YAMAHA

RD500LC '85

47X-SE2

SERVICE INFORMATION

RD500LC
1985 by Yamaha Motor Co., Ltd.
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NOTICE

This manual has been written by Yamaha Motor Company for use by Authorized Yamaha Dealers and their qualified mechanics. In light of this purpose it has been assumed that certain basic mechanical precepts and procedures inherent to our products are already known and understood by the mechanic. Without such basic knowledge, repairs or service to this model may render the machine unsafe, and for this reason we must advise that all repairs and/or service be performed by an Authorized Yamaha Dealer who is in possession of the requisite basic product knowledge.
Yamaha Motor Company, Ltd. is continually striving to further improve all models manufactured by the company. Modifications are therefore inevitable and changes in specifications or procedures will be forwarded to all Authorized Yamaha Dealers and will, where applicable, appear in future editions of this manual.

FOREWORD

This Service Information has been prepared to introduce revisions and new servicing points/data for the RD500LC ('85). For complete service information procedures it is necessary to use this publication together with the following microfiche service manual and service information.

RD500LC SERVICE MANUAL: 47X-ME2
RD500LC SERVICE INFORMATION: 47X-SE1

TECHNICAL PUBLICATIONS
SERVICE DIVISION
MOTORCYCLE OPERATIONS
YAMAHA MOTOR CO., LTD.

REVISION

The '84 Service Information contains wrong data. Please make correction as per the following.

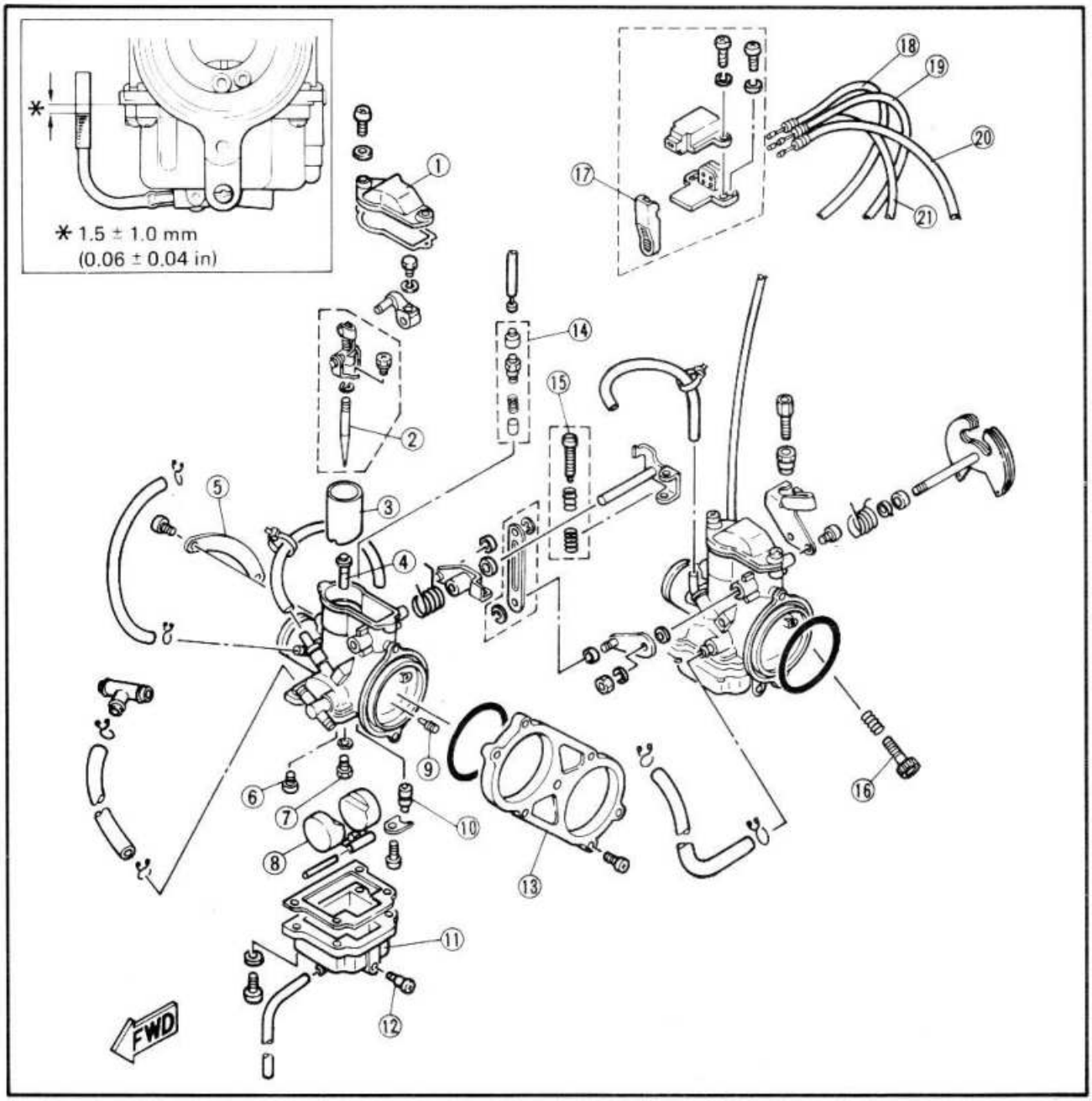
PAGE	ITEM	INCORRECT	CORRECT
11 35	CARBURETOR: Float Height	21.0 ± 1.0 mm (0.83 ± 0.04 in)	24.0 ± 1.0 mm (0.94 ± 0.04 in)
32	SPARK PLUG: Type	DR9HS	BR9HS
31 36	COOLANT: Total Amount	1.95 L (1.72 Imp qt, 2.06 US qt)	2.3 L (2.02 Imp qt, 2.43 US qt)

