



YAMAHA

TY 175C

ASSEMBLY MANUAL



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90894—07511

FOREWORD

This Assembly Manual contains the information required for the unpacking and assembly of Yamaha motorcycles so that the Yamaha serviceman can assemble the machine in the correct manner. To perform machine assembly, a basic knowledge of service and Yamaha machines is required. Therefore, all Yamaha dealers are urged to make a full study on the service of Yamaha motorcycles using the relevant service manuals.

NOTICE

The service specifications given in this Assembly Manual are based on the model as manufactured when this manual was published. Since this model may require improvements, the service standards may be subject to change in the future. If any change is introduced into the specifications or service procedures, Yamaha dealers will be notified through technical service information to be published by Yamaha. The assembly procedure is described in the order that the mechanic should follow, and the correct service tools should be used in the correct manner. Failure to do this may result in poor performance and danger to the rider.

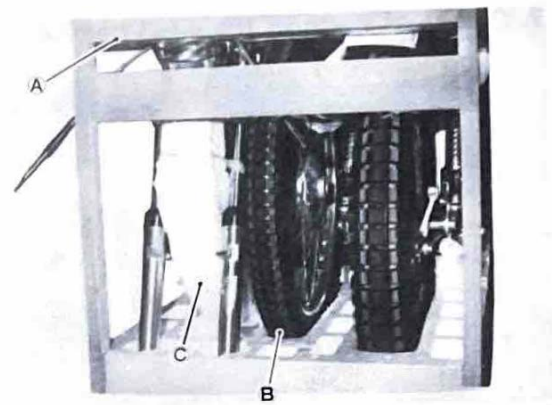
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YAMAHA TY175C
ASSEMBLY MANUAL
1st EDITION, August, 1975
OVERSEAS SERVICE DEPARTMENT
YAMAHA MOTOR CO., LTD.
IWATA, JAPAN
LIT-11666-00-10

PARTS CHECK LIST

Before starting the assembly, check for damaged or missing. Also check the machine for damage, scratches and other defects.

No.	Parts name	Q'ty
A	Foam styrol case	1
B	Front wheel	1
C	Front fender	1



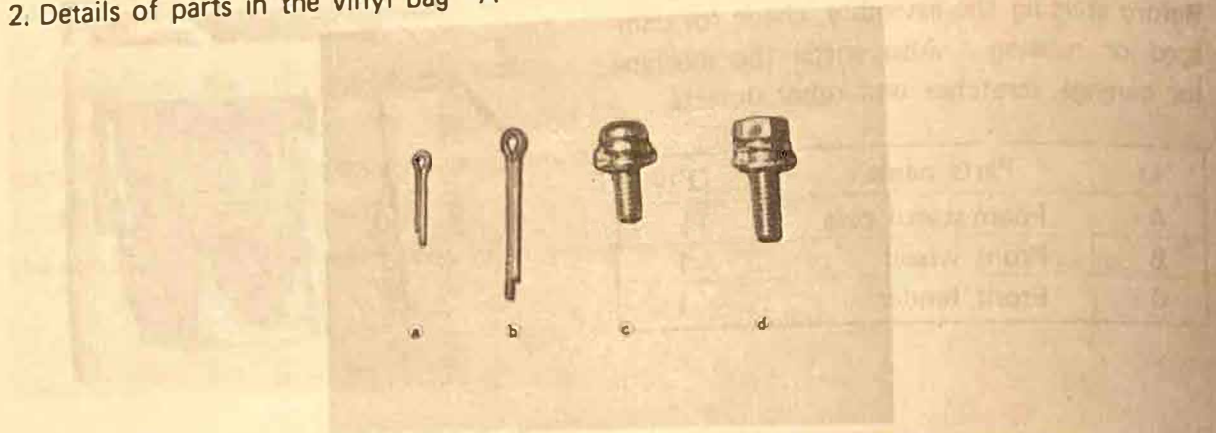
1. Details of parts on foam styrol case "A".



No.	Parts name	Q'ty
1	Handlebar assembly	1
2	Breather pipe	1
3	Brake & Tensionbar assembly	1
4	Vinyl bag A	1
5	Vinyl bag B	1
6	Service tool	1
7	Owner's service manual	1
8	Warranty guide book	
9	Front wheel collar	1

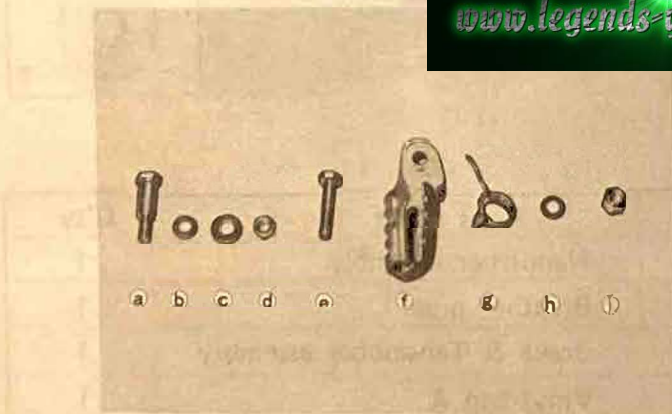
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2. Details of parts in the vinyl bag "A"



Setting position	Parts name	Q'ty	Remarks
a	Cotter pin (small)	1	for tension bar
b	Cotter pin (large)	1	for front wheel
c	Pan head screw with spring and plain washer	1	for front brake adjuster
d	Hex. bolt with spring and plain washer	4	for front fender

3. Details of parts in the vinyl bag "B"



Setting position	Parts name	Q'ty	Remarks
a	Tension bar bolt 8 mm	1	for tension bar
b	Spring washer	1	
c	Plain washer	1	
d	Hexagon nut	1	
e	Bolt 8 mm	1	for footrest (right)
f	Footrest	1	
g	Return spring	1	
h	Plain washer	1	
i	Nut 8 mm	1	

PREPARATION

1. To assemble the machine correctly, service tools, supplies and working space are required.
2. The workshop where the machine is assembled should be clean and large. The floor should be level.



