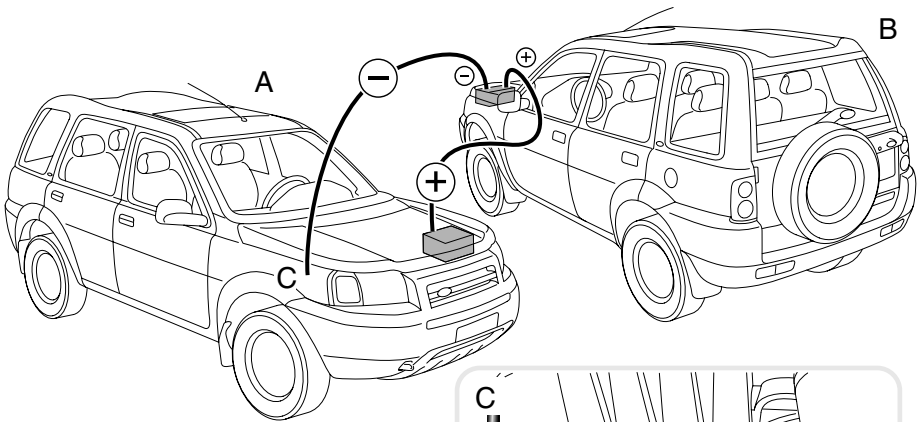
STARTING WITH A DISCHARGED BATTERY



H4008

A. Disabled vehicle
B. Donor vehicle
C. Engine earth point

Using booster cables (jump leads) from a donor battery, or a battery fitted to a donor vehicle, is the only approved method of starting a vehicle with a discharged battery. Push or tow starting is NOT possible!

If the battery is completely discharged (battery condition indicator shows CLEAR), it may not be possible to start the engine using booster cables. In this case, a replacement battery must be fitted.

WARNING

Before using booster cables, ensure that you are familiar with the information shown under 'BATTERY SAFETY', page 186.

Always adopt the following procedure:
If a donor vehicle is to be used, both vehicles should be parked with their battery locations adjacent to each other. Ensure that the two vehicles do not touch.

Apply the parking brakes and ensure that the transmission of both vehicles is set in neutral ('P' or Park for vehicles with automatic transmission).

Turn off the starter switch and ALL electrical equipment of BOTH vehicles.

Connect the RED booster cable between the positive (+) terminal of the donor battery and the positive (+) terminal of the discharged battery.

Connect the BLACK booster cable from the negative (-) terminal of the donor battery to a good earth point (eg. an engine mounting or other unpainted surface) at least 0.5 m from the battery and well away from fuel and brake lines on the disabled vehicle (refer to inset 'C' on the previous page).

WARNING

For safety reasons:

- ***DO NOT connect a booster cable to the negative (-) terminal of the discharged battery! If in doubt, seek qualified assistance.***
- ***ENSURE that each connection is securely made and that there is no risk of the clips accidentally slipping or being pulled from the battery terminals - this could cause sparking, which could lead to fire or explosion.***

Check that the cables are clear of any moving parts of both engines, then start the engine of the donor vehicle and allow it to idle for a few minutes. Now start the vehicle with the discharged battery (DO NOT crank the engine for more than 15 seconds).

Once both engines are running normally, allow them to idle for two minutes before switching off the engine of the donor vehicle. DO NOT switch on any electrical circuits on the previously disabled vehicle until AFTER the booster cables have been removed.

Disconnect the booster cables in an EXACT reversal of the procedure used to connect them, ie: disconnect the BLACK cable from the earth point on the disabled vehicle FIRST.

