

DAIHATSU

CHARADE

Chassis

2

SECTION 2

CLUTCH

DESCRIPTION	2- 2
TROUBLE SHOOTING	2- 2
CLUTCH PEDAL ADJUSTMENT	2- 2
CLUTCH PEDAL AND	
CLUTCH RELEASE CABLE	2- 4
COMPONENTS	2- 4
REMOVAL	2- 4
INSPECTION	2- 5
INSTALLATION	2- 6
CLUTCH UNIT	2- 7
COMPONENTS	2- 7
REMOVAL	2- 7
INSPECTION	2- 8
INSTALLATION	2-10

WR-02001

CLUTCH

DESCRIPTION

TROUBLE SHOOTING

Symptom	Possible causes	Remedies	Page
Gear shifting is hard or impossible.	<ul style="list-style-type: none"> Excessive clutch pedal free travel. Excessive clutch disc runout, or damaged lining. Input shaft or disc splined section contaminated or sticking. Faulty clutch pressure plate. 	<ul style="list-style-type: none"> Adjust clutch pedal free travel. Check clutch disc. 	2-3
		<ul style="list-style-type: none"> Repair, as required. 	2-8
		<ul style="list-style-type: none"> Replace clutch cover. 	2-8
Slipping clutch	<ul style="list-style-type: none"> Improper clutch pedal free travel. Worn or oily clutch disc linings. Faulty pressure plate. Flattened diaphragm spring. 	<ul style="list-style-type: none"> Adjust clutch pedal free travel. 	2-3
		<ul style="list-style-type: none"> Replace clutch disc. 	2-7
		<ul style="list-style-type: none"> Replace clutch cover. 	2-7
		<ul style="list-style-type: none"> Replace clutch cover. 	2-7
Grabbing and chattering clutch	<ul style="list-style-type: none"> Worn or oily clutch disc linings. Faulty pressure plate. Flattened disc torsion spring. Bent diaphragm spring. 	<ul style="list-style-type: none"> Check clutch disc and replace, as required. 	2-8
		<ul style="list-style-type: none"> Replace clutch cover. 	2-7
		<ul style="list-style-type: none"> Replace clutch disc. 	2-7
		<ul style="list-style-type: none"> Replace clutch cover. 	2-7
Clutch noises	<ul style="list-style-type: none"> Parts in housing loose. Worn or contaminated release bearing. Release fork and linkage seized. 	<ul style="list-style-type: none"> Repair, as required. Replace release bearing. 	2-7
		<ul style="list-style-type: none"> Repair, as required. 	
Dragging clutch (Poor clutch disengagement)	<ul style="list-style-type: none"> Clutch pedal free travel improperly adjusted. Flattened diaphragm spring, or worn tip end of spring. 	<ul style="list-style-type: none"> Adjust clutch pedal free travel. 	2-3
		<ul style="list-style-type: none"> Replace clutch cover. 	2-7

WR-02002

CLUTCH PEDAL ADJUSTMENT

- Check the clutch pedal for the installation height.
 Pedal installation height
 (Distance between pedal pad upper surface's center and dash panel)

R.H.D. vehicle	189.5 - 194.5 mm (7.46 - 7.66 inch)
L.H.D. vehicle	181.5 - 186.5 mm (7.15 - 7.34 inch)
- Adjust the pedal installation height, as required.
 - Slacken the lock nut. Turn the stopper bolt until the installation height conforms to the specification.
 - Tighten the lock nut.

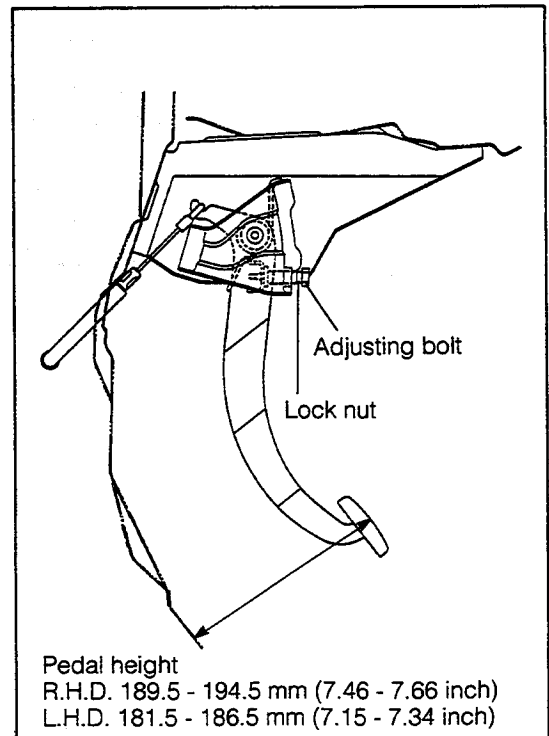


Fig. 2-1

WR-02003

3. Clutch cable adjustment

- (1) Pull the outer cable lightly with a force of 2 - 5 kg (4.4 - 11.0 lb). Check the clearance.
- (2) Ensure that the stopper (protruding portion) is fitted securely in the adjusting groove.
- (3) Adjusting position of clutch outer cable
3 - 6 mm (0.12 - 0.24 inch)

