DATE: 8/26/2011

MODELS: All Companion C21, C31, and C41 Reservoirs

ISSUE: Liquid Level Gauge Pressure Sensing Line Routing

NOTES: Effective immediately, the length of the low pressure sensing line on all Companion reservoir liquid level gauges has been shortened from 12 in (30.5 cm) to 5 in (12.7 cm). The routing of the tube will also be changed.

This change was made to accommodate the new 3-port manifold configuration of the reservoirs containing relief/economizer (R/E) valves. It will eliminate excess tubing lengths by routing the low pressure line in the shortest and most direct path.

**DESIGN CHANGE**

The liquid level gauge (LLG) measures contents using differential pressure. It utilizes a high pressure line running into the tank, and a low pressure line running to the relief/economizer valve. Prior to this change, both of these urethane tubes were 12 in (30.5 cm) long and were both orderable using part number #B-775856-00. The old configuration is shown in Figure 1.
The low pressure line was routed around the LLG and then both lines were routed together through the mounting plate as shown in figure 2.

Effective immediately, the low pressure line will be shortened to 5 in (12.7 cm). It will no longer be routed around the LLG and through the mounting plate. Instead, it will run directly from the top of the LLG to the R/E valve as shown below in Figure 3 and 4. This will eliminate excess tubing and help to prevent kinks and bends. The 5 in (12.7 cm) tube will be orderable using part number #20537653S.
The high pressure line will continue to be 12 in (30.5 cm) long and routed in the same manner leading from the LLG to the inner tank as shown in Figure 5. Its part number will remain #B-775856-00.
OPTIONAL MODIFICATION OF EXISTING RESERVOIRS

Any reservoirs manufactured prior to this change containing a relief/economizer valve and a 3-port manifold can be modified to utilize the current 5 in (12.7 cm) low pressure tube.

This modification is optional and not required, as the re-routing does not affect performance in any way. Customers wishing to perform this modification will have 2 options.

The first option will be to order a pre-cut 5 in (12.7 cm) sensing line and replace the old line. The 5” tube can be ordered using #20537653S.

Before removing the old line, make sure that the reservoir is empty and that it has no pressure. The old 12 in (30.5 cm) tube is removed by sliding the brass press-on hose clamps away from the connection (as shown in figure 6) and then pulling the line off of the barb. This is done at both the LLG and the R/E valve.

![Figure 6 - Tubing Removal and Replacement](image)

The replacement hose is then attached directly between the R/E valve and the LLG (reference Figures 3 & 4) and secured at both ends with the press-on hose clamps. If needed, replacement hose clamps can be ordered using part number #B-775794-00.

Rather than ordering a new hose, customers may also cut the existing 12 in (30.5 cm) hose that is already on the reservoir and re-route it. Remove the existing tube as described above by first removing the press-on hose clamps. Then cut or trim a 5 in (12.7 cm) piece from this line using a razor blade or scissors. Install the 5 in (12.7 cm) piece directly from the R/E valve to the LLG as described above.
CONTACT: For technical questions or concerns, contact Technical Service:
USA: 800-482-2473
technicalservice.usa@chart-ind.com
Europe: +44 1344 403100
technicalservice.europe@chart-ind.com

For ordering information or general inquiries, contact Customer Service:
USA: 800-482-2473
customerservice.usa@chart-ind.com
Europe: +44 1344 403100
customerservice.europe@chart-ind.com