

ARB 1999 LAND ROVER DISCOVERY BATTERY TRAY KIT FOR TD5 AND V8 PETROL MODELS

FITTING KIT No 6171402

Part No 42/4332030

This battery tray is designed to fit an Exide ED4R battery or equivalent.

PART No	QTY	DESCRIPTION	USE
6542033	1	BATTERY TRAY	BATTERY TRAY
6151021	1	M8 X 20 BOLT	
4581078	1	M8 FLAT WASHER	
6151132	1	M8 FLANGE NUT	
6582423	1	BATTERY CLAMP	BATTERY CLAMP
6151092	2	M10 X 20 BOLT	
4581039	2	M10 FLAT WASHER	
4581048	2	M10 SPRING WASHER	

WIRING KIT No 6171403: To suit 4332030 only

PART No	QTY	DESCRIPTION	USE
6151017	2	M6 X 16 BOLT	BATTERY SEPARATOR
4581035	4	M6 FLAT WASHER	
6151162	2	M6 NYLOC NUT	
1314	1	BATTERY SEPERATOR	
6821125	1	CABLE BATTERY (-) TO ENGINE	WIRING
6821153	1	CABLE BATTERY (+) TO BATTERY SEPARATOR	
6821150	1	CABLE (-) TO SEPARATOR	
6821149	1	LOOM MAIN BATTERY (+) TO BATTERY SEPARATOR	
180701	1	SCOTCH LOCK	
180302	15	CABLE TIE	

TOOLS REQUIRED

Metric socket set, Phillips head screw driver, 10, 12, 13mm spanners, side cutters, pliers, drill and 9mm drill bit.

Installation Procedure

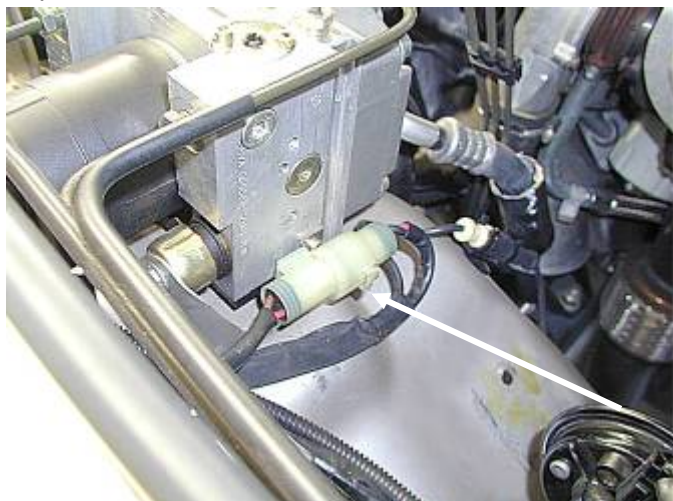
1.



WARNING

- Refer to owners manual before disconnecting the battery.
- Always remove the starter key before disconnecting the battery. Failure to do so could cause a failure of the airbag SRS.
- Disconnect the battery.
- Disconnect the horn and remove the bracket. (fig.1)

2.



- Unclip and disconnect the white wiring loom connector and temporally move to one side. (fig.2)
This is necessary to allow enough clearance when fitting the battery tray.

3.



- There are two existing captive nuts and bolts in the firewall, These bolts are used to mount the top of the tray. (fig.3)

NOTE: On diesel models a small section of the sound deadening foam must be removed. Locate the top mount bolts and cut out a square large enough to allow the tray to sit directly against the steel firewall. The tray must not be fitted on top of the foam. (fig.3)

4.



- Remove the plastic mounting clip from the inner guard and drill out this hole to 9mm. (fig.4)
This is the lower mounting hole for the tray.

5.



- Bolt the separator to the battery tray as shown using 2, M6 bolts, flat washes and nyloc nuts. (fig.5)
- Connect all cables in accordance with the wiring diagram. (fig.11)
- Mount the horn to the side of the tray as shown. (fig.5)

6.



- Place the tray in position ensuring there are no crushed or trapped wires.
- Start the top two mount bolts to locate the tray.
- Bolt the lower mount into position using the supplied M8 x 20 bolt, flat washer and flange nut.
- Tighten all bolts. (fig.6)
- Reconnect the horn and white wiring loom connector.

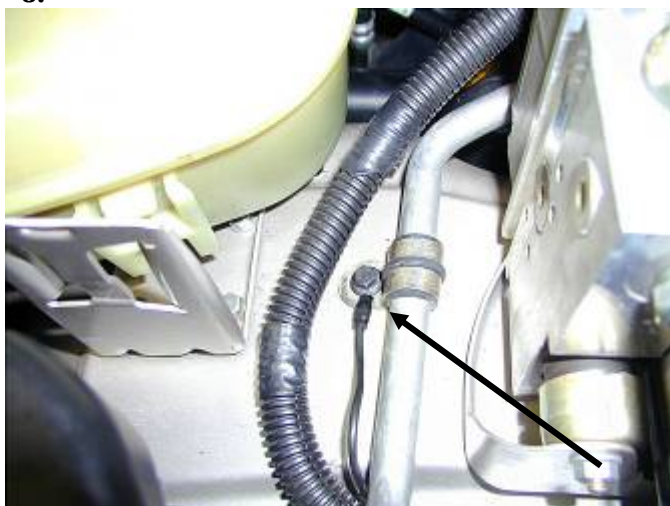
7.



