

Instruction Manual

Operation / Safety / Maintenance

Meets applicable requirements of AS/NZS 2693:2007
ASME B30.1-2015
Machinery Directive 2006/42/EC

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**Thank you for purchasing Jack.
With proper maintenance and use,
Jack will provide years of dependable
service. Please only use genuine Jack
components to ensure your Jack always
works properly. Failing to do so may
make Jack unsafe and void warranty.**

Store these instructions in a safe place for future reference.
ARB recommends that when the Jack is not in use, it is stored
in the bag provided and the shaft fully compressed.



WARNING

- ◆ This Jack is not for vehicle maintenance or wheel removal
- ◆ Do not get under a raised vehicle
- ◆ Do not get under a vehicle that is supported by a Jack
- ◆ Do not put any part of your body under a vehicle when Jack is being used as the only support device

**JACK**

BY



ARB Corporation Ltd.

42-44 Garden St, Kilsyth 3137 Vic | Ph: +61 3 9761 6622 | arb.com.au

JACK WARNING



OWNER RESPONSIBILITY

DO NOT OPERATE OR REPAIR THIS EQUIPMENT WITHOUT READING THIS MANUAL.

To maintain the Jack and user safety, the responsibility of the owner is to read and follow these instructions. Follow all instructions and operational procedures. Inspect the Jack for proper operation and function prior to every use.

Read and follow the safety instructions.

Ensure all Jack operators understand instructions, know how to use the Jack safely and are properly trained. Operate the Jack using the correct parts and only replace components with genuine replacements. Service and maintain the Jack with only genuine and approved components, failure to do so will make the Jack unsafe. Carefully inspect the Jack regularly and perform all maintenance as required. Keep all decals clean and visible.

The Jack is intended for off road use in vehicle recovery situations. The Jack has not been designed for use in a horizontal orientation, Jack performance cannot be guaranteed when used on extreme angles.

WORKING LOAD LIMIT 2,000KG / 4,400LBS



SAFETY INFORMATION & WARNINGS

Operators of the Jack should study, understand and follow all instructions in this manual before operating the Jack. Failure to heed these warnings may result in loss of load, damage to the Jack and/or Jack failure resulting in personal injury or property damage.

Safe manual handling of Jack:

- ◆ Use good lifting technique (straight back, using legs to lift).
- ◆ When not in the carrying bag, carry the Jack with two hands, horizontally, across the front of the body.
- ◆ When in the carrying bag, lift using the bag's carrying handles.
- ◆ Do not carry the Jack on one shoulder, as this is unbalanced, unstable, and increases risk of injury/damage to the person carrying the Jack and any person or object in the immediate surroundings.
- ◆ While carrying the Jack, be aware of surroundings when turning, to prevent hitting people or objects in the immediate vicinity.

1. Position

Position the Jack to only lift in areas of the vehicle specified as off road jacking points.

2. Always use support stands

After lifting the vehicle, always support the load with appropriately rated vehicle support stands before working on the vehicle.

3. Do not overload Jack

Do not overload this Jack beyond its rated capacity. Overloading this Jack can cause damage or failure to the Jack.

4. Always use on hard and level surface

This Jack is designed only for use on hard level surfaces capable of withstanding the load. Use on unstable or other insufficient surfaces can result in Jack instability and possible loss of load.

5. Insert hook as far as possible

Insert the hook as far as possible to apply the most load closer to the body. Failure to insert enough of the hook can cause the Jack to become unstable, fail, damage vehicle or loss of load. See 4; *Hook Engagement*

JACK WARNING



6. Do not raise or lower the Jack unless tools, equipment and people are clear

When lowering the Jack ensure the vicinity is clear. Ensure there are no tools or equipment left under the vehicle before lowering.

Always lower the Jack slowly and in a controlled manner.

7. Do not use the Jack to support or stabilise a load

Using the Jack to support or stabilise a load may result in unexpected movement and result in serious injury, being crushed and/or death.

Always securely chock and block (stabilise) the load to be lifted.

Never place any part of the body under a raised load without properly chocking and supporting the load.

8. Never use the Jack on curved or tubular vehicle parts

Failure to follow may cause the Jack to slip and damage the vehicle and/or cause injury to the operator.

Use a Jack adaptor to lift from wheel rims or bumpers.

9. The use of heavy duty rigging/winchng gloves is recommended

10. Do not move or dolly a vehicle while the Jack is in use

11. Stay alert and use caution when operating Jack

Do not use the Jack when tired, incoherent, dizzy or under the influence of drugs and/or alcohol. The operator MUST be alert and watch the lifted load during operation of the Jack.

12. Training

Read this manual before use. Do not allow anyone who has not read this manual and/or does not understand the instructions and safety requirements to use the Jack.

13. Inspection

Using a Jack that is not in good working condition and free of debris may cause property damage and/or loss, serious injury and/or death.

Inspect the Jack before each use. Ensure the Jack is not damaged, excessively worn, or missing parts.

Do not lubricate the shaft.

14. Operating Temperature

The Jack has been designed to operate within a temperature range of -20°C to +50°C.



15. Do not lift any object or vehicle that is occupied.

All passengers/persons must vacate the object or vehicle prior to being lifted.

16. Chock and Block (stabilise)

A chock is a wedge which is placed under the un-lifted wheels to inhibit the wheels from rolling.

When you block a load, you secure and support a load that has been lifted.

Apply park brake in the vehicle before operating the Jack.

Chock the wheel opposite the end being lifted.

With the vehicle lifted, place the block or stabiliser under an appropriate location on the vehicle.

The block or stabiliser must have a load rating greater than the load being lifted.

17. Additional Notes

Retain the original or a copy of the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with your Jack before use.

- ◆ **DO NOT MODIFY** the Jack in any way. Unauthorised modification may impair the function, lifespan and/or safety of the Jack. The Jack was designed for specific applications.
- ◆ **ALWAYS CHECK FOR DAMAGED OR WORN** out parts before using the Jack. Broken parts will affect the equipment operation.
- ◆ When the Jack is not in use, the Jack must be stored in the bag provided. Inspect for good working condition prior to storage and re-use.
- ◆ Keep away from children.
- ◆ Not tested for use in potentially explosive environments.
- ◆ Not tested for use in areas with potential for sensitivity to static electricity.
- ◆ Not intended for use in the lifting of dangerous materials.
- ◆ Not intended for the use of contact and/or preparation of food.
- ◆ Not intended for use in marine environments and/or on maritime vessels.
- ◆ This product does not exceed 70dB(A) during operation. Hearing PPE not required during operation.

The Jack was designed to reduce risks and increase safety. Operation of the Jack may have the potential to cause harm if used improperly. Ensure all instructions are read and understood prior to operation of the Jack.

JACK

CARE & MAINTENANCE

MAINTENANCE INSTRUCTIONS

The Jack is to be only serviced by an ARB specialist.
For Jack decommission, refer to the last page of these instructions.

CHANGING OIL

It is recommended that you return your Jack back to an ARB store for servicing if an oil change is required.
Refer to last page for oil leak and spillage procedures.

LUBRICATION

DO NOT attempt to lubricate the shafts, they are self-lubricating and will lubricate themselves upon re-use.

CLEANING

Periodically check the external upper and lower seals. The seals keep contaminants from entering the Jack. Wipe with a cloth when necessary.

Check the shafts for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

Rinse the Jack with fresh water. Never use high pressure and never use chemicals to clean the Jack.

Avoid operating the lowering lever or depressing the pressure relief button whilst cleaning.

STORAGE

Store Jack with the shaft fully retracted (Jack lowered), the handle retained in the rubber bumper and the hook in the upright position.

Ensure the Pressure Relief Button is not depressed while in storage. Storage with Pressure Relief Button depressed may cause oil leakage.

When not in use, the Jack should be stored within the supplied carry bag.

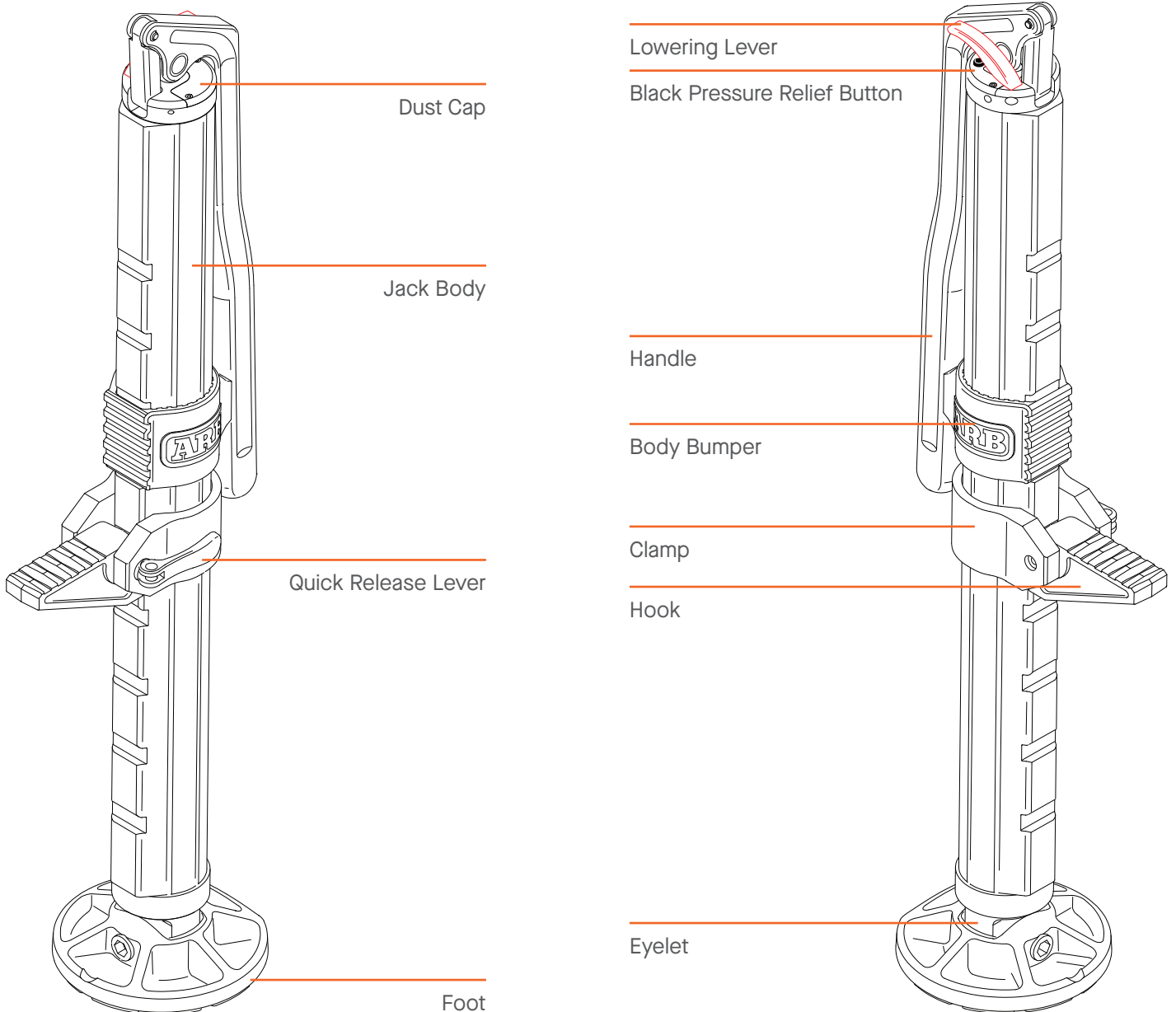
If the Jack is transported within a vehicle, ensure the Jack is adequately restrained so as to not become a projectile in the event of a collision.

