









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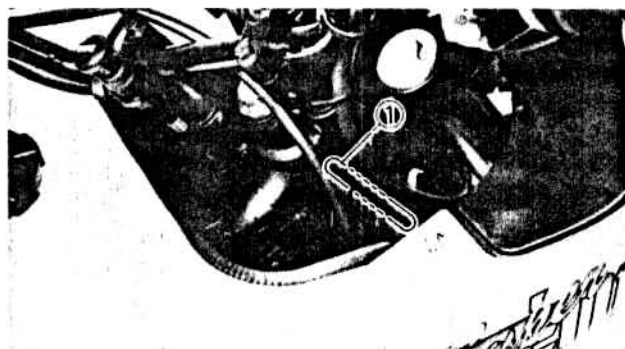
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CHAPTER 1. GENERAL INFORMATION

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GENERAL INFORMATION



MOTORCYCLE IDENTIFICATION

FRAME SERIAL NUMBER

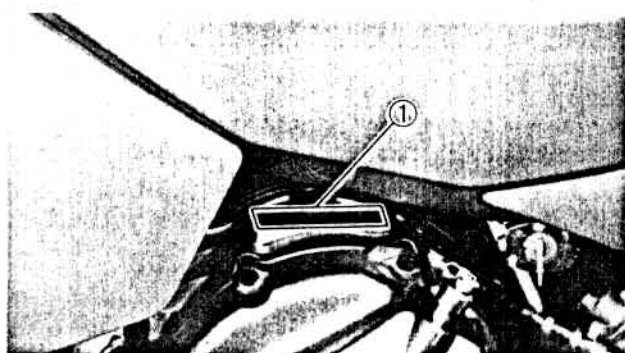
The frame serial number ① is stamped into the right side of the steering head.

Starting serial number:

3LD-000101

3SC-000101 (E)

3TD-000101 (CH)



ENGINE SERIAL NUMBER

The engine serial number ① is stamped into the right side of the engine.

Starting serial number:

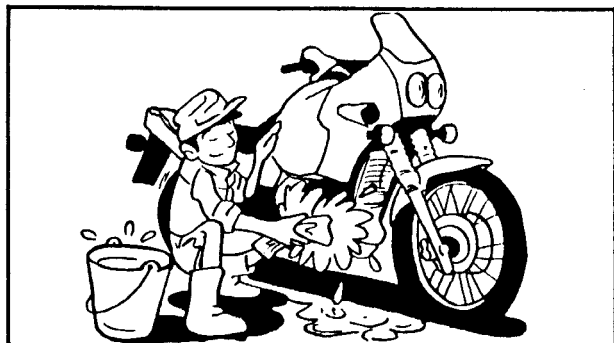
3LD-000101

3SC-000101 (E)

3TD-000101 (CH)

NOTE:

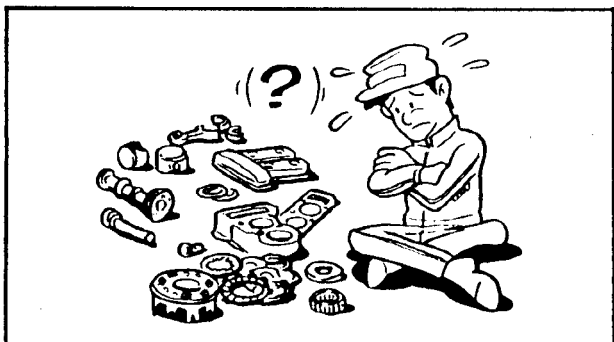
- The first three digits of these numbers are for model identifications; the remaining digits are the unit production number.
- Designs and specifications are subject to change without notice.



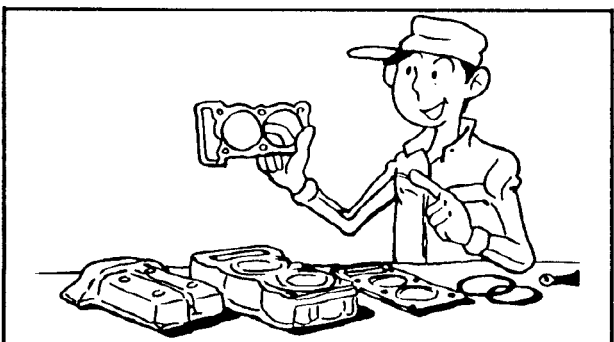
IMPORTANT INFORMATION

PREPARATION FOR REMOVAL

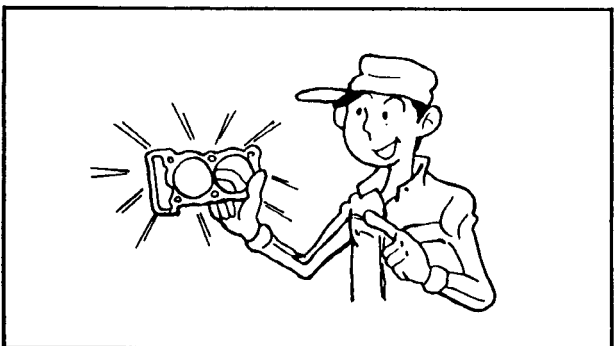
1. Remove all dirt, mud, dust, and foreign material before removal and disassembly.
2. Use proper tools and cleaning equipment. Refer to "SPECIAL TOOL".



3. When disassembling the machine, keep mated parts together. This includes gears, cylinders, pistons, and other mated parts that have been "mated" through normal wear. Mated parts must be reused as an assembly or replaced.



4. During the machine disassembly, clean all parts and place them in trays in the order of disassembly. This will speed up assembly time and help assure that all parts are correctly reinstalled.
5. Keep away from fire.



