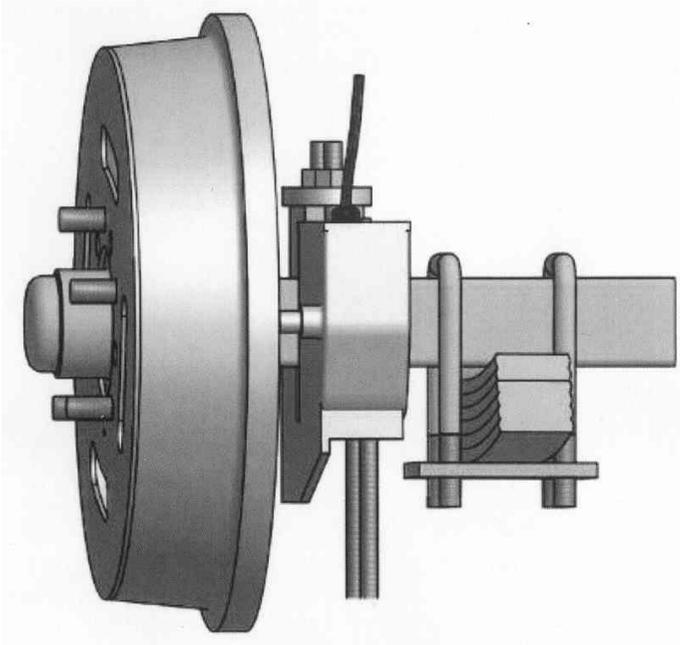


# WOLI

where u left it

CARAVAN AND TRAILER ANTI THEFT DEVICE



**Installation Manual**

# Table of Contents

General Instructions And Warnings .....	2
Safety First.....	3
Getting Started .....	3
Installing On Unbraked Drum/Disc Braked Axle .....	4
Installing On Jayco J-Tech Independent Suspension .....	6
Installing The Alarm Unit.....	7
Wiring The Main And Alarm Units.....	8
Technical Support .....	9

## GENERAL INSTRUCTIONS AND WARNINGS

### **Read all instructions before using this product**

Thank you for choosing the WULI caravan and trailer anti-theft system. Before attempting to install your new WULI anti-theft system please read these instructions thoroughly. This manual contains safety warnings, precautions, a parts list and diagrams intended to ensure the safe and easy installation of the WULI unit.

### **WARNING**

The warnings, cautions and instructions outlined in this manual cannot cover all possible conditions or situations that may arise. Common sense and caution are factors which cannot be built into any product. It is the installer's responsibility therefore to exercise common sense and care in relation to the installation of the WULI unit.

## SAFETY FIRST

Fitting the WULI anti-theft system requires extreme care. Do not allow any person to get under a vehicle of any kind while it is supported by a jack only. Use vehicle/axle stands to support the vehicle and then attempt to rock it gently back and forth and then side to side to ensure it is safe and stable before getting under any vehicle. (Using incorrect or unsafe procedures can result in the possibility of property damage, personal injury or death.)

Wuli therefore strongly suggest that a suitably qualified and/or experienced person such as a trailer manufacturer or repairer, a licensed mechanic or an approved WULI installer be engaged to fit the WULI unit.

## GETTING STARTED

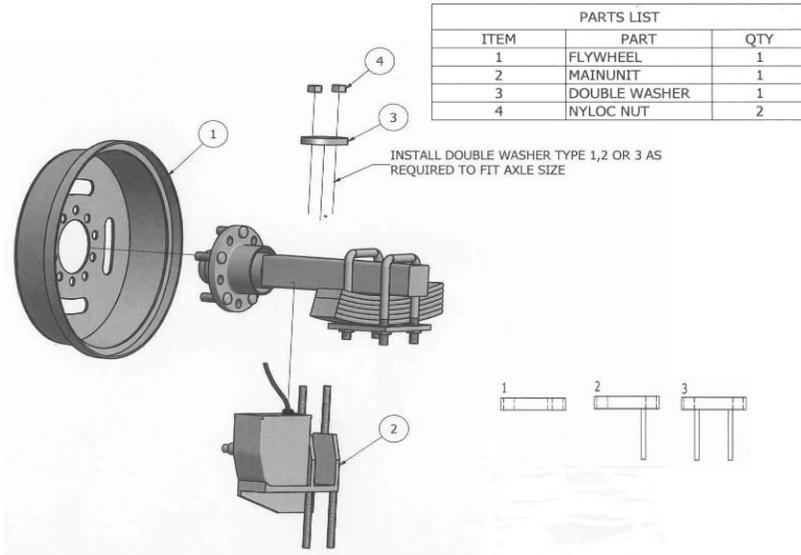
1. Ensure the trailer or caravan is parked on a hard, level surface
2. Engage the parking brake firmly.
3. It is advisable to couple the trailer or caravan to a tow vehicle before attempting to install the WULI unit. If the trailer or caravan does not have a park brake then this is highly advisable. (Alternatively, wheel chocks may be used. However please remember that brakes and wheel chocks will only be effective when the restrained wheel is sitting on the ground.)
4. With the aid of a wheel brace loosen all nuts on the wheel, we recommend the left-hand side of the vehicle, which need to be removed by one full turn. (**Do not remove or further loosen any nuts until the wheel has been raised off the ground.**)
5. Place a jack under the vehicle jacking point and raise the wheel on one side of the vehicle only so that it is free of the ground surface.
6. Place a suitably rated axle stand under the trailer jacking point and then slowly release the jack. (The stand height should be set so that when the jack is released the wheel will spin free of the ground surface.)

