## 68294005AA FCA US LLC 800 CHRYSLER DRIVE AUBURN HILLS, MI 48326-2757

# **CAUTION – DO NOT REMOVE THIS DOCUMENT FROM THE VEHICLE**

# INCOMPLETE VEHICLE DOCUMENT 2016 MODEL YEAR PICKUPS AND CHASSIS CABS

# THIS DOCUMENT APPLIES TO RAM PICKUPS

# NOT EQUIPPED WITH OUTSIDE REARVIEW MIRRORS, AS WELL AS ALL RAM MODELS DJ/D2 (2500/3500 4X2 & 4X4), AND DD/DP/DF (3500/4500/5500 4X2 & 4X4 CHASSIS CABS).

The purpose of this document is to provide information and direction to subsequent manufacturers who must certify compliance of vehicles manufactured in two or more stages with the United States Federal Motor Vehicle Safety Standards and the Canada Motor Vehicle Safety Regulations, and other regulations applicable to the USA and/or Canada.

This document is provided in accordance with 49 CFR Part 568 - <u>Vehicles Manufactured in Two or More Stages</u> (National Highway Traffic Safety Administration), and Canada Motor Vehicle Safety Regulations, Section 6.1, Vehicles Manufactured in Stages (Transport Canada).



Upon completion of this vehicle, the final-stage upfitter, alterer or manufacturer must place a completed Vehicle Tire and Loading Placard on driver's side B-Pillar of the vehicle, as required by CMVSS/FMVSS 110 and/or 120. The sticker below shows the information you will need for the Vehicle Placard.

# AFFIX TIRE LOADING LABEL HERE

The following safety standards information is valid only if this vehicle is completed as one of the vehicle types shown on the United States or Canadian certification label on the previous page.

#### Pickups not equipped with outside rearview mirrors.

Pickup trucks not equipped with outside rearview mirrors will conform to the following Federal Motor Vehicle Safety Standards or Canada Motor Vehicle Safety Standards if no alterations are made to the vehicle other than the installation of conventional, door-mounted, outside rearview mirrors:

101<sup>(†)</sup>, 102<sup>(†)</sup>, 103<sup>(†)</sup>, 104<sup>(†)</sup>, 105<sup>(†)</sup>, 106<sup>(†)</sup>, 108<sup>(†)</sup>, 108.1<sup>(†)</sup> (Canada), 109<sup>(†)</sup>, 110<sup>(†)</sup>, 113<sup>(†)</sup>, 114<sup>(†)</sup>, 115<sup>(†)</sup> (Canada), 116<sup>(†)</sup>, 118<sup>(†)</sup>, 119<sup>(†)</sup>, 120<sup>(†)</sup>, 124<sup>(†)</sup>, 125<sup>(†)</sup>, 126<sup>(†8)</sup>, 135<sup>(†8)</sup>, 138<sup>(†8)</sup>, 139<sup>†8)</sup>, 201<sup>(†)</sup>, 202<sup>(†)</sup>, 202a<sup>(†)</sup>, 203<sup>(†)</sup> (Canada), 204<sup>(†)</sup>, 205<sup>(†)</sup>, 206<sup>(†)</sup>, 207<sup>(†)</sup>, 208<sup>(†)</sup>, 209<sup>(†)</sup>, 210.1<sup>(†)</sup> (Canada), 210.2<sup>(†)</sup> (Canada), 212<sup>(†)</sup>, 213<sup>†8)</sup>, 214<sup>(†)</sup>, 216<sup>(†)</sup>, 219<sup>(†)</sup>, 225<sup>(†)</sup> (USA), 301<sup>(†)</sup>, 301.1<sup>\*(†)</sup> (Canada), 301.2<sup>\*(†)</sup> (Canada), 302<sup>(†)</sup>, 303<sup>\*(†)</sup> (USA), 304<sup>(†)</sup> (USA), 1106<sup>(†)</sup> (Canada), 40 CFR Part 205<sup>(†)</sup>, 49 CFR Part 565<sup>(†)</sup>, and ICES-002<sup>(†)</sup> (Canada).

Conformity to <u>FMVSS/CMVSS 111 Rearview mirrors</u> is not determined by the design of this incomplete vehicle and no representation as to conformity is made.

No representation as to conformity to any FMVSS or CMVSS beyond the information specifically contained within this document is made.

