

# CK-165, CK-265, CK-167 CABLE CLUTCH RETROFIT

# Installation Instructions READ IN ENTIRETY BEFORE INSTALLING

#### 1. DISASSEMBLY

- Remove the two screws attaching the parking brake mechanism to the dashboard bottom edge.
- Remove the three nuts retaining the cowl vent duct assembly. Remove cowl vent duct assembly.
- Push parking brake assembly to side. Do not disconnect parking brake cable.
- Disconnect master cylinder rod from brake pedal and remove stop light switch.
- Remove clutch pedal spring from the pedal support by removing three bolts (½" hex head) accessible from under the pedal support. (Note: spring is <u>not</u> reused with the cable clutch setup)
- Remove the clutch pedal retaining clip or cotter pin at the passenger side end of the clutch pedal shaft.
- Slide clutch pedal with attached pivot shaft out of pedal support (toward driver side of car)
- Remove brake pedal, then slide clutch pedal out and remove.

## 2. MODIFICATION OF PEDAL (see Page 3) (skip this step if you bought a CK-165-P or CK-167-P kit with the clutch pedal)

- Grind a 1/8" bevel on both flat sides of the top of the clutch pedal.
- Align the new quadrant directly atop the clutch pedal arm
- Cable retainer notch goes to the rear, towards driver.
- Position new quadrant so it is exactly 90 degrees (vertical) from pedal shaft. Check in two planes.
- It is very important that the quadrant stays in the same plane as it travels so the cable will pull from the same direction and will follow the groove in the quadrant. Magnetic welder'd clamp works great for this.
- Place a fillet weld on both sides of the quadrant where it meets the top of the clutch pedal.
- Grind the new weld flat so it cannot interfere with the pedal bushing or bearings upon reassembly.
- If you are installing a MustangSteve CK-167-P clutch pedal kit on a 67-68, see Page 5.

## 3. MODIFICATION OF COWL FLOOR

- Place pedal support loosely in position under dash.
- Test fit clutch pedal to determine where the cowl floor must be modified.
- Trial fit clutch pedal with quadrant until you have the clearance needed to get it in place. Note: Do not attempt to install the plastic pedal bushings until the cowl floor is sufficiently raised and the quadrant/pedal will easily slide into place for test fitting. That will allow you to trial fit the pedal shaft at a slight angle, making it easier to get into place. Unbolting of the pedal support from the firewall and dashboard is required in order to get the pedal in with the quadrant attached to the top. When adequate clearance is obtained, install the bushings or bearings in the support
- Using a ball peen hammer or hydraulic jack, modify the sheet metal right above the clutch pedal to stretch the metal and raise it up about 1/4" to 3/8" to provide quadrant clearance. (This will NOT show!).
- Smaller dent may also be required where cable approaches firewall.
- Install clutch and brake pedal in the pedal support. Once in place, replace and tighten all pedal support mounting bolts.

#### Note:

- Shorty headers are recommended for best cable fit.
- This kit will not work with 1994-1995 T5 on cars with factory power steering.

On cars with factory power steering, when the 1994-1995 T5 transmission and bellhousing is used there will be interference between the cable and the power steering ram. This is not an issue with the 1993 and earlier T5 and their bellhousings. The interference is caused by the release lever being positioned lower on the bellhousing.

#### 4. BILLET FIREWALL BRACE INSTALLATION (see Page 4)

- Take careful measurements to locate the ½" hole you will place in the firewall.
- Clamp a straightedge to the installed quadrant so it reaches to the firewall.
- Referencing straightedge (to allow the hole to be in line with the center of the cable groove) make a vertical mark on the firewall to provide horizontal dimension for the hole location on the firewall.
- Use an awl or center punch to make a dent on that line from under the dash, approx. ½" below cowl.
- From engine side of firewall, locate the small dent made in previous step.
- Position billet firewall brace so the center of the bracket aligns horizontally with small dent.
- Mark position of two 5/16" holes to be drilled vertically in cowl flange.
- Drill two 5/16" holes.
- Insert two provided 5/16" bolts into billet brace.
- Tighten bolts, being sure brace is hard against firewall.
- **SPECIAL NOTE FOR 67-68 MODELS** An additional steel bracket is supplied that bolts to the rear of the billet brace, and also bolts to the upper, outer bolt that goes from the engine compartment to the pedal support. On P/B equipped cars, this bolt also secures the booster to the firewall. It may be required to place a washer between the bracket and firewall/or booster in order to get best bracket alignment. The 67-68 billet brace is designed so that when located firm against the driver side inner fender, the cable hole will be properly located in line with the quadrant. However, because of the possibility that your particular Mustang may have been previously modified, CHECK the horizontal dimension to be sure it will align with the cable before drilling any holes.

