

Common Electric 20.5 Enhancement Kit, 826-2631

The enclosed kit is designed to fit 20.5 kW In-and-Out Burger fryers.

See bill of material on page 5.

On early model fryers, the element wires are wrapped with fabric. The fabric is cut away in the retrofit and the wires are rerouted.

The shroud around the springs on the old rear brace does not extend below the brace.

Element wires on newer fryers are routed as shown and lack the fabric covering.

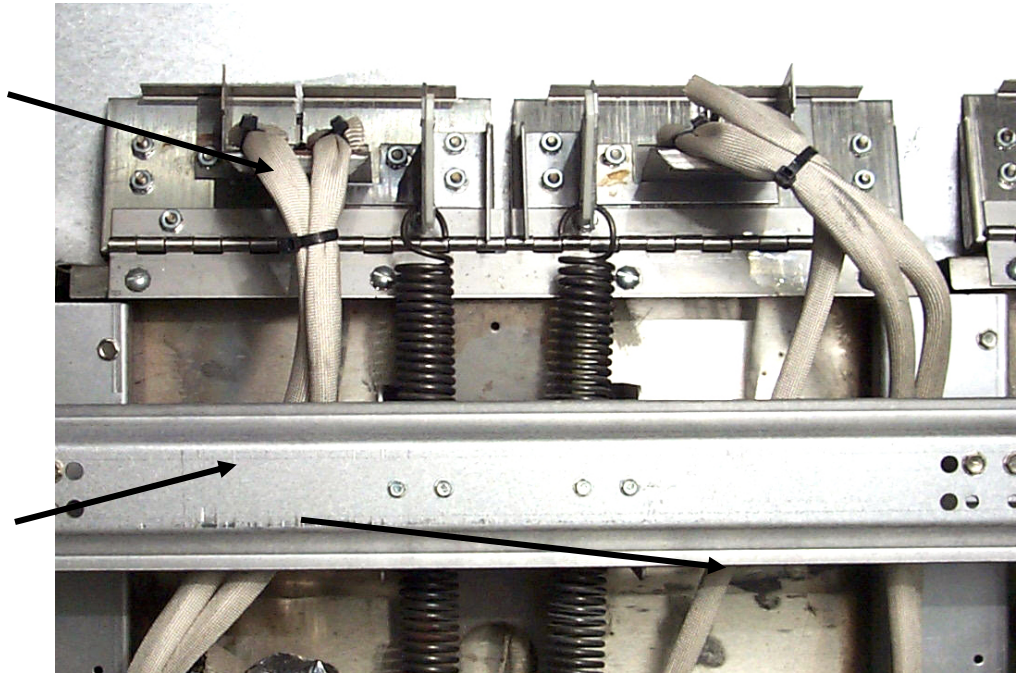


Figure 1: A fryer exhibiting these features will require a complete retrofit.

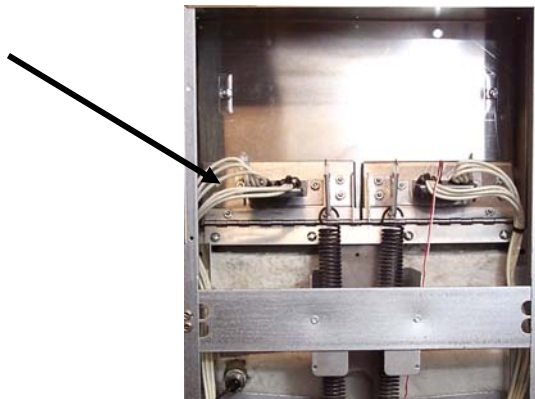


Figure 2



Figure 3: A shroud is provided in the retrofit kit and should be added if the raised edge (shown with the arrow) is absent from the fryer being retrofitted. A tilt-plate without the needed shroud is shown below.



