

# ENERPAC



POWERFUL SOLUTIONS. GLOBAL FORCE.

## Repair Parts Sheet

### Hydraulic Rail Puller Model RP120BP

L3024 Rev. H 09/16

For Date Codes Beginning with the Letter "C"

**To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.**

Enerpac recommends that all kit components be installed to insure optimum performance of the repaired product.

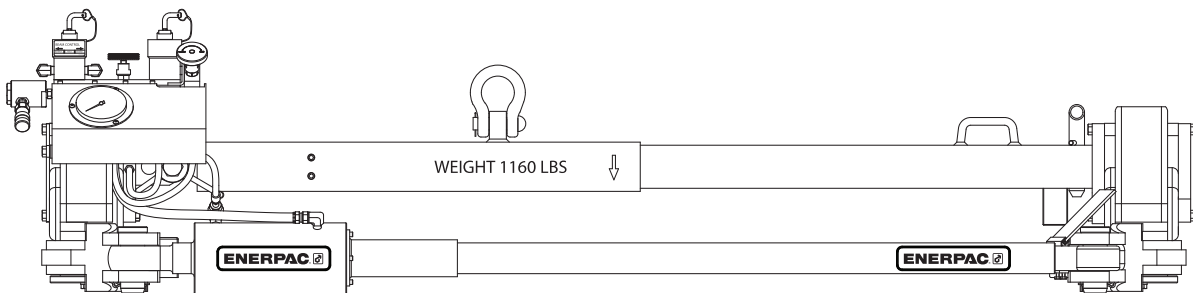
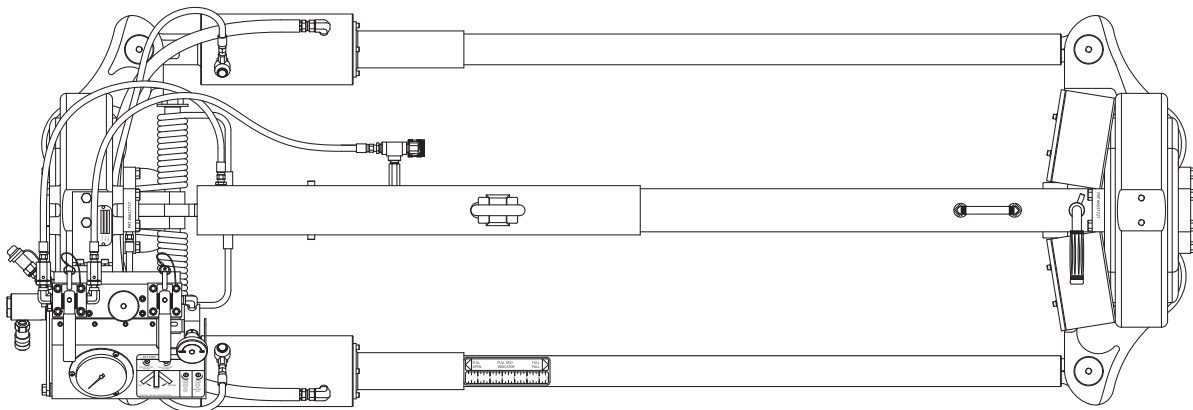
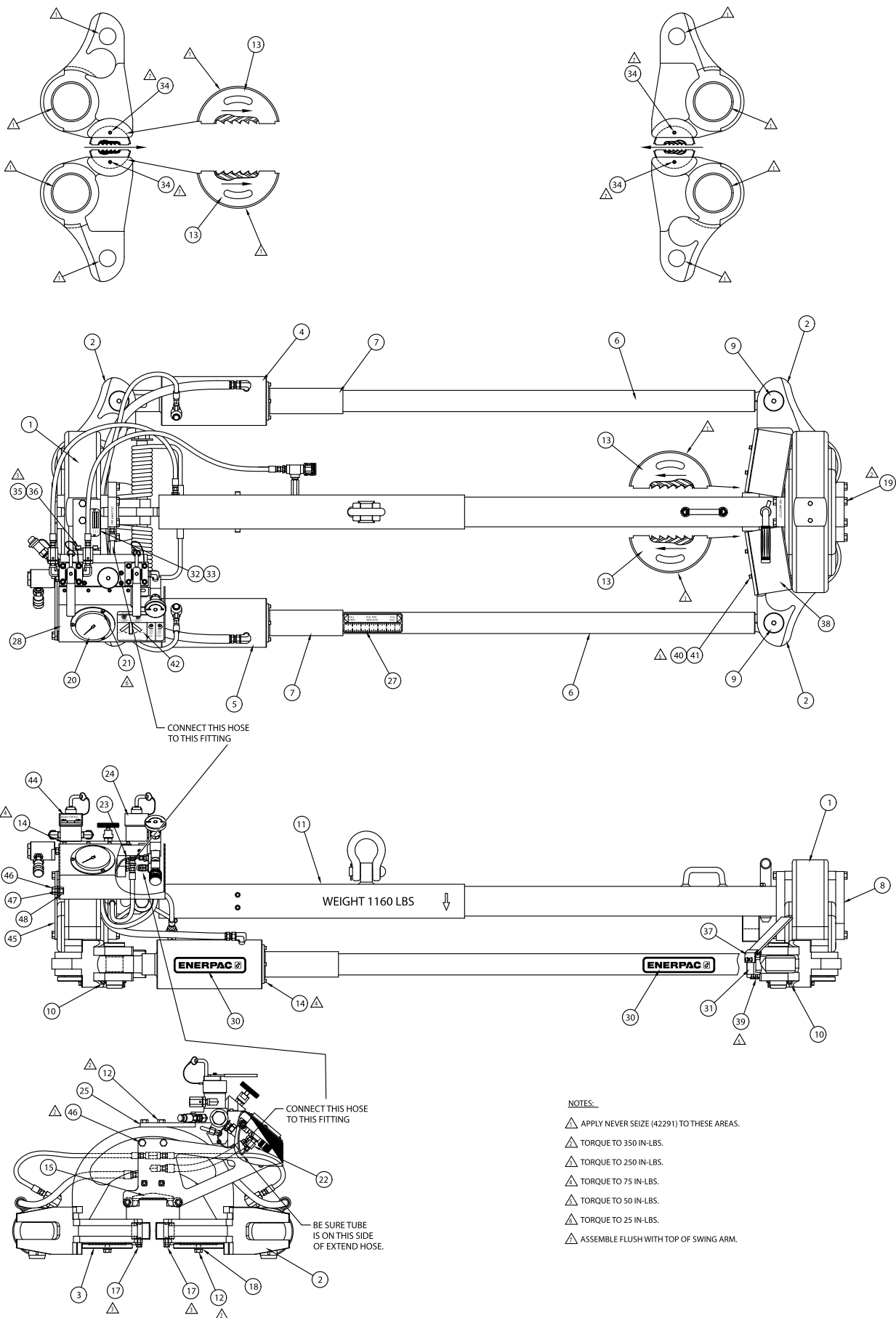


