3215F-01

OVERHAUL

HINT:

- Overhaul the RH side using the same procedures as those for the LH side.
- If work that does not involve brake fluid bleeding, such as drum brake shoe replacement, is started 2 minutes or more after the power switch is turned off, brake control (ECB) prohibition is not necessary.
- 1. REMOVE REAR WHEEL
- 2. BRAKE CONTROL (ECB) OFF (SEE PAGE 32-24)

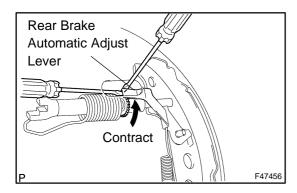
NOTICE:

Prohibit the brake control (ECB) certainly before bleeding the brake fluid.

3. DRAIN BRAKE FLUID

NOTICE:

Wash brake fluid off immediately if it adheres to any painted surfaces.

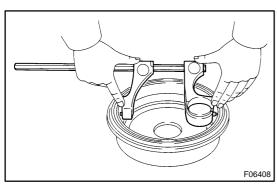


4. REMOVE REAR BRAKE DRUM SUB-ASSY

- (a) Put matchmarks on the rear brake drum and the axle hub.
- (b) Release the parking brake and remove the rear brake drum sub-assy.

HINT:

If the rear brake drum sub—assy cannnot be removed, push the rear brake automatic adjust lever through the backing plate service hole using a screwdriver. Turn and contract the adjuster using another screwdriver.



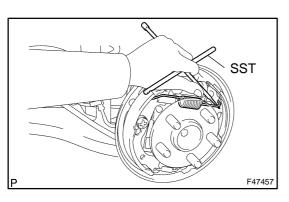
5. INSPECT BRAKE DRUM INSIDE DIAMETER

(a) Using a brake drum gauge or equivalent, measure the inside diameter of the drum.

Standard inside diameter: 200.0 mm (7.874 in.) Maximum inside diameter: 201.0 mm (7.913 in.)

HINT:

If the inside diameter of the brake drum is at the maximum or more, replace the brake drum sub-assy.



6. SEPARATE PARKING BRAKE SHOE STRUT SET LH

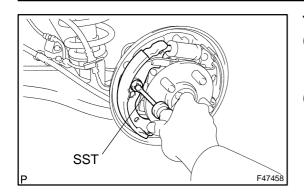
(a) Using SST, disconnect the spring and parking brake shoe strut set from the brake shoes.

SST 09703-30011

NOTICE:

Be careful not to damage the cylinder dust boot.

2004 Prius - Preliminary Release (RM1075U)

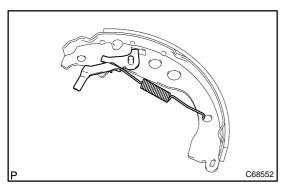


7. REMOVE FRONT BRAKE SHOE

- (a) Using SST, remove the shoe hold down spring cup, the shoe hold down spring and shoe hold down spring pin. SST 09718–00010
- (b) Remove the brake shoe (front) and tension spring.

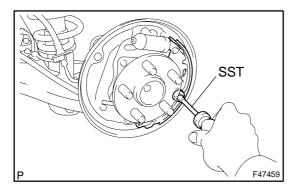
8. REMOVE PARKING BRAKE SHOE STRUT SET LH

(a) Remove the parking brake shoe strut set from the brake shoe (rear).



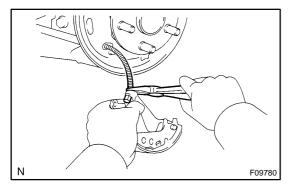
9. REMOVE REAR BRAKE AUTOMATIC ADJUST LEVER LH

(a) Remove the rear brake automatic adjust lever tension spring and the rear brake automatic adjust lever.



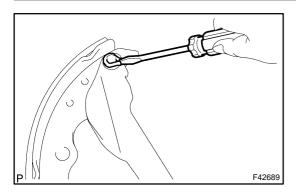
10. REMOVE REAR BRAKE SHOE

- (a) Remove the tension spring from the brake shoe (rear).
- (b) Using SST, remove the shoe hold down spring cup, the shoe hold down spring and shoe hold down spring pin. SST 09718–00010



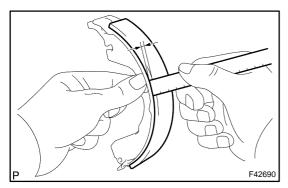
(c) Using needle–nose pliers, disconnect the parking brake cable, and remove the brake shoe (rear).

2004 Prius - Preliminary Release (RM1075U)



11. REMOVE REAR BRAKE PARKING BRAKE SHOE LEVER SUB-ASSY

(a) Using a screwdriver, remove the C-washer and the parking brake shoe lever.

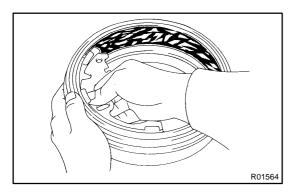


12. INSPECT REAR DRUM BRAKE SHOE LINING THICKNESS

(a) Using a ruler, measure the thickness of the shoe lining. Standard thickness: 4.0 mm (0.157 in.)

