

STARTER MOTOR TROUBLESHOOTING GUIDE

1. Disconnect spark plug cap, and ground the cap terminal.
2. Turn key switch to "START" position and check condition.



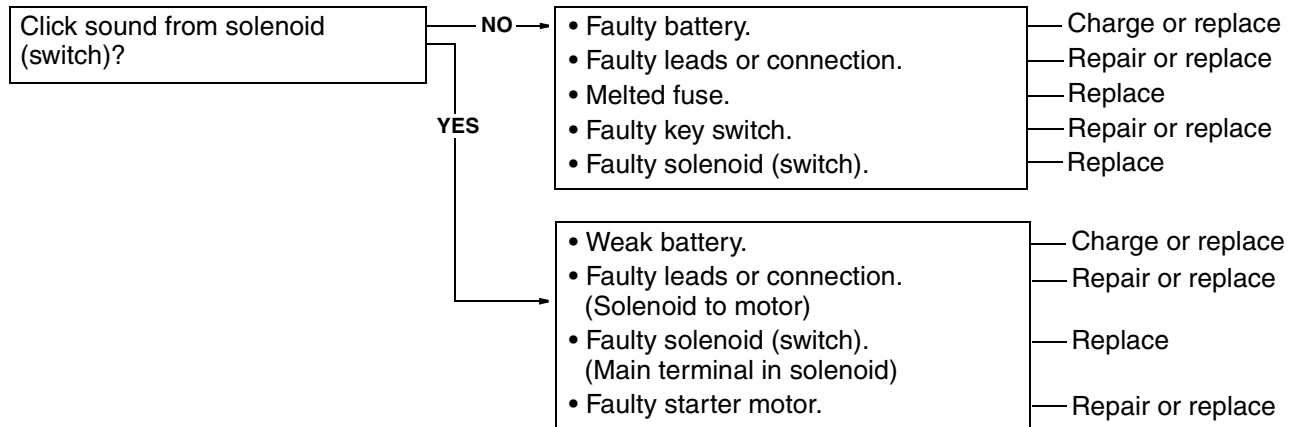
CAUTION

Engine may be cranked in this test. **DO NOT touch any rotating parts of engine and equipment during test.**

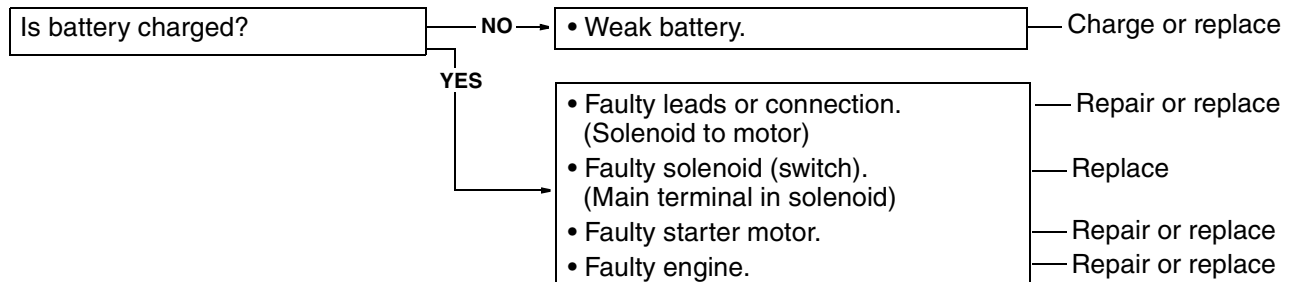
IMPORTANT: If starter does not stop when key switch is in off position, disconnect negative (-) lead from battery as soon as possible.