# Ram Models DJ/D2 (2500/3500 4X2 & 4X4), and DD/DP/DF (3500/4500/5500 4X2 & 4X4 Chassis Cabs).

- FMVSS 101 If this vehicle is equipped with a driver's seat, when CMVSS101<sup>↑</sup> completed it will conform with MVSS 101 - Controls and Displays if no alterations are made to the location, identification or illumination of the controls covered by this standard, including the driver's seating position. Subsequent manufacturers must assure for any controls which are added and covered by this standard.
- FMVSS 102 This vehicle, when completed, will conform to MVSS 102 CMVSS 102<sup>†</sup> - Transmission Shift Lever Sequence, Starter
  - Interlock, and Transmission Braking Effect if no alterations are made to the transmission, shift control, accelerator control, or starter interlock system on automatic transmissions, provided that the shift lever positions are permanently displayed in view of the driver.
- FMVSS 103
   This vehicle, when completed, will conform to MVSS 103

   CMVSS 103<sup>†</sup>
   - Windshield Defrosting and Defogging Systems if no alterations are made to the defroster system, including vehicle heater assembly and controls.
- FMVSS 104
   This vehicle, when completed, will conform to MVSS 104

   CMVSS 104<sup>†</sup>
   - Windshield Wiping/Washing Systems if no alterations are made to windshield wiping or washing systems.
- FMVSS 105 This vehicle, when completed, will comply with MVSS 105 - Hydraulic Brake Systems if:
  - No alterations are made to the service and parking brake systems
  - Rear axle must carry at least 37 percent of the vehicle weight when the front seat is ballasted as follows:
     GVWR
     Eront Seat Ballast

GVWK	TTOTIL SEAL Dallast
<10,000 lb (4,536 kg)	400 lb
>10,000 lb (4,536 kg)	500 lb

- The GVWR and GAWR are not exceeded
  - For the Ram Pickup and 3500 Chassis Cabs, the height above frame rail datum line of the combined centers of gravity of components added by the subsequent manufacturer does not exceed Ymax, where ...

For the Ram Pickup and 3500 Chassis Cab

Ymax = B - 1.6(X)

NOTE: If the combined CG of the added components is <u>behind</u> the rear axle, then Ymax = B+1.6x

X = horizontal distance in inches from the centerline of the rear axle to the combined center of gravity of all the added items.  For 4500 and 5500 Chassis Cabs, The height above the frame datum, top of frame rail (at rear) to ground line of the combined centers of gravity of the items added by the subsequent manufacturer must not exceed the Ymax where ...

For the 4500 and 5500 Chassis Cabs

Ymax = B + or - 0.9 times X

And X = Horizontal distance from the rear axle centerline to the combined centers of gravity of all added components. MINUS (-) is forward and PLUS (+) is rearward of rear axle centerline.

B = factors chart (see pg. 3 of this document).

**NOTE:** MVSS 105 is applicable only if completed vehicle has a GVWR of 7176 lbs (3,500 kg) or more.

 FMVSS 106
 This vehicle, when completed, will conform to MVSS 106

 CMVSS 106<sup>†</sup>
 Brake Hoses if no alterations are made to the hydraulic or vacuum brake hose assemblies.

FMVSS 108 This vehicle will not conform to MVSS 108 - Lamps,

- CMVSS 108<sup>t</sup> CMVSS 108.1<sup>t</sup> Reflective Devices and Associated Equipment in its present (incomplete) stage of manufacture. All incomplete vehicle manufacturer-installed components which are covered by this standard will comply, provided that subsequent manufacturers do not alter, obscure, or relocate these components. Subsequent manufacturers must add all necessary additional equipment required to meet this standard.
- FMVSS 110 The vehicle as shipped does <u>not</u> conform to <u>MVSS 110</u> <u>CMVSS 110</u> <u>- Tire Selection and Rims for Motor Vehicles with</u> <u>GVWR of 10,000 lbs (4,536 kg) or less</u>. It is the responsibility of the final stage manufacturer to properly affix the Tire and Loading placard label to the vehicle according to MVSS 110, as well as assure tire, tire rims and tire pressure are appropriately selected for the vehicle.
- FMVSS 111 CMVSS 111<sup>†</sup>
  This vehicle, when completed, will conform to <u>MVSS 111</u> <u>- Rearview Mirrors</u>\* if no alterations are made to the rearview mirror systems and the driver's indirect view to the rear is not obscured by the body or other equipment. \*<u>NOTE</u>: On vehicles with outside rearview mirrors deleted, conformity to <u>MVSS 111</u> - <u>Rearview Mirrors</u> is not determined by the design of this incomplete vehicle and no representation as to conformity is made.
- FMVSS 113
   This vehicle, when completed, will conform to MVSS 113

   CMVSS 113<sup>+</sup>
   - Hood Latch Systems if no alterations are made to the hood latches or attaching parts.
- FMVSS 114 CMVSS 114<sup>+</sup>
   This vehicle, when completed, will comply with MVSS 114 - Theft Protection\* if no alterations are made to the steering column lock, transmission shift linkage, ignition switch interlock or the audible key-left-in-lock warning systems.

   Completed vehicles with a GVWR of 10,000 lbs (4,536 kg) or less are required to be equipped with an electronic engine immobilizer system (CANADA).

