

## SCHEDULE

### VEHICLE INSPECTION HANDBOOK FOR MANITOBA (STANDARDS OF SAFETY AND REPAIR AND INSPECTION PROCEDURES FOR LIGHT VEHICLES AND MOTORCYCLES)

**Note:** A standard specified by a vehicle's original manufacturer applies instead of a standard set out in this handbook if the standard specified by the vehicle's original manufacturer is less rigorous.

#### DEFINITIONS OF GENERAL APPLICATION

The following definitions apply in Parts 1 and 2.

**"CMVSS"** means Canada Motor Vehicle Safety Standard, as prescribed under the *Motor Vehicle Safety Regulations*, C.R.C., c. 1038, made under the *Motor Vehicle Safety Act* (Canada). (« NSVAC »)

**"DOT"** means Department of Transportation (USA — Federal). (« DOT »)

**"frayed"** means broken or separated threads or strands. (« effiloché »)

**"inadequate"** means a vehicle component or system that does not meet the vehicle manufacturer's specification or industry standards. (« inadéquat »)

**"insecure"** means that a component is becoming detached due to deterioration of the means of attachment, that the means of attachment is unable to withstand normal vehicle operation or that the component is not attached in a manner that is at least equivalent to the original equipment manufacturer's means of attachment. (« mal fixé »)

**"inspect"** means to perform a visual, manual or auditory examination of a vehicle component or system to check for rejection criteria or hazardous conditions. (« vérifier »)

**"LED"** means light emitting diode. (« DEL »)

**"level 1 leak"** means seepage of fluid or liquid that is not great enough to form drops. (« fuite de niveau 1 »)

**"level 2 leak"** means seepage of fluid or liquid that is great enough to form drops, but not great enough to cause the drops to fall during inspection. (« fuite de niveau 2 »)

**"level 3 leak"** means seepage of fluid or liquid that forms drops and is great enough to cause the drops to fall during inspection. (« fuite de niveau 3 »)

**"missing"** means the absence of a component that is ordinarily present on the vehicle, that was present on the vehicle when the vehicle was manufactured or that is required for normal and safe operation of the vehicle. (« absent »)

**"National Safety Mark"** means a Transport Canada number issued to a recognized manufacturer. (« marque nationale de sécurité »)

**"OEM"** means original equipment manufacturer and refers to the vehicle's original manufacturer. (« constructeur d'origine »)

**"SAE"** means Society of Automotive Engineers. (« SAE »)

## PART 1

### LIGHT VEHICLE STANDARDS OF SAFETY AND REPAIR AND INSPECTION PROCEDURES

(vehicles having a gross vehicle weight rating less than 4,500 kg or  
having a seating capacity of 10 persons or fewer including driver)

#### DEFINITIONS

The following definitions apply in this Part.

**"body lift"** means anything inserted between the frame and body of a vehicle to increase the height of the body relative to the frame. (« surélévation de la carrosserie »)

**"critical viewing area"** means the area of a vehicle's windshield that is swept by the OEM windshield wipers. (« zone de visibilité essentielle »)

**"FMVSS"** means Federal Motor Vehicle Safety Standard, as published by the U.S. National Highway Traffic Safety Administration. (« FMVSS »)

**"frame height"** means the measurement from the top of the cross-section of an unladen vehicle's frame to the ground. (« hauteur du châssis »)

**"hazardous condition"** means a rejection criterion that

(a) has safety implications so serious that the vehicle involved should not be driven; and

(b) is described in this Part's table of standards of safety and repair and inspection procedures, in the column having the subheading "HAZARDOUS CONDITIONS". (« risque »)

**"HID"** means high intensity discharge. (« DHI »)

**"JIS"** means Japanese Industry Standard. (« JIS »)

**"light vehicle"** means a motor vehicle, other than a motorcycle, moped, motorized mobility aid or snow vehicle, that

(a) in the case of a motor home or a truck or other cargo vehicle, has a GVWR less than 4,500 kg; or

(b) is

(i) a passenger car,

(ii) a multipurpose passenger vehicle, or

(iii) another passenger vehicle that is designed for carrying fewer than 11 persons, including its driver. (« véhicule léger »)

**"modified vehicle"** means

- (a) a vehicle whose frame and/or suspension has been altered from its original design, through substitution of original parts, to an extent that the vehicle ride height is no longer within the manufacturer's ride height specifications; or
- (b) a homemade vehicle, u-built vehicle, antique reproduction vehicle or other similar specially constructed vehicle that was not issued a National Safety Mark at the time of manufacture;

but does not include a vehicle that is altered by changing its engine or installing frame stiffeners. (« véhicule modifié »)

**"MPV"** means multipurpose passenger vehicle.

**"multipurpose passenger vehicle"** means a motor vehicle having a designated seating capacity of 10 persons or fewer (including the driver) that is constructed either on a truck chassis or with special features for occasional off-road operation, but does not include a passenger car, tractor, air-cushion vehicle, all-terrain vehicle, golf cart, low-speed vehicle, three-wheeled vehicle or truck, or a vehicle imported temporarily for special purposes. (« voiture de tourisme à usages multiples »)

**"National Safety Code Standard 11"** means the National Safety Code Standard 11 published by the Canadian Council of Motor Transport Administrators. (« Norme 11 du Code canadien de sécurité »)

**"passenger car"** means a motor vehicle having a designated seating capacity of 10 persons or fewer (including the driver), but does not include an all-terrain vehicle, competition vehicle, golf cart, low-speed vehicle, three-wheeled vehicle, multipurpose passenger vehicle, antique reproduction vehicle, motorcycle, truck, or a vehicle imported temporarily for special purposes. (« voiture de tourisme »)

**"pressure fuel system"** means a vehicle fuel system in which the fuel is liquified petroleum gas (propane) or compressed or liquified natural gas. (« circuit d'alimentation en carburant sous pression »)

**"rejection criterion"** means a vehicle or equipment condition or deficiency that constitutes grounds to fail the vehicle on an inspection performed for the purpose of *The Highway Traffic Act*, *The Drivers and Vehicles Act* or a regulation made under either of those Acts and

- (a) is described in this Part's table of light vehicle standards of safety and repair and inspection procedures, in the columns having the subheadings "GENERAL CONDITIONS" and "HAZARDOUS CONDITIONS" under the shared heading "REJECT IF"; or
- (b) when the condition or deficiency is in a light vehicle's pressure fuel system, is described in the column entitled "Reject if" of the Inspections Table in Part B (Periodic Commercial Motor Vehicle Inspections) of *National Safety Code Standard 11*, published by the Canadian Council of Motor Transport Administrators, under Section 1.13 (Pressurized or Liquified Fuel System) of that table. (« critère de rejet »)

**"SRS"** means supplemental restraint system. (« SRS »)

**"SUV"** means sport utility vehicle.

**"sport utility vehicle"** means a multipurpose passenger vehicle that is designated by its manufacturer as a sport utility vehicle. (« véhicule utilitaire sport » ou « VUS »)

"**track width**" means the distance between the centre points of a vehicle's left tire tread and right tire tread. (« voie »)

"**truck**" means a motor vehicle designed primarily for the transportation of cargo or property. (« camion »)

**Table of Light Vehicle Standards of Safety and Repair and Inspection Procedures**

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b>Section 1 — Power Train</b>		
<b>1.1 Vehicle Identification Number:</b>  Inspect:		
a) vehicle identification number  <b>Note:</b> Any evidence of tampering with the vehicle identification number must be reported to a Manitoba Public Insurance Vehicle Safety office.	a) - missing, altered, defaced, obliterated, illegible, obscured, or mounting appears to have been tampered with	
<b>1.2 Accelerator Pedal and Throttle Actuator:</b>  <b>Additional Inspection Procedure(s):</b> Inspect with engine idling, press and release the accelerator pedal. Check engine response.  Inspect:		Engine will not return to idle.
a) pedal and actuator	a) - missing, inferior, binding, or engine will not return to idle - adjustable pedal inoperable	
b) anti-slip material	b) - missing, exposed or insecure	
c) throttle position sensor and connections	c) - missing, insecure, inoperative, corroded or improperly connected	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) mount	d) - missing, broken or insecure	
e) linkage and cable	e) - broken, insecure, inferior, or excessive wear - inferior retainers - binding, seized or frayed	
f) springs	f) - missing, broken, inferior, stretched or deteriorated	
<p><b>1.3.1 Fuel System — Gasoline and Diesel:</b></p> <p><b>Note:</b> For pressure fuel system standards and inspection procedures, refer to National Safety Code Standard 11, Part B.</p> <p>Inspect:</p>		<p>Fuel tank is not securely attached to the motor vehicle. (<b>Note:</b> Some fuel tanks are equipped with springs or rubber bushings to permit movement.)</p> <p>Fuel tank filler cap or OEM filler valve is missing.</p> <p>Gasoline fuel system has a level 1, level 2 or level 3 leak of gasoline at any point.</p> <p>Diesel fuel system has a level 2 or level 3 leak of fuel at any point.</p>
a) filler tube and overflow tube	a) - insecure	
b) tank(s), including slip tanks, externally mounted tanks and secondary tanks	b) - broken, cracked, insecure or inferior - inadequate repair or broken welds - tank is not protected by frame or bumper - tank located within 38 mm (1.5 in.) of exhaust system is not protected by heat shield(s) - vehicle fuel tank not designed for type of fuel used by vehicle	
c) tank mount(s) and straps(s)	c) - missing, broken, cracked, insecure, inferior, or excessive deterioration	
d) cap(s) and OEM filler valve	d) - missing, insecure, inferior, or does not prevent spillage	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
e) fuel lines	e) - cracked, inferior, insecure, rubbing, cut, or worn to cord layer - located within 25 mm (1 in.) of exhaust system and not protected by heat shield(s)	
f) pump	f) - insecure	
g) vent	g) - improperly vented	
h) fuel system	h) - level 1 leak, level 2 leak or level 3 leak of gasoline anywhere in a gasoline fuel system - level 2 or level 3 leak of diesel fuel anywhere in a diesel fuel system	
i) air intake at engine	i) - missing flame arrestor - missing air filter housing - piping disconnected at engine	
<b>1.3.2 Electric or Hybrid Vehicles:</b>  <b>Additional Inspection Procedure(s):</b> High voltage systems should be inspected using all the manufacturer's safety precautions, procedures and equipment.  Inspect:		High voltage cable is exposed.  Any sign of shorting, arcing or hot spot at or near any electrical component or wiring.  Traction battery is damaged or has level 1, level 2 or level 3 leak.
a) high voltage cable	a) - insecure, exposed, improperly shielded, or visible cable damage	
b) wiring	b) - damaged or corroded in a way that exposes any conductor - insulation is chafing due to abrasive contact with any vehicle part - improperly shielded	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) electrical system connections	c) - connector is damaged, insecure or corroded in way that exposes any conductor - connector is unable to properly connect or lock into place	
d) traction motor and generator	d) - damaged, insecure or loose - indication of burning or overheating - drive component abnormally worn	
e) traction battery	e) - damaged, insecure or loose - indication of burning or overheating	
f) battery storage area	f) - damaged or structurally weakened	
g) self-diagnostic or status indicator	g) - there is any condition indicated by the system that is defined by the manufacturer as being unsafe	
<p><b>1.4 Exhaust System:</b></p> <p><b>Note:</b> A vehicle may be equipped with a device designed to temporarily bypass or prevent the operation of a muffler which must not be active when the vehicle is on a highway.</p> <p><b>Additional Inspection Procedure(s):</b></p> <p>Inspect with the engine running:</p>		<p>Exhaust leak, other than a minor leak at a joint, within the perimeter of the cab or passenger compartment, or both.</p> <p>Perforation or separation of any exhaust system component.</p> <p>Any part of the exhaust system has caused, or is likely to cause, burning or charring damage to electrical wiring, fuel system or any other combustible part.</p> <p>Any cut-out or bypass of exhaust system other than a temporary bypass that can be opened and closed.</p>
Inspect:		
a) manifolds or headers	a) - missing, broken, cracked, insecure, or leaking exhaust	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) mufflers	<ul style="list-style-type: none"> <li>b) - missing, inferior, leaking exhaust or not a welded patch</li> <li>- any baffles missing</li> </ul>	
c) resonators	<ul style="list-style-type: none"> <li>c) - missing, leaking exhaust or not a welded patch</li> </ul>	
d) tail pipes	<ul style="list-style-type: none"> <li>d) - missing on vehicle other than a truck</li> <li>- leaking exhaust or not a welded patch</li> <li>- does not expel the exhaust fumes beyond the vehicle's perimeter</li> <li>- does not terminate within 100 mm (4 in.) of the vehicle's perimeter</li> <li>- restricted</li> </ul>	
e) exhaust pipes	<ul style="list-style-type: none"> <li>e) - missing, leaking exhaust or not a welded patch</li> <li>- restricted</li> </ul>	
f) heat shield(s)	<ul style="list-style-type: none"> <li>f) - missing or insecure</li> <li>- any brake line, power steering hose or fuel line is located within 25 mm (1 in.) of exhaust system and not protected by heat shield(s)</li> <li>- missing on exposed exhaust components</li> </ul>	
g) mounting and connectors	<ul style="list-style-type: none"> <li>g) - missing, broken or insecure</li> </ul>	
h) exhaust system	<ul style="list-style-type: none"> <li>h) - leaking or insecure</li> <li>- does not extend beyond passenger compartment on a truck, or does not extend beyond truck's cab on a truck without a tail pipe</li> <li>- any portion passes through occupant compartment</li> <li>- any cut-out or bypass of the muffler terminates below an operable window and exhaust is not directed down and to the rear of the vehicle</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>1.5 Emission Equipment:</u></b> Inspect:		
a) catalytic converter	<ul style="list-style-type: none"> <li>a) - missing on a vehicle manufactured on or after January 1, 1995 and equipped with a gasoline engine</li> <li>- missing on a vehicle manufactured on or after January 1, 1995 and equipped with a diesel engine if the manufacturer originally equipped it with a catalytic converter</li> <li>- leaking exhaust or not a welded patch</li> </ul>	
b) emission control equipment	b) - on a vehicle manufactured on or after January 1, 1995 (including a vehicle with a diesel engine), there is evidence that any part of the OEM emission system has been bypassed, defeated, disabled, improperly modified or removed	
<b><u>1.6 Belts:</u></b> Inspect:		
a) steering and brake system belts	a) - missing, cracked (other than designed), frayed or slipping	
b) pulley	<ul style="list-style-type: none"> <li>b) - broken, cracked, or bent</li> <li>- out of alignment</li> </ul>	
<b><u>1.7 Constant Velocity Joints, U-joints, Drive Shaft and Differentials:</u></b> Inspect:		
a) constant velocity joint seal (boots)	a) - missing, leaking grease or torn	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) constant velocity joint  <b>Additional Inspection Procedure(s):</b> While operating vehicle turn to extreme right and left.	b) - noisy	
c) u-joints	c) - noisy - rotational free play is evident, or loose in yoke - yoke cracked	
d) attachments	d) - nuts or bolts missing, broken, loose or inferior	
e) centre bearing(s)	e) - missing, insecure, rubber mount excessively deteriorated, excessive play in bearing, or mounting hardware insecure	
f) slip joint	f) - seized or worn to 1.16 mm (0.062 in.) rotational movement	
g) differential	g) - missing or does not operate as designed	
h) drive shaft	h) - cracked, bent or twisted	
<b><u>Section 2 — Suspension</u></b>		
<b><u>2.1 Road Clearance:</u></b>  Inspect:		Any part of the vehicle extends below the scrub line.
a) clearance between lowest part of the vehicle and a level surface	a) - any part of the vehicle, except tires, rims and mud flaps, is less than 89 mm (3.5 in.) above surface	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) scrub line  <b>Note:</b> The scrub line is the plane formed from lines joining the lowest edge of each rim of a vehicle.  <b>Additional Inspection Procedure(s):</b> Vehicles equipped with aftermarket air or hydraulic suspension systems are to be inspected through entire range of movement.	b) - any part of the vehicle, except tires or mud flaps, extends below the scrub line	
<b><u>2.2 Ride Height:</u></b>  Inspect:		
a) controls	a) - ride height controls not equipped with an interlock system to prevent operation when vehicle is in motion	
b) vehicle height	b) - not within manufacturer's specifications (when prescribed by OEM)	
c) height of a modified vehicle that is a passenger car  <b>Note:</b> Includes a mini-van.  <b>Additional Inspection Procedure(s):</b> Measure from height from a level surface.	c) - the frame height varies more than 50 mm (2 in.) from side to side on the front or rear on a vehicle raised more than 152.4 mm (6 in.) from OEM specifications	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) height of a modified vehicle that is a truck, MPV or SUV  <b>Additional Inspection Procedure(s):</b> Measure frame height from a level surface.	d) - the front track width divided by the sum of the frame height at the vehicle's highest point plus any body lift is less than 1.80 for a vehicle having a wheelbase of 254 cm (100 in.) or more - the front track width divided by the sum of the frame height at the vehicle's highest point plus any body lift is less than 2.00 for a vehicle having a wheelbase of less than 254 cm (100 in.) - the frame height varies more than 50 mm (2 in.) from side to side on the front or rear	
e) suspension movement	e) - not equipped with a suspension that provides unrestricted, active, vertical up and down movement between axle and frame or unibody at each wheel location	
<b>2.3 Tracking Components:</b>  <b>Additional Inspection Procedure(s):</b> Inspect all suspension locating devices not specifically identified in this section.  Inspect:		Any component is broken or allows the axle to shift from its normal position.  Tracking component failure is imminent (does not apply to loose bushings in torque or track rods).
a) tracking components	a) - missing, broken, cracked, insecure, torn or excessively worn - permits axle to shift from its normal position - spherical rod end not equipped with safety washer or retainer shim - spherical rod end mounting hardware less than grade 8	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b><u>2.4 Leaf Springs and Attachments:</u></b></p> <p>Inspect:</p>		<p>In any leaf spring assembly, the main leaf is broken or missing or at least 25% of the leaves are broken or missing.</p> <p>One or more leaves are displaced in a manner that could result in contact with a tire, rim or brake component.</p> <p>Imminent failure of a composite spring.</p>
a) leaf springs	a) - leaf missing, broken, cracked, welded, inadequate or disabled	
b) shackles  <b>Additional Inspection Procedure(s):</b> Shackle bolt hole subject to visual inspection only.	b) - missing, broken, cracked or insecure - extended or misaligned - shackle bolt hole elongated	
c) hangers  <b>Additional Inspection Procedure(s):</b> Hanger bolt hole subject to visual inspection only.	c) - missing, broken, cracked or insecure - hanger bolt hole elongated	
d) bolts, u-bolts and nuts	d) - missing, broken, cracked, inferior, insecure, welded, or nut not fully engaged	
e) centre bolts	e) - missing, broken or insecure	
f) bushings or pivot	f) - missing, loose, or worn in excess of 3 mm (1/8 in.)	
g) torque arms	g) - missing, broken, cracked, loose, bent or perforated - welding other than by component manufacturer - bushing missing, loose, or excessively deteriorated or worn - bushing bracket or bolt missing, broken or loose	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
h) stabilizer bars, links and bushings	<ul style="list-style-type: none"> <li>h) - missing, broken, bent, or disconnected</li> <li>- welding other than by component manufacturer</li> <li>- link missing or broken, or link end excessively worn</li> <li>- bushing broken or excessively worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	
i) rebound rubber, bump stop and mount	<ul style="list-style-type: none"> <li>i) - missing, loose, split or excessively deteriorated</li> </ul>	
j) composite springs	<ul style="list-style-type: none"> <li>j) - missing, broken, cracked, splintered, separated, delaminated, ineffective or inadequate</li> </ul>	
<p><b><u>2.5 Coil Springs and Attachments:</u></b></p> <p><b>Note:</b> Includes independent rear and multilink independent suspension.</p> <p>Inspect:</p>		Coil spring is missing, broken into second coil (or more), or welded.
a) springs and seats	<ul style="list-style-type: none"> <li>a) - missing, broken, cracked, welded, cut, inadequate, or improperly seated</li> </ul>	
b) control arms	<ul style="list-style-type: none"> <li>b) - broken, cracked, perforated, loose, bent, excessively deteriorated or worn</li> <li>- control arm shaft or bushing missing or loose</li> <li>- welding other than by component manufacturer</li> </ul>	
c) torque arms	<ul style="list-style-type: none"> <li>c) - missing, broken, cracked, loose, bent or perforated</li> <li>- welding other than by component manufacturer</li> <li>- bushing missing, loose, or excessively deteriorated or worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) axial strut	<ul style="list-style-type: none"> <li>d) - missing, broken, cracked, loose, bent or perforated</li> <li>- bushing missing, loose, or excessively deteriorated or worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> <li>- welding other than by component manufacturer</li> </ul>	
e) radius arm	<ul style="list-style-type: none"> <li>e) - missing, broken, loose, bent or perforated</li> <li>- welding other than by component manufacturer</li> <li>- washer contacts frame, bracket bent or cracked, or bushing excessively loose</li> </ul>	
f) stabilizer bars, links and bushings	<ul style="list-style-type: none"> <li>f) - missing, broken, bent or disconnected</li> <li>- welding other than by component manufacturer</li> <li>- link missing or broken, or link end excessively worn</li> <li>- bushing broken or excessively worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	
g) spacers	<ul style="list-style-type: none"> <li>g) - spacer between coils, or spacer other than OEM under or on top of coil springs</li> </ul>	
h) rebound rubber, bump stop and mount	<ul style="list-style-type: none"> <li>h) - missing, loose, split or excessively deteriorated</li> </ul>	
<p><b><u>2.6 Air Suspension System and Attachments:</u></b></p> <p><b>Additional Inspection Procedure(s):</b> Warning — if computer controlled, the control switch must be in "OFF" position if vehicle is being hoisted or raised.</p> <p>Inspect:</p>		<p>Air leak at any air spring or bag.</p> <p>Any condition that fails to allow the vehicle to maintain the ride height within OEM specifications.</p> <p>Tank or reservoir not originally designed as a pressure vessel.</p>

