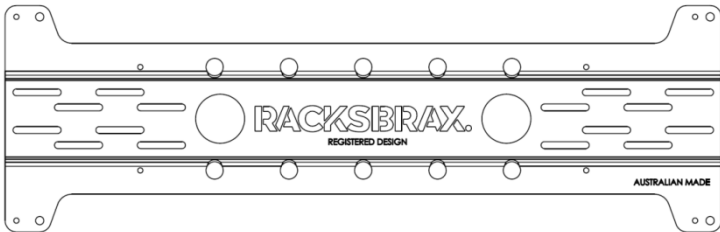


# RACKS BRAX.<sup>®</sup>



## **HD HITCH** **ACCESSORY PLATE (8174)** with optional Accessory Bars (8173)

*Assembly and Mounting Instructions*

# **RACKSBRAX.**

## **TABLE OF CONTENTS**

<b>What do I need to set up my RacksBrax Accessory Plate?</b>	<b>3-4</b>
<b>Steps to fitting the RacksBrax Accessory Plate</b>	<b>7</b>
My Measurements	<b>7</b>
Measuring the "Z" distance (Figure 7)	<b>8</b>
Determining which Slot Pair will fit roof rack bars on Accessory Plate	<b>9</b>
<b>How should I mount my Accessory Plate?</b>	<b>11-12</b>
<b>RacksBrax Accessory Bars (8173)</b>	<b>13-15</b>

# RACKSBRAX.

The fully engineered **RacksBrax Accessory Plate** (8174) takes the time and hassle out of loading and unloading your MAXTRAX® MKII, MAXTRAX® XTREME, TRED® Pro and ARB x TRED® Pro recovery boards.



**FIGURE 1** Accessory Plate and HD Hitch mounted to roof rack bars.



**FIGURE 2** Accessory Plate and HD Hitch mounted to roof rack tray.

When using the **RacksBrax Accessory Plate** with a **Racksbrax HD Hitch** (*sold separately*), you can load or unload your recovery boards in seconds. As a bonus, when unloaded, residual headroom is reduced by at least 100mm leaving your Hitches in place ready for your next trip.



**FIGURE 3** Headroom reduced.

# RACKSBRAX.

The RacksBrax Accessory Plate suits **ROOF RACK BARS** provided centre-to-centre spacing is between 480mm and 920 mm which covers most roof bar/vehicle combinations on the market.

## WHAT DO I NEED TO SET UP MY RACKSBRAX ACCESSORY PLATE?

### A. **ROOF RACK BARS**

2 roof rack bars are ideally suited to the Accessory Plate. Some tray-style roof racks such as ARB® Deluxe Roof Racks, ARB® Steel Cab Racks and ARB® Trade Racks also work. The Accessory Plate is **not needed** in situations where you have, for example, a Rhino-Rack® Pioneer platform-style rack where brackets/Hitches can be located at the precise recovery board mounting points.

### B. **BRACKETS**

*(Purchased separately from a roof rack stockist or your accessory's manufacturer)*

You will need brackets with fastener hole centres between **40mm and 53mm**; unless your roof rack is a tray-style rack outlined above and has side rail supports which you can directly attach a RacksBrax HD Hitch and thus a RacksBrax Accessory Plate to. The brackets (typically "L" or "T" shaped) that fit to your roof racks are specific to your roof rack design and are **not included** with the any of our HD Hitch packs or the Accessory Plate.

### C. **RACKSBRAX HD HITCH** (8159) *(sold separately)*

The HD Hitch is available online ([www.racksbrax.com](http://www.racksbrax.com)) or from an authorised RacksBrax dealer (also found on our website).

### D. **RACKSBRAX ACCESSORY PLATE** (8174)

This is the main mounting interface for your recovery boards to the side of your vehicle. The Accessory Plate may be used in conjunction with the RacksBrax Accessory Bars (8173) to gain more height and thus increased door clearance which is sometimes needed for some roof rack and vehicle combinations/setups. See **Point E** below for where both the Accessory Plate (8174) and Accessory Bars (8173) may be needed.

