AMENDMENT NO. 2 JUNE 2024

TO

IS 16192 (PART 2) : 2014 AUTOMOTIVE VEHICLES — WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES

PART 2 SHEET METAL WHEEL RIMS — METHOD OF TESTS AND REQUIREMENTS

(*Page* 1, *clause* **1**) — Substitute the following for the existing:

'**1 SCOPE**

1.1 This standard (Part 2) prescribes the general and performance requirements of sheet metal wheel rims intended for use on two wheelers (L1 and L2 category of vehicles as defined in IS 14272), three wheelers (L5 category of vehicles as defined in IS 14272), E-rickshaws and E-carts.

1.2 Wired spoke wheel rims are not covered under this standard.'

(*Page* 1, *clause* **3**) — Substitute the following for the existing:

'**3 DEFINITIONS AND NOMENCLATURE**

3.1 The definitions and nomenclature shall be as per IS 10694 (Part 1).

3.2 Typical Types of Sheet Metal Wheel Rim

3.2.1 *Composite Construction Sheet Metal Wheel Rims*

It can be of following two types:

a) Type 1 — wheels of which the rim is made of sheet metal and the spokes or disc are made of steel; and
b) Type 2 — wheels of which the rim is made of sheet metal and the spokes or disc are made of light alloy.

Rim, spoke or disc, and hub are then assembled together (*see* Fig. 1).

3.2.2 *Hybrid Construction Sheet Metal Wheel Rims*

Wheels of which, rim and ring are made of sheet metals and casing is made of compatible material. Rim, ring, casing, hub and motor are then assembled together (*see* Fig. 2).

NOTE — These wheels are constructed by using, rim, rings, hub motor, etc in such a manner that it will sustain enduring operating conditions in the field.

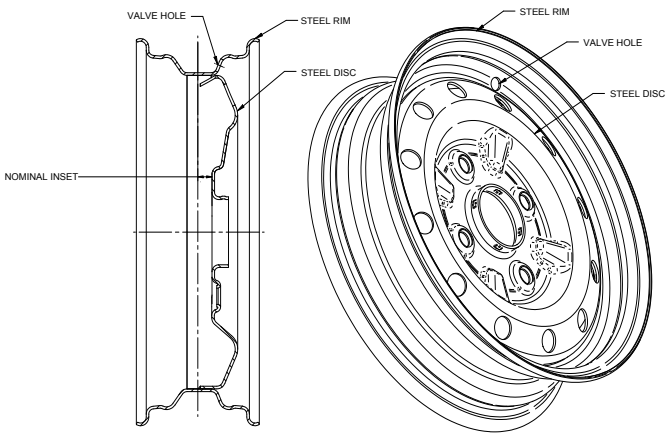

FIG. 1 TYPICAL COMPOSITE CONSTRUCTION STEEL WHEEL RIM

Price Group 1

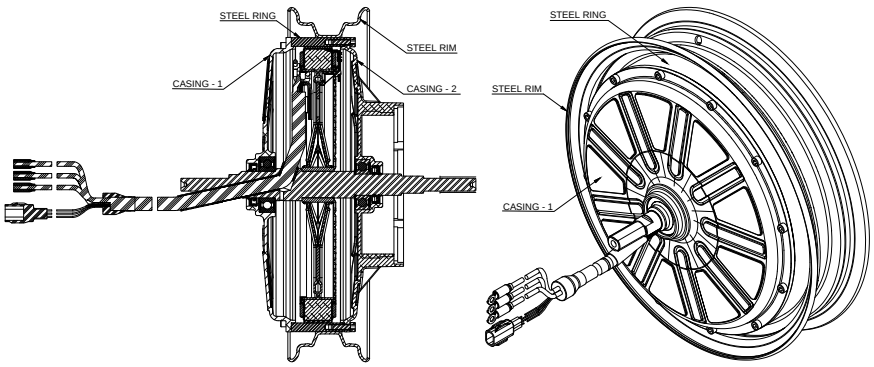

FIG. 2 TYPICAL HYBRID WHEEL RIMS'.

(*Page* 1, *clause* **4.2.2**) — Substitute the following for the existing:

'**4.2.2** *Test*

4.2.2.1 Hybrid wheel rim (*see* **3.2.2**) and composite wheel rim of Type 2 (*see* **3.2.1**) when tested as per **4** of IS 16192 (Part 1), shall meet the requirements prescribed therein.

NOTE— Hybrid Wheel rim (*see* **3.2.2**) shall be tested with the motors for which it is designed.

4.2.2.2 Composite wheel rim of Type 1 shall be tested as per **4.2.3** and **4.2.4** and shall meet the requirements prescribed therein.'

(*Page* 1, *clause* **4.2.3.1**, *line* 5) — Substitute '(*see* Fig. 3)' *for* '(*see* Fig. 1)'.

(*Page* 1, *clause* **4.2.3.1**, *Fig.* 1) — Substitute 'FIG. 3 MODEL EQUIPMENT FOR DYNAMIC CORNERING FATIGUE TEST' *for* 'FIG. 1 MODEL EQUIPMENT FOR DYNAMIC CORNERING FATIGUE TEST'.

(*Page* 2, *clause* **4.2.4.1**, *line* 7) — Substitute '(*see* Fig. 4)' *for* '(*see* Fig. 2)'.

(*Page* 2, *clause* **4.2.4.1**, *Fig.* 2) — Substitute 'FIG. 4 MODEL EQUIPMENT FOR DYNAMIC RADIAL FATIGUE TEST' for 'FIG. 2 MODEL EQUIPMENT FOR DYNAMIC RADIAL FATIGUE TEST'.

[Page 3, *clause* **5.3(e)**] — Insert the following after **5.3(e)**:

'f) Any design change in mounting of the motor, applicable for hybrid wheels.'

(*Page* 4, *Annex* B) — Insert the following after Sl No. 15):

'16) Material grade of:

16.1 Rim
16.2 Ring
16.3 Spoke/Disc
16.4 Hub motor casing

17) Motor Details:

17.1 Power rating (for information only)
17.2 Make
17.3 Type

18) Part number of wheel rim assembly'.