



COMPLAINT/REMEDY

- COMPRESSOR**
 - PUMPS BEYOND "CUT-OUT"
 - Check gauge.
 - Check governor.
 - Be certain it pressurizes unloader port when above "cut-out".
 - Check unloader/plungers. Lube, kit or change head.
 - WON'T PUMP AIR
 - Check gauge.
 - Check compressor drive.
 - Check inlet valves and plungers. If stuck, leak will be evident at intake when unloaded. Install unloader kit, head kit or head assembly.
 - SLOW PRESSURE BUILD-UP
 - Check gauge.
 - Check compressor drive.
 - Check intake for restriction.
 - Check discharge line for restriction.
 - Check unloader function. Lube or kit.
 - Check inlet and exhaust valves. Leak will be evident at intake when unloaded. Kit or exchange head.
 - PUMPS EXCESSIVE OIL
 - Check oil return for restriction, kink or loop.
 - Check gasket sealant obstructing drain.
 - Check for undersize return line (1/2" minimum).
 - Check for fitting restricting drain.
 - Check for intake vacuum (20" water maximum).
 - Check for excessive engine crankcase pressure (poor engine ventilation).
 - Check compressor ring wear. Exchange for service unit.
- WET TANK**
 - EXCESS OIL ACCUMULATION
 - See PUMPS EXCESSIVE OIL (above).
 - EXCESS WATER ACCUMULATION
 - Drain daily. Install automatic drain on wet tank.
 - DAMAGED WET TANK
 - Replace.
- 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 in venting at 140/150 P.S.I.
 - 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.

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- SINGLE CHECK VALVE**
 - ALLOW BLEED BACK TO SUPPLY RESERVOIR
 - Periodic Test: bleed supply reservoir and observe gauges. Check valves should maintain rear and front reservoir pressure.
 - Replace if results are negative.
- PRIMARY & SECONDARY RESERVOIR**
 - EXCESS OIL/WATER
 - Drain as required.
 - Check automatic drain valve on wet tank for proper operation (See #5).
- AIR GAUGE**
 - INCORRECT READING
 - Calibrate or replace.
- DUAL SYSTEM FOOT BRAKE VALVE**
 - LEAKS AT EXHAUST WITH ALL BRAKES RELEASED
 - Check anti-compound double check valve # 18.
 - Check #17 for back flow into service control line.
 - Check trailer air system for back flow into tractor's service control line.
 - CAUTION: CHOCK WHEELS - Repair and replace items as necessary.
 - LEAKS AT EXHAUST WITH HAND VALVE APPLIED
 - Check double check valve #20 or #21. Repair or replace.
 - 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 WHEN SERVICE BRAKES ARE APPLIED
 - Repair or replace.
- SERVICE BRAKE CHAMBER**
 - LEAKS
 - Replace diaphragm.
 - Cage park brake.
 - Reset dampers.
 - Adjust brakes.
 - WITH SERVICE BRAKES APPLIED STROKE IS AT OR BEYOND MAXIMUM LIMIT OF:
 - Type 9 1 3/8"
 - Type 12 1 3/8"
 - Type 16 1 3/4"
 - Type 20 1 3/4"
 - Type 24 1 3/4"
 - Type 30 2"
 - SLUGGISH APPLICATION OR RELEASE
 - Check basic brake.
 - Check for air line restriction/leak.
 - Align linkage.
 - Check chamber return spring.
 - Adjust brakes. Angle should approach 90° on application.
 - Check for improper chamber or obstruction.
- BRAKE ADJUSTER**
 - SLEEVE WILL NOT DEPRESS
 - Clean and lubricate or replace with unit dimensionally same.
 - ADJUSTING SHAFT WILL NOT TURN
 - Replace with unit dimensionally same.
 - CRACKED HOUSING
 - Check spring brake anti-compound system.
 - Check air chamber size. Replace if larger than original size.
 - Check direction of travel for proper position of hex nut (Shown Under #12).
 - Hex nut must face away from chamber for uni-directional brake adjuster.
 - WORN CLEVIS PIN BUSHING
 - Replace bushing.
- 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 replace.
 - LEAKS AT EXHAUST PORT WITH SERVICE BRAKES APPLIED
 - Exhaust valve not seating properly. Repair or replace.

