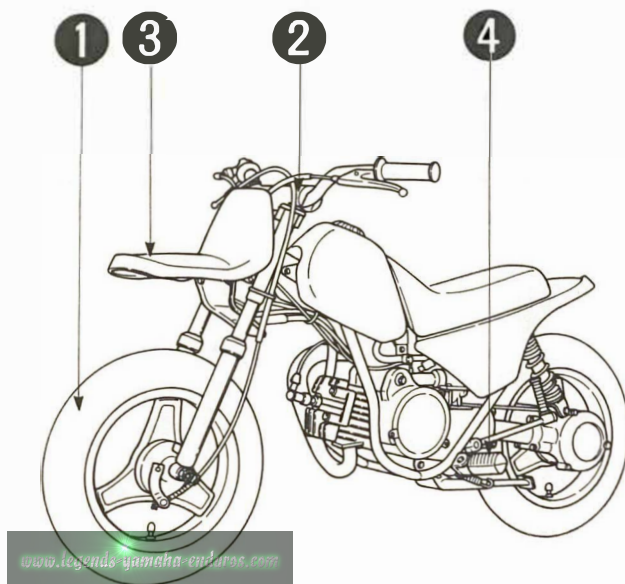




PW50K

ASSEMBLY MANUAL



FOREWORD

This Assembly Manual contains the information required to unpack and assembly Yamaha motorcycles correctly prior to delivery to the customer. Proper motorcycle setup assembly and predelivery 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 Setup and Predelivery Check List for this model.

Proper setup assembly and predelivery 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 minimum service problems during the break-in period.

To conform with federal new vehicle regulations.

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 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 motorcycle and/or rider.

THE DEALER SETUP AND PREDELIVERY CHECK LIST has been designed to be used with this Assembly Manual. As each procedure is satisfactorily completed, the mechanic should mark the appropriate space on the sheet. After it has been signed by the assembling mechanic, the servicing mechanic, and the customer, a copy of the Check List should be given to the customer and another copy retained in the dealership files. If the Service Manager test rides the motorcycle before delivery, he should also sign the Check List.

CONCERNING CRATE DAMAGE:

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

www.legends-yamaha-enduros.com

UNPACKING

Note on transportation

Use care not to but the motorcycle packed in the crate against a hard object or give it a heavy shock during transportation or in the service shop.

PREPARATION

To assemble the motorcycle correctly, supplies and working space are required:

Supplies

Oils, greases, shop rags.

Workshop

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

Procedure for unpacking

1. To remove the motorcycle 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.
2. Remove the front fender and front wheel from the styrofoam base.
3. Remove the nails from each corner of the crate, and remove the struts.
4. Lift up the motorcycle, and remove the rear wheel section from the styrofoam base. Then take out the motorcycle.
5. To install the front fender and front wheel, place a proper-size wooden box or a suitable stand under the engine to keep the front of motorcycle raised off the floor. Take care so that the motorcycle does not fall over.
6. Before starting the assembly, check for damaged or missing parts. The parts are contained in the styrofoam tray, the small carton box and the vinyl bags in the package. Also check the motorcycle for damage, scratches and other defects.

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

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 motorcycle.

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

PW50K ASSEMBLY MANUAL

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Printed in U.S.A.

LIT-11666-03-71

GLOSSARY

(Symbols most commonly used)

