

MODELS 3800M2, 3800P2, 3800Q2, 3800R2, 3800S2 AND 3800U2
NONREVERSIBLE ASSEMBLY MACHINE MOTORS
MODELS 3840M2, 3840P2, 3840Q2, 3840R2, 3840S2 AND 3840U2
REVERSIBLE ASSEMBLY MACHINE MOTORS
and
MODELS 3850M2, 3850P2, 3850Q2, 3850R2, 3850S2 AND 3850U2
REVERSIBLE ASSEMBLY MACHINE MOTORS
WITH OFFSET HEAD

Always operate, inspect and maintain this Motor in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.

FOR TOP PERFORMANCE AND MAXIMUM DURABILITY OF PARTS, OPERATE THIS MOTOR AT 90 psig (6.2 bar/620 kPa) AIR PRESSURE WITH 3/4" (19 mm) AIR SUPPLY HOSE.

▲WARNING

Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this Motor, or before performing any maintenance on this Motor. Failure to do so could result in injury.

LUBRICATION

Oil: Ingersoll-Rand No. 50 Lubricant.

Grease: Ingersoll-Rand No. 28 Lubricant.

We recommend the use of an air line lubricator in the air supply line. Attach the Ingersoll-Rand No. C31-06-G00 Filter-Lubricator-Regulator Unit as close to the Motor as practical. These units have a 3/4" pipe tap inlet and outlet. The C31-06-G00 has a 3/4 qt (709 mL) capacity. Larger capacity units may be used, but do not use a unit having less than 3/4" pipe tap inlet and outlet.

After each forty hours of operation, or as experience indicates, lubricate the Motor through the Grease Fitting (34). Do not grease excessively. Too much grease in the Gear Case (33) will cause heating. Grease leakage from the spindle end is also an indication that an excessive amount of grease has accumulated within the Gear Case.

