

UI BULLETIN #28

SUBJECT: Pickup Box Removal

MODELS AFFECTED: S/T and C/K Pickup Trucks

MODEL YEAR(S): 2001 and beyond

DATE: 9/02/99

PAGE: 1 of 33

PICKUP BOX REMOVAL PROGRAM

The following information is for vehicle alterers who intend to remove Pickup boxes from S/T & C/K Trucks and install second unit bodies on these vehicle. This information applies only to those vehicles which have a Gross Vehicle Weight Rating (GVWR) OF 4600 lbs. up to and including 10,000 lbs. (Vehicles listed in Tables A1 & A2).

REAR BUMPER REMOVAL

Information is also provided for alterers who intend only to remove the rear bumper from the All New C/K.



ALTERATIONS TO COMPLETE VEHICLES

Persons who alter complete (certified) Pickup Trucks by removal of the Pickup box should be aware that this type of activity would impose upon them the corresponding responsibility for ensuring that the units as sold are in compliance with all applicable safety and/or emissions (including noise and RFI) requirements. Specific questions concerning compliance or certification to these requirements should be directed to the vehicle alterer's legal counsel or the National Highway Traffic Safety Administration, The Environmental Protection Agency, The California Air Resources Board, or in Canada, The Ministry of Transport or The Canadian Department of Commerce.

The Enviornmental Protection Agency has provided an explanation of the policy they will follow regarding the modification by the secondary manufacturers of complete Light Duty Trucks prior to sale and delivery to the ultimate purchaser. This explanation is contained in a letter from C.N. Freed of the EPA to M.M. McBride of the RecreationVehicle Industry Association, dated july 13, 1979. A portion of this letter states:

- "...Secondary manufacturers are not manufacturers under the act when the following conditions are met:
 - 1. The vehicles produced by a secondary manufacturer conform in all material respects to the design specification in the original manufacturer's application for certification (hereafter'application'); and
 - 2. The weight of the vehicle produced by a secondary manufacturer, including the weight of fuel at nominal tank capacity, is no more than 500 lbs. above the maximum vehicle weight."

No frontal area restrictions will apply to secondary manufacturers who comply with the conditions above. However, every vehicle sold to an ultimate pruchaser must be covered by emission warranty mandated by section 270(a) of the Act. Secondary manufacturers who do not meet the above conditions will be considered manufacturers under the Act and will be required to ensure that the vehicles they produce are covered by acertificate of conformity.



The maximum vehicle weight for a given vehicle is determined by:

- A) Subtracting 300 lbs. from the highest loaded vehicle weight (see 40 CFR 86.079-2 for loaded vehicle weight definition and the table at 40 CFR 86.129-80) associated with the test weight listed in the application for the vehicle, and
- B) Adding the weight of all options that are offered by the original manufac turer for the applicable truck line that were not included in the curb weight reported in the application.

In the case of mutually exclusive options, only the weight of the heavier option is to be used when computing the maximum vehicle weight.

Some original manufacturers provide their sales organizations with a "Data Book" that lists the curb weights of complete Light Duty Trucks equipped with standard equipment (not including the weight of any optional equipment). "The Data Book" also describes the options (including their weight) the original manufacturer offers. A secondary manufacturer may use the "Data Book" Curb weight and option weight to determine the maximum vehicle weight for a given vehicle by adding the weight of every option offered by the original manufacturer for the vehicle to the curb weight in the "Data Book". In the case of mutually exclusive options, only the weight of the heavier options is to be added to the "Data Book" curb weight only when the vehicle in question actually contains thes options.

Those who wish to remove the Pickup box from a Pickup Truck for the purpose of installing special equipment or another type of body should be further advised that a Pickup may require modification in one of the following areas. Before a decision is made to alter a C/K Pickup Model, please be advised of he following considerations:



The maximum vehicle weight (cont'd)

Vehicle:

Analyze the vehicle specification for product content. The option content of a particular vehicle will determine which if any of the four areas of modification might not be applicable to the vehicle alterations contemplated.

Service Parts

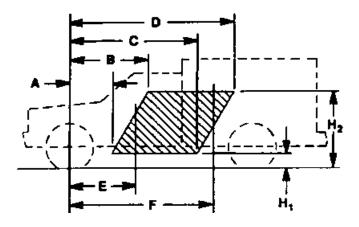
The service parts and related service part number as outlined in the four areas of modification may be ordered throughout your local Chevrolet/GMC Dealer. Contact your Dealer's Service Parts Representative for availability and price.

Areas of Modification

- 1. Fuel filler neck assembly and housing.
- 2. Tail lamp, tail lamp wiring harness and license plate bracket assembly.
- 3. Fuel tank filler pipe ground strap.
- 4. Spare tire mounting.



ALLOWABLE CENTER OF GRAVITY CHARTS



C.G. of vehicle in the FMVSS unladen condition (Curb Wt. + 400 LB.) must be inside the shaded area. In other words, it must be within the trapezoid formed by the coordinates A, B, C, D, H1, H2.

Also, it must be to the rear of verticle line E and forward of vertical line F.