### E. **RACKSBRAX ACCESSORY BARS** (8173) *(sold separately)*

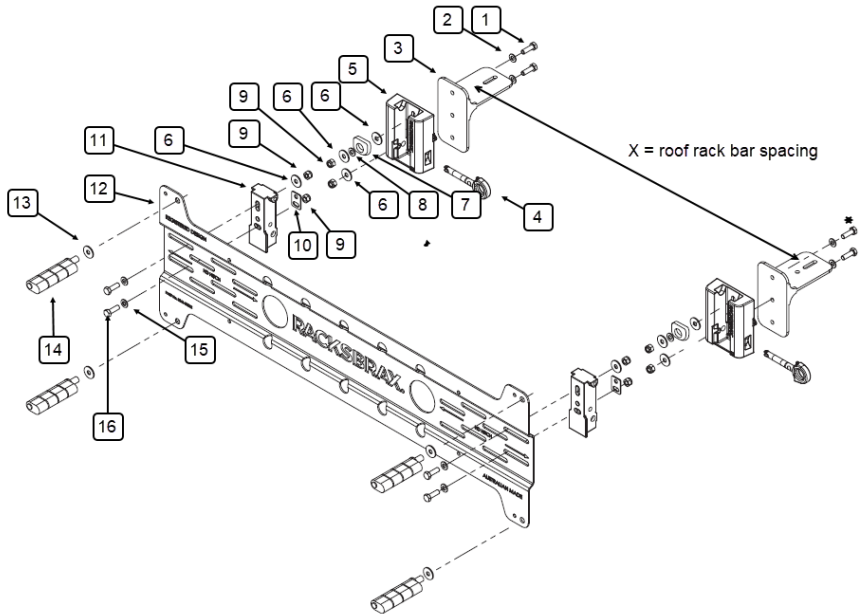
These are not included but are a companion product to the Accessory Plate which allows the height of the Accessory Plate to be adjusted by up to 150mm in 25mm increments. Accessory Bars may be used without an Accessory Plate and with an HD Hitch to allow the fast removal of recovery boards for platform-style roof racks (e.g. Rhino-Rack® Pioneer). **Table 2** is a Ready Reckoner which allows you to determine if your rig configuration requires the addition of Accessory Bars with your Accessory Plate.

### F. **RECOVERY BOARD MOUNTING PINS** *(sold separately)*

These will suit your specific recovery boards (e.g. MAXTRAX® or TRED®). These are not included but are available at good roof rack stockists or on our website ([www.racksbrax.com](http://www.racksbrax.com)).

# RACKSBRAX.

**FIGURE 4** RacksBrax HD Hitch and RacksBrax Accessory Plate including Recovery Board Mounting Pins.



Part		Qty	Code
1	Hex M8 25mm Set Screw (Grade 304)	2	3846-03036
2	Round Washer M8 (16mm x 1mm) (Grade 304)*	12	3846-03033
3	Bracket with M8 hole centres 43-50mm by others***	2	Not provided
4	RacksBrax HD Hitch Pin*	2	3846-01003
5	RacksBrax HD Hitch Body*	2	3846-01001
6	Round Washer M8 (24mm x 2mm) (Grade 304)	8	3846-03034
7	Buffer Washer (30mm x 24mm x 3mm) (EDPM)	2	3846-01026
8	Round Washer M8 (16mm x 3mm) (Grade 304)	2	3846-01027
9	Hex M8 Nut Nylon Insert (Grade 304)*	8	3846-03035
10	Holder Washer (2mm x 32mm x 22.5mm) (Grade 304)	2	3846-01013
11	RacksBrax HD Hitch Holder*	2	3846-01002
12	RacksBrax Accessory Plate	1	3846-02022
13	MAXTRAX® Mounting Pin Washer (30mm x 3mm) (EDPM)**	4	3846-03038
13	TRED® Mounting Pin Washer (25mm x 6mm) (EDPM)**	4	3846-03039
14	Recovery Board Mounting Pin (MAXTRAX® or TRED®) ***	4	Not provided
15	Hex M8 20mm Set Screw (Grade 304)*	6	3846-03032
-	Round Washer M8 (24mm x 2mm) (Grade 304)*	4	3846-03034

- \* Included in HD Hitch purchased separately.
- \*\* Suits either MAXTRAX® or TRED® Mounting Pin shaft.
- \*\*\* Purchased separately.
- + Extra fasteners for Accessory Bar and Accessory Plate when combined.

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**FIGURE 5** Roof rack bars **WITHOUT** the added height adjustment of the Accessory Bars.



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## THE RACKSBRAX ACCESSORY PLATE AND ROOF RACK BARS

The RacksBrax Accessory Plate can span roof rack bars spaced between 480mm and 920mm centres, which suits most standard roof bar setups including those designed for double and single cab utes or pickups.