For all other maintenance requirements, return to ARB for service.

JACK COMPONENTS

KNOW YOUR JACK

Compare these illustrations with your Jack BEFORE operation to become familiar with the location of various Jack components.



Ensure all markings are present and clearly legible prior to each operation.

JACK OPERATION

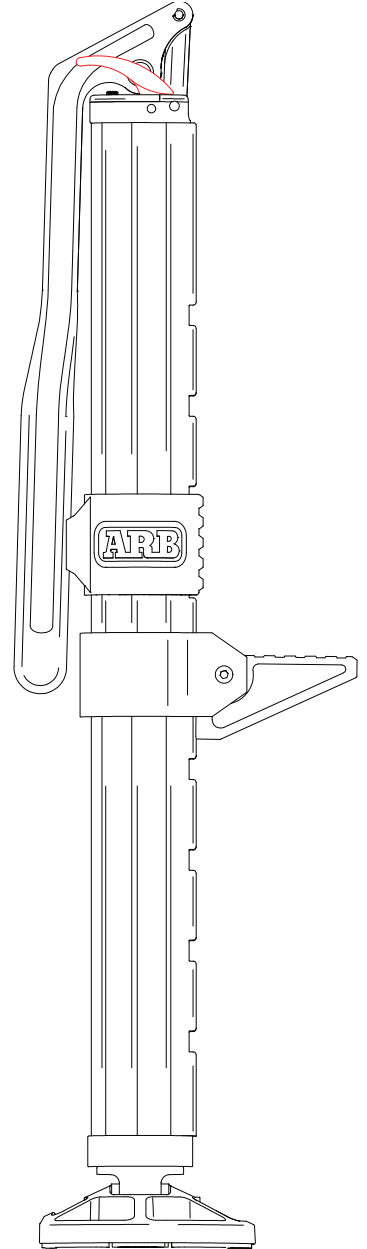
BEFORE USE

Occasionally during shipment and/or handling, air becomes trapped within the hydraulic system which interferes with the Jack's performance. To release the trapped air, please perform the following with the Jack in an upright position:

1. Depress the red lowering lever for a period of 5-10 seconds.
2. Depress the black pressure relief button on top of the Jack for 5-10 seconds.
3. Pump the Jack handle several times to ensure no bubbling noises are present.
4. Ensure the pump operates smoothly before putting into service.

OPERATING PRINCIPLES

- ◆ When the lowering lever is not depressed, upward strokes of the Jack handle draws oil from the reservoir tank into the piston cavity. Hydraulic pressure holds the valve closed, which keeps the oil in the piston cavity.
- ◆ Downward strokes of the Jack handle releases oil into the cylinder, which forces the pump system upward inside the shaft.
- ◆ When the Jack reaches maximum extension, oil is bypassed back into the reservoir to prevent an overextended ram stroke and possible damage to the Jack.
- ◆ Depressing the RED lowering lever allows the oil to flow through the pump and back into the reservoir tank. This releases hydraulic pressure from below the pump system and allows the Jack to retract (lower).



Prior to use, consider wind conditions and suitability for operation

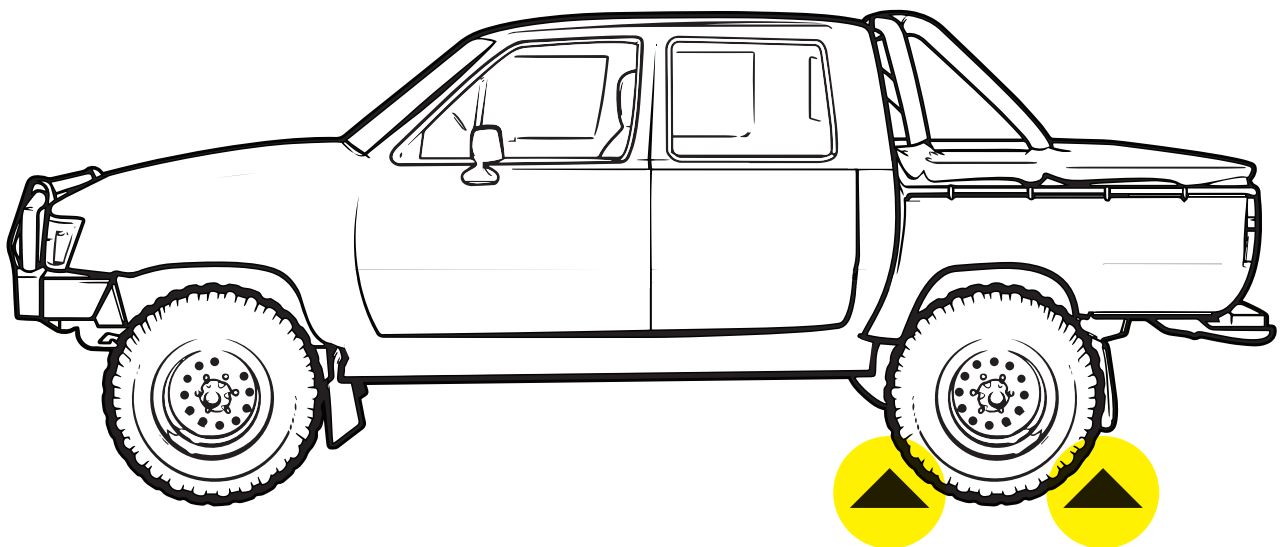
How to use your JACK

RAISING THE JACK

1. VEHICLE SAFETY

Stabilise the vehicle by applying chocks to the wheels at the opposite end of the vehicle being lifted.

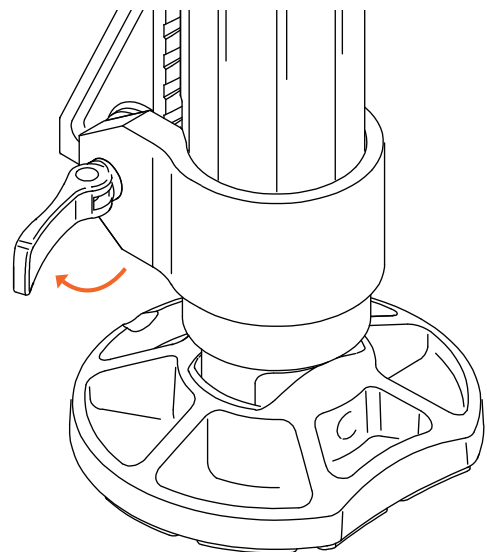
**See safety information section 14*



2. CLAMP LOCK

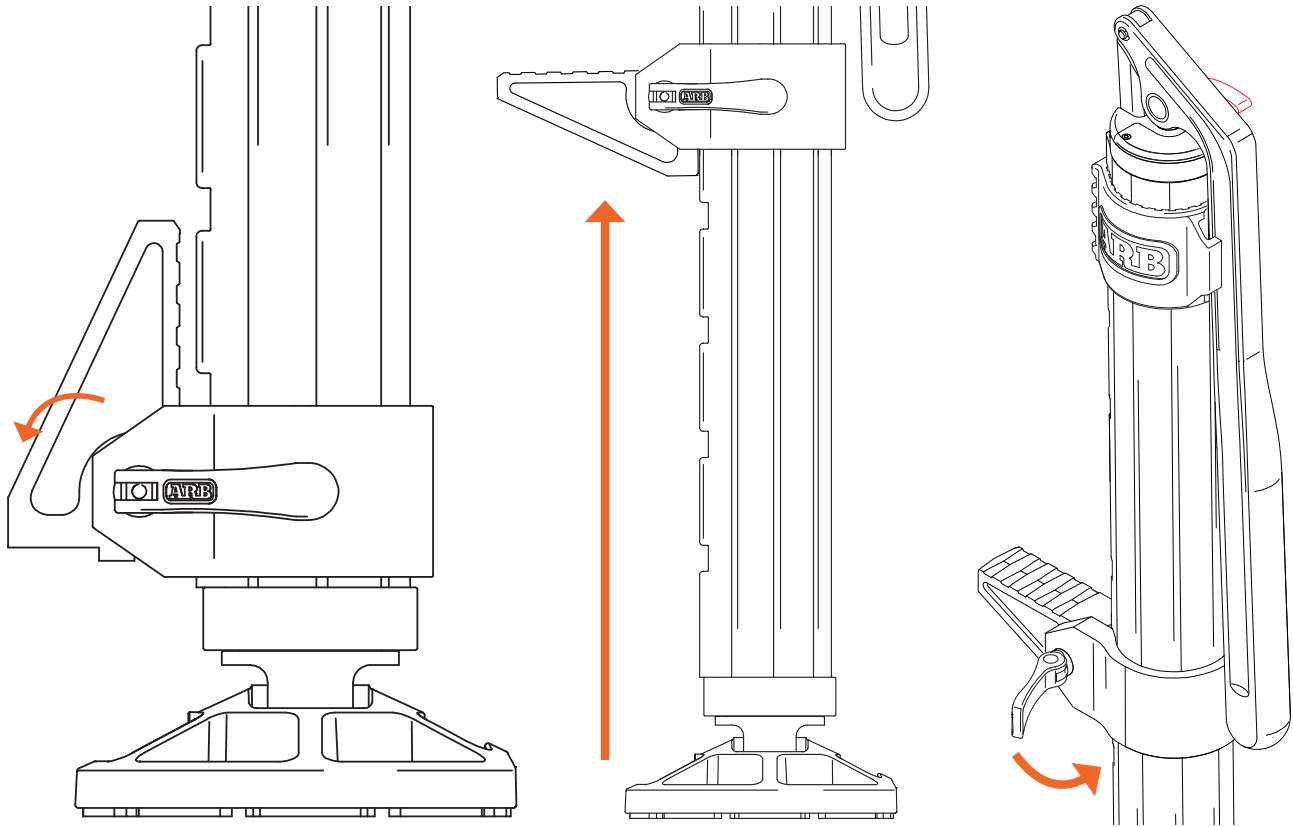
To position the hook for lifting, release the lever on the side of the clamp. The quick release lever does not need any adjustment; pull the lever away from the body of the Jack to release the clamp. If the clamp no longer applies enough clamping force; close the lever and adjust with a hex key until the hook is adequately clamped. Do not over tighten.

