#### DOCUMENT FOR INCOMPLETE VEHICLE APPLICABLE TO THE 2015 MODEL YEAR (GMTK2X) C/K <u>LIGHT AND HEAVY DUTY</u> FULL-SIZE TRUCKS (SECOND EDITION)

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#### DO NOT REMOVE

THIS DOCUMENT MUST REMAIN
WITH THIS VEHICLE UNTIL IT IS
CERTIFIED AS A COMPLETED VEHICLE

PLACE LABEL HERE

This document is furnished as required by the Canada Motor Vehicle Safety Act and United States (U.S.) Federal Motor Vehicle Safety Regulations (FMVSR) to aid intermediate and final stage manufacturers in their determination of conformity of the completed vehicle with applicable Canada Motor Vehicle Safety Standards (CMVSS) and U.S. Federal Motor Vehicle Safety Standards (FMVSS). Also included are instructions which must be followed in order to assure that Environmental Protection Agency (EPA) and California emission certification requirements and U.S. National Highway Traffic Safety Administration (NHTSA) and Environmental Protection Agency (EPA) Fuel Economy Regulations are met.

This document is not a substitute for knowledge and understanding of the requirements of the Canada Motor Vehicle Safety Act, Federal Motor Vehicle Safety Regulations (FMVSR), or applicable Canada Motor Vehicle Safety Standards (CMVSS) and Federal Motor Vehicle Safety Standards (FMVSS). Intermediate and final stage manufacturers should be familiar with the Regulations and Standards referred to above to be aware of their specific responsibilities as they relate to the final destination and sale of each incomplete vehicle.

Any intermediate or final stage manufacturer making material alterations to this incomplete vehicle during the process of manufacturing the complete vehicle should be constantly vigilant to recognize all the effects, either direct or indirect, on other components, assemblies or systems caused by any alteration. No alteration should be made to the incomplete vehicle that either directly or indirectly results in any component, assembly or system being in nonconformance with any applicable Canada Motor Vehicle Safety Standard or Federal Motor Vehicle Safety Standard or Emission Regulation.

The statements contained in this Incomplete Vehicle Document are accurate as of the date of manufacture of the Incomplete Vehicle and can be relied on by any intermediate and/or final stage manufacturer as a basis for certification.

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#### INTRODUCTION

This document contains information relative to conformance of this incomplete vehicle with the following:

- Part I FEDERAL MOTOR VEHICLE SAFETY STANDARDS AND CANADA MOTOR VEHICLE SAFETY STANDARDS
- Part II U.S. ENVIRONMENTAL PROTECTION AGENCY, STATE OF CALIFORNIA, AND CANADIAN EMISSION REQUIREMENTS

#### PART I

For C/K Chassis Cab, refer to Part I, Chart A that follows. This section contains a list of Canada Motor Vehicle Safety Standards (CMVSS), and Federal Motor Vehicle Safety Standards (FMVSS), followed by a section entitled "Statements Regarding Canada Motor Vehicle Safety Standards (CMVSS), and Federal Motor Vehicle Safety Standards (FMVSS)". In the latter section, an appropriate statement of applicability is made for each standard, and by vehicle type, as it relates to the incomplete vehicle.

#### Basic Type CK <u>Chassis Cab</u> Incomplete Vehicle TYPE: Truck



Normally complete type C/K Pickup or Utility Vehicles that follow, along with the basic type incomplete C/K Chassis Cab above that are built with specific Regular Production Option (RPO) or Special Equipment Option (SEO), may require additional statements of applicability. If required, the additional statements will be found under each affected CMVSS and/or FMVSS Standard.

#### **Normally Complete Type CK Vehicle Types**

<u>Pick-up</u>
TYPE: Truck

TYPE: Multipurpose Vehicle





The identifiers TYPE 1, TYPE 2 or TYPE 3 prefix statements (of applicability) regarding Canada Motor Vehicle Safety Standards (CMVSS), and Federal Motor Vehicle Safety Standards (FMVSS). "Examples" of these statements follow:

- TYPE 1 A statement that the vehicle when completed will conform to the standard if no alterations are made in identified components of the incomplete vehicle. EXAMPLE: This vehicle when complete will conform to CMVSS 104 and FMVSS No. 104, Windshield Wiping and Washing Systems, if no alterations are made in the windshield wiper components.
- TYPE 2 A statement of specific conditions of final manufacture under which the manufacturer specifies that the completed vehicle will conform to the standard. EXAMPLE: This vehicle when completed will conform to CMVSS 121 and FMVSS 121, Air Brake Systems, if it does not exceed any of the gross axle weight ratings, if the center of gravity at GVWR is not higher than ## feet above the ground, and if no alterations are made to any brake system component.

### TYPE 3 A statement that conformity with the standard cannot be determined based upon the components supplied on the incomplete vehicle, and that the incomplete vehicle manufacturer makes no representation to conformity with the standard.

In accordance with the requirements of Canada Motor Vehicle Safety Regulations, and Federal Motor Vehicle Safety Regulations Part 568.4, the following information is included on the label affixed to the front cover of this document:

- the name of the incomplete vehicle manufacturer;
- the month and year the incomplete vehicle manufacturer performed its last manufacturing operation on the incomplete vehicle;
- the vehicle identification number (VIN);
- the Gross Vehicle Weight Rating (GVWR) expressed in kg (lb), intended for the vehicle when it is a completed vehicle;
- the Gross Axle Weight Rating (GAWR) expressed in kg (lb), intended for each axle of the vehicle when it is a completed vehicle, listed in order from front to rear.

In addition, the final stage manufacturer is responsible under Canada Motor Vehicle Safety Regulations, and Federal Motor Vehicle Safety Regulations and Part 567.5, to place the GVWR and the GAWR of each axle, on the Final Vehicle Certification Label. Required on label is the "Gross Vehicle Weight Rating" or "GVWR" followed by the appropriate value in kilograms and (pounds), which shall not be less than the sum of the unloaded vehicle weight, rated cargo load, and 68 kg (150 lb) pounds times the number of the vehicle's designated seating positions, if known. However, for school buses the minimum occupant weight allowance shall be 54.4 kg (120 lb) pounds per passenger and 150 pounds for the driver.

Unloaded Vehicle Weight means the weight of a vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo or occupants.

During the completion of this vehicle, GVWR and GAWR may be affected in various ways, including but not limited to the following:

- The installation of a body or equipment that exceeds the rated capacities of the Incomplete Vehicle.
- The addition of designated seating positions that exceed the rated capacities of the Incomplete Vehicle.
- Alterations or substitution of any components such as axles, springs, tires, wheels, frames, steering and brake systems that may affect the rated capacities of the Incomplete Vehicle.

On page 2 before each vehicle illustration and after the word TYPE, is a list of types of vehicles into which the incomplete vehicle is designed to be manufactured.

If supplemental technical information is required to support this document, go to the GM Upfitter Integration website located at <a href="https://www.gmupfitter.com">www.gmupfitter.com</a>

#### PART I - CHART A

# LIST OF CANADA MOTOR VEHICLE SAFETY STANDARDS (CMVSS) AND FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS), APPLICABLE TO THE C/K CHASSIS CAB, PICK-UP, OR UTILITY SEE STATEMENTS REGARDING CMVSS AND FMVSS ON PAGES THAT FOLLOW

| CMVSS<br>NO. | FMVSS<br>NO. | TITLE  | CHASSIS<br>CAB | PICK-UP | UTILITY |
|--------------|--------------|--|----------------|---------|---------|
| 1106         | -            | Exterior noise   | 1              | 1       | 1       |
| ICES-<br>002 | -            | Canada interference causing equipment standard   | 1              | 1       | 1       |
| 101          | 101          | Controls and displays  | 1              | 1       | 1       |
| 102          | 102          | Transmission shift position sequence, starter interlock, and transmission braking effect | 2,3            | 2,3     | 2,3     |
| 103          | 103          | Windshield defrosting and defogging systems  | 1              | 1       | 1       |
| 104          | 104          | Windshield wiping and washing systems  | 1              | 1       | 1       |
| 105          | 105          | Hydraulic and electric brake systems   | 2              | 2       | 2       |
| 106          | 106          | Brake hoses, hydraulic, air and vacuum   | 1              | 1       | 1       |
| 108          | -            | Daytime running lamps  | 1              | 1       | 1       |
| 108          | 108          | Lamps, reflective devices and associated equipment                                       | 1,3            | 1       | 1       |
| 110          | 110          | Tire selection and rims for motor vehicles with a GVWR of 4536 kg (10,000 lb) or less    | 2              | 2       | 2       |
| 111          | 111          | Rearview mirrors   | 1,3            | 1,3     | 1,3     |
| 113          | 113          | Hood latch system  | 1              | 1       | 1       |
| 114          | 114          | Theft prevention and rollaway prevention   | 1              | 1       | 1       |
| 115          | -            | Vehicle identification number  | 1              | 1       | 1       |
| 116          | 116          | Motor vehicle brake fluids   | 1              | 1       | 1       |
| 118          | 118          | Power operated window, partition and roof panel systems                                  | 1              | 1       | 1       |
| 120          | 120          | Tire selection and rims for motor vehicles with a GVWR of more than 4536 kg (10,000 lb)  | 2              | 2       | 2       |
| 124          | 124          | Accelerator control systems  | 1,3            | 1,3     | 1,3     |
| -            | 125          | Warning devices designed to be carried in motor vehicles                                 | 1              | 1       | 1       |
| 126          | 126          | Electronic stability control systems   | 2              | 2       | 2       |
| 135          | 135          | Light vehicle brake systems  | 2              | 2       | 2       |
| -            | 138          | Tire pressure monitoring systems   | 2              | 2       | 2       |
| 201          | 201          | Occupant protection in interior impact   | 1,3            | 1,3     | 1,3     |
| 202          | 202A         | Head restraints  | 1,3            | 1,3     | 1,3     |
| 203          | 203          | Impact protection for the driver from the steering control system                        | 1,3            | 1,3     | 1,3     |
| 204          | 204          | Steering control rearward displacement   | 2,3            | 2,3     | 2,3     |
| 205          | 205          | Glazing materials  | 1              | 1       | 1       |
| 206          | 206          | Door locks and retention components  | 1              | 1       | 1       |
| 207          | 207          | Seating systems  | 1,3            | 1,3     | 1,3     |
| 208          | 208          | Occupant crash protection  | 1,2,3          | 1,2,3   | 1,2,3   |

| CMVSS<br>NO. | FMVSS<br>NO. | TITLE  | CHASSIS<br>CAB | PICK-UP | UTILITY |
|--------------|--------------|--|----------------|---------|---------|
| 209          | 209          | Seat belt assemblies   | 1,3            | 1,3     | 1,3     |
| 210          | 210          | Seat belt assembly anchorages  | 1,3            | 1,3     | 1,3     |
| 210.1        | -            | Tether anchorages for restraint systems                                      | 1,3            | 1,3     | 1,3     |
| 210.2        | -            | Lower universal anchorage systems for restraint systems and booster cushions | 1,3            | 1,3     | 1,3     |
| 212          | 212          | Windshield mounting  | 2              | 2       | 2       |
| 213.4        | 213          | Built-in child restraint systems and built-in booster cushions               | 3              | 3       | 3       |
| 214          | 214          | Side impact protection   | 2              | 2       | 2       |
| 216          | 216          | Roof crush resistance  | 1              | 1       | 1       |
| 219          | 219          | Windshield zone intrusion  | 2              | 2       | 2       |
| -            | 225          | Child restraint anchorage systems  | 1,3            | 1,3     | 1,3     |
| 301          | 301          | Fuel system integrity  | 2              | 2       | 2       |
| 301.1        | =            | LPG fuel system integrity  | 3              | 3       | 3       |
| 302          | 302          | Flammability of interior materials   | 1,3            | 1,3     | 1,3     |
| 301.2        | 303          | CNG fuel system integrity  | 3              | 3       | 3       |
| -            | 304          | Compressed natural gas fuel containers                                       | 3              | 3       | 3       |
| _            | 403          | Platform lift systems  | 3              | 3       | 3       |
| _            | 404          | Platform lift installations in motor vehicles                                | 3              | 3       | 3       |

TYPE 1, 2 or 3 numbers to the right hand side of the table above designate the appropriate paragraph in the CMVSS or FMVSS standards that follow.

## Statements Regarding Canada Motor Vehicle Safety Standards (CMVSS), and Federal Motor Vehicle Safety Standards (FMVSS)

### CMVSS 1106 – EXTERIOR NOISE <u>Applies to all types of Incomplete Vehicles Contained in this Document</u>

#### TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

A. This incomplete vehicle, when completed, will conform to the above standards providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Air Induction System (tuning elements)

Alternator

Axles/halfshafts/propshaft

Components for AWD system (axle, propshaft, PTU)

Engine assembly

Exhaust System

Exterior noise generating devices

Exterior rearview mirror assemblies

Front of dash sound deadening material

Hood assembly including sound deadening material and seals

Intake system (Air Induction System (i.e. Air filter,

Mass Air flow (MAF) sensor, ducts))

Power steering pump

Powertrain control and logic

Powertrain cooling fan and motor assemblies Radiator/condenser assembly to body seals

Tires (including correct tire pressure)

Transmission/Transaxle assembly

Underbody shields including air deflector

Wheel house liners and shields

B. Final compliance with CMVSS 1106 is the responsibility of the final stage manufacturer for any modifications, added material, components, or systems.

### INTERFERENCE CAUSING EQUIPMENT STANDARD (CANADA ONLY) – ICES-002 Applies to all types of Incomplete Vehicles Contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles with spark ignition engines contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to the performance requirements of the above regulations provided no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Ignition coil(s)
Ignition wires & plugs

Spark plug wires VCM/PCM/ECM/TCM

The final stage manufacturer must provide a statement of compliance on the Final Stage Manufacturer's Compliance Label with the following bilingual information in order to comply with Industry Canada's Interference Causing Equipment Standard ICES/NMB-002:

ICES/NMB-002

# FMVSS 101 – CONTROLS AND DISPLAYS Applies to all types of Incomplete Vehicles Contained in this Document CMVSS 101– CONTROLS AND DISPLAYS Applies to all types of Incomplete Vehicles Contained in this Document with a GVWR less than 4536 kg (10,000 lb)

TYPE 1 The following statement is applicable to all types of Incomplete Vehicles contained in this document as noted above (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 101 and FMVSS 101 providing no alterations are made which affect the size, location, identification or illumination of the controls and displays or the location, travel and type of driver's seat, as manufactured by General Motors,. If the driver's seat is installed by the intermediate or final stage manufacturer, the "H" point must be located as shown in the **GM Upfitter Integration website located at www.gmupfitter.com** 

The following controls must be operable, and the following displays for the following functions and malfunctions shall be fitted in such a manner that they are identifiable, by the driver while the driver is seated in the driver's designated seating position with the driver's seat belt fastened around the driver in accordance with the manufacturer's instructions:

Hand operated controls (if equipped):

Automatic vehicle speed (cruise control)

Clearance lamps (switch)

Clutch pedal
Driver's sun visor
Engine start
Engine stop

Electronic stability control system "off"

Hand throttle

Hazard warning signal Hazard warning switch

Headlamps

Headlamp upper or lower beam switch Heating and air conditioning fan Heating and air conditioning system

Horn

Ignition (switch)
Illumination intensity
Manual choke

Master lighting switch
Park brake (pedal or lever)

Position, side marker, end-outline marker,

identification or clearance lamps

Rear window defogging and defrosting systems

Service brake (pedal or lever)

Steering wheel

Taillamps

Transaxle/transmission shifter (except transfer case)

Turn signal

Windshield defogging and defrosting systems

Windshield washer (washing system)

Identification lamps (switch)

Windshield wiper (wiping system)

Foot operated controls (if equipped):

Accelerator

Clutch

Headlamp upper or lower beam switch

Highbeam

Park brake (pedal or lever)

Service brake (pedal or lever) Tai**ll**amp

Windshield washer (washing system) Windshield wiper (wiping system)

Displays (if equipped):

Air brake low pressure

Antilock brake system malfunction

Battery charging condition Brake lining wear-out condition

Brake system malfunction (Canada - ISO symbol)

Brake Pressure (system loss)

Electrical charge

Electronic stability control system "off"

Electronic stability control system malfunction

Engine coolant temperature

Engine oil pressure

Fuel level

Gross loss of brake pressure condition

Hazard warning signal

Headlamp upper beam

Highbeam

Low brake air pressure telltale

Low brake fluid condition

Low tire pressure indication (see MVSS 138)

Odometer (Canada must be metric)

Parking brake applied

Regenerative brake system malfunction

Seat belt (unfastened telltale)

Speedometer (Canada must be metric) Tire pressure monitoring system malfunction

Transmission control position

Turn signal(s)

Variable brake proportioning system malfunction

If the intermediate or final stage manufacturer installs any of the above controls and displays, they must also meet the requirements of this standard.

#### **CMVSS 101 – CONTROLS**

#### Applies to all types of Incomplete Vehicles contained in this Document with a GVWR greater than or equal to 4536 kg (10,000 lb)

#### TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document with a GVWR greater than or equal to 4536 kg (10,000 lb) (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to the controls portion of CMVSS 101 providing no alterations are made which affect the size. location, identification or illumination of the controls and or the location. travel and type of driver's seat, as manufactured by General Motors,. If the driver's seat is installed by the intermediate or final stage manufacturer, the "H" point must be located as shown in the GM Upfitter Integration website located at www.gmupfitter.com

The following controls must be operable by the driver while the driver is seated in the driver's designated seating position with the driver's seat belt fastened around the driver in accordance with the manufacturer's instructions:

Hand operated controls (if equipped):

Automatic vehicle speed system

Clearance lamps (switch)

Clutch pedal Driver's sun visor

Engine start Engine stop Hand throttle

Hazard warning signal Hazard warning switch

Headlamp

Headlamp upper or lower beam switch Heating and air conditioning fan

Highbeam

Ignition (switch) Illumination intensity

Manual choke

Master lighting switch Park brake (pedal or lever)

Rear window defrosting and defogging systems

Service brake (pedal or lever)

eering wheel

Taillamp

Transaxle/transmission shifter (except transfer case)

Turn signal

Windshield defrosting and defogging systems

Windshield washer (washing system)

Horn

Identification lamps (switch)

Windshield wiper (wiping system)

Foot operated controls (if equipped):

Accelerator

Clutch

Headlamp upper or lower beam switch

Highbeam

Park brake (pedal or lever)

Service brake (pedal or lever)

Tai**ll**amp

Windshield washer (washing system)

Windshield wiper (wiping system)

If the intermediate or final stage manufacturer installs any of the above controls, they must also meet the requirements of this standard.

## CMVSS 102 and FMVSS 102 – TRANSMISSION SHIFT POSITION SEQUENCE, STARTER INTERLOCK, AND TRANSMISSION BRAKING EFFECT Refer to Vehicle Types, and Applicable "Mobility" Statements that follow

TYPE 2 The following statement is applicable to all incomplete vehicle types contained in this document and not equipped with a Mobility Package (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 102 and FMVSS 102 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Automatic (AT) or Manual (MT) Transaxle/Transmission control and identification system, including but not limited to:

AT floor shift mechanism

AT gear ratios and final drive ratio

AT gear shift sequence and control logic (electrical

or mechanical)

AT neutral safety switch assembly and wire

AT position indicator linkage and display

AT steering column assembly

Automatic transmission/transaxle assembly

Brake - AT interlock controls Engine starter interlock controls MT clutch-starter interlock system

AT or MT shift position pattern (knob, plate or label)

Vehicle wiring harnesses

The items listed below, if provided by General Motors with this vehicle, must be installed as specified:

Body wiring harness (to complete circuitry to rear lamps).

TYPE 3 The following statement is applicable to all incomplete vehicle types contained in this document and equipped with a Mobility Package (unless otherwise noted on the cover).

Conformity with CMVSS 102 and FMVSS 102 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

### CMVSS 103 and FMVSS 103 – WINDSHIELD DEFROSTING AND DEFOGGING SYSTEMS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 103 and FMVSS 103 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Windshield defrosting and defogging systems, including but not limited to:

Chassis and instrument panel wiring harness assembly

Defroster air distributor assembly (manifold)

Defroster air duct assembly

Defroster air hoses (distributor to nozzle)

Defroster air to windshield outlet assembly (nozzle)

(it affects blower speed)

Defroster outlet to heater assembly adapter Engine control, software and calibration

Engine coolant pump

Engine water outlet thermostat assembly

Engine wiring harness

Engine wiring harness

Heater and air conditioning wiring harness

Heater and defroster assembly (including motor and

blower)

Heater and defroster control (electrical, mechanical,

vacuum)

Heater and radiator hoses/hose assemblies

Heater blower motor speed control

Side window defroster ducts

Vacuum control hoses and electric actuators

Windshield assembly

### CMVSS 104 and FMVSS 104 – WINDSHIELD WIPING AND WASHING SYSTEMS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 104 and FMVSS 104 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Windshield wiping and washing systems, including but not limited to:

Vehicle wiring harness and electrical controls

Washer reservoir cap

Water reservoir filler assembly

Windshield assembly

Windshield module attachments

Windshield washer fluid reservoir

Windshield washer nozzle

Windshield washing system hoses Windshield wiper arm assembly Windshield wiper blade assembly Windshield wiper linkage assembly Windshield wiper/washer control

Windshield wiper/washer motor/pump assembly

## CMVSS 105 and FMVSS 105 – HYDRAULIC AND ELECTRIC BRAKE SYSTEMS Applies to all types of Incomplete Vehicles Contained in this Document Greater than 3500 kg (7,716 lb) GVWR

TYPE 2 The following statement is applicable to all types of Incomplete Vehicles contained in this document with a greater than 3500 kg (7,716 lb) GVWR, (unless otherwise noted on the cover).

This incomplete vehicle when completed will conform to CMVSS 105 and FMVSS 105 provided it is completed in accordance with the following specific conditions by the (intermediate and) final stage manufacturer:

A. Providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Anti-Lock Brake System

Brake assemblies and components (service/ parking) - (power boosters, master cylinder, wheel cylinder, calipers, wheel speed sensor, wheel speed sensor wiring, brake lining, etc.)

Brake pedal, brake switch, parking brake hand lever or park brake switch and related mechanical components

Brake system electrical controls and logic Gauges and warning devices, and statements Hydraulic brake fluid and reservoirs Hydraulic brake lines, fittings and routings Hydraulic brake valves and components Master cylinder-warning statement

Parking brake actuator and related mechanical components

Power steering or vacuum lines and routing

Power steering or vacuum pump

Tires and Wheels

Vacuum brake lines, fittings and routings

Vehicle wiring harnesses

Wheelbases

- B. GVWR, GAWR front and rear weight ratings as listed on the Incomplete Vehicle Label affixed to the front cover of this document must not be exceeded.
- C. The center of gravity of the total vehicle falls within the areas referenced on the "ALLOWABLE CENTER OF GRAVITY CHART" that follows. Instructions for determining the allowable center of gravity variation are listed below:

These charts detail the envelope of allowable center of gravity variation for completed vehicles. This is significant for the lightly loaded portion of FMVSS 105, which is defined as curb plus 181.4 kg (400 lb) distributed in the driver-passenger area of the vehicle for vehicles with GVWR of 4536 kg (10,000 lb) or less or as curb plus 226.8 kg (500 lb) distributed in the driver-passenger area of the vehicle for vehicles with GVWR greater than 4536 kg (10,000 lb).

