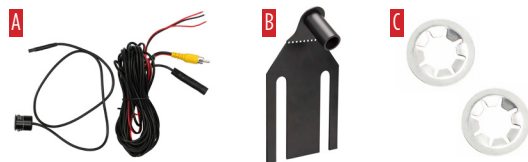




### KIT COMPONENTS

- A) Camera and wiring • B) Bracket • C) Push nuts (2)



## Spare Tire Bracket with Flush Mount Backup Camera Fits Select Jeep Wrangler Models 2007-2023

The TE-JPKT is designed to mount a camera behind the tailgate mounted spare tire on a 2007-2018 Jeep Wrangler/Wrangler JL 2018-2023

The TE-JPKT is intended for integrating with multimedia type aftermarket head units with LCD displays.

### KIT FEATURES

- High-quality metal housing
- 1/4" CMOS camera
- 0.5 lux night vision
- Compatible with AHD & CVBS Monitors
- Defeatable parking lines
- Resolution: 720 x 480 (CVBS)  
1280 x 720 (AHD)
- Field of view:  
110-degrees (Horizontal)  
170-degrees (Diagonal)
- IP68 Rating  
(water-resistant & dust proof)
- Wire length:  
Camera Cable: 0.61m / 2ft  
Extension Cable: 6.7m / 22ft

**NOTE:** iBEAM recommends the part: TE-CAMFLTR (Pulse Width Modulation Stabilizer) be used if power is being connected via the taillight. (sold separately)

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Visit [iBeamUSA.com](http://iBeamUSA.com) for more detailed information about the product and up-to-date vehicle specific applications

**ATTENTION:** With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections, especially the air bag indicator lights, are plugged in before reconnecting the battery or cycling the ignition to test this product.

**NOTE:** Refer also to the instructions included with the aftermarket accessory before installing this device.

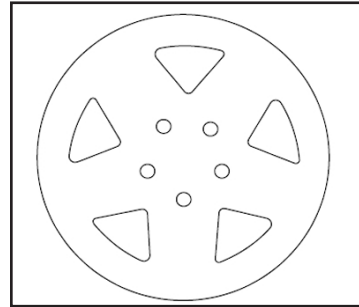
## TIRE REMOVAL & CAMERA MOUNTING

### Tire Removal & Camera Mounting:

1. Verify the spoke pattern is the correct one for this installation. (Fig A) (Fig B)
2. Remove lug nuts to free spare tire from its carrier.
3. Place the JPKT bracket over the two top-most mounting studs, with the camera mounting tube facing out. (Figure C)
4. Place the press clips over the studs with their tabs facing out.
5. Use a 3/4 (18mm) deep socket and a

hammer to drive the clips onto the studs. The clips are designed to retain the camera whenever the spare is temporarily removed.

6. Run the 4-pin camera cable through the camera mounting tube on the bracket and route to the factory grommet to the left of the spare tire carrier. Do not fully insert the camera yet. Leave a couple inches of wire free.



(Figure A) Spoke Pattern needed to work with **TE-JPKT**.



(Figure B)



(Figure C)

**BEST PRACTICE** is to make connections before mounting to allow viewing of the camera on your screen, verifying proper operation with optimum angle and a view free of obstructions.

### INSTALLATION TOOLS & ACCESSORIES REQUIRED

- Wheel lug wrench
- 3/4 18mm deep socket
- T27 Torx driver
- 4mm (5/32") Allen hex wrench
- Panel popper/push pin remover
- Soft plastic trim removal tool
- 10mm socket and ratchet
- Wire loom (convoluted plastic 1/4" or Techflex® braided)
- Electrical tape
- Zip ties
- Solder and soldering iron or solderless connectors for wire splicing

## WIRING INSTALLATION

1. Locate and remove the rubber grommet and insert the 4-pin camera connector through the existing hole in its center alongside the factory wires. (Figure C)
2. From the inside of the tailgate, remove the factory plastic louvered grille and wire cover by gently prying with a soft plastic trim removal tool to free the clips holding them in place. (Figure D)
3. Use the grille opening to access and fish the camera cable through the interior of the tailgate into the factory wire chase area.
4. Reinstall the grommet into the tailgate.
5. Connect the camera extension harness to the 4-pin camera cable taking care to align the pins using the stamped arrows on the connectors.
6. Route the harness along with the factory wiring, using zip ties to secure the camera harness to the factory wiring. At the portion of the harness exposed in the hinge area, the camera cable should be protected by Techflex® braided loom or plastic convoluted wire loom.
7. Reinstall the louvered plastic and wire chase covers.

