YAMAHA

DT125F/DT175F

Supplementary Service Manual

LIT-11616-01-26

2N4-28197-10

FORWORD

This Supplementary Service Manual for DT125F/DT175F has been published to supplement the Service Manual for the DT125E/DT175E, and provides updated information for the DT125F/DT175F model as well as new data concerning the DT125E/DT175E. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with the Service Manual for the DT125E/175E.

NOTE:

This Supplementary Service Manual contains special information regarding periodic maintenance to the emissions control system for the DT125F/DT175F. Please read this material carefully.

NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanics education into one manual, so it is assumed that persons using this manual to perform maintenance and repairs on Yamaha motorcycles have a basic understanding of the mechanical precepts and procedures inherent to motorcycle repair technology. Without such knowledge, attempted repairs or service to this model may render it until for use and/or unsafe.

This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools is necessary to ensure that the machine will operate as designed. If there is any question about a service procedure it is imperative that you contact a Yamaha dealer before continuing. Before attempting any service, check with your Yamaha dealer for any service information changes that apply to this model. This policy is intended to provided the customer with the most satisfaction from his machine and to conform with federal enviromental quality objectives.

Yamaha Motor Company, Ltd. is continually striving to further improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all Authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

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.

YAMAHA DT125F/DT175F
SUPPLEMENTARY SERVICE MANUAL
1ST EDITION, MAY 1978

PRINTED IN JAPAN
LIT-11616-01-26

Page numbers shown in brackets correspond to page numbers of the DT125E/DT175E Service Manual (2A6-28197-10).

(PAGE 2)
1-1. MACHINE IDENTIFICATION

Starting serial number
DT125F: 2N4-000101 DT175F: 2N5-000101

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2-1 MAINTENANCE AND LUBRICATION INTERVAL CHARTS
PERIODIC MAINTENANCE EMISSION CONTROL SYSTEM

No.	ITEM	REMARKS	INITIAL BREAK-IN		THEREAFTER EVERY
			1,000 km (600 mi) or 1 month	4,000 km (2,500 mi) or 7 months	3,000 km (2,000 mi) or 6 months
1.	Ignition Timing	(DT125F) Check and clean contact breaker point. Check and adjust ignition timing. Replace point if necessary. Check point cam wick. Apply oil if necessary.	O	O	O
		(DT175F) Check and adjust ignition timing.			
2.	Spark Plug	Check spark plug condition and plug gap. Replace plug every 3,000 km (2,000 mi)	O	O Replace	O Replace
3.	Fuel Hose	Check fuel hose for cracks and damage. Replace if necessary.	O	O	O
4.	Fuel Petcock	Check fuel petcock for proper function.	O	O	O
5.	Idle Speed	Check and adjust engine idle speed. Adjust cable free play.	O	O	O
6.	Exhaust System	Retighten exhaust system conditions.	O	O	O

GENERAL MAINTENANCE/LUBRICATION

	ITEM	REMARKS	TYPE	INITIAL BREAK-IN		THEREAFTER EVERY	
				1,000 km (600 mi) or 1 month	4,000 km (2,500 mi) or 7 months	3,000 km (2,000 mi) or 6 months	15,000 km (9,500 mi) or 24 months
1.	Transmission Oil	Warm-up engine before draining	Yamalube 4-cycle oil or SAE 10W/30 "SE" motor oil or "GL" gear oil	O	O	O	
2.	Drive Chain	Adjust and lubricate thoroughly	Yamaha chain and cable lube or SAE 10w/30 motor oil	O	O	O	
3.	Brake System	Inspect and adjust. Replace shoes if necessary.	—	O	O	O	
4.	Clutch	Adjust free play	—	O	O	O	

No.	ITEM	REMARKS	TYPE	INITIAL BREAK-IN		THEREAFTER EVERY	
				1,000 km (600 mi) or 1 month	4,000 km (2,500 mi) or 7 months	3,000 km (2,000 mi) or 6 months	15,000 km (9,500 mi) or 24 months
5.	Control and Meter Cables	Inspect and lubricate thoroughly	Yamaha chain and cable lube or SAE 10W/30 motoroil	o	o	o	
6.	Throttle Cable	Adjust as necessary. Lightly lubricate	Lithium base grease		o	o	
7.	Brake and Clutch Pivot Shaft	Lubricate. Apply lightly.	Yamaha chain and cable lube or SAE 10W/30 motor oil		o	o	
8.	Side Stand Shaft Pivot	Lubricate. Apply lightly	Yamaha chain and cable lube or SAE 10W/30 motor oil		o	o	
9.	Front Fork Oil	Drain completely. Fill to specification	Yamaha fork oil 10wt or equivalent				o
10.	Steering Ball Bearings and Races	Check steering assembly for looseness. Moderately repack ever 15,000km (9,500 mi)	Medium weight wheel bearing grease		o	o	o
11.	Wheel Bearings	Check bearings for smooth rotation Moderately repack every 15,000 km (9,500 mi)	Medium weight wheel bearing grease		o	o	o
12.	Battery	Check specific gravity	–		o	o	
13.	Autolube Pump	Check and adjust pump cable and minimum pump stroke	–	o	o	o	
14.	Air Filter	Check for clogging. If necessary clean and dampen with oil	–	o	o	o	

ANTICIPATED MAINTENANCE

The maintenance items in this table are set apart from the regular periodic maintenance items because of their anticipated need of irregular service intervals. The service interval is dependent upon variable factors such as the severity of use, operating conditions, etc. Therefore, perform this maintenance when the described symptoms warrant it.

No.	ITEM	REMARKS
1.	Spark Plug	If any spark plug failure is noticed replace the spark plug. Symptoms indicating spark plug failure are anticipated to occur around 3,000 km (2,000 mi).
2.	Decarbonization	If heavy power loss is evident, decarbonize the cylinder head, piston head and exhaust system. Carbon build-up is anticipated to occur around 5,000 ~ 10,000 km (3,000 ~ 6,000 mi).
3.	Piston	If the piston rattles, the vehicle becomes hard to start, appears to be lacking power, or becomes in-operative, repair as follows: replace the piston and piston rings, clean, hone, or replace the cylinder. These symptoms are anticipated to occur mainly below 500 km (300 mi).

1. Spark plug

Symptoms — If carbon builds up heavily between the spark plug electordes, no spark will be produced or spark will be weak, and thus engine performance will be adversely affected. Sometimes, the engine may completely stop and starting may become impossible. Or misfires may increase, and the engine runs irregularly. If any of these symptoms is evident, the spark plug is considered to be bridged with carbon.

If the flow of fuel or oil is excessive due to improper adjustments, or even when the starter lever (choke) is used in a wrong manner, the spark plug will become wet or oily, and the engine will misfire, run irregularly or show poor performance due to the deterioration of insulation between the electrodes. These symptoms are anticipated to occur around 3,000 km (2,000 mi).

Maintenance — After inspection of plug if the carbon bridge and/or plug is wet or oily, replace the plug.

Standard spark plug: N-3 (CHAMPION) Plug gap: 0.6 ~ 0.8 mm (0.024 ~ 0.031 in)

2. Decarbonization

Symptoms — If the machine is driven habitually at low speeds, the spark plug runs cold, and thus carbon tends to build up in the cylinder exhaust port, cylinder head, piston head, exhaust passage in the exhaust pipe and in the silencer. When carbon collects heavily, the exhaust gas will meet with the increased resistance in the exhaust passages, and finally the engine will show very poor performance or slow acceleration which can be noticed by the rider. This build-up is anticipated to occur around 5,000 km (3,000 mi) to 10,000 km (6,000 mi).

Maintenance — After inspection if the carbon build-up is evedent, decarbonize the piston crown, exhaust port, cylinder head and exhaust passage of exhaust pipe.

