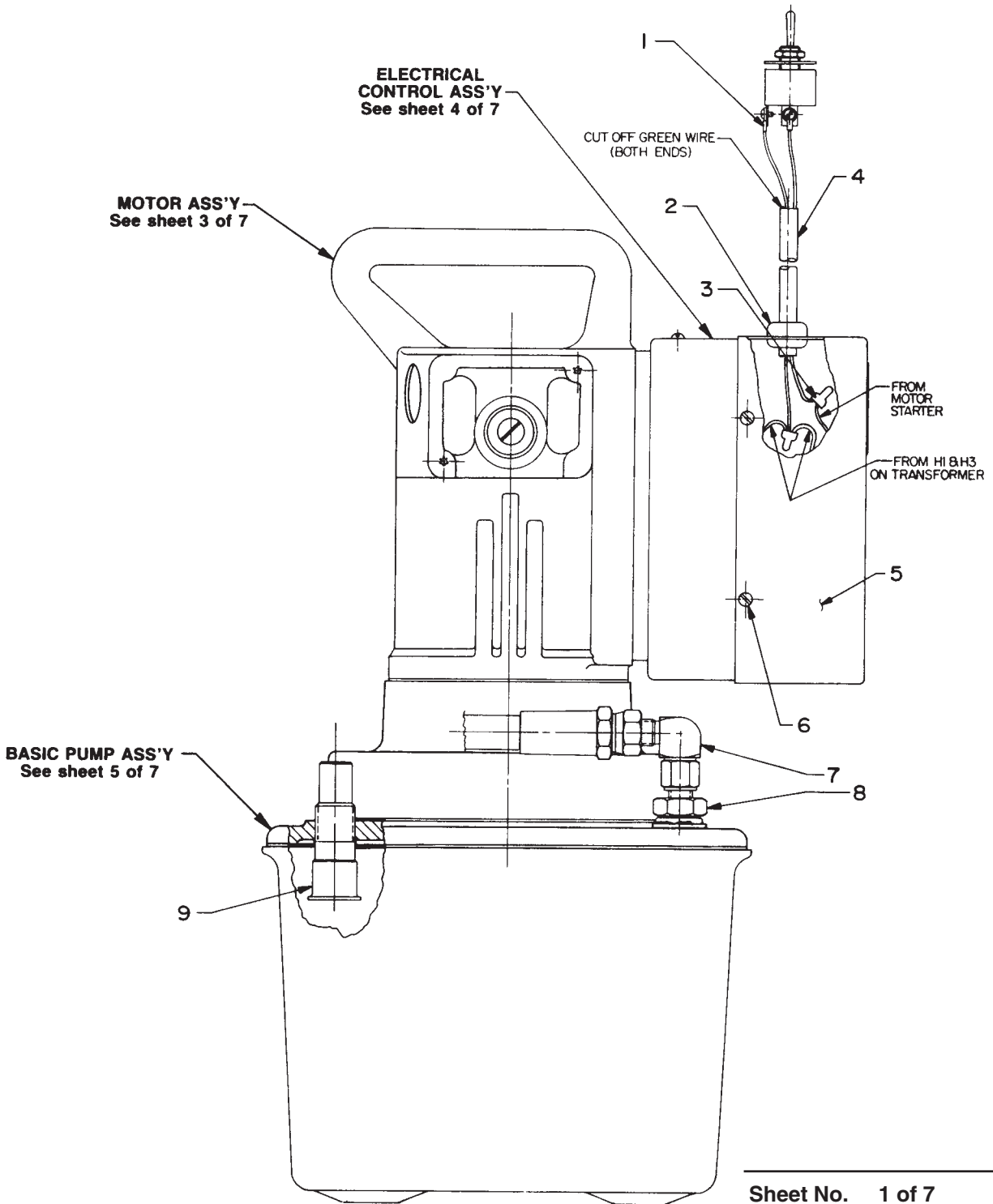


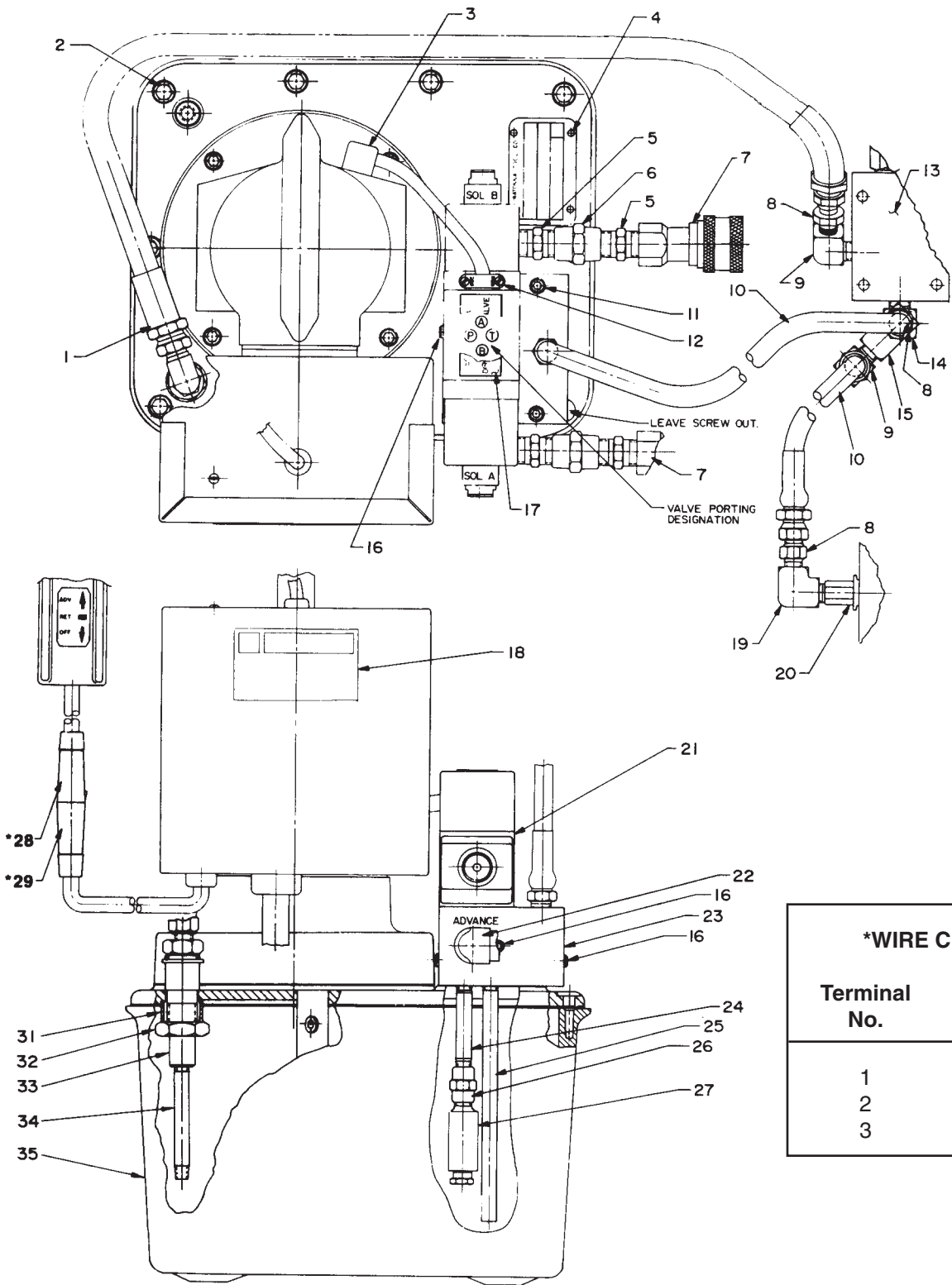
ELECTRIC HYDRAULIC PUMP



Parts List, Form No. 100656, Back sheet 1 of 7

| Item No. | Part No. | No. Req'd | Description |
|-----------------|-----------------|------------------|---|
| 1 | 10525 | 2 | Ring Tongue Terminal |
| 2 | 11485 | 1 | Strain Relief Bushing |
| 3 | 15525 | 2 | Splice Cap |
| 4 | 12908 | 1.6 ft. | Cord |
| 5 | 43126WH2 | 1 | Control Box Cover |
| 6 | 14812 | 4 | Pan Hd. Tapping Screw (#8-18 X 3/8 Lg.) |
| 7 | 16867 | 1 | 90° Elbow Fitting |
| 8 | 16863 | 1 | Straight Fitting |
| 9 | 306445 | 1 | Fitting |

TOP AND SIDE VIEWS



| *WIRE CHART | |
|--------------|------------|
| Terminal No. | Wire Color |
| 1 | Black |
| 2 | White |
| 3 | Green |

