Terminator DP/FAK-5LHT Kit
for Tee Splice of
Electrically Heated TubeTrace Bundles

INSTALLATION PROCEDURES
The following installation procedures are suggested guidelines for the installation of the Terminator DP/FAK-5L: Tee Splice kit. They are not intended to preclude the use of other methods and good engineering or field construction practices.

**Receiving, Storing and Handling . . .**

1. Inspect materials for damage incurred during shipping.
2. Report damages to the carrier for settlement.
3. Identify parts against the packing list to ensure the proper type and quantity has been received.
4. Store in dry location.

**Terminator DP/FAK-5L Kit Contents . . .**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Expediter Assembly: Flat Mount Base, Grommet, Threaded Grommet Compressor, and Support Cap with O-Ring</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Junction Box Lid</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Junction Box Base with O-Ring</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Nut</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Terminal Block (Typical)</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Junction Box Cord</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Tee Splice Top</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Tee Splice Base</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>Pan Head S.S. Screws, #10-32 x .75</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>KEPT S.S. Nuts, #10-32</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>M5 Screw</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>M5 Lock Washer</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>Fiberglass Rope, 1/2” Dia. X 12’ Length</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>Heat Reflective Tape, 1.75” Wide</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>Glass Fiber Tape, 2” Wide</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>RTV Sealant Tube</td>
</tr>
</tbody>
</table>

**Required: Order Separately for each heater to be fabricated. Refer to PETK Instruction, Form PN50132 for additional information.**

**PETK Power and End Termination Kits (one req’d. per heater)**

- PETK-1D for BSX, RSX, VSX
- PETK-2D for KSX, HTSX
- PETK-3D for HPT

**Tools Required . . .**
The Terminator DP/FAK-5L Tee Splice Kit is designed to make a waterproof seal over the end of TubeTrace at the tee splice connections. Review instructions prior to installation. Kit will make one splice connection (Tube fittings not included). See separate instructions for details on splicing heat tracing.

**Terminator DP Certifications/Approvals . . .**

- **IP66 NEMA/Type 4X -60°C ≤ Ta ≤ +55°C**
- Ordinary & Hazardous Locations
  - Class I, Division 2, Groups A, B, C, & D, Zone 2 IIC
  - Class II, Division 2, Groups F & G
  - Class III Listed Heat Tracing System 137M

**Installation Precautions for Electrical Heaters (if required)**

- To minimize the potential for arcing on electric heat tracing and fire caused by product damage or improper installation use ground-fault protection. The National Electrical Code (NEC) and Canadian Electrical Code (CEC) require ground-fault protection of equipment for each branch circuit supplying electric heat tracing.
- Installation must comply with Thermon requirements and be installed in accordance with the NEC, CEC, or any other applicable national and local codes.
- Component approvals and performance ratings are based on the use of Thermon specified parts only. User supplied power connection fittings must be listed or certified for intended use.
- De-energize all power sources before opening enclosure.
- Keep ends of bundles, heating cable and kit components dry before and during installation.

**INSTALLATION PROCEDURES**

1. Remove outer jacket and insulation from tubing bundle to the required length for making connections.

2. Strip back bundle jacket and insulation 38mm (1-1/2") to 76mm (3") beyond buss connection indentation of each heat tracing. If buss connection indentation is less than 305mm-381mm (12"-15") from end of the heat tracing, proceed stripping the bundle jacket and insulation to the next indentation.

3. Make tube connections with appropriate fittings, provided by others. Test fittings for leaks before proceeding.

4. Wrap high temperature tubing with 1/2" fiberglass rope. Ensure 100% coverage to keep tubing and heat tracing from making contact. **DO NOT wrap heat trace with fiberglass rope.**

5. Wrap fiberglass rope with 1 pass of reflective tape (50% overlap) and one pass of heat reflective tape (25% overlap).
6. Wrap with 3 passes of glass fiber tape (50% overlap).

7. Complete with additional wraps of heat reflective tape (25% overlap).

8. Cut FAK-5L top and base to match outside diameter of tubing bundle and remove end pieces.

9. Mount Expediter Base with O-Ring to bottom cover using (3) M5 mounting screws and lock washers. Punch out weep hole.

10. Form a gasket by applying RTV sealant to the FAK-5L top and base.

11. Fit tubing bundle to bottom half of cover and install top half. Screw down firmly. Inspect ends of tubing splice cover for snug fit. Apply additional RTV sealant where needed.

12. Trim heat tracing to 180mm (7”) minimum from expediter base.

13. Terminate heat tracing with appropriate PETK termination kit. Refer to PETK installation instructions for details (not addressed here).

14. For power connection applications: Use dimple molded into side of junction box base to locate center hole, drill for user supplied power connection fitting per manufacture’s recommendations.
15. Mount junction box on expediter making sure to align slots to properly orient junction box base.

16. Install quick mount terminal blocks twist to position and tighten screws.

17. Complete system wiring between fabricated heat tracing and power supply wiring.

18. Install junction box lid and twist hand tight. Insert screwdriver into ratchet slot located on side of junction box base to tighten.

19. Use screwdriver ratchet on junction box lid. Lid will rotate 30°.

20. Lid latch mechanism fully engaged. To remove lid, repeat steps 17 and 18 but in opposite direction.

21. Completed Terminator DP/FAK-5L for Tee Splice power assembly for TubeTrace Type SE/ME Bundle (Installation shown is to feed power in kit junction box. Many installations will be for splice only, without power feed to the electrical heat tracing circuits.)