



IN64800
November 1998

Aerospace Group
Conveyance Systems Division
Carter[®] Ground Fueling

Applicable additional manuals:
NONE

Installation Instructions

Pressure Control Coupler

Model 64800

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SUMMARY OF REVISIONS

DATE OF CHANGE	PARAGRAPH/ PAGE	REV LTR	E.O. NO.	REVISION	APPROVE D BY
11/1/98		NC		New Release	

1.0 SCOPE

These installation instructions have been developed for your use in mounting the 64800 Coupler on any hydrant servicing vehicle. These instructions do not cover all requirements for such an installation which might be dictated by other authorities which have jurisdiction over the use of your vehicle. The responsibility for proper final installation configuration is yours. Consult with the local airport authority or corporate authority for further information.

2.0 EQUIPMENT SUPPLIED BY CUSTOMER

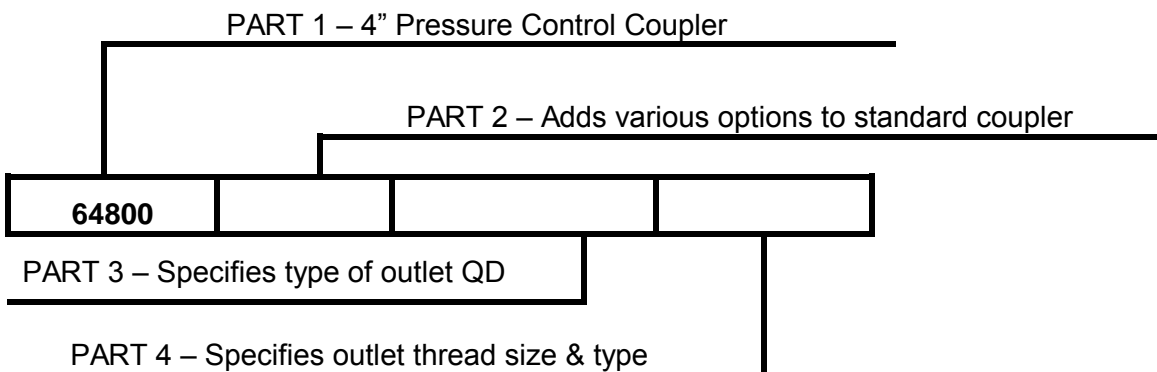
The following is a listing of the required equipment supplied by the customer on the refueling vehicle. The coupler system needs to interface with all of the items below:

- ➔ Hoses, valves and fittings to connect between the vehicle and the Model 64800 Coupler.
- ➔ Air reference pressure source between the vehicle and the Model 64800 Coupler.

3.0 GENERAL DESCRIPTION:

Eaton's Carter brand Model 64800 Coupler is the latest pressure control hydrant coupler designed for use on hydrant vehicles with conventional air reference type pressure control systems. It is designed to attach to a 4 inch hydrant pit valve conforming to the design criteria in API 1584. Model 64800 has several improvements, developed after years of use of older Model 60700-1 Coupler. These improvements make installation and operation easier. The pressure control elbow has been downsized to a 3 inch diameter to allow for the improvements to be made with no weight increase penalty. The pressure loss of the downsized coupler is insignificant and in the majority of cases will not be noticed by the operator. The inlet of the Model 64800 Coupler is the connection made to the hydrant pit valve. The outlet of the 64800 is a quick disconnect joint for attaching to an intake hose or similar fluid conduit for the delivery of fuel to the aircraft. Several options for the outlet quick disconnect assembly are provided to make it possible to mate with existing 60700-1 or 60600 type female halves. One 3/8 inch hose is needed to connect the fuel sense pressure connection to the vehicle venturi or other sense point. One 1/4 inch hose is needed to connect the coupler with the vehicle air reference pressure source. When desired a 1/4 inch hose can also be connected from a port on the side of the coupler to the air pilot on the mating hydrant valve. Hose barb fittings are available as options for these connections if desired (Option F).