Minimum thickness: 1.0 mm (0.039in.)

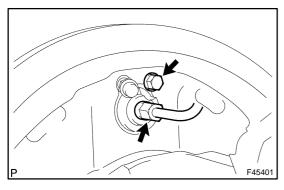
If the lining thickness is at the minimum thickness or less, or if there is severe or uneven wear, replace the brake shoe.



13. INSPECT BRAKE DRUM AND REAR DRUM BRAKE SHOE LINING FOR PROPER CONTACT

(a) Apply chalk to the inside surface of the drum, then grind the drum on the brake shoe lining to fit.

If the contact between the drum and the shoe lining is improper, repair it using a brake shoe grinder or replace the brake shoe assembly.



14. REMOVE LH, FRONT OR UPPER REAR WHEEL BRAKE CYLINDER ASSY

(a) Using SST, disconnect the brake line. SST 09023-00100

HINT:

Use a container to catch the brake fluid.

(b) Remove the bolt and the rear wheel brake cylinder assy.

15. REMOVE REAR WHEEL CYLINDER CUP KIT

- (a) Remove the 2 cylinder dust boots from the rear wheel brake cylinder.
- (b) Remove the 2 pistons and the compression spring.
- (c) Remove the 2 wheel cylinder cups from each piston.

16. INSPECT BRAKE WHEEL CYLINDER

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

If necessary, replace the brake wheel cylinder sub-assy.

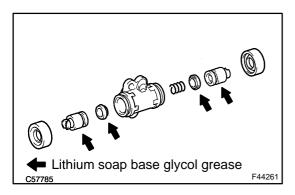
17. REMOVE DRUM BRAKE, REAR BLEEDER PLUG

(a) Remove the rear drum bleeder plug from the rear wheel cylinder assy.

2004 Prius - Preliminary Release (RM1075U)

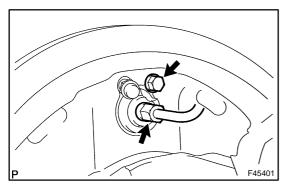
18. TEMPORARILY TIGHTEN DRUM BRAKE, REAR BLEEDER PLUG

(a) Install the rear drum brake bleeder plug to the rear wheel cylinder assy.



19. INSTALL REAR WHEEL CYLINDER CUP KIT

- (a) Apply lithium soap base glycol grease to 2 new wheel cylinder cups and 2 pistons.
- (b) Install the 2 wheel cylinder cups on each piston.
- (c) Install the compression spring and the 2 pistons to the rear wheel brake cylinder.
- (d) Install the 2 new cylinder dust boots to the rear wheel brake cylinder.



20. INSTALL LH, FRONT OR UPPER REAR WHEEL BRAKE CYLINDER ASSY

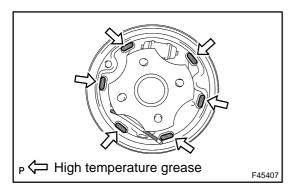
(a) Install the rear wheel brake cylinder assy with the bolt.

Torque: 9.8 N·m (100 kgf·cm, 87 in·lbf)

(b) Using SST, connect the brake line.

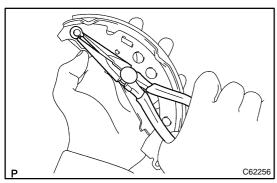
SST 09023-00100

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)



21. APPLICATION HIGH TEMPERATURE GREASE

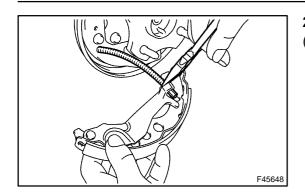
(a) Apply high temperature grease to the shoe attached surface of the backing plate.



22. INSTALL REAR BRAKE PARKING BRAKE SHOE LEVER SUB-ASSY

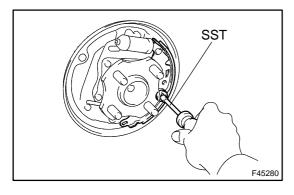
(a) Using needle–nose pliers, install the parking brake lever with a new C–washer.

2004 Prius - Preliminary Release (RM1075U)



23. INSTALL REAR BRAKE SHOE

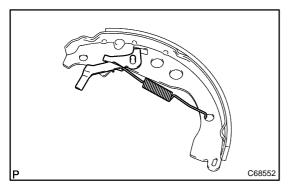
(a) Using needle-nose pliers, connect the parking brake cable No.3 to the parking brake shoe lever.



(b) Using SST, install the rear brake shoe, the pin, the shoe hold down spring and the shoe hold down cup.SST 09718–00010

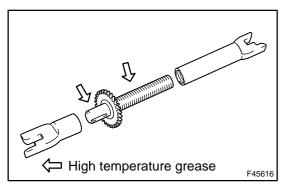
24. INSTALL REAR BRAKE SHOE RETURN SPRING

(a) Install the rear brake shoe retern spring to the brake shoe (rear).