Figure 3A

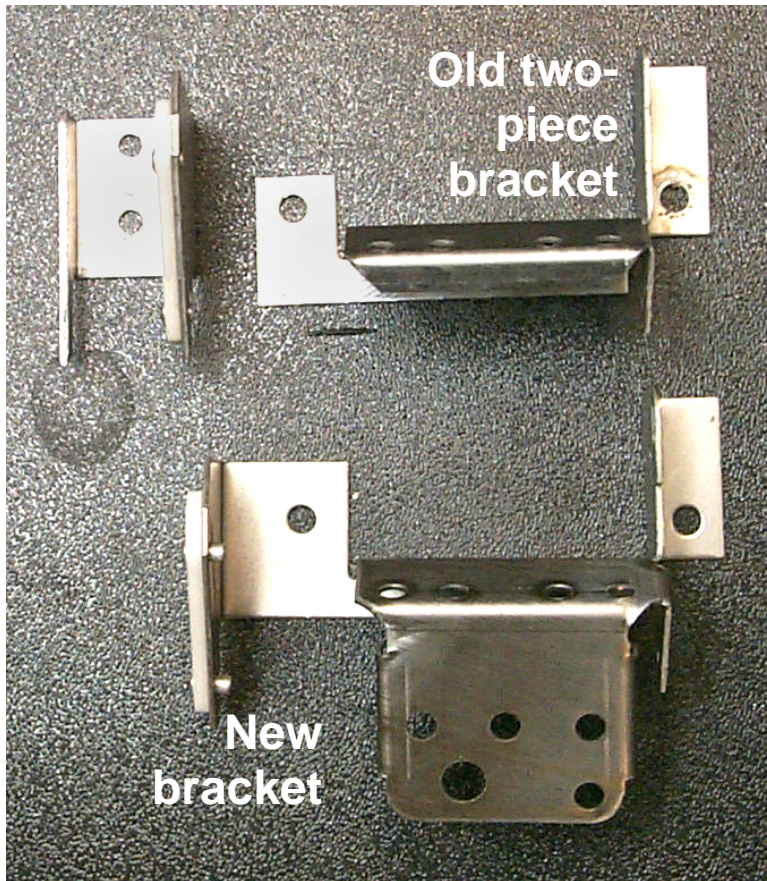


Figure 4: All fryers will get a new element support bracket, which provides new tie-down points for the element wires. The old two-piece bracket is shown at the top of the photo.

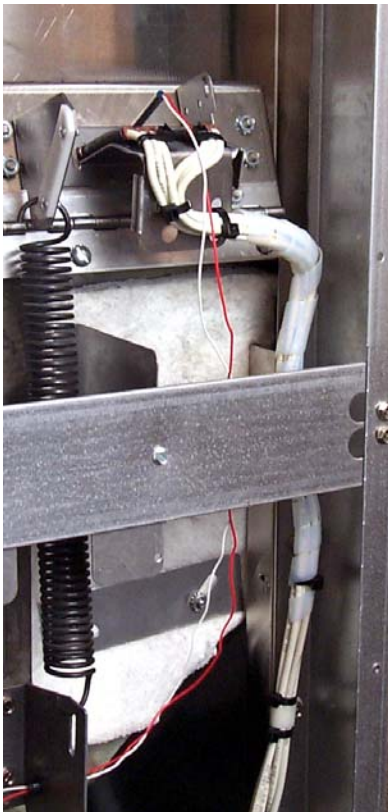


Figure 5: A reworked fryer is shown at left. The element wires are attached to the new element support bracket in four places with hi-temp wire ties. The element wires are also encased in a spiral wrap from the point they leave the bracket to below the level of the hi-limit. A drawing of the wire routing and placement of the spiral wrap is shown on page 6.

