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Our ref:

CHR12/1412

Your ref:

681/2012

Contact officer: Stephen Kinnersly Contact phone:

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3 December 2012

Coroner Susan Armour Coroners Court of Victoria Level 11, 222 Exhibition Street MELBOURNE VIC 3000

Dear Ms Armour,

Re: Lyle Jeffrey

Thank you for the letter dated 27 March 2012 that included a copy of the "Finding into Death Without Inquest" concerning the death of Lyle Jeffery.

In your findings you recommend that the Australian Competition and Consumer Commission (ACCC) take whatever action deemed necessary to address the safety concerns identified in the investigation that relate to the use of the "Crampbuster" throttle control device by motorcyclists.

The ACCC sought advice from the Department of Infrastructure and Transport (DIT) as to compliance with the Australian Design Rules (ADR) for motor vehicles and general comments on safety. The Crampbuster is an aftermarket product for motor cycles (an item fitted to the vehicle at a later date, not supplied by the manufacturer when the vehicle is first supplied to the market). Although aftermarket products are not within the jurisdiction of the ADRs, the ACCC sought the expertise of the department to form an opinion on the safety of the product. I have attached the DIT advice to the ACCC for your information.

The DIT advised that the presence of the Crampbuster (if installed correctly) attached to the throttle of a motorcycle would be unlikely to interfere with the use of the throttle in accordance with the ADR requirements. The driver of the motorcycle can still grip and twist the throttle, and if the driver's hand is released from the throttle, it should still return to the idle position.

However, the DIT suggested that if the device was not correctly installed it could prevent the use of the throttle. From the details provided in your findings the ACCC is



unable to determine whether the device was correctly installed in the incident resulting in the death of Mr Jeffrey.

The ACCC also sought advice from the Automotive Branch of the Western Australian Department of Commerce (DOC) in relation to the safety of this device. DOC advised that "Providing the Crampbuster is correctly installed and used I think it is very unlikely that it would cause a rider to lose control of the motorcycle" and furthermore that the Crampbuster "is not likely to impede the safe operation of a motorcycle throttle".

The ACCC has conducted a search of its databases and is not aware of any other incidents or complaints concerning the Crampbuster or similar throttle control devices for motorcycles.

The ACCC has completed its assessment of the "Crampbuster" throttle control device and based on the above advice does not consider the need for product safety intervention at this time. However, should further information be provided which indicates the need for intervention by the ACCC we will review our assessment accordingly.

It may also be of interest that the DIT advises that over the next two years the Australian Government will be reviewing the case for mandatory Anti-lock Brake System on motorcycles.

If you have any queries with this assessment please contact Mr Stephen Kinnersly on (08) 9325 0618 or stephen.kinnersly@accc.gov.au.

Yours sincerely

John Jamieson

Director

Recalls & Hazard Assessment

Product Safety Branch

Attachment: DIT advice to the ACCC regarding the Crampbuster device.

BRIEFING

File Reference: 12/5295

Advice on Australian Design Rules related to Findings into Death Without Inquest – Lyle Jeffery (court ref 681/2012)

Role of the Department of Infrastructure and Transport

The Australian Government maintains a federal system to apply national standards for road vehicles before they can be supplied to the Australian market. The system is outlined within the Act and the Regulations. The national standards are known as the Australian Design Rules (ADRs) and deliver levels of vehicle safety, emission control and theft protection that are generally expected by the Australian community. The ADRs are determined by the Minister for Infrastructure and Transport, following a transparent and collaborative process involving State and Territory Governments and industry stakeholders. The ADRs are recognised as contributing towards safer roads and cleaner air.

The underlying rationale of the system is for new vehicles manufactured in Australia or entering Australia to be assessed and certified as complying with the ADRs. These arrangements are administered by the Department of Infrastructure and Transport under the Motor Vehicle Standards Act 1989 and Motor Vehicle Standards Regulations 1989.

