

FZR 600/750R/1000 MODEL GUIDE '90

YAMAHA
Stig

OVERSEAS SERVICE
SERVICE DEVISION
MOTORCYCLE GROUP



FZR600/750R/1000

MODEL GUIDE

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1. INTRODUCTION

1-1 FZR600/FZR750R/FZR1000

Last year was a very good year for the FZR's. With the introduction of the totally redesigned FZR1000 and FZR750R, and the all-new FZR600, Yamaha established itself as the premier builder of supersports machinery. Each of these machines virtually dominates its class. Never before have production machines had such a wonderful blend of power, handling and all-around high performance. And never before have street riders, racers and motojournalists been so enthusiastic in their praise.

In 1990 the FZR's will be better yet. All benefit from detailed improvements. The FZR600 also gets new brakes along with new tyres. The FZR750R has new tyres. The FZR1000? Already close to perfection, it gets very little attention: improved adjustability for the suspension and a newly finished muffler. And all the FZR's sport new colors, graphics and other styling improvements.

This is going to be another very good year for the FZR's – another very bad year for the competition.

2. '90 MODEL NEW FEATURES

2-1 FZR600

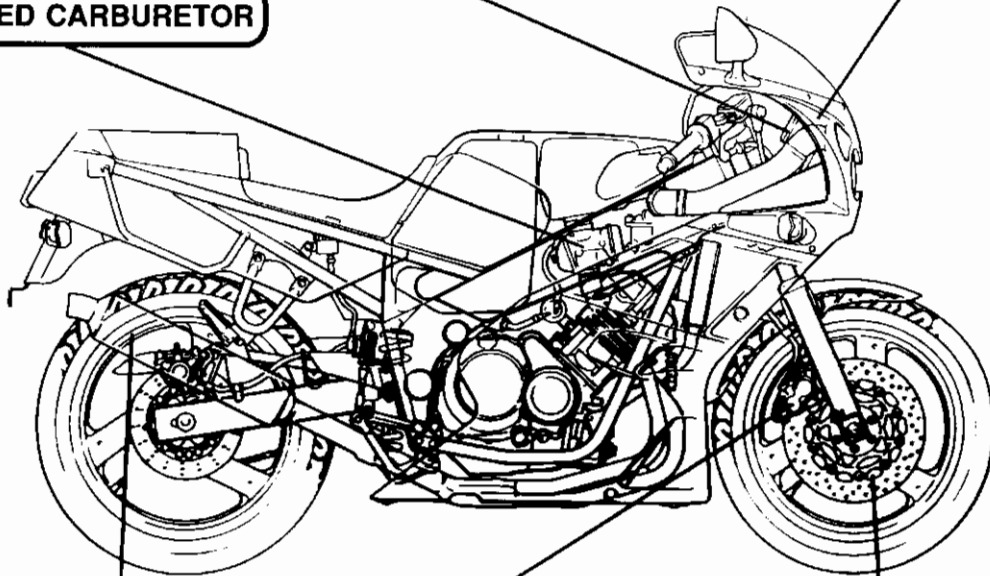
NEW DESIGN METER

- Improved Ergonomics and Appearances
- Another nice change for 1990 is the switch to FZR1000-style instrumentation. While the locations of the meters are the same, the panel is no sponge, like those on racing machines.

'90 NEW COLOR

- Combined with the new color scheme for 1990, these cosmetic changes make the 1990 FZR600 even more stylish.

ADVANCED CARBURETOR



NEW DESIGN HYDRAULIC CALIPER (4 pot unequal piston)

- Improved Braking Performance
- The most significant changes to the FZR600 for 1990 center around the brakes. Last year's 2-pot brake calipers have been replaced with 4-pot opposed piston calipers, similar to those used on the FZR1000. The pistons have different diameters, the leading piston being slightly smaller than the trailing piston.

STAIN PLATING MUFFLER

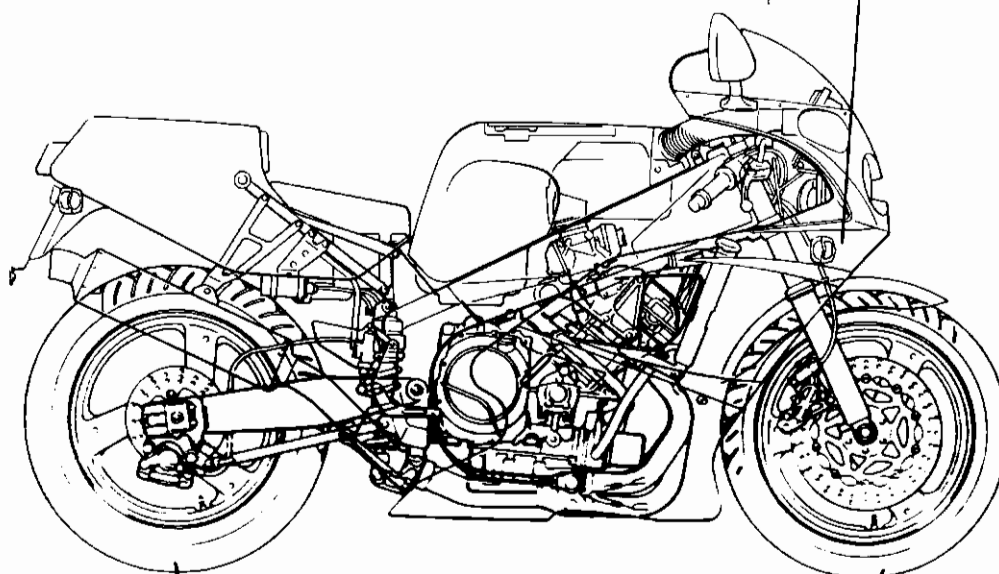
- Improved Appearances
- Appearances have been improved by covering the collector with a sheet of satinplated steel.

NEW DESIGN FLOATING DISK

- The discs have also been changed. The now feature a different hole pattern, for longer disc life.

2-2 FZR750R

'90 NEW COLOR
Color is changed.



REAR TYRE SIZE CHANGED	FRONT TYRE SIZE CHANGED
170/60ZR17 ↓ 180/55ZR17	120/70ZR17 ↓ 130/60ZR17
<p>New for 1990 are the Michelin Hi-Sport Radial tyre, replacing the A59X/M59X combination. Last year's 120/70 front is now 130/60; the 170/60 rear is now 180/55. These tyres were designed specifically for production racing and give excellent traction. Wheel sizes and rim widths remain unchanged.</p>	

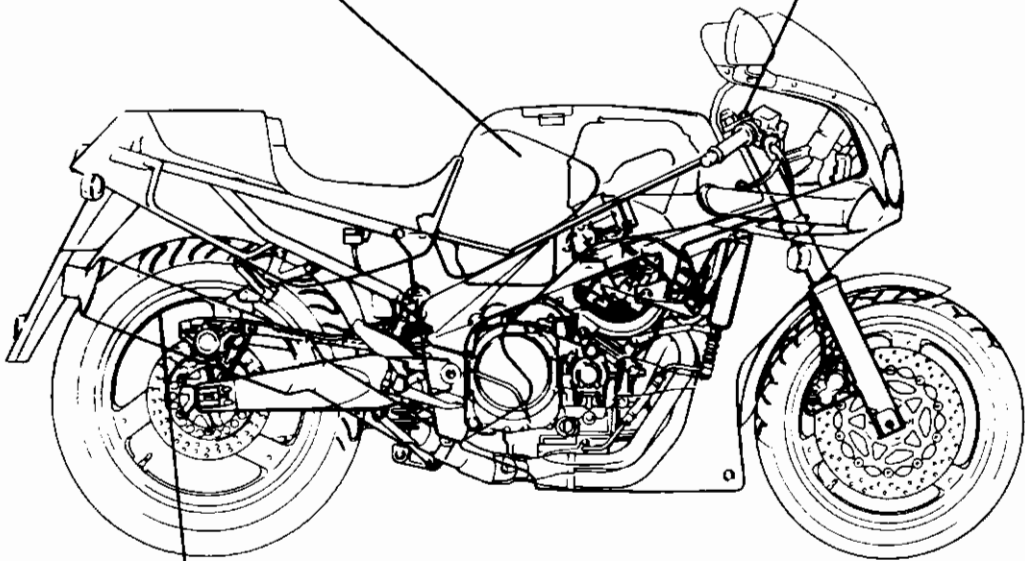
2-3 FZR1000

In addition to the machine's new colors and graphics. Together with the new color scheme, the 1990 FZR1000 is truly a stunning example of motorcycle styling.

Front fork spring preload adjustment method is changed

- The suspension can be adjusted so each rider can get the best results from it.

