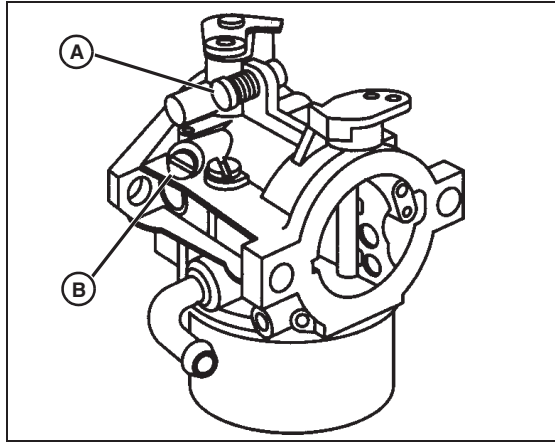
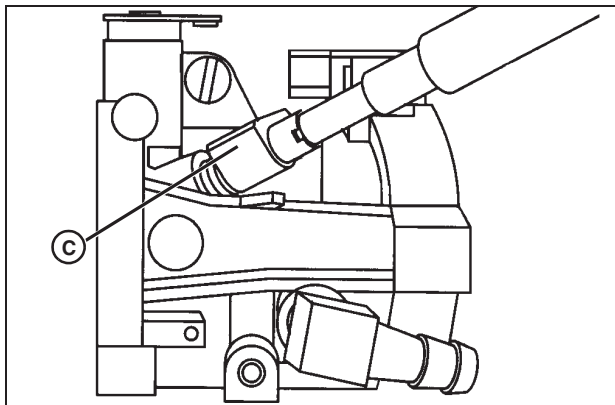


ENGINE - 17 HP BRIGGS & STRATTON TESTS AND ADJUSTMENTS



M95222

4. Turn idle speed screw (A) to obtain 1750 rpm minimum.
5. Remove the limiter cap from the idle mixture screw (B).
6. Then turn idle mixture screw (B) slowly clockwise until engine just begins to slow. Note position of slot on screw.
7. Now turn idle mixture screw (B) in counterclockwise direction until engine just begins to slow. Note position of slot on screw.
8. Turn screw to midpoint between speed changes.



M95231

9. Install limiter cap (C) with flat facing up.
10. Move throttle control from idle to high speed position. Engine should accelerate smoothly. If it does not, open idle mixture needle screw 1/8 turn. There should be no afterfire.

Specification:

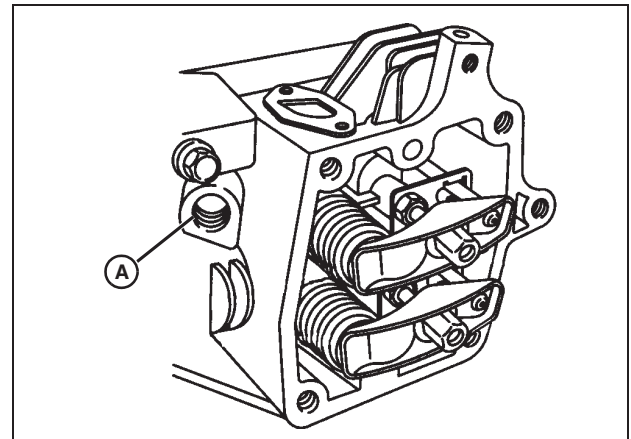
Carburetor Slow Idle Speed 1750 rpm

Valve Clearance Adjustment

NOTE: *Correct position of crankshaft is necessary to eliminate interference by the compression release mechanism on the cam gear when adjusting valve clearance.*

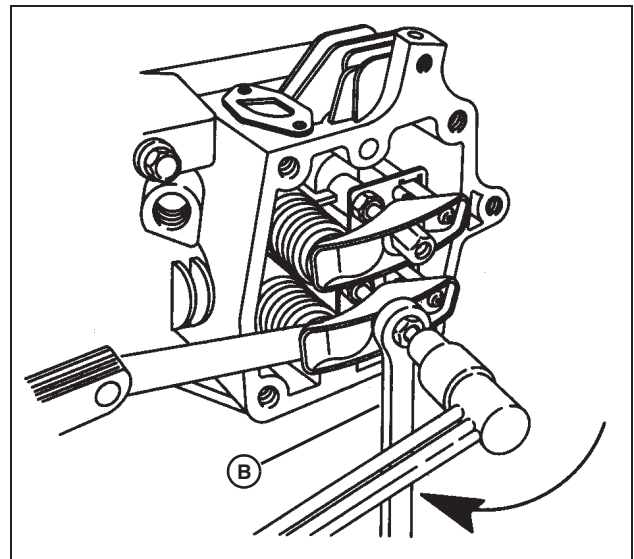
Procedure:

1. Starting with a cold engine, remove valve cover.
2. Turn crankshaft until piston is at Top Dead Center, (TDC) on the compression stroke (both valves closed).



