CITY OF HAMILTON

PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Parking and By-law Services Division

TO: Chair and Members Planning Committee	**WARD(S) AFFECTED:** CITY WIDE
COMMITTEE DATE: February 19, 2013	
SUBJECT/REPORT NO: Vehicle Inspection Manual for Taxis (PD05141(c)) (City Wide)	
SUBMITTED BY: Tim McCabe General Manager Planning and Economic Development Department	**PREPARED BY:** William Young (905) 546-2424 Ext. 2469
SIGNATURE:	

RECOMMENDATIONS

(a) That the amending by-law attached as Appendix "A" to Report PD05141(c) which is in a form satisfactory to the City Solicitor, and which amends the General Provisions to Schedule 25 (Taxis) of the Licensing By-Law, be approved;

(b) That the Vehicle Inspection Manual (VIM), attached as Appendix "B" to Report PD05141(c), be approved for use in taxicab and limousine vehicle licensing inspections.

EXECUTIVE SUMMARY

On May 25, 2005 City Council approved the following recommendation of the former Economic Development and Planning Committee:

"*That staff be directed to consult with the Taxi Industry, including stakeholders on the development of an expanded comprehensive policy manual for the inspection of taxicabs."*

The Vehicle Inspection Manual (VIM) recommended in this Report is the result of extensive stakeholder consultation and staff's experience in promoting safe taxi service to the residents and visitors to this City.

Alternatives for Consideration – N/A

FINANCIAL / STAFFING / LEGAL IMPLICATIONS (for Recommendation(s) only)

Financial/Staffing/Legal: N/A

HISTORICAL BACKGROUND (Chronology of events)

On May 17, 2005, the former Economic Development and Planning Committee approved Report PD05141 (Taxicab Inspection and Enforcement) including the recommendation "*That staff be directed to consult with the Taxi Industry, including stakeholders on the development of an expanded comprehensive policy manual for the inspection of taxicabs*." The recommendation was approved by City Council May 25, 2005.

On March 1, 2011 Information Report PD05141(b) provided an update advising that, while some progress had been made in developing an inspection manual, it was not completed and little, if any, consultation took place before 2007, when there was a complete Divisional management changeover and an operational review which identified, among other things, deficiencies in enforcement.

POLICY IMPLICATIONS

N/A

RELEVANT CONSULTATION

In addition to extensive consultation with the taxi industry, staff consulted with Risk Management as well as the Ministry of Transportation and the International Association of Transportation Regulators (IATR) in the preparation of this Report.

ANALYSIS / FOR RECOMMENDATION
(include Performance Measurement/Benchmarking Data, if applicable)

The City licenses certain classes of businesses in the interest of promoting public health or safety, consumer protection and/or nuisance prevention. Taxis are regulated through the Licensing By-Law for the benefit of the public who use this form of transportation (e.g. vehicle standards, driver training and performance, meter rates, number of

licences, etc.). Every licensed taxicab is subject to mandatory inspections to ensure compliance with the by-law. Such inspections include, but are not limited to:

- meter accuracy;
- visual exterior and interior inspections;
- assessment of mechanical fitness and safety;
- submission of an Ontario Ministry of Transportation Vehicle Inspection Report or a Safety Standards Certificate issued under the Highway Traffic Act.

As staff have become more proactive and proficient in enforcing by-laws since the 2007 Operational Review, some in the taxi industry are concerned that there is now a higher level of scrutiny of their vehicles. Therefore, more than ever, a comprehensive taxicab inspection manual would assist in clarifying expectations.

Accordingly, staff and industry stakeholders (taxi industry mechanics, owners and operators) worked together to develop a comprehensive policy manual for the inspection of taxicabs for consideration of Committee/Council. The Industry stakeholders involved in the development of the manual generally support the version being recommended.

ALTERNATIVES FOR CONSIDERATION
(include Financial, Staffing, Legal and Policy Implications and pros and cons for each alternative)

N/A

CORPORATE STRATEGIC PLAN (Linkage to Desired End Results)

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community
Healthy Community

Healthy Community

- Public Safety is enhanced by ensuring that licensed vehicles are maintained and do not pose a risk to public safety.

APPENDICES / SCHEDULES

Appendix “A” to Report PD05141(c) - Amending By-law
Appendix “B” to Report PD05141(c) - Vehicle Inspection Manual (VIM)

WY/dt

Authority: Item , Committee
Report (Staff report number)
CM: Date
Bill No.

CITY OF HAMILTON

BY-LAW NO. _____

To Amend By-law No. 07-170, a By-law to License and Regulate Various Businesses

WHEREAS Council enacted a by-law to license and regulate various businesses being City of Hamilton By-law No. 07-170;

AND WHEREAS this By-law amends Schedules 25 – Taxicabs of By-law No. 07-170 with respect to inspections;

NOW THEREFORE the Council of the City of Hamilton enacts as follows:

1. Sections 55 to 59 of Schedule 25 of By-law No. 07-170 are deleted and replaced with the following new sections 55 to 58:

INSPECTIONS AND APPROVED TAXICABS

55. Repealed.

56.(1) As required by the Issuer of Licences, every taxicab owner shall submit their taxicab for inspections, at the taxicab owner's expense.

(2) The Issuer of Licences:

(a) may specify the establishments where an inspection of a taxicab is to be carried out; and

(b) shall specify, by means of a manual or otherwise, what the inspection is to consist of which may include but is not limited to:

(i) a visual exterior and interior inspection of the taxicab;

(ii) an assessment of mechanical fitness and safety of the taxicab.

(3) At a minimum, a taxicab that is:

(a) zero to three years old, excluding the manufactured year, shall have a mechanical fitness and safety assessment inspection one time per year;

(b) more than three years old, excluding the manufactured year, shall have a mechanical fitness and safety assessment inspection two times per year.

(4) Every taxicab owner shall provide, at the time of renewing their licence and at such other times as required by the Issuer of Licences, at the taxicab owner's expense, either:

(a) an Ontario Ministry of Transportation Vehicle Inspection Report, showing that the taxicab has been accepted within the past 36 days; or

(b) a Safety Standards Certificate for the taxicab issued under the Highway Traffic Act for the taxicab within 36 days of the inspection date.

(5)(a) A taxicab may be approved by the Issuer of Licences after all inspections have been carried out and all reports and certificates have been provided in accordance with this Schedule.

(b) When a taxicab has been approved by the Issuer of Licenses, it shall continue to be approved only so long as:

(i) the taxicab owner complies with this Schedule; and

(ii) all inspections, reports and certificates show that the taxicab owner's taxicab complies with this Schedule.

TAXICAB AGE RESTRICTION

57.(1) A taxicab shall be no more than six years old, excluding the manufactured year.

(2) Despite subsection 57(1):

(a) a taxicab fuelled by an alternative fuel, as determined by the Issuer of Licences from time to time, shall be no more than seven years old, excluding the manufactured year; and

(b) a spare taxicab, previously approved as a taxicab under section 56, shall be no more than seven years old, excluding the manufactured year.

SPARE TAXICABS

58.(1) The Issuer of Licences may approve a vehicle owned by a taxicab owner as a spare taxicab.

(2) The number of spare taxicabs that may be approved by the Issuer of Licences under subsection 58(1) is limited to one per five taxicabs owned by the taxicab owner to a maximum of nine.

