M945 User Manual

Inspect your system carefully upon receipt.
Let us know right away of any damage you note.

- IMPORTANT ! -

THIS MACHINE IS NOT TO BE OPERATED BY ANYONE UNTIL HAVING CAREFULLY READ THIS INSTRUCTION MANUAL ON ITS USE.

IF ANYONE ELSE THAN THE ORIGINAL BUYER OF OUR EQUIPMENT IS TO USE THE MACHINE, THEN HE/SHE IS TO BE FURNISHED WITH AN INSTRUCTION MANUAL.

To request new or additional instruction manuals please call us or download a copy at MyTana.com



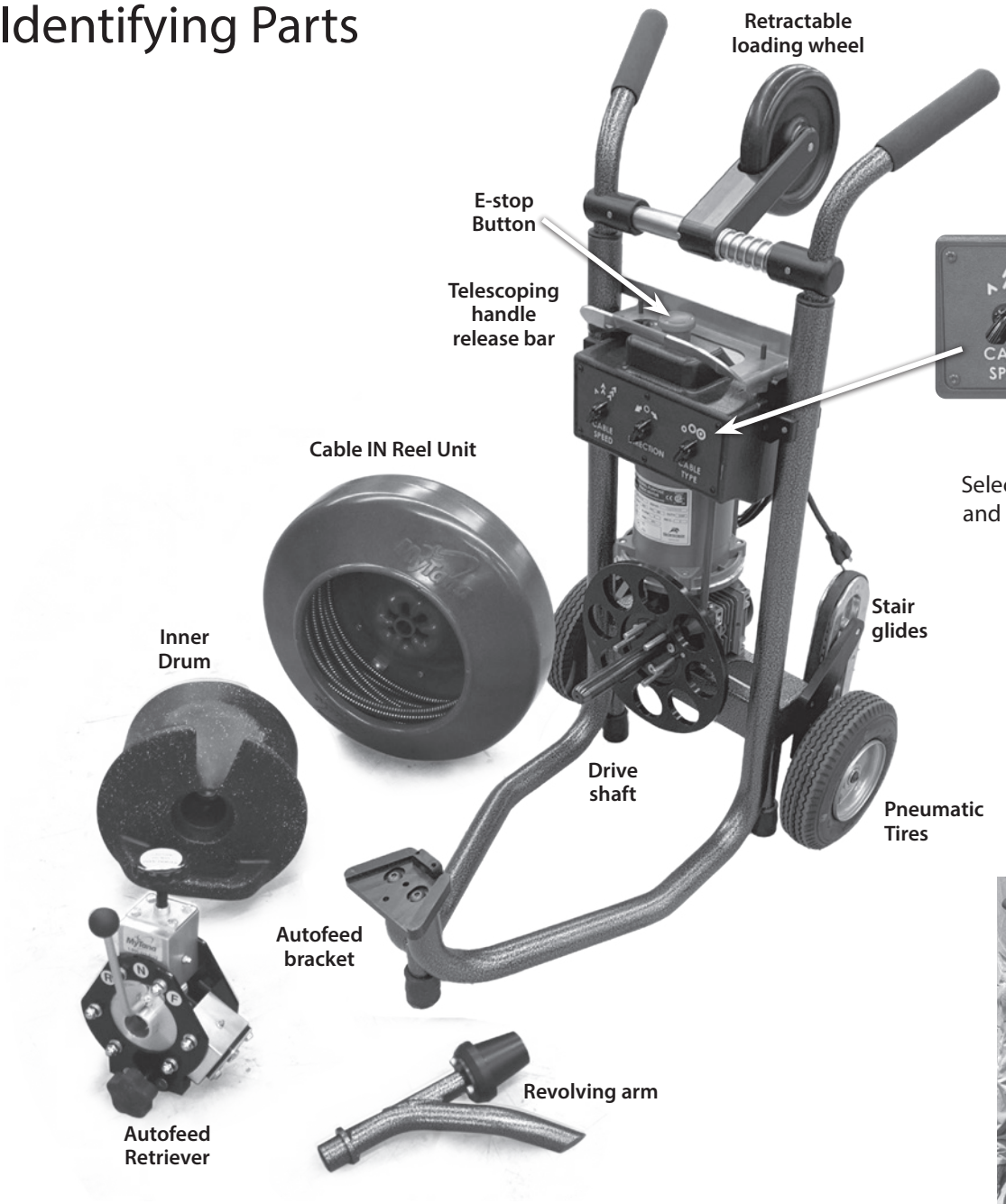
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Manufacturers of Quality Sewer & Drain Cleaning Equipment since 1957

www.MyTana.com
746 Selby Ave • St. Paul, MN 55104
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Factory Direct Customer Service
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Competent • Polite • Clear

Identifying Parts





Control Panel

Select your RPM, feed direction and torque selection. See pg 4.



