

Formset # FS015 Trikes with Motorcycle Controls

For the final inspection of class LE1 vehicles [with motorcycle controls] of a GVM of less than 1000kg

#	vehicle	method	feature	required status	stds ref	✓	✗
1	On road wheels on level surface	visual	Stance	<ul style="list-style-type: none"> Normal attitude front to rear and side to side with normal wheel alignments 			
2		measure & record	Track & Wheelbase	<ul style="list-style-type: none"> Centre of tyre treads RH to LH Vertical centreline of front wheel to vertical centre rear 			
3		visually assess	Ground clearance	<ul style="list-style-type: none"> no part of the vehicle contacts the ground when the front tyre and either rear tyre is deflated. 			
4		visually assess	Body [if fitted]	<ul style="list-style-type: none"> All exposed edges have minimum edge radii of 3mm and body forward contours are pedestrian friendly. 			
5				<ul style="list-style-type: none"> Body form strength is adequate to carry component, luggage and aerodynamic loading. 			
6				<ul style="list-style-type: none"> Body to frame mountings are of adequate strength and inter-dependence. 			
7				<ul style="list-style-type: none"> Clearance will be maintained between body, including mudguards and all moving parts 			
8			Seating	<ul style="list-style-type: none"> Seating may be tandem and / or side by side. A formed and padded seat, securely fastened consistent with vertical & longitudinal occupant loading, exists for each occupant. 			
9				<ul style="list-style-type: none"> The combination of seat and foot support allows each passenger to be reasonably located and be able to brace against the dynamic forces potentially presented by the vehicle. 			
10				<ul style="list-style-type: none"> The drivers seat centreline is either on the vehicle centreline or offset to the right side of the vehicle. Where the driver's seat is offset, the controls are arranged in front of the seating position. 			
11				<ul style="list-style-type: none"> Seat belts are not required but where fitted they must comply with the relevant mounting requirements as per the LVV Code of Construction. 			
12			Mudguards	<ul style="list-style-type: none"> Effectively mounted mudguards extending the full width of the tyre and at least 1/3 of the tyre circumference cover all wheels. 			
13	Wheels free with vehicle at eye level	Visually assess, refer to drawing and data provided.	Frame	<ul style="list-style-type: none"> Drawing showing material specification and sizes and pre-paint inspection data is available. Alternatively, the vehicle has had extensive use and a detailed visual inspection of all stress areas has not revealed any structural deterioration, with Certifier to note specifically this condition. 			
14				<ul style="list-style-type: none"> Weld appearance is sound and assurance of weld quality is available. 			
15				<ul style="list-style-type: none"> Braces and gussets are installed where necessary to increase torsion capability & reduce localised stress particularly where frame is attached to donor parts. 			
16				<ul style="list-style-type: none"> Donor parts are fit for further service. 			
17				<ul style="list-style-type: none"> Component to frame mountings are of adequate design for purpose 			
18				<ul style="list-style-type: none"> All mounting points through hollow sections are crush resistant 			
19				<ul style="list-style-type: none"> All fastenings are of adequate size, strength and correctly torqued. 			
20				<ul style="list-style-type: none"> Steering stem spigotted where welded. 			
21			Steering	<ul style="list-style-type: none"> Handlebars, where used, are of tubular section with closed ends, braced as necessary to cope with steering loads without excessive deflection. 			
22				<ul style="list-style-type: none"> Steering head bearings are suitable for vehicle mass and potential performance, correctly adjusted and adequately sealed against water and dust. 			
23				<ul style="list-style-type: none"> Draglinks, where fitted, are capable of resisting strut loading and bending due to offset design. 			
24				<ul style="list-style-type: none"> thread engagement inspection holes are present in adjustable links 			
25				<ul style="list-style-type: none"> Steering trail is maintained either all positive or all negative throughout suspension travel. 			
26				<ul style="list-style-type: none"> Any steering dampers must resist steering forces only throughout full steering movement available. 			
27				<ul style="list-style-type: none"> Full steering movement between positive stops must be available over full suspension travel. 			
28			Front and rear suspension	<ul style="list-style-type: none"> Fork leg and axle sections are adequate to resist steering and braking loads consistent with installed rake. Triple clamps sourced from donor motorcycles are fit for any shear loads occurring in this application 			
29				<ul style="list-style-type: none"> Weld appearance is sound and assurance of weld quality is available. 			
30				<ul style="list-style-type: none"> Springs are retained with suspension at full droop 			
31				<ul style="list-style-type: none"> Stanchion and sliders on extended tele-forks are each single piece construction 			
32				<ul style="list-style-type: none"> Critical fasteners are provided with locking system 			
33				<ul style="list-style-type: none"> Sliding and rotating bearings are adequately retained and dust and water protected 			

