

TRANSFER OIL
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1 BASIC CHECK

1-1 TRANSFER OIL

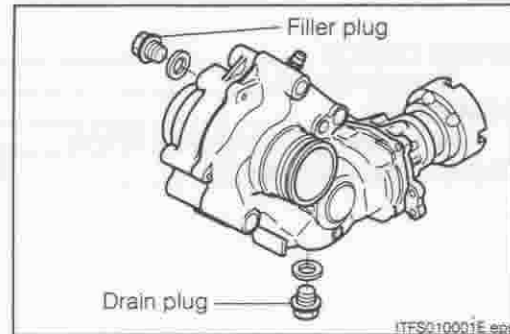
1-1-1 INSPECTION

(1) CONDITION

1. Inspect the condition of transfer oil.
SPECIFIED VALUE: No contamination, burnt smell and mixing impurity.

(2) LEVEL

1. Park the vehicle on a level, flat place.
2. Remove the filler plug.



3. Check the transfer oil level.
SPECIFIED VALUE: 5mm or less below lower edge of filler plug hole
4. Install the filler plug.
TIGHTENING TORQUE: $39.2 \pm 9.8\text{N}\cdot\text{m}$

NOTE

- Never reuse the removed gasket.

TF-BI-X-C-00011

1-1-2 REPLACE

1. Park the vehicle on a level, flat place.
2. Remove the drain plug, and drain the transmission oil.
3. Install the drain plug.
TIGHTENING TORQUE: $39.2 \pm 9.8\text{N}\cdot\text{m}$
SPECIFIED VALUE: Never reuse the removed gasket.
4. Remove the filler plug, and fill the transmission oil.
LUBRICANT: SAE80W-90,API GL-5
Filling Amount 0.4 l
SPECIFIED VALUE: 5mm or less below lower edge of filler plug hole
5. Install the filler plug.
TIGHTENING TORQUE: $39.2 \pm 9.8\text{N}\cdot\text{m}$

CAUTION

- Never reuse the removed gasket.

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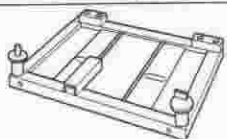




2 TRANSFER

2-1 REMOVAL AND INSTALLATION

2-1-1 INSTRUCTIONS

- This section explains the removal/installation procedures for the transfer Ay from or to the vehicle.
For disassembling, checking and assembling procedures for the transfer Ay, refer to the separate Service Manual for Type T1E-N1 Transfer.
Service Manual: Type T1E-N1 Transfer No.9730

2-1-2 PREPARATION TOOLS

	Shape	Part number, part name	Use
SST		09994-87201-000 Holder, engine frame	For removal/installation of engine frame
Tool		Engine support bridge	For suspending engine and transaxle
		Engine support bridge	For suspending engine and transaxle
		Chain block	For suspending engine and transaxle (for addition to engine support bridge)
		High-transmission jack	For removal/installation of transaxle
Interment	Torque wrench		
Lubricant	MP grease, Gear oil(For transaxle) SAE75W-85 or 75W-90(API GL-3 or GL-4), Gear oil(For transfer) SAE 80W-90(API GL-5)		

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2-1-3 OPERATION BEFORE REMOVAL

- Disconnect the battery ground cable from the negative terminal.

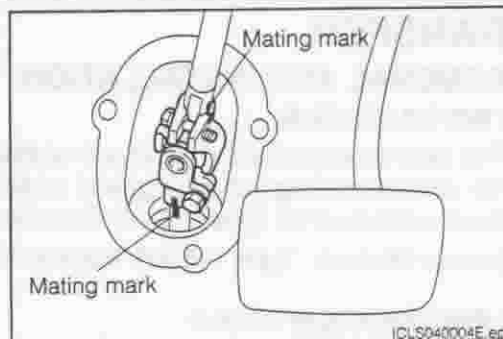
NOTE

- Memory such as troubleshooting code or radio shall be recorded to avoid being erased before disconnect the battery ground cable from the negative terminal .
- Disconnect the bond cable.
 - Remove the air cleaner case.
 - Separation of radiator
 - Remove the radiator bracket.
 - Fix the radiator together with the radiator fan to upper support with string etc .

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5. Separation of universal joint

- (1) Attach mating marks to universal joint and steering gear, and separate the joint portion.



6. Supporting engine and transaxle.

- (1) Install the engine hanger No.1, No.2.

