Quick Reference Guide

This quick reference guide will assist you in locating a desired topic or procedure.

- Bend the pages back to match the black tab of the desired chapter number with the black tab on the edge at each table of contents page.
- Refer to the sectional table of contents for the exact pages to locate the specific topic required.

General Information

Table of Contents

Before Servicing

Before starting to service a motorcycle, careful reading of the applicable section is recommended to eliminate unnecessary work. Photographs, diagrams, notes, cautions, warnings, and detailed descriptions have been included wherever necessary. Nevertheless, even a detailed account has limitations, a certain amount of basic knowledge is also required for successful work.

Especially note the following:

(1) Dirt

Before removal and disassembly, clean the motorcycle. Any dirt entering the engine or other parts will work as an abrasive and shorten the life of the motorcycle. For the same reason, before installing a new part, clean off any dust or metal filings.

(2) Battery Ground

Remove the ground (−) lead from the battery before performing any disassembly operations on the motorcycle. This prevents:

(a) the possibility of accidentally turning the engine over while partially disassembled.

(b) sparks at electrical connections which will occur when they are disconnected.

(c) damage to electrical parts.

(3) Tightening Sequence

Generally, when installing a part with several bolts, nuts, or screws, start them all in their holes and tighten them to a snug fit. Then tighten them evenly in a cross pattern. This is to avoid distortion of the part and/or causing gas or oil leakage. Conversely when loosening the bolts, nuts, or screws, first loosen all of them by about a quarter turn and then remove them. Where there is a tightening sequence indication in this Service Manual, the bolts, nuts, or screws must be tightened in the order and method indicated.

(4) Torque

When torque values are given in this Service Manual, use them. Either too little or too much torque may lead to serious damage. Use a good quality, reliable torque wrench.

(5) Force

Common sense should dictate how much force is necessary in assembly and disassembly. If a part seems especially difficult to remove or install, stop and examine what may be causing the problem. Whenever tapping is necessary, tap lightly using a wooden or plastic-faced mallet. Use an impact driver for screws (particularly for the removal of screws held by a locking agent) in order to avoid damaging the screw heads.

(6) Edges

Watch for sharp edges, especially during major engine disassembly and assembly. Protect your hands with gloves or a piece of thick cloth when lifting the engine or turning it over.

(7) High-Flash Point Solvent

A high-flash point solvent is recommended to reduce fire danger. A commercial solvent commonly available in North America is Stoddard solvent (generic name). Always follow manufacturer and container directions regarding the use of any solvent.

(8) Gasket, O-Ring

Do not reuse a gasket or O-ring once it has been in service. The mating surfaces around the gasket should be free of foreign matter and perfectly smooth to avoid oil or compression leaks.

(9) Liquid Gasket, Non-Permanent Locking Agent

Follow manufacturer's directions for cleaning and preparing surfaces where these compounds will be used. Apply sparingly. Excessive amounts may block engine oil passages and cause serious damage. An example of a non-permanent locking agent commonly available in North America is Loctite Lock'n Seal (Blue).

(10) Press

A part installed using a press or driver, such as a wheel bearing, should first be coated with oil on its outer or inner circumference so that it will go into place smoothly.

(11) Ball Bearing and Needle Bearing

Do not remove any ball or needle bearings that are pressed in unless it is necessary. If they are removed, replace them with new ones.

When installing a bearing, press it in with the marked side facing out using a suitable driver until it is bottomed. Bearings should be pressed into place by pushing evenly the bearing race which is affected by friction.

(12) Oil Seal and Grease Seal

Replace any oil or grease seals that were removed with new ones, as removal generally damages seals.

When pressing in a seal which has manufacturer's marks, press it in with the marks facing out. Seals should be pressed into place using a suitable driver, which contacts evenly with the side of seal, until the face of the seal is even with the end of the hole.

(13) Seal Guide

A seal guide is required for certain oil or grease seals during installation to avoid damage to the seal lips. Before a shaft passes through a seal, apply a little high temperature grease on the lips to reduce rubber to metal friction.

