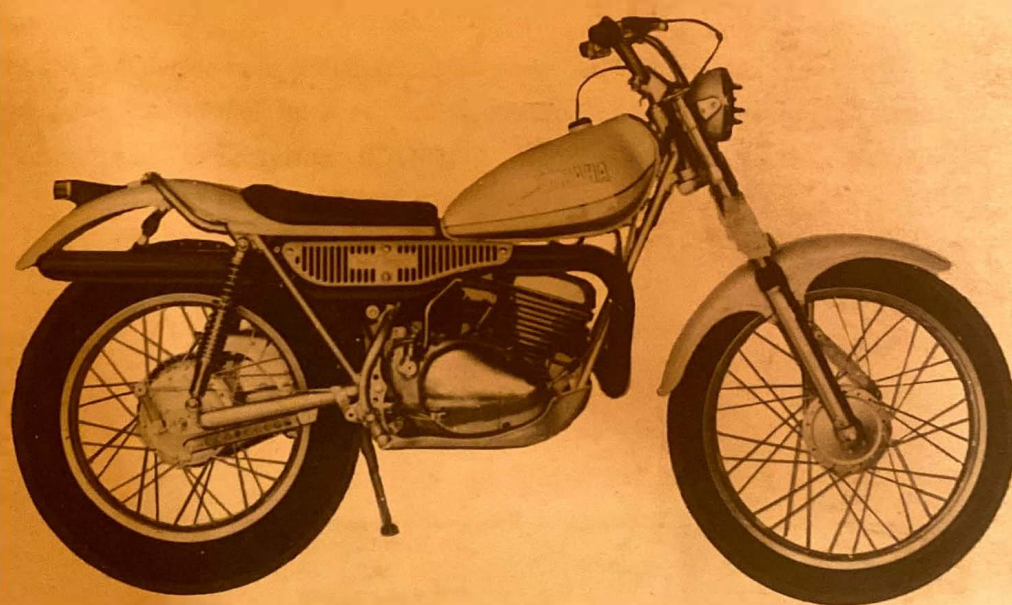


TY250A

ASSEMBLY MANUAL



YAMAHA

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NOTICE

This manual has been written by Yamaha Motor Company for use by Authorized Yamaha Dealers and their qualified mechanics. In light of this purpose it has been assumed that certain basic mechanical precepts and procedures inherent to our product are already known and understood by the reader. Without such basic knowledge, incorrect assembly of one of the models listed within these pages could occur. This may render the machine unsafe.

The dealer is further cautioned to review the Service Manual for the machine being assembled in order to acquaint himself with the servicing procedures on the machine after assembly has been completed.

The Research and Service Departments of Yamaha are continually striving to further improve all models manufactured by the company. Modifications are therefore inevitable and changes in specifications or procedures mentioned within this manual will be forwarded to all Authorized Yamaha Dealers and will, where applicable, appear in future editions of this manual.

Should the dealer note a difference between the information in this manual and the actual model, he is advised to contact the U.S. Distributor, Yamaha International Corporation (CANADA Distributor: YAMAHA MOTOR CANADA LTD.) per established routine for clarification.

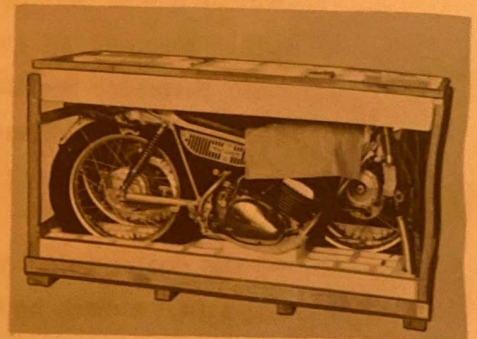
**YAMAHA TY250A
ASSEMBLY MANUAL**
1st Edition, July 1973
**SERVICE DEPARTMENT
YAMAHA MOTOR CO., LTD.
IWATA, JAPAN**
Lit-11664-38-01

