



# YAMAHA

# YZ125X

# ASSEMBLY MANUAL



[www.legends-gandhin-ciduroa.com](http://www.legends-gandhin-ciduroa.com)

90894-07543

## 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.

## IMPORTANT NOTICE

This motorcycle may be equipped either for competition use or general off-road use. It may be illegal to operate this vehicle off-road when it is equipped for competition use. Check your state and local riding area regulations. This vehicle is not manufactured for use on public streets, roads or high ways. Such use is prohibited by law. An off-road riding kit is provided with each vehicle to comply with noise level and spark arrester laws and regulations for installation instructions see directions in this manual. Performance will be substantially decreased. Retuning is not required.

YAMAHA YZ125X  
ASSEMBLY MANUAL  
1st Edition, December 1975  
OVERSEAS SERVICE DEPARTMENT  
YAMAHA MOTOR CO., LTD.  
IWATA, JAPAN  
LIT-11666-00-26

## UNPACKING AND SET-UP

### Supplies

Oils, greases, shop rags, electrical contact cleaner.

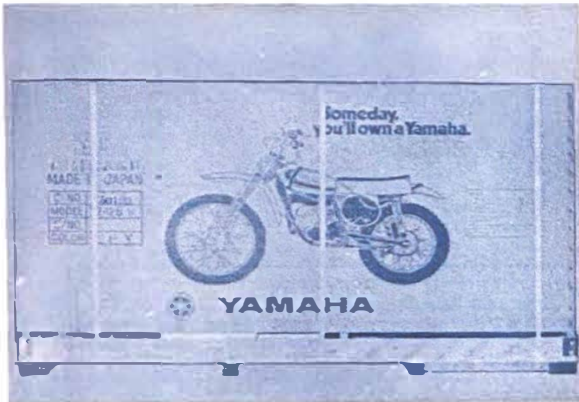
### Workshop

The workshop where the machine is assembled should be clean and large. The floor should be level.

### 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 the service shop.

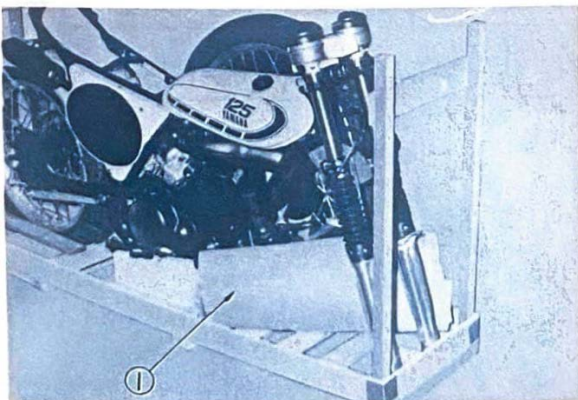
### Procedure for unpacking



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.

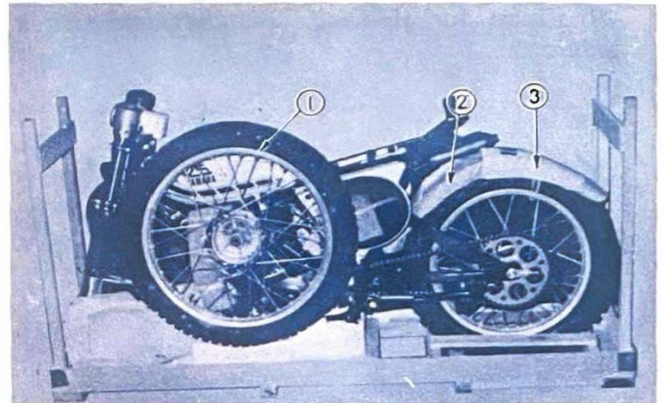
Remove the foam tray and the seat.

Remove the nails from each corner of the crate, and remove the struts.



1. Semi double seat

Remove the front and rear fender. Next, remove the front wheel.



