YAMAHA

XV750U/UC '88

Supplementary Service Manual

LIT-11616-06-14

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the XV750U/UC. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with following manual:

XV700L/LC, XV1000L/LC Service Manual (LIT-11616-04-13)
XV700CS/SS Supplementary Service Manual (LIT-11616-05-02)

XV750U/UC
SUPPLEMENTARY
SERVICE MANUAL
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P/N LIT-11616-06-14

NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanic's education into one manual, so it is assumed that persons using this book to perform maintenance and repairs on Yamaha motorcycles have a basic understanding of the mechanical concepts and procedures inherent in motorcycle repair technology. Without such knowledge, attempted repairs or service to this model may render it unfit to use and/or unsafe.

This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools is necessary to ensure that the motorcycle will operate as designed. If there is any question about a service procedure, it is imperative that you contact a Yamaha dealer for any service information changes that apply to this model. This policy is intended to provide the customer with the most satisfaction from his motorcycle and to conform with federal environmental quality objectives.

Yamaha Motor Company, Ltd. is continually striving to improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all Authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

NOTE:

This Service Manual contains information regarding periodic maintenance to the emission control system for the XV750L/LC, XV1000L/LC. Please read this material carefully.

TECHNICAL PUBLICATIONS
SERVICE DIVISION
MOTORCYCLES GROUP
YAMAHA MOTOR CO., LTD.

HOW TO USE THIS MANUAL

PARTICULARLY IMPOTANT INFORMATION

This material is distinguished by the following notations.

NOTE: A **NOTE** provides key information to make procedures easier or clearer.

CAUTION: A **CAUTION** indicates special procedures that must be followed to avoid damage to the motorcycle.

WARNING: A **WARNING** indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

MANUAL FORMAT

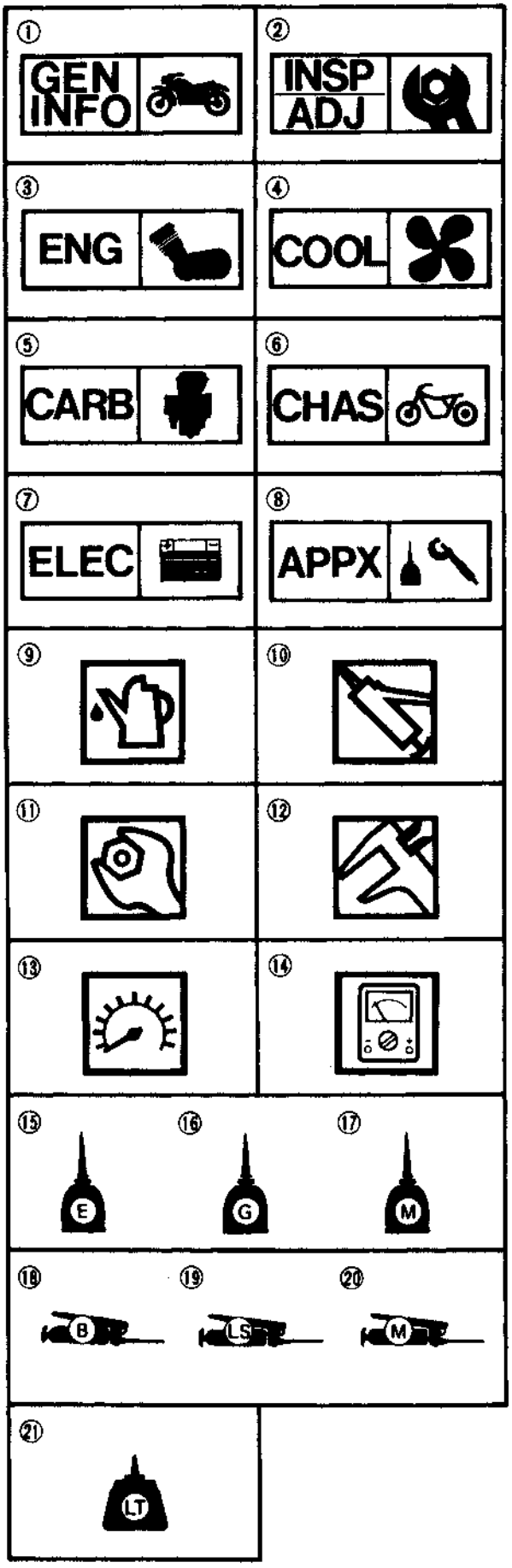
All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspection operations.

In this revised format, the condition of a faulty component will precede an arrow symbol and the course of action required will follow the symbol, e.g.,

- Bearings:
  Pitting/Damage → Replace.

EXPLODED DIAGRAM

Each chapter provides exploded diagrams before each disassembly section for ease in identifying correct disassembly and assembly procedures.



ILLUSTRATED SYMBOLS
(Refer to the illustration)

Illustrated symbols ① to ⑧ are designed as thumb tabs to indicate the chapter's number and content.

① General information
② Periodic inspection and adjustment
③ Engine
④ Cooling system
⑤ Carburetion
⑥ Chassis
⑦ Electrical
⑧ Appendices

Illustrated symbols ⑨ to ⑭ are used to identify the specifications appearing.

⑨ Filling fluid
⑩ Lubricant
⑪ Tightening
⑫ Wear limit, clearance
⑬ Engine speed
⑭ Ω, V, A

Illustrated symbols ⑮ to ㉑ in the exploded diagram indicate grade of lubricant and location of lubrication point.

⑮ Apply engine oil
⑯ Apply gear oil
⑰ Apply molybdenum disulfide oil
⑱ Apply wheel bearing grease
⑲ Apply lightweight lithium-soap base grease
⑳ Apply molybdenum disulfide grease
㉑ Apply locking agent (LOCTITE®)

CONTENTS

GENERAL INFORMATION 1
- MOTORCYCLE IDENTIFICATION 1
  - VEHICLE IDENTIFICATION NUMBER 1
  - ENGINE SERIAL NUMBER 1

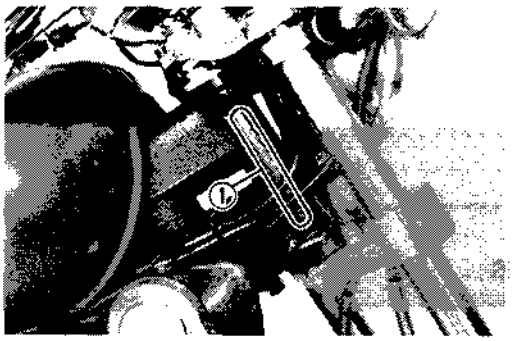
PERIODIC INSPECTIONS AND ADJUSTMENTS 2
- ENGINE 2
  - IDLING SPEED ADJUSTMENT 2
  - THROTTLE CABLE FREE PLAY ADJUSTMENT 2
  - CARBURETOR SYNCHRONIZATION 4

ENGINE OVERHAUL 6
- INSPECTION AND REPAIR 6
  - CYLINDER AND PISTON 6

CARBURETION 8
- CARBURETOR 8
- COASTING ENRICHER SYSTEM SECTION VIEW 9
- AIR INDUCTION SYSTEM 10
- DISASSEMBLY 11
- INSPECTION 13
- ASSEMBLY 14
- ADJUSTMENT 17

SPECIFICATION 19
- GENERAL SPECIFICATIONS 19
- MAINTENANCE SPECIFICATIONS 20
- CABLE ROUTING 25
- FUEL HOSE ROUTING 26

WIRING DIAGRAM



GENERAL INFORMATION

MOTORCYCLE IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

The vehicle identification number ① is stamped into the steering head pipe.

NOTE:

The vehicle identification number is used to identify your motorcycle and may be used to register your motorcycle with the licensing authority in your state.

Starting Serial Number:
XV750U 3AL-000101
XV750UC 3CM-000101



ENGINE SERIAL NUMBER

The engine serial number ① is stamped into the left side of the engine.

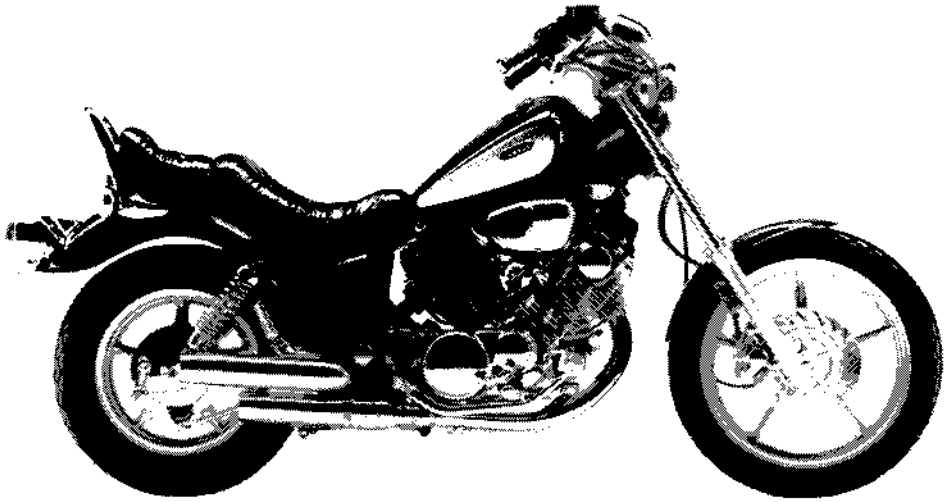
NOTE:

The first three digits of these numbers are for model identifications; the remaining digits are the unit production number.

Starting Serial Number:
XV750U . . . . . .JYA3ALE0 * JA000101
XV750UC . . . . . .JYA3CMC0 * JA000101

NOTE:

Designs and specifications are subject to change without notice.

