



Technical Service Information

FORD E40D NEW DESIGN CENTER SUPPORT SERVICE KIT WITH BALL BEARING

CHANGE: There is now available, from Ford Motor Co, a new design center support service kit with a ball bearing in the support. The new service package is available under OEM part number F4TZ-7A130-B, and will service all past model E40D transmissions, 1989 through 1994 model years only. The parts in this service kit are different dimensions than 1995 model year production parts. Refer to Figure 1 for service kit contents.

REASON: Greatly increases transmission durability.

PARTS AFFECTED:

(1) **CENTER SUPPORT** - Different machining dimensions on the inside bore, to accommodate an added ball bearing that will now support the overdrive center shaft. The new design ball bearing center support assembly can be identified as a "Service Part", by the letter "S" stamped on the hub, in the location shown in Figure 2. The Service Kit Ball Bearing Center Support has different dimensions than 1995 production ball bearing center support. Refer to Dimension "A" on the cutaway drawing in Figure 2.

(2) **OVERDRIVE CENTER SHAFT** - Different machining dimensions on the center shaft to accommodate the added ball bearing, and the pilot on the center shaft has been removed. The new design Overdrive Center Shaft can be identified as a "Service Part", by the letter "S" stamped on the shaft in one of two places, as shown in Figure 3. The Service Kit Overdrive Center Shaft has different dimensions than 1995 model year production overdrive center shaft, as shown in Figure 3.

The Overdrive Center Shaft in this service kit is bored to accept either the long or short overdrive planetary carrier assembly and input shaft, as shown in Figure 3.

SPECIAL NOTE: There is also an updated Overdrive Carrier and Input Shaft, available under OEM part number F4TZ-7B446-B, to help improve durability. Both pieces have different dimensions than the previous parts, as shown in Figure 6. The new overdrive carrier hub is 12mm (-.472") shorter than the previous model, and the internal splines now run the full length of the hub. The Input Shaft is also 12mm (.472") shorter than the previous models, to accommodate the new overdrive carrier, and has I.D. groove cut in shaft for identification (See Figure 6).

OUTPUT SHAFT - Small bushing **MUST** be removed and the orifice cup plug included in the service kit **MUST** be installed, to accommodate the removal of the pilot from the overdrive center shaft. This will now ensure that lube oil will be directed to the proper areas. Refer to Figure 4 for the bushing removal and orifice cup plug installation. The orifice cup plug in this service kit is different dimensions than the 1995 production models, and will fit **ONLY** an output shaft that had the bushing.



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PARTS AFFECTED:

(4) NO. 5 NEEDLE BEARING - Make certain the No. 5 Needle Bearing from service kit is installed with the service kit parts REGARDLESS of whether your unit had one or did not have one. Some 1994 model year transmissions were built with some or all of the parts that "Resemble" the parts in this kit, and may or may not have a No. 5 needle bearing. Make certain that the No 5 needle bearing from the service kit is installed. Refer to Figure 5 for proper installation of the needle bearing.

INTERCHANABILITY:

(1) This Service Kit will service all past model E40D transmissions 1989 thru 1994 model years, when used in its entirety, and is highly recommended on ALL previous model E40D transmissions.

(2) The parts in this Service Kit are different dimensions than 1995 model year production parts and WILL NOT interchange with them (See Figures 2 and 3).

(3) Some 1994 model year transmissions were built with some or all of the parts that "Resemble" the parts in this service kit. When servicing these units, use all of the parts in the kit EXCEPT, the orifice cup plug. These units already have a cup plug in the output shaft and it is a different diameter. The Service Kit orifice cup plug will fit ONLY an output shaft that had a bushing (See Figure 4).

(4) The Overdrive Carrier Assembly and Input Shaft are matching components and MUST be serviced as a package.

