



Steve Nixon &lt;steve.nixon.viamed@googlemail.com&gt;

**Oxygen sensor returns SRS67494**

1 message

**Steve Nixon** <steve.nixon@vandagraphst.com>

17 June 2020 at 11:47

Reply-To: steve.nixon@vandagraphst.com

To: Duncan Clark &lt;D.Clark@jfdglobal.com&gt;

Bcc: derek.lamb@vandagraphst.com

Returns number: **SRS67494**Oxygen sensor: **8010050**

Hi Duncan

The following is in regard to the oxygen sensors that you returned for investigation.

Your reference number is **SCAR-0337**, our returns number is **SRS67494**. Can any future returns please refer to the VST returns number supplied.

The number of sensors returned is confirmed and agreed at 167 sensors.

The allocation against JFD P.O. numbers differs from our records:

JFD order	VST Invoice	Invoice Date	Days to notification 11th May 2020	Days to receipt 28th May 2020	JFD Sensor count	VST Sensor count
11802749	VSTIN01104	05/10/2018	584	601	2	2
11807111	VSTIN01147	21/12/2018	507	524	3	4
11902156	VSTIN01221	13/05/2019	364	381	2	2
11904351	VSTIN01273	27/08/2019	258	275	10	25
11190875	VSTIN01339	07/02/2020	94	111	150	134

The following six sensors are not covered by warranty. Do you want them returning or should we dispose of them on your behalf?

100001	Oct-18
100005	Oct-18
100499	Dec-18
100500	Dec-18
100501	Dec-18
100587	Dec-18

The two sensors reported as failed mag test would normally be out of our scope and ability to test, but our measurements show that the output cap dimensions are out of tolerance, therefore covered by warranty. Going forward, as the critical parts are supplied to JFD for pre-production magnetic signature assessment, we are not in a position to accept the liability of mag test failures. To date the numbers have been small, but we have no way of determining the cause nor location resulting in the increased signatures. To date 4 out of 1,720 sensors have been returned, 0.23%. With the last two, one was reported 364 days after sale and the other 94 days. My understanding was that sensors were mag tested as part of JFD's inward QA inspection procedures.

Seven sensors have been reported with erratic readings, one sensor was reported at 364 days after sale and the others are out of warranty (568, 584 days).

Regarding the remaining 158 sensors, the reason stated for return was the measurement of the input cap being too large. From our measurements we found that 56 of these are within specification, but we have failed them as the output cap diameter is out of specification. We are currently investigating the cause of the casing dimensions being out of specification and we will get back to you regarding a plan to remedy or replace the sensors. As a matter of interest would you mind letting me know which instrument/s you used to measure the dimensions of the sensors? Also, as discussed can you please supply two sensor housings for us to use.

As you know we have been affected by COVID19 in terms of personnel shortages/restrictions and at the same time having to prioritize medical sensors for emergency usage. Worldwide there is also a shortage of parts and materials. The situation of the current batch of returned sensors has been exacerbated by the number of returns and the delay in notification of the problem (notified 94 & 258 days, received 111 & 275 days), spread over two main batches (Aug-19 & Feb-20).

You have 50 sensors (P.O. 12002300) on back order with us and we are currently scheduled to supply these Week 27.

Regards

Steve

Steve Nixon  
Director - Vandagraph Sensor Technologies Ltd.

Mobile: +44 (0)7850 252267