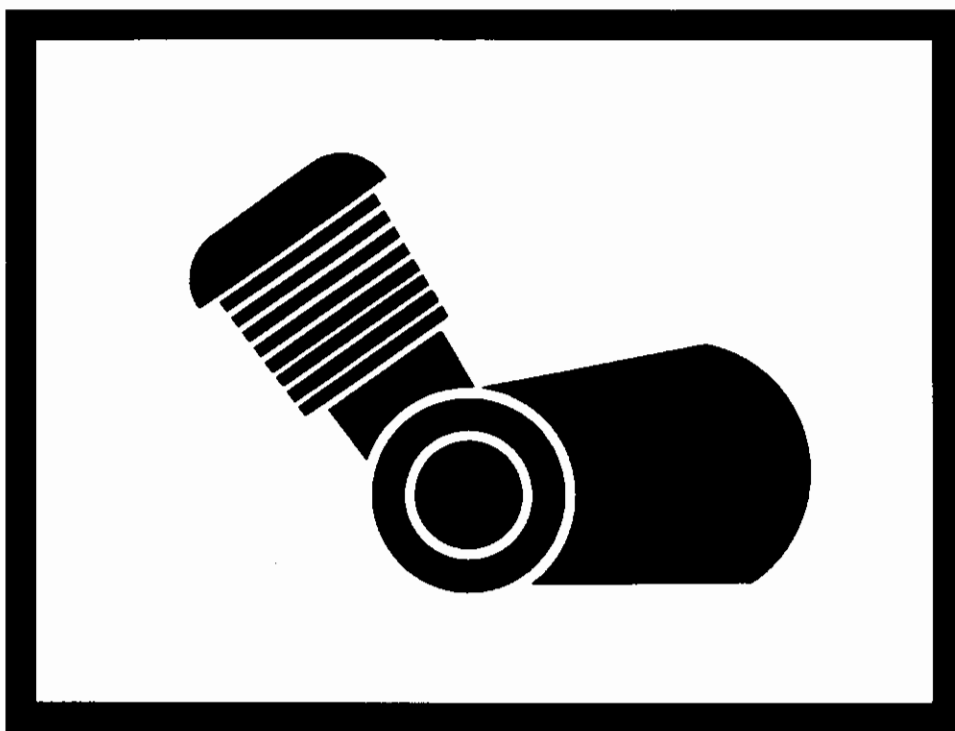
Changes for 1990 are minor and center around the front forks and exhaust pipe. New screw-type preload adjusters now extend above the tube tops and are turned with a wrench. The old method required use of a screwdriver to turn the recessed adjuster. With the new method, finer adjustments can be made much easier.



The exhaust pipe and muffler

- Muffler is changed to improve appearances. The exhaust pipe and muffler have been refinished for improved appearances. The 1989 model featured a black pipe from the EXUP box rearward, with a satinplated muffler cover. For 1990, the pipe is white-chrome plated and the muffler cover is baked stainless steel. The baking process turns the stainless a gold color, which contrasts beautifully with the white pipe.

3. CHANGES BETWEEN '89 AND '90 MODEL



3-1ENGINE

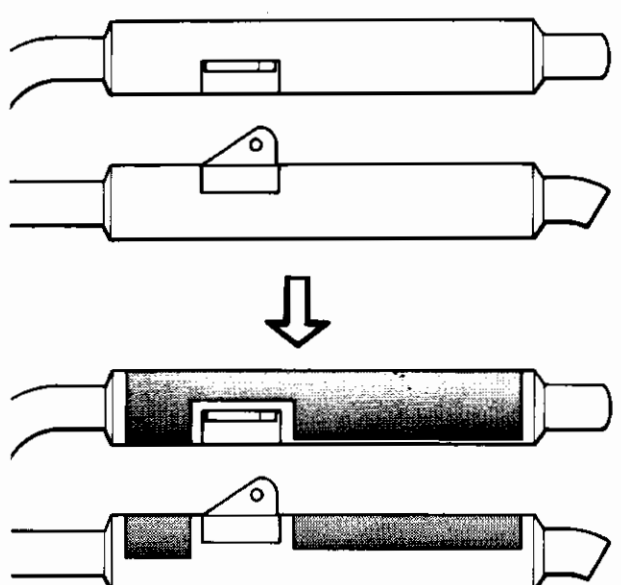
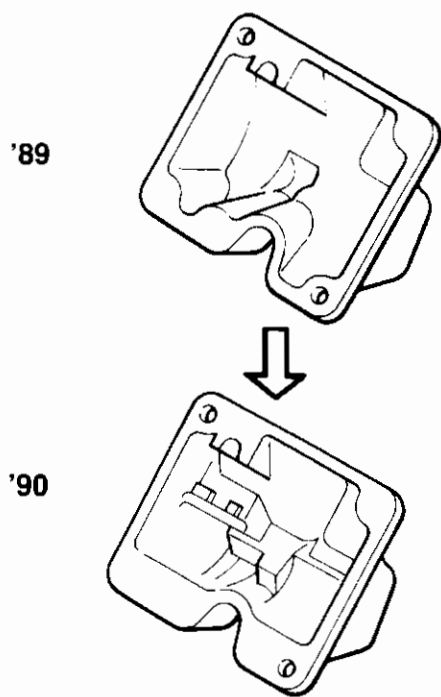
FZR600

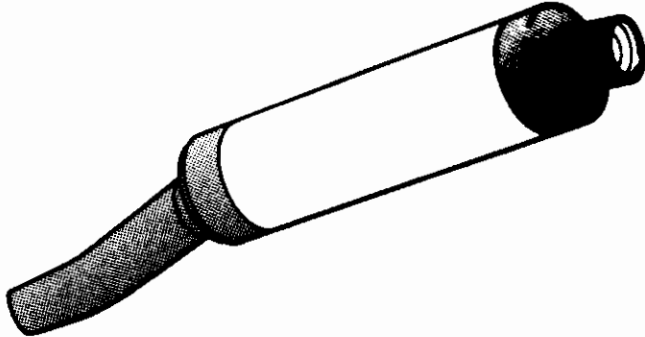
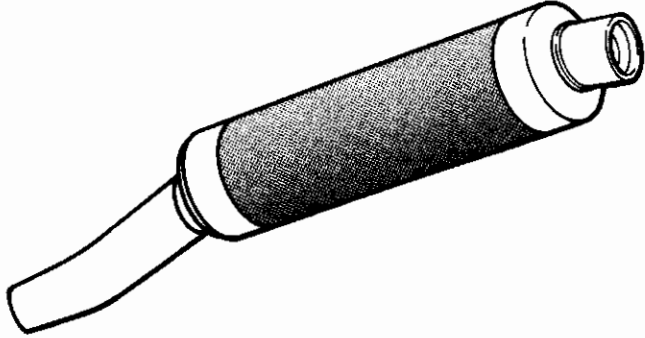

MUFFLER ASSEMBLY6

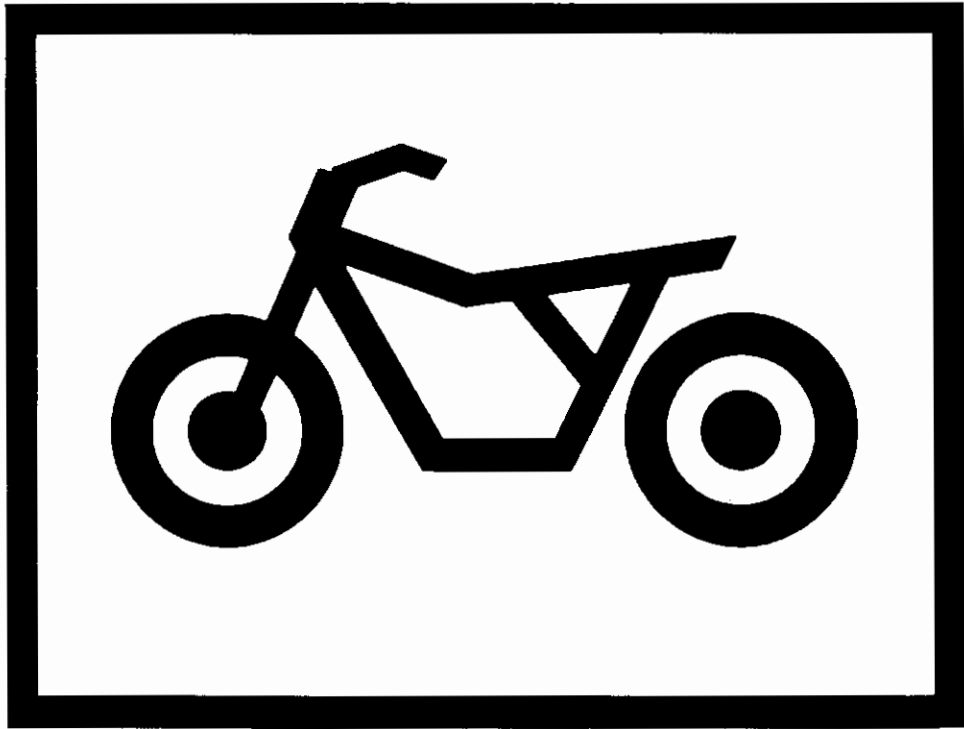
CARBURETOR ASSEMBLY6

FZR1000

MUFFLER AND SILENCER7

Change	Part No.	Interchangeability
<p>MUFFLER ASSEMBLY</p> <ul style="list-style-type: none"> A cover plate which is painted black and then satin coated on top is introduced.  <p>'89</p> <p>'90</p> <p>★ To improve the commercial value</p>	<p>3HE-14710-00</p> <p style="text-align: center;">↓</p> <p>3HE-14710-10</p>	<p>Interchangeable</p>
<p>CARBURETOR ASSEMBLY</p> <ul style="list-style-type: none"> The float chamber is re-designed.  <p>'89</p> <p>'90</p> <p>★ To prevent the overflow of fuel into the float chamber during riding on rough roads.</p>	<p>Contact the overseas service section.</p>	<p>The chamber is interchangeable as an individual item.</p>

