

Figure 4

## OPERATION USING POWER DRIVE MOUNTED TOOLS

**WARNING:**  
OPERATOR SHOULD BE THOROUGHLY FAMILIAR WITH SAFETY PRECAUTIONS BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT.

**CORRECT OPERATING POSITION FOR CUTTING, THREADING AND REAMING IS TO STAND ON THE SWITCH SIDE OF THE POWER DRIVE, WITH LEFT FOOT OPERATING FOOT SWITCH. (FIGURE 6)**

### Installing 05307 Carriage, Die Head, 05308 Reamer and 05309 Cutter

1. Pull two support bars on power drive forward (Figure 7).
2. Slide two retaining ring assemblies against power drive body and secure with two set screws.
3. Secure eyebolt assembly to 05307 Carriage.
4. Slide lever arm through eyebolt assembly and secure to collar assembly with shoulder bolt.
5. Slide 05307 Carriage and collar assembly onto support bars.
6. Tighten collar assembly thumb screw into groove on support bar.
7. Insert die head post into mating hole in carriage.

**NOTE: WHEN FULLY INSERTED, SPRING LOADED BALL WILL HOLD DIE HEAD IN PLACE.**

8. Install cutter and reamer and secure with pins.
9. Install pipe.
10. Position oiler under pipe.

### Cutting Pipe with 05309 Cutter

1. Swing reamer and threader back to out-of-way position.
2. Move pipe cutter down onto pipe and move carriage with carriage lever to line up cutter wheel with mark on pipe (Figure 8).
3. Tighten cutter feed screw handle on pipe.
4. Turn REV/OFF/FOR switch to FOR (forward) position and step on foot switch.
5. Continuously turn cutter feed screw handle with both hands until pipe is cut off.
6. Release foot switch and turn REV/OFF/FOR switch to OFF position.
7. Return pipe cutter to out-of-way position.