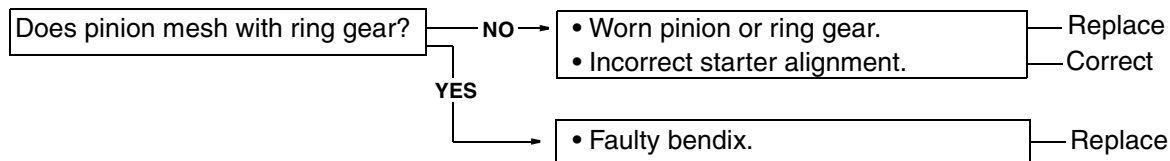
Starter Does Not Rotate



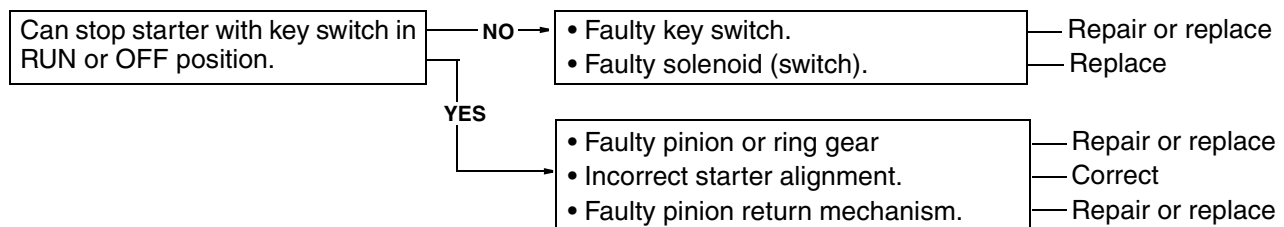
Starter Rotates Slowly



Starter Rotates But Can Not Crank Engine



Starter Does Not Stop With Key Switch In RUN or OFF Position



TESTS AND ADJUSTMENTS

THROTTLE CABLE ADJUSTMENT

Reason:

To make sure the throttle cable moves the throttle and choke control lever through its full range of movement.

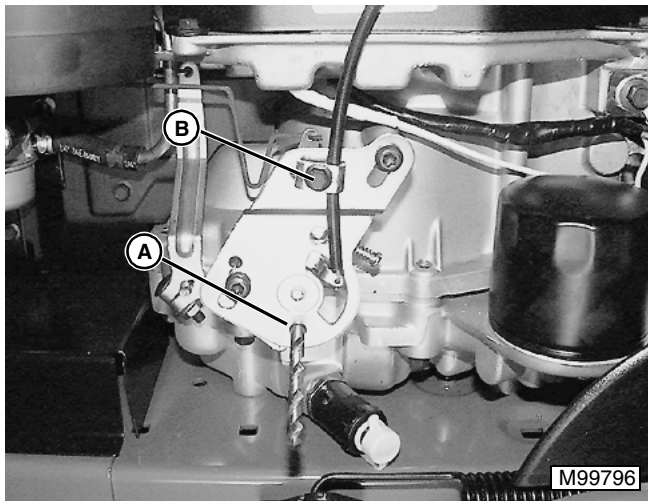


Equipment:

- 6.4 mm (0.25 in.) Drill Bit

Procedure:

1. Move throttle lever to FAST idle position.



2. Align hole in throttle control lever with hole (A) in throttle control plate. Put a **6.4 mm (0.25 in.)** drill bit through holes to keep the throttle control lever from moving. Be sure drill bit is perpendicular to the throttle control plate.
3. Loosen cap screw (B) and pull throttle cable housing tight. Tighten cap screw.
4. Remove drill bit.
5. Move throttle lever to the full choke position. Make sure throttle lever is held up against throttle plate. Choke should be fully closed.
6. Move throttle lever through full range to be sure linkage is not binding.

CHOKE ADJUSTMENT

Reason:

To make sure the choke plate is fully closed when the throttle lever is in the full choke position. Correct adjustment also makes sure choke is completely open in the fast idle position.

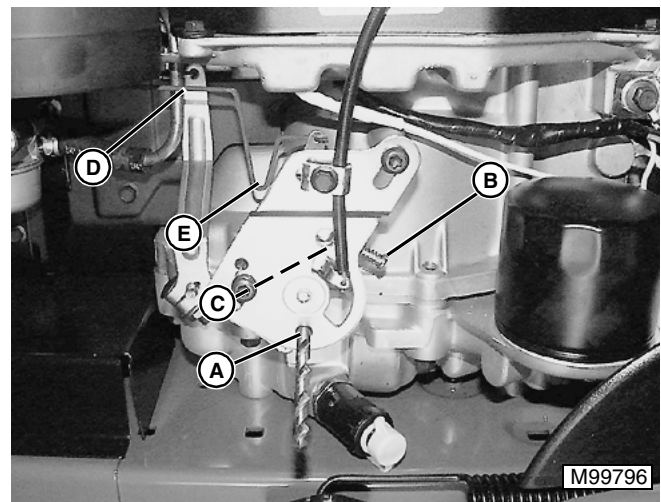
Equipment:

- 6.4 mm (0.25 in.) Drill Bit

Procedure:

NOTE: Adjust throttle cable before adjusting choke.

