
**CHAPTER 6.
CARBURETORS**

CARBURETORS 6-1

 CHECKING THE CARBURETORS 6-7

 ASSEMBLING THE CARBURETORS 6-9

 INSTALLING THE CARBURETORS 6-11

 MEASURING AND ADJUSTING THE FUEL LEVEL 6-12

 CHECKING AND ADJUSTING THE THROTTLE POSITION
 SENSOR 6-13

 CHECKING THE FUEL PUMP 6-16

 CHECKING THE FUEL COCK 6-17

 CHECKING THE FUEL COCK OPERATION 6-17

AIR INDUCTION SYSTEM 6-18

 AIR INJECTION 6-18

 AIR CUTOFF VALVE 6-18

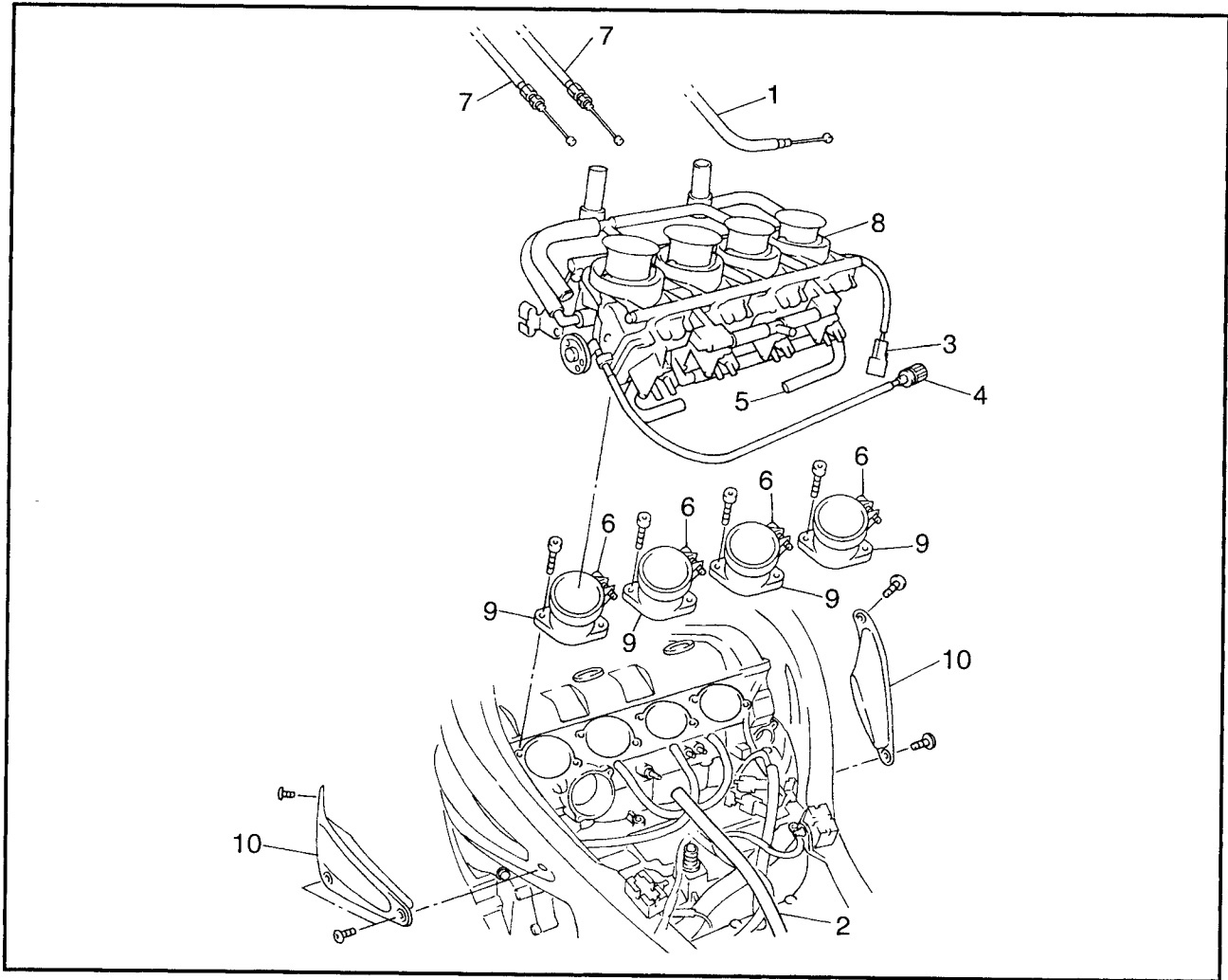
 AIR INDUCTION SYSTEM DIAGRAMS 6-19

 CHECKING THE AIR INDUCTION SYSTEM 6-20

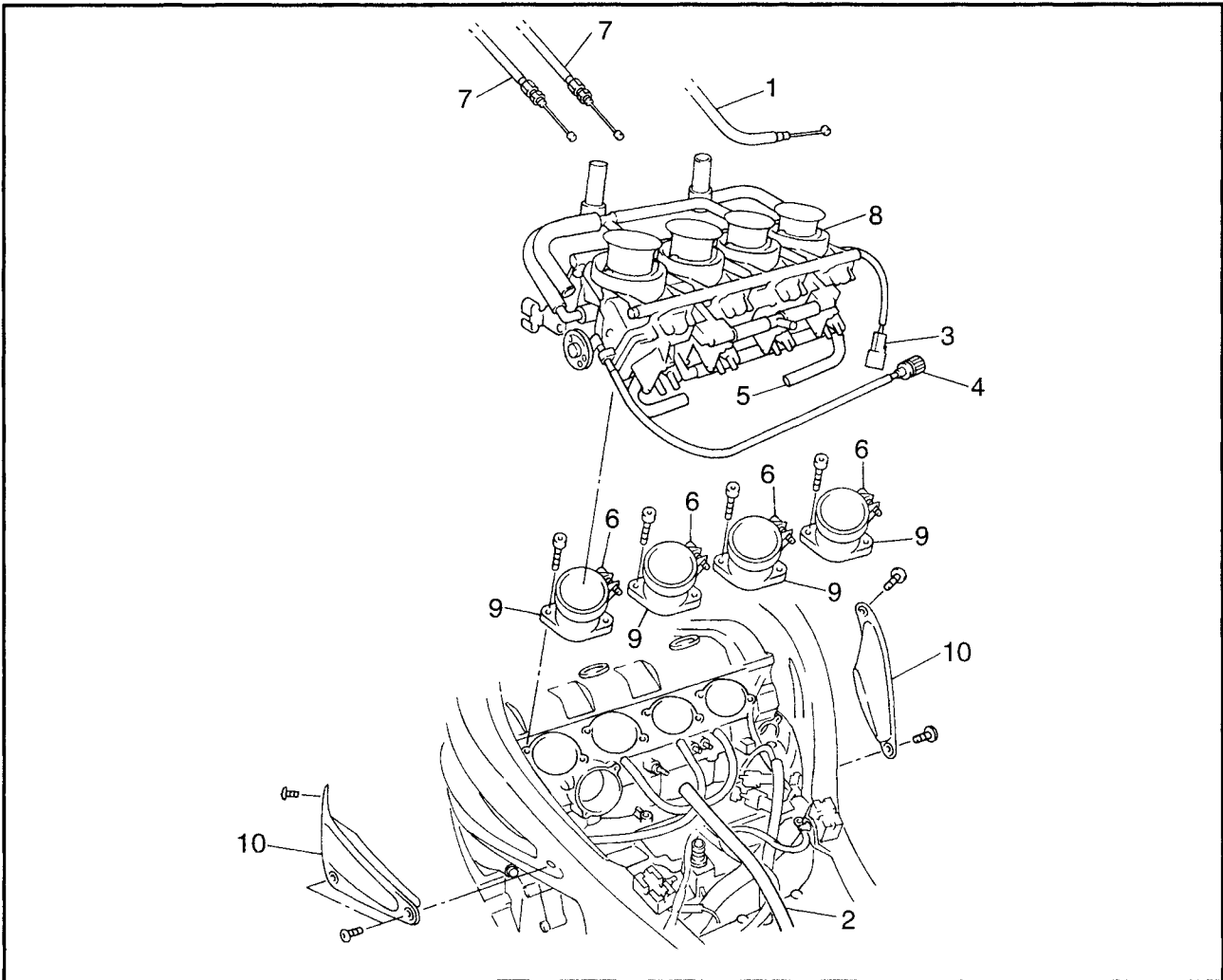
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CARBURETORS