				PICKUP BOX REMOVAL VEHICLES								
MODEL	GVWR WHEELBASE	WHEELBASE	DRIVE	BRAKE	COORDINATES OF ALLOWABLE C.G. VARIATION AT FMVSS UNLADEN					C.G. LIMIT		
			SYSTEM	(CURB Wt.+ 400 LB.)				FORWARD	REARWARD			
					H1	H2	Α	В	С	D	E	F
CC15903	6,400 LB.	133.0"	SW	JC5	12"	48"	34"	60"	71"	95"	41"	95"
CK15903	6,400 LB.	133.0"	SW	JC5	12"	48"	34"	60°	71"	95"	41"	95"
CC25903	7,200 LB.	133.0"	SW	JH6	12"	48"	36"	59"	70"	92"	40"	92"
CC25903*	8,600 LB.	133.0"	\$W	JH6	12"	48"	36"	59"	70"	92"	40"	92"
CK25903*	8,600 LB.	133.0"	sw	JH6	12"	48"	36"	59"	70"	92"	40"	92"
CC25953	8,600 LB.	157.5"	sw	JH6	12"	48"	43"	70"	83"	110"	48"	110"
CK25953	8,600 LB.	157.5"	sw	JH6	12"	48"	43"	70"	83"	110"	48"	110"

SW = SINGLE WHEEL DRIVE

DW = DUAL WHEEL DRIVE

C.G. = CENTER OF GRAVITY

BRAKE SYSTEMS

JC5 = BRAKE VACUUM POWER, 4 WHEEL DISC: 6,400 LB. JH6 = BRAKE HYDRAULIC POWER, 4 WHEEL DISC: 9,900 LB.

* = AVAILABLE WITH ZW9: PICKUP BOX DELETE (INCOMPLETE VEHICLE DOCUMENT INCLUDED)



TABLE 'A'

Model	General Body Type	Maximum Body Center of Gravity Height	Maximum Body Height	Minimum Cab to Body Clearance	Maximum Unloaded Vehicle Weight with Service Body	Maximum Body Weight
CC15903 6,400 LB. GVWR 133.0" WB 55.9" CA Regular Cab	Low Service	14.0"	Under 62.0"	3.0"	5,034 LB.	1,100 LB.
CK15903 6,400 LB. GVWR 133.0" WB 55.9" CA Regular Cab	Low Service	14.0"	Under 62.0"	3.0™	5,246 LB.	1,100 LB.
CC25903 7,200 LB. GVWR 133.0" WB 55.9" CA Regular Cab	Low Service	14.0"	Under 62.0"	3.0"	6,000 LB.	1,400 LB.
CC25903 8,600 LB. GVWR 133.0" WB 55.9" CA Regular Cab	Low Service High Service	14.0" 20.3"	Under 62.0" 62.0" and over	3.0"	7,272 LB.	1,700 LB. 2,600 LB.
CK25903 8,600 LB. GVWR 133.0" WB 55.9" CA Regular Cab	Low Service	14.0"	Under 62.0"	3.0"	6,689 LB.	1,700 LB.
CC25953 8,600 LB. GVWR 157.5" WB 55.9" CA Extended Cab	Low Service High Service	14.0" 20.3"	Under 62.0" 62.0" and over	3.0"	7,272 LB.	1,700 LB. 2,600 LB.
CK25953 8,600 LB. GVWR 157.5" WB 55.9" CA Extended Cab	Low Service	14.0"	Under 62.0"	3.0"	6,689 LB.	1,700 LB.

Max. Body C.G. Height dimensions are measured from top of frame directly behind the cab. Weight of pickup box: 360 LB./Weight of rear bumper: 53 LB.

Max Body Weight = Max. Unloaded Vehicle Weight - Curb Weight without PU Box & Bumper Body Weight + Vehicle Curb Weight must not exceed "Max. Unloaded Vehicle Weight" Curb Wt. can be established by Dealer using Sales Data Book or by having vehicle weighed. Certification label is located inside driver's door frame area (GVWRs and Payload).



PICKUP BOX REMOVAL FUEL FILL SYSTEM MODIFICATIONS FOR GASOLINE VEHICLES

Parts are provided through your Chevrolet/GMC Dealer to convert the fuel fill and vent system to meet the packaging requirements of the particular bodies that are installed on the chassis. See page 8 for part numbers.

Certain guidelines must be adhered to in modifying the fuel fill and vent system to ensure that the completed product meets the manufacturer's requirements.

- 1.) The fuel fill and vent system must be installed such that there is adequate clearance between the fuel fill vent system and the tires under all operating conditions. Body attachment brackets and must also be located such that there is adequate clearance to all fuel system components, such as the fuel lines and the fuel level sending unit, under all operating conditions.
- 2.) The fuel fill / vent pipe system available from the dealer includes a number of additional hose retaining beads. The pipe can be trimmed at the hose retaining beads to adjust for the various chassis lengths and body widths. The pipes must be trimmed only at locations where a hose retaining bead is present. A hose retaining bead must be present at each pipe to hose interface in a modified fuel fill and vent system. Pipe ends must be free of burrs which may be detrimental to satisfactory assembly and, or function.
- 3.) A minimum of 8.0 inches of fill hose must be maintained between the filler neck and the fuel tank as measured in an outboard direction from the tank surface (at the fill hose nipple) to the outlet end of the filler neck.
- 4.) Both the fill and the vent hoses must be routed (and supported, if needed) such that there are no sags or kinks. Excess hose length may be removed as required provided hose does not kink. As viewed from the filler neck, pipes and hoses must have a downward slope toward the tank. There should be a minimum of 4° of downward slope in the fill and vent pipes at any location.
- 5.) The fuel fill and vent system should be restrained in the upfit vehicle. This is necessary to avoid chaffing, fretting, rubbing, etc. which may cause wear to the pipes or hoses.