(3) No taxicab owner shall use a spare taxicab:

(a) without first giving notice, including the plate number of the taxicab that will be replaced and the dates when the spare taxicab will be used, to the Issuer of Licences;

(b) for more than seven consecutive days;

(c) unless he or she complies with all of the requirements for a taxicab owner under this Schedule, including complying with section 56 by submitting their spare taxicab for inspections and by providing Ontario Ministry of Transportation Vehicle Inspection Reports or Safety Standards Certificates issued under the Highway Traffic Act.

(4) No taxicab driver shall drive a spare taxicab unless he or she complies with all of the requirements for a taxicab driver under this Schedule.

2. Subsection 60(1) of Schedule 25 of By-law No. 07-170 is amended by deleting the words "section 56 of".

3. Paragraphs 64(1)(l) and (m) of Schedule 25 of By-law No. 07-170 are deleted and replaced with the following new paragraphs 65(1)(l) and (m):

(l) submit to the Issuer of Licences a valid Safety Standards Certificate issued in accordance with the Highway Traffic Act for each taxicab at the time the owner's licence is renewed or transferred;

(m) submit each taxicab or spare taxicab for inspection or approval or both as required under the General Provisions of this By-law or this Schedule;

4. Paragraph 65(1)(i) of Schedule 25 of By-law No. 07-170 is deleted and replaced with the following new paragraph 65(1)(i):

(h) fail to submit a taxicab or a spare taxicab for inspection or approval or both as required under the General Provisions of this By-law or this Schedule;

5. This By-law comes into force on the day it is passed.

PASSED this day of , 20 .

_____	_____
R. Bratina Mayor	R. Caterini City Clerk

Hamilton

LIVERY VEHICLE SAFETY INSPECTION PROGRAM

SCHEDULE 1

SAFETY INSPECTION CRITERIA

Instructions for conducting vehicle inspections

A vehicle must be free of all of the defects listed in this schedule to pass inspection.

Application of the criteria

Not all items listed in this inspection standard are present or required on every vehicle being inspected. Inspect each vehicle in accordance with the components and systems that are relevant to it.

Inspection Method

A visual inspection is required for all vehicle components and systems. In certain cases, specific additional inspection instructions are provided relevant to an item, which must be followed in addition to conducting the visual inspection.

Application of OEM specifications

In the case where a defect listed in the standard includes specifications defining the safe operating limit of any component which conflicts with the OEM specification for its safe operating limit, the OEM specifications will apply. Note: The specification given by the OEM must be documented and clearly defined as the safe operating limit for it to apply and override any specification listed in this standard. Do not confuse service recommendations with safe operating limits. (OEM documents must be provided)

Correcting vehicle defects

Repair to vehicles must always be carried out in accordance with the relevant and most current OEM service and repair procedures.

Body and finish repair

Body and finish repairs must be carried out in accordance with OEM or Inter-Industry Conference On Auto Collision Repair (I-CAR) standards.

Definitions

OEM – means the original manufacturer of the vehicle or a company that is authorized to modify vehicles in accordance with Canada Motor Vehicle Safety Standards.

Improperly modified - means that a vehicle, component or system has been modified in a manner that is inconsistent with the installation service or repair instructions issued by the OEM or inconsistent with an applicable standard or regulation.

Improperly repaired – means that a vehicle, component or system has been repaired in a manner that is inconsistent with the instructions issued by the OEM or inconsistent with an applicable standard or regulation.

Not equivalent to OEM – means parts or repairs that reduce the strength, reliability, function or integrity of a vehicle component or system.

Special Note: Legislative Authority

Where any safety criterion in this schedule conflicts with or represents a lower standard of safety or performance than any applicable Ontario Act or Regulation, the Act or Regulation will apply.

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PART 1 – POWER TRAIN

1. Drivability 2. Accelerator Pedal 3. Fuel System – Gasoline or Diesel 4. Fuel System – LPG 5. Fuel System – Other 6. Engine Accessory Drive Belt	7. Ignition, Interlock & Gear Selector 8. Clutch 9. Engine/Transmission Mount 10. Drive Shaft 11. Rear Axle

Section 1. Drivability

Inspection Method: Test-drive the vehicle to highway speed and test operation in all gear positions.

Subsection	Defect(s)
(1) indicator warning lamp	a) malfunction of any system or component is indicated (active fault code) b) indicator/warning device is defeated or has been tampered with
(2) vibration & noise	a) abnormal noise or vibration is felt while driving
(3) road noise	a) abnormal road noise is heard while driving
(4) tracking	a) vehicle pulls to one side or tracks abnormally
(5) engine operation	a) poor acceleration, misfire, noise hesitates, smoking, strong exhaust odour
(6) emission control	a) 'check engine' (MIL) lamp is illuminated b) emission control component is removed, defeated or inoperative
(7) braking	a) vehicle pulls to one side b) abnormal noise is felt during braking

Section 2. Accelerator Pedal	
Inspection Method: With engine idling, press and release the accelerator.	
Subsection	Defect(s)
(1) pedal	a) pedal installed that is not equivalent to OEM b) anti-slip material is loose worn smooth or missing c) pedal or linkage missing d) throttle/peddle position sensor fails to operate
(2) mount	a) insecure or deteriorated by corrosion
(3) linkage/cable	a) worn out or insecure b) part is used that is not equivalent to OEM c) cable is broken, seized, binding or frayed
(4) spring	a) missing, broken or improper type b) stretched, deteriorated or corroded

Section 3.I Fuel System – Gasoline or Diesel	
Subsection	Defect(s)
(1) general	a) strong fuel odour inside or immediately outside vehicle b) visible fuel leak
(2) cap	a) improper type b) missing or allows spillage
(3) tank	a) improperly modified b) not designed for the storage of automotive fuel c) improperly repaired or any repair on non-metallic tank d) insecurely mounted e) perforated, cracked or a weld broken
(4) tank mount/strap	a) part used that is not equivalent to OEM b) cracked or broken c) missing, loose fastener or loose
(5) line/hose (liquid or vapour)	a) improperly secured b) steel braided line is rusted at first layer c) routed improperly and subject to being damaged d) crack, chaffing or wear extending to or beyond cord layer e) not approved for fuel system use
(6) pump	a) insecurely mounted b) damaged c) emergency fuel shut off system (inertia switch) is inoperative

Section 3.II Fuel System – LPG	
Subsection	Defect(s)
(1) general	a) strong fuel odour inside or immediately outside vehicle b) fuel is leaking
(2) tank type	a) not approved type b) tank decal or certificate is missing, altered or invalid
(3) component	a) improperly modified or repaired b) cracked or insecurely mounted
(4) tank mounting	a) welding other than OEM b) valve is not identified c) mounting bolt is smaller than 12 mm (1/2 in) diameter or less than SAE grade 5 d) incorrect working pressure for mounting location e) tank not equipped with an 80% fill valve and automatic stop fill valve f) any mounting strap, bracket of fastener is loose, missing, broken or cracked
(5) line/hose	a) frayed to braid, damaged, cracked, or not secured at 1.25 m intervals or less b) flex line other than approved type II or III is used c) metal line other than seamless steel or approved sheathed copper is used d) less than 9.5 mm (3/8 in) in diameter e) quick coupler is installed in line f) non-approved hose is used
(6) hydrostatic relief valve	a) one is not located between each pair of shutoffs b) not approved type or not labeled

(7) gauge	a) missing or inoperative

Section 3.III Fuel System – Other

Inspection method: Inspect system in accordance with OEM instructions or applicable standard.