(14) Circlip, Retaining Ring

Replace any circlips and retaining rings that were removed with new ones, as removal weakens and deforms them. When installing circlips and retaining rings, take care to compress or expand them only enough to install them and no more.

(15) Cotter Pin

Replace any cotter pins that were removed with new ones, as removal deforms and breaks them.

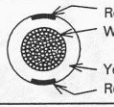
(16) Lubrication

Engine wear is generally at its maximum while the engine is warming up and before all the rubbing surfaces have an adequate lubricative film. During assembly, oil or grease (whichever is more suitable) should be applied to any rubbing surface which has lost its lubricative film. Old grease and dirty oil should be cleaned off. Deteriorated grease has lost its lubricative quality and may contain abrasive foreign particles.

Don't use just any oil or grease. Some oils and greases in particular should be used only in certain applications and may be harmful if used in an application for which they are not intended. This manual makes reference to molybdenum disulfide grease (MoS_2) in the assembly of certain engine and chassis parts. Always check manufacturer recommendations before using such special lubricants.

(17) Electrical Wires

All the electrical wires are either single-color or two-color and, with only a few exceptions, must be connected to wires of the same color. On any of the two-color wires there is a greater amount of one color and a lesser amount of a second color, so a two-color wire is identified by first the primary color and then the secondary color. For example, a yellow wire with thin red stripes is referred to as a "yellow/red" wire; it would be a "red/yellow" wire if the colors were reversed to make red the main color.

Wire (cross-section)	Name of Wire Color
	Yellow/Red

(18) Replacement Parts

When there is a replacement instruction, replace these parts with new ones every time they are removed. These replacement parts will be damaged or lose their original function once removed.

(19) Inspection

When parts have been disassembled, visually inspect these parts for the following conditions or other damage. If there is any doubt as to the condition of them, replace them with new ones.

Abrasion	Crack	Hardening	Warp
Bent	Dent	Scratch	Wear
Color change	Deterioration	Seizure	

(20) Specifications

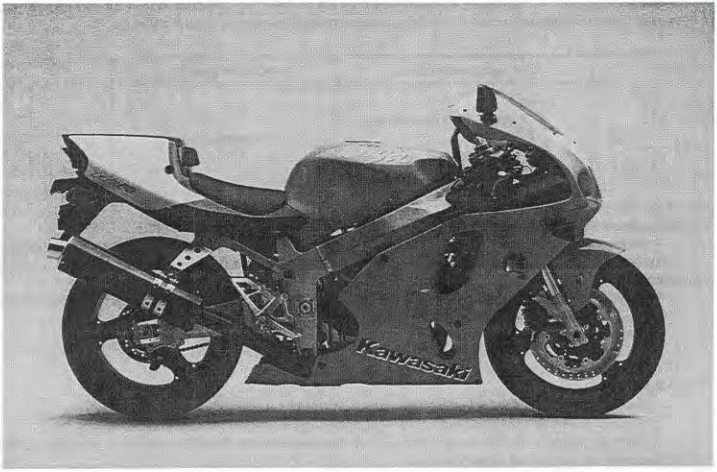
Specification terms are defined as follows:

"Standards" show dimensions or performances which brand-new parts or systems have.

"Service Limits" indicate the usable limits. If the measurement shows excessive wear or deteriorated performance, replace the damaged parts.

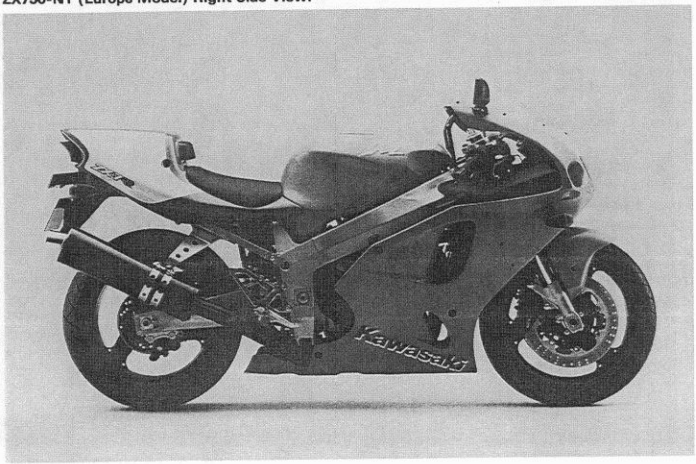
ZX750-N1 (US and Canada Models) Left Side View:

