

## MODEL APPLICATION

Year	Model	Beginning Frame No.
2000	KX65-A1	JKBKEAC□YA000001 JKAKX065AAA000001
2001	KX65-A2	JKBKXEAC□1A009001 JKBKX065AAA009001
2002	KX65-A3	JKBKXEAC□2A016001 JKBKX065AAA016001
2003	KX65-A4	JKBKXEAC□3A027001 JKBKX065AAA027001
2004	KX65-A5	JKBKXEAC□4A036001 JKBKX065AAA036001
2005	KX65-A6	JKBKXEAC□5A042001 JKBKX065AAA042001
2006	KX65A6	JKBKXEAC□6A048001 JKBKX065AAA048001
2007	KX65A7	JKBKXEAC□7A054001 JKBKX065AAA054001
2008	KX65A8	JKBKXEAC□8A059001 JKBKX065AAA059001
2009	KX65A9	JKBKXEAC□9A065001 JKBKX065AAA065001
2010	KX65AA	JKBKXEAC□AA070001 JKBKX065AAA070001
2011	KX65AB	JKBKXEAC□BA072001 JKBKX065AAA072001
2012	KX65AC	JKBKXEAC□CA075001 JKBKX065AAA075001
2013	KX65AD	JKBKXEAC□DA078001 JKBKX065AAA078001
2014	KX65AE	JKBKXEAC□EA081001 JKBKX065AAA081001

□: This digit in the frame number changes from one machine to another.



**KAWASAKI HEAVY INDUSTRIES, LTD.**  
Motorcycle & Engine Company

**Part No.99924-1252-15**

Printed in Japan



**Kawasaki**

**KX65**



# **Motorcycle Service Manual**

# Quick Reference Guide

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## LIST OF ABBREVIATIONS

A	ampere(s)	lb	pound(s)
ABDC	after bottom dead center	m	meter(s)
AC	alternating current	min	minute(s)
ATDC	after top dead center	N	newton(s)
BBDC	before bottom dead center	Pa	pascal(s)
BDC	bottom dead center	PS	horsepower
BTDC	before top dead center	psi	pound(s) per square inch
°C	degree(s) Celsius	r	revolution
DC	direct current	rpm	revolution(s) per minute
F	farad(s)	TDC	top dead center
°F	degree(s) Fahrenheit	TIR	total indicator reading
ft	foot, feet	V	volt(s)
g	gram(s)	W	watt(s)
h	hour(s)	Ω	ohm(s)
L	liter(s)		

**This motorcycle is designed for a rider weighing less than 121 pounds (55 kg). Exceeding this limit could damage the motorcycle.**

# Foreword

This manual is designed primarily for use by trained mechanics in a properly equipped shop. However, it contains enough detail and basic information to make it useful to the owner who desires to perform his own basic maintenance and repair work. A basic knowledge of mechanics, the proper use of tools, and workshop procedures must be understood in order to carry out maintenance and repair satisfactorily. Whenever the owner has insufficient experience or doubts as to his ability to do the work, all adjustments, maintenance, and repair should be carried out only by qualified mechanics.

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

To get the longest life out of your motorcycle:

- Follow the Periodic Maintenance Chart in the Service Manual.
- Be alert for problems and non-scheduled maintenance.
- Use proper tools and genuine Kawasaki motorcycle parts. Special tools, gauges, and testers that are necessary when servicing Kawasaki Motorcycles are introduced by the Service Manual. Genuine parts provided as spare parts are listed in the Parts Catalog.
- Follow the procedures in this manual carefully. Don't take shortcuts.
- Remember to keep complete records of maintenance and repair with dates and any new parts installed.

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## How to Use this Manual

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In this manual, the product is divided into its major systems and these systems make up the manual's chapters.

The Quick Reference Guide shows you all of the product's system and assists in locating their chapters. Each chapter in turn has its own

comprehensive Table of Contents.

For Example, if you want ignition coil information, use the Quick Reference Guide to locate the Electrical System chapter. Then, use the Table of Contents on the first page of the chapter to find the ignition coil section.

Whenever you see these symbols, heed their instructions! Always follow safe operating and maintenance practices.

### **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

### **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### **NOTICE**

**NOTICE** is used to address practices not related to personal injury.

This manual contains four more symbols which will help you distinguish different types of information.

### **NOTE**

○ *NOTE* indicates information that may help or guide you in the operation or service of the vehicle.

- Indicates a procedural step or work to be done.
- Indicates a procedural sub-step or how to do the work of the procedural step it follows. It also precedes the text of a NOTE.
- ★ Indicates a conditional step or what action to take based on the results of the test or inspection in the procedural step or sub-step it follows.

In most chapters an exploded view illustration of the system components follows the Table of Contents. In these illustrations you will find the instructions indicating which parts require specified tightening torque, oil, grease or a locking agent during assembly.

# General Information

## Table of Contents

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## 1-2 GENERAL INFORMATION

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### Before Servicing

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Before starting to perform an inspection service or carry out a disassembly and reassembly operation on a motorcycle, read the precautions given below. To facilitate actual operations, notes, illustrations, photographs, cautions, and detailed descriptions have been included in each chapter wherever necessary. This section explains the items that require particular attention during the removal and reinstallation or disassembly and reassembly of general parts.

#### **Especially note the following:**

(1) Dirt

Before removal and disassembly, clean the motorcycle. Any dirt entering the engine will 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

Disconnect the ground (–) cable from the battery before performing any disassembly operations on the motorcycle. This prevents the engine from accidentally turning over while work is being carried out, sparks from being generated while disconnecting the cables from electrical parts, as well as damage to the electrical parts themselves. For reinstallation, first connect the positive cable to the positive (+) terminal of the battery

(3) Installation, Assembly

Generally, installation or assembly is the reverse of removal or disassembly. However, if installation or assembly sequence is given in this Service Manual, follow it. Note parts locations and cable, wire, and hose routing during removal or disassembly so they can be installed or assembled in the same way. It is preferable to mark and record the locations and routing whenever possible.

(4) Tightening Sequence

When installing bolts, nuts, or screws for which a tightening sequence is given in this Service Manual, make sure to follow the sequence. When installing a part with several bolts, nuts, or screws, start them all in their holes and tighten them to a snug fit, thus ensuring that the part has been installed in its proper location. Then, tighten them to the specified torque in the tightening sequence and method indicated. If tightening sequence instructions are not given, tighten them evenly in a cross pattern. Conversely, to remove a part, first loosen all the bolts, nuts, or screws that are retaining the part a 1/4-turn before removing them.

(5) 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.

(6) 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 removing screws held by non-permanent locking agent) in order to avoid damaging the screw heads.

(7) Edges

Watch for sharp edges, as they could cause injury through careless handling, especially during major engine disassembly and assembly. Use a clean piece of thick cloth when lifting the engine or turning it over.