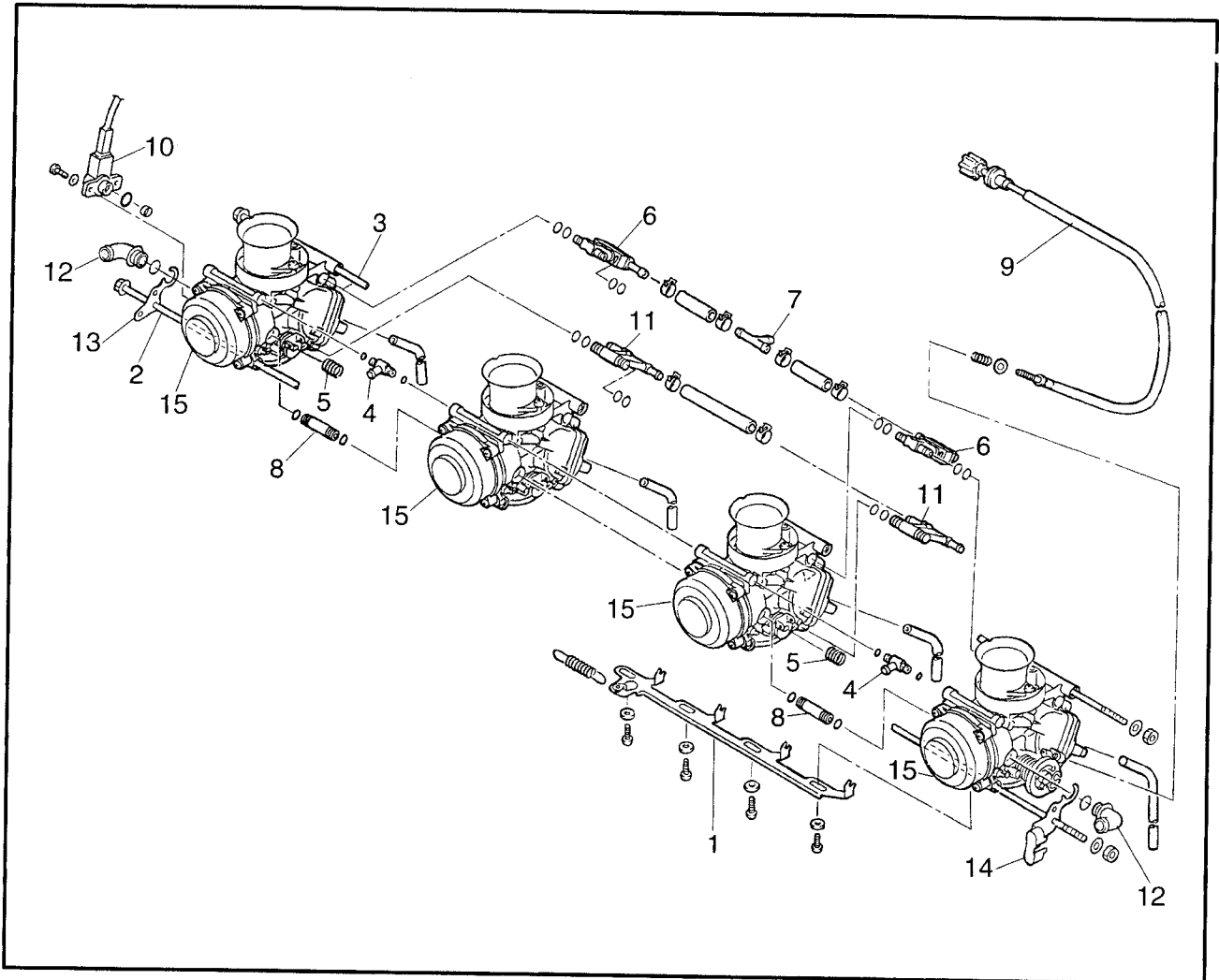
CARBURETORS



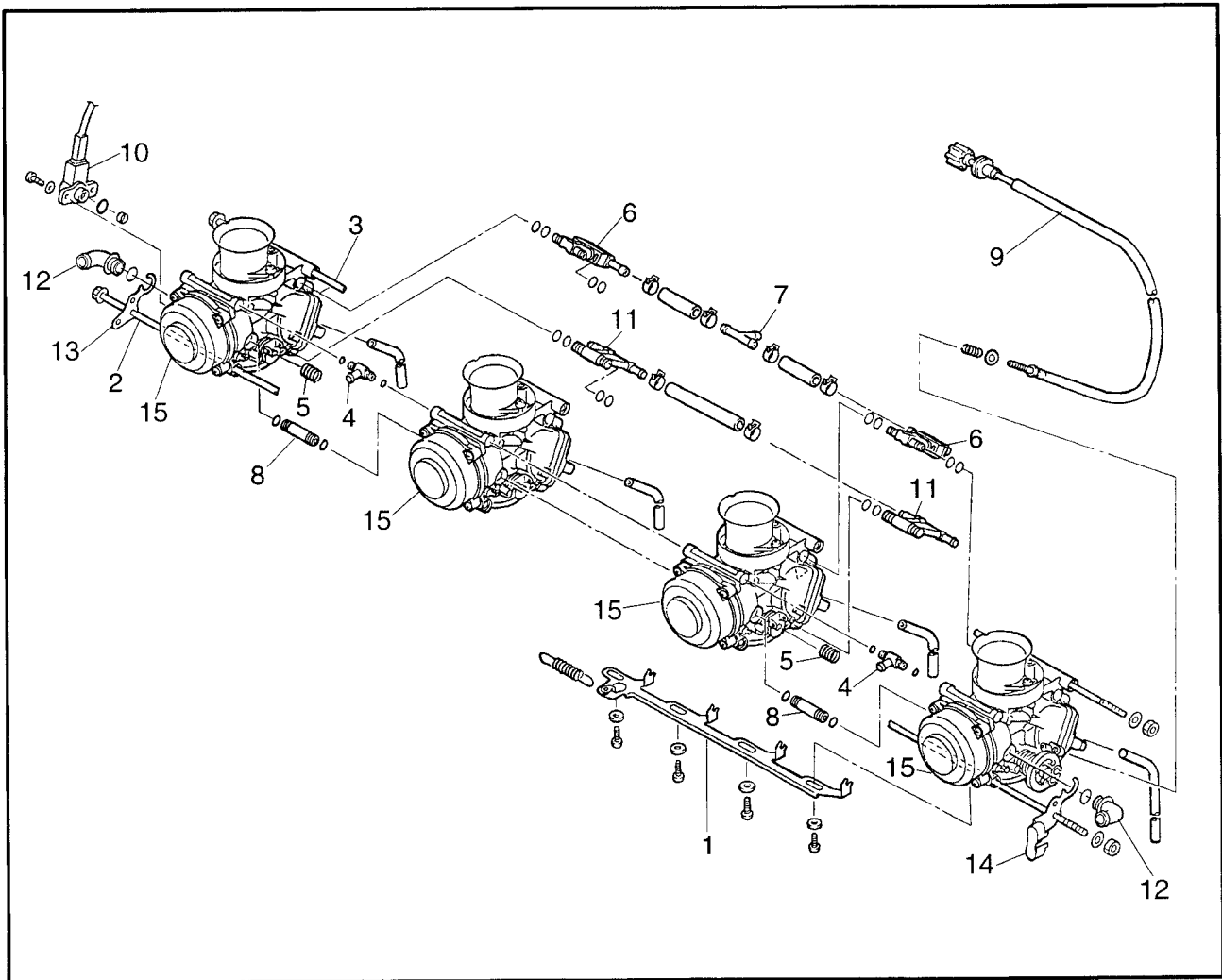
Order	Job/Part	Q'ty	Remarks
	Removing the carburetors		
	Rider seat and fuel tank		Remove the parts in the order listed. Refer to "Seats" and "FUEL TANK" in chapter 3.
	Air filter case and heat protector plate		Refer to "AIR FILTER CASE AND IGNITION COILS" in chapter 3.
1	Starter cable	1	
2	Fuel hose	1	
3	Throttle position sensor coupler	1	Disconnect
4	Throttle stop screw	1	



