



# **New Range Rover (PLA 405) Vehicle Handling Guide**

## **Supplement to the JLR Transport Quality Manual (TQM)**

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# Section 1 – Vehicle Handover

## Carrier / Dealer Handover Checks



The following Quality checks are required at vehicle handover...

- Check vin on Manifest, D42 Label (on windscreen) and VIN Plate matches
- Inspect vehicle and Check for damage (as per TQM chapter 7 & 8)
- Check vehicle protection is in place (see pages 6, 7 & 8)
- Check key stowage (x 2 Key fobs in Drivers' door pocket)
- Check wing mirrors are folded inboard
- Check windows and sunroof are closed

# Section 2 Personal Protective Equipment (PPE)

## Personal Protection Equipment (PPE) Checks



### Check Correct 'Car Friendly' Personal Protection Equipment is worn

- Personnel must wear clean working clothes at all times (no oil/grease stains)
- No buttons, exposed zips or belt buckles
- Wearing safety boots or shoes closed around the foot is obligatory. The shoes/boots must prevent from slipping
- Rings and other jewellery are not permitted, unless properly covered
- Do not carry in pockets sharp objects (pens, tools, etc...) that could accidentally damage the vehicles
- Working gloves must be worn when working on the truck, the wagon, the ship or the compound. However, they must be removed before entering the vehicle
- Wearing high visibility jackets or clothes with high visibility elements is compulsory in compounds. The use of safety helmets is subject to local laws, regulations or guidelines
- If safety helmets are used for operations, they must be removed before entering the vehicle.

## SINGLE POINT LESSON

**Topic:** Car User-Friendly Personal Protective Equipment (PPE)

**Who To:** All contractors who handle JLR product Globally

**Summary:** TQM (Transport Quality Manual) PPE Compliance for all JLR Outbound Distribution Contracted Personnel

Hi-Visibility, clean outerwear  
Car-friendly i.e no exposed buttons, zips or fastenings

No protruding,  
or sharp objects

Hi-Visibility  
trousers, or suitable  
workwear



Safety boots /  
shoes



Watches, rings etc  
must be covered if  
not removed

Belt buckle must be  
covered

Suitable workwear  
No denim jeans /  
trousers with  
exposed rivets, zips  
etc

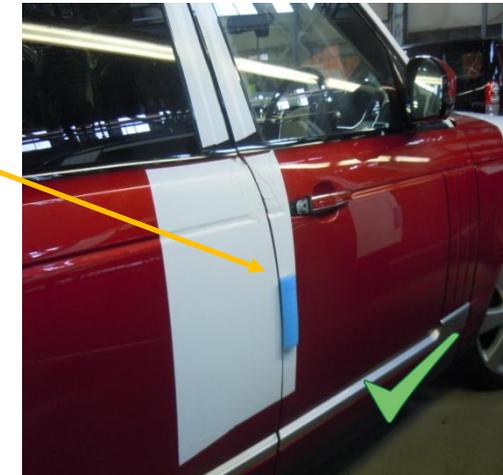
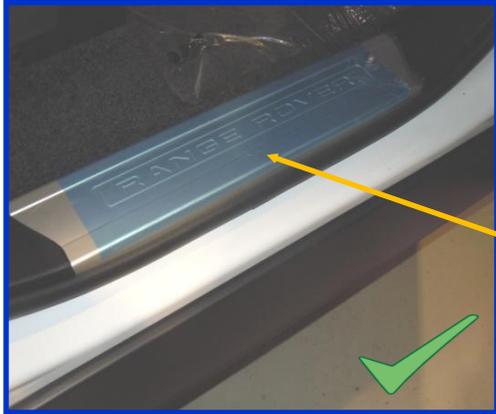
# Section 3

## Vehicle Protection Checks



**Check** vehicle has ALL protection in place at inspection / handover / collection once vehicle has been inspected for any damage.:

- Centre Console
- Tread plate protection
- Sill protection
- Drivers door protection Interior
- Drivers door protection Exterior
- Steering wheel protection
- Carpet protection
- Driver's seat protection



# Vehicle Protection Checks



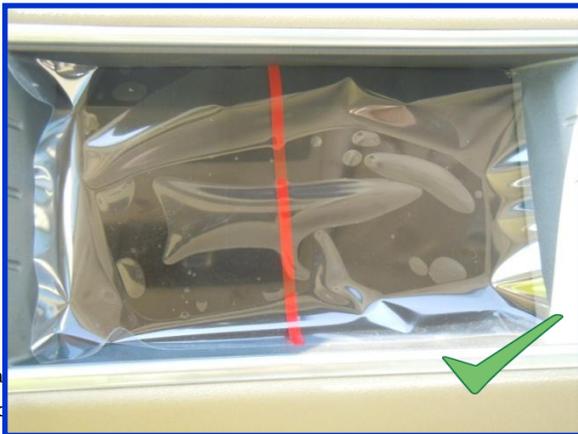
Key Stowage (2 keys bound together with short VIN)



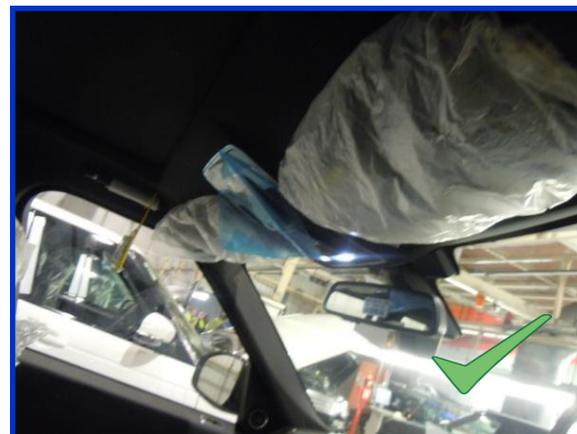
Keys stowed in drivers' door pocket



Cubby Box Lid



Sat Nav Protection



Drivers Sun Visor



PRNDL Selector

# Vehicle Protection Checks – Full Body Covers



**If a vehicle is fitted with a full body cover please check::**

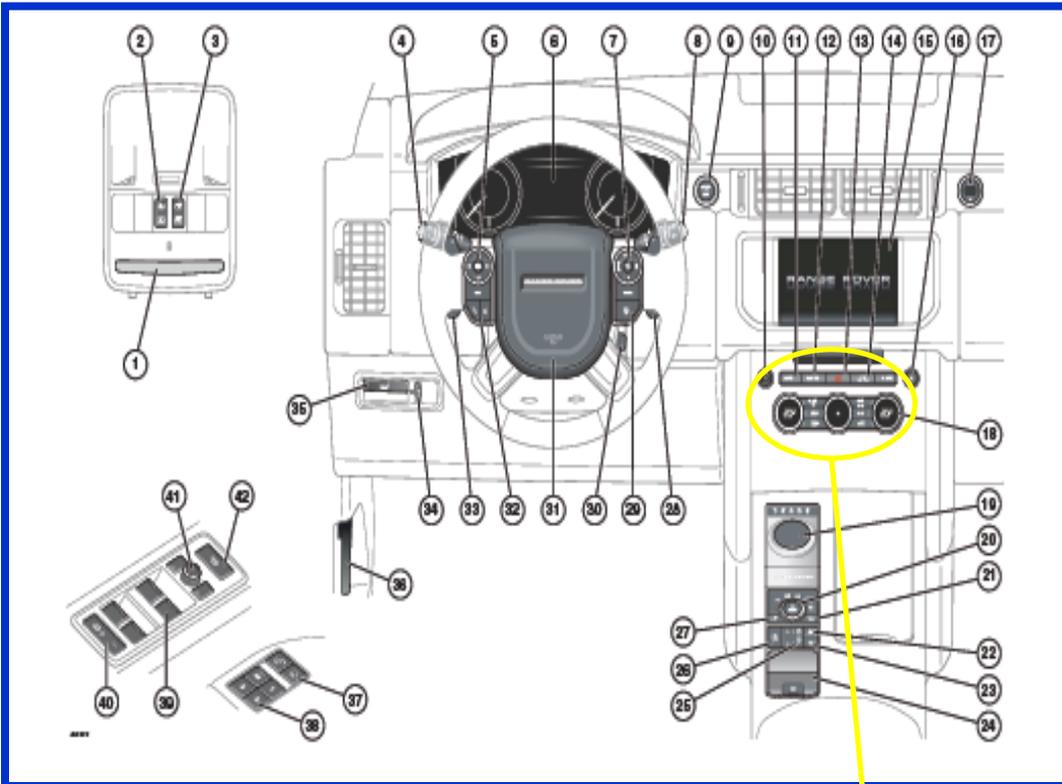
- Drivers door is rolled up and securely fastened whilst loading to vehicle



- Ensure that **the drivers door is fully zipped up** once loaded in location on transporter after getting out of vehicle.

