

Jeep Grand Cherokee WK2 MY2011-2021

Predator Front Bar

IMPORTANT! – READ BEFORE INSTALLATION

- When installed in accordance with these instructions, the front protection bar does not affect the operation of the vehicles SRS airbags.
- This product must be installed exactly as per these instructions using only hardware supplied.
- Take a few moments to read instructions thoroughly before beginning work.
- In the event of damage to any bar component please contact OFFROAD ANIMAL to arrange repair/replacement of components.
- Do not use this product for any vehicle make or model other than that specified on these instructions.
- Do not remove labels from this product.
- This product and its fixings must not be modified in any way unless stated in these fitting instructions.
- The installation of this product is recommended for trained personnel.
- These instructions are correct at time of publication. OFFROAD ANIMAL cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer. If you find something has changed, please contact us to let us know!
- During installation it is the duty of the installer to check correct operation/clearances of all components.
- If Instructions are to be printed for reference in the workshop, it is recommended that they are printed in colour, for best legibility.

GENERAL CARE AND MAINTENANCE

Only wash the product with a PH neutral car wash to prevent paint damage and discolouration.

Plastic parts may be maintained with silicone spray.

Do not use acidic or alkaline based cleaning products.

It is important to perform regular checks (pre trip or on an annual basis) on the installed product. Checks include:

- Visual inspection for damage (eg. cracks, chips, dents etc.)
- Electrical wiring is not rubbing anything or worn out
- Bolts are torqued to correct specification (see torque guide below)

For touching up small stone chips, Offroad Animal recommends the following paint products:

- Dupli-Color Trim & Bumper Paint Black (TB101)
- VHT Hood, Bumper & Trim Paint Black (SP27)

BOLT TORQUE SETTINGS

Use the following bolt torques on all general fasteners, unless otherwise specified.

GENERAL FASTENERS		
Size	Torque Nm	
M5	5 Nm	
M6	9 Nm	
M8	22 Nm	
M10	44 Nm	
M12	77 Nm	

Use the following bolt torques on all structural front bar mount and tow point fasteners, and rear towbar fasteners, unless otherwise specified.

FRONT BAR MOUNTS AND TOW POINTS + REAR TOWBAR		
Size	Torque Nm	
M10	57 Nm	
M12	100 Nm	
M14	164 Nm	
M16	248 Nm	

Always use a torque wrench to set correct torque settings. Ensure torque wrench is set to Nm unit of measurement. Otherwise perform conversion to lb-ft.

PARTS LISTING

IMPORTANT: Check all parts are present before beginning work! Contact OFFROAD ANIMAL if something is missing.

Main Parts - In the Box

Qty	Part Number	Description	Image
1	FB-JGC- WK2-14- PR-ASM1	WK2 PREDATOR WELDMENT	V.V.
1	RP-JGC- WK2-11- ASM0	RECOVORY POINTS WK2	
1	FB-JGC- WK2-14- PR-ASM2R	IMPACT ABSORBER WK2 RH	
1	FB-JGC- WK2-14- PR-ASM2L	IMPACT ABSORBER WK2 LH	
1	M-0002R	Light Cover Mesh	Rice Control
1	M-0002L	Light Cover Mesh	
1	M-0015R	Dmax Predator side Mesh RH	

1	M-0015L	Dmax Predator side Mesh LH	
1	M-0020	Wk2 Predator Centre Fairlead Mesh	
1	B-0474	ACC mount predator	
1	B-0482R	Wk2 lower gusset RH	
1	B-0482L	Wk2 lower gusset LH	
1	B-0519R	Ram 1500 Halo Fog Light Bracket RH	
1	B-0519L	Ram 1500 Halo Fog Light Bracket LH	
2	P-0165	Wk2 radiator brace predator	0 0
1	U-0033	Wk2 Predator Bash Plate	
1	NPF-COM- SM-ASM0	Number Plate Flip ASM Small	

	I		
2	PW-P- 14X9-2800	Pinch Weld - Plain 14X9MM, Rubber, 2800mm Length	N/A
1	OFA-LOGO	Offroad Animal Metal Logo	
1	FI Note	Fitting Instruction Note	N/A
1	FB-JGC- WK2-14- PR-ADRCP	ADR Compliance Plate Grand Cherokee Predator 14+	OFFICIAL ANNAL, 12 SUPCET COME MISSENSTER NO. 583, AN DEFENDE OF SEPERATURE PLANSAGE CHARLES OF SEPERATURE PLANSAGE CHARLES OF SEPERATURE PLANSAGE MISSENSTER OF SEPERATURE PLANSAGE DOCUMENT OF SEPERATURE PLANSAGE
		WK2 PREDATO	R AIR SUSPENSION KIT
1	U-0038R	WK2 SIDE UNDERPANEL WITH AIR SUSPENISON RH	
1	U-0038L	WK2 SIDE UNDERPANEL WITH AIR SUSPENISON LH	
1	B-0087	AIR SUSPENSION BRACKET	
		WK2 PREDATOR I	NO AIR SUSPENSION KIT
1	U-0094R	WK2 Side Underpanel - No Air Suspension RH	
1	U-0094L	WK2 Side Underpanel - No Air Suspension LH	

Small Parts – Contained in Small Parts Kit Bag

4 M5X30 PAN SCREW, PAN HEAD PHILLIPS, M5X30X0.8 GR4.6 ZP 22 M6x16 BHCS BLACK ZINC SCREW, BUTTON HEAD CAP, M6X16X1 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH 22 M6 FLAT WASHER BLACK ZINC M6 Flat Washer, 12x6.1x1, ISO4042 ZnNi BLACK PASSIVATED FINISH 5 M6 X 20 HEX M6X20 HEX BOLT, ZP, 8.8 5 M6 Mud Guard Washer ID 0.25IN X OD 1IN 14 M6 FLANGE NUT Flange Nut, M6x1 G8.8 ZP 10 M6CN3MM CAGE NUT M6x2.6-3.5 4 M8 X 16 BHCS BZP SCREW, BUTTON HEAD CAP, M8X16X1.25 GR12.9, ISO4042 ZnNi BLACK PASSIVATED FINISH 6 M8 X 30 BHCS BLACK ZINC SCREW, BUTTON HEAD CAP, M8X30X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH 10 M8 FLAT WASHER- BLACK ZINC SCREW, BUTTON HEAD CAP, M8X30X1.25, ISO4042 ZnNi BLACK PASSIVATED FINISH 10 M8 FLAT WASHER- BLACK ZINC M8 FLAT WASHER DFINISH 2 M8 FLAT WASHER- BLACK ZINC M8 FLAT WASHER DFINISH 2 M8 FLAT WASHER M8 FLAT WASHER 8 M8 FLAT WASHER M8 FLAT WASHER 8 M8 FLAT WASHER M8 FLAT WASHER 9 M9 FLAT WASHER M8 FLAT WASHER <th></th> <th></th> <th></th>			
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2 M12 FLANGE NUT Flange Nut, M12x1.75 G8.8 ZP	8	M12X30	Bolt Hex, M12X30x1.75, GR8.8 ZP
	14	M12 FW LHD	M12 FW Large Heavy Duty
	2	M12 FLANGE NUT	Flange Nut, M12x1.75 G8.8 ZP
	6	M12 Nyloc nut	M12 Nyloc nut

