



**YAMAHA**

# **MX 125C**

## **ASSEMBLY MANUAL**



90894-07513

## 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.

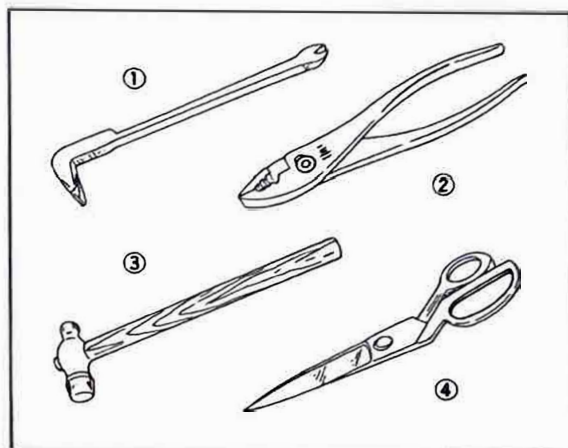
YAMAHA MX125C  
ASSEMBLY MANUAL  
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SERVICE DEPT.  
OVERSEAS ENGINEERING DIVISION  
YAMAHA MOTOR. CO., LTD.  
IWATA, JAPAN  
LIT-11666-00-12

## PREPARATION

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

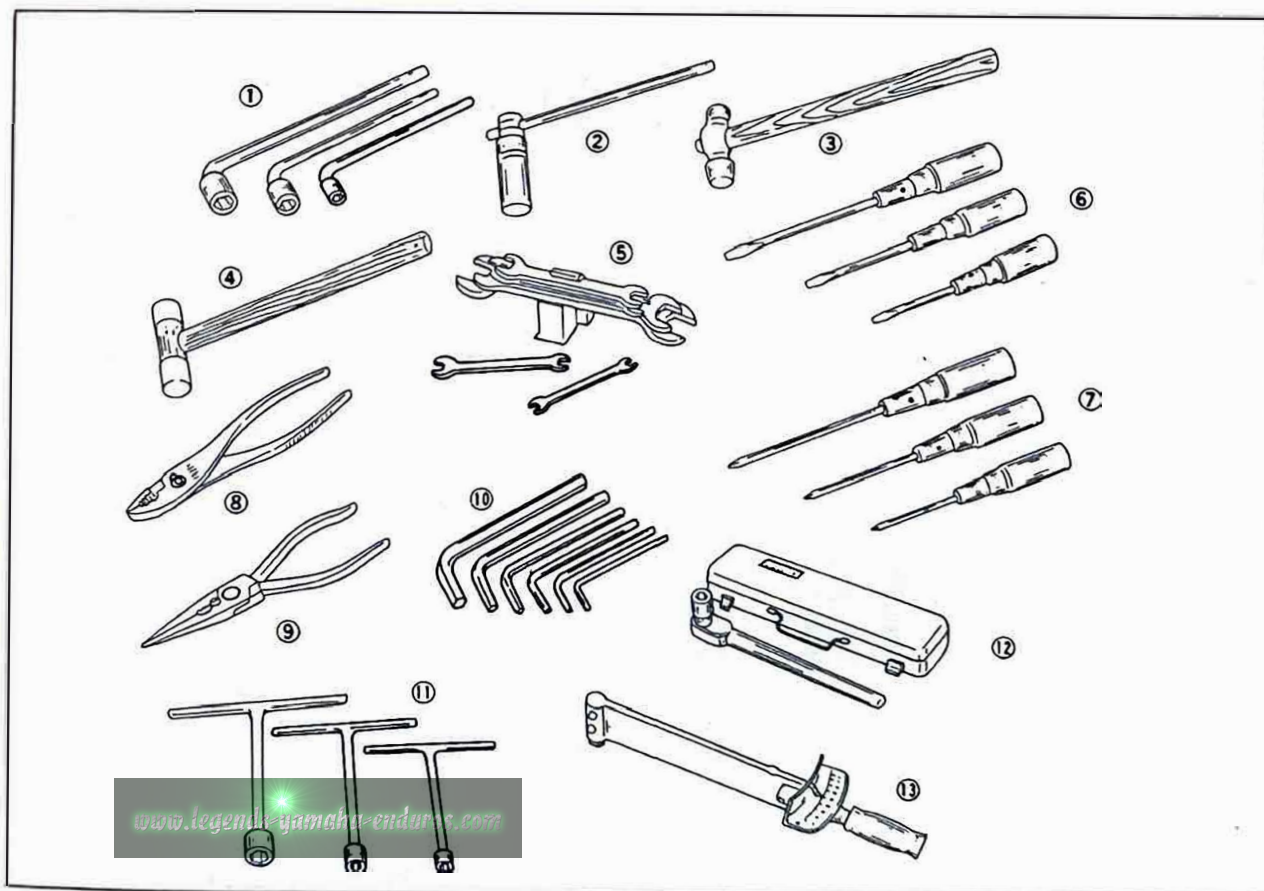
### Tools for unpacking

1. Nail puller
2. Pliers
3. Steel hammer
4. Scissors



### 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. Phillips 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



## TORQUE SPECIFICATIONS

The following torque specifications must be adhered to on every machine. Some items with several fasteners should be torqued down in a criss-cross pattern in successive stages until torque specification is reached. The method is similar to installing an automobile wheel and will avoid warping the component.

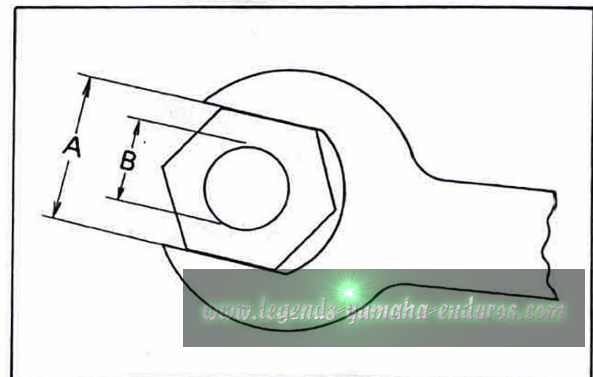