If greater clamping force is required; With the clamp lock in the closed position, use a 5mm Hex Key to tighten the clamp bolt. Do not exceed 4.5Nm.



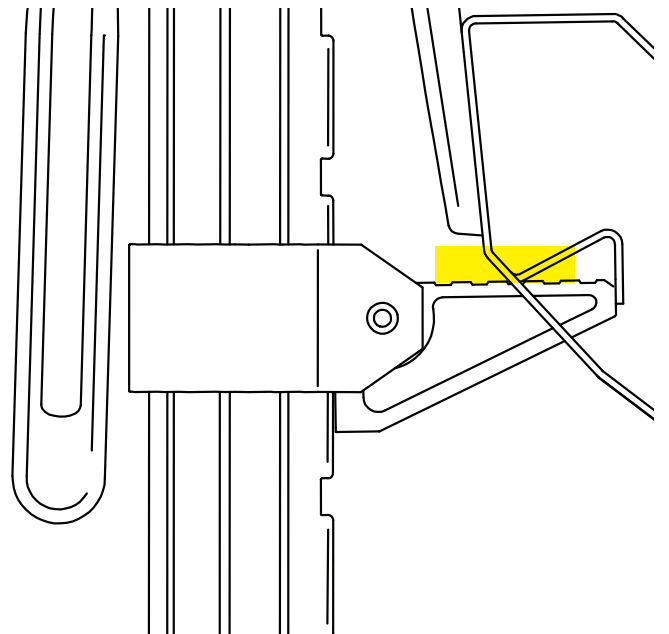
3. HOOK POSITION

Rotate the hook to a horizontal position and raise the hook to the desired groove closest to but just below your target jacking point.



Close the quick release lever.

NOTE: It is important that you allow for some height between your jacking point and the hook so that the Jack can be removed safely once you lower the Jack.



4. FOOT ORIENTATION

Before jacking a vehicle, check the foot orientation. The foot orientation determines the way the Jack may pivot as the vehicle is raised.

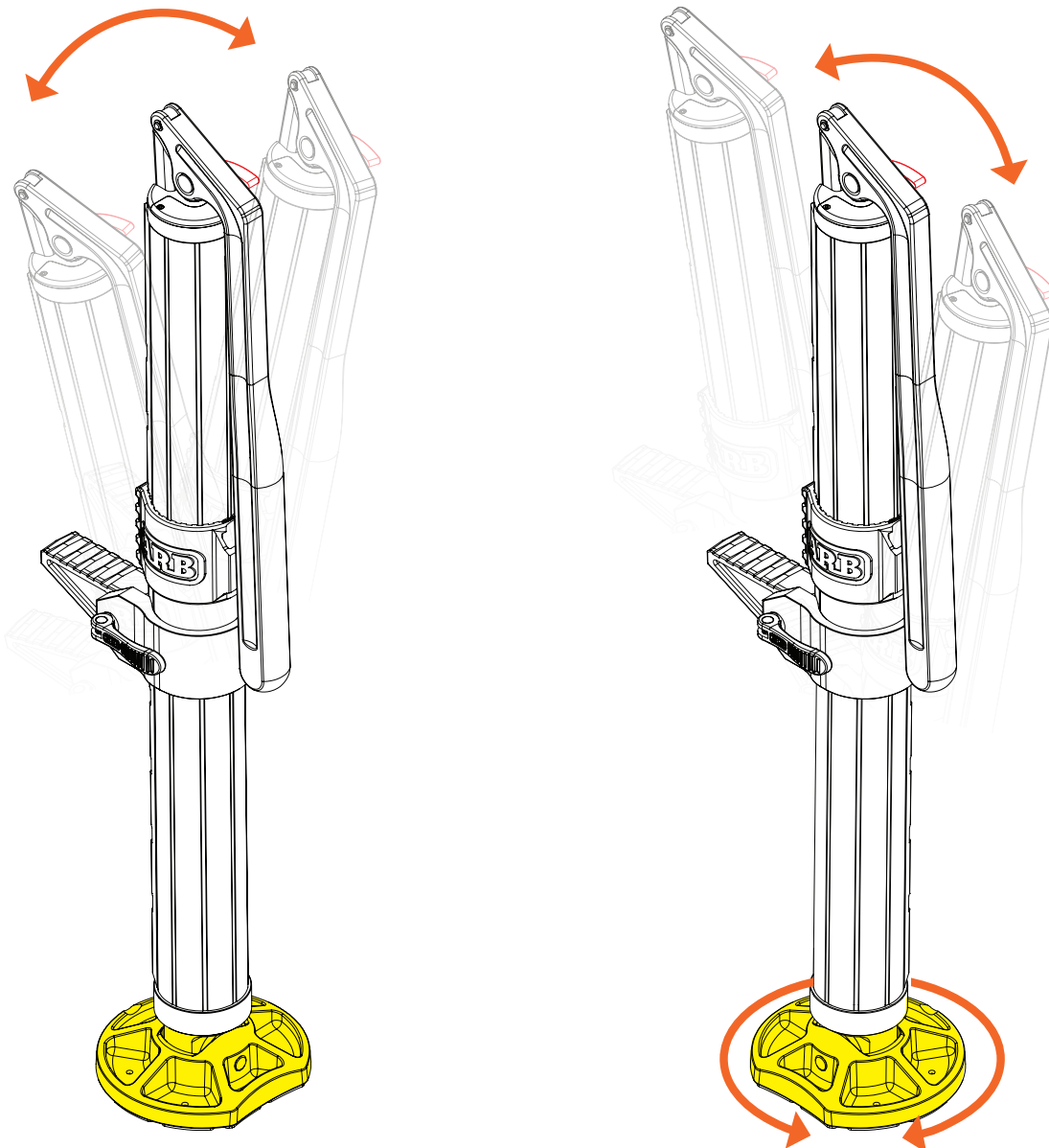
The shaft rotates inside the body; to rotate, stand on the foot and twist the body.

NOTE: The Jack may blow over if left unattended in high winds.



WARNING

Failure to consider the movement in the foot may result in property damage and/or serious injury. The vehicle will move in an arc motion and the Jack can become unstable if not aligned properly.



5. BODY BUMPER POSITIONING

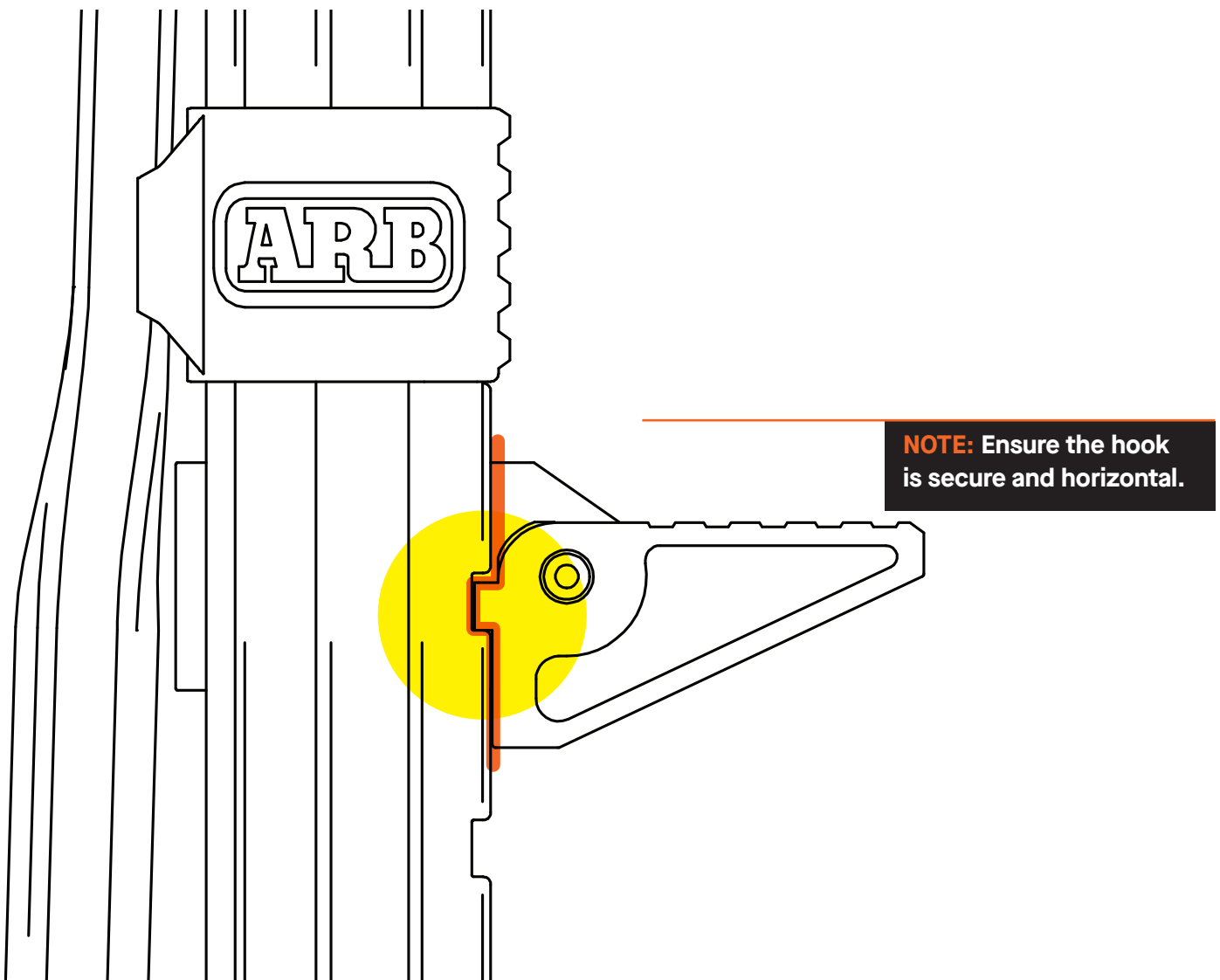
To prevent contact between the Jack and the vehicle, position the Jack's body bumper where the Jack may touch the vehicle.

