**Electric Eel® DUAL CABLE REPAIR**

**SC2 Female fitting**  
Left hand wound inner cable  
**SC1 Male fitting**  
Right hand wound outer cable  
**SC4 INNER CABLE FITTING AT EACH END**  
94 1/2” INNER CABLE (DUAL)

**TOOLS FOR REPAIR**

Electric Eel Dual Cable can be economically repaired assuming the SC-1 and SC-2 fittings and at least half the inner cable is salvageable. The usual procedure is to disassemble the cables, disposing of the outer cable which under most circumstances should not be reused. Kinked and damaged areas are cut out of the inner cables and screw splicers are used to restore them to their original length as described in the following procedure.

Some of the repair tools shown at the right can be made in your shop or purchased from our firm.

**MALE REPAIR TOOL**  
1/4” dia. x 18” long Steel Rod  
T-101 Repair Tool  
SC1 Coupling

**FEMALE REPAIR TOOL**  
Same as male repair tool  
T-102 Repair Tool  
SC2 Coupling

**T-104 Cable Hook**  
Form hook around 1/4” rod  
1/4” dia. x 4” long Steel Rod

**T-105 Repair Spanner**  
1/4” dia. x 3” long Steel Rod

Most tools are of welded construction. Cut off the threaded ends of the SC1 and SC2 couplings before welding to handles.

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**CABLE DISASSEMBLY**

1. Secure either the male or female repair tool in the vise and attach the cable to the coupling on the repair tool (as shown in fig. A). If the cable is rusty, apply oil to the close windings of the outer cable. Then, screw the outer cable from the coupling using the T-105 repair spanner. (Use pipe wrench if repair spanner not available.)

2. Clamp the outer cable in the vise and—with the repair tool engaged in the coupling—pull the inner cable up approximately 2”, clamping the inner cable with vise grip pliers (as shown in fig. B).

3. The 3/16” dia. x 3/8” spiro pin that anchors the inner cable to the coupling can now be driven out by using a flat end punch of 3/8” diameter. If the pin is worn, replace it with a new pin.

4. The coupling at the opposite end of the cable can now be unscrewed from the outer cable and, if necessary, can be removed from the inner cable.
CABLE REPAIR

Severe kinks or damaged areas of the inner cable should be removed, using a bolt cutter or the edge of a grinding wheel. The damaged section that is removed from the cable can be replaced with new cable or a salvaged length of cable, using the C14 inner cable splicer (as shown in figs. C and D). Cable ends to be spliced should be ground flat. The splicer has a left hand thread to match the left hand wound inner cable. It is advisable to keep any splicer at least 8" from the end of the cable, so as not to impair the flexibility of the cable. The SC4 inner cable fitting is screwed into the cable in the same manner as the splicer. Since the outer cable cannot be spliced — broken, worn, or badly kinked outer cable should be replaced.

CABLE REASSEMBLY

1. Assemble either the SC1 or the SC2 coupling to the inner cable, using 3/16" diameter spirol pin. Use a ball peen hammer to drive the pin in.

2. Clamp the outer cable in the vise so that about 1 1/2" of the close windings protrude above the vise. To help in starting the SC-1 and SC-2 fittings into the outer cable, drive a thin bladed screwdriver or similar tool between the last two coils and pry up the end of the wire. This provides a starting place for the threads on fitting. Then insert the inner cable and — using the proper repair tool — screw the coupling into the outer cable. Peen down the end of the outer cable (as shown in fig. E.)

3. Remove the cable from the vise and clamp the opposite end in the vise. Using the inner cable repair hook, pull out approximately 2" of the inner cable and hold it in place with vise grip pliers.

4. Assemble the proper dual coupling to the inner cable using a 3/16" diameter spirol pin.

5. Attach the dual repair tool to the coupling and rotate 4 1/2 turns counterclockwise before screwing the coupling into the outer cable.

6. Peen down the end of the outer cable (as shown in fig. E.)

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