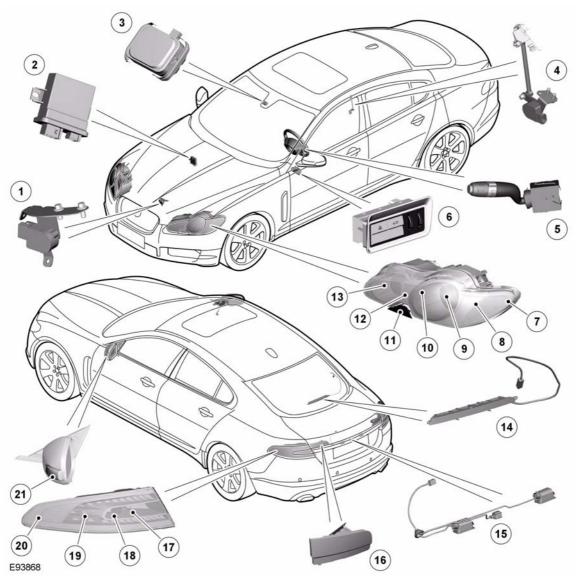
# **Exterior Lighting**

#### **COMPONENT LOCATION**



- 1 Front height sensor
- 2 Headlamp leveling module
- 3 Rain/light sensor
- 4 Rear height sensor
- 5 Light switch Left-hand (LH) steering column multifunction switch
- 6 Auxiliary lighting switch
- 7 Side marker lamp (NAS only) (2 off)
- 8 Front turn signal indicator (2 off)
- 9 Halogen or xenon headlamp projector module (2 off)
- 10 Cornering/Static bending lamp (where fitted) (2 off)
- 11 Headlamp telescopic power washer (2 off)

- 12 Front side lamp (2 off)
- 13 High beam only halogen lamp (2 off)
- 14 High Mounted Stop Lamp (HMSL) Light emitting diode (LED)'s
- 15 License plate lamps (2 off)
- 16 Rear fog lamp (2 off)
- 17 Rear turn signal indicator (2 off)
- 18 Reverse lamp (2 off)
- 19 Side lamp/stop lamp Light emitting diode (LED)'s (2 off)
- 20 Side marker Light emitting diode (LED)'s (All markets) (2 off)
- 21 Side repeater lamp (2 off)

#### **OVERVIEW**

The lighting systems are controlled by the Engine junction box (EJB), Rear junction box (RJB) and the Central junction box (CJB). The two boxes contain fuses, relays and microprocessors to control the power supply and functionality of the lighting systems.

Driver lighting selections using the Left-hand (LH) steering column multifunction switch or the auxiliary lighting switch are passed to the Central junction box (CJB) via the instrument cluster.

The lighting system has an 'auto' lights function which is controlled by the Central junction box (CJB) on receipt of signals from the rain/light sensor located at the top of the windscreen. The exterior lights are turned on or off in response to ambient light signals from the rain/light sensor on a Local interconnect network (LIN) bus connection to the Central junction box (CJB). The auto lights can also be activated when the windshield wipers are activated by signals from the rain sensor, which is located at the top of the windshield or when the driver activates the wipers in the fast wipe position.

Two levels of headlamp specification are available; halogen or xenon. In certain markets the headlamps feature a cornering lamp or a static bending lamp which illuminates the area at the side of the vehicle when turning into driveways for example. North American Specification (NAS) vehicles have a side marker lamp installed in the headlamp assembly. Replacement of any of the headlamp bulbs requires removal of the headlamp assembly.

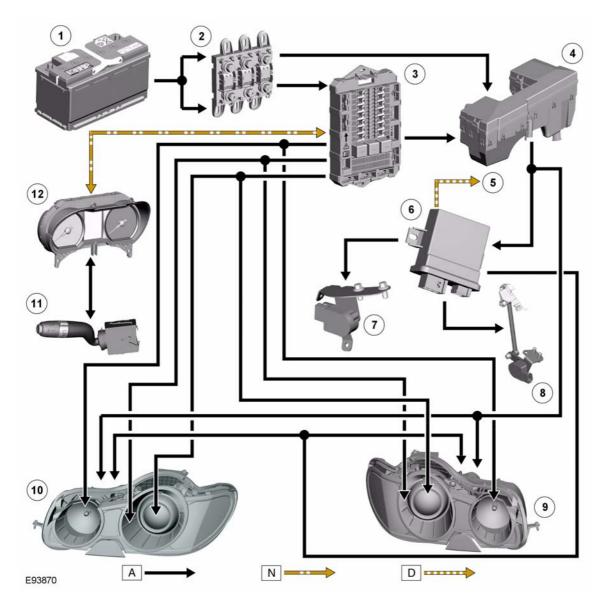
Two systems of headlamp leveling are available; manual leveling which is only available on halogen headlamps and static dynamic leveling which is available on xenon headlamps. The manual system uses a thumbwheel rheostat to adjust the vertical alignment of the headlamps to compensate for differing vehicle loading. The static dynamic system uses height sensors fitted to the front and rear suspension and a headlamp leveling module which periodically monitors the vehicle attitude and adjusts the headlamp vertical alignment accordingly.

The headlamps are fitted with a tourist lever which allows the vehicle to be driven in opposite drive hand markets without applying blanking decals to the headlamp lens. A lever, accessible from the rear inside of the headlamp, moves a flap to blank off a portion of the beam spread and prevent glare to oncoming drivers. The headlamp assembly requires removal to access the tourist lever.

