

Troubleshooting the Brake System

Problem	Cause	Solution
Low brake pedal (excessive pedal travel required for braking action.)	<ul style="list-style-type: none"> Excessive clearance between rear linings and drums caused by in-operative automatic adjusters Worn rear brakelining Bent, distorted brakeshoes, front or rear Air in hydraulic system 	<ul style="list-style-type: none"> Make 10 to 15 alternate forward and reverse brake stops to adjust brakes. If brake pedal does not come up, repair or replace adjuster parts as necessary. Inspect and replace lining if worn beyond minimum thickness specification Replace brakeshoes in axle sets Remove air from system. Refer to Brake Bleeding.
Low brake pedal (pedal may go to floor with steady pressure applied.)	<ul style="list-style-type: none"> Fluid leak in hydraulic system Air in hydraulic system Incorrect or non-recommended brake fluid (fluid evaporates at below normal temp). Master cylinder piston seals worn, or master cylinder bore is scored, worn or corroded 	<ul style="list-style-type: none"> Fill master cylinder to fill line; have helper apply brakes and check calipers, wheel cylinders, differential valve tubes, hoses and fittings for leaks. Repair or replace as necessary. Remove air from system. Refer to Brake Bleeding. Flush hydraulic system with clean brake fluid. Refill with correct-type fluid. Repair or replace master cylinder
Low brake pedal (pedal goes to floor on first application—o.k. on subsequent applications.)	<ul style="list-style-type: none"> Disc brake pads sticking on abutment surfaces of anchor plate. Caused by a build-up of dirt, rust, or corrosion on abutment surfaces 	<ul style="list-style-type: none"> Clean abutment surfaces
Fading brake pedal (pedal height decreases with steady pressure applied.)	<ul style="list-style-type: none"> Fluid leak in hydraulic system Master cylinder piston seals worn, or master cylinder bore is scored, worn or corroded 	<ul style="list-style-type: none"> Fill master cylinder reservoirs to fill mark, have helper apply brakes, check calipers, wheel cylinders, differential valve, tubes, hoses, and fittings for fluid leaks. Repair or replace parts as necessary. Repair or replace master cylinder
Decreasing brake pedal travel (pedal travel required for braking action decreases and may be accompanied by a hard pedal.)	<ul style="list-style-type: none"> Caliper or wheel cylinder pistons sticking or seized Master cylinder compensator ports blocked (preventing fluid return to reservoirs) or pistons sticking or seized in master cylinder bore Power brake unit binding internally 	<ul style="list-style-type: none"> Repair or replace the calipers, or wheel cylinders Repair or replace the master cylinder Test unit according to the following procedure: <ol style="list-style-type: none"> Shift transmission into neutral and start engine Increase engine speed to 1500 rpm, close throttle and fully depress brake pedal Slow release brake pedal and stop engine Have helper remove vacuum check valve and hose from power unit. Observe for backward movement of brake pedal. If the pedal moves backward, the power unit has an internal bind—replace power unit