

" THIS ARTICLE IS INTENDED FOR YOUR REFERENCE ONLY.

ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "

1955-57 TURBO HYDRA-MATIC 200R4 TRANSMISSION INSTALLATION

Installation of a newer, easier to service, more reliable, higher performance and more fuel efficient drivetrain is the most popular upgrade for 1955-57 Chevy owners. Since the original classics were only available with a 2-speed Powerglide automatic or a 3-speed manual transmission, upgrading to a modern 4-speed automatic is the way to go for improved driveability. Two readily available and popular choices are the TH 700R4 and the TH 200R4. The 200 is often overlooked due to a bad reputation for failure in it's early years. However, the right year TH 200R4 is actually a very popular choice with drag racers over the 700 due to it's lighter weight and more efficient output.

The TH 200R4 can be found in 1982-1989 rear wheel drive Buicks, Pontiacs, Oldsmobiles, Cadillacs and some Chevrolets. The famed turbocharged Buick Grand national utilized this transmission exclusively. In addition to it's lighter weight, this transmission was developed at a time when highest efficiency/maximum horsepower to the rear wheels was desired to improve fuel economy. When choosing a TH 200R4, avoid the 1982-1983 transmissions. These early units were very prone to leakage and failure. Choose a 1984-1989 transmission for better reliability. This transmission is flanged to fit any GM small or big block, so selection is easy. Following is a table that shows the first gear through fourth gear ratios of some popular transmissions:

	First	Second	Third	Fourth
Powerglide	1.82 or 1.76	1.00	X	X
TH 350	2.52	1.52	1.00	X
TH 400	2.48	1.48	1.00	X
TH 200R4	2.74	1.57	1.00	.67
TH 700R4	3.06	1.62	1.00	.70

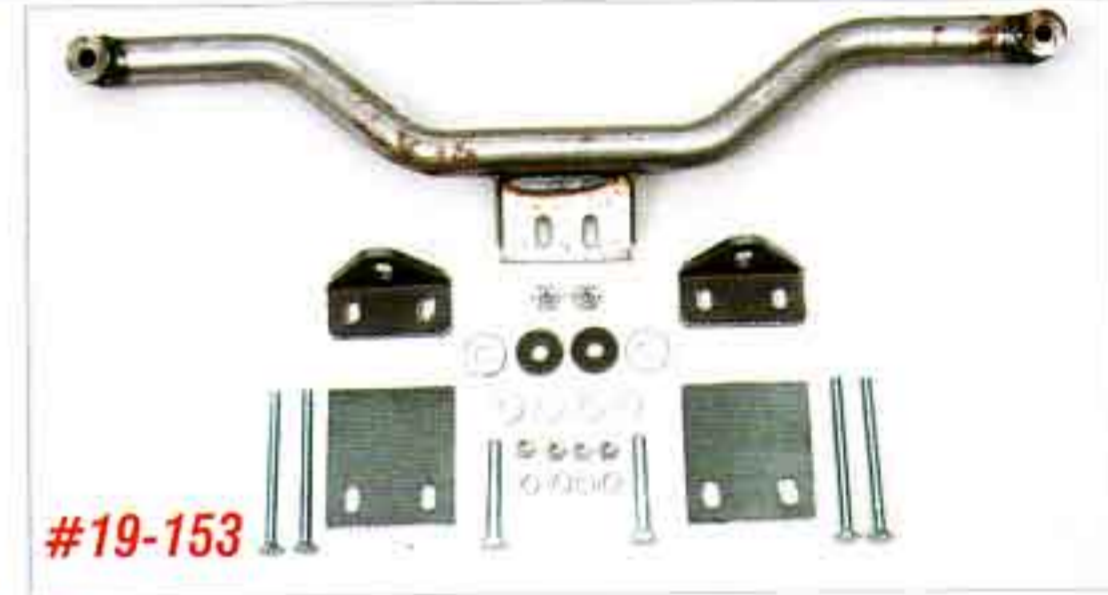
Each number represents the final drive ratio of the engine to the driveshaft. The higher number will give increased torque while the lower number gives improved mileage. While the 700R4 has better low-end torque, the TH200R4 will actually give better highway mileage.

