

Installation Guide

MRCRDDVRBR



CLEAR-VIEW


FULL DISPLAY REAR-VIEW MIRROR REPLACEMENT KIT WITH DVR & HD CAMERA
VEHICLE SPECIFIC SPARE TIRE MOUNT & HARDWARE



2021-2022 Ford Full Size Bronco




Important


Please read and follow the instructions carefully. To emphasize special information, the symbol  and the words Warning, Caution and Note have special meanings. Pay special attention to messages highlighted by these signal words.

These instructions are designed as a guide to help make the installation of this product successful. Always use caution and ask for assistance if you are not sure how to proceed.

AAMP Global & EchoMaster are not responsible for any damage that may occur during installation or any changes to the vehicle interior.

 **WARNING**

Indicates a potential hazard that could result in a death or serious injury

 **CAUTION**

Indicates a potential hazard that could result in vehicle damage

NOTE

Indicates special information to make installation easier or instructions clearer.

Vehicle Preparation & Protection


 **CAUTION**

Consult your vehicle owner's manual to disconnect the battery. Do not disconnect ANY airbag connectors or indicators. Doing so may result in activating a diagnostic code. These codes will require the dealer to perform the reset procedure which may incur a reset fee. If you are unsure of any vehicle trim removal process consult the OEM service manual.

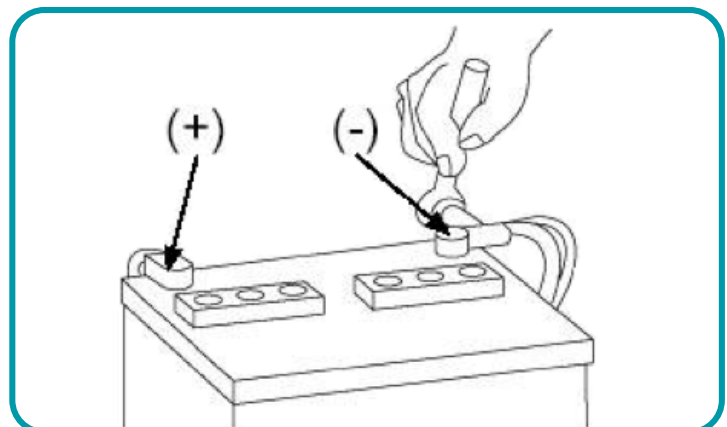
Removing vehicle trim panels in extreme hot and/or cold climate could result in damage. Use care when removing all vehicle trims. Using painter's blue tape on the vehicle trim panels can help limit any scratches and/or marring. Use a nylon trim panel removal tool whenever possible.

NOTE

Consult Vehicle owners guide before disconnecting negative battery cable

 **WARNING**

DO NOT TOUCH the positive terminal with any tool when removing the negative battery cable