1. Front wheel 2. Front fender 3. Rear fender

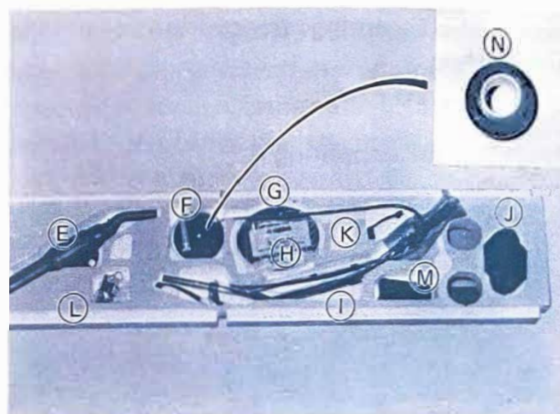
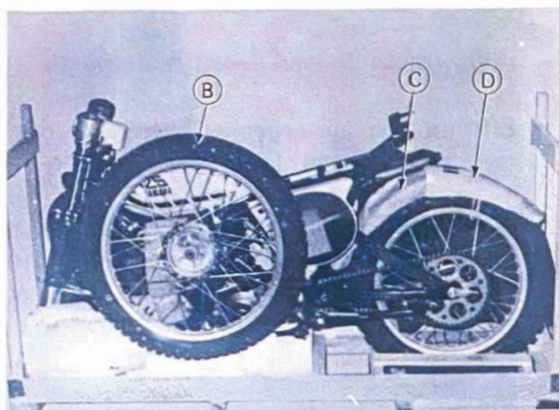
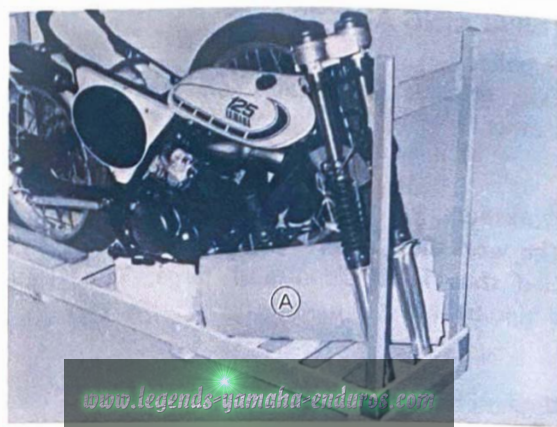
Lift up the motorcycle. Then take out the rear wheel from the lower wooden case.

Place a proper-size wooden box or a machine stand under the engine to keep the front of the machine raised off the floor. Take care so that the machine does not fall over.



### Parts check list

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



No.	Parts name	Q'ty	Remarks
A	Semi double seat	1	
B	Front wheel	1	
C	Front fender	1	
D	Rear fender	1	
* E	Silencer	1	OFF-ROAD RIDING KIT
F	Front brake shoe plate assembly	1	
G	Number plate	1	
H	Vinyl bag	1	
I	Handlebar assembly	1	
* J	Air cleaner case cap (L&R)	1	OFF-ROAD RIDING KIT
K	Change pedal with bolt (6mm)	1	
L	Vinyl bag	1	
M	Tool set	1	
N	Distance collar with hub dust cover	1	For front wheel

\* For installation instruction about "OFF-ROAD RIDING KIT", refer to page 12.

Details of parts in the vinyl bag "H".

No.	Parts name	Q'ty	Remarks
H-1	Owner's service manual	1	
H-2	Safety wire	1	
H-3	Warning ravel	1	OFF-ROAD RIDING KIT
H-4	Vinyl bag	1	

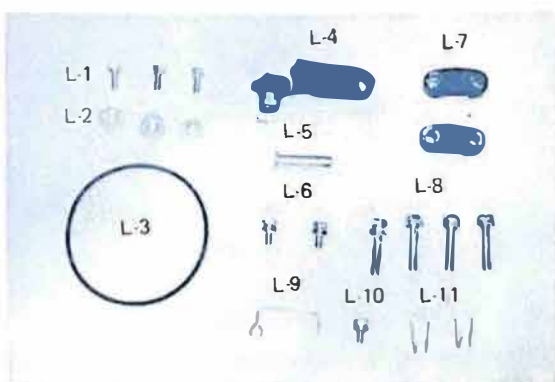
Details of parts in the vinyl bag "H-4".

No.	Parts name	Q'ty	Remarks
H-4-a	Cotter pin	1	For front wheel
H-4-b	Plain washer	1	For footrest
H-4-c	Cotter pin	1	
H-4-d	Holder	1	For front brake cable



Details of parts in the vinyl bag "L".

No.	Parts name	Q'ty	Remarks
L- 1	Bolt (6mm) with spring washer	3 sets	For rear fender
L- 2	Plain washer	3	
L- 3	O-ring	1	For number plate
L- 4	Footrest with torsion spring	1 set	
L- 5	Clevis pin	1	For footrest
L- 6	Bolt (6mm) with plain & spring washer	2 sets	For seat
L- 7	Handle upper holder	2	For handlebar
L- 8	Bolt (8mm) with spring washer	4 sets	
L- 9	Wire holder	1	
L-10	Bolt (6mm) with plain & spring washer	1 set	For wire holder
L-11	Number plate stay	2	For number plate



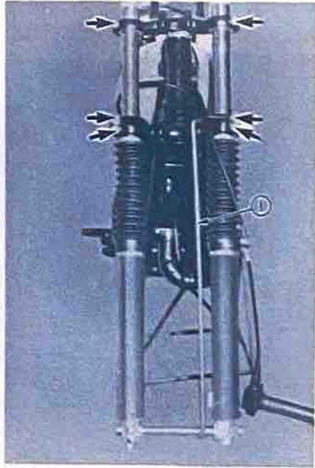
### Procedure for set-up

#### Front fork holding bar removal

1. Loosen the upper and lower bracket pinch bolts, while holding the front fork outer tube so that the front forks do not drop. Remove the front fork holding bar.

