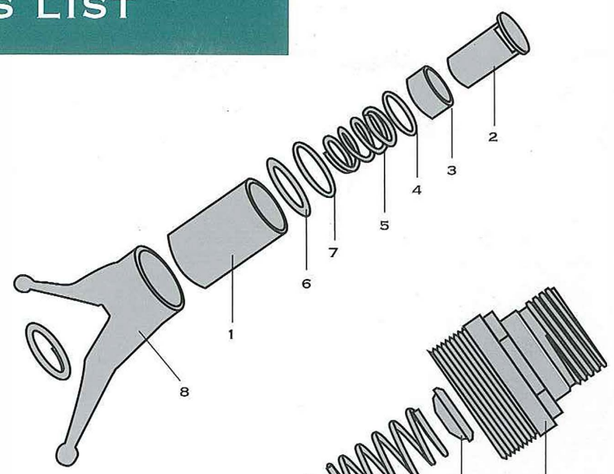
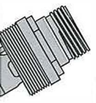
PARTS LIST

Fuel nozzle 2510

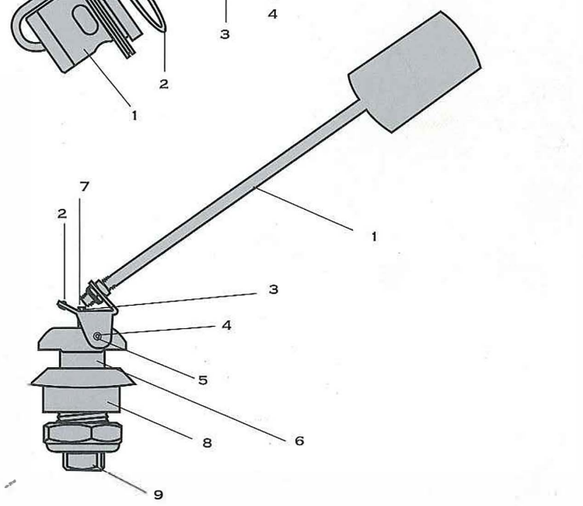
Item	Description	Part Number
1.	Body	2404
2.	T-Valve	2405
3.	Sleeve	2406
4.	"O" Ring	2803
5.	Spring	2901
6.	Snap Ring	1100
7.	"O" Ring	2804
8.	Union Nut	2754





Locomotive Coupling Half 2500

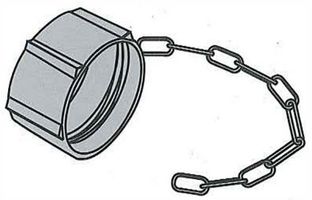
Item	Description	Part Number
1.	Tube & Cylinder	2503
2.	"O" Ring	2802
3.	Spring	2900
4.	Piston	2400
5.	Brass Seat Retainer	2401
6.	Spring	2936
7.	Poppet Valve	2501
8.	Coupling Body	2752



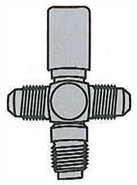
Internal horizontal float 2515

Item	Description	Part Number
1.	Float & Arm Assembly	2516
2.	Nylon Plug	2805
3.	Snap Ring	2104
4.	Nylon Bushing	2806
5.	Spring Pin	2101
6.	Valve Body	2407
7.	Float Valve	2408
8.	Nylon Nut	2409
9.	Jam Nut	2102

Dust Cap 2502



Override Valve 2525



The Override Valve #2525 bypasses the automatic shutoff feature of the fueling unit when manual or visual topping is desired. The fuel does not go in one side and out the other as sometimes happens with competitors' products. The system utilizes a closed tank that is opened only when and where it is being refueled.

Instruction Plate 2914

A corresponding instruction plate #2914 is also available to attach to the tank near the override valve.

