

Date:

March 2016

Description:

ARB Alloy Bar

Application:

Ford Ranger PXII

Part No. & Barcode :

7440020 - 9332018041999

Product Group:

007 – ALLOY ARB BARS

Fitting:

4 Hours



Product Specification

The PXII Ford Ranger is the latest vehicle to receive the ARB Alloy bar treatment.

ARB's new alloy bar range development is based upon a few key characteristics. To achieve the weight saving expected of an alloy bar, ARB's engineers have concentrated on strength through design whilst complementing the vehicles styling. Three different alloys and tempers are used in production of the ARB alloy bar. These specific grades of alloy have been chosen to provide excellent corrosion resistance and high fatigue strength.

Chassis mounts, initially developed for the PX Ranger Summit Bar have been utilised to ensure that the alloy bar is securely mounted to the chassis and the crush rate characteristics of the air bag system are retained. The bar mounts have had extensive Finite Element Analysis (FEA) testing and destructive crush testing to ensure that they do not deviate from the manufacturers chassis impact characteristics.

A number of design elements are featured including the 30mm radius on the wings and centre pan, 60mm outer tube, 48mm centre cross tube, separate bolt in winch mount, pressed top pan with pressed winch cover, buffers and a centre two piece grill.

Protection & Styling Characteristics:

- Vehicle specific design for the 2015 PXII Ford Ranger.
- Registered design of styling and design components.
- 4mm alloy used for wings and pan.
- 60mm x 3mm alloy outer tube and 48mm x 3mm alloy cross tube.
- 30mm radius on wings and centre section.
- Engineered, air bag compatible mounting system secures to chassis via high tensile bolts and hardware.
- Split pan design for maximum strength and airflow.
- 2 piece grill design for split pan.
- Extensive steel under protection panels on centre and either side.
- Pressed top pan and aluminium winch cover panel.
- Combination style bar to suit both winch and non-winch applications. The bar includes a pressed aluminium winch cover panel.
- The lower pan features a knock-out Roller Fairlead panel which is kept in place if no winch is being fitted.
- Durable two piece buffers.
- Will accommodate Warn, Magnum, Bushranger and Smittybilt low mount model electric winches up to 10,000lb. Separate winch mount is required.
- Provision to accommodate ARB Intensity LED's and a range of IPF lights.
- Provision for optional ARB Fog Light kit part no 3500590.
- Includes ARB LED Indicator and Clearance light.
- Two aerial brackets located on the top of the centre cross tube.
- Bar adds approximately 174mm to the overall length of the PXII Ranger.
- Part # 3540170 Parking Sensor Retro Fit Kit is under development for fitting of Alloy bar to PXII Wildtrack models.
- No Hi Lift jack points provided on the ARB Alloy bar.
- Part # 3500700 Anti-Reflective Tape Kit is available for customers experiencing reflection on the outer tube.

Weight:

Weight has been an important consideration for ARB's engineers when designing our range of Alloy Bars. The bar assembly of the PXII alloy bar compared to the bar assembly of the ARB Summit bar equivalent is 58% lighter at approximately 20kg versus 48kg.

Bar chassis mounts and under wing protection panels between the two alternatives are similar at approximately 32kg. The winch mount for the alloy bar is approximately 10kg.

Alloy & Welds:

Like with steel, alloy comes in different specifications and different resultant strengths. How alloy is processed through the manufacturing stages can also affect the mechanical properties and strength of the alloy.