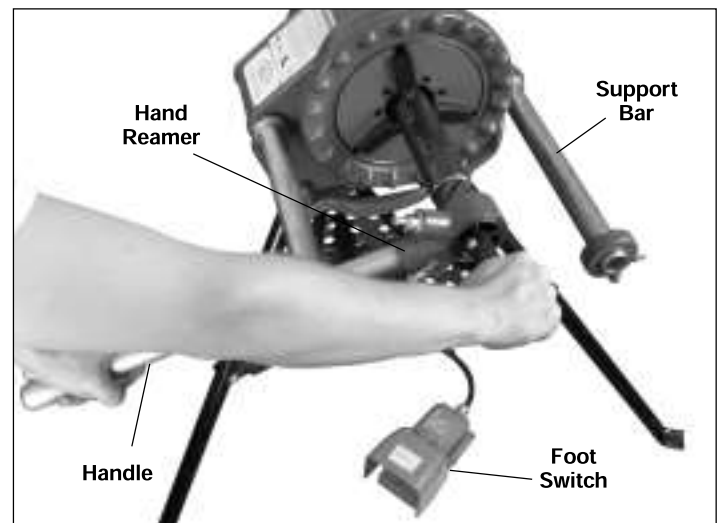


Figure 5

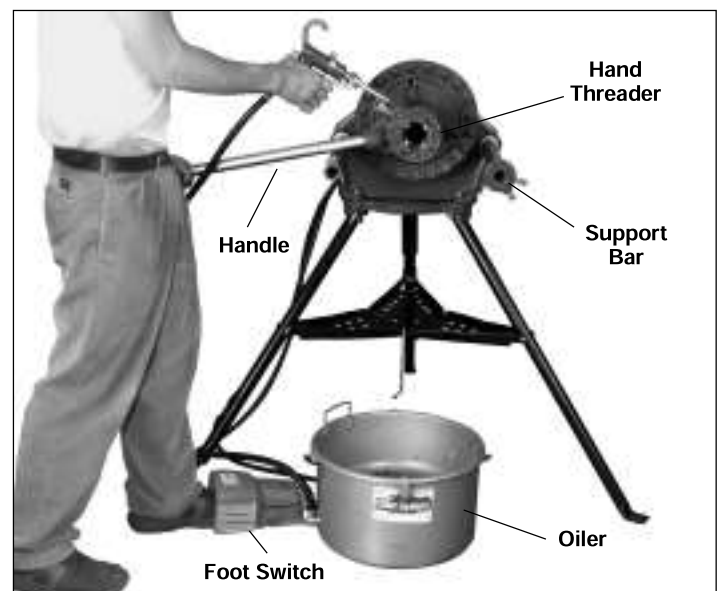


Figure 6

### Reaming Pipe with 05308 Reamer

1. Swing die head and cutter back to out-of-the-way position (Figure 10).
2. Move reamer arm down into reaming position.
3. Extend reamer by pressing latch and sliding knob toward pipe until latch engages bar.
4. Turn REV/OFF/FOR switch to FOR and complete reaming by pushing carriage lever with right hand.
5. Position reamer into pipe and complete reaming by pushing carriage lever with right hand.
6. Retract reamer bar and return reamer to out-of-way position.
7. Release foot switch and turn REV/OFF/FOR switch to OFF position.
8. Release speed chuck handwheel and centering head from pipe.
9. Remove pipe.

### Threading Pipe with the R811 Die Head

1. Install die set. Refer to "Installing Dies" (page 8) procedure.
2. Swing cutter and reamer to out-of-way position (Figure 9).
3. Lower die head into threading position.
4. Apply Reed Threadguard Cutting Oil to pipe end.
5. Turn REV/OFF/FOR switch to FOR position and step on foot switch.
6. Engage dies with pipe using carriage lever and oil dies with plenty of Reed Threadguard Cutting Oil until thread is completed.
7. When thread is complete, raise throwout lever to the

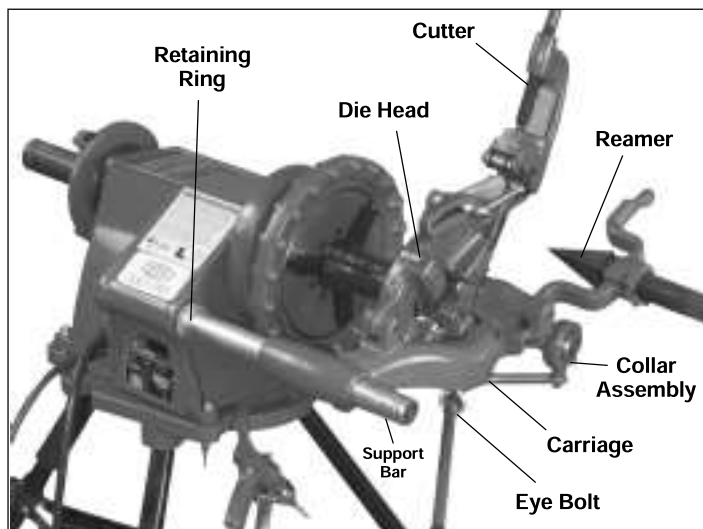


Figure 7 - 5301PD Power Drive with accessories.

open position, **retracting the dies** on the R811 Universal Die head.

8. Release foot switch and turn REV/OFF/FOR switch to OFF position.
9. Move carriage lever away from pipe end and return die head to up and out-of-way position.

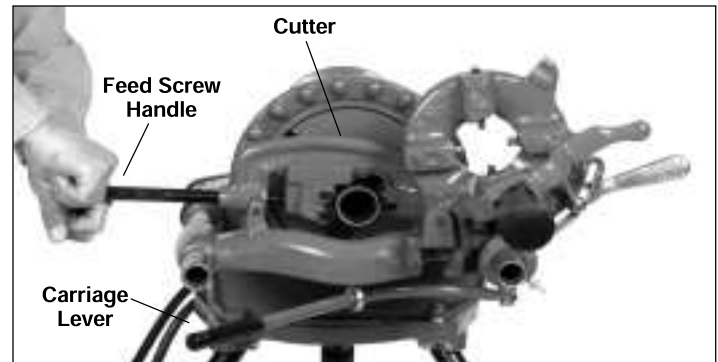


Figure 8 - Cutting pipe with cutter

### Installing Dies in the R811 Universal Die Head

The R811 Universal Die Head requires one set of 4 Universal Dies to thread pipe ranging from 1/8" to 2". One set of dies is required for each of the following pipe size ranges:

- 1/8"
- 1/4" and 3/8"
- 1/2" and 3/4"
- 1" through 2"

**NOTE: BOLT THREADING REQUIRES A SEPARATE SET OF DIES FOR EACH BOLT SIZE.**

1. Lay die head on bench with numbers face up.
2. Flip throwout lever to OPEN position.
3. Loosen clamp lever approximately three turns.
4. Lift tongue of clamp lever washer up out of slot under size bar. Slide throwout lever all the way to end of slot in the OVER direction indicated on size bar.
5. Remove dies from die head.
6. Die numbers 1 through 4 must agree with those on die head.
7. Insert dies to mark on side of die head.
8. Slide throwout lever back so that tongue of clamp lever washer will drop in slot under size bar.
9. Adjust die head size bar until index line on lock screw or link is aligned with proper size mark on size bar.
10. Tighten clamp lever. For bolt threads, align index line with bolt line on size bar.
11. If oversize or undersize threads are required, set the index line in direction of OVER or UNDER size mark on size bar.