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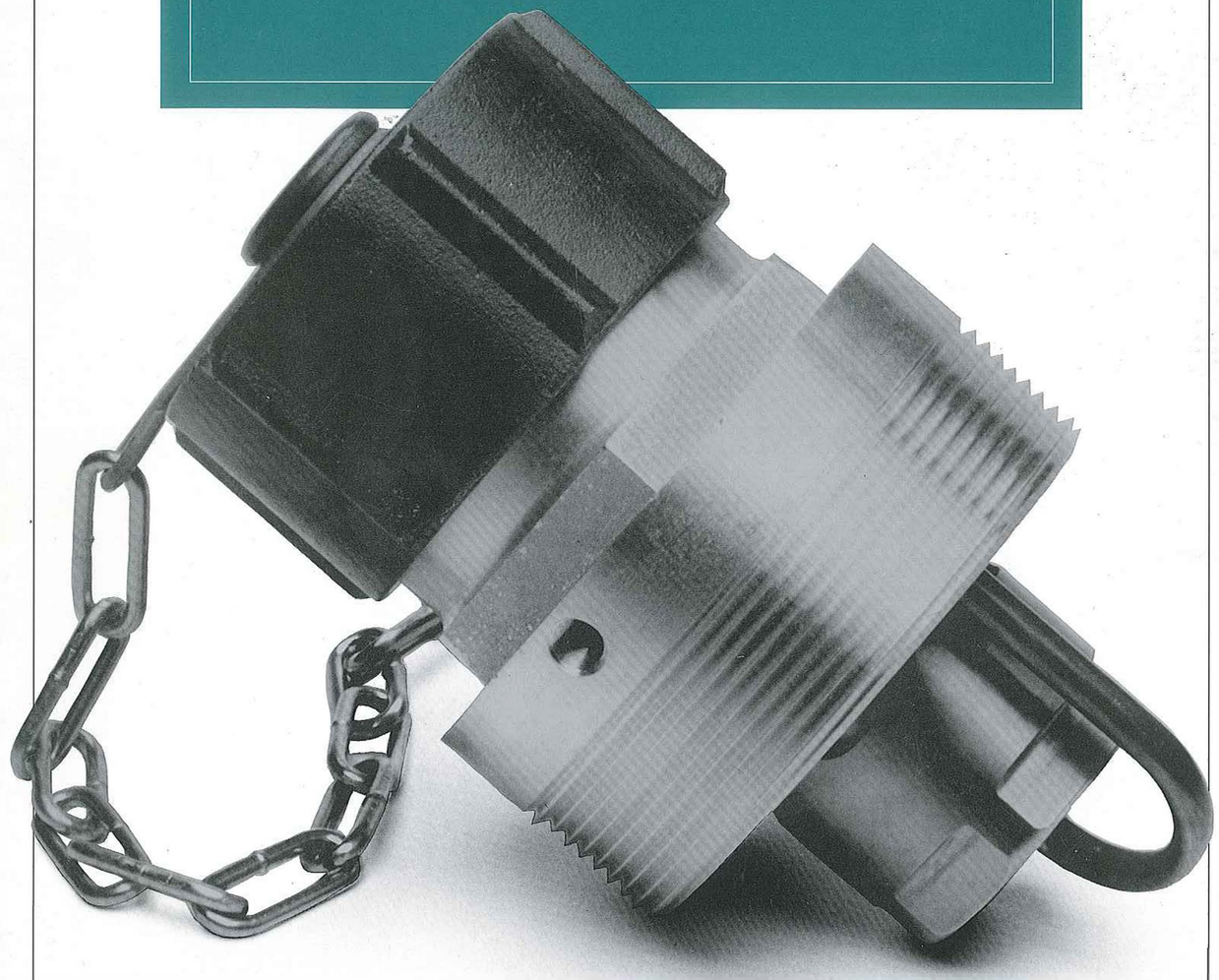
AUTOMATIC FUEL INPUT SYSTEM

ELIMINATES SPILLAGE • NO HAND TOPPING
HIGH FLOW RATE • COMPATIBLE WITH ANY SYSTEM



EDCA

FUELING SYSTEMS, INC.

A COMPLETE FUELING SYSTEM THAT PROVIDES GREATER SAFETY, REDUCED COST AND FASTER OPERATION.

