3/4" x 9"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-0255-40HP	G-0255-40Z	G-274
4 1/2 "	G-0255-44HP	G-0255-44Z	G-274
5"	G-0255-50HP	G-0255-50Z	G-265
5 1/2 "	G-0255-54HP	G-0255-54Z	G-263
5 3/4 "	G-0255-56HP	G-0255-56Z	-
6"	G-0255-60HP	G-0255-60Z	G-261
6 1/4 "	G-0255-62HP	G-0255-62Z	G-283
6 1/2 "	G-0255-64HP	G-0255-64Z	G-768R
6 3/4 "	G-0255-66HP	G-0255-66Z	G-287

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-6-EH	G-6-V1
VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
VALVE SEAT	G-6-ADD-B4	G-6-S4
VALVE SPRING	G-5710-115	G-5710-115
INSERT-URETHANE	G-6-WI	G-6-FI
INSERT-URETHAN HT	G-6-WI-HT	G-6-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-6	G-6-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 5/8"	G-1293147	G-1293083	G-1293085	G-1293146	G-50V14

GASKET

VALVE COVER GASKET	G-768Z	CYLINDER HEAD GASKET	-
--------------------	--------	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL 10-P-130

6 3/4 " x 10"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-0255-40HP	G-0255-40Z	G-274
4 1/2 "	G-0255-44HP	G-0255-44Z	G-274
5"	G-0255-50HP	G-0255-50Z	G-265
5 1/2 "	G-0255-54HP	G-0255-54Z	G-263
5 3/4 "	G-0255-56HP	G-0255-56Z	-
6"	G-0255-60HP	G-0255-60Z	G-261
6 1/4 "	G-0255-62HP	G-0255-62Z	G-283
6 1/2 "	G-0255-64HP	G-0255-64Z	G-768R
6 3/4 "	G-0255-66HP	G-0255-66Z	G-287

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-6-EH	G-6-V1
VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
VALVE SEAT	G-6ADD-B4	G-6-S4
VALVE SPRING	G-5710-115	G-5710-115
INSERT-URETHANE	G-6-WI	G-6-FI
INSERT-URETHAN HT	G-6-WI-HT	G-6-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-6	G-6-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

PART NO.	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
	1 5/8"	G-1290347	G-1290083	G-1290085	G-1290346	G-50V14

GASKET

VALVE COVER GASKET	G-768Z	CYLINDER HEAD GASKET	-
--------------------	--------	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL 12-P-160

7 1/2" x 12"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-0259-40HP	G-0259-40Z	G-265
4 1/2"	G-0259-44HP	G-0259-44Z	G-265
5"	G-0259-50HP	G-0259-50Z	G-265
5 1/2"	G-0259-54HP	G-0259-54Z	G-263
5 3/4"	G-0259-56HP	G-0259-56Z	-
6"	G-0259-60HP	G-0259-60Z	G-261
6 1/4"	G-0259-62HP	G-0259-62Z	G-283
6 1/2"	G-0259-64HP	G-0259-64Z	G-284
6 3/4"	G-0259-66HP	G-0259-66Z	G-287
7"	G-0259-70HP	G-0259-70Z	G-285

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
VALVE SEAT	G-7-DBB12	G-7-S12
VALVE SPRING	G-5710-115	G-5710-115L
INSERT-URETHANE	G-7-WI	G-7-FI
INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-7	G-7-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4"	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 5/8"	G-1292147	G-1292083	G-1292085	G-1292146	G-50V14

GASKET

VALVE COVER GASKET	G-771U	CYLINDER HEAD GASKET	-
--------------------	--------	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL 14-P-220

9 " x 14"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0554400	G-0554400Z	-	VALVE ASSY-URETHANE	G-U5B-23	G-8-V1
4 1/2"	G-0554450	G-0554450Z	G-274	VALVE ASSY-URETHANE HT	G-U5B-23-HT	G-8-V1-HT
5"	G-0554500	G-0554500Z	G-265	VALVE SEAT	G-8DD-B7	G-8-S7
5 1/2"	G-0554550	G-0554550Z	G-263	VALVE SPRING	G-5710-023	G-5710-115L
6	G-0554600	G-0554600Z	G-261	INSERT-URETHANE	G-8-WI	G-8-FI
6 1/2"	G-0554650	G-0554650Z	G-284	INSERT-URETHANE HT	G-8-WI-HT	G-8-FI-HT
7	G-0554700	G-0554700Z	G-285	SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-8-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 5/8"	G-1295147	G-1295083	G-1295085	G-1295146	G-50V14

GASKET

VALVE COVER GASKET	G-1540163	CYLINDER HEAD GASKET	-
--------------------	-----------	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL JWS-165L

4 ½ " x 5"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
3 "	G-0240-30HP	G-0240-30Z	G-925C	VALVE ASSY-URETHANE (SUCTION & DISCHARGE)	-	G-4-V2
3 ½ "	G-0240-34HP	G-0240-34Z	G-925C	VALVE ASSY-URETHANE HT (SUCTION & DISCHARGE)	-	G-4-V2-HT
4"	G-0240-40HP	G-0240-40Z	G-925C	VALVE SEAT	-	G-4-S17
4 ½ "	G-0240-44HP	G-0240-44Z	G-925C	SUCTION	-	G-4-S18
				VALVE SEAT	-	G-4-S18
				DISCHARGE	-	G-4-S18
				VALVE SPRING	-	G-19000-6
				SUCTION	-	G-19000-6
				VALVE SPRING	-	G-5710-118
				DISCHARGE	-	G-5710-118
				INSERT-URETHANE	-	G-4-FI
				INSERT-URETHANE HT	-	G-4-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	-	-
				PULLER HEAD	-	-

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
3"	1"	I-30-A10	G-30A-KIT	LL-30-A10	LLU-30-A10	LLU-30-A10-HT
3 ½ "	1"	I-34-K10	G-34K-KIT	LL-34-K10	LLU-34-K10	LLU-34-K10-HT
4"	1"	I-40-K10	G-40K-KIT	LL-40-K10	LLU-40-K10	LLU-40-K10-HT
4 ½ "	1"	I-44-K10	G-44K-KIT	LL-44-K10	LLU-44-K10	LLU-44-K10-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1"	G-1717294	G-1716006	G-1716037	G-1717295	G-005400403

GASKET

VALVE COVER GASKET	-	CYLINDER HEAD GASKET	-
--------------------	---	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL JWS-400

6" x 8 1/2"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-4701-40HP	G-4701-40Z	G-272	VALVE ASSY-URETHANE SUCTION & DISCHARGE	-	G-3-V4
4 1/2"	G-4701-44HP	G-4701-44Z	G-274	VALVE ASSY-URETHANE HT SUCTION & DISCHARGE	-	G-3-V4-HT
5"	G-4701-50HP	G-4701-50Z	G-276	VALVE SEAT SUCTION	-	G-3-S11
5 1/2"	G-4701-54HP	G-4701-54Z	G-278	VALVE SEAT DISCHARGE	-	G-3-S10
5 3/4"	G-4701-56HP	G-4701-56Z	-	VALVE SPRING SUCTION	-	G-19000-5
6"	G-4701-60HP	G-4701-60Z	G-280	VALVE SPRING DISCHARGE	-	G-5710-115
				INSERT-URETHANE	-	G-3-FI
				INSERT-URETHANE HT	-	G-3-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	-	-
				PULLER HEAD	-	-

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2"	I-44-K15	G-44K-KIT	LL-44-K15	LLU-44-K15	LLU-44-K15-HT
5"	1 1/2"	I-50-K15	G-50K-KIT	LL-50-K15	LLU-50-K15	LLU-50-K15-HT
5 1/2"	1 1/2"	I-54-K15	G-54K-KIT	LL-54-K15	LLU-54-K15	LLU-54-K15-HT
5 3/4"	1 1/2"	I-56-K15	G-56K-KIT	LL-56-K15	LLU-56-K15	LLU-56-K15-HT
6"	1 1/2"	I-60-K15	G-60K-KIT	LL-60-K15	LLU-60-K15	LLU-60-K15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2"	G-173276	G-1714296	G-1715037	G-1714295	G-50V14

GASKET

VALVE COVER GASKET	-	CYLINDER HEAD GASKET	-
--------------------	---	----------------------	---

GENERAL PETROLEUM MACHINERY

NATIONAL C-250

7 1/4" x 15"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5 1/2"	G-0245-54HP	G-0245-54Z	G-812	VALVE ASSY-URETHANE	G-U5B-23	G-8-V2
6"	G-0245-60HP	G-0245-60Z	G-812	VALVE ASSY-URETHANE HT	-	
				VALVE SEAT	G-8DD-B2	G-8-S2
				VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-UDD8	
				INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5 1/2"		G-203-54-B5	G-54B-KIT			
6"		G-203-60-B5	G-60B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-1550255	G-1602454	-	-	

GASKET

VALVE COVER GASKET	G-537	CYLINDER HEAD GASKET	G-565
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

NATIONAL C-350

7 3/4" x 18"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-0246-50HP	G-0246-50Z	G-214	VALVE ASSY-URETHANE	G-U5B-23	G-8-V2
5 1/2"	G-0246-54HP	G-0246-54Z	G-214	VALVE ASSY-URETHANE HT		
6"	G-0246-60HP	G-0246-60Z	G-214	VALVE SEAT	G-8DD-B2	G-7-S2
6 1/2"	G-0246-64HP	G-0246-64Z	G-214	VALVE SPRING	G-5710-32	G-5710-32
7"	G-0246-70HP	G-0246-70Z	G-214	INSERT-URETHANE	G-UDD8	
				INSERT-URETHANE HT		
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *		
				PULLER HEAD		

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B5	G-50B-KIT			
5 1/2"		G-203-54-B5	G-54B-KIT			
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KIT			
7"		G-203-70-B5	G-70B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-1550225	G-1602462	-	-	

GASKET

VALVE COVER GASKET	G-675	CYLINDER HEAD GASKET	G-676
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

NATIONAL K-380

7 1/4" x 14"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
6"	G-1252-60HP	G-1252-60Z	G-217	VALVE ASSY-URETHANE	G-7EEF	G-7-V1
6 1/2"	G-1252-64HP	G-1252-64Z	G-217	VALVE ASSY-URETHANE HT		G-7-V1-HT
				VALVE SEAT	G-7DD-B1	G-7-S1
				VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-UDD7	G-7-FI
				INSERT-URETHANE HT		G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-1550145	G-1681478	-	-	