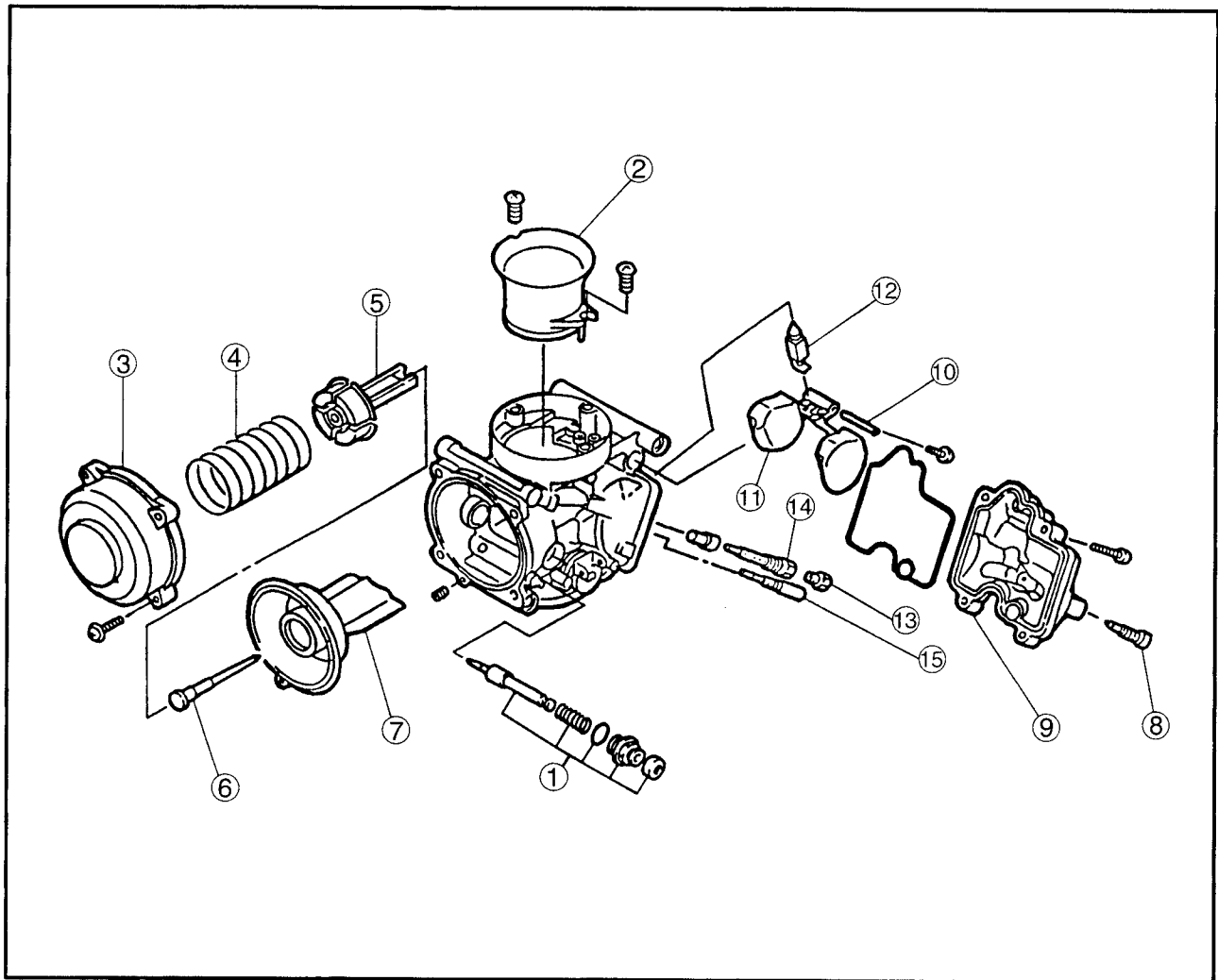
Order	Job/Part	Q'ty	Remarks
5	Therm bypass hose	2	For installation, reverse the removal procedure.
6	Carburetor joint clamp screw	4	
7	Throttle cable	2	
8	Carburetor assembly	1	
9	Carburetor joint	4	
10	Side cover	2	



