

Chris Durham Motorsports



Gladiator Conversion Installation Instructions

NOTES:

- The Chris Durham Motorsports Gladiator Conversion transforms the look of a JK Wrangler by retrofitting the classic Gladiator grille design used on Jeep trucks during the 1960s and early 70s.
- Fits 2007-2017 Jeep Wrangler JK 2-Door and 4-Door.
- Read these instructions thoroughly before starting the installation.
- Double-check what you received against the parts list to make sure that you have all required pieces prior to beginning.
- This conversion, while designed to be as simple to install as possible, does require light sheetmetal and wiring modifications. Review the installation instructions and be sure that you are confident in performing these steps. If unsure, CDM recommends installation by a professional autobody or custom shop.
- This conversion is designed to accept a stock center Gladiator grille, but this Gladiator grille will need to be sourced by the end user. These grilles can be found online in good condition for reasonable prices. Alternatively, CDM offers a fiberglass Gladiator grille option that looks very similar to an original grille.
- Fender flares are not included with the base Gladiator kit but are available as an optional upgrade.
- We strongly recommend completely installing all conversion components to verify fit and finish **BEFORE** having the components painted.
- Paintwork will be required. CDM components come in a paint-ready gelcoat that requires minimum prep work, but painting is the responsibility of the end user.

PARTS LIST

Component	Hardware
Gladiator Hood	(4) 8mm lock nut
Gladiator Grille Header	(1) 5/16" x 2-1/2" bolt (1) 5/16" lock nut
Fender Support Bracket, Left	(5) 5/16" x 1" bolt (5) 5/16" lock washer (10) 5/16" flat washer (5) 5/16" nut
Fender Support Bracket, Right	(5) 5/16" x 1" bolt (5) 5/16" lock washer (10) 5/16" flat washer (5) 5/16" nut
Headlight support bracket, Left	(2) 1/4" x 1" lag screw (2) 4mm flat washer (2) 4mm nut (2) 4mm Delrin nut
Headlight support bracket, Left	(2) 1/4" x 1" lag screw (2) 4mm flat washer (2) 4mm nut (2) 4mm Delrin nut
Cowl L-Bracket	(2) self-tapping screw

INSTALLATION PROCEDURE

1. Read these instructions several times prior to beginning to ensure a complete understanding of the basic steps required. If there are questions, please contact us for clarification.
2. Place the vehicle on a level surface and set the parking brake.
3. (Figures 1 and 2) Open the hood and disconnect the wiper washer supply hoses along with any wires or ground straps running between the hood and the body. Unbolt the hood and remove it from the vehicle.



Fig. 1



Fig. 2

4. (Figures 3 and 4) Remove the windshield wiper arms and remove the four outer bolts securing the cowl in place. Remove the cowl. Remove the plastic cover that was covering windshield washer motor attached to the cowl. This plastic cover will not be re-used.



5. Remove the windshield hinge covers but save them as well as the hardware for re-use.

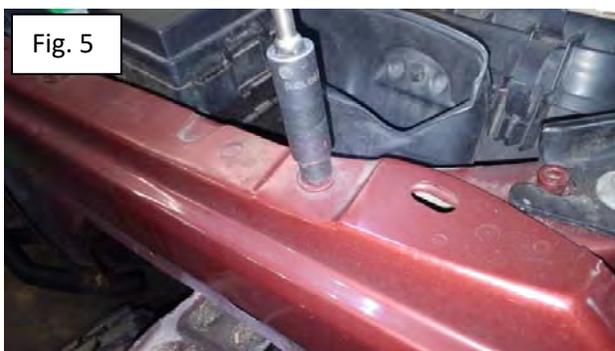
6. Remove the front fender flares, including the inner fender structure. Refer to the factory service manual for the detailed procedure of flare removal.

7. Unfasten the clips securing the grille and remove the grille. Remove the hood latches but set aside for re-use.

8. Remove the headlight assemblies. This is best accomplished by backing out all three studs securing the assemblies, remove the complete assembly, and disconnecting the wiring. Save the headlights and adjustment screws for re-use.

Important: We DO NOT recommend removing the headlight mounting bracket from the three screws. Most of the time these break, and then the only option is replacing the entire headlight assembly.

9. (Figures 5 and 6) Loosen the hardware securing the front portion of the fenders in place. Once loose, use a cutoff wheel or similar tool to cut around the metal fender flare support tab sticking out directly above the center of the tire. There should be about ¼" of clearance around the bracket.



10. Observe the front edge of the cowl and note that there are ribs present in the center of the front lip. These ribs help give the cowl a slight arch in the center. Use a pair of pliers to carefully flatten out these ribs, which in turn will flatten the top of the cowl and remove the arch present in it.

11. Temporarily re-install the cowl Loosely re-install the factory cowl screws but do not tighten them at this time.



Fig. 7

12. (Figure 7) The front portion of the fenders should be free from the fender supports. On each side, carefully pull outward and the front portion of the fenders to spread them outward, away from the underlying support structure. This will in effect straighten the profile of the fender, eliminating some of the original taper towards the front grille. It will also be necessary to lightly re-form the curved portion of the fender that meets with the cowl; push inward with the palm of your hand as shown to

accomplish this as shown. Be gentle and patient to avoid creating any creases or ripples.

13. (Figure 8) On each side, install the supplied fender spacer bracket (they are marked "D and "P" for reference) Position the brackets under the lip of the fender as shown and secure using the supplied hardware, then position the bracket on top of the fender support and secure using the factory hardware. Do not tighten the hardware at this time.



