

Introduction

This handbook outlines the inspection procedures and criteria for determining vehicle compliance with the standards of safety and repair maintained by the Registrar of Motor Vehicles in accordance with Manitoba Regulation 75/94, the Vehicle Safety Inspection Regulation.

The standards and procedures contained herein have been compiled from several sources. The American Association Of Motor Vehicle Administrators (AAMVA), Commercial Vehicle Safety Alliance (CVSA), and Motor Vehicle Manufacturers Association (MVMA) Standards have been consulted and form the foundation on which the inspection handbook is based.

Every reasonable effort has been made to ensure the accuracy of this handbook. It is possible, however, specific pieces of information may have been inadvertently omitted or that there may be discrepancies between the Registrar's Standard and the Original Equipment Manufacturer's Standards.

Where a discrepancy arises between the Registrar's Standard and the Original Equipment Manufacturer's (OEM) Standard, the user of the handbook is obliged to use the lesser standard.

Users of this manual are encouraged to notify the Vehicle Standards and Inspection office at Manitoba Public Insurance of any errors, omissions or discrepancies.

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ITEM AND METHOD OF INSPECTION	REJECT IF:
Section 1: Power Train	
1-1 Vehicle Identification Number(a) vehicle identification number(b) registration certificate	(a) missing, altered, defaced, obliterated, not readily recognizable(b) registration certificate, vehicle identification number and licence plate number do not agree
1-2 Accelerator Pedal With engine idling, manually depress accelerator pedal and then release. Visually inspect: (a) pedal (b) mount (c) linkage (d) springs	 (a) binding, missing, engine will not return to idle position (b) insecure, deteriorated by corrosion (c) worn, insecure, inferior retainers (d) missing, deteriorated, improper
1-3 Fuel System (gasoline and diesel) (a) filler tube (b) tank(s) (c) tank mount(s) (d) strap(s) (e) cap(s) (f) fuel lines (g) pump (h) air intake (i) location L.P.G., C.N.G. and DUAL - Fuel Vehicles Refer to the pressure fuel section of this manual	 (a) leaking, insecure (b) leaking, insecure, cracked, welds broken (c) cracked, loose, bolts missing (d) cracked, loose, missing (e) missing, does not prevent spillage, improper type (f) cracked, leaking, insecure, damaged, rubbing (g) leaking, physically damaged, insecure (h) flame arrestor or air filter housing is missing (i) any part of fuel system closer than 38mm (1.5in) of exhaust system is not protected by shield(s) Out of Service Criteria: (i) any fuel system has a visible leak at any point
	 (ii) any fuel tank filler cap missing (iii) any fuel tank not securely attached to the motor vehicle Note: Some fuel tanks use springs or rubber bushings to permit movement.

ITEM AND METHOD OF INSPECTION	REJECT IF:
1-4 Exhaust System, Emission Equipment and Catalytic Converter With the engine running, visually and audibly inspect: (a) manifolds (b) mufflers (c) resonators (where fitted) (d) tail pipes (e) exhaust pipes (f) mounting hardware (g) exhaust cut-out (h) heat shield (applicable vehicles) (i) tail pipe termination (j) catalytic converter – (Applies to motor vehicles manufactured on or after January 1,1995) (k) emission control equipment – (Applies to motor vehicles manufactured on or after January 1,1995)	 (a) leaking (b) leaking, missing, patch not welded (c) leaking, missing, patch not welded (d) leaking, missing, patch not welded (e) leaking, missing, patch not welded (f) missing, loose (g) exhaust cut-out is installed (h) insecure, missing (i) the installation does not expel the exhaust fumes beyond outside perimeter of the vehicle trucks – tail pipe does not extend beyond passenger compartment (j) missing, or replaced with a non-catalytic muffler (k) any emission equipment is missing
1-5 Clutch	does not function
1-6 Neutral Safety Switch (if originally equipped)	does not function
Section 2: Suspension	
 2-1 Leaf Springs and Attachments Visually inspect: (a) spring leaves (b) shackles (c) hangers (d) u-bolts (e) centre bolts (f) bushings or pivot (g) torque arms (h) stabilizer bars – if factory installed (i) ride height (passenger car type) 	 (a) leaf in any leaf spring assembly broken or missing (b) loose, broken, missing, worn (c) loose, broken, missing, worn (d) loose, broken, missing (e) broken, missing (f) loose, missing (g) broken, loose (h) broken, welded repair, damaged, missing (i) not within manufacturer's specifications Out of Service Criteria: (i) one-quarter of the leaves, or the main leaf, in any leaf spring assembly is broken or missing (ii) one or more leaves displaced in a manner that could result in contact with a tire, rim,

2-2 Coil Springs and Attachments

Visually inspect:

- (a) springs
- (b) control arms
- (c) torque arms (rear)
- (d) axial strut (applicable units)
- (e) radius arm (applicable units)
- (f) stabilizer bars (front & rear) if factory installed
- (g) spacers

Note: Spacers allowed under coil springs (if factory installed).

- **(h)** ride height (passenger car type)
- (i) rebound rubber

REJECT IF:

- (a) broken
- **(b)** bent, cracked, welded repair, control arm shaft or bushings loose
- (c) missing, bent, cracked, welded repair, bushings loose
- (d) missing, bent, cracked, welded repair, bushings loose
- (e) missing, bent, cracked, welded repair, bushings loose
- **(f)** missing, disconnected, broken, loose, welded or damaged
- **(g)** more than two spacers used between coils
- **(h)** not within manufacturer's specifications
- (i) missing

Out of Service Criteria:

- (i) coil spring broken into second or more coil, welded
- (ii) u-bolt, strut, radius arm, stabilizer bar, or control arm is broken, loose, cracked or missing so as to permit displacement of the axle from the normal position
- (iii) any spring locators or other axle positioning part(s) cracked, broken, loose or missing, resulting in shifting of any axle from its normal position
- (iv) any part used for attaching a torque, radius or tracking component assembly to the vehicle frame or an axle that is cracked, loose, broken or missing

(Does not apply to loose bushings in torque or track rods)

ITEM AND METHOD OF INSPECTION	REJECT IF:
2-3 Torsion Bar Springs and Attachments	(a) cracked, welded
Visually inspect:	(b) bent, cracked, welded repair, bushings loose
(a) torsion bar(b) control arms	(c) missing, bent, cracked, welded repair, bush- ings loose
(c) torque arms - rear (applicable units)	(d) missing, disconnected, broken, loose, welded, damaged
(d) stabilizer bar(s) (applicable units)	(e) missing, bent, cracked, welded, bushings loose
(e) axial strut (applicable units)(f) ride height	(f) not within manufacturer's specifications
(i) Hac height	Out of Service Criteria:
	(i) broken torsion bar spring in a torsion bar suspension
	(ii) any torsion bar attachment or other axle positioning part(s) cracked, broken, loose or missing, resulting in shifting of any axle from its normal position
2-4 MacPherson Strut	(a) broken
Visually inspect:	(b) bent, cracked, field welded, bushings loose
(a) coil spring	(c) rusted through that the strut could come
(b) control arm	detached; attaching bolts are loose, bent or misaligned
(c) mounting tower	(d) missing, disconnected, broken, loose, field
(d) stabilizer bar(e) ride height	welded, damaged, bushings loose
Note: Adjustment holes can be enlarged as long as	(e) not within manufacturer's specifications
they do not infringe on centre hole or flange.	
2-5 Shock Absorbers/Shock Struts Visually inspect:	(a) vehicle continues free rocking motion after 2 oscillations
(a) with vehicle on level surface, push down on	(b) defective
one corner of vehicle and release	(c) loose
(b) condition	(d) missing
(c) mountings	(e) leakage (not slight dampness)
(d) bushings	
(e) leakage	
2-6 Drive Wheel Bearings	(a) exceeds vehicle manufacturer's specifications
Inspect:	(b) loose, noisy
(a) free play	(c) leaking
(b) condition	
(c) seal	