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34	Wheels free with vehicle at eye level	Visually assess, refer to drawing and data provided.		<ul style="list-style-type: none"> Ball joints operate within design angles at all times 			
35			<ul style="list-style-type: none"> Suspension location and damping member mountings transfer load directly to frame and are fit for loading consistent with vehicle performance. 				
36			<ul style="list-style-type: none"> Suspension joints are able to articulate freely within full range of suspension movement. 				
37				<ul style="list-style-type: none"> Suspension design geometry avoids excessive camber change due to bump loading 			
38				<ul style="list-style-type: none"> Vehicle occupants are protected from moving parts 			
39	Wheels free		Controls, instruments & fittings	<ul style="list-style-type: none"> These hand controls can be operated without moving the applicable hand from the handlebar grips, lock to lock: <ol style="list-style-type: none"> Turn signal [correct logic with right or left hand operation optional] Horn [push activated, right or left hand operation optional] Headlamp beam [right or left hand operation optional] Front wheel brake [right hand only] Throttle [right hand only, self closing clockwise] Clutch [left hand only - if applicable] 			
40				<ul style="list-style-type: none"> Foot controls are operated by pedals adjacent to the natural foot rest position: <ul style="list-style-type: none"> Brake [right side of control group] * Clutch [left side of control group] * *note exception for disability compensation Gearshift mechanism positive and logical for sequential operation 			
41				<ul style="list-style-type: none"> Turn signal and high beam visual indicators fitted 			
42				<ul style="list-style-type: none"> Brake light switched by both hand and foot brakes 			
43				<ul style="list-style-type: none"> Speedometer [with calibration certificate for 100km/hr] fitted and in working order. 			
44				<ul style="list-style-type: none"> Where a wind deflector is fitted it provides clear forward vision for the driver over the top and evidence is produced that it is made from an approved shatterproof material. 			
45				<ul style="list-style-type: none"> Where a windscreen is fitted it is made from approved automotive laminated safety glass with full edge framing and is fitted with an electric wiper mechanism capable of maintaining adequate driving vision. A windscreen washer is also fitted and operable. 			
46				<ul style="list-style-type: none"> Rear vision mirror[s] give adequate field of view [one mirror obligatory] 			
47				<ul style="list-style-type: none"> All control surfaces and footrests have an anti-slip finish 			
48				<ul style="list-style-type: none"> Footrests available for each occupant foot, vertical load capability to exceed 100kg per foot position. 			
49	Wheels free with vehicle at eye level		Power unit and transmission installation	<ul style="list-style-type: none"> Mountings are adequate in operation: <ol style="list-style-type: none"> to withstand shock torque loading to prevent non-essential contact with other components 			
50				<ul style="list-style-type: none"> Fabricated component weld appearance is sound and assurance of weld quality is available. 			
51				<ul style="list-style-type: none"> All mounting points through hollow sections are crush resistant 			
52				<ul style="list-style-type: none"> Fasteners are of adequate size & provided with locking system 			
53				<ul style="list-style-type: none"> The function of any control [throttle or gear shift etc] is not affected by movement of units in their mountings 			
54				<ul style="list-style-type: none"> All service connections allow for unit movement and are supported to prevent chaffing. 			
55				<ul style="list-style-type: none"> Moving parts, particularly rotating parts & chains are shielded to eliminate risk of contact with vehicle occupants while vehicle is in use, including shielding against component failure. 			
56				<ul style="list-style-type: none"> Relative movements between separate engine, transmission and final drive units must respect the type of drive medium used so that correct alignments exist and correct chain tension, where used, is maintained. 			
57				<ul style="list-style-type: none"> Engine start function is restricted to park and neutral for automatic trans. 			
58				<ul style="list-style-type: none"> Driveshaft type & construction must be adequate for torque of unit relative to the mass of vehicle and suspension movement. Observe: <ol style="list-style-type: none"> Spline plunge engagement over full movement range Operating angles are within design range; i.e. minimum 3% to makers limit maximum. Driveshaft fabrication is professionally documented or NDT evidenced 			
59			Brakes	<ul style="list-style-type: none"> The front wheel brake must be able to operate independently of the rear wheel system. [pre 1977 manufacture units do not require front brake]. 			
60				<ul style="list-style-type: none"> Each rear wheel brake is operated simultaneously within an automatically balanced system 			