PICKUP BOX REMOVAL FUEL FILL SYSTEM MODIFICATIONS FOR GASOLINE VEHICLES (Cont'd)

- 6.) Fuel fill hose clamps are to be tightened to 22 lb-in torque.
- 7.) Fuel vent hose clamps are to be tightened to 16 lb-in torque.
- 8.) Route the rear axle vent hose using the clips on the frame and the bracket on the fuel filler neck assembly.

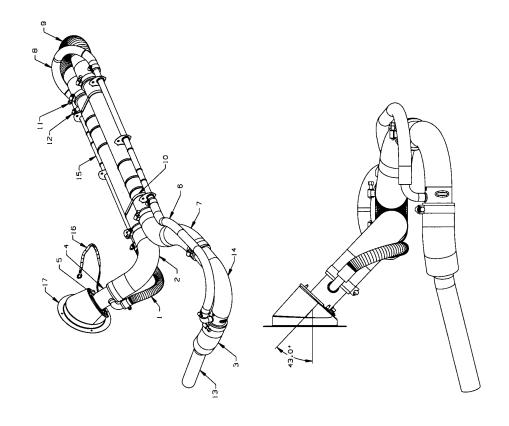
The FMVSS Regulations and the U.S. EPA and California Exhaust and Evaporative Emission Requirements found in the 1999 Body Builder Manual (Current C/K Pickup Box Removal Program Section) are valid for the 1999 All New Silverado/Sierra Pickup Box Removal Program. Please refer to the Current C/K Pickup Box Removal Program Section of the 1999 Body Builder Manual to assure compliance.

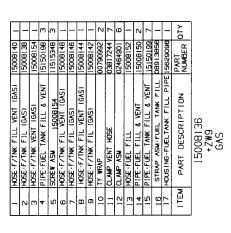
The parts required to replace the existing fuel fill system (-ZW9) are:

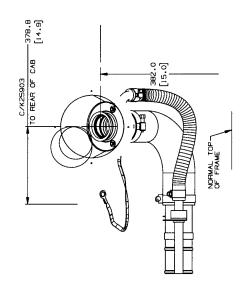
Pipe Assembly-Fuel Tank Filler
 Pipe Tank Filler Cap
 Part Number: 15008136
 Part Number: 15001538



Upfitter Integration

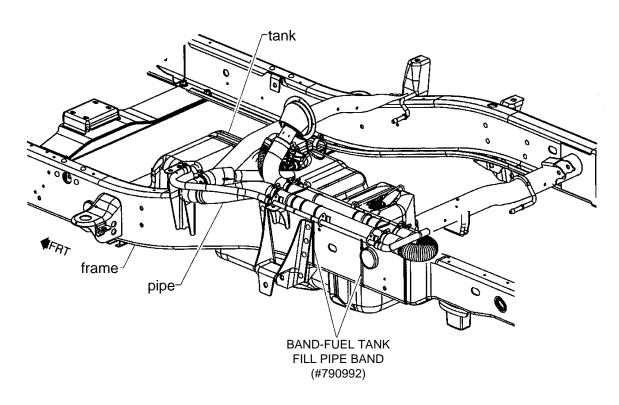








FUEL FILLER PIPE ASSEMBLY TO FRAME

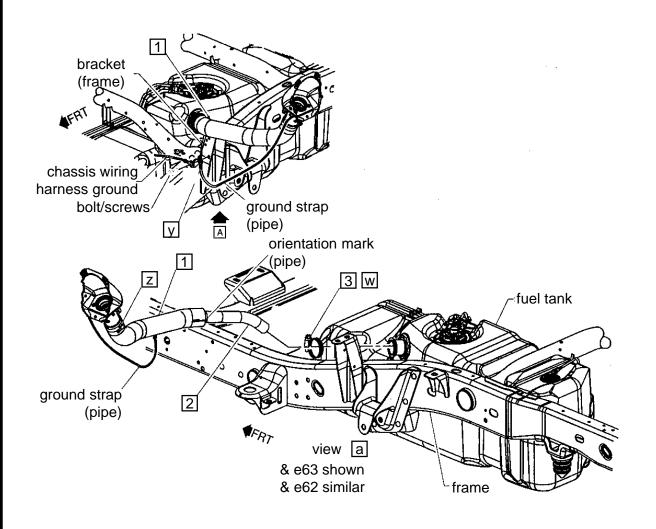


INSTALL FUEL FILL PIPE TO LH FRAME RAIL WITH (Z) STRAP



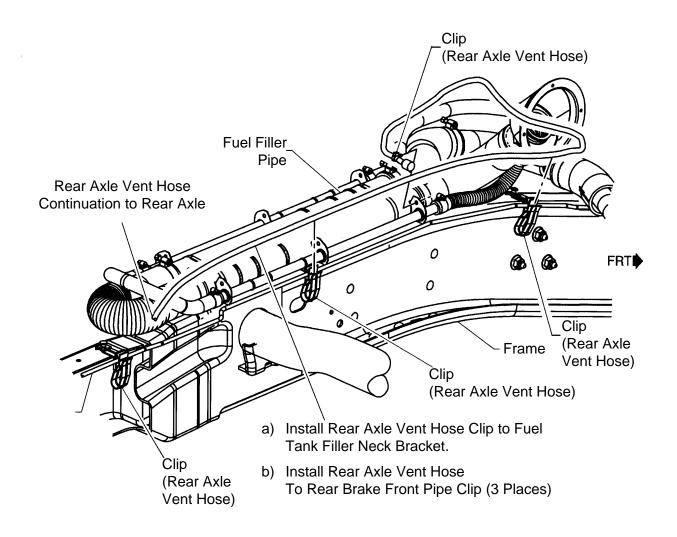
Upfitter Integration

- 1 PIPE ASM
- 2 LUBRICANT APPROX. 0.0020
- 3 ELAMP (22lb.in)
- W CLAMP MUST BE ORIENTED BETWEEN 0°-60° AS
- ₩NAL MUST POINT
- Z BRINT CLAMP AS SHOWN



