

User Manual

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Welcome

Welcome to the BOG OUT solution and congratulations on your purchase.

BOG OUT is a lightweight, compact and easy to use vehicle recovery device. It assists in recovering a vehicle from a bog by using the vehicle's own drive wheel as a winch providing traction and enabling the vehicle to escape in forward or reverse gear depending on the circumstance. BOG OUT can also uniquely be operated by just one person.

This user manual and the information available at www.bogout.com contain details about the device's functions and features.

- Please read this manual before using the device to ensure safe and proper use.
- We will not be liable for performance issues caused by your incorrect use of the device.
- We will not be liable for any damage caused as a consequence of your incorrect use of the device.
- Modifying the device in any way or using incompatible equipment with the device could likely result in failure, breakage or malfunction. Such actions will void your warranty.

Instructional Icons



Warning: situations that could cause injury to yourself or others.

Caution: situations that could cause damage to the device or your vehicle.

Note: notes, usage tips and relevant additional information

Introduction

Why Do Vehicles Get Bogged?

Vehicles get stuck in various situations because they lose traction. Differentials (**Diffs**) drive the front and/or rear pairs of wheels. Diffs are designed to transfer power to the wheel that has the least amount of load (or traction).

On a two wheel drive, lose traction on one of the drive wheels and you're stuck. Four wheel drives are better, but if you lose traction on one front and one rear wheel at the same time, you'll find yourself in the same predicament.

A four wheel drive (4wd) is called a 4wd because it can drive from any of its four wheels. You might however, be surprised to know that usually only two wheels can drive at once - those with the least amount of load (being one front and one rear).

Vehicle recovery is something most 4wd users have some experience with. It's almost always a messy, difficult and time-consuming affair. It can also be dangerous and has the potential to be expensive.

Staying bogged is not much fun, so getting out is the priority, especially on isolated tracks where assistance may not be readily available, or where flood or tidal waters present impending danger.

BOG OUT employs a simple principle, it is a harness designed to capture the rotational power of a driven wheel by creating a winch and providing the necessary traction to allow your vehicle to pull itself free.

General Product Information

BOGOUT standard model is designed to fit all common 4wd, small tractor and cars tyres. BOG OUT will fit tread patterns from 165mm ($6\frac{1}{2}$ ") to 345mm ($13\frac{1}{2}$ "), and will work with wheel diameters of 14" and larger.

For less standard tyres (such as the tyres of a small car or a larger tractor) please refer to our website which has a range of various non-standard BOG OUT solutions.

If neither a standard or non-standard BOG OUT meets your specifications, we can custom build one to suit. Please contact us if you are interested in a tailor made BOG OUT solution. Our friendly staff will be happy to assist your design to manufacture the best solution for your needs.

Contents

Each BOG OUT purchased includes:

- Single BOG OUT recovery device (single code 1101 or double code 1102)
- Two red connector ties per BOG OUT
- Single Back Sack (storage and carry bag)
- User Manual

Safety Tips



Warnings

To avoid injury to yourself and others:

- (a) when *fitting* or *removing* BOG OUT:
 - (i) ensure that your vehicle is **stable** and **can't roll**, **slide**, **tip or fall**.
 - (ii) turn your vehicle's motor off and make sure it can't be started.
- (b) when *using* BOG OUT:
 - (i) **ensure persons are a safe distance** from a device under tension.
 - (ii) ensure area is free from other vehicles.
 - (iii) always **use a dampener** in case of breakage and recoil.
 - (iv) ensure the winching wheel is being **closely observed**.
 - (v) always choose a **suitable anchor**.