ALL REPLACEMENT PARTS

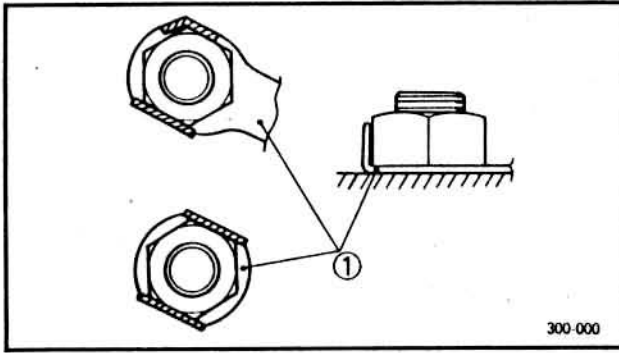
1. Use only genuine Yamaha parts for all replacements. Use oil and/or grease recommended by Yamaha for assembly and adjustment. Other brands may be similar in function and appearance, but inferior in quality.

GASKETS, OIL SEALS, AND O-RINGS

1. All gaskets, seals, and O-rings should be replaced when an engine is overhauled. All gasket surfaces, oil seal lips, and O-rings must be cleaned.
2. Properly oil all mating parts and bearings during reassembly. Apply grease to the oil seal lips.

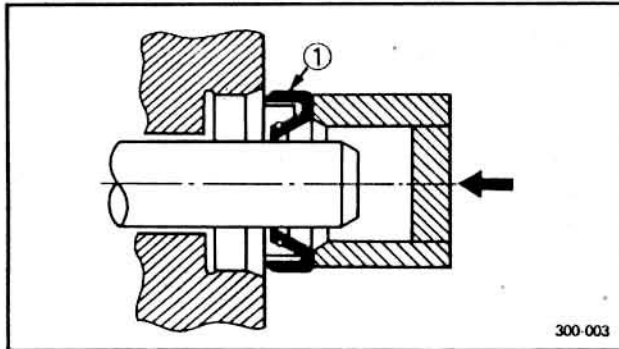
IMPORTANT INFORMATION

GEN
INFO



LOCK WASHERS/PLATES AND COTTER PINS

1. All lock washers/plates ① and cotter pins must be replaced when they are removed. Lock tab(s) should be bent along the bolt or nut flat(s) after the bolt or nut has been properly tightened.



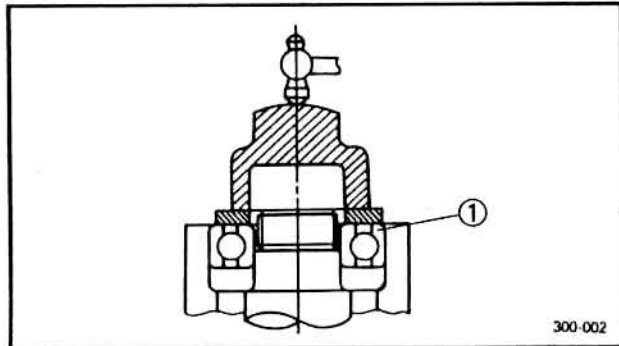
BEARINGS AND OIL SEALS

1. Install the bearing(s) and oil seal(s) with their manufacturer's marks or numbers facing outward. (In other words, the stamped letters must be on the side exposed to view.) When installing oil seal(s), apply a light coating of light-weight lithium base grease to the seal lip(s). Oil the bearings liberally when installing.

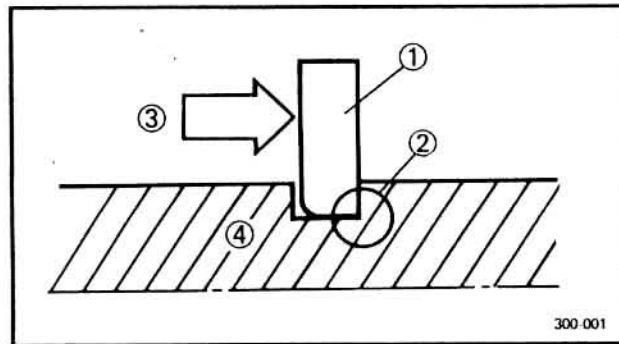
- ① Oil seal

⚠ CAUTION:

Do not use compressed air to spin the bearings dry. This causes damage to the bearing surfaces.



- ① Bearing



CIRCLIPS

1. All circlips should be inspected carefully before reassembly. Always replace piston pin clips after one use. Replace distorted circlips. When installing a circlip ①, make sure that the sharp edged corner ② is positioned opposite to the thrust ③ it receives. See the sectional view.

- ④ Shaft

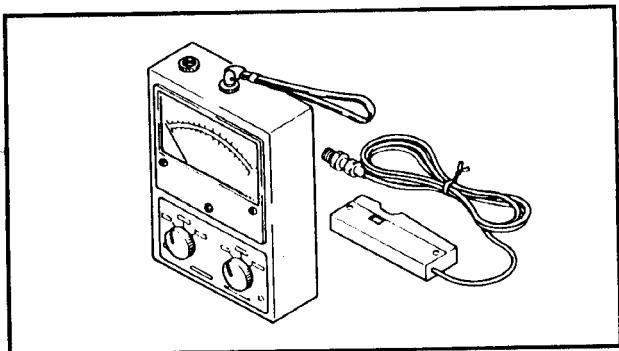
**SPECIAL TOOLS**

The proper special tools are necessary for complete and accurate tune-up and assembly. Using the correct special tool will help prevent damage caused by the use of improper tools or improvised techniques.

