#### WINDSCREEN WIPERS

#### CAUTIONS

- Do not operate the wipers on a dry screen. The drag on the wiper mechanism may cause damage.
- Before operating in freezing or very hot conditions, ensure that the wipers have not stuck to the glass. The drag on the wiper mechanism may cause damage.

Remove any snow, ice or frost, from the screen, around the wiper arms, the

wiper blades and from the screen scuttle before operating the wipers. Snow and ice can cause damage to the wiper mechanism if left unclear.

**Note:** If the wiper blades do become stuck, or jammed, an electronic cut out may temporarily halt their operation. If this happens, switch off the wipers and the ignition. Clear any obstructions and free the wiper blades before attempting to switch on the ignition

The wipers and washers will only operate when the starter switch is turned to position  ${\bf I}$  or  ${\bf II}.$ 



E91447

- 1. Rain sensor or intermittent variable delay
- 2. Normal speed wipe
- 3. Fast speed wipe
- Pull the lever down and release immediately. With the lever held down, the wipers will operate at fast speed until the lever is released.

#### Intermittent variable delay



With the lever in position **1**, rotate the collar clockwise to decrease the interval between wipes. Rotate the collar counterclockwise to increase the interval between wipes.

## Speed dependent mode

When speed dependent mode is configured, the operation of all wiper modes will be affected by the vehicle's speed.

If the vehicle's speed drops below 8 km/h (5 mph) with the wipers operating, the wipers will switch to the next lowest speed. When the vehicle's speed increases to over 8 km/h (5 mph), the original wiper speed setting is restored.



This feature can be enabled or disabled by a Land Rover Dealer/Authorised Repairer.

# Speed dependent intermittent mode

The frequency of intermittent variable delay is adjusted automatically according to road speed on vehicles not equipped with a rain sensor.

The intermittent period can be adjusted for each of the speed dependent modes by rotating the collar clockwise or counterclockwise.



This feature can be enabled or disabled by a Land Rover Dealer/Authorised Repairer.

# **RAIN SENSOR**

## Rain sensor variable delay

#### CAUTION

Ensure that the wipers are switched off before entering an automatic car wash. If the rain sensitive wipers operate during the car washing process damage may occur to the wiper mechanism.



With the wiper switch in position **1**, wiper operation is adjusted automatically according to information supplied by the rain sensor.

Rotate the collar clockwise to increase or counterclockwise to decrease the sensitivity of the rain sensor, and therefore the frequency of wiper operation.

## WINDSCREEN WASHERS

#### WARNING



If the vehicle operates in temperatures below 41°F (5°C), use washer fluid with antifreeze protection. In cold weather, failure to use washer fluid with antifreeze protection could result in impaired vision and increase the risk of an accident.



Some screen wash products are flammable: do not allow screen wash to come into contact with sources of

ignition.

#### CAUTION

Only screen wash products which are  $( \mathbf{!} )$ approved for automotive use should be used and then only in accordance with the manufacturer's instructions.



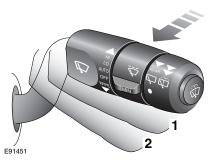
E91450

Push the button to operate the windscreen washer. The front wipers will operate if the button is pressed for more than half a second. When the button is released, the wipers will complete two further strokes before parking automatically.

If the button is pressed for less than half a second, only the washer will operate.

**Note:** National or local regulations may restrict the use of Volatile Organic Compounds (VOCs), which are commonly used as antifreeze agents in washer fluid. A washer fluid with limited VOC content should be used only if it provides adequate freeze resistance for all climates in which the vehicle will be operated.

## **REAR WINDOW WIPER AND** WASHERS



# Wiper - intermittent operation

Pull the lever to position **1**. The intermittent delay period will vary according to the delay switch setting.

## Wiper - continuous operation

The rear wiper can be configured to operate continuously.



This setting can be configured by a Land Rover Dealer/Authorised Repairer.

## Washer

Pull the lever to position 2 and hold it. The wiper and washer will operate until the lever is released. When the lever is released, the washer will stop and the wiper will complete a further two wipe cycles and then return to intermittent operation.

## Reversing

If reverse gear is selected while the front wipers are operating, the rear wiper will operate automatically.

## Tailgate open disable

If the tailgate is opened while the rear wiper is operating, the wiper will:

- Stop immediately.
- Not start to move if it is already stationary.

If the tailgate is then closed, the wiper will start after three seconds.

If the tailgate is open and the vehicle's speed is above 3 km/h (2 mph), then the wiper will operate normally.

# **HEADLAMP WASHERS**

If the headlamps are on, operating the screen washer will also power wash the headlamps.

**Note:** If the fluid level sensor detects a low level, the headlamp power wash is inhibited.

## ADJUSTING THE WINDSCREEN WASHER JETS

#### WARNING

Do not operate the washer jets during adjustment. Washer fluid may cause irritation to the eyes and skin.



Always read and observe the washer fluid manufacturer's instructions.

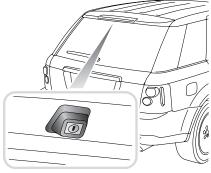
## Front washer jets



E80473

The windshield washer jets are set during manufacture and should not need adjusting. However, if adjustment is ever necessary, insert a needle into the jet orifice and lever it gently to position each jet, so that the spray is directed towards the centre of the windshield.

## Rear washer jets



E90904

Should any jet become obstructed, insert a needle or thin strand of wire into the orifice to clear the blockage.

# CHECKING THE WIPER BLADES

#### CAUTION

Only use cleaning products which have (! been approved for use on automotive glass and rubber. Inappropriate products may cause damage.



E80573

The wiping edge of the blades should be cleaned periodically. Clean the blade edge by

wiping with a soft cloth or sponge, using warm soapy water.

Also, check the blade rubber for cracks, splits and roughness. If any damage is found, replace the blade immediately to prevent damage to the glass.

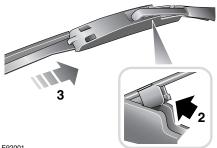
# CHANGING THE WIPER BLADES

#### CAUTION

Only fit correct length and type of wiper blade. Failure to do so may cause damage to the wiper system; it may also affect the operation of the rain sensor.

## Front

**1.** Lift the wiper arm away from the screen and pivot the blade assembly away from the arm.



E92001

- 2. Press the tab, to release the blade assembly.
- 3. Slide the blade assembly off the end of the wiper arm.
- 4. Carefully replace the arm to its stowed position.



5. To replace, position the wiper arm into the aperture in the middle of the blade assembly and push firmly into position until the blade clips into place.

#### Rear

1. Lift the wiper arm away from the rear window.



- 2. Press the tab, to release the blade assembly.
- **3.** Slide the blade assembly off the end of the wiper arm.
- 4. Carefully replace the arm to its stowed position.



5. To replace, position the blade assembly onto the inside of the wiper arm and push firmly into position until the blade clips into place.