#### CAUTION:

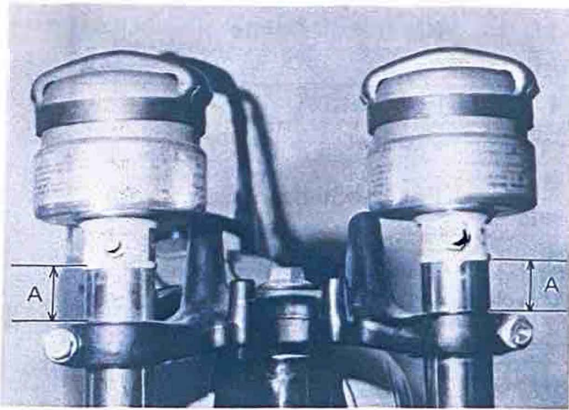
When doing above procedure care should be taken that the front fork inner tube does not hit your face or body.



1. Holding bar

2. Adjust length "A" to the value specified below.

Length "A": 21 mm (0.82 in)



3. Retighten the front fork pinch bolts to the specified torque below.

#### Tightening torque:

##### Handle crown:

1.1 – 1.8 m·kg  
(8.0 – 13.0 ft·lb)

##### Under bracket:

2.0 – 2.5 m·kg  
(14.5 – 18.1 ft·lb)

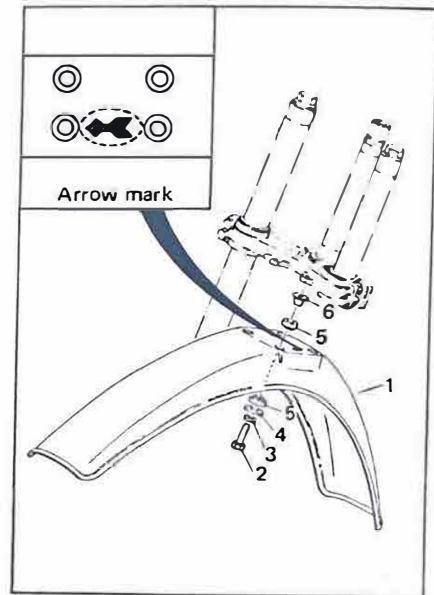
Insert the front fender between the front forks, and secure the front fender using bolts, spring washers, plain washers, fender dampers and fender collars which are fitted to the under bracket.

#### Tightening torque:

0.35 – 0.55 m·kg  
(30 – 48 in·lb)

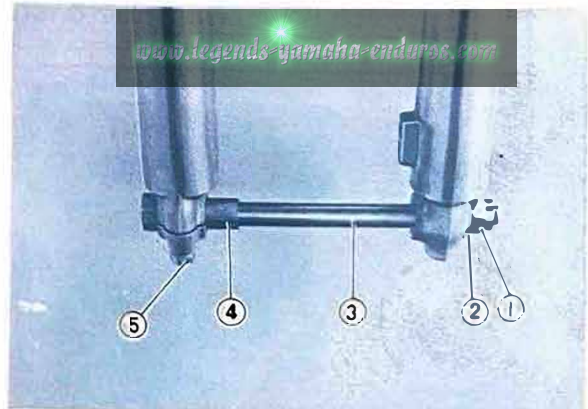
#### NOTE:

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



1. Front fender
2. Bolt
3. Spring washer
4. Plain washer
5. Damper
6. Fender collar

Remove the front wheel axle nut and plain washer, and loosen the two 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

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.



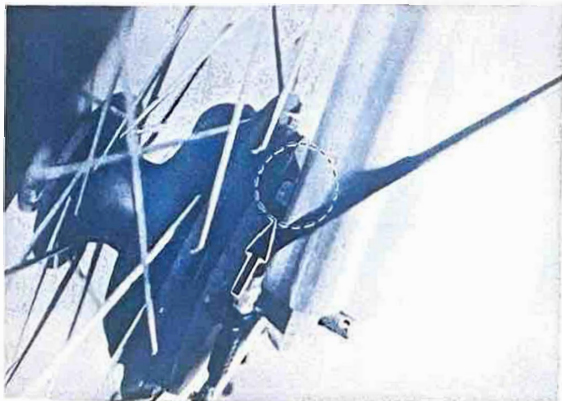
Install the distance collar in the wheel hub on the right side of the front wheel.

**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.



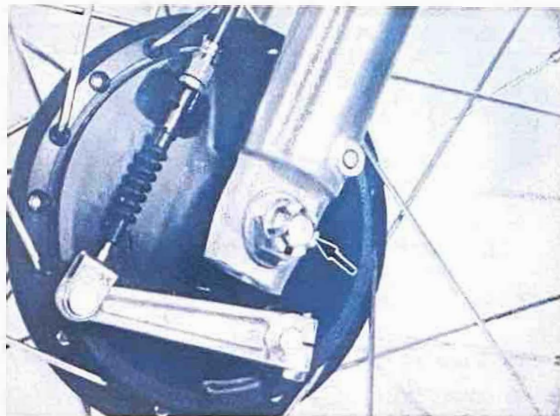
Align the stopper (located in the bottom part of the front fork) with the shoe plate groove, and place the front wheel between the forks. Insert the wheel axle.



Tighten the wheel axle nut with specified torque.