Cautions

To avoid damage to the BOG OUT device or to your vehicle:

- (a) when *fitting* BOG OUT:
 - (i) beware of **sharp or hot parts** around the wheel and under the vehicle.
 - (ii) ensure **proper attachment** of the device to your vehicle and chosen anchor.
- (b) when *using* BOG OUT:
 - (i) engage in a **slow** and **gentle** manner.
 - (ii) use low range, first or reverse gear.
 - (iii) **do not accelerate** when coming out of the bog.
 - (iv) do not reverse against BOG OUT while it is under load and wrapped around the wheel.
 - (v) ensure BOG OUT is **continuously fitting over the wheel** if you can't see the device, stop your vehicle walk a safe distance away and check it regularly during recovery.



Notes

(a) try BOG OUT in a safe environment first – practice fitting and using it in your yard.

Quick User Guide



Do not use BOG OUT unless you have read and are familiar with the Full Instructions and Safety Tips.

Once you are familiar with using a BOG OUT device the following process can be followed as a quick usage guide:

- 1. **Direction**: consider anchor availability and most suitable path to recovery.
- 2. **Unpack:** lay BOG OUT flat on the ground along recovery path from anchor point to bogged:
 - (a) front wheel where vehicle to drive forwards to recovery; or
 - (b) **rear wheel** where vehicle to reverse to recovery.



- 3. **Harness:** fasten one end of BOG OUT to your vehicle's wheel, using either <u>Method 1</u> or <u>Method 2</u> (refer to Quick Connect Guide).
- 4. **Anchor:** attach other end of BOG OUT to anchor point.
- 5. **Recovery:** *slowly* drive out of the bog in low range first or reverse gear.
- 6. **Pack**: release BOG OUT from anchor and wheel, clean and store in back sack.



There are **two methods** of attaching BOG OUT - you should determine which suits your vehicle before use.

Quick Connect Guide





Adequate rim clearance is required for Method 1 - ensure wheel can rotate freely without connector or BOG OUT system catching on the brakes, steering or other mechanical parts housed in the wheel arch or under the vehicle.

1.

Method 1 – connect through rim

Attach the '*short tails*' end of BOG OUT to the desired wheel by:

- 1. passing a connector through the wheel's rim; and
- 2. tying the connector to the BOG OUT tails using a 'sheet bend knot'.

Method 2 – form a snare

Attach the '*long tails*' end of BOG OUT around the wheel by:

- passing BOG OUT over the wheel;
- 2. pulling the tails back along the ground; and
- 3. tying the tails back to the main straps with connectors using a 'sheet bend knots'.









BOG OUT must always pull from the bottom of the tyre.

Full Instructions

Direction

Before using BOG OUT it is important to consider the optimal path to recovery. Your key thoughts should be about your surroundings including:

- (a) available anchors (further information on anchor suitability is contained below);
- (b) best path to recovery, either forwards or backwards;
- (c) likelihood of changing conditions; and
- (d) potential risks to a safe recovery.

Only ever attempt to recover a vehicle if it is in a level position and able to be recovered in a straight line. Call for expert assistance if in any doubt.



- Be wary of inconspicuous dangers which may have the potential to destabilise a vehicle during recovery.
- The BOG OUT system is made from exceptionally strong materials and is more than capable of pulling a vehicle over if used incorrectly.
- The BOG OUT system **MUST** be kept in line with the wheel it is attached to so that it remains over the wheel during recovery.
- More than one BOG OUT system can be used **end to end** to help vehicles move longer distances. However, care MUST be taken so that the device doesn't foul on any mechanical parts of the vehicle as the BOG OUT becomes progressively wound onto the tyre.
- It is also possible to **double up** a BOG OUT system if extra strength is thought to be needed.
- Learning to use the BOG OUT system properly is easiest in a safe clear area such as your backyard. You will be best prepared by learning the simple knots and methods before you get into a situation requiring real recovery.
- A single BOG OUT may be used to assist recovery on lightly bogged vehicles but heavily bogged vehicles will likely require two.