The certification process involves a manufacturer providing evidence (often in the form of test reports) to demonstrate compliance with each applicable ADR. If the evidence of compliance is satisfactory, a manufacturer is issued an Identification Plate Approval allowing the import and supply to the market of that type of vehicle. There are also several concessional arrangements that allow for the limited supply to the market of both new and used vehicles that may not comply with the ADRs.

Once a new vehicle or a used imported vehicle (as defined in the Act) has been supplied to the market, it becomes a used vehicle and the requirements for registration, maintenance, modification and use are the responsibility of the state and territory governments. While each jurisdiction has slightly different requirements, all have adopted, to a greater extent, the Australian Vehicle Standard Rules. Generally the states and territories require a vehicle to continue to comply with the ADRs (allowing for wear and tear) and provide arrangements to allow for vehicle modifications that may not meet the ADRs (often requiring engineering analysis).

The Crampbuster

The Crampbuster appears to be an aftermarket component (that is, an item fitted to a vehicle at a later date, not supplied by the manufacturer when the vehicle is first supplied to the market) and therefore the requirement to comply with the ADRs under the Australian Government's Motor Vehicle Standards legislation does not apply. However, VicRoads may be able to provide advice as to what level of continued compliance is required once the bike is registered and used on the road.

The Crampbuster (based on limited research¹) is a device (not permanently) fixed to the motorbikes throttle, allowing a driver to apply force using their palm to twist and hold the throttle, rather than gripping and twisting with the hand wrapped around the throttle.

Relevantly, *Vehicle Standard (Australian Design Rule 57/00 - Special Requirements for L-Group Vehicles) 2006* (ADR 57) (attached), sets out requirements for motorbike throttles. Based on the ADR² a motorbike is required to have a twist grip throttle on the right handlebar that is self-closing in a clockwise direction to the idle position after the hand is released. Additionally the throttle must be operable throughout its full range by the driver's right hand without removing the hand from the throttle.

The presence of a Crampbuster (if installed correctly) attached to the throttle on a motorbike would be unlikely to interfere with the use of the throttle in accordance with the ADR requirements. The driver can still grip and twist the throttle, and if the driver's hand is released from the throttle, it should still return to the idle position.

However, if the Crampbuster was not correctly installed, for example, installed with the palm plate point upwards, it would prevent the use of the throttle (as the Crampbuster would prevent the driver gripping the throttle).

It should be noted that this assessment is based on the information provided in the Coroner's Findings and general understanding of Crampbuster like devices. The Department has not carried out any tests on Crampbuster devices and does not hold data that could be used to determine if they are a contributing factor in motorbike crashes.

ABS and Integrated Braking Systems

As part of a comprehensive ADR development program agreed with the states and territories, and in line with the National Road Safety Strategy 2011-20, over the next two years the Australian Government will review the case for mandating Anti-lock Brake Systems (ABS) on motorcycles.

There is no relevant international regulation that could be adopted. Australia is currently monitoring the difference domestic and regional approaches to motorcycle ABS being taken by the United States and Europe.

Erik Connell Acting Section Head Policy, Legislation & Projects Vehicle Safety Standards

18 June 2012

² See clauses 57.2.3.1.2, 57.2.3.1.2.1, 57.2.3.4, 57.2.3.4.2, and Table 1.

¹ The Coroner's Findings do not provide a brand name, description or picture of the device. It is assume the Crampbuster is similar to products available at http://www.crampbuster.com/.



Vehicle Standard (Australian Design Rule 57/00 – Special Requirements for L-Group Vehicles) 2006

I, JAMES ERIC LLOYD, Minister for Local Government, Territories and Roads, determine this vehicle standard under subsection 7 (1) of the *Motor Vehicle Standards Act 1989*.