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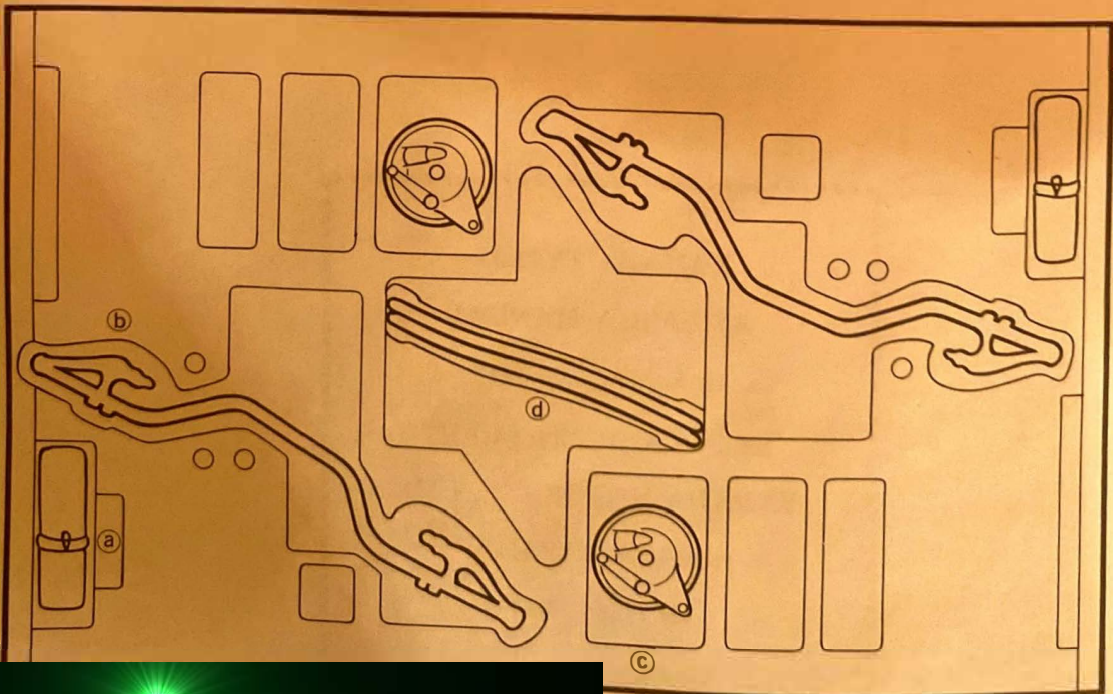
UNPACKING



- 1) The TY250A is put in a cardboard crate. To unpack, cut plastic bands wound around the cardboard crate using a cutter, and then take it out. Lift the top off the crate by pulling it straight up with an assistant.



- 2) Check the parts contained in the foam styrol case for quantity and damage. If any parts are found damaged, replace.



Check List

Set Position	Part Name	Q'ty
a	Tool set	1
b	Handle bar ass'y	1
c	Front brake shoe ass'y	1
d	Fuel tank air breather pipe	1

The quantity of parts specified above is per machine.

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Vinyl Bag

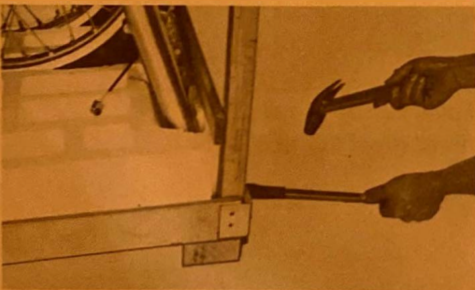
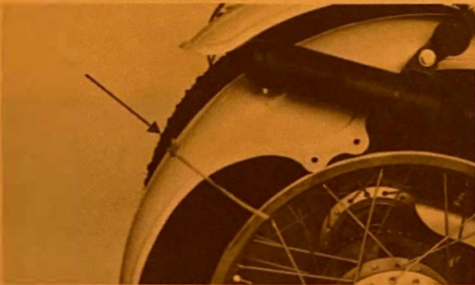
	Part Name	Q'ty
a	Owner's service manual	1
b	6 x 18 Bolts	4
c	6 mm Spring washers	4
d	6 mm Plain washers	4

The quantity of parts specified above is per machine.

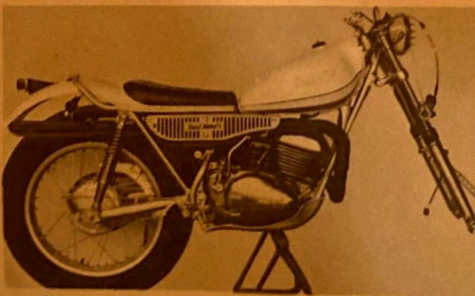
SET-UP PROCEDURES



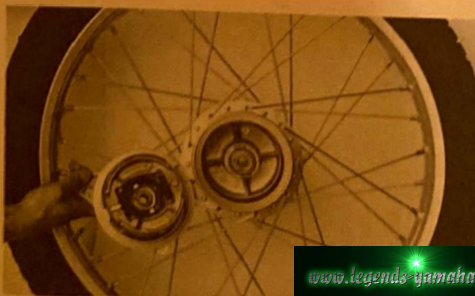
- 3) Take out the front fender which is placed between the rear wheel and the rear fender, and take out the front wheel.



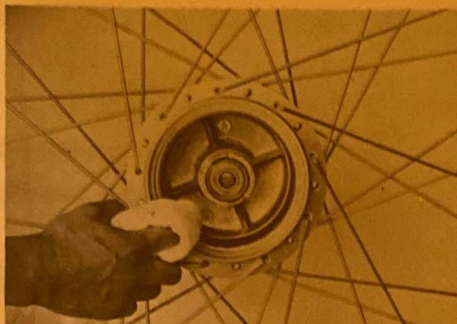
- 4) a. Remove the nail at each corner of the crate, and remove the struts.
b. Lift up the motorcycle. Then take out the rear wheel from the lower foam styrol case.



- 5) Place a suitable support under the engine. This will keep the front of the machine elevated while the front fender and front wheel are installed.



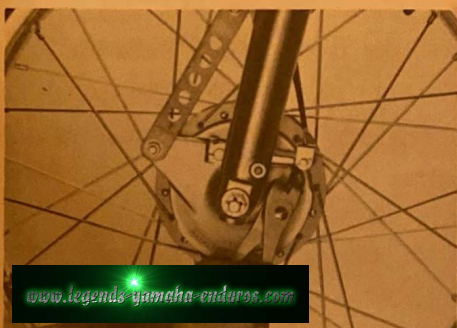
- 6) a. Loosen the two nuts securing the axle holder. Next, remove the wheel shaft nut and plain washer, and pull out the wheel shaft.
b. Check for any loose parts inside the brake plate and brake drum.



- 7) Wipe off any dust on the brake shoe linings and drum with a clean cloth.
Then fit the brake shoe plate assembly to the drum.



- 8) Install the front wheel on the front forks. Make sure of the position of the tension bar and the shoe plate they should be set as shown in the photo.
Then tighten the nut.
Note: Tighten the wheel shaft securing nut temporarily on this step.



- 9) Install the front brake cable to the cam lever and install the cotter pin then prior to bending the ends of cotter pin apart as shown in the photo.



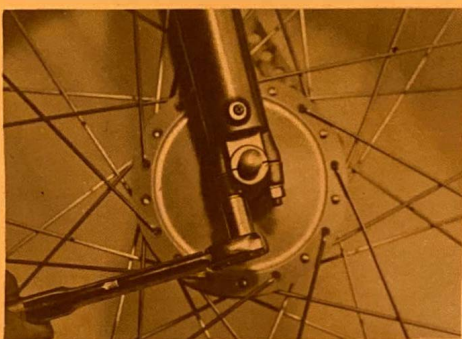
- 10) Tighten the front wheel shaft nut with specified torque.

