

MANUAL TRANSMISSION (R15M-D, R15MX-D)

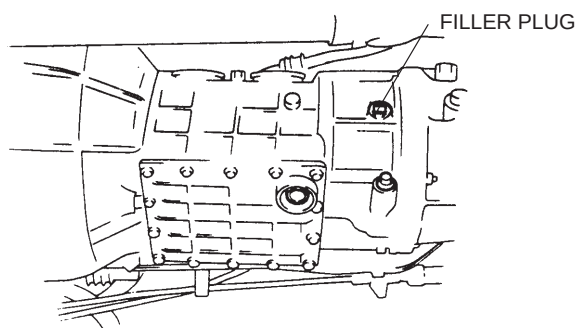
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MANUAL TRANSMISSION

TRANSMISSION OIL INSPECTION

1. Remove the filler plug.



2. Verify that the oil is at the brim of the filler plug hole as shown. If it is low, add the specified oil from the filler plug hole.

Specified oil

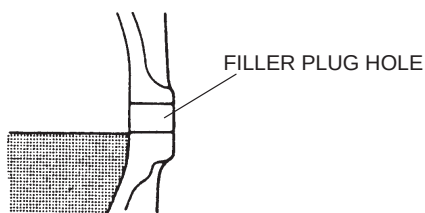
Grade:

API service GL-4 or GL-5

Viscosity:

SAE 75W-90 (All season) or

SAE 80W-90 (Above 10°C {50°F})



3. Install a new filler plug.

Tightening torque

25—39 N·m {2.6—4.0 kgf·m, 19—28 ft·lbf}

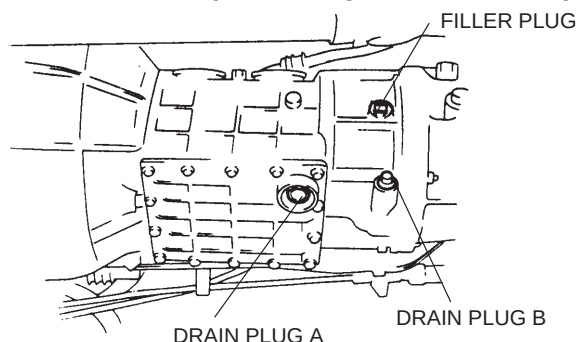
TRANSMISSION OIL REPLACEMENT

1. Remove drain plugs A and B, and drain the oil into a container.
2. Clean the drain plug A.
3. Install the drain plug A with new washer and a new drain plug B.

Tightening torque

A: 40—58 N·m {4.0—6.0 kgf·m, 29—43 ft·lbf}

B: 21—31 N·m {2.1—3.2 kgf·m, 16—23 ft·lbf}



4. Remove the filler plug and add the specified oil through the filler plug port until the level rises to the bottom of the port.

Specified oil

Grade:

API service GL-4 or GL-5

Viscosity:

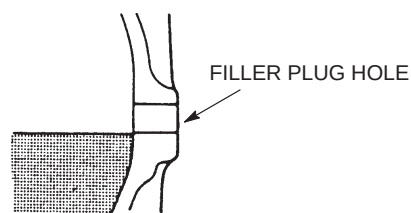
SAE 75W-90 (All season) or

SAE 80W-90 (Above 10°C {50°F})

Capacity:

2.8 L {3.0 US qt, 2.5 Imp qt} (R15M-D)

3.2 L {3.4 US qt, 2.8 Imp qt} (R15MX-D)



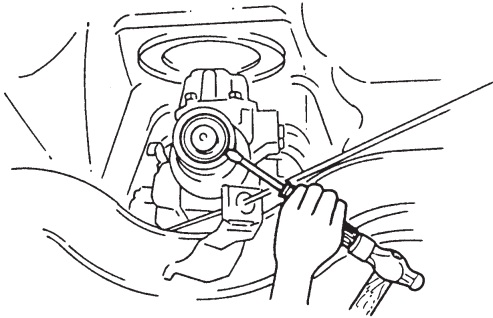
1. Install a new filler plug.