What's in the box

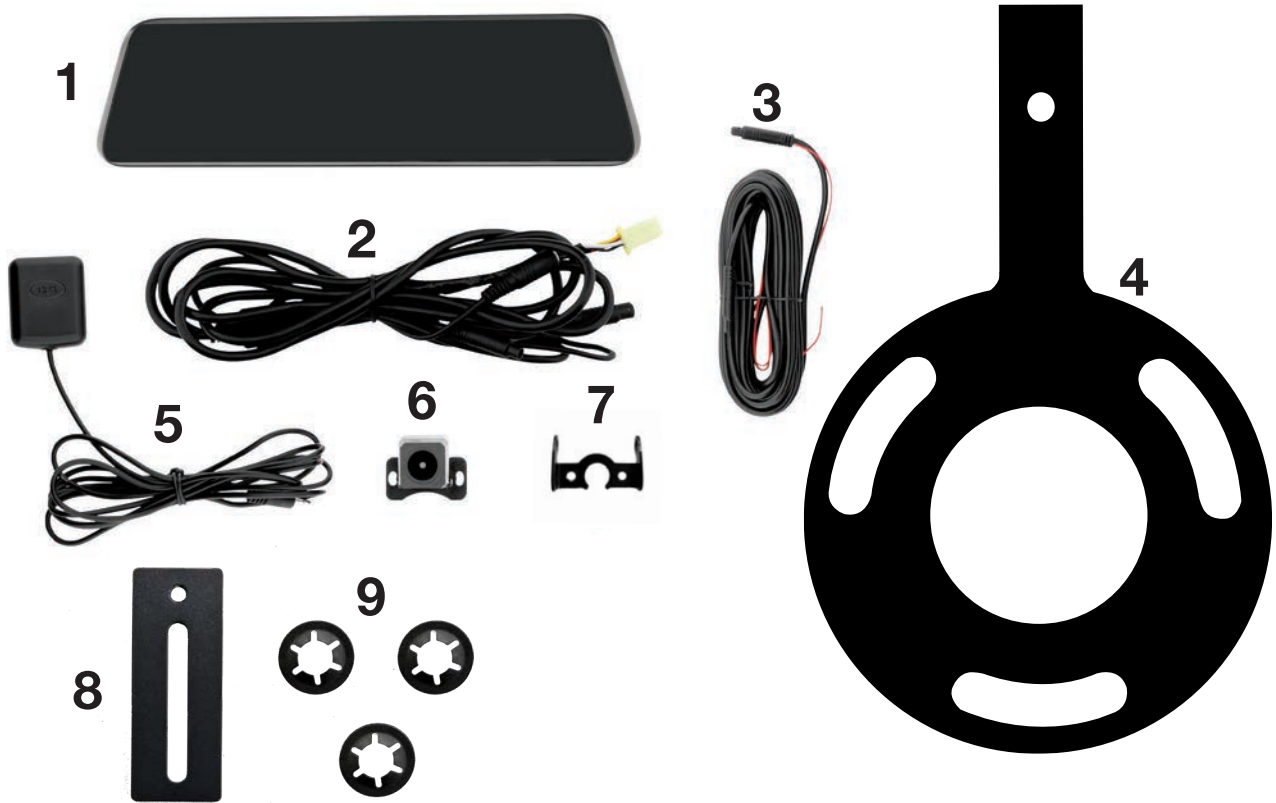


Image	Description	Qty
1	Mirror Display / Front Dash Camera	1
2	Display Power / Video Cable	1
3	Camera Extension Cable	1
4	Spare Tire Mounting Bracket	1
5	GPS Antenna	1
6	Rear Camera	1
7	Camera Bracket (PMRC-BRKT)	1
8	Riser Plate	1
9	Push Nuts	3

NOTE: The kit consists of two boxes (MRCHDDVR2 / JP4MOUNTBR). There are additional parts included that will not be used.



Recommended Tools

<i>Lug Wrench</i>	<i>#1 Straight Screwdriver</i>	<i>Allen Wrench Set</i>
<i>Plastic Trim Tool</i>	<i>#1 Phillips Screwdriver</i>	<i>Hammer</i>
<i>7mm Socket</i>	<i>#2 Phillips Screwdriver</i>	<i>11/16 " (17mm) Deep Socket</i>
<i>8mm Socket</i>	<i>Diagonal Cutters</i>	<i>Small Pick Tool</i>
<i>10mm Socket</i>	<i>Wire Crimpers</i>	<i>Zip Ties</i>
<i>Ratchet</i>	<i>Electrical Tape</i>	<i>Utility Knife</i>
<i>Socket Extension</i>	<i>Wire Feeder</i>	<i>Torx T-20, 30</i>

Installation Notes

Read this installation guide thoroughly before disassembling vehicle or making wire connections. Installation of this product requires technical skill, experience, and specialized tools. If unsure, it is recommended to have it professionally installed by an authorized EchoMaster Dealer.

Questions?