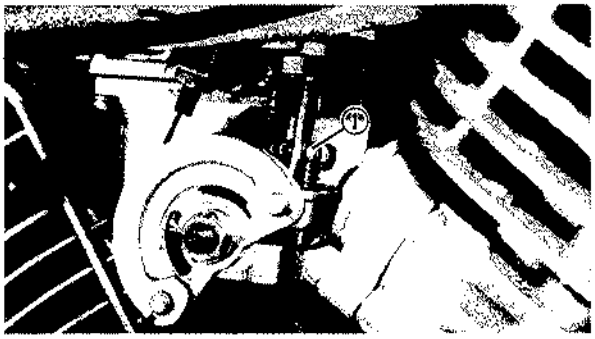


PERIODIC INSPECTIONS AND ADJUSTMENTS

ENGINE

IDLING SPEED ADJUSTMENT

1. Start the engine and let it warm up.
2. Inspect:
   - Idle speed
     Out of specification → Adjust.



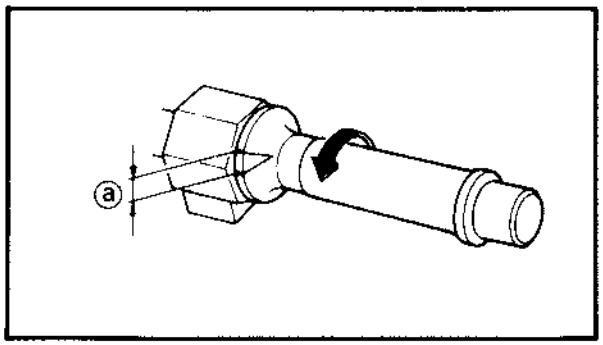
Idle Speed: 950 ~ 1,050 r/min	

3. Adjust:
   - Idle speed
     Turn the throttle stop screw ①

Turn in	**Engine speed is increased.**
Turn out	**Engine speed is decreased.**

THROTTLE CABLE FREE PLAY ADJUSTMENT

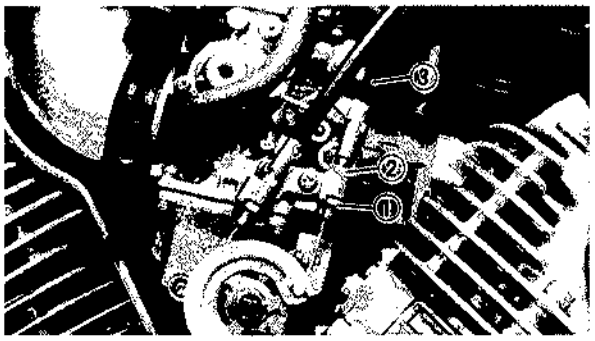
NOTE:
Before adjusting the throttle cable free play, the engine idle speed should be adjusted.



1. Check:
   - Throttle cable free play ⓐ
     Out of specification → Adjust.

Throttle Cable Free Play ⓐ: 2 ~ 3 mm (0.08 ~ 0.12 in)	

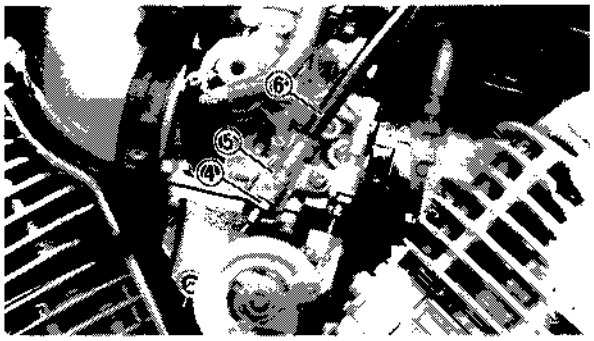
2. Remove:
   - Air cleaner

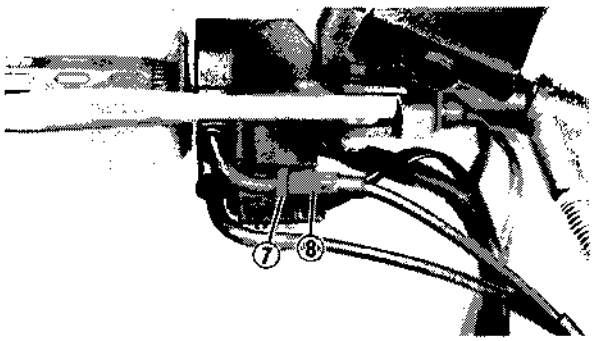


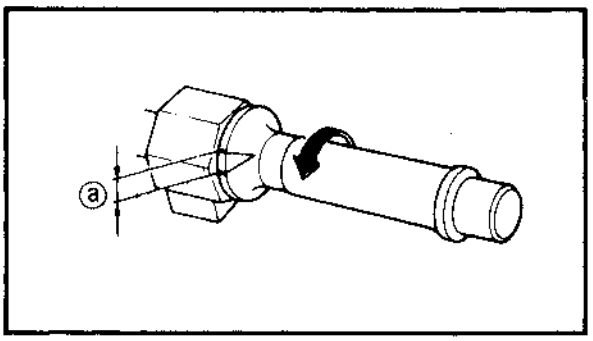
3. Adjust:
   - Throttle cable free play

Throttle cable adjustment steps:

First step:
- Loosen the locknuts (Throttle cable 2) ① .
- Turn the adjuster (Throttle cable 2) ② clockwise or counterclockwise until the specified free play ⓐ .







Throttle Cable 2 Free Play ⓐ:
Zero mm (Zero in)

③ Throttle cable 2

- Tighten the locknuts ① .

Second step:
- Loosen the locknuts (Throttle cable 1) ④ .
- Turn the adjuster (Throttle cable 1) ⑤ clockwise or counterclockwise until proper free play (Throttle grip) is attained.

Throttle Cable Free Play (Throttle Grip):
2 ~ 3 mm (0.08 ~ 0.12 in)

⑥ Throttle cable 1

- Tighten the locknuts ④ .

Third step:
- If the free play is incorrect, adjust the throttle cable free play with the adjuster (Throttle grip side).
- Loosen the locknut (Throttle cable 1 — Throttle grip side) ⑦ .
- Turn the adjuster (Throttle cable 1 — Throttle grip side) ⑧ clockwise or counterclockwise until proper free play (Throttle grip) ⓐ is attained.

Throttle Cable Free Play (Throttle Grip) ⓐ:
2 ~ 3 mm (0.08 ~ 0.12 in)

- Tighten the locknut ⑦ .

Final step:
- Start the engine and let it at idling.
- Steer the handlebar all the way to right and left.
- Check the idle speed for steadiness.

Idle Speed: 950 ~ 1,050 r/min

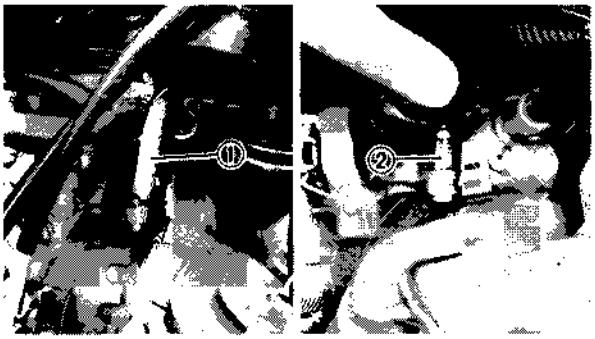
- If the idle speed is fluctuated, repeat the "Third step".

CARBURETOR SYNCHRONIZATION

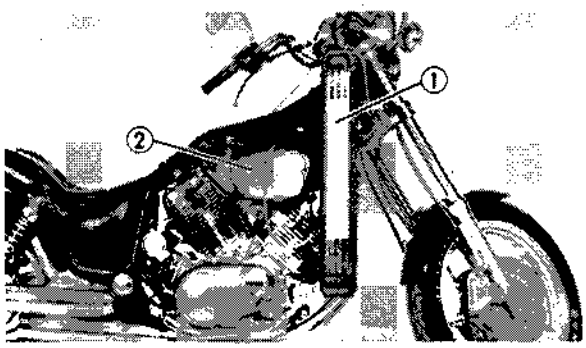
Carburetors must be adjusted to open and close simultaneously.

NOTE:

Valve clearance must be set properly before synchronizing the carburetors.



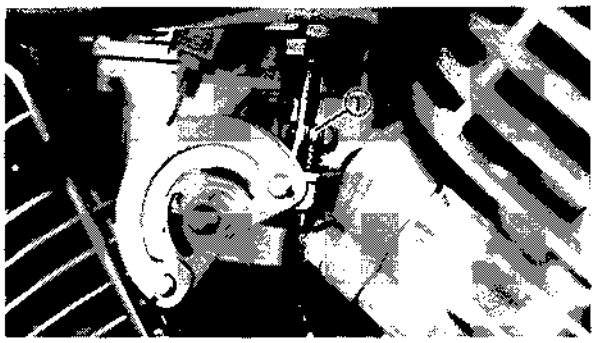
1. Remove:
   - Fuel tank
   - Air cleaner
2. Remove:
   - Hose ①
     From the front carburetor joint.
   - Blind plug ②
     From the rear carburetor joint.



3. Install:
   - Vacuum gauge ①
   - Air cleaner ②

	Vacuum Gauge: P/N YU-08030-A

4. Start the engine and let it warm up.



5. Adjust:
   - Idle speed
     Turn the throttle stop screw ① .

Turn in	**Engine speed is increased.**
Turn out	**Engine speed is decreased.**

	Idle Speed: 950 ~ 1,050 r/min



6. Adjust:
   - Carburetors synchronization

Carburetor synchronization adjustment steps:

- Synchronize carburetor No. 1 to carburetor No. 2 by turning synchronizing screw ① until both gauges read the same.



- Racing the engine for less than a second, two or three times, and check the synchronization again.

Vacuum Pressure at Idle Speed:
22.7 ~ 5.3 kPa
(170 ~ 190 mmHg, 6.7 ~ 7.5 inHg)
Vacuum Synchronous Difference:
(Below) 1.33 kPa (10 mmHg, 0.40 inHg)

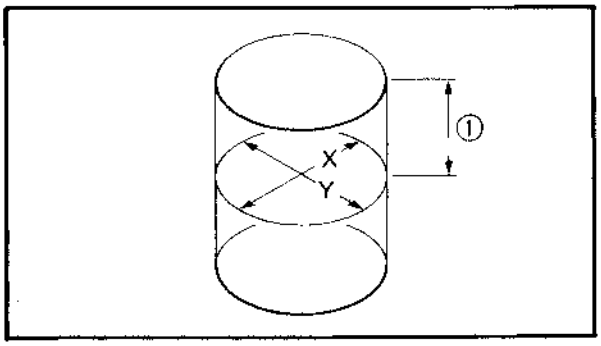
7. Adjust:
   - Idle speed
8. Install:
   - Fuel tank

ENGINE OVERHAUL

INSPECTION AND REPAIR

CYLINDER AND PISTON

1. Inspect:
   - Cylinder and Piston walls
     Vertical scratches → Rebore or Replace cylinder and piston.
2. Measure:
   - Piston-to-cylinder clearance



Piston-to-cylinder clearance measurement steps:

First step:

- Measure the cylinder bore "C" with a Cylinder Bore Gauge.