(8) High Flash-Point Solvent

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

(9) Gasket, O-ring

Replace a gasket or an O-ring with a new part when disassembling. Remove any foreign matter from the mating surface of the gasket or O-ring to ensure a perfectly smooth surface to prevent oil or compression leaks.

(10) Liquid Gasket, Locking Agent

Clean and prepare surfaces where liquid gasket or non-permanent locking agent will be used. Apply them sparingly. Excessive amount may block engine oil passages and cause serious damage.

**Before Servicing**

(11) Press

When using a press or driver to install a part such as a wheel bearing, apply a small amount of oil to the area where the two parts come in contact to ensure a smooth fit.

(12) Ball Bearing and Needle Bearing

Do not remove a ball bearing or a needle bearing unless it is absolutely necessary. Replace any ball or needle bearings that were removed with new ones. Install bearings with the manufacturer and size marks facing out, applying pressure evenly with a suitable driver. Apply force only to the end of the race that contacts the press fit portion, and press it evenly over the base component.

(13) Oil Seal and Grease Seal

Replace any oil or grease seals that were removed with new ones, as removal generally damages seals. Oil or grease seals should be pressed into place using a suitable driver, applying a force uniformly to the end of seal until the face of the seal is even with the end of the hole, unless instructed otherwise. When pressing in an oil or grease seal which has manufacturer's marks, press it in with the marks facing out.

(14) Circlip, Retaining Ring, and Cotter Pin

When installing circlips and retaining rings, take care to compress or expand them only enough to install them and no more. Install the circlip with its chamfered side facing load side as well.

Replace any circlips, retaining rings, and cotter pins that were removed with new ones, as removal weakens and deforms them. If old ones are reused, they could become detached while the motorcycle is driven, leading to a major problem.

(15) Lubrication

Engine wear is generally at its maximum while the engine is warming up and before all the sliding surfaces have an adequate lubricative film. During assembly, make sure to apply oil to any sliding surface or bearing that has been cleaned. Old grease or dirty oil could have lost its lubricative quality and may contain foreign particles that act as abrasives; therefore, make sure to wipe it off and apply fresh grease or oil. 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.

(16) Direction of Engine Rotation

To rotate the crankshaft manually, make sure to do so in the direction of positive rotation. Positive rotation is counterclockwise as viewed from the left side of the engine. To carry out proper adjustment, it is furthermore necessary to rotate the engine in the direction of positive rotation as well.

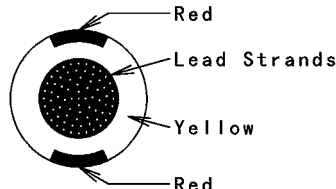

(17) Replacement Parts

Replacement Parts must be KAWASAKI genuine or recommended by KAWASAKI. Gaskets, O-rings, oil seals, grease seals, circlips, cotter pins or self-locking nuts must be replaced with new ones whenever disassembled.

(18) Electrical Leads

All the electrical leads are either one-color or two-color. A two-color lead is identified first by the primary color and then the stripe color. For example, a yellow lead with thin red stripes is referred to as a "yellow/red" lead; it would be a "red/yellow" lead if the colors were reversed. Unless instructed otherwise, electrical leads must be connected to leads of the same color.

**Two-Color Electrical**

Lead (cross-section)	Color Indicated on the Lead	Color Indicated on the Wiring Diagram
	<p>Yellow/Red</p>	

GB02069BW1 C

(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.



## 1-4 GENERAL INFORMATION

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### Before Servicing

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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.

Model Identification

KX65-A1 Left Side View



KX65-A1 Right Side View



# 1-6 GENERAL INFORMATION

## General Specifications

Items	KX65-A1 ~ A2	KX65-A3 ~ A6, A6 ~ AE
<b>Dimensions</b>		
Overall Length	1 580 mm	1 590 mm
Overall Width	690 mm (KX65-A1), 730 mm (KX65-A2)	760 mm
Overall Height	925 mm (KX65-A1), 935 mm (KX65-A2)	955 mm
Wheelbase	1 110 mm	1 120 mm
Road Clearance	270 mm (KX65-A1), 280 mm (KX65-A2)	305 mm
Seat Height	720 mm (KX65-A1), 730 mm (KX65-A2)	760 mm
Dry Mass	53 kg	57 kg (KX65-A3 ~ A8)
Curb Mass	—	60 kg (KX65A9 ~)
Front	26.5 kg	28.5 kg
Rear	29.5 kg	31.5 kg
Fuel Tank Capacity	3.8 L	←
<b>Engine</b>		
Type	2-stroke, single cylinder, piston reed valve	←
Cooling System	Liquid-cooled	←
Bore and Stroke	44.5 × 41.6 mm	←
Displacement	64 cm <sup>3</sup>	←
Compression Ratio	8.4: 1	←
Carburetion System	MIKUNI VM24SS	←
Fuel Type:		
Minimum Octane Rating:		
Research Octane Number (RON)	(AU, EUR) 95	←
Antiknock Index (RON + MON)/2	(US, CA) 90	←
Starting System	Primary kick	←
Ignition System	CDI	←
Ignition Timing	20.5° BTDC @6 000 r/min (rpm)	←
		20.5°BTDC @7 100 r/min (rpm) (KX65A6 ~)
Spark Plug	NGK BR10EG (US) NGK B10EG	← NGK BR10EG (KX65A6 ~)
Port Timing		
Intake:		
Open	Full open	←
Close	—	←
Scavenging:		
Open	61.8° BBDC	←
Close	61.8° ABDC	←
Duration	123.6°	←
Exhaust:		
Open	91.5° BBDC	←

General Specifications

Items	KX65-A1 ~ A2	KX65-A3 ~ A6, A6 ~ AE
Close	91.5° ABDC	←
Duration	183°	←
Lubrication System (Gasoline : Oil)	Petrol mix (32:1)	←
<b>Drive Train</b>		
Primary Reduction System:		
Type	Gear	←
Reduction Ratio	3.500 (77/22)	←
Clutch Type	Wet, multi disc	←
Transmission:		
Type	6-speed, constant mesh, return shift	←
Gear Ratios:		
1st	2.846 (37/13)	←
2nd	2.125 (34/16)	←
3rd	1.722 (31/18)	←
4th	1.428 (30/21)	←
5th	1.217 (28/23)	←
6th	1.083 (26/24)	←
Final Drive System:		
Type	Chain drive	←
Reduction Ratio	3.538 (46/13)	3.615 (47/13)
Overall Drive Ratio	13.416 @Top gear	13.703 @Top gear
Transmission Oil:		
Grade	API SG, SH, SJ, SL or SM with JASO MA, MA1 or MA2	←
Viscosity	SAE 10W-40	←
Capacity	0.5 L	←
<b>Frame</b>		
Type	Tubular, semi-double cradle	←
Steering Angle	40° to either side	←
Caster (Rake Angle)	26.5°	27°
Trail	60 mm	←
Front Tire:		
Size	60/100-14 30M	←
Type	tube type	←
Rear Tire:		
Size	80/100-12 41M	←
Type	tube type	←
Rim Size:		
Front	14 × 1.40	←
Rear	12 × 1.60	←
Front Suspension:		
Type	Telescopic fork	←
Wheel Travel	210 mm	←

## 1-8 GENERAL INFORMATION

### General Specifications

Items	KX65-A1 ~ A2	KX65-A3 ~ A6, A6 ~ AE
Rear Suspension:		
Type	Swingarm (Uni-trak)	←
Wheel Travel	225 mm	240 mm
Brake Type:		
Front and Rear	Single disc	←
Effective Disc Diameter:		
Front	154.8 mm	←
Rear	146 mm	←

Specifications are subject to change without notice, and may not apply to every country.  
US: United States Model

## GENERAL INFORMATION 1-9

### Periodic Maintenance Chart

The maintenance must be done in accordance with this chart to keep the motorcycle in good running condition.

