

Component Procedures: Manual Transmission/Transaxle

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Component Procedures: Manual Transmission/Transaxle

Parts and Labor (itype_189)

Parts

Qualifier	Part #	Name	Price	Note
Transmission	24263300	Transmission	3169.74	Order By Description.

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Gear Shift Control > Gear Shift Assembly, R&R	B	1.4	0.0
Remove & Replace	Manual Transmission > Rear Extension Seal, R&R	B	1.8	1.4
Remove & Replace	Manual Transmission > Transmission, R&R > Ais?	B	5.9	4.4
Remove & Replace	Manual Transmission > Transmission, R&R > Tre?	B	4.6	3.3
Remove & Replace	Mounts > Rear Mount, R&R > Manual Trans	B	0.4	0.0
Change	Manual Transmission > Trans Fluid, Change	C	0.5	0.0
Remove & Install	Manual Transmission > Transmission, R&I > Ais?	B	5.6	0.0
Remove & Install	Manual Transmission > Transmission, R&I > Tre?	B	4.3	0.0
Overhaul	Manual Transmission > Transmission, Overhaul ?	A	12.4	0.0
Overhaul	Manual Transmission > Transmission, Overhaul ?	A	11.1	0.0

Specifications Quick Reference (itype_439)

Quick Specifications

- item

AISIN AY6 (MV5) - Manual Transmission (Article 14044)

Non Standards

- Transmission Identification Information (14045)
- Transmission System (14046)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14132)

Non Standards

- Transmission Identification Information (14138)
- Manual Transmission Description and Operation (14133)
- Reverse Inhibit Description and Operation (14134)
- Transmission Fluid Temperature Sensor Description and Operation (14137)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14218)

Non Standards

- Manual Transmission Schematics (14219)

AISIN AY6 (MV5) - Manual Transmission (Article 14113)

Non Standards

- Manual Transmission Schematics (14114)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14230)

Non Standards

- Disassembled Views (14231)

AISIN AY6 (MV5) - Manual Transmission (Article 14130)

Non Standards

- Disassembled Views (14131)

AISIN AY6 (MV5) - Manual Transmission (Article 14070)

Non Standards

- Transmission Disassemble (14087)
- Output Shaft Disassemble (14078)

- Input Shaft Disassemble (14076)
- Counter Gear Shaft Disassemble (14073)
- Transmission Case Disassemble (14086)
- Transmission Extension Disassemble (14089)
- Synchronizers Disassemble (14082)
- Gears and Shafts Cleaning and Inspection (14074)
- Bearings and Spacers Cleaning and Inspection (14071)
- Synchronizers Cleaning and Inspection (14081)
- Shift Shaft and Shift Fork Cleaning and Inspection (14079)
- Transmission Case Cleaning and Inspection (14085)
- Synchronizers Assemble (14080)
- Transmission Extension Assemble (14088)
- Transmission Case Assemble (14084)
- Counter Gear Shaft Assemble (14072)
- Input Shaft Assemble (14075)
- Output Shaft Assemble (14077)
- Transmission Assemble (14083)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14165)

Non Standards

- Transmission Disassemble (14185)
- Main Shaft and Input Shaft Disassemble (14171)
- Counter Gear Shaft Disassemble (14168)
- Synchronizers Disassemble (14180)
- Synchronizers Cleaning and Inspection (14179)
- Synchronizers Assemble (14178)
- Shift Shaft and Fork Assemblies Disassemble (14176)
- Shift Shaft and Fork Assemblies Cleaning and Inspection (14175)
- Shift Shaft and Fork Assemblies Assemble (14174)
- Transmission Case and Clutch Housing Disassemble (14184)
- Transmission Case and Clutch Housing Cleaning and Inspection (14183)
- Transmission Case and Clutch Housing Assemble (14182)
- Shift Control Shaft Cover Assembly Disassemble (14173)
- Shift Control Shaft Cover Assembly Assemble (14172)
- Transmission Extension Disassemble (14188)
- Transmission Extension Cleaning and Inspection (14187)
- Transmission Extension Assemble (14186)
- Bearings and Spacers Cleaning and Inspection (14166)
- Gears Cleaning and Inspection (14169)
- Counter Gear Shaft Assemble (14167)
- Main Shaft and Input Shaft Assemble (14170)
- Transmission Assemble (14181)
- Shimming Procedures (14177)

AISIN AY6 (MV5) - Manual Transmission (Article 14109)

Non Standards

- Transmission Replacement (14110)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14214)

Non Standards

- Transmission Replacement (14215)

Seal Reuse Caution (Article 13086)

Document ID: 2066116

Caution:

Do not reuse the seals. Replace with NEW seals. Reusing old seals may cause transmission damage.

