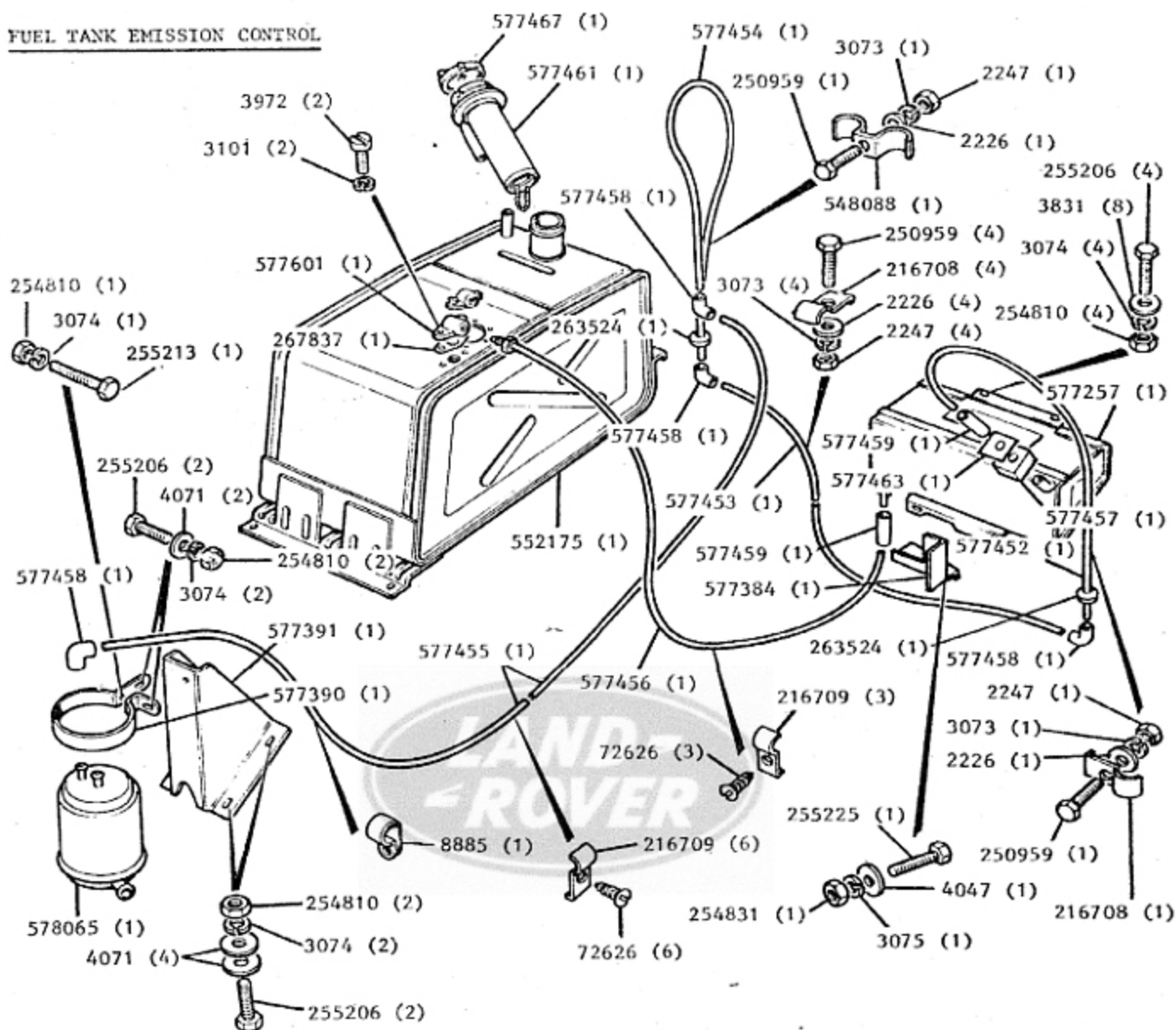


FUEL TANK EMISSION CONTROL



REMARKS

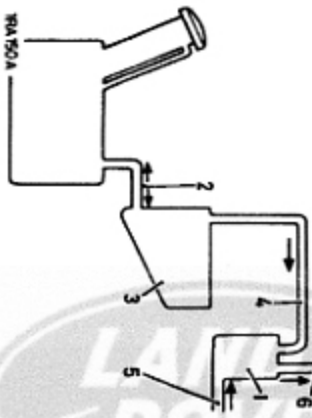
Applicable to Series 11A vehicles numbered from 24439373.G and Series 111 models.