Parts List, Form No. 100656, Back sheet 2 of 7

| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|---|
| 1 | 302535 | 1 | Hydraulic Hose |
| 2 | 209799 | 9 | Hex Washer Hd. Screw (1/4-10 X 7/8 Lg Self-tapping) |
| 3 | 12176 | 1 | Strain Relief Bushing |
| 4 | 10575 | 4 | Rd. Hd. Drive Screw (#2 X 3/16 Lg.) |
| 5 | 10673 | 4 | Straight Fitting |
| 6 | 10682 | 2 | Straight Fitting |
| 7 | *212218 | 2 | Coupler |
| 8 | 16779 | 3 | Straight Fitting |
| 9 | 16823 | 2 | 90° Elbow Fitting |
| 10 | 37216 | 2 | Hose |
| 11 | 10890 | 4 | Cap Screw (1/4-20 X 2" Lg.) |
| 12 | 11203 | 1 | Elec. Connector |
| 13 | *306573 | 1 | Pressure Regulator Valve |
| 14 | 10617 | 1 | 90° Elbow Fitting |
| 15 | 10618 | 1 | Tee Fitting |
| 16 | 11084 | 3 | Pipe Plug |
| 17 | 210399 | 1 | Control Valve Decal |
| 18 | 200188 | 1 | Caution Decal |
| 19 | 10615 | 1 | 90° Elbow Fitting |
| 20 | *46280 | 1 | Torque Gauge |
| 21 | 16664-1 | 1 | Solenoid Valve (115 Volt) |
| | 16664-2 | 1 | Solenoid Valve (230 Volt) |
| 22 | 9681 | 2 | 90° Elbow Fitting |
| 23 | 51217 | 1 | Manifold |
| 24 | 15456 | 1 | Nipple Fitting |
| 25 | 20847 | 1 | Drain Line |
| 26 | 18841 | 1 | Straight Fitting |
| 27 | 21278-15 | 1 | Relief Valve (Set at 1,500/1,700 PSI) |
| 28 | *212431 | 1 | Female Audio Connector |
| 29 | *212432 | 1 | Male Audio Connector |
| 31 | 202824 | 1 | Spacer |
| 32 | 10396 | 1 | Jam Nut |
| 33 | 306445 | 1 | Fitting |
| 34 | 12891-1 | 1 | Straight Fitting |
| 35 | 61389 | 1 | Reservoir (For HWCE03A3) |
| | 61165 | 1 | Reservoir (For HWCE03A1) |

PARTS INCLUDED BUT NOT SHOWN

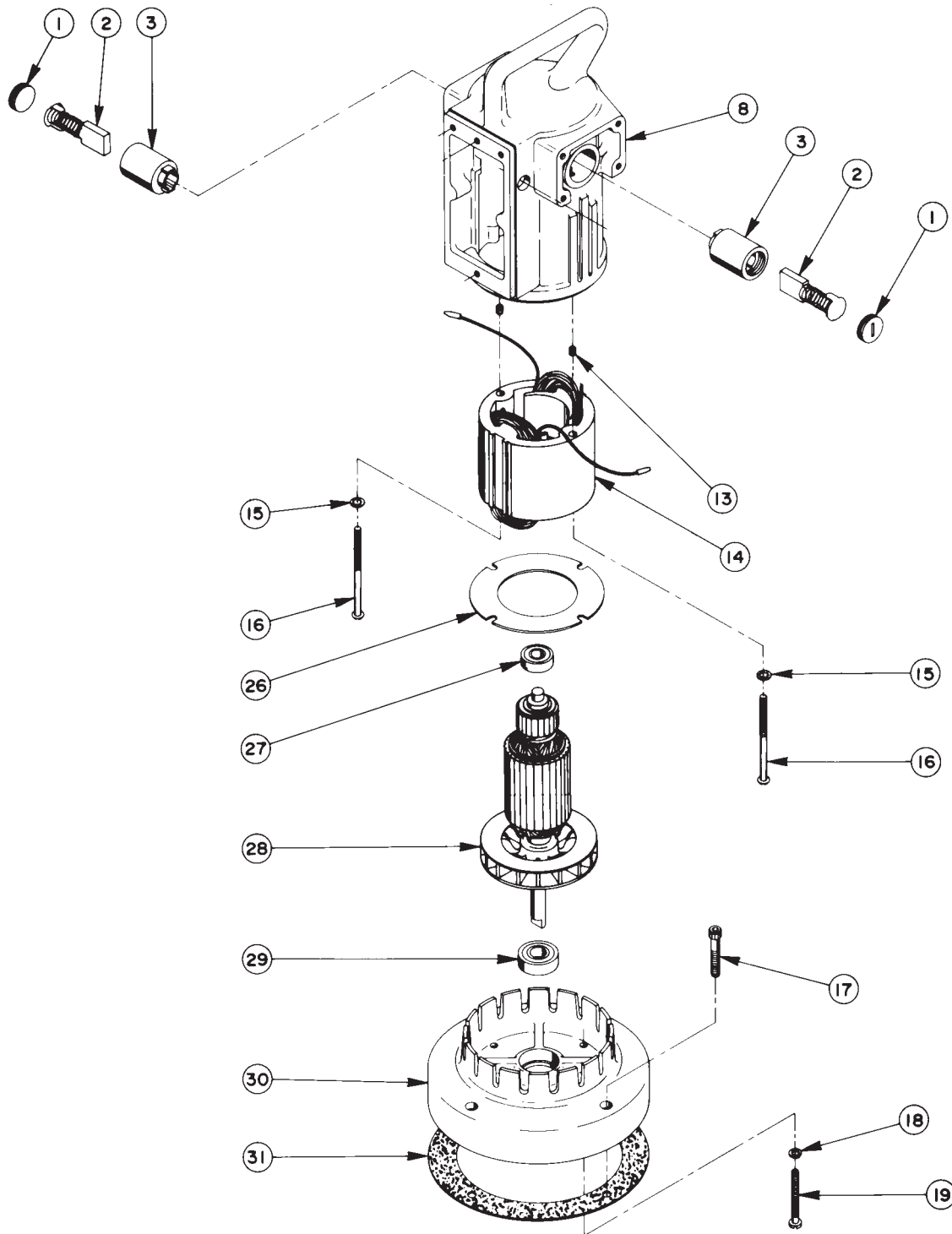
| | | |
|---------|---|-----------------------------------|
| *212217 | 2 | Quick Disconnect Coupler (Plug) |
| *212218 | 2 | Quick Disconnect Coupler (Socket) |
| *46281 | 1 | Twin Hose |