Torque settings are for dry, clean threads. Torquing should always be done to the nut, never to the bolt head.

### NOTE:

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

### Torque Specifications

| A (Nut)     | B (Bolt) | m·kg    | ft·lb | in·lb   |
|-------------|----------|---------|-------|---------|
| 10 mm       | 6 mm     | 1.0     | 7.2   | 85      |
| 12 mm       | 8 mm     | 2.0     | 15    | 175     |
| 14 mm       | 10 mm    | 3.5~4.0 | 20~29 | 300~350 |
| 17 mm       | 12 mm    | 4.0~4.5 | 29~33 | 350~400 |
| 19 mm       | 14 mm    | 4.5~5.0 | 33~36 | 400~440 |
| 22 mm       | 16 mm    | 5.5~6.5 | 41~49 | 480~570 |
| 24 mm       | 18 mm    | 5.8~7.0 | 42~50 | 500~600 |
| 27 mm       | 20 mm    | 7.0~8.3 | 50~60 | 600~700 |
| SPARK PLUGS |          | 2.5~3.0 | 20~22 | 230~250 |



## 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

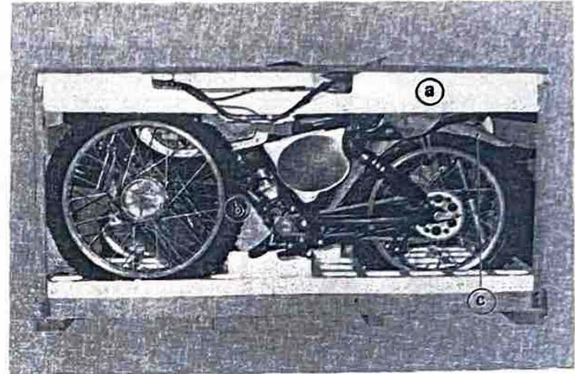
To remove the machine and parts packed in the wooden crosspieces, cut the wire bands around the box using a cutter or scissors. Next, remove the exterior wooden crosspieces.

