

North American Adjustable Port Valves

Adjustable port valves are for control purposes only.
They are not for tight shutoff.

GENERAL INFORMATION

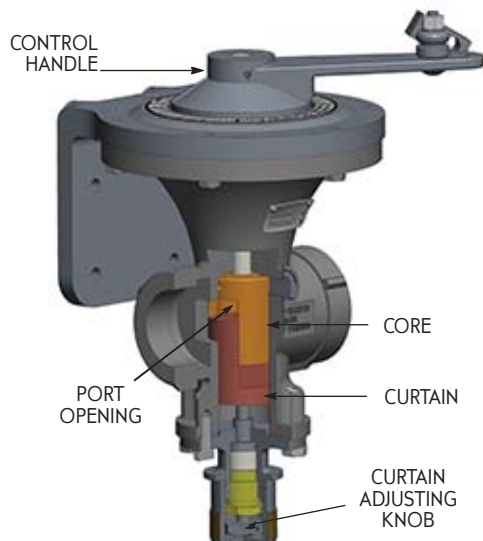
Adjustable Port Valves are ideal for automatic control of fuel or air flow to meet the requirements of modern instrumentation in combustion systems. The adjustable port feature permits sizing the valve to fit the application, after valve has been installed. Linkages can be adjusted for full or limited valve travel.

INSTRUCTIONS

gas, oil, steam, compressed air

Adjustable Port Valves are precision built and should not be subjected to unnecessary strains or rough handling. Provide proper pipe alignment by use of pipe hangers and supports. Instead of holding the valve body itself between jaws of a vise, screw valve onto a piece of pipe held in a vise. When installing valve in a pipe line, use a pipe wrench at the lugs provided.

Valve port should be adjusted so some pressure drop is observed across valve at high fire. To adjust valve port opening for required flow conditions, set linkage at full valve travel. Remove adjusting screw cover. For sizes 3/4" to 6" turn adjusting screw knob clockwise to increase or counterclockwise to decrease flow. For size 3/8" and 1/2" turn knob clockwise to decrease flow or counterclockwise to increase flow. This raises or lowers the curtain in the core, altering valve port opening.



Use two wrenches to tighten a pipe into the valve.



The packing nut should be tight to prevent valve from leaking around adjusting screw and it secures the adjusting screw in position, therefore it is difficult to operate the port adjustment by hand, necessitating use of a wrench.

Always assure packing nut is tightened to prevent leakage and always replace adjusting screw cover to prevent tampering after making any curtain adjustments.

1008A valves are factory lubricated with general purpose lithium #2 grease. For lubrication instructions see Sheet 1008A-3 (see Sheet 1010A-1 for oxygen use).

The table (right) shows the number of turns required for adjusting the curtain height from full open to fully closed.

Valve Size	Number of turns from full open to fully closed
3/8" and 1/2"	11
3/4"	14
1"	16
1 1/4" and 1 1/2"	23
2"	30
2 1/2"	35
3"	43
4"	60
6v	87

1008A REPLACEMENT PARTS

Starting in October 2009, the 1008 series valves were replaced with the redesigned 1008A series valves.

The differences between the 1008A and the 1008 valve designs are as follows:

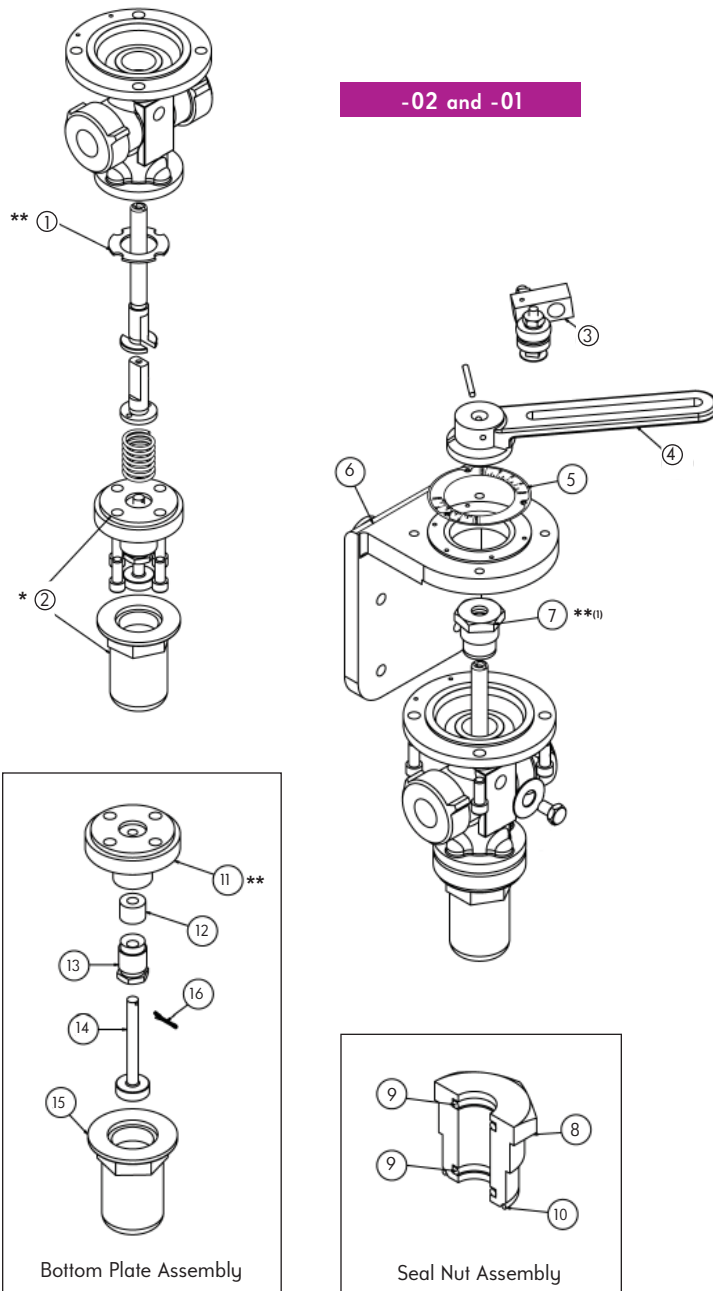
1. **The bottom plate and bottom plate gasket.** The old-style flat faced bottom plate and bottom plate gasket have been replaced with new raised face bottom plate and bottom plate gasket.
2. **The shaft seal with shaft seal nut.** The old style U-cup and U-cup retaining nut have been replaced by O-rings and O-ring seal nut.

The old-style 1008 **bottom plates and bottom plate gaskets** as well as the old-style **1008 U-cup shaft seal nuts and U-cup shaft seals** are no longer available as replacement parts. The new 1008A parts have been designed to fit into an

old-style 1008 valve and are required to repair any old-style 1008 series valve. However it is important to note that the old-style U-cup nuts do not work with the new O-rings. The old bottom plates do not work with the new bottom plate gaskets.

If an old-style 1008 bottom plate gasket or shaft seal requires replacement, the **new bottom plate and bottom plate gasket** or the new **shaft seal nut and O-ring seals** are required to repair and upgrade the 1008 series to be like the new 1008A series design.

The following table indicates the items required to repair and upgrade an old-style 1008 series valve.



PARTS LIST		-02 (3/8")	-01 (1/2")
1 **	Gasket	2-111323-11	2-111323-11
2 *	Bottom Plate Adjusting Screw assembly	2-11348-1	2-11348-1
3	Swivel Block Assembly	2-5021-2	2-5021-2
4	Handle	2-3706-10	2-3706-1
5	Indicator Dial	2-4349-1	2-4349-1
6	L Bracket Optimal U Bracket	2-05016-1 2-0588-1	2-0516-1 2-0588-1
7 ** ⁽¹⁾	Seal Nut assembly Standard (with O rings)	2-11334-1	2-11334-1
	Seal Nut assembly for Steam (with O rings)	2-11334-2	2-11334-2

SEAL NUT ASSEMBLY

8	Seal Nut Standard (less O rings)	2-11283-1	2-11283-1
9	Inner O Rings Standard (2) required	R520-4080-V	R520-4080-V
10	Inner O rings Steam (2) required	R520-4080-EP	R520-4080-EP
	Outer O Ring Standard	R520-4115-V	R520-4115-V
	Outer O Ring Steam	R520-4115-EP	R520-4115-EP

BOTTOM PLATE ADJUSTING SCREW ASSEMBLY

11 **	Bottom Plate	2-11324-1	2-11324-1
12	Packing	2-6563-1	2-6563-1
13	Packing Nut	2-0773-6	2-0773-6
14	Curtain Adjusting Screw	2-0450-1A	2-0450-1A
15	Adjusting Screw Cover	2-0449-1	2-0449-1
24	Cotter Pin	R570-0525-S	R570-0525-S

* The new bottom plate required to upgrade the 1008 series valve is available as a loose item or it comes included in the bottom plate adjusting screw assembly.

** Replacement parts required to upgrade an old-style 1008 series valve into a 1008A series valve. These parts are required to repair the shaft seal or bottom plate gasket seal on an old-style 1008 series valve (see Replacement Parts info on this sheet).

(1) This item must be removed with the handle facing down.

Note: Items with no balloon are not field replaceable.