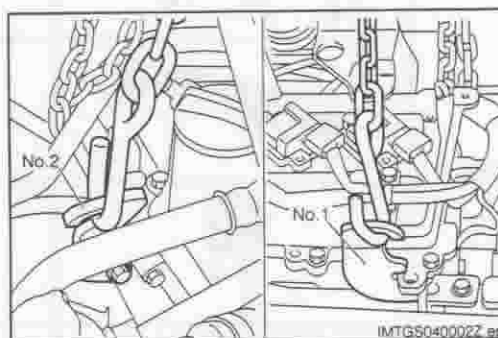
WARNING

- Do not work while the exhaust manifold is still hot to avoid getting burn.

NOTE

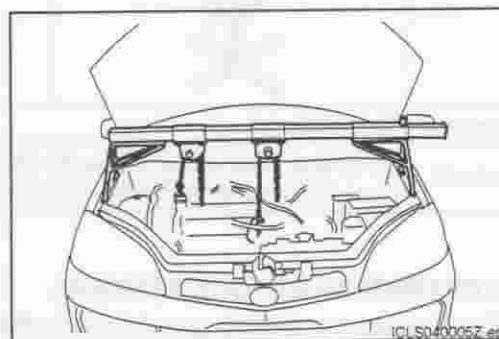
- The engine hanger No.1, No.2 and the installation bolts are supplies as replacement parts.

TIGHTENING TORQUE: $20.0 \pm 6.0\text{N}\cdot\text{m}$



- (2) Using engine support bridge, hold engine Ay and transaxle Ay in direct coupling condition.

TOOL: Engine support bridge



7. Jack up the vehicle.

WARNING

- Keep the position of the jackup point to avoid causing serious accident due to inclining of the vehicle.

8. Remove the wheel.

9. Drain the transmission oil.

Refer to MT-2.

10. Remove the lower arm bracket connecting rod.

Refer to MTG-5.

11. Remove the stabilizer bar.

Refer to FS-26.

12. Remove the exhaust pipe.

WARNING

- Do not work while the exhaust pipe is still hot to avoid getting burn .

13. Separation of the suspension lower arm S/A.

(1) Separate the suspension lower arm from the steering knuckle.

Refer to FS-26.

14. Separation of drive shaft (RH) .

(1) Pull out a drive shaft from transaxle, and hang it with the wire.

Refer to DPS-3.

15. Separation of propeller shaft Ay

(1) Separate the propeller shaft Ay at transfer side, and hang it on a vehicles.

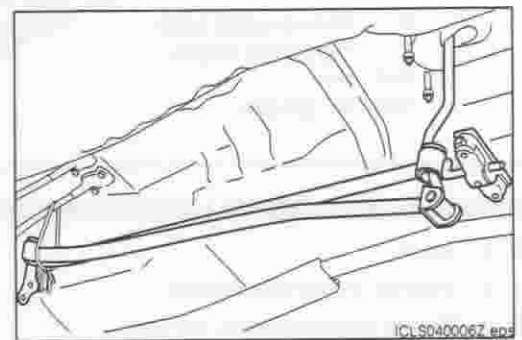
CAUTION

- Be very careful not to apply load to the center support bearing and second joint section.

Refer to DPS-26.

16. Separation of shift & select rod (For MT vehicles)

(1) Separate the shift & select control rod and the extension rod at transmission side, and hang it on a vehicle.

