



# Installation Instructions

## Bracket & Lever Kit for Ford AOD Transmission

### Part No. 40496

See "Applications" tab on this product's page at [www.bmracing.com](http://www.bmracing.com) for complete vehicle & model year fitment.

This lever and bracket kit allows any B&M 3-speed shifter to be used on vehicles equipped with Ford AOD transmissions.

**NOTE:** Although the AOD is a 4-speed transmission, it has only three forward shifter positions, so a 3-speed shifter must be used.

Take the time to read and understand these instructions before starting. This transmission uses all metric fasteners.

**NOTE:** You will need a new transmission oil pan gasket and about 6 quarts of B&M Trick Shift or Dexron III transmission fluid, since it is necessary to drop the transmission pan and drain the fluid to install the shift lever. A new filter is also recommended.

Check the lever that is currently on your transmission. If it is the same type of lever that is included in this kit (with the same size swivel hole, and installed pointed downwards), you will not need to change the lever. You only need to install the cable bracket (skip to the middle of Step 8).

**STEP 1.** Jack the car up to a convenient working height and place jack stands under the frame.

**CAUTION: Never work under a car that is supported by just a jack!**

**Always use jack stands or other fixed supports.**

**STEP 2.** Place a drain pan under the transmission. Working from the rear of the pan forward, gradually remove the pan bolts, allowing the fluid to drain as you go. Remove the pan and the gasket. Scrape any remaining gasket material off of the pan and the transmission case. **You may consider installing a B&M Transmission Drain Plug (PN 80250) before reinstalling the pan. The drain plug allows regular transmission fluid changes without having to drop the pan.**

**STEP 3.** Disconnect the shift linkage from the transmission shift lever (1). If the vehicle has a steering column shifter, 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 throttle lever nut, remove the throttle lever (2) from the transmission, and let it hang loose from the linkage.

**STEP 4.** Remove the oil filter (3) from the valve body. Remove the detent spring 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 20mm nut on the inner end of the shift lever shaft, and slide the lever out of the case. Leave the throttle lever shaft and inner lever (6) in place.

**STEP 6.** Slide the new shift lever (1) into the case over the throttle lever shaft. The arm should be pointed downwards. Engage the new shift lever with the inner shift lever (7), and install the nut. Reinstall the shift lever retaining pin in its hole, and tap it into place. Tighten the nut. Verify that the inner throttle lever (6) is properly located, and that the spring is in place. Verify 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 the linkage is in its original position. Install the detent spring (4) and bolt. Verify that the throttle lever (2) moves freely, and that it pushes in the throttle valve on the valve body. Verify that the shift lever (1) moves through all of its positions, and that the Park operating rod (8) moves with it.

**STEP 8.** Replace the oil filter (3). (A new filter is also recommended.) Install a new oil pan gasket. Reinstall the original bolts, except for the two that secure the cable

bracket. The cable bracket (9) is installed with the supplied longer bolts, with the spacers (10) between the bracket and the pan flange. Tighten the oil pan bolts to 12-16 ft-lbs. **CAUTION: Do not overtighten the bolts, or the pan gasket may be damaged!**

