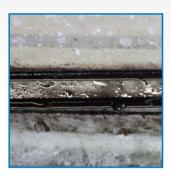


REGULATORS BRAKE HOSES



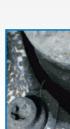
APPEARANCE Leakage, wet spots **CAUSE** Brake hose worn **EFFECT** • Loss of brake force Extended brake pedal travel

REMEDY Replace brake hose

WHEEL CYLINDERS



APPEARANCE Rust around brake cylinder pins CAUSE Limited usage of brakes, improper lubrication during assembly **EFFECT** No brake force, vehicle tends to pull to one side during braking **REMEDY** Replace or overhaul brake cylinder



APPEARANCE Leakage, wet spots **CAUSE** Brake line rusted **EFFECT** • Loss of brake force • Extended brake pedal travel **REMEDY** Replace brake line



APPEARANCE Wet spots at brake drum **CAUSE** Brake cylinder leakage **EFFECT** Mushy brake pedal, brake pedal sinks to the floor, limited brake performance. Due to brake fluid on the brake lining the vehicle may tend to pull to one side during braking **REMEDY** Replace brake cylinder



APPEARANCE Bulge on brake hose

CAUSE Brake hose harness damaged, brake hose clamped between moving parts **EFFECT** Brake pedal sinks deeper than normal, spongy feel

REMEDY Replace all brake hoses



APPEARANCE	Smoke from the drum brake
CAUSE	Brake lining drags against the brake drum due to stuck pistons in the wheel cylinder
EFFECT	Brake lining overheats, excessive wear
REMEDY	Replace wheel cylinder and brake lining, drum when needed

CLUTCH CABLES



APPEARANCE	Clutch pedal slowly returns to engaged position after release
CAUSE	Clutch cable does not move freely in the outer cable
EFFECT	The clutch slips, excessive wear of the clutch plate
REMEDY	Replace the clutch inner and outer cable

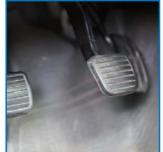


HYDRAULIC CLUTCH

PPEARANCE	None or leakage/wet spots at master or slave cylinder
CAUSE	Leaking master cylinderLeaking slave cylinder
EFFECT	Soft clutch pedal
REMEDY	 Overhaul or replace master cylinder Overhaul or replace slave cylinder







APPEARANCE (Clutch pedal remains on the floor
CAUSE	Clutch cable broken
	The clutch can not disengage and the gears cannot be shifted
REMEDY	Replace clutch cable



TROUBLE TRACER – HYDRAULICS

BRAKE CALIPERS



CAUSE	Dirt and moisture have entered the brake caliper, dust cap broken
EFFECT	Limited brake performance, vehicle tends to pull to one side during braking.
REMEDY	Replace overhaul brake caliper

HANDBRAKE CABLES

APPEARANCE	Handbrake travel is too long	
CAUSE	Brake lining is worn while the brake lining adjustment does not work automatically	
EFFECT	The parking brake cannot be applied with enough force to hold the vehicle on a slope	
REMEDY	Adjust the parking brake lining, adjust the parking brake cable or replace the brake lining	
APPEARANCE	The vehicle seems to drag while driving	
CAUSE	The parking brake cable won't release due to rust in the inner cable	
EFFECT	The parking brake continiously brakes causing the brakes to overheat	
REMEDY	Replace the parking brake cable	
APPEARANCE	The vehicle won't remain at it's position on a slope with the parking brake applied. The parking brake lever travel	



APPEARANCE Wet spots around brake caliper CAUSE Leakage of brake caliper piston seal.

EFFECT Mushy brake pedal, brake pedal sinks to the floor, limited brake performance. Due to brake fluid on the brake pads the vehicle may tend to pull to one side during braking

REMEDY Replace or overhaul the brake caliper



- **APPEARANCE** Uneven wear of brake pads on one brake caliper **CAUSE** Brake caliper sliding
 - mechanism stuck EFFECT One brake pad needs to brake the
 - wheel. The vehicle may tend to pull to one side during braking. Excessive brake pad wear.

REMEDY Clean and lubricate the caliper sliding mechanism

BRAKE MASTER CYLINDERS



APPEARANCE Abnormal brake pedal behaviour Brown contaminated brake fluid

CAUSE Worn seals

- **EFFECT** Mushy, spongy feel in the pedal
 - Pedal sinks slowly to the floor

Overhaul or replace the master

REMEDY cylinder

PRESSURE REGULATOR VALVES



PPEARANCE	Flat spots on rear tires
CAUSE	The pressure regulator valve does not work
EFFECT	The rear brakes tend to lock up, especially when the vehicle is empty or the road surface is slippery
REMEDY	Check and replace the pressure regulator valve.

is at it's maximum without any effort

EFFECT The parking brake cannot be applied

CAUSE Parking brake cable broken

REMEDY Replace the parking brake cable