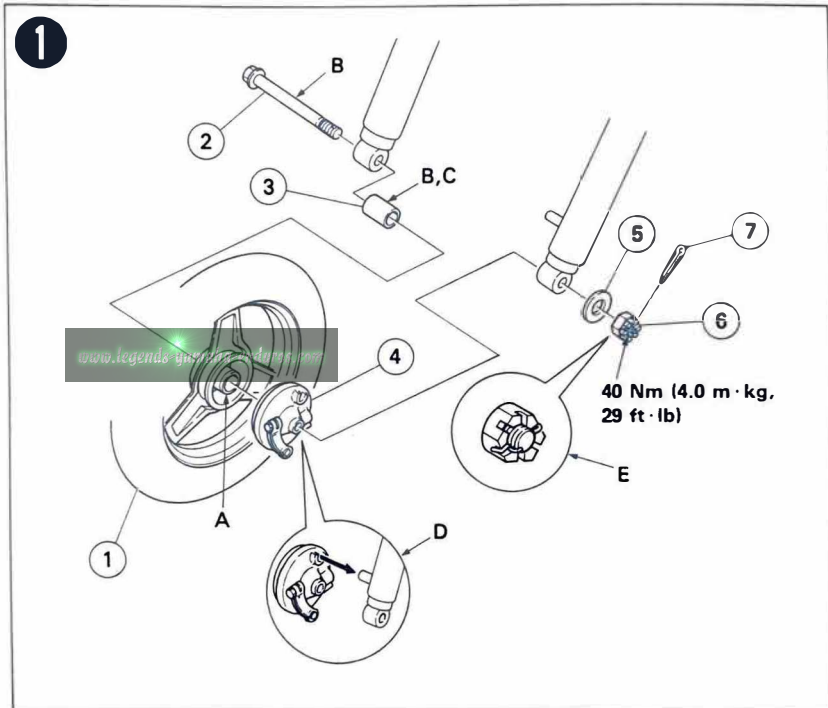
- C: The "C" marked parts are contained in the small carton box.
- S: The "S" marked parts are contained in the styrofoam tray (upper or lower).
- V: The "V" marked parts are contained in the vinyl bag.
- *: The asterisk (*) parts are temporarily fitted on the motorcycle.

SETUP PROCEDURES

NOTE: _____

Before starting the setup, see the GLOSSARY.

Front wheel



Parts list

No.	Part name	Q'ty	Locating mark	Remarks
1	Front wheel	1	S	—
2	Front wheel axle	1	•	d = 10 mm (0.39 in), l = 166 mm (6.54 in)
3	Collar	1	V	d = 10 mm (0.39 in)
4	Front brake shoe plate assembly	1	S	—
5	Plain washer	1	•	d = 10 mm (0.39 in)
6	Axle nut	1	•	d = 10 mm (0.39 in)
7	Cotter pin	1	V	d = 2 mm (0.08 in), l = 20 mm (0.79 in)

Setup points

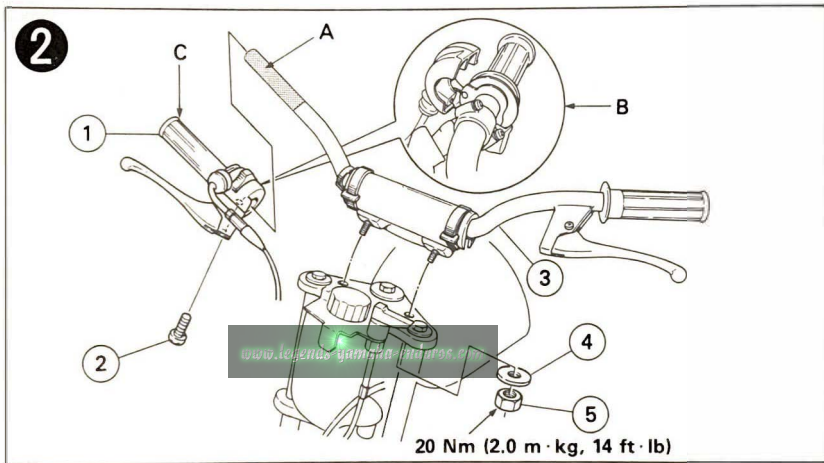
- A: Clean the inner surface of the front wheel hub with a clean cloth.
- B: Apply a light coat of lithium soap base grease.

- C: If the collar is dirty, clean with a rag.
- D: Insert the front wheel between the front fork legs so that the torque stopper (projecting portion) on the front fork correctly engages the slot in the brake shoe plate.
- E: Insert the cotter pin into the axle nut and bend the end of the cotter pin.

WARNING:

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.

