

FITTING INSTRUCTIONS



Document Title: FI-222

Model Number:

SA222AA223BK Winch Bar Non Parking Sensor

SA224AA223BK Winch Bar Parking Sensor

SA271AA223BK Winch Bar Non Parking Sensor EU

SA273AA223BK Winch Bar Parking Sensor EU

Application:

Jeep Wrangler JL 06/19+

Sport, Overland, Rubicon

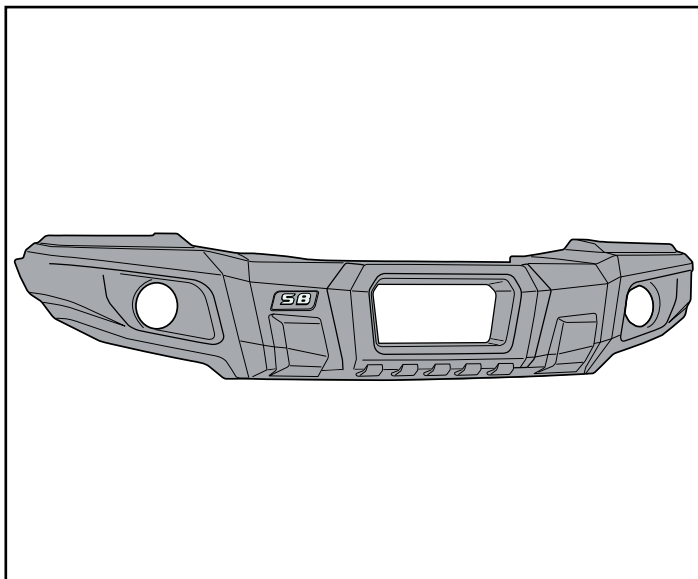
Jeep Gladiator JT 06/20+

Overland, Rubicon, Launch Edition

Fitting Time:

Winch Bar Non PS: Minimum 2 Hours

Winch Bar PS: Minimum 2.5 Hours



Revision: G (11 January 2021)



**PROUDLY
AUSTRALIAN MADE**



Additional Kits:

3500630	Optional Flip Up Number Plate Kit (Required when fitting a winch)
SAHLJ2	Optional High Lift Jack Point
SA222TFK	Top filler kit (required when not fitting a winch)
SA223TPK	Tow point kit (Required to replace factory top tow hooks, Contains 1 tow point, can be fitted to either the RH side or LH side, must be fitted at the same time as the StealthBar)
SA223SPK	Skid plate kit (Required to replace factory steel skid plate that joins to the OE steel bumper, must be fitted at the same time as the StealthBar)
SA223FLK	Fog light kit (Required to replace OE steel bumper flush mount fog lights, must be fitted at the same time as the StealthBar)

Warning:

- Do not attach VFPS to the vehicle using anchorages not intended for this purpose (e.g. engine mounting bolts).
- Do not use this product for any vehicle make or model, other than those specified by the VFPS manufacturer.
- Do not remove the plaque or label from the VFPS (SmartBar).
- Do not modify the structure of the VFPS in any way.

Note:

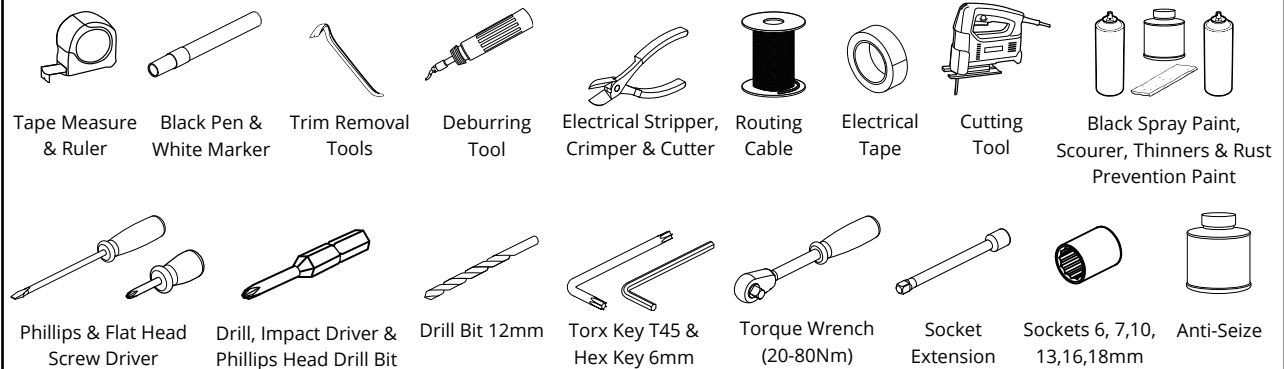
- Left and Right hand sides of the vehicle and SmartBar throughout this instruction are from the view of being in the drivers seat looking forward.
- Please take the time to read the instructions thoroughly before proceeding with fitment of the SmartBar.
- Ensure all components, as listed in the bill of materials on the back page, are received prior to commencing the fitment. Please retain all hardware until fit-up is complete.
- All wiring should be completed by a qualified auto electrician. SmartBar bears no responsibility for any electrical failure caused by the incorrect fitment of the lamps.
- Ensure these fitting instructions are passed onto the vehicle owner and/or operator.
- We recommend the **use of anti-seize on all threaded fittings.**



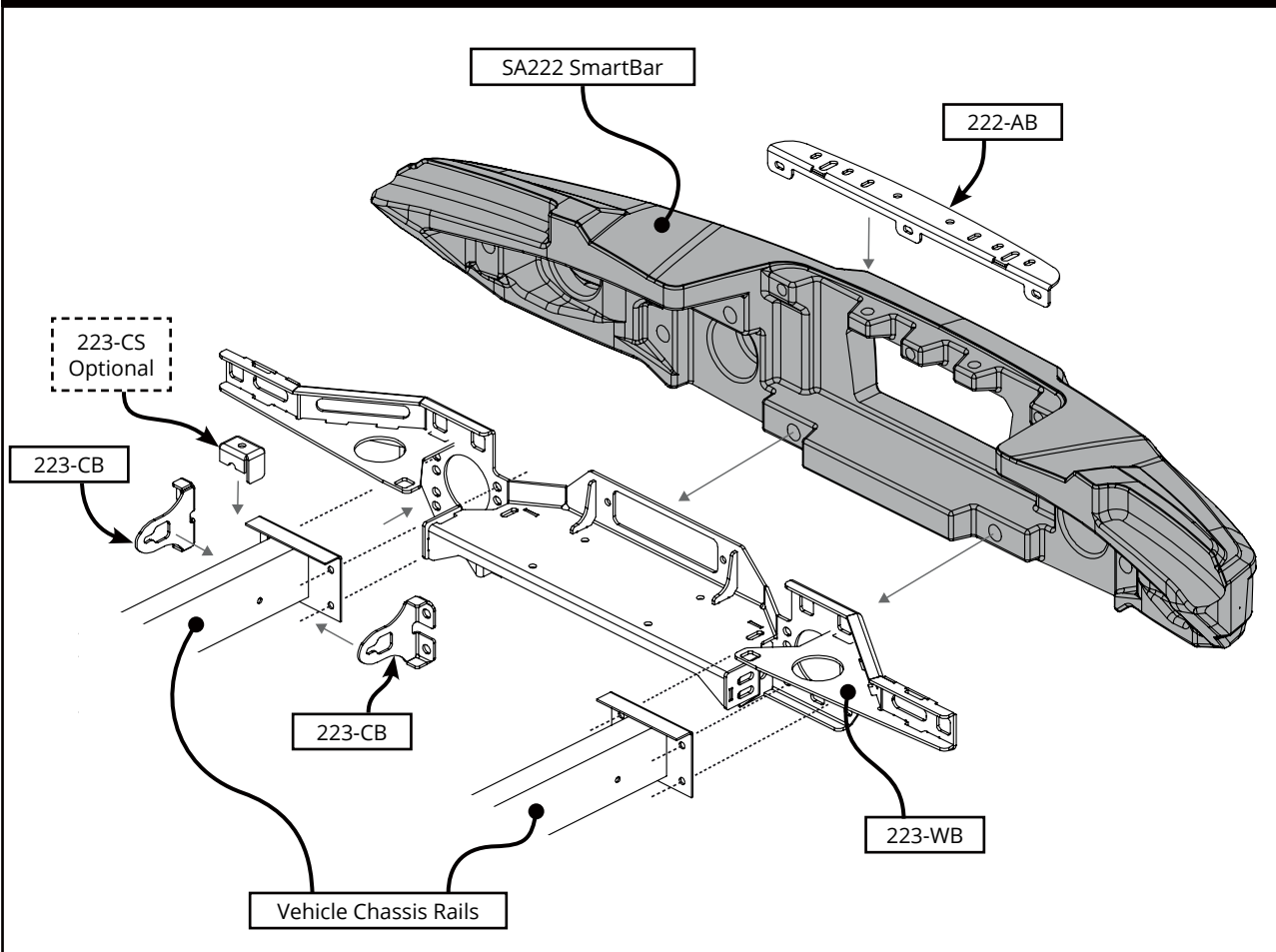
CAUTION A torque specification of 28Nm is required for the M10 bolts and 55Nm for M12 bolts into the SmartBar nutserts. THESE MUST NOT BE OVERTIGHTENED.

If you have any queries regarding this product and its installation please contact the retailer it was purchased from.

Tools Required



Standard Mounting Brackets Overview - SA223BK



Torque Specifications (Into Bar Nutserts)

Bolt Size	Torque (Nm)	Torque (lb/ft)
M10	28	20
M12	55	40

Torque Specifications (Metal to Metal Mounts)

Bolt Size	Torque (Nm)	Torque (lb/ft)
M10	44	32
M12	78	57

Step 1: Bumper Removal

1.1 Remove the number plate.

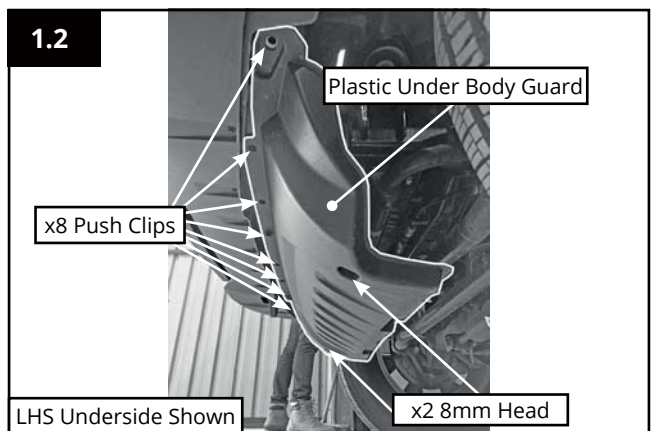
1.1



Note: For steel bumper models skip to step 1.3.

1.2 Remove the plastic under body guard and retain for later use.

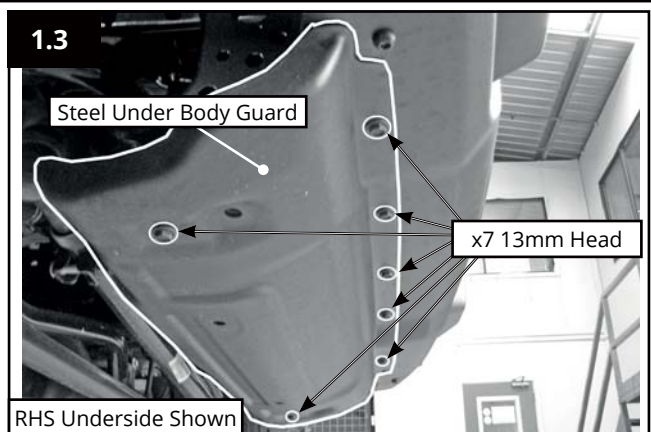
1.2



Note: Steel bumper models only.

1.3 Remove the steel underbody guard and discard.

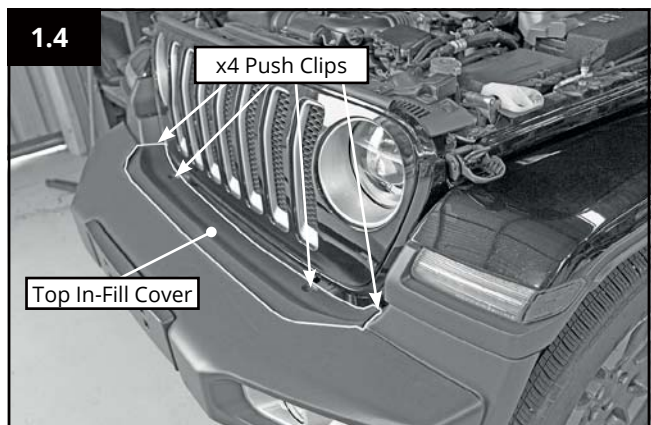
1.3



Note: For steel bumper models skip to step 1.5.

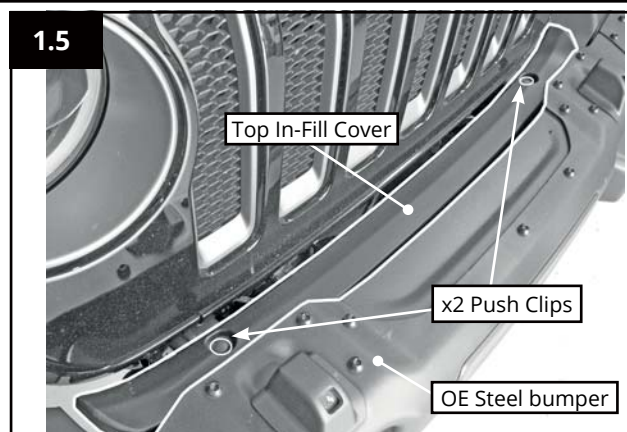
1.4 Remove clips from top in-fill cover.

1.4

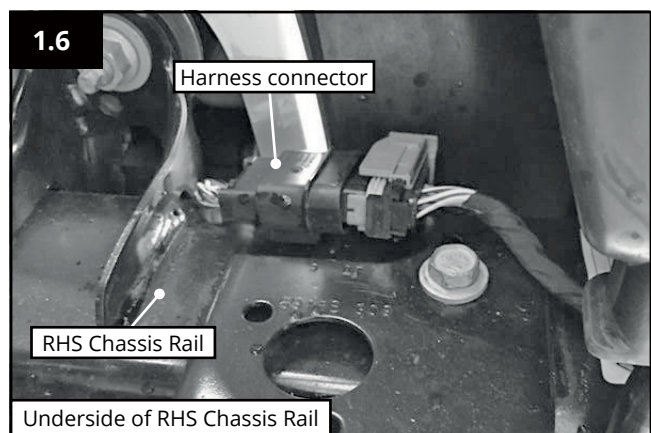


Note: Steel bumper models only.

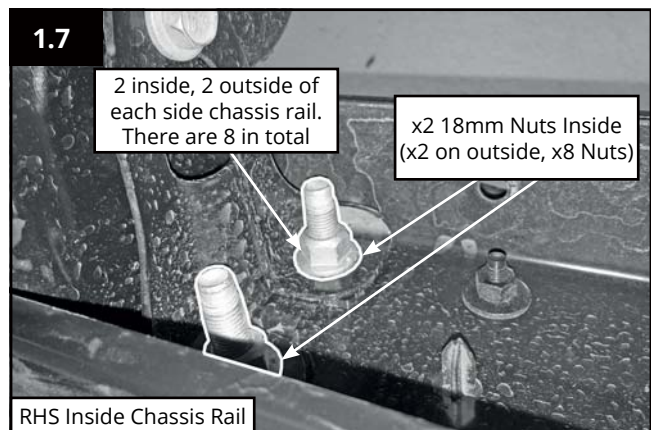
1.5 Remove top in-fill cover and discard.



1.6 Disconnect wiring harness.

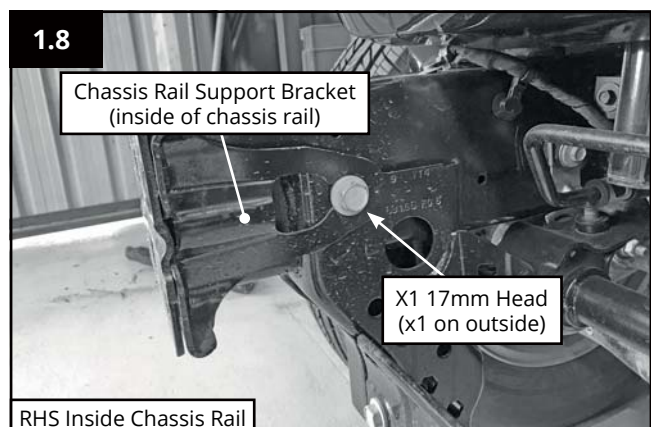


1.7 Remove bumper.



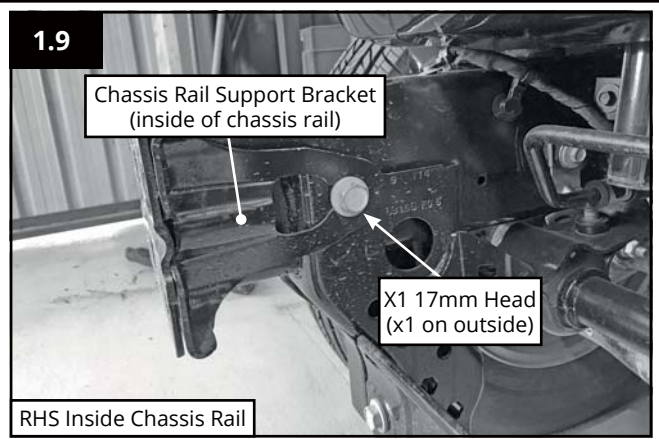
Note: For steel bumper models skip to step 1.9.

1.8 Remove chassis rail support brackets, one inside RHS chassis rail and one on the outside of RHS chassis rail. Retain for later use.



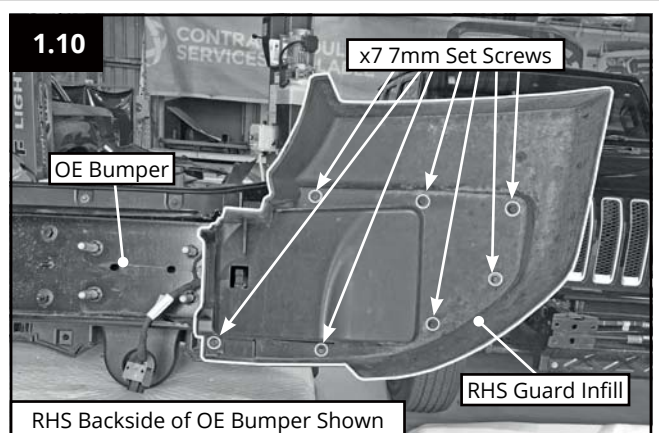
Note: Steel bumper models only.

1.9 Remove chassis rail support brackets, one inside RHS chassis rail and one on the outside of RHS chassis rail. Repeat on LHS Chassis Rail. Retain for later use.

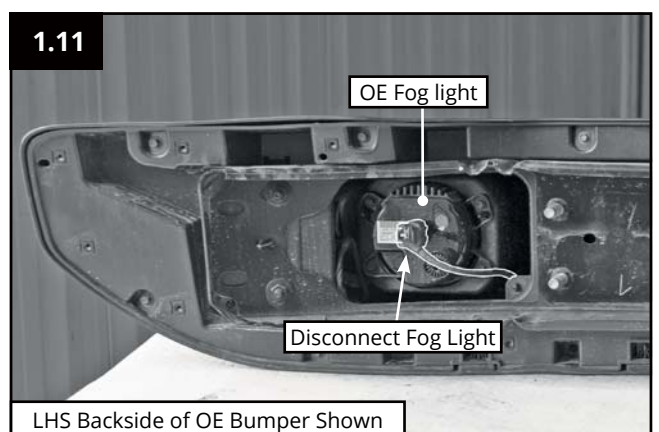


Note: For steel bumper models skip to step 1.17

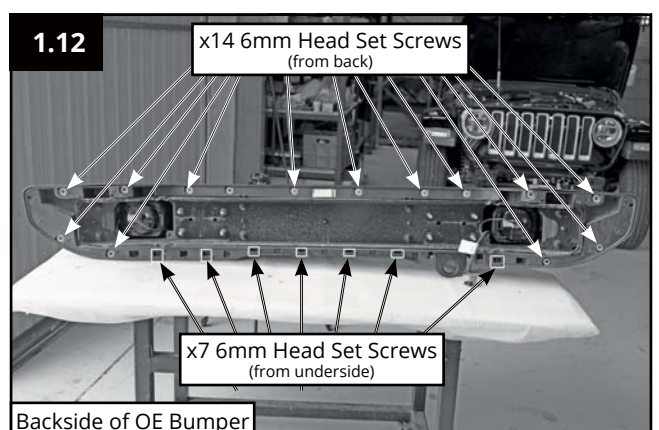
1.10 Remove guard infill's from bumper and discard. RHS shown, repeat on LHS.



1.11 Disconnect fog lights. LHS shown, repeat on RHS.

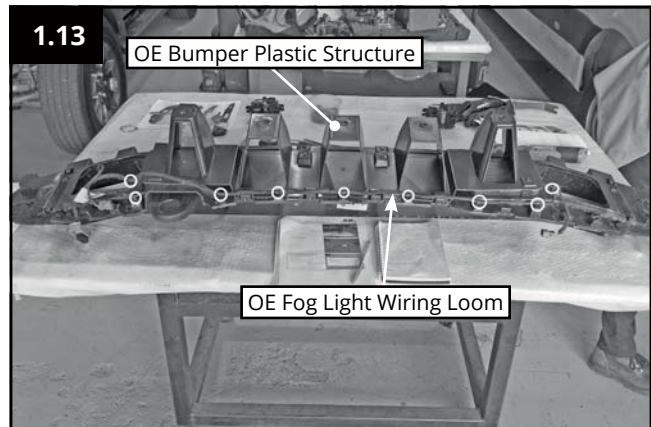


1.12 Remove steel backing from bumper.



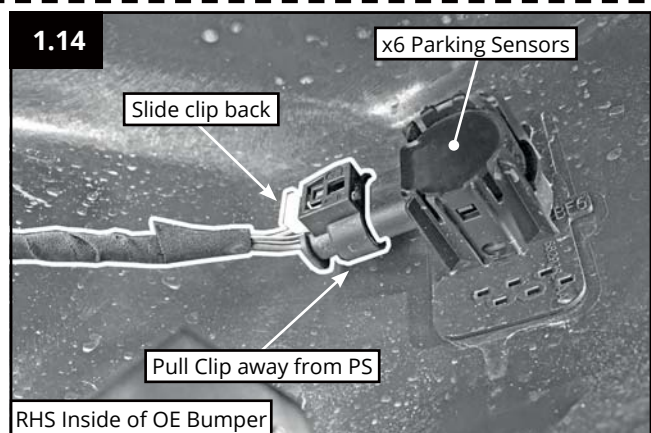
Note: For parking sensor models skip to step 1.14

1.13 Remove fog light loom from plastic structure, retain for later use.

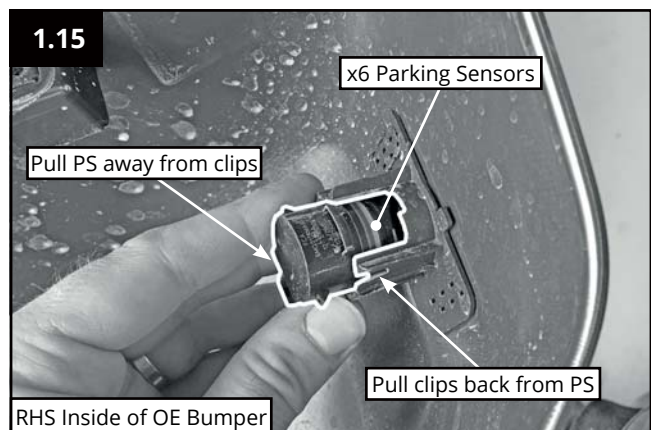


Note: Parking sensor models only.

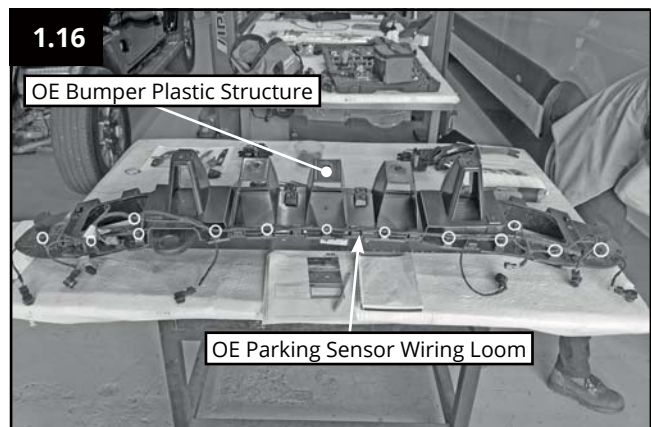
1.14 Disconnect loom from parking sensors.



1.15 Disconnect the parking sensors from the bumper skin, take note of parking sensor orientation and location, retain for later use.



1.16 Remove parking sensor loom from plastic structure, retain for later use.

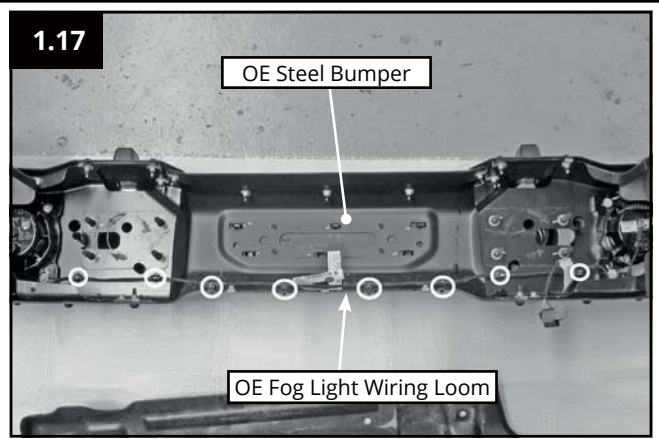


Note: Steel bumper models only.

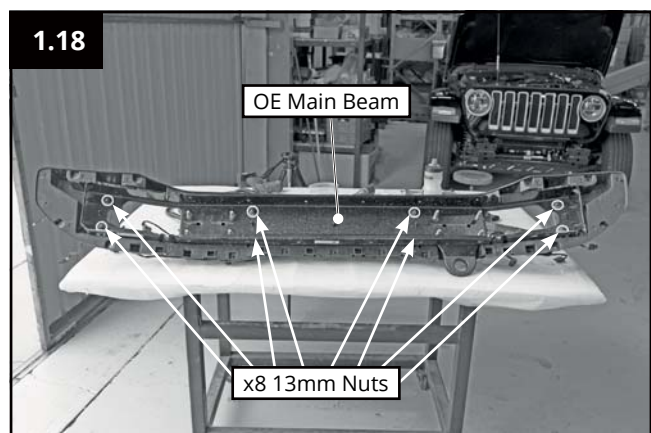
1.17 Remove fog light loom from OE Steel Bumper, retain for later use.

Note: Steel bumper fog lights cannot be fitted into StealthBar, an aftermarket fog light kit is required.

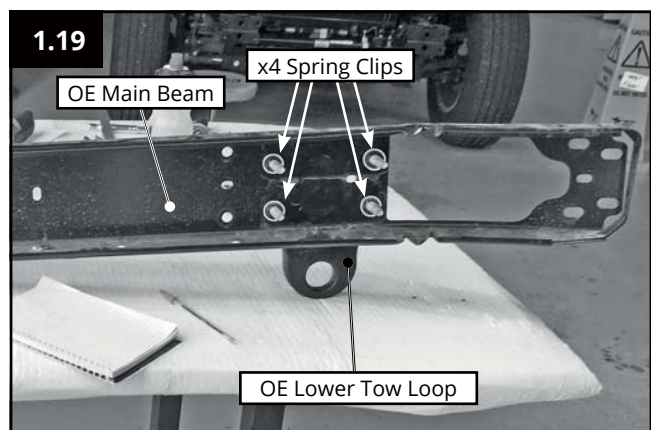
Part No: SA222FLK



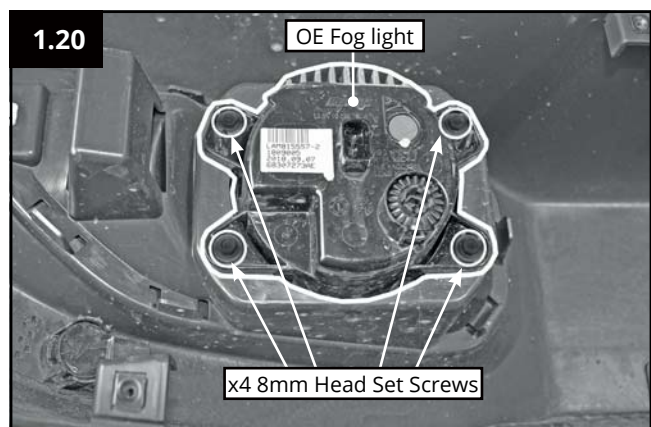
1.18 Remove plastic structure from main beam and discard.



1.19 Remove OE Lower Tow Loop from main beam, retain for later use. Discard Main Beam.



1.20 Remove fog lights from bumper skin, retain for later use. LHS shown, repeat on RHS. Discard Bumper Skin.

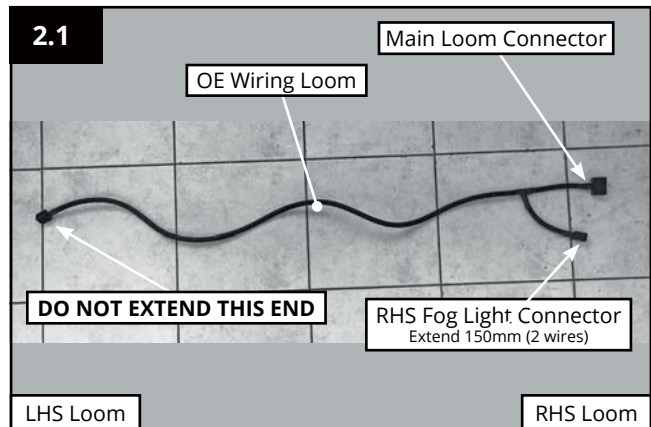


Step 2: Wiring

Wiring should be conducted by a certified auto electrician. SmartBar is not responsible for electrical failure caused by incorrect wiring.

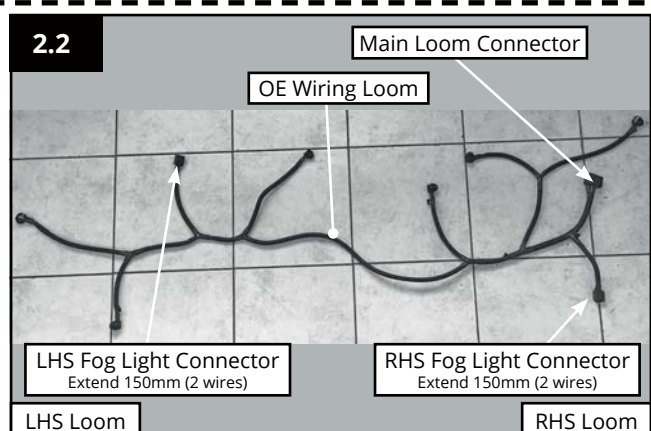
Note: Parking sensor models skip to step 2.2.

2.1 For non-parking sensor std bumpers & steel bumpers, extend RH fog light connector.



Note: Parking sensor models only.

2.2 Extend fog light connectors. Do not extend parking sensor wires.

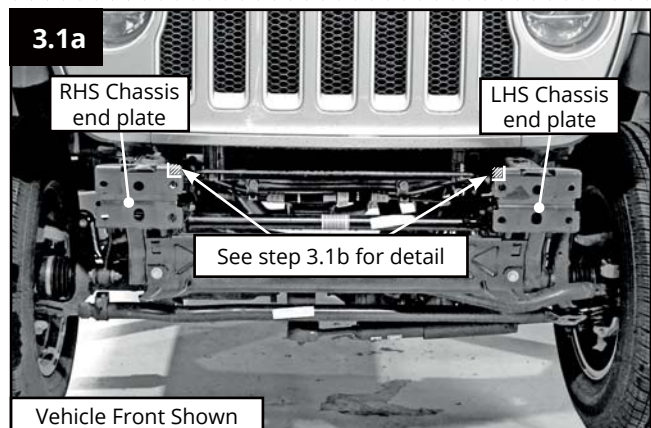


Step 3: Bracket Installation

Note: Non Warn Zeon Winch Install skip to step 3.2.

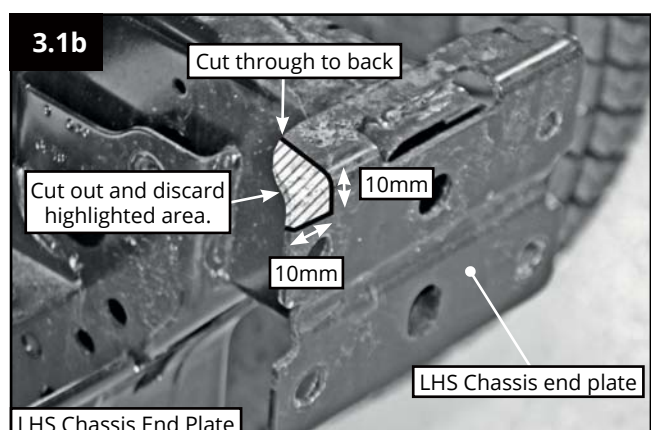
Note: For Warn Zeon winch installation only.

3.1a To create clearance for the Warn Zeon winch, trim chassis end plates.



3.1b Trim end plates as shown. LHS shown, repeat on RHS.

Important: All trimmed areas must be treated with a rust preventative paint.



3.2 Enlarge the hole on top of the chassis rail to 12mm. RHS shown, repeat on LHS.

Important: All drilled holes must be treated with a rust preventative paint.

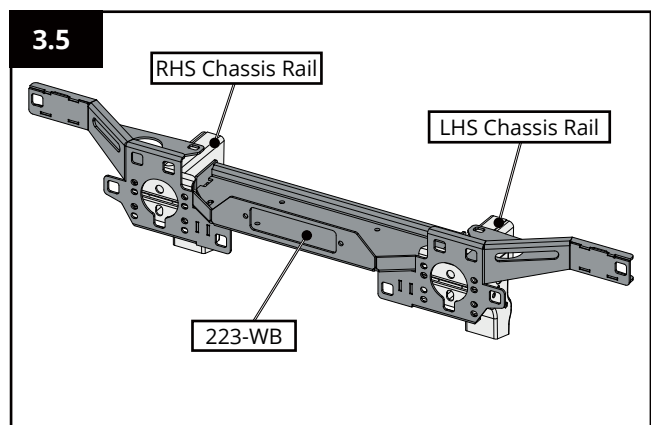
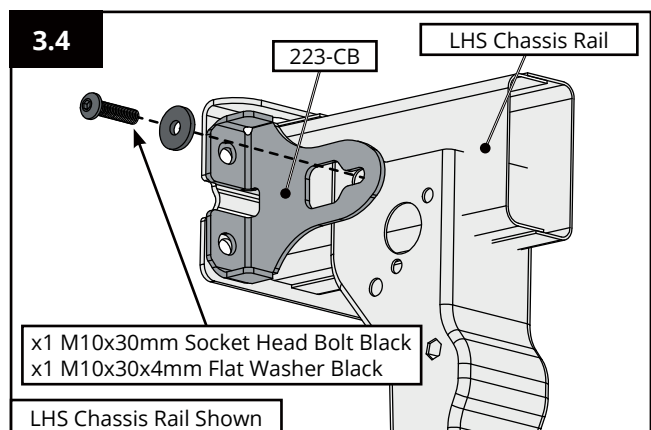
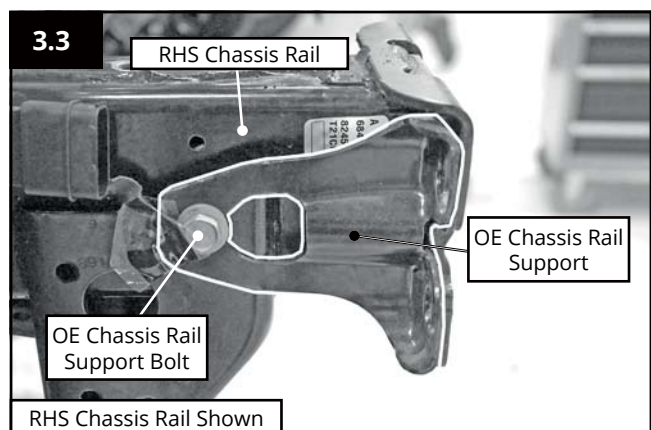
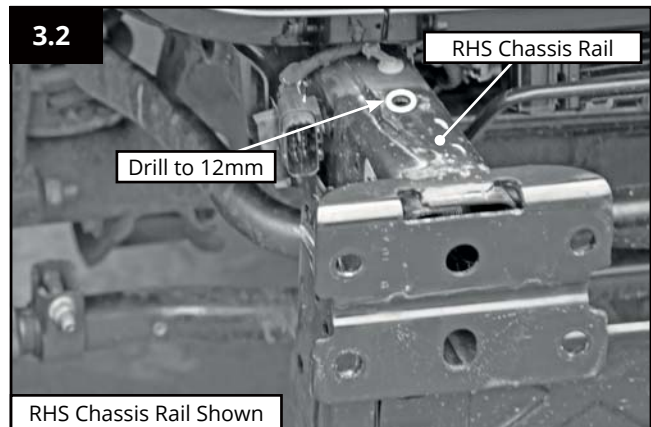
Note: Do not fully tighten any of the brackets until final alignment of the bar is finished.

Note: For steel bumper models skip to step 3.4.

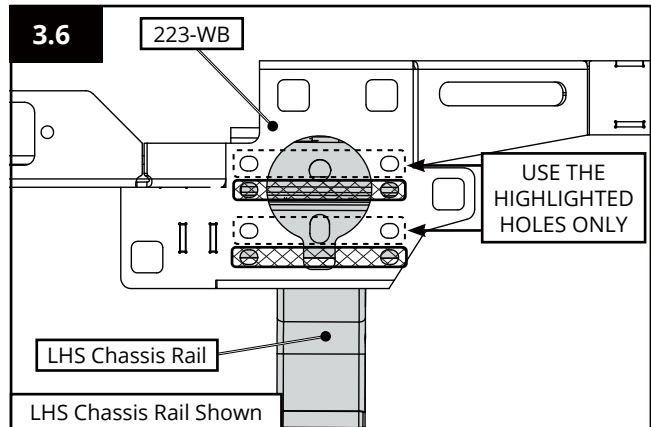
3.3 Reattach OE outer chassis rail support bracket on RHS chassis.

3.4 Place 223-CB on outside of LHS chassis rail bracket.

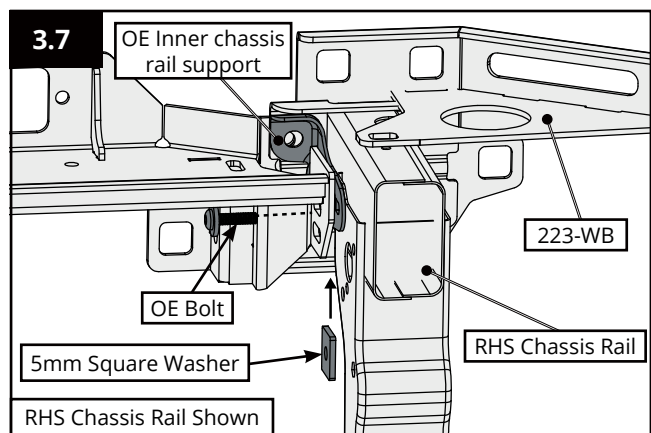
3.5 Set 223-WB onto the front of the chassis.



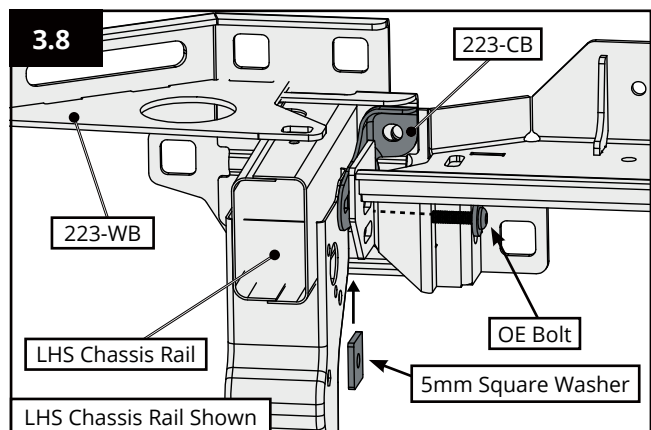
3.6 Align highlighted holes with the chassis end plates.



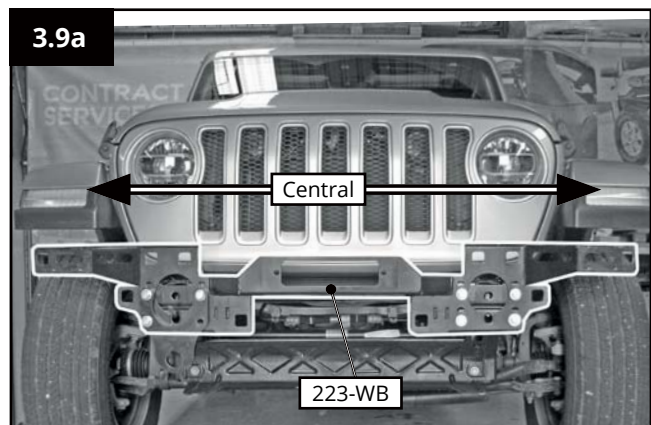
3.7 Reattach OE inner chassis rail support bracket between RHS chassis rail and 223-WB. Insert spacer between OE inner chassis rail and 223-WB, then insert hardware.



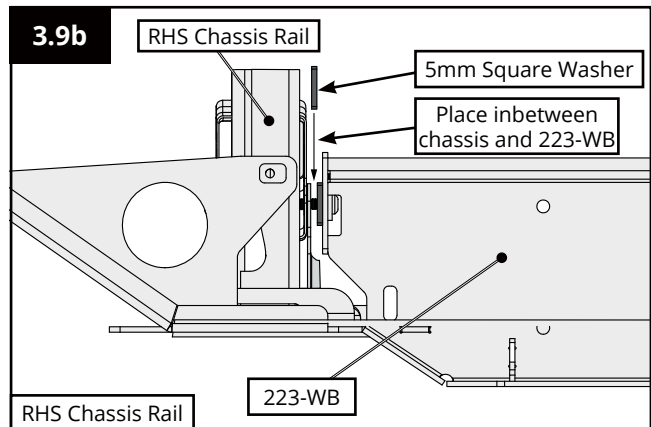
3.8 Place 223-CB between inside of LHS chassis and 223-WB. Insert spacer between 223-CB and 223-WB, then insert hardware.



3.9a Check 223-WB is central to the vehicle, if required space accordingly as per step 3.9b

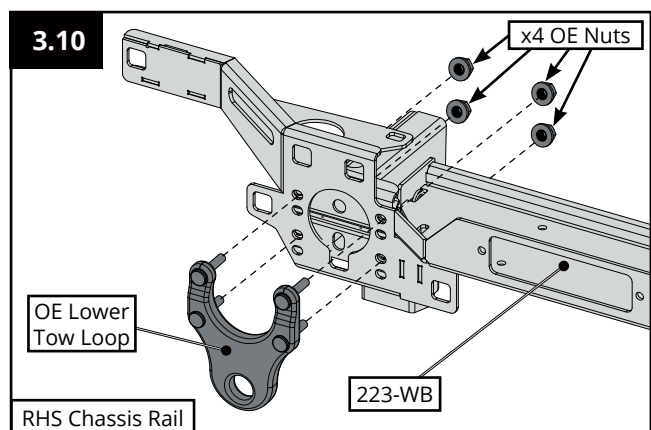


3.9b Additional spacing if required.



Note: For steel bumper models skip to step 3.11.

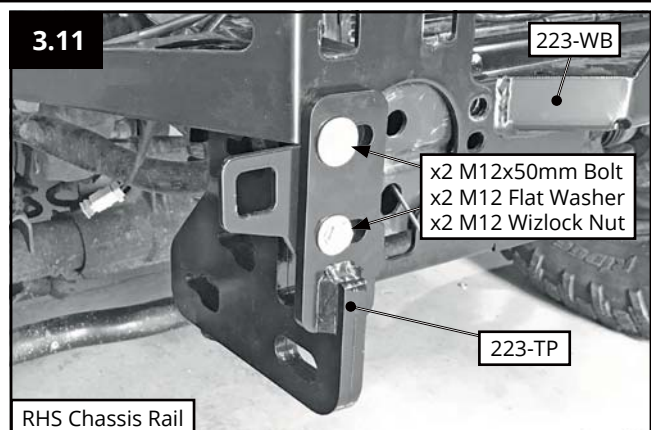
3.10 Attach OE Lower Tow Loop to the 223-WB into the RHS chassis end plate, use OE nuts to retain.



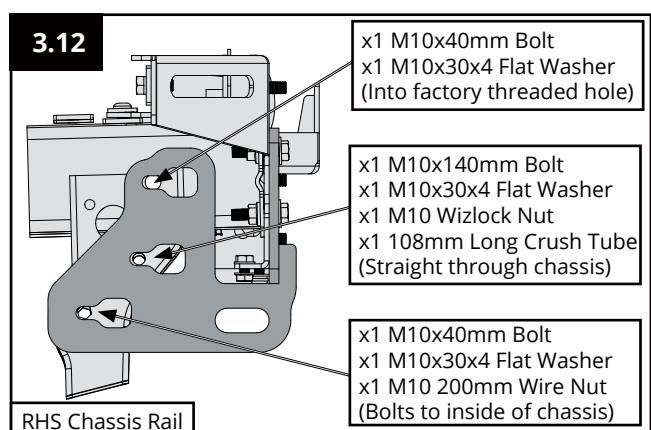
Note: SA223TPK Fitment.

Note: Do not fully tighten any of the brackets until final alignment of the bar is finished.

3.11 Place 223-TP onto outside of RH side chassis rail, retain with hardware through the front.

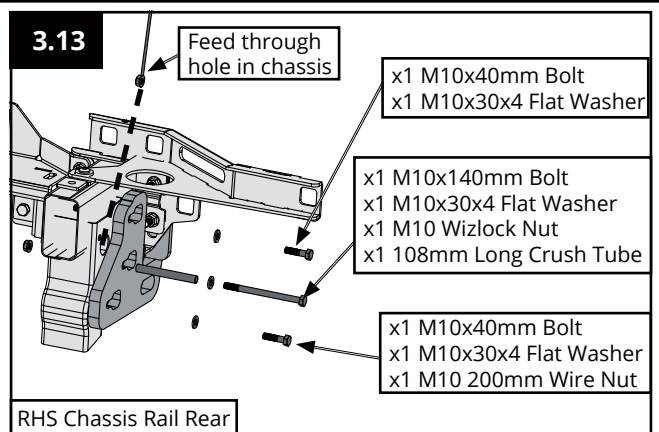


3.12 Insert hardware for the outside of the tow point in these locations.

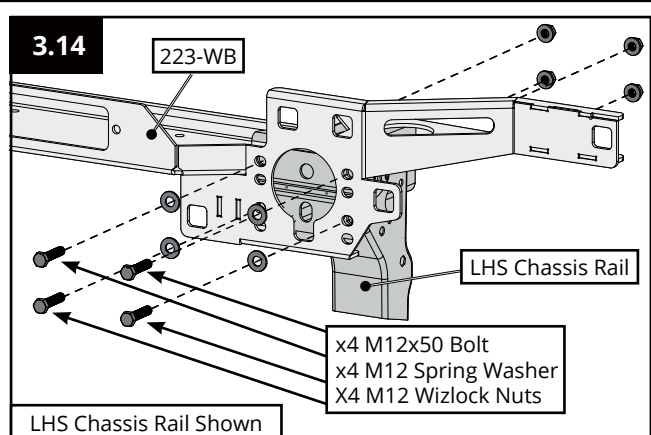


Note: SA223TPK Fitment

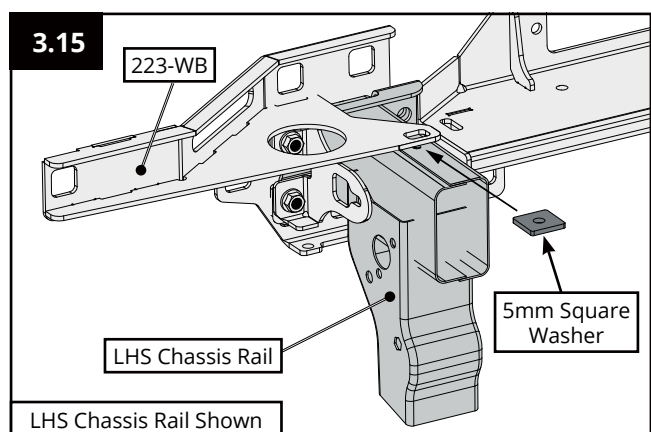
3.13 Insert hardware for the outside of the tow point.



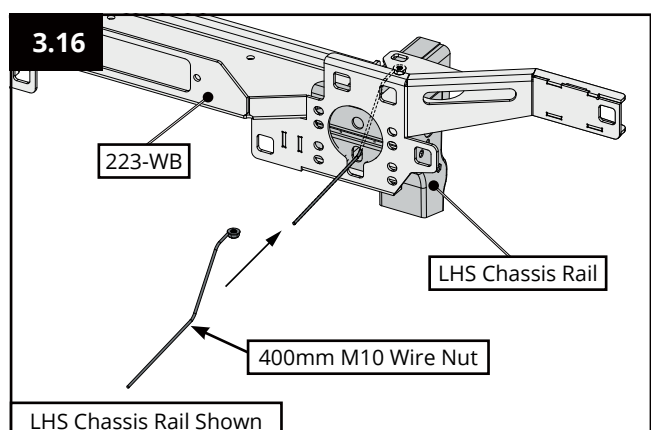
3.14 Bolt 223-WB to LHS chassis end plate as shown.



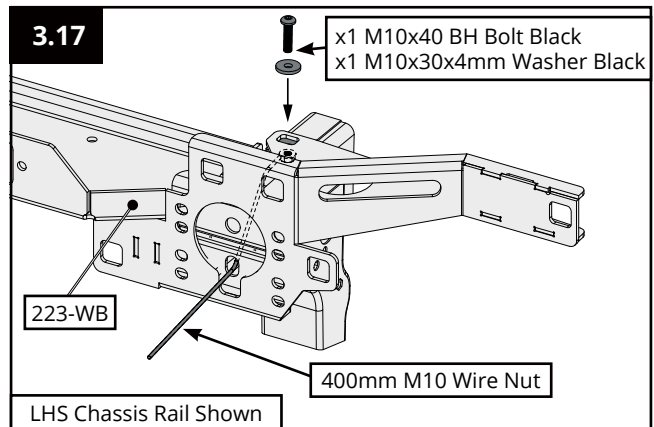
3.15 Use a spacer between 223-WB and top of Chassis, additional spacers can be added if required. LHS shown, repeat on RHS.



3.16 Insert wire nut through the front of chassis. LHS shown, repeat on RHS.

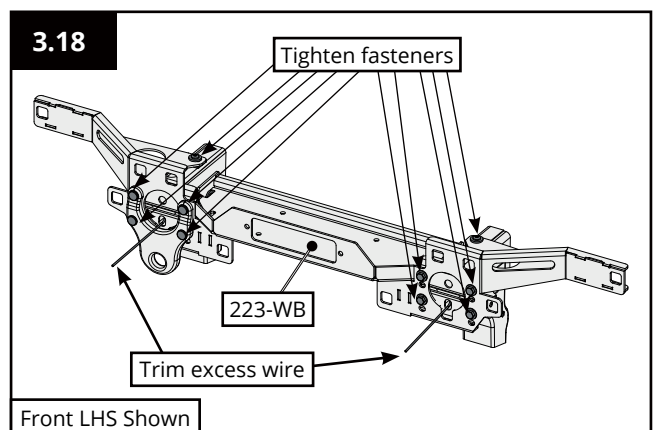


3.17 Place bolt through 223-WB and chassis rail into wire nut. LHS shown, repeat on RHS.

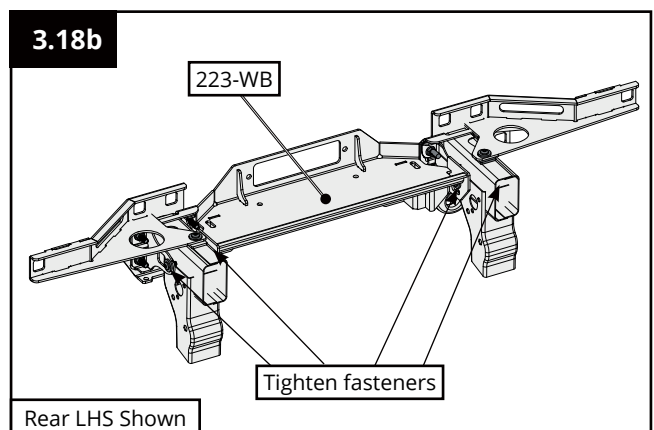


3.18a With all fasteners in place and bracket 223-WB centred between the chassis rails, tighten all to the appropriate torque.

Note: Trim excess wire from wire nuts.

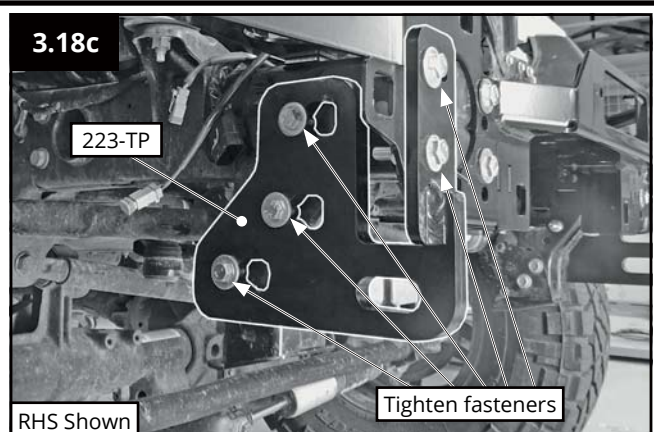


3.18b With all fasteners in place and bracket 223-WB centred between the chassis rails, tighten all to the appropriate torque.



Note: SA223TPK Fitment.

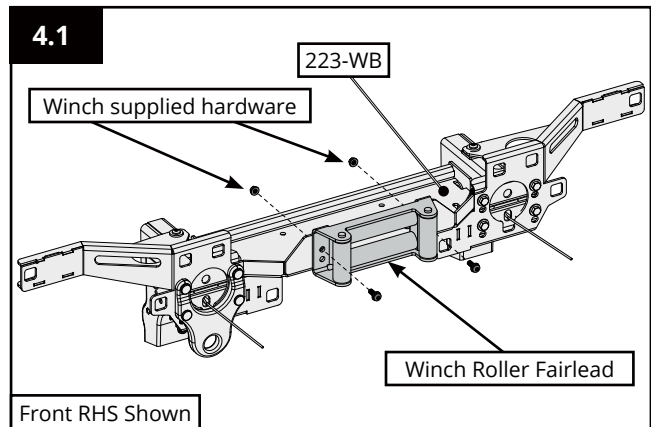
3.18c Tighten fasteners shown.



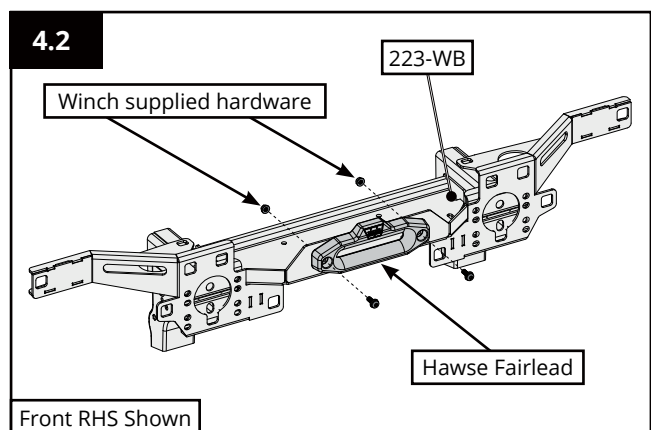
Step 4: Winch Installation

Note: Skip to step 5.1 if no winch is being installed.

4.1 If installing a winch with wire cable install the Roller Fairlead on the front using hardware supplied with winch.

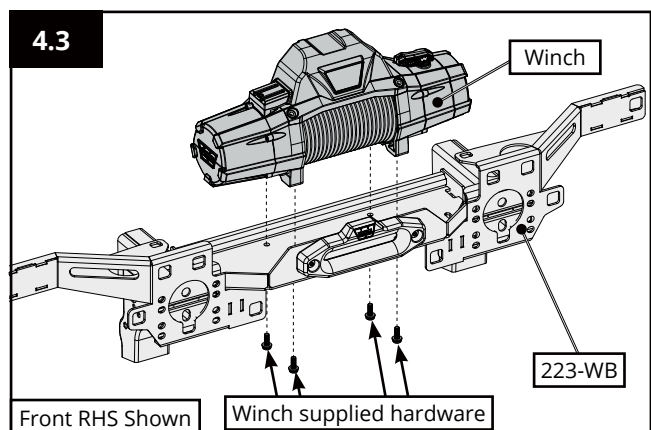


4.2 If installing a winch with synthetic rope install the Hawse Fairlead on the front using hardware supplied with winch.



4.3 Attach winch to 223-WB using hardware supplied with winch.

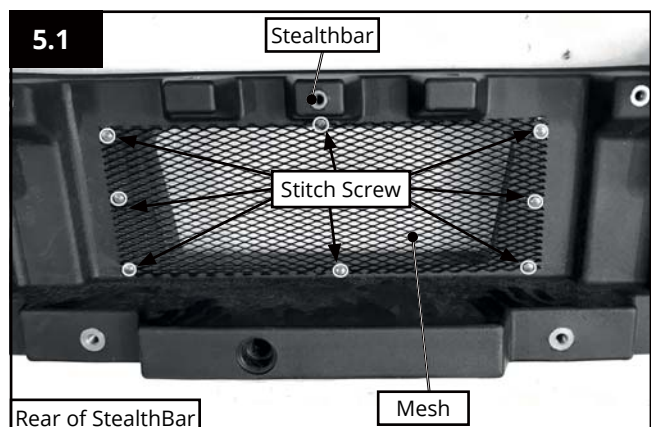
Note: Consult Winch manufacturer installation manual for correct and safe installation procedure.



Step 5: StealthBar & Plastic Underbody Guard Preparation

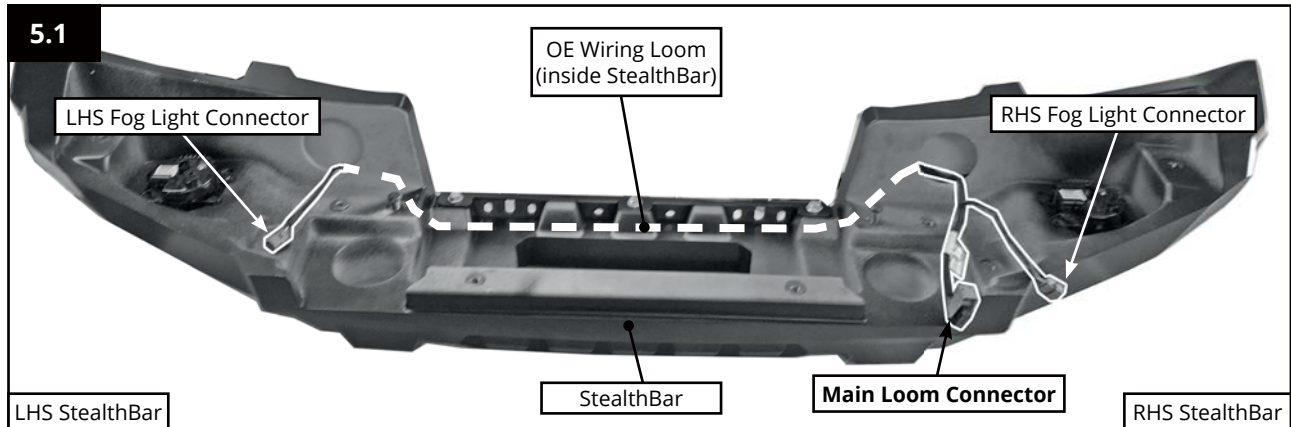
Note: If no winch is installed skip to step 5.2.

5.1 Remove fasteners and mesh form StealthBar and discard.

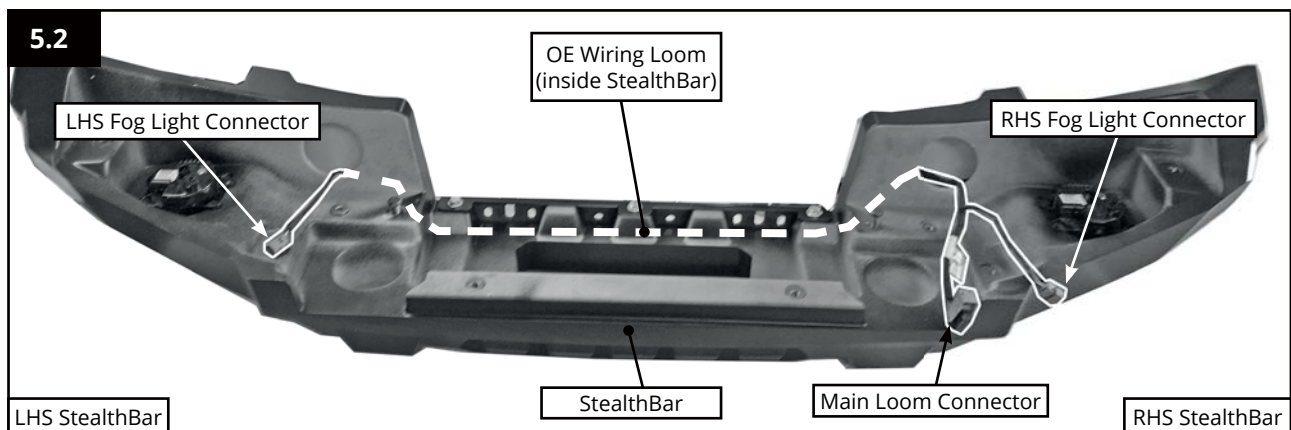


Note: Parking Sensor models skip to step 5.3.

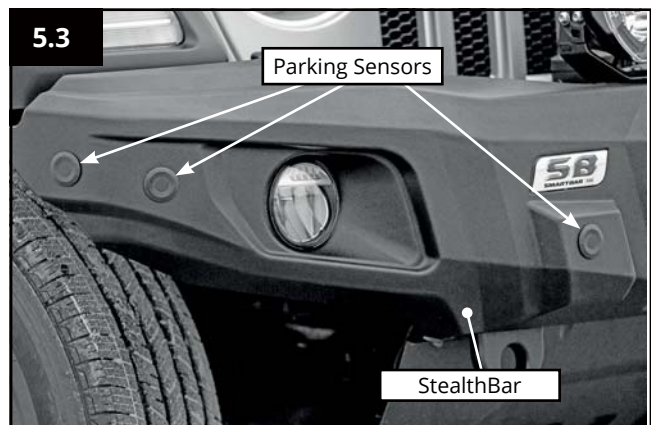
5.2 Feed the wiring loom inside of the StealthBar using an electrical snake. Feed loom through making sure the main connector is on the RHS as shown.



5.3 Feed the wiring loom inside of the StealthBar using an electrical snake. Feed loom through making sure the main connector is on the RHS as shown.

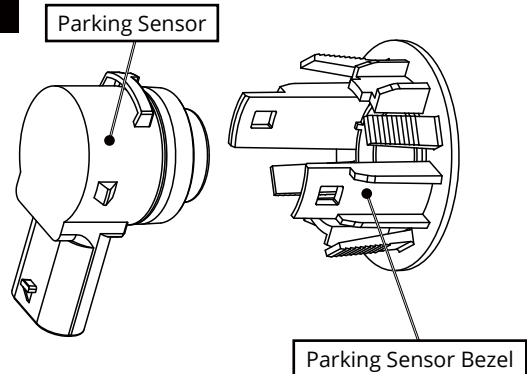


5.4 Pull parking sensors through the StealthBar. RHS shown, repeat on LHS.



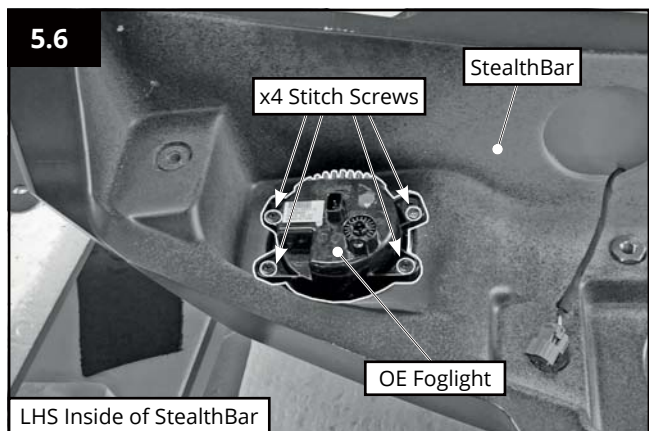
5.5 Pull sensor through StealthBar and clip parking Sensor bezel on from the outside.

5.5



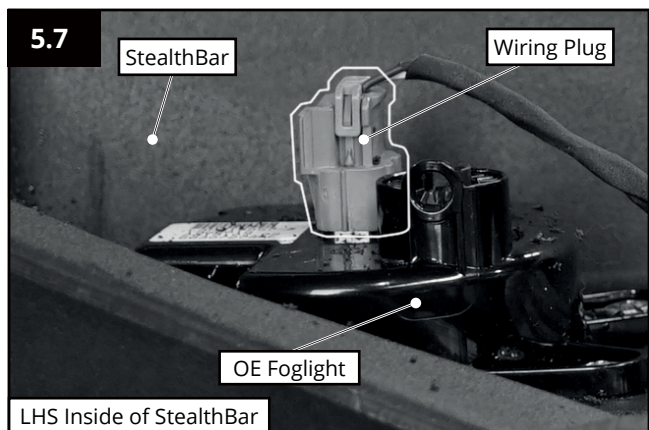
5.6 Install the OE fog lights into the rear of the StealthBar. LHS shown, repeat on RHS.

5.6



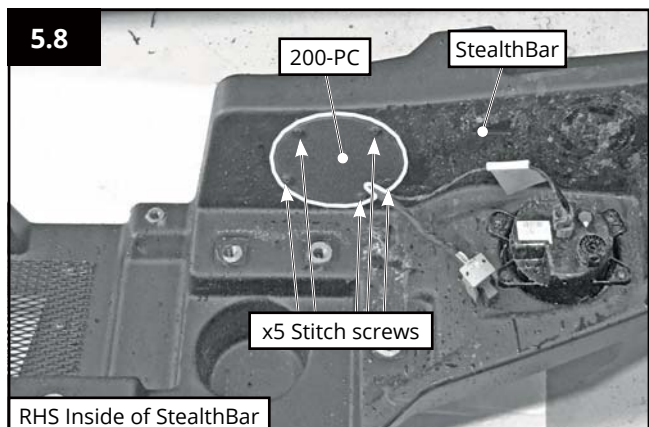
5.7 Plug wiring loom into rear of foglight. LHS shown, repeat on RHS.

5.7

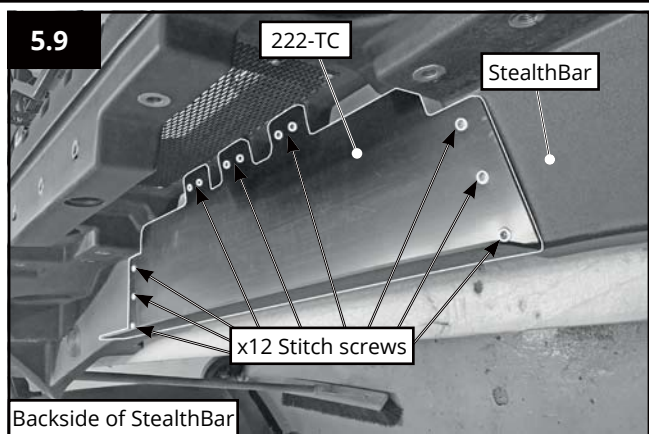
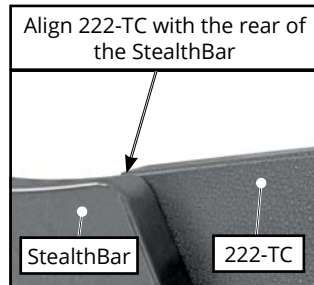


5.8 Fix 200-PC over wiring hole with the loom exiting through the slot. RHS shown, repeat on LHS.

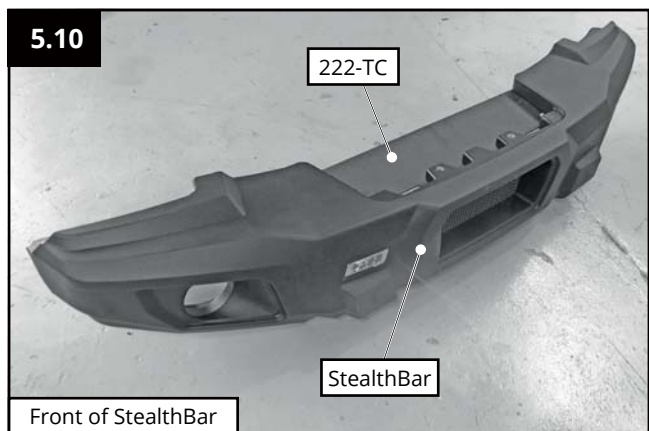
5.8



5.9 If not fitting a winch it is recommended to install the SA222TFK. Screw 222-TC into StealthBar.

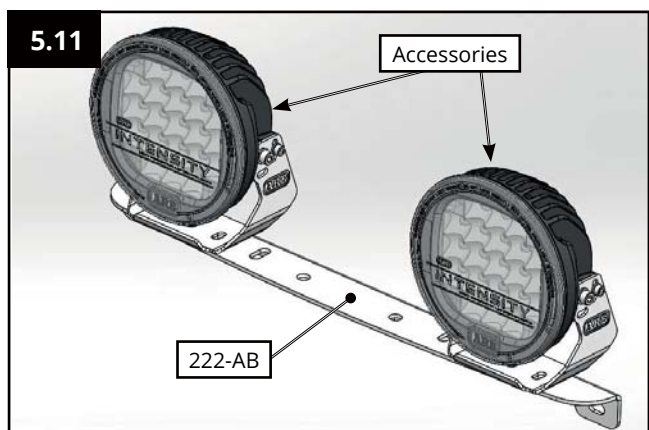


5.10 Correct installation of Top Cover.

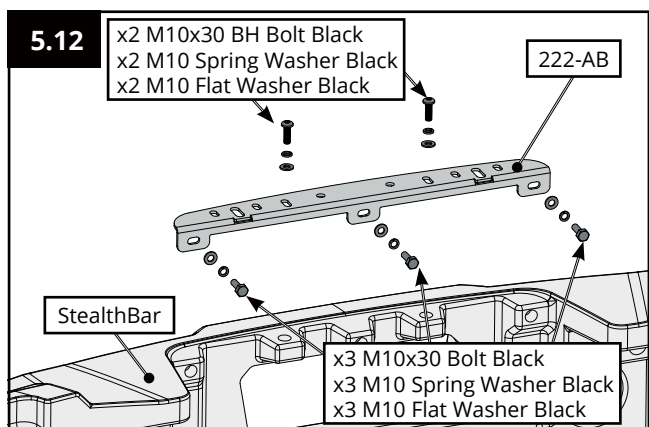


5.11 Fit 222-AB to StealthBar.

Note: Due to space limitations it may be easier to install accessories to the 222-AB before its attached to the vehicle.



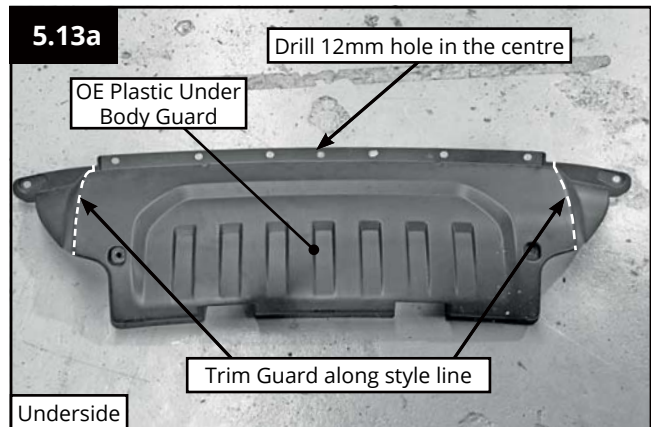
5.12 Fit 222-AB to StealthBar.



Note: If fitting SA223TPK skip to step 5.13b.

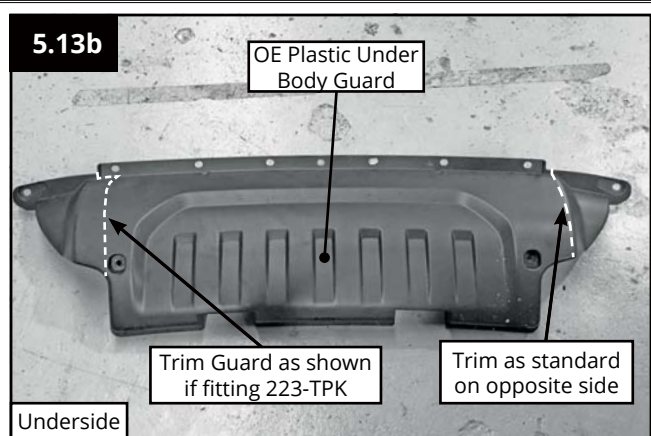
Note: If fitting SA223SPK skip to step 6.1.

5.13a Trim Plastic Underbody Guard to suit StealthBar fitment.



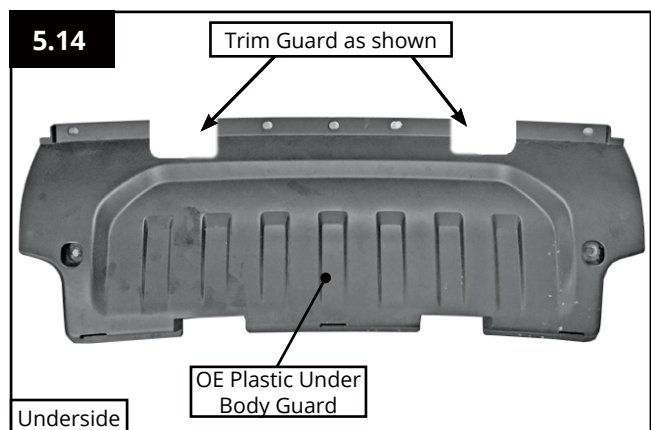
Note: Trim to suit SA223TPK.

5.13b Trim Plastic Underbody Guard to suit SA223TPK fitment, trim opposing side as standard.

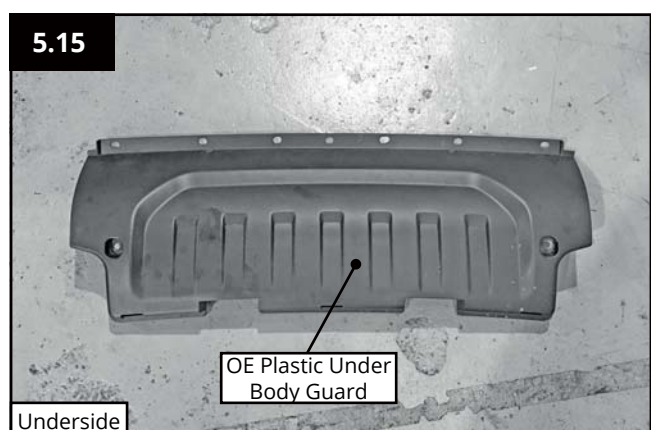


Note: To allow usability of a high lift jack, the area shown needs to be cut to allow the SAHLJ2 to fit into position. SAHLJ2 Sold separately.

5.14 Trim both sides of the Under Body Guard to allow SAHLJ2 to fit in place, test fit guard onto vehicle and check clearance.



5.15 Clean up and dress cut edges.



Step 6: StealthBar Install

6.1 Loosely place hardware in StealthBar as shown. This will allow the StealthBar to hang on the brackets while you insert the rest of the fasteners.

Note: Use anti-seize on all hardware inserted into the StealthBar.

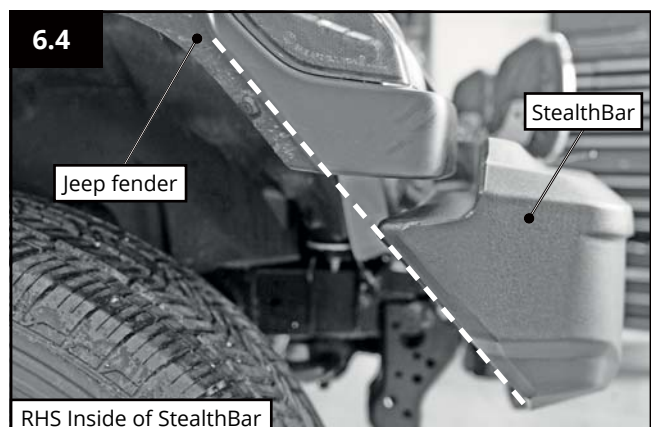
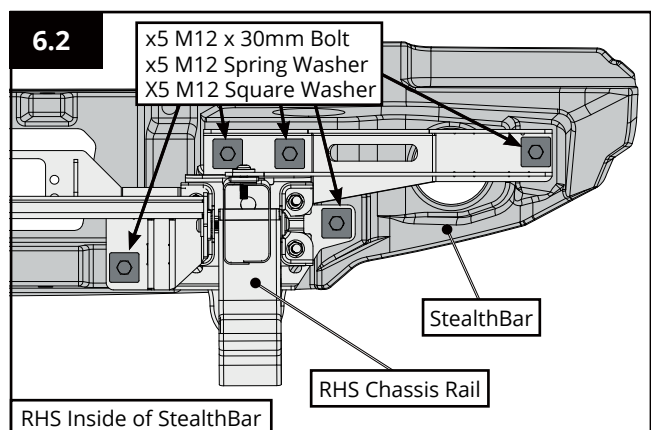
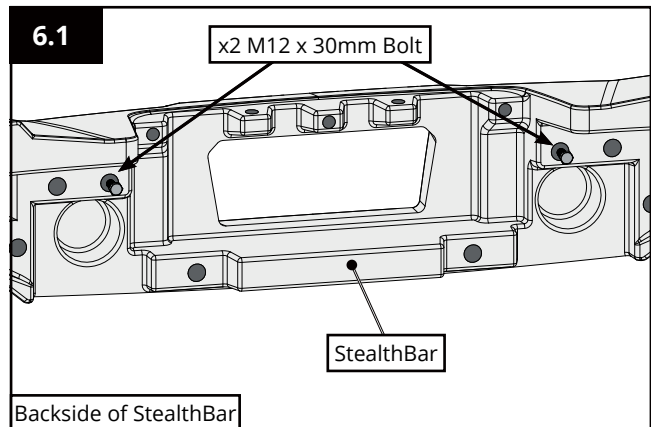
6.2 With the StealthBar hanging loose on the brackets install the hardware as shown. RHS shown, repeat on LHS.

Note: Do not fully tighten hardware at this stage.

6.3 Align StealthBar to vehicle centrally left to right.

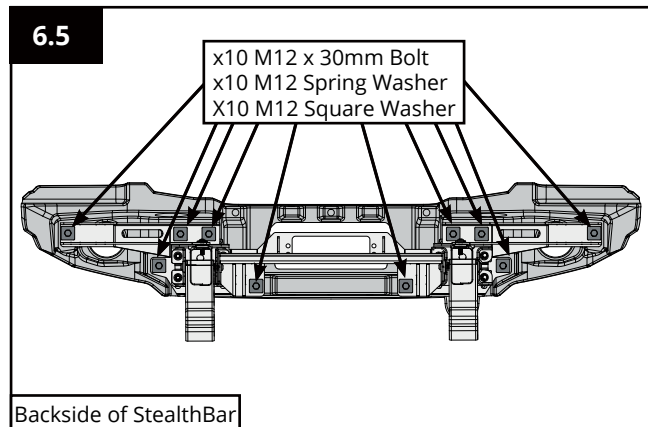
6.4 Check clearance between vehicle and StealthBar.

Check alignment with back of StealthBar and fender of vehicle.

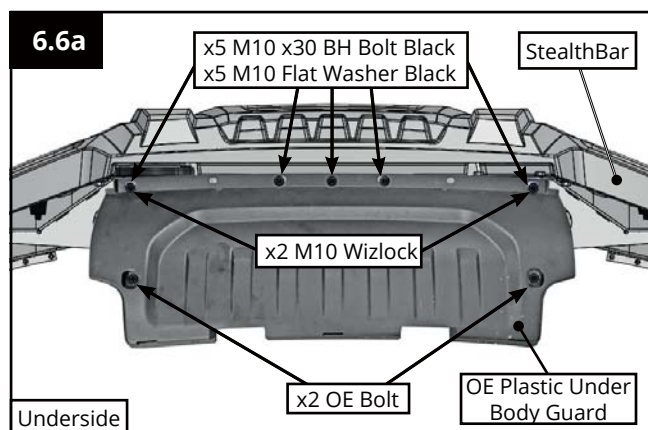


Note: If fitting SA223SPK skip to step 6.7a.

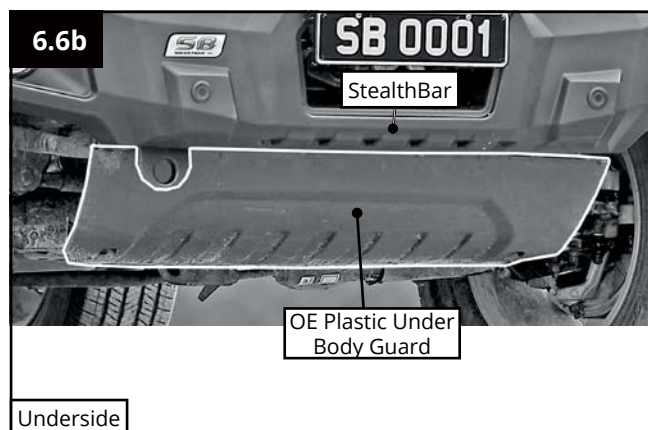
6.5 With the StealthBar aligned tighten all fasteners into the StealthBar.



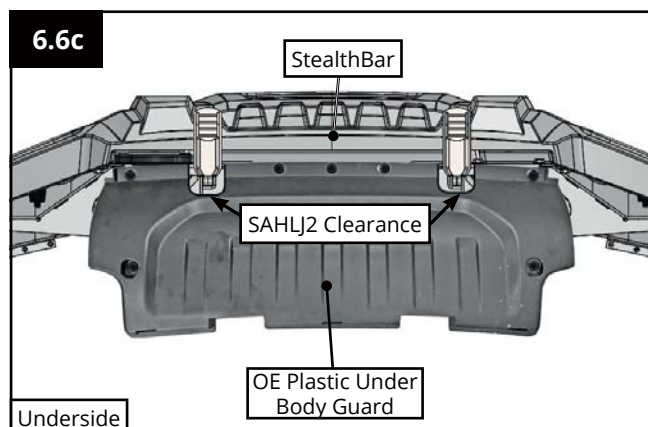
6.6a Re-fit trimmed OE Plastic Underbody Guard.



6.6b Re-fit trimmed Plastic Underbody Guard.

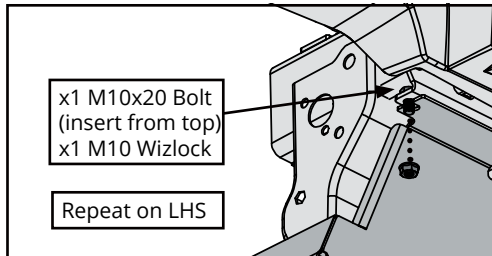


6.6c If using a high lift jack, check clearance around the OE Plastic underbody guard to SAHLJ2.



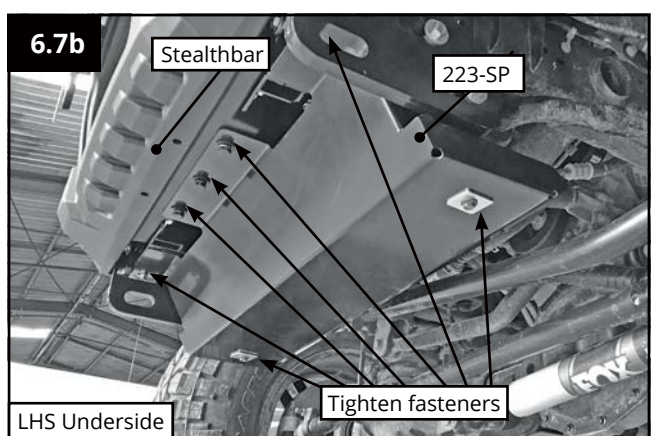
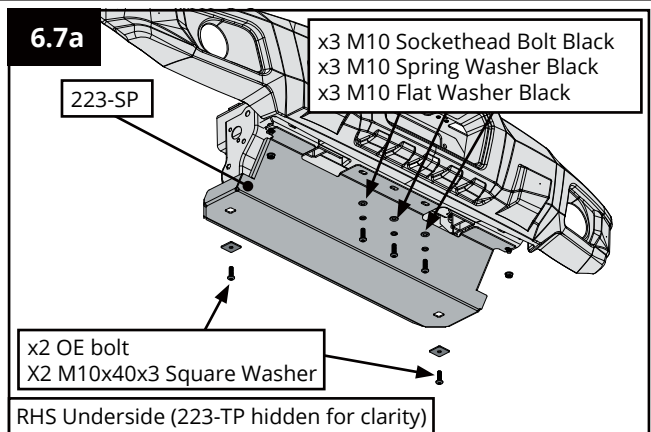
Note: SA223SPK Fitment

6.7a Place 223-SP up to chassis and StealthBar and attach with hardware shown.



Note: SA223SPK Fitment

6.7b Tighten fasteners shown.

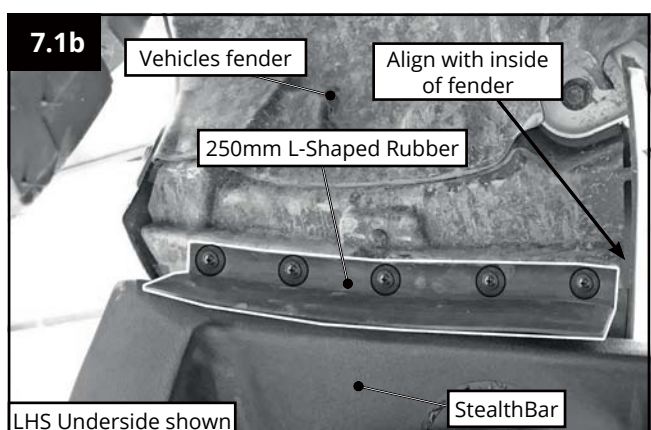
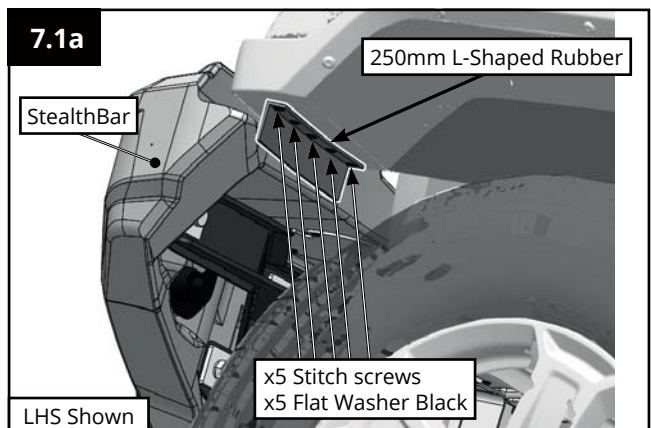


Step 7: Finishing

7.1a Fit L-Shaped rubber to the underside of the fender. LHS shown, repeat on RHS.

Note: Do not overtighten screws.

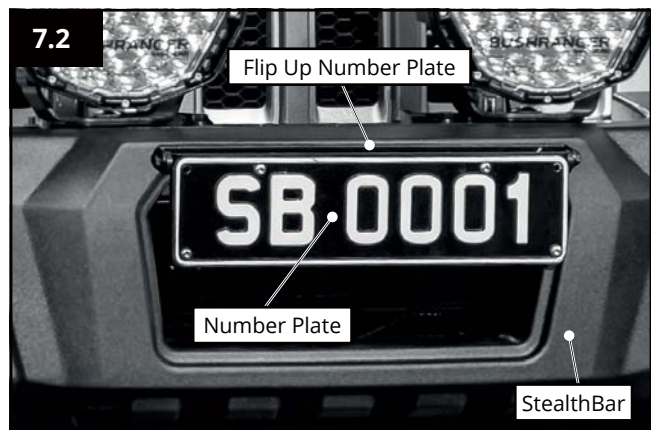
7.1b Line up L-Shaped rubber so it sits of the rear of the StealthBar and is aligned to the inside of the inner fender.



Note: Skip to step 7.3 if no winch is being installed.

7.2 Install flip up number plate.

ARB Part Number: 3500630



7.3 Screw number plate to the StealthBar.



7.4 Finished parking sensor StealthBar.



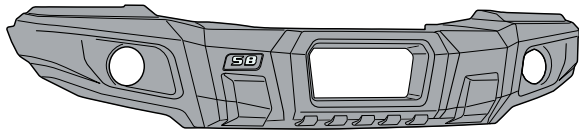
7.5 Finished StealthBar with replacement tow point, replacement steel skid plate and replacement fog lights.



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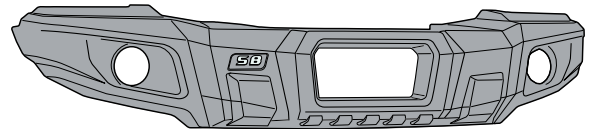
SA222 StealthBar

Code	Description	Qty	OK
MK1	222 Moulded Bar Black	1	
BP80305	SB Bar Badge	1	
MM81034	222-M	1	
BP1145	8-15X15 BUTTON HEAD NICKLE SCREW	8	



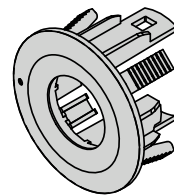
SA224 StealthBar (Parking Sensor)

Code	Description	Qty	OK
MK1	222 Moulded Bar Black	1	
BP80305	SB Bar Badge	1	
MM81034	222-M	1	
BP1145	8-15X15 BUTTON HEAD NICKLE SCREW	8	
SA224PSK	SA224PSK Parking Sensor Kit	1	



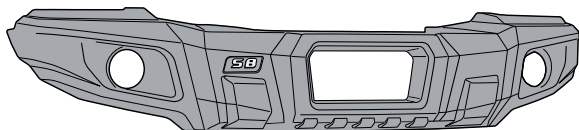
BP80485

SA224PSK Items
(kit includes x6 BP80485)



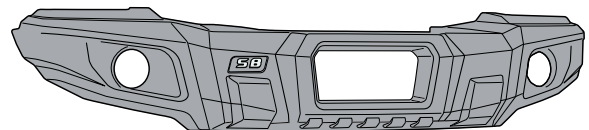
EUROPE ONLY SA271 StealthBar

Code	Description	Qty	OK
MK2	222 Moulded Bar Black	1	
BP80305	SB Bar Badge	1	
MM81034	222-M	1	
BP1145	8-15X15 BUTTON HEAD NICKLE SCREW	8	



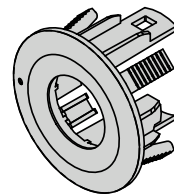
EUROPE ONLY SA273 StealthBar (PS)

Code	Description	Qty	OK
MK2	222 Moulded Bar Black	1	
BP80305	SB Bar Badge	1	
MM81034	222-M	1	
BP1145	8-15X15 BUTTON HEAD NICKLE SCREW	8	
SA224PSK	SA224PSK Parking Sensor Kit	1	



BP80485

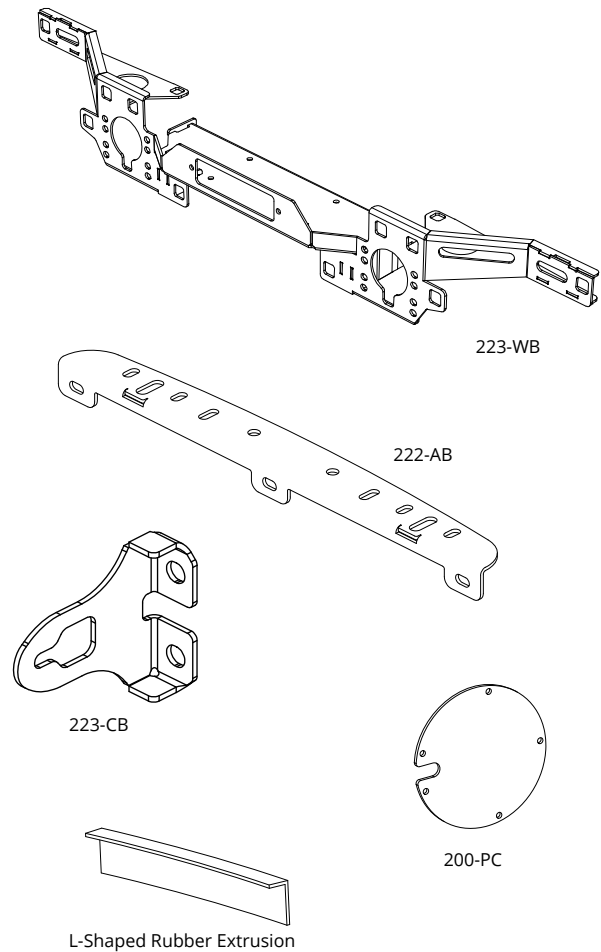
SA224PSK Items
(kit includes x6 BP80485)



StealthBar Winch Kit SA223BK

Code	Description	Qty	OK
Do not wrap winch frame			
MM81033	223-WB WINCH BRACKET	1	
Pack as one			
MM81029	222-AB ACCESSORY BRACKET	1	
MM81030	223-CB CHASSIS BK WNCH SUPP	2	
BP80320	200-PC	2	
BP80622	RUBBER EXTRUSION L 40X20X3	0.25	
BP80622	RUBBER EXTRUSION L 40X20X3	0.25	
BP1028	12 X 50 M88ZPB HEX CAD BOLT	4	
BP1024	12 X 30 M88ZPB HEX CAD BOLT	10	
MM1244	12X40X40X5Zpg Square Washer	18	
BP1094	12MZPW M12 WASHERS	4	
BP1140	12MSW M12 ZINC PLT SPRING WASH	10	
BP80313	M12 FLANG W/LOCK NUT UN023512	4	
BP80592	10X40 TZP BHSS BOLT BLACK 480	4	
BP80591	10X30 TZP BHSS BOLT BLACK 480	7	
BP38729	BOLT 10X30 M88 ECO BLACK	3	
BP38750	WASHER SPRING M10 ECO BLACK	12	
BP38767	WASHER FLAT M10 ECO BLACK	10	
BP80542	M10 FLAT WASHER M10X30X4 BLACK	4	
BP1125	10MWLNBU M10 WIZ LOCK NUT	2	
BP80560	WIRE NUT 400	2	
BP1145	8-15X15 BUTTON HEAD NICKLE SCR	28	
BP39337	1/4X1X1.6MM WASHER E-COAT BLK	10	
BP1156	70-92230 3Mm 2Core Sheath Wire	0.15	
BP1156	70-92230 3Mm 2Core Sheath Wire	0.15	
BP1157	ACX1105 10mm Split Tube 125M	0.2	
BP1157	ACX1105 10mm Split Tube 125M	0.2	
BP1190	56154 Red Cable Join (100)	8	
BP80383	CABLE TIES 300X5 CTB305BK	6	
BP42962	Smartbar Warranty Card	1	
Pack in separate sealed tube, tape to outside of BK kit			
BP1024	12 X 30 M88ZPB HEX CAD BOLT	2	
MM1244	12X40X40X5Zpg Square Washer	2	
Packed By		Date	

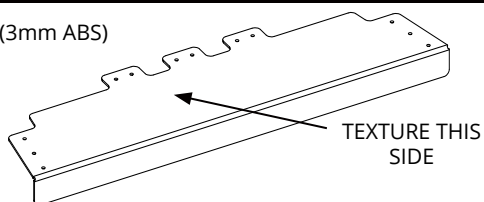
SA223BK StealthBar Winch Brackets



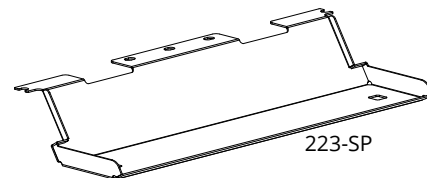
OPTIONAL KITS ONLY, SEE SPECIFIC PACKING KIT WHEN REQUIRED

See FI-222TFK packing list for below kit

222-TC (3mm ABS)

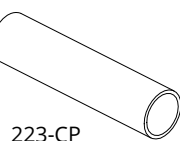
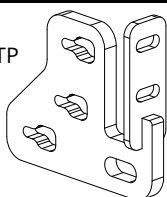


See FI-223SPK packing list for below kit



See FI-223TPK packing list for below kit

223-TP



See FI-223FLK packing list for below kit

KW-JLF01



x2 lights per kit