

2023 JTRD MOPAR Front Trail Cam Installation

Step 1: Buy Parts

<u>Part Number</u>	<u>Part Description</u>	<u>3.6L Gasser</u>	<u>3.0L Diesel</u>
68436466AA	Front Camera	1	1
68396526AB	Front Camera Bracket	1	1
06510197AA	Camera Bracket Nut/Push Nut	2	2
68090949AA	Camera Bracket Screw	2	2
6QN24RXFAD	Camera Grille Section	1	1
04672861AC	Video Processor Module (CVPM - 2021 to 2023)	1	1
06104378AA	CVPM Bolts/Bolt: Hex Flange Head	2	2
68370828AA	Camera Washer Hose (Between nozzle elbow and 2nd hose)/Cam Washer	1	1
68456244AA	Camera Washer Hose (Between pump and 1st hose)	1	0
68465694AA	Camera Washer Hose (Between pump and 1st hose - Diesel)	0	1
68370210AA	Camera Washer Nozzle/Nozzle: Washer	1	1
68310928AA	Washer Pump/Pump Washer, WindShield	1	1
68428691AA/ 68382603AB	Camera Washer Harness	1	0
<i>SEE BELOW</i>	Rear Back up Camera with Front Trail Cam	1	1
68370825AA	Hose: Washer nozzle elbow	1	1
6ZU33TX7AB	JL Center Console With Trail Cam	1	1
6ZU92TX7AA	Console Mat	1	1
<u>Rearview Camera Colors/PartNumbers</u>			
6NN98VGVAD	Gator		
6NN98GW7AD	White		
6NN98LAUAD	Granite Crystal		
6NN98RUAAD	Gobi		
6NN98MRCAD	Red		
6NN98PDNAD	Sting Gray		

6NN98DX8AD	Black		
6NN98JSCAD	Billet Silver		
6NN98MBJAD	Hydro Blue		
6NN98SE4AD	Punkn		
6NN98PGGAD	Sarge Green		
6NN98SSEAD	Silver Zenith		
Farka Z Cables			
	Bingfu Farka Z Female to Female Cable 2m/6.5ft	2	2
	Bingfu Farka Z Male to Female Cable 2m/6.5ft	1	1
	Bingfu Farka Z Male to Female Cable 1m/3.28 ft	2	2
	Bingfu Farka Z Female to Female Cable 3m/10ft	1	1
	Tuolnk 2 Pack 6 inch Male to Female Cable	1	1
Other Stuff			
	Wire Harness From @Jimmy07: order the following lengths - 5'-3" Ground - 6' - 6" CANBUS Wires - 18' Power Wire	1	1
	Tesa Tape 51036 roll (For wires in engine compartment)	1	1
	Tesa Tape 51608 roll (For wires in cabin)	2	2
	OBDGenie Security Bypass	1	1
	OBD Link MX+	1	1
	Push pin zip ties (Amazon S Sydien 50Pcs Black Fir Tree Nylon Push...)	1	1
	4 in 1 Wrangler Grille Fastrener Retainer Clips (Amazon)	1	1
	5' Washer Hose (NAPA)	0	1

2: Install Front Trail Camera

1. Remove front grille. I used the following YouTube video to help:



2. Remove the center grille piece. Like the video says it is tough to get it out and you will need to use two screw drivers at the same time to pry it up and get out the clips. The white plastic clips are easy to remove but mine were VERY brittle and broke immediately.

3. Insert the new center grille and attach it.

4. Push in the Camera Brakes Nut/Push Nut (06510197AA) into the square holes on either side of the camera hole.

5. Carefully insert the Front Camera (684366466AA) into the grille camera hole. It will only fit one way due to cutout.

6. Install the Camera Washer Nozzle (68370210AA) through the front of the grille. This is gently snap into place and can only go in one way due to shape.

7. Install Washer Nozzle Elbow (68370825AA) onto back of Camera Washer Nozzle

8. Install the Front Camera Bracket (68396526AB) and secure it with the 2 Camera Bracket Screws (68090949AA).

9. Connect Bingfu Farka Z Male to Female Cable 1m/3.28ft (wrap this cable in Tesa Tape 51036) to camera. There will be holes to attach the wire down the backside of the grille and to the left side of the vehicle. Using the Push Pin Zip Ties, secure the Bingfu Farka Z Male to Female Cable 1m/3.28ft to the grille ending below the left headlamp.