Figure 1 - RP120BP Rail Puller Main Assembly



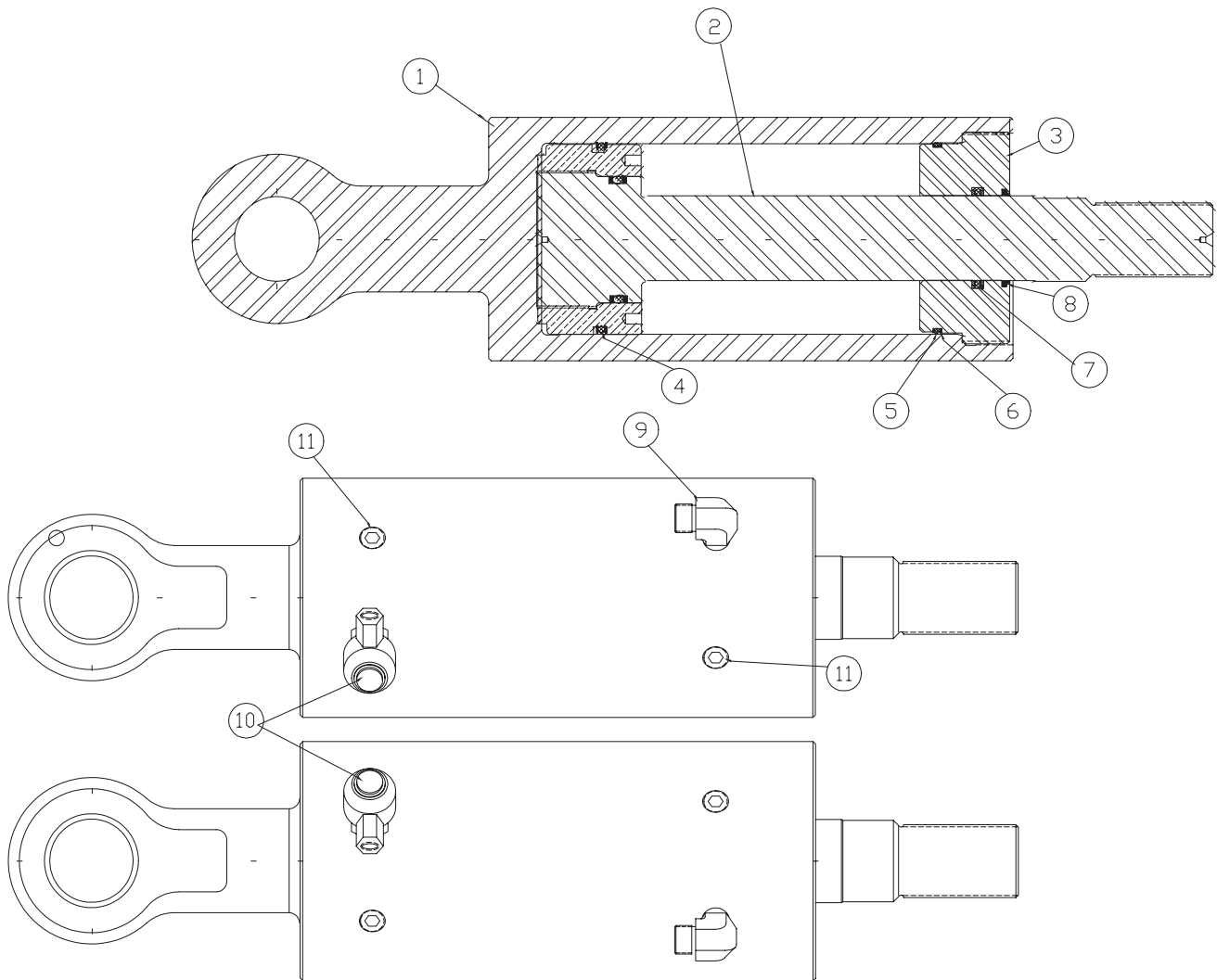
- NOTES:
- ▲ APPLY NEVER SEIZE (42291) TO THESE AREAS.
  - ▲ TORQUE TO 350 IN-LBS.
  - ▲ TORQUE TO 250 IN-LBS.
  - ▲ TORQUE TO 75 IN-LBS.
  - ▲ TORQUE TO 50 IN-LBS.
  - ▲ TORQUE TO 25 IN-LBS.
  - ▲ ASSEMBLE FLUSH WITH TOP OF SWING ARM.

**Repair Parts List (Refer to Figure 1)**

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	44563	2	Rail Puller Bracket	24	(See Fig. 4)	1	Rail Puller Intensifier Asm
2	44564	4	Rail Puller Swing Arm	25	44587	1	Intensifier Mtg Bracket
3	44582E	4	Swing Arm Plate	27	◆ 44639	1	Decal, Rail Pull Indicator
4	(See Fig. 2)	1	Rail Puller Cyl Asm Left	28	46104	1	Intensifier Cover
5	(See Fig. 2)	1	Rail Puller Cyl Asm Right	30	◆ 68259E	4	Logo, Enerpac 9.19 x 1.94"
6	* 44585	2	Rail Clevis Rod Assembly	31	46081	4	Rail Puller Brush Bracket
7	44584	2	Rail Piston Rod Cover	32	44799	1	Tag, Model and Serial No.
8	44579	1	Lift Beam Mounting Bracket	33	44908E	2	Drive Screw #6 x 1/4"
9	44593	4	Rail Pull Pin Swing	34	93632E	4	Set Screw - Nylok
10	* 93789E	4	Cotter Pin	35	93594E	2	SHCS 3/8-16 x 1" Lg
11	(See Fig. 3)	1	Rail Puller Beam Assembly	36	93943E	2	Lock Washer, 3/8"
12	44629	6	HHCS 1/2-12 x 1/25" Plt	37	46082	4	Rail Puller Brush Holder
13	◆ 44583E	4	Rail Pull Grip	38	46083	4	Rail Puller Brush
14	93581E	12	SHCS 1/4-20 x 1/2"	39	B1005046X	8	Hex Head Capscrew
15	44592E	2	Rail Puller Wear Plate	40	93580E	8	SHCS 1/4-20 x 3/8" Lg.
17	◆ B1073046X	4	HHCS 3/8-16 x 3/4" Lg.	41	B1015066X	8	Lockwasher, 1/4" Plt
18	93946E	4	Lock Washer, 1/2" Plt	42	◆ DS1340026	1	Decal, Operation RP120BP
19	44630	12	HHCS 1/2-13 x 1.75" Plt.	44	◆ DS1337026	1	Decal, Beam Control Valve
20	46107	1	Tonnage Gauge	45	DS1975111	1	Bracket, Intensifier Support
21	43365E	3	BHCS 10-24 x .25 316SS	46	B1137046X	5	HHCS 1/2-13 x 1" Zinc
22	46106E	1	Female Connector 1/4 NPT	47	B1036108X	2	Flat Washer, 1/2" Zinc
23	46419	1	Tubing, Rail Puller Gauge	48	B1009122	1	Hex Nut, 1/2-13

