



Dealer
Service
Information
Bulletin

Attention: Service Manager

Subject: VALVE TRAIN ADJUSTMENT - 1969 RAM AIR IV

Should it become necessary to disassemble, repair, or readjust valve train components on Ram Air IV engine, it will be necessary to perform one of the following valve adjustment procedures. It is not possible on this engine to tighten the rocker arm adjusting nut until it seats on the shoulder of the rocker arm stud to obtain the correct valve setting.

The procedure to be followed will depend upon whether the engine has remained in the car or has been removed for necessary repair. In cases where the engine has been removed, the second procedure should be used and the valve adjustment made before attempting to start the engine.

ENGINE IN CAR

1. After necessary repair has been made, tighten affected rocker arm adjusting nut (s) sufficiently snug so that rocker arm (s) will not jump off valve stem or pushrod when engine is started.
2. Start engine and retighten rocker arm nut on any valve that is noisy or clattering. Tighten only enough so that noise disappears. If noise is noted in a valve assembly which has not been disassembled, it will be necessary to remove the lock nut and tighten the rocker arm adjusting nut as described above.

NOTE: You may find it desirable to purchase a set of oil deflector clips to eliminate excessive oil splash from the rocker arm oil feed holes while engine is running. These clips are available commercially from most independent auto parts suppliers.

3. After allowing engine sufficient time to reach normal operating temperature (approximately 5 minutes), and with engine running, individually loosen each rocker arm adjusting nut until the valve assembly begins to clatter or becomes noisy.

4. Retighten rocker arm adjusting nut until noise disappears. This will bring the pushrod just slightly into the top of the lifter travel.
5. Being sure the rocker arm adjusting nut does not change position, install lock nut and tighten to 30-40 lb. ft. torque.
6. Having performed adjustment on all valve assemblies upon which it was necessary, install rocker arm splash shields and retaining nuts and torque to 60-90 lb. in.

ENGINE OUT-OF-CAR

After all necessary work has been performed and train components have been reassembled:

1. Turn crankshaft until No. 1 piston is at TDC on compression stroke (Distributor rotor at No. 1 firing position) and timing mark on balancer is aligned with 0° mark on timing cover.
2. Tighten rocker arm adjusting nuts on two valves on this cylinder until .008" clearance is obtained between rocker arm and top of valve stem.
3. Tighten adjusting nut an additional 1/8 turn \pm 5°.
4. Install lock nuts and tighten to 30-40 lb. ft. torque.

For each succeeding cylinder in the firing order (1, 8, 4, 3, 6, 5, 7, 2), rotate crankshaft 90° to bring piston up to TDC on its' firing stroke, and repeat steps 2 through 4.

SERVICE DEPARTMENT
PONTIAC MOTOR DIVISION
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