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61				<ul style="list-style-type: none"> Front and rear wheel brake operation may be linked only where the front brake contains a split system capable of fully independent operation. 			
62				<ul style="list-style-type: none"> All actuating components, including flexible lines within the hydraulic system are brand manufactured and certified for automotive use 			
63				<ul style="list-style-type: none"> Fabricated parts having welds where failure would result in brake loss have NDT certificates 			
64	Wheels free with vehicle at eye level	Visually assess, refer to drawing and data provided.	Brakes [cont]	<ul style="list-style-type: none"> All rigid hydraulic lines are to be automotive quality Bundy tubing, double ball flared, supported at 300mm minimum intervals and protected against abrasion, stone damage and service jacking. 			
65				<ul style="list-style-type: none"> Disc brake callipers & rotors must be matched as to type; floating or fixed. 			
66				<ul style="list-style-type: none"> Reactive torque inputs will not inhibit suspension movement when brakes are applied. [assess before road test] 			
67				<ul style="list-style-type: none"> Actuating levers are adequately mounted, accessible, operable without excessive foot or hand movement and return positively against a stop. 			
68				<ul style="list-style-type: none"> Hydraulic reservoirs will retain fluid reserves when pads are worn and will not bleed air into the system when mounted on moving parts; i.e. the full range of handlebar movement 			
69				<ul style="list-style-type: none"> Push rods: <ol style="list-style-type: none"> Contain no offset, are of adequate cross-section relative to length & material do not contact non-related parts. End fittings are keyed, not solely butt welded. Any guides must not deflect or inhibit rod movement within range of travel. 			
70				<ul style="list-style-type: none"> Adjustable components incorporate a positive locking system and a visual indicator of thread engagement. 			
71				<ul style="list-style-type: none"> Vital fasteners are provided with locking systems 			
72				<ul style="list-style-type: none"> Vital parts are not electroplated except where original equipment or they are certified as heat treated 			
73				<ul style="list-style-type: none"> Where vacuum servo's are fitted: <ol style="list-style-type: none"> They are rigidly mounted Lines are of an automotive approved type, securely mounted. A vacuum check valve is operational 			
74				<ul style="list-style-type: none"> Where parking brakes are fitted they are solely mechanically linked to the shoes or pads 			
75			Wheels and Tyres	<ul style="list-style-type: none"> All wheels have double safety beads and are fitted with tyres nominated by the tyre manufacturer for that rim size, speed potential & loading. 			
76				<ul style="list-style-type: none"> Wheel bearings must be protected against dirt and water ingress 			
77				<ul style="list-style-type: none"> Alloy wheels are not repaired or modified 			
78				<ul style="list-style-type: none"> Steel wheels that are modified have assurance of weld quality and concentricity available. 			
79				<ul style="list-style-type: none"> Correct types of wheel nuts are all present and have full thread engagement, with wheel seats in good condition. 			
80				<ul style="list-style-type: none"> Wheel offsets do not overload bearings and any wheel spacers maintain full machined contact area and are either affixed to the hub or wheel 			
81			Electrical	<ul style="list-style-type: none"> All wiring, connections and fittings are to automotive standard, adequate for the current draw of the particular application. 			
82				<ul style="list-style-type: none"> All multiple wiring runs are tape wrapped into a harness, secured tidily to prevent chaffing and fouling of adjacent, particularly moving components. 			
83			Fuel System	<ul style="list-style-type: none"> Fuel tanks are securely mounted, insulated against vibration from mechanical components and road shock. Tanks fabricated from steel or alloy must be fully seam welded using a similar base material. 			
84				<ul style="list-style-type: none"> Tanks immediately vulnerable to rear end crash should be filled with an 'explosafe' or similar purpose vapour barrier material. 			
85				<ul style="list-style-type: none"> Rigid fuel lines are made from steel Bundy tube, adequately supported against vibration and chaffing. 			
86				<ul style="list-style-type: none"> Flexible fuel lines are to be of a material approved for automotive applications. 			
87				<ul style="list-style-type: none"> Where the fuel system does not utilise a positive displacement pump an anti-drain or anti-siphon valve is incorporated to prevent involuntary spillage. 			

