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## Ford AOD Bracket and Lever Kit Installation Instructions

**Part Number 618016**

This lever and bracket kit allows any TCI® or B&M shifter to be used on a vehicle equipped with a Ford AOD Automatic Overdrive Transmission.

With an AOD transmission a TCI® three speed shifter must be used, not a four speed shifter. Even though the AOD is a four speed automatic transmission, it has only three forward shifter positions. The shifting procedure to be able to control the forward gears is described at the end of these instructions.

Before starting the installation read the instructions and be sure that you understand them. The transmission uses all metric fasteners.

**NOTE:** You will need a transmission oil pan gasket and about six (6) quarts of TCI® RTF, Type CJ or Dexron II transmission fluid, since it is necessary to drain the transmission and drop the transmission oil pan to install the shift lever.

Check the lever that is currently on the transmission. If it is the same as the lever that is included in this kit and the lever is installed pointed downwards, you will not need to change the lever. You will only have to install the cable bracket. (Go to **Step 8.**)

**Step 1** Jack the car up to a convenient working height and place jack stands under the frame. Never work under a car that is supported only by a jack. Always use jack stands or other supports.

**Step 2** Place a drain pan under the transmission. Starting at the rear of the pan working towards the front, loosen the pan bolts and allow the fluid to drain. Remove all of the bolts and let the remaining fluid drain.

Remove the pan and the gasket material off of the oil pan and the transmission case. You may want to install a TCI® drain plug kit (805800) in the oil pan or install a TCI® cast aluminum pan (438000) before you replace it.

**Step 3** See **Figure 1.** Disconnect the shift linkage from the transmission shift lever (1). If the vehicle has a steering column shift lever, secure the shift lever on the bottom of the steering column in the PARK position otherwise it will not be possible to lock the steering column. Remove the

13mm nut that secures the throttle linkage lever (2) and remove the arm from the transmission. Let the arm hang loose on the linkage.

**Step 4** Remove the oil filter from the valve body. Remove the detent spring attaching bolt and the spring (4).

**Step 5** Use a pair of diagonal cutters to remove the shift lever retaining pin (5) from the case. Loosen the 20 mm nut on the inner end of the shift lever and slide the lever out. Leave the throttle lever shaft and inner lever (6) in place.

**Step 6** Slide the new shift lever into the case over the throttle lever shaft. The arm should be pointed downwards. Engage the new shift lever (1) with the inner shift lever (7) and install the nut. Install the shift lever retaining pin back into its hole in the case and tap it in. Tighten the nut. Check to see that the inner throttle lever (6) is properly located and that the spring is in place. Check that the Park operating rod (8) is in place.

**Step 7** Install the throttle lever (2) onto its shaft and tighten the nut. Be sure that linkage is in its original position. Install the detent spring and its bolt (4). Check that the throttle lever moves freely and that it pushes in the throttle valve on the valve body. Check that the shift lever (1) moves through all its positions and the Park operating rod (8) moves with it. Replace the oil filter. We recommend that you use a new filter unless the current filter has very low mileage. Replace the oil pan gasket with a new gasket.

**Step 8** See **Figure 2.** Replace the original bolts except the two that secure the cable bracket. The cable bracket (9) is installed with the supplied longer bolts with spacers (10) between the bracket and the flange on the pan. (Spacers are not required for cast pans.) Tighten the oil pan bolts to 12-16 ft.-lbs.

**Step 9** Fill the transmission with 5 quarts of TCI® RTF, Type CJ or Dexron II transmission fluid.

**Step 10** Remove the two rubber boots (11), one large nut and a large washer (12) from the shifter cable. Route the cable from the shifter to the transmission as explained in the shifter installation instructions. Avoid sharp bends and route the cable away from hot engine exhaust parts. Cable may be secured up and out of the way with nylon cable ties. Slide

the end of the cable into the cable bracket. Install washer and large nut (12) over end of cable. Position cable so the threaded portion of the cable housing is centered in the cable bracket. Tighten both large nuts to hold the cable in this position. Install two rubber boots (11) onto the end of the cable.

**Step 11** Move the transmission shift lever (1) all the way forward to the Park position. Then move the lever rearward two positions to the Neutral position. Move the shifter lever to the Neutral position. Install the cable swivel (13) onto the end of the cable and adjust until the small end of the swivel will slip freely in and out of the shift lever bushing in each gear position. NOTE: Swivel may have to be adjusted one turn in either direction. Install cotter key supplied with eth kit into swivel and spread key ends.