FOR TUNE UP

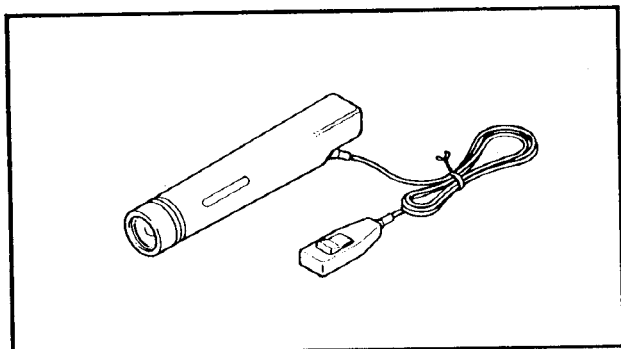
1. Inductive tachometer
P/N 90890-03113

This tool is needed for detecting engine rpm.



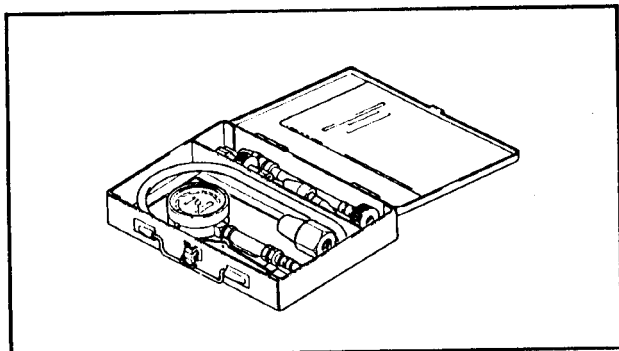
2. Inductive timing light
P/N 90890-03109

This tool is necessary for checking ignition timing.



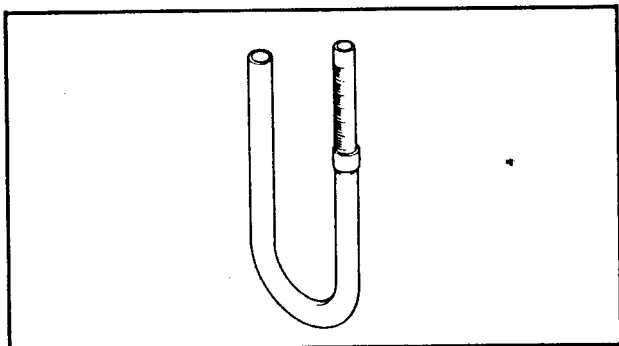
3. Compression gauge
P/N 90890-03081

This gauge is used to measure the engine compression.

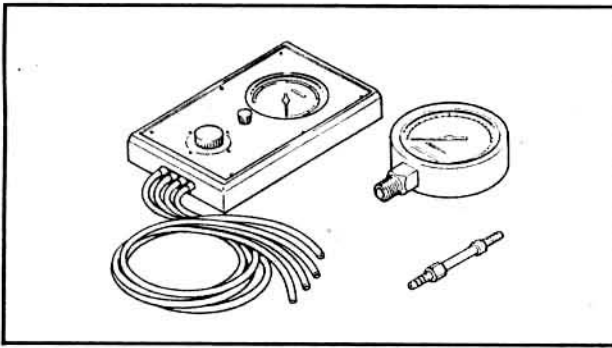


4. Fuel level gauge
P/N 90890-01312

This gauge is used to measure the fuel level in the float chamber.

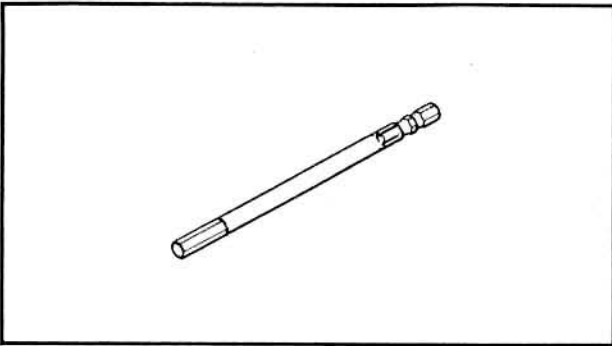


SPECIAL TOOLS



5. Vacuum gauge
P/N 90890-03094

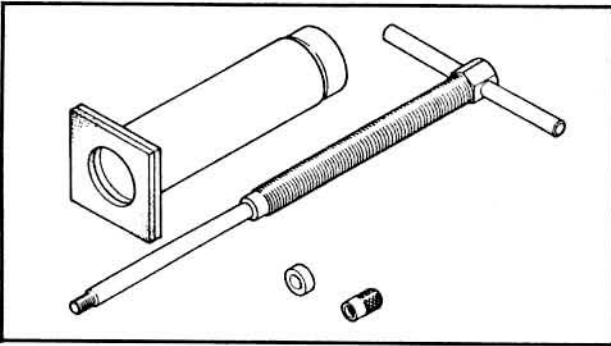
This gauge is needed for carburetor synchronization.



FOR ENGINE SERVICE

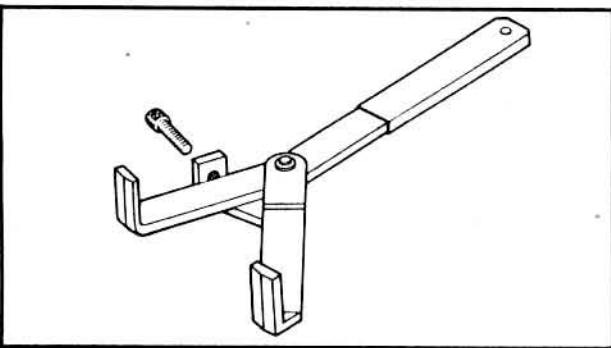
1. Hexagon wrench (6 mm)
P/N 90890-01395

This tool is used to loosen or tighten the cylinder head securing nut.