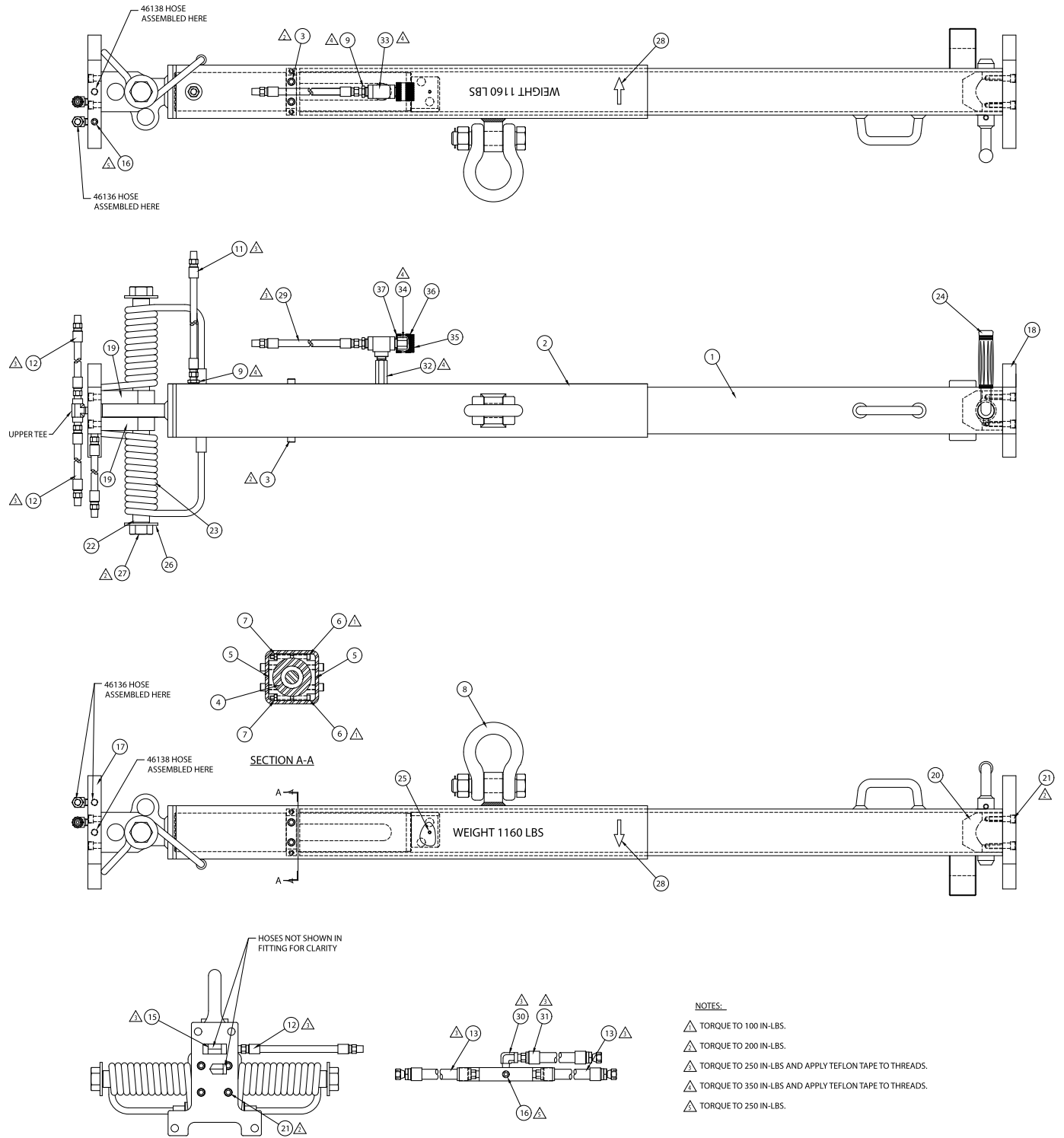
◆ Included as part of Decal Kit RP120BPK.  
 \* Included as part of Pull Rod Kit 18046K.  
 ◆ Included as part of Grip Kit 55282K.

Figure 2 - 46148 Cylinder Assembly (Left)  
46149 Cylinder Assembly (Right)



<b>Repair Parts List (Refer to Figure 2)</b>			
<b>Item</b>	<b>Part Number</b>	<b>Qty.</b>	<b>Description</b>
1	44575	1	Rail Puller Cylinder Body
2	44576	1	Rail Puller Piston
3	44577	1	Rail Puller Retaining Nut
4	+ B1346513	1	T-Seal Piston, 4-1/2"
5	+ 5602244E	1	O-Ring, 4-1/4 x 4-1/2
6	+ 5608244E	1	Back-Up Ring
7	+ 97295E	1	GT Ring (Rod Type)
8	+ A8020476	1	Wiper 2" Rod
9	44865E	1	Elbow 3/8 NPT-O-Ring
10	46091	1	FM Pipe Union To M Pipe
11	84084E	2	Pipe Plug 3/8" Flush
+ Included as part of Seal Kit 54290K.			

