



# **Special Tools**

Some of Eaton's Carter line of ground fueling products require special tools to maintain and overhaul them. In some instances, the use of special tools will simply make the job faster and easier. This brochure outlines those special tools that are essential to maintaining these products.

# 60554ST1 Hydrant Outlet Wear Gauge

This gauge is now available to check for wear on the interface of Eaton hydrant pit valves made in accordance with API Bulletin1584, 3rd Edition. Refer to the appropriate service manual for instructions.



## 61607 Ball Tool for Models 64348/64349/61428 & 61429 Refueling Nozzles

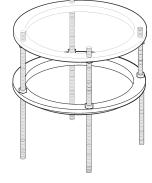
The ball removal and installation tool is utilized to collect and automatically count the balls used in the swivel joints of the nozzle. It is simple to use and assures that the proper installation is achieved. It is suggested that a separate tool be used for each swivel joint. A minimum of two are required for the simplest of nozzle configurations (one for the collar swivel and one for the hose swivel). Three are required for a nozzle having a hose end control valve (HECV) or a ball valve.

## 61362 Hydrant Coupler Lower Half Wear Gauge

This gauge is used to determine if any one of several parts used in the lower half of hydrant coupler models 61525, 60600. 60600-1, 60700-1, 64800, 64802, 64804, 64900 or 64902, designed in accordance with API Bulletin1584, are worn beyond useful life. It should be used at each overhaul to determine the useful life of the lugs, body or collar used in these couplers. A new addition to the gauge provides definitive information on the condition of the lugs. Refer to the appropriate service manual for instructions.

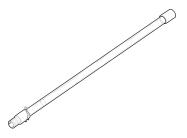
# TF64191-2 Compression Spring Tool

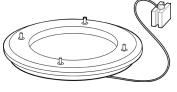
The compression spring tool is used to safely relieve pressure from and allow removal and reinstallation of the large breakaway spring in the probe half of Model 64191 7-inch Emergency Breakaway Coupling.



Additional tools are available for use in overhauling probe assembly 64191-1 and receiver assembly 64191-2 components:

- Part number TF64191-4 seal installation sleeve
- Part number TF64191-5 male adapter test assembly tool
- Part number TF64191-6 female adapter test assembly tool
- Part number TF64191-7 hand tool set for 64191-1
- Part number TF64191-8 hand tool set for 64191-2





#### 61656 Blockout Device

The Blockout Device is recommended for use when defueling through a hose end control valve (HECV), or when it is necessary to check the secondary pressure control device in a system. The blockout device does not introduce fuel into the ambient port of the HECV which can later become a dangerous spray during operation. It can be used on most Eaton hose end control valves.

#### 61657-2 Aircraft Adapter Wear Gauge

Aircraft adapters can wear to the point where they are unsafe to refuel. Part number 61657-2 Aircraft Adapter Wear Gauge can be used to determine this unsafe condition. The gauge checks three wear points on each adapter, the width and thickness of the three lugs and the width of the three slots found on the adapter. It can be used on bottom loading and stowage adapters, as well. An inadvertent disconnect from either can be just as dangerous as one that might occur when refueling an aircraft.

## 64000 Poppet Adjustment Gauge

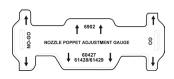
This simple inexpensive gauge provides an accurate method of achieving the proper adjustment of the poppet of Model 64348 Refueling Nozzle. The gauge can be used on all Eaton underwing nozzles except Models 64200 and 64250. Use gauge 64250ST-1 for these later style nozzles.

## IF220351 Quick Disconnect (QD) Wear Gauge

The ball locking sleeve on the standard QD and the dry break disconnects will wear with age. Wear of the sleeve can cause the disconnect to accidentally separate, resulting in a possible spill. Part number IF220351 Inspection Gauge is designed to determine the safe limits of the sleeve wear. It can be used for either the standard QD on Model 60427 Refueling Nozzle, Model 60672-1 Dry Break Quick Disconnect or the newer Model 61154 Dry Break Quick Disconnect.









Eaton
Aerospace Group
Fluid & Electrical Distribution Division
9650 Jeronimo Road
Irvine, California 92618
Phone: (949) 452 9500
Fax: (949) 452 9992
E-mail: groundfueling@eaton.com