Reach out to our Technical Support Team:
Phone: 727-592-5991
Email: support@aampglobal.com
Chat: [EchoMaster.com](https://www.EchoMaster.com)

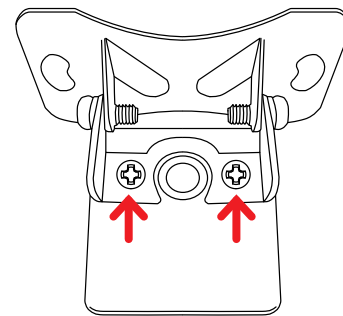
Illustrations are typical and may not match exact vehicle detail

Rear Camera Bracket

The MRCHDDVR2 Rear Camera comes with a “universal” bracket attached. For all Bronco installations, the universal bracket will need to be removed and the New Camera Bracket from the JP4MOUNTBR will need to be installed by following the steps below.

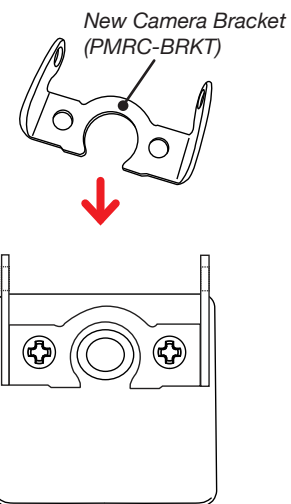
Step 1

Using a #1 Phillips screw driver, remove the two screws securing the universal bracket from the back of the camera and remove.



Step 2

Attach the New Camera Bracket using the same screws removed in Step 1.



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Spare Tire Camera Mount

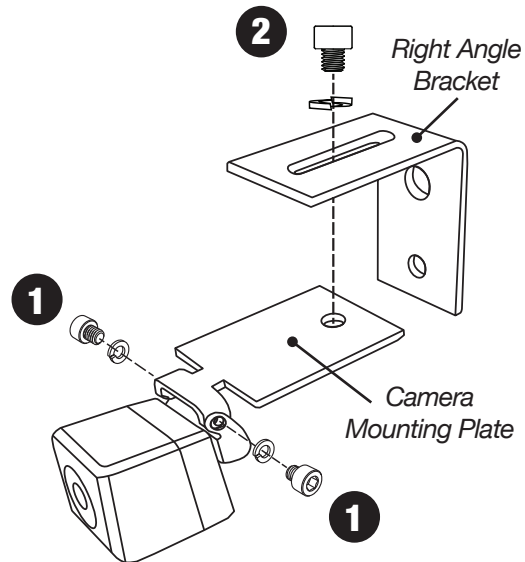
Using the JP4MOUNTBR kit, attach the camera and assemble the mounting bracket as shown.

Step 1

Using two M3 x .50 screws and lock washers, attach the camera to the Camera Mounting Plate.

Step 2

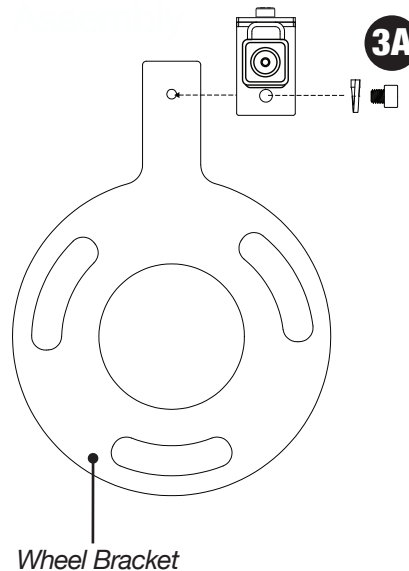
Using a M6 x 1 screw and lock washer, attach the Camera Mounting Plate to the Right Angle Bracket as shown.



Step 3A

For most applications with stock/standard wheels, attach the camera bracket assembly to the Wheel Bracket using a M6 x 1 screw and lock washer.

For applications with larger wheels and/or off-center wheel openings, see step 3B.

