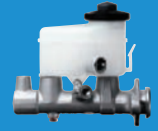
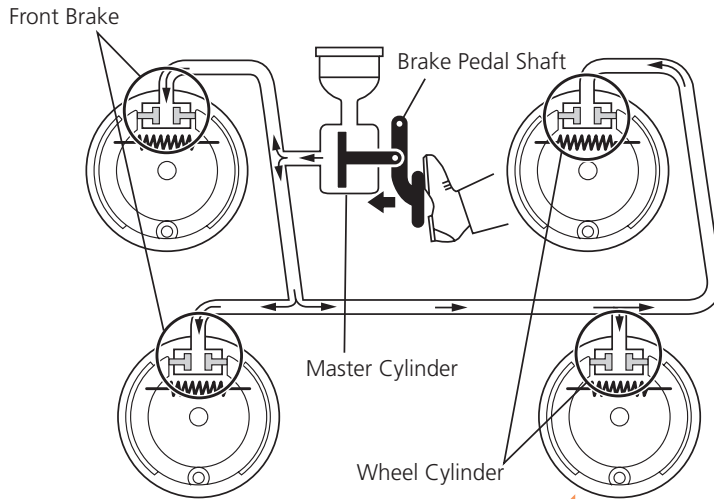


Brake Wheel Cylinder



Function

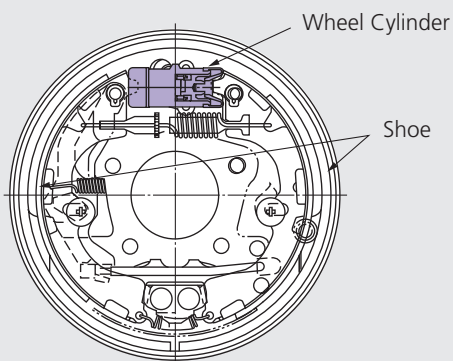


Vehicles Equipped with Drum Brake Systems

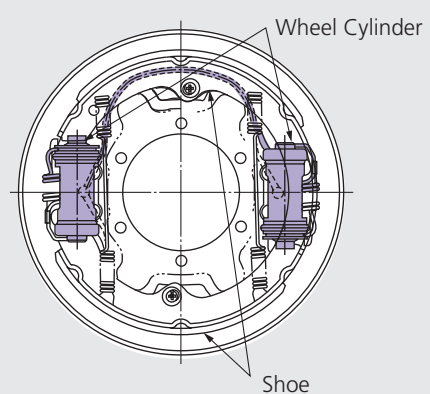
The wheel cylinder is a component that transforms hydraulic power to mechanical force to control the expansion of the shoes within the drum brake system.

Variations

Leading-Trailing Type

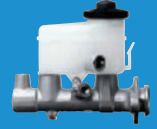


2-Leading and Dual 2-Leading Type

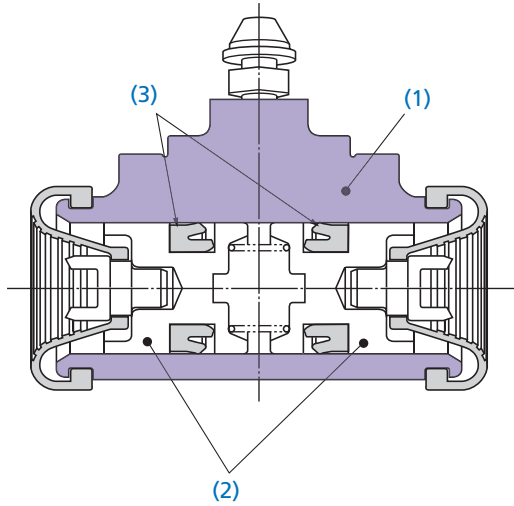


* The figures above show static state position of the brake cylinder(s).

Variations



Leading-Trailing Type



2 Leading Type

General Components (all wheel cylinders)

(1) Cylinder Body Material Variations:

Cast Iron

Highly durable and low cost.

