

TROUBLE SHOOTING CHART (Hydraulic Brakes)

CONDITION	CAUSE	REMEDY
Pedal Goes To Floorboard	Lining Wear.	See Page 2
	Brake Shoes out of adjustment.	See Page 2
	Leak in System.	Examine all wheel cylinders, hose and connections. If no leaks, inspect cylinders for scored bores.
	Pedal Adjustment Improper.	See Page 6-7
	No fluid in supply tank.	See Bleeding, Page 2-3
	Air in system.	See Bleeding, Page 2-3
All Brakes Drag	Improper fluid in system.	Flush clean with alcohol. Replace any swollen cups. Bleed as shown on Page 3.
	Pedal Adjustment Improper.	See Page 5-6-7
	Weak brake shoe spring.	Replace spring.
One Wheel Drags	Brake shoe bearing seized to anchor pin.	Free up and lubricate.
	Brake shoe set too close to drum.	See Page 6-7
	Cups distorted.	Replace cups, clean and bleed.
	Loose wheel brgs.	adjust
	Grease-soaked lining.	Renew with MACK Lining.
Vehicle Swerves To One Side	Shoes improperly set.	See Page 2-3
	Dust shield loose on axle.	Tighten shield and readjust brakes.
	Front spring clips loose.	Tighten clips.
	Different makes of lining.	Linings vary in friction. Replace with proper MACK lining.
	Tires inflated improperly.	Each tire inflated to same pressure.

AIR BRAKES

When chassis is equipped with an air brake system, the brake shoe cams are actuated by linkage to brake chambers which are operated by air pressure. An Air Compressor mounted on and driven by the engine, replaces the vacuum booster cylinder as the source of power.

The service (foot) brakes are of internal, two shoe construction, applying on all four wheels. The shoes are operated by "S" shaped cams giving constant lift.

BRAKE SHOE ADJUSTMENT is made by jacking up the wheel and turning the worm shaft nut of the Slack Adjuster, which rotates the camshaft with respect to the lever or chamber push rod, until the brake shoes are tight against the drum. See Fig. 11-A

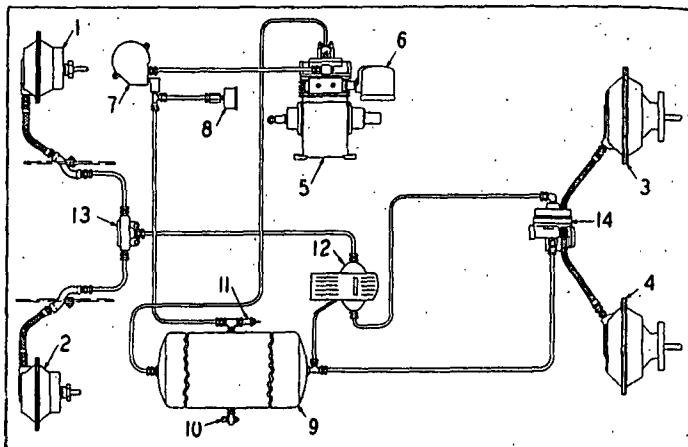


Fig. 11

1. 2. 3. 4. Brake Chambers 8. Pressure Gage 12. Application Valve
 5. Air Compressor 9. Reservoir 13. Quick Release Valve
 6. Air Filter 10. Drain Cock 14. Relay Valve
 7. Governor 11. Safety Valve

Then back off on the worm until the wheel is free. Apply the brakes and note push rod travel. This should be kept to a minimum, as given on page - 9 -. As the lining wears, the worm should be readjusted to retain the minimum push rod travel. The travel should always be set accurately so as to be the same for both brake chambers on a particular axle. Maintain at least 60 pounds air pressure while making adjustments.

AIR COMPRESSOR furnishes compressed air to the reservoir. The compressor operates continuously while the engine is running, but the governor functions to unload the compressor discharge valves when 100 to 105 pounds reservoir pressure is reached, thereafter allowing the compressor to operate without any compression until the pressure drops to between 80 and 85 pounds.

Every 18,000 miles the compressor head should be detached and the carbon removed. The discharge valves, springs and seats, also the unloader valves, should be cleaned. The passage allowing the pumping of air from cylinder to cylinder when compressor operates without compression, must be kept open, otherwise the Safety Valve will blow off. The discharge line from compressor to reservoir should be checked at this time to insure unrestricted flow. The unloader diaphragm should be inspected.

The discharge valve lift is .042". The clearance between unloader valve stem and tappet should be set at .010" minimum and .015" maximum. A noticeable increase over this clearance indicates carbon accumulation on valve seat.

The compressor head is water cooled by connections to the engine cooling system. When water is drained from radiator and engine to prevent freezing, the compressor head should also be drained by removing plug.

The compressor is automatically lubricated by pressure from the engine oil circulation system. The oil pressure at compressor should be at least 5 pounds minimum at engine idling speed, and 15 pound minimum at governed speed.

AIR CLEANER is fitted to the compressor for removing foreign matter from the air. Every 1500 miles remove the filtering material, wash