The following tools will be required to install the product.

Hand Tools	Power Tools	Workshop Equipment
Metric socket set 8-19mm	Electric/air impact	Masking tape
	driver (optional)	
Socket extension bar		Tape measure
	Air hacksaw	
Metric spanner set 8-19mm	or	30cm ruler
	Angle grinder	
Hex/Allen key set 4-6mm		Adhesive silicone (with
		caulking gun)
Torx bit set		
		Utility knife
Ratcheting socket wrench		
		Torque wrench
Flat head screwdriver set		Daint nan
Trim tool		Paint pen
Trim tool		Isanranyi alsahal
Side cutters		Isopropyl alcohol
Side cutters		Rag
Phillips head screwdriver		Lag
set		
SEL		

GENERAL WARNINGS

Take care not to lose factory hardware, as some will be re-used.

Take care not to damage parking sensors.

If ACC radar is not working as it should, stand side on the vehicle and see which way it's pointing. If pointing up or down adjust screws so it's pointing straight ahead.

WORKSHOP SAFETY

It is the responsibility of the installer to always complete works in a safe manner. Make sure the following safety equipment is available and precautions are observed whilst fitting this product.

Hearing Protection	Always wear ear protection when using power tools.
Eye Protection	Ensure eye protection is always worn when cutting or drilling.
Manual Handling	Do not attempt to lift bar assemblies or rock sliders on your own. Always use two people to lift or use mechanical Lifting aid such as hydraulic lifting trolley.
Vehicle Support	Always ensure vehicle is properly supported when working on it. Do not attempt to fit products whilst suspension work is being carried out. Do not work under a vehicle supported only by a jack.



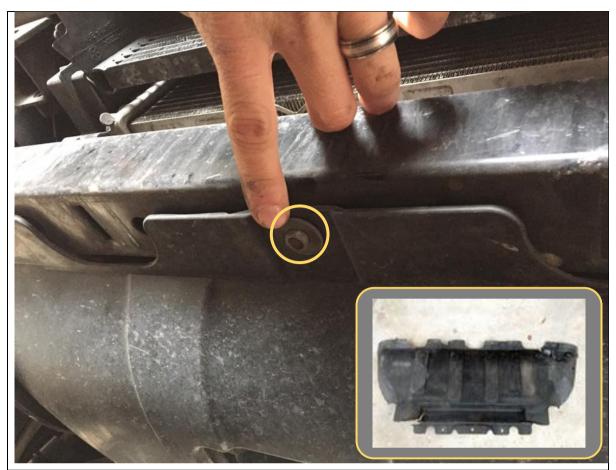
NOTE: Images may vary from your vehicle, depending on country and trim / specification level.

- 1. First remove the lower air dam fascia. To do this climb under your Jeep and remove all 7x quarter turn clips by hand. 2x are tucked up high in each corner and 3x in the middle, with another 2x off to the side not tucked up.
- 2. Once they are removed pull the entire lower air dam away from Jeep by hand. You will not be reusing this part.

TOOLS REQUIRED

FASTENERS

Discard



3. Remove factory lower radiator cover. 3x M6 bolts on front and 2x M8 bolts on back. Use 10mm socket or spanner for front and 13mm for rear.

TOOLS REQUIRED

10mm socket/spanner 13mm socket/spanner

FASTENERS

Retain for re-use



- 4. Remove factory tie down and or tow points.
- 5. Vehicles equipped with Mopar tow points, first remove the M20 Nut and 2x M10 nolts to remove the main hook. Then remove the 2x bolts securing the tow hook mounting bracket. Complete on both sides.

Socket set

FASTENERS

Discard

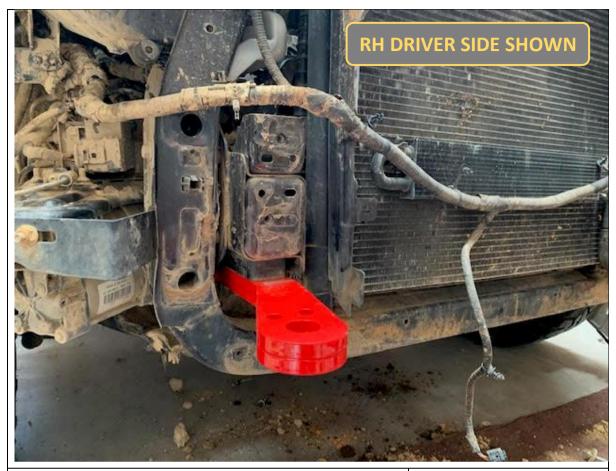


6. Stack Offroad Animal Tow points together as shown with M10 bolts and M10 flat washers.

TOOLS REQUIRED

FASTENERS

4x M10x80 hex bolt 4x M10 flat washer

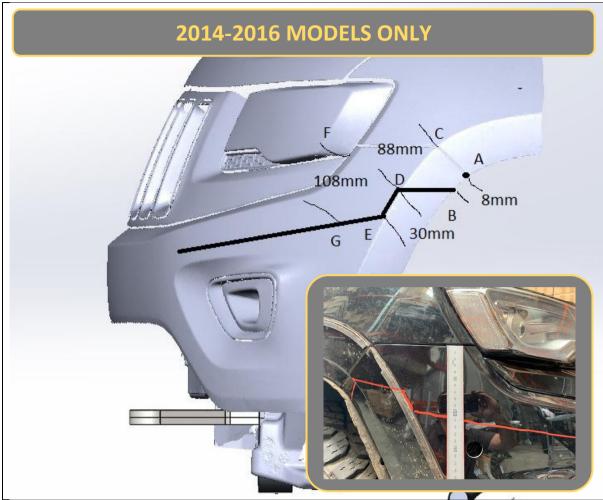


- 7. Fit Offroad Animal recovery points as shown on LH and RH side with M10x80 bolts directly into frame of Jeep.
- 8. Torque Bolts to 70Nm (51 Ft Lbs.) using Torque Wrench.

