



YAMAHA

TY250C

ASSEMBLY MANUAL

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90894-07534

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 model may require improvements, the service specifications 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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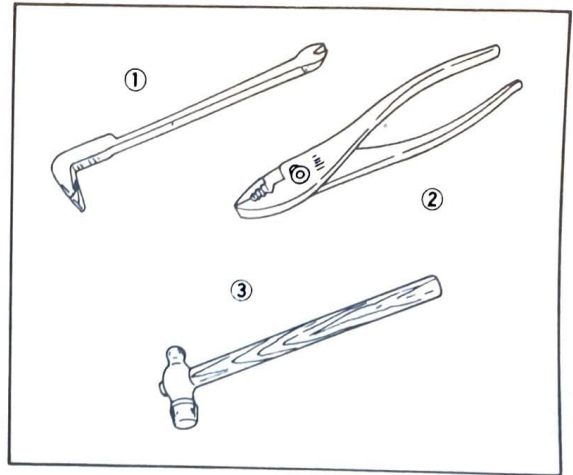
YAMAHA TY250C
ASSEMBLY MANUAL
1st EDITION SEPTEMBER, 1975
SERVICE DEPT.
OVERSEAS ENGINEERING DIVISION
YAMAHA MOTOR. CO., LTD.
IWATA, JAPAN
LIT-11666-00-25

PREPARATION

To assemble the machine correctly, the following service tools, greases and working space are required.

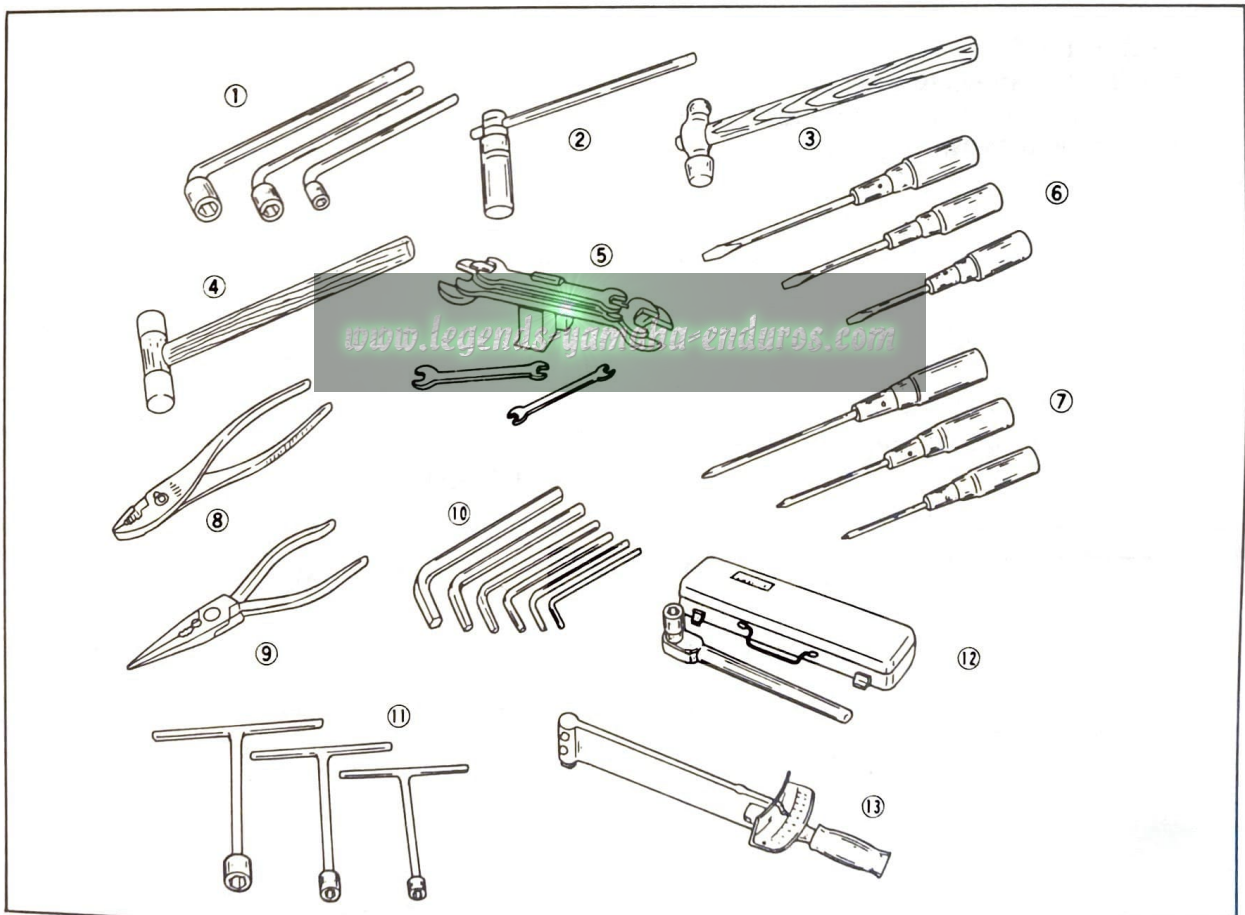
Tools for unpacking

1. Nail puller
2. Pliers
3. Steel hammer



Tools for assembling

1. L-handle socket wrench
2. Spark plug wrench
3. Steel hammer
4. Soft faced hammer
5. Open end wrench set
6. Slotted head screwdrivers (Large, Medium and Small)
7. Pihillips head screwdrivers (Large, Medium and Small)
8. Pliers
9. Long nose pliers
10. Allen wrench set
11. T-handle socket wrench
12. Socket wrench set
13. Torque wrench



Workshop

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.