***Part numbers marked with an asterisk must be ordered from:**

**Ingersoll-Rand
P.O. Box 1776
Liberty Corner, N.J. 07938**

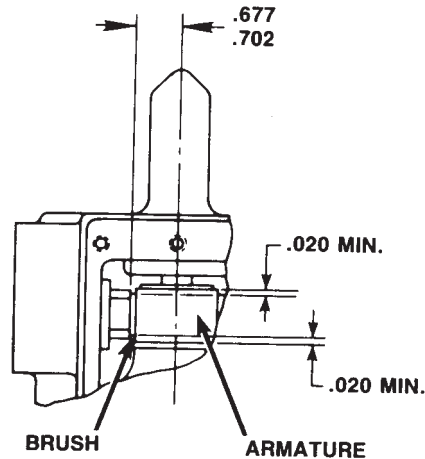
UNIVERSAL MOTOR ASSEMBLY

12,000 RPM - 115 or 230 Volt, 50/60 Hz.



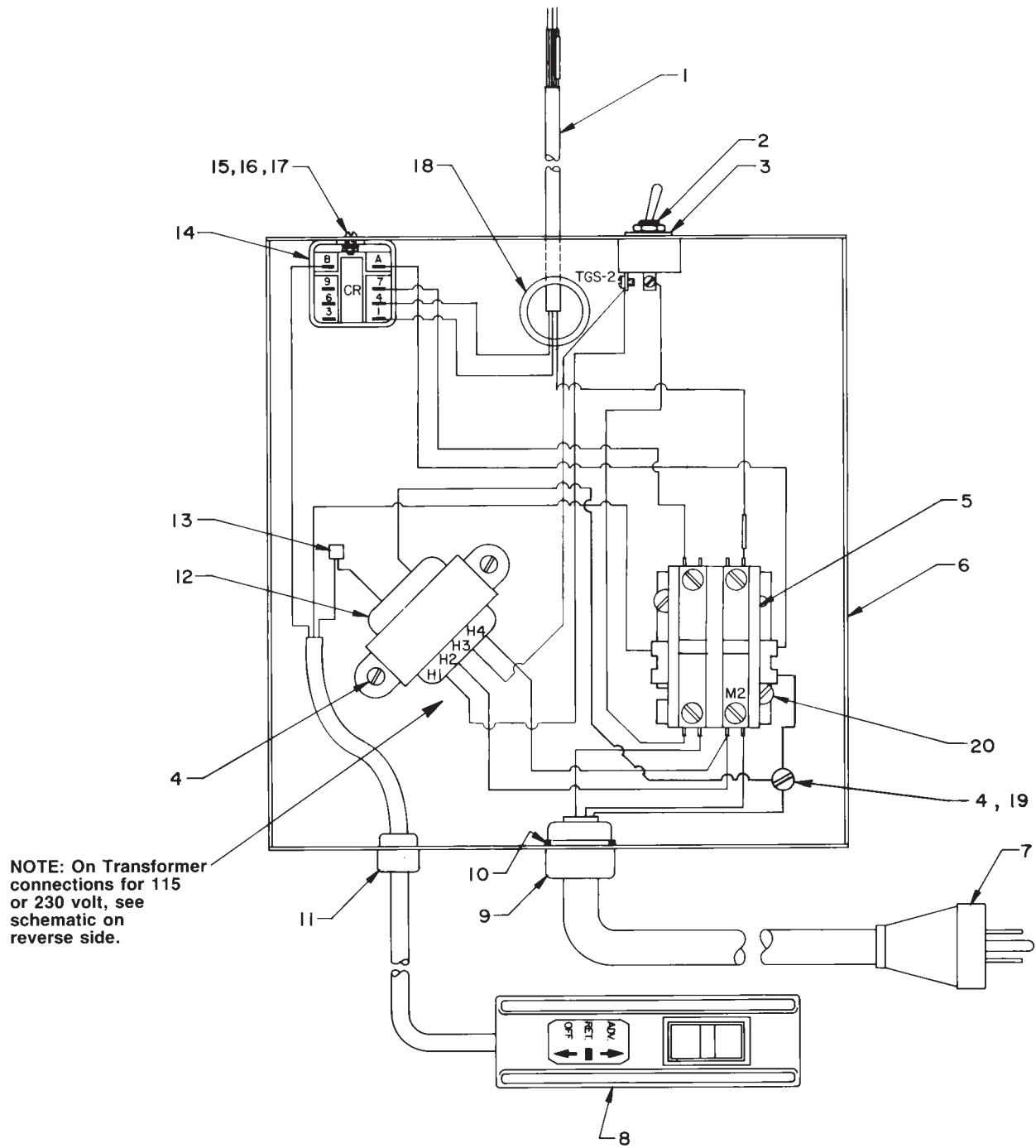
| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|---|
| 1 | 10806 | 2 | Brush Holder Cap |
| 2 | 10804 | 2 | Brush Assembly |
| 3 | 10805 | 2 | Brush Holder |
| 8 | 61901 | 1 | Motor Shell |
| 13 | 10133 | 2 | Hex Socket Set Screw (#10-24 UNC X 1/4 Lg.) |
| 14 | 10802 | 1 | Field (115 Volt) |
| | 10803 | 1 | Field (230 Volt) |
| 15 | 12356 | 2 | Lockwasher |
| 16 | 10170 | 2 | Machine Screw (#10-24 UNC X 3-1/4 Lg.) |
| 17 | 10022 | 4 | Cap Screw (#10-24 UNC X 3-1/4 Lg.) |
| 18 | 10241 | 4 | Lockwasher |
| 19 | 10169 | 4 | Machine Screw (#10-24 UNC X 2" Lg.) |
| 26 | 20786 | 1 | Baffle Plate |
| 27 | 10438 | 1 | Ball Bearing |
| 28 | 10800 | 1 | Armature (115 Volt) |
| | 10801 | 1 | Armature (230 Volt) |
| 29 | 10439 | 1 | Ball Bearing |
| 30 | 40059 | 1 | Motor Base |
| 31 | 30650 | 1 | Gasket |