16/17mm socket/spanner
Torque wrench

FASTENERS

4x M10x80 hex bolt 4x M10 flat washer



This step is for marking up the bumper cut on a 2014-2016 model.

Skip to <u>Step 24</u> for 2017-2020 models, <u>Step 38</u> for Summit and S models, and Step 50 for 2011-2013 models.

- 9. Start by removing the factory flare.
- 10. Apply masking tape onto bumper.
- 11. Measure 8mm down from point A to point B. Place a mark.
- 12. Measure 88mm down along the mould line in bumper from point C to point D. Place a mark.
- 13. Measure 30mm down along the mould line in bumper from point D to point E. Place a mark.
- 14. Measure 108mm vertically down from point F to point G. See inset photo. Place a mark.
- 15. Using a marker pen, join points B-to-D, then D-to-E and finally E-to-G.

TOOLS REQUIRED

Ruler Measuring tape Masking tape Marker pen



16. This step shows a fully marked side. Repeat for other side.

Ruler Measuring tape Masking tape Marker pen



- 17. Point H is the join between the grille and the point at which the bumper starts to slope down, and right in the middle of the bumper from left to light. Measure 35mm down on that sloping face and put a mark (point I).
- 18. Point J is the point at which the bumper and grille meet at the edge of the grille slot. Measure 35mm down and put a mark (point K).
- 19. Point L is the point where the bumper and fog light housing meet, and <u>left to right directly above the globe of</u> the light (not the housing). Measure 60mm up and put a mark (point M).
- 20. Mark a line with a marker pen, joining point I to point K, point K to point M, and finally point M back to point G.
- 21. Repeat for other side.

Ruler Measuring tape Masking tape Marker pen





22. These photos will better portray how to measure steps 18 and 19.

TOOLS REQUIRED



23. If you have not done so already, use marking tape to mark out the cut lines, and put masking tape above the cut lines to protect the portion of the bumper that will stay.

Skip to Step 62 after completion.

TOOLS REQUIRED

Masking tape



The following steps are for cutting a bumper 2017-2021. Does not suit Summit or S models.

- 24. Remove factory flare.
- 25. Apply masking tape onto bumper.
- 26. Measure 10mm down from point A to point B and mark this point.
- 27. Measure 90mm down along the mould line to point D and mark this point.
- 28. Follow the mould line down a further 30mm to point E and mark this point.
- 29. Point F is right at the edge of the impression for the fog light indent in the bumper, roughly 220mm from point F.
- 30. Draw a line with a marker pen connecting point B-to D, then point D-to E, and finally E-to F.
- 31. Repeat for the other side.

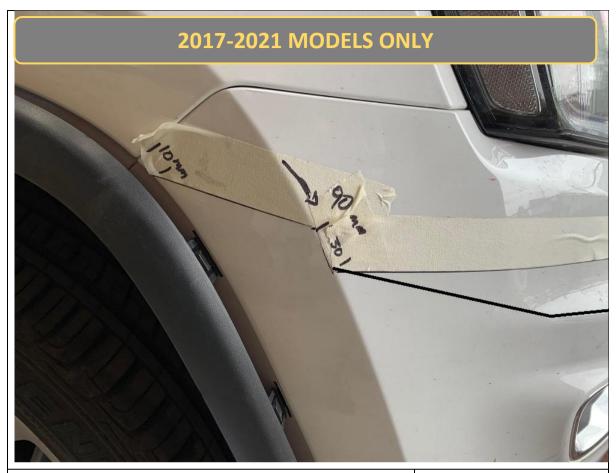
TOOLS REQUIRED

Ruler Measuring tape Masking tape Marker pen



- 32. Point G is the centre of the bumper from left to right and the topmost mould line.
- 33. Measure 55mm down and mark point H.
- 34. Point I is the edge of the grille on the top mould line. Measure 55m down and mark point J.
- 35. Draw a line from point H to J, then J to F from the previous step.
- 36. Repeat for the other side.

Ruler Measuring tape Masking tape Marker pen



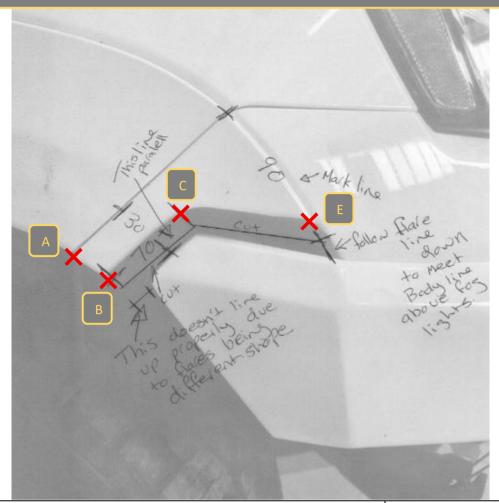
37. If you have not done so already, use marking tape to mark out the cut lines, and put masking tape above the cut lines to protect the portion of the bumper that will stay.

Skip to Step 62 after completion.

TOOLS REQUIRED

Masking tape

SUMMIT, S LIMITED AND S OVERLAND MODELS ONLY



The following steps are for cutting a bumper for Summit, S Limited and S Overland models.

- 38. Apply masking tape onto bumper.
- 39. Point A is the corner of bumper and quarter panel, mark 30mm down along the wheel arch to point B.
- 40. Point C is 70mm up from point B, parallel to the quarter panel line.
- 41. Point E is 90mm down the mould line.
- 42. Point F is the join of the side mould line and the one that runs across the front of the vehicle (see next page).
- 43. Mark from point B-to-C, then C-to-E, then E-to-F.
- 44. The cut will be along this line so use masking tape above this to protect the portion of the bumper that is staying.

