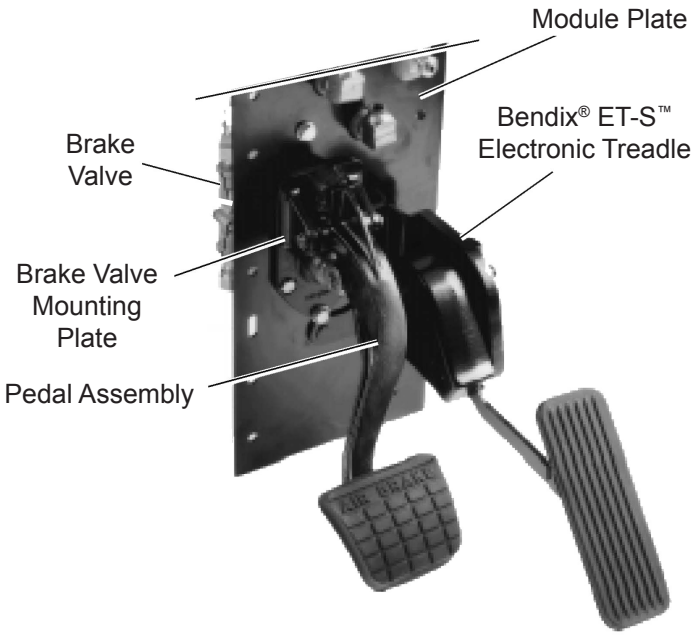
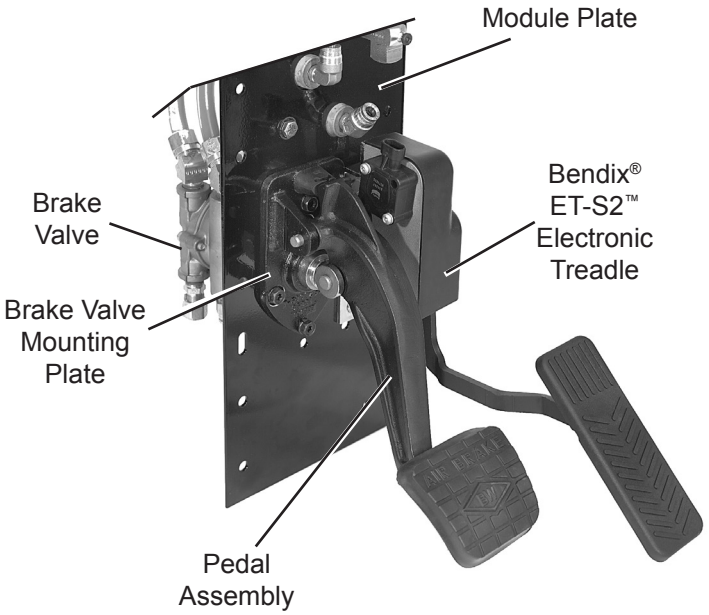
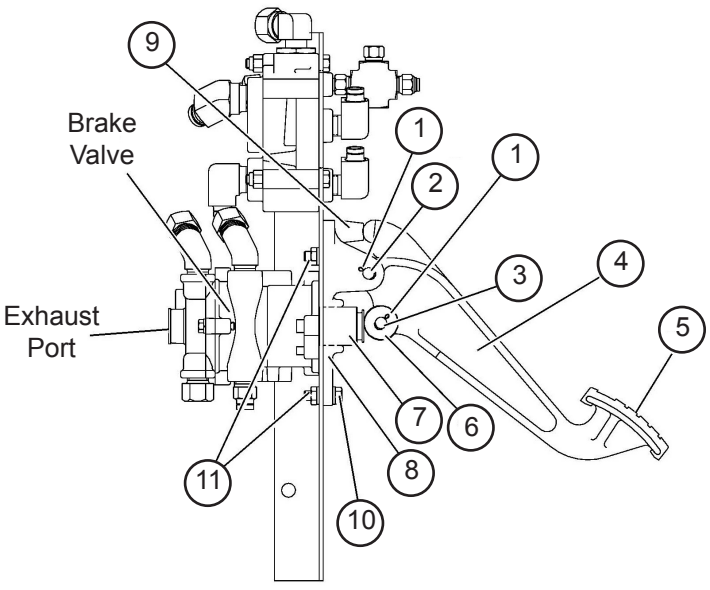
Installation Instructions

BRAKE PEDAL & MOUNTING PLATE INSTALLATION KIT







Kit Contents:

Item No.	Description	Qty.
1	3/32" Cotter Pin	2
2	Fulcrum Pin	1
3	Roller Pin	1
4	Pedal	1
5	Pedal Cover	1
6	Roller	2
7	Plunger	1
8	Mounting Plate	1
9	Stop Button	1
10	5/16" Hex/Torx® Cap Screw	5
11	Locknut	2
12	Barium Grease (not shown)	1

Figure 1 – Brake Pedal

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.**

DISASSEMBLY

Refer to Figures 1 and 2 throughout. Discard all removed items that are included in the kit.

