

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

SM427MISC

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Applicable addition manuals: SM60427 Nozzle SM61445 Coupler SM40679 Quick Disconnect

Maintenance & Repair Manual

Misc. Male Adapters To Mate Model 60427 Nozzles And Model 61445 Couplers

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MAINTENANCE, OVERHAUL & TEST INSTRUCTIONS MISCELANEOUS MALE HALF ADAPTERS

1.0 INTRODUCTION

This manual furnishes detailed instructions covering the maintenance and overhaul of Eaton's Carter brand Models 41600, 44812 and 44805 Male Half Adapters. These

adapters are utilized to mate different Eaton Carter brand or Whittaker female half quick disconnects.

2.0 EQUIPMENT DESCRIPTION

Three Carter brand male half adapters are designed to mate either Carter Model 60427 Nozzle or Model 61445 (or the older Model 60445) Hydrant Coupler to allow the unit to

be connected to either a mating Carter brand female quick disconnect half or a Whittaler F582 or F577 quick dsconnect.

3.0 DISASSEMBLY

- 3.1 Separate the male adapter from the nozzle or coupler by removing the six Screws (5) and Washers (4). Remove and discard Oring (3). Follow the appropriate instructions for the individual male half adapter part number involved.
- 3.2 41600 Flight Refueling Adapter Do not remove Ball Race Ring (2) unless it is to be replaced.
- 3.3 44805 Whittaker Male Half Adapter Remove and discard Quad Ring (8). Do not remove Wear Ring (9) unless it is to be replaced. Replace it if the adjacent metal surfaces show signs of galling or the part itself is damaged.
- 3.4 44812 Heavy Duty Male Half Adapter Remove O-ring (12) and discard. Do not remove Ball Race Rings (2) unless they are to be replaced.

4.0 INSPECTION

It is recommended that the O-rings (3) and (12) and Quad Ring (8) be replaced at each repair or overhaul. Inspect all metal parts for dings, gouges, abrasions, etc. Use 320 grit paper to smooth and remove sharp edges. Replace any part with

damage exceeding 15% of local wall thickness. Use Alodine 1200 to touch up bared aluminum. The Ball Race Rings (2) & (10) should be checked for noticeable wear. Replace if wear is apparent.

5.0 REASSEMBLY

- 5.1 Reassemble in reverse order of disassembly (Refer to Figure 1), observing the following:
- 5.1.1 Make certain all components are clean and free from oil, grease, or any other corrosion

resistant compound on all interior or exterior surfaces. Wash all parts with cleaning solvent, Federal Specification P-D-680 or equivalent, and dry thoroughly with a clean, lint-free cloth or compressed air.

WARNING:

Use cleaning solvent in a well-ventilated area. Avoid breathing of fumes and excessive solvent contact with skin. Keep away from open flame.

- 5.1.2 NOTE: A light coat of petrolatum, Federal Specification VV-P-236 or equivalent commercial quality, can be applied to all orings and screws for ease of installation.
 - Install O-ring (12) in groove in Adapter (11). Install Quad Ring (8) into the groove in Adapter (7) adjacent to Wear Ring (9). Be sure that the Quad Ring (8) is placed
- near the round end of the Adapter (7). If Wear Ring (9) is to be replaced do not over stretch it while installing. Install O-ring (3) onto flanged end of Adapters (1, 7 & 11).
- 5.1.3 If Ball Race rings (2) and (10) are to be replaced, be careful not to scratch adjacent surfaces of the Adapters (1, 7 & 11).

6.0 TEST

6.1 The Unit shall be tested as a part of a completed nozzle or coupler as instructed in SM60427 or SM61445.

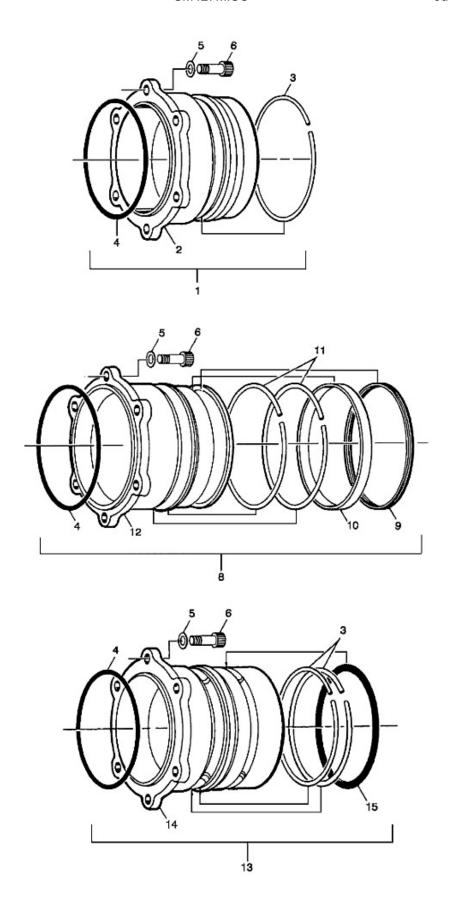
7.0 ILLUSTRATED PARTS CATALOG

Table 1.0 tabulates the parts and sub-assemblies comprising the 41600, 44805 and 44812 Male Half Adater Assemblies. The item numbers of the table are keyed to the exploded view of the units diagramed in Figure 1.

TABLE 1.0

			Units Per	Used on	Spares/10
Item	Part Number	Description	Assembly	Option	Units/Yr
<u> </u>	41600	Male Half Assembly, Flight Refulei	ng1	60427R	
2	26935	Adapter	1	60427R	-
3	28702	Ball Race Ring		60427R	1
4	201201-151	O-ring	1	60427R	10
5	5710-63-30	Washer	6	60427R	-
6	GF16995-49	Screw	6	60427R	-
8	44805	Male Half Adapter, Thiem	1	61445T	-
4	201201-151	O-ring	1	61445T	10
5	5710-63-30	Washer	6	61445T	-
6	GF16995-49	Screw	6	61445T	-
9	210174-231	Quad Ring	1	61445T	10
10	2803082-101	Wear Ring	1	61445T	5
11	207364	Ball Race Ring	2	61445T	2
12	210598	Adapter	1	61445T	-
13	44812	Male Half Adapter, Heavy Duty	1	61445R	-
14	203522	Adapter	1	61445R	-
3	28702	Ball Race Ring	2	61445R	2
4	201201-151	O-ring	1	61445R	10
5	5710-63-30	Washer	6	61445R	-
6	GF16995-49	Screw	6	61445R	-
15	201201-231	O-ring	1	61445R	10

- Notes: 1. All part numbers beginning with "GF" are interchangeable with those beginning with either "AN" or "MS". If the "GF" is followed by three numbers it is interchangeable with and "AN" part, otherwise it is interchangeable with an "MS" part of the same number.
 - 2. The recommended spare parts shown above are the number required to support 10 Units for one year or each overhaul whichever is sooner. These quantities do not include replacement spares for intermediate replacement of parts required by abuse or misuse of the equipment. The recommended quantities are based on the ratio of spare parts sold for each unit during a one year period of time. The actual quantity required will vary from location to location.



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