



HYTORC

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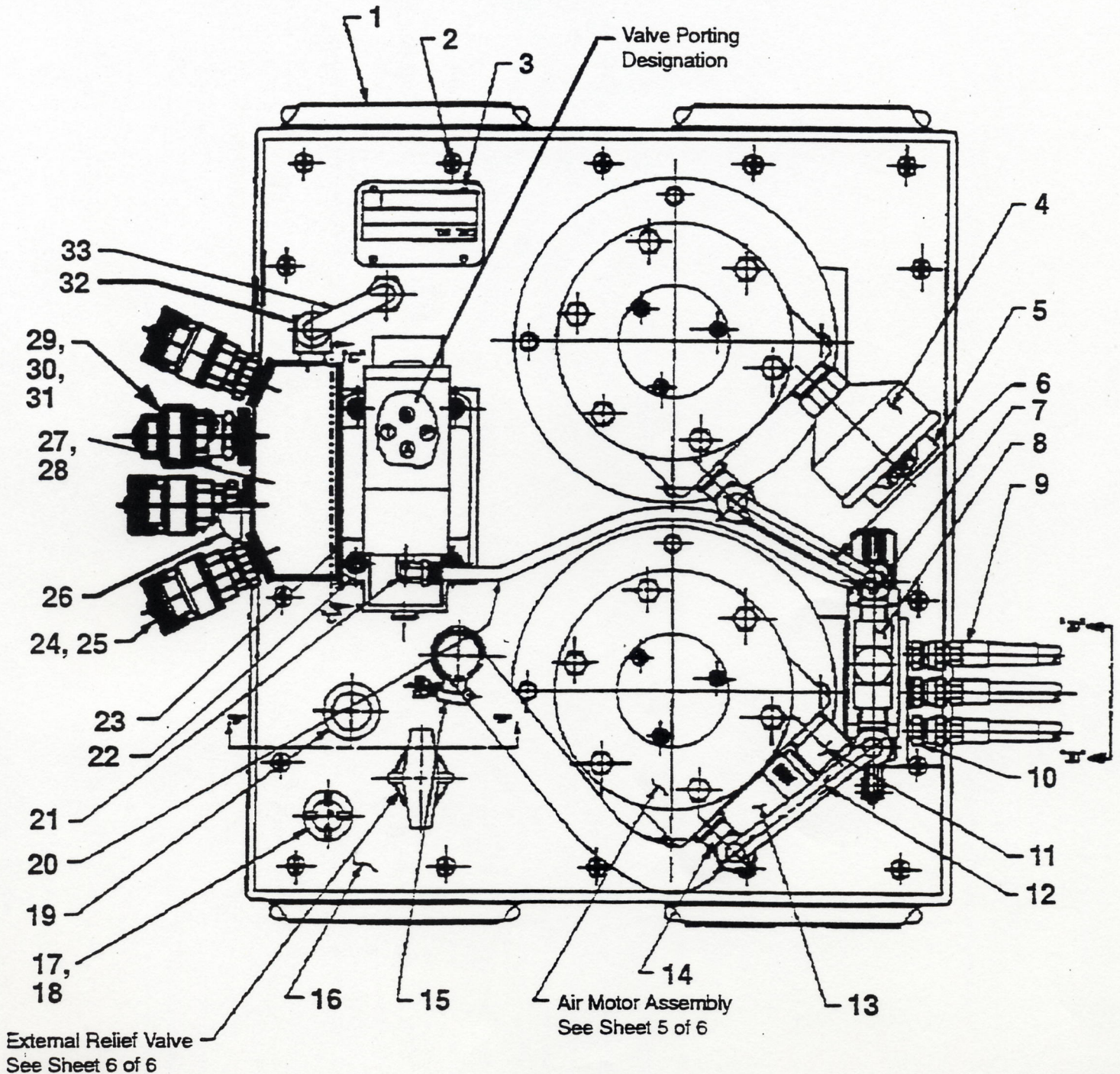
Fax: (201) 512-9615

Form No. 107285

Parts List for:

RSST-10T

MODEL B
TANDEM AIR HYDRAULIC PUMP
Max. Capacity: 10,000 PSI



Sheet No. 1 of 6

Rev. 3 Date: 6 Nov. 1998

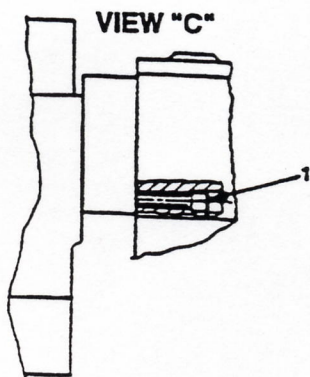
Parts List, Form No. 107285, Back sheet 1 of 6

Item No.	Part No.	No. Req'd	Description
1	64367BK2	1	Reservoir
2	16876	18	Mach. Screw (10-24 UNC X 1/2 Lg.)
3	10575	4	Screw (#2 X 3/16 Lg.)
4	13966	1	Muffler
5	205505	2	Deflector (Includes screw, Note: Point exhaust opening down.)
6	304121	1	Tube
7	10894	2	Elbow Fitting
8	208699	1	Tee Fitting
9	45052	1	Hose Assembly (Three strand; Note: Connect hose assembly to hand control and pump as shown. Color coded or numbered ends must correspond to the numbers on the hand control & pump unit.)
10	208218	6	Straight Fitting
11	212897	1	90° Elbow Fitting
12	304122	1	Tube
13	212898	1 ft.	Pressure Hose
14	17636	2	Elbow
15	12367	2	Hose Clamp
16	58202	1	Cover Plate
17	20937	1	Filler Plug