GASKET

VALVE COVER GASKET	G-678	CYLINDER HEAD GASKET	G-679
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

NATIONAL K-500A

7 1/2" x15"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
6"	G-0254-60HP	G-0254-60Z	G-225	VALVE ASSY-URETHANE	G-U5B-23	G-8-V1
6 1/2"	G-0254-64HP	G-0254-64Z	G-225	VALVE ASSY-URETHANE HT	-	
				VALVE SEAT	G-8DD-B2-	G-8-S1
				VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-UDD8	
				INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-1550115	G-1602420	-	-	

GASKET

VALVE COVER GASKET	G-705	CYLINDER HEAD GASKET	G-253
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO F350

6 3/4" x 7"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0146-40HP	G-0146-40Z	G-281	VALVE ASSY-URETHANE	G-U5-B5	G-5-V1
4 1/2"	G-0146-44HP	G-0146-44Z	G-281	VALVE ASSY-URETHANE HT	G-U5-B5-HT	G-5-V1-HT
5"	G-0146-50HP	G-0146-50Z	G-281	VALVE SEAT	G-5DD-B1	G-5-S1
5 1/2"	G-0146-54HP	G-0146-54Z	G-281	VALVE SPRING	G-5710-111	G-5710-111
5 3/4"	G-0146-56HP	G-0146-56Z	G-281	INSERT-URETHANE	G-5-WI	G-5-FI
6"	G-0146-60HP	G-0146-60Z	G-281	INSERT-URETHANE HT	G-5-WI-HT	G-5-WI-HT
6 1/4"	G-0146-62HP	G-0146-62Z	G-281	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0146-64HP	G-0146-64Z	G-281	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0146-66HP	G-0146-66Z	G-281	PULLER HEAD	G-1700-5	G-5-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1"	I-40-K10	G-40K-KIT	LL-40-K10	LLU-40-K10	LLU-40-K10-HT
4 1/2"	1"	I-44-K10	G-44K-KIT	LL-44-K10	LLU-44-K10	LLU-44-K10-HT
5"	1"	I-50-B10	G-50B-KIT	LL-50-B10	LLU-50-B10	LLU-50-B10-HT
5 1/2"	1"	I-54-B10	G-54B-KIT	LL-54-B10	LLU-54-B10	LLU-54-B10-HT
5 3/4"	1"	I-56-B10	G-56B-KIT	LL-56-B10	LLU-56-B10	LLU-56-B10-HT
6"	1"	I-60-B10	G-60B-KIT	LL-60-B10	LLU-60-B10	LLU-60-B10-HT
6 1/4"	1"	I-62-L10	G-62L-KIT	LL-62-L10	LLU-62-L10	LLU-62-L10-HT
6 1/2"	1"	I-64-L10	G-64L-KIT	LL-64-L10	LLU-64-L10	LLU-64-L10-HT
6 3/4"	1"	I-66-L10	G-66L-KIT	LL-66-L10	LLU-66-L10	LLU-66-L10-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1"	G-1551490	G-07913702	G-PP600500	-	G-7403224

GASKET

VALVE COVER GASKET	G-733	CYLINDER HEAD GASKET	G-281
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO F500

6 3/4" x 7"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0146-40HP	G-0146-40Z	G-281	VALVE ASSY-URETHANE	G-U5-B5	G-5-V1
4 1/2"	G-0146-44HP	G-0146-44Z	G-281	VALVE ASSY-URETHANE HT	G-U5-B5-HT	G-5-V1-HT
5"	G-0146-50HP	G-0146-50Z	G-281	VALVE SEAT	G-5DD-B1	G-5-S1
5 1/2"	G-0146-54HP	G-0146-54Z	G-281	VALVE SPRING	G-5710-111	G-5710-111
5 3/4"	G-0146-56HP	G-0146-56Z	G-281	INSERT-URETHANE	G-5-WI	G-5-FI
6"	G-0146-60HP	G-0146-60Z	G-281	INSERT-URETHAN HT	G-5-WI-HT	G-5-WI-HT
6 1/4"	G-0146-62HP	G-0146-62Z	G-281	SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-5	G-5-PH

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1"	I-40-K10	G-40K-KIT	LL-40-K10	LLU-40-K10	LLU-40-K10-HT
4 1/2"	1"	I-44-K10	G-44K-KIT	LL-44-K10	LLU-44-K10	LLU-44-K10-HT
5"	1"	I-50-B10	G-50B-KIT	LL-50-B10	LLU-50-B10	LLU-50-B10-HT
5 1/2"	1"	I-54-B10	G-54B-KIT	LL-54-B10	LLU-54-B10	LLU-54-B10-HT
5 3/4"	1"	I-56-B10	G-56B-KIT	LL-56-B10	LLU-56-B10	LLU-56-B10-HT
6"	1"	I-60-B10	G-60B-KIT	LL-60-B10	LLU-60-B10	LLU-60-B10-HT
6 1/4"	1"	I-62-L10	G-62L-KIT	LL-62-L10	LLU-62-L10	LLU-62-L10-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

PART NO.	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
	-	G-1551700	G-07913702	G-PP600500	-	G-7403224

GASKET

VALVE COVER GASKET	G-733	CYLINDER HEAD GASKET	G-281
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO F650

6 3/4" x 8"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0146-40HP	G-0146-40Z	G-281	VALVE ASSY-URETHANE	G-U5-B5	G-5-V1
4 1/2"	G-0146-44HP	G-0146-44Z	G-281	VALVE ASSY-URETHANE HT	G-U5-B5-HT	G-5-V1-HT
5"	G-0146-50HP	G-0146-50Z	G-281	VALVE SEAT	G-5DD-B1	G-5-S1
5 1/2"	G-0146-54HP	G-0146-54Z	G-281	VALVE SPRING	G-5710-30	G-5710-111
5 3/4"	G-0146-56HP	G-0146-56Z	G-281	INSERT-URETHANE	G-5-WI	G-5-FI
6"	G-0146-60HP	G-0146-60Z	G-281	INSERT-URETHAN HT	G-5-WI-HT	G-5-FI-HT
6 1/4"	G-0146-62HP	G-0146-62Z	G-281	SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-5	G-D-5

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHAN BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1/2"	G-1551698	G-6310007800	G-PP600750	-	G-50V14

GASKET

VALVE COVER GASKET	G-733	CYLINDER HEAD GASKET	G-281
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO F-800

7" x 9"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-0148-40HP	G-0148-40Z	G-282	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2"	G-0148-44HP	G-0148-44Z	G-282	VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
5"	G-0148-50HP	G-0148-50Z	G-282	VALVE SEAT	G-6DD-B6	G-6-S6
5 1/2"	G-0148-54HP	G-0148-54Z	G-282	VALVE SPRING	G-5710-115	G-5710-115
5 3/4"	G-0148-56HP	G-0148-56Z	G-282	INSERT-URETHANE	G-6-WI	G-6-FI
6"	G-0148-60HP	G-0148-60Z	G-282	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6 1/4"	G-0148-62HP	G-0148-62Z	G-282	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0148-64HP	G-0148-64Z	G-282	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0148-66HP	G-0148-66Z	G-282	PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4"	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2"	G-6320-0030-00	G-6320-0041-00	G-6320-0072-00	-	G-50V14

GASKET

VALVE COVER GASKET	G-740	CYLINDER HEAD GASKET	G-282
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO F-1000

7" x 10"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0148-40HP	G-0148-40Z	G-282	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2"	G-0148-44HP	G-0148-44Z	G-282	VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
5"	G-0148-50HP	G-0148-50Z	G-282	VALVE SEAT	G-6DD-B6	G-6-S6
5 1/2"	G-0148-54HP	G-0148-54Z	G-282	VALVE SPRING	G-5710-115	G-5710-115
5 3/4"	G-0148-56HP	G-0148-56Z	G-282	INSERT-URETHANE	G-6-WI	G-6-FI
6"	G-0148-60HP	G-0148-60Z	G-282	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6 1/4"	G-0148-62HP	G-0148-62Z	G-282	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0148-64HP	G-0148-64Z	G-282	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0148-66HP	G-0148-66Z	G-282	PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 3/4"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-6319-0075-00	G-6319-0020-00	G-6319-0071-00	-	G-50V14

GASKET

VALVE COVER GASKET	G-740	CYLINDER HEAD GASKET	G-282
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO FB-1300

7" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-2145-40HP	G-2145-40Z	G-800	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2"	G-2145-44HP	G-2145-44Z	G-800	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-2145-50HP	G-2145-50Z	G-800	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2"	G-2145-54HP	G-2145-54Z	G-800	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4"	G-2145-56HP	G-2145-56Z	G-800	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-2145-60HP	G-2145-60Z	G-800	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4"	G-2145-62HP	G-2145-62Z	G-800	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-2145-64HP	G-2145-64Z	G-800	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-2145-66HP	G-2145-66Z	G-800	PULLER HEAD	G-1700-7	G-D-7
7"	G-2145-70HP	G-2145-70Z	G-800			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-6316-0359-00	G-6316-0028-00	G-6316-0107-11	-	G-50V14

GASKET

VALVE COVER GASKET	G-741	CYLINDER HEAD GASKET	G-801
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO FB-1600

7" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-2145-40HP	G-2145-40Z	G-800	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2"	G-2145-44HP	G-2145-44Z	G-800	VALVE ASSY-URETHANE HT	G-U5-EEF-HT	G-7-V1-HT
5"	G-2145-50HP	G-2145-50Z	G-800	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2"	G-2145-54HP	G-2145-54Z	G-800	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4"	G-2145-56HP	G-2145-56Z	G-800	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-2145-60HP	G-2145-60Z	G-800	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4"	G-2145-62HP	G-2145-62Z	G-800	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-2145-64HP	G-2145-64Z	G-800	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-2145-66HP	G-2145-66Z	G-800	PULLER HEAD	G-1700-7	G-D-7
7"	G-2145-70HP	G-2145-70Z	G-800			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4"	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-6316-0359-00	G-6316-0028-00	G-6316-0107-11	-	G-50V14

GASKET

VALVE COVER GASKET	G-741	CYLINDER HEAD GASKET	G-801
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO D-300/500

7 1/2" x 14"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5 1/2"	G-0135-54HP	G-0135-54Z	G-153	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
6"	G-0135-60HP	G-0135-60Z	G-153	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
6 1/2"	G-0135-64HP	G-0135-64Z	G-153	VALVE SEAT	G-7DD-B1	G-7-S1
7"	G-0135-70HP	G-0135-70Z	G-153	VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-7-WI	G-7-FI
				INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5 1/2"		G-203-54-B4	G-54B-KIT			
6"		G-203-60-B4	G-60B-KIT			
6 1/2"		G-203-64-B4	G-64B-KIT			
7		G-203-70-B4	G-70B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #4	G-133	G-6133	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-663	CYLINDER HEAD GASKET	G-667
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO D-375

