

The installation of a 1989 World Class T5 V8 transmission with 2.95 1st and .63 5th gears into my 1967 Corvette started with searching the archives for all the previous installations and learning from the guys who did this before me. Thanks Mr Terry Fox and Mr Tom Austin. Then start by trimming off the torque arm mounting area used for the Camaros and Firebirds. This must be removed to clear the rear cross member of the Corvette. Remember that the transmission is rotated 18 degrees if using the Camaro bellhousing so trim accordingly.





Trimmed and prior to sanding smooth

Next is to tear down the transmission to see what needs to be replaced.





Cases and cover painted with AlumaBlast.



Start by pressing in new front bearing race.



New front bearing race installed. Be sure to use sealant when installing. I also pressed a new mating bearing onto the countershaft.



Assembly of the main shaft with new synchros, sliders, and Timken bearings.



Counter shaft installed and shimmed to 4 in-lb running torque using the steel billet retainer and peel-a-shim from Paul at 5 speeds.com. Note the stock retainer next to the billet one.



Assembly of the main case with counter gear shaft, main shaft and 5th gear installed.



Main case assembled with shift fork cover.



The tail shaft and front retainer are installed to check main shaft end play. Using peel-a-shims in .002" increments from 5speeds.com I was able to shim it to -.001" end play.



1983 Camaro bellhousing with 18 degree tilt on left compared to the stock Muncie bellhousing.



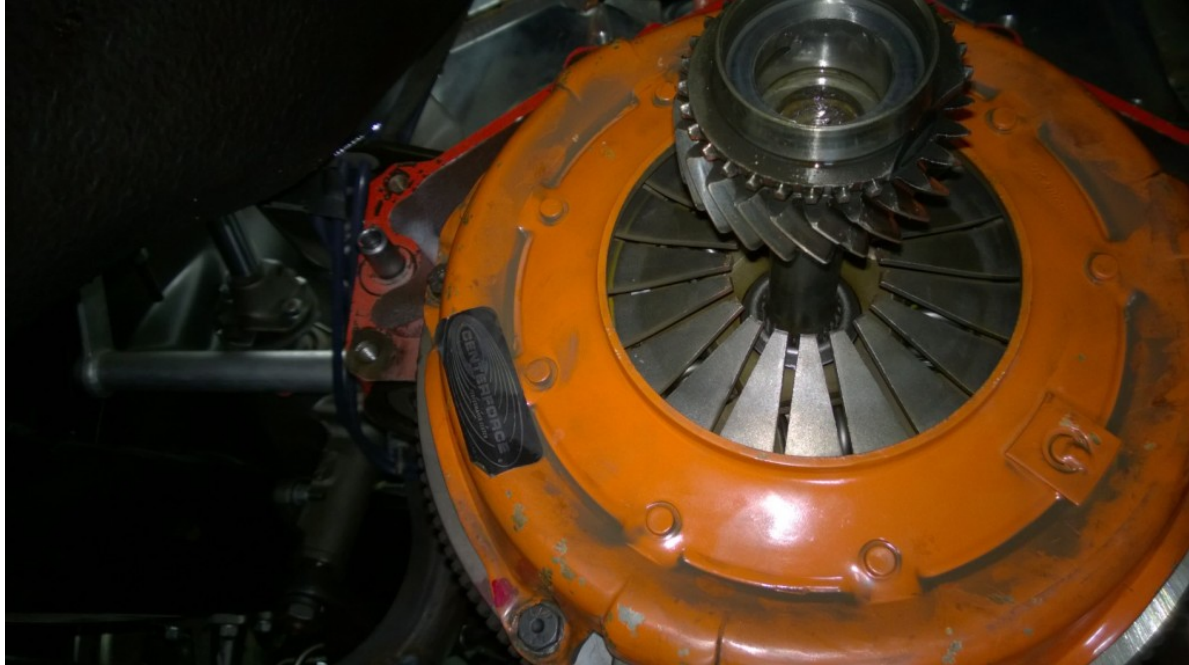
You need to use a die grinder to add clearance for a stock type starter nose. If using a mini starter this is not required.



1983 Camaro clutch fork on top (Pioneer P/N CF100), stock '67 Corvette fork bottom.



Removing factory dowel pins. This required drilling and tapping in order to pull them out.



The

T5 uses a 26 spline clutch disk vs the 10 spline that the Muncie uses. I used my existing Centerforce pressure plate and throw out bearing since they were fairly new and installed a new Centerforce clutch disk using a damaged T5 input shaft as an alignment tool.



The RobbMc Engineering adjustable dowel pins installed. They use an internal set screw to secure them in place.



By using the .007" Robb offset pins I was able to dial in the Camaro bellhousing to .006" Total Indicated Runout (TIR). This is well within the .010" max limit. With the stock pins I started with .012" TIR. Note the 18 degree rotation from center of the 12mm transmission mounting holes.



The T5 slid right into place. The '89 WC T5 uses an electronic speedometer sender but all you have to do is remove it, install a TH350 driven gear "bullet" retainer and the correct TH350 driven gear for your rear end ratio. I'm using the stock GM rubber mount from the Muncie. I have side exhaust so I simply notched the area in the cross member to clear the speedometer cable vs. using a 90 degree adapter. Note that the T5 and Camaro bellhousing both use metric bolts.



The rear transmission mount needs to be modified for the T5. I bought a damaged bracket on Ebay which was perfect to cut up. Tom Austin posted some pics of his bracket he made for his T5 install so I started by tack welding up the pieces for fitting, and eventually trimmed it further and completed the welding.





The stock Corvette clutch linkage rod is on top. I used an adjustable linkage rod GM #3849703 from Summit Racing and a 3/8"x8" grade 8 bolt that I cut the head off of to make it long enough, then welded a portion of a grade 8 washer to it for the spring attachment.



Modified pushrod installed. By using the '83 Camaro clutch fork you have a perpendicular attachment at both the Z bar and clutch fork. The clutch pedal feel is just like before with the Muncie linkage.



The downside is the need to cut the divider out between the ash tray to clear the T5 shifter housing. The Camaro shifter shaft was cut off just above the 18 degree angle to the right. An extension was welded onto the shaft to center the shifter 1.5" forward.

Before modifying the Camaro shifter you should take it apart so you do not damage the plastic pivot ball inside when welding. Simply grind off the single tab on the rear edge. The front has two bent over tabs



Then tack the shifter together when finished.



To close out the shifter opening I made a fiberglass close out panel to fit around the new shifter.



A new 5 Speed shift pattern from Silver Sport Transmissions was installed on the console.



Driveshaft shortening

The 1989 WC T5 is exactly 3 inches longer than the Muncie which required having the driveshaft shortened by 3". I also had Spicer solid U-Joints installed at the same time it was shortened.



Backup switch:

To keep the engine bay wiring looking stock I simply cut the wire harness from the Muncie's backup light switch 4 inches from the switch and installed a two pin Weather Pack connector. The male Weather Pack connector plugs right into the reverse switch on the T5. I installed a mating female connector on the Muncie switch in case there was ever a need to re-install it.



Ash Tray

As with most 5 speed conversions the new transmission is longer and blocks off the ash tray. The T5 limits the space for the ash tray but doesn't completely block it off. I didn't want to open the ash tray slide and have a void so I simply notched the ash tray to clear the transmission.