6. HOOK ENGAGEMENT

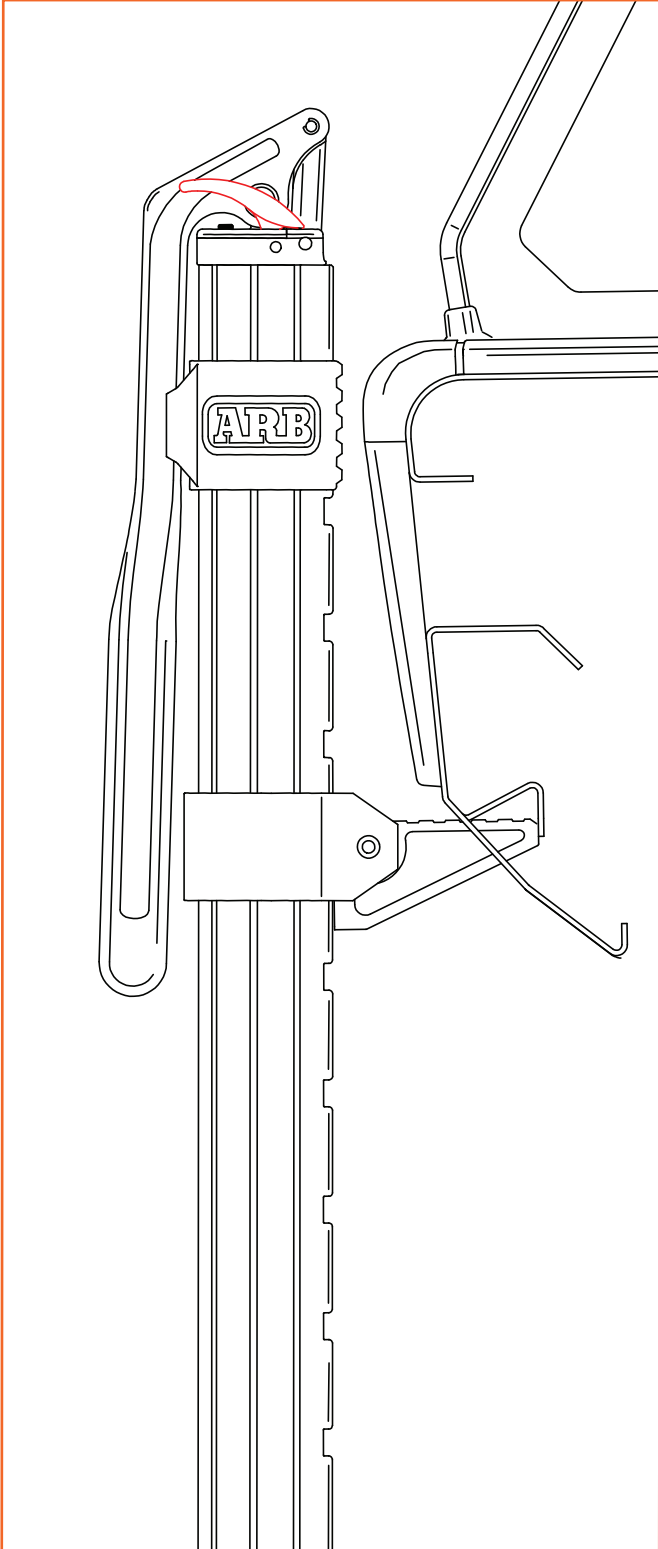
The hook engages in the receptacle of most ARB bars.

It is recommended that you push the hook as far in as possible and to ensure a secure lift.

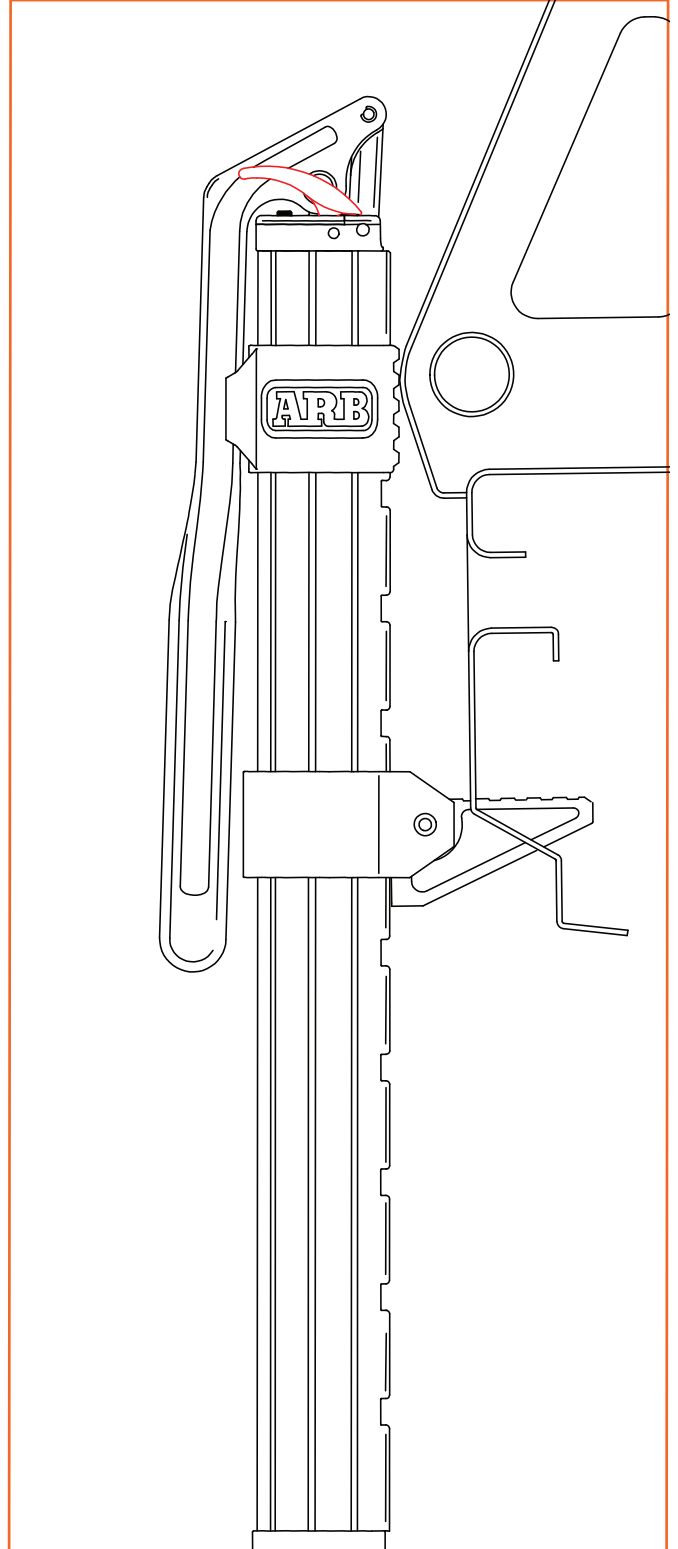
Some bars may restrict the depth which the hook can be inserted. Do not lower the hook below the restrictive plate as this may cause damage to the bar.