Item No.	Part No.	No. Req'd	Description
18	200415	1	Filler Plug Gasket
19	212304	1	Plastic Cap
20	14726	1.2 ft.	Plastic Tubing (1/4)
21	252653	2	Elbow Fitting (90 deg. 1/8 NPTF)
22	31057	1	Valve (See Form No. 107284)
23	303267	1	Directional Valve (Air)
24	251797	4	Quick Coupler
25	252068	4	Dust Plug
26	350431	1	Temperature Gauge
27	421221	1	Manifold (Plug bottom cross hole with plug [Item#28])
28	10427	1	Plug Fitting (1/8 NPTF)
29	251798	4	Quick Coupler Plug
30	252069	4	Dust Cap
31	10672	1	Straight Fitting (1/4 NPTF)
32	10475	1	90° Elbow Fitting (Assemble into top port)
33	351820	1	Tube

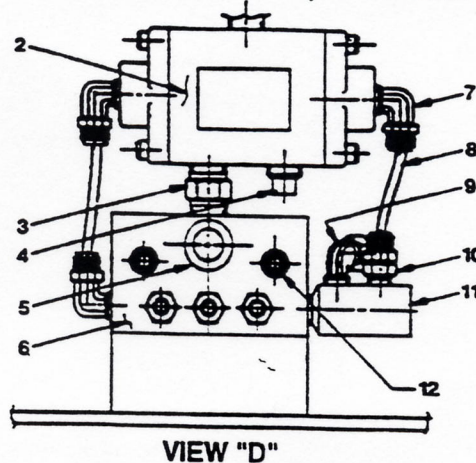
PARTS INCLUDED BUT NOT SHOWN

421266	1	Air Operated Hand Control (See Form No. 107283)
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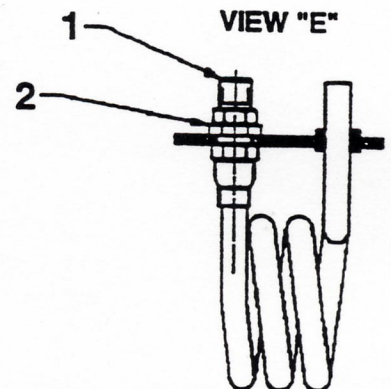


VIEW "C"

SECTIONS C-C, D-D & E-E



VIEW "D"



VIEW "E"

Item No.	Part No.	No. Req'd	Description
1	12102	4	Soc. Hd. Cap Screw (10-24 UNC x 3/4 Lg.; Torque to 35/40 in. lbs.)
2	17565	1	Air Valve (Note: Serial No. plate on air valve must be to the outside.)
3	16494	1	Nipple
4	13272	1	Plastic Pipe Plug (1/4 NPTF)
5	11967	1	Plastic Cap

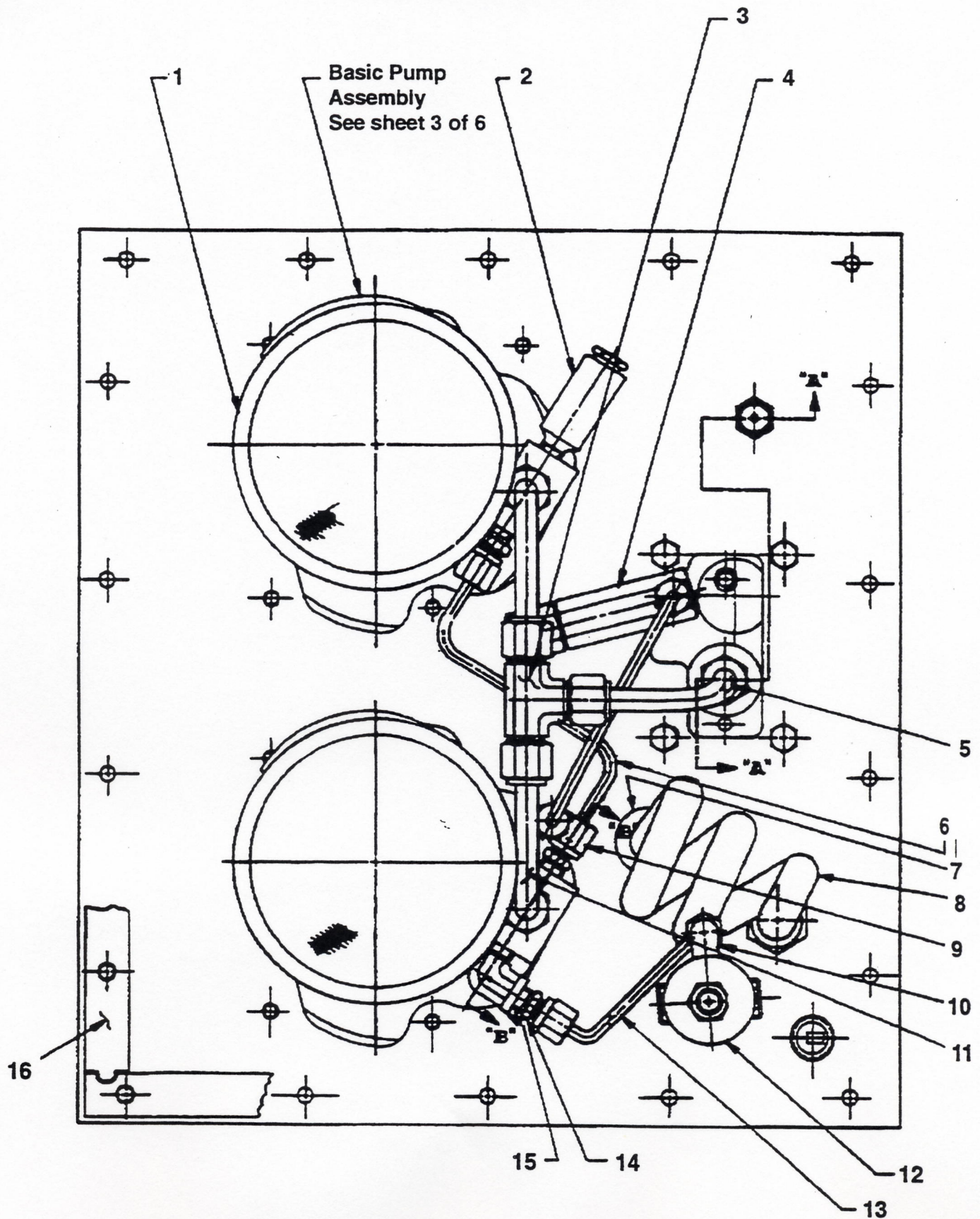
Item No.	Part No.	No. Req'd	Description
6	350244	1	Air Valve Manifold
7	15044	3	90° Male Connector
8	14281	.6 ft.	Plastic Tubing (1/8 O.D.)
9	15045	1	Elbow Fitting
10	15043	1	Straight Male Connector
11	200058	1	Double Elbow

