

Terminator DP/FAK-1 Kit for Bulkhead Entry of Electrically Heated TubeTrace® Bundles INSTALLATION PROCEDURES



The Heat Tracing Specialists®

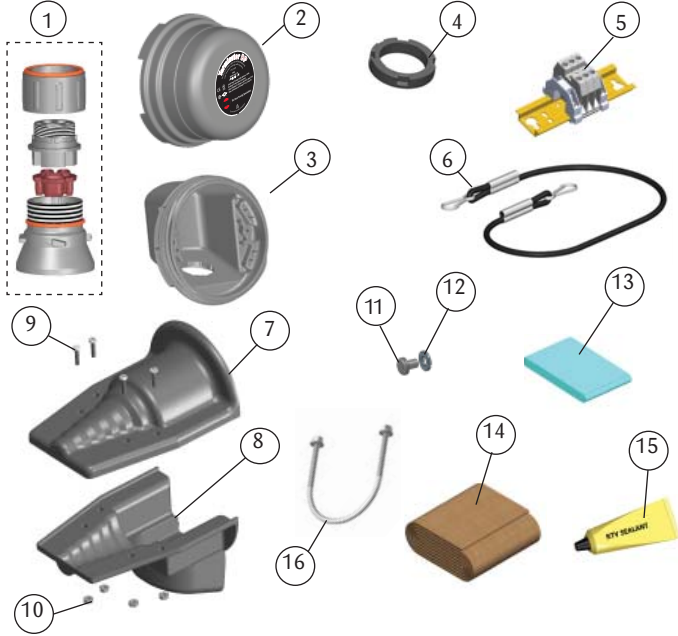
Terminator DP/FAK-1

The following installation procedures are suggested guidelines for the installation of the Terminator DP/FAK-1 Bulkhead Entry Kit.

Receiving, Storing and Handling . . .

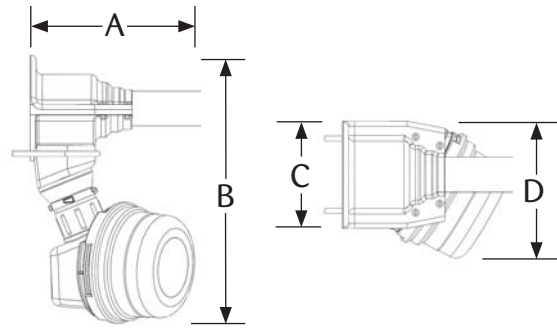
1. Inspect materials for damage incurred during shipping.
2. Report damages to the carrier for settlement.
3. Identify parts against the packing list to ensure the proper type and quantity has been received.
4. Store in a dry location.

Terminator DP/FAK-1 Kit Contents . . .



Item	Quantity	Description
1	1	Expediter Assembly: Flat Mount Base, Grommet, Threaded Grommet Compressor, and Support Cap with O-Ring
2	1	Junction Box Lid
3	1	Junction Box Base with O-Ring
4	1	Expediter Assembly Nut
5	5	Terminal Block (Typical)
6	1	Junction Box Cord
7	1	FAK-1 Cover (Top)
8	1	FAK-1 Cover (Base)
9	4	Pan Head S.S. Screws, #10-32 x .75" (19mm)
10	4	KEPT S.S. Nuts, #10-32
11	3	M5 Screw
12	3	M5 Lock Washer
13	1	Heat Reflective Tape
14	1	Glass Fiber Tape
15	3	RTV Sealant Tube
16	1	U-Bolt, Washers and Nuts

Dimensions . . .



	A	B	C	D
	inch (mm)	inch (mm)	inch (mm)	inch (mm)
Terminator DP /FAK-1	8-1/8" (206mm)	13-3/8" (340mm)	5-1/4" (133mm)	6-3/4" (171mm)

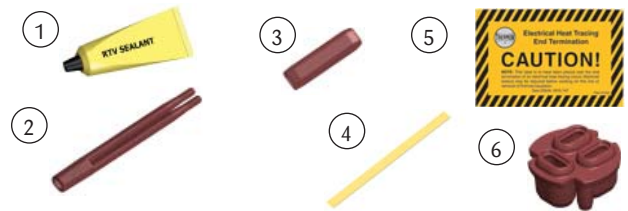
Required: Order Separately for each heater to be fabricated . . .