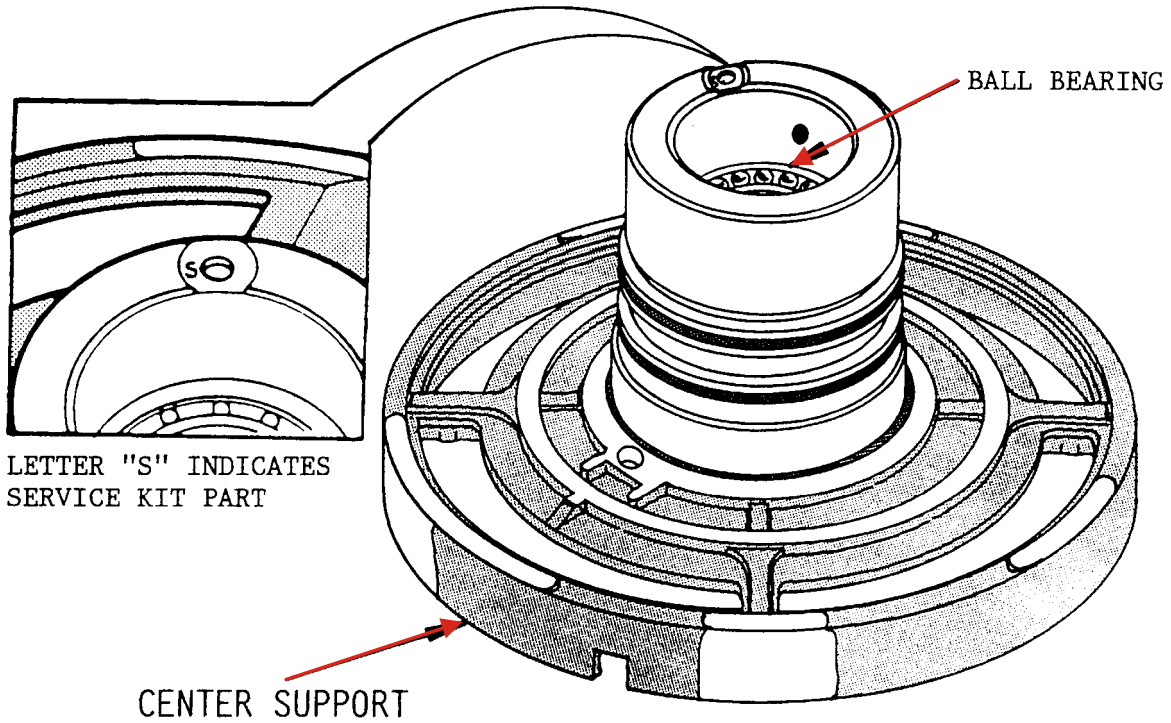
DO NOT MIX LONG AND SHORT COMPONENTS.

Refer to Figure 7 to ensure that you have built the unit with the matching components. The Input Shaft must extend 1.5" past the end of the oil pump stator, if the correct input shaft and overdrive carrier were used. Refer to Figure 7 for proper assembly dimensions.

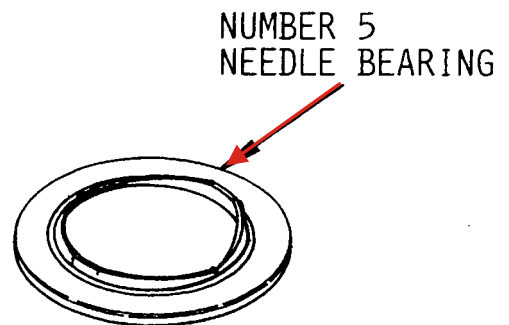
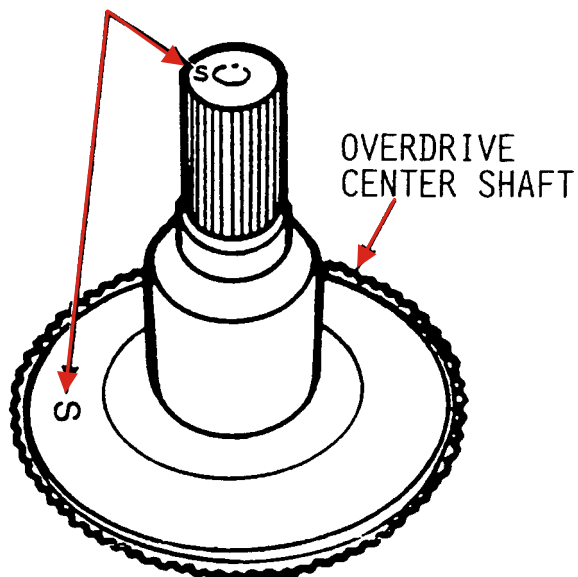
SERVICE INFORMATION:

Ball Bearing Center Support Service Kit F4TZ-7A130-B
Overdrive Carrier/Input Shaft Service Kit F4TZ-7B446-B

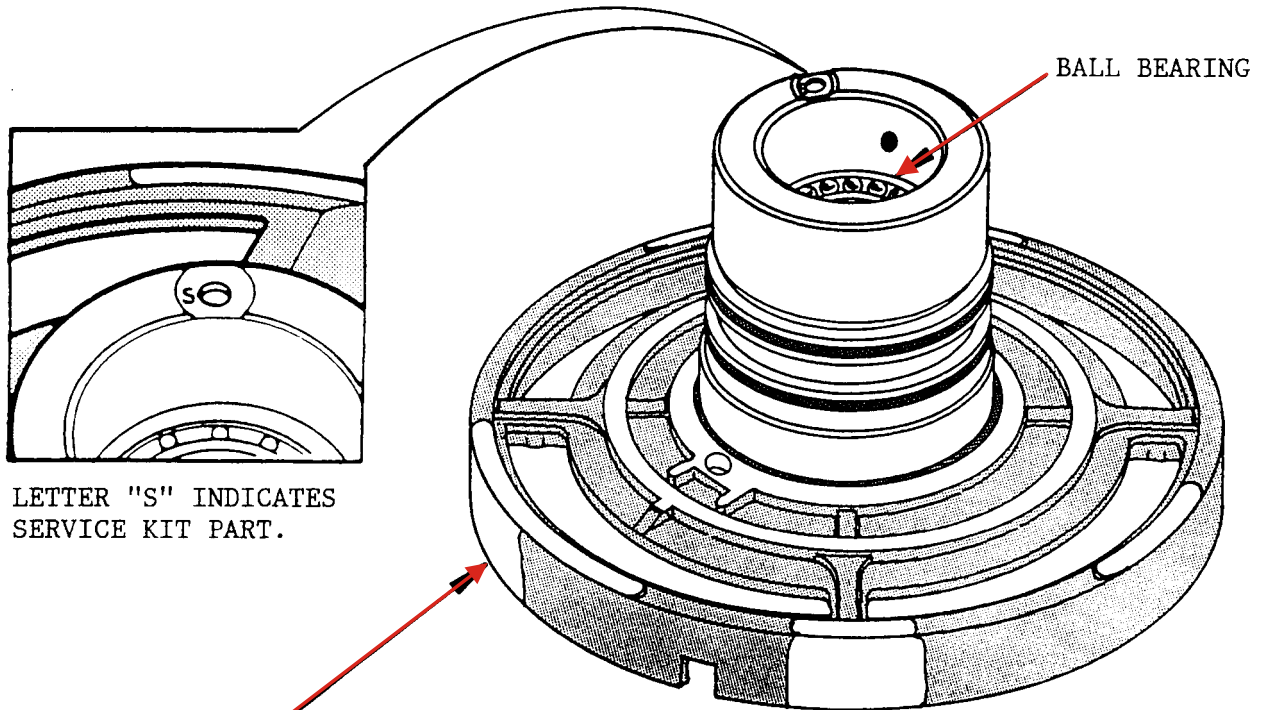
F4TZ-7A130-B SERVICE KIT CONTENTS



THE LETTER "S" COULD BE IN EITHER LOCATION. THE "S" INDICATES SERVICE KIT PART



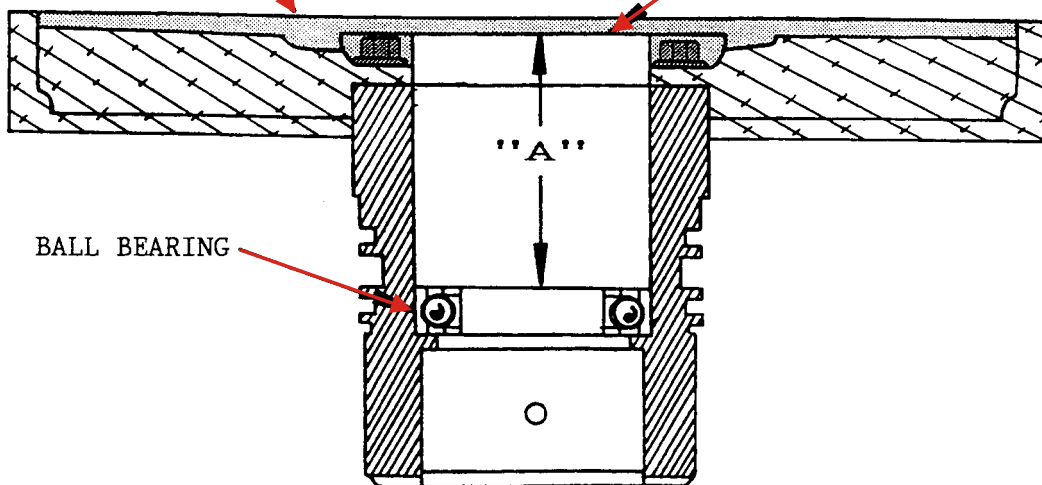