TOOLS REQUIRED

Ruler Measuring tape Masking tape Marker pen

SUMMIT, S LIMITED AND S OVERLAND MODELS ONLY

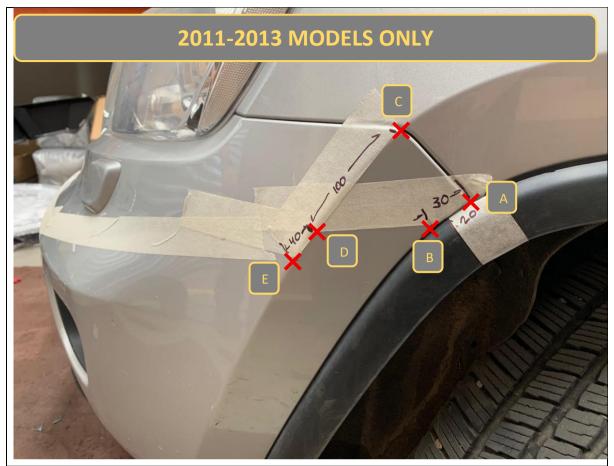


- 45. Point G is the centre of the bumper from left to right and the topmost mould line.
- 46. Measure 55mm down and mark point H.
- 47. Point I is the edge of the grille on the top mould line. Measure 55m down and mark point J.
- 48. Draw a line from point H to J, then J to F from the previous step.
- 49. Repeat for the other side.

Skip to Step 62 after completion.

TOOLS REQUIRED

Ruler Measuring tape Masking tape Marker pen



The following steps are for cutting bumper for 2011-2013 models.

- 50. Apply masking tape onto bumper.
- 51. Point A is the edge of the bumper where it meets the flare. Start here and measure 30mm along the flare to point B.
- 52. Point D is 100mm down along the mould line measured from point C.
- 53. Point E is 40mm down along the mould line measured from point D.
- 54. Use masking tape to cover the top side (what you'll keep) of the bumper.

TOOLS REQUIRED

Ruler Measuring tape Masking tape Marker pen

FASTENERS

Bolt



55. Point G is 105mm vertically down from point F.

TOOLS REQUIRED

Ruler Tape measure Marker pen



- 56. Point H is the corner of the fog light mould recess.
- 57. Point I is the point along the mould line directly above point H.
- 58. Using masking tape, tape the mould line from the middle of the car outwards and pass through point I and then through point G to point E in the previous steps.
- 59. Using an air hacker or angle grinder, trim the bumper. It's easiest to do this with the bumper removed. Cut B-D-E-G-I then to the middle Cut below the tape line.

Ruler Measuring tape Masking tape Marker pen

Air hacksaw or Angle grinder



60. With the bumper cut and back on the vehicle, and the mounts installed, mark a point directly above the flat face of the mount, then 45mm towards the centre of the car. Then 40mm up towards the car. Shade this area and cut it out.

TOOLS REQUIRED

Ruler Measuring tape Masking tape Marker pen

Air hacksaw or Angle grinder



61. You'll also need to trim through the plastic reinforcement underneath it.

TOOLS REQUIRED

Spanner

FASTENERS

Bolt



All model trims follow instructions from here.

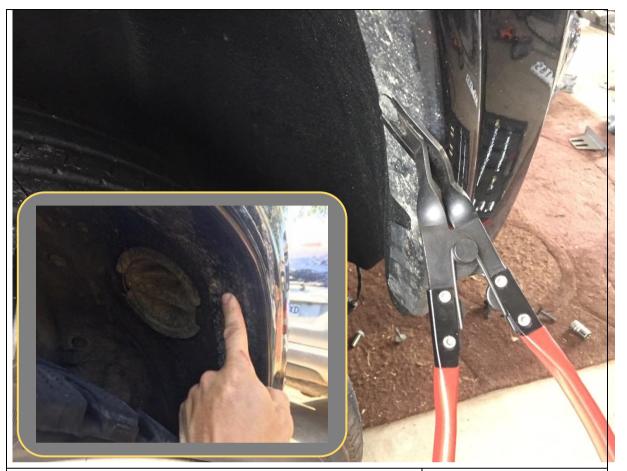
62. Next step is to remove the rest of the front bumper. Start with the bonnet/hood open and pry out two clips shown with trim tool or flat head screwdriver.

TOOLS REQUIRED

Trim tool or Flat head screwdriver

FASTENERS

Retain factory clips



- 63. At the wheel arch on both sides you will need to pry out 2 plastic rivets. You can also drill out the center of the rivet if you're struggling to pry it out.
- 64. Remove screw shown with 10mm socket or spanner.

Trim tool or Flat head screwdriver

10mm socket or spanner

FASTENERS

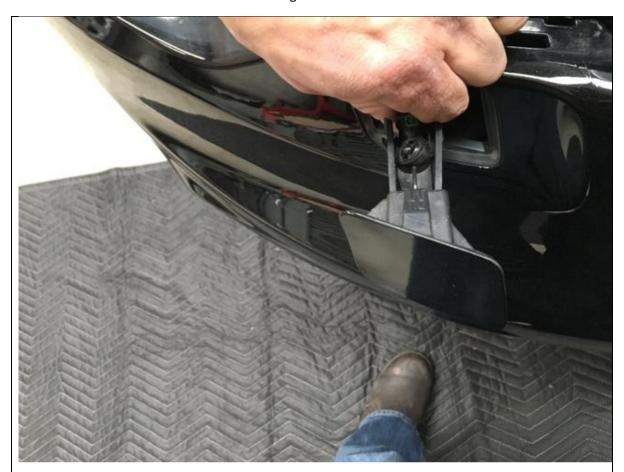
Discard plastic rivets



65. Pull the factory flare away from bumper, and using a flat head screwdriver release at least 2x of the push in clips on top edge being careful not to break them as you pull the flare away from the body.

