



FITTING INSTRUCTIONS

Part Number: **5640200**
Product **US RANGER REAR BAR 2019 ON**
Description:
Suited to **ALL MODELS, WITH BOTH THE LIGHT AND HEAVY DUTY TOWBAR**
vehicle/s: **PACKAGES**
Optional
Accessory: **5740200 – LOWER PROTECTION RAIL KIT**

WARNING

NOTE THE FOLLOWING:

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ In the event of damage to any tow bar component, contact your nearest authorised ARB stockist.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ Do not remove labels from this tow bar.
- ◆ This product or its fixing must not be modified in any way.
- ◆ The installation of this product may require the use of specialized tools and/or techniques
- ◆ It is recommended that this product is only installed by trained personnel.
- ◆ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer.
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components.
- ◆ Work safely at all times.
- ◆ Unless otherwise instructed, tighten fasteners to specified torque.
- ◆ For recovery, fit a suitable and rated tow hitch to the central tow hitch receiver.

ARB 4x4 ACCESSORIES

Corporate Head Office

42-44 Garden St
Kilsyth, Victoria
AUSTRALIA 3137

Tel: +61 (3) 9761 6622
Fax: +61 (3) 9761 6807

Australian enquiries
North & South American enquiries
Other international enquiries

sales@arb.com.au
sales@arbusa.com
exports@arb.com.au

GENERAL CARE AND MAINTENANCE

By choosing an ARB Bar, you have bought a product that is one of the most sought after 4WD products in the world. Your bar is a properly engineered, reliable, quality accessory that represents excellent value. To keep your bar in original condition it is important to care and maintain it following these recommendations:



- Prior to exposure to the weather your bar should be treated to a Carnuba based polish on all exposed surfaces. It is recommended that this is performed on a six monthly basis or following exposure to salt, mud, sand or other contaminants.
- As part of any Pre Trip Preparation, or on an annual basis, it is recommended that a thorough visual inspection of the bar is carried out, making sure that all bolts and other components are torqued to the correct specification. Also check that all wiring sheaths, connectors, and fittings are free of damage. Replace any components as necessary. This service can be performed by your local authorized ARB Stockist.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

BASIC TOOL KIT	METRIC SOCKET SET
METRIC ALLEN KEY SET	METRIC TORX KEY SET
60MM HOLE SAW (IF FITTING TO LIGHT DUTY TOWBAR)	TORQUE WRENCH CAPABLE OF 275Nm

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear 	Hearing protection 
--	--

NOTE: 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.

FASTENER TORQUE SETTINGS:

SIZE	Torque Nm	Torque lbft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft
M16	200Nm	148lbft

PARTS LISTING

APPLICATION.	PART NO.	QTY	DESCRIPTION
BAR FITMENT	3193877	1	PLATE EXTRUSION SUIT US RANGER
	180302	8	CABLE TIE 4.8 x 180mm
	3163091	1	PLUG BLANKING 17.4mm
	3163222	2	PLUG SENSOR BLANKING PAIR
	3540290	1	SENSOR SURROUND KIT (4)
	4654955L	1	CHASSIS SPACER LH
	4654955R	1	CHASSIS SPACER RH
	4581085	12	WASHER FLAT M8x19x1.2 ZNB480
	6151300	10	NUT CAGED M6 2.6-3.5
	6151384	4	SCREW ST PHD 5.2x16 BTZP480
	6151625	12	SCREW BHD M8x1.25x25
	6151548	4	NUT FLANGE M8x1.25 BTZP 480 SERRATED
	6151975	10	SCREW BHD M6x12 SS
	6821189	4	GROMET RND – NUMBER PLATE RETAINER
OPTIONAL: LOWER PROTECTION RAIL KIT	PART NO.	QTY	DESCRIPTION
	4654816L	1	WELDED ASSEMBLY RAIL LH
	4654816R	1	WELDED ASSEMBLY RAIL RH
	4654817L	1	WELDED ASSEMBLY CHASSIS PLATE LH
	4654817R	1	WELDED ASSEMBLY CHASSIS PLATE RH
	4584363	10	WASHER FLAT M12x26x4 TZP480
	6151355	10	BOLD HXHD M12x1.75x30 TZP480
	6151657	10	NUT FLANGE M12x1.75 TZP480

FITTING PROCEDURE



1. Removal of OE bumper – *Follow this procedure for both the light duty & heavy-duty tow bars. (Heavy duty tow pack shown)*



2. Unclip the number plate lights from behind the bumper and remove.
3. Disconnect the globes from the housings and set aside the housings for use in the ARB rear bar.



4. Using the vehicle key, remove the locking plug for the spare wheel access. Set aside for use in the ARB rear bar.



5. Unclip the smart trailer plug from behind. (Heavy duty tow pack models only).
6. Disconnect the wiring loom from the plug. Set plug aside for use in the ARB rear bar.