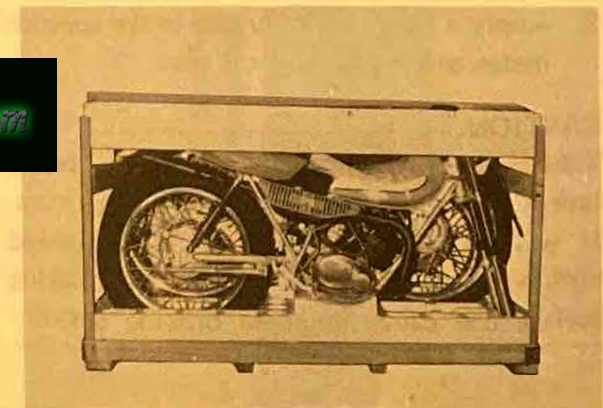
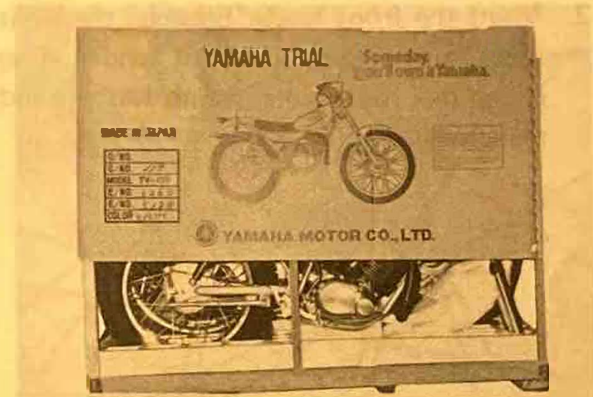
UNPACKING

Note on transportation

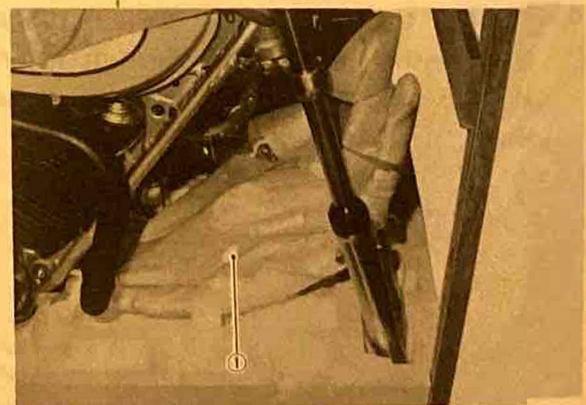
Use care not to butt the machine, packed in the crate, against a hard object or give it a heavy shock during transportation or in the service shop.

Procedures for unpacking

To remove the machine and parts packed in the cardboard crate, cut the vinyl bands around the box using a cutter or scissors. Next, remove the exterior carton by lifting it straight up.



1. Remove the front fender and fender stay held between the right and left front forks.
Next, remove the front wheel.
2. Remove the nails from each corner of the crate, and remove the struts.
3. Lift up the machine, and remove the rear wheel section from the foam styrol base. Then take out the machine.

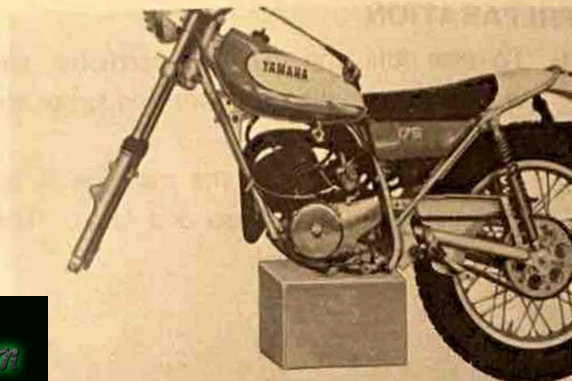


1. Front fender

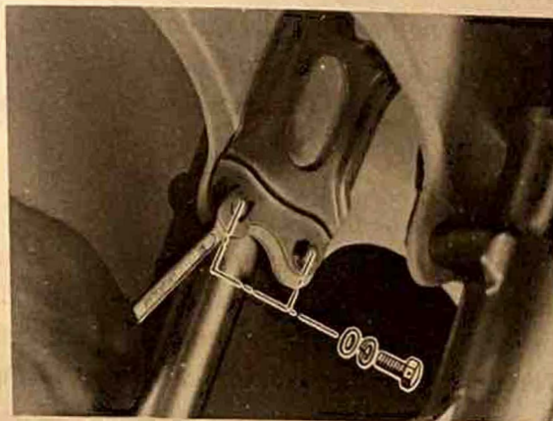
SET-UP PROCEDURES

1. To install the front fender and front wheel, place a proper-size wooden box under the engine to keep the front of the machine raised off the floor. Take care so that the machine does not fall over.

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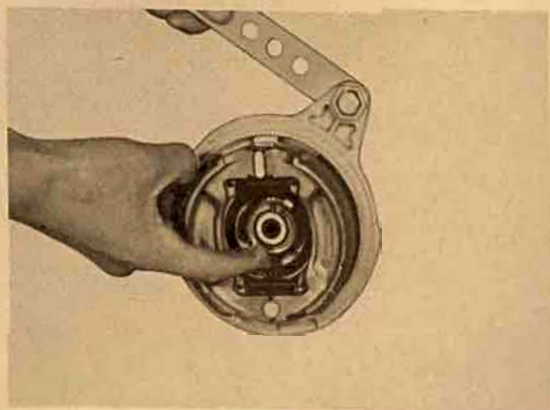
2. Insert the front fender between the front forks, and secure the front fender using 6 mm hex head bolts, spring washers and plain washers, for each.



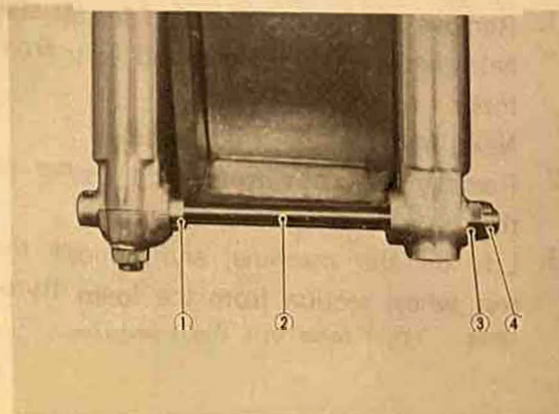
3. Apply a light coat of grease to the speedometer drive gear and oil seal.

CAUTION: _____

Take care not to put grease on the brake linings or inner surface of the brake drum. If you do so, clean using a rag dampened with a solvent. Foreign material on braking surface can cause impaired braking action.



4. Remove the front wheel axle nut and plain washer, and loosen the nuts securing the axle holder. Then remove the wheel axle and distance collar.

