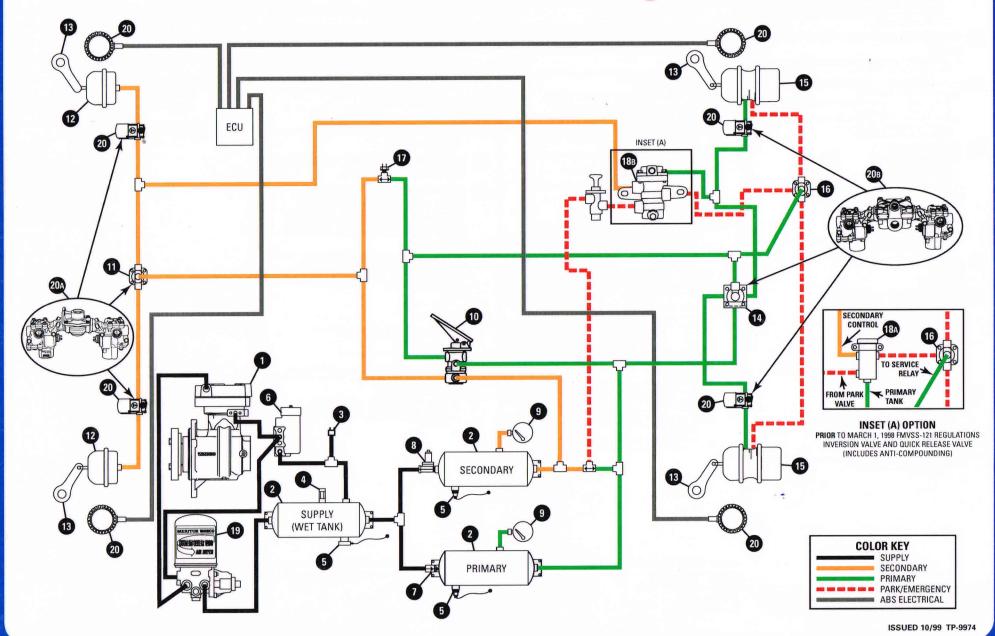
# MERITOR WABCO

# **Truck Troubleshooting Guide**



# **Truck Troubleshooting Guide**

# CONDITION/REMEDY

#### COMPRESSOR

- FOR TROUBLESHOOTING INFORMATION REFER TO THE OEM OPERATING INSTRUCTIONS.
- ◆ NOTE: If the compressor is manufactured by Meritor WABCO, refer to Maintenance Manual 31 (318 Compressor for Mack E Tech Engines) or contact the Meritor Customer Support Center at 800-535-5560.

# 2 SUPPLY, PRIMARY AND SECONDARY AIR

■ FOR TROUBLESHOOTING INFORMATION REFER TO THE 0EM OPERATING INSTRUCTIONS.

#### LOW PRESSURE INDICATOR SWITCH

- BUZZER OR LIGHT INOPERABLE
- · Check ground and wiring on switch and buzzer/light.
- · Replace switch or buzzer/light.
- WON'T OPERATE AT PRESSURES BELOW 60 P.S.I.
- Check dash gauge for accuracy. · Replace switch or buzzer/light
- SAFETY VALVE

  - "POPS" OFF EXCESSIVELY Check system pressure
  - ◆ Valve operating properly when venting at 140/150 P.S.I. (as required).

  - ◆ Check unloader/governor.
    "POPS" OFF AT LESS THAN 140 P.S.I.
  - Replace
  - LEAKS Replace
  - **WON'T FUNCTION** 
    - Periodic Test: remove and test above 150 P.S.I. with shop air.
- · Replace if non-functional

#### **DRAIN VALVES - MANUAL**

- LEAKS
- Replace

#### DRAIN VALVES - AUTOMATIC

- WON'T DRAIN
- · Repair or replace
- WON'T DRAIN IN COLD WEATHER
- Replace with heated unit. **■ LEAKS - MALFUNCTIONS**
- · Repair or replace
- Periodic Test: with system pressure stabilized (compressor unloaded) no leak evident at discharge port - make several foot brake applications to reduce wet tank pressure. Moisture should drain from discharge port.

#### GOVERNOR

- FLUTTERS
- Check gauge
- Check unloader line size (5/16" x 5' maximum).
- · Check air actuated accessory. Is the air volume requirement greater than governor capacity?
- Check for plugged governor reservoir line.
- Repair, adjust or replace governor. ■ WON'T PASS AIR TO UNLOADER TO "CUT-OUT" COMPRESSOR
- Check governor reservoir line
- · Repair or replace

### CONDITION/REMEDY

#### SINGLE CHECK VALVE

- ALLOW BLEED BACK TO SUPPLY RESERVOIR
  - · Periodic Test: bleed supply reservoir and observe gauges. Check valves should maintain primary and secondary reservoir
  - · Replace if test results are negative.

