



# Technical Service Information

## THM 440-T4

### CENTER GEARBOX DISTRESS (LUBE CHANGES)

**COMPLAINT:** Repeated failure of the 3rd roller clutch and/or the input sprag.

**CAUSE:** Lack of lube oil to 3rd roller clutch and input sprag.

**CORRECTION:** Modification as follows, of the parts indicated, will increase lube flow to both the 3rd roller clutch and the input sprag.

#### **1. MODIFY OUTPUT SHAFT:**

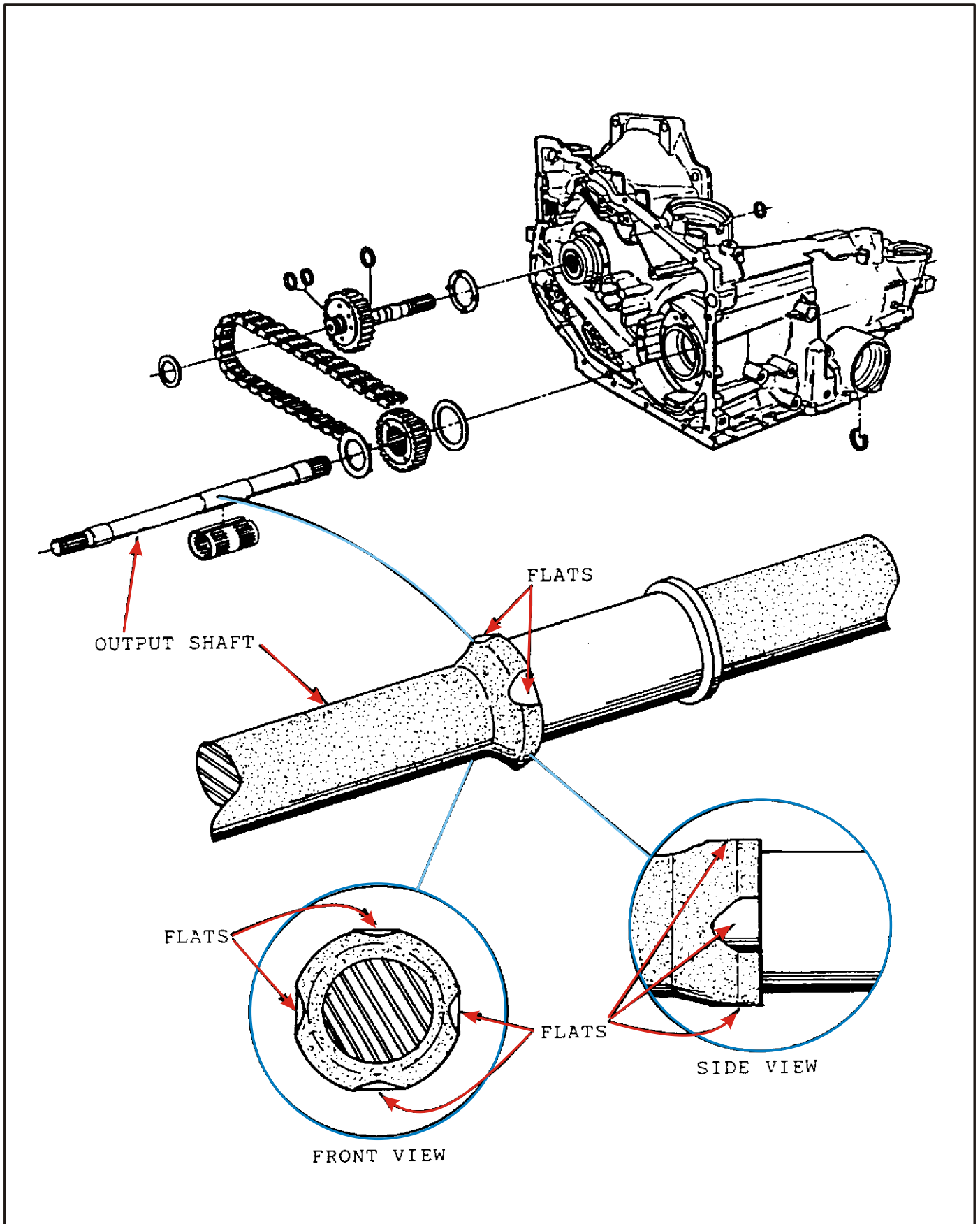
Grind four (4) flats on the output shaft at the front of the bearing in the locations shown in Figure 1.