ZX750-N1 (US and Canada Models) Right Side View:

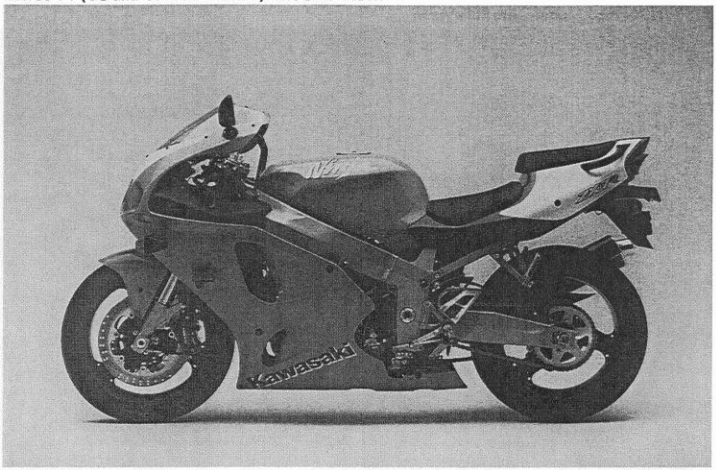


ZX750-N1 (Europe Model) Left Side View:

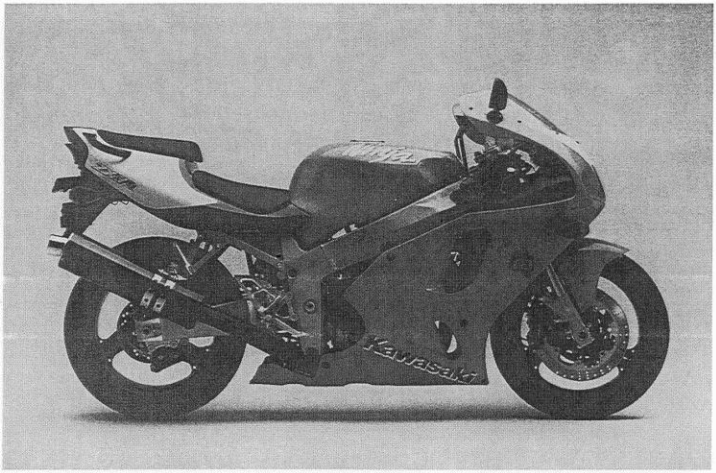
ZX750-N1 (Europe Model) Right Side View:



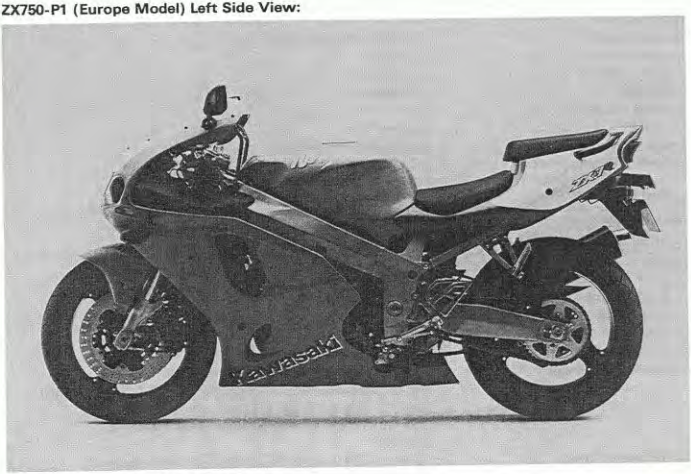
ZX750-P1 (US and Canada Models) Left Side View:



ZX750-P1 (US and Canada Models) Right Side View:



ZX750-P1 (Europe Model) Left Side View:



ZX750-P1 (Europe Model) Right Side View:

General Specifications

Item		ZX750-N1, N2
Dimensions:		
Overall length		2 090 mm, (FG) 2 190 mm
Overall width		740 mm
Overall height		1 130mm
Wheelbase		1 420 mm
Road clearance		105 mm
Seat height		790 mm
Dry weight		200 kg, (CA) 201 kg
Curb weight:	Front	117 kg, (CA) 117.5 kg
	Rear	112 kg, (CA) 112.5 kg
Fuel tank capacity		18.0 L
Performance:		
Minimum turning radius		3.4 m
Engine:		
Type		4-stroke, DOHC, 4-cylinder
Cooling system		Liquid-cooled
Bore and stroke		73.0 x 44.7 mm
Displacement		748 mL
Compression ratio		11.5, (FR) 10.8
Maximum horsepower		90 kW (122 PS) @12 000 r/min (rpm), (FR) UTAC's norm 75.1 kW (102 PS) @11 500 r/min (rpm), (AR) 72 kW (98 PS) @12 000 r/min (rpm), (FG) DIN 72kW (98 PS) @12 000 r/min (rpm), (US) –
Maximum torque		78 N-m (8.0 kg-m, 57.9 ft-lb) @9 300 r/min (rpm), (AR) 73 N-m (7.4 kg-m, 53.5 ft-lb) @7 000 r/min (rpm), (FG) DIN 73 N-m (7.4 kg-m, 53.5 ft-lb) @7 000 r/min (rpm), (FR, US) –
Carburetion system		Carburetors, Keihin FVK-D41 x 4
Starting system		Electric starter
Ignition system		Battery and coil (transistorized)
Timing advance		Electronically advanced (digital)
Ignition timing		From 10° BTDC @1 100 r/min (rpm) to 45° BTDC @5 000 r/min (rpm) (AR, CA, FG) From 5° BTDC @1 300 r/min (rpm) to 40° BTDC @5 000 r/min (rpm)
Spark plug		NGK CR9E or ND U27ESR-N
Cylinder numbering method		Left to right, 1-2-3-4
Firing order		1-2-4-3
Valve timing:		
Inlet	Open	44° (BTDC), (FR) 27° (BTDC)
	Close	64° (ABDC), (FR) 57° (ABDC)
	Duration	288°, (FR) 264°
Exhaust	Open	54° (BBDC), (FR) 57° (BBDC)
	Close	34° (ATDC), (FR) 27° (ATDC)
	Duration	268°, (FR) 264°
Lubrication system		Forced lubrication (wet sump with cooler)

Item		ZX750-N1, N2
Engine oil:	Grade	SE, SF or SG class
	Viscosity	SAE10W-40, 10W-50, 20W-40, or 20W-50
	Capacity	3.6 L
Drive Train:		
Primary reduction system:		
	Type	Gear
	Reduction ratio	1.754 (93/53)
Clutch type		Wet multi disc
Transmission:		
Type		6-speed, constant mesh, return shift
Gear ratios:	1st	2.375 (38/16)
	2nd	1.894 (36/19)
	3rd	1.619 (34/21)
	4th	1.409 (31/22)
	5th	1.291 (31/24)
	6th	1.200 (30/25)
Final drive system:	Type	Chain drive
	Reduction ratio	2.625 (42/16)
	Overall drive ratio	5.527 @Top gear
Frame:		
Type		Press, diamond
Caster (rake angle)		25°
Trail		99 mm
Front tire:	Type	Tubeless
	Size	120/70 ZR17
Rear tire:	Type	Tubeless
	Size	190/50 ZR17
Front suspension:	Type	Telescopic fork
	Wheel travel	120 mm
Rear suspension:	Type	Swing arm (uni-trak)
	Wheel travel	130 mm
Brake type:	Front	Dual discs
	Rear	Single disc
Electrical Equipment:		
Battery		12 V 8 Ah
Headlight:	Type	Semi-sealed beam
	Bulb	Quartz-halogen
		Left 12 V 55 W, Right 12 V 55 W
		(US, CN, UK) 12 V 45/45 W x 2
Tail/brake light		12 V 5/21 W x 2, (US, CN) 12 V 8/27W x 2
Alternator:	Type	Three-phase AC
	Rated output	30.7 A / 14 V @6 000 r/min (rpm)

Specifications are subject to change without notice, and may not apply to every country.