3. Piston

Symptoms — If the engine develops a rattling piston noise, is difficult to start, and provides markedly reduced performance particularly at low and medium speeds, the piston may be worn excessively. This may be the result of a number of conditions. Improper carburetion and ignition timing adjustments may cause excessive piston heating and abnormal wear. Improper or inadequate lubrication may result in such overheating and piston wear. Damage may be caused to the cylinder. For this reason the replacement of a worn piston involves the replacement of the piston and the piston rings, as well as the cleaning, honing, or replacement of the cylinder. This is anticipated to occur mainly below 500 km (300 mi) during the break-in period.

Maintenance — After inspection, if cylinder seizure occurred, hone or replace the cylinder and replace piston and piston rings.

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2-2. ENGINE

A. Carburetor

1. Pilot air screw

The pilot air screw is set at the factory by the use of special equipment.

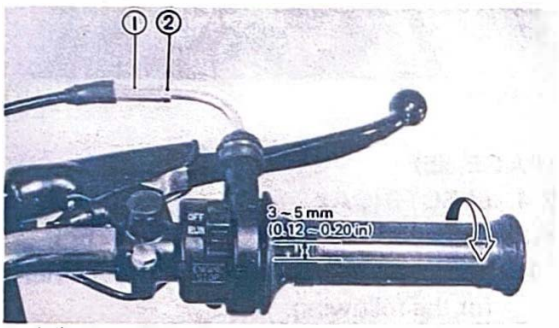
No attempt should be made to change this adjustment by the dealer.

1. Pilot air screw (Do not adjust)
2. Throttle stop screw

3. Throttle stop screw

Idling speed: 1,350 ~ 1,500 r/min

4. Throttle cable
   Check play in turning direction of throttle grip. The free play should be 3 ~ 5 mm (0.12 ~ 0.20 in) at grip flange. Loosen the lock nut and turn the wire adjuster to make the necessary adjustment. Be sure to tighten the lock nut properly.



1. Adjuster 2. Lock nut

(PAGE 8)

C. Autolube pump

Minimum pump stroke: 0.18 ~ 0.27 mm (0.007 ~ 0.011 in)

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D. Engine and transmission oil

2. Transmission oil

b.

Recommended oil: Yamalube 4-cycle oil or SAE 10W/30 "SE" motor oil or "GL" gear oil

Transmission oil quantity: Replacement: 650 cc (0.7 US. qt) Overhauling: 750 cc (0.8 US. qt)

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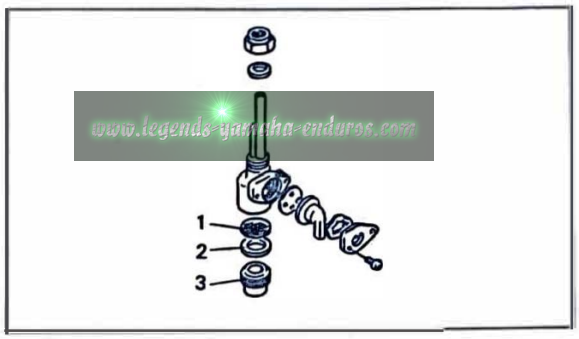
2-3. CHASSIS

A. Fuel petcock



1. Filter screen 3. Filter cup
2. Filter gasket

B. Brakes and wheels

6. Axles

a. Check axle nuts.

Front	Axle nut: 4.8 m-kg (35 ft-lb)
Rear	Axle nut: 10.0 m-kg (72 ft-lb)

7. Check tire pressure.
   Recommended pressures:

	FRONT	REAR
DT125F/DT175F BASIC WEIGHT with oil and full fuel tank	DT125F 48.5kg (106.9lb)	DT175F 56.5kg (124.6lb)
	DT175F 48.5kg (106.9lb)	DT175F 57.5 kg (126.8 lb)
Standard tire	Bridgestone 2.75-21-4PR	Bridgestone 3.50-18 4PR
Tire load limit	DT125F 88.5kg (195lb)	DT125F 179.2kg (395lb)
	DT175F 88.5kg (195lb)	DT175F 181.4kg (400lb)
Cold tire pressure OFF road riding ON road riding	0.9kg/cm² (13psi) 1.7kg/cm² (24psi)	1.1kg/cm² (16psi) 2.0kg/cm² (28psi)
Minimum tire tread depth	0.8mm (0.03in)	0.8mm (0.03in)

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C. Drive chain

2. Tension adjustment

e. Tighten the rear axle nut.

Axle nut torque: 10.0 m-kg (72 ft-lb)

3. Chain lubrication

a. Clean the chain in a solvent so the dust and dirt are removed.

b. Spray or apply oil to the side plate and all center rollers.

Recommended lubricant:
Yamaha chain and cable lube or
SAE 10W/30 motor oil

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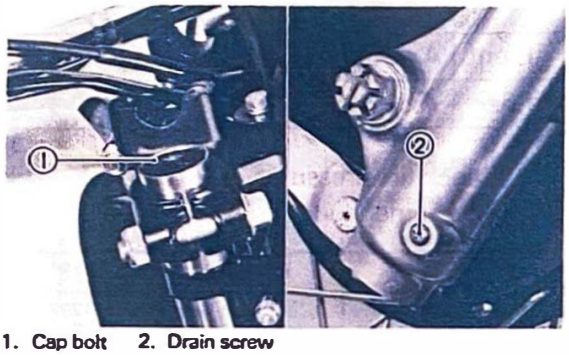
D. Front fork oil change

1. Elevate front wheel by placing a suitable stand under the engine.
2. Remove the handlebar, and then loosen the handle crown pinch bolts.
3. Remove cap bolts from inner fork tubes.
4. Place container under each fork tube. Remove drain screw from each outer tube.



1. Cap bolt 2. Drain screw

5. After most of oil has drained, slowly raise and lower outer tubes to pump out remaining oil.
6. Replace drain screws.

NOTE:
Check gasket, replace if damaged.

7. Measure correct amount of oil and pour into each leg.

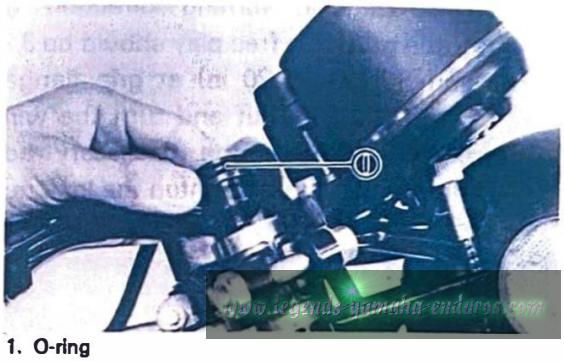
Recommended oil:
Yamaha Fork Oil 10Wt or equivalent

Quantity per leg: 186 cc (6.3 oz)

8. After filling, slowly pump the fork tubes up and down to distribute the oil.
9. Inspect O-ring on fork cap bolts and replace if damaged.
10. Install the fork cap bolts and torque to specification.

Fork cap bolt torque: 3.0 m-kg (22 ft-lb)

11. Retorque handle crown pinch bolts to specification.



1. O-ring

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2-4. ELECTRICAL

A. Contact breaker points (DT125F)

1. The contact breaker should be checked for the following:
   a. Wear of the bakelite cam heel
   b. Damage of contact point surfaces
   c. Rust or wear on the breaker arm or arm shaft
   d. Faulty insulation of the contact breaker assembly
   e. Oil or dirt on the contact breaker assembly
2. Apply a few drops of light-weight machine oil or distributor lubricant to the point cam lubricator. Do not over oil.
3. To clean the points, run a point file between the points until the grey deposits and pits have been removed. Spray the points with ignition point cleaner or lacquer thinner, and place a piece of clean paper between the points, let them close, and remove the paper. Repeat until no residue shows.
4. Point replacement should be necessary when the points becomes severely pitted, or if the heel is broken or worn unevenly, or if the points becomes shorted or show faulty operation.

NOTE:
New points must be cleaned.

