

# BLACK JACK®

## TRAILER JACK



USER MANUAL

### **Black Jack® Mini** 1000kg 12V DC

P/N: BJTJ-Mini

Please read and understand all instructions before use. Retain this manual for future reference.

[www.blackjacktrailerjacks.com.au](http://www.blackjacktrailerjacks.com.au)



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## 1. SPECIFICATIONS

<b>Maximum Load Capacity</b>	1000 kg
<b>Stroke Length</b>	Max stroke length 18" (450mm)
<b>Foot Plate</b>	Removable 110mm diameter foot plate
<b>Handle</b>	Manual crank override
<b>Tube Diameter</b>	50mm outer Dimension
<b>Construction</b>	Steel tubes and plate and polypropylene cover
<b>Motor Type</b>	Sealed encapsulated brushless motor
<b>Finish</b>	Powder coat tube, zinc plated inner and drop tubes
<b>Overall Dimensions</b>	H 830 x W 110 x D 170mm
<b>Voltage Rating</b>	12V DC
<b>Circuit Protection</b>	Circuit Breaker 30amp short stop, auto resettable ignition protected
<b>Current Rating</b>	Maximum 28A (Extended), 6A (Retracted)
<b>IP Rating</b>	Minimum IP55

## 2. INTRODUCTION

Congratulations on your new Black Jack!

The Black Jack Trailer Jack is rated to support up to 1000kg trailer tongue weight and can fit directly into a standard 50mm jockey wheel clamp.

The Black Jack features an LED light to illuminate the hitch area at night and a built-in levelling gauge. It also features a high quality cover to protect it against dirt, moisture and harsh conditions that exist behind a tow vehicle.

The soft ground Foot Pad can be used for more stability on soft grass, mud or other unstable surfaces.

### 3. SAFETY

**WARNING! Read and understand all instructions before using this device. The operator must follow basic precautions to reduce the risk of personal injury and/or damage to the equipment.**

Keep this manual for safety warnings, precautions, operating or inspection and maintenance instructions.

### 4. HAZARD DEFINITIONS

Please familiarise yourself with the hazard notices found in this manual. A notice is an alert that there is a possibility of property damage, injury, or death if certain instructions are not followed.

#### **DANGER!**

This notice indicates an immediate and specific hazard that will result in severe personal injury or death if the proper precautions are not taken.

#### **WARNING!**

This notice indicates a specific hazard or unsafe practice that could result in severe personal injury or death if the proper precautions are not taken.

#### **CAUTION!**

This notice indicates a potentially hazardous situation that may result in minor or moderate injury if proper practices are not taken.

#### **NOTICE!**

This notice indicates that a specific hazard or unsafe practice will result in equipment or property damage, but not personal injury.

### 5. WORK AREA

Operate in a safe work environment. Keep your work area clean, well-lit, and free of distractions. Keep anyone not wearing the appropriate safety equipment away from the work area.

Store unused devices properly in a safe and dry location to prevent rust or damage. Lock devices away and keep out of the reach of children.

Do not install or use in the presence of flammable gases, dust, or liquids.

## 6. PERSONAL PRECAUTIONS

Control the device, personal movement, and the work environment to avoid personal injury or damage to device.

Do not operate any device when tired or under the influence of drugs, alcohol, or medications.

Avoid wearing clothes or jewelry that can become entangled with the moving parts of a device. Keep long hair covered or bound.

## 7. SPECIFIC SAFETY PRECAUTIONS

**WARNING! DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to the device safety rules. If you use this device unsafely or incorrectly, you can suffer serious personal injury.**

This device was designed for a specific function. Do not modify or alter this device or use it for an unintended purpose.

Do not attempt to lift more than the 1000 kg maximum lifting capacity of this jack.

Always place the jack on a hard, level surface capable of supporting the load. Allow enough clearance around the jack and the load for movement.

Never place any part of your body beneath the trailer that is supported by the jack. A jack failure or shifting of the trailer may cause it to collapse and cause a serious injury or death.

Keep your limbs and body away from any pinch or shearing points while using the jack. Failure to do so may result in a serious injury.

Inspect the jack before each use. DO NOT use if bent, broken, cracked or otherwise damaged, if any suspect parts are noticed or it has been subjected to a sudden or unexpected load (shock loading).

Ensure that all applicable pins, bolts, and nuts are firmly tightened before using.

Do not allow untrained persons to operate the jack. Secure the load, trailer, and vehicle by chocking all the wheels before using.

Do not place your hands between moving components.

Use only with accessories rated to handle the forces exerted by the device during operation. Other accessories may break and forcefully launch pieces.

Ensure that there are no obstructions under the load and that the area is clear before lowering it.

Ensure that the lock pin is properly inserted through the inner and outer tubes, and that there is no load on the trailer before using the manual drop leg extension.

Do not adjust the drop foot while there is a load on the Black Jack.

## 8. ELECTRICAL SAFETY

Disconnect device from power source before cleaning, servicing, changing parts/ accessories or when not in use

Protect yourself against electric shocks when working on electrical equipment. Avoid body contact with grounded surfaces. There is an increased chance of electrical shocks if your body is grounded.