Subsection	Defect(s)
(1) condition	a) any part of system fails to comply with requirements b) any part of system is in a hazardous condition

Section 4. Fluid Levels

Inspection method: Inspect system in accordance with OEM instructions or applicable standard.

Subsection	Defect(s)
(1) level	a) any fluid is at or below minimum specified level

Section 5. Engine Accessory Drive Belt

Subsection	Defect(s)
(1) condition	a) frayed or cracked b) worn beyond OEM specifications c) oil soaked d) missing or broken
(2) adjustment	a) deflection/tension is outside OEM specifications
(3) pulley	a) misaligned or bent b) cracked

Section 6. Ignition, Interlock & Gear	
Inspection Method: Test gear selector, shift interlock and engine start functions. Test engine start function at least three times.	
Subsection	Defect(s)
(1) ignition & interlock	a) engine will not shut down when ignition switch is turned off b) engine starts when clutch is engaged (manual transmission) c) engine starts in any position other than "P" or "N" (automatic transmission)
(2) starter	a) engine fails to start normally each time b) starter fails to engage and disengage normally
(3) gear selector	a) gear selection indicator not aligned with gear selector b) gear selection can be shifted from "P" position without pressing the brake pedal
(4) ignition & interlock	a) not in clear view of driver
Section 7. Clutch (when applicable)	
Inspection Method: Operate the clutch with the engine running and place transmission into gear.	
Subsection	Defect(s)
(1) operations	a) fails to properly engage/disengage transmission and engine
(2) pedal	a) loose or insecurely mounted b) body area of mounting bracket severely corroded, or rusted through c) repaired by welding d) anti-slip material is loose, worn smooth or missing e) broken or cracked

	f) missing
(3) adjustment	a) free-play is not within OEM specification

Section 8. Engine Transmission

Subsection	Defect(s)
(1) condition & attachment	a) mount is bent or loose b) fastener missing, insulator deteriorated or swollen c) part used that is not equivalent to OEM d) any part is missing, cracked or broken e) engine and/or transmission is shifting out of place

Section 9. Exhaust System

Inspection Method: Inspect with the engine running. (Some minor leaking and soot tracks are normal at the pipe joints of diesel engine exhaust systems.)

Subsection	Defect(s)
(1) general	a) exhaust leak outside the perimeter of the passenger compartment (some minor leaks at joints are normal) b) any component is perforated or separated c) exhaust odour or fumes in the passenger compartment
(2) exhaust component: manifold, muffler, catalytic converter, resonator or pipe	a) part used that is not equivalent to OEM b) loose, non-welded patch or repair, collapsed and restricting exhaust c) part missing d) any part of exhaust system is closer than 25 mm (1 in) from any part of fuel or brake system, or any other combustible material that is not protected by shields e) catalytic converter is closer than 50 mm (2 in) from any part of fuel or brake system or any other combustible material

(3) mounting hardware	a) missing b) loose, broken or insecurely mounted
(4) heat shield	a) insecure b) missing
(5) turbocharger	a) leaking exhaust
(6) pipe termination	a) does not direct exhaust away from the vehicle b) terminates farther than 50 mm (2 in) away from the vehicle's exterior envelope

Section 10. Transmission/Transaxle

Inspection Method: See test-drive instructions in 1. Drivability

Subsection	Defect(s)
(1) gear change	a) harsh or missed shift, incorrect shift point
(2) noise/vibration	a) abnormal noise or vibration
(3) shift linkage	a) bent or misaligned b) broken or improperly installed
(4) leakage	a) leaking from seal, housing or other component b) lubricant is below minimum level c) major lubricant leakage
(5) park mechanism	a) fails to hold vehicle stationary

Section 11. Drive Shaft

Inspection Method: Remove load from shaft(s) and check for movement.

Subsection	Defect(s)
(1) condition	a) failure of any driveline component imminent

(2) U-joint	a) rotational free play exists in U-joint b) rust is being expelled from bearing cup
(3) U-clamp	a) bent or misaligned b) U-clamp missing
(4) fastener	a) loose or stripped b) missing
(5) centre bearing	a) loose, worn or rubber mount is deteriorated
(6) CV joint	a) any loose or noisy during acceleration or deceleration
(7) axle shaft	a) repaired by welding b) bent
(8) CV boot	a) cut, damaged or missing b) leaking (lubricant is being lost)

Section 12. Rear Axle

Subsection	Defect(s)
(1) condition	a) repaired by welding b) bent c) noise or other evidence of impending failure
(2) seal/lubricant	a) lubricant is below minimum level b) leaking from seal, housing or other component c) major lubricant leaking

PART 2 – SUSPENSION

13. Suspension & Frame Attachments 14. Axle Attaching & Tracking Components 15. Spring and Attachments	16. Air Suspension 17. Shock Absorber

General Instructions

Inspection Method: Unless otherwise specified by the OEM, inspect ride height while vehicle is parked on a flat level surface and then raise the vehicle to access the suspension components.

Section 13. Suspension & Frame Attachments

Subsection	Defect(s)
(1) vehicle ride height	a) suspension is sagged so that the vehicle is more than 39 mm (1.5 in) from manufacturer's specified height when measured at the tire centerline b) one side of the vehicle is 25 mm(1 in) or more, higher or lower than the other when measured at the tire centerline
(2) frame bracket	a) improperly repaired b) loose, missing, cracked, broken or worn out
(3) fastener	a) missing or loose

Section 14. Axle Attaching & Tracking Components

Subsection	Defect(s)
(1) axle attachment & saddle	a) bent b) cracked, broken, loose or missing c) axle has shifted from its normal position

(2) bushing	a) worn out or loose b) shifted out of place c) missing
(3) arm, rod, strut or control arm	a) bent, cracked or loose b) repaired by welding (OEM welding of component is acceptable) c) wear or damage permits axle or wheel to shift out of place d) broken or missing
(4) stabilizer bar or link	a) bent, cracked or loose b) broken or missing c) repaired by welding (OEM welding of component is acceptable)

Section 15. Spring & Attachments

Subsection	Defect(s)
(1) leaf spring	a) spring leaf is broken, missing, cracked or shifted out of place b) main leaf or ¼ of the leaves in one assembly are broken or missing c) leaf is shifted and contacting another vehicle part
(2) composite spring	a) worn more than 3 mm (1/8 in) in load bearing area (some 'fuzzing' is normal) b) broken, crack of any length visible on both opposite sides of a spring, splintered, delaminating, not the same type on each side of vehicle
(3) shackle, pin & bushing	a) loose or shifted out of place, vertical movement of a spring or shackle against a spring pin exceeds OEM specification b) fastener missing or loose c) broken or missing
(4) U bolt & hardware	a) loose or shifted out of place b) missing
(5) hanger	a) loose, cracked or repaired by welding

	b) broken or missing
(6) coil spring	a) spacer is used b) broken c) broken and shifted out of place d) contacting other part in hazardous manner
(7) torsion bar	a) cracked or repaired by welding b) missing or broken
(8) bump pad	a) missing, loose, split or deteriorated

Section 16. Air Suspension (when applicable)

Inspection Method: Inspect with air in system and supports placed under the vehicle to protect against dropping of the vehicle in the event of air loss.

