



UI BULLETIN #52

SUBJECT: All New C/K Trailer Tow Wiring

MODELS AFFECTED: All New C/K

MODEL YEAR(S): 1999 and Beyond

DATE: 2/4/02

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ALL NEW C/K TRAILER TOW WIRING

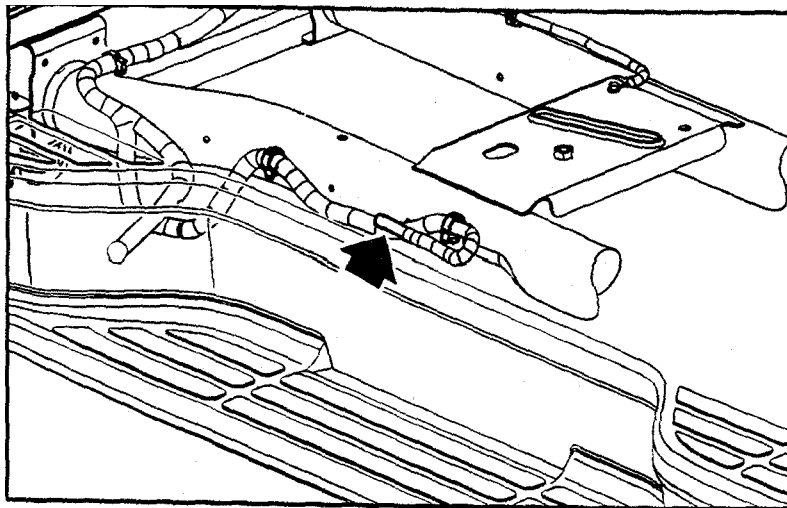
The All New C/K is equipped with a number of trailer wiring packages and provisions which were not available on the Classic C/K trucks. The All New C/K is available with three basic Trailer Wiring Configurations:

- **Light Duty** (standard on pickup) which consists of 6 blunt cut wires located at the rear of the truck.
- **Heavy Duty** (Z82 option) includes a seven pin universal trailer connector which is mounted on the trailer tow bracket at the rear of the truck. This option also provides a trailer brake control jumper and in-cab connector which can be used for a body builder added trailer brake control.
- **Camper/Fifth Wheel Trailer Wiring Package** (UY2 option)
Available on all pickups, this option provides an eight-wire harness which is located under the front left edge of the pickup box.

Each of the above options and related features as well as conversion kits are described in detail in the following pages.

LIGHT DUTY TRAILER WIRING (PICKUP ONLY)

Light Duty trailer wiring is standard on All New C/K pickups and consists of six blunt cut wires which are located at the rear of the vehicle and tied to the frame as shown below:



The six-wire harness consists of the following trailer circuits:

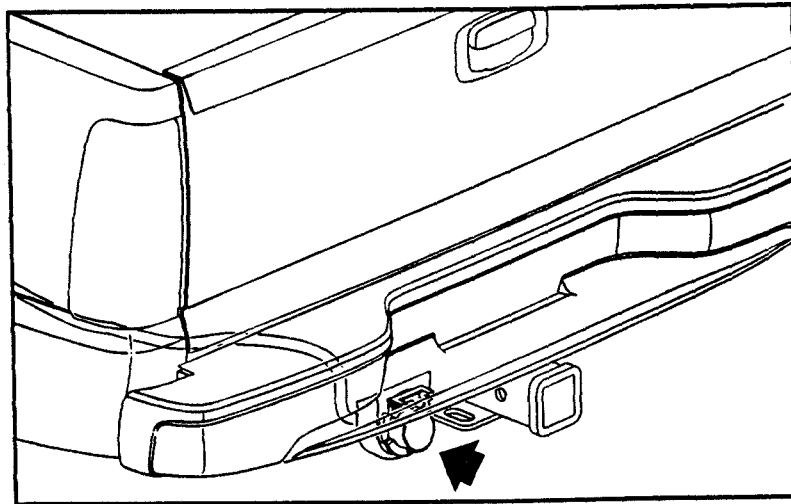
- Yellow: Left Stop/Turn Signal
- Dark Green: Right Stop/Turn Signal
- Brown: Tail lamps
- White: Ground
- Light Green: Backup Lamps
- Light Blue: Center High-Mounted Stop Lamp (CHMSL)

A schematic diagram of the Light Duty Trailer Wiring is provided in the appendix of this bulletin.

The harness requires the installation of a trailer wiring harness connector. This wiring can also be upgraded for heavy duty trailering through a conversion kit, which is available through a GM dealer. Information on the heavy duty trailer wiring and further details on the conversion kit are covered in the next section.