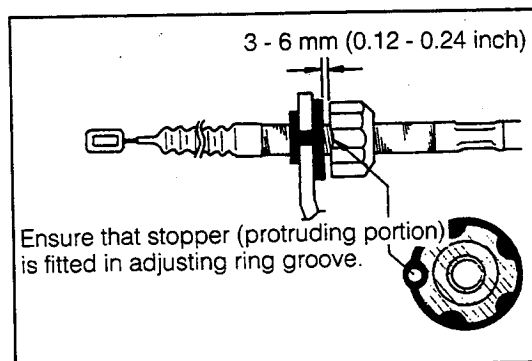


Fig. 2-2

WR-02004

4. Adjust the clutch pedal free travel.

- (1) Depress the clutch pedal gradually until you feel a resistance from the clutch. Measure the depressing distance up to this point.

Pedal Free Travel: 15 - 30 mm (0.59 - 1.18 inch)

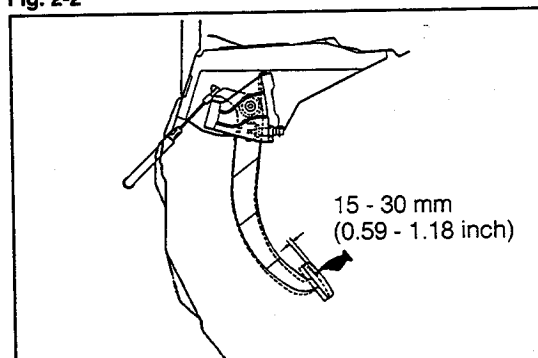


Fig. 2-3

WR-02005

5. Adjust the clearance between the clutch pedal and the floor with the pedal fully depressed. (Minimum clearance between the dash panel and the pedal arm)

Vehicles mounted with Type CB-80 engine:
not less than 20 mm (0.79 inch)

Vehicle other than those mounted with Type CB-80 engine:
not less than 25 mm (0.98 inch)