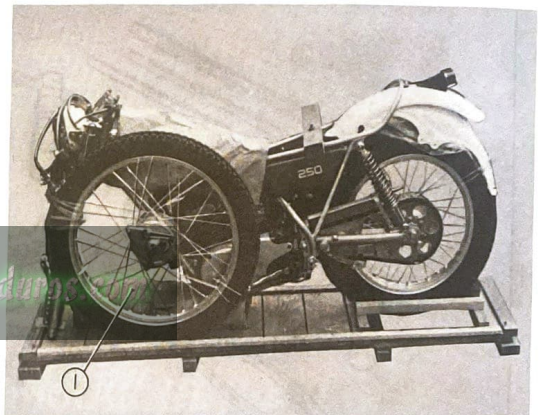
Procedure for unpacking

To remove the machine and parts packed in the crate, proceed as follows:

1. Remove the nails securing the top board, and remove the top board complete.
2. Remove the nails securing the wooden crosspieces supporting the top board, and remove the crosspieces.
3. Remove the nails and hook securing the frame holding crosspiece, and remove the crosspiece.
4. Loosen the wire bands and remove the side board.
5. Remove the plastic piece holding the front wheel axle to the bottom board.

PARTS CHECK LIST

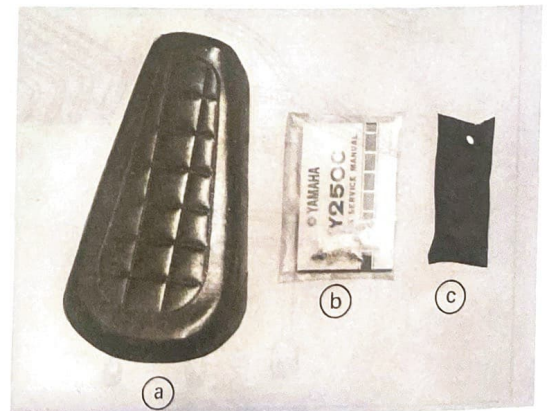
Before starting the assembly, check for damaged or missing. Also check the machine for damage, scratches and other defects.



1. Vinyl bag

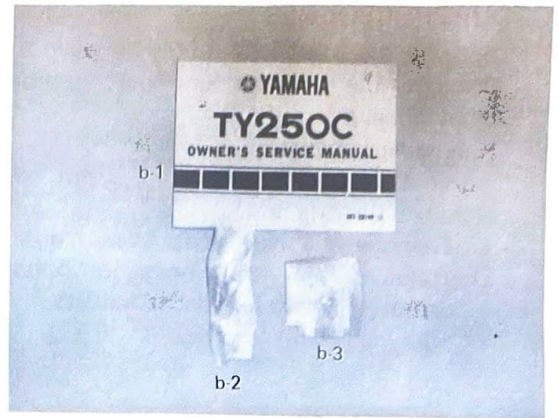
Details of parts in the vinyl bag

No.	Q'ty	Parts name
a	1	Seat
b	1	Vinyl bag
c	1	Service tool assembly



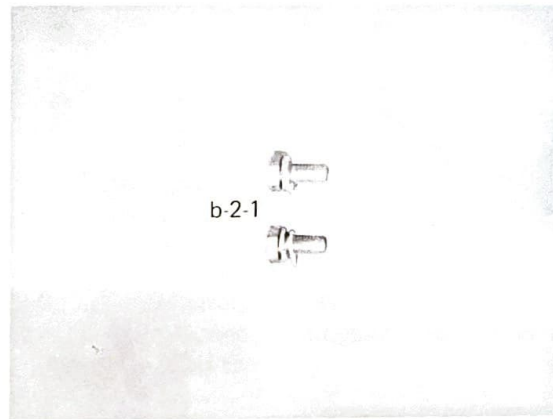
Details of parts in the vinyl bag "b"

No.	Q'ty	Parts name
b-1	1	Owner's Service Manual
b-2	1	Vinyl bag
b-3	1	Vinyl bag



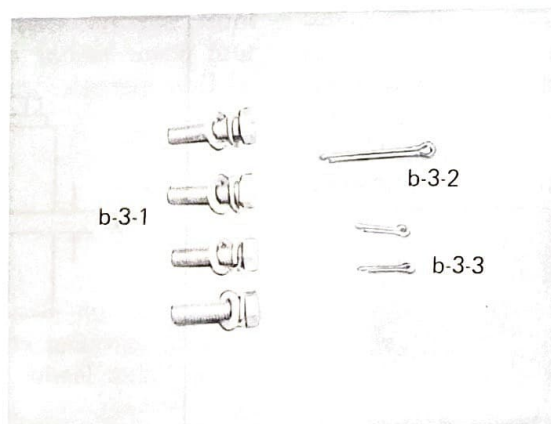
Details of parts in the vinyl bag "b-2"

No.	Q'ty	Parts name	Remarks
b-2-1	2	Bolt with plain and spring washer	For seat



Details of parts in the vinyl bag "b-3"

No.	Q'ty	Parts name	Remarks
b-3-1	4	Bolt with plain and spring washer	For front fender
b-3-2	1	Cotter pin (large)	For front wheel axle
b-3-3	2	Cotter pin (small)	For tension bar and front brake wire



SET-UP PROCEDURES

1. Remove the front fender held between the rear tire and the rear fender. Next, remove the front wheel assembly.

2. Handlebar installation

Note that the throttle wire is not removed from the throttle grip.