*Continued on next page*



(Figure C)



(Figure D)

If AHD or Parking guideline adjustments are necessary, cut the white and green loops according to desired functions desired. (Outlined in Table A, below)

**Table A: Resolution and Wiring Functions**

| Resolution       | Parking Guide Lines | White Loop | Green Loop |
|------------------|---------------------|------------|------------|
| 480i (CVBS NTSC) | Off                 | Uncut      | Uncut      |
| 480i (CVBS NTSC) | On                  | Cut        | Uncut      |
| 720p (AHD)       | Off                 | Cut        | Cut        |
| 720p (AHD)       | On                  | Uncut      | Cut        |

**Note:** The camera must have 12V removed and reapplied before any loop function changes are recognized.

1. **WHITE** loop controls parking guide lines. Its behavior is affected by the **GREEN** loop.
2. **GREEN** loop enables AHD (Analog HD) video output. The higher resolution method of transmission gives superior quality images, but is only compatible with AHD capable monitors and displays.
3. **UNCUT**, the camera displays standard NTSC video at 480i resolution.
4. **CUT**, the camera transmits at 720p resolution. (See Table A).

## WIRING CONNECTIONS

### RED WIRE

1. Connects to +12-volt switched voltage to power the camera. It runs through the length of the video cable, and can be connected at either end of the cable.
2. If the **RED** wire is connected to the +12-volt reverse light wire in the back of the vehicle, the other side of the **RED** wire exiting the **YELLOW RCA** connector at the opposite end of the video cable will be supplied 12-volts that can be used to trigger the reverse input of the aftermarket in-dash radio.
3. If a stable +12 reverse voltage is NOT available at the camera location, it can be supplied at the opposite end of the cable to the **RED** wire at the **YELLOW RCA** connector.
4. If the display has the ability to display the camera while in forward motion, a switched 12-volt accessory power may be connected to either end of the **RED** wire, but the radio will need a separate reverse +12-volts to activate the reverse screen.

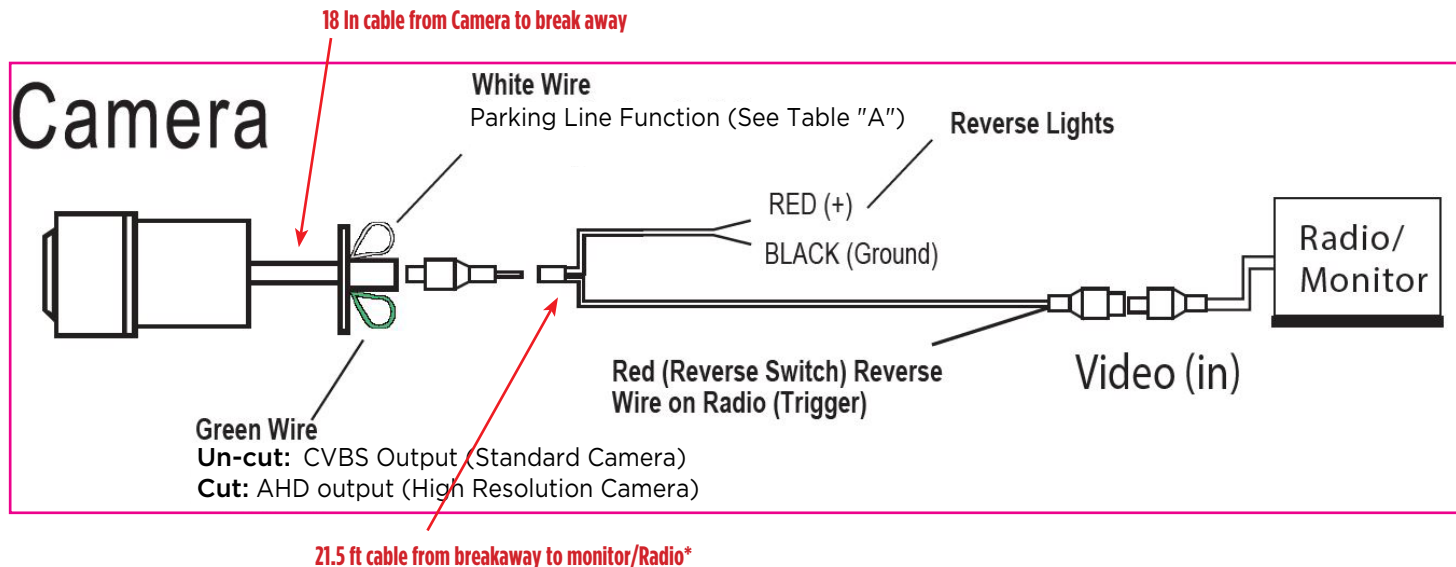
**NOTE:** Many aftermarket radio installation data interface harnesses can supply both 12V reverse and switched accessory power.