   \* NOTE: MVSS 114 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.
- 49 CFR Part 565
   This vehicle, when completed, will conform to 49 CFR Part

   CMVSS 115<sup>+</sup>
   565 or CMVSS 115 Vehicle Identification Number if:
  - No alterations are made to the VIN plate, the VIN plate-mounting, or the VIN plate location
  - No component installed by the subsequent manufacturers obscures the visibility of the VIN plate through the windshield.
- FMVSS 116 CMVSS 116<sup>†</sup>
   This vehicle, when completed, will conform to MVSS 116 - Motor Vehicle Brake Fluids if no alterations, substitutions, or introduction of foreign material are made to the brake fluid.
- FMVSS 118 If so equipped, this vehicle, when completed, will CMVSS 118<sup>+</sup> Conform to <u>MVSS 118 - Power Operated</u> <u>Window</u>, <u>Partition and Roof Panel Systems if no</u> alterations are made to the power window and related electrical systems.
  - Subsequent manufacturers must assure compliance with <u>MVSS 118 - Power Operated Window, Partition</u> and <u>Roof Panel Systems</u> if powered roof panels, internal partitions or MPV power operated rear window systems are installed.
     <u>NOTE</u>: MVSS 118 is applicable only if completed

vehicle has GVWR of 10,000 lbs (4,536 kg) or less.

\*If so Equipped. (†) See Section on Canadian Requirements. (&) sections as applicable

B Factors for Determining Center of Gravity										
Weight of Components Addedby	Ram	2500/3500	Pickup (D.	J/D2)	Ram 3500 Chassis Cab (DD/DF)					
Weight of Components Added by Subsequent Manufacturers	Std Cab Mega Cab		Crew Cab		Standard Cab			Crew Cab		
Subsequent manufacturers	140.5" WB	160.5" WB	149.5" WB	169.5" WB	143.5" WB	143.5" WB	167.5" WB	172.4" WB	172.4" WB	
B Factors	В	В	В	В	В	В	В	В	В	
Rear Axle Type					SRW	DRW	DRW	SRW	DRW	
250 lbs (Minimum allowable added weight for 2500)	140	140	140	140						
500 lbs	140	140	140	140						
750 lbs	140	140	140	140						
1,000 lbs	140	140	140	140	130	130	130	130	130	
1,250 lbs	140	140	140	140						
1,500 lbs	140	140	140	140						
1,750 lbs	140	140	140	140						
2,000 lbs	140	140	140	140	125	125	125	125	125	
2,250 lbs	140	140	140	140						
2,500 lbs	140	140	140	140						
2,750 lbs	140	140	140	140						
3,000 lbs	134	134	134	134	120	120	120	120	120	
3,250 lbs	128	128	128	128						
3,500 lbs	122	122	122	122						
3,750 lbs	116	116	116	116						
4,000 lbs	110	110	110	110		115	115		115	
5,000 lbs						110	110		110	
6,000 lbs						105	105		105	

	BI	Factors for Deter	mining Center o	f Gravity				
Neight of Components Added by	Ram 4500 Chassis Cab (DP)							
Weight of Components Added by Subsequent Manufacturers	Std Cab	Std Cab	Std Cab	Std Cab	Crew Cab	Crew Cab		
oussequent manufacturers	144.5" WB	168.5" WB	192.5" WB	204.5" WB	173.4" WB	197.4" WB		
B Factors	В	В	В	В	В	В		
Rear Axle Type	DRW	DRW	DRW	DRW	DRW	DRW		
1000 lbs	130	130	130	130	130	130		
2000 lbs	125	125	125	125	125	125		
3000 lbs	120	120	120	120	120	120		
4000 lbs	115	115	115	115	115	115		
5000 lbs	110	110	110	110	110	110		
6000 lbs	105	105	105	105	105	105		
7000 lbs	100	100	100	100	100	100		
8000 lbs	95	95	95	95	95	95		

B Factors for Determining Center of Gravity Ram 5500 Chassis Cab (DP)								
Veight of Components Added by Subsequent Manufacturers	Std Cab	Std Cab	Std Cab	Std Cab	Crew Cab	Crew Cab		
Subsequent Manufacturers	144.5" WB	168.5" WB	192.5" WB	204.5" WB	173.4" WB	197.4" WB		
B Factors	В	В	В	В	В	В		
Rear Axle Type	DRW	DRW	DRW	DRW	DRW	DRW		
1000 lbs	130	130	130	130	130	130		
2000 lbs	125	125	125	125	125	125		
3000 lbs	120	120	120	120	120	120		
4000 lbs	115	115	115	115	115	115		
5000 lbs	110	110	110	110	110	110		
6000 lbs	105	105	105	105	105	105		
7000 lbs	100	100	100	100	100	100		
8000 lbs	95	95	95	95	95	95		
9000 lbs	90	90	90	90	90	90		
10000 lbs	85	85	85	85	85	85		
11000 lbs	80	80	80	80	80	80		

SRW = Single Rear Wheel DRW = Dual Rear Wheel Note: Min X = The farthest point forward relative to the rear of cab (inches) that the center of gravity can be located. Positive Min X is rear of back of cab; negative Min X is forward. Note: See FMVSS/CMVSS 301 for further weight limitations. See FMVSS/CMVSS 212 for additional center-of-gravity limitations.