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) air springs and bag	<ul style="list-style-type: none"> <li>a) - missing, leaking, loose, cut, inoperable, patched, or exposed to cord</li> <li>- mount or mounting location provides inadequate support</li> </ul>	
b) lines and fittings	<ul style="list-style-type: none"> <li>b) - leaking air, cracked, inferior, insecure, or restricted lines chafed or rubbing</li> </ul>	
c) spring mounting	<ul style="list-style-type: none"> <li>c) - brackets or bolts missing, loose, broken, cracked or perforated</li> </ul>	
d) compressor	<ul style="list-style-type: none"> <li>d) - insecure</li> </ul>	
e) tank and reservoir	<ul style="list-style-type: none"> <li>e) - leaking air, insecure, or located within passenger compartment</li> <li>- not originally designed as a pressure vessel</li> </ul>	
f) operation  <b>Additional Inspection Procedure(s):</b> Computer controlled systems must be checked with engine running.	<ul style="list-style-type: none"> <li>f) - system fails to maintain ride height within OEM specifications</li> </ul>	
g) rebound rubber, bump stop and mount  <b>Note:</b> Bump stop may be removable.	<ul style="list-style-type: none"> <li>g) - missing, loose, split or excessively deteriorated</li> </ul>	
h) control arms	<ul style="list-style-type: none"> <li>h) - broken, cracked, loose, bent, perforated, or excessively deteriorated or worn</li> <li>- welding other than by OEM</li> <li>- control arm shaft or bushing missing or loose</li> </ul>	
i) torque arms	<ul style="list-style-type: none"> <li>i) - missing, broken, cracked, loose, bent or perforated</li> <li>- welding other than by OEM</li> <li>- bushing missing, loose or excessively deteriorated or worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
j) axial strut	<ul style="list-style-type: none"> <li>j) - missing, broken, cracked, loose, bent or perforated</li> <li>- welding other than by component manufacturer</li> <li>- bushing missing, loose, or excessively deteriorated or worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	
k) radius arm	<ul style="list-style-type: none"> <li>k) - missing, broken, cracked, loose, bent or perforated</li> <li>- washer contacts frame, bracket bent or cracked, or bushing excessively loose</li> <li>- welding other than by OEM</li> </ul>	
l) stabilizer bars, links and bushings	<ul style="list-style-type: none"> <li>l) - missing, broken, bent or disconnected</li> <li>- welding other than by OEM</li> <li>- link missing or broken, or link end excessively worn</li> <li>- bushing broken or excessively worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	
<b><u>2.7 Hydraulic Suspension System and Attachments:</u></b>  Inspect:		Any condition that does not allow the vehicle to maintain the ride height setting.
a) actuator	a) - missing, insecure, leaking or does not function	
b) hydraulic oil reservoir	b) - insecure or leaking	
c) hydraulic shock absorber	<ul style="list-style-type: none"> <li>c) - insecure, leaking or loose</li> <li>- mounting broken or cracked</li> </ul>	
d) high pressure pump	d) - insecure, leaking or loose	
e) accumulator	e) - leaking or loose	
f) hydraulic lines	f) - cracked, inferior, insecure, leaking, chafing, flattened, twisted, restricted or bulged	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
g) batteries	g) - insecure or leaking	
h) switches	h) - insecure - operates system with vehicle in motion	
i) coil springs	i) - broken or cracked	
<b><u>2.8 Torsion Bar Springs and Attachments:</u></b> Inspect:		Spring is missing, broken or welded.
a) torsion bar	a) - missing, broken, cracked, perforated, welded or inadequate	
b) control arms	b) - broken, cracked, loose, bent or perforated - welding other than by component manufacturer - control arm shaft or bushing missing, loose, or excessively deteriorated or worn	
c) torque arms	c) - missing, broken, cracked, loose, bent or perforated - welding other than by component manufacturer - bushing missing, loose, or excessively deteriorated or worn - bushing bracket or bolt missing, broken or loose	
d) stabilizer bars, links and bushings	d) - missing if OEM equipped, broken, bent or disconnected - welding other than by component manufacturer - link missing or broken, or link end excessively worn - bushing excessively worn - bushing bracket or bolt missing, broken or loose	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
e) axial strut	<ul style="list-style-type: none"> <li>e) - missing, broken, cracked, loose, bent or perforated</li> <li>- welding other than by component manufacturer</li> <li>- bushing missing, loose, or excessively deteriorated or worn</li> <li>- bushing bracket or bolt missing, broken or loose</li> </ul>	
f) mounts and mounting brackets	f) - missing, broken, cracked, loose or excessively deteriorated	
g) rebound rubber and bump stop	g) - missing, loose, split or excessively deteriorated	
<b>2.9 MacPherson Strut:</b>  Inspect:		Coil spring missing, broken into second coil (or more), or welded.
a) coil spring	a) - missing, broken, cracked, cut, inadequate, welded or improperly seated in the saddle	
b) control arm	<ul style="list-style-type: none"> <li>b) - broken, cracked, loose, bent or perforated</li> <li>- welding other than by component manufacturer</li> <li>- control arm shaft or bushing missing, loose, or excessively deteriorated or worn</li> </ul>	
c) tower  <b>Additional Inspection Procedure(s):</b> Weakening can be evaluated by tapping with rounded end of a 10 to 12 ounce ball-peen hammer. A weak tower will allow the hammer to penetrate through the metal.	<ul style="list-style-type: none"> <li>c) - cracked, rust perforated or corroded</li> <li>- metal fatigue is evident</li> <li>- repair not welded using OEM-approved method</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) stabilizer bars, links and bushings	d) - missing, broken, bent or disconnected - welding other than by component manufacturer - link missing, broken, or link end excessively worn - bushing excessively worn - bushing bracket or bolt missing, broken or loose	
e) upper strut bearings	e) - loose, binding or excessively worn	
f) rebound rubber, bump stop and mount	f) - missing, loose, split or excessively deteriorated	
<b><u>2.10 Shock Absorbers and Struts:</u></b>  <b>Additional Inspection Procedure(s):</b> With vehicle on level surface, push down on the vehicle at each shock location.  Inspect:		Shock is missing or broken on a coil or air ride suspension.
a) shock absorbers/struts  <b>Additional Inspection Procedure(s):</b> Cycle begins on downward motion.	a) - missing at any wheel - seized, inadequate or shaft bent - level 2 leak of oil - vehicle cycles more than twice	
b) mounts	b) - broken, cracked, loose or missing components	
c) bushings	c) - missing, loose, elongated, or excessively deteriorated or worn	
<b><u>2.11 Wheel Bearings:</u></b>  Inspect:		
a) wheel bearings	a) - loose, binding or seized - noisy while rotating - dust cap or cotter pin missing - stake nuts improperly installed	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b><u>2.12 Front and Rear Axles:</u></b></p> <p><b>Additional Inspection Procedure(s):</b> Inspect the exposed portion of any axle shaft only, not the axle housings.</p> <p>Inspect:</p>		
a) axles	a) - broken, cracked, inferior, loose or bent - welding other than by component manufacturer	
b) attachment hardware	b) - missing, broken, cracked, inferior or loose	
c) seals	c) - missing - level 2 or level 3 leak of oil	
d) hubs and flange	d) - bent (run out exceeds OEM specifications)	
e) spindles	e) - bent or damaged - welded	
<b><u>Section 3 — Brakes and Brake Systems</u></b>		
<p><b><u>3.1 Parking Brake:</u></b></p> <p><b>Additional Inspection Procedure(s):</b> Removal of brake components may be required.</p> <p>Inspect:</p>		Upon actuation of parking brake, vehicle fails to hold position.
a) parking brake	a) - equipped with hydraulic brake lock system only and not also equipped with an OEM parking brake	
b) indicator lamp	b) - fails to illuminate with parking brake applied, or remains illuminated with parking brake released	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) application	c) - fails to fully apply or release at each parking brake wheel location, not a mechanical type, or vehicle fails to hold position	
d) application mechanism	d) - missing, broken, binding, inoperable, or fails to lock as per OEM design - anti-slip provision on pedal missing, loose or excessively worn	
e) cables	e) - missing, broken, seized, loose or frayed - equalizer missing - inferior connectors	
f) parking brake lining	f) - broken, contaminated, or no lining at thinnest point	
g) parking brake drum and rotor	g) - worn beyond manufacturer's discard specifications	
h) parking brake mechanical components	h) - missing, broken, loose, bent, seized, excessively worn or improperly installed	
i) backing plate	i) - missing if integral to parking brake function - loose, bent, perforated or excessively worn if it impairs parking brake function - shoe contact area is grooved or worn in a manner that restricts free movement of shoes	
<b><u>3.2 Brake Lines, Hoses and Master Cylinder:</u></b>  Inspect:		Any brake hose or line swells under pressure.  Any level 2 or 3 leak of brake fluid in any part of the brake system.
a) lines and fittings	a) - level 1, 2 or 3 leak of brake fluid - cracked, insecure, loose, twisted, welded, soldered, chafing, restricted, contacts any moving parts, or non-approved tubing, fittings or compression fittings	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) hoses (front and rear)	<ul style="list-style-type: none"> <li>b) - level 1, 2 or 3 leak of brake fluid</li> <li>- cracked or chafed to first braid if rubber composite material, insecure, loose, twisted, bulged, swells under pressure, restricted, or contacts any moving parts</li> <li>- does not display approval markings</li> <li>- located within 25 mm (1 in.) of exhaust system and not protected by heat shield(s)</li> </ul>	
c) master cylinder	<ul style="list-style-type: none"> <li>c) - level 1, 2 or 3 leak of brake fluid</li> <li>- loose</li> <li>- fluid in either chamber below OEM level or more than 13 mm (0.5 in.) below the top of the reservoir</li> </ul>	
d) master cylinder cap	<ul style="list-style-type: none"> <li>d) - level 1, 2 or 3 leak of brake fluid</li> <li>- missing, broken, cracked, loose, vent holes plugged, or gasket missing</li> <li>- rubber components swollen</li> </ul>	
e) fluid	e) - visual evidence of contamination	
<b><u>3.3 Service Brake Failure Indicator:</u></b>  Inspect:		Brake failure lamp remains illuminated with engine running and service brakes applied.
a) service brake warning indicator lamp  <b>Additional Inspection Procedure(s):</b> When testing, do not apply parking brake.	<ul style="list-style-type: none"> <li>a) - fails to illuminate during test cycle, or remains illuminated with engine running and service brake applied</li> </ul>	
b) antilock brake system indicator lamp	<ul style="list-style-type: none"> <li>b) - fails to illuminate during test cycle, or remains illuminated with engine running</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>3.4 Pedal Travel:</b></p> <p><b>Note:</b> A pedal continuing to move slowly in the applied direction after pressure has been taken off is indicative of an internal leak in the master cylinder that may not be detected through the inspection criteria set out in section 3.2.</p> <p><b>Additional Inspection Procedure(s):</b> With engine off, apply pressure to brake pedal for one minute.</p> <p>Inspect:</p>		<p>Pedal travel in excess of 80% of the distance between its free height and the floor.</p> <p>The service brake pedal requires pumping to obtain the pedal reserve.</p>
a) pedal travel	a) - pedal continues to move slowly in the applied direction - pedal travel in excess of 80% of the distance between its free height and the floor - missing, broken, insecure or obstructed	
b) non-skid surface	b) - missing, loose or excessively worn	
<p><b>3.5 Hydraulic Assisted Brake Booster and System:</b></p> <p><b>Additional Inspection Procedure(s):</b> With engine off, depress brake pedal several times, apply moderate foot pressure on brake pedal and start engine.</p> <p>Inspect:</p>		No additional movement on the brakes when engine starts (no assist is evident).
a) hydraulic assisted brake booster and system	a) - no pedal movement is detected	
b) pump reservoir	b) - fluid level below "ADD" mark, or level 2 or 3 leak of oil - loose	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) lines and hoses  <b>Additional Inspection Procedure(s):</b> With engine off, depress brake pedal, make one full brake application.	c) - missing, inferior or chafing - level 2 or 3 leak of oil	
d) reserve	d) - insufficient reserve to allow one full brake application	
<b>3.6 Vacuum Brake Booster and System:</b>  <b>Additional Inspection Procedure(s):</b> With engine off, depress brake pedal several times to eliminate vacuum reserve, apply moderate force on brake pedal and start engine.  Inspect:		There is no additional movement on the brakes when engine starts (no assist is evident).
a) vacuum brake booster and system	a) - no pedal movement is detected - leaking, insecure or inoperable	
b) lines and hoses	b) - missing, broken, cracked, leaking, collapsed, chafing, inferior, insecure or cord exposed - located within 25 mm (1 in.) of exhaust system and not protected by heat shield(s)	
c) one way check valve	c) - missing, leaking or inoperable	
d) clamps	d) - missing, broken or loose	
e) low vacuum warning device	e) - missing, inoperable, or remains activated	
f) reservoir  <b>Additional Inspection Procedure(s):</b> Start engine, build to full vacuum, shut engine off, and make one full brake application.	f) - missing, leaking or insecurely mounted	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
g) reserve	g) - insufficient reserve to allow one full brake application	
<p><b>3.7 Drum Brakes:</b></p> <p><b>Additional Inspection Procedure(s):</b> Remove all wheels and brake drums.</p> <p>Inspect:</p>		<p>Brake drum failure is imminent.</p> <p>Drum diameter exceeds discard limit.</p> <p>Lining is contaminated.</p> <p>No lining at thinnest point on bonded lining.</p> <p>No lining above rivet head on riveted lining.</p> <p>Absence of any braking action on any wheel.</p> <p>Level 2 or 3 leak of brake fluid at wheel cylinder.</p>
a) brake lining	<p>a) - missing, broken, cracked, loose, contaminated, improperly installed, rivets loose, or lining loose or separated</p> <p>- 1.6 mm (1/16 in.) or less at the thinnest point on bonded lining</p> <p>- 1.6 mm (1/16 in.) or less above rivet head on riveted lining</p>	
b) adjusters	b) - missing, seized, excessively worn, inoperable, or improper thread for wheel position	
c) self adjuster cables and linkage	c) - missing, broken, loose, inoperable or cable frayed	
d) anchor pins, springs and retainers	d) - missing, broken, loose, bent, worn excessively, or springs stretched	
e) backing plate	e) - loose, bent, perforated or excessively worn	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
f) wheel cylinders  <b>Additional Inspection Procedure(s):</b> Do not disturb dust seals to inspect for leak.	f) - missing, loose, misaligned, seized or inoperable - level 1, 2 or 3 leak of brake fluid - dust seals missing, cracked or insecure	
g) brake drums	g) - missing - cracks extend to the open edge of the drum, or any external cracks present - piece broken out of friction surface or mounting surface - any heat cracks are present (not short heat checks), or hot spots are present - any groove exceeds manufacturer's discard limit - out of round more than 0.25 mm (0.01 in.) on drum having a diameter of 280 mm (11 in.) or less - out of round more than 0.63 mm (0.025 in.) on drum having a diameter greater than 280 mm (11 in.) - diameter exceeds the component manufacturer's discard limit - mismatched size on any one axle - the measurement (for vehicles manufactured before January 1, 1971, or when manufacturer's limit is not marked on the drum) exceeds the original diameter by: <ul style="list-style-type: none"> <li>- 1.5 mm (0.060 in.) for a drum on passenger car</li> <li>- 2.3 mm (0.090 in.) for a truck drum having an original diameter of 360 mm (14 1/8 in.) or less</li> <li>- 3.0 mm (0.120 in.) for a truck drum having an original diameter greater than 360 mm (14 1/8 in.)</li> </ul>	
h) application  <b>Additional Inspection Procedure(s):</b> With engine off apply brakes and attempt to rotate each wheel assembly.	h) - wheel rotates	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>3.8 Disc Brakes:</b></p> <p><b>Additional Inspection Procedure(s):</b> Remove all wheels, calipers and pads.</p> <p>Inspect:</p>		<p>Rotor is cracked to the hub.</p> <p>Rotor failure is imminent.</p> <p>Lining contaminated.</p> <p>Brake pad friction material totally separated from backing plate.</p> <p>No lining at thinnest point on bonded lining.</p> <p>No lining above rivet head on riveted lining.</p> <p>Absence of any braking action on any wheel.</p> <p>Rotor thickness is less than component manufacturer's discard limit.</p> <p>Level 2 or 3 leak of brake fluid at caliper.</p> <p>Bolts missing from caliper or caliper bracket.</p>