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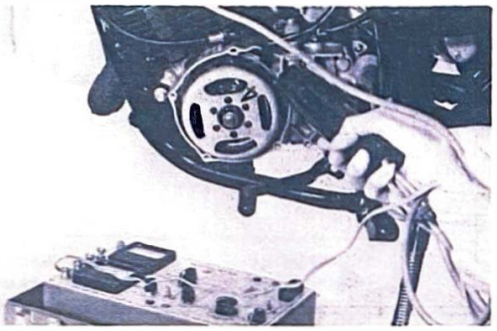
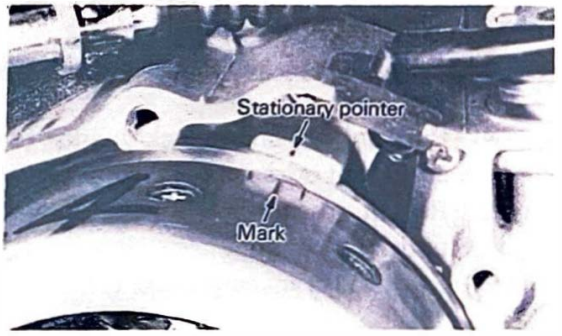
B. Ignition timing (DT125F)

1. Ignition timing is checked with a timing light by observing the position of the stationary pointer stamped on the crankcase and the marks on the magneto flywheel.
2. Connect one lead wire of timing light to spark plug lead wire, and the other to the battery.
3. Start the engine and keep the engine speed as specified. Use a tachometer for checking.

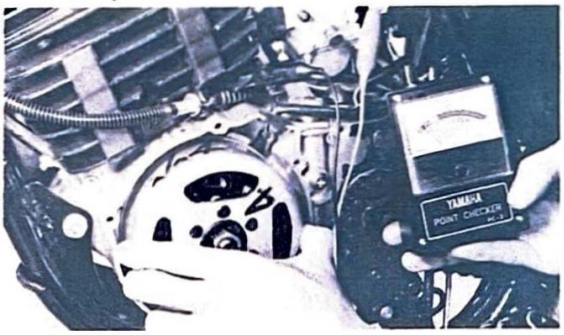
Engine speed: 1,350 ~ 1,500 r/min



4. The center mark of the magneto flywheel should line up the stationary pointer on the crankcase at a specified engine speed.



5. If they are not aligned or a new crankcase is used for replacement, proceed as follows.
6. Switch on point checker and adjust zero point. Disconnect magneto harness from main harness. Connect red lead of point checker to black/white lead in wire harness coming from magneto.
7. Connect black lead of point checker to unpainted surface of cylinder fin or unpainted crankcase bolt.
8. Rotate magneto flywheel until the center mark on the magneto flywheel lines up the stationary pointer on the crankcase. At this time, point checker needle should swing from "CLOSE" to "OPEN" position, indicating the contact breaker (ignition points) have just begun to open.



9. Adjust ignition timing by slightly loosening Phillips head screw and carefully rotating contact breaker assembly with a slotted screw driver, and retighten Phillips head screw before rechecking timing.
   Recheck the timing by repeating step 8 and 2-4.

NOTE:

After ignition timing has been set, check point gap. If it is over tolerance, (0.3 ~ 0.4 mm (0.012 ~ 0.016 in), the contact breaker assembly should be replaced. Do not attempt to bend the fixed point breaker to decrease maximum point gap. This will only result in point misalignment, difficulty in setting timing and premature point failure.

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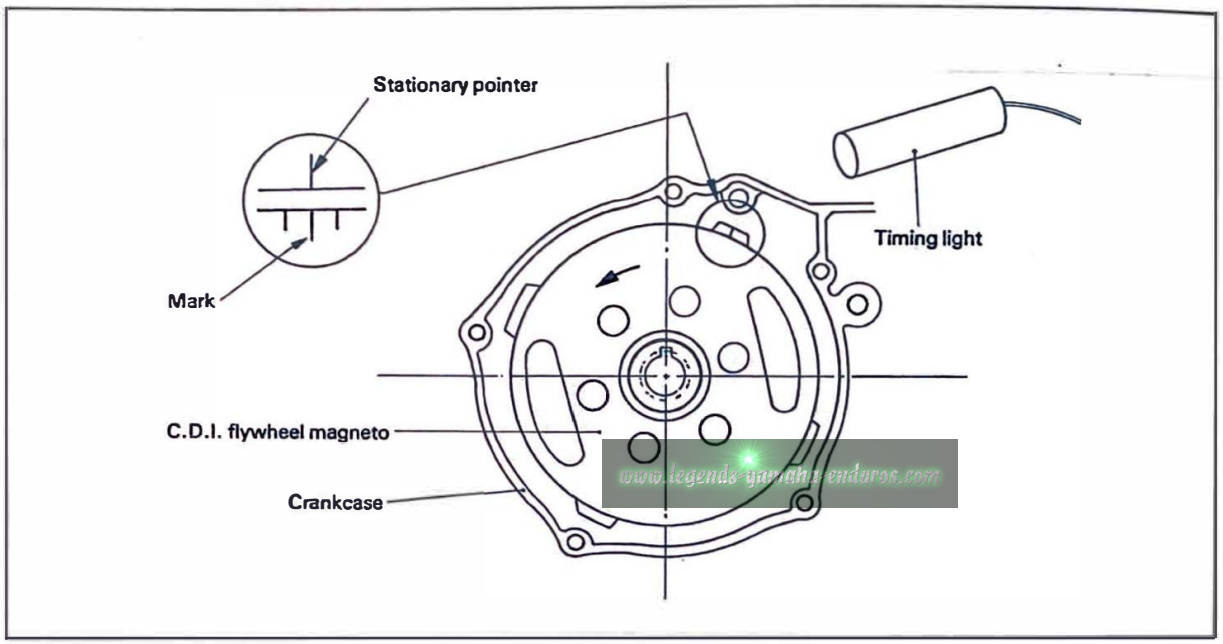
Ignition timing for DT175F (C.D.I)

1. Ignition timing is checked with timing light by observing the position of the stationary pointer marked on the crank-cace and the marks on the C.D.I. magneto flywheel.



2. Checking the ignition timing
   Using the timing light, the case mark (stationary pointer) and magneto center mark, adjust the ignition timing correctly.
   a) Remove the crankcase cove (L).
   b) Connect one lead wire of timing light to spark plug lead wire, and the other to the battery.
   c) Start the engine and keep it running at the specified speed.

Specified speed: 2,000 r/min

   d) While running the engine at the specified speed, check to see that the stationary pointer is aligned with the magneto center mark. If the marks are out of alignment, follow the steps below.

3. Adjusting the ignition timing
   1) Remove the crankcase cover (L) and flywheel.
   2) Loosen base set screw and turn base until the stationary pointer and the mark on the base align.
   3) Tighten base set screw and install flywheel.
   4) Run engine and check marks for alignment by means of timing light.
   5) Repeat procedure (above steps 2-4) until marks align.
   6) Re-install crankcase cover (L).

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D. Spark plug

2. Inspection

c.

Spark plug type : N-3 (Champion)
Spark plug gap : 0.6 ~ 0.8 mm (0.024 ~ 0.031 in)

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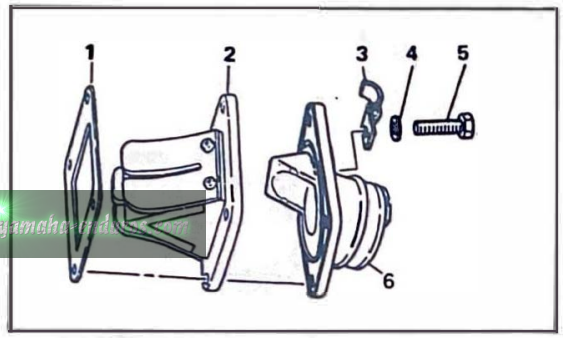
3-2. DISASSEMBLY

A. Reed valve assembly



1. Valve seat packing
2. Reed valve assembly
3. Wire holder
4. Spring washer
5. Hexagon bolt
6. Carburetor joint

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3-3. INSPECTION AND REPAIR

C. Piston

Piston clearance: DT125F: 0.035 ~ 0.040 mm (0.0014 ~ 0.0016 in) DT175F: 0.040 ~ 0.045 mm (0.0016 ~ 0.0018 in)

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F. Autolube pump

b.