BRUSH HOLDER & ARMATURE INSTALLATION SPECIFICATIONS



When replacing brushes or the armature, the dimensions shown must be as specified.

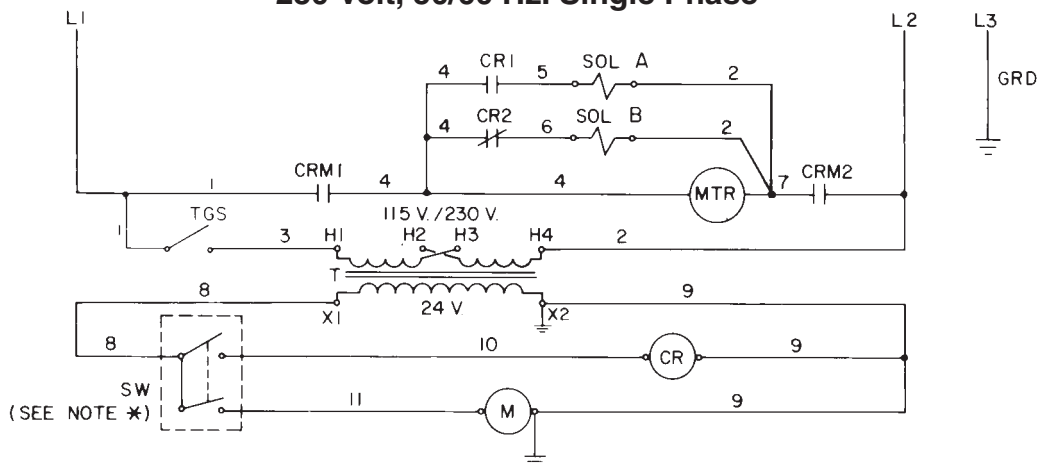
ELECTRIC CONTROL ASSEMBLY (115 Volt Unit Shown)



| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|--------------------------------------|
| 1 | 12908 | 2 ft. | Electric Cord |
| 2 | 12301 | 1 | Toggle Switch |
| 3 | 13890 | 1 | Indicator Plate |
| 4 | 10164 | 3 | Machine Screw (#10-24 UNC X 3/8 Lg.) |
| 5 | 420718-4 | 1 | Contactor |
| 6 | 51218WH2 | 1 | Electrical Control Box |
| 7 | 21051 | 1 | Power Cord |
| 8 | 250023 | 1 | Remote Control Hand Switch (24 Volt) |
| 9 | 11431 | 1 | Strain Relief Bushing |
| 10 | 23506 | 1 | Spacer |
| 11 | 15993 | 1 | Strain Relief Bushing |
| 12 | 11852 | 1 | Transformer |
| 13 | 208322 | 1 | Wire Nut |
| 14 | 39092 | 1 | Relay |
| 15 | 10159 | 2 | Machine Screw (#6-32 UNC X 5/16 Lg.) |
| 16 | 10195 | 2 | Hex Nut |
| 17 | 15906 | 2 | Shakeproof Washer |
| 18 | 15497 | 1 | Grommet Strip |
| 19 | 11456 | 2 | Lockwasher |
| 20 | 10166 | 2 | Machine Screw (10-24 X 1/2 Lg.) |