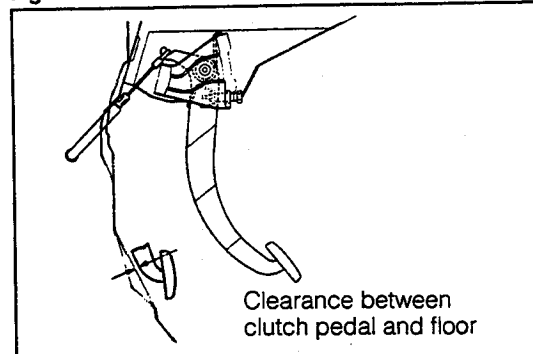


Fig. 2-4

WR-02006

CLUTCH

CLUTCH PEDAL AND CLUTCH RELEASE CABLE COMPONENTS

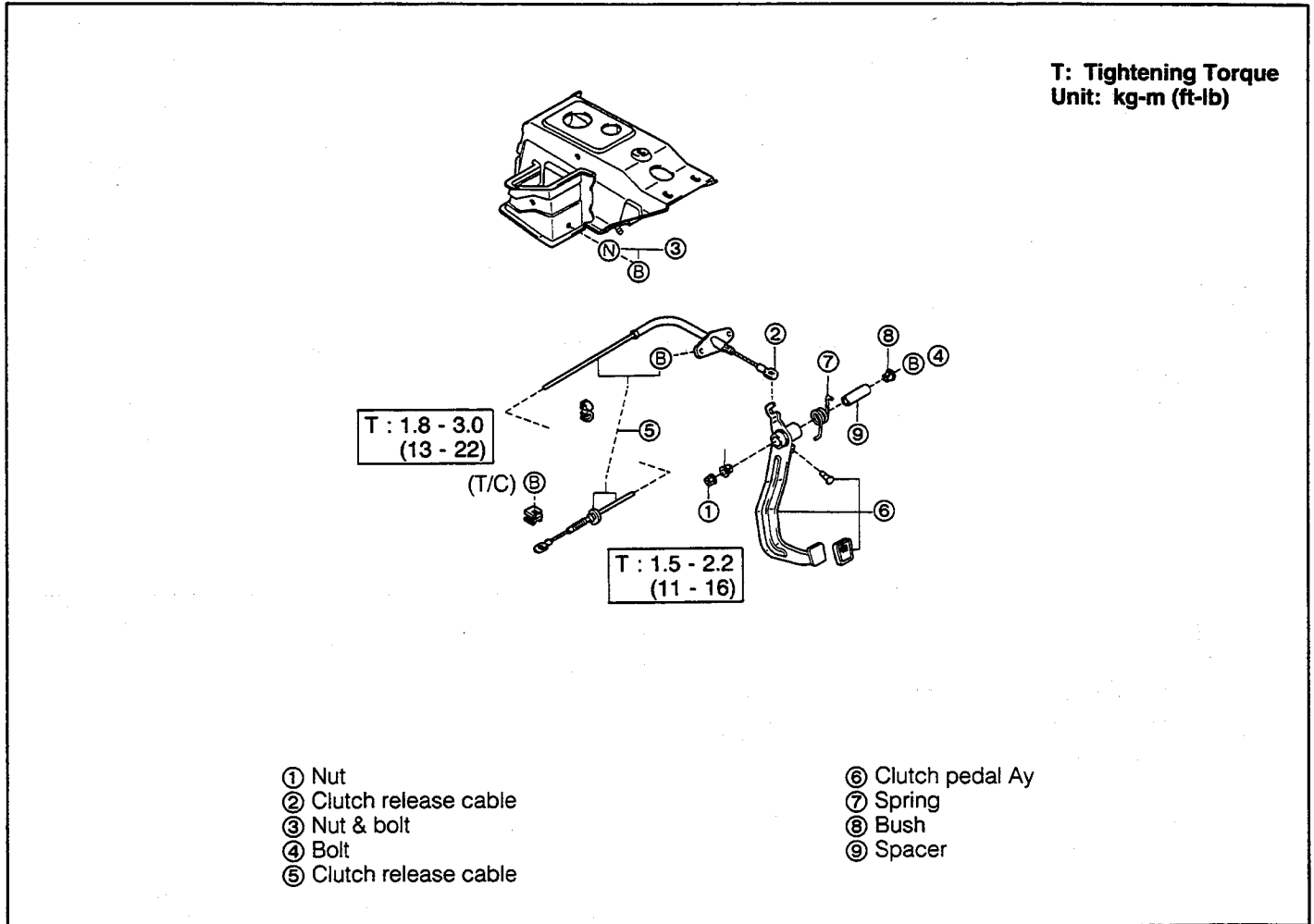


Fig. 2-5

WR-02007

REMOVAL

1. Remove the brake pedal Ay. (Only for L.H.D. vehicles. See page 8-7)
2. Remove the nut located at the clutch pedal installation section. Separate the end section of the clutch release cable.
3. Remove the adjusting bolt.

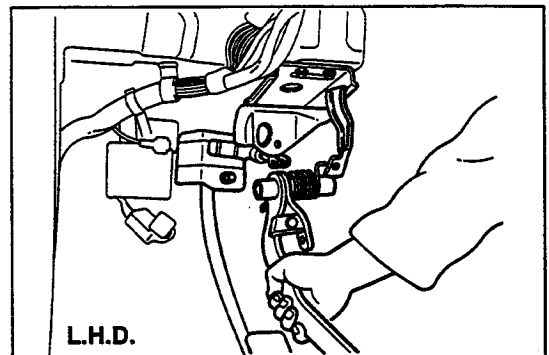


Fig. 2-6

WR-02008

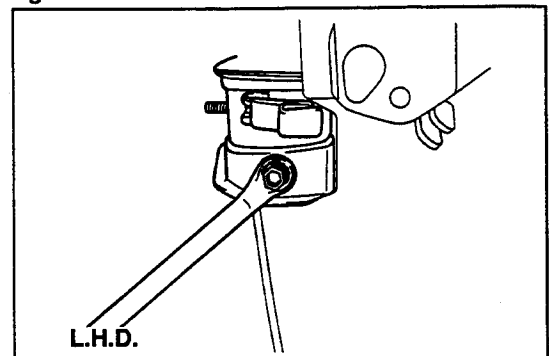


Fig. 2-7

WR-02009

4. Remove the bolt with washer.

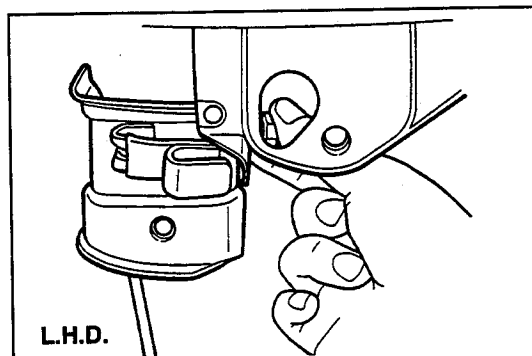


Fig. 2-8 WR-02010

5. Remove the cable bracket attaching bolt. Remove the clutch cable.

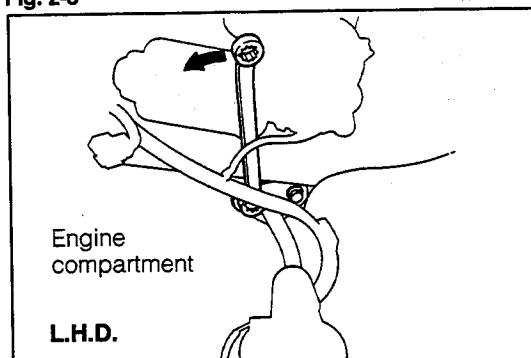


Fig. 2-9 WR-02011

6. Remove the clutch pedal assembly. Remove the spring, bush and spacer.

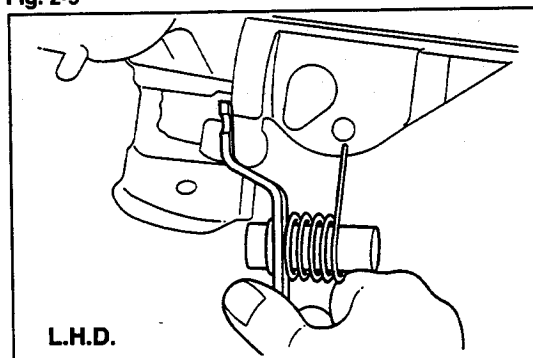


Fig. 2-10 WR-02012

INSPECTION

Inspect the following parts.