PICKUPS WITHOUT (ZW9)



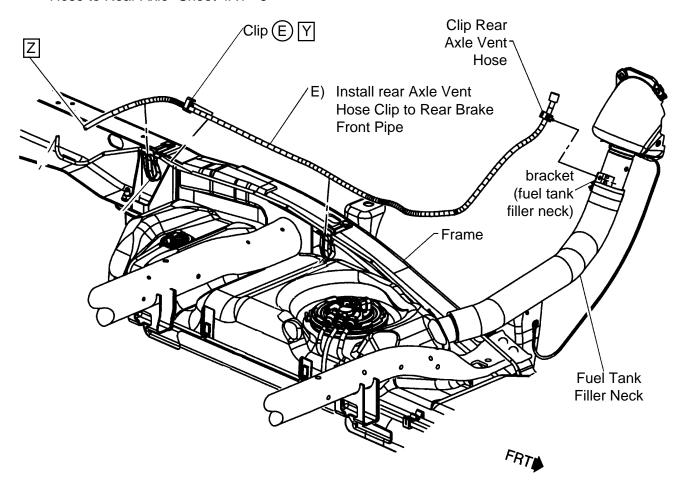


Rear Axle Vent Hose (zw9)



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- Secure Vent Hose Clip to Brake Line 10-25mm Forward of Basket Clip.
- For Continuation Of ose See "Rear Axle Vent Hose to Rear Axle" Sheet 4A1 3



Rear Axle Vent Hose (zw9)



PICKUP BOX REMOVAL TAIL LAMP WIRING MODFICATIONS

REAR JUNCTION BLOCK

The taillamp wiring on the All New C/K is routed to a junction block located at the rear of the vehicle. This junction block interfaces with the rear chassis harness and breaks out the license lamp, left turn lamp and right turn lamp connections (see page 16 for connector face view). A schematic diagram of the Rear Junction Block and taillamp circuits is shown on page 17. On trucks without the Pickup Box Delete (ZW9) option, this junction block is attached to the underside of the box and therefore must be relocated when removing the box. On trucks with ZW9, this junction block is attached to the left frame rail (see pages 18 & 19).

The parts required to relocate the Rear Junction Block to left frame are as follows:

Junction Block
 Junction Block Bracket
 Bolt/Screw (two required)
 Part Number: 12191376
 Part Number: 15034931
 Part Number: 11516885

REAR TAIL LAMPS AND LICENSE PLATE LAMP

Trucks originally ordered with the ZW9 option will come equipped with separated function (stop, turn, park, backup) tail lamps which are mounted vertically and attached to the frame rails. these lamps were designed such that they will also comply with the requirements of FMVSS 108 if re-mounted horizontally (and to the FMVSS guidelines) by the upfitter. The license plate lamp assembly will be attached to the left frame rail as shown on page 20. Pages 20 to 24 provide the assembly sequence for the tail lamps and license plate lamp assemblies for trucks built with the ZW9 option.

The parts required to install the rear tail lamps and license plate lamp assembly are as follows:

Taillamp Assembly - LH
 Taillamp Assembly - RH
 Rear License Plate Lamp Assembly
 Stud/plate Assembly (two required)
 Nut (four required)
 Part Number: 15029718
 Part Number: 15154884
 Part Number: 15008506
 Part Number: 11516796



PICKUP BOX REMOVAL TAIL LAMP WIRING MODFICATIONS

COMBINATION LAMPS ON ALL NEW C/K CHASSIS

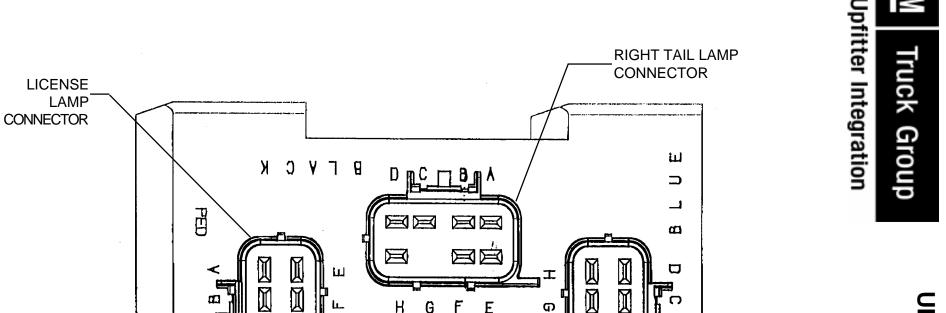
The All New C/K tail lamp wiring was designed for separated function Stop and Turn lamps, therefore, the tail lamp feeds from the rear junction block cannot be used directly for combination stop/turn lamps. Feeds for combined stop/turn lamps are, however, available off of the trailer tow harness. Trailer wiring is incorporated on all of the All New C/K trucks in one of two forms, Light Duty trailer wiring or Heavy Duty Trailer Wiring. On trucks with Light Duty trailer wiring, the trailer harness is tied back to rear cross member (see Basic Trailer Wiring Package on page 25). On trucks with Heavy Duty trailer wiring the trailer harness is run to the universal trailer connector at the rear of the vehicle (see Heavy Duty Trailer Wiring Package on page 25).