PETK Power and End Termination Kits (per heater)

PETK-1D for BSX, RSX, VSX

PETK-2D for KSX, HTSX

PETK-3D for FP, HPT



Item	Quantity	Description
1	1	RTV Sealant Tube
2	1	TBX Power Connection Boot
3	1	ET End Cap
4	1	Tape Strip Teflon 6" (PETK-3D only)
5	1	End Termination Caution Label
6	1	GRW-G Grommet (PETK-3D only)

Tools Required . . .



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INSTALLATION PROCEDURES

The Terminator DP/FAK-1 Bulkhead Entry Kit is designed to make a waterproof seal over the end of TubeTrace and terminate Thermon EHT in an approved junction box. Review Instructions prior to installation. Kit will make one connection.

Terminator DP Certifications/Approvals . . .

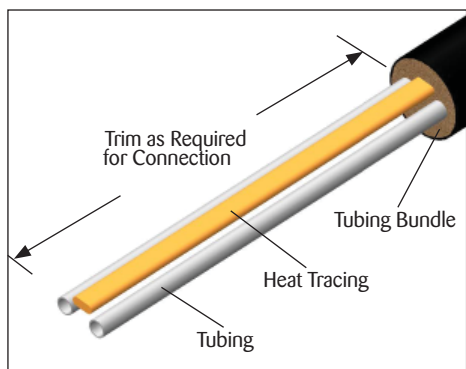


IP66 NEMA/Type 4X $-60^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$
 Ordinary & Hazardous Locations
 Class I, Division 2, Groups A, B, C, & D,
 Zone 2 IIC
 Class II, Division 2, Groups F & G,
 Class III Listed Heat Tracing System 137M



Installation Precautions . . .

- To minimize the potential for arcing on electrical 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 electrical 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, heat tracing and kit components dry before and during installation.
- Individuals installing these products are responsible for complying with all applicable safety and health guidelines. Proper personal protective equipment, or PPE, should be utilized during installation. Contact Thermon if you have any additional questions.

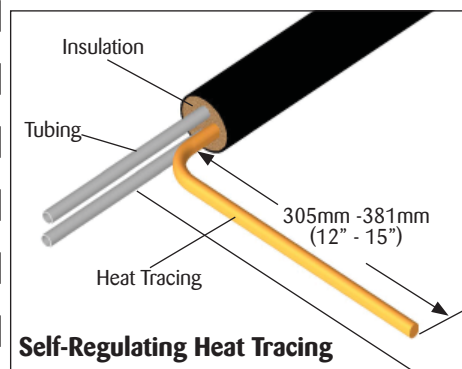


- Remove outer jacket and insulation from tubing bundle as included from end of the tubing bundle. Ensure sufficient heat trace is available for electrical connection. See instructions included with heat trace PETK kit.

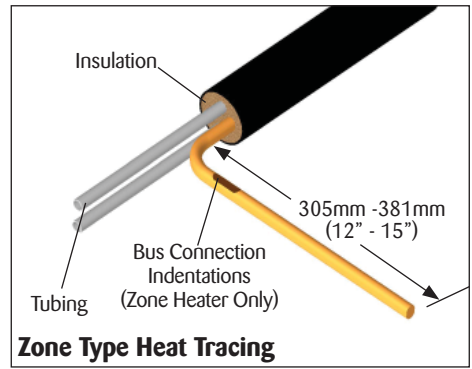


Do not cut or damage the heat trace or sampling tube.

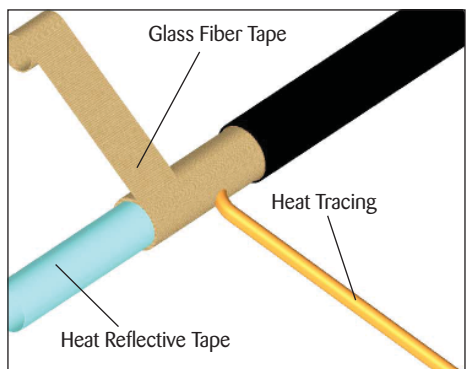
CAUTION (Found on TubeTrace SE/ME bundles)