ITEM AND METHOD OF INSPECTION	REJECT IF:
2-7 Free-Wheeling BearingsInspect:(a) free play(b) condition	(a) exceeds vehicle manufacturer's specifications (b) loose, noisy
 2-8 Constant Velocity Joints Visually inspect: (a) constant velocity joint seal (with the front of the vehicle raised) (b) constant velocity joint (while operating vehicle) (c) axles 	(a) leaking, missing(b) makes noise when wheels turned to extreme(c) bent, field welded
2-9 Road ClearanceVisually inspect underside of vehicle:(a) clearance between lowest part of the vehicle and a flat road surface	(a) any part of the vehicle extends below the rim of any wheel
Section 3: Brakes	
CAUTION: Anti-lock braking systems require special treatment and should be handled and inspected according to the manufacturer's recommended procedure.	Note: Micro lock system is not considered to be an acceptable parking brake.
3-1 Parking Brake(a) function(b) mechanical components(c) indicator light (OEM equipped)	 (a) does not operate, fails to hold vehicle, does not release fully (b) any component is seized, missing, incorrectly installed, broken, loose, worn that the brake is inoperable (c) fails to operate

ITEM AND METHOD OF INSPECTION	REJECT IF:
3-2 Brake Lines, Hoses and Master Cylinder Visually inspect: (a) hoses	(a) cracked, chafing, flattened, insecurely mounted, twisted, restricted, bulged, leaking, nonapproved type
(b) lines (c) master cylinder	(b) any repairs other than steel tubing, tubing connections not double flared, flattened, re- stricted, leaking, welded, non-approved type
(d) cap (e) hose protection	(c) fluid level is down by more than 12.5 mm (0.5 in) in either chamber or as recommended by the manufacturer, pedal fades under a steady pressure
	(d) missing, damaged, vent hole is plugged, gas- ket missing, damaged
	(e) hoses located within 38 mm (1.5 in) of exhaust system and not protected by heat shields
	Out of Service Criteria:
	(i) any visually observed leaking hydraulic fluid in the brake system
	(ii) seeping or swelling brake hose(s) under appilication of pressure
	(iii) fluid lines or connections leaking, restricted, crimped, cracked or broken
3-3 Brake Failure Indicators (where original equipment)	(a) the lamp fails to operate, the lamp is continu- ously illuminated
Visually and manually inspect: (a) warning indicator	(b) lamp comes on with engine running and brake pedal depressed firmly
(b) pressure differential switch	Out of Service Criteria:
	(i) brake failure or low fluid warning light is on
3-4 Brake Pedal Reserve and Leakage Test	(a) pedal is obstructed
(non power assisted)	(b) non skid surface is missing
Apply a moderate foot force to the pedal, and maintain it for 30 seconds.	(c) pedal continues to move slowly in the applied direction
(a) pedal accessibility	(d) pedal travel from free height to depressed height is more than 80% of the total possible
(b) pedal condition(c) leakage	travel, or does not meet the manufacturer's specifications
(d) travel	Out of Service Criteria:
	(i) the service brake pedal requires pumping to obtain the pedal reserve

ITEM AND METHOD OF INSPECTION	REJECT IF:
Brake Pedal Reserve and Leakage Test (Cont.) (hydraulic assisted) Stop engine, then depress brake pedal several times to eliminate all pressure. While maintaining light foot force on the pedal, start engine and observe if pedal moves slightly down when engine starts. Visually inspect: (a) travel	(a) pedal does not move slightly downward as engine is started while force is on brake pedal
3-5 Brake Pedal Reserve - Vacuum Power Brakes With the engine shut off, all vacuum exhausted, and without pumping or repeated brake pedal applications, apply a moderate foot force to the pedal, and maintain it for 30 seconds. Visually and with a measuring device, inspect: (a) pedal accessibility (b) pedal condition (c) leakage (d) travel	 (a) pedal is obstructed, broken, missing (b) non skid surface is missing (c) pedal continues to move slowly in the applied direction (d) d) pedal travel from free height to depressed height is more than 80% of the total possible travel, or does not meet the manufacturer's specifications Out of Service Criteria: (i) the service brake pedal requires pumping to obtain the pedal reserve
3-6 Vacuum Brake System Visually and manually inspect: (a) lines and hoses (b) leaks (c) clamps (d) tank (if fitted) 3-7 Power Brake Operation	 (a) collapsed, broken, chafed (b) any leakage detected (c) loose, missing, broken (d) loose, damaged (a) does not operate
With the engine off, depress brake pedal several times to eliminate vacuum, apply light force on brake pedal and start engine. Visually inspect booster: (a) operation (b) condition	 (b) loose, damaged Out of Service Criteria: (i) the service brake pedal does not move toward floor board when engine is started with brakes applied

3-8 Hydraulic Booster System

With engine stopped eliminate all pressure. Maintain light foot force and start engine.

Visually inspect:

- (a) pedal travel
- (b) fluid level
- (c) lines and hoses
- (d) leakage
- (e) belts

3-9 Drum Brakes

Remove at least one front and one rear wheel on opposite sides of vehicle.

Note: Wheel removal does not apply to new vehicles where New Vehicle Information Statement (NVIS) or Certificate of Origin for vehicle is supplied by the Canadian or U.S. manufacturer.

(a) Bonded Lining

Visually and with the use of a steel scale or Vernier caliper inspect:

- (i) thickness
- (ii) condition
- **(b)** Riveted Lining (total lining thickness)

Visually and with the use of a steel scale or Vernier caliper inspect:

- (i) thickness
- (ii) condition
- (c) Mechanical Components

Visually inspect:

- (i) self-adjusters
- (ii) self-adjuster cables
- (iii) anchor pins and springs
- (iv) backing plate
- (v) parking brake cables and linkage
- (d) Wheel Cylinders

Visually inspect:

- (i) operation
- (ii) leaks
- (iii) dust seals

REJECT IF:

- (a) no movement in pedal is detected
- (b) fluid level below "ADD" mark
- (c) broken, kinked, restricted
- (d) leakage evident at pump, booster lines or hoses
- (e) frayed, cracked

Out of Service Criteria:

- the service brake pedal does not move toward floor board when engine is started with brakes applied
- (a) Bonded Lining
 - (i) worn to 1.6 mm (1/16 in) or less, at any point other than chamferred area of lining
 - (ii) broken, cracked, lining insecurely bonded to the shoe, contaminated (contaminated linings must be replaced)
- **(b)** Riveted Lining (total lining thickness)
 - (i) worn to 3.2 mm (1/8 in) or less, at any point other than chamferred area of lining
 - (ii) broken, cracked, contaminated (contaminated linings must be replaced)
- (c) Mechanical Components
 - (i) seized, extensively worn or inoperable, missing, wrong thread for wheel installed
 - (ii) missing, broken, inoperable
 - (iii) extensively worn, broken, loose, missing
 - (iv) worn sufficiently to restrict free movement of shoes
 - (v) missing, loose, broken, inoperable
- (d) Wheel Cylinders
 - (i) inoperable, seized
 - (ii) leaking
 - (iii) damaged, missing, deteriorated

Drum Brakes (Cont.)

(e) Brake Drums

Visually inspect for:

- (i) cracks
- (ii) damage
- (iii) wear measure inside diameter of drum at 2 locations approximately 90° apart by using an approved gauge – document drum measurement on inspection report
- (iv) operation with engine not running apply the brakes, then attempt to rotate the wheel assembly and inspect operation for brake effectiveness

3-10 Disc Brakes

Remove at least one front and one rear wheel on opposite sides of vehicle.

Note: Wheel removal does not apply to new vehicles where New Vehicle Information Statement (NVIS) or Certificate of Origin for vehicle is supplied by the Canadian or U.S. manufacturer.