Minimum pump stroke: 0.18 ~ 0.27 mm (0.007 ~ 0.011 in)
Pump output: Maximum output — 2.58 cc (0.0872 oz)/ 200 strokes (100 cycles) Minimum output — 0.25 cc (0.0085 oz)/ 200 strokes (100 cycles)

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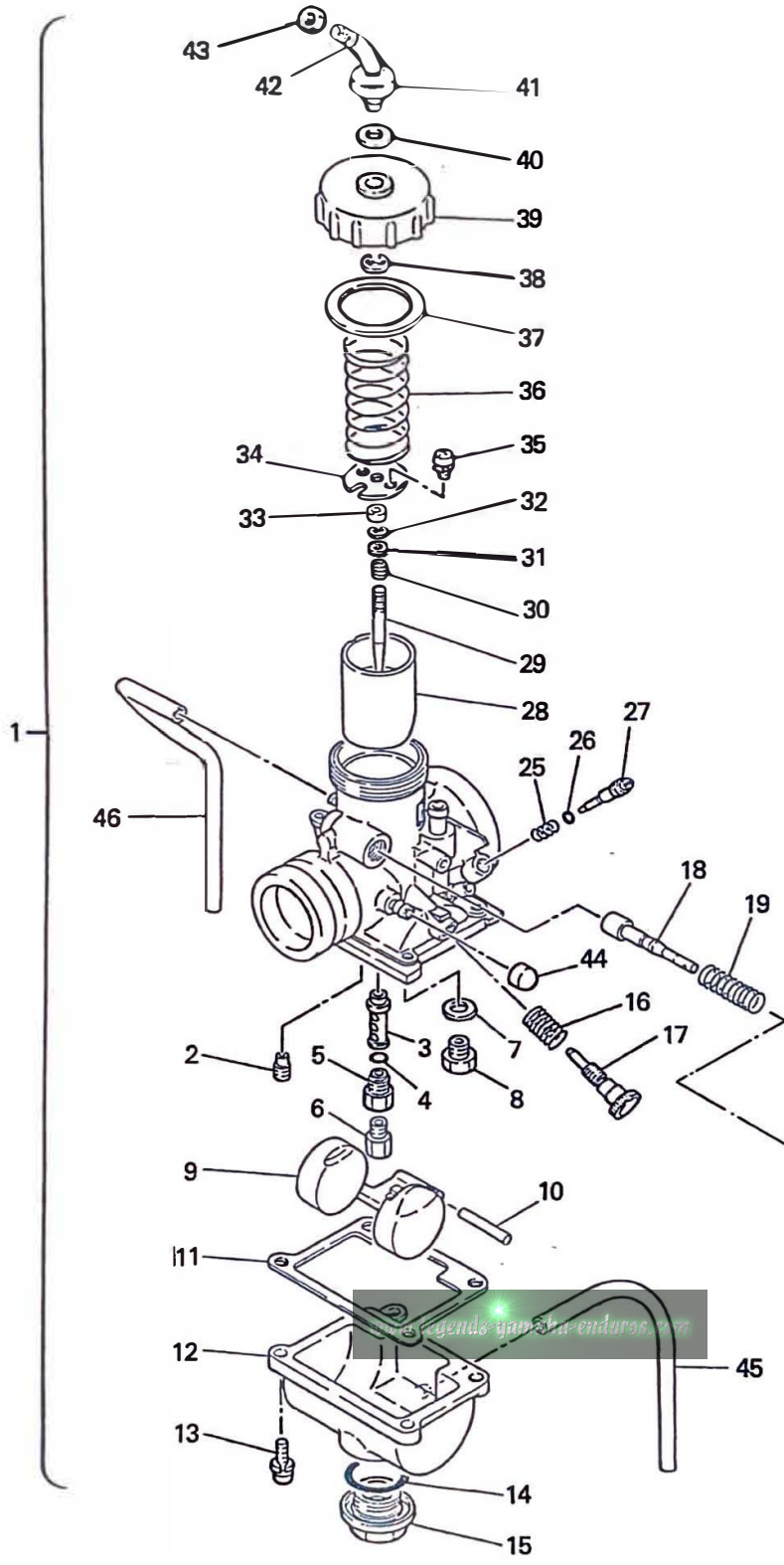
4-1. CARBURETOR



1. Carburetor ass'y
2. Pilot jet
3. Needle jet
4. O-ring
5. Holder
6. Main jet
7. Valve seat washer
8. Valve seat ass'y
9. Float
10. Float pin
11. Float chamber gasket
12. Float chamber body
13. Panhead with washer screw
14. O-ring
15. Screw plug
16. Throttle stop spring
17. Throttle stop screw
18. Starter plunger
19. Plunger spring
20. Plunger cap
21. Plunger clip
22. Plunger cap cover
23. Holder
24. Cotter pin
25. Air adjusting spring
26. O-ring
27. Pilot air screw
28. Throttle valve
29. Needle
30. Throttle valve spring
31. Washer
32. Clip
33. Ring
34. Plate
35. Panhead with washer screw
36. Throttle valve
37. Packing
38. Clip
39. Mixing chamber top
40. Packing
41. Cap
42. Wire guide tube
43. Wire adjusting nut
44. Cap
45. Over flow pipe
46. Air vent pipe

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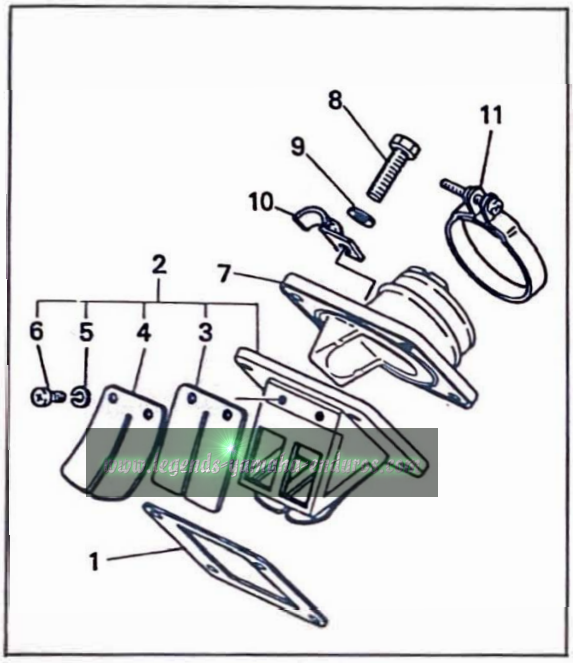
4-2. REED VALVE ASSEMBLY

A. Inspection

3.

Standard value"a":
9.0 ± 0.3 mm (0.354 ± 0.0118 in)

4.



