

# **Rotary Pipe Cutter**

For cutting steel, ductile iron and cast iron pipe

Applies to: 03240, 03242, 03250, 03252, 03260, 03262, 03263, 03264, 03265, 03270, 03271, 03272, 03273, 03274



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#### **REED MANUFACTURING**

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## **Operating Instructions**

The Reed Rotary Pipe Cutter is a very efficient tool for cutting many different sizes of cast iron, ductile iron, and steel pipe from 20" to 42". In most cases, the Rotary Pipe Cutter is a one person tool. RC30, RC36 and RC42 models work better with two operators.

#### Fig. 1

#### **Cutter Wheel Reference Chart for Rotary Pipe Cutters**

Item	Reed	Std.				
Code	Cat. No. Pkg.		Reed Cutter	Inches	s mm	Application
03530	RCS8-36	4	LCRC8; LCRC12; LCRC16; RC20; RC24; RC30; RC36; RC42	0.635	16.1	Steel; Stainless Steel
03535	RCI8-30	4	LCRC8; LCRC12; LCRC16; RC20; RC24; RC30; RC36	0.500	12.7	Cast Iron; Ductile Iron (manual)
03550	RCX	4	LCRC8; LCRC12; LCRC16; RC20; RC24; RC30; RC36; RC42	0.800	20.3	Heavy Wall Steel; Stainless Steel

#### For best results and efficient operation, these instructions should be followed carefully. This pertains to ALL sizes of **Rotary Pipe Cutters.**

Determine the best type of cutter wheel to use for the pipe to be cut by referencing Fig. 1.

"S" and "I" cutter models interchange to one another by changing the cutter wheels installed in any given cutter. For instance, changing the cutter wheels to RCI8-30 wheels, the RC36S cutters for steel becomes an RC36I and is able to cut 30" nominal cast iron/ductile iron pipe.

To change the cutter wheels, lay the Rotary Pipe Cutter on its side, with the head of the wheel pin head pointing down. Next, lightly tap the end of all wheel pins facing up, allowing them to drop out far enough to enable the removal of the cutter wheel. Line up the cutter wheel and outboard roller and push the wheel pins back up into the hole. Next, seat the wheel pin into place with a light tap. Repeat this procedure for all of the cutter wheels.

### **OPERATING INSTRUCTIONS** for RC20 and RC24 Rotary Pipe Cutters

- 1. To set-up for making a cut, loosen the nuts on the main screws just enough to permit the cutter frame to slide over the end of the pipe. (The main screws can also be slipped out of the frame slot to permit the cutter to open and be placed around the pipe. Re-engage the main screw with the frame slot to close the cutter frame.)
- 2. Position the cutter so the cutter wheels are in-line with the cut-off mark. Rotate the cutter until the weight of the cutter is resting on the spring-loaded guide fingers and the two guides are centered on the top of the pipe. All cutter wheels should at this time be away from the pipe. The arrow on the frame points in the direction of the desired rotation.
- 3. Slightly rock and wiggle the cutter until all four of the guide fingers touch the pipe. This process insures that the cutter sits square on the pipe.
- 4. Next, without disturbing the cutter position, tighten up the main screw nuts EQUALLY by hand. Usually the two bottom wheels will contact the pipe first. Continue tightening as the spring-loaded guide fingers retract and permit the top wheels to contact the pipe. Using the lug wrench on the operating handle, tighten the one accessible nut as tight as possible while still being able to rotate the cutter.

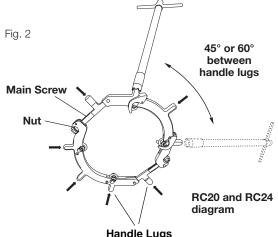
5. Slip the lug wrench over the most conveniently accessible lug. Rotate the cutter, one lug at a time in the direction of the arrow, until the other nut is in position to be tightened. After one complete rotation check to see if the cutter is tracking properly.

6. To complete the cut, continue rotating the cutter. At every half revolution, tighten nearest main screw nut one quarter to one half turn. It is important to complete the cut without pausing and to maintain consistent pressure.

#### **HELPFUL HINTS**

• Steel pipe must be cut all the way through the wall. Cast iron pipe, depending on age and hardness, will snap off clean and true after about onefourth of the wall has been penetrated. Ductile iron, being very tough, usually snaps off after one-third to one-half the wall has been penetrated.