Handlebar



Parts list

No.	Part name	Q'ty	Locating mark	Remarks
1	Handlebar grip	1	•	—
2	Panhead screw	2	•	d = 5 mm (0.2 in), l = 25 mm (0.98 in)
3	Handlebar	1	S	—
4	Plain washer	2	V	d = 8.5 mm (0.33 in)
5	Self locking nut	2	V	d = 8 mm (0.31 in)

Setup points

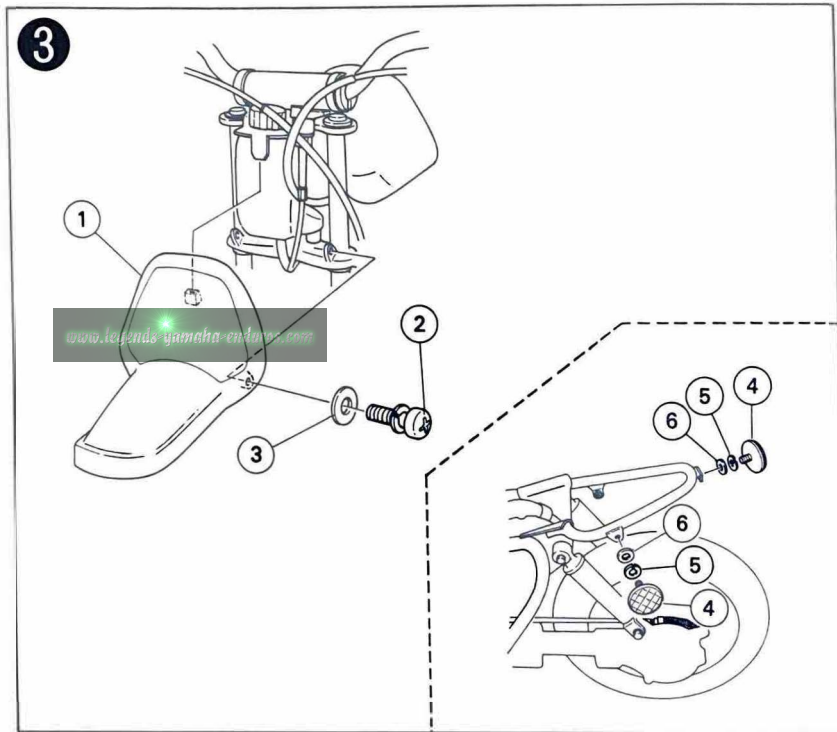
- A: Apply a light coat of lithium soap base grease.
- B: Thread the throttle cable through the hole in upper handlebar switch (R). Hook the throttle cable end onto its seat in the throttle guide housing. Then, grease the throttle cable and housing.

- C: Slip the throttle grip over the right handlebar to the limit and slide it back about 2 mm (0.08 in).

NOTE:

Check the throttle grip for smooth action.
REFER TO "ADJUSTMENTS AND PREDELIVERY SERVICE".