HEAVY DUTY TRAILER WIRING (w/RPO Z82)

Heavy Duty trailer wiring is available for All New C/K pickups and utilities and is provided with the Heavy Duty Trailer Equipment Package (Z82). This package includes a seven way universal trailer connector which is mounted to the trailer platform hitch as shown:



Note: A one pin CHMSL connector is provided on pickup and cab-chassis trucks only. This connector (hidden in this view) is tied to the trailer harness and located just forward of the trailer connector. This connector is available for use with a trailer, slide in camper or cap.

The universal trailer connector contains all the circuits (with the exception of CHMSL) provided by the Light Duty trailer harness with the addition of the following circuits:

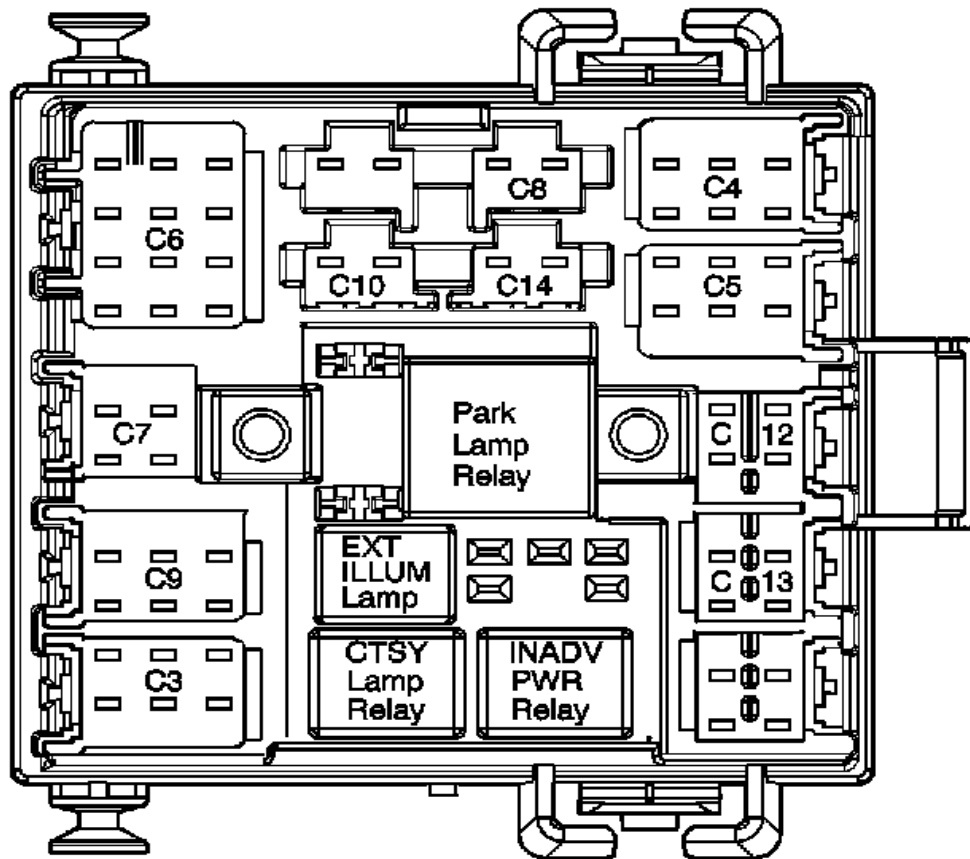
- Red: Battery Feed (12 gauge)
- Dark Blue: Trailer Brake (12 gauge)

In addition the White Ground lead is upgraded from 16 gauge (Light Duty wiring) to 10 gauge. A schematic diagram of the heavy duty trailer wiring package is provided in the Appendix of this bulletin.

HEAVY DUTY TRAILER WIRING (Continued)

The Heavy Duty trailer wiring package also includes a trailer brake jumper harness (part #15366255) for an electric trailer brake controller. This jumper harness consists of approximately 8 feet of blunt cut wiring attached to a 6 way connector. The jumper harness interfaces with the TRLR receptacle (C5) on the Mid Bussed Electrical Center (MBEC). The MBEC is located inside the cab under the dash on the left hand side of the vehicle.

