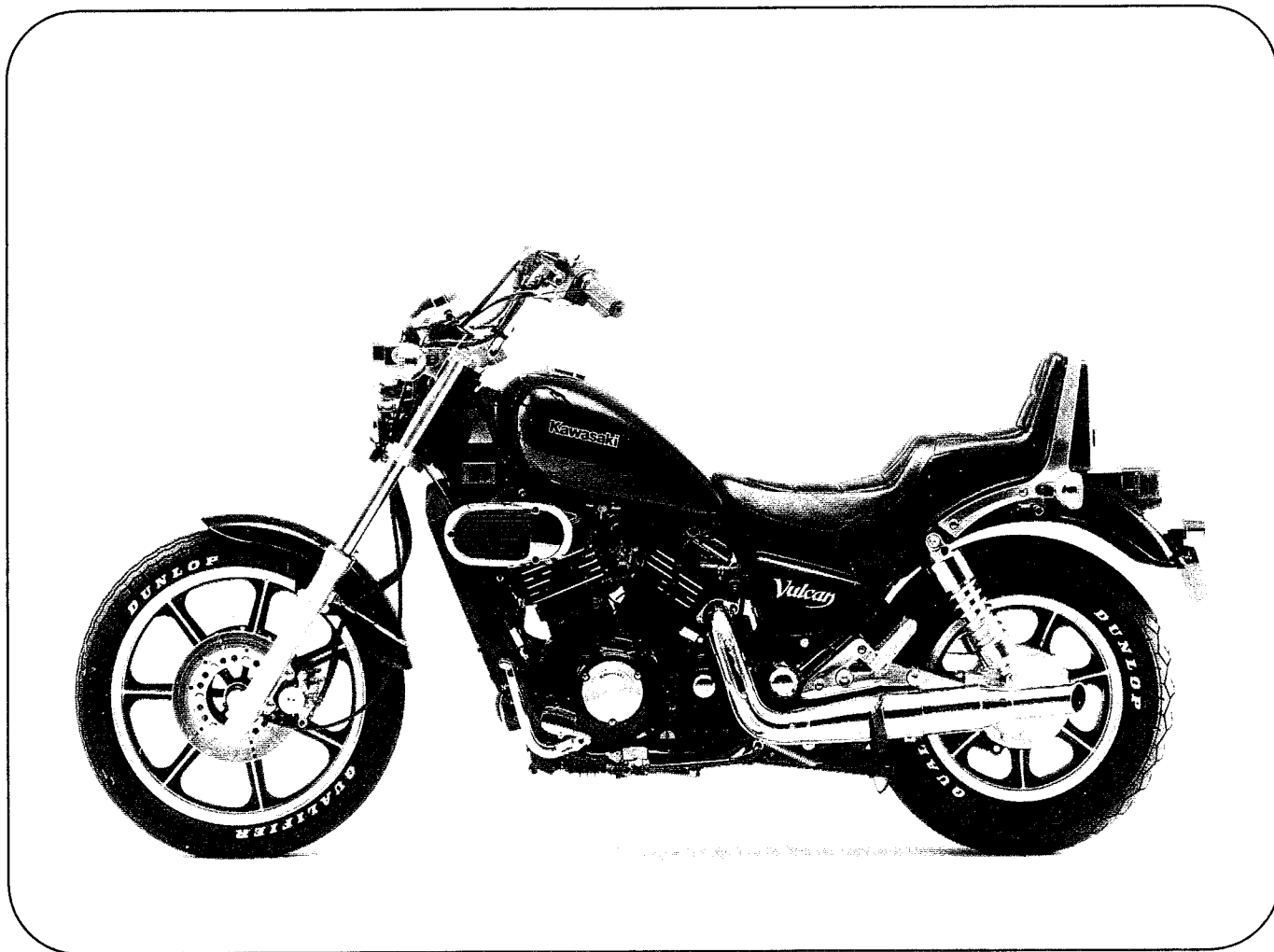




Kawasaki

Vulcan
VN750
TWIN



Motorcycle Service Manual

Quick Reference Guide

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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.