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) rotors	<ul style="list-style-type: none"> <li>a) - missing, broken, inferior, crack on surface extends to outer edges, or hot spots are present</li> <li>- corrosion or pitting on more than 10% of total pad contact area</li> <li>- any groove other than by component manufacturer is below manufacturer's discard limit</li> <li>- holes other than by component manufacturer</li> <li>- mismatched size on any one axle</li> <li>- improper size or type for caliper</li> <li>- lateral run-out exceeds 0.127 mm (0.005 in.) on rotor having a diameter of 380 mm (15 in.) or less</li> <li>- lateral run-out exceeds 0.25 mm (0.010 in.) on rotor having a diameter greater than 380 mm (15 in.)</li> <li>- wear exceeds the component manufacturer's limit</li> </ul>	
b) calipers	<ul style="list-style-type: none"> <li>b) - missing, inferior, insecure, seized, piston seized, insecurely mounted, improperly mounted, or inferior attaching hardware</li> <li>- level 1, 2 or 3 leak of brake fluid</li> <li>- guide pin stripped</li> <li>- bushing seized</li> <li>- piston dust seal missing, cracked or split</li> <li>- piston cracked or broken</li> </ul>	
c) pads	<ul style="list-style-type: none"> <li>c) - missing, broken, cracked, loose, contaminated, improperly installed, rivet loose, or lining loose or separated</li> <li>- 1.6 mm (1/16 in.) or less at the thinnest point on bonded lining</li> <li>- 1.6 mm (1/16 in.) or less above rivet head on riveted lining</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) application  <b>Additional Inspection Procedure(s):</b> With engine off apply brakes and attempt to rotate the wheel assembly.	d) - wheel rotates	
<b>Section 4 — Steering</b>		
<b>4.1 Steering Lash:</b>  <b>Additional Inspection Procedure(s):</b> On vehicles equipped with power steering, the engine must be running and the fluid level, belt condition and tension must be adequate before the testing.  With wheels in straight ahead position, turn steering wheel until turning motion can be observed at wheels, mark rim of steering wheel and, using a point of reference, turn steering wheel in the opposite direction until motion can be observed at wheels.  Inspect:	Total movement greater than shown in the following table is encountered at the steering wheel rim before the front wheels indicate any movement:	
	<b>Type of Steering</b>	<b>Lash Exceeds</b>
	Power steering	75 mm (4 in.)
	Manual steering	110 mm (4.5 in.)
Rack and pinion	38 mm (1.5 in.)	
a) steering lash  <b>Additional Inspection Procedure(s):</b> Measure the distance between a mark and the point of reference.	a) - total movement greater than shown in the following table is encountered at the steering wheel rim before the front wheels indicate any movement:	
	<b>Type of Steering</b>	<b>Lash Exceeds</b>
	Power steering	50 mm (2 in.)
	Manual steering	75 mm (3 in.)
	Rack and pinion	25 mm (1 in.)

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>4.2 Steering Travel:</b></p> <p><b>Additional Inspection Procedure(s):</b> With engine running, and wheels on ground, turn steering wheel through a full right and left turn.</p> <p>Inspect:</p>		Any condition that interferes with free movement of any steering component.
a) condition	a) - binding or jamming during cycle	
b) steering stops	b) - missing, loose, bent or improperly adjusted	
c) clearance	c) - evidence of contact between tire and any other component	
d) travel left and right	d) - the difference from a straight ahead position to a full left and straight ahead position to a full right turn exceeds one half turn - lock to lock steering wheel travel is less than two turns or more than six turns	
<p><b>4.3 Power Steering System:</b></p> <p><b>Additional Inspection Procedure(s):</b> With engine running and brake applied, turn steering from lock to lock.</p> <p>Inspect:</p>		No assist evident.
a) hoses	a) - level 2 or 3 leak of oil - cord layer exposed - located within 25 mm (1 in.) of exhaust system and not protected by heat shield(s)	
b) pump	b) - level 2 or 3 leak of oil - missing or loose on vehicles equipped with power steering box	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) cylinders	c) - level 2 or 3 leak of oil - insecure	
d) electrical components	d) - any component is insecure, exposed wiring, or corroded connector	
e) power steering assist	e) - no assist is evident	
f) warning lamp	f) - brake warning indicator illuminates during steering test	
<p><b>4.4 Steering Box, Linkage and Rack and Pinion:</b></p> <p><b>Note:</b> Inspection components/process is dependent on system design.</p> <p><b>Additional Inspection Procedure(s):</b> With vehicle on ground, rock steering left and right.</p> <p>Inspect:</p>		<p>Any mounting bolt or nut on steering box loose or missing.</p> <p>Any crack in steering box, mounting bracket, or frame adjacent to box.</p> <p>Any missing or loose bolt or nut on a tie rod, pitman arm, drag link, centerlink, steering arm, idler arm or tie rod sleeve.</p> <p>Movement of any stud or nut under a steering load.</p> <p>Any movement (not rotational) between any linkage member and its attachment point.</p>
a) modifications	a) - injected with any plastic or polymer compound, or modified in any way that conceals wear	
b) tie rods, sleeve and spherical rod end	b) - missing, broken, cracked, inferior, loose or bent - welding other than by component manufacturer - spherical rod end not equipped with safety washer or retainer shim - spherical rod end mounting hardware less than grade 8	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) tie rod ends and inner socket assembly	c) - missing, broken, cracked, bent, seized, or looseness is evident - welding other than by component manufacturer	
d) drag link and idler arm	d) - missing, broken, cracked, insecure, bent, seized, looseness is evident at ball and socket, wear exceeds OEM specifications, or adjusting device loose - welding other than by component manufacturer	
e) center link and bell crank	e) - missing, broken, cracked, bent, welded, or looseness is evident - welding other than by component manufacturer	
f) pitman arm	f) - missing, broken, cracked, bent, or looseness is evident - welding other than by component manufacturer	
g) steering box and rack and pinion	g) - level 2 or 3 leak of oil - insecure or loose - bolts or nuts missing or loose, or housing broken or cracked - welding other than by component manufacturer	
h) rack bellow seal	h) - missing, split, torn or improperly positioned	
i) dampener	i) - missing, insecure, bent or seized - level 2 or 3 leak of oil	
j) cotter pins and lock nuts	j) - missing, inferior, or lock nut loose	
k) mounting hardware and bushings	k) - missing, broken, cracked, insecure, loose, bent, or excessively deteriorated or worn	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b>4.5 Steering Column and Coupler:</b>		Absence or looseness of any u-bolt, or other positioning part(s) in the steering column. Worn, faulty or welded repair of insecure universal joint steering wheel.
Inspect:		
a) steering wheel	<ul style="list-style-type: none"> <li>a) - missing, broken, loose on splines, not fully circular, does not perform as intended by OEM, or securement nut missing or loose</li> <li>- in a condition that allows driver's clothing or jewelry to become lodged or entangled (e.g. welded chain)</li> <li>- outside diameter is less than 350 mm (13 in.)</li> </ul>	
b) telescopic and tilt steering movement  <b>Additional Inspection Procedure(s):</b> Measure at steering wheel.	b) - play is in excess of 6.4 mm (0.250 in.)	
c) securement	<ul style="list-style-type: none"> <li>c) - missing, broken, insecure, or bent column bracket or clamp cracked</li> <li>- any clamp, bolt, nut or roll pin is inferior or loose</li> </ul>	
d) steering shaft u-joint	<ul style="list-style-type: none"> <li>d) - broken, cracked, inferior, binding, seized or excessively loose</li> <li>- welding other than by component manufacturer</li> </ul>	
e) steering shaft yoke	<ul style="list-style-type: none"> <li>e) - missing, broken, cracked, inferior or loose</li> <li>- welding other than by component manufacturer</li> <li>- any clamp, bolt or nut roll pin is loose</li> </ul>	
f) slip joint	f) - rotational free play between splines exceeds 1.5 mm (0.050 in.)	
g) sleeve	g) - broken, cracked, loose or bent	
h) flexible coupler	h) - missing, cracked, inferior, collapsed, misaligned, split, excessively deteriorated or excessively loose	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
i) steering shaft and coupler	i) - any condition that interferes with the free movement of the steering shaft or coupler	
<p><b>4.6 Kingpins:</b></p> <p><b>Additional Inspection Procedure(s):</b> Raise vehicle and apply brakes.</p> <p>Inspect:</p>		Kingpin or thrust bearing seized.
a) kingpin	a) - binding or seized - injected with any plastic or polymer compound, or modified in any way that conceals wear - thrust bearing binding or seized	
b) horizontal movement  <b>Additional Inspection Procedure(s):</b> Grasp tire at top and bottom and rock in and out.	b) - movement in excess of 3 mm (0.125 in.) measured at outside edge of tire	
c) vertical movement  <b>Additional Inspection Procedure(s):</b> Place a bar under tire and by prying vertically check for vertical movement between spindle and axle.	c) - movement is in excess of 2.5 mm (0.100 in.)	
d) retainer	d) - missing, inferior or loose	
<p><b>4.7 Ball Joints:</b></p> <p><b>Additional Inspection Procedure(s):</b> Refer to manufacturer's specifications for test methods and rejection criteria for horizontal and vertical movement.</p> <p>Inspect:</p>		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) ball joint	a) - injected with any plastic or polymer compound, or modified in any way that conceals wear	
b) horizontal movement (radial)	b) - wear is in excess of the manufacturer's specifications, or movement in wear indicator type ball joint	
c) vertical movement (axial)	c) - wear is in excess of the manufacturer's specifications, or movement in wear indicator type ball joint	
d) securement	d) - loose in spindle or control arm, not properly seated, or retained other than by OEM or component manufacturer's recommended method	
<b>4.8 Electronic Stability Control (ESC):</b>  <b>Additional Inspection Procedure(s):</b> Vehicle may have to be road tested for completion of self diagnostic check.  Inspect:		
a) warning lamp	a) - fails to illuminate, or lamp remains illuminated - any visual evidence of tampering	
<b>4.9 Electronically Controlled Steering:</b>  Inspect:		
a) electronically controlled steering	a) - does not operate within OEM specifications	
<b>Section 5 — Instruments and Auxiliary Equipment</b>		
<b>5.1 Speedometer and Odometer:</b>  Inspect:		
a) speedometer	a) - missing, does not function, or fails to illuminate	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) odometer	b) - missing or does not function	
<p><b>5.2 Automatic Transmission Neutral Safety Switch and Transmission Gear Shift Indicator:</b></p> <p><b>Additional Inspection Procedure(s):</b> Apply the parking brakes, shift the automatic transmission into each gear and turn the ignition switch to the start position.</p> <p>Inspect:</p>		
a) automatic transmission neutral safety switch	a) - missing on a vehicle manufactured on or after November 25, 1970 - engine starts in any selector position other than park or neutral	
b) automatic transmission gear position indicator	b) - missing at least one functioning indicator - fails to accurately indicate gear position, or fails to illuminate	
c) gear shift level interlock	c) - missing on vehicle manufactured on or after May 30, 2005 - can be taken out of park position without application of the service brake	
d) manual transmission gear position indicator	d) - missing, or fails to accurately indicate gear position	
<p><b>5.3 Horn:</b></p> <p>Inspect:</p>		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) horn	<ul style="list-style-type: none"> <li>a) - control not readily accessible to driver, not clearly audible from a distance of 60 m (200 ft.), plays a musical tune, not a pressure type switch, or fails to function</li> <li>- switch not clearly identified if not located on steering wheel</li> </ul>	
<b><u>5.4 Clutch:</u></b> Inspect:		
a) clutch	<ul style="list-style-type: none"> <li>a) - fails to disengage transmission from engine</li> <li>- fluid level below manufacturer's minimum fluid level</li> <li>- level 2 or 3 leak at any point</li> </ul>	
b) pedal	b) - missing, broken, insecure, loose, bent or obstructed	
c) non-skid pedal surface	c) - missing, loose or excessively worn	
d) clutch switch	d) - missing on any vehicle manufactured on or after May 30, 2005	
<b><u>5.5 Engine Shutdown:</u></b> Inspect:		
a) engine shutdown	<ul style="list-style-type: none"> <li>a) - fails to function per OEM design</li> <li>- non-OEM design not clearly labelled</li> </ul>	
<b><u>5.6 Auxiliary Equipment:</u></b>  <b>Note:</b> Includes, but not limited to, items such as luggage racks and carriers or mounted toolboxes.  Inspect:		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) auxiliary equipment	<ul style="list-style-type: none"> <li>a) - any sharp edges protruding</li> <li>- any component insecure</li> <li>- inadequate fasteners</li> </ul>	
<b><u>5.7 Trailer Hitch:</u></b> Inspect:		
a) mounting	<ul style="list-style-type: none"> <li>a) - broken, cracked or bent</li> <li>- insecure, or mounting bolts less than grade 5</li> <li>- any sharp edges protruding</li> </ul>	
<b><u>5.8 Dimmer Switch:</u></b> Inspect:		
a) dimmer switch	a) - insecure, fails to function as designed, or does not operate freely	
<b><u>Section 6 — Lamps</u></b>  <b>Note:</b> See Appendix 1 for a list of lamp type codings.		
<b><u>6.1 Lamps:</u></b>  <b>Additional Inspection Procedure(s):</b> All lamps mentioned below must be inspected with all lamps on. Manually turn on headlamp switch.  Inspect:		<p>At least one headlamp does not function on low beam.</p> <p>At least one tail lamp does not function.</p> <p>At least one stop lamp does not function.</p>

