



Installation Instructions for the Ultimate Short Shifter
for Cadillac CTS-V

Thank you for purchasing the Ultimate Shift Kit. Please read these directions thoroughly and become familiar with the procedure.

UUC recommends installation only by trained professionals, or those of sufficient mechanical skill to undertake this procedure safely.

PARTS LIST:

- 1 - Ultimate Short Shifter lever with integral cartridge bearings and self-adjusting main pivot bearing assembly.
- 2 – bolt and nylock nut
- 1 - Small tube of lubricant

Required tools:

basic hex and star socket and allen key set
long flat-blade screwdriver
power drill and drill bits

Recommended items to have available during assembly:

paper towels
work light
work gloves

Car Preparation

Make sure that you perform this procedure when the car is cool. It is recommended that you put the car on the lift the night before this installation as the exhaust and drivetrain components do radiate a lot of heat. ***You may run the risk of being burned.***

We recommend using a professional automotive lift. Serious injury or death may occur if your car is not properly supported. If you need help, ask someone with more experience, or have the kit installed by a professional mechanic.

INSTALLATION PROCEDURE:

Removing the shift knob, boot, and foam inner liner (performed inside of car.)

Remove the shift knob and leather boot From within the car: the knob is attached to the boot, so it will not come off completely but must be separated from the shift lever. Pull the knob straight up (do not twist), and then lift up on the shift boot, prying it off the console with your hands by pulling on either side of it to release the clips holding it down.

Underneath the leather shift boot is a foam insulator. Remove this piece by pulling it up from one corner. **Note the orientation of this piece when removing to ensure correct re-installation.**

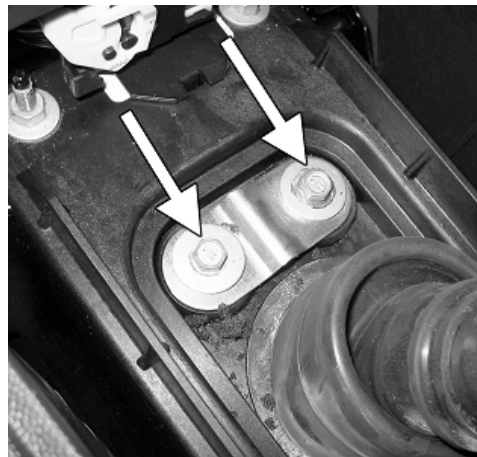
Identify and remove two bolts as indicated in pictures below.



Remove foam liner.



Remove these two bolts.



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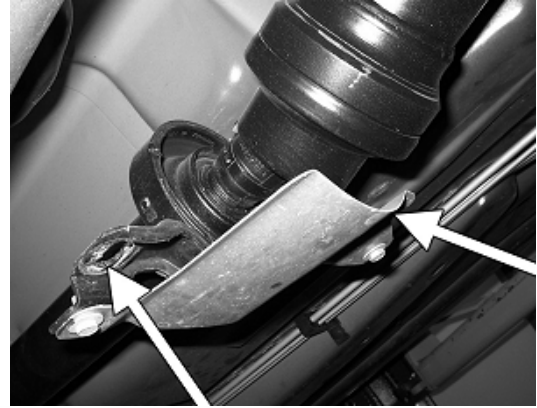
These next steps are performed underneath the car.

Begin by removing middle section of exhaust system. Leave the rear mufflers in place.

Disconnect driveshaft from transmission by removing three bolts at flex disk as indicated:

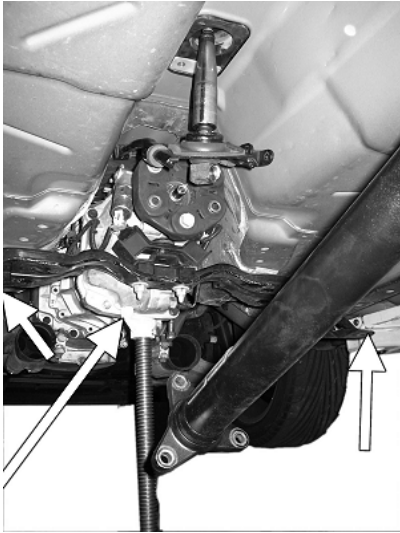


Lower driveshaft center support by removing two bolts as indicated:



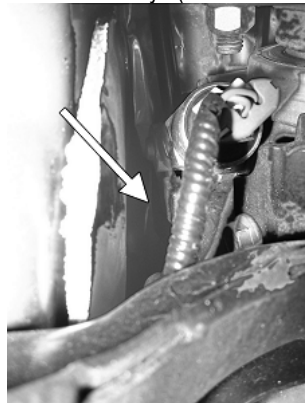
Disconnect shifter's lower pivot from selector rod (linkage) by removing the connecting bolts. Use a hex key on one side and a wrench or socket on the other (left and right views shown below):



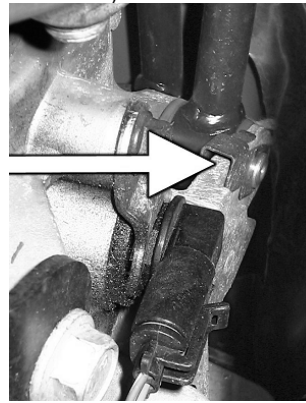


Support transmission with transmission jack, remove six retaining bolts and lower transmission for additional clearance.