(a) Components

Visually and with the use of a micrometer or a dial indicator, inspect:

- (i) rotors
- (ii) calipers
- (iii) pads
- (b) Operation

With engine not running apply the brakes, then attempt to rotate the wheel assembly and inspect operation:

(i) brake effectiveness

REJECT IF:

- (e) Brake Drums
 - (i) crack extends to open edge of the drum, external cracks are present
 - (ii) friction surface is excessively scored
 - (iii) diameter exceeds the manufacturer's limit marked on the drum
 - (iv) wheels rotate

Out of Service Criteria:

- (i) any linings that are contaminated
- (ii) bonded linings worn to 0.8 mm (1/32 in), riveted 2.4 mm (3/32 in)
- (iii) any drum diameter exceeds the maximum diameter marked on the drum
- (iv) an external crack that opens upon brake application
- (v) absence of any braking action
- (a) Components
 - (i) broken, excessively scored, thickness less than manufacturer's specifications marked on rotor, lateral runout exceeds 0.125 mm (.005 in) on disc 380 mm (15 in) diameter or less, grooves exceed 2.3 mm (.090 in)
 - (ii) leaking, piston seized, caliper seized, insecurely mounted
 - (iii) damaged, seized, contaminated, bonded linings worn to 16mm (1/16 in) at thinnest point, riveted linings worn to 3.2 mm (1/8 in) at thinnest point of lining
- (b) Operation
 - (i) wheels rotate

Out of Service Criteria:

- (i) any pads that are contaminated
- (ii) thickness of any rotor less than the minimum thickness marked on the assembly
- (iii) absence of any braking action
- (iv) bonded pads worn less than 0.8 mm (1/32 in), riveted 2.4 mm (3/32 in)
- (v) cracks other than heat cracks to hub

3-11 Proportioning Valve

(if equipped)

(a) Determine if rear wheel brakes are working. **CAUTION:** Manufacturer's procedures should be followed.

REJECT IF:

(a) rear wheels fail to lock

Machining and Wear Limits - Brake Drums

- (a) No combination of machining and/or wear shall exceed a manufacturer's limit.
- (b) If manufacturer's limit not given, then no combination of wear and/or machining shall exceed original diameter by more than the following limits:

Original Diameter	Limit
All passenger cars	1.5 mm (0.60 in)
360 mm (14-1/8 in) or less	2.3 mm (0.90 in)
Greater than 360 mm (14-1/8 in)	3.0 mm (0.120 in)

Machining and Wear Limits - Brake Rotors

Original thickness may not be decreased by any combination of wear and machining below manufacturer's minimum thickness stamped on the rotor.

Section 4: Steering

4-1 Steering Lash

On vehicles equipped with power steering, the engine must be running and the fluid level, belt condition and tension, all adequate before the testing.

(a) With front wheels in straight ahead position, turn steering wheel until turning motion can be observed at either of front wheels. Mark rim of steering wheel and, using pointer, turn steering wheel in the opposite direction until motion can be again observed at front wheel.

Measure the distance between the mark and the pointer.

(a) total movement greater than shown in the following table is encountered at the steering wheel rim before the front wheels indicate any movement:

Type of Steering	Lash Exceeds
Power Steering	50 mm (2 in)
Manual Steering	76 mm (3 in)
Volkswagen/Audi Only	no play allowed

Or manufacturer's specifications

4-2 Steering Travel

Turn steering through a full right and left turn.

Visually and manually inspect:

- (a) manually for binding
- (b) manually for jamming
- (c) steering stops (visually)
- (d) travel left and right
- (e) steering wheel

4-3 Steering Linkage/Rack and Pinion

Visually inspect any modification to the rod ends, drag link or idler arm.

Power Steering/Manual Steering

Rock steering left and right, and observe movement in steering components.

Visually inspect:

- (a) tie rods
- **(b)** tie rod ends
- (c) drag link and idler arm
- (d) pitman arm
- (e) steering box/rack and pinion
- **(f)** cotter pins/lock nuts
- (g) bellows seal

REJECT IF:

- (a) binding during cycle
- (b) jamming during cycle
- **(c)** missing, evidence of tires rubbing on suspension or body parts
- (d) number of turns from the straight ahead position to full left lock does not equal (plus or minus 1/2 turn) number of turns from the straight ahead to the full right lock position
- **(e)** less than 330 mm (13 in)

Out of Service Criteria:

(i) any modification or other condition that interferes with free movement of any steering component

Injected with any plastic/polymer compound or modified in any way that conceals wear.

- (a) bent, welded
- **(b)** looseness is evident, bent, welded, seized, injected
- (c) looseness is evident, bent, welded, seized, injected
- (d) loose, welded, injected
- **(e)** loose, insecurely mounted, bolts missing or loose
- **(f)** missing, inferior substitute
- (g) split, missing

Out of Service Criteria:

- (i) any mounting bolt(s) on steering gear box loose or missing
- (ii) any crack(s) in gear box, mounting brackets, or frame adjacent to box
- (iii) any nut is loose or missing on a tie rod, pitman arm, drag link, steering arm, idler arm or tie rod sleeve
- (iv) movement of any stud nut under a steering load
- (v) any ball and socket joint in the steering linkage shows axial looseness
- (vi) any movement (not rotational) between any linkage member and its attachment point

ITEM AND METHOD OF INSPECTION	REJECT IF:
 4-4 Steering Column and Coupler Visually and manually inspect the steering column and flexible coupling in the column for: (a) condition (b) security (c) telescope/tilt steering movement 	 (a) pot joint or rag joint is badly misaligned or deteriorated (b) column brackets loose or missing; clamp bolt, nut, locking roll pin is loose or missing (c) play is in excess of 6.4 mm (.250 in) Out of Service Criteria: (i) any absence or looseness of any u-bolt, or other positioning part(s) in the steering column (ii) worn, faulty or weld-repaired universal joint (iii) steering wheel not properly secured
 4-5 Kingpins Visually inspect: (a) modifications (b) horizontal movement attempt to rock in and out and observe movement at extreme top or bottom of tire (c) check vertical movement between spindle support and axle (d) kingpin or thrust bearing 	 (a) injected with any plastic/polymer compound or modified in any way that conceals wear (b) in excess of 6.5 mm (1/4 in) for wheels under 406 mm (16 in) (c) movement is in excess of 2.5 mm (.100 in) measured vertically (d) seized
4-6 Ball Joints Note: Refer to manufacturer's specifications for test methods and rejection criteria for a, b, c only Visually inspect: (a) modifications (b) horizontal movement (c) vertical movement	 (a) injected with any plastic/polymer compound or modified in any way that conceals wear (b) movement is in excess of the manufacturer's specifications (c) movement is in excess of the manufacturer's specifications
4-7 Ball Joint SecurementVisually inspect:(a) ball joints at spindle(b) ball joints at control arms	(a) loose in spindle(b) loose in control arm, not seated properly
 4-8 Power Steering Visually inspect: (a) belts (b) hoses (c) pump (d) cylinders (if equipped) (e) steering box (f) assist 	 (a) missing, loose (b) leaking, (seepage permitted) (c) loose, leaking (seepage permitted) (d) loose, leaking (e) loose, leaking (seepage permitted) (f) no assist is evident

ITEM AND METHOD OF INSPECTION	REJECT IF:
For Total Loss Vehicles Only (a) Front, each wheel (i) caster (ii) camber (iii) toe (iv) SAI (v) included angle (vi) total toe (vii) set back (viii) turning angle (b) Rear, each wheel (i) caster (ii) camber (iii) toe (iv) total toe (viv) total toe	 (a) not within manufacturer's alignment specifications (b) not within manufacturer's alignment specifications
Section 5: Instruments and Auxillia	ary Equipment
5-1 Speedometer	(a) does not function
5-2 Odometer	(a) does not function
5-3 Automatic Transmission Visually inspect: (a) shift indicator	(a) does not function, not accurate
5-4 Horn Inspect: (a) activating control (b) audibility	(a) not readily accessible to driver, does not function(b) not clearly audible, sound of horn plays a musical tune
5-5 Clutch PedalVisually inspect:(a) pedal(b) anti-slip provisions	(a) missing, loose, linkage worn (b) missing

REJECT IF:

Section 6: Lamps

6-1 Lamps

All lamps mentioned below except a hazard lamp must be inspected with lights on.