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) all lamps	<p>a) - any auxiliary equipment is placed in front of a lamp, unless the obstructed lamp is replaced with an auxiliary lamp of the same standard</p> <ul style="list-style-type: none"> <li>- any substance is placed on or in front of any lamp</li> <li>- any required lamp is missing, broken, insecure, fails to illuminate, or has water visible in its interior</li> <li>- cracked so as to allow the penetration of dust or moisture or so as to impair the lamp's effectiveness</li> <li>- any single LED assembly that is not a headlamp has 25% or more of the LEDs inoperative</li> <li>- headlamp switch does not operate all required lamps simultaneously, excluding turn signal and hazard warning lamps</li> <li>- any lens or assembly displays a JIS marking, excluding the tail, parking and turn signal lamp assemblies on a vehicle imported into Canada that is 15 years or older</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p>b) headlamps</p> <p><b>Note:</b> "E" Code frontal illumination markings are compliant if labeled: <b>C CR C/R HC HC/R DC DCR DC/R HCHR DCHR</b></p> <p><b>Additional Inspection Procedure(s):</b> A double arrow (↔) indicates a switchable beam pattern device and inspector must confirm proper low beam projection setting for LHD (Left Hand Drive) traffic pattern.</p>	<p>b) - less than two or more than four facing front, or not as far apart as practicable</p> <ul style="list-style-type: none"> <li>- not white, or proper filament is not lit</li> <li>- height is less than 560 mm (22 in.) or more than 1370 mm (54 in.) above road surface when measured at centre of lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE, DOT or compliant "E" Code marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> <li>- markings are accompanied by a single directional arrow</li> <li>- assembly does not display either HG, DC, DR or DCR codes on a vehicle that has had its non-HID headlamp assembly retrofitted with HID bulbs</li> <li>- does not operate on high and low beam when activated by dimmer switch</li> <li>- not all LEDs illuminate if lamp is an LED assembly</li> </ul>	
<p>c) high beam indicator</p>	<p>c) - does not illuminate when high beam lamps are activated</p>	
<p>d) parking lamps</p>	<p>d) - not two located facing front</p> <ul style="list-style-type: none"> <li>- not as far apart as practicable</li> <li>- not white or amber</li> <li>- height is less than 380 mm (15 in.) or more than 1830 mm (72 in.) above road surface when measured at the centre of the lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or JIS marking and proper lamp type coding if on a vehicle imported into Canada that is 15 years or older, or manufacturer has not provided a product compliance certificate</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
e) tail lamps	<ul style="list-style-type: none"> <li>e) - less than two located facing rear</li> <li>- not as far apart as practicable</li> <li>- not red</li> <li>- proper filament not lit</li> <li>- height is less than 380 mm (15 in.) or more than 1830 mm (72 in.) above the road surface when measured at the centre of lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or JIS marking and proper lamp type coding if on a vehicle imported into Canada that is 15 years or older, or manufacturer has not provided a product compliance certificate</li> </ul>	
f) stop lamps	<ul style="list-style-type: none"> <li>f) - less than two, not facing rear, not as far apart as practicable, not red, or proper filament not lit when brakes applied</li> <li>- height is less than 380 mm (15 in.) or more than 1830 mm (72 in.) above road surface when measured at the centre of lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
g) centre high-mounted stop lamp	g) - missing on a passenger car manufactured on or after January 1, 1987 - missing on a truck or MPV manufactured on or after January 10, 1997 - not one facing rearward - not red - not activated when brakes applied - lamp does not comply with CMVSS 108 - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate - not visible to rear	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
h) turn signal lamps	<ul style="list-style-type: none"> <li>h) - not four (excluding supplemental side-mounted turn signals), with two facing front and two facing rear as far apart as practicable</li> <li>- front not amber or white, rear not amber or red, or proper filament not lit</li> <li>- does not flash between 50 and 130 times per minute</li> <li>- height is less than 380 mm (15 in.) or more than 2110 mm (83 in.) above road surface when measured at centre of lamp</li> <li>- lamp (excluding supplemental side mounted turn signals) does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or JIS marking and proper lamp type coding if on a vehicle imported into Canada that is 15 years or older, or manufacturer has not provided a product compliance certificate</li> <li>- not activated only by the turn signal switch</li> <li>- turn signal switch does not remain in selected position and activate only the proper turn signal lamps</li> <li>- not a self-cancelling turn signal switch if equipped on a truck, passenger car or MPV manufactured on or after January 1, 1977</li> </ul>	
i) turn signal indicators	<ul style="list-style-type: none"> <li>i) - missing on vehicle manufactured on or after January 1, 1971</li> <li>- does not accurately indicate turn direction</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
j) hazard warning lamps and indicator	j) - missing on vehicle manufactured on or after January 1, 1971 - not four lamps as far apart as practicable - front not amber or white, rear not red or amber, or proper filament not lit - lamps and indicator(s) do not flash simultaneously when hazard warning lamps are activated - lamp does not comply with CMVSS 108 - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate - not activated only by hazard warning lamp switch	
k) number plate lamp(s)	k) - not white - does not illuminate rear number plate - not shielded so that light is not directed rearward - lamp does not comply with CMVSS 108 - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
l) side marker lamps	<ul style="list-style-type: none"> <li>l) - missing on vehicle manufactured on or after January 1, 1971</li> <li>- not four, with two on each side as close to corners as practicable</li> <li>- front not amber or rear not red</li> <li>- height is less than 380 mm (15 in.) above road surface when measured at the centre of lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> <li>- front park lamp or tail lamp serves as side marker lamp but cannot be seen from the side</li> </ul>	
m) backup lamps	<ul style="list-style-type: none"> <li>m) - missing on a vehicle manufactured on or after January 1, 1971</li> <li>- not one or two, or not located facing rear</li> <li>- not white</li> <li>- does not illuminate only when transmission is in reverse</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	
n) clearance lamps	<ul style="list-style-type: none"> <li>n) - missing on vehicle 2.05 m (80 in.) or more in width</li> <li>- not positioned as far apart as practicable indicating width of vehicle</li> <li>- not two amber facing front, or not two red facing rear</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
o) identification lamps	<ul style="list-style-type: none"> <li>o) - missing on vehicle 2.05 m (80 in.) or more in width</li> <li>- not positioned as close as practicable to the top and centre of vehicle</li> <li>- not three amber facing forward, or not three red facing rear</li> <li>- spaced apart less than 150 mm (6 in.) or more than 300 mm (12 in.)</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	
<p>p) daytime running lamps</p> <p><b>Additional Inspection Procedure(s):</b> Inspect with engine running, transmission in forward gear and parking brake off. Headlamp switch to be in the "OFF" position.</p> <p>Vehicle design may require vehicle to be driven several metres before system activates.</p>	<ul style="list-style-type: none"> <li>p) - missing on vehicle manufactured on or after December 1, 1989</li> <li>- not two located on front of vehicle</li> <li>- not white or amber</li> <li>- do not operate continually</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	
<p>q) fog lamps</p> <p><b>Note:</b> The following items (items q to x) are not required equipment. However, if present on a vehicle they must meet requirements.</p>	<ul style="list-style-type: none"> <li>q) - more than two located on front</li> <li>- not white or amber on front</li> <li>- any part is higher than the headlamps</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> <li>- not activated by a dedicated switch within reach of the driver</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
r) high beam driving lamps	<ul style="list-style-type: none"> <li>r) - more than two driving lamps in total (low beam or high beam)</li> <li>- not white</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> <li>- does not illuminate only when headlamps are on high beam</li> </ul>	
s) low beam driving lamps	<ul style="list-style-type: none"> <li>s) - more than two driving lamps in total (low beam or high beam)</li> <li>- not white</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> <li>- does not illuminate only when headlamps are on low beam</li> </ul>	
t) side turn signal repeaters	<ul style="list-style-type: none"> <li>t) - more than two if located on fender between front bumper and front door, or more than four if located on exterior rear view mirrors</li> <li>- not one on each side and amber on fender between front bumper and front door</li> <li>- not one facing forward and amber on driver exterior rear view mirror and passenger exterior rear view mirror</li> <li>- not one facing rearward and amber or red on driver exterior rear view mirror and passenger exterior rear view mirror</li> <li>- not activated only by the turn signal switch</li> <li>- does not flash simultaneously with front turn signal lamps</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
u) off-road lamps	u) - not covered with opaque cover	
v) under vehicle lamps	v) - not equipped with an interlock switch which prevents operation while the vehicle is in motion	
w) cargo lamps	w) - more than two - not white - not positioned and directed toward the rear of the vehicle - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate	
<p><b>6.2 Prohibited Lighting:</b></p> <p><b>Note:</b> Prohibited lighting is any flashing, oscillating or strobe lamp, or any lamp or signaling device not identified in Section 6, which is not approved by a Special Lighting Permit issued by the Registrar through a Manitoba Public Insurance Vehicle Safety office or authorized by regulation (see note below).</p> <p><b>Note:</b> Local vehicles for hire, emergency vehicles, roadside assistance vehicles, winter maintenance vehicles and overhead utility vehicles may be equipped with several types of lighting prohibited for other vehicles. If in doubt, consult Part 3 of the <i>Vehicle Equipment, Safety and Inspection Regulation</i>.</p> <p>Inspect:</p>		
a) prohibited lighting	a) - not approved by the registrar through the issuance of a special lighting permit or authorized by regulation	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>6.3 Reflectors:</b></p> <p><b>Note:</b> A lamp lens that is reflective may also function as a reflector.</p> <p>Inspect:</p>		
a) all reflectors	<ul style="list-style-type: none"> <li>a) - any reflector does not comply with CMVSS 108</li> <li>- any reflector does not display SAE or DOT marking</li> <li>- height is less than 380 mm (15 in.) or more than 1530 mm (60 in.) above road surface</li> <li>- insecure or discolored</li> <li>- more than 20% of reflector is missing</li> </ul>	
b) rear reflectors	<ul style="list-style-type: none"> <li>b) - missing on vehicle manufactured on or after January 1, 1971</li> <li>- not two facing rear at the same height</li> <li>- not spaced as far apart as possible</li> <li>- not red</li> </ul>	
c) side marker reflectors	<ul style="list-style-type: none"> <li>c) - missing on vehicle manufactured on or after January 1, 1971</li> <li>- not two on each side, or not as close to corners as practicable</li> <li>- front not amber, or rear not red</li> </ul>	
<p><b>6.4 Lamp Aim:</b></p> <p>Inspect:</p>		
a) headlamps	<ul style="list-style-type: none"> <li>a) - aim not within manufacturer's specifications</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) fog and driving lamps	b) - the vertical aim is to the left of the vertical centre line of the low beam - the horizontal aim is more than 0.0 mm (0.0 in) above or 100 mm (4 in.) below the horizontal centre line of the lamp (measured at 7.5 m (25 ft.) from lamp)	

**Appendix 1 – Applicable SAE and DOT Codes**

CODE	FUNCTION DESCRIPTION
A	Reflex Reflector
A2	Reflex reflector for use on motor vehicles 2032 mm or more in overall width
A3	Reflex reflector for conspicuity treatment (CT) for use on vehicles 2032 mm or more in overall width
A4	Reflex reflector for CT vehicles > 2032 mm — 50 mm wide (truck or trailer)
A5	Reflex reflector for CT vehicles > 2032 mm width (truck or trailer)
A6	Reflex reflector for CT (vehicles 2032 mm width) — 100 mm wide (truck or trailer)
A7	Reflex reflector for CT (vehicles 2032 mm width) — 100 mm wide (school bus)
DL	Distributed lighting system (headlamp)
E	Side turn signal lamps - vehicles 12 m or more in length
E2	Side turn signal lamps - vehicles less than 12 m in length
F	Front Fog lamp
F2	Fog Tail lamps
G	Truck cargo lamp
H	Sealed beam headlamp
HC	Headlamp cleaner
HG	Discharge forward lighting (headlamp)
HH	Sealed beam headlamp housing
HR	Replaceable bulb headlamp
I	Turn signal lamp spaced greater than 100 mm from headlamp
I3	Turn signal lamps spaced from 75 mm to less than 100 mm from headlamp

CODE	FUNCTION DESCRIPTION
I4	Turn signal lamps spaced from 60 mm to less than 75 mm from headlamp
I5	Turn signal lamps spaced less than 60 mm from headlamp
I6	Rear mounted turn signal lamp and front mounted turn signal lamps mounted 100 mm or more from the headlamp, for use on vehicles 2032 mm or more in overall width
I7	Front mounted turn signal lamp mounted less than 100 mm from the headlamp, for use on vehicles 2032 mm or more in overall width
J1690	Flasher
K	Front cornering lamps
K2	Rear cornering lamps
L	Licence plate lamps
P	Parking lamps
P2	Sidemarkers for use on vehicles 2032 mm or less in overall width
P3	Clearance, sidemarkers, and identification lamp for use on vehicles 2032 mm or more in overall width
PC	Combination clearance and sidemarkers lamp
PC2	Combination clearance and sidemarkers lamp for use on vehicles 2032 mm or more in overall width
Q	Turn signal operating unit - class A
QB	Turn signal operating unit - class B
QC	Vehicular hazard warning signal operating unit
QD1	Turn signal operating unit for use on vehicles 2032 mm or more in overall width - Type 1
QD2	Turn signal operating unit for use on vehicles 2032 mm or more in overall width - Type 2
QE1	Hazard warning operating unit for use on vehicles 2032 mm in overall width - Type 1
QE2	Hazard warning operating unit for use on vehicles 2032 mm in overall width - Type 2
R	Reversing (backup) lamps
S	Stop lamps
S2	Stop lamp for use on vehicles over 2032 mm or more in overall width
T	Tail lamps (rear position lamp)
T2	Tail lamp (rear position lamp) for use on vehicles 2032 mm or more in overall width
U	Supplemental high-mounted stop and turn signal lamp
U2	High mounted stop lamp for trucks 2032 mm or more in overall width
U3	Center high-mounted stop lamp for passenger cars, light trucks, and MPVs
W	Warning lamps for emergency, maintenance, and service vehicles
W2	Warning lamp for school buses