1. Bush for wear or damage.
2. Pedal spacer for wear or damage.
3. Pedal for damage or deformation.
4. Pedal pad for wear or damage.
5. Spring for flattened condition.

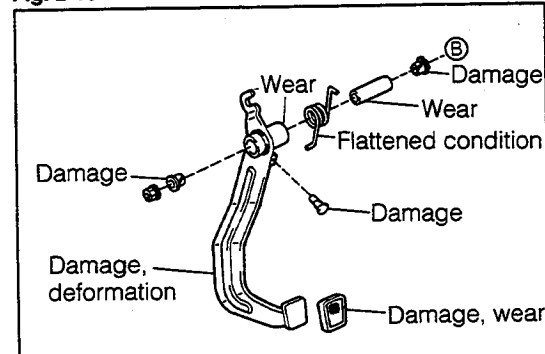


Fig. 2-11 WR-02013

6. Each section of clutch cable

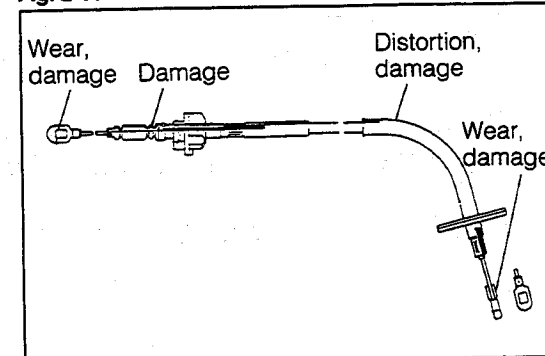


Fig. 2-12 WR-02014

CLUTCH

INSTALLATION

1. Apply MP grease to the following points.
 - (1) Inside of bush and spacer
 - (2) Connecting section of clutch pedal and release cable
2. Install the spring, bush and spacer to the clutch pedal assembly. Then, install the assembly to the pedal bracket.
3. Install the bolt with washer in position.
4. Install both ends of the clutch cable. Tighten the bracket with the bolts.
Tightening Torque: 0.4 - 0.7 kg-m (2.9 - 5.1 lb)
5. Install the adjusting bolt.
6. Tighten the nut.
Tightening Torque: 1.5 - 2.2 kg-m (11 - 16 lb)
7. Depress the clutch pedal two or three times. Proceed to adjust the clutch pedal, following the procedure at page 2-2.
8. Install the brake pedal Ay. (Only for L.H.D. vehicles. See page 8-8)