To Adjust the Handles

Lift up the handle release bar to raise or lower the telescoping handles. They will lock in to position either fully up or fully retracted.



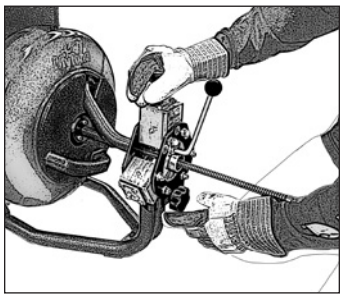
Work in 1½" to 2" lines with the optional **SK945 Sinkline Kit**. Includes 3/8" cable in a smaller reel, and a smaller revolving arm.

Assembly

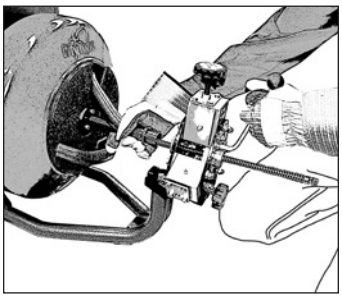
The M945 may arrive completely assembled. However, due to shipping constraints if your reel arrives not mounted, refer to "Installing a Reel" below.

Changing Reels

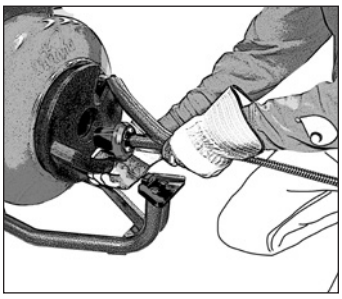
To remove a reel



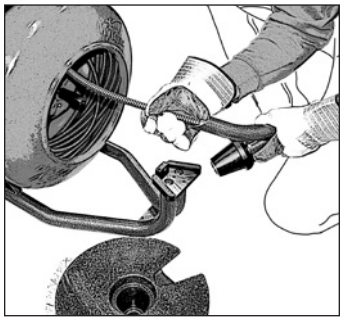
1 Loosen the knob on the bottom of the Autofeed.



2 Carefully slide the Autofeed off it's bracket and off the cable

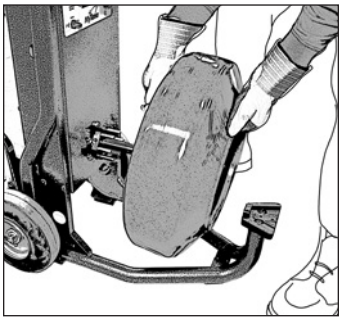


3 Pull out the Inner Drum and the Revolving Arm at the same time.



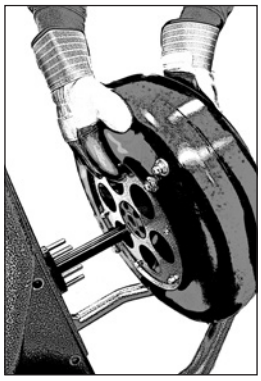
4 Pull the cable out of the Revolving Arm and feed it completely back in to the reel