AISIN AY6 (MV5) - Manual Transmission (Article 14121)

Non Standards

- Adhesives, Fluids, Lubricants, and Sealers (14122)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14222)

Non Standards

- Adhesives, Fluids, Lubricants, and Sealers (14223)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14226)

Non Standards

- Fastener Specifications (14227)
- Shim Size Specifications (14229)

AISIN AY6 (MV5) - Manual Transmission (Article 14116)

Non Standards

- Fastener Specifications (14126)
- Transmission Clearance Specifications (14129)
- 1st and 2nd Gear Synchronizer Retaining Ring Specifications (14117)
- 3rd and 4th Gear Synchronizer Retaining Ring Specifications (14118)
- 5th Gear Synchronizer Retaining Ring Specifications (14119)
- Countershaft Front and Rear Bearing Retaining Ring Specifications (14125)
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Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14224)

Non Standards

- Adhesives, Fluids, Lubricants, and Sealers (14225)

All Technical Service Bulletins (itype_100)

Tsbs

- Manual Transmission Operating Characteristics (03-07-29-004L, 2019/04/02)
- Product Quality Center (PQC) Assembly Replacement Process — For Service Agents Not Required to Contact PQC Prior to Assembly Replacement (12-07-30-001E, 2015/03/26)
- Manual Transmission Pops/Jumps Out of Third Gear After Shifting and During Acceleration (23-NA-172, 2023/10/06)

AISIN AY6 (MV5) - Manual Transmission (Article 14063)

Non Standards

- Transmission Fluid Leak Diagnosis (14064)

AISIN AY6 (MV5) - Manual Transmission (Article 14049)

Non Standards

- Clutch Pedal Position Learn (14050)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14141)

Non Standards

- Clutch Pedal Position Learn (14142)

AISIN AY6 (MV5) - Manual Transmission (Article 14059)

Non Standards

- Symptoms - Manual Transmission (14060)
- Transmission Shifts Hard (14069)
- Transmission Gear Clash When Shifting Gears (14065)
- Transmission Noisy (14068)
- Transmission Does Not Shift into One Gear (14062)
- Transmission Jumps Out of Gear (14066)
- Transmission Locked in One Gear (14067)
- Transmission Clunk on Acceleration or Deceleration (14061)

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14155)

Non Standards

- Symptoms - Manual Transmission (14156)
- Transmission Shifts Hard (14164)
- Transmission Gear Clash When Shifting Gears (14160)
- Transmission Noisy (14163)
- Transmission Jumps Out of Gear (14161)
- Transmission Does Not Shift Into One Gear (14158)
- Transmission Locked in One Gear (14162)
- Transmission Clunk on Acceleration or Deceleration (14157)
- Transmission Fluid Leak Diagnosis (14159)

AISIN AY6 (MV5) - Manual Transmission - Special Tools (Article 14115)

Illustration Tool Number/ Description

- Click for full-size image DT 47678 Transmission Holding Fixture
- Click for full-size image DT 47678-10 Transmission Holding Fixture Adapters
- Click for full-size image DT 47722 Shift Rail Bushing Remover/Installer
- Click for full-size image DT 47723 Output Shaft Bearing Installer
- Click for full-size image DT 47724 Output Shaft Bearing Cup Installer
- Click for full-size image DT 47725 Extension Housing Bearing Cup Installer
- Click for full-size image DT 47726 Counter Shaft Rear Bearing Installer
- Click for full-size image DT 49027 Coil Pin Remover and Installer
- Click for full-size image J 2619-01 Slide Hammer
- Click for full-size image J 8001-3 Dial Indicator
- Click for full-size image J 8092 Driver Handle
- Click for full-size image J 22912-B Split Plate Bearing Puller
- Click for full-size image J 26900-12 Dial Indicator 1-10 mm
- Click for full-size image J 26900-13 Magnetic Indicator Base
- Click for full-size image J 26941 Bushing and Bearing Remover 3–4 in
- Click for full-size image J 36614 Inner Pinion Bearing Installer
- Click for full-size image J 41816 Crankshaft Balancer Remover
- Click for full-size image J 44749 Split Plate Bearing Gear Puller
- Click for full-size image J 44765 Seal Installer
- Click for full-size image J 45012 Holding Fixture

Tremec 6-Speed (M10, MG9, MM6) - Manual Transmission (Article 14220)

Non Standards

- Special Tools (14221)

Miscellaneous Information (itype_111)

Tsbs

- Manual Transmission Operating Characteristics (03-07-29-004L, 2019/04/02)

OEM Policies and Procedures (itype_120)

Tsbs

- Product Quality Center (PQC) Assembly Replacement Process — For Service Agents Not Required to Contact PQC Prior to Assembly Replacement (12-07-30-001E, 2015/03/26)