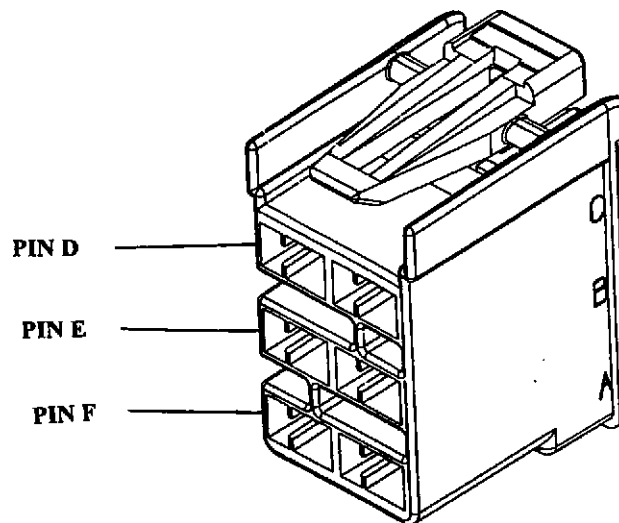
Mid Bussed Electrical Center (MBEC)



The trailer brake jumper harness is for the upfitter/body builder to use when installing an electric trailer brake controller system. A description of the TRLR circuits is provided on the following page.

HEAVY DUTY TRAILER WIRING (Continued)

The trailer brake jumper harness connector is shown below along with a listing of the trailer brake control circuits that can be accessed through the MBEC TRLR connector:



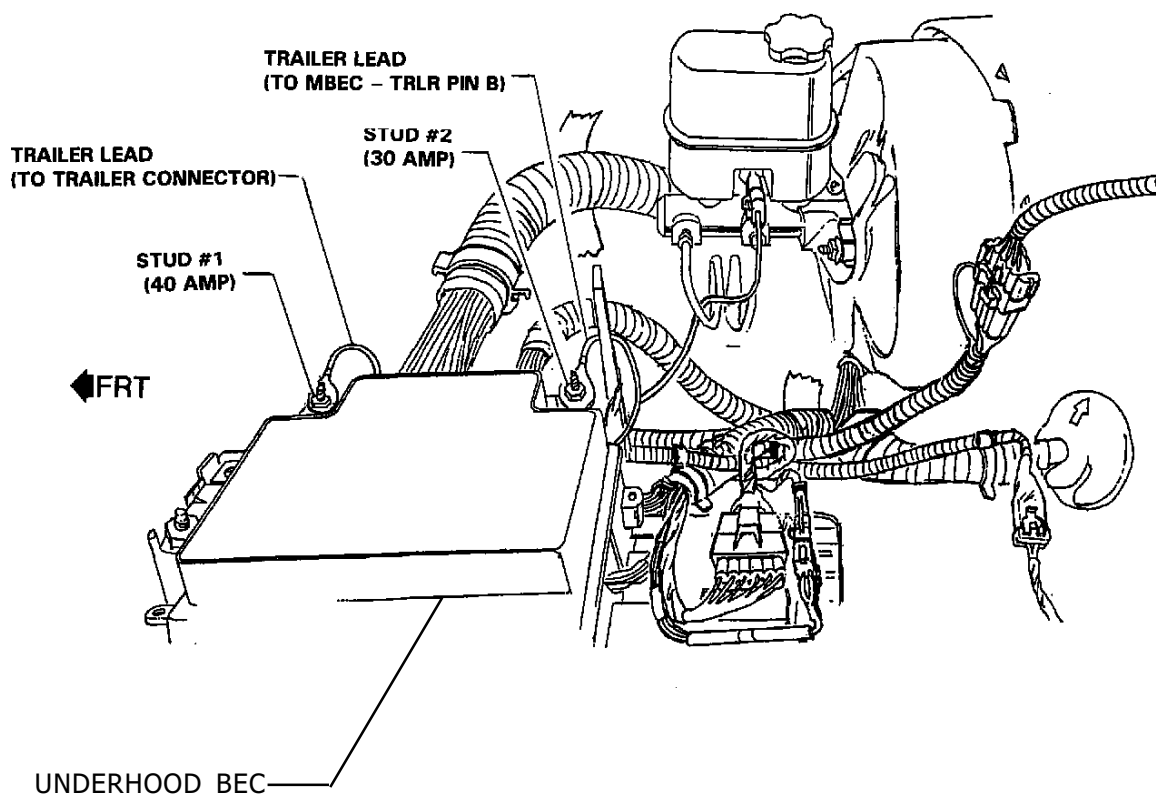
- A - Light Blue: Trailer CHMSL (Brake Switch)
- B - Red: Battery (Fused to 30 Amps)
- C - Dark Blue: Trailer Brake (to 7-way trailer connector)
- D - Brown: Interior Park Lamp
- E - Not Used
- F - Black: Ground

With the exception of the Dark Blue trailer brake circuit (pin C), these above circuits are active and available on trucks that are not equipped with the Heavy Duty trailer wiring. To access these circuits, the upfitter/body builder can purchase the mating connector shown above (part #12193926) from Pioneer, the distributor for Packard, by calling 1-800-PACKARD. The trailer brake jumper harness, which includes the connector and 8' of wiring, can also be purchased separately from a GM dealer.

