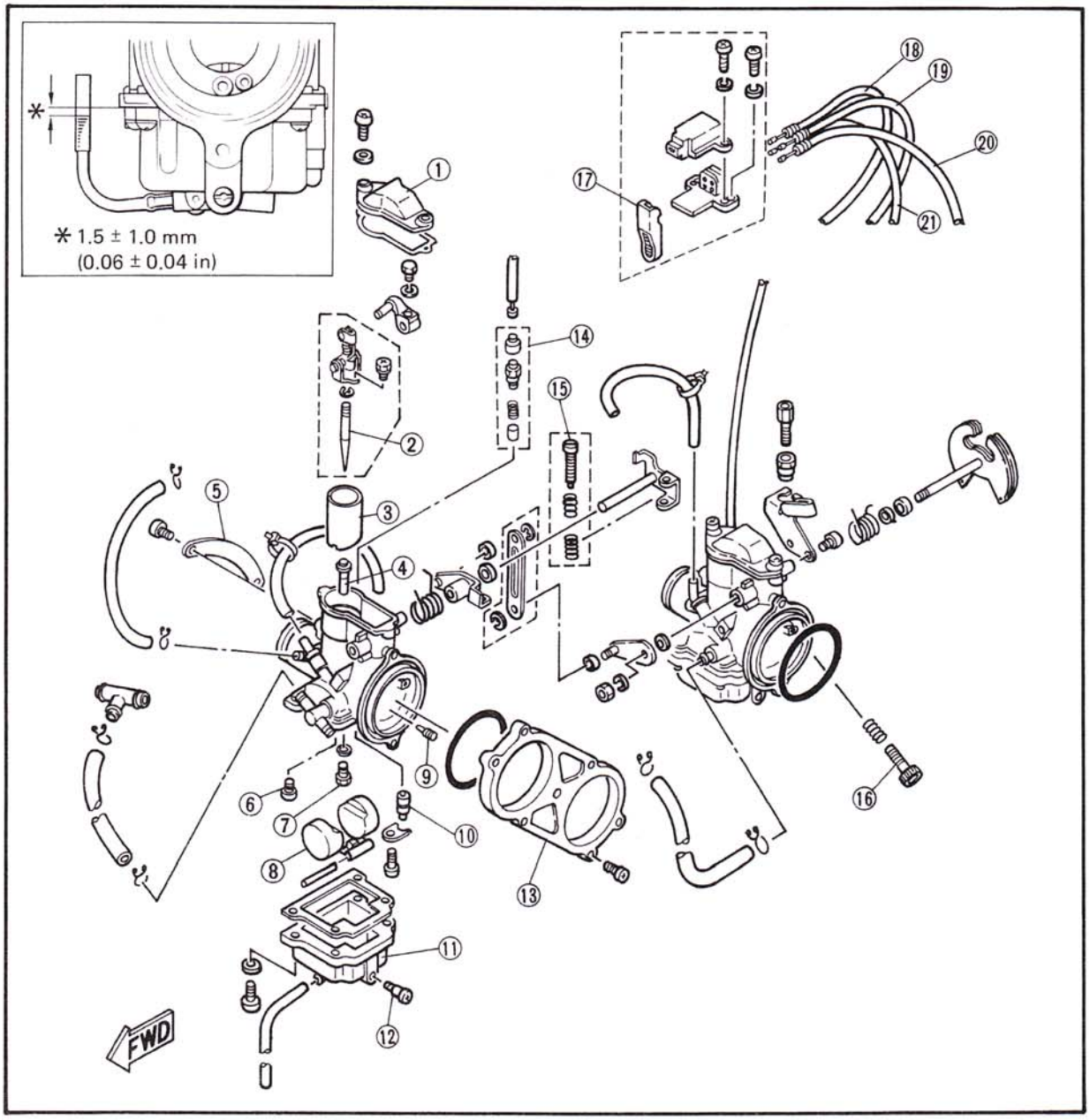
# CHAPTER 5.
# CARBURETION

# CARBURETION

## CARBURETOR

1. Top cover
2. Jet needle
3. Throttle valve
4. Needle jet
5. Bracket
6. Pilot jet
7. Main jet
8. Pilot air jet
9. Valve seat
10. Float
11. Float chamber
12. Drain screw
13. Carburetor holder
14. Starter plunger
15. Synchronizing screw
16. Throttle stop screw
17. Choke lever
18. To right upper carburetor
19. To right lower carburetor
20. To left lower carburetor
21. To left upper carburetor

| SPECIFICATIONS | |
|---|---|
| Main jet | # 195 |
| Main air jet | # 1.8 (upper cylinder) |
| | # 1.6 (lower cylinder) |
| Jet needle | 5LT14-3 |
| Needle jet | O-0 |
| Pilot jet | # 22.5 |
| Pilot air jet | # 1.1 |
| Fuel level | 1.5 ± 1.0 mm |
| | (0.06 ± 0.04 in) |
| Float height | 21.0 ± 1.0 mm |
| | (0.83 ± 0.04 in) |
| Float valve seat | ϕ 2.8 |
| Engine idle speed | 1,250 r/min |

