

Dodge Ram BACKUP CAMERA INSTALLATION

Thank you for your purchase! These instructions are intended for the do-it-yourselfer who decides to install the camera without professional assistance. Keep in mind you will be installing a device that uses electrical power from your computer controlled truck. If you are not confident in your ability to attach this device without frying your electrical system, new camera, or yourself please seek PROFESSIONAL INSTALLATION!

BEFORE YOU BEGIN

Cables: The camera harness is 4 feet long and will get you through the bottom of your tailgate and through the back of the bed. The chassis harness is 25' long and is designed so that all electrical connections can be made inside the cab as per the wiring instructions contained in this document. The camera connector should be tied up in an accessible location by the spare tire area so it can be accessed for tailgate removal.

This kit is designed to be connected to a Lockpick, aftermarket navigation, or external monitors. It will connect to any monitor with an RCA input.

REQUIRED TOOLS

Socket Wrench
8mm Socket
T30 Torx Bit
Flat Head Pocket Screwdrivers
Razor Knife
RTV or Butyl Sealant

Section 1: Setting up for the installation

Unpack the contents of the package and gather the required tools listed above so you can be sure you have everything you need before you begin. In the package you should have the tailgate handle with camera, chassis harness, and a ziplock bag containing 2 red tap splices, 1 U-terminal, and a handful of zip ties.

1. It is not necessary to remove the tailgate to install this camera system. It is also not necessary to drill any holes as we will be using the holes that already exist.
2. Remove the tailgate backing panel using a T-30 Torx bit (Image 1).

3. Remove the red clips from the existing tailgate handle by unsnapping them with your fingers. Remove the rods from the handle (Image 2).
4. Remove the 8mm bolts holding the handle onto the tailgate and remove handle.
5. Install new handle into tailgate in reverse order dropping the camera cable through the existing holes in the bottom of the tailgate and the back of the bed. Be sure to secure the red clips on the tailgate latch properly to ensure they do not come apart through vibration etc.



IMAGE 1

Section 2: Route the chassis harness into the cab

1. From under the vehicle, connect the chassis harness to the camera harness plug. BE CAREFUL AS IT IS KEYED AND CAN ONLY GO TOGETHER ONE WAY! DO NOT FORCE IT TOGETHER!
2. Run the chassis harness to the driver's side firewall area securing it with the included zip ties along the frame rail and away from any moving parts. Be careful that the cable didn't come disconnected from the camera while you were pulling it through the chassis.
3. We will be penetrating the cab through a large grommet located by the gas pedal area. This is the grommet that the hood latch cable goes through. Strip access loom from the camera harness as we will only be pulling raw wire through this grommet, not the loom.
4. Remove the grommet from the firewall and open it up enough to get the camera harness run through. It may be necessary to slice it open a little farther in order to make room for the cable to pass through. If you end up having to cut the grommet be sure to re-seal it using RTV or Butyl sealer as necessary to ensure a water tight seal.
5. Once the camera wires are routed through the grommet push the grommet back into place and use the included zip ties to secure the wires out of the way.
6. As a final check make sure that the cable is now secure from all moving parts under the vehicle, through the holes in the box and tailgate. Coil up any excess cable behind the dash or console and secure it with a zip tie. Again, use the RTV or butyl tape to seal the grommet that you poked a hole in previously or you will end up with we carpet!



IMAGE 2

Section 4: Wire connections

1. If you are connecting your camera to a LockPick you should attach all the camera harness connections to the appropriate input on the Lockpick. All connections are clearly labeled. Otherwise go to next step.
2. Plug the RCA video cable into the input on your receiver or aftermarket monitor. Secure the excess cable so it will not interfere with anything under the dash.

3. Connect the black ground wire to any clean metal surface using the included u-terminal.
4. Remove the driver's side kick panel to gain access to the instrument panel wiring connector (Image 3). This is the wiring bundle to the left of where the steering shaft goes through the floor.
5. Locate the white and red wire from cavity 7 (see appendix) and splice the red wire from the camera harness to this wire. This is the reverse trigger

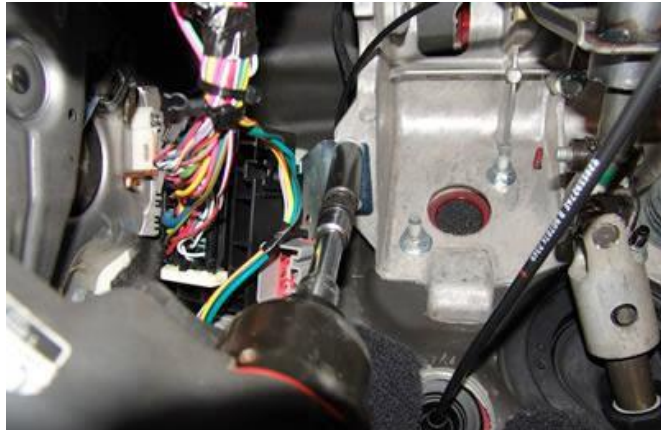


IMAGE 3

wire. If you would like your camera to be powered constantly you will wire the camera red wire to the truck's pink and light green wire from cavity 16 in the connector. NOTE: the only reason you would want your camera powered on the accessory power (pink/lt grn) is if you wanted access to your camera other than in reverse.

