

How To Use This Manual

This manual provides detailed instructions on motor mount installation. Use the table of contents below to locate required information.

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CAREFULLY FOLLOW THE INSTRUCTIONS IN THIS MANUAL FOR OPTIMUM PERFORMANCE AND TROUBLE FREE SERVICE.

Introduction

The following instructions apply to the assembly of motor mounts to Type AFX gear drives.

WARNING: Consult applicable local and national safety codes for proper guarding of rotating members. Lock out power source and remove external loads from drive before servicing drive or accessories.

Standard Assembly

The motor mount should be assembled in the 12 o'clock position relative to the gear drive. Refer to Figures 1 and 2 for illustration.

Motor Mount & Plate Installation

- A. Install adjusting screws in motor mount. Based on the drive size, remove the high speed head bolts as shown in Figure 1. Note the following before proceeding:
 - SIZES 273 & 284AFX** — Use the oil level plug on the side of the drive near the low speed shaft for checking oil level, due to interference of the motor mount with the dipstick.
 - SIZES 284 THRU 357AFX** — Align farthest right hole of motor mount to farthest right hole of drive when assembling.
 - SIZE 388 AFX** — Align slotted hole in lower left hand corner of motor mount with farthest left hole in drive when assembling.
- B. Bolt the motor mount to the drive as illustrated in Figure 1 using the longer fasteners provided. Hand tighten fasteners.
- C. Assemble motor plates on adjusting screws furnished.

Support Bracket Installation

- A. A support bracket is furnished when motor frame size is 250T or larger and for Size 273. When furnished, align the support bracket to the motor mount as shown in Figure 2.

Figure 1

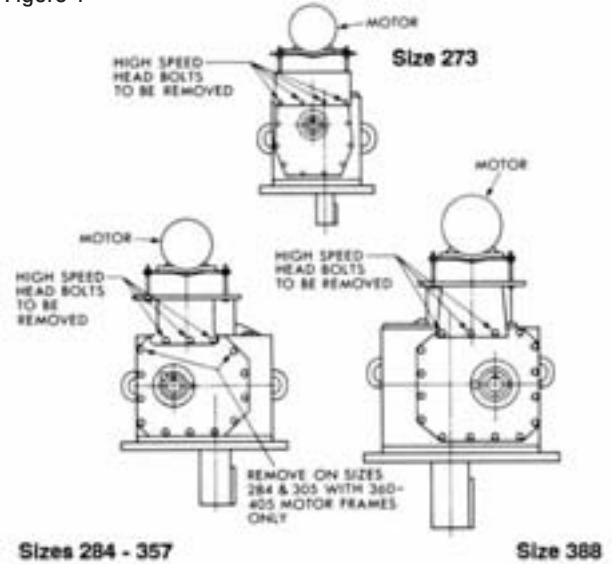
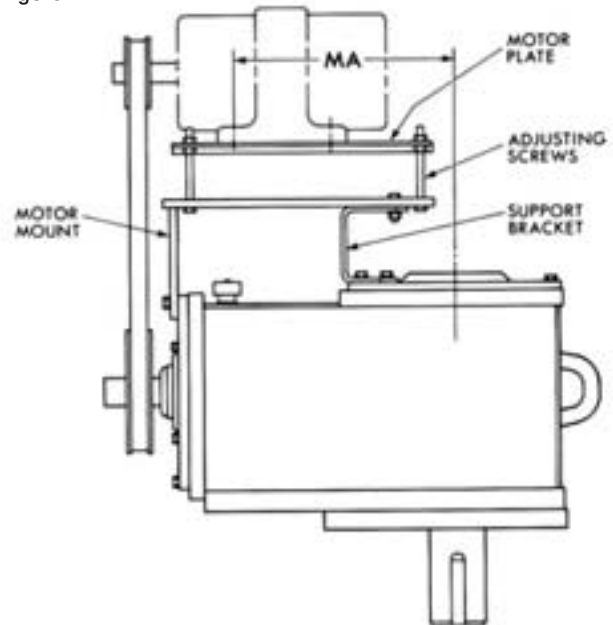


Figure 2



- B. Identify and remove required fasteners from upper low speed bearing carrier to secure support bracket to the drive. Bolt support bracket to motor mount using the fasteners, lock washers and nuts provided. Hand tighten fasteners.