VIEW "E"

Item No.	Part No.	No. Req'd	Description
1	251795	1	Straight Fitting (1/2 NPSM)
2	251796	1	Hex Jam Nut (1/2)

Note: Shaded areas reflect last revision(s) made to this form.

PUMP BOTTOM VIEW

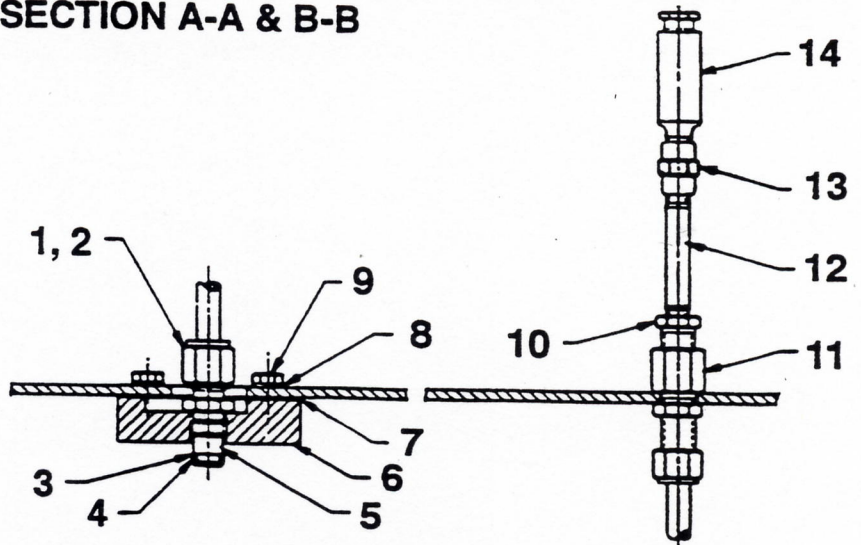


Parts List, Form No. 107285, Back sheet 2 of 6

Item No.	Part No.	No. Req'd	Description
1	21345	2	Filter Assembly (Includes o-ring)
2	21278	1	Relief Valve (Set at 10,100/10,700 PSI)
3	10659	1	Tee Fitting
4	22747	1	Accumulator & Piping Assembly
5	304118	1	Tube
6	304117	1	Tube
7	212896	1	Grommet
8	46626	1	Heat Exchanger Coil

Item No.	Part No.	No. Req'd	Description
9	11173	2	Straight Connector
10	16177	1	90° Elbow Fitting
11	304116	2	Tube
12	47647	1	Pressure Regulator Assembly (See sheet 6 of 6)
13	29267	1	Oil Line Assembly
14	14844	1	Fitting
15	13229	1	Elbow Fitting
16	50712	1	Reservoir Gasket