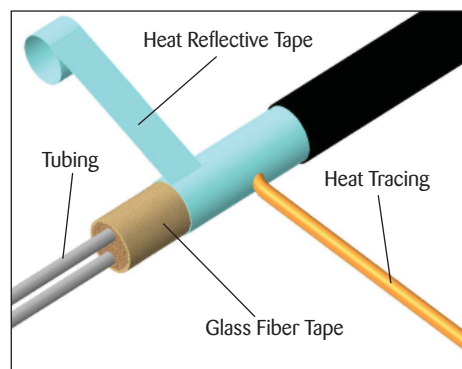
- Trim heat tracing to within 305mm - 381mm (12" - 15") of the end of the insulation. If self regulating heat trace proceed to step 3. For Zone-type heat trace continue with identification of bus connection on step 2a.



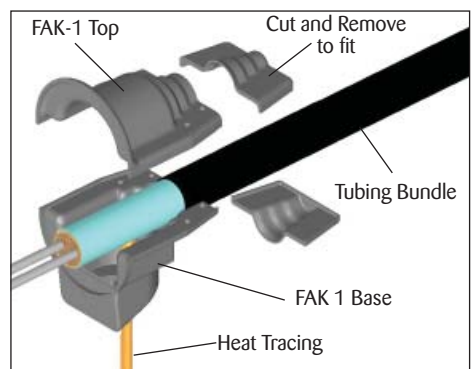
- Strip back bundle insulation 38mm (1 1/2") to 76mm(3") beyond bus connection heat tracing. If bus connection indentation is less than 305mm (12")-381mm (15") from end of the heat tracing, proceed stripping the bundle insulation to the next indentation.



- Wrap tubes and heat tracing with pass of heat reflective tape (25% overlap). Then wrap with 3 passes of glass fiber tape (50% overlap), or until fiber tape is equal to original bundle insulation thickness.

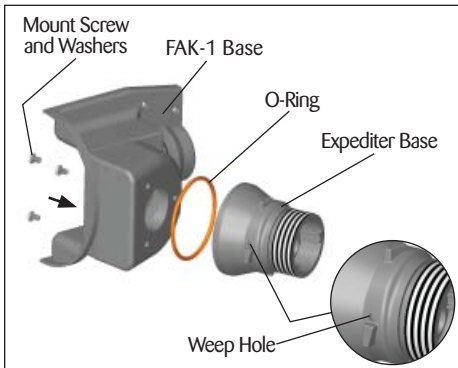


- Complete with additional passes of heat reflective tape.

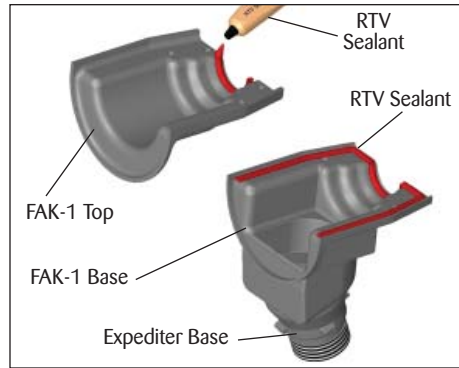


- Cut FAK-1 top and base ends to match outside diameter of tubing bundle and remove end pieces.

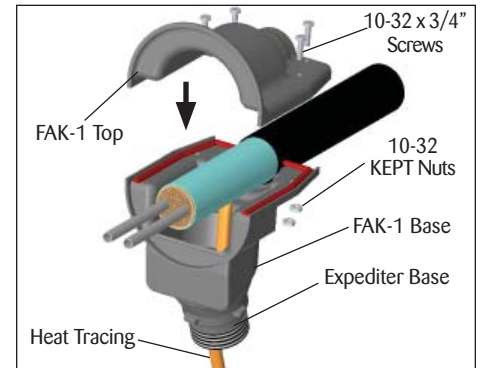
Terminator DP/FAK-1



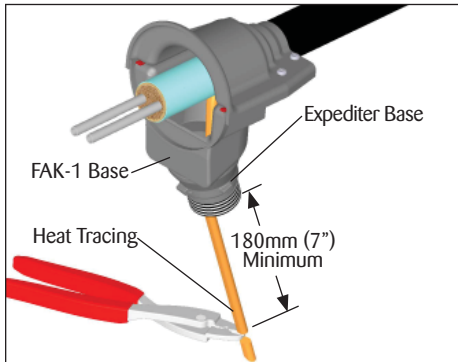
6. Mount expediter base with o-ring to FAK-1 base using (3) M5 mounting screws and lock washers. Punch out weep hole.