Nickel-Phosphorous Plated Cast Iron

Same as Cast Iron type with excellent rust and wear resistance within the cylinder.

Hard Alumite Coated Aluminum Stock

Light weight characteristics with excellent rust and wear resistance.

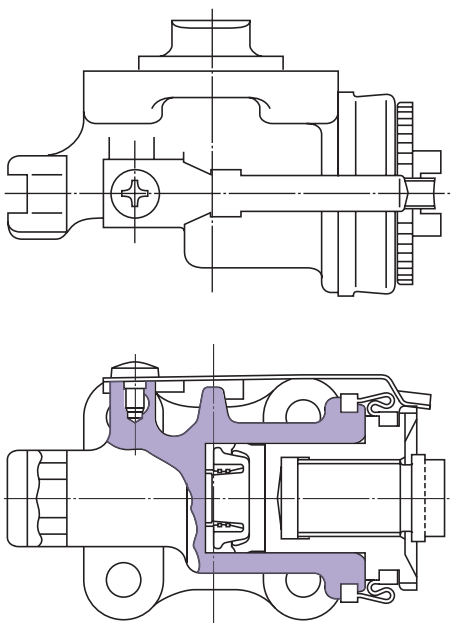
(2) Aluminum Piston

Alumite coating achieves light weight characteristics with excellent rust and wear resistance. Press-fit steel support reinforces components attached to the shoe.

(3) Cup

Advanced technology EPDM material provides excellent sealing and heat resistance.

2-Leading Type



Wheel cylinder with auto-adjuster

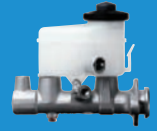
The wheel cylinders for the 2-Leading type drum brake system are normally utilized on the front brakes for truck applications. One piston is used per cylinder assembly.

Adjuster bolt prevents excess piston stroke, resulting from the gradual wear of the friction material on the brake shoe.

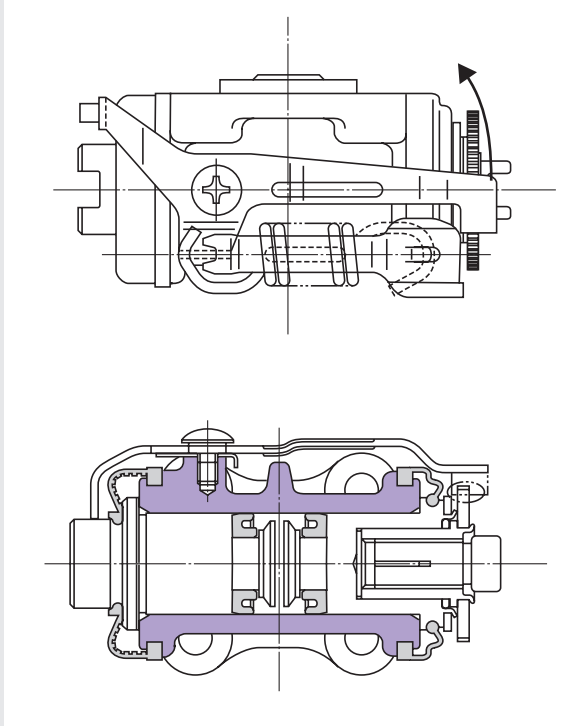
Hydraulic section of the 2-Leading type is similar to the Leading-Trailing type.

For auto-adjuster function, refer to next page.

