

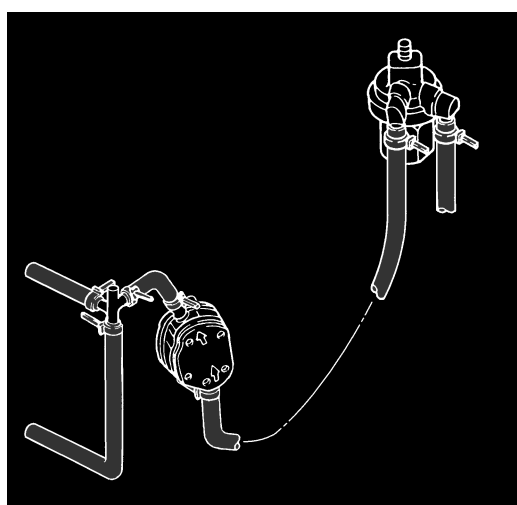
- (4) Check the top cowling fitting and repeat the adjustment if necessary.

NOTE:

- Moving the latch towards the seal will loosen the top cowling.
- Moving the latch away from the seal will tighten the top cowling.

FUEL SYSTEM INSPECTING THE FUEL LINE

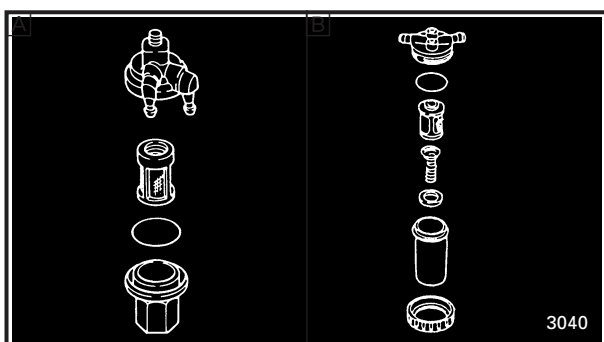
1. Inspect:
 - Plastic locking tie
Loosen → Retighten or replace.
2. Inspect:
 - Fuel line
Cracks/damage/leaks → Replace.
Refer to "FUEL FILTER" on page 4-1.
Refer to "FUEL PUMP" on page 4-10.

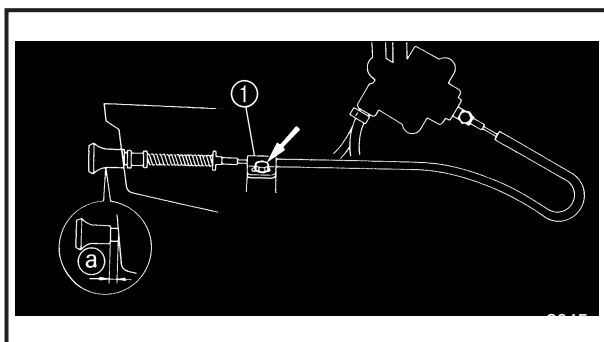


INSPECTING THE FUEL FILTER

- Inspect:
- Fuel filter element
 - Fuel filter cup
Clogs/cracks/leaks → Replace.
Foreign matter → Clean.
Refer to "FUEL FILTER" on page 4-1.

- ☐ A Oil injection models
☐ B Pre-mixed models





INSPECTING THE MANUAL INJECTION (E115AMH, E115AWH)

- Inspect:
 - Injection knob gap ①
 Out of specification → Adjust.

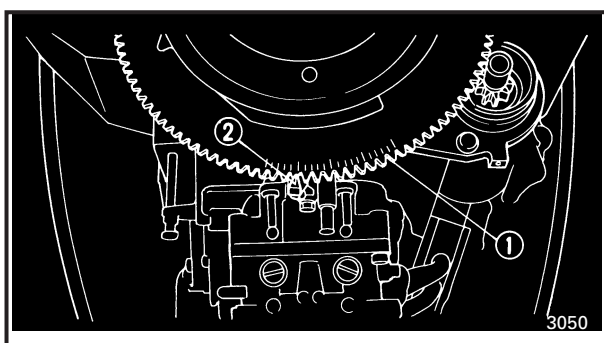


Injection knob gap
1 - 2 mm (0.04 - 0.08 in)

- Adjust:
 - Injection knob gap

Adjustment steps

- Loosen the bolt slightly.
- Adjust the position of the cable bracket ① up to specified gap is obtained.
- Tighten the bolt.

