



# PRODUCT BULLETIN

## Brake Lock Electric Activated

### DESCRIPTION

The ZF Brake Lock supplements the standard parking brake of a vehicle by using a portion of the hydraulic service brake system. The brake lock is installed directly into the vehicles service brake system. It is activated by the flip of a toggle switch located within reach of the vehicle operator. When the operator applies the brake pedal, the brake lock acts as a one-way check valve and holds pressure to the brakes until the lock is released. Service brake operation is not affected by the use of the brake lock.

The Electric Activated Brake Lock can be used in many different vehicle applications, however, it is not recommended for use in frequent stop applications or emergency vehicle applications. Please contact ZF Off-Highway Solutions Minnesota Inc. for assistance in choosing one of our many other lock designs for these type applications.

### BENEFITS

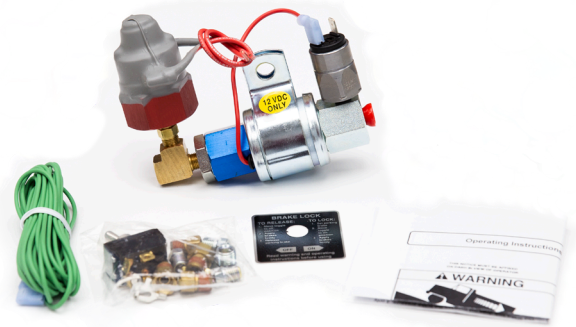
- Easy to install and maintain
- Does not affect normal service brake operation
- Supplements your standard parking brake
- Operates with a flip of a toggle switch

### FEATURES

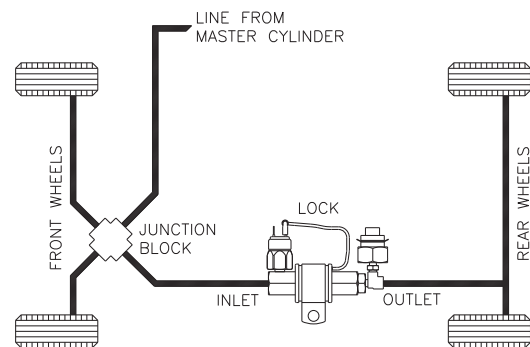
- Can be used on cab-forward or cab-over vehicles
- Brake fluid and hydraulic oil models available
- Uses standard brake line fittings
- No additional plumbing necessary

### SPECIFICATIONS

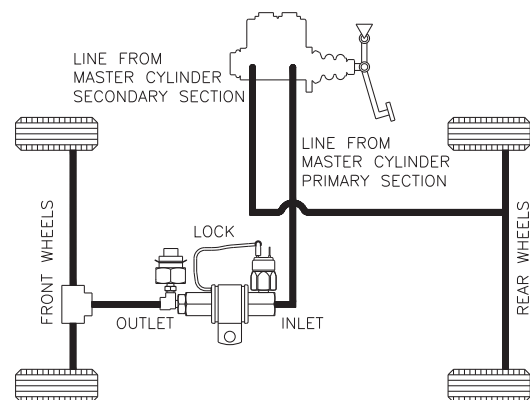
Maximum operating temperature.....250 °F  
Fluid type ..... mineral base hydraulic oil models  
and brake fluid models  
Toggle switch ..... DPST, 15 A @ 12/24 Vdc  
Low pressure warning switch ..... NO, 20 A @ 12 Vdc  
NO, 12 A @ 24 Vdc



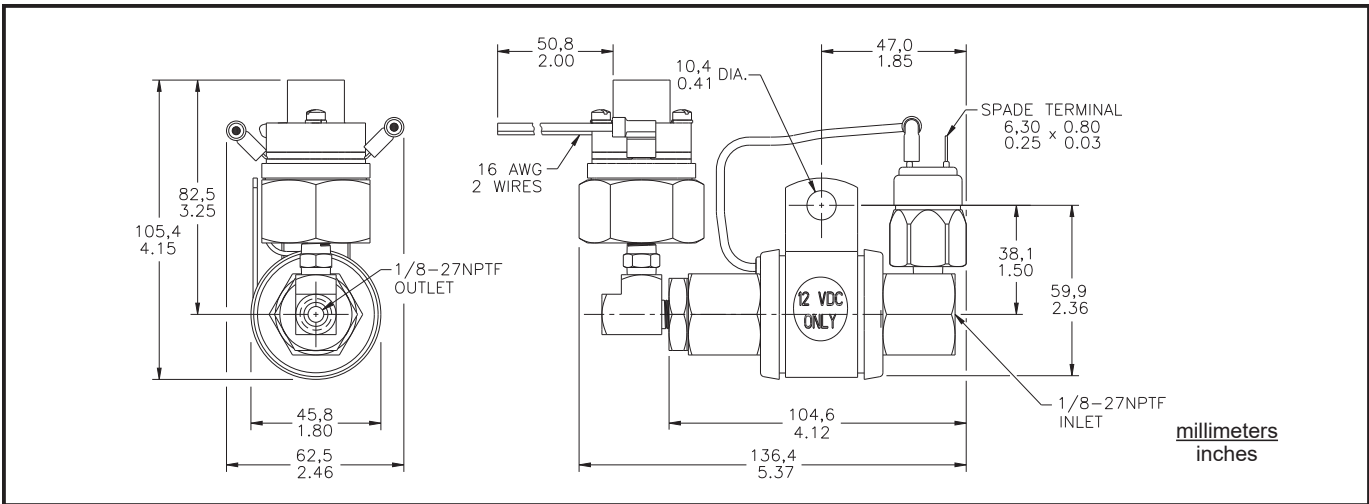
### TYPICAL INSTALLATIONS



Single Brake System



Dual Brake System



### Brake Lock Operation

**To Lock:** Set parking brake. Switch the toggle to the on position. Apply service brakes firmly until low pressure warning switch alarm stops.

**To Release:** Move toggle to the off position. Apply the service brake pedal firmly to overcome locked pressure.

#### NOTE

The brake lock does not incorporate a pressure limiting function. Therefore, the operator should avoid excessive brake pedal force when applying the brake lock. Excessive force causes high pressure to be locked in the brakes which can be difficult to release. Changes in outside temperature can cause locked up pressure to increase or decrease. A rise in temperature can cause increased pressure in the brake system which can lead to damaged brake system components and made it difficult to release locked brake pressure. To minimize the effects of temperature changes, the brake lock must be released and reapplied every hour.

### Low Pressure Warning Switch

All ZF Hydraulic Brake Locks include a low pressure warning switch for your safety and the safety of others who may be exposed to danger if the vehicle moves.

The low pressure warning switch is used in combination with an audible and/or visual alarm to signal a possible reduction in brake pressure and holding capability.

**Do not disconnect the low pressure warning switch.**

The low pressure warning switch provides two important safety features. First, a signal that indicates that sufficient pressure to hold the vehicle has been locked in the braking system. Second, if a loss of pressure occurs in the locked brake system, the alarm will activate indicating insufficient brake holding pressure.

Model Number	Description
407 128 000 0 (BF)	Brake Lock, 12 Vdc electric activated
407 128 001 0 (HO)	Brake Lock, 12 Vdc electric activated
407 128 002 0 (BF)	Brake Lock, 24 Vdc electric activated

BF = DOT 3, 4, 5 and 5.1 brake fluid  
HO = mineral base hydraulic oil

### Typical Vehicle Applications

- ✓ Tow Trucks
- ✓ Tilt Bed Trucks
- ✓ General Delivery
- ✓ Lawn Service
- ✓ Crane Hoist Trucks
- ✓ Bulk Fuel Delivery

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