7 1/2" x 14"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-0130-50HP	G-0130-50Z	G-200	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
5 1/2"	G-0130-54HP	G-0130-54Z	G-200	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
6"	G-0130-60HP	G-0130-60Z	G-200	VALVE SEAT	G-7-S1	G-7DD-B1
6 1/2"	G-0130-64HP	G-0130-64Z	G-200	VALVE SPRING	G-5710-32	G-5710-32
7"	G-0130-70HP	G-0130-70Z	G-200	INSERT-URETHANE	G-7-WI	G-7-FI
				INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B4	G-50B-KIT			
5 1/2"		G-203-54-B4	G-54B-KIT			
6"		G-203-60-B4	G-60B-KIT			
6 1/2"		G-203-64-B4	G-64B-KIT			
7"		G-203-70-B4	G-70B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #4	G-130	G-6130	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-663	CYLINDER HEAD GASKET	G-126
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

EMSCO DB-550/700

7 1/2" x 16"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5 1/2"	G-0141-54HP	G-0141-54Z	G-200	VALVE ASSY-URETHANE	G-U5B-LP	G-8-V2
6"	G-0141-60HP	G-0141-60Z	G-200	VALVE ASSY-URETHANE HT	-	G-8-V2-HT
6 1/2"	G-0141-64HP	G-0141-64Z	G-200	VALVE SEAT	G-8DD-B2	G-8-S2
7"	G-0141-70HP	G-0141-70Z	G-200	VALVE SPRING	G-5710-32-	G-5710-32
				INSERT-URETHANE	G-UDD8	
				INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5 1/2"		G-203-54-B5	G-54B-KIT			
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KIT			
7"		G-203-70-B5	G-70B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-141	G-6141	-	-	-

GASKET

VALVE COVER GASKET	G-66-134	CYLINDER HEAD GASKET	G-64-134
--------------------	----------	----------------------	----------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER TEE

5" x 8"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
3"	G-1190-30	G-1190-30Z	G-174	VALVE ASSY-URETHANE	-	G-204TEE482
3 1/2 "	G-1190-34	G-1190-34Z	G-174	VALVE ASSY-URETHANE HT	-	G-204TEE482-HT
4 "	G-1190-40	G-1190-40Z	G-174	VALVE SEAT	-	G-200PEE039
				VALVE SPRING	-	G-78H26
				INSERT-URETHANE	-	G-1PA452
				INSERT-URETHANE HT	-	G-1PA452-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-4	G-D-4

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
3 "	1"	I-30-K10	G-30K-KIT	-	-	-
3 1/2 "	1"	I-34-K10	G-34K-KIT	LL-34-K10	LLU-34-K10	LLU-34-K10-HT
4 "	1"	I-40-K10	G-40K-KIT	LL-40-K10	LLU-40-K10	LLU-40-K10-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1"	200PEE060	300TEE839	-	-	G-50V3

GASKET

VALVE COVER GASKET	G-799	CYLINDER HEAD GASKET	G-799
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PAH

5" x 8"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
3 1/2 "	G-0189-34HP	G-0189-34Z	G-266	VALVE ASSY-URETHANE	PJ-482	G-4-V1
4"	G-0189-40HP	G-0189-40Z	G-266	VALVE ASSY-URETHANE HT	PJ-482-HT	G-4-V1-HT
4 1/2 "	G-0189-44CR	-	G-266	VALVE SEAT	G-PJ-451	G-4-S5
				VALVE SPRING	G-78H23	G-5710-33
				INSERT-URETHANE	PJ-452	G-4-F1
Big OD				INSERT-URETHANE HT	PJ-452-HT	G-4-F1-HT
4 1/2 "	G-0193-44HP	-	G-266	SEAT PULLER ASSEMBLY *Does not include puller head		
5"	G-0193-50CR	-	G-266	PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-4	G-D-4

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
3 1/2 "	1 1/2" & 1 5/8"	I-34-K15	G-34K-KIT	-	-	-
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
Big OD						
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2"	G-PJ183A	300PZH839	G-200PZJ4065	-	G-50V14

GASKET

VALVE COVER GASKET	G-799	CYLINDER HEAD GASKET	G-799
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PZL

7" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-303PZL4055		G-316PZL316	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
5 1/2"	G-302PZL4055		G-316PZL316	VALVE ASSY-URETHANE HT	G-6-EEF-HT	G76-V1-HT
6"	G-301PZL4055		G-316PZL316	VALVE SPRING	G-5710-115	G-5710-115L
6 1/2"	G-300PZL4055		G-301PZL316	INSERT-URETHANE	G-7-WI	G-7-FI
				INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1-1/2"	G-301(2)PZL060S	G-302PZL839	G-300PZL4065	G-304PZL110	G-50V14

GASKET

VALVE COVER GASKET	G-309PZL316	CYLINDER HEAD GASKET	G-309PZL316
--------------------	-------------	----------------------	-------------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PZ-7

7" x 7"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-1192-40HP	G-1192-40Z	G-692	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-1192-44HP	G-1192-44Z	G-692	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-1192-50HP	G-1192-50Z	G-692	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2 "	G-1192-54HP	G-1192-54Z	G-692	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-1192-56HP	G-1192-56Z	G-692	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-1192-60HP	G-1192-60Z	G-692	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-1192-62HP	G-1192-62Z	G-692	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-1192-64HP	G-1192-64Z	G-692	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-1192-66HP	G-1192-66Z	G-692	PULLER HEAD	G-1700-7	G-D-7
7"	G-1192-70Cr	-	G-692			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
Clamp	1 1/2"	G-201PZG060A	G-200PZG839	G-2012240	-	G-50V14
Threaded	1 1/2"	G-0196	G-16-0196	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-749	CYLINDER HEAD GASKET	G-749
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PZ-8

7" x 8"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-1191-40HP	G-1191-40Z	G-692
4 1/2 "	G-1191-44HP	G-1191-44Z	G-692
5"	G-1191-50HP	G-1191-50Z	G-692
5 1/2 "	G-1191-54HP	G-1191-54Z	G-692
5 3/4 "	G-1191-56HP	G-1191-56Z	G-692
6"	G-1191-60HP	G-1191-60Z	G-692
6 1/4 "	G-1191-62HP	G-1191-62Z	G-692
6 1/2 "	G-1191-64HP	G-1191-64Z	G-692
6 3/4 "	G-1191-66HP	G-1191-66Z	G-692
7"	G-1191-70Cr	-	G-692

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
VALVE SEAT	G-7DD-B1	G-7-S1
VALVE SPRING	G-5710-115	G-5710-115L
INSERT-URETHANE	G-7-WI	G-7-FI
INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE D UROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
Clamp	1 1/2"	G-1PZ183	G-1PO183	G-2012240	-	G-50V14
Threaded	1 1/2"	G-200PZJ060A	G-16-0196	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-749	CYLINDER HEAD GASKET	G-749
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PZ-9

7" x 9"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-1191-40HP	G-1191-40Z	G-692	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-1191-44HP	G-1191-44Z	G-692	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-1191-50HP	G-1191-50Z	G-692	VALVE SEAT	G-7-DDB1	G-7-S1
5 1/2 "	G-1191-54HP	G-1191-54Z	G-692	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-1191-56HP	G-1191-56Z	G-692	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-1191-60HP	G-1191-60Z	G-692	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-1191-62HP	G-1191-62Z	G-692	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-1191-64HP	G-1191-64Z	G-692	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-1191-66HP	G-1191-66Z	G-692	PULLER HEAD	G-1700-7	G-D-7
7"	G-1191-70Cr	-	G-692			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
Clamp	1 1/2"	G-1PZ183	G-PZ183	G-2012240	-	G-50V14
Threaded	1 1/2"	G-200PZJ060A	G-16-0201	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-749	CYLINDER HEAD GASKET	G-749
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PZ-10

7" x 10"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-0197-40HP	G-0197-40Z	G-692	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-0197-44HP	G-0197-44Z	G-692	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-0197-50HP	G-0197-50Z	G-692	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2 "	G-0197-54HP	G-0197-54Z	G-692	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-0197-56HP	G-0197-56Z	G-692	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0197-60HP	G-0197-60Z	G-692	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-0197-62HP	G-0197-62Z	G-692	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-0197-64HP	G-0197-64Z	G-692	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-0197-66HP	G-0197-66Z	G-692	PULLER HEAD	G-1700-7	G-D-7
7"	G-0197-70HP	G-0197-70Z	G-692			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
Clamp	1 1/2"	G-200PZL060	G-200PZL839	G-200PZL092A	-	G-50V14
Threaded	1 1/2 "	-	G-16-0201	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-798U	CYLINDER HEAD GASKET	G-798U
--------------------	--------	----------------------	--------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PZ-11

7" x 11"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0197-40HP	G-0197-40Z	G-692	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-0197-44HP	G-0197-44Z	G-692	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-0197-50HP	G-0197-50Z	G-692	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2 "	G-0197-54HP	G-0197-54Z	G-692	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-0197-56HP	G-0197-56Z	G-692	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0197-60HP	G-0197-60Z	G-692	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-0197-62HP	G-0197-62Z	G-692	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-0197-64HP	G-0197-64Z	G-692	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-0197-66HP	G-0197-66Z	G-692	PULLER HEAD	G-1700-7	G-D-7
7"	G-0197-70HP	G-0197-70Z	G-692			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
Clamp	1 1/2"	G-200PZL060	G-200PZL839	G-200PZL092A	-	G-50V14
Threaded	1 1/2"	-	G-16-0201	-	-	G-50V14

GASKET

VALVE COVER GASKET	G-798U	CYLINDER HEAD GASKET	G-798U
--------------------	--------	----------------------	--------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER FXK.FXN

7 1/2" x 14"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
5"	G-0185-50HP	G-0185-50Z	G-154	VALVE ASSY-URETHANE	G-U5B-23	G-8-V2
5 1/2"	G-0185-54HP	G-0185-54Z	G-154	VALVE ASSY-URETHANE HT		
6"	G-0185-60HP	G-0185-60Z	G-154	VALVE SEAT	G-8DD-B2	G-8-S2
6 1/2"	G-0185-64HP	G-0185-64Z	G-154	VALVE SPRING	G-5710-32	G-5710-32
7"	G-0185-70HP	G-0185-70Z	G-154	INSERT-URETHANE	G-UDD8	
				INSERT-URETHANE HT		
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B4	G-50B-KIT			
5 1/2"		G-203-54-B4	G-54B-KIT			
6"		G-203-60-B4	G-60B-KIT			
6 1/2"		G-203-64-B4	G-64B-KIT			
7"		G-203-70-B4	G-70B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-185		-	-	G-50V14