1. Valve seat packing
2. Valve reed ass'y
3. Reed valve
4. Reed valve stopper
5. Spring washer
6. Panhead screw
7. Carburetor joint
8. Bolt
9. Plate washer
10. Clamp
11. Hose clamp

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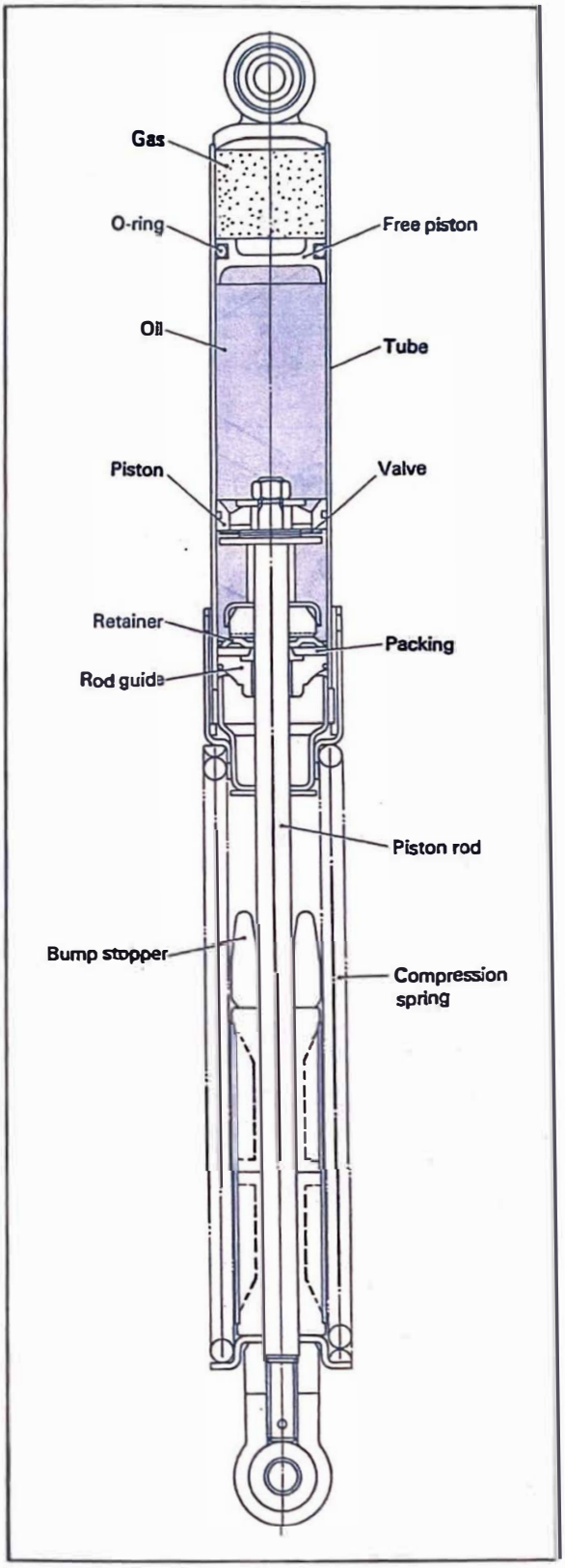
5-1. YAMAHA MONOCROSS SUSPENSION (DE CARBON SYSTEM)



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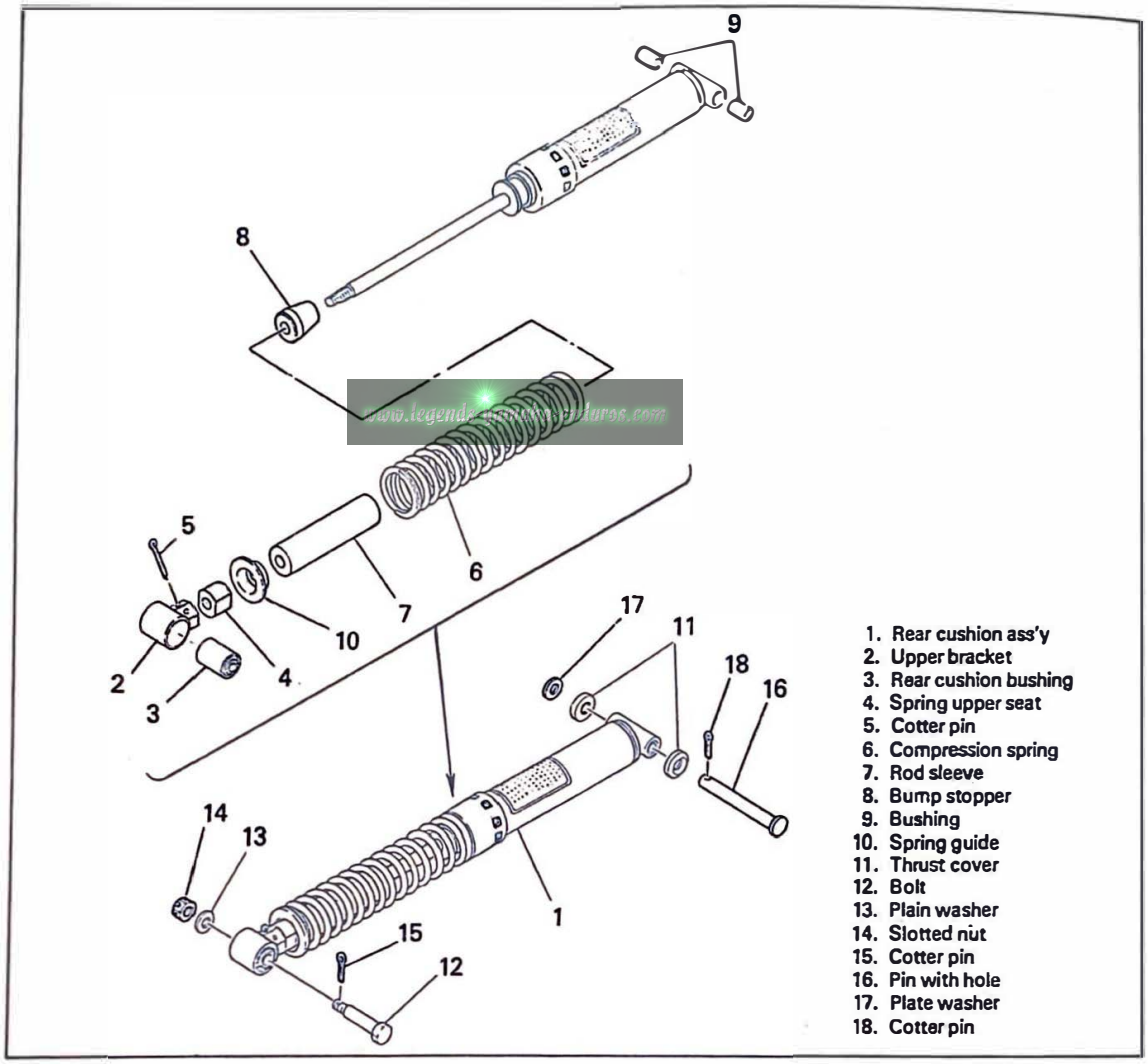
2.



1. Rear cushion ass'y
2. Upper bracket
3. Rear cushion bushing
4. Spring upper seat
5. Cotter pin
6. Compression spring
7. Rod sleeve
8. Bump stopper
9. Bushing
10. Spring guide
11. Thrust cover
12. Bolt
13. Plain washer
14. Slotted nut
15. Cotter pin
16. Pin with hole
17. Plate washer
18. Cotter pin

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D. Adjustment

The spring preload of the rear shock absorber can be adjusted to suit rider preference, weight and the course conditions.

- Decrease the spring pre-load for softer ride.

When bottoming feels excessive and too soft:

- Increase the spring pre-load.

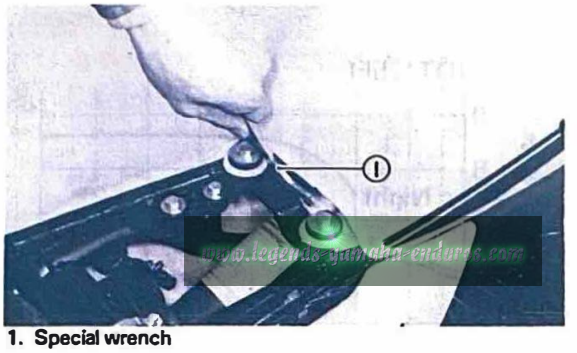
To adjust, use the special wrench (in the owner's tool kit) as shown. If the adjuster is raised, the spring becomes stiffer and if lowered the spring becomes softer.