Tightening torque: 5.0 ~ 7.0 kg-m
36.2~51.0 lb-ft



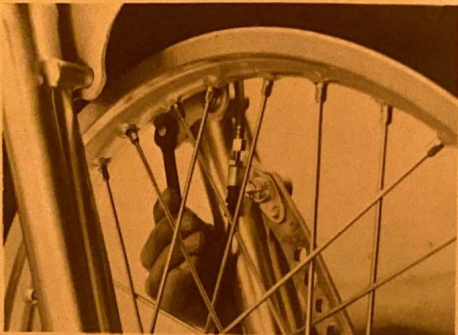
- 11) Lock the wheel shaft nut with the cotter pin.

Note: The cotter pin should be installed with the open ends pointing down, prior to bending the ends apart.



- 12) Tighten the two axle holder nuts with specified torque.

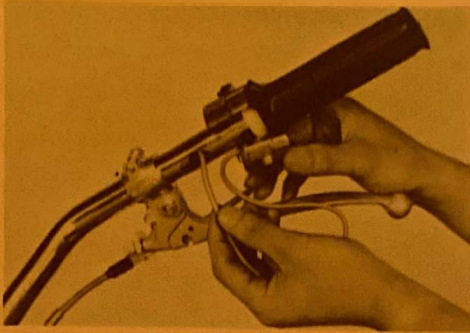
Tightening torque: 2.0 ~ 2.5 kg-m
14.5 ~ 18.0 lb-ft



- 13) 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.



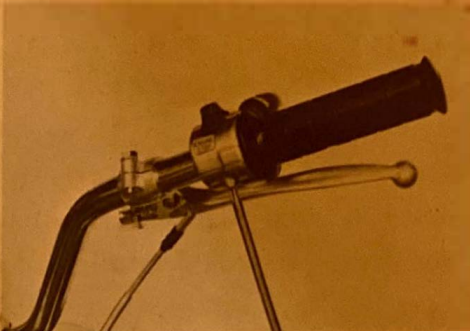
- 14) Apply a light coating of grease to the right handle bar end and throttle grip housing.



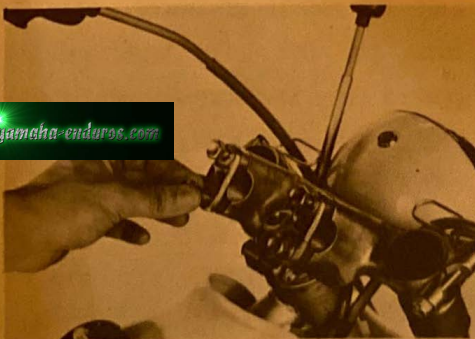
- 15) As shown in the photo to the right, thread the kill switch lead wire through the hole under the right handlebar.



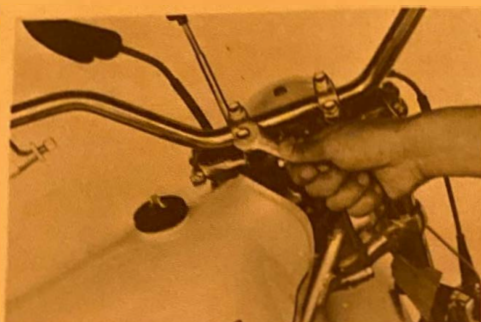
- 16) Align the locating pin (attached to the lower side of the throttle grip housing) with the hole in the handlebar.



- 17) Bolt the upper and lower throttle housing together, and check the throttle grip for smooth action, then fully tighten the throttle housing securing screws.



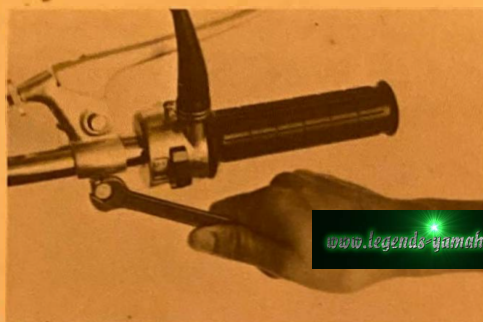
- 18) Remove the handlebar holder hex head securing bolts and lock washers, then remove the holders.