OPERATION	FREQUENCY					As required
	After each race (or 2.5 hr.)	Every 3 races (or 7.5 hr.)	Every 5 races (or 12.5 hr.)	Every 10 races (or 25 hr.)		
Clutch - adjust	•					
Clutch and friction plates - inspect †		•	R			
Throttle cable - adjust	•					
Spark plug - clean, gap †	•	R				
Air cleaner element - clean	•					
Air cleaner element - replace	When damaged					
Carburetor - inspect/adjust	•					
Transmission oil - change		•				
Piston and piston ring - clean/inspect †		•	R			
Cylinder head, cylinder - inspect		•				
Muffler body - clean/inspect †	•					
Muffler body packing - change		•				
Small end bearing - inspect †		•		R		
Kick pedal and shift pedal - clean	•					
Exhaust pipe O-ring - replace		•				
Engine sprocket - inspect †	•					
Coolant - inspect †	•					R
Water hoses, connections - inspect †	•					
Reed valve - inspect †	•					
Brake adjustment - inspect †	•					
Brake pad wear - inspect †			•			
Brake fluid level - inspect †		•				
Brake fluid - change	Every 2 years					
Brake master cylinder cup and dust seal - replace	Every 2 years					
Brake caliper fluid seal and dust seal - replace	Every 2 years					
Brake hose - replace	Every 4 years					
Brake hoses, connections - inspect †	•					
Spoke tightness and rim runout - inspect †	•					
Drive chain - adjust	•					
Drive chain - lubricate	•					
Drive chain wear - inspect †			•			
Drive chain slipper and guide - replace	When damaged					
Front fork - inspect/clean	•					
Front fork oil - change	1st time after 2 races, then every 5 races					
Nuts, bolts, fasteners - inspect †	•					
Fuel system - clean	•					
Fuel hose - replace	Every 5 years					

## 1-10 GENERAL INFORMATION

### Periodic Maintenance Chart

OPERATION	FREQUENCY					As required
	After each race (or 2.5 hr.)	Every 3 races (or 7.5 hr.)	Every 5 races (or 12.5 hr.)	Every 10 races (or 25 hr.)		
Fuel hoses, connections - inspect †	•					
Steering play - inspect †	•					
Steering stem bearing - grease			•			
Rear sprocket - inspect †			•			
General lubrication - perform	•					
Wheel bearing - inspect †				•		
Swing arm and Uni-Trak linkage pivots - grease			•			
Swing arm and Uni-Trak linkage pivots - inspect †			•			
Rear shock oil - replace	1st time after 2 races, then every 5 races					

†: Replace, add, adjust, clean or torque if necessary.

R: Replace

**Torque and Locking Agent**

Tighten all bolts and nuts to the proper torque using an accurate torque wrench. If insufficiently tightened, a bolt or nut may become damaged, strip an internal thread, or break and then fall out. The following table lists the tightening torque for the major bolts and nuts, and the parts requiring use of a non-permanent locking agent or liquid gasket.

When checking the tightening torque of the bolts and nuts, first loosen the bolt or nut by half a turn and then tighten to specified torque.

Letters used in the "Remarks" column mean:

L: Apply a non-permanent locking agent to the threads.

Lh: Left-hand Threads.

R: Replacement Parts

S: Tighten the fasteners following the specified sequence.

Fastener	Torque			Remarks
	N·m	kgf·m	ft·lb	
<b>Fuel System</b>				
Rear Frame Mounting Bolts	34	3.5	25	
Carburetor Clamp Screws	1.5	0.15	13 in·lb	
Carburetor Holder Mounting Bolts	8.8	0.90	78 in·lb	
Air Cleaner Housing Plate Nuts	3.0	0.31	27 in·lb	
Air Cleaner Housing Mounting Bolts	8.8	0.90	78 in·lb	
Reed Valve Screws	9.8	1.0	87 in·lb	
<b>Cooling System</b>				
Radiator Mounting Bolts	8.8	0.90	78 in·lb	
Shroud Mounting Bolts	8.8	0.90	78 in·lb	
Air Bleeder Bolt	8.8	0.90	78 in·lb	
Water Pump Cover Bolts	8.8	0.90	78 in·lb	
Water Pump Impeller Bolt	8.3	0.85	73 in·lb	
Water Hose Clamp Screws	1.5	0.15	13 in·lb	
Coolant Drain Plug (Water Pump)	8.8	0.90	78 in·lb	
Water Pump Cover Fitting Bolts	5.9	0.60	52 in·lb	
<b>Engine Top End</b>				
Cylinder Head Nuts	25	2.5	18	
Spark Plug	26	2.6	19	
Cylinder Nuts	25	2.5	18	
Muffler Mounting Bolts	8.8	0.90	78 in·lb	L
Expansion Chamber Damper Mounting Bolt, Nut	8.8	0.90	78 in·lb	
Inner Pipe Mounting Bolts (KX65A1 ~ A2)	5.9	0.6	52 in·lb	L
Inner Pipe Mounting Bolts (KX65A3 ~)	8.8	0.90	78 in·lb	L
<b>Engine Right Side</b>				
Primary Gear Nut (KX65A6 ~)	49	5.0	36	Lh
Clutch Spring Bolts	9.3	0.95	82 in·lb	
Clutch Hub Bolt	64	6.5	47	
Ratchet Guide Bolt	8.8	0.90	78 in·lb	
Ratchet Guide Screw	5.2	0.53	46 in·lb	
Kick Pedal Bolt	12	1.2	104 in·lb	
Right Engine Cover Bolts	8.8	0.90	78 in·lb	
Oil Filler Cap	1.5	0.15	13 in·lb	



