Installing JCM Universal Clamp Couplings

Universal Clamp Couplings provide a safe, fast, permanent repair to a wide variety of pipelines.

Simple steps make installations successful, lasting the life of the pipeline.

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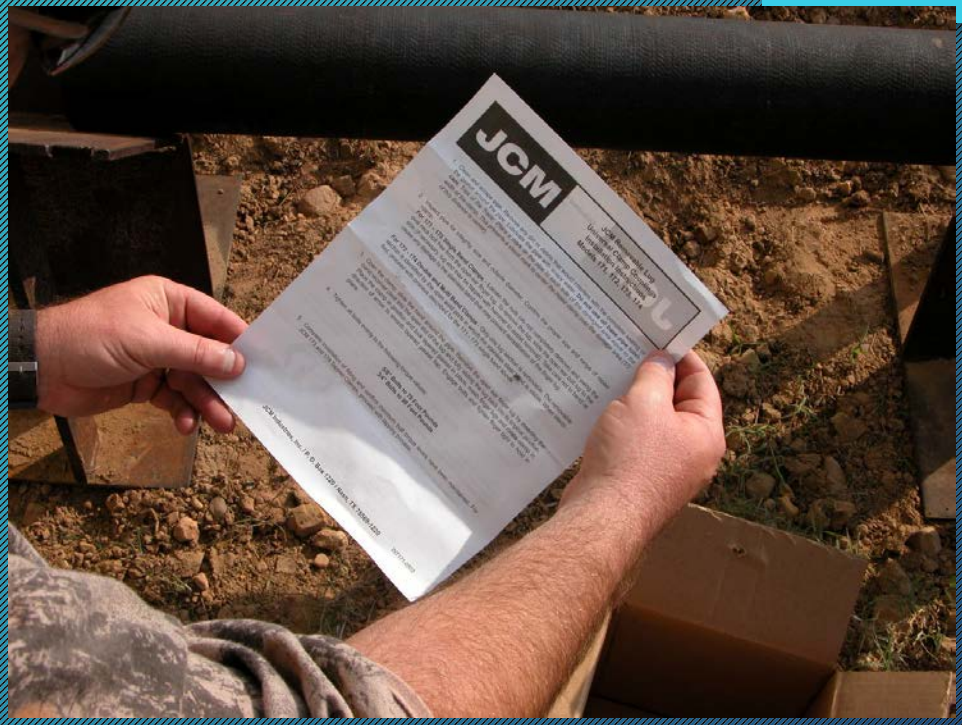
Before installing the clamp, review installation instructions. Instructions include the step by step procedure to pipe preparation, clamp installation and bolt torque requirements.



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Begin the application by carefully excavating the repair area; following all applicable trench preparation procedures.

Scrape and clean the repair area. Using a wire brush will help remove any hardened debris that may interfere with the gasket seal.

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Tricks of the Trade – Pipe Preparation and Inspection

Always clean and lubricate the pipe with water or soapy water.

Inspect the relative condition of the pipe. Confirm that the damage is not severe to warrant full replacement.

Remove any clumps of dirt or debris that may interfere with the sealing of the gasket.

Using a mirror will aid in the inspection of the back and underside of pipelines in narrow or limited excavation areas.

Leave sufficient pressure on a broken line to prevent intrusion of foreign matter to prevent line contamination.

Drill holes in the ends of splits or crack to relieve forces which could cause splits to continue.

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After the pipe has been cleaned, measure the circumference of the pipe to confirm the “outside diameter” to the “range” printed on the universal clamp coupling.

Use an O.D. tape or a flat narrow tape that has no elasticity.

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After measuring the pipe, confirm the size and range printed on the box label and…

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… the clamp label. If the measured O.D. of the pipe falls within the range indicated on the clamp, installation should proceed.

If the measured O.D. falls outside the indicated range, contact distributor or manufacturer, provide the pipe diameter and clamp size and they will advise installation technician at that time.

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- Upon removal from the packaging, inspect the clamp for condition.
- Ensure that gasket is in good shape, all bolts, nuts and washers are present.
- Inspect for any warping or shipping damage.

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Loosen the nuts (do not completely remove); swing the bolt free from the open ear finger lug.

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Open the clamp.

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Lubricate the pipe surface with water or soapy water mixture. Do not use a oil base pipe lubricant. The oil creates a film between the gasket and the pipe preventing a water tight seal.