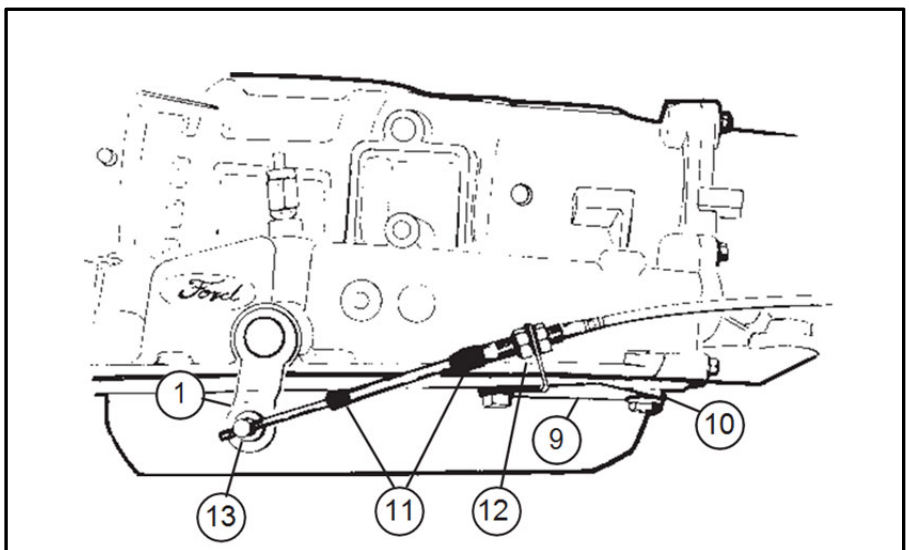
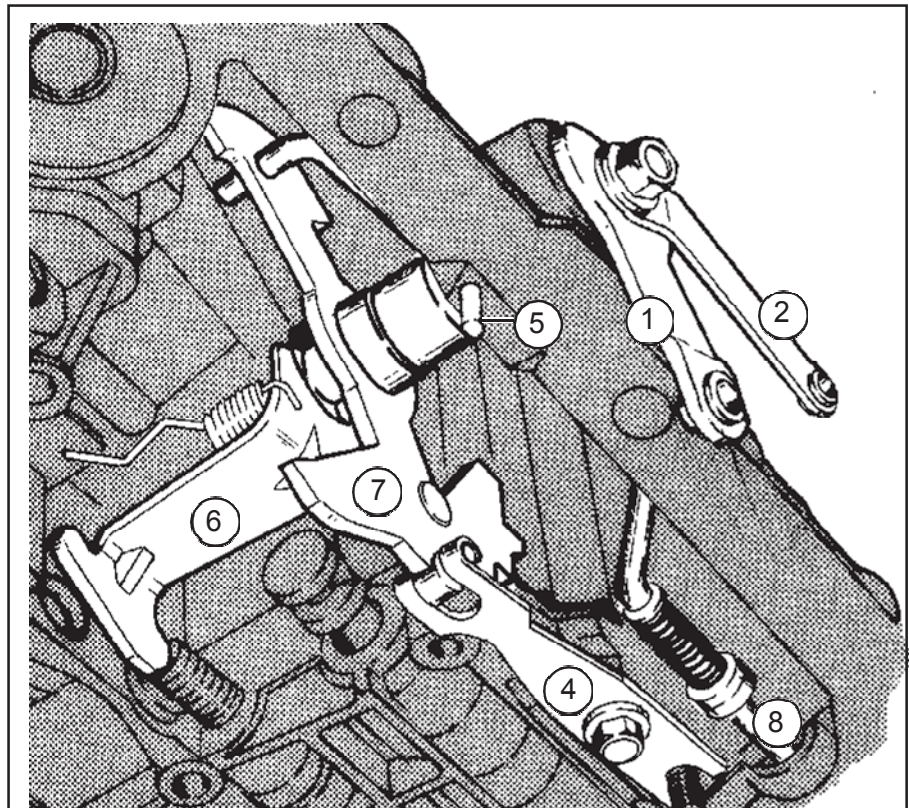
**STEP 9.** Fill the transmission with 5 quarts of B&M Trick Shift or Dexron III transmission fluid.

**STEP 10.** Remove the 10-32 jam nut, two rubber boots (11), and one large jam nut (12) and lockwasher, from the shifter cable. Route the cable from the shifter to the transmission as explained in the shifter installation instructions. Avoid sharp bends, and keep the cable away from hot engine exhaust parts. (The cable may be secured out of the way with cable ties.) Slide the cable end through the cable bracket, and reinstall the lockwasher and large jam nut (12). Adjust the jam nuts so that the threaded section of the cable housing is centered in the cable bracket, then tighten the nuts against the bracket. Reinstall the two rubber boots (11) and the 10-32 jam nut on the cable.

**STEP 11.** Move the transmission shift lever (1) to the PARK (full forward) position, then move the lever back two clicks to NEUTRAL. In the vehicle, move the shifter lever to its NEUTRAL position. Install the swivel (13) onto the end of the cable, and adjust until the end of the swivel slides freely in and out of the shift lever. Move the shifter through all of the gear positions, and at each position, verify that the swivel slips freely in and out of the shift lever.

**NOTE:** The swivel may have to be adjusted one turn in either direction. When you are satisfied with the swivel adjustment, snug the jam nut against it and install the cotter key.

**STEP 12.** Start the engine and shift the transmission slowly through each gear position, and then back to NEUTRAL. Check the transmission fluid level, and add more fluid if necessary to bring it up to the proper level. Verify that the shifter operates smoothly, and that the transmission shifts to the selected gear.