TAKE CARE to not let the cable spring out of the reel

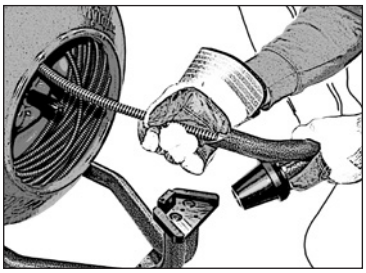


5 Slide the reel off the drive pins.

Installing a Reel

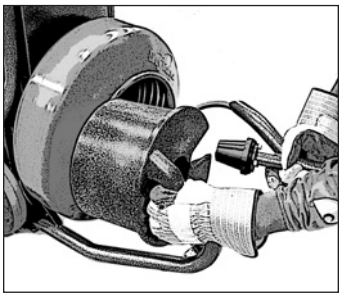


1 Line the drive pins up with the grooves on the reel. Slide the reel all the way in to bumper

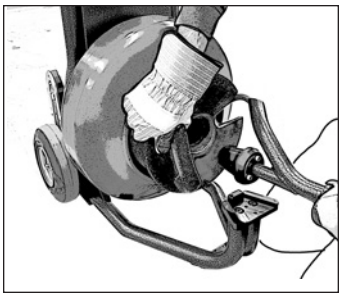


2 Feed cable through the Revolving Arm tube. Fittings between the leader and main cable may need an extra push.

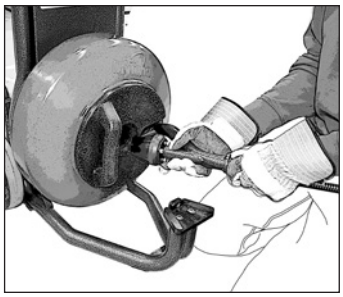
TAKE CARE to not let the cable spring out of the reel



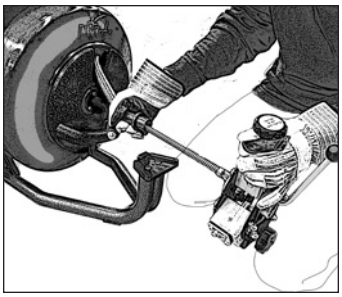
3 Fit the cable into the groove on the Inner Drum.



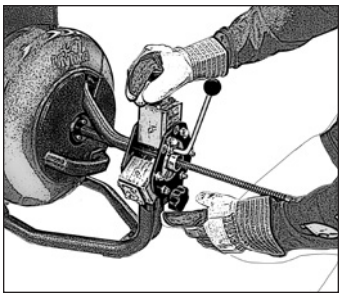
4 Slide the Inner Drum into the reel keeping the Rev Arm free and cable in the groove.



5 Fit the Rev Arm into the Inner Drum



6 Insert the cable through the automatic feed



7 Slide the Autofeed on to it's bracket and tighten the knob on the bottom side.

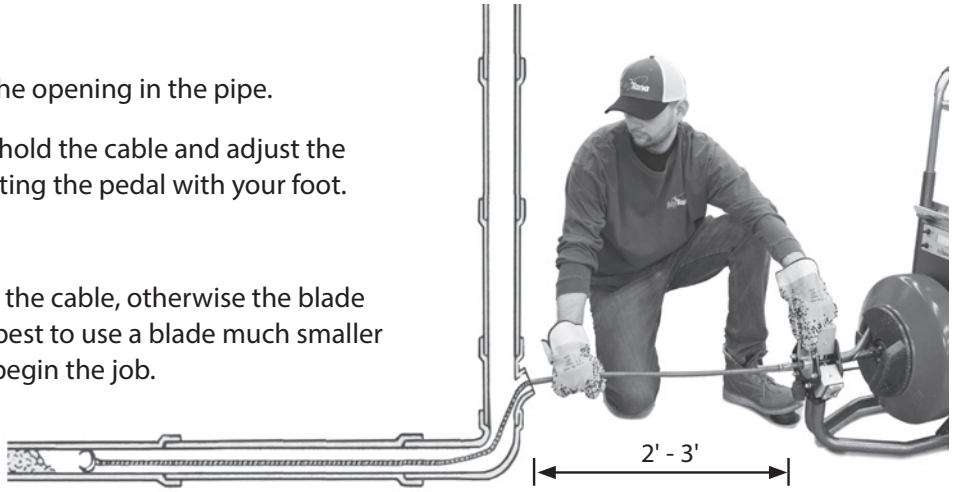
ALL OPERATORS
Read all instructions on these pages BEFORE operating equipment.

Getting Started

– Placement

Place the machine about 2-3 feet from the opening in the pipe.

Position the foot pedal so you can both hold the cable and adjust the Autofeed and control panel while operating the pedal with your foot.



Attach Blade

Attach the blade securely to the front of the cable, otherwise the blade could slip on the front of the cable. It is best to use a blade much smaller than the inside diameter of the pipe to begin the job.