25. INSTALL REAR BRAKE AUTOMATIC ADJUST LEVER LH

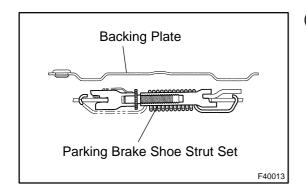
(a) Install the rear brake automatic adjust lever and the rear brake automatic adjust lever tension spring to the front brake shoe.



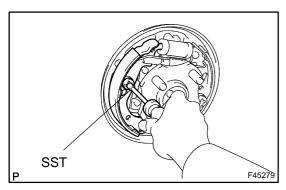
26. INSTALL PARKING BRAKE SHOE STRUT SET LH

- (a) Apply high temperature grease to the adjusting bolt and assemble.
- (b) Install the shoe return spring to the strut set.

2004 Prius - Preliminary Release (RM1075U)

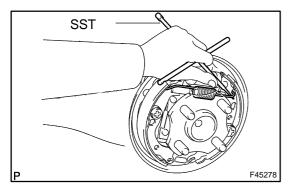


(c) Install the parking brake shoe strut set as shown in the illustration.



27. INSTALL FRONT BRAKE SHOE

- (a) Connect the tension spring to the brake shoe (front) and rear brake shoe.
- (b) Using SST, install the brake shoe (front), the pin, the shoe hold down spring and the cup.SST 09718–00010



28. CONNECT PARKING BRAKE SHOE STRUT SET LH

(a) Using SST, connect the shoe return spring to the front brake shoe and rear brake shoe.

SST 09703-30011

NOTICE:

Be careful not to damage the wheel cylinder boot.

2004 Prius - Preliminary Release (RM1075U)

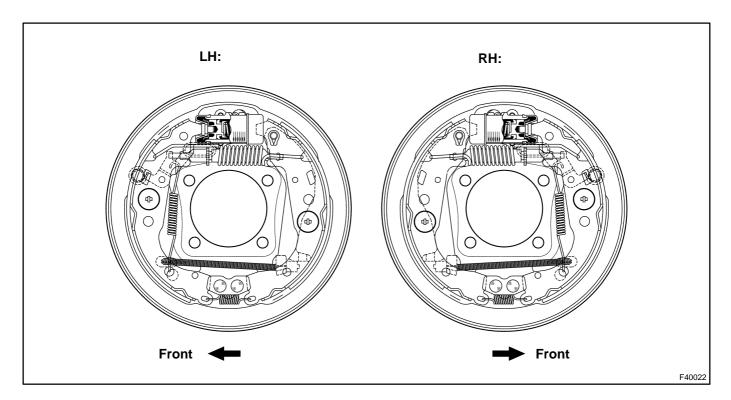
29. CHECK REAR DRUM BRAKE INSTALLATION

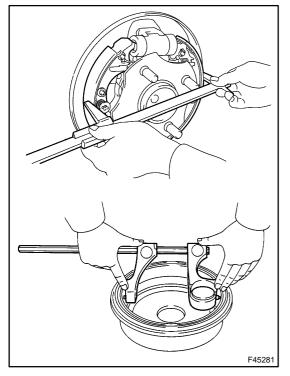
(a) Check that each part is installed properly.

NOTICE:

There should be no oil or grease adhering to the friction surfaces of the shoe lining and drum.

If they are not installed correctly as shown in the illustration, reinstall them.





(b) Measure the brake drum inside diameter and the diameter of the brake shoes. Check the difference between the diameters the correct shoe clearance.

Shoe clearance: 0.6 mm (0.024 in.)

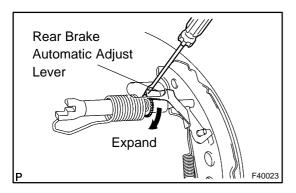
NOTICE:

There should be no oil or grease adhering to the friction surfaces of the shoe lining and the drum.

2004 Prius - Preliminary Release (RM1075U)

30. INSTALL REAR BRAKE DRUM SUB-ASSY

(a) Aligning the matchmarks, install the rear brake drum sub-assy.



31. ADJUST REAR DRUM BRAKE SHOE CLEARANCE

- (a) Temporarily install the 2 hub nuts.
- (b) Remove the hole plug, and turn the adjuster to expand the shoe until the drum locks.
- (c) Rotate the adjuster by 8 notches.
- (d) Install the hole plug.
- 32. FILL RESERVOIR WITH BRAKE FLUID (SEE PAGE 32-4)
- 33. BLEED FRONT AND REAR BRAKE SYSTEMS (SEE PAGE 32-4)
- 34. CHECK BRAKE FLUID LEAKAGE
- 35. CHECK FLUID LEVEL IN RESERVOIR
- 36. INSTALL REAR WHEEL
 - Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
- 37. CHECK PARKING BRAKE PEDAL TRAVEL (SEE PAGE 33-2)
- 38. ADJUST PARKING BRAKE PEDAL TRAVEL (SEE PAGE 33-2)
- 39. CHECK AND CLEAR DTC (SEE PAGE 05-975)