

2011 RAM SNOWPLOW INSTALLATION

INTRODUCTION

The factory-installed Snowplow Preparation Groups (or their equivalent components) are recommended and listed for each vehicle. The normal warranty applies to Dodge Ram trucks that have after market snowplows installed in accordance with these guidelines.

Maximum Vehicle Loading Requirements:

Installation of snowplows and their mounting hardware may result in a vehicle weight distribution or a front axle loading which is detrimental to brake performance or which exceeds the front GAWR. The following load requirements are applicable:

1. The loaded vehicle, including all after market accessories, the snowplow system, passengers, and cargo, must not exceed the gross vehicle weight (GVW), front or rear gross axle weight (GAW) ratings specified on the Safety Compliance Certification label located in the driver's side door opening.
2. The empty truck with all permanently attached accessories and snowplow components must not exceed 62 percent of its total weight on the front axle to comply with FMVSS/CMVSR 105 Brake Certification. Permanently attached snowplow parts are those parts not easily removed when the blade is removed. The permanently attached parts are: sub-frame, hydraulic pump, hydraulic lift cylinder, lamps, wiring, snowplow controls, etc.

If the front axle loading exceeds either 62 percent of the empty truck total weight, or the front GAWR, ballast-compensating weight must be securely attached at the rear of the truck to bring front axle weight within weight specifications as defined above.

Notes for Heavy Duty Snowplows:

- At any time, the maximum number of occupants in the truck must not exceed two
- Under Any Circumstances, vehicles should NOT exceed GVWR (Gross Vehicle Weight Rating), Front or Rear GAWRs (Gross Axle Weight Ratings)
- Snowplow prep packages are NOT available with Sport (AAG) package
- Cargo capacity will be reduced by the addition of options.
- Ballast should be securely attached inside the box at 9 inches from the rear tailgate for pickups.
- The total weight of permanently attached hardware should not exceed 125 lbs.
- Max snowplow weight should not exceed values for models shown in this section.

The snowplow weights shown in the charts on the next page are the manufacturer recommendations based on maximum vehicle option content. Other plow weight values may be possible, based on the specific capability of the vehicle being modified (actual weight, GVWR, front and rear GAWR). The maximum allowable plow weight can be determined by the dealer /supplier / manufacturer. In all cases, the loaded vehicle weight, including the snowplow system, all aftermarket accessories, driver, passengers, options, and cargo, must not exceed either the Gross Vehicle Weight (GVWR) or Gross Axle Weight (GAWR) ratings. The GVWR and GAWR weights are specified on the Safety Compliance Certification Label on the driver's side door opening.

Applications – 4x4 Only (Package Code AHD)

Model	Wheel Base	P/U Box	GVWR Low/High	Front GAWR	Engine
2500 Reg. Cab	140.5"	8.0'	8,650 / 9,000	*	EZC, ETJ
3500 Reg. Cab	140.5"	8.0'	12,200	5,500	ETJ
2500 Quad Cab	149.5"	6.5'	8,800 / 9,600	*	EZC, ETJ
2500 Quad Cab	169.5"	8.0'	8,800 / 9,600	*	EZC, ETJ
3500 Quad Cab	149.5"	6.5'	10,100	5,500	ETJ
3500 Quad Cab	169.5"	8.0'	10,100 / 12,200	5,500	ETJ

* Front GAWR 5,200 Gas / 5,500 Diesel

Engine Codes: EZC: 5.7L V8 Gas
ETJ: 6.7L Diesel

MFD BY CHRYSLER GROUP LLC DATE OF MFR: 03-03

GVWR 2062 KG 04544 LB GAWR 1154 KG FRONT 2543 LB GAWR 8931 KG REAR 2051 LB

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

VIN: 1111111111111111 TYPE: TYPE UNKNOWN

MDH: 030303 PNT:PKJT VEHICLE MADE IN U.S.A. TRM:BFDV 4648102

Safety Compliance Certification Label

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ST Model

4X4 Pickup			FGAWR All	2500			
w/Driver				Manual	Automatic	GVWR	Code
7L62	140.5"	5.7L V8	5,200		1155	8,650	Z7A
Regular Cab		6.7L Turbo Diesel	5,500	770	835	9,000	Z7C
7L91	149.5"	5.7L V8	5,200		1060	8,800	Z7B
Crew Cab		6.7L Turbo Diesel	5,500	605	665	9,600	Z7E
7L92	169.5"	5.7L V8	5,200		1020	8,800	Z7B
Crew Cab		6.7L Turbo Diesel	5,500	625	690	9,600	Z7E