SECTION A-A & B-B

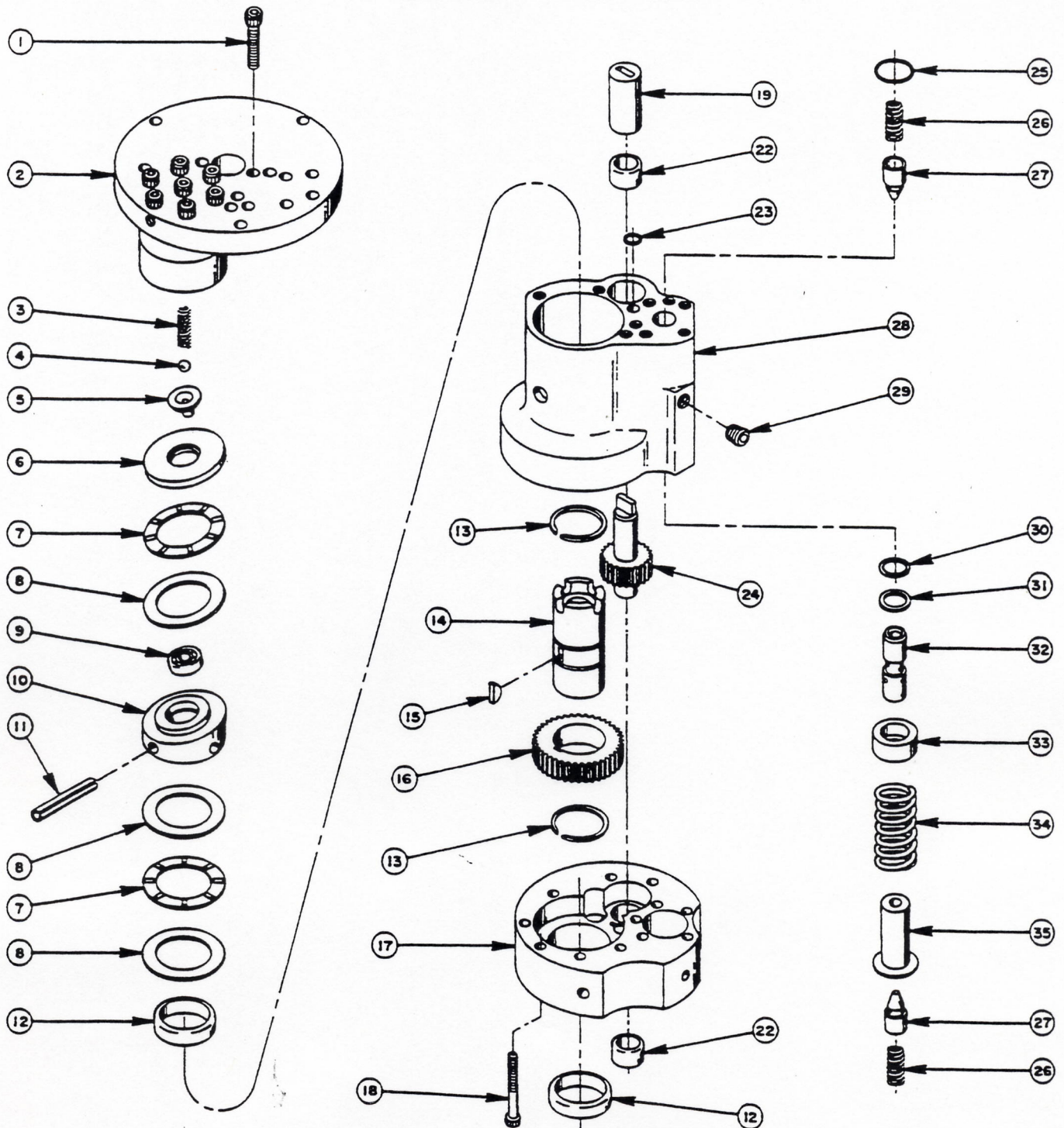


SECTION A-A

SECTION B-B

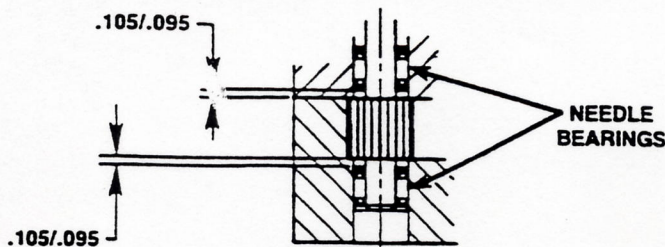
Item No.	Part No.	No. Req'd	Description
1	10430	3	Sleeve Fitting (3/8 Tube)
2	10431	3	Nut Fitting (3/8 Tube)
3	11863	1	Backup Washer
4	10268	1	O-ring (3/8 x 1/2 x 1/16)
5	20787	1	Valve Connector
6	43110	1	Valve Mounting Block
7	200395	1	Gasket
8	10244	4	Lockwasher
9	10005	4	Hex. Hd. Screw
10	13269	1	Straight Fitting
11	18345	1	Straight Fitting (Bulkhead)
12	15456	1	Straight Fitting (Nipple)
13	18841	1	Straight Fitting
14	21278-15	1	Relief Valve (Set at 1,500/1,700 PSI)
15	10015	4	Soc. Hd. Cap Screw (1/4-28 UNC x 1" Lg.; Torque to 130/180 in. lbs.)
16	20776	2	Valve Body
17	10425	2	Compression Spring (3/8 O.D. x 3/4 Lg.)
18	20770	2	Connector (Torque to 40/45 ft. lbs. oiled.)
19	10261	2	Soft Copper Washer (3/4 x 19/32 x 1/32)
20	20771	2	Poppet
21	10266	2	O-ring (1/4 x 3/8 x 1/16)