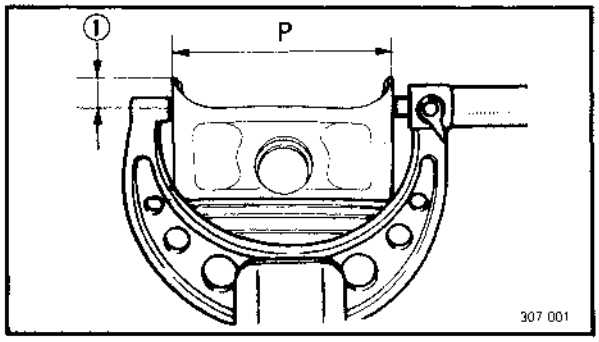
① 35 mm (1.38 in) from the cylinder top.

NOTE:

Measure the cylinder bore "C" in parallel to and at right angles to the crankshaft. Then, find the average of the measurements.

	Standard	Wear Limit
Cylinder Bore "C":	82.985 ~ 83.035 mm (3.267 ~ 3.269 in)	83.15 mm (3.274 in)

$$C = \frac{X + Y}{2}$$



- If out of specification, rebore or replace cylinder, and replace piston and piston rings as a set.

2nd step:

- Measure the piston skirt diameter "P" with a micrometer.

① 9.5 mm (0.374 in) from the piston bottom edge.

	Piston Size P
Standard	82.95 ~ 82.97 mm (3.266 ~ 3.267 in)
Oversize 2	83.5 mm (3.287 in)
Oversize 4	84 mm (3.307 in)

- If out of specification, replace piston and piston rings as a set.

3rd step:

- Calculate the piston-to-cylinder clearance with following formula:

Piston-to-cylinder clearance =
Cylinder bore "C" –
Piston skirt diameter "P"

- If out of specification, rebore or replace cylinder, and replace piston and piston rings as a set.



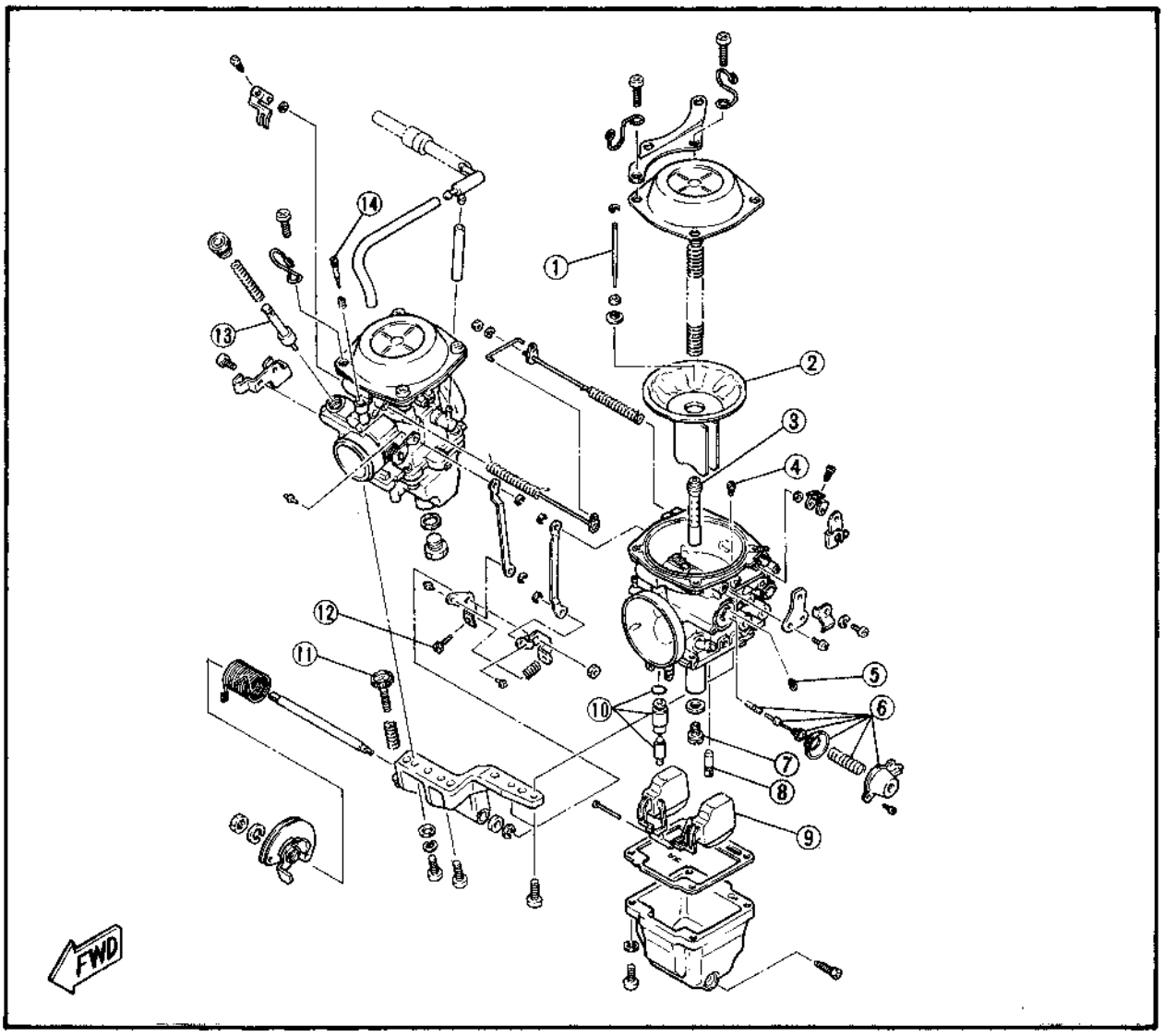
Piston-to-cylinder Clearance:
0.04 ~ 0.06 mm
(0.0016 ~ 0.0024 in)
Limit: 0.15 mm (0.006 in)

CARBURETION

CARBURETOR

① Jet needle
② Piston valve
③ Needle jet
④ Pilot air jet 1
⑤ Pilot air jet 2
⑥ Casting enricher
⑦ Main jet
⑧ Pilot jet
⑨ Float
⑩ Valve seat assembly
⑪ Throttle stop screw
⑫ Syncronizing screw
⑬ Starter plunger
⑭ Pilot screw

SPECIFICATIONS	
ID Mark	3AL01 3CM00 (For California)
Main Jet	#122.5
Main Air Jet	#80
Jet Needle	5DL12
Needle Jet	Y-4
Pilot Air Jet	#60
Pilot Jet	#40
Valve Seat Size	ϕ2.3
Starter Jet	#35
Pilot Screw	Preset
Float height (F.H.)	23 ~ 25 mm (0.91 ~ 0.98 in)
Fuel Level (F.L.)	1.5 ~ 2.5 mm (0.06 ~ 0.10 in)
Engine Idle Speed	950 ~ 1.050 r/min

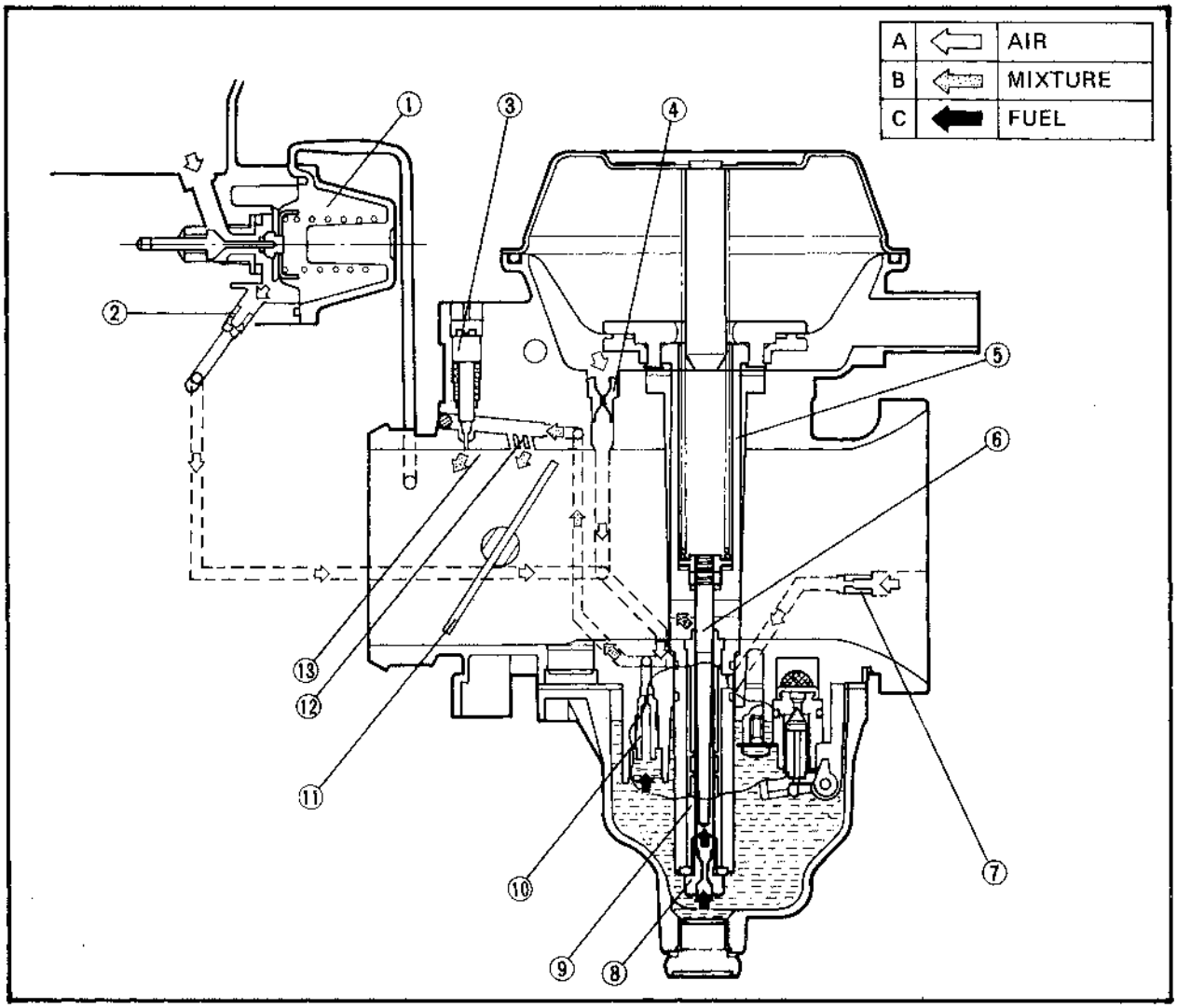


COASTING ENRICHER SYSTEM SECTION VIEW

① Coasting enricher
② Pilot air jet 2
③ Pilot screw
④ Pilot air jet 1
⑤ Piston valve
⑥ Jet needle
⑦ Main air jet
⑧ Main jet
⑨ Needle jet
⑩ Pilot jet
⑪ Throttle valve
⑫ Bypass port
⑬ Pilot outlet

CAUTION:

The pilot screw settings are adjusted for maximum performance at the factory. Any attempt to change these settings will decrease engine performance.