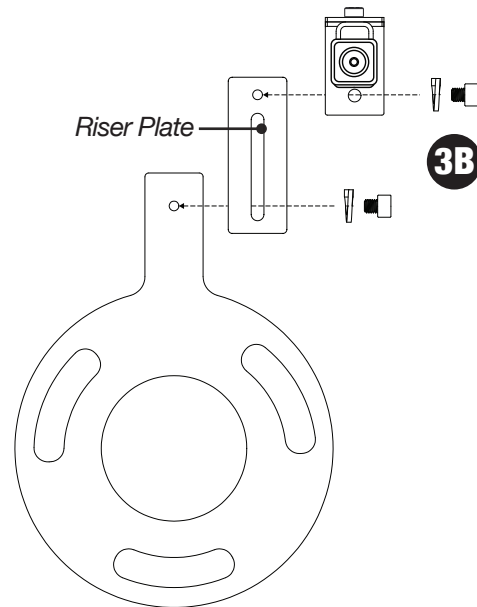


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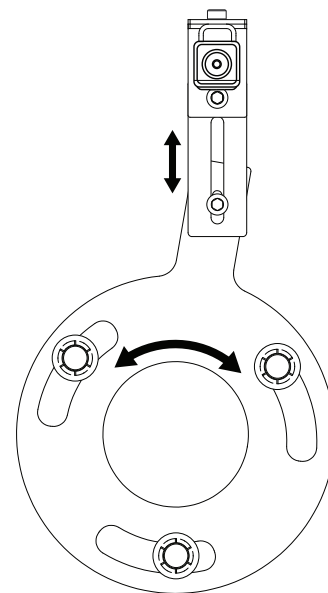
Spare Tire Camera Mount (cont)

Step 3B

For larger wheels, attach the Riser Plate to the Wheel Bracket and attach the camera assembly to the Riser plate using M6 x 1 screws and lock washers.



When using the riser plate, the camera height, angle and rotation can be adjusted to match the wheel.



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Mounting the Rear Camera

Step 1

Remove the spare tire off of the tire carrier using a 19mm socket, or factory tire iron. Place the spare tire on the ground face down. Place the bracket on the back of the spare tire and align camera to fit through a usable opening closest to center as possible.



Step 2

Place the Spare Tire Mounting Bracket and camera assembly on the wheel studs and secure with the three push nut retainers included in the JP4MOUNTBR.

The push nut retainers are installed using a 11/16" (17mm) deep socket and a hammer.



Step 3

Temporarily install the spare tire. Confirm a usable opening in the wheel is located at or close to center. This may require removing and rotating the wheel until a usable opening is located. If using the Riser Plate, the camera can be adjusted up and down.

Remove the spare tire. Tighten all camera mount hardware.



Illustrations are typical and may not match exact vehicle detail

Routing the Camera Cable

Step 1

Remove the trim panel on the inside of the tailgate by pulling it away from the tailgate along the bottom of the panel from one side to the other (1). Then swing the panel upward to disengage the upper tabs and pull down (2).

NOTE

A plastic trim tool may be needed for the following panel removal steps.



Step 2

Remove the vent panel on the inside of the tailgate by pulling it away from the tailgate along the left side of the panel and releasing the tabs on the right side.



Step 3

Loosen the 14mm bolts holding the spare tire carrier bracket. Route the camera cable through the opening in the top of carrier and through the opening on the left side. Once the wire has been pulled through you can re-tighten the 14mm bolts holding the spare tire carrier bracket.



Illustrations are typical and may not match exact vehicle detail



Routing the Camera Cable (cont)

Step 4

Remove the rubber grommet on the outside of the swing gate.



Step 5

Push the 4 plastic tabs holding the grommet in place from the inside of the vent.



Step 6

Cut the zip tie off the front of the grommet.
Remove the felt tape from the front and back of the grommet.



Illustrations are typical and may not match exact vehicle detail

Routing the Camera Cable (cont)

Step 7

Once the grommet has been untaped slide the camera wire into the front of the grommet, coming out the back side. Pull all the leftover slack and retape front and back of the grommet. Zip tie the harness back to the grommet.



Step 8

Push the grommet back into the swing gate and make sure it is seated properly.



Step 9

Using the vent opening to access the inside of the tailgate, feed the camera cable out the access hole along with the factory wiring harness. Zip tie camera harness to factory wire harness.