- 1) Remove the handlebar from front forks.
- 2) Remove the four hexagon bolts, and remove the two handlebar holders.

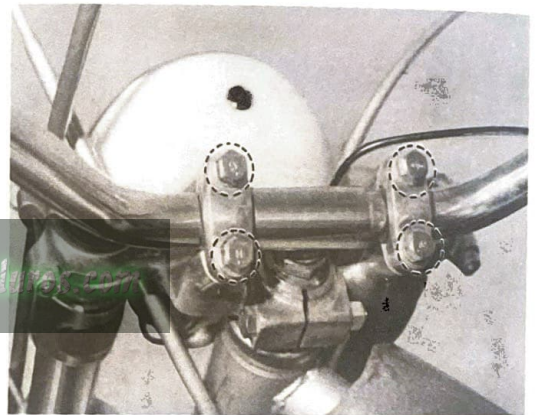
- 3) Insert the lead wire coming from handle switches (L and R) into the grommet attached to the headlight body.

For details of cable routing, refer to "CABLE ROUTING DIAGRAM".

- 4) Install the handlebar using the two removed upper holders and four hexagon bolts.

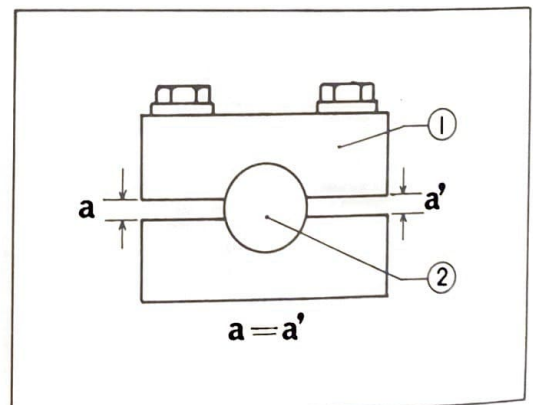
Tightening torque

1.1 ~ 1.8 m·kg (8 ~ 13 ft·lb)



CAUTION:

- 1) Tighten bolts in stages and maintain an equal gap on each side of both holders.
- 2) Make certain throttle grip rotates on handlebar freely, without binding. If not, normal throttle return will be impaired.

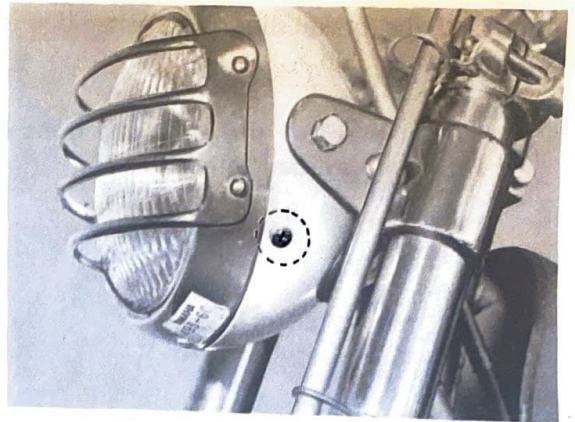


1. Holder 2. Handlebar

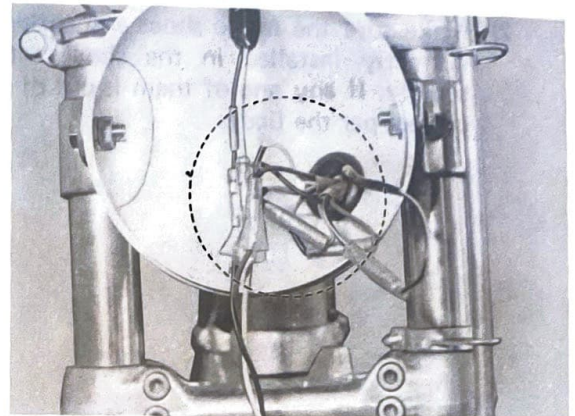
3. Remove the Phillips head screw from the bottom of the headlight body. Insert a slotted head screwdriver between the headlight body and the headlight rim, pry out the lens assembly.

NOTE:

During the operation, care should be taken not to scratch the headlight body and lens rim. Also take care so that the screw is not lost.

