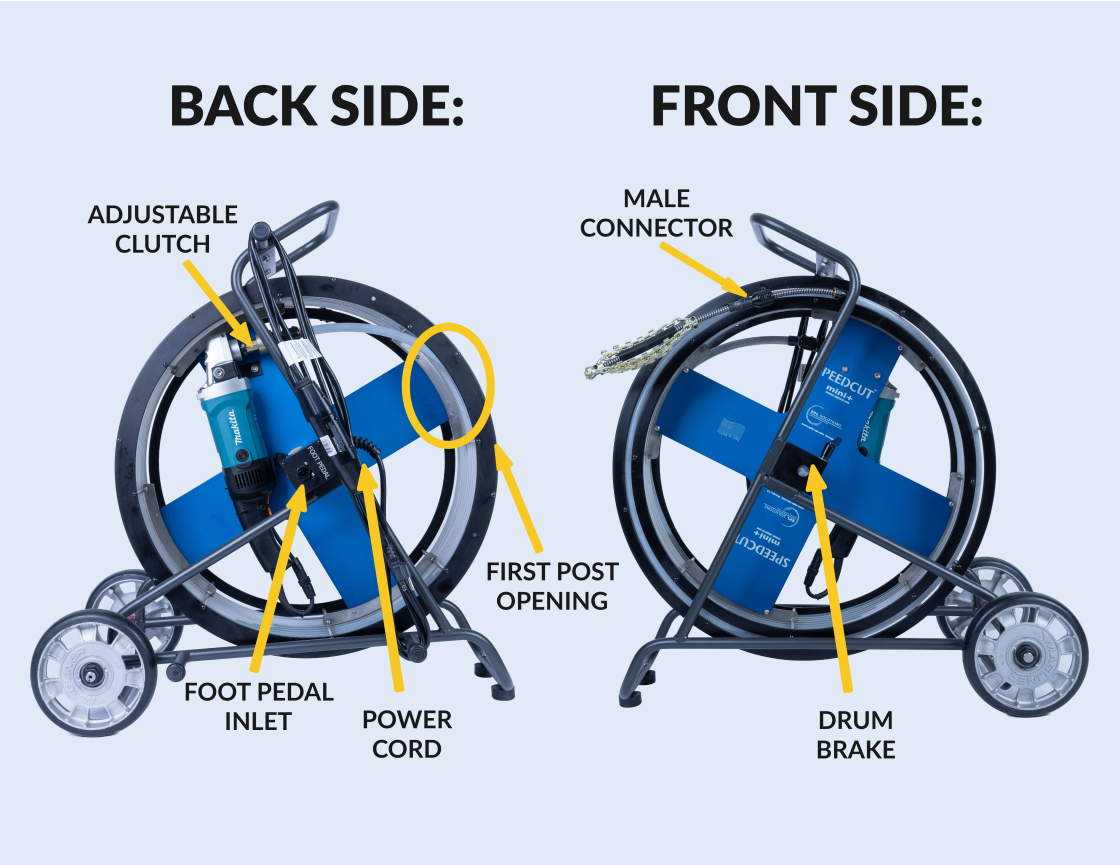
EPL SOLUTIONS, INC.

SpeedCut® Mini+ Wheels

High-Speed Descaler · Setup & Operation Manual

PRODUCT	SpeedCut® Mini+
USE	High-speed descaling and drain cleaning
OPERATOR	Trained operators only. Eye and hand protection mandatory.

Contents



1 Safety Guidelines

Read this section before the machine ever leaves the truck. Every line below exists because someone learned it the hard way.

- Only trained operators should run the SpeedCut® Mini+.
- Always wear safety glasses and protective gloves.
- Avoid loose clothing or jewelry that may get caught in moving parts.
- Keep the workspace clear, dry, and well-lit.
- Use only the provided power cord.
- Never operate the unit in rain or wet conditions.
- Know how to use the foot pedal, and make sure you can unplug the machine quickly if you need to.