# Section 4 Driver Controls

## Dashboard Overview



See Page 11 For Front  
and Rear Screen Defrost

### DRIVER CONTROLS

1. Front interior lamps (39).
2. Panoramic roof switch (42).
3. Roof blind switch (42).
4. High beam/direction indicator/trip computer switch (36/ 59).
5. Instrument panel menu control (58).
6. Instrument pack and Driver information centre (58).
7. Cruise control/Adaptive cruise control switches (107/ 108).
8. Wiper/washer controls (40).
9. START/STOP button (83).
10. Audio system control (123).
11. Front Climate control (65).
12. Climate controls on/off (65).
13. Hazard warning light switch.
14. Heated/climate seat (66).
15. Touch screen (61).
16. CD eject (123).
17. Upper/lower glovebox release (81).
18. Climate control (65).
19. Rotary gear selector (87).
20. Terrain response (117).
21. Low range transmission (89).
22. Automatic speed limiter (ASL), (122).
23. ECO stop/start (86).
24. Electric parking brake (95).
25. Air suspension control (92).
26. Stability control off switch (91).
27. Hill descent control (HDC) switch (120).
28. Up Gearshift paddle (87).
29. Heated steering wheel switch (23).
30. Steering column adjuster (23).
32. Voice recognition and telephone switches (147).
33. Down Gearshift paddle (87).
34. Interior lamps dimming control.
35. Tailgate release switch (7).
36. Bonnet release lever (180).
37. Central locking switches (13).
38. Driving position memory (16).
39. Window controls (42).
40. Rear windows isolation and child door locks (27).
41. Mirror adjuster/power fold mirror controls (44).
42. Access/height adjustment (93).

### Starting Procedure in Transit Mode

1. Press hazard switch.

Once the hazard switch has been pressed the main battery is active for approx. 20 seconds. During this time the vehicle can be started as follows:

2 Depress footbrake

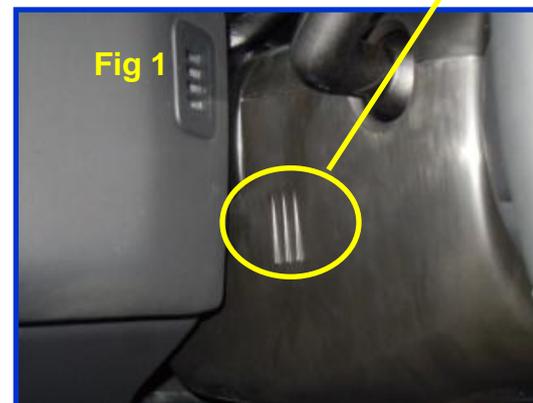
3 Press START / STOP button – fascia display will read “Smart Key Not Found”

4 Hold the smart key against the sensor on the side of steering column (marked with three lines figs 1 & 2 ) orientation as shown in fig 2 with silver strip facing towards rear of vehicle

5 With brake pedal depressed, press and release the START / STOP button.

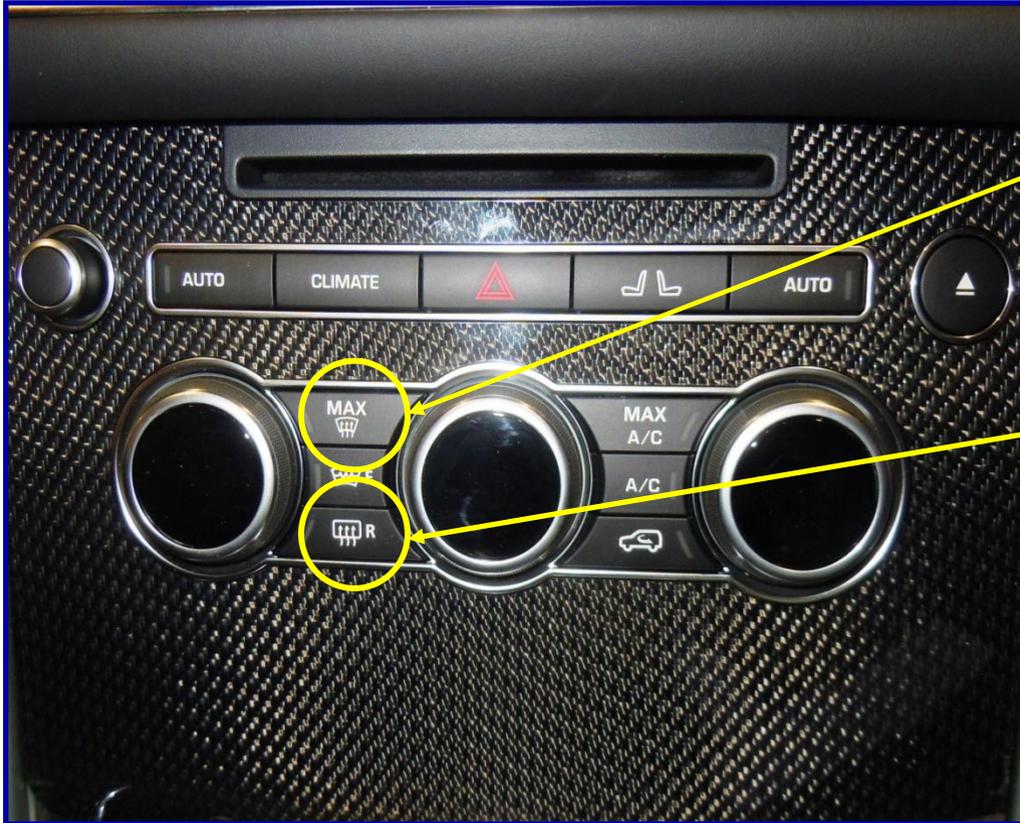
6 Press again to stop the engine.

**Should the vehicle not start, repeat the above process.**



# Driver Controls

## Front and Rear Screen Defrost



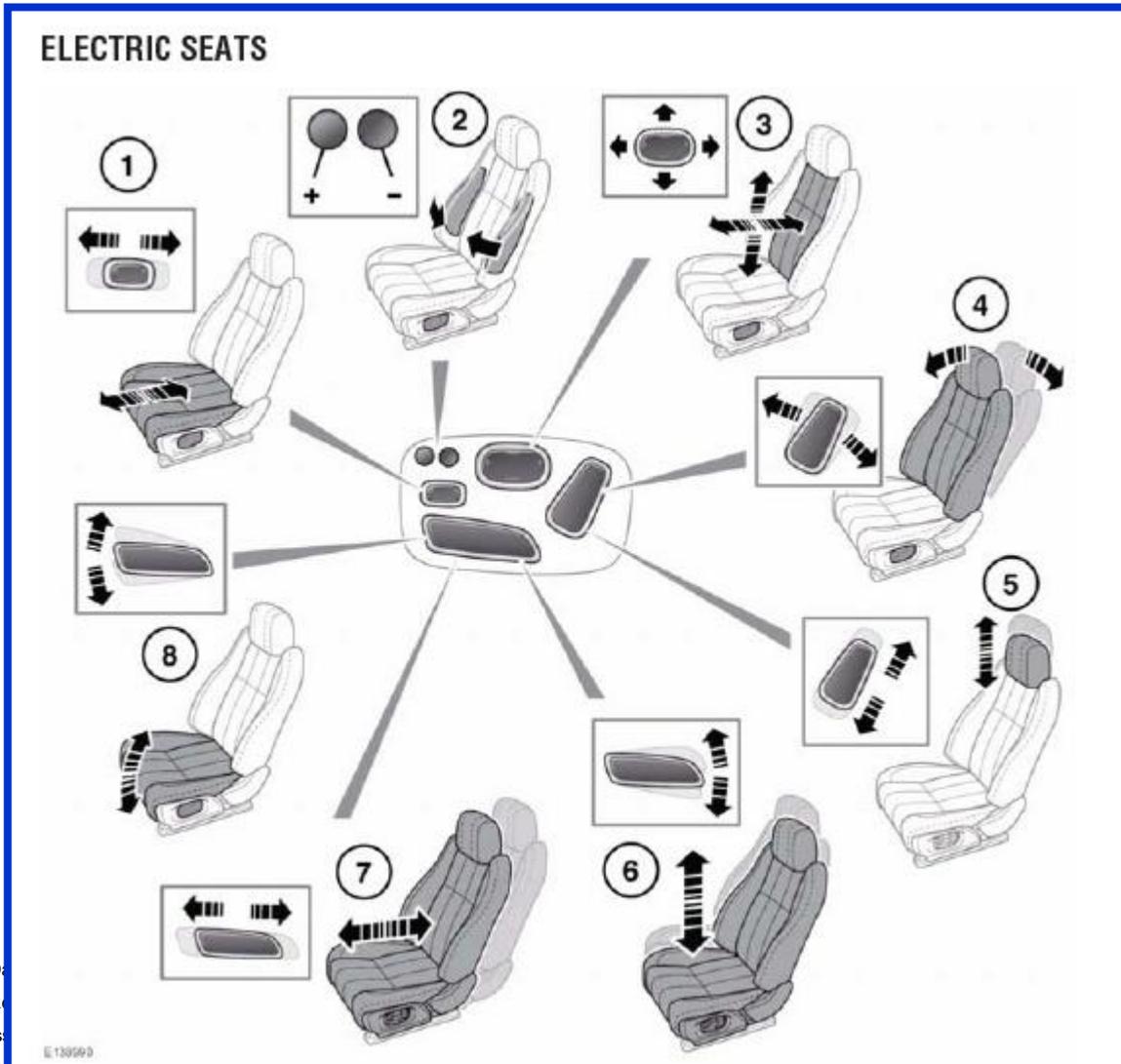
Rear screen heater: Press to switch on/off.