The lightly loaded center of gravity of complete vehicles needs to be restricted so it will meet FMVSS 105 stopping distances. The laden center of gravity does not need to be specified as it is controlled within the CMVSS 105 and FMVSS 105 test procedure by specific instructions as to how ballast is to be placed (while height is not controlled, it is assumed that for test purposes it would be reasonable).

For upfitter use, the center of gravity location can be approximated by the following formula:

| d                          | =                     | [Wrc + Wrb + [(Hp)(Wp)/WB]] WB<br>Wt   |
|----------------------------|-----------------------|--|
| h                          | =                     | [h1Wc + h2Wb + (h3)(Wp)]<br>Wt   |
| d<br>h<br>Wrc<br>Wrb<br>WB | =<br>=<br>=<br>=<br>= | horizontal distance from front wheels to completed vehicle center of gravity mm (in) vertical distance from ground to completed vehicle center of gravity mm (in) rear component of Chassis weight kg (lb) rear component of body weight kg (lb) vehicle wheelbase mm (in) |
| Wt                         | =                     | total weight of chassis and body kg (lb) plus 181.4 kg (400 lb) for vehicles with GVWR of 4536 kg (10,000 lb) or less.   |
| Wt                         | =                     | total weight of chassis and body kg (lb) plus 226.8 kg (500 lb) for vehicles with GVWRgreater than 4536 kg (10,000 lb).  |
| h1<br>Wc<br>h2<br>Wb       | =<br>=<br>=<br>=      | center of gravity height from ground of the Bare Chassis = 743 mm (29.25 in) total weight of Chassis kg (lb) center of gravity height of body from ground mm (in) total weight of body kg (lb)   |
| Wp                         |                       | = 181.4 kg (400 lb) Amount from lightly loaded definition that is evenly distributed in driver-passenger area of vehicle for vehicles with GVWR of 4536 kg (10,000 lb) or less.  |
| Wp                         | =                     | 226.8 kg (500 lb) Amount from lightly loaded definition that is evenly distributed in driver-passenger area of vehicle for vehicles with GVWR greater than 4536 kg (10,000 lb).  |
| Нр                         | =                     | 1482 mm (58.35 in) Horizontal distance from front axle to center of gravity of 181.4 kg (400 lb) or 226.8 kg (500 lb) evenly distributed in driver-passenger area of vehicle.  |
| h3                         | =                     | 1013 mm (39.88 in) Vertical center of gravity height of 181.4 kg (400 lb) evenly distributed in driver-passenger area for vehicles with GVWR of 4536 kg (10,000 lb) or less.   |
| h3                         | =                     | 1013 mm (39.88 in) Vertical center of gravity height of 226.8 kg (500 lb) evenly distributed in driver-passenger area for vehicles with GVWR greater than 4536 kg (10,000 lb).   |

## **CMVSS 105 and FMVSS 105 ALLOWABLE CENTER OF GRAVITY CHARTS**

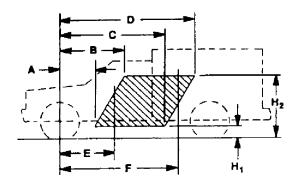
|        |                    |                 |                                      |               | Incomplete, Pickup Box Removal, or Snow Plow Prep Package Vehic |                           |   |  |                          |                          |                                   |                                    |  |
|--------|--------------------|-----------------|--------------------------------------|---------------|---|---------------------------|---|--|--------------------------|--------------------------|-----------------------------------|------------------------------------|--|
| Model  | GVWR<br>kg<br>(lb) | Brake<br>System | Whee <b>l-</b><br>Base<br>mm<br>(in) | Rear<br>Wheel |   | S/FMVSS L                 | In <b>l</b> aden, Cu<br>as defined I<br>ו | wab <b>l</b> e C/G \<br>urb Weight -<br>oy CMVSS<br>mm<br>(in) | + 181 <b>.</b> 4 kg (    |                          | Fwd<br>C/G<br>Limit<br>mm<br>(in) | RRwd<br>C/G<br>Limit<br>mm<br>(in) |  |
|        |                    |                 |                                      |               | H <sub>1</sub>  | H <sub>2</sub>            | Α   | В  | С                        | D                        | E                                 | F                                  |  |
| C25743 | 4309<br>(9500)     | J95             | 3904<br>(153.7)                      | SRW           | 304 <b>.</b> 8<br>(12.0)  | 1219.2<br>(48.0)          | 1288<br>(50.7)                            | 1542<br>(60.7)   | 2785<br>(109.6)          | 3039<br>(119.6)          | 1288<br>(50.7)                    | 2733<br>(107.6)                    |  |
| C25743 | 4491<br>(9900)     | J95             | 3904<br>(153.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1288<br>(50.7)                            | 1542<br>(60.7)   | 2785<br>(109.6)          | 3039<br>(119.6)          | 1288<br>(50.7)                    | 2733<br>(107.6)                    |  |
| C25743 | 4536<br>(10,000)   | J95             | 3904<br>(153.7)                      | SRW           | 304 <b>.</b> 8<br>(12.0)  | 1219.2<br>(48.0)          | 1288<br>(50.7)                            | 1542<br>(60.7)   | 2785<br>(109.6)          | 3039<br>(119.6)          | 1288<br>(50.7)                    | 2733<br>(107.6)                    |  |
| C25753 | 4309<br>(9500)     | J95             | 3662<br>(144.2)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1213<br>(47.8)                            | 1467<br>(57.8)   | 2618<br>(103.1)          | 2871<br>(113.0)          | 1209<br>(47.6)                    | 2564<br>(100.9)                    |  |
| C25753 | 4491<br>(9900)     | J95             | 3662<br>(144.2)                      | SRW           | 304 <b>.</b> 8<br>(12.0)  | 1219 <b>.</b> 2<br>(48.0) | 1213<br>(47.8)                            | 1467<br>(57.8)   | 2618<br>(103.1)          | 2871<br>(113.0)          | 1209<br>(47.6)                    | 2564<br>(100.9)                    |  |
| C25753 | 4536<br>(10,000)   | J95             | 3662<br>(144.2)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1213<br>(47 <u>.</u> 8)                   | 1467<br>(57.8)   | 2618<br>(103.1)          | 2871<br>(113.0)          | 1209<br>(47 <u>.</u> 6)           | 2564<br>(100.9)                    |  |
| C25903 | 4218<br>(9300)     | J95             | 3395<br>(133.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1131<br>(44.5)                            | 1385<br>(54.5)   | 2433<br>(95.8)           | 2687<br>(105.8)          | 1120<br>(44.1)                    | 2377<br>(93 <b>.</b> 6)            |  |
| C25903 | 4491<br>(9900)     | J95             | 3395<br>(133.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1131<br>(44.5)                            | 1385<br>(54.5)   | 2433<br>(95.8)           | 2687<br>(105.8)          | 1120<br>(44.1)                    | 2377<br>(93 <b>.</b> 6)            |  |
| C25903 | 4536<br>(10,000)   | J95             | 3395<br>(133.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1131<br>(44.5)                            | 1385<br>(54.5)   | 2433<br>(95.8)           | 2687<br>(105.8)          | 1120<br>(44.1)                    | 2377<br>(93 <b>.</b> 6)            |  |
| C25943 | 4309<br>(9500)     | J95             | 4259<br>(157.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1397<br>(55 <b>.</b> 0)                   | 1651<br>(65.0)   | 3031<br>(119.3)          | 3284<br>(129.3)          | 1406<br>(55 <b>.</b> 4)           | 2982<br>(117.4)                    |  |
| C25943 | 4491<br>(9900)     | J95             | 4259<br>(157.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1397<br>(55 <b>.</b> 0)                   | 1651<br>(65.0)   | 3031<br>(119.3)          | 3284<br>(129.3)          | 1406<br>(55 <b>.</b> 4)           | 2982<br>(117.4)                    |  |
| C25943 | 4536<br>(10,000)   | J95             | 4259<br>(157.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1397<br>(55 <b>.</b> 0)                   | 1651<br>(65.0)   | 3031<br>(119.3)          | 3284<br>(129.3)          | 1406<br>(55 <b>.</b> 4)           | 2982<br>(117.4)                    |  |
| C25953 | 4309<br>(9500)     | J95             | 4017<br>(158 <b>.</b> 2)             | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1323<br>(52 <b>.</b> 1)                   | 1576<br>(62 <b>.</b> 0)  | 2863<br>(112.7)          | 3117<br>(122.7)          | 1326<br>(52 <b>.</b> 2)           | 2812<br>(110.7)                    |  |
| C25953 | 4491<br>(9900)     | J95             | 4017<br>(158 <b>.</b> 2)             | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1323<br>(52 <b>.</b> 1)                   | 1576<br>(62.0)   | 2863<br>(112.7)          | 3117<br>(122.7)          | 1326<br>(52 <b>.</b> 2)           | 2812<br>(110.7)                    |  |
| C25953 | 4536<br>(10,000)   | J95             | 4017<br>(158 <b>.</b> 2)             | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1323<br>(52 <b>.</b> 1)                   | 1576<br>(62.0)   | 2863<br>(112.7)          | 3117<br>(122,7)          | 1326<br>(52 <b>.</b> 2)           | 2812<br>(110.7)                    |  |
| C35743 | 4536<br>(10,000)   | J95             | 3904<br>(153.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1288<br>(50 <b>.</b> 7)                   | 1542<br>(60.7)   | 2785<br>(109.6)          | 3039<br>(119.6)          | 1288<br>50.7)                     | 2733<br>(107.6)                    |  |
| C35743 | 4763<br>(10,500)   | J95             | 3904<br>(153.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1074<br>(42 <b>.</b> 3)                   | 1286<br>(50.6)   | 2971<br>(117 <b>.</b> 0) | 3182<br>(125.3)          | 1171<br>(46 <b>.</b> 1)           | 2928<br>(115 <b>.</b> 3)           |  |
| C35743 | 5035<br>(11,100)   | J95             | 3904<br>(153.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 1074<br>(42.3)                            | 1286<br>(50.6)   | 2971<br>(117.0)          | 3182<br>(125.3)          | 1171<br>(46.1)                    | 2928<br>(115.3)                    |  |
| C35903 | 4717<br>(10,400)   | J95             | 3395<br>(133.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 943<br>(37.1)                             | 1155<br>(45.5)   | 2593<br>(102.1)          | 2804<br>(110 <b>.</b> 4) | 1019<br>(40 <b>.</b> 1)           | 2547<br>(100 <b>.</b> 3)           |  |
| C35903 | 5035<br>(11,100)   | J95             | 3395<br>(133.7)                      | SRW           | 304.8<br>(12.0)   | 1219.2<br>(48.0)          | 943<br>(37.1)                             | 1155<br>(45.5)   | 2593<br>(102.1)          | 2804<br>(110 <b>.</b> 4) | 1019<br>(40 <b>.</b> 1)           | 2547<br>(100 <b>.</b> 3)           |  |

|        |                    |                 |                              |               | In                       | ıcomp <b>l</b> ete, l                  | Pickup Box              | Remova <b>l</b> , c               | r Snow P <b>l</b> o                | w Prep Pac               | kage Vehic              | cles                     |
|--------|--------------------|-----------------|------------------------------|---------------|--------------------------|--|-------------------------|-----------------------------------|------------------------------------|--------------------------|-------------------------|--------------------------|
| Model  | GVWR<br>kg<br>(lb) | Brake<br>System | Wheel-<br>Base<br>mm<br>(in) | Rear<br>Wheel |                          | Coordina<br>S/FMVSS L<br>kg (500 lb) a |                         | Fwd<br>C/G<br>Limit<br>mm<br>(in) | RRwd<br>C/G<br>Limit<br>mm<br>(in) |                          |                         |                          |
|        |                    |                 |                              |               | H <sub>1</sub>           | H <sub>2</sub>                         | Α                       | (in)<br>B                         | С                                  | D                        | E                       | F                        |
| C35903 | 5908<br>(13,025)   | J96             | 3395<br>(133.7)              | DRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 943<br>(37 <b>.</b> 1)  | 1155<br>(45 <b>.</b> 5)           | 2593<br>(102 <b>.</b> 1)           | 2804<br>(110 <b>.</b> 4) | 1019<br>(40 <b>.</b> 1) | 2547<br>(100 <b>.</b> 3) |
| C35903 | 6078<br>(13,400)   | J96             | 3395<br>(133.7)              | DRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 943<br>(37 <b>.</b> 1)  | 1155<br>(45 <b>.</b> 5)           | 2593<br>(102 <b>.</b> 1)           | 2804<br>(110 <b>.</b> 4) | 1019<br>(40 <b>.</b> 1) | 2547<br>(100.3)          |
| C35943 | 4536<br>(10,000)   | J95             | 4259<br>(157.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1397<br>(55 <b>.</b> 0) | 1651<br>(65 <b>.</b> 0)           | 3031<br>(119 <b>.</b> 3)           | 3284<br>(129 <b>.</b> 3) | 1406<br>(55 <b>.</b> 4) | 2982<br>(117 <b>.</b> 4) |
| C35943 | 4853<br>(10,700)   | J95             | 4259<br>(157.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1165<br>(45 <b>.</b> 9) | 1377<br>(54 <b>.</b> 2)           | 3235<br>(127 <u>.</u> 4)           | 3446<br>(135 <b>.</b> 7) | 1278<br>(50 <b>.</b> 3) | 3195<br>(125.8)          |
| C35943 | 5171<br>(11,400)   | J95             | 4259<br>(157.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1165<br>(45 <b>.</b> 9) | 1377<br>(54.2)                    | 3235<br>(127.4)                    | 3446<br>(135.7)          | 1278<br>(50 <b>.</b> 3) | 3195<br>(125.8)          |
| C35943 | 5908<br>(13,025)   | J96             | 4259<br>(157.7)              | DRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1165<br>(45 <b>.</b> 9) | 1377<br>(54.2)                    | 3235<br>(127.4)                    | 3446<br>(135.7)          | 1278<br>(50 <b>.</b> 3) | 3195<br>(125.8)          |
| C35953 | 4536<br>(10,000)   | J95             | 4017<br>(158 <b>.</b> 2)     | SRW           | 304.8<br>(12.0)          | 1219 <b>.</b> 2<br>(48 <b>.</b> 0)     | 1323<br>(52 <b>.</b> 1) | 1576<br>(62.0)                    | 2863<br>(112.7)                    | 3117<br>(122.7)          | 1326<br>(52 <b>.</b> 2) | 2812<br>(110.7)          |
| C35953 | 4853<br>(10,700)   | J95             | 4017<br>(158 <b>.</b> 2)     | SRW           | 304.8<br>(12.0)          | 1219 <b>.</b> 2<br>(48.0)              | 1103<br>(43 <b>.</b> 4) | 1315<br>(51.8)                    | 3055<br>(120,3)                    | 3266<br>(128.6)          | 1205<br>(47 <b>.</b> 4) | 3013<br>(118.6)          |
| C35953 | 5080<br>(11,200)   | J95             | 4017<br>(158.2)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1103<br>(43.4)          | 1315<br>(51.8)                    | 3055<br>(120.3)                    | 3266<br>(128.6)          | 1205<br>(47.4)          | 3013<br>(118.6)          |
| C35953 | 5908<br>(13,025)   | J96             | 4017<br>(158.2)              | DRW           | 304.8<br>(12.0)          | 1219 <b>.</b> 2<br>(48.0)              | 1103<br>(43 <b>.</b> 4) | 1315<br>(51.8)                    | 3055<br>(120.3)                    | 3266<br>(128.6)          | 1205<br>(47 <b>.</b> 4) | 3013<br>(118.6)          |
| C36003 | 5987<br>(13,200)   | J96             | 3493<br>(137.5)              | DRW           | 304.8<br>(12.0)          | 1219 <b>.</b> 2<br>(48.0)              | 968<br>(38 <b>.</b> 1)  | 1180<br>(46.5)                    | 2666<br>(105.0)                    | 2877<br>(113.3)          | 1048<br>(41.3)          | 2619<br>(103.1)          |
| C36043 | 5987<br>(13,200)   | J96             | 4356<br>(171.5)              | DRW           | 304 <b>.</b> 8<br>(12.0) | 1219 <b>.</b> 2<br>(48.0)              | 1190<br>(46.9)          | 1402<br>(55.2)                    | 3307<br>(130.2)                    | 3518<br>(138.5)          | 1307<br>(51.5)          | 3267<br>(128.6)          |
| C36403 | 5987<br>(13,200)   | J96             | 4115<br>(162.0)              | DRW           | 304 <b>.</b> 8<br>(12.0) | 1219.2<br>(48.0)                       | 1128<br>(44.4)          | 1340<br>(52.8)                    | 3128<br>(123.1)                    | 3339<br>(131.5)          | 1234<br>(48.6)          | 3086<br>(121.5)          |
| K25743 | 4309<br>(9500)     | J95             | 3904<br>(153.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1288<br>(50.7)          | 1542<br>(60.7)                    | 2785<br>(109.6)                    | 3039<br>(119.6)          | 1288<br>(50.7)          | 2733<br>(107.6)          |
| K25743 | 4491<br>(9900)     | J95             | 3904<br>(153.7)              | SRW           | 304 <b>.</b> 8<br>(12.0) | 1219 <b>.</b> 2<br>(48.0)              | 1288<br>(50.7)          | 1542<br>(60.7)                    | 2785<br>(109.6)                    | 3039<br>(119.6)          | 1288<br>(50.7)          | 2733<br>(107.6)          |
| K25743 | 4536<br>(10,000)   | J95             | 3904<br>(153.7)              | SRW           | 304 <b>.</b> 8<br>(12.0) | 1219 <b>.</b> 2<br>(48.0)              | 1288<br>(50.7)          | 1542<br>(60.7)                    | 2785<br>(109.6)                    | 3039<br>(119.6)          | 1288<br>(50.7)          | 2733<br>(107.6)          |
| K25753 | 4309<br>(9500)     | J95             | 3662<br>(144.2)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1213<br>(47 <b>.</b> 8) | 1467<br>(57.8)                    | 2618<br>(103.1)                    | 2871<br>(113.0)          | 1209<br>(47 <b>.</b> 6) | 2564<br>(100.9)          |
| K25753 | 4491<br>(9900)     | J95             | 3662<br>(144.2)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1213<br>(47 <b>.</b> 8) | 1467<br>(57.8)                    | 2618<br>(103.1)                    | 2871<br>(113.0)          | 1209<br>(47 <b>.</b> 6) | 2564<br>(100.9)          |
| K25753 | 4536<br>(10,000)   | J95             | 3662<br>(144.2)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1213<br>(47.8)          | 1467<br>(57.8)                    | 2618<br>(103.1)                    | 2871<br>(113.0)          | 1209<br>(47.6)          | 2564<br>(100.9)          |
| K25903 | 4309<br>(9500)     | J95             | 3395<br>(133.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1131<br>(44.5)          | 1385<br>(54.5)                    | 2433<br>(95 <b>.</b> 8)            | 2687<br>(105.8)          | 1120<br>(44.1)          | 2377<br>(93.6)           |
| K25903 | 4491<br>(9900)     | J95             | 3395<br>(133.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1131<br>(44 <b>.</b> 5) | 1385<br>(54.5)                    | 2433<br>(95 <b>.</b> 8)            | 2687<br>(105 <b>.</b> 8) | 1120<br>(44 <b>.</b> 1) | 2377<br>(93 <b>.</b> 6)  |
| K25943 | 4491<br>(9900)     | J95             | 4259<br>(157.7)              | SRW           | 304.8<br>(12.0)          | 1219.2<br>(48.0)                       | 1397<br>(55 <b>.</b> 0) | 1651<br>(65,0)                    | 3031<br>(119.3)                    | 3284<br>(129.3)          | 1406<br>(55 <b>.</b> 4) | 2982<br>(117.4)          |