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88		Visually assess, refer to drawing and data provided.	Exhaust system	<ul style="list-style-type: none"> The exhaust is fitted with effective muffler[s] with tailpipe[s] that discharge to the rear or to the side immediately in front of a rear wheel[s]. 			
89	<ul style="list-style-type: none"> the occupants and heat sensitive components are insulated from the exhaust system. 						
90	<ul style="list-style-type: none"> the system mountings provide support for the complete system. 						
91	Vehicle on road wheels		Lighting	Lights are fitted as follows: <ul style="list-style-type: none"> Headlamp[s] Turn Signal Lamps [D]'s front and rear [with standards markings] Tail lamp[s] fitted to indicate vehicle width from rear Stop lamp[s] recommended integral with tail-lamps Rear number plate lamp Front fog lamp[s] which operate as an alternative to headlamps [option]. Rear reflectors fitted [with standards markings] 			
92			Lighting [cont]	<ul style="list-style-type: none"> A forward facing clearance lamp, preferably amber, is fitted to each side to indicate vehicle width from the front. 			
93	Road Test	physical assessment	full load	<ul style="list-style-type: none"> With vehicle fully laden at rest there is residual suspension movement remaining 			
94			ride	<ul style="list-style-type: none"> Shock absorbers control ride and maintain wheel adhesion There are few sharp impacts transmitted to the sprung mass during braking or on uneven surfaces. There is no reason to believe that the limits of suspension travel will be consistently reached during full load operation. 			
95			handling	When vehicle is driven up to open road speed limits on test course which includes corners with uneven surfaces <ul style="list-style-type: none"> progressive and positive steering feel, without excessive effort for smaller persons, throughout all turning manoeuvres progressive and positive steering feel when turning in. no excessive understeer or oversteer directionally stable and self correcting from minor inputs with no hands off camber climb directionally stable when road cambers change no reason to suspect adverse change to handling characteristics with fully laden vehicle 			
96			braking	<ul style="list-style-type: none"> front brake is progressively controllable through to lock-up and back, without excessive dive or climb attitude in front 			
97				<ul style="list-style-type: none"> foot brake is progressively controllable through to lock-up and back, without excessive squat or perch. 			
98				<ul style="list-style-type: none"> directional stability is maintained during front only braking 			
99				<ul style="list-style-type: none"> directional stability is maintained during foot only braking 			
A1				<ul style="list-style-type: none"> directional stability is maintained during braking on uneven surfaces. 			
A2		performance verified		<ul style="list-style-type: none"> the vehicle is capable of performing five successive stops from 100km/hr to zero within a distance of 61 metres, all within a total elapsed time of three[3] minutes. 			
A3				<ul style="list-style-type: none"> the handbrake, where fitted, is capable of holding the vehicle on a slope with a minimum gradient of 1 in 5 			
A4		assessment	general	<ul style="list-style-type: none"> where fitted with a wind deflector, the driver has clear vision of the road ahead over the top of the wind deflector. 			
A5				<ul style="list-style-type: none"> where fitted with a windscreen [safety glass] the windscreen wiper clears the windscreen to provide full driving vision 			

Certifier ID:
