



# YAMAHA

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

# YZ250G/YZ465G

# ASSEMBLY MANUAL



## FOREWORD

This Assembly Manual contains the information required to unpack and assemble Yamaha motorcycles correctly prior to delivery to the customer. Proper motorcycle set-up assembly and pre-delivery service demands a basic knowledge of motorcycle service procedures, familiarity with Yamaha products, and correct tools. This assembly manual should be used with the Dealer Set-up and Pre-delivery Check List, Service Manual, and Parts List for this model.

Proper set-up assembly and pre-delivery service is necessary for the following service:

The assure the customer of the long life and performance he expects from his new Yamaha motorcycle.

To minimize service problems during the break-in period.

## NOTICE

The service specifications given in this manual are based on the model as manufactured. Modifications and significant changes in specifications and/or procedures will be forwarded to all Authorized Yamaha Dealers.

The procedures below are described in the order that the mechanic should follow. Special care should be taken to ensure that the procedures are carried out correctly and completely. Failure to do so can result in poor performance and possible harm to the machine and/or rider.

### **CONCERNING CRATE DAMAGE:**

**Follow the instructions in the Dealer Warranty Handbook, Procedure Section.**

Particularly important information is distinguished in this manual by the following notations:

**NOTE:** A NOTE provides key information to make procedures easier or clearer.

**CAUTION:** A CAUTION indicates special procedures that must be followed to avoid damage to the machine.

**WARNING:** A WARNING indicates special procedures that must be followed to avoid injury to a machine operator or person inspecting or repairing the machine.

**YZ250G/YZ465G Assembly Manual**  
**Yamaha Motor Corporation, U.S.A., 1979**  
**1st. Edition, August 1979**  
**All rights reserved. Any reprinting or**  
**unauthorized use without the written**  
**permission of Yamaha Motor Corporation,**  
**U.S.A., is expressly prohibited.**

**Printed in Japan**  
**P/N LIT-11666-01-85**

## PREPARATION

To assemble the machine correctly, the following supplies and working space are required.

### Supplies

Oils, greases, shop rags.

### 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 cardboard crate, cut the vinyl bands around the box using scissors. Next, remove the exterior carton by lifting it straight up, and remove the foam tray and front wheel.

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

Remove the front fender, rear fender and the semi double seat.

## PARTS CHECK LIST

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

Check parts in cardboard crate.

No.	Part name	Q'ty
1	Front wheel	1
2	Front fender	1
3	Seat	1
4	Rear fender	1

### Parts list: Foam styrol case

No.	Part name	Q'ty
1	Handlebar assembly	1
2	Brake shoe plate assembly (with brake wire)	1
3	Number plate	1
4	Tool kit	1
5	Fuel tank breather pipe	1
6	Owner's Service Manual (within Air check gauge)	1
7	Vinyl bag 1	1
8	Vinyl bag 2	1
9	Vinyl bag 3	1

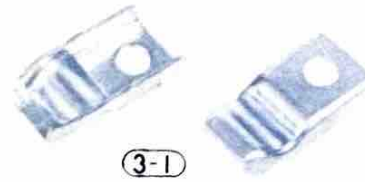
### Parts list: Vinyl bag 1

No.	Part name	Q'ty	Remarks
1-1	Footrest (right)	1	Footrest
1-2	Torsion spring	1	
1-3	Bolt (d = 8mm, $l = 28\text{mm}$ )	1	
1-4	U-nut (d = 8mm)	1	Handlebar
1-5	Upper holder	2	
1-6	Flange bolt (d = 8mm, $l = 35\text{mm}$ )	4	Front wheel
1-7	Wheel axle collar	1	



Parts list: Vinyl bag 2

No.	Part name	Q'ty	Remarks
2-1	Bolt (d = 6mm, l = 35mm)	2	Seat
2-2	U-nut (d = 6mm)	2	
2-3	Plate washer (d = 6.5mm)	2	
2-4	Bolt with washer (d = 6mm, l = 20mm)	4	Front fender
2-5	Plate washer (d = 6.5mm)	4	
2-6	Washer (d = 6.5mm)	4	
2-7	Bolt with washer (d = 6mm, l = 16mm)	4	Rear fender
2-8	Plate washer (d = 6.5mm)	4	
2-9	Band	2	Number plate
2-10	Hose	2	



### SET-UP PROCEDURES

Lift up the machine and take out the rear wheel from the lower wooden case.