# 1-12 GENERAL INFORMATION

## Torque and Locking Agent

Fastener	Torque			Remarks
	N·m	kgf·m	ft·lb	
Gear Set Lever Screw	8.8	0.90	78 in·lb	
<b>Engine Removal/Installation</b>				
Engine Mounting Nuts	25	2.5	18	
Engine Mounting Nuts (KX65-A3 ~)	29	3.0	21	
Swing Arm Pivot Shaft Nut	69	7.0	51	
<b>Engine Bottom End/Transmission</b>				
Cylinder Stud	–	–	–	L (Planted Side)
Crankcase Bolts	8.8	0.90	78 in·lb	
Shift Pedal Bolt	8.8	0.90	78 in·lb	
Engine Oil Drain Plug	20	2.0	15	
Bearing Retaining Screws	8.8	0.90	78 in·lb	
Shift Drum Operating Plate Bolt	24	2.4	17	L
Shift Drum Plate Mounting Screws	5.2	0.53	46 in·lb	L
Gear Set Lever Screw	8.8	0.90	78 in·lb	
Flywheel Nut	29	3.0	21	
<b>Wheels/Tires</b>				
Front Axle Nut	79	8.0	58	
Rear Axle Nut	79	8.0	58	
Spoke Nipple	Not less than 1.5	Not less than 0.15	Not less than 13 in·lb	
<b>Final Drive</b>				
Rear Axle Nut	79	8.0	58	
Rear Sprocket Bolts	26	2.7	20	
<b>Brakes</b>				
Caliper Mounting Bolts (Front, Rear)	25	2.5	18	
Brake Hose Banjo Bolts	25	2.5	18	
Master Cylinder Clamp Bolts	8.8	0.90	78 in·lb	S
Rear Master Cylinder Mounting Screws	9.8	1.0	87 in·lb	
Rear Master Cylinder Push Rod Locknut	18	1.8	13	
Brake Disc Mounting Bolts (Front, Rear)	9.8	1.0	87 in·lb	L
Caliper Bleed Valves (Front, Rear)	7.8	0.80	69 in·lb	
Brake Pedal Mounting Bolt	25	2.5	18	
Brake Lever Adjuster locknut	4.9	0.50	43 in·lb	
Brake Pad Bolts	18	1.8	13	
<b>Suspension</b>				
Front Fork Clamp Bolts (Upper)	20	2.0	14	
Front Fork Clamp Bolt (Lower)	29	3.0	22	
Fork Bottom Allen Bolt	20	2.0	14	L
Front Fork Top Plug	22	2.2	16	
Swingarm Pivot Shaft Nut	69	7.0	51	R
Rear Shock Absorber Mounting Bolt (Upper)	39	4.0	29	
Rear Shock Absorber Mounting Nut (Lower)	34	3.5	25	R

**Torque and Locking Agent**

Fastener	Torque			Remarks
	N·m	kgf·m	ft·lb	
Tie-rod Mounting Nuts (Front, Rear)	59	6.0	43	R
Rocker Arm Pivot Nut	83	8.5	61	R
Caliper Mounting Bolts	25	2.5	18	
Rear Frame Mounting Bolts	34	3.5	25	
<b>Steering</b>				
Steering Stem Head Nut	44	4.5	33	
Steering Stem Nut	2.9	0.30	26 in·lb	
Handlebar Clamp Bolts	25	2.5	18	
Clutch Lever Clamp Bolts	8.8	0.90	78 in·lb	
Front Fork Clamp Bolts (Upper)	20	2.0	15	
Front Fork Clamp Bolts (Lower)	29	3.0	22	
<b>Electrical System</b>				
Magneto Cover Bolts	8.8	0.90	78 in·lb	
Flywheel Nut	29	3.0	21	
Stator Plate Mounting Screws	4.9	0.50	43 in·lb	
Ignition Coil Mounting Bolts	8.8	0.90	78 in·lb	
CDI Unit Mounting Bolts	8.8	0.90	78 in·lb	
Spark Plug	26	2.6	19	

The table below relating tightening torque to thread diameter, lists the basic torque the bolts and nuts. Use this table for only the bolts and nuts which do not require a specific torque value. All of the values are for use with dry solvent-cleaned threads.

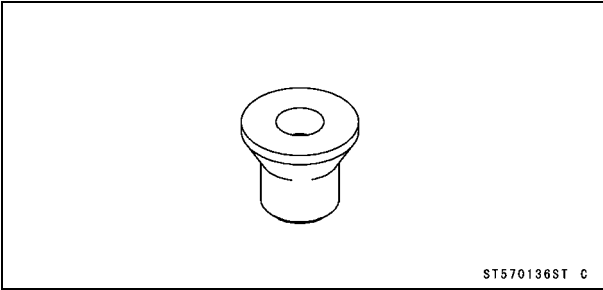
**Basic Torque for General Fasteners**

Threads dia. (mm)	Torque		
	N·m	kgf·m	ft·lb
5	3.4 ~ 4.9	0.35 ~ 0.50	30 ~ 43 in·lb
6	5.9 ~ 7.8	0.60 ~ 0.80	52 ~ 69 in·lb
8	14 ~ 19	1.4 ~ 1.9	10.0 ~ 13.5
10	25 ~ 34	2.6 ~ 3.5	19.0 ~ 25
12	44 ~ 61	4.5 ~ 6.2	33 ~ 45
14	73 ~ 98	7.4 ~ 10.0	54 ~ 72
16	115 ~ 155	11.5 ~ 16.0	83 ~ 115
18	165 ~ 225	17 ~ 23	125 ~ 165
20	225 ~ 325	23 ~ 33	165 ~ 240

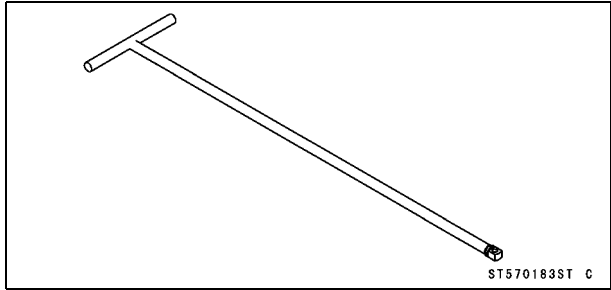
# 1-14 GENERAL INFORMATION

## Special Tools and Sealants

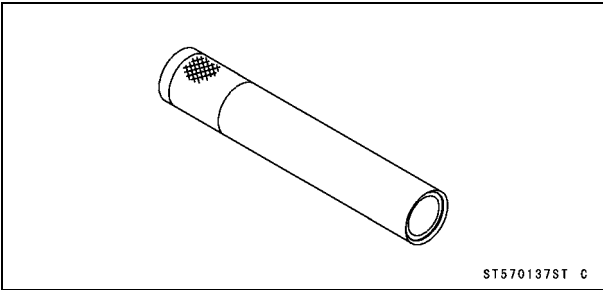
**Bearing Puller Adapter:**  
57001-136



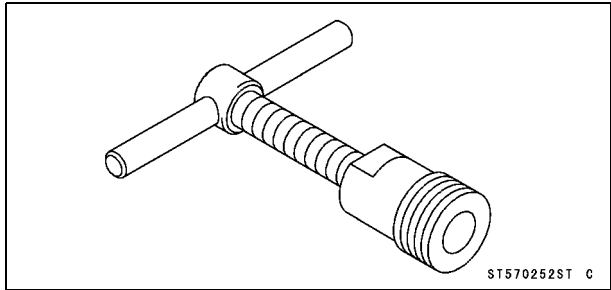
**Fork Cylinder Holder Handle:**  
57001-183