TOOLS REQUIRED

Flat head screwdriver



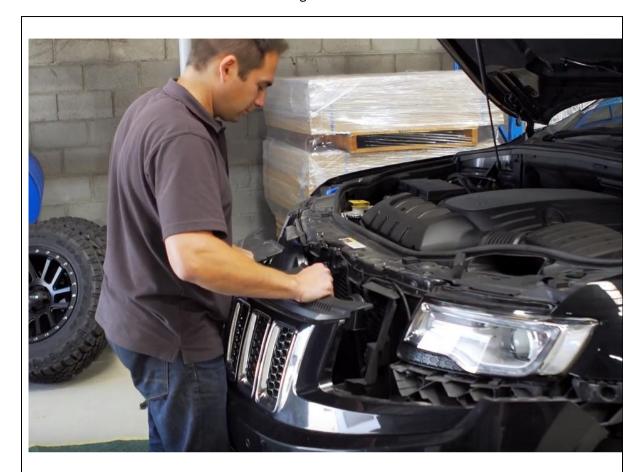
66. If equipped, pull headlight washer out by hand and detach retaining clips allowing mechanism to retract and remove outside panel.

TOOLS REQUIRED



67. Pull the edge of the bumper away from the body.

TOOLS REQUIRED



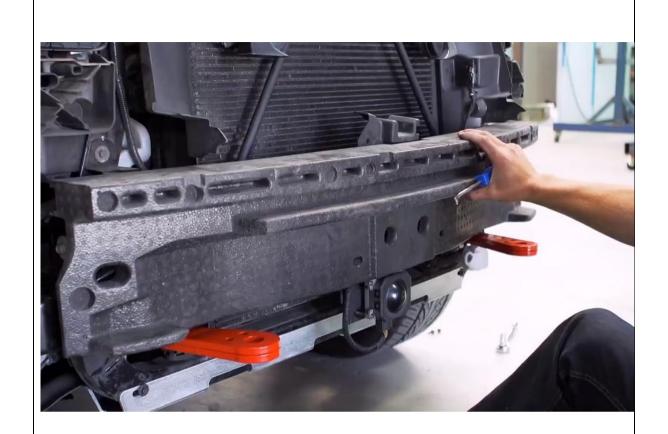
68. Lifting the top section ever so slightly you can release clips holding in the top section and pull the remainder of the bumper away.

TOOLS REQUIRED

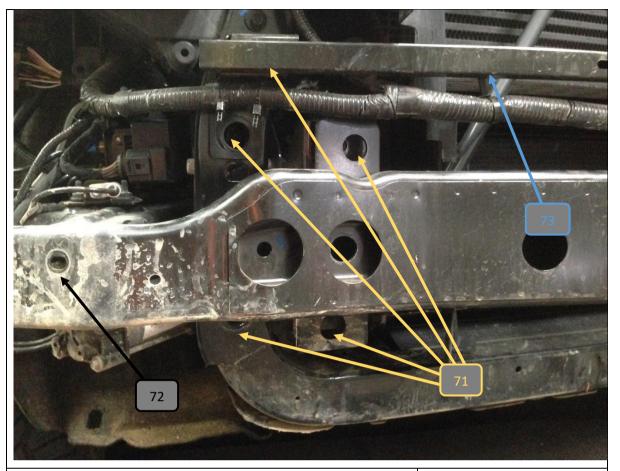


69. Pull out 2x plastic Christmas tree clips holding foam in.

Trim tool or Flat head screwdriver



70. Pull the foam insert off.	TOOLS REQUIRED
	FASTENERS



- 71. Remove Crash beam by removing 8x M8 bolts (4x per side with 13mm tool) and 2x M6 bolts with 10mm tool.
- 72. If equipped with air suspension remove 2x flange nuts holding compressor onto bumper reinforcement.
- 73. Using a trim tool or similar remove all loom securing keepers holding wiring onto bumper reinforcement.

10mm spanner or socket 13mm spanner or socket

Trim tool Or Flat head screwdriver

FASTENERS

Retain all fasteners, some will be re-used



74. If ACC adaptive cruise control is fitted, unplug the loom and pull the radar sensor off the mounting posts.



75. Remove 2x screws 13mm tool holding the round support bars from the top of the bonnet, then remove and discard the entire reinforcement bar.

TOOLS REQUIRED

13mm socket/spanner

FASTENERS

Retain for re-use



76. Cut the tab off shown in picture above from both sides.

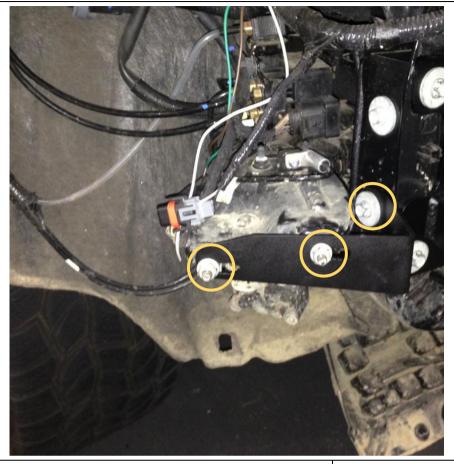
You can bend it back and forth a few times and remove it by hand.

TOOLS REQUIRED

Angle grinder or Air hacksaw or Sawzall

FASTENERS

Bolt

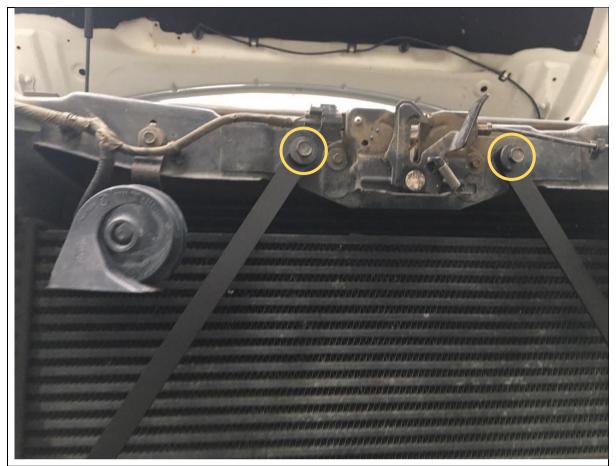


77. If vehicle is fitted with air suspension, fit the air suspension bracket as shown using factory bolts.

13mm spanner/socket 15mm spanner/socket

FASTENERS

Re-use factory



78. Fit radiator braces as shown with factory bolts.

TOOLS REQUIRED

13mm spanner/socket

FASTENERS

Re-use factory



79. If factory parking sensors are present on the vehicle, you'll need to remove the sensor from each housing and pry the housing off the bumper with a trim tool or flat head screwdriver.