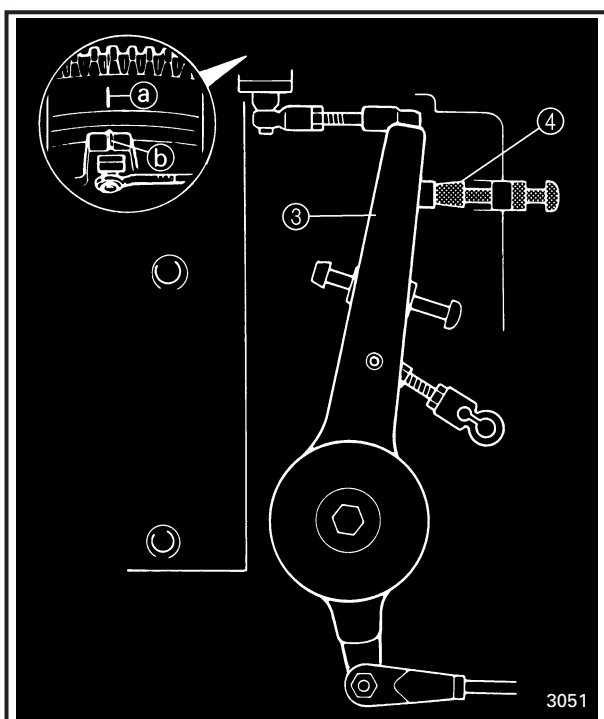


CONTROL SYSTEM ADJUSTING THE IGNITION TIMING

- Inspect:
 - Ignition timing (full advance)
 Incorrect → Adjust.

Inspecting steps

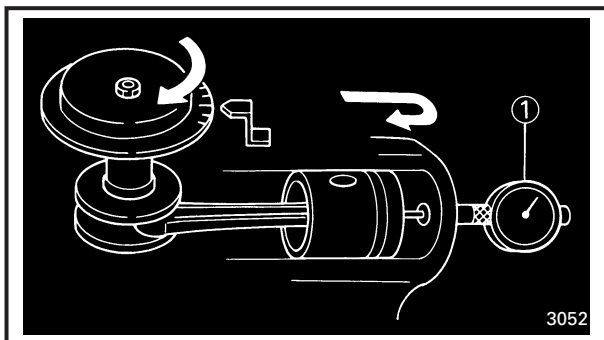
- Remove the flywheel magnet assembly cover.
- Turn the flywheel magnet assembly ① clockwise and align the timing plate ② with the specified mark.



Flywheel magnet assembly position

100A, 130B, S130B, L130B, 140B/100TR, 130TR, S130TR, L130TR:	BTDC 22°
E115A:	BTDC 23°
115B, 115C, S115C/ C115TR, 115TR, S115TR, B115TR:	BTDC 25°

- Turn the magneto control lever ③ so that it contacts the full advance adjusting screw ④.
- Check that the mark ① on the flywheel magnet assembly aligns with the mark ② on the pulser coil assembly.



2. Adjust:
- Ignition timing (full advance)

Adjustment steps

- (1) Remove all of the spark plugs.
- (2) Remove the intake silencer.
- (3) Install the dial gauge ① into cylinder #1's spark plug hole.
- (4) Slowly turn the flywheel magnet assembly clockwise and stop it when the piston is at TDC.
- (5) Set the dial gauge to "0".
- (6) Turn the flywheel magnet assembly clockwise until the dial gauge indicates the proper specification.

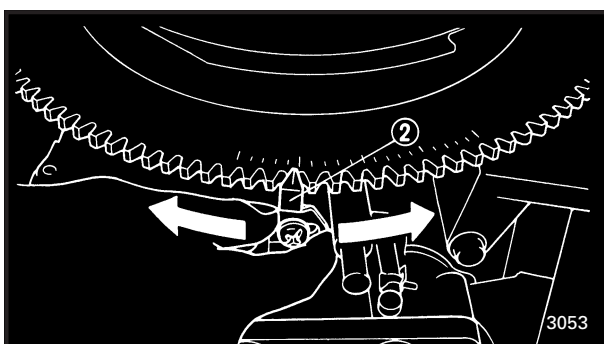
NOTE:

Turn the flywheel magnet assembly clockwise to locate BTDC.