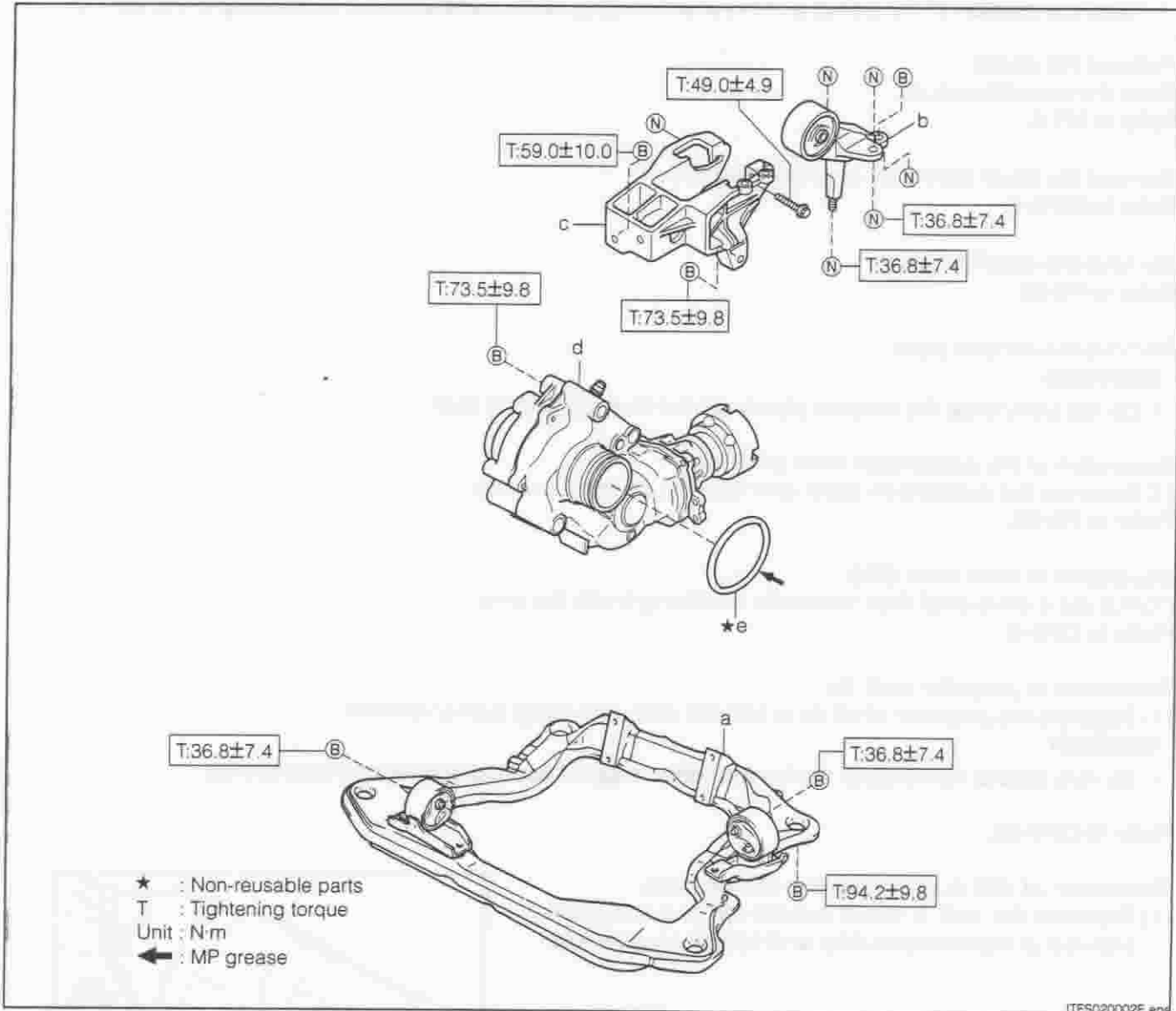


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2-1-4 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 ⑤ a Frame
- 2 4 b Insulator, engine mounting rear
- 3 ③ c Bracket, engine mounting, rear right
- 4 ② d Transfer Ay
- 5 1 e Ring, O

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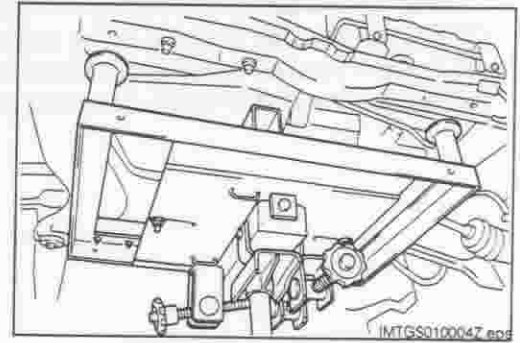
2-1-5 POINTS OF REMOVAL

1. Removal of frame

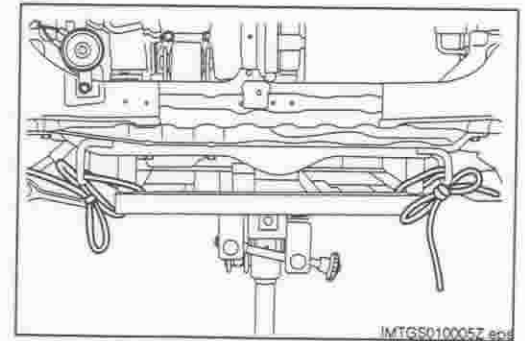
(1) Support the frame with the high-transmission jack applied to the frame.