GASKET

VALVE COVER GASKET	G-808	CYLINDER HEAD GASKET	G-249
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

GARDNER DENVER PEE-5

LINERS & LINER SEALS

SIZE	LINERS & LINER SEALS			VALVES, SEATS, SPRINGS & INSERTS		
	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
3"	G-4603-30HP	G-4603-30Z		VALVE ASSY-URETHANE		
4"	G-4603-40HP	G-4603-40Z		VALVE ASSY-URETHANE HT		
				VALVE SEAT		
				VALVE SPRING		
				INSERT-URETHANE		
				INSERT-URETHANE HT		
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *		
				PULLER HEAD		

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
3"	1"	I-30-K10	G-30K-KIT			
4"	1"	I-40-K10	G-40K-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

IDECO T-500

7" x 8"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0234-40HP	G-0234-40Z	G-783	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2"	G-0234-44HP	G-0234-44Z	G-783	VALVE ASSY-URETHANE HT	G-6-EH-TH	G-6-V1-HT
5"	G-0234-50HP	G-0234-50Z	G-783	VALVE SEAT	G-6ADD-B6	G-6-S6
5 1/2"	G-0234-54HP	G-0234-54Z	G-783	VALVE SPRING	G-5710-115	G-5710-115
5 3/4"	G-0234-56HP	G-0234-56Z	G-783	INSERT-URETHANE	G-6-WI	G-6-FI
6"	G-0234-60HP	G-0234-60Z	G-783	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6 1/4"	G-0234-62HP	G-0234-62Z	G-783	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0234-64HP	G-0234-64Z	G-783	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0234-66HP	G-0234-66Z	G-783	PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2"	G-551-522-03	G-551-506-06	G-551-506-08	-	G-50V14

GASKET

VALVE COVER GASKET	G-783	CYLINDER HEAD GASKET	G-783
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

IDECO T-800

7" x 9"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0230-40HP	G-0230-40Z	G-783	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2"	G-0230-44HP	G-0230-44Z	G-783	VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
5"	G-0230-50HP	G-0230-50Z	G-783	VALVE SEAT	G-6ADD-B6	G-6-S6
5 1/2"	G-0230-54HP	G-0230-54Z	G-783	VALVE SPRING	G-5710-115	G-5710-115
5 3/4"	G-0230-56HP	G-0230-56Z	G-783	INSERT-URETHANE	G-6-WI	G-6-FI
6"	G-0230-60HP	G-0230-60Z	G-783	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6 1/4"	G-0230-62HP	G-0230-62Z	G-783	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0230-64HP	G-0230-64Z	G-783	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0230-66HP	G-0230-66Z	G-783	PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-551-405-13	G-551-406-06	G-551-406-08	-	G-50V14

GASKET

VALVE COVER GASKET	G-783	CYLINDER HEAD GASKET	G-783
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

IDECO T-1000

7" x 10"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0230-40HP	G-0230-40Z	G-783	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2"	G-0230-44HP	G-0230-44Z	G-783	VALVE ASSY-URETHANE HT	G-6-EH-TH	G-6-V1-HT
5"	G-0230-50HP	G-0230-50Z	G-783	VALVE SEAT	G-6ADD-B6	G-6-S6
5 1/2"	G-0230-54HP	G-0230-54Z	G-783	VALVE SPRING	G-5710-115	G-5710-115
5 3/4"	G-0230-56HP	G-0230-56Z	G-783	INSERT-URETHANE	G-6-WI	G-6-FI
6"	G-0230-60HP	G-0230-60Z	G-783	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6 1/4"	G-0230-62HP	G-0230-62Z	G-783	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0230-64HP	G-0230-64Z	G-783	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0230-66HP	G-0230-66Z	G-783	PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2"	G-551-405-13	G-551-306-06	G-551-406-08	-	G-50V14

GASKET

VALVE COVER GASKET	G-783	CYLINDER HEAD GASKET	G-783
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

IDECO T-1300

7 1/2" x 12"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-0233-40HP	G-0233-40Z	G-782
4 1/2"	G-0233-44HP	G-0233-44Z	G-782
5"	G-0233-50HP	G-0233-50Z	G-782
5 1/2"	G-0233-54HP	G-0233-54Z	G-782
5 3/4"	G-0233-56HP	G-0233-56Z	G-782
6"	G-0233-60HP	G-0233-60Z	G-782
6 1/4"	G-0233-62HP	G-0233-62Z	G-782
6 1/2"	G-0233-64HP	G-0233-64Z	G-782
6 3/4"	G-0233-66HP	G-0233-66Z	G-782

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
VALVE SEAT	G-7DD-B1	G-7-S1
VALVE SPRING	G-5710-115	G-5710-115L
INSERT-URETHANE	G-7-WI	G-7-FI
INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
1 1/2"	G-551-105-13	G-551-106-06	G-551-106-08	-	G-50V14

GASKET

VALVE COVER GASKET	G-782	CYLINDER HEAD GASKET	G-782
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

IDECO T-1600

7 1/2" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0233-40HP	G-0233-40Z	G-782	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2"	G-0233-44HP	G-0233-44Z	G-782	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-0233-50HP	G-0233-50Z	G-782	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2"	G-0233-54HP	G-0233-54Z	G-782	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4"	G-0233-56HP	G-0233-56Z	G-782	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0233-60HP	G-0233-60Z	G-782	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4"	G-0233-62HP	G-0233-62Z	G-782	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0233-64HP	G-0233-64Z	G-782	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0233-66HP	G-0233-66Z	G-782	PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-551-105-13	G-551-106-06	G-551-106-08	-	G-50V14

GASKET

VALVE COVER GASKET	G-782	CYLINDER HEAD GASKET	G-782
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

OILWELL A-350-PT

7" x 8"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-0287-40HP	G-0287-40Z	G-753	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2 "	G-0287-44HP	G-0287-44Z	G-754	VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
5"	G-0287-50HP	G-0287-50Z	G-742	VALVE SEAT	G-6ADD-B6	G-6-S6
5 1/2 "	G-0287-54HP	G-0287-54Z	G-743	VALVE SPRING	G-5710-115	G-5710-115
5 3/4 "	G-0287-56HP	G-0287-56Z	G-744	INSERT-URETHANE	G-6-WI	G-6-FI
6"	G-0287-60HP	G-0287-60Z	G-745	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6 1/4 "	G-0287-62HP	G-0287-62Z	-	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-0287-64HP	G-0287-64Z	G-746	PULLER ASSEMBLY *	G-1700	G-1700
7"	G-0287-70HP	G-0287-70Z	G-756	PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1-1/2"	G-20150123	G-16484101	G-20150132	G-20150124	G-50V14

GASKET

VALVE COVER GASKET	G-732	CYLINDER HEAD GASKET	G-754
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

OILWELL A-600-PT

7" x 8"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-0287-40HP	G-0287-40Z	G-753	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
4 1/2 "	G-0287-44HP	G-0287-44Z	G-754	VALVE ASSY-URETHANE HT	G-6ADD-B6	G-6-S6
5"	G-0287-50HP	G-0287-50Z	G-742	VALVE SPRING	G-5710-115	G-5710-115
5 1/2 "	G-0287-54HP	G-0287-54Z	G-743	INSERT-URETHANE	G-6-WI	G-6-FI
5 3/4 "	G-0287-56HP	G-0287-56Z	G-744	INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
6"	G-0287-60HP	G-0287-60Z	G-745	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/4 "	G-0287-62HP	G-0287-62Z	-	PULLER ASSEMBLY *	G-1700	G-1700
6 1/2 "	G-0287-64HP	G-0287-64Z	G-746	PULLER HEAD	G-1700-6	G-D-6
7"	G-0287-70HP	G-0287-70Z	G-756			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1-1/2"	G-20150123	G-16484101	G-20150132	G-20150125	G-50V14

GASKET

VALVE COVER GASKET	G-732	CYLINDER HEAD GASKET	G-732
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

OILWELL A-850-PT

7 1/2" x 9"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0285-40HP	G-0285-40Z	G-753	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-0285-44HP	G-0285-44Z	G-754	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-0285-50HP	G-0285-50Z	G-742	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2 "	G-0285-54HP	G-0285-54Z	G-743	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-0289-56HP	G-0289-56Z	G-744	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0289-60HP	G-0289-60Z	G-745	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-0289-62HP	G-0289-62Z	-	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-0289-64HP	G-0289-64Z	G-746	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-0289-66HP	G-0289-66Z	G-755	PULLER HEAD	G-1700-7	G-D-7
7"	G-0289-70HP	G-0289-70Z	G-756			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2"	G-20-150-123	G-10300142	G-20-150-132	G-20-150-125	G-50V14

GASKET

VALVE COVER GASKET	G-760	CYLINDER HEAD GASKET	-
--------------------	-------	----------------------	---

GENERAL PETROLEUM MACHINERY

OILWELL A-1100-PT

7 1/2" x 10"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-0289-40HP	G-0289-40Z	G-753	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-0289-44HP	G-0289-44Z	G-754	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-0289-50HP	G-0289-50Z	G-742	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2 "	G-0289-54HP	G-0289-54Z	G-743	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-0289-56HP	G-0289-56Z	G-744	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0289-60HP	G-0289-60Z	G-745	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-0289-62HP	G-0289-62Z	-	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-0289-64HP	G-0289-64Z	G-746	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-0289-66HP	G-0289-66Z	G-755	PULLER HEAD	G-1700-7	G-D-7
7"	G-0289-70HP	G-0289-70Z	G-756			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	-	G-20-150-123	G-20-150-125	G-20-150-132	G-20-150-0125	G-50V14

GASKET

VALVE COVER GASKET	G-760	CYLINDER HEAD GASKET	-
--------------------	-------	----------------------	---

GENERAL PETROLEUM MACHINERY

OILWELL A-1400-PT

7 1/2" x 10"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
-	-	-	-	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2 "	G-0284-44HP	G-0284-44Z	G-754	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5"	G-0284-50HP	G-0284-50Z	G-742	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2 "	G-0284-54HP	G-0284-54Z	G-743	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4 "	G-0284-56HP	G-0284-56Z	G-744	INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0284-60HP	G-0284-60Z	G-745	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4 "	G-0284-62HP	G-0284-62Z	-	SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2 "	G-0284-64HP	G-0284-64Z	G-746	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4 "	G-0284-66HP	G-0284-66Z	G-755	PULLER HEAD	G-1700-7	G-D-7
7"	G-0284-70HP	G-0284-70Z	G-756			

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	-	G-20-150-123	G-20-150-125	G-20-150-132	G-1551707	G-50V14