Piston position

100A, 130B, S130B, L130B,
140B/100TR, 130TR, S130TR,
L130TR: 3.05 mm (0.12 in)
E115A: 3.33 mm (0.13 in)
115B, 115C, S115C/
C115TR, 115TR, S115TR,
B115TR: 3.91 mm (0.15 in)

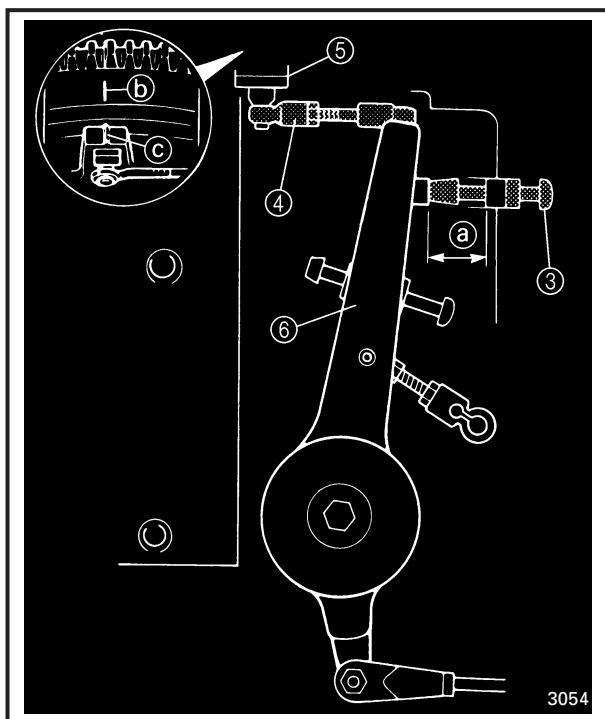


- (7) Align the timing plate ② with the specified mark on the flywheel magnet assembly.



Timing plate position

100A, 130B, S130B, L130B,
140B/100TR, 130TR,
S130TR, L130TR: BTDC 22°
E115A: BTDC 23°
115B, 115C, S115C/
C115TR, 115TR, S115TR,
B115TR: BTDC 25°



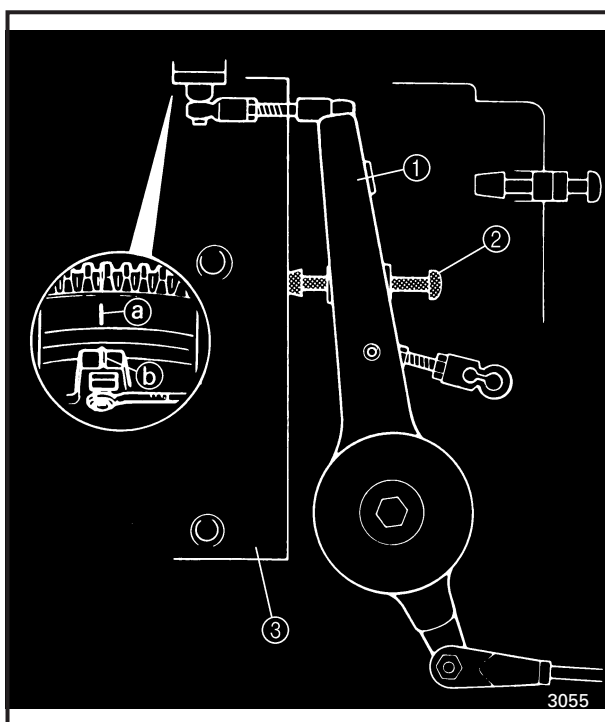
- (8) Secure the timing plate.
- (9) Adjust the length (a) of the full advance adjusting screw (3) to specification.



