

Installation Instructions

Bracket & Lever Kit

Ford C-6 Transmission

Part No. 40497

See "Applications" tab on this product's page at www.bmracing.com for complete vehicle & model year fitment.

STEP 1. Raise and safely support car at least 1-2 feet off the ground to allow plenty of room to work. Do not support the car with a jack, use jack stands or other solid support to keep car from falling.

STEP 2. If you have not already done so, remove the nut and lockwasher holding the downshift linkage onto the downshift lever shaft. The downshift lever is the outer lever. Pull the lever off the shaft and allow the linkage to hang free. Remove and discard stock shift linkage rods. Some C-6 transmissions have a Neutral safety/Backup light switch on the transmission shift lever. If your transmission is so equipped, remove the two bolts holding the switch in place and slide it off the shift shaft. Disconnect the switch at the factory plug and discard it.

STEP 3. Install the **B&M** selector lever, See **figure 1**. Note: The B&M lever must point downward for proper operation. If the stock shift lever on your transmission points down, you will have to remove the lower part of the stock arm by cutting it off to clear the **B&M** lever, (See **figure 2**). Install **B&M** selector lever onto shift shaft of transmission. Align selector lever so when it points straight down it travels equal arcs in both directions from center, then tighten 1/4"-20 x 1 1/2" pinch bolt and nut. The lever should travel smoothly from front to back

with a positive click in each gear position. Make sure O-ring is in position on downshift shaft and install downshift lever in position on shaft. Install lockwasher and nut and tighten securely. Downshift lever must operate smoothly. Reconnect downshift linkage.

STEP 4. Remove the two transmission oil pan bolts from the left rear corner of the oil pan. Install cable bracket in position, (See **figure 1**) with two spacers between the pan and bracket. (If your transmission is equipped with a cast aluminum oil pan, these spacers can be omitted.) Install the two 5/16-18 x 1.00" bolts supplied and tighten 12-13 ft. lbs. Do not overtighten as this can damage pan gasket.

STEP 5. Route the shifter cable according to **figure 3** Avoid kinks and sharp bends and route the cable away from hot engine or exhaust parts.

Remove the two rubber boots, one large nut, and a large lockwasher from the threaded end of the shifter cable. Slide the end of the cable into the cable bracket, Install large nut and lockwasher loosely over end of cable. Install two rubber boots onto end of cable. Install the swivel on the threaded end of the cable and position it in the center of the threaded portion.

STEP 6. Move the transmission selector lever by hand to full rear posi-

tion (LOW). Place the shifter lever to the low gear position (all the way back). Adjust the large nuts on the cable so that the swivel will slide into the hole on the selector lever. Tighten the large nuts completely. Be sure that the swivel will slide freely in and out of the hole in the selector lever.

With the swivel in the selector lever, move the shifter to PARK position, as far forward as the shifter will go without forcing it. (The shifter has further travel that is used to reach the GM park position but is not used on Ford transmissions. Trying to force the cable will damage the cable.) The shift lever on the transmission should be all the way forward. Check to see that the swivel will slide freely in and out of the hole in the lever in this position. If it does not slip in freely, adjust the swivel slightly until it will slip into the hole in the lever in both LOW and PARK positions. Operate shifter through all gear positions. Check to make sure swivel will slide in and out of the selector lever hole in each gear position. Install cotter key supplied with shifter into swivel and spread key ends.

If you have a problem, **DO NOT FORCE THE SHIFTER**, this will damage the cable, the shifter or the transmission. Simply start at the beginning and carefully check all your steps.