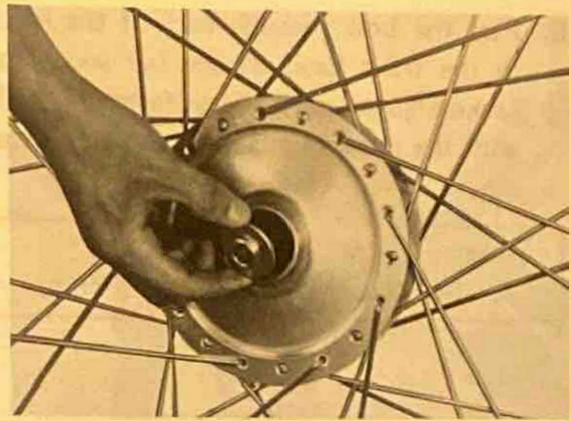


1. Distance collar
2. Wheel axle
3. Plain washer
4. Axle nut

5. Install the collar in the wheel hub on the right side of the front wheel.

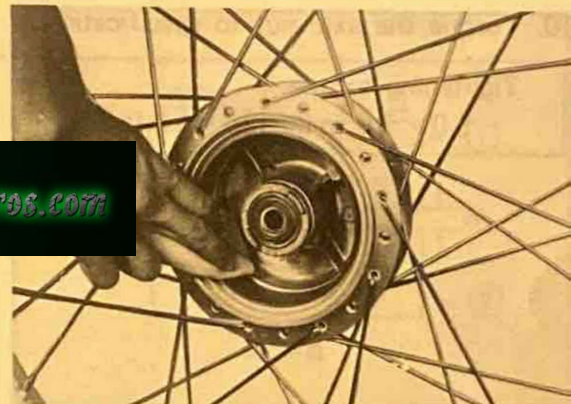
NOTE:

To avoid damaging the oil seal lip, apply a light coat of lithium base grease to the oil seal lip and collar. If the collar is dirty, clean with a rag.

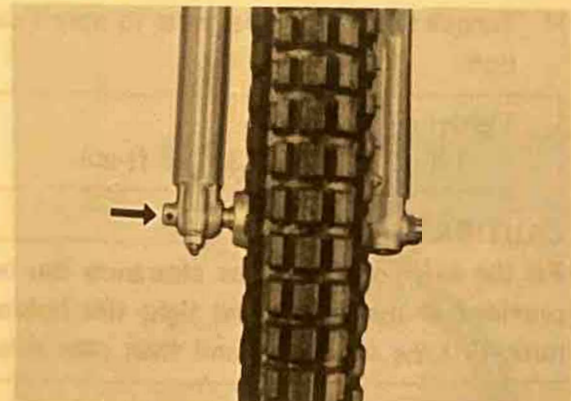


6. Clean the inner surface of the front wheel hub with a clean cloth. And install the brake shoe plate assembly in the wheel hub.

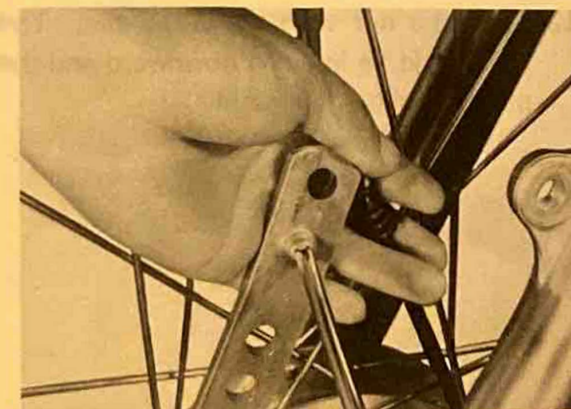
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7. Insert the front wheel between the front fork legs. Insert the axle, mount the plain washer on the axle, and install the axle nut. Lightly tighten the axle holder nuts so that the axle does not turn while the axle nut is tightened.



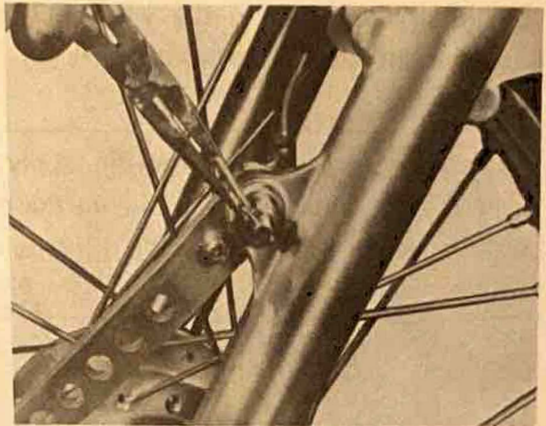
8. Install the front brake adjuster stay to tension bar hole with panhead screw.



9. Pass the bolt through each of the holes in the front fork, tension bar and front brake adjuster stay. Then fasten the bolt with the nut and secure it with the cotter pin.

Tightening torque:

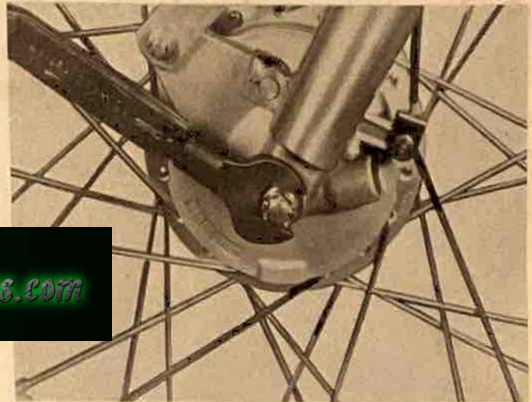
1.4 - 2.2 m·kg (10.1 - 15.9 ft·lb)



10. Torque the axle nut to specification.

Tightening torque:

5.0 - 7.0 m·kg (36 - 51 ft·lb)



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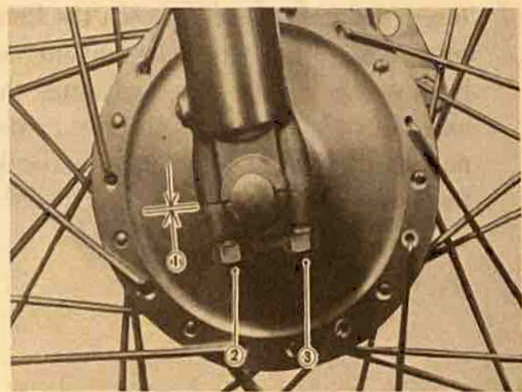
11. Torque the axle holder nuts to specification.