Fig. 8

14. (Figure 9) Raise the hood hinges out of the way, and with the help of an assistant, position the CDM hood on the vehicle. Align the trailing edge of the hood with the cowl and make sure the gaps are even on all sides (TIP: place a doubled over piece of cardboard between the cowl and the hood to help set and maintain the gap between the hood and the cowl). Lower the hinges to the hood and use the hinge holes as a template to mark the location of the hinge holes to be drilled in the hood. Raise the hinges one more time and drill at the marked locations. Secure the hood hinges to the hood using the factory bolts with the supplied 8mm flange nuts and support plates.



Fig. 9



Fig. 10

15. (Figure 10) Locate the supplied L-shaped bracket. Position the long end of the bracket in the center of the front lip of the cowl, with the short leg of the bracket facing forward (toward the front bumper). Secure the long end of the L bracket to the cowl using the supplied self-tapping screw. Secure the short leg to the firewall lip using a self-tapping screw.

16. (Figure 11) Raise the hood. Locate the factory egg-shaped hole in the center of the factory lower cross-brace in front of the radiator. This hole is present in the face of the cross-brace only; it does not go through the rear portion of the brace. Position a piece of wood to protect the condenser, and using a 21/64" bit, drill all the way through cross brace. Make a reference mark on the top of the cross-brace indicating the location of this hole to assist with the next step.



Fig. 11

17. (Figure 12 and 13) Locate the ambient air temperature sensor mounted to the lower portion of the core support. Relocate this sensor to the bottom of the core support and drill a new mounting hole to secure it. Note the short lip that is present in the lower corners of the of the core support. This lip will need to be trimmed back so that it is flush with the face of the core support. Use a cutoff wheel, grinder, or similar tool.



Fig. 12



Fig. 13

NOTE: We strongly recommend applying protective tape to the forward portions of the front fenders at this time to help prevent scratches to the factory paint on the fenders while fitting the CDM grille header.



Fig. 14

17. (Figure 14) Position the CDM grille header in place. Carefully lower the hood and align the corners of the header with the corners of the hood. Once satisfied with the placement, mark location of the center hole drilled in the previous step. Remove the header and drill at the marked location.

18. (Figure 14, 15, and 16) Reposition the grille header and secure the bottom center using the supplied 5/16" x 2-1/2" bolt, and nut through the holes drilled previously. Gently push the top of the header rearward to rest it against the front fenders. Lower the hood and adjust overall alignment of the header. Pay close attention to the alignment of the front corners, as these panel gaps will be highly noticeable when installation is complete. Make adjustments as necessary until satisfied with the alignment of all components, but especially the grille header and the hood. Also pay close attention to the gap and alignment between the hood and the fender down the sides. Once properly positioned, on each side mark the locations of the existing hood latch holes in the fenders on the header (these will need to be marked from the backside of the fenders). Remove the header and drill at the marked locations.



Fig. 15



Fig. 16

19. Install the supplied headlight brackets on the core support; there will be one for each side. Use the supplied ¼" x 1" lag screws to secure the bracket to the bottom two holes of the original headlight location, and original fine thread bolt in the upper location. Leave the brackets loose for now for slight adjustments later.

20. (Figure 17) Attach the headlight assembly to the headlight brackets. Start one of the supplied 4mm nuts and flat washer on the single fine thread bolt on the headlight assembly. Secure the headlight assembly to the CDM bracket using the supplied Delrin nuts on the bottom two coarse thread studs, and a second supplied 4mm nut on the upper fine thread bolt. For clarification, the CDM bracket should be sandwiched between



Fig. 17

the two 4mm nuts on the fine thread bolt of the headlight assembly. These nuts will now serve as the headlight adjuster. Unclip and unwrap the factory headlight wiring as necessary in order to reach the new location of the headlights and reconnect them. Repeat these steps on the other side.

21. Install the user-sourced classic Jeep Gladiator grille in the CDM grille header, or the CDM grille that was ordered separately from CDM. The header will have provisions to accommodate both grille styles. Grille hardware is ¼-20 coarse thread.

22. Install the header on the vehicle for the final time. Secure the lower portion with the center bolt as done previously. Make any minor adjustments necessary to align the headlights with the headlight holes in the header and then snug the headlight bracket assemblies. Align the header with the hood latch holes and loosely secure. Tighten the fender hardware.

23. Install the cowl and secure it using the four factory screws as well as the supplied screw detailed in step 15 for the center L bracket.

24. Check for hood-to-cowl clearance. Open the hood and lift it all the way back against the windshield while carefully observing the clearance between the hood and the cowl. It will be close, but there should not be any contact between the back of the hood and the front of the cowl. Make adjustments as necessary until any clearance issues are resolved.

25. Make one final check of alignment, panel gaps, and overall look to ensure you are satisfied with the installation.

At this point mock-up is complete. The Gladiator components can now be removed for prep and painting.

26. Follow the previous steps for final assembly.

27. Reinstall the windshield wiper arms, windshield hinge plates, trouble light, and any other components that were removed during initial disassembly.

28. Locate the factory JK marker lights. Re-route the marker light wiring as necessary to reach the new light location and secure the bulb and socket in the light. Press the light into the marker light bracket built into the CDM grille header. Now install the user-supplied Gladiator marker lights. If the customer chooses, the lights can be wired to be functional.

29. Installation is now complete. Double-check all panels and fasteners for proper fit and tightness. Double-check all fasteners after 500 miles.