Tightening torque

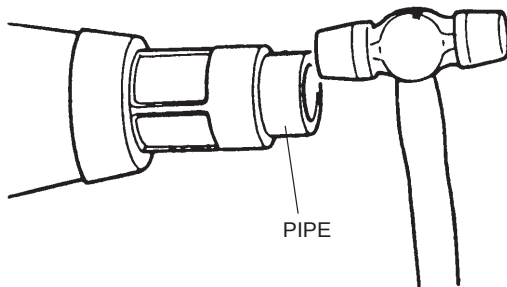
25—39 N·m {2.6—4.0 kgf·m, 19—28 ft·lbf}

OIL SEAL (R15M-D) REPLACEMENT

1. Drain the transmission oil.
2. Remove the propeller shaft.
(Refer to section L, PROPELLER SHAFT (4x2),
PROPELLER SHAFT REMOVAL/INSTALLATION.)
3. Remove the oil seal using a screwdriver.



4. Apply the specified oil to the new oil seal.
5. Install the oil seal until it touches the case using a suitable piece of pipe.



6. Install the propeller shaft.
(Refer to section L, PROPELLER SHAFT (4x2),
PROPELLER SHAFT REMOVAL/INSTALLATION.)
7. Add the transmission oil.
(Refer to MANUAL TRANSMISSION,
TRANSMISSION OIL REPLACEMENT.)

VEHICLE SPEEDOMETER SENSOR REMOVAL/INSTALLATION

(Refer to section J1, MANUAL TRANSMISSION,
VEHICLE SPEEDOMETER SENSOR
REMOVAL/INSTALLATION.)

VEHICLE SPEEDOMETER SENSOR INSPECTION

(Refer to section J1, MANUAL TRANSMISSION,
VEHICLE SPEEDOMETER SENSOR INSPECTION.)