Tightening torque:

1.8 - 2.5 m·kg (13 - 18 ft·lb)

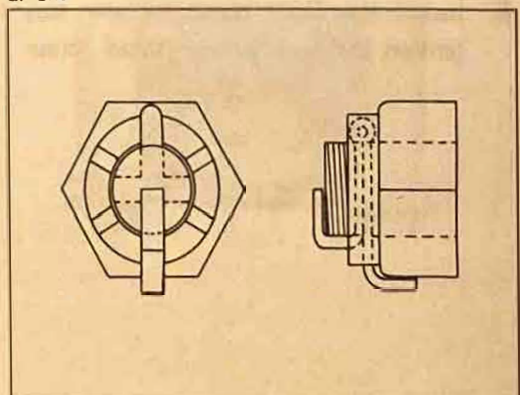
CAUTION

Fit the axle holder so that clearance can be provided at the rear. And tight the holder nuts, first the front side and then rear side.



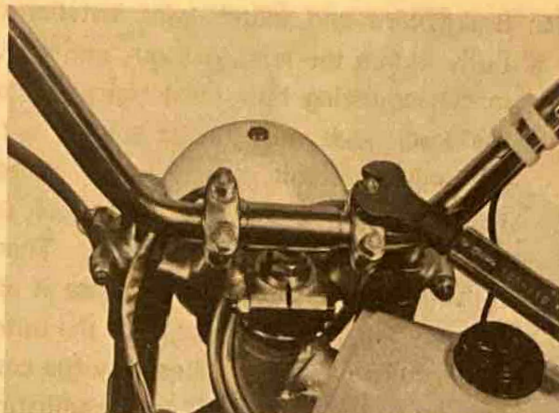
1. Clearance 3. 1st
2. 2nd

12. Lock the nut with the cotter pin. The pin should be inserted downward and the pin ends should be bent.



13. Handlebar installation

- a. Remove the four hexagon bolts, and remove the two handlebar holders.
- b. Insert the all lead wire coming from the handle switches through the handle crown into the headlight body.



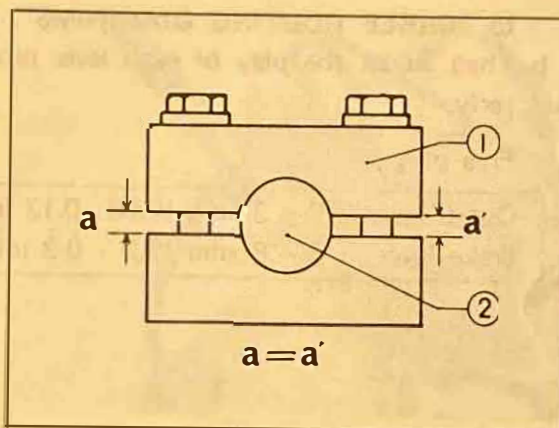
- c. Install the handlebar using the two removed upper holders and hexagon bolts.

Tightening torque:

1.1 - 1.8 m·kg (7.96 - 13.0 ft·lb)

CAUTION:

Tighten bolts in stages and maintain an equal gap on each side of both holders.

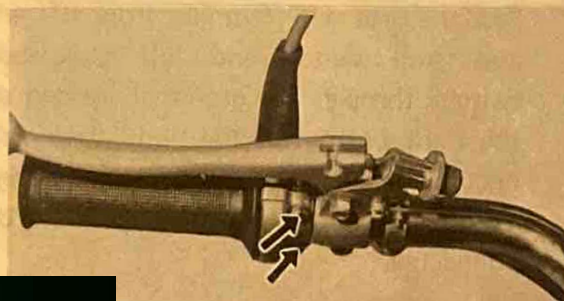
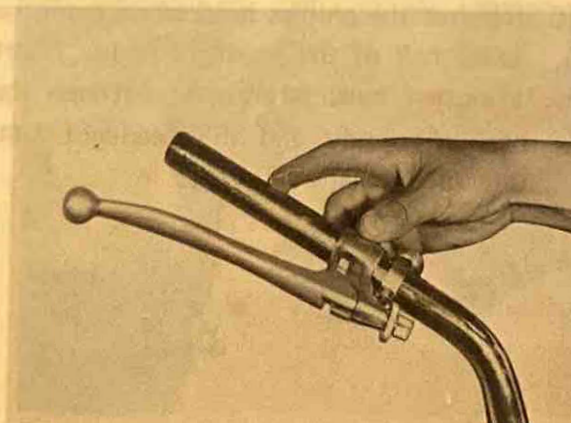


1. Holder 2. Handlebar

14. Grease the right end of the handlebar and the throttle grip housing, and install the throttle grip.

CAUTION:

Make certain throttle grip rotates on handlebar freely without binding. If not, normal throttle return will be impaired.



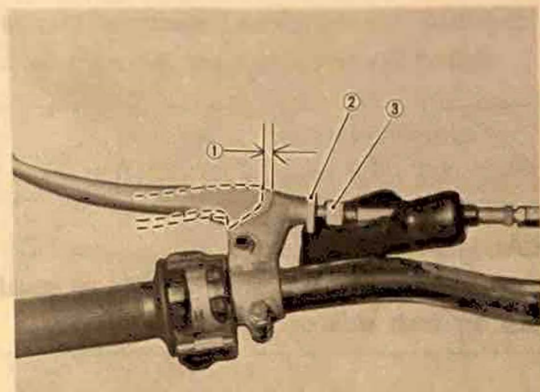
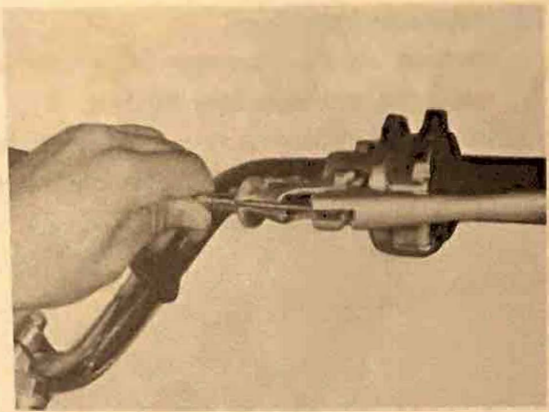
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15. Brake wire and clutch wire installation

- a. Fully loosen the lever lock nut, and screw in the adjusting bolt until tight so that the lever lock nut slot is aligned with the adjusting bolt slot. Next, connect the cable end to the lever, and hook up the outer cable to the lock nut. Then, fully pull in the lever, and release it abruptly. At the same time, pull the outer cable quickly. This makes easy the connection of the outer cable to the adjusting bolt. For detailed cable routing, refer to "CABLE ROUTING DIAGRAMS".
- b. Then adjust the play of each lever properly.

