

TRANSMISSION REMOVAL & INSTALLATION - M/T

1994 Toyota Celica

1994 MANUAL TRANSMISSION REMOVAL & INSTALLATION
Toyota

Celica

REMOVAL & INSTALLATION

REMOVAL

WARNING: To prevent air bag deployment, disconnect negative battery cable and wait at least 90 seconds before working on vehicle.

1) Disconnect negative battery cable. On 2.2L (5S-FE) models, remove battery and cruise control actuator. Remove air cleaner case with air intake hose. Remove clutch release cylinder with hose attached and secure aside.

2) Remove starter. Disconnect necessary ground straps, electrical connections and control cables from transaxle. Remove upper transaxle mounting bolts from cylinder block.

3) Raise and support vehicle. Remove front wheels. Remove lower engine covers. Drain transaxle fluid. Remove axle shafts from transaxle. See the AXLE SHAFTS - 1.8L, or the AXLE SHAFTS - 2.2L article in DRIVE AXLES.

4) Remove front exhaust pipe, located below oil pan. Remove front exhaust pipe support bracket. On 2.2L (5S-FE), remove stiffener plate, located between cylinder block and transaxle, at rear of oil pan.

5) Support engine with hoist. Using transmission jack, slightly raise transaxle to remove weight from engine mounts.

6) Remove front (exhaust manifold side) engine mount-to-crossmember bolts/nuts. Remove rear (intake manifold side) engine mount-to-crossmember bolts/nuts.

7) Remove front (exhaust manifold side) engine mount and rear (intake manifold side) engine mount brackets from cylinder block. Remove bolts and crossmember, located below engine and transaxle. Remove transaxle mount bolts.

8) Remove remaining transaxle mounting bolts. Slightly lower engine and remove transaxle. Place a reference mark on clutch cover and flywheel for reassembly reference.

9) Alternately loosen clutch cover bolts until spring tension is released. Remove clutch cover and clutch disc. Remove clutch release fork, clutch release bearing and pivot stud from transaxle (if necessary). See Fig. 1.

INSPECTION

1) Check wear on facings of clutch disc by measuring depth of each rivet head. Minimum depth at any rivet is .012" (.30 mm). Check clutch disc runout. Maximum runout at facing on clutch disc is .031" (.80 mm). Replace clutch disc if not within specification.

2) Using dial indicator, check flywheel runout. Replace flywheel if flywheel runout is greater than .004" (.10 mm).

3) Using caliper, measure depth and wear on diaphragm spring on clutch cover. See Fig. 2. Maximum depth is .024" (.60 mm) and maximum width is .197" (5.00 mm). Replace clutch cover if necessary.

4) Ensure clutch release bearing rotates smoothly. Replace clutch release bearing if necessary.

INSTALLATION

1) If installing flywheel, apply thread sealant on threads of flywheel bolts before installing. Install and alternately tighten flywheel bolts in a crisscross pattern to specification. Refer to the TORQUE SPECIFICATIONS table.