NOTICE

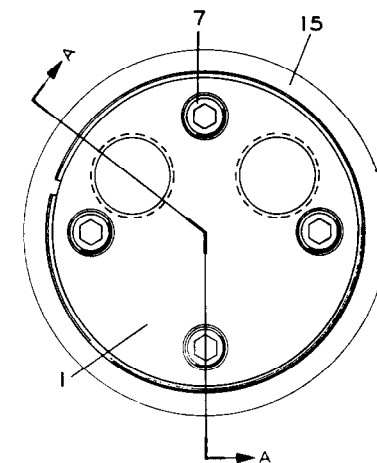
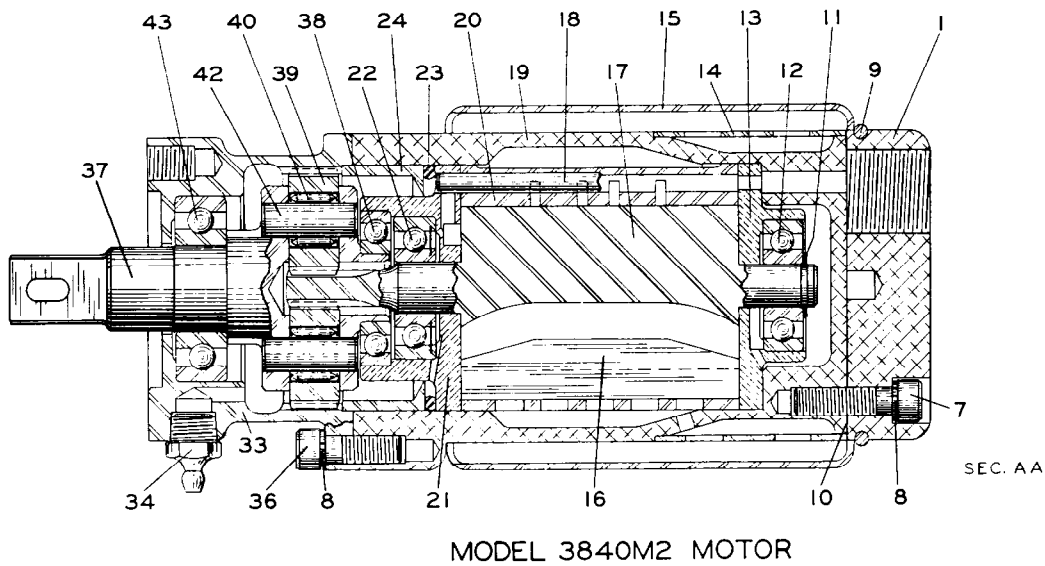
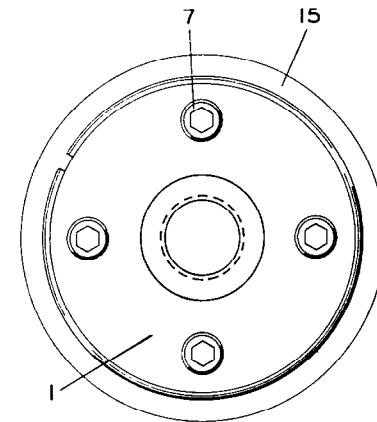
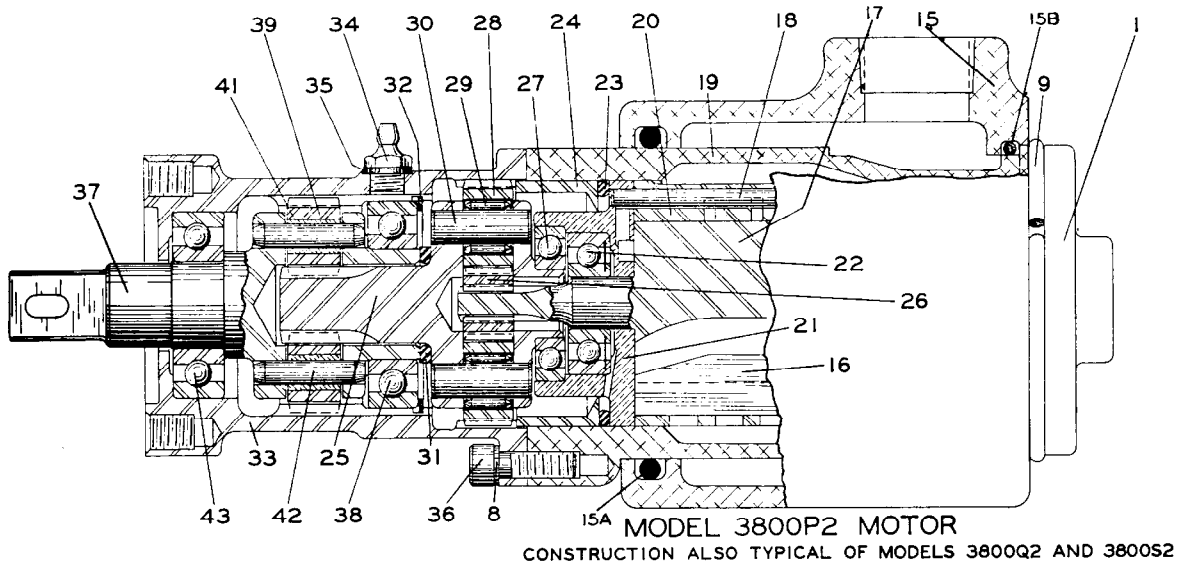
The use of other than genuine Ingersoll-Rand replacement parts may result in decreased Motor performance and increased maintenance, and may invalidate all warranties.

Refer All Communications to the Nearest
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INGERSOLL-RAND®
AIR MOTORS



(Dwg. TPA189-1)

