



## Free Backing Brake Solenoid

- Installs directly in line between the trailer hydraulic activator and the brake line.
- Adapts to all models of hydraulic actuators
- Only one electrical connection required between solenoid and vehicle backup light.

## DIRECTIONS - VEHICLE WIRING

1. Disconnect trailer hitch and any wiring connectors from the vehicle.
2. Connect a 14 gauge wire to the backup (reverse) light wire of the vehicle. This wire should be of sufficient length to attach to the existing vehicle/trailer wire receptacle. The end of this wire will require a female end that will match the solenoid male connector wire.
3. For ease of use, tape or band the end of the reverse light wire to the vehicle's trailer electrical connector.

## DIRECTIONS - SOLENOID INSTALLATION

**Caution: Brake fluid can cause damage to painted areas. Use a cloth rag under the actuator/brake line connection to collect any spilled brake fluid.**

1. Remove the brake line and pipe fitting from the rear of the actuator master cylinder. Save the fitting for later use.
2. Using an ice pick or other sharp instrument puncture the spring loaded check valve located inside the rear of the master cylinder. This valve is used to keep back pressure upon drum brakes and is not needed for the operation of disc brakes. If this valve is not punctured a constant pressure will be maintained causing the disc brakes to drag leading to premature wear.
3. Screw the solenoid valve into the master cylinder using a thread sealant or Teflon tape and tighten. Make sure thread sealant does not obstruct fluid flow.
4. Connect the wire from the solenoid valve to the reverse light wire of the tow vehicle.
5. Engage parking brake. With engine off and ignition on, check for proper solenoid operation by placing gear shift in reverse. Backup lights should turn on and an audible click should be heard in the solenoid. Make sure backup lights do not engage in any other gear position.

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