TOOLS REQUIRED

Trim tool or Flat blade screwdriver



80. Clean the front face of the sensor housing with isopropyl alcohol and a rag. Then apply a healthy amount of adhesive silicone as shown.

TOOLS REQUIRED

Isopropyl alcohol Rag Adhesive silicone

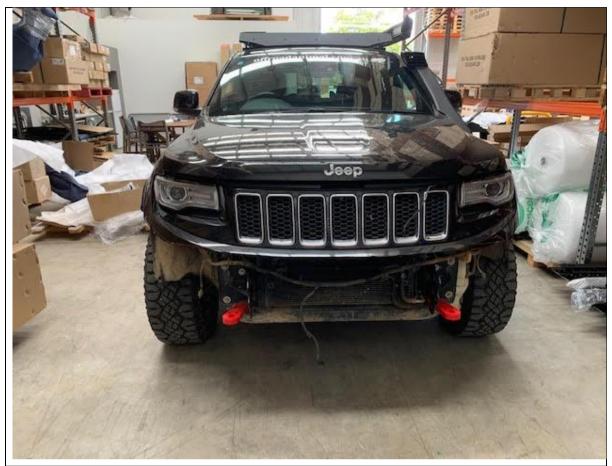


- 81. Press the sensor housing onto the inside of the bull bar where the parking sensor holes are (ensure clean face on bull bar as well).
- 82. Orientate the housing so the parking sensor will still be able to fit in with wires hanging out the side.
- 83. Repeat for other 5x sensor housings.

Allow at least an hour for silicone to set and cure.

TOOLS REQUIRED

Isopropyl alcohol Rag Adhesive silicone



- 84. Using an angle grinder, air hacksaw or jigsaw, trim the bumper. Make sure the cut edges are neat and tidy. You can clean it up with a utility knife or deburring tool.
- 85. Re-fit trimmed bumper to car. Re-connect headlight washers if equipped.

Angle grinder or Air hacksaw or Jigsaw

Utility knife or Deburring tool



86. Fit 10x M6 cage nuts to the bottom edge of the bar as shown (5x per side).

You can often just push them in by hand, otherwise you can use a flat head screwdriver to push the edge of the cage nut to engage with the slot.

TOOLS REQUIRED

Flat head screwdriver

FASTENERS

10x M6 cage nut



87. After adhesive silicone has set, push the parking sensors into their housings.

Make sure the housings are set, if the weather is cold you may need to wait longer.

TOOLS REQUIRED



88. If fitting an integrated light bar, do so now.

This bar is designed to fit the Offroad Animal 22-inch light bar. If fitting this light bar, assemble the light bar with legs facing outwards, and line it up with the slots in the centre gusset. Secure with M6 fasteners supplied with the light.

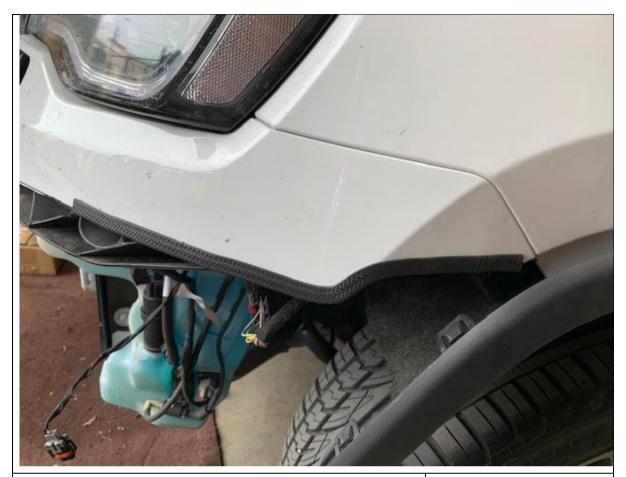
This bar can accommodate most other "20-22inch" size light bars.

TOOLS REQUIRED

Refer to light bar instructions

FASTENERS

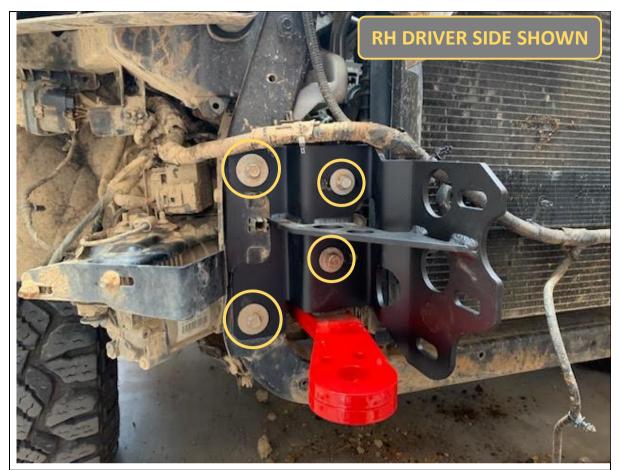
Supplied with light bar



89. Fit a small section of pinch weld rubber to the trimmed bumper edge as shown. Trim pinch weld with side cutters.

TOOLS REQUIRED

Side cutters



- 90. Install the chassis brackets as shown with factory retained bolts.
- 91. Repeat for other side.
- 92. Measure between the inner mount faces and ensure you have about 2-5mm wider distance than the outside upright faces on the bullbar.

Also ensure the mounts are sitting central to the body and not off to one side.

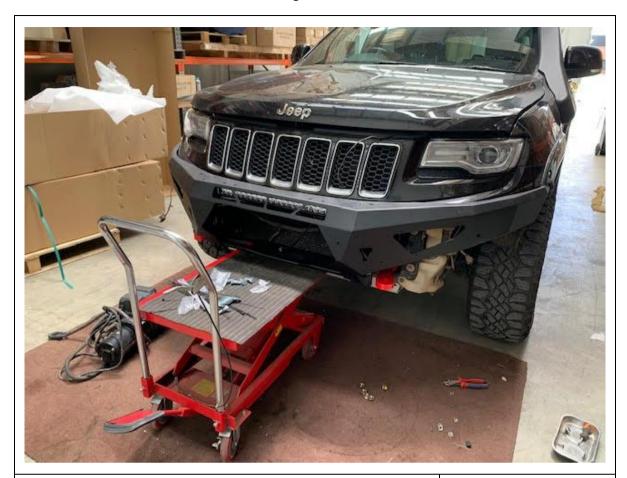
93. Torque bolts to 30Nm.