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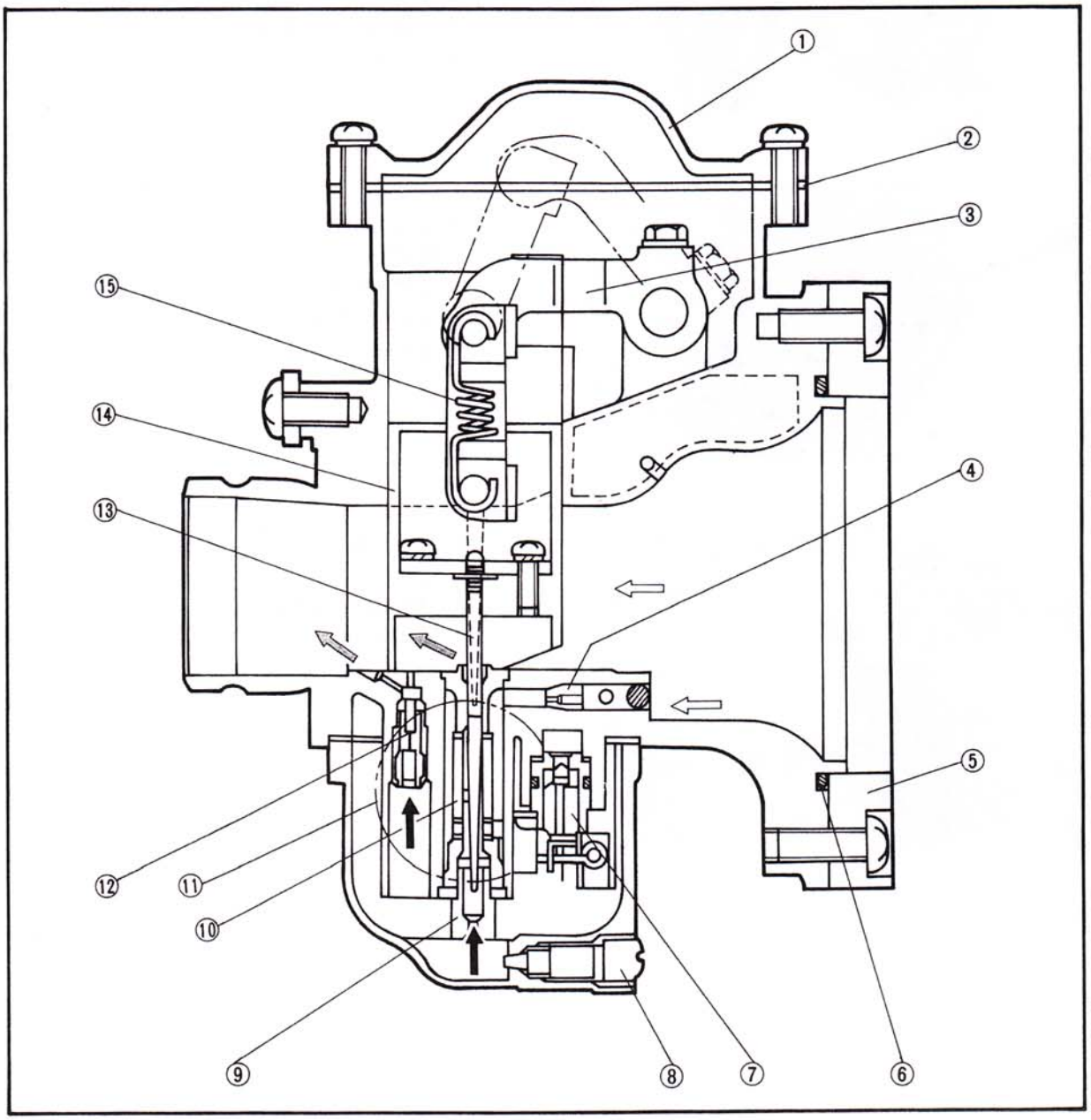
## SECTION VIEW