FITTING PROCEDURE



7. Unclip the parking sensors from the OE housings by unclipping them from behind the bumper.

Leave the sensors connected to the loom and hanging down.

8. Remove the 2x plastic clips from behind the number plate



9. Unclip the upper plastic trim from the steel bumper assembly.

Hint: The trim may be difficult to unclip by hand. Using pliers on the internal clips can aid with the removal process.



10. Remove the 4xM8 Torx bolts on the top of each steel bumper end.
11. Remove the M8 bolt on the inner tabs of each bumper end. There are two bolts inside the bumper ends that need removal.
12. Carefully lift off the bumper ends without damaging the vehicle.
13. Remove lower trim by removing the 6 screws





Tabs prior to bending

14. For fitment of the ARB rear bar, these two mounting tabs on each side need to be bent out of the way. (This can be done using pliers or a shifter)
15. Bend the upper tabs back by 45deg as shown:



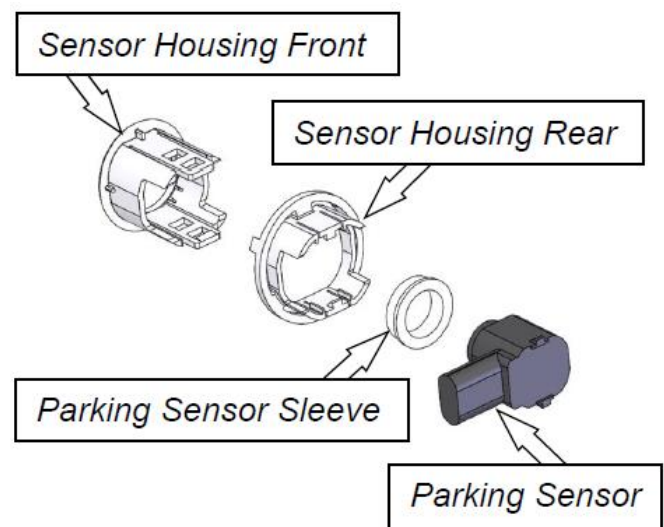
16. Bend the lower tabs down by 90deg as shown:



Bar Preparation:

17. Lay the bar on a soft surface to ensure no damage occurs while preparing the bar.
18. Insert the 4x ARB front sensor housings supplied in the fitting kit as shown. Turn the bar over and clip on the housing rear.

The parking sensor rubber sleeve should have remained on the parking sensor when unclipped from the OE bumper.



Note: If your vehicle has no parking sensors, fit the blanking plugs supplied in the fitting kit.



19. Fit the OE smart trailer plug (if fitting to heavy duty tow pack). Ensure the steel retaining clips have fully grabbed onto the bar. They may need to be pried out with a flat blade screwdriver.
20. **Note: For fitment of the smart trailer plug that comes with the heavy-duty tow pack, the section of rear panel needs to be removed with a hacksaw blade as shown below. Use anti-corrosion touch up paint to areas cut.**



Warning: Cutting operations can result in flying metal debris; safety glasses should be worn.



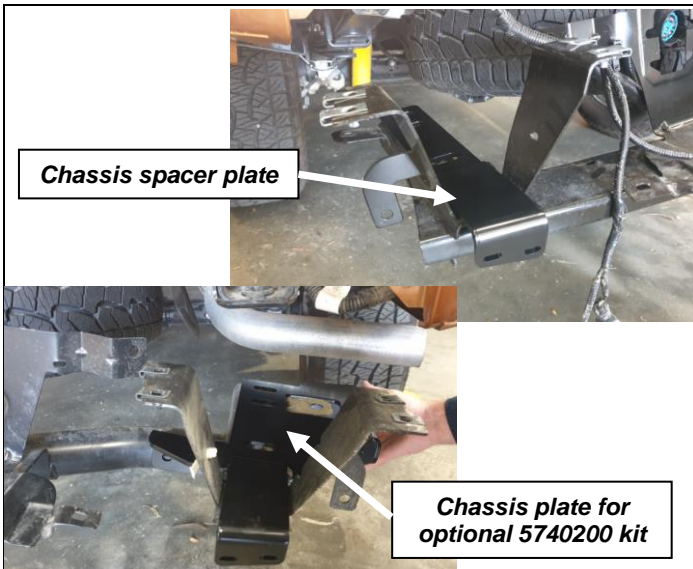
21. Fit 10x M6 cage nuts to the under-side of bar for the treadplate.



22. Loosen the M16 OE tow bar retaining bolts on one side. (The light-duty tow bar has 2 bolts each side. The heavy-duty tow bar has 3 bolts each side).
23. Remove the retaining bolts on the other side. This allows the tow bar to drop down on an angle for fitment of the mounting brackets.



