

# RACKS BRAX.<sup>®</sup>



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

*Assembly and Mounting Instructions*

**TABLE OF CONTENTS**

<b>What do I need to set up my RacksBrax HD Accessory Plate?</b>	<b>3</b>
<b>Steps to fitting the RacksBrax HD Accessory Plate</b>	<b>6</b>
My Measurements	<b>6</b>
Measuring the "Z" distance (Figure 7 and Figure 8)	<b>7</b>
Determining which Slot Pair on the HD Accessory Plate will fit my roof rack bar spacing/height	<b>8</b>
<b>How should I mount my HD Accessory Plate?</b>	<b>9-10</b>
<b>RacksBrax HD Accessory Bars (8173)</b>	<b>11-13</b>

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The fully engineered **RacksBrax HD Accessory Plate** (8174) takes the time and hassle out of loading and unloading your MAXTRAX® MKII, MAXTRAX® XTREME, TRED® PRO, ARB x TRED® PRO, TRED® GT, TRED® HD and TRED® 1100 recovery boards.

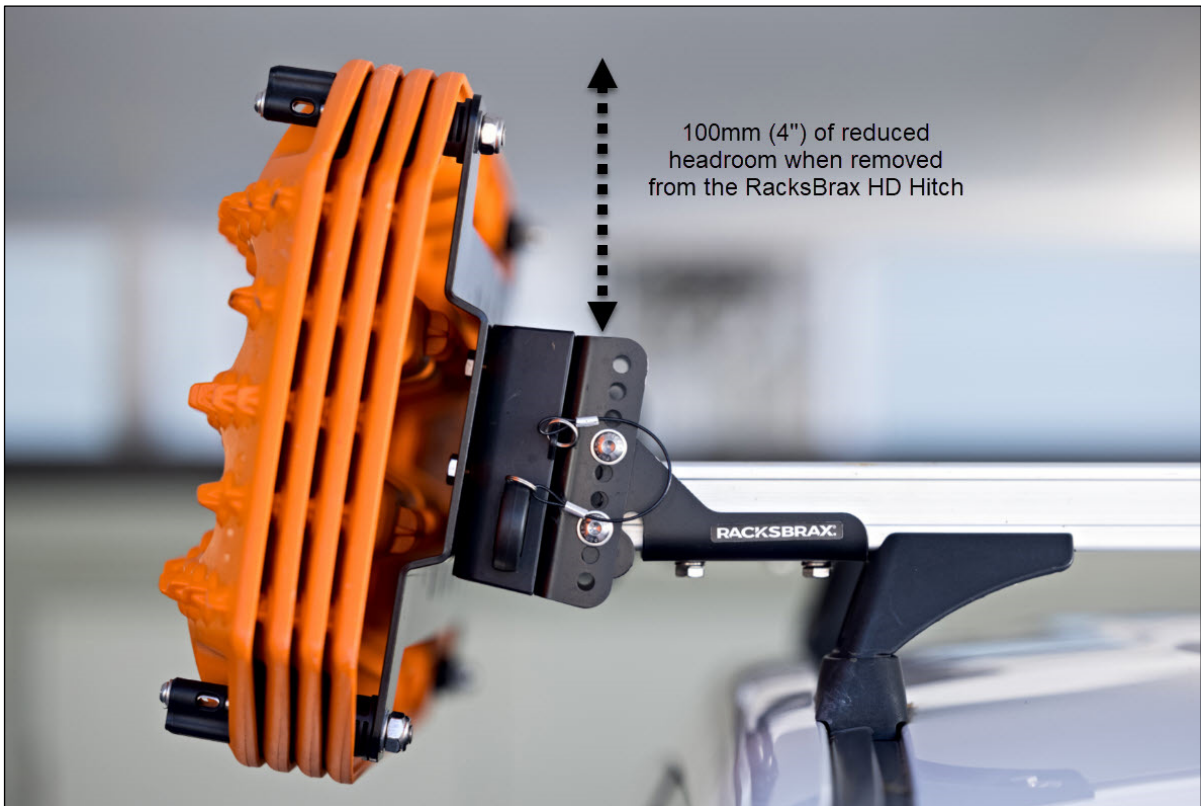


**FIGURE 1** HD Accessory Plate and HD Hitch mounted to roof rack bars.



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

When using the **RacksBrax HD 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 reduction as recovery boards are removed when using the HD Hitch, HD Accessory Plate and HD AB 0-15 Short (adjustable bracket), each sold separately.