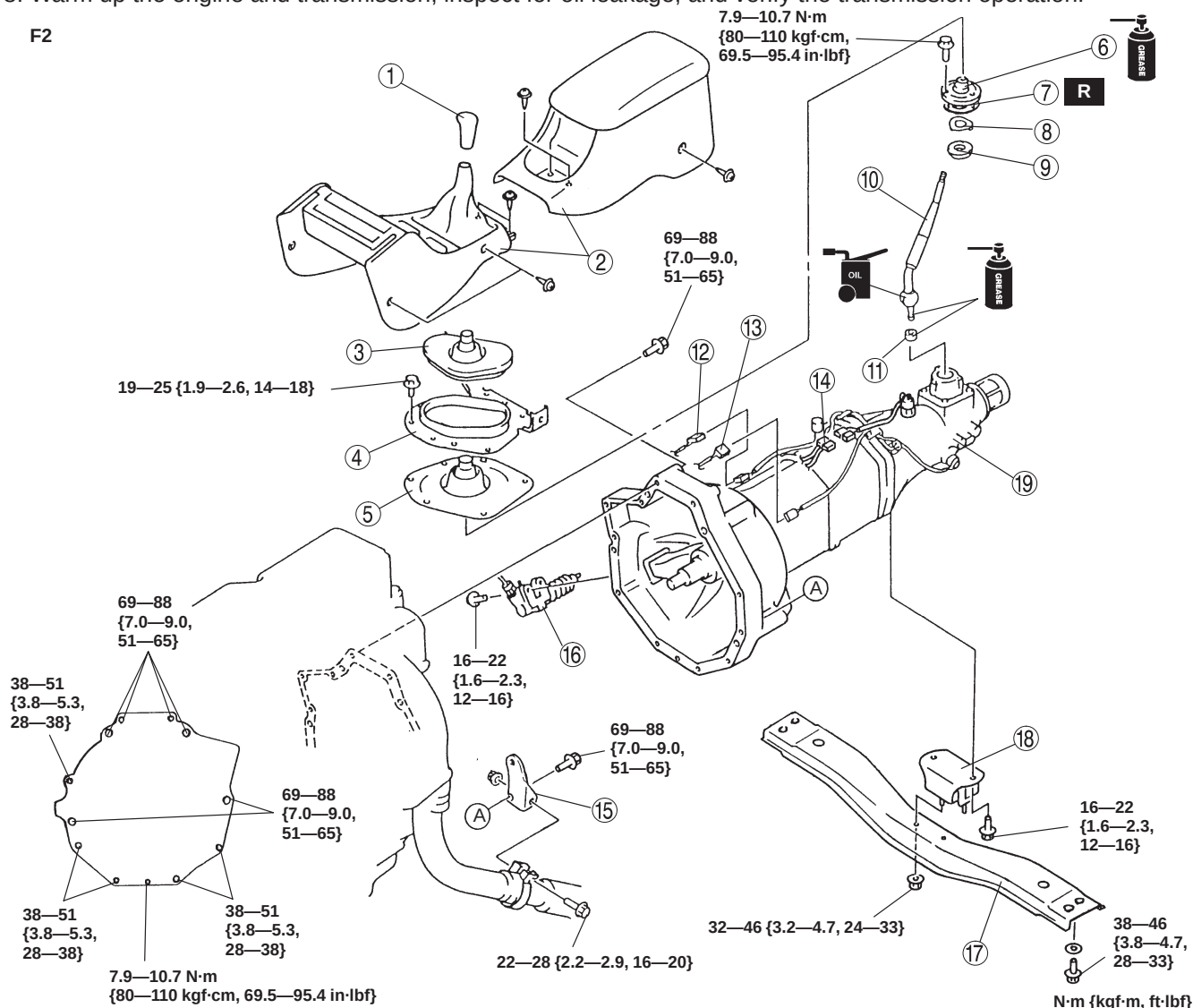
MANUAL TRANSMISSION

MANUAL TRANSMISSION REMOVAL/INSTALLATION

4 × 2 (R15M-D)

1. Disconnect the negative battery cable.
2. Drain the transmission oil into a container.
3. Remove the propeller shaft. (Refer to section L, PROPELLER SHAFT (4x2), PROPELLER SHAFT REMOVAL/INSTALLATION.)
4. Remove the starter. (Refer to section G, STARTING SYSTEM, STARTER REMOVAL/INSTALLATION.)
5. Remove in the order indicated in the table.
6. Install in the reverse order of removal.
7. Add the specified amount and type of transmission oil. (Refer to MANUAL TRANSMISSION, TRANSMISSION OIL REPLACEMENT.)
8. Warm up the engine and transmission, inspect for oil leakage, and verify the transmission operation.

