

Installation Instructions

ET-S Kit No. 5002359

ET-S2 Kit No. 5006085

ET-S& ET-S2 TREADLE SPRING KIT

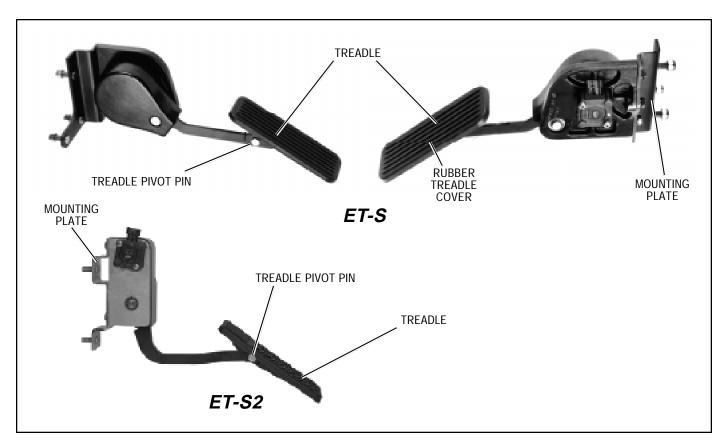


FIGURE 1 - ET-S & ET-S2 ELECTRONIC TREADLES

IMPORTANT! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following general precautions should be observed at all times:

- 1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels.
- 2. Stop the engine when working around the vehicle.
- 3. If the vehicle is equipped with air brakes, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle.
- 4. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that removes all electrical power from the vehicle.
- When working in the engine compartment the engine should be shut off. 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.
- Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.
- 7. Never exceed recommended pressures and always wear safety glasses.
- 8. 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.
- Use only genuine Bendix replacement parts, components, and kits. Replacement hardware, tubing, hose, fittings, etc. should be of equivalent size, type, and strength as original equipment and be designed specifically for such applications and systems.

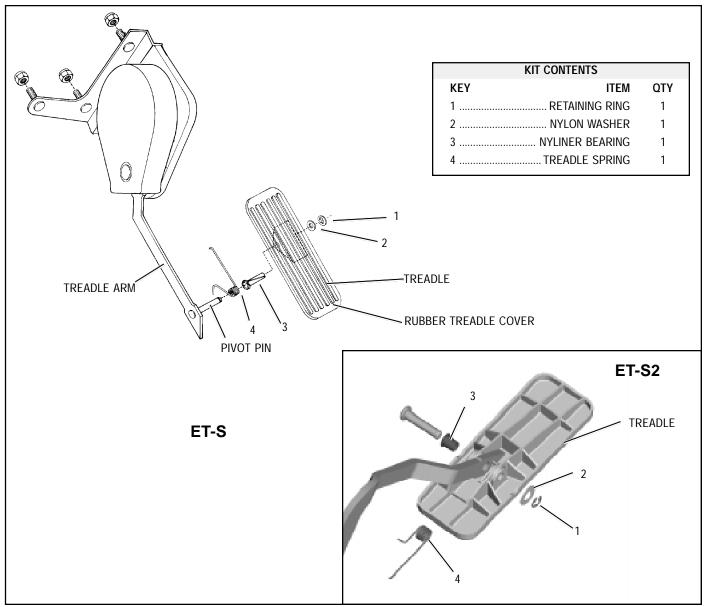


FIGURE 2 - ET-S & ET-S2 EXPLODED VIEWS

- Components with stripped threads or damaged parts should be replaced rather than repaired. Repairs requiring machining or welding should not be attempted unless specifically approved and stated by the vehicle or component manufacturer.
- 11. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.

REMOVAL

Refer to Figures 1 and 2.

- 1. Park the vehicle on a level surface and block the wheels.
- 2. Drain the air pressure from all vehicle reservoirs.
- 3. Unplug the cable assembly at the opposite end of the potentiometer. Disconnect by lifting the lock tab and pulling the connectors until they disengage.
- 4. Remove the Electronic Treadle from the vehicle. The electronic treadle and bracket can be removed from the

vehicle firewall or the treadle assembly can be removed from the bracket that mounts to the firewall. Set aside the mounting hardware for reassembly.

DISASSEMBLY

ET-S

- Position the treadle on its side with the potentiometer facing up. Remove the small retaining ring (1) that holds the treadle on to the treadle arm pin and the small nylon washer (2).
- After the washer is removed, pull the treadle off, carefully releasing the pressure from the treadle spring (4). Remove the nyliner bearing (3) from the treadle arm. Discard all items replaced by the kit.

ET-S2

Position the treadle assembly on its side with the potentiometer facing down. Remove the small retaining ring
and the nylon washer (2) from the treadle pivot pin.

- 2. Remove the pivot pin from the treadle assembly. Gently release the tension on the treadle spring (4) while removing the treadle from the treadle arm.
- 3. Remove the nyliner bearing (3) from the treadle arm. Discard all items replaced by the kit.

CLEANING AND INSPECTION

- 1. Use suitable solvent (e.g. alkaline detergent and water) to clean all metal parts (note that mineral spirits may damage paint finish).
- Inspect the treadle and treadle arm for severe corrosion, pitting, or cracks. If severe, replace the electronic treadle assembly. Superficial corrosion and/or pitting is acceptable.
- 3. Inspect the cable assembly for loose or frayed wires, physical damage, or any contaminants on the connectors. Check end-to-end electrical continuity at terminals. Replace as necessary.
- 4. Inspect the rubber treadle cover (ET-S) and replace if necessary.

ASSEMBLY

ET-S

- With the electronic treadle assembly potentiometer pointing up place the treadle spring (4) on the treadle pivot pin with the tangs of the spring pointing toward the top of the treadle assembly. Rest the shorter tang on the top of the treadle arm.
- Install the Nyliner Bearing (3) into the treadle. Note: the Nyliner Bearing collar is placed on the treadle arm side. Holding the spring in position, install the treadle onto the pivot pin. The treadle must be installed with the pivot point toward the top of the electronic treadle.

- 3. Place the nylon washer (2) and retaining ring (1) on the pivot pin and secure the treadle into position.
- Make sure the ET-S has smooth, even treadle movement.
- 5. Install the ET-S on the vehicle (see *Installation*).

ET-S2

- 1. Position the treadle assembly on its side with the potentiometer facing up.
- 2. Insert the nyliner bearing (3) into the treadle arm with the collar up (toward potentiometer side). The nyliner bearing (3) will protrude through the treadle arm providing a guide for the treadle spring (4).
- 3. Place the treadle spring (4) on the protruding portion of the nyliner bearing with the tangs of the treadle spring (4) pointing toward the ET-S2 body. The short tang should rest on the top side of the treadle arm. Align the treadle arm and treadle spring with the recess in the underside of the treadle.
- 4. Insert the pivot pin from the potentiometer side of the ET-S2 assembly through the treadle, treadle arm, nyliner bearing and spring. Secure with the nylon washer (2) and retaining ring (1).
- Make sure the ET-S2 has smooth, even treadle movement.
- 6. Install the ET-S2 on the vehicle (see Installation).

INSTALLATION

- 1. Using the nuts and washers set aside, install the assembled treadle on the vehicle. Torque to between 85 and 110 lb. in.
- Reconnect the cable connector by plugging it into the potentiometer's integral connector and pushing until the lock tab snaps into place.