#### **2. MODIFY OUTPUT SHAFT BEARING:**

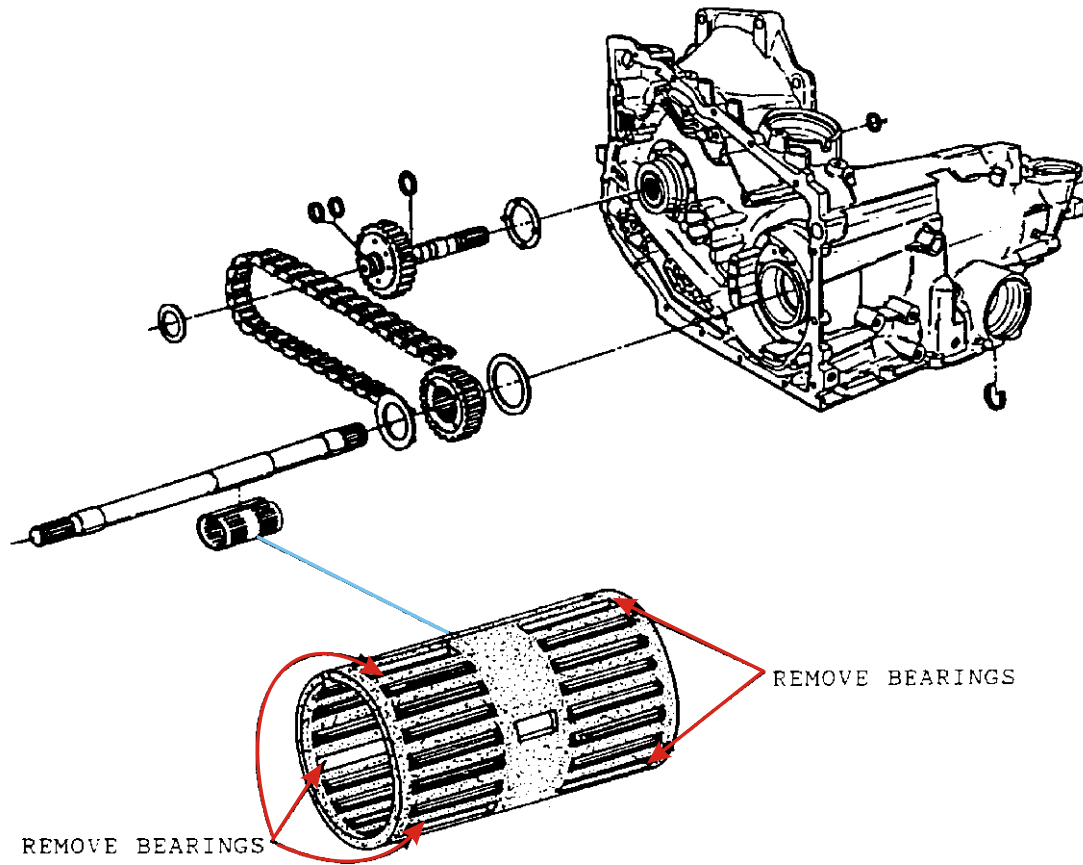
Remove individual needle bearings as shown in Figure 2, in three equally spaced locations around the bearing, to provide three "Troughs" for additional lube oil to flow. Removing the needles does not impair the durability of the bearing assembly.

#### **3. MODIFY ASSEMBLY PROCEDURE:**

When installing the sprag assembly onto the input sun gear, align one of the three lube oil holes in the inner race, with one of the two lube oil holes in the input sun gear, as shown in Figure 3.