## MAINTENANCE INSTRUCTIONS

**WARNING: ALWAYS UNPLUG POWER CORD BEFORE SERVICING POWER DRIVE.**

### JAW INSERT REPLACEMENT

**IMPORTANT: WHEN TEETH ON JAW INSERTS BECOME WORN AND FAIL TO HOLD PIPE OR ROD DURING OPERATION, REPLACE ENTIRE SET OF JAW INSERTS. CLEAN TEETH OF JAW INSERTS DAILY WITH WIRE BRUSH.**

1. Place screw driver in insert slot and turn 90 degrees in either direction (Figure 11).
2. Place insert sideways on locking pin and press down as far as possible.
3. Hold insert down firmly with screwdriver, turn teeth face up.



Figure 10

### LUBRICATION

Proper lubrication is essential to trouble-free operation and long life of power drive.

Grease main shaft bearing (#95414, #95415) every 2 to 6 months depending on amount of power drive use. Grease fittings are provided on side base, one at each end of shaft. Use a good grade of cup grease.

### MOTOR BRUSH REPLACEMENT

Check motor brushes (#95458) every 6 months and replace when worn to less than 1/2 inch. If commutator (#95420) is worn, turn outer dimension of commutator and undercut mica before replacing brushes.



Figure 9 - Threading Pipe with R811 Die Head

### MOTOR REPLACEMENT

**WARNING: ALWAYS UNPLUG POWER CORD BEFORE SERVICING POWER DRIVE.**

1. Unplug motor receptacle from switch box.
2. Remove 2 screws (#35411) holding motor.
3. Loosen lock screw (#35403) in body at neck of motor and lift motor out.