1. Remove the seat.

1. Stiffer (H) 2. Softer (S) 3. Adjuster

2. Turn the adjuster in or out until adjustment is suitable.

	Hard		STD	Soft	
Adjusting Position	2	1	*	1	2



1. Special wrench

3. Install the seat and tighten the securing bolt.

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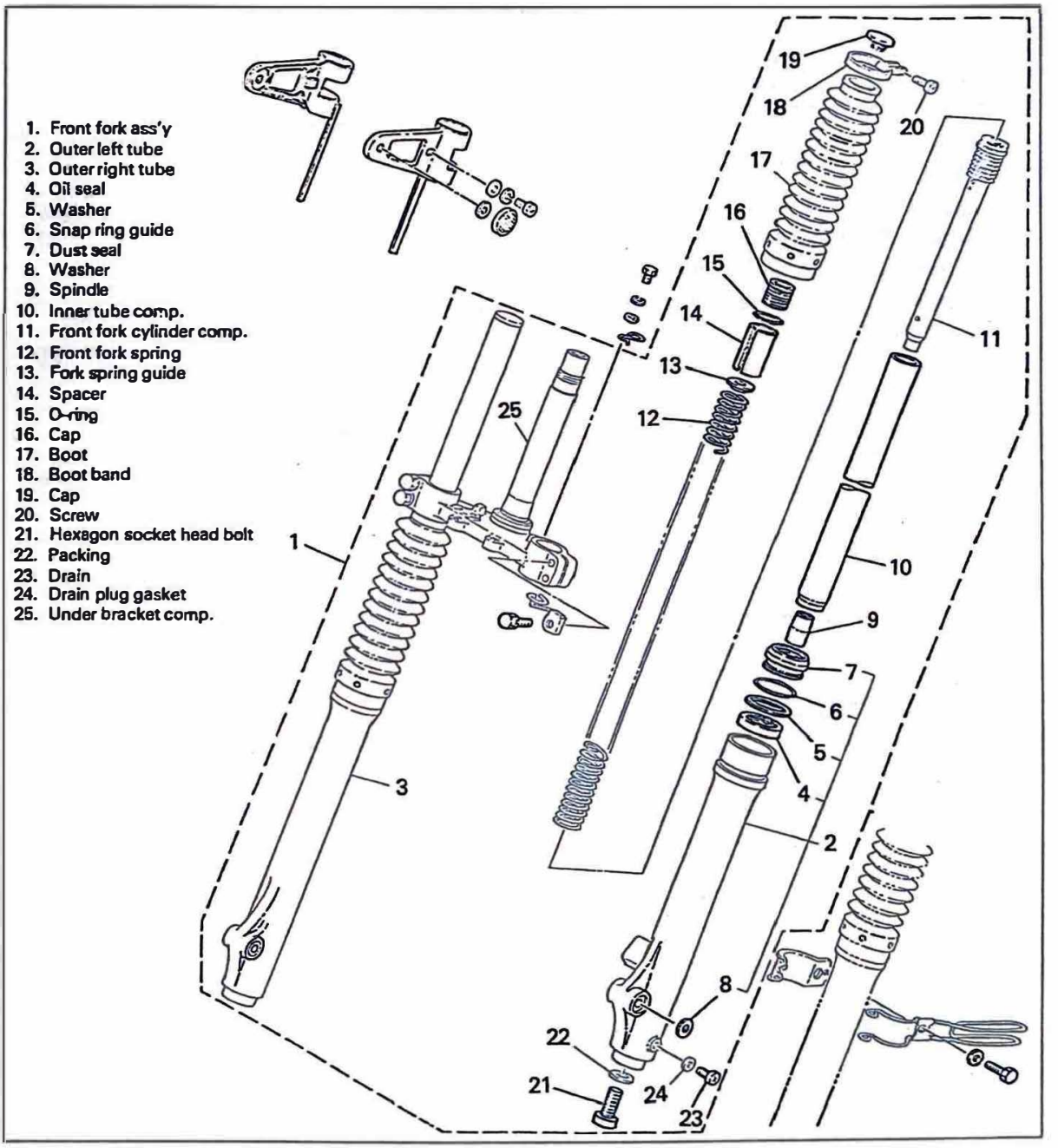
5-5. FRONT FORKS



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C. Reassembly

NOTE:

Apply a holding agent, such as "LOCTITE" to threads of bolt.

6.

Recommended oil:
Yamaha Fork Oil 10Wt or equivalent

7.

Tightening torque:
Cap bolt: 3.0 m-kg (22 ft-lb)
Pinch bolt: 2.5 m-kg (18 ft-lb)

ADDITION

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5-9. LUBRICATION

A. Brake/Clutch pivot shaft

Check the smooth operation of the levers and pedal. If not smooth, oil the pivot points.

Recommended lubricant:
Yamaha Chain and Cable Lube or
SAE 10W/30 motor oil

B. Side stand shaft pivot

Check the condition of side stand shaft pivot. If it is stiff, oil the pivot.

Recommended lubricant:
Yamaha Chain and Cable Lube of
SAE 10W/30 motor oil

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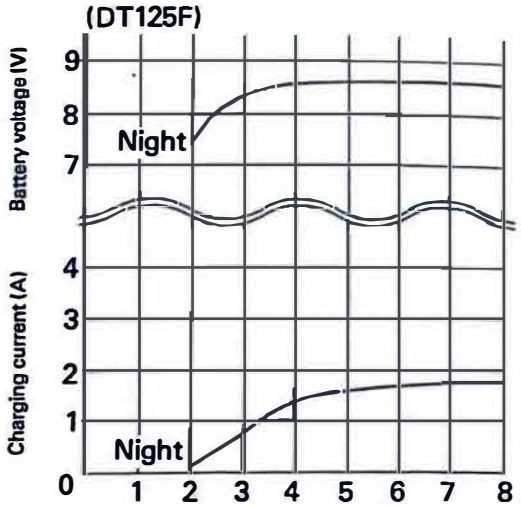
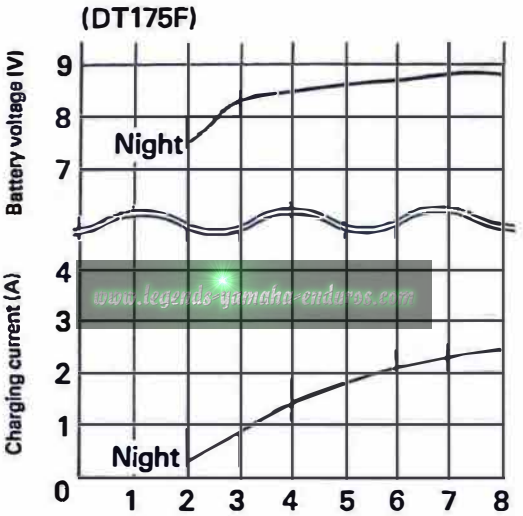
6-3. CHARGING SYSTEM

A. Charging output test





		Amperage (D.C.) Unit: Amperage	Voltage (D.C.) Unit: Volt
	r/min	0.8 ± 0.3	Nighttime
DT125F	3,000	0.4 ± 0.3	8.3
	8,000	1.9 ± 0.5	8.6
DT175F	3,000	0.8 ± 0.3	8.2
	8,000	2.4 ± 0.5	8.7

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7-1. GENERAL SPECIFICATION
A. General

Model	DT125F	DT175F
Model (I.B.M. No.) Frame I.D. & Starting Number Engine I.D. & Starting Number	2N4 2N4-000101 2N4-000101	2N5 2N5-000101 2N5-000101
Dimension: Overall Width (standard) Overall Height (standard)	 850 mm (33.5 in) 1,140 mm (44.9 in)	 ← ←
Weight: Net Weight	 97 kg (214 lb)	 98 kg (216 lb)
Performance: Minimum Turning Radius	 2,200 mm (86.6 in)	 ←