1. Top cover
2. Gasket
3. Lever
4. Pilot air jet
5. Carburetor holder
6. O-ring
7. Valve seat
8. Drain screw
9. Main jet
10. Needle jet
11. Float
12. Pilot jet
13. Jet needle
14. Throttle valve
15. Spring

| | | |
|---|---|---|
| A | ⇦ | AIR |
| B | ⇦ | MIXTURE |
| C | ⬅ | FUEL |

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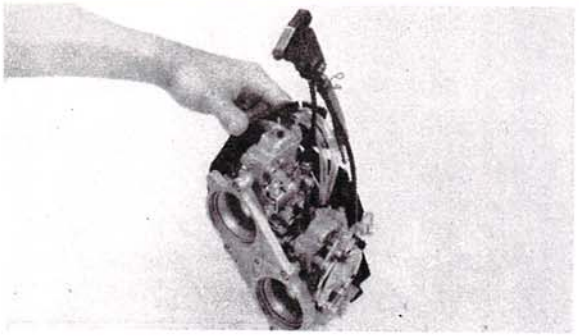
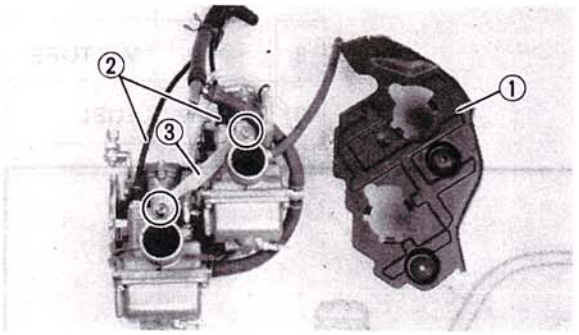


## CARBURETOR OVERHAUL

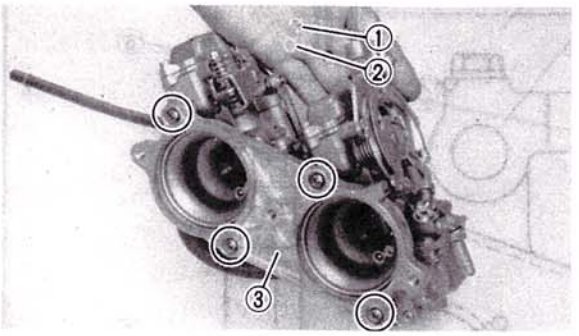
### REMOVAL

1. Remove:
   - Carburetor assembly
     Refer to engine removal section.

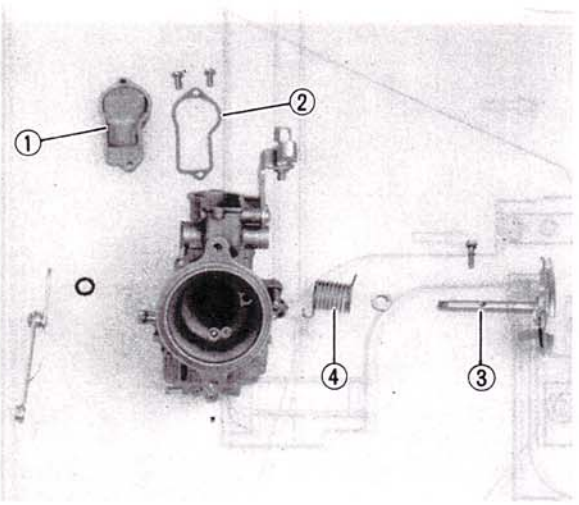



### DISASSEMBLY

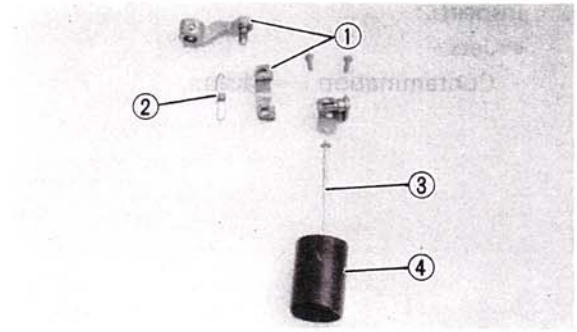
1. Disconnect:
   - Carburetor cover ①
   - Hoses
2. Remove:
   - Starter plungers ②
   - Bracket ③