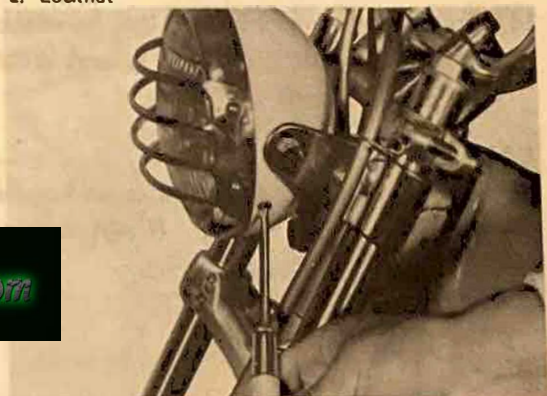
Free play

Clutch lever	: 2 - 3 mm (0.08 - 0.12 in)
Brake lever	: 5 - 8 mm (0.2 - 0.3 in)

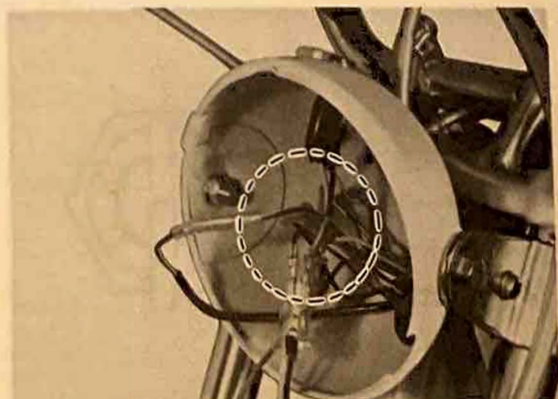


1. Free play 3. Adjuster
2. Locknut

16. Remove the phillips head screw from the lower half of the headlight body. Insert a slotted head screwdriver between the headlight body and the headlight rim, pry out the lens assembly.



17. Pass the lead wire (coming from the engine stop switch and left handlebar switch) through the grommet located at the right bottom of the body, and connect lead wires inside the headlight body. Lead wires of the same color should be connected.

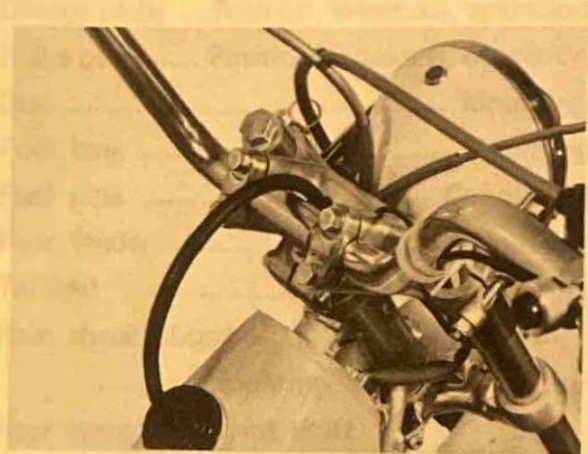


18. When installing the headlight lens assembly, care should be used so that wires are not pinched. Secure the headlight assembly in place with the phillips head screw.

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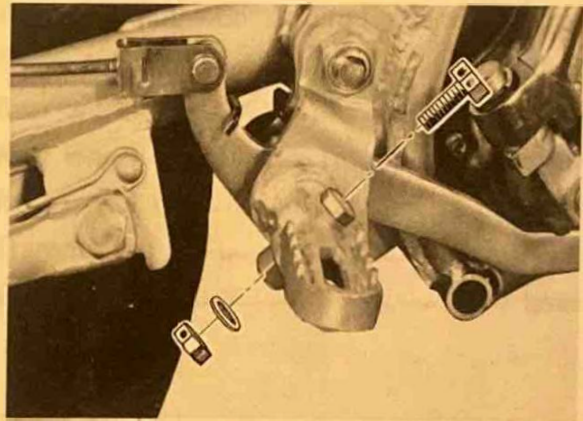


19. Connect the air breather pipe to the fuel tank cap, and thread it through the hole located in front of the steering upper crown.

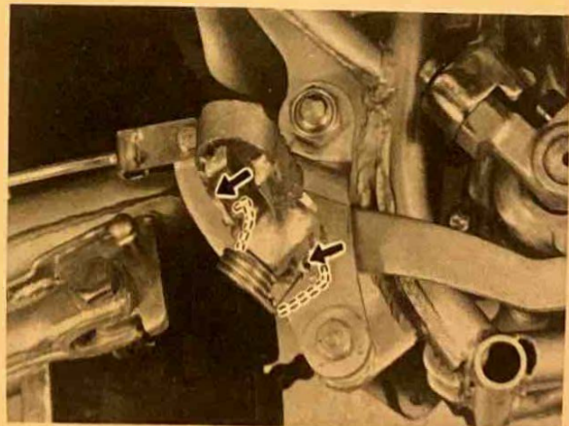


20. Footrest installation

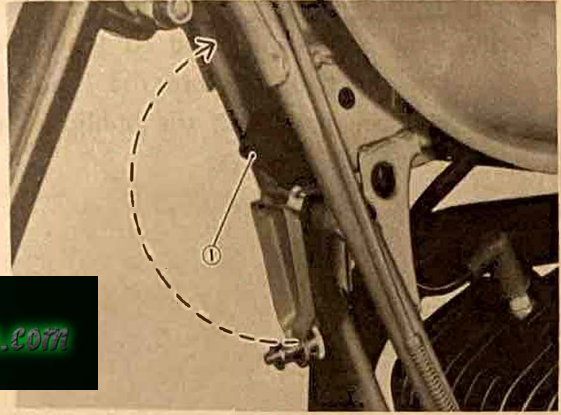
- a. Align the hole in the footrest bracket with the hole in the footrest, and insert the bolt into the holes. Then tighten the nuts so that the footrest can be lightly moved.



- b. Next, install the return spring.



21. Install the service tool assembly as photo.



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1. Tool assembly

INSPECTIONS AND ADJUSTMENTS

Inspections

After all packed parts are installed, check to see that all these parts and other parts (mounted or installed at the Yamaha factory) are correctly mounted or installed, or tightened to specification. This check-up should be started with the front of the machine.