Tightening torque:

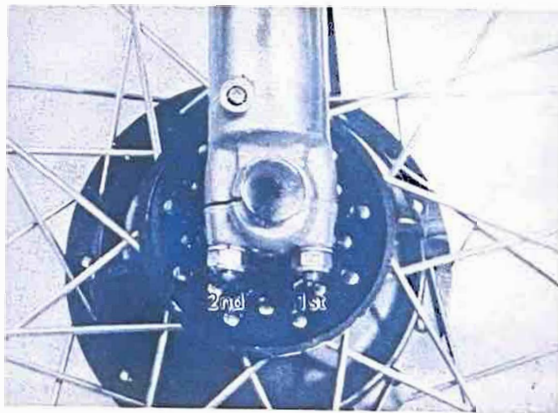
7.0 – 10.0 m·kg  
(50 – 72 ft·lb)



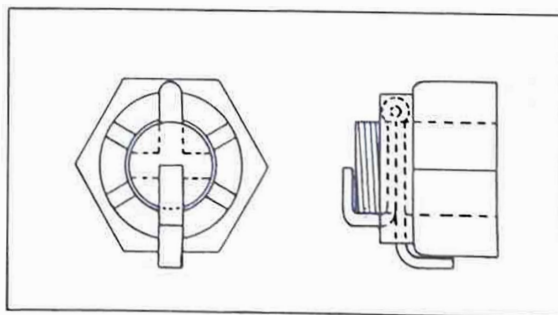
Install the axle holder as illustrated. First tighten the nut on the front end of the axle holder, and tighten the nut on the rear end.

Tightening torque:

0.8 – 1.25 m·kg  
(70 – 110 in·lb)



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

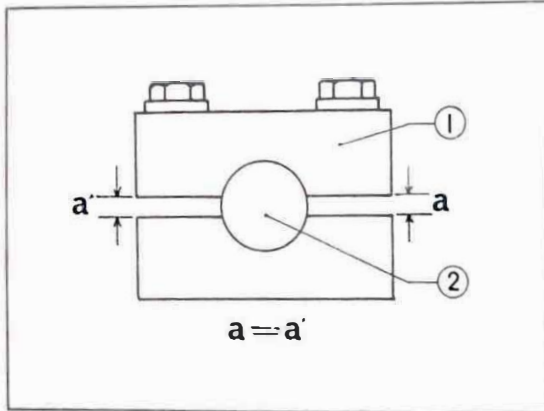


### Handlebar installation

Install the handlebar using the two upper holders, four hexagon bolts and four spring washers.

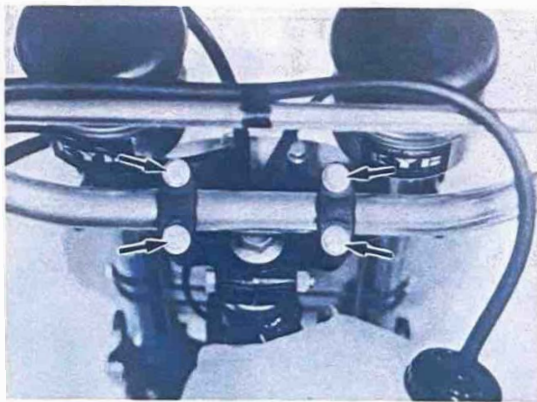
#### CAUTION:

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  
(8.0 – 13.0 ft·lb)



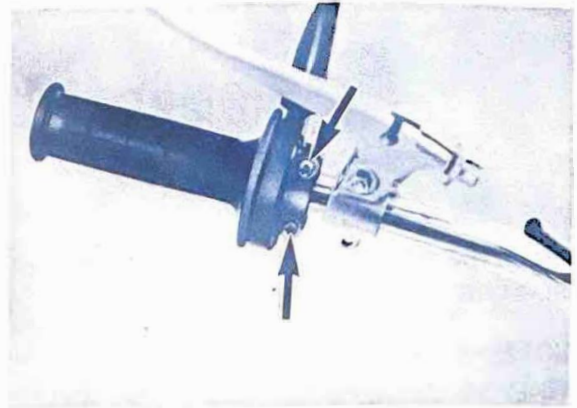
Apply a light coating of grease to the right handlebar end and throttle grip housing.



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 each holder.

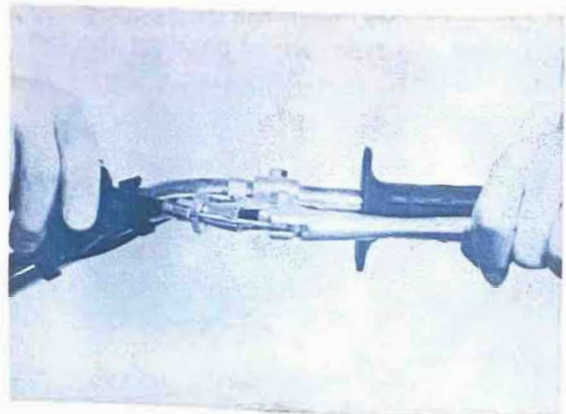


Connect the clutch cable to clutch lever.

1. 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".