NOTE

The Yellow line indicates camera wire path.



Illustrations are typical and may not match exact vehicle detail



Routing the Camera Cable (cont)

Step 10

Pull straight up on the plastic panel against the back seat and remove panel. Remove the 4 plastic covers hiding the floor bolts.



Step 11

Use a 10mm socket and remove the 8 bolts holding the tie downs in place. Remove the tie downs and plastic cover and set aside.



Step 12

After the 8 bolts are removed, pull up on the plastic floor and remove the flooring.



Illustrations are typical and may not match exact vehicle detail

Routing the Camera Cable (cont)

Step 13

With a 8mm socket, remove the 8mm bolt holding the steel bracket and set aside.

NOTE

Bracket will not be present for vehicles equipped with a hard top.



Step 14

On the right side of the back of the Bronco, pop up the plastic trim panel around the steel roll cage. Remove the trim panel and set aside.



Step 15

Remove the small plastic cover attached to the large plastic panel.



Illustrations are typical and may not match exact vehicle detail



Routing the Camera Cable (cont)

Step 16

From the back of the Bronco remove the plastic floor trim covering.



Step 17

Release the passenger rear large plastic panel from the rear sill panel.



Step 18

Remove the large plastic trim panel on the right rear side of the Bronco. Start with pulling forward where the small plastic cover was removed in step 15.



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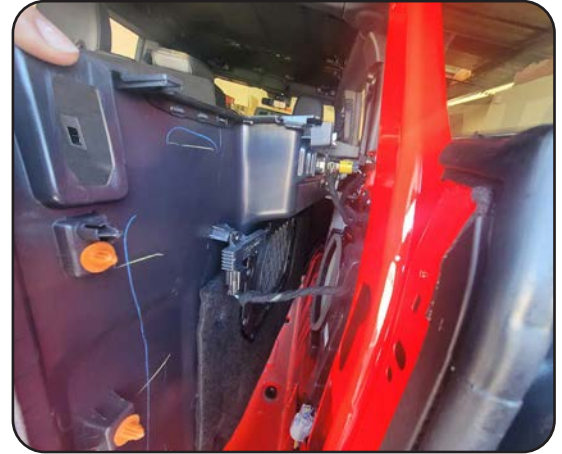
Routing the Camera Cable (cont)

Step 19

Release all the plastic snaps holding the panel on. With all the snaps released, pull the trim panel towards the center of the vehicle to remove it.

NOTE

Unplug the interior light and/or power port on the backside of the panel.

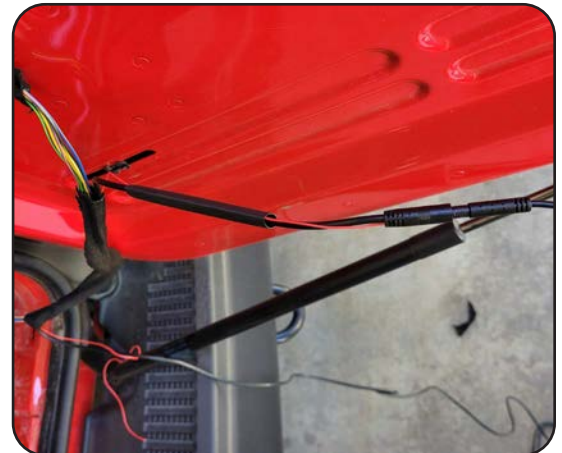


Step 20

Remove the felt tape on both ends of the factory fabric wire loom. Push the black cable with the Red single wire through the wire loom. Place the provided heat shrink onto the camera cable. Align the 2 Arrows of the connectors. Once the connectors are aligned properly push them together. Place the heat shrink over both connectors. Use a heat gun or lighter to shrink the heat shrink around the two connectors.

NOTE

Not lining up the arrows of the connectors properly will result in damage to the connectors.



Step 21

With the camera cable connected and ran through the wire loom, wrap both ends with fabric tape or similar type tape.



