SPECIAL NOTES

Kinked Cables are conclusive evidence of abuse and/or misuse. A Coiled Cable cannot be forced, nor can a long length of cable be pushed ahead of the rotating machine without running the risk of kinking. In the event of a kinked cable, cut out damaged section and splice for continued service.

If proper cable size is used and equipment is operated as close as possible to pipe outlets, while held securely, kinkage of cable will not occur. Always penetrate line slowly, never force cable as action at end of cable disperses blockage not cable pressure.

ACIDS: Drano, Liquid Plumber and other "easy chemical remedies" leave acid residue in the drain. No matter how diluted, acid solutions cause crystallization of the steel which can easily be identified. If at all possible the drain should be flushed before cleaning. Obviously this cannot be done in many cases. Where flushing is impossible, wash cable with garden hose as soon as stoppage has been cleared.

"SUR-LOK" COUPLER SYSTEM



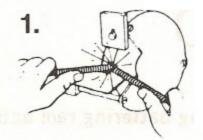
If a kink has badly distorted cable coils, to repair damage, section should be cut out and spliced with an Exclusive BURTON "SUR-LOK" SPLICER shown in these simple "SUR-LOK" Cable Repair Instructions.

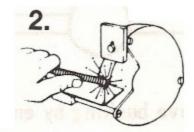
- Cut out damaged section of cable by using edge of a grinding wheel as shown.
 A high speed hack saw blade or a heavy duty bolt cutter can be used.
- Grind flat both cut ends of cable to be spliced. Dress ends of cable to remove burrs.
- 2A. For Repairing Plazcore: After Step 2 of SUR-LOK coupler system repair instructions, drill plastic core from inside cable to a depth of 1". For 1/2" cable use drill size 3/16", for 3/4" cable use drill size 1/4".
- 3. Clamp cable in vise as shown with end extended approximately 1½" above vice jaw. Insert tapered punch into cable and hit with hammer two or three good sharp blows, to spread top coil.
- Raise first tapered coil with sharp edged tool to enable first thread of coupler to thread into cable.

NOTE: If your cables are L.H. wound, you must thread coupler into cable in a counterclockwise direction.

5. Insert male coupler in end of coil. Secure a crescent wrench to head and screw into coil until bottomed. On other piece of cable to be spliced repeat above instructions. To screw female part into coil use a drift punch inserted through

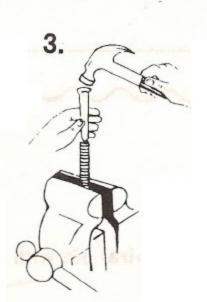
opening in coupler. CAUTION: DO NOT OVERTIGHTEN, AS THIS MAY CAUSE CABLE TO RUPTURE. Join two pieces of cable male to female part and install drive pin.







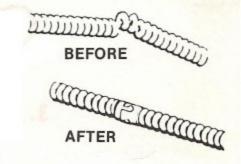


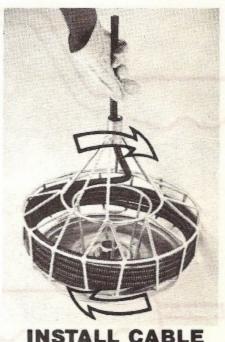




for the repair of BURTON "Buroc" Cables!

"SUR-LOK" Couplers can save you cable replacements . . .





INSTALL CABLE
CLOCKWISE
IN CAGE ON ALL
BURTON EQUIPMENT





WELDING INSTRUCTIONS

FOR ATTACHING CONNECTORS TO DRAIN CLEANING CABLES

(For Cup-type Connectors)

WELDING - Electric Arc E-7108 Coated Electrode 1/8" Diameter 50 Volts 115 Amps



- Clean surface dirt, grease, oil and corrosion from end of auger where welds will be made in notches of connector.
- 2. Insert auger into connector and hold in place with one notch up.
- 3. Wrap a wet cloth or a piece of felt around the cable as close as possible to your weld. This will prevent the high temperature in the welding area from spreading into the cable causing the cable to become brittle. Keep the wet cloth on until the connector has cooled. Do not quench.
- Strike arc and hold so the weld penetrates the auger coil partway then puddles up to melt the walls of the notch.
- Stop when the puddle is about flush or a little above the surface of the connector.
- Rotate snake and repeat on opposite side.

SAFETY NOTE

Do not clean the cable with a chlorinated hydrocarbon solvent like trichlorethylene and then weld. The electric arc in the presence of the solvent vapors will produce phospene, a poisonous gas.

SILVER SOLDERING – (Very good, but more expensive)

Easy-Flo 35 (Handy & Harmon) or equal

Handyflux (Handy & Harmon) or equal

- Clean the outside surfaces of the snake thoroughly with solvent to remove grease and oil and then with a wire wheel. The inside of the connector should be free of surface soil and corrosion.
- Wrap a wet cloth or piece of felt around the cable as close as possible to your weld. This will prevent the high temperature in the welding area from spreading into the cable causing the cable to become brittle. Keep the wet cloth on until the connector has cooled. Do not quench.
- Using solder manufacturer's recommendations and a suitable torch, heat auger with connector in place to 800° - 1000°F and flux thoroughly.
- Continue heating to 1125° 1295° and add silver solder until it flows into the space between the connector and outer surface of the auger coils.
- The solder should be the "viscous" acting type, not the "thin and runny" type.

WELDING INSTRUCTIONS

FOR ATTACHING CONNECTORS TO DRAIN CLEANING CABLES



(For Butt-Weld Connectors)

For stick electrode welding the following is recommended:

E-7018 Weld Electrode 1/8" Diameter 50 Volts 115 Amps

- Cut the cable with an abrasive saw or disc at 90°. If the cut is not square, make it square by grinding.
- Clean surface dirt, grease, oil and corrosion from the end of the cable where the weld will be made.
- Clamp the cable in a vise vertically with 1 to 2 inches of the cable extending upward.
- 5. Wrap a wet cloth or piece of felt around the cable as close as possible to your weld. This will prevent the high temperature in the welding area from spreading into the cable causing the cable to become brittle. Keep the wet cloth on until the connector has cooled. Do not quench.
- Hold the butt-weld connector (same diameter as cable) directly on top of the cable with the weld prep end down.
- Strike the arc in the groove formed between the weld prep and the end coil of the cable.
- Move forward when the puddle is a little below or about flush with the surface of the connector. Try to penetrate only halfway through the cable coil, except at the end where the coil tapers to nothing and it is not possible to do so. Stop after welding about 1/4".
- Make sure the connector is square with the cable and move 180° around the cable. Rotate the cable if necessary.
- Now start welding. It's only necessary to weld in two or three spots. Remember not to penetrate more than halfway through the cable coil.
 - (As an alternative, the cable and the connector can be individually clamped into a piece of angle (iron) in a horizontal position. The welding can be accomplished in a manner similar to that described above. Do not clamp the connector tight enough to damage it particularly when it is hot.)
- 11. It is important that the weld fuses into half of the coil when the coil is at its full diameter, not less and not more. Use enough amperage to get good penetration.
- 12. The weld area will be red when welding is complete. Allow the weld to cool slowly. Do not quench or try to cool the weld rapidly.
- 13. The weld should be more or less flat, that is, without a crown that could make travel through a power feed difficult. If necessary, grind flat, being careful not to touch cable.

SAFETY NOTE

Do not clean the cable with chlorinated hydrocarbon solvent like trichlorethylene and then weld. The electric arc in the presence of the solvent vapors will produce phosgene, a poisonous gas.

General Wire Spring Co. McKees Rocks, PA 15136 USA