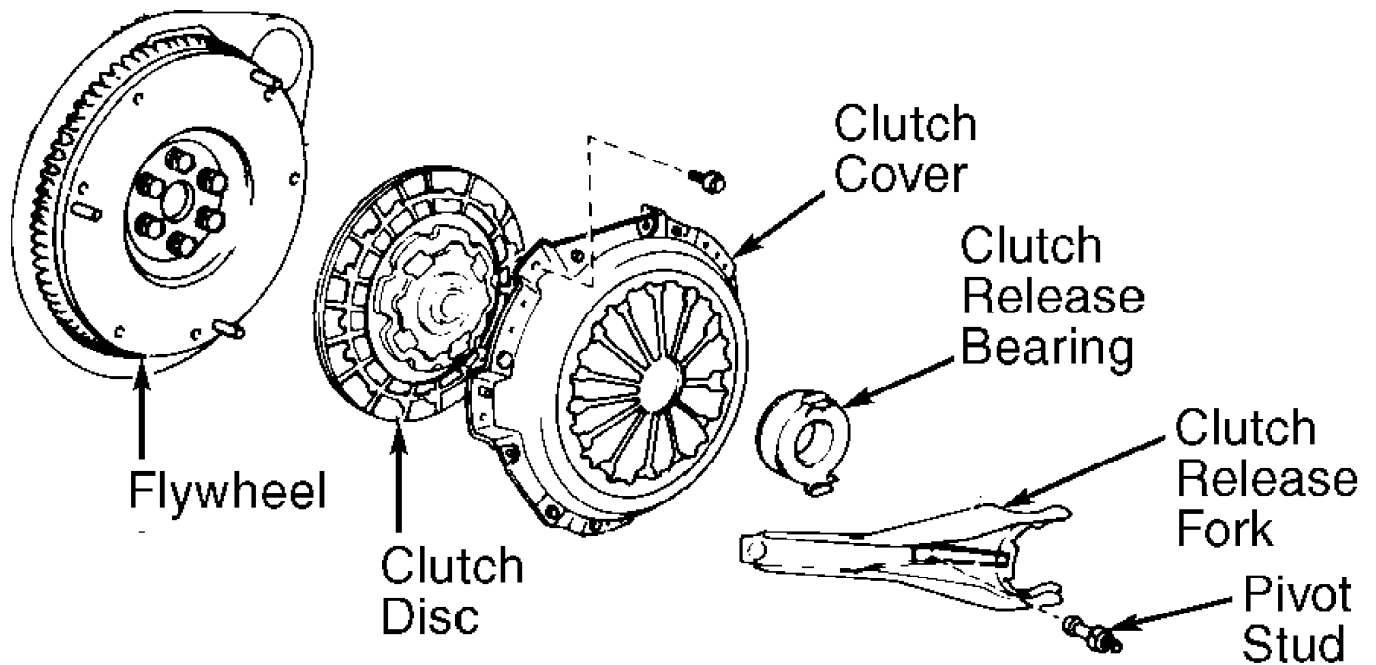
2) Install clutch disc in clutch cover. Align reference marks on clutch cover and flywheel. Install clutch disc and clutch cover on flywheel.

3) Using clutch aligner, center clutch disc on flywheel. Install and alternately tighten clutch cover bolts in a crisscross pattern to specification. See TORQUE SPECIFICATIONS.

4) Apply molybdenum disulfide grease to clutch release fork-to-pivot stud contact surfaces, hub on clutch release bearing and clutch disc splines. Install clutch release fork and clutch release bearing on transaxle (if removed).

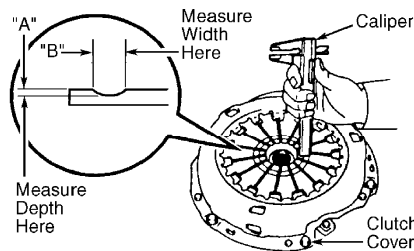
5) To install remaining components, reverse removal procedure. Tighten retaining bolt/nuts to specification. Refer to the TORQUE SPECIFICATIONS table. Fill transaxle with 75W-90 gear oil with API GL-4 or GL-5 rating.

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Fig. 1: Exploded View Of Typical Clutch Assembly
Courtesy of Toyota Motor Sales, U.S.A., Inc.



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Fig. 2: Checking Diaphragm Spring Depth & Width
Courtesy of Toyota Motor Sales, U.S.A., Inc.

TORQUE SPECIFICATIONS

CELICA

TORQUE SPECIFICATIONS (CELICA)

Application	Ft. Lbs. (N.m)
Flywheel Bolts	
4A-FE	58 (79)
5S-FE	65 (88)
3S-GTE	80 (108)
Pressure Plate Bolts	14 (19)
Transaxle-To-Engine Bolts	
10-mm Bolts	34 (46)
12-mm Bolts	47 (64)
Wheel Lug Nuts	76 (103)

CELICA ALL-TRAC

TORQUE SPECIFICATIONS (CELICA ALL-TRAC)

Application	Ft. Lbs. (N.m)
Dynamic Damper Bolt	19 (26)
Engine Mount	
Crossmember-To-Underbody Bolt	38 (52)
Bracket-To-Engine Bolts (Right Front)	38 (52)
Insulator Through Bolt	64 (87)
Insulator-To-Bracket Nuts (Right Front)	38 (52)
Mount-To-Crossmember Bolt	54 (73)
Flywheel Bolt	65 (88)
Power Steering Pump Bolt	32 (43)
Pressure Plate Bolts	14 (19)
Stiffener Support Brace Bolt	
(Engine Block-To-Flywheel Housing)	27 (37)
Strut Tower-To-Firewall Brace	
Bolt	15 (20)
Nut	47 (64)
Suspension Crossmember Bolt	112 (152)
Transaxle-To-Engine Bolts	
10-mm Bolts	34 (46)
12-mm Bolts	47 (64)
Wheel Lug Nuts	76 (103)