F2

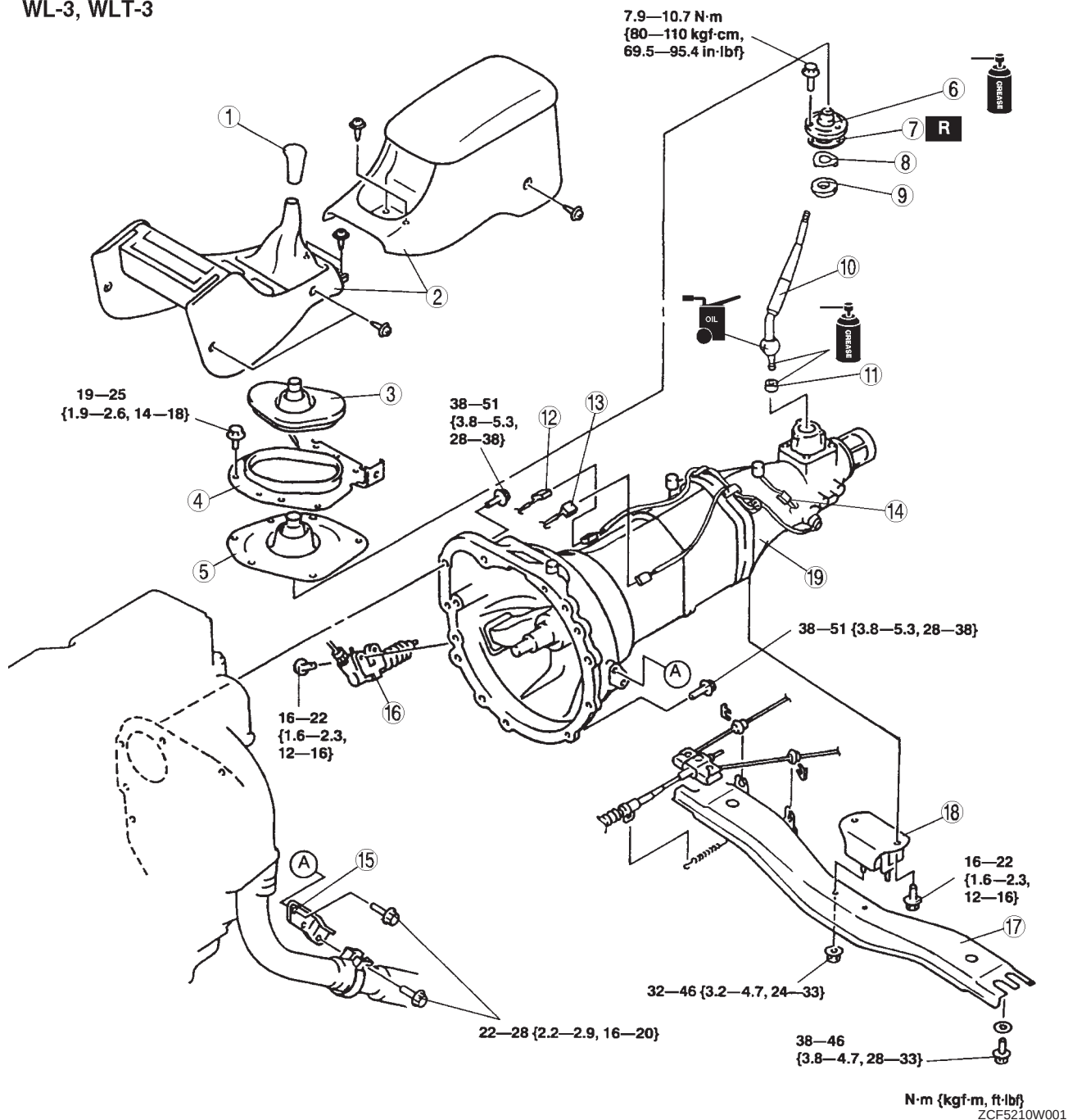


1	Shift lever knob
2	Console
3	Dust boot
4	Change boot upper plate
5	Boot
6	Dust boot
7	Gasket
8	Wave washer
9	Change bush
10	Change lever
11	Change seat

12	Vehicle speedometer sensor connector
13	Back-up light switch connector
14	Neutral switch connector (F2 CIS)
15	Front pipe bracket
16	Clutch release cylinder
17	Crossmember + Removal Note
18	Transmission lower mount
19	Transmission + Removal note + Installation note

MANUAL TRANSMISSION

WL-3, WLT-3



1	Shift lever knob
2	Console
3	Dust boot
4	Change boot upper plate
5	Boot
6	Dust boot
7	Gasket
8	Wave washer
9	Change bush
10	Change lever
11	Change seat

12	Vehicle speedometer sensor connector
13	Back-up light switch connector
14	Neutral switch connector
15	Front pipe bracket
16	Clutch release cylinder
17	Crossmember See NO TAG Crossmember removal note
18	Transmission lower mount
19	Transmission See NO TAG Transmission removal note See NO TAG Transmission installation note

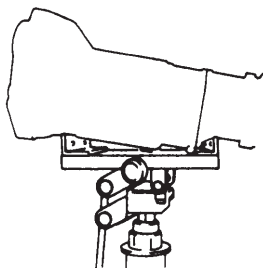
Crossmember removal note

- Securely support the transmission on a transmission jack, then remove the crossmember.

Transmission removal note

Warning

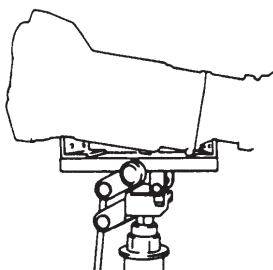
- **Do not allow the transmission to fall from the transmission jack.**
- Maintain the stability of the transmission while removing it.