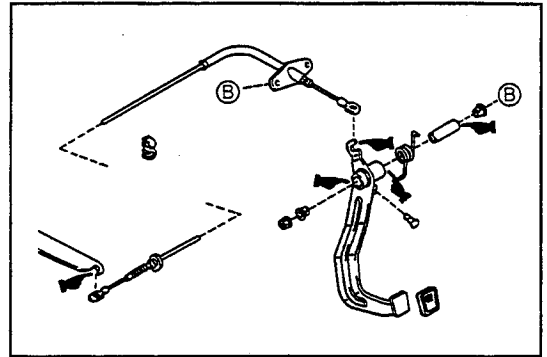


Fig. 2-13

WR-02015

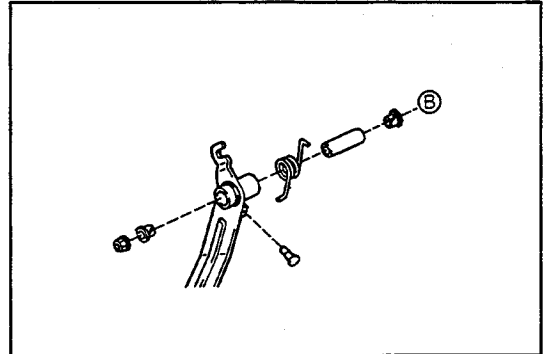


Fig. 2-14

WR-02016

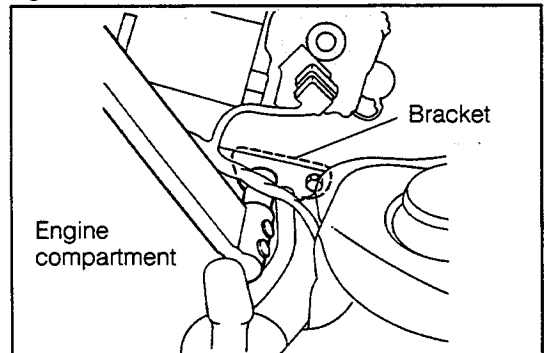


Fig. 2-15

WR-02017

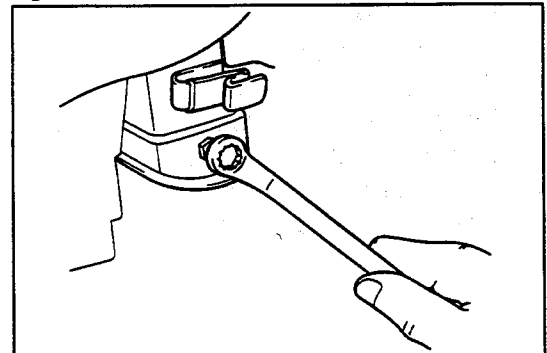


Fig. 2-16

WR-02018

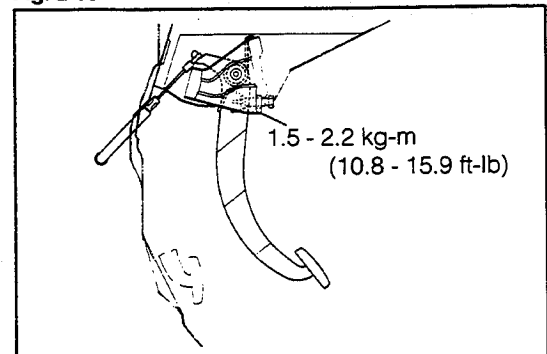


Fig. 2-17

WR-02019



CLUTCH UNIT COMPONENTS

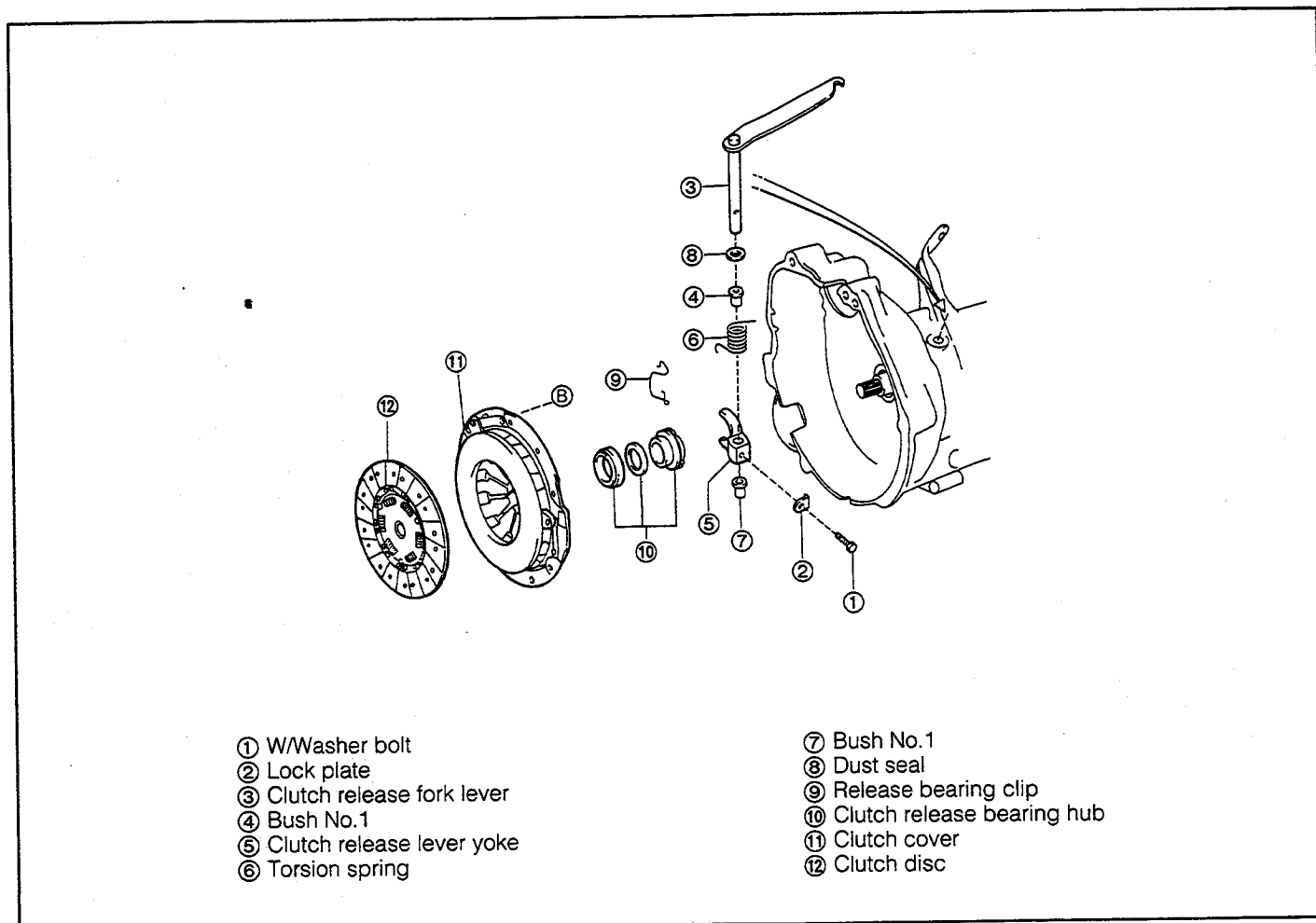


Fig. 2-18

WR-02020

REMOVAL

1. Remove the transmission assembly from the vehicle. (See page 3-3.)

**SEE
TRANSMISSION
REMOVAL SECTION
Page 3-3 to 3-7.**

WR-02021

2. Release the lock plate. Proceed to remove the lock plate along with the bolt.

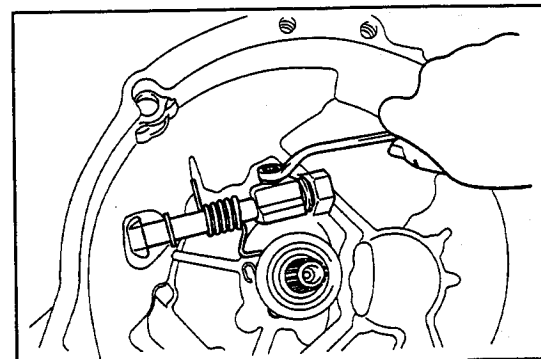


Fig. 2-19

WR-02022

CLUTCH

3. Pull out the clutch release fork lever. Remove the bush, release lever yoke, spring, release bearing clip and release bearing hub.