This makes it fast and easy to load your recovery tracks onto the side of roof bars leaving space on top of the bars for other gear. Loading your Accessory Plate and recovery boards combo takes only seconds (refer to **Figure 5**).

**FAST ON!  
FAST OFF!**

# RACKSBRAX.

## STEPS TO FITTING THE RACKSBRAX ACCESSORY PLATE

### A. **PARK**

Park your vehicle on level ground.

### B. **FOR ROOF RACK BARS**

Determine which roof rack bracket fits your roof rack and where it will sit on your roof rack bar. The bracket will need fastener hole centres between 40 and 53mm centres and should fit as close to the end of the bar as possible. Brackets should be a minimum 5mm thick and 40mm wide.

### C. **FOR TRAY-STYLE ROOF RACKS**

If you have a "Tray" style of roof rack, some tray styles such as the ARB® Deluxe Roof Racks, ARB® Steel Cab Racks and ARB® Trade Racks will not require a bracket (see examples in **Figure 6** opposite).

### D. **MEASURE DISTANCE "X"**

Measure the centre to centre roof rack bar spacing (see **Figure 4**, on **page 4**) and note it down below.

### E. **FIT YOUR RACKSBRAX HD HITCHES**

Fit a set of RacksBrax HD Hitches (e.g. Standard pack 8159) to the chosen bracket (or tray-side rail support) following the instructions provided with the HD Hitch.

### F. **MEASURE DISTANCE "Z"**

Measure vertical distance, "Z", from a point on the outside face of the bracket at the lowest bracket fastener point to where that vertical line intersects an obstruction, typically the vehicle roof or (more likely) the highest point on the vehicle door (refer to **Figure 7** opposite) and note it down below.

### G. **FIND THE RIGHT SLOT PAIR ON THE RACKSBRAX ACCESSORY PLATE**

Using **Table 1** (on **page 9**) and dimension "X" (**Step D**) to determine which "Slot Pair" (1 or 2) (see **Figure 8**, on **page 9**) will suit your roof rack/rig configuration. These are the horizontal slots that align with your HD Hitch "Holder" fastener holes. Note your Slot Pair number below.

The Slot Pairs are defined in **Figure 8** (on **page 9**). Dimension Z is the distance from the lower bracket fastener to the vehicle roof or door (**Step F** above).

My **X** measurement = \_\_\_\_\_ mm

My **Z** measurement = \_\_\_\_\_ mm

My Slot Pair

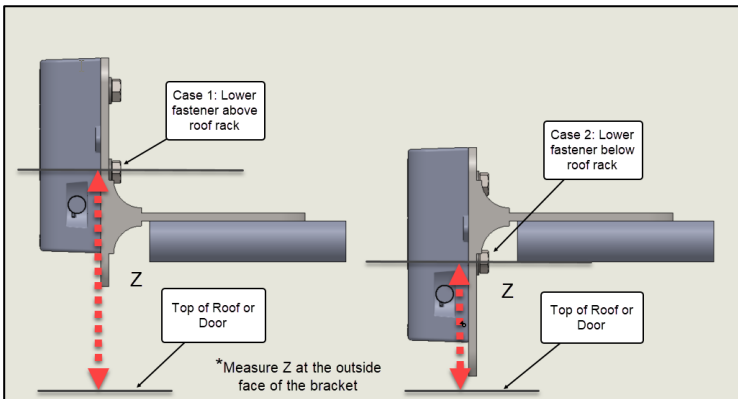
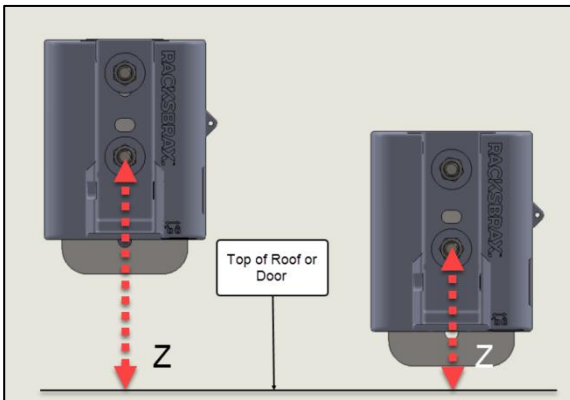
**1 OR 2**