7. Reinspect the stand position to ensure that the vehicle is safely supported on the axle stand.
8. Check that the wheel on the trailer or caravan still spins freely just above the ground surface. (If it will not spin freely then the above jacking procedure must be repeated with the axle stand set at a higher height.)
9. Once supported with a free-spinning wheel, gently attempt to rock the vehicle back and forth and then side to side to ensure that it is safe and stable on the axle stand.
10. If safe, then remove the loosened wheel nuts on one side of the trailer or caravan and then remove the wheel.

Wuli recommend that a small padlock or bolt be fitted through the 6mm hole provided in the mounting studs to help prevent unauthorised removal of the MAIN UNIT. Mag wheel lock nuts may also be used to help prevent unauthorised removal of the trailer or caravan wheel and tampering with the locking action. Use of permanent thread locker is recommended to ensure nyloc nuts do not loosen over time.

## **INSTALLING ON UNBRAKED DRUM/DISC BRAKED AXLE**

Before installation take some time to familiarize yourself with the various components of your WULI Anti-theft Locking System as illustrated in the diagram that follows.



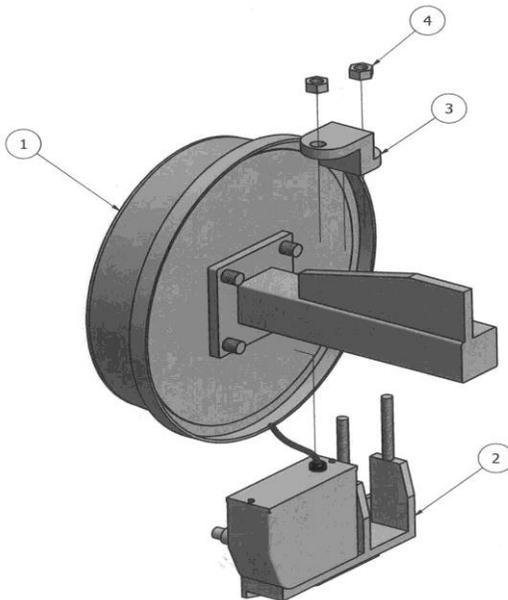
1. With the trailer or caravan now safely supported and the wheel removed, assembly can begin.
2. Ensure components are within easy reach before you begin assembly.
3. Slip the MAIN UNIT (2) over the axle from below as indicated above. (Ensure that the WULI locking pin is pointing outwards.)
4. Hold the MAIN UNIT in place and then coming down from above; slide the DOUBLE WASHER (3) over the projecting mounting bolts.
5. Thread the two NYLOC NUTS (4) onto the mount bolts and then tighten to the point where the MAIN UNIT will still slip sideways on the axle.
6. Slide the FLYWHEEL (1) over the wheel studs on the hub.
7. Thread two or three of the vehicles wheel nuts onto opposing studs and gently tighten them so that the FLYWHEEL is held in full contact with the wheel hub.
8. Adjust the position of the MAIN UNIT on the axle so that there is a 5 mm gap between the locking pin and the inner end of a FLYWHEEL lug.
9. Securely tighten the NYLOC NUTS. (If using a torque wrench, set the wrench to 44N/m.)
10. Re-check that the clearance between the locking pin and a lug is still 5 mm. (If the spacing has changed then repeat the above alignment procedure.)