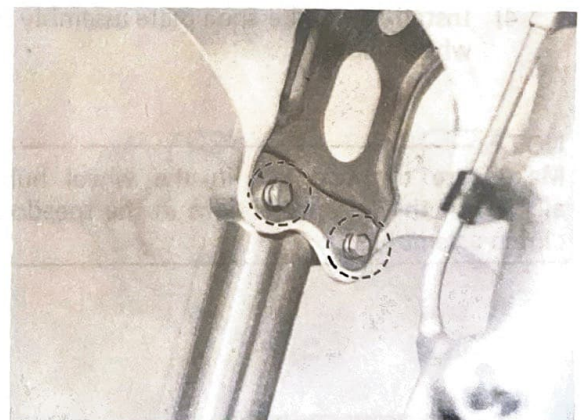


4. Connect all lead wires inside the headlight body. The wires of identical colors should be connected.



5. When installing the headlight lens assembly, care should be used so that wires are pinched. Secure the headlight assembly in place with the Phillips head screw.
6. Lift up the machine, and remove the rear wheel section from the bottom board. Then take out the machine.
7. To install the front fender and front wheel, place a proper-size wooden box or a wooden block under the engine to keep the front of the machine raised off the floor. Take care so that the machine does not fall over.

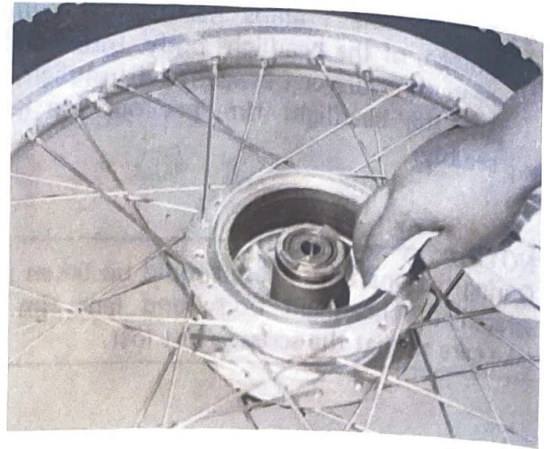
8. Insert the front fender between the front fork legs, and secure the fender using four bolts with plain and spring washers (b-3-1).



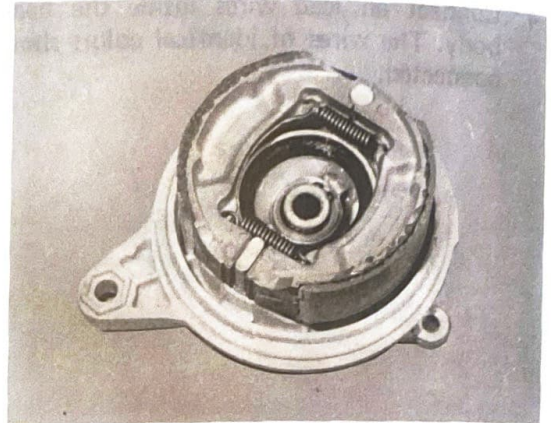
9. Remove the front wheel axle nut and plain washer, and loosen the nuts securing the axle holder. Then remove the wheel axle, wheel axle collar and plastic piece.

10. Install the brake shoe plate assembly in the front wheel hub.

1) Clean the inner surface of the front wheel hub with a clean cloth.

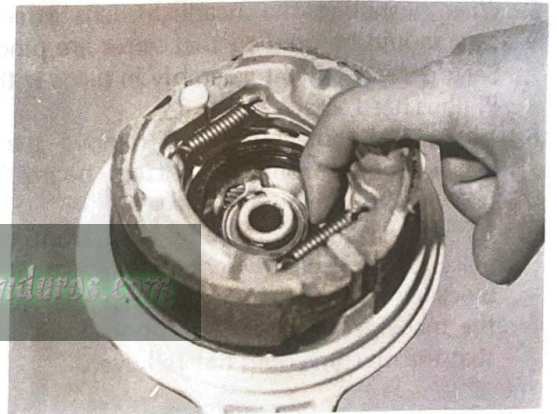


2) Make sure the brake shoes and springs are correctly installed in the shoe plate assembly. If any one of them is out of plate, correct per the figure.



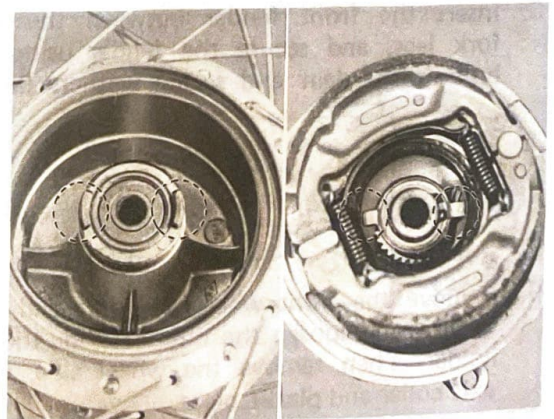
3) Apply a light coat of grease to the speedometer drive gear and oil seal.

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) Install the brake shoe plate assembly in the wheel hub.

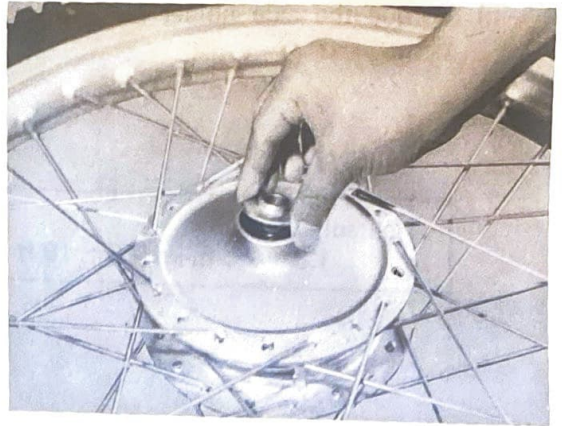
NOTE: _____
Make sure the two legs in the wheel hub not align with the two projections in the speedometer clutch assembly.



