



Service Bulletin

**Oil separator heaters replacement
RTAC/RTAD/RTWB/RTUB,**

Charmes units only

RT-SVB17A-E4

Problem description

Introduction

When compressors are off cycle, oil separator heaters are energized to maintain oil at an adequate temperature. Because heaters are continuously energized during off-cycle and the well temperature may rise to high values, oil could turn into acid that corrodes the stainless steel of the well. This corrosion is so severe that after a while it causes the bulb well to leak.

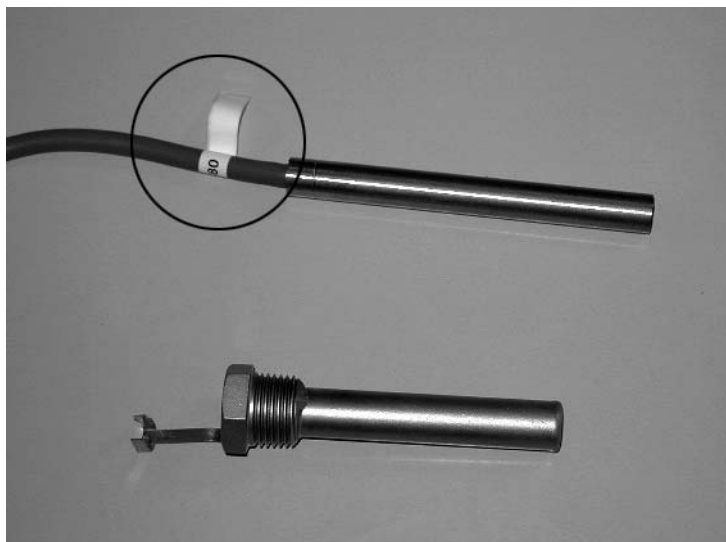
The aim of this service bulletin is to provide you with parts references to replace defective heaters.

Problem description

Oil separator heaters fitted in RTAD/RTAC/RTWB/RTUB chillers are energized when compressors of the considered circuit are off. These heaters are not thermo-regulated and after a while the temperature of the heating element could reach very high temperatures. Those high temperatures may cause the oil to turn into acid and corrode the stainless steel bulb well, leading to a leak.

To avoid any leaking incidence, we implemented in factory a new heater with heating component thermo-regulated at 180°C. This temperature infer a much lower well temperature and does not decompose oil into acid.

To avoid any confusion, this new heater is equipped with a flag indicating the regulating temperature, as shown in the following picture:



Action Plan

Affected units

All oil separator heaters could be implicated since the implementation of RTAC/RTAD/RTWB/RTUB products. However these oil separator heaters have been implemented in the factory since:

Chillers	RTAD all sizes, RTWB/RTUB up to size 220, RTAC sizes up to 170	RTAC 185-200, RTAC 3 and 4 compressors	RTWB/RTUB 222-224
Oil separator diameter	6" and 8"	10" and 14"	10"
Implementation date	May 2004	End of October 2004	End of November 2004

This heater can be recognized by the flag circled in the above picture. To ensure a heater is an old generation unit, check the resistance value: if the value is **95 Ohms**, the resistance is not a thermo regulated one and is included in this service bulletin. The resistance value of the thermo regulated heater (which is not constant) is much lower.

Action plan

If heaters are defective

Our recommendation is to replace any defective heater by the new thermo-regulated heater as a corrective action. The well should also be replaced.

As a preventive action

As a preventive action if the bulb is not leaking, only the heating element should be changed. This preventive action must only take place when servicing the unit or when any other units on that particular site experienced this problem.

Parts needed

2 different parts have been referenced:

- **HTR0186E** for the heating component
- **WEL0023E** for the bulb well

These two parts enable to change either only the heater element or the whole product in case of leak. In case of a leaking heater, heater and bulb should be changed. In case of preventive action only the heater should be changed.

Labor allowance

Non Leaking heaters

- Warranty replacement: 2-hour labor, 50km mileage
- Out of warranty replacement: Affected heaters should be changed during start-up or servicing. No labor nor mileage, parts only.

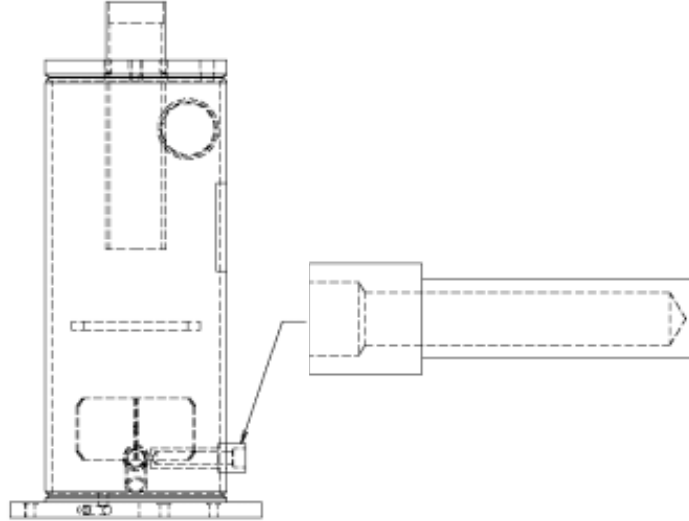
Leaking heaters

- One out of 2 heaters leaking: 6-hour labor time, the other non leaking heater should be changed within these 6 hours. No extra-time allowed to change the other heater.
- Both heaters leaking: 8-hour labor time.

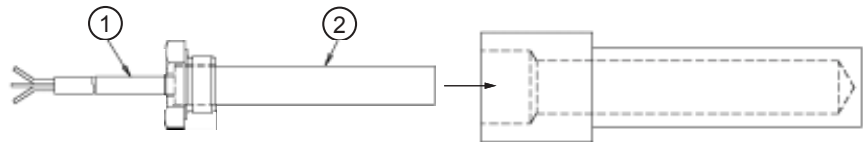
Future equipment evolution

In **February 2005** the 8", 10" and 14" oil separator design will change to the US design. The thermo regulated heater will then no longer be used on 8", 10" and 14" oil separators but only on the 6" units. A new oil separator design will be implemented.

This new oil separator will have a 4mm thick bulb well integrated in the separator itself as shown in the following drawing.



The heater is slightly different from the old one used up to May 04, with a nut allowing to maintain the element into the bulb well.



1. Cable 2. Heater

The **HTR0186E** must not be fitted in this new oil separator, but the **HTR0188E** will.

For 6" oil separator (RTWB 207 to 212, RTAD085-100), the oil heater will remain the same thermo-regulated one (HTR186E).



Quality Management
System Approval



Literature order number RT-SVB17A-E4

Date 0105

New

Literature stocking location Europe

Trane
A business of American Standard Companies
www.trane.com

For more information, contact your local Trane
district office or e-mail us at comfort@trane.com

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