11. Remove the wheel nuts securing the FLYWHEEL and fit the vehicle wheel over the FLYWHEEL. (Ensure that the wheel nuts are tightened to the torque setting recommended by the trailer or caravan manufacturer.)
12. If you are installing the WULISTDL you will need to remove one u bolt from the axle fish plate. You must then use the Wuli unit bottom threaded rods to secure fish plate to the leaf springs. ***Therefore it is essential that you have identified and utilised a SECURE jacking point.***

## INSTALLING ON JAYCO J-TECH INDEPENDENT SUSPENSION

*Note: Jayco J-Tech independent suspension requires a different main unit (see below).*

Before installation take some time to familiarize yourself with the various components of your WULI Anti-theft Locking System as illustrated.



PARTS LIST		
ITEM	PART	QTY
1	FLYWHEEL	1
2	MAINUNIT	1
3	STEPPED PLATE	1
4	NYLOC NUT	2

1. With the trailer or caravan now safely supported and the wheel removed, assembly can begin.
2. Ensure components are within easy reach before you begin assembly.
3. Slip the MAIN UNIT (2) over the axle from below as indicated above. (Ensure that the WULI locking pin is pointing outwards.)
4. Hold the MAIN UNIT in place and then coming down from above; slide the STEPPED PLATE (3) over the projecting mounting bolts.
5. Thread the two NYLOC NUTS (4) onto the mount bolts and then tighten to the point where the MAIN UNIT will still slip sideways on the axle.
6. Slide the FLYWHEEL (1) over the wheel studs on the hub.
7. Thread two or three of the vehicles wheel nuts onto opposing studs and gently tighten them so that the FLYWHEEL is held in full contact with the wheel hub.
8. Adjust the position of the MAIN UNIT on the axle so that there is a 5 mm gap between the locking pin and the inner end of a FLYWHEEL lug.
9. Securely tighten the NYLOC NUTS. (If using a torque wrench, set the wrench to 44N/m.)
10. Re-check that the clearance between the locking pin and a lug is still 5 mm. (If the spacing has changed then repeat the above alignment procedure.)
11. Remove the wheel nuts securing the FLYWHEEL and fit the vehicle wheel over the FLYWHEEL. (Ensure that the wheel nuts are tightened to the torque setting recommended by the trailer or caravan manufacturer.)

## **INSTALLING THE ALARM UNIT**

The ALARM UNIT must never be submerged in water.

IP (or "Ingress Protection") ratings are used to define the level of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt etc) and moisture. The ALARM UNIT has an **IP65** rating which means that it is dust-proof and wash-down capable. If

required, the alarm unit may be washed using a quick, gentle water spray.

**(WARNING: Do not use a pressure washer on the main unit or on the alarm unit).**

Mount the alarm unit in a protected area to avoid emersion as well as stone, rock or debris damage.

The ALARM UNIT must be securely fastened either;

**1 Internally**

The ALARM UNIT can be fitted using a lighter socket or be hard-wired into your caravan providing it has an independent 12-volt power source,

or

**2 Externally**

The ALARM UNIT can be fitted on a trailer and be connected to the trailer's wiring loom. The ALARM UNIT should be located out of sight and easy reach.

If the ALARM UNIT is fitted in an exposed location WULI recommend that it be protected inside a wire cage enclosure which can be purchased online at [www.wuli.com.au](http://www.wuli.com.au) or through an authorised stockist.

Please remember the ALARM UNIT must not be mounted in a location where it will be submerged in water. Also, as it is triggered by a radio signal the ALARM will not work if it is totally surrounded by a metal in an enclosure (eg. the front boot of a caravan or tradies tool box).

## **WIRING THE MAIN AND ALARM UNITS**

The MAIN UNIT is supplied with 5 metres of 2 core cable.

The ALARM UNIT is supplied with 1.5 metres of 2 core cable.

The WULI cable wiring colours are:

**White:** Earth Return  
**Red:** Positive

Locate a suitable connection site(s) to join the main and alarm unit wiring into the trailer wiring loom.

The **WHITE** wire from each unit must be connected to the **WHITE** or **EARTH** wire in the trailer wiring loom.

The **RED** wire from each unit is advised to be connected to the **BROWN** wire or tail light wire in the trailer loom to ensure that the internal batteries remain charged.

WULI recommend that all wiring connections be soldered and then sealed using heat-shrink tubing.

**After your installation is completed check the function of all the caravan or trailer electrical circuits including lighting and brakes, then re-check that all nuts have been tightened, especially the wheel nuts.**

## **TECHNICAL SUPPORT**

If you are having difficulties with installation, please contact the authorised stockist you or your client purchased the product from. If they are unable to resolve the issue, please contact us either via email on [info@wuli.com.au](mailto:info@wuli.com.au) or call during business hours Monday – Friday on 0407 624 311.