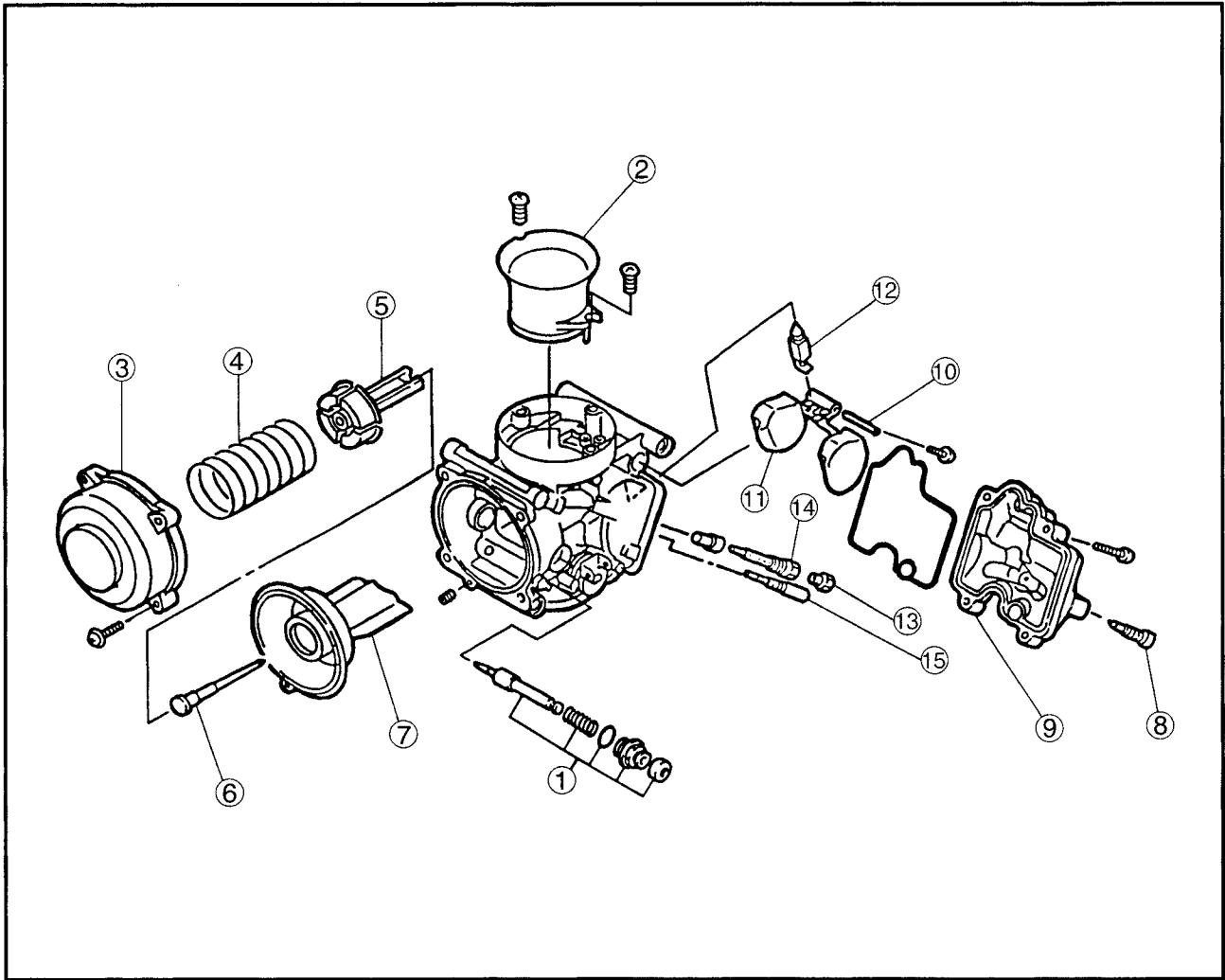
Order	Job/Part	Q'ty	Remarks
	Separating the carburetors		
1	Starter plunger link	1	Remove the parts in the order listed.
2	Connecting bolt	1	
3	Connecting bolt	1	
4	Hose joint	2	Refer to "ASSEMBLING THE CARBURETORS"
5	Spring	2	
6	Fuel feed pipe	2	Refer to "ASSEMBLING THE CARBURETORS"
7	Fuel feed pipe	1	
8	Pipe	2	
9	Throttle stop screw	1	
10	Throttle position sensor	1	
11	Water pipe	2	