### BLACK WIRE

1. Connects to ground. (A metal, non-painted surface or factory ground wire)  
If the ground is made outside the vehicle, paint, undercoating or dielectric grease should be applied over the ground connection for corrosion resistance.

**NOTE:** Some vehicles with LED lighting use an unsuitable pulsed DC voltage on reverse lights.

## WIRING THE CAMERA



\*If more length is needed use: **MPS-ECR36**: 36 inch extension cable  
**MPS-ECR72**: 72 inch extension cable

# HARNESS INSTALLATION

## TIRE REINSTALLATION/CAMERA CALIBRATION

1. Reinstall the spare tire oriented so the camera has a clear view between the spokes of the wheel.
2. View the image on the head unit.  
With the wheel lugs loose, the camera mounting bracket can be shifted vertically, and the camera mount can be swiveled on the bracket.  
The mount can be bent at the perforated area to adjust vertical view.
3. Do not push the camera into the tube prematurely as it is difficult to remove once inserted.

4. To prevent water ingress into the mounting tube, seal the back of the mount where the cable exits with butyl rubber putty or silicone RTV sealant.
5. Torque the spare tire's lug nuts to spec. (59ft/lb. spare tire torque per Jeep recommendations).

## REASSEMBLY

1. Reassemble the rear trim and make sure to properly torque the tire mounting lugs.
2. Reassemble door sill trim and reinsert plastic push pins. Reinstall glove box door being sure to reinsert door damper into its slot if equipped.



## SPECIFICATIONS

|                        |                                     |
|------------------------|-------------------------------------|
| TE-FLC                 | Reverse Camera                      |
| Chip Sensor            | H63 CMOS                            |
| Resolution NTSC (CVBS) | 720H x 480V                         |
| Resolution AHD         | 1280H x 720V                        |
| Viewing Angle          | 110°(H) / 170°(Diagonal)            |
| Video Output           | AHD/CVBS (Composite Video)          |
| Minimum Lux            | .05 Lux                             |
| Power Supply           | DC 12V                              |
| Video Output Voltage   | 3.3V                                |
| Connector              | Mini 4-PIN with Guideline/AHD Loops |
| Video Cable            | 6.5 meters (21.5 feet)              |
| Working Current        | 90mA                                |
| S/N Ratio              | >52dB                               |
| Water Resistance       | IP68 (dustproof/water tight 1.5M)   |
| Operating Temperature  | -40°C - 80°C                        |

Having difficulties? We're here to help.



Contact our Tech Support line at:

**386-257-1187**



Or via email at:

[techsupport@metra-autosound.com](mailto:techsupport@metra-autosound.com)

### Tech Support Hours (Eastern Standard Time)

Monday - Friday: 9:00 AM - 7:00 PM

Saturday: 10:00 AM - 5:00 PM

Sunday: 10:00 AM - 4:00 PM



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