

## General

Mounting of the Planetdrive servo gearhead to the servo motor is easy and trouble free when following these simple instructions. The motor is connected to the gear drive via a rigid hollow pinion. Reduction spacers may be used to accommodate various shaft sizes. It is important to use motors with shafts that are concentric and perpendicular to the flange centering ring and mounting surface.

To avoid motor misalignments the motor adapter centering ring has been manufactured with an open tolerance. This reduces problems with motors that have shaft to pilot concentricity inaccuracies. It is therefore important to note that the gear drive and motor should be assembled in a vertical orientation and the connection clamp should be tightened prior to tightening the flange bolts. More detailed instructions follow.

The Planetdrive planetary gears are provided with lifetime lubrication and are maintenance free.

## Motor Mounting

1. If a key (2) exists in the motor shaft, it should be removed. With motor speeds over 3000 rpm there may be a possibility of motor shaft imbalance. The motor key seat should then be filled with a modified key which must not extend beyond the key way surface.
2. Remove the shaft clamp access hole plug (3) located in the motor adapter plate.
3. Turn the clamping element (5) until the head of the clamping screw (7) is visible through the access hole.
4. Examine the adapter flange (4), hollow bore(6), motor flange, and motor shaft for any scoring, nicks, or burrs. Clean all surfaces.
5. With some flange sizes, the adapter flange may have to be mounted on the motor first before attaching the gearbox.
6. Place the motor (1) in a vertical position with the shaft up. If the motor has a key way, it should be aligned opposite the split in the clamping element.
7. If a bore reduction bushing is used, the bushing split and clamping element split should be aligned.
8. Slide the gear drive carefully and evenly onto the motor shaft. Do not press or strike to aid assembly. If the gear drive is too heavy use a lifting device. The motor adapter face should seat completely on to the motor flange surface.
9. Tighten the clamping element screw (7) first to guaranty proper alignment. Use a torque wrench to assure the proper tightening torque.
10. Insert and tighten the (4) flange bolts.
11. Replace the shaft clamp access hole plug (3).

Note: Inappropriate assembly can lead to damage and invalidate the warranty.

| starting torque for the clamping screw (7) |                 |
|--|-----------------|
| clamping screw DIN 912                     | starting torque |
| M3   | 2.1 Nm          |
| M4   | 4.2 Nm          |
| M5   | 8.3 Nm          |
| M8   | 43 Nm           |