10. Connect the Camera Washer Hose (Between Zone Elbow and 2nd Hose) (68370828AA) to the diagonal radiator support brace. Ensure the metal connector release is at the top and can reach the the Camera Washer Nozzle Elbow when its installed.

11. Align the Camera Washer Hose (Between Zone Elbow and 2nd Hose) (68370828AA) through the hole in the picture and attach the clip to the hidden hole on the frame accessed through the left front wheel well.



12. Reinstall Grille on the vehicle.

THIS IS A GREAT PLACE TO STOP AND BREAK UP THE INSTALL

Step 3: Running the Camera Farka and Changing the Washer Pump

1. Remove the left front wheel well liner. Here is the video I used:



2. Remove both left and right top body panels by windshield.

3. Remove both Wiper Blade Arms.

4. Remove Plastic Over over Wiper Motor (this just snaps out).



SUBSECTION A: Routing the Farka Cable

5. Connect Bingfu Farka Z Female to Female 3m/10ft cable to Farka Z (wrap this entire wire in Tesa Tape 51036) on the grille from the Trail Camera. If you remove the grille again you will notice a small hole on the painted part of the body below the light. This is a perfect place to secure the female end of the 10ft cable using a pushpin zip tie and keep things tidy.



6. Following other electrical wires on the left side of the vehicle, route the Bingfu Farka Z Female to Female 3m/10ft cable all the way down the top-left side of the vehicle attaching the wire to other wires with zip ties as you see fit.

7. On you reach the backside of the engine route follow the wires that enter windshield area, then turn the wire down the front side of the are that houses the wiper motor and arms. Stay on the front side of this area securing it carefully until getting to the right side of the vehicle.

Left Side of compartment.



Right Side of Compartment: Wire is attached at the front of the compartment.



8. Tie off the Bingfu Farka Z Female to Female 3m/10ft cable under the right upper body panel you removed.

SUBSECTION B: Washer work

9. Remove 3 bolts holding on the washer reservoir. There will be one up high and down low. The best way to access these is lying under the vehicle.



10. Disconnect wires on the drivers side of the reservoir.

11. Place a bucket under the car in that area if you have any fluid in the reservoir.

12. Gently maneuver the reservoir side-to-side until free.

13. Remove both the wire harness and the single washer hose connected to the pump. This just slides off with a little pull.

14. Pull the top of the pump out then pull out the pump from top to bottom. Its only held in by the design of the reservoir/pump and is easy to remove.

15. Install Washer Pump/Pump Washer, Windshield (68310928AA) into the that same location mirroring how the other one was. Ensure it is fully seated to the bottom of the reservoir so it doesn't leak.

16. On the back side of the reservoir are hose attachments molded into the actual reservoir. The hose you removed attache it to the passenger side of the pump and secure the hose in the passenger side molded attachments.

17. Remove all the preinstalled clips on the Camera Washer Hose (Between pump and first hose - Diesel) (68456244AA) and save these for step 20. Attach this hose to the drivers side of

the pump and then secure the hose using the molded attachments up the reservoir following the same path as the windshield washer side.

18. Reconnect the pump wire harness to the pump and reservoir level wire harness. Re-secure the 3 screws holding the reservoir in place.

19. Move to the top engine bay and following the original hose to where it is secured to the engine bay. Open that clip and attach the new hose except have it turn to head to the front of the vehicle.

20. You will need to create a hose to run from this point to the front of the left wheel well. It will require 2x male right-angle attachments and 5' of washer hose (purchase from NAPA). Run it from hose out of the reservoir to the front staying at the top-left side of the engine bay then down to front connection installed in Part 2. Secure the hose without pinching it (zip ties can pinch the tube) and use the clips you removed in step 17. *CAVEAT: if you order 68456244AA as required on the 3.6L it will come with a filter in the middle that I also used. If you order this part you will also accidentally have all the male connectors you require to build your own hose)*

21. Attach the two ends which will clip into place.

22. Reinstall Wheel well liner, top trim piece, and both sides of the top body panels that were removed.

THIS IS A GREAT PLACE TO STOP AND BREAK UP THE INSTALL - The only thing that will not work is your washer pump since you have not coded it yet.