GASKET

VALVE COVER GASKET	G-760	CYLINDER HEAD GASKET	-
--------------------	-------	----------------------	---

GENERAL PETROLEUM MACHINERY

OILWELL A-1700-PT

7 1/2" x 12"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4 1/2 "	G-0284-44HP	G-0284-44Z	G-754	VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
5"	G-0284-50HP	G-0284-50Z	G-742	VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
5 1/2 "	G-0284-54HP	G-0284-54Z	G-743	VALVE SEAT	G-7DD-B1	G-7-S1
5 3/4 "	G-0284-56HP	G-0284-56Z	G-744	VALVE SPRING	G-5710-115	G-5710-115L
6"	G-0284-60HP	G-0284-60Z	G-745	INSERT-URETHANE	G-7-WI	G-7-FI
6 1/4 "	G-0284-62HP	G-0284-62Z	-	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/2 "	G-0284-64HP	G-0284-64Z	G-746	SEAT PULLER ASSEMBLY *Does not include puller head		
6 3/4 "	G-0284-66HP	G-0284-66Z	G-755	PULLER ASSEMBLY *	G-1700	G-1700
7"	G-0284-70HP	G-0284-70Z	G-756	PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	-	G-20-150-123	G-20-150-125	G-20-150-132	G-1551707	G-50V14

GASKET

VALVE COVER GASKET	G-760	CYLINDER HEAD GASKET	-
--------------------	-------	----------------------	---

GENERAL PETROLEUM MACHINERY

OPI 350D

7" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
4"	G-0478-40HP	G-0478-40Z		VALVE ASSY-URETHANE	-	G-4-V1
4 1/2"	G-0478-44HP	G-0478-44Z		VALVE ASSY-URETHANE HT	-	G-4-V1-HT
5"	G-0478-50HP	G-0478-50Z		VALVE SEAT	-	G-4-S2
5 1/2"	G-0478-54HP	G-0478-54Z		VALVE SPRING	-	G-5710-33
6"	G-0478-60HP	G-0478-60Z		INSERT-URETHANE	-	G-4-FI
6 1/4"	G-0478-62HP	G-0478-62Z		INSERT-URETHANE HT	-	G-4-FI-HT
6 1/2"	G-0478-64HP	G-0478-64Z		SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-4	G-D-4

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2				-	G-50V14

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

OPI 700 HDL

7" x 8"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-0481-40HP	G-0481-40Z	G-753
4 1/2 "	G-0481-44HP	G-0481-44Z	G-754
5"	G-0481-50HP	G-0481-50Z	G-742
5 1/2 "	G-0481-54HP	G-0481-54Z	G-743
5 3/4 "	G-0481-56HP	G-0481-56Z	G-744
6"	G-0481-60HP	G-0481-60Z	G-745
6 1/4 "	G-0481-62HP	G-0481-62Z	-
6 1/2 "	G-0481-64HP	G-0481-64Z	G-746
6 3/4 "	G-0481-66HP	G-0481-66Z	G-755
7"	G-0481-70HP	G-0481-70Z	G-756

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-6-EH	G-6-V1
VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
VALVE SEAT	G-6ADD-B6	G-6-S6
VALVE SPRING	G-5710-115	G-5710-115
INSERT-URETHANE	G-6-FI	G-6-FI
INSERT-URETHAN HT	G-6-FI-HT	G-6-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-6	G-1700-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHAN BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2 "	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2 "	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4 "	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4 "	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
6 3/4 "	1 1/2" & 1 5/8"	I-66-L15	G-66L-KIT	LL-66-L15	LLU-66-L15	LLU-66-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	-	-	-	-	-	G-50V14

GASKET

VALVE COVER GASKET	-	CYLINDER HEAD GASKET	-
--------------------	---	----------------------	---

GENERAL PETROLEUM MACHINERY

OPI 1000 HDL

7" x 12"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4"	G-0482-40HP	G-0482-40Z		VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
4 1/2"	G-0482-44HP	G-0482-44Z		VALVE ASSY-URETHANE HT	G-U5-EEF-HT	G-7-V1-HT
5"	G-0482-50HP	G-0482-50Z	G-742	VALVE SEAT	G-7DD-B1	G-7-S1
5 1/2"	G-0482-54HP	G-0482-54Z	G-743	VALVE SPRING	G-5710-115	G-5710-115L
5 3/4"	G-0482-56HP	G-0482-56Z		INSERT-URETHANE	G-7-WI	G-7-FI
6"	G-0482-60HP	G-0482-60Z	G-745	INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 1/4"	G-0482-62HP	G-0482-62Z		SEAT PULLER ASSEMBLY *Does not include puller head		
6 1/2"	G-0482-64HP	G-0482-64Z	G-746	PULLER ASSEMBLY *	G-1700	G-1700
6 3/4"	G-0482-66HP	G-0482-66Z	G-756	PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62B-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2				-	G-50V14

GASKET

VALVE COVER GASKET	G-755	CYLINDER HEAD GASKET	G-755
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

BOMCO F-1600

7" x 12"

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4"	G-2145-40HP	G-2145-40Z	G-800
4 1/2"	G-2145-44HP	G-2145-44Z	G-800
5"	G-2145-50HP	G-2145-50Z	G-800
5 1/2"	G-2145-54HP	G-2145-54Z	G-800
5 3/4"	G-2145-56HP	G-2145-56Z	G-800
6"	G-2145-60HP	G-2145-60Z	G-800
6 1/4"	G-2145-62HP	G-2145-62Z	G-800
6 1/2"	G-2145-64HP	G-2145-64Z	G-800
6 3/4"	G-2145-66HP	G-2145-66Z	G-800

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
VALVE ASSY-URETHANE HT	G-7-EEF-HT	G-7-V1-HT
VALVE SEAT	G-7DD-B1	G-7-S1
VALVE SPRING	G-5710-115	G-5710-115L
INSERT-URETHANE	G-7-WI	G-7-FI
INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
1 1/2"	G-6316-0359-00	G-6316-0028-00	G-6316-0107-11	-	G-50V14

GASKET

VALVE COVER GASKET	G-740	CYLINDER HEAD GASKET	G-801
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

LS 3NB1300C

7" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-3NB1316-50	G-3NB1316-50Z		VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
5 1/2"	G-3NB1316-54	G-3NB1316-54Z		VALVE ASSY-URETHANE HT	G-U5-EEF-HT	G-7-V1-HT
5 3/4"	G-3NB1316-56	G-3NB1316-56Z		VALVE SEAT	G-7DD-B1	G-7-S1
6"	G-3NB1316-60	G-3NB1316-60Z		VALVE SPRING	G-5710-115	G-5710-115L
6 1/4"	G-3NB1316-62	G-3NB1316-62Z		INSERT-URETHANE	G-7-WI	G-7-FI
6 1/2"	G-3NB1316-64	G-3NB1316-64Z		INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 3/4"	G-3NB1316-66	G-3NB1316-66Z		SEAT PULLER ASSEMBLY *Does not include puller head		
	Liner Seal	G-107.11.110.42		PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-107.11.110.39	G-107.11.01.02	G-107.11.114.00	-	G-50V14

GASKET

VALVE COVER GASKET	G-107.11.110.05	CYLINDER HEAD GASKET	G-107.11.110.68
--------------------	-----------------	----------------------	-----------------

GENERAL PETROLEUM MACHINERY

LS 3NB1600

7" x 12"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-3NB1316-50	G-3NB1316-50Z		VALVE ASSY-URETHANE	G-7-EEF	G-7-V1
5 1/2"	G-3NB1316-54	G-3NB1316-54Z		VALVE ASSY-URETHANE HT	G-U5-EEF-HT	G-7-V1-HT
5 3/4"	G-3NB1316-56	G-3NB1316-56Z		VALVE SEAT	G-7DD-B1	G-7-S1
6"	G-3NB1316-60	G-3NB1316-60Z		VALVE SPRING	G-5710-115	G-5710-115L
6 1/4"	G-3NB1316-62	G-3NB1316-62Z		INSERT-URETHANE	G-7-WI	G-7-FI
6 1/2"	G-3NB1316-64	G-3NB1316-64Z		INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
6 3/4"	G-3NB1316-66	G-3NB1316-66Z		SEAT PULLER ASSEMBLY *Does not include puller head		
	Liner Seal	G-107.11.110.42		PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4"	1 1/2" & 1 5/8"	I-40-K15	G-40K-KIT	LL-40-K15	LLU-40-K15	LLU-40-K15-HT
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
5 3/4"	1 1/2" & 1 5/8"	I-56-B15	G-56B-KIT	LL-56-B15	LLU-56-B15	LLU-56-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/4"	1 1/2" & 1 5/8"	I-62-L15	G-62L-KIT	LL-62-L15	LLU-62-L15	LLU-62-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	1 1/2	G-107.11.110.39	G-107.11.01.02	G-107.11.114.00	-	G-50V14

GASKET

VALVE COVER GASKET	G-107.11.110.05	CYLINDER HEAD GASKET	G-107.11.110.68
--------------------	-----------------	----------------------	-----------------

GENERAL PETROLEUM MACHINERY

IDECO MM 550/600/700

7 1/4" x15"

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-2335-50HP	G-2335-50Z	G-222	VALVE ASSY-URETHANE	G-U5B-LP	G-8-V2
5 1/2"	G-2335-54HP	G-2335-54Z	G-222	VALVE ASSY-URETHANE HT	-	G-8-V2-HT
6"	G-2335-60HP	G-2335-60Z	G-222	VALVE SEAT	G-8DD-B2	G-8-S2
6 1/2"	G-2335-64HP	G-2335-64Z	G-222	VALVE SPRING	G-5710-32	G-5710-32
7"	G-2335-70HP	G-2335-70Z	G-222	INSERT-URETHANE	G-UDD8	
				INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B5	G-50B-KIT			
5 1/2"		G-203-54-B5	G-54B-KIT			
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KIT			
7"		G-203-70-B5	G-70B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	API #5	G-1551295	G-1681400	-	-	G-7403402

GASKET

VALVE COVER GASKET	G-699	CYLINDER HEAD GASKET	G-252
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

SKYTOP BREWSTER B-1000T/1100T

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
4 1/2"	G-4331-44HP	G-4331-44Z	G-496	VALVE ASSY-URETHANE	G-6-EH	G-6-V1
5"	G-4331-50HP	G-4331-50Z	G-496	VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
5 1/2"	G-4331-54HP	G-4331-54Z	G-496	VALVE SEAT	G-6ADD-B6	G-6-EH
6"	G-4331-60HP	G-4331-60Z	G-496	VALVE SPRING	G-5710-115	G-5710-115
6 1/2"	G-4331-64HP	G-4331-64Z	G-496	INSERT-URETHANE	G-6-WI	G-6-FI
				INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-B15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.	G-50V14					