BATTERY SAFETY

WARNING

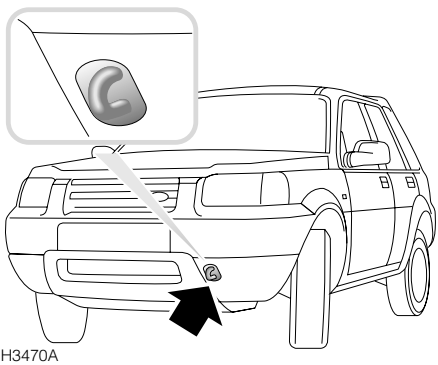
- ***Always wear appropriate eye protection when working with batteries.***
- ***During normal use, batteries emit explosive hydrogen gas sufficient to cause severe explosions capable of causing serious injury - keep sparks and naked lights away from the engine compartment.***
- ***DO NOT attempt to start the vehicle if the battery is suspected of being frozen.***
- ***Make sure BOTH batteries are of the same voltage (12 volts), and that the booster cables have insulated clamps and are approved for use with 12 volt batteries.***
- ***DO NOT disconnect the discharged battery.***
- ***DO NOT connect positive (+) terminals to negative (-) terminals, and ensure booster cables are kept away from any moving parts in the engine compartment.***
- ***Take care when working near rotating parts of the engine.***
- ***ENSURE that each connection is securely made and that there is no risk of the clips accidentally slipping or being pulled from the battery terminals - this could cause sparking, which could lead to fire or explosion.***

TOWING EYES

WARNING

The towing eyes at the front and rear of the vehicle are designed for vehicle recovery purposes only and must NOT be used to tow a trailer or caravan. Excessive force should not be used when being recovered, or when recovering other vehicles using the towing eyes.

Front

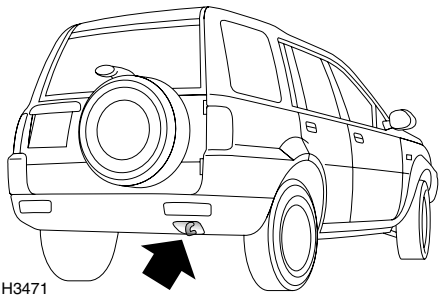


H3470A

A single towing eye, set in the front spoiler is provided for use ONLY when the vehicle is to be towed with all four wheels on the ground.

DO NOT use the front lashing ring for towing purposes.

Rear



H3471

A single towing eye is provided at the rear of the vehicle for use ONLY when towing another vehicle.

TOWING FOR RECOVERY

Most vehicle recovery specialists will load your vehicle onto a trailer. However, if it is necessary to recover the vehicle by towing with all four wheels on the ground, observe the following procedure:

CAUTION: To avoid serious damage to the transmission, towing distance must be limited to a maximum of 50 miles.

1. Secure the towing attachment from the recovery vehicle to the front towing eye of the vehicle to be recovered.
2. With the parking brake applied and gear selector position 'P' (Park) selected, insert the key and turn the starter switch to position 'I' to unlock the steering.
3. Place the gear selector lever in 'N' (Neutral).
4. If it is necessary for the brake lights, wipers and direction indicators to be operated, turn the starter switch to position 'II'.
5. Release the parking brake.

NOTE: *If, due to an accident or electrical fault, it is not considered safe to turn the starter switch, the battery should first be disconnected.*

WARNING

DO NOT allow the vehicle to be towed further than 50 miles (80 km) and restrict towing speed to 30 mph (50 km/h).

CAUTION: DO NOT tow the vehicle unless the starter switch is turned to position 'I' or 'II' (to unlock the steering).

CAUTION: DO NOT turn the starter switch to position '0', or attempt to remove the key, while the vehicle is in motion.

Suspended tow

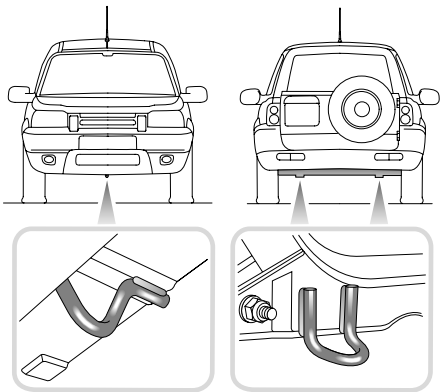
If it is necessary to tow your vehicle on two wheels (ie: suspended from a recovery vehicle), it is essential that the propeller shaft connected to the axle that is to remain on the ground is disconnected by qualified personnel, prior to being towed.

CAUTION: If the rear axle is to be raised, the steering wheel and/or linkage MUST be secured in a straight ahead position, but the steering lock MUST NOT be used for this purpose. The vehicle can then be attached to the towing truck.

LONG DISTANCE/MOTORHOME TOWING

CAUTION: Your Freelander is not suitable for long-distance towing. Towing the vehicle on four wheels for distances exceeding 50 miles, will seriously damage the transmission.