### OPERATION

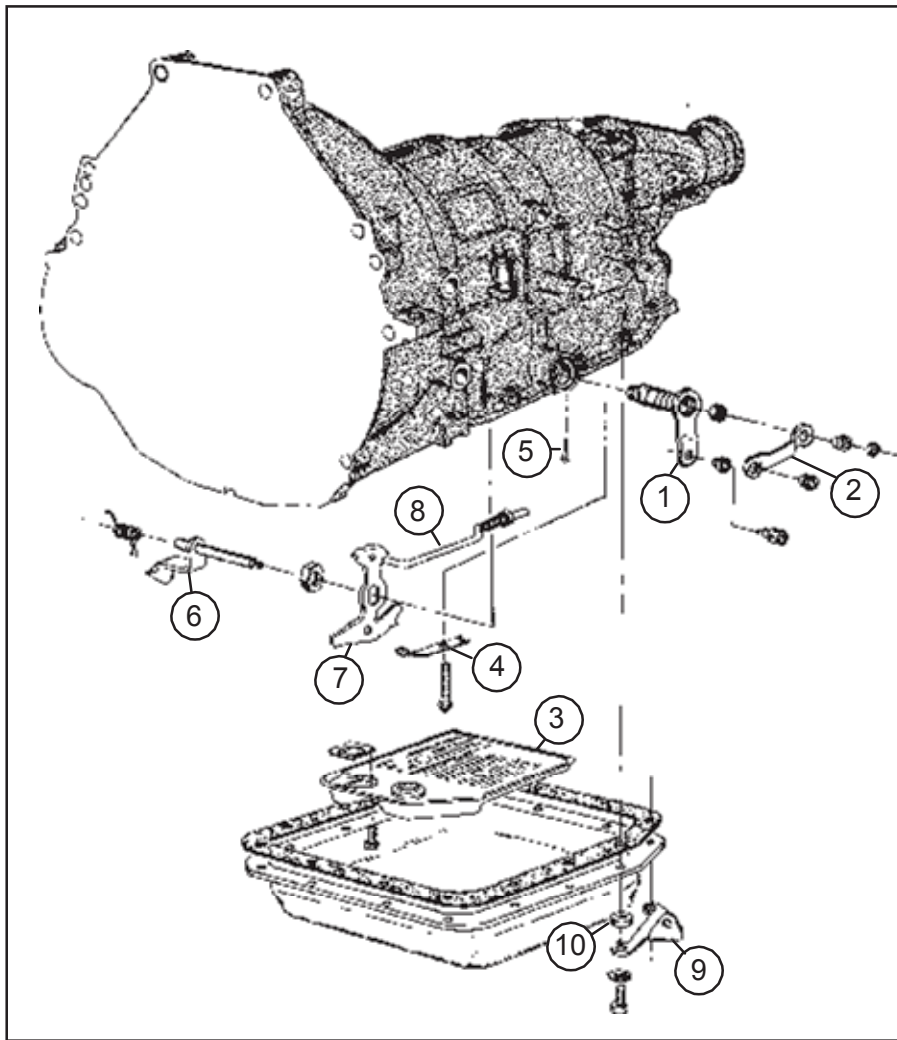
Although the AOD is a 4-speed transmission, its shift lever has only three forward positions: OD, 2 and 1. On a B&M automatic shifter, these positions are 3, 2 and 1.

**For normal street driving (with the shifter in Position 3),** the transmission will automatically shift between all four forward gears (in-

cluding 4th / Overdrive), depending on vehicle speed.

**With the shifter in Position 2,** the transmission will automatically shift between its first three forward gears (1st through 3rd / Direct Drive), depending on vehicle speed.

**With the shifter in Position 1,** it will automatically shift between 1st (Low)



### LEGEND

1. Shift lever
2. Throttle lever
3. Oil filter
4. Detent spring
5. Shift lever retaining pin
6. Inner throttle lever
7. Inner shift lever
8. Park operating rod
9. Cable bracket
10. Spacers
11. Cable boots
12. Large jam nut
13. Cable swivel

### TOOL LIST

Open-end wrenches:

- 13mm
- 20mm

Socket: 13mm

Screw drivers

Gasket scraper

Diagonal cutters

### PARTS LIST

Cable bracket

Shift lever & seal assembly

Cable swivel

Cotter key

Spacers (qty. 2)

Bolts, M8-1.25 × 25mm (qty. 2)

and 2nd Gears, depending on vehicle speed.

**Shifting from Position 3 to Position 2** will always shift the transmission from 4th Gear to 3rd Gear, and **shifting to Position 1** will shift to either 2nd or 1st (Low) Gear.

### IMPORTANT:

**RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE**

B&M Performance maintains a highly-trained technical support department to answer your technical questions, provide additional product information, and offer various recommendations.

**Technical Support:  
(866) 464-6553**