CARBURETION

CARBURETOR

1. Top cover
2. Jet needle
3. Throttle valve
4. Needle jet
5. Bracket
6. Pilot jet
7. Main jet
8. Float
9. Pilot air jet
10. Valve seat
11. Float chamber
12. Drain screw
13. Carburetor holder
14. Starter plunger
15. Synchronizing screw
16. Throttle stop screw
17. Choke lever
18. To right upper carburetor
19. To right lower carburetor
20. To left lower carburetor
21. To left upper carburetor

SPECIFICATIONS	
Main jet	#165
Main air jet	#1.8 (upper cylinder) #1.6 (lower cylinder)
Jet needle	5LT14-3
Needle jet	N-8
Pilot jet	#22.5
Pilot air jet	#1.4
Fuel level	1.5 ± 1.0 mm (0.06 ± 0.04 in)
Float height	24,0 ± 1,0 mm (0,94 ± 0,04 in)
Float valve seat	ϕ 2.8
Engine idle speed	1,250 r/min



APPENDICES

SPECIFICATIONS

GENERAL SPECIFICATIONS

Model	RD500LC	
Model Code Number: Engine Starting Number: Frame Starting Number:	47X 47X-004101 47X-004101	
Basic Weight: With Oil and Full Fuel Tank	205 kg (452 lb)	
Engine: Engine Type Cylinder Arrangement Displacement Bore x Stroke Compression Ratio Starting System	Liquid cooled, 2-stroke, gasoline V-4 cylinder 499 cm^3 56.4 x 50.0 mm (2.22 x 1.97 in) 6.4 : 1 (Upper cylinder), 6.0 : 1 (Lower cylinder) Kick starter	
Radiator Capacity: (Including All Routes)	2.3 L (2.02 Imp qt, 2.43 US qt)	
Spark Plug: Type/Manufacturer Gap	BR9HS/NGK, W27FSR/NIPPONDENSO 0.6 ~ 0.7 mm (0.024 ~ 0.028 in)	
Tire: Type Size (F) Size (R)	Tubeless 120/80 V16 YOKOHAMA F101/MICHELIN A48/DUNLOP K125 130/80 V18 YOKOHAMA R101/MICHELIN M48/DUNLOP K225	
Tire Pressure (Cold tire): Basic Weight: With Oil and Full Fuel Tank Maximum Load *	 205 kg (452 lb) 205 kg (452 lb)	
Cold Tire Pressure	Front	Rear
Up to 90 kg (198 lb) Load *	196 kPa (2.0 kg/cm^2, 28 psi)	226 kPa (2.3 kg/cm^2, 32 psi)
90 kg (198 lb) ~ Maximum Load *	226 kPa (2.3 kg/cm^2, 32 psi)	284 kPa (2.9 kg/cm^2, 42 psi)
High Speed Riding	226 kPa (2.3 kg/cm^2, 36 psi)	245 kPa (2.5 kg/cm^2, 36 psi)
* Load is the total weight of cargo, rider, passenger, and accessories.		