Variations

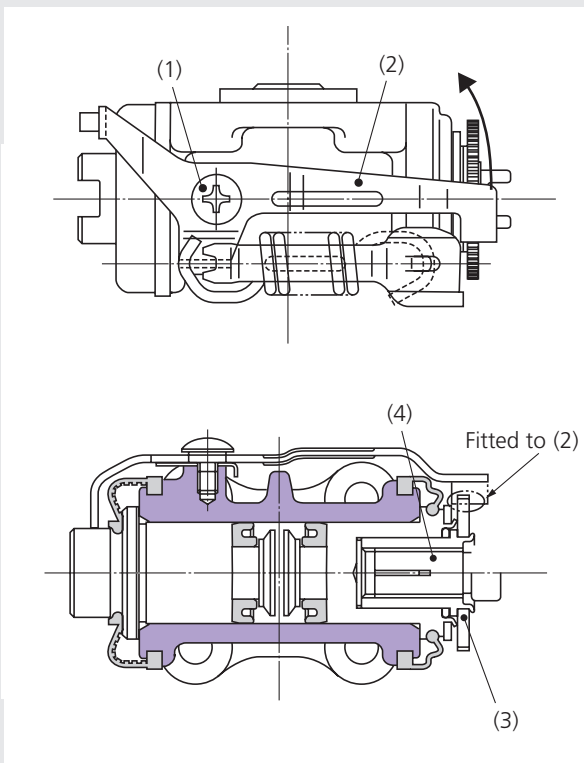


Dual 2-Leading Type



The wheel cylinders for Dual 2-Leading type drum brake system are normally utilized on the rear brakes for truck applications. A pair of pistons are used per cylinder assembly.

Wheel Cylinders with Auto-Adjusters



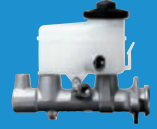
Auto-adjuster equipped wheel cylinders compensate for increased piston stroke due to wear from the friction material on the brake shoe.

Operation:

The fulcrum for the auto adjuster is located at (1) the center of the screw. The lever (2) rotates around the fulcrum which rotates the adjuster nut (3). The rotation of the adjuster nut pushes out the adjuster bolt (4), which compensates for the decreased thickness of the friction material on the shoe. The piston assembly moves with the adjuster systems so that the piston stroke essentially does not change.

Manual adjusters only have the adjuster nut (3) and the adjuster bolt (4) components. Manual adjustments to compensate for the increased piston strokes are done by rotating the adjuster bolt and nut.

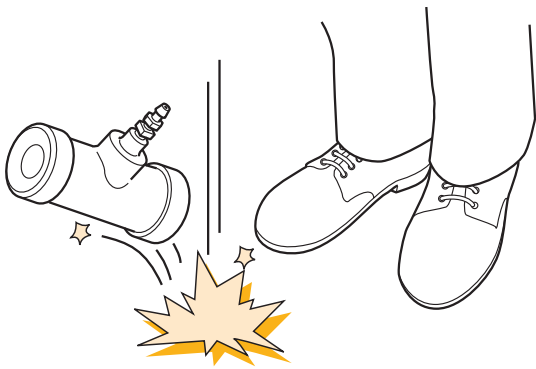
Installation Procedure



CAUTION! Failure to follow recommended procedures may cause brake failure and injury. Always consult the manufacturer's vehicle specific service manual for reference.

1

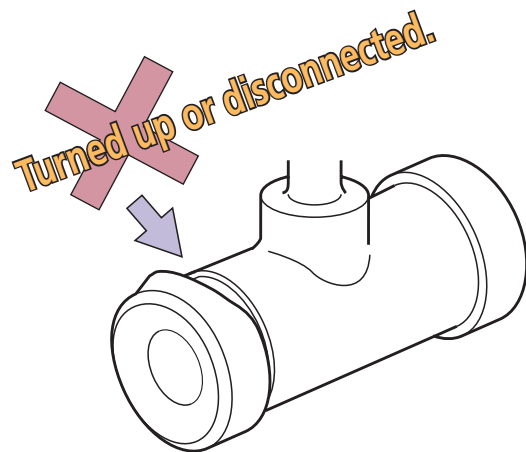
Handle with care. Clutch master cylinders are precision manufactured. Do not drop or deform. Never use a damaged unit.



Optimal hydraulic pressure may not be achieved due to damaged internal parts, resulting in incorrect operation and injury.

2

Ensure that the boot is installed correctly so that it protect the cylinder for water, dust, dirt, and debris.



If the boot is not installed correctly, foreign objects could enter the mechanical assembly, causing insufficient brake control.