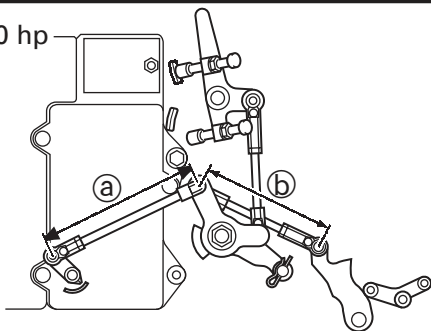
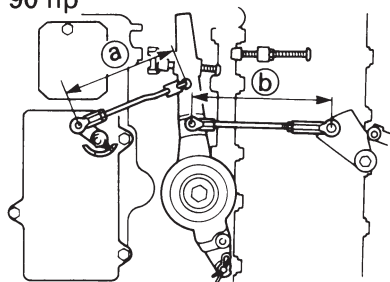




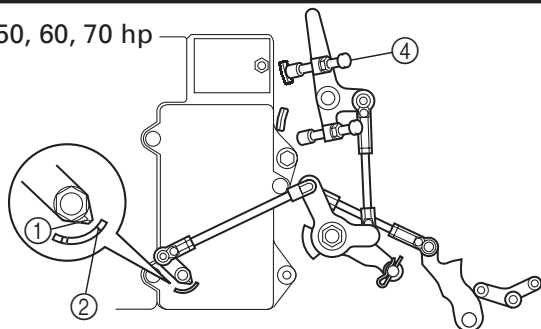
50, 60, 70 hp



75, 80, 90 hp

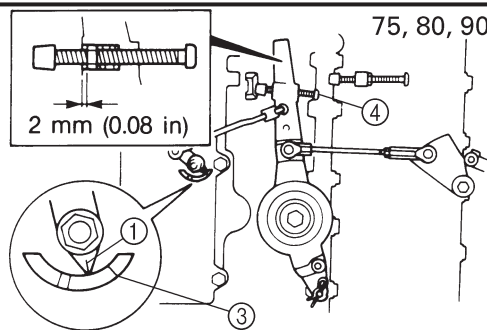


50, 60, 70 hp

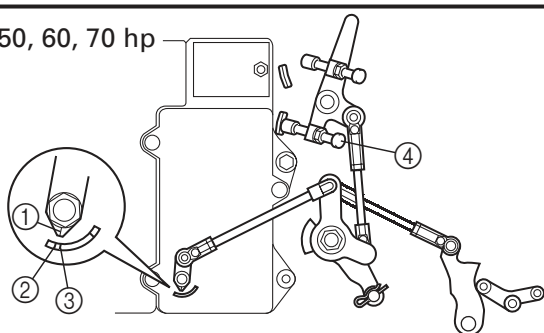


2 mm (0.08 in)

75, 80, 90 hp



50, 60, 70 hp



THROTTLE SENSOR CONTROL LINK ADJUSTMENT

1. Adjust the lengths of the throttle sensor control link and throttle cam control link to specifications.



Throttle sensor control link length ①:

50, 60, 70 hp: 120 ± 0.5 mm
(4.72 ± 0.02 in)

75, 80, 90 hp: 93.5 ± 0.5 mm
(3.68 ± 0.02 in)

Throttle cam link length ②:

50, 60, 70 hp: 95 mm (3.74 in)

75, 80, 90 hp: 120.5 mm (4.74 in)

2. Adjust the length of the full-retard adjusting screw so that when the full-retard adjusting screw contacts the stopper, the full-retard indication on the CDI unit aligns with the timing indicator.

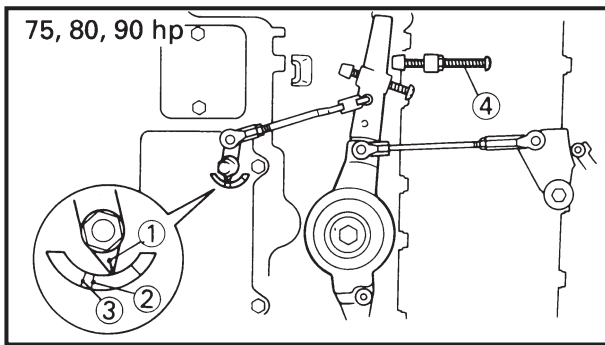
- ① Timing indicator
- ② Full-retard indication (50, 60, 70 hp)
- ③ Full-retard indication (75, 80, 90 hp)
- ④ Full-retard adjusting screw