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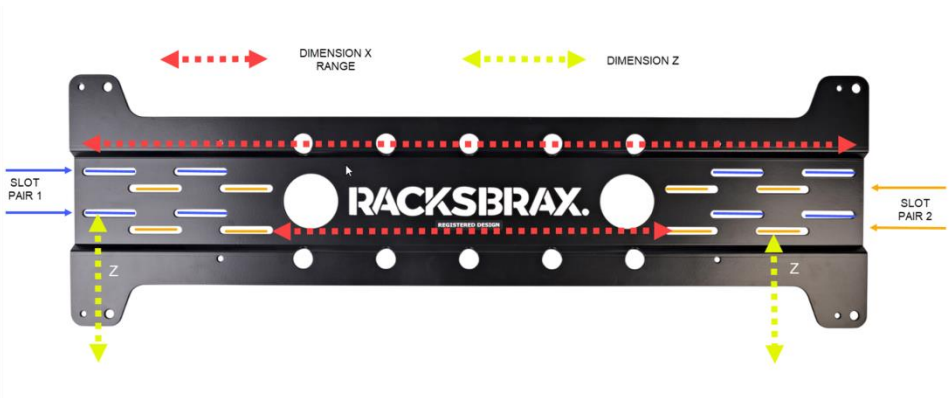


**FIGURE 6** TRED<sup>®</sup> and MAXTRAX<sup>®</sup> recovery boards (respectively) with HD Hitch fitted to side rail supports.



**FIGURE 7** Distance "Z", the distance from the lower bracket fastener to the vehicle door.

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**FIGURE 8** Determining which Slot Pair your roof racks are placed on

**TABLE 1** Which Slot Pair will my roof rack bar spacing fit on my Accessory Plate?

"X" Roof rack bar spacing width (mm)	Corresponding Slot Pair on Accessory Plate
920 – 811**	1
810	1 or 2
809 – 701	2
700	1 or 2
699 – 591	1
590	1 or 2
589 – 480	2

\*\* See note on page 10.

# RACKSBRAX.

**\*\* NOTE** In situations where:

- You are using MAXTRAX® Mounting Pins; **AND**
- Your roof rack bar spacing is between 900mm and 830mm; **AND**
- You are using the Accessory Bars with the Accessory Plate;

## **YOU WILL NEED TO USE THE SPACER WASHERS PROVIDED.**

At each of the 4 bolted connections between the Accessory Plate and the Accessory Bar, insert 2 of the 24mm diameter spacer washers on each bolted connection to separate the Accessory Plate from the Accessory Bars by 4mm (total of 8 washers). 2 of the 8 spacer washers are supplied with the Accessory Plate and 6 with the Accessory Bars.

The MAXTRAX® Mounting Pin M10 thread will also need to be **shortened to 15mm below** its nylon flange. This is to ensure the MAXTRAX® M10 washer and insert nut fit and the threaded end of the MAXTRAX® Mounting Pins clears the Accessory Bars.

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## HOW SHOULD I MOUNT MY ACCESSORY PLATE?

Using **your measurements on page 7** refer to **Table 2** below and **Figure 9** (opposite) to determine:

- The orientation of your Accessory Plate when it is mounted; and
- The possible need for **Accessory Bars** if there is not enough clearance between the vehicle roof/door and the Accessory Plate.

**TABLE 2** Roof or door clearance, Accessory Plate orientation and whether Accessory Bars are needed.

"Z" Distance (mm)	Slot Pair 1 (with a recommended 30mm clearance between mounted Plate/boards and door/roof)	Slot Pair 2 (with a recommended 30mm clearance between mounted Plate/boards and door/roof)
50		
↓		
160		
165		
170		
180		
190		
↓		
280		

# RACKSBRAX.

**FIGURE 9** Determining the orientation and whether you need Accessory Bars (8173).

**RED**

Accessory Bars **are** required.  
Refer to **pages 13-15**.



The image shows a black metal Accessory Plate (8173) with the RACKSBRAX logo in the center. It has two circular cutouts and several rectangular slots. The plate is shown in its standard orientation, which is the orientation for which Accessory Bars are required.

**AMBER**

Accessory Bars **are not** required  
**but** Accessory Plate can be turned *upside down*  
to gain a further 20mm of increased height.



The image shows the same black metal Accessory Plate (8173) as in the previous section, but it is oriented upside down. This orientation allows for an additional 20mm of height without the need for Accessory Bars.