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The RacksBrax HD Accessory Plate particularly suits **ROOF RACK BARS** provided centre-to-centre spacing is between 480mm and 940mm which covers most roof bar/vehicle combinations on the market.

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

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

2 roof rack bars are ideally suited to the HD Accessory Plate. Some tray-style roof racks such as ARB® Deluxe Roof Racks, ARB® Steel Cab Racks and ARB® Trade Racks also work well. The HD 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 hole spacing. In this case, refer to point **E** below.

### B. **BRACKETS** (Not included)

You will need brackets with fastener hole centres between **40mm and 52mm**; unless your roof rack is a tray-style rack outlined above (**Figure 2**) and has side rail supports which you can directly attach a RacksBrax HD Hitch and thus a RacksBrax HD Accessory Plate to. The brackets (typically "L" or "T" shaped brackets with a cross section of at least **40mm wide** and **5mm thick**) 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 HD Accessory Plate.

RacksBrax HD Adjustable Brackets and RacksBrax HD L Brackets can be purchased separately and are fully compatible with our entire HD Range.

### 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 listed on the RacksBrax website).

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

This is the main mounting interface for your recovery boards to the side of your vehicle. The HD Accessory Plate may be used in conjunction with the RacksBrax HD 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 HD Accessory Plate (8174) and HD Accessory Bars (8173) may be needed.

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

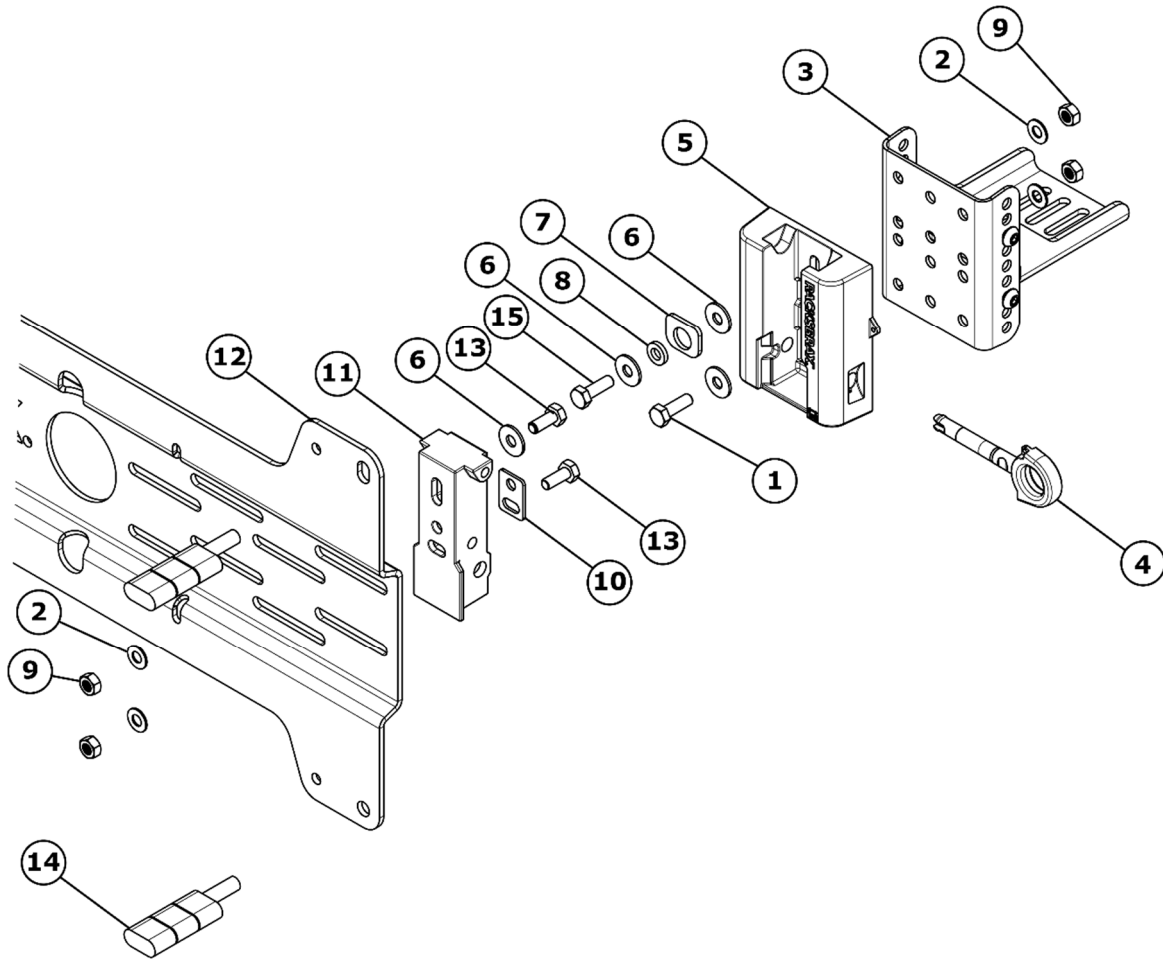
These are not included but are a companion product to the HD Accessory Plate which allows the height of the HD Accessory Plate to be adjusted by up to 150mm in 25mm increments. HD Accessory Bars may be used without an HD Accessory Plate and with an HD Hitch to allow the fast removal of recovery boards from 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 HD Accessory Bars with your HD 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 line at [www.racksbrax.com](http://www.racksbrax.com).