11. Install the distance 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.



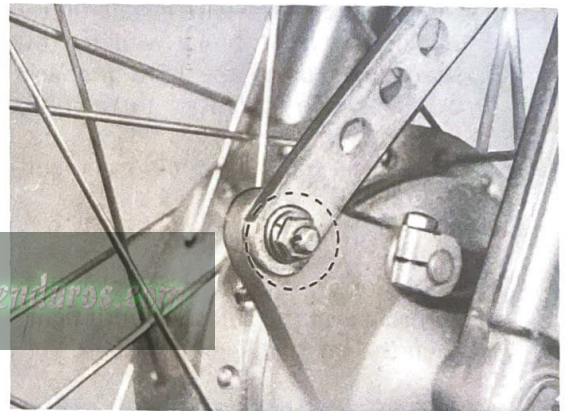
12. Install the front wheel on the front forks.

- 1) Insert the wheel axle with axle collar, mount the plain washer on the axle, and install the axle nut.

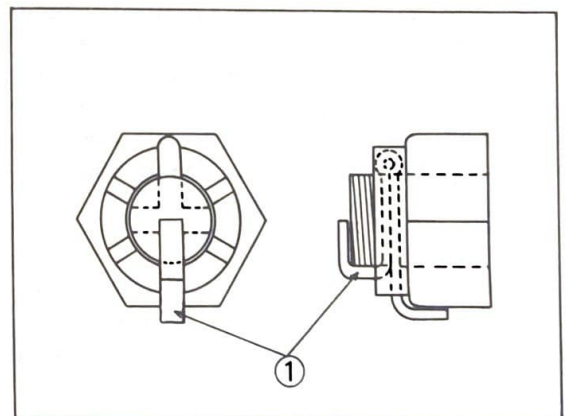
- 2) Install the tensionbar to the brake shoe plate using the bolt, plain washer, spring washer and nut which are fitted to the shoe plate. Then tighten the nut and lock the nut with the cotter pin (b-3-3).

- 3) Lightly tighten the axle holder nut, and torque the axle nut to specification while holding the opposite side.

Tightening torque
5.0 ~ 7.0 m·kg (36 ~ 51 ft·lb)



- 4) Lock the nut with the cotter pin (b-3-2). The pin should be inserted downward, and the pin ends should be bent.



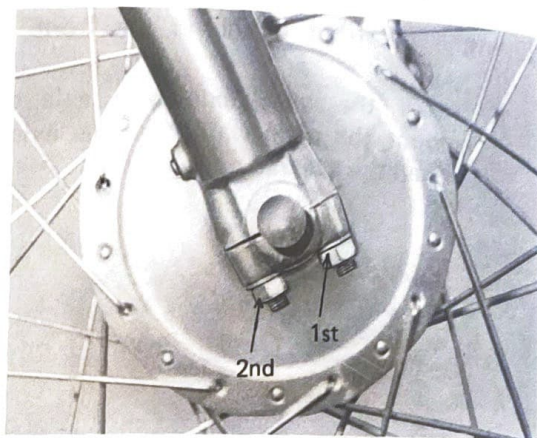
1. Cotter pin (6-3-2)

- 5) Torque the axle holder nuts to specification.

Tightening torque:
1.8 ~ 2.5 m·kg (13 ~ 18 ft·lb)

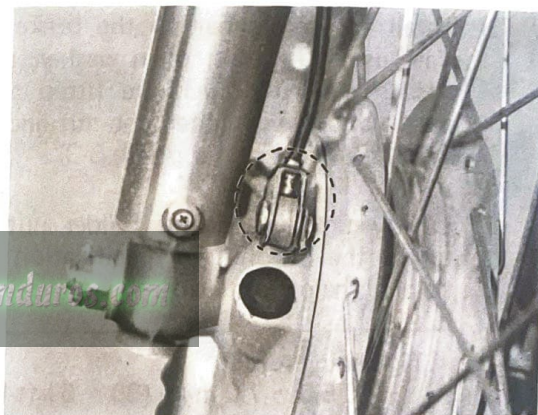
CAUTION:

First tighten the nut on the front end of the axle holder, and tighten the nut on the rear end.



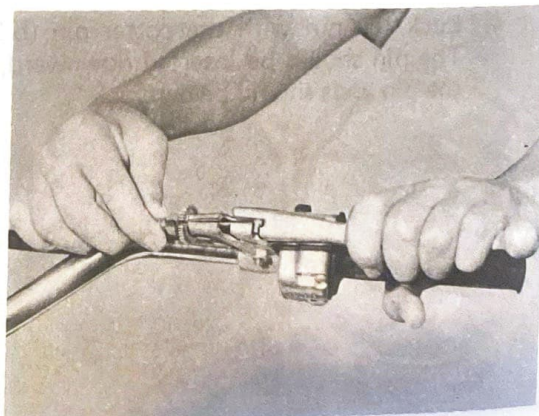
13. Brake wire and clutch wire installation

- 1) Install the front brake wire to the camshaft lever using the joint pin and plain washer which are fitted to the brake wire joint. Then secure the joint pin using cotter pin (b-3-3).