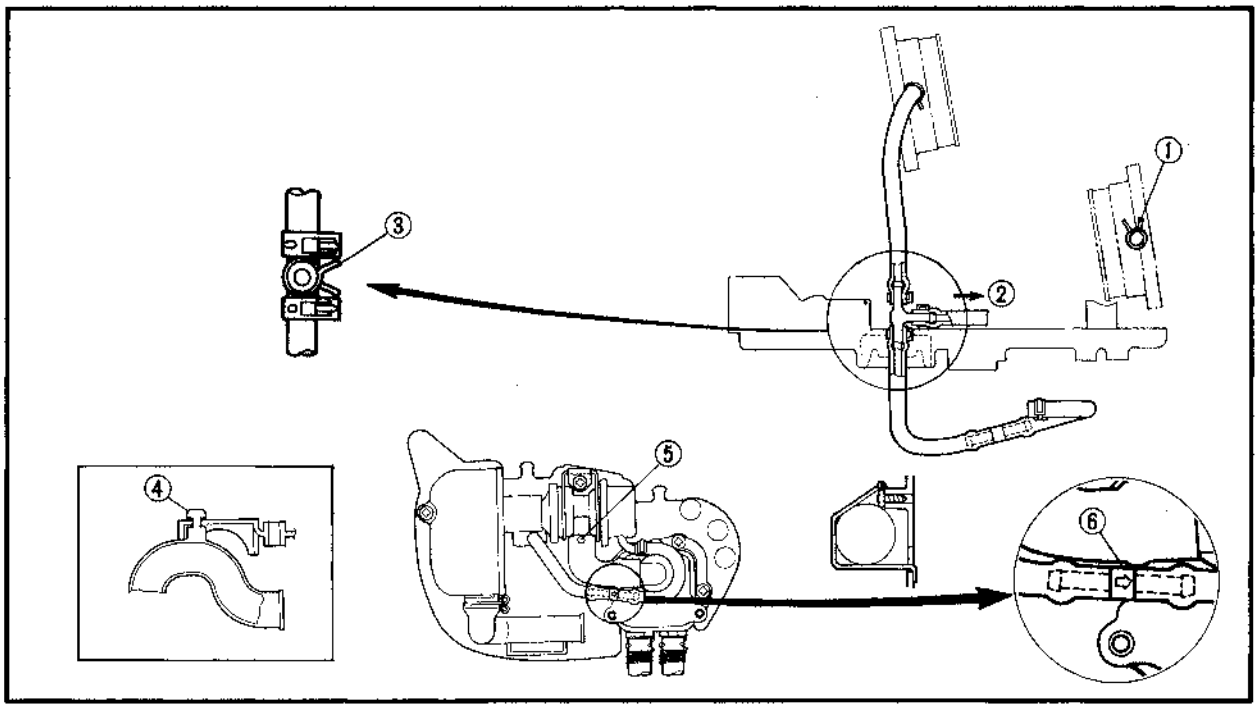


- When the throttle is open, air is supplied to the pilot jet through route A and B.
- When the throttle is closed, vacuum (P) is increased, thereby pulling the enricher diaphragm and shutting off the air in route B. Hence, the mixture at the pilot outlet becomes richer and reduces after burning.

AIR INDUCTION SYSTEM

Vacuum Line Routing

① Make the clamping claws face inside
② To fuel cock
③ Make the clamping claws face downward
④ Insert the projection of the hose bend into the square hole
⑤ Make the white point mark face the air-cut valve side
⑥ Make the arrow mark face the air-cut valve side

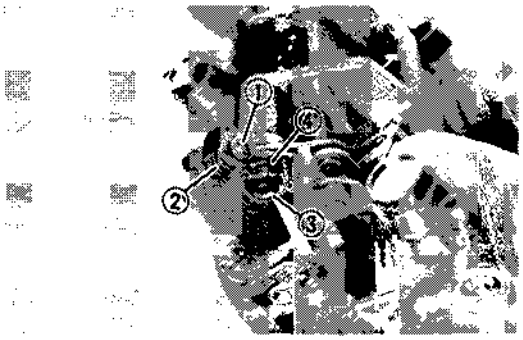


DISASSEMBLY

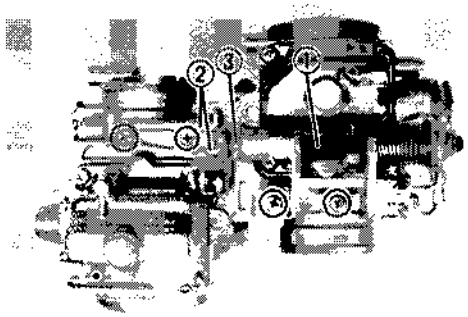
NOTE:
The following parts can be cleaned and inspected without carburetor separation.
- Throttle
- Piston valve
- Starter plunger



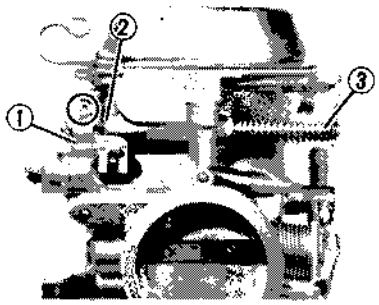
1. Remove:
   - Bracket ①
2. Disconnect:
   - Starter link ②



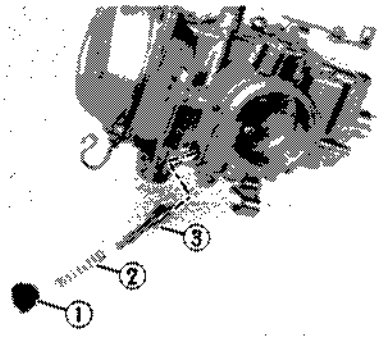
3. Remove:
   - Syncronizing screw ①
   - Spring ②
   - Nut ③
   - Spring washer ④



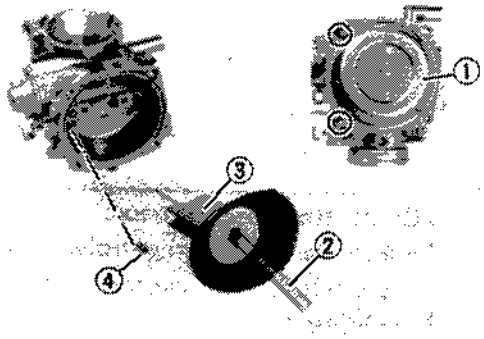
4. Remove:
   - Throttle shaft assembly ①
   - Throttle levers ②
   - Collar ③



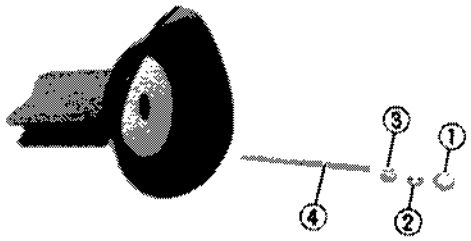
5. Remove:
   - Starter lever ①
   - Washer ②
   - Starter shaft ③



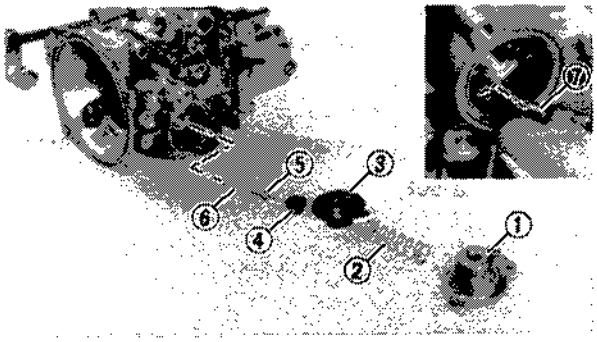
6. Remove:
   - Nut ①
   - Spring ②
   - Starter plunger ③



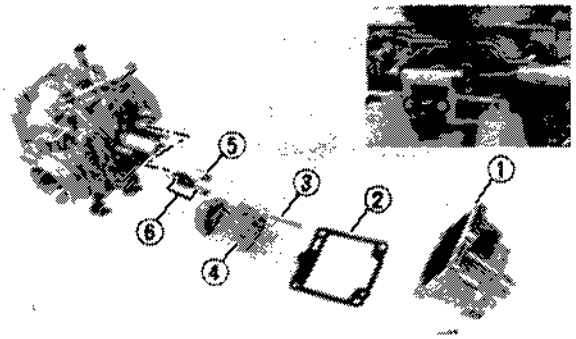
7. Remove:
   - Cover (Vacuume chamber) ①
   - Spring ②
   - Piston valve assembly ③
   - Pilot air jet 1 ④



8. Remove:
   - Spring seat ①
   - Clip ②
   - Ring ③
   - Jet needle ④

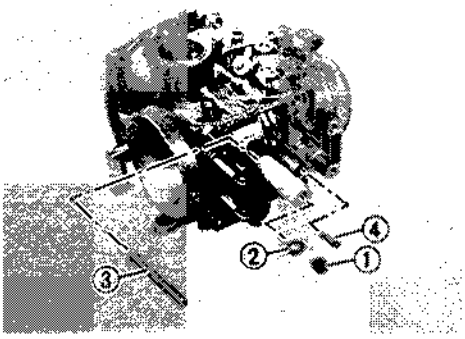


9. Remove:
   - Cover (Coasting enricher) ①
   - Spring ②
   - Diaphragm ③
   - Holder ④
   - Push rod ⑤
   - Spring ⑥
   - Pilot air jet 2 ⑦

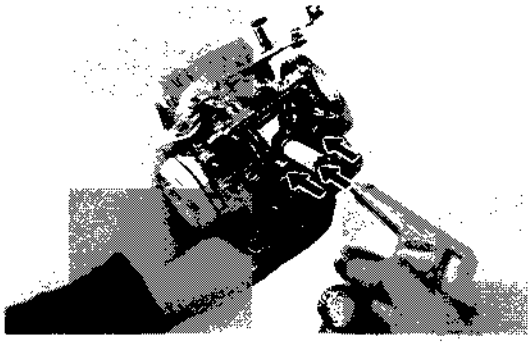


10. Remove:
    - Cover (Float chamber) ①
    - Gasket ②
    - Float pin ③
    - Float ④
    - Screw ⑤
    - Valve seat assembly ⑥

NOTE:
When removing the float pin, remove it with a float pin extracter (2 mm O.D.)