4X4 Pickup			FGAWR All	3500 SRW				3500 DRW			
w/Driver				Manual	Automatic	GVWR	Code	Manual	Automatic	GVWR	Code
8L62 Regular Cab	140.5"	6.7L Turbo Diesel	5,500					735	795	12,200	Z8D
8L91 Crew Cab	149.5"	6.7L Turbo Diesel	5,500	805	870	10,100	Z8B				
8L92 Crew Cab	169.5"	6.7L Turbo Diesel	5,500	685	745	10,100	Z8B	595	655	12,200	Z8D

Note:

- Snowplow Weight doesn't include attaching hardware, and worst case seating (Bench).
- Calculations are based upon vehicle with maximum options.
- N/R = Not Recommended for snowplow application
- SRW = Single Rear Wheel.
- DRW = Dual Rear Wheel.
- Minimum Plow is 500 lbs
- Power Wagon not Recommended for snowplow application

SLT Model

4X4 Pickup			FGAWR All	2500			
w/Driver				Manual	Automatic	GVWR	Code
7H62	140.5"	5.7L V8	5,200		1125	8,650	Z7A
Regular Cab		6.7L Turbo Diesel	5,500	675	735	9,000	Z7C
7H91	149.5"	5.7L V8	5,200		970	8,800	Z7B
Crew Cab		6.7L Turbo Diesel	5,500	540	605	9,600	Z7E
7H92	169.5"	5.7L V8	5,200		805	8,800	Z7B
Crew Cab		6.7L Turbo Diesel	5,500	N/R	N/R	9,600	Z7E
7H81	160.5"	5.7L V8	5,200		N/R	8,800	Z7B
Mega Cab		6.7L Turbo Diesel	5,500	N/R	N/R	9,600	Z7E

SLT Model

4X4 Pickup			FGAWR All	3500 SRW				3500 DRW			
w/Driver				Manual	Automatic	GVWR	Code	Manual	Automatic	GVWR	GVWR
8H62 Regular Cab	140.5"	6.7L Turbo Diesel	5,500					655	720	12,200	Z8D
8H91 Crew Cab	149.5"	6.7L Turbo Diesel	5,500	585	645	10,100	Z8B				
8H92 Crew Cab	169.5"	6.7L Turbo Diesel	5,500	N/R	N/R	10,100	Z8B	N/R	N/R	12,200	Z8D
8H81 Mega Cab	160.5"	6.7L Turbo Diesel	5,500	500	565	10,100	Z8B	N/R	N/R	10,500	Z8G

Note:

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Premium Model

4X4 Pickup w/Driver			FGAWR All	2500			
				Manual	Automatic	GVWR	Code
7R91		5.7L V8	5,200		980	8,800	Z7B
Crew Cab	149.5"	6.7L Turbo Diesel	5,500	600	605	9,600	Z7E
7R92		5.7L V8	5,200		860	8,800	Z7B
Crew Cab	169.5"	6.7L Turbo Diesel	5,500	N/R	N/R	9,600	Z7E
7R81		5.7L V8	5,200		875	8,800	Z7B
Mega Cab	160.5"	6.7L Turbo Diesel	5,500	500	570	9,600	Z7E

Premium Model

4X4 Pickup w/Driver			FGAWR All	3500 SRW				3500 DRW			
				Manual	Automatic	GVWR	Code	Manual	Automatic	GVWR	CODE
8R91											
Crew Cab	149.5"	6.7L Turbo Diesel	5,500	630	670	10,100	Z8B				
8R92											
Crew Cab	169.5"	6.7L Turbo Diesel	5,500	600	665	10,100	Z8B	N/R	550	12,200	Z8D
8R81											
Mega Cab	160.5"	6.7L Turbo Diesel	5,500	570	605	10,100	Z8B	690	720	10,500	Z8G

Note:

- Snowplow Weight doesn't include attaching hardware, and worst case seating (Bench).
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ELECTRICAL CONSIDERATIONS

HEADLAMPS

Each headlamp bulb is independently Pulse Width Modulated (PWM) controlled by an electronic control module. This module also monitors each bulb to detect failures (i.e. bulb burned out) on both the high beam and low beam filaments. When this failure occurs, the "LAMP OUT" telltale indicator in the instrument cluster will illuminate whenever the ignition is in the RUN position. The module also provides the DRL function when required and therefore there is no separate DRL controller.