|        |                    |                 |                              |               | Incomplete, Pickup Box Removal, or Snow Plow Prep Package Vehicles |  |                         |                                   |                                    |                          |                         |                         |  |
|--------|--------------------|-----------------|------------------------------|---------------|--|--|-------------------------|-----------------------------------|------------------------------------|--------------------------|-------------------------|-------------------------|--|
| Model  | GVWR<br>kg<br>(lb) | Brake<br>System | Wheel-<br>Base<br>mm<br>(in) | Rear<br>Wheel |  | Coordina<br>S/FMVSS L<br>kg (500 lb) a |                         | Fwd<br>C/G<br>Limit<br>mm<br>(in) | RRwd<br>C/G<br>Limit<br>mm<br>(in) |                          |                         |                         |  |
|        |                    |                 |                              |               | H <sub>1</sub>   | H <sub>2</sub>                         | А                       | В                                 | С                                  | D                        | E                       | F                       |  |
| K25943 | 4536<br>(10,000)   | J95             | 4259<br>(157.7)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1397<br>(55 <b>.</b> 0) | 1651<br>(65 <b>.</b> 0)           | 3031<br>(119.3)                    | 3284<br>(129 <b>.</b> 3) | 1406<br>(55 <b>.</b> 4) | 2982<br>(117.4)         |  |
| K25953 | 4309<br>(9500)     | J95             | 4017<br>(158 <b>.</b> 2)     | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1323<br>(52 <b>.</b> 1) | 1576<br>(62 <b>.</b> 0)           | 2863<br>(112.7)                    | 3117<br>(122.7)          | 1326<br>(52 <b>.</b> 2) | 2812<br>(110.7)         |  |
| K25953 | 4491<br>(9900)     | J95             | 4017<br>(158.2)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1323<br>(52 <b>.</b> 1) | 1576<br>(62.0)                    | 2863<br>(112.7)                    | 3117<br>(122.7)          | 1326<br>(52 <b>.</b> 2) | 2812<br>(110.7)         |  |
| K25953 | 4536<br>(10,000)   | J95             | 4017<br>(158 <b>.</b> 2)     | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1323<br>(52 <b>.</b> 1) | 1576<br>(62.0)                    | 2863<br>(112.7)                    | 3117<br>(122.7)          | 1326<br>(52 <b>.</b> 2) | 2812<br>(110.7)         |  |
| K35743 | 4536<br>(10,000)   | J95             | 3904<br>(153.7)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1288<br>(50 <b>.</b> 7) | 1542<br>(60.7)                    | 2785<br>(109 <b>.</b> 6)           | 3039<br>(119.6)          | 1288<br>50.7)           | 2733<br>(107.6)         |  |
| K35743 | 4899<br>(10,800)   | J95             | 3904<br>(153.7)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1074<br>(42 <b>.</b> 3) | 1286<br>(50.6)                    | 2971<br>(117.0)                    | 3182<br>(125.3)          | 1171<br>(46 <b>.</b> 1) | 2928<br>(115.3)         |  |
| K35743 | 5216<br>(11,500)   | J95             | 3904<br>(153.7)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1074<br>(42 <b>.</b> 3) | 1286<br>(50.6)                    | 2971<br>(117.0)                    | 3182<br>(125.3)          | 1171<br>(46 <b>.</b> 1) | 2928<br>(115.3)         |  |
| K35903 | 4536<br>(10,000)   | J95             | 3395<br>(133.7)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1131<br>(44 <b>.</b> 5) | 1385<br>(54.5)                    | 2433<br>(95 <b>.</b> 8)            | 2687<br>(105.8)          | 1120<br>(44 <b>.</b> 1) | 2377<br>(93 <b>.</b> 6) |  |
| K35903 | 4853<br>(10,700)   | J95             | 3395<br>(133.7)              | SRW           | 304 <b>.</b> 8<br>(12.0)   | 1219.2<br>(48.0)                       | 943<br>(37.1)           | 1155<br>(45.5)                    | 2593<br>(102.1)                    | 2804<br>(110.4)          | 1019<br>(40 <u>.</u> 1) | 2547<br>(100.3)         |  |
| K35903 | 5171<br>(11,400)   | J95             | 3395<br>(133.7)              | SRW           | 304 <u>.</u> 8<br>(12.0)   | 1219.2<br>(48.0)                       | 943<br>(37.1)           | 1155<br>(45.5)                    | 2593<br>(102.1)                    | 2804<br>(110.4)          | 1019<br>(40.1)          | 2547<br>(100.3)         |  |
| K35903 | 5908<br>(13,025)   | J96             | 3395<br>(133.7)              | DRW           | 304 <b>.</b> 8<br>(12.0)   | 1219 <b>.</b> 2<br>(48.0)              | 943<br>(37.1)           | 1155<br>(45.5)                    | 2593<br>(102.1)                    | 2804<br>(110.4)          | 1019<br>(40.1)          | 2547<br>(100.3)         |  |
| K35903 | 6078<br>(13,400)   | J96             | 3395<br>(133.7)              | DRW           | 304 <b>.</b> 8<br>(12.0)   | 1219 <b>.</b> 2<br>(48.0)              | 943<br>(37.1)           | 1155<br>(45.5)                    | 2593<br>(102.1)                    | 2804<br>(110.4)          | 1019<br>(40.1)          | 2547<br>(100.3)         |  |
| K35943 | 4989<br>(11,000)   | J95             | 4259<br>(157.7)              | SRW           | 304 <b>.</b> 8<br>(12.0)   | 1219.2<br>(48.0)                       | 1165<br>(45 <b>.</b> 9) | 1377<br>(54.2)                    | 3235<br>(127.4)                    | 3446<br>(135.7)          | 1278<br>(50.3)          | 3195<br>(125.8)         |  |
| K35943 | 5262<br>(11,600)   | J95             | 4259<br>(157.7)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1165<br>(45 <b>.</b> 9) | 1377<br>(54.2)                    | 3235<br>(127.4)                    | 3446<br>(135.7)          | 1278<br>(50.3)          | 3195<br>(125.8)         |  |
| K35943 | 5908<br>(13,025)   | J96             | 4259<br>(157.7)              | DRW           | 304 <b>.</b> 8<br>(12.0)   | 1219 <b>.</b> 2<br>(48.0)              | 1165<br>(45 <b>.</b> 9) | 1377<br>(54.2)                    | 3235<br>(127.4)                    | 3446<br>(135.7)          | 1278<br>(50.3)          | 3195<br>(125.8)         |  |
| K35953 | 4536<br>(10,000)   | J95             | 4017<br>(158.2)              | SRW           | 304 <b>.</b> 8<br>(12.0)   | 1219 <b>.</b> 2<br>(48.0)              | 1323<br>(52.1)          | 1576<br>(62.0)                    | 2863<br>(112.7)                    | 3117<br>(122.7)          | 1326<br>(52.2)          | 2812<br>(110.7)         |  |
| K35953 | 4989<br>(11,000)   | J95             | 4017<br>(158.2)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1103<br>(43 <b>.</b> 4) | 1315<br>(51.8)                    | 3055<br>(120.3)                    | 3266<br>(128.6)          | 1205<br>(47.4)          | 3013<br>(118.6)         |  |
| K35953 | 5262<br>(11,600)   | J95             | 4017<br>(158.2)              | SRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1103<br>(43 <b>.</b> 4) | 1315<br>(51.8)                    | 3055<br>(120.3)                    | 3266<br>(128.6)          | 1205<br>(47.4)          | 3013<br>(118.6)         |  |
| K35953 | 5908<br>(13,025)   | J96             | 4017<br>(158.2)              | DRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1103<br>(43.4)          | 1315<br>(51.8)                    | 3055<br>(120.3)                    | 3266<br>(128.6)          | 1205<br>(47.4)          | 3013<br>(118.6)         |  |
| K36003 | 5987<br>(13,200)   | J96             | 3493<br>(137.5)              | DRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 968<br>(38.1)           | 1180<br>(46.5)                    | 2666<br>(105.0)                    | 2877<br>(113.3)          | 1048<br>(41.3)          | 2619<br>(103.1)         |  |
| K36043 | 5987<br>(13,200)   | J96             | 4356<br>(171.5)              | DRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1190<br>(46 <b>.</b> 9) | 1402<br>(55.2)                    | 3307<br>(130 <b>.</b> 2)           | 3518<br>(138.5)          | 1307<br>(51 <b>.</b> 5) | 3267<br>(128.6)         |  |
| K36403 | 5987<br>(13,200)   | J96             | 4115<br>(162.0)              | DRW           | 304.8<br>(12.0)  | 1219.2<br>(48.0)                       | 1128<br>(44.4)          | 1340<br>(52.8)                    | 3128<br>(123.1)                    | 3339<br>(131 <b>.</b> 5) | 1234<br>(48 <b>.</b> 6) | 3086<br>(121.5)         |  |

SRW = Single Rear Wheel DRW = Dual Rear Wheel C/G = Center of Gravity

Brake Systems: Hydraulic Powered Boosters – J95, J96



C/G of vehicle in CMVSS or FMVSS unladen condition [Curb + 181.4 kg. (400 lb) or Curb + 226.8 kg. (500 lb) as defined by CMVSS 105 and FMVSS 105] must be inside shaded area – that is, the C/G must be within the trapezoid formed by the coordinates A, B, C, D, H1, & H2, plus the C/G must be to the rear of vertical line E and forward of vertical line F.

### CMVSS 106 and FMVSS 106 – BRAKE HOSES, HYDRAULIC, AIR AND VACUUM Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 106 and FMVSS 106 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Hydraulic, Air, and Vacuum Brake Hoses and assemblies

Labeling requirements

#### CMVSS 108 – DAYTIME RUNNING LAMPS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed will conform to the Daytime Running Lamps (DRL) requirements of CMVSS108 providing no alterations are made to the ignition switch, DRL system components or wiring, and any vehicle forward lighting as manufactured by General Motors.

## CMVSS 108 and FMVSS 108 – LAMPS, REFLECTIVE DEVICES AND ASSOCIATED EQUIPMENT Pick-up and Utility

TYPE 1 The following statement is applicable to Pick-up and Utility types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 108 and FMVSS 108 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Hazard Flasher Hazard Warning Signal Operating Unit Turn Signal Flasher
Turn Signal Operating Unit

NOTES: Pick-ups are equipped with a bulb outage feature. In order to maintain operation of the turn signal bulb outage feature, the LH and RH taillamp assemblies must each contain two (2) operational bulbs, of the bulb designation number as manufactured by General Motors.

<u>Utilities are equipped with a bulb outage feature</u>. In order to maintain operation of the turn signal bulb outage feature, the LH and RH taillamp assemblies must each contain one (1) operational bulb of the bulb designation number as manufactured by General Motors.

## CMVSS 108 and FMVSS 108 – LAMPS, REFLECTIVE DEVICES AND ASSOCIATED EQUIPMENT Chassis Cab

TYPE 1 The following statement is applicable to Chassis Cab types of incomplete vehicles contained in this document and completed with a body width LESS THAN 203.2 cm (80 in).

This incomplete vehicle, when completed, will conform to CMVSS 108 and FMVSS 108 if it is completed with a body width less than 203 cm (80 in), and providing the following conditions are met:

- A. Each of these devices must be properly installed on the completed vehicle and meet all requirements of CMVSS 108 and FMVSS 108:
  - 1. The following when provided by General Motors will conform to CMVSS 108 and FMVSS 108 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Back-up lamps

Daytime running lamps controls and wiring (Canada)

Front cab roof clearance and identification lamps

Front side marker lamps

Front side marker reflex reflectors

Hazard Flasher

Hazard warning signal operating unit

Headlamp dimmer switch
Headlamp highbeam indicator
Headlamps and/or fog lamps
High-mounted stop lamp

License plate lamp

Owner Manual instructions

Park lamps

Rear reflex reflectors Rear side marker lamps Rear turn signal lamps

Stop lamps Tail lamps

Turn signal and Vehicle hazard warning indicator

lamps

Turn signal flasher
Turn signal lamps

Turn signal operating unit

Vehicle hazard warning signal flasher Vehicle hazard warning signal operating unit

NOTE:

Chassis Cabs completed with a body width less than 203.2 cm (80 in), and NOT equipped with a turn signal/flasher module intended for use with Light Emitting Diode (LED) tailamps, or NOT equipped with a tailamp delete option and/or NOT equipped with a Center High-Mounted Stop Lamp delete option and ARE equipped with the "Calibration Tailamp, Single Bulb Option". In order to maintain operation of the turn signal bulb outage feature, the LH and RH taillamp assemblies must each contain one (1) operational bulb of the bulb designation number as manufactured by General Motors.

- 2. No part of the completed vehicle shall be installed so as to prevent any of the devices listed above from meeting their required photometric output at the specified test points. If such interference exists, the applicable devices may have to be relocated or additional devices added to meet the requirements of CMVSS 108 and FMVSS 108. Any CMVSS 108 or FMVSS 108 part shall not be painted.
- 3. The following additional devices must be installed on the body and meet all requirements of CMVSS 108 and FMVSS 108 if the body width is greater than or equal to 203.2 cm (80 in):

Front and rear clearance lamps Front and rear identification lamps

Rear side marker lamps
Rear side marker reflex reflectors

4. The following additional devices must be installed on the body and meet all requirements of CMVSS 108 and FMVSS 108 if the overall vehicle length is greater than or equal to 9.144 m (30 ft):

Intermediate side marker lamps

Intermediate side reflex reflectors

- B. No alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems including but not limited to those listed in A, 1, above.
- TYPE 3 The following statement is applicable to Chassis Cab types of incomplete vehicles contained in this document and completed with a body width less than 203.2 cm (80 in), and equipped with a Center High-Mounted Stop Lamp delete option.

Conformity with CMVSS 108 and FMVSS 108 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

TYPE 3 The following statement is applicable to Chassis Cab types of incomplete vehicles contained in this document and completed with a body width less than 203.2 cm (80 in), and equipped with a turn signal/flasher module intended for use with Light Emitting Diode (LED) tailamps, or equipped with a tailamp delete option, since either of these options will not contain a bulb outage feature due to the "Calibration Tailamp. Single Bulb Option" not being orderable (unless otherwise noted on the cover).

Conformity with CMVSS 108 and FMVSS 108 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 108 and FMVSS 108 – LAMPS, REFLECTIVE DEVICES AND ASSOCIATED EQUIPMENT Chassis Cab

TYPE 1 The following statement is applicable to Chassis Cab types of incomplete vehicles contained in this document and completed with a body width EQUAL TO OR GREATER THAN 203.2 cm (80 in).

This incomplete vehicle, when completed, will conform to CMVSS 108 and FMVSS 108 if it is completed with a body width equal to or greater than 202.2 cm (80 in), and providing the following conditions are met:

- A. Each of these devices must be properly installed on the completed vehicle and meet all requirements of CMVSS 108 and FMVSS 108:
  - 1. The following when provided by General Motors will conform to CMVSS 108 and FMVSS 108 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Back-up lamps
Center high-mounted stop lamp

Center nign-mounted stop lamp

Daytime running lamps controls and wiring (Canada)
Front cab roof clearance and identification lamps

Front cab roof clearance and identification lamps

Front side marker lamps

Front side marker reflex reflectors

Headlamp dimmer switch Headlamp highbeam indicator Headlamps and/or fog lamps

License plate lamp

**Owner Manual instructions** 

Park lamps

Rear reflex reflectors Rear side marker lamps Rear turn signal lamps

Stop lamps

Turn signal and Vehicle hazard warning indicator

lamps

Turn signal flasher Turn signal lamps

Turn signal operating unit

Vehicle hazard warning signal flasher Vehicle hazard warning signal operating unit

2. No part of the completed vehicle shall be installed so as to prevent any of the devices listed above from meeting their required photometric output at the specified test points. If such interference exists, the applicable devices may have to be relocated or additional devices added to meet the requirements of CMVSS 108 and FMVSS 108. Any CMVSS 108 or FMVSS 108 part shall not be painted.

3. The following additional devices must be installed on the body and meet all requirements of CMVSS 108 and FMVSS 108 if the overall vehicle length is greater than or equal to 9.144 m (30 ft):

Intermediate side marker lamps

Intermediate side reflex reflectors

B. No alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed in A, 1, above.

#### CMVSS 110 and FMVSS 110 - TIRE SELECTION AND RIMS FOR MOTOR VEHICLES WITH A GVWR OF 4536 kg (10,000 lb) OR LESS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover),

This incomplete vehicle, when completed, will conform to CMVSS 110 and FMVSS 110, providing:

A. No alterations are made which affect the function, physical or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to:

Owner Manual instructions

Wheels

- Tires
- B. GVWR, GAWR front and rear weight ratings as listed on the Incomplete Vehicle Label affixed to the front cover of this document are not exceeded.
- C. The vehicle normal load on the tires shall not be greater than 94 percent of the load rating at the cold inflation pressures listed on the front cover of this document, calculated using the appropriate tire and rim technical organization documents (i.e. Tire and Rim Association, etc.) and CMVSS 110 and FMVSS 110 requirements.
- D. The tire and wheel information shown on the Incomplete Vehicle Document Label must be transferred to the final stage manufacturer's Certification Label and Tire Information Label, providing no equipment or tire pressure changes are made, and the final stage manufacturer labels the vehicle in compliance with CMVSS 110 and FMVSS 110.

NOTE: Incomplete Vehicles referenced in this document may be shipped with reduced tire pressures for shipping purposes only.

#### CMVSS 111 and FMVSS 111 – REARVIEW MIRRORS Applies to all types of Incomplete Vehicles contained in this Document Without Shipped Loose Mirror, or Mirror Delete options

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document, without shipped loose mirror or mirror delete options (unless otherwise noted on the cover).

This incomplete vehicle will conform to CMVSS 111 and FMVSS 111 providing:

- A. No alterations or substitutions are made to the outside mirrors or inside mirrors furnished with the vehicle,
- B. The driver's seat location is not altered,
- C. The body width is not increased, and
- D. The body remains symmetrical about the vehicle centerline.

## CMVSS 111 and FMVSS 111 – REARVIEW MIRRORS Applies to all types of Incomplete Vehicles contained in this Document With Shipped Loose Mirror, or Mirror Delete Options

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with shipped loose mirror, or mirror delete options (unless otherwise noted on the cover).

Conformity with CMVSS 111 and FMVSS 111 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

#### CMVSS 113 and FMVSS 113 – HOOD LATCH SYSTEM Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 113 and FMVSS 113 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Hood latch systems, which may include but are not limited to:

Hood latch (catch) assembly

Hood latch striker plate (hook) and reinforcements

Hood latch cable release system including controls

Hood latch pilot

Hood latch support assembly

### CMVSS 114 and FMVSS 114 – THEFT PROTECTION AND ROLLAWAY PREVENTION <u>Applies to all types of Incomplete Vehicles Contained in this Document</u> 4536 kg (10,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 114 and FMVSS 114 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Brake-transaxle/transmission interlock controls Electronic Immobilizer Engine electronics (ECM/PCM/VCM) Engine starter interlock controls Ignition key Ignition key warning chime system Owner Manual instructions
Steering column lock assembly
Transaxle/Transmission assembly
Transaxle/Transmission assembly neutral start
switch and wiring

### CMVSS 115 – VEHICLE IDENTIFICATION NUMBER Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 115, providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

The Vehicle Identification Number VIN label or plate

VIN plate fasteners

### CMVSS 116 and FMVSS 116 – MOTOR VEHICLE BRAKE FLUIDS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

The hydraulic brake fluid in this incomplete vehicle, as manufactured by General Motors, will conform to CMVSS 116 and FMVSS 116 providing no alterations are made which affect the physical or chemical properties of the brake fluid.

#### CMVSS 118 and FMVSS 118 – POWER OPERATED WINDOW, PARTITION AND ROOF PANEL SYSTEMS

#### Applies to all types of Incomplete Vehicles Contained in this Document 4536 kg (10,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less (unless otherwise noted on the cover).

This incomplete vehicle, if equipped by General Motors with power windows, when completed, will conform to CMVSS 118 and FMVSS 118 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Power window electrical system Power window operating system Power window operating system control logic Window glazing material

Final compliance with Standard 118 is the responsibility of the final stage manufacturer for any modifications, or added material, components, or systems.

### CMVSS 120 and FMVSS 120 – TIRE SELECTION AND RIMS FOR MOTOR VEHICLES WITH A GVWR OF MORE THAN 4536 kg (10,000 lb) Applies to all types of Incomplete Vehicles contained in this Document

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 120 and FMVSS 120, providing:

A. No alterations are made which affect the function, physical or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to:

Owner Manual instructions

Wheels

- Tires
- B. GVWR, GAWR front and rear weight ratings as listed on the Incomplete Vehicle Label affixed to the front cover of this document are not exceeded.
- C. The tire and wheel information shown on the Incomplete Vehicle Document Label must be transferred to the final stage manufacturer's Certification Label providing no equipment or tire pressure changes are made, and the final stage manufacturer labels the vehicle in compliance with CMVSS 120 and FMVSS 120.

NOTE: Incomplete Vehicles referenced in this document may be shipped with reduced tire pressures <u>for shipping purposes only</u>.

### CMVSS 124 and FMVSS 124 – ACCELERATOR CONTROL SYSTEMS Refer to Vehicle Types, and Applicable "Mobility" Statements that follow

TYPE 1 The following statement is applicable to all incomplete vehicle types contained in this document and not equipped with a Mobility Package (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 124 and FMVSS 124 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Accelerator/throttle control systems, including but not limited to:

Attachment pin, hole or ball stud to fuel injection unit throttle lever

Cable or rod, throttle or accelerator, and support bracket including seals

Cruise control module, wiring and cable (if equipped) Electronic throttle control assembly and related

Engine controller (controller, software, calibration)
Floor covering material must not be installed under
pedal or within 25.4 mm (1 in) of side of pedal
Lever, throttle or accelerator and supporting bracket
Pedal-throttle or accelerator and attachments
Spring(s) - throttle or accelerator return

TYPE 3 The following statement is applicable to all incomplete vehicle types contained in this document and equipped with a Mobility Package (unless otherwise noted on the cover).

Conformity with CMVSS 124 and FMVSS 124 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

### FMVSS 125 – WARNING DEVICES DESIGNED TO BE CARRIED IN MOTOR VEHICLES Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document if ordered with safety warning triangle option (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to FMVSS 125 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Safety warning triangles

## CMVSS 126 and FMVSS 126 – ELECTRONIC STABILITY CONTROL SYSTEMS Applies to all types of Incomplete Vehicles Contained in this Document 4536 kg (10,000 lb) GVWR or less

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less (unless otherwise noted on the cover).

This incomplete vehicle when completed will conform to CMVSS 126 and FMVSS 126 provided it is completed in accordance with the following specific conditions by the (intermediate and) final stage manufacturer:

A. Providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Anti-Lock Brake, Traction Control and Electronic Stability control system, including sensors and control module

Brake assemblies and components (service/ parking) - (i.e. power boosters, master cylinder, wheel cylinder, calipers, rotors, wheel speed Master cylinder-warning statement
Owner Manual instructions
Parking brake actuator and related mechanical
components

Power steering or vacuum lines and routing Power steering or vacuum pump

sensor, wheel speed sensor wiring, brake lining etc.)