Dated

5 July 2006

[Signed]

James Eric Lloyd

Minister for Local Government, Territories and Roads

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A. LEGISLATIVE PROVISIONS

- A.1. NAME OF STANDARD
- A.1.1. This Standard is the Vehicle Standard (Australian Design Rule 57/00 Special Requirements for L-Group Vehicles) 2006.
- A.1.2. This Standard may also be cited as Australian Design Rule 57/00 Special Requirements for L-Group Vehicles.
- A.2. COMMENCEMENT
- A.2.1. This Standard commences on the day after it is registered.
- A.3. REPEAL
- A.3.1. This Standard repeals each vehicle standard with the name Australian Design Rule 57/00 Special Requirements for L-Group Vehicles that is:
 - (a) made under section 7 of the Motor Vehicle Standards Act 1989; and
 - (b) in force at the commencement of this Standard.
- A.3.2. This Standard also repeals each instrument made under section 7 of the Motor Vehicle Standards Act 1989 that creates a vehicle standard with the name Australian Design Rule 57/00 Special Requirements for L-Group Vehicles, if there are no other vehicle standards created by that instrument, or amendments to vehicle standards made by that instrument, that are still in force at the commencement of this Standard.

B. SCOPE

- B.1. The function of this national standard is to specify special requirements for the construction of L-Group vehicles.
- B.2. They must also comply with all requirements for L-group vehicles as set out in individual ADRs.

C. APPLICABILITY AND IMPLEMENTATION

- C.1. Applicability Summary
- C.1.1. This national standard applies to the design and construction of vehicle as set out in the table below.

C.1.2. Applicability Table

Vehicle Category	ADR Category Code *	UNECE Category Code *	Manufactured on or After	Acceptable Prior Rules
Moped 2 wheels	LA	L1	1 July 1998	Nil
Moped 3 wheels	LB	L2	Not applicable	
Motor cycle	LC	L3 "	1 July 1998	Nil
Motor cycle and sidecar	LD	L4	1 July 1998	Nil
Motor tricycle	LE .	L5	Not applicable	ř
Passenger car	MA	M1	Not applicable	
Forward-control passenger vehicle	MB	M1	Not applicable	
Off-road passenger vehicle	MC	M1 .	Not applicable	
Light omnibus	MD	M2	Not applicable	
Heavy omnibus	ME	M3	Not applicable	
Light goods vehicle	NA	N1	Not applicable	
Medium goods vehicle	NB	N2	Not applicable	
Heavy goods vehicle	NC	N3	Not applicable	
Very light trailer	TA	01	Not applicable	
Light trailer	TB	O2	Not applicable	
Medium trailer	TC	O3	Not applicable	
Heavy trailer	TD	O4	Not applicable	

57.1. **DEFINITIONS**

57.1.1. Refer to Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005.

57.2. REQUIREMENTS

- 57.2.1. Side-cars
- A side-car must not be so attached to a vehicle nor must it be of such mass or dimensions as to prevent the driver from safely driving the vehicle or from having a sufficient view to the front, rear and either side of the vehicle to enable the vehicle to be driven with safety.
- 57.2.1.2. A side-car must not be attached to the right-hand side of a vehicle.
- 57.2.2. Steering Gear and Handlebars
- 57.2.2.1. Handlebars must extend not less than 250 mm nor more than 450 mm on each side of the centreline of the vehicle.
- 57.2.2.2. The height of the lowest part of the handgrip above the lowest part of the upper surface of the driver's seat must not exceed 380 mm.
- 57.2.2.3. All steering gear and steering gear connections must be so designed to eliminate accidental detachment or over-locking.

^{*} The category code may also be in the format L₁, L_A etc.