Change	Part No.	Interchangeability
<p>MUFFLER AND SILENCER</p> <ul style="list-style-type: none"> • Defuser Color is changed from Black to White Chrome plated.  <ul style="list-style-type: none"> • The silencer is changed to stainless baked type (satin plated).  <p>★ To improve the appearances of the silencer.</p>	<p>3GM-14710-02  3GM-14710-10</p>	<p>Interchangeable</p>



3-2 CHASSIS

FZR600

BRAKE CALIPER9

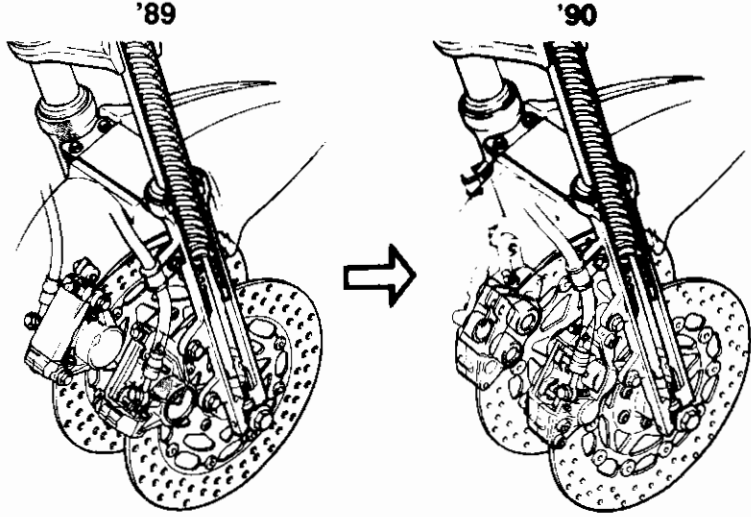
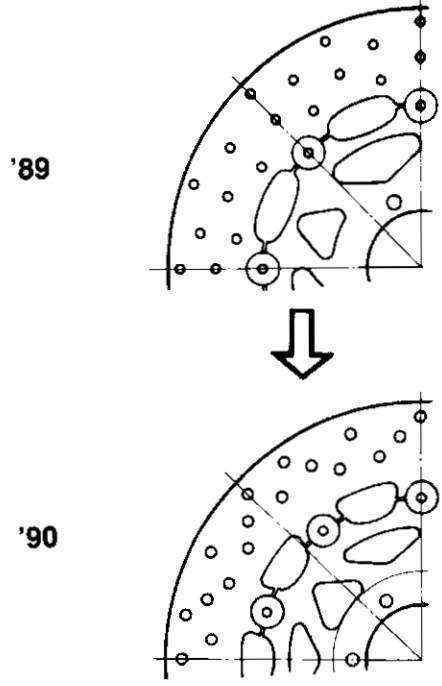
BRAKE DISK9

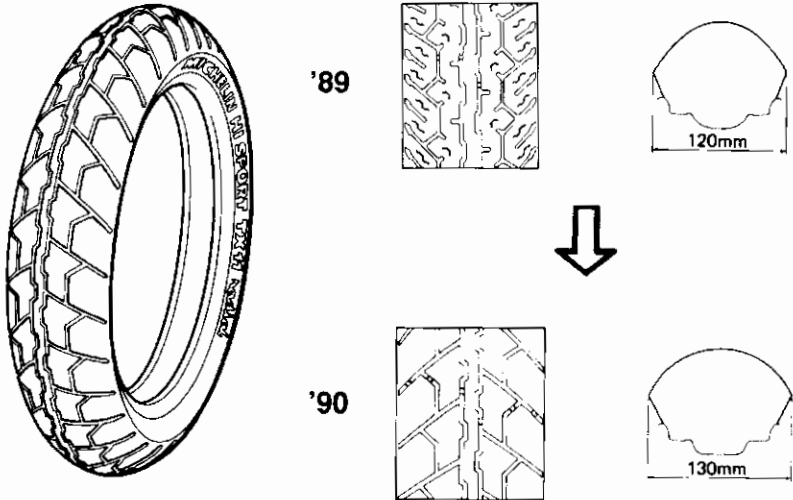
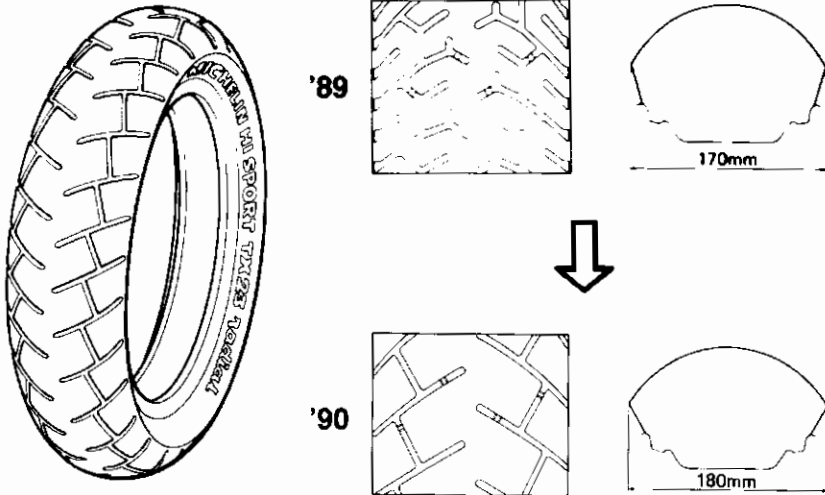
FZR750R

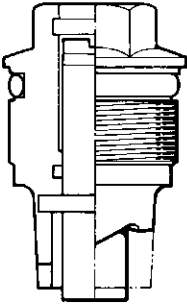
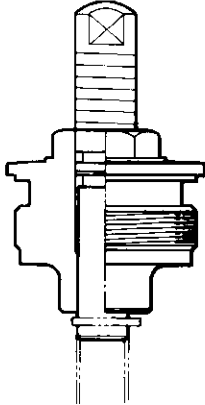