PART NUMBER FOR ORDERING

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| | | | | | |
|------|--|------------|------|---|---------------|
| | Backhead Assembly | R3820-A202 | • 21 | Front End Plate | R3800-11 |
| 1 | Backhead | | • 22 | Front Rotor Bearing | R1-24A |
| | for Series 3800 | R3800-102 | • 23 | Motor Retaining Ring | 34U-216 |
| | for Series 3840 and 3850 | R3840-102 | 24 | Motor Retainer | R3800-118 |
| 7 | Backhead Cap Screw (4) | 510-638 | | Gear Head Assembly | |
| 8 | 1/4" Lock Washer (7) | 8U-58 | | for P ratio | R38P-A216 |
| • 9 | Exhaust Deflector Retaining Ring | R4-323 | | for Q ratio | R380-A216 |
| • 10 | Backhead Gasket | | | for R ratio | R3800R2-A216 |
| | for Series 3800 | R3800-283 | | for S ratio | R380S-A216 |
| | for Series 3840 and 3850 | R3840-283 | | for U ratio | R3800U2-A216 |
| • 11 | Rotor Bearing Retainer | 404-118 | • 25 | Gear Head | |
| • 12 | Rear Rotor Bearing | R1-24 | | for P ratio | R38P-216 |
| • 13 | Rear End Plate | R3800-12 | | for Q ratio | R380Q-216 |
| ◆ 14 | Muffler | R38-23 | | for R ratio | R3800R2-216 |
| 15 | Exhaust Deflector | | | for S ratio | R380S-216 |
| | with slotted front exhaust | R3800-23 | | for U ratio | R3800U2-216 |
| | with 3/4" Pipe Tap exhaust | R3800-A123 | • 26 | Rotor Pinion (for P ratio) (19 teeth) | R38P-17 |
| 15A | Deflector Front Seal | | 27 | Gear Head Bearing | 4E-510 |
| | (used with R3800-A123) | R3800-210 | • 28 | Gear Head Planet Gear (2) | |
| 15B | Deflector Rear Seal | | | for P ratio (22 teeth) | R38P-10 |
| | (used with R3800-A123) | 10BMP-604 | | for Q ratio (25 teeth) | R380Q-10 |
| • 16 | Vane Packet (set of 5 Vanes) | R38-42-5 | | for R ratio (26 teeth) | WBT380NL-10 |
| • 17 | Rotor | | | for S or U ratio | |
| | for M, P, S or U ratio (7 teeth) ... | R3800M-53 | | (27 teeth) | 4E-10A |
| | for Q ratio (11 teeth) | R3800Q-53 | • 29 | Planet Gear Bearing (2) | 8U-654 |
| | for R ratio (9 teeth) | R3800R2-53 | • 30 | Gear Head Planet Gear Shaft (2) | 8U-191 |
| 18 | Cylinder Dowel | R38KT-198 | • 31 | Gear Head Spacer | R38P-80 |
| 19 | Motor Housing | R3800-40 | 32 | Spindle Bearing Retainer | FMC2-280 |
| • 20 | Cylinder | | 33 | Gear Case | |
| | for Series 3800 | R3800-3 | | for M ratio | ET3802M-A37 |
| | for Series 3840 and 3850 | R3840-3 | | for P, Q, R, S or U ratio | E3802P-A37-37 |

◆ Muffler (14) is not used with tapped Exhaust Deflector.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

