PUBLISHED: 26-OCT-2017 2019.0 DISCOVERY (LR), 102-05

TOWING



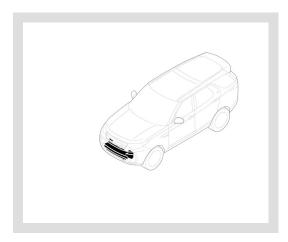
REMOVAL AND INSTALLATION

VPLRP0329



WARNING:

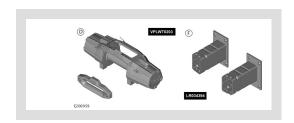
Accessories which are not properly fitted can be dangerous. Read the instructions carefully prior to fitting. Whilst fitting, comply with instructions at all times. If in doubt, contact your nearest approved dealer.

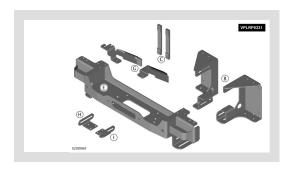


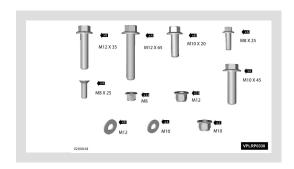
Visual Inspection Chart

ELECTRICAL

- Warn Winch Remote control box.
- Short wiring kit and Bracket PN89970.
- Warn Remote Socket kit PN90394





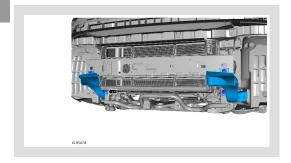


ITEM	PART NUMBER	DESCRIPTION
Radiator Core	-LR077849	Required with V6 Diesel.
Hose	-LR062457	Required with V6 Diesel.
Hose	-LR034617	Required with V6 Diesel.

INSTALLATION

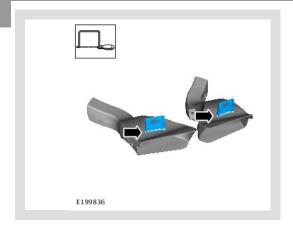
- Disconnect the battery. For additional information, refer to: Specifications (414-00 Battery and Charging System General Information, Specifications).
- 2. Remove the front bumper.For additional information, refer to:Front Bumper (501-19 Bumpers, Removal and Installation).
- 3. Remove the right front fender splash shield.For additional information, refer to:Fender Splash Shield (501-02 Front End Body Panels, Removal and Installation).

4.



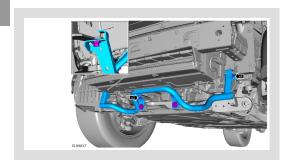
Remove the brake ventilation ducts.

5



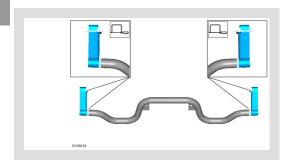
Using a suitable tool, cut the brake ducts as shown in the illustration.

6.



Remove the bracket.

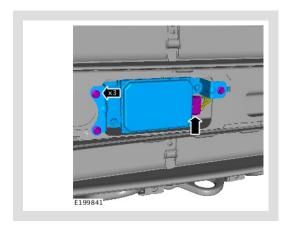
7.



Using a suitable tool, cut the bracket as illustrated.

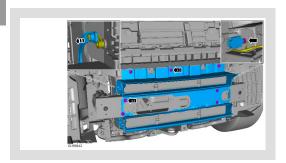


If equipped.



Remove and discard the ACC sensor.

9



Remove the cowling.

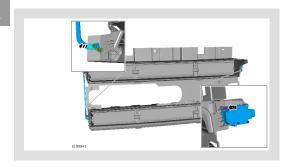
Release the linkage.

Remove the electrical connector.

Remove the fir tree clips.

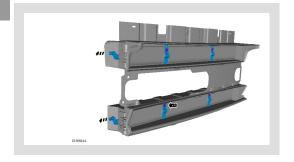
Remove and discard the four bolts.

10



Remove the linkage.

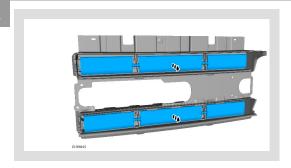
Remove and discard the actuator.



Remove and discard the two linkages.

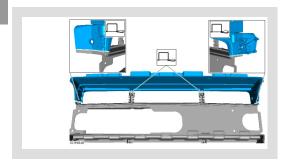
Remove and discard the the four clips.

12.



Remove ad discard the vents.

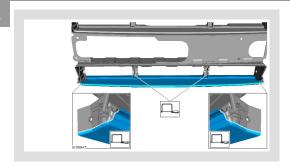
13



Using a suitable tool, cut the cowl as illustrated.

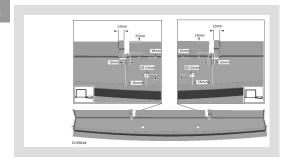
Retain the upper section.