- FMVSS 119
   This vehicle, when completed, will conform to MVSS 119

   CMVSS 119<sup>+</sup>
   - New Pneumatic Tires for Motor Vehicles other than Passenger Cars if:
  - No tire alterations or substitutions are made
  - The required tire data are either added to the vehicle's certification label or furnished on a separate tire information label
  - The tire load carrying capacity and speed rating are not exceeded

\***NOTE**: MVSS 119 is applicable only if completed vehicle has a GVWR of more than 10,000 lbs.

- FMVSS 120
   This vehicle as shipped does not conform to MVSS 120

   CMVSS 120<sup>†</sup>
   Tire Selection and Rims for Motor Vehicles with a

   GVWR
   of more than 10,000 lbs (4,536 kg). It is the responsibility of the final stage manufacturer to ensure the following conditions are met to allow compliance:
  - No alterations are made to the tires and rims
  - The required tire and rim data are either added to the completed vehicle's certification label or furnished on a separate tire information label in <u>accordance with MVSS</u> <u>110</u>, Section 4 (for vehicles with a GVWR < 10,000 lbs) and MVSS 120 (for vehicles with a GVWR ≥ 10,000 lbs)
  - The load carrying capacity and speed rating of the required tires and wheels are not exceeded
- FMVSS 124
   This vehicle, when completed, will conform to MVSS 124

   CMVSS 124<sup>†</sup>
   Accelerator Control Systems if no alterations are made to the accelerator control system.
- FMVSS 126
   This vehicle when completed will conform to MVSS 126

   CMVSS 126<sup>†</sup>
   Electronic Stability Control Systems if no alterations are made to the stability control system or related chassis and electrical components.

   \*NOTE: MVSS 126 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.
- FMVSS 138 This vehicle when completed will conform to MVSS 138 - Tire Pressure Monitoring Systems if no alterations are made to the tire pressure monitoring system or related chassis and electrical components. \*NOTE: MVSS 138 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.
- FMVSS 139
   This vehicle when completed will conform to MVSS 139

   CMVSS 139<sup>+</sup>
   New Pneumatic Radial Tires for Light Vehicles if no alterations are made to the radial tires or related chassis components.

   \*NOTE:
   MVSS 139 is applicable only if completed vehicle

\*<u>NOTE</u>: MVSS 139 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.

- FMVSS 201 If this vehicle is equipped with a seat or seats, when CMVSS 201<sup>+</sup> completed, it will conform to <u>MVSS 201</u>-
  - Occupant Protection in Interior Impact\* if no alterations are made to the seat locations, instrument panel, armrests, the interior trim including but not limited to, the upper interior trim including that over the doors, windshield and rear window, the roof side rails, the headliner, headliner and roof mounted components, and the roof pillars. \*NOTE: MVSS 201 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.

FMVSS 202 This vehicle, when completed, will conform to MVSS 202a

- FMVSS 202a <u>Head Restraints</u>\* if no alterations are made to the seat or head restraints.
  - \***NOTE:** MVSS 202a is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.
- CMVSS 203<sup>†</sup> This vehicle, when completed, will conform to <u>MVSS 203</u> - Impact Protection for the driver from the <u>Steering Control System</u>\* if no alterations are made to the driver's seat location, steering wheel, steering column assembly or any attaching parts. \*<u>NOTE</u>: MVSS 203 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.
- FMVSS 204
   This vehicle, when completed, will conform to MVSS 204

   CMVSS 204<sup>+</sup>
   Steering Control Rearward Displacement\* if:
  - No alterations are made to the steering control system, including, but not limited to, steering wheel, steering column assembly, front structure, bumper and attaching parts

 FMVSS 206,
 This vehicle, when completed, will conform to MVSS 206

 CMVSS 206
 - Door Locks and Door Retention Components if no alterations are made to the door locks, door hinges or their attachments.

FMVSS 205

CMVSS 205<sup>†</sup>

\***NOTE:** MVSS 206 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.

