



Double Chain Clamp Manual

Model 261

About Us

We appreciate your business!

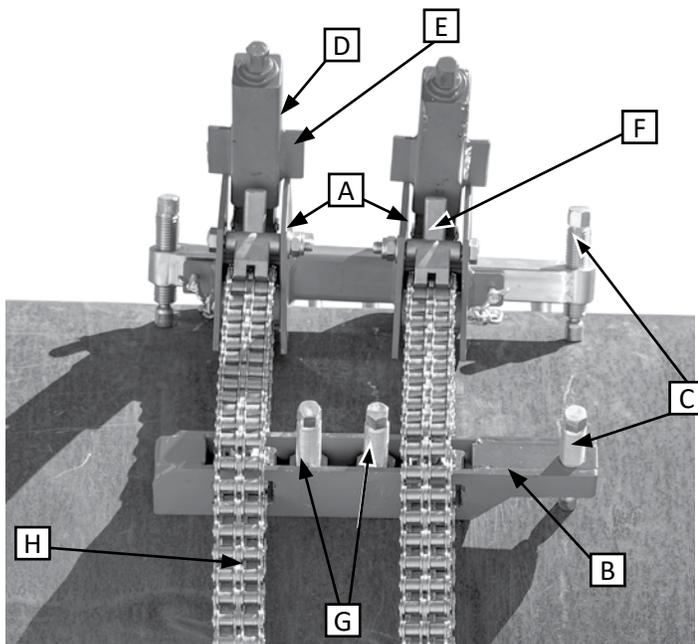
Congratulations on your new SAWYER product. We are proud to have you as our customer and will strive to provide you with the best service and reliability in the industry. This product is backed by our extensive warranty and world-wide service network. To locate your nearest distributor or service agency, please contact us at the phone number and address listed on the bottom of each page.

You are in good company!

Sawyer Manufacturing Company is the world leader in the design and manufacture of pipeline and welding equipment and has been since 1948. Sawyer equipment has become a standard in the industry and continues to set the benchmark for quality and durability.

This user operation manual has been made to instruct you for the best use and operation of your Sawyer product. Your satisfaction with our products is our main goal. Please read this entire manual carefully, noting all tips, notes and warnings. Safety always comes first.

Parts Diagram



- | | |
|------------------|--------------------------|
| A. Main Block | E. Fine Adjuster Wings |
| B. Jack Bars | F. Chain Lock Mechanism |
| C. Jack Screws | G. Chain Tightening Bolt |
| D. Fine Adjuster | H. Chain |

WARNING

WARNING: Alignment handle is for alignment only. All reforming and aligning is to be done with jack screws.

CAUTION

CAUTION: Sawyer Manufacturing offers a precision chain clamp for the mating of two individual pipes together for easier welding. It is not intended to be used as an individual support or to lift the pipes. The chain clamp should only be used within its stated size range. All jack bars should face the same way and come in full contact with the pipes before final welding.

Record the following information for warranty purposes:

Where purchased: _____

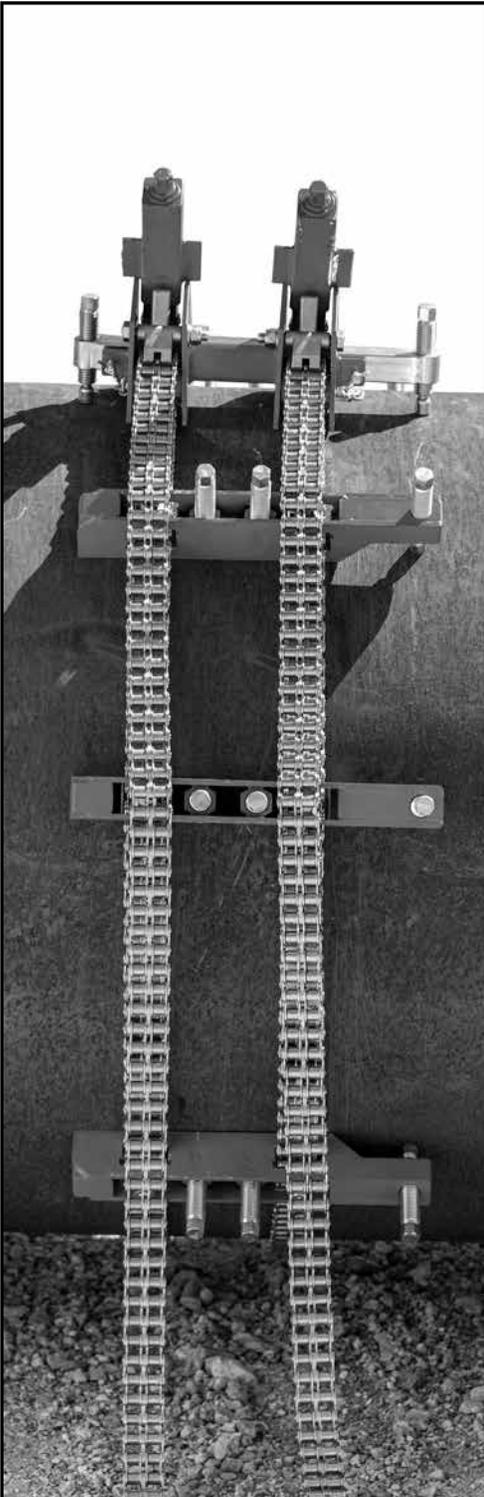
Purchase date: _____

Warranty

All products manufactured by or for Sawyer Manufacturing Company are guaranteed against defects due to faulty workmanship or materials for twelve months from the date of purchase.