TRANSPORTER OR TRAILER LASHING



H3472

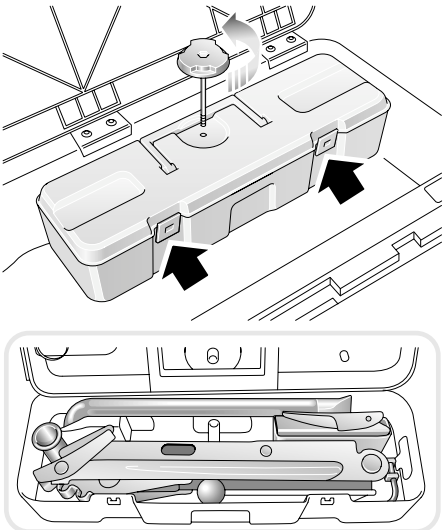
Lashing rings are fixed to the underside of the vehicle, where shown in the illustration.

Under no circumstances should the vehicle be towed or recovered by lashing to the rear subframes. Serious damage to the subframe and body may occur.

WARNING

The lashing rings are for lashing only and must NOT be used for towing.

TOOL KIT



H3492

The tool kit is contained in a toolbox located in the rear loadspace stowage box. To remove the toolbox from the stowage box, unscrew the restraining clamp.

To open the toolbox, lift the two catches.

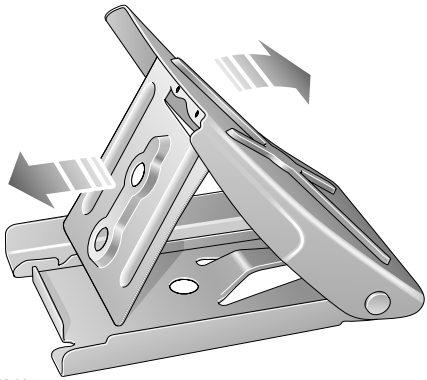
NOTE: *When not in use, the tools should always be returned to the toolbox, and the toolbox should be securely clamped in the stowage box.*

Only tighten the restraining clamp to 'finger' tightness, when making the toolbox secure.

WARNING

DO NOT drive with the tools or toolbox loose in the vehicle. In the event of a collision they could become dangerous projectiles and cause serious personal injury.

Tools



H3497

The tool kit contains the jack, wheel chock, and wheel wrench.

The wheel chock is designed to fold flat and must be assembled, as shown in the illustration, before use.

WARNING

ALWAYS use the wheel chocks when jacking the vehicle.

Care of the jack

Examine the jack occasionally and clean and grease the moving parts.

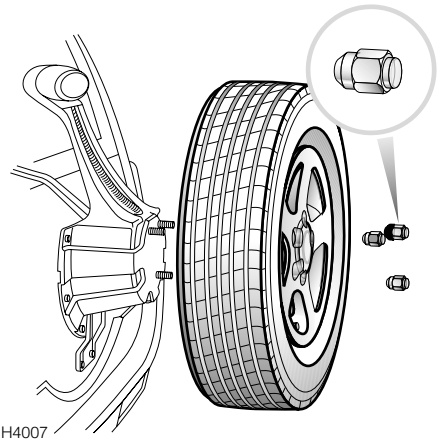
Always close the jack and return the jack to the toolbox when not in use.

WARNING

After wheel changing, always secure tools, chocks, jack and spare wheel in their correct storage positions. Such objects if not properly stowed can become flying missiles in a crash or rollover, potentially causing injury or death.

SPARE WHEEL

Removing the spare wheel



Use the wheel nut wrench supplied in the tool kit to remove the nuts securing the spare wheel to the carrier and then lift off the wheel.

WARNING

DO NOT use the spare wheel securing nuts in place of the road wheel nuts, or use the road wheel nuts to secure the spare wheel - the nuts are not inter-changeable.

The wheels are extremely heavy. Take care when lifting and particularly when removing the spare wheel from its mounting position on the tail door.

Refitting the spare wheel

Position the spare wheel on the carrier, then fit and tighten the nuts securing the spare wheel to the carrier.

JACKING

If possible, choose a safe place to stop away from the main thoroughfare. Always ask your passengers to get out of the vehicle and wait in a safe area away from other traffic.