Unpack



- If using harness <u>Method 1</u>, short tails end is to be closest to the bogged wheel. If using <u>Method 2</u> the long tails end is to be closest to the bogged wheel.
- The red connector tie is sacrificial and should be replaced when damaged. These are available on our website www.bogout.com or enquire in store where BOG OUT is sold.
- Once you have determined your safe and effective recovery direction, it's time to unpack.
- It is best to keep the BOG OUT device on the ground where possible so after you have pulled the BOG OUT from its sack, lay it down flat between the bogged wheel and your chosen anchor.



• The BOG OUT system should at all times be in line with the track of the wheel it is to be attached to and aligned in the direction the recovery will proceed.



- It is advisable to attach a dampener in case of breakage and recoil.
- It must be understood that the device would likely be used in hostile circumstances, therefore care and common sense MUST be employed and you must have a realistic expectation of the device's durability. Whilst we have used the same device in many recoveries, it only takes one cut to render the BOG OUT or associated products unserviceable. Harsh and repeated abrasion along with poor care will damage the device.

Harness



It is recommended that no shackles or other mechanical devices be used on the BOG OUT system because of the:



- (a) potential damage it could cause to your vehicle; and
- (b) the chance of creating a dangerous missile if a part of the recovery equipment fails under load.



Make sure your vehicle is turned off and secure ignition key. Ensure the parking/ hand brake is engaged so that it cannot be started or moved whilst engaging BOG OUT.

Method 1 It is very important to keep the BOGOUT system in line with the line of the tyre

Method 1 may be used on most wheel variants and vehicles provided that the vehicle's brake, or other mechanical parts are not positioned in the way on the inward facing side of the wheel. If this is the case the red connector tie when rotated, could possibly cause damage to the vehicle itself. You should check to make sure that your vehicle has adequate clearance for the recovery device to function before using this method. Ask a mechanic if you're uncertain.



If the rim is incompatible, there is any risk of interference or if you are otherwise in doubt, you should use Method 2 (detailed further below).

Simply attach the *short tails* end of BOG OUT to the bogged wheel by passing the red connector tie through the rim and tying it to each of the spliced eyes which are at the end of the *short tails*.

A **sheet bend knot** is recommended for best results when tying the connector to the BOG OUT through the vehicle's rim. This knot can be done as follows:





Tuck tag end back under to create a 'bow' (or slippery hitch) which makes it much easier to undo.

After use, this knot can be loosened when worked. The strap can be reused if it hasn't been damaged. If the strap has pulled too tight cut it away when finished taking care not to damage the BOG OUT system, and discard it. The connector ties are cheap to replace and should be considered disposable.



You should always use caution during recovery and if there is a possibility of BOG OUT disturbing brake or steering parts especially hydraulic brake lines. You should proceed slowly with recovery and frequently check that the device is functioning correctly.

Method 2

Method 2 incorporates a 'snare' setup around the wheel. As with method 1, it is very important to keep the BOG OUT system in line. To start, lift the *long tails* over the tyre and around it and pull the tails down to the ground until the first 'rung' is on the ground.

The long tails then need to pass along the ground and back to the main straps of the BOG OUT. It is advised that some mud, sand or dirt be scooped out of the way first to allow the device to form correctly around the tyre. The spliced eyes can then be tied to the main straps, *capturing* the tyre in the harness. The spliced eyes should be connected using the red connector ties so the harness can *noose* and grip the tyre as in the following diagrams.





Pull long tails



Lay long tails of BOG OUT over tyre











It is easier to pre-tie the connector tie to the inside splice.

along

Tighten the red connector ties firmly to the BOG OUT so the BOG OUT grips the tyre snugly.

It is important to have at least five rungs on the tyre. This keeps the BOG OUT system away from the brake, steering and other parts of the vehicle housed in the wheel well. Position the red connector ties so that they can slide and tighten. This will allow the BOG OUT system to snare the tyre. When the tyres shown above are driven clockwise, BOG OUT system will tighten and pull itself under the tyre and against the anchor and provide positive traction.

The same **sheet bend knot** is preferred, this time using a doubled over tie. Tie the inside knot first and you'll have to get under the vehicle to do this, but ONLY IF SAFE. These knots MUST be tied CORRECTLY so rungs are evenly spaced.