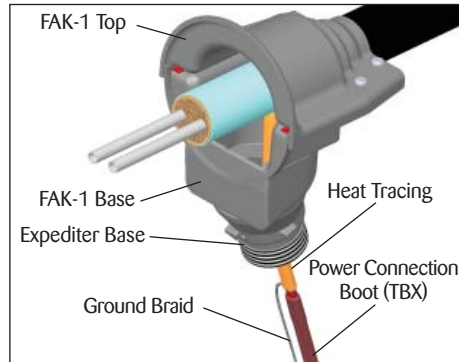
7. Form a gasket by applying RTV sealant to FAK-1 base and along radius of FAK-1 top as shown.



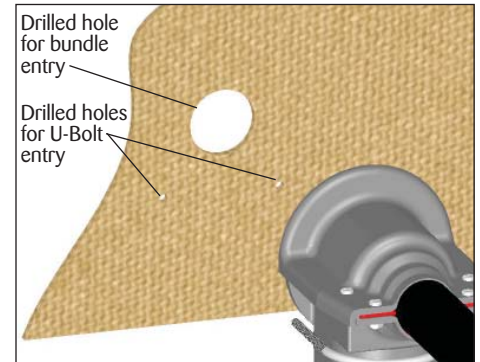
8. Fit tubing bundle to FAK-1 as shown using 10-32 x 3/4" pan head screws and KEPT nuts.



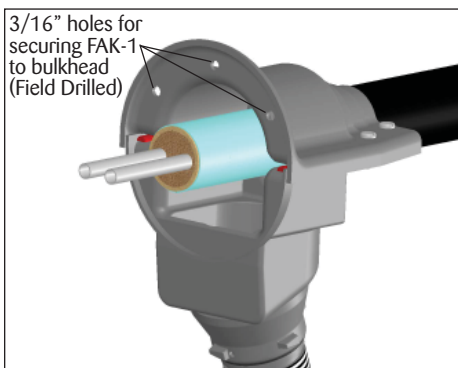
9. Trim heat tracing to 180mm (7") minimum from expediter base.



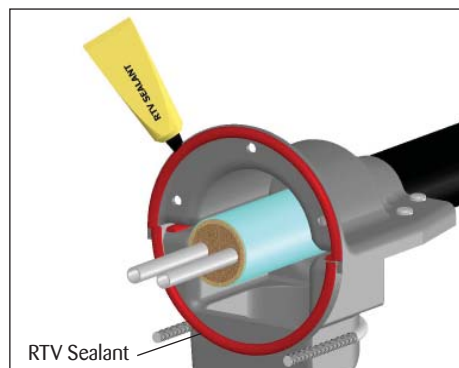
10. Terminate heat tracing with appropriate PETK termination kit. Refer to PETK installation instructions for details not addressed here.



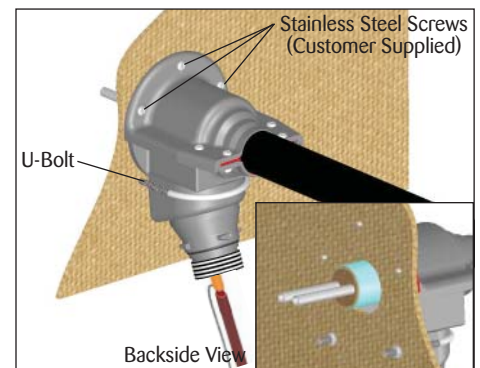
11. Drill hole matching bundle diameter into bulkhead. Mark location for U-Bolt entry and drill 1/4" (7mm) holes through bulkhead.



12. Pre-drill FAK-1 top with 3/16" (5mm) holes for securing FAK-1 to bulkhead.



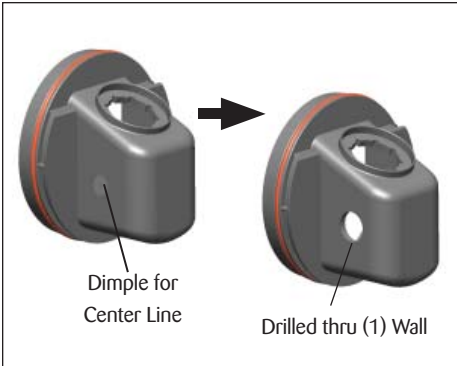
13. Apply RTV bead to back of FAK-1 flange prior to securing to bulkhead.



