Item and Method of Inspection	Reject If
1. Suspension and Frame Attachments	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
NOTE: This section applies to all types of suspension. Manufacturer welding of components is a normal part of many manufacturing processes and is distinct from welding to modify or repair a part. Additional Inspection Procedure(s): Raise the vehicle as necessary to access the suspension components.	
a) road clearance (applies to buses with a GVWR of less than 4,500 kg)	a) track bar or any other suspension component extends down below the lowest part of the wheel rim
b) vehicle ride height Additional Inspection Procedure(s): Check ride height while vehicle is parked on a flat level surface.	b) suspension is sagged so that the vehicle ride height, on a vehicle other than a bus, is more than 50 mm from manufacturer specified height when measured at the tire centreline – one side of the vehicle is more than 50 mm, higher or lower than the other when measured at the tire centreline – on a bus, step height at an entrance door is 25 mm above or below the range of step height specified by the manufacturer
c) frame bracket, mounting bracket and hanger **NOTE: Some trailer suspension systems use a "cross tube brace", consisting of a pipe positioned between the spring hangers on either side of the vehicle.** **The "cross tube brace" is used to position the suspension for shipment and installation and has no bearing on the alignment or the function of the suspension.**	c) broken, cracked, damaged, loose, missing, or perforated due to corrosion or deterioration welded or repaired in a way that does not meet OEM standard
d) mounting fasteners	d) broken, cracked, loose or missing
	<u>OUT OF SERVICE</u> **i) An axle has shifted or is able to shift from its normal position.** **ii) Any attaching component is broken, cracked, loose or missing.** **iii) The condition of the suspension system allows a tire to contact any part of the vehicle frame or body.**

All inspection procedures are visual unless additional inspection procedures are indicated or where applied force is necessary to verify tightness and/or component security.

Item and Method of Inspection	Reject If
2. Axle Attaching and Tracking Components	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
NOTE: This section applies to all types of suspension. Additional Inspection Procedure(s): Raise the vehicle as necessary to access the suspension components. Inspect using hand pressure and suitable tools.	
a) axle attachment, axle saddle	a) bent, broken, cracked, loose or missing – axle has shifted from its normal position
b) bushing (rubber or composite material)	b) loose or shifted out of place, missing, worn beyond manufacturer specification – wear or damage permits axle or wheel to shift out of position
c) suspension connecting component, (e.g.: arm, torque rod, radius rod, strut, track rod, control arm) **NOTE: Some suspension connecting components are supplied as unfinished two-piece assemblies that require welding once the required length is established. This type of welding is not cause for rejection.**	c) bent, broken, cracked, loose, missing, worn beyond manufacturer specifications, or perforated due to corrosion or deterioration – welded or repaired in a way that does not meet OEM standard – wear or damage permits axle or wheel to shift out of position
d) stabilizer/anti-sway bar or link	d) Bent, broken, cracked, loose, missing or worn beyond manufacturer specification – welded or repaired in a way that does not meet OEM standard
e) equalizer or "walking" beam	e) Broken, cracked or bushing mounting holes are elongated – welded or repaired in a way that does not meet OEM standard. – wear in suspension allows tires to contact frame. – axles do not align correctly – on a truck or truck-tractor, "walking" beam cross tube bushing has more than 7 mm clearance

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Item and Method of Inspection	Reject If
	OUT OF SERVICE **i) An axle has shifted or is able to shift from its normal position.** **ii) Any attaching component is broken, cracked, loose or missing.** **iii) The condition of the suspension system allows a tire to contact any part of the vehicle frame or body.**
3. Axle and Axle Assembly	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
a) condition	a) axle is bent or damaged – axle material or a weld is cracked – loose or shifted out of normal position – welded or repaired in a way that does not meet OEM standard
	OUT OF SERVICE **i) Axle has shifted or is able to shift from its normal position.** **ii) Axle material or a weld is cracked.**
4. Spring and Spring Attachments	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
a) leaf spring	a) any spring leaf is broken, cracked, missing, or is shifted out of place – any spring leaf is worn more than 3 mm in the hanger contact area or where leaves are in contact with each other – leaf is shifted and contacting another vehicle part
b) composite spring **NOTE: Some change in the appearance of a composite spring, described as "fuzzing" is normal as the spring ages. A crack of a composite spring is a separation in any axis which passes completely through the spring.**	b) worn more than 3 mm in load bearing area – broken, crack of any length visible on both sides of a spring – splintered, delaminating or not the same type on each side of vehicle.