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



	PART	QUANTITY
1	Hex M8 25mm Set Screw (Grade 304)*	2
2	Round Washer M8 (17mm x 1.2mm) (Grade 304) *	8
3	Bracket with M8 hole centres 43-50mm**	2
4	RacksBrax HD Hitch Pin*	2
5	RacksBrax HD Hitch Body*	2
6	Round Washer M8 (22mm x 1.8mm) (Grade 304)***	8
7	Buffer Washer (30mmx24mmx3mm) (EDPM)***	2
8	Buffer Washer M8 (16mm x 3mm) (Grade 304)***	2
9	Hex M8 Nut (nylon insert) (Grade 304) *	8
10	Holder Washer (2mm x 32mm x 22.5mm) (Grade 304)***	2
11	RacksBrax HD Hitch Holder*	2
12	RacksBrax HD Accessory Plate***	1
13	Hex M8 20mm Set Screw (Grade 304) *	4
14	Recovery Board Mounting Pin (MAXTRAX® or TRED®)**	4
15	Hex M8 30mm Set Screw (Grade 304)***	2

\* included in the entire HD Hitch range (sold separately) (8159, 8162, 8163, 8179, 8180, 8181)

\*\* sold separately

\*\*\* included in the HD Accessory Plate (8174)

**NOTE:** Do not use nylon-insert lock nuts more than once.

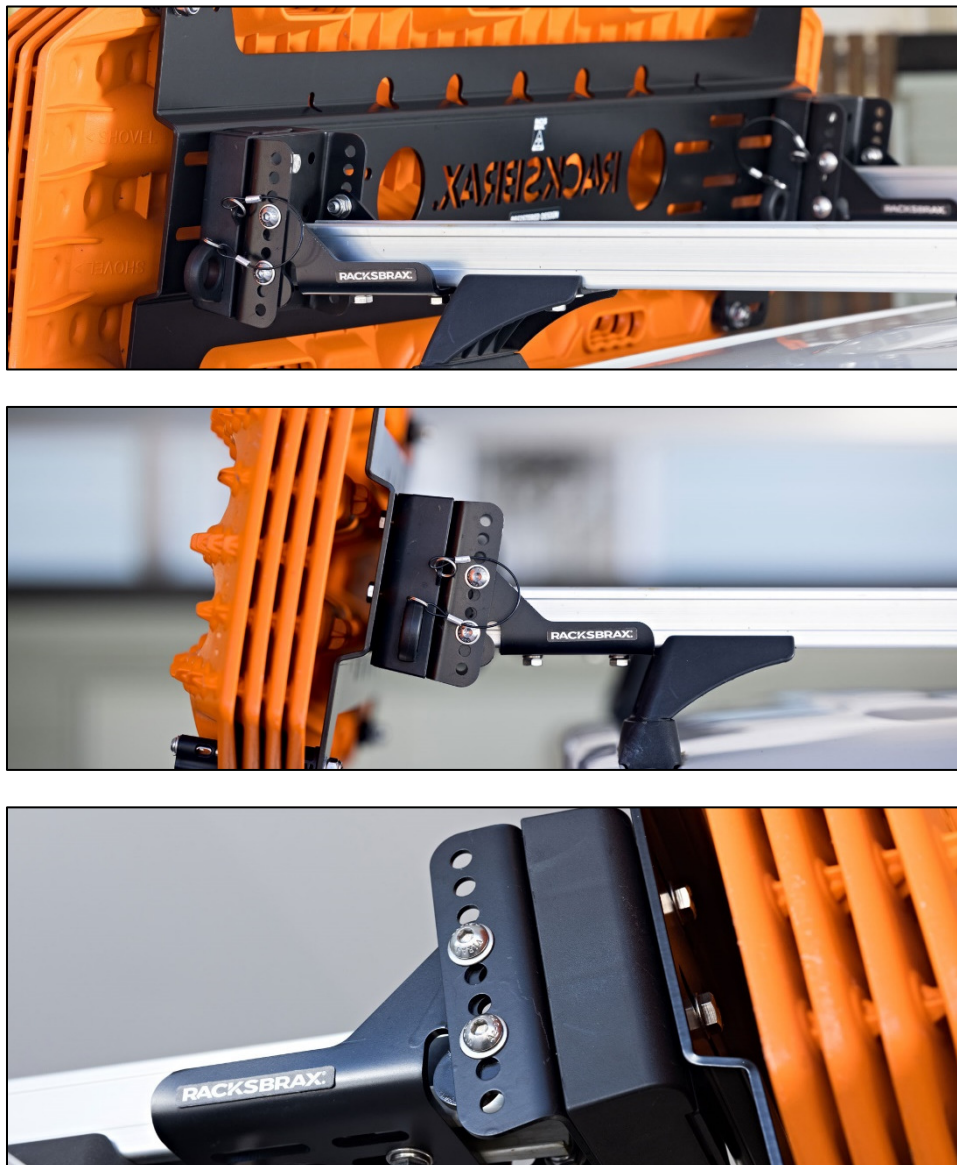
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## THE RACKSBRAX HD ACCESSORY PLATE AND ROOF RACK BARS

The RacksBrax HD Accessory Plate can span roof rack bars (or other support points) spaced between 480mm and 940mm centres, which suits most standard roof bar setups including several tray style roof racks as well as those designed for double and single cab utes or pickups.

This makes it fast and easy to load your recovery boards onto the side of roof bars leaving space on top of the bars for other gear. Loading your HD Accessory Plate and recovery boards combo takes only seconds (refer to **Figure 5**). Likewise, removing these also takes seconds with the added bonus of reducing headroom by approximately 100mm (4”).

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



## STEPS TO FITTING THE RACKSBRAX HD 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 52mm 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**).

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

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

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

Fit a set of RacksBrax HD Hitches (e.g. HD Hitch Standard 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**) and note it down below.