NOTE: *Switch on the hazard warning lights to alert other road users.*

Before changing a wheel, ensure the front wheels are in the straight ahead position, apply the handbrake and select 'P' (Park).

WARNING

ALWAYS use the wheel chocks when jacking the vehicle.

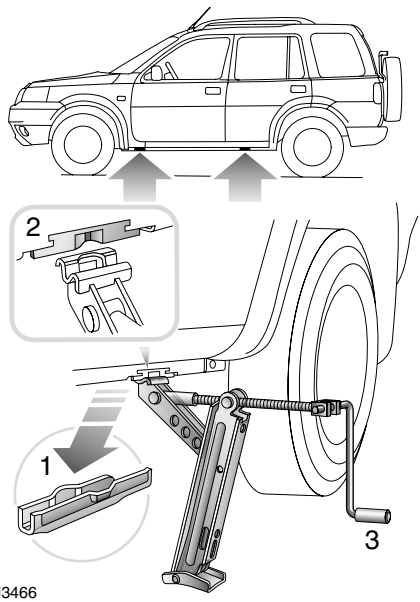
Turn off the starter switch and remove the key. Observe the following precautions:

- Ensure the jack is positioned on firm, level ground; NEVER on soft ground, or over metal gratings or manhole covers. DO NOT place additional material between the jack and the ground, this may jeopardise the safety of the jacking operation.
- Jacking on a slope is NOT recommended, but if it is unavoidable, chock the wheel diagonally opposite the one to be removed on the downhill side, using the chock provided in the tool kit.
- NEVER jack the vehicle with passengers inside or with a caravan or trailer connected!

WARNING

NEVER work beneath the vehicle with the jack as the only means of support. The jack is designed for wheel changing only!

Positioning the jack



Use the flat, wedge-shaped end of the wheel nut wrench to lever off the appropriate jacking point cover (1).

Position the jack with the base directly under the jacking point (2) nearest the wheel to be removed and with the handle dropping vertically towards the ground (3). Ensure the jack is positioned on firm, level ground.

Turn the jack screw clockwise to raise the jack until the jack head fits snugly around the center of the jacking point.

NOTE: *ONLY jack the vehicle using the jack location points described, or damage to the vehicle could occur. Under no circumstances should any part of the undertray assembly be used as a jacking point.*

CHANGING A WHEEL

WARNING

Avoid accidental contact with any underbody parts, especially hot exhaust components.

Removing

1. Use the wheel nut wrench to slacken the wheel nuts half a turn anti-clockwise.
2. Turn the jack handle clockwise to raise the vehicle until the tire is clear of the ground.
3. Remove the wheel nuts and place to one side to prevent them from being lost.
4. Remove the road wheel.

NOTE: *Avoid placing wheels face down on the ground. This may scratch the alloy surface.*

Refitting

1. Before fitting a wheel, ensure that the mating faces of the hub and wheel are clean and free from rust or anti-seize compound - any accumulation of dirt or rust could cause the wheel nuts to become loose and result in an accident. Use an approved anti-seize compound to treat the wheel mounting spigot. This will minimise the tendency for adhesion between wheel and spigot. If this is not practicable at the time of the wheel change, refit the spare wheel for the time being, but remove and treat the wheel at the earliest opportunity. Esure that no compound comes into contact with brake components or the flat mounting surfaces of the wheel.
2. Fit the spare wheel and lightly tighten the wheel nuts (domed side towards the wheel) until the wheel is firmly seated against the hub.
3. Ensure that the space under and around the vehicle is free from obstructions, then lower the vehicle and remove the jack.
4. Fully tighten the wheel nuts in an alternating pattern until all are tightened. DO NOT OVERTIGHTEN by using foot pressure or extension bars on the wheel nut wrench, as this could overstress the wheel studs.
5. Refit the jacking point cover.
6. Fit the replaced wheel to the spare wheel carrier (see *'Refitting the spare wheel', page 182*).
7. Return the tools to the toolbox and secure the toolbox to its bracket in the lockable stowage box in the rear loadspace.

WARNING

Always check the tire pressure after changing a wheel, and have the tightness of the wheel nuts checked by a retailer as soon as possible!