Max Defrost: Press to remove frost or heavy misting from the windscreen.

*This setting activates the blowers, air-conditioning, front and rear screen heaters and prohibits recirculation, to achieve a rapid defrost*

Rear screen heater: Press to switch on/off.

**Max Defrost must be used, as front screen heater is disabled in transit mode**



Do not adjust the seat while the vehicle is moving. Doing so could cause loss of vehicle control and personal injury.

1. Cushion length.
  2. Bolster inflate/deflate.
  3. Lumbar support.
  4. Seat back angle.
  5. Head restraint height.
  6. Seat height.
  7. Forward and rearward position.
  8. Cushion tilt.
- To adjust the seats, the Smart Key must be in the vehicle and the ignition switched on.

## Drive Selector (Automatic Gearbox)

Once vehicle is started, the Drive Selector will raise on the centre console. The Drive Selector can be operated using the below instructions

### Gearshift interlock

The brake pedal must be depressed before the selector can be moved from the **P** Park position. Maintain brake pressure until a gear is selected.

Select **P** before switching off the engine.

For fully automatic gear selection

Select “D” for forward gear changes

Select “R” for reverse.



**NB: Vehicle inhibitor restricts vehicle speed to 26mph whilst in transit mode**

## Parking Brake Application and Release

### *Parking Brake Release*

While the transit relay is installed, the parking brake will only release using the following procedure:

- 1 Switch the ignition on and wait 5 seconds.
- 2 Apply the foot brake and hold.
- 3 Lift the parking brake switch to apply.
- 4 Press the parking brake switch to release.



The red warning indicator in the instrument pack will illuminate when parking brake has been applied.

### **Releasing**

- With the ignition on, apply the foot brake and press down on the parking brake lever.
- If the vehicle is stationary with the parking brake applied and either **Drive** or **Reverse** selected, pressing the accelerator will automatically release the parking brake.



**Some controls are optional and therefore will not be present in all vehicles.**

**Vehicles will have limited functionality whilst in transport mode.**

**Functions Disabled When Vehicle is in Transit Mode Include:**

- **Passive entry / Passive Start**
- **Front Electric Heated screen (use max defrost)**
- **Heated Seats / Park Heat**
- **Infotainment**
- **Alarm functions**

**For Information:**

- **Doors and Tailgate locked down (except drivers door)**
- **Speed limited to 26mph / 42kph**

# Driver Controls - PLA 405 Loading Configuration



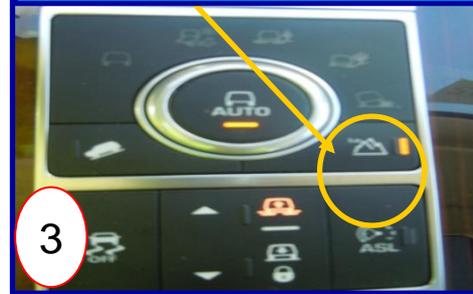
Once Vehicle is Started the Drive Select will rise in "P"



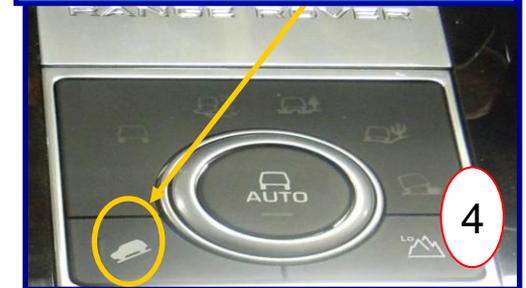
Select "N", and apply electronic park brake (inset)



Select Low Range (button will illuminate)



Select Hill Descent Control HDC (button does not illuminate)



Check that HDC and Low Range icons are lit on display



Note: On some variants, Hill Descent is automatically selected when Low Range is selected.

*If Hill Descent does not automatically engage, use the button highlighted in fig 4 and check that HDC is highlighted on dashboard*

Select "S" (push down to move through "D")



Select S1 (using L/H paddle on steering wheel)



Check that S1, Hill Descent and Low Range indicators are lit on display



Release EPB (Electronic Park Brake)



# Section 5 Road Transport

## Care Points



Vehicle must be loaded / unloaded at crawl speed, in a slow and controlled manner (5mph max.)





Care is required when loading through areas of transporters with restricted width.

Care required whilst loading vehicles check when required during loading to prevent damage.



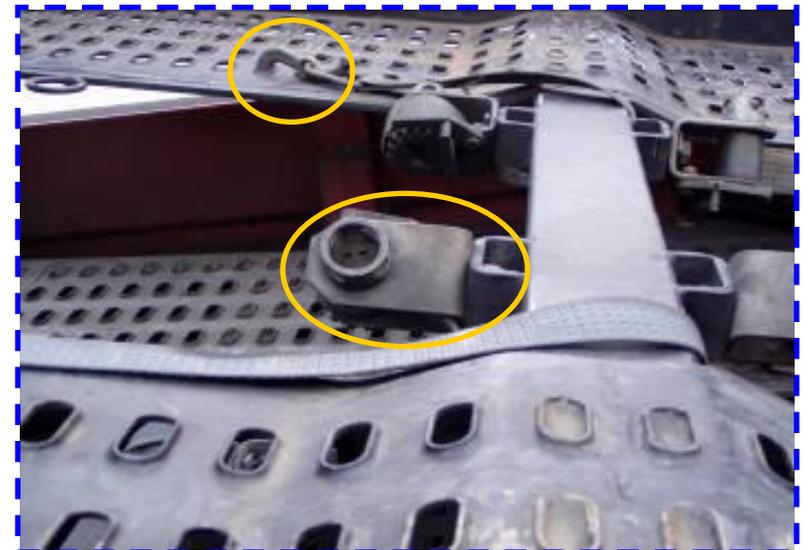
# Road Transport

## Loading Care Points



Ensure ramps and skids are fully extended and do not exceed 8 degrees.