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.

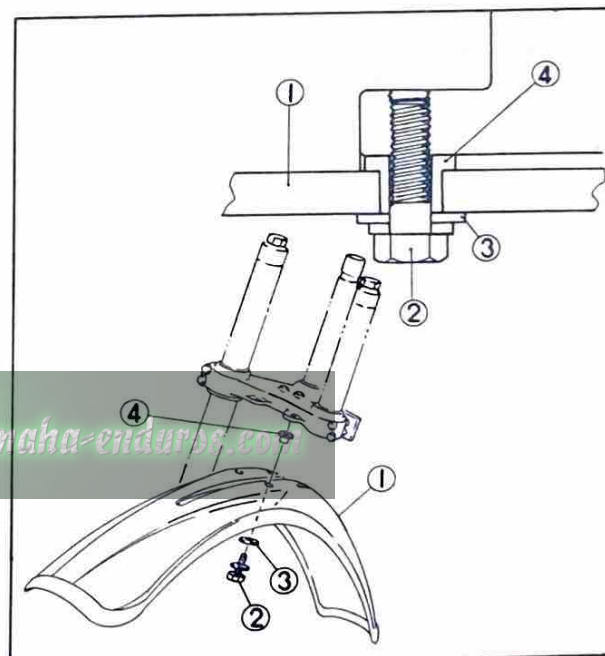
1. Insert the front fender between the front forks, and secure the front fender using bolts with washers, plain washers and washers.



Tightening torque: 0.6 m·kg (5 ft·lb)

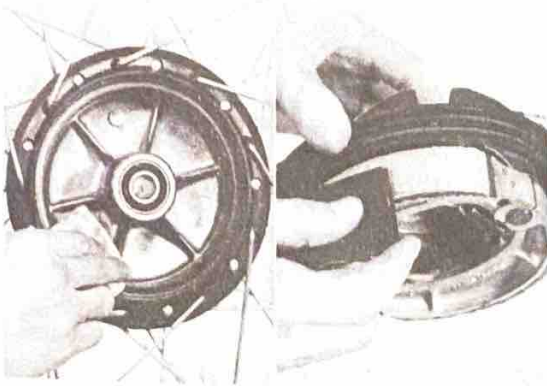
Parts list: Vinyl bag 3 (Wire holder)

No.	Part name	Q'ty
3-1	Clamp	2
3-2	Panhead screw with washer (d = 6mm, l = 25mm)	1
3-3	Plate washer (d = 6.5mm)	1
3-4	Nut (d = 6mm)	1

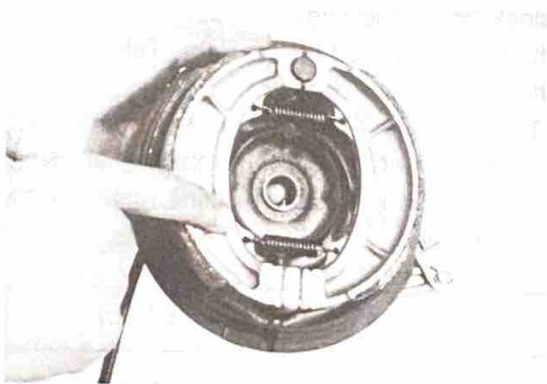


1. Front fender
2. Bolt with spring washer
3. Plain washer
4. Washer

2. Clean the brake shoe linings and wheel hub with a clean cloth.



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



4. Install the brake shoe plate assembly in the wheel hub.
5. Remove the front wheel axle.

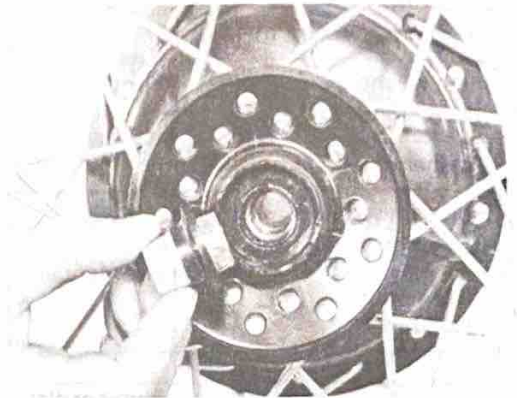


1. Wheel axle

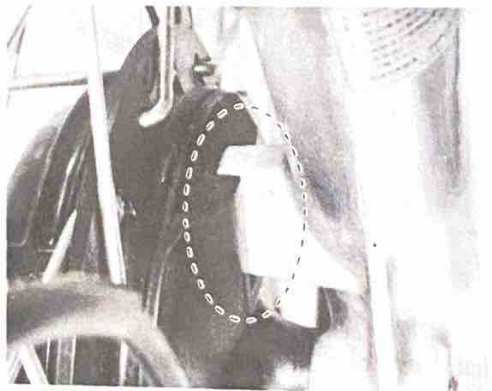
6. Install the wheel axle collar in the wheel hub on the right side of the front wheel.