2. Adjust cable length according to the specification in the model YZ125X Owner's Service Manual.



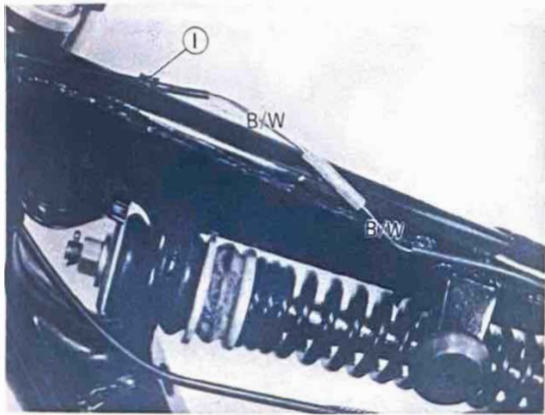


### Engine stop switch

1. Remove the bolt securing the tank.  
Remove the tank.
2. Connect the engine stop switch cord wire to the lead wire of C.D.I. unit (Black/White) and clamp the wire connection.
3. Reinstall the fuel tank.

### NOTE:

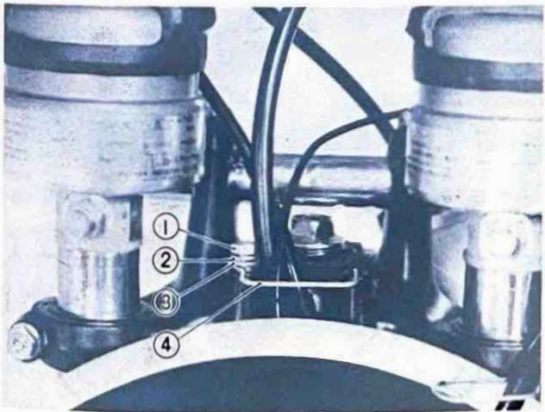
For detailed cable routing, refer to "CABLE ROUTING DIAGRAM".



1. Clamp

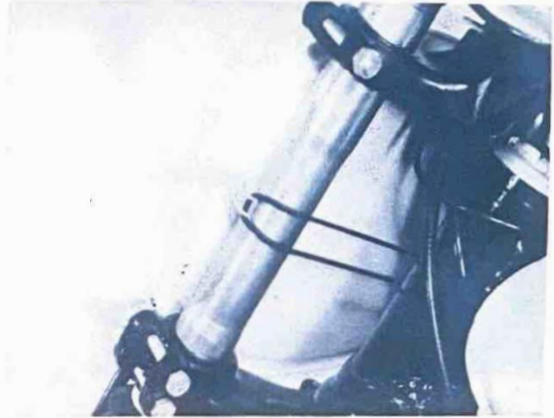
### Wire holder installation

Install the wire holder using the bolt, plain washer and spring washer.



- |                  |                 |
|------------------|-----------------|
| 1. Bolt          | 3. Plain washer |
| 2. Spring washer | 4. Wire holder  |

Install the front number plate on the front forks, using the O-ring and the number plate stays.

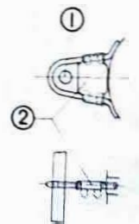
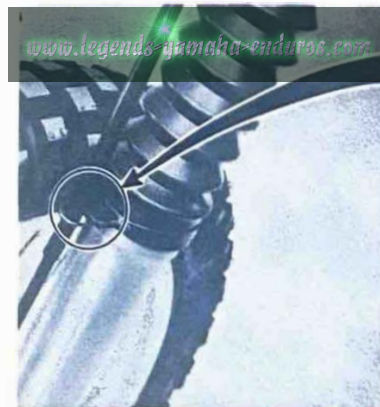


Connect the front brake cable to brake lever.

1. Pass front brake cable through three wire holders as illustrated.

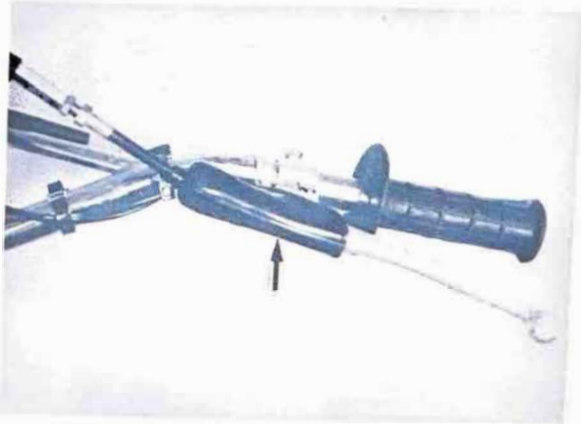


2. Refer to "Connect the clutch cable to clutch lever".
3. The holder should be inserted downward, and bend the tabs of the holder as illustrated.