Item	
Front wheel spokes	Tension
Front wheel rim	Hopping, deflection
Front wheel tire.....	Tire pressure
Front wheel axle nut	
.....	Cotter pin, tightening torque
Front wheel axle holder nuts	
.....	Tightening torque
Front brake tension plate lock bolt	
.....	Tightening torque
Front fork pinch bolts ...	Tightening torque
Steering head lock nut....	Tightening torque
Handlebar holder	Tightening torque
Clutch lever holder	Tightening torque
Brake lever holder	Tightening torque
Throttle housing	
.....	Position, operation, tightness
Engine mounting bolts ...	Tightening torque
Carburetor joint(s)	Tightness
Footrests	Position, tightening torque
Change pedal ...	Position, looseness, operation
Brake pedal	Position, looseness, operation
Seat	Mounting
Fuel tank	Mounting
Fuel pipe	Connection
Rear fender	Mounting
Taillight	Mounting, wiring
Rear shock absorber	
.....	Mounting, tightening torque
Rear swing arm pivot shaft	
.....	Tightening torque
Rear axle nut ...	Cotter pin, tightening torque
Chain puller	Lock nut
Rear wheel	Spoke tension
Rear wheel rim	Hopping, deflection
Rear wheel tire	Tire pressure
Transmission oil	Oil level
Engine oil	Oil level

Adjustments

NOTE: _____

This section deals with the main points only. For details, refer to the service manual for this model.

1. Idling speed adjustment

- a. Before adjustment, fully warm up the engine.
- b. Fully tighten the air screw, and turn in and out the throttle stop screw so that the engine runs at the lowest possible speed.
- c. Slowly back out the air screw, and the engine speed increase. When the engine idles faster, stop turning the air screw.

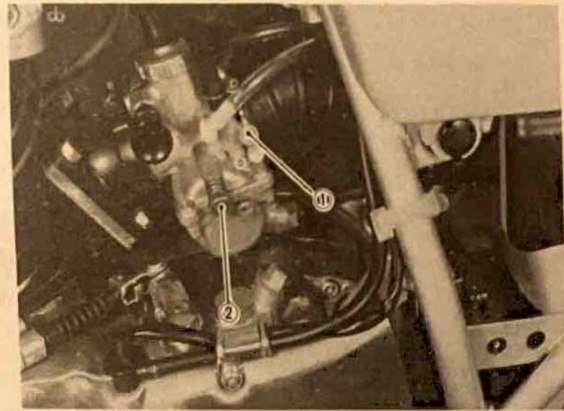
Standard turns out: $1\frac{1}{2}$

- d. Next, back out the throttle stop screw so that the engine idles at the specified speed.

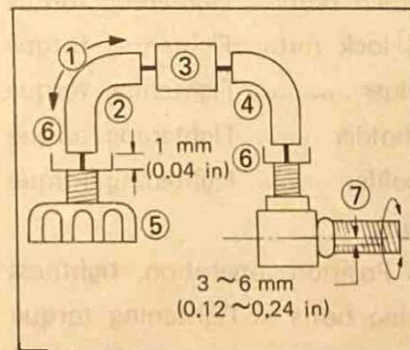
Standard speed: 1,050 - 1,150 rpm

2. Throttle wire adjustment

- a. After adjusting the idling speed, adjust the play in throttle wire 2 to 1.0 mm (0.04 in)
- b. Next, adjust the play to throttle wire 1 to 3 - 6 mm (0.12 - 0.24 in) at the throttle grip flange.



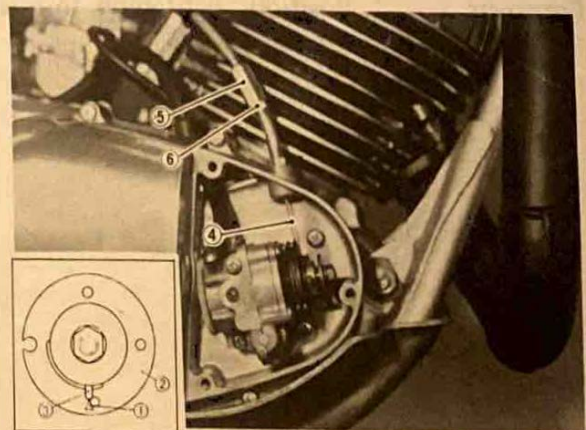
1. Pilot air screw
2. Throttle stop screw



1. Slide
2. Cable 2
3. Junction block
4. Cable 1
5. Carburetor cap
6. Cable adjuster
7. Throttle grip

3. Pump wire adjustment

- a. Remove pump cover.
- b. Open throttle slightly to take up all play.
- c. Loosen wire adjuster lock nut and turn adjuster in or out until the proper mark on the adjusting pulley is aligned with the guide pin.

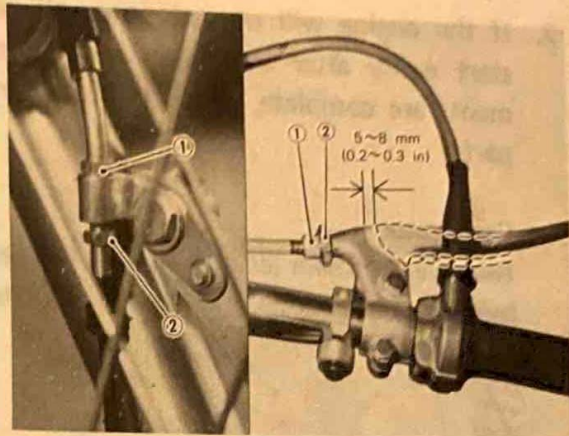


1. Mark (Δ)
2. Adjust pulley
3. Pin
4. Pump cable
5. Adjuster
6. Adjuster lock nut

4. Front brake wire adjustment

Loosen the brake wire adjuster lock nut, and adjust the play of the brake lever (at the position illustrated) to specification. After the adjustment, be sure to screw in the lock nut until tight.

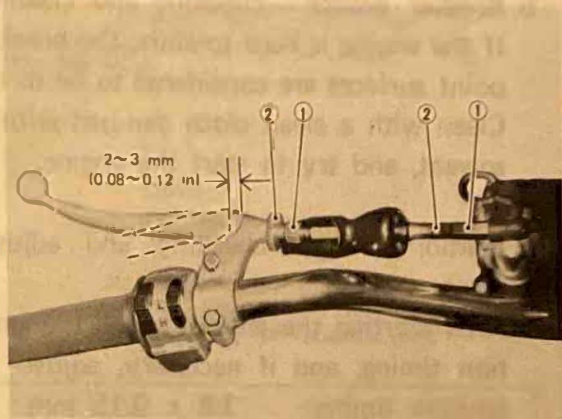
Standard value: 5 - 8 mm (0.2 - 0.3 in)



1. Adjuster
2. Adjuster lock nut

5. Clutch wire adjustment

Loosen the clutch wire adjuster lock nut, and adjust the clutch wire by turning the wire adjuster. Turning the adjuster clockwise (the adjuster is tightened) increases clutch wire play, while turning counter-clockwise decreases the play. The play should be 2 - 3 mm (0.08 - 0.12 in) at the position shown in the figure.