**NOTE:**

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



7. Insert the front wheel between the front fork legs so that the stopper (projection) on the front fork end is correctly engaged the slot in the brake shoe plate.

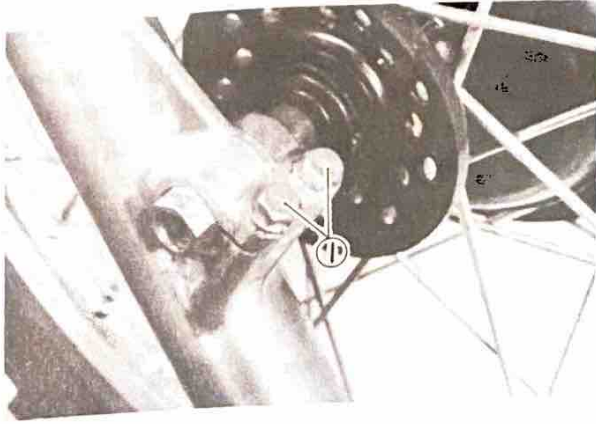


8. Insert the axle and tighten the axle with specified torque.

Tightening torque: 6.0 m·kg (42 ft·lb)

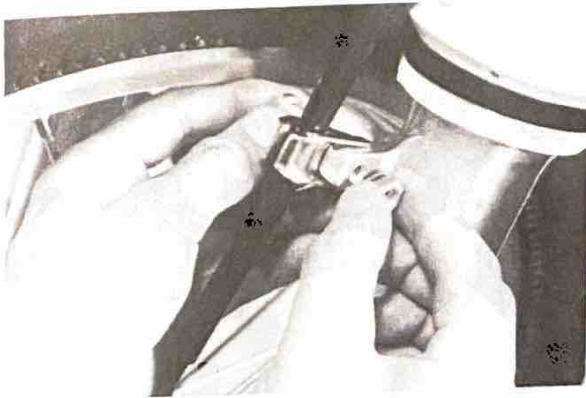
9. Tighten the wheel axle pinch bolts with specified torque.

Tightening torque: 1.0 m·kg (7.0 ft·lb)



1. Pinch bolt

10. Pass the brake wire through each holder and secure clamps to the fork with pan head screws, washers, plate washers, and nuts.



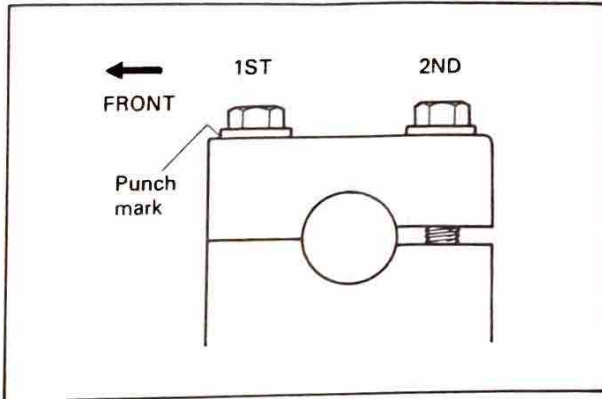
11. Install the handlebar using the two upper holders and four flange bolts.