UPFITTER INTEGRATION

HEAVY DUTY TRAILER WIRING (Continued)

The All New C/K trucks are shipped from the assembly plant with the trailer Battery Hot lead disconnected. To provide power to the trailer hot lead, the 40 Amp Maxi-Fuse (which is provided in a separate package) must be installed at the Stud #1 location in the Underhood BEC. The Underhood BEC is located on the left side of the engine compartment. The Underhood BEC and trailer battery wiring is shown below:



The trailer battery ring terminal on Stud #2 is fused with 30 Amp Maxi-Fuse. This circuit provides power to the MBEC TRLR connector inside the cab.



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HEAVY DUTY TRAILER WIRING (w/o RPO Z82)

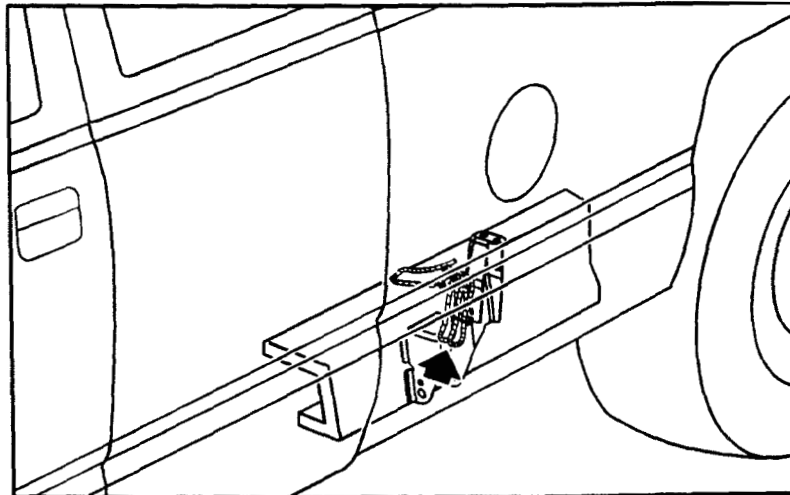
In certain cases, the heavy duty trailer wiring will be provided on trucks that do not have the Z82 package or trailer platform hitch. In general, this wiring will be provided on all Utility trucks, cab chassis trucks and those pickups equipped with the Manual Selectable Ride Option (ZX3). In this case, the trailer harness will consist of the 7 heavy duty trailer circuits as described in the previous section and the 1-way CHMSL on pickups and chassis cab trucks only. The trailer wiring will be tied back to the rear cross member. The trailer brake jumper harness is not included with the cab chassis models and must be purchased separately from a GM Dealer.

HEAVY DUTY TRAILER WIRING CONVERSION PACKAGES

- Light Duty to Heavy Duty Wiring. Trucks with Light Duty trailer wiring can be upgraded to have the Heavy Duty trailer wiring features as described in the section on Heavy Duty Trailer Wiring w/o Z82. A heavy duty wiring conversion kit (part #12495932) can be purchased through a GM dealer. This kit consists of an underbody harness kit w/seven pin universal trailer connector (part #12463530) and instruction sheet (part #12463639). Part #12463530 includes the seven pin trailer connector, connections for the Light Duty blunt cut wires, ground connection and chassis wiring which runs to the Underhood BEC (Stud #2), and the trailer brake circuit. The Trailer Brake Jumper Harness can also be purchased from a GM dealer.
- Heavy Duty to Light Duty Trailer Connector. A seven-way to four-way connector adapter (part # 12496599) can be purchased through a GM dealer. This allows trucks with the Heavy Duty Trailer Wiring to be compatible with four-way trailer connectors.

