

2022 (8) TMI 719 - CUSTOMS AUTHORITY FOR ADVANCE RULINGS, MUMBAI

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IN RE : TATA MOTORS LTD.

Ruling No. CAAR/Mum/ARC/07/2022 in Application No. CAAR/CUS/APPL/07/2022-O/o Commr-CAAR-MUMBAI

Dated: - 17-3-2022

Classification of import goods - differential pressure sensors and tyre pressure monitoring sensors - to be classified under heading 8708 or under heading 9026? - HELD THAT:- The impugned devices are used for measuring the pressure of gases. They are fitted with sensors sensitive to the variations in pressure. Heading 9026 covers instruments and apparatus like manometers for measuring or checking the pressure of liquids or gases. Pressure gauges indicate the pressure of a liquid or gas in a closed space - Further, Heading 9026 also includes differential pressure gauges, used to measure pressure differences. The devices under consideration use electrical phenomena to measure the pressure. Therefore, these instruments can be classified under Heading 9026. Sub-heading 9026 20 00 specifically includes instruments for measuring or checking the pressure.

The Hon'ble Tribunal in COMMISSIONER OF CUSTOMS, BANGALORE VERSUS SPM INDIA LTD. [2006 (12) TMI 368 - CESTAT, BANGALORE], observed that as the device does not have controlling and operating functionalities, they are not classifiable under sub-heading 9032 as an automatic controlling instrument and is eligible for classification under Tariff Item 9026 80 90 of the Tariff Act, 1975 - Taking into account the preceding discussions, it is opined that Heading 9026 and more specifically sub-heading 9026 20 00 is the appropriate classification for the devices under consideration.

The differential pressure sensor and tyre pressure monitoring system merit classification under subheading 9026 20 00 of the first schedule of the Customs Tariff Act, 1975.

Judgment / Order

Shri M.R. Mohanty, Authority for Advance Rulings, Customs

Shri T. Vishwanathan, Ms. Anjali Hirawat & Gopalan D., Advocates and Ms. Nidhi Agarwal, Rajesh Shukla, Gajanan Shanbag & Shubham Gupta, for the Assessee.

RULING

M/s. Tata Motors Ltd. filed an application on 27-1-2022 seeking advance rulings on the classification of differential pressure sensors and tyre pressure monitoring sensors.

2. The applicant is an automobile manufacturer and inter alia engaged in the manufacturing of commercial vehicles and parts thereof for sale within India and abroad. For manufacturing such vehicles, the applicant is importing different types of pressure sensors viz., Differential Pressure Sensors (DPS) and Tyre Pressure Monitoring Sensors (TPMS).

2.1 DPS is used to sense the exhaust gas flow through the diesel particulate filter by measuring the differential pressure across the filter. The exhaust gas flow is a function of the amount of blockage due to

Particulate Matter (PM) accumulation within the diesel particle filter. As the filter accumulates PM, the flow decreases, resulting in an increased pressure drop across the filter. DPS, thereby, provides an analogue output voltage proportional to the differential pressure across the filter. Two piezo-resistive pressure sensing elements and Application-Specific Integrated Circuits (ASIC) are utilized to convert the applied pressure to an analogue voltage. Further, these pressure sensors are connected to the Engine Control Unit (ECU).

2.2 TPMS is an electronic system designed to monitor the air pressure inside the pneumatic tyres of vehicles. TPMS provides real-time tyre pressure information. TPMS uses pressure monitoring sensors within each tyre that monitors specific pressure levels. Sensors in a direct TPMS may even provide tyre temperature readings. The direct tyre pressure monitoring system sends all of this data to a centralized control module where it is analysed, interpreted, and, if tyre pressure is lower than what it should be, it is transmitted directly to the dashboard where an indicator light illuminates. A direct tyre pressure monitor usually sends all of this data wirelessly.

2.3 The applicant has stated that both the devices are classifiable under 9026 20 00. In support of the above, the applicant has submitted decisions taken by The Hon'ble Bengaluru Bench of the CESTAT in the cases of SPM India [2007 (211) E.L.T. 573] and Bosch India [2021(375) E.L.T. 227].

3. The applicant in their CAAR-1 form declared that they intend to import the impugned devices from the Air Cargo Complex, Mumbai. The application was forwarded to the jurisdictional commissioner of customs for comments. However, no reply has been received, though reminders have also been sent.

4. The application was listed on 1-3-2022 for hearing. S/Shri T. Vishwanathan, D. Gopalan, Gajanan Shanbag, Shubham Gupta, Rajesh Shukla and Ms. Anjali Hirawat appeared on behalf of the applicant. No one appeared on behalf of the commissioner of customs. Shri Vishwanathan and others explained the characteristics of the two devices in detail.

5. I have considered all the materials placed before me in respect of the subject devices. I have gone through the submissions made by the applicant during the personal hearing. No reply has been received from the jurisdictional commissioner. Therefore, I proceed to pronounce my rulings on the basis of information available on record. The issue before me is the classification of DPS and TPMS.

5.1 According to the applicant, a DPS employs piezo-resistive sensors for the detection of pressure. The device is mounted on the side of the vehicle's Diesel Particulate Filter (DPF) connected to the exhaust and is used to monitor its condition by measuring the difference in pressure between the front and rear parts of DPF. By monitoring the pressure difference between these two points, the saturation level of the DPF can be determined. Once a certain level of pressure is detected by the sensor, it transmits a signal to the main ECU. The ECU then sends out an engine post-injection command that increases exhaust gas temperature and removes the soot accumulation in the DPF.