INSTALLATION INSTRUCTIONS FOR WIRING RESTRAINT KITS

1. Disconnect the unit from the electric power source.
2. Remove all back panels.
3. Remove the tilt-housing cover and rear brace; retain the screws.
4. Use shears to cut all sheathing and tie wraps from the element, probe, and hi-limit wires (see Fig. 6).
5. Lift the elements and rest them on the vat covers. Detach the element springs.
6. Clean grease and oil from around the tilt plate
7. Remove the existing element support brackets from the tilt housing and replace them with the brackets provided in the kit. See Fig. 7. **Note:** Oil encrusted nuts can be loosened by spinning them counterclockwise with a cordless electric driver before attempting to back them off. Screws stuck in a nut can be removed by drilling out the portion of the screw exposed in the nut and breaking off the nut. Use a 1/8-in or 3.2 mm drill bit.
8. Inspect the element wires for cuts, nicks, and scrapes. If the insulation is badly scuffed but the conductor (wire) is intact and serviceable, disconnect the lead and repair the damaged area by covering it with heat-shrink tubing. If the conductor is damaged, cut out the damaged section and use one of the butt splices provided with the kit to reconnect the wire. **See notes on page 4 on repairing element wires.**

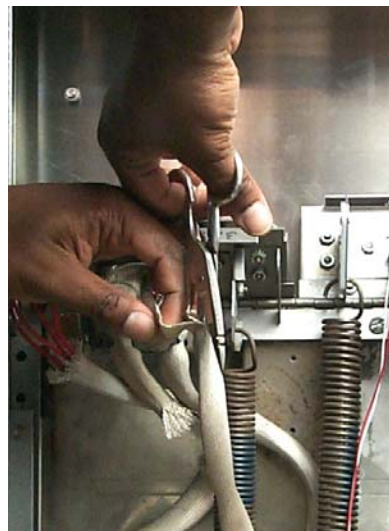


Figure 6: Cut all sheathing from the element wires.

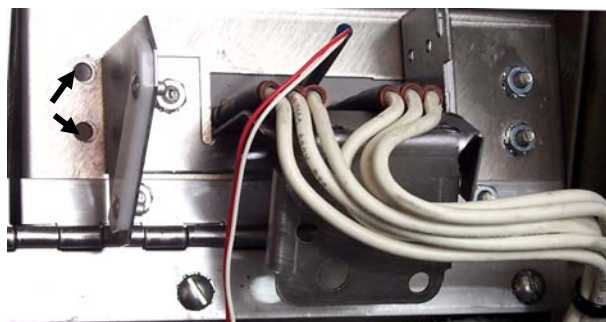


Figure 7: The new element support bracket includes the spring slide hardware. Remove and discard the old slide bracket. Reinstall the screws and nuts to fill the holes in the tilt plate on units with a shroud formed on the tilt plate. See arrows above. The holes are used to mount a shroud on older units.

