



Installation Instructions

BENDIX® MV-3® VALVE REPLACEMENT

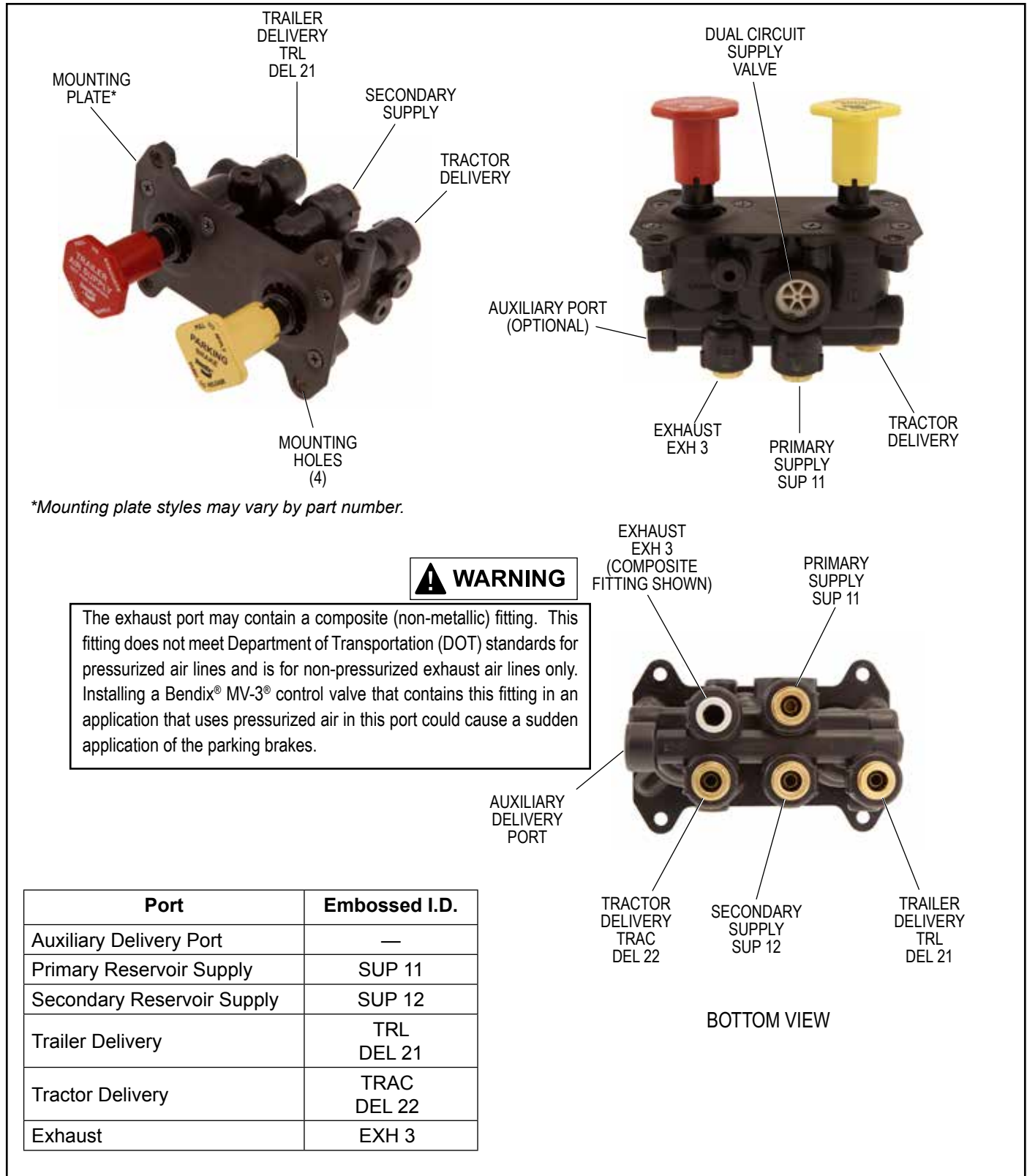


Figure 1 - BENDIX® MV-3® DASH CONTROL VALVE PORT IDENTIFICATION



GENERAL SAFETY GUIDELINES

WARNING! PLEASE READ AND FOLLOW THESE INSTRUCTIONS

TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following guidelines should be observed **AT ALL TIMES**:

- ▲ Park the vehicle on a level surface, apply the parking brakes and always block the wheels. Always wear personal protection equipment.
- ▲ Stop the engine and remove the ignition key when working under or around the vehicle. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. Where circumstances require that the engine be in operation, **EXTREME CAUTION** should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated or electrically-charged components.
- ▲ Do not attempt to install, remove, disassemble or assemble a component until you have read, and thoroughly understand, the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
- ▲ If the work is being performed on the vehicle's air brake system, or any auxiliary pressurized air systems, make certain to drain the air pressure from all reservoirs before beginning **ANY** work on the vehicle. If the vehicle is equipped with a Bendix® AD-IS® air dryer system, a Bendix® DRM™ dryer reservoir module, or a Bendix® AD-9si® air dryer, be sure to drain the purge reservoir.
- ▲ Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
- ▲ Never exceed manufacturer's recommended pressures.
- ▲ Never connect or disconnect a hose or line containing pressure; it may whip and/or cause hazardous airborne dust and dirt particles. Wear eye protection. Slowly open connections with care, and verify that no pressure is present. Never remove a component or plug unless you are certain all system pressure has been depleted.
- ▲ Use only genuine Bendix® brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, wiring, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
- ▲ Components with stripped threads or damaged parts should be replaced rather than repaired. Do not attempt repairs requiring machining or welding unless specifically stated and approved by the vehicle and component manufacturer.
- ▲ Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
- ▲ For vehicles with Automatic Traction Control (ATC), the ATC function must be disabled (ATC indicator lamp should be ON) prior to performing any vehicle maintenance where one or more wheels on a drive axle are lifted off the ground and moving.
- ▲ The power **MUST** be temporarily disconnected from the radar sensor whenever any tests **USING A DYNAMOMETER** are conducted on a vehicle equipped with a Bendix® Wingman® system.
- ▲ You should consult the vehicle manufacturer's operating and service manuals, and any related literature, in conjunction with the Guidelines above.

GENERAL

This instruction sheet is intended to provide the necessary information to replace the Bendix® MV-3® valve.

REMOVAL OF THE BENDIX® MV-3® VALVE

1. Remove and save the mounting hardware that secures the cover plate to the dash.
2. Identify and mark all the air lines and their respective ports.
3. Disconnect the air lines from the valve.

INSTALLATION OF THE REPLACEMENT MV-3 VALVE



1. **Inspect the exhaust port for the presence of a composite (non-metallic) port.** If this port is a composite port, verify that it is used for exhaust air only and is not pressurized. **DO NOT** apply pressurized air to this port, it could cause damage to the valve and result in a sudden application of the parking brakes.
2. Install the new MV-3 valve to the dash using the hardware removed in Step 1 of Removal. Connect the air lines to the ports as marked during disassembly. When connecting threaded ports use a liquid thread sealing compound, attach the air line until it is hand tight and then turn approximately one and a half turns further (or use a maximum of 10 ft-lbs of torque. *Note: over-torquing will crack the port.*

OPERATIONAL TEST

1. With the supply pressure at 120 psi, push the red button in. The button must stay in.
2. Slowly reduce the pressure in both service reservoirs. The red button must pop when the supply pressure drops to 20 to 45 psi.
Note: The yellow button **must not** pop out before the red button.
3. Hold the red button in and continue to reduce pressure in all service reservoirs. Air must start to escape from the exhaust port when the trailer supply line pressure reaches 20 psi minimum.
4. Release the red button and rebuild the supply pressure to at least 120 psi. Push in the yellow button; the yellow button must remain in.
5. Charge the system to 120 psi and push both buttons in. Pull the red button out. The yellow button must remain in.
6. Push the red button in and pull the yellow button out. The red button must pop out almost instantaneously.

7. Build both service reservoirs to 120 psi. Decrease the pressure at the secondary reservoir. The primary reservoir pressure should not drop below 100 psi. Repeat the test for decreasing primary reservoir pressure. The secondary reservoir pressure should not drop below 100 psi.
8. If the Bendix® MV-3® valve fails to operate as described, replace or repair it using genuine Bendix parts.
9. Close all reservoir drain cocks and deliberately caused leakage points before placing the vehicle in service.
10. Test drive the vehicle at a slow speed in a safe area prior to placing it back into service.



Log-on and Learn from the Best

On-line training that's available when you are –24/7/365.
Visit www.brake-school.com.