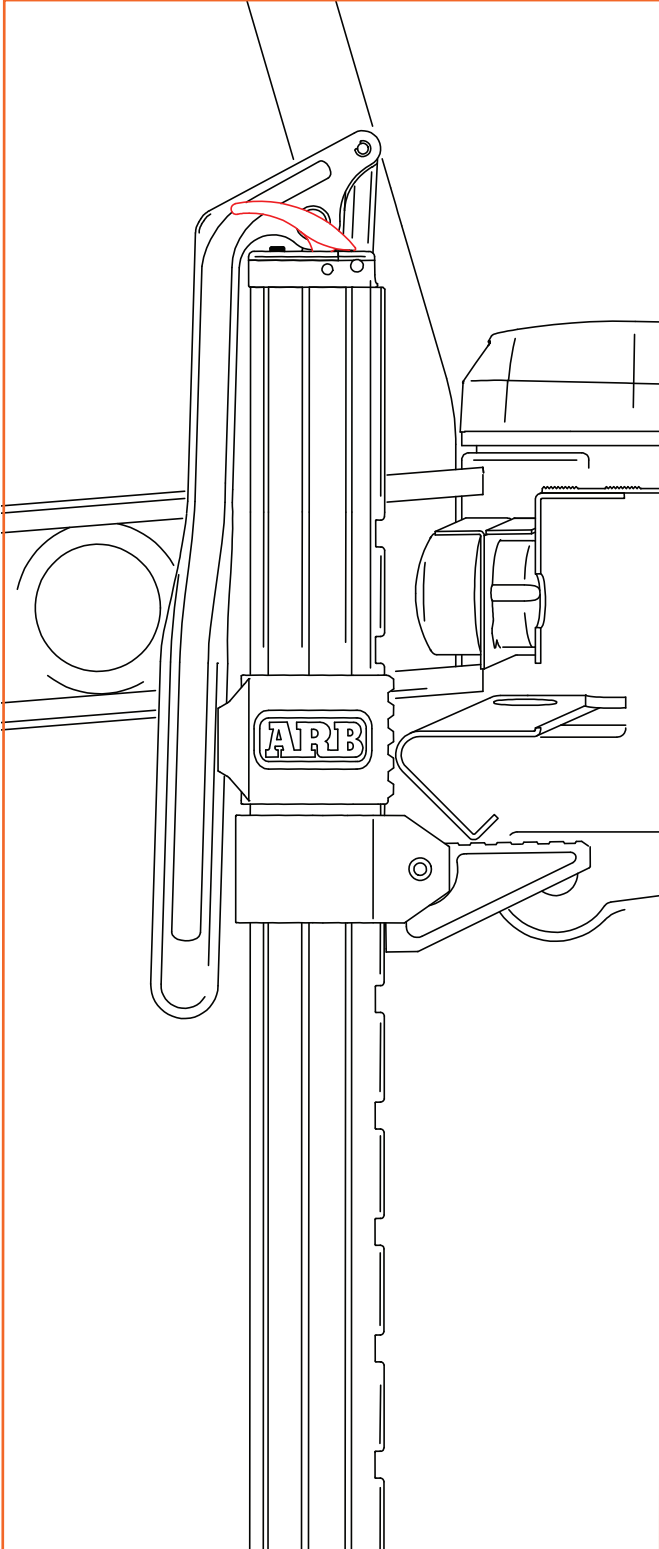
SAHARA / SUMMIT BAR



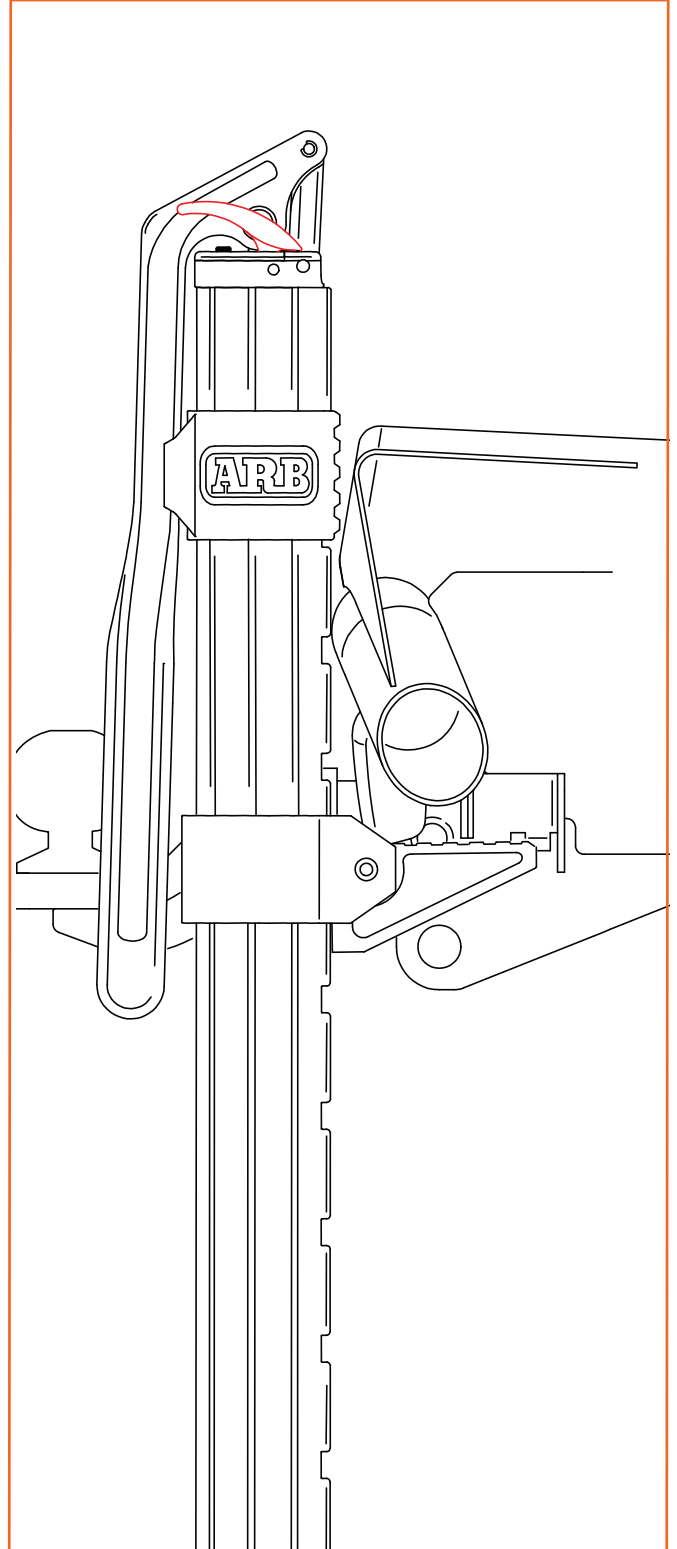
COMMERCIAL / DELUXE BAR



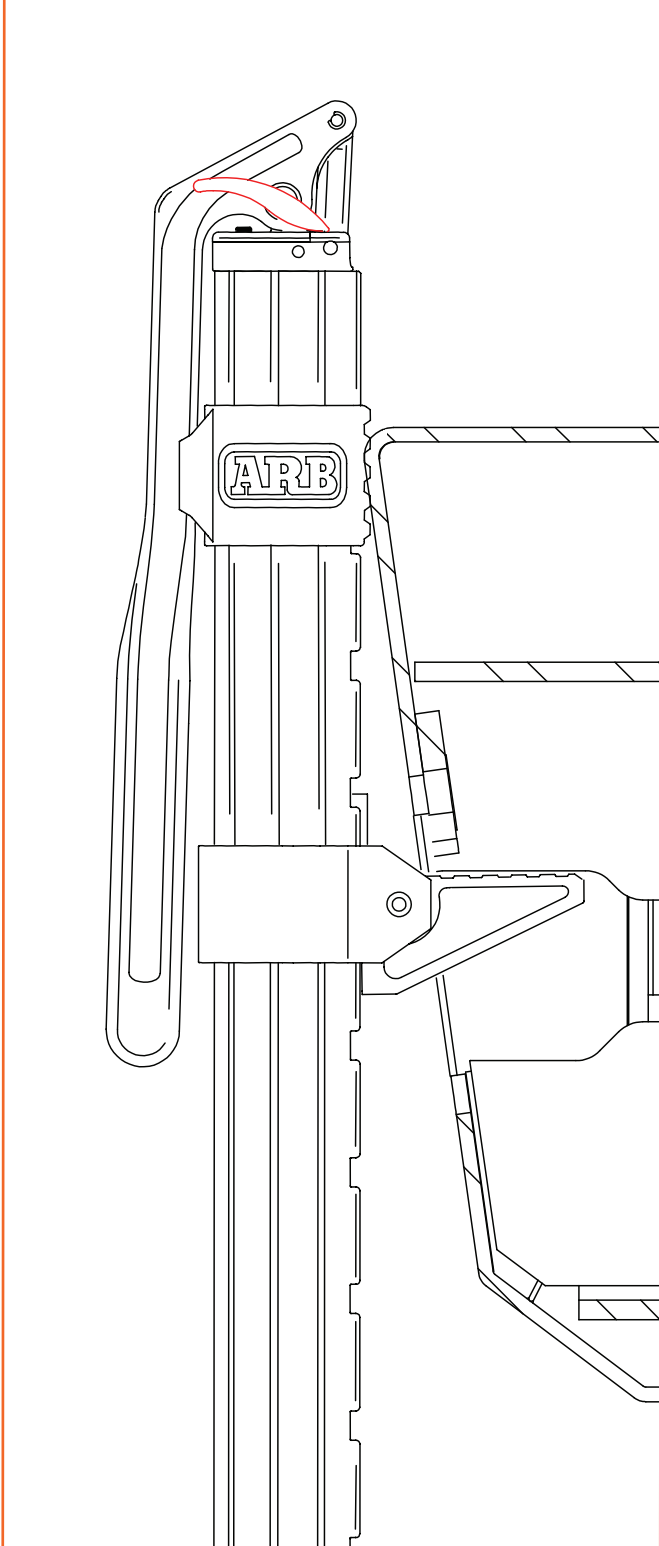
REAR CARRIER



SUMMIT RSTB

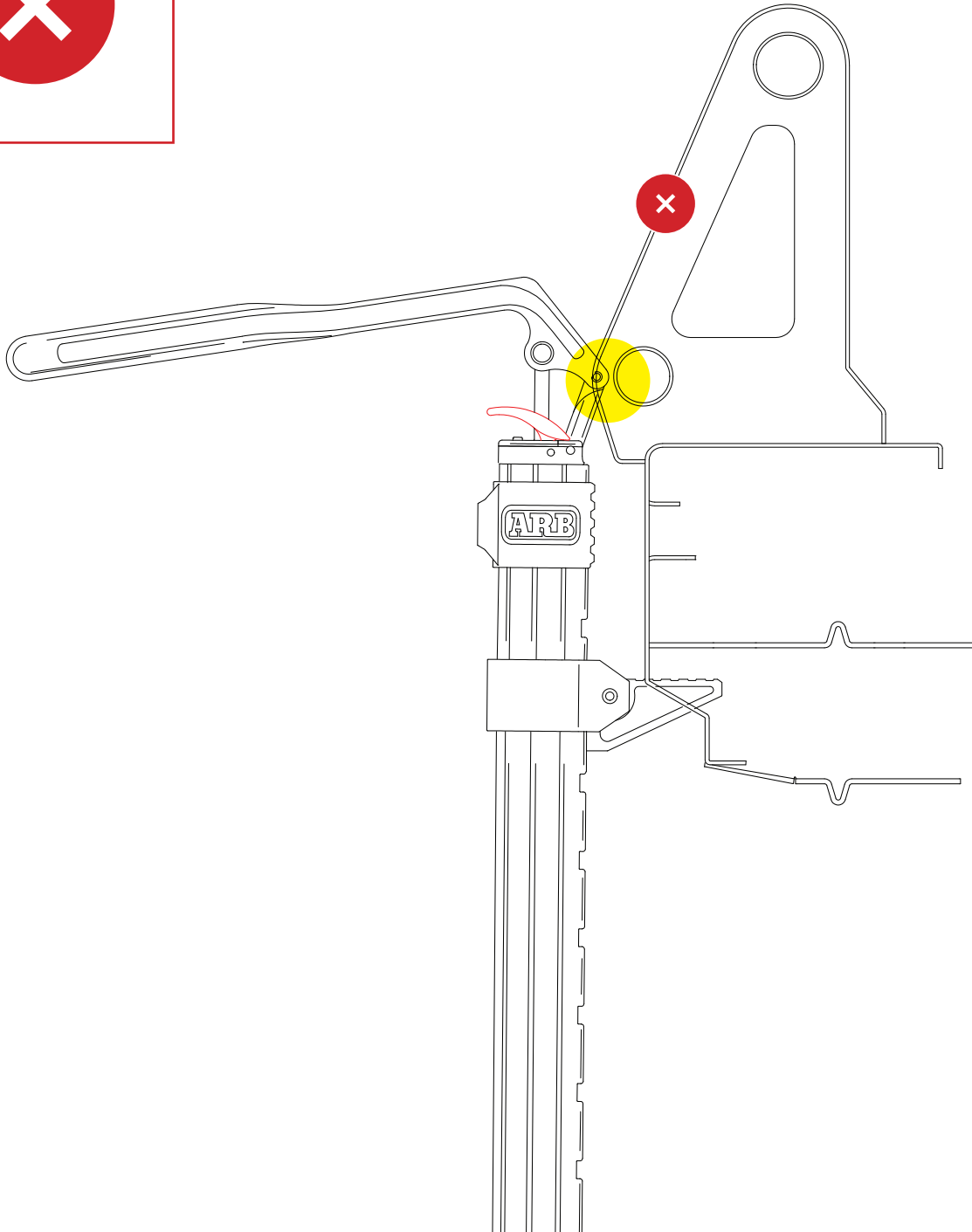
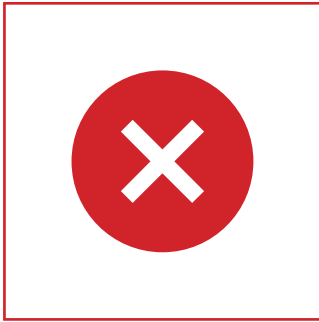


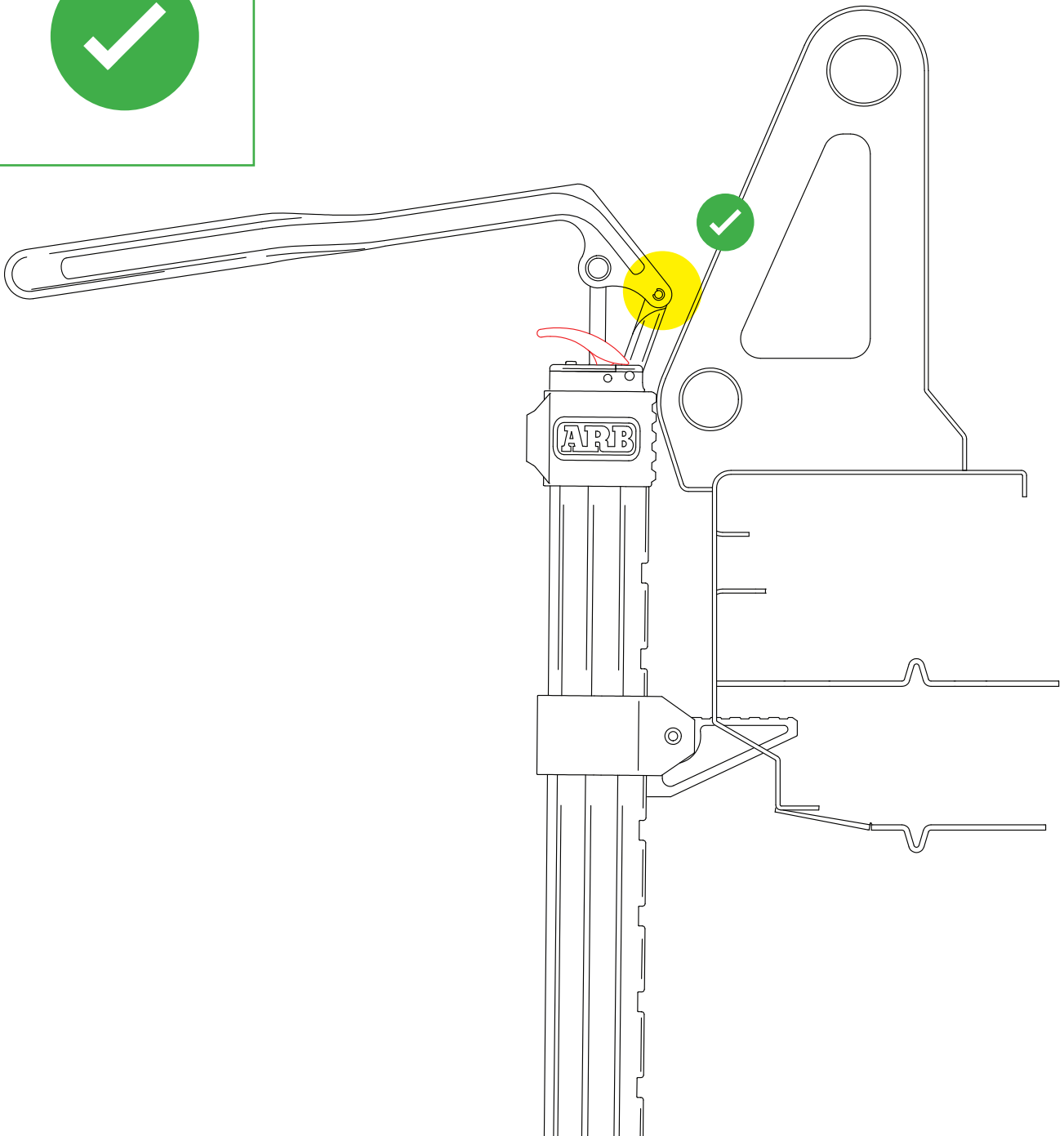
REAR BUMPER



7. VEHICLE INTERFERENCE