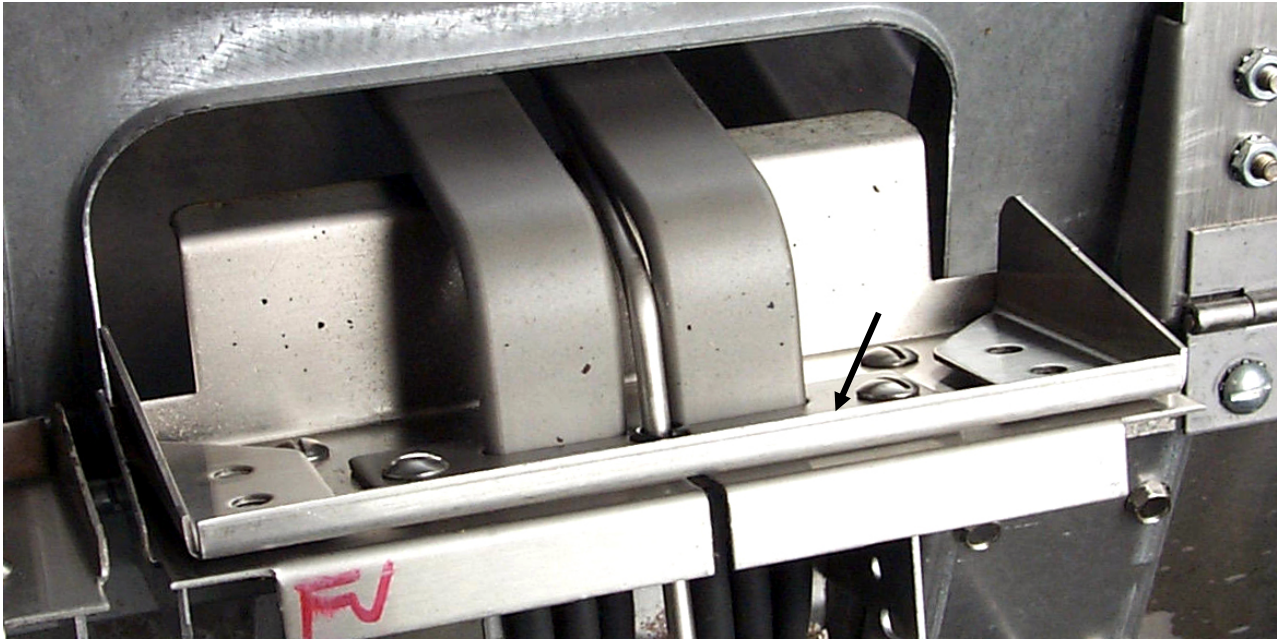


Figure 8: Attach the provided shroud (shown above) to the tilt assembly if the top edge it provides (see arrow) is absent from the existing assembly. See also Figure 2.

Notes on examining element wires

NOTE 1: If the break is on the element support bracket, **DO NOT** use a butt splice. Replace the element.

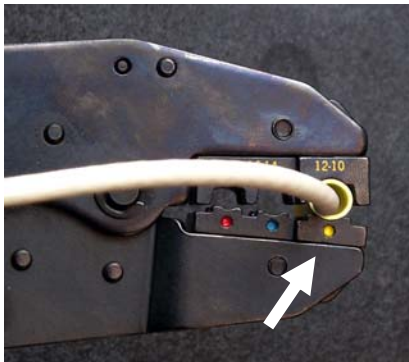


Figure 9: The end of the butt splice being crimped should be aligned with the yellow dot in the jaw and flush with the surface of the jaw.

NOTE 2: Stripping for the butt splices should be $5/16\text{-inch} \pm 1/32\text{-inch}$.

NOTE 3: It is mandatory that an Aven or Paladin crimping tool be used to install the butt splices. The Frymaster P/N for the tool is 815-0951.

NOTE 4: The element wire must be seated fully in the butt splice before crimping. The end being crimped must be aligned with the yellow dot in the jaws of the pliers. Apply pressure until the ratcheting ceases and there is an audible click. The jaws will release. See Fig. 9

NOTE 4: It is not necessary to use heat-shrink tubing over the butt splices.

9. On the element support bracket, a split bushing (817-1025) surrounds the probe. A plug (816-0480) fills that port if the probe is not present. Ensure the split bushing and plugs are in place. Replace if damaged or missing. Attach the element shroud, if needed, to the tilt-plate as shown in Figure 3.

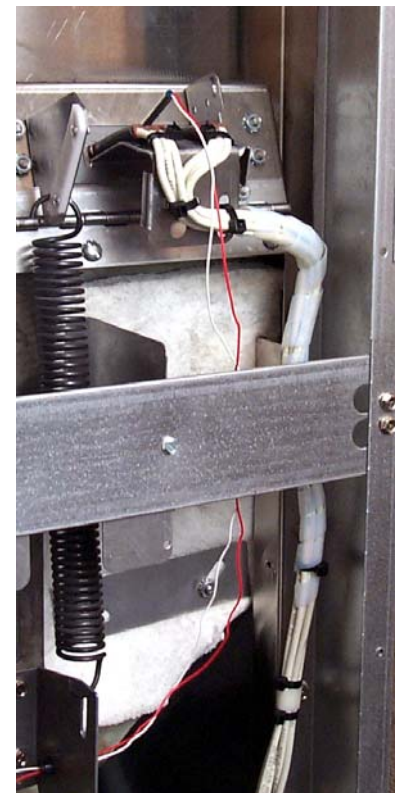


Figure 10: Route the element wires as shown and cover with spiral wrap from the bracket's edge to below the hi-limit. See wire-routing diagram on page 6.