11. Remove:
- Main jet ①
- Washer ②
- Needle jet ③
- Pilot jet ④



INSPECTION

1. Inspect:
- Carburetor body
- Passages

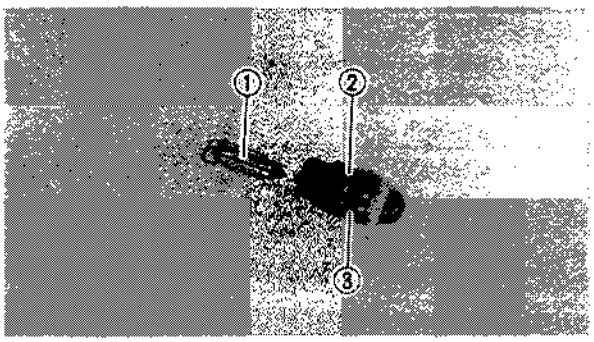
Contaminated.

Carburetor cleaning steps:
- Wash carburetor in petroleum based solvent. (Do not use any caustic carburetor cleaning solution.)
- Blow out all passages and jets with a compressed air.



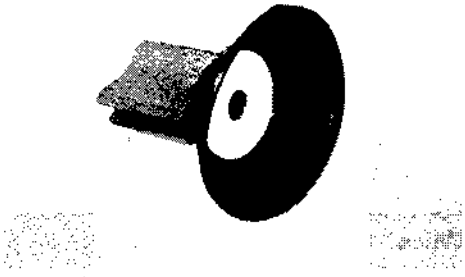
2. Inspect:
- Float

Damage → Replace.



3. Inspect:
- Float needle valve ①
- Seat ②
- O-ring ③

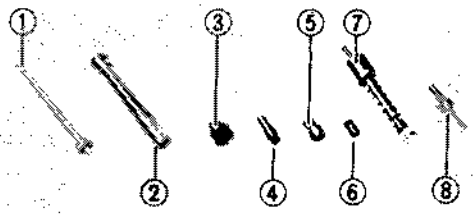
Damage/Wear/Contamination→Replace as a set.



4. Inspect:
- Throttle valve

Scratches→Replace.
- Rubber diaphragm

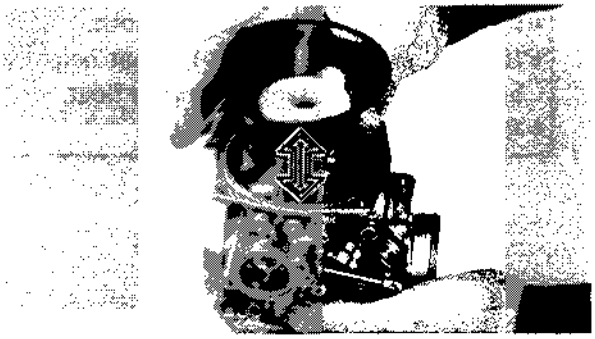
Tears→Replace.



5. Inspect:
   - Jet needle ①
   - Needle jet ②
   - Main jet ③
   - Pilot jet ④
   - Pilot air jet 1 ⑤
   - Pilot air jet 2 ⑥
   - Starter plunger ⑦
   - Valve (Enricher system) ⑧

   Bends/Wear/Damage → Replace.
   Contamination → Blow out jets with a compressed air.





6. Check:
   - Free movement

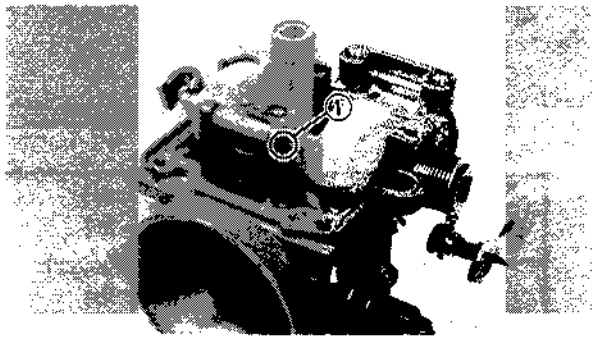
   Insert the throttle valve into the carburetor body, and check for free movement.
   Stick→Replace.

ASSEMBLY

To assemble the carburetor, reverse the disassembly procedures. Note the following points.

CAUTION:

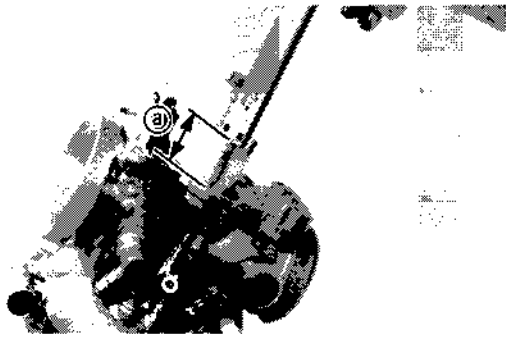
- **Before reassembling, wash all parts in clean gasoline.**
- **Always use a new gasket.**



1. Install:
   - Float pin ①

NOTE:

Cork the float pin end lightly to prevent it fall off.



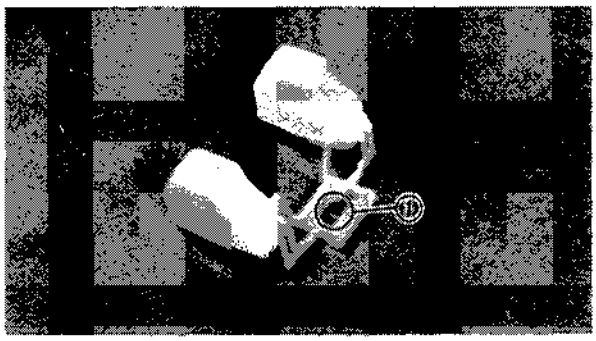
2. Measure:
   - Float height ⓐ
     Out of specification → Adjust.

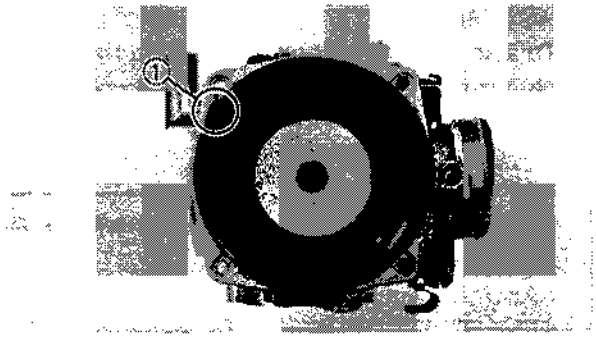
Float Height ⓐ:
23 ~ 25 mm (0.91 ~ 0.98 in)

Measurement and adjustment steps:
- Hold the carburetor in an upside down position.
- Incline the carburetor at 60 ~ 70°.
- Measure the distance from the mating surface of the float chamber (gasket removed) to the top of the float.

NOTE:
The float arm should be resting on the needle valve, but not compressing the needle valve.

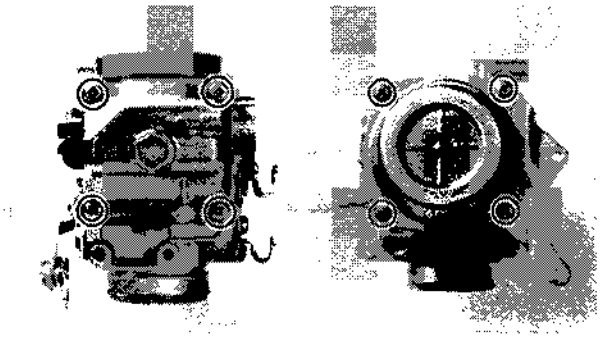
- If the float height is not within specification, inspect the valve seat and needle valve.
- If either is worn, replace them both.
- If both are fine, adjust the float height by bending the float tang ① on the float.
- Recheck the float height.





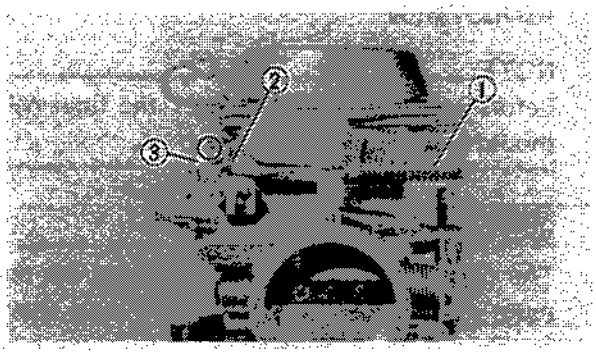
3. Install:
   - Piton valve assembly

NOTE:
Note position of tab ① on diaphragm. This tab must be placed in the cavity of the carburetor body during reassembly.