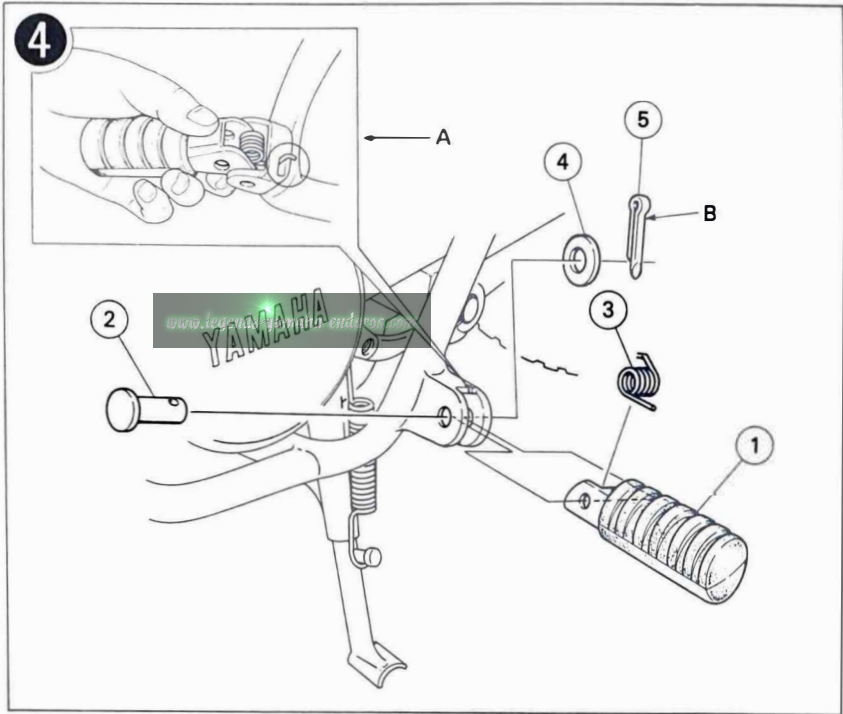
Front fender



Parts list

No.	Part name	Q'ty	Locating mark	Remarks
1	Front fender	1	S	
2	Panhead screw with spring washer	2	V	d = 6 mm (0.24 in), l = 12 mm (0.47 in)
3	Plain washer	2	V	d = 6 mm (0.24 in)
4	Reflector	3	V	
5	Spring washer	3	V	d = 5 mm (0.2 in)
6	Plain washer	3	V	d = 5 mm (0.2 in)

Footrest



Parts list

No.	Part name	Q'ty	Locating mark	Remarks
1	Foot rest	2	S	—
2	Clevis pin	2	V	d = 8 mm (0.31 in), l = 38 mm (1.5 in)
3	Torsion spring	2	V	—
4	Plain washer	2	V	d = 8 mm (0.31 in)
5	Cotter pin	2	V	d = 2 mm (0.08 in), l = 12 mm (0.47 in)

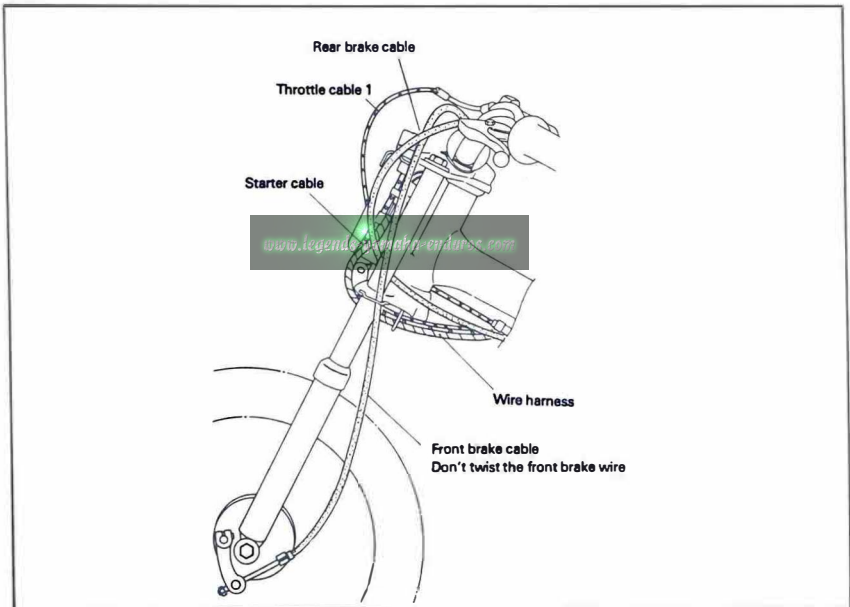
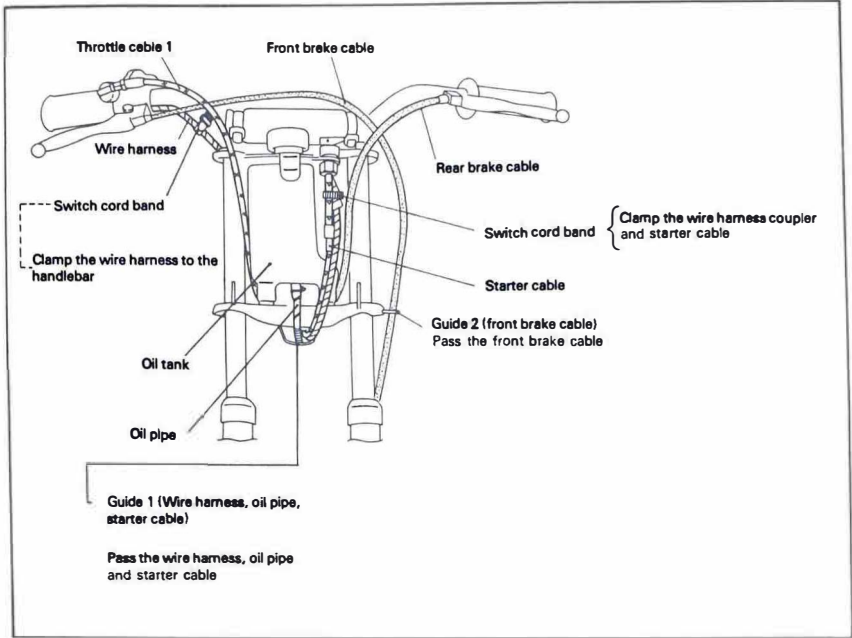
Setup points

A: Hook one end of the return spring onto the hole in the bracket and insert the other end into the footrest.