CENTER SUPPORT WITH BALL BEARINGS



LETTER "S" INDICATES
SERVICE KIT PART.

CENTER SUPPORT

NO. 5 NEEDLE
BEARING SURFACE.



BALL BEARING

DIMENSION "A"

SERVICE KIT PART = 2.062"

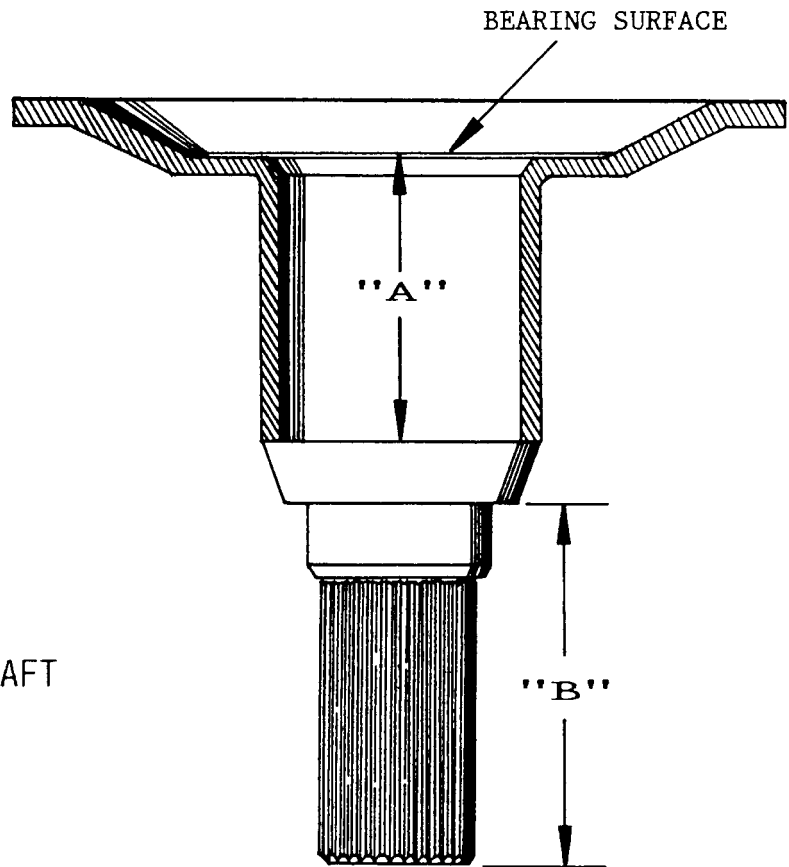
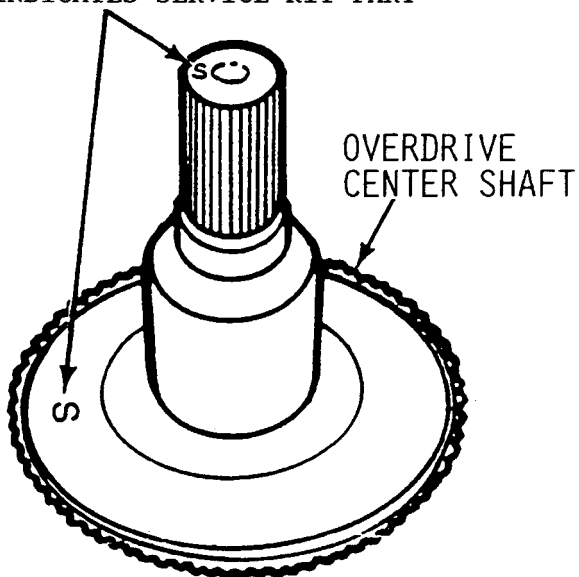
1995 PRODUCTION = 1.838"