STEP 7. On Ford vehicles, the Neutral safety/Backup light switch is lo-

Ford C-6

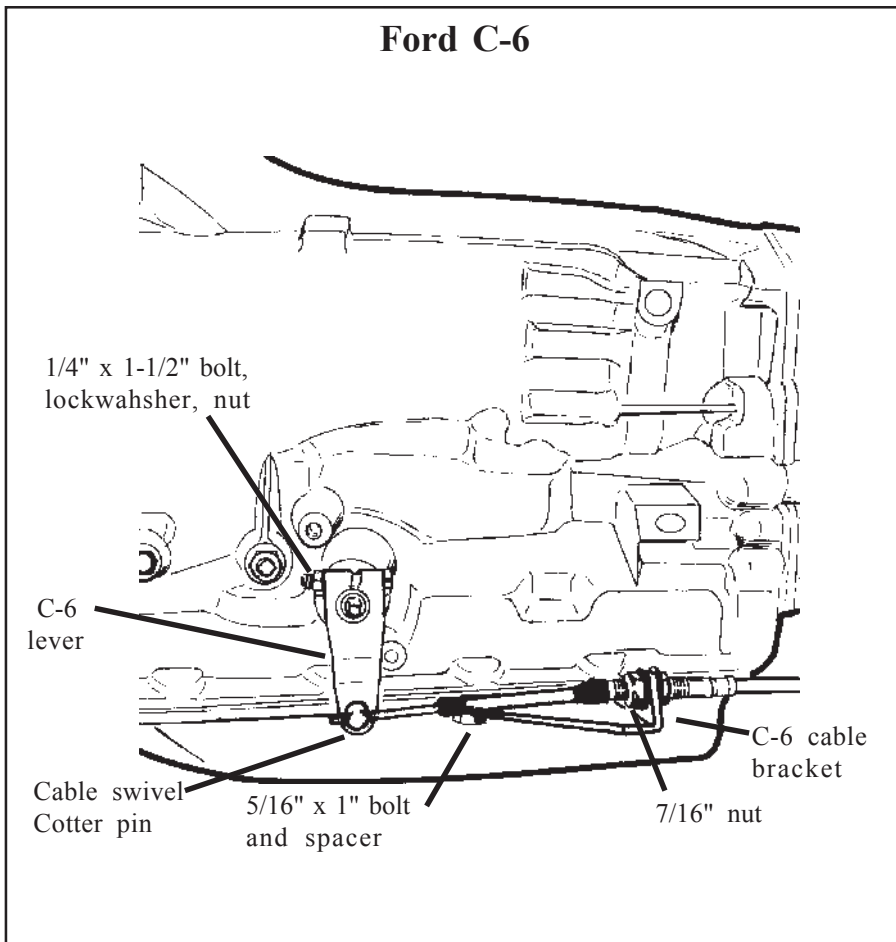


Figure 1

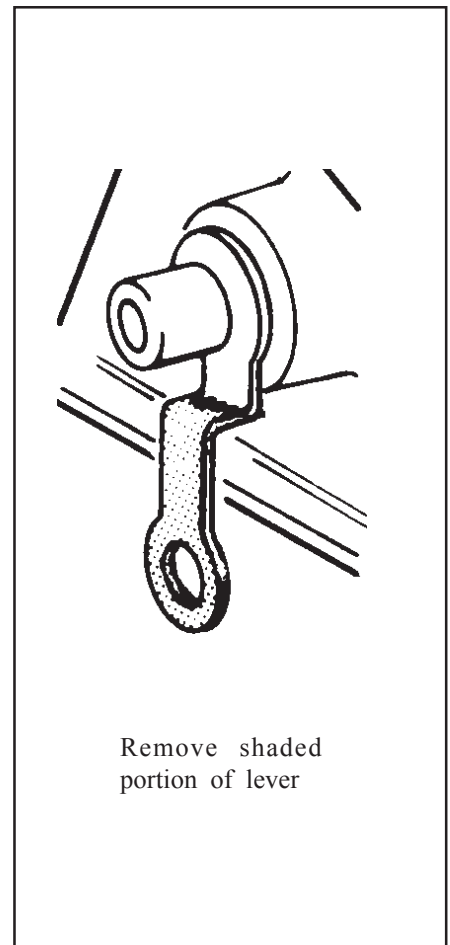


Figure 2

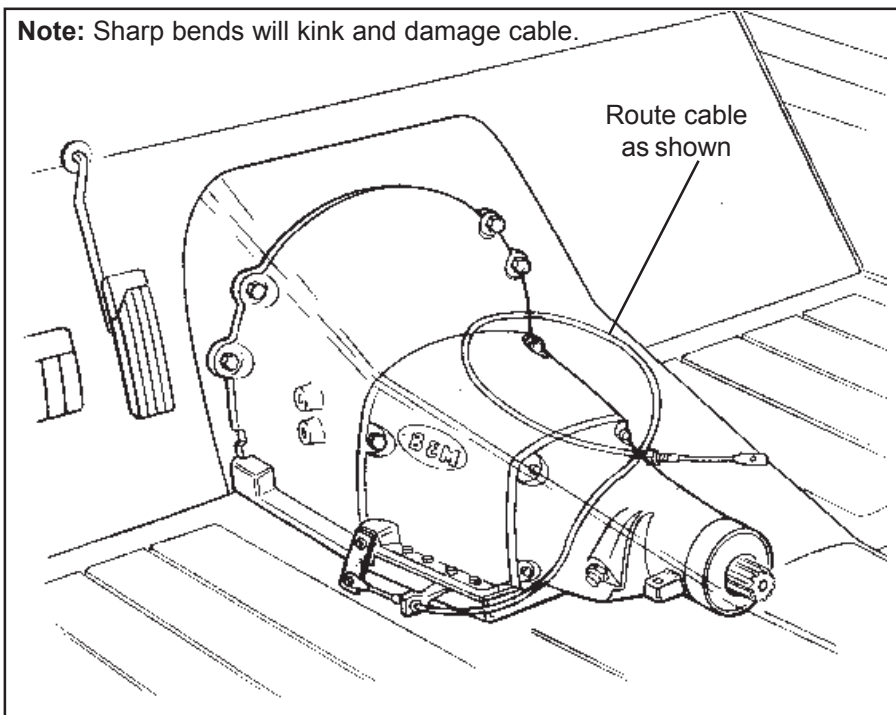


Figure 3

icated on the transmission (or on the steering column on some early vehicles). It will be necessary to hook up

the Neutral safety/Backup light switches on the **B&M** shifter. Locate and identify the Neutral safety wires

(the engine will not crank unless these wires are connected together), and Reverse light wires. Disconnect Battery ground cable before beginning to wire the Neutral safety and Reverse light switches. Reroute the wires to the **B&M** shifter. Check the instructions for your shifter to see which switch is used for which application. Strip 1/4" insulation off wires and install supplied slip-on terminals. Crimp terminals onto wires using a crimping tool or pliers. Connect the Neutral safety wires to the Neutral safety switch and the Reverse light wires to the Reverse switch. Tape terminal connections to prevent shorts. Reconnect battery ground cable, disconnect coil wire and set the parking brake. Check switch operation by attempting to start motor in each shifter position. **The starter must crank only when shifter is in the Park or Neutral position.** Check Backup light operation when the shifter is shifted to the Reverse position. Adjust switches if required. Reconnect coil wire.