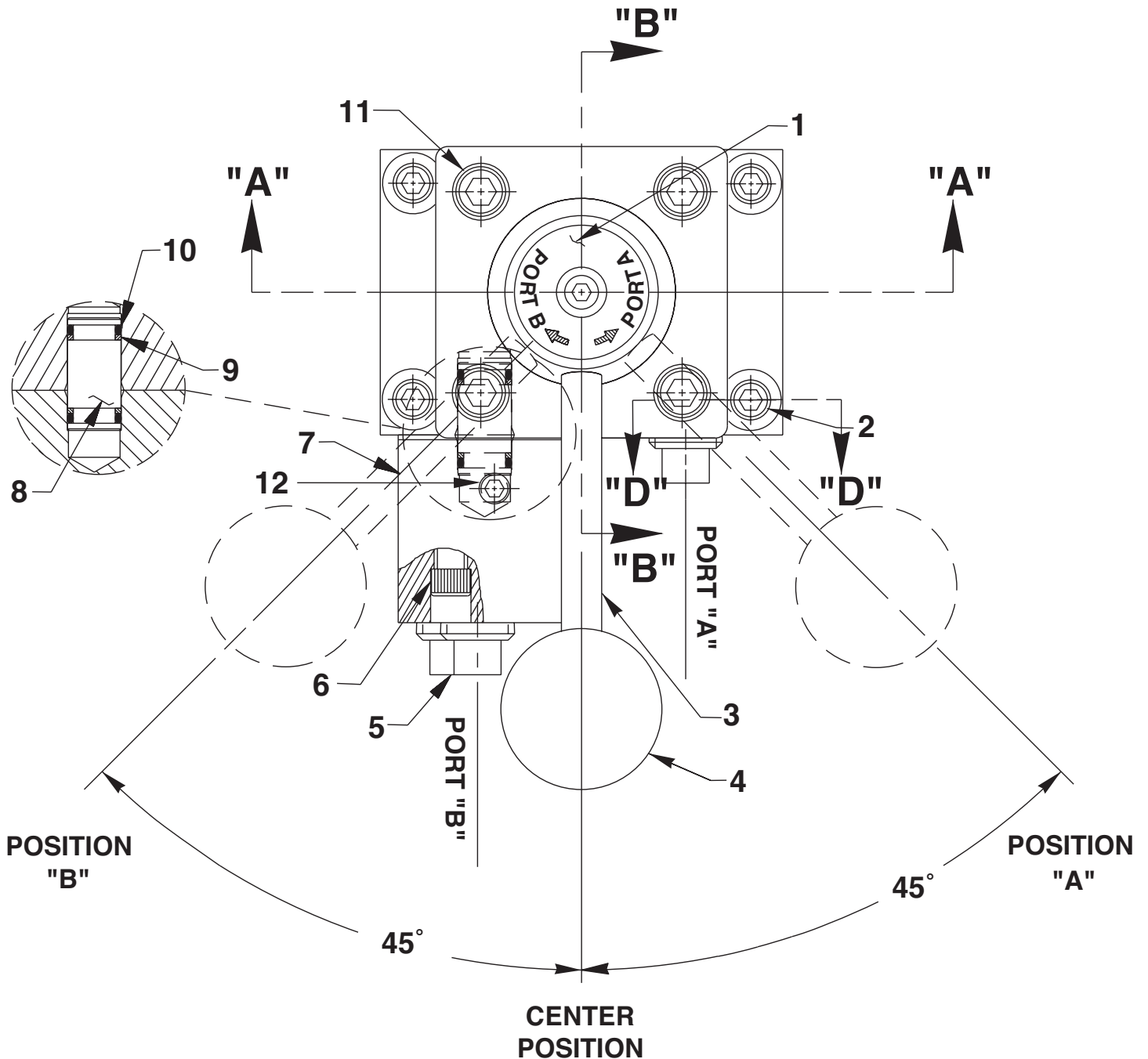


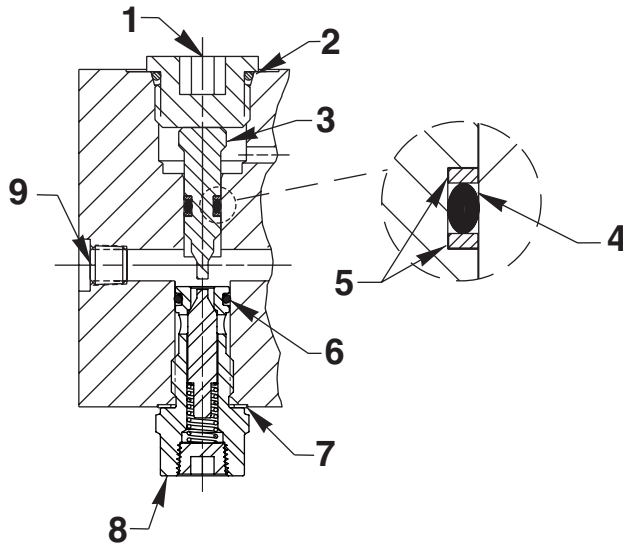
MODEL F MANUAL VALVE ASSEMBLY TOP VIEW



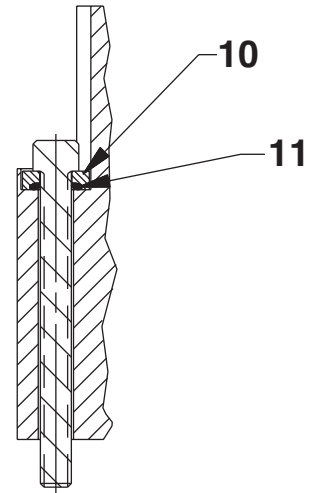
| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|--|
| 1 | *211936 | 1 | Decal |
| 2 | 10856 | 4 | Screw (1/4-20 UNC X 2-1/2 Lg.) |
| 3 | 21639 | 1 | Stud |
| 4 | 211911 | 1 | Ball Knob |
| 5 | 11127 | 3 | Plug Fitting (3/8 NPTF) |
| 6 | 10854 | 3 | Screw (1/4-20 UNC X 1-3/4" Lg.) |
| 7 | 421494 | 1 | Manifold Body |
| 8 | 252181 | 1 | Bushing |
| 9 | *11863 | 2 | Backup Washer (1/2 X 3/8 X 1/16) |
| 10 | *10268 | 2 | O-ring (1/2 X 3/8 X 1/16) |
| 11 | 11013 | 4 | Screw (5/16-18 X 1" Lg.; Torque to 300/320 in. lbs.) |
| 12 | 15130 | 1 | Plug Fitting (1/16 NPTF) |

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300571.

