CRANE AEROSPACE & ELECTRONICS ELDEC Corporation

REVISION TRANSMITTAL

TO: HOLDERS OF SERVICE LETTER SL83-204-02-01 FOR ELDEC 83-204-02, 83-207-02 and 83-210-01 — **TIRE PRESSURE SENSORS**

REVISION 3, DATED DEC 21/16

HIGHLIGHTS

This page transmits a revision to Service Letter SL83-204-02-01. The entire Service Letter has been reprinted. Discard the old Service Letter and replace with the new copy.

Page No.	Description of Change	Effectivity
1, 2	Updated the EAR statement. Added 767-200, 767-200ER, 767-300, and 767-300 ER to the list of affected aircraft operators, and in paragraph 1. Replaced both tables in paragraph 1 with Table 1 in paragraph 2.	All
3	Added 767-200, 767-200ER, 767-300, and 767-300 ER aircraft to paragraph 3. Revised paragraph 5 to change contact information.	All

CRANE AEROSPACE & ELECTRONICS ELDEC Corporation A Crane Co. Company

SERVICE LETTER

TO: OPERATORS OF BOEING 747-400, 767-200, 767-200ER, 767-300, 767-300ER, and 737NG AIRCRAFT

SUBJECT: ***Smart***Stem® WIRELESS TIRE PRESSURE SENSORS

1. Description

This Service Letter provides information about Crane Aerospace & Electronics ***Smart***Stem tire pressure sensors for the Boeing 747-400, 737NG and some 767 aircraft. Crane P/Ns 83-204-02 (large fill valve) and 83-207-02 (standard fill valve) are interchangeable with existing tire pressure fill valves on the 747-400, and 767-200, 767-200ER, 767-300 and 767-300ER aircraft. Crane P/Ns 83-204-02, 83-207-02, and 83-210-01 (recessed wheels) are interchangeable with existing tire pressure fill valves on the 737NG aircraft. ***Smart***Stem tire pressure sensors, measured by a ***Smart***Stem Hand-Held Reader (HHR), allow the user to take tire pressure readings without the use of a manual tire pressure gauge. For more information on the ***Smart***Stem system, refer to section 4 below.

Crane ***Smart***Stem technology has been installed as basic equipment on new production Boeing 777 aircraft since 2007, and on Boeing 787 since production started in 2009. In addition, ***Smart***Stem tire pressure sensors are certified on a number of business jet aircraft and have been in service since 2008. For more information, or to purchase ***Smart***Stem for your 747-400, 767-200, 767-200ER, 767-300, 767-300ER, and 737NG aircraft, please refer to paragraph 5 below.

2. Airplane TPS Applicability

Refer to Table 1 to determine TPS applicability by aircraft type and airframe.

Table 1 (Sheet 1 of 2)

Wheel Part Numbers	Wheel Manufacturer	Aircraft Location	83-204-02 (Large Fill)	83-207-02 (Standard Fill)	83-210-01 (Standard Fill on Recessed Wheel)
737NG					
3-1557[1]	Goodrich	Main	N/A	N/A	•
3-1558[2]	Goodrich	Main	N/A	N/A	•
3-1559[3]	Goodrich	Nose	•	•	•
3-1654[3]	Goodrich	Main	N/A	N/A	•
3-1674[3]	Goodrich	Main	•	•	•

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Table 1 (Sheet 2 of 2)

Wheel Part Numbers	Wheel Manufacturer	Aircraft Location	83-204-02 (Large Fill)	83-207-02 (Standard Fill)	83-210-01 (Standard Fill on Recessed Wheel)
2607825-2[3]	Honeywell	Nose	•	•	N/A
2612301-2[1]	Honeywell	Main	•	•	N/A
2612311-1[2]	Honeywell	Main	•	•	N/A
2615001-1[3]	Honeywell	Main	•	•	N/A
C20626200[4]	Messier-Bugatti	Main	•	•	N/A
C20637000[3]	Messier-Bugatti	Nose	•	•	N/A
747					
2603561-9 THRU -16[5]	Honeywell	Nose	•	•	N/A
2607081-1 THRU -3[5]	Honeywell	Nose	•	•	N/A
2603561-50 THRU -52[5]	Honeywell	Nose	•	•	N/A
3-1479-1, -2[5]	Goodrich	Nose/Main	•	•	N/A
3-1597[6]	Goodrich	Nose/Main	•	•	N/A
767					
2606735-1, -2[7]	Honeywell	Nose	•	•	N/A
2606741-1[7]	Honeywell	Main	•	•	N/A
2608811-3, -5[7]	Honeywell	Main	•	•	N/A
C20509000[7]	Messier-Bugatti	Main	•	•	N/A

1. Used on 737NG – 600/700 airframes.
2. Used on 737NG – 600/700/800/900 airframes.
3. Used on 737NG – 600/700/800/900/900ER airframes.
4. Used on 737NG – 700/800/900/900ER airframes.
5. Used on 747 – 400 airframes.
6. Used on 747 – 400ER airframes.
7. Used on 767 – 200/200ER/300/300ER airframes.

NOTE: All aircraft have two nose wheels. The 737NG has four main wheels, the 767 has eight main wheels, and the 747 has sixteen main wheels. One sensor is installed on each wheel. Refer to the Table 1 for sensor options based on the wheel part number and airframe.

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3. Key Benefits

Key operational benefits of the Crane ***Smart***Stem tire pressure sensors on Boeing 747-400, 767-200, 767-200ER, 767-300, 767-300ER, and 737NG include:

- Easy to use worldwide in any environment.
- Faster and more accurate tire pressure measurements – typically 3 seconds for a single tire.
- No release of gas from the tire during measurement, due to ***Smart***Stem proprietary wireless interrogation.
- HHR display panel provides clear digital pressure readings in all conditions.
- Accurate tire pressure records are maintained electronically on the HHR, and easily downloaded to any PC.

4. Background

SmartStem is a passive, wireless tire pressure system that replaces a standard tire fill valve on the wheel. The system consists of a ***Smart***Stem tire pressure sensor for each wheel, and an HHR that is utilized as Special Ground Support Equipment (SGSE) to wirelessly interrogate the sensors and display a digital readout of the tire pressure and temperature. This proprietary wireless interrogation method allows an operator to receive tire pressure information without any release of gas from the tire.

The HHR stores up to 10,000 tire pressure readings which can be easily downloaded to a PC device for record keeping, review, and analysis. ***Smart***Stem tire pressure sensors can be programmed to store the aircraft tail number and wheel position, so that tire pressure measurement data can be traced to a specific aircraft and wheel.

A successful In-Service Evaluation was performed by two 747-400 operators, with Boeing approval, prior to certification.

5. Additional Information

For additional information contact ELDEC Product Support Representative at the address below.

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