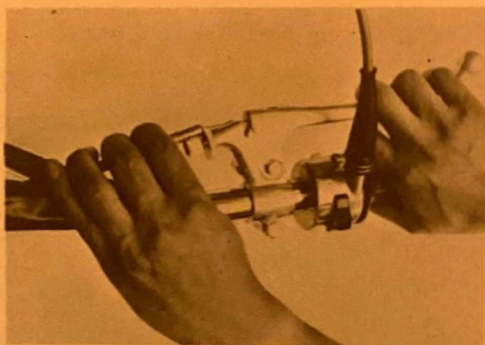
19) Install the handlebar assembly.

Make sure the lock washers on the securing bolts are in place and that the bolts are evenly torqued in gradual stages and in a cross-pattern.

Tightening torque: 1.8 ~ 2.5 kg-m
13.1 ~ 18.1 lbs-ft



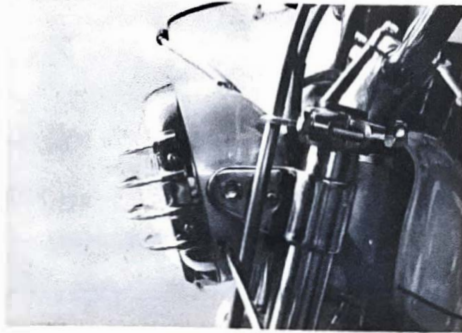
20) Tighten the brake and clutch lever holder 6 mm hex head bolts.



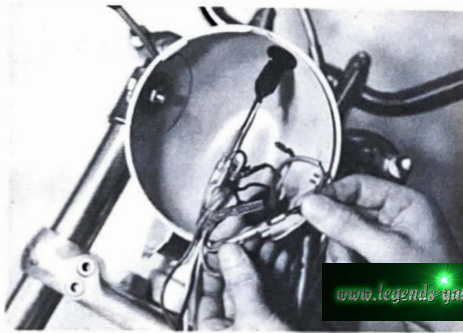
21) Connect the brake and clutch cable to the each levers.

- a. Fully loosen the lever lock nut, and screw in the adjusting bolt until it becomes 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 rock 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. Adjust cable length according to the specification in the model Owner's Service Manual.

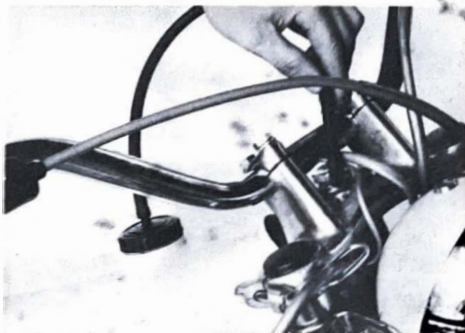




- 22) Remove the Pan head anchor screw from the lower half of the headlight body. Then remove the headlight and rim assembly and set aside.



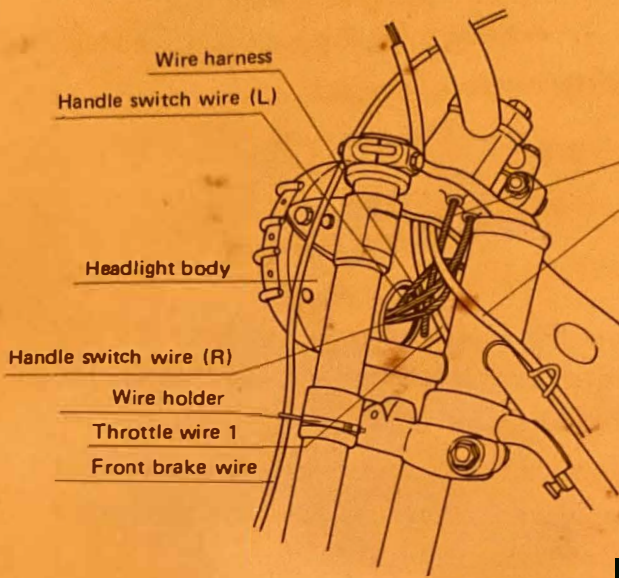
- 23) Pass the lead wires (coming from the kill switch and head light switch) through the grommet located at the right bottom of the body, and connect lead wires inside the head lamp body. Lead wires of the same color should be connected.