**Step 12** Start the engine and shift the transmission through all the gear positions and then to Neutral. Check the transmission fluid level and add more if necessary to bring it up to the proper level. Be sure that the shifter operates smoothly and that the transmission shifts to the correct gear.

#### OPERATION

Even though the AOD is a four speed automatic transmission, it has only three forward shifter positions. With a TCI® shifter these positions are labeled "D", "2" and "1". To get the best acceleration with this transmission it is necessary to use a special shifting technique.

1. To accelerate from a standing start, move the shifter to the "1" position.
2. 1-2 shift: Accelerate to the desired speed then shift to the "2" position. After the up shift, pull the stick back to the "1" position. This will hold the transmission in second gear.
3. 2-3 shift: When desired speed is reached, shift to "2" again. Transmission will shift to third.

4. 3-4 shift: When desired speed is reached, shift to the "D" position. In normal driving the transmission will shift up to overdrive (4<sup>th</sup>) gear when the shifter is in the "D" position. When the shifter is in the "2" position it will only shift up to direct (3<sup>rd</sup>) gear. When the shifter is in the "1" position it will be in either low (1<sup>st</sup>) or second gear depending on vehicle speed. Shifting the transmission to third gear and shifting to "1" will shift to either second or low.

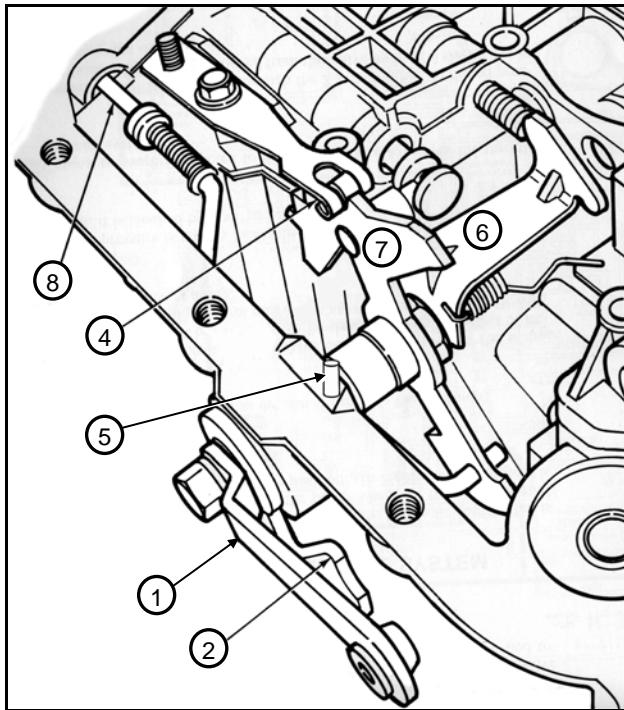


Figure 1

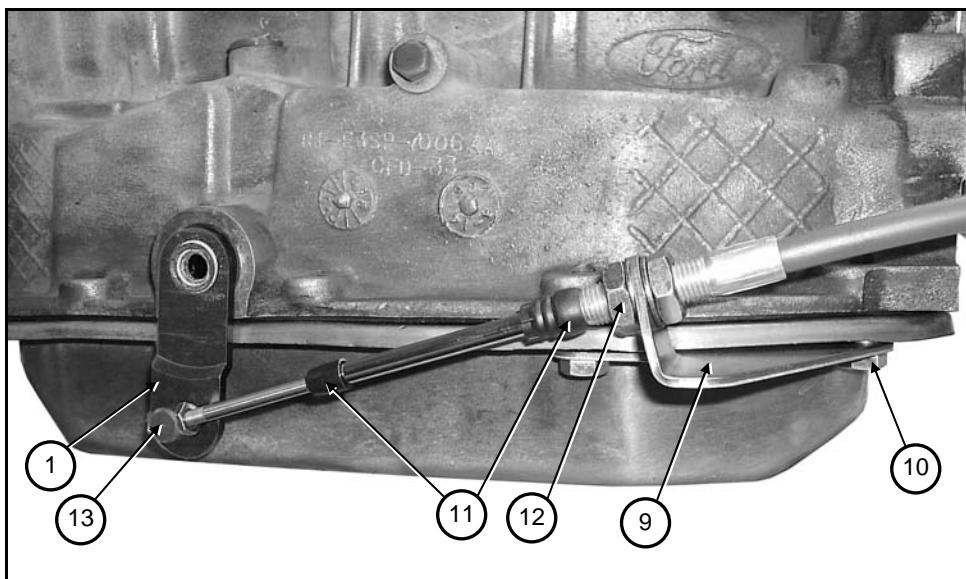


Figure 2