



**APPLICABLE TO ALL NOTED CARTER 3 & 4"  
HYDRANT COUPLERS AND IN-LINE CONTROL  
VALVES OF ALL TYPES**

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## **PRODUCT IMPROVEMENT**

All Carter hydrant couplers and in-line control valves have similar piston assembly designs. The seal on the piston shaft on early units was retained only by the piston spring. If one tried to defuel through the unit it was a possibility that the seal would become dislodged and cause a failure typically leakage through the vent port. A few years ago this seal design was revised to include an integral retention method. The same part number, 200770 was used since it was interchangeable with the previous design. Under certain pressure conditions this seal was still subject to failure hence a totally new design improvement was introduced in 2003. This product news bulletin outlines the changes required to units in service when they are subject to overhaul. The service manuals on current production units that are affected have been changed to cover the changes in detail. Older units are covered by this bulletin to be used in conjunction with the existing service manual. The older seal, 200770 will for a limited time be available as a spare part, however if other major parts are to be replaced it will be best to replace the entire piston assembly as noted herein.

### **CURRENT PRODUCTION MODELS**

Service Manuals have been changed and are available from Carter distributors or from the web site under Downloads for the following:

64800 - 3" Hydrant Coupler  
64802 - Digital 3" Hydrant Coupler.

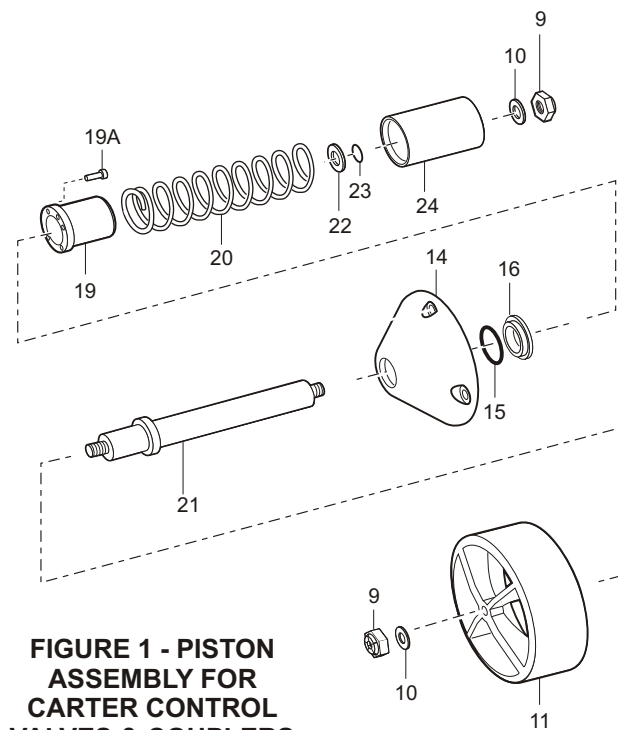
The following units all have the improved seal design and are not affected by this change:

64900 - 4" Hydrant Coupler  
64902 - 4" Digital Hydrant Couple  
64500, 64501, 64502, 64503, 64504, 64505 - 3" Control Valves  
64510, 64511, 64512, 64513, 64514, 64515 - 4" Control Valves.

**PHASING OUT & OUT OF PRODUCTION MODELS** - These units will be covered in detail in reference to the latest manual available on the web site or through a distributor.

UNIT	DESCRIPTION	SN	KIT NUMBER
60700-1	4" Hydrant Coupler - Air Reference	4134	KD60700-1-11
61024	4" In-line Valve - Air Reference	All	KD64124-2
64002	4" By-pass Valve - Air Reference	All	KD64002-5
64050	4" Digital In-line Control Valve	192	KD64124-2
64060	4" Digital By-pass Valve	128	KD64124-2
64080	3" In-line Valve - Air Reference	651	KD64080-2
64082	3" By-pass Valve - Air Reference	All	KD64082-5
64110	3" Digital In-line Control Valve	216	KD64080-2
64120	3" Digital By-pass Valve	All	KD64080-2
64124	4" In-line Valve - Air Reference	278	KD64124-2
64702	4" Digital Hydrant Coupler	112	KD60700-1-12

On units with serial numbers listed above and prior ones, if only the seal requires replacing check with Carter to determine if it is available. If so it can be replaced otherwise, replace items 9, 10, 11A or 11B, 12A or 12B, 13, 14 & 17-22 in Figure 1 initially with the appropriate kit shown above. Once this has been accomplished and on subsequent overhauls refer to Figure 1 for parts identification.



**FIGURE 1 - PISTON  
ASSEMBLY FOR  
CARTER CONTROL  
VALVES & COUPLERS**

Figure 1 applies to both 3 & 4" units. The table below will differentiate the differences in part numbers due to size.

The initial overhaul of an older unit will require the replacement of the entire piston assembly using the appropriate kit shown below. Thereafter, the specific part may be replaced.

The assembly instructions provided in the appropriate manual still applies except note items 19 is attached to item 14 with the six screws (19A) to retain items 15 & 16. The screws are very small so do not over tighten them.

ITEM	PART NUMBER	DESCRIPTION	USED ON
9	50FK-624	Nut	Both 3 & 4" units (Control Valves & Couplers)
10	GF960C818	Washer	Both 3 & 4" units (Control Valves & Couplers)
11	220666	Piston, Outer	3" units (Control Valves & Couplers)
	202334	Piston, Outer	4" units (Control Valves & Couplers)
12-13	Left intentionally blank		
14	221593	Retainer	3" Bypass Valves
	221598	Retainer	4" Bypass Valves
	221607	Retainer	3" Inline Valves
	221608	Retainer	4" Inline Valve & Coupler
	221641	Retainer	3" Couplers
15	203565	O-Ring	Both 3 & 4" units (Control Valves & Couplers)
16	221595	Seal, Shaft	Both 3 & 4" units (Control Valves & Couplers)
17-18	Left intentionally blank		
19	221594	Guide, Spring	Both 3 & 4" units (Control Valves & Couplers)
19A	NAS1351C04-4	Screw	Both 3 & 4" units (Control Valves & Couplers)
20	200757	Spring	60700-1, 64702, 64124, 64050, 64060, 64080, 64110, 64120, 64800, 64801, 64802
	221194	Spring	64002, 64082
	220005	Spring	64130, 64133, 64134, 64140, 64704, 64803
21	202290	Shaft, Piston	Both 3 & 4" units (Control Valves & Couplers)
22	202291	Washer	Both 3 & 4" units (Control Valves & Couplers)
23	MS29513-012	O-Ring	Both 3 & 4" units (Control Valves & Couplers)
24	200759	Piston, Inner	Both 3 & 4" units (Control Valves & Couplers)