# PARTS CHECK LIST

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

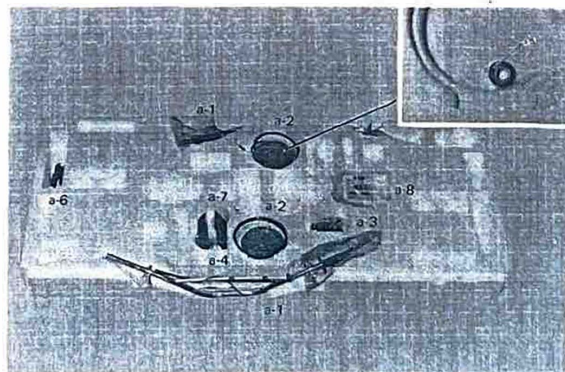
Check list

| Set position | Q'ty/Unit | Parts name       |
|--------------|-----------|------------------|
| a            | 1         | Foam styrol case |
| b            | 1         | Front wheel      |
| c            | 1         | Front fender     |
| d            | 1         | Seat             |



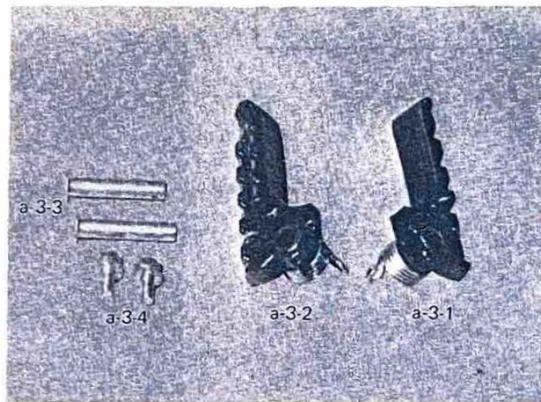
Details of parts on the foam styrol case "a"

| No. | Q'ty/Unit | Parts name                      | Remarks                    |
|-----|-----------|---------------------------------|----------------------------|
| a-1 | 1         | Handlebar assembly              |                            |
| a-2 | 1         | Front brake shoe plate assembly | Front brake wire installed |
| a-3 | 1         | Vinyl bag                       |                            |
| a-4 | 1         | Vinyl bag                       |                            |
| a-5 | 1         | Distance collar                 | For front wheel            |
| a-6 | 1         | Lever cover                     | For front brake lever      |
| a-7 | 1         | Service tool assembly           |                            |
| a-8 | 1         | Owner's service manual          |                            |



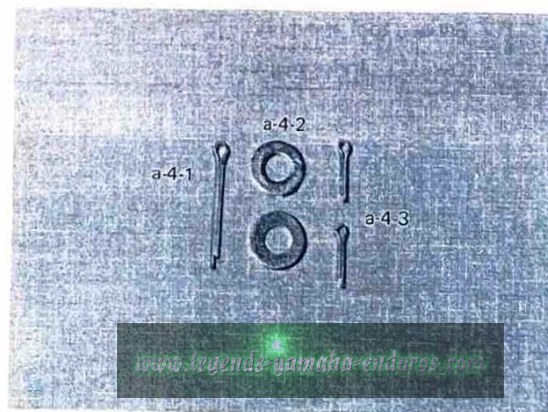
Details of parts in the vinyl bag "a-3"

| No.   | Q'ty/Unit | Parts name                                      | Remarks       |
|-------|-----------|---|---------------|
| a-3-1 | 1         | Foot rest with torsion spring (Right hand side) |               |
| a-3-2 | 1         | Foot rest with torsion spring (Left hand side)  |               |
| a-3-3 | 2         | Clevis pin                                      | For foot rest |
| a-3-4 | 2         | Bolt (6 mm) with plain washer                   | For seat      |



Details of parts in the vinyl bag "a-4"

| No.   | Q'ty/Unit | Parts name   | Remarks         |
|-------|-----------|--------------|-----------------|
| a-4-1 | 1         | Cotter pin   | For front wheel |
| a-4-2 | 2         | Plate washer | For foot rest   |
| a-4-3 | 2         | Cotter pin   |                 |



## SET-UP PROCEDURES

1. Remove the front fender held between the rear tire and the rear fender. Next, remove the front wheel.
2. Remove the seat, and remove the nails from each corner of the crate, and remove the struts.
3. Lift up the motorcycle. Then take out the rear wheel from the lower wooden case.
4. 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.
5. Insert the front fender between the front forks, and secure the front fender using bolts, spring washers, plain washers, fender dampers and fender collars which are fitted to the under bracket.