Brake pedal, brake switch, parking brake hand lever or park brake switch and related mechanical components

Brake system electrical controls and logic Gauges and warning devices, and statements Hydraulic brake fluid and reservoirs Hydraulic brake lines, fittings and routings Hydraulic brake valves and components Tires and Wheels
Stability control system, including control module, sensors and software calibrations
Steering control system including related hardware
Suspension components (i.e. bushings, control arms, shocks, springs, sway bars)
Vacuum brake lines, fittings and routings
Vehicle wiring harnesses
Wheelbases

- B. GVWR, GAWR front and rear weight ratings as listed on the Incomplete Vehicle Label affixed to the front cover of this document must not be exceeded.
- C. The Tire Pressures as listed on the Incomplete Vehicle Label affixed to the front cover of this document must be followed
- D. The Maximum Completed Vehicle Unloaded (Curb) restrictions as shown in CMVSS301 and FMVSS 301 Table A, must not be exceeded.
- E. The center of gravity of the total vehicle falls within the areas referenced on the CMVSS 126 and FMVSS 126 Compliance Certification "X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions" charts that follow. Instructions for determining the allowable center of gravity variation are listed below:

### K2XX LD C/K 15903 (Regular Cab), Bridgestone Dueler AT LT265/70R17 (RC5) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| X – Longitudinai, 1   | <u> Laterar arra</u>    |                 | Y – Lateral (   |                 |                 |                 |
|---|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| @ Maximum X Longitudinal CG Location from Front Axle CL cm (in) | Model<br>Identification | -10 (-3.9)      | -5 (-2)         | 0               | 5 (2)           | 10 (3.9)        |
| 140 (55.1)  | C15903                  | 80.3<br>(33.68) | 83.1<br>(34.66) | 83.1<br>(35.65) | 83.1<br>(34.66) | 80.3<br>(33.68) |
| 140 (33.1)  | K15903                  | 80.3<br>(33.68) | 83.1<br>(34.66) | 83.1<br>(35.65) | 83.1<br>(34.66) | 80.3<br>(33.68) |
| 150 (59.1)  | C15903                  | 80.3<br>(33.68) | 87.6<br>(34.66) | 88.5<br>(35.65) | 87.6<br>(34.66) | 80.3<br>(33.68) |
| 130 (33.1)  | K15903                  | 80.3<br>(33.68) | 87.6<br>(34.66) | 88.5<br>(35.65) | 87.6<br>(34.66) | 80.3<br>(33.68) |
| 160 (63.0)  | C15903                  | 84.9<br>(33.68) | 92.1<br>(34.66) | 93.9<br>(35.65) | 92.1<br>(34.66) | 84.9<br>(33.68) |
| 100 (03.0)  | K15903                  | 84.9<br>(33.68) | 92.1<br>(34.66) | 93.9<br>(35.65) | 92.1<br>(34.66) | 84.9<br>(33.68) |
| 170 (66.9)  | C15903                  | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) |
| 170 (00.9)  | K15903                  | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) |
| 180 (70.9)  | C15903                  | 88.5<br>(35.80) | 88.5<br>(36.43) | 91.2<br>(35.65) | 88.5<br>(35.80) | 88.5<br>(36.43) |
| 180 (70.9)  | K15903                  | 88.5<br>(35.80) | 88.5<br>(36.43) | 91.2<br>(35.65) | 88.5<br>(35.80) | 88.5<br>(36.43) |
| 190 (74.8)  | C15903                  | 88.5<br>(35.80) | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) | 88.5<br>(35.80) |
| 190 (14.0)  | K15903                  | 88.5<br>(35.80) | 91.2<br>(35.65) | 91.2<br>(35.65) | 91.2<br>(35.65) | 88.5<br>(35.80) |
| 200 (78.7)  | C15903                  | 74.9<br>(35.80) | 82.2<br>(35.80) | 87.1<br>(34.31) | 82.2<br>(35.80) | 74.9<br>(35.80) |
| 200 (10.1)  | K15903                  | 74.9<br>(35.80) | 82.2<br>(35.80) | 87.1<br>(34.31) | 82.2<br>(35.80) | 74.9<br>(35.80) |
| 210 (92.7)  | C15903                  | 74.9<br>(35.80) | 74.9<br>(36.43) | 74.9<br>(37.22) | 74.9<br>(36.43) | 74.9<br>(35.80) |
| 210 (82.7)  | K15903                  | 74.9<br>(35.80) | 74.9<br>(36.43) | 74.9<br>(37.22) | 74.9<br>(36.43) | 74.9<br>(35.80) |

#### K2XX HD C/K 25903 (Regular Cab)

#### Firestone Transforce HT ALS LT245/75R17/E (QHQ) Tire Bridgestone Duravis M700 AT LT265/70R17/E (QXT) Tire Goodyear Wrangler SR-A ALS LT265/70R18/E (QWF) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

|   | @ Y – Lateral CG Offset Location cm (in) |            |         |        |        |          |  |
|---|--|------------|---------|--------|--------|----------|--|
| @ Maximum X Longitudinal CG Location from Front Axle CL cm (in) | Model<br>Identification                  | -10 (-3.9) | -5 (-2) | 0      | 5 (2)  | 10 (3.9) |  |
|   | C25903                                   | 86.7       | 90.5    | 91.5   | 90.5   | 86.7     |  |
| 140 (55.1)  | 020903                                   | (34.1)     | (35.6)  | (36.0) | (35.6) | (34.1)   |  |
| 140 (55.1)  | K25903                                   | 86.7       | 90.5    | 91.5   | 90.5   | 86.7     |  |
|   | N20900                                   | (34.1)     | (35.6)  | (36.0) | (35.6) | (34.1)   |  |
|   | C25903                                   | 86.7       | 90.5    | 93.3   | 90.5   | 86.7     |  |
| 150 (59.1)  | C25905                                   | (34.1)     | (35.6)  | (36.7) | (35.6) | (34.1)   |  |
| 130 (39.1)  | K25903                                   | 86.7       | 90.5    | 93.3   | 90.5   | 86.7     |  |
|   | K20903                                   | (34.1)     | (35.6)  | (36.7) | (35.6) | (34.1)   |  |
|   | C25002                                   | 91.0       | 92.3    | 94.9   | 92.3   | 91.0     |  |
| 160 (63 0)  | C25903                                   | (35.8)     | (36.4)  | (37.4) | (36.4) | (35.8)   |  |
| 160 (63.0)  | K25903                                   | 91.0       | 92.3    | 94.9   | 92.3   | 91.0     |  |
|   |  | (35.8)     | (36.4)  | (37.4) | (36.4) | (35.8)   |  |
|   | C25903                                   | 91.0       | 94.0    | 94.9   | 94.0   | 91.0     |  |
| 470 (66.0)  | C25903                                   | (35.8)     | (37.0)  | (37.4) | (37.0) | (35.8)   |  |
| 170 (66.9)  | V05000                                   | 91.0       | 94.0    | 94.9   | 94.0   | 91.0     |  |
|   | K25903                                   | (35.8)     | (37.0)  | (37.4) | (37.0) | (35.8)   |  |
|   | 005000                                   | 91.0       | 94.0    | 94.9   | 94.0   | 91.0     |  |
| 400 (70 0)  | C25903                                   | (35.8)     | (37.0)  | (37.4) | (37.0) | (35.8)   |  |
| 180 (70.9)  | V05000                                   | 91.0       | 94.0    | 94.9   | 94.0   | 91.0     |  |
|   | K25903                                   | (35.8)     | (37.0)  | (37.4) | (37.0) | (35.8)   |  |
|   | 005000                                   | 82.5       | 89.0    | 95.5   | 89.0   | 82.5     |  |
| 400 (74.0)  | C25903                                   | (32.5)     | (35.1)  | (37.6) | (35.1) | (32.5)   |  |
| 190 (74.8)  | VOE002                                   | 82.5       | 89.0    | 95.5   | 89.0   | 82.5     |  |
|   | K25903                                   | (32.5)     | (35.1)  | (37.6) | (35.1) | (32.5)   |  |
|   | 005000                                   | 82.5       | 89.0    | 95.5   | 89.0   | 82.5     |  |
| 200 (72 7)  | C25903                                   | (32.5)     | (35.1)  | (37.6) | (35.1) | (32.5)   |  |
| 200 (78.7)  | V05000                                   | 82.5       | 89.0    | 95.5   | 89.0   | 82.5     |  |
|   | K25903                                   | (32.5)     | (35.1)  | (37.6) | (35.1) | (32.5)   |  |

## K2XX HD C/K 25903 (Regular Cab) Michelin LTX AT2 LT265/70R18/E (QGM) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| @ Maximum X   |                         | @ Y - Lateral CG Offset Location cm (in) |         |        |        |          |  |  |  |
|---|-------------------------|--|---------|--------|--------|----------|--|--|--|
| Longitudinal CG<br>Location from Front<br>Axle CL cm (in) | Model<br>Identification | -10 (-3.9)                               | -5 (-2) | 0      | 5 (2)  | 10 (3.9) |  |  |  |
|   | C25903                  | 81.7                                     | 86.5    | 86.5   | 86.5   | 81.7     |  |  |  |
| 140 (55.1)  | C25905                  | (32.2)                                   | (34.1)  | (34.1) | (34.1) | (32.2)   |  |  |  |
| 140 (55.1)  | K25903                  | 81.7                                     | 86.5    | 86.5   | 86.5   | 81.7     |  |  |  |
|   | K25905                  | (32.2)                                   | (34.1)  | (34.1) | (34.1) | (32.2)   |  |  |  |
|   | C25903                  | 86.5                                     | 86.5    | 88.2   | 86.5   | 86.5     |  |  |  |
| 150 (59.1)  | 02000                   | (34.1)                                   | (34.1)  | (34.7) | (34.1) | (34.1)   |  |  |  |
| 150 (59.1)  | K25903                  | 86.5                                     | 86.5    | 88.2   | 86.5   | 86.5     |  |  |  |
|   | 1120000                 | (34.1)                                   | (34.1)  | (34.7) | (34.1) | (34.1)   |  |  |  |
|   | C25903                  | 86.5                                     | 90.0    | 90.0   | 90.0   | 86.5     |  |  |  |
| 160 (63.0)  | 020000                  | (34.1)                                   | (35.4)  | (35.4) | (35.4) | (34.1)   |  |  |  |
| 100 (00.0)  | K25903                  | 86.5                                     | 90.0    | 90.0   | 90.0   | 86.5     |  |  |  |
|   |                         | (34.1)                                   | (35.4)  | (35.4) | (35.4) | (34.1)   |  |  |  |
|   | C25903                  | 86.5                                     | 89.0    | 91.8   | 89.0   | 86.5     |  |  |  |
| 170 (66.9)  | 020000                  | (34.1)                                   | (35.1)  | (36.2) | (35.1) | (34.1)   |  |  |  |
| 170 (00.0)  | K25903                  | 86.5                                     | 89.0    | 91.8   | 89.0   | 86.5     |  |  |  |
|   | 1120000                 | (34.1)                                   | (35.1)  | (36.2) | (35.1) | (34.1)   |  |  |  |
|   | C25903                  | 86.5                                     | 86.5    | 92.6   | 86.5   | 86.5     |  |  |  |
| 180 (70.9)  | 020000                  | (34.1)                                   | (34.1)  | (36.5) | (34.1) | (34.1)   |  |  |  |
| 100 (10.0)  | K25903                  | 86.5                                     | 86.5    | 92.6   | 86.5   | 86.5     |  |  |  |
|   | 1120000                 | (34.1)                                   | (34.1)  | (36.5) | (34.1) | (34.1)   |  |  |  |
|   | C25903                  | 86.5                                     | 86.5    | 89.7   | 86.5   | 86.5     |  |  |  |
| 190 (74.8)  | 020000                  | (34.1)                                   | (34.1)  | (35.3) | (34.1) | (34.1)   |  |  |  |
| .55 (1 115)   | K25903                  | 86.5                                     | 86.5    | 89.7   | 86.5   | 86.5     |  |  |  |
|   | 1120000                 | (34.1)                                   | (34.1)  | (35.3) | (34.1) | (34.1)   |  |  |  |
|   | C25903                  | 86.5                                     | 86.5    | 88.6   | 86.5   | 86.5     |  |  |  |
| 200 (78.7)  | 02000                   | (34.1)                                   | (34.1)  | (34.9) | (34.1) | (34.1)   |  |  |  |
|   | K25903                  | 86.5                                     | 86.5    | 88.6   | 86.5   | 86.5     |  |  |  |
|   |                         | (34.1)                                   | (34.1)  | (34.9) | (34.1) | (34.1)   |  |  |  |

#### **K2XX HD C/K 25943 (Crew Cab)**

#### Firestone Transforce HT ALS LT245/75R17/E (QHQ) Tire Bridgestone Duravis M700 AT LT265/70R17/E (QXT) Tire Goodyear Wrangler SR-A ALS LT265/70R18/E (QWF) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| @ Maximum X Longitudinal CG Location   Model   Model |   |  |  |  |   |  |
|--|---|--|--|--|---|--|
| Model<br>Identification  | -10 (-3.9)  | -5 (-2)  | 0  | 5 (2)  | 10 (3.9)  |  |
| C25943   | 84.5<br>(33.3)  | 87.0<br>(34.3)   | 87.5<br>(34.5)   | 87.0<br>(34.3)   | 84.5<br>(33.3)  |  |
| K25943   | 84.5  | 87.0   | 87.5   | 87.0   | 84.5 (33.3)   |  |
| C25943   | 84.5  | 87.0   | 89.5   | 87.0   | 84.5<br>(33.3)  |  |
| K25943   | 84.5  | 87.0   | 89.5   | 87.0   | 84.5<br>(33.3)  |  |
| C25943   | 84.5  | 87.0   | 89.5   | 87.0   | 84.5<br>(33.3)  |  |
| K25943   | 84.5  | 87.0   | 89.5   | 87.0   | 84.5<br>(33.3)  |  |
| C25943   | 84.5  | 87.0   | 89.5   | 87.0   | 84.5<br>(33.3)  |  |
| K25943   | 84.5  | 87.0   | 89.5   | 87.0   | 84.5<br>(33.3)  |  |
| C25943   | 89.5  | 91.5   | 93.5   | 91.5   | 89.5<br>(35.3)  |  |
| K25943   | 89.5  | 91.5   | 93.5   | 91.5   | 89.5<br>(35.3)  |  |
| C25943   | 89.5  | 91.5   | 93.5   | 91.5   | 89.5<br>(35.3)  |  |
| K25943   | 89.5  | 91.5   | 93.5   | 91.5   | 89.5<br>(35.3)  |  |
| C25943   | 89.5  | 91.5   | 93.5   | 91.5   | 89.5<br>(35.3)  |  |
| K25943   | 89.5  | 91.5   | 93.5   | 91.5   | 89.5<br>(35.3)  |  |
| C25943   | 89.5  | 89.5   | 93.5   | 89.5   | 89.5<br>(35.3)  |  |
| K25943   | 89.5  | 89.5   | 93.5   | 89.5   | 89.5<br>(35.3)  |  |
| C25943   | 79.5  | 84.5   | 91.6   | 84.5   | 79.5<br>(31.3)  |  |
| K25943   | 79.5  | 84.5   | 91.6   | 84.5   | 79.5<br>(31.3)  |  |
|  | C25943 K25943 C25943 K25943 C25943 K25943 C25943 | Model Identification         -10 (-3.9)           C25943         84.5 (33.3)           K25943         84.5 (33.3)           C25943         84.5 (33.3)           K25943         84.5 (35.3)           K25943         89.5 (35.3) | Model Identification         -10 (-3.9)         -5 (-2)           C25943         84.5         87.0           (33.3)         (34.3)           K25943         84.5         87.0           (25943)         84.5         87.0           (33.3)         (34.3)           K25943         89.5         91.5           (35.3)         (36.0)           K25943         (35.3)         (35.3)           K25943         (35.3) <td< td=""><td>Model Identification         -10 (-3.9)         -5 (-2)         0           C25943         84.5         87.0         87.5           (33.3)         (34.3)         (34.5)           K25943         84.5         87.0         87.5           (33.3)         (34.3)         (34.5)           C25943         84.5         87.0         89.5           (33.3)         (34.3)         (35.3)           K25943         84.5         87.0         89.5           (33.3)         (34.3)         (35.3)           K25943         84.5         87.0         89.5           (33.3)         (34.3)         (35.3)           K25943         84.5         87.0         89.5           (35.3)         (34.3)         (35.3)           K25943         (33.3)         (34.3)         (35.3)           K25943         (35.3)         (34.3)         (35.3)           K25943         (35.3)         (36.0)         (36.8)           K25943         (35.3)         (36.0)         (36.8)           K25943         (35.3)         (36.0)         (36.8)           K25943         (35.3)         (36.0)         (36.8)           K259</td><td>Model Identification         -10 (-3.9)         -5 (-2)         0         5 (2)           C25943         84.5         87.0         87.5         87.0           K25943         84.5         87.0         87.5         87.0           K25943         84.5         87.0         89.5         87.0           C25943         84.5         87.0         89.5         87.0           K25943         89.5</td></td<> | Model Identification         -10 (-3.9)         -5 (-2)         0           C25943         84.5         87.0         87.5           (33.3)         (34.3)         (34.5)           K25943         84.5         87.0         87.5           (33.3)         (34.3)         (34.5)           C25943         84.5         87.0         89.5           (33.3)         (34.3)         (35.3)           K25943         84.5         87.0         89.5           (33.3)         (34.3)         (35.3)           K25943         84.5         87.0         89.5           (33.3)         (34.3)         (35.3)           K25943         84.5         87.0         89.5           (35.3)         (34.3)         (35.3)           K25943         (33.3)         (34.3)         (35.3)           K25943         (35.3)         (34.3)         (35.3)           K25943         (35.3)         (36.0)         (36.8)           K25943         (35.3)         (36.0)         (36.8)           K25943         (35.3)         (36.0)         (36.8)           K25943         (35.3)         (36.0)         (36.8)           K259 | Model Identification         -10 (-3.9)         -5 (-2)         0         5 (2)           C25943         84.5         87.0         87.5         87.0           K25943         84.5         87.0         87.5         87.0           K25943         84.5         87.0         89.5         87.0           C25943         84.5         87.0         89.5         87.0           K25943         89.5 |  |

## K2XX HD C/K 25943 (Crew Cab) Michelin LTX AT2 LT265/70R18/E (QGM) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| @ Maximum X   |                         | @ Y – Lateral CG Offset Location cm (in) |                |                |                |                |  |  |
|---|-------------------------|--|----------------|----------------|----------------|----------------|--|--|
| Longitudinal CG<br>Location from Front Axle<br>CL cm (in) | Model<br>Identification | -10 (-3.9)                               | -5 (-2)        | 0              | 5 (2)          | 10 (3.9)       |  |  |
| 160 (63.0)  | C25943                  | 82.0<br>(32.3)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 82.0<br>(32.3) |  |  |
| 100 (03.0)  | K25943                  | 82.0<br>(32.3)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 82.0<br>(32.3) |  |  |
| 170 (66 0)  | C25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 170 (66.9)  | K25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 180 (70.9)  | C25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 160 (70.9)  | K25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 100 (74.9)  | C25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 190 (74.8)  | K25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 200 (70.7)  | C25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 200 (78.7)  | K25943                  | 83.5<br>(32.9)                           | 84.8<br>(33.4) | 84.8<br>(33.4) | 84.8<br>(33.4) | 83.5<br>(32.9) |  |  |
| 240 (92.7)  | C25943                  | 83.5<br>(32.9)                           | 88.1<br>(34.7) | 85.5<br>(33.7) | 88.1<br>(34.7) | 83.5<br>(32.9) |  |  |
| 210 (82.7)  | K25943                  | 83.5<br>(32.9)                           | 88.1<br>(34.7) | 85.5<br>(33.7) | 88.1<br>(34.7) | 83.5<br>(32.9) |  |  |
| 200 (00 0)  | C25943                  | 83.5<br>(32.9)                           | 86.2<br>(34.0) | 88.9<br>(35.0) | 86.2<br>(34.0) | 83.5<br>(32.9) |  |  |
| 220 (86.6)  | K25943                  | 83.5<br>(32.9)                           | 86.2<br>(34.0) | 88.9<br>(35.0) | 86.2<br>(34.0) | 83.5<br>(32.9) |  |  |
| 220 (22.2)  | C25943                  | 83.5<br>(32.9)                           | 86.0<br>(33.9) | 87.9<br>(34.6) | 86.0<br>(33.9) | 83.5<br>(32.9) |  |  |
| 230 (90.6)  | K25943                  | 83.5<br>(32.9)                           | 86.0<br>(33.9) | 87.9<br>(34.6) | 86.0<br>(33.9) | 83.5<br>(32.9) |  |  |
| 0.40 (0.1.7)  | C25943                  | 83.5<br>(32.9)                           | 83.5<br>(32.9) | 84.9<br>(33.4) | 84.0<br>(33.1) | 83.5<br>(32.9) |  |  |
| 240 (94.5)  | K25943                  | 83.5<br>(32.9)                           | 83.5<br>(32.9) | 84.9<br>(33.4) | 84.0<br>(33.1) | 83.5<br>(32.9) |  |  |

#### K2XX HD C/K 25953 (Double Cab)

#### Firestone Transforce HT ALS LT245/75R17/É (QHQ) Tire Bridgestone Duravis M700 AT LT265/70R17/E (QXT) Tire Goodyear Wrangler SR-A ALS LT265/70R18/E (QWF) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| @ Maximum X   |                         | @ Y – Lateral CG Offset Location cm (in) |                |                |                |                |  |  |  |
|---|-------------------------|--|----------------|----------------|----------------|----------------|--|--|--|
| Longitudinal CG<br>Location from Front Axle<br>CL cm (in) | Model<br>Identification | -10 (-3.9)                               | -5 (-2)        | 0              | 5 (2)          | 10 (3.9)       |  |  |  |
|   | C25953                  | 84.5                                     | 86.2           | 88.1           | 86.2           | 84.5           |  |  |  |
| 150 (59.1)  |                         | (33.3)<br>84.5                           | (34.0)<br>86.2 | (34.7)<br>88.1 | (34.0)<br>86.2 | (33.3)<br>84.5 |  |  |  |
|   | K25953                  | (33.3)                                   | (34.0)         | (34.7)         | (34.0)         | (33.3)         |  |  |  |
|   | 005050                  | 84.5                                     | 86.2           | 88.1           | 86.2           | 84.5           |  |  |  |
| 160 (62 0)  | C25953                  | (33.3)                                   | (34.0)         | (34.7)         | (34.0)         | (33.3)         |  |  |  |
| 160 (63.0)  | KOE0E3                  | 84.5                                     | 86.2           | 88.1           | 86.2           | 84.5           |  |  |  |
|   | K25953                  | (33.3)                                   | (34.0)         | (34.7)         | (34.0)         | (33.3)         |  |  |  |
|   | C25953                  | 84.5                                     | 86.2           | 88.7           | 86.2           | 84.5           |  |  |  |
| 170 (66.9)  | C25955                  | (33.3)                                   | (34.0)         | (34.9)         | (34.0)         | (33.3)         |  |  |  |
| 170 (00.9)  | K25953                  | 84.5                                     | 86.2           | 88.7           | 86.2           | 84.5           |  |  |  |
|   | N20900                  | (33.3)                                   | (34.0)         | (34.9)         | (34.0)         | (33.3)         |  |  |  |
|   | C25953                  | 84.9                                     | 87.7           | 88.7           | 87.7           | 84.9           |  |  |  |
| 180 (70.9)  | 023933                  | (33.4)                                   | (34.5)         | (34.9)         | (34.5)         | (33.4)         |  |  |  |
| 100 (70.3)  | K25953                  | 84.9                                     | 87.7           | 88.7           | 87.7           | 84.9           |  |  |  |
|   | 1125555                 | (33.4)                                   | (34.5)         | (34.9)         | (34.5)         | (33.4)         |  |  |  |
|   | C25953                  | 90.3                                     | 90.3           | 92.7           | 90.3           | 90.3           |  |  |  |
| 190 (74.8)  |                         | (35.6)                                   | (35.6)         | (36.5)         | (35.6)         | (35.6)         |  |  |  |
| 130 (14.8)  | K25953                  | 90.3                                     | 90.3           | 92.7           | 90.3           | 90.3           |  |  |  |
|   | 1120000                 | (35.6)                                   | (35.6)         | (36.5)         | (35.6)         | (35.6)         |  |  |  |
|   | C25953                  | 90.3                                     | 91.3           | 92.7           | 91.3           | 90.3           |  |  |  |
| 200 (78.7)  | 020000                  | (35.6)                                   | (36.0)         | (36.5)         | (36.0)         | (35.6)         |  |  |  |
| 200 (1011)  | K25953                  | 90.3                                     | 91.3           | 92.7           | 91.3           | 90.3           |  |  |  |
|   | 1120000                 | (35.6)                                   | (36.0)         | (36.5)         | (36.0)         | (35.6)         |  |  |  |
|   | C25953                  | 90.3                                     | 91.3           | 92.7           | 91.3           | 90.3           |  |  |  |
| 210 (82.7)  | 020000                  | (35.6)                                   | (36.0)         | (36.5)         | (36.0)         | (35.6)         |  |  |  |
| 210 (0211)  | K25953                  | 90.3                                     | 91.3           | 92.7           | 91.3           | 90.3           |  |  |  |
|   | 1120000                 | (35.6)                                   | (36.0)         | (36.5)         | (36.0)         | (35.6)         |  |  |  |
|   | C25953                  | 90.3                                     | 91.3           | 92.7           | 91.3           | 90.3           |  |  |  |
| 220 (86.6)  | 323330                  | (35.6)                                   | (36.0)         | (36.5)         | (36.0)         | (35.6)         |  |  |  |
| ZZU (80.0)  | K25953                  | 90.3                                     | 91.3           | 92.7           | 91.3           | 90.3           |  |  |  |
|   | . 123000                | (35.6)                                   | (36.0)         | (36.5)         | (36.0)         | (35.6)         |  |  |  |
|   | C25953                  | 68.5                                     | 79.5           | 89.5           | 79.5           | 68.5           |  |  |  |
| 230 (90.6)  | 523000                  | (27.0)                                   | (31.3)         | (35.3)         | (31.3)         | (27.0)         |  |  |  |
|   | K25953                  | 68.5                                     | 79.5           | 89.5           | 79.5           | 68.5           |  |  |  |
|   |                         | (27.0)                                   | (31.3)         | (35.3)         | (31.3)         | (27.0)         |  |  |  |

