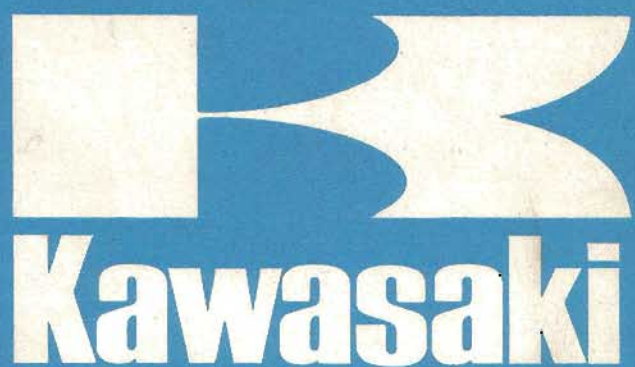


# **SHOP MANUAL**



## **KZ Series**

1974

# Decimal Equivalents

INCH				MM	INCH	INCH				MM	INCH
$\frac{1}{64}$				.015625	1mm= .03937 inch	$\frac{33}{64}$				.515625	14mm= .55118 inch
	$\frac{1}{32}$			.03125			$\frac{17}{32}$			.53125	
$\frac{3}{64}$				.046875		$\frac{35}{64}$				.546875	
		$\frac{1}{16}$		.0625				$\frac{9}{16}$		.5625	
$\frac{5}{64}$				.078125	2mm= .07874 inch	$\frac{37}{64}$				.578125	15mm= .59055 inch
	$\frac{3}{32}$			.09375			$\frac{19}{32}$			.59375	
$\frac{7}{64}$				.109375	3mm= .11811 inch	$\frac{39}{64}$				.609375	16mm= .62992 inch
		$\frac{1}{8}$		.125				$\frac{5}{8}$		.625	
$\frac{9}{64}$				.140625	4mm= .15748 inch	$\frac{41}{64}$				.640625	
	$\frac{5}{32}$			.15625			$\frac{21}{32}$			.65625	
$\frac{11}{64}$				.171875		$\frac{43}{64}$				.671875	17mm= .66929 inch
		$\frac{3}{16}$		.1875				$\frac{11}{16}$		.6875	
$\frac{13}{64}$				.203125	5mm= .19685 inch	$\frac{45}{64}$				.703125	18mm= .70866 inch
	$\frac{7}{32}$			.21875			$\frac{23}{32}$			.71875	
$\frac{15}{64}$				.234375	6mm= .23622 inch	$\frac{47}{64}$				.734375	
		$\frac{1}{4}$		.25				$\frac{3}{4}$		.75	
$\frac{17}{64}$				.265625	7mm= .27559 inch	$\frac{49}{64}$				.765625	20mm= .78740 inch
	$\frac{9}{32}$			.28125			$\frac{25}{32}$			.78125	
$\frac{19}{64}$				.296875	8mm= .31496 inch	$\frac{51}{64}$				.796875	
		$\frac{5}{16}$		.3125				$\frac{13}{16}$		.8125	
$\frac{21}{64}$				.328125		$\frac{53}{64}$				.828125	21mm= .82677 inch
	$\frac{11}{32}$			.34375			$\frac{27}{32}$			.84375	
$\frac{23}{64}$				.359375	9mm= .35433 inch	$\frac{55}{64}$				.859375	22mm= .86614 inch
		$\frac{3}{8}$		.375				$\frac{7}{8}$		.875	
$\frac{25}{64}$				.390625	10mm= .39370 inch	$\frac{57}{64}$				.890625	
	$\frac{13}{32}$			.40625			$\frac{29}{32}$			.90625	
$\frac{27}{64}$				.421875	11mm= .43307 inch	$\frac{59}{64}$				.921875	24mm= .94488 inch
		$\frac{7}{16}$		.4375				$\frac{15}{16}$		.9375	
$\frac{29}{64}$				.453125	12mm= .47244 inch	$\frac{61}{64}$				.953125	
	$\frac{15}{32}$			.46875			$\frac{31}{32}$			.96875	
$\frac{31}{64}$				.484375	13mm= .51181 inch	$\frac{63}{64}$				.984375	25mm= .98425 inch
		$\frac{1}{2}$		.5					1	1.	