Do not expose device to rain or wet conditions. Water entering a power device will increase the risk of electric shock.

Do not alter any parts of the device or accessories. All parts and accessories are designed with built-in-safety features that may be compromised if altered.

Make certain the power source conforms to requirements of your equipment (see Specifications).

Do not operate this device if the leads are frayed or damaged as an electric shock or surge may occur, resulting in personal injury or property damage.

Inspect the leads for cracks, fraying or other faults in the insulation before each use. Discontinue use if the leads feel more than comfortably warm while operating the device.

Keep all connections dry and off the ground to reduce the risk of electric shock. Do not touch the leads with wet hands.

Keep the leads away from heat, oil, sharp edges or moving parts.

Install caps over the battery terminals to prevent accidental contact. Discharged batteries may still carry charges and cause electric shock upon contact.

## 9. INSTALLATION

1. Attach and secure the trailer's coupler to the tow vehicle's hitch. Chock the wheels of the trailer and vehicle. Also apply the vehicle's parking brake.
2. Install the jack into the existing 50mm jockey wheel clamp.
3. Position the jack to face your preferred operating position, either front, sideways or facing the rear.
4. The design of the vehicle may impair the use of the manual crank (L) based on the jack's orientation.
5. Tighten the clamps bolt, ensuring there is no movement.
6. Connect the 50amp Andersen plug to an existing Andersen plug.
7. Press the UP/DOWN switch to test that the connection is correct, and the jack is working. Also press the LIGHT ON/OFF Switch to confirm the light is working.

## 10. OPERATION

The UP/DOWN switch is OFF in its natural position.

Press UP to extend the Black Jack and DOWN to retract the Black Jack.

**WARNING:** When the Black Jack is fully extended or fully retracted the UP/DOWN switch must be released immediately. Failure to release the switch can result in significant internal mechanical damage to the Black Jack.

The ON\OFF switch is for the light only. It does NOT switch power on or off to the Black Jack

The Black Jack has a built-in 30-Amp circuit breaker which automatically trips and resets. It is designed to protect against power surges.

**WARNING!** Never apply horizontal force against the jack. The load may shift and cause the jack to fail, creating a dangerous situation for the user or bystanders.



## 11. UNHITCHING THE TRAILER

Chock the trailer's wheels to prevent rolling.

Press the UP/DOWN switch to extend the jack's leg until the foot plate contacts the ground and raises the trailer off the hitch.

Move the towing vehicle away from the trailer's hitch receiver.

Level the trailer by pressing the UP/DOWN switch to raise or lower the jack. It is level once the bubble level is centered.

## 12. HITCHING THE TRAILER

Press the UP/DOWN switch to raise the trailer's hitch receiver above the level of the towing vehicle's hitch.

Align the towing vehicle's hitch with the trailer hitch receiver.

Press the UP/DOWN switch to lower the trailer hitch receiver onto the towing vehicle hitch. Secure the hitch receiver once seated.

Retract the Jack to its fully retracted position.

You may need to move the jack to the bottom-most mounting lug for appropriate ground clearance while travelling.

**WARNING! The hitch receiver must be properly aligned and seated before retracting the leg fully to prevent it from slipping off the hitch and causing an injury to yourself or bystanders.**

**WARNING! When retracting the jack make sure the UP/DOWN button is released immediately when fully retracted to avoid damage or blown fuses.**

### 13. MANUAL OVERRIDE

A loss of power may require you to raise and lower the trailer using the manual crank.

Remove the crank cap and set aside.

Insert the manual crank onto the shaft in the housing.

Crank clockwise to extend the leg. Crank counterclockwise to retract the leg.

Follow the directions for hitching or unhitching the trailer.

Replace the crank cap when done and store the crank.

### 14. CARE & MAINTENANCE

Maintain the device with care. A Black Jack in good condition is efficient, easier to control and will have few problems. Inspect the device components periodically. Repair or replace damaged or worn components. Only use identical replacement parts when servicing.

Inspect and lubricate the device when required. Apply grease to the inner tube when extended and then retract to grease the outer tube

NEVER use a penetrating oil to lubricate the device. Penetrating oil may act as a solvent that can break down the grease and cause the device to seize up.

The Black Jack's motor is sealed and maintenance-free.

Check the wiring from time-to-time. Ensure all the connections are tight and free from corrosion.

## 15. TROUBLESHOOTING

Contact Titan RV for a solution if the device does not function properly or parts are missing. If you are unable to do so, get a qualified technician to service the device. Also, check the troubleshooting guide below:

Problems	Possible Cause(s)	Suggested Solution(s)
Motor is not operating	No or Low Voltage	Check battery and electrical connections. Power supplied must be at least 12.2V DC. If the battery is low, plug the Black Jack into an alternative 12.2 volt supply to provide power to the Black Jack.
	No Power from trailer connector	Check the trailer connector has power. Replace or repair the trailer connectors or wiring.
Light Operates but not Motor	Low Voltage	Check voltage inside Black Jack is minimum 12.2 volts.
	UP/DOWN Switch is faulty	Check power at middle positive terminal on switch when UP or DOWN is pressed. If no voltage is shown then the switch is faulty.
Light and Motor not operating	Blown Fuse	Check fuse in the line to the power supply and replace with 30-40 amp fuse.

