

BLACK JACK®

TRAILER JACK



USER MANUAL

Black Jack® Trailer Jack 1,600kg 12V DC

P/N: BJTJ-1600, BJTJ-1000 and BJTJ-1001

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

www.blackjacktrailerjacks.com.au

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1. SPECIFICATIONS

Maximum Load Capacity	1600 kg
Height Range	356mm (254 to 609mm from mounting point. Excluding Drop Leg Height)
Stroke Length	Max stroke length including drop leg 22" (560mm)
Drop Leg Height	Up to 203mm
Foot Plate	Removable 133mm diameter foot plate or optional folding foot
Handle	Manual crank override
Ratio	5:1 (manual crank handle)
Tube Diameter	58mm outer Dimension
Construction	Steel tubes and plate and polypropylene cover
Motor Type	Sealed encapsulated brushless motor
Finish	Powder coat tube, zinc plated inner and drop tubes
Overall Dimensions	H 781 x W 216 x D 140mm
Voltage Rating	12V DC
Circuit Protection	Circuit Breaker 30amp short stop, auto resettable ignition protected
Current Rating	Maximum 28A (Extended), 6A (Retracted)
IP Rating	Minimum IP55

2. INTRODUCTION

Congratulations on your new Black Jack!

The Black Jack Trailer Jack is rated to support up to 1600kg trailer tongue weight and with the patented Black Jack Clamp, it can be fitted to any trailer A-frame.

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.

It comes with a choice of 2 feet: The traditional leg extension foot that can be adjusted, and the amazing new Black Jack folding foot. The choice is yours.

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 1,600 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.

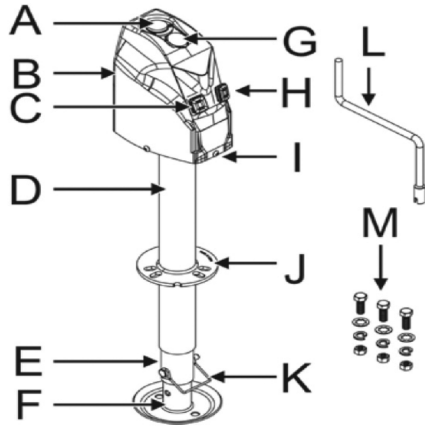
Install caps over the battery terminals to prevent accidental contact. Discharged batteries may still carry charges and cause electric shock upon contact.

9. IDENTIFICATION KEY

Letter references that are in parenthesis (A) refer to the included Identification Key.

10. ASSEMBLY & INSTALLATION

- A Bubble Level
- B Housing
- C LED ON/OFF Switch
- D Tube
- E Leg
- F Foot Plate
- G Crank Cap
- H Extend/Retract Switch
- I LED (under housing)
- J Mounting Plate
- K Lock Pin
- L Manual Crank



- M Hardware (3 each of 3/8-16 in. Bolts, 3/8 Star Washers, 3/8 Split Lock Washers and 3/8-16 Hex Nuts)

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. Mount the Black Jack bracket to the chassis using the 4 bolts and lock nuts.
3. Slide the tube (D) into the Black Jack Mounting Bracket hole. Guide the foot plate into the jack's leg (E). Ensure the groove in the leg is aligned with the one on the foot plate. Do not insert the lock pin (K).
4. Position the jack to face your preferred operating position, either front, sideways or facing the rear.
5. The design of the vehicle may impair the use of the manual crank (L) based on the jack's orientation.

6. Insert the three M10 bolts through the mounting plate and secure with the M10 lock nuts.
7. Tighten the bolts ensuring the whole unit is tightly secured to the A-Frame.
8. Connect the 50amp Andersen plug to an existing Andersen plug.
9. Connect the supplied wiring harness to the Black Jack and the other end of the wiring harness to the 12 volt Battery (model BJTJ-1001).
10. Press the extend/retract switch (H) to test that the connection is correct, and the jack is working. Also press the LIGHT ON/OFF Switch (C) to confirm the light is working.
11. Push the foot plate up fully and insert the lock pin (K) and retract the jack.
12. If installing the optional folding foot, please refer to the installation guide and warnings on page 13.