- 57.2.2.4. The horizontal distance measured from the mid-point between the head stem bearings where the head stem is the steering pivot point, to a point vertically above the centre of the front wheel must not exceed 550 mm.
- 57.2.2.5. The handlebars must be symmetrical on either side of the front wheel and steering head assembly.
- 57.2.3. Operation and Location of Controls
- 57.2.3.1. Column 1 of Table 1 indicates whether controls are mandatory (M) or optional (O). The designation M+ indicates that applicability depends on the vehicle's design.
- 57.2.3.1.1. In any case where an item of equipment listed in Column 2 of Table 1 is provided, the control for such item must be located as specified in Column 3 of Table 1 and mode of control operation must be as specified in Column 4 of Table 1.
- 57.2.3.1.2. Each of the following controls located on the right handlebar must be operable throughout its full range by the driver's right hand without removal of the hand from the throttle:
- 57.2.3.1.2.1. Hand lever controlling front wheel brake;
- 57.2.3.1.2.2. Direction indicator control (if fitted to right handlebar); and
- 57.2.3.1.2.3. Supplemental Engine Stop.
- 57.2.3.1.3. Each of the following controls located on the left handlebar must be operable throughout its full range by the driver's left hand without removal of the hand from the handgrip:
- 57.2.3.1.3.1. Hand lever controlling the clutch;
- 57.2.3.1.3.2. Direction indicator control (if fitted to left handlebar);
- 57.2.3.1.3.3. Horn button; and
- 57.2.3.1.3.4. Headlamp main/dipped beam control.
- 57.2.3.1.4. In the case where a vehicle is equipped with self-proportioning or anti-lock braking devices utilising a single control for front and rear brakes, the requirements for location and operation of the control must be as for a rear brake control.
- 57.2.3.2. Visual Indicator Display and Illumination Requirements

 In any case where a visual indicator listed in Column 1 of Table 2 is provided, the information which is displayed must be visible to the seated driver under daylight conditions. Display illumination and operation of display illumination must be as specified in Column 2 of Table 2.
- 57.2.3.3. Control and Visual Indicator Display Identification Requirements

 In any case where an item of equipment or visual indicator listed in Column 1 of Table 3 is provided, the control or display for such item must be identified by the word or words shown in Column 2 of Table 3. Control

positions must be identified to signify the function performed at that control position, by at least the data specified in Column 3. The items of equipment or visual indicators listed in Table 3, other than the Manual Fuel Shut-off Control; the Manual Choke; and the Ignition Switch must be

- visible to the seated driver and the control or display identification must be legible to the seated driver.
- 57.2.3.3.1. In clause 57.2.3.3 above, as an alternative to using the words in columns 2 and 3 of table 3, the use of equivalent ISO symbols to identify a control and signify the function performed at the control is permissible.
- 57.2.3.4. "Clockwise" and "counter-clockwise" as specified in the following Tables refer to opposing directions of rotation around the following axes, as applicable:
- 57.2.3.4.1. the operational axis of the ignition control viewed from in front of the ignition key opening; or
- 57.2.3.4.2. the axis of the right handlebar on which the twist grip throttle is located, viewed from the outer end of that handlebar.

TABLE 1 CONTROL LOCATION AND OPERATION REQUIREMENTS

Column 1	Column 2	Column 3	Column 4
Mandatory operation or optional	Equipment or control	Control location	Control
M ⁺	Manual clutch (handlever) or combined clutch and gear change	Left handlebar	Squeeze to disengage clutch
O	Foot-operated gear change pedal	Left foot control	Up from first gear position to select lower numerical gear ratios commonly referred to as "higher gears") and down to select higher numerical gear ratios (commonly referred to as "lower gears")
M	Headlamp main/dipped beam control	Left handlebar	Up for main beam, down for dipped beam. In the case where the control is combined with the headlamp on-off control, means must be provided to prevent inadvertent actuation of the "off" functions.
M	Horn	Left handlebar	Push to activate.
M	Direction indicator lamps	Left or right handlebar	
0	Ignition switch	(Off-counterclockwise from other positions.
0	Manual only fuel shut-off control		(1) Off-forward; On-downward. Reserve (if provided) - On- upward; or (2) as per FMVSS 123.
M	Twist grip throttle	Right handlebar	Self-closing in a clockwise direction to idle position after release of hand.
M	Supplemental Engine Stop	Right handlebar	A thumb-operated device to stop engine.
M	Front wheel brake hand lever	Right handlebar	Squeeze to activate.
M	Rear wheel brake - motor cycles - motor cycles equipped with automatic transmission	Right foot control As above; or Left handlebar	Depress to activate Squeeze to activate.
M	Rear wheel brake - mopeds - mopeds equipped with automatic transmission	Right foot control As above; or Left handlebar	Depress to activate Squeeze to activate.