Figure 3 - DS1346900 Beam Assembly



**Repair Parts List (Refer to Figure 3)**

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	44569	1	Lift Beam Inner Weld	22	44604	1	Lift Beam Pivot Pin
2	46232	1	Lift Beam Outer Weld	23	44313C	1	Torsion Spring Conn
3	97084E	4	SHCS 3/8-16 x 3/4" Lg		44313L	1	Torsion Spring Left
4	44617	1	RP Beam RDA 1012		44313R	1	Torsion Spring Right
5	44605	2	Cylinder Mounting Clamp	24	44568	1	Lifting Beam Pin
6	81908	2	SHCS 1/4-20 x 2.75"	25	43757E	1	Roll Pin 3/16" x 2-1/4"
7	B1001122	2	Hex Nut 1/4-20"	26	42080E	2	Washer 2-1/2" x 11/16"
8	43217	1	Lifting Shackle	27	44631	2	HHCS 1"-8 x 2" Plated
9	46421E	2	Reducer 3/8" x 1/4"	28	◆ 68094E	2	Decal, Arrow
11	DS1327646	1	Hose 32" Low Pressure	29	46137E	1	Hose, 42" Low Pressure
12	46136E	3	Hose 24" Low Pressure	30	F100095-7	1	Street Elbow, 0.25"
13	46138E	2	Hose 24" High Pressure	31	46359	1	Hose 14" High Pressure
15	F100095-35	2	.25" NPT Tee	32	18103E	1	Pipe Nipple, 3"
16	A1008245	2	Pipe Plug 1/4" Flush	33	CJ652096	1	Tee, Female 3/8 NPTF
17	46058	1	Mounting Plate	34	88458E	1	Valve, Relief, 4200 PSI
18	44579	1	Lift Beam Mounting Bkt.	35	88822E	1	Plug, Dust
19	44580	2	Clevis Mounting Bracket	36	88823E	1	Sleeve
20	44581	1	Bracket Clevis RP	37	88824E	1	Washer
21	86184E	8	SHCS 3/8-16 x 1-1/2"				

◆ Included as part of Decal Kit RP120BPKD.

**Repair Parts List (Refer to Figure 3A)**

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
01	44606E	1	Cylinder Body	12	* B1264503	1	Backup, 1-9/16" x 1-3/4"
02	46127E	1	Piston	13	* B1362562	1	Backup, 1-9/16" x 1-3/4"
03	86564E	1	Bottom	14	45105	1	Piston Gland
04	* 40717E	1	Wiper, 1" Rod Diameter	15	C802049	1	Washer
05	* 5608214	1	Washer, Backup 1" x 1-1/4"	16	* B1412028	1	Screw, Socket Head Cap
06	* B1019503	1	O-Ring 1" X1-1/4"	17	* B1017503	1	O-Ring, 7/8" x 1-1/8"
08	* B1026503	1	O-Ring	18	* B1036562	2	Back Up -212
09	* 85529	1	Back-Up Ring	19	46097E	1	Nut, Retaining
10	* 85879E	1	Back-Up Ring	20	* B1266503	1	O-Ring, 1-11/16" x 1-7/8"
11	* 88964E	1	U-Cup, Unbalanced	22	46099E	1	Washer, Piston Gland

\* Included as part of Seal Kit 44617K.

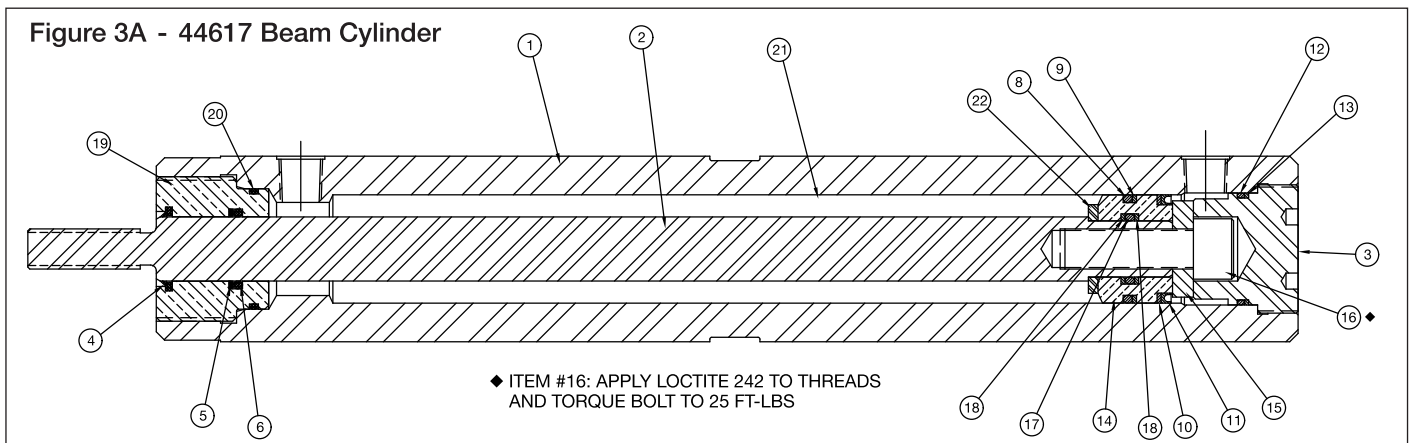
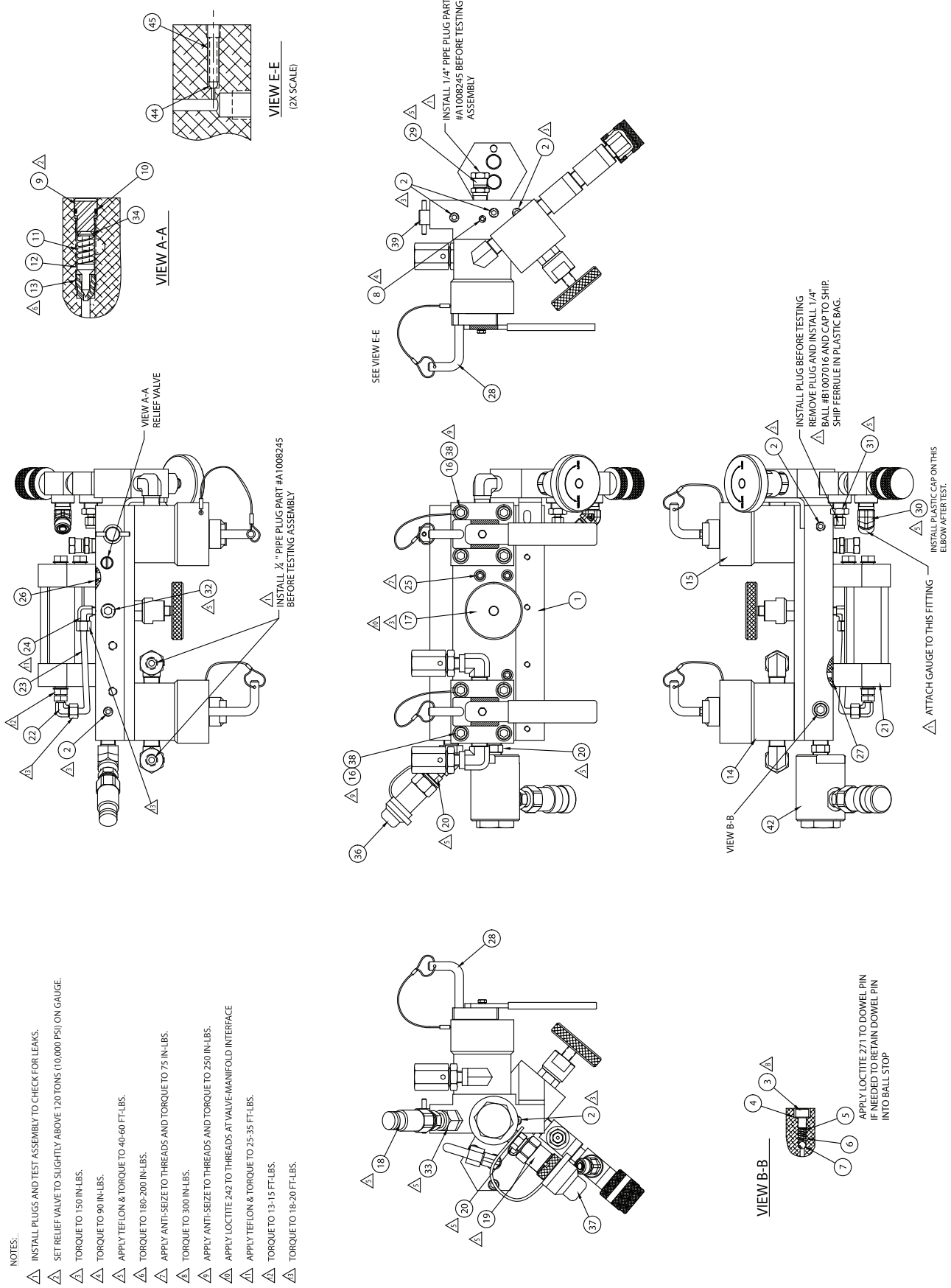