TOOLS REQUIRED

13mm socket Tape measure

FASTENERS

Retained from factory

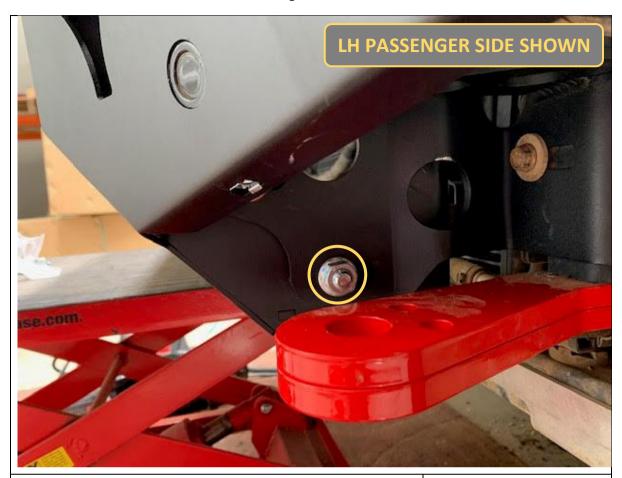


94. With the help of a friend or lifting table (guess which one is easier, no it's not with your friend) lift the bar on top the mounts and hold up with 1x M12x30 hex bolt, flat washer and flange nut on each side.

TOOLS REQUIRED

FASTENERS

2x M12x30 hex bolt 2x M12 heavy duty washer 2x M12 flange nut



95. Fit the 4x more M12x30 hex bolts, 8x flat washers (on both bolt and nut side) and 4x Nyloc nuts. Skip the bottom most hole below the tow point for now.

Leave bolts loose.

TOOLS REQUIRED

FASTENERS

4x M12x30 hex bolt 8x M12 heavy duty washer 4x M12 Nyloc nut

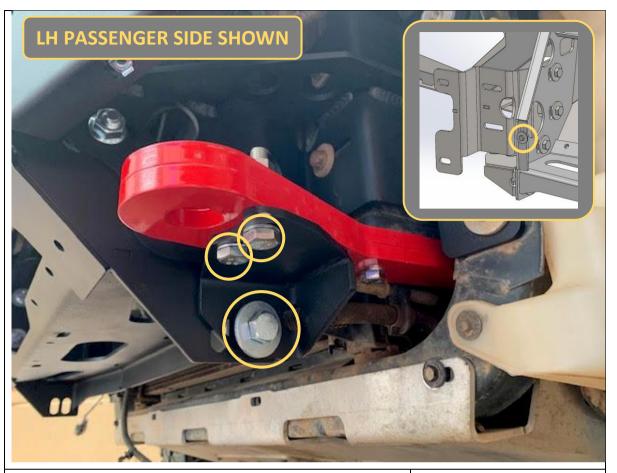


- 96. Push the bar up to the cut bumper edge and as far back as it will while still clearing the bumper. Allow around 5mm gap as these cars are monocoque chassis construction and there's no frame/body flex.
- 97. If you want, you can put more pinch weld on the edge of the bar, but we don't think it's required.
- 98. Mark the flare in line with the end of the bar.
- 99. Trim the flare. Make sure the cut edges are neat and tidy. You can clean it up with a utility knife or deburring tool.

Marker pen

Angle grinder or Air hacksaw or Jigsaw

Utility knife or Deburring tool



100. Once the bar is in position, fit the lower gusset as shown through the remaining hole in the bar with 1x M12x30 hex bolts, 2x flat washers (on both bolt and nut side) and 1x Nyloc nut.

Also fit gusset to tow points with 2x M10x50 hex bolts, flat washers and flange nuts.

Do this on both sides.

- 101. Torque all M12 bolts to 100Nm and M10 bolts to 57Nm.
- 102. Fit the bottom of the 2x radiator braces to the back face of the bullbar uprights (see inset photo) with M6x20 hex bolts, mudguard washers and flange nuts.

TOOLS REQUIRED

10mm spanner 16/17mm socket/spanner 18/19mm socket/spanner Torque wrench

FASTENERS

2x M12x30 hex bolt 2x M12 heavy duty washer 2x M12 Nyloc nut

> 4x M10x50 hex bolt 4x M10 flat washer 4x M10 flange nut

2x M6x20 hex bolt 2x M6 mudguard washer 2x M6 flange nut



103. If equipped, fit the radar to ACC bracket as shown with 4x M5x30 pan head screws.

Phillips head screwdriver

FASTENERS

4x M5x30 pan head screw



104. For 2017-2021 models, you'll need to remove the front face of the radar unit to get to the fasteners in order to fit to the ACC bracket. Replace the front face cover afterwards.

TOOLS REQUIRED

Phillips head screwdriver Torx bits

FASTENERS

4x M5x30 pan head screw



105. If fitting a winch to the bar, fit the hawse fairlead to centre mesh panel now.

106. Fit number plate flip and number plate as well.

TOOLS REQUIRED

Refer to winch instructions

10mm socket/spanner

FASTENERS

Supplied with winch

2x M6x20 hex bolt 2x M6 flat washer 2x M6 flange nut



- 107. If fitting winch, do so now by angling it into the front of the bar as shown.
- 108. Secure with hardware supplied with winch.
- 109. Ensure you can reach the control box plug with the remote controller cable.
- 110. If you have a winch that doesn't allow the control box to mount on the top of it, or has the opening facing up, you'll need to relocate the control box to the side of the winch, or under the bonnet.
- 111. Ensure clutch handle will be accessible through opening in front mesh panel. Refer to winch instructions if required.