The Left Stop/Turn Lamp feed can be accessed from the Yellow wire (circuit 1618). The Right Stop/Turn Lamp feed can be accessed from the Dark Green wire (circuit 1619). A schematic diagram of the above mentioned trailer feed circuits is provided on page 26. If using these feeds, the upfitter must consider whether the truck will be used for trailer towing. If so, the upfitter must ensure that the loads of the truck stop/turn lamps combined with the trailer stop/turn lamps do not exceed the capacity of the circuits. Load guidelines for this as well as splicing guidelines can be found in the Upfitter Integration Electrical Guideline Manual.

REAR CHASSIS WIRING HARNESS AND REAR LAMP CONNECTOR FACES

A connector face diagram of the Rear Chassis Harness Connector is shown on page 27. As was mentioned above, under the Rear Junction Block heading, the Rear Chassis Harness interfaces with the Rear Junction Block where the rear lamp circuits are broke out. If the upfitter prefers to interface directly with this connector, thus eliminating the Rear Junction Block, an in-line mating connector is available and can be obtained by ordering part number 15326788. Connector faces for the Tail Lamp Connectors and Rear License Plate Lamp Connector are also provided and are shown on pages 28 through 30. Please note that these connectors can either be purchased from a local GM dealer or through Packard by calling 1-800-PACKARD (722-5273).

REAR JUNCTION BLOCK AS VIEWED FROM REAR OF VEHICLE WITH ZW9



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LEFT TAIL LAMP

CONNECTOR

(T)

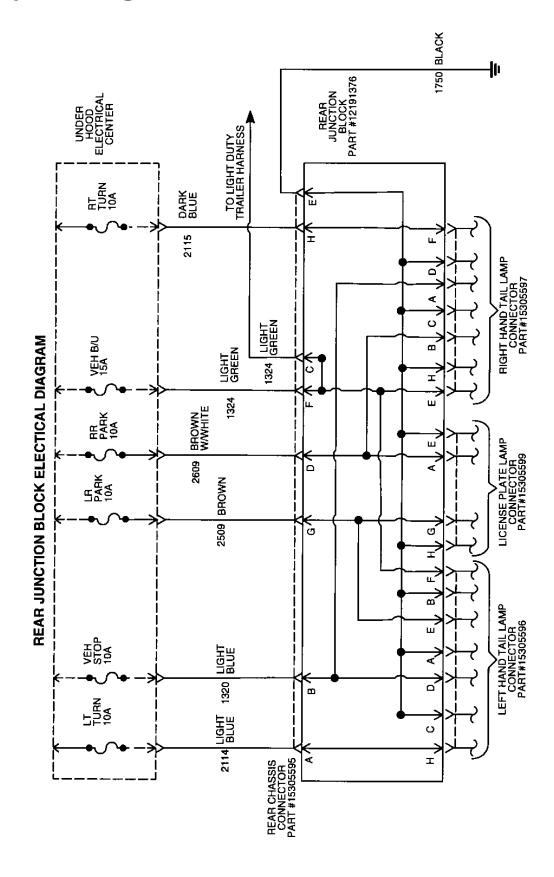
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REAR CHASSIS HARNESS CONNECTOR