Full advance adjusting screw length (a)

100A, 130B, S130B, L130B, 140B/100TR, 130TR, S130TR, L130TR:	29.0 mm (1.14 in)
E115A:	24.5 mm (0.96 in)
115B/C115TR:	22.0 mm (0.87 in)
115C, S115C/115TR, S115TR, B115TR:	26.0 mm (1.02 in)

- (10) Disconnect the magneto control link (4) from the pulser coil assembly (5).
- (11) Turn the magneto control lever (6) so that it contacts the full advance adjusting screw (3).
- (12) Adjust the length of the magneto control link (4) so that the mark (b) on the flywheel magnet assembly aligns with the mark (c) on the pulser coil assembly (5).



3. Inspect:

- Ignition timing (full retard)
- Out of specification → Adjust.

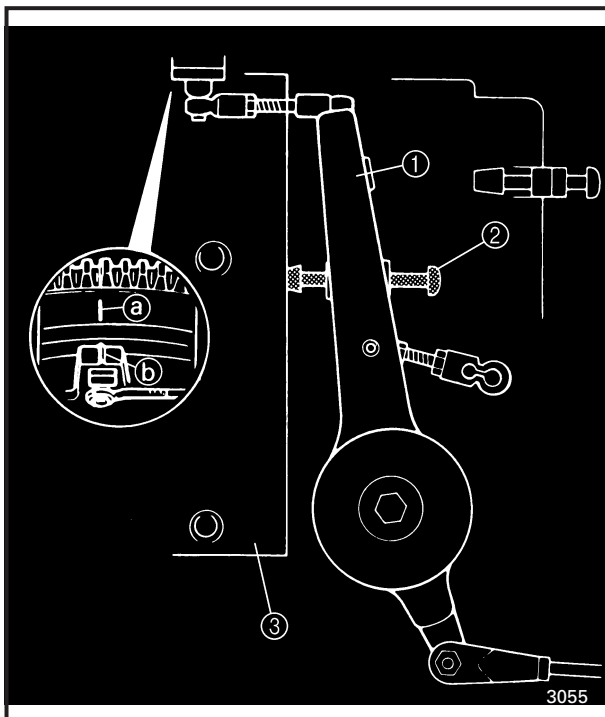
Inspecting steps

- (1) Turn the flywheel magnet assembly clockwise and align the timing plate and the specified mark.



Flywheel magnet assembly position ATDC 5°

- (2) Turn the magneto control lever (1) so that the full retard adjusting screw (2) contacts the crankcase (3).
- (3) Check that the mark (a) on the flywheel magnet assembly aligns with the mark (b) on the pulser coil assembly.



4. Adjust:

- Ignition timing (full retard)

Adjustment steps

- (1) Turn the flywheel magnet assembly clockwise and align the timing plate and the specified mark.



**Flywheel magnet assembly
position
ATDC 5°**

- (2) Turn the magneto control lever ① to the full retard position.
- (3) Adjust the full retard adjusting screw ② so that the mark ③ on the flywheel magnet assembly aligns with the mark ④ on the pulser coil assembly.

SYNCHRONIZING THE CARBURETOR

NOTE:

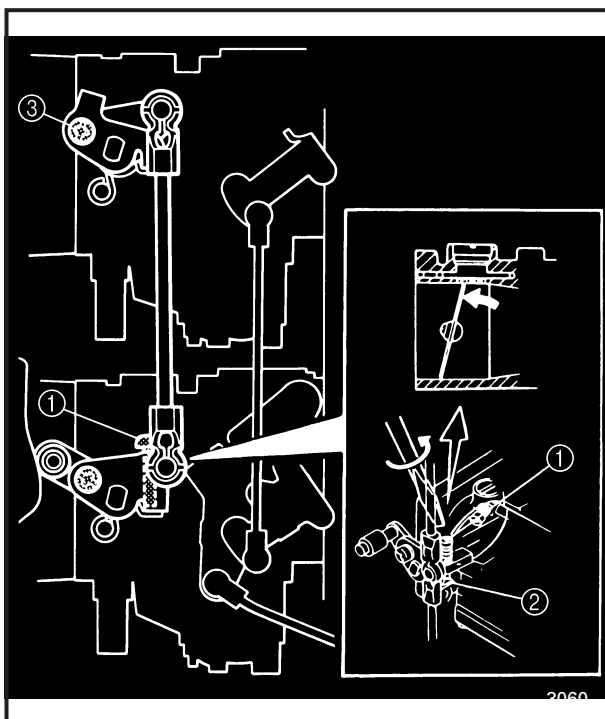
Before synchronizing the carburetor, be sure to adjust the ignition timing.

