320U4–01

OVERHAUL

1. REMOVE FRONT WHEEL

2. DRAIN BRAKE FLUID

3. REMOVE FRONT DISC BRAKE CYLINDER SUB–ASSY

(a) Remove the union bolt and gasket from the caliper, then disconnect the flexible hose from the caliper.

HINT:

Use a container to catch the brake fluid ,because it drains out.

(b) Remove the 4 bolts and caliper.

4. REMOVE FRONT DISC BRAKE PAD KIT

(a) Remove the 2 anti–squeal springs.

(b) Remove the 2 brake pads.

(c) Remove the 2 anti–squeal shims and 2 pad retainers from the pad.

NOTICE:

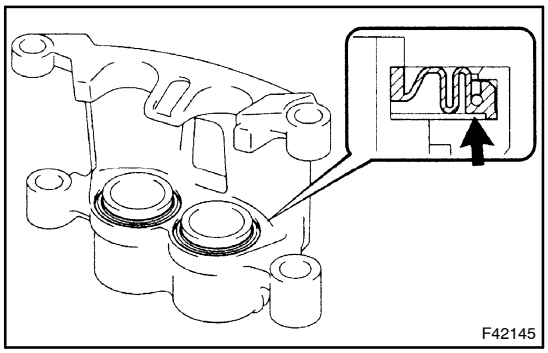
The anti–squeal springs and support plates can be used again if they have sufficient rebound, no deformation, no cracks or no wear, and have had all rust, dirt and foreign particles cleaned off.

5. REMOVE FRONT DISC BRAKE PAD SUPPORT PLATE

6. REMOVE FRONT DISC BRAKE CYLINDER SLIDE BUSH

7. REMOVE BUSH DUST BOOT NO.1

(a) Remove the 4 bush dust boots from the disc brake cylinder.



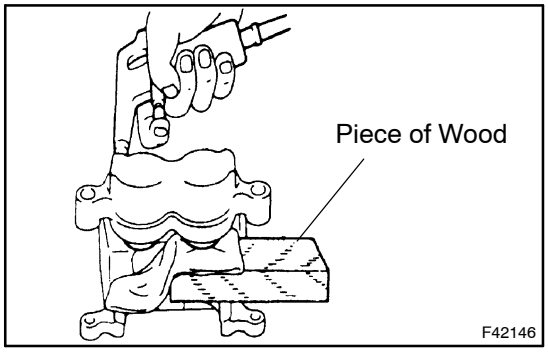
8. REMOVE CYLINDER BOOT

(a) Using a screwdriver, remove the 2 cylinder boot set rings from the caliper.

(b) Remove the 2 cylinder boots from the caliper.

NOTICE:

At the time of the installation, engage the boots securely in the caliper groove.



9. REMOVE FRONT DISC BRAKE PISTON

(a) Insert thick rags or an equivalent between the piston and cylinder to prevention of the piston scratches.

(b) Clamp a piece of wood wound with rags securely, so that the piston on the one side will not fly.

(c) Using compressed air to remove the pistons in order from the cylinder.

CAUTION:

Do not place your fingers in front of the piston when using compressed air.

NOTICE:

- **The removal of the piston always must be performed with a piston fixed on the one side.**
- **Do not splash fluid.**

10. REMOVE PISTON SEAL

(a) Using a screwdriver, remove the 2 piston seals from the cylinder.

NOTICE:

Do not damage the caliper inside and seal groove.

11. REMOVE FRONT DISC BRAKE BLEEDER PLUG

(a) Remove the bleeder plug cap and bleeder plug.

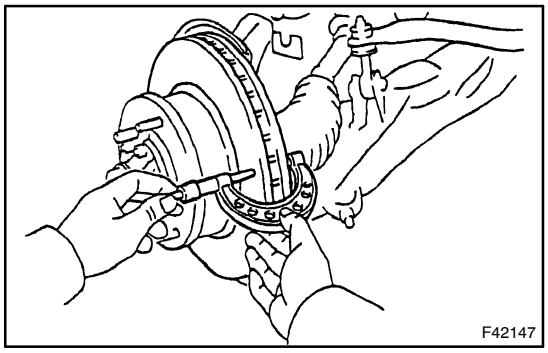
12. INSPECT BRAKE CYLINDER AND PISTON

(a) Check the cylinder bore and piston for rust or scoring.

13. MEASURE PAD LINING THICKNESS

(a) Using vernier calipers, measure the pad lining thickness.
Minimum thickness: 3.0 mm (0.118 in.)

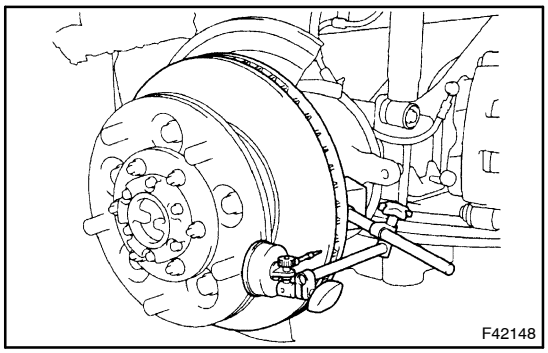
Replace the pad if of the pad has the minimum thickness or if it shows signs of uneven wear.