All vehicle lighting must meet **CMVSS**, **DOT or SAE** standards for lights and signalling devices.

Visually inspect:

- (a) Headlamps
- **(b)** tail lamp(s)
- (c) stop lamps
- (d) centre high-mounted stop lamp (if equipped) (required January 1, 1987 on passenger cars)
- (e) turn signal lamps
- (f) hazard warning lamps (where equipped)
- (g) side marker lamps (where equipped)NOTE: A lamp may be both side marker and clearance lamp if visible from side and end.
- (h) front parking lamps
- (i) backup (if equipped)
- (j) fog lamps
- (k) driving lamps
- (1) roll-bar high-mounted lamps and off-road lamps
- (m) other lamps
- (n) clearance lamps (not required on vehicles under 2.05 m (81 in.) width)
- (o) identification lamps (not required on vehicles under 2.05 m (81 in.) width)
- (p) daytime running lamps

Auxiliary equipment is placed on, in, or in front of any lamp (except originally equipped with transparent covers).

Any lamp is missing or not securely mounted: fails to illuminate properly; any lens broken or cracked so as to impair its effectiveness; modified wiring in poor condition; water (not just moisture droplets) inside the lamp.

- (a) not 2 or 4, not white, not facing front as far apart as practical; not proper filament
- **(b)** not clearly visible, not the proper filament(s) lit; not red
- **(c)** not clearly visible, not red, not the proper filament(s) lit
- (d) not red, comes on with signal lights
- **(e) front:** not white or amber; **rear:** not amber or red; not clearly visible, not proper filament lit, not flashing, indicator does not show correct turn direction
- **(f)** all hazard warning lamps do not operate in unison
- (g) not 4 located 2 on each side, front: amber, rear: red; not clearly visible
- (h) not white or amber, not clearly visible
- (i) more than 2, not white, not clearly visible, illuminated in forward gear
- (j) more than 2 on front, (not white or yellow)
- (k) more than 2 on front, not white
- (1) opaque covers not in place
- (m) red light showing toward front or white light showing toward rear
- (n) (if equipped) does not have 4, not located at widest part of vehicle, front not amber, rear not red
- (o) (if equipped) does not have 6, (3 amber on front, three red on rear), not as high and near centre as practical, not clearly visible
- (p) not equipped on all vehicles manufactured after December 1, 1989; not located on front of vehicle; not white or yellow in colour; does not operate continually when engine operating and master lighting switch is not in the "ON" position

ITEM AND METHOD OF INSPECTION	REJECT IF:
Lamps (Cont.)	Out of Service Criteria: The vehicle does not have: (i) at least one headlamp operative on low beam (ii) at least one steady-burning red lamp on the rear and visible from 154 m (500 ft) (iii) at least one operative stop lamp on the rear (iv) turn signals on each side at rear
6-2 Reflectors Visually inspect all reflectors	any reflector missing, insecurely mounted; any lens broken, cracked, modified such as to impair its effectiveness.
 6-3 Indicator and Instrument Panel Lamps Visually inspect: (a) brake warning indicator (if equipped) (b) high beam indicator (c) turn signal indicators (d) hazard lamp indicators (e) instrument panel lamps (speedometer) 6-4 Headlight Aiming Visually Inspect: (a) aim 	 (a) fails to operate (b) fails to operate (c) fails to operate (d) fails to operate (e) fails to operate (a) not within manufacturer's specifications
Section 7: Electrical	<u>i</u>
7-1 Wiring Where visible, inspect: (a) security (b) insulation	(a) loose and contacts moving parts (b) bare wire exposed
7-2 BatteryVisually inspect:(a) tray or box(b) cover or hold down	(a) weakened, cracked (b) missing, insecure
7-3 Switches (for operation of vehicle)Visually and manually inspect: (a) operation(b) condition	(a) a vehicle system switch fails to function (b) damaged

ITEM AND METHOD OF INSPECTION	REJECT IF:				
Section 8: Body					
 8-1 Hood and Safety Catch Manually inspect hood operation and visually inspect: (a) latches (b) secondary latches (c) hinges 	 (a) broken, missing, seized, insecurely mounted, inoperable, will not close or open easily (b) broken, missing, inoperable (c) missing, broken, cracked, seized, inoperable 				
 8-2 Conventional Body Visually inspect for: (a) torn metal/moulding (b) rear quarter panels (c) wheel spray protection (d) wheel panels 	 (a) sharp edges (protruding so as to be hazardous to passengers, pedestrians or cyclists) (b) rusted through sufficiently or improperly repaired to allow exhaust gases to enter occupant compartment or affect safety (c) mud flap or fenders not full width of tire, or height of bottom edge greater than 2/3 distance from centre of wheel to extreme rear of vehicle (d) missing, incomplete, perforated to allow exhaust gases into trunk/passenger compartment 				
 8-3 Frame and Mounts With the vehicle raised, visually inspect: (a) frame rails (b) engine/transmission mounts/bolts (c) cross members (d) body mounts/insulator 	 (a) improperly repaired, cracked, broken, bent, perforated or separated due to corrosion between front and rear suspension mounts and rear frame to body mounts (b) missing, loose, broken (c) improperly repaired, cracked, broken, bent or separated due to corrosion or collision damage to a depth as to weaken member so as to effect the safety and structural integrity of the vehicle (d) split, broken, cracked, loose, missing, missing bolts 				

ITEM AND METHOD OF INSPECTION	Reject If:				
Frame and Mounts (Cont.)	Out of Service Criteria: (i) any cracked, rusted, loose, sagging or broken				
	frame member permits shifting of the body onto moving parts				
	(ii) any other condition indicating an imminent collapse of the frame				
	(iii) any cracked, rusted, loose or broken frame member adversely affecting the support of any functional components such as steering gear, engine, transmission, body parts and suspension				
	(iv) a 38 mm (1 1/2 in) or longer crack in a frame web is directed towards bottom of flange				
	(v) any crack extends from a frame web around radius and into bottom flange				
	(vi) crack 25 mm (1 in) or longer in bottom flange				
8-4 Bumpers (front and rear)	(a) missing, loose, broken, wood material, torn portion is protruding so as to create a hazard				
Visually inspect:	(b) collapsed				
(a) condition(b) shock absorber (if equipped)	(c) cars - centre of bumper not between 355 - 560 mm (14 in - 22 in) from the ground				
(c) height (d) dimensions	trucks - lowest part of front bumper, higher than 740 mm (29 in) from the ground (rear bumper not mandatory)				
	(d) less than track width, horizontal surface less than 76 mm (3 in)				
	trucks (front) 100 mm (4 in)				
8-5 Floor (a) condition	(a) rusted through or allows exhaust gases to enter the vehicle				
8-6 UnibodyVisually inspect:(a) floor pan(b) strut towers and spring shackle supports	(a) improperly repaired or rusted through to allow exhaust gases entering occupant compartment or the safety and structural integrity features of the vehicle are compromised by the deteriorated condition				
(c) body panels(d) high strength, front and rear structural side	(b) cracked, broken, rusted through to a depth so as to weaken supports				
members	(c) perforated as to weaken structural integrity of vehicle or allow exhaust gases into occupant compartment				
	(d) oxy-acetylene welded or braised, cracked, broken, rusted through to a depth so as to weaken member				

Unibody (Cont.)