When tested in accordance with the requirements of

the standard; (1), no component installed by the subsequent manufacturer impinges upon the steering control system with the sufficient energy to displace

the steering control systems, and (2), no vehicle modification by the subsequent manufacturer results

in any portion of the vehicle impinging upon the steering control system with sufficient energy to

\*NOTE: MVSS 204 is applicable only if completed vehicle

has: (1), a GVWR of 10,000 lbs (4,536 kg) or less and (2),

This vehicle, when completed, will conform to MVSS 205

windshield or windows, and if no nonconforming glazing

- Glazing Materials if no alterations are made to the

displace the steering control system

an unloaded vehicle weight of 5,500 lbs or less.

- FMVSS 207
   If this vehicle is equipped with a driver's seat or front seats, when completed, it will conform to MVSS 207

   Seating Systems if no alterations are made to the seats, seat tracks, vehicle underbody including, but not limited to frame, body, body mounts, or any attaching parts.
- FMVSS 208 CMVSS 208<sup>+</sup> If this vehicle, when completed, will conform to <u>MVSS 208</u> - <u>Occupant Crash Protection</u> if no alterations are made to the seat belt and seat belt warning systems, seat locations and/or the windshield header. Subsequent manufacturers must assure compliance for any added designated seating positions and for any modifications to the vehicle front end structure that may alter the crash characteristics, performance, or pulse, including, but not limited to, rails, bumper structure and attaching parts, crash sensors and airbag deployment electronics, occupant restraint system including the seat belt system, airbags, steering system, and knee blockers.
- FMVSS 209
   This vehicle, when completed, will conform to MVSS 209

   CMVSS 209<sup>†</sup>
   Seat Belt Assemblies if no alterations are made to the seat belt assemblies. Subsequent manufacturers must assure compliance for added designated seating positions.
- FMVSS 210 CMVSS 210<sup>+</sup> This vehicle, when completed, will conform to MVSS 210 - Seat Belt Assembly Anchorages if no alterations are made to the seat belt assembly anchorages, body parts, frame, body mounts, or seat location. Subsequent manufacturers must assure compliance for added designated seating positions.
- FMVSS 212 This vehicle, when completed, will conform to MVSS\_212 - Windshield Mounting if:
  - No alterations are made to the body, body mounts, and frame rails that significantly affect crush from back of the cab forward in the vehicle
  - No alterations are made to the windshield or the windshield mounting system
  - When tested in accordance with the requirements of this standard: (1), no component installed by the subsequent manufacturers impinges upon the cab with sufficient energy to separate the windshield from its mounting, and (2), no vehicle modification by the subsequent manufacturer results in any portion of the vehicle impinging upon the cab with sufficient energy to separate the windshield from its mounting \*<u>NOTE</u>: MVSS 212 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or less.
- FMVSS 214 CMVSS 214<sup>†</sup> This vehicle, when completed, will meet <u>MVSS 214 (static)</u> -<u>Side Impact Protection</u> and is applicable only if completed vehicle has a GVWR of 10,000 lbs (4536 kg) or less. If no alterations are made to the vehicle, including but not limited to the doors, door frames, door latches, door hinges or attaching parts, vehicle structure below the doors and the door aperture structure.

This vehicle, when completed, does not need to conform to MVSS 214 (Dynamic) Side Impact Protection. This vehicle has a GVWR greater than 6,000 lbs.

\*If so Equipped. (†) See Section on Canadian Requirements. (&) sections as applicable

