



HEAVY DUTY SERVICE BULLETIN

AMERICAN BRAKEBLOK DIVISION



BULLETIN NO. 20

TROUBLE SHOOTING CHECK LIST FOR TRAILERS

When problems arise with the trailer brakes, first be certain that the tractor brakes are functioning properly and accepting their share of the braking of the entire train.

Since the actuation of the trailer brakes is entirely dependent on the air brake system of the tractor, it is important that their association be compatible in that the systems be synchronized. We refer you to our handout on the "Procedure for Check-Out of Air Brake Systems" as a follow through.

Tractor and trailer brakes have much in common and complaints similar in nature frequently have corrections applicable to both. However, both have some components that are individual to either the tractor or trailer. Our Bulletin No. 19 can provide supplemental information that may be of help in some instances where the corrections are common to both and are not covered in this bulletin.

Driver Complaints

Causes

Insufficient Brakes

Brakes need adjusting, lubricating, or relining.
Tractor protection valve not in "normal" position.
Faulty relay emergency valve.
No trailer air supply-clogged emergency line.
Low air pressure in air brake system (below 80 psi).
Brake valve delivery pressure in towing vehicle below normal.
Restricted tubing or hose.
Wrong size actuators.

Brakes Apply Too Slowly

Brakes need adjusting or lubricating.
Low air pressure in the air brake system (below 80 psi).
Brake valve delivery pressure in towing vehicle below normal.
Restricted tubing, hose or line filter.
Excessive leakage with brakes applied.
Faulty relay emergency valve.

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Driver ComplaintsCauses

Brakes Release Too Slowly

Brakes need adjusting or lubricating.
Brake rigging binding.
Exhaust port of relay emergency valve restricted or plugged.
Restricted tubing or hose.

Brakes Do Not Apply

Connecting hoses to trailer crossed.
Faulty relay emergency valve.
Tractor protection valve not functioning properly or not in normal position (see operating instructions).
No air pressure in air brake system.
Restricted tubing or hose.
Hoses between tractor and trailer not connected.

Brakes Do Not Release

Connecting hoses to trailer crossed.
Brake valve on towing vehicle in applied position.
Brake rigging binding.
Relay emergency valve in emergency position.
Faulty relay emergency valve.
Restricted tubing or hose.
Tractor protection valve not functioning properly or not placed in "normal" position.

Brakes "Grab"

Grease on brake lining -- reline brakes.
Brake rigging binding.
Faulty relay emergency valve.
Faulty brake valve on towing vehicle.
No trailer load.

Uneven Brakes

Brakes need adjusting, lubricating or relining.
Grease on brake lining.
Brake shoe return spring broken.
Brake drum out of round.
Leaking brake chamber or actuator diaphragm.
Restricted tubing or hose.
Broken slack adjuster or foundation brake parts.

Excessive Leakage with Brakes Released

Relay emergency valve or drain valve leaking.
Leaking tubing or hose.
Hose uncoupled or leaking hose coupling.

Excessive Leakage with Brakes Fully Applied

Faulty relay emergency valve.
Leaking brake chamber diaphragm.
Leaking tubing or hose.
Hose uncoupled or leaking hose coupling.

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Driver Complaints

Causes

Excessive Leakage with
Relay Emergency Valve in
Emergency Position

Faulty relay emergency valve.

Inspection Disclosures

Causes

Excessive Oil and Water
Present in the Air Brake
System

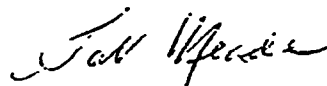
Reservoirs not drained often enough.
Compressor passing excessive oil.
Compressor air strainer restricted.
Excessive engine oil pressure.
Back pressure from engine crankcase.
Excessive oil (flooding) in compressor crankcase.

Mechanic's Complaints

Causes

Drums Won't Go On

Tapered blocks incorrectly positioned.
Undersize brake drum.
Oversize rollers or cam plates.
Shoes not retracted fully.
Incorrect thickness lining.
Distorted brake shoe.
Rusty or dirty shoe table.
Wrong brake shoe.



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