BASIC PUMP ASSEMBLY



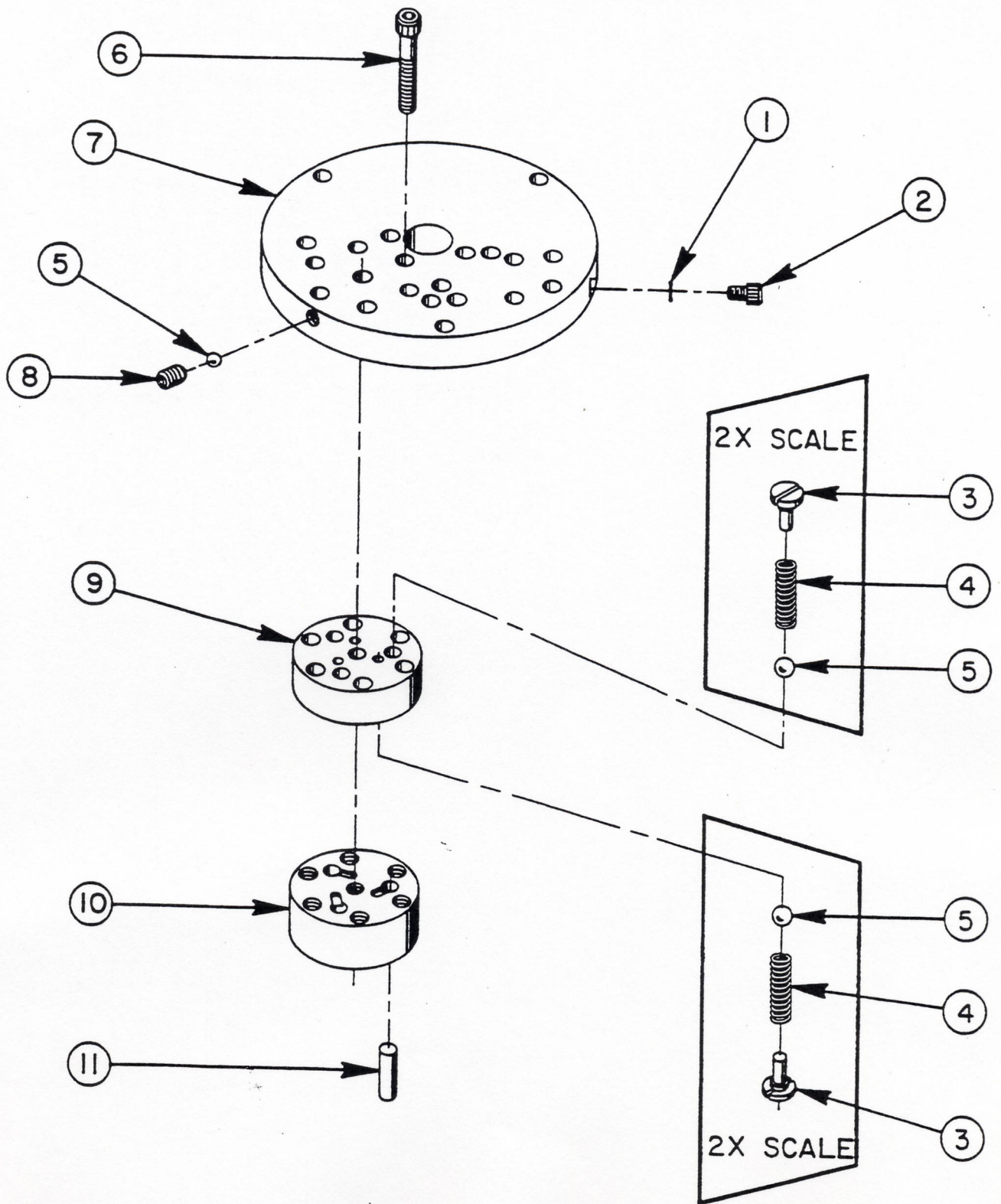
Item No.	Part No.	No. Req'd	Description
1	10020	10	Soc. Hd. Cap Screw (1/4-20 UNC x 1-1/4 Lg.; Torque to 170/180 in. lbs.)
2	33113	1	High Pressure Pump Assembly (See sheet 4 of 6)
3	10361	1	Compression Spring (1/4 O.D. x 1" Lg.)
4	10375	1	Steel Ball (1/4 dia.)
5	23547	1	Bearing Top Plate
6	23548	1	Top Plate
7	11228	2	Thrust Bearing
8	11813	3	Bearing Race
9	11814	1	Ball Bearing
10	23549	1	Angle Plate
11	11955	1	Roll Pin
12	11064	2	Needle Bearing
13	11261	2	Retaining Ring
14	23556	1	Shaft
15	11821	1	Woodruff Key
16	23557	1	Gear
17	30533	1	Pump End Plate
18	10001	13	Soc. Hd. Cap Screw (#10-32 UNC x 1-3/4 Lg.; Torque to 50 in. lbs.)
19	21091	1	Nylon Coupling
22	11199	2	Needle Thrust Bearing (See note below)
23	10266	1	O-ring (3/8 x 1/4 x 1/16)
24	21272	1	Drive Gear
25	10303	1	O-ring (7/8 x 3/4 x 1/16)
26	10425	2	Compression Spring (3/8 O.D. x 3/4 Lg.)
27	20771	2	Poppet
28	40120	1	Pump Body
29	10427	1	Pipe Plug (1/8 NPTF)
30	10271	1	O-ring (11/16 x 1/2 x 1/16)
31	12389	1	Teflon Backup Washer (11/16 x 1/2 x 1/16)
32	20849	1	Spool
33	23255	1	Spring Guide
34	10426	1	Compression Spring (1" O.D. x 1-13/16 Lg.)
35	23256	1	Spring Guide
36	10016	3	Soc. Hd. Cap Screw (1/4-20 UNC X 1" Lg.)