14



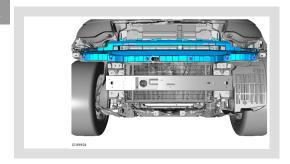
Using a suitable tool, cut the cowl as illustrated.

Retain the lower section and discard the centre section.



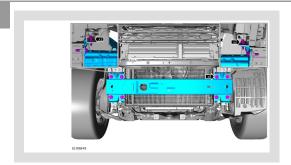
Cut the lower section as illustrated.

16.



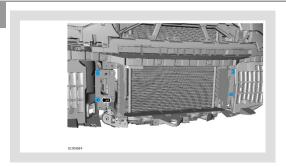
Remove the trim.

17

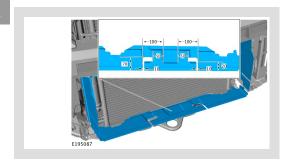


Remove the armature.

18

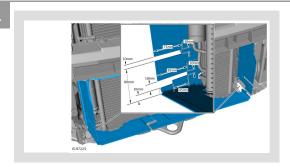


Remove and discard the 4 fixings.



Using a suitable cutting tool, cut the lower trim as illustrated.

20

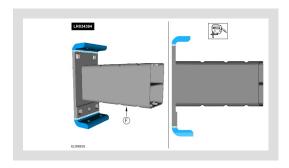


Using a suitable cutting tool, cut the lower trim sides as illustrated.

21

∧ NOTE:

Repeat this step for both crash beams.



Cut the new crash beams as illustrated.

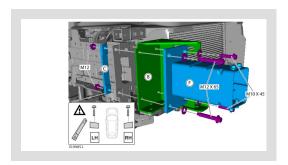


Make sure the left and right brackets are facing the correct way against the chassis as illustrated.



NOTES:

- Repeat this step for the other side.
- Install the bolts finger tight at this stage.



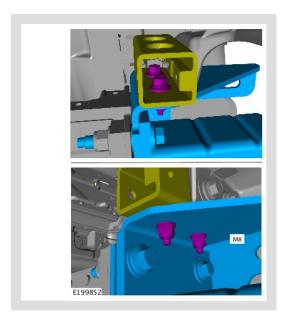
Install the bumper crash beam and brackets.

23

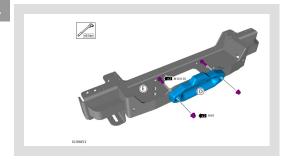
\wedge

NOTES:

- Repeat this step for the other side.
- Install the bolts finger tight at this stage.



Install the fixings.

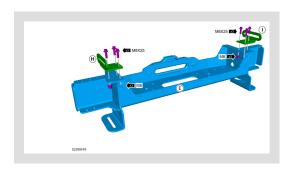


Install the winch fairlead.



NOTE:

Install the bolts finger tight at this stage.



Install the brackets to the winch armature.

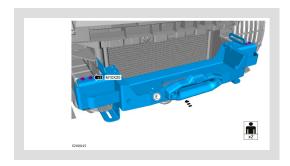
! CAUTION:

This step requires the aid of another person.



∧ NOTE:

Install the bolts finger tight at this stage.



Install the winch armature assembly.



Install the bolts finger tight at this stage.

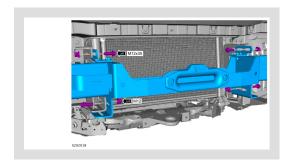


Install the winch armature assembly lower bolts.



∧ NOTE:

Install the bolts finger tight at this stage.

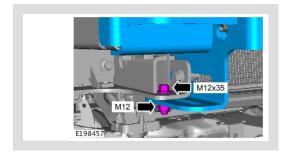


Install the fixings in the direction illustrated.



∧ NOTE:

Install the bolts finger tight at this stage.

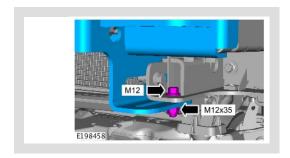


Install the fixings in the direction illustrated.



NOTE:

Install the bolts finger tight at this stage.

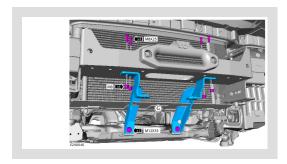


Install the fixings in the direction illustrated.



∧ NOTE:

Install the bolts finger tight at this stage.

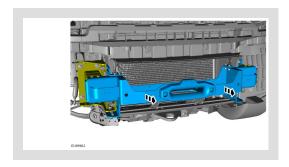


Install the lower brackets.



! CAUTION:

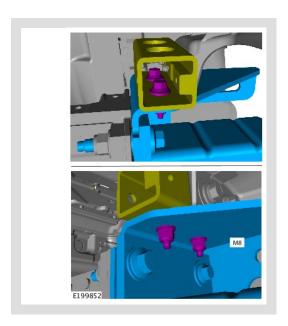
This step requires the aid of another person.