16mm socket/spanner

FASTENERS

Supplied with winch



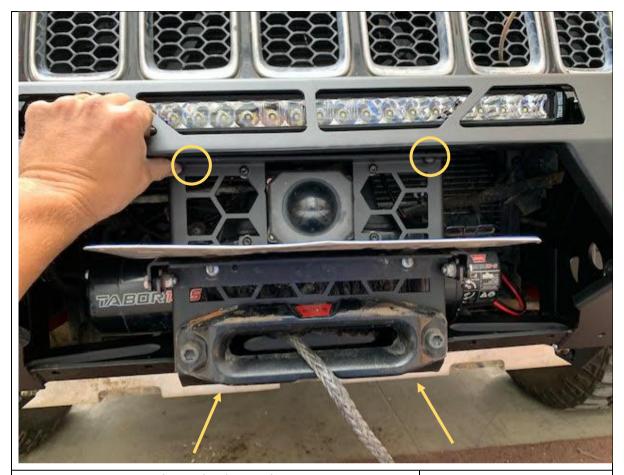
112. Fit the ACC mount with radar to the centre mesh panel with 4x M6x16 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

4mm hex/Allen key

FASTENERS

4x M6x16 black button head 4x M6 black flat washer 4x M6 flange nut



113. Fit centre mesh panel to bar as shown.

Secure at the top to the threaded inserts in the bar with 2x M8x16 black button head bolts and black washers.

Secure at the bottom to the winch cradle with 2x M8x25 hex bolts, flat washers and flange nuts.

114. Now is the time to align the radar. Standing side on and front on, ensure the radar is facing directly forward. You can adjust the mounting screws to achieve this.

Note: Offroad Animal will not be held responsible for poorly aligned radars. They work as long as they are facing forward, not left or right, or up or down.

TOOLS REQUIRED

5mm hex/Allen key 13mm socket/spanner

FASTENERS

2x M8x16 black button head 2x M8 black washer

> 2x M8x25 hex bolt 2x M8 flat washer 2x M8 flange nut

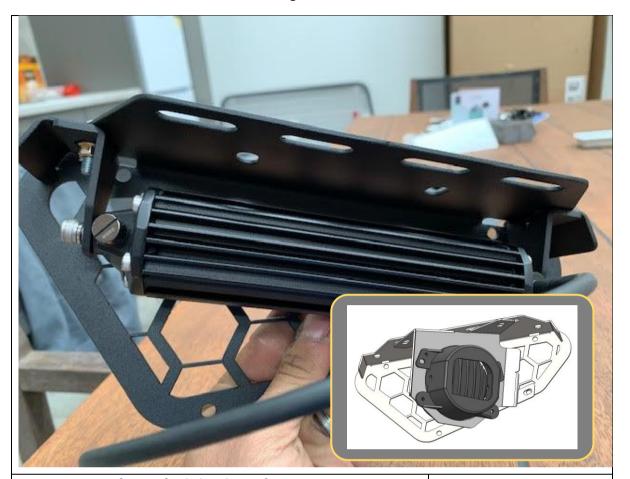


- 115. Fit middle side mesh panel as shown with 1x M8x16 black button head bolt and black washer. Note the side flange of the mesh panel goes behind the inner lip of the bull bar. Leave the 2x bottom bolts empty for now.
- 116. Repeat for other side.

5mm hex/Allen key

FASTENERS

2x M8x16 black button head 2x M8 black washer



117. Your factory fog lights do not fit, sorry.

But you can fit our Offroad Animal Halo fog lights with the supplied bracket or driving lights in the wings. 2x cube lights or 1x 6-8" single row LED light bar. See above showing a single row 8" Offroad Animal LED light bar.

Or you can leave this area blank, just the wing mesh panel.

118. Repeat for other side.

TOOLS REQUIRED

FASTENERS

M8 hardware



119. Fit wing mesh panels to the bar from behind, and secure each one with 4x M6x16 black button head bolts, black washers and flange nuts.

4mm hex/Allen key

FASTENERS

4x M6x16 black button head 4x M6 black flat washer 4x M6 flange nut

Per side



120. Fit the centre bash plate as shown, and secure through the mesh panel into the front face of the bar with 4x M8x30 black button head bolts, black washers and flange nuts.

TOOLS REQUIRED

5mm hex/Allen key 13mm spanner

FASTENERS

4x M8x30 black button head 4x M8 black flat washer 4x M8 flange nut



121. Fit lower factory M6 bolts through bash plate into cross member. Do not over torque these or else you will strip threads.

If you lost the factory bolts the bar should also be supplied with extra M6x20 hex bolts and mudguard washers for this.

TOOLS REQUIRED

10mm socket/spanner

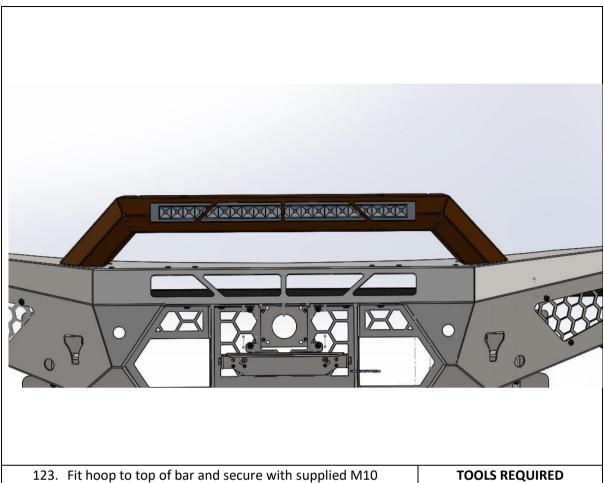
FASTENERS

Factory bolts



122. If fitting optional Stealth Hoop and light bar, fit light to hoop as shown.

TOOLS REQUIRED



123. Fit hoop to top of bar and secure with supplied M10 hardware from hoop kit.

124. This bar can also be fitted with the Offroad Animal Rally Hoop or regular round driving lights.



125. Fit the side underpanels as shown.

Secure each underpanel to the cage nuts in the bar with 5x M6x16 black button head bolts and black washers.

Secure each underpanel to the centre bash plate at the bottom corner with 1x M8x30 black button head bolt, black washer and flange nut.

126. Trim the felt wheel well liner with a utility knife so that it can tuck neatly in behind the back folded flange of the underpanel and be held in place.

TOOLS REQUIRED

4mm hex/Allen key 5mm hex/Allen key Utility knife

FASTENERS

10x M6x16 black button head 10x M6 black washer

2x M8x30 black button head 2x M8 black washer 2x M8 flange nut



- 127. Fit the logo plate (you bloody better do it or we'll find out and hunt you).
- 128. Fit compliance plate under bash plate so you can show
- 129. You're done unless you need to wire lights in, then you should have been doing that already.

coppers if they want to see it.

130. Enjoy!

TOOLS REQUIRED