This ring is designed to be installed on the pump of a transmission during the overhaul process. If the transmission is already assembled, the pump should be removed and the alignment procedure should be followed. **Failure to do this defeats the most important aspect of this system and could cause damage to the torque converter!**

**ALIGNMENT PROCEDURE**

The best procedure for this operation is to have the ring installed at the time of transmission assembly by a qualified transmission shop. If that is not possible, follow these directions closely and if any questions arise please call our technicians at 410-298-4343.

1. Hold the transmission in an upright position but do not let it rest on the output shaft.

2. Remove the pump bolts and remove the front pump by using either one or two slide hammers (Figure A), or by threading two (2) 3/8 hex bolts into the removal holes and by prying (or pulling) up on the bolts to remove the pump. The input shaft should remain in the transmission at this time. Once the pump is removed, make sure the pump washer remains on the back of the pump and is positioned properly. You may use grease or Vaseline to hold it for reassembly.

3. Remove the O-ring from the pump body. (Figure B).

4. Now is the time to check the face of the pump surface where the ring will sit. Remove any rust, paint or dirt that may interfere with the ring sitting flat against the pump. Using a pump alignment tool or a very large hose clamp, position the ring on top of the pump and use the tool to align the pump and the ring together. This is done to assure perfect alignment between the ring and the pump. Install two (2) 3/8 x 1 1/4 bolts (not supplied) through the ring and into the two (2) threaded holes in the pump. These are the same two holes that are used for the slide hammers. Once the ring and the pump are aligned, tighten these two bolts to secure the ring to the pump (10 ft. lbs.). These bolts are only temporary and will be removed after the pump is installed. Reinstall the o-ring on the pump. Make sure the washer is positioned correctly. Install a new pump gasket if needed at this time. Place a very small dab of silicone sealer at this spot before the pump is lowered in position. Use just enough sealer to fill the gap in the gasket. (Figure C).

5. Lower the pump and ring assembly onto the transmission making...
sure the pump bolts are aligned. Placing a Phillips screwdriver through one hole helps this process. Once the pump is down, start a few of the Allen bolts into the holes. The pump will probably have to be tapped all the way down. A small dead blow hammer or hammer handle does a good job. Avoid using the pump bolts to pull the pump down. Do not remove the two 3/8 alignment bolts yet! Once the pump is all the way down, install the Allen head bolts and torque to 20 ft.lbs. Now remove the two alignment bolts and install the two (2) Allen bolts. The ring is now installed, aligned and ready for installation on whatever bellhousing you have chosen. (Figure D).

Torque bellhousing to ring bolts to 40 ft. lbs.