NOTE:

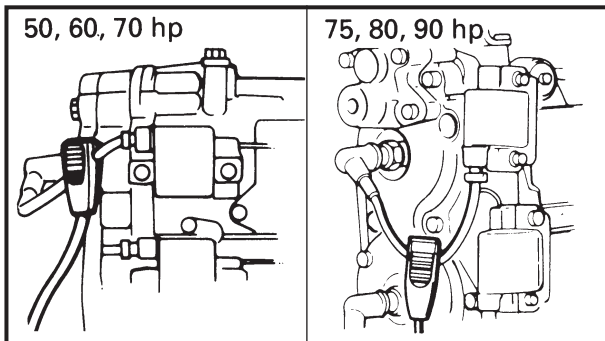
The nut in the magneto control lever should be 2 mm (0.08 in) off from the end of the magneto control lever.

3. Adjust the length of the full-advance adjusting screw so that when the full-advance adjusting screw contacts the stopper, the full-advance indication on the CDI unit aligns with the timing indicator.

- ① Timing indicator
- ② Full-advance indication (50, 60 hp)
- ③ Full-advance indication (70 hp)
- ④ Full-advance adjusting screw



- ① Timing indicator
- ② Full-advance indication (75, 80 hp)
- ③ Full-advance indication (90 hp)
- ④ Full-advance adjusting screw



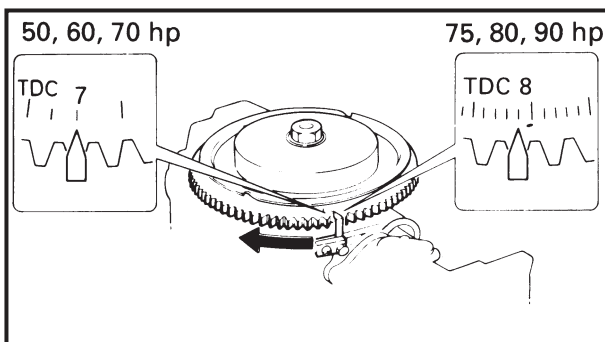
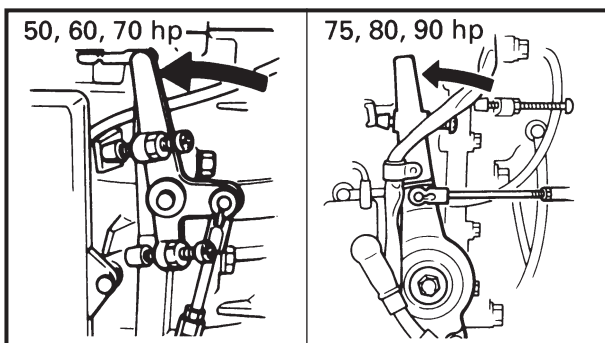
IGNITION TIMING ADJUSTMENT

CAUTION:

When checking ignition timing using a timing light, be sure to replace the propeller with the specified test propeller, and make tests with the machine placed in a test tank.

NOTE:

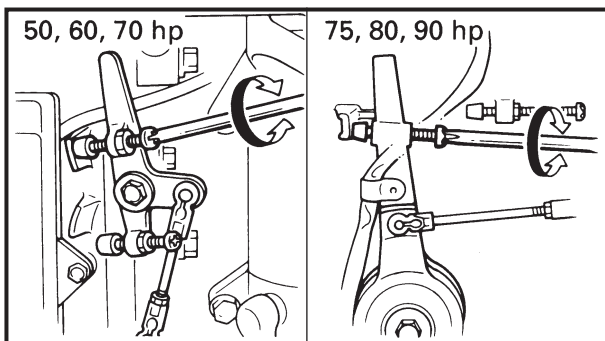
Before adjusting, be sure to warm up the engine.