NEEDLE BEARING INSTALLATION SPECIFICATIONS



When replacing the needle bearings on the drive gear of the basic pump, the dimensions shown must be as specified.

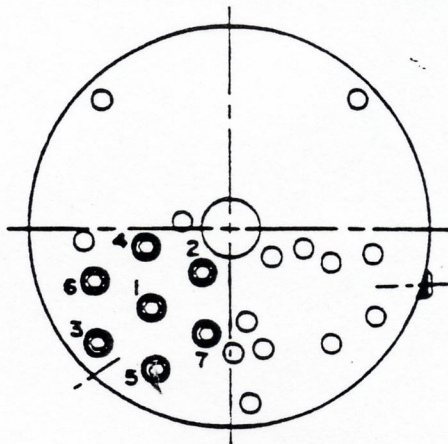
HIGH PRESSURE PUMP ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	10442	1	Copper Washer (3/8 x 1/4 x 1/32)
2	10002	1	Soc. Hd. Cap Screw (1/4-20 UNC x 3/8 Lg.; Torque to 140/160 in. lbs.)
3	*24549	6	Valve Guide
4	*10445	6	Compression Spring (5/32 O.D. x 3/4 Lg.)
5	*12223	7	Steel Ball (3/16 dia.)
6	*10023	7	Soc. Hd. Cap Screw (1/4-28 UNF x 1-1/2 Lg.; Torque to 170/180 in. lbs.; See note below)
7	*50411	1	Top Plate
8	10519	1	Soc. Set Screw (1/4-20 UNC x 3/8 Lg.; Torque to 65/70 in. lbs.)
9	*40630	1	Valve Head
10	*41062	1	Pump Barrel
11	*21628	3	Piston

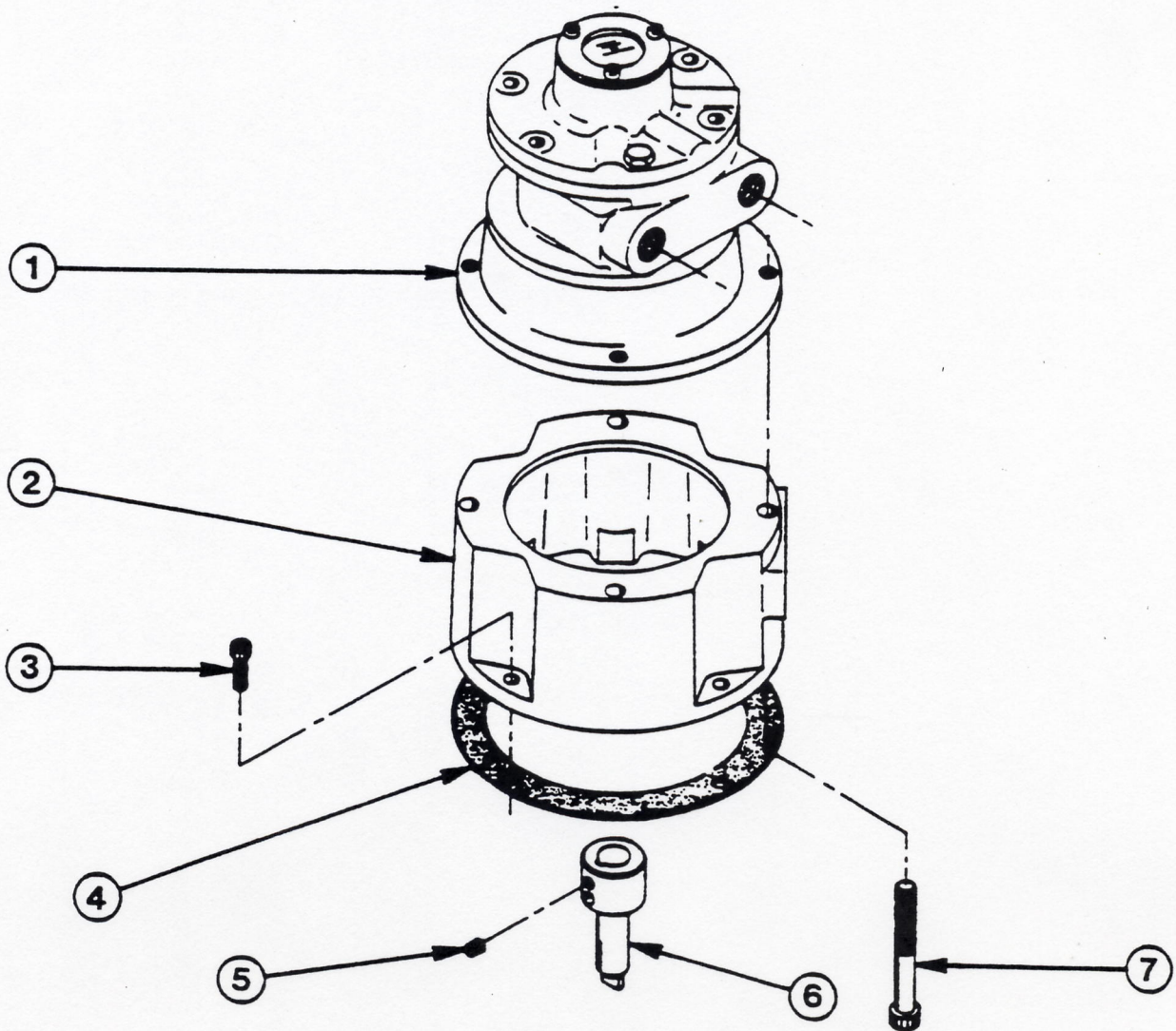
Consult factory when replacing items marked with an asterisk (*).