SECTION B-B



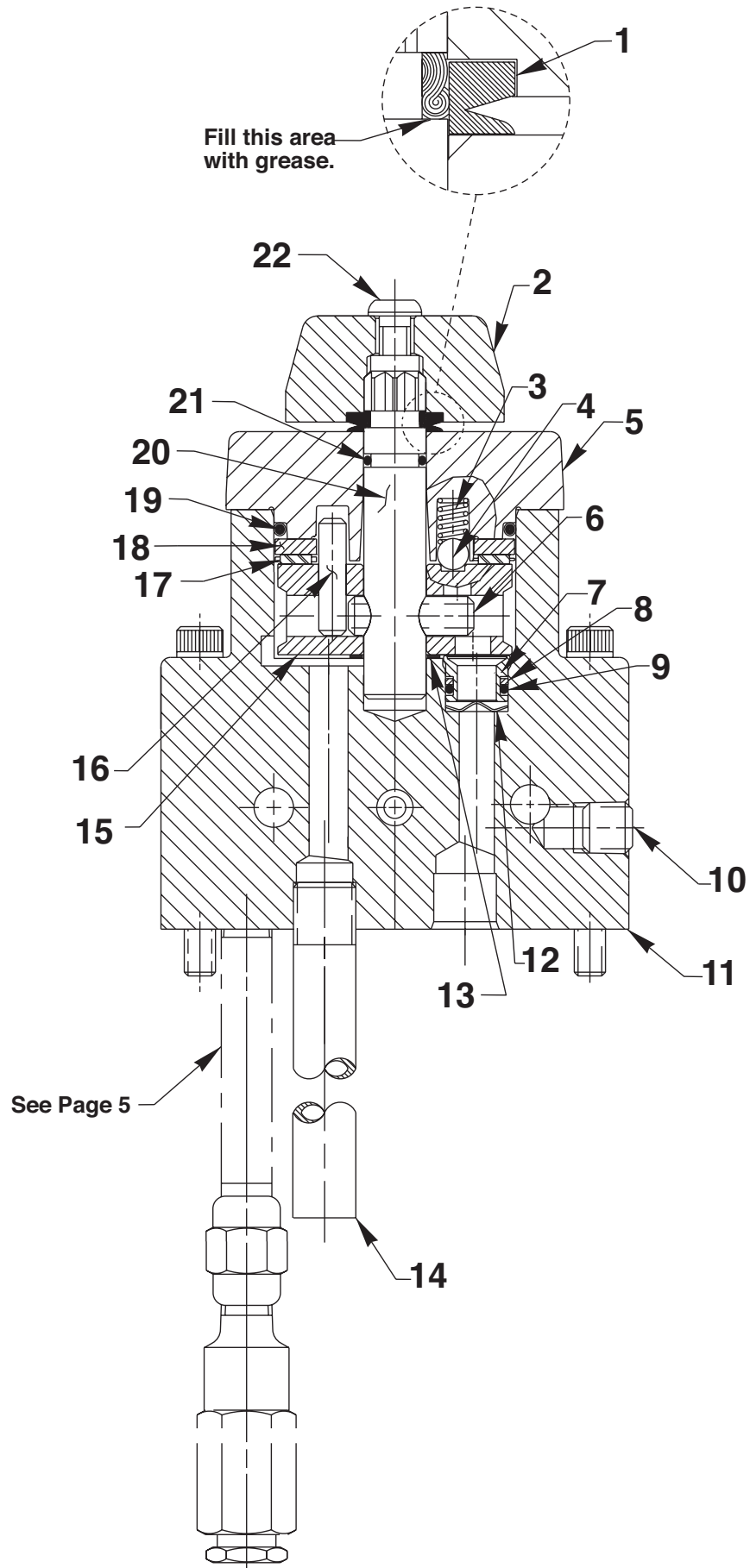
SECTION D-D



| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|--|
| 1 | 214014 | 1 | Plug Fitting (3/4-16 UNF; Note Discard rubber o-ring.) |
| 2 | *215193 | 1 | O-ring (13/16 X 5/8 X 3/32; Nitrile) |
| | 18999 | 1 | O-ring (13/16 X 5/8 X 3/32; Viton) |
| | 250157 | 1 | O-ring (13/16 X 5/8 X 3/32; EPR) |
| 3 | 214015 | 1 | Piston |
| 4 | *12099 | 1 | O-ring (9/32 X 5/32 X 1/16; Nitrile) |
| | 18972 | 1 | O-ring (9/32 X 5/32 X 1/16; Viton) |
| | 250399 | 1 | O-ring (9/32 X 5/32 X 1/16; EPR) |
| 5 | *207354 | 2 | Backup Washer (9/32 X 5/32 X .048) |
| 6 | *14763 | 1 | O-ring (7/16 X 5/16 X 1/16; Nitrile) |
| | 18974 | 1 | O-ring (7/16 X 5/16 X 1/16; Viton) |
| | 13472 | 1 | O-ring (7/16 X 5/16 X 1/16; EPR) |
| 7 | *14874 | 1 | Copper Washer (.700 X 1/2 X 1/32) |
| 8 | 3000826 | 1 | Cartridge sub-assy. (Torque to 250/280 in. lbs.) |
| 9 | 15130 | 4 | Plug Fitting (1/16 NPTF) |
| 10 | 253153 | 4 | Washer, Special 1/4 Sealing |
| 11 | 10266 | 4 | O-ring (.37 x .25 Nitrile) |

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300571.