10. Re-attach element springs and lower the elements into the frypot.

11. Place spiral wrap around the element wires to protect them from chafing (see Fig. 10). Ensure the wrap covers the element wires from the edge of the new bracket to below the level of the hi-limit. Attach a wire tie below the bottom edge of the spiral wrap to ensure it stays in place. See illustration on page 6.

12. Route the wires as shown in Fig. 10 and 12. Ensure the wires cannot touch the back of the fryer when the tilt-plate is moved. Also, ensure that the probe wires are not bundled with the element wires (see Fig. 10).

13. Route the lower portion of the element wires out of the way of the back panel. Use wire ties to secure as required. See Fig. 12. Suspend the C6 connector from the spring hanger with a wire tie. See Fig. 11. Ensure the probe wires are not tight and do not rub against sharp edges. Also, ensure they are clear of the element springs.

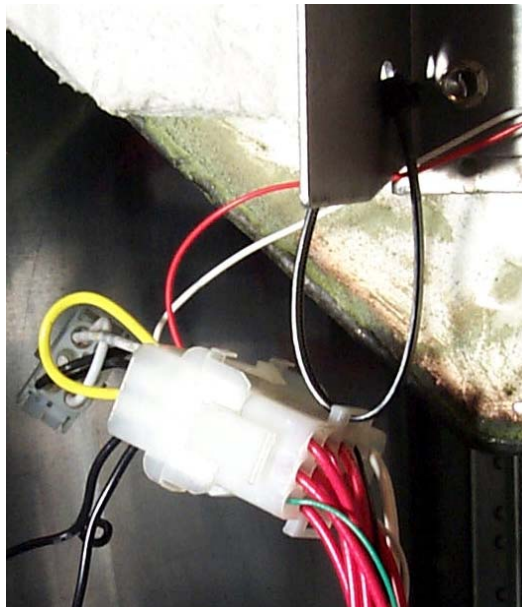


Figure 11: Suspend C6 connectors from spring hanger with a wire tie.

14. Return power to unit and ensure proper operation before reinstalling back panels.

15. Install back panels and tilt housing cover and return to service.

| In Kit 826-2631 | | |
|-----------------|--------------------------------|-----|
| Part No | Description | Qty |
| 1080740 | BRACKET ASSY,LH SPRING IN/OUT | 1 |
| 1080741 | BRACKET ASSY,RH SPRING IN/OUT | 1 |
| 2316002 | PLATE,TILT BRKT LEFT IN & OUT | 1 |
| 2326002 | PLATE,TILT BRKT RIGHT IN & OUT | 1 |
| 8073301 | SPLICE, 12 GA BUTT | 3 |
| 8090256 | NUT,KEPS 10-32 HX ZP | 12 |
| 8090361 | SCRW,DRLL #8X1/2 HX HD ZP | 2 |
| 8090434 | SCRW,#10X3/8 HX WSHR HD NP | 5 |
| 8090810 | CLAMP,NYLON WIRE STANYL TE341 | 2 |
| 8110966 | TUBING, ST-650-1/4 HEAT SHRINK | 1 |
| 8160579 | LOOM,3/4 SPLIT CORRUGATED WIRE | 1 |
| 8196448 | INST,RTRO TLT ASSY 15"IN & OUT | 1 |
| 8261385 | TY WRAPS, (8140015) QTY. 25 | 1 |
| 8090518 | SCRW,8-32X3/8 HX WSHR SL HD SS | 2 |
| 8160480 | PLUG .375 OD DOME | 1 |
| 8071025 | BUSHING, .375 X .188 ID | 1 |
| 8090767 | SCREW,10-32 X 1/2 PHIL TRHD SS | 12 |