If the handle linkage is going to interfere with the vehicle, move the hook to a lower groove and pump the Jack to raise the hook to the target jacking point.





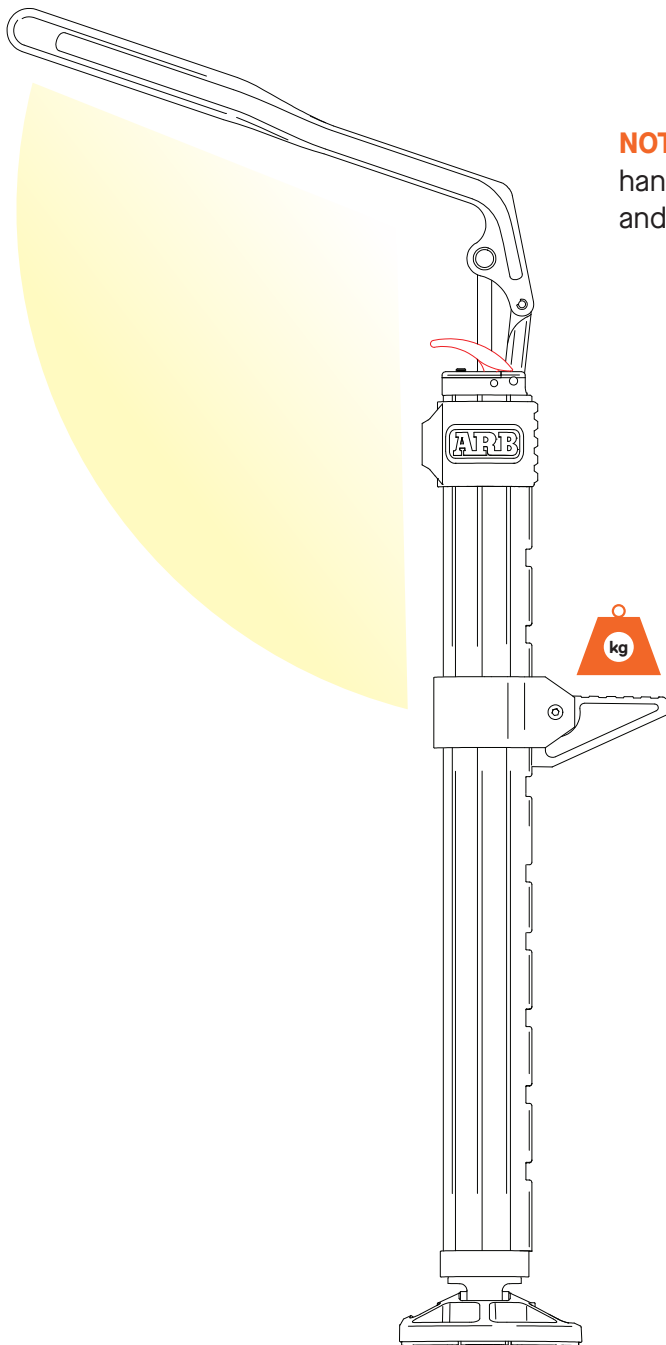
8. JACK PUMPING

Raise the Jack slightly and re-check that the jacking point and foot position is secure.

Use the most appropriate pumping method for the weight and/or your personal geometry when lifting a vehicle.

