



SCF006 THERMAL FUSE(S) INSTALLATION INSTRUCTIONS

IMPORTANT NOTE

To avoid damaging the new Thermal Fuse Assembly try to identify the cause of the failure. There are a number of causes for Thermal Fuse failure which include a weak water pump, steam leaks, faulty thermocouple, and/or malfunctioning steam generator/boiler (which may require cleaning or calibration). Troubleshooting instructions and procedures are provided in "A Guide to Maintaining the SciCan STATIM® Cassette Autoclave" which is included in RPI's Field Service Smart Kit® (RPI Part #SCK028) and is also available on RPI's website www.rpiparts.com.

REMOVING THE THERMAL FUSE ASSEMBLY

- 1) Disconnect power cord from the wall.
- 2) Remove the black wire marked "No. 3" (it is the third wire from the bottom of the connector) from the PC board terminal block. Do not remove the wire from the bundle of wires at this time. *See Figure 1, Detail A.*
- 3) Remove the pump outlet metering tube attached to the steam generator/boiler by using a 3/8" wrench on the compression nut while supporting the steam generator/boiler fitting with a 7/16" wrench. *See Figure 1, Detail B.*
- 4) Remove the silicone tubing from the air compressor. *See Figure 1, Detail C.*
- 5) Loosen the boiler outlet copper tube using a 7/16" wrench on the compression nut while supporting the boiler outlet fitting with a 7/16" wrench. *See Figure 1, Detail D.*
- 6) Remove the two chassis screws from the boiler bracket using a Philips Head screwdriver. *See Figure 2, Detail A.*

WARNING

**DO NOT REMOVE THE THERMOCOUPLE FROM THE STEAM GENERATOR/BOILER.
DO NOT KINK OR STRESS THE THERMOCOUPLE.**

- 7) Carefully lay the boiler on its side towards the back of the machine, exposing the bottom side of the boiler. Remove the short screw holding the steam generator/boiler and the Thermal Fuse(s) in place with a Philips Head screwdriver while supporting the steam generator/boiler by hand so as not to damage the thermocouple. *See Figure 2, Detail B.*

(Continued)