- 2) Fully loosen the lever adjuster lock nuts and screw in the adjusters until tight. Next, align the slit in the lever holder.

- 3) Insert the wire end into the lever hole, and hook the outer cable end onto the adjuster lock nut, then squeeze the lever. Next, while pulling the outer cable in the direction opposite to the lever, release the lever quickly. While releasing it, seat the outer cable into the adjuster.

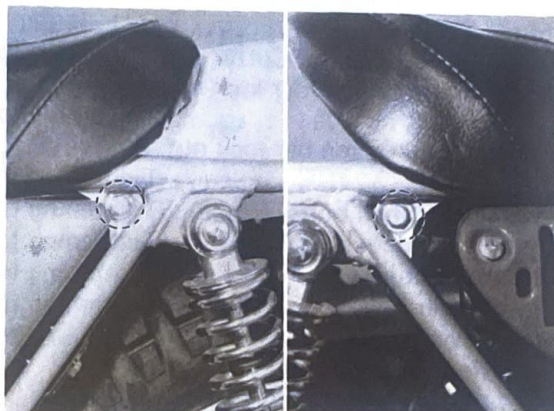


CAUTION:

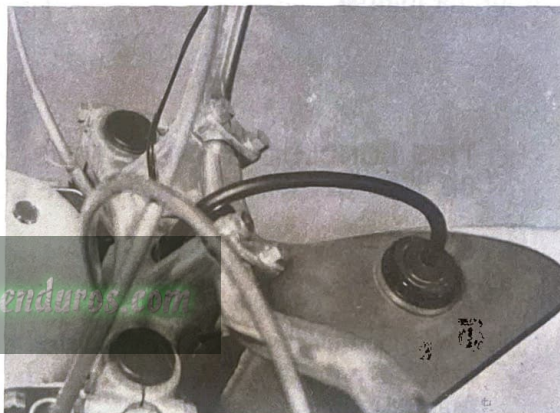
Proper wire routing is essential to insure safe vehicle operation. For details of the cable routing, refer to "CABLE ROUTING DIAGRAM".

- 4) Adjust wire length according to the specification in the model TY250C Owner's service manual.
- 5) Cover the lever covers on the brake and clutch lever holders.