**Green**

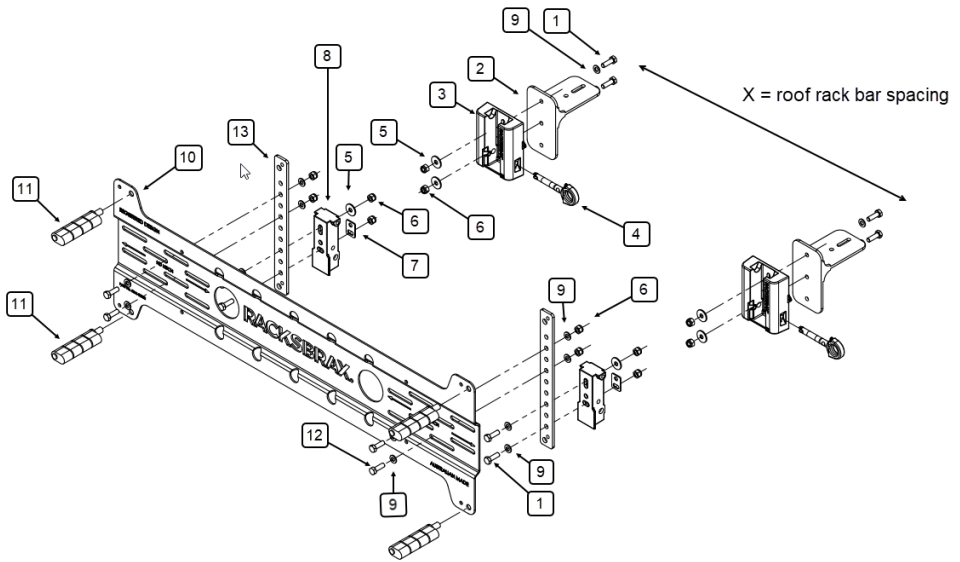
Accessory Bars **are not** required.



The image shows the black metal Accessory Plate (8173) in its standard orientation, identical to the first section. In this specific context, Accessory Bars are not required.

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**FIGURE 10** RacksBrax HD Hitch, RacksBrax Accessory Plate and RacksBrax Accessory Bars including Recovery Board Mounting Pins.



1. M8 x 20mm bolt (supplied with the RacksBrax HD Hitch Standard pack)
2. Brackets to suit roof rack bars with fastener holes at 40 and 53mm centres
3. RacksBrax HD Hitch Body
4. RacksBrax HD Hitch Pin
5. M8 24mm diameter washer (supplied with Accessory Plate)
6. M8 nylon insert nut (supplied with HD Hitch Standard pack and Accessory Bar)
7. M8 32mm x 22mm rectangular washer (supplied with Accessory Plate)
8. RacksBrax HD Hitch Holder (supplied with the RacksBrax HD Hitch Standard pack)
9. M8 16mm dia. Washer (supplied with the HD Hitch Standard pack and Accessory Bars)
10. RacksBrax Accessory Plate
11. Recovery Board Mounting Pins (Pins by MAXTRAX® or TRED®)
12. M8 x 30mm bolt (supplied with the RacksBrax Accessory Bar)
13. RacksBrax Accessory Bar

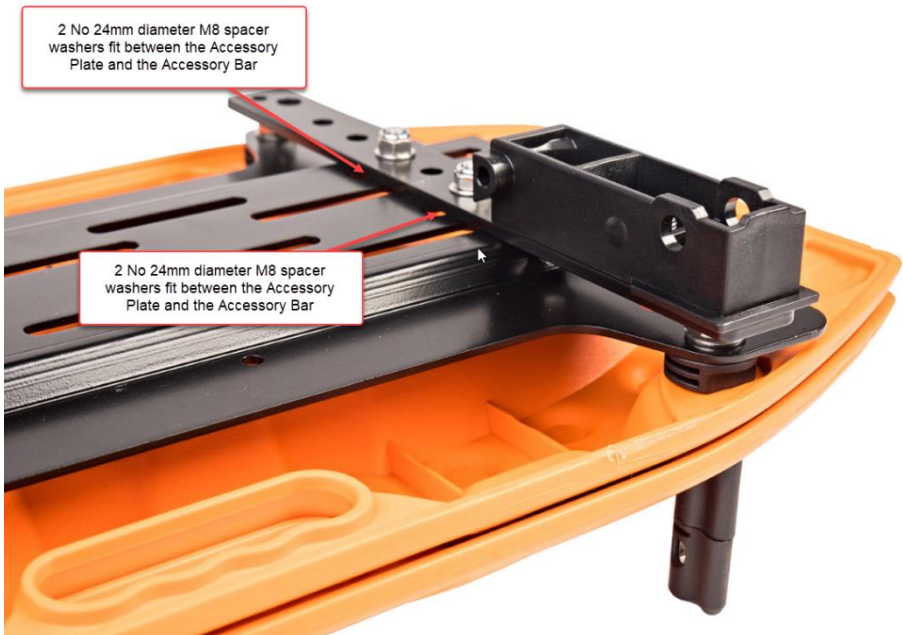
# RACKSBRAX.