Illustrations are typical and may not match exact vehicle detail



Routing the Camera Cable (cont)

Step 22

Locate the factory black 20 pin connector. Find the Green with Brown Stripe wire (GRN/BRN) pin number 2 in the connector. Using a multimeter, confirm the reverse wire shows 12V when in reverse. **DO NOT START THE VEHICLE. ENGAGE THE PARKING BRAKE.** The wire can be tested with just the ignition turned on.



Step 23

Attach the Red reverse Trigger Wire on the camera's extension cable to the reverse wire of the vehicle.



Step 24

Remove the front passengers sill panel.



Illustrations are typical and may not match exact vehicle detail

Routing the Camera Cable (cont)

Step 25

Remove the passengers rear sill panel.



Step 26

Remove the plastic trim panel located above the passenger kick panel.



Step 27

Remove the passenger kick panel.



Illustrations are typical and may not match exact vehicle detail



Routing the Camera Cable (cont)

Step 28

Route the camera cable from the bottom of the 20 pin connector to the top of the factory harness and zip tie along the factory amp harness.

NOTE

For vehicles without factory amp or subwoofer locate a route that is similar for the camera wire harness.



Step 29

Continue routing the camera wire down to the rear door seal panel area. Push the wire under the moulding between the front and rear door.

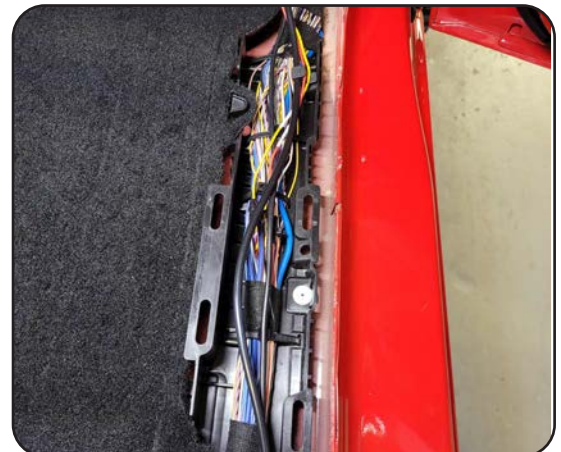
NOTE

For 2 Door Broncos, skip to step 29



Step 30

Continue routing the camera wire following the factory wire harness forward, across the door sill(s), up to the top of the kick panel area. Secure with zip ties.



Illustrations are typical and may not match exact vehicle detail

Installing the Mirror & Harness

Step 1

Remove the 13mm bolt located above the kick panel. Place the Black ground terminal located on the rear view mirror harness behind the 13mm bolt. Tighten the 13mm bolt with the ground wire.



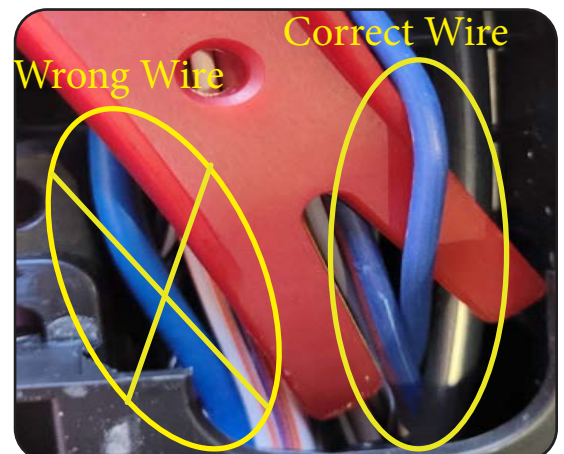
Step 2

Locate the Blue wire in the main factory wire harness located on the front passenger floor where the door seal panel was located.



NOTE

For vehicles equipped with the Premium sound system (B&O) There are 2 large Blue wires. Do not probe or cut the largest Blue wire. This wire is the Data for the factory amp. The Blue wire your looking for should match the color of the other Blue with Red stripe wire in the harness.



Illustrations are typical and may not match exact vehicle detail



Installing the Mirror & Harness (cont.)

Step 3

Once you have located the correct Blue wire with a multi-meter measure the voltage. You should have 12 volts or more. Connect the Yellow Mirror wire to the vehicles Blue wire (12v wire).