FIGURE 1

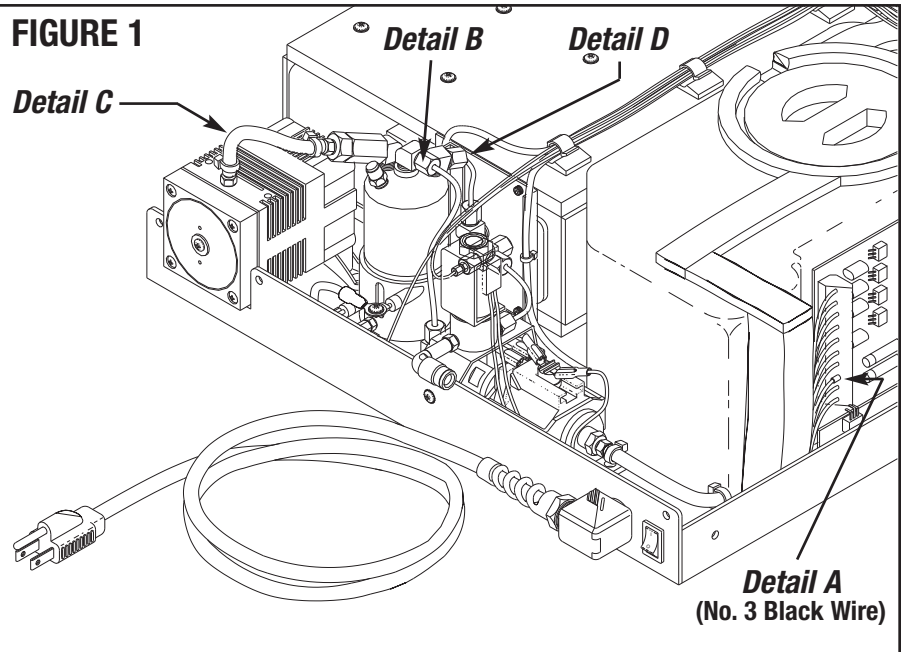
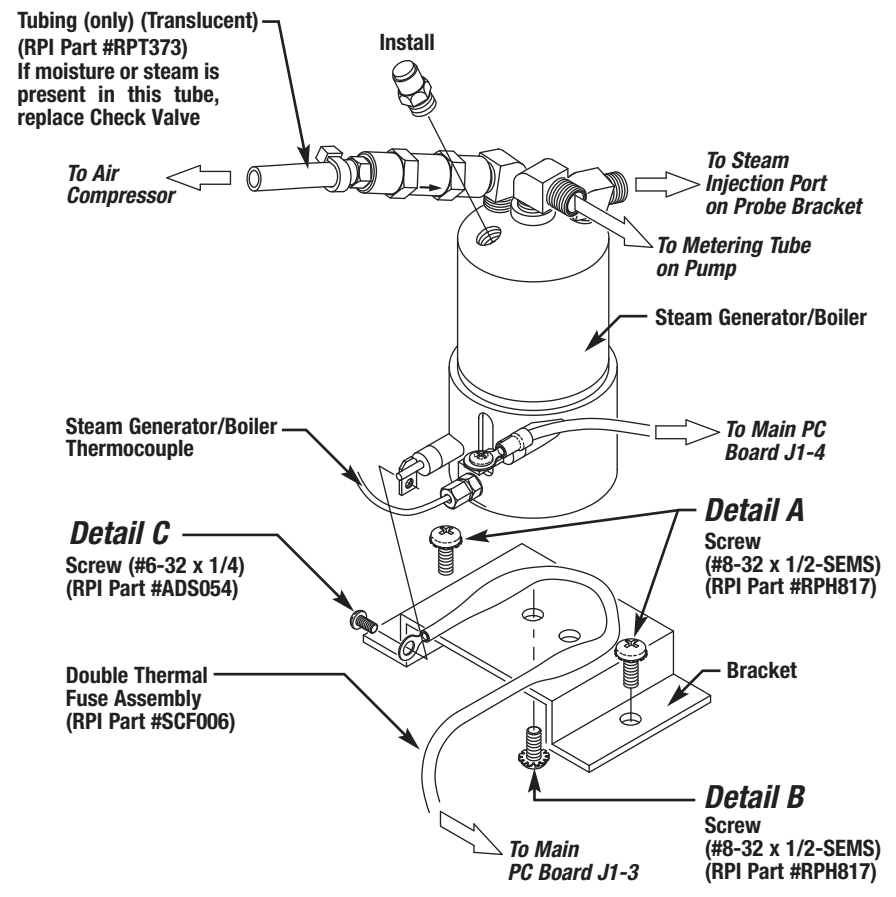


FIGURE 2



- 8) Using a Philips Head screwdriver, remove the Thermal Fuse(s) ring terminal which is mounted at the boiler. Do not remove the old Thermal Fuse wire from the boiler. Clean any debris from the Thermal Fuse mount area before installing the new Thermal Fuse Assembly. This will help to ensure good thermal conductivity. See **Figure 3, Detail A - Double Fuse or Single Fuse Mount Styles.**

INSTALLING THE NEW THERMAL FUSE(S) ASSEMBLY

- 9) Before you begin to install the new Thermal Fuse, note the following:

CAUTION

AVOID KINKING/STRESSING THE THERMOCOUPLE.
AVOID PINCHING THE WIRES UNDER THE BOILER BRACKET.