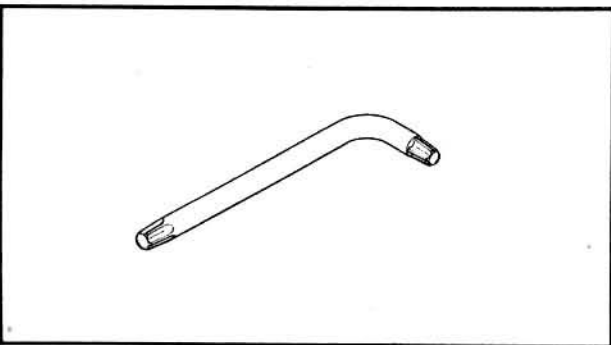
2. Piston pin puller
P/N 90890-01304

This tool is used to remove the piston pin.



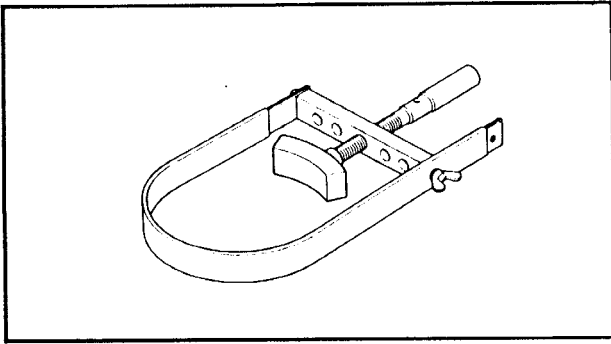
3. Universal clutch holder
P/N 90890-04086

This tool is used to hold the clutch when removing or installing the clutch boss locknut.



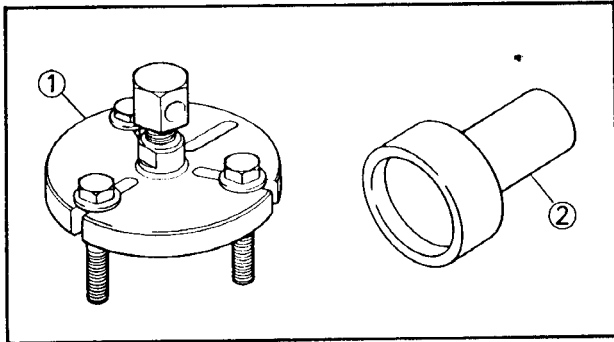
4. Torx wrench (T30)
P/N 90890-05245

This tool is used to loosen or tighten the main axle bearing retainer bolt.



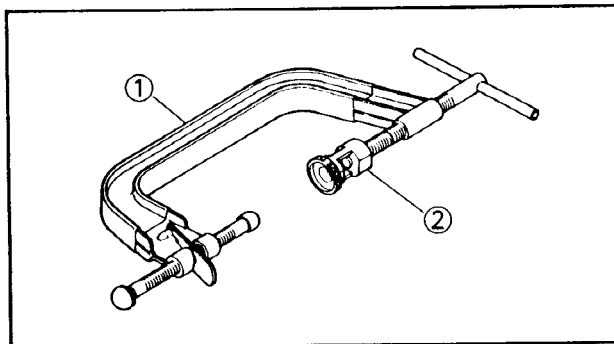
5. Rotor holder
P/N 90890-01701

This tool is used to hold the rotor.



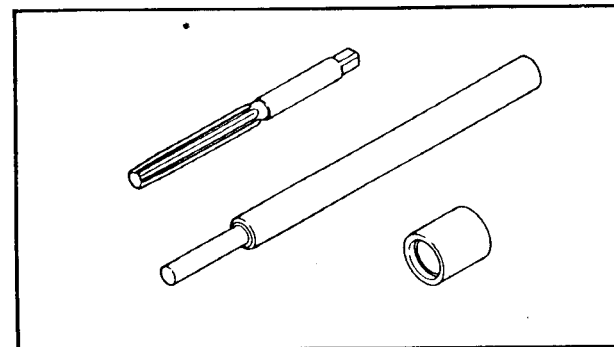
6. Rotor puller
P/N 90890-01362 ①
Adapter
P/N 90890-01382 ②

These tools are used to remove the rotor.



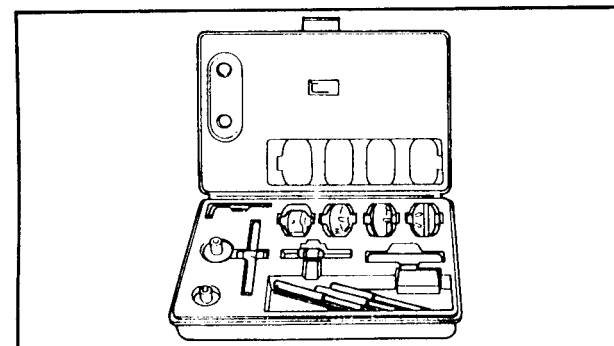
7. Valve spring compressor
P/N 90890-04019 ①
Attachment
P/N 90890-04114 ②

These tools are used to remove and install the valve assemblies.



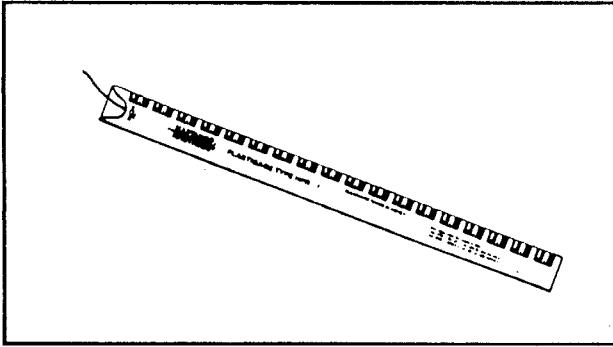
8. Valve guide remover and installer set (5.5 mm)
P/N 90890-04016

These tools are used to remove, install and re-bore the valve guide.