CAMPER/FIFTH-WHEEL TRAILER WIRING

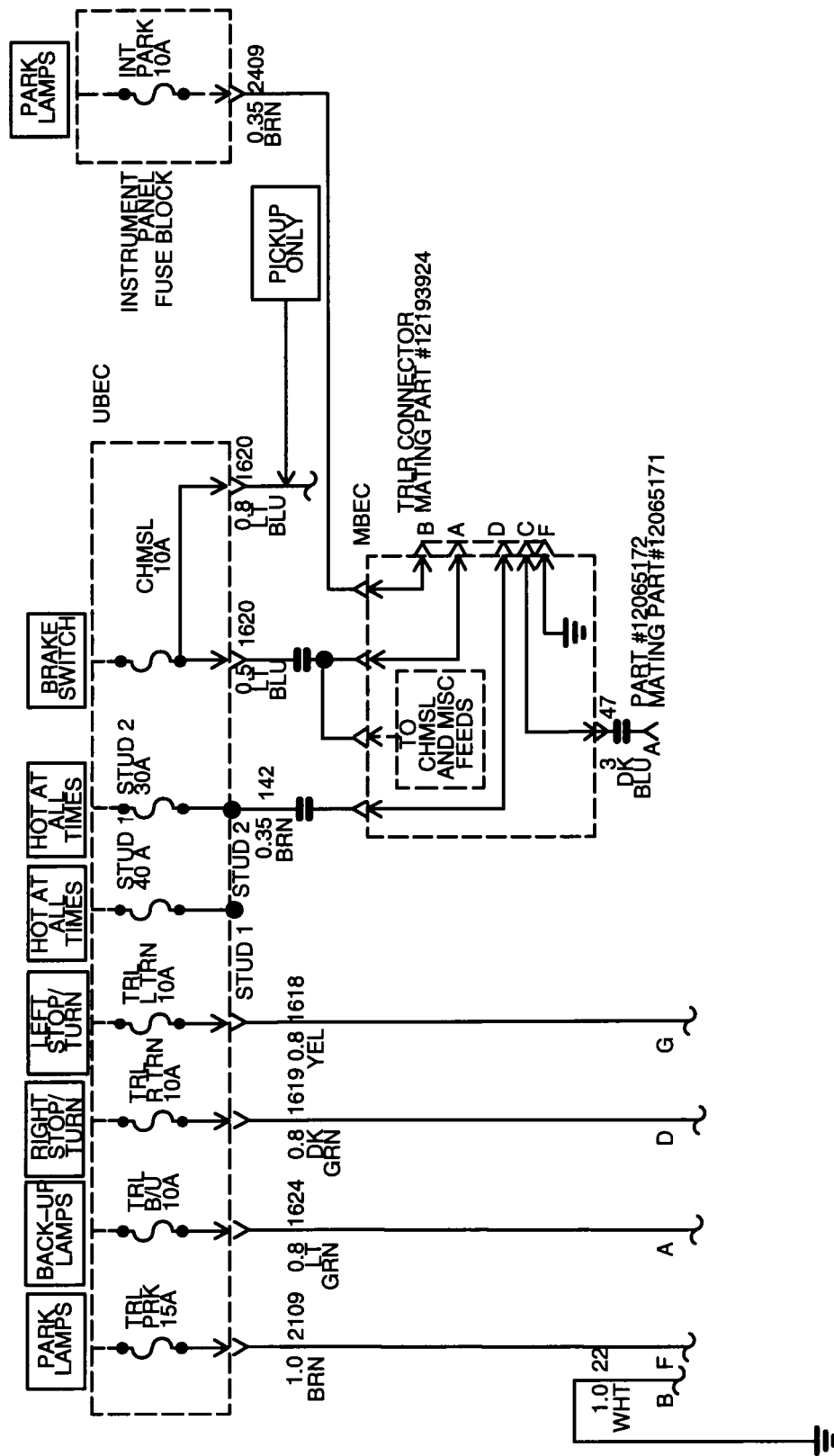
Camper/Fifth Wheel Trailer Wiring (RPO UY2) is available on all pickup trucks. It consists of an extension to the eight wire trailer harness. This extension is routed up to the front edge of the pickup box on the driver's side of the vehicle and is attached to the frame bracket as shown below:



At that point, approximately 4 feet of blunt cut wire is available which can be extended up to a camper by routing it between the pickup box and cab. There are two holes in the front of the pickup box provided for retaining clips to retain that wiring. The Camper/Fifth-Wheel harness provides the seven circuits provided by the Heavy Duty trailer wiring in addition to a CHMSL feed.

The Camper/Fifth Wheel harness is available as option UY2 on 1500 /2500/2500HD/3500 series pickup trucks equipped with Z82 (Heavy Duty Trailer Equipment Package).

APPENDIX LIGHT DUTY TRAILER WIRING (PICKUP ONLY)





APPENDIX HEAVY DUTY TRAILER WIRING SCHEMATIC