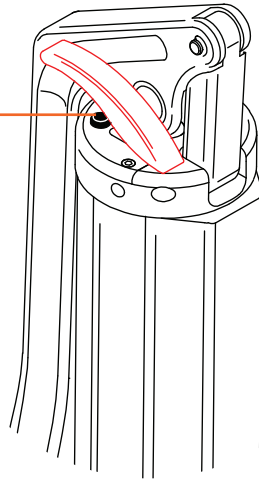
When the Jack is under light load, use the full stroke of the handle. As the weight increases and the Jack raises, consider a smaller pumping action. Doing so keeps the force below shoulder-line and reduces effort required by the operator.

As the load increases on the Jack, the handle will require increased input force by the operator to operate. Please consider the mass you are lifting and operator technique to achieve the desired lift.



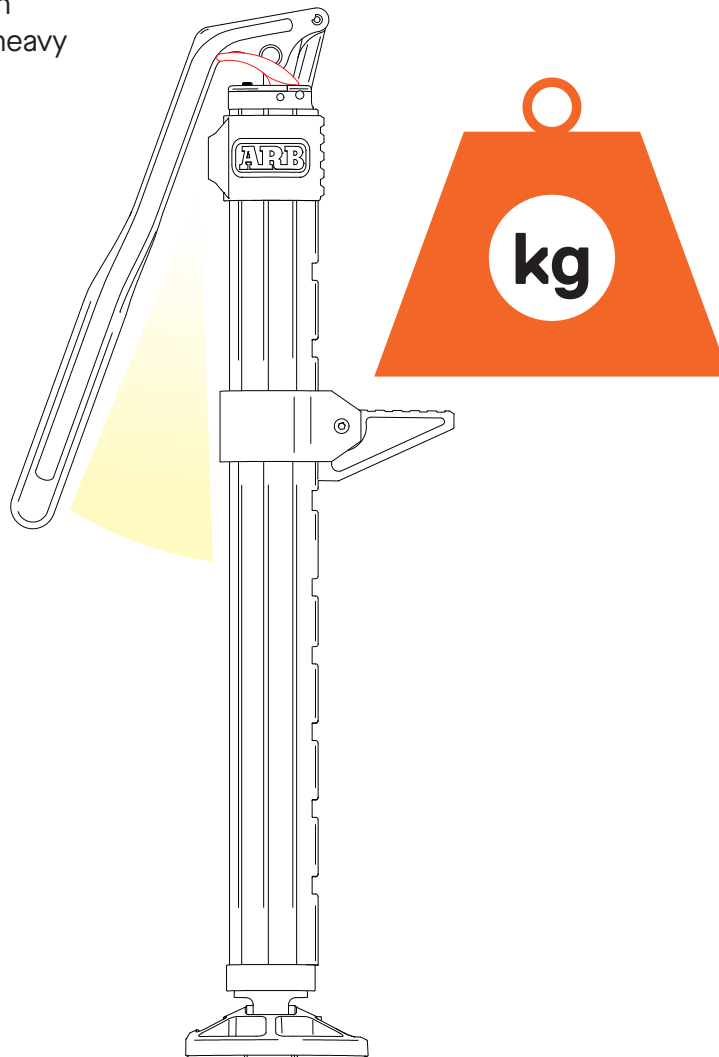
NOTE: Full stroke of the handle is ideal for setup and low lifts.

**DEPRESS THE BLACK BUTTON
IF HANDLE LOSES PRESSURE**



NOTE: If the handle loses pressure during pumping, depress the black pressure relief button which is located under the red lowering lever. This will allow the Jack to equalize pressure and the Jack's pumping efficiency will return to normal.

NOTE: Keep the handle below shoulder level to maintain the most efficient and ergonomic action during high lifts and heavy loads.



The Jack is designed for single person use only. If at any time during use operation becomes difficult, STOP.
Seek assistance if you cannot maintain control of the handle force during lifting operations.

How to use your JACK

VEHICLE SAFETY

1. VEHICLE SAFETY

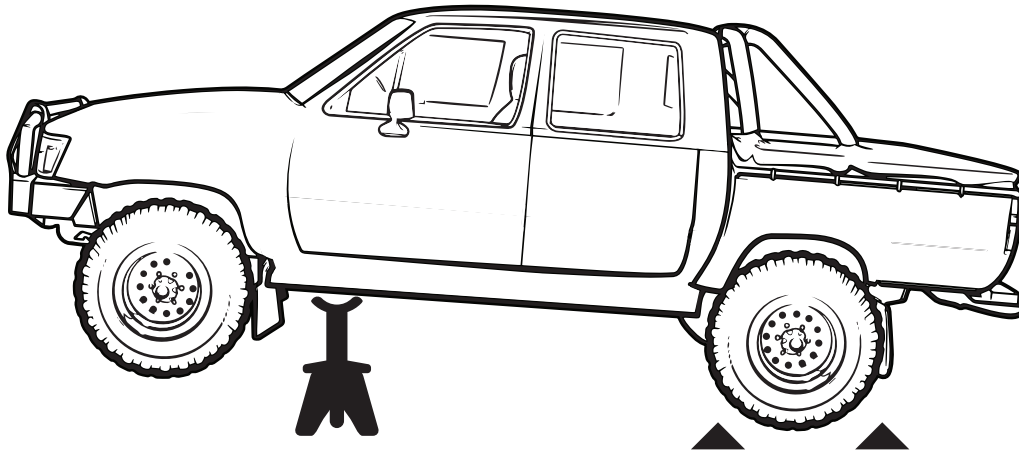
Raise the vehicle to desired height. Once raised, transfer the load to an appropriately rated Jack stand.



WARNING

Raising an inflated tyre more than 50mm (~2") above the ground or attempting to lift more than one wheel at a time may result in the vehicle tipping over, unexpected movement, serious injury and/or death. Always raise an inflated tyre less than 50mm (~2") and only one tyre at a time.

Use only certified Jack stands and adhere to their operating instructions.



WARNING

Do not put any part of your body under the vehicle when Jack is being used as the support device.

How to use your JACK

LOWERING THE JACK

1. VEHICLE SAFETY

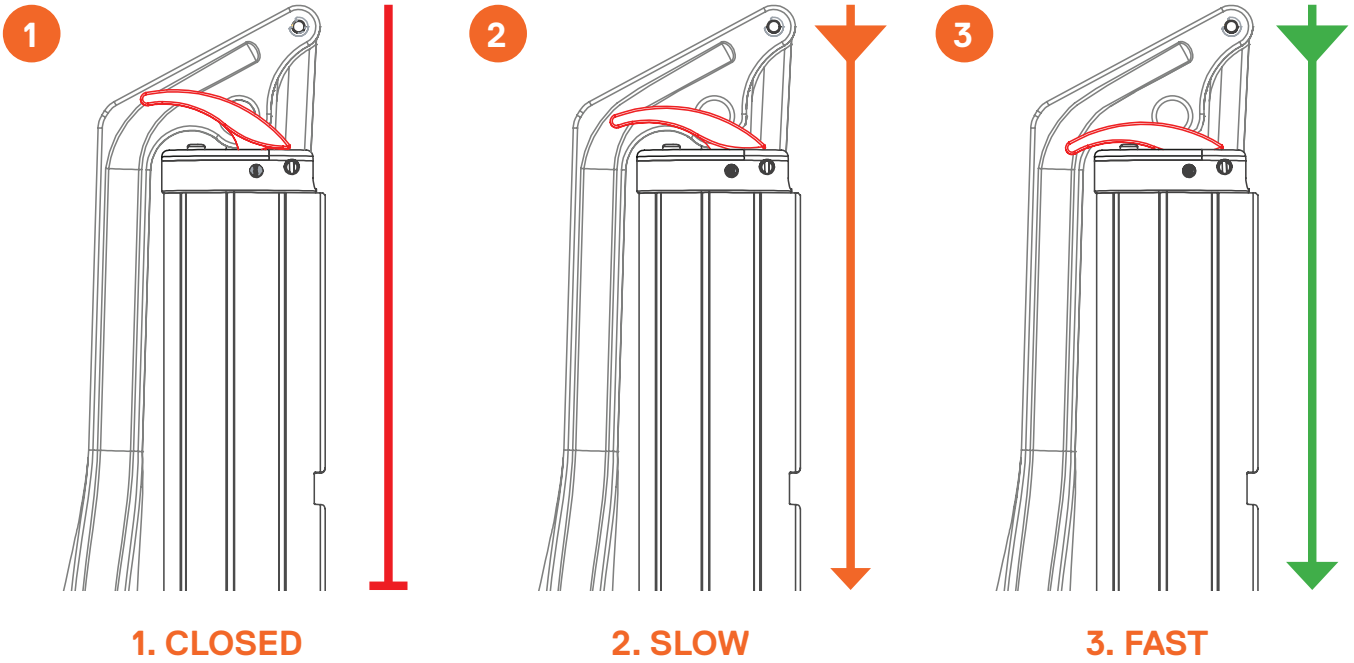
Raise load high enough to clear the Jack stands, then carefully remove Jack stands (always in pairs).

2. LOWERING

Using a slow and smooth action, depress the RED lowering lever. If the Jack has not been used recently, initial force on the lever may be higher to break the seal of the valve. Correct technique when using the lowering lever will ensure safe and controlled descent.

3. DESCENT CONTROL

The initial two-thirds of the release lever travel is intended for slow lowering of the loaded Jack. The final third of the lever travel is for fast lowering of the unloaded Jack. Do not use the fast lowering speed while the Jack is loaded.