(AR) : Austria Model
(CA) : California Model
(CN) : Canada Model
(FG) : Germany Model
(FR) : France Model
(UK) : U.K. Model
(US) : U.S. Model

Item		ZX750-P1, P2, P3, P4
Dimensions:		
Overall length		2 090 mm, (FG, GR, NR, SD, ST) 2 190 mm
Overall width		740 mm
Overall height		1 130mm
Wheelbase		1 435 mm
Road clearance		105 mm
Seat height		790 mm
Dry weight		203 kg, (CA) 204 kg
Curb weight:	Front	117 kg, (CA) 117.5 kg
	Rear	115 kg, (CA) 115.5 kg
Fuel tank capacity		18.0 L
Performance:		
Minimum turning radius		3.4 m
Engine:		
Type		4-stroke, DOHC, 4-cylinder
Cooling system		Liquid-cooled
Bore and stroke		73.0 x 44.7 mm
Displacement		748 mL
Compression ratio		11.5, (FR) 10.8
Maximum horsepower		90 kW (122 PS) @11 800 r/min (rpm), (AR) P1 – P3: 72 kW (98 PS) @11 500 r/min (rpm), (FG) P1 – P3: DIN 72 kW (98 PS) @11 500 r/min (rpm) (FR) UTAC's norm 75.1 kW @11 000 r/min (rpm), (SD) 61 kW (83 PS) @9 500 r/min (rpm), (ST) 39 kW (53 PS) @7 500 r/min (rpm), (US) –
Maximum torque		78 N-m (8.0 kg-m, 57.9 ft-lb) @9 300 r/min (rpm), (AR) P1 – P3: 74 N-m (7.5 kg-m, 54.2 ft-lb) @6 800 r/min (rpm), (FG) P1 – P3: DIN 74 N-m (7.5 kg-m, 54.2 ft-lb) @6 800 r/min (rpm) (SD) 70 N-m (7.1 kg-m, 51.4 ft-lb) @6 500 r/min (rpm), (ST) 56 N-m (5.7 kg-m, 41.2 ft-lb) @5 000 r/min (rpm), (FR, US) –
Carburetion system		KEIHIN CVK-D38 x 4
Starting system		Electric starter
Ignition system		Battery and coil (transistorized)
Timing advance		Electronically advanced (digital)
Ignition timing		From 10° BTDC @1 100 r/min (rpm) to 45° BTDC @5 000 r/min (rpm), (AR, CA, FG, ST) From 5° BTDC @1 300 r/min (rpm) to 40° BTDC @5 000 r/min (rpm)
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Lubrication system		Forced lubrication (wet sump with cooler)
Engine oil:	Grade	SE, SF or SG class
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Clutch type		Wet multi disc
Transmission:		
Type		6-speed, constant mesh, return shift
Gear ratios:	1st	2.857 (40/14)
	2nd	2.000 (36/18)
	3rd	1.619 (34/21)
	4th	1.391 (32/23)
	5th	1.222 (33/27)
	6th	1.103 (32/29)
Final drive system:	Type	Chain drive
	Reduction ratio	2.687 (43/16)
	Overall drive ratio	5.203 @Top gear
Frame:		
Type		Press, diamond
Caster (rake angle)		25°
Trail		99 mm
Front tire:	Type	Tubeless
	Size	120/70 ZR17
Rear tire:	Type	Tubeless
	Size	190/50 ZR17
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	Wheel travel	120 mm
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	Bulb	Quartz-halogen
		Left 12 V 55 W, Right 12 V 55 W
		(AS, CN, UK, US) 12 V 45/45 W x 2
Tail/brake light		12 V 5/21 W x 2, (US, CA, CN) 12 V 8/27 W x 2
Alternator:	Type	Three-phase AC
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