14. Secure FAK-1 to bulkhead using (3) three stainless steel screws (customer supplied) and U-Bolt as shown.



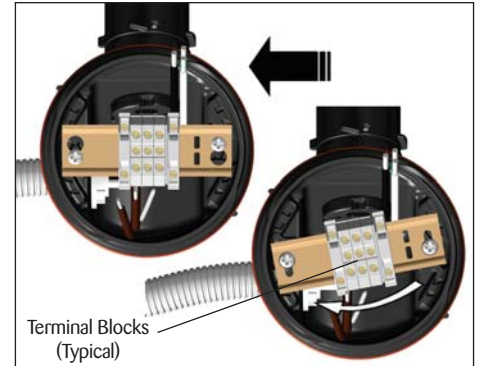
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15. For power connection applications: Use dimple molded into side of junction box base to locate center hole, drill for user supplied power connection fitting per manufacturer's recommendations.



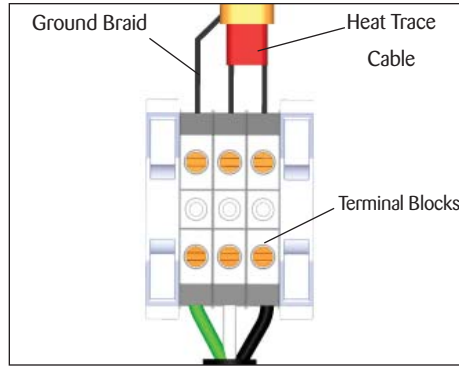
16. Mount junction box on expediter making sure to align slots to properly orient junction box base.



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



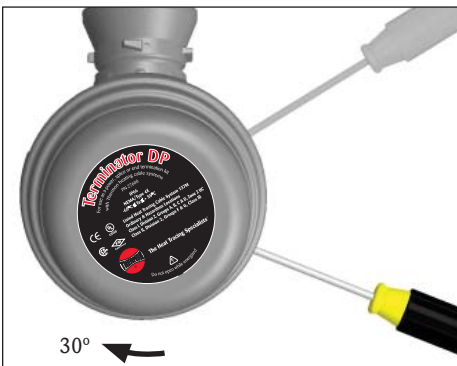
18. Complete system wiring between fabricated heat tracing and power supply wiring.



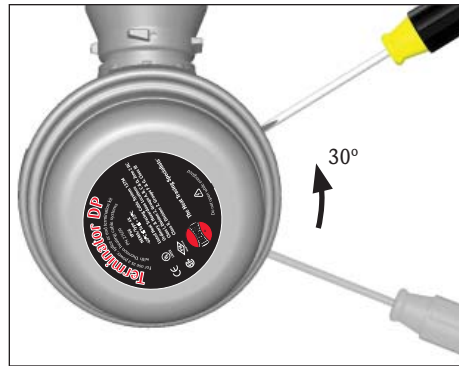
Typical Wiring Diagram.



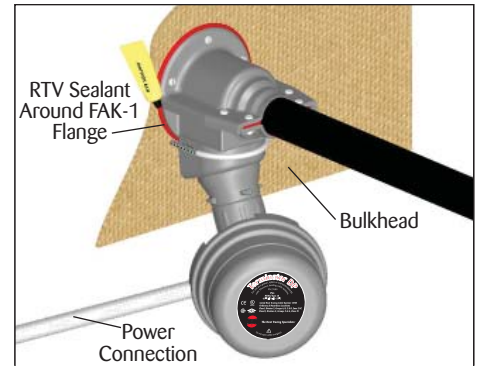
19. Install junction box lid and twist hand tight. Insert screwdriver into ratchet slot located on side of junction box base to tighten.



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



21. To remove lid, repeat steps 19 and 20 but in opposite direction.



22. Apply RTV bead around FAK-1 flange. Completed Terminator DP/FAK-1 for Bulkhead Entry of Electrically Heated TubeTrace Bundles.



THERMON . . . The Heat Tracing Specialists®
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Specifications and information are subject to change without notice. Form PN50057-1012

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