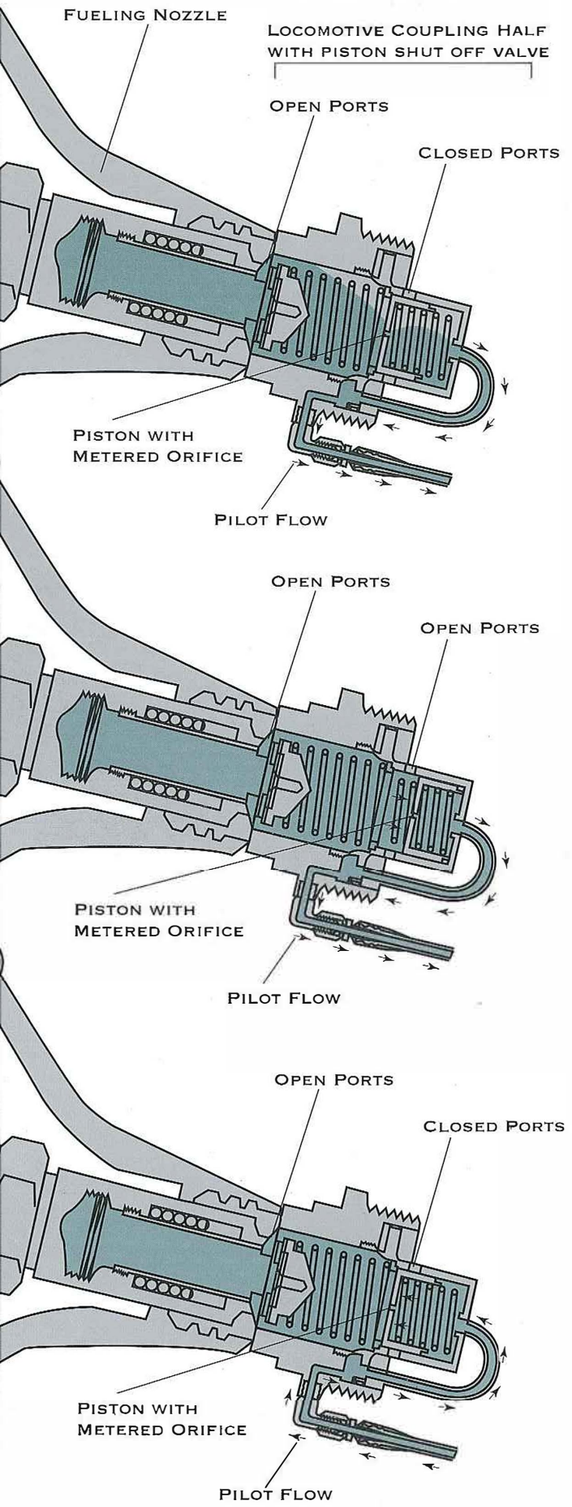


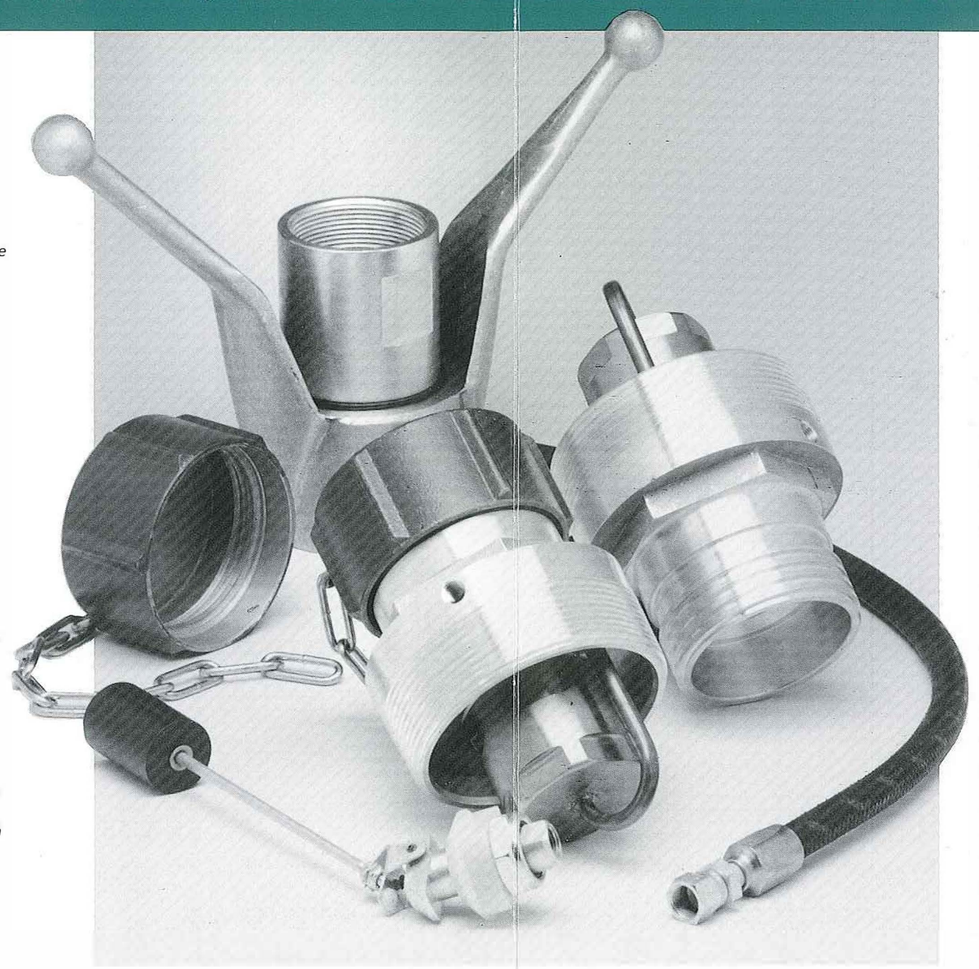
FIGURE 1
*The **fueling nozzle** is connected to the locomotive couping half. The fuel is passing through the nozzle, the locomotive coupling half and the **pilot flow**. Full flow has not yet started as the **piston** is closed.*