Figure 4 - DS1345900 Intensifier Assembly

NOTES:

- ▲ INSTALL PLUGS AND TEST ASSEMBLY TO CHECK FOR LEAKS.
- ▲ SET RELIEF VALVE TO SLIGHTLY ABOVE 120 TONS (10,000 PSI) ON GAUGE.
- ▲ TORQUE TO 150 IN.-LBS.
- ▲ TORQUE TO 90 IN.-LBS.
- ▲ APPLY TEFLON & TORQUE TO 40-60 FT.-LBS.
- ▲ TORQUE TO 180-200 IN.-LBS.
- ▲ APPLY ANTI-SEIZE TO THREADS AND TORQUE TO 75 IN.-LBS.
- ▲ TORQUE TO 300 IN.-LBS.
- ▲ APPLY ANTI-SEIZE TO THREADS AND TORQUE TO 250 IN.-LBS.
- ▲ APPLY LOCTITE 242 TO THREADS AT VALVE-MANIFOLD INTERFACE
- ▲ APPLY TEFLON & TORQUE TO 25-35 FT.-LBS.
- ▲ TORQUE TO 13-15 FT.-LBS.
- ▲ TORQUE TO 18-20 FT.-LBS.





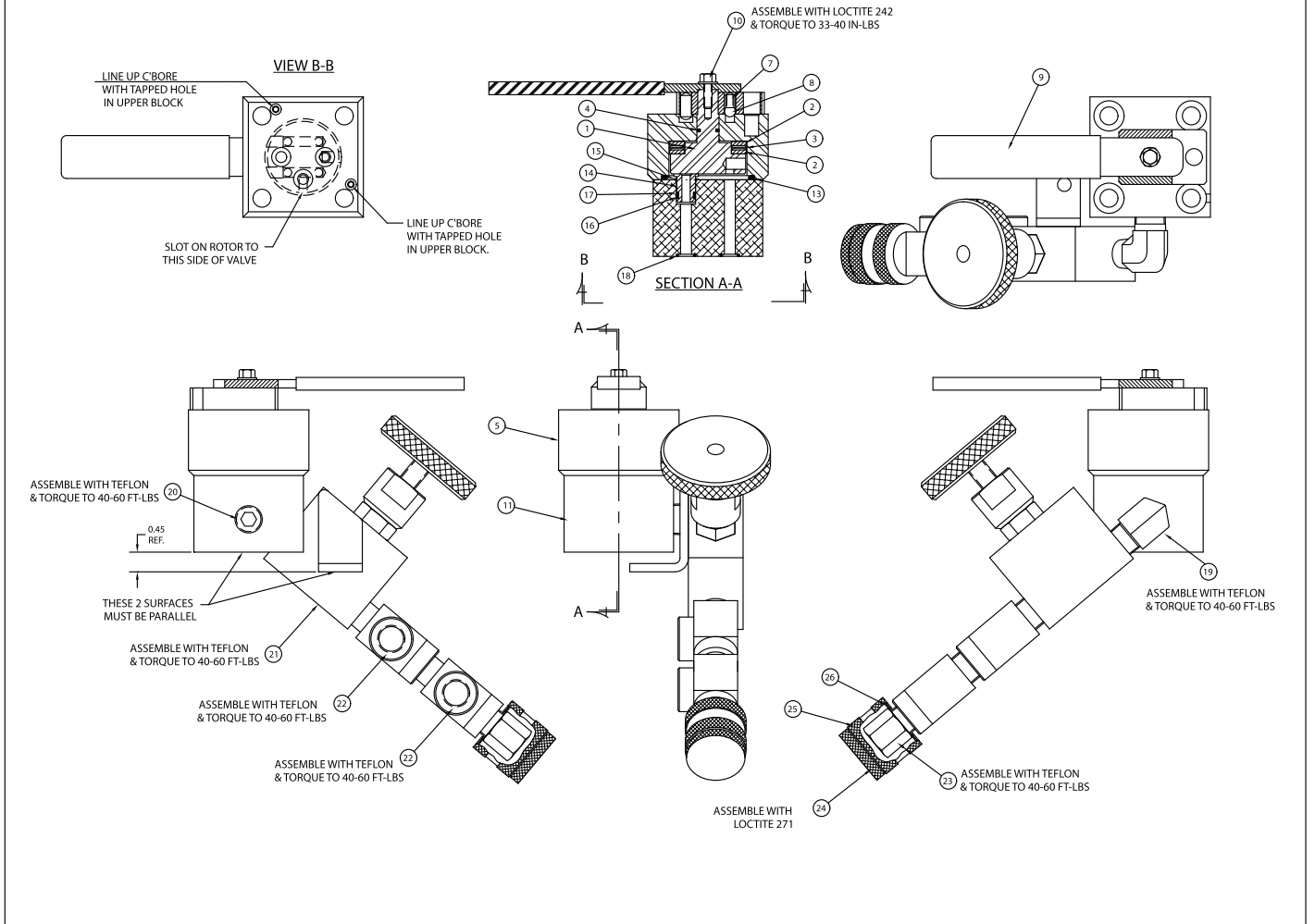
**Repair Parts List (Refer to Figure 4)**