Above: Showing the 3x M16 bolts on the heavy-duty tow pack



24. Fit the chassis spacer as shown in top photo. Ensure the orientation is the same as the photo.

****If fitting the optional 5740200 Lower Protection Rail kit fit the large welded chassis plate instead of the small spacers that came with the rear bar fitting kit.**

25. Lift the tow bar back up and loosely fit the bolts.

26. Remove the tow bar bolts on the other side and repeat steps 24 & 25.



Use a low tack film or similar to protect the rear quarter panels of the vehicle while fitting the rear bar.

The vehicle is now ready for rear bar fitment. Note that the tow bar bolts still need to be loose at this stage.



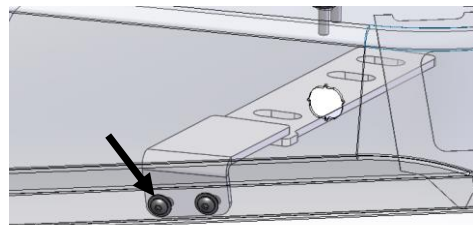
27. Lift the rear bar carefully on to the OE tow bar as shown. Be careful not to damage the rear bar or the vehicle.

Hint: It is recommended that two people lift the bar up to avoid any damage.



28. Use 8x black M8x25 button head bolts and black M8 flat washers on the top of the bar (4 bolts and washers per side) to affix the bar to the upper tow bar brackets. Leave loose at this stage.

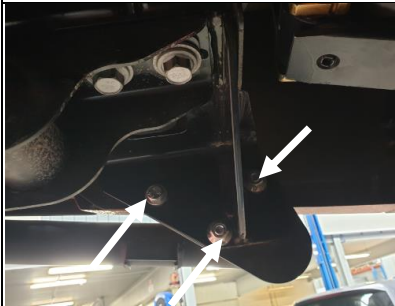
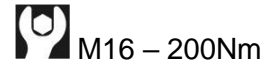
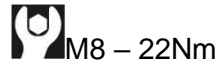
Use 4x black M8x25 button head bolts, 4x black M8 washers and 4x black M8 flange nuts on the front of the bar (2 bolts per side) to affix the bar to the chassis mount brackets. Leave loose at this stage.





29. If only fitting the rear bar, adjust the bar so that it sits with an even gap at both wing tips. Tighten the 12x M8 bolts to the specified torque. Tighten the main tow bar M16 bolts to the specified torque. Skip to step 36.

Note: If fitting the optional 5740200 Lower Protection Rail kit, leave the M16 tow bar bolts loose and continue from step 30.



For fitment of the 5740200 Lower Protection Rail kit:

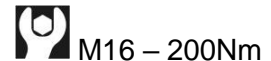
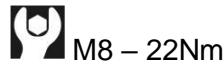
30. Holding each lower protection rail in position, loosely fasten using the M12 bolts, washers and flange nuts provided in the 5740200 - fitting kit. (Use 5x bolts, washers and nuts on each side).



31. Adjust the rear bar so that it has an even gap on both wing tips to the vehicle body. Adjust the lower protection rails so that they are parallel to both the vehicle body and the rear bar wing.

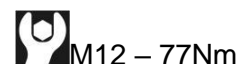
32. Tighten the 12x M8 bolts on the rear bar to the specified torque.

33. Tighten the main tow bar M16 bolts to the specified torque.



34. Re-adjust the lower protection rails so that they are parallel to both the vehicle body and the rear bar wing.

35. Tighten the 5x bolts on each lower protection rail to the specified torque.





Left: Outer sensor
Below: Inner sensor



36. Clip the 4x parking sensors into the housings, ensuring the rubber sleeves are still on the sensors and that they don't catch/pinch when sliding into the housing.



37. Re-fit the rear number plate globe and then clip in the OE number plate light assembly as shown. Ensure that both tabs are clipped properly on the bracket.



38. Fit the number plate using 4 plastic gromets and black screws.

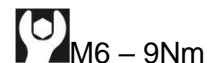
39. Fit the aluminium treadplate using 8x M6 stainless steel screws. Do not use washers under the screw heads. Tighten to specified torque.

Note: If using the light duty tow pack, a 60mm hole (using a hole saw) will need to be drilled in the centre of the treadplate for the tow ball provision. There is a 3mm pilot hole in the tread plate in the correct position.



40. Fit the spare wheel locking cap.

41. There is a provision for an ARB air-line coupling in the rear bar. If you are not fitting the air-line coupling, fill the hole with the 17mm plastic blanking plug.





2019 US Ranger with light-duty tow pack



FITTED PRODUCT

NOTICE: ONCE BAR IS FITTED:

- ◆ Ensure all bolts are tensioned correctly.
- ◆ All wiring is clear of sharp edges or moving surfaces and secured properly.
- ◆ Piping is secured well away from sharp or moving components.
- ◆ Check all wiring and connections to lamps and sensors.
- ◆ If fitted, test operation of parking sensors after fitment.

NOTE:

Sensors may not function well under the following conditions:

- ◆ After the vehicle has been sitting out in hot or cold weather.
- ◆ When the system is affected by electrical equipment or devices generating an ultrasonic wave.
- ◆ When operating in bad weather