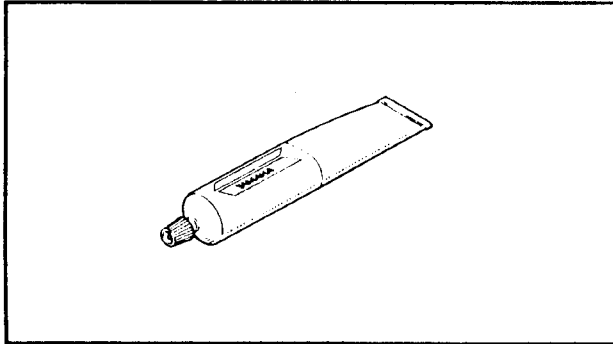
9. Valve seat cutter
P/N YM-91043

This tool is used to adjust the valve clearance.



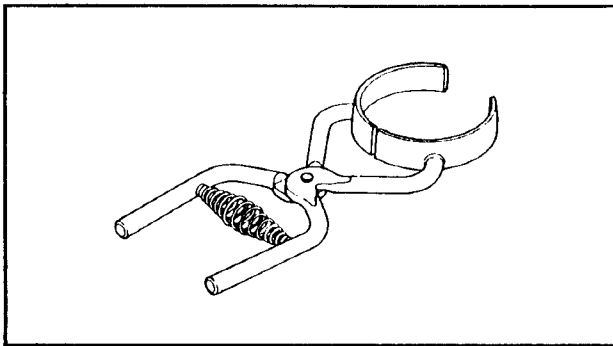
10. Plastigage® set "Green"
P/N YU-33210

This gauge is needed to measure the clearance for the connecting rod bearing and the crankshaft bearing.



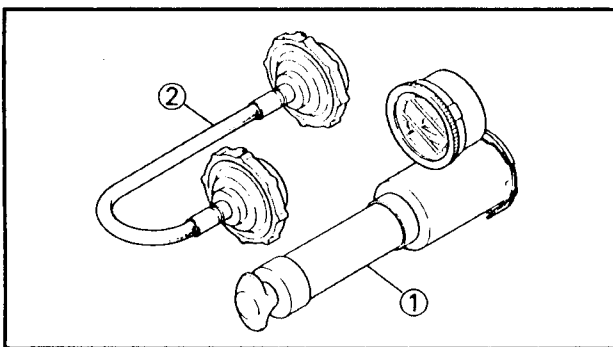
11. YAMAHA bond No. 1215
P/N 90890-85505

This sealant (bond) is used for crankcase mating surfaces, etc.



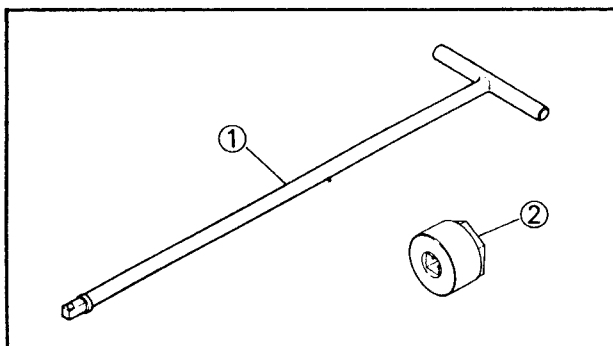
12. Piston ring compressor
P/N 90890-04121

This tool is used to compress piston rings when installing the cylinder.



13. Radiator cap tester
P/N 90890-01325 ①
Adapter
P/N 90890-01352 ②

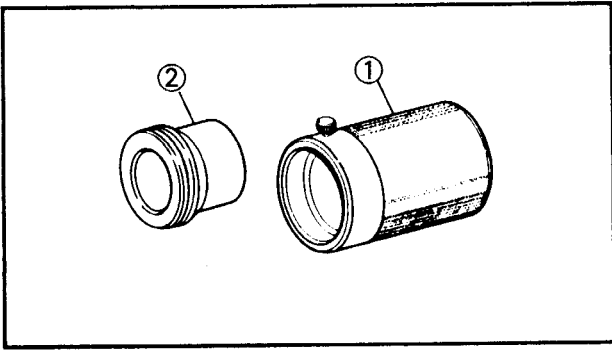
This tester is used for checking the cooling system.



FOR CHASSIS SERVICE

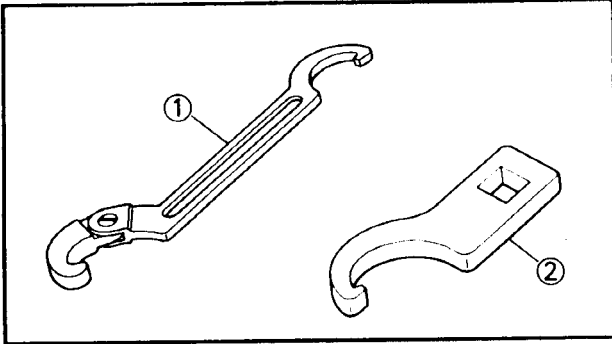
1. T-handle
P/N 90890-01326 ①
Fork damper rod holder (30 mm)
P/N 90890-01327 ②

These tools are used to loosen and tighten the front fork damper rod holding bolt.



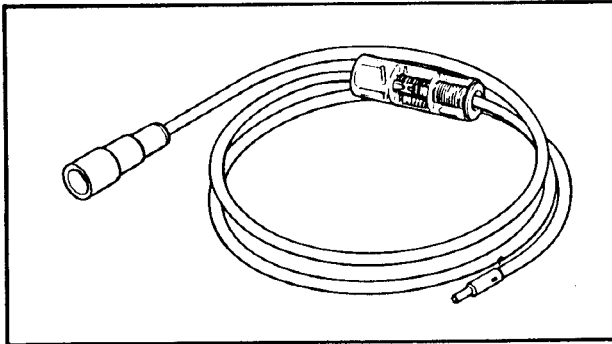
- 2. Front fork seal driver (weight)
P/N 90890-01367 ①
Adapter (43 mm)
P/N 90890-01374 ②

These tools are used when installing the fork oil seal.