PART NUMBER FOR ORDERING

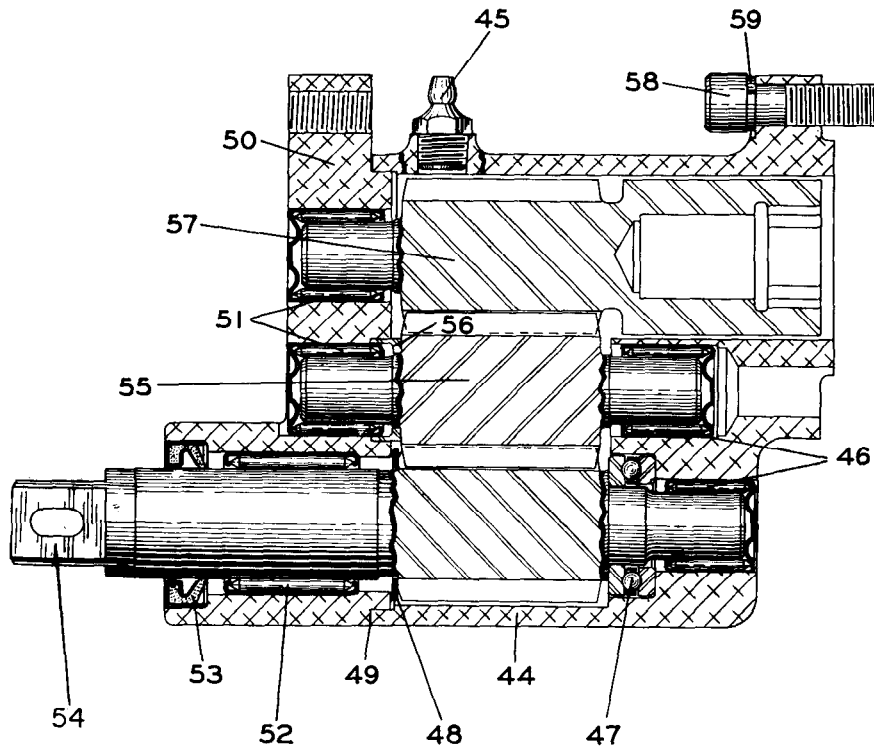
PART NUMBER FOR ORDERING

| | | | | | | |
|------|---|---------------|---|----|---|-----------|
| 34 | Grease Fitting for M ratio | 23-188 | • | 38 | Spindle Rear Bearing for M ratio | 4E-510 |
| | for P, Q, R, S or U ratio | R1-188 | | | for P, Q, R, S or U ratio | R38P-97 |
| 35 | Grease Fitting Washer (for P, Q, R, S or U ratio) | R3-92A | • | 39 | Spindle Planet Gear for M ratio (2) (27 teeth) | 4E-10A |
| 36 | Gear Case Cap Screw (3) | R0H-354 | | | for P, Q, R or S ratio (3) (12 teeth) | R38P-9 |
| | Spindle Assembly for M ratio with 3800M-8 Spindle | R3800M-A8 | | | for U ratio (3) (13 teeth) | R3800U2-9 |
| | with 3800M-208 Spindle | R3800M-A208 | | 40 | Spindle Planet Gear Bearing (for M ratio) (1 for each Spindle Planet Gear) | 8U-654 |
| | for P, Q, R or ratio with 3800P-8 Spindle | R3800P-A8 | • | 41 | Spindle Planet Gear Bushing (for P, Q, R, S or U ratio) (1 for each Spindle Planet Gear) | R38P-500 |
| | with 3800P-208 Spindle | R3800P-A208 | | | Spindle Planet Gear Shaft for M ratio (2) | 8U-191 |
| | with 3800P-308-1 Spindle | R3800P-A308-1 | | | for P, Q, R, S or U ratio (3) | R38P-190 |
| | for U ratio | R3800U2-A8 | | 42 | Spindle Planet Gear Shaft for M ratio (2) | 8U-191 |
| • 37 | Spindle for M ratio 5/8" square drive | R3800M-8 | | | for P, Q, R, S or U ratio (3) | R38P-190 |
| | 1/2" square drive | R3800M-208 | | 43 | Spindle Front Bearing | 4UA9-593 |
| | for P, Q, R or S ratio 5/8" square drive, standard length (extends 1-1/4" from gear case face) | R3800P-8 | • | * | Air Strainer (1 for Nonreversible Motors; 2 for Reversible Motors) | R38-565A |
| | 1/2" square drive, standard length | R3800P-208 | | | | |
| | 1/8" square drive (1" longer than standard) | R3800P-308-1 | | | | |
| | for U ratio | R3800U2-8 | | | | |

* Not illustrated.

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OFFSET HEAD ASSEMBLY (FOR SERIES 3850 MOTORS)



(Dwg. TPB195)

PART NUMBER FOR ORDERING

| | | |
|------|---|---------------|
| | Offset Head Assembly | R3810P2-A147 |
| 44 | Offset Gear Housing | R3810-147 |
| 45 | Grease Fitting | 23-188 |
| 46 | Gear Housing Bearing (2) | R3810-143 |
| 47 | Socket Driver Thrust Bearing | R3810-105 |
| • 48 | Socket Driver Thrust Washer | R3810-706 |
| • 49 | Gear Housing Cover Gasket | R3810-592 |
| 50 | Offset Gear Housing Cover | R3810-148 |
| 51 | Gear Housing Cover Bearing (2) | R3810-143 |
| • 52 | Socket Driver Front Bearing | R3810-593 |
| • 53 | Socket Driver Seal | R3810-271 |
| • 54 | Socket Driver | |
| | 5/8" square drive | R3810-145-5/8 |
| | 1/2" square drive | R1811-145-1/2 |
| 55 | Intermediate Gear | R3810-142 |
| 56 | Intermediate Gear Spacer | R3810-149 |
| 57 | Drive Gear | R3810-146 |
| * | Housing Cover Small Cap Screw (2) | 510-638 |
| * | Housing Cover Large Cap Screw (2) | 34U-103 |
| * | 1/4" Lock Washer (2) | 8U-58 |
| * | 5/16" Lock Washer (2) | 34U-58 |
| 58 | Housing Cap Screw (4) | 34U-103 |
| 59 | 5/16" Lock Washer (6) | 34U-58 |

* Not illustrated.

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MAINTENANCE TOOLS

| TOOL NUMBER FOR ORDERING | TOOL NAME FOR ORDERING | OPERATION |
|-----------------------------|-------------------------------------|---|
| P25-228 | Grease Gun | Lubrication. |
| 33116 | Needle Bearing Inserting Tool | Installing the Planet Gear Bearings (29 or 40) in the Planet Gears (28 or 39). |

NOTES