BOLT TIGHTENING SEQUENCE



**NOTE: Assemble in sequence shown.
Lubricate under head and on threads.
Torque to 180 in. lbs.**

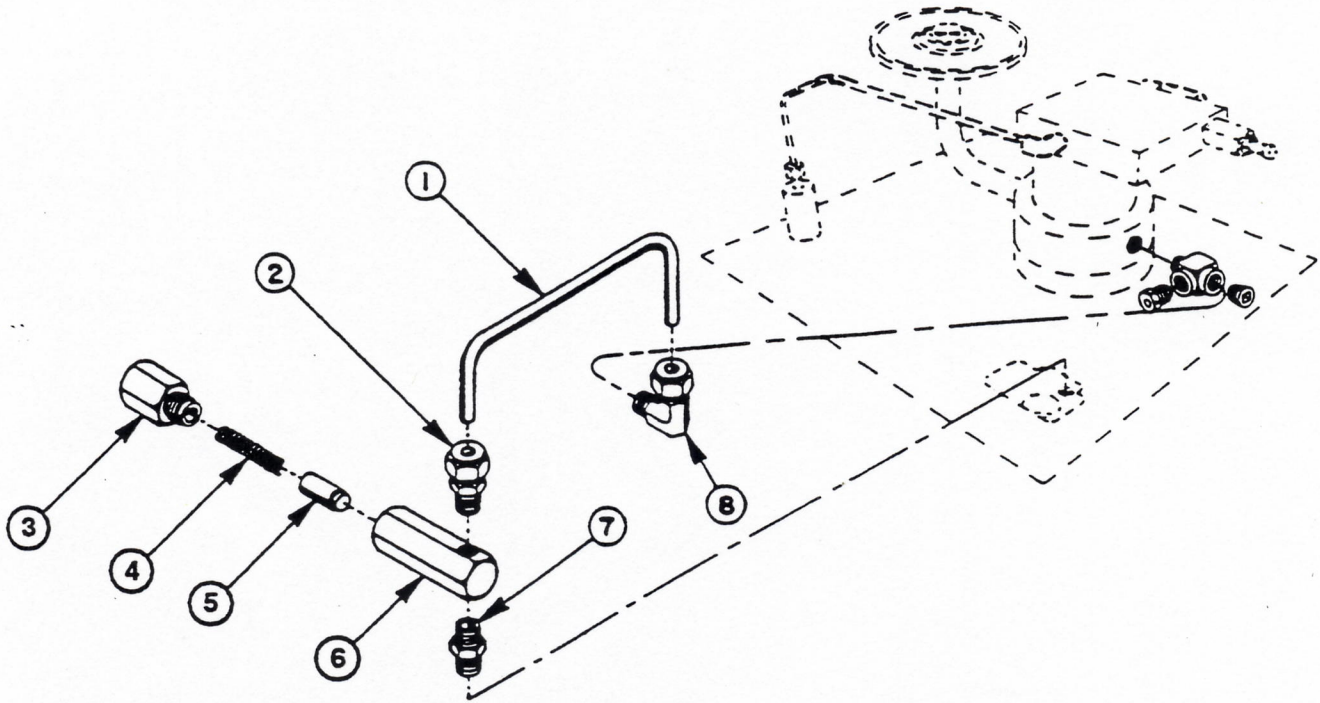
AIR MOTOR



Item No.	Part No.	No. Req'd	Description
7	17816	4	Cap Screw (3/8-16 UNC x 3" Lg.)
6	37842	1	Shaft Extension
5	10556	1	Set Screw (1/4-20 UNC x 1/4 Lg.)
4	30650	1	Gasket
3	10008	4	Cap Screw (1/4-20 UNC x 3/4 Lg.)
2	51158	1	Motor Base
1	*14717	1	Air Motor