TYRE10

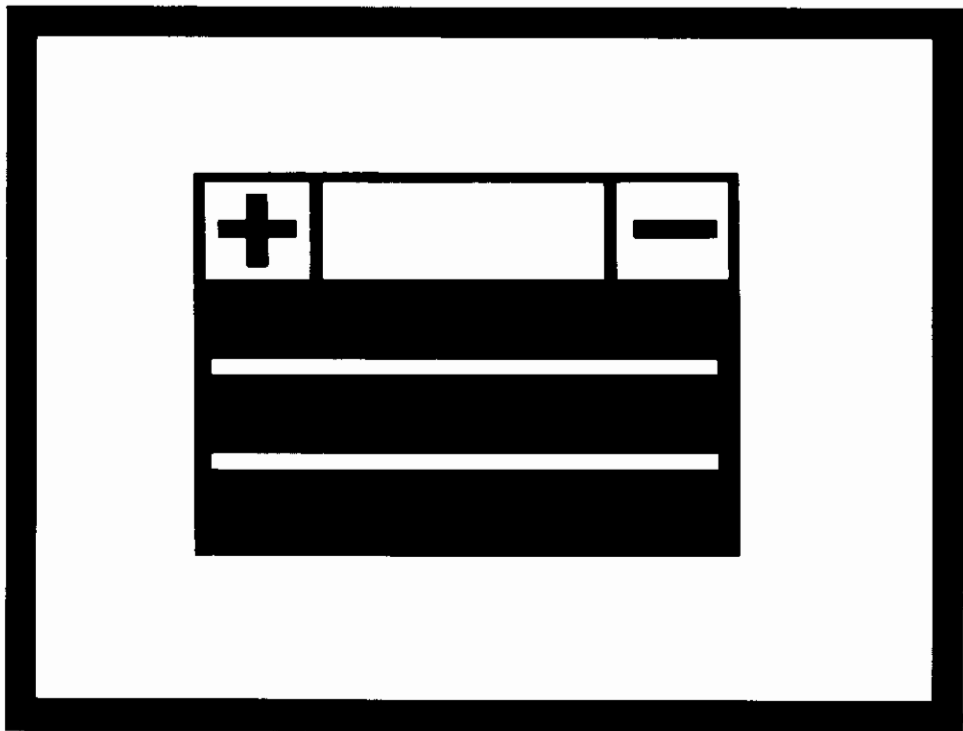
FZR1000

FRONT FORK11

Change	Part No.	Interchangeability
<p>BRAKE CALIPER</p> <ul style="list-style-type: none"> • 2-Pot opposed caliper → 4 Pot different sized piston <p> $\varnothing 45.37 \text{ mm} \times 2 \rightarrow \varnothing 30.25 \text{ mm} \times 2$ $\varnothing 33.96 \text{ mm} \times 2$ </p>  <p>★ The caliper is modified to improve the braking performance.</p>	<p>Left 3HE-2580U-00 Right 3HE-2580T-00</p> <p style="text-align: center;">↓</p> <p>Left 3HE-2580U-50 Right 3HE-2580T-50</p>	<p>Interchangeable as a set assembled with the front fork</p>
<p>BRAKE DISK</p> <ul style="list-style-type: none"> • Holes are Rearranged in Disc.  <p>★ To improve the durability of the disk</p>	<p>3CV-25830-10</p> <p style="text-align: center;">↓</p> <p>3RG-2581T-00</p>	<p>Interchangeable</p>

Change	Part No.	Interchangeability
<p>TYRE Front</p> 	<p>MICHELIN (A59X) 120/70 ZR17 ↓ (TX11) 130/60 ZR17</p>	
<p>Rear</p> 	<p>MICHELIN (M59X) 170/60 ZR17 ↓ (TX23) 180/55 ZR17</p>	
<p>★ The Michelin Hi-sport tyres are adopted, which are wider for better grip on roads, thus suitable for sport riding. While the A59X/M59X tyres ('89) are designed with a focus on total performance on streets, the TX11/23 tyres are developed for racing competitions, with a capability of circuit riding.</p>		

Change	Part No.	Interchangeability
<p>FRONT FORK</p> <ul style="list-style-type: none"> • Spring Preload Adjustment method is changed. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>'89</p>  </div> <div style="font-size: 2em;">→</div> <div style="text-align: center;"> <p>'90</p>  </div> </div> <p>★ To be able to fine-adjust the spring in the initial setting, the adjuster is changed from the cam type to the thread type.</p>	<p>3GM-23111-00  3GM-23111-10</p>	<p>Interchangeable</p>



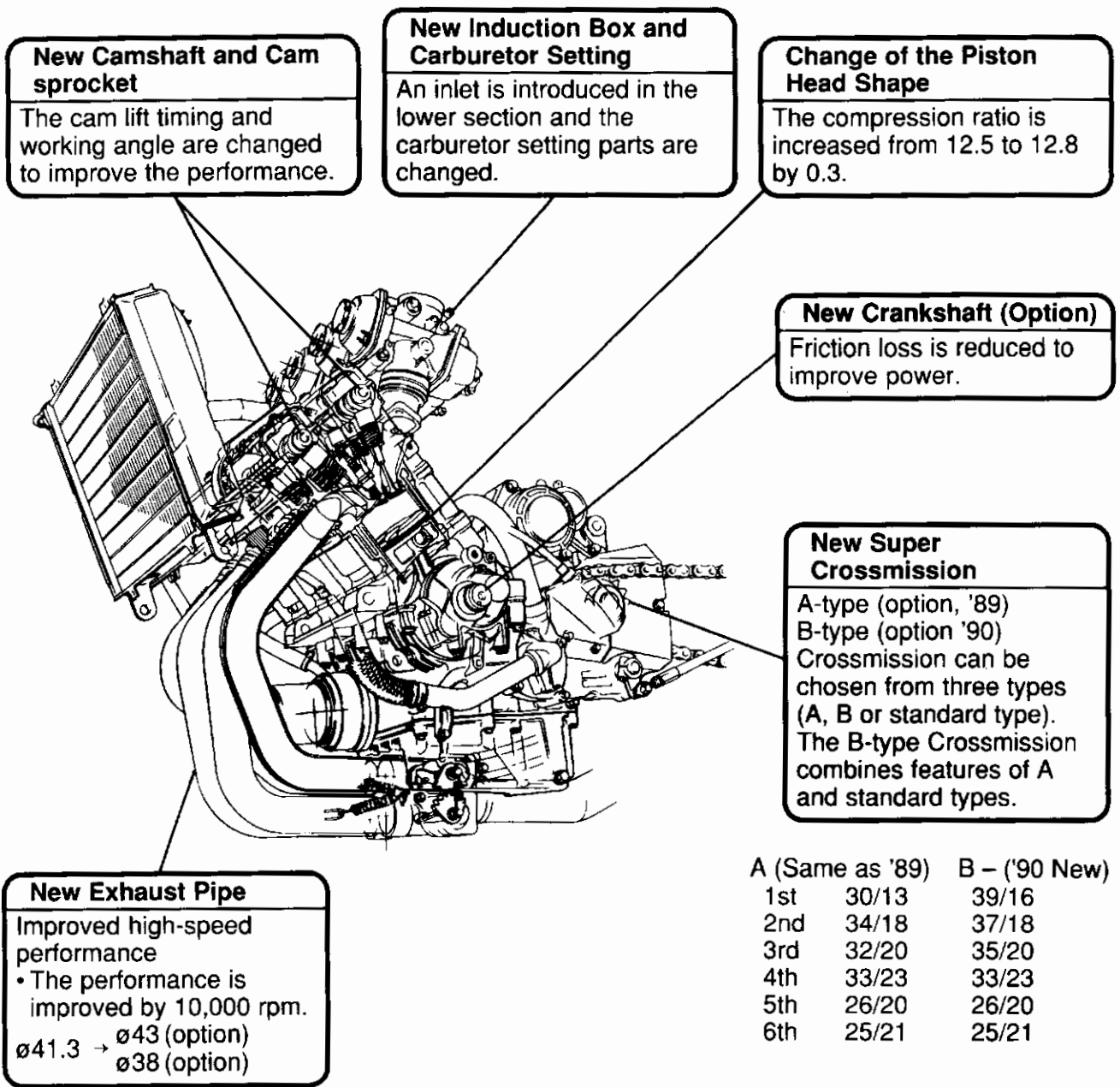
3-3 ELECTRICAL

FZR600

METER ASSEMBLY 13

Change	Part No.	Interchangeability
<p>METER ASSEMBLY</p> <ul style="list-style-type: none"> The FZR1000 type of meter is adopted. <div style="text-align: center;"> </div> <p>'89</p> <p>'90</p> <p>★ To improve the ergonomics and appearances of the meters</p>	<p>METER ASSEMBLY 3HE-83500-00</p> <p style="text-align: center;">↓</p> <p>3HE-83500-50</p> <p>STAY ASSEMBLY 3HE-28356-00</p> <p style="text-align: center;">↓</p> <p>3HE-28356-20</p>	<p>Interchangeable as a set assembled with the meter stay</p>

3-4 CHANGES IN RACING-KIT PARTS FOR THE FZR750R



New Camshaft and Cam sprocket
 The cam lift timing and working angle are changed to improve the performance.

New Induction Box and Carburetor Setting
 An inlet is introduced in the lower section and the carburetor setting parts are changed.

Change of the Piston Head Shape
 The compression ratio is increased from 12.5 to 12.8 by 0.3.

New Crankshaft (Option)
 Friction loss is reduced to improve power.

New Super Crossmission
 A-type (option, '89)
 B-type (option '90)
 Crossmission can be chosen from three types (A, B or standard type).
 The B-type Crossmission combines features of A and standard types.