F42147

14. INSPECT DISC THICKNESS

(a) Using a micrometer, measure the disc thickness.
Standard thickness: 35.0 mm (1.378 in.)
Minimum thickness: 33.0 mm (1.299 in.)

Replace the disc if the thickness of the disc is at the minimum or less. Replace the disc or grind it on a lathe if it is scored or is worn unevenly.


F42148

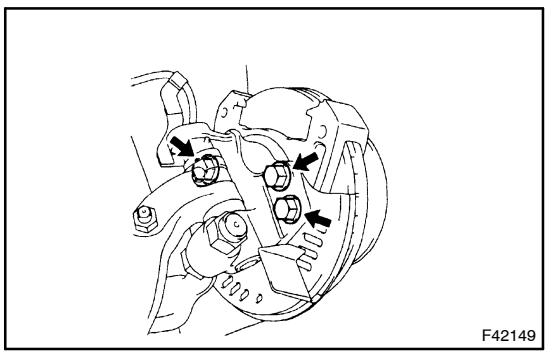
15. INSPECT DISC RUNOUT

(a) Using a dial indicator, measure the disc runout at a position of 10 mm (0.39 in.) from the outside edge.
Maximum disc runout: 0.12 mm (0.0047 in.)

If the bearing play and axle hub runout are normal, replace the disc or grind it on an ”On–car brake lathe”.

HINT:

Before measuring the runout, confirm that the front bearing preload is within the specified rauge (See page 30–2).


F42149

16. REPLACE FRONT DISC

(a) Remove the 3 bolts and disc brake cylinder mounting.
(b) Remove the front axle hub (See page 30–34).
(c) Remove the disc from the axle hub (See page 30–34).
(d) Install a new disc and torque the 5 bolts.
Torque: 165 N·m (1,680 kgf·cm, 122 ft·lbf)
(e) Install the axle hub and adjust the front bearing preload (See page 30–2).
(f) Install the disc brake cylinder mounting with the 3 bolts.
Torque: 265 N·m (2,700 kgf·cm, 195 ft·lbf)

17. TEMPORARILY TIGHTEN FRONT DISC BRAKE BLEEDER PLUG

(a) Temporarily tighten the bleeder plug, and install the bleeder plug cap.

18. INSTALL PISTON SEAL

(a) Apply lithium soap base glycol grease to a new piston seal.
(b) Install the piston seal to the disc brake cylinder.

19. INSTALL FRONT DISC BRAKE PISTON

(a) Apply lithium soap base glycol grease to the piston.

(b) Install the piston to the disc brake cylinder.

NOTICE:

Do not forcibly screw the piston into the disc brake cylinder.

20. INSTALL CYLINDER BOOT

(a) Apply lithium soap base glycol grease to a new cylinder boot. Then install the cylinder boot to the disc brake cylinder.

HINT:

Install the boot securely in the grooves of the cylinder and piston.

(b) Using a screwdriver, install the set ring.

NOTICE:

Do not damage the cylinder boot.

21. INSTALL BUSH DUST BOOT NO.1

(a) Apply lithium soap base glycol grease to the seal surface of the 4 new bush dust boots.

(b) Install the 4 bush dust boots to the disc brake cylinder.

22. INSTALL FRONT DISC BRAKE CYLINDER SLIDE BUSH

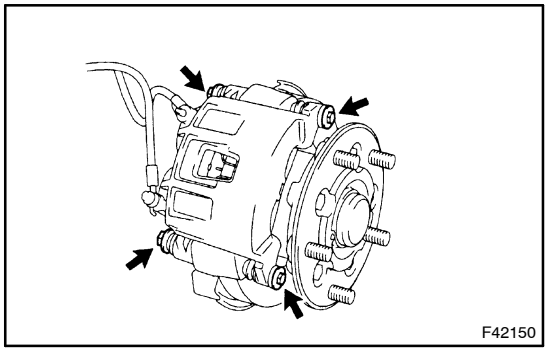
23. INSTALL FRONT DISC BRAKE PAD SUPPORT PLATE

24. INSTALL FRONT DISC BRAKE PAD KIT

(a) Install the 2 anti–squeal shims and 2 pad retainers to the pad.

(b) Install the 2 brake pads.

(c) Install the 2 anti–squeal springs.



25. INSTALL FRONT DISC BRAKE CYLINDER SUB–ASSY

(a) Install the 4 bolts and caliper.

Torque:

78.4 N·m (800 kgf·cm, 58 ft·lbf) for inside

15.7 N·m (160 kgf·cm, 12 ft·lbf) for outside

(b) Install the union bolt and a new gasket to the caliper, and then connect the flexible hose to the caliper.

Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

26. BLEED BRAKE LINE (See page 32–4)

27. CHECK FLUID LEVEL IN RESERVOIR (See page 32–4)

28. CHECK BRAKE FLUID LEAKAGE

29. INSTALL FRONT WHEEL