

### 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.


Applications - (Package Code AHD)					
Model	Wheel Base	GVWR		Front GAWR	Engine
Reg. Cab	144"	16,500	18,750	7,000	ETJ
	168"	16,500	19,500	7,000	ETJ
	192"	16,500	19,500	7,000	ETJ
	204"	16,500	19,500	7,000	ETJ
Quad Cab	164"	16,500	18,750	7,000	ETJ
	188"	16,500	19,500	7,000	ETJ

**Engine Codes:** ETJ: 6.7L Diesel

#### 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 approved vehicles shown in the charts on the next page are the manufacturer recommendations based on maximum vehicle option content. 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.

MFD BY DAIMLERCHRYSLER CORPORATION		DATE OF MFG: 03-03	
GVWR 2062 KG 04544 LB	GAWR 1154 KG FRONT 2543 LB	GAWR 0931 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

### Snowplow Package (AHD) Availability on 2008 DM RAM Models

#### ST Model

4X2 Chassis Cab			FGAWR	4500 DRW		
Driver Only				All	Manual	Automatic
4L43 Quad	164.5"	6.7L TD Diesel	7,000	Available	Available	16,500
4L43 Quad	164.5"	6.7L TD Diesel	7,000	Available	Available	15,000
4L44 Quad	188.5"	6.7L TD Diesel	7,000	Available	Available	16,500
4L44 Quad	188.5"	6.7L TD Diesel	7,000	Available	Available	15,000
4L63 Reg Cab	144.5"	6.7L TD Diesel	7,000	Available	Available	16,500
4L63 Reg Cab	144.5"	6.7L TD Diesel	7,000	Available	Available	15,000
4L64 Reg Cab	168.5"	6.7L TD Diesel	7,000	Available	Available	16,500
4L64 Reg Cab	168.5"	6.7L TD Diesel	7,000	Available	Available	15,000
4L65 Regt Cab	192.5"	6.7L TD Diesel	7,000	Available	Available	16,500
4L65 Regt Cab	192.5"	6.7L TD Diesel	7,000	Available	Available	15,000
4L66 Regt Cab	204.5"	6.7L TD Diesel	7,000	Available	Available	16,500
4L66 Regt Cab	204.5"	6.7L TD Diesel	7,000	Available	Available	15,000

#### ST Model

4X4 Chassis Cab			FGAWR	4500 DRW		
Driver Only				All	Manual	Automatic
9L43 Quad	164.5"	6.7L TD Diesel	7,000	Available	Available	16,500
9L43 Quad	164.5"	6.7L TD Diesel	7,000	Available	Available	15,000
9L44 Quad	188.5"	6.7L TD Diesel	7,000	Available	Available	16,500
9L44 Quad	188.5"	6.7L TD Diesel	7,000	Available	Available	15,000
9L63 Reg Cab	144.5"	6.7L TD Diesel	7,000	Available	Available	16,500
9L63 Reg Cab	144.5"	6.7L TD Diesel	7,000	Available	Available	15,000
9L64 Reg Cab	168.5"	6.7L TD Diesel	7,000	Available	Available	16,500
9L64 Reg Cab	168.5"	6.7L TD Diesel	7,000	Available	Available	15,000
9L65 Regt Cab	192.5"	6.7L TD Diesel	7,000	Available	Available	16,500
9L65 Regt Cab	192.5"	6.7L TD Diesel	7,000	Available	Available	15,000
9L66 Regt Cab	204.5"	6.7L TD Diesel	7,000	Available	Available	16,500
9L66 Regt Cab	204.5"	6.7L TD Diesel	7,000	Available	Available	15,000

#### ST Model

4X2 Chassis Cab			FGAWR	5500 DRW		
Driver Only				All	Manual	Automatic
5L43 Quad	164.5"	6.7L TD Diesel	7,000	Available	Available	18,750
5L44 Quad	188.5"	6.7L TD Diesel	7,000	Available	Available	19,500
5L63 Reg Cab	144.5"	6.7L TD Diesel	7,000	Available	Available	18,750
5L64 Reg Cab	168.5"	6.7L TD Diesel	7,000	Available	Available	19,500
5L65 Regt Cab	192.5"	6.7L TD Diesel	7,000	Available	Available	19,500
5L66 Rect Cab	204.5"	6.7L TD Diesel	7,000	Available	Available	19,500

#### ST Model

4X4 Chassis Cab			FGAWR	5500 DRW		
Driver Only				All	Manual	Automatic
0L43 Quad	164.5"	6.7L TD Diesel	7,000	Available	Available	18,750
0L44 Quad	188.5"	6.7L TD Diesel	7,000	Available	Available	19,500
0L63 Reg Cab	144.5"	6.7L TD Diesel	7,000	Available	Available	18,750
0L64 Reg Cab	168.5"	6.7L TD Diesel	7,000	Available	Available	19,500
0L65 Regt Cab	192.5"	6.7L TD Diesel	7,000	Available	Available	19,500
0L66 Regt Cab	204.5"	6.7L TD Diesel	7,000	Available	Available	19,500

#### NOTE:

1. Minimum 800lb blade weight considered for plow availability.
2. Snowplow calculations are based upon maximum options.
3. N/R = Not Recommended for snowplow application.
4. DRW = Dual Rear Wheels.
5. Single passenger weight = 150 lbs. (Driver Only).

#### SNOW PLOW ASSUMPTIONS:

Single fuel tank in rear (52) Gallons.  
1680 lbs Minimum Cargo Bed Weight.  
Standard 40/20/40 Vinyl Bench seat.  
1300 lbs. Maximum Ballast for DRW.  
1580 lbs. Maximum Ballast for 0L66 model

#### NOTE:

Many models may require in excess of 1,000 lbs. of ballast behind the rear axle to ensure that the front axle is within GVWR. The GVWs, GAWRs, and base weights are provided in the technical information section to allow calculation of the appropriate ballast.