– Feed cable and blade into the line

Remove the clean-out plug, disengage Autofeed (by loosening screw knob on top cylinder) and insert the cable and blade into the pipe by hand with a twisting motion.

ALWAYS HAVE BLADE 5 OR 6 FT INTO PIPE AND FREELY MOVING BEFORE YOU START MOTOR

When you have passed the bend, continue to rotate and push the blade **about 5-6 ft into the pipe, making sure it is not caught or bound so that it can rotate freely.**

▶ **NEVER HAVE A SPINNING BLADE OUTSIDE THE CLEANOUT!**

Operation

Plug the M945 in — if the E-stop button is pushed in, give it a quick twist until it pops out.

Select your CABLE SPEED

> = 200 RPM

>> = 250 RPM

>>> = 300 RPM



Select your CABLE TYPE/size. Torque limit will be based on that selection.

- 3/8" cable
- 9/16" hollow core cable
- 9/16" wire core cable

The DIRECTION switch should always be in the forward position.

▶ **MyTana cable machines rotate counter-clockwise, so forward is the LEFT arrow** (as shown). Use the Autofeed to rewind cable.

- **BEFORE STARTING** your first job**, r**ead the paragraph on "**Building up Torque**" (below)
- **UNPLUG THE MACHINE WHEN NOT IN USE –** Never walk away from the machine when it is running
- **SAFETY** Operators should wear heavy-duty gloves when operating this machine. Tuck in any loose clothing and tie up long hair. Protective eyewear is recommended.

Make your control panel selections

As you operate the machine, place one hand on the cable close to the cleanout and one hand on the Autofeed to prevent any throwing of the cable.

Engage the Autofeed to feed the cable in to the line. Move the feed lever about 10˚ toward "**F**" and start the reel rotation by pressing your foot on the foot pedal. Turn the screw knob on the top cylinder to the right until the cable starts to move forward. Do not tighten the knob more than is required to move the cable forward. Push lever fully into the forward position.



– Obstructions

When the operator has had sufficient experience, his "touch" will tell him how much tension is allowed to build in the cable before pulling back from the obstruction; however, inexperienced operators should be cautious and allow the cable only about 5 seconds to cut through.

If the blade doesn't release, move the Autofeed lever to the "**R**" (reverse) position to pull it away from the obstruction. The freed blades spin rapidly when torque is released. Try again to move forward. Use this combined force of the reel rotation and cable torque/spinning blade to optimize your cutting power. This action will be more effective and will shorten the length of time on the job.

The built-in torque limit setting (the cable selection on the control panel) will help avoid over-torquing the cable to the point of damaging the cable or blade, or causing injury to yourself. BE AWARE!

- If the cable doesn't pull back, see "Difficulties" section (next page).

Continue working through obstructions in this way until you have reached the end of the pipe.

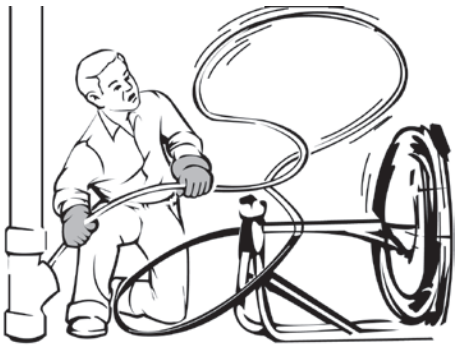
After the first opening is made, turn on the nearest faucet so that water will flush the loosened debris. Be sure the water is draining and doesn't back up to the cleanout.

Building up Torque

As the reel revolves, it generates power and stores up energy in the cable, which when released, allows the blade to travel at a much higher rate of speed.

When the revolving blade comes in contact with an obstruction and it cannot cut through within about 5 seconds, or at all, the cable naturally continues to wind up with the rotation of the reel. This wind up builds up torque, or tension, which acts as a powerful spring motor. If too much tension is allowed in the cable, it will lash in the operator's hands or can whip widely and dangerously out of control (see below). The torque build up is an extremely powerful force and the operator must always be warned of it's potential danger.