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

Using **Table 1** and dimension "X" (**Step D**) to determine which "Slot Pair" (1 or 2) (see **Figure 8**) 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**. 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

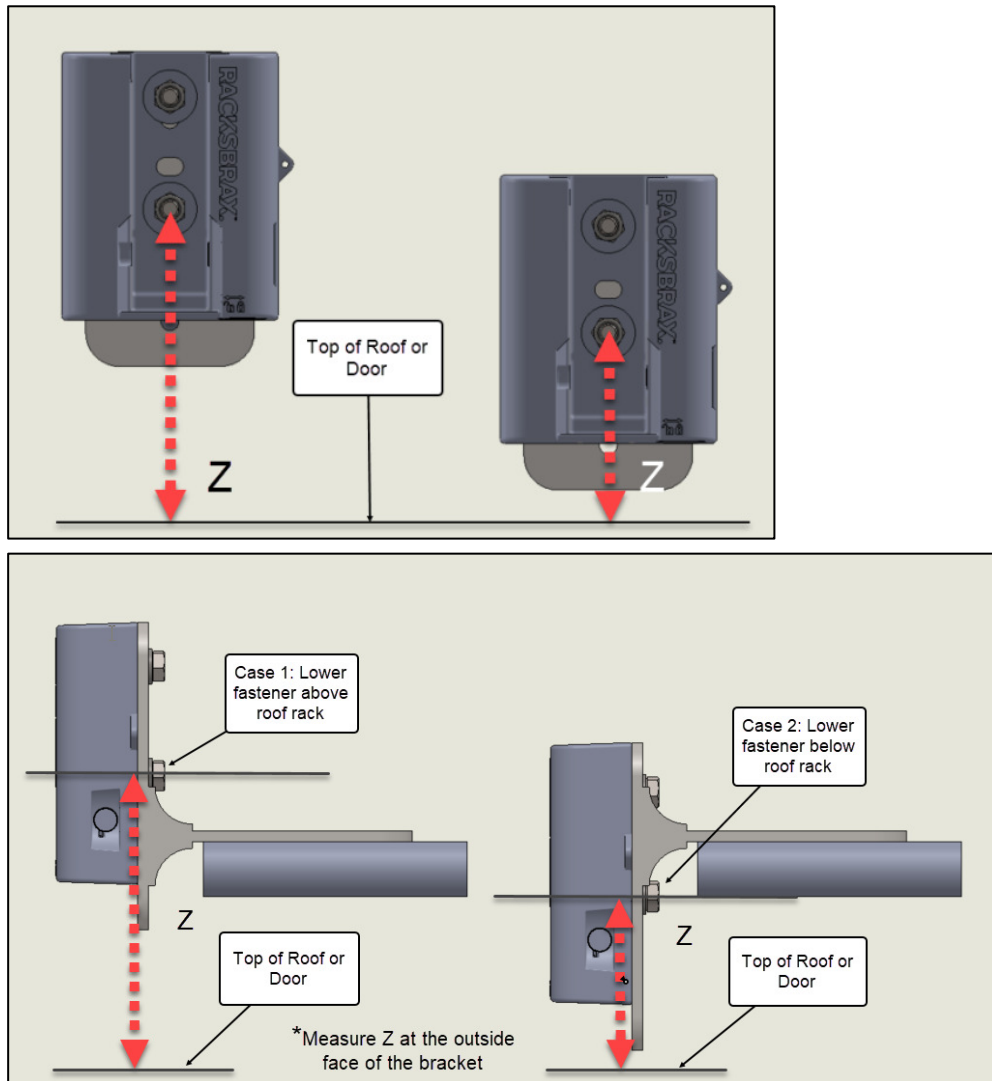
My Slot Pair

**1** OR **2**

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**FIGURE 6** MAXTRAX<sup>®</sup> and TRED<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 on my HD Accessory Plate will fit my roof rack bar spacing?

"X" Roof rack bar spacing (mm)	Corresponding Slot Pair on HD Accessory Plate
941 – 824**	1
824	1 or 2
824 – 708	2
708	1 or 2
708 – 592	1
592	1 or 2
592 – 478	2

**\*\* NOTE** In some configurations if:

- You are using MAXTRAX® Mounting Pins; **AND**
- You are using the HD Accessory Bars with the HD Accessory Plate;

The MAXTRAX® Mounting Pin M10 thread may need to be **shortened to 15mm beyond** 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 HD Accessory Bars.