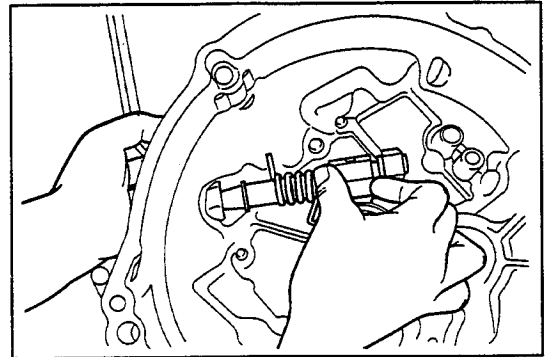


Fig. 2-20

WR-02023

4. Remove the clutch cover from the flywheel. Take out the clutch disc.

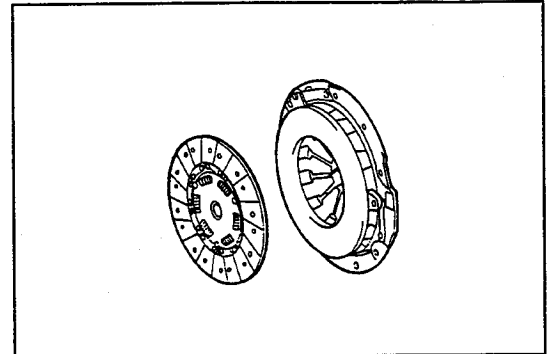


Fig. 2-21

WR-02024

INSPECTION

1. Check the pressure plate and flywheel surface for scores, cracks and discoloration.

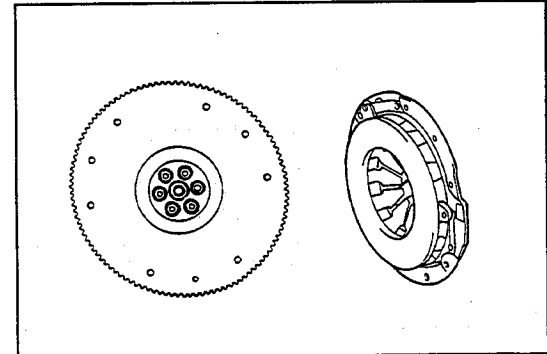


Fig. 2-22

WR-02025

2. Check the diaphragm spring tips for wear, rust and breakage.

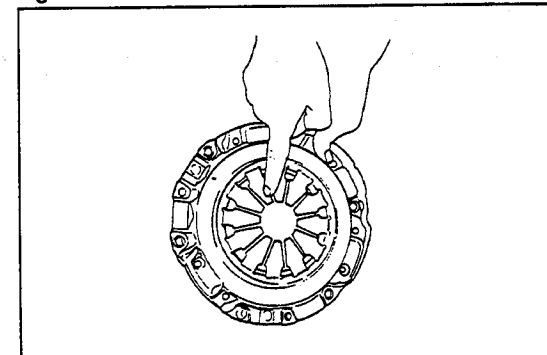


Fig. 2-23

WR-02026

3. Check the clutch disc for wear and runout.

Allowable Wear Limit (Rivet Depth):
0.3 mm (0.012 inch)

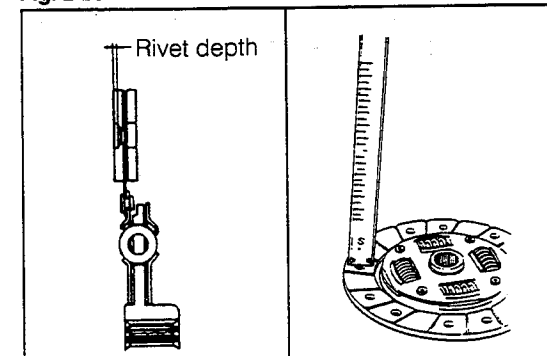
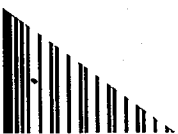


Fig. 2-24

WR-02027



Allowable Limit of Lateral Runout:
1.34 mm (0.0528 inch)

NOTE:

Measure the lateral runout with the clutch disc assembled onto a new input shaft.