Subsection	Defect(s)
(1) ride height	a) height is above or below OEM specification b) vehicle leans to one side or air spring pressure is unequal c) suspension is bottomed out
(2) air lines	a) restricted or insecurely mounted b) leaking
(3) air spring	a) patched, cut, improperly seated, cracked or weathered to reinforcing ply b)leaking
(4) height control valve	a) inoperative

Section 17. Shock Absorber

Inspection Method: Bounce vehicle and release it.

Subsection	Defect(s)
(1) operation	a) vehicle oscillates more than two cycles after release

(2) shock absorber	a) damaged disconnected or missing
(3) mount & hardware	a) loose, broken or missing
(4) oil leakage	a) leaking (some oil seepage is normal)

PART 3 – BRAKES

18. Parking Brake 19. Hydraulic System 20. Vacuum Assist 21. Hydraulic Assist	22. Drum brake Components 23. Disc Brake Components 24. Antilock Brake System

Important Note: Brake component measurements

The following measurements must be taken for every wheel brake of every vehicle inspected, and the measurements must be recorded in the appropriate section of the inspection certificate.

- The thinnest section of the brake lining or pad
- The inside diameter of the brake drum at its widest point
- The thinnest area of the brake rotor friction surface

When new components are installed, record 'new' on the inspection certificate.

Section 18. Parking Brake

Inspection Method:
Manual transmission: Test parking brake operation with the brake applied, run engine at approximately 800 rpm and partially engage the clutch

Automatic transmission: Test parking brake operation with the brake applied. With the engine running and the transmission in drive, accelerate lightly.

Subsection	Defect(s)

(1) function	a) parking brake fails to hold vehicle
(2) indicator lamp	a) fails to illuminate during self-test and when brake is applied
(3) release	a) parking brake holds or drags when released
(4) mechanism	a) binding b) missing, inoperative or broken
(5) cable/linkage	a) cable is frayed, seized or swelling b) broken or missing
(6) lining	a) oil soaked b) missing

Section 19. Hydraulic System

Subsection	Defect(s)
(1) brake pedal	a) cracked, insecurely mounted or repaired by welding b) body area of mounting bracket severely corroded or rusted through c) anti-slip material is loose or worn smooth d) missing or broken
Inspection Method: With engine running, depress brake pedal with about 50 kg force.	
(2) metal line & fitting	a) repaired by welding or soldering, chafing insecure heavy corrosion scaling (some surface rust is normal) b) cracked, flattened or restricted sections, not equivalent to OEM and intended for brake use c) leaking
(3) flexible hose	a) cracked or chafed to first braid (rubber composite material only), insecurely mounted, twisted b) flattened or restricted sections, bulged or swells under pressure, not equivalent to OEM and intended for brake use

	c) leaking
(4) master cylinder	a) insecurely mounted or fluid is below minimum level shown b) leaking
(5) fluid fill cap	a) loose, vent holes plugged, cap gasket missing, swelled or damaged b) missing
(6) warning (failure lamp)	a) indicator fail to operate when ignition is in the test position b) indicator remains illuminated with ignition in 'on' position
(7) brake valve	a) any brake valve is inoperative or leaking b) not equivalent to OEM and intended for brake use
Inspection Method: Apply moderate force (25 kg) to the brake pedal and maintain it for one minute. The engine must be running for power assisted brake systems.	
(8) leakage	a) pedal moves in the applied direction (refer to OEM specification)
(9) pedal travel	a) free travel is below OEM specification b) applied travel is 65% or more of total travel c) applied travel is 80% or more of total travel

Section 20. Vacuum Assist

Subsection	Defect(s)
(1) vacuum hose/line	a) incorrect type of line or hose used b) cracked or chafed, or less than 38 mm (1.5 in) from any exhaust system part c) leaking, missing, broken or collapsed
(2) check valve	a) leaking, missing or inoperative
(3) clamp	a) loose, missing or broken
(4) vacuum tank	a) loose b) damaged or deteriorated from corrosion

	c) missing or leaking
Inspection Method: Stop the engine, deplete vacuum reserve by applying and releasing brake pedal several times. Apply light force (12 kg) to the brake pedal and restart the engine.	
(5) operation	a) pedal fails to move downward during test or no vacuum boost
Inspection Method: Start the engine, build to full vacuum, shut engine off. Make full brake applications.	
(6) reserve	a) pedal assist is lost before second brake application is made during test
(7) pump	a) fails to achieve and maintain 4.5 kPa (18 in of vacuum) with engine running at 1200 rpm. (note: altitude may affect vacuum level b) fails to operate

Section 21. Hydraulic Assist

Subsection	Defect(s)
(1) pump reservoir	a) leaking b) fluid below minimum level
(2) line/hose	a) incorrect type b) insecurely mounted c) missing or broken
(3) belt	a) frayed cracked or worn beyond OEM specification b) oil soaked c) missing or broken
(4) motor operation	a) the electric backup for power assist unit fails to run when engine is stopped and ignition in either 'off' or 'on' b) the electric backup for the power assist unit runs when engine is running
Inspection Method: With engine stopped, deplete pressure reserve by applying and releasing brake pedal several times. Apply moderate force (30 kg) to the brake pedal and restart the engine.	
(5) operation	a) pedal fails to move downward during test

Section 22. Drum Brake Components	
Subsection	Defect(s)
Inspection Method: Refer to the instructions at the beginning of this section for the measurements to be taken and recorded.	
(1) operation	a) brake is not functioning
(2) self adjuster	a) inoperative, seized, worn out or incorrect thread direction
(3) anchor pin & return spring	a) loose, bent, worn out, broken or stretched b) broken or missing
(4) backing plate	a) loose, bent or damaged b) land area worn or grooved and restricting shoe movement
(5) axle & spindle	a) wheel seal leaking b) axle or spindle cracked
(6) wheel cylinder	a) damaged b) dust seal, cracked, damaged or missing c) mounted insecurely d) leaking, inoperative or seized
(7) brake shoe lining	a) worn unevenly b) bonded lining insecurely bonded to shoe c) rivet loose or missing

	d) installed incorrectly, broken, cracked or contaminated e) bonded lining worn 1.6 mm (1/16 in) or less at thinnest point f) riveted lining worn to 1.6 mm (1/16 in) or less above any rivet
(8) brake drum	a) internal crack extends to the open edge of the drum b) hot spot that cannot be removed by machining c) any groove deeper than the 'machine to' limit d) out of round more than: 0.25 mm (0.01) on drum 280 mm (11 in) or less 0.63 mm (0.025 in) on drum larger than 280 mm (11 in) e) inside diameter exceeds OEM wear limit f) out of round more than: 0.5 mm (0.02 in) on drum 280 mm (11 in) or less 1.25 mm (0.05 in) on drum larger than 280 mm (11 in) g) externally cracked, broken or piece missing

Section 23. Disc Brake Components

Inspection Method: Refer to the beginning of this section

Subsection	Defect(s)
(1) operation	a) brake is not functioning
(2) disc/rotor	a) pitted, damaged or grove deeper 'machine to' limit b) disc not vented properly c) hot spots exists that cannot be removed by machining d) thickness is at minimum thickness indicated on rotor e) lateral run out or thickness variation exceeds 0.128 mm (0.005 in)

	f) lateral run out or thickness variation causes noticeable pedal pulsation g) cracks on surface extend to outer edges h) thickness is below minimum thickness indicated on rotor i) broken rotor
(3) caliper	a) piston dust seal split or cracked b) mounting hardware not equivalent to OEM, mounted incorrectly or caliper guides are improperly repaired c) mismatched, assembly worn beyond OEM specification d) leaking, piston seized, caliper seized e) retainer or fastener is loose, broken or missing
(4) pad	a) damaged b) rivets loose on riveted lining or bonded pad loose c) contaminated, broken, cracked, installed incorrectly d) bonded pad worn to 1.6 mm (1/16 in) or less at thinnest point e) rivet pad worn to 1.6 mm (1/16 in) or less above any rivet

Section 24. Anti-lock Brake System

Inspection Method: Cycle ignition switch and monitor warning/indicator lamp. Scan system for active fault codes whenever a fault is evident or suspected. Record fault code(s) and description on inspection report form. (Follow OEM instructions if different from above.)