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	46549	1	Rail Intensifier Manifold	22	43955E	1	Straight Thd Elbow
2	A1007245	6	Pipe Plug, 1/8" Flush	23	43956E	1	Tube Assembly
3	46124E	1	Ball Stop Intensifier	24	43957E	1	Male Elbow
4	♣85726E	1	Gasket 25/64 x 19/32"	25	♣40843E	4	SHCS 1/4-20 x 1.5"
5	69424E	1	Dowel Pin, 1/8" Dia	26	♣B1011803	1	O-Ring
6	♣68225E	1	Spring	27	♣B1220503	1	O-Ring 1/2 x 5/8"
7	♣B1009016	1	Ball, 5/16"	28	88530E	2	Lock Pin W/Lanyard
8	A1006245	1	1/16" Pipe Plug - Flush	29	DS1974095	1	3/8 NPTF, 1/4 NPSM Swivel
9	43274E	1	Pow'r Bud Adj Screw	30	45927	1	Elbow, 45 3/8 NPT O-Ring
10	B1007503	1	O-Ring .38" x .50" x .06"	31	46105	1	Male Conn 3/8 NPT-1/8"
11	66085E	1	Spring - Relief Valve	32	A1009245	1	Flush Plug, 3/8"
12	68003E	1	Cone - Ext Relief	33	♣♣CU235096	1	Elbow, 45 Deg Street
13	68004E	1	Seat - Ext Relief	34	88497E	1	Spring Cap
14	(See Fig. 8)	1	Beam Control Valve	36	C515E	1	Dust Cap FF Hose
15	(See Fig. 5)	1	Control Valve, Rail Puller	37	C516E	1	Dust Cap FF Ram
16	B1087028X	8	SHCS 3/8-16 x 3-1/4"	38	C432108	8	Lock Washer 3/8"
17	(See Fig. 7)	1	Assembly, Needle Valve	39	44842SR	1	Release Screw ASM
18	43959E	1	LP Coup Male, 3/8"	42	♣♣46522	1	Inline Filter (includes #42A)
19	43960E	1	LP Coup Female, 3/8"	42A	♣ RP120EK	1	Filter Element
20	♣♣J651096	3	Pipe Nipple	44	B1005016	1	Ball, 3/16" Dia
21	♣ (See Fig. 9)	1	Hydraulic Booster	45	46700	1	Spring Relief

♣ Included as part of Booster Kit 55284K.

♣♣ Included as part of Filter Kit 18047K. **Note:** Order RP120EK for the replacement filter element only (no housing).

**Figure 5 - 46066SR Control Valve Subassembly**

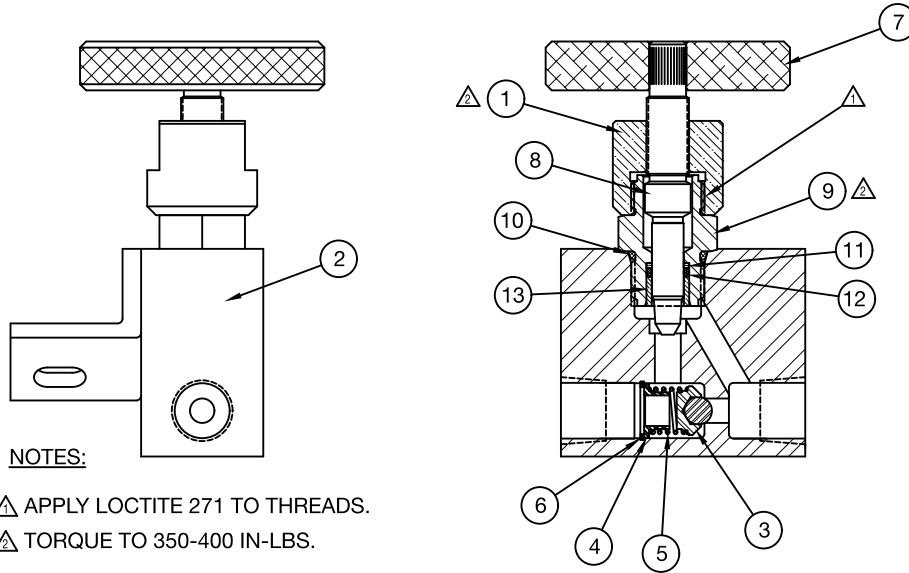


**Repair Parts List (Refer to Figure 5)**

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	44603E	1	Valve Rotor Beam Control	15	68028E	3	Spring Washer
2	68026E	2	Thrust Washer	16	+ B1006503	3	O-Ring 5/16 x 7/16"
3	68155E	1	Thrust Bearing	17	+ B1011564	3	Washer-BU
4	+ B1007503	1	O-Ring 3/8 x 1/2"	18	+ B1011803	3	O-ring 5/16 x 7/16
5	43962E	1	Upper Valve Block	19	80626E	1	90 Male Elbow, 3/8-3/8"
7	DD4298110	1	Detent Spring	20	A1009245	1	Pipe Plug, 3/8" Flush
8	B1007016	1	Ball 1/4"	21	(See Fig. 6)	1	V10E Asm W/Bracket
9	45040SR	1	Valve Handle Rail Puller	22	18114E	2	Service Tee
10	DS2115046	1	Screw 10-24 x .50 Hex Flg.	23	84027E	1	Relief Valve, 10,500 PSI
11	44602E	1	Sub Plt 4W Valve Int	24	88822E	1	Dust Plug
13	+ B1091503	1	O-Ring 1-7/8 x 2-1/8"	25	88823E	1	Sleeve
14	68181E	3	Seal	26	88824E	1	Washer

+ Included as part of Seal Kit 54490K.