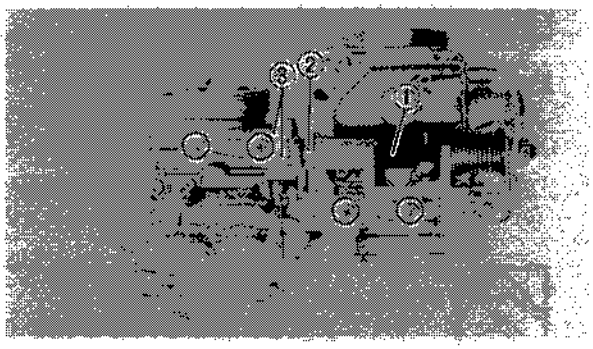
4. Install:
   - Float chamber cover
   - Vacuum chamber cover
   - Bracket

Screw (Float Chamber Cover):
4 Nm (0.4 m·kg, 2.8 ft·lb)
Screw (Vacuum Chamber Cover):
4 Nm (0.4 m·kg, 2.8 ft·lb)



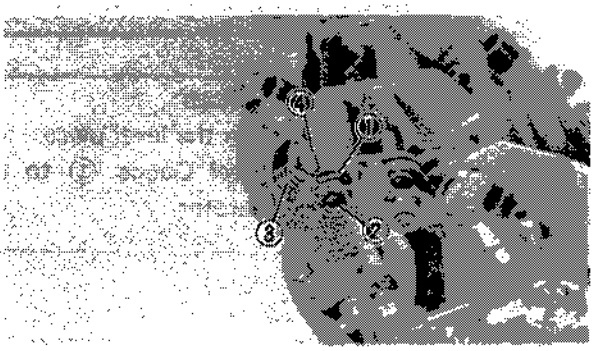
4. Install:
   - Starter shaft ①
   - Washer ②
   - Starter lever ③

Screws (Starter Lever):
8 Nm (0.8 m·kg, 5.8 ft·lb)
Apply LOCTITE®



5. Install:
   - Throttle shaft assembly ①
   - Collar ②
   - Throttle levers ③

Screws (Throttle Shaft Assembly):
4 Nm(0.4 m·kg, 2.8 ft·lb)



6. Install:
   - Spring washer ①
   - Nut (Throttle shaft) ②
   - Spring ③
   - Syncronizing screw ④

Nut (Throttle Shaft):
5 Nm (0.5 m·kg, 3.6 ft·lb)

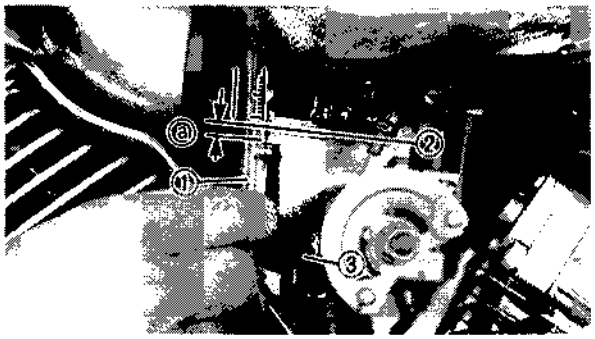
7. Check:
   - Throttle valves

CAUTION:
Throttle valves must be fully closed.

ADJUSTMENT

NOTE:
Before adjusting the fuel level, the float height should be adjusted.

CAUTION:
The pilot screw settings are adjusted for maximum performance at the factory. Any attempt to change these settings will decrease engine performance.



Fuel Level Adjustment

1. Measure:
   - Fuel level ⓐ
     Out of specification → Adjust it by the following adjustment steps.

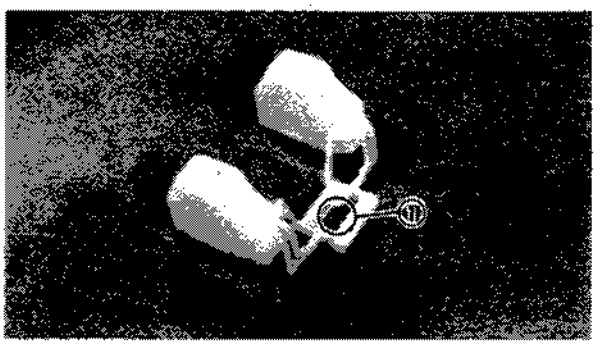
Fuel Level ⓐ :
1.5 ~ 2.5 mm (0.06 ~ 0.10 in)
Below the carburetor body edge

Fuel level measurement steps:
- Place the motorcycle on the level place.
- Connect the Fuel Level Gauge ① to the drain hole of the carburetor.

Fuel Level Gauge:
P/N YM-01312

- Place the Gauge vertically next to the carburetor body edge ② .
- Loosen the drain screw ③ .
- Warm up the engine, then shut it off after a few minutes.
- Measure the fuel level. It should be within the specified range.

NOTE:
Fuel level readings of both side of carburetor line should be equal.



2. Adjust:
   • Fuel level

Fuel level adjustment steps:
- Remove the carburetor assembly.
- Remove the float, valve seat and the needle valve.
- Inspect the valve seat and the needle valve. If either is worn, replace as a set.
- If both are fine, adjust the float height by bending the float tang ① .
- Recheck the fuel level.

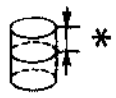
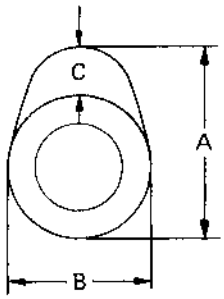
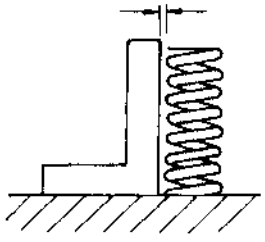
SPECIFICATIONS

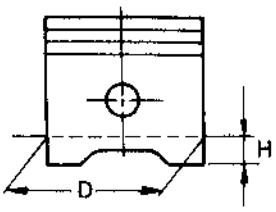
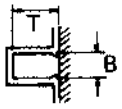
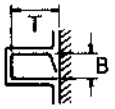
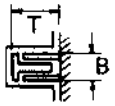
GENERAL SPECIFICATIONS

Model	XV750U/UC
Model Code Number:	3AL (XV750U) 3CM (XV750UC)
Vehicle Identification Number:	JYA3ALE0 * JA000101 (XV750U) JYA3CMC0 * JA000101 (XV750UC)
Engine Starting Number:	3AL-000101 (XV750U) 3CM-000101 (XV750UC)
Dimensions:	
Overall Length	2,285 mm (90 in)
Overall Width	840 mm (33.1 in)
Overall Height	1,190 mm (46.9 in)
Seat Height	715 mm (28.1 in)
Wheelbase	1,525 mm (60 in)
Minimum Ground Clearance	145 mm (5.71 in)
Engine:	
Engine Type	Air cooled 4-stroke, gasoline, SOHC
Cylinder Arrangement	V-2 cylinder
Displacement	749 cm^3 (45.7 cu.in)
Bore x Stroke	83.0 x 69.2 mm (3.268 x 2.724 in)
Compression Ratio	8.7 : 1
Compression Pressure	1,078.8 kPa (11 kg/cm^2, 156 psi)
Starting System	Electric starter
Transmission:	
Primary Reduction System	Spur gear
Primary Reduction Ratio	78/47 (1.659)
Secondary Reduction System	Shaft drive
Secondary Reduction Ratio	47/45 x 19/18 x 32/11 (3.207)
Transmission Type	Constant-mesh, 5-speed
Operation	Left foot operation
Gear Ratio 1st	40/17 (2.352)
2nd	40/24 (1.666)
3rd	36/28 (1.285)
4th	32/31 (1.032)
5th	29/34 (0.852)

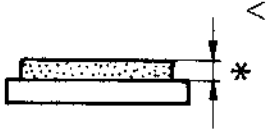
MAINTENANCE SPECIFICATIONS

Engine

Model			XV750U/UC
Cylinder:			
Bore Size/			82.985 ~ 83.035 mm (3.267 ~ 3.269 in)
Measureing Point*			35 mm (1.38 in)
Wear Limit			83.1 mm (3.272 in)
Camshaft:			
Drive Method			Chain drive (Center)
Cam Cap Inside Dia.			25.000 ~ 25.021 mm (0.9843 ~ 0.9851 in)
Camshaft Outside Dia.			24.96 ~ 24.98 mm (0.9827 ~ 0.9835 in)
Shaft-to-Cap Clearance			0.020 ~ 0.061 mm (0.0008 ~ 0.0024 in)
Cam Dimensions:	Intake	"A"	39.17 mm (1.5421 in)
		< Limit >	39.02 mm (1.54 in)
		"B"	32.23 mm (1.2689 in)
		< Limit >	32.08 mm (1.26 in)
		"C"	6.94 mm (0.2732 in)
	Exhaust	"A"	39.20 mm (1.5433 in)
		< Limit >	39.05 mm (1.54 in)
		"B"	32.26 mm (1.2701 in)
		< Limit >	32.11 mm (1.26 in)
		"C"	6.94 mm (0.2732 in)
Camshaft Runout Limit			0.03 mm (0.0012 in)
Cam Chain Type/Number of Links			SILENT CHAIN/98
Cam Chain Adjustment Method			Automatic
Valve Spring:			
Free Length			
Inner Spring		IN.	45.3 mm (1.78 in)
		EX.	45.3 mm (1.783 in)
Outer Spring		IN.	44.6 mm (1.76 in)
		EX.	44.6 mm (1.76 in)
Installed Length (Valve Closed)			
Inner Spring		IN.	38.0 mm (1.50 in)
		EX.	38.0 mm (1.50 in)
Outer Spring		IN.	40.0 mm (1.58 in)
		EX.	40.0 mm (1.58 in)
Tilt Limit			
Inner Spring	IN. & EX.		2.5°/2.0 mm (0.08 in)
Outer Spring	IN. & EX.		2.5°/2.0 mm (0.08 in)
			
Direction of Winding (Top view)			Inner spring: IN.  EX.  Outer spring: IN.  EX. 

