

# Trouble Shooting

## BRAKE SYSTEM TROUBLE SHOOTING

**NOTE** — This is a general trouble shooting guide. Not all steps will apply to all brake systems.

CONDITION & POSSIBLE CAUSE	CONDITION & POSSIBLE CAUSE
<p><b>Pull When Brake Applied</b></p> <ul style="list-style-type: none"> <li>● Incorrect tire pressure.</li> <li>● Front end out of alignment.</li> <li>● Unmatched tires.</li> <li>● Restricted brake lines or hoses.</li> <li>● Malfunctioning caliper.</li> <li>● Bent shoe or oily linings.</li> <li>● Loosen suspension parts.</li> <li>● Loose calipers.</li> </ul> <p><b>Brake Rough, Chatters or Pulsates</b></p> <ul style="list-style-type: none"> <li>● Excessive lateral runnout.</li> <li>● Parallelism not to specification.</li> <li>● Wheel bearings not adjusted.</li> <li>● Drums out-of-round.</li> <li>● Disc pad reversed.</li> <li>● Caliper not sliding.</li> </ul> <p><b>Excessive Pedal Effort</b></p> <ul style="list-style-type: none"> <li>● Malfunctioning power unit.</li> <li>● Linings or pads contaminated.</li> <li>● Linings or pads glazed.</li> <li>● Worn pads or linings.</li> <li>● Siezed pistons.</li> <li>● Worn or scored rotors or drums.</li> <li>● Incorrect pads or linings.</li> <li>● Partial system failure.</li> </ul> <p><b>Low Pedal Effect</b></p> <ul style="list-style-type: none"> <li>● Air in hydraulic sytem.</li> <li>● Fluid leaks in master clinder.</li> <li>● Bleed screw loose.</li> </ul> <p><b>Excessive Pedal Travel</b></p> <ul style="list-style-type: none"> <li>● Partial brake system failure.</li> <li>● Insufficient or incorrect fluid.</li> <li>● Rear brakes not adjusted.</li> <li>● Air in system.</li> <li>● Bent shoe and lining.</li> <li>● Excessively worn pads or linings.</li> <li>● Plugged master cylinder cap.</li> <li>● Excessive rotor runnout.</li> </ul> <p><b>Brakes Grab or Uneven Application</b></p> <ul style="list-style-type: none"> <li>● All conditions under "Brake Pulls".</li> <li>● Malfunction of combination valve.</li> <li>● Binding brake pedal.</li> <li>● Linings contaminated.</li> <li>● Siezed piston(s).</li> <li>● Incorrect tire pressure.</li> <li>● Brake line plugged.</li> <li>● Caliper alignment incorrect.</li> <li>● Unmatched pads or linings.</li> </ul>	<p><b>Brake Dragging or Slow Return</b></p> <ul style="list-style-type: none"> <li>● Master cylinder pistons not returning correctly.</li> <li>● Restricted brake lines or hoses.</li> <li>● Incorrect parking brake adjustment.</li> <li>● Parking brake cable frozen.</li> <li>● Incorrect or misaligned pedal push rod.</li> <li>● Power booster output rod too long.</li> <li>● Incorrect installation of pads.</li> </ul> <p><b>Pedal Travel Decreasing</b></p> <ul style="list-style-type: none"> <li>● Compensating port plugged.</li> <li>● Swollen master cylinder cup.</li> <li>● Master cylinder piston not returning.</li> <li>● Weak shoe retracting springs.</li> <li>● Wheel cylinder pistons sticking.</li> </ul> <p><b>Spongy Pedal</b></p> <ul style="list-style-type: none"> <li>● Air in system.</li> <li>● Swollen brake hoses.</li> <li>● Incorrect brake fluid.</li> <li>● Filler cap vent hole plugged.</li> </ul> <p><b>Pedal Yields Under Slight Pressure</b></p> <ul style="list-style-type: none"> <li>● Deteriorated check valve.</li> <li>● External fluid leaks.</li> <li>● Internal leak in master cylinder.</li> </ul> <p><b>Squeal or Squeak Without Brake Application</b></p> <ul style="list-style-type: none"> <li>● Front linings worn out.</li> <li>● Dust or oil on drums or rotors.</li> </ul> <p><b>Shock When Pedal Applied</b></p> <ul style="list-style-type: none"> <li>● Brake drum cracked or distorted.</li> <li>● Uneven brake drum wear.</li> <li>● Broken return spring.</li> </ul> <p><b>Rattling in Front Brakes</b></p> <ul style="list-style-type: none"> <li>● Pad anti-rattle spring clip broken or missing.</li> <li>● Excessive clearance between pads and caliper.</li> </ul> <p><b>Brake React Slowly</b></p> <ul style="list-style-type: none"> <li>● Check valve malfunction.</li> <li>● Vacuum hose blocked or broken.</li> <li>● Air cleaner restricted.</li> </ul> <p><b>Leaks in Caliper Piston Cylinder</b></p> <ul style="list-style-type: none"> <li>● Damaged or worn caliper piston seal.</li> <li>● Deep Scores or corrosion in cylinder bore.</li> </ul>