

ASTON MARTIN

January 15, 2014

Ms. Jennifer Timian Chief, Recall Management Division National Highway Traffic Safety Administration 1200 New Jersey Avenue, SE Washington, D. C. 20590

Dear Ms. Timian:

RE: Aston Martin Recall 13V228

This letter advises NHTSA of Aston Martin's decision to file a Defect Information Notice (Part 573 Report) with respect to a new issue related to the throttle pedal arm. On May 29, 2013, Aston Martin filed a Defect Information Notice regarding throttle pedal arm breakage in certain Aston Martin vehicles. This notice was supplemented on October 23, 2013. Customer notification for this recall began in June, 2013, and notification regarding the second recall began on October 23, 2013.

Aston Martin received a report from our dealer in Connecticut that a throttle pedal arm had broken during its installation as part of the second recall. This prompted an immediate investigation. We have not had any similar reports about any of the 1,083 US vehicles that have been repaired in the second recall. As our counsel advised you in December, we temporarily suspended shipping pedals for the recall repairs pending the outcome of our investigation.

Root cause of Defect

We have conducted substantial testing on the pedal arm that failed, as well as on pedals from other batches. To date, Aston Martin has been unable to replicate the failure mode. Aston Martin's engineering specification requires pedals arms to be made of PA6 material supplied by DuPont. Initial tests on the failed pedal arm have shown that the Tier Three Supplier (defined below) used counterfeit material, which was received in bags labelled as DuPont PA6 material.

Tests reveal that the failed pedal arm was made from material consistent with PA6.6 material, rather than DuPont PA6 as specified in our drawing specification. Further testing of a cross section of pedal arms (made since parts started being produced for the previous recall) detected both non DuPont PA6 material as well as PA6.6 material, similar to that found in the failed pedal arm. The errors in the temperature settings found on the injection moulding machine at the Tier Three Supplier meant that both materials could be processed, however the raw material means that the quality of the pedals is unknown. Further testing on the same set of pedals shows that none of them have failed load testing at less than 600N (the original design specification). The specified DuPont PA6 material has given results of a minimum of 1000N.

All counterfeit material and all pedal arms made of this suspect material have been quarantined.

The information required by your regulations follows:



573.6(c)(2) - Potentially Affected Vehicles

So far, throttle pedal assemblies have been replaced on 1,083 US vehicles as part of the second recall. Another 3,821 US vehicles were included in the second recall, but have not yet had their throttle pedal assemblies replaced. Since the second recall, an additional 97 vehicles have been shipped to the US, which also need to be repaired.

Accordingly, the scope of the population covered by this Defect Information Notice is wider than the scope of vehicles covered by the October 23, 2013 amendment to Recall 13V228. The vehicles are listed below:

| Model | Registered & AMLNA Fleet | Port & Dealer Un- Registered | Build Range (MM/YY) |
|-----------------------|-----------------------------|---------------------------------|------------------------|
| DB9 Coupe | 444 | 35 | 12/07-12/13 |
| DB9 Volante | 544 | 47 | 11/07-12/13 |
| DBS Coupe | 456 | 1 | 11/07-10/13 |
| DBS Volante | 203 | 1 | 05/09-10/13 |
| Virage Coupe | 120 | 0 | 01/11-08/12 |
| Virage Volante | 156 | 0 | 01/11- 08/12 |
| V8 Vantage Coupe | 848 | 32 | 11/07-12/13 |
| V8 Vantage Roadster | 730 | 36 | 11/07-12/13 |
| V8 Vantage S Coupe | 175 | 6 | 11/10- 12/13 |
| V8 Vantage S Roadster | 127 | 8 | 11/10- 12/13 |
| V12 Vantage Coupe | 194 | 1 | 06/10-10/13 |
| Rapide | 644 | 0 | 02/10- 12/12 |
| Rapide S | 131 | 62 | 10/12-12/13 |
| TOTAL | 4772 | 229 | N/A |

573.6(c)(3) - Number of Vehicles Potentially Containing the Defect

The total number of vehicles subject to this Defect Information Notice is 5,001 – the 1,083 vehicles that have already had their throttle pedals replaced in the second recall, plus the 3,821 vehicles that have not yet had their throttle pedals replaced as part of the second recall, and 97 additional vehicles delivered to the US outside the scope of the campaign (because they were produced with the potentially defective throttle pedal assembly identified above).

573.6(c)(4) - Percentage of Vehicles Estimated to Contain the Defect

Aston Martin has been unable to replicate the one failure that occurred during installation of the recall remedy pedal in Connecticut, and has no reports from customers in the field of any failure of the second recall remedy pedal. Thus, Aston Martin has no basis to estimate the percentage of the vehicles that actually contain a defective pedal. All of the vehicles identified in Section (c)(2) above will be included in the recall.