Subsection	Defect(s)
(1) indicator lamp	a) missing b) inoperative (does not operate during self-test cycle) c) indicates system fault (remains illuminated when ignition switch is "ON")
(2) control unit, wheel speed sensor & wiring	a) missing b) inoperative c) damaged, insecurely mounted, improper or corroded connection

	d) part used that is not equivalent to OEM

PART 4 - STEERING

25. Steering Wheel Lash 26. Steering Wheel Travel 27. Steering Components	28. Ball Joints 29. Power Steering 30. Wheel Alignment

Section 25. Steering Wheel Lash

Inspection Method. Begin with front wheels in the straight ahead position and turn the steering wheel in each direction just until movement of the front wheels is observed. Measure the lash distance at the outside rim of the steering wheel.

Subsection	**Defect(s)**
(1) manual	a) lash is greater than 75 mm (3.0 in) b) lash is greater than 100 mm (4.0 in)
(2) power steering	a) lash is greater than 50 mm (2 in) b) lash is greater than 75 mm (3.0 in)
(3) rack and pinion steering	a) lash is greater than 12 mm (0.5 in) b) lash is greater than 25 mm (1.0 in)

Section 26. Steering Wheel Travel

Inspection Method: With engine running turn the steering wheel to full right and full left positions.

Subsection	Defect(s)
(1) operation	a) number of steering wheel turns from centre to full left and from center to full right differs by ½ turn or more b) binds or jams

(2) steering wheel	a) off-center b) modified or damaged c) more than ¼ turn off center when in straight ahead position d) broken or loose on spline
(3) clearance	a) tire contacts frame, fender or other part (check OEM clearance specifications)

Section 27. Steering Components

Inspection Method: Rock the steering wheel rapidly to the left and right and check for movement in steering linkage and joints.
(Note: "Lateral movement" refers to movement perpendicular to the axis of a pivot. "Vertical movement" refers to movement in line with the axis of a pivot.

Subsection	Defect(s)
(1) general	a) noise or roughness is felt when steering wheel is turned to right or left b) failure of any part or component appears imminent
(2) steering rod or link	a) fastener improperly installed b) bushing worn out c) cracked, bent, damaged or repaired by welding d) fastener loose or missing e) adjusting sleeve is loose

(3) pitman/idler arm	a) lateral movement is present b) damaged, bent, repaired by welding or heated c) spline is loose or stripped d) vertical movement exceeds 3.2 mm (1/8 in) or OEM limit e) threads are stripped or damaged f) attaching nut is missing or loose
(4) ball & socket joint (tie rod end)	a) lateral movement is present b) damaged or bent c) repaired by welding or heated d) attaching nut is loose, threads are stripped or damaged
(5) steering rack/box	a) mounting fastener missing or loose b) steering rack/box is loose or insecurely mounted
(6) strut bearing	a) binding or worn out
(7) steering mount and frame support	a) frame or support cracked or damaged b) bushing worn out c) fastener missing or loose d) insecurely mounted
(8) cotter pins	a) improperly installed or part used that is not equivalent to OEM b) missing
(9) steering column	a) loose or improperly secured, fastener loose or missing b) repaired by welding c) movement in spline or slip joint exceeds OEM limit
(10) tilt or telescoping wheel	a) fails to lock b) play at tilt lock or telescoping lock exceeds 6 mm (0.250 in)

Section 28. Ball Joints

Inspection Method: Inspect in accordance with OEM instructions. When any movement is present, check vertical and lateral movement using a dial indicator. Inspect ball joints with wear indicators while in a loaded condition.

Subsection	Defect(s)
(1) general	a) failure of any part or component appears imminent
(2) condition	a) improperly installed or repaired b) improper retainer or fastener is used c) wear is at OEM limit d) wear exceeds OEM limit e) loose in knuckle or control arm missing or loose retainer

Section 29. Power Steering

Subsection	Defect(s)
(1) general	a) fluid is contaminated b) fluid leak (some seepage is normal) c) major fluid leakage or fluid below minimum level d) failure of any component appears imminent e) vehicle control or operation is noticeably affected by steering problem
(2) hose	a) rubbed by moving parts b) within 25 mm (1 in) of exhaust system c) cracked

(3) pump	a) noisy operation b) loose c) inoperative
(4) cylinder	a) loose b) inoperative
(5) mounting bracket	a) cracked or broken b) loose, fastener missing or loose
(6) assist	a) no power assist

Section 30. Wheel Alignment	
Inspection Method: Inspect tire wear patterns and check during test drive	
Subsection	Defect(s)
(1)alignment	a) tire shows evidence of misalignment b) vehicle control or operation is noticeably affected by misalignment

PART 5 – INSTRUMENTS & CONTROLS

25. Wiring 26. Battery 27. Warning & Indicator Lamps 28. Speedometer & Odometer 29. Horn	30. Window Wiper & Washer 31. Heater & Defroster 32. Air Conditioning 33. Vehicle Identification/Certification

Section 31. Wiring

Subsection	Defect(s)
(1)security	a) wire or harness is loose and contacting moving parts b) fuse panel or live circuit in passenger compartment or trunk is not covered c) wires are routed improperly d) wires are positioned in a way that is hazardous to driver and/or passenger
(2)insulation	a) peeled, cracked or rubbed through b) sections missing
(3) condition	a) damaged or burnt wiring b) improperly connected wiring or part used that is not equivalent to OEM c) wire or harness is burning, shorting or arcing

Section 32. Battery

Subsection	Defect(s)
(1) mounts	a) cracked, weakened or missing

(2) cover or hold down	a) missing, insecure or improperly vented b) part used that is not equivalent to OEM c) battery gas odour is present in passenger compartment

Section 33. Warning & Indicator Lamp

Subsection	Defect(s)
(1) general	a) any fault is indicated by a warning or indicator lamp b) warning or indicator lamp is not clearly visible
(2) high beam indicator	a) inoperative
(3) turn signal indicator	a) inoperative, incorrect direction is indicated
(4) hazard warning lamp indicator	a) inoperative
(5) SRS indicator	a) fails to operate during test cycle b) indicates system fault (scan and record active fault code and description)

Section 34. Speedometer & Odometer

Subsection	Defect(s)
(1) operation	a) odometer is inoperative b) speedometer is inoperative
(2) visibility	a) speedometer not clearly visible from driver's position b) speedometer not illuminated

Section 35. Horn

Subsection	Defect(s)

(1) control	a) inoperative or non-OEM switch installed
(2) sound	b) OEM horn is inoperative or fails to provide a clearly audible sound

Section 36. Window Wiper & Washer

Subsection	Defect(s)
(1) control	a) control or system fails to operate normally in all speeds and positions b) fails to operate in at least one speed or position

Section 37. Heater & Defroster

Inspection Method: Test operation of controls and functions in all positions

Subsection	Defect(s)
(1) control	a) control or system fails to operate normally in all speeds and positions b) fails to operate in at least one speed or position
(2) type	a) incorrect heater type (use of auxiliary fuel burning heater is not permitted)
(3) fan	a) fails to operate in all speeds
(4) leakage	a) engine coolant leaks from heater, hoses or connection
(5) windshield defroster	a) air flow is not sufficient to clear area of windshield swept by wiper blades and the windows of the front doors
(6) rear defroster	a) inoperative b) inoperative in winter conditions

Section 38. Air Conditioning

Inspection Method: Air conditioning system must be functional when OEM equipped.