Step 4: The interior - This will take time

23. **IMPORTANT:** DISCONNECT THE BATTERIES AND CHOCK THE VEHICLE

24. Unscrew the front passenger seat using an impact drill and E12 socket.

25. Lean the seat back and disconnect the small yellow wire harness and the large black wire harness at the front of the seat. The black wire harness will have a clip attached to the seat that will need to be removed as well.

26. Lift out the seat and place it outside the vehicle and remove the front passenger carpeting.

27. Remove center console. Using painters tape, tape the front of your dash and where the corners are at the front of the console. The hardest part of this removal was the trim piece beneath the parking break, it was an SOB and was just a bunch of plastic clips. I used this video



28. Lean the console on its side and disconnect the three wire harnesses that were under the passenger seat.



29. Lift out the center console and place it in a larger work area.

30. Begin disassembling the center console. *KEY: Remove the rear-top 2 screws that can be accessed when opening the top lid.* This is an exercise in being meticulous. Each part you remove will be transferred to the new console. This is not hard but take your time.

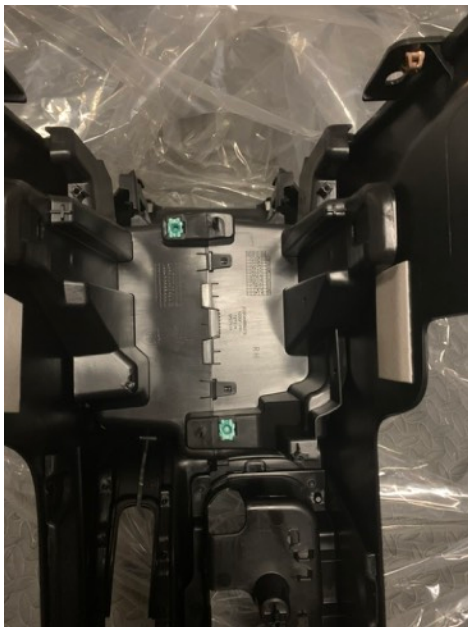
31. Assemble new console using JL Center Console With Trail Cam (6ZU33TX7AB). Carefully use all the parts wires, screws to create the new console. *Do no connect the bottom air vent tube.*

32. Mark the below Farka cables (I placed color coded tape at each end of the cables) and wrap the cables in Tesa 51608 tape. Attach 3 Bingfu Farka 2m/6.5ft Cables to Video Processor Module (04672861AC) as follows:

Orange Connection	Female to Female	Rear Camera
Violet Connection	Male to Female	Stereo
Green Connection	Female to Female	Front Camera

33. Connect @Jimmy07 wire harness to Video Processor Module (04672861AC).

34. Install Video Processor Module (04672861AC) under console and secure with the 2x CVPM Bolts/Bolt: Hex Flange Head (06104378AA).



35. Install the air vent tube under the center console.

36. Install center console back into vehicle. Attach all the previous wiring harnesses that are under the seat. Route the Farkas and CVPM Harness to follow the other wiring harnesses under the seat and the passengers side of the vehicle to the front.

37. Remove lower side trim by door sill. Under that piece is a grey plastic wire harness guide. Remove the 2x visible 10mm nuts. The using a screw driver carefully open it enough to route you wires through it the the passenger front footwell.

38. Reinstall the carpeting and the seat. *IMPORTANT: REINSTALL ALL SEAT WIRING HARNESSSES*

THIS IS A GREAT PLACE TO STOP AND BREAK UP THE INSTALL

Step 5: Complete the Wiring Connections

39. Open tail gate and remove 4 screws on plate over the rear view camera to gain access. Disconnect cable from rearview camera. Slide the plastic clip holding rearview camera to the passenger side of the vehicle.