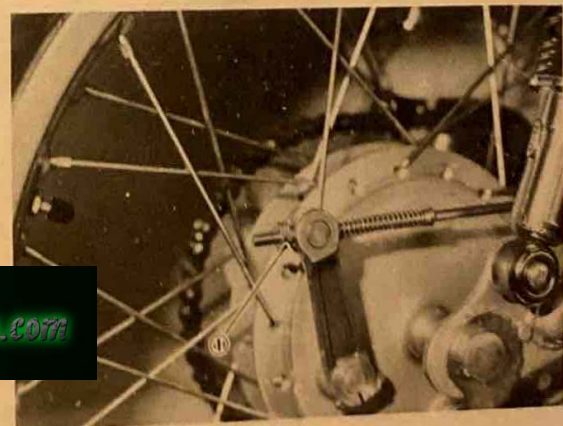
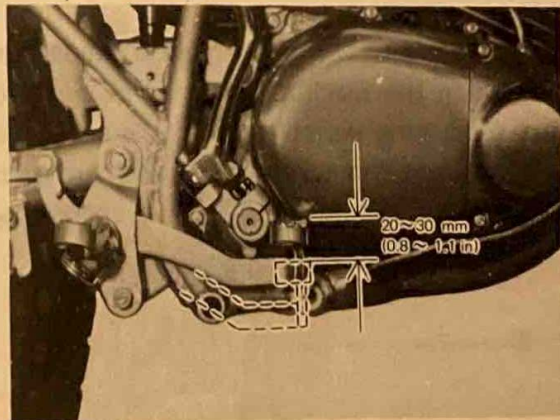


1. Adjuster
2. Adjuster lock nut

6. Rear brake pedal adjustment

Rear brake pedal play can be adjusted by turning the adjusting nut on the rear end of the brake rod. Turning clockwise (tightening) decreases play. Turning counterclockwise (loosening) increases play.

Standard value: 20 - 30 mm (0.8 - 1.1 in) / at the brake pedal

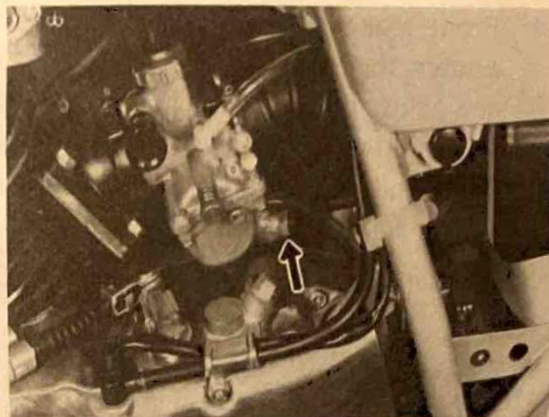


1. Adjusting nut

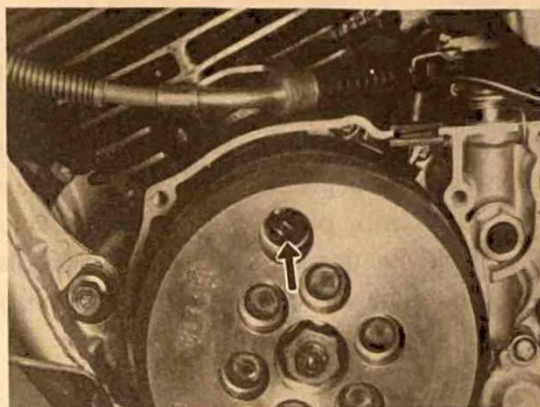
7. If the engine will not start or will not start easily after inspection and adjustments are complete, check the following parts.

a. Carburetor

Remove the main jet attached to the carburetor float bowl, and drain off the gasoline.



b. Breaker points – checking and cleaning
If the engine is hard to start, the breaker point surfaces are considered to be dirty. Clean with a clean cloth damped with a solvent, and try to start the engine.

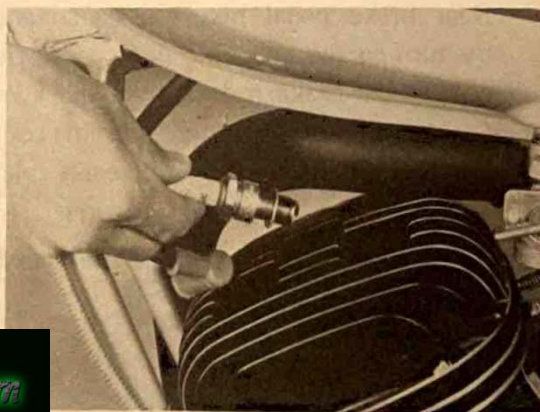


c. Ignition timing – checking and adjustment

After starting the engine, check the ignition timing, and if necessary, adjust.

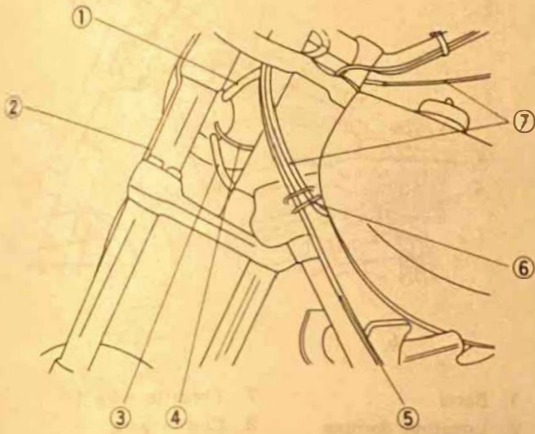
Ignition timing:	$1.8 \pm 0.15 \text{ mm}$ $(0.071 \pm 0.006 \text{ in})$
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d. Spark plug – checking and adjustment
When the machine is stored or not used for a long period of time, the spark plug may get wet with oil. If so, hard starting will result. Remove the spark plug, and clean as required.