Remove retaining clips on either side of black metal shifter carrier. Note that these parts are a combination pin and clip and must first be pried up and then slid out sideways (each side to outside of car).



(left side of transmission)



(right side of transmission)



Remove shifter carrier by pulling toward rear of car and rotating around to the passenger side. This will be very tight, but can be done as long as rearward pressure is maintained on carrier.

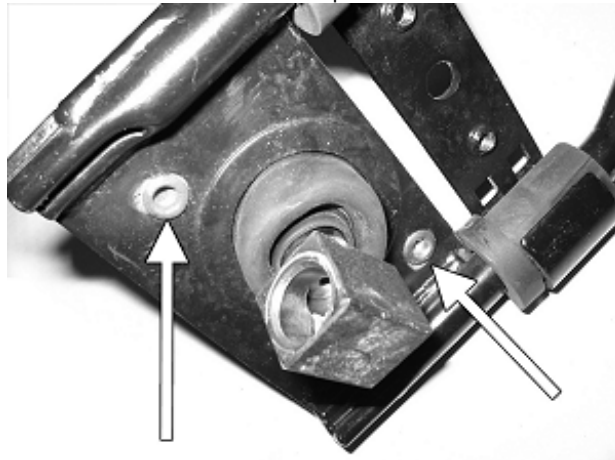
When rotated around, pull carrier and shifter assembly straight down and out of car.



Remove foam piece from base of shifter:



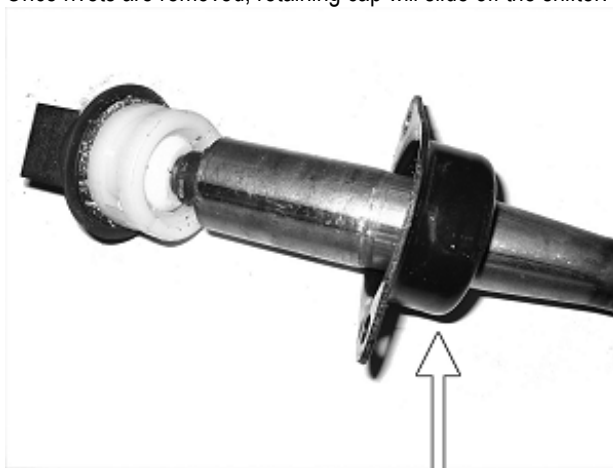
Locate the two rivets that keep the shifter in the carrier:



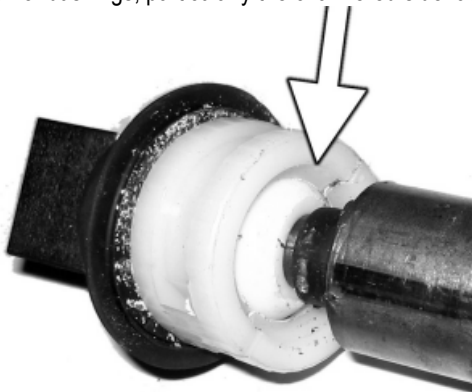
Drill out the two rivets:



Once rivets are removed, retaining cap will slide off the shifter:



Note orientation of bushings, particularly the chamfered side facing upwards:



Carefully pry bushing apart with flat-blade screwdriver:



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At this point, installation is the exact opposite of dis-assembly.

- 1) Lubricate new UUC shifter ball liberally with included grease and snap original shifter ball bushings onto new UUC shifter in orientation shown on page 5.
- 2) Put original retaining cap on UUC shifter, secure to carrier base with enclosed bolts and nuts.
- 3) Put carrier back into car, following procedure on page 4 in reverse.
- 4) Re-attach shift linkage to bottom of shifter using original bolt and nut.

Note that only one orientation is correct, and shape of shifter bottom prevents incorrect orientation:



- 5) Bolt the transmission cross-brace to the floorpan of the car.
- 6) Back inside of car, re-install two bolts removed from interior console. **You may require an assistant to push the shifter carrier up from underneath the car.**
- 7) **VERY IMPORTANT: before further re-assembly, check shifter action through all the gears. Make sure there is no binding and that all six forward gears and reverse can be easily engaged.**
- 8) Re-install interior foam piece and leather boot/knob parts.
- 9) Back underneath the car, re-install the driveshaft and exhaust.

Congratulations!

Installation is now complete and you may enjoy your new UUC Ultimate Short Shifter.

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10 Ilene Court, Unit #5 • Hillsborough, NJ • 08844
www.uucmotorwerks.com

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