Tightening torque:

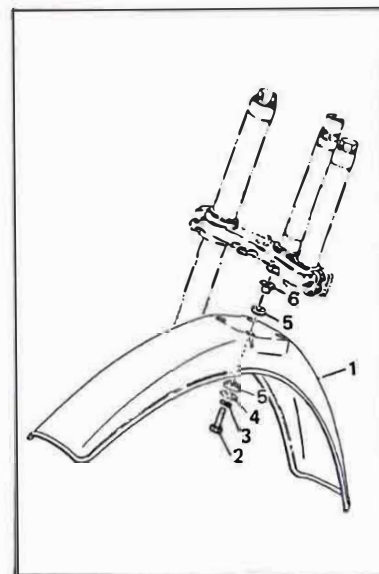
0.35 ~ 0.55 m·kg  
(30 ~ 48 in·lb)

### NOTE:

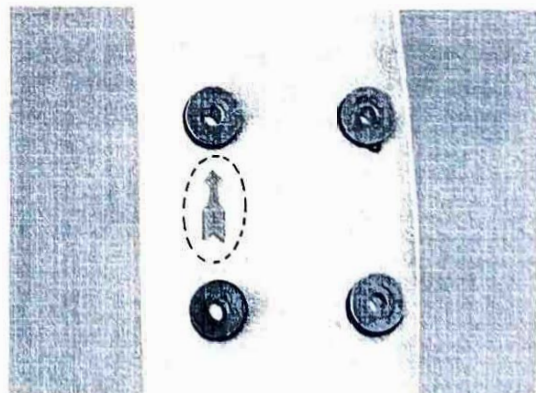
The front fender should be installed with the arrow mark in the center facing forward.



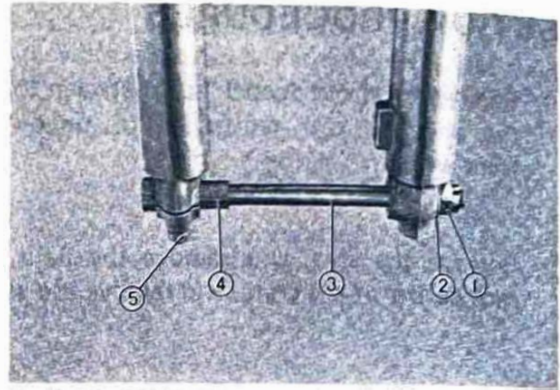
1. Front fender



- |                     |                  |
|---------------------|------------------|
| 1. Front fender (c) | 4. Plain washer  |
| 2. Bolt             | 5. Damper        |
| 3. Spring washer    | 6. Fender collar |

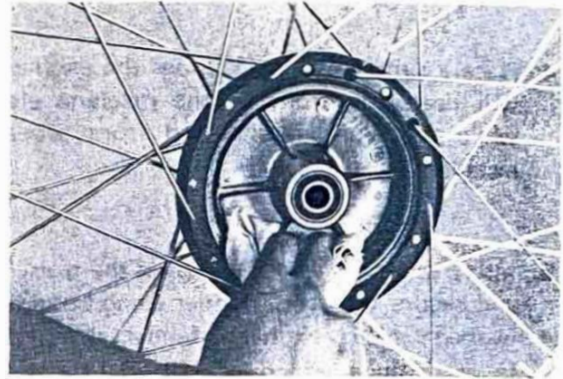


6. Remove the front wheel axle nut and plain washer, and loosen the nuts securing the axle holder. Then remove the wheel axle and wheel axle collar.



1. Wheel axle nut 2. Plain washer 3. Wheel axle  
4. Wheel axle collar 5. Holder nut

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 distance collar (a-5) 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.



9. Align the stopper (located in the bottom part of the front fork) with the shoe plate groove, and place the front wheel between the front forks. Insert the wheel axle with axle collar.





10. Tighten the wheel axle nut with specified torque.

**NOTE:** \_\_\_\_\_

Lightly tighten the axle holder nuts so that the axle does not turn while the axle nut is tightened.