5.2 The applicant has described that the TPMS monitors the air pressure inside the pneumatic tyres on vehicles and reports real-time tyre-pressure information to the driver, using either a gauge, a pictogram displays, or a simple low-pressure warning light. TPMS can be divided into two types - direct and indirect. From the details submitted before me, it appears that the device under consideration is direct TPMS which directly measures tyre pressure using hardware sensors. In each wheel, most often on the inside of the valve, there is a battery-driven pressure sensor that transfers pressure information to the control unit, which reports it to the vehicle's on-board computer. Some units also measure and alert the temperature of the tyre as well. The sensor is equipped with an RF transmitter circuit which is used to broadcast the measured pressure of the tyre.

6. In this case, these devices can be classified either as instruments for measurement of pressure or as parts and accessories to be used solely or principally with vehicles. Therefore, I am confronted with two different possible headings for classification of the impugned devices, i.e.,

8708 : Parts and accessories of the motor vehicles of Headings 8701 to 8705

Or

9026 : Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of Heading 9014, 9015, 9028 or 9032.

6.1 The impugned devices are used for measuring the pressure of gases. They are fitted with sensors sensitive to the variations in pressure. Heading 9026 covers instruments and apparatus like manometers for measuring or checking the pressure of liquids or gases. Pressure gauges indicate the pressure of a liquid or gas in a closed space. One of the types of pressure gauge, as per explanatory notes, is an electrical pressure gauge based on variations of an electrical phenomenon (e.g., resistance, capacitance) or using ultrasound. Further, Heading 9026 also includes differential pressure gauges, used to measure pressure differences. The devices under consideration use electrical phenomena to measure the pressure. Therefore, these instruments can be classified under Heading 9026. Sub-heading 9026 20 00 specifically includes instruments for measuring or checking the pressure.

6.2 As per GRI-1, the table of contents, alphabetical index, and titles of sections, chapters and sub-chapters are provided for ease of reference only; for legal purposes, classification shall be determined according to the terms of the headings and any relative section or chapter notes and, provided such headings or notes do not otherwise require, according to the following provisions. Section XVII covers Chapter 87. Note 2 to Section XVII states that the expressions "parts" and "parts and accessories" do not apply to the following articles, whether or not they are identifiable as for the goods of this Section : ... (g) Articles of Chapter 90. The general explanatory notes state that the articles need to comply with the following three conditions to be eligible for classification as part and accessories under any chapter of Section XVII :

- (a) They must not be excluded by the terms of Note 2 to this Section and
- (b) They must be suitable for use solely or principally with the articles of Chapters 86 to 88 and
- (c) They must not be more specifically included elsewhere in the Nomenclature

The scope of Note 2 to Section XVII is further explained in the general explanatory notes to Section XVII, (III) Parts and Accessories, (A). It lists parts and accessories excluded by the above-mentioned section note. Sr. No. 8 of this list states that the instruments and apparatuses of Chapter 90, including those used on certain vehicles are excluded from Section XVII. Sr. No. 8(e) mentions a manometer (Heading 9026), a pressure gauge, as one of the examples in the exclusion list. As pressure gauges like DPS and TPMS can be classified under Chapter 90, they appear to be excluded from Section XVII, and consequently from Heading 8708.

6.3 It is also necessary to take note of the case laws that has dealt with similar questions, i.e., whether to classify a particular device as a part and accessory of a vehicle or as a separate article. In the case of Premier Instruments & Controls Ltd. - 2005 (101) ECC 566, 2005 (183) E.L.T. 65 (Tri. - Chennai), as upheld by the Apex Court, the Chennai Bench of the Hon'ble Tribunal ruled that the automotive dashboard cluster consisting of pressure gauge, temperature gauge, fuel gauge, ammeter and speedometer are classifiable as parts and accessories of vehicles. The Hon'ble Tribunal observed that these devices containing multiple instruments were cleared as a single device, i.e., as an instrument cluster. Although the components of the instrument are classifiable under Chapter 90, the instrument cluster does not find a place in Chapter 90. Therefore, the instrument cluster is classifiable as a part, principally and solely meant for use in motor vehicles, under Heading 8708. However, in the present case both DPS and TPMS answer to a specific sub-heading i.e. 9026 20 00 as instruments for measuring or checking the pressure.

Therefore, although, they are principally and solely used in vehicles, they appear to be excluded from Heading 8708.

6.4 I have also studied the case laws relied upon by the applicant. In the case of SPM India, the issue of classification of air leak tester was under consideration. It was observed by the Hon'ble Tribunal that the air leak tester is a high precision measuring instrument and can be classified under Heading 9026, and that when there is a specific entry, there is no need to choose a residual entry under Heading 9031. Accordingly, the Hon'ble Tribunal ruled that Heading 9026 as an appropriate heading for air leak tester. The issue of classification of water sensors used for monitoring and detecting the presence of water in the fuel feed system under consideration. The Hon'ble Tribunal, observed that as the device does not have controlling and operating functionalities, they are not classifiable under sub-heading 9032 as an automatic controlling instrument and is eligible for classification under Tariff Item 9026 80 90 of the Tariff Act, 1975. Taking into account the preceding discussions, it is my considered opinion that Heading 9026 and more specifically sub-heading 9026 20 00 is the appropriate classification for the devices under consideration.

7. In view of my aforesaid discussions, I rule that the differential pressure sensor and tyre pressure monitoring system merit classification under subheading 9026 20 00 of the first schedule of the Customs Tariff Act, 1975.