ELECTRICAL SCHEMATIC

115 Volt, 50/60 Hz. Single Phase
230 Volt, 50/60 Hz. Single Phase



NOTE*

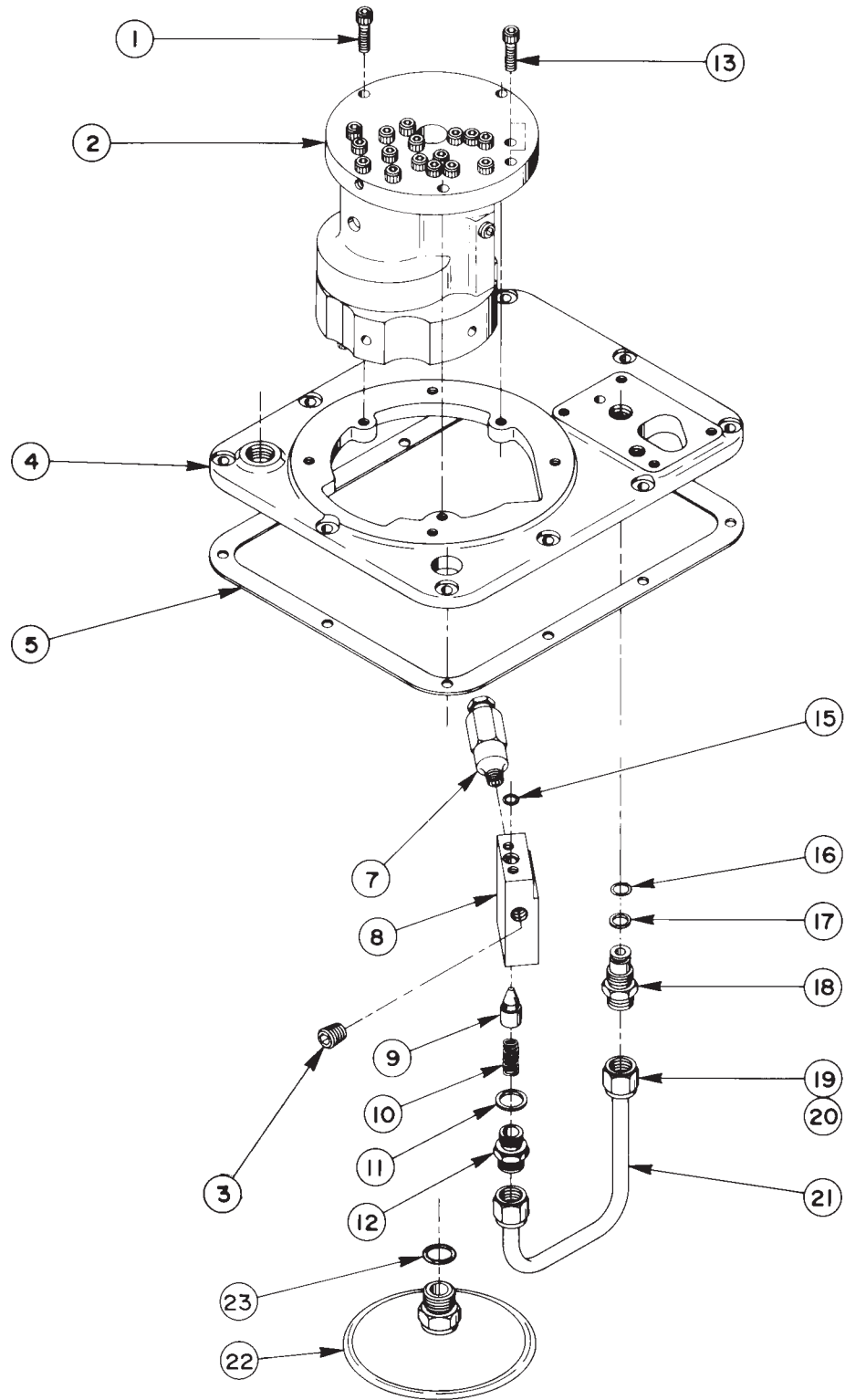
PROGRESSIVE REMOTE CONTROL SWITCH.
 POSITION 1 (OFF): MOTOR OFF, SOLENOID OFF.
 POSITION 2 (RET.): MOTOR ON, SOLENOID "B" ON.
 POSITION 3 (ADV.): MOTOR ON, SOLENOID "A" ON. (MOMENTARY)
 MOTOR STAYS ON BETWEEN POSITION 2 AND 3.