This guarantee is limited to the repair or replacement of any parts found to be defective, and no other liability—expressed, implied, or contingent—is assumed.

Installation



Installing the Clamp on the Pipe

- 1.** Lay out the clamp on the floor or table (with a level surface) with Jackbars facing down. Make sure all Jackscrews are lightly touching the floor and the Jackbars are not elevated off the floor.

The Double Chain Clamp has one (1) or more Double Main Blocks containing two (2) Chain Ends and Chain Locks. A Jackbar protrudes out of the side of the Main Block to assist with the alignment and reforming processes.
- 2.** Evenly space the Jackbars along the Chain and tighten both Chain Lock hex screws located on the Jackbar to secure the Jackbars in position on the Chain. Adjust all Jackscrews to make sure they are lightly touching the floor and the Jackbar is not raised off the floor.
- 3.** Take the Chain Locks which are located on both sides of the Main Block out of the support holes and leave dangling until it is time to lock the Chain in position.
- 4.** Lower the clamp over each side of the pipe (using a crane if required). Pull the clamp over the pipe if there is not enough clearance above the pipe to lower the clamp down on the pipe with a crane.
- 5.** Fit the clamp on pipe with the end of the Jackbars protruding from the end of the pipe by about 25mm.
- 6.** Adjust the clamp so the Main Block is at a convenient height (usually waist height).
- 7.** Place the Fine Adjustments Wings into the notches of the Main Block.
- 8.** Install the Chain Locks into the Main Block over the chains.
- 9.** Pull both Chains through the Main Block until both chains are tight against the side of the pipe or vessel. The lengths of the excess on each chain should be equal.
- 10.** Ensure the chain is locked into place

Installation

- 11.** Move the other section of the pipe (to be welded) forward until pipe rests on the Jackscrews. If there is too much hi-lo, it may be necessary to remove some of the out-of-roundness of the mating pipe to fit the pipe to the clamp.

Caution: It should never be necessary to tighten every Jackscrew. Tighten only those Jackscrews where the highs in the pipe exist. When adjusting the pipe diameters to match up to each other, it may be necessary to loosen some Jackscrews that were tightened previously.

Caution: Do not attempt to adjust all Jackscrews at the same time to remove the high points.

- 12.** Tighten each Jackscrew a little at a time. Go around the Vessel as many times as necessary until you have a good fit-up.

Caution: Do not tack weld the vessels before a good fit-up is achieved all the way around the vessel. Use a HiLo gauge to check the HiLo of the pipe.

- 13.** When possible, completely weld the weld joint on inside of the vessel before removing the clamp. This eliminates the tacking of the weld joint on the outside of the pipe or vessel. When inside welding of the weld joint is not possible, the Jackbars should be arranged to obtain an 80% weld joint on the outside of the vessel.

Note: If it is not possible to weld the inside first, we suggest that all unrestricted areas of the weld joint be welded on the outside of the pipe or vessel before removing the clamp. This will help prevent cracking of the skip-welds.

- 14.** Raise the Jackscrews 5mm or 6mm off the vessel surface before removing the clamp.

- 15.** Reverse the procedure used to install the clamp to remove the clamp.

Note: An optional pull-lift (come along) can be supplied to assist with installation on larger pipes. Pull lifts are fairly self explanatory, but if any assistance is required, please contact sales@sawyermfg.com for more information.

Operation

This information is supplied as a guide only. As a distributor of Sawyer Mfg. Co. products, it is imperative that you thoroughly check the content of this guide before reproducing it to ensure it complies with all necessary guidelines in your own country.

Sawyer Mfg. Co. Double Chain Clamps have full CE Certification.

Sawyer Mfg. Co. Double Chain Clamps do not come with a Hydraulic option, due to the increased safety concerns of the CE process. The uncontrolled stress on the chain could, potentially, cause a chain to sever and result in serious injury. As a result of these increased safety concerns, we now offer an adaption to the main block which uses the supplied torque wrench (set to the correct pressure) with which to tighten the chain.

SIZE GUIDE

Part Number	Number of Main Blocks (Subject to Change per Customer Requirements)	Number of Jack Bars	Pipe Size (Inches)
261-1036	1	9	10"-36"
261-1048	1	12	10"-48"
261-1054	1	14	10"-54"
261-1060	1	16	10"-60"
261-1072	1	20	10"-72"
261-1084	1	24	10"-84"
261-1096	2	28	10"-96"
261-10108	2	32	10"-108"
261-10120	2	36	10"-120"
261-10132	2	39	10"-132"
261-10144	2	42	10"-144"

For Stainless Steel, add "SS" to the end of the product code.

For larger sizes, contact sales@sawyeremfg.com with your requirements for a tailored quotation

Safety

1. Sawyer Mfg. Co. Double Chain Clamps are not intended to support and/or lift the entire pipe.
2. Reforming and aligning capability will vary depending on the pipe diameter, wall thickness, and material tensile strength.
3. All Jack Bars must be in contact with the pipe before commencing any procedures.
4. The Level and Support Device should never be used as sole support for the pipe, fitting or valve.
5. The Clamp should be fully inspected before each use.
6. Two people are required to operate these clamps.
7. Sawyer Mfg. Co. Double Chain Clamps should never be used on pipe sizes outside the stated range. Modification of size range by adding/removing chain and/or Jack Bars can ONLY be done by a trained Sawyer Mfg. Co. engineer.
8. Failure to comply with the above conditions will void any warranty issued.