GASKET

VALVE COVER GASKET	G-795	CYLINDER HEAD GASKET	G-786
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

SKYTOP BREWSTER B-1300T/1600T

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL
4 1/2"	G-4330-44HP	G-4330-44Z	G-496
5"	G-4330-50HP	G-4330-50Z	G-496
5 1/2"	G-4330-54HP	G-4330-54Z	G-496
6"	G-4330-60HP	G-4330-60Z	G-496
6 1/2"	G-4330-64HP	G-4330-64Z	G-496
7"	G-4330-70HP	G-4330-70Z	G-496

VALVES, SEATS, SPRINGS & INSERTS

STYLE	4 WEB	FULL OPEN
VALVE ASSY-URETHANE	G-7-V1	G-7-EEF
VALVE ASSY-URETHANE HT	G-7-V1-HT	G-7-EEF-HT
VALVE SEAT	G-7-S1	G-7DD-B1
VALVE SPRING	G-5710-115	G-5710-115L
INSERT-URETHANE	G-7-WI	G-7-FI
INSERT-URETHANE HT	G-7-WI-HT	G-7-FI-HT
SEAT PULLER ASSEMBLY *Does not include puller head		
PULLER ASSEMBLY *	G-1700	G-1700
PULLER HEAD	G-1700-7	G-D-7

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
4 1/2"	1 1/2" & 1 5/8"	I-44-B15	G-44B-KIT	LL-44-B15	LLU-44-B15	LLU-44-B15-HT
5"	1 1/2" & 1 5/8"	I-50-B15	G-50B-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54B-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/2"	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT
7"	1 1/2" & 1 5/8"	I-70-L15	G-70L-KIT	LL-70-L15	LLU-70-L15	LLU-70-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.		G-1551850	G-07913086	G-PP601300		G-50V14

GASKET

VALVE COVER GASKET	G-785	CYLINDER HEAD GASKET	G-786
--------------------	-------	----------------------	-------

GENERAL PETROLEUM MACHINERY

SKYTOP BREWSTER B-550F

LINERS & LINER SEALS

SIZE	LINERS & LINER SEALS		LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
	HIGH CHROME	CERAMIC ZIRCONIA		STYLE	4 WEB	FULL OPEN
6"	G-4233-60HP	G-4233-60Z		VALVE ASSY-URETHANE	G-U5B-LP	G-8-V1
6 1/2"	G-4233-64HP	G-4233-64Z		VALVE ASSY-URETHANE HT	-	
				VALVE SEAT	G-8DD-B1	G-8-S1
				VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-UDD8	G-8-FI
				INSERT-URETHAN HT	-	
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

EW-440

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
3"	G-4350-30HP	G-4350-30Z		VALVE ASSY-URETHANE		
3 1/2"	G-4350-34HP	G-4350-34Z		VALVE ASSY-URETHANE HT		
4"	G-4350-40HP	G-4350-40Z		VALVE SEAT		
4 1/2"	G-4350-44HP	G-4350-44Z		VALVE SPRING		
5"	G-4350-50HP	G-4350-50Z		INSERT-URETHANE		
				INSERT-URETHANE HT		
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *		
				PULLER HEAD		

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
3"	1"	I-30-K10	G-30K-KIT			
3 1/2"	1"	I-34-K10	G-34K-KIT			
4"	1"	I-40-K10	G-40K-KIT			
4 1/2"	1"	I-44-K10	G-44K-KIT			
5"	1"	I-50-K10	G-50K-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

EW-446

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
5 1/2"	G-5203-54HP	G-5203-54Z		VALVE ASSY-URETHANE		
6"	G-5203-60HP	G-5203-60Z		VALVE ASSY-URETHANE HT		
				VALVE SEAT		
				VALVE SPRING		
				INSERT-URETHANE		
				INSERT-URETHANE HT		
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *		
				PULLER HEAD		

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5 1/2"	1 1/2" & 1 5/8"	I-54-B15	G-54-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
6"	1 1/2" & 1 5/8"	I-60-B15	G-60-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

EW-447

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
5"	G-EW447-50HP	G-EW447-50Z		VALVE ASSY-URETHANE		
5 1/2"	G-EW447-54HP	G-EW447-54Z		VALVE ASSY-URETHANE HT		
6"	G-EW447-60HP	GSEW447-60Z		VALVE SEAT		
				VALVE SPRING		
				INSERT-URETHANE		
				INSERT-URETHANE HT		
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *		
				PULLER HEAD		

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"	1½" & 1⅝"	I-50-B15	G-50-KIT	LL-50-B15	LLU-50-B15	LLU-50-B15-HT
5 1/2"	1½" & 1⅝"	I-54-B15	G-54-KIT	LL-54-B15	LLU-54-B15	LLU-54-B15-HT
6"	1½" & 1⅝"	I-60-B15	G-60-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

LEWCO 15W-600/GA-550

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
5"	G-4351-50HP	G-4351-50Z		VALVE ASSY-URETHANE	G-U5B-LP	G-8-V1
5 1/2"	G-4351-54HP	G-4351-54Z		VALVE ASSY-URETHANE HT	-	
6"	G-4351-60HP	G-4351-54Z		VALVE SEAT	G-8DD-B2	G-8-S2
				VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-UDD8	G-8-FI
				INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B5	G-60B-KIT			
5 1/2"		G-203-54-B5	G-54B-KIT			
6"		G-203-60-B5	G-60B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

LEWCO 9W-1000

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
6"	G-4354-60HP	G-4354-60Z		VALVE ASSY-URETHANE	G-6-EH	G-6-V1
6 1/2 "	G-4354-64HP	G-4354-64Z		VALVE ASSY-URETHANE HT	G-6-EH-HT	G-6-V1-HT
				VALVE SEAT	G-6ADD-B6	G-6-S6
				VALVE SPRING	G-5710-115	G-5710-115
				INSERT-URETHANE	G-6-WI	G-6-FI
				INSERT-URETHANE HT	G-6-WI-HT	G-6-FI-HT
				SEAT PULLER ASSEMBLY *Does not include puller head		
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-6	G-D-6

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
6"	1 1/2" & 1 5/8"	I-60-B15	G-60B-KIT	LL-60-B15	LLU-60-B15	LLU-60-B15-HT
6 1/2 "	1 1/2" & 1 5/8"	I-64-L15	G-64L-KIT	LL-64-L15	LLU-64-L15	LLU-64-L15-HT

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

WILSON 600

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
5 1/2"	G-0429-54HP	G-0429-54Z		VALVE ASSY-URETHANE	G-U5B-LP	G-8-V1
6"	G-0429-60HP	G-0429-60Z		VALVE ASSY-URETHANE HT	-	
6 1/2"	G-0429-64HP	G-0429-64Z		VALVE SEAT	G-8DD-B2	G-8-S2
				VALVE SPRING	G-5710-32	G-5710-32
				INSERT-URETHANE	G-UDD8	G-8-FI
				INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-8	G-D-8

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5 1/2"		G-203-54-B5	G-54B-KIT			
6"		G-203-60-B5	G-60B-KIT			
6 1/2"		G-203-64-B5	G-64B-KT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

GASO 1740/1742

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
3"	G-5300-30	G-5300-30Z		VALVE ASSY-URETHANE	-	G-4-V7
3 1/2"	G-5300-34	G-5300-34Z		VALVE ASSY-URETHANE HT	-	G-4-V7-HT
4"	G-5300-40	G-5300-40Z		VALVE SEAT	-	G-4-S13A
4 1/2"	G-5300-44	G-5300-44Z		VALVE SPRING	-	G-5710-05
5"	G-5300-50	G-5300-50Z		INSERT-URETHANE	-	G-4-IA
				INSERT-URETHANE HT	-	G-4-IA-HT
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-4	G-D-4

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
3"		G-203-30-B3	G-30B-KIT			
3 1/2"		G-203-34-B3	G-34B-KIT			
4"		G-203-40-B3	G-40B-KIT			
4 1/2"		G-203-44-B3	G-44B-KIT			
5"		G-203-50-B3	G-50B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

GASO 1743

LINERS & LINER SEALS

VALVES, SEATS, SPRINGS & INSERTS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	STYLE	4 WEB	FULL OPEN
5"	G-8236-50	G-8236-50Z		VALVE ASSY-URETHANE	-	
5 1/2"	G-8236-54	G-8236-54Z		VALVE ASSY-URETHANE HT	-	
6"	G-8236-60	G-8236-60Z		VALVE SEAT	-	
6 1/2"	G-8236-64	G-8236-64Z		VALVE SPRING	-	
7"	G-8236-70	G-8236-70Z		INSERT-URETHANE	-	
7 1/4"	G-8236-72	G-8236-72Z		INSERT-URETHANE HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-4	G-D-4

PISTONS

SIZE	BORE HUB Ø	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHANE BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B3	G-50B-KIT			
5 1/2"		G-203-54-B3	G-54B-KIT			
6"		G-203-60-B3	G-60B-KIT			
6 1/2"		G-203-64-B3	G-64B-KIT			
7"		G-203-70-B3	G-70B-KIT			
7 1/4"		G-203-72-B3	G-72B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

GASO 2652

LINERS & LINER SEALS

SIZE	HIGH CHROME	CERAMIC ZIRCONIA	LINER SEAL	VALVES, SEATS, SPRINGS & INSERTS		
				STYLE	4 WEB	FULL OPEN
5"	G-20703-50	G-20703-50Z		VALVE ASSY-URETHAN	-	
5 1/2"	G-20703-54	G-20703-54Z		VALVE ASSY-URETHAN HT	-	
6"	G-20703-60	G-20703-60Z		VALVE SEAT	-	
6 1/2"	G-20703-64	G-20703-64Z		VALVE SPRING	-	
7"	G-20703-70	G-20703-70Z		INSERT-URETHAN	-	
7 1/4"	G-20703-72	G-20703-72Z		INSERT-URETHAN HT	-	
SEAT PULLER ASSEMBLY *Does not include puller head						
				PULLER ASSEMBLY *	G-1700	G-1700
				PULLER HEAD	G-1700-4	G-D-4

PISTONS

SIZE	BORE HUB Ø SIZE	REPLACEABLE RUBBER PISTON ASSY	PISTON REPLACEMENT RUBBER KIT	BONDED RUBBER PISTON ASSY	SINGLE DUROMETER URETHAN BONDED	URETHANE BONDED HIGH TEMP.
5"		G-203-50-B4	G-50B-KIT			
5 1/2"		G-203-54-B4	G-54B-KIT			
6"		G-203-60-B4	G-60B-KIT			
6 1/2"		G-203-64-B4	G-64B-KIT			
7"		G-203-70-B4	G-70B-KIT			
7 1/4"		G-203-72-B4	G-72B-KIT			

PISTON RODS, EXTENSION RODS & ACCESSORIES

	DIAMETER	PISTON ROD	EXTENSION ROD	ROD CLAMP	SUB ROD	PISTON ROD NUT
PART NO.						