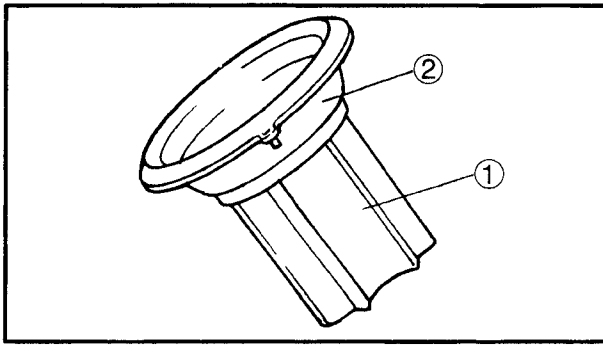
Order	Job/Part	Q'ty	Remarks
12	Balance pipe	2	For installation, reverse the removal procedure
13	Balance pipe bracket	1	
14	Throttle cable bracket	1	
15	Carburetor	4	



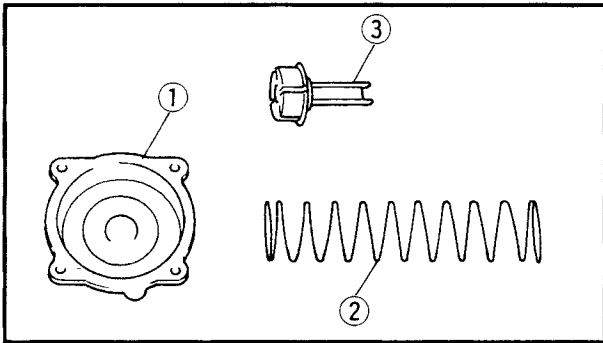
Order	Job/Part	Q'ty	Remarks
	Disassembling the carburetor		Disassemble the parts in the order listed. NOTE: _____ The following procedure applies to all of the carburetors.
①	Starter plunger	1	
②	Air funnel	1	
③	Vacuum chamber cover	1	
④	Piston valve spring	1	
⑤	Jet needle holder	1	
⑥	Jet needle kit	1	
⑦	Piston valve	1	Refer to "ASSEMBLING THE CARBURETORS."
⑧	Fuel drain bolt	1	
⑨	Float chamber	1	
⑩	Float pivot pin	1	



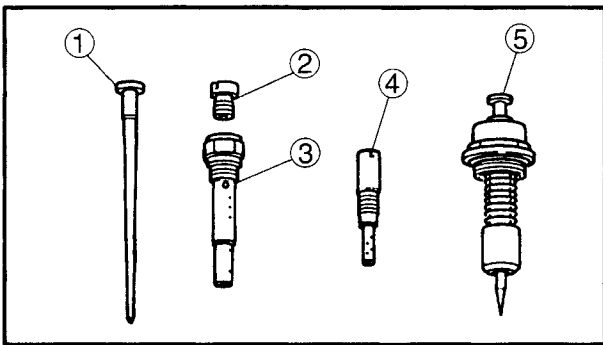
Order	Job/Part	Q'ty	Remarks
①	Float	1	For assembly, reverse the disassembly procedure.
②	Needle valve	1	
③	Main jet	1	
④	Main jet holder	1	
⑤	Pilot jet	1	



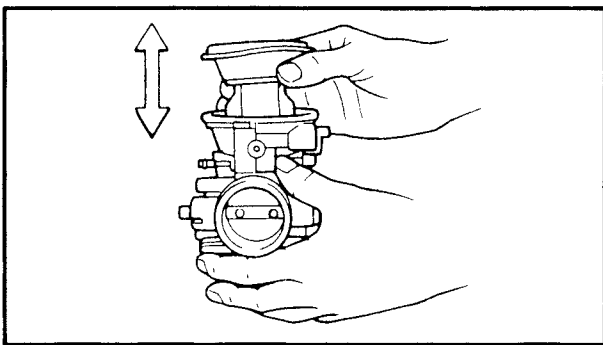
7. Check:
- piston valve ①
Damage/scratches/wear → Replace.
 - piston valve diaphragm ②
Cracks/tears → Replace.



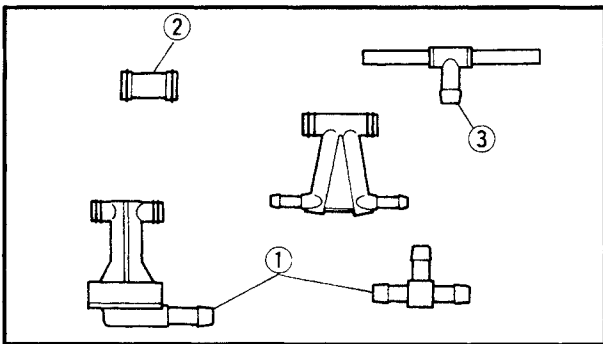
8. Check:
- vacuum chamber cover ①
 - piston valve spring ②
 - jet needle holder ③
Cracks/damage → Replace.