For fuel tank and fuel filler details not shown here refer to basic Land-Rover parts catalogue.

EVAPORATIVE LOSS CONTROL

- Description** 17.15.00
- Fuel tank evaporative emissions are vented to an activated charcoal filled container where they are adsorbed, then vented through a flame trap to the combustion air intake system during engine running as follows:
- 1 A charcoal-filled adsorption container is situated in the engine compartment, to deal with evaporative emissions from the fuel tank.
 - 2 From the main fuel tank there is a main tank breather pipe.
 - 3 This is fed into a separate expansion tank.
 - 4 From the expansion tank a further breather pipe leads to the charcoal container.
 - 5 At the side of the container, an air inlet pipe is open to atmosphere.
 - 6 From the top, a pipe leads to the carburettor air cleaner elbow.
 - 7 Normal fuel tank breathing is through the air inlet pipe on the charcoal container and then through the two breather pipes via the expansion tank.
 - 8 Any vapours from the fuel in the main or expansion tanks are fed via the main breather and expansion tank breather pipes into the charcoal container, where they are adsorbed on the charcoal and do not escape to atmosphere.
 - 9 During engine accelerating conditions air is drawn in through the air inlet pipe at the side of the container, purging the trapped emissions into the engine through the carburettor air cleaner elbow.

- 10 The function of the expansion tank is to provide an overflow reservoir for the main tank, as it is possible when the main tank is completely filled in high ambient temperature conditions for the fuel to expand and for a large quantity along the breather pipe. The size of the expansion tank allows for maximum fuel expansion; under such conditions evaporative emissions are still controlled by the charcoal and, due to the location of the breather pipe at the bottom of the expansion tank, the overflow fuel will eventually be drawn back into the main tank as fuel is used.

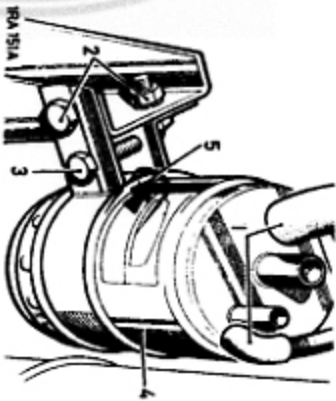


ADSORPTION CANISTER

Remove and refit 17.15.13

WARNING: No attempt should be made to cleanse the container. The use of compressed air could cause the activated charcoal filling to ignite.

- 1 Note the hose positions and disconnect at container.
- 2 Remove the fixings, container strap to mounting bracket.
- 3 Slacken the pinch bolt on the strap.
- 4 Withdraw and discard the canister.



- Refitting**
- 5 Reverse 1 to 4. Position the container such that the 'open-to-atmosphere' pipe faces inboard and toward the rear of the engine compartment.

EXHAUST EMISSION CONTROL

Description 17.20.00

Exhaust emission control is achieved by alterations to carburation and combustion characteristics, together with modifications to the distributor vacuum supply line and ignition timing procedure, as follows:

Carburettor jets

The carburettor is provided with main and enrichment jets having special flow characteristics. The jets are identifiable by their cadmium plated finish and they are not interchangeable with similar size jets with a natural finish.

Carburettor throttle-prop system

Under high manifold depression, that is, on engine overrun with rapid throttle closure, wet fuel is drawn off the inlet manifold walls and gives a rich air/fuel ratio and poor combustion. To compensate for this condition a system is employed of popping open the carburettor throttle butterfly to reduce the manifold depression and admit sufficient volume of the correct air/fuel mixture to give good combustion.

- 1 A trigger valve is connected to the inlet manifold via a pipe.
- 2 Under high manifold depression a vacuum is formed in the trigger valve lifting a diaphragm from its seat which is pre-set to lift at 20.5 to 21.5 in. Hg.
- 3 The depression is relayed via a pipe to a vacuum servo unit.