## K2XX HD C/K 25953 (Double Cab) Michelin LTX AT2 LT265/70R18/E (QGM) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| "X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"  @ Maximum X |                         |            |               |              |               |          |  |  |  |  |
|---|-------------------------|------------|---------------|--------------|---------------|----------|--|--|--|--|
| @ Maximum X   | Madel                   | @          | Y – Lateral ( | CG Offset Lo | cation cm (ir | 1)       |  |  |  |  |
| Longitudinal CG<br>Location from Front Axle<br>CL cm (in)   | Model<br>Identification | -10 (-3.9) | -5 (-2)       | 0            | 5 (2)         | 10 (3.9) |  |  |  |  |
|   | C25953                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
| 150 (50.1)  | C25955                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
| 150 (59.1)  | K25953                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
|   | K25955                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
|   | C25953                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
| 160 (63.0)  | C25955                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
| 160 (63.0)  | K25953                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
|   | N25955                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
|   | C25052                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
| 170 (66.9)  | C25953                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
| 170 (66.9)  | K3E0E3                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
|   | K25953                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
|   | C25953                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
| 180 (70.9)  | C25953                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
|   | V2E0E2                  | 81.7       | 81.7          | 85.5         | 81.7          | 81.7     |  |  |  |  |
|   | K25953                  | (32.2)     | (32.2)        | (33.7)       | (32.2)        | (32.2)   |  |  |  |  |
| 190 (74.8)  | C25953<br>K25953        | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
|   |                         | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
| 190 (74.8)  |                         | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
|   | N20903                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
|   | C25953                  | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
| 200 (79.7)  | C25955                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
| 200 (78.7)  | K25953                  | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
|   | K20900                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
|   | C25953                  | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
| 240 (82.7)  | C25955                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
| 210 (82.7)  | K25953                  | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
|   | N20903                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
|   | C25953                  | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
| 220 (06 E)  | C20953                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
| 220 (86.6)  | KSEGES                  | 81.7       | 86.2          | 88.9         | 86.2          | 81.7     |  |  |  |  |
|   | K25953                  | (32.2)     | (34.0)        | (35.0)       | (34.0)        | (32.2)   |  |  |  |  |
|   | C25052                  | 80.1       | 80.1          | 80.1         | 80.1          | 80.1     |  |  |  |  |
| 230 (00 6)  | C25953                  | (31.6)     | (31.6)        | (31.6)       | (31.6)        | (31.6)   |  |  |  |  |
| 230 (90.6)  | K25953                  | 80.1       | 80.1          | 80.1         | 80.1          | 80.1     |  |  |  |  |
|   | N20900                  | (31.6)     | (31.6)        | (31.6)       | (31.6)        | (31.6)   |  |  |  |  |

## K2XX HD C/K 35903 (Regular Cab) Michelin LTX AT2 LT265/70R18/E (QGM) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| "X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions" |                  |            |  |   |        |          |  |  |  |  |
|--|------------------|------------|--|---|--------|----------|--|--|--|--|
| @ Maximum X<br>Longitudinal CG   | Model            | @`         | @ Y – Lateral CG Offset Location cm (in) |   |        |          |  |  |  |  |
| Longitudinal CG Location from Front Axle CL cm (in)                                  | Identification   | -10 (-3.9) | -5 (-2)                                  | 0   | 5 (2)  | 10 (3.9) |  |  |  |  |
|  | C35903           | 85.7       | 87.5                                     | 87.5  | 87.5   | 85.7     |  |  |  |  |
| 140 (55.1)   | C35903           | (33.7)     | (34.4)                                   | (34.4)  | (34.4) | (33.7)   |  |  |  |  |
| 140 (55.1)   | K35903           | 85.7       | 87.5                                     | 87.5  | 87.5   | 85.7     |  |  |  |  |
|  | K35903           | (33.7)     | (34.4)                                   | (34.4)  | (34.4) | (33.7)   |  |  |  |  |
|  | C35903           | 85.7       | 89.3                                     | 89.3  | 89.3   | 85.7     |  |  |  |  |
| 150 (50 1)   | C30903           | (33.7)     | (35.2)                                   | (35.2)  | (35.2) | (33.7)   |  |  |  |  |
| 150 (59.1)   | V25002           | 85.7       | 89.3                                     | 89.3  | 89.3   | 85.7     |  |  |  |  |
|  | K35903           | (33.7)     | (35.2)                                   | 5.2)     (35.2)     (35.2)     (33.7)       2.1     94.0     92.1     85.7       6.3)     (37.0)     (36.3)     (33.7)       2.1     94.0     92.1     85.7       6.3)     (37.0)     (36.3)     (33.7) |        |          |  |  |  |  |
|  | C25002           | 85.7       | 92.1                                     | 94.0  | 92.1   | 85.7     |  |  |  |  |
| 160 (63.0)   | C35903           | (33.7)     | (36.3)                                   | (37.0)  | (36.3) | (33.7)   |  |  |  |  |
|  | K35903           | 85.7       | 92.1                                     | 94.0  | 92.1   | 85.7     |  |  |  |  |
|  |                  | (33.7)     | (36.3)                                   | (37.0)  | (36.3) | (33.7)   |  |  |  |  |
| 170 (66.9)   | C35903<br>K35903 | 85.7       | 92.1                                     | 94.0  | 92.1   | 85.7     |  |  |  |  |
|  |                  | (33.7)     | (36.3)                                   | (37.0)  | (36.3) | (33.7)   |  |  |  |  |
|  |                  | 85.7       | 92.1                                     | 94.0  | 92.1   | 85.7     |  |  |  |  |
|  |                  | (33.7)     | (36.3)                                   | (37.0)  | (36.3) | (33.7)   |  |  |  |  |
|  | C25002           | 85.7       | 86.6                                     | 94.0  | 86.6   | 85.7     |  |  |  |  |
| 100 (70 0)   | C35903           | (33.7)     | (34.1)                                   | (37.0)  | (34.1) | (33.7)   |  |  |  |  |
| 180 (70.9)   | K25002           | 85.7       | 86.6                                     | 94.0  | 86.6   | 85.7     |  |  |  |  |
|  | K35903           | (33.7)     | (34.1)                                   | (37.0)  | (34.1) | (33.7)   |  |  |  |  |
|  | C25002           | 85.7       | 86.6                                     | 91.2  | 86.6   | 85.7     |  |  |  |  |
| 100 (74.0)   | C35903           | (33.7)     | (34.1)                                   | (35.9)  | (34.1) | (33.7)   |  |  |  |  |
| 190 (74.8)   | V25002           | 85.7       | 86.6                                     | 91.2  | 86.6   | 85.7     |  |  |  |  |
|  | K35903           | (33.7)     | (34.1)                                   | (35.9)  | (34.1) | (33.7)   |  |  |  |  |
|  | C35903           | 85.7       | 86.6                                     | 91.2  | 86.6   | 85.7     |  |  |  |  |
| 200 (78.7)   | C33803           | (33.7)     | (34.1)                                   | (35.9)  | (34.1) | (33.7)   |  |  |  |  |
| 200 (10.1)   | K35903           | 85.7       | 86.6                                     | 91.2  | 86.6   | 85.7     |  |  |  |  |
|  | 100000           | (33.7)     | (34.1)                                   | (35.9)  | (34.1) | (33.7)   |  |  |  |  |

## K2XX HD C/K 35943 (Crew Cab) Goodyear Wrangler SR-A ALS LT265/70R18/E (QWF) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

|                                      | T = Lateral and     | @ Y – Lateral CG Offset Location cm (in) |               |           |  |          |  |  |  |  |
|--------------------------------------|---------------------|--|---------------|-----------|--|----------|--|--|--|--|
| @ Maximum X Longitudinal CG Location | Model               | @  | Y – Lateral ( | Uffset Lo | cation cm (ir                            | וי)      |  |  |  |  |
| from Front Axle CL cm (in)           | Identification      | -10 (-3.9)                               | -5 (-2)       | 0         | 5 (2)                                    | 10 (3.9) |  |  |  |  |
|                                      | C35943              | 87.4                                     | 91.9          | 91.9      | 91.9                                     | 87.4     |  |  |  |  |
| 160 (63.0)                           | 000940              | (34.4)                                   | (36.2)        | (36.2)    | (36.2)                                   | (34.4)   |  |  |  |  |
| 100 (03.0)                           | K35943              | 87.4                                     | 91.9          | 91.9      | 91.9                                     | 87.4     |  |  |  |  |
|                                      | 100940              | (34.4)                                   | (36.2)        | (36.2)    | (36.2)                                   | (34.4)   |  |  |  |  |
|                                      | C35943              | 87.4                                     | 94.2          | 94.2      | 94.2                                     | 87.4     |  |  |  |  |
| 170 (66.9)                           | 033943              | (34.4)                                   | (37.1)        | (37.1)    | (37.1)                                   | (34.4)   |  |  |  |  |
| 170 (00.3)                           | K35943              | 87.4                                     | 94.2          | 94.2      | 94.2                                     | 87.4     |  |  |  |  |
|                                      | 100940              | (34.4)                                   | (37.1)        | (37.1)    | (37.1)                                   | (34.4)   |  |  |  |  |
|                                      | C35943              | 93.0                                     | 94.2          | 98.6      | 94.2                                     | 93.0     |  |  |  |  |
| 180 (70.9)                           | 000940              | (36.6)                                   | (37.1)        | (38.8)    | (37.1)                                   | (36.6)   |  |  |  |  |
| 160 (70.9)                           | K35943              | 93.0                                     | 94.2          | 98.6      | 94.2                                     | 93.0     |  |  |  |  |
|                                      | 100940              | (36.6)                                   | (37.1)        | (38.8)    | (37.1)                                   | (36.6)   |  |  |  |  |
|                                      | C35943              | 93.0                                     | 97.5          | 98.6      | 97.5                                     | 93.0     |  |  |  |  |
| 190 (74.8)                           | 033943              | (36.6)                                   | (38.4)        | (38.8)    | (38.4)                                   | (36.6)   |  |  |  |  |
| 190 (74.8)                           | K35943              | 93.0                                     | 97.5          | 98.6      | 97.5                                     | 93.0     |  |  |  |  |
|                                      | N35943              | (36.6)                                   | (38.4)        | (38.8)    | (38.4)                                   | (36.6)   |  |  |  |  |
| 200 (78.7)                           | C35943<br>K35943    | 93.0                                     | 97.5          | 98.6      | 97.5                                     | 93.0     |  |  |  |  |
|                                      |                     | (36.6)                                   | (38.4)        | (38.8)    | (38.4)                                   | (36.6)   |  |  |  |  |
| 200 (78.7)                           |                     | 93.0                                     | 97.5          | 98.6      | 97.5                                     | 93.0     |  |  |  |  |
|                                      | N33943              | (36.6)                                   | (38.4)        | (38.8)    | (38.4)                                   | (36.6)   |  |  |  |  |
|                                      | C35943              | 93.0                                     | 95.3          | 97.5      | 95.3                                     | 93.0     |  |  |  |  |
| 210 (82.7)                           | 033943              | (36.6)                                   | (37.5)        | (38.4)    | (37.5)                                   | (36.6)   |  |  |  |  |
| 210 (02.7)                           | K35943              | 93.0                                     | 95.3          | 97.5      | 97.5<br>(38.4)<br>97.5<br>(38.4)<br>95.3 | 93.0     |  |  |  |  |
|                                      | 100340              | (36.6)                                   | (37.5)        | (38.4)    | (37.5)                                   | (36.6)   |  |  |  |  |
|                                      | C35943              | 79.5                                     | 95.3          | 97.5      | 95.3                                     | 79.5     |  |  |  |  |
| 220 (86.6)                           | 000940              | (31.3)                                   | (37.5)        | (38.4)    | (37.5)                                   | (31.3)   |  |  |  |  |
| 220 (66.6)                           | K35943              | 79.5                                     | 95.3          | 97.5      | 95.3                                     | 79.5     |  |  |  |  |
|                                      | 100940              | (31.3)                                   | (37.5)        | (38.4)    | (37.5)                                   | (31.3)   |  |  |  |  |
|                                      | C35943              | 79.5                                     | 84.5          | 91.6      | 84.5                                     | 79.5     |  |  |  |  |
| 230 (90.6)                           | 000040              | (31.3)                                   | (33.3)        | (36.1)    | (33.3)                                   | (31.3)   |  |  |  |  |
| 230 (80.0)                           | K35943              | 79.5                                     | 84.5          | 91.6      | 84.5                                     | 79.5     |  |  |  |  |
|                                      | NJJ34J              | (31.3)                                   | (33.3)        | (36.1)    | (33.3)                                   | (31.3)   |  |  |  |  |
|                                      | C35943              | 79.5                                     | 84.5          | 91.6      | 84.5                                     | 79.5     |  |  |  |  |
| 240 (94.5)                           | 000 <del>04</del> 0 | (31.3)                                   | (33.3)        | (36.1)    | (33.3)                                   | (31.3)   |  |  |  |  |
| 240 (84.0)                           | K35943              | 79.5                                     | 84.5          | 91.6      | 84.5                                     | 79.5     |  |  |  |  |
|                                      | N30843              | (31.3)                                   | (33.3)        | (36.1)    | (33.3)                                   | (31.3)   |  |  |  |  |

## K2XX HD C/K 35953 (Double Cab) Michelin LTX AT2 LT265/70R18/E (QGM) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

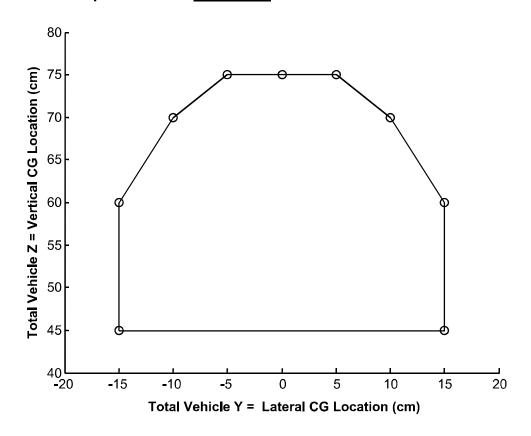
| @ Maximum X   | i – Lateraran           | @ Y – Lateral CG Offset Location cm (in) |         |        |        |          |  |  |  |  |
|---|-------------------------|--|---------|--------|--------|----------|--|--|--|--|
| Longitudinal CG Location from Front Axle CL cm (in) | Model<br>Identification | -10 (-3.9)                               | -5 (-2) | 0      | 5 (2)  | 10 (3.9) |  |  |  |  |
|   | C35053                  | 81.2                                     | 81.2    | 85.5   | 81.2   | 81.2     |  |  |  |  |
| 150 (50.1)  | C35953                  | (32.0)                                   | (32.0)  | (33.7) | (32.0) | (32.0)   |  |  |  |  |
| 150 (59.1)  | K35953                  | 81.2                                     | 81.2    | 85.5   | 81.2   | 81.2     |  |  |  |  |
|   | K30903                  | (32.0)                                   | (32.0)  | (33.7) | (32.0) | (32.0)   |  |  |  |  |
|   | C35953                  | 81.2                                     | 81.2    | 85.5   | 81.2   | 81.2     |  |  |  |  |
| 160 (63.0)  | Coogos                  | (32.0)                                   | (32.0)  | (33.7) | (32.0) | (32.0)   |  |  |  |  |
| 160 (63.0)  | K35953                  | 81.2                                     | 81.2    | 85.5   | 81.2   | 81.2     |  |  |  |  |
|   | K30903                  | (32.0)                                   | (32.0)  | (33.7) | (32.0) | (32.0)   |  |  |  |  |
|   | C35953                  | 82.2                                     | 84.4    | 85.5   | 84.4   | 82.2     |  |  |  |  |
| 170 (66.9)  | Coogos                  | (32.4)                                   | (33.2)  | (33.7) | (33.2) | (32.4)   |  |  |  |  |
| 170 (66.9)  | K35953                  | 82.2                                     | 84.4    | 85.5   | 84.4   | 82.2     |  |  |  |  |
|   | K30903                  | (32.4)                                   | (33.2)  | (33.7) | (33.2) | (32.4)   |  |  |  |  |
|   | C35953                  | 82.2                                     | 82.2    | 91.0   | 82.2   | 82.2     |  |  |  |  |
| 180 (70.9)  | C33933                  | (32.4)                                   | (32.4)  | (35.8) | (32.4) | (32.4)   |  |  |  |  |
|   | K35953                  | 82.2                                     | 82.2    | 91.0   | 82.2   | 82.2     |  |  |  |  |
|   | K35953                  | (32.4)                                   | (32.4)  | (35.8) | (32.4) | (32.4)   |  |  |  |  |
|   | C35953<br>K35953        | 82.2                                     | 86.6    | 91.0   | 86.6   | 82.2     |  |  |  |  |
| 190 (74.8)  |                         | (32.4)                                   | (34.1)  | (35.8) | (34.1) | (32.4)   |  |  |  |  |
| 190 (74.8)  |                         | 82.2                                     | 86.6    | 91.0   | 86.6   | 82.2     |  |  |  |  |
|   | K33933                  | (32.4)                                   | (34.1)  | (35.8) | (34.1) | (32.4)   |  |  |  |  |
|   | C35953                  | 82.2                                     | 86.6    | 91.0   | 86.6   | 82.2     |  |  |  |  |
| 200 (78.7)  | Coogos                  | (32.4)                                   | (34.1)  | (35.8) | (34.1) | (32.4)   |  |  |  |  |
| 200 (78.7)  | K35953                  | 82.2                                     | 86.6    | 91.0   | 86.6   | 82.2     |  |  |  |  |
|   | K30903                  | (32.4)                                   | (34.1)  | (35.8) | (34.1) | (32.4)   |  |  |  |  |
|   | C35953                  | 82.2                                     | 86.6    | 91.0   | 86.6   | 82.2     |  |  |  |  |
| 210 (82.7)  | C33933                  | (32.4)                                   | (34.1)  | (35.8) | (34.1) | (32.4)   |  |  |  |  |
| 210 (62.7)  | K35953                  | 82.2                                     | 86.6    | 91.0   | 86.6   | 82.2     |  |  |  |  |
|   | K33933                  | (32.4)                                   | (34.1)  | (35.8) | (34.1) | (32.4)   |  |  |  |  |
|   | C35953                  | 70.2                                     | 85.5    | 88.8   | 85.5   | 70.2     |  |  |  |  |
| 220 (86.6)  | C30803                  | (27.6)                                   | (33.7)  | (35.0) | (33.7) | (27.6)   |  |  |  |  |
| 220 (86.6)  | K35953                  | 70.2                                     | 85.5    | 88.8   | 85.5   | 70.2     |  |  |  |  |
|   | เขากลุกจ                | (27.6)                                   | (33.7)  | (35.0) | (33.7) | (27.6)   |  |  |  |  |
|   | C35953                  | 70.2                                     | 85.5    | 88.8   | 85.5   | 70.2     |  |  |  |  |
| 230 (90.6)  | Coogoo                  | (27.6)                                   | (33.7)  | (35.0) | (33.7) | (27.6)   |  |  |  |  |
| 230 (80.0)  | K35953                  | 70.2                                     | 85.5    | 88.8   | 85.5   | 70.2     |  |  |  |  |
|   | 1/0/300                 | (27.6)                                   | (33.7)  | (35.0) | (33.7) | (27.6)   |  |  |  |  |

## K2XX HD C/K 35953 (Double Cab) Goodyear Wrangler SR-A ALS LT265/70R18/E (QWF) Tire CMVSS 126 and FMVSS 126 Compliance Certification