9. Check:
- jet needle kit ①
 - main jet ②
 - main jet holder ③
 - pilot jet ④
 - starter plunger ⑤
Bends/damage/wear → Replace.
Obstruction → Clean.
Blow out the jets with compressed air.



10. Check:
- piston valve movement
Insert the piston valve into the carburetor body and move it up and down.
Tightness → Replace the piston valve.



11. Check:
- fuel feed pipes ①
 - pipes ②
 - hose joint ③
Cracks/damage → Replace.
Obstruction → Clean.
Blow out the pipes with compressed air.



12. Check:

- fuel hoses
- Cracks/damage/wear → Replace.
- Obstruction → Clean.
- Blow out the hoses with compressed air.

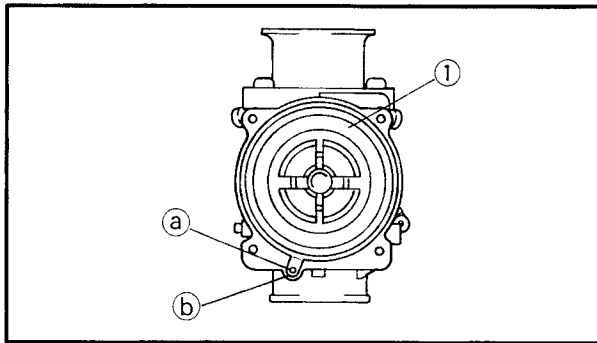
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ASSEMBLING THE CARBURETORS

The following procedure applies to all of the carburetors.

CAUTION:

- Before assembling the carburetors, wash all of the parts in a petroleumbased solvent.
- Always use a new gasket.



1. Install:

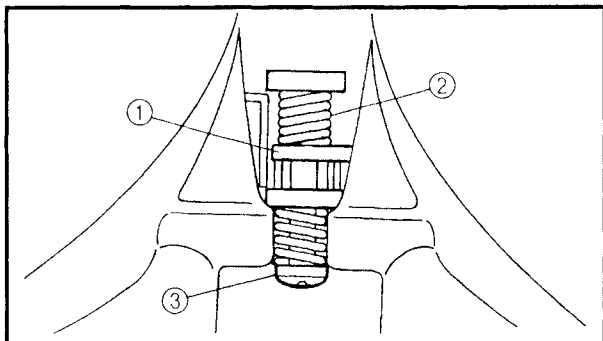
- piston valve ①
- jet needle
- jet needle holder
- piston valve spring
- vacuum chamber cover

NOTE:

- Install the end of the piston valve spring onto the spring guide on the vacuum chamber cover.
- Align the tab ① on the piston valve diaphragm with the recess ② in the carburetor body.

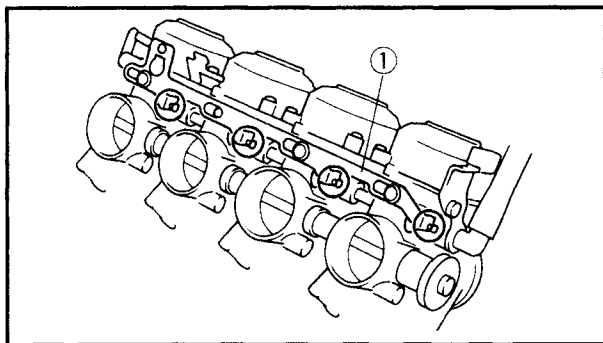


2. Install:
- pipes
 - fuel feed pipes
 - vacuum chamber pipe
 - vacuum chamber air vent hose
 - springs
 - float chamber air vent hoses
 - hose joint
 - spacers
 - copper washer
 - connecting bolts



NOTE:

- Do not tighten the connecting bolts yet.
- Install the throttle valve lever ① onto carburetors #2, #3, and #4 between the spring ② and synchronizing screw ③.



3. Install:
- starter plunger link ①

NOTE:

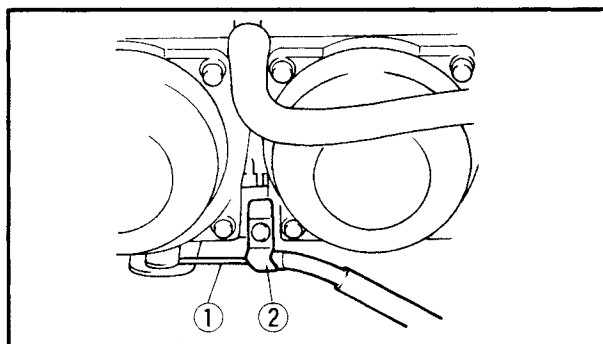
Install the starter plunger link ① onto each starter plunger.