OVERDRIVE CENTER SHAFT

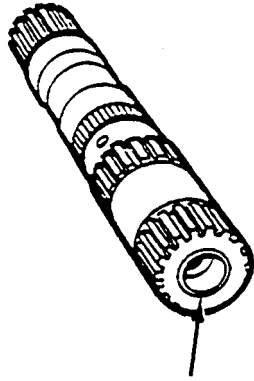
DIMENSION "A"
SERVICE KIT = 1.938"
1995 PRODUCTION = 1.710"

DIMENSION "B"
SERVICE KIT = 2.368"
1995 PRODUCTION = 2.592"

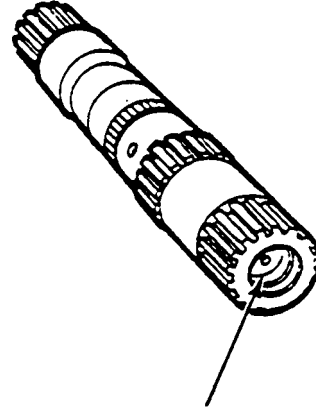
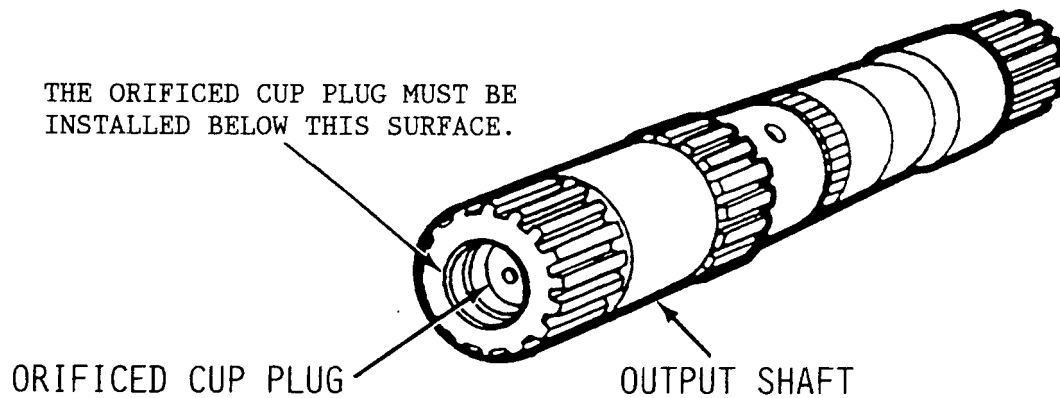
THE LETTER "S" COULD BE IN
EITHER LOCATION. THE "S"
INDICATES SERVICE KIT PART