NOTE

Make sure to not touch the Blue wire to any grounded surface.



Step 4

Locate the White with a Orange stripe (WHT/ORG) wire in the factory wire harness. Turn the vehicle to Accessory or Run. With a multi-meter measure the voltage. You should have 12 volts or more. Connect the Mirror Red wire to this (WHT/ORG) wire.



Step 5

Remove the 4 #30 Torx bolts holding the passenger side grab handle.



Illustrations are typical and may not match exact vehicle detail

Installing the Mirror & Harness (cont.)

Step 6

Once all 4 bolts are removed pull the grab handle off and set aside.



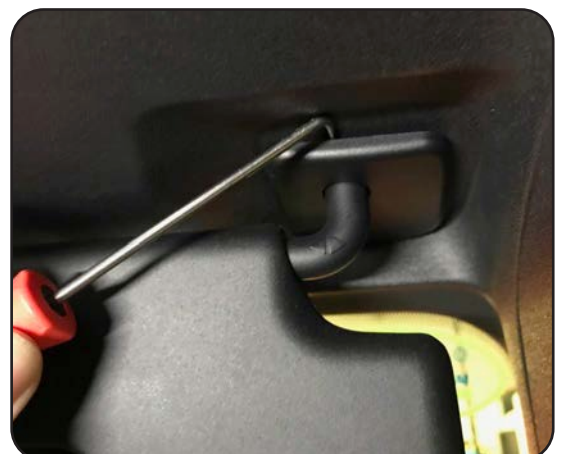
Step 7

Release the plastic airbag trim cover on the passenger side A pillar.



Step 8

Open the passenger visor. With an angle pick tool remove the plastic cover hiding the visor mount screw.



Illustrations are typical and may not match exact vehicle detail



Installing the Mirror & Harness

Step 9

Extend the visor until it is in the fully open position. Remove the 7mm screw holding the visor in place. Slide the visor out.

NOTE

Once the visor has been unscrewed from the mount there will be a wire from the vehicle connecting the visor.



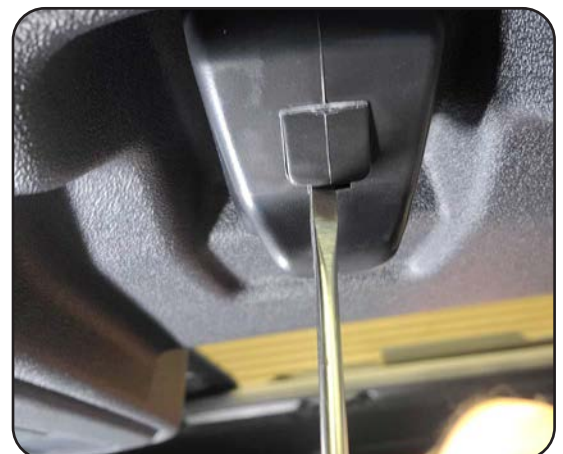
Step 10

Disconnect the visor from the connector and set aside.



Step 11

With a small flat head screw driver open the door hiding the screw to remove the passenger visor retaining clip. With a #20 Torx screw driver, remove the screw and pull the visor retaining clip off.

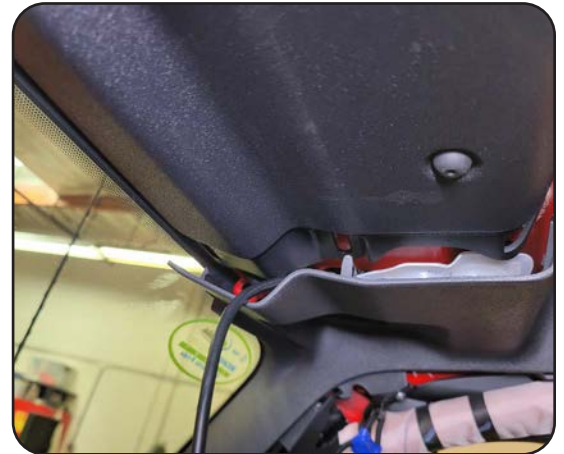


Illustrations are typical and may not match exact vehicle detail

Installing the Mirror & Harness (cont.)