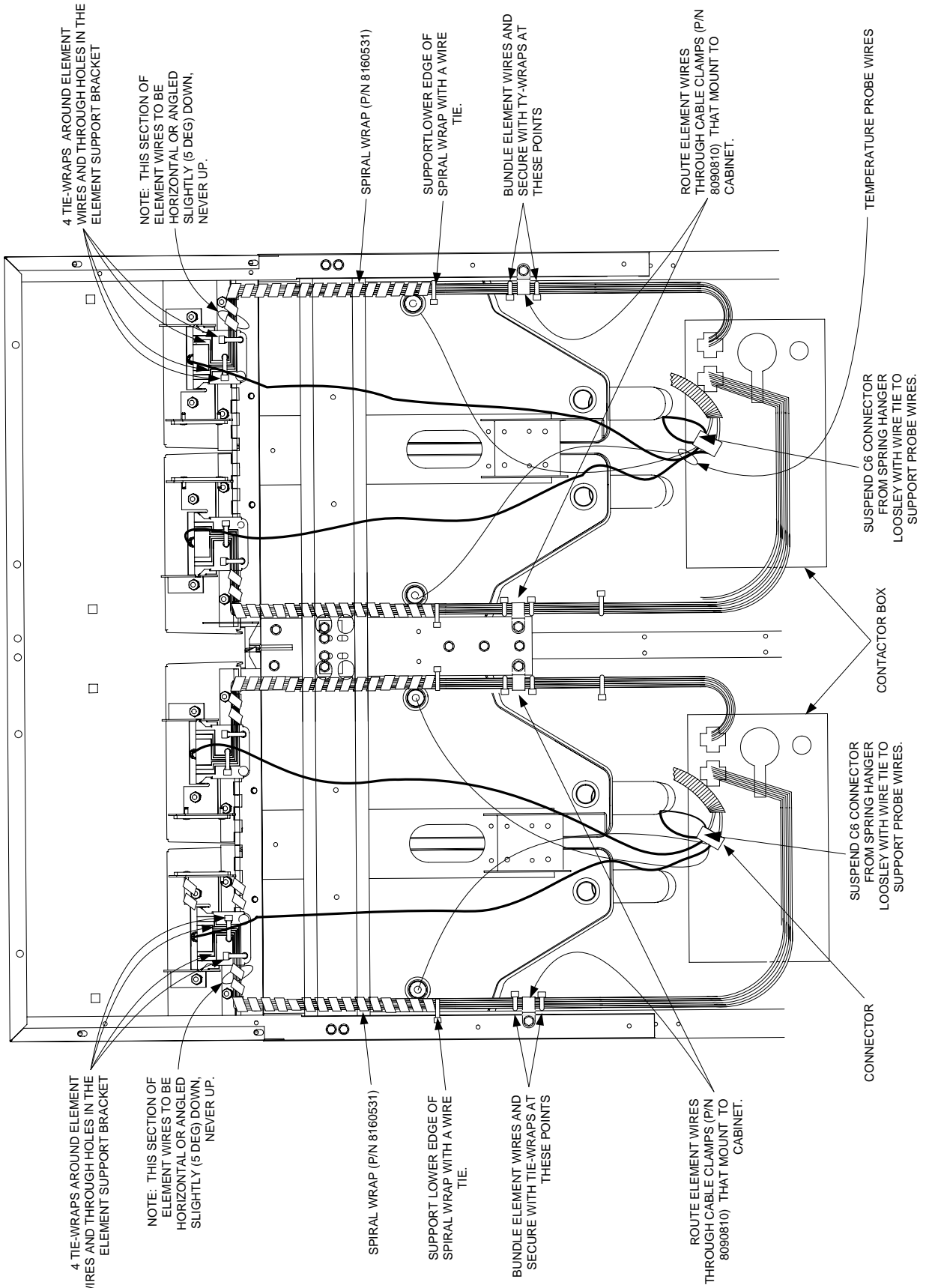


Fig. 12