1. Inspect:

- Carburetor synchronization
Incorrect → Adjust.

Inspecting steps

- (1) Remove the intake silencer.
- (2) While turning the lower throttle lever, check that all throttle valves become fully closed at the same time.



2. Adjust:

- Carburetor synchronization

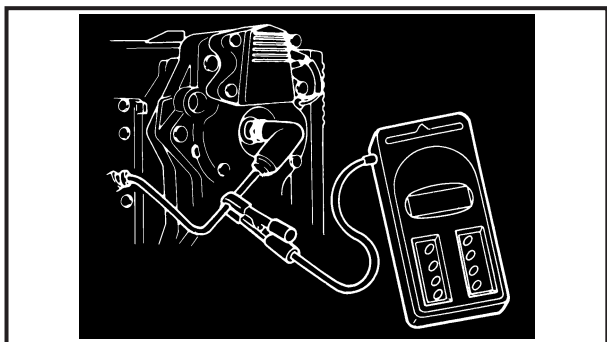
Adjustment steps

- (1) Loosen the throttle stop screw ① until it does not touch the throttle arm stopper ②.
- (2) Loosen the upper carburetor's throttle lever securing screw ③ by turning them clockwise.
- (3) While lightly pushing the lower carburetor's throttle lever in the direction of the arrow (fully closed), tighten the upper carburetor's throttle lever securing screw ③ by turning them counter-clockwise.
- (4) Turn the lower throttle lever and make sure that all of the throttle valves are synchronized.

ADJUSTING THE ENGINE IDLING SPEED

NOTE: _____

Before adjusting the engine idling speed, be sure to synchronize the carburetor and ignition timing.



1. Measure:
- Engine idling speed
- Out of specification → Adjust.



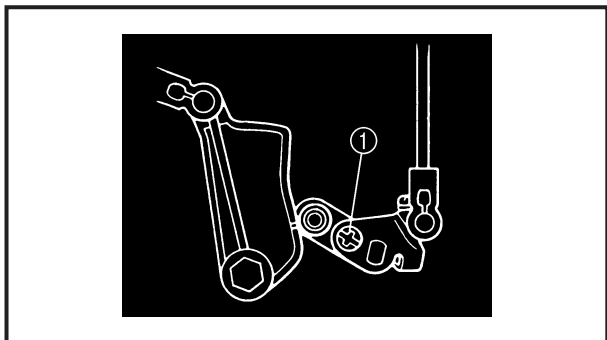
Engine idling speed
750 ± 50 r/min

Measuring steps

- (1) Start the engine and allow it to warm up for a few minutes.
- (2) Install the tachometer onto the spark plug lead of cylinder #1.



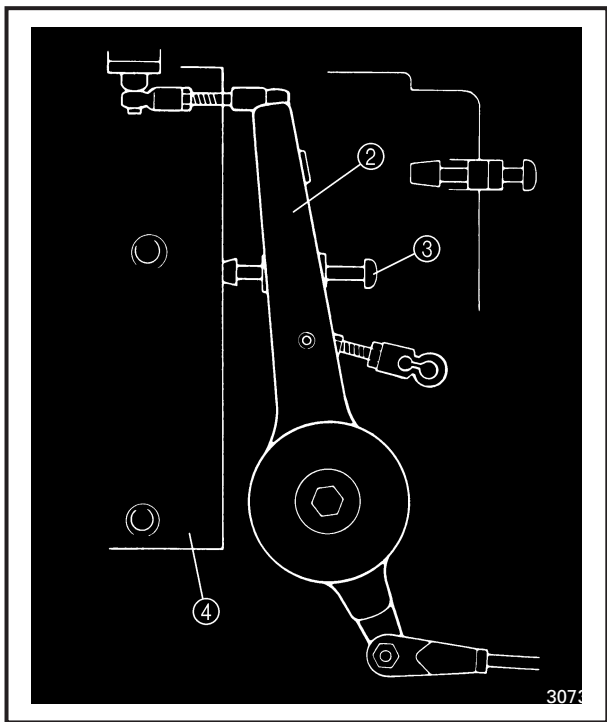
Tachometer
YU-08036-A / 90890-06760



2. Adjust:
- Engine idling speed

Adjustment steps

- (1) Loosen the throttle roller adjusting screw ①.