New Exhaust Pipe
 Improved high-speed performance
 • The performance is improved by 10,000 rpm.
 ø41.3 → ø43 (option)
 ø38 (option)

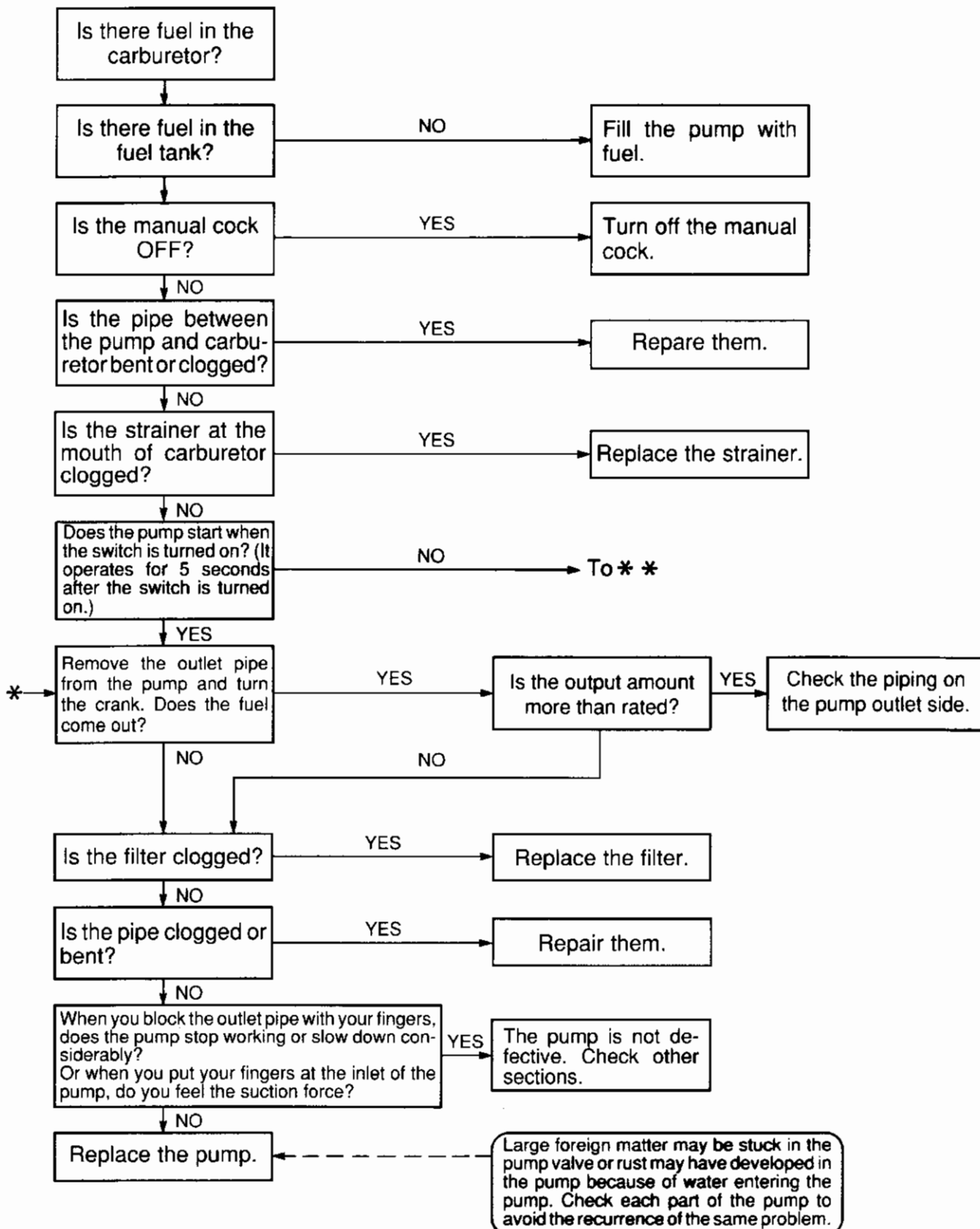
	A (Same as '89)	B - ('90 New)
1st	30/13	39/16
2nd	34/18	37/18
3rd	32/20	35/20
4th	33/23	33/23
5th	26/20	26/20
6th	25/21	25/21

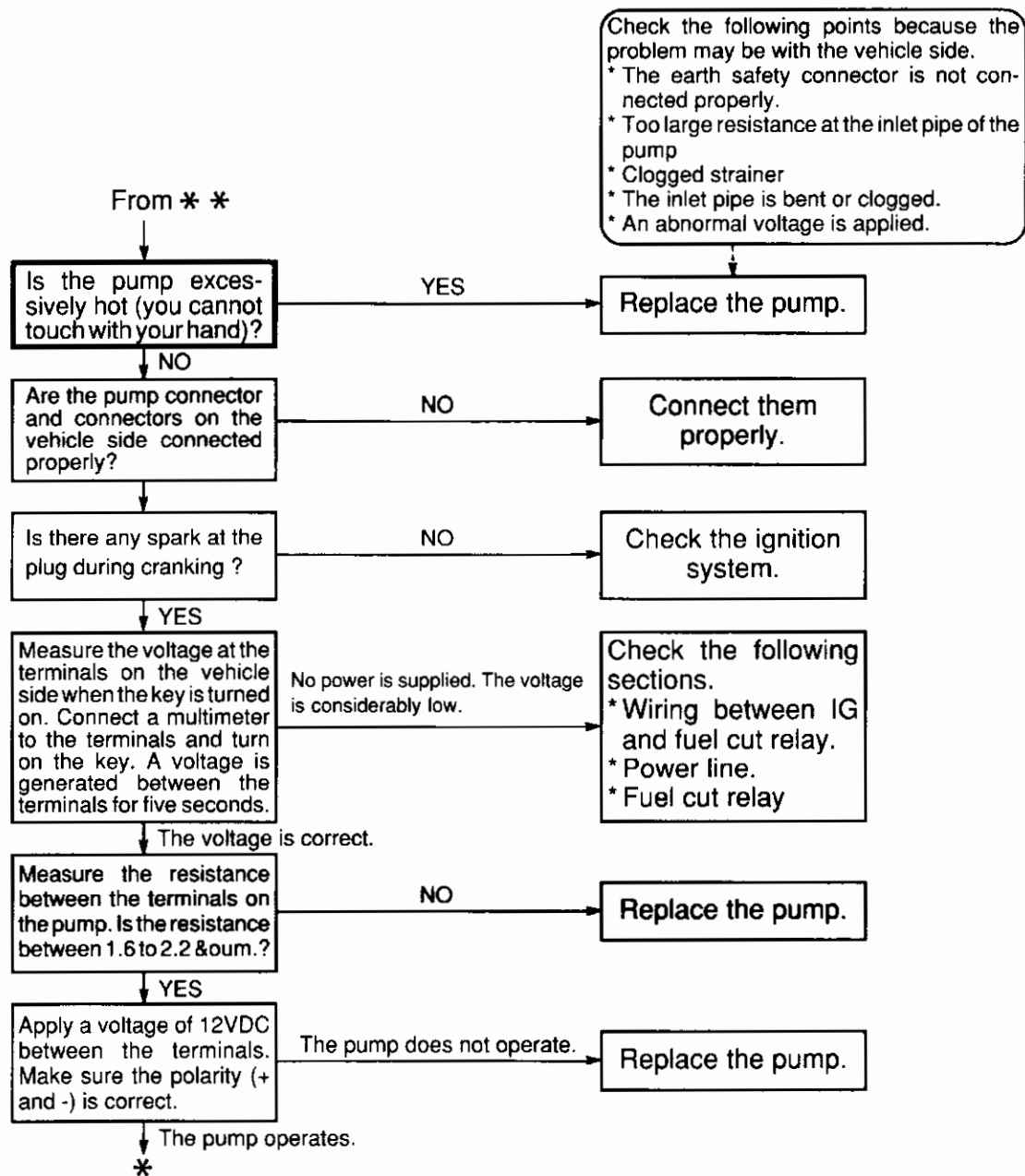
* All racing-kit parts are available at YAMAHA ENGINEERING Co.

4. TECHNICAL INFORMATION

4-1 TROUBLESHOOTING OF ELECTROMAGNETIC DIAPHRAGM FUEL PUMP

FZR600/FZR1000





5. SERVICE DATA

5-1 TYRE DESTINATION LIST

FZR600

Model	Destination	Tyre Manufacture	
		DUNLOP	BRIDGESTONE
3HJ2	AUSTRIA		○
3HE3	ENGLAND FRANCE ITALY	○	
3HE3	BELGIUM DENMARK FINLAND NETHERLANDS NORWAY SWEDEN		○
3RG2	GERMANY (50 ps)		○
3RH2	GERMANY (27 ps)		○
3HF3	SWITZERLAND		○
3HE4	SPAIN	○	

* This table shows OEM (Original Equipment Manufacturer) tyres.