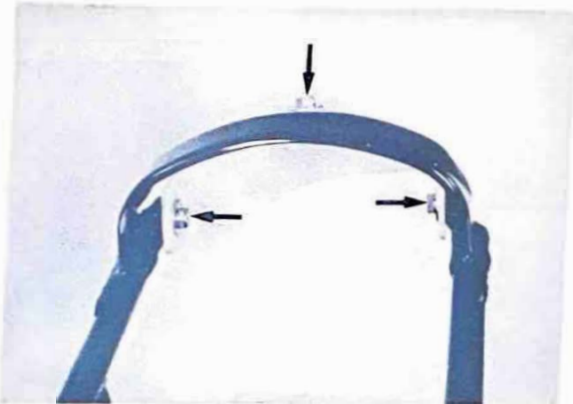
1. Front brake cable
2. Holder

Cover the brake and clutch lever holders with holder covers.



**Rear fender installation**

Install the rear fender using the bolts, spring washers and plain washers.



**Installing the semi double seat**

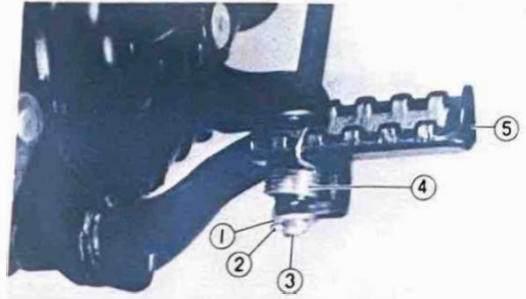
Tighten the securing bolt after inserting a rear flap to inside the both seat rail.

Tightening torque:

0.35 – 0.55 m·kg  
(30 – 48 in·lb)



Install right footrest using clevis pin, plain washer and cotter pin, and the pin ends should be bent.



- 1. plain washer      3. Clevis pin      5. Footrest
- 2. Cotter pin      4. Torsion spring

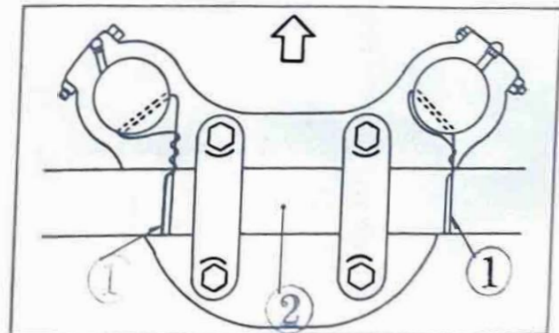
Install the change pedal on the change shaft, and install the mounting bolt.



Connect the air breather pipe to the fuel tank cap.



The safety wire should be installed as illustrated.



- 1. Safety wire      2. Handlebar

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 holder securing nuts
5. Front fork securing bolts
6. Steering head lock nuts
7. Handlebar holder securing bolts
8. Handle lever, and throttle assembly mounts
9. Engine mounting bolts
10. Cylinder head securing bolts
11. Carburetor mounting flange screws
12. Footrest mounts
13. Change pedal securing bolt
14. Brake pedal mount and actuating mechanism
15. Rear fender mount
16. Rear shock (cushion) mounting bolt
17. Rear swing arm pivot securing nuts
18. Rear axle lock nut
19. Chain adjusting bolts and lock nuts
20. Rear wheel spoke tightness
21. Rear wheel rim deflection and runout
22. Rear wheel tire pressure

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

For specifications regarding ignition timing, carburetor adjustment, tire pressures, engine oil type and quantity, etc., refer to appropriate sections of YZ125X Owner's Service Manual.

## TORQUE SPECIFICATIONS

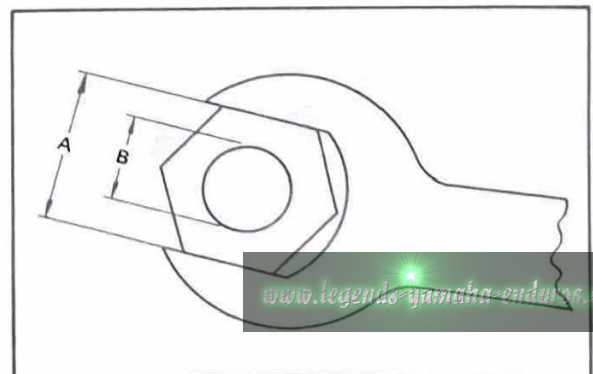
The following torque specifications must be adhered to on every machine. Some items with several fasteners should be torqued down in a criss-cross pattern in successive stages until torque specifications is reached. The method is similar to installing an automobile wheel and will avoid warping the component. Torque settings are for dry, clean threads. Torquing should always be done to the nut, never to the bolt head.

### NOTE:

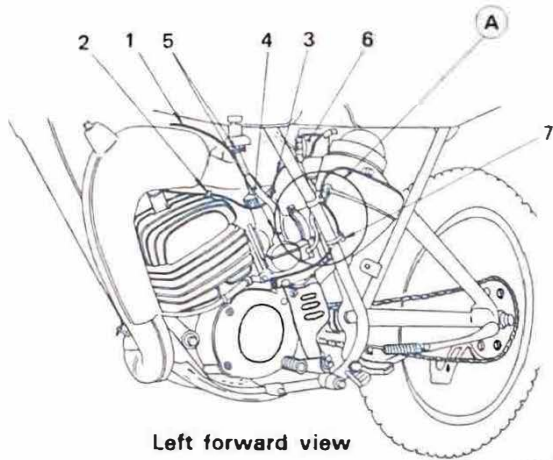
Certain items with other than standard thread pitches may require differing torque. Consult the model Service Manual or distributor if a question arises.