# 5. DRILL HOLE FOR CABLE (see Page 4)

- Mark the vertical component of the ½" hole location by marking the firewall through the big hole in the installed billet brace.
- Hole must be drilled through the firewall BELOW the cowl floor. Note: The flanged seam in the engine compartment where the cowl and firewall are welded together is NOT even with the floor of the cowl. The floor of the cowl is about 3/4" BELOW that flange, so be careful when drilling the 1/2" hole.
- Start with a 1/8" pilot hole to be sure you drill in the correct location. Check from under the dash to be sure the hole aligns with the quadrant groove.
- The new hole should be centered in the hole of the billet bracket when completed.

## 6. INSTALL CABLE

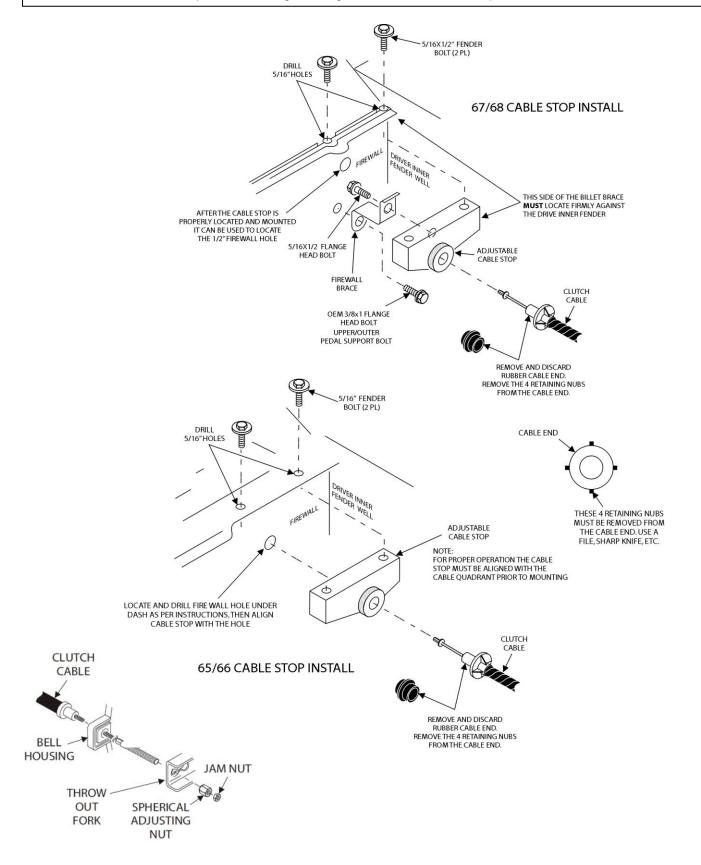
- Remove and discard black rubber bushing from top of new cable, exposing the plastic housing shaft.
- Grind or file off the 4 small tangs meant to hold the removed rubber bushing in place.
- Steel bracket that is mounted to the cable can be utilized or discarded as desired.
- Feed non-threaded end of cable through billet firewall brace.
- Attach the cable end onto the quadrant receptacle, using zip tie to hold cable end temporarily in quadrant.
- From the billet brace, route the cable housing forward, with option of over or under the export brace, then around the oil filter, then along the oil pan rail to the bellhousing. Heat resistant tube or tape wrap is advised if cable is near exhaust. Cable housing will melt resulting in very hard clutch pedal action if allowed to get hot. Maintain at least 2" from header or exhaust if at all possible. If not, insulate heavily.
- Insert the cable housing plastic stop into the receptacle on the bellhousing. No clip is needed.
- Connect the adjustable cable end to the clutch release arm. Adjust cable to zero lash, then 1-2 more turns.
- Check pedal quadrant to be sure cable is in the groove properly.
- Depress clutch pedal to verify correct operation and pedal travel. Re-adjust as required to get proper actuation. Clutch should begin to move the car at about midpoint of clutch pedal travel. Adjust to suit. The cable will be tighter than you think it should be. This is Ford's design from the Fox Mustang 5.0.