	Tyre Manufacture	Size	Model
OEM	DUNLOP	Front : 110/70V-17-V240	K275F
		Rear : 130/70V-18-V240	K275
	BRIDGESTONE	Front : 110/70V-17-V240	G549
		Rear : 130/70V-18-V240	G550
Replace	PIRELLI	Front : 110/70-V17	MT79
		Rear : 130/70-V18	MT78

FZR750R

Model	Destination	Tyre Manufacture	
		MICHELIN	PIRELLI
All model	All over the world	○	

Replace	All model	○	○
Front	130/60 ZR 17	TX 11	MP7S
Rear	180/55 ZR 17	TX23	MP7S

FZR1000

Model	Destination	Tyre Manufacture			
		DUNLOP	BRIDGESTONE	MICHELIN	PIRELLI
3LE2	AUSTRIA GERMANY SWEDEN			○	
3LG2	ENGLAND	○			
3LF2	FRANCE			○	
3GM3	ITALY, etc		○		
3GM4	SPAIN		○		

Peplace	All model	○	○	○	○
Front	130/60 ZR 17	K510 F	CY 15	A59 X	MP7S
Rear	170/60 ZR 17	K510	CY 16	M59 X	MP7S

5-2 HEADLIGHT BEAM VARIATION FZR750R

☀ = LIGHT "ON"
○ = LIGHT "OFF"

Destination		Lighting	Bulb to be used		Head light type
FRANCE	HI	☀ ○	12V 55W	12V 55W	Harogen (Yellow bulb)
	LO	○ ☀			
W. GERMANY	HI	☀ ☀	12V 55W	12V 60/50W	Harogen
	LO	○ ☀			
ENGLAND	HI	☀ ☀	12V 35/35W	12V 35/35W	Harogen
	LO	☀ ☀			
ITALY	HI	☀ ☀	12V 35/35W	12V 35/35W	Seald beam
	LO	☀ ☀			
SWITZERLAND	HI	☀ ○	12V 55W	12V 55W	Harogen
	LO	○ ☀			

5-3 SPECIFICATIONS

AUSTRIA : (A) GERMANY : (D) ITALY : (I) BELGIUM : (B) SWEDEN : (S)
 FRANCE : (F) ENGLAND : (GB) HOLLAND : (NL) DENMARK : (DK)
 NORWAY : (N) FINLAND : (SF) SPAIN : (E) SWITZERLAND : (CH)

FZR600

ITEM		SPECIFICATION			
Type Name		3HE 3RG (50ps D), 3RH (27ps D) 3HJ (A) 3HF (CH)			
Model		FZR600, FZR500 (A)			
Type		3HE-026101 3RG-002101 (50ps D) 3RH-003101 (27ps D) JYA3HES0 * LA046101 (E) 3HF-002101 (CH)			
Total Length		2165 mm 2095 mm (F, E)			
Wheel base		1420 mm			
Overhang		295 mm 450 mm 380 mm (F, E)			
Minimum distance from ground		135 mm			
Total Width		700 mm			
Total Handle Width		615 mm			
Total Height		1160 mm			
Weight		102 kg (Net) 88 kg (E) (Dry) 99 kg (Net) 91 kg (E) (Dry) 201 kg (with oil and full fuel tank) (Net) 179 kg (E) (without oil and fuel) (Dry)			
		(I, B, S, CH, A)	(F, GB, NL, DK, N, A)	(SF, E)	(D)
With one person	Front	124 kg	125 kg	127 kg	130 kg
	Rear	147 kg	151 kg	154 kg	161 kg
	Total	271 kg	276 kg	281 kg	291 kg
With two persons	Front	124 kg	125 kg	127 kg	136 kg
	Rear	217 kg	226 kg	234 kg	245 kg
	Total	341 kg	351 kg	361 kg	381 kg
		(D, F, B, I)	(SF, E)	(OTHERS)	
Max. allowable weight	Front	148 kg	135 kg	130 kg	
	Rear	245 kg	245 kg	231 kg	
	Total	393 kg	380 kg	361 kg	
Max. allowable axle weight	Front	191kg/2.90 (kg/cm ²)	191kg/2.90 (kg/cm ²)	180kg/2.90 (kg/cm ²)	
	Rear	245kg/2.90 (kg/cm ²)	245kg/2.90 (kg/cm ²)	231kg/2.90 (kg/cm ²)	

ITEM		SPECIFICATION
Tyre		
Size	Front	110/70V 17-V240 110/70 V17 (PIRELLI)
	Rear	130/70V 18-V240 130/70 V18 (PIRELLI)
Manufacture	Front	BRIDGESTONE/DUNLOP/PIRELLI
	Rear	BRIDGESTONE/DUNLOP/PIRELLI
Pattern	Front	G549/K275F/MT79
	Rear	G550/K275/MT78
Radius of Tyre	Front	276 mm
	Rear	307 mm
Rim		
Type	Front	Cast
	Rear	Cast
Rim Size	Front	MT 3.00 x 17
	Rear	MT 3.50 x 18
Suspension		
System	Front	Telescopic
	Rear	Swing arm
Type of Cushion Spring	Front	Coil spring
	Rear	Coil spring
Wheel Travel	Front	130 mm
	Rear	115 mm
Steering		
Caster Angle of Front Wheel		25°
Trail of Front Wheel		94 mm
Steering Angle		28°
Minimum Round Radius		3.5 m
Handle Lock Approval (D only)		Same as '89 Model FZ750 (3KS)
Chassis		
Frame Type		Double cradle
Passenger's Grip		Out
Fuel		
Type		Gasoline
Tank Capacity		18 L
Tank Reserve Amount		3.4 L
Engine		
Displacement		599 cm ³ , 499 cm ³ (A)
Starting System		Electric starter
Engine Type		4-stroke, 4-cylinder
Bore x Stroke		59 x 54.8 59 x 45.7 (A)
Compression Ratio		11.6 ~ 12.4 : 1 9.7 ~ 10.5 : 1 (A)
Tilt Angle		Engine angle 35°00'
		Angle from engine inclination 45°00'
Engine Arrangement		Forward inclined, 4-cylinder, Lateral position

ITEM	SPECIFICATION
Carburetor Manufacturer Type Venturi Diameter Number of Carburetors Marking Choke Type	MIKUNI BDST 32 32 mm 4 3HE 3HF (CH) Manual
Aircleaner Manufacturer Marking Type Number	YAMAHA 3HE Dry type element 1
Cylinder Head Valve Type Valve Clearance Valve Diameter Valve Timing Valve Lift Stroke (Max.)	DOHC DOHC 0.11 ~ 0.20 mm 0.21 ~ 0.30 mm 24.0 mm 21.0 mm BTDC 29°/ABDC 59° BBDC 59°/ATDC 29° 7.50 mm 7.30 mm
Spark Plug Type (Manufacturer) Resistance Value Gap Ignition Timing (B.T.D.C.) Ignition Order	CR8E, CR9E (NGK), U24ESR-N,U27ESR-N (ND) 3.0 ~ 7.5 kΩ 0.7 ~ 0.8 mm 4 ~ 6° at 1200 rpm #1 → #2 → #4 → #3
Lubrication Method Oil Pump Type/Manufacturer Engine Oil Capacity Engine Oil Grade	Pressure lubricated, wet sump Trochoid pump/IHARA 3.1 L, 3.0L (CH) SAE 20W40 Type SE
Clutch Type/Manufacturer Operation Friction Plate Manufacturer Friction Plate Dimension Friction Plate Quantity	Wet, multiple-disc/YAMAHA BODY Mechanical type F.C.C. 115.2 (Outside Dia.) x 90 (Inside Dia.) x 3.0 mm (Thickness) 9

ITEM	SPECIFICATION
Cooling System Coolant Capacity Total Sub tank Thermostatic Valve Opening Temp. Radiator Type Relief Valve Opening Pressure	2200 cc 280 cc 80 ~ 84°C 3HE 0.95 ~ 1.25 kg/cm ²
Transmission Type/Manufacturer Control Gear Ratio 1st 2nd 3rd 4th 5th 6th	Constant mesh/YAMAHA Left foot operation 42/15 (2.800) 43/22 (1.955) 31/20 (1.550) 28/21 (1.333) 31/26 (1.192) 30/27 (1.111)
Reduction Method Primary Secondary Reduction Ratio Primary Secondary Rear Axle Ratio Total Reduction Ratio 1st 2nd 3rd 4th 5th 6th	Gear Chain 82/48 (1.708) 46/15 (3.067), 49/15 (3.267) (A) 3.067 (F) 14.669, 15.626 (A) 10.240, 10.907 (A) 8.120, 8.650 (A) 6.985, 7.441 (A) 6.246, 6.654 (A) 5.821, 6.201 (A)
Maximum Performance Maximum Torque Max. Engine Design Speed Idling Speed	66.8 kw/10500 rpm (90.9 ps/10500 rpm) 62.5 kw/10500 rpm (85.0 ps/10500 rpm) (F) 51.7 kw/10500 rpm (70.4 ps/10500 rpm) (A) 36.1 kw/8000 rpm (49.1 ps/8000 rpm) (CH, 50ps D) 19.7 kw/8000 rpm (26.8 ps/8000 rpm) (27ps D) 65.7 Nm/8500 rpm (6.7 kgm/8500 rpm) 50.0 Nm/9000 rpm (5.1 kgm/9000 rpm) (A) 51.0 Nm/4000 rpm (5.2 kgm/4000 rpm) (CH) 49.0 Nm/4000 rpm (5.0 kgm/4000 rpm) (50ps D) 39.2 Nm/3500 rpm (4.0 kgm/3500 rpm) (27ps D) 11000 rpm 1150 ~ 1250 rpm, 1250 ~ 1350 rpm (CH)
Carburetor Setting Main Jet Jet Needle-Clip Position Needle Jet Pilot Jet	# 107.5 , #92.5 (27ps D) 5CFZ4-2 , 5CFZ4-1 (A) , 5CFZ4-4 (27ps D) Y-0 , Y-4 (A) #30 , #32.5 (CH)