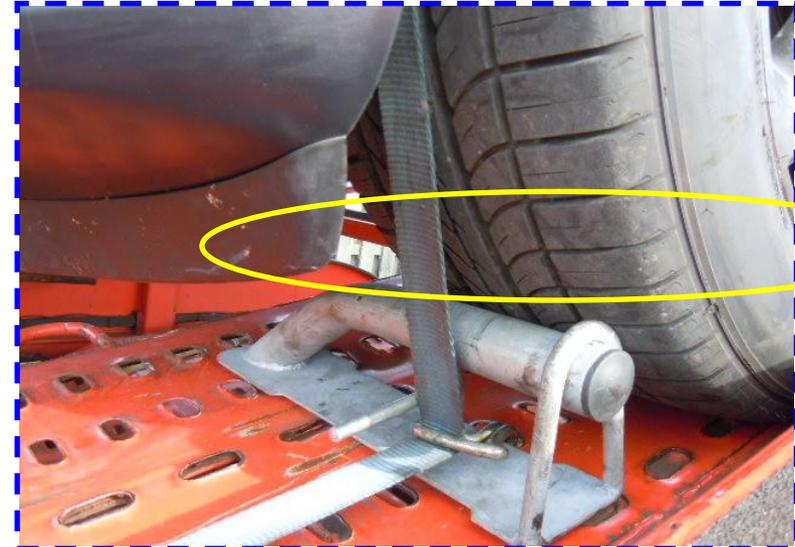
Ensure decks of transporters are free from obstructions i.e. lashing straps, winches and hooks.





Care required whilst entering and exiting vehicles i.e. door contact on transporter beams and pillars.

Over-wheel lashing only, and chocks are used to secure vehicle in position.



# Section 6 – Vessel Transport

## Loading and Unloading



Care required when loading and unloading onto the vessel and decks. Vehicle must be loaded / unloaded at crawl speed, in a slow and controlled manner (5mph max.)



# Vessel Transport

## Lashing – Stem to Stern Stowage



If PLA 405 is stowed stem to stern,  
each vehicle should have  
**2 lashings** at the front and two  
at the back.



# Vessel Transport

## Lashing – Traverse and Ramp Stowage



Front



Front

If stowed transversely or on a ramp, each vehicle should have **3 lashings** plus wheel chocks at the front and the back.

**LASHING THROUGH ALLOY WHEELS IS NOT ALLOWED**



Rear



Rear

# Vessel Transport

## Lashing - with Electrically Deployable Tow bar (EDT)



If PLA 405 has an EDT, the rear lashing straps will have to be attached to a lashing eye (fitted at manufacturing plant), as there is no integral rear lashing point when EDT is fitted

# Section 7 - Containerisation

## Container Loading

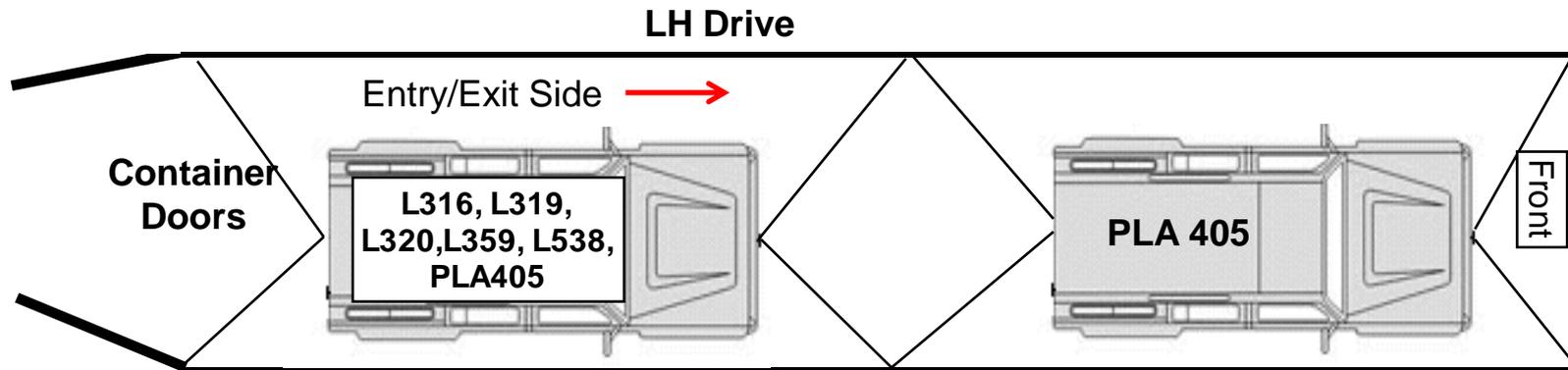


- Vehicles need to be loaded / unloaded in a controlled, slow manner (5mph max)
- Vehicles must be free of bird liming / contamination
- Vehicles to be loaded into position using 2 people. One driver and one marshal.
- Prior to exiting the vehicle all lashing in angles need to be checked for clearance, by the marshal (this is a quality risk especially for ETO Spec Vehicles)
- Loading configurations to be determined as per loading schematics on pages 21 to 24
- Vehicles to be lashed in and secured as per process detailed in this handling guide & TQM (Chapter 6)
- Once loaded into position Keys to be placed in an envelope and secured underneath drivers' windscreen wiper, this will permit access to vehicle upon delivery and prevent keys being locked in vehicles.
- Drivers' window must be left opened by 1 inch / 25mm for ventilation during transport.
- Care required getting in and out of the vehicle once in container due to vehicle width and door opening restrictions.