	Red	1/0.5		1	- (		e manufacturer must certify the completed vehicle as required
Engine	e Body	WB	GVWI 4x2	R (lbs) 4x4	Unloaded Vehicle Weight UVW (lbs)	that it conforms	e manufacturer must complete this vehicle in such a manner s to all standards in effect on the date of manufacture by FCA late of final completion, or a date between those two dates.
RAM MODELS	<= 10k lb	GVWR M			cle Weight Maximum	Note: Final Ma	
	subse systen the fu subse the ve suffici systen * <u>NOTE</u> : F	quent ma n with suff el system quent ma ehicle im ent energ n MVSS 30	anufacture ficient ene , and no nufacture pinging u yy to pun 1 is applie	er imping ergy to pu vehicle n r results upon the cture or cable only	es upon the fuel ncture or separate nodification by the in any portion of fuel system with separate the fuel / if completed 36 kg) or less.	Each intermed affect the valid must furnish ar address and a document to re vehicle manuf addenda, as re	liate manufacturer making any changes in this vehicle which dity of any statement in this document as provided to him n addendum to this document that contains his name, mailing an indication of all changes that should be made in this eflect changes that he made in this vehicle. The incomplete facturer must then furnish this document, along with any equired, and in the manner specified in Paragraph 568.5 of le 49 CFR Part 568.
	• When this s	tested in a tandard	accordano	ce with the	e requirements of stalled by the	Note: Interme	diate Manufacturers
	• The compl	Unloaded	Vehicle	e Weight	according to the r kit <u>(UVW)</u> of the d the values listed	with the Enviro CFR Part 205. are made to th	nmental Protection Agency's Exterior Noise Regulations - 40 When completed, it will continue to comply if no alterations are air intake system, cooling system, exhaust system or tires, ctions are placed in close proximity to the tail pipe outlet.
	• The su	ubsequent	t manufac	turer com	pletes the frame		re than 10,000 lbs only te vehicle, as manufactured by FCA US LLC fully complied
CMVSS 301 <sup>†</sup>	<ul> <li>Fuel Syst</li> <li>No alternative</li> </ul>	tem Integr erations a	•	o the fuel	system		e – Ram 3500, 4500 & 5500 4x2 and 4x4 models with a
FMVSS 301 CMVSS 301†	This vehic	le, when c	ompleted		36 kg) or less. orm to <u>MVSS_301</u>	Other Fede	eral Requirements
	rail, A-pill Subseque any modifie the crash o but not limi side air ba * <u>NOTE</u> : M	ar/B-pillar nt manufa cations to t characteris ited to rails g curtain o VSS 201	upper, acturers n the vehicle stics, perfe s or attach deployme is applical	and/or winust assu e side stru ormance, ning parts, nt electroi ble only it	f completed	the air intake obstructions ar Further, this ir complied with and when com	system, cooling system, exhaust system or tires, and no replaced in close proximity to the tail pipe outlet. noomplete vehicle, as manufactured by FCA US LLC, fully in Interference-Causing Equipment Standard ICES-002, npleted will continue to comply if no alterations are made to ignition coils, ignition wires, spark plug wires, spark plugs
FMVSS 226	- Ejection vehicle ha	Mitigation s GVWR	<u>and</u> is a of 10,000	applicable ) lbs (453	orm to <u>FMVSS 226</u> only if completed 6 kg) or less if no	and 111. In ad Motor Vehicles and when com	bughout this document except as noted for CMVSS 108 ddition, this incomplete vehicle also conforms to Canadian Safety Standards (CMVSS) 1106 - Interior and Exterior Noise npleted, will continue to comply if no alterations are made to
210.2 <sup>†</sup>	no alterat body parts must assu	ions are s or seat lo	made to ocations. S	child sea Subseque	t top anchorages, nt manufacturers signated seating	This incomple with the Cana	Requirements te vehicle as produced by FCA US LLC conforms in full adian Motor Vehicle Safety Standards indicated by (†) in
FMVSS 225 CMVSS 210.1 <sup>†</sup> - and CMVSS	Child Res	straint An	chorage S	Systems	orm to <u>FMVSS 225</u> (USA) or <u>CMVSS</u> Child Restraints if		*NOTE: 49 CFR Part 393 is applicable only if completed vehicle has a GVWR of 10,000 lbs (4,536 kg) or more.
	* <b>NOTE</b> : M	VSS 219	is applical		f completed 36 kg) or less.		<ul> <li>Lighting Devices, Reflectors and Electrical Equipment (Part 393, Subpart B)</li> </ul>
	and (2 manul penetr the inr	2), no veh facturer re rating the	nicle mod esults in "protected e of that po	ification b any porti d zone" of	by the subsequent on of the vehicle f the windshield or e windshield below		<ul> <li>Floors (Part 393.84)</li> <li>Interior Noise (Part 393.94)</li> <li>Subsequent manufacturers must assure compliance to the following:</li> </ul>
	this st subse zone"	andard: ( quent ma of the wi	1), no co nufacture ndshield	mponent r penetra or the inr	e requirements of installed by the tes the "protected her surface of that e "protected zone"		<ul> <li>Glazing (Part 393, Subpart D)</li> <li>Heating Systems (Part 393.77)</li> <li>Horn (Part 393.81)</li> <li>Speedometer (Part 393.82)</li> <li>Exhaust System (Part 393.83)</li> </ul>
	systen vehicle	n, the bod	ly & vehic	le structu	hood mounting re that would alter front seats forward	CMVSR (Sect 6- 6 6)	<ul> <li>3 This vehicle, when completed will conform to 49 CFR Part 393 - Parts and Accessories Necessary for Safe Operation if no alterations are made to the following:</li> <li>Brakes (Part 393, Subpart C)</li> <li>Clarger (Part 394, Subpart D)</li> </ul>
FMVSS 219 CMVSS 219†					orm to MVSS 219		interior materials are added.
FMVSS 216 CMVSS 216 <sup>†</sup>		- Roof Ci	ush Resis	stance. Th	need to conform to his vehicle has a	FMVSS 302 CMVSS 302 <sup>†</sup>	This vehicle, when completed will conform to <u>MVSS 302</u> <u>- Flammability of Interior Materials</u> if no alterations are made to any interior component and no non-conforming

\*Option

2500 Pickup

Cab

3500 Chas

S

Single Rear Wheel

10000\*

140.5

149.5

169.5

140.5

149.5

169.5

140.5

149.5

169.5

143.5

172.4

143.5

172.4

9,000

10000 / 9,900\*

10000 / 9.900\*

10000\*

8,000

8,000

Reg

Crew

Reg

Crew

Reg

Crew

Reg

Crew

Reg

Crew

5.7L

V8

6.4L

V8

6.7L

Diesel

6.4L

V8

6.7L

Diesel

Example:

by sections 567.5 and 568.6, 49 CFR Part 567 and 568.

