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MOTORCYCLE EMERGENCY RELIEF TYRE TUBE

FIELD OF THE INVENTION

This invention relates to the field of emergency relief tyre tube for use on motorcycle and scooter tyres.

BACKGROUND OF THE INVENTION

Motorcycle tyre have been in used for ages but there is no known emergency relief tyre tube being implemented on any motorised vehicles. If the current existing tyre or its inner tube is punctured then there is no other immediate remedy except to go to the nearest tyre shop for repair, if there is no spare wheel in hand. It is uncommon for a motorcyclist to carry a spare wheel along and not a practical solution.

OBJECT OF THE INVENTION

This present invention is an object to provide an emergency relief in case of a tyre puncture. The motorcyclist can still proceed with the journey after pumping up the relief tyre tube without much delay, rather than going for immediate repair which may not be nearby.

SUMMARY OF THE INVENTION

This present invention is to provide immediate remedy by way of installing a spare emergency relief tyre tube inside the motorcycle tyre ready for use when the tyre and inner tube in use punctures. The tyre is reinflated by pumping up the relief tyre tube.

BRIEF DESCRIPTION OF THE DRAWING

In order that this specified invention may be more readily understood, the following description is given by way of example, one specific embodiment of emergency relief motorcycle tyre tube made in accordance with the invention.

Reference will be made to the accompanying drawings, in which;

FIG. 1 shows the elevation of the motorcycle wheel installed with the relief tyre tube, with only the inlet air valve be seen.

FIG. 2 shows the side elevation of both the tyre tubes' position in the tyre with the emergency relief tyre tube inflated and the normal tyre tube deflated.

FIG. 3 shows the side elevation of the spare relief tyre tube in place and the normal tyre tube inflated.

FIG. 4 shows the cross-section of the motorcycle wheel with the emergency relief tyre tube uninflated as a spare.

FIG. 5 shows the cross-section of the motorcycle wheel with the non-inflatable portion which is in between the tyre rim and the inflated normal tyre tube.

FIG. 6 shows the cross-section of the motorcycle wheel with the emergency relief tyre tube inflated and the normal tyre tube deflated after a puncture.

FIG. 7 shows the plan view of the relief tyre tube pumped up and the normal tyre tube deflated underneath.

FIG. 8 shows the plan view of the non-inflatable section of the relief tyre tube on top the inflated normal tyre tube at the normal tyre tube air inlet valve area.

FIG. 9 shows the side view of the relief tyre tube pumped up and the normal tyre tube deflated. The crumpled part below the normal tyre tube air inlet valve belongs to the non-inflatable section of the relief tyre tube.

FIG. 10 shows the longitudinal section of the tyre at the normal tyre tube air inlet valve area, with the normal tyre tube deflated off air when the relief tyre tube is being pumped up.

FIGURES 11, 12 & 13 shows the longitudinal section of the non-inflatable portion of the relief tyre tube which can be made in three examples.

DESCRIPTION OF THE EMBODIMENTS OF THE INVENTION

In detail now and refering to the drawings, FIG. 1 shows the elevation of the motorcycle wheel with the relief tyre tube air inlet valve 1 and the normal tyre tube air inlet valve 2 opposite to each other. An additional opening 3 on the tyre rim 4 needs to be provided for the relief tyre tube air valve 1.

In normal usage, the normal tyre tube 5 is inflated while the relief tyre tube 6 is uninflated as shown in FIG. 3.

FIG. 2 shows the position of the normal tyre tube 5 after the relief tyre tube 6 is inflated.

The cross-section in FIG. 4 indicates the embodiments of the motorcycle tyre 7 in its normal usage. Fitted within the tyre 7 is an inflated normal tyre tube 5 with the spare tyre tube 6 laid uninflated in between the tyre rim 4 and the normal tyre tube 5 at the relief tyre tube air inlet valve 1 area.

At the normal tyre tube air inlet valve 2 area, shows the non-inflatable portion 8 of the relief tyre tube 6, as indicated in the cross-section, as in FIG. 5.

After a puncture, as shown in FIG. 6, the normal tyre tube 5 is deflated and the relief tyre tube 6 is pumped up and occupying the inside of the tyre 7. This can be done by means of a portable foot pump or other similar devices.

In the plan view of FIG. 7 shows the inflated relief tyre tube 6, and the non-inflatable portion 8 crumpled, normal tyre tube 5 is deflated.

FIG. 8 shows the normal position of the relief tyre tube 6 with the non-inflatable section 8 at the normal tyre tube air inlet valve 2 area. An opening 9 is provided on the non-inflatable portion 8 of the relief tyre tube 6 for the normal tyre tube air inlet valve 2 to go through. This can be seen on the plan view of FIG. 8, the normal tyre tube 5 is inflated in this case.

The side view of the tyre tube 5 & 6 at the normal tyre tube air inlet valve 2 area shows how the relief tyre tube 6 takes up the place of the normal tyre tube 5 after it has been deflated. The crumpled portion 8 belongs to the non-inflatable portion 8 of the relief tyre tube 6, as indicated in FIG. 9.

FIG. 10 shows a clearer view of the concept in longitudinal section at the normal tyre tube air inlet valve 2 area. The relief tyre tube 6 occupies the inner portion of the tyre 7, while the normal tyre tube 5 is deflated off air.

FIGS. 11, 12 & 13 show examples of how the non-inflatable portion 8 of the relief tyre tube 6 may be made. It can be of a continuous, but specially moulded to hold the two ends 10 of the relief tyre tube 6 together, as in FIG. 11.

FIG. 12 indicates the other option, that is by providing a non-inflatable piece of rubber 8 or other materials to have the two ends of the relief tyre tube 10 connected.

The next is by fusing the affected portion 8 of the relief tyre tube 6 at the tube ends 10 area to make it non- inflatable, as shown in the longitudinal section of the relief tyre tube 6, in FIG. 13.

CLAIMS

1. The emergency relief tyre tube 6 is installed between the tyre rim 4 of the normal tyre tube 5, for emergency relief use in case the normal tyre tube 5 had a puncture.

2. The emergency relief tyre tube 6 as in the above claim 1 can be fitted on the wheels of any motorcycle, scooter, bicycle, or any other tyred vehicles.

3. The emergency relief tyre tube 6 as in the above claims 1 & 2 can be made of any rubber, synthetic materials, plastic or elastic substances or any other petrochemical products.

4. The relief tyre tube 6 as in the above mentioned 3 claims can be inflated by a foot pump or any other similar devices for the inflation of the relief tyre tube 6.