



Pipe Restrainers series 1100

1100C Bell Restrainers for AWWA C900 PVC Pipe and 1100S Bell Joint for IPS PVC Pipe
Sizes 4" - 48"

4" - 12" SERIES 1100 INSTALLATION INSTRUCTIONS



Assemble the spigot end of first pipe into the second pipe bell using standard procedure per pipe manufacturer.



Assemble one restrainer behind the bell of pipe. Evenly tighten the restrainer clamping bolts to the recommended torque, ensuring the gap between pads on both sides remain even. Use one of the Restraint rods as a guide to position Restraint on spigot end. Mark a reference line such that the Restraint rod ends extend past each nut approximately 0.50".



Assemble the second restrainer on the spigot end of pipe. After aligning second restrainer with the first one, tighten the clamping bolts to the recommended torque evenly such that the gap between pads on both sides remain even .



Insert the restraining rods through the restrainer ears. Place a washer (Provided and required only for sizes 8"-12") on each end of restrainer ear as shown. Snug tighten all nuts such that rods stick out approximately 0.50" past the nut on each end.

Caution: Do not over - tighten restraining nuts. Turn nut to hand tight plus half turn.

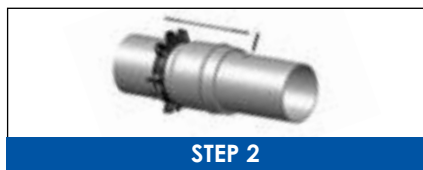
NOTE: Due to variability of PVC Pipe bell lengths, please contact Star Pipe Products if rod lengths are short.

RECOMMENDED TORQUE (CLAMPING BOLTS)	
PIPE SIZE (IN)	RANGE OF TORQUE (FT-LBS)
4"-12"	90-110

14" - 36" SERIES 1100 INSTALLATION INSTRUCTIONS



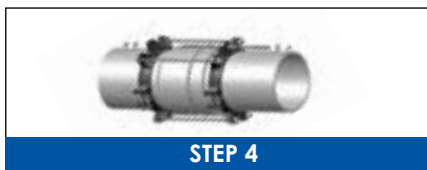
Assemble the spigot end of first pipe into the second pipe bell using standard procedure per pipe manufacturer.



Assemble one restrainer behind the bell of pipe. **Make sure that the open end of the restrainer ears are toward the joint.** Evenly tighten the restrainer clamping bolts to the recommended torque, ensuring the gap between pads on both sides remain even. Use one of the Restraint rods as a guide to position Restraint on spigot end. Mark a reference line such that the Restraint rod ends extend past each nut approximately 0.50". **NOTE: Due to variability of PVC Pipe bell lengths, please contact Star Pipe Products if rod lengths are short.**



Assemble the second restrainer on the spigot end of pipe. **Make sure the open end of the restrainer ears are toward the joint.** After aligning second restrainer with the first one tighten restrainer clamping bolts to the recommended torque.



Insert the restraining rods through the restrainer ears. Snug tighten all nuts against the washer on restrainer such that the spigot end is secured into the bell end and rod sticks out approximately 0.50" past the nut on each end. **Caution: Do not over-tighten restraining nuts. Turn nut to hand tight plus half turn.**

(TABLE B) CLAMPING BOLTS RECOMMENDED TORQUE		
PIPE SIZE (IN)	RANGE OF TORQUE (FT-LBS)	PIPE
14-36	130 min.	C900 PVC
14-16	200 min.	DIP

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STAR® PIPE PRODUCTS



Pipe Restrainers series 1100

1100C Bell Restrainers for AWWA C900 PVC Pipe
and 1100S Bell Joint for IPS PVC Pipe
Sizes 4" - 48"

42" - 48" SERIES 1100 INSTALLATION INSTRUCTIONS



STEP 1

Assemble the spigot end of first pipe into the second pipe bell using standard procedure per pipe manufacturer.



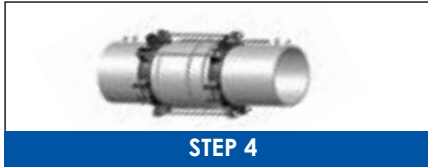
STEP 2

Assemble one restrainer behind the bell of pipe. **Make sure that the open end of the restrainer ears are toward the joint.** Evenly tighten the restrainer clamping bolts to the recommended torque, ensuring the gap between pads on both sides remain even. Use one of the Restraint rods as a guide to position Restraint on spigot end. Mark a reference line such that the Restraint rod ends extend past each nut approximately 0.50". **NOTE: Due to variability of PVC Pipe bell lengths, please contact Star Pipe Products if rod lengths are short.**



STEP 3

Assemble the second restrainer on the spigot end of pipe. **Make sure the open end of the restrainer ears are toward the joint.** After aligning second restrainer with the first one tighten restrainer clamping bolts to the recommended torque.



STEP 4

Insert the restraining rods through the restrainer ears. Snug tighten all nuts against the washer on restrainer such that the spigot end is secured into the bell end and rod sticks out approximately 0.50" past the nut on each end. **Caution: Do not over-tighten restraining nuts. Turn nut to hand tight plus half turn.**

(TABLE B) CLAMPING BOLTS RECOMMENDED TORQUE

PIPE SIZE (IN)	RANGE OF TORQUE (FT-LBS)	PIPE
42-48	130 min.	C900 PVC

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