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Tightening torque:  
7.0 ~ 10.0 m·kg (51 ~ 72 ft·lb)

11. Tighten the axle holder nuts with specified torque:

Tightening torque:  
0.8 ~ 1.1 m·kg  
(70 ~ 95 in·lb)

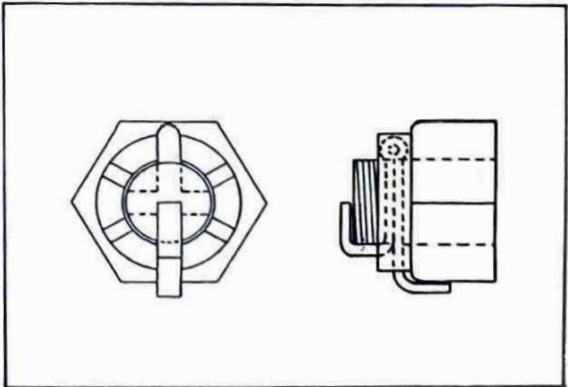
**CAUTION:** \_\_\_\_\_

Tighten axle holder nuts in stage and maintain an equal gap each side.

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12. Lock the nut with cotter pin (a-4-1). The pin should be inserted downward, and the pin ends should be bent.



13. Handlebar installation

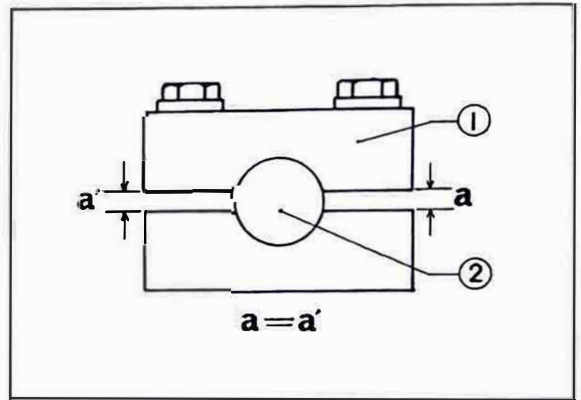
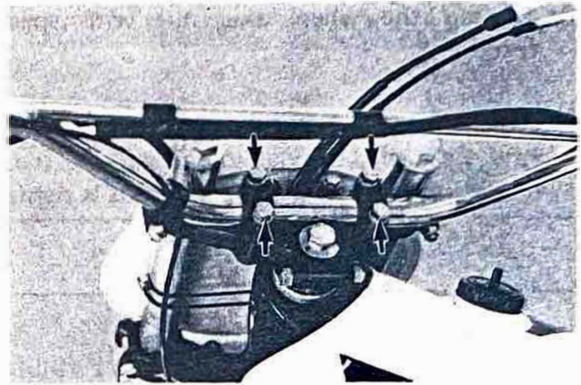
- 1) Remove the four hexagon bolts, and remove the two handlebar holders.
- 2) Install the handlebar using the two removed upper holders, four spring washers and hexagon bolts.

**CAUTION:**

Tighten the bolts in the stages and maintain an equal gap on each side of each holder.

Tightening torque:

1.1 ~ 1.8 m·kg (95 ~ 160 in·lb)



1. Holder 2. Handlebar

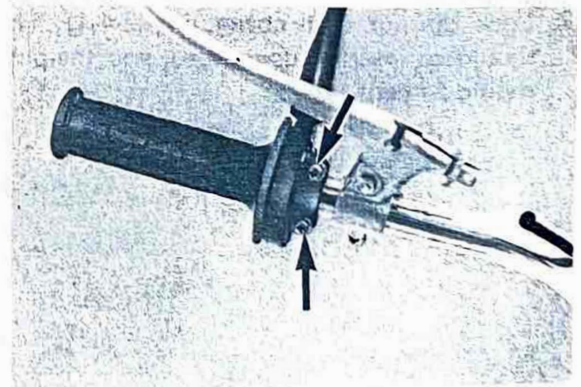
14. Apply a light coating of grease to the right handlebar end and throttle grip housing.



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

**CAUTION:**

Tighten screws in the stages and maintain an equal gap on each side of throttle housing.