Tightening torque: 2.9 m·kg (21 ft·lb)

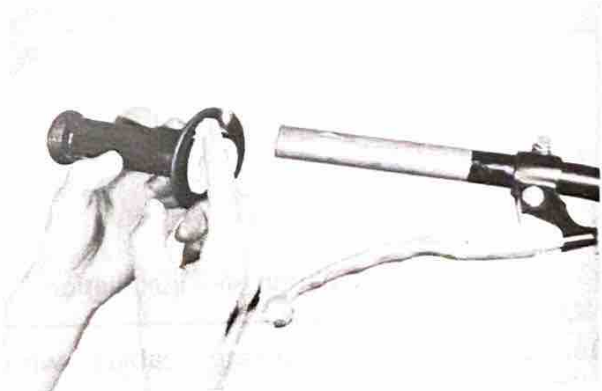


1. Upper holder 2. Flange bolt

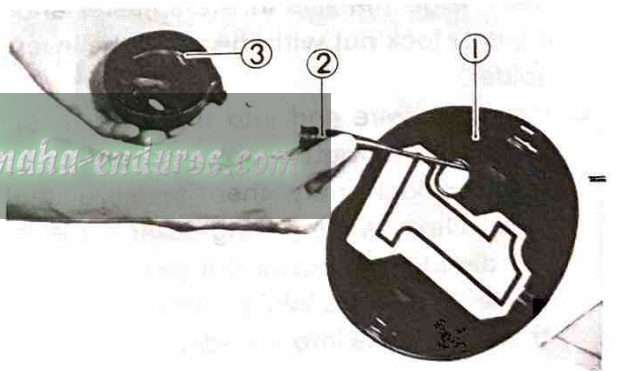
**CAUTION:**  
First tighten the bolts on the front side of the handle bar holder and tighten the bolts on the rear side.



12. Install the throttle grip assembly.  
a. Grease the right end of the handlebar and the throttle grip housing.



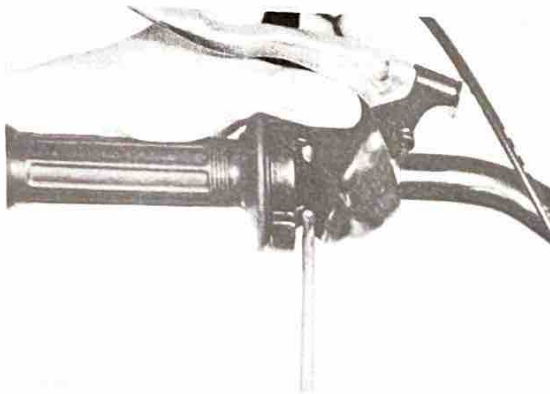
- b. Remove the screw from the throttle grip and disconnect the throttle wire.  
c. Pass the throttle wire through the number plate and connect it to the throttle grip.



1. Number plate 2. Throttle cable 3. Throttle cover



- d. After passing the throttle cover, tighten the screw. Make certain throttle grip rotates on handlebar freely, without binding. If not, normal throttle return will be impaired.



### 13. Brake wire and clutch wire installation

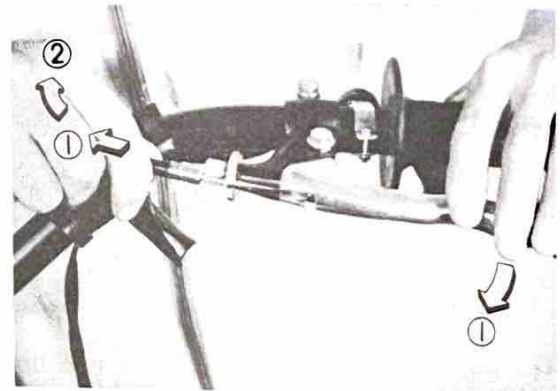
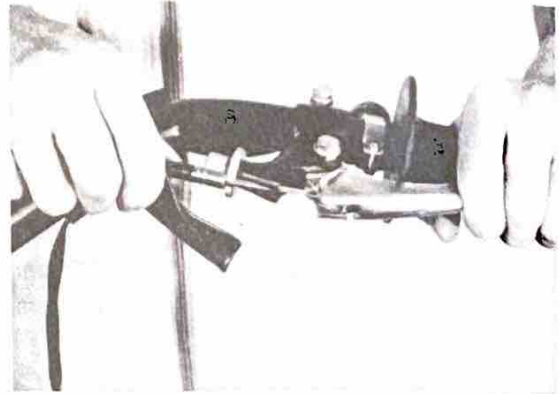
#### NOTE:

Before assembly, lubricate cables with suitable cable lubricant.

- a. Screw in the cable length adjusters on the brake shoe plate (brake wire) and cable length adjuster (clutch wire).
- b. Fully loosen the lever adjuster lock nut and screw in the adjuster until tight. Next, align the slits in the adjuster and adjuster lock nut with the slit in the lever holder.
- c. 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 outer cable in the direction opposite the lever, release the lever quickly. While releasing it, seat the outer cable into the adjuster.