4. Tighten:
- connecting bolts

7 Nm (0.7 m•kg, 5.1 ft•lb)

NOTE:

- Place the carburetor assembly on a surface plate with the intake manifold side down. Then, tighten the connecting bolts while pushing down the carburetor assembly with an even force.
- After tightening the connecting bolts, check that the throttle valve lever and starter plunger link operate smoothly.



5. Install:
- starter cable ①

NOTE:

Install the starter cable holder ② onto the starter cable.



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INSTALLING THE CARBURETORS

1. Adjust:

- carburetor synchronization

Refer to "SYNCHRONIZING THE CARBURETORS" in chapter 3.

2. Adjust:

- engine idling speed



Engine idling speed
1250 ~ 1350 r/min

Refer to "ADJUSTING THE ENGINE IDLING SPEED" in chapter 3.

3. Adjust:

- throttle cable free play



Throttle cable free play (at the flange of the throttle grip)
6 ~ 8 mm (0.24 ~ 0.31 in)

Refer to "ADJUSTING THE THROTTLE CABLE FREE PLAY" in chapter 3.



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MEASURING AND ADJUSTING THE FUEL LEVEL

1. Measure:

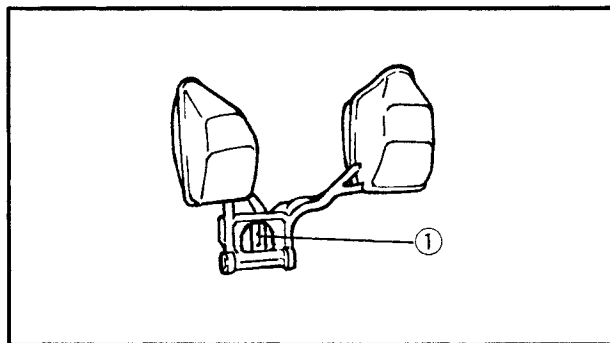
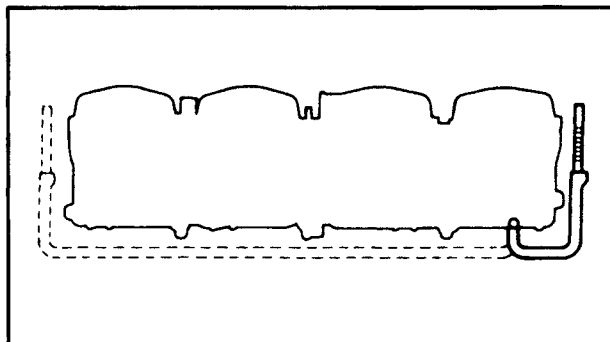
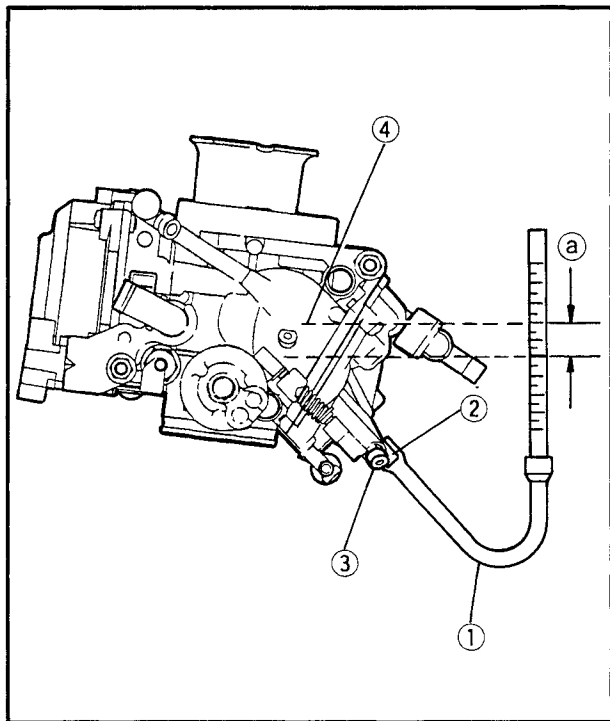
- fuel level (a)

Out of specification → Adjust.



Fuel level (below the mark on the body)

17.5 ~ 18.5 mm (0.69 ~ 0.73 in)



- a. Stand the motorcycle on a level surface.
- b. Place the motorcycle on a suitable stand to ensure that the motorcycle is standing straight up.
- c. Install the fuel level gauge (1) onto the fuel drain pipe (2).



Fuel level gauge

90890-01312, YM-01312-A

- d. Loosen the fuel drain bolt (3).
- e. Hold the fuel level gauge vertically next to the line (4) on the float chamber.
- f. Measure the fuel level (a).

NOTE: _____

Fuel level readings should be equal on both sides of the carburetor assembly.



- 2. Adjust:

 - fuel level



- a. Remove the carburetor assembly.
- b. Check the needle valve seat and needle valve.
- c. If either is worn, replace them as a set.
- d. If both are fine, adjust the float level by slightly bending the float tang (1).
- e. Install the carburetor assembly.
- f. Measure the fuel level again.
- g. Repeat steps (a) to (f) until the fuel level is within specification.