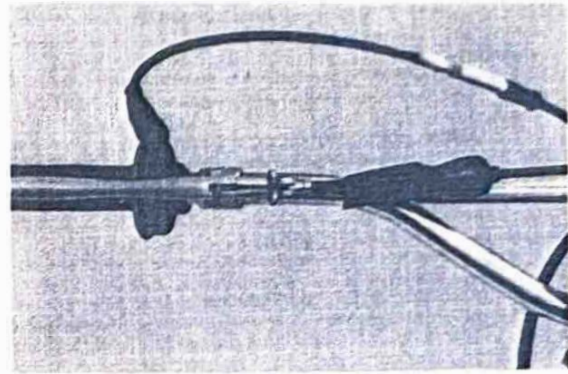


16. Connect the brake and clutch cable to each lever.

- 1) Install the lever cover (a-6) on front brake wire.
- 2) 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 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".

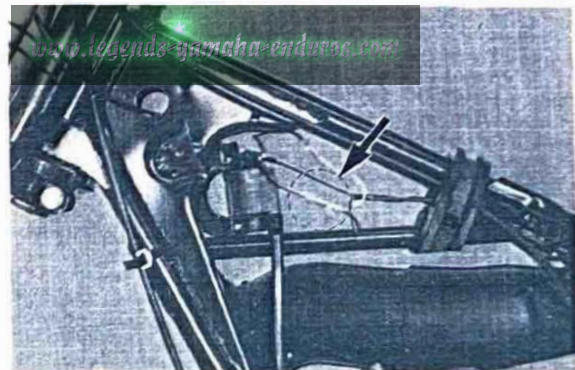
- 3) Adjust cable length according to the specification in the model MX125C Owner's Service Manual.
- 4) Cover the lever covers on the brake and clutch lever holders.



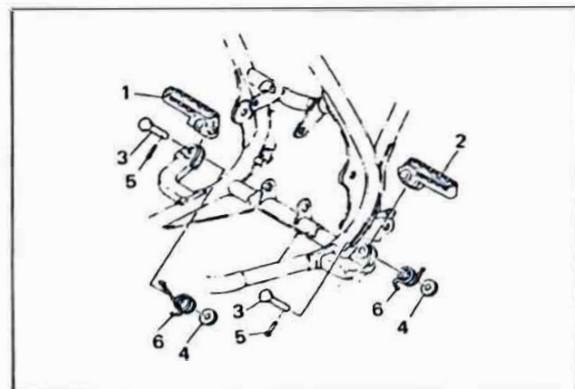
17. Connect the engine stop switch lead wire (coming from the engine stop switch) to the lead wire (black/white) coming from the C.D.I. unit assembly in the connector.

**NOTE:**

Before connecting the engine stop switch lead wire, fuel tank should be removed.



18. Install both right and left foot rests using clevis pin (a-3-3), plate washer (a-4-2) and cotter pin (a-4-3), and the pin ends should be bent. Next, install the torsion spring to foot rest bracket.



- |                                      |                         |
|--------------------------------------|-------------------------|
| 1. Right hand side foot rest (a-3 1) | 4. Plate washer (a-4 2) |
| 2. Left hand side foot rest (a-3-2)  | 5. Cotter pin (a-4-3)   |
| 3. Clevis pin (a-3-3)                | 6. Torsion spring       |

19. Connect the air breather pipe to the fuel tank cap.

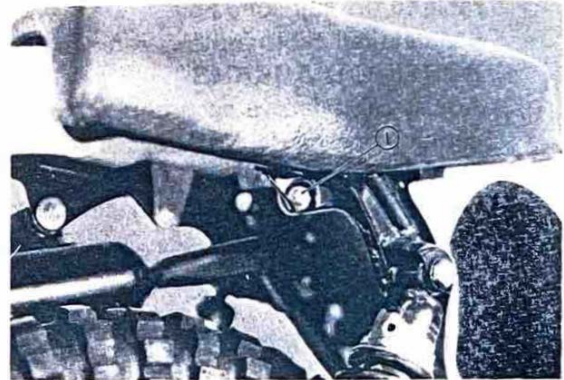


20. Installing the seat

Tighten the securing bolt with plain washer (a-3-4) after inserting a rear flap to inside the both seat rail.