- (e) welding
- (f) fenders and mud flaps
- **(g)** frame and/or structural body components:
 - (i) corrosive deterioration or deterioration of structural components such as frame assemblies in full frame or semi-monocoque vehicle construction and floor pan on unibody and monocoque construction
 - corrosive weakening can be evaluated by tapping with rounded end of a 10 to 12 ounce ball peen hammer or jacking at front or rear and measuring rear edge of door to "B" pillar clearance before and after jacking
 - (ii) evidence of collision damage or additional welding on frame rails
 - (iii) structural components (which include rad supports, inner fender skirts, floor pan, rocker panels, engine compartment side rails, upper reinforcements, lower body rails in the rear, inner fender wells, and luggage compartment floors)

REJECT IF:

- **(e)** components welded when originally bolted or riveted
- (f) not full width of tire, height of bottom edge greater than 2/3 distance from centre of wheel to the extreme rear of vehicle
- **(g)** frame and/or structural body components:
 - (i) frame rails or cross members are perforated or separated due to corrosion anywhere between the front and rear suspension mountings and near frame-to-body mountings on vehicles with frames and sub-frames and when unibody sheet metal is separated
 - perforated or flaking in area near suspension component mounting or where structural shapes have been stamped into the floor pan
 - frame rails, cross members, subframe assemblies and unibody or monocoque stamped structural shapes are distorted, or cracking is visible
 - signs of heating to straighten unibody structure
 - tapping with hammer causes indentations indicating extensive corrosive weakening of metal in structural shapes
 - rear edge of door to "B" pillar clearance changes significantly during jacking
 - (ii) frame rail shows evidence of welding or additional gusseting; frame rail twisted or bent
 - (iii) originally bolted components welded as part of repair

8-7 Doors and Door Latches

Inspect:

- (a) handles (interior, enclosed vehicle)
- **(b)** catches
- (c) hinges

- (a) missing, broken, inoperable
- **(b)** loose, worn or misaligned so as not to latch on primary and secondary catches
- (c) cracked, missing, loose so door will not close properly, seized

8-8 Windshield

Refer to "Windshield Damage Defined" on page 23.

Note: Critical viewing area is the area swept by the windshield wipers.

Visually inspect for:

(a) condition

Over the whole windshield, visually inspect:

- **(b)** missing area
- **(c)** tinting (other than original by vehicle manufacturer)
- **(d)** type (marking applies to all vehicles manufactured on and after 1952)

Seated in the driver's seat in a normal position, visually inspect:

(e) obstructions to view

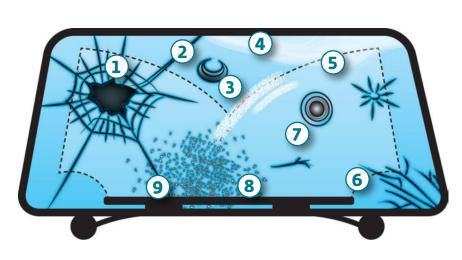
REJECT IF:

- (a) outright breakage
 - (i) two or more cracks over 279 mm (11 in) long in the critical viewing area of the driver
 - (ii) any star or shot damage over 51 mm (2 in) in diameter in the critical viewing area of the driver
 - (iii) two or more stone or shot damages larger than 25 mm (1 in) in the critical viewing area of the driver
 - (iv) four or more star or shot damages larger than 25 mm (1 in) in diameter in the critical viewing area of the windshield
 - (v) if cloudiness extends more than 76 mm (3 in) into the windshield (measured from outer edge)
 - (vi) broken glass showing sharp edge
 - (vii) cracked through both layers of glass
- **(b)** any portion of windshield glass, or the complete windshield glass area, missing
- (c) tinting of windshield more than 127 mm (5 in) below top or is non transparent
- (d) windshield is other than a laminated safety glass of type AS-1 or AS-10, 14 or is not marked with the AS grade (AS-1 or AS-10, 14 only)
- (e) the view of the driver over the front of vehicle is obstructed by more than a 51 mm (2 in) upward projection into the horizontal forward vision area of the windshield as measured from the rearmost part of the hood or bottom edge of windshield whichever is highest

ITEM AND METHOD OF INSPECTION	REJECT IF:
 8-9 Windshield Wipers and Washers Visually inspect both sides for: (a) number fitted (b) operation (c) blades (d) arms (e) washers (applies to all vehicles manufactured on or after Jan. 1, 1971) 	 (a) less than original installation (b) fails to operate (c) torn, hardened, missing; fails to wipe 75% (approximately) of the windshield; fails to contact the windshield properly (d) missing, bent, distorted (e) fails to function, fails to clean an effective area in 10 cycles, not aligned Out of Service Criteria: (i) any wiper is inoperative, or there are missing or damaged parts that render a wiper ineffec- tive on the driver's side
 8-10 Windows (side and rear) Visually and manually inspect: (a) type (marking applies to all vehicles manufactured on and after Jan.1, 1971) (b) condition (c) operation (d) tinting/obstructions (other than original by vehicle manufacturer) 	 (a) not safety glass type, not so marked with AS 1, 2, 10, 11 (b) any window is cracked through both layers, broken or clouded so as to restrict vision; rear window is broken or clouded to the extent that the driver is unable to see 60m (200 ft) to the rear (Trucks do not require rear window) (c) left front window does not operate as intended (d) after June 1, 1993 have tinting contrary to Manitoba Regulation 99/93
8-11 Mirrors – Interior (passenger cars required) Visually inspect: (a) presence (b) condition (c) adjustment	(a) missing(b) cracked, broken, obscured(c) not adjustable, will not maintain adjustment
8-12 Mirrors – Exterior Visually inspect: (a) left outside mirror (b) right outside mirror (c) view (d) mounts (e) glass condition (f) adjustment NOTE: All trucks and buses require left and right outside mirrors regardless of model year.	 (a) missing from passenger vehicles manufactured after Jan.1, 1971; missing from any truck or bus regardless of model year (b) missing from multipurpose passenger vehicles manufactured on or after Sept. 1, 1988; missing from any truck or bus regardless of model year (c) mirror does not give a clear view to the rear, obstructed (d) insecure, loose, excessive protrusion (e) cracked, pitted, vision reduced (f) not adjustable

ITEM AND METHOD OF INSPECTION	REJECT IF:
8-13 Sun Visors Visually and manually inspect: (a) location (b) attaching parts (c) positioning	(a) missing on driver's side(b) broken, bent, loose(c) cannot be maintained in a set position
 8-14 Windshield Defroster Turn on the defroster fan and feel for warm air coming out of the ducts. (a) fan operation (b) air flow (c) controls 	 (a) fails to operate (b) insufficient volume of air as to clear area swept by wipers (auxiliary fans may be used to assist the defroster) (c) fails to operate as designed
8-15 Interior Heaters Turn on fan and feel for warm air coming out of heater duct. Visually and manually inspect: (a) fan (b) condition	(a) fails to operate (b) any leaks are present
8-16 Seat - Driver's Visually inspect: (a) driver's seat	(a) not tightly secured to the floor, frame broken, adjusting mechanism does not operate, will not lock in position, covering material torn and exposing any metal component
8-17 Seats - Passenger's Visually inspect for: (a) passenger seat	(a) not tightly secured to the floor, frame broken, adjusting mechanism does not operate, will not lock in position
8-18 Seat BeltsVisually inspect:(a) seat belts (applicable model year 1971 and subsequent year)(b) retractors	 (a) seat belts are missing, webbing is frayed, split, torn; belt buckles do not operate properly; belt anchorages or mounting surfaces are weakened, damaged, deformed, missing (b) fails to allow belt to extend to its maximum length, does not release properly
8-19 Trunk Visually and manually inspect: (a) trunk lid (b) seal	 (a) will not close, latch won't hold, hinges damaged, perforations in trunk area to allow exhaust gases to enter (b) missing or deteriorated to permit exhaust gases into trunk area