## Torque Specifications

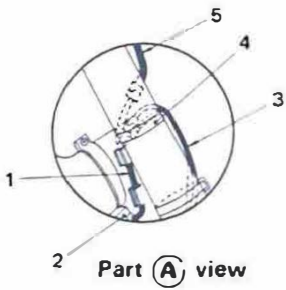
A (Nut)	B (Bolt)	m-kg	ft-lb	in-lb
10 mm	6 mm	1.0	7.2	85
12 mm	8 mm	2.0	15	175
14 mm	10 mm	3.5 ~ 4.0	25 ~ 29	300 ~ 350
17 mm	12 mm	4.0 ~ 4.5	29 ~ 33	350 ~ 400
19 mm	14 mm	4.5 ~ 5.0	33 ~ 36	400 ~ 440
22 mm	16 mm	5.6 ~ 6.5	41 ~ 49	480 ~ 570
24 mm	18 mm	5.8 ~ 7.0	42 ~ 50	504 ~ 600
27 mm	20 mm	7.0 ~ 8.3	50 ~ 60	600 ~ 700
SPARK PLUGS		2.5 ~ 3.0	18 ~ 22	220 ~ 260



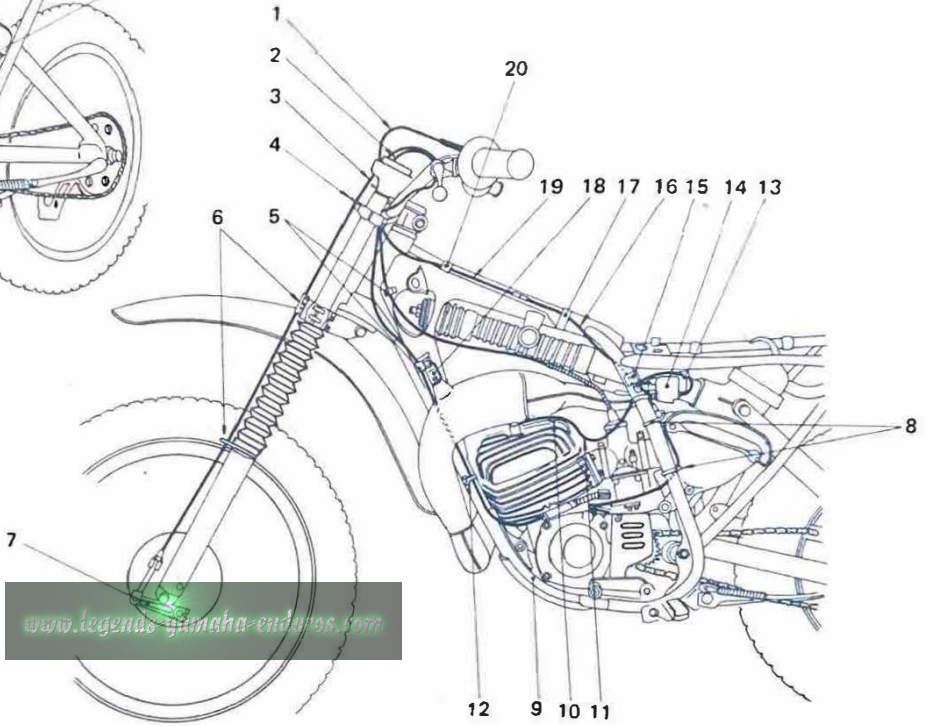
# CABLE ROUTING DIAGRAM



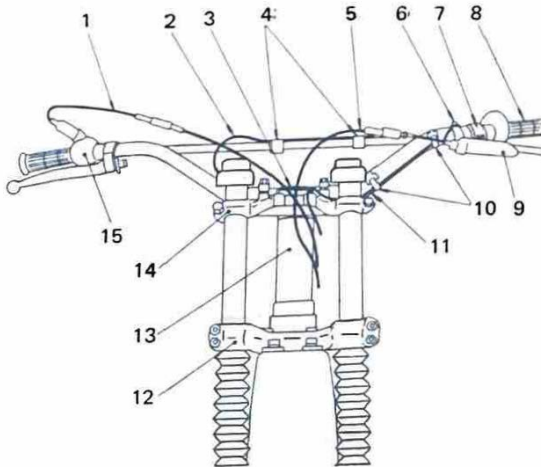
Left forward view



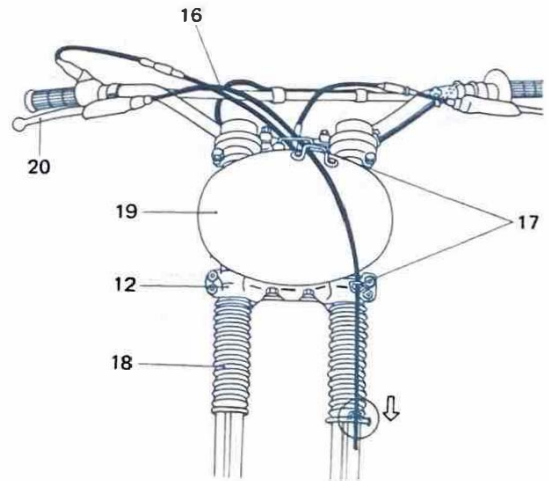
Part **A** view



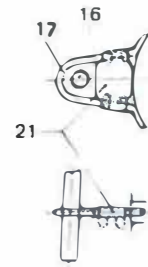
Left side view



Front view (1)