4. Check to see if the release bearing rotates smoothly. Rotate the release bearing by your hand, while applying a pressure to the bearing in a thrust direction. Check to see if the bearing rotates without any abnormal feeling or binding.

5. Check the release bearing hub, clip-contacting surface and hub-to-housing sliding section for damage and wear.

6. Check to see if the clip has the configuration as shown in the figure in its horizontal plane.

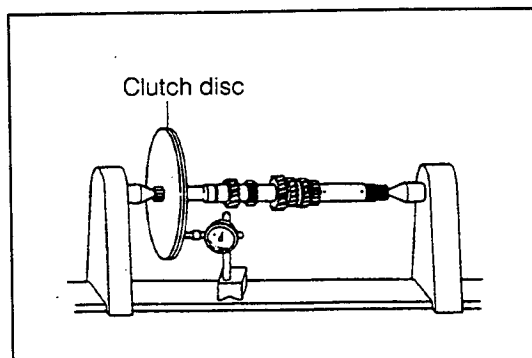


Fig. 2-25

WR-02028

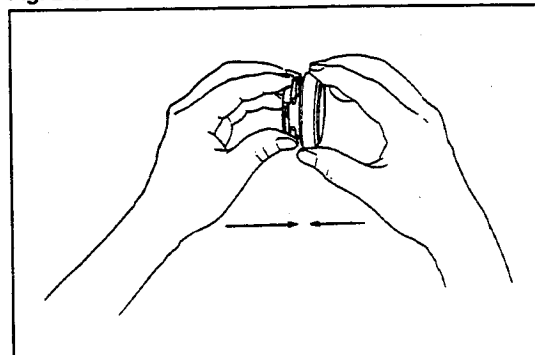


Fig. 2-26

WR-02029

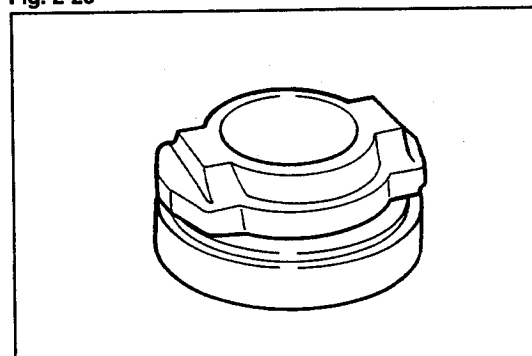


Fig. 2-27

WR-02030

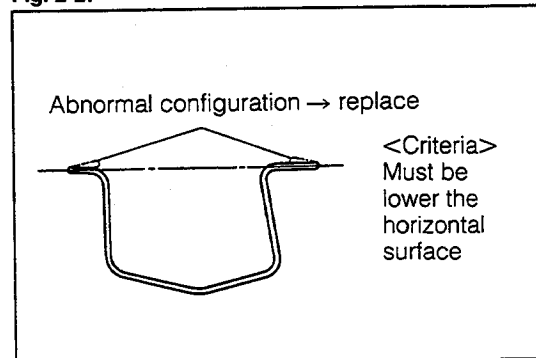


Fig. 2-28

WR-02031

CLUTCH

INSTALLATION

1. Install the clutch disc and clutch cover, using the following SST.

SST: 09301-87202-000

Bolt Tightening Torque: 1.5 - 2.2 kg-m (11 - 16 ft-lb)

NOTE:

- (1) Assemble the clutch disc in the direction as shown in the figure.
 - (2) Tighten the bolts evenly, starting with those bolts provided near the locating pin.
 - (3) Apply long-life chassis grease to the clutch disc splined section.
2. Check the clutch cover diaphragm spring tips for variation in height. Adjust the diaphragm spring tips, as required.

Check

Allowable Limit of Variation in Height:

0.7 mm (0.028 inch)

SST: 09302-87701-000

87702

Adjustment

Align the diaphragm spring tips at such a height that makes the number of tips to be adjusted at a minimum number.

SST: 09333-00011-000

3. Assemble the clutch release bearing hub and release bearing clip to the clutch release lever yoke.
 - (1) Bring the cut-out section of the release lever yoke in contact with the clip.
 - (2) Under the condition described in (1), assemble the lever yoke by turning it 180 degrees.

NOTE:

Apply long-life chassis grease to the yoke-to-hub sliding section and bearing-to-housing case sliding section.

