Introduction

This service bulletin will explain how to:
1. Modify the MILO hybrid cable assembly with replacement connectors.
2. Replace the bulkhead connector assembly in the hydraulic power unit electrical enclosure.
3. Replace the bulkhead connector assembly in the remote control enclosure.

Parts List

The 200620 kit contains the following parts:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>SB130314</td>
<td>BULLETIN SERV MILO HYBRID CBL (NOT SHOWN)</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>200621</td>
<td>RECPT MILO 5-PIN TURCK CTRL/P</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>200622</td>
<td>RECPT MILO 5-PIN TURCK PENDANT</td>
</tr>
</tbody>
</table>

The following tools will be needed to complete this job:

- Wire cutter
- Wire stripper
- Small flat head screwdriver
- Small knife
- Drill
- Drill bits
- 13/16 - 7/8 hole bit

Make sure to follow all local lockout/tagout procedures before performing the modification on the equipment.
WARNING
You must wear the proper personal protective equipment (PPE) when modifying the equipment.

Modification of MILO hybrid cable terminals (both ends)

1. Use wire cutters to cleanly remove the Harting cable connector from both ends of the green hybrid cable.

2. Install the connector cap with lanyard.
3. Install new connector back-shell parts on each end as shown.
   
   **NOTE:** Make sure the parts are oriented as shown in the picture below. Cap with lanyard not shown.

4. Strip away approximately 1 inch of protective green cable jacket.
   
   **NOTE:** Do not cut too deep when removing protective cable jacket.

5. This will show 4 black wires labeled 1, 2, 3, 4 and two pairs of shielded wires yellow and orange and white and blue.
6. Cut wire number 1 off, this is not used.
7. Cut the blue and white wires and associated shielding off, they are not used.
8. Remove approximately 3/4 inch of shielding from the yellow and orange wires.
9. Strip away approximately 1/4 inch of insulation from all wires.
10. The wires are marked 2, 3, 4 and the yellow (Y) and orange (O) will be used.
11. Locate the numbers on the back of the plug.

12. Use a small screw driver and carefully connect the five wires as listed below.

   NOTE: Due to the small size of the yellow and orange wires; the terminal screws will need to be a little tighter to make sure they remain securely fastened in the terminal when applying tape and installing the back shell.

   | terminal 1 | Yellow Wire |
   | terminal 2 | Black Wire 2 |
   | terminal 3 | Black Wire 3 |
   | terminal 4 | Black Wire 4 |
   | terminal 5 | Orange Wire |

13. Once the wires are installed, do a “tug test” on each wire to make sure it remains fastened.

14. Carefully apply electrical tape to the cable and wires making sure the wires remain securely fastened in the terminals.

15. Carefully screw the back-shell to the plug until it is snug.

16. Rotate plug until the hole aligns with the back-shell tightening slot.
17. Insert a small screw driver or allen wrench and finish tightening the plug hand tight.

18. Screw the cord grip to the back-shell.

19. Tighten the cord grip until hand tight.

20. Do the same steps to the other end of the MILO cable.
21. Do NOT use pins for holding device!

Modification of pendant panel

1. Locate the pendant panel.

2. Drill a pilot hole between the two connectors on the bottom of the pendant panel.
   
   NOTE: Do NOT allow drill to go to deep. Damage to the inside can result.

3. Use a hole bit and drill a 13/16 to 7/8 max hole.
4. Remove any sharp edges.

5. Half the distance between the two plugs drill a 7/32 hole to attach the cap and hardware.

6. Install the receptacle and nut and cap with screw and nut.

7. Install nut and tighten connector in place.

8. Route wires to appropriate terminals.

9. Locate the wires that will be replaced.

   1) Terminals 137 and 138
   2) DC- wire
   3) 142 wire
   4) 141 wire

   NOTE: Do not strip wires, terminal blocks are insulation displacement style.
10. Remove 137 and 138 and replace with new 137 and 138 in the PLC.

11. Trace and remove old DC- wire. Place the new DC- wire in the existing location. Do NOT strip wire.

12. Trace and remove old 142 wire. Place new 142 wire in the existing terminal block. Do NOT strip wire.

13. Trace and remove old 141 wire. Place new 141 wire in the existing terminal block. Do NOT strip wire.

14. Route wires and replace caps.

Modification of HPU side box

1. Locate HPU side box.

2. Install receptacle and drill 7/32 hole next to receptacle hole for cap and hardware.
3. Locate the wires that will be removed.

1) Terminals 137 and 138
2) DC- wire
3) 142 wire
4) 141 wire

4. Remove 137 and 138 and replace with new 137 and 138 in the exact location.

5. Trace and remove old DC- wire. Place the new DC- wire in the existing location. Do NOT strip wire.

6. Trace and remove old 142 wire. STRIP approximately 1/4 inch of new wire and place 142 wire in the existing terminal block.

7. Trace and remove old 141 wire. STRIP approximately 1/4 inch of new wire and place 141 wire in the existing terminal block.

8. Route wires and replace caps.
9. Install MILO hybrid cable.