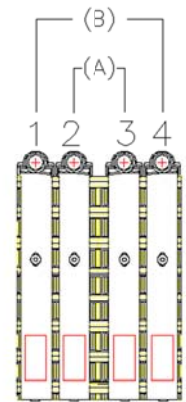




Recommended practice for installation of Heavy Duty “HD” and Heavy Duty “MD” Hubless Cast Iron Pipe Couplings manufactured by Ideal Clamp Products, Inc.

A. Clamp and Gasket Installation

- 1) Pipe ends are to be cut as squarely and smoothly as possible.
- 2) Check coupling and gasket for foreign material, clean if necessary.
- 3) Insert gasket over pipe or fitting until end of pipe or fitting butts against the gasket’s integrally molded shoulder.
- 4) Slide the coupling assembly over the other pipe or fitting to be joined.
- 5) Insert the second pipe or fitting into the gasket until both ends of pipe or fittings butt against the integrally molded shoulder in the center of gasket.
- 6) Slide the coupling assembly into position centered over the gasket. At this point, it is recommended to hand tighten the clamp and shield assembly with a wrench.



Sizes 1 1/2", 2", 3" & 4"

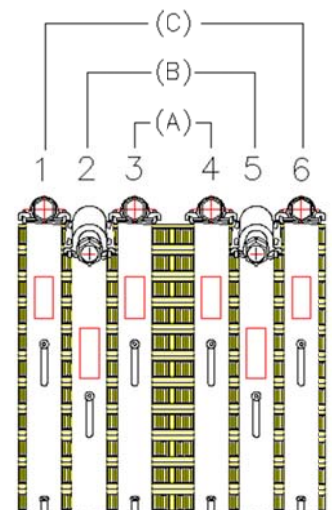
Final tightening is described below.

- 7) Use a preset, or preferably, a dial indicating type torque wrench and tighten clamps to 80 inch-pounds of torque using the procedure below.
- 8) Coupling sizes 1 1/2", 2", 3", and 4" have four clamps.
**First the inner clamps “A” are to be tightened alternately in 20 lbf-in increments until the recommended 80 lbf-in is reached. Then, the outer clamps “B” are tightened alternately in 20 lbf-in increments until the recommended 80 lbf-in is reached.

** When O.D. difference between pipe and fitting is visibly different the following torque pattern is recommended 1-3, 2-4. (This Assumes min. \varnothing pipe is under 1 & 2 as shown, if not reverse sequence).

- 9) Coupling sizes 5", 6", 8" and 10" have six clamps.
** First the inner clamps “A” are to be tightened alternately in 20 lbf-in increments until the recommended 80 lbf-in is reached. Next, the middle clamps “B” are to be tightened alternately in 20 lbf-in increments until the recommended 80 lbf-in is reached. Finally, the outer clamps “C” are to be tightened alternately in 20 lbf-in increments until the recommended 80 lbf-in is reached.

** When O.D. difference between pipe and fitting is visibly different the following torque pattern is recommended 1-4, 2-5, 3-6. (This Assumes min. \varnothing pipe is under 1, 2 & 3 as shown, if not reverse sequence).



Sizes 5", 6", 8" & 10"

B. NOTES:

- 1) For installation details inside and outside building, see CISPI 310.