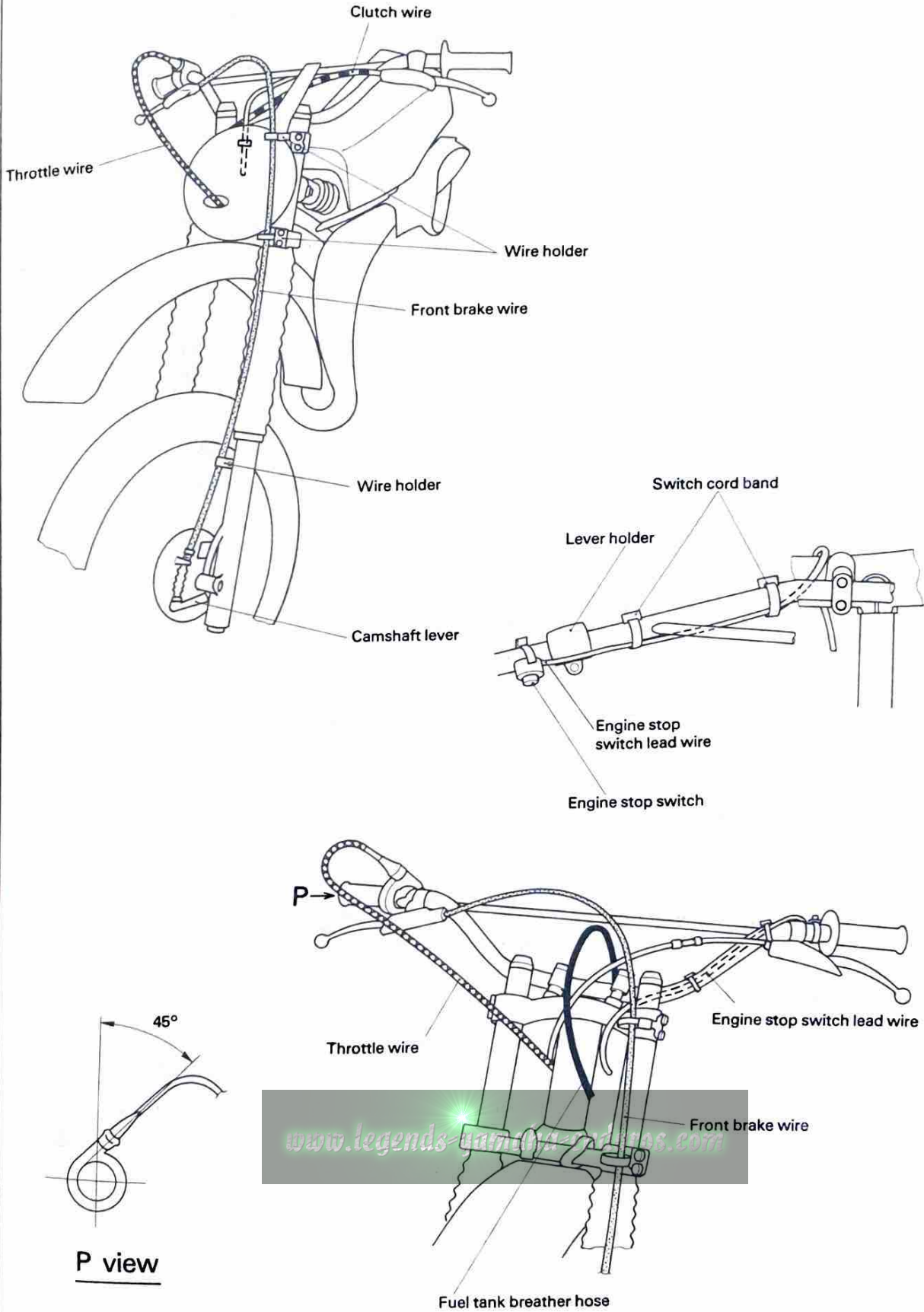
#### WARNING:

Proper cable and wire routing is essential to insure safe vehicle operation, refer to "CABLE ROUTING DIAGRAM".

