

Holden Astra 2004-2009 Workshop Manual

Crankshaft and Pistons

Crank mechanism is made more rigid without increasing weight.



Fig. 2.19. Crankshaft and Pistons:
1 - connecting rod, 2 - piston, 3 - crankshaft

In connection with higher power and using a special form of piston used oil jet nozzles for cooling the piston. They are located on the engine block and are aimed at the underside of the piston. The crankshaft has a more rigid structure, without increasing weight. It also uses floating piston pins.

Cooling of the piston

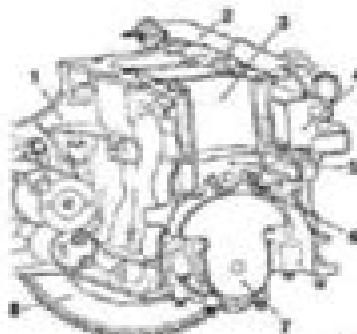


Fig. 2.20. Cooling of the piston: 1 - the engine block, 2 - pipe cooling system, 3 - cylinder walls, 4 - oil cooler; 5 - piston, 6 - oil spray nozzles; 7 - crankshaft; 8 - flywheel

By new piston (Fig. 2.20) gasoline engine 2.0 16V has a lot more with thermal loads. Increased due to increased power output, the piston is equipped with piston cooling.

Rear crankshaft oil seal (Fig. 2.21) is mounted into the crankshaft oil seal housing. At petrol engine 2.0 16V mount the rear crankshaft oil seal housing into the housing.



Fig. 2.21. Rear crankshaft oil seal with the housing: 1 - rear crankshaft oil seal, 2 - housing, 3 - crankshaft, 4 - crankshaft sensor, 5 - connecting cable to plug the wiring harness of the crankshaft sensor

2.3. Removing and installing the power unit

General and safety by disconnecting power unit

If it is decided to lift the engine, it is necessary to undertake certain



Fig. 2.22. General view of the engine 2.0 16V

measures to ensure the place where the work will be done. Undoubtedly, the best place is to have a garage. It is important to have a work platform, as well as a place to store the car. If no workshop, you will need a flat smooth concrete or asphalt playground.

Washing the engine compartment and the engine before removing the hood will provide clean and comfortable working conditions.

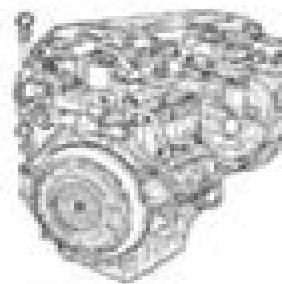


Fig. 2.23. General view of the engine 2.0 16V

Also need the lift or lifters. Make sure that these devices have a margin of capacity and are able to raise the engine with all the mounted units. Safety measures play a crucial role, since the use of the motor car - a potentially dangerous operation.

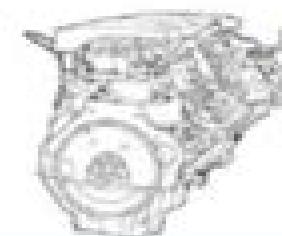


Fig. 2.24. General view of the engine 2.0 16V



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P. G. Strasman

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