573.6(c)(5) – Description of the Defect

The defect is described in the introduction to this letter.

Suppliers' Details

The manufacturer of the complete throttle pedal assembly for Aston Martin is Precision Varionic International Limited (**"PVI"**), Sensor House, Langley Road, Hillmead, Swindon SN5 5WB, England. Telephone number: +44 (0) 1793 879879.

The manufacturer of the pedal arm (the **"Tier Two Supplier"**) is Fast Forward Tooling (HK) Limited, Room 502/f/F, Prosperous Building, 48-52 Des Voeux Road, Central, Hong Kong.

The Tier Two Supplier appointed the following sub-contractor to mold the pedal arms: Shenzhen Kexiang Mould Tool Co. Limited, 1st Floor Building A2, Fuhai Industrial Park, Fuhai Road, Bao'An District, Shenzhen (the **"Tier Three Supplier"**).

The counterfeit material used by the Tier Three Supplier was supplied by Synthetic Plastic Raw Material Co., Ltd of Dongguan Zhang Mutou Town Plastic Logistics Center City.

573.6(c)(6) – Chronology of Principal Events

On December 2, 2013, Aston Martin received a report from the dealer in Connecticut, US, who was performing the second recall. He reported that the pedal arm on the throttle pedal assembly that he was installing as a remedy for the second recall broke during the installation process. Aston Martin immediately launched an internal investigation.

On December 3, 2013, Aston Martin suspended the shipping of the potentially suspect pedals, pending the outcome of the internal investigation.

Aston Martin's investigation continued into early January 2014. Aston Martin was unable to replicate the failure reported by the dealer, but determined that the Tier Three Supplier was manufacturing pedal arms with non-conforming counterfeit material.

On January 14, 2014 Aston Martin's Recall Committee met and decided to conduct a Safety Recall of all vehicles fitted with the potentially defective pedals from the second recall, and to change the remedy pedal for the vehicles subject to the second recall that had not yet been remedied.

573.6(c)(8) - Remedial Action

As noted above, Aston Martin immediately suspended the supply of remedy parts to its dealers. DuPont is delivering batches of the correct material to mould new pedal arms under the direct supervision of Aston Martin and DuPont. As soon as the new pedal arms are manufactured and shipped to the UK, they are assembled by the tier one supplier, PVI.

Aston Martin and DuPont representatives will be physically present in China to directly supervise the production of all pedal arms. DuPont validates the material used to manufacture the pedals as being DuPont material. Aston Martin validates that all moulding process controls are correct and also validates the pedal arm assemblies at PVI by conducting overload testing and in vehicle testing. Aston Martin is also planning to resource the manufacture of pedal arms from China to the United Kingdom as soon as possible in 2014.

Notification of Customers

It is Aston Martin's intention to notify all 5,001 customers who are listed in the table above. There will be two versions of the customer notice. The first version will be sent to all customers who already received the second recall notice (4,904 customers), to advise them that the recall must be performed again on their vehicles and to urge them to schedule an appointment for the recall service. The second recall (97 customers), and will urge them to schedule an appointment for the recall service.

573.6(c)(10) - Schedule for Action

Aston Martin is developing a proposed schedule for this re-notification. Aston Martin has attached with this notice information regarding the revised remedy, a proposed schedule for renotification and two draft customer notifications for your review. Aston Martin expects that this action will require a restart of the six required quarterly reports, beginning when the new customer notification begins.

Aston Martin has an established Safety Related Recall Process in place to ensure that end user customers and Aston Martin dealers are fully advised and reimbursed through our Warranty System. New Recall Action document: RA-03-0017 provides the necessary details in this regard, inclusive of a repair process and repair time, additionally a Dealer Quarantine Notice (QN-03-0019) and customer communications strategy. A draft copy of RA-03-0017 is enclosed.

Mailings to customers will be facilitated using Aston Martin's own corporate CRM database, plus dealer records from the VIN based customer files available. Additionally, data from R.L. POLK will be used.

The Aston Martin customer letters will accompany the RA-03-0017 Dealer documentation suite alerting all Aston Martin dealers to carry out the new Safety Related Recall Action, on vehicles previously modified by the original recall action, and those yet to be remedied, in accordance with the schedule to be provided by Aston Martin to its dealers.

We will notify Aston Martin dealers of the Recall Action through Aston Martin's dealer website <u>www.astonmartintechinfo.com</u>, the Aston Martin Dealer Communication System, and by email. The following documents will be communicated to dealers:

- 1. Safety Recall Action Notice RA-03-0017;
- 2. Quarantine Notice QN-03-0019;
- 3. VIN list of affected vehicles by dealer;
- 4. Customer notification letter; and
- 5. Change of Ownership or Address Form.

Please contact the undersigned if you have any questions regarding this letter. Thank you.

Yours sincerely, upson **Bill Donnelly** General Manager - Global After Sales Operations