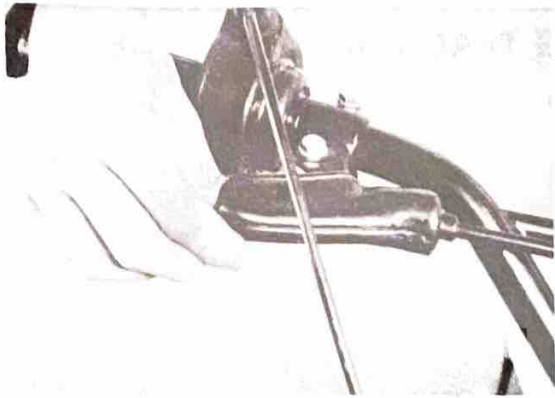


- d. Cover the brake and clutch lever holders with holder covers.

# CABLE ROUTING DIAGRAM







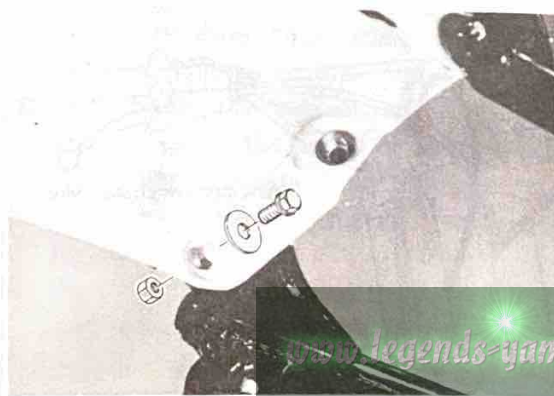
14. Connect the engine stop switch lead wire (Black and Black/White) to the lead wire of C.D.I., and clamp the wire connection.



**NOTE:**

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

15. Install the rear fender to frame.  
Tighten the rear fender securing bolts.

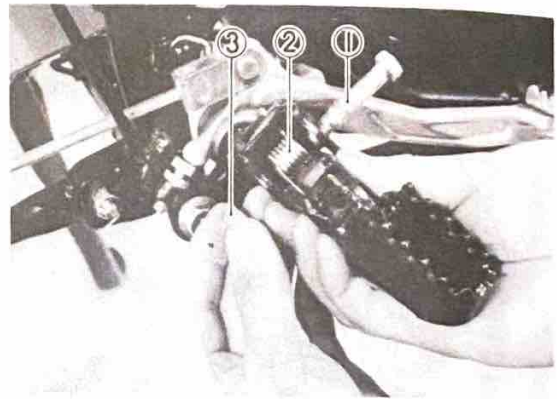


16. Install the semidouble seat to the frame using bolts, plate washers and U-nuts.

Tightening torque: 0.5 m·kg (3.6 ft·lb)



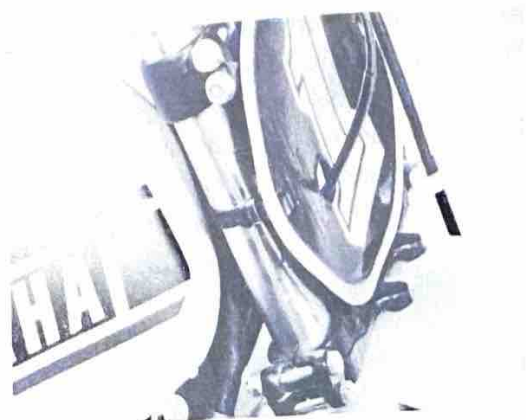
17. Install the right footrest using the bolt, torsion spring and U-nut.



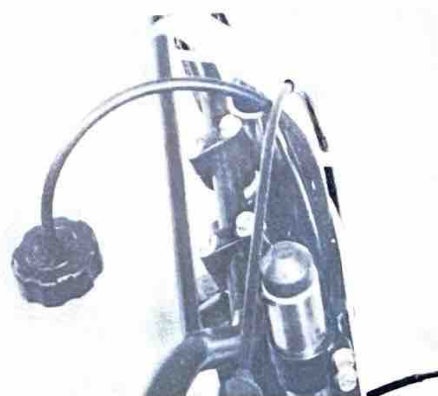
1. Bolt      2. Torsion spring      3. U-nut

18. Secure the number plate to the front forks using bands and hoses.





19. Connect one end of the air breather pipe to the fuel tank filler cap, and insert the other end to the holder of number plate.