TRANSFORMER CONNECTIONS

| 115 V., 50/60 Hz. | 230V. 50/60 Hz. |
|-------------------|-----------------|
| H1 to TGS-2 | H1 to TGS-2 |
| H2 to M2 | H2 to H3 |
| H3 to TGS-2 | H4 to M2 |
| H4 to M2 | |

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

GENERAL PUMP ASSEMBLY

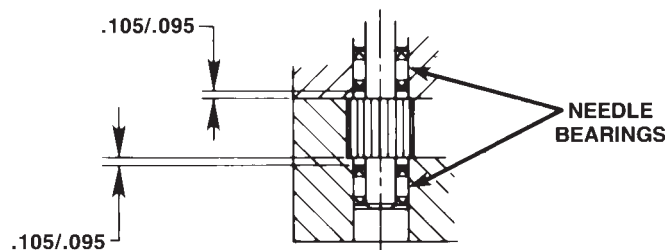


Parts List, Form No. 100656, Back sheet 5 of 7

| Item No. | Part No. | No. Req'd | Description |
|-----------------|-----------------|------------------|--|
| 1 | 10016 | 3 | Cap Screw (1/4-20 UNC X 1" Lg.) |
| 2 | *28348 | 1 | Basic Pump Assembly Replacement (Includes all items on sheet 6 of 7 and items 1, 7, 8, 9, 10, 11, 12, 13, 15 & 22 on this sheet) |
| 3 | 10427 | 1 | Pipe Plug |
| 4 | 40064WH2 | 1 | Cover |
| 5 | 40164 | 1 | Gasket |
| 7 | 21278-50 | 1 | Relief Valve (Set at 5,100/5,700 PSI) |
| 8 | 20776 | 1 | Valve Body |
| 9 | 20771 | 1 | Poppet |
| 10 | 10425 | 1 | Compression Spring |
| 11 | 10261 | 1 | Copper Washer |
| 12 | 20770 | 1 | Connector (Torque to 40/45 ft. lbs. oiled) |
| 13 | 10015 | 2 | Cap Screw (1/4-28 UNF X 1" Lg.; Torque to 180 in. lbs.) |
| 15 | 10266 | 1 | O-ring (3/8 X 1/4 X 1/16) |
| 16 | 10268 | 1 | O-ring (1/2 X 3/8 X 1/16) |
| 17 | 11863 | 1 | Teflon Backup Washer |
| 18 | 20787 | 1 | Valve Connector |
| 19 | 10430 | 2 | Tube Sleeve |
| 20 | 10431 | 2 | Tube Nut |
| 21 | 21045 | 1 | Oil Line |
| 22 | 21344 | 1 | Filter Assembly (Includes Item #23) |
| 23 | 10300 | 1 | O-ring (5/8 X 15/32 X 5/64) |

| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|--|
| 1 | 10020 | 9 | Cap Screw (1/4-20 UNC X 1-1/4 Lg.; Torque to 170-180 in. lbs.) |
| 2 | 33114 | 1 | High Pressure Pump Assembly (See sheet 7 of 7) |
| 3 | 10361 | 1 | Compression Spring (1/4 O.D. X 1" Lg.; Torque to 170-180 in. lbs.) |
| 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 | 23574 | 1 | Gear |
| 17 | 40072 | 1 | Pump End Plate |
| 18 | 10001 | 13 | Cap Screw (#10-32 UNF X 1-3/4 Lg.; Torque to 50 in. lbs.) |
| 19 | 21091 | 1 | Coupling |
| 20 | 21092 | 1 | Adapter |
| 21 | 21093 | 1 | Key |
| 22 | 11198 | 2 | Needle Thrust Bearing (See note below) |
| 23 | 10266 | 1 | O-ring (3/8 X 1/4 X 1/16) |
| 24 | 20774 | 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 | 40071 | 1 | Pump Body |
| 29 | 10427 | 1 | Pipe Plug |
| 30 | 10271 | 1 | O-ring (11/16 X 1/2 X 3/32) |
| 31 | 12389 | 1 | Teflon Backup Washer |
| 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 |