Length of the red loop can be adjusted to suit different tyre diameters but keep as short as possible.



Tuck tag end back under to form a 'bow' or 'slippery hitch' which will allow it to be undone much easier

Anchor

The BOG OUT system has been tested on many anchor points, ranging from small saplings to large trees and even to other stationary vehicles. Our test results have indicated that the BOG OUT system will work with the majority of anchor points. This is because the device pulls from the very lowest point of the vehicle (the bottom of the tyre to which it is harnessed) and pulls along the ground, connecting at the base of the anchor point pulling on its strongest part.

Finding a suitable anchor to secure the BOG OUT to might be as simple as attaching it to a conveniently placed tree, or another vehicle.

Many other anchor varieties other than trees and vehicles can be used effectively. There are a range of purchasable anchoring systems on the market as well so you will know you will be able to escape any bog without being reliant on Nature's available anchoring systems. BOG OUT has its own specialised anchoring system. This anchor system will become available on <u>www.bogout.com</u> once testing has been completed.



- If you intend on anchoring to a tree you should always use a tree protector strap, as trees near bog areas are invaluable to future vehicle recovery.
- Where there is no suitable anchoring point available users may improvise by digging a hole for a suitably strong and large item such as a spare wheel or log to be buried in and used as an anchor.



- Falling branches from trees being utilised in the recovery process can pose a risk and are something all involved in the recovery need to be wary of.
- It is dangerous to irresponsibly attach BOG OUT to anything insufficient or unstable as an anchor. Do not attach to a dead tree or boulder on a slope.
- Don't use tow balls on tow bars as attachment/anchor points

Recovery

Once BOG OUT is properly attached to your vehicle and a suitable anchor, the recovery can begin. When all persons are clear, start the motor, release any brake systems and select an appropriate low ranging gear (first or reverse). Slowly take up the tension by judicious use of the clutch and accelerator.

If BOG OUT is correctly used, the vehicle should drive out of the bog with ease. If it doesn't, the BOG OUT may be snagged, or the vehicle may otherwise be restrained. You will have to stop recovery and fix the issue before reattempting.

When the vehicle moves, stop and check everything is safe and secure and that the BOG OUT is forming correctly and evenly as a harness for the wheel. Under no circumstances should anyone get under the vehicle or near the recovery gear whilst it is under tension, or in any position where they may be harmed.

It's unlikely that the BOG OUT could be broken by the vehicle if used correctly because the device is designed to be stronger than the weakest part of the drive train (the vehicle's clutch). However, BOG OUT is not indestructible and not intended for day to day use. If your BOG OUT is damaged, typically by sharp rocks, tree roots, harsh abrasion or misuse etc, it should be discarded and replaced immediately.

Remember, vehicles in slippery situations may slide or move unexpectedly.



- Never allow people to push the vehicle whilst recovery is in progress.
- BOG OUT is an extremely strong device and may damage the vehicle or itself if not used carefully and slowly.
- BOG OUT is designed to allow a vehicle to *creep* or *inch* its way out of a bog. It has little stretch and is NOT designed to accept shock load like a snatch strap
 - Guide ropes may be necessary to keep the device in line during recovery.

Release BOG OUT

To remove the device, simply disconnect the anchor and then reverse the direction (without getting bogged again) until it's unwound off the tyre. Lastly, undo the red connector/s. Do not reverse against the BOG OUT when still under load. This will possibly cause damage to the device or the vehicle.



- Once the vehicle regains its own traction the BOG OUT will loosen as the circumference of the tyre will be greater that the circumference of the BOG OUT.
- Another way to remove BOG OUT is to 'rock' the vehicle forward or backwards driving over it and flipping a wrap off sideways and over the tyre each time until the device is free.



Be careful BOG OUT doesn't then entangle parts of the vehicle especially brakes.

Pack

After BOG OUT is free it should be rolled up and kept in its sack until it can be properly cleaned and dried.