- (2) Start the engine and allow it to warm up for a few minutes.
- (3) Install the tachometer onto the spark plug lead of cylinder #1.

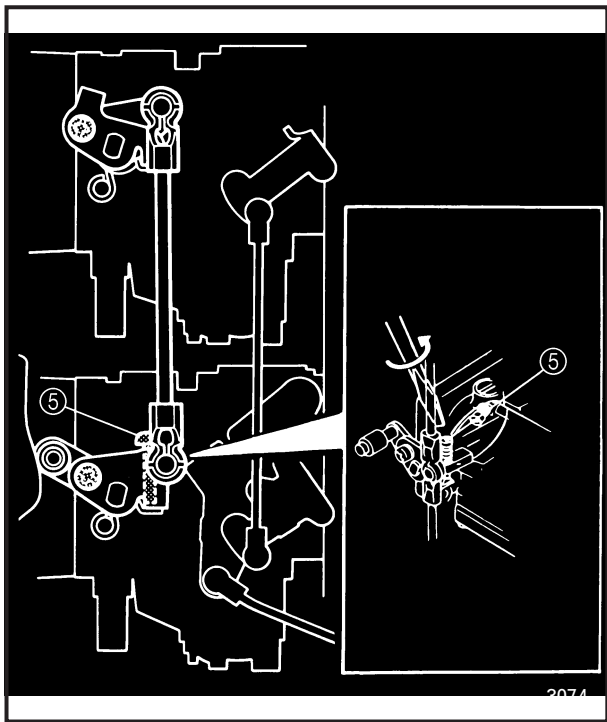
Tachometer
YU-08036-A / 90890-06760

- (4) Turn the magneto control lever (2) so that the full retard adjusting screw (3) contacts the crankcase (4).
- (5) Adjust the throttle stop screw (5) in or out until the specified engine idling speed is obtained.

Turning in	Engine idling speed increases.
Turning out	Engine idling speed decreases.

Engine idling speed
750 ± 50 r/min

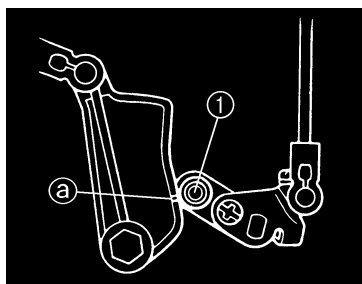
- (6) Tighten the throttle roller adjusting screw (1).



ADJUSTING THE CARBURETOR PICKUP TIMING

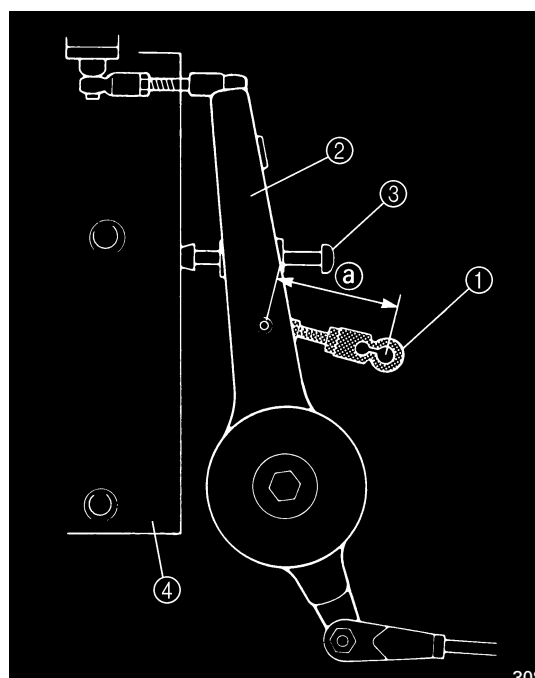
NOTE: Before adjusting the carburetor pickup timing, be sure to adjust the ignition timing, carburetor synchronization and engine idling speed.