14. Install the seat using the two bolts with plain and spring washers (b-2-1).



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



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INSPECTIONS

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

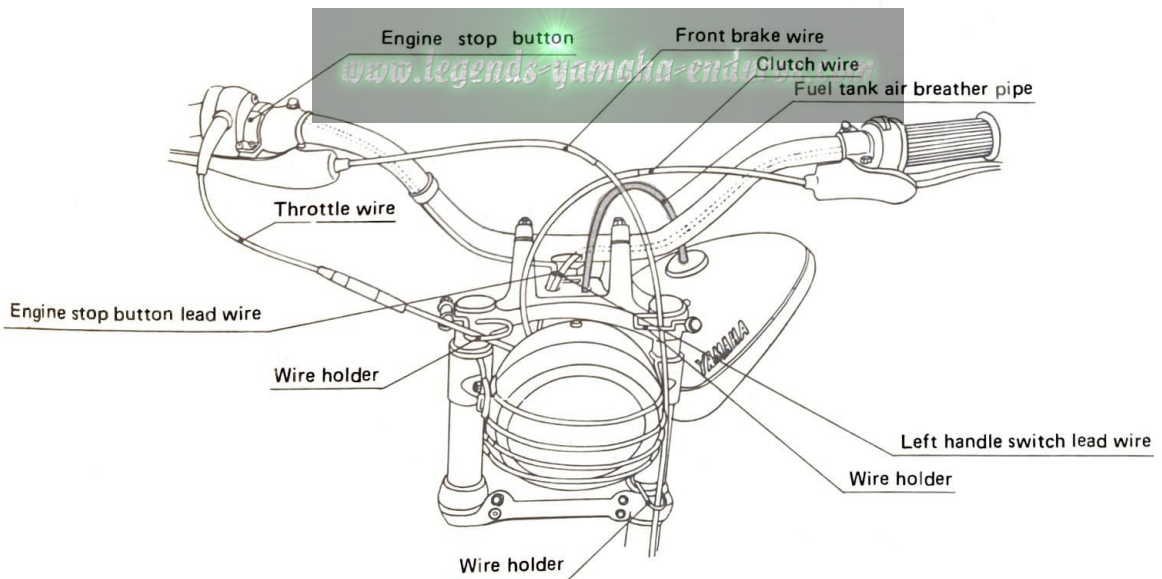
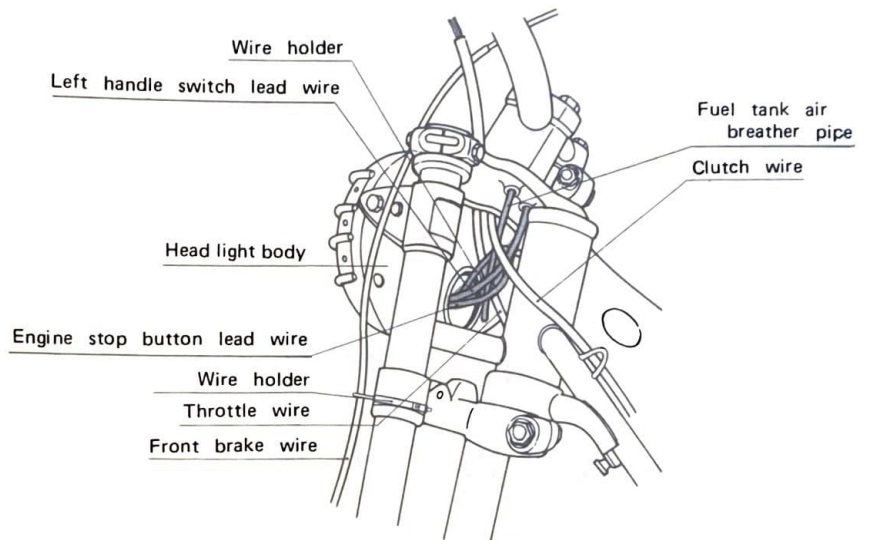
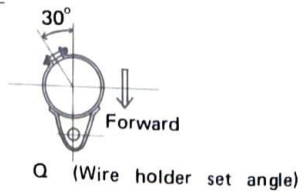
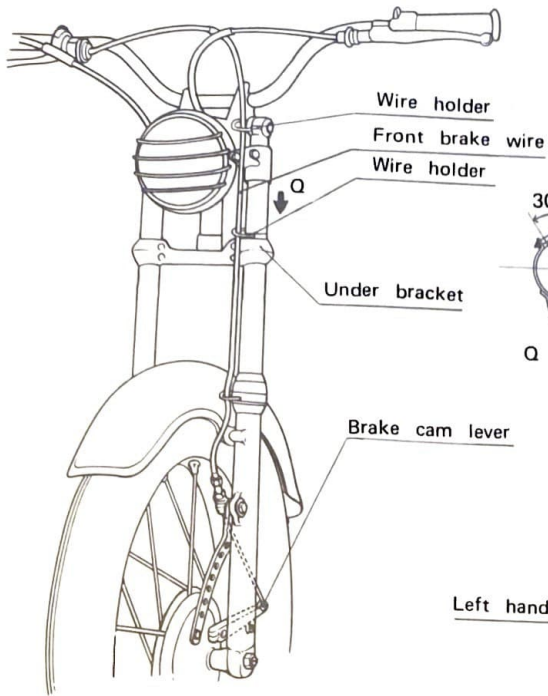
Front wheel spokes	Tension	Footrests	Installation
Front wheel rim	Hopping, deflection	Change pedal	Position, looseness, operation
Front wheel tire	Tire pressure	Brake pedal	Position, looseness, operation
Front wheel axle nut	Cotter pin, tightening torque	Seat	Mounting, tightening torque
Front wheel axle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