Subsection	Defect(s)
(1) operation	a) control or system fails to operate normally in all speeds and positions b) inadequate cooling c) improperly repaired, incorrect refrigerant gas

Section 39. Vehicle Identification/Certification	
Subsection	Defect(s)
(1) compliance label	a) *CMVSS National Safety Mark, or **RIV decal or certificate is missing b) CMVSS tire information label is missing
(2) VIN (Serial Number)	a) missing, damaged, obscured, defaced, mismatched at different vehicle locations b) mounting rivets are not original or appear to have been tampered with c) not located inside passenger compartment, adjacent to left front door post and visible from outside vehicle d) vehicle information decal or equivalent OEM documentation is missing

*Canadian Motor Vehicle Safety Standard

** Registrar of Imported Vehicles

Note: When original vehicle labels are not present, other documentation can be used to verify compliance with CMVSS requirements. For more information on vehicle label requirements, contact a local OEM dealer, Municipal, State/Provincial and/or Federal Government.

PART 6 - LAMPS	
40. Lamp Operation 41. Lamp Controls & Switches	
Section 40. Lamp Operation	
Subsection	Defect(s)
(1) required lamps	a) any required lamp is missing or improperly modified b) any non-approved lamp is installed on vehicle
(2) operation	a) any required lamp fails to illuminate or incorrect bulb filament illuminates b) not clearly visible, covered with non-approved material, discoloured or tinted c) missing, broken, cracked or insecurely mounted d) moisture is visible inside any lamp e) lamp, lens or cover does not indicate compliance with CMVSS, DOT or SAE standards f) lamp is improperly installed or improperly aimed
(3) LED lamps	a) 25% or more of LED's of any one lamp assembly do not illuminate
(4) headlamp	a) both low beams are inoperative b) both low beams are inoperative anytime between one-half hour before sunset and one-half hour after sunrise
(5) daytime running lamps	a) inoperative or improperly wired

(6) tail lamp	a) all are inoperative b) all are inoperative anytime between one-half hour before sunset and one-half hour after sunrise
(7) stop lamp	a) all are inoperative
(8) turn signal	a) inoperative at rear b) all are inoperative between one-half hour before sunset and one-half hour after sunrise

Section 41. Lamp Controls & Switches

Subsection	Defect(s)
(1) headlamp control & dimmer	a) missing, broken or inoperative b) improperly wired or part used that is not equivalent to OEM
(2) turn signal control	a) missing, broken or inoperative b) improperly wired or improper replacement
(3) hazard warning control	a) missing, broken or inoperative b) improperly wired or improper replacement

Table of Minimum Lamp Requirements				
Lamp	No.	Location	Control	Colour
Headlamp	• two or four	• facing front • as far apart as practical • between 560 mm and 1370 mm (22-54 in) above road surface when measured at the centre of the lamp	• operate by headlamp control • operate on high and low beam	• white
Tail lamp	• two	• at the rear, facing rear • as far apart as practical • between 380 mm and 1.83m (15-72 in) above the road surface	• operated by headlamp control	• red
Stop lamp	• two	• facing the rear • as far apart as practical	• activated by brake lamp switch	• red
Stop lamp, centre high mount	• one	• on rear of vehicle	• activated by brake lamp switch	• red
Turn signal lamps	• four	• as far apart as practical • two facing front • two facing rear	• continuous flashing operation • operated by turn signal control	• front: amber • rear: amber or red
Hazard warning lamp	• four	• two facing front • two facing rear	• continuous flashing operation • operated by hazard warning control	• front: amber • rear: amber or red
Side marker lamp	• four	• two on each side • as close to corners as practical • 380 mm (15 in) above ground or higher	• operated by headlamp control	• front: amber • rear: red
Clearance lamps	• four	• only required if OEM installed • as far apart as practical • at widest point of vehicle • two facing front, as high as practical	• operated by headlamp control	• amber
License plate lamp	• one	• located so that license plate is illuminated	• operated by headlamp control	• white

Daytime running lamp	• two	• required on vehicles manufactured after December 1, 1989 • facing front	• operate equivalent to OEM	• white or yellow
Auxiliary/fog lamp	• n/a	• facing front and/or rear	• operate on low beam only	• front: white or amber • rear: red

PART 7 - BODY

42. Body Panel
43. Hood
44. Frame / Sub-Frame
45. Unibody Component
46. Bumper
47. Trailer Hitch / Cargo Carrier Devices
48. Door
49. Side & Rear Window
50. Sun Visor
51. Windshield
52. Rear View & Side Mirror
53. Seat
54. Occupant Restraints & Protective
55. Trunk

Section 42. Body Panel

Subsection	Defect(s)
(1) condition	a) any panel is loose, damaged or modified so that lamps don't fit properly b) hole intentionally made or perforation caused by rust, corrosion or damage c) improperly repaired d) section is missing and body fails to control road spray as intended by OEM e) torn, cut, or unfinished metal edge is exposed in a way that can be hazardous to any person f) there is evidence of structural damage or weakness
(2) moulding	a) loose or protruding from body
(3) floor	a) hole intentionally made or perforation caused by rust, corrosion or damage

Section 43. Hood	
Subsection	Defect(s)
(1) hood	a) damaged b) metal is perforated or corroded through in the hinge or latch area c) missing
(2) primary & secondary latch	a) hood does not open and close properly b) part is used that is not equivalent to OEM c) a latch is inoperative, broken, missing, seized or insecurely mounted d) hood cannot be securely latched
(3) hinge & support	a) hinge or support is cracked, seized or inoperative b) missing or improper support for holding hood in open position c) missing or broken
Section 44. Frame/Sub-Frame	
Subsection	Defect(s)
(1) rail or cross member	a) bent, weakened or improperly repaired b) cracked, broken or perforated by rust, corrosion or damage c) failure appears imminent
(2) body & sub-frame mounts	a) mount insulator is damaged or deteriorated b) mount insulator is missing, weakened or improperly repaired c) mount is missing, cracked or broken
(3) jounce bumper	a) bottom-out contact point on frame or body is damaged or poorly reinforced

Section 45. Unibody Component	
Inspection Method: Inspect visually and if necessary, tap with a blunt instrument to confirm integrity. Confirm critical measurements when there is evidence of damage, distortion or improper repairs.	
Subsection	Defect(s)
(1) structural metal parts	a) any part is improperly repaired b) perforated or weakened by rust, corrosion or damage c) cracked, separated or damaged in way that weakens any part d) failure of any part appears imminent
Section 46. Bumper	
Subsection	Defect(s)
(1) condition	a) modified or improperly repaired b) tear or cut exposing a protruding edge c) energy absorbing foam missing or damaged d) loose or broken e) bumper is missing
(2) impact absorber support	a) loose, leaking or inoperative b) modified or improperly repaired c) collapsed, missing
(3) height	a) improperly repaired or installed so that height has changed from OEM position
Section 47. Trailer Hitch/Cargo Carrier	

Subsection	Defect(s)
(1) condition	a) any part is bent, damaged or broken
(2) attachment	a) any part is improperly installed, insecure or fastener is missing

Section 48. Door

Inspection Method: Test the operation of each door, latch and lock, and the opening and closing action of each door. (Including sliding doors and tailgates.)