GASKET

VALVE COVER GASKET		CYLINDER HEAD GASKET	
--------------------	--	----------------------	--

GENERAL PETROLEUM MACHINERY

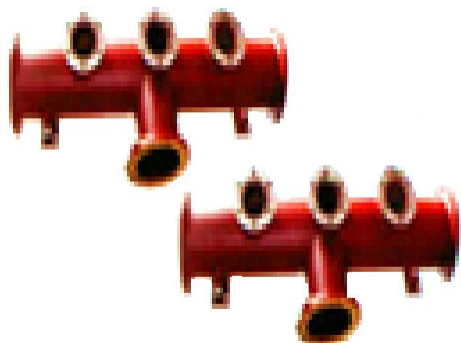
PULSATION DAMPENERS

GPM supplies forged and casted steel pulsation dampeners which are inter-changeable and compatible with Hydril series "K" dampeners, Emsco series "PD" dampeners and Bomco series "KB" dampeners. These units are dependable and reliable with API connections.

PULSATION DAMPENER MODEL NUMBERS

Model Numbers	Total Capacity Gallons	Maximum Service Pressure	Standard Bottom Connections	
K-10-3000	10	3,000 PSI	4" API • 3,000# Ring Joint	
K-10-5000	10	5,000 PSI	4" API • 5,000# Ring Joint	
K-20-5000	20	5,000 PSI	4" API • 5,000# Ring Joint	
PD-45	10	5,000PSI	4" API • 5,000# Ring Joint	
PD-55	20	5,000 PSI	4" API • 5,000# Ring Joint	
KB-45	10	5,000PSI	4" API • 5,000# Ring Joint	
KB-75	20	5,000PSI	4" API • 5,000# Ring Joint	

DISCHARGE AND SUCTION MANIFOLD



GENERAL PETROLEUM MACHINERY

WAFER BUTTERFLY VALVE

Size	Operation	Remark	
DN50(2")	Hand lever	Design : API 609 Pressure: 150PSI Body: Ductile iron Stem: SS416 Seat : EPDM	
DN65(2 1/2")	Hand lever		
DN80(3")	Hand lever		
DN100(4")	Hand lever		
DN125(5")	Hand lever		
DN150(6")	Hand lever		
DN200(8")	Hand lever		
DN250(10")	Gear		
DN300(12")	Gear		

RESILIENTSEATED ECCENTRIC FLANGED BUTTERFLY VALVE

Size	Operation	Remark	
DN100(4")	Gear	Pressure: PN16 Body: Ductile iron Disc : Ductile Iron Stem: SS416 Seat : EPDM flange connection :ANSI125#	
DN125(5")	Gear		
DN150(6")	Gear		
DN200(8")	Gear		
DN250(10")	Gear		
DN300(12")	Gear		

GENERAL PETROLEUM MACHINERY

DOUBLE BUTTERFLY CONCENTRIC DISC BUTTERFLY VALVE

Size	Operation	Remark	
DN50(2")	Gear	Pressure: PN16 Body: Ductile iron +EPDM Stem: SS416 flange connection :ANSI125#	
DN65(2 1/2")	Gear		
DN80(3")	Gear		
DN100(4")	Gear		
DN125(5")	Gear		
DN150(6")	Gear		
DN200(8")	Gear		
DN250(10")	Gear		
DN300(12")	Gear		

LUG BUTTERFLY VALVE

Size	Operation	Remark	
DN50(2")	Hand lever	Pressure: PN16 Body: Ductile iron Stem: SS416 Seat : EPDM flange connection : ANSI125#	
DN65(2 1/2")	Hand lever		
DN80(3")	Hand lever		
DN100(4")	Hand lever		
DN125(5")	Hand lever		
DN150(6")	Hand lever		
DN200(8")	Hand lever		
DN250(10")	Gear		
DN300(12")	Gear		

GENERAL PETROLEUM MACHINERY

GEAR END PARTS

G.P.M. supplies Crankshaft, Pinion shaft Eccentric ring gear and other parts for mud pump power end.



WASHPIPE ASSY

G.P.M. supplies washpipe assembly and spare parts for SL150, SL225 Swivel.



GENERAL PETROLEUM MACHINERY

AIR CHUCK



E Type



C、CHD Type

Air chuck is applicable for holding drill pipe and tubing in the oil field workover operations. C type and CHD type can simultaneously pass through tubing string and cable pump, and can be used for bearing pressure workover operations.

Model	Load (T)	Applicable OD (in)
C type	80	2 ³ / ₈ -4 ¹ / ₂
CHD type	120	2 ³ / ₈ -5 ¹ / ₂
E type	175	2 ³ / ₈ - 7 ⁵ / ₈

GENERAL PETROLEUM MACHINERY

SPLIT SLIPS



Split slips involve 2 model, W3 ½ - 5/100 and W5- 7/100. By changing slip inserts and die holder, it is applicable to hold the drill pipes, drill collars and casings with different sizes.

Type		W3 ½-5/100				W5-7/100							
Applicable outside diameter of drill string	in	3 ½	4	4 ½	5	5	5 ½	5 9/16	5 ¾	6 1/8	6 1/4	6 5/8	7
	mm	88.9	101.6	114.3	127	127	139.7	141.3	141.6	155.6	158.8	168.3	177.8
Maximum load(KN)		1125				1125							

DRILL COLLAR SLIPS (WT TYPE)



WT type drill collar slips are applicable to hold drill collars with diameters ranging from 4 1/2in (114.3mm) to 9 1/2(241.3mm).

Specification		WT4 ½-6	WT5 ½-7	WT6 ¾-8 1/4	WT 8 -9 ½
OD of drill collar	in	4 ½-6	5 ½-7	6 ¾-8 1/4	8 -9 ½
	mm	114.3	139.7	171.5	203.2
		152.4	177.8	209.6	241.3
Weight (kg)		49	46	42	39
Maximum load		40ton			

GENERAL PETROLEUM MACHINERY

SAFETY SLIPS



Safety clamps are mainly designed to hold string with plain adapter and drill collar. WA - C type is applicable to pipe OD ranging from 3 ½ to 15 5/8 in (88.9-396.9mm); WA - T type is applicable to pipe OD ranging from 1 1/8 to 4 ½ in (28.6-114.3mm)

Model	Pipe O.D. mm(in)	Qty. of Chain Links	Weight	
			kg	lb
WA-C	88.9-117.5(3 ½-4 5/8)	7	20.9	46
	114.3-142.9(4 ½-5 5/8)	8	25.0	55
	139.7-168.3(5 ½-6 5/8)	9	27.7	61
	165.1-193.7(6 ½-7 5/8)	10	29.1	64
	190.5-219.1(7 ½-8 5/8)	11	31.3	69
	215.9-244.5(8 ½-9 5/8)	12	32.7	72
	241.3-269.9(9 ½-10 5/8)	13	40.0	88
	266.7-295.3(10 ½-11 5/8)	14	41.8	92
	292.1-320.7(11 ½-12 5/8)	15	44.0	97
	317.5-346.1(12 ½-13 5/8)	16	46.3	102
	342.9-371.5(13 ½-15 5/8)	17	48.6	107
	368.3-396.9(14 ½-15 5/8)	18	50.9	112
WA-T	28.6-50.8(1 1/8-2)	4	16.3	36
	54.0-82.6(2 1/8-3 1/4)	5	18.2	40
	88.9-114.3(3 ½-4 ½)	6	20.0	44

GENERAL PETROLEUM MACHINERY

DRILL PIPE POWER TONGS (ZQ TYPE)



ZQ type drill pipe power tongs are tools for petroleum drilling, which are used to make up/break out of the screw thread of pipe string. Integrating the functions of manual tongs and spinner, the series products are designed as opening type that can conveniently engage or disengage string, featuring strong flexibility and compact structure.

Model		ZQ162-50	ZQ203-100	ZQ203-125	ZQ162-50 II	ZQ203-100 II	ZQ203-125 II
Applicable caliber	mm	85-162	127-203	127-203	85-162	127-203	127-203
	in	2 3/8-5	3 1/2-8	3 1/2-8	2 3/8-5	3 1/2-8	3 1/2-8
Maximum torque	KN.m	50	100	125	50	100	125
	ft.lbs	36880	73750	92200	36880	73750	92200
Max. speed (high gear)	rpm	60	40	40	60	40	40
Min. speed (low gear)	rpm	4.1	2.7	2.7	4.1	2.7	2.7
air pressure	Mpa	0.5-1					
	psi	72-144					
Rated pressure	Mpa	16	16.6	20	16	16.6	20
	psi	2320	2400	2900	2320	2400	2900
Rated flow	L/min	120	114	114	120	114	114
	gpm	31.7	30	30	31.7	30	30
Shifting distance	mm	1000	1500	1500	1000	1500	1500
	in	39.4	59	59	39.4	59	59
Lifting distance	mm	/	/	/	0-440	0-430	0-430
	in				0-17.3	0-17	0-17
Size	mm	1570*800*1190	1760*1000*1360	1785*1080*1360	1570*800*1370	1760*1000*1630	1785*1080*1630
	in	62*31*41	69*39*53	70*42*53	62*31*54	69*39*64	70*42*64
Weight	kg	1500	2400	2650	1700	2500	2750
	lbs	3310	5290	5840	3748	5510	6036

5607 Campbell Road, Houston, TX 77041, U.S.A.

Tel: 713-791-9265, Fax: 713-791-9267, Email: gpmym@yaho.com, Web site: www.gpmintlus.com

GENERAL PETROLEUM MACHINERY

TUBING POWER TONGS (YQ TYPE)

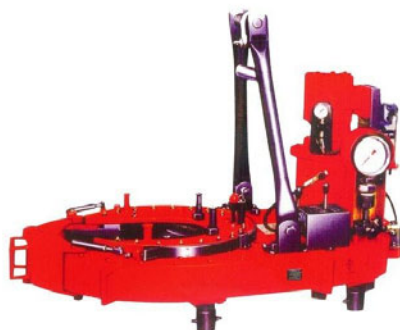
Equipped with torque gauge indicating the make-up torque, YQ series tubing power tongs are extensively used for make-up/break out of tubing or small drill pipe, featuring such advantages as compact structure, light weight and easy operation.