CODE	FUNCTION DESCRIPTION
W3-1	Optical warning device - Class 1
W3-2	Optical warning device - Class 2
W3-3	Optical warning device - Class 3
W4	Emergency warning device (triangular shape)
W5-1	360° gaseous discharge lamp - Class 1
W5-2	360° gaseous discharge lamp - Class 2
W5-3	360° gaseous discharge lamp - Class 3
X	Adaptive (forward) lighting system
Y	Auxiliary high beam lamp
Y2	Daytime running lamp
Z	Auxiliary low beam lamps

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b>Section 7 — Electrical</b>		
<b>7.1 Wiring:</b> Inspect:		
a) wiring	a) - interferes with driver's controls, or loose as to contact moving parts - not secured every 1.8 m	
b) insulation	b) - visible wiring has bare wire exposed	
<b>7.2 Battery:</b> Inspect:		
a) mounts, tray and box	a) - missing, broken, cracked, insecure or perforated	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) cover, hold down, bolts, nuts and retainers	b) - missing, inferior or insecure	
c) battery	c) - improperly located, sealed or vented - installed so as to allow vented gases to enter into an enclosed passenger compartment - level 2 or level 3 leak of battery fluid	
<p><b><u>Section 8 — Body</u></b></p> <p><b>Note:</b> When a mechanic performing an inspection is in doubt as to the integrity of a structural component on any vehicle, written verification of compliance from an OEM- or Manitoba Public Insurance-accredited repair facility is required.</p> <p><b>Note:</b> If a person intends to obtain a type 8 collector number plate or a type 8 personalized collector plate for a vehicle that was manufactured on or before December 31, 1948, or was manufactured to resemble such a vehicle, the vehicle is not required to have wheel spray protection or windshield wipers.</p> <p><b>Additional Inspection Procedure(s):</b> Weakening should be evaluated by tapping with rounded end of a 10 to 12 ounce ball-peen hammer. Weakened metal will allow the hammer to penetrate the metal.</p>		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>8.1 Hood and Safety Catch:</u></b>		
Inspect:		
a) hood	a) - missing on any vehicle that is not a modified vehicle - labeled for off-road use	
b) primary and secondary latches  <b>Note:</b> Latches include items such as hood pins, dzus fasteners, and similar retainers	b) - missing on any vehicle that is not a modified vehicle - broken, inferior, insecure, inoperable, or does not latch on primary and secondary catches	
c) hinges	c) - missing on any vehicle that is not a modified vehicle - broken, cracked, insecure, seized, inoperable, or bolts missing or loose	
d) shocks/prop rod	d) - missing - will not hold hood up - broken, cracked, insecure, seized, inoperable or bolts missing or loose	
<b><u>8.2 Conventional Body:</u></b>		Any frame member, support or mount permits shifting of frame or body onto moving parts. Any condition indicating an imminent collapse of the frame. Any frame member or mount adversely affecting the support of any steering, engine, transmission, body or suspension component. A 38 mm (1.5 in.) or longer crack in a frame web. Any crack extends from a frame web around radius. A 25 mm (1 in.) or longer crack in bottom flange of frame.

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
Inspect:		
a) protrusion	a) - any sharp edges protruding	
b) rear quarter panels and inner wheel housing	b) - perforated to allow exhaust gases to enter the trunk or passenger compartment - damaged or improper repair	
c) wheel spray protection  <b>Note:</b> Body overhang is the distance from the vertical centre line of the tire to the end of the body.  Underbody height is the distance from the highest point of the bottom of the body overhang behind the rear wheel to the ground.	c) - missing fender, mudflap or mudguard if vehicle's body overhang measurement is three times or less the underbody height measurement - fenders, mudflap or mudguard not full tread width of tire, fender contacts tire, or coverage of the tire tread circumference is not, at a minimum, 15° to the front and 90° to the rear of the vertical centre line of the wheel measured at the centre of the wheel rotation - distance between the bottom of the mudflap or mudguard to the ground exceeds 210 mm, or the top of the mudflap or mudguard does not reach up to the top of the tire or a body element (whichever is lowest) - fender, mudflap or mudguard has a tear or wear hole that is larger than 100 mm across the longest dimension, or the aggregated longest dimensions of multiple holes in a single fender, mudflap or mudguard exceeds 100 mm	
d) cab corners	d) - perforated or inadequately sealed - repair material not of same type and thickness as OEM or repaired not using OEM-approved method	
e) structural components	e) - perforated - repair not conducted using OEM-approved method	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
f) floor, firewall and trunk	f) - perforated due to corrosion, any hole, or inadequately sealed - repair material not of same type and thickness as OEM or repaired not using OEM-approved method	
g) frame rails and cross members	g) - inadequately repaired, cracked, broken, bent, compressed, kinked, weakened, twisted, torn, perforated or separated, attaching components missing or loose, or cut or notched to weaken member	
h) engine, transmission mounts, supports and mounting hardware	h) - missing, broken, inferior, insecure, loose, split, or perforated by corrosion	
i) body mounts, supports, insulator and mounting hardware	i) - missing, broken, inferior, insecure, loose, split, or perforated by corrosion	
j) truck box and flatdeck	j) - any mounted hardware missing, insecure or inferior - any crack or hole in floor that would allow any load to escape - any cross member or floor support that is missing, broken, cracked, inferior, collapsed, perforated by rust, or any cross member or support that is altered without sufficient reinforcement	
<b><u>8.3 Unibody and Monocoque:</u></b>          Inspect:		Any frame member, support or mount permits shifting of frame or body onto moving parts.  Any condition indicating an imminent collapse of the frame or monocoque structure.  Any frame member or mount adversely affects the support of any steering, engine, transmission, body or suspension component.