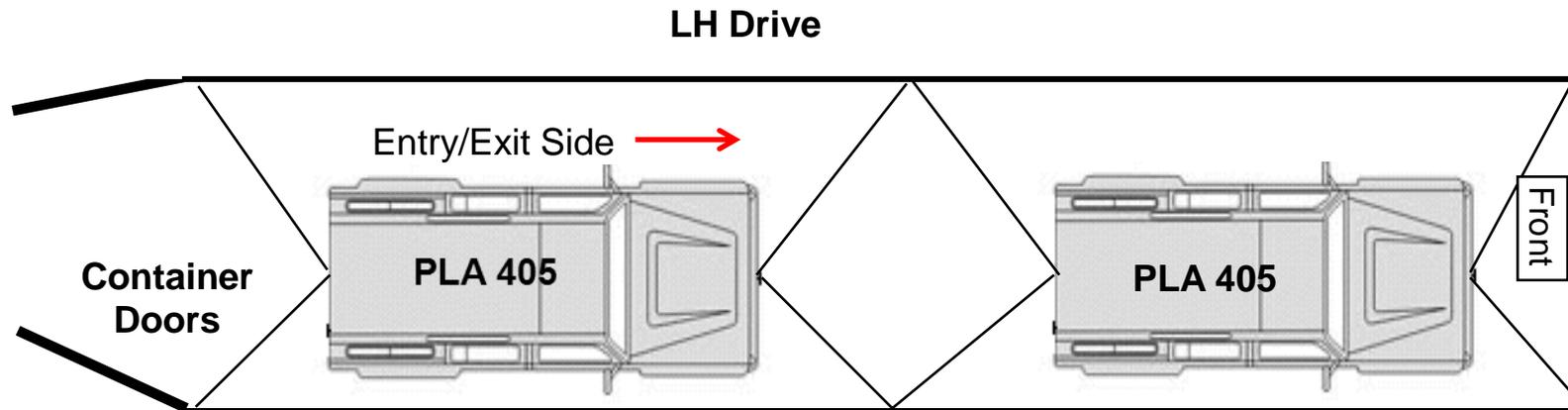
# Container Loading Planning



## LH Drive Vehicles > LOADING SCHEMATICS



Both vehicles loaded in forward direction



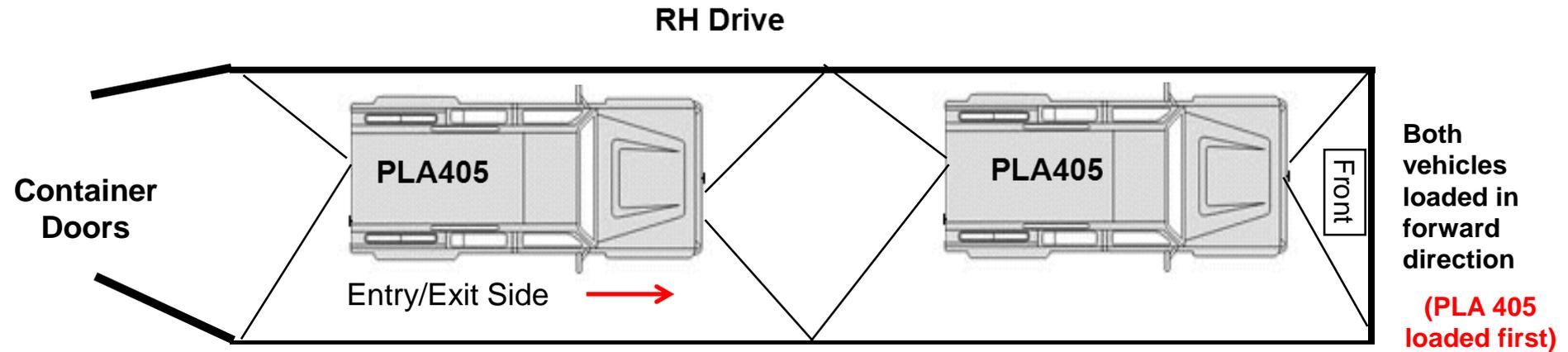
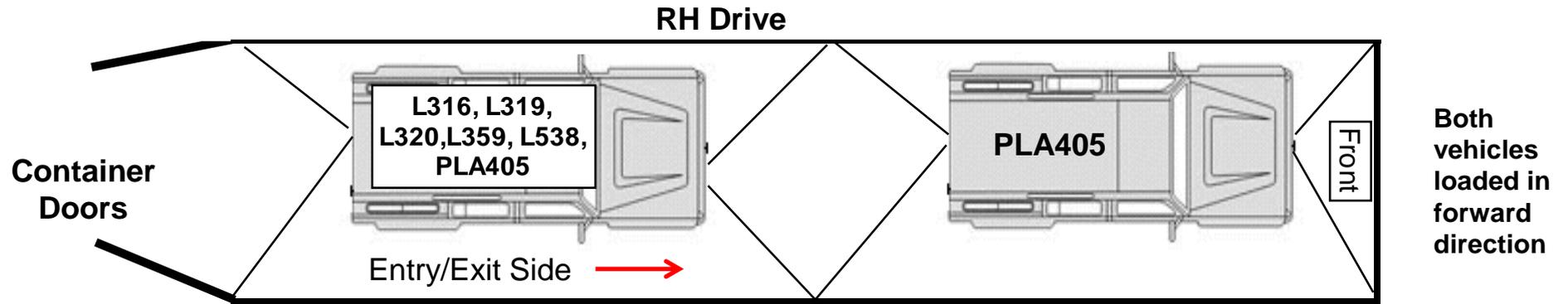
Both vehicles loaded in forward direction

**(PLA405 loaded first)**

# Container Loading Planning



## RH Drive Vehicles > LOADING SCHEMATICS

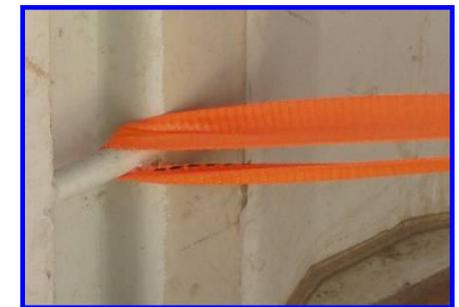
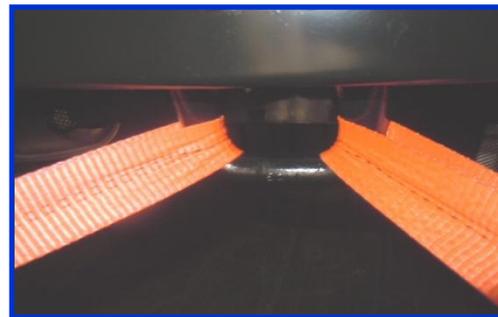


# Container Loading



Vehicles Must be loaded with a 2 man team (1 x marshal & 1 x driver), under the supervision and guidance of the loading Marshal

Once Vehicle is in position prior to the driver getting out of the vehicle the marshal needs to ensure adequate clearance angles are checked so that lashing in straps will clear the bumper when attached to tow eye and pulled back to container tie in location. This needs to be done prior to lashing vehicle down fully.



**Lashing strap needs to be clear  
not making contact with bumper**

# Container Loading



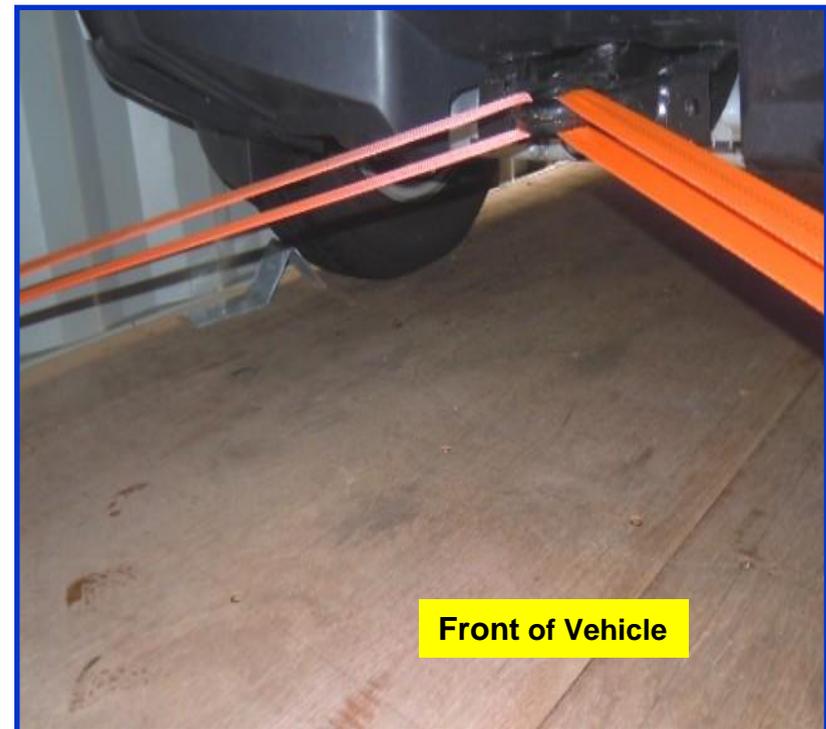
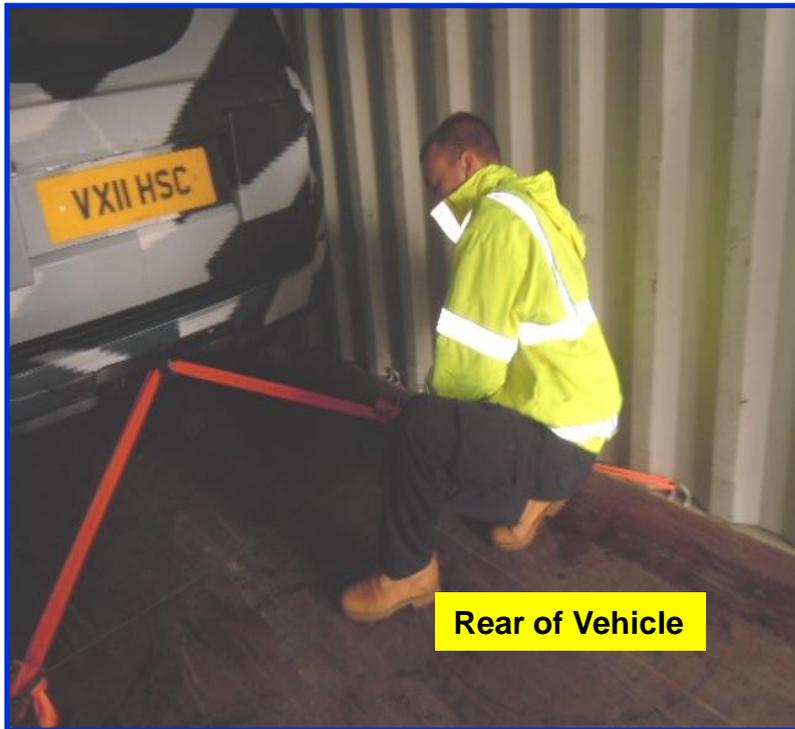
PLA 405 is the widest of all JLR product

Care required when getting in and out of the vehicle as space is extremely limited