## HOW SHOULD I MOUNT MY HD ACCESSORY PLATE?

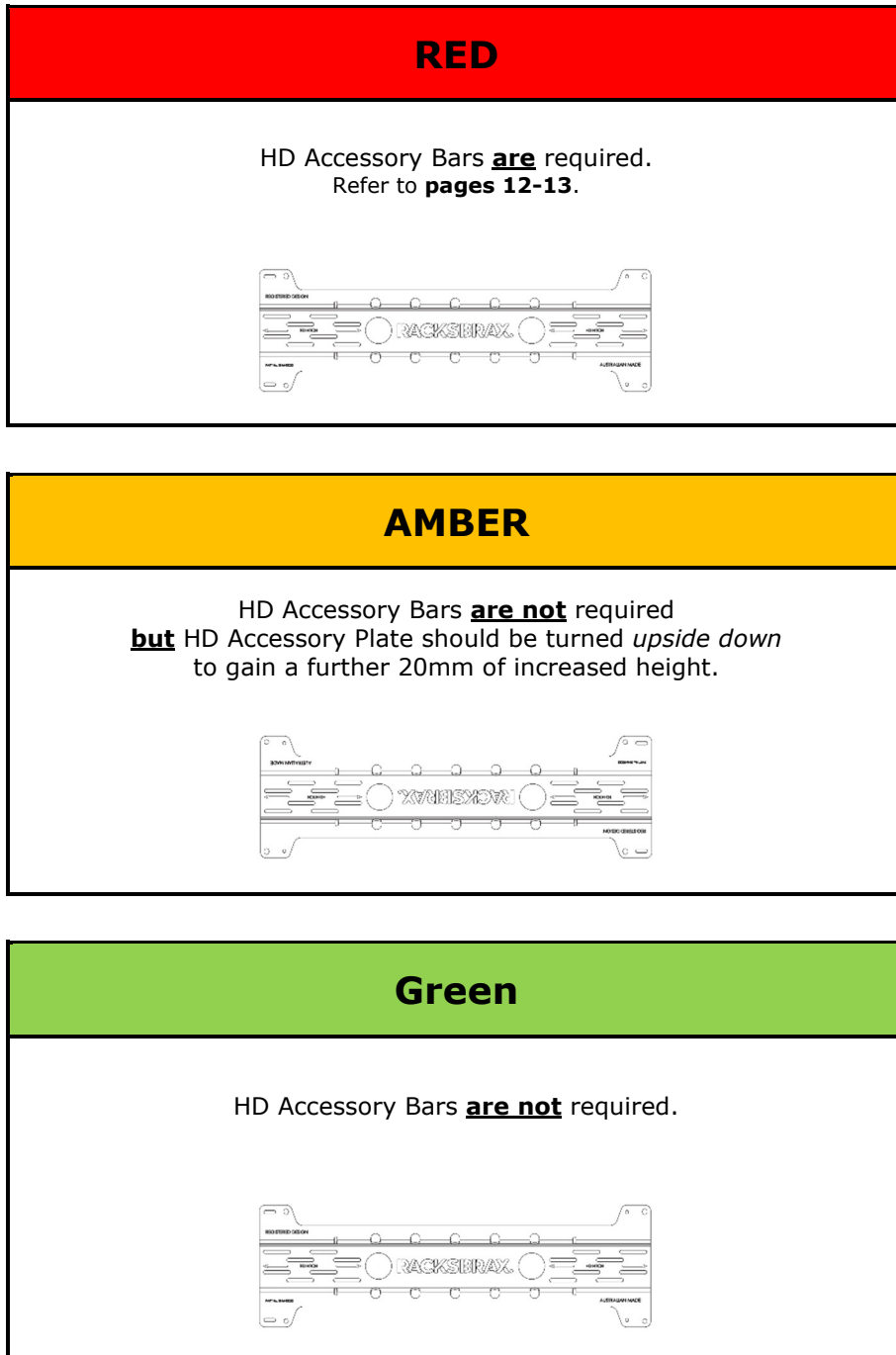
Using **your measurements on page 6** refer to **Table 2** below and **Figure 9** to determine:

- The orientation of your HD Accessory Plate when it is mounted (it may need to be fitted with the RACKSBRAX logo inverted-Amber); and
- The possible need for **HD Accessory Bars** if there is not enough clearance between the vehicle roof/door and the HD Accessory Plate/recovery boards-red.

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

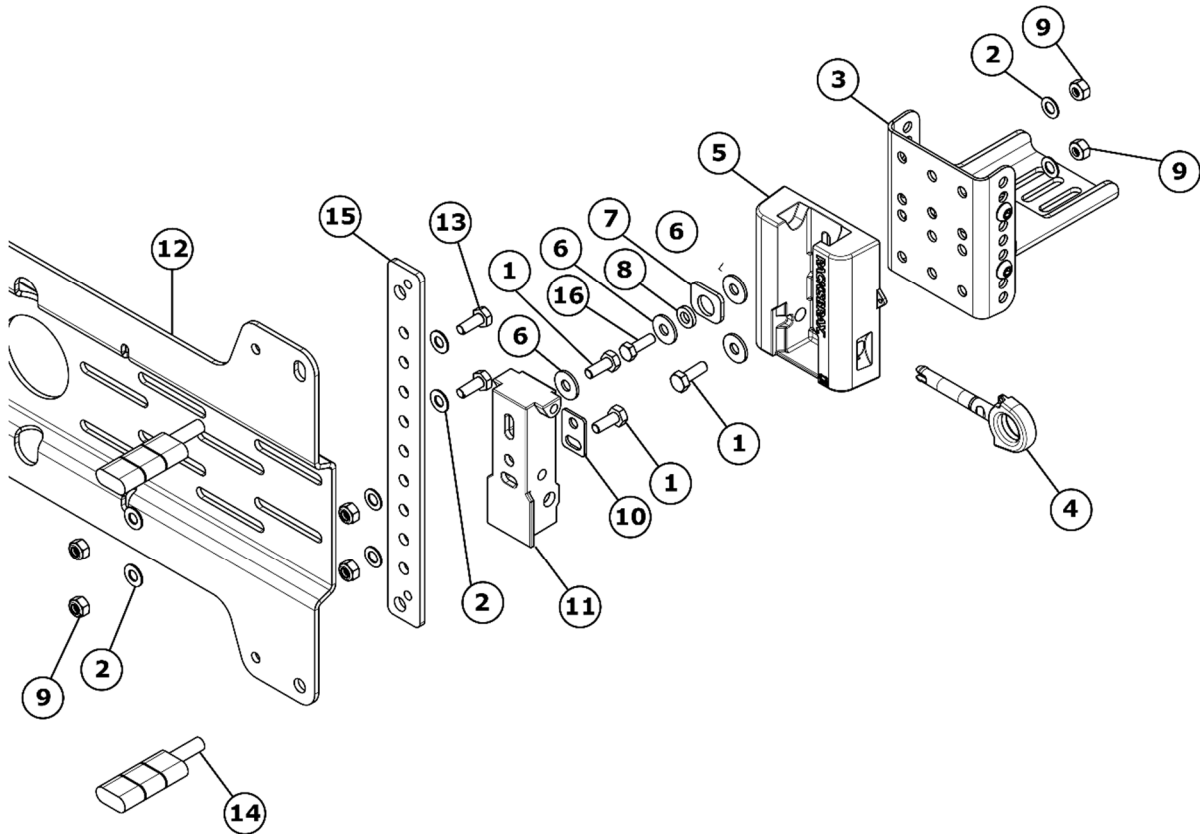
"Z" Distance (mm)	Slot Pair 1 (with a recommended 30mm clearance between mounted Plate/recovery boards and door/roof)	Slot Pair 2 (with a recommended 30mm clearance between mounted Plate/recovery boards and door/roof)
50		
↓		
160		
165		
170		
180		
190		
↓		
280		