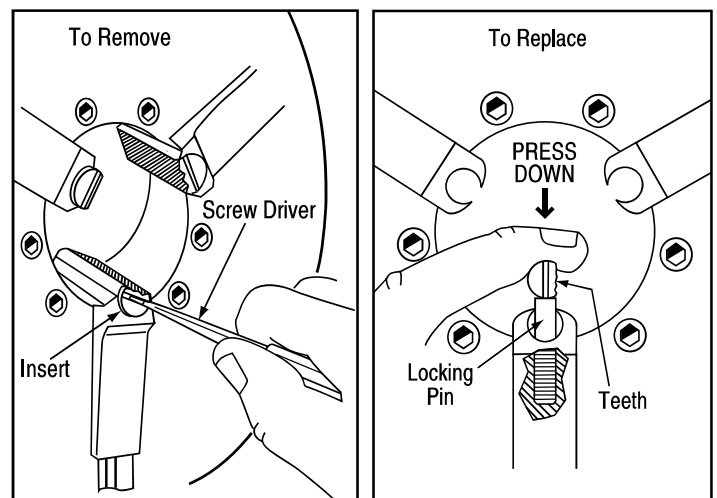
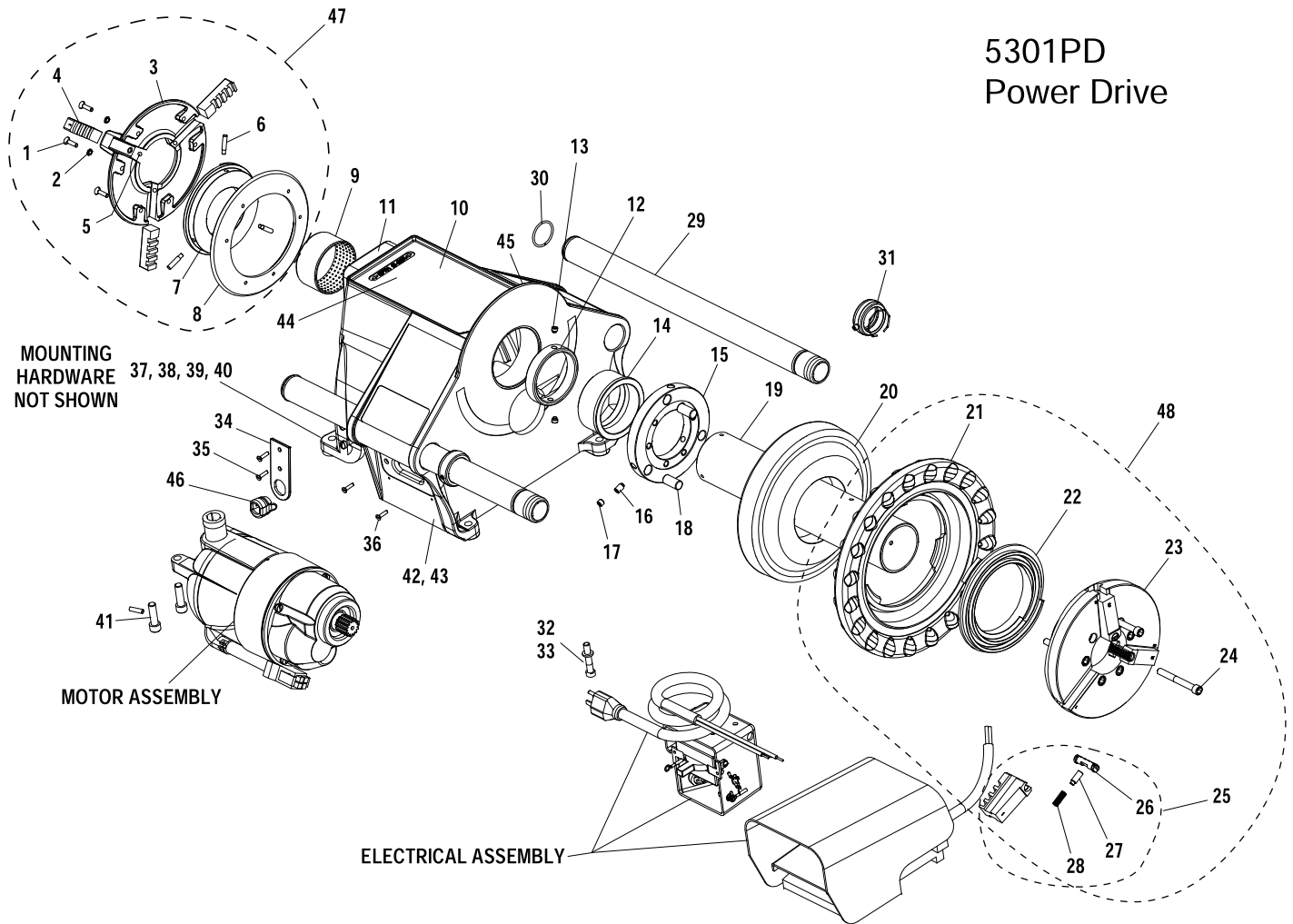


