

Electric Eel[®]

MODEL RF Drain Cleaning Machine

Operator's Manual



!! DANGER !!

FOR YOUR SAFETY

Before you operate or
maintenance this equipment,
READ this manual carefully and
completely!

The Electric Eel Model RF Drain Cleaning machine is a professional quality sewer and drain cleaning piece of equipment. This machine is specifically designed for cleaning 3" to 6" drain lines up to 100 feet in length and features a two-way auto cable feed for ease of operation. A cable guide spring also keeps hands off rotating cable near the machine.

ELECTRIC EEL MANUFACTURING CO., INC.

501 West Leffel Lane, Springfield, Ohio 45501-9885

Call Toll Free (800) 833-1212 (937) 323-4644 FAX: (937) 323-3767

www.electriceel.com

Proudly Made in The USA Since 1939

STANDARD EQUIPMENT

Electric Eel Model RF comes complete with:

- RF unit with auto cable feeder
- Cable guide spring
- 100 ft. of 3/4" Tri-Max Cable
- Set of 3 cleaning tools including:
 - A-1DC starting drill
 - U-3H grease tool(U-cutter)
 - HDD-3S root saw
- 1-FLSC1SC2 flexible leader
- SC-18 spanner wrench
- Tool bag to hold cleaning tools

SAFETY INSTRUCTIONS

The following safety rules for operating Electric Eel's Sewer and Drain Cleaning equipment **MUST** be read carefully before operating this machine.

 **DANGER** 



To prevent serious injuries including:

- Shock, electrocution or burns due to improper grounding.
- Serious injuries to body, limbs or hands and feet due to cables that twist, kink and break.
- Eye injuries caused by loose cable, thrown debris or splashed water.

**READ SAFETY INFORMATION
THOROUGHLY!**

GENERAL SAFETY



TO PREVENT SERIOUS BODILY INJURY:

1. **ALWAYS** wear **HEAVY** leather gloves and safety glasses when operating equipment.
2. Place machine cable guide spring at pipe opening. **NEVER** have exposed cable.
3. **DO NOT** wear loose clothing or jewelry while operating this machine.

4. Use foot switch to operate machine while keeping good footing and balance at all times. **DO NOT OVERREACH.**
5. Machine, foot actuator and cable should be operated by one person only. Additional personnel in the working area should observe all safety instructions.
6. **ALWAYS** keep all guards in place during operation.
7. **ALWAYS** wear rubber-soled non-slip shoes.
8. **ALWAYS** avoid direct contact of skin, facial area and especially eyes with drain water. Chemical compounds used in drains can result in serious burns and other injuries.
9. Replace fittings, cables and any rotating parts as soon as they become visibly worn. Replace any cables which become fractured, bent, kinked, or any other damage occurs.
10. **NEVER** attempt to service equipment beyond the recommendations of the operating instructions. All other servicing should be referred to qualified service personnel.
11. To maintain safe operation, use only identical replacement parts and cables from Electric Eel.
12. **ALWAYS** keep clear of rotating cages/drums, shafts, pulleys, belts, or other rotating parts.

GENERAL SAFETY - ELECTRICAL



DANGER



TO PREVENT SERIOUS BODILY INJURY AND TO AVOID DANGER FROM ELECTRICAL SHOCK:

1. **ALWAYS** use a Ground Fault Circuit Interrupter (GFCI) with a properly grounded outlet for all electrical cords, connections, and parts as installed by factory and **DO NOT** make any alterations.
2. **NEVER** use machine in damp or wet conditions.
3. **NEVER** expose machine to rain.
4. **THE USER SHOULD NEVER ATTEMPT TO SERVICE THE ELECTRICAL COMPONENTS.** For safety reasons, all electrical replacement components should be installed by a qualified electrician.
5. **ALWAYS disconnect the power cord** from the electrical source before making any adjustments or changes to power units.
6. If an extension cord is used, the power source **MUST** be equipped with a Ground Fault Circuit Interrupter (GFCI) and properly grounded.

7. Only use 10/3 or larger three-wire extension cords with three-prong grounding plugs and three-pole receptacles.
8. When using an extension cord outdoors, only use those intended for outdoor use. (Indicated on cord by suffix "W-A" after cord type.)