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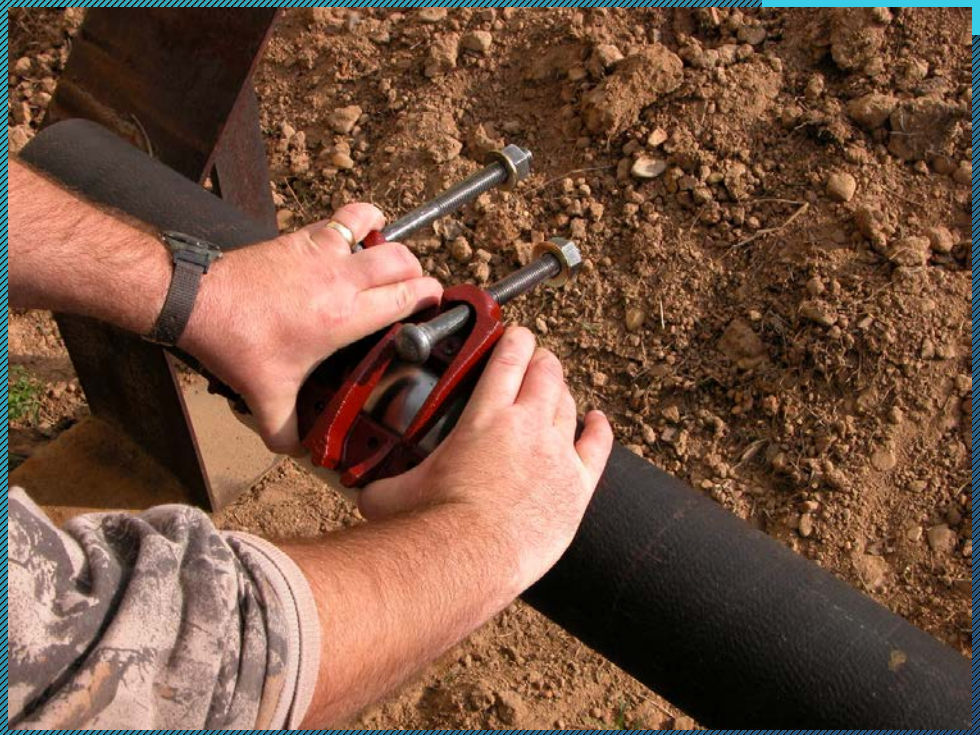
Wrap the clamp around the pipe.



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Mesh fingers and engage bolts into open ear lugs. Do not tighten bolts.

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Rotate clamp in direction of the arrow to ensure gasket is laying flat – crimps and folds will create a leak channel and the repair will fail (eventually).

If rotation is not possible due to space conflicts, visually inspect the tapered gasket flap to make sure it is flat under the clamp.

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Tighten bolts with wrench to the recommended bolt torques.

Confirm proper torque levels with torque wrench.

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For the 171 Removable Lug is the Open Ear Lug. Note the Open Slots for the oval neck bolts. This is the lug section that is removable.

To remove the lug, slide the lug to the side.

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If necessary, lug end may be tapped with hammer or wrench to loosen and assist removal.

Take care not to bend or cause any damage to the stainless band that may prevent reinstallation of the finger lug.

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When the lug has been removed, set it aside in a clean, safe place free from dirt, sand or debris that could impede reinstallation of the lug.

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Open the clamp fully. Wrap the thin stainless steel band around the pipe. Sliding the lug free end through any narrow, restricted or rockbound areas.

Lubricate the gasket and pipe with water/soapy water to make rotation of the gasket on the pipe easier.

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When clamp is installed around the pipe, reinstall the open ear lug onto the stainless receiver band. Again, if necessary, gently tap the lug with a hammer or wrench to start it back onto the band.

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Rotate clamp in direction of the arrow to ensure gasket is laying flat – crimps and folds will create a leak channel and the repair will fail (eventually).

If rotation is not possible due to space conflicts, visually inspect the tapered gasket flap to make sure it is flat under the clamp.

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Tighten bolts with wrench to the recommended bolt torques.

Confirm proper torque levels with torque wrench.

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Tricks of the Trade – Clamp Installation

Place a reference mark on the pipe back from the damaged area to help center the clamp over the break. Clamps provide maximum performance when centered over damaged area.

Breaks involving deflected pipe require a wider clamp.

Damage involving large holes or massive pitted areas – use a stainless steel or galvanized plate over the hole, under the clamp to provide the gasket a sealing surface.

Clamp performance drops when gap between pipe ends is larger than 1/2”. Use a stainless steel spacer (thin gauge stainless) to fill or place over the gap