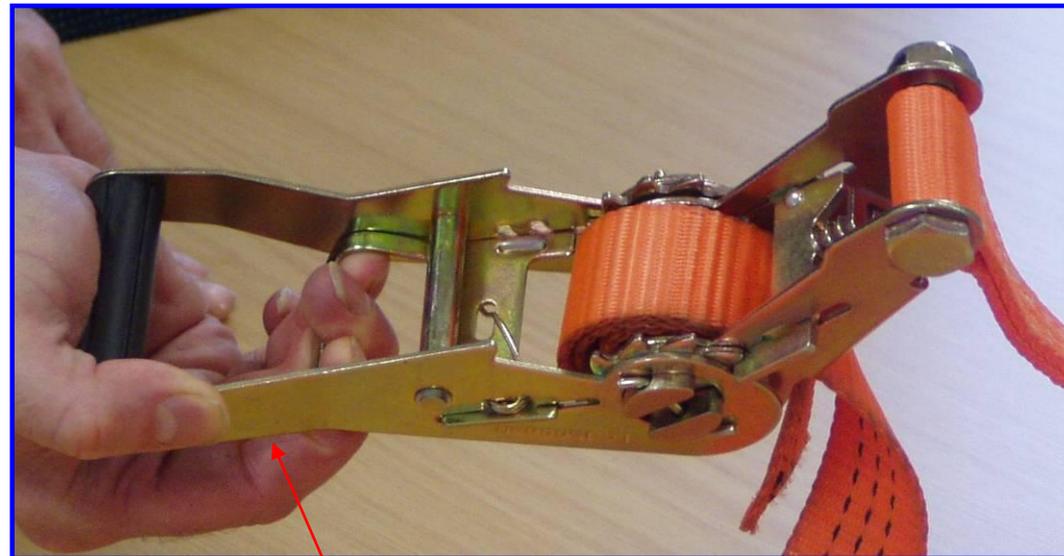
**Extreme care is required when loading /unloading Containers due to space constraints**

**The use of a small step may assist getting in and out of the vehicle**

# Container Loading



- Inspect Vehicles for damage once container door is opened
- Document and photo any damage found as per TQM process
- Unload the Vehicle as detailed in TQM Chapter 6.6

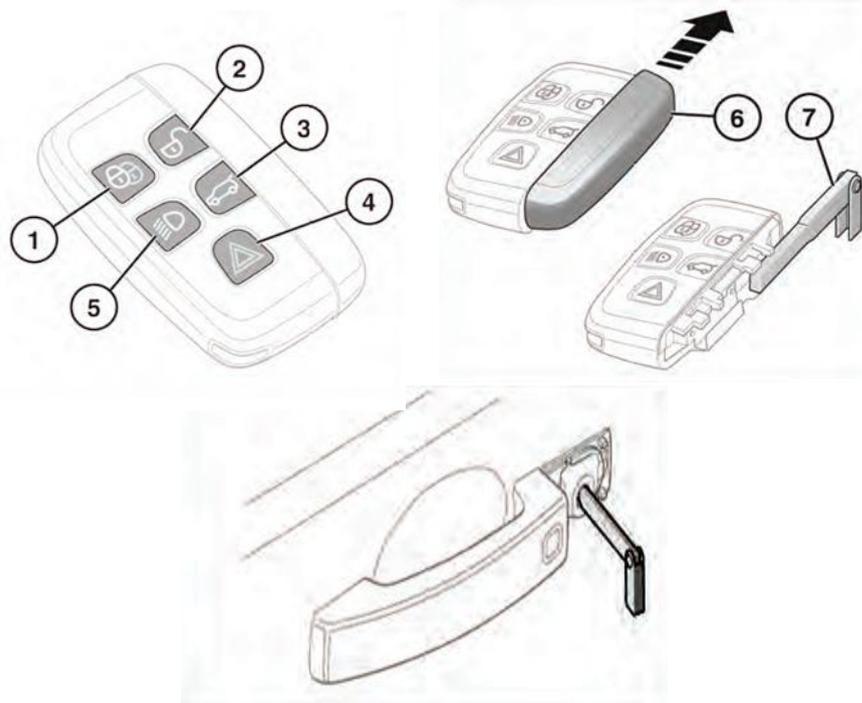


To release tension from lashing in straps pull on tension release mechanism as shown

# Section 7 – Appendix (i)



## Key Fob - Opening and Locking the Vehicle



- 1.Lock
- 2.Unlock
3. Tailgate Release
4. Panic Alarm
5. Approach Lighting
6. Emergency Key Access
7. Remove blade

### Locking the Vehicle

Once engine / ignition is turned off, vehicle can be locked with key fob (key fob must be outside the vehicle) within approx. 15 - 20 seconds.

### Unlocking the Vehicle

When there is no power to the vehicle, the key blade is required to gain access.

Remove the blade as indicated. On the **DRIVERS DOOR** insert the blade and turn towards the rear of the vehicle.

Upon entry the battery can be activated by pressing the hazard switch. Keys should be stowed in driver's door pocket as per TQM

### Caution

If the vehicle security system is armed, only the front left hand door will unlock. The alarm will sound when the door is opened. Press the unlock button on the Smart Key to disarm the alarm or press the START/STOP button.

# Appendix (ii)

## PLA 405 Weights and Dimensions



### PLA 405 Short Wheel Base

	Length	Width ( Mirrors Folded)	Track (Max)			Foot Print	Cube	Weight	Approach Angle	Departure Angle
			Front	Rear	Height					
V6 Diesel	4998	2073	1690	1683	1827	10.36	18.92	2340	31	31
V8 Diesel	4998	2073	1690	1683	1827	10.36	18.92	2521	31	31
V8 Petrol	4998	2073	1690	1683	1827	10.36	18.92	2353	31	31
V8 PetroL S/C	4998	2073	1690	1683	1827	10.36	18.92	2497	31	31

Compared to L322, the PLA405 is 48mm longer, 29mm wider, 75mm shorter. Weight is approx 200kg less on average

***N.B. Roof rails will be dealer-fit only***

## Replacing Battery

### BATTERY WARNING SYMBOLS



Do not allow naked flames or other sources of ignition near the battery, as the battery may emit explosive gases.



Ensure that when working near or handling the battery, suitable eye protection is worn, to protect the eyes from acid splashes.



To prevent risk of injury, do not allow children near the battery.



Be aware that the battery may emit explosive gases.



The battery contains acid which is extremely corrosive and toxic.



Consult the handbook for information, before handling the battery.

### REMOVING THE VEHICLE BATTERY



Switch the ignition off before disconnecting battery terminals. Always disconnect the negative terminal first and reconnect last.



Remove all metal jewellery before working on, or near, the battery, and never allow metal objects or vehicle components to come into contact with the battery terminals. Metal objects can cause sparks, and/or short circuits, resulting in an explosion.



Do not allow the battery posts or terminals to come into contact with your skin. They contain lead, and lead compounds which are toxic. Always wash your hands thoroughly after handling the battery.



Always disconnect the negative terminal first and reconnect last.



Use caution when lifting the battery out of, or into, the vehicle. It is heavy, and may cause injury when lifting, or if dropped.



Do not tip the battery when lifting or moving as tilting the battery more than 45 degrees may damage the battery, and may cause the electrolyte to leak out. Battery electrolyte is highly corrosive, and toxic.



The vent pipe must be in place at all times when the battery is connected to the vehicle. Ensure that the vent pipe is clear of obstructions and not kinked. Failure to do so may cause a pressure build up in the battery, resulting in an explosion.



Do not rest the battery on any part of the vehicle as it may cause damage due to its weight.