Figure 11

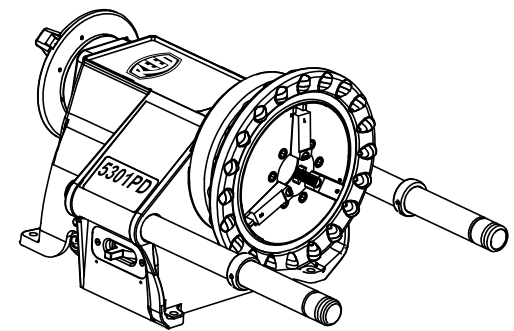


5301PD  
Power Drive

**Parts List**

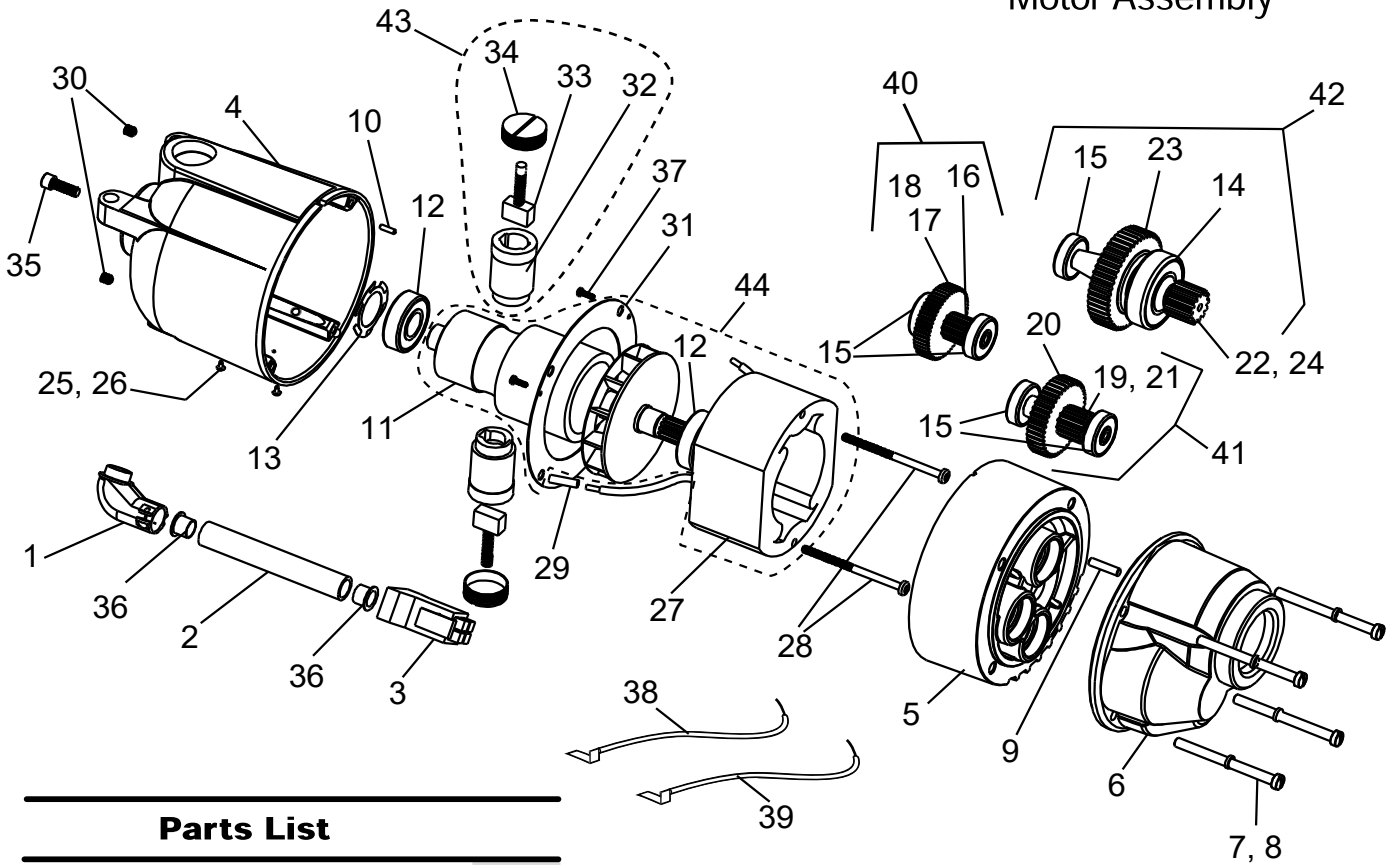
Ref. No.	Description	Item Code	Qty.	Ridgid #
1	SCREW, SLOTTED	35400	6	46790 6/Pk
2	LOCK WASHER	35401	6	40270 6/Pk
3	CENTERING HEAD	95400	1	43735
4	REAR JAW SET	95882	1	46500
5	BALL BEARING	35406	3	—
6	STEP PIN	95411	3	45260 5/Pk
7	SCROLL, REAR	95412	1	44095
8	BACK PLATE	95401	1	43740
9	REAR BEARING	95414	1	—
10	BODY	95571	1	—
11	GREASE FITTING	40338	1	46860
12	THRUST RING	95419	1	45345
13	SET SCREW	35404	2	33785 5/Pk
14	FRONT BEARING	95415	1	—
15	DRIVE RING	95427	1	30027
16	SET SCREW	35412	3	45265 3/Pk
17	SET SCREW	35413	3	45300 5/Pk
18	DRIVE DOWEL PIN	35415	3	30022 3/Pk
19	DRIVE SHAFT	95413	1	44100
20	RING GEAR	95409	1	30017
21	HAND WHEEL	95403	1	89150