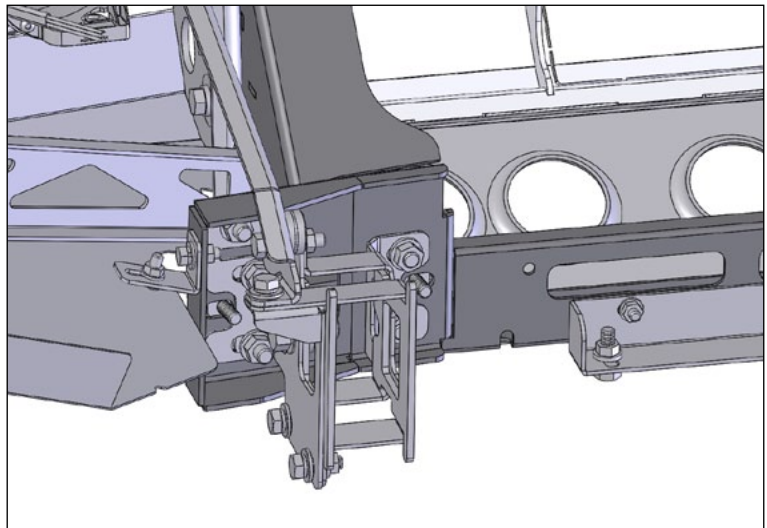
Three different alloys and tempers are used in production of ARB's alloy bars. The bar to chassis bracket mounts and uprights use 5083-H1 16 alloy. Centre pan and wings use 5032-H32 alloy which has been heat treated. The outer and centre tubes use 6063-T4 heat treated to T4 temper for strength and workability.

Specific grades of alloy have been chosen to provide excellent corrosion resistance and high fatigue strength. The wings and centre pan are 4mm, the outer tube is 60mm x 3mm and the centre cross tube is 48mm x 3mm.

With any welded alloy product, attention to welds is paramount. All visual welds are CMT pulse welds to give what is commonly referred to as "stack of coins welds".

Chassis Mounts:

The chassis mounts developed for the 2011 on Ranger Summit bar have been retained for the facelift model bar. The chassis mounts include bracing from the bar back to and around the chassis. These are required to provide valuable support around the consistency of an OE chassis weld. The brace ties the bar into a cradle around the chassis rather than just mounted on the face of the chassis flange. This bracing is particularly important for vehicles used in extreme conditions.



Pressed Form Top Pan:

ARB's alloy bar for the PXII features a pressed form top pan. The press form adds strength to the top pan whilst allowing for the winch cover panel to be recessed.



Pressed Winch Cover:

A 4mm aluminium press formed winch cover panel is supplied with the PXII Alloy Bar for when no winch is being fitted. When fitted the winch cover panel is recessed in the press form top pan to give a level and integrated appearance.



Buffers, Centre Pan Grill And Fog Light Surround:

The Ranger PXII Alloy Bar features two piece buffers, centre pan grill and ARB's recently released fog light surround (Fog Light part No 3500590 is optional). All three components have been designed to integrate with each other and the bar design.

To provide access to winch clutch handles and to assist with valuable air flow to the radiator and intercooler the split pan has a two piece grill for an integrated, OE style appearance.

An access door on the left hand side allows access to winch clutch handles. This door also overcomes clutch lever access issues when larger lights are fitted to the top pan.



Fog Lights:

ARB'S 51W fog light, part number 3500590, is optional fitment to the ARB Alloy PXII bar. If no fog lights are fitted the fog light insert is supplied standard with a screw in cover.

The fog light surround will be supplied in the natural black finish to complement the buffer design. ARB Auxiliary Fog Light Loom part no 3500530 is required if fitting the ARB Fog Light option. A clear fog light cover is available separately under part no 3500680.



Adaptive Cruise Control Kit:

ARB's engineers have developed a simple alloy relocation bracket to move the adaptive cruise control module into the split pan of the ARB Alloy bar on the right hand side. The original wiring loom is retained and re-routed to mount the unit.

Fitting instructions included with the kit detail alignment of the bracket. If the vehicle stance is variable ie due to towing or additional loads being carried / removed from the vehicle, performance of the Adaptive Cruise Control may be affected due to the angle of operation.

Regular cleaning and maintenance of the adaptive cruise control module, fasteners and bracket is recommended to ensure correct operation of the system. Real world evaluation will continue of the mounting position.