NOTE: _____

After installing the footrest, check that it moves smoothly.


B: Insert the cotter pin into the clevis pin and bend the end of the cotter pin.



ADJUSTMENTS AND PREDELIVERY SERVICE

The following adjustments must be made before delivery of the motorcycle to a customer. Use the check list to mark off each operation

when it is complete. The Check List is available at no charge from YPDI in pads of 50 sets. (P/N LIT-11161-00-78)



OWNER'S IDENTIFICATION CARD

YAMAHA MOTOR CORPORATION U.S.A.
1515 S. GARDEN AVENUE, TORRANCE, CALIFORNIA 90503
TELEPHONE (213) 606-2000 FAX (213) 606-2001

REG. NO. _____ ENGINE NO. _____

MAKE & MODEL _____ YEAR _____ MODEL _____

COLOUR _____

MOTORCYCLE PURCHASE REGISTRATION

TO COMPLY WITH FEDERAL LAWS ON PRODUCT RECALLS, AS WELL AS TO ENSURE PROPER WARRANTY COVERAGE (ON APPLICABLE MODELS), THIS FILL-IN REGISTRATION MUST BE FILLED OUT COMPLETELY AND SENT TO ADMINISTRATOR@yamaha-usa.com IMMEDIATELY AFTER THE SALE OF VEHICLE TO ORIGINAL OWNER.

OWNER'S NAME _____ ADDRESS _____ CITY _____ STATE _____ ZIP _____

AREA CODE | PHONE NO. _____

DEALER SETUP ASSFMRLY

SETUP ASSFMRLY

1. FRONT LIGHT (P/N 3130-101-00) - Tighten to specified torque.

2. FRONT WHEEL (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

3. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

4. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

5. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

6. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

7. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

8. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

9. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

10. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

CUSTOMER QUESTIONNAIRE & CHECKLIST

CUSTOMER QUESTIONNAIRE

A. IN WHOM POSSESSED WHO WILL BE THE PRIMARY RIDER OF YOUR NEW YAMAHA MOTORCYCLE?

1. MALE
2. FEMALE
3. SINGLE ADULT FEMALE
4. ADULT FEMALE
5. CHILD

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50. CHILD

PRE-DELIVERY CHECKLIST

PRE-DELIVERY SERVICES

1. FRONT LIGHT (P/N 3130-101-00) - Tighten to specified torque.

2. FRONT WHEEL (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

3. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

4. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

5. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

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9. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

10. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

PRE-DELIVERY ADJUSTMENTS AS SPECIFIED IN THE USER MANUAL

1. FRONT LIGHT (P/N 3130-101-00) - Tighten to specified torque.

2. FRONT WHEEL (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

3. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

4. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

5. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

6. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

7. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

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9. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

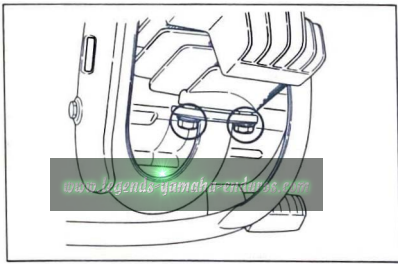
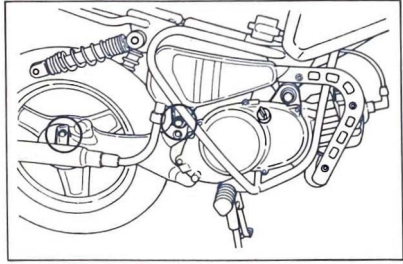
10. FRONT BRAKE (P/N 1111-101-00) - Tighten axle nut and cone washers to specified torque.