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) frame, strut towers and spring shackle supports, inner fender skirts and aprons, cowling, rocker panels, engine compartment side rails, upper reinforcements, a-b-c pillars, lower body rails and inner fender wells and floor pan or luggage compartment floor	<ul style="list-style-type: none"> <li>a) - broken, cracked, bent, perforated, weakened, separated, kinked or torn</li> <li>- repair material not of same type and thickness as OEM or repair not welded using OEM-approved method</li> <li>- repair not conducted using OEM-approved method</li> </ul>	
b) body panels	<ul style="list-style-type: none"> <li>b) - perforated so as to weaken structural integrity of vehicle or allow exhaust gases into occupant compartment</li> </ul>	
c) frame rails, cross members and sub-frame assemblies	<ul style="list-style-type: none"> <li>c) - missing, broken, cracked, loose, bent, perforated, weakened, separated, cut or notched, kinked, twisted, torn, compressed, separated, or attaching components missing or loose</li> <li>- repair not conducted using OEM-approved method</li> </ul>	
<p>d) wheel spray protection</p> <p><b>Note:</b> Body overhang is the distance from the vertical centre line of the tire to the end of the body.</p> <p>Underbody height is the distance from the highest point of the bottom of the body overhang behind the rear wheel to the ground.</p>	<ul style="list-style-type: none"> <li>d) - missing fender, mudflap or mudguard if vehicle's body overhang measurement is three times or less the underbody height measurement</li> <li>- fenders, mudflap or mudguard not full width of tire, fender contacts tire, or coverage of the tire tread circumference is not at least 15 degrees in front to at least 90 degrees to the rear of the vertical centre line at each wheel measured at the centre of the wheel</li> <li>- distance from the bottom of the mudflap or mudguard to the ground exceeds 210 mm, or the top of the mudflap or mudguard does not reach up to the top of the tire or a body element (whichever is lowest)</li> <li>- fender, mudflap or mudguard has a tear or wear hole that is larger than 100 mm across the longest dimension, or the aggregated longest dimensions of multiple holes in a single fender, mudflap or mudguard exceeds 100 mm</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
e) engine, transmission mounts, supports and mounting hardware	e) - missing, broken, inferior, insecure, loose, split, or perforated by corrosion	
f) protrusion	f) - any sharp edges protruding	
<b><u>8.4 Bumpers:</u></b> Inspect:		
a) bumper and rebar	<ul style="list-style-type: none"> <li>a) - front bumper missing on a vehicle, other than a modified vehicle manufactured before January 1, 1970 that is not a raised vehicle</li> <li>- rear bumper missing on a vehicle, other than a modified vehicle manufactured before January 1, 1970 or a truck</li> <li>- broken, insecure, torn portion or ends protruding so as to create a hazard, perforated, splintering material, or modifications that lessen performance designed by OEM</li> <li>- passenger car manufactured on or after January 1, 1974: horizontal centerline of bumper is less than 350 mm (14 in.) or more than 560 mm (22 in.) from ground</li> <li>- trucks: lowest part of front bumper higher than 740 mm (29 in.) from ground</li> <li>- vertical surface less than 50 mm (2 in.)</li> <li>- does not extend to outside edges of frame rails, or does not extend from the frame rail to the outer edge of the tire if the fender does not extend to 90° to the front of the vertical centre line of the wheel</li> <li>- extends past the body line and the ends do not angle towards the body</li> <li>- not attached in original mounting position</li> </ul>	
b) bumper cover	b) - insecure, or torn portion protruding so as to create a hazard	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>8.5 Doors, Trunk Lid, Hatch, Rear Cargo Doors:</u></b>  Inspect:		
a) doors, trunk lid, hatch and rear cargo doors	a) - missing on any vehicle that is not a modified vehicle - inferior, perforated, or seal(s) missing	
b) occupant compartment door handles	b) - interior handle missing or inoperable on enclosed vehicle - exterior handle missing or inoperable on an enclosed vehicle that is not a modified vehicle - secondary catch missing on enclosed vehicle	
c) hinges and securement devices	c) - missing, broken, cracked, insecure, seized, inoperable, or bolt(s) missing or loose	
<b><u>8.6 Roof - retractable or removable:</u></b>  Inspect:		
a) securement devices	a) - missing, broken or inadequately secures roof	
<b><u>8.7 Windshield:</u></b>  Inspect:		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) condition	<ul style="list-style-type: none"> <li>a) - missing or improperly installed</li> <li>- outright breakage</li> <li>- any crack in the critical viewing area exceeds 300 mm (12 in.) in length</li> <li>- total combined length of two or more cracks in critical viewing area exceeds 300 mm (12 in.) in length</li> <li>- three or more shot or star damages in excess of 25 mm (1 in.) in critical viewing area</li> <li>- five or more shot or star damages in excess of 25 mm (1 in.) anywhere on the windshield</li> <li>- cloudiness extends more than 76 mm (3 in.) towards the centre of the windshield</li> <li>- any exposed sharp edges</li> <li>- any damage through both layers of glass or missing glass exposing laminate</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) tinting and obstructions	<ul style="list-style-type: none"> <li>b) - windshield has been altered (i.e. decorative engraving or etching)</li> <li>- substance other than clear UV blocking tint applied to windshield below top 127 mm (5 in.) shade band</li> <li>- non-transparent or reflective film or substance applied to shade band area</li> <li>- uniform shade band reduces light transmission to less than 25%, unless OEM-equipped</li> <li>- graduated shade band reduces light transmission to less than 5% in the top 64 mm of the windshield, unless OEM-equipped</li> <li>- graduated shade band reduces light transmission to less than 25% in the area between 64 mm and 127 mm measured from the top of the windshield, unless OEM-equipped</li> <li>- any decals or device obstructs vision in the critical viewing area</li> </ul>	
c) type	<ul style="list-style-type: none"> <li>c) - not a safety glass of type AS-1, AS-10, AS-11C or AS-14 and so marked on a vehicle manufactured on or after January 1, 1952</li> <li>- safety glass of type AS-14 on a vehicle that is a convertible or has no roof</li> </ul>	
d) view  <b>Additional Inspection Procedure(s):</b> Forward viewing area is measured at the windshield and is the measurement between the highest point of the dash, bottom of the windshield or the hood (and any protrusion), whichever is the highest, and the top of the windshield.  <b>Note:</b> Rearview mirror and windshield wipers are not obstructions.	<ul style="list-style-type: none"> <li>d) - vertical height of unobstructed forward viewing area in a normal seating position across entire windshield is less than 178 mm (7 in.)</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>8.8 Windows:</b></p> <p>Inspect:</p>		
<p>a) front sides</p>	<p>a) - not safety glass type AS-1, AS-2, AS-4A, AS-10, AS-11A, AS-14, AS-15A or AS-15B and so marked on a vehicle manufactured on or after January 1, 1971</p> <ul style="list-style-type: none"> <li>- any window is broken or cracked, or has exposed edges</li> <li>- both front side windows do not operate as intended</li> <li>- less than 50% total light transmission</li> <li>- more than 35% light reflection</li> <li>- missing either outside rear-view mirrors</li> <li>- any reflective film or substance</li> <li>- clouded or deteriorated so as to restrict vision</li> <li>- any obstruction that prevents a clear viewing area 180° forward of the driver's seat back</li> </ul>	
<p>b) rear side and rear</p> <p><b>Note:</b> Vehicles with aftermarket rear-side and rear window tinting must have both outside rear view mirrors.</p>	<p>b) - not safety glass of types AS-1, AS-2, AS-4, AS10, AS-11A, AS-11C, AS-14, AS-15A or AS-15B and so marked on a vehicle manufactured on or after January 1, 1971</p> <ul style="list-style-type: none"> <li>- safety glass type A-3, except if equipped on a truck or MPV on a rear window that is not required for driving visibility</li> <li>- any window is broken or cracked, or has exposed edges</li> <li>- any reflective film or substance</li> <li>- clouded as to restrict vision</li> <li>- any obstruction that prevents a clear view to the rear and both sides if the vehicle is not equipped with both outside rear view mirrors</li> <li>- any substance applied to portion of rear window covering centre high-mounted stop lamp</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) panoramic glass roofs, sun roof	<ul style="list-style-type: none"> <li>c) - broken, cracked</li> <li>- has exposed edges</li> <li>- insecure</li> </ul>	
<b><u>8.9 Windshield Wipers and Washers:</u></b> Inspect:		
a) wipers	<ul style="list-style-type: none"> <li>a) - does not have power driven wiper system</li> <li>- fails to clear approximately 80% of the windshield</li> <li>- fails to operate on both high and low speed on vehicles manufactured on or after January 1, 1971</li> <li>- fails to operate on at least one speed on vehicles manufactured on or before December 31, 1970</li> <li>- fails to return to park position</li> </ul>	
b) blade(s)	b) - missing or torn	
c) arm(s)	c) - missing or broken	
d) washers  <b>Additional Inspection Procedure(s):</b> Ensure fluid in system prior to testing.	<ul style="list-style-type: none"> <li>d) - missing on vehicle manufactured on or after January 1, 1971</li> <li>- fails to function, or fluid does not contact windshield in critical viewing area</li> </ul>	
<b><u>8.10 Mirrors – Interior:</u></b> Inspect:		
a) interior mirrors  <b>Note:</b> Passenger car requirement only.	<ul style="list-style-type: none"> <li>a) - missing on a passenger car</li> <li>- broken, cracked, insecure, loose, or any condition which does not allow a clear view to the rear</li> <li>- not adjustable, or will not maintain a set position</li> <li>- surface area less than 64.5 cm<sup>2</sup> (10 sq. in.), or either height or width is less than 50 mm (2 in.)</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b>8.11 Mirrors – Exterior:</b>  Inspect:		
a) all exterior mirrors  <b>Note:</b> Power mirrors that maintain a set manual adjustment do not require the switch to operate. This would be an advisement only.	<ul style="list-style-type: none"> <li>a) - broken, cracked, insecure, loose, or any condition which does not provide a clear view to the rear</li> <li>- not adjustable, or will not maintain a set position</li> <li>- passenger cars: reflective surface area is less than 80 cm<sup>2</sup> (12.4 sq. in.) or less than 64.5 cm<sup>2</sup> (10 sq. in.) if convex</li> <li>- MPVs, vans, or trucks: surface area is less than 125 cm<sup>2</sup> (19.37 sq. in.)</li> </ul>	
b) driver side exterior rear view mirror	<ul style="list-style-type: none"> <li>b) - missing from passenger car manufactured on or after January 1, 1971</li> <li>- missing from any truck or MPV</li> <li>- missing from vehicle with aftermarket window tinting</li> </ul>	
c) passenger side mirror	<ul style="list-style-type: none"> <li>c) - missing from MPV manufactured on or after September 1, 1988</li> <li>- missing from vehicle equipped with aftermarket window tint</li> <li>- missing from any truck</li> </ul>	
<b>8.12 Sun Visor:</b>  Inspect:		
a) sun visor	<ul style="list-style-type: none"> <li>a) - missing on driver's side if equipped by OEM at time of manufacture</li> <li>- not adjustable or cannot be maintained in a set position</li> <li>- inadequate for intended purpose</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b><u>8.13 Windshield Defroster or Defogger:</u></b></p> <p><b>Additional Inspection Procedure(s):</b> Turn on the defroster or defogger fan and feel for heated air coming out of the defroster or defogger ducts.</p> <p>Inspect:</p>		
a) defroster or defogger	a) - missing on vehicle where the design, construction or alteration readily allows the passenger compartment to be enclosed - fan does not function on high speed - heated air cannot be felt exiting defroster duct	
<p><b><u>8.14 Seats:</u></b></p> <p><b>Note:</b> Includes cushions, seat backs and headrests. Seat back locks not part of inspection.</p> <p>Inspect:</p>		
a) driver's seat	a) - frame missing, broken or inadequately secured - adjusting mechanism fails to operate - will not remain in set position - covering material missing or torn, and any metal component or spring is exposed - seat and seat back will not remain in an upright position - not designed for automotive use	
b) passenger seats	b) - frame missing, broken or inadequately secured - covering material missing or torn, and any metal component or spring is exposed - not designed for automotive use	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>8.15 Seat Belts:</u></b>  Inspect:		
a) seat belts	<ul style="list-style-type: none"> <li>a) - missing on vehicle manufactured on or after January 1, 1971</li> <li>- missing on vehicle manufactured before January 1, 1971 if OEM equipped</li> <li>- broken, inferior, frayed, split, torn, stretched or insecurely anchored</li> </ul>	
b) buckles	<ul style="list-style-type: none"> <li>b) - missing, broken, fails to latch or release, or release guard missing</li> </ul>	
c) retractors	<ul style="list-style-type: none"> <li>c) - does not fully extend or retract, or motorized retractors do not lock into "ON" position</li> <li>- seat belt inertial lock fails to engage</li> </ul>	
d) shoulder on lap adjustment mechanism	<ul style="list-style-type: none"> <li>d) - fails to adjust</li> </ul>	
e) compliance label	<ul style="list-style-type: none"> <li>e) - aftermarket seat belt assembly not labeled as either CMVSS or FMVSS compliant</li> <li>- aftermarket seat belt assembly labelled "Not For Road Use"</li> </ul>	
f) pre-tensioner and load limiter	<ul style="list-style-type: none"> <li>f) - pre-tensioner has been activated and system not repaired or replaced to meet OEM standard</li> <li>- load limiter has been activated and system not repaired or replaced to meet OEM standard</li> </ul>	
<b><u>8.16 Supplemental Restraint System (SRS) Indicator Light:</u></b>  <b>Additional Inspection Procedure(s):</b> Start engine and check the status of the air bag (SRS) indicator light.  Inspect:		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) air bag (SRS) indicator light	<ul style="list-style-type: none"> <li>a) - fails to function during test cycle or remains illuminated with engine running if the vehicle's manufacturer originally equipped the vehicle with one or more air bags</li> <li>- any visual evidence of tampering</li> </ul>	
<b><u>8.17 Air Bag Cover:</u></b>  Inspect:		
a) air bag cover	<ul style="list-style-type: none"> <li>a) - missing if the vehicle's manufacturer originally equipped it with one or more air bags</li> <li>- damaged or inferior</li> </ul>	
<b><u>Section 9 — Tires and Wheels</u></b>		
<b><u>9.1 Tires:</u></b>  <b>Note:</b> Every tire must have a minimum tread depth when measured throughout a continuous circumferential band excluding tread wear indicators on the tread of all major grooves of the tire tread width of at least 1.6 mm (2/32 in.) on all tires.  Inspect:		<p>Tire tread is cut or damaged into the cord.</p> <p>Any tire is flat.</p> <p>Tire is marked "not for highway use" or has similar markings indicating it is not for use on a highway.</p>
a) tread depth	<ul style="list-style-type: none"> <li>a) - less than 1.6 mm (2/32 in.) tread is remaining</li> <li>- any tread wear indicator contacts the road surface</li> <li>- tires worn on inside or outside shoulder with no tread left</li> </ul>	
b) condition	<ul style="list-style-type: none"> <li>b) - exposed cords, separation, bulges, repaired with boot or blowout patch, no tread in cupped or flat spot area, or lateral run-out is evident</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) tire inflation pressure	<ul style="list-style-type: none"> <li>c) - more than 10% above or below component manufacturer's recommended pressure</li> <li>- air leakage is evident</li> </ul>	
d) tire size	<ul style="list-style-type: none"> <li>d) - vehicle is equipped with a tire having a tread width less than the vehicle manufacturer's recommended specifications</li> <li>- different size tires on one axle if dual pair, one of a dual pair more than 13 mm (0.5 in) difference in diameter, or tires within a dual pair contacting each other</li> <li>- front tire tread width less than 140 mm (5.5 in.) on a vehicle that has been altered so as to increase the weight or load on the front wheels (e.g., engine swap)</li> </ul>	
e) tire type	<ul style="list-style-type: none"> <li>e) - equipped with both bias ply tires and radial ply tires on same axle, or with radial ply tires on front axle and bias ply tires on rear axle</li> <li>- vehicle is equipped with studded tires between May 1 and September 30, both dates inclusive</li> <li>- only one tire on drive-axle studded, rear drive-axle tire not studded with front tires studded, or not all tires studded on a front wheel drive vehicle</li> </ul>	
f) markings	f) - no "DOT" markings or National Safety Marks	
g) directional tire	g) - improperly installed	
h) weight rating	h) - the weight on any tire exceeds the weight rating of that tire	
i) clearance	i) - evidence of tire contact with any component at any point throughout the entire steering and suspension travel	
j) retreaded and recapped tires	j) - passenger car or truck equipped with retreaded or recapped tire on any steering axle	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b><u>9.2 Wheel and Rim:</u></b></p> <p>Inspect:</p>		<p>In excess of 25% of nuts missing on any wheel. Any wheel is broken, cracked or loose.</p>
a) wheel and rim	<p>a) - missing, broken, cracked, loose, bent or crooked</p> <ul style="list-style-type: none"> <li>- improper type</li> <li>- stud holes elongated</li> <li>- welding other than by component manufacturer</li> <li>- centre lock knock-off type loose on hub splines</li> <li>- any wheel or rim has wobble in excess of OEM or component manufacturer's specifications or is out of round</li> </ul>	
b) studs and nuts	<p>b) - missing, broken, cracked, inferior, loose, bent, crooked, seized, cross threaded, stripped, or nut not fully engaged with stud threads</p>	
c) wheel fastener torque	<p>c) - not torqued to manufacturer's specifications</p>	
<p><b><u>Section 10 — Passenger Accessibility Features and Equipment</u></b></p> <p><b>Note:</b> Accessibility features are items that are provided on "accessible vehicles" specifically designed for entry, accommodation, securement and exiting of persons with various physical conditions that may limit their mobility. Many of these features are designed to provide access to the vehicle by means of a mobility assistive device (such as a cane, walker, wheelchair or scooter). The items listed in this section apply only to those features on this type of accessible vehicle.</p>		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>10.1 Service Ramps:</u></b>		
Inspect:		
a) maximum gradient of ramp	a) - gradient is less than 1 in 3	
b) skid resistant surface	b) - surface not skid resistant	
c) width	c) - less than 760 mm (30 in.) in width	
d) sides of ramp	d) - not fitted with guards 25 mm (1 in.) to 50 mm (2 in.) in height	
e) load capability	e) - static load design under 340 kg (750 lbs) over a length of 1100 mm (42 in.) and the full width of the ramp halfway up the ramp	
f) exposed moving parts	f) - not guarded	
g) operation	g) - fails to function in all weather conditions	
h) controls	h) - more than one control, or no storage provision for control	
i) power ramp control safety device	i) - no safety device provided to prevent the operation of the ramp when the parking brake of the vehicle is not engaged - fails to function	
j) manual override capability	j) - missing - fails to function	
k) operating instructions	k) - not posted, or illegible	
l) ramp storage position inside vehicle	l) - insecure	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>10.2 Accessibility Lifts:</u></b>		
Inspect:		
a) lift securement	a) - not provided	
b) lift dimensions	b) - width less than 760 mm (30 in.) or length less than 965 mm (38 in.)	
c) load capability	c) - not capable of lifting minimum load	
d) lift platform surface	d) - not equipped with skid resistant material, or skid resistant material excessively worn	
e) guards at platform sides	e) - not 25 mm (1 in.) to 50 mm (2 in.) in height	
f) platform and lip	f) - lip at the outer edge is less than 65 mm (2.5 in.) when in the raised position - lip is not in the vertical position when the platform is in the lifting or lowering mode - lip is not retracted when the platform reaches the lower limit of travel	
g) exposed moving parts	g) - not guarded	
h) platform speed	h) - less than 0.06 m/s (12 fpm) or greater than 0.13 m/s (25 fpm) from a no load to a rated load condition, or lift platform descends at more than the maximum rated speed	
i) operation	i) - fails to function in all weather conditionsc	
j) controls	j) - not located so as to enable the operator to stand anywhere around the edge of the platform when operating the lift - operable using more than one hand - not of a continuous pressure type - less than or more than one storage provision	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
k) power ramp control safety device	k) - no safety device provided to prevent the operation of the ramp when the parking brake of the vehicle is not engaged or fails to function	
l) manual override capability	l) - missing - fails to function	
m) operating instructions	m) - not posted, or illegible	
n) power closing platform	n) - power closing platform does not fold in "up" position, or folds when more than 22 kg (48 lbs) is in the centre of the platform	
<p><b><u>10.3 Mobility Aid Securement and Occupant Restraint Systems</u></b></p> <p><b>Note:</b> Only required in vehicles with passenger mobility aid securement and occupant restraint systems.</p> <p>Inspect:</p>		
a) retractors	a) - missing - fails to properly lock - webbing is cut, frayed, damaged, split, torn or stretched	
b) pin connectors	b) - any pin connector bushing is missing, broken, cracked or damaged	
c) floor anchorages	c) - missing or insecure - unclean as to prevent proper locking of retractor	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) floor track and hardware	<ul style="list-style-type: none"> <li>d) - missing, loose or insecure</li> <li>- any sign of corrosion</li> <li>- track fitting does not move freely along entire length of track</li> <li>- track fitting wobbles on retractor</li> </ul>	
e) shoulder belt anchorages	<ul style="list-style-type: none"> <li>e) - missing or insecure</li> </ul>	
f) shoulder and lap belt	<ul style="list-style-type: none"> <li>f) - missing, broken, inferior, or insecurely mounted</li> <li>- webbing is cut, frayed, damaged, split, torn or stretched</li> <li>- buckle is missing, broken, cracked, worn or corroded</li> <li>- end fitting is attached to webbing insecurely</li> <li>- cannot be lengthened or shortened</li> <li>- fails to properly lock</li> </ul>	
g) mounting hardware	<ul style="list-style-type: none"> <li>g) - missing or insecure</li> </ul>	
h) mobility aid securement and occupant restraint systems	<ul style="list-style-type: none"> <li>h) - any metal component is broken, cracked, worn or corroded</li> <li>- any component is not installed as per manufacturer's installation instructions</li> <li>- any component does not have manufacturer's label or logo, excluding floor track</li> <li>- all components are not of the same manufacturer</li> <li>- any component is not secured to a metal vehicle body structure</li> </ul>	
<b><u>10.4 First Aid Kit:</u></b>		
Inspect:		
a) first aid kit	<ul style="list-style-type: none"> <li>a) - missing in vehicle with passenger mobility aid securement and occupant restraint systems</li> <li>- location not plainly marked if first aid kit is not in view of driver</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) size and contents	b) - not equivalent to Manitoba Workers' Compensation kits	
c) first aid container	c) - not a sturdy, dustproof removable container made of metal or of plastic of comparable strength	
d) mounting	d) - improper holder	
<b><u>10.5 Fire Extinguisher:</u></b> Inspect:		
a) fire extinguisher	a) - missing in vehicle with passenger mobility aid securement and occupant restraint systems - badly damaged - no mark for location of fire extinguisher if fire extinguisher is not in view	
b) accessibility	b) - obstructed	
c) type and capacity	c) - not equipped with at least one fire extinguisher showing a rating of 2A:10B:C or better	
d) mount	d) - insecure - not in a quick release holder in the view of the driver	
e) seal	e) - missing if fire extinguisher not equipped with gauge - broken or not in place	
f) charge	f) - reading less than minimum	
g) approval and label	g) - not approved by FM Global (FM), Underwriters Laboratories (UL) or Underwriters Laboratories of Canada (ULC) and labeled accordingly - no name plate or instructions	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
h) gauge  <b>Additional Inspection Procedure(s):</b> To inspect gauge, tap gauge and inspect.	h) - moves to "recharge" or down	
i) powder	i) - cannot feel powder shift	
j) nozzle	j) - deteriorated, clogged or corroded through	
<b><u>10.6 Ventilation:</u></b>  Inspect:		
a) static type exhaust ventilator	a) - missing at least one in vehicle with passenger mobility aid securement and occupant restraint systems that is not also equipped with functioning air conditioning	
<b><u>10.7 Warning Device:</u></b>  <b>Note:</b> Required in vehicles with passenger mobility aid securement and occupant restraint system only.  Inspect:		
a) advanced warning device	a) - missing in vehicle with passenger mobility aid securement and occupant restraint systems - not three present in kit - not triangular reflex reflectors	

PART 2

MOTORCYCLE STANDARDS OF SAFETY AND REPAIR  
AND INSPECTION PROCEDURES

**DEFINITIONS**

The following definitions apply in this Part.

**"hazardous condition"** means a rejection criterion that

- (a) has safety implications so serious that the vehicle involved should not be driven; and
- (b) is described in this Part's table of standards of motorcycle safety and repair and inspection procedures, in the column having the subheading "HAZARDOUS CONDITIONS".

**"rejection criterion"** means a vehicle or equipment condition or deficiency that

- (a) constitutes grounds to fail the vehicle on an inspection performed for the purpose of *The Highway Traffic Act*, *The Drivers and Vehicles Act* or a regulation made under either of those Acts; and
- (b) is described in this Part's table of motorcycle standards of safety and repair and inspection procedures, in the columns having the subheadings "GENERAL CONDITIONS" and "HAZARDOUS CONDITIONS" under the shared heading "REJECT IF".