- When cutting cast iron pipe, after hearing the first snap or crack in the pipe, continue tightening the nuts to maintain maximum pressure on the pipe until complete cutoff occurs. If a support can be maintained on the pipe while cutting, such as with a crane, hydraulic jack, etc., it will often cut the operation time in half by inducing the fracture to occur sooner and to run clear around the pipe instead of part way.
- When cutting into a section of cast iron pipe that has been buried in the ground for a long time, the line may be under compression from various causes and the slightly jagged fracture of the cuts may resist lifting the cut piece out. One way around this difficulty is to make three cuts instead of two. Make a third cut about  $2^{1/2}$ " inside one of the end cuts. A sledge hammer will break out the two and a half inch section and then the bigger piece will lift out easily. When cutting cast pipe under compres-sion, the cutter must be fed and rotated until all outboard rollers are in contact with the pipe, to be sure of complete fracture.
- The cutter is designed not to break under cutting loads. The handle will bend first.
- Certain brands of ductile iron pipe are softer than others and lend themselves to faster and easier cutting with RCS8-30 cutter wheels for steel pipe. If cutter wheel breakage is not excessive, the substantial time and labor savings may very well justify this.



#### PIPE DESCALERS

Cat. No.	Item Code	Pipe	Length		
DS12	08000	3 - 12 in	70 - 300 mm	32 in	810 mm
DS36	08006	3 - 36 in	70 - 910 mm	44 in	1110 mm
DS12B	08008	3 - 12 in	70 - 300 mm	45 in	1143 mm

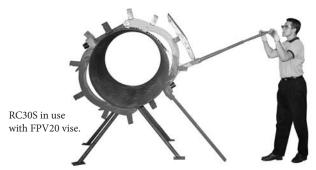
**BADLY CRUSTED AND RUST SCALED PIPE:** Remove the rust and scale from the area to be cut with a REED Descaler (Fig. 3). A hammer and chisel or coarse file may also be used. This will help save cutter wheels and cutting time; and helps to square the cutter on the pipe to ensure tracking.

**HELPFUL HINTS:** On large diameter pipe, it may be desirable to alternate two workers pulling on the handle. Failure to maintain maximum preassure only results in wasted time. While cast and ductile iron pipe will fracture along the cut line after penetrating part way, continue feeding the wheels in to make sure the cut is completed. Ductile iron tends to work harden. Continuous feeding and maximum pressure helps prevent this. If some ductile iron needs to be cut all the way through, consider using cutter wheels for steel, as they will cut much faster. The steel cutter wheels will not last as long as cutter wheels for ductile, and may be only effective on less hard ductile iron.

Tighten feed screw. Saddle held in place by chain. Saddle holds ratchet handle.



CAUTION:Always wear proper eye protection when using this or any hand tool.

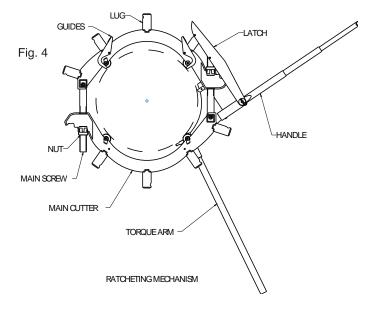


## OPERATING INSTRUCTIONS for RC30, RC36, and RC42 Rotary Pipe Cutters

To aid in rotating cutters RC30 and larger, a Ratcheting Mechanism is included with each cutter. This mechanism consists of a saddle (or pivot block) that is clamped to the pipe by a chain, a lever handle and a latch (Figs 4 and 5). As the handle is rotated up, the latch slides up over the top of a lug on the cutter. When the handle is rotated down, the latch engages the lug and pulls the cutter around the pipe.

1. Place upper yoke half (the one with finger guides) on the top of the pipe. Be sure the round grooves in the lugs are facing away from the direction of rotation. Align the wheels over desired cutting line.

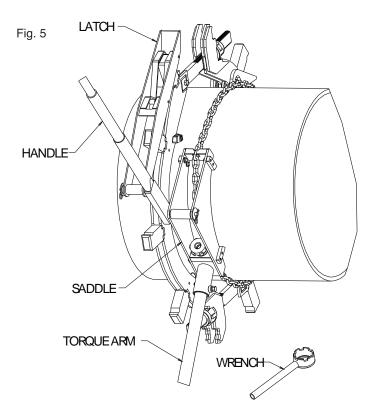
- 2. Attach lower yoke to upper yoke one side at a time by sliding the main screws into the slots and seating the nuts into counter bores.
- Check to see if cutter wheels are over desired cutting line. Rotate the cutter until the weight of the cutter is resting on the spring-loaded guide fingers and the two guides are centered on the top of the pipe. All cutter wheels should at this time be away from the pipe.
- 4. Slightly rock and wiggle the cutter until all four of the guide fingers touch the pipe. This process insures the cutter sits square on the pipe. Check to see if cutter wheels are centered over desired cutting line.
- 5. Next, without disturbing the cutter position, tighten up the main screw nuts EQUALLY by hand. Usually the two bottom wheels will contact the pipe first. Continue tightening as the spring-loaded guide fingers retract and permit the top wheels to contact the pipe. Using the wrench, tighten the one accessible nut as tight as possible while still being able to rotate the cutter.