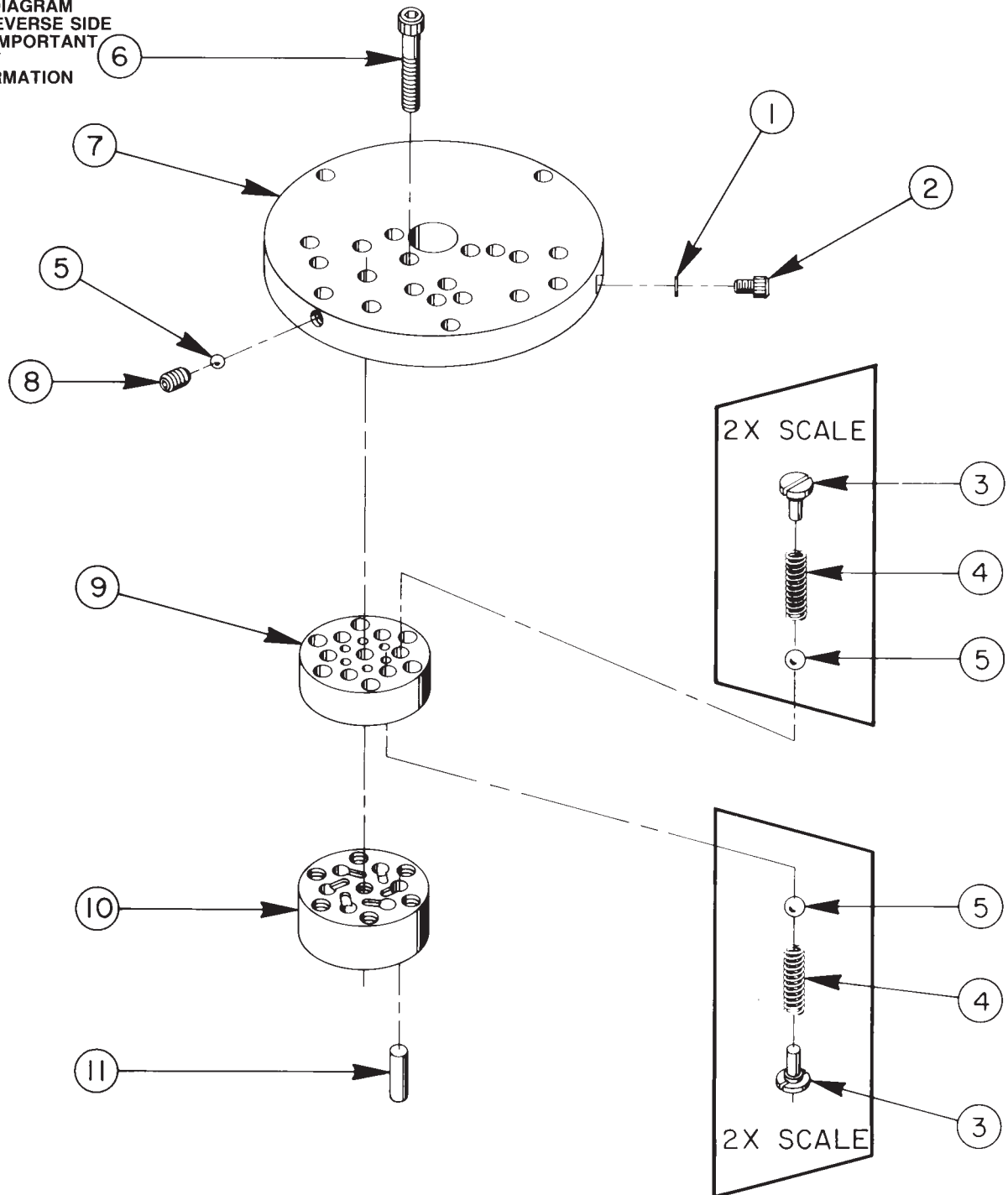
NEEDLE BEARING INSTALLATION SPECIFICATIONS



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

HIGH PRESSURE PUMP ASSEMBLY

SEE DIAGRAM
ON REVERSE SIDE
FOR IMPORTANT
ASS'Y
INFORMATION

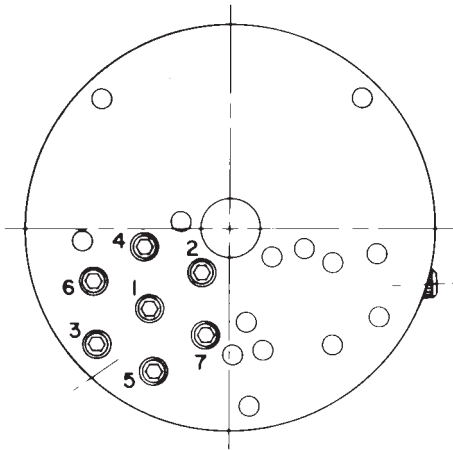


33114 HIGH PRESSURE PUMP ASS'Y (6 Pistons - 9/32 Dia.)

| Item No. | Part No. | No. Req'd | Description |
|----------|----------|-----------|---|
| 1 | 10442 | 1 | Copper Washer |
| 2 | 10002 | 1 | Cap Screw (1/4-20 UNC X 3/8 Lg.; Torque to 140/160 in. lbs.) |
| 3 | *24549 | 12 | Valve Guide |
| 4 | *10445 | 12 | Compression Spring (5/32 O.D. X 3/4 Lg.) |
| 5 | *12223 | 13 | Steel Ball (3/16 Dia.) |
| 6 | *10023 | 7 | Cap Screw (1/4-28 UNF X 1-1/2 Lg.; Torque to 170/180 in. lbs.) |
| 7 | *50411 | 1 | Top Plate |
| 8 | 10519 | 1 | Socket Set Screw (1/4-20 UNC X 3/8 Lg.; Torque to 65/70 in. lbs.) |
| 9 | *41048 | 1 | Valve Head |
| 10 | *41063 | 1 | Pump Barrel |
| 11 | *21628 | 6 | 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.**

Refer to any operating instructions included with this product for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

Items found in this parts list have been carefully tested and selected. **Therefore: Use only genuine Power Team replacement parts!**

Additional questions can be directed to our Technical Services Department.