MAINTENANCE SPECIFICATIONS

Engine

Model		RD500LC
Piston:		
Piston Clearance		0.050 ~ 0.055 mm (0.0020 ~ 0.0022 in)
< Limit >		< 0.10 mm (0.004 in) >
Piston Size "D"		56.39 ~ 56.40 mm (2.220 ~ 2.221 in)
Measuring Point "H"		15 mm (0.6 in)
Oversize	1st	56.65 mm (2.230 in)
Oversize	2nd	56.90 mm (2.240 in)
Crankshaft:		
Crank Width	"A"	55.95 ~ 56.00 mm (2.2028 ~ 2.2047 in)
Assembly Width	"B"	167.85 ~ 168.00 mm (6.6083 ~ 6.6014 in)
< Runout Limit >	"C"	< 0.03 mm (0.0012 in) >
Big End Side Clearance	"D"	0.25 ~ 0.75 mm (0.0098 ~ 0.0295 in)
< Limit >		< 0.1 mm (0.004 in) >
Small End Free Play	"E"	0.4 ~ 0.6 mm (0.0157 ~ 0.0236 in)
< Limit >		< 2.0 mm (0.08 in) >
Carburetor:		
I.D. Mark		1GE00
Main Jet	(M.J.)	#165
Main Air Jet	(M.A.J.)	#1.8 (Upper cylinder), #1.6 (Lower cylinder)
Jet Needle	(J.N.)	5LT14-3
Needle Jet	(N.J.)	N-8
Cutaway	(C.A.)	2.0
Pilot Air Jet	(P.A.J.)	#1.4
Pilot Jet	(P.J.)	#22.5
Valve Seat Size	(V.S.)	2.8
Starter Jet	(G.S.)	#60
Fuel Level	(F.L.)	1.5 ± 1.0 mm (0.06 ± 0.04 in)
Float Height	(F.H.)	24.0 ± 1.0 mm (0.94 ± 0.04 in)
Engine Idle Speed		1,250 r/min
Coolant:		
Total Amount		2.3 L (2.02 Imp qt, 2.43 US qt)
Reservoir Tank Capacity		0.35 L (0.31 Imp qt, 0.37 US qt)
< From Low to Full Level >		0.25 L (0.22 Imp qt, 0.264 US qt)
Water Pump		
Type		Single-suction centrifugal pump
Reduction Ratio		28/18 (1.555)
Thermostat:		
Opening Temperature		65°C (149°F)
Full Open Temperature/Lift		71°C (160°F)/7 mm (0.28 in) or more

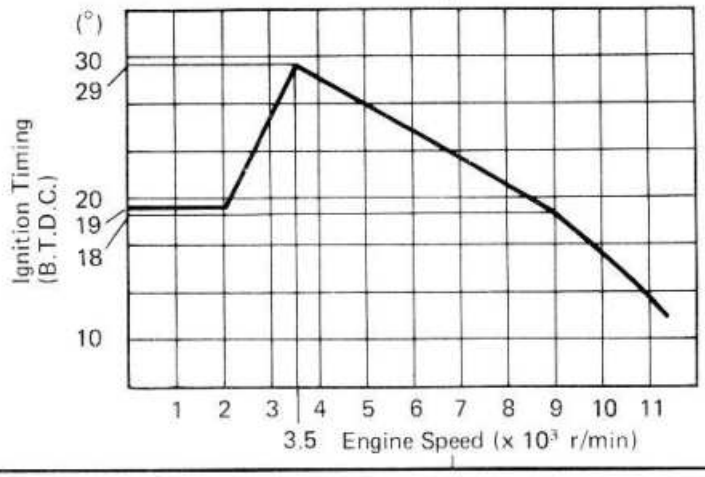
SPECIFICATIONS

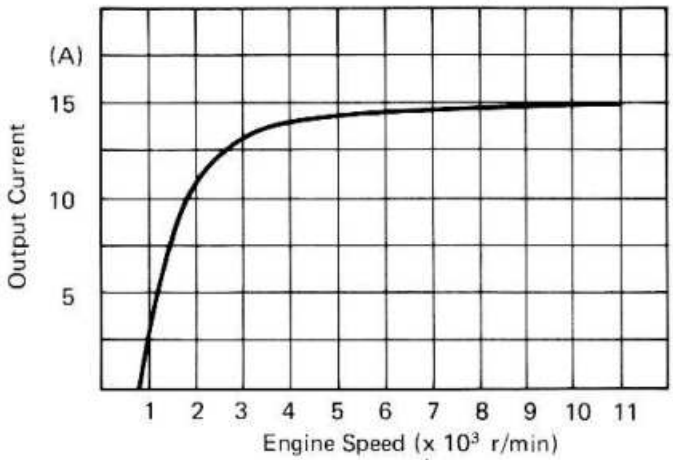
Chassis

Model		RD500LC
Front Suspension:		
Front Fork Travel		140 mm (5.51 in)
Fork Spring Free Length		498 mm (19.6 in)
< Limit >		< 493 mm (19.4 in) >
Collar Length		40 mm (1.57 in)
Spring Rate	K1	7.75 N/mm (0.79 kg/mm, 44.2 lb/in)
	K2	10.20 N/mm (1.04 kg/mm, 58.2 lb/in)
	K3	24.00 N/mm (2.45 kg/mm, 137 lb/in)
Stroke	K1	0 ~ 95 mm (0 ~ 3.74 in)
	K2	95 ~ 115 mm (3.74 ~ 4.53 in)
	K3	115 ~ 140 mm (4.53 ~ 5.51 in)
Optional Spring		No.
Oil Capacity		300 cm^3 (10.6 Imp oz, 10.1 US oz)
Oil Grade		Fork oil 7.5w or equivalent fork oil

Electrical

Model	RD500LC
Voltage:	12V
Ignition System:	
Ignition Timing (B.T.D.C.)	19° at 1,250 r/min
Advanced Timing (B.T.D.C.)	13° at 11,000 r/min
Advancer Type	Electrical



Model	RD500LC
A.C. Generator:	
Model/Manufacturer	47X51/NIPPONDENSO
Nominal Output	14V, 14A at 3,000 r/min
	
Stator Coil Winding Resistance (Color)	0.4Ω ± 20% at 20°C (68°F) (White – White)

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