Front view (2)



#### Left forward view

1. Throttle cable assembly
2. Clamp
3. High-tension cord
4. Fuel pipe
5. Clip
6. Ignition coil
7. C.D.I. Unit

#### Part (A) view

1. C.D.I. Unit wire
2. C.D.I. Unit
3. C.D.I. Magneto wire
4. Band
5. Sub-lead wire

#### Left side view

1. Throttle cable
2. Clutch cable
3. Front brake cable
4. Cable holder
5. Clamp
6. Cable holder
7. Camshaft lever
8. Band
9. Down tube
10. Absorber
11. High-tension cord
12. Band
13. Clamp
14. Ignition coil
15. Clamp
16. Sub-lead wire
17. Taping
18. Muffler stay
19. Switch cord
20. Clamp

#### Note:

Clamp the switch cord, some looseness should be allowed on the switch cord even when the steering handle is turned fully to the right.

#### Front view (1), (2)

1. Throttle cable
2. Breather pipe
3. Wire holder
4. Taping
5. Clutch cable
6. Engine stop switch
7. Lever holder (L.H.)
8. Grip (L.H.)
9. Lever (L.H.)
10. Switch cord band
11. Switch cord
12. Under bracket
13. Head pipe
14. Handle crown
15. Grip cap
16. Front brake cable
17. Cable holder
18. Boot
19. Number plate
20. Lever (R.H.)
21. Holder

#### 1. Throttle cable

Cap grip → Wire holder (above the handle crown) → In front of clutch cable → Left side of head pipe (clamp) → Right side of high-tension cord → Carburetor  
(Front view, left side view)

#### 2. Clutch cable

Lever (L.H.) → In front of the front brake cable → Wire holder (above the handle crown) → Left side of head pipe → Muffler stay (clamp) → Under left side of down tube (clamp)  
(Front view, left side view)

#### 3. Front brake cable

Lever (R.H.) → In front of clutch cable → Cable holder (on number plate) → In front of number plate → Cable holder (left side of under bracket) → Cable holder (left side of front fork, on outer tube) → Lever camshaft  
(Front view, left side view)

#### 4. Engine stop switch cord

Ahead of lever holder (L.H.) → Clamp on handle (two places) → Wire holder (above the handle crown) → Left side of head pipe → Clamp together with holder wire harness (on main pipe) → Connect to sub-lead wire  
(Front view, left side view)

#### 5. High-tension cord

Ignition coil → Upper left side of seat pillar tube (inside) → Left side of throttle cable → Right side of fuel pipe → Clamp the high-tension cord at the absorber on the cylinder head → Spark plug  
(Left forward view, left side view)

#### 6. Sub-lead wire

Taping the sub-lead wire on the main pipe after connecting the switch cord → Clamp the sub-lead wire at upper of inside the seat pillar tube (L.H.) after connected to the ignition coil  
(Left side view)

#### 7. Breather pipe

Install the breather pipe to the fuel tank cap → Taping the breather pipe on the handle tension bar (two portions)  
(Front view)

#### 8. Fuel pipe

Fuel petcock → Left side of high-tension cord → Carburetor  
(Left forward view)

#### 9. Breather pipe of transmission oil

Straight down between the cross tube and the engine mounting boss

#### 10. Overflow pipe of carburetor

Straight down between the engine mounting boss and the cross tube

#### 11. C.D.I. magneto wire

Between the seat pillar tube and the air cleaner → Connect the C.D.I. magneto wire to the C.D.I. unit wire (Clamp on the connector of C.D.I. unit wire)  
(Part A view, left forward view, left side view)

#### 12. C.D.I. unit wire

Install the C.D.I. unit wire to the clamp on the front left of the air cleaner → Connect the C.D.I. unit wire to the sub-lead wire and the C.D.I. magneto wire.  
(Part A view, left forward view, left side view)

## INSTALLATION OF THE OFF-ROAD RIDING KIT

An off-road riding kit is provided with each vehicle to comply with noise level and spark arrester laws and regulations.

Performance will be substantially decreased. Retuning is not required.

### DESCRIPTION OF THE KIT

1. Spark arrester – silencer
2. Air cleaner case cap (L) and (R)
3. Warning ravel

### NOTE:

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California, New Hampshire and Oregon residents

For off-road riding install the entire kit to insure compliance with state laws and regulations.

All other states

For off-road riding install the spark arrester - silencer only. To improve performance, the diameter of the silencer aperture may be enlarged from 9mm to 25mm. This procedure must not be performed by California, New Hampshire or Oregon riders.

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