- 10) Mount the ring terminal and assemble the Thermal Fuse onto the steam generator/boiler. Align the Thermal Fuse(s) within the spacing standoffs. Mount the steam generator/boiler to the bracket using the small screw (see **Figure 2, Detail B**). (For Single Fuse Mount, also see **Footnote Regarding the Single Fuse Mount** below.)
- 11) Place the steam generator/boiler compression fitting onto the copper outlet tube. Screw the compression nut onto the steam generator/boiler fitting. Do not tighten at this time.
- 12) Mount the steam generator/boiler bracket to the chassis and tighten.
- 13) Tighten all fittings.
- 14) Place the new Thermal Fuse wire along side the bundle of wires. Using the new cable ties provided, wrap the new Thermal Fuse wire together with the bundle of wires. Wrap the cable ties (do not tighten yet), one at a time, around the bundle of wires and the Thermal Fuse wire – maintaining the integrity of the bundled wires. Connect the black #3 wire to the Main PC Board terminal block connector J1-3. Cut and remove the old cable ties, then remove the old Thermal Fuse wire. Tighten all cable ties, then cut and remove excess.
- 15) Test the machine.

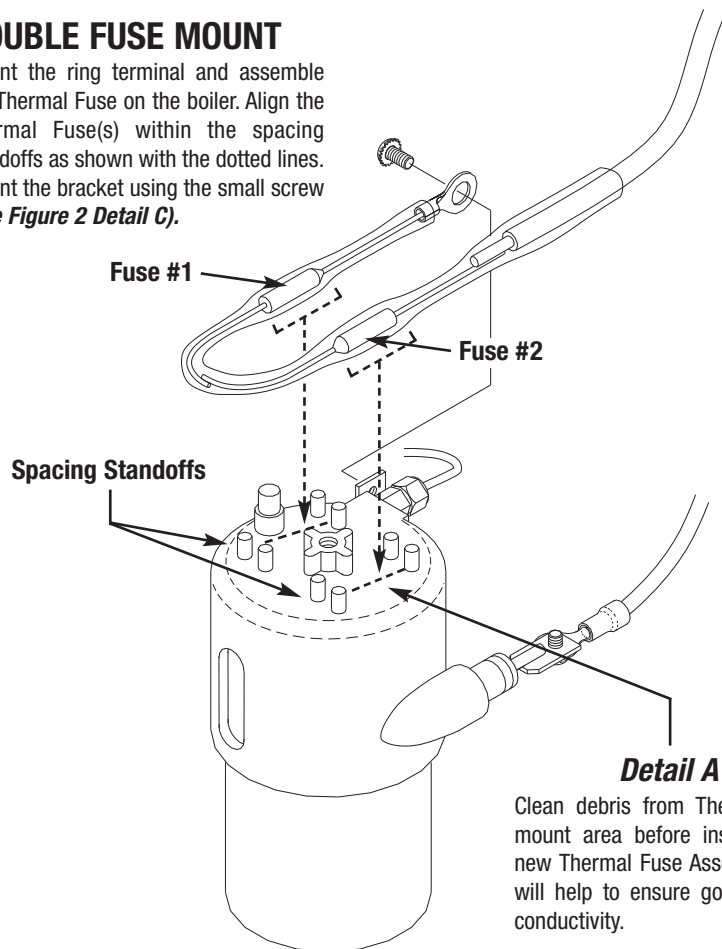
* Footnote Regarding the Single Fuse Mount

The earlier models use a single thermal fuse versus the newer models that use two thermal fuses. In which case, fuse #2 shown in the illustration should not be mounted - simply route the fuse with the remainder of the wire as directed.

FIGURE 3

DOUBLE FUSE MOUNT

Mount the ring terminal and assemble the Thermal Fuse on the boiler. Align the Thermal Fuse(s) within the spacing standoffs as shown with the dotted lines. Mount the bracket using the small screw (see **Figure 2 Detail C**).



SINGLE FUSE MOUNT

Mount the ring terminal and assemble the Thermal Fuse on the boiler. Align the Thermal Fuse within the spacing standoffs as shown with the dotted lines. Mount the bracket using the small screw (see **Figure 2 Detail C**).

