

**EMCO**  
**WHEATON**

# **POSI/LOCK 105®**

## AUTOMATIC DRY-BREAK FUELING SYSTEM FOR BUSES



**IR** *Ingersoll Rand*  
Transport Solutions

[emcowheaton.com/fuel-systems](http://emcowheaton.com/fuel-systems)

# POSI/LOCK 105® AUTOMATIC DRY-BREAK FUELING SYSTEM FOR BUSES

The Emco Wheaton POSI/LOCK 105 Automatic Fueling System is the industry standard for fast fill, spill-free fueling of transit buses and other fleet vehicles.

Designed to specifically meet the needs of the fuel tank and the vehicle on which it is installed, the POSI/LOCK 105 system is the choice of bus companies and transit authorities from Toronto to New York, from London to Hong Kong and from Dublin to Chicago. The Posi/Lock system comprises two main parts: the Posi/Lock 105 Refueling Nozzle attached to the dispenser, and the Posi/Lock Filler Neck Assembly mounted to the vehicle fuel tank.

Custom designed to fit your fueling application, The POSI/LOCK 105 system is truly Better by Design!

## THE POSI/LOCK FILLER NECK ASSEMBLY

**Dust Cap**  
Connection point-protected by the impact resistant POSISNAP Cap, or conventional Aluminum Twist Cap.

**Fill Neck**  
Patented fill neck design including the POSI/LOCK II and POSI/LOCKIII specially configured to handle flow rates of 20-50 US GPM (75-185 l/min). Emco Wheaton has several platforms to fit virtually any potential fuel tank configuration.

**Pressure Relief Valve**  
Factory-tested pressure relief valve meets the requirements of US DOT standards for fuel tank protection in a fire situation.

**Adapter**  
Emco Wheaton DRY-BREAK technology to prevent spillage.

**Whistle**  
An audible signal which stops when the tank is full.

**Level Control Valve**  
Customized level control valve with settings that meet the US DOT standards requiring the fuel tank to be no more than 95% full, and provides protection against fuel spillage in a vehicle rollover situation.



## POSI/LOCK 105 REFUELING NOZZLE



### Operation

To begin fueling, the operator connects the nozzle to the adapter on the bus, opens the poppet lever, then locks open the fueling lever. With the nozzle open, fuel enters the tank of the bus. As the tank fills, the exiting air activates the whistle. The whistle sounds until the tank is filled to the design capacity. When the tank is approximately 95% full, the Level Control Valve closes. In turn, the nozzle automatically shuts off when it senses the back-pressure in the fuel tank. The fuel tank is protected by the pressure relief valve.

### Benefits and Potential Cost Savings

#### Environmental Benefits:

- Elimination of liability related to contamination of water and soil by spilled diesel fuel.
- Elimination of on-road spillage related to sloshing of fuel.

#### Health & Safety Benefits:

- Keeps workers and their environment clean and safe.

#### Potential cost savings:

- Reduction in the cost of fuel spilled (and wasted).
- Reduction in costs related to the disposition of spilled diesel fuel, water, and absorbent cleaning materials.

#### Labor savings:

- Reduced time needed to fuel buses due to “fast filling” and fueler not having to attentively fill the tank to capacity.
- Increased efficiency as fueler can perform other tasks while bus is filling.
- Elimination of labor cost associated with cleaning up spills.