1008A PART LIST

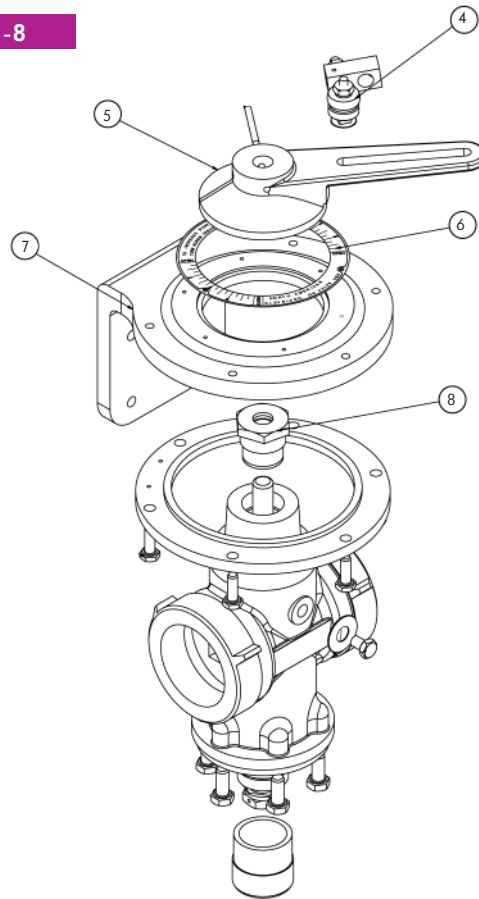
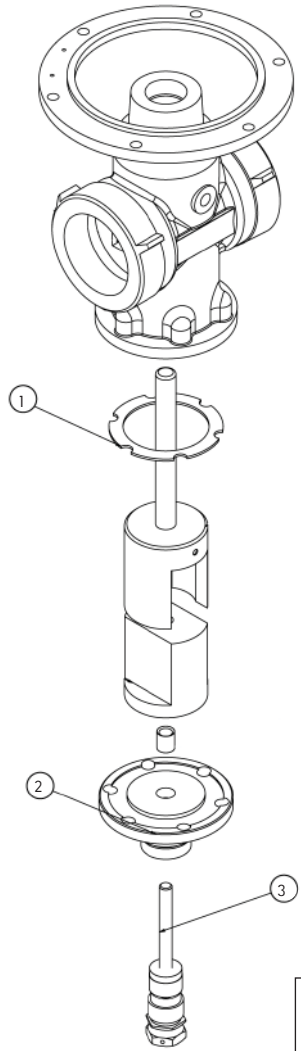
PARTS LIST		- 0 (3/4")	- 1 (1")	- 2 (1-1/4")	- 3 (1-1/2")	- 4 (2")	- 5 (2-1/2")	- 6 (3")	- 7 (4")	- 8 (6")
1	Gasket **	2-11323-11	2-11323-12	2-11323-13	2-11323-14	2-11323-15	2-11323-16	2-11323-17	2-11323-18	2-11323-19
2	Bottom Plate **	2-11325-2	2-11326-2	2-11327-2	2-11328-2	2-11329-2	2-11330-2	2-11331-2	2-11332-2	2-11333-2
3	Swivel Block assembly	2-5021-2	2-5021-2	2-5021-2	2-5021-2	2-5021-2	2-5021-2	2-5021-2	2-5021-2	2-5021-2
4	Adjusting Screw assembly	2-4888-1	2-4888-1	2-4888-1	2-4888-2	2-4888-2	2-4888-2	2-4888-3	2-4888-3	2-4888-4
5	Handle	2-3706-1	2-3706-1	2-3707-1	2-3707-1	2-3707-1	2-3707-2	2-3707-2	2-3707-2	2-3707-2
6	Indicator Dial	2-4348-1	2-4348-1	2-4347-1	2-4347-1	2-4347-1	2-4347-1	2-4347-1	2-4347-1	2-4347-1
7	L Bracket Optional U Bracket	2-0516-1 2-0588-1	2-0516-1 2-0588-1	2-0587-1 2-0589-1	2-0517-1 2-0590-1	2-0517-1 2-0590-1	2-0518-1 2-0591-1	2-0518-1 2-0591-1	2-0518-1 2-0591-1	2-0518-1 2-0591-1
8	Seal Nut assembly Standard ^{*(1)} (with O rings)	2-11334-1	2-11334-1	2-11335-1	2-11335-1	2-11335-1	2-11336-1	2-11336-1	2-11336-1	2-11336-1
	Seal Nut assembly for Steam ^{*(1)} (with O rings)	2-11334-2	2-11334-2	2-11335-2	2-11335-2	2-11335-2	2-11336-2	2-11336-2	2-11336-2	2-11336-2
SEAL NUT ASSEMBLY										
9	Seal Nut Standard (less O rings)	2-11283-1	2-11283-1	2-11284-1	2-11284-1	2-11284-1	2-11285-1	2-11285-1	2-11285-1	2-11285-1
10	Inner O Ring Standard (2) req'd	R520-4080-V	R520-4080-V	R520-4102-V	R520-4102-V	R520-4102-V	R520-4140-V	R520-4140-V	R520-4140-V	R520-4140-V
	Inner O Ring Steam (2) req'd	R520-4080-EP	R520-4080-EP	R520-4102-EP	R520-4102-EP	R520-4102-EP	R520-4140-EP	R520-4140-EP	R520-4140-EP	R520-4140-EP
11	Outer O Ring Standard	R520-4115-V	R520-4115-V	R520-4166-V	R520-4166-V	R520-4166-V	R520-4207-V	R520-4207-V	R520-4207-V	R520-4207-V
	Outer O Ring Steam	R520-4115-EP	R520-4115-EP	R520-4166-EP	R520-4166-EP	R520-4166-EP	R520-4207-EP	R520-4207-EP	R520-4207-EP	R520-4207-EP
ADJUSTING SCREW ASSEMBLY										
12	Curtain Adjusting Screw	2-0724-1A	2-0724-1A	2-0724-1A	2-4890-1	2-4890-1	2-4890-1	2-0792-1A	2-0792-1A	2-0783-1A
13	Collar	N/A	N/A	N/A	2-4889-1	2-4889-1	2-4889-1	2-0794-1A	2-0794-1A	2-0785-1A
14	Packing	2-6563-1	2-6563-1	2-6563-1	2-6563-2	2-6563-2	2-6563-2	2-6563-3	2-6563-3	2-6563-4
15	Packing Nut	2-0773-6	2-0773-6	2-0773-6	2-0773-3	2-0773-3	2-0773-3	2-0773-4	2-0773-4	2-0773-1
16	Adjusting Screw Knob	2-0725-1	2-0725-1	2-0725-1	2-0762-1	2-0762-1	2-0762-1	2-0793-1	2-0793-1	2-0784-1
17	Collar Roll Pin	N/A	N/A	N/A	R570-4130-S	R570-4130-S	R570-4130-S	R570-4180-S	R570-4180-S	R570-4220-S
18	Knob Roll Pin	R570-4130	R570-4130	R570-4130	R570-4135	R570-4135	R570-4135	R570-4190	R570-4190	R570-4230
19	Companion Flange	-	-	-	-	-	-	-	2-0855-1 (2 req'd)	2-3730-2 (2 req'd)
20	Flange Gasket	-	-	-	-	-	-	-	2-1295-4 (2 req'd)	2-1295-5 (2 req'd)
21	Flange Bolt	-	-	-	-	-	-	-	R066-3750(10 req'd)	R066-3750 (12 req'd)
22	Flange Nut	-	-	-	-	-	-	-	R510-2399(10 req'd)	R510-2399 (12 req'd)

