Loosen the two clutch adjusting screws an equal amount to a point where the drive unit will turn the cable—but where the clutch will slip when the slightest obstruction is encountered. Then, tighten the clutch by giving each adjusting screw one-half turn until the clutch will slip only under moderate loading.

AFTER **ANY** ADJUSTMENT IS MADE TO THE CLUTCH TO ALTER ITS TORQUE FOR A LIMITED PERIOD OF TIME ON A SPECIFIC JOB, **ALWAYS RETURN THE TORQUE SETTINGS TO THE FACTORY SPECIFICATION OF 100 INCH POUNDS.**

An accurate setting should be made by:

1. Obtaining an inch/lbs. torque wrench and adapter from ELECTRIC EEL.
2. Attach the adapter to the drive fitting of the Model C machine and follow instructions included with the adapter.

THE CABLE

The Dual Cable is composed of a right hand wound, open spaced, outer steel spring and a left hand wound, closed spaced, inner steel spring which are joined at each end with couplings. This construction provides a strong, flexible cable that self-feeds through the pipeline in either direction.

Cable sections and tools are joined by firmly pressing the fittings together and turning the cables or tools a quarter turn to engage the snap lock pin.

Cables and cleaning tools are disconnected by using the spanner wrench, (available from ELECTRIC EEL), by disengaging the locking pin and turning a quarter turn in the opposite direction, as shown below. The Dual Cable sections require periodic maintenance—usually just an occasional oiling of the snap lock pin in the male coupling.

If the cables are to be stored for several weeks between jobs, a light coating of oil will prevent rusting.

Operating Instructions

⚠ DANGER ⚠

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

1. If at all possible, the nature and approximate location of the stoppage should be determined before starting the job. Usually a drain or sewer line obstruction is removed by running the cleaning tool downstream until the obstruction is reached.
2. The cleaning tool should be chosen according to the enclosed information for the line size being cleaned.
3. The cleaning tool reduces the obstruction to small pieces, which are then washed downstream by the flow of water. In such cases, after clearing the obstruction, you should use as much water in the line as possible.
4. Check for clean outs—and, where possible, avoid traps by using an opening beyond the trap.
5. Wheel the machine into the space where the work is to be done. Remove as many 8' sections of cable from the cable container as operating space will permit—and use a spanner wrench to separate the cables.
6. Then connect the proper tool to the first section of cable and insert it into the opening of the pipeline that is to be cleaned. If it enters the pipeline freely, feed it in by hand until an obstruction is met. Then, attach the cable to the machine. BEFORE TURNING ON THE MOTOR, BE SURE THE REVERSING SWITCH IS ON "FORWARD".
7. If the opening is trapped, you must use the feeding tool to start the cable into the line. The FEEDING TOOL is held against the rotating cable so that the cable feeds into the pipeline far enough to gain its own footing. Remove the starting switch from its bracket and use it and the feeding tool as shown in Figure 5.
8. As soon as the cleaning tool has negotiated the trap, shut off the motor and return the switch to the bracket. AVOID "P" traps in 3" diameter pipelines as they can cause severe cable damage. We recommend our Model J cables and cleaning tools for this application.
9. To add additional 8' cable sections use the following procedure, but **NEVER** add more than **ONE 8' SECTION** of cable at a time between sewer opening and machine. Feed the added section into the pipeline until the machine is two or three feet from the opening. Then add another length of cable. The open spaced, right hand wound construction of the outer cable member provides a self-feeding action and exerts an even pressure against the pipeline stoppage. If the safety clutch slips, put the machine in reverse and back away momentarily from the obstruction.
10. Work the cable back and forth—by alternating the motor in reverse and forward for a few seconds in each direction—until the initial opening in the obstruction is made. It is not necessary to let too much cable out of the line. A foot or two backward and forward several times usually does the job. Repeated slippage may indicate a broken or damaged pipeline. **AVOID** slack in the cable between the machine and the pipeline opening—as this is the area where cable will have a tendency to loop and then kink and become damaged and/or could cause serious injury.
11. Repeat this operation until flow is established. WHEN POSSIBLE, KEEP PLENTY OF FRESH WATER RUNNING THROUGH THE LINE WHILE WORK IS BEING DONE. This allows the obstruction, broken loose by the cleaning tool, to be flushed out. This also allows the cable to be washed off when it is withdrawn from the pipeline. It is important to wash off the cable in this manner—or with a hose—immediately after the job is completed. This prevents damage to the cable and tools by the chemicals present in drains and sewers.
12. After the initial opening is made, reverse the motor to feed the cable out of the line. Use the proper tool to complete the job.

    Occasionally, a tool will hang up on some obstruction and will not feed back. If this happens, put the motor in forward rotation and pull back on the dolly until the tool is past the obstruction. Then, put the machine in reverse and the tool will feed out.

CLEANING TOOLS

The cleaning tools shown on the following page fall basically into two categories: (1) starting tools which have drill or spade points, and (2) finishing tools which usually are of a flat spring design with serrated edges. 3" and 4" diameter lines can usually be cleaned by using the starting tool to make the initial opening—and then using the finishing tool for the second run through the line.