40. Remove old rearview camera and replace with Rear Backup Camera with Front Trail Cam (see parts list for color/part #). Attach Tuolnk 6 inch Male to Female Cable. Female end attaches to new camera and male end to the previous removed wire.

41. Secure the camera using the plastic clip and reattach the plate to the tailgate with the 4 screws.

42. *Remove passenger side exterior trim piece above antennae. Fold down windshield. Remove Glovebox*

43. Using the Bingfu Farka Z Male to Female Cable 1m/3.28ft (wrap in Tesa Tape 51036). Attach the female end to the previously wired Bingfu Farka Female to Female Cable 3m/10ft from step 8.

44. Insert the male-end of the Bingfu Farka Z Male to Female Cable 1m/3.28ft into right upper corner of the dashboard and fish it out through the glove compartment.



45. Fish the read wire from @Jimmy07 wiring harness back up through this same hole. *HINT: I used a simple drawstring tool from Amazon "Schiller Easy Threader Craft Tool"*

46. Connect the wires in the front passenger footwell. First disconnect the white Farka :

Orange Connection	Female to Female	White male end you just disconnected - Rear Camera
Violet Connection	Male to Female	White Female end you just disconnected - Stereo
Green Connection	Female to Female	The Farka you just fished through - Front Camera



47. Connect the green CANBUS wire from the @Jimmy07 wiring harness to the white CANBUS receiver behind the glovebox (it does not matter where).

48. In the right passenger foot well just forward of the door are three grounding screws. Two of which are used. Remove the nut from the unused grounding screw and attach the black grounding washer from @Jimmy07 harness.

49. Secure all the wires as you see fit to other wires using zip ties etc.

50. Reinstall trim footwell trim pieces and glovebox.

51. Run the red power wire from @Jimmy07 wiring harness to the F55 Fuse and replace it with the fuse tap. Secure this wire attaching it with zip ties and/or Tesa 51036 tape.



52. Reinstall the upper trim exterior trim piece and fold windshield down and secure it.

THIS IS NOT A GREAT PLACE TO STOP AND BREAK UP THE INSTALL. *You will not have a working backup camera or a windshield washer pump.*

Step 6: Programming

53. Remove trim piece below steering column.
54. Remove the surety wires and plug them into OBDGenei Security Bypass
55. Insert OBD Link MX+ into OBDII port under dash next to footwell.
56. Turn ignition to RUN but DO NOT START VEHICLE
57. Open AlfaOBD App and complete the following steps in order:

Step 1	Connect The OBDLinkMX+ by hitting the large Bluetooth symbol on the top left of the app	
Step 2	Choose Brand - Jeep (at top) 1st drop down - Gladiator 2nd drop down - Body Control Module 3rd drop down - MY2020+PowerNet	
Step 3	Select Battery ICON at bottom right of screen and allow the system to fully populate (this saves your current setting if you mess anything up)	
Step 4	Select Car ICON in the bottom right of screen	
Step 5	Drop down menu choose - Car Configuration Change	
Step 6	Configure the following which will be in order in the drop down menu: - for each select START → NEXT → then see “procedure complete”	
VehConfig 1	Rear View Camera	NO
VehConfig 2	Off Road Capable	YES
VehConfig 8	Off Road Camera Present	YES
ECUConfig 3	Rear Camera Present	NO
CBC Features	Reversible Washer Pump Enabled	YES
CBC Config	I/O Connector A pin 14	YES
CustSetMenu 1	Rear View Camera Gridlines CSM Present	NO/DISABLE
CustSetMenu 1	Rear Camera CSM Present	NO/DISABLE
CustSetMenu 3	Auto Launch Forward Facing Camera Off Road Plus CSM Present	NO/DISABLE
CustSetMenu 3	Auto Launch Off Road Plus CSM Present	YES/ENABLE
CustSetMenu 3	Forward Facing Camera Gridlines CSM Present	YES/ENABLE
CustSetMenu 3	Rear CVPM Camera Dynamic Gridlines CSM Present	YES/ENABLE
CustSetMenu 3	Rear CVPM Camera Static Gridlines CSM Present	YES
Cabin Net	CVPM Central Vision Processing	YES