Sample Calculation – Ram Pickup FMVSS/CMVSR<sup>†</sup> 105

Subsequent manufacturer wishes to add a 260-lb winch to the front

bumper and a 1.110-lb body to a 140.5" wheelbase 2500 HD 4x2. The

midpoint of the winch will be 174" from the centerline of the rear axle

directly above the frame rails. The body will be placed directly behind the

cab and its floor will be directly above the frame rails. Can the modification

be done without negating FMVSS/CMVSS<sup>†</sup> 105 compliance?

Compliance, Chassis Cab (>7, 716 lb/3,500 kg GVWR)

#### Sample Calculation – Ram Pickup FMVSS/CMVSR<sup>†</sup> 105 Compliance, Chassis Cab - Continued

#### Solution:

First, determine the location of the center of gravity of the individual components to be added. For the purposes of this example, the center of gravity (CG) of the winch is 5 inches above its base and at its exact center in the fore and aft direction. The CG of the body is 7.5 inches above its floor and 62 inches from its front in the fore and aft direction. (See illustration below.)

Second, calculate the combined CG of the winch and body in the fore and aft direction. To find the combined CG, the weight of the winch is multiplied by the distance of its CG from the centerline of the rear axle. This result is then divided by the total weight of the components.

$$X = \frac{6.3" \times 1,110 \text{ lb} - 181.4" \times 260 \text{ lb}}{(1,110 \text{ lb} + 260 \text{ lb})} = -29.3"$$

A negative value for "X" indicates that the CG is in front of the rear axle centerline.

**Note:** If all added component CGs are behind the rear axle, then the respective weight times CG distance results are added together before being divided by total weight.

Third, calculate Ymax from the equation: Ymax = B+1.6(X).

From the "B" factor table, "B" for a 1,370-lb load for a 140.5-inch wheelbase is about 140.

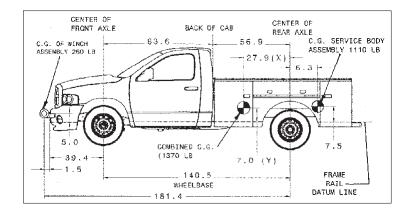
Therefore, Ymax = 140-1.6(29.3) = 93.2 inches.

Fourth, calculate the combined vertical CG of the added components (Y) by multiplying the CG height of each component by the weight of each component, adding the results and dividing by the total weight of components:

$$f = \frac{5" \times 260 \text{ lb} + 7.5" \times 1,110 \text{ lb}}{(260 \text{ lb} + 1,110 \text{ lb})} = 7.0"$$

**Note:** If an added component's CG was below the frame rail datum line, then its weight-times-CG-distance result would be subtracted from the weight-times-distance-result of components with CGs above the frame rail datum line.

Fifth, compare the value of Y with Ymax. For the additional components to be installed without affecting FMVSS/CMVSS<sup>+</sup> 105 compliance, the value of Y must not exceed Ymax. In the above example, Y(7.0") is less than Ymax (93.2"). Therefore, the winch and body combination can be added.



# **INCOMPLETE VEHICLE AND HEAVY-DUTY ENGINE INFORMATION**

## a) INCOMPLETE VEHICLES

#### FEDERAL, CANADA AND CALIFORNIA (AND STATES ADOPTING CALIFORNIA EMISSION REGULATIONS)

#### EXHAUST EMISSION CERTIFICATION PARAMETERS - INCOMPLETE VEHICLE - BOX OFF PACKAGES

The gasoline powered trucks listed below will conform with all Federal, Canadian or the State of California (and States Adopting California Emission Regulations) exhaust emission regulations applicable to the 2016 model year new heavy-duty vehicles and medium duty vehicles, if the following conditions are not exceeded in completion of the vehicle. Emissions related curb weight and frontal area restrictions apply.

MODELS Incomplete Vehicles - Box Off Pkgs.	Body Model	Engine Displacement	Sales Area	GVWR	Max Completed Truck Curb Weight	Max Completed Truck Curb Frontal Area
2500/3500 HD 4X2	DJ/D2	5.7L/6.4L Gasoline	Federal, Canada and California	*	*	*
2500/3500 HD 4X4	DJ/D2	5.7L/6.4L Gasoline	Federal, Canada and California	*	*	*
3500 CC 4X2	DD/DF	6.4L Gasoline	Federal, Canada and California	*	*	*
3500 CC 4X4	DD/DF	6.4L Gasoline	Federal, Canada and California	*	*	*

\*See under hood Vehicle Emission Control Information label.