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B. Engine

Description: Engine Model Compression Ratio Nominal Effective	 2N4 10.6 : 1 7.2 : 1	 2N5 10.1 : 1 6.8 : 1
Piston: Piston Skirt Clearance Piston Over Size	 0.035 ~ 0.040 mm (0.0014 ~ 0.0016 in) 56.25, 56.50, 56.75, 57.00 mm (2.215, 2.224, 2.234, 2.244 in)	 0.040 ~ 0.045 mm (0.0016 ~ 0.0018 in) 66.25, 66.50, 66.75, 67.00 mm (2.608, 2.618, 2.628, 2.638 in)
Clutch: Friction Plate — Thickness/Quantity Clutch Plate — Thickness/Quantity	 3.0 mm (0.12 in) × 5 pcs. 1.2 mm (0.047 in) × 4 pcs.	 3.0 mm (0.12 in) × 6 pcs. 1.2 mm (0.047 in) × 5 pcs.
Transmission: Gear Ratio 3rd (Teeth) (Ratio) 4th 5th Transmission Gear Oil Quantity & Type Secondary Reduction Ratio & Method	 28/18 (1.555) 25/21 (1.190) 22/23 (0.956) 650 cc (0.7US. qt) (Replacement) 750 cc (0.8US. qt) (Overhauling) Yamalube 4-cycle oil or SAE 10W/30 "SE" motoroil or "GL" gear oil 49/14 (3.500) Chain	 ← ← ← ← ← ← 49/16 (3.062) Chain
Intake: Air Cleaner — Type/Quantity — Oil Grade	 Wet-foam rubber Yamalube 2-cycle oil or SAE 20 motor oil	 ← ←

Model	DT125F	DT175F
Carburetor:		
I.D. Mark	2N400	2N500
Jet Needle-clip Position (J.N.)	5GLB-3	5J11-4
Needle Jet (N.J.)	N-4	←
Cutaway (C.A.)	2.0	←
Pilot Jet (P.J.)	#22.5	#2.0
Air Screw (turns out) (A.S.)	1-1/4 ± 1/4	3/4 ± 1/4
Engine Idling Speed	1,350 ~ 1,500 r/min	←
Lubrication:		
Autolube Pump		
— Colar Code	Green	Gray
— Minimum Stroke	0.18 ~ 0.27 mm (0.007 ~ 0.011 in)	←
Autolube Pump		
— Reduction Ratio	62/1	40/1
— Minimum Output/ 200 stroke (100 cycle)	0.25 cc (0.0085 oz)	←
— Maximum Output/ 200 stroke (100 cycle)	2.58 cc (0.0872 oz)	←
Throttle Position (Adjusting Mark)	⊠	O
Oil Tank Capacity	1.0 lit (1.1 US. qt)	←
Oil Grade	Yamalube 2-cycle oil or 2-cycle engine oil with "BIA certified for service TC-W"	←

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C. Chassis

Steering system:		
Trail	124 mm (4.88 in)	←
Lock to Lock Angle	90°	←
Front suspension:		
Front Fork Spring		
Free Length	546.5 mm (21.5 in)	←
Wire Diameter × Winding Diameter	3.4 × 80 mm (0.134 × 3.4 in)	
	22.4 mm (0.88 in)	←
Spring Constant	K1: 0.25 kg/mm (14.0 lb/in)	←
	0 ~ 140 mm (0 ~ 5.5 in)	←
	K2: 0.333 kg/mm (18.5 lb/in)	←
	140 ~ 0 mm (5.5 ~ 0 in)	←
Inner Tube Outside Diameter	32 mm (1.26 in)	←
Oil Seal Type	SD-324410.5	←
Front Fork Oil Quantity & Type	186 cc (6.3 oz) Yamaha Fork Oil 10Wt or equivalent	←
Rear suspension:		
Gas pressure	15 kg/cm² (213 lb/in²)	←
Absorber stroke	82 mm (3.2 in)	←
Wheel travel	150 mm (5.9 in)	←
Compression spring		
Free length	258 mm (10.2 in)	←
Set length	249 mm (9.8 in)	←
Spring constant	K1: 4.022 kg/mm (225.2 lb/in) 0 ~ 67 mm (0 ~ 2.6 in)	←
	K2: 6.592 kg/mm (369.1 lb/in) 67 mm ~ (2.6 in ~)	←
Spring diameter	9.0 mm (0.35 in)	←

Model	DT125F	DT175F
Fuel Tank: Capacity	 6.8 lit (1.8 US. gal)	 ←
Wheel: Tire Pressure (Front) (Rear)	 Sae page 4 See page 4	 ← ←

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D. Electrical

Ignition system: — Model/Manufacture — Pulser coil resistance	 F001T25271 (Mitubishi) —	 F003T25072 (Mitubishi) 12.4Ω ± 10%
Ignition Coil: Model/Manufacture Primary winding resistance	 F006T41271 (Mitubishi) 1.0Ω ± 10% at 20°C	 F006T41174 (Mitubishi) ←
Spark plug: Type/Manufacture Spark plug gap CDI unit: Type/Manufacture	 N-3/Champion 0.6 ~ 0.8 mm (0.024 ~ 0.031 In) —	 ← ← F8T01171 (Mitubishi)
Charging system: Flywheel magneto Charging output (Nighttime)	 F001T25271 0.8 ± 0.3A or more/3,000 r/min 1.9 ± 0.5A or less/8,000 r/min	 F003T25072 ← 2.4 ± 0.5A or more/8,000 r/min
Horn: Model	 MF-6	 ←

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Tightening torque

Model	DT125F/DT175F
Engine:	
Cylinder head	M8 2.5 m-kg (18 ft-lb)
Spark plug	M14 2.5 m-kg (18 ft-lb)
Cylinder	M10 4.0 m-kg (29 ft-lb)
Primary drive gear	M12 6.0 m-kg (43 ft-lb)
Clutch boss	M14 5.0 m-kg (36 ft-lb)
Clutch spring	M5 0.5 m-kg (3.6 ft-lb)
Drive sprocket	M16 5.5 m-kg (40 ft-lb)
Kick crank	M8 1.5 m-kg (11 ft-lb)
Reed valve	M3 0.1 m-kg (0.7 ft-lb)
Rotor nut	M12 5.5 m-kg (40 ft-lb)
Chassis:	
Engine mount front upper rear upper rear lower	M8 2.5 m-kg (18 ft-lb) M8 2.5 m-kg (18 ft-lb) M10 4.0 m-kg (29 ft-lb)
Pivot shaft nut	M12 4.0 m-kg (29 ft-lb)
Front fork damper unit	M8 2.0 m-kg (15 ft-lb)
Rear shock absorber (frame)	M10 2.5 m-kg (18 ft-lb)
Handle crown pinch bolt fitting bolt upper bracket holder	M8 2.5 m-kg (18 ft-lb) M14 6.0 m-kg (43 ft-lb) M8 1.5 m-kg (11 ft-lb)
Inner tube	M10 3.5 m-kg (25 ft-lb)
Under bracket pinch bolt	M8 2.0m-kg (15 ft-lb)
Front axle nut	M10 4.8 m-kg (35 ft-lb)
Front fork damper unit	M10 2.0 m-kg (15 ft-lb)
Rear axle nut	M14 10.0 m-kg (72 ft-lb)
Driven sprocket bolt	M10 4.0 m-kg (29 ft-lb)