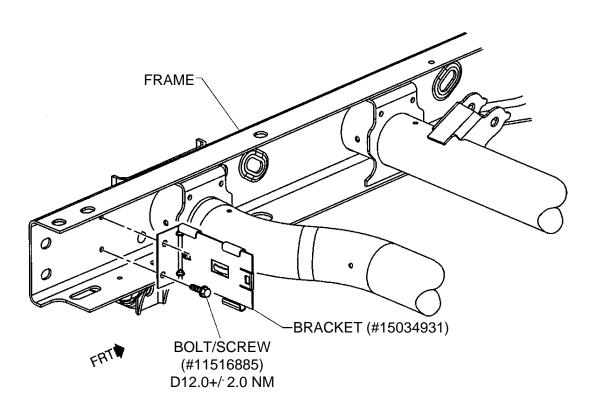


Upfitter Integration





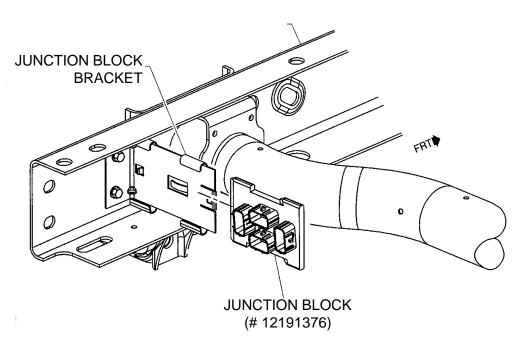
REAR JUNCTION BLOCK BRACKET TO FRAME



JUNCTION BLOCK BRACKET ATTACHED TO FRAME WITH (2) BOLT/SCREWS



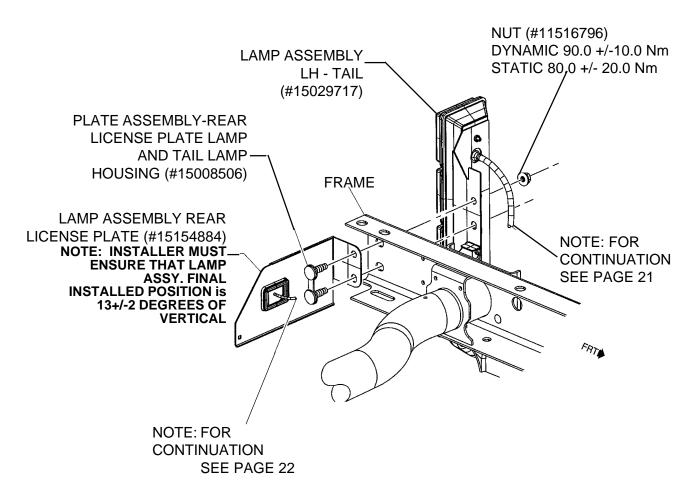
REAR JUNCTION BLOCK INSTALLATION



JUNCTION BLOCK INSTALLED TO JUCTION BLOCK BRACKET



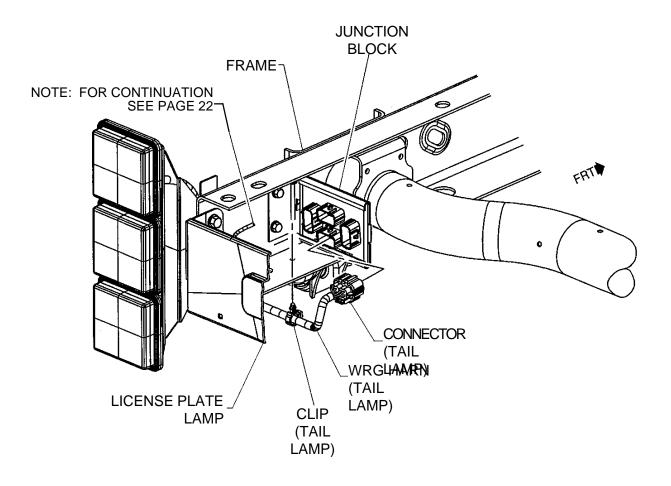
LEFT HAND TAIL LAMP TO FRAME



LICENSE PLATE LAMP AND TAIL LAMP ASSEMBLIES ARE FASTENED TO FRAME RAIL WITH PLATE ASSEMBLY AND TWO NUTS.



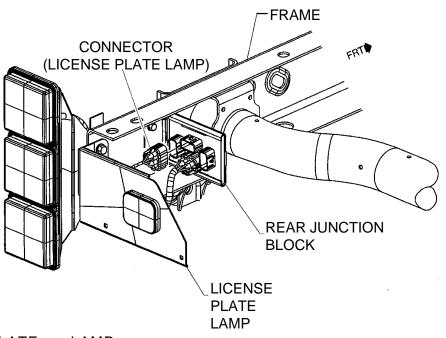
LEFT HAND TAIL LAMP TO JUNCTION BLOCK



TAIL LAMP HARNESS IS FASTENED TO FRAME WITH CLIP AS SHOWN. CONNECTOR IS THEN MATED WITH THE REAR JUNCTION BLOCK.



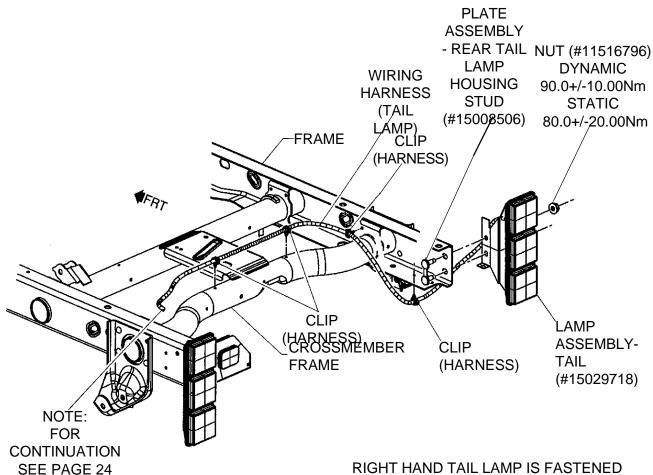
LICENSE PLATE LAMP TO REAR JUNCTION BLOCK



LICENSE PLATE LAMP ASSEMBLY CONNECTOR IS MATED WITH REAR JUNCTION BLOCK.



RIGHT HAND TAIL LAMP TO FRAME

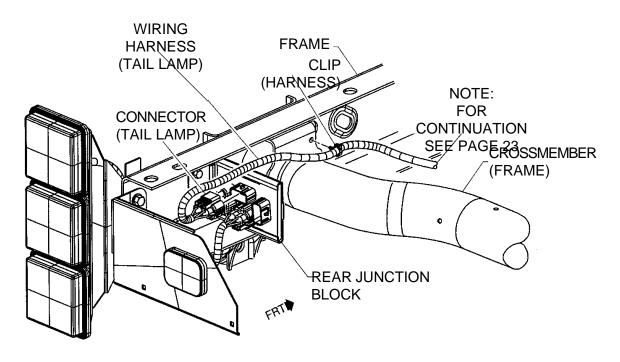


TO FRAME WITH (1) STUD PLATE AND (2) NUTS. TAIL LAMP HARNESS IS FASTENED TO FRAME WITH (2) CLIPS AND FASTENED TO CROSSMEMBER WITH (2) CLIPS.