Tools Needed:

Torque Wrench
1/2" Ratchet
Assorted Sockets
Assorted Wrenches

Time Frame:

6 Hours



Parts Needed:

- 19-150 1955-57 TH 200/350 Installation Kit
Except Convertible
- 19-155 1955-57 TH 200/350 Convertible Installation Kit
- 19-153 1955-57 Transmission Crossmember Kit
Except Convertible
- 19-160 1955-57 TH 200/350/400 Convertible Crossmember
- 19-36 1955-72 TH 200/350/700R4 Yoke
- 19-64 1955-72 TH200/700R4 TVI Cable
- 19-30 1955-72 TH 168 Tooth Flexplate
- 19-62 1955-72 Automatic Flywheel Bolts
- 19-66 1955-72 Carburetor TVI Cable Pin
- 19-166 1955-72 TH 200R4 Dipstick & Tube
- 19-23 1955-72 TVI Cable Bracket
- 19-24 1955-57 TH 200/350 Cooling Lines
- 19-01 1955-57 TH 200/350/400/700R4 Installation Brackets
- 19-19 1955-57 TH 200/350/400/700R4 Column Shift Linkage
- 19-18 1955-72 TH 200/350/700R4 Rear Transmission Mount



Photo #1: The original engine was mounted to the main crossmember with rubber grommets and studs. The rear of the engine was held in place with mounts from the bellhousing to the frame horns.

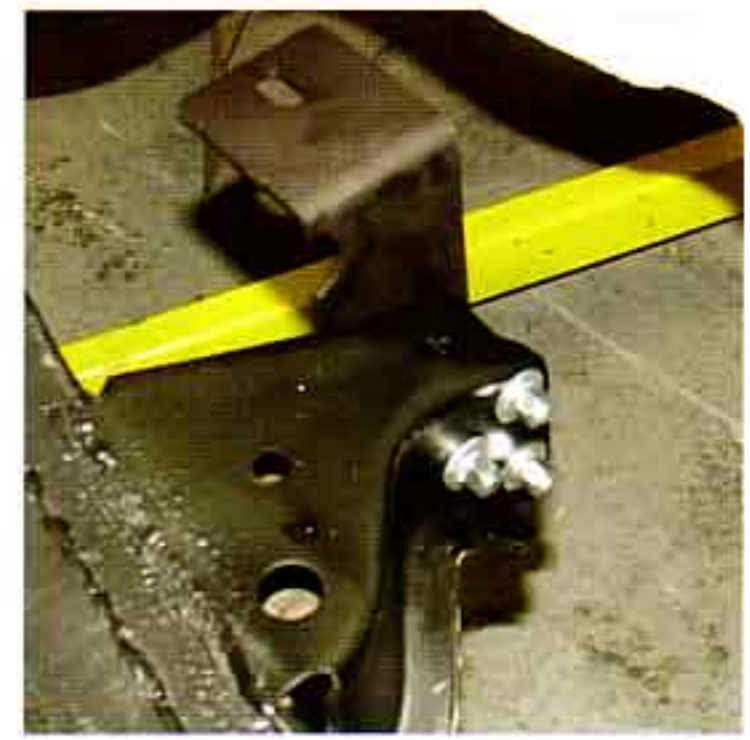


Photo #6a & 6b: The lower half of the new transmission supports bolt to the front of the original frame horns with three 3/8" X 3-1/4" bolts, flat washers, lock washers and nuts. There is a cut-out on the drivers side lower bracket to allow the front emergency brake cable to pass by.



Photo #2: Begin by installing the TH flexplate on the engine. The automatic flexplate, P/N 19-30, has raised areas where the torque converter bolts on. Make sure the raised area is facing to the transmission.

Photo #3: The flywheel is held to the crankshaft with five 7/16" X 11/16" fine thread bolts with serrated lock washers P/N 19-62. Torque these bolts to 45 ft/lbs.



Photo #7: The upper half of the transmission supports bolt to the bellhousing using the two lower bellhousing-to-engine-block bolts.



Photo #4: Make sure the torque converter is installed all the way into the front of the transmission. If the torque converter is not installed all the way and the transmission is

bolted to the back of the engine, damage will occur to the front pump of the transmission. To make sure the converter is in all the way, lay a straight edge on the bellhousing. The snout on the converter should be flush with the straight edge.



Photo #8a & 8b: The upper and lower brackets are held together with a 1/2" X 2" bolt with flat washers, a castellated nut and cotter pin. Tighten the nut and install the cotter pin so that there is a slight squeeze on the rubber grommets. This will insulate any engine vibrations from the frame and body.

Photo #5: Raise the transmission and attach to the engine with the top two bellhousing-to-engine-block bolts and lock washers.



Photo #9: With the bellhousing bolted to the engine, bolt the torque converter to the flexplate using the supplied metric bolts.



Photo #10: The transmission mount P/N 19-18 bolts to the tailshaft housing using the two 10mm X 40mm bolts supplied with the kit.

YOU CAN DO IT MODIFICATION



Photo #11: The transmission crossmember P/N 19-153 bolts to the transmission mount with two 7/16" X 1" bolts, lock washers and flat washers.

Photo #12: The outer elbow brackets for the transmission crossmember bolt to the frame using two 3/8" carriage bolts. The brackets have a mounting slot for the crossmember to allow for any variations in the frame width.



Photo #13a & 13b: The transmission crossmember bolts to the elbow brackets with a 1/2" X 3" bolt. There is a flat washer on the top of the crossmember and a heavy 1/4" thick flat washer and lock nut on the bottom of the elbow bracket.



Photo #14a & 14b: Square the crossmember in the frame and using a C-clamp, hold the left and right elbow brackets in place. Drill an 1/8" pilot hole into the frame centered in the elbow mount bracket holes.



Photo #15: Remove the crossmember and elbow mounting brackets. Using a square, mark the outside of the frame and drill all four 3/8" elbow mounting bracket holes.

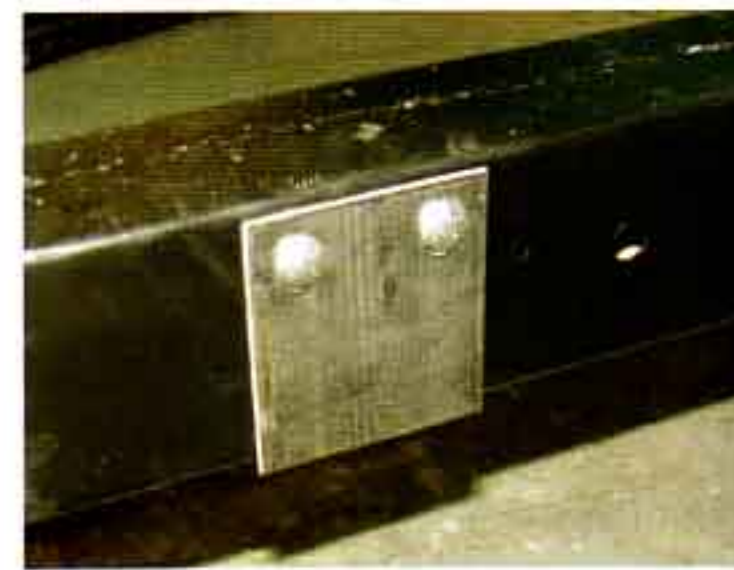


Photo #16a & 16b: The elbow mounting brackets and outer backing plates are held to the frame with two 3/8" X 5" bolts with flat washers, lock washers and nuts.



Photo #17a & 17b: Now reinstall the transmission crossmember and bolt the crossmember to the elbow brackets and transmission mount.



Photo #18: The crossmember has plenty of offset to allow any size or type of exhaust system to pass underneath.



Photo #19: The kickdown/TVI cable P/N 19-64 is the same as a TVI cable for a TH700-R4. The cable connects to a hook inside the kickdown cavity on the right hand side of the transmission.



Photo #20: The TVI cable is held to the transmission case with a 10mm bolt.



Photo #21a & 21b: The kickdown bracket **P/N 19-23** mounts to the two rear intake bolts on the drivers side of the engine.

Photo #22: There is a lock nut on the outer case of the kickdown cable. The outer case is adjustable in length. This will allow the cable to be used with any carburetor or fuel injection system. Once the cable is properly adjusted in length, lock the nut down.