## 15. TROUBLESHOOTING CONT.

Problems	Possible Cause(s)	Suggested Solution(s)
Fuse keeps blowing	Holding down UP/DOWN for too long	The most common cause for blowing fuses is holding down the UP/DOWN switch for too long. Once the jack leg has been fully retracted or fully extended you must remove your finger from the switch immediately. Please be aware that the Jack motor can draw more than 30amps at 12Vdc if you hold the UP/DOWN switch longer than required. Drawing more than 30amps will blow the 30amp fuse.
	Pressing the UP/DOWN switch the wrong way	Ensure the operator understands the operation of the UP/DOWN switch. Pressing the switch the wrong way when the jack is either fully extended or fully retracted may cause the Black Jack to attempt to draw more than 30-amps and blow the fuse.
Fuse keeps blowing	Poor Ground/Earth will cause the fuse to blow	A bad Earth or poor connections. Check all connections between the battery and Jack are tight. Check the earth point is secure and any connecting circuits.
	Poor Power Supply	Most common cause is the wire gauge used between the battery and the Black Jack is too small. A minimum of number 8 B&S (7.2mm) wire used over 5 meters. We recommend our harness, Part No. BJTJ-HAR  Use a 40 amp fuse

## 16. WARRANTY & PARTS

All replacement parts are available on the Black Jack Trailer Jack web site:  
[www.blackjacktrailerjacks.com.au](http://www.blackjacktrailerjacks.com.au)

For warranty replacement contact

Titan RV

Unit 5 Euro Business Park

26-34 Weippin Street Cleveland QLD 4163

P: +61 07 3286 1199 E: [info@blackjacktrailerjacks.com.au](mailto:info@blackjacktrailerjacks.com.au)

## 17. INTELLECTUAL PROPERTY

### Registered Trademark

Black Jack® Trailer Jacks is a registered trademark in Australia owned by Titan Stability Solutions Pty Ltd.

### Patent

The Black Jack Clamp is a registered patent in Australia (Patent NO 2021204066).

### Registered Design

The Black Jack Clamp is a registered design pending in Australia.

### Copyright

This "Black Jack Trailer Jack® Mini 1000kg 12V DC User Manual" is copyright protected and owned by Titan Stability Solutions Pty Ltd.

### Domain Name

[blackjacktrailerjacks.com.au](http://blackjacktrailerjacks.com.au) is a registered domain name owned by Titan Stability Solutions Pty Ltd.

## 18. COMPLIANCE

### 1. EMC Compliance

The Black Jack TM is EMC approved and compliant with:

EN 61000-6-3:2007+A1:2011+AC:2012

EN IEC 61000-6-1:2019

EN IEC 61000-3-2:2019

EN 6100-3-3:2013+A1:2019

### 2. Australian Standards for Gas Installations in Caravans

Gas Installations in Caravans AS\NZS 5601.2.2020 (Standard)

The Standard requires that an "ignition source" cannot be located within the clearances of an exchange gas cylinder.

The standard defines an "ignition source" as "A source of energy that can ignite an explosive atmosphere"

Note 1 to entry: Such sources include, but are not limited to flames, incandescent material, electrical sparks, hot surfaces, and mechanical impact sparks.

Note 2 to entry: For the purposes of domestic caravans and boats, items of equipment within a controlled area that are non sparking by nature or encapsulated are NOT considered to be ignition sources.

The Black Jack has been tested by an independent third party laboratory in Victoria and found to be compliant with the standard.

A Summary of the test report confirms:

**The tested electric powered Caravan and Trailer Jack model BJTJ series complied with the below tested clauses of the standard AS\NZS 5601.2.2020 +A1 2021.**

<b>Clause 1.3.41</b>	<b>Ignition Source Definition</b>
<b>Clause 2.4.2</b>	<b>Required Clearance</b>
<b>Clause 3.1.8</b>	<b>Required Clearance around a cylinder</b>
<b>Clause 5.3</b>	<b>Encapsulated devices</b>

**The testing was carried out based on the information observed on the actual samples.**

For a copy of the report please contact us.



## ABOUT BLACK JACK®

Black Jack® Trailer Jacks is a division of Titan Stability Solutions Pty Ltd trading as Titan RV.



Our range of brands include:

### REDFOOT LEVELLING

Hydraulic auto levelling system for motorhomes, caravans, specialty vehicles and 5th wheelers.

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### BLACK JACK™ TRAILER JACK

Gone are the days of manually winding the jockey wheel to raise or lower the caravan or trailer.

[www.blackjacktrailerjacks.com.au](http://www.blackjacktrailerjacks.com.au)



# BLACK JACK®

## TRAILER JACK

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