SST: 09994-87201-000

TOOL: High-transmission jack



(2) Fix the frame with string or chain so that it may not be out of place.



(3) Remove the fitting bolts of frame.

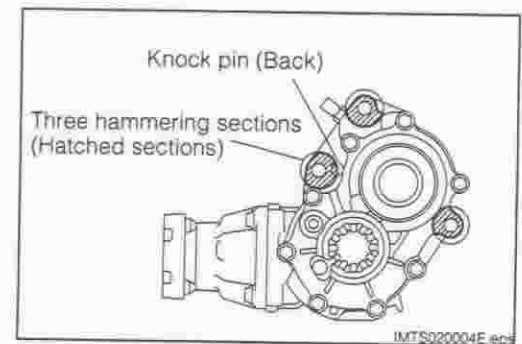
(4) Operating high-transmission jack, lower the front frame with it inclined backward.

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2-1-6 POINTS OF INSTALLATION

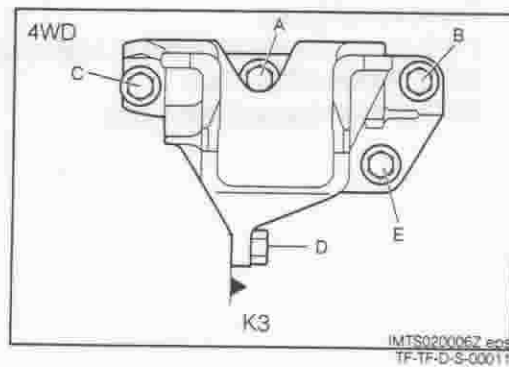
1. Installation of transfer Ay

- (1) Apply MP grease to the entire periphery of the O-ring.
- (2) While aligning the transfer with the splined section of the transaxle, push the transfer, until the knock pin contacts the case.
- (3) Align the knock pin position to the knock pin hole on the transaxle side.
- (4) Tap the hatched positions shown in the right figure with a plastic hammer, until the mating surfaces are aligned.
- (5) Tap the hatched positions shown in the right figure with a plastic hammer, until the mating surfaces are aligned.



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- (6) Tighten the connection bolts to the specified torque.
- 2. Installation of engine mounting rear right bracket
 - (1) Temporarily tighten the bolt A.
 - (2) Tighten the bolt C, while pressing the engine mounting rear right bracket and transaxle Ay or transfer Ay.
 - (3) Tighten the bolt B and E to the specified torque.
 - (4) Tighten the bolt A to the specified torque.
 - (5) Tighten the bolt D to the specified torque.



2-1-7 OPERATION AFTER INSTALLATION

1. Install the shift & select rod. (For MT vehicles)
Refer to MT-15.

2. Install the propeller shaft. (For 4WD vehicles)

CAUTION

- Be very careful not to apply load to the center support bearing and second joint section.

Refer to DPS-26.

3. Install the drive shaft.
Refer to DPS-3.

4. Install the suspension lower arm S/A.
Refer to DPS-3.

5. Install the exhaust pipe.

6. Install the stabilizer bar.
Refer to FS-26.

7. Install the lower arm bracket connecting rod.
Refer to MTG-5.

8. Fill the transfer oil.
Refer to TF-2.

9. Fill the transmission oil.
Refer to MT-2.

10. Install the wheels.
TIGHTENING TORQUE: $103.0 \pm 14.7\text{N}\cdot\text{m}$

11. Jack down the vehicle.

12. Remove the engine support bridge.

13. Remove the engine hunger.

14. Connection of universal joint

(1) Fit the mating marks together, and connect the joint portion.

CAUTION

- Align the position of roll connector when fit wheel centre together, in case mating mark is disappeared (For the vehicle equipped with the air bag) .

15. Install the radiator.

16. Install the air cleaner case.

17. Connect the bond cable.

18. Connect the battery negative terminal.

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1 TIGHTENING TORQUE

Tightening components		N·m	kgf·cm
Transfer	× Transaxle	73.5 ± 9.8	750 ± 100
Filler plug	× Transfer	39.2 ± 9.8	400 ± 100
Drain plug	× Transfer	39.2 ± 9.8	400 ± 100
Engine mounting rear bracket	× Engine Ay	58.8 ± 9.8	600 ± 100

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