



**Total Piping Solutions, Inc.**  
 1760 Haskell Road  
 Olean, New York 14760  
 Tel: 716-372-0160  
 Fax: 716-372-1767  
 E-Mail: sales@tps.us  
 Visit Our Website: <http://tps.us>

## Installation Instructions EZ-MAX<sup>®</sup> PLUS Pipe Repair Clamp

MEETS OR EXCEEDS AWWA C230 FOR FULL  
 ENCIRCLEMENT REPAIR CLAMPS



The EZ-MAX PLUS Repair Clamp is an extended range wrap-around 360° repair clamp capable of repairing and reconnecting pipe of the same diameter. The EZ-MAX PLUS Repair Clamp comes ready to install (open and wrap around the pipe), and the product requires no disassembly prior to installation.

FORM#: EZMAX INST 05-11

## Specifications: EZ-MAX<sup>®</sup> PLUS 4000 Series Pipe Repair Clamps

**EZ-MAX Plus Stainless Steel Repair Clamp:** The EZ-MAX PLUS Repair Clamp is a non-welded wide range repair clamp capable of repairing and reconnecting pipes of the same diameter. The EZ-MAX PLUS Repair Clamp offers an efficient range adjustable band with a pressure assisted waffled mat-type gasket. The band shall be capable of repairing leaks, holes or splits in cast iron, ductile, steel, copper, PVC and asbestos cement pipe materials and shall be suitable for re-rounding and reinforcement of damaged or polyethylene pipe.

**Size Range:** Available in nominal diameter ranges of 1.5 to 12 inches for all pipe classes as indicated in the chart on following pages. Currently available in 6, 9, 12, 15 and 24 inch widths. All repair clamps will be capable of handling a range of eight-tenths of an inch (0.8) or 100 % more range than conventional repair clamp designs. This range enhancement allows for a potential inventory reduction of up to 50 %.

**Clamp Body, Integrated Lugs and Spanner Plate:** Non-welded design with the band and lug system fully integrated as a common assembly. Materials are of a type 304 (18-8) grade stainless steel per ASTM A240. The type 304 (18-8) stainless steel gasket spanner plate (gasket bridge) is mechanically attached to the band eliminating the need to glue or molding of the metal plate to the gasket.

**Lug Material:** The patented type 304 (18-8) stainless steel cold formed lug system is completely integrated with the band material and is held in form by high impact ABS plastic mono-block retainers. The clamp lugs are equipped with anti-rotation lock teeth. The reverse lug clamping mechanism allows for the clamp to operate over an extended range of eight-tenths of an inch (0.8"). This feature allows the clamp to accommodate nearly every pipe class within a nominal range. The patented low profile lugs eliminate the need for extra excavation and under-dig for wrench clearance.

**Pressure-Assisted Mat-type Gasket:** The gasket is of an NSF-61 approved EPDM compound. The mat-type gasket design is equipped with pressure-assisted sealing bands that are hydraulically actuated by water pressure. The sealing bands prevent migration of dirt and water across the width of the clamp.

**Gasket Attachment:** The gasket is mechanically attached to the band with a series of non-conductive fasteners located at the edge of the sealing area. This attachment method eliminates the need for gluing and provides insulation from metallic pipe materials. The single piece gasket is molded to include a lap-type tapered end for easy installation and positive sealing.

**Nuts and Bolts:** Replaceable drop-in nuts and bolts of ASTM F593-304 Grade Stainless Steel with yield strengths that conform to all nationally recognized standards. Bolts are protected with No-Gall Dry Lube. **(DO NOT LUBRICATE BOLTS.)**

**Performance and Testing:** When properly installed on de-scaled pipe with structural integrity intact, the repair clamp will seal or reconnect pipes of the same diameter at working pressure up to 150 psig. NOTE: No more than 3/8 inch gap allowed if using clamp to reconnect pipe ends. All products are proof-tested to a minimum of 1.5 times working pressure or 225 psig. (COMPLIANCE WITH AWWA C230 FOR FULL ENCIRCLEMENT REPAIR CLAMPS.)

**Installation:** The EZ-MAX PLUS 4000 Repair Clamp requires no disassembly. The clamp is easily wrapped around the pipe, can be slid over the break, and offers a quick-set lug system that requires either two, three, four or six bolts to be tightened to the required torque. The clamp is designed so that all work can be performed from the top side of the pipe. (NO DISASSEMBLY REQUIRED.)