Tightening torque:

0.35 ~ 0.55 m·kg  
(30 ~ 48 in·lb)



1. Securing bolt with plain washer (a-3-4)

## 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.

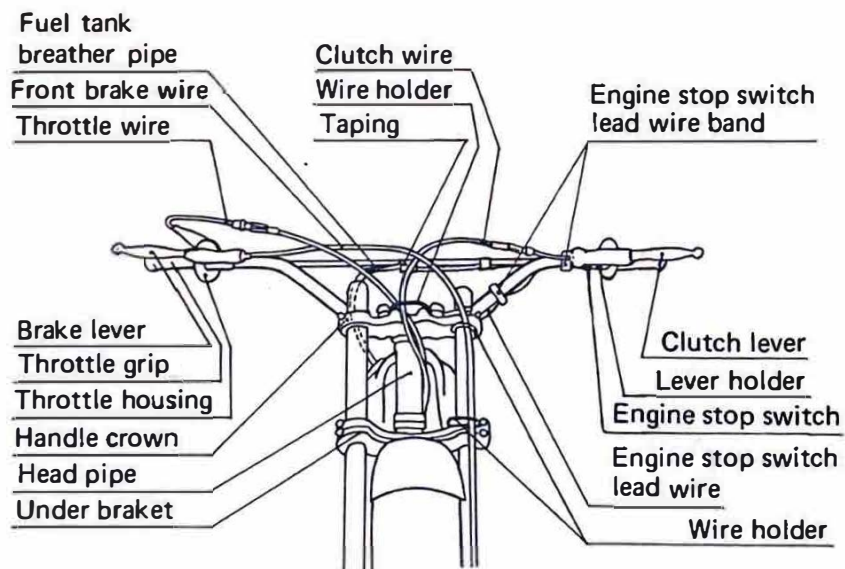
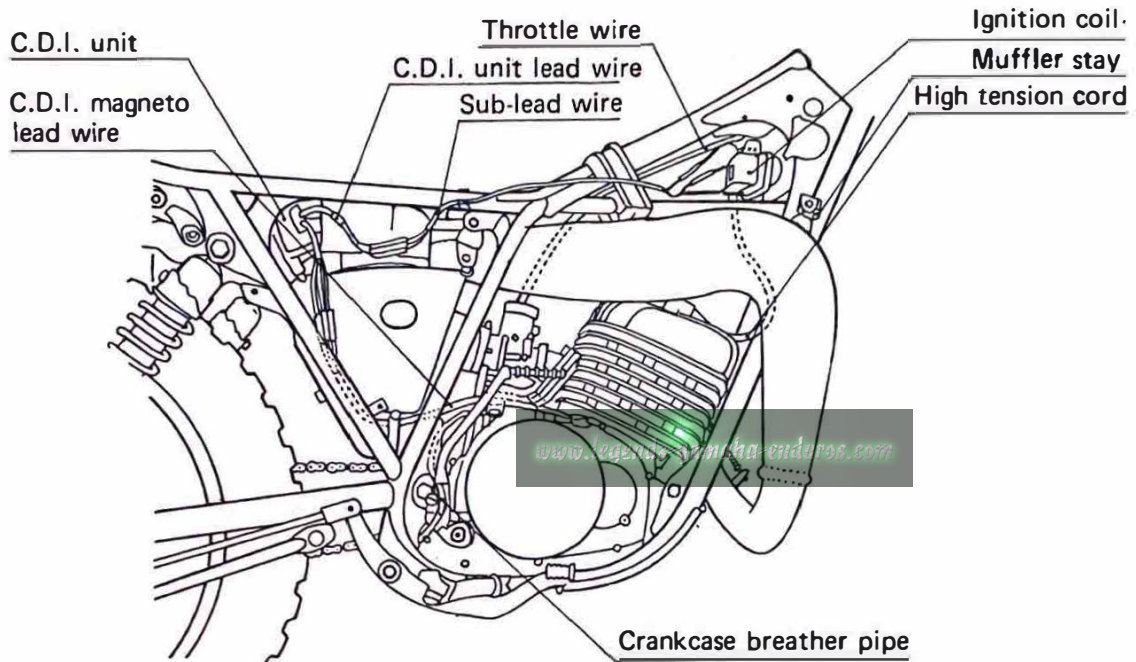
### Item