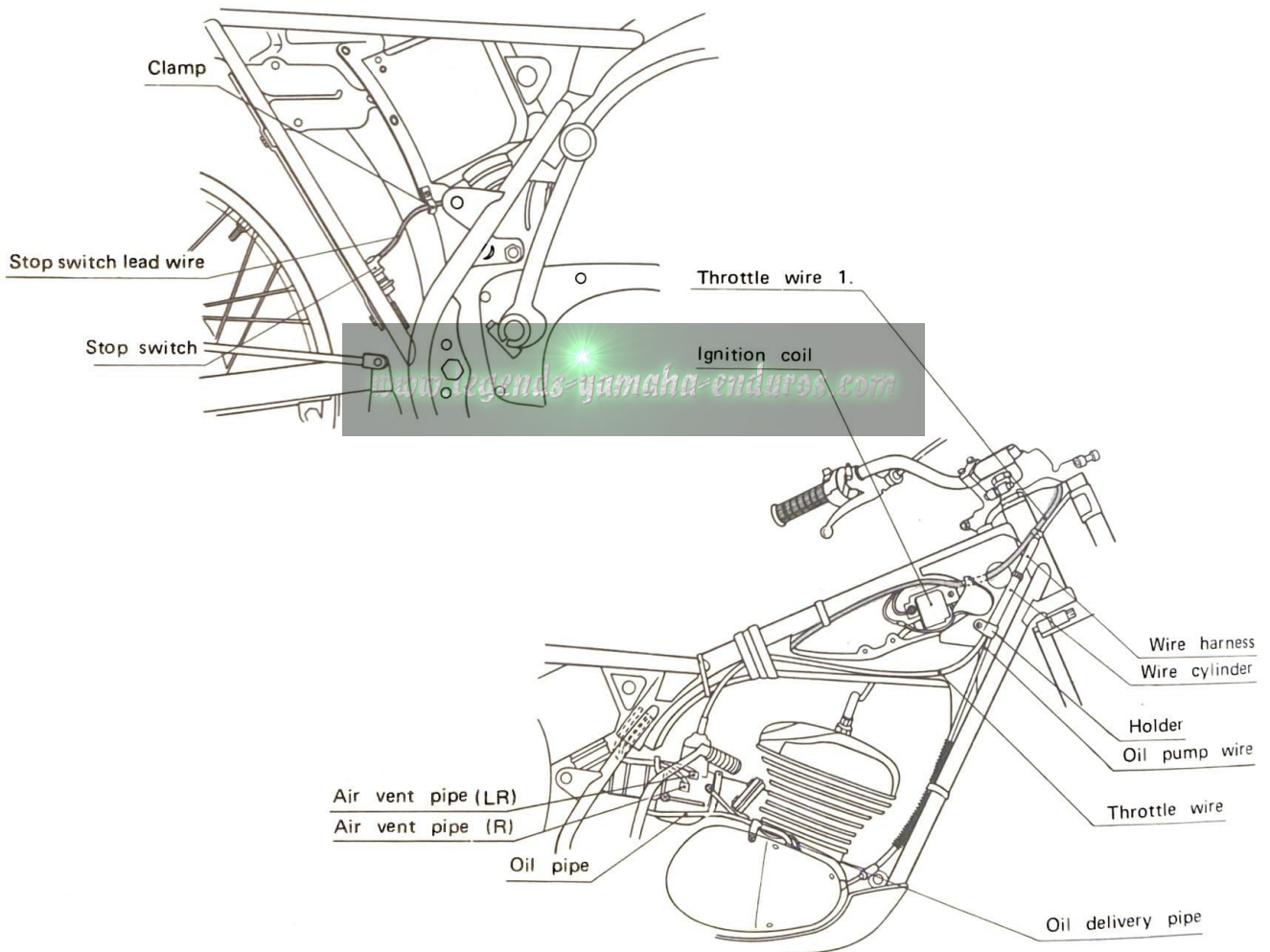
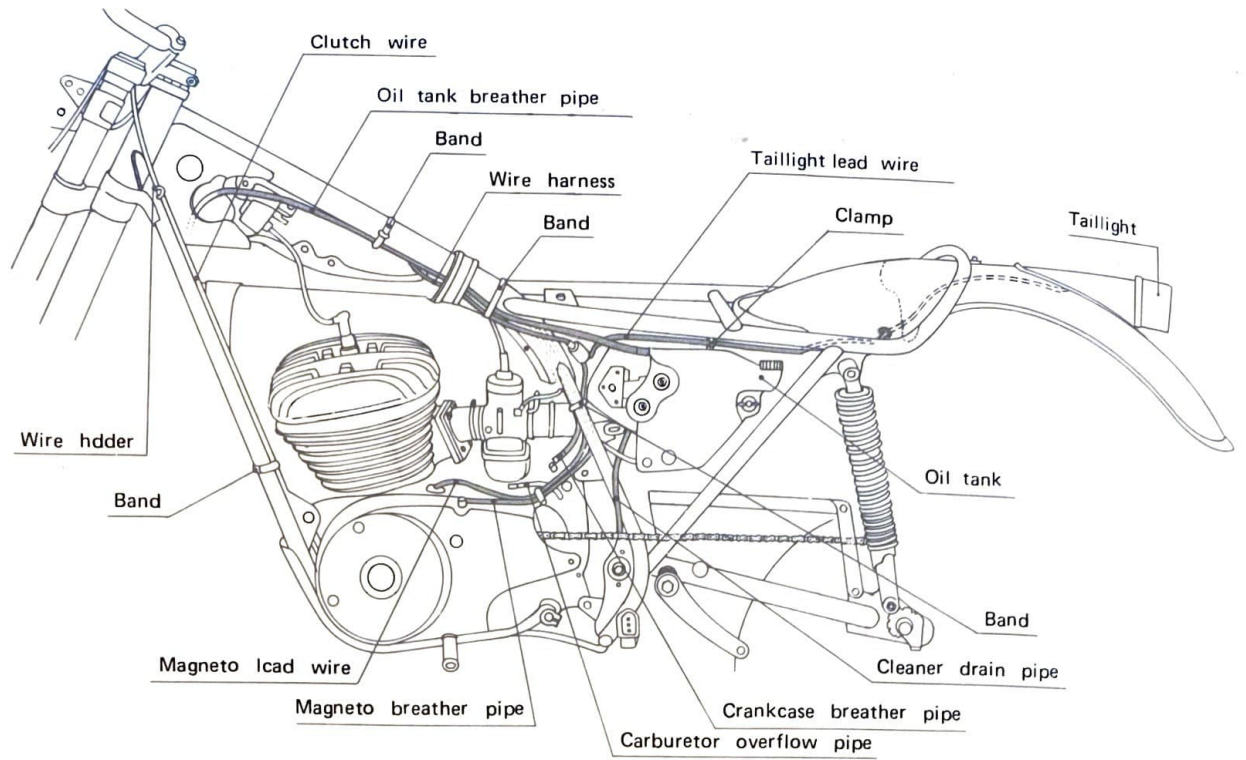
THIS CONCLUDES THE ASSEMBLY PORTION. HOWEVER, THE UNIT MUST STILL BE "SET-UP" DELIVERY TO THE CUSTOMER.

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For specifications regarding ignition timing, carburetor adjustment, tire pressures, transmission oil type and quantity etc., refer to appropriate sections of TY250C Owner's Service Manual.

CABLE ROUTING DIAGRAM





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