OUTPUT SHAFT



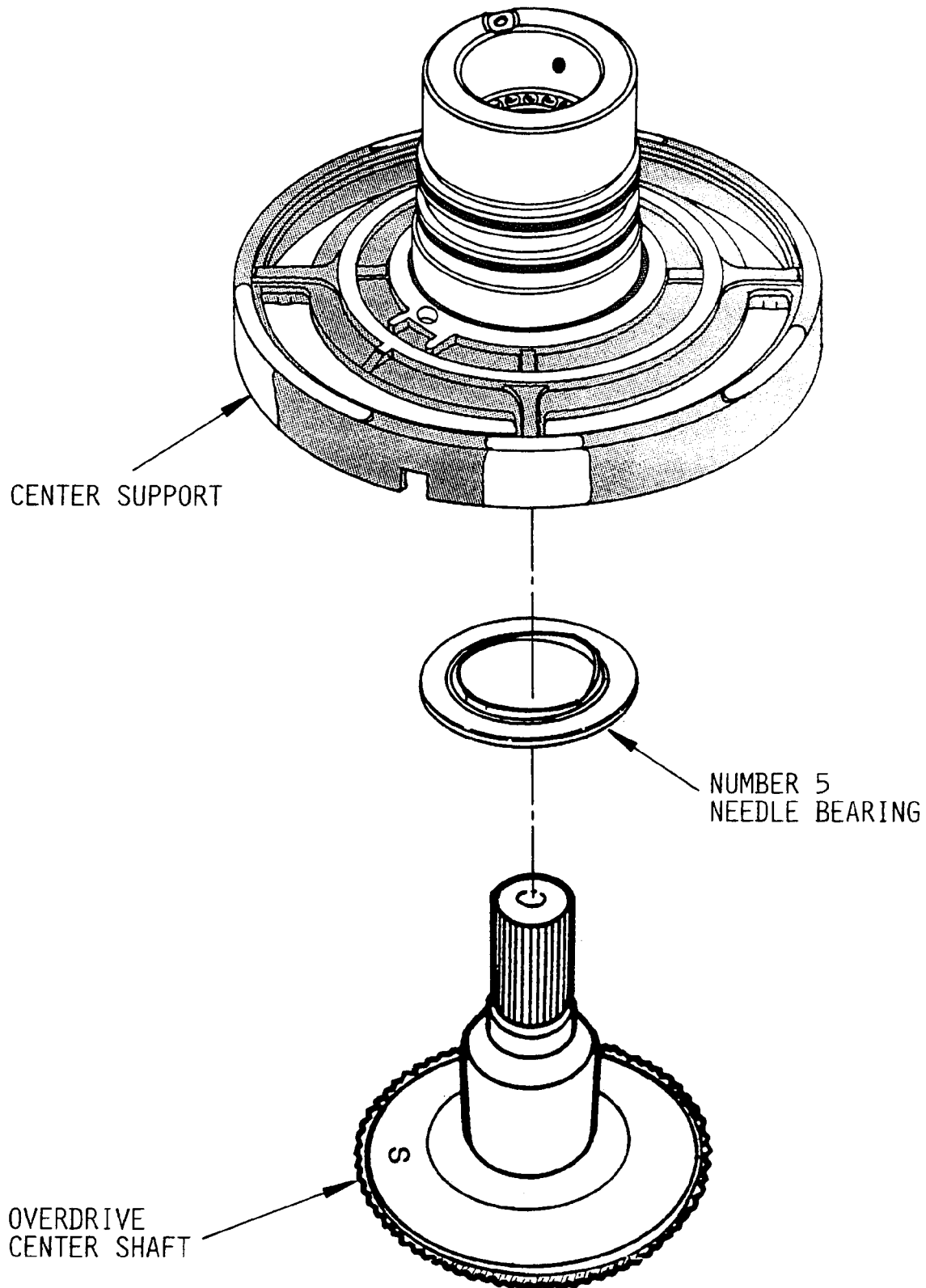
REMOVE BUSHING

INSTALL ORIFICED CUP PLUG
FROM SERVICE KITTHE ORIFICED CUP PLUG MUST BE
INSTALLED BELOW THIS SURFACE.