Model	YQB/C3	YQB6	YQB12
Application range of master tong (mm)	60-89	73-114	73-140
Application range of back-up tong (mm)	73-114.5	89-141.5	89-156
High gear rated torque (KN.m)	1.1	5	2.63
Second high gear rated torque (KN.m)	/	1.5	4.52
Second low gear rated torque (KN.m)	/	/	7.79
Low gear rated torque (KN.m)	3.0	6.0	13.4
High gear maximum speed (r / min)	100	85	68
Second high gear maximum speed rpm)	/	/	40
Second low gear maximum speed (rpm)	/	/	23
Low gear maximum speed (rpm)	30	20	13
Rated system pressure (Mpa)	10	11	14
Maximum oil supply (L/min)	80	100	120
Weight(kg)	158	240	471

GENERAL PETROLEUM MACHINERY

CASING POWER TONGS (TQ TYPE)



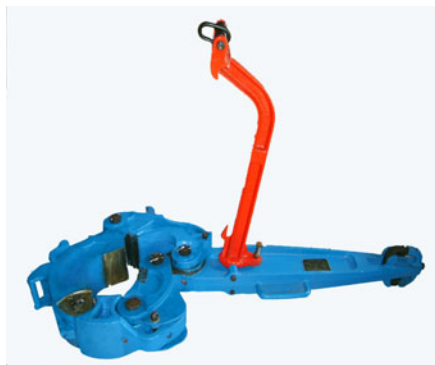
TQ type casing power tongs are extensively used for make-up/break out casings in the petroleum drilling operation. Designed as opening type, the tong head can freely engage and disengage casing, featuring strong flexibility and easy operation. Torque monitoring meter can be equipped for the detection and record of make-up torque. It is an ideal mechanized rig floor equipment.

MAINONE

Model			TQ178-16Y	TQ340-35Y	TQ340-50Y	TQ508-70Y
Applicable OD	mm		101.6-178	114.3-340	114.3-340	244.5-508
	in		4-7	4 1/2-13 3/8	4 1/2-13 3/8	9 5/8-20
Maximum pressure	Mpa		18	21	21	20
	psi		2610	3045	3045	2900
Working flow	L/min		110-160	110-170	110-170	110-170
	gpm		29.3-42.7	29.3-45.4	29.3-45.4	29.3-45.4
Maximum torque	High gear	KN.m	2.4-3	4.0-5.6	6.0-7.5	8.4-10.7
		ft.lbs	1770-2210	2950-4130	4425-5531	6190-7890
	Low. gear	KN.m	15-18	26-35.2	42-50	48.9-70.5
		ft.lbs	11060-13270	19175-25960	30975-36875	37244-52000
Rotational speed	High gear	rpm	54-79	57-95	55-75	26-43.6
	Low. gear	rpm	9-13	9-15	8-12	4-6.6
Size	mm		1500*760*780	1580*900*860	1565*910*810	2080*1280*760
	in		59*30*30.7	62.2*35.4*33.9	61.6*35.8*31.9	82*50.4*30
weight	kg		560	760	880	1550
	lb		1230	1670	1933.7	3410

GENERAL PETROLEUM MACHINERY

DRILLING TONGS (SDD TYPE)



Q4-17/140 (101.60-431.80mm) drilling tongs are mainly used for make-up/break out of string in need of outsize torque in the drilling operation. It is applicable to the different size strings by changing the lug jaw.

Latch Lug Jaw No.	Gripping Range		Maximum Torque	
	in	mm	KN.m	ft lbs
1#	4-8 ½	101.60-215.90	140	100000
2#	8 ½-12	215.90-304.80		
3#	12-15	304.80-381.00	105	75000
4#	15 ¾	400.10	140	100000
5#	16-17	406.40-431.80	85	60000

Drilling tongs (DB type)



Q3½-17/90(89-432mm) drilling tongs are mainly used for make-up/break out of strings in need of large torque in the drilling operation. It is applicable to the different size strings by changing the lug jaw.

Model	Latch Lug Jaw No.	Lug Law Size		Maximum Torque	
		in	mm	KN.m	ft lbs
DB3 ½-17/90	2a	3 ½-8 ¼	89-210	90	65000
	2b	8-11 ¼	203-286	90	65000
	2c	11 ¾-14 ¾	298-365	55	40000
	2d	16-17	406-432	55	40000
	2d-1	8 ½-17	216-432	90	65000

5607 Campbell Road, Houston, TX 77041, U.S.A.

Tel: 713-791-9265, Fax: 713-791-9267, Email: gpmym@yaho.com, Web site: www.gpmintlus.com

GENERAL PETROLEUM MACHINERY

WORKOVER TONGS (C TYPE)



Q2 3/8-10 3/4 /35(60.03-273.10mm) workover tongs are mainly used for make-up/break out of string in the process of workover operations or drilling operations. It is applicable to the different sizes strings by changing the lug jaw.

Model	Latch Lug Jaw No.	Gripping Range		Torque	
		in	mm	(KN.m)	(ft.lbs)
Q2 3/8-10 3/4/35	3a	2 3/8-4 1/2	60.3-114.3	35	26000
	3b	4 1/2-6 1/2	114.3-165.1		
	3c	6 1/2-8 5/8	165.1-219.1		
	3d	9 5/8-10 3/4	244.5-273.1		

CASING TONGS



Q13 3/8-30/35 (339.70-762.00mm) casing tongs are mainly used for make-up/break out of casing in the casing running operations. It is applicable to the different sizes casings by changing the lug jaw.

GENERAL PETROLEUM MACHINERY

Gripping Range		Maximum torque	
in	mm	KN.m	ft.lbs
13 ⅝-14 ½	339.70-368.30	35	26000
14 ½-16	368.30-406.40		
16-17 ½	406.40-444.50		
17 ½-19	444.50-482.60		
19-20	482.60-508.00		
20-21 ½	508.00-546.10		
21 ½-23	546.10-584.20		
24-25 ½	609.60-647.70		
25 ½-27	647.70-685.80		
27-28 ½	685.80-732.90		
28 ½-30	732.90-762.00		

CASING STABBING BOARD



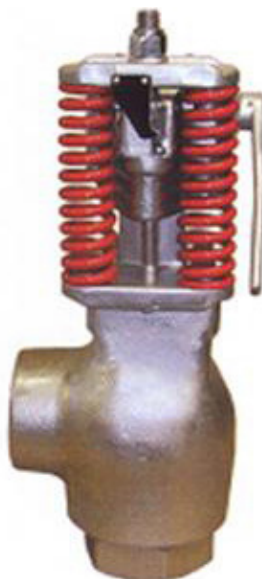
Pneumatic adjustable casing stabbing board is auxiliary equipment for casing running in the process of drilling operations. It adopts the compress air as the power source to drive air winch and realize the rising and lowering of casing stabbing board. distance between stabbing board and traveling block can be adjusted according to safety operation requirement,. Furthermore, the stabbing board is equipped with at least 2 sets of safety protection devices, so as to guarantee the safety of personnel and equipment.

GENERAL PETROLEUM MACHINERY

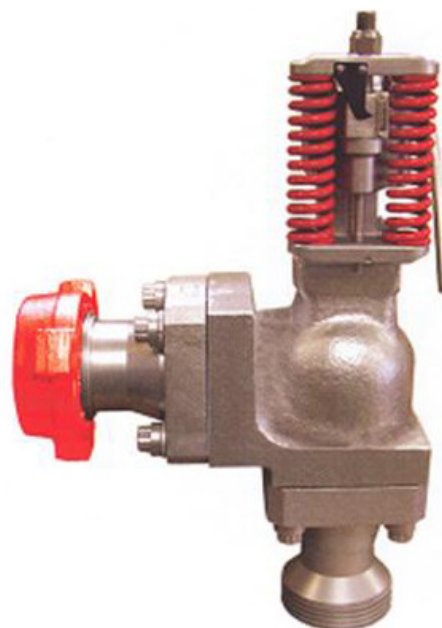
RESET RELIEF VALVE



RA2



RA3



RB3

The reset relief valve is mainly used as the blown off safety valve for drilling mud pump. When the setting pressure is exceeded, the safety valve can automatically open the valve to release pressure. Once the valve releases pressure, it is feasible to complete reset and recover normal operation in several seconds by moving the reset handle. To set the safe pressure value, it is merely required to rotate the nut, namely change the pressure rating. The pressure indicator indicates the pressure value.

Model	Pressure adjustment range (psi)	Connection mode
RA2	1500-5000	Weld or Flange connection
RA3	1500-5000	Weld or Flange connection
RB3	1500-5000	1002 or 1502 Union 1002 or 1502 Union

GENERAL PETROLEUM MACHINERY

OPENER



Made of high quality alloy steel through heat treatment, this opener is featured by high strength and reliable performance. Three changeable alloy nozzles are mounted on this opener to form spraying jet that can quickly clean dilute and wet mud fluid and expand borehole.

Model	Hole diameter	Overall dimension
K23-311-K24-914	311-914.4(MM)	1524-2642(MM)

DRILLING WIRELINE GUIDER (PSQ TYPE)



The drilling wireline guider is one kind of facility installed on drawworks of drilling rig to avoid big swing and disorder winding of wire rope.

This wireline guider consists of the frame and the long guide shaft set on the frame, wherein the first short guide shaft and the second short guide shaft are set on the long guide shaft, and big and small pulleys are mounted on the short guide shaft, featuring simple structure, easy installation and safe operation.

This product effectively realizes the easy disassembly of rope guider and the change of pulleys through reliable and convenient operations, and also has the excellent wireline guiding efficiency

Model: PSQ30, PSQ40, PSQ50, PSQ70 Patent number: 200820037539.4

The maximum stroke of small pulley in short guide shaft	The maximum stroke of short guide shaft holder in long guide shaft
356mm	1420mm -1950mm

GENERAL PETROLEUM MACHINERY

ROLLER KELLY BUSHINGS



Roller Kelly bushings are suitable for rotary table of 17 ½-49 ½ in. This product is designed and manufactured according to API Spec 7K.

Model	Type	Drive mode	Applicable specification of Kelly	
			Square (in)	Hex (in)
HDS	Heavy	Square drive	3-6	3-6
27-HDP		Pin drive	3-6	3-6
20-HDP		Pin drive	3-6	3-6
RTM4	Medium	Square drive	2 ½-5 1/4	3 -4 1/4
20-MDP		Pin drive	2 ½-4 1/4	3 -4 1/4
17-MDP		Pin drive	2 ½-4 1/4	3 -4 1/4
RTS4	Light-duty	Square drive	2 ½-4 1/4	3 -4 1/4