

## VALVE TO FITTING RESTRAINT



**DUCTILE  
IRON**

*Eliminates  
Concrete  
Thrust  
Blocking  
of Valve*

*Clamps  
Valve  
Directly, to  
Fitting*

*Fits Most  
Push-On  
Valves for  
IPS-PVC  
Pipe*

### Engineered for Durability

#### Eliminate Concrete Thrust Blocks

With the HARCO Valve to Fitting Restraint System you can eliminate concrete thrust blocking of valves. This dramatically speeds the installation and allows for later access to the valve. When the valve is restrained directly to the Tee, simple concrete thrust blocking of the Tee provides for all thrust restraint. Alternatively, joint restraint of the fitting to the pipe can be accomplished with HARCO's other joint restraint products.

#### Stock Just One Size of Rings...

One size fits all. An easy thing to say but not an easy thing to do, especially when you are talking about restraining rings for push-on valves. Manufacturers such as American Flow Control/Waterous, AVK, Clow, Kennedy, Matco-Norca (10RT, 100RT and 200RTD), M&H and Nibco make push-on valves for use with IPS-

PVC pipe. The challenge is to find one ring that fits all the various combinations of feet and stiffeners that these manufacturers employ. With the HARCO system, you need to stock just one item to work with the valve manufacturer of your choice.

#### The HARCO Difference

HARCO's design clamps directly to the valve preventing movement, unlike other valve restraints. HARCO's back-up ring fits over the valve behind the bell and is connected via threaded rod to the fitting. Other valve restraint systems provide restraint bars that span the valve connecting the fitting to an *as cast* serration grip ring. The valve is not directly restrained and the *as cast* serrations provide inconsistent gripping of the pipe.



HARRINGTON CORPORATION • P.O. BOX 10335 • LYNCHBURG, VIRGINIA 24506

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PF106-110504

# VALVE TO FITTING RESTRAINT SYSTEM

Product Sheet

## Valve to Fitting Assembly Instructions

Items to be assembled:

- A - (1) Valve back-up rings consisting of two halves "TOP" (has small notch), "BOTTOM" (has large slot.)
- B - (2) HARCO I-Bolts with two low alloy nuts.
- C - (1) Push-on joint valve.
- D - (1) HARCO fitting with lugs.

Notes:

- HARCO recommends all assembly be done prior to placement in the ditch, although assembly in the ditch is possible.
- Not all valve brands and models require all slots provided on split rings.
- I-Bolt is custom length for valve to fitting restraint assembly.

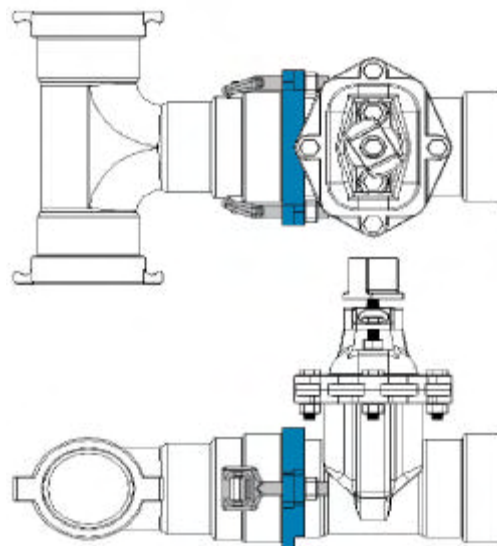
**Step 1:** Cut IPS-PVC pipe to a length which allows valve and HARCO fitting bells to contact flush against one another (pre-measuring valve and fitting bell depths is required).

**Step 2:** Insert pipe into valve bell first, then install HARCO fitting onto opposite end, making sure bell ends contact each other as shown.

**Step 3:** Assemble valve back-up ring around socket of bell so it seats against the valve "gasket race." The "BOTTOM" ring half is installed on the bottom of the valve, while the other half goes on from the top side.

**Step 4:** Slide HARCO I-Bolt through ring holes on either side, then hook the I-lets over lugs on the HARCO fitting. Thread low alloy nuts on to I-Bolts and tighten until bells are snug.

**Step 5:** Concrete thrust block fitting as required.



## Ordering Information

SIZE	PART NUMBER	WEIGHT
3"	820320	5
4"	820420	7
6"	820620	8
8"	820820	11

## Completed Installation



## Suggested Specifications

Valve to fitting restraint shall consist of a ductile iron (ASTM A536) valve back-up ring that fits behind the bell of the valve and threaded rod ending in an eyebolt and nuts that fit onto the lugs of the fitting. The bolts and nuts shall be made from either a low alloy steel as per AWWA/ANSI C111/A21.1 or ductile iron to ASTM A536. All valve restraint is to be supplied by the Harrington Corporation of Lynchburg, Virginia.



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