SHAMROCK CHAIN CUTTER 1.5 KIT OPERATIONS MANUAL

DESCRIPTION/PARTS LIST

The <u>Chain Cutter 1.5 Kit</u> from Shamrock is powered by a jetting machine and is designed to scrape the full pipe diameter. It removes grease, scale, and roots from the interior of collection lines. The minimum operating flow for this chain cutter using a $\frac{3}{4}$ " machine is 25 gpm. Using a 1" machine, this cutter can handle a maximum flow up to 90 gpm.

	Minimum	Maximum
Operating Pressure	1500 psi	4000 psi
Flow Conditions	25 gpm	80-90 gpm

PART NO.	DESCRIPTION
CHACUT-1.5	Body Assembly
24014A17	Cutter Blade
CC1.5-4	4" Chain
(CC1.5-4S)	4" Chain with scrapper
CC1.5-6	6" Chain
(CC1.5-6S)	6" Chain with scraper
CC1.5-8	8" Chain
(CC1.5-8S)	8" Chain with scraper
CC1.5-10	10" Chain
(CC1.5-10S)	10" Chain with scrapper
CC1.5-12	12" Chain
(CC1.5-12S)	12" Chain with scrapper
CC1.5-6SK	6" Pipe Skid
CC1.5-8SK	8" Pipe Skid
CC1.5-10SK	10" Pipe Skid
CC1.5-12SK	12" Pipe Skid
CC1.5-HDWR	Hardware Kit
CC1.5-INST	Instruction Manual
902TBH	Tool Box

OPERATION

- 1. Install the proper size chain and skid combination onto the body assembly.
 - a. Chain Installation:
 - i. Remove the three socket head cap screws on the top of the rotor assembly.
 - ii. Place the end of each chain segment into the milled pocket on the rotor assembly.
 - iii. Secure each segment with a socket head cap screw.

b. Skid Installation:

- i. Attach the skid by placing it in the skid slot on the body assembly.
- ii. Tighten the two set screws provided to lock the skid in place.
- 2. Prior to using the cutter, clean the sewer line thoroughly of dirt, sludge, and rocks, by using a Shamrock sewer nozzle shaft. This will allow the cutter to perform at its maximum capability. It may be necessary to make progressive passes into the pipe and flush the debris in increments.

For best results, a Shamrock <u>Ultimate Penetrator Nozzle</u> or <u>Sand and Sludge Nozzle</u> is highly recommended.

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OPERATION CONTINUED...

- 3. Insert the cutter into the sewer line in an upstream position.
- 4. Build pressure slowly by using just enough pressure to turn the rotor and start the tool moving up the pipe.
- 5. Let the cutter move slowly into the blockage. Increase the water flow to keep rotational torque strong. Always keep tool moving. **DO NOT DWELL IN ONE POSITION FOR EXCESSIVE PERIODS**.
- 6. Whenever possible use a closed-circuit TV to monitor chain cutting, this is an effective procedure to prevent damage to the sewer pipe and to get the cutters positioned exactly where needed.
- 7. When finished with the cutting job or at the end of each shift, clean and dry the tool. (Shamrock recommends using WD-40. However, kerosene, diesel or a similar fluid may be used.) **NOTE: Oil and greases emulsify under high pressure and should not be used.**
- 8. Store the cleaned, dried, and lubricated cutter in the tool box provided.

SAFETY TIPS

IMPROPER USE OF THIS TOOL MAY CAUSE SERIOUS INJURY OR DEATH.

- Clear line of all loose debris before using the cutter.
- Never remove a tool from the pipe while it is under pressure.
- Never let the tool operate in one place for long periods of time.
- Follow the safety instructions of the sewer cleaner or trailer manufacturer.
- If the pipe you are working in is fissured, cracked, or clay tile use less aggressive scraping and <u>DO NOT</u> use scraper blocks.
- **<u>NEVER</u>** test or run the cutter outside of the pipe.
- <u>NEVER</u> attempt to repair the cutter as it can cause serious injury. To setup a repair, visit www.shamrocktools.com/repair.

This tool uses two sealed and special water-cooled bearings. It is not necessary to lubricate or service the tool until the sealed bearing needs to be replaced. We recommend that the bearing replacement and tool repair be performed by a Shamrock Technician. To setup a repair, visit <u>www.shamrocktools.com/repair</u>.

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