Windshield Damage Defined

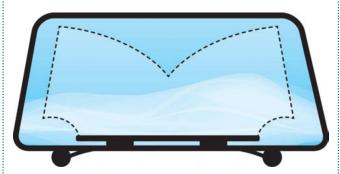


- 1) Outright Breakage
- 2) Half Moon
- 3) Wiper Arm Damage
- 4) Cloudiness
- 5) Star or Shot Damage
- 6) Corner Cracks
- 7) Bullseye
- 8) Strain Crack
- 9) Sand Pits or Haze

PASSENGER SIDE

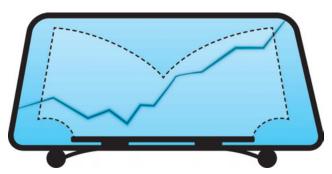
PASSENGER SIDE

DRIVER'S SIDE PASSENGER SIDE



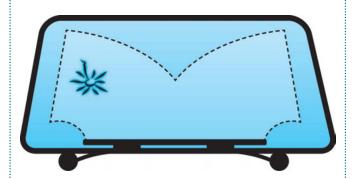
Cloudiness extends MORE THAN 3" (76 mm) into the windshield (measured from outer edge) – **RE-**

DRIVER'S SIDE



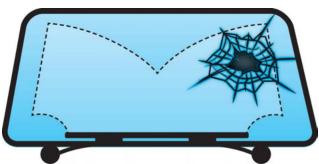
Crack extending the entire length of the windshield – **DO NOT REJECT**

DRIVER'S SIDE PASSENGER SIDE



Star or shot damage LESS THAN 2" (51 mm) in diameter in the Critical Viewing Area of the windshield - DO NOT REJECT

DRIVER'S SIDE



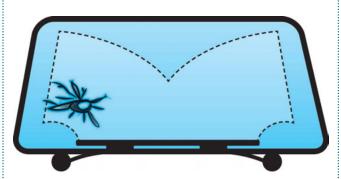
Outright breakage – **REJECT**

Windshield Damage Defined (Cont.)

DRIVER'S SIDE PASSENGER SIDE

Two cracks in the Critical Viewing Area of the driver are over 11" (279 mm) in length – **REJECT**

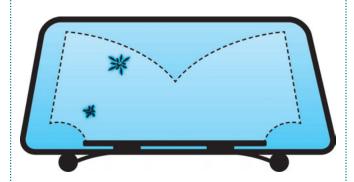
DRIVER'S SIDE PASSENGER SIDE



Star or shot damage OVER 2" (51 mm) in diameter in the Critical Viewing Area of the driver's side of the windshield – **REJECT**

DRIVER'S SIDE

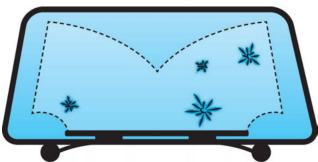
PASSENGER SIDE



Two or more star or shot damage LARGER THAN 1" (25 mm) in the Critical Viewing Area of the driver's side of the windshield – **REJECT**

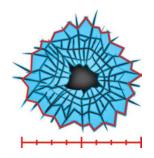
DRIVER'S SIDE

PASSENGER SIDE



Four or more star or shot damage LARGER THAN 1" (25 mm) in the Critical Viewing Area of the windshield – **REJECT**

How to measure stone or shot damage:



Measure across the largest extending ring

Star or shot damage to windshields causes damage rings to run outside of the damaged areas. To take an accurate measurement, measure across the largest extending ring.

Glass that does not afford clear vision is:

- 1) **Extreme** cloudiness running more than 3" (76 mm) into the windshield.
- 2) Distorted plastic curtains.
- 3) **Extreme** damage caused by blowing sand or other pitting.
- 4) Extreme windshield wiper damage.

REJECT IF:

Section 9: Tires and Wheels

9-1 Tread Depth

Visually examine all tread wear indicators:

For tires without tread wear indicators, using a tread depth gauge, measure the tread depth in any two adjacent major tread grooves at three circumferential locations spaced approximately equally around the outside of the tire:

- (a) all tires
- (b) studded tires (if any fitted)

Note: If a vehicle is presented for an inspection with studded tires between April 30 and October 1, the driver should be warned that this is contrary to regulations

Tread wear indicators contact road in any two adjacent grooves at three points equidistantly spaced around the outside of the tire.

- (a) less than 1.6 mm (2/32in) tread is remaining
- (b) only one tire on drive axle studded, rear driveaxle tires not studded with front tires studded, not all tires studded on a vehicle with frontwheel drive

9-2 Tread Section of Tire

Visually inspect for:

Front Tires

- (a) damage
- (b) separation
- (c) flat spots and cupping
- **(d)** section repairs
- (e) run-out

Rear Tires

- (a) damage
- (b) separation
- (c) flat spots and cupping
- (d) section repairs
- (e) run-out

9-3 Sidewalls

Visually inspect for:

- (a) bulges
- **(b)** cords
- (c) matching tire size
- (d) valve stems
- (e) direction of rotation marking

Front Tires

- (a) has a cut exposing cord greater than 25 mm (1 in)
- (b) has any tread separation, any peeling
- (c) tread no longer evident in cupped area
- **(d)** has any breaks, boots, blow-out patches
- (e) run-out indicates broken or slipped belt

Rear Tires

- (a) has a cut exposing cord greater than 25 mm (1 in)
- **(b)** has any tread separation, any peeling
- (c) tread no longer evident in cupped area
- (d) has any breaks, boots, blow-out patches
- (e) run-out indicates broken or slipped belt
- (a) has any bulges, bumps, lumps apparently caused by separation of cords, belts or by partial failure of the tire structure including the bead area
- **(b)** has any wear or damage, such as cuts, that exposes cords
- (c) mismatching tires for example: different size tires on one axle, or one of a dual pair more than 13 mm (0.5 in) different diameter
- (d) seriously damaged, leaking
- (e) a directional tire is incorrectly mounted

ITEM AND METHOD OF INSPECTION	REJECT IF:				
9-4 Tire Pressure With use of a gauge, check: (a) pressure	(a) pressure not within recommended range set by vehicle manufacturer or as marked on sidewall				
 9-5 Wheel Nuts, Studs Visually and manually check: (a) tightness and thread engagement (b) condition (c) cross threading 	 (a) loose, inadequate thread engagement (b) cracked, crooked, missing, seized from rust (c) cross-threaded Out of Service Criteria: (i) missing nuts exceed 25% of total nuts on a wheel 				
 9-6 Wheels Visually inspect each wheel: (a) stud holes (of wheels removed for brake check) (b) condition (c) repaired damage (d) centre-lock knock-off type 	 (a) stud holes elongated (b) rim or disc is crooked, bent, cracked: spoke broken, missing (c) field welded (d) loose on hub splines 				
9-7 Tire Type Visually inspect: (a) examine for tire type	(a) 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				
	Out of Service Criteria: (i) any tire that is part of a single wheel mount on any vehicle has any part of the breaker strip or carcass ply showing in the tread, or worn-through plies in the sidewall (ii) a tire is marked "NOT FOR HIGHWAY USE" or otherwise marked and having a like meaning except Slow Moving Vehicles carrying a Slow Moving Vehicle triangle				

Section 10: Body Integrity for Total Loss Vehicles Only

Body Structural Integrity Inspection Standards

The repair/rebuild process shall meet or exceed the rebuilding standards specified by the Inter-Industry Conference on Auto Collision Repairs (I-CAR) and/or the Original Equipment Manufacturer (OEM). Dimensional manuals such as those produced by Mitchell are acceptable for gauging vehicle specifications.

In any case where there is inconsistency OEM standards will prevail.

The alignment of the chassis or of the unitized body must conform to the manufacturer's standards and tolerances relative to the safe use of the vehicle, in particular with regard to the position of the suspension and steering components.

The four wheels must be aligned in accordance with the manufacturer's tolerances.

Body Structural Integrity Inspection Standards (Cont.)

The repair and assembly of the components of the body must be carried out in such a way as to provide occupant protection that is equal to/or exceeds I-CAR or OEM standards.