Therefore, the any aftermarket wiring kits should use the following guidelines:

- Disconnection of the OEM headlamps will be interpreted by the electronic module as a burned out bulb therefore; it is recommended that the aftermarket lamps utilize the OEM headlamp circuits. NOTE – the aftermarket bulbs must draw no more current than the OEM bulbs (9007QL).
- Provide a means of allowing the customer to manually switch between the OEM headlamps and the aftermarket headlamps. Connection of both the OEM and aftermarket lamps at the same time will cause the control module to disable the circuit due to an overload condition and illuminate the "LAMP OUT" indicator in the instrument cluster.
- Also, assure that the OEM headlamps cannot be inadvertently disabled when the aftermarket lamps are disconnected (i.e. when the snowplow is not on the vehicle).
- Do NOT splice the right and left headlamp circuits together. Connection of both lamps to the same circuit will cause the control module to disable the circuit due to an overload condition and illuminate the "LAMP OUT" indicator in the instrument cluster.

TURN LAMPS

Each turn lamp - front driver, front passenger, rear driver, and rear passenger is independently controlled by an electronic control module. This module also monitors each bulb to detect failures (i.e. bulb burned out). When this failure occurs the "LAMP OUT" tell tale indicator in the instrument cluster will illuminate whenever the ignition is in the RUN position.

In order to successfully connect the plows turn signal lamps to the vehicle's wiring the following must be done:

- The front driver circuit is L61, 18 gauge WT/LG
- The front passenger circuit is L60, 18 gauge WT/TN

- Both L60 & L61 need to be spliced into in order to control a set of relays (please see attached drawing on page 5). These relays are necessary for proper function of the turn signals while the plow lamps are attached to the vehicle's electrical system. Failure to do so will cause the front turn signals to be inoperable or intermittent.

NOTE: The electronic module is only capable of detecting bulb failure in the vehicles lamps.

PARK LAMPS

The vehicle park/tail/license/marker/tailgate lamps are partitioned into three subsets – driver side, passenger side, and trailer tow connectors with the total vehicle load balanced between the driver and passenger side. Aftermarket wiring kits must have provisions that:

- Maintain separation between all three subsets. The preferred method for aftermarket park lamps is to use one of these circuits as a sense line to control a relay to activate aftermarket lamps. The relays power feed needs to be a fused battery feed provided by the kit
- If aftermarket park lamps need to be wired directly to the vehicle circuits. The load should be balanced between driver and passenger side, with neither side sourcing more than 2A of additional load current.
 - The driver side circuit is L161, 20 gauge WT/YL wire – see wiring schematics. The easiest place to find and splice into this circuit is in the harness bundle near the connection to the driver headlamp assembly
 - The passenger side circuit is L160, 20 gauge WT/GY wire – see wiring schematics. The easiest place to find and splice into this circuit is in the harness bundle near the connection to the passenger headlamp assembly

IGNITION RUN FEED

If required, the only location to obtain an ignition run feed is to splice into circuit F306. Circuit F306 18 gauge PK/YL is a dedicated Ignition Run feed to the Cigar Lighter.

The best location to splice into F306 is right at the connection into the back of the Cigar Lighter. This connection can be accessed by removing the center stack trim piece which the Cigar Lighter is mounted into. There will be two wires going into the connector. Circuit F306 is the 18

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gauge PK/YL wire. The other wire will be (Z736) BK/YL tracer.

The spliced in aftermarket wire should be a minimum 18 gauge high temperature rated wire due to the 20A fuse for the Cigar lighter.

The load placed on the aftermarket circuit should not exceed 2A. Exceeding 2A will potentially blow the Cigar Lighter fuse when activating the Cigar lighter and the aftermarket load simultaneously.

Note: Circuit F306 is an Ignition Run and ACCESSORY feed, meaning it will be hot with the ignition key in the Run position and also the Accessory position.

Note: If more than a 2A ignition feed is required, then the aftermarket application will have to add an external relay, with appropriate battery fusing and use the recommended F306 circuit to turn the relay on and off.

Note: There is no other acceptable place to find a vehicle Ignition Run source, in cab or underhood.



09/01/2010