FZR600

ITEM	SPECIFICATION
Bulb Wattage x Quantity Head Lamp Marker Lamp Tail/brake Lamp Flasher Lamp Auto Cancel Flasher System	12V 45W x 1, 45W/40W x 1 12V 45W/40W x 2 (DK, N, E) 12V 35W/55W x 2 (GB) 12V 55W x 1, 60W/55W x 1(F, CH) 12V 35W/35W x 2 (I) 12V 4W x 1 12V 3.4W x 2 (GB) 12V 4W x 2 (I) 12V 5W/21W x 2 12V 21W x 4 With Out (D)
Voltage	12V
Battery Type Capacity	GM12 12AH (10 hr)

FZR750R

GERMANY : (D)
SWITZERLAND : (CH)

ITALY : (I) FRANCE : (F) ENGLAND : (GB)

ITEM		SPECIFICATION		
Type Name		3PJ (D) 3PG(F) 3PK (I, GB) 3SJ (CH)		
Model		FZR750R		
Type		3PJ-001101 (D) 3PG-001101 (F) 3PK-002101 (I) 3PK-003101 (GB) 3SJ-001101 (CH)		
Total Length		2180 mm (D, GB, CH) 2100 mm (F, I)		
Wheel base		1445 mm		
Overhang		300 mm		
	Front	435 mm (D, GB, CH)		
	Rear	355 mm (F, I)		
Minimum distance from ground		120 mm		
Total Width		705 mm		
Total Handle Width		620 mm		
Total Height		1160 mm		
Weight		106 kg (Net) 95 kg (E) (Dry) 104 kg (Net) 92 kg (E) (Dry) 210 kg (with oil and full fuel tank) (Net) 187 kg (E) (without oil and fuel) (Dry)		
		(D)	(F, GB)	(I, CH)
With one person	Front	144 kg	137 kg	135 kg
	Rear	156 kg	148 kg	145 kg
	Total	300 kg	285 kg	280 kg
Max. allowable weight	Front	150 kg		
	Rear	170 kg		
	Total	320 kg		
Max. allowable axle weight	Front	177 kg/2.50 (kg/cm ²)		
	Rear	266 kg/2.50 (kg/cm ²)		

ITEM		SPECIFICATION
Tyre		
Size	Front Rear	130/60 ZR17 180/55 ZR17
Manufacture	Front Rear	MICHELIN/PIRELLI MICHELIN/PIRELLI
Pattern	Front Rear	TX 11/MP7 Sport TX 23/MP7 Sport
Radius of Tyre	Front Rear	282 mm 302 mm
Rim		
Type	Front Rear	Cast Cast
Rim Size	Front Rear	MT 3.50 x 17 MT 5.50 x 17
Suspension		
System	Front Rear	Telescopic Swing arm
Type of Cushion Spring	Front Rear	Coil spring Coil spring
Wheel Travel	Front Rear	130 mm 150 mm
Steering		
Caster Angle of Front Wheel		24°30'
Trail of Front Wheel		100 mm
Steering Angle		25°
Minimum Round Radius		3.6 m, 3.9 m (D)
Handle Lock Approval (D only)		Same as '89 Model (3PJ)
Chassis		
Frame Type		Press back bone
Passenger's Grip		Out
Fuel		
Type		Gasoline
Tank Capacity		19 L
Tank Reserve Amount		4 L
Engine		
Displacement		749 cm ³
Starting System		Electric starter
Engine Type		4-stroke, 4-cylinder
Bore x Stroke		72.0 x 46.0
Compression Ratio		10.8 ~ 11.6 : 1
Tilt Angle		Engine angle 35°00' Angle from engine inclination 40°00'
Engine Arrangement		Forward inclined, 4-cylinder, Lateral position

ITEM	SPECIFICATION
Carburetor Manufacturer Type Venturi Diameter Number of Carburetors Marking Choke Type	MIKUNI BDST 38 38 mm 4 3PG 3PK (I, GB) 3SJ (CH) Manual
Aircleaner Manufacturer Marking Type Number	YAMAHA 3FV Dry type element 1
Cylinder Head Valve Type Valve Clearance Valve Diameter Valve Timing Valve Lift Stroke (Max.)	DOHC DOHC 0.11 ~ 0.20 mm 0.21 ~ 0.30 mm 23.0 mm 24.5 mm BTDC 37°/ABDC 67° BBDC 37°/ATDC 67° 7.40 mm 7.80 mm
Spark Plug Type (Manufacturer) Resistance Value Gap Ignition Timing (B.T.D.C.) Ignition Order	DR9EA (NGK), X27ESR-U (ND) 3.0 ~ 7.5 kΩ 0.6 ~ 0.7 mm 9 ~ 11° at 1200 rpm #1 → #2 → #4 → #3
Lubrication Method Oil Pump Type/Manufacturer Engine Oil Capacity Engine Oil Grade	Pressure lubricated, wet sump Trochoid pump/IHARA 3.5 L SAE 20W40
Clutch Type/Manufacturer Operation Friction Plate Manufacturer Friction Plate Dimension Friction Plate Quantity	Wet, multiple-disc/YAMAHA BODY Mechanical type F.C.C. 133 (Outside Dia.) x 113 (Inside Dia.) x 3.0 mm (Thickness) 9

ITEM		SPECIFICATION
Cooling System		
Coolant Capacity	Total	2500 cc
	Sub tank	200 cc
Thermostatic Valve Opening Temp.		80.5 ~ 83.5°C
Radiator Type		3FV
Relief Valve Opening Pressure		0.95 ~ 1.25 kg/cm ²
Transmission		
Type/Manufacturer		Constant mesh/YAMAHA
Control		Left foot operation
Gear Ratio	1st	32/13 (2.462)
	2nd	33/17 (1.941)
	3rd	31/19 (1.632)
	4th	33/23 (1.435)
	5th	26/20 (1.300)
	6th	25/21 (1.190)
Reduction Method		Gear
	Primary	Chain
Reduction Ratio	Primary	68/41 (1.659)
	Secondary	46/16 (2.875)
Rear Axle Ratio		
Total Reduction Ratio	1st	11.737
	2nd	9.256
	3rd	7.780
	4th	6.841
	5th	6.199
	6th	5.677
Maximum Performance		75.0 kw/12000 rpm (102 ps/12000 rpm) (F) 73.6 kw/11250 rpm (100 ps/11250 rpm) (D) 89.0 kw/12000 rpm (121 ps/12000 rpm) (I, GB)
Maximum Torque		29.4 kw/5500 rpm (40 ps/5500 rpm) (CH) 69.6 Nm/9000 rpm (7.1 kgm/9000 rpm) (F) 66.0 Nm/7750 rpm (6.7 kgm/7750 rpm) (D) 77.5 Nm/9250 rpm (7.9 kgm/9250 rpm) (I, GB) 52.0 Nm/5000 rpm (5.3 kgm/5000 rpm) (CH)
Max. Engine Design Speed		13000 rpm
Idling Speed		1150 ~ 1250 rpm
Carburetor Setting		
Main Jet	#1.4 : #127.5	#2.3 : #122.5 (F, D)
	#1.4 : #122.5	#2.3 : #117.5 (I, GB)
	#1.4 : #125	#2.3 : #120 (CH)
Jet Needle		5CEW-11
Needle Jet		Y-0
Pilot Jet		#42.5, #35 (CH)