^{*} **Note**: Indicates dependent on vehicle design

TABLE 2
VISUAL INDICATOR DISPLAY ILLUMINATION REQUIREMENTS

Column 1	Column 2
Visual Indicator Display	Illumination
Speedometer	Illuminated whenever the head lamp is illuminated.
Neutral indicator	Green display lamp illuminated when the gear selector is
	in the neutral position.
Main beam indicator - LC, LD	Blue display lamp illuminated whenever the headlamp is
only (LA - Dipped Beam	illuminated and the headlamp main/dipped beam control
Only)	is in the main beam mode.

TABLE 3 CONTROL AND VISUAL INDICATORS DISPLAY IDENTIFICATION REQUIREMENTS

Column 1	Column 2	Column 3
Control or Display	Identification of Control or	Identification at Position of
Appropriate or Display	Display	Control
Ignition Switch		Off
Supplemental Engine Stop	Engine stop	Off, Run
Manual Choke	Choke	
Electric Starter		Start
Headlamp Main/Dipped	Lights	Hi, Lo
Beam Control		7
Horn	Horn	
Direction Indicator	Turn	L,R
Main Beam or High Beam	Main Beam or High beam	
Indicator		
Tachometer	r/min; rpm; RPM; or min-1	
Fuel Tank Shut-Off Control	Fuel	Off, On, Res.
Neutral Indicator	Neutral	
Speedometer	km/h	Major gradations marked at
		10 km/h intervals

57.2.4. Transmission Requirement

All vehicles equipped with manual transmission which are powered by an internal combustion engine, must be so designed to allow the transmission to be disengaged by the driver at any engine speed.

57.2.5. Electrical Generator

All vehicles must be fitted with a generator capable of maintaining a continuous supply of electrical energy required for continuous operation of the ignition and lighting systems when stationary with the engine operating at idle. The supply of electrical energy must be not less than that required for continuous operation of all lamps installed, except front/rear fog lamp(s), reversing lamp, 'Internal Lamp' and 'Search Lamp'.

57.2.6. Foot Rests

Every vehicle must be fitted with foot rests for the driver and also for the passenger if a seating position for passenger is provided.

- 57.2.7. Stands
- 57.2.7.1. All LA and LC group vehicles must be equipped with a stand capable of holding the vehicle in a substantially upright stable position. The stand may be of the side or centre type and must be equipped with a spring or other device capable of holding it clear of the road under normal operating conditions.
- 57.2.7.2. In the case of vehicles so equipped with a side stand, the side stand must either:
- 57.2.7.2.1. automatically fold back into the closed or riding position,
- 57.2.7.2.1.1. when the vehicle is returned to the normal vertical position for riding; or
- 57.2.7.2.1.2. as a result of the vehicle being moved forward by a deliberate action of the rider; or
- 57.2.7.2.1.3. without disturbing the equilibrium of the vehicle, if the side stand comes into contact with the road while the vehicle is moving; or
- 57.2.7.2.2. be connected to the ignition system in such a manner that the ignition system can only be activated when the side stand is in the closed or riding position; or
- 57.2.7.2.3. be connected to an audible signal and a warning lamp, visible to the rider in the normal riding position, which are activated if the ignition is switched on and the side stand is not in the closed or riding position; or
- 57.2.7.2.4. be connected in such a manner so that the vehicle cannot be operated under its own power unless it is retracted.
- 57.2.8. Chain Guards

Every vehicle, where the chain transmits engine power must, if the frame or any other equipment does not provide such protection, be fitted with a chain guard which must provide protection from the front sprocket and at least the upper free-run of the drive chain to a point not less than 300 mm to the rear of the rearmost footrest or to a point vertically above the centre of the rear drive sprocket.

57.3. ALTERNATIVE STANDARDS

The technical requirements of ECE R 60/00 "Motorcycle/moped controls" are be deemed to be equivalent to the technical requirements for:

Operation & Location of Controls;

Visual Indicator Display & Illumination Requirements; and

Control & Visual Indicator Display Identification requirements, of this rule.