Subsection	Defect(s)
(1) door action	a) door or tailgate is misaligned, improperly repaired or improperly modified b) finger pinch sensor on power sliding door is damaged or inoperative c) tailgate supporting gas spring inoperative (not able to support tailgate) d) binds, jams e) fails to open or close fully
(2) handle	a) improperly repaired or installed b) binds or jams c) missing, broken or inoperative
(3) hinge	a) cracked or seized b) missing, broken or worn out
(4) seal	a) damaged b) missing or fails to seal completely
(5) latch	a) loose or misaligned b) missing or fails to lock on both primary and secondary latch positions

(6) lock	a) button or knob is missing or broken b) lock is inoperative or incorrect type
(7) sliding door track & roller	a) misaligned, excessive play in track or roller is worn out b) sliding door binds or jams
(8) inner panel	a) missing or loose b) interferes with latch, lock or window control

Section 49. Side & Rear Window

Subsection	Defect(s)
(1) operation	a) any window is missing or fails to open or close properly
(2) type	a) not factory marked as being AS-1, AS-2, AS-10 or AS-11
(3) condition	a) exposed sharp edge b) cracked

Section 50. Sun Visor

Subsection	Defect(s)
(1) location & position	a) fails to stay in set position b) missing on either side of vehicle
(2) attachment	a) broken, bent, loose missing (includes secondary attachment)

Section 51. Windshield

Subsection	Defect(s)

(1) condition	a) missing b) any condition that blocks driver's view
(2) crack or chip	a) any crack, or any chip larger than 13 mm (1/2 in) in diameter, in the area swept by the wipers and in direct view of the driver b) two cracks extending from one edge to any other edge c) crack or chip has exposed sharp edge d)star chip larger than 50 mm (2 in) in diameter, in the area swept by the wipers e)crack or damage through both layers of glass
(3) visibility	a) decal or tint covers more than 10% of windshield area b) glass is discoloured over more than 10% of windshield area c) tint or decal extends more than 75 mm (3 in) from top of windshield d)pitting or damage that causes glare or reduces driver's visibility
(4) type	a) not factory marked as being AS-1 glass
(5) obstruction	a) decal or covering is located in the area swept by the wipers
(6) adhesive	a) improper adhesive or sealant is used

Section 52. Rear View & Side Mirror

Subsection	Defect(s)
(1) location & position	a) fails to stay in set position b) center inside, left side or right side mirror is missing

(2) condition	a) cracked or discoloured, or fails to provide unobstructed view to rear of vehicle
(3) mount	a) perforated by rust, corrosion or damage b) loose or not adjustable

Section 53. Seat

Inspection Method: Test adjustment controls, range of adjustment and operation of seat locks

Subsection	Defect(s)
(1) condition	a) padding is missing or out of position b) seat is distorted or bent c) any metal part normally covered by upholstery is exposed d) seat is not properly secured
(2) adjustment & lock	a) seat adjuster or lock is damaged or inoperative b) driver seat fails to lock in any set position
(3) headrest	a) missing b) bent, damaged or adjustment is inoperative

Section 54. Occupant Restraints & Protective Devices

Inspection Method: Extend each seat belt, test each seat belt buckle and retractor. Inspect each anchor point, latch plate and belt positioner. {SRS = Supplemental Restraint System}

Subsection	Defect(s)

(1) seat belt, buckle & latch, anchor & positioner	a) any part is missing, damaged or inoperative b) belt stitching is damaged or weakened c) belt is frayed or torn through any strand of webbing d) belt fails to retract e) latch sticks, binds or jams f) anchor or positioner is insecure, out of place or damaged
(2) child seat anchor	a) missing, insecure or damaged (only required if OEM equipped)
(3) air bag & SRS component	a) any part is missing or part is used that is not equivalent to OEM b) any part is improperly repaired or improperly installed c) air bag deployment is potentially obstructed by any object
(4) air bag & SRS control	a) fault code present (record code and description) b) control is inoperative or any part is bypassed c) wiring is damaged, improperly repaired or improper connector is used

Section 55. Trunk

Subsection	Defect(s)
(1) lid	a) misaligned when closed b) hole or perforation caused by rust, corrosion or damage
(2) hinge	a) damaged b) missing

(3) latch/lock	a) improperly repaired b) latch fails to open or close properly
(4) seal	a) missing, damaged or fails to seal completely
(5) floor	a) hole or perforation caused by rust, corrosion or damage

PART 8 - ACCESSIBILITY

56. Mobility Aid Ramp	60. Raised Roof
57. Aid Lift	61. Lowered Floor
58. Mobility Aid Securement	62. Air Bag Disable
59. Mobility Aid Interlock & Alarm	63. Emergency Equipment

Mobility Aid = (device such as a wheelchair or scooter)

Section 56. Mobility Aid Ramp

Inspection Method: Follow manufacturer instructions and operate the ramp manually and/or under power through full deployment and stowing cycles. Inspect for proper operation and securement in all positions. Inspect surface, side barriers, seals, stowing and securement devices.

Subsection	Defect(s)
(1) condition & operation	a) improperly modified b) counterbalance is missing, damaged or ineffective c) slider or hinge binds or jams d) inoperative (fails to operate in every intended manner)
(2) hydraulic deployment mechanism	a) hydraulic fluid leak b) incorrect hydraulic fluid

	c) loose on vehicle mounting location or at ramp attachment d) manual override system damaged or inoperative
(3) ramp surface	a) ramp is bent or distorted more than 13 mm (1/2 in) across width or length b) anti-skid material is worn out or missing over a total area larger than can be completely covered by a 75 mm (3 in) diameter circle
(4) ramp barrier	a) inadequate height (refer to OEM specifications) b) bent, loose or broken
(5) securement	a) fails to secure in stowed position to prevent moving into passenger area
(6) seals	a) damaged or ineffective allowing water or debris to enter vehicle
(7) operating instructions	a) operating instructions not located in vehicle b)warning/instruction label missing or illegible
(8) hinge & mounting	a) hinge is damaged or worn out b) mount or mounting hardware is damaged, loose or missing
(9) handle	a) missing or damaged

Section 57. Mobility Aid Lift

Inspection Method: Follow manufacturer instructions and operate lift under power through full deployment, lift and stowing cycles. Also operate lift manually. Inspect for proper operation and securement in all positions. Inspect surface and side barriers

Subsection	Defect(s)
(1) condition & operation	a) improperly modified b) binds or jams c) inoperative (fails to operate in every intended manner)

(2) hydraulic lift mechanism	a) hydraulic fluid leak b) incorrect hydraulic fluid c) loose on vehicle mounting location or at ramp attachment d) manual system damaged or inoperative
(3) barriers	a) insecure b) damaged or out of position
(4) operating instructions	a) operating instructions not located in vehicle b) warning/instruction label missing or illegible

Section 58. Mobility Aid Securement

Inspection Method: Assemble tie-down straps and/or retractors to vehicle securement locations and inspect attachment. Fully extend and retract straps and/or retractors. Test automatic locking and retracting features.