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Item and Method of Inspection	Reject If
c) shackle, pin, bushing Additional Inspection Procedure(s): Check the wear of the spring pins according to manufacturer service instructions	c) broken, loose or missing – shifted out of normal position – fastener loose or missing – vertical movement of a spring or shackle against a spring pin exceeds OEM standard or if not available; wear exceeds limit below – for pin size of 12.5 mm to 25 mm: wear limit is 2 mm – for pin size of 25 mm to 45 mm: wear limit is 3 mm
d) U-bolt and hardware	d) broken, cracked, loose, missing, or shifted out of normal position – welded or repaired in a way that does not meet OEM standard.
e) spring contact area of hanger (slipper) **NOTE: Wear plates are permitted by some manufacturers in the spring contact (slipper) area of fabricated hangers.**	e) repaired by welding (except installation of wear plates) – spring load bearing area is worn more than 3 mm
f) coil spring	f) broken or shifted out of normal position – spacer is used between the coils of a spring
g) torsion bar	g) broken, cracked or missing – repaired by welding
h) bump pad	h) loose, missing or split
i) rubber load cushion	i) rubber block or vertical pin is broken, loose, missing or split

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Item and Method of Inspection	Reject If
	OUT OF SERVICE **i) Any metal spring leaf is missing, or has leaves shifted out of place.** **ii) The main leaf or more than 25% of the leaves of a metal leaf spring are cracked.** **iii) Spring leaf is shifted and in contact with a rotating part.** **iv) A composite spring is broken, has a crack of any length intersecting with another crack, or a crack longer than ¾ the length of the spring.** **v) Torsion bar is broken or cracked.** **vi) Coil spring is broken.** **vii) A rubber load cushion is missing or separated.**
5. Air Suspension	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
NOTE: This section applies to fixed axle and liftable axle suspension systems. Additional Inspection Procedure(s): Check with air system at normal operating pressure, liftable suspension in lowered position, and with supports placed under the vehicle to protect against dropping of the vehicle in the event of air loss. Maintain appropriate air pressure in any liftable axle system.	
a) ride height	a) height is 50 mm above or below OEM specification – vehicle leans to one side or air spring pressure is unequal
b) air spring (air bag)	b) improperly seated, missing, patched or reinforcing ply is exposed due to damage or deterioration – air leak
c) air spring base, mounting plate	c) broken, cracked or missing – perforated by corrosion or deterioration – welded or repaired in a way that does not meet OEM standard

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Item and Method of Inspection	Reject If
d) air system Additional Inspection Procedure(s): Inspect the function and operation of the air suspension system and controls in accordance with manufacturer service instructions.	d) pressure protection valve is inoperative or missing – control, pressure regulator or gauge, is inoperative or missing
e) air line, connection and fitting **NOTE: Refer to correct type of hose or tube and the related defective condition(s) as defined in the chart in the definition section of this standard.**	e) fitting, line, repair method, installation or modification does not meet OEM standard – tubing or hose is defective as defined in the chart in Appendix B – fitting or connection is broken, cracked, flattened or leaking – damaged in a way (such as: melting, flattening, deformation or kinking) that can restrict air flow
f) height control valve	f) inoperative – a system originally equipped with 2 valves has a valve missing or has been converted to a single valve – a system with only one valve has the valve positioned in a location other than on an axle
g) kneeling feature on a bus Additional Inspection Procedure(s): Use the control to operate the kneeling feature. Confirm the system operates as intended.	g) fails to operate as intended – audible or visual warning fails to operate as intended
h) pressure protection valve	h) air goes to suspension before brake system tank pressure reaches 450 kPa (65 psi).
	OUT OF SERVICE **i) An air spring (air bag) is missing, deflated or has an air leak.**
6. Self-Steer and Controlled-Steer Axle	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
NOTE: The suspension components on a self-steer or controlled steer axle must be inspected according to items 1-4 in this section. The steering components must be inspected according to Section 4.	

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Item and Method of Inspection	Reject If
7. Shock Absorber/Strut Assembly	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
a) condition	a) damaged, detached, or missing, not operate as intended – binding strut bearing/mount prevents free rotation of the steering wheel
b) mount and hardware	b) broken, loose or missing
c) oil leak	c) level 2 leak of oil
d) bushings	d) loose, missing deteriorated, rubber excessively dispersed
e) positioning	e) shock not located at each OEM position
	OUT OF SERVICE **i) A shock absorber on air ride suspension is broken, detached, or missing.**
8. MOR/ryde Suspension	**Truck | ✓ | Trailer | ✓ | Bus | ✓ |**
a) attachment to frame	a) bolts loose, missing
b) attachment to axle	b) cracked, broken, loose, damaged
c) clearance between frame and U-bolts	c) any component does not clear frame
d) U-bolts	d) loose, not torqued to OEM specifications
e) rubber banding (check with 3 in. measuring device)	e) separation of rubber in excess of 19 mm (3/4 in.) in depth from steel plate
f) crossmember at suspension **NOTE: All bolts shall be torqued to manufacturer's specifications.**	f) missing, broken, cracked, loose
	OUT OF SERVICE **i) Any component allows the axle to shift from its normal position.** **ii) Any attaching component is missing, loose, cracked or broken.**

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