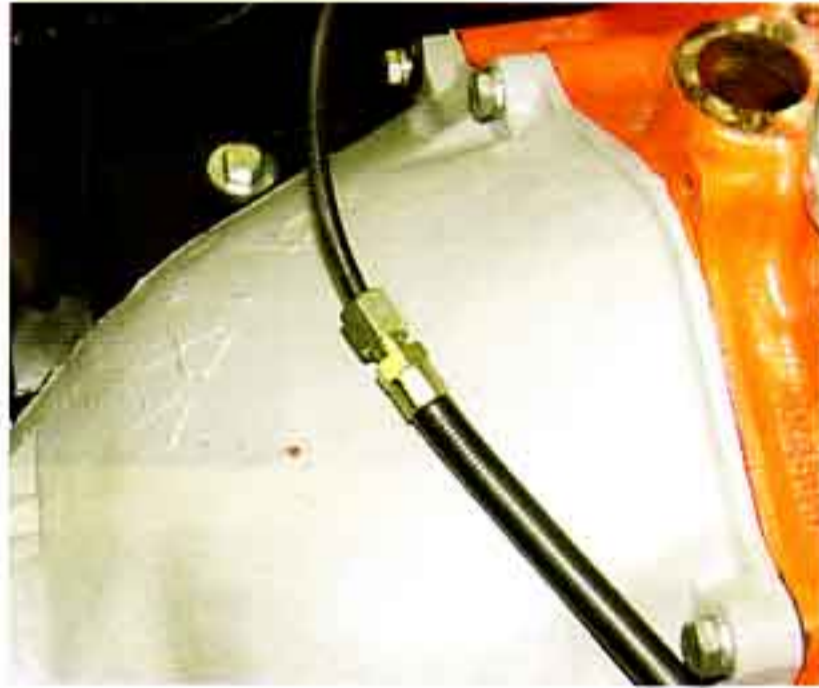


Photo #23: The kickdown cable pin **P/N 19-66** bolts to the lower throttle arm.

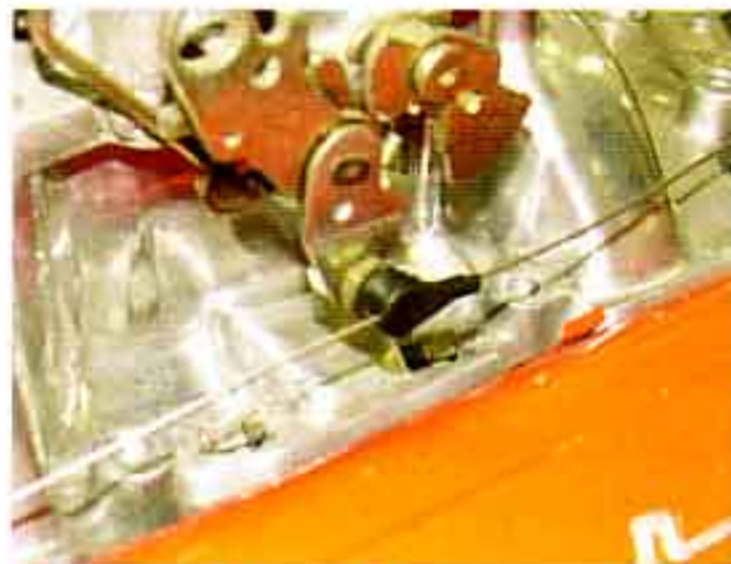


Photo #24a & 24b: Connect the plastic clip from the kickdown cable to the kickdown pin on the carburetor. Adjust the cable using the barrel clamp so that when the carburetor is at full throttle the cable is pulled tight.



Photo #25: The dipstick and tube **P/N 19-166** is held in place using the right hand upper bellhousing bolt.



Photo #26a & 26b: The transmission cooler lines **P/N 19-24** are designed to route around the dipstick and tube, feed around the starter and connect to the stock radiator in the V-8 position. Other lines, **P/N 19-41** are available for cars with radiators in the 6-cylinder position.



Photo #27a & 27b: The driveshaft yoke **P/N 19-36** is the same as a TH350 and TH700-R4. Install the yoke into the tail shaft of the transmission and push it in until it bottoms out. Now pull the yoke out 1" and measure from the center of the front cup to the center of the rear cup on the rear end and have your driveshaft shortened appropriately at a driveline shop.



Photo #28: Shifter linkage **P/N 19-19** connects the transmission to the stock or aftermarket steering column.

With the new transmission there will be a drop of 700 RPM from 3rd to 4th gear. This will improve milage and reduce engine wear.
Good Luck! 