"X = Longitudinal, Y = Lateral and Z = Vertical Center of Gravity (CG) Restrictions"

| @ Maximum X Longitudinal               |                         | @ Y – Lateral CG Offset Location cm (in) |         |        |   |          |  |  |  |  |
|--|-------------------------|--|---------|--------|---|----------|--|--|--|--|
| CG Location from Front Axle CL cm (in) | Model<br>Identification | -10 (-3.9)                               | -5 (-2) | 0      | 5 (2)   | 10 (3.9) |  |  |  |  |
|  | 025052                  | 88.8                                     | 88.8    | 94.3   | 88.8  | 88.8     |  |  |  |  |
|  | C35953                  | (35.0)                                   | (35.0)  | (37.1) | (35.0)  | (35.0)   |  |  |  |  |
| 150 (59.1)                             |                         | 88.8                                     | 88.8    | 94.3   | 88.8  | 88.8     |  |  |  |  |
|  | K35953                  | (35.0)                                   | (35.0)  | (37.1) | (35.0)  | (35.0)   |  |  |  |  |
|  | C25052                  | 88.8                                     | 88.8    | 94.3   | 88.8  | 88.8     |  |  |  |  |
| 160 (62 0)                             | C35953                  | (35.0)                                   | (35.0)  | (37.1) | (35.0)  | (35.0)   |  |  |  |  |
| 160 (63.0)                             | V25052                  | 88.8                                     | 88.8    | 94.3   | 88.8  | 88.8     |  |  |  |  |
|  | K35953                  | (35.0)                                   | (35.0)  | (37.1) | (35.0)     (35.0)       95.4     93.2       (37.6)     (36.7)       95.4     93.2 | (35.0)   |  |  |  |  |
|  | C25052                  | 93.2                                     | 95.4    | 94.3   | 95.4  | 93.2     |  |  |  |  |
| 170 (66.9)                             | C35953                  | (36.7)                                   | (37.6)  | (37.1) | (37.6)  | (36.7)   |  |  |  |  |
| 170 (66.9)                             | K35953                  | 93.2                                     | 95.4    | 94.3   | 95.4  | 93.2     |  |  |  |  |
|  | K35955                  | (36.7)                                   | (37.6)  | (37.1) | (37.6)  | (36.7)   |  |  |  |  |
|  | C35953                  | 93.2                                     | 95.4    | 99.8   | 95.4  | 93.2     |  |  |  |  |
| 180 (70.9)                             | C33933                  | (36.7)                                   | (37.6)  | (39.3) | (37.6)  | (36.7)   |  |  |  |  |
|  | K35953                  | 93.2                                     | 95.4    | 99.8   | 95.4  | 93.2     |  |  |  |  |
|  | 100900                  | (36.7)                                   | (37.6)  | (39.3) | (37.6)  | (36.7)   |  |  |  |  |
|  | C35953<br>K35953        | 93.2                                     | 95.4    | 98.7   | 95.4  | 93.2     |  |  |  |  |
| 190 (74.8)                             |                         | (36.7)                                   | (37.6)  | (38.9) | (37.6)  | (36.7)   |  |  |  |  |
| 190 (14.0)                             |                         | 93.2                                     | 95.4    | 98.7   | 95.4  | 93.2     |  |  |  |  |
|  | 1100000                 | (36.7)                                   | (37.6)  | (38.9) | (37.6)  | (36.7)   |  |  |  |  |
|  | C35953                  | 93.2                                     | 94.3    | 98.7   | 94.3  | 93.2     |  |  |  |  |
| 200 (78.7)                             | 000000                  | (36.7)                                   | (37.1)  | (38.9) | (37.1)  | (36.7)   |  |  |  |  |
| 200 (10.1)                             | K35953                  | 93.2                                     | 94.3    | 98.7   | 94.3  | 93.2     |  |  |  |  |
|  | 1100000                 | (36.7)                                   | (37.1)  | (38.9) | (37.1)  | (36.7)   |  |  |  |  |
|  | C35953                  | 93.2                                     | 94.3    | 98.7   | 94.3  | 93.2     |  |  |  |  |
| 210 (82.7)                             |                         | (36.7)                                   | (37.1)  | (38.9) | (37.1)  | (36.7)   |  |  |  |  |
| 210 (62.7)                             | K35953                  | 93.2                                     | 94.3    | 98.7   | 94.3  | 93.2     |  |  |  |  |
|  | 1100000                 | (36.7)                                   | (37.1)  | (38.9) | (37.1)  | (36.7)   |  |  |  |  |
|  | C35953                  | 93.2                                     | 94.3    | 98.7   | 94.3  | 93.2     |  |  |  |  |
| 220 (86.6)                             |                         | (36.7)                                   | (37.1)  | (38.9) | (37.1)  | (36.7)   |  |  |  |  |
| ZZU (80.b)                             | K35953                  | 93.2                                     | 94.3    | 98.7   | 94.3  | 93.2     |  |  |  |  |
|  | . 1.00000               | (36.7)                                   | (37.1)  | (38.9) | (37.1)  | (36.7)   |  |  |  |  |
|  | C35953                  | 79.5                                     | 94.3    | 94.3   | 94.3  | 79.5     |  |  |  |  |
| 230 (90.6)                             | 20000                   | (31.3)                                   | (37.1)  | (37.1) | (37.1)  | (31.3)   |  |  |  |  |
|  | K35953                  | 79.5                                     | 94.3    | 94.3   | 94.3  | 79.5     |  |  |  |  |
|  | . 100000                | (31.3)                                   | (37.1)  | (37.1) | (37.1)  | (31.3)   |  |  |  |  |

## CMVSS 126 and FMVSS 126 Compliance Certification Y = Lateral and Z = Vertical Center of Gravity Restriction Visual Representation <u>EXAMPLE</u> shown in centimeters



For upfitter use and applicable to CMVSS 126 and FMVSS 126, the longitudinal and vertical vehicle center of gravity location can be approximated by following the formula below and by referencing data elements within CMVSS 105 and FMVSS 105 – HYDRAULIC AND ELECTRIC BRAKE SYSTEMS or CMVSS 135 and FMVSS 135 LIGHT VEHICLE BRAKE SYSTEMS, ... ALLOWABLE CENTER OF GRAVITY CHARTS.

In addition, the equation to calculate the lateral vehicle center of gravity location from center of vehicle can be estimated by using the following formula:

lateral offset from centerline of vehicle = [{(RF corner weight kg (lb) + RR corner weight) kg (lb) / (total vehicle weight kg (lb))} - 0.5] \* vehicle track width of 152 cm (59.8 in)

If the lateral offset from centerline of vehicle calculation above results in a positive number, the lateral vehicle offset center of gravity is toward the right side (passenger) of the vehicle.

Alternatively, if the lateral offset from centerline of vehicle calculation above results in a negative number, the lateral vehicle offset center of gravity is toward the left side (driver) of the vehicle.

## CMVSS 135 and FMVSS 135 – LIGHT VEHICLE BRAKE SYSTEMS <u>Applies to all types of Incomplete Vehicles Contained in this Document</u> 3500 kg (7,716 lb) GVWR or less

TYPE 2 The following statement is applicable to all types of Incomplete Vehicles contained in this document with a 3500 kg (7,716 lb) GVWR or less, (unless otherwise noted on the cover).

This incomplete vehicle when completed will conform to CMVSS 135 and FMVSS 135 provided it is completed in accordance with the following specific conditions by the (intermediate and) final stage manufacturer:

A. Providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Anti-Lock Brake System

Brake assemblies and components (service/ parking) - (i.e. power boosters, master cylinder, wheel cylinder, calipers, rotors, wheel speed sensor, wheel speed sensor wiring, brake lining etc.)

Brake pedal, brake switch, parking brake hand lever or park brake switch and related mechanical components

Brake system electrical controls and logic Gauges and warning devices, and statements Hydraulic brake fluid and reservoirs Hydraulic brake lines, fittings and routings Hydraulic brake valves and components Master cylinder-warning statement Owner Manual instructions

Parking brake actuator and related mechanical components

Power steering or vacuum lines and routing

Power steering or vacuum pump

Tires and Wheels

Vacuum brake lines, fittings and routings

Vehicle wiring harnesses

Wheelbases

- B. GVWR, GAWR front and rear weight ratings as listed on the Incomplete Vehicle Label affixed to the front cover of this document must not be exceeded.
- C. The center of gravity of the total vehicle falls within the areas referenced on the "ALLOWABLE CENTER OF GRAVITY CHART" that follows. Instructions for determining the allowable center of gravity variation are listed below:

These charts detail the envelope of allowable center of gravity variation for completed vehicles. This is significant for the lightly loaded portion of CMVSS 135 and FMVSS 135, which is defined as curb plus 181.4 kg (400 lb) distributed in the driver-passenger area of the vehicle.

The lightly loaded center of gravity of complete vehicles needs to be restricted so it will meet CMVSS 135 and FMVSS 135 stopping distances. The laden center of gravity does not need to be specified as it is controlled within the CMVSS 135 and FMVSS 135 test procedure by specific instructions as to how ballast is to be placed (while height is not controlled, it is assumed that for test purposes it would be reasonable).

For upfitter use, the center of gravity location can be approximated by the following formula:

$$d = \frac{[Wrc + Wrb + [(Hp)(Wp)/WB]] WB}{Wt}$$

$$h = \underbrace{[h1Wc + h2Wb + (h3)(Wp)]}_{Wt}$$

d = horizontal distance from front wheels to completed vehicle center of gravity mm (in)

h = vertical distance from ground to completed vehicle center of gravity mm (in)

Wrc = rear component of Chassis weight kg (lb)
Wrb = rear component of body weight kg (lb)

WB = vehicle wheelbase mm (in)

Wt = total weight of chassis and body kg (lb) plus 181.4 kg (400 lb)

h1 = center of gravity height from ground of the Bare Chassis = 711 mm (28 in)

Wc = total weight of Chassis kg (lb)

h2 = center of gravity height of body from ground mm (in)

Wb = total weight of body kg (lb)

Wp = 181.4 kg (400 lb) Amount from lightly loaded definition that is evenly distributed in driver-

passenger area of vehicle.

Hp = 1467 mm (57.76 in) Horizontal distance from front axle to center of gravity of 181.4 kg (400

lb) evenly distributed in driver-passenger area of vehicle.

h3 = 948 mm (37.32 in) Vertical center of gravity height of 181.4 kg (400 lb) evenly distributedin

driver-passenger area for vehicles with 3500 kg (7,716 lb) GVWR or less.

### CMVSS 135 and FMVSS 135 ALLOWABLE CENTER OF GRAVITY CHARTS

|        |                             |                           |                   |                       | Incompl       | ete, Pick-             | Up Box R                          | emova <b>l</b> , c                 | r Snow P       | low Prep        | Package        | Vehic <b>l</b> es |
|--------|-----------------------------|---------------------------|-------------------|-----------------------|---------------|------------------------|-----------------------------------|------------------------------------|----------------|-----------------|----------------|-------------------|
| Model  | GVWR<br>kg<br>( <b>l</b> b) | Brake base System mm (in) |                   | base Rear<br>mm Wheel |               | oordinate<br>SS/FMVS\$ | Fwd<br>C/G<br>Limit<br>mm<br>(in) | RRwd<br>C/G<br>Limit<br>mm<br>(in) |                |                 |                |                   |
|        |                             |                           | (**)              |                       | H₁            | H <sub>2</sub>         | Α                                 | В                                  | С              | D               | E              | F                 |
| C15703 | 2948<br>(6500)              | JD9                       | 3022.6<br>(119.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1020<br>(40.2)                    | 1368<br>(53.9)                     | 1851<br>(72.9) | 2391<br>(94.1)  | 1020<br>(40.2) | 2391<br>(94.1)    |
| C15703 | 2994<br>(6600)              | JD9                       | 3022.6<br>(119.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1020<br>(40.2)                    | 1369<br>(53.9)                     | 1851<br>(72.9) | 2391<br>(94.1)  | 1020<br>(40.2) | 2391<br>(94.1)    |
| C15703 | 3039<br>(6700)              | JD9                       | 3022.6<br>(119.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1020<br>(40.2)                    | 1369<br>(53.9)                     | 1831<br>(72.1) | 2391<br>(94.1)  | 1020<br>(40.2) | 2391<br>(94.1)    |
| C15703 | 3062<br>(6750)              | JD9                       | 3022.6<br>(119.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1020<br>(40.2)                    | 1369<br>(53.9)                     | 1820<br>(71.6) | 2391<br>(94.1)  | 1020<br>(40.2) | 2391<br>(94.1)    |
| K15703 | 3039<br>(6700)              | JD9                       | 3022.6<br>(119.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1020<br>(40.2)                    | 1369<br>(53.9)                     | 1831<br>(72.1) | 2405<br>(94.7)  | 1020<br>(40.2) | 2405<br>(94.7)    |
| K15703 | 3084<br>(6800)              | JD9                       | 3022.6<br>(119.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1020<br>(40.2)                    | 1369<br>(53.9)                     | 1809<br>(71.2) | 2405<br>(94.7)  | 1020<br>(40.2) | 2405<br>(94.7)    |
| C15903 | 3039<br>(6700)              | JD9                       | 3378.2<br>(133.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1130<br>(44.5)                    | 1445<br>(56.9)                     | 2020<br>(79.5) | 2603<br>(102.5) | 1130<br>(44.5) | 2603<br>(102.5)   |
| C15903 | 3084<br>(6800)              | JD9                       | 3378.2<br>(133.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1130<br>(44.5)                    | 1445<br>(56.9)                     | 1996<br>(78.6) | 2603<br>(102.5) | 1130<br>(44.5) | 2603<br>(102.5)   |
| K15903 | 3130<br>(6900)              | JD9                       | 3378.2<br>(133.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1130<br>(44.5)                    | 1446<br>(56.9)                     | 1972<br>(77.6) | 2604<br>(102.5) | 1130<br>(44.5) | 2604<br>(102.5)   |
| K15903 | 3175<br>(7000)              | JD9                       | 3378.2<br>(133.0) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1130<br>(44 <b>.</b> 5)           | 1446<br>(56.9)                     | 1948<br>(76.7) | 2604<br>(102.5) | 1130<br>(44.5) | 2604<br>(102.5)   |
| C15753 | 3130<br>(6900)              | JD9                       | 3644.9<br>(143.5) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1213<br>(47.8)                    | 1503<br>(59.2)                     | 2109<br>(83.0) | 2752<br>(108.3) | 1219<br>(48.0) | 2752<br>(108.3)   |
| C15753 | 3175<br>(7000)              | JD9                       | 3644.9<br>(143.5) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1213<br>(47.8)                    | 1503<br>(59.2)                     | 2084<br>(82.0) | 2752<br>(108.3) | 1219<br>(48.0) | 2752<br>(108.3)   |
| C15753 | 3266<br>(7200)              | JD9                       | 3644.9<br>(143.5) | SRW                   | 305<br>(12.0) | 1219<br>(48.0)         | 1213<br>(47.8)                    | 1504<br>(59.2)                     | 2036<br>(80.2) | 2713<br>(106.8) | 1213<br>(47.8) | 2713<br>(106.8)   |

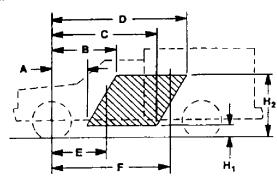
|        |   |     |                   |     | Incomplete, Pick-Up Box Removal, or Snow Plow Prep Package Vehicles |  |                |                |                |                 |                |                                    |
|--------|---|-----|-------------------|-----|---|--|----------------|----------------|----------------|-----------------|----------------|------------------------------------|
| Model  | Model GVWR kg (lb) Brake System mm (in) Wheel-base Wh |     |                   |     |   | Coordinates of Allowable C/G Variation at CMVSS/FMVSS Unladen, Curb Weight + 181.4 kg (400 lb) |                |                |                |                 |                | RRwd<br>C/G<br>Limit<br>mm<br>(in) |
|        |   |     |                   |     | H₁  | H <sub>2</sub>   | Α              | В              | С              | D               | E              | F                                  |
| C15753 | 3357<br>(7400)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 1990<br>(78.3) | 2667<br>(105.0) | 1213<br>(47.8) | 2667<br>(105.0)                    |
| K15753 | 3221<br>(7100)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 2060<br>(81.1) | 2736<br>(107.7) | 1213<br>(47.8) | 2736<br>(107.7)                    |
| K15753 | 3266<br>(7200)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 2036<br>(80.2) | 2713<br>(106.8) | 1213<br>(47.8) | 2713<br>(106.8)                    |
| K15753 | 3357<br>(7400)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 1990<br>(78.3) | 2667<br>(105.0) | 1213<br>(47.8) | 2667<br>(105.0)                    |
| K15753 | 3447<br>(7600)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1505<br>(59.2) | 1947<br>(76.6) | 2624<br>(103.3) | 1213<br>(47.8) | 2624<br>(103.3)                    |
| C15543 | 3130<br>(6900)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1503<br>(59.2) | 2109<br>(83.0) | 2752<br>(108.3) | 1219<br>(48.0) | 2752<br>(108.3)                    |
| C15543 | 3175<br>(7000)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1503<br>(59.2) | 2084<br>(82.0) | 2752<br>(108.3) | 1219<br>(48.0) | 2752<br>(108.3)                    |
| C15543 | 3266<br>(7200)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 2036<br>(80.2) | 2713<br>(106.8) | 1213<br>(47.8) | 2713<br>(106.8)                    |
| C15543 | 3357<br>(7400)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 1990<br>(78.3) | 2667<br>(105.0) | 1213<br>(47.8) | 2667<br>(105.0)                    |
| K15543 | 3221<br>(7100)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 2060<br>(81.1) | 2736<br>(107.7) | 1213<br>(47.8) | 2736<br>(107.7)                    |
| K15543 | 3266<br>(7200)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 2036<br>(80.2) | 2713<br>(106.8) | 1213<br>(47.8) | 2713<br>(106.8)                    |
| K15543 | 3357<br>(7400)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1504<br>(59.2) | 1990<br>(78.3) | 2667<br>(105.0) | 1213<br>(47.8) | 2667<br>(105.0)                    |
| K15543 | 3447<br>(7600)  | JD9 | 3644.9<br>(143.5) | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1213<br>(47.8) | 1505<br>(59.2) | 1947<br>(76.6) | 2624<br>(103.3) | 1213<br>(47.8) | 2624<br>(103.3)                    |
| C15743 | 3130<br>(6900)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1555<br>(61.2) | 2234<br>(87.9) | 2888<br>(113.7) | 1287<br>(50.7) | 2888<br>(113.7)                    |
| C15743 | 3175<br>(7000)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1555<br>(61.2) | 2207<br>(86.9) | 2884<br>(113.5) | 1287<br>(50.7) | 2884<br>(113.5)                    |
| C15743 | 3266<br>(7200)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1556<br>(61.3) | 2156<br>(84.9) | 2832<br>(111.5) | 1287<br>(50.7) | 2832<br>(111.5)                    |
| C15743 | 3357<br>(7400)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1556<br>(61.3) | 2107<br>(82.9) | 2784<br>(109.6) | 1287<br>(50.7) | 2784<br>(109.6)                    |
| K15743 | 3221<br>(7100)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1556<br>(61.3) | 2181<br>(85.9) | 2858<br>(112.5) | 1287<br>(50.7) | 2858<br>(112.5)                    |
| K15743 | 3266<br>(7200)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1556<br>(61.3) | 2156<br>(84.9) | 2832<br>(111.5) | 1287<br>(50.7) | 2832<br>(111.5)                    |
| K15743 | 3357<br>(7400)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1556<br>(61.3) | 2107<br>(82.9) | 2784<br>(109.6) | 1287<br>(50.7) | 2784<br>(109.6)                    |
| K15743 | 3447<br>(7600)  | JD9 | 3886.2<br>(153)   | SRW | 305<br>(12.0)   | 1219<br>(48.0)   | 1287<br>(50.7) | 1557<br>(61.3) | 2061<br>(81.1) | 2737<br>(107.8) | 1287<br>(50.7) | 2737<br>(107.8)                    |

ABS = Antilock Braking System

Brake Systems: Vacuum Powered Boosters - JF3, JF7 and JD9. Hybrid - J92.

C/G = Center of Gravity DRW = Dual Rear Wheel SRW = Single Rear Wheel

VSES = Vehicle Stability Enhancement System



C/G of vehicle in CMVSS or FMVSS unladen condition [Curb + 181.4 kg. (400 lb)] must be inside shaded area – that is, the C/G must be within the trapezoid formed by the coordinates A, B, C, D, H1, & H2, plus the C/G must be to the rear of vertical line E and forward of vertical line F.

# FMVSS 138 – TIRE PRESSURE MONITORING SYSTEMS (If Equipped) Applies to all types of Incomplete Vehicles Contained in this Document 4536 kg (10,000 lb) GVWR or less

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to FMVSS 138, providing the vehicle is equipped with a <u>Tire Pressure Monitoring System (TPMS) installed by General Motors</u>, and no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Body control module Instrument panel cluster Owners Manual instructions Remote start coax antennae (if equipped) Tires and Wheels
TPMS receiver module
TPMS sensors integral to the valve stems
Vehicle wiring harness

All incomplete vehicles shipped from the General Motors assembly plant will have tire pressures set for shipping purposes only. It is responsibility of the final stage manufacturer to label the vehicle in compliance to FMVSS 138. In addition, it is the responsibility of the final stage manufacturer to ensure the TPMS system is calibrated to the values printed on the final stage manufacturer's Tire Certification Label or Tire Information Label.

Wheelbase alteration, and/or addition of components may interfere with the TPMS radio frequency signal that may result in a malfunction warning displayed in the Driver Information Center (DIC). If this condition is observed, go to the GM Upfitter Integration website located at <a href="https://www.gmupfitter.com">www.gmupfitter.com</a>

NOTE: The TPMS is not required to monitor the spare tire, either when it is stowed or when it is installed on the vehicle.

## CMVSS 201 and FMVSS 201 – OCCUPANT PROTECTION IN INTERIOR IMPACT <u>Applies to all types of Incomplete Vehicles Contained in this Document</u> 4536 kg (10,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 201 and FMVSS 201 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Air bag system
Armrests, folding and stationary
Body structure
Door pads
Door structure
Headliner

Instrument panel
Interior compartment doors
Seats, seat backs and head restraints
Sun visors
Upper interior trim

# CMVSS 201 and FMVSS 201 – OCCUPANT PROTECTION IN INTERIOR IMPACT <u>Applies to all types of Incomplete Vehicles Contained in this Document</u> <u>4536 kg (10,000 lb) GVWR or less</u>

TYPE 3 The following statement is applicable to any type of incomplete vehicle contained in this document, 4536 kg (10,000 lb) GVWR or less, with any seat delete option that is applicable to any seating position (unless otherwise noted on the cover).

Conformity with CMVSS 201 and FMVSS 201 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

NOTE: Any seats installed by intermediate or final stage manufacturers must comply with CMVSS 201 and FMVSS 201. In addition, the "H" point of any seats installed by the intermediate or final stage manufacturers must be located as shown in the **GM Upfitter Integration website located at www.gmupfitter.com** 

## CMVSS 202– HEAD RESTRAINTS <u>Applies to all types of Incomplete Vehicles Contained in this Document</u> 4536 kg (10,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 202 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Front seat assemblies including head restraints

**Owner Manual instructions** 

TYPE 3 The following statement is applicable to any type of incomplete vehicle contained in this document, 4536 kg (10,000 lb) GVWR or less, with any seat delete option that is applicable to any seating position (unless otherwise noted on the cover).

Conformity with CMVSS 202 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

# FMVSS 202A – HEAD RESTRAINTS Applies to all types of Incomplete Vehicles Contained in this Document 4536 kg (10,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all Front Seating Positions in all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to FMVSS 202A providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below

Front seat assemblies including head restraints

Owner Manual instructions

NOTE: Rear seats in these incomplete vehicles as manufactured by GM do not have head restraints.

TYPE 3 The following statement is applicable to all Rear Seating Positions in all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less, with any seat delete option or when any alterations are made to Rear Seating Positions as manufactured by GM (unless otherwise noted on the cover).

Conformity with FMVSS 202A cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

NOTE:

If the intermediate or final stage manufacturer adds or modifies seats as manufactured by General Motors, they are also responsible to provide an addendum to the Owner Manual in order to meet FMVSS 202A requirements.

# CMVSS 203 and FMVSS 203 – IMPACT PROTECTION FOR THE DRIVER FROM THE STEERING CONTROL SYSTEM Applies to all types of Incomplete Vehicles Contained in this Document 4536 kg (10,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 203 and FMVSS 203 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Driver's seat assembly Instrument panel

Steering control system including related hardware Steering wheel, column, and shaft

TYPE 3 The following statement is applicable to any type of incomplete vehicle contained in this document, 4536 kg (10,000 lb) GVWR or less, with any driver seat delete option (unless otherwise noted on the cover).

Conformity with CMVSS 203 and FMVSS 203 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 204 and FMVSS 204 – STEERING CONTROL REARWARD DISPLACEMENT <u>Applies to all types of Incomplete Vehicles Contained in this Document</u> 4536 kg (10,000 lb) GVWR or less and an unloaded vehicle weight of 2495 kg (5,500 lb) or less

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document, 4536 kg (10,000 lb) GVWR or less and an unloaded vehicle weight of 2495 kg (5,500 lb) or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 204 and FMVSS 204 providing the dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded, and no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below that would affect the steering control system displacement in a 48 kph (30 mph) fixed barrier impact:

Frame assembly and mounting system
Front impact bar assembly and mounting system
Hood and hinge assemblies
Powertrain and powertrain mounting system
Steering control system including related hardware

Steering wheel, column, and shaft assembly Tires and wheels Vehicle/body front end sheet metal components Vehicle/body front end structural components Vehicle/body roof structure and components

#### TYPE 3 The following statement is applicable to any type of incomplete vehicle contained in this document, 4536 kg (10,000 lb) GVWR or less, with any bumper delete option (unless otherwise noted on the cover).

