

PRECAUTIONS

1. Care must be taken to replace each part properly as it could affect the performance of the brake system and result in a driving hazard. Replace the parts with parts of the same part number or equivalent.
2. It is very important to keep parts and the area clean when repairing the brake system.

TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Low or spongy pedal	Linings worn Leak in brake system Master cylinder faulty Air in brake system Wheel cylinder faulty Piston seals worn or damaged Rear brake automatic adjuster faulty	Replace brake shoes or pads Repair leak Repair or replace master cylinder Bleed brake system Repair wheel cylinder Repair brake calipers Repair or replace adjuster	BR-19 , 26 BR-9 BR-6 BR-26 BR-19 BR-26
Brakes drag	Parking brake out of adjustment Parking brake wire binding Booster push rod out of adjustment Return spring faulty Brake line restricted Lining cracked or distorted Wheel cylinder or caliper piston sticking Automatic adjuster broken Master cylinder faulty	Adjust parking brake Repair as necessary Adjust push rod Replace spring Repair as necessary Replace brake shoes and pads Repair as necessary Replace adjuster Repair or replace master cylinder	BR-8 BR-17 BR-17 BR-19 , 26 BR-21 , 26 BR-26 BR-9
Brakes pull	Tires improperly inflated Oil or grease on linings Brake shoes distorted, linings worn or glazed Drum or disc out of round Return spring faulty Wheel cylinder faulty Piston frozen in caliper Disc brake pad sticking	Inflate tires to proper pressure Check for cause. Replace shoes Replace brake shoes Replace drum or disc Replace spring Repair wheel cylinder Repair caliper Replace pads	BR-19 , 26 BR-26 BR-21 , 26 BR-26 BR-26 BR-21 BR-19
Brakes grab/chatter	Oil or grease on linings Drum or disc scoured or out of round Brake shoes distorted, linings worn or glazed wheel cylinder faulty Disc brake pad sticking Brake booster faulty	Check for cause. Replace shoes Replace drum or disc Replace brake shoes Repair wheel cylinder Replace pads Replace booster	BR-19 , 26 BR-21 , 26 BR-26 BR-26 BR-19 BR-16

TROUBLESHOOTING (Cont'd)

Problem	Possible cause	Remedy	Page
Hard pedal but brakes ineffective	Oil or grease on linings Brake shoes distorted, linings worn or glazed, drums worn Disc brake pads worn Piston frozen in caliper Brake booster faulty Brake line restricted Vacuum leaking	Check for causes. Replace shoes Replace as required Replace pads Repair caliper Replace booster Repair as necessary Repair as necessary	BR-19, 26 BR-26 BR-19 BR-21 BR-16
Snapping or clicking noise when brakes are applied	On drum brakes–brake shoes binding at backing plate ledges On drum brakes–backing plate ledges worn On drum brakes–loose or missing hold down spring On drum brakes–loose set bolt at backing plate On disc brakes–rust on front edge of inboard shoes On disc brakes–loose installation bolt	Lubricate Replace and lubricate ledges Replace Tighten Inspect, lubricate. Replace if necessary Tighten	BR-26 BR-26 BR-26 BR-26 BR-19 BR-19
Scraping or grinding noise when brakes are applied	Worn brake linings Caliper to wheel or rotor interference Dust cover to rotor or drum interference Other brake system components: Warped or bent brake backing plate, cracked drum or rotor Tires rubbing against chassis and body	Replace, refinish drums or rotors if heavily scoured Replace as required Correct or replace Inspect and service Inspect and service	BR-26 BR-21 BR-21, 26
Squealing groaning or chattering noise when brakes are applied Note: Brake friction materials inherently generate noise and heat in order to dissipate energy. As a result, Occasional squeal is normal and is aggravated by severe environmental conditions such as cold, heat, wetness, snow, salt, mud, etc. This occasional squeal is not a functional problem and does not indicate any loss of brake effectiveness	Brake drums and linings rotors and pads worn or scoured Disc brakes–burred or rusted calipers Dirty, greased, contaminated or glazed linings Improper lining parts Maladjustment of brake pedal or booster push-rod Drum brakes–weak damaged or incorrect shoe hold-down springs, loose or damaged shoe hold-down pins and springs and grooved backing plate ledges	Inspect, service or replace Clean burr Clean or replace Inspect for correct usage or replace Inspect and adjust Inspect, service or replace	BR-21, 26 BR-21 BR-26 BR-26 BR-5 BR-26

TROUBLESHOOTING (Cont'd)

Problem	Possible cause	Remedy	Page
Squealing noise when brakes are not applied	Bent or warped backing plate causing interference with drum	Service or replace	BR-26
	Improper machining of drum causing interference with backing plate or shoe	Replace drum	BR-26
	Maladjustment of brake pedal or booster push-rod	Inspect and adjust	BR-5
	Poor return of brake booster or master cylinder or wheel cylinder	Inspect, service or replace	BR-9 , 16, 26
	Disc brakes–rusted, stuck	Inspect. Lubricate if necessary	BR-21
	Other brake system components:	Inspect, service, replace as required	BR-26
	Loose or extra parts in brakes		
	Rear drum adjustment too tight causing lining to glaze		
	Worn, damaged or insufficiently lubricated wheel bearings		BR-26
	Drum brakes–weak, damaged or incorrect shoe retracting springs		BR-26
Groaning, clicking or rattling noise when brakes are not applied	Drum brakes–grooved backing plate ledges		
	Improper positioning of pads in caliper		
	Outside diameter of rotor rubbing caliper housing		
	Stones foreign material trapped inside wheel covers	Remove stones, etc.	
	Loose wheel hub nuts	Tighten to correct torque. Replace if stud holes are elongated	
	Disc brakes–loose installation bolt	Inspect. Tighten if necessary	BR-21
	Maladjustment of brake pedal or booster push-rod	Inspect and adjust	BR-5
	Disc brakes–poor return of piston	Inspect, service or replace	
	Drum brakes–loose or extra parts	Inspect, remove or service	
	Worn, damaged or dry wheel bearings	Inspect, lubricate or replace	BR-26