- The earth cable (8821125) must be connected to the engine. (fig.7)
Do not connect the earth cable to any insulated engine parts or accessories.

Note: Diesel engine shown.

8.



- Connect the small earth lead (6821150) to the inner guard or a good suitable earth. (fig.8)

9.



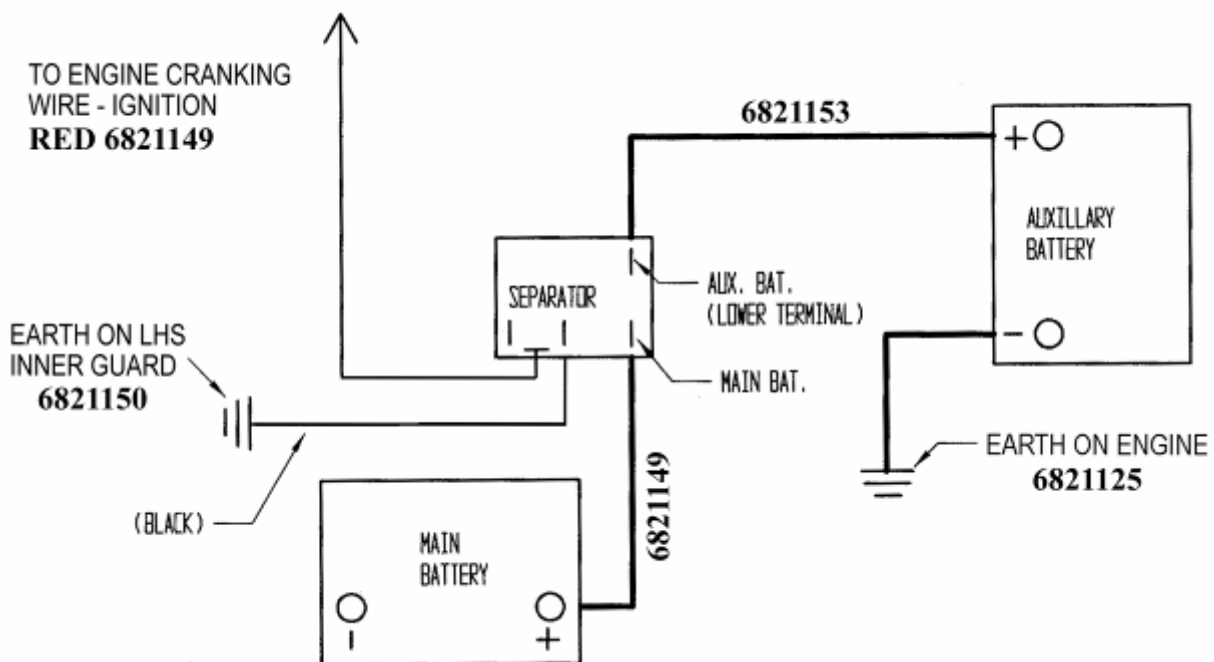
- Place the battery (ED4R or equivalent) in the tray ensuring terminals are forward of the firewall.
- Securely fasten using the battery clamp, M10 x 20 bolts, flat and spring washers. (fig.9)
- Wire in accordance with the wiring diagram. Refer (fig.11)
- Do not connect either battery until wiring is complete.

10.



- Cable tie the supplied wiring loom along the firewall behind the engine. **Take care not to run the wiring over sharp edges, moving components or near hot surfaces.**
- Run the red ignition wire to the starter motor solenoid.
- Cable tie all wiring into place.
- Connect both batteries.

11.



INFORMATION ON THE BATTERY SEPARATOR:

PRIORITIZED CHARGING. The battery separator waits until the battery connected to the active charging source reaches approximately 13.2V before paralleling and charging the remaining batteries. The system disconnects at approximately 12.8V. The primary battery is the priority charged battery.

PREVENTS CHARGING SYSTEM OVERLOAD. If the current requirements are greater than the charging source can produce, the battery separator will automatically separate the batteries, thus directing all available charge current to the battery directly connected to the charging source. The system will then reset and re-attempt charging the auxiliary battery. A time delay prevents false switching.

START ASSIST FEATURE. An optional input from the key switch or a manual switch will program the battery separator to parallel the batteries during starting. This feature will only engage if the auxiliary battery has sufficient power available to assist in starting.

WIRING ACCESSORIES As the battery separator priority charges, it is desirable to wire additional driving lights to the primary battery. Other accessories such as a winch or refrigerator should be wired to the auxiliary battery.