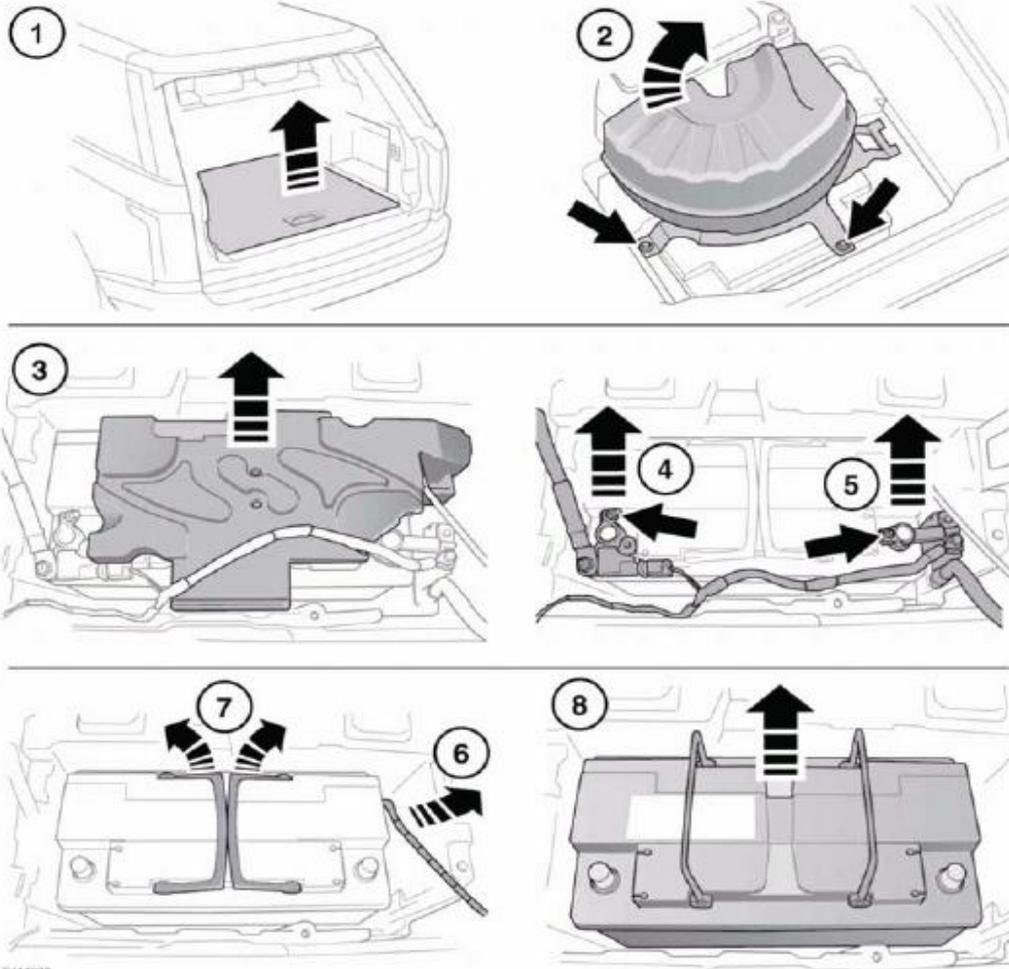


Do not run the engine with the battery disconnected. Doing so may damage the charging system.

*Note: Ensure that all electrical circuits are switched off, all windows are closed, and the alarm is disarmed.*

*Note: Remove the smart key from the vehicle and wait two minutes to allow the systems to power down fully*

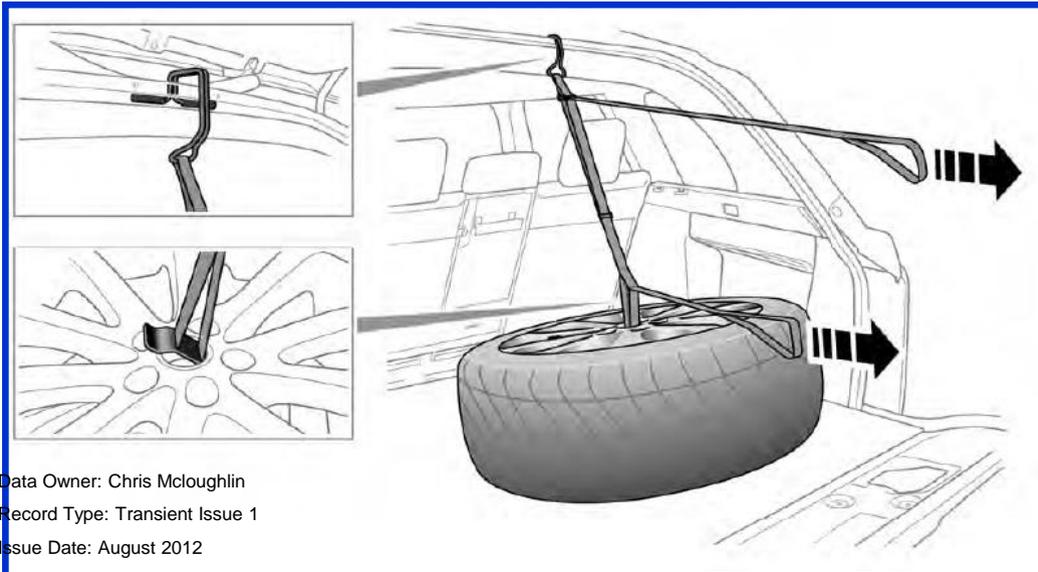
# Replacing Battery - Removal



1. Remove the loadspace floor panel. Fig 1
2. Remove the spare wheel. See **REMOVING THE SPARE WHEEL.** Page 36
3. Remove the two bolts. Lift the left hand side of the compressor mounting plate and raise to the vertical position. Fig 2
4. Remove the insulation panel. Fig 3
5. Undo the negative clamp nut. Lift the cable and clamp clear of the battery terminal. Fig 4
6. Undo the positive clamp nut. Lift the cable and clamp clear of the battery terminal. Fig 5
7. Pull the breather pipe to release. Fig 6
8. Lift out the battery using the handles. Figs 7,8

- If the vehicle has a flat battery and needs to be replaced, the following procedures should be followed if no other specialist equipment available. (Please ensure that normal starting procedures have been attempted at least twice prior to carrying out any battery removal/exchange.) The vehicle will have to be **removed** from transit mode to allow the tailgate to be opened from its lockdown condition. If no specialist equipment available, due to the weight of the spare wheel, a lifting aid is supplied in the load-space of the vehicle, to assist with the removal of the spare wheel to access the battery

## Removing the Spare Wheel



- Remove the loadspace floor panel fig
- Remove spare wheel retaining bolt
- Remove the vehicle jack and the spare wheel assist tool
- Attach the assist tool
  - Pull the upper strap to lift up the spare wheel
  - Pull the lower strap to carefully place the spare wheel on the tailgate
- Remove the tool and carefully lift the spare wheel from the vehicle
- Once battery is replaced carefully refit all items (Reverse Order)



## PLA 405 Automatic Transmission Removal From Park

- *When should this process be used?*

The process should be used to release the transmission from Park to allow vehicle recovery when normal methods are unavailable due to engine, power supply or transmission failure. Risk assessment for any Health & Safety risks/hazards should be carried out prior to using this process. It is recommended that this process is carried out by trained professional recovery operatives.

- *What should I try before starting this process?*

Try to enter transmission service mode. This is attempted by turning the ignition on then keeping the brake pedal and the upshift paddle held for over 10 seconds. The selector should rise and allow N to be selected by moving the selector out of the P position.

- **Caution:** *Mandatory precautions needed before using this process*

The vehicle should be secured so that when moving the transmission out of park it will not move. The parking brake should be in the applied position or wheel chocks used. The engine should not be running.

# Emergency Park Release (EPR)



**Slide back cup-holder cover**



**Release catch on red lever**



**Pull lever forward then back and upwards to open position**



**Vehicle is moved from Park to Neutral**

## Restoring Vehicle to Normal Condition

- Components should be refitted in reverse order.
- The vehicle should be secured by the parking brake or other method when refitting the components. The engine should not be running.

### Methods of releasing the EPB when in stuck applied

Vehicle EPB is fully electronic (No cables) therefore alternative manual release process needs to be followed if preferred option 1 not possible.

Risk assessment for any Health & Safety risks/hazards should be carried out prior to using this process.

It is recommended that this process is carried out by trained professional recovery operatives.

**Option 1 IDS (Diagnostic System)** laptop puts vehicle into maintenance/service mode.

- EPB can be taken off via SAT nav screen inside the vehicle. (Vehicle Must have electric power) Go to Menu/Brake/Handbrake/EPB Release
- Once done apply footbrake to re calibrate.

**Option 2 Manual Release for EPB on Rear Calliper**

- Remove x 2 bolts from actuator housing (Torx T30 fastenings)
- Remove the actuator and the O- ring set
- Insert Allen key and turn anticlockwise to wind release brake from pad.