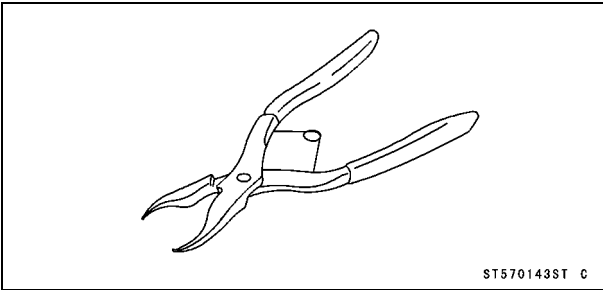
**Steering Stem Bearing Driver:**  
57001-137



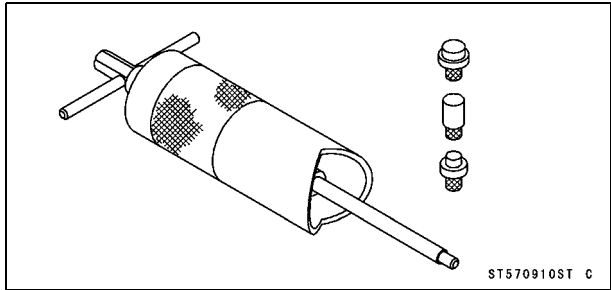
**Flywheel Puller, M12 x 1.75:**  
57001-252



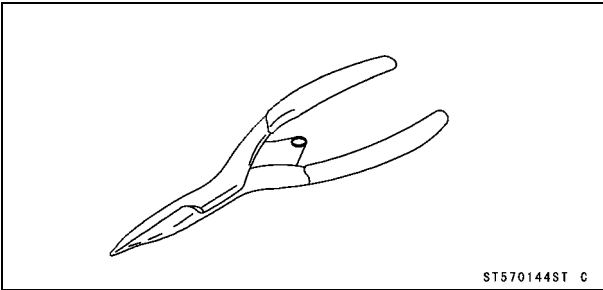
**Inside Circlip Pliers:**  
57001-143



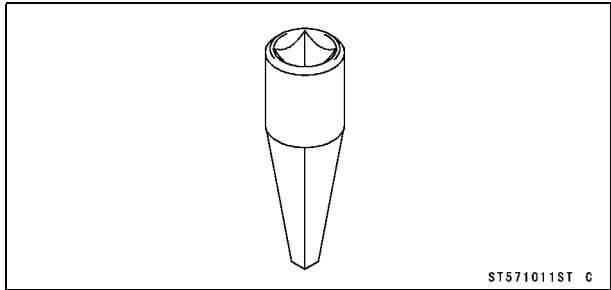
**Piston Pin Puller Assembly:**  
57001-910



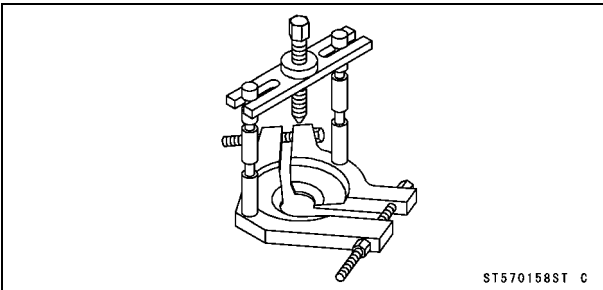
**Outside Circlip Pliers:**  
57001-144



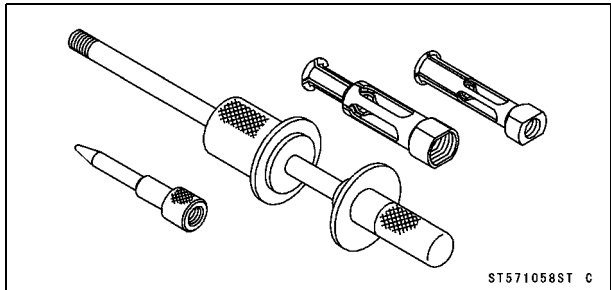
**Fork Cylinder Holder Adapter:**  
57001-1011



**Bearing Puller:**  
57001-158

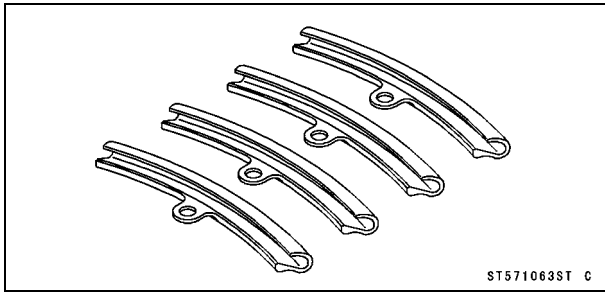


**Oil Seal & Bearing Remover:**  
57001-1058

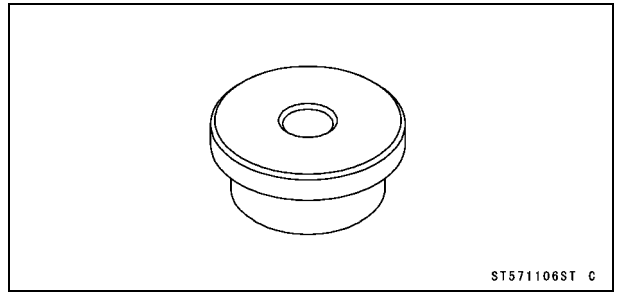


Special Tools and Sealants

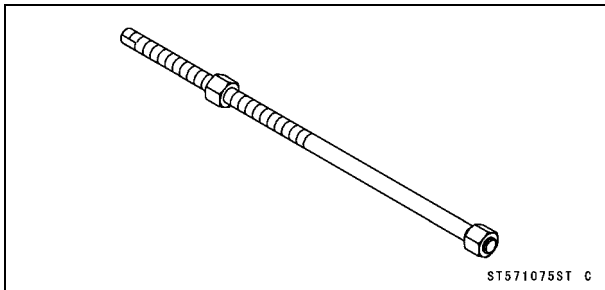
Rim Protector:  
57001-1063



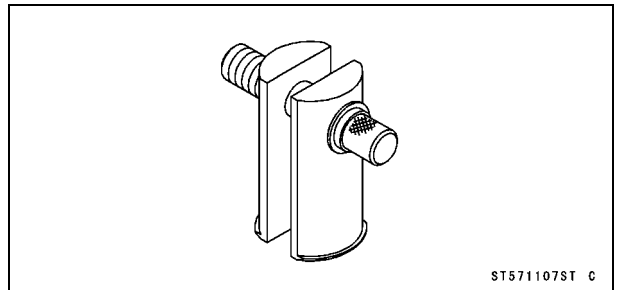
Head Pipe Outer Race Driver,  $\phi 46.5$ :  
57001-1106