Unrepairable components of the structure must be replaced.

Repairable components of the body must be repaired in accordance with methods or techniques that do not affect their original properties in accordance with I-CAR or OEM recommendations.

The assembly joints of the body must be located in the places recommended by the manufacturer or other agencies such as I-CAR.

Those joints which are a part of a repair or replaced component must be accessible when the structural integrity inspection is made. No sealant, soundproofing or rustproofing compound shall be applied to the areas repaired or replaced prior to the inspection.

All structural components of a vehicle must be assembled using methods that do not affect the mechanical and metallurgical properties of the component.

Body Structural Integrity is defined as:

"Critical components designed as stress and weight/load bearing member/elements such as radiator support, inner fender skirts, floor pan, rocker panels, engine compartment side rails, upper reinforcements, lower body rails in the rear, inner fender wells, luggage compartment floors and the unibody are within 3 mm (less than 1/8 in) of the critical manufacturing dimensions, alignments and tolerances. All fits and alignments are determined by the accuracy of the welded structural panels."

Note: This is in addition to the mechanical inspection.

If you see any of the following, you MUST refer the vehicle for a structural integrity assessment.

- 1) Hood:
 - Crush Zone modifications on the hood.
 - Damage to crush zone on the hood.
- 2) Body:
 - Torn metal on body
- 3) Frame Rails and Mounts:
 - Cracked, broken, bent perforated or separated due to corrosion or collision damage.
- 4) Unibody:
 - Rusted through sufficiently or improperly repaired to allow exhaust gases to enter occupant compartment or affect safety and/or structural integrity.
 - Kinks or wrinkles in sub sheet metal eg. cowl, strut towers, firewall, floor pans, suspension.
- 5) Frame/Structural Components:
 - Evidence of frame splicing.
 - Signs of welding on unibody.
 - Welding on frame or suspension components that were originally bolted item.
 - Windshield not properly installed or improper sealant used Ref. CMVSS 212, 216

The following is an advisory item and should not constitute a failed inspection:

Air bags not installed on a vehicle equipped with same - advise owner.

ITEM AND METHOD OF INSPECTION	Reject If:			
10-1 Hood Manually inspect hood operation and visually inspect: (a) latches (b) secondary latches (c) hinges (d) safety retainer pins (e) hood reinforcement (f) crush zones	 (a) broken, missing, seized, insecurely mounted, inoperable, will not close or open easily (b) broken, missing, inoperable (c) missing, broken, cracked, seized, inoperable (d) missing (e) hood reinforced other than by manufacturer (f) any modifications to crush zones 			
10-2 Body Visually inspect for: (a) torn metal (b) rear quarter panels (c) floor (d) body panels (e) wheel panels	 (a) sharp edges damaged in such a manner that factory installed lamps cannot be secured as per factory installation, missing section torn away so road spray is not controlled (b) rear quarter panels mud flap or fenders not full width of tire, or height of bottom edge greater than 2/3 distance from centre of wheel to extreme rear of vehicle fitted so that it could cause interference with steering mechanism or cause rubbing of tires when suspension bottomed and steering moved block to block, includes rear wheels 			
	 (c) floor rusted through sufficiently to cause a hazard or allow exhaust gases to enter the vehicle improperly repaired to compromise the safety and structural integrity features of the vehicle (d) perforated or dented in excess of 50 mm (2 in) from original body design so as to affect the safety and structural integrity features of the vehicle (e) wheel panels missing, incomplete improperly repaired to affect the safety and structural integrity of the vehicle perforated to allow exhaust fumes into trunk/passenger compartment 			

ITEM AND METHOD OF INSPECTION	REJECT IF:
 10-3 Frame Rails and Mounts With the vehicle raised, visually inspect: (a) frame rails (b) body mounts (c) cross members 	 (a) repair does not conform to OEM or I-CAR Standards, cracked, broken, bent, perforated or separated due to corrosion between front and rear suspension mounts and rear frame to body mounts (b) split, broken, cracked, loose, missing, missing
(d) welded and heated areas	bolts (c) repair does not conform to OEM or I-CAR Standards, improperly repaired, cracked, broken, bent or separated due to corrosion or collision damage to a depth as to weaken member
	(d) not coated, repair does not conform to OEM or I-CAR Standards
	Out of Service Criteria:
	(i) any cracked, rusted, loose, sagging or broken frame member permits shifting of the body onto moving parts; any other condition indi- cating an imminent collapse of the frame
	(ii) any cracked, rusted, loose or broken frame member adversely affecting the support of any functional components such as steering gear, engine, transmission, body parts and suspension
	(iii) a 38 mm (1 1/2 in) or longer crack in a frame web is directed towards bottom of flange
	(iv) any crack extends from a frame web around radius and into bottom flange
	(v) crack 25 mm (1 in) or longer in bottom flange
 10-4 Unibody Visually inspect condition of: (a) floor pan (b) strut towers and spring shackle supports (c) body panels (d) high strength, front and rear structural side 	 (a) improperly repaired or rusted through sufficiently to cause a hazard or allow exhaust gases to enter occupant compartment or compromises the safety and structural integrity features of the vehicle (b) cracked, broken, rusted through to a depth so as to weaken supports
members	(c) does not conform to OEM or I-CAR Standards
	(d) oxy-acetylene welded or braised, cracked, broken, rusted through to a depth so as to weaken member

ITEM AND METHOD OF INSPECTION	REJECT IF:				
Unibody (Cont.) (e) welding (f) unibody sheet metal (g) fenders and mud flaps	 (e) components welded when originally bolted or riveted, unless recommended by OEM or I-CAR (f) separated, flaking in areas near suspension mounts, structural shapes distorted, signs of heating, hammer-caused indentations (g) not full width of tire, height of bottom edge greater than 2/3 distance from centre of wheel to the extreme rear of vehicle 				
10-5 Bumpers (front and rear) Visually inspect: (a) condition (b) shock absorber (if equipped) (c) height (d) dimensions (e) reinforcement bars	 (a) missing, loose, broken, torn portion is protruding so as to create a hazard (b) collapsed, welded to rail, not collapsible (c) cars - centre of bumper not between 355 - 560 mm (14 in - 22 in) from the ground trucks - lowest part of front bumper, higher than 740 mm (29 in) from the ground (rear bumper not mandatory) (d) less than track width, horizontal surface less than 76 mm (3 in) trucks (front) 100 mm (4 in) (e) welded, heated, unless recommended by OEM or I-CAR, torn or missing 				
Inspect: (a) operation (b) buttons or handles (c) catches (d) hinges (e) seals (f) location (g) intrusion beam	 (a) binds, jams, closes insecurely (b) missing, broken, inoperable (c) loose, worn so as not to latch on primary and secondary catches (d) cracked, missing, loose so door will not close properly, seized (e) exhaust gases enters passenger compartment (f) location no exit on each side exits as per original manufacturer are nonoperational (g) repair does not conform to OEM or I-CAR Standards 				

10-7 Frame and/or Structural Body Components

- (a) corrosive deterioration
 - inspect for corrosive deterioration or deterioration of structural components such
 as frame assemblies in full frame or semimonocoque vehicle construction and floor
 pan on unibody and monocoque construction
 - corrosive weakening can be evaluated by tapping with rounded end of a 10 to 12 ounce ball peen hammer or jacking at front or rear and measuring rear edge of door to "B" pillar clearance before and after jacking.
- **(b)** inspect for evidence of collision damage or additional welding on frame rails or unibody
- (c) measure and gauge three dimensional measurements, height, width and length
- (d) structural components include radiator support, inner fender skirts, floor pan, rocker panels, engine compartment side rails, upper reinforcements, lower body rails in the rear, inner fender wells, and luggage compartment floors

REJECT IF:

- (a) corrosive deterioration
 - frame rails or cross members are perforated or separated due to corrosion anywhere between the front and rear suspension mountings and near frame-to-body mountings on vehicles with frames and sub-frames and when unibody sheet metal is separated
 - perforated or flaking in area near suspension component mounting or where structural shapes have been stamped into the floorpan
 - frame rails, cross members, sub-frame assemblies and unibody or monocoque stamped structural shapes are distorted, or cracking is visible
 - signs of heating to straighten unibody structure
 - tapping with hammer causes indentations indicating extensive corrosive weakening metal in structural shapes
 - rear edge of door to "B" pillar clearance changes significantly during jacking
- (b) collision damage or additional welding
 - frame rail shows evidence of welding or additional gusseting; frame rail twisted, bent or repair does not conform to OEM or I-CAR Standards,
 - unibody shows signs of welding or buckling
- (c) not straightened or aligned to numerical tolerances
- (d) structural components
 - originally bolted components welded as part of repair
 - does not meet OEM or I-CAR Standards

10-8 Unibody structural integrity rejection criteria

Visually inspect unibody structural components for:

- (a) alignment
- **(b)** securement
- (c) welding techniques
- (d) structural components
- (e) windshield replacement

REJECT IF:

- (a) structural components are obviously misaligned (door, trunk, hood)
- **(b)** door latches, hood catch, trunk latch, fail to operate properly and hold unit secure
- **(c)** welding techniques
 - high strength steels are oxy-acetylene or stick electrode welded
 - structural components are gas welded
 - does not conform to OEM or I-CAR Standards
- (d) structural components
 - structural components have been sectioned and does not conform to OEM or I-CAR Standards
 - kinks, wrinkles or other defects in sub sheet metal in such areas as cowling, strut towers, floor pan, suspension attachment points
- (e) not properly installed or improper sealant, reference CMVSS 212 and 216

Section 11: CSA/Manitoba Labour Decals

11-1 Manitoba Labour CSA Approved Decals

Note: Recreational vehicles must be inspected by Department of Labour authorized inspection stations. For information on mobile home and RV inspections and decals, visit the Manitoba Office of the Fire Commissioner website – http://www.firecomm.gov.mb.ca/codes mobile homes rvs.html.

Visually inspect for:

(a) specification chart, standards decal, and sale or lease permit

(a) missing, not legible

Application

For Standards or Manufacturer Inspection Under The Buildings and Mobile Homes Act

Office of the Fire Commissioner

508-401 York Avenue Winnipeg, MB R3C 0P8 (204) 945-3322 1601 Van Home Avenue East Brandon, MB R7A 7K2 (204) 726-6855



NS	TRUCTIONS: 1) PLEASE PRINT 3) MAKE CHEQUES OR	MO	NEY ORDERS PAYAL	BLE TO MI	INISTER OF FIN	IANCE (Do	not send cash in mail)	
1) a)	4) FORWARD INTACT, A APPLICATION INFORMATION: Applicant Name Company Name (if applicable)							
b)	Company Name (if applicable)							
c)	Address Postal Code		d) Phone Number					
2)	DESCRIPTION OF UNIT:		_ 0) 1 110110 110111001				_	
	TYPE OF UNIT: Double-wide Mobile Home Conventional Mobile Home	 Motor Home 5th Wheel Trailer Truck Camper 			Trade Name			
	Travel Trailer Camping or Tent Trailer				Year Serial #	_ Model		
			1018-E			icy	EVEROV COVERS	
	B) APPLIANCE SPECIFICATION: 1. Furnace 1 & 2 2. Water Heater	MAKE					ENERGY SOURCE	
	3. Air Conditioner							
	4. Range							
	Refrigerator Dishwasher							
	7. Clothes Washer					-		
	8. Dryer							
	9. Microwave	_				-		
	 Propane Tank CRN# CO Detector/Alarm 	_						
		TIO	NT2			-		
	C) ELECTRICAL SYSTEM SPECIFICA Voltage Amperage	1101	V: Frequency		No. of	Receptacle	e Outlets	
	No. of Lighting Outlets	1	lo. of Razor Outlets _		No. of		tlets	
	D) PLUMBING SYSTEM SPECIFICATI	D) PLUMBING SYSTEM SPECIFICATIONS: (Number of fixture			3. Bathtubs			
	4. Kitchen Sinks		5. Shower Stalls	S		6. Laundr	y Tubs	
	7. Auto Washers				s 9. Floor		rains	
	10. Urinals	11. Holding Tanks _		ks		12. Other		
	E) MECHANICAL SYSTEM SPECIFICATION:							
		The furnace installed in this unit is capable of maintaining a +						
		Outdoor temperature of C with storm sash, or without storm						
	 F) STRUCTURAL DESIGN SPECIFICA 1. Roof Design Snow Load 			3 Floor	Decian Load			
	Nool Design Show Load Ultimate Load				3. Floor Design Load 4. Pier Design Spacings			
	G) VEHICULAR SYSTEM SPECIFICAT	TION	1+	a fortene				
	1. LengthF				Feet	3. Exterior	area	
	Gross trailer weight		5. Vertical tongue lo	ad			ation pr	
	7. Min. Tire size and ply rating			_				
	H) INSPECTION INFORMATION							
		Proposed 1. Dwelling Unit 2. I			Location of Unit - Address			
	USE 3. Construction Camp)	4		Co. Name (if a	pplicable) _		
3) N	NOTE BEFORE SIGNING:							
	 It may be necessary to dismantle c 							
	 The costs incurred and arrangements for dismantling and reassembling the unit shall be the responsibility of the applicant. The Department does not accept any responsibility for damage to the unit or any systems, equipment or appliances which ma 							
	The Department does not accept a occur during inspections, tests or d				III OF any systems	i, equipmen	it of appliances willon may	
4)	SIGNATURE OF APPLICANT	10111	ining and roses.	19.	Date			
_							Fees: S	
Det	partment use only		-				THE SECTION OF THE SE	
	Assignment Authorize	d		ector.			Permit #:	
			Insn	ector				

Section 12: Approved Theft Deterrent Immobilizer

12-1 Approved Theft Deterrent Immobilizer Only inspect if:

The motor vehicle is a "most-at-risk motor vehicle" as defined in the Approved Theft Deterrent Immobilizer Regulation. Refer to the list of most-at-risk motor vehicles – http://web2.gov.mb.ca/laws/regs/2008/120.pdf make, model and applicable model years to determine which motor vehicles must be inspected.

Method of inspection:

- (a) After determining that the motor vehicle is a most-at-risk motor vehicle, visually inspect both of the vehicle's front side windows to determine whether the vehicle displays a window decal from the Vehicle Security Installation Bureau Inc. (identifying the vehicle as being equipped with an approved theft deterrent immobilizer). Refer to the decal example on the following page.
- (b) If the vehicle does not display the decal, contact the Manitoba Public Insurance Corporation ("MPI"), at 985-7214 or 1-877-266-6766 (toll free) and select the immobilizer option to find out whether the vehicle being inspected requires an approved theft deterrent immobilizer.

Note: "Approved theft deterrent immobilizer" is defined in the *Approved Theft Deterrent Immobilizer Regulation* and has that defined meaning in this section. That regulation requires a most-at-risk motor vehicle to be equipped with an approved theft deterrent immobilizer if:

- the vehicle is an imported vehicle (as defined in that regulation); or
- the vehicle is a recovered vehicle (also as defined in that regulation).

APPROVED THEFT



DETERRENT PROGRAM

REGISTERED INSTALLATION 0000000

WARNING! THEFT PROTECTED

The motor vehicle meets the following criteria:

- (a) the vehicle is on the list of most-at-risk motor vehicles;
- (b) the vehicle does not display a Vehicle Security Installation Bureau Inc. window decal on at least one front side window; and
- (c) MPI confirms that
 - (i) the Approved Theft Deterrent Immobilizer Regulation requires the vehicle to be equipped with an approved theft deterrent immobilizer, and
 - (ii) according to its records, the vehicle is not equipped with an approved theft deterrent immobilizer.