Conformity with CMVSS 204 and FMVSS 204 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 205 and FMVSS 205 – GLAZING MATERIALS Applies to all types of Incomplete Vehicles contained in this Document

#### TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 205 and FMVSS 205 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Glazing material Visibility of the monogram
The monogram Windshield shade banding

Final compliance with CMVSS 205 and FMVSS 205 is the responsibility of the final stage manufacturer for any modifications, or added material, parts, components, or systems.

### CMVSS 206 and FMVSS 206 – DOOR LOCKS AND DOOR RETENTION COMPONENTS Applies to all types of Incomplete Vehicles Contained in this Document

#### TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 206 and FMVSS 206 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Door and pillar systems, including but not limited to:

Body rear end upper and lower panel Doors

Door hinges Exterior door handles
Door latch strikers and striker plates Inside lock control linkages

Door latches Rear compartment latch and striker assembly

Door locks Rear compartment lid assembly Door pillars Rear compartment lid hinge assembly

Door wedges

Final compliance with CMVSS 206 and FMVSS 206 is the responsibility of the final stage manufacturer for any modifications, or added material, parts, components, or systems.

## CMVSS 207 and FMVSS 207 – SEATING SYSTEMS Applies to all types of Incomplete Vehicles Contained in this Document

#### TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 207 and FMVSS 207 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Floor pan assemblies Seat assembly

Folding seat or seat back latch assembly Seat or seat back latch assembly

Seat adjuster assembly Seat anchorage brackets, reinforcements, attachment hardware, etc. Seat or seat back latch release control Seat or seat back latch striker Seat riser

TYPE 3 The following statement is applicable to any type of incomplete vehicle contained in this document, with any seat delete option that is applicable to any seating position (unless otherwise noted on the cover).

Conformity with CMVSS 207 and FMVSS 207 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 208 and FMVSS 208 – OCCUPANT CRASH PROTECTION Applies to all types of Incomplete Vehicles Contained in this Document

- TYPE 2 The following statement is applicable to all types of vehicles contained in this document (unless otherwise noted on the cover) having an unloaded vehicle weight of 2495 kg (5,500 lb) or less and a GVWR of 3856 kg (8,500 lb) or less, and built by General Motors with complete seats and seat belt assemblies. For vehicles GVWR of 3856 kg (8,500 lb) or less, the vehicle model number as shown on the label on the cover must be included on the final stage manufacturer's certification label.
  - A. The front seating positions provided by General Motors will conform to the requirements of CMVSS 208 and FMVSS 208, providing the dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded, and no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the Owner Manual instructions, and components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:
    - the number, location or configuration of the designated seating positions including seats, risers, adjusters; and
    - 2. the number, placement, installation or model number of the seat belt assemblies provided; and
    - 3. the instrument panel or its mounting, the steering column/shaft or its mounting, the knee bolster or its mounting, the steering wheel, horn pad, driver air bag module or its mounting and covering, passenger air bag module or its mounting or covering (if equipped), air bag crash sensors, windshield, or interior trim. Note: For the "Passenger Sensing System" (if equipped), modifying or putting a padded cover on the passenger seat can affect the performance of this system.
    - 4. Sensing and Diagnostic Module (SDM), and all air bag system wiring. Do not relocate or move the SDM, or air bag crash sensors. Do not obstruct the path of air bag deployment. Do not mount any components that produce more than a 20 Gauss magnetic field as measured at the SDM. Speakers/magnets must be located at least 12.7 cm (5 in) from the SDM. You must disconnect the SDM before doing any welding on the vehicle, otherwise do not disconnect the SDM. Caution: To help avoid Personal Injury Due to unwanted air bag inflation, observe the following precautions! Do not weld, solder, braze, hammer, machine, drill, heat, electrical splice, add onto, remove, relocate, test, paint, loosen or in any way alter air bag components or wiring or fuses. Carpet may be put over the SDM if an appropriate moisture barrier (such as a rubber matted backing) is supplied. When performing any operation around air bag components or wiring, including but not limited to any operations around the instrument panel, electrical wiring and fuse block, steering column/wheel, and the engine compartment, you must disable the air bag system prior to the operation. If the vehicle is equipped with an SDM, you must disable the air bag system prior to installing intermediate or final stage manufacturer components. Note: Striking or dropping a powered SDM may cause air bag deployment. The air bag system must be enabled after operation completion. This must be verified before shipping the vehicle. Instructions for disabling and enabling the air bag system can be found in the GM service manual. Note: All connectors that have wiring routed between the SDM and an air bag inflator module have yellow connectors.
    - 5. If the sunshade is removed or altered, or if the intermediate or final stage manufacturer installs the sunshade, a new Inflatable Restraints System Caution label must be installed per CMVSS 208 and FMVSS 208 requirements. In order to be in compliance with CMVSS 208 and FMVSS 208, no other label shall be installed on the same side of the sunvisor as the Air Bag Caution label. The instrument panel temporary warning label (if equipped) must not be removed.

- 6. The vehicle frame, front bumper system, body structure including front sheet metal or other front structure, roof structure, doors, floor pan, dash panel, cowl structure, rocker structure, driveline or contents of the engine compartment by any incomplete or final stage manufacturer which would result in any difference from the modified vehicle's deceleration if the modified vehicle were to be subjected to barrier impact tests conducted per CMVSS 208 and FMVSS 208.
- B. The rear seating positions provided by General Motors will conform to CMVSS 208 and FMVSS 208 providing no alterations are made to the number, location or configuration of the designated seats/seating positions or to the number, placement, installation or model number of the seat belt assemblies of this incomplete vehicle.
- C. Intermediate or final stage manufacturers are advised that mounting hardware ahead of the bumper/radiator, such as, but not limited to, plows, winches, brush guards, etc., may affect airbag sensing and resultant performance.
- TYPE 1 The following statement is applicable to all types of vehicles contained in this document (unless otherwise noted on the cover) having either an unloaded vehicle weight greater than 2495 kg (5,500 lb) or a GVWR greater than 3856 kg (8,500 lb), and built by General Motors with complete seats and seat belt assemblies.

This incomplete vehicle, when completed, will conform to CMVSS 208 and FMVSS 208 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Owner Manual instructionsSeat belt anchoragesSeat anchoragesSeat belt assembliesSeat assembliesSeat belt warning system

NOTE: <u>For vehicles equipped with an optional Inflatable Restraint System, refer to additional information in the TYPE 2 statement immediately preceding.</u>

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with respect to any seats installed by the intermediate or final stage manufacturer (unless otherwise noted on the cover).

Conformity with CMVSS 208 and FMVSS 208 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 209 and FMVSS 209 – SEAT BELT ASSEMBLIES Applies to all types of Incomplete Vehicles Contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

The seat belt assembly provided by General Motors when mounted to its original attachments locations, at any designated seating position, will conform to CMVSS 209 and FMVSS 209 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Owner Manual instructions
Seat belt anchorages
Seat assemblies
Seat ssemblies

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with respect to any seats, seat belt assemblies or seat belt assembly anchorages installed by the intermediate or final stage manufacturer (unless otherwise noted on the cover).

Conformity with CMVSS 209 and FMVSS 209 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 210 and FMVSS 210 – SEAT BELT ASSEMBLY ANCHORAGES Applies to all types of Incomplete Vehicles Contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 210 and FMVSS 210 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

B, C, and D-pillar structures

Child restraint system including lower and top tether

anchorages, seat brackets, plates and

reinforcements Floor pan assembly

Owner Manual instructions

Roof structure

Seat assemblies Seat belt assemblies

Seat belt anchorage brackets, plates, and

reinforcements Seat belt routing

Seat position/adjustment capability

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with respect to any seats, seat belt assemblies or seat belt assembly anchorages installed by the intermediate or final stage manufacturer (unless otherwise noted on the cover).

Conformity with CMVSS 210 and FMVSS 210 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 210.1 – TETHER ANCHORAGES FOR RESTRAINT SYSTEMS Applies to all types of Incomplete Vehicles Contained in this Document to be completed as a Multipurpose Passanger Vehicle or Truck with a 3956 kg (9500 lb) GVMP or less and an

Multipurpose Passenger Vehicle or Truck with a 3856 kg (8500 lb) GVWR or less and an Unloaded Vehicle Weight of 2495 kg (5500 lb) or less

TYPE 1 The following statement is applicable to all multipurpose passenger vehicle or truck types of incomplete vehicles contained in this document with a 3856 kg (8500 lb) GVWR or less and an Unloaded Vehicle Weight of 2495 kg (5500 lb) or less (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 210.1 provided the original equipment seats are not replaced, no seating positions are removed or added, and no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Air bag manual cut-off switch (if equipped)

Child restraint system including lower and top tether anchorages, seat brackets, plates and

reinforcements

Access to lower anchorage system

Floor pan assembly

Labeling requirements

Owner Manual instructions

Seat assemblies
Seat belt assemblies

Seat belt anchorage brackets, plates, and

reinforcements Seat belt routing

Seat position/adjustment capability

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with respect to any seats, seat belt assemblies or seat belt assembly anchorages installed by the intermediate or final stage manufacturer (unless otherwise noted on the cover).

Conformity with CMVSS 210.1 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

### CMVSS 210.2 – LOWER UNIVERSAL ANCHORAGE SYSTEMS FOR RESTRAINT SYSTEMS AND BOOSTER CUSHIONS

# Applies to all types of Incomplete Vehicles Contained in this Document with a 3856 kg (8,500 lb) GVWR or less and an Unloaded Vehicle Weight of 2495 kg (5,500 lb) or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 210.2 provided the original equipment seats are not replaced, no seating positions are removed or added, and no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Air bag manual cut-off switch (if equipped)
Child restraint system including lower and top tether anchorages, seat brackets, plates and

reinforcements

Access to lower anchorage system

Floor pan assembly Labeling requirements

Owner Manual instructions Seat assemblies Seat belt assemblies

Seat belt anchorage brackets, plates, and

reinforcements Seat belt routing

Seat position/adjustment capability

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with respect to any seats, seat belt assemblies or seat belt assembly anchorages installed by the intermediate or final stage manufacturer (unless otherwise noted on the cover).

Conformity with CMVSS 210.2 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 212 and FMVSS 212 – WINDSHIELD MOUNTING Applies to all types of Incomplete Vehicles Contained in this Document 4536 kg (10,000 lb) GVWR or less

- TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover) with a 4536 kg (10,000 lb) GVWR or less, when completed will conform to CMVSS 212 and FMVSS 212 if:
  - A. No alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Air bag crash sensors

Air bag system including covers and module

Air bag system wiring harnesses, connectors, and

\_fuses/relays

Dash panel and cowl assembly Doors and hinge assemblies

Frame assembly and mounting system

Front impact bar assembly and mounting system

Hood and hinge assemblies

Powertrain and powertrain mounting system

Seat anchorages Seat assemblies Seat belt anchorages Seat belt assemblies

Sensing and Diagnostic Module (SDM) and

retainers/brackets

Steering control system including related hardware

Steering wheel, column, and shaft assembly

Sun visor assemblies

Vehicle/body front sheet metal components/reinforcements Vehicle/body front structural

components/reinforcements

Vehicle/body roof structure and components Windshield and windshield mounting system Windshield frame/frame reinforcement

During a 48 kph (30 mph) frontal barrier impact test, no component installed by any intermediate or final stage manufacturer shall move forward from its permanently mounted position.

B. The following statements apply to only Chassis Cab and Pick-up types of incomplete vehicles:

- 1. The dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded.
- 2. The minimum vertical clearance between the cab roof and any portion of the installed body or accessories that extends over the cab roof must not be less than 20 cm (8 in).

## CMVSS 213.4 and FMVSS 213 – BUILT-IN CHILD RESTRAINT SYSTEMS AND BUILT-IN BOOSTER CUSHIONS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

Conformity with CMVSS 213.4 and FMVSS 213 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

# CMVSS 214 and FMVSS 214 – SIDE IMPACT PROTECTION Applies to all types of Incomplete Vehicles contained in this Document 4536 kg (10,000 lb) GVWR or less – Static 2722 kg (6,000 lb) or less – Dynamic

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document with a 4536 kg (10,000 lb) GVWR or less for static requirements, and with a 2722 kg (6,000 lb) GVWR or less for dynamic requirements (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 214 and FMVSS 214 providing:

A. No alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Air bag crash sensors

Air bag system including covers and module

Air bag system wiring harnesses, connectors, and

fuses/relavs

Body structure including roof structure and

components

Body sheet metal components/reinforcements

Door assemblies Door hinges

Door latch mechanisms

Door latch strikers and striker plates

Door latches

Door pillars

Door trim panels

Door wedges

Door window mechanisms

Seat anchorages Seat assemblies Seat belt anchorages Seat belt assemblies

Sensing and Diagnostic Module (SDM) and

retainers/brackets

Side curtain airbag system (if equipped)

Tires and Wheels

Upper interior trim including headliner

Vehicle frame

- B. The (intermediate and) final stage manufacturer conforms to the following:
  - 1. a box, platform, or other rear structural assembly must be installed on the back of the vehicle.
  - 2. the rear assembly structure must provide comparable stiffness to the pickup box sold as original equipment as part of the complete vehicle version of this product.
  - the method of rear assembly structure mounting and mount properties (material and structural) are similar to those used to attach the pickup box sold as original equipment as part of the complete vehicle version of this product.
  - 4. the dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded.

# CMVSS 216 and FMVSS 216 – ROOF CRUSH RESISTANCE <u>Applies to all types of Incomplete Vehicles contained in this Document</u> 2722 kg (6,000 lb) GVWR or less

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document with a 2722 kg (6,000 lb) GVWR or less (unless otherwise noted on cover).

This incomplete vehicle conforms to CMVSS 216 and FMVSS 216 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Antennae Hood assembly Body roof structure and components/reinforcements Hood mounts

Body sheet metal components/reinforcements

Motor compartment structure and components

Front, rear and side glazing materials and mounting

Dash panel and cowl structure Structural components and door assemblies

## CMVSS 219 and FMVSS 219 – WINDSHIELD ZONE INTRUSION <u>Applies to all types of Incomplete Vehicles contained in this Document</u> 4536 kg (10,000 lb) GVWR or less

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document with a 4536 kg (10,000 lb) GVWR or less, but not applicable to walk-in vans, motor homes, tow-trucks, ambulance, or other emergency/rescue/medical vehicles equipped for wheelchairs (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 219 and FMVSS 219 providing:

A. No alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Antennae Hood assembly Body roof structure and components/ reinforcements Hood mounts

Body sheet metal components/reinforcements Motor compartment structure and components

Body structural components/reinforcements Windshield wiper
Dash panel and cowl structure Windshield wiper motor

- B. The dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded.
- C. During a 48 kph (30 mph) frontal barrier impact test:
  - 1. no component installed by any intermediate or final stage manufacturer shall prevent the hood from folding in its designed folding pattern; and
  - no component installed by any intermediate or final stage manufacturer shall penetrate the windshield or protected zone.

## FMVSS 225 – CHILD RESTRAINT ANCHORAGE SYSTEMS Applies to all types of Incomplete Vehicles Contained in this Document 3855 kg (8,500 lb) GVWR or less

TYPE 1 The following statements are applicable to all types of incomplete vehicles contained in this document with seats installed by General Motors (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to FMVSS 225 provided the original equipment seats are not replaced, no seating positions are removed or added, and no alterations are made which affect the function.

physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Air bag manual cut-off switch (if equipped)

Child restraint system including lower and top tether

anchorages, seat brackets, plates and

reinforcements

Access to top tether and lower anchorage systems

Floor pan assembly Owner Manual instructions Seat assemblies Seat belt assemblies

Seat belt anchorage brackets, plates, and

reinforcements Seat belt routing

Seat position/adjustment capability

#### TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document with seat or seat belt delete options in any seating position (unless otherwise noted on the cover).

Conformity with FMVSS 225 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

#### CMVSS 301 and FMVSS 301 – FUEL SYSTEM INTEGRITY Refer to Vehicle Types, GVWRs, and Applicable Statements that follow

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document 4536 kg (10,000 lb) GVWR or less with any Incomplete Option (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to CMVSS 301 and FMVSS 301 providing it is completed in accordance with the following specific conditions by the (intermediate and) final stage manufacturer:

The following items when installed by General Motors will conform providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

Fuel filler door assembly

Fuel filter

Fuel hose shields

Fuel pipes and hose assemblies

Fuel system

Fuel system attaching or protective structure

Fuel system control module

Fuel system fasteners and retainers

Fuel tank assembly Fuel tank cap assembly

Fuel tank filler neck hose

Fuel tank filler neck/pipe assembly Fuel tank filler neck/pipe fasteners

Fuel tank filler neck/pipe hose clamp/clamp

assembly

Fuel tank filler neck/pipe housing assembly

Fuel tank filler neck/pipe plate Fuel tank filler neck/pipe vent hose

Fuel tank filler neck/pipe vent hose clamp/strap

Fuel tank meter assembly

Fuel tank shields

Fuel vapor lines and canister assembly

- B. The (intermediate and) final stage manufacturer conforms to the following:
  - 1. a box, platform, or other rear structural assembly must be installed on the back of the vehicle.
  - 2. the rear assembly structure must provide comparable stiffness to the pickup box sold as original equipment as part of the complete vehicle version of this product.
  - 3. the method of rear assembly structure mounting and mount properties (material and structural) are similar to those used to attach the pickup box sold as original equipment as part of the complete vehicle version of this product.
  - 4. The dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded.
- C. This incomplete vehicle, when completed, will conform to CMVSS 301 and FMVSS 301 Fuel System Integrity

- 1. No alterations are made to the fuel system and attaching or protective structure, the contents or arrangement of the engine compartment, the powertrain and driveline, the cab structure, the chassis structure, the bumper system, door structure, or tires and wheels.
- 2. The dimension and mass as well as other restrictions (excluding the Maximum Frontal Area) found in MVSS 301 Table A, are not exceeded.
- 3. The final stage manufacturer completes the fuel filler neck and fuel level sender installation(s) according to "Best Practices" or "Special Applications (if applicable)" sections found within the Body Builder Manuals on the GM Upfitter Integration website located at <a href="https://www.gmupfitter.com">www.gmupfitter.com</a>
- 4. During all barrier impact tests:
  - a. No component installed by any intermediate or final stage manufacturer impinges or causes distortion to the fuel system with sufficient energy to puncture or separate the fuel system.
  - b. No vehicle modification by any intermediate or final stage manufacturer results in any portion of the vehicle impinging upon or causing distortion to the fuel system with sufficient energy to puncture or separate the fuel system. Care should be taken that the structural integrity of the vehicle is restored following any modification of the structure.
  - c. Any body installed by an intermediate or final stage manufacturer is mounted securely to absorb loads and prevent movement relative to the frame which could cause any fuel system component to be punctured, separated or otherwise damaged when tested to applicable procedures of CMVSS 301 or FMVSS 301.

#### **TABLE A**

| Models                | GVWR<br>kg<br>(lb)<br>(RPO) | Engine<br>(RPO)                  | General<br>Body<br>Types | Maximum Body<br>Center of Gravity<br>Height<br>cm (in) | Maximum Body<br>Height<br>cm<br>(in) | Maximum Unloaded Vehicle Weight (Completed Vehicle Maximum Weight) kg (lb) | Maximum<br>Body Weight<br>kg (lb) | Maximum<br>Frontal<br>Area<br>m² (ft²) |
|-----------------------|-----------------------------|----------------------------------|--------------------------|--|--------------------------------------|--|-----------------------------------|--|
| C15903<br>Reg.<br>Cab | 3039<br>(6700)<br>(C3J)     | 4.3 L<br>Gas<br>(LV3)            | Service<br>Body          | 35.6<br>(14.0)<br>above the frame                      | Under<br>157.5 cm<br>(62.0)          | 2472<br>(5450)   | 499 kg<br>(1,100 <b>l</b> b)      | 3.6 (38)                               |
| K15903<br>Reg.<br>Cab | 3130<br>(6900)<br>(C5H)     | 4.3 L<br>Gas<br>(LV3)            | Service<br>Body          | 35.6<br>(14.0)<br>above the frame                      | Under<br>157.5 cm<br>(62.0)          | 2472<br>(5450)   | 499 kg<br>(1,100 <b>l</b> b)      | 3.6 (38)                               |
| C15903<br>Reg.<br>Cab | 3084<br>(6800)<br>(C5U)     | 5.3 L<br>Gas<br>(L83)            | Service<br>Body          | 35.6<br>(14.0)<br>above the frame                      | Under<br>157.5 cm<br>(62.0)          | 2699<br>(5950)   | 499 kg<br>(1,100 <b>l</b> b)      | 3.6 (38)                               |
| K15903<br>Reg.<br>Cab | 3175<br>(7000)<br>(C5W)     | 5.3 L<br>Gas<br>(L83)            | Service<br>Body          | 35.6<br>(14.0)<br>above the frame                      | Under<br>157.5 cm<br>(62.0)          | 2699<br>(5950)   | 499 kg<br>(1,100 <b>l</b> b)      | 3.6 (38)                               |
| C25903<br>Reg.<br>Cab | 4,218<br>(9,300)<br>(G4A)   | 6.0 L<br>Gas<br>(L96)            | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 3927<br>(8640)   | 816<br>(1,800)                    | Not<br>Applicable                      |
| C25903<br>Reg.<br>Cab | 4,491<br>(9,900)<br>(C4M)   | 6.6 L<br>Diese <b>l</b><br>(LML) | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4200<br>(9240)   | 1,179<br>(2,600)                  | 4<br>(44)                              |