SAMPLE

ENGINE SECTION

Autolube pump

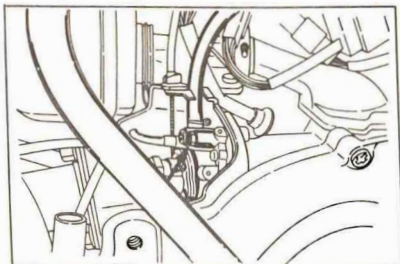
Prior to servicing the Autolube pump, remove the muffler.



1. Air bleeding
To bleed the oil pump, first remove the bleed screw. Start engine and run at idling speed. Then pull the oil pump cable

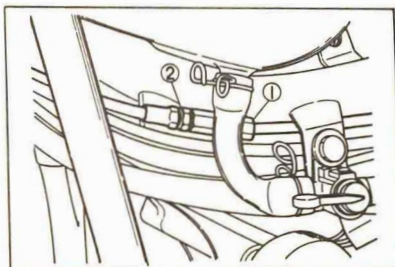
as much as possible, and continue to run the engine until all air bubbles disappear from the oil flowing out from the bleeder hole.

Reinstall bleed screw.

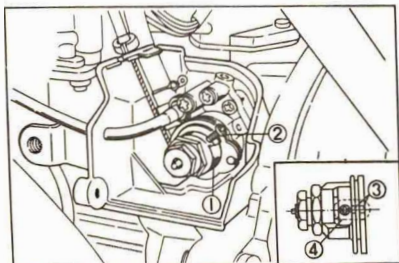


2. Oil pump cable adjustment

- a. Remove the slack in throttle cable 2 by turning the adjusting screw attached to the carburetor.
- b. Loosen the lock nut.
- c. Turn the adjusting screw so that the mark on the adjusting pulley is aligned with the Phillips head screw attached to the adjusting plate.
- d. Screw in the lock nut until tight.



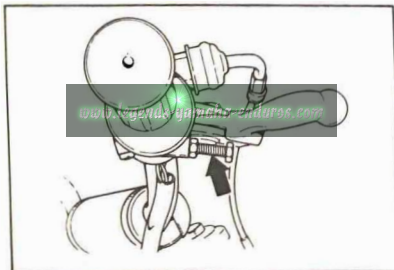
1. Adjuster 2. Lock nut



1. Adjusting pulley 2. Phillips head screw
3. Mark 4. Set position

Speed limiter

- A speed limiter is furnished on the bottom of the throttle grip. If this limiter is screwed in, it "limits" the degree of throttle opening; that is, controls the vehicle speed.
- After removing the adjuster, plug the adjuster hole with the plug (contained in the carton).

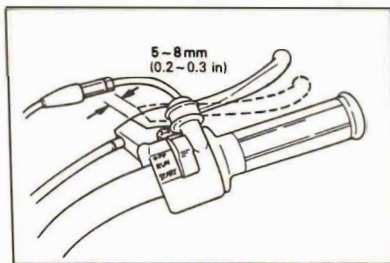


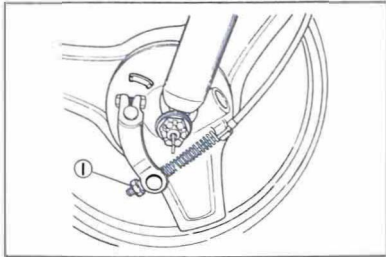
CHASSIS SECTION

Brake adjustment

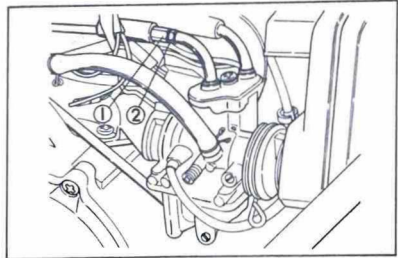
Brake cable free play can be adjusted to suit rider preference, but a minimum free play of 5 ~ 8 mm (0.2 ~ 0.3 in) should be maintained. Free play can be adjusted at brake shoe plates.

Turn the adjuster in or out until proper adjustment is achieved.