Pull the winch cradle forward to the end of the cradle slots.



Repeat this step for the other side.



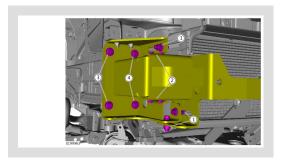
Tighten the fixings.

Torque: 45 Nm.

34.



Repeat this step for the other side.



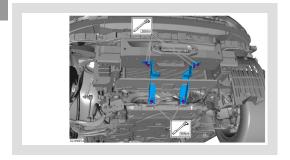
Tighten the bolts in the order illustrated.

1. Torque: 55 Nm.

2. Torque: 45 Nm.

3. Torque: 110 Nm.

4. Torque: 48 Nm.

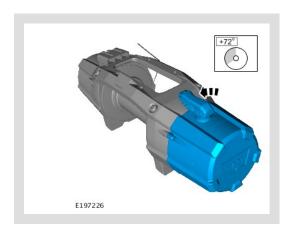


Tighten the bolts as illustrated starting with the lower two bolts.



∧ NOTE:

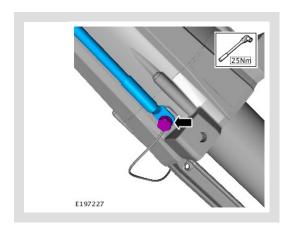
Refer to the Warn instruction manual for removing the winch control unit.



Rotate the winch gearbox so the release handle is facing forward.

NOTE:

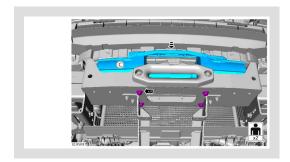
Attach the ground wire extension to a suitable location.



Attach the earth cable to the winch.

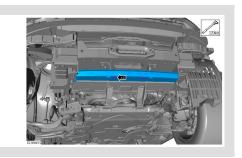


This step requires the aid of another person.



Install the winch.

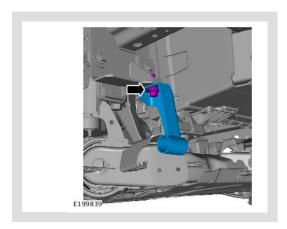
Torque: 40Nm.



Install the lower trim previously cut.

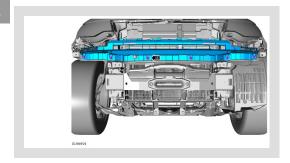
∧ NOTE:

Repeat this step for the other side.



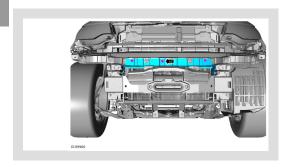
Install the cut section.

Torque: 30 Nm.



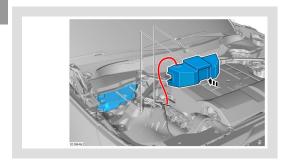
Install the trim.

42



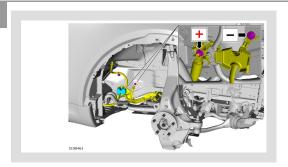
Install the upper trim previously cut.

43.

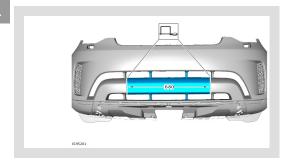


Install the winch control unit in the engine bay in the position shown.

44

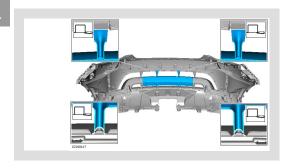


Use the points illustrated for the winch live and ground connections.



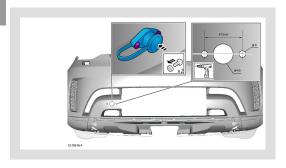
Cut the front bumper as illustrated.

46



Cut the front bumper as illustrated.

47.

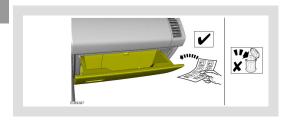


Install the winch remote socket kit PN90394.

- 48. Using the approved diagnostic tool:
 - 1. Deactivate the Parking sensors.
 - 2. Deactivate the Adaptive cruise control.
 - 3. Deactivate the Lower active vanes and configure for upper vane use only.
- 49. Install the front bumper.For additional information, refer to:Front Bumper (501-19 Bumpers, Removal and Installation).
- 50. Install the right front fender splash shield.For additional information, refer to:Fender Splash Shield (501-02 Front End Body Panels, Removal and Installation).

51. Connect the battery.For additional information, refer to:Specifications (414-00 Battery and Charging System - General Information, Specifications).

52.



Keep the manufacturer winch instructions in the glove box.