11. OPERATION

The Extend\Retract switch is OFF in its natural position. Press EXT to extend the Black Jack and RET to retract the Black Jack. **WARNING:** When the Black Jack is fully extended or fully retracted the EXT\RET 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.

12. UNHITCHING THE TRAILER

Chock the trailer's wheels to prevent rolling.

Press the extend/retract switch to extend the jack's leg (E) until the foot plate contacts the ground and raises the trailer off the hitch.

If the fully extended leg does not reach the ground. Retract the leg until you have enough room to extend the foot plate. Remove the lock pin and lower the foot plate until it touches the ground.

Raise the foot plate upwards until the bolt holes in it align with the bolt hole in the leg. Insert the locking pin and close the clasp. Extend the Black Jack until the trailer is clear of the tow hitch.

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

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

13. HITCHING THE TRAILER

Press the extend 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 retract 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.

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 EXT/RET button is released immediately when fully retracted to avoid damage or blown fuses.

14. MANUAL OVERRIDE

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

Remove the crank cap (G) 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.

15. 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. Ensure the ground wire has a solid metal-to-metal contact with the trailer frame.

16. OPTIONAL FOLDING FOOT

Your new Black Jack comes with a choice of two feet.

The silver steel foot is the traditional adjustable foot. You can manually adjust the height and it will tuck up under the chassis tightly.

The Black Jack folding foot will automatically drop from the horizontal position to the vertical position when the leg is extended saving time and without the need to manually adjust the foot. When retracting, the folding foot will automatically move from the vertical position to horizontal, again saving time.

The choice of feet to use is up to you and will be based on your individual set up and requirements.



16. OPTIONAL FOLDING FOOT

Black Jack Folding Foot Installation.

The folding foot must be installed so that it is clear of any obstructions. The folding foot must be able to freely extend and retract to its full extension and full horizontal retraction.



If the foot encounters an obstruction, for example:

- a chassis rail
- brake cables,
- Bottom of the Black Jack Clamp

before it is fully retracted to a horizontal position then there is a risk of serious internal mechanical damage to the Black Jack. The damage is caused by the leverage pressure (up to 3,500kg) the folding foot can add if it encounters an obstruction. This type of damage is NOT covered under warranty as it is a user installation error.

When installing the folding foot, make sure the Black Jack orientation allows for full clearance of the folding foot. This may mean rotating the orientation of the Black Jack. If the folding foot cannot be installed so that it is clear of obstructions, then DO NOT USE IT. Install the silver adjustable foot instead.

17. 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 12V DC. If the battery is low, plug the Black Jack into an alternative 12 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 volts.
	RET/EXT Switch is faulty	Check power at middle positive terminal on switch when EXT or RET 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.

17. TROUBLESHOOTING CONT.

The 30-amp fuse keeps blowing

Normal operating range for a 300kg load is 8 amps retracting (RET) and up to 18 amps extending (EXT). At a maximum weight of 1,600kg, the Black Jack pulls 28 amps extending. So under normal operation the 30-amp fuse should not blow.

Problems	Possible Cause(s)	Suggested Solution(s)
Fuse keeps blowing	Holding down RET/EXT for too long	The most common cause for blowing fuses is holding down the RET/EXT 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 RET/EXT switch longer than required. Drawing more than 30amps will blow the 30amp fuse.
	Pressing the EXT\RET switch the wrong way	Ensure the operator understands the operation of the EXT\RET 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.
	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 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

18. WARRANTY & PARTS

All replacement parts are available on the Black Jack Trailer Jack web site:
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

19. 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

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20. 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.

Clause 1.3.41	Ignition Source Definition
Clause 2.4.2	Required Clearance
Clause 3.1.8	Required Clearance around a cylinder
Clause 5.3	Encapsulated devices

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.



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BLACK JACK®

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CONTACT US

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