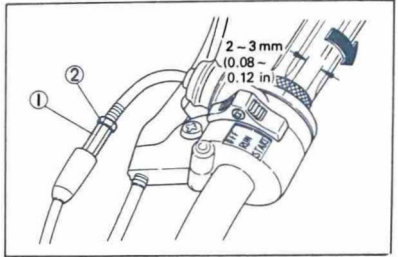
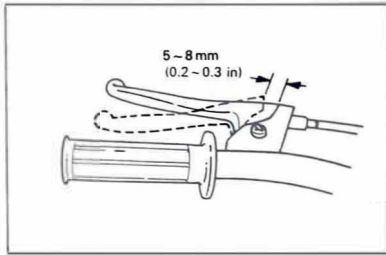




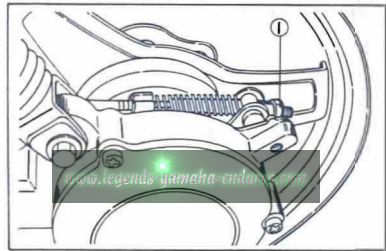
1. Adjuster



1. Adjuster 2. Lock nut



1. Adjuster 2. Lock nut



1. Adjuster

Throttle cable adjustment

Check play in turning direction of throttle grip. The play should be 2 ~ 3 mm (0.08 ~ 0.12 in) at grip flange. Loosen the lock nut and turn the wire adjuster to make the necessary adjustment. After adjusting, be sure to tighten the lock nut properly.

APPENDICES

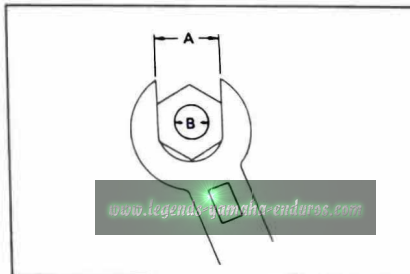
SERVICE DATA

Spark plug Type Gap	BP4HS (NGK), W14FPL (ND) 0.6 ~ 0.7 mm (0.024 ~ 0.027 in)	
Fuel Recommended fuel Fuel tank capacity	Regular or low lead gasoline 2.0 ℓ (0.44 IMP gal, 0.53 US gal)	
Engine oil Recommended oil Oil tank capacity	Air-cooled 2 cycle engine oil 0.3 ℓ (0.26 IMP qt, 0.32 US qt)	
Transmission oil Recommended oil Oil quantity	SAE 10W/30 type "SE" motor oil 350 cm ³ (0.31 IMP qt, 0.37 US qt)	
Tire pressure	Front	Rear
	1.0 bar (1.0 kg/cm ² , 14 psi)	1.0 bar (1.0 kg/cm ² , 14 psi)

TORQUE SPECIFICATIONS

The list below covers those stud/bolt sizes with standard I.S.O. pitch threads. Torque specifications for components with thread pitches other than standard are given within the applicable chapter. Torque specifications call for dry, clean threads. Components such as the cylinder or cylinder head should be at room temperature prior to torquing. A cylinder head or any other item with several fasteners should be torqued down in a crosswise pattern in successive stages until torque specification is reached. The method is similar to installing an automobile wheel and will avoid warping the component.

A	B	General torque specifications		
		Nm	m · kg	ft · lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94



- A. Distance across flats
B. Outside thread diameter

Tightening torque

	Tightening torque
Engine:	
Spark plug	M14 20 Nm (2.0 m · kg, 14 ft · lb)
Oil pump	M5 4 Nm (0.4 m · kg, 2.9 ft · lb)
Chassis:	
Front wheel axle	M10 40 Nm (4.0 m · kg, 29 ft · lb)
Handle	M8 20 Nm (2.0 m · kg, 14 ft · lb)
Handle crown — Steering shaft	M10 35 Nm (3.5 m · kg, 25 ft · lb)
— Handle holder	M8 25 Nm (2.5 m · kg, 18 ft · lb)
— Inner tube	M10 35 Nm (3.5 m · kg, 25 ft · lb)
Steering shaft nut	— 30 Nm (3.0 m · kg, 22 ft · lb)
Engine mounts	M10 50 Nm (5.0 m · kg, 36 ft · lb)
Rear wheel axle	M12 60 Nm (6.0 m · kg, 43 ft · lb)

OWNER'S TOOL KIT

No.	Part name	Q'ty
1	Owner's tool bag	1
2	Box wrench (21)	1
3	Handlebar	1