- 3. Ring nut wrench
P/N 90890-01268 ①
P/N 90890-01403 ②

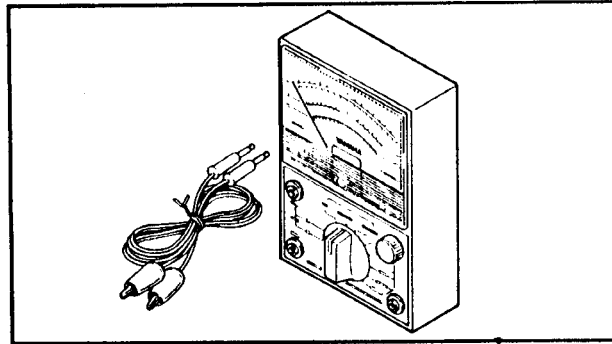
This tool is used to loosen and tighten the steering ring nut.



FOR ELECTRICAL COMPONENTS

- 1. Dynamic spark tester
P/N 90890-03144

This instrument is necessary for checking the ignition system components.



- 2. Pocket tester
P/N 90890-03112

This instrument is invaluable for checking the electrical system.



CHAPTER 2. SPECIFICATIONS

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SPECIFICATIONS

GENERAL SPECIFICATIONS

Model	XTZ750
Model Code Number:	3LD 3SC (E) 3TD (CH)
Frame Starting Number:	3LD-000101 3SC-000101 (E) 3TD-000101 (CH)
Engine Starting Number:	3LD-000101 3SC-000101 (E) 3TD-000101 (CH)
Dimensions:	
Overall Length	2,285 mm (90.0 in) (B)(F)(GB)(NL)(E)(I) 2,355 mm (92.7 in) (D)(S)(DK)(SF)(N)(CH)
Overall Width	815 mm (32.1 in)
Overall Height	1,355 mm (53.3 in)
Seat Height	865 mm (34.1 in)
Wheelbase	1,505 mm (59.3 in)
Minimum Ground Clearance	240 mm (9.5 in)
Basic Weight:	
With Oil and Full Fuel Tank	226 kg (498 lb)
Minimum Turning Radius:	2,400 mm (94.5 in)
Engine:	
Engine Type	Liquid cooled 4-stroke, DOHC
Cylinder Arrangement	Forward inclined parallel 2-cylinder
Displacement	749 cm ³
Bore × Stroke	87 × 63 mm (3.43 × 2.48 in)
Compression Ratio	9.5 : 1
Compression Pressure	950 kPa (9.5 kg/cm ² , 135 psi)
Starting System	Electric starter
Lubrication System:	Dry sump
Engine Oil Type or Grade:	<p>SAE 10W30 type SE motor oil</p> <p>SAE 20W40 type SE motor oil</p>

GENERAL SPECIFICATIONS

SPEC



Model	XTZ750	
Engine Oil Capacity: Periodic Oil Change: With Oil Filter Replacement Total Amount	4.0 L (3.5 Imp qt, 4.2 US qt) 4.1 L (3.6 Imp qt, 4.3 US qt) 4.4 L (3.9 Imp qt, 4.7 US qt)	
Coolant Total Amount: (Including All Routes)	1.7 L (1.5 Imp qt, 1.8 US qt)	
Air Filter:	Dry type element	
Fuel: Type Tank Capacity Reserve Amount	Regular gasoline 26 L (5.7 Imp qt, 6.9 US gal) 5 L (1.1 Imp qt, 1.3 US gal)	
Carburetor: Type × Quantity Manufacturer	BDST 38 × 2 MIKUNI	
Spark Plug: Type Manufacturer Gap	DPR8EA-9/X24EPRU-9 NGK/NIPPON DENSO 0.8 ~ 0.9 mm (0.031 ~ 0.035 in)	
Clutch Type:	Wet, multiple-disc	
Transmission: Primary Reduction System Primary Reduction Ratio Secondary Reduction System Secondary Reduction Ratio Transmission Type Operation Gear Ratio	Spur gear 67/39 (1.718) Chain Drive 46/16 (2.875) Constant mesh 5-speed Left foot operation 1st 37/13 (2.846) 2nd 37/20 (1.850) 3rd 30/21 (1.429) 4th 27/23 (1.174) 5th 28/27 (1.037)	
Chassis: Frame Type Caster Angle Trail	Double cradle 26.5° 101 mm (3.98 in)	
Tire:	Front	Rear
	Type Size Manufacturer (Type)	With tube 90/90-21 54H BRIDGESTONE (TW47)

GENERAL SPECIFICATIONS

SPEC



Model	XTZ750	
Tire Pressure (Cold Tire): Maximum load*	184 kg (406 lb)	
Cold tire pressure	Front	Rear
Up to 90 kg (198 lb) load*	225 kPa (2.25 kg/cm ² , 33 psi)	225 kPa (2.25 kg/cm ² , 33 psi)
90 kg (198 lb) ~ Maximum load*	225 kPa (2.25 kg/cm ² , 33 psi)	250 kPa (2.5 kg/cm ² , 36 psi)
High speed riding	225 kPa (2.25 kg/cm ² , 33 psi)	250 kPa (2.5 kg/cm ² , 36 psi)
*Load is total weight of cargo, rider, passenger, and accessories.		
Brake: Front Brake Type Operation Rear Brake Type Operation	Dual disc brake Right hand operation Single disc brake Right foot operation	
Suspension: Front Suspension Rear Suspension	Telescopic fork Swingarm (Link suspension)	
Shock Absorber: Front Shock Absorber Rear Shock Absorber	Coil-Air spring/Oil damper Coil-Gas spring/Oil damper	
Wheel Travel: Front Wheel Travel Rear Wheel Travel	235 mm (9.25 in) 215 mm (8.46 in)	
Electrical: Ignition System Generator System Battery Type or Model Battery Capacity	T.C.I. (Digital) A.C. magneto generator YB14L-A 12V, 14AH	
Headlight Type:	Quartz bulb (Halogen)	
Bulb Wattage × Quantity: Headlight	12V 55W + 12V 60/55W (D, F, B, S) 12V 45/40W × 2 (SF, NL, E, DK, N) 12V 35/35W × 2 (I, GB)	
Auxiliary Light	12V 4W × 1 (D, F, B, S, SF, NL) 12V 4W × 2 (E, DK, N) 12V 3W × 2 (I) 12V 3.4W × 2 (GB)	
Tail/Brake Light Flasher Light	12V 5W/21W × 1 12V 21W × 4	