# FOR GASOLINE FUELED INCOMPLETE VEHICLES

## FUEL VAPOR RECOVERY (GASOLINE FUELED VEHICLES) – CALIFORNIA (AND STATES ADOPTING CALIFORNIA EMISSION REGULATIONS)

The following information applies to gasoline fueled vehicles for sale or use in the State of California (and States Adopting California Emission Regulations). California regulations require that the vehicle fuel systems be designed to accommodate a vapor recovery fueling nozzle including unobstructed access to the fill pipe. Fuel filler pipes installed according to the instructions provided in the fuel filler kit will comply with the "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks," referenced in Title 13 California Administrative Code providing no part of the second body, as installed, intrudes into the nozzle access zone.

#### ADDITIONAL MODIFICATION INFORMATION FOR FEDERAL, CANADA AND CALIFORNIA (AND STATES ADOPTING CALIFORNIA EMISSION REGULATIONS)

The term "second bodies" includes not only the basic body or body structure but also any equipment permanently attached to the vehicle installed by the vehicle alterer.

- None of the following fuel system components as installed by FCA US LLC are to be removed, replaced, relocated, altered or modified in any way:
- Fuel tank and attachment hardware, including sending unit and vapor valve
- Fuel lines, routing and attachments, excluding fuel filler cap, filler pipe, filler hose and filler system attachment hardware
- -Vapor line and carbon canister (Gasoline only)
- -Fuel pump

- Leak detection system (Gasoline only)
- Fuel filter and attachment
- Throttle body
- Air cleaner assembly
- · No additional fuel tanks may be added.
- Any alteration or modification made to the vehicle as manufactured by FCA US LLC, and components or structure installed by the vehicle alterer must not result in penetration, separation or other damage to the fuel system or any portion thereof when the vehicle is tested in any manner specified by applicable provisions of FMVSS/CMVSS 301.
- The second body installed and the required fuel system components (identified below) must be located and mounted as follows:
- Second body components must not contact any fuel system component (other than at the points where the fuel system is permanently attached to the second body)
- Second body deformation or movement relative to the frame must not cause any fuel system component to be penetrated, disconnected or otherwise damaged.
- The rear end of the second body (excluding the rear bumper) installed must not extend beyond (overhang) the rear edge of the vehicle frame or frame extension. Any extension of the vehicle frame must be constructed and attached so as to perform as a continuation of the vehicle frame when the altered vehicle is tested in any manner specified by applicable provisions of FMVSS/CMVSS 301
- The fuel filler cap, filler pipe, filler hose and filler system attachment hardware must be installed according to the instructions provided in fuel filler kit and must be securely retained to remain intact when the vehicle is tested in any manner specified by applicable provisions of FMVSS/CMVSS 301.

# b) HEAVY-DUTY ENGINE CERTIFICATION INFORMATION

#### FEDERAL, CANADA AND CALIFORNIA (AND STATES ADOPTING CALIFORNIA EMISSION REGULATIONS)

The following vehicles are certified under Federal, Canadian or the State of California (and States Adopting California Emission Regulations) heavy-duty engine certification regulations and <u>NO</u> emission related curb weight and frontal area restrictions apply.

MODELS	Body Model	Engine Displacement	Transmission	Sales Area
3500/4500/5500 Ram 4X2 Chassis Cab	DD/DP/DF	6.7L Diesel	AISIN AS69RC MTX G56	Federal, Canada and California
3500/4500/5500 Ram 4X4 Chassis Cab	DD/DP/DF	6.7L Diesel	AISIN AS69RC MTX G56	Federal, Canada and California
3500 Ram 4X2 Chassis Cab	DD/DF	6.4L V8 Gas	AISIN AS66RC	Federal, Canada and California
3500 Ram 4X4 Chassis Cab	DD/DF	6.4L V8 Gas	AISIN AS66RC	Federal, Canada and California
4500/5500 Ram 4X2 Chassis Cab	DP	6.4L V8 Gas	AISIN AS66RC	Federal, Canada and California
4500/5500 Ram 4X4 Chassis Cab	DP	6.4L V8 Gas	AISIN AS66RC	Federal, Canada and California

# **CAUTION** VEHICLE TRANSPORTATION AND DEALERSHIP PERSONNEL:

DO NOT REMOVE THIS DOCUMENT FROM THE VEHICLE. IT IS REQUIRED BY LAW TO BE PROVIDED TO THE FINAL STAGE MANUFACTURER