ITEM	SPECIFICATION
Bulb Wattage x Quantity Head Lamp Marker Lamp Tail/brake Lamp Flasher Lamp Auto Cancel Flasher System	12V 35W/35W x 2 (I, GB) 12V 55W x 1, 60W/55W x 1(D, F, CH) 12V 3W x 2 (I) 12V 3.4W x 2 (GB) 12V 4W x 1 (D, F, CH) 12V 5W/21W x 2 12V 21W x 4 With Out (D)
Voltage	12V
Battery Type Capacity	MF, YTX9-12B 8AH (10 hr)

FZR1000

AUSTRIA : (A) ITALY : (I) BELGIUM : (B) SWEDEN : (S)
 GERMANY : (D) ENGLAND : (GB) HOLLAND : (NL) DENMARK : (DK)
 FRANCE : (F) NORWAY : (N) FINLAND : (SF) SPAIN : (E) SWITZERLAND : (CH)

ITEM		SPECIFICATION			
Type Name		3GM 3LE (D, S, A) 3LF (F) 3LG (GB) 3LH (CH)			
Model		FZR1000			
Type		3GM-009101 JYA3GMS0 * LA016101 (E) 3LE-009101 (D, S, A) 3LF-007101 (F) 3LG-004101 (GB) 3LH-005101 (CH)			
Total Length		2200 mm			
Wheel base		1460 mm			
Overhang		Front		295 mm	
		Rear		445 mm	
Minimum distance from ground		135 mm			
Total Width		730 mm			
Total Handle Width		625 mm			
Total Height		1160 mm			
Weight		Front 116 kg (Net) 105 kg (E) (Dry) Rear 119 kg (Net) 109 kg (E) (Dry) Total 235 kg (with oil and full fuel tank) (Net) 214 kg (E) (without oil and fuel) (Dry)			
		(I, B, S, CH, A)	(F, GB, NL, DK, N, A)	(SF, E)	(D)
With one person	Front	138 kg	140 kg	141 kg	145 kg
	Rear	167 kg	170 kg	174 kg	180 kg
	Total	305 kg	310 kg	315 kg	325 kg
With two persons	Front	136 kg	138 kg	139 kg	143 kg
	Rear	239 kg	247 kg	256 kg	272 kg
	Total	375 kg	385 kg	395 kg	415 kg
		(D, F, S, A)	(SF, E)	(OTHERS)	
Max. allowable weight	Front	160 kg	160 kg	160 kg	
	Rear	280 kg	260 kg	249 kg	
	Total	440 kg	420 kg	409 kg	
Max. allowable axle weight	Front	194kg/2.90 (kg/cm ²)	182kg/2.90 (kg/cm ²)	170kg/2.90 (kg/cm ²)	
	Rear	284kg/2.90 (kg/cm ²)	266kg/2.90 (kg/cm ²)	249kg/2.90 (kg/cm ²)	

ITEM		SPECIFICATION
Tyre		
Size	Front Rear	130/60VR 17-V280, 130/60 ZR17 170/60VR 17-V280, 170/60 ZR17
Manufacture	Front Rear	BRIDGESTONE/DUNLOP/MICHELIN/PIRELLI BRIDGESTONE/DUNLOP/MICHELIN/PIRELLI
Pattern	Front Rear	CY15/K510F/A59X/MP7S CY16/K510/M59X/MP7S
Radius of Tyre	Front Rear	282 mm 302 mm
Rim		
Type	Front Rear	Cast Cast
Rim Size	Front Rear	MT 3.50 x 17 MT 5.50 x 17
Suspension		
System	Front Rear	Telescopic Swing arm
Type of Cushion Spring	Front Rear	Coil spring Coil spring
Wheel Travel	Front Rear	120 mm 130 mm
Steering		
Caster Angle of Front Wheel		26°45'
Trail of Front Wheel		110 mm
Steering Angle		27°
Minimum Round Radius		3.6 m
Chassis		
Frame Type		Press back bone
Passenger's Grip		Out
Fuel		
Type		Gasoline
Tank Capacity		19 L
Tank Reserve Amount		3.4 L
Engine		
Displacement		1002 cm ³
Starting System		Electric starter
Engine Type		4-stroke, 4-cylinder
Bore x Stroke		75.5 x 56.0
Compression Ratio		11.6 ~ 12.4 : 1
Tilt Angle		Engine angle 35°00' Angle from engine inclination 35°00'
Engine Arrangement		Forward inclined, 4-cylinder, Lateral position

ITEM	SPECIFICATION
Carburetor Manufacturer Type Venturi Diameter Number of Carburetors Marking Choke Type	MIKUNI BDST 38 38 mm 4 3GM 3LF (F, D, A, S) 3LH (CH) Manual
Aircleaner Manufacturer Marking Type Number	YAMAHA 3GM Dry type element 1
Cylinder Head Valve Type Valve Clearance Valve Diameter Valve Timing Valve Lift Stroke (Max.)	DOHC DOHC 0.11 ~ 0.20 mm 0.21 ~ 0.30 mm 23.5 mm 25.0 mm BTDC 33°/ABDC 63° BBDC 63°/ATDC 33° Intake Exhaust Intake Exhaust Intake (Open/Close) Exhaust (Open/Close) Intake Exhaust
Spark Plug Type (Manufacturer) Resistance Value Gap Ignition Timing (B.T.D.C.) Ignition Order	DR8ES-L (NGK), X24ESR-U (ND) 3.0 ~ 7.5 kΩ 0.6 ~ 0.7 mm 4 ~ 6° at 1000 rpm #1 → #2 → #4 → #3
Lubrication Method Oil Pump Type/Manufacturer Engine Oil Capacity Engine Oil Grade	Pressure lubricated, wet sump Trochoid pump/IHARA 3.5 L SAE 20W40
Clutch Type/Manufacturer Operation Friction Plate Manufacturer Friction Plate Dimension Friction Plate Quantity	Wet, multiple-disc/YAMAHA BODY Hydraulic type F.C.C. A 134 (Outside Dia.) x 112 (Inside Dia.) x 3.0 mm (Thickness) B 134 (Outside Dia.) x 116 (Inside Dia.) x 3.0 mm (Thickness) A=1, B=8

ITEM	SPECIFICATION
Cooling System Coolant Capacity Total Sub tank Thermostatic Valve Opening Temp. Radiator Type Relief Valve Opening Pressure	2300 cc 380 cc 80.5 ~ 83.5°C 3GM 0.95 ~ 1.25 kg/cm ²
Transmission Type/Manufacturer Control Gear Ratio 1st 2nd 3rd 4th 5th	Constant mesh/YAMAHA Left foot operation 36/14 (2.571) 32/18 (1.778) 29/21 (1.381) 27/23 (1.174) 28/27 (1.037)
Reduction Method Primary Secondary Reduction Ratio Primary Secondary Total Reduction Ratio 1st 2nd 3rd 4th 5th	Gear Chain 68/41 (1.659) 47/17 (2.765) 11.791 8.152 6.332 5.383 4.755
Maximum Performance Maximum Torque Max. Engine Design Speed Idling Speed	106.7 kw/10000 rpm (145.0 ps/10000 rpm) 92.0 kw/10000 rpm (125.0 ps/10000rpm) (GB) 75.0 kw/9500 rpm (102.0 ps/9500 rpm) (F) 74.0 kw/9500 rpm (101.0 ps/9500 rpm) (D, S, A) 44.3 kw/5250 rpm (60.2 ps/5250 rpm) (CH) 107.3 Nm/8500 rpm (10.9 kgm/8500 rpm) 98.2 Nm/8500 rpm (10.0 kgm/8500 rpm) (GB) 87.0 Nm/5250 rpm (8.9 kgm/5250 rpm) (F) 88.3 Nm/5250 rpm (9.0 kgm/5250 rpm) (D, S, A) 81.2 Nm/5000 rpm (8.29 kgm/5000 rpm) (CH) 11500 rpm 900 ~ 1100 rpm, 1000 ~ 1100 rpm (CH)
Carburetor Setting Main Jet Jet Needle-Clip Position (CH only) Needle Jet Pilot Jet	#1.4 : #125 #2.3 : #127.5 #1.4 : #127.5 #2.3 : #125 (F, D, S, A, CH) 5CEW8 Y-0 #40 , #37.5 (CH)

ITEM	SPECIFICATION
Bulb Wattage x Quantity Head Lamp Marker Lamp Tail/brake Lamp Flasher Lamp Auto Cancel Flasher System	12V 35W/35W x 2 (I, GB) 12V 45W/40W x 2 (DK, N, E) 12V 45W x 1, 45W/40W x 1 (A, NL, SF) 12V 55W x 2 (B, S) 12V 55W x 1, 60W/55W x 1 (D, F, CH) 12V 5W 12V 5W/21W x 2 12V 21W x 4 With, Out (D)
Voltage	12V
Battery Type Capacity	YB14L 14AH (10 hr)



YAMAHA MOTOR CO.,LTD.

IWATA, JAPAN