#### PRESSURE CONTROL CHECK VALVE

- WILL NOT PERMIT AIR TO PURGE AIR DRYER. CHECK THAT ONE-WAY CHECK HAS BEEN REMOVED.
- - FOR TROUBLESHOOTING INFORMATION REFER TO THE OEM OPERATING INSTRUCTIONS

#### **DUAL SYSTEM FOOT BRAKE VALVE**

- LEAKS AT EXHAUST WITH ALL BRAKES RELEASED
- ◆ Check anti-compound double check valve #16.
- ◆ Check #18A & 18B for back flow into service control line.
- 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
- CAUTION: CHOCK WHEELS REPAIR AND REPLACE ITEMS AS
- LEAKS AT EXHAUST WITH FOOT BRAKE APPLIED ◆ Foot valve defective. Repair or replace.
- LEAKS AT EXHAUST WITH ALL PARK BRAKES SET IN PARK POSITION AND FOOT BRAKE RELEASED
- · Foot valve defective. Repair or replace

#### **QUICK RELEASE VALVE**

- LEAKS AT EXHAUST PORT WITH ALL BRAKES RELEASED
- ◆ Check and replace #18A or 18B if back flow occurs into
- LEAKS WHEN SERVICE BRAKES ARE APPLIED
  - Repair or replace

#### SERVICE BRAKE CHAMBER

■ FOR TROUBLESHOOTING INFORMATION REFER TO THE OFM. OPERATING INSTRUCTIONS

#### SLACK ADJUSTER

- FOR TROUBLESHOOTING INFORMATION REFER TO THE OEM OPERATING INSTRUCTIONS.
- ◆ NOTE: If the slack adjusters are manufactured by Meritor, refer to Maintenance Manual 4B (Automatic Slack Adjusters) or contact the Meritor Customer Support Center at 800-535-5560 (Ilamasin costo desde Mexico 001-800-889-1834).

#### RELAY VALVE

- LEAKS AT EXHAUST PORT WITH ALL BRAKES RELEASED
- ◆ 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.
- · Check reservoir port for evidence of contamination, check supply lines for rusty fittings or carbon deposits. Repair or
- LEAKS AT EXHAUST PORT WITH SERVICE BRAKES APPLIED
  - Exhaust valve not seating properly. Repair or replace.

# CONDITION/REMEDY

- SPRING PARKING BRAKE (SERVICE ONLY SERVICE CHAMBER SIDE OF SPRING BRAKE)
  - FOR TROUBLESHOOTING INFORMATION REFER TO THE OEM OPERATING INSTRUCTIONS.

## **QUICK RELEASE AND DOUBLE CHECK** VALVE COMBINATION

- FOOT VALVE EXHAUST LEAK PARK BRAKES RELEASED YELLOW DASH CONTROL V VALVE EXHAUST LEAK IN PARK POSITION AND SERVICE BRAKES APPLIED
- ◆ Check anti-compound double check valve portion for feedback to foot or dash control valve. Repair or replace.

#### STOP LIGHT SWITCH

- LEAKS
- Replace
- FAILS TO SIGNAL A GOOD BULB THROUGH SOUND WIRING AT
- INVERSION RELAY VALVE WITH THE LOSS OF REAR SERVICE BRAKES.
- APPLICATION OF SPRING BRAKE BY USING THE EMERGENCY SECTION SHOULD BE AVAILABLE ALONG WITH FRONT SERVICE BRAKE BY APPLYING FOOT VALVE
  - PERIODICALLY TEST BY BLEEDING PRIMARY SERVICE TANK AND **OBSERVING FRONT BRAKE AND REAR SPRING BRAKE** APPLICATION UPON DEPRESSING FOOT PEDAL. REPAIR OR REPLACE, IF AFTER CHECKING INVERSION VALVE IS NOT **FUNCTIONING PROPERLY.**
  - LEAKS · Repair or replace

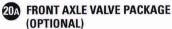
#### **AIR DRYER**

- AIR LEAKING CONSTANTLY FROM PURGE VALVE
- Purge valve seal damaged. Replace. Purge valve frozen.
- Inspect heater (see heater problems).
- HEATER INOPERATIVE
- · Blown Fuse. Check fuse and replace with 8-10 amp fuse
- Broken wires or poor connections. Repair or replace wiring to
- SLOW WET TANK BUILD-UP
- Filter and/or desiccant plugged. Service air dryer.
- If a System Saver Series air dryer is installed, refer to Meritor WABCO Maintenance Manual 34 (Single Canister) or

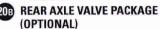
## CONDITION/REMEDY

## 20 ABS ELECTRONIC CONTROL UNIT, MODULAR VALVES, SENSORS, AND TOOTH RINGS

■ FOR TROUBLESHOOTING INFORMATION REFER TO THE OEM OPERATING INSTRUCTIONS



■ COMBINES TWO MODULATOR VALVES AND QUICK RELEASE VALVE.



**■ COMBINES TWO MODULATOR VALVES AND RELAY** VALVE.

NOTE: If the vehicle has Meritor WABCO ABS, refer to Meritor WABCO Maintenance Manual 28 (C version ABS) or 30

Meritor WABCO Vehicle Control Systems

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