

Bulletin Number: DTB-052218

**Date:** May 22, 2018  
**Product:** Dunkirk Steam Boilers - ESC IV to ESC V  
**From:** Technical Service Department  
**Title:** ESC LWCO Probe Location Change



## Situation

The current ESC IV oil fired steam boilers have the LWCO control and probe installed on the front section of the boiler. During steaming, the front of the boiler generates more steam than the rear of the boiler. This causes a density change. The less dense water in the front of the boiler is pushed higher by the denser water in the back of the boiler, causing a slightly slanted water line. The slanted water line has no effect on the boiler's ability to make dry steam. However, since the water line is slightly lower in the back section, it is logical to have the low water cut off monitor water level in the back section rather than the front section.

## Solution

Dunkirk Boilers will be implementing a remote style LWCO sensing probe which will be in the back section of the casting. Locating the probe in the back section will provide the most accurate water level sensing.

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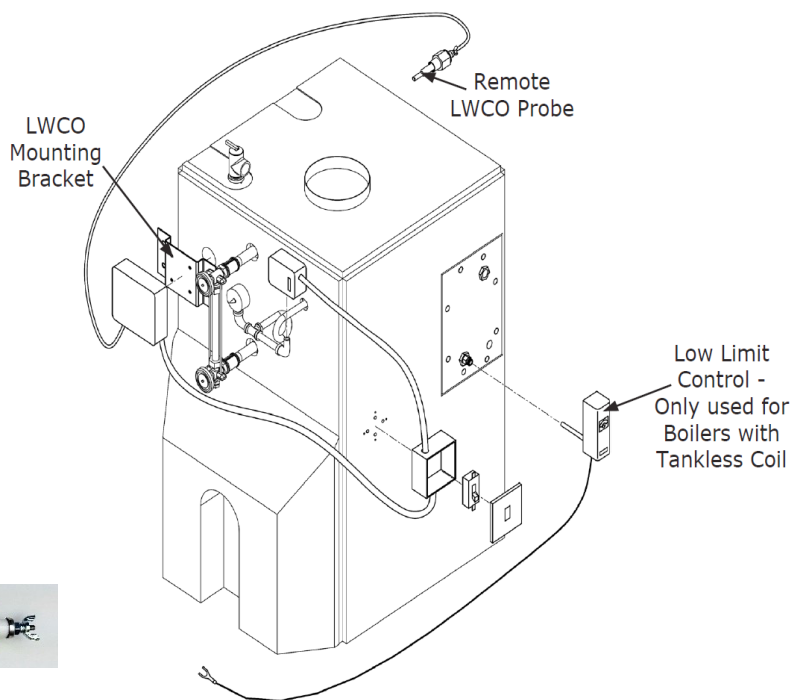
The casting/jacket has been changed by adding a tapping in the casting and a hole in the jacket panel for the new remote LWCO sensing probe; see **photo 1**.

The LWCO control location will remain on the front of the boiler see **photo 2**.

**Photo 1**



**Photo 2**



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Sensing the water level in the rear section will provide extra protection by reading the waterline at the lowest possible point.

## Timing

This product enhancement will be a rolling change and is expected to take place sometime in June 2018. The boiler series will change from ESC IV to ESC V.

## Other Impacted Parts

Part Description	Old Part Number	New Part Number
LWCO control with sensing probe	240007160 Hydrolevel CG450-P-2060  Will continue to be available for servicing older model boilers	240012146 Hydrolevel CG450-2060  Includes the remote sensing probe
LWCO remote style sensing probe	Not Applicable	240012195  Available as a part when only the sensing probe needs to be replaced

For future field replacement please call Customer Service at 1-800-325-5479 to confirm the correct Heat Exchanger Replacement Kit.