Transmission installation note

Warning

- **A transmission that is not securely supported on a transmission jack is dangerous. It can slip or fall, causing serious injury. Never work without the transmission jack until crossmember installation is finished.**
1. Place the transmission on a transmission jack.
 2. Maintain the stability of the transmission while installing the jacks.

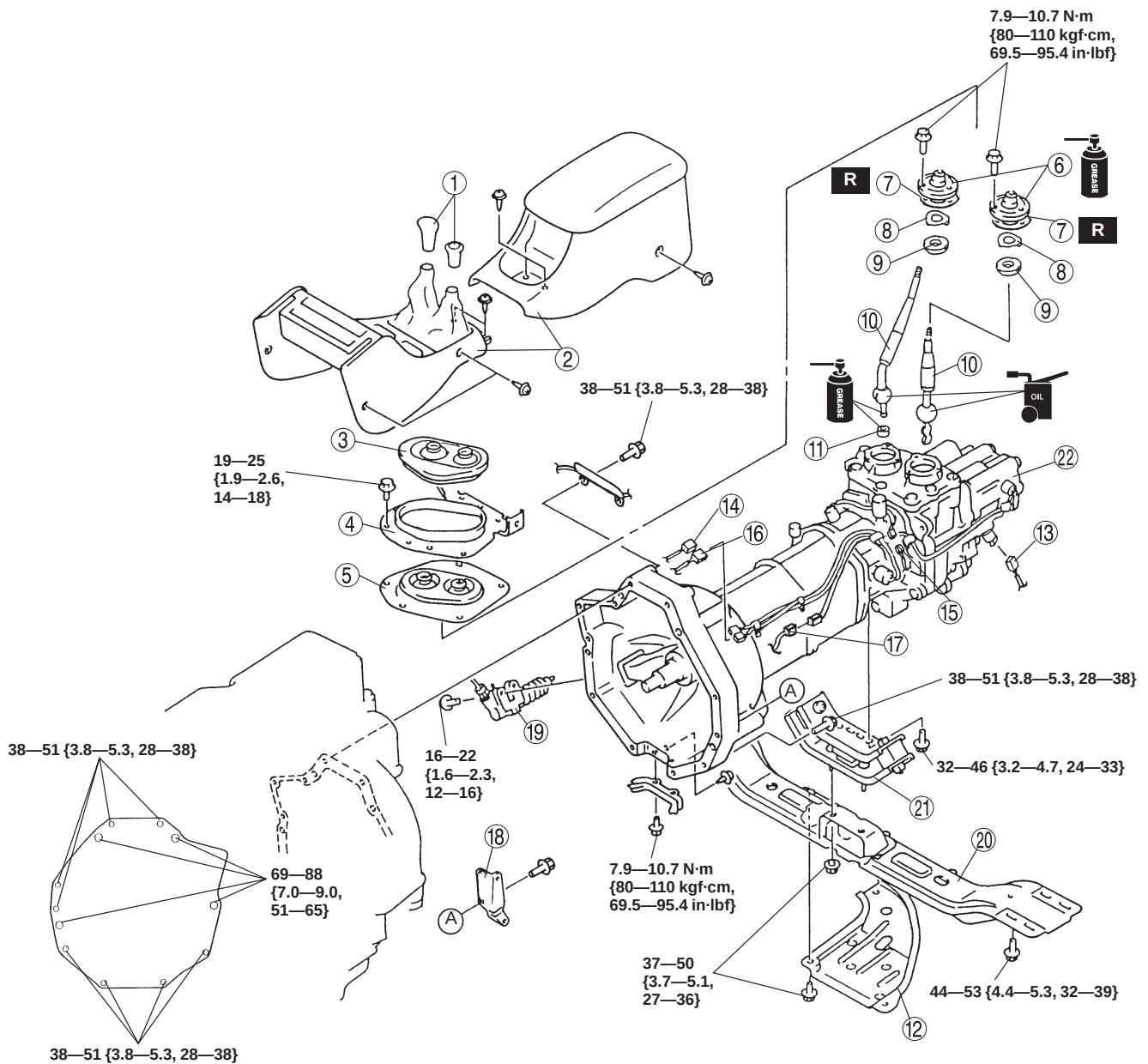


MANUAL TRANSMISSION

4×4 (R15MX-D)