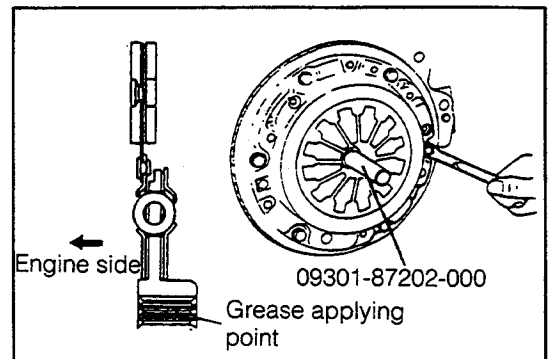


Fig. 2-29

WR-02032

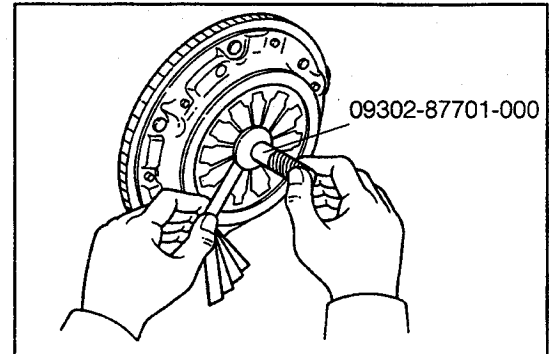


Fig. 2-30

WR-02032A

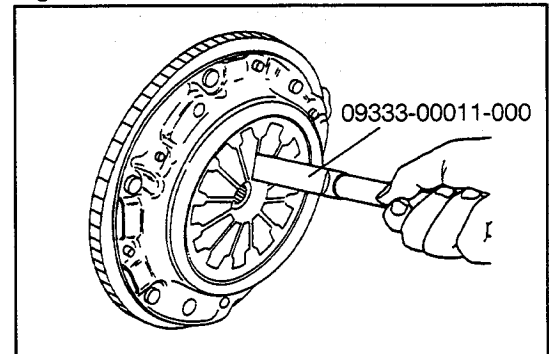


Fig. 2-31

WR-02033

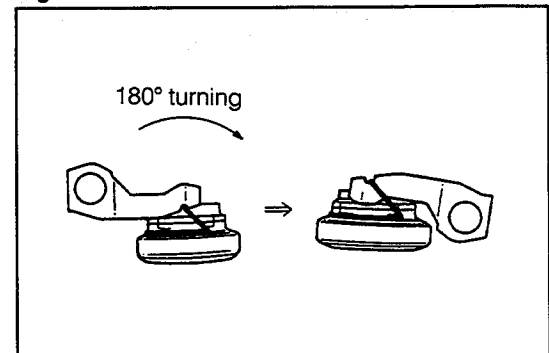


Fig. 2-32

WR-02034

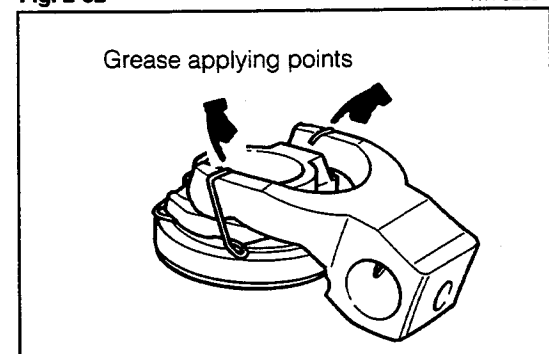


Fig. 2-33

WR-02035

4. Assemble the bush, dust seal, torsion spring and clutch release lever in position.

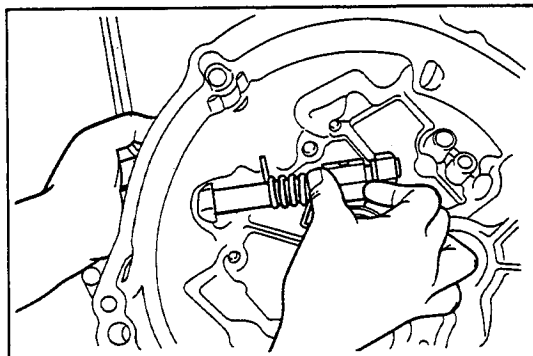


Fig. 2-34

WR-02036

5. Assemble the bolt with washer, with the lock plate interposed.

Tightening Torque: 3.0 - 4.0 kg-m (22 - 29 ft-lb)

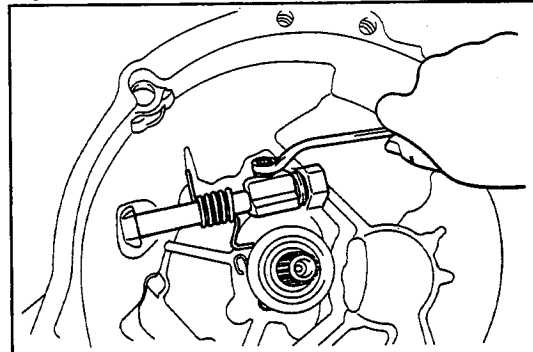


Fig. 2-35

WR-02037

6. Check the release hub and yoke for proper operation. Operate the clutch release lever about 50 times. Check the section A of the clip. If the clip exhibits excessive spread and there is a likelihood that the clip may be detached, replace it with a new clip.
7. Install the transmission assembly to the vehicle.
(See page 3-7.)

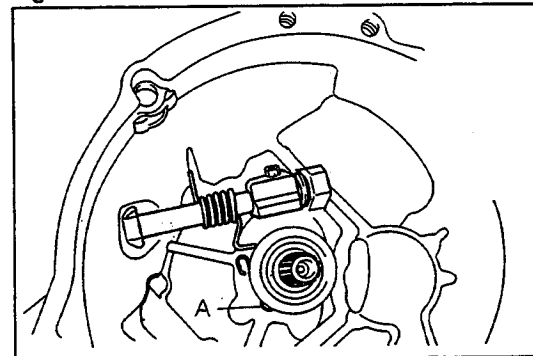


Fig. 2-36

WR-02038