M95245

3. Insert a screwdriver through the spark plug opening (A) until it touches the top of the piston.
4. Continue to turn the crankshaft clockwise until the piston has moved down 6.35 mm (0.25 in.).



M95246

5. Check valve clearance with a feeler gauge between valve stem and rocker arm. Valve clearance should be 0.08 - 0.13 mm (0.003 - 0.005 in.) for the intake valve, and 0.13 - 0.18 mm (0.005 - 0.007 in.) for the exhaust valve.
6. If not, adjust as necessary using a 13 mm open end wrench and a 5 mm hex wrench. Tighten lock nut to 6.8 N•m (60 lb-in.).
7. Recheck clearance and make adjustments if necessary.
8. Install valve cover.

ENGINE - 17 HP BRIGGS & STRATTON TESTS AND ADJUSTMENTS

Specifications:

Lock nut..... 6.8 N•m (60 lb-in.)

Valve Clearance

Intake..... 0.08 - 0.13 mm (0.003 - 0.005 in.)

Exhaust..... 0.13 - 0.18 mm (0.005 - 0.007 in.)

Armature Air Gap Adjustment

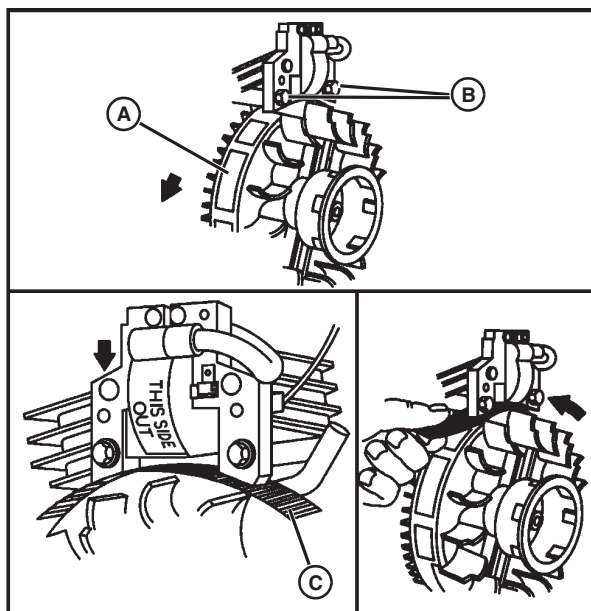
Reason:

To set the ignition air gap for proper operation and timing of the ignition system.

Equipment:

- 0.30 mm (0.012 in.) Thickness Gauge

Procedure:



M95220

1. Rotate flywheel until magnet (A) is away from armature laminations.
2. Loosen the armature mounting screws (B) and slide armature away from flywheel as far as possible.
3. Tighten one screw enough to hold the armature in place.
4. Rotate flywheel until magnet is directly under armature laminations.
5. Place a 0.30 mm (0.012 in.) thickness gauge (C) between armature and magnet.
6. Loosen the mounting screw so magnet will pull armature against thickness gauge.
7. Tighten both mounting screws (B) to specification.
8. Rotate flywheel while pulling thickness gauge out from

between the armature and the magnet.

Specifications:

Armature Air Gap 0.25 - 0.35 mm (0.010 - 0.014 in.)

Armature Mounting Screws 2.8 N•m (25 lb-in.)

Cylinder Leakdown Test

Reason:

To check pressure capacity of piston rings and cylinder bore for efficient engine operation.

Equipment:

- JTO3502 Cylinder Leak Tester

Procedure:

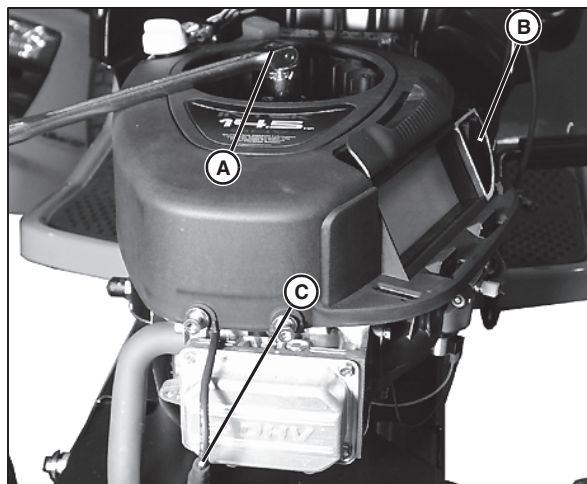
IMPORTANT: Avoid damage! When servicing engine (when the engine is running), it is important to remove hood to avoid damage from muffler exhaust heat source.

1. Remove hood assembly. See "Hood Removal and Installation" on page 375 in the Miscellaneous section.



CAUTION: Avoid Injury! Engine will be HOT. Do not touch with bare skin, especially the exhaust pipe or muffler while making test.

2. Warm engine to operating temperature, then stop engine.
3. Move transaxle shift lever to NEUTRAL. Lock park brake.



MX9745

4. Remove the flywheel screen and use a socket with a breaker bar (A) on the flywheel nut to hold the flywheel in position when performing the test.