The part numbering system for the coupler is as follows with the options noted in the tables below:



PART 1

OPTION	DESCRIPTION
B	Adds folding handle assembly
C	Adds product selection
D	Adds lockwire to flange joints
E	Adds API style air & fuel quick disconnect
F	Adds hose barb fittings to all air and fuel ports
G	Adds collar stop assembly
W	Adds carriage assembly
X	Adds safety clip to QD (with option 2 only)
Y	Adds second carrying handle at outlet swivel joint
Z	Replaces standard transverse carrying handle at centerline of coupler with handle that is parallel to outlet

PART 3

OPTION	DESCRIPTION
2	Adds Adapter to mate thumb latch swivel quick disconnect
3	Adds Adapter to mate 60700-1 type QD
4	Adds Adapter to mate 60600/60600-1 (except option K) type QD

PART 4

OPTION	DESCRIPTION
H	2 ½" NPT outlet
K	2 ½" BSPP outlet
L	3" NPT outlet
M	3" BSPP outlet
N	4" BSPP outlet
P	4" NPT outlet

4.0 INSTALLATION:

- 4.1 Installation of the quick disconnect joint to the fuel delivery conduit (hose or pipe) is by means of a pipe thread, either NPT or BSPP and should be handled in the normal manner.
- 4.2 There are two ports located on the block at the top of the coupler. Both ports accept SAE straight threaded fittings with o-ring seals. Options E and F provide fittings that have hose barb connections. Port A is sized for 3/8" tube or hose fittings while Port B is sized for 1/4" tube or hose fittings. Port A is for use in connecting via hose to the fuel sense port located at a Venturi or

other sensing port on the vehicle. Port B is for use in connecting the air reference pressure from the vehicle.

- 4.3 Another port located on the left side of the coupler (when facing the outlet of the unit) is for use in connecting the air supply to the hydrant valve via a ¼ inch hose. On the standard coupler this port is plugged. If the coupler is used with an air type hydrant valve, remove the plug and insert a ¼ inch SAE straight threaded fitting with o-ring seal to suit. Option E and F provide hose barbed type fittings for use in this port.

5.0 BLEEDING

One of the new features of the Model 64800 Coupler is the inclusion of an easier bleeding valve. On top of the coupler and inline with Port A is a hexagon shaped bolt with an phillips head screw in the center. This is the bleeding screw. Once the coupler is attached to a system and pressure is applied, loosen this screw and leave it loose while operating the deadman system several times. Once a steady leakage of fuel is apparent from this screw the coupler is fully bled of air and the screw should be tightened.