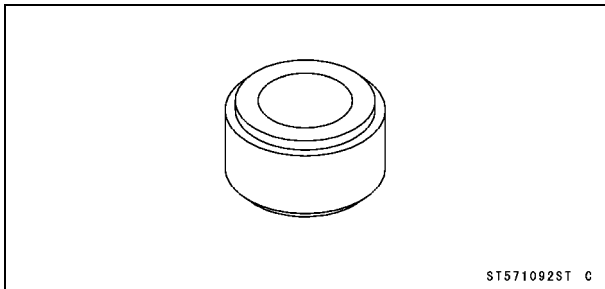
Head Pipe Outer Race Press Shaft:  
57001-1075



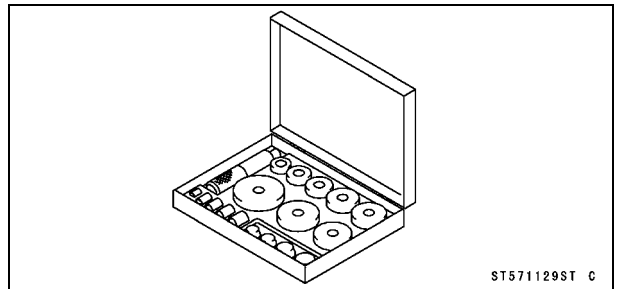
Head Pipe Outer Race Remover ID > 37 mm:  
57001-1107



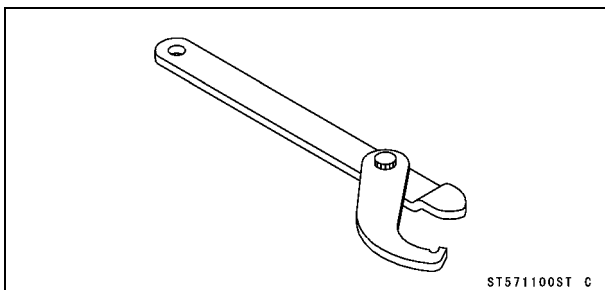
Steering Stem Bearing Driver Adapter,  $\phi 29.7$ :  
57001-1092



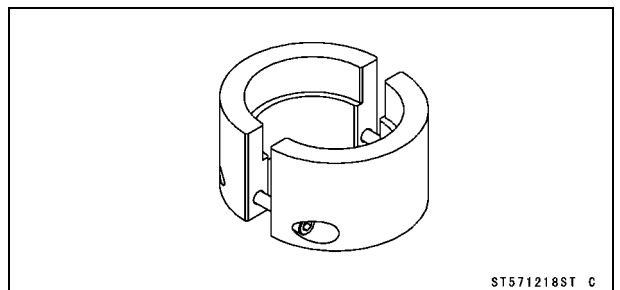
Bearing Driver Set:  
57001-1129



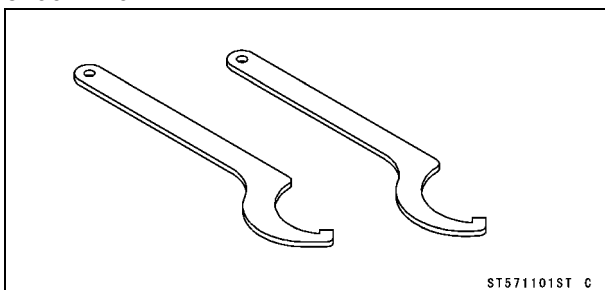
Steering Stem Nut Wrench:  
57001-1100



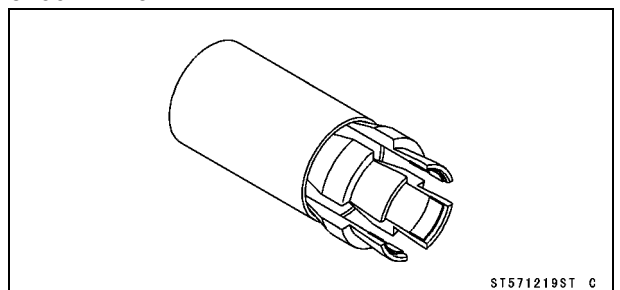
Fork Outer Tube Weight:  
57001-1218



Hook Wrench R37.5, R42:  
57001-1101



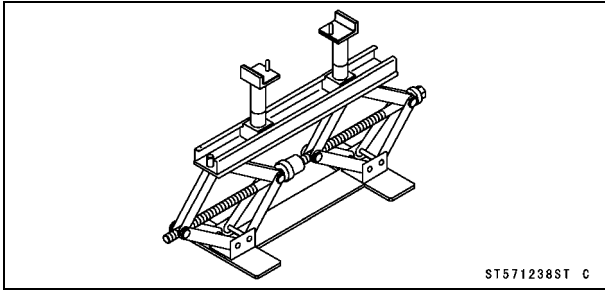
Front Fork Oil Seal Driver:  
57001-1219



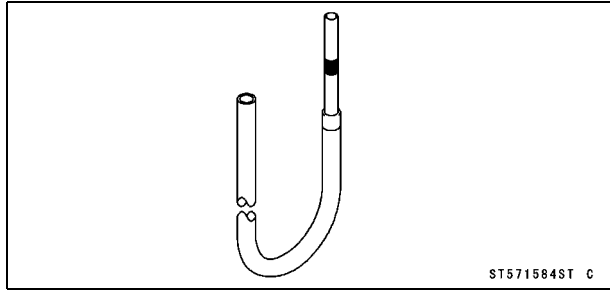
# 1-16 GENERAL INFORMATION

## Special Tools and Sealants

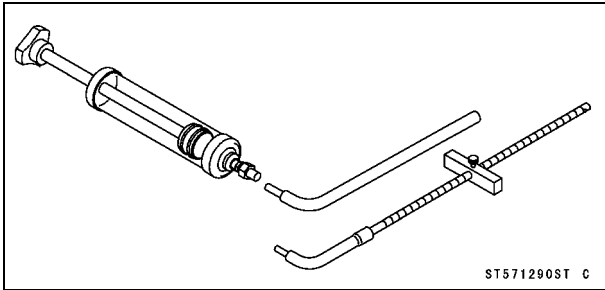
**Jack:**  
57001-1238



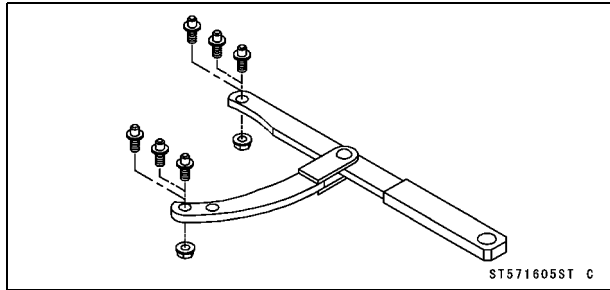
**Graduated Cylinder & Tube:**  
57001-1584