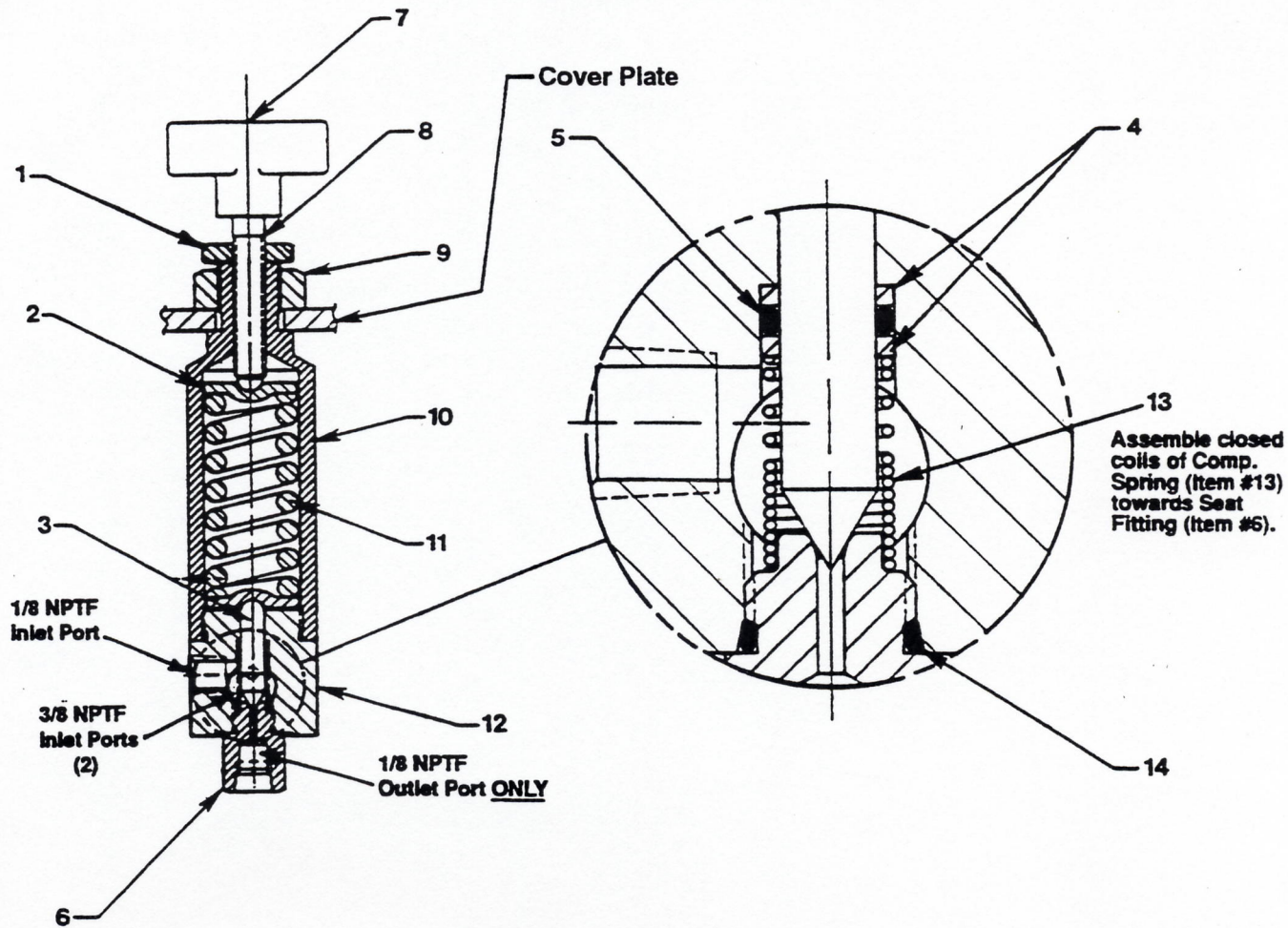
*For air motor repair kit, order no. 252100.

PILOT OIL LINE/ACCUMULATOR ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	22746	1	Oil Line
2	11173	1	Connector
3	202121	1	Spring Retainer (Torque to 50/70 in. lbs.)
4	16499	1	Compression Spring (1/4 O.D. x 2-3/16 Lg.)
5	21945	1	Plunger
6	21944	1	Cylinder Body
7	11421	1	Pipe Nipple
8	11278	1	Connector
	21943	1	Accumulator (Consists of Items 3, 4, 5, & 6)

PRESSURE REGULATOR



Item No.	Part No.	No. Req'd	Description
1	215683	1	Regulator Locking Nut
2	215428	2	Spring Retainer
3	309079	1	Poppet
4	215430	2	Backup Washer (3/8 x 9/32 x 3/64)
5	10266	1	O-ring (3/8 x 1/4 x 1/16)
6	309078	1	Seat Fitting
7	215693	1	Tee Knob
8	215721	1	Stem
9	10396	1	Jam Nut (3/4-16)
10	309077	1	Spring Housing
11	215429	1	Compression Spring (1.100 O.D. x 2-1/2 Lg.)
12	47648	1	Regulator Body
13	215431	1	Compression Spring
14	13755	1	O-ring (9/16 x 13/32 x 5/64)

PRESSURE REGULATOR OPERATING INSTRUCTIONS



WARNING: To help avoid personal injury,

- Do not touch the pressure regulator during operation. The unit can become very hot (over 180° F.) depending upon the flow and pressure setting used.
- Do not exceed the rated capacity of the pressure regulator (17 cu. in. to 8 GPM).

IMPORTANT: To help prevent equipment damage, return lines must be sized large enough for flow and pressure setting used. Back pressure created by a return system can impair unit operation.

For easy adjustment of the pressure regulator, always adjust the pressure setting by **INCREASING** to a desired pressure setting. The pressure range for this regulator is from 300 PSI to 10,000 PSI.

1. Loosen the locking nut on the pressure regulator. Turn the adjusting knob a few turns counterclockwise (CCW) to decrease the pressure setting to a lower than desired pressure.
2. Start the pump. Slowly turn the adjusting knob clockwise (CW) to gradually increase the pressure setting. When the desired pressure setting is attained, lock the adjusting screw into position by tightening the locking nut.

MAINTENANCE

The pressure regulator has an accuracy rating of $\pm 3\%$. To maintain that accuracy level, regularly clean the entire hydraulic system.

HYDRAULIC SCHEMATIC