Model		XV750U/UC
Piston:		
Piston Size "D"		82.95 ~ 82.97 mm (3.266 ~ 3.267 in)
Measuring Point "H"		9.5 mm (0.374 in) (From bottom line of piston skirt)
Piston-to-Cylinder Clearance		0.04 ~ 0.06 mm (0.0016 ~ 0.0024 in)
Oversize: 2nd		83.5 mm (3.287 in)
4th		84.0 mm (3.307 in)
Piston Ring:		
Sectional Sketch	 Top Ring	Barrel B = 1.2 mm (0.047 in) T = 3.3 mm (0.130 in)
	 2nd Ring	Taper B = 1.5 mm (0.059 in) T = 3.6 mm (0.142 in)
	 Oil Ring	Expander B = 2.8 mm (0.110 in) T = 2.8 mm (0.110 in)
End Gap (Installed):	Top Ring	0.2 ~ 0.4 mm (0.008 ~ 0.016 in)
	2nd Ring	0.3 ~ 0.5 mm (0.012 ~ 0.020 in)
	Oil Ring	0.3 ~ 0.9 mm (0.012 ~ 0.035 in)
Side Clearance:	Top Ring	0.04 ~ 0.08 mm (0.002 ~ 0.003 in)
	2nd Ring	0.04 ~ 0.08 mm (0.002 ~ 0.003 in)
	Oil Ring	0 ~ 0.04 mm (0 ~ 0.002 in)
Carburetor:		
Type/Manufacture x Quantity		BST40/MIKUNI x 2
I.D. Mark		3AL01, 3CM00 (For California)
Main Jet	(M.J.)	# 122.5
Main Air Jet	(M.A.J.)	# 80
Jet Needle-Clip Position	(J.N.)	5DL12
Needle Jet	(N.J.)	Y-4
Pilot Jet	(P.J.)	# 40
Pilot Air Jet	(P.A.J.)	# 60
Pilot Screw	(P.S.)	Preset
Valve Seat Size	(V.S.)	ϕ 2.3
Starter Jet	(G.S.)	# 35
Throttle Valve Size	(Th.V)	# 13.5
Float Height	(F.H.)	23 ~ 25 mm (0.91 ~ 0.98 in)
Fuel Level	(F.L.)	1.5 ~ 2.5 mm (0.06 ~ 0.10 in) Below from the float chamber line

CHASSIS

Model	XV750U/UC
Front Disc Brake:	
Type	Dual disc
Disc Outside Diameter x Thickness	267 x 5 mm (10.7 x 0.2 in)
Pad Thickness Inner	5.5 mm (0.22 in)
< Limit >*	0.5 mm (0.02 in)
Pad Thickness Outer	5.5 mm (0.22 in)
< Limit >*	0.5 mm (0.02 in)
	
Master Cylinder Inside Diameter	15.87 mm (0.62 in)
Caliper Cylinder Inside Diameter	38.18 mm (1.50 in)
Brake Fluid Type	DOT # 4 or DOT # 3
Brake Lever and Brake Pedal:	
Brake Lever Free Play	2 ~ 5 mm (0.08 ~ 0.20 in)
Brake Pedal Position	40 mm (2.0 in) Upper from footrest top end
Brake Pedal Free Play	20 ~ 30 mm (0.8 ~ 1.2 in)
Clutch Lever Free Play:	8 ~ 12 mm (0.32 ~ 0.47 in)

TIGHTENING TORQUE:

Part to be tightened	Thread size	Tightening torque			Remarks
		Nm	m·kg	ft·lb	
Front Wheel Axle	M14 x 1.5	110	11.0	80	
Front Wheel Axle and Front Fork	M8 x 1.25	20	2.0	14	
Front Fender and Output Tube	M6 x 1.00	9	0.9	6.5	
Under Bracket and Inner Tube	M8 x 1.25	23	2.3	17	
Handle Crown and Inner Tube	M8 x 1.25	20	2.0	14	
Handle Crown and Steering Shaft	M22 x 1.0	110	11.0	80	
Steering Shaft and Ring Nut	M22 x 1.0				See NOTE
Front Brake Caliper and Front Fork	M10 x 1.25	35	3.5	25	
Handle Crown and Handlebar Holder (Lower)	M12 x 1.25	59	5.9	43	
Handlebar and Handlebar Holder (Upper)	M8 x 1.25	20	2.0	14	
Front Brake Disc and Hub	M8 x 1.25	20	2.0	14	Use lock washer
Master Cylinder and Brake Hose	M10 x 1.25	26	2.6	19	
Headlight Stay and Under Bracket	M6 x 1.0	9	0.9	6.5	
Headlight Stay and Headlight	M8 x 1.25	20	2.0	14	
Brake Hose x Front Brake Caliper	M10 x 1.25	26	2.6	19	
Front Brake Caliper Bleed Screw	M8 x 1.25	6	0.6	4.3	
Master Cylinder and Master Cylinder Cap	M5 x 0.8	2	0.2	1.4	
Master Cylinder and Master Cylinder Bracket	M6 x 1.0	9	0.9	6.5	
Cylinder Stud Bolt and Engine Stay (Front)	M12 x 1.25	54	5.4	39	
Engine Stay (Front) and Frame	M10 x 1.25	55	5.5	40	
Engine Stay (Rear) and Frame	M10 x 1.25	55	5.5	40	
Engine Mounting (Rear-Top) and Frame	M10 x 1.25	55	5.5	40	
Engine Mounting (Rear-Bottom) and Frame	M10 x 1.25	55	5.5	40	
Engine and Footrest Bar (Front)	M10 x 1.25	55	5.5	40	
Engine and Footrest Bar (Rear)	M10 x 1.25	55	5.5	40	
Footrest and Footrest Bar	M10 x 1.25	45	4.5	32	
Muffler Bracket and Frame	M8 x 1.25	23	2.3	17	
Pivot Shaft (Left) and Swingarm	M22 x 1.5	100	10.0	72	
Pivot Shaft (Right) and Swingarm	M22 x 1.5	6	0.6	4.3	
Pivot Shaft and Locknut	M22 x 1.5	100	10.0	72	Use lock washer
Rear Shock Absorber and Frame	M8 x 1.25	20	2.0	14	
Rear Shock Absorber and Swingarm	M10 x 1.25	30	3.0	22	
Rear Shock Absorber and Shaft Drive Housing	M10 x 1.25	30	3.0	22	
Swingarm and Shaft Drive Housing	M10 x 1.25	42	4.2	30	
Rear Wheel Shaft and Nut	M14 x 1.5	110	11.0	80	
Clutch Hub and Hub	M10 x 1.25	69	6.9	50	
Clutch Hub and Damper	M10 x 1.25	62	6.2	45	
Sidestand Bracket	M10 x 1.25	55	5.5	40	
Rear Fender (Rear) and Frame	M8 x 1.25	20	2.0	14	
Rear Fender (Front) and Frame	M6 x 1.0	9	0.9	6.5	
Tension Bar and Swingarm	M8 x 1.25	20	2.0	14	
Tension Bar and Brake Shoe Plate	M8 x 1.25	20	2.0	14	
Drain Plug (Final Gear)	M14 x 1.5	23	2.3	17	
Drain Plug (Final Gear)	M14 x 1.5	23	2.3	17	

Part to be tightened	Thread size	Tightening torque			Remarks
		Nm	m·kg	ft·lb	
Frame and Ignition Coil Cover	M6 x 1.0	3	0.3	2.2	
Mudguard and Ignitor Unit		1	0.1	0.7	

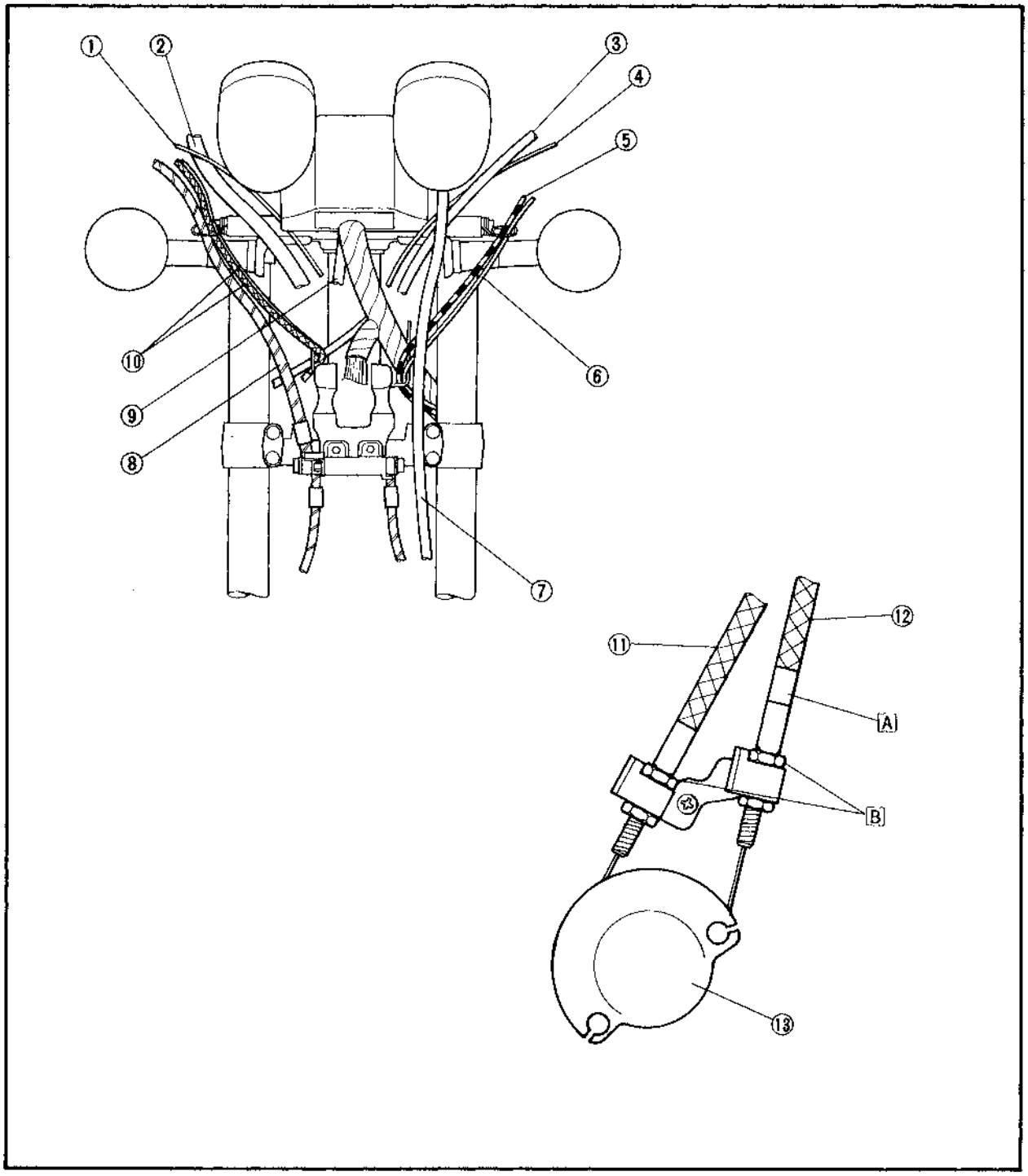
NOTE:

1. First, tighten the ring nut approximately 55 Nm (5.0 m·kg, 36 ft·lb) by using the torque wrench, then loosen the ring nut one turn.
2. Retighten the ring nut 3 Nm (0.3 m·kg, 2.2 ft·lb).