## RACKSBRAX ACCESSORY BARS (8173)

Accessory Bars may be needed to extend the height of your **Accessory Plate** (8174) and/or recovery boards to clear the roof or doors on some roof rack/rig combinations. Note that **Table 2** (on **page 11**) is set with a minimum of 30mm of clearance between the bottom of the recovery boards and the roof/door. Additional clearance is possible by using **Accessory Bars** between the HD Hitch and the Accessory Plate.

If needed, **RacksBrax Accessory Bars** can be purchased separately and used in combination with the **Accessory Plate** to allow up to a further 150mm of vertical adjustment to the Accessory Plate. These **Accessory Bars** allow for a wider range of roof rack legs/supports and vehicle shape combinations ensuring sufficient clearance between the recovery tracks and door openings, or vehicle body/roof, once loaded. Refer to **Figure 10** (opposite) for Accessory Plate assembly if Accessory Bars are required to gain clearance.

**FIGURE 11** Accessory Bars may be used in combination with the Accessory Plate to gain extra roof/door clearance and height. Spacer washers may be required (see note on **page 10**).



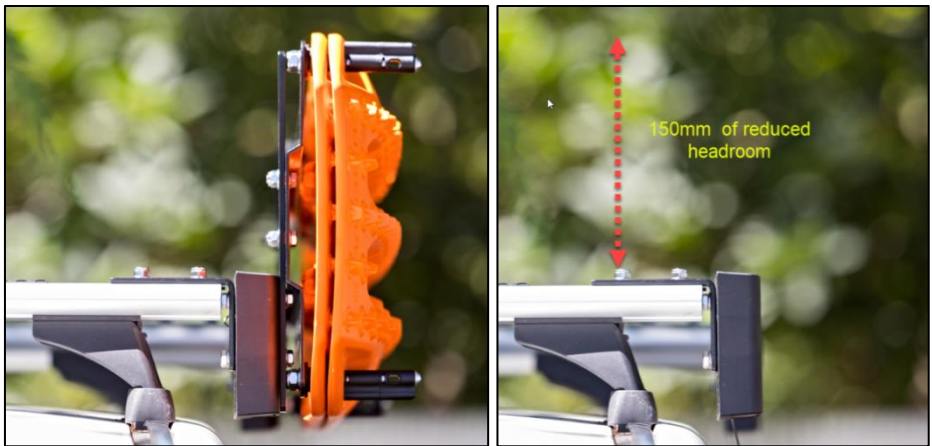
# RACKSBRAX.

## WHAT'S THE SECRET WITH BRACKETS AND HEADROOM AND THE USE OF THE ACCESSORY BARS?

Brackets that suit your roof rack need to be in place to mount the RacksBrax HD Hitch. They will need M8 drill holes at between 43 and 53mm centres so the Hitch can be bolted onto the bracket. Additionally, brackets need to be at least **40mm wide** and **5mm thick**.

Down facing "L" brackets (low set) may be used, reducing headroom but this may mean you need to use Accessory Bars to boost the height of the recovery boards to allow door clearance. The advantage is when the recovery boards are removed, headroom can be minimised by up to 150mm.

If upward facing brackets (high set) are fitted, your rig is more likely to **NOT** need the Accessory Bars to allow door clearance under your recovery tracks. The disadvantage is that when recovery boards are removed there is less free headroom.



**FIGURE 12** Roof rack bars **WITH** the added adjustment of Accessory Bars.

**FAST ON!  
FAST OFF!**

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For more information on our other products, future releases and more, visit our website [www.racksbrax.com](http://www.racksbrax.com).