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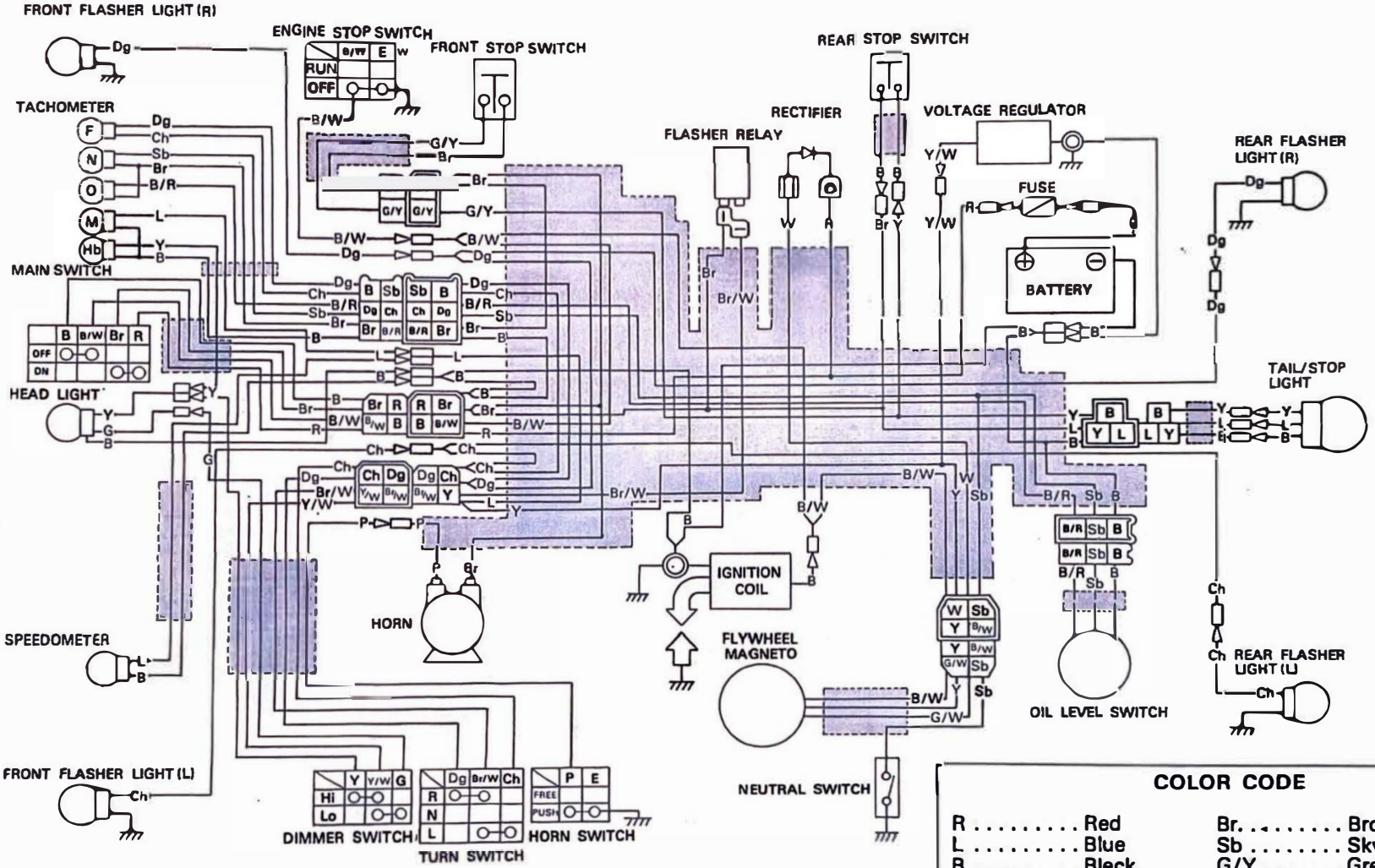
DT125F WIRING DIAGRAM



COLOR CODE

R	Red	Br.	Brown
L	Blue	Sb	Skyblue
B	Bleck	G/Y	Green/Yellow
P	Pink	B/R	Black/Red
Y	Yellow	Y/W	Yellow/White
G	Green	B/W	Black/White
W	White	G/W	Green/White
Dg	Dark green	Br/W	Brown/White
Ch	Dark brown		

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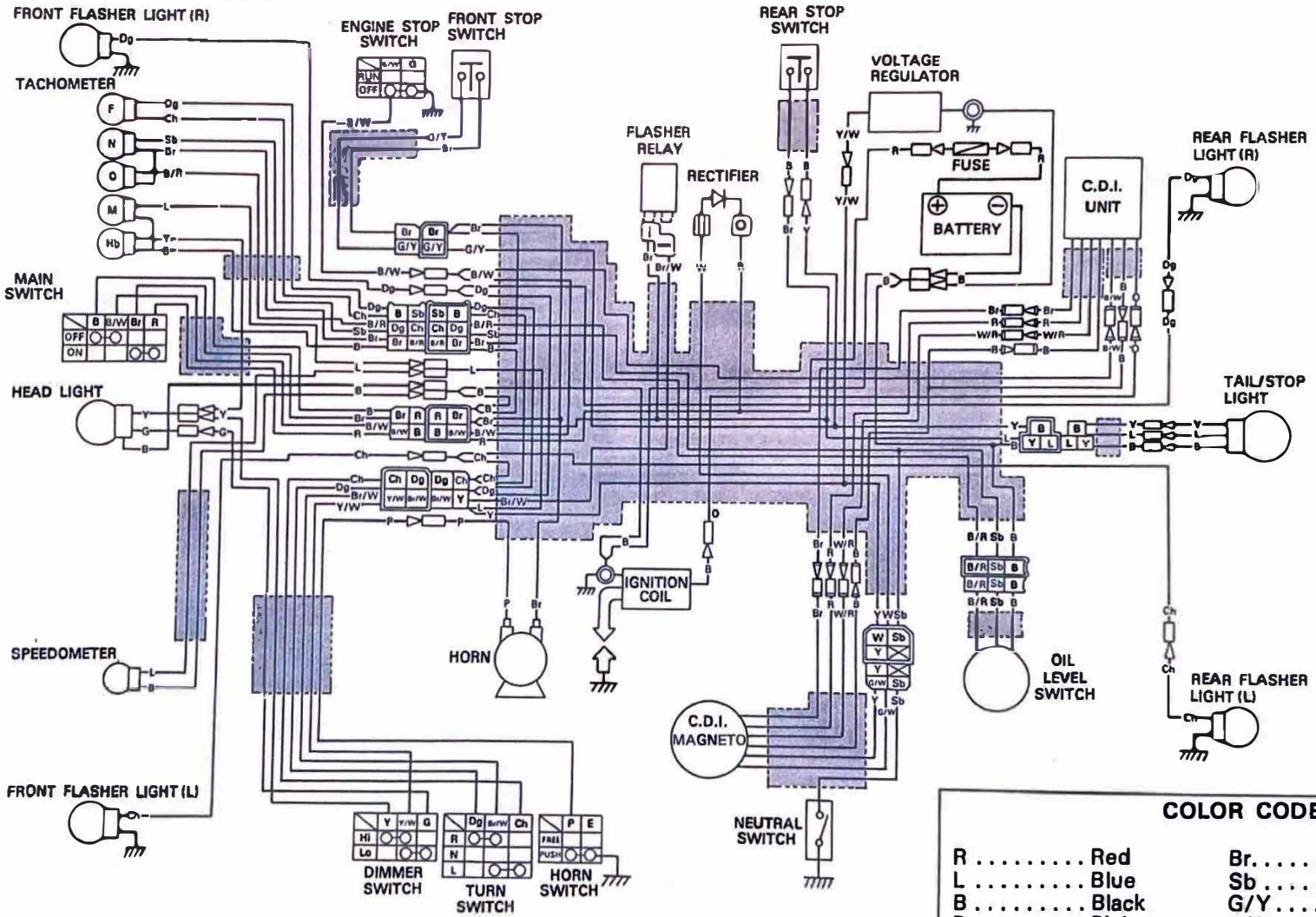
DT175F WIRING DIAGRAM



COLOR CODE

R	Red	Br.	Brown
L	Blue	Sb	Sky blue
B	Black	G/Y	Green/Yellow
P	Pink	B/R	Black/Red
Y	Yellow	W/R	White/Red
G	Green	Y/W	Yellow/White
O	Orange	B/W	Black/White
W	White	G/W	Green/White
Dg	Dark green	Br/W	Brwon/white
Ch	Dark brown		

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