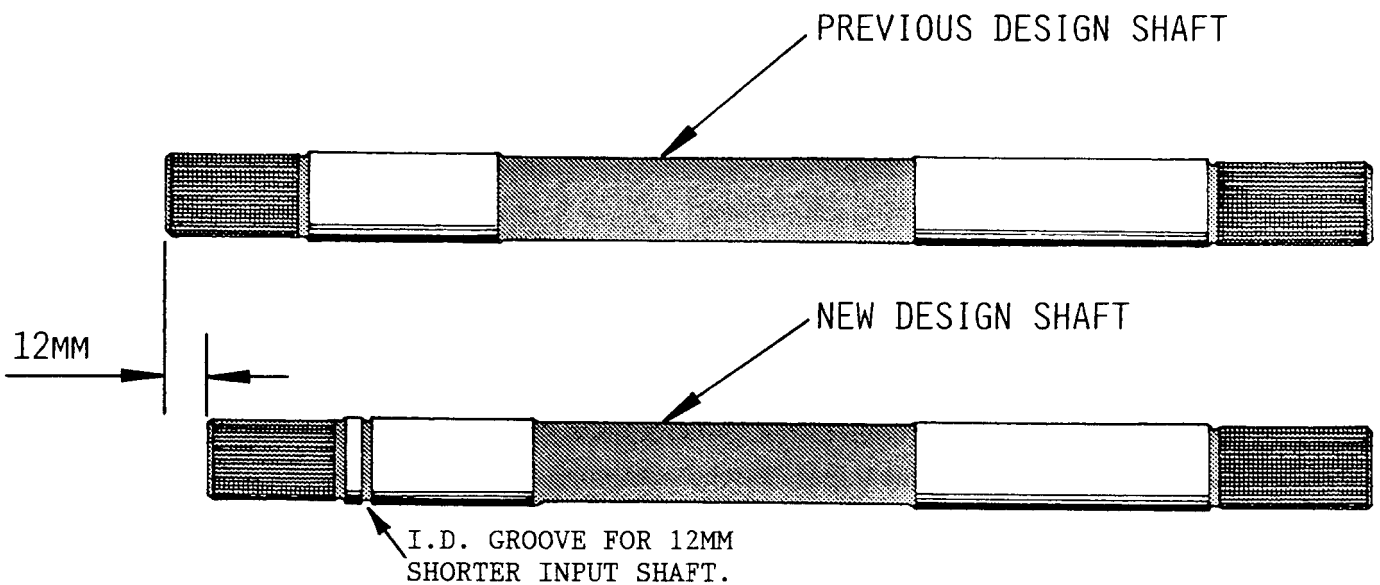
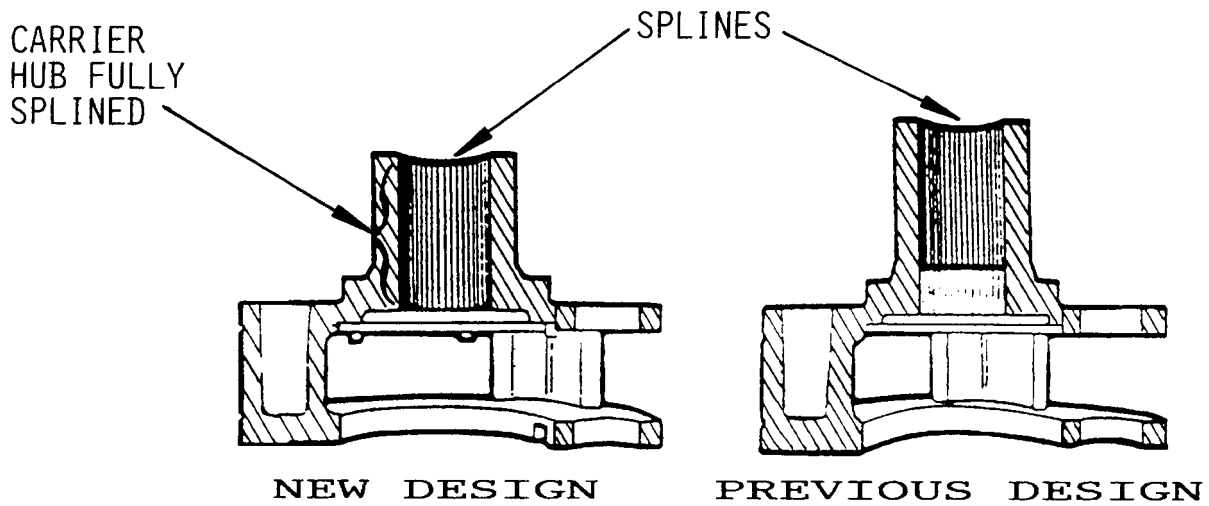
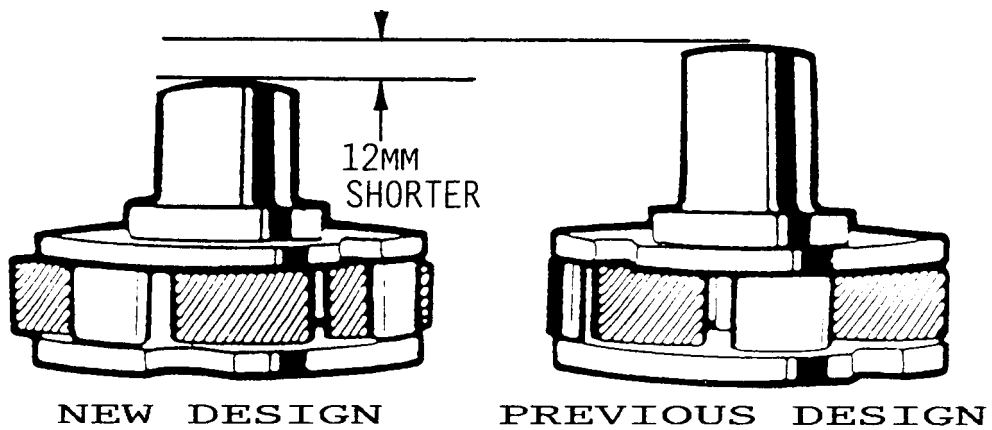
ORIFICED CUP PLUG