Subsection	Defect(s)
(1) vehicle securement point	a) floor or wall mounted tie-down hardware is damaged or insecure b)less than 4 securement points are available at any PMAD location
(2) tie-down strap	a) tie-down straps and/or retractor belts damaged or frayed through one strand b) retractor mechanism does not retract, lock or hold properly c) less than 4 restraint devices available for any PMAD location

Section 59. Mobility Aid Interlock & Alarm

Inspection Method: Test driver alarm and/or interlock preventing vehicle operation when wheelchair lift or ramp is deployed in accordance with manufacturer instructions.

Subsection	Defect(s)

(1) operation	a) interlock or alarm does not function as intended
Section 60. Raised Roof	
Subsection	Defect(s)
(1) condition	a) support frame cracked or separating from frame b) roof or frame leaking
Section 61. Lowered Floor & Floor Plate	
Subsection	Defect(s)
(1) condition	a) frame or frame welds cracked b)anti-skid material is worn out or missing over a total area larger than can be completely covered by a 75 mm (3 in) diameter circle
Section 62. Air Bag Disable	
Subsection	Defect(s)
(1) function	a) switch to disable airbag is inoperative
Section 63. Emergency Equipment	
Subsection	Defect(s)
(1) general	a) roadside hazard warning is missing, damaged or incorrect type b) first aid kit is missing or incomplete c) emergency seat belt cutter is missing d) fire extinguisher is missing, incorrect type, discharged or expired

PART 9 – TIRE & WHEEL

64. Tire Condition
65. Tire Tread
66. Tire Sidewall
67. Tire Pressure
68. Wheel/Rim
69. Wheel Fastener
70. Wheel Bearing/Hub

Section 64. Tire Condition

Inspection Method: Measure and record the tread depth in a major groove at the lowest point of the tread. If the tread depth is near the wear limits, measure in several spots around the tire and record the lowest tread depth. Record tire size and brand.

Subsection	Defect(s)
(1) general	a) failure of any tire appears imminent

(2) tread depth	a) 1.6 mm (2/32 in) of tread remaining b) less than 1.6 mm (2/32 in) of tread remaining c) wear bar is exposed d) cord is exposed
(3) retread	a) retread tire is used
(4) type	a) tires on an axle are not exactly the same brand and tread pattern b) tire speed rating is below OEM specification (speed rating not applicable to 'winter' rated tires when used in all wheel positions during winter driving conditions) c) tire is marked "temporary use only" or "Not for Highway Use"
(5) size	a) does not match OEM specified width, aspect ratio or load rating b) mixed tire sizes used on vehicle

Section 65. Tire Tread

Subsection	Defect(s)
(1) cut	a) tire tread has a cut greater than 25 mm (1 in) in length that extends below bottom of tread b) piece of tire greater than 625 sq mm (1 sq. in) is missing c) body cord of tire is exposed in cut
(2) separation	a) tire tread is separating
(3) re-grooving	a) tire tread has been re-grooved or modified
4) tread condition	a) any single tread bar is worn away around the tire's circumference b) flat spot or cupped area is worn to wear bar c)flat spot or cupped area where tread is less than 1.6 mm (2/32 in)

5) repair	a) tire has a section repair b) hole or puncture is improperly repaired

Section 66. Tire Sidewall

Subsection	Defect(s)
(1) condition	a) weather cracks are visible b) casing is broken or distorted, cord is exposed or bulge in sidewall

Section 67. Tire Pressure

Subsection	Defect(s)
(1) pressure	a) not within 3 psi of specified inflation pressure b) audible air leak

Section 68. Wheel/Rim

Subsection	Defect(s)
(1) condition	a) damaged or discoloured as a result of heating, or repaired by welding (unless remanufactured through approved process) b) part used that is not equivalent to OEM c) damaged or bent d) cracked e)broken
(2) valve stem	a) damaged b) cap is missing or damaged
(3) installation	a) incorrect size or type for vehicle, or incorrectly installed

Section 69. Wheel Fastener	
Inspection Method: Test fastener security using a torque wrench set to OEM specified setting.	
Subsection	Defect(s)
(1) condition	a) broken, bent, missing, loose or ineffective
(2) installation	a) incorrect fastener b) nut is not fully engaged with the stud
(3) security	a) any fastener rotates before the lowest torque value specified by the manufacturer is applied
Section 70. Wheel Bearing/Hub	
Inspection Method: Elevate axle so that the tire is clear of floor. Rotate wheel and check for roughness or noise. Check wheel bearing play by rocking wheel toward and away from vehicle. When end play is present, measure and compare to OEM specifications. Re-torque hub nut as specified by OEM.	
Subsection	Defect(s)
(1) condition	a) end play exceeds OEM specifications b) binding, noise or roughness is detected when wheel rotates
(2) hub nut	a) loose or missing
(3) seal	a) lubricant is leaking from hub, seal or grease cap (some minor seepage at seal is normal on non-sealed bearing
PART 10 – CUSTOMER SERVICE	

71. Interior	74. Taxi Meter
72. Exterior	75. Communication Equipment
73. Trunk	76. Top Light

Section 71. Interior

Subsection	Defect(s)
(1) license	a) any mandatory license or license holder is missing
(2) condition	a) litter, loose article or equipment is present in passenger area b) potentially offensive material or advertising is displayed c) normal driver or passenger view is obstructed in any way d) offensive odour is present that can't be vented away
(3) trim	a) missing, damaged or defaced b) condition is potentially hazardous to driver or passenger
(4) upholstery & carpet	a) missing, dirty, stained, discoloured or torn cushioning or padding missing or damaged c) hole or burn mark through outer layer d) condition is potentially hazardous to driver or passenger
(5) seat belts	a) stained or dirty
(6) glass & mirror	a) broken or stained

Section 72. Exterior

Subsection	Defect(s)
(1) decals & plates	a) mandatory decal or plate is missing or not properly displayed

(2) paint	a) surface is rough or improperly repaired b) colour of car fails to match registered broker colour
(3) body	a) dent that can't be completely covered by a 75 mm (3 in) diameter circle b) more than 1 dent that can't be completely covered by a 50 mm (2 in) diameter circle c) scratch or damage through paint that can't be completely covered by a 12 mm (1/2 in) by 150 mm (6 in) template d) improperly repaired e) one or more area(s) of surface rust where the combined area can't be completely covered by a 75 mm (3 in) diameter circle

Section 73. Trunk

Subsection	Defect(s)
(1) condition	a) loose article or equipment is present that can damage luggage b) litter, dirt or debris is present c) liner, trim or carpet is missing, wet, dirty, stained or torn d) offensive odour is present that can't be vented away

Section 74. Taxi Meter

Subsection	Defect(s)

(1) mounting & location	a) not located so that it can clearly be seen by passenger in any seated position b) insecure c) obstructing any vehicle control, indicator lamp or instrument
(2) display	a) inoperative or not fully illuminated
(3) operation & seal	a) inoperative, non-approved type, seal missing or broken b) evidence of tampering, improperly repaired

Section 75. Communication Equipment

Subsection	Defect(s)
(1) general	a) required communication equipment is missing or inoperative
(2) mounting &location	a) not located so that it can be accessed by driver b) obstructs any vehicle control or display c) insecure

Section 76. Top Light

Subsection	Defect(s)
(1) operation	a) inoperative or insecure