| Models                           | GVWR<br>kg<br>(lb)<br>(RPO) | Engine<br>(RPO)          | General<br>Body<br>Types | Maximum Body<br>Center of Gravity<br>Height<br>cm (in) | Maximum Body<br>Height<br>cm<br>(in) | Maximum Unloaded Vehicle Weight (Completed Vehicle Maximum Weight) kg (lb) | Maximum<br>Body Weight<br>kg (lb) | Maximum<br>Frontal<br>Area<br>m² (ft²) |
|----------------------------------|-----------------------------|--------------------------|--------------------------|--|--------------------------------------|--|-----------------------------------|--|
| C25903<br>Reg.<br>Cab            | 4,536<br>(10,000)<br>(C7A)  | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4245<br>(9340)   | 1,179<br>(2,600)                  | Not<br>Applicable                      |
| C25943<br>Crew<br>Cab            | 4,309<br>(9,500)<br>(GEH)   | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4018<br>(8840)   | 816<br>(1,800)                    | Not<br>Applicable                      |
| C25943<br>Crew<br>Cab            | 4,536<br>(10,000)<br>(C7A)  | 6.6 L<br>Diesel<br>(LML) | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4218<br>(9300)   | 1,179<br>(2,600)                  | 4<br>(44)                              |
| C25953<br>Doub <b>l</b> e<br>Cab | 4,309<br>(9,500)<br>(GEH)   | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4018<br>(8840)   | 816<br>(1,800)                    | Not<br>Applicable                      |
| C25953<br>Doub <b>l</b> e<br>Cab | 4,536<br>(10,000)<br>(C7A)  | 6.6 L<br>Diesel<br>(LML) | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4218<br>(9300)   | 1,179<br>(2,600)                  | 4<br>(44)                              |
| K25903<br>Reg.<br>Cab            | 4,309<br>(9,500)<br>(GEH)   | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4018<br>(8840)   | 816<br>(1,800)                    | Not<br>Applicable                      |
| K25903<br>Reg.<br>Cab            | 4,491<br>(9,900)<br>(C4M)   | 6.6 L<br>Diesel<br>(LML) | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4200<br>(9240)   | 1,179<br>(2,600)                  | 4<br>(44)                              |
| K25943<br>Crew<br>Cab            | 4,491<br>(9,900)<br>(C4M)   | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4200<br>(9240)   | 816<br>(1,800)                    | Not<br>Applicable                      |
| K25943<br>Crew<br>Cab            | 4,536<br>(10,000)<br>(C7A)  | 6.6 L<br>Diesel<br>(LML) | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4218<br>(9300)   | 1,179<br>(2,600)                  | 4<br>(44)                              |
| K25953<br>Doub <b>l</b> e<br>Cab | 4,309<br>(9,500)<br>(GEH)   | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4018<br>(8840)   | 816<br>(1,800)                    | Not<br>Applicable                      |
| K25953<br>Doub <b>l</b> e<br>Cab | 4,536<br>(10,000)<br>(C7A)  | 6.6 L<br>Diesel<br>(LML) | Service<br>Body          | 51.6<br>(20.3)<br>above the fr ame                     | 157.5<br>(62.0) and<br>over          | 4218<br>(9300)   | 1,179<br>(2,600)                  | 4<br>(44)                              |
| C35943<br>Crew<br>Cab            | 4,536<br>(10,000)<br>(C7A)  | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4245<br>(9340)   | 1,179<br>(2,600)                  | Not<br>Applicable                      |
| C35953<br>Doub <b>l</b> e<br>Cab | 4,536<br>(10,000)<br>(C7A)  | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4245<br>(9340)   | 1,179<br>(2,600)                  | Not<br>Applicable                      |
| K35903<br>Reg.<br>Cab            | 4,536<br>(10,000)<br>(C7A)  | 6.0 L<br>Gas<br>(L96)    | Service<br>Body          | 51.6<br>(20.3)<br>above the frame                      | 157.5<br>(62.0) and<br>over          | 4245<br>(9340)   | 1,179<br>(2,600)                  | Not<br>Applicable                      |

| Models                           | GVWR<br>kg<br>(lb)<br>(RPO) | Engine<br>(RPO)       | S I BOOV I      |                                   | Maximum Body<br>Height<br>cm<br>(in) | Maximum Unloaded Vehicle Weight (Completed Vehicle Maximum Weight) kg (lb) | Maximum<br>Body Weight<br>kg (lb) | Maximum<br>Frontal<br>Area<br>m² (ft²) |  |
|----------------------------------|-----------------------------|-----------------------|-----------------|-----------------------------------|--------------------------------------|--|-----------------------------------|--|--|
| K35953<br>Doub <b>l</b> e<br>Cab | 4,536<br>(10,000)<br>(C7A)  | 6.0 L<br>Gas<br>(L96) | Service<br>Body | 51.6<br>(20.3)<br>above the frame | 157.5<br>(62.0) and<br>over          | 4245<br>(9340)   | 1,179<br>(2,600)                  | Not<br>Applicable                      |  |

#### Notes:

- Table A above applies to ONLY incomplete vehicles (RPO: &VXT) as manufactured by GM without pick-up boxes (RPO: &ZW9).
- On page 2 within this document, before each vehicle illustration and after the word TYPE, is a list of types of vehicles into which the incomplete vehicle is designed to be manufactured. For the allowable vehicle TYPE(s), CMVSS 301 and FMVSS 301 only applies to vehicles with a 4536 kg (10,000 lb) GVWR or less. As a result, Table A does not include data for GVWRs exceeding 4536 kg (10,000 lb) GVWR.
- For all included models, the minimum cab to body clearance is 7.6 cm (3.0 in)
- CA (back of cab sheet metal to centerline of rear axle dimensions) are located within the "General Arrangement" section found within the **GM Upfitter Integration website located at <u>www.gmupfitter.com</u>**
- \* The Maximum Frontal Area column applies to: PART II, U.S. EPA, CALIFORNIA, AND CANADIAN EXHAUST & EVAPORATIVE EMISSION REQUIREMENTS AND EPA FUEL ECONOMY REGULATIONS.
- The completed vehicle Maximum Unloaded Vehicle (Curb) Weight, and/or GVWR, should not be exceeded. If any of these restrictions are exceeded, re-certification by the final stage manufacturer will be required.
- The Maximum Body Weight equals the Maximum Unloaded Vehicle (curb) Weight minus the incomplete Cab & Chassis (curb) weight as manufactured by GM. The actual vehicle (curb) weight must be determined by weighing the vehicle with fuel and fluids filled, minus occupants and cargo. The Maximum Body Weight in Table A is based on the maximum possible incomplete Cab & Chassis (curb) weight as manufactured by GM. It may be permissible to exceed the Maximum Body Weight (as stated in Table A), provided the Maximum Unloaded Vehicle (curb) Weight (as stated in Table A) is not exceeded at final stage manufacturer completion.
- Also see the Vehicle Emission Control Information Label in the vehicle engine compartment for maximum completed vehicle curb weight, GVWR, and frontal area restrictions, if applicable.
- Note: WB refers to wheelbase; GVWR refers to Gross Vehicle Weight Rating.

### CMVSS 301.1 – LPG FUEL SYSTEM INTEGRITY Applies to all types of Incomplete Vehicles contained in this Document

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

Conformity with CMVSS 301.1 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 302 and FMVSS 302 - FLAMMABILITY OF INTERIOR MATERIALS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed will conform to CMVSS 302 and FMVSS 302 providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below:

All trim panels including door, front, rear and side panels

Instrument panel Seat assemblies Arm rests
Compartment shelves
Console
Engine compartment covers
Floor coverings
Head restraints
Headlining

Seat backs
Seat belts
Seat cushions
Shades
Sun visors
Wheel housing covers

NOTE: The list above also includes any other interior materials, such as padding and crash deployed elements that are designed to absorb energy on contact by occupants in the event of a crash.

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover). If the intermediate or final stage manufacturer installs any items but not limited to those listed above (examples: Curtains, Engine compartment cover, Mattress covers, Shades and Wheel housing covers, etc.), they must also meet the requirements of this CMVSS 302 and FMVSS 302.

Conformity with CMVSS 302 and FMVSS 302 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## CMVSS 301.2 and FMVSS 303 – CNG FUEL SYSTEM INTEGRITY Applies to all types of Incomplete Vehicles contained in this Document

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

Conformity with CMVSS 301.2 and FMVSS 303 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## FMVSS 304 – COMPRESSED NATURAL GAS FUEL CONTAINERS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

Conformity with FMVSS 304 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

## FMVSS 403 – PLATFORM LIFT SYSTEMS Applies to all types of Incomplete Vehicles contained in this Document

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

Conformity with FMVSS 403 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

### FMVSS 404 – PLATFORM LIFT INSTALLATIONS IN MOTOR VEHICLES Applies to all types of Incomplete Vehicles contained in this Document

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

Conformity with FMVSS 404 cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the standard.

#### **PART II**

### U.S. EPA, CALIFORNIA, AND CANADIAN EXHAUST & EVAPORATIVE EMISSION REQUIREMENTS AND EPA/NHTSA FUEL ECONOMY REGULATIONS

Incomplete vehicles come in three major classifications: (1) Light Duty Trucks (Light and Medium Duty in California) are certified by the primary manufacturer and the vehicle is labeled as being in compliance with emission and fuel economy requirements. (2) Heavy Duty Vehicles are required to have an engine certified by the engine manufacturer and the engine is labeled as being in compliance with emission and fuel economy requirements. (3) Light Duty Vehicles certified and labeled by the intermediate or final stage vehicle manufacturer as being in compliance with emission and fuel economy requirements.

Reference PART I CMVSS 301 and FMVSS 301 Table A, and PART II Table B. The completed vehicle Maximum Unloaded Vehicle (Curb) Weight, GVWR, and/or Maximum Frontal Area restrictions shown in Tables A and B should not be exceeded. If any of these restrictions are exceeded, re-certification by the final stage manufacturer will be required.

In addition, all gasoline/gasoline-ethanol blend powered Federal/California Light Duty, Medium Duty and Heavy Duty Vehicles are required to have an approved fuel evaporative emission control system. Vehicles certified to Heavy Duty emission standards also require special evaporative emission labeling. In order to assure that Environmental Protection Agency (EPA), National Highway Traffic Safety Administration (NHTSA), California and Canada Emission Certification and/or Fuel Economy regulations are met, this vehicle must be completed in strict accordance with all instructions contained in this document, especially the following instructions which relate to:

#### **EMISSION RELATED COMPONENTS**

#### TYPE 1 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

A. This incomplete vehicle, when completed, will conform to U.S. EPA, CALIFORNIA, AND CANADIAN EXHAUST & EVAPORATIVE EMISSION REQUIREMENTS AND EPA/NHTSA FUEL ECONOMY REGULATIONS providing the vehicle is completed in strict accordance with all statements included in this document, especially those that relate to: "EMISSION RELATED COMPONENTS, and no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the components, assemblies or systems, as manufactured by General Motors, including but not limited to those listed below (if equipped):

Air Injection Reaction (AIR) System

Axle

**Brake System** 

Catalytic Converter

Components for All Wheel Drive (AWD) System: axle, Power Take-Off Unit (PTU), propshaft

Diesel Exhaust Emission Reduction Fluid (DEF) system, including, but not limited to: associated plumbing, fill neck assembly heated delivery line, heater, injector, level sensor, pump, sensors, tank temperature sensor

Diesel Exhaust System, including, but not limited to: NOx Sensors, NOx Sensor Control Module, Diesel Exhaust (HCI) Direct Fuel Injector System, associated plumbing, injectors, injector controller and calibrations

Diesel/Bio-Diesel blend Particulate Filter (DPF) system, including, but not limited to: diesel/bio-diesel blend particulate filter assembly diesel/bio-diesel blend oxidation catalyst assembly, exhaust system pressure differential assembly and/or plumbing, exhaust temperature sensor

Engine Assembly, including, but not limited to:

crankcase emission control system, evaporative emission control system, Exhaust Gas Recirculation (EGR) system, fuel delivery and injection system, glow plugs, Glow Plug Control Module (GPCM), ignition system, Positive Crankcase Ventilation (PCV) system

Engine Electronics, including, but not limited to: coolant temperature sensor,

ECM/GPCM/PCM/VCM, engine speed sensor, mass air flow sensor, calibrations/software

Exhaust oxygen sensors

Exhaust system

Intake System, including, but not limited to: air induction components/system ducts, filter, mass air flow sensor, intake air heater

Onboard Diagnostics Emission System

Tires and Wheels

Transaxle/Transmission Assembly

Transaxle/Transmission Electronics, including, but not limited to: calibrations/software Transmission Control Module (TCM)

Turbo Charging System, associated equipment and controls

cooling fan and drive system,

NOTE: <u>The Tailpipe Rear Cooler Assembly is non-emissions related</u>. If equipped, to ensure adequate control of exhaust temperature, the intermediate or final stage manufacturer must complete tailpipe (loose kit) installations according to the instructions provided.

- B. Cold tire pressure as listed for front and rear on the Incomplete Vehicle Label affixed to the front cover of this document must be maintained.
- C. GVWR, GAWR front and rear weight ratings as listed on the Incomplete Vehicle Label affixed to the front cover of this document must not be exceeded.

#### **TABLE B**

| Models                | GVWR<br>kg<br>(lb)<br>(RPO) | Engine<br>(RPO)          | Maximum<br>Unloaded<br>Vehicle Weight<br>kg (lb) | Service<br>Body Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) | Dump Body<br>Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) | Platform with<br>Bulk Head<br>Body Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) | Hi-Cube Van<br>Body Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) |
|-----------------------|-----------------------------|--------------------------|--|--|---|---|--|
| C35903<br>Reg.<br>Cab | 5,035<br>(11,100)<br>(JFN)  | 6.6 L<br>Diesel<br>(LML) | 4,509<br>(9940)                                  | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| C35903<br>Reg.<br>Cab | 5,908<br>(13,025)<br>(CHX)  | 6.6 L<br>Diesel<br>(LML) | 4990<br>(11,000)                                 | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| C35943<br>Crew<br>Cab | 5,171<br>(11,400)<br>(C7W)  | 6.6 L<br>Diesel<br>(LML) | 4,509<br>(9940)                                  | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| C35943<br>Crew<br>Cab | 5,908<br>(13,025)<br>(CHX)  | 6.6 L<br>Diesel<br>(LML) | 4990<br>(11,000)                                 | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| C35953<br>Ext.<br>Cab | 5,080<br>(11,200)<br>(JFO)  | 6.6 L<br>Diesel<br>(LML) | 4,509<br>(9940)                                  | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| C35953<br>Ext.<br>Cab | 5,908<br>(13,025)<br>(CHX)  | 6.6 L<br>Diesel<br>(LML) | 4990<br>(11,000)                                 | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| C36003<br>Reg.<br>Cab | 5,987<br>(13,200)<br>(9E5)  | 6.6 L<br>Diesel<br>(LML) | 5125<br>(11,300)                                 | 5.2 (56)   | 5.2 (56)  | 5.9 (64)  | 7.9 (85)   |
| C36043<br>Crew<br>Cab | 5,987<br>(13,200)<br>(9E5)  | 6.6 L<br>Diesel<br>(LML) | 5125<br>(11,300)                                 | 5.2 (56)   | 5.2 (56)  | 5.9 (64)  | 7.9 (85)   |
| C36403<br>Reg.<br>Cab | 5,987<br>(13,200)<br>(9E5)  | 6.6 L<br>Diesel<br>(LML) | 5125<br>(11,300)                                 | 5.2 (56)   | 5.2 (56)  | 5.9 (64)  | 7.9 (85)   |
| K35903<br>Reg.<br>Cab | 5,171<br>(11,400)<br>(C7W)  | 6.6 L<br>Diesel<br>(LML) | 4,509<br>(9940)                                  | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |

| Models                | GVWR<br>kg<br>(lb)<br>(RPO) | Engine<br>(RPO)          | Maximum<br>Unloaded<br>Vehicle Weight<br>kg (lb) | Service<br>Body Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) | Dump Body<br>Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) | Platform with<br>Bulk Head<br>Body Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) | Hi-Cube Van<br>Body Type<br>Maximum<br>Frontal<br>Area<br>m² (ft²) |
|-----------------------|-----------------------------|--------------------------|--|--|---|---|--|
| K35903<br>Reg.<br>Cab | 5,908<br>(13,025)<br>(CHX)  | 6.6 L<br>Diesel<br>(LML) | 4990<br>(11,000)                                 | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| K35943<br>Crew<br>Cab | 5,262<br>(11,600)<br>(C7V)  | 6.6 L<br>Diesel<br>(LML) | 4,509<br>(9940)                                  | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| K35943<br>Crew<br>Cab | 5,908<br>(13,025)<br>(CHX)  | 6.6 L<br>Diesel<br>(LML) | 4990<br>(11,000)                                 | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| K35953<br>Ext.<br>Cab | 5,262<br>(11,600)<br>(C7V)  | 6.6 L<br>Diesel<br>(LML) | 4,509<br>(9940)                                  | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| K35953<br>Ext.<br>Cab | 5,908<br>(13,025)<br>(CHX)  | 6.6 L<br>Diesel<br>(LML) | 4990<br>(11,000)                                 | 5.2 (56)   | 5.2 (56)  | 4.6 (50)  | 7.9 (85)   |
| K36003<br>Reg.<br>Cab | 5,987<br>(13,200)<br>(9E5)  | 6.6 L<br>Diesel<br>(LML) | 5,125<br>(11,300)                                | 5.2 (56)   | 5.2 (56)  | 5.9 (64)  | 7.9 (85)   |
| K36043<br>Crew<br>Cab | 5,987<br>(13,200)<br>(9E5)  | 6.6 L<br>Diesel<br>(LML) | 5,125<br>(11,300)                                | 5.2 (56)   | 5.2 (56)  | 5.9 (64)  | 7.9 (85)   |
| K36403<br>Reg.<br>Cab | 5,987<br>(13,200)<br>(9E5)  | 6.6 L<br>Diesel<br>(LML) | 5,125<br>(11,300)                                | 5.2 (56)   | 5.2 (56)  | 5.9 (64)  | 7.9 (85)   |

#### Notes:

- Table B above applies to ONLY incomplete vehicles (RPO: &VXT) as manufactured by GM without pick-up boxes (RPO: &ZW9).
- On page 2 within this document, before each vehicle illustration and after the word TYPE, is a list of types of vehicles into which the incomplete vehicle is designed to be manufactured.
- For all included models, the maximum cab to body clearance is 7.6 cm (3.0 in)
- CA (back of cab sheet metal to centerline of rear axle dimensions) are located within the **GM Upfitter Integration** website located at <a href="https://www.gmupfitter.com">www.gmupfitter.com</a>
- \* The Maximum Frontal Area columns apply to: PART II, U.S. EPA, CALIFORNIA, AND CANADIAN EXHAUST & EVAPORATIVE EMISSION REQUIREMENTS AND EPA FUEL ECONOMY REGULATIONS.
- The completed vehicle Maximum Unloaded Vehicle (Curb) Weight, and/or GVWR, should not be exceeded. If any of these restrictions are exceeded, re-certification by the final stage manufacturer will be required.
- The Maximum Body Weight equals the Maximum Unloaded Vehicle (curb) Weight minus the incomplete Cab & Chassis (curb) weight as manufactured by GM. The actual vehicle (curb) weight must be determined by weighing the vehicle with fuel and fluids filled, minus occupants and cargo.
- Also see the Vehicle Emission Control Information Label in the vehicle engine compartment for maximum completed vehicle curb weight, GVWR, and frontal area restrictions, if applicable.
- GVWR refers to Gross Vehicle Weight Rating.
- All Federal/California gasoline/gasoline-ethanol blend powered heavy duty vehicles (except those equipped with
  option NJ2, Temporary Fuel Tank) will have an evaporative emission control system that is certified for a fuel tank
  capacity for the vehicle as built. Intermediate or Final Stage Manufacturers wishing to add fuel tank capacity beyond
  the original equipment fuel tank capacity must recertify that the Modified Fuel System meets Evaporative Emission

Regulations in effect at the time of original vehicle manufacture. Compliance with applicable exhaust and evaporative emission requirements is the responsibility of the final stage manufacturer.

11/11/13 - Change in red above per Steve Bollinger:

D. Further compliance with applicable fuel evaporative emissions will be maintained providing the final stage manufacturer completes the fuel filler neck and fuel level sender installation(s) according to "Best Practices" or "Special Applications (if applicable)" sections found within the Body Builder Manuals on the **GM Upfitter Integration website located at <a href="https://www.gmupfitter.com">www.gmupfitter.com</a>** 

Further compliance with applicable fuel evaporative emission regulations will be maintained if no alterations are made to change material or increase the size or length of the following non-metallic fuel and evaporative emission hoses:

Fuel feed hoses front and rear Fuel return hoses front and rear Fuel tank filler hoses to filler neck Fuel tank vent hoses to filler neck Fuel vapor lines at canister
Fuel vapor lines from engine to chassis pipes
Fuel vapor lines from fuel tank sender to chassis
pipes

E. The following is applicable to models with option NJ2 – Temporary Fuel Tank. Vehicles equipped with option NJ2 - Temporary Fuel Tank do not have an evaporative emission control system.

Compliance with applicable exhaust and evaporative emission requirements is the responsibility of the final stage manufacturer. General Motors makes no representation as to the conformity with applicable exhaust and evaporative emission requirements based upon the components supplied on the incomplete vehicle.

A final stage manufacturer who retains the original equipment gasoline/gasoline-ethanol blend powered engine as certified by General Motors may purchase original equipment evaporative emission control system components (see your GM dealer) necessary for the final stage vehicle to comply with evaporative emissions requirements. It is the responsibility of the final stage manufacturer to determine the components necessary to ensure evaporative emissions compliance.

TYPE 3 The following statement is applicable to all types of incomplete vehicles contained in this document manufactured with a gasoline engine, and having an auxiliary heat exchanger installed in the engine cooling system by a subsequent stage manufacturer (unless otherwise noted on the cover).

Conformity with CMVSS, U.S. EPA, CALIFORNIA, AND CANADIAN EXHAUST & EVAPORATIVE EMISSION REQUIREMENTS AND EPA FUEL ECONOMY REGULATIONS cannot be determined based upon the components supplied on the incomplete vehicle, and General Motors makes no representation to conformity with the regulations.

NOTE: This non-permitted modification will continually set Service Engine Diagnostic Codes.

SPECIFICATION FOR FILL PIPES AND OPENINGS OF 2015 AND SUBSEQUENT MODEL MOTOR VEHICLE FUEL TANKS (APPLICABLE ONLY TO CALIFORNIA GASOLINE/GASOLINE-ETHANOL BLEND POWERED VEHICLES)

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to Title 13, California Code of Regulations Section 1965, and the "Specifications for Fill Pipes and Openings of 1977 through 2015 Model Year Motor Vehicle Fuel Tanks", providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the fuel filler neck(s) and any intermediate or final stage manufacturer completes the fuel filler neck installation(s) according to the instructions which are furnished in the loose parts box.

#### **LABELS**

TYPE 2 The following statement is applicable to all types of incomplete vehicles contained in this document (unless otherwise noted on the cover).

This incomplete vehicle, when completed, will conform to U.S. EPA, CALIFORNIA, AND CANADIAN EXHAUST & EVAPORATIVE EMISSION REQUIREMENTS AND EPA/NHTSA FUEL ECONOMY REGULATION labeling requirements providing no alterations are made which affect the function, physical, chemical, or mechanical properties, environment, location or vital spatial clearances of the Emission Control related Information Labels that are permanently affixed. The labels are required by government regulation and must not be obstructed from view or defaced so as to impair their visibility or legibility. In addition, a Federal Fuel Economy and Environmental Label or a California Environmental Performance Label may be affixed to the window glass of the incomplete vehicle as manufactured by General Motors. If equipped, the label must remain in place until this vehicle is received by the ultimate customer.

#### **NOTES**