2 Before You Begin

What's Included

- SpeedCut® Mini+ unit
- Power cord
- Foot pedal
- Accessory bag w/ Allen keys
- Setup & Operation Manual

Required Tools

- 30W non-detergent oil (or 0W-20 for cold climates)
- 1/8" Allen key
- 7/64" Allen key — for clutch tension adjustment (see **Section 6.1**)
- Crescent wrench
- Clean rags
- Safety PPE

Setup Area

- Choose a clean, dry, and level space.
- Ensure adequate lighting and room to feed cable.

3 Setup

1. Position the machine near the access point.
2. Plug in power and foot pedal by going underneath the drum/basket and into the electrical box.
3. Pull out 2 ft. of cable and briefly test spin without any bit.
4. Attach a bit securely (see Section 7).
5. Optional: connect low-flow water for flushing.
6. Position the camera 12" behind the bit for visibility, if available.
7. Confirm the workspace is clear, PPE is on, and no loose items are nearby.

4 Operation

- Push the cable and chain/tool into the pipe.
- Never push the cutting tool into a blockage or scale **before** pressing the foot pedal.
- Step on the foot pedal and allow the chain to spin.
- Do not force the cable forward — let the tool do the work.
- Watch the camera, if used, to monitor progress.
- After cutting, withdraw the cable slowly and wipe it clean.

If a Stall Occurs

- Immediately release the pedal.
- Pull or push off of obstruction to free the cutter.
- Allow any backspin to stop naturally.
- Refer to Troubleshooting in **Section 6**.

5 Maintenance

Cable Oiling

1. Disconnect power and the foot pedal.
2. Disconnect the cable from the clutch.
3. Pull off of the cable hook.
4. Pull the entire cable from the drum.
5. Pull the cable out from the sleeve.
6. Pour oil into the chain-side opening.
7. Wipe the cable clean and insert it into the sleeve.
8. Reinsert the cable and sleeve in the 1st post opening (see Image A on Page 1).
9. Reattach all parts and test.

SPEED MATTERS During normal descaling, keep the drill speed at **3–4 or lower**. See Section 6.1.

TIP Oil the cable frequently. It is the cheapest thing you can do to extend cable life and keep the machine performing the way it did on day one.

WATCH THE VIDEO

How to Oil the Cable

Scan to watch the full oiling procedure step by step.

6 Troubleshooting

Work the table from left to right. Most issues in the field come down to load, speed, or tension — and all three are adjustable.

Table A — Common Issues

Issue	Possible Cause	Solution
Motor does not start	Power cord not connected	Ensure cords are connected securely
	Power source issue	Try a different outlet or reset the breaker
	Motor overheated	Unplug and let cool before retrying
	Air foot pedal not connected	Ensure air foot pedal is connected securely
Cable not spinning	Cutter bit jammed	Release the foot pedal and free the bit with a push/pull
	Broken cable	Follow steps for cable repair — see Section 8
	Set screws on clutch not tightened on cable	Tighten set screws onto cable with 1/8" Allen key
	Clutch too loose	Tighten clutch to desired tension — see 6.2
	Motor overheated	Unplug and allow the motor to cool
Motor stalls frequently	Clutch too tight	Loosen until it slips before stalling
	Bit too aggressive	Switch to a smaller bit
	Excessive water drag	Reduce water flow
Clutch activating (slipping) during normal use	Chains sized too large	Resize the chains to the pipe diameter or under — see 6.1
	Drill speed set too high	Run at speed 3–4 max during normal descaling — see 6.1
	Clutch out of adjustment	Adjust clutch tension at the tensioning nut — see 6.1
Backspin after stall	Cable under tension	Let the cable unwind naturally
Noise or vibration	Loose parts or worn bit	Inspect fittings and replace worn components

6.1 Clutch Activating? Start Here.

The clutch is a safety device, not a failure. It is designed to slip before your chains do — so when it activates, it is telling you the machine is under more load than it should be. Do not fight it. Diagnose it.

If your clutch is activating, work through these three checks in order. See **Table B**.