#### 6. Set-up for Ratcheting Mechanism

Insert Torque Arm into saddle. Place the saddle on the side of cutter where the pipe is to remain. Rest the teeth of the saddle against the pipe and the Torque Arm against the ground at an angle. Adjust the position of the saddle so that it is 3-1/8" (79 mm) from the center of cut to the side of saddle (Fig. 6). Be sure all four teeth of the saddle are contacting the pipe for proper alignment. Loosen chain screw nut to the end of the screw, wrap the chain around the pipe and pull tight. Hook closest chain link into the chain catch on the opposite end of the saddle. Fully tighten the chain screw with the provided wrench.

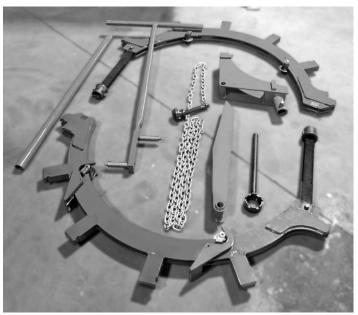
- 7. Connect ratchet handle to the triangular saddle by inserting the lower steel pin on the end of the handle into the hole in the saddle. Secure the handle with the washer and cotter pin provided.
- 8. Connect red latch (used to hook around lugs) to ratchet handle pin. Secure the latch with the other washer and cotter pin provided. Check to see if the latch is centered over the cutter.



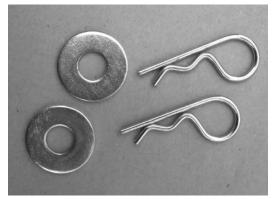
- 9. Lift handle until latch slides up over one of the lugs, then pull down on the handle to rotate the cutter.
- 10. After each half rotation, tighten one of black nuts on the cutter with provided wrench, alternating between each nut. Tighten the nuts as tight as possible each time. After one complete rotation check to see if the cutter is tracking properly.

### It is important to complete the cut without pausing and to maintain consistent pressure.

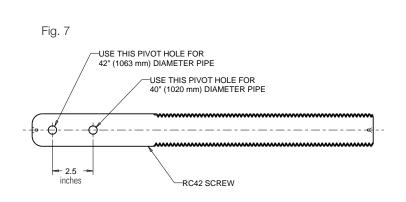
For the RC30 and larger cutters, it may be advisable to have two workers: one person tightens the nuts while the other person rotates the cutter.

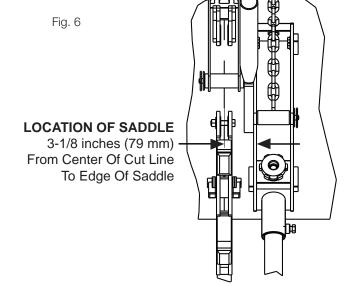


RC42 Parts Provided for Assembly



Cotter Pin & Washer Used to Secure Handle to Latch (2 sets provided).





Left arrow shows "center of cut line". Right arrow shows "edge of saddle".



#### **REED Warranty**

REED will repair or replace tools with any defects due to faulty materials or workmanship for one (1) year or five (5) years from the date of purchase, as applicable. This warranty does not cover part failure due to tool abuse, misuse, or damage caused where repairs or modifications have been made or attempted by non REED authorized repair technicians. This warranty applies only to REED tools and does not apply to accessories. This warranty applies exclusively to the original purchaser.

**One (1) year warranty:** Power units for pneumatic, electric, hydraulic and battery-powered tools have a one year warranty. This includes, but is not limited to REED pumps, universal pipe cutter motors, power drives, power bevel tools, threading machines, cordless batteries and chargers.

Five (5) year warranty: Any REED tool not specified under the one (1) year warranty above is warrantied under the REED five (5) year warranty.

NO PARTY IS AUTHORIZED TO EXTEND ANY OTHER WARRANTY. NO WARRANTY FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PUR-POSE SHALL APPLY.

No warranty claims will be allowed unless the product in question is received freight prepaid at the REED factory. All warranty claims are limited to repair or replacement, at the option of REED, at no charge to the customer. REED is not liable for any damage of any sort, including incidental and consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary by state, province or country.

Warranty Effective December 1, 2018