**Table of Motorcycle Standards of Safety and Repair and Inspection Procedures**

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>Section 1 — Power Train</u></b>		
<b><u>1.1 Vehicle Identification Number:</u></b>		
Inspect:		
a) vehicle identification number  <b>Note:</b> Any evidence of tampering with the vehicle identification number must be reported to a Manitoba Public Insurance Vehicle Safety office.	a) - missing, altered, defaced, obliterated, illegible, obscured, or mounting appears to have been tampered with	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b>1.2 Accelerator and Throttle Actuator:</b>		
Inspect:		
a) throttle and actuator	a) - missing, inferior or binding	Engine will not return to idle.
b) mounts	b) - missing, broken, cracked or insecure	
c) linkage and cable	c) - broken, inferior, insecure or excessively worn - inferior retainers - throttle linkage or cable binding, seized or frayed - idle return cable missing, or broken	
d) springs	d) - missing, broken, inferior, stretched or deteriorated	
<b>1.3.1 Fuel System — Gasoline and Diesel:</b>		Fuel tank is not securely attached to the motorcycle.  Level 1, level 2 or level 3 leak of fuel.  Fuel tank filler cap is missing.
Inspect:		
a) tank	a) - broken, cracked, inferior or insecure - inadequate repair or broken welds - tank located within 38 mm (1.5 in.) of exhaust system not protected by heat shield(s)	
b) tank mount	b) - missing, broken, cracked, inferior, insecure or excessively deteriorated	
c) filler caps	c) - missing, inferior or insecure - does not prevent spillage	
d) fuel lines	d) - cracked, inferior, insecure, rubbing, cut, or worn to cord layer - located within 25 mm (1 in.) of exhaust system and not protected by heat shield(s)	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
e) fuel system	e) - level 1, level 2 or level 3 leak of fuel anywhere in the fuel system	
f) air intake at engine	f) - missing air filter housing - piping disconnected at engine	
g) fuel shut-off	g) - missing or inoperative	
<p><b><u>1.3.2 Electric or Hybrid Vehicles:</u></b></p> <p><b>Additional Inspection Procedure(s):</b> High voltage systems should be inspected using all the manufacturer's safety precautions, procedures and equipment.</p> <p>Inspect:</p>		<p>High voltage cable is exposed.</p> <p>Any sign of shorting, arcing or hot spot at or near any electrical component or wiring.</p> <p>Traction battery is damaged or has level 1, level 2, or level 3 leak.</p>
a) high voltage cable	a) - insecure, exposed, improperly shielded, or visible cable damage	
b) wiring	b) - damaged or corroded in a way that exposes any conductor - insulation is chafing due to abrasive contact with any vehicle part - improperly shielded	
c) electrical system connections	c) - connector is damaged, insecure or corroded in a way that exposes any conductor - connector is unable to properly connect or lock into place	
d) traction motor and generator	d) - damaged, insecure or loose - indication of burning or overheating - drive component abnormally worn	
e) traction battery	e) - damaged, insecure or loose - indication of burning or overheating	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
f) battery storage area	f) - damaged or structurally weakened	
g) self-diagnostic or status indicator	g) - there is any condition indicated by the system that is defined by the manufacturer as being unsafe	
<b><u>1.4 Exhaust System:</u></b> Inspect with engine idling:		
a) mountings and connections	a) - missing, broken, insecure or connection loose or separated	
b) heat shields	b) - missing or insecure - incorrect size to provide rider(s) protection	
c) mufflers	c) - missing, inferior or leaking exhaust - any baffles missing or inferior - not a welded patch	
d) exhaust system	d) - leaking exhaust anywhere except in the exhaust drain holes	
<b><u>1.5 Transmission System:</u></b> Inspect:		
a) drive chain and belt	a) - more than 40 mm play at the mid-point between sprocket and chain or exceeds OEM specifications - master link improperly installed - drive chain or belt damaged or improperly adjusted - belt missing, cracked (other than designed), frayed or slipping	
b) drive guard	b) - missing, broken, cracked, inferior or insecure	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) sprockets	<ul style="list-style-type: none"> <li>c) - broken, cracked, damaged or loose</li> <li>- undercut teeth visible on sprockets</li> <li>- missing, broken or loose mounting hardware</li> </ul>	
d) drive shaft	d) - not within OEM specifications	
e) u-joints	<ul style="list-style-type: none"> <li>e) - broken or loose</li> <li>- rotational free play</li> <li>- missing nuts or bolts</li> </ul>	
f) shifter	<ul style="list-style-type: none"> <li>f) - lever is missing, broken, cracked, bent, binding, loose, or deteriorated by corrosion</li> <li>- does not function as designed</li> </ul>	
<b><u>1.6 Clutch:</u></b> Inspect:		
a) clutch	a) - fails to disengage transmission from engine	
b) pedal and lever	b) - missing, broken, insecure, loose, bent, obstructed, or sharp ends	
c) non-skid pedal surface	c) - missing, loose or excessively worn	
d) reservoir	<ul style="list-style-type: none"> <li>d) - level 1, level 2 or level 3 leak of hydraulic fluid</li> <li>- hydraulic fluid is below the fill mark</li> <li>- lever fades under steady pressure</li> </ul>	
<b><u>1.7 Engine Shutdown:</u></b> Inspect:		
a) engine shutdown	a) - fails to function	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>Section 2 — Suspension</u></b>		
<b><u>2.1 Wheel Bearings:</u></b> Inspect:		
a) wheel bearings	a) - binding or seized - noisy while rotating - missing or damaged cotter pin - stake nuts improperly installed - play not within OEM specifications	
<b><u>2.2 Suspension Components:</u></b>  Inspect:		Any spring is broken.  Any component is cracked.  Any component allows the axle to shift from its normal position.
a) swing arm  <b>Additional Inspection Procedure(s):</b> Inspect lateral movement of swing arm by exerting side-to-side force against the rear wheel.	a) - broken, cracked, damaged or loose - weld not by component manufacturer	
b) swing arm bushing and bearings	b) - seized or excessively worn	
c) shock absorbers and springs	c) - missing, broken, damaged, seized or inadequate - level 2 or level 3 leak	
d) shock absorber mounting hardware	d) - missing, broken, cracked or loose	
e) shock absorber bushings	e) - missing, loose, elongated, or excessively deteriorated or worn	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
f) front fork assembly  <b>Additional Inspection Procedure(s):</b> Apply front brake and bounce the front of the motorcycle to assess rebound in front forks.	f) - broken, cracked, loose, twisted, bent, binding or seized - weld not by component manufacturer - slug extension present - front wheel dampening missing	
g) front fork seals	g) - level 2 or level 3 leak	
h) front fork length  <b>Additional Inspection Procedure(s):</b> Measure length with no rider on motorcycle.	h) - longer than 820 mm (32 in.) from the lowest point of the lower triple tree to the centre of the axle	
i) road clearance	i) - any part of the motorcycle extends below the rim of any wheel	
<b><u>2.3 Computer Controlled Air Suspension System</u></b>  Inspect:		
a) air springs	a) - missing, loose, cut, patched or spring rubber cracked to first braid - leaking - vehicle leans to one side	
b) lines	b) - missing, cracked, restricted, crushed, or disabled - insecurely mounted - leaking	
c) spring mounting	c) - brackets or bolts missing or loose, - bolt threads stripped - spring loose in mount	
d) compressor	d) - missing or inoperative - insecurely mounted	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
e) compressor relay	e) - missing or inoperative	
f) control module	f) - missing or inoperative	
g) height sensors	g) - missing, loose, inoperative or improperly located	
h) switch	h) - missing, inoperative or disconnected	
i) warning lamp	i) - inoperable or inoperative during test cycle	
<b>Section 3 — Brake System</b>		
<b><u>3.1 Mechanical Components:</u></b>  Inspect:		Mechanical components cannot be adjusted to provide braking.
a) brake actuating cam shaft and lever	a) - insecure or loose - fails to operate system as intended	
b) cable and adjusters	b) - seized, binding, frayed, or improperly routed - no means of locking brake adjustments	
c) clevises, pins, rods and couplings	c) - missing, broken, inferior, bent, or excessively worn	
d) pedal, shaft and bearings	d) - broken, damaged, insecure, loose, bent, binding or seized	
<b><u>3.2 Operating Controls:</u></b>  Inspect:		
a) operating controls	a) - not readily accessible, or inadequate leverage	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) hand and foot levers	<ul style="list-style-type: none"> <li>b) - less than 1/3 travel remains when brakes normally applied</li> <li>- fails to return from applied position</li> <li>- the brake control lever or pedal has no free play</li> <li>- non-skid surface is missing, loose or excessively worn on brake pedal</li> </ul>	
c) footrest	<ul style="list-style-type: none"> <li>c) - missing operator footrests on either side of vehicle</li> <li>- missing passenger footrests on either side of vehicle if vehicle was designed to carry a passenger</li> </ul>	
<b><u>3.3 Anti-Lock Brakes:</u></b>  Inspect:		
a) indicator lamp	<ul style="list-style-type: none"> <li>a) - fails to illuminate during system test, or remains illuminated or flashes after system test</li> <li>- any visual evidence of tampering</li> </ul>	
<b><u>3.4 Hydraulic Components:</u></b>		<p>Any brake hose or line seeps or swells under pressure.</p> <p>Any level 2 or level 3 leak in the brake system.</p> <p>Any connection is broken, cracked, crimped or restricted.</p> <p>Any master cylinder reservoir is less than 1/4 full.</p> <p>Cotter pin or locking device is missing from the bolts securing either end of the brake torque link.</p> <p>Brake failure lamp remains illuminated with engine running and service brakes applied.</p> <p>Absence of any braking action.</p>

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
Inspect:		
a) lines and fittings	<ul style="list-style-type: none"> <li>a) - cracked, inferior, insecure, twisted, welded, soldered, chafed, flattened, restricted section or contacts any moving part</li> <li>- level 1, level 2 or level 3 leak of brake fluid</li> <li>- tubings or fittings not OEM-approved</li> <li>- any compression fittings used</li> </ul>	
b) hoses	<ul style="list-style-type: none"> <li>b) - level 1, level 2 or level 3 leak of brake fluid</li> <li>- cracked or chafed to the first braid if rubber composite material</li> <li>- insecure, loose, twisted, flattened, bulged, swells under pressure, restricted section, or contacts any moving part</li> <li>- does not display approved markings</li> <li>- located within 25 mm (1.0 in.) of exhaust system and not protected by heat shield(s)</li> </ul>	
c) master cylinder	<ul style="list-style-type: none"> <li>c) - level 2 or level 3 leak of brake fluid</li> <li>- insecure or loose</li> <li>- fluid level in either chamber below OEM level or more than 13 mm (0.5 in.) below the top of the reservoir</li> </ul>	
d) master cylinder cap	<ul style="list-style-type: none"> <li>d) - missing, insecure or damaged</li> <li>- vent holes plugged</li> <li>- gasket missing</li> <li>- rubber components swollen</li> </ul>	
e) brake failure indicators	<ul style="list-style-type: none"> <li>e) - missing, broken or disconnected</li> <li>- the lamp fails to operate when the ignition switch is on the "START" position</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>3.5 Drum Brakes:</b></p> <p><b>Additional Inspection Procedure(s):</b> Remove all wheels and brake drums.</p> <p>Inspect:</p>		<p>Brake drum failure is imminent.</p> <p>Drum diameter exceeds discard limit.</p> <p>Lining is contaminated.</p> <p>No lining at thinnest point on bonded lining.</p> <p>No lining above rivet head on riveted lining.</p> <p>Absence of any braking action on any wheel.</p> <p>Level 2 or level 3 leak of brake fluid at wheel cylinder.</p>
a) bonded lining	<p>a) - worn to 1.6 mm (1/16 in.) or less at the thinnest point</p> <p>- worn to 1.6 mm (1/16 in.) or less above rivet head</p> <p>- missing, broken, cracked, insecure, loose, contaminated, improperly installed, rivets loose, or primary and secondary shoes reversed</p>	
b) adjusters	b) - missing, seized, excessively worn, inoperable, or incorrect thread for wheel position	
c) self adjuster cables and linkage	c) - missing, broken, loose, inoperable or cable frayed	
d) anchor pins, springs and retainers	d) - missing, broken, loose, bent, excessively worn or springs stretched	
e) wheel cylinders	<p>e) - missing, loose, misaligned, seized or inoperable</p> <p>- level 1, level 2 or level 3 leak of brake fluid</p> <p>- dust seals missing, cracked or insecure</p>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
f) brake drums	f) - inferior - cracks extend to the open edge of the drum, or any external cracks are present - piece broken out of friction surface or mounting surface - any heat cracks are present (not short heat checks) - any groove exceeds manufacturer's discard limit - diameter exceeds the component manufacturer's discard limit - the measurement exceeds the original diameter by 1.5 mm (0.06 in.)	
g) application  <b>Additional Inspection Procedure(s):</b> With engine off, apply brakes and attempt to rotate the wheel assembly	g) - wheel rotates when brakes applied	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>3.6 Disc Brakes:</b></p> <p><b>Additional Inspection Procedure(s):</b> Remove all wheels, calipers and pads</p> <p>Inspect:</p>		<p>Rotor is cracked to the hub.</p> <p>Rotor failure is imminent.</p> <p>Lining contaminated.</p> <p>Brake pad totally separated from backing plate.</p> <p>No lining at thinnest point on bonded lining.</p> <p>No lining above rivet head on riveted lining.</p> <p>Absence of any braking action on any wheel.</p> <p>Rotor thickness is less than component manufacturer's discard limit.</p> <p>Level 2 or level 3 leak of brake fluid at caliper.</p> <p>Bolts missing from caliper or bracket.</p>
<p>a) rotors</p>	<p>a) - missing, broken, inferior, crack on surface extends to outer edges, or hot spots are present</p> <ul style="list-style-type: none"> <li>- corrosion or pitting on more than 10% of total pad contact area</li> <li>- grooves in contact area exceed 2.3 mm (0.009 in.) other than by component manufacturer</li> <li>- wear exceeds component manufacturer's limit</li> <li>- lateral run-out exceeds 0.127 mm (0.005 in.)</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) calipers	b) - missing, insecure, leaking, piston seized, improperly mounted, or inferior attaching hardware - level 1, level 2 or level 3 leak of brake fluid - guide pin stripped or seized - bushing seized - piston dust seals missing, cracked or split - piston cracked or broken	
c) pads	c) - missing, broken, cracked, loose, contaminated, improperly installed, spalled, rivet loose, or lining loose or separated - 1.6 mm (1/16 in.) or less at the thinnest point on bonded linings - 1.6 mm (1/16 in.) or less above rivet head on riveted linings	
d) application  <b>Additional Inspection Procedure(s):</b> With engine off, apply brakes and attempt to rotate the wheel assembly.	d) - wheel rotates	
<b>Section 4 — Steering System</b>		
<b>4.1 Handlebars:</b>          Inspect:		Any condition that interferes with free movement of a steering component.  Handlebars are broken or insecure.  Steering binding or sticking.