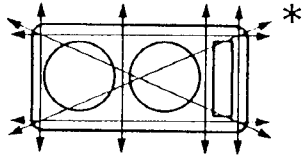
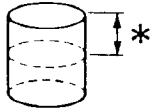
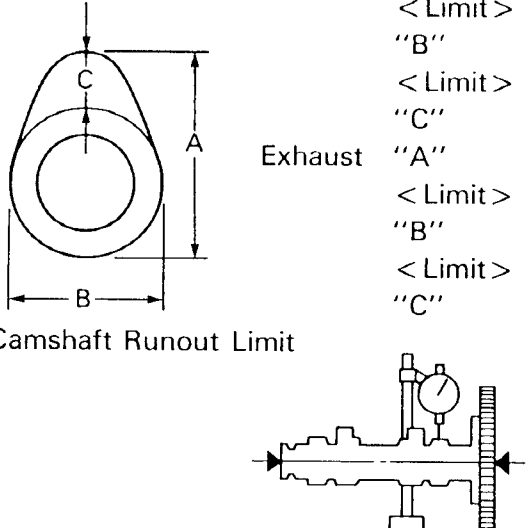
GENERAL SPECIFICATIONS

SPEC

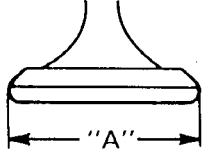
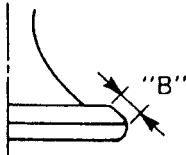
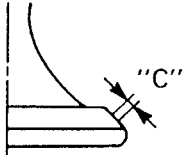
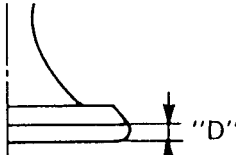
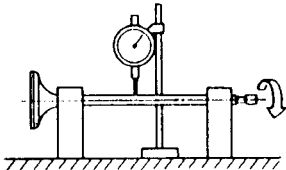


Model	XTZ750	
Indicator Light: Wattage x Quantity	"METER LIGHT" "NEUTRAL" "HIGH BEAM" "TURN"	12V 3.4W x 2 12V 3.4W x 1 12V 3.4W x 1 12V 3.4W x 2

MAINTENANCE SPECIFICATIONS
ENGINE

Model	XTZ750
<p>Cylinder Head: Warp Limit*</p> 	<p>0.03 mm (0.0012 in) * Lines indicate straightedge measurement.</p>
<p>Cylinder: Bore Size/Measuring Point*</p>  <p><Wear Limit></p>	<p>87.000 ~ 87.005 mm (3.4252 ~ 3.4254 in) 40 mm (1.6 in) 87.1 mm (3.429 in)</p>
<p>Camshaft: Drive Method Camshaft Outside Diameter Shaft-to-cap Clearance Cam Dimensions: Intake Exhaust Camshaft Runout Limit</p> 	<p>Chain drive (Right) 24.967 ~ 24.980 mm (0.9830 ~ 0.9835 in) 0.020 ~ 0.054 mm (0.0008 ~ 0.0021 in) 35.7 ~ 35.8 mm (1.4055 ~ 1.4094 in) < Limit > 35.6 mm (1.4 in) "B" 27.95 ~ 28.05 mm (1.1004 ~ 1.1043 in) < Limit > 27.85 mm (1.1 in) "C" 7.65 ~ 7.85 mm (0.3012 ~ 0.3091 in) Exhaust "A" 35.95 ~ 36.05 mm (1.4154 ~ 1.4193 in) < Limit > 35.85 mm (1.41 in) "B" 27.95 ~ 28.05 mm (1.1004 ~ 1.1043 in) < Limit > 27.85 mm (1.1 in) "C" 7.9 ~ 8.1 mm (0.3110 ~ 0.3189 in) 0.03 mm (0.0012 in)</p>
<p>Timing Chain: Chain Type/No. of Links Chain Adjustment Method</p>	<p>82 RH 2015/138 Links Automatic</p>



Model		XTZ750	
Valve, Valve Seat, Valve Guide: Valve Clearance (Cold):			
	IN.	0.15 ~ 0.20 mm (0.006 ~ 0.008 in)	
	EX.	0.25 ~ 0.30 mm (0.010 ~ 0.012 in)	
Valve Dimensions:			
			