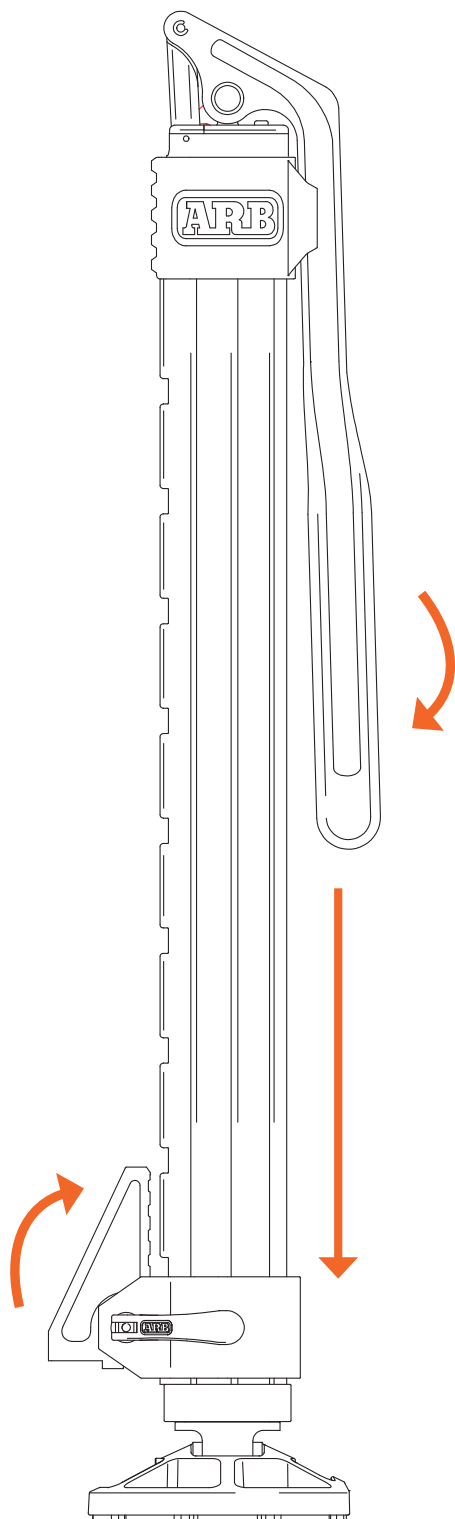


4. JACK STORAGE

After removing the Jack from the vehicle, fully depress the release lever and apply downward pressure on the Jack to fully compress it to its storage position.

Lower the handle and press it into the retaining fingers of the rubber bumper.

Open the quick release lever and rotate the foot upward, close the quick release to hold the hook in place.



JACK TROUBLESHOOT

If the Jack does not operate as expected, see troubleshooting table below.
If a solution is not found below, contact ARB for support:

ARB Australia + 61 3 9761 6622
 ARB USA +1 425-264-1270
 ARB Europe +420 323 040 900

HOLDING & LOWERING					
PROBLEM	JACK WILL NOT HOLD LOAD				⊗
	JACK WAS HOLDING LOAD, THEN BEGINS TO LOWER				⊗
	HANDLE RAISES BY ITSELF WHEN JACK IS UNDER LOAD				⊗
	JACK WILL NOT LOWER UNDER VEHICLE LOAD				⊗
	RED LEVER HAS MORE THAN 2MM 'FREE-PLAY'				⊗
	JACK WILL NOT LOWER UNDER BODY WEIGHT	⊗	⊗		
	LOAD ON JACK LESS THAN 60KG	⊗			
	LOAD ON JACK GREATER THAN 60KG		⊗		
		1	2		RETURN TO ARB

PROBLEM	LIFTING				
	JACK WILL NOT LIFT LOAD	⊗	⊗	⊗	⊗
	JACK WAS LIFTING, THEN BEGAN TO LOWER				⊗
	JACK MAKES SQUEALING NOISE WHEN PUMPED		⊗		
	HANDLE CAN BE PUMPED BUT JACK DOES NOT RAISE		⊗		
	HANDLE HAS 'DEAD' SPOTS WITHIN PUMPING RANGE				⊗
	USING JACK AT >2000M/6500' ALTITUDE			⊗	
	HANDLE LOSES FORCE DURING PUMPING		⊗		
	JACK WILL NOT EXTEND TO FULL HEIGHT				⊗
	HANDLE HAS NO RESISTANCE/WILL NOT MAINTAINING POSITION	⊗			
	3	4	5	RETURN TO ARB	

1. Jack is designed to hold vehicle weight. Due to the high-precision internal seals, it may be difficult to initialise lowering if there is not enough weight on the Jack. Ensure the red lever is fully depressed. Engage the hook at the lowest setting and stand on the hook while depressing the red lever. Internal pressure may be a factor, depress the black pressure relief button. If escaping air is heard, this will solve the issue.

2. Ensure the black pressure relief button is fully depressed during lowering. It may be necessary to rotate the jack body to release the internal friction of the seals.

3. Jack internal pressure is not balanced. Depress black pressure relief button and re-test. Jack breather may not have opened, depress black pressure relief button to increase pumping efficiency.

4. >2000kg/4400lb is being attempted to be lifted.

5. In altitudes higher than 2000m/6500' above sea level, Jack requires more intervention to equalise internal pressures. Depress the black pressure relief button while pumping to increase lifting efficiency.

JACK

SERVICE & SPARE PARTS







WARNING

The Jack has the potential to cause major harm to users if not cared for properly. Jack should never be internally serviced by an individual unless approved by ARB.

If Jack requires maintenance to internal components It MUST be returned to an ARB store for a qualified technician to repair. DO NOT ATTEMPT TO REPAIR INTERNAL COMPONENTS YOURSELF

IMAGE	DESCRIPTION	PART NUMBER
	<p>Dust Cap Assembly</p>	<p>VN30010008SP</p>
	<p>Jack Skewer Assembly</p>	<p>VN40010001SP</p>
	<p>Jack Sticker Kit</p>	<p>VN40010003SP</p>
	<p>Jack Spare Foot Assembly</p>	<p>VN40010004SP</p>
	<p>Jack Spare Handle</p>	<p>VN40010005SP</p>
	<p>Jack Spare Handle Linkage</p>	<p>VA50010006SP</p>

IMAGE	DESCRIPTION	PART NUMBER
	Jack Bumper Body	VD50040001SP
	Jack Spare Hook	VA50010001SP
	Jack Release Lever (Red)	VA50010005SP
	Jack Air Valve Core	VE80010003SP

1. JACK DECOMMISSION

To render a damaged Jack safe

1. Lower Jack if possible to its stored position
2. Use a small blade (steel ruler is optimal) and remove one of the two E-clips from the handle's link
3. Slide the link pin out of the link and handle
4. With the handle and link disconnected, re-install the link pin and re affix E-clip

The Jack is now unable to pump efficiently

5. Unscrew M3 cap screw from dust cap (right hand side, near lowering lever)
6. Use M3 cap screw to remove threaded dowel pin
7. Remove red lowering lever.
8. Return dowel pin and M3 cap screw to Jack.
9. Store Red lowering lever in a safe place.

The Jack is now fully disabled for both raising and lowering.

2. JACK OIL LEAK AND SPILLAGE

The Jack uses 10W Hydraulic mineral oil, this fluid is only toxic if ingested. If contact with hydraulic fluid occurs, wash your hands thoroughly prior to contact with food or drinks.

Avoid oil interacting with any rubbers, vehicle paint, plastic or upholstery.

Promptly clean oil spillages using warm soapy water, then rinse immediately with fresh water.

Jack is filled with 1.1 Litres of oil

Jack never needs more than approx. 990mls; the extra fluid ensures that the pump always has enough fluid. Small leaks won't need to have Jack topped up.

To ensure Jack has enough fluid:

- ◆ Raise Jack to full extension without load
- ◆ If Jack reaches its end stop without any air sucking noises, it has sufficient fluid and does not need to be refilled
- ◆ If Jack does not reach full extension, or begins to produce "air sucking" or "gurgling" noises during pumping, Jack may need extra fluid to operate to its full extension
- ◆ Topping up the fluid requires disassembly, and must only be done by authorised service personnel, as incorrect disassembly/reassembly may cause Jack to malfunction

NOTE: Topping up with excess fluid may cause malfunction, including leakage and inability for Jack to lower fully.

JACK SPECIFICATIONS

Min. Lifting Height	160mm / 6.3"
Max. Lifting Height	710mm-1230mm / 27.9"-48.42"
Travel	540mm / 21.25"
Lifting Range	160mm-1230mm / 6.3"-48.42"
Compressed Height	890mm / 35"
Extended Height	1432mm / 56.3"
Weight	10.5kg / 23.15lb
Lift per Stroke	13mm / 0.51"
Max. Lifting Capacity	2000kg / 4409.25lb
Fluid	10W Hydraulic Mineral Oil
Fluid Capacity	1.1L / 1.16qt



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 PO Box 105, Kilsyth,
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 42-44 Garden Street, Kilsyth,
 Victoria 3137 Australia

EC DECLARATION OF CONFORMITY (Original Language Version)

In accordance with:
EC Machinery Directive 2006/42/EC (Annex II 1A)

We herewith declare that the:

Product description: Hydraulic long travel 4x4 recovery jack, 2000kg capacity
Model Name: Jack
Model Number: 1060001
Serial Number: 19080001 onwards
Manufacturer: ARB Corporation Ltd
 42-44 Garden St
 Kilsyth 3137
 Victoria, Australia

when used in accordance with the manufacturer's instructions, conforms with the essential health and safety requirements of the Machinery Directive.

In support of this declaration the subject equipment has been evaluated as complying with:

- a) The Machinery Directive Relevant Essential Health and Safety Requirements (Annex I), by compliance with the applicable clauses of the following harmonised standards:

EN ISO 12100, EN 1494 and associated standards

- b) The Pressure Equipment Directive (2014/68/EU) by calculation results being less than CAT I (Group 2 Liquids) and thereby covered by the Machinery Directive.

Technical File for Compliance with 2006/42/EC, "ARB Jack 1060001 Technical File - 2019-07-30 Version 1" dated 30 July 2019, is held by the manufacturer.

The Person Authorised to Compile the Technical File (TF) under the EU Machinery Directive (2006/42/EC) is:

Mr. Tomas Vobr
 General Manager
 ARB Europe s.r.o.
 Na Dlouhém č.80, DC2
 251 01 Říčany – Jažlovice
 Czech Republic

If the equipment is modified without the agreement of the undersigned, this declaration becomes invalid.

BEN MITCHELL

Name of Person Signing

Signed

DIRECTOR OF OPERATIONS

Position in Organisation

30 July 2019, Kilsyth, Victoria, Australia

Date & Place of Signing



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