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) handlebars	<ul style="list-style-type: none"> <li>a) - missing, broken, cracked, inferior, insecure, loose, bent, deformed or improperly aligned</li> <li>- not equipped with hand grips</li> <li>- height of handlebars exceeds the height of the driver's shoulders while the driver is seated in a normal operating position</li> <li>- width of handlebars exceeds 920 mm (36 in.) or is less than 530 mm (21 in.) measured at outermost point</li> </ul>	
b) throttle and control levers	b) - missing, broken or loose	
c) steering head and steering stops  <b>Additional Inspection Procedure(s):</b> With front wheel raised so that it does not bear any weight, grasp the fork legs at the axle and apply force forwards and backwards.	c) - steering head bearing shows any movement or roughness of motion, or is outside component manufacturer's specifications or over-tightened to such an extent that the steering is affected by binding or sticking  - not made of 1.524 mm (0.06 in.) steel tube or equivalent strength	
<b>4.2 Motor Tricycle Steering System:</b>  <b>Note:</b> These components should only be inspected if present on a motor tricycle.  Inspect:		
a) tie rod ends and inner sleeve socket	<ul style="list-style-type: none"> <li>a) - missing, broken, cracked, inferior, loose, bent or seized</li> <li>- welding other than by component manufacturer</li> <li>- injected with any plastic or polymer compound</li> </ul>	
b) pitman arm	<ul style="list-style-type: none"> <li>b) - missing, broken, cracked, loose or bent</li> <li>- welding other than by component manufacturer</li> <li>- injected with any plastic or polymer compound</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
c) steering column	<ul style="list-style-type: none"> <li>c) - column brackets missing or loose</li> <li>- roll pins missing or loose</li> <li>- splines or bushings worn beyond manufacturer's specifications</li> <li>- play exceeds manufacturer's specifications</li> </ul>	
d) ball joints  <b>Additional Inspection Procedure(s):</b> Refer to manufacturer's specifications for test methods and rejection criteria for horizontal and vertical movement.	<ul style="list-style-type: none"> <li>d) - modified in any way that conceals wear</li> <li>- horizontal and vertical movement in excess of manufacturer's specifications</li> <li>- injected with any plastic or polymer compound</li> <li>- movement in wear indicator type ball joint</li> <li>- loose in spindle or control arm, not properly seated, or retained other than by OEM or component manufacturer's recommended method</li> </ul>	
e) sway bar bushings	<ul style="list-style-type: none"> <li>e) - worn beyond manufacturer's specifications</li> </ul>	
f) control arm	<ul style="list-style-type: none"> <li>f) - bent</li> <li>- welding other than by component manufacturer</li> <li>- bushing worn beyond manufacturer's specifications</li> </ul>	
g) steering shaft and couplers	<ul style="list-style-type: none"> <li>g) - any condition that interferes with the free movement of the steering shaft or coupler</li> </ul>	
h) power steering box and module  <b>Additional Inspection Procedure(s):</b> With vehicle on ground, rock steering left and right.	<ul style="list-style-type: none"> <li>h) - level 2 or level 3 leak of oil</li> <li>- insecure or loose</li> <li>- bolts or nuts missing or loose, or housing broken or cracked</li> <li>- welding other than by component manufacturer</li> <li>- bellow at the top of steering box is missing, split, torn or improperly positioned</li> <li>- fails to assist steering</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>Section 5 — Instruments and Auxiliary Equipment</u></b>		
<b><u>5.1 Dimmer Switch:</u></b> Inspect:		
a) dimmer switch	a) - insecure, fails to function as designed, or does not operate freely	
<b><u>5.2 Horn:</u></b> Inspect:		
a) horn	a) - control not readily accessible to driver, not clearly marked, not clearly audible from a distance of 60 m (200 ft.), plays a musical tune, not a pressure type switch, or fails to function	
<b><u>5.3 Speedometer:</u></b> Inspect:		
a) speedometer	a) - missing, insecure, does not function, or fails to illuminate	
<b><u>5.4 Air Bag Readiness Light:</u></b>  <b>Note:</b> Applies to motorcycles with OEM-equipped airbags only.  <b>Additional Inspection Procedure(s):</b> Start engine and note air bag readiness light function.  Inspect:		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) air bag readiness light	<ul style="list-style-type: none"> <li>a) - fails to function during test cycle, or remains illuminated with engine running</li> <li>- any visual evidence of tampering</li> </ul>	
<b><u>5.5 Air Bag Cover:</u></b> Inspect:		
a) air bag cover	a) - missing, damaged, inferior or repaired	
<b><u>5.6 Trailer Hitch:</u></b> Inspect:		
a) mounting	<ul style="list-style-type: none"> <li>a) - insecure, or mounting bolts less than grade 5</li> <li>- any sharp edges protruding</li> </ul>	
<b><u>5.7 Side Car Assemblies:</u></b> Inspect:		<p>Bearings do not satisfy requirements under section 2.1, 2.2 or 3.1.</p> <p>Tires do not satisfy requirements under section 9.1.</p> <p>Wheels do not satisfy requirements under section 9.2.</p>
a) side car assemblies	<ul style="list-style-type: none"> <li>a) - bearings do not satisfy requirements under section 2.1, 2.2 or 3.1</li> <li>- tires do not satisfy requirements under section 9.1</li> <li>- wheels do not satisfy requirements under section 9.2</li> <li>- any sharp edges protruding, or any component insecure</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>5.8 Other Auxiliary Equipment:</b></p> <p><b>Note:</b> Includes, but is not limited to, items such as luggage racks and carriers, back rests, highway bars, engine case guards, and fairings.</p> <p>Inspect:</p>		
a) auxiliary equipment	a) - any sharp edges protruding or any component insecure	
<p><b>Section 6 — Lamps</b></p> <p><b>Note:</b> See Appendix 2 for a list of lamp type codings.</p>		
<p><b>6.1 Lamps:</b></p> <p><b>Additional Inspection Procedure(s):</b> All lamps mentioned below must be inspected with headlamp on. Manually turn on headlamp switch.</p> <p>Inspect:</p>		<p>At least one headlamp does not function on low beam.</p> <p>Headlamp does not operate continuously with engine running if motorcycle manufactured on or after January 1, 1975.</p> <p>At least one tail lamp does not function.</p> <p>At least one stop lamp does not function.</p>

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) all lamps	<ul style="list-style-type: none"> <li>a) - any auxiliary equipment placed in front of a lamp, unless the obstructed lamp is replaced with an auxiliary lamp of the same standard</li> <li>- any substance is placed on, in or in front of any lamp</li> <li>- a required lamp is missing, broken, insecure, fails to illuminate, or has water visible in interior</li> <li>- cracked so as to allow the penetration of dust or moisture or so as to impair the lamp's effectiveness</li> <li>- any single LED assembly that is not a headlamp has 25% or more of the LEDs inoperative</li> <li>- headlamp switch does not operate all required lamps simultaneously, excluding turn signal and hazard warning lamps</li> <li>- any lens or assembly displays a JIS marking, excluding the tail and turn signal lamp assemblies on a vehicle imported into Canada that is 15 years or older</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) headlamps (motorcycle type marked "M")  <b>Note:</b> "E" Code frontal illumination markings are compliant if labeled: <b>C CR C/R HC HC/R DC DCR DC/R HCHR DCHR</b>	b) - not one on vertical centre line or not two symmetrical about vertical centre line - not white, not clearly visible or proper filament is not lit - does not comply with CMVSS 108 - any non-OEM lamp does not display DOT, SAE, or compliant "E" Code markings and proper lamp type coding, or the manufacturer has not provided a product compliance certificate - markings are accompanied by a single directional arrow (→) - assembly does not display either HG, DC, DR or DCR codes on a motorcycle that has had its non-HID headlamp assembly retrofitted with HID bulbs - does not operate continuously with engine running if motorcycle was manufactured on or after January 1, 1975 - does not operate on high and low beam when activated by dimmer switch - height is less than 560 mm (22 in.) or more than 1370 mm (54 in.) above road surface when measured at centre of lamp - not all LEDs illuminate if LED assembly	
c) high beam indicator	c) - does not illuminate when high beam lamps are activated - dimmer switch insecure or does not operate freely	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) tail lamps	<ul style="list-style-type: none"> <li>d) - not one on vertical centre line, or not two symmetrical about vertical centre line as far apart as practicable</li> <li>- not facing rear</li> <li>- not red, or proper filament not lit</li> <li>- height is less than 380 mm (15 in.) or more than 1830 mm (72 in.) above road surface when measured at the centre of lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or JIS marking and proper lamp type coding on a vehicle imported into Canada that is 15 years or older, or manufacturer has not provided a product compliance certificate</li> </ul>	
e) stop lamps	<ul style="list-style-type: none"> <li>e) - not one on vertical centre line, or not two symmetrical about vertical centre line as far apart as practicable</li> <li>- not facing rear</li> <li>- not red, or proper filament not lit when brakes applied</li> <li>- height is less than 380 mm (15 in.) or more than 1830 mm (72 in.) above road surface when measured at the centre of lamp</li> <li>- lamp does not comply with CMVSS 108</li> <li>- non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
f) turn signal lamps	f) - missing on a motorcycle manufactured on or after January 1, 1974 - not four, with two facing front and two facing rear as far apart as practicable - front not amber or white, rear not amber (lens must not be reflective) or red, or proper filament not lit - does not flash between 50 and 130 times per minute - height is less than 380 mm (15 in.) or more than 2110 mm (83 in.) above road surface when measured at centre of lamp - lamp does not comply with CMVSS 108 - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or JIS marking and proper lamp type coding on a vehicle imported into Canada that is 15 years or older, or manufacturer has not provided a product compliance certificate - not activated only by the turn signal switch - turn signal switch does not remain in selected position and activate only the proper turn signal lamps	
g) turn signal indicators	g) - missing on motorcycle manufactured on or after January 1, 1974 - does not accurately indicate turn direction	
h) number plate lamp	h) - does not illuminate number plate - not white - not shielded so that light is not directed rearward - lamp does not comply with CMVSS 108 - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
i) fog lamps  <b>Note:</b> The following items (items i to k) are not required equipment. However, if present on a vehicle they must meet requirements.	i) - more than two located on front, or not symmetrical - not white or amber - any part is higher than the headlamps - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate - not activated by a dedicated switch within reach of the driver	
j) high beam driving lamps	j) - more than two driving lamps in total (low beam or high beam), or not symmetrical - not white - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate - does not illuminate only when headlamps are on high beam	
k) low beam driving lamps	k) - more than two driving lamps in total (low beam or high beam), or not symmetrical - not white - non-OEM lamp does not display SAE or DOT marking and proper lamp type coding, or the manufacturer has not provided a product compliance certificate - does not illuminate only when headlamps are on low beam	
<b>6.2 Reflectors:</b>  <b>Note:</b> A lamp or lens that is reflective may also function as a reflector.  Inspect:		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
a) all reflectors	<ul style="list-style-type: none"> <li>a) - any reflector does not comply with CMVSS 108</li> <li>- any reflector does not display SAE or DOT marking</li> <li>- height is less than 380 mm (15 in.) or more than 1530 mm (60 in.) above road surface</li> <li>- insecure or discolored</li> <li>- more than 20% of reflector is missing</li> </ul>	
b) rear reflectors	<ul style="list-style-type: none"> <li>b) - missing on motorcycle manufactured on or after January 1, 1971</li> <li>- not red</li> <li>- not at the same height</li> <li>- not one on vertical centre line, or not two symmetrical about vertical centre line and positioned as far apart as practicable</li> </ul>	
c) side marker reflectors	<ul style="list-style-type: none"> <li>c) - missing on a motorcycle manufactured on or after January 1, 1971</li> <li>- not two on each side or not as close to front and rear as practicable</li> <li>- front not amber, or rear not red</li> </ul>	
<p><b>6.3 Prohibited Lighting:</b></p> <p><b>Note:</b> Prohibited lighting is any flashing, oscillating or strobe lamp, or any lamp or signalling device not described in Section 6.1, which is not approved by a Special Lighting Permit issued by the Registrar through a Manitoba Public Insurance Vehicle Safety office or authorized by regulation (see note below).</p> <p><b>Note:</b> Emergency vehicles may carry prohibited lighting without a permit. If in doubt, consult Part 3 of the <i>Vehicle Equipment, Safety and Inspection Regulation</i>.</p>		

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
Inspect:		
a) prohibited lighting	a) - not approved by the registrar through the issuance of a special lighting permit	
<b>6.4 Lamp Aim:</b>		
a) aim	a) - aim not within manufacturer's specifications	
b) high beam lamps	b) - horizontal aim is more than 100 mm (4 in.) above or 100 mm (4 in.) below the horizontal centering line - vertical aim is more than 100 mm (4 in.) to the left of or 100 mm (4 in.) to the right of the vertical centering line	
c) low beam lamps	c) - centre of high intensity zone not within 50 to 100 mm below the horizontal axis and 130 to 200 mm to the right of the vertical axis	
d) fog and driving lamps	d) - the vertical aim is to the left of the vertical centre line of the low beam - the horizontal aim is more than 0.0 mm (0.0 in.) below the horizontal centre line of the lamp (measured at 7.5 m (25 ft.) from lamp)	

**Appendix 2 – Applicable SAE and DOT Codes**

CODE	FUNCTION DESCRIPTION
A	Reflex reflector
C	Motorcycle auxiliary front lamp
D	Motorcycle and motor driven cycle turn signal lamp
L	Licence plate lamp
M	Motorcycle and motor driven cycle headlamps motorcycle type
S	Stop lamps
T	Tail lamps (rear position lamp)

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b><u>Section 7 — Electrical</u></b>		
<b><u>7.1 Wiring:</u></b>		
Inspect:		
a) wiring	a) - interferes with driver's controls, loose or insecure	
b) insulation	b) - visible wiring has bare wire exposed	
<b><u>7.2 Battery:</u></b>		
Inspect:		
a) battery	a) - improperly located, sealed or vented - level 1, level 2 or level 3 leak of battery fluid	
b) mounts, tray and box	b) - missing, broken, cracked, insecure or perforated	
c) cover, hold down, bolts, nuts and retainers	c) - missing, inferior or insecure	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
d) vent tube	d) - missing if required by component manufacturer, disconnected or obstructed	
<b><u>7.3 Switches:</u></b> Inspect:		
a) switches	a) - any vehicle system switch fails to function - damaged	
<b><u>Section 8 — Frame and Sheet Metal</u></b>		
<b><u>8.1 Frame</u></b>  <b>Note:</b> When a mechanic conducting an inspection is in doubt as to the integrity of a structural component, written verification of compliance from an OEM or Manitoba Public Insurance accredited repair facility is required.  Inspect:		Frame is broken, bent or twisted. Evidence of any condition indicating an imminent collapse of the frame.
a) frame	a) - broken, cracked, bent, twisted, compressed, flexes, structural damage, or inadequate repair - the steering neck angle dimension has been altered from the OEM design	
b) engine, transmission mounts and mounting hardware	b) - missing, broken, inferior, insecure or split	
<b><u>8.2 Seats:</u></b> Inspect:		
a) seat(s)	a) - missing, broken frame or insecure - will not remain in locked position	Driver seat not in OEM position.  Placement of passenger seat interferes with driver controls.

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
b) footrest(s)	b) - missing or insecure	
<b><u>8.3 Fenders:</u></b> Inspect:		
a) fenders	a) - missing, cracked, insecure or torn - any sharp edges protruding - not full width of tire	
<b><u>8.4 Windshields</u></b> Inspect:		
a) windshield or windscreen	a) - cracked or insecure - obscures driver's view	
<b><u>8.5 Mirrors:</u></b> Inspect:		
a) mirrors	a) - missing left-hand or right-hand exterior rear view mirrors on a motorcycle manufactured on or after January 1, 1971 - broken, cracked, insecure or obstructed - less than 65 cm <sup>2</sup> (10 in <sup>2</sup> ) of reflective surface - does not maintain a set position, not adjustable or does not give a clear view to the rear	
<b><u>8.6 Kickstand or Centre Stand:</u></b> Inspect:		
a) kickstand and centre stand	a) - not at least one kickstand or centre stand - broken, loose, does not remain in a stowed position, or inadequate for weight of motorcycle	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<b>Section 9 — Tires and Wheels</b>		
<b>9.1 Tires:</b>  Inspect:		<p>Tire tread is cut or damaged into the cord. Any tire is flat. Tire is marked "not for highway use" or has similar markings indicating it is not for use on a highway. Tire has any part of the breaker strip or carcass ply showing in the tread or wear through plies in the sidewall. Tires marked for automotive use on a two-wheeled motorcycle.</p>
a) tread depth	<ul style="list-style-type: none"> <li>a) - less than 1.6 mm (2/32 in.) of tread is remaining</li> <li>- any tread wear indicator contacts the road surface</li> </ul>	
b) condition	<ul style="list-style-type: none"> <li>b) - exposed cords, separation, bulges, repaired with boot or blowout patch, no tread in cupped or flat spot area, or lateral run-out is evident</li> <li>- any sidewall repair</li> </ul>	
c) tire inflation pressure	<ul style="list-style-type: none"> <li>c) - more than 10% above or below component manufacturer's recommended pressure</li> <li>- air leakage is evident</li> </ul>	
d) tire size	<ul style="list-style-type: none"> <li>d) - vehicle is equipped with a tire having a tread width less than the vehicle manufacturer's recommended specifications</li> </ul>	
e) markings	<ul style="list-style-type: none"> <li>e) - no "DOT" markings or National Safety Marks</li> </ul>	
f) directional tire	<ul style="list-style-type: none"> <li>f) - improperly installed</li> </ul>	
g) clearance	<ul style="list-style-type: none"> <li>g) - evidence of tire contact with any component at any point throughout the entire steering and suspension travel</li> </ul>	

ITEM AND METHOD OF INSPECTION	REJECT IF	
	GENERAL CONDITIONS	HAZARDOUS CONDITIONS
<p><b>9.2 Wheels:</b></p> <p>Inspect:</p>		<p>Any wheel is loose.  Any bolt is missing.  Cast or composite wheel has any one spoke missing, broken or cracked.  Any steel wheel is cracked or has two or more wheel spokes missing or broken.</p>
a) wheels and rims	<p>a) - missing, broken, cracked, loose, bent or crooked</p> <ul style="list-style-type: none"> <li>- welding other than by component manufacturer</li> <li>- diameter less than 250 mm</li> <li>- any wheel or rim has wobble in excess of OEM or component manufacturer's specifications or is out of round</li> <li>- any spoke missing, broken, loose or bent</li> </ul>	
b) axle nuts	<p>b) - missing, broken, cracked, inferior, loose, bent, crooked, seized, cross threaded, stripped, or inadequate thread engagement</p> <ul style="list-style-type: none"> <li>- inadequate torque</li> </ul>	
<p>c) steering alignment</p> <p><b>Additional Inspection Procedure(s):</b> For ease of inspection, a series of three parallel lines, 25 mm (1 in.) apart, on the floor of the inspection area may be used. Centre the front tire on the centre reference line and observe tracking of the rear wheel as the motorcycle is moved forward along the line a minimum of twice the length of the vehicle.</p>	<p>c) - the wheel planes do not align with the longitudinal axis of the frame, causing tracking between the front and rear wheel to misalign by 25 mm (1 in.) or more</p> <ul style="list-style-type: none"> <li>- wheel plane is not aligned within OEM specifications</li> <li>- the front wheel plane is not vertical and parallel to the front fork tubes</li> </ul>	