note: procedure does not show backup alarm (8s3)

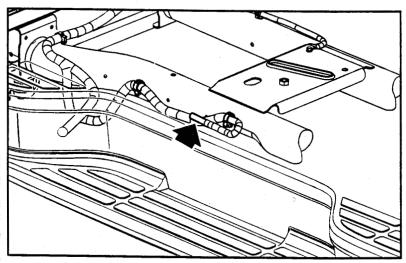


RIGHT HAND TAIL LAMP TO FRAME

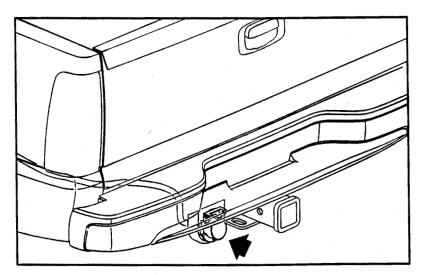


RIGHT HAND TAIL LAMP
CONNECTOR IS MATED WITH
REAR JUNCTION BLOCK.
NOTE: PROCEDURE DOES NOT
SHOW BACK-UP ALARM
(8s3)

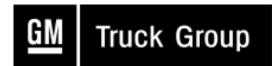




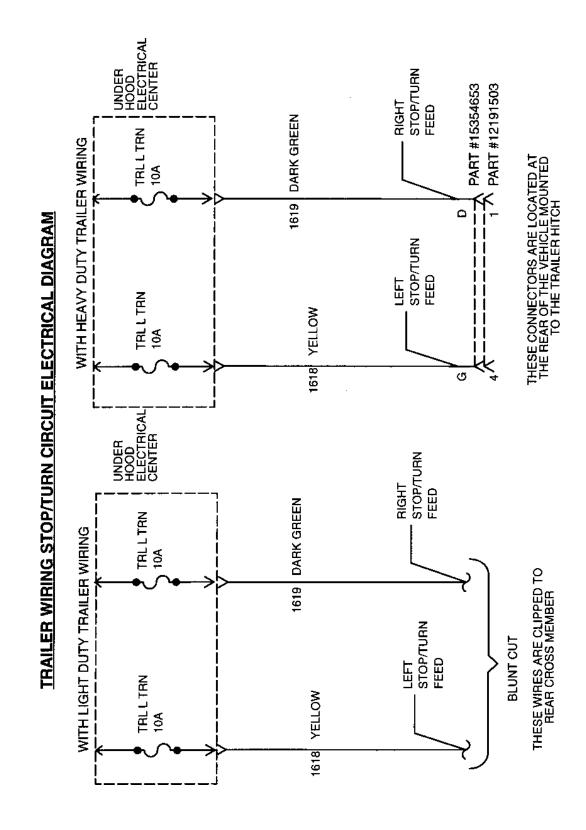
BASIC TRAILER WIRING PACKAGE



HEAVY DUTY TRAILER WIRING PACKAGE (IF EQUIPPED)

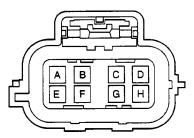


Upfitter Integration





REAR JUNCTION BLOCK - REAR CHASSIS HARNESS CONNECTOR



CAVITY	WIRE COLOR	CIRCUIT NO.	<u>FUNCTION</u>
А	LIGHT BLUE	2114	LEFT TURN SIGNAL
В	LIGHT BLUE	1320	STOP LAMPS (CHMSL)
C*	LIGHT GREEN	1324	VEHICLE BACKUP LAMPS-FEED TO LIGHT DUTY TRAILER WIRING
D	BROWN W/WHITE	2609	HARGES REAR PARKING LAMPS
Е	BLACK	1750	GROUND
F	LIGHT GREEN	1324	VEHICLE BACKUP LAMPS
G	BROWN	2509	LEFT REAR PARKING LAMPS
Н	DARK BLUE	2115	RIGHT TURN SIGNAL

^{*}This pin is used only on trucks with light duty trailer wiring. on trucks with heavy duty trailer wiring, this connector will be a 7-way connector

Connector Infomation

8-way Connector Assy. Part No.:15317304 Color: Blue 7-way Connector Assy. Part No.:15317309 Color: Purple

Mating Connector Information

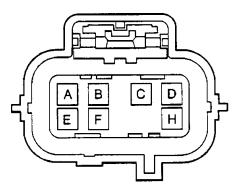
In addition to the Rear Junction Block, the rear junction block connector (both 7-way and 8-way) can be mated with the following in-line connector:

Connector Part No.: 15326788

Primary Lock Reinforcement (PLR): 15326794 Total Position Assurance (TPA) clip: 15317301



REAR JUNCTION BLOCK - LEFT HAND TAIL LAMP CONNECTOR



CAVITY	WIRE COLOR	CIRCUIT NO.	<u>FUNCTION</u>
А	BLACK	1750	GROUND - LH STOP/ PARK LAMPS
В	BLACK	1750	GROUND - LH BACKUP LAMP
С	BLACK	1750	GROUND-LH TURN SIGNAL LAMP
D	LIGHT BLUE	1320	LEFT STOP LAMP
Е	BROWN	2509	LEFT REAR PARKING LAMP
F	LIGHT GREEN	1324	LEFT BACKUP LAMP
G			NOT USED
Н	LIGHT BLUE	2114	LEFT TURN SIGNAL