**Advisory Information on Product Performance:** Repair clamp applications for pipe line repairs are wide and varied. The service performance of the full encirclement repair clamp is dependent on a number of variables including: size and type of repair; the structural integrity of the pipe; pipe material; pipe diameter; the pipe line content; surface finish; temperature; and working pressure of the piping system. Due to the number of variables involved, it is recommended that the repair clamp manufacturer be consulted in regards to the repair clamp model selection, proper application, and the anticipated performance of the repair clamp for specific end-user pipe repair needs prior to product purchase and usage.



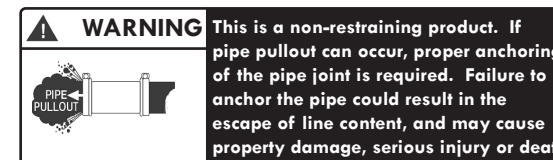
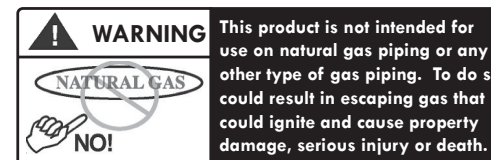
**Total Piping Solutions, Inc.**  
 1760 Haskell Road  
 Olean, New York 14760  
 Tel: 716-372-0160  
 Fax: 716-372-1767  
 E-Mail: sales@tps.us  
 Visit Our Website: <http://tps.us>



Patented and Trademarked by  
**Krausz Industries, Ltd.**

NOTE: For specific information, dimensions or special applications on the EZ-MAX 4000 series, consult Total Piping Solutions, Inc.

EZ-MAX PLUS now available with CC or IP Threaded Outlets from 3/4" to 2" in diameter. Visit our website or call one of our conveniently located sales offices for additional information and availability.



Specifications

## Installation

1. Begin by selecting the EZ-MAX PLUS Repair Clamp that best fits the pipe diameter. Note: The EZ-MAX PLUS Repair Clamp is designed for use on nearly all pipe types and classes that conform to AWWA standards (including polyethylene pipe in wall thickness greater or equal to SDR 17).
2. Thoroughly de-scale and clean the outer pipe surface prior to wrapping the repair clamp around the pipe. The outer pipe surface must be free of dirt, corrosion and debris.
3. If possible, place a reference mark on the pipe a measured distance from the break or leak to facilitate locating the clamp.
4. With bolts facing away from the installer, open the repair clamp by loosening the nuts, so they are flush with the tops of the bolts (removal of nuts is not required). Partially compress the lug assembly, pull upwards on the lug compression beam and unlatch the lug assembly allowing the clamp to extend to a fully open position.
5. Position the clamp around the pipe centered over or adjacent to the break or leak. (Note: The EZ-MAX PLUS has sufficient range to allow for assembly next to the damaged area of the pipe or break and can be slid into position as long as the pipe surface has been lubricated.)
6. Make sure that the tapered end of the gasket is on the surface of the pipe and is smoothly in place. For rough surfaced pipe such as ductile iron and A/C pipe, lubricant must be used on the gasket prior to wrapping the repair clamp around the damaged area of the pipe.
7. Once the band is around the pipe, reengage the compression beam over the lug assembly by pushing it forward until it clicks in place twice. Tighten the compression nuts, finger tight, making sure the lock teeth are aligned. Completely rotate the clamp around the pipe in the direction of the nuts to insure a smooth gasket surface is achieved along the tapered end of the gasket.
8. Place the nut, bolt and lug assembly in a position that allows for easy tightening of the bolts. Make sure that the reference mark on the pipe is measured to the middle of the clamp.
9. Tighten all the nuts, working from the center of the lug assembly towards the ends of the clamp. The leak should stop as the center nut or nuts become tight. Note: Do not lubricate bolts as this will void product warranty.
10. Torque all nuts as directed on the product label to the recommended torque and re-torque to check that the tightness is as even as possible.
11. Torque Requirements are as follow:
  - 1.5 to 2.5 inch . . . . . 30 ft.-lb.
  - 3 inch . . . . . 40 ft.-lb.
  - 4 to 5 inch . . . . . 50 ft.-lb.
  - 6 inch . . . . . 60 ft.-lb.
  - 8 inch . . . . . 70 ft.-lb.
  - 10 to 12 inch . . . . . 100 ft.-lb.