FIGURE 2
*The force of the fuel has opened the **piston** in the locomotive coupling half. Full flow is now entering the tank.*

*The **piston** will remain open permitting full flow as long as the **pilot flow** is unrestricted through the pressure and return lines.*

FIGURE 3
*The **float valve assembly** within the tank has risen shutting off the **pilot flow**. The pressure is now equalized on both sides of the **piston** in the locomotive coupling half. The spring force now pushes the piston back closing the **ports** and shutting off the flow of fuel into the tank.*

*Disconnection of the **nozzle** from the locomotive coupling half is then made without any loss of fuel.*



ELIMINATE COSTLY FUEL SPILLAGE AND OVERFLOWING.

The EDCA automatic fueling system saves thousands of dollars in lost fuel by preventing spills and the environmental problems they cause: water contamination, the need for equipment to separate fuel oil from public sewage systems, and fire hazards. Typical fuel loss of 1 to 2% with manual filling is completely eliminated. The system prevents accidents from slick fueling areas (lengthens ballast life at fuel stands) and assists in compliance with government regulations.

FILL TANKS COMPLETELY AND QUICKLY WITHOUT HAND TOPPING.

A high flow rate of 10-300 gpm provides maximum efficiency in fueling operations and requires no hand topping or monitoring. Self-sealing valves prevent lost fuel during disconnect. The system allows fueling from either side of the tank.

A DEPENDABLE, PROVEN SYSTEM, EASILY INSTALLED AND MAINTAINED.

The system is entirely mechanical. There is no power required, and no electronic parts to fail. The EDCA system is completely compatible with existing fueling systems and can be installed quickly, with ease of maintenance in the shop or in the field. All parts are precision made and manufactured for durability. The EDCA fueling system is in use worldwide.

SYSTEM COMPONENTS

The ***Fueling Nozzle*** is attached to the fuel hose at the fueling stand. It consists of a self-sealing valve that is opened or closed automatically when the nozzle is connected to or disconnected from the Locomotive Coupling Half. The purpose of this self-sealing valve is to prevent fuel from draining out of the fuel hose when it is in the uncoupled position. Also, the head end of the Fuel Nozzle valve opens a self-sealing valve in the locomotive half when the two units are coupled together.

The ***Locomotive Tank Coupling Half*** with automatic shut-off valve is located in the fuel tank fill pipe of the diesel locomotive. It provides a mating connection for the EDCA Fueling Nozzle. When the Fueling Nozzle is connected to the Locomotive Coupling Half, a self-sealing poppet valve on the outside of the coupling is opened (see sectional view). The piston valve has a small orifice that allows a pilot fuel flow to go to the Float Valve Assembly. The pilot fuel flow reduces the pressure on the back side of the piston so that the incoming fuel holds the piston open.

When the pilot fuel flow is topped by the Float Valve Assembly, pressure builds up on the back side of the piston and equalizes with the pressure on the front side of the piston. A spring behind the piston closes the piston valve to shut off the main fuel into the fill pipe.

A ***Dust Cap*** protects the threads and mechanism from dirt, ice and physical damage. EDCA Dust Caps are supplied with a safety chain to prevent accidental loss. Two Coupling Halves with Dust Caps are included in the package.

The ***Float Valve Assembly*** is mounted inside the fuel tank. The simplified design and unique nylon bushing nut permits easy installation and long maintenance-free service life.

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