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# Installation of One-Way Clutches

### Clutch Drive Configuration

Clutches are normally assembled as illustrated in the included pictures so that the housing will drive the cam and thus the shaft in a clockwise direction. They can be easily assembled to drive counter-clockwise per customer specifications.

### General

When possible, the unit should not be taken apart for assembly onto the shaft. Access to the set screw in the cam member is provided via the oil hole screw. The set screw binds the key and the cam to the shaft and positions the clutch axially on the shaft, see Figures 1 & 2.

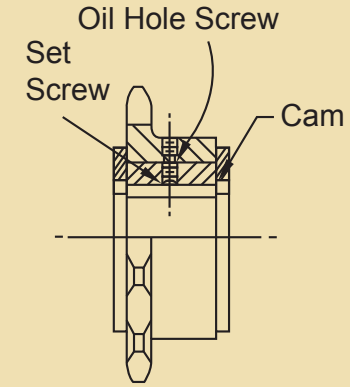


FIGURE 1
UNSEALED

### Lubrication

Two methods of lubrication are used. Grease is generally used in an unsealed unit like the standard one-way sprockets and ratchet arms, see Figure 1, and mineral oil in the sealed types like the over-running clutch of Figure 2. Of course special conditions might change this, since re-lubrication with grease requires the removal of one of the covers and sometimes complete teardown and cleaning, while re-lubrication with mineral oil thru the oil hole screw is the easiest. So, in some cases, re-lubrication of an unsealed unit with mineral oil would be practical.

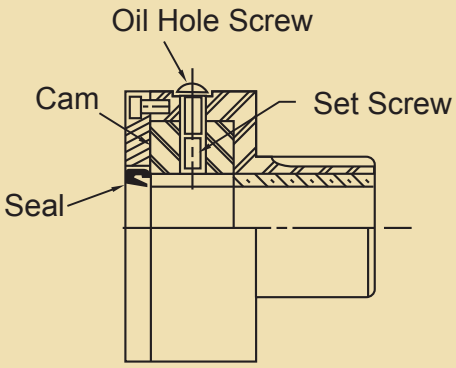


FIGURE 2
SEALED TYPE

### Assembly With Grease

During initial assembly with grease the rollers and rings are given a light coating prior to introduction of the rollers into the space between the cam and ring. Care must be taken at this point to avoid over-stressing the springs. Springs enter easily, if after all springs are inserted halfway, they are worked in gradually while members are manually over-run. Before unit is closed, a volume of grease approximately equal in size to a sphere of the same diameter as the roller is placed on each of the "ramps" adjacent to the rollers as shown in Figure 3.

**Lube Table**

| Size Clutch | Type of Oil C.C. |
|---|---|
| 5 | 0.5 |
| 14 | 1.5 |
| 28 | 3 |
| 100 | 10 |
| 300 | 30 |

### Assembly With Oil

Coat parts with a lube oil such as Standard Oil of Ohio's Factovis 52 prior to assembly and proceed as above. Lubricant is added after closing in compliance with the Lubrication Table.

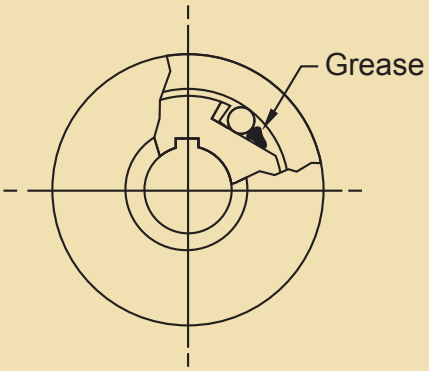


FIGURE 3