Electric Eel Dual Cable Details

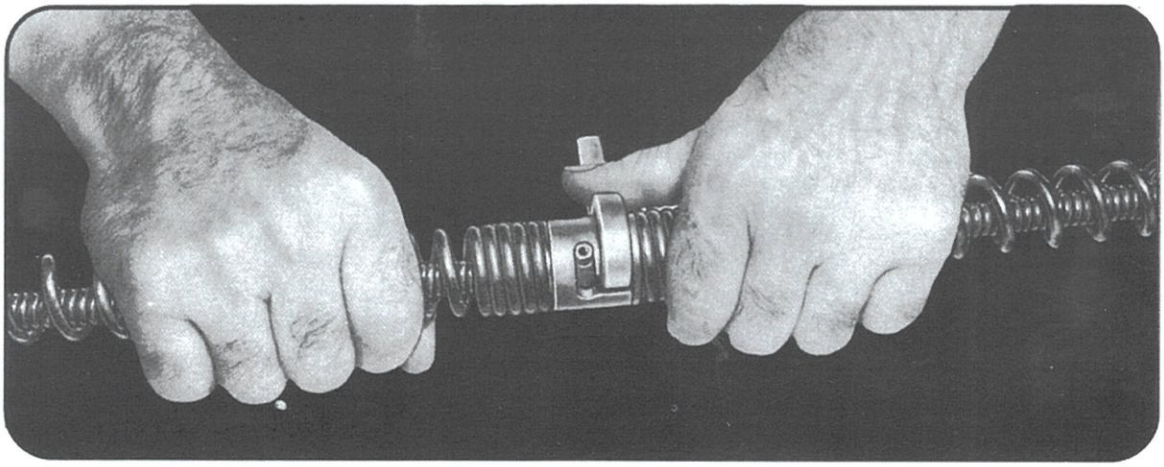
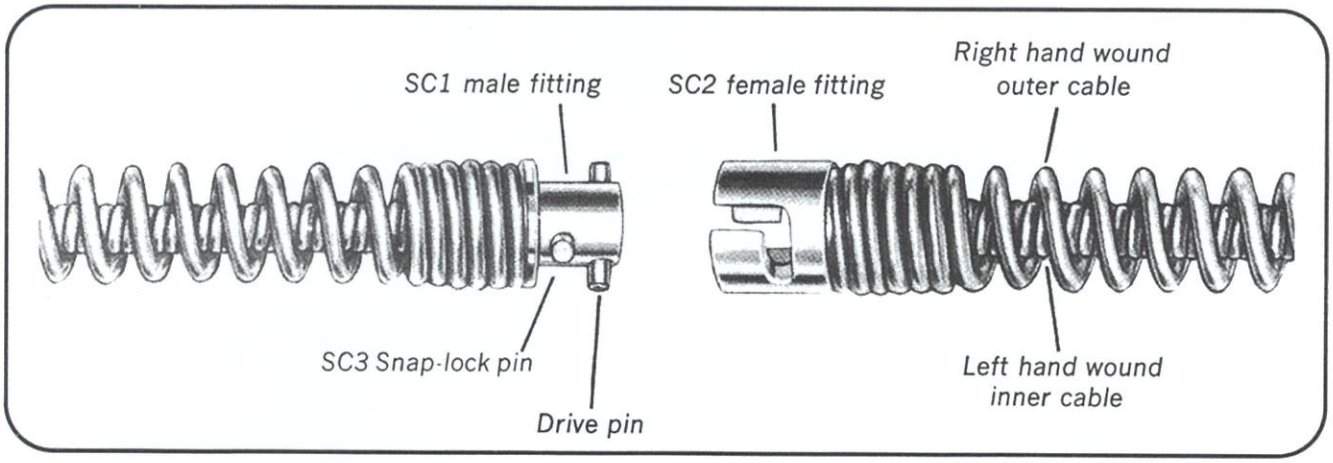
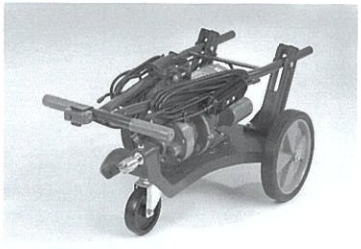


Figure 2 Separating cables with spanner wrench



WARNING!
DO NOT HANDLE ROTATING CABLE



The Model C Electric Eel has a folding handle so that it may be easily transported and stored. You will find that this feature is also advantageous when you are working in crawl spaces.

Badly blocked pipelines usually require more than two runs through the line. Progressively larger cleaning tools should be used on each run until the line is cleaned to its original diameter.

EXAMPLE: A badly blocked 4" pipeline should be opened with the A-1DC tool. The HDD-3S tool should be used for the second run. The finishing run should be made with the HDD-4S tool—or with the A-14DC tool if entrance is made through a "P" trap.

Since the dual cable imparts a whipping action to the cleaning tool, the opening made in the pipeline obstruction is approximately 1/2" to 1" larger in diameter than the cleaning tool.