Figure 6 - 44614SR V10E Valve Subassembly



NOTES:

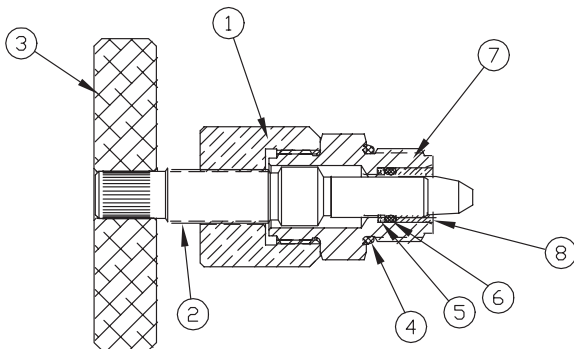
- △ APPLY LOCTITE 271 TO THREADS.
- TORQUE TO 350-400 IN-LBS.

Repair Parts List (Refer to Figure 6)

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	❖ 44973E	1	Cap, Needle Valve	8	❖ 44689E	1	Needle, Nickel Plated
2	44613E	1	V10E Manifold W/ Brk	9	❖ 42565E	1	Retainer, Needle Valve
3	41186E	1	Poppet Assy	10	❖ B1908503	1	O-Ring SAE Port #8
4	41187E	1	Spring Guide	11	❖ B1011564	1	Washer, Back-up
5	41188E	1	Spring	12	❖ B1011803	1	O-Ring, 5/16" x 7/16" URE
6	41189E	1	Retaining Ring - Intrn	13	❖ 42567E	1	O-Ring Trap
7	❖ 43958E	1	Knob, Intensifier				

❖ Included as part of Needle Assembly 41183SR.

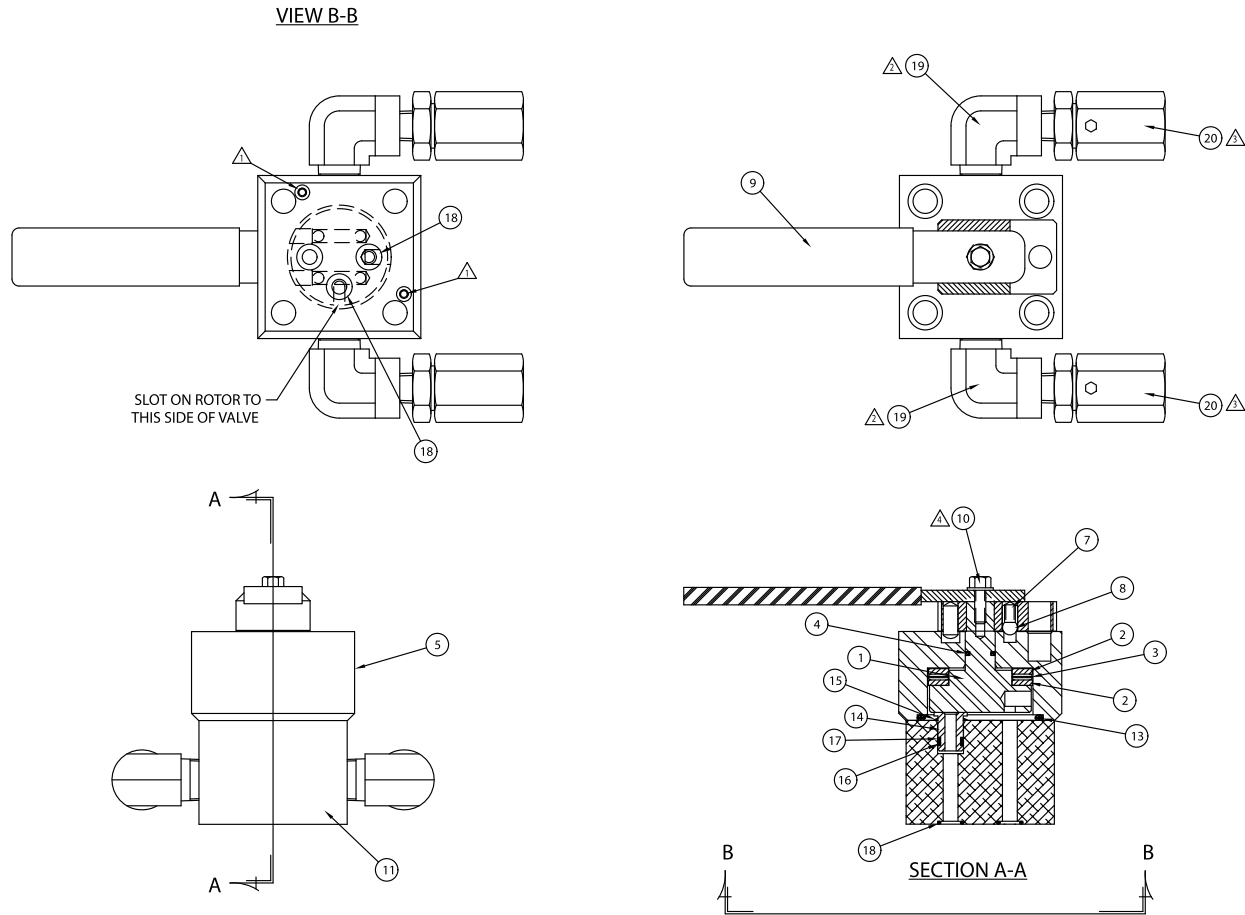
Figure 7 - DS1508900SR Needle Valve Assembly



Repair Parts List (Refer to Figure 7)

Item	Part Number	Qty.	Description
1	44973E	1	Cap, Needle Valve
2	DS1507617	1	Spool, Speed Control
3	42568E	1	Knob, Needle Valve
4	B1908503	1	O-Ring, SAE Port 8
5	B1011564	1	Washer, Back-up
6	B1011803	1	O-Ring, 5/16" x 7/16" URE
7	42565E	1	Retainer, Needle Valve
8	42567E	1	O-Ring Trap