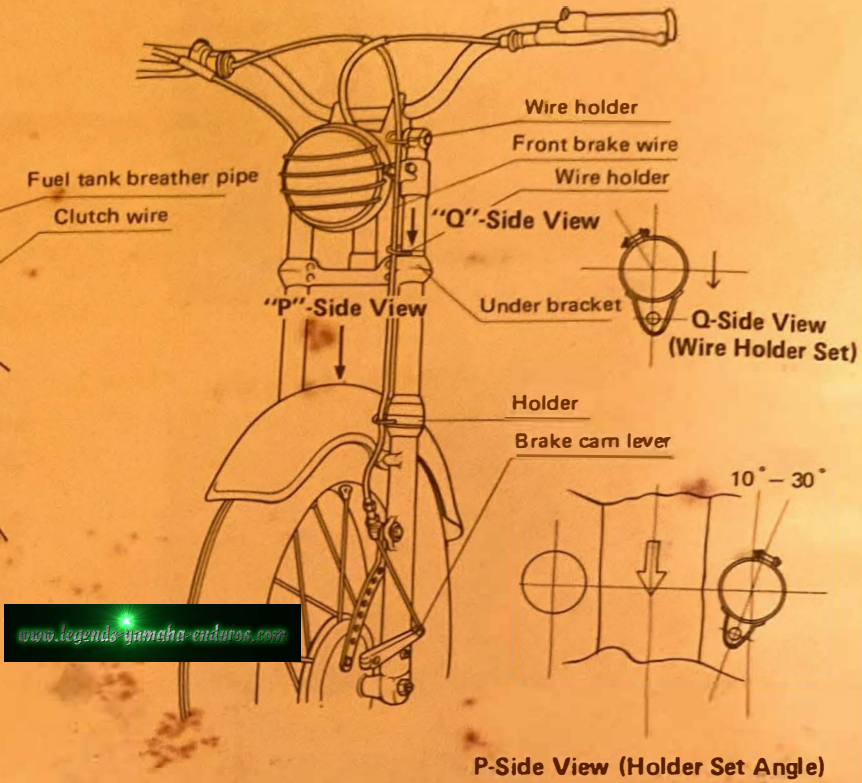
- 24) Connect the air breather pipe to the fuel tank cap, and thread it through the hole located in front of the steering upper crown.