COMPLAINT/REMEDY

- SPRING PARKING BRAKE (SERVICE ONLY SERVICE CHAMBER SIDE OF SPRING BRAKE)**
 - PARK BRAKE DRAGS OR WON'T RELEASE
 - Check for: Improper adjustment, restriction or broken line. Diaphragm failure. System pressure too low. Improper manual release. Broken return spring (spring side). Quick release of relay malfunction. Broken power spring.
 - Replace entire unit or piggy-back emergency section.
 - SLUGGISH PARK APPLICATION
 - Check for: Diaphragm failure. Improper manual release. Broken power spring.
 - LEAKS WHEN PRESSURIZED FOR PARK BRAKE RELEASE
 - Check for: Ruptured spring side diaphragm. Push rod seal leakage (may be evident at # 14 relay valve).
 - SERVICE CHAMBER MALFUNCTION
 - See #12 service brake chamber.
- DOUBLE CHECK VALVE UNITES FRONT BRAKE AND REAR BRAKE RESERVOIRS TO FEED PARK CONTROL (INSET B OPTION WITH TWO VALVE DASH PANEL)**
 - REAR TANK BLEED-DOWN ALSO BLEEDS FRONT TANK OR VICE VERSA
 - Periodic Test: Pressure should remain in one tank after the other is drained. Replace if not functioning properly.
- TWO-LINE TRACTOR PROTECTION VALVE (NON-AUTOMATIC TYPE)**
 - WILL NOT RESPOND TO TRAILER CHARGE VALVE
 - Defective valve. Repair or replace.
 - SUPPLY LINE TO TRAILER WITH SLOW BLEED-DOWN DOES NOT SHUT OFF TRACTOR AIR AND VENT BETWEEN 45 P.S.I. AND 20 P.S.I.
 - Check trailer charge valve #23, as it should "pop" to let T.P. valve vent trailer supply. Repair or replace.
 - LEAKS AT EXHAUST PORT OR TRACTOR SERVICE (BACK THROUGH HAND OR FOOT VALVE) OR TRAILER SUPPLY
 - Defective valve. Repair or replace.
- QUICK RELEASE AND DOUBLE CHECK VALVE COMBINATION**
 - FOOT VALVE EXHAUST LEAK PARK BRAKES RELEASE YELLOW DASH CONTROL 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.
- HAND CONTROL VALVE - TRAILER SERVICE BRAKES**
 - LEAKS AT EXHAUST PORT WHEN RELEASED AND FOOT VALVE IS APPLIED
 - Check #20. Replace if necessary.
 - LEAKS AT EXHAUST PORT WHEN RELEASED AND TRAILER PARKING BRAKES ALSO RELEASED
 - Check #17 for internal backflow into service control line, or trailer air system for backflow into tractor service control line.
 - LEAKS AT EXHAUST PORT WHEN RELEASED OR APPLIED AND ALL PARKING BRAKES IN PARKED POSITION
 - 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**
 - FOOT VALVE EXHAUST PORT LEAKS WHEN HAND VALVE IS APPLIED
 - Replace.
 - HAND VALVE EXHAUST PORT LEAKS WHEN FOOT VALVE IS APPLIED
 - Replace.
- DOUBLE CHECK VALVE SEPARATES FRONT AXLE FOOT BRAKE PRESSURE FROM REAR AXLE FOOT BRAKE PRESSURE AND/OR TRAILER HAND VALVE PRESSURE FOR DELIVERY TO TRAILER**
 - LEAKS THROUGH FOOT VALVE EXHAUST WITH HAND VALVE APPLIED
 - Replace #20 or #21.
 - Periodic Test: Alternately loosen each inlet line and apply pressure to other. If leak is detected - replace.

COMPLAINT/REMEDY

- STOP LIGHT SWITCH**
 - LEAKS
 - Replace.
 - FAILS TO SIGNAL A GOOD BULB THROUGH SOUND WIRING AT 3-6 P.S.I.
 - Replace.
 - MANIFOLD DASH VALVE WITH BUILT-IN TWO-WAY CHECK (RED OCTAGON) TRAILER CHARGE (YELLOW DIAMOND) TRACTOR PARK**
 - PARK BRAKE WON'T RELEASE
 - Check for full system pressure delivery through valve.
 - PARK BRAKE WON'T APPLY
 - Repair or replace. If it will not release pressure.
 - LEAKS AT EXHAUST PORT IN PARK POSITION SERVICE BRAKES APPLIED
 - Check #18 anti-compound double check valve.
 - LEAKS AT EXHAUST PORT IN PARK POSITION SERVICE BRAKES RELEASED
 - Repair or replace.
 - WON'T APPLY TRAILER IMMEDIATELY WHEN "PULLED"
 - Replace, if it won't exhaust. Repair or replace #17 if #25 is functioning properly.
 - REAR TANK BLEED-DOWN ALSO BLEEDS FRONT TANK OR VICE VERSA
 - Periodic Test: Pressure should remain in one tank after the other is drained. Replace, if inoperative.
 - BARRIER WHEEL OIL SEALS (NOT SHOWN IN SCHEMATIC)**
 - OIL LEAK
 - Check for proper glazing of the sealing lip.
 - Check serrations on O.D. and I.D. to see that sealing surfaces are dry. If wet, this could denote the leakage path.
 - Check area between positioning pads. If wet, suspect seal leak.
 - Check seal for possible damage incurred during installation.
 - Check hub bore and spindle surfaces for imperfections or irregularities.
 - Check to see that proper seal has been installed for the particular axle application.
 - 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 heater.
 - SLOW WET TANK BUILD-UP
 - Filter and/or desiccant plugged. Service at air dryer.
 - ABS INLINE VALVES**
 - FOR COMPLETE TROUBLESHOOTING INFORMATION REFER TO LITERATURE PIECES MODAL POWER TX-2 INSTALLATION & SERVICE MANUAL (L30022) AND/OR ABS DIAGNOSTIC TROUBLESHOOTING GUIDE (L20295)
 - ABS SENSORS & EXCITER RINGS**
 - FOR COMPLETE TROUBLESHOOTING INFORMATION REFER TO LITERATURE PIECES MODAL POWER TX-2 INSTALLATION & SERVICE MANUAL (L30022) AND/OR ABS DIAGNOSTIC TROUBLESHOOTING GUIDE (L20295)
- NOTE: FOR FURTHER TECHNICAL ASSISTANCE CONTACT YOUR HALDEX DISTRIBUTOR, YOUR LOCAL HALDEX SALES PROFESSIONAL, OR CALL (800) 643-2374 AND ASK FOR A TECHNICAL ADVISOR.