1. Park the vehicle on a level surface and block the wheels.
2. Drain the air pressure from all vehicle reservoirs. *Note that the air lines may still hold residual pressure*.
3. Remove the cotter pin (1) from the fulcrum pin (2). Remove the fulcrum pin (2) and the brake pedal assembly from the mounting plate (8).
4. Remove the brake pedal plunger (7) and stop button (9).
5. Remove the three 5/16" hex/Torx® cap screws that secure the brake valve mounting plate (8) to the brake valve and gasket. Remove the two 5/16" hex/Torx cap screws and locknuts that secure the brake valve mounting plate to the firewall or module mounting plate.

CLEANING AND INSPECTION

1. Use a suitable solvent (e.g. alkaline detergent and water) to clean all metal parts *(note that mineral spirits may damage the paint finish)*.
2. Inspect all components for severe corrosion, pitting, or cracks. Replace as necessary.

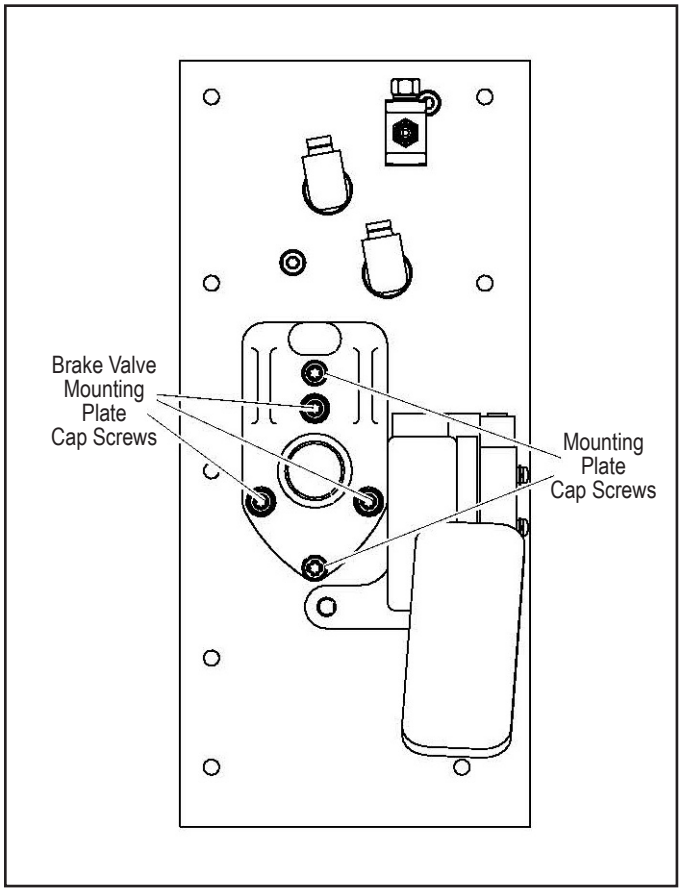


Figure 2 – Front View with the Brake Pedal Removed

ASSEMBLY

Use the kit contents for the assembly.

1. Align the two mounting holes of the brake valve mounting bracket with those of the firewall or mounting plate. Insert and begin tightening the two brake valve mounting plate cap screws (10) and locknuts (11). It is important to be sure that the plunger will pass freely through the aligned mounting plate and module plate holes when assembled. Apply barium grease (12), to the plunger and mounting plate bore to ensure smooth travel of the plunger. Use the plunger (7) to check for this correct arrangement, and then tighten the bolts to 75–110 in-lbs of torque.
2. Using the three remaining 5/16" hex/Torx cap screws (10) secure the brake valve to the brake valve mounting plate (8). Gradually tighten the screws to reach a final torque of 75–110 in-lbs. This procedure prevents any distortion of the brake valve which might affect its performance.
3. Attach the pedal cover (5) to the brake pedal arm (4).
4. Coat the roller pin shaft (3) with the barium base grease (12) supplied. Place the rollers (6) on either side of the brake pedal (4) at the roller pin hole. Align the holes of the rollers and pedal and insert the roller pin (3). Secure with the cotter pin (1).

   Note: In all cases, each leg of the cotter pin must be bent at least 45°(90° minimum included angle).
5. Coat the fulcrum pin shaft (2) with barium base grease. Place the brake pedal into position. Align the fulcrum pin holes of the brake pedal (4) and the brake valve mounting plate (8). Insert the fulcrum pin (2) and secure with the cotter pin (1).
6. Perform the Operation and Leakage Tests before returning vehicle to service.

OPERATION AND LEAKAGE TESTS

OPERATION TEST

Check that the pedal (4) and plunger (7°) move freely and that there is no binding.

LEAKAGE TEST

Make and hold a range of pressure applications (e.g. 30, 50 and 80 psi) while testing the brake valve exhaust port for leakage by coating it with a soap solution. This test checks that the brake valve was reattached to the module plate without distortion. Permitted leakage at the exhaust port is a one inch bubble in three seconds in both the applied and released positions.

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