## 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 pinch bolt	..... Tightening torque
Steering head holding 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 bolt	..... Tightening torque
Carburetor joint	..... Tightness
Footrest	..... Position, tightening torque
Change pedal	..... Position, looseness, operation
Brake pedal	..... Position, looseness, operation
Seat	..... Mounting
Fuel tank	..... Mounting
Fuel pipe	..... Connection
Rear fender	..... Mounting
Rear shock absorber	..... Mounting
Rear swing arm pivot shaft	..... Tightening torque
Rear axle nut	..... Tightening torque
Chain puller	..... Lock nut
Rear wheel	..... Spoke tension
Rear wheel rim	..... Hopping, deflection
Rear wheel tire	..... Tire pressure
Transmission	..... Oil level
Control cables	..... Lubrication
Electrical components	..... Operation, adjustment

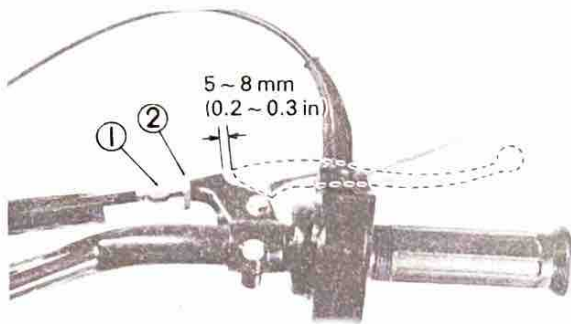
## Adjustment

### NOTE:

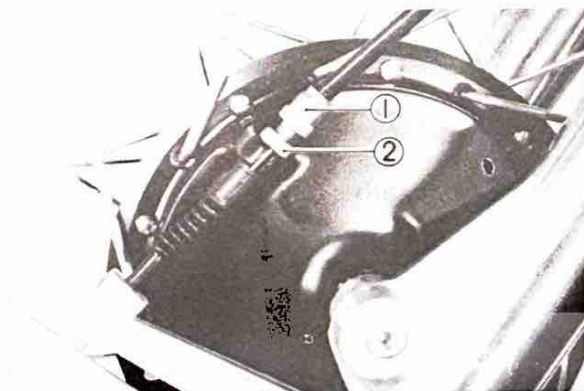
This section deals with the main points only. For details, refer to the YZ250G/YZ465G Owner's Service Manual.

### Front brake adjustment

Front brake cable free play can be adjusted to suit rider preference, but a minimum free play of 5 ~ 8 mm (0.2 ~ 0.3 in) should be maintained.



1. Adjuster 2. Lock nut



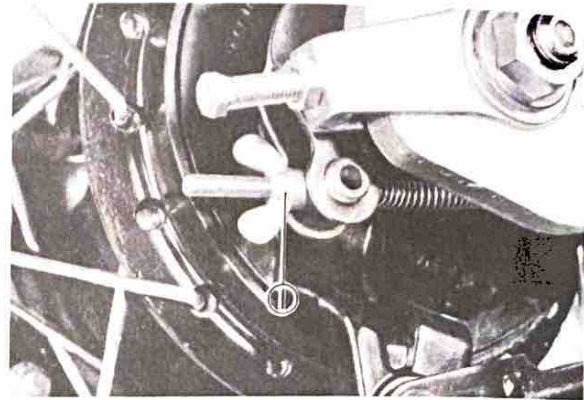
1. Adjuster 2. Lock nut

Free play can be adjusted at handle bar lever and brake shoe plate.

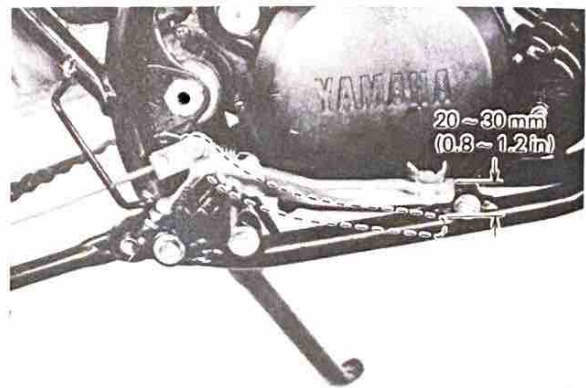
1. Loosen the adjuster lock nut on the brake lever holder, fully turn the adjuster in.
2. Loosen the lock nut on the shoe plate and turn the adjuster in or out until proper adjustment is achieved.
3. Unless the shoe plate adjuster helps bringing a proper play, turn to the lever holder adjuster.
4. Tighten all adjuster lock nuts.

