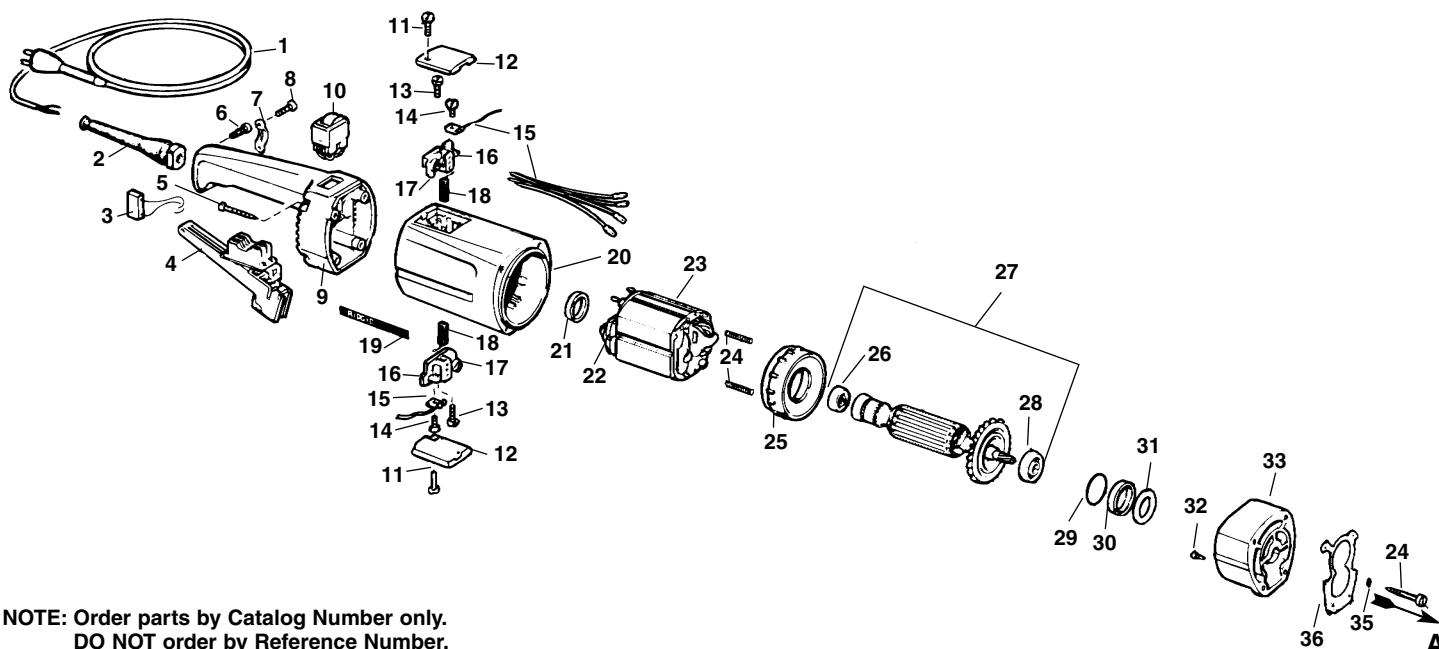
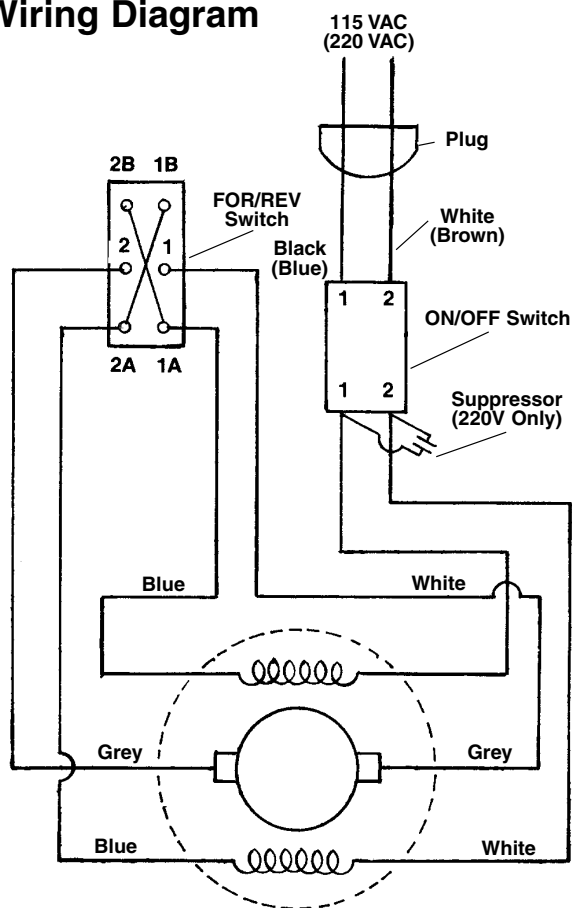
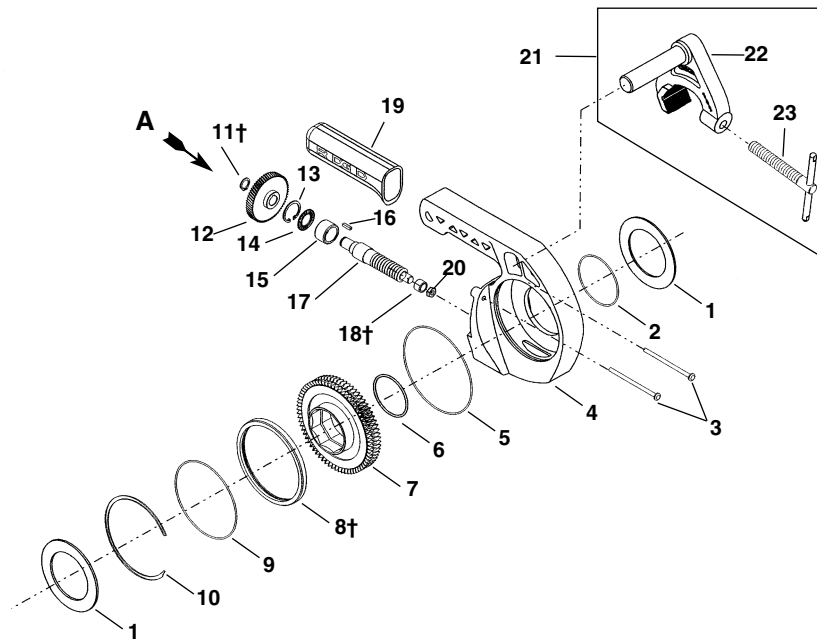