OUTPUT SHAFT

NOTE: THE ORIFICED CUP PLUG IN THIS SERVICE KIT IS DIFFERENT
DIMENSIONS THAN 1995 PRODUCTION MODELS, AND WILL FIT
ONLY AN OUTPUT SHAFT WITH A BUSHING.

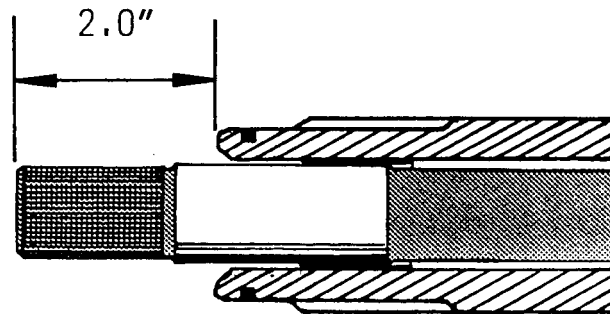
NUMBER 5 NEEDLE BEARING

OVERDRIVE CARRIER AND INPUT SHAFT



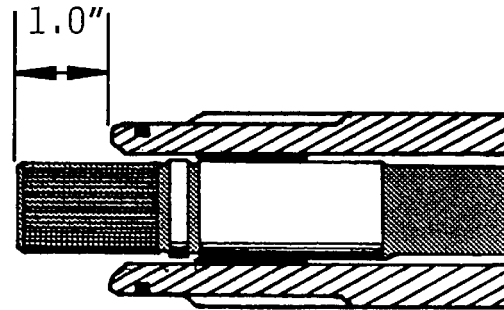
OVERDRIVE CARRIER AND INPUT SHAFT USAGE

INCORRECT



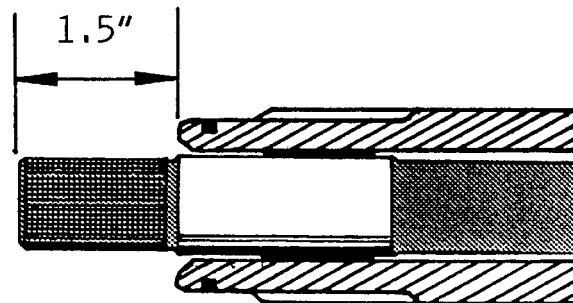
PREVIOUS (LONG) INPUT SHAFT USED
WITH NEW DESIGN OVERDRIVE CARRIER

INCORRECT



NEW DESIGN (SHORT) INPUT SHAFT USED
WITH PREVIOUS OVERDRIVE CARRIER

CORRECT USAGE



THE INPUT SHAFT MUST EXTEND 1.5" PAST THE END OF THE PUMP STATOR
IF THE CORRECT INPUT SHAFT AND OVERDRIVE CARRIER WERE USED.