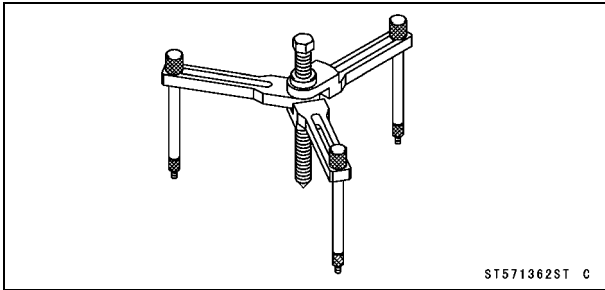
**Fork Oil Level Gauge:**  
57001-1290



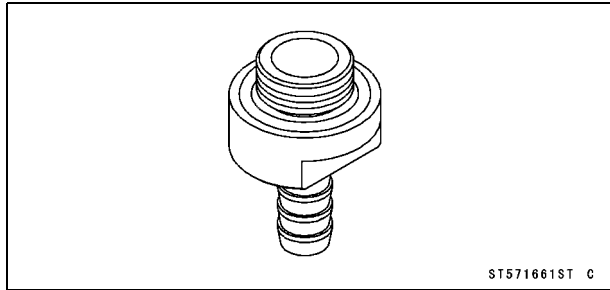
**Flywheel & Pulley Holder:**  
57001-1605



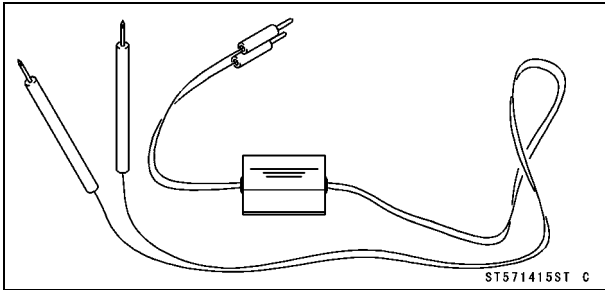
**Crankcase Splitting Tool Assembly:**  
57001-1362



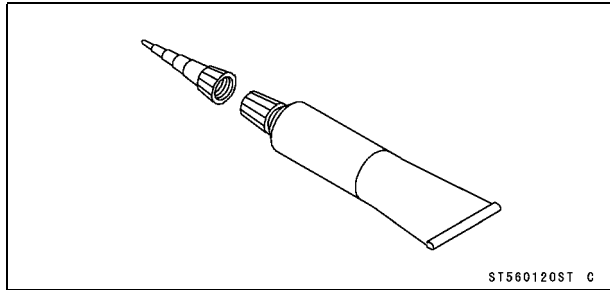
**Fuel Level Gauge Adapter, M16 x 1:**  
57001-1661