| Ref. No. | Catalog No. | Description                 |
|----------|-------------|-----------------------------|
| 1        | 20746       | Cord w/Plug (115V)          |
|          | 20276       | Cord w/Plug (230V - Europe) |
| 2        | 20286       | Sleeve                      |
| 3        | 20326       | Suppressor                  |
| 4        | 20266       | ON/OFF Switch               |
| 5        | 20586       | Screw (4)                   |
| 6        | 20576       | Screw (3)                   |
| 7        | 20296       | Cable Clamp                 |
| 8        | 20566       | Screw (2)                   |
| 9        | 20526       | Handle                      |
| 10       | 21796       | Switch (115V)               |
|          | 20516       | Switch (230V)               |
| 11       | 20546       | Screw (2)                   |
| 12       | 20496       | Cap (2)                     |
| 13       | 20556       | Screw (2)                   |
| 14       | 20406       | Screw (2)                   |
| 15       | 20396       | P.V.C. Wire (2)             |
| 16       | 20356       | Brush Holder (2)            |
| 17       | 20316       | Coil Spring (2)             |
| 18       | 20306       | Set of 2 Brushes            |
| 19       | 34382       | Name Plate                  |
| 20       | 20236       | Motor Housing               |
| 21       | 20506       | Spacer                      |
| 22       | 20386       | Lead Wire Plate             |
| 23       | 21716       | Field (115V)                |
|          | 20246       | Field (230V)                |
| 24       | 20486       | Pressure Spring (2)         |
| 25       | 20476       | Fan Housing                 |
| 26       | 20336       | Bearing                     |
| 27       | 21736       | Armature (115V)             |
|          | 20256       | Armature (230V)             |
| 28       | 47477       | Bearing                     |
| 29       | 20466       | Spring Ring                 |
| 30       | 20456       | Spacer                      |
| 31       | 20446       | Washer                      |
| 32       | 34387       | Screw (2)                   |
| 33       | 34392       | Fan Housing                 |
| 34       | 34397       | Screw (2)                   |
| 35       | 34517       | Brass Washer (2)            |
| 36       | 34512       | Gasket                      |

