Introduction

Two additional 6 speed transaxles have been introduced into the GM line, the 6T40 and 6T45.

The first car to receive the transmission in the United States will be the 2008 Chevrolet Malibu, followed by the 2009 Saturn Aura and Pontiac G6. The transaxle is also the primary application for the Daewoo Tosca and the Buick Lacrosse in Asia. The 6T40/45 family of transaxles is poised to become the largest 6 speed FWD applications that GM will produce.

Known as the "global 6 speed" or "GF6" the 6T40/6T45 improves fuel economy on average of 4 % while performance was improved 8% on average over its 4 speed cousins. The 6T40/6T45 share the same architecture and most of the parts are the same. The primary difference is the 6T45 is a heavy duty version of the 6T40. The heavy duty parts in the 6T45 include:

- 1.25" wide chain verses a 1" chain with the 6T40
- Input planetary is a 5 pinion assembly
- Heavier ribbed case
- Heavier Differential



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Features RPO CODES:

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- 6T40 car Fwd RPO MH8
- 6T40 car Awd RPO MHB
- 6T45 car Fwd RPO MH7
- 6T45 car Awd RPO MHC
- Input torque capacity 6T40 177 lb-ft (240 Nm)
- Output torque capacity 6T40 277 lb-ft (375 Nm)
- Weight 178 lbs (81kg)

RATIOS:

- 1st 4.58-1
- 2nd 2.96-1
- 3rd 1.91-1
- 4th 1.44-1
- 5th 1-1
- 6th .74-1
- REV 2.94-1
- Final Drive "effective ratio" 2.89-1, 3.17-1 or 3.87-1
- Fluid Type—Dexron VI
- Fluid capacity Valve body cover removal—5.3-7.4 qts (5-7 liters)
- Fluid capacity fluid change—4.2-6.3 qts (4-6 liters)
- Fluid capacity Overhaul--- 7.4-9.5 qts (7-9 liters)
- No dipstick, oil level checked via a plug (most applications)
- EC3 236 mm "hyper elliptical" furnace brazed torque converter. Torque converter contains a lip seal that will be damaged if the converter is removed or installed in any position other than "vertical". Special tools are available J46409
- 5 clutches (3 holding, 2 driving) clutch to clutch shifting
- 1 diode one way clutch
- 1 shift solenoid used (On/Off Design), SS1
- 6 Variable bleed solenoids, PCS1, PCS2, PCS3, PCS4, PCS5, TCC

Features (continued)

- A Motorola (Continental) built 32 bit TCM (TEHCM) mounted internal to the transmission on the valve body (Referred to as the "control solenoid valve assembly") The TEHCM incorporates the TCM, Solenoids, pressure switches, TFT sensor and it is bolted to the valve body.
- Gerotor type oil pump, 3 selective gears thicknesses available
- Internal Mode Switch (IMS) equipped
- Hall effect input and output speed sensors
- Performance Algorithm Shifting (PAS) programming
- Performance Algorithm Lift foot (PAL) programming
- Winter mode programming
- Sport mode and TAP shift equipped
- Adaptive Strategies with fast learn capabilities
- Reverse lock out feature
- Grade Braking
- Fwd/Awd applications can be dingy towed but Awd applications cannot be dolly towed. Neither application can be towed with the rear wheels in the air, as would happen when the vehicle is being towed by a tow truck.

Exploded View

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