The tail lamp comprises two separate lamp assemblies. The turn signal indicator, side and stop lamps and reverse lamps are located in each rear fender tail lamp assembly. The rear fog lamps are located in separate units attached to the luggage compartment lid. A side marker lamp is fitted to the rear fender tail lamp assembly and is fitted in all markets.

The turn signal indicator and reverse lamps use Phillips Hypervision glass filament bulbs. The rear fog lamps, side lamps, stop lamps and the High Mounted Stop Lamp (HMSL) use Light emitting diode (LED)'s.

## **XENON HEADLAMPS - CONTROL DIAGRAM**

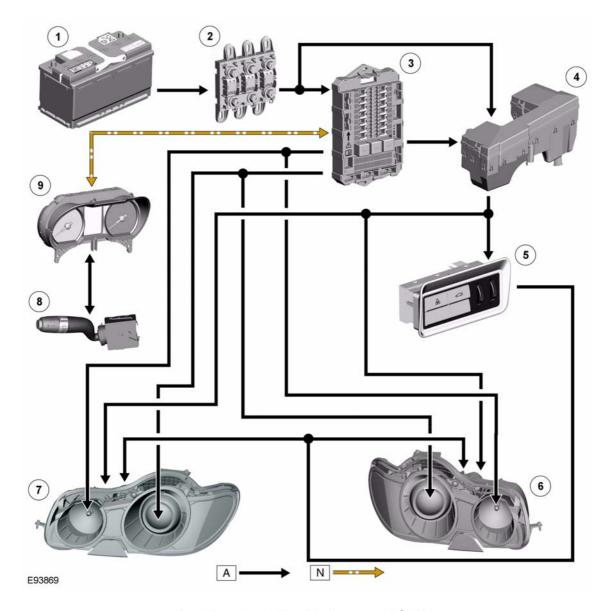


A = Hardwired; D = High speed CAN bus

- 1 Battery
- 2 Battery junction box (BJB) Megafuse
- 3 Central junction box (CJB)
- 4 Engine junction box (EJB)
  5 Medium speed Controller area network (CAN) bus to other vehicle systems
- 6 Headlamp leveling module

- 7 Front height sensor
- 8 Rear height sensor
- 9 Right-hand (RH) headlamp assembly
- 10 Left-hand (LH) headlamp assembly
- 11 Left-hand (LH) steering column multifunction switch
- 12 Instrument cluster

## **HALOGEN HEADLAMPS - CONTROL DIAGRAM**

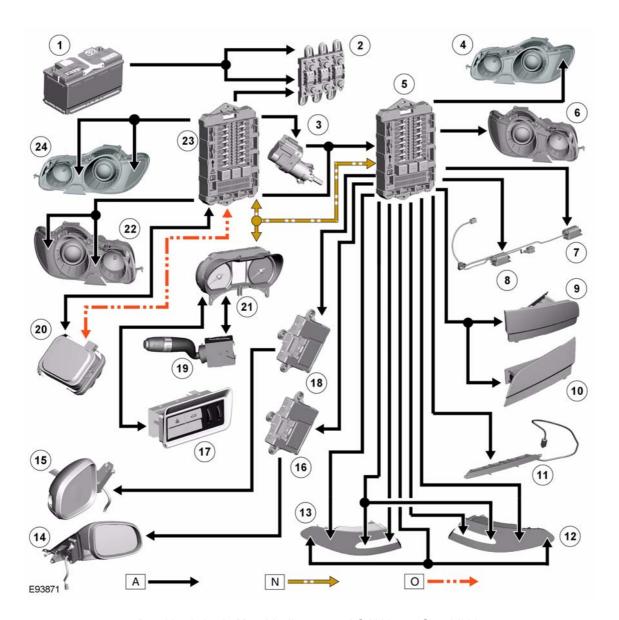


**A** = Hardwired; **N** = Medium speed CAN bus

- 1 Battery
- 2 Battery junction box (BJB) Megafuse
- 3 Central junction box (CJB)
- 4 Engine junction box (EJB)
- **5** Auxiliary lighting switch

- 6 Right-hand (RH) headlamp assembly
- 7 Left-hand (LH) headlamp assembly
- 8 Left-hand (LH) steering column multifunction switch
- 9 Instrument cluster

### SIDE LAMPS/TURN SIGNAL INDICATORS/FOG LAMPS - CONTROL DIAGRAM



 $\mathbf{A} = Hardwired; \mathbf{N} = Medium \text{ speed CAN bus}; \mathbf{O} = LIN \text{ bus}$ 

- 1 Battery
- 2 Battery junction box (BJB) Megafuse
- 3 Stop lamp switch
- 4 Left-hand (LH) turn signal indicator
- 5 Rear junction box (RJB)
- 6 Right-hand (RH) turn signal indicator
- 7 Right-hand (RH) licence plate lamp
- 8 Left-hand (LH) licence plate lamp
- 9 Left-hand (LH) fog lamp
- 10 Right-hand (RH) fog lamp
- 11 High mounted stop lamp
- 12 Right-hand (RH) tail lamp assembly
- 13 Left-hand (LH) tail lamp assembly

- 14 Right-hand (RH) door mirror side repeater
- 15 Left-hand (LH) door mirror side repeater
- 16 Right-hand (RH) front door module
- 17 Auxiliary lighting switch
- 18 Left-hand (LH) front door module
- 19 Light switch Left-hand (LH) steering column multifunction switch
- 20 Rain/light sensor
- 21 Instrument cluster
- 22 Right-hand (RH) headlamp assembly
- 23 Central junction box (CJB)
- 24 Left-hand (LH) headlamp assembly

		. 1 4	•
Exterior	1 10	nnt	ınc
LACCIO		giit	II IÇ