1. Move throttle lever to CHOKE position then back to FAST idle position.



2. Align hole in throttle control lever with hole in throttle control plate. Put a **6.4 mm (0.25 in.)** drill bit through holes to keep the throttle control lever from moving. Be sure drill bit is perpendicular to the throttle control plate.
3. Turn screw (B) counterclockwise until screw does not contact the choke control lever (C).
4. Turn screw clockwise until screw just touches the choke control lever.
5. Remove drill bit.
6. Move throttle lever to full choke position.
7. Try to move choke rod (D) forward (choke rod should not move). If the choke rod moves forward, the choke plate is not fully closed. Carefully bend the choke rod at Vee bend (E) until the choke plate is fully closed.
8. Move throttle lever to be sure choke linkage is not binding.

GOVERNOR ADJUSTMENT

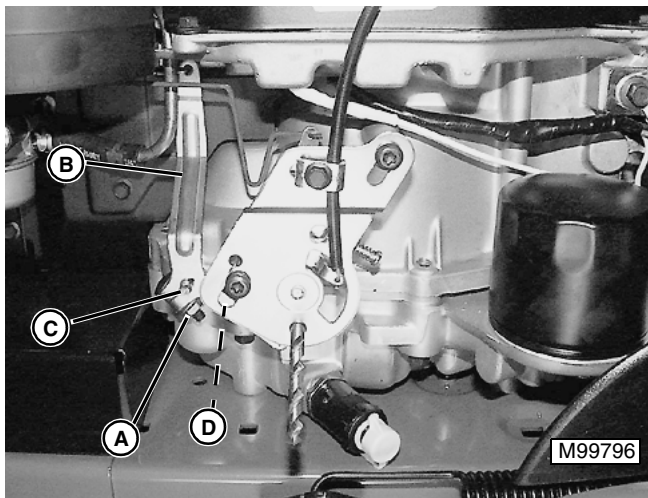
Reason:

To make sure the governor shaft contacts the fly-weight plunger when the engine is stopped.

NOTE: Adjust throttle cable before adjusting governor linkage.

Procedure:

1. Move throttle lever to FAST idle position.



2. Loosen nut (A).
3. Hold top of governor arm (B) toward carburetor. Turn governor shaft (C) counter-clockwise until it stops. Hold governor shaft and tighten nut.
4. Move throttle lever through full range to be sure linkage is not binding.
5. Governor spring (D) should be installed in the hole closest to governor shaft. If governor is not responding properly, replace spring and readjust fast idle speed. If spring did not correct the problem, repair governor.

FAST IDLE SPEED ADJUSTMENT

Reason:

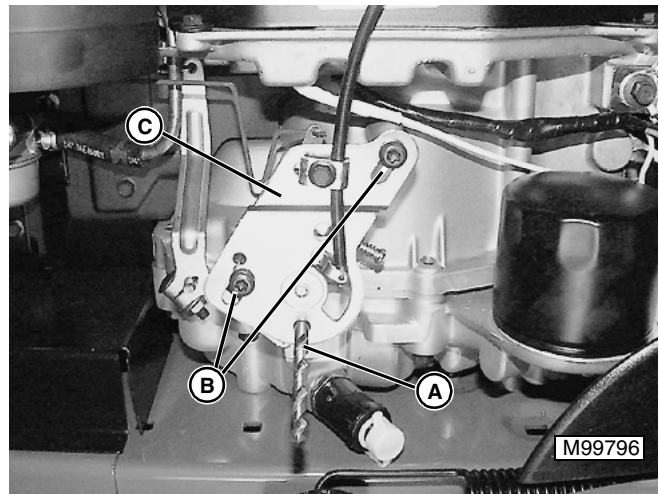
To set engine fast idle rpm.

Equipment:

- JTO5719 Photo Tachometer

Procedure:

1. Move transaxle shift lever to NEUTRAL position. Engage park brake.



2. Put reflective tape on blower housing screen.
3. Start and run engine at MEDIUM idle for five minutes.

CAUTION

Engine will be HOT. Be careful not to burn skin.

4. Move throttle lever to FAST idle position.
5. Align holes of throttle lever and throttle control plate with 6.4 mm (0.25 in.) drill bit (A). This keeps the throttle control lever from moving during adjustment. Be sure drill bit is perpendicular to the throttle control plate.
6. Use a photo tachometer to check engine rpm at the blower housing screen.

Specifications:

Fast idle speed setting 3350 ± 50 rpm
Control panel screw torque 9.9 N•m (88 lb-in.)

Results:

- If fast idle speed does not meet the specifications, loosen cap screws (B)
- Move throttle control plate (C) upward to increase rpm or downward to decrease rpm
- Hold the throttle control plate and tighten cap screws



Suggest:

If the above button click is invalid.

Please download this document

first, and then click the above link

to download the complete manual.

Thank you so much for reading