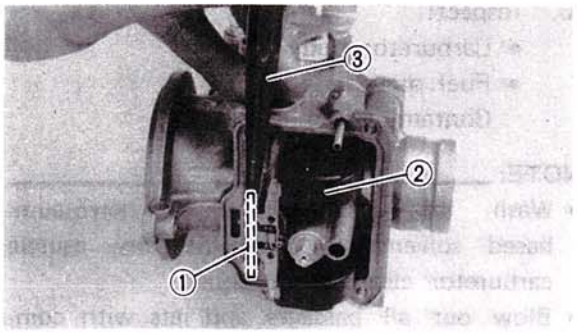

3. Remove:
   - Circlip ①
   - Washer ②
   - Carburetor holder ③
   - Carburetors
   - O-rings




4. Remove:
   - Top cover ①
   - Gasket ②
   - Throttle pulley ③
   - Spring ④

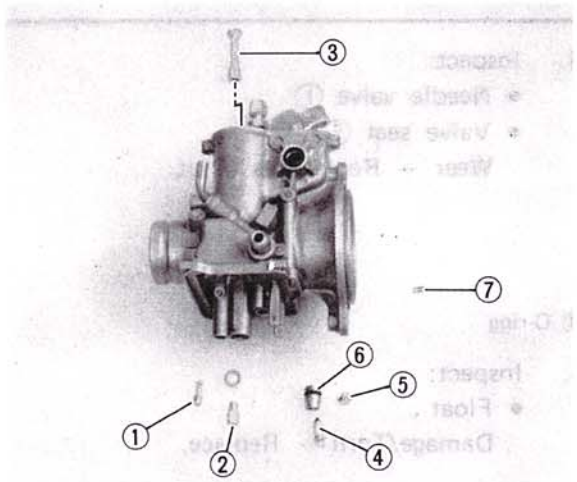



5. Remove:
   - Lever ①
   - Spring ②
   - Jet needle ③
   - Throttle valve ④
   - Float chamber
   - Gasket



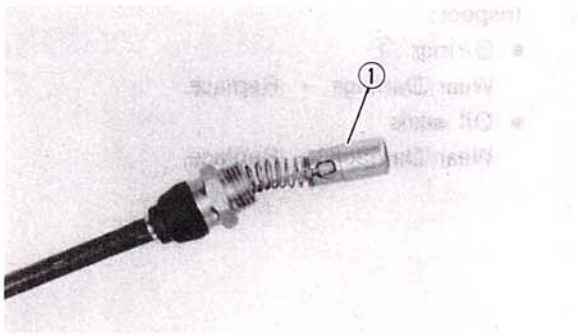

6. Remove:
   - Float pin ①
   - Float ②

③ Center punch




7. Remove:
   - Pilot jet ①
   - Main jet ②
   - Needle jet ③
   - Needle valve ④
   - Screw ⑤
   - Valve seat ⑥
   - Pilot air jet ⑦

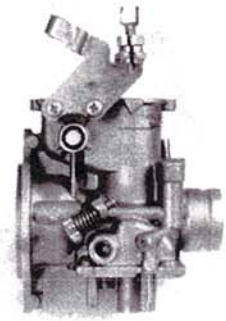
**NOTE:**
Remove the needle jet toward the throttle valve.




**INSPECTION**

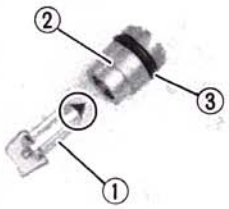
1. Inspect:
   - Starter plunger ①
     Damage/Wear → Replace.
   - Throttle valve
     Scraches/Wear → Replace.
   - Jet needle
     Bends/Wear → Replace.

2. Inspect:
   - Jets
     Contamination → Clean.



3. Inspect:
   - Carburetor body
   - Fuel passage
     Contamination → Clean.

**NOTE:**
- Wash the carburetor in a petroleum-based solvent. Do not use any caustic carburetor cleaning solutions.
- Blow out all passages and jets with compressed air.




4. Inspect:
   - Needle valve ①
   - Valve seat ②
     Wear → Replace as a set.

③ O-ring

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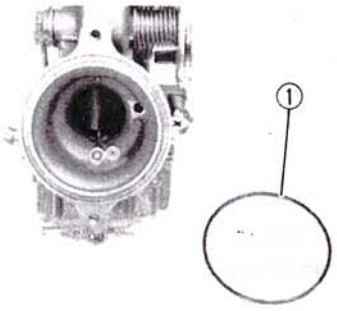
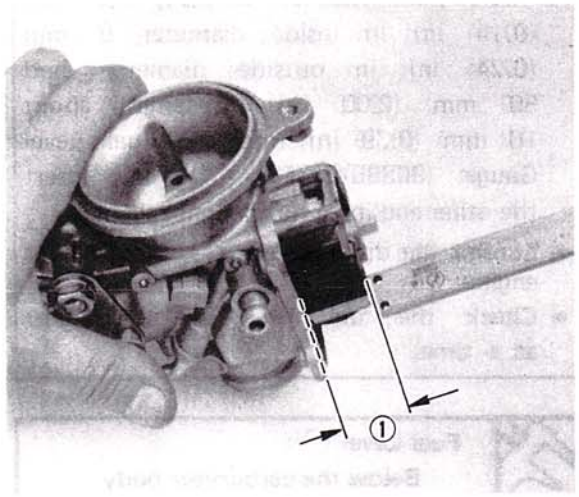
5. Inspect:
   - Float
     Damage/Torn → Replace.




