Tractor Troubleshooting Guide

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MADE IN GERMANY

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COLOR KEY

SUPPLY SECONDARY PRIMARY PARK/EMERGENCY ABS ELECTRICAL TRAILER CONTROL TRAILER SUPPLY

1. PRIMARY DELIVERY
2. SECONDARY DELIVERY
3. PRIMARY INSET
4. SECONDARY INSET
5. PARK/EMERGENCY INSET
6. ABS ELECTRICAL INSET
7. TRAILER CONTROL INSET
8. TRAILER SUPPLY INSET

1. PRIMARY DELIVERY
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8. TRAILER SUPPLY INSET

INSET (A) OPTION PRIOR TO MARCH 1, 1998 FMVSS-121 REGULATIONS
INVERSION VALVE AND QUICK RELEASE VALVE (INCLUDES ANTI-COMPOUNDING)

INSET (B) OPTION AFTER MARCH 1, 1998 FMVSS-121 REGULATIONS
NEW INVERSION VALVE AND QUICK RELEASE VALVE (INCLUDES ANTI-COMPOUNDING)

SIDE VIEW INSET (A) OR (B)
Compressor

1. For troubleshooting information refer to the OEM operating instructions.
2. If the compressor is manufactured by Meritor WABCO, refer to the Meritor Maintenance Manual 31.
3. Always check the air tank to ensure it is properly inflated.
4. Replace the air gauge if necessary.

Dual System Foot Brake Valve

1. Leaks at exhaust with all brakes released.
2. Check anti-compound double check valve #18A and #18B for back flow into service control line.
3. Check service brake air system for back flow into tractor's service control line.
4. Check seal in spring brake for back flow of spring "hold-off" pressure through service port to open exhaust on valve. Replace #18 Spring Parking Brake.

Quick Release Valve

1. Leaks at exhaust port with all brakes released.
2. Check and replace #18A & #18B if backflow occurs into secondary control line.

Lockout Valve

1. Leaks when spring brakes are applied.
2. Check for plugged governor reservoir line.
3. Repair or replace.

Valve

1. Leaks when service brakes are applied.
2. Check air actuated accessory. Is the air volume requirement greater than governor capacity?

Governor

1. Leaks - Malfunctions.
2. Periodic Test: Bleed the primary and secondary tanks. Check for unusual pressures.
3. Replace if test results are negative.

Safety Valve

1. "Pops" off excessively.
2. Check system pressure.
3. Replace the safety valve if necessary.

Quick Release Valve

1. Leaks at exhaust port with all brakes released.
2. Check and replace #16 anti-compound double check valve.

Relay Valve

1. Leaks at exhaust port with all brakes released.
2. Check seal in spring brake for back flow of spring "hold-off" pressure through service port to open exhaust on valve. Replace #15 Spring Parking Brake.

Air Dryer

1. Periodically test by bleeding rear service tank and observing foot brake and rear spring brake application under pressure. Replace if "popping" does not occur.

Two Line Tractor Protection Valve (Non-Automatic Type)

1. Will not respond to trailer charge valve.
2. Supply line to trailer with slow bleed-down does not shut off tractor air and vent between 10 and 20 psi.

Stop Light Switch

1. Leaks.
2. Failed to signal a good bulb through sound wiring at 3/4 psi.

Two-Way Check Valve

1. Will not permit air to purge air dryer.
2. Make sure the single check valve has been removed.

Pressure Control Check Valve

1. Will not permit air to purge air dryer.

Air Gauge

1. Leaks.

Single Check Valve

1. Allow bleed to supply reservoir.
2. Periodic Test: Bleed supply reservoir and observe gauges.
3. Replace if test results are negative.

DRAIN VALVES - MANUAL

1. Leaks.
2. Replace.

DRAIN VALVES - AUTOMATIC

1. Won't drain.
2. Repair or replace.

HANDEL CONTROL VALVE - TRACTOR SERVICE BRAKES

1. Leaks at exhaust port when released and foot valve is applied.
2. Check #23. Replace if necessary.
3. Leaks at exhaust port when released and trailer air system for backflow into tractor service control line. Replace #18 Spring Parking Brake.
4. Leaks at exhaust port when released and applied and all parking brakes in parked position.
5. Hand control valve is defective. Repair or replace.

Double check Valve Separates trailer hand valve pressure from rear foot brake pressure for delivery to trailer.

1. Foot valve exhaust port leaks when hand valve is applied.
2. Replace.

Double Check Valve Separates front axle foot brake pressure from rear axle foot brake pressure and/or trailer hand brake pressure for delivery to trailer.

1. Tractoar foot valve exhaust port exhaust leaks.
2. Replace.

ABS Electronic Control Unit, Modulator Valves, Sensors, and Tooth Rings

1. For troubleshooting information refer to the OEM operating instructions.

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