Table B — Three Checks

#	Check This	The Fix
1	Your chains are set too large.	Resize the chains to fit the pipe diameter — or under. A chain that is oversized for the pipe loads the machine every rotation, and the clutch does exactly what it was built to do: it gives before the cable does.
2	Your drill speed is too high.	Set the speed to 3–4 at the highest during normal descaling and operation. Speeds beyond this may cause the clutch to activate prematurely. Faster is not better here.
3	The clutch needs adjustment.	Over time, the clutch may need to be adjusted. Loosen the 7/64 screw on the tensioning block of the clutch. Tighten the tensioning block until it reaches your desired tension. Then re-fasten the 7/64 screw.

6.2 Adjusting the Clutch — Step by Step

1. Loosen the 7/64 screw on the tensioning block of the clutch.
2. Tighten the tensioning block until it reaches your desired tension.
3. Re-fasten the 7/64 screw.

> **REMEMBER** Set the clutch so it slips before the cable fails — never the other way around. A clutch that never slips is not a stronger machine.

Still activating? Call us at **714-453-9760**. Walk us through the pipe, the chain size, and the speed you are running, and we will work it out with you. We would rather spend ten minutes on the phone than have you lose a day on the job.

7 Bit Selection Guide

The right bit is the difference between descaling a line and beating on it. Match the tool to the pipe, not to the schedule.

Bit	When to Reach for It
Chain Cutter	Descaling pipe interiors. Size the chain to the pipe diameter or under.
Tulip Cutter (1.5")	Punching through solid blockages.
Brush	Preparing epoxy-coated pipe surfaces.
Sandpaper	Polishing epoxy for a smooth finish.

BEFORE EVERY JOB Inspect bits for wear. A worn bit loads the machine, trips the clutch, and finishes nothing.

WATCH THE VIDEO

Sizing Your Chains

Scan to watch how to size chains to the pipe diameter for a clean, safe cut.

8 Cable Repair

WATCH THE VIDEO

Cable Repair Walkthrough

Scan to watch the full cable repair and reassembly on video.

1. Disconnect power.
2. Pull the full cable from the drum.
3. Loosen the clutch set screws.
4. Pull off of the hook and remove the remaining cable.
5. Remove the motor/clutch end sleeve cap.
6. Trim any damaged sleeve.
7. Push the male connector flush with the sleeve cap (see Image A on Page 1).
8. Trim to exactly 2" of exposed cable on the motor/clutch end.
9. Remove any burrs if the cable end is frayed.
10. Reinsert the cable and sleeve through the 1st post opening (see Image A on Page 1).
11. Reattach all parts and test.

9 Cleaning & Storage

- Wipe the cable clean with a dry rag after use.
- Do not hose down the machine or cable.
- Store in a cool, dry place away from sunlight.
- Coil the cable loosely, without kinks.
- Cover the unit and oil occasionally if unused for long periods.

10 Quick Reference

Safety Checklist

- ✓ Wear PPE
- ✓ Foot pedal clear
- ✓ Bit secured
- ✓ Work area dry and open
- ✓ Chain sized to pipe diameter or under
- ✓ Drill speed set to 3–4

Quick Setup Steps

- Plug in.
- Test spin.
- Attach bit.
- Use optional water.
- Start slow and feed cable carefully.

Clutch Activating? Three Checks

- Chains too large → resize to pipe diameter or under.
- Speed too high → back down to 3–4.
- Clutch out of adjustment → loosen the 7/64 screw, set tension, re-fasten.

11 Support & Warranty

- 1-Year Limited Warranty.
- Covers manufacturing defects under normal use.
- Excludes misuse, improper maintenance, and unauthorized changes.
- Proof of purchase required for claims.

Returns & Repairs

- Contact support before shipping.
- Unauthorized returns may be refused.
- Charges apply for out-of-warranty repairs.

> **NOTE** Serial numbers are automatically recorded at the time of purchase and kept on file for warranty tracking.

We're here to fix a problem, not sell equipment.

Putting Plumbers First. · Quality Equipment. Shared Knowledge. Problems Solved.

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