



# Tru-Dual® Series 1610TD

Bell Restraint Harness for Ductile Iron & C900 PVC Pipe  
Split Serrated Restraint Ring, Split Non-Serrated Bell Ring

## Installation Instructions

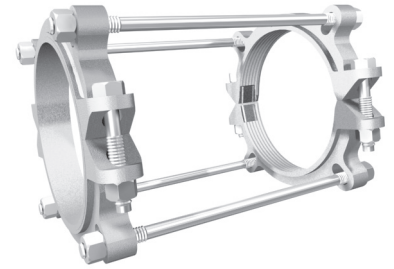
1. The Series 1600TD is designed for restraining ductile iron pipe and C900 PVC at push-on bell joints. It has a split, serrated restraint ring with heat treated inserts on the spigot and a split non-serrated ring behind the bell.

All EBAA products intended for installation on ductile iron pipe are designed for and limited to use on ductile iron pipes that comply with the requirements of ANSI/AWWA C151/A21.51 and have a Brinell Hardness or equivalent measurement value that does not exceed 230BHN. **These requirements apply to the entire pipe wall profile at all restraining wedge engagement points and to the full penetration depth of each restraining wedge.\***

2. Assemble the push-on joint per the pipe manufacturer's instructions.
3. Install both halves of the non-serrated bell ring around the pipe behind the bell. Install the side bolts and tighten each to 60 ft-lbs (110 ftlbs on 8 inch, 10 inch and 12 inch).
4. Slide the bell ring toward the bell so that it fits snugly behind the bell.
5. Remove the side bolts from the serrated restraint ring. Use the tie bolts to determine the proper location of the restraint ring on the spigot. Allow enough room on the tie bolt to fully engage the nuts.
6. Install both halves of the restraint ring at the proper location, tapping each half into place. Make sure that the complete ID of the ring is touching the pipe before installing the side bolts. Tighten the side bolts evenly to 60 ft-lbs torque (110 ft-lbs on 8 inch, 10 inch and 12 inch).
7. Place nuts on the tie bolts and tighten until they are snug. Allow enough room on the tie bolt to fully engage the nut with several threads showing. Do not tighten these bolts enough to force the spigot further into the bell of the joint.

\*To learn more about this addendum, please visit: <https://ebaa.com/spec/dip>

APPROXIMATE SHIPPING WEIGHT: 53.80 lbs.



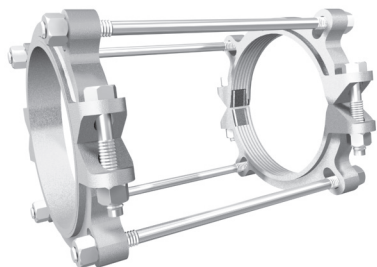
## CONTENTS

| Qty. | Description                       |
|------|-----------------------------------|
| 1    | 10 in. Size 1500TD Restraint Ring |
| 1    | 10 in. Size 1600 Split Bell Ring  |
| 4    | Low Alloy Steel Tie Rods w/ Nuts  |

## Restraints Made in The USA

For use on water or wastewater pipelines subject to hydrostatic pressure and tested in accordance with either AWWA C600 or ASTM D2774

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