6. Inspect:
   - O-rings ①
     Wear/Damage → Replace.
   - Oil seals
     Wear/Damage → Replace.

## ASSEMBLY

1. Assembly:
   - Carburetors
     Reverse the disassembly procedures.

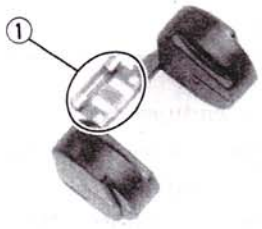



## FLOAT HEIGHT ADJUSTMENT

1. Measure:
   - Float height ①
     Out of specification → Adjust.

**Float height measurement steps:**
- Hold the carburetor in an upside down position.
- Incline the carburetor at 60 ~ 70° (so that the end of the float valve does not hang down as a result of float weight).
- Measure the distance from the mating surface of the float chamber (gasket removed) to the top of the float.

**NOTE:**
The float should be just resting on, but not depressing, the spring loaded inlet needle.

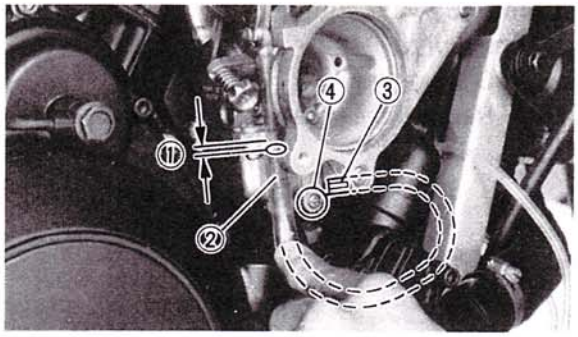


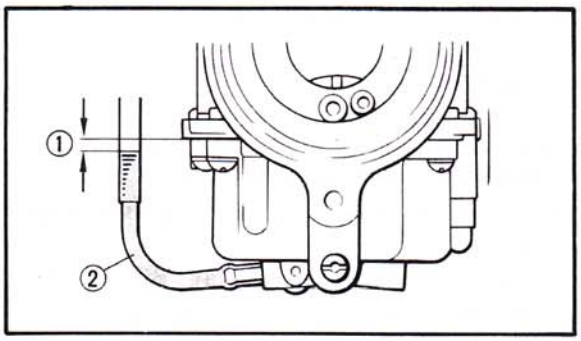

**Float Height ①:**
**21.0 ± 1.0 mm (0.83 ± 0.04 in)**

**Float height adjustment step:**
- Remove the float.
- Adjust float height by bending the float tang ① slightly.
- Repeat the procedure for other carburetors.

## INSTALLATION

1. Install:
   - Carburetors
     Reverse the removal steps.



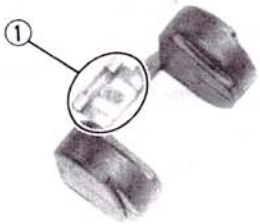

## FUEL LEVEL ADJUSTMENT

1. Measure:
   - Fuel level ①
     Out of specification → Adjust.

**Measurement steps:**
- Place the motorcycle on a level surface.
- Use a garage jack under the engine to ensure that the carburetor is positioned vertically.
- Insert one end of a pipe, 3.5 mm (0.14 in) in inside diameter, 6 mm (0.24 in) in outside diameter, and 50 mm (2.00 in) in length about 10 mm (0.39 in) into the Fuel Level Gauge (90890-01312) ②, and insert the other end into the drain nozzle ③.
- Loosen the drain screw ④ and start the engine.
- Check the fuel level, one carburetor at a time.

**Fuel Level ① :**
**Below the carburetor body**
**1.5 ± 1.0 mm (0.06 ± 0.04 in)**

② Carburetor body
③ Float chamber




2. Adjust:
   - Fuel level
     If necessary.

**Adjustment steps:**
- Remove the carburetors.
- Adjust float level by bending the float tang ① slightly.
- Repeat the procedure for the other carburetors.

3. Adjust:
   - Carburetor cables
   - Carburetor synchronization
   - Engine idle speed
     Refer to CHAPTER 2 for adjustment.

**Engine Idle Speed:**
**1,250 r/min**