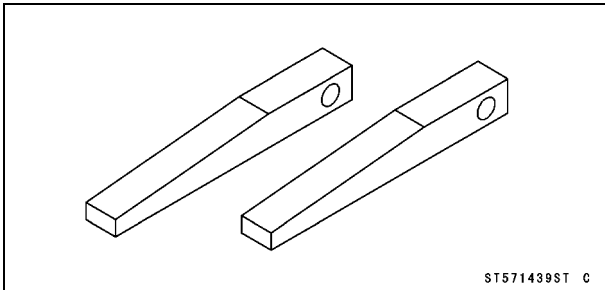
**Peak Voltage Adapter:**  
57001-1415



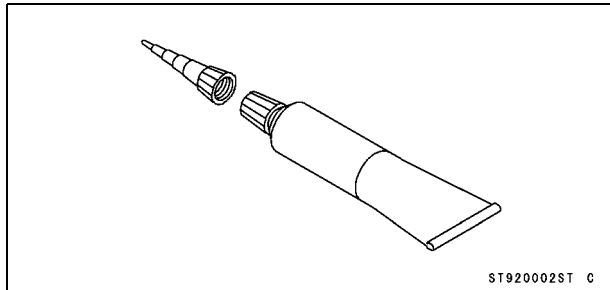
**Liquid Gasket, TB1211:**  
56019-120



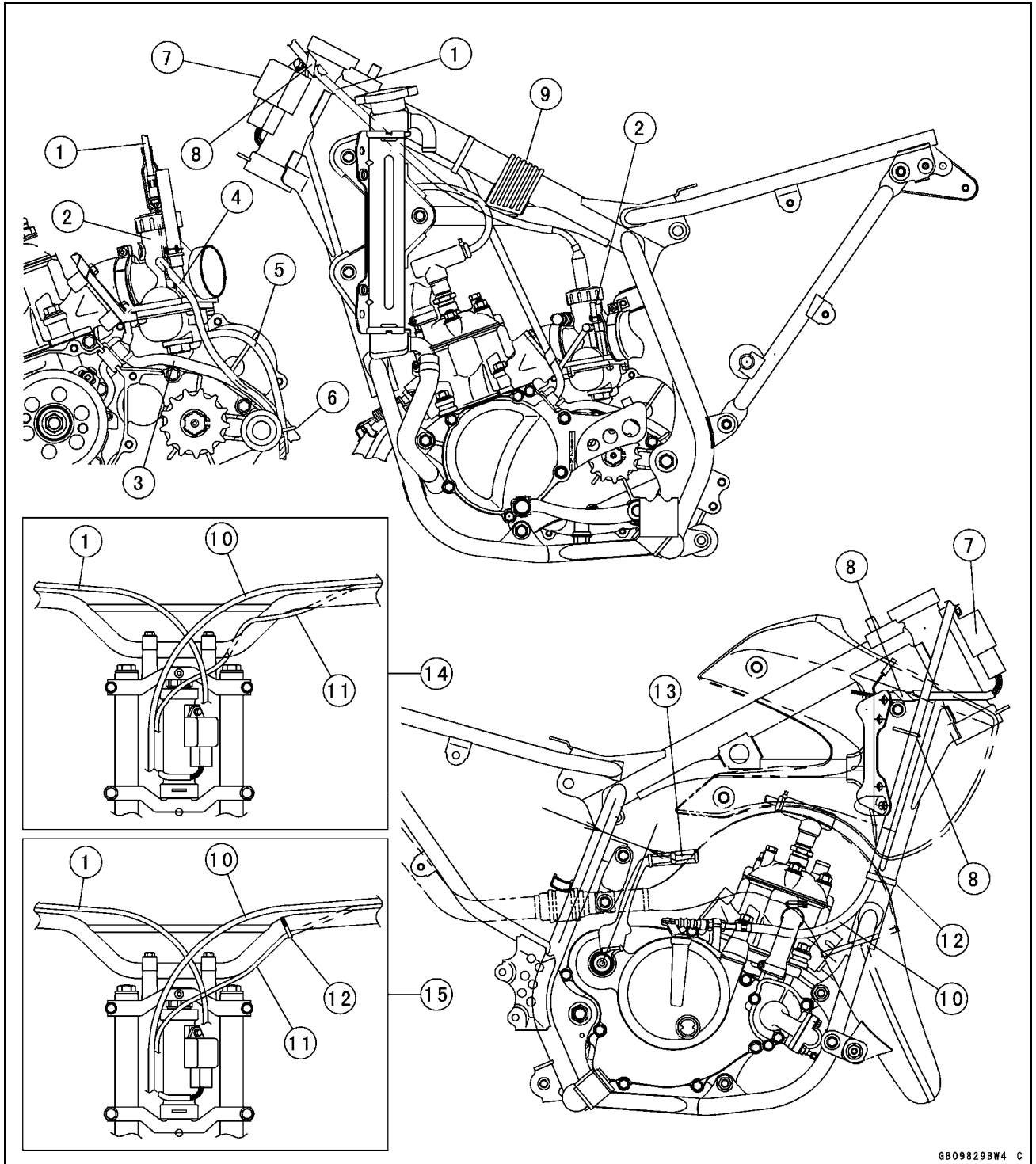
**Crank Shaft Jig:**  
57001-1439



**Liquid Gasket, TB1105B:**  
92104-002



Cable, Wire and Hose Routing

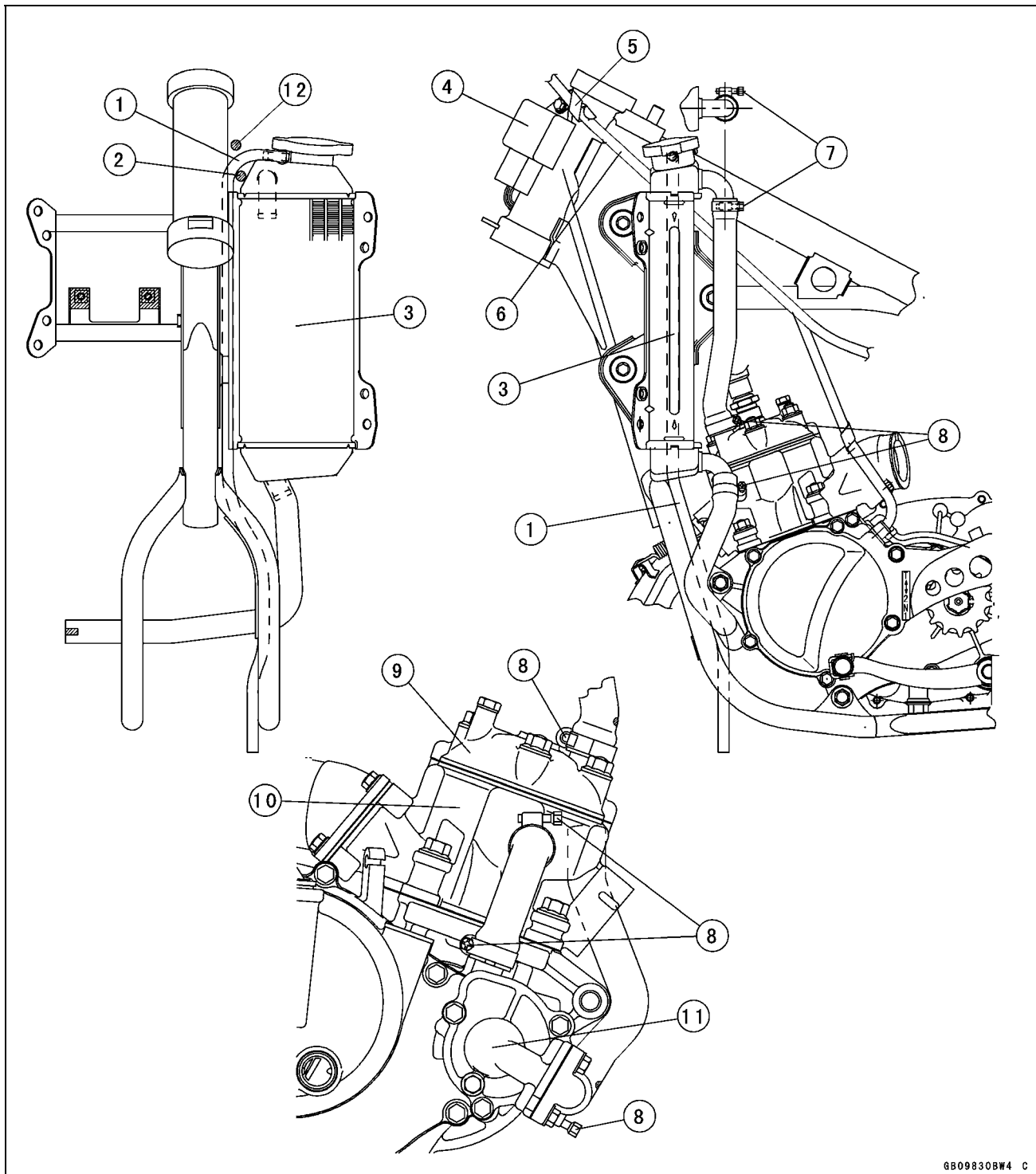


GB09829BW4 C

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1. Throttle Cable</li> <li>2. Carburetor</li> <li>3. Breather Hose</li> <li>4. Air Vent Hose</li> <li>5. Overflow Hose</li> <li>6. The hoses are passed from the left side of the engine through the clamp in order of the air vent hose, the overflow hose and the breather hose as shown in figure.</li> <li>7. CDI Unit (KX65-A1 ~ A6)</li> </ul> | <ul style="list-style-type: none"> <li>8. Clamp</li> <li>9. Rubber Damper (Note its installing direction.)</li> <li>10. Clutch Cable</li> <li>11. Engine Stop Button Lead</li> <li>12. Band</li> <li>13. Install the kick pedal so that it should be parallel to the frame as shown in figure.</li> <li>14. KX65-A1 ~ A2</li> <li>15. KX65-A3 ~ A6</li> </ul> |
|---|---|

# 1-18 GENERAL INFORMATION

## Cable, Wire and Hose Routing



6B09830BW4 C

1. Breather Hose
2. Run the throttle cable under the breather hose.
3. Radiator
4. CDI Unit (KX65-A1 ~ A6)
5. Clamp (KX65-A1 ~ A6)
6. Throttle Cable
7. Clamp as shown in figure. (Be sure the clamp screw position is inside.)
8. Clamp as shown in figure.
9. Cylinder Head
10. Cylinder
11. Water Pump Cover
12. Engine Stop Button Lead (KX65A6 ~)



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