Figure 8 - DS1344900SR Beam Control Valve



NOTES:

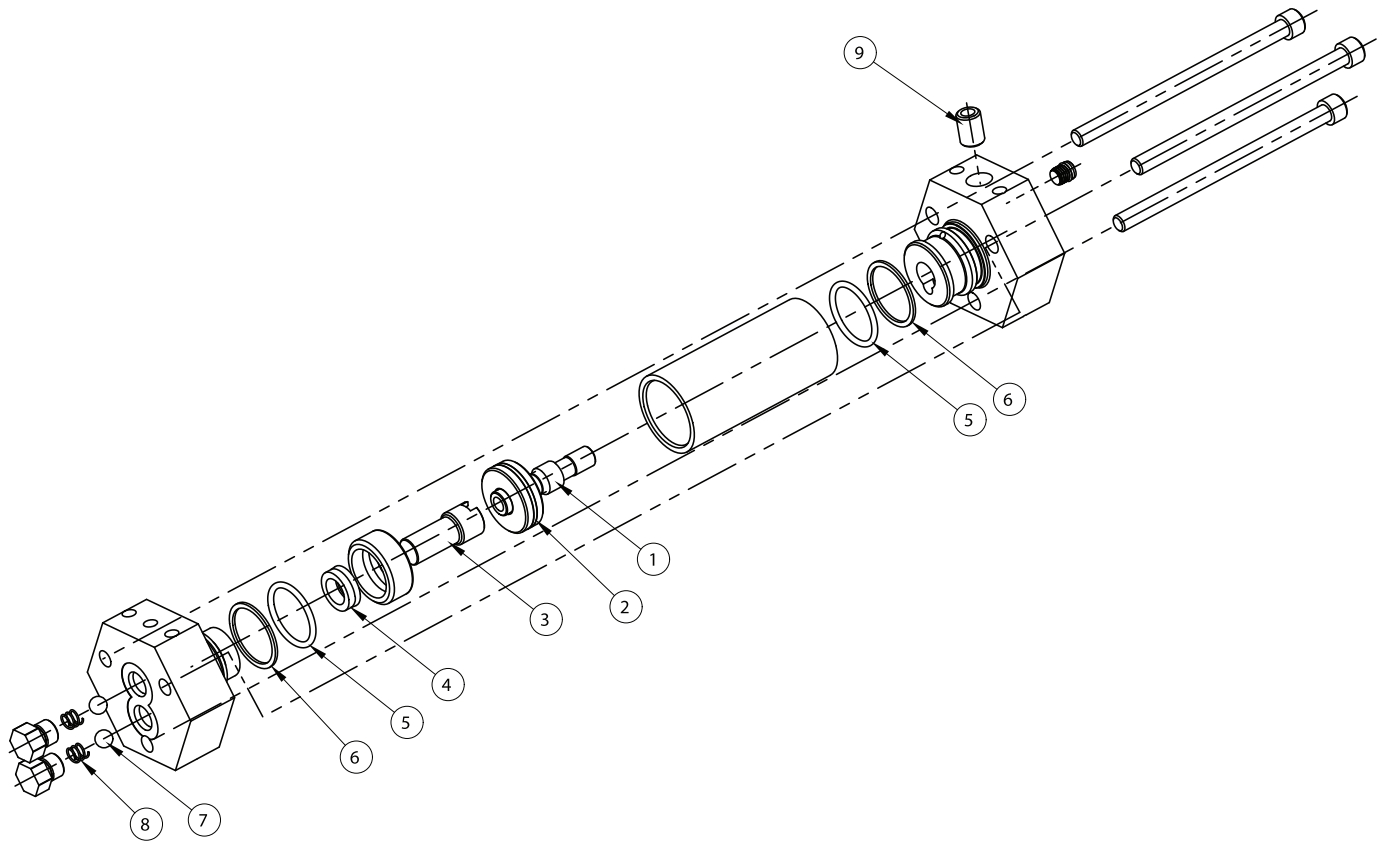
- △ LINE UP C'BORE WITH TAPPED HOLE IN UPPER BLOCK.
- △ TORQUE TO MIN 40-45 FT-LBS AND APPLY TEFLON TAPE OR LOCTITE 545 TO THE THREADS.
- △ TORQUE TO 15-20 FT-LBS AND APPLY TEFLON TAPE OR LOCTITE 545 TO THE THREADS.
- △ TORQUE TO 33-40 IN-LBS AND APPLY LOCTITE 242.

Repair Parts List (Refer to Figure 8)

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	44603E	1	Valve Rotor Beam Con	11	44602E	1	Sub Plt 4W Valve Int
2	68026E	2	Thrust Washer	13	+ B1225903	1	O-Ring 1-7/8 x 2-1/8"
3	68155E	1	Thrust Bearing	14	68181E	3	Seal
4	+ B1012903	1	O-Ring 3/8 x 1/2"	15	68028E	3	Spring Washer
5	43962E	1	Upper Valve Block	16	+ B1011903	3	O-Ring 5/16 x 7/16"
7	DD4298110	1	Detent Spring	17	+ B1011564	3	Washer-BU
8	B1007016	1	Ball 1/4"	18	+ B1011803	3	O-Ring
9	45040SR	1	Valve Handle Rail Puller	19	42352E	1	90 Male Elbow, 1/4-3/8"
10	DS2115046	1	Screw, 10-24 x 0.50" Hex Flg.	20	46139	2	F to M Swivel, 1/4" Pipe

+ Included as part of Seal Kit 54490K.

Figure 9 - 43912 Hydraulic Booster Assembly



Repair Parts List (Refer to Figure 9)			
Item	Part Number	Qty.	Description
1	DS2345051	1	Piston/Shuttle Assembly
2	* ❖	1	Piston Seal
3	DS2344051		Piston, High Pressure
4	*	1	U-Cup
5	*	2	O-Ring
6	*	2	Backup
7	*	2	Ball, 5/16"
8	*	2	Spring
9	❖ DS1738828	1	Orifice 1/8"

\* Included as part of Repair Kit 43912RK.  
❖ Included with item #1.  
❖ Orifice may not be separate part on some recent production units.  
**Note:** For complete hydraulic booster assembly, order part number 55284K (includes all parts shown above).



# NOTES:

A large rectangular box with a thin black border, containing 20 horizontal lines for writing. The lines are evenly spaced and extend across the width of the box, leaving a small margin at the top and bottom.

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