Section 5: Test

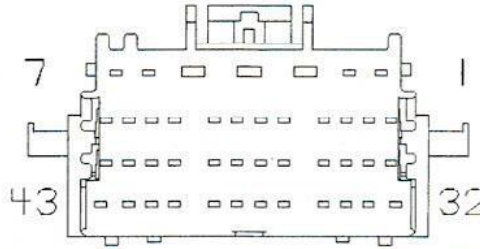
Start the engine and place the truck into reverse making sure that the screen displays properly. If so, you're ready for the next step. If not, chances are that something isn't connected properly. Make sure the camera plug is firmly seated in the chassis harness as this would cause the camera to not function. If everything works go to the next step, otherwise see the troubleshooting section at the end of this document.

Step 7, Reassemble

Since everything tests fine you can put everything back together in reverse order. Make sure the grommet is sealed and all the wires are out of the way of any moving parts. If your truck came with a locking tailgate remove the black plug from the lock hole.

APPENDIX A

Instrument panel harness



| Pin Name | Circuit Name | Function | Gauge | Color | Tracer Color |
|----------|--------------|---|-------|-------|--------------|
| 1 | A412 | FUSED B(+) | 18 | RD | |
| 2 | A108 | FUSED B(+) | 20 | LG | RD |
| 3 | A116 | FUSED B(+) | 14 | YL | RD |
| 4 | C7 | BLOWER MOTOR SUPPLY | 10 | DB | |
| 5 | A207 | FUSED B(+) | 18 | RD | LC |
| 6 | F306 | FUSED IGNITION RUN/ACCESSORY CONTROL OUTPUT | 18 | DB | PK |
| 7 | L1 | BACKUP LAMP FEED | 16 | WT | RD |
| 8 | N0 | | | | |
| 9 | A106 | FUSED B(+) | 22 | LB | RD |
| 10 | F201 | FUSED IGNITION RUN/START CONTROL OUTPUT | 20 | PK | OR |
| 11 | A417 | FUSED B(+) | 22 | RD | WT |
| 12 | A128 | ADJUSTABLE PEDALS MOTOR DRIVER | 20 | RD | OR |
| 13 | F921 | FUSED IGNITION RUN CONTROL OUTPUT | 22 | PK | YL |
| 14 | A901 | FUSED B(+) | 22 | RD | PK |
| 15 | N0 | | | | |
| 16 | F943 | FUSED IGNITION RUN/START CONTROL OUTPUT | 20 | PK | LG |
| 17 | A909 | FUSED B(+) | 20 | RD | GY |
| 18 | L91 | HAZARD SWITCH SENSE | 22 | WT | BR |
| 19 | L51 | BRAKE LAMP SWITCH OUTPUT | 20 | WT | |
| 20 | D51 | CAN C BUS (-) | 22 | WT | LB |
| 21 | N0 | | | | |
| 22 | L14 | CARGO LAMP DRIVER | 22 | WT | TN |
| 23 | X205 | LEFT REAR SPEAKER (+) | 18 | GY | LG |
| 24 | X201 | LEFT FRONT SPEAKER (+) | 18 | CY | VT |
| 25 | C91 | HEATED STEERING WHEEL FEED | 20 | DB | LG |
| 26 | C986 | HEATED STEERING WHEEL RETURN | 20 | GY | DB |
| 27 | F100 | FUSED IGNITION RUN CONTROL OUTPUT | 20 | PK | VT |

TROUBLESHOOTING:

We will provide you with excellent support of your new camera. We just ask that try a few things before contacting us:

1. Is the chassis harness still connected? Often times it can get pulled apart when pulling the harness toward the driver's floor so check that first.
2. Is the chassis harness connector properly seated to the camera connector? This is almost always the problem so make sure the camera plug is pushed as far as it can go. Sometimes it may be best to disconnect it and reconnect it again while pushing firmly to ensure it's seated all the way.
3. Do you have power at the camera when the truck is in reverse? Be sure to test the read lead at the camera end FIRST. If you do not have power, check your connection or check the fuse covering the circuit you're getting power from. Be careful not to touch multiple pins inside the connection when power is applied. Test one pin at a time until you find the one with power (it should be the lower left pin when looking into the connector with the orientation arrow on the top.
4. Do you have a good ground?
5. Is the video RCA cable connected and secure at your receiver?