Ref. No.	Description	Item Code	Qty.	Ridgid #
22	SCROLL, FRONT	95404	1	43540
23	CAP	95405	1	43525
24	BOLT, SHCS	35405	6	45295 6/Pk
25	JAW SET, FRONT	95552	1	44090
26	JAW INSERT	95421	3	44715
27	PIN	95422	3	—
28	COMPRESSION SPRING	95451	3	—
29	SUPPORT BAR	95483	2	44425
30	SPRING RING	95424	2	44525
31	RETAINING RING ASSEMBLY	95880	2	44725
32	LOCK WASHER	35429	1	—
33	BOLT, SHCS	35403	1	—
34	STRAIN RELIEF PLATE	95423	1	45825
35	SCREW	35407	2	44735 5/Pk
36	SCREW	35408	2	45280
37	BOLT, HEX	35416	4	46670 5/Pk
38	FLAT WASHER	30011	4	44230 5/Pk
39	LOCK WASHER	30033	4	40930 5/Pk
40	WING NUT	23382	4	45385
41	BOLT, SHCS	35411	2	46745 5/Pk



Ref. No.	Description	Item Code	Qty.	Ridgid #
42	DRIVE SCREW	37710	4	—
43	NAME PLATE	95418	1	—
44	WARNING STICKER	95578	1	88690
45	GREASE FITTING	35450	1	—
46	CORD GROMMET	95429	1	46735
47	REAR JAW ASSEMBLY	95476	1	—
48	FRONT HANDWHEEL SCROLL / JAW ASSEM.	95484	1	—
BODY BEARINGS AND HARDWARE INCLUDES:				
9, 10, 11, 14, 39, 40, 41, 45, 46,		95569	1	—

## 5301PD Motor Assembly



### Parts List

Ref. No.	Description	Item Code	Qty.	Ridgid #
1	90° CONNECTOR	95452	1	46900
2	CONDUIT	95453	1	—
3	PLUG	95454	1	46830
4	MOTOR HOUSING	95406	1	—
5	FAN HOUSING	95407	1	43165
6	GEAR COVER	95408	1	42875
7	LOCK WASHER	35428	4	45150 5/Pk
8	SCREW	35427	4	45075 5/Pk
9	DOWEL PIN	95417	1	—
10	DOWEL PIN	35430	1	—
11	ARMATURE W/FAN	95572	1	44010
12	BEARING	98855	2	44565
13	FINGER DISK SPRING	95445	1	44580
14	BEARING	98845	1	45315
15	BEARING	98846	5	45060
16	GEAR SHAFT - 1ST	95446	1	44985
17	SPUR GEAR	98809	1	44985
18	KEY	48807	1	44985
19	GEAR SHAFT - 2ND- 38 RPM	95448	1	45005
	- 57 RPM	95564	1	45005
20	SPUR GEAR	95447	1	45005
21	KEY	48810	1	45005
22	GEAR SHAFT - 3RD	95450	1	45370
23	SPUR GEAR - 38 RPM	95449	1	45370
	- 57 RPM	95563	1	45370
24	KEY	48816	1	45370
25	NAME PLATE	95456	1	—
26	DRIVE SCREW	30133	2	85920 5/Pk

Complete Motor Assembly  
38 RPM 95481  
57 RPM 95499

Ref. No.	Description	Item Code	Qty.	Ridgid #
27	FIELD	95573	1	86690 2/Pk
28	FIELD SCREW	98848	2	44555 2/Pk
29	INSULATOR TUBE	98885	2	—
30	SET SCREW	30018	2	39770 5/Pk
31	FAN PLATE	95474	1	—
32	BRUSH HOLDER	95455	2	—
33	BRUSH ASSEMBLY, PAIR	95570	1	44540
34	BRUSH CAP	95459	2	—
35	LOCK SCREW	35435	1	—
36	BUSHING PLASTIC	35434	2	—
37	SCREW	35449	3	—
38	BRUSH LEAD, RED w/TERMINAL	95580	1	—
39	BRUSH LEAD, WHITE w/TERMINAL	95579	1	—
40	SHAFT ASSEMBLY 1	95478	1	44985
41	SHAFT ASSEMBLY 2 - 38 RPM	95479	1	45005
	57 - RPM	95549	1	—
42	SHAFT ASSEMBLY 3 - 38 RPM	95480	1	45370
	57 RPM	95550	1	—
43	BRUSH/HOLDER/CAP ASSEMBLY	95585	2	—
44	FIELD & ARMATURE	95587	1	—

See  
Ref. No. 43

See  
Ref. No. 40

See  
Ref. No. 41

See  
Ref. No. 42