

Introduction

The following instructions apply to the assembly of C-Face Motor Adapters to Type AFX and AFH drives. The adapter is assembled to a special high speed seal cage.

In addition to standard mechanic's tools, a torque wrench, hex socket driver and feeler gauges are required.

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

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

Disassembly

1. Remove the high speed seal cage and fasteners. Discard the seal cage, oil seal, grease fitting and seal cage fasteners. Save the shim gaskets for reference when reassembling, but do not reuse them.
2. Clean the shaft extension, but DO NOT allow abrasive material to mar the shaft surface polished by the seal. Clean all gasket material from the seal cage face of the drive housing.

Assembly — (Figure 1 & Table 2)

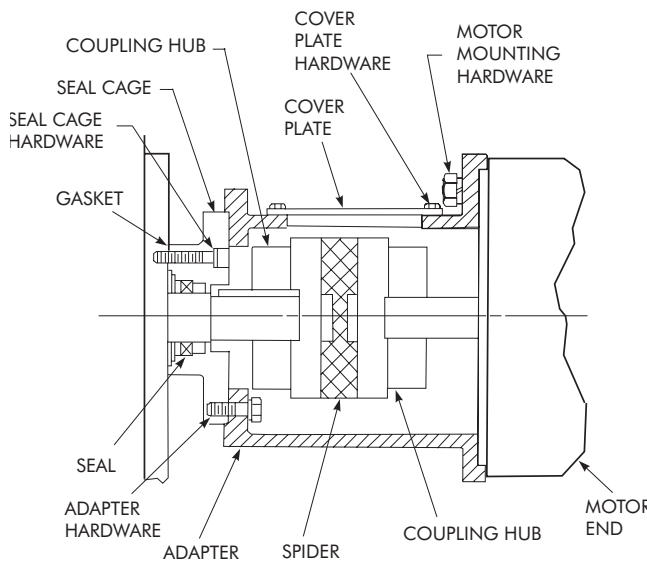


Figure 1

1. Coat seal O.D. with Permatex #3 or equivalent.
2. See Figure 2. Position seal squarely in seal cage with the spring toward the bearing. Place a square ended cylindrical tool against the seal and press or lightly tap the tool (not the seal) until the seal is seated.

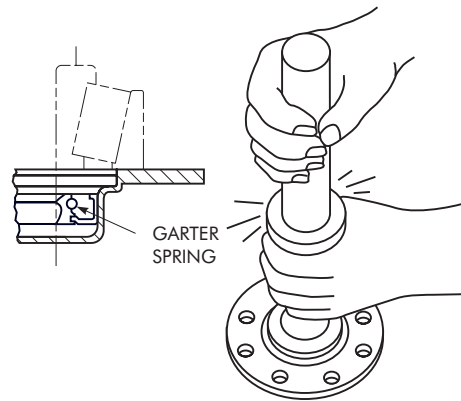


Figure 2

3. Replace the old gasket with a new one of the same thickness.

CAUTION: Protect seal lips from the sharp edges of the keyway by wrapping thin strong paper around the shaft and coating the paper and the seal lips with grease before sliding the seal on or off the shaft. Do not expand the seal lips more than .03" diameter.

4. Install seal cage in register if provided. Insert fasteners with lock washers and tighten finger tight.
5. Certain drive sizes have cages without a register. The seal cage and seal must be centered on the shaft. Use a feeler gauge to check clearances at 90° intervals between shaft and seal cage bore. Lightly tap the cage and center within .004".
6. Cross tighten fasteners to the torque specified in Table 1.
7. Install motor adapter to seal cage. Position adapter so cored opening will allow easy access to coupling. Insert fasteners with lock washers and tighten to torque specified in Table 1.
8. Mount drive coupling hub to gear drive shaft, locate per

TABLE 1 — Tightening Torques (lb-in)
DO NOT LUBRICATE FASTENERS

Thread Dia-UNC ★	Seal Cage	Adapter	Motor
.3125-18	145	...	...
.375-16	255	330	330
.500-13	...	...	825

★ SAE Grade 5 or ASTM A449 non-lubricated fasteners.

9. Mount motor coupling hub to motor shaft, locate per Table 2. Tighten coupling hub set screw.
10. Mount coupling spider on motor coupling hub.
11. Assemble motor to motor adapter, engage coupling and tighten motor mounting fasteners to torque specified in Table 1.
12. Mount cover plate over cored opening in motor adapter. Tighten fasteners.

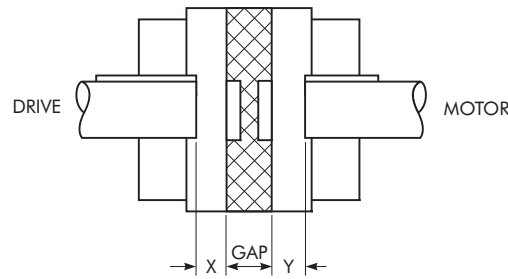


TABLE 2 — Coupling Mounting Dimensions for Standard Motor Frames — Inches ★

Motor Frame Size	Lovejoy Coupling Size	Drive Size							
		273		284		305		326	
		X	Y	X	Y	X	Y	X	Y
Double Reduction									
56C	L110	...	...	...	...	...	...	...	...
143TC-145TC	L110	...	...	...	...	...	...	...	...
182TC-184TC	L190	0	.62	...	...	...	...	...	...
213TC-215TC	L190	.25	.38	0	.12	.12	.12	...	...
254TC-256TC	L190	0	0	0	0	.12	0	...	...
284TC-286TC	L190	.12	0	.06	.06	.12	.12	...	...
Triple Reduction									
56C	L110	0	.18	...	...	...	...	...	...
143TC-145TC	L110	0	.12	0	.15	...	...	...	...
182TC-184TC	L190	0	.62	.12	.54	0	.60	0	.66
213TC-215TC	L190	.25	.38	.25	.40	.12	.50	0	.16
254TC-256TC	L190	...	...	0	0	0	0	0	.04
284TC-286TC	L190	...	...	...	...	.10	0	.06	.10
Quadruple Reduction									
56C	L110	.38	.48	.50	.48	.25	.46	0	.20
143TC-145TC	L110	.38	.42	.50	.40	.25	.40	0	.16
182TC-184TC	L190	...	...	.66	.75	.50	.78	.25	.40
213TC-215TC	L190	...	...	...	...	...	...	.25	.40
254TC-256TC	L190	...	...	...	...	...	...	...	...
284TC-286TC	L190	...	...	...	...	...	...	...	...

★ Dimension X is the amount that the end of the drive hub coupling bore overhangs the shaft end.
 Dimension Y is the amount that the end of the motor hub coupling bore overhangs the shaft end.
 Zero (0) dimensions for X or Y indicates that the end of the coupling hub bore is flush with the end of the shaft.