**Figure 1**



**REMOVE INDIVIDUAL NEEDLE BEARINGS IN THREE EQUALLY SPACED LOCATIONS AROUND THE BEARING TO PROVIDE THREE TROUGHS FOR ADDITIONAL LUBE OIL TO FLOW**

**Figure 2**

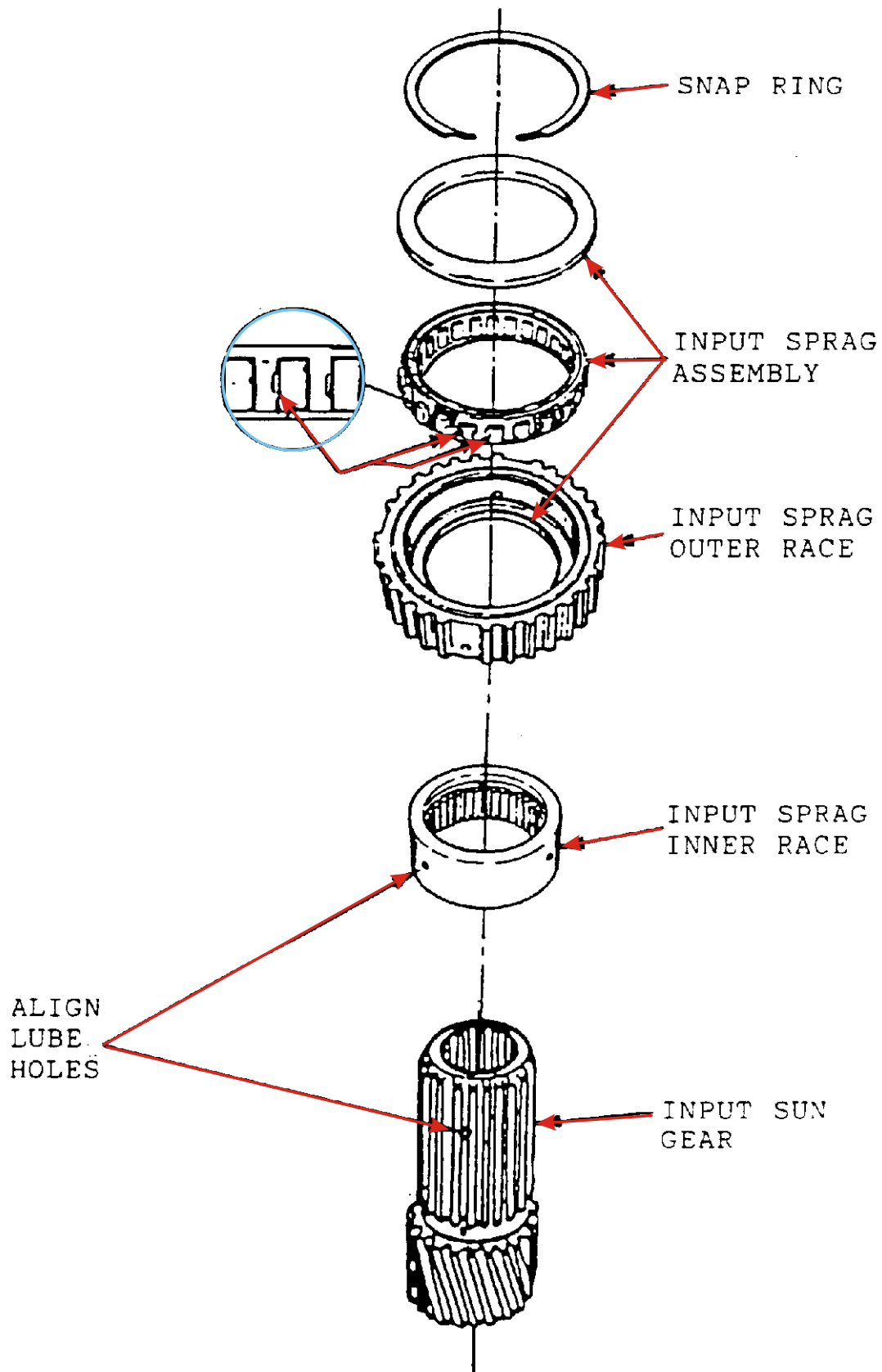


Figure 3