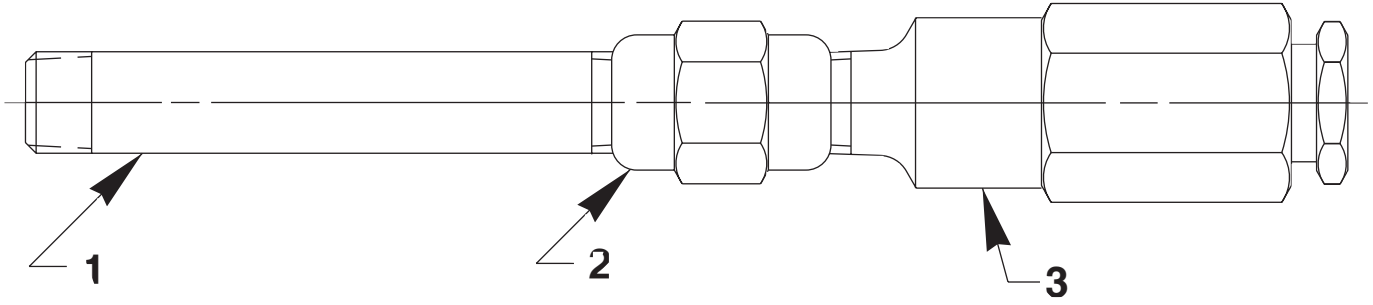
SECTION A-A



| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|---|
| 1 | *213674 | 1 | V-ring |
| 2 | 46057 | 1 | End Stem |
| 3 | 15095 | 1 | Spring (1/4 O.D. X 15/32 Lg.) |
| 4 | 10375 | 1 | Ball (1/4 Dia.) |
| 5 | 61343 | 1 | Valve Cap |
| 6 | 10496 | 1 | Slotted Spring Pin |
| 7 | 252460 | 3 | Seal |
| 8 | *11863 | 3 | Backup Washer (1/2 X 3/8 X 1/16) |
| 9 | *10268 | 3 | O-ring (1/2 X 3/8 X 1/16; Nitrile) |
| | 11439 | 3 | O-ring (1/2 X 3/8 X 1/16; Viton) |
| | 17716 | 3 | O-ring (1/2 X 3/8 X 1/16; EPR) |
| 10 | 14972 | 1 | Plug Fitting (1/4 NPTF) |
| 11 | 65818 | 1 | Valve Body |
| 12 | 21975 | 3 | Spring Washer |
| 13 | 214801 | 1 | Spacer Washer |
| 14 | 200609 | 1 | Drain Tube |
| 15 | 421472 | 1 | Rotor |
| 16 | 250056 | 1 | Slotted Spring Pin |
| 17 | 11228 | 1 | Needle Bearing |
| 18 | 11227-1 | 1 | Bearing Race |
| 19 | *15892 | 1 | O-ring (1.956 X 1.720 X .118; Nitrile) |
| | 19097 | 1 | O-ring (1.956 X 1.720 X .118; Viton) |
| | 212887 | 1 | O-ring (1.956 X 1.720 X .118; EPR) |
| 20 | 46048 | 1 | Stem |
| 21 | *13943 | 1 | O-ring (1/2 X 3/8 X 1/16; Disogren) |
| | 11439 | 1 | O-ring (1/2 X 3/8 X 1/16; Viton) |
| | 17716 | 1 | O-ring (1/2 X 3/8 X 1/16; EPR) |
| 22 | 15911 | 1 | Screw (Torque to 60/80 in. lbs. Note: Apply Loctite No. 222 or equivalent at assembly.) |

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300571.