CABLE ROUTING DIAGRAMS

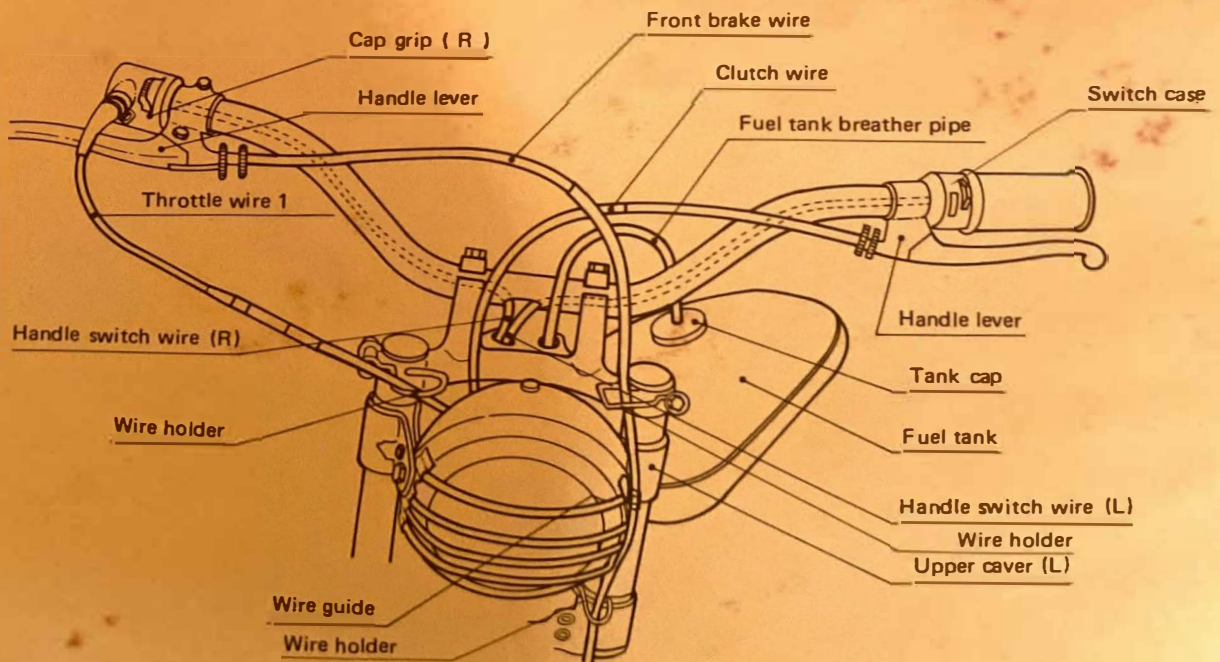
HEADLIGHT-SIDE VIEW



FRONT-VIEW



HANDLE CROWN-SIDE VIEW

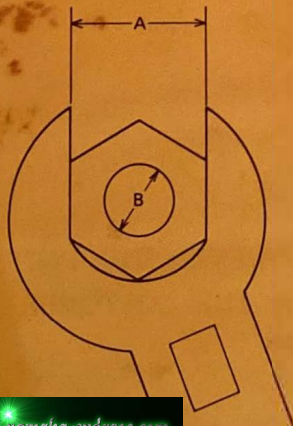


TORQUE SPECIFICATIONS

The following torque specifications must be adhered to on every machine. Tightening torque, on multi-secured components, Several studs should be in gradual stages and in a pattern that will avoid warpage to the item being secured.

Torque settings are for dry, clean threads. Torquing should always be done to the nut, never the bolt head.

Note: Certain items with other than standard thread pitches may require differing torque. Consult the model Service Manual or distributor if a question arises.



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Torque Specifications

A	B			
(Nut)	(Bolt)	kg-m	Ft-lbs	In-lbs
10 mm	6 mm	1.0	7.5	90
10 mm	7 mm	1.5	11	135
13 mm 14 mm	8 mm	2.0	15	180
17 mm	10 mm	3.5 - 4.0	20 - 29	300 - 350
19 mm	12 mm	4.0 - 4.5	29 - 33	350 - 400
22 mm	14 mm	4.5 - 5.0	33 - 37	400 - 450
26 mm	17 mm	5.8 - 7.0	40 - 50	500 - 600
27 mm	18 mm	5.8 - 7.0	40 - 50	500 - 600
30 mm	20 mm	7.0 - 8.3	50 - 60	600 - 700
SPARK PLUG		1.5 - 1.9	11 - 14	135 - 170

Starting at the front of the unit, inspect the following fittings, mounts, and fasteners for correct installation and fastener torque.

1. Front wheel spoke tightness.
2. Front wheel rim deflection and runout.
3. Front wheel tire pressure.
4. Front wheel axle nut, cotter pin.
5. Front wheel axle holder securing nuts.
6. Front brake tension plate securing bolts.
7. Front fork securing bolts.
8. Steering Head Lock Nuts.
9. Handlebar holder securing bolts.
10. Clutch and brake levers, and throttle assembly mounts.
11. Engine mounting bolts.
12. Cylinder head securing nuts.
13. Carburetor mounting flange screws.
14. Foot rest mounts.
15. Change pedal securing bolt.
16. Brake pedal mount and actuating mechanism.
17. Rear fender and taillight amounts.
18. Rear shock mounting nuts.
19. Rear swing arm pivot securing nuts.
20. Rear axle lock nut and cotter pin.
21. Chain adjuster and lock nuts.
22. Rear wheel spoke tightness.
23. Rear wheel rim deflection and run out.
24. Rear wheel tire pressure.

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

For specifications reading ignition timing, carburetor adjustment, tire pressures, engine oil type and quantity, etc.

Refer to appropriate sections of TY250A owner's service manual.

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IWATA, JAPAN

LIT -11664-38-01

Printed in Japan
738-28x1