SIZE 273 = Remove 2 fasteners.

ALL OTHERS = Remove 3 fasteners.

- C. Using the longer fasteners provided, bolt the support bracket to the drive. Torque all fasteners to values specified in Table 1 in the following order:

TABLE 1 — Fastener Tightening Torques (lb-in)

| DRIVE SIZE | Motor Mount & Support Bracket to Drive Housing | Support Bracket to Motor Mount |
|----------------|--|--------------------------------|
| 273, 284 & 305 | 825 | 825 |
| 326 & 357 | 1640 | 825 |
| 388 | 1640 | 1640 |

TABLE 2 — Motor Location (MA) (Inches)

| DRIVE SIZE | Motor Frame Size | | | | | | | | |
|------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 56 | 140 | 180 | 210 | 250 | 280 | 320 | 360 | 400 |
| 273 | 13.80 | 14.30 | 13.80 | 13.06 | 12.30 | 11.80 | 11.30 | ... | ... |
| 284 | ... | 17.36 | 16.86 | 16.10 | 15.36 | 14.86 | 14.36 | 13.98 | 13.22 |
| 305 ★ | ... | 20.08 | 19.58 | 18.82 | 18.08 | 17.58 | 17.08 | 16.68 | 15.94 |
| 326 † | ... | 24.50 | 24.00 | 23.24 | 22.50 | 22.00 | 21.50 | 20.88 | 20.12 |
| 357 † | ... | 26.74 | 26.24 | 25.48 | 24.74 | 24.24 | 23.74 | 23.12 | 22.36 |
| 388 | ... | 33.20 | 32.70 | 31.94 | 31.20 | 30.70 | 30.20 | 29.50 | 28.74 |

★ Add .12" to MA for double reduction drives.

† Add .38" to MA for double reduction drives.

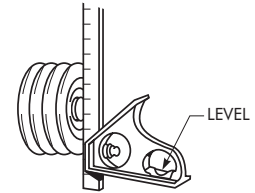
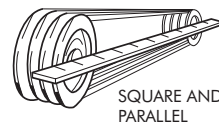
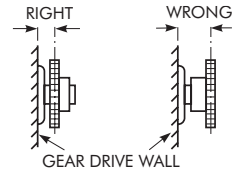
1. Motor mount to high speed head fasteners.
2. Support bracket to low speed bearing carrier fasteners.
3. Motor mount to support bracket fasteners.

Motor Mount Installation

- A. Motor plates are pre-drilled for standard foot-mounted NEMA motors that are rated within the capacity of the drive and within the drive size range. Use dimension MA from Figure 2 and Table 2 to locate the motor properly.
- B. Install motor foundation bolts. If necessary, adjust the motor plate upward temporarily or remove the plate completely. Shims to a maximum of 1.5" thick may be used between the motor plate and motor feet to increase the shaft center distance. **DO NOT SHIM MOTOR MORE THAN 1.5".**

Mount Sheaves & Belts

- A. Mount power take-offs as close to the drive housing as possible to avoid undue bearing load and shaft deflection.
- B. Align the output shaft of the drive square and parallel with the driven shaft by placing a straightedge across the face of the sprockets or sheaves as illustrated.



- C. **DO NOT** overtighten belts or chains. Adjust chains to manufacturers specifications. Adjust belts as follows:
The ideal tension is the lowest tension at which the belt will not slip under peak load conditions. Check the belt tension frequently during the first 24 to 48 hours of run-in operation. Overtightening belts will shorten belt and bearing life. Keep belts free from foreign material which may cause slippage.
- D. Inspect the V-drive periodically; tighten the belts if they are slipping.