Step 12

Release the plastic panel behind the rear view mirror against the windshield.



Step 13

Remove the plastic cover behind the factory rear view mirror.



Step 14

Unscrew the #20 Torx bolt holding the rear view mirror. Lift mirror up and away from bracket holding the mirror in place.



Illustrations are typical and may not match exact vehicle detail



Installing the Mirror & Harness (cont.)

Step 15

Disconnect the connector located on the back-side of the rear view mirror. Set rear view mirror aside.



Step 16

Route the factory rear view mirror harness to the center opening where the mirror plastic cover was.



Step 17

Route the camera cable up the kick panel area and up to the top of the plastic a-pillar. Open up the A-Pillar plastic panel enough to push the cable through the opening.



Illustrations are typical and may not match exact vehicle detail

Installing the Mirror & Harness (cont.)

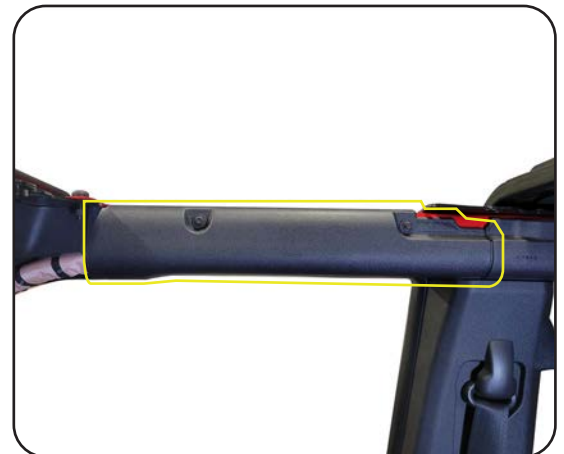
Step 18

Release the A-Pillar trim from the plastic roof panel.
Pull down on the panel and slide the cable from the outside of the a-pillar to the inside.



Step 19

Remove the (2) 8mm bolts holding the front passenger plastic roll bar cover. Remove the roll bar cover and set aside.



Step 20

Attach the MRCHDDVR2 mirror to the factory mirror mount.
Tighten the Phillips screw using a #2 Phillips screw driver. Route the mirror cable to where it comes out of the right side of the plastic roof trim cover.



Illustrations are typical and may not match exact vehicle detail



Installing the Mirror & Harness (cont.)

Step 21

Connect the 4 pin plug on the Camera Extension harness to the matching plug on the mirror power/video harness. Line up both arrows before seating connectors fully.

NOTE

Not lining up the arrows properly will result in damaging the connectors.



Step 22

Tuck the connector and the remaining mirror cable between the glass and the plastic roof trim panel.



Step 23

Remove the passenger side front speaker grill. With a panel remover tool start from the front of the grill against the dashboard and release the snap clips. continue around the grill until all snaps are released. Remove the grill and set aside.



Illustrations are typical and may not match exact vehicle detail

Step 24

Remove the factory speaker by unscrewing the (2) 7mm screws. Set the speaker aside. Remove the tape on the bottom of the GPS antenna. Place the GPS antenna on the metal flange under the dash. Route the GPS wire under the dash and plug into the 3.5mm jack on the Mirror.



Test and Enjoy

After the installation is complete, Operating Instructions start on Page 11 of the User Manual included with the MRCHDDVR2

Questions?

Reach out to our Technical Support Team:

Phone: 727-592-5991

Email: support@aampglobal.com

Chat: EchoMaster.com

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AGREEMENT: End user agrees to use this product in compliance with the instructions and terms of use above and with all State and Federal laws. EchoMaster provides instructions and safety warnings with respect to this product and disclaims all liability for any use not in conformity with those instructions or other misuse of its product. If you do not agree, please discontinue use immediately and contact EchoMaster. This product is intended for off-road use and passenger use only.



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