6.0 CLOSING TIME ADJUSTMENT

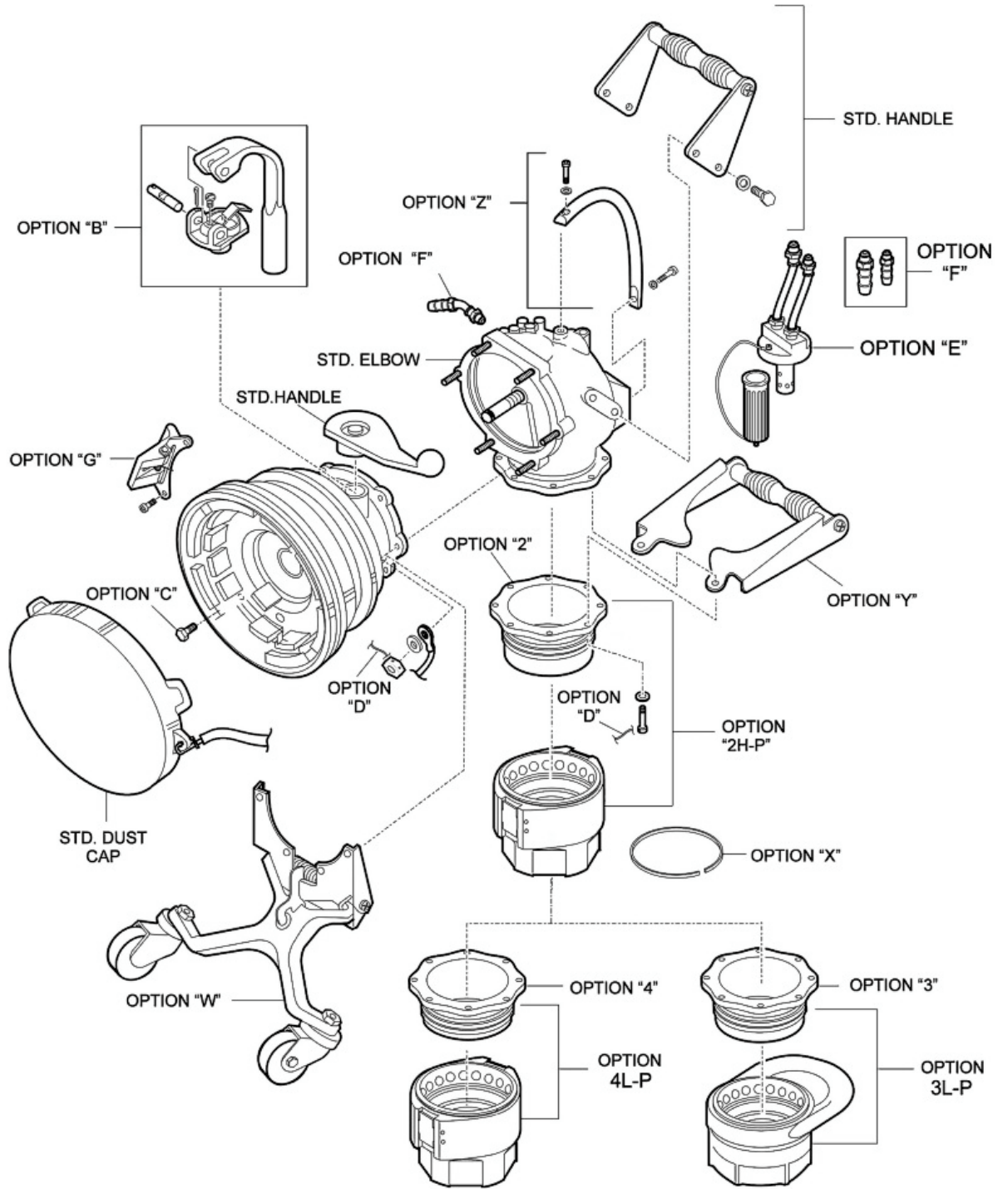
The closing time may require adjustment even though all new units are adjusted at the factory. It is recommended that the system be tested first and if adjustment is needed then follow this procedure.

Another new feature is the accessibility of the closing time adjustment screw. When facing the outlet of the coupler the screw is located on the top of the coupler under the hexagon headed bolt in line with Port B and closer to the outlet than the bleeding screw. To adjust the closing time, simply remove the hex bolt and using an allen key to tighten the screw below the hex headed bolt to bottom out. Then back out screw 3 - 4 complete turns. This should adjust closing time to approximately 2.5 to 3 seconds. Finer adjustment may be necessary during test.

7.0 CARRIAGE INSTALLATION

If a carriage is to be installed onto the coupler, **no additional hardware is needed** other than that furnished with the coupler. Remove the four nuts and washers from the studs in the pressure control elbow that will be used to fasten the carriage to the unit. Place the mounting bracket of the carriage onto the four studs and replace the nuts and washers. The nuts should be torqued to 90 ± 10 in.-lbs. (104 ± 12 kg.-cm.). If lockwire is desired the nuts are drilled for acceptance of same.

8.0 Illustrated Options



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