NEVER LET THIS HAPPEN



Difficulties

If the cable resists going forward or backward than one of several things is occurring:

- You are stuck in an obstruction (see below)
- If torque does not start to build, you may be at an elbow or are hitting an offset or break in the line. Apply some forward pressure manually to help you figure out what it happening.
- The feed wheels are worn and need replacing
- There is debris hanging onto the end of cable and blade that is resisting retrieval. In this case manually help the Autofeed pull the cable back into the reel, clear blade of debris and run cable through line again to make sure all blockages are removed

If at any time the cutting blades become stuck and cannot be released, and the torque has reached it's limit according to the CABLE SIZE you selected, the torque limiter will stop the reel rotation. Hold cable close to the Autofeed to prevent the cable from coming out of the reel.

Take your foot off the pedal. The tension will release and may spin the reel backwards, removing the strain on the cable. After the reel stops, spin it backwards (clockwise) a few more turns by hand or use the reverse DIRECTION on the control panel (needs to be activated with the foot pedal). This may release the obstructions that can be wrapped around the cutting blades.

▶ Using the reverse direction on the control panel lasts for only 10 seconds.

You can also push in the e-stop button to cut power completely.

When the cable is released, pull the cable out of the pipe, clean off any obstruction accumulated on the blades or cable, and insert it into the sewer again, still using the smaller blades.

– Finishing up

When the obstruction is removed, place the Autofeed-Retriever fully in the "R" position until you hear the blade nearing the pipe opening. Disengage feed (by turning screw knob to the left).

▶ **DO NOT** use the reverse DIRECTION on the control panel to rewind the cable.

SHUT OFF THE MOTOR and pull the blade out of the pipe opening. Remove the blade and stack the cable snugly against the outer diameter of the reel.

Follow the first opening with slightly larger blades until you can use a blade large enough to scrape the sidewalls of the pipe or sewer. Increasing the speed of the M945 will enhance this scraping action.

User Tips

– Using the Autofeed-Retriever

Turn top knob only as far as needed to move cable back or forth – avoid turning down the screw knob on top cylinder of feed too tightly:

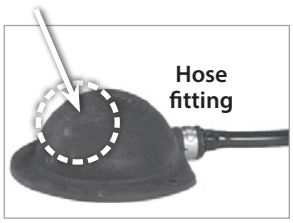
- It impedes the proper rotation of the cable through the auto feed
- It causes excessive wear on cable and bearings
- On retrieval, it causes the cable to stack loosely into the reel, rather than snugly against the outer walls as it should
- It can break the feed bearings

Do not run cable fittings (i.e. couplings, splicers, cable ends) through a tightened down auto feed. Again, this can break feed wheels. Release the feed, pull fittings through manually and then re-engage.

– Foot Pedal

The foot pedal and hose may need to be replaced from time to time (parts are available, call us or visit MyTana.com). Loosen the pressure nut on the end of the hose and pull out to remove foot pedal unit from the pneumatic switch.

To help increase the longevity of your pedal/hose place your foot on pedal directly opposite the hose fitting.



Maintenance

Occasionally remove the reel and lubricate the main drive shaft.



– Cable care

If you are not using your machine every day, treating your cable with a cleaner / rust inhibitor will extend cable life dramatically. You can also hose down the cable (remove reel from machine to do this).

Remove the brass drain plug on the back of the reel, and lay flat so water can drain out of the reel. Spray the cable with WD40 or any light oil.

Make sure that the cable stacks to the outermost part of the reel when returning cable to the reel. This helps prevent kinking or twisting inside the reel.

If a cable becomes kinked or wavy due to fatigue or over-stress, either repair the cable with splicing cores, or replace the cable.

– Autofeed

It is essential to keep the Autofeed clean and properly lubricated. Refer to the Autofeed Manual for complete information.

- The feed unit has been greased at the factory. However, routinely continue to grease all housing equipped with zerks (grease fittings).
- Remove front disc periodically, clean and lubricate. Free movement of the front disc is crucial to proper movement of cylinders and drive wheels.
- If feed will not used for a period of time, lubricate before storage.

Watch for wear on drive wheels (bearings) and drive pins.

Make sure drive pins stay in designated slots on movement disc.

Remove debris (i.e. rags, string, hair) from cable before running through the feed. This kind of debris can clog up the feed wheels and movement parts rather quickly.