THE GROUND FAULT CIRCUIT INTERRUPTER (GFCI)

This machine is equipped with a Ground Fault Circuit Interrupter (GFCI) which is designed to prevent a serious electrical shock. This device should be tested on the jobsite before putting the machine into operation as follows:

1. To ensure protection against electric shock, test the device before each use. When test button is pushed in, the indicator light should go off. Reactivate the device by pushing the reset button in. If the indicator light goes on, the device is ready for use. **DO NOT** use the device if the indicator light does not go on when reset or if the indicator light remains on, when the test button is pushed in.
2. This device does not guard against electric shock resulting from defects or faults in any wiring supplying power to this device, or from contact with both circuit conductors.

GENERAL SAFETY- ROTATING CABLES AND EQUIPMENT



DANGER



TO PREVENT SERIOUS BODILY INJURY AND TO AVOID DANGER FROM ROTATING CABLES AND EQUIPMENT:

1. **USE CAUTION AT ALL TIMES.** Cable can twist or kink and cause serious injury. Fingers or other body parts can be caught in rotating parts.
2. **NEVER handle the rotating cable.**
3. **NEVER handle any cable under tension. Relieve all tension build up before attempting to handle cable.**
4. **NEVER** operate machine without cable guide spring in place.
5. Use feeder to advance or retract cable with motor switch in **FORWARD** position for **ALL** cleaning operations.
6. **DO NOT** continue to operate machine when cleaning tool becomes stuck in obstruction. **Excess torque on a cable could cause it to fracture.** (Refer to operating instructions to free cleaning tool.)

7. **NEVER** force a tool and cable into a pipeline blockage. This may overload the cable or tool and cause it to fracture.
8. **ALWAYS** wear **HEAVY** leather gloves and safety glasses when operating machine.
9. Use correct tool for the job or application. Check the tool listing for the correct tool and line size.
10. To maintain safe and efficient operation, thoroughly clean all cables with water after use. Acids in the drain and sewer lines attack and deteriorate the metal of the cables and tools. Deterioration will cause weakness in cable and tools and result in fracture or breakage. A light coating of oil applied to the cable before storing will help prevent rusting and premature failure.
11. Replace all cables and tools that become deteriorated, worn, kinked, bent, or any other damage that occurs.

MACHINE SET-UP



DANGER



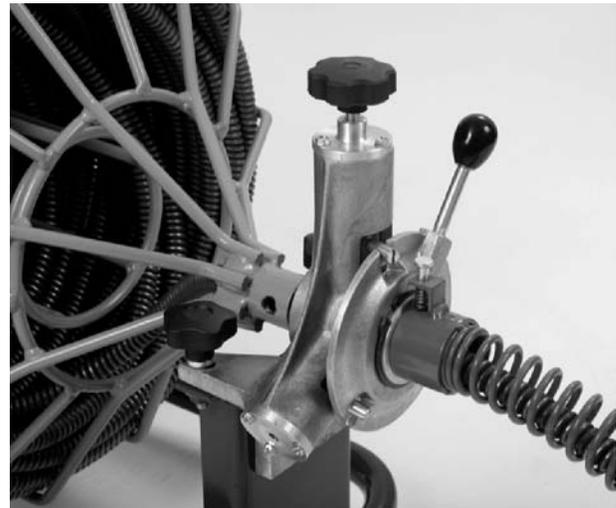
TO PREVENT SERIOUS BODILY INJURY:

NEVER USE ANY CABLE IN THIS MACHINE OTHER THAN ELECTRIC EEL 3/4" DIAMETER CABLE.

DISCONNECT POWER CORD BEFORE ANY SET UP OR MAINTENANCE IS ATTEMPTED.

