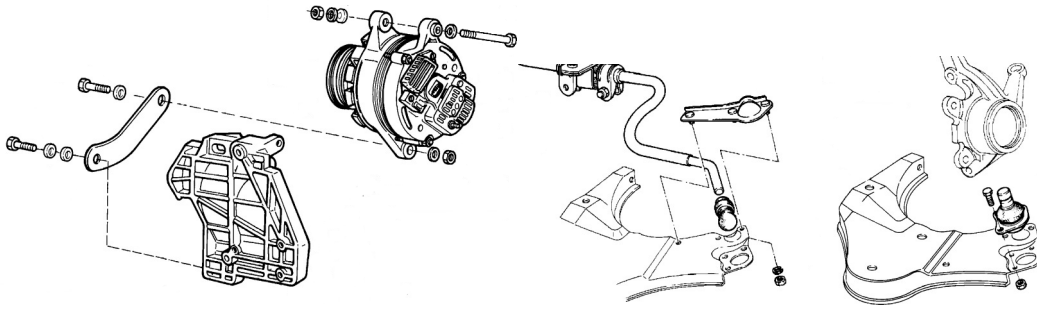


Lancia Delta HF Integrale Removing the Alternator



Overview

This document describes removing the alternator with the engine in place. The alternator is located on the right, front side of the engine (or right, rear of the engine bay). It is fixed in place, driven by a serpentine belt, and hangs from a bracket. It is accessed through the right, front wheel well, after removing the wheel, the fender liner behind that wheel, and that lower control arm.

Removal

1. Raise the right side of the car and support it on jack stands.

Jack the right side of the car at the center jack points. Place jack stands at the right front jack point and the bracket. Lower the jack enough for the car to rest onto the jack stands

2. Remove the wheel.
3. Remove the lower control arm.

This involves removing the lower ball joint (three M8 bolts and nuts), the anti-roll bar attachment (three M8 nuts and washers), the front pickup (two M10 nuts and washers), and the rear pickup (two M10 nuts and washers). A plate comes off with the rear pickup.

4. Remove the serpentine belt.

Loosen the two bolts (13mm wrench) on the face of the tensioner. Unscrew the tensioner to loosen the belt. Remove the belt.

5. Remove the lower alternator bracket.

The bolt (17mm wrench) at one end of the bracket is threaded into the same bracket that the alternator hangs from. The bolt (17mm wrench) at the other end goes through the lower ear of the alternator and is held in place by a nut (17mm wrench).

6. Remove the two electrical leads on the back of the alternator.

One lead is held in place by a 10mm nut. The other lead is a spade connector that is pulled out of the alternator.

7. Loosen and remove the upper alternator bolt.

The bolt comes in through the back of the alternator and access to the bolt's head (19mm wrench) has limited space for turning a wrench. The best tool would be a stubby, ratcheting wrench. Access to the nut (19mm wrench) and washer on the other end are limited by the gap to the chassis and frame and the alternator pulley.

8. Remove the alternator.

The alternator will likely need to be pulled off of the upper bracket. From there it is maneuvered out. The clip that the lower rear fender liner screw threads into should be removed to make room. The gap in the alternator for the upper mount should be rotated down and the alternator pivots over the half-shaft at that gap to remove.

Installation

Reverse the removal instruction to install.

The trickiest part is getting the upper alternator bolt in place. After orienting the alternator into place below its installed position, start the bolt into the rear ear, then raise the alternator to the upper bracket. There is a power steering hose that may foul the bolt. Once the alternator is in position, getting the bolt to continue into the hole in the upper bracket is hard because it is done blind. With the bolt pressed in as far as it will go by hand, use the wrench to thread it in the rest of the way.

The next tricky part is getting the washer and nut onto the other end of the bolt. Swing the alternator to the right (rear of the car) to make room to get your hand in to place the washer and thread the nut. The torque is listed below, but it will be hard to get a torque wrench on either end of the bolt. Do not torque the upper bolt until the lower bracket and nuts are installed.

The final part that may be tricky is reinstalling the anti-roll bar into the lower control arm. If only one corner of the car is raised, the anti-roll bar will be under load from the other side of the car.

The upper alternator bolt is torqued to 69 Nm (51 lb-ft). The lower alternator and bracket bolts are torqued to 43 Nm (32 lb-ft). The anti-roll bar nuts are torqued to 19 Nm (14 lb-ft). The ball joints nuts are torqued to 30 Nm (22 lb-ft). The suspension pickup nuts are torqued to 40 Nm (30 lb-ft).