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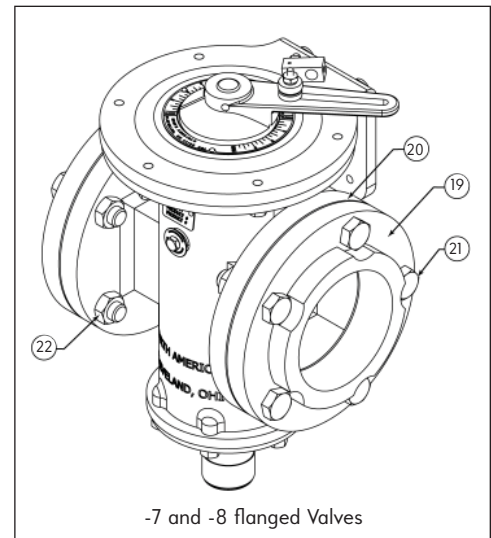
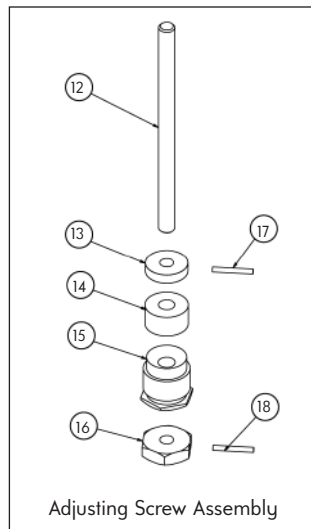
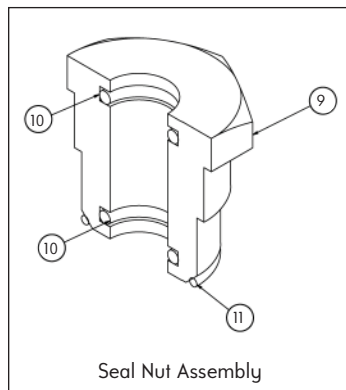
(1) This item must be removed with the handle facing down.

1008A PARTS LIST, *cont.*

-0 through -8



Note: Items with no balloon are not field replaceable.



WARNING: Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and insurance Underwriters recommendations, and care in operation.



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