# Emergency Park Brake (EPB) Release

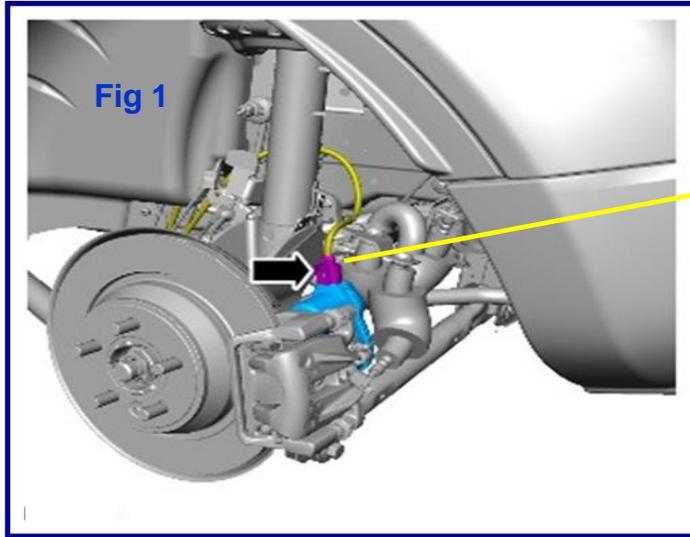


Fig 1

Disconnect the battery ground cable

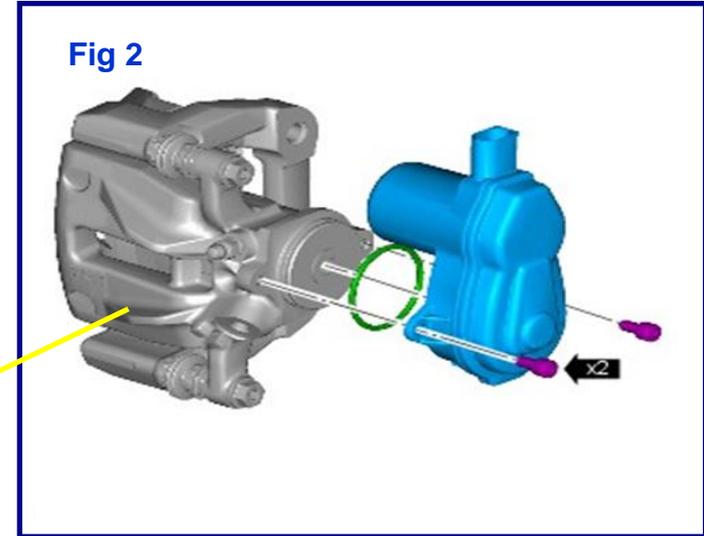
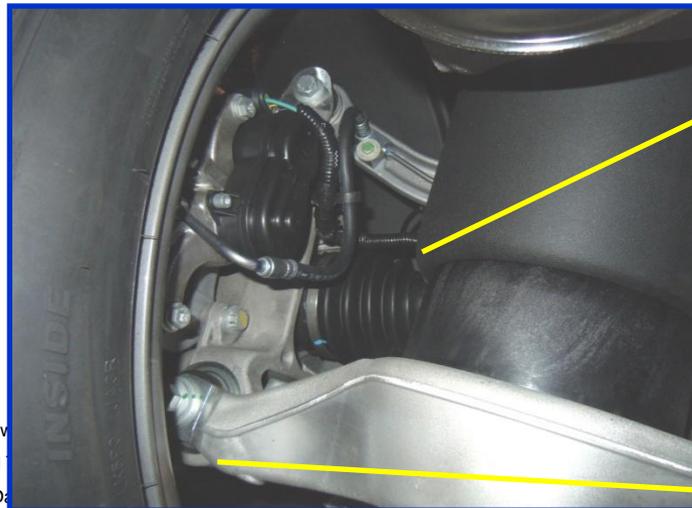
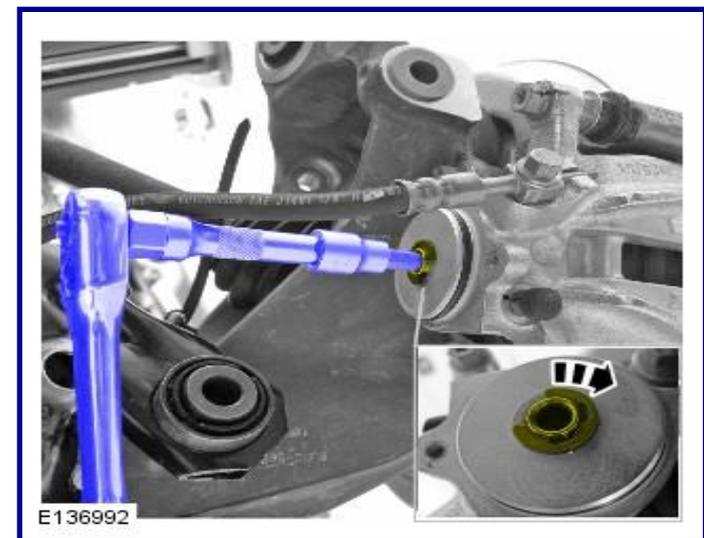


Fig 2



Manual release. This involves removing the electric motor / actuator (2 Torx T30 screws figs 1 & 2) and O-ring set, and winding back the piston manually, using an Allen key.

Rear Wheel



E136992

### Minimum Re-Fuelling Level

If the vehicle does run out of fuel, a minimum of 9 litres will be required to prime the system in order to restart the engine. (Vehicle receives 22 litres of diesel / 25 Litres of petrol at manufacturing fueling point. This should suffice for outbound distribution, however if emergency re-fuelling is required please ensure a minimum of 9 litres is added and correct fuel type is used.

**Note:** The filler flap will only be locked **closed** when the vehicle is centrally locked.

### DIESEL MISFUELLING PROTECTION DEVICE

When the mis-fuelling device is activated, it may cause fuel to be discharged from the filler neck.

**Note:** It is the driver's responsibility to fill the vehicle with the correct fuel. The diesel mis-fuelling protection device only reduces the risk of filling the vehicle with the incorrect fuel

The filler spout on some fuel cans and older fuel pumps may trigger the mis-fuelling device. which will need resetting before further fuel can be put into vehicle

### FUEL FILLER FLAP



Take note of all warnings and instructions given on the label affixed to the inside of the filler flap.

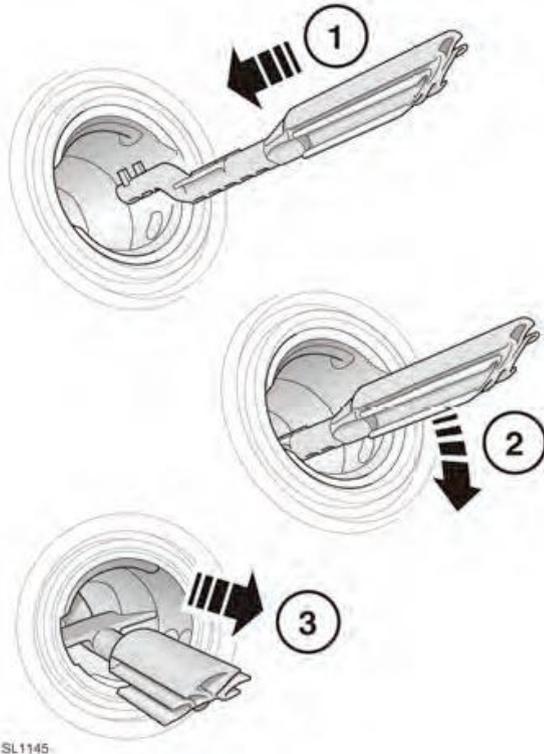
The fuel filler flap is located on the right side of the vehicle, at the rear.

1. Ensure that the vehicle is fully unlocked and press the left side of the flap to unlatch it.
2. Open the flap fully.
3. Twist the cap counter-clockwise to release.
4. Use the retaining clip to keep the filler cap out of the way while fuelling.
5. After refuelling, tighten the cap until it clicks 3 times. Close the filler flap and push until it is latched shut.

# Re-Fuelling



The reset tool is located in the luggage compartment.



Reset the mis-fuel protection device as follows:

1. Insert the reset tool with the teeth uppermost, as far as it will go into the filler neck.
2. Locate the teeth by pushing down the top of the reset tool.
3. With the top of the tool pressed down and the teeth engaged, slowly pull the tool out of the filler neck to reset the device.

Do not twist the device, once the teeth have engaged.

**Note:** The yellow part of the protection device should no longer be visible in the filler neck.

Return the reset tool to the luggage compartment

## FUEL SPECIFICATION

Diesel vehicles in Algeria, Egypt, Libya, Morocco, India, Pakistan and Tunisia must only use premium diesel fuel.

Petrol	Diesel
91-98 RON	EN 590