Connector Infomation

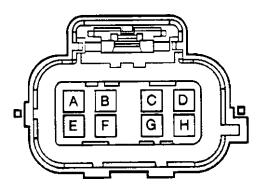
8-way Connector Assy. Part No.:15317305

Color: Gray

Primary Lock reinforcement (PLR): 15326794 Total Position Assurance (TPA) clip: 15317301



REAR JUNCTION BLOCK - LICENSE PLATE LAMP CONNECTOR



CAVITY	WIRE COLOR	CIRCUIT NO.	<u>FUNCTION</u>
А	BROWN W/WHITE	2609	RIGHT LICENSE PLATE LAMP
В			NOT USED
С			NOT USED
D			NOT USED
E	BLACK	1750	GROUND-RIGHT LICENSE PLATE LAMP
F			NOT USED
G	BROWN	2509	LEFT LICENSE PLATE LAMP
Н	BLACK	1750	GROUND - LEFT LICENSE PLATE LAMP

Connector Infomation

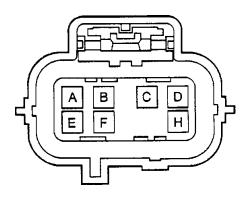
Connector Assy. Part No.: 15317307

Color: White

Primary Lock Reinforcement (PLR): 15326794 Total Position Assurance (TPA) clip: 15317301



REAR JUNCTION BLOCK - RIGHT HAND TAIL LAMP CONNECTOR



<u>CAVITY</u>	WIRE COLOR	<u>CIRCUIT NO.</u>	<u>FUNCTION</u>
Α	LIGHT BLUE	1320	RIGHT STOP LAMP
В	BROWN W/WHITE	2609	RIGHT REAR PARKING LAMP
С	BLACK	1750	GROUND - RH STOP/ PARK LAMP
D	BLACK	1750	GROUND - RH TURN SIGNAL LAMP
Е	LIGHT GREEN	1324	RIGHT BACKUP LAMP
F	DARK BLUE	2115	RIGHT TURN SIGNAL LAMP
G			NOT USED
Н	BLACK	1750	GROUND - RH BACKUP LAMP

Connector Infomation

Connector Assy. Part No.: 15317306

Color: Black

Primary Lock Reinforcement (PLR): 15326794 Total Position Assurance (TPA) clip: 15317301



REAR BUMPER REMOVAL WIRING MODIFICATIONS

Trucks ordered with the Rear Bumper Delete (VF7) option will come equipped with the Rear License Plate Lamp Assembly which is fastened to the left frame rail as shown on page 32. The License Plate Connector is mated with the Rear Junction Block as shown on page 33.

The parts required to attach the Rear License Plate Lamp Assembly to the left frame rail are as follows:

Rear License Plate Lamp Assembly

Stud/plate Assembly (one required)

Nut (two required)

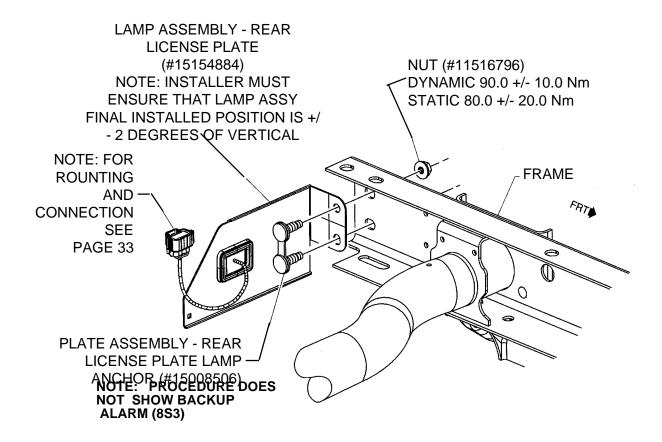
Part Number: 15154884

Part Number: 15008506

Part Number: 11516796



LICENSE PLATE LAMP TO REAR JUNCTION BLOCK

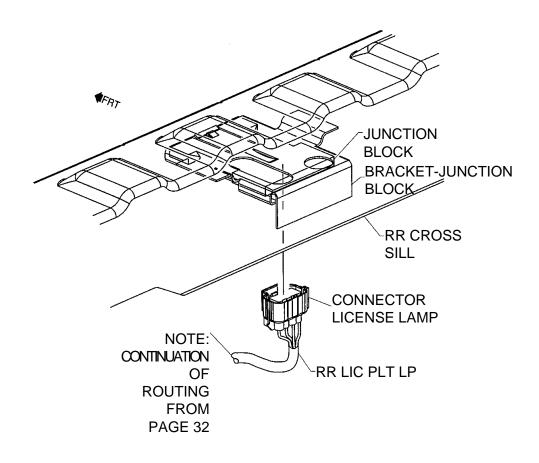


LICENSE PLATE LAMP ASSEMBLY ATTACHED TO FRAME WITH (1) ANCHOR PLATE AND (2) NUTS.

PICKUP WITH REAR BUMPER DELETE (VF7)



LICENSE PLATE LAMP TO REAR JUNCTION BLOCK



LICENSE PLATE LAMP CONNECTOR IS MATED TO JUNCTION BLOCK

PICKUP WITH REAR BUMPER DELETE (VF7)