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



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



	PART	QUANTITY
1	Hex M8 25mm Set Screw (Grade 304)* +	6
2	Round Washer M8 (17mm x 1.2mm) (Grade 304)*	8
3	Bracket with M8 hole centres 43-50mm**	2
4	RacksBrax HD Hitch Pin*	2
5	RacksBrax HD Hitch Body*	2
6	Round Washer M8 (22mm x 1.8mm) (Grade 304)*** +	8
7	Buffer Washer (30mmx24mmx3mm) (EDPM)*** +	2
8	Buffer Washer M8 (16mm x 3mm) (Grade 304)*** +	2
9	Hex M8 Nut (nylon insert) (Grade 304)* +	12
10	Holder Washer (2mm x 32mm x 22.5mm) (Grade 304)*** +	2
11	RacksBrax HD Hitch Holder*	2
12	RacksBrax HD Accessory Plate***	1
13	Hex M8 20mm Set Screw (Grade 304)*	4
14	Recovery Board Mounting Pin (MAXTRAX® or TRED®)**	4
15	Accessory Bar (Grade 304)+	2
16	Hex M8 30mm Set Screw (Grade 304)*** +	2

\* included in the entire HD Hitch range (sold separately) (8159, 8162, 8163, 8179, 8180, 8181)

\*\* purchased separately

\*\*\* included in the HD Accessory Plate (sold separately)

+ included in the HD Accessory Bars (sold separately)

**NOTE:** Do not use nylon-insert lock nuts more than once.

## RACKSBRAX HD ACCESSORY BARS (8173)

HD Accessory Bars may be needed to extend the height of your **HD Accessory Plate** (8174) and/or recovery boards to clear the roof or doors on some roof rack/rig combinations. Note that **Table 2** 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 HD Accessory Bars between the HD Hitch and the HD Accessory Plate.

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

**FIGURE 11** HD Accessory Bars may be used in combination with the HD Accessory Plate to gain extra roof/door clearance and height.

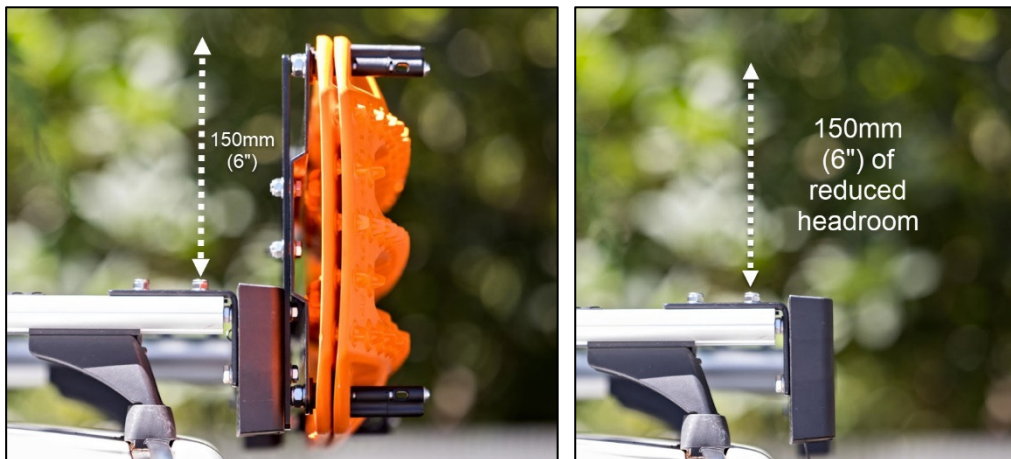


## WHAT'S THE SECRET WITH BRACKETS AND HEADROOM AND THE USE OF THE HD ACCESSORY BARS?

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 40 and 52mm centres so the HD 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 HD 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 HD Accessory Bars to allow door clearance under your recovery boards. 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).