This machine comes completely assembled except for the cable guide spring. Simply connect cable guide spring to feeder with snap pin. (See Figure #1)

Figure 1

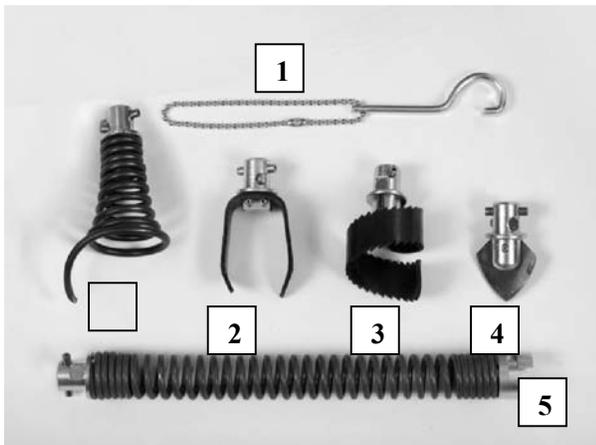


TOOL SELECTION

It is important to choose the proper cleaning tool for each cleaning application. See the tools outlined below.

Standard Tools Included with the Model RF Kit:

1. **SC-18** Spanner Wrench
2. **U3H** Grease Tool (U-Cutter)
3. **HDD-3S** Root Saw
4. **A-1DC** Starting Drill Tool
5. **1-FLSC1SC2** Flexible Leader for Negotiating P-Traps



OPERATING INSTRUCTIONS



OPERATOR MUST BE THOROUGHLY FAMILIAR WITH ALL SAFETY INSTRUCTIONS BEFORE OPERATING EQUIPMENT.

FOR AUTOMATIC CABLE FEEDER

1. **WITH POWER OFF**, attach a small spear-type cleaning tool to the end of the cable. This tool will enable you to bore a starter hole in the obstruction, allowing backed-up water to drain.

NOTE: The flexible leader should be used with the A-1DC Starting Tool when negotiating P-Traps or severe bends in the line.

2. Place machine cable guide spring at pipe opening. **NEVER** have exposed cable.
3. Position foot actuator for easy operator accessibility.
4. Make sure switch is in **FORWARD** position. Run machine in **FORWARD** at all times during cleaning operation.
5. Place one **HEAVY** leather gloved hand on the cable guide spring to control cable as it rotates inside; and use other hand to work the feeder control lever.

DANGER: Operator must keep one **HEAVY** leather gloved hand on cable guide spring at all times during operation.

6. **WITH POWER ON**, in order to feed cable, the operator must move the feeder control lever from **NEUTRAL** (the position midway between FORWARD and REVERSE) to the **FORWARD** position, while depressing the foot actuator. (See Figure #2 for **FORWARD** feeder position)

Figure 2



NOTE: The speed at which the cable is fed initially can be controlled by moving the control lever toward **FORWARD** to increase speed and moving back toward **NEUTRAL** to slow speed.

NOTE: If the feeder control lever is initially put in **FORWARD** but the cable is not advancing, then turn the cable tension knob in a clockwise direction until the cable begins to advance. (See Figure #3)

DO NOT over-tighten cable tension knob as it may damage feeder bearings.

Figure 3



7. Continue to automatically feed cable until obstruction is met. When cable begins to drag or rotation becomes difficult, move the lever to the **NEUTRAL** position and allow tool to cut away at the obstruction. (See Figure #4 for **NEUTRAL** feeder position)

Figure 4



DANGER: NEVER force the cable or tool into the obstruction. Choose the proper feeding speed in order to give a smooth cutting action.

8. If tool becomes hung up in the obstruction, move control lever to the **REVERSE** position to back out tool. (See Figure #5)

Figure 5



9. After tool has been removed from obstruction, move control lever back to the **FORWARD** position and continue to work through obstruction.
10. To retrieve cable from line, move control lever to the **REVERSE** position (while continuing to operate cage in forward rotation) and cable will back out of line and feed into cage.

NOTE: It is recommended to use a continuous flush of water to clean tool, cable and sewer line as cable is retrieved.

11. When tool is close to cleanout opening, return Control Lever to **NEUTRAL** position, place switch in **OFF** position, release foot actuator and allow machine to come to a complete stop.
DISCONNECT POWER CORD.
12. Pull remaining cable and tool from drain line and hand-feed cable back into machine.

MAIN SEWER OR SEPTIC TANK OVERUN

Operator should determine the approximate distance from cleanout opening to the main sewer or septic tank. **Overrunning cable into these areas can cause cables to twist or knot-up preventing their retrieval.**