



Powering Business Worldwide

Aerospace Group
Conveyance Systems Division
Carter[®] Brand Ground Fueling Equipment

IN64802

November 1998

Applicable additional manuals:

NONE

Installation Instructions

Pressure Control Coupler

Model 64802

NOTE: OEM/CUSTOMER - PLEASE FILL OUT AND MAIL IN THE REGISTRATION CARD PROVIDED WITH THE INSTALLATION INSTRUCTIONS, IN64035 OR IN64235. SEE THAT INSTRUCTION MANUAL FOR FURTHER INSTRUCTIONS.

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1.0 SCOPE

These installation instructions have been developed for use in mounting a Model 64802 64802 Digital 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

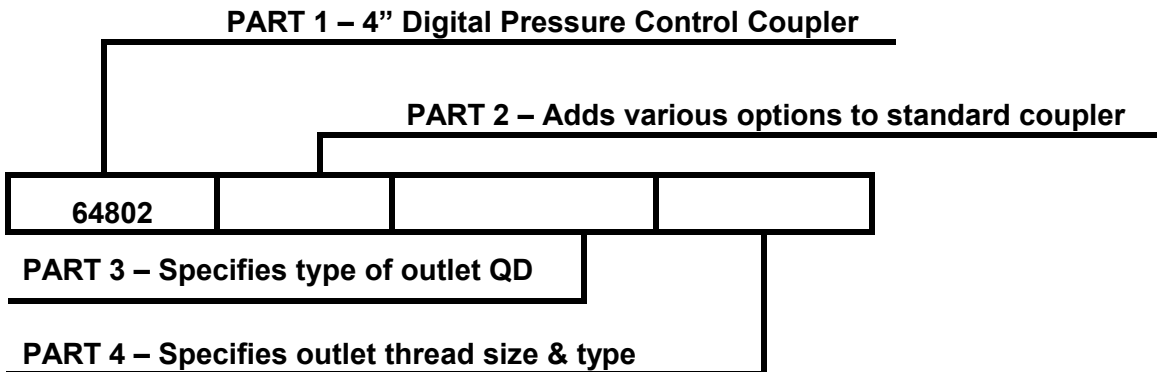
The following is a listing of the required equipment supplied by the customer on the refueling vehicle. The digital coupler system needs to interface with all of the items below:

- ➔ Hoses, valves and fittings to connect between the 64102 and the 64802.
- ➔ Accumulator utilized as the fluid power source for the 64102. (See installation instructions IN64102 for connection details.)

3.0 GENERAL DESCRIPTION:

Eaton's Carter brand Model 64802 Digital Coupler is a version of the standard Model 64800 Pressure Control Hydrant Coupler, an improvement over the 60700-1 Coupler, to 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. It is designed to attach to a 4 inch Hydrant Pit Valve conforming to the design criteria in API 1584. The outlet of the 64802 is a quick disconnect joint for attaching to an intake hose or similar fluid conduit for the delivery of fuel to the aircraft. One 3/8 inch hose attaches to the top of the 64802. The other end of this hose is connected to a 64102 Manifold Assembly which allows for the controlled operation of the 64802 Digital Coupler.

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
F	Adds male half quick disconnect to fuel command port
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 A ¼" hose connects to the Port B located in the side of the top of the 64802. If a "wrap-around" type coupler hose is used, the hose can be installed directly into the port. If a hose reel is used for the coupler hose, then it is necessary to install a double dry-break disconnect assembly in between the coupler port and the hose. Option F provides the male half of such an assembly and the female half is also available from Carter. This will prevent the incursion of air into the command hose system. The other end of this hose connects to the 64102 to supply fuel into and out of the control cavity of the 64802. See

the installation instructions for the 64102 Manifold Assembly, IN64102, for specifics about the hose required for this application. **It is important that the hose used be of a type that does not expand or contract easily. Such action will hinder the operation of the system at low flows.**

5.0 BLEEDING

It is suggested that a valve of some sort on a tee fitting be installed at this location which can be used to bleed air out of this conduit and out of the control cavity of the pressure control valve. Bleeding of the fuel command line is extremely important to good control. It is recommended that one "over-bleed" this line to be sure. After the initial bleeding, conduct a test of the system changing the aircraft manifold back pressure from high to low to high to get the coupler to open and close. Actuate the deadman several times. Do this with the bleed valve open to purge air from the system.

The hex headed bolt on the top of the coupler can also be used to directly bleed the coupler cavity prior to system bleeding. Loosen the bolt and operate the deadman several times. After the air has escaped tighten the bolt to seal.

Once the physical installation is complete and the vehicle is filled with fuel, upon first pressurization of the 64802 Digital Coupler, follow the instructions in the installation instructions for the 64102, IN64102, to bleed air from this line and the 64802.

6.0 CARRIAGE INSTALLATION

If a carriage is to be installed onto the 64802 **no additional hardware is needed** other than that furnished with the 64802. 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.

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