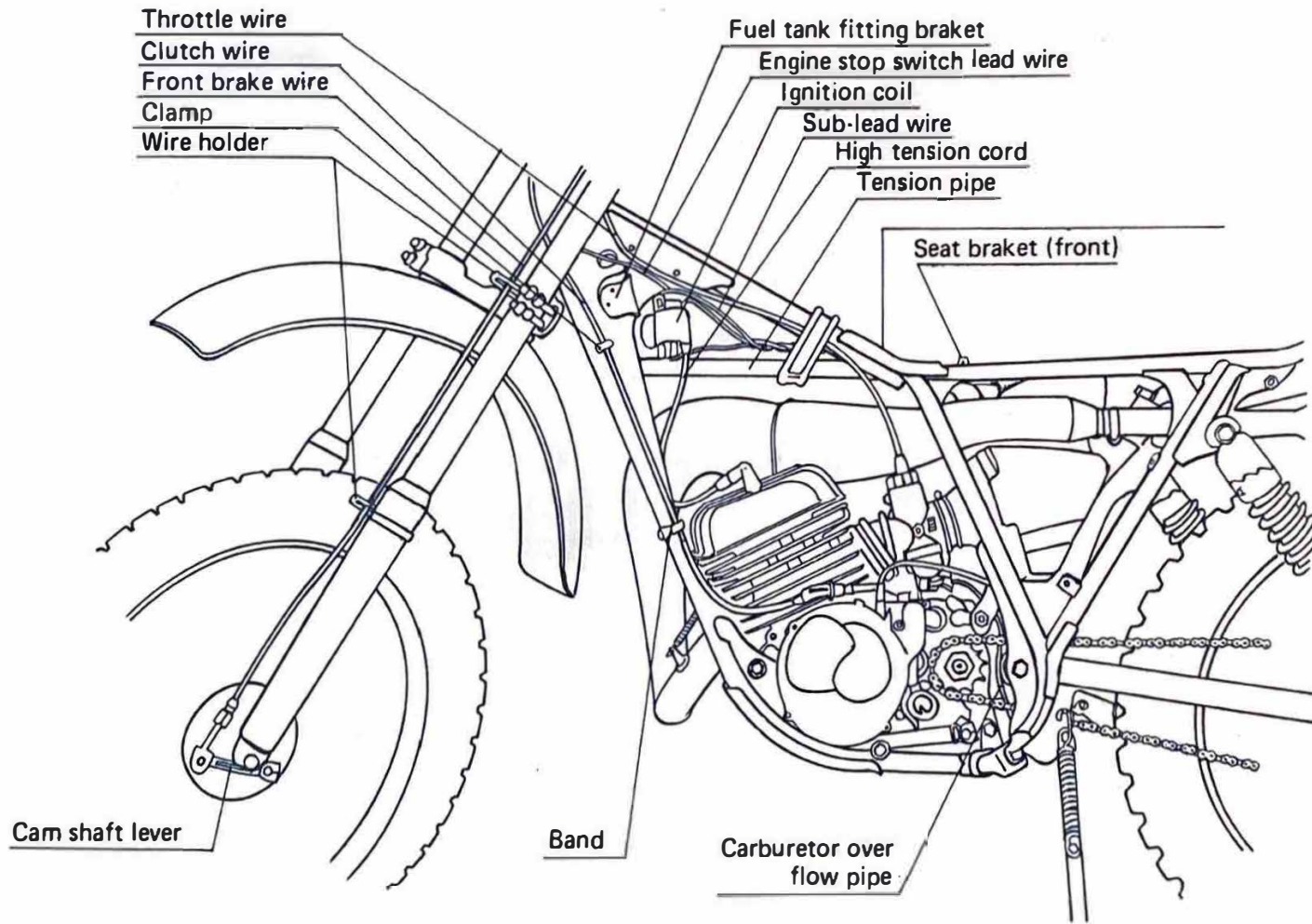
|                                   |                                |                            |                                |
|-----------------------------------|--------------------------------|----------------------------|--------------------------------|
| Front wheel spokes .....        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

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

For specifications regarding ignition timing, carburetor adjustment, tire pressures, transmission oil type and quantity etc., refer to appropriate sections of MX125C Owner's Service Manual.

# CABLE ROUTING DIAGRAM





[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



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