Part Number	Nominal Diameter (inch)	Width (inch)	Range (inch)	Approx. Weight (lbs.)
4006-0216-150	1.5"	6"	1.86 – 2.16"	3
4006-0265-150	2"	6"	2.35 – 2.65"	4
4006-0315-150	2.5"	6"	2.85 – 3.15"	4
4009-0425-150-EXT	3"	9"	3.42 – 4.25"	8
4009-0527-150-EXT	4"	9"	4.47 – 5.27"	9
4009-0560-150-EXT	4-5"	9"	4.80 – 5.60"	9
4009-0630-150-EXT	6"	9"	5.50 – 6.30"	11
4009-0740-150-EXT	6"	9"	6.60 – 7.40"	11
4009-0764-150-EXT	6"	9"	6.84 – 7.54"	12
4009-0860-150-EXT	8"	9"	7.80 – 8.60"	12
4009-0940-150-EXT	8"	9"	8.60 – 9.40"	13
4009-0980-150-EXT	8"	9"	9.00 – 9.80"	14
4009-1153-150-EXT	10"	9"	10.73 – 11.53"	17
4009-1215-150-EXT	10"	9"	11.35 – 12.15"	17
4009-1355-150-EXT	12"	9"	12.75 – 13.55"	21
4009-1440-150-EXT	12"	9"	13.60 – 14.40"	22
4012-0527-150-EXT	4"	12"	4.47 – 5.27"	12
4012-0560-150-EXT	4-5"	12"	4.80 – 5.60"	12
4012-0630-150-EXT	6"	12"	5.50 – 6.30"	15
4012-0740-150-EXT	6"	12"	6.60 – 7.40"	15
4012-0764-150-EXT	6"	12"	6.84 – 7.64"	15
4012-0860-150-EXT	8"	12"	7.80 – 8.60"	18
4012-0940-150-EXT	8"	12"	8.60 – 9.40"	18
4012-0980-150-EXT	8"	12"	9.00 – 9.80"	18
4012-1153-150-EXT	10"	12"	10.73 – 11.53"	21
4012-1215-150-EXT	10"	12"	11.35 – 12.15"	21
4012-1355-150-EXT	12"	12"	12.75 – 13.55"	22
4012-1440-150-EXT	12"	12"	13.60 – 14.40"	23

Part Number	Nominal Diameter (inch)	Width (inch)	Range (inch)	Approx. Weight (lbs.)
4015-0527-150-EXT	4"	15"	4.47 – 5.27"	15
4015-0560-150-EXT	4-5"	15"	4.80 – 5.60"	15
4015-0630-150-EXT	6"	15"	5.50 – 6.30"	16
4015-0740-150-EXT	6"	15"	6.60 – 7.40"	19
4015-0764-150-EXT	6"	15"	6.84 – 7.64"	19
4015-0860-150-EXT	8"	15"	7.80 – 8.60"	20
4015-0940-150-EXT	8"	15"	8.60 – 9.40"	22
4015-0980-150-EXT	8"	15"	9.00 – 9.80"	22
4015-1153-150-EXT	10"	15"	10.73 – 11.53"	27
4015-1215-150-EXT	10"	15"	11.35 – 12.15"	27
4015-1355-150-EXT	12"	15"	12.75 – 13.55"	34
4015-1440-150-EXT	12"	15"	13.60 – 14.40"	34
4024-0527-150-EXT	4"	24"	4.47 – 5.27"	24
4024-0560-150-EXT	4-5"	24"	4.80 – 5.60"	24
4024-0630-150-EXT	6"	24"	5.50 – 6.30"	29
4024-0740-150-EXT	6"	24"	6.60 – 7.40"	29
4024-0764-150-EXT	6"	24"	6.84 – 7.64"	29
4024-0860-150-EXT	8"	24"	7.80 – 8.60"	35
4024-0940-150-EXT	8"	24"	8.60 – 9.40"	35
4024-0980-150-EXT	8"	24"	9.00 – 9.80"	35
4024-1153-150-EXT	10"	24"	10.73 – 11.53"	42
4024-1215-150-EXT	10"	24"	11.35 – 12.15"	42
4024-1355-150-EXT	12"	24"	12.75 – 13.55"	54
4024-1440-150-EXT	12"	24"	13.60 – 14.40"	54