CABLE ROUTING

① Brake switch lead
② Handlebar switch lead (Right)
③ Handlebar switch lead (Left)
④ Clutch switch lead
⑤ Clutch cable
⑥ Starter cable
⑦ Speedometer cable
⑧ Brake hose
⑨ Main switch lead
⑩ Throttle cable
⑪ Throttle cable 1
⑫ Throttle cable 2
⑬ Carburetor throttle puller

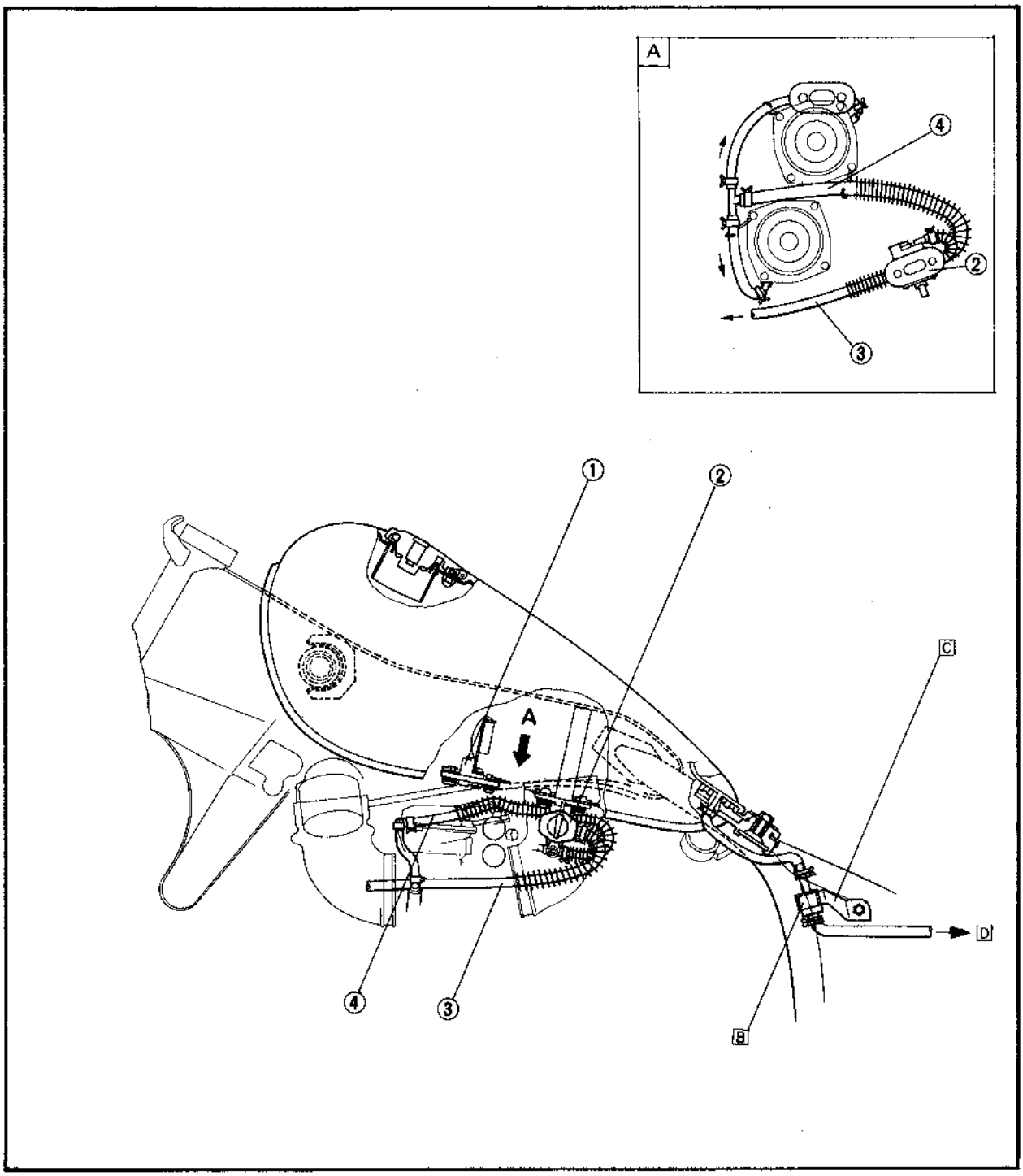
[A] Color is gray.
[B] Set the upper nut at the fully screwed-up position.



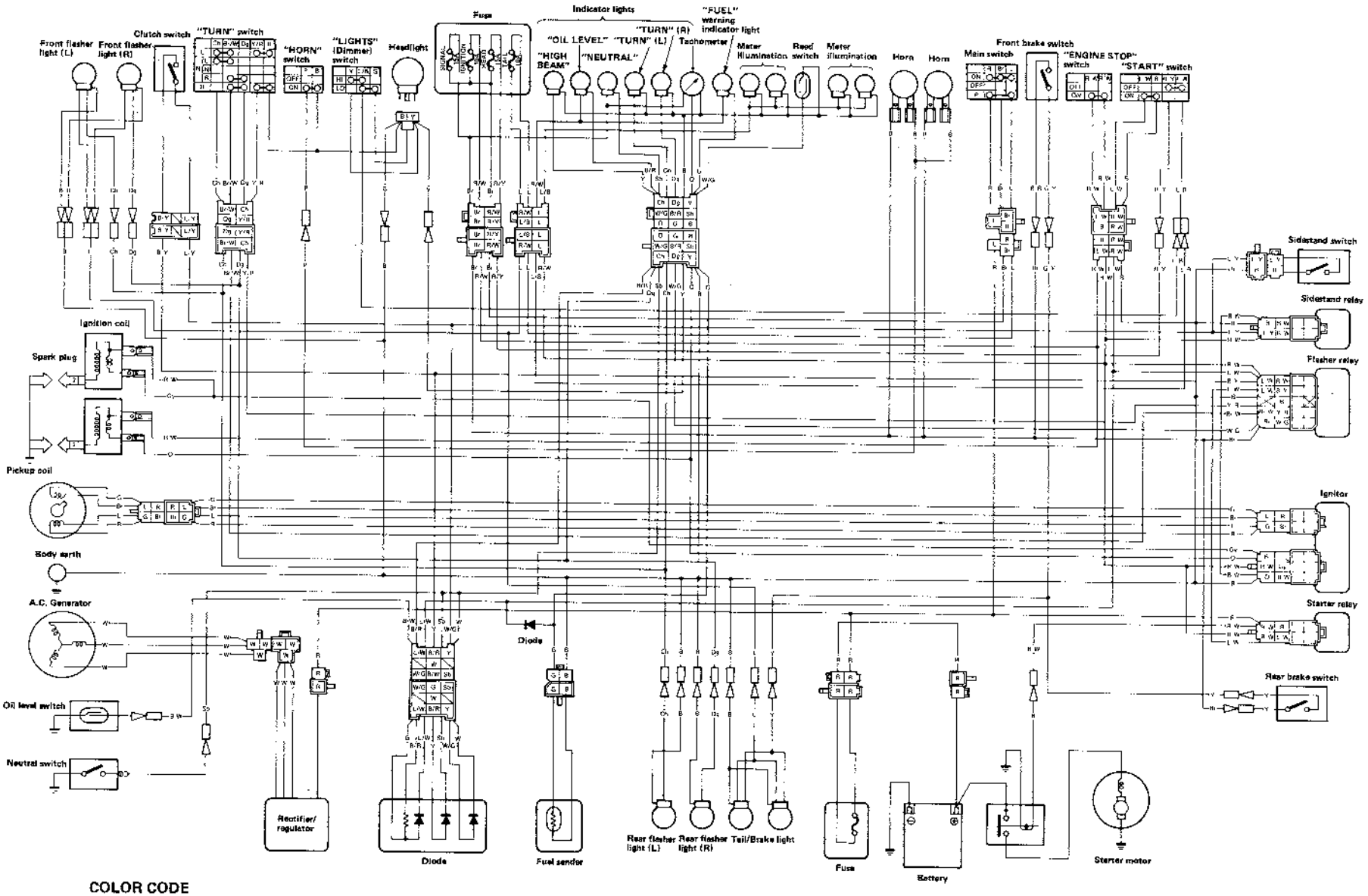
FUEL HOSE ROUTING

① Fuel sender
② Fuel cock assembly
③ Vacuum hose
④ Fuel hose
⑤ Air-vent hose

[A] "A" VIEW
[B] Be sure that the roll over valve is installed with correct direction.
[C] Install the holder onto the relay stay.
[D] Connect the white marked end of the joint pipe 2 to the canister port.



XV750U/UC WIRING DIAGRAM



COLOR CODE

B . . . . . .Black	Y . . . . . .Yellow	B/R . . . . .Black/Red	R/W . . . . .Red/White
G . . . . . .Green	Br. . . . . .Brown	B/W . . . . .Black/White	R/Y . . . . .Red/Yellow
L . . . . . .Blue	Ch . . . . . .Chocolate	B/Y . . . . .Black/Yellow	W/G . . . . .White/Green
O . . . . . .Orange	Dg . . . . . .Dark green	L/B. . . . . .Blue/Black	Y/R . . . . .Yellow/Red
P . . . . . .Pink	Gy . . . . . .Gray	L/W . . . . .Blue/White	Br/W. . . . .Brown/White
R . . . . . .Red	Sb . . . . . .Sky blue	L/Y . . . . .Blue/Yellow	

YAMAHA MOTOR CO.,LTD.
IWATA, JAPAN

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