1. Disconnect the negative battery cable.
2. Drain the transmission and transfer oil into a container.
3. Remove the front and rear propeller shaft.
(Refer to section L, FRONT PROPELLER SHAFT (4x4), FRONT PROPELLER SHAFT REMOVAL/INSTALLATION.)
(Refer to section L, REAR PROPELLER SHAFT (4x4), REAR PROPELLER SHAFT REMOVAL/INSTALLATION.)
4. Remove the front pipe. (G6 engine)
(Refer to section F1, EXHAUST SYSTEM, EXHAUST SYSTEM REMOVAL/INSTALLATION.)
5. Remove the starter. (Refer to section G, STARTING SYSTEM, STARTER REMOVAL/INSTALLATION.)
6. Remove in the order indicated in the table.
7. Install in the reverse order of removal.
8. Add the specified type and amount of transmission and transfer oil.
(Refer to MANUAL TRANSMISSION, TRANSMISSION OIL REPLACEMENT.)
(Refer to section J3, TRANSFER, TRANSFER OIL REPLACEMENT.)
9. Warm up the engine and transmission, inspect for oil leakage, and verify the transmission operation.

G6



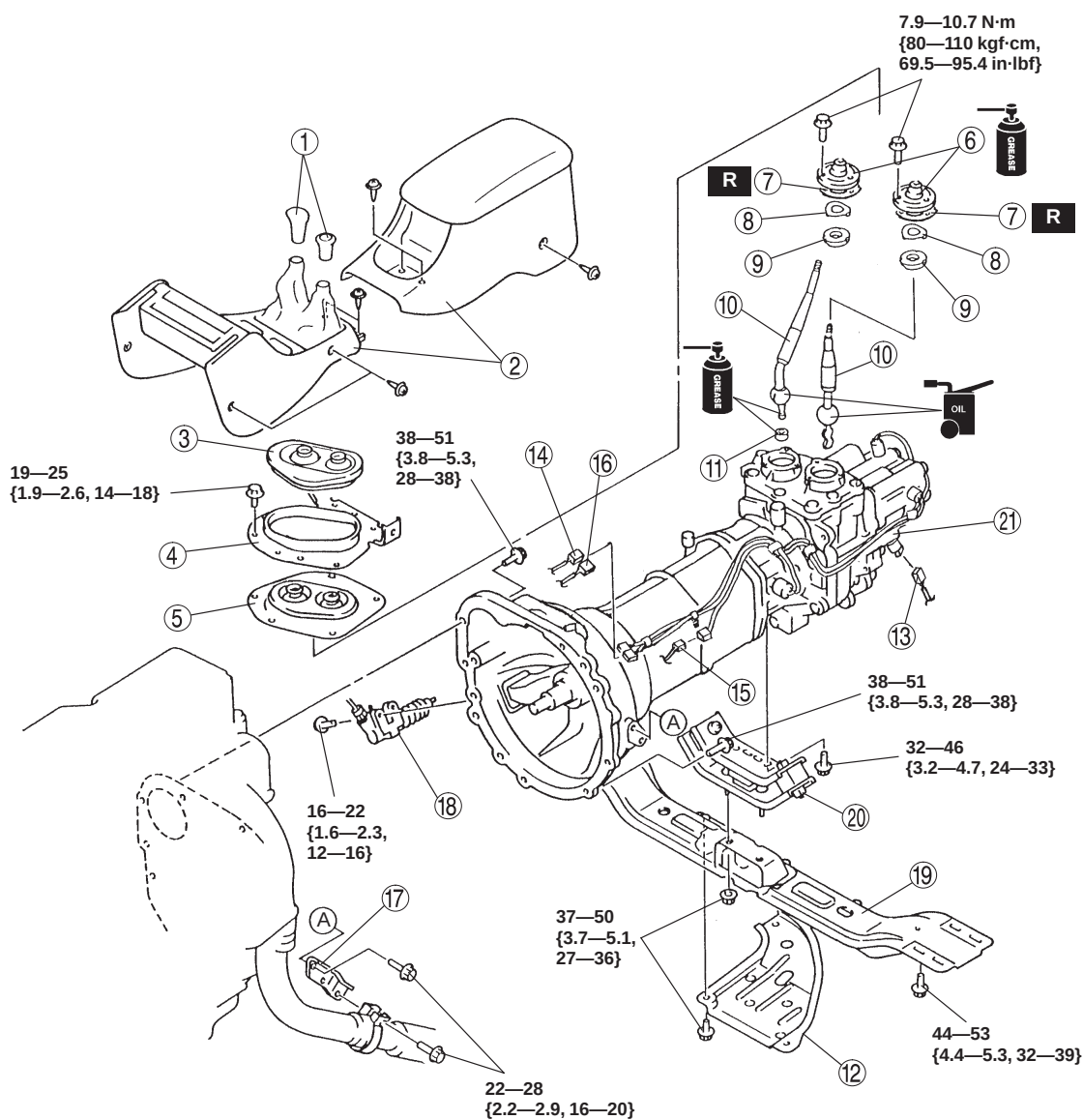
N·m {kgf·m, ft·lbf}

MANUAL TRANSMISSION

1	Shift lever knob
2	Console
3	Dust boot
4	Change boot upper mount
5	Boot
6	Dust boot
7	Gasket
8	Wave washer
9	Change bush
10	Change lever
11	Change seat
12	Transfer under cover
13	Vehicle speedometer sensor connector

14	Back-up light switch connector
15	Neutral switch connector
16	4x4 indicator switch connector
17	Transfer neutral switch connector (RFW model)
18	Front pipe bracket
19	Clutch release cylinder
20	Crossmember + MANUAL TRANSMISSION, MANUAL TRANSMISSION REMOVAL/INSTALLATION, 4 × 2 (R15M-D), Crossmember removal note
21	Transmission lower mount
22	Transmission and transfer + Removal note + Installation note