#### 7. MISCELLANEOUS

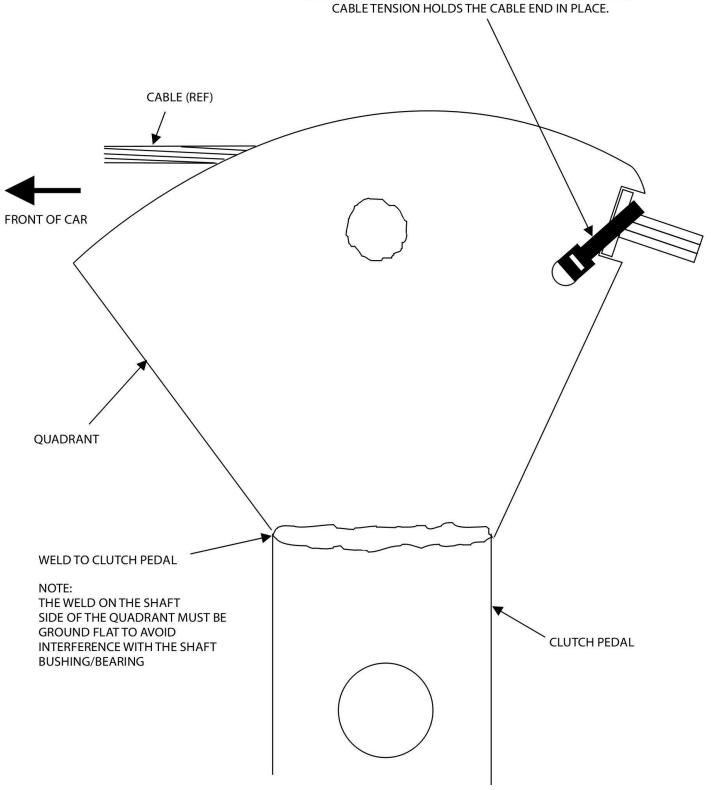
- Reinstall cowl vent duct.
- Reinstall parking brake mechanism
- Reattach master cylinder or booster rod to brake pedal
- Reinstall brake light switch

#### **IMPORTANT**

Cable clutches require a diaphragm type pressure plate. Be sure to install a new 5.0 Mustang release bearing. Adjust cable so it has exactly ZERO PLAY, then adjust tighter on the adjusting nut until proper actuation is achieved. This is correct adjustment when using a diaphragm type pressure plate. The release bearing is slightly engaged at all times, and this is normal, and same as Ford intended. This allows for quicker clutch actuation, as well as less clutch pedal travel. This is same adjustment as Fox Mustang clutches use. No return spring is required below car or under the dash. Large pedal spring is not used. Typical clutch engagement point is set at about mid-travel of the pedal. Adjust cable to obtain that release point, but not tight enough where the clutch will slip.



A ZIP TIE WILL HOLD THE CABLE END IN PLACE
WHILE THE CLUTCH CABLE IS BEING ROUTED
AND INSTALLED ON THE BELL HOUSING/CLUTCH LEVER ARM.
AFTER THE CABLE IS INSTALLED AND ADJUSTED PROPERLY,



# Installation of adjustable pedal stop on 67-68 Mustang or Cougar pedal support.

(Adjustable stop is included with the CK-167-P kit that comes with a clutch pedal)



Mark the area to be removed.



Cut out the marked area. File edges smooth





Bend the tab upward. Slot in tab needs to be as low as possible. Once folded, cut out the top of tab.





- Drill two 5/16" holes, one at top, centered at top edge of tab and one at bottom of existing slot.
- Weld all edges of the folded tab, including a bead across the top of the upper hole. Grind flat.
- Use a saber saw to connect the two holes. Grind any burrs from around the slot.
- Bolt the stop to the slot with bolt head coming from under the pedal support. Make sure the stop's rubber pad is flat against the clutch pedal tab.
- Adjust clutch pedal stop to your preference, leaving at least enough pedal stroke to actuate the clutch.