1. Inspect:
 - Pickup timing
 Incorrect → Adjust.



Inspecting steps

- (1) Turn the magneto control lever so that the full retard adjusting screw contacts the crankcase.
- (2) Check that the mark **a** on the throttle cam aligns with the center of the throttle roller **1**.



2. Adjust:

- Pickup timing

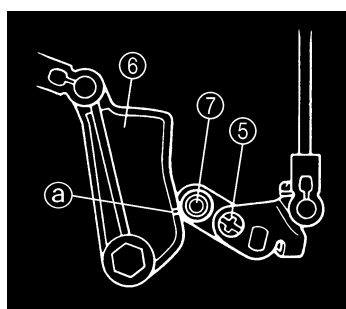
Adjustment steps

- (1) Adjust the throttle cam control link **1** to the specified length **a**.



Throttle cam control link length
53.0 mm (2.09 in)

- (2) Turn the magneto control lever **2** so that the full retard adjusting screw **3** contacts the crankcase **4**.



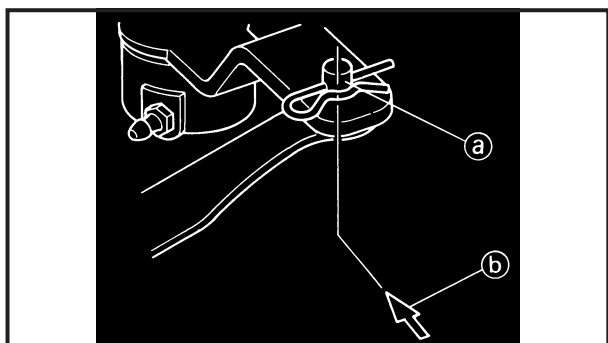
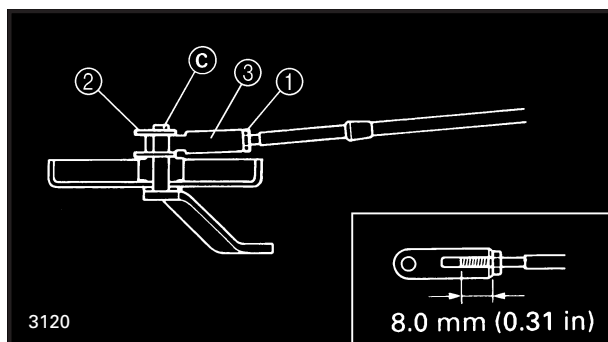
- (3) Loosen the throttle roller adjusting screw **5**.
- (4) Align the mark **a** on the throttle cam **6** with the center of the throttle roller **7**.
- (5) Tighten the throttle roller adjusting screw **5**.

ADJUSTING THE REMOTE CONTROL SHIFT CABLE

1. Inspect:
 - Shift operation
 Incorrect → Adjust.
2. Adjust:
 - Remote control shift cable length

Adjustment steps

- (1) Loosen the locknut ①.
- (2) Remove the clip ②.
- (3) Disconnect the shift cable joint ③.
- (4) Set the remote control lever to the neutral position.
- (5) Align the center of the set pin ④ with the mark ⑤ on the bottom cowling.
- (6) Adjust the position of the shift cable joint until its hole aligns with the set pin ④.
- (7) Install the clip and tighten the locknut.



CAUTION:

The remote control cable joint must be screwed in more than 8 mm (0.31 in).

ADJUSTING THE REMOTE CONTROL THROTTLE CABLE

NOTE:

Before adjusting the remote control throttle cable, be sure to adjust the ignition timing and carburetor synchronization.

1. Inspect:
 - Throttle operation
 Incorrect → Adjust.

Inspecting steps

- (1) Turn the throttle lever fully.
- (2) Check the magneto control lever ① so that it contacts the full advance adjusting screw ②.