### Unit Conversion Table

cc	x	.0610	=	cu in
cc	x	.02816	=	fl oz (imp)
cc	x	.03381	=	fl oz (U S)
cu in	x	16.39	=	cc
fl oz (imp)	x	35.51	=	cc
fl oz (U S)	x	29.57	=	cc
ft-lbs	x	12	=	in-lbs
ft-lbs	x	.1383	=	kg-m
gal (imp)	x	4.546	=	liters
gal (imp)	x	1.201	=	gal (U S)
gal (U S)	x	3.7853	=	liters
gal (U S)	x	.8326	=	gal (imp)
grams	x	.03527	=	oz
in	x	25.40	=	mm
in-lbs	x	.0833	=	ft-lbs
in-lbs	x	.0115	=	kg-m
kg	x	2.2046	=	lb
kg	x	35.274	=	oz
kg/cm <sup>2</sup>	x	14.22	=	lbs/sq in
kg-m	x	7.233	=	ft-lbs
kg-m	x	86.796	=	in-lbs
km	x	.6214	=	miles
lb	x	.4536	=	kg
lb/sq in	x	.0703	=	kg/cm <sup>2</sup>
liter	x	28.16	=	fl oz (imp)
liter	x	33.81	=	fl oz (U S)
liter	x	.8799	=	qt (imp)
liter	x	1.0567	=	qt (U S)
meter	x	3.281	=	ft
mile	x	1.6093	=	km
mm	x	.03937	=	in
oz	x	28.35	=	grams
qt (imp)	x	1.1365	=	liters
qt (imp)	x	1.201	=	qt (U S)
qt (U S)	x	.9463	=	liters
qt (U S)	x	.8326	=	qt (imp)
°C → °F:	$\frac{9(^{\circ}\text{C} + 40)}{5} - 40 = ^{\circ}\text{F}$			
°F → °C:	$\frac{5(^{\circ}\text{F} + 40)}{9} - 40 = ^{\circ}\text{C}$			

### List of Abbreviations

ABDC	.....	after bottom dead center
ATDC	.....	after top dead center
BBDC	.....	before bottom dead center
BDC	.....	bottom dead center
BTDC	.....	before top dead center
cc	.....	cubic centimeters
cu in	.....	cubic inches
fl oz	.....	fluid ounces
ft	.....	foot, feet
ft-lbs	.....	foot-pounds
gal	.....	gallon, gallons
hp	.....	horsepower
in	.....	inch, inches
in-lbs	.....	inch-pounds
kg	.....	kilogram, kilograms
kg/cm <sup>2</sup>	.....	kilograms per square centimeter
kg-m	.....	kilogram-meters
km	.....	kilometer
kph	.....	kilometers per hour
lb, lbs	.....	pound, pounds
lbs/sq in	.....	pounds per square inch
ℓ	.....	liter
m	.....	meter, meters
mi	.....	mile, miles
mm	.....	millimeters
mph	.....	miles per hour
oz	.....	ounce, ounces
psi	.....	pounds per square inch
qt	.....	quart, quarts
rpm	.....	revolutions per minute
sec	.....	second, seconds
SS	.....	standing start
TDC	.....	top dead center
"	.....	inch, inches

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# **SHOP MANUAL**

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## **KZ Series**

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# Foreword

This manual is designed primarily for use in a properly equipped shop by motorcycle mechanics although it contains enough detail and basic information to make it useful to the motorcycle user who desires to carry out his own basic maintenance and repair work. Since a certain basic knowledge of mechanics, the proper use of tools, and workshop procedures must be understood in order to carry out maintenance and repair satisfactorily, the adjustments, maintenance, and repair should be carried out only by qualified mechanics whenever the owner has insufficient experience or has doubts as to his ability to do the work so that the motorcycle can be operated safely.

In order to perform the work efficiently and to avoid costly mistakes, the mechanic should read the text, thoroughly familiarizing himself with the procedures before starting work, and then do the work carefully in a clean area. Whenever special tools or equipment is specified, makeshift tools or equipment should not be used. Precision measurements can only be made by using the proper instruments, and the use of substitute tools may adversely affect safe operation of the motorcycle.

This manual is divided into the following four sections:

(1) Adjustment

The adjustment section gives the procedure for all adjustments which may become necessary periodically and which do not involve major disassembly.

(2) Disassembly

This section shows the best method for the removal, disassembly, assembly, and installation which are necessary for maintenance and repair. Since assembly and installation are usually the reverse of disassembly and removal, assembly and installation are not explained in detail in many cases. Instead, assembly notes and installation notes are provided to explain special points.

(3) Maintenance and Theory of Operation

The procedures for inspection and repair are described in detail in this section. An explanation on the structure and functioning of each of the major parts and assemblies is given to enable the mechanic to understand better what he is doing.

(4) Appendix

The appendix in the back of this manual contains miscellaneous information, including a special tool list, a torque table, a table for periodic maintenance, and a troubleshooting guide.

Since this Shop Manual is based on the first production units of the KZ400, there may be minor discrepancies between the actual vehicle and the illustrations and text in this manual. Major changes and additions pertaining to later year units will be explained in a supplement following the appendix or by a new edition.

Places marked by an asterisk (\*) indicate where improvements have been made in the text over the original edition or where the information only applies to a newer model.



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