WL, WL TURBO



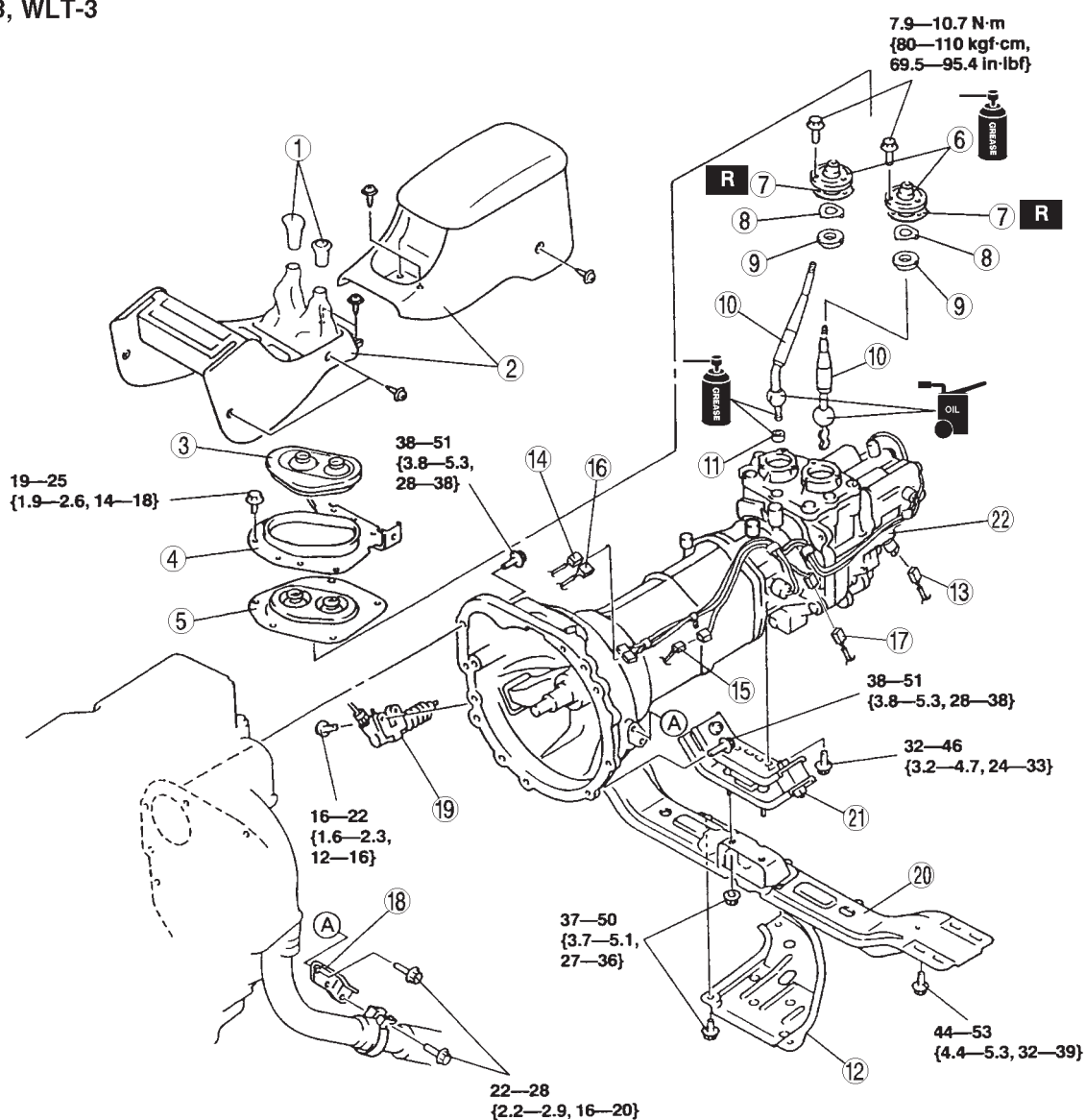
N·m {kgf·m, ft·lbf}

MANUAL TRANSMISSION

1	Shift lever knob
2	Console
3	Dust boot
4	Change boot upper mount
5	Boot
6	Dust boot
7	Gasket
8	Wave washer
9	Change bush
10	Change lever
11	Change seat
12	Transfer under cover
13	Vehicle speedometer sensor connector

14	Back-up light switch connector
15	Transfer neutral switch connector (RFW model)
16	4x4 indicator switch connector
17	Front pipe bracket
18	Clutch release cylinder
19	Crossmember + MANUAL TRANSMISSION, MANUAL TRANSMISSION REMOVAL/INSTALLATION, 4 × 2 (R15M-D), Crossmember removal note
20	Transmission lower mount
21	Transmission and transfer + Removal note + Installation note

WL-3, WLT-3



N·m {kgf·m, ft·lbf}
ZCF5210W003

1	Shift lever knob
2	Console

3	Dust boot
4	Change boot upper plate

MANUAL TRANSMISSION

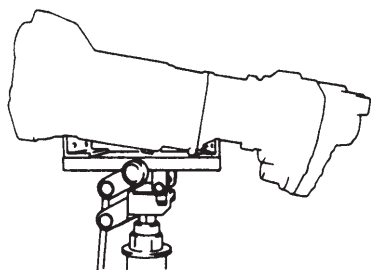
5	Boot
6	Dust boot
7	Gasket
8	Wave washer
9	Change bush
10	Change lever
11	Change seat
12	Transfer under cover
13	Vehicle speedometer sensor connector
14	Back-up light switch connector
15	Transfer neutral switch connector (RFW model)

16	4x4 indicator switch connector
17	Neutral switch connector
18	Front pipe bracket
19	Clutch release cylinder
20	Crossmember
21	Transmission lower mount
22	Transmission and transfer See NO TAG Transmission and transfer removal note See NO TAG Transmission and transfer installation note

Transmission and transfer removal note

Warning

- **Do not allow the transmission to fall from the transmission jack.**
- Maintain the stability of the transmission and transfer while removing the jacks.



Transmission and transfer installation note

Warning

- **A transmission and transfer that are not securely supported on a transmission jack are dangerous. They can slip or fall, causing serious injury. Never work without the transmission jack until crossmember installation is finished.**
1. Place the transmission and transfer on a transmission jack.
 2. Maintain the stability of the transmission and transfer while installing the jacks.