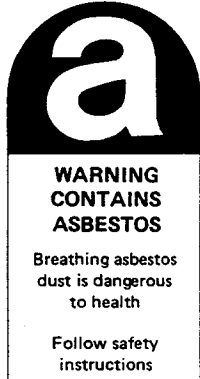
Motorcycle Service Manual

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No liability can be accepted for any inaccuracies or omissions in this publication, although every possible care has been taken to make it as complete and accurate as possible.

The right is reserved to make changes at any time without prior notice and without incurring an obligation to make such changes to products manufactured previously. See your Motorcycle dealer for the latest information on product improvements incorporated after this publication.

All information contained in this publication is based on the latest product information available at the time of publication. Illustrations and photographs in this publication are intended for reference use only and may not depict actual model component parts.



This warning may apply to any of the following components or any assembly containing one or more of these components:—

Brake Shoes or Pads
Clutch Friction Material
Gaskets
Insulators

SAFETY INSTRUCTIONS

- Operate if possible out of doors or in a well ventilated place.
- Preferably use hand tools or low speed tools equipped, if necessary, with an appropriate dust extraction facility. If high speed tools are used, they should always be so equipped.
- If possible, dampen before cutting or drilling.
- Dampen dust and place it in properly closed receptacle and dispose of it safely.

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)		

Read OWNER'S MANUAL before operating.

EMISSION CONTROL INFORMATION

To protect the environment in which we all live, Kawasaki has incorporated crankcase emission (1) and exhaust emission (2) control systems in compliance with applicable regulations of the United States Environmental Protection Agency and California Air Resources Board. Additionally, Kawasaki has incorporated an evaporative emission control system (3) in compliance with applicable regulations of the California Air Resources Board on vehicles sold in California only.

1. Crankcase Emission Control System

This system eliminates the release of crankcase vapors into the atmosphere. Instead, the vapors are routed through an oil separator to the intake side of the engine. While the engine is operating, the vapors are drawn into combustion chamber, where they are burned along with the fuel and air supplied by the carburetion system.

2. Exhaust Emission Control System

This system reduces the amount of pollutants discharged into the atmosphere by the exhaust of this motorcycle. The fuel and ignition systems of this motorcycle have been carefully designed and constructed to ensure an efficient engine with low exhaust pollutant levels.

3. Evaporative Emission Control System

Vapors caused by fuel evaporation in the fuel system are not vented into the atmosphere. Instead, fuel vapors are routed into the running engine to be burned, or stored in a canister when the engine is stopped. Liquid fuel is caught by a vapor separator and returned to the fuel tank.

The Clean Air Act, which is the Federal law covering motor vehicle pollution, contains what is commonly referred to as the Act's "tampering provisions."

"Sec. 203(a) The following acts and the causing thereof are prohibited...

(3)(A) for any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title prior to its sale and delivery to the ultimate purchaser, or for any manufacturer or dealer knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.

(3)(B) for any person engaged in the business of repairing, servicing, selling, leasing, or trading motor vehicles or motor vehicle engines, or who operates a fleet of motor vehicles knowingly to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this title following its sale and delivery to the ultimate purchaser..."

(Continued on next page.)

NOTE

- *The phrase "remove or render inoperative any device or element of design" has been generally interpreted as follows:*
1. *Tampering does not include the temporary removal or rendering inoperative of devices or elements of design in order to perform maintenance.*
 2. *Tampering could include:*
 - a. *Maladjustment of vehicle components such that the emission standards are exceeded.*
 - b. *Use of replacement parts or accessories which adversely affect the performance or durability of the motorcycle.*
 - c. *Addition of components or accessories that result in the vehicle exceeding the standards.*
 - d. *Permanently removing, disconnecting, or rendering inoperative any component or element of design of the emission control systems.*

WE RECOMMEND THAT ALL DEALERS OBSERVE THESE PROVISIONS OF FEDERAL LAW, THE VIOLATION OF WHICH IS PUNISHABLE BY CIVIL PENALTIES NOT EXCEEDING \$10,