"B" PORT PRESSURE CONTROL SYSTEM

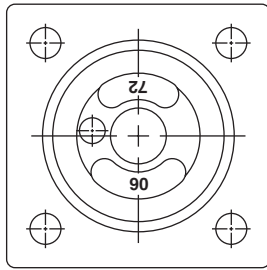


Set at 5800/6400 P.S.I.

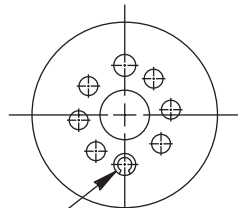
* Note: These three parts assembled together and shipped loose.

| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|--|
| 1 | 12891-1 | 1 | Straight Fitting |
| 2 | 18841 | 1 | Straight Fitting |
| 3 | 21278-57 | 1 | Relief Valve Assembly (Set at 5800/6400 PSI) |

INTERNAL ASSEMBLY ORIENTATION OF PARTS

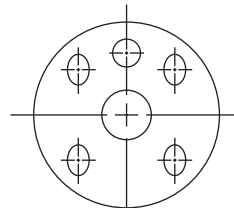


**END CAP
BOTTOM VIEW**

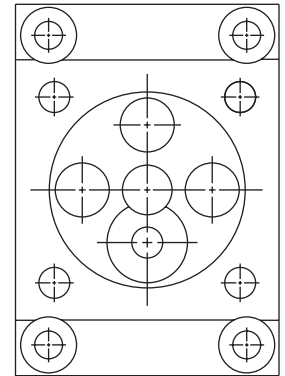


**ROTOR
TOP VIEW**

ROLL PIN LOCATION
(POSITION OPENING AS SHOWN)

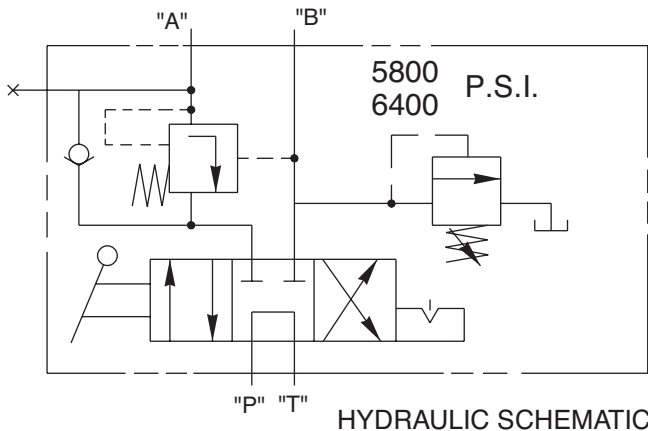


**ROTOR
BOTTOM VIEW**



**VALVE BODY
TOP VIEW**

SPECIFICATIONS



VALVE, PUMP MOUNTED MANUAL DETENTED 3-POSITION, 4-WAY TANDEM CENTER WITH "B" PORT PRESSURE CONTROL AND RELEASE SYSTEM. (2.15 TO 1 RATIO REF.)
 RATED PRESSURE: 10,000 P.S.I.
 CASE PRESSURE; 500 P.S.I.
 RATED FLOW: 5 G.P.M. (REF.)

REPORT ERRORS TO ENGINEERING DEPARTMENT.
 FUNCTION:
 CENTER POSITION:
 "A" AND "B" PORTS BLOCKED, PRESSURE PORT TO TANK.
 "A" POSITION:
 PRESSURE TO "A" PORT, "B" PORT TO TANK.
 "B" POSITION:
 PRESSURE TO "B" PORT (CONTROLLED TO 6400 P.S.I. MAX.) "A" PORT TO HOLD UNTIL PRESSURE RATIO IS OBTAINED AND THEN RELEASES TO TANK.
 "A" PORT WILL REMAIN OPEN AS LONG AS "B" PORT MAINTAINS PRESSURE RATIO.

NOTE: "A" PORT IS BLOCKED WITH "B" AND "P" PORTS OPEN TO TANK DURING TRANSITION BETWEEN VALVE POSITIONS. PRESSURE RATIO IS THE PRESSURE DIFFERENTIAL IN THE "A" AND "B" PORTS.