



**TN02905  
REV B, FEB-06-2013**

**INSTRUCTION – THREADED ELEMENT**

**Record of Revisions**

*When updated, this document is changed in its entirety*

REV	DATE	DESCRIPTION	BY	APPROVAL
B	FEB-06-2013	Add torque max to spec to M6 element	DNE	
A	JAN-11-2013	Initial Release	DNE	DNE



Figure 1 (Generic image of threaded element with socket connector)

**General:**

The Tanis series of threaded heat elements are subcomponents of approved Tanis systems. They are intended for use in tension applications. Elements are configured by a part number that defines, connector, threading, voltage requirement, and wattage output.

**Description:**

- Element lead, 6 inches long, terminated with a sealed connector.
- Threaded component heater body configurations (lengths vary):  
M6 -1.00 shaft, M11 hex head.  
1/4 - 20UNC or 28UNF shaft, 1/2-inch hex head.  
5/16-18UNC or 24UNF shaft, 1/2-inch hex head.

**Suggested Tools:**

- Torque wrench (inch-pound) specific.
- M11 or 7/16 inch slotted socket.
- 1/2 inch slotted socket (Figure 2).



Figure 2 - Tanis tool TU02905-05  
(1/4 drive 1/2 inch socket)

**Installation:**

- ⚠ Caution:** Use engine manufacturer’s torque requirements for location of installation. Do not exceed maximum torque allowances:
- 6mm elements, 115-inch pounds (13-Nm).
  - 1/4-inch elements, 110-inch pounds.
  - 5/16-inch elements, 280-inch pounds.

Use washers, and/or spacers as required.  
Figures 3 through 8 depict generic examples of threaded elements installed.  
Follow specific instruction per application and reference notes on page 2.

1. Access installation site, inspect threads, and correct any discrepancies before proceeding.
2. Install element and torque to manufactures specification.
3. Once installed, properly secure element lead and connector.

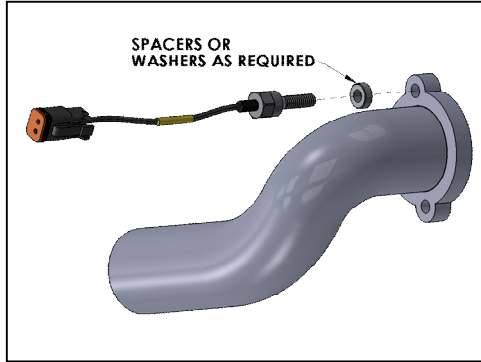


Figure 3

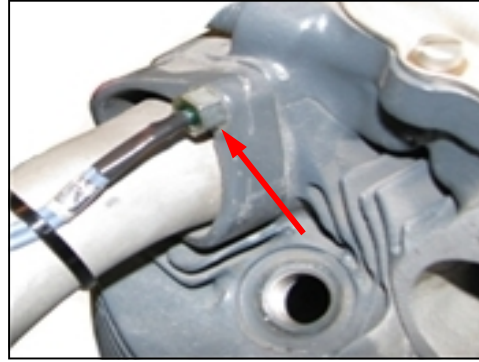


Figure 4

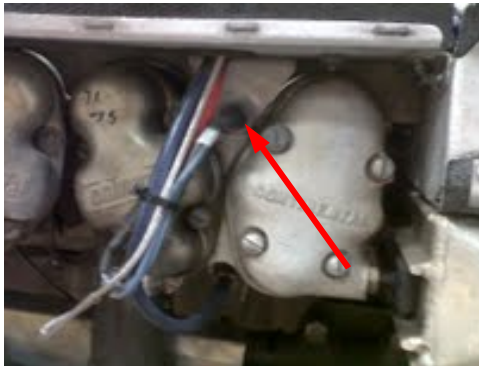


Figure 5

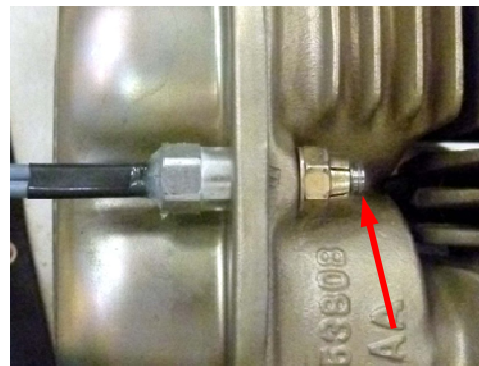


Figure 6

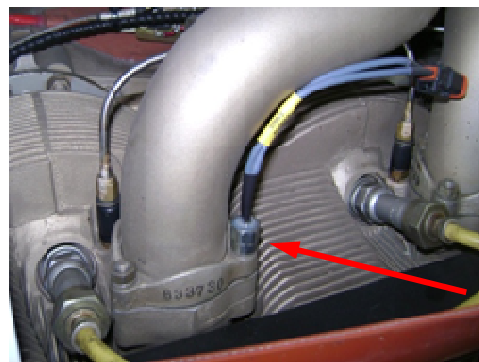


Figure 7

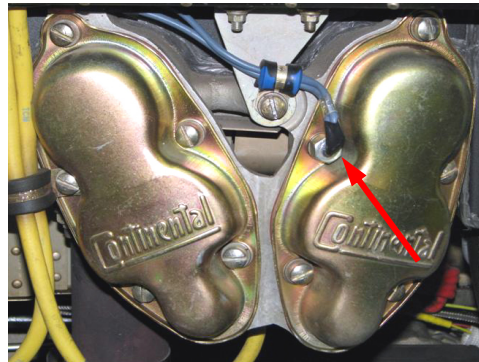


Figure 8

**Notes:**

- a) Check installation site threads for damage or wear.
- b) Repair worn threads per manufacturer's instruction, or use Heli-coil insert.
- c) As required, use aluminum spacer(s) and/or metal washer(s) to prevent over extending (no more than 2 to 3 threads), or bottoming out of element (Figures 3 and 6).
- d) A minimum thread engagement of six full threads is required, *maximum thread engagement is optimal*.
- e) When properly installed the element body mating surfaces will be in full contact with spacer/washer(s), and component.
- f) Do not over flex the element lead; this may damage the wiring where it enters the element.

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