**AHD Snowplow Prep Already includes upgraded springs.  
The Heavy Duty or Super Heavy Duty Springs are Not Required**

(AHD) Snow Plow Prep Package – Not available with (SKS of SKT)  
(SKS) Heavy Duty Front Springs – Not available with (AHD or SKT)  
(SKT) Super Heavy Duty Front Springs – Not available with (AHD or SKS)

- 1) For a **permanent** aftermarket installation to the front of the vehicle (front axle load) between 225 and 675 lbs., the heavy duty front springs (SKS) upgrade is recommended.
  - Under no circumstances, may vehicles be loaded to exceed the 5200 lb. Front GAWR.
  - Front End Alignment and Headlamp Aim must be re-set after upfit
- 2) For a **permanent** aftermarket installation to the front of the vehicle (front axle load) over 675 lbs., the super heavy duty front springs (SKT) upgrade is recommended.
  - Under no circumstances, may vehicles be loaded to exceed the 5200 lb. Front GAWR.
  - Front End Alignment and Headlamp Aim must be re-set after upfit

### 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
- The front passenger circuit is L60, 18 gauge

- 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 L70, 18 gauge Pink / Violet 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 L7, 18 gauge Black / Yellow 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 F30. Circuit F30 is a dedicated Ignition Run feed to the Cigar Lighter.

The best location to splice into F30 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 F30 is the Red 18 gauge wire. The other wire will be tan with a black 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.

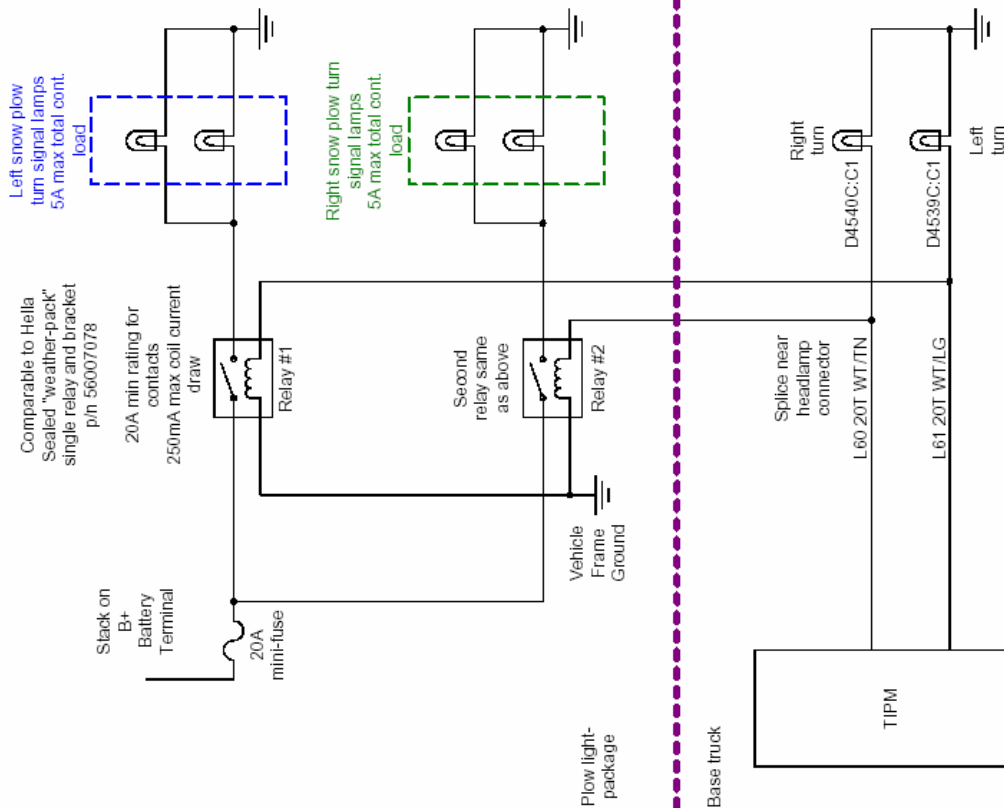
The load placed on the aftermarket circuit should not exceed 2A. Exceeding 2A will potentially blow the Cigar Lighter fuse when activating the Cigar lighter and the aftermarket load simultaneously.

**Note: Circuit F30 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 F30 circuit to turn the relay on and off.**

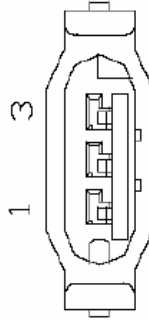
**Note: There is no other acceptable place to find a vehicle Ignition Run source, in cab or underhood.**

## PRELIMINARY



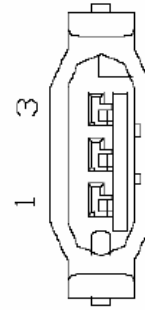
Control #  C-Num D4540C  
Harn Con Pn : 04707132 Harness : Headlamp Dash

Device name	Pin	Ckt Name	Gauge	Color	MS	TCG
LAMP_HDLF_RT	C1	L60	20	WT/TN	T	
	C2	L70C	20	WT/GY	T	
	C3	Z378	18	BR	T	



Control #  C-Num D4539C  
Harn Con Pn : 04707132 Harness : Headlamp Dash

Device name	Pin	Ckt Name	Gauge	Color	MS	TCG
LAMP_HDLF_LI	C1	L61	20	WT/LG	T	
	C2	L7B	20	WT/YL	T	
	C3	Z377	20	BR/BR	T	



A	Corrected relay p/n	1/18/06	ZS10
NR	DR Plow-turn	1/17/06	ZS10