### Rear brake adjustment

The rear brake should be adjusted so the end of the brake pedal moves 20 ~ 30 mm (0.8 ~ 1.2 in). To adjust, turn the adjuster on the brake rod clockwise to reduce play; turn the adjuster counterclockwise to increase play.

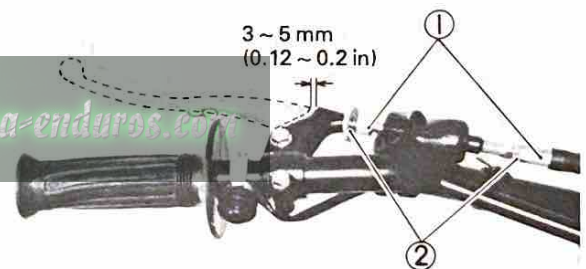


1. Adjuster



### Clutch adjustment

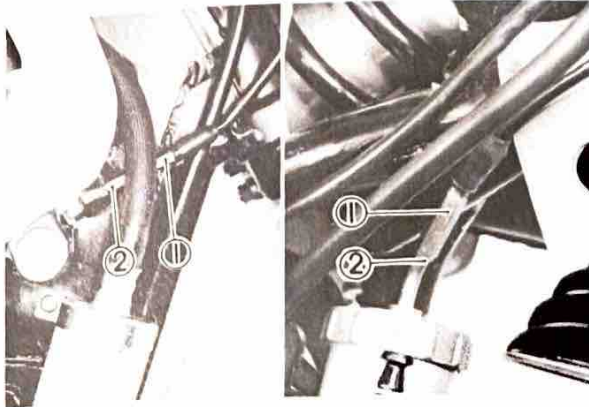
Loosen either the handle lever adjuster lock nut or the cable in-line length adjuster lock nut. Next, turn the length adjuster either in or out until proper lever freeplay is achieved.



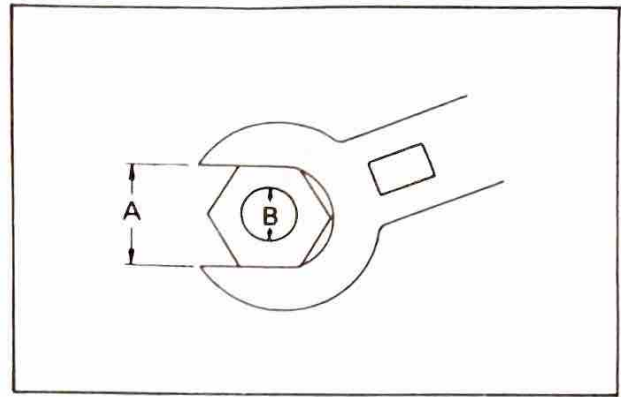
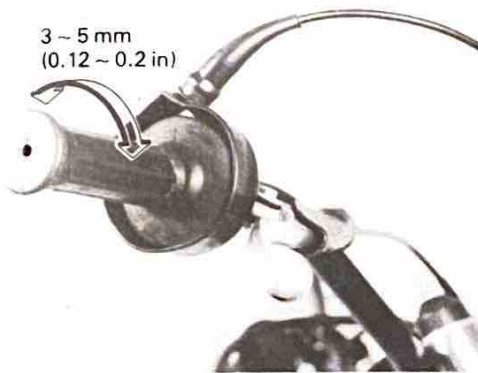
1. Adjuster 2. Lock nut

### Throttle cable adjustment

Check play in turning direction of throttle grip. The play should be 3 ~ 5 mm (0.12 ~ 0.2 in) at grip flange, loosen the lock nut and turn the wire adjuster to make the necessary adjustment. Tighten the adjuster lock nut.



1. Adjuster 2. Lock nut



A (Nut)	B (Bolt)	General torque specifications	
		m-kg	ft-lb
10 mm	6 mm	0.6	4.5
12 mm	8 mm	1.5	11
14 mm	10 mm	3.0	22
17 mm	12 mm	5.5	40
19 mm	14 mm	8.5	61
22 mm	16 mm	13.0	94

### TORQUE SPECIFICATIONS

The following torque specifications must be adhered to on every machine. Components with several studs should be tightened 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. Refer to the Owner's service manual.

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

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



**YAMAHA MOTOR CO., LTD.**

IWATA, JAPAN

PRINTED IN JAPAN  
79 · 10 - 2.02 × 1 □  
(英)