## Wiring Diagram





**NOTE: Order parts by Catalog Number only.  
DO NOT order by Reference Number.**

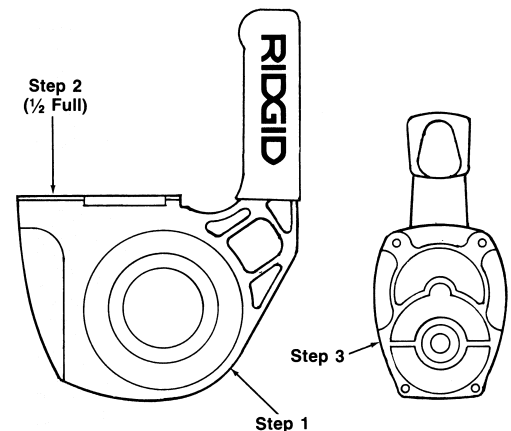
| Ref. No. | Catalog No. | Description                                                             |
|----------|-------------|-------------------------------------------------------------------------|
| 1        | 34402       | Cap (2)                                                                 |
| 2        | 34437       | O-Ring, 2 $\frac{1}{2}$ " x 2 $\frac{5}{8}$ " x $\frac{1}{16}$ " Buna N |
| 3        | 34412       | Screw (2)                                                               |
| 4        | 34417       | Gear Housing                                                            |
| 5        | 34422       | O-Ring, 4 $\frac{1}{2}$ " x 4 $\frac{5}{8}$ " x $\frac{1}{16}$ " Buna N |
| 6        | 38830       | Spring Ring                                                             |
| 7        | 34427       | Worm Gear                                                               |
| 8†       | 34432       | Ring Bearing                                                            |
| 9        | 34407       | O-Ring, 4" x 4 $\frac{1}{8}$ " x $\frac{1}{16}$ " Buna N                |
| 10       | 34442       | Spiral Ring                                                             |
| 11†      | 34447       | Retaining Ring                                                          |
| 12       | 34452       | Helical Gear                                                            |
| 13       | 34457       | Retaining Ring                                                          |
| 14       | 34462       | Thrust Bearing                                                          |
| 15       | 34467       | Needle Bearing                                                          |
| 16       | 34472       | Key                                                                     |
| 17       | 34477       | Worm                                                                    |
| 18†      | 34482       | Needle Bearing                                                          |
| 19       | 34487       | Hand Grip                                                               |
| 20       | 77710       | Hex Nut                                                                 |
| 21       | 34497       | Support Arm Assembly                                                    |
| 22       | 34502       | Arm                                                                     |
| 23       | 34507       | Screw Assembly                                                          |
|          | 34522       | Worm Gear Lubricant (2 oz.)                                             |
|          | 20826       | Carrying Case w/Insert                                                  |
|          | 34527       | Insert (only)                                                           |

## Service Notes

### Gear Head Assembly

#### Proper Oil Fill Procedure: Capacity 2 ozs.

- Step 1: Wipe Gear Cavity with oil and assemble Gear Head.  
 Step 2: Fill Worm Cavity  $\frac{1}{2}$  full of oil - install Worm.  
 Step 3: Pour remaining oil in Helical Gear Cavity - install Helical Gear.  
 Step 4: Install new Gasket and attach motor Assembly with Gear Head upright.



#### †Ref. No. 18

Hex Nut has been inserted behind Needle Bearing (Ref. No. 18) in the Gear Housing Assembly (Ref. No. 4). To replace Needle Bearing, thread 6 mm or  $\frac{1}{4}$  - 20 rod into nut and pull Bearing.

#### †Ref. No. 8

Chamfered edge of Ring Bearing must be installed (down) into Worm Gear.

#### †Ref. No. 11

Chamfered edge of Retaining Ring must be installed facing Gear.