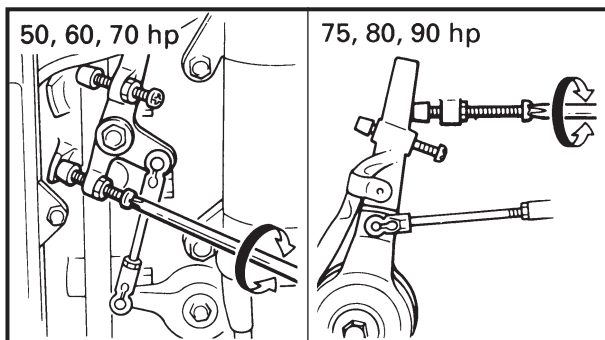
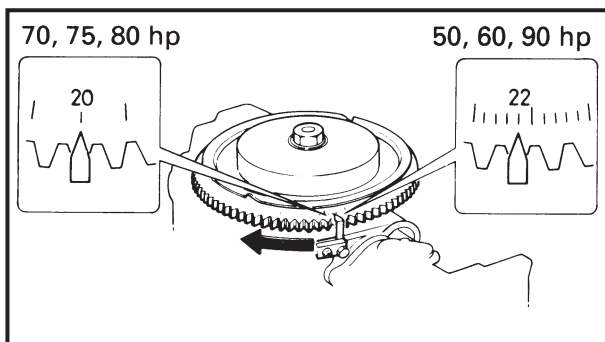
- Attach the timing light and tachometer to the No. 1 cylinder high tension code.
- While keeping the stopper in contact with the full-retard adjusting screw, measure the full-retard ignition timing with the timing light.
If the timing is out of specification, adjust it by turning the full-retard adjusting screw.

NOTE:

When measuring the full-retard ignition timing, keep the specified engine speed.



	Full-retard side engine speed: 800 ± 50 r/min
	Full-retard side ignition timing: 50, 60, 70 hp: 7 ± 1° ATDC 75, 80, 90 hp: 8 ± 1° ATDC



3. While keeping the stopper in contact with the full-advance adjusting screw, measure the full-retard ignition timing with the timing light.

If the timing is out of specification, adjust it by turning the full-advance adjusting screw.

NOTE:

When measuring the full-advance ignition timing, keep the specified engine speed.



Full-advance side engine speed:

50, 60, 75, 80, 90 hp:

5,000 ± 500 r/min

70 hp:

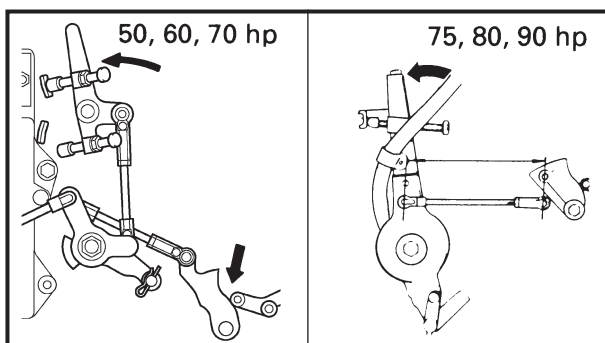
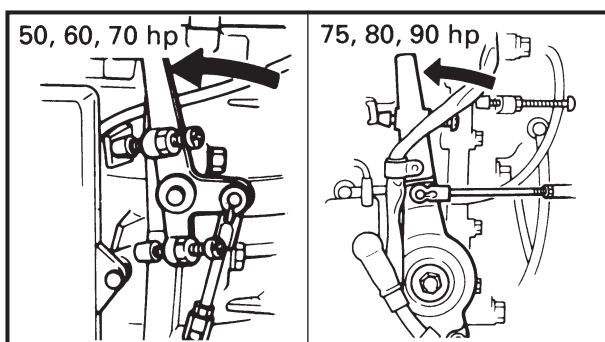
5,500 ± 500 r/min



Full-advance side ignition timing:

50, 60, 90 hp: 22 ± 1° BTDC

70, 75, 80 hp: 20 ± 1° BTDC



PICK-UP TIMING ADJUSTMENT

NOTE:

Engine idle speed should be adjusted properly before adjusting the pick-up timing.

1. Turn the magneto control lever to the full-retard position.
2. Bring the throttle cam to lightly contact the throttle lever roller. (The throttle valve should not open.)
Adjust the accelerator link length and connect magneto control lever to the accelerator cam.