

Troubleshooting Guide

Troubleshooting brakes is a difficult task to cover in a catalog. Briefly listed below are some possible causes of brake trouble. This reference guide to troubleshooting may help you narrow the section of your braking system which is causing your problems. Don't forget sometimes there can be multiple problems in a braking system. Be thorough and recheck each area.

Problem	Possible Cause	Problem	Possible Cause
* Low pedal-will pump up	<ul style="list-style-type: none"> - Rotor Runout. - Loose wheel bearings. - Air in hydraulic system. - Drum brakes out of adjustment. 	* Pedal effort too high	<ul style="list-style-type: none"> - Master cylinder too large. - Pedal ratio too low. - Linings too hard. - Racing linings too cold. - Power-assist failure. - Brakes wet. - Glazed linings. - Oil or fluid on linings. - Drum-brake-shoe arc. incorrect. - Brakes too hot.
* Low pedal won't pump up	<ul style="list-style-type: none"> - Bad seals in caliper. - Badly worn pads. - Rotor runout. - Leak in hydraulic system. - Loose wheel bearings. - Excessive free-play in brake linkage. - Balance bar too far off center. 	* Vibrating pedal	<ul style="list-style-type: none"> - Excessive rotor runout or thickness variation. - Damaged wheel bearings. - Cracked drum or rotor. - Bent axle. - Drum warped or eccentric. - Brakes not releasing. - Vented-rotor fins rusted out so side plates deflect under pressure.
* Changing brake pedal travel	<ul style="list-style-type: none"> - Slop in wheel bearing or suspension. - Balance-bar failure. - Balance bar too far off center. 	* Swerving under hard braking	<ul style="list-style-type: none"> - Front suspension bottoming. - Toe-in adjustment wrong. - Bump-steer problems. - Shock-absorber failure. - Shock-absorber adjustment dissimilar. - Brake balance way off. - Caster or camber uneven. - Chassis or suspension twisted. - Worn steering or suspension pivots. - Tire sizes dissimilar. - Excess front-wheel scrub radius.
* Spongy pedal	<ul style="list-style-type: none"> - Air in hydraulic system. - Deflection of caliper or mount. - Deflection of hoses. - Brake fluid too hot. - Badly worn linings or pads. - Concave or convex lining wear. - Deflection of master cyl. mount. - Master cylinder too small. - Pedal ratio too high. - Drum-brake-shoe arc incorrect. - Distorted brake shoes or backing plate. - Old brake fluid. - Cracked brake drum. 	* Pedal goes to floor	<ul style="list-style-type: none"> - Air in hydraulic system. - Leaking seal in master cylinder. - Leak in hose or tube. - Leak in caliper or wheel cylinder. - Tapered pad wear. - Drum brake not adjusting. - Electric current passing through fluid.
* Brake pedal not returning	<ul style="list-style-type: none"> - Master-cylinder reservoir not vented. - No clearance in brake pushrod. - Binding in pedal pivots or pushrod. 	* Brakes grab or lock	<ul style="list-style-type: none"> - Drum-brake-shoe arc incorrect. - Loose or distorted backing plate. - Contaminated linings. - Brakes wet. - Racing linings too cold. - Failed brake-shoe return spring. - Drum-brake linings burned up.
* Front or rear brakes locking	<ul style="list-style-type: none"> - Too much front or rear brake balance. - Failure in opposite brake system. 	* Brakes not releasing	<ul style="list-style-type: none"> - Blocked master-cylinder port. - Binding pedal pivots. - No free play in pushrod. - Seized caliper or wheel cylinder. - Aged or overheated caliper seals. - Swollen seals-incorrect fluid. - Caliper slides corroded and stuck. - Heal drag on cup-type seals. - Parking brake on or misadjusted. - Power booster faulty. - Distorted shoes or backing plate.
* One brake locking	<ul style="list-style-type: none"> - Caliper piston seizing in cylinder. - Wheel cylinder seizing. - Bad brake-shoe return spring. - Loose or distorted backing plate. - Oil or fluid leak into brake. - Loose caliper mount. - Excessive weight on other wheel. - Twist in car chassis or suspension. - Mismatched rotors, linings or drums. 		
* Pedal effort too low	<ul style="list-style-type: none"> - Master cylinder too small. - Pedal ratio too high. - Too much servo action on drum brakes. - Linings too soft. - Too much power assist. - Defective booster. 		
* Brakes squeal	<ul style="list-style-type: none"> - Wear in brake shoes or attachments. - Worn pads. - Cold linings. - Need new brake-pad anti-squeal shims. - Need anti-squeal compound behind pads. - Need to chamfer ends of linings. - Brakes wet. 		