#### Operational Savings and Benefits:

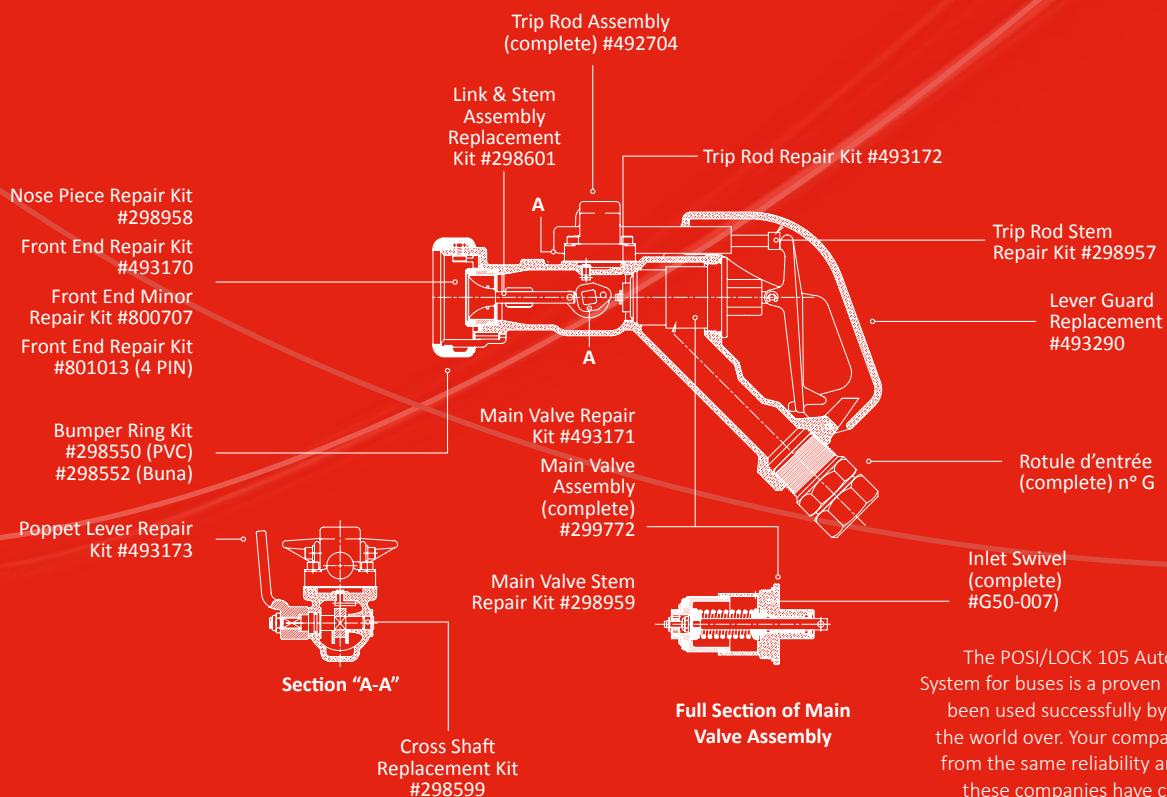
- **95% Fill – Always.**  
No premature shut-off related to fuel foaming.
- **Eliminating Spillage and Theft.**  
Fuel cannot be dispensed from the nozzle unless it is properly coupled to the bus. This eliminates inappropriate use or inadvertent spillage of fuel purchased by the bus company.
- **Vandalism Minimized.**  
Because the POSI/LOCK 105, is a closed system, it is virtually impossible to vandalize the system by introducing foreign materials or liquids into the nozzle or the fuel tank of the bus.

### Maintenance and Design Advantages

- The POSI/LOCK 105 System is virtually maintenance-free. Once the system is installed, it seldom requires maintenance attention unless components have been physically damaged.
- Emco Wheaton offers value-added Fuel Systems Engineering Services. We will ensure that the POSI/LOCK system is correctly configured to produce a 95% fill every time, through theoretical design as well as actual testing and calibration of customer-supplied fuel tanks in our facility.

### Nozzle Service

Nozzles are completely rebuildable and serviceable using the Emco Wheaton Repair Kit Program. Mechanics can service nozzles using kits that include instruction sheets and everything needed to repair that area of the nozzle. Alternatively, the Emco Wheaton factory rebuild program will restore your nozzle to factory specifications using the same procedures and testing used for new nozzles.



The POSI/LOCK 105 Automatic Fueling System for buses is a proven entity that has been used successfully by bus operators the world over. Your company will benefit from the same reliability and quality that these companies have come to expect

## Manufacturing Facilities / Sales Office

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EMCO WHEATON is uniquely positioned to solve your fueling challenges. Contact us for a custom solution!



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