Head Dia.	Face Width	Seat Width	Margin Thickness
"A" Head Dia.	IN.	25.9 ~ 26.1 mm (1.020 ~ 1.028 in)	
	EX.	27.9 ~ 28.1 mm (1.098 ~ 1.106 in)	
"B" Face Width	IN.	2.06 ~ 2.46 mm (0.081 ~ 0.097 in)	
	EX.	2.06 ~ 2.46 mm (0.081 ~ 0.097 in)	
"C" Seat Limit Width	IN.	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)	
	EX.	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)	
"D" Margin Thickness Limit	IN.	0.8 ~ 1.2 mm (0.032 ~ 0.047 in)	
	EX.	0.8 ~ 1.2 mm (0.032 ~ 0.047 in)	
Stem Outside Diameter	IN.	5.475 ~ 5.490 mm (0.2156 ~ 0.2161 in)	
	EX.	5.460 ~ 5.475 mm (0.2150 ~ 0.2156 in)	
< Limit >	IN.	5.45 mm (0.214 in)	
	EX.	5.43 mm (0.214 in)	
Guide Inside Diameter	IN.	5.50 ~ 5.51 mm (0.216 ~ 0.217 in)	
	EX.	5.50 ~ 5.51 mm (0.216 ~ 0.217 in)	
< Limit >	IN.	5.55 mm (0.219 in)	
	EX.	5.55 mm (0.219 in)	
Stem-to-Guide Clearance	IN.	0.01 ~ 0.04 mm (0.0004 ~ 0.0015 in)	
	EX.	0.03 ~ 0.05 mm (0.001 ~ 0.002 in)	
< Limit >	IN.	0.08 mm (0.003 in)	
	EX.	0.1 mm (0.004 in)	
Stem Runout Limit		0.01 mm (0.004 in)	
			
Valve Seat Width	IN.	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)	
	EX.	0.9 ~ 1.1 mm (0.035 ~ 0.043 in)	

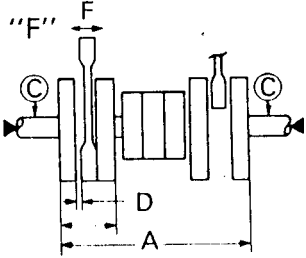
MAINTENANCE SPECIFICATIONS

SPEC



Model	XTZ750
<p>Valve Spring:</p> <p>Free Length IN. EX.</p> <p>Set Length (Valve Closed) IN. EX.</p> <p>Compressed Pressure (Valve Closed) IN. EX.</p> <p>Tilt Limit IN. EX.</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>Direction of Winding (Top View) IN. EX.</p>	<p>37.29 mm (1.47 in) 37.29 mm (1.47 in) 30.39 mm (1.2 in) 30.39 mm (1.2 in) 10.00 ~ 11.60 kg (22.05 ~ 22.57 lb) at 30.39 mm 10.00 ~ 11.60 kg (22.05 ~ 22.57 lb) at 30.39 mm 2.5°/1.7 mm (2.5°/0.067 in) 2.5°/1.7 mm (2.5°/0.067 in)</p> <p>Clockwise Clockwise</p>
<p>Piston:</p> <p>Piston Size "D" Measuring Point "H"</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>Piston Off-set Piston Off-set Direction Piston-to-Cylinder Clearance <Limit ></p>	<p>86.920 ~ 86.935 mm (3.422 ~ 3.423 in) 4.7 mm (0.185 in)</p> <p>1 mm (0.04 in) INSIDE 0.065 ~ 0.085 mm (0.0026 ~ 0.0033 in) < 0.15 mm (0.0059 in) ></p>
<p>Piston Ring:</p> <p>Top Ring:</p> <p>Type Dimensions (B × T) End Gap (Installed)</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>Side Clearance (Installed)</p> <p>2nd Ring:</p> <p>Type Dimensions (B × T) End Gap (Installed)</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>Side Clearance</p> <p>Oil Ring:</p> <p>Dimensions (B × T) End Gap (Installed)</p> <div style="text-align: center; margin: 10px 0;"> </div>	<p>Barrel 1.0 × 3.3 mm (0.039 × 0.130 in) 0.3 ~ 0.5 mm (0.012 ~ 0.020 in) 0.03 ~ 0.07 mm (0.0012 ~ 0.0028 in)</p> <p>Taper 1.0 × 3.3 mm (0.039 × 0.130 in) 0.3 ~ 0.5 mm (0.012 ~ 0.020 in) 0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in)</p> <p>2.0 × 2.8 mm (0.079 × 0.110 in) 0.2 ~ 0.7 mm (0.008 ~ 0.028 in)</p>



Model	XTZ750
Connecting Rod: Oil Clearance Bearing Color Code	0.026 ~ 0.050 mm (0.001 ~ 0.002 in) 1. Blue 2. Black 3. Brown 4. Green
Crankshaft: Crank Width "A" Runout Limit "C" Big End Side Clearance "D" Small End Free Play "F"  Oil Clearance Bearing Color Code	64.75 ~ 65.25 mm (2.549 ~ 2.569 in) 0.02 mm (0.0008 in) 0.16 ~ 0.27 mm (0.006 ~ 0.011 in) 0.8 ~ 1.0 mm (0.0315 ~ 0.0394 in) 0.020 ~ 0.038 mm (0.0007 ~ 0.0015 in) 1. Blue 2. Black 3. Brown, 4. Green 5. Yellow 6. Pink 7. Red
Balancer: Drive Method	Spur gear
Clutch: Friction Plate: Thickness Quantity Wear Limit Clutch Plate: Thickness Quantity Warp Limit Clutch Plate: Thickness Quantity Warp Limit Clutch Spring: Free Length Quantity Minimum Free Length Clutch Release Method	2.9 ~ 3.1 mm (0.114 ~ 0.122 in) 8 pcs. 2.8 mm (0.11 in) 2.2 ~ 2.4 mm (0.087 ~ 0.094 in) 1 pc. 0.1 mm (0.004 in) 1.9 ~ 2.1 mm (0.075 ~ 0.083 in) 7 pcs. 0.1 mm (0.004 in) 51.8 mm (2.04 in) 6 pcs. 50 mm (1.97 in) Outer pull, rack & pinion pull
Transmission: Main Axle Runout Limit Drive Axle Runout Limit	0.08 mm (0.003 in) 0.08 mm (0.003 in)
Shifter: Type	Guide bar