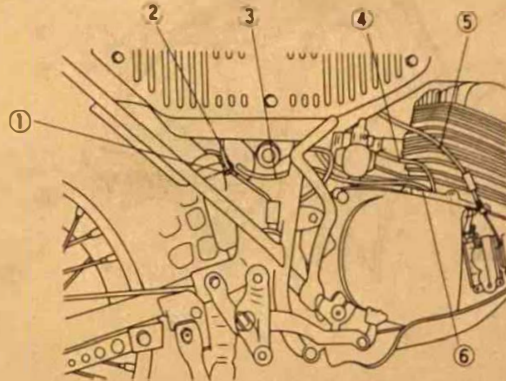


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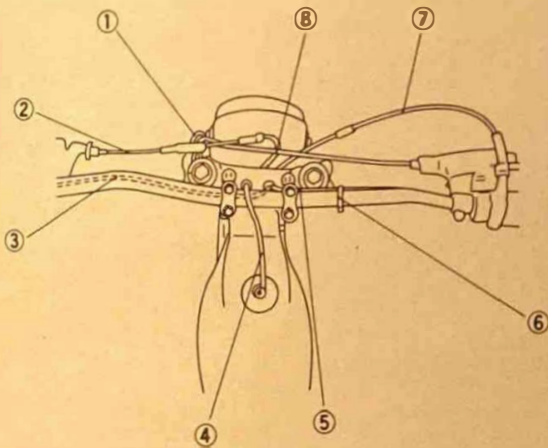
CABLE ROUTING DIAGRAM



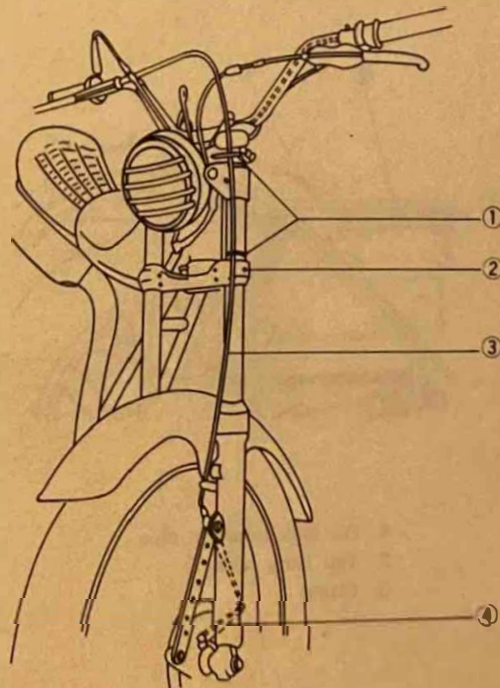
1. Switch handle wire (left)
2. Brake wire
3. Wire harness
4. Switch handle wire (right)
5. Clutch wire
6. Wire holder
7. Throttle wire 1



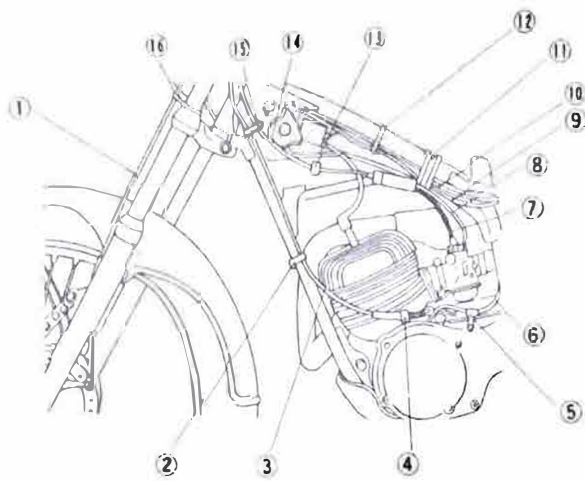
1. Clamp
2. Stop switch cord
3. Oil pipe
4. Delivery pipe
5. Pump wire
6. Crankcase (R) breather pipe



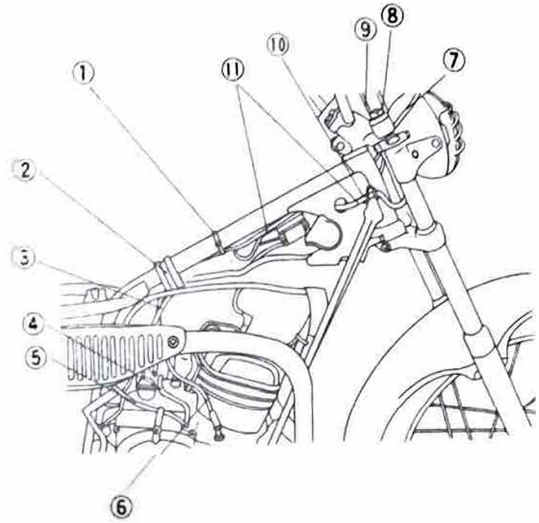
1. Wire holder
2. Clutch wire
3. Switch handle wire (left)
4. Fuel tank breather pipe
5. Switch handle wire (right)
6. Band
7. Throttle wire 1
8. Brake wire



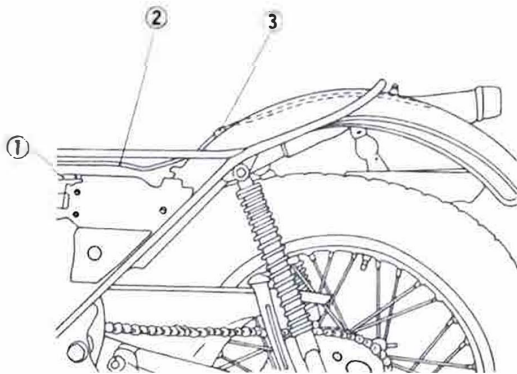
1. Wire holder
2. Under bracket
3. Front brake wire
4. Brake cam lever



- | | |
|--------------------------|----------------------------|
| 1. Brake wire | 9. Wire harness |
| 2. Band | 10. Oil tank breather pipe |
| 3. Clutch wire | 11. Locating damper |
| 4. Clutch wire holder | 12. Band |
| 5. Clamp | 13. Clamp |
| 6. Flywheel magneto cord | 14. Throttle wire 1 |
| 7. Throttle wire 2 | 15. Wire holder |
| 8. Pump wire | 16. Wire holder |



- | | |
|--------------------|--------------------|
| 1. Band | 7. Throttle wire 1 |
| 2. Locating damper | 8. Clutch wire |
| 3. Throttle wire 2 | 9. Brake wire |
| 4. Delivery wire | 10. Wire holder |
| 5. Oil pipe | 11. Wire harness |
| 6. Pump wire | |



- | |
|---------------------------|
| 1. Oil tank breather pipe |
| 2. Tail lamp wire |
| 3. Clamp |

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