691 System Components:

The 691 User Interface serves as the operator control center for the 691 System. It contains a recessed rocker switch, audible alarm and visual indicator lamp. Location: in the vehicle cab.

The 691 Control Module is the electronic processing center for the 691 System. It monitors and controls all system functions. LED indicators on the control module identify operating modes and input status for easy system diagnosis. The control module will also activate the vehicle's horn if necessary. The 691 Control Module is normally operated by the 691 User Interface. However, it can be controlled by other electrical switches, which may match mechanical switches already found in the cab or a remotely located switch or circuit when operator intervention is not desired. Location: commonly mounted directly to the 691 Power Unit using supplied mounting bracket, or remotely located in the vehicle cab.

When activated, the 691 Power Unit pressurizes and locks system pressure. Two pressure switches send signals to the control module, indicating the current pressure conditions. If correction is necessary, the 691 Power Unit will compensate system pressure accordingly. The 691 Power Unit will not over-pressurize the vehicles brake system. Upon deactivation, the 691 Power Unit reverses flow to release locking pressure. Location: under the hood, behind the seat, or on a vehicle frame rail.

The 691 Actuators are mechanical devices that link the hydraulics of the 691 System to the vehicle brake system. The actuators do not interfere with normal service braking. Both the single and dual 691 Actuators are available in two different bore sizes and are capable of displacing 1.77-2.90 in³ (per side for duals) of brake system fluid. Location: usually mounted on a vehicle frame rail.

Electrohydraulic 691 Brake Interlock System

Patent Number 5,505,528

The MICO 691 Brake Lock System provides pressure to the service brake system in the same manner as when the vehicle operator presses on the brake pedal. The 691 System locks hydraulic pressure in the service brakes to supplement the vehicle's mechanical parking brake and provide extra holding. The 691 consists of a small electrohydraulic pump, remote mounted actuator (single and/or dual), electronic control module and small dash-mounted user interface. The operator simply activates a switch and the 691 System automatically applies, monitors, and maintains brake locking pressure.

A small user interface is simple to install and conserves space on the often crowded vehicle dash. The control module has onboard diagnostic LED’s, is waterproof, durable, and easy to mount. Factory installed weatherproof connectors reduce the time and complexity of wiring the system.

In addition to operator control using the "Lock/Release" switch on the user interface, 691 Systems can be remotely controlled and/or interlocked using leads in the main wiring harness. This allows control of the brake lock system from locations outside the cab. As an interlock, 691 operation is linked to other vehicle systems and components; for example, PTO, electrical generator, hydraulic pump, air compressor, to ensure the brakes are locked and the vehicle is immobilized wherever they are being used.
MICO 691 Brake Interlock System

**Features**
- Supplements existing parking brake for additional holding
- Automatically monitors and maintains optimal brake lock system pressure
- Activates with the flip of a switch
- Can be interlocked with other 12-volt systems
- Can be remotely controlled
- Operates with ignition on or off
- Microprocessor controlled with onboard diagnostic LED’s
- Waterproof control module and wire connectors
- Compatible with single, dual, or anti-lock brake systems

**Benefits**
- Provides added safety for operator, vehicle, and work area
- Allows workers to focus on their work functions
- Simple operation reduces learning curve
- Creates more safety by locking your vehicle brakes before other systems can function
- Driver intervention is not required, reducing human error
- Less chance of operator error if system is always armed and ready
- Wiring and component functions are verified resulting in easy troubleshooting
- Provides longer life in adverse environments
- Wide selection of models is sure to satisfy your needs

For model numbers and specification information refer to the MICO Brake Lock Application Guide (80-950-152).