BOG OUT should cleaned in warm fresh water if it is dirty. Once it has been cleaned you should allow it time to dry in the shade. The clean dry device can then be packed for future use.

Usage Tips Recap

- It should go without saying that vehicle recovery can be dangerous. Many people have been injured or killed during vehicle recovery operations.
 - Beware of anchor points that are attached to recovery gear under tension
- Excessive loads can be applied to recovery gear which can break or cause damage to the vehicle
 - Vehicles can move suddenly and unexpectedly during recovery.
 - Resist using shackles or other mechanical devices
 - Discard damaged or worn equipment



- Any recovery equipment used in conjunction with the BOG OUT should be of adequate rating and condition.
- Keep recovery gear on or close to the ground and utilise recoil dampeners

Other Uses

Comparison chart

	BOG OUT	Snatch Strap	Tow Rope	Traction boards	Winch Elect/PTO	Winch Hand	Block and Tackle
Self Recovery	Y	N	N	Y	Y	?	?
Forward	Y	Y	Y	Y	Y	Y	Y
Reverse	Y	Y	Y	Y	N	Y	Y
Sand	Y	Y	Y	Y	Y	Y	Y
Mud	Y	Y	Y	?	Y	Y	Y
Snow	Y	Y	Y	?	Y	Y	Y
Ruts	Y	Y	Y	?	Y	Y	Y
Steep Incline	Y	?	?	N	Y	Y	Y
Steep Decline	Ŷ	N	?	N	N	Y	Y
Easy to use	Y	Y	Y	?	Y	N	N

Tow Rope

BOG OUT isn't just a vehicle recovery device, it can also be used as a tow rope. Simply roll the main straps together to tidy the rungs and use like any other tow rope. The BOG OUT standard model is made from two main straps each with a break strength of about two tonnes, so the device can pull up to about four tonnes of load when properly used.

Never use tow balls as points of attachment and always use a dampener in case of equipment failure and recoil.

Different places have different laws regulating the use of tow ropes. It is your responsibility to comply with those regulations.



Tow ropes wear from being in contact with the road and would weaken/damage your BOG OUT so this must be considered.

Restraining Device

BOG OUT by way of its ladder design may come in handy to assist in securing light loads. The device is not specifically designed for such work though so should be used in such instances with careful consideration.

Do Not Use as a Lifting Device

BOG OUT is not designed for lifting and has not been tested or rated in this regard. Under no circumstances should the BOG OUT be used as a lifting device.

Warranty

We warrant that care and diligence has been taken to provide each BOG OUT device free from defect.

In the unlikely event that a product is manufactured improperly, or if materials used are defective, we will offer a full replacement of your device for a period of 12 months from the date of your purchase.

A replacement will not be made unless you:

- 1. supply us with a copy of your receipt evidencing your purchase; and
- 2. provide us with evidence to our satisfaction of the defect.

Nothing in this warranty attempts in any way to exclude any non-excludable warranties or guarantees implied by the Australian Consumer Law (**ACL**). To the extent that this warranty conflicts with any such warranty or guarantee or the ACL, the provisions of the ACL will apply.

Disclaimer

BOG OUT is designed to be used in hostile environments, but its components are not impervious to damage. If you want your BOG OUT to last, general care and common sense during use must prevail. As stipulated in our Warranty, we will only replace a defective BOG OUT not one which has been damaged by use.

You should maintain realistic expectation as to durability of the device. We will not be held responsible for damage done to the device, a vehicle or persons during recovery situations that have resulted as a consequence of the misuse of the device.

You should be aware that there is a real risk involved in undertaking any vehicle recovery and we will not be liable for any damage or injury that occurs whatsoever, unless you have strictly followed this User Manual in all respects and the injury or damage is directly linked to an inherent defect in the manufacturing of your specific device.

Contact

Please feel free to contact us with any comments, queries or concerns relating to BOG OUT. Our details are as follows:

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