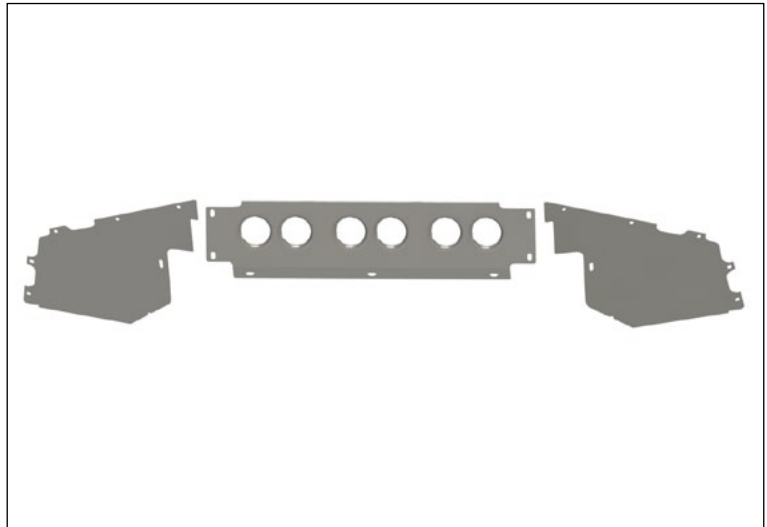
Please ensure that customers are aware that driver assistance features are supplemental and do not replace the driver's judgement. Full adaptive cruise control functions may not operate in some driving conditions and road conditions or adverse weather.

Part Number	Description	Product Group	Barcode
3540160	ADAPTIVE CRUISE CONTROL KITIALLOY SUITS 7440020	012 – Barwork Accessories	9332018041982

Under Pan Protection Panels:

Centre and side protection panels are supplied with the fitting kit of the ARB Alloy bar for the PXII. Panels are manufactured from laser cut and folded 2mm steel. Panels are finished with a zinc rich primer and a satin black powder coat.

The centre panel features six round laser cut holes to both add to the strength of the panel and to aid with air flow to the radiator and front mounted intercooler.



Winch Mount:

To enable winch fitment, a separate winch mount is required. By utilising a separate winch mount overall bar weight is kept down (for non-winch applications) and ensures that the full weight of the winch and control box are on the bar mounts rather than on the bar assembly itself.

The lower pan of the bar features a knock-out panel for when a winch is to be fitted. The separate ARB Alloy winch mount has an integrated control box mount to recess the control box lower in the pan. Different mount holes and control box mount brackets are provided to suit different winches. Fitting instructions for the kit have further information as to which mount hole or bracket is suitable.

Part Number	Description	Product Group	Barcode
3500730	WINCH INSTALL KIT ALLOY BAR	012 – Barwork Accessories	9332018037213

Winch Model Fitment:

The ARB winch mount for the PXII Alloy bar fits the following winches:

- Warn M8000, XD9000, XP9.5 and XDC 9.5
- Warn ZEON 8, 8-S, 10 and 10-S
- Warn ZEON Platinum 10 and 10-S
- Smittybilt Gen2 X20 10K
- Bushranger DV-9TH, DS-9.5TH and Seal 9.5TH

Additional fit kits are required depending on the winch being fitted:

- All winch fitments require P/N 3500730 Winch Install Kit Alloy Bar
- Warn ZEON and ZEON Platinum fitment requires P/N W89965 Short Wiring Kit
- Warn ZEON Platinum fitment may require P/N W94288 Enhanced Signal Kit



Driving Light Mounts:

Laser cut holes are provided in the pressed top pan for fitment of a range of compatible driving lights including ARB Intensity and IPF 808, 800 and 900 series lights. Note: Pinning holes for ARB Intensity lights included.



Antenna Mounts:

Two aerial mounts are welded to the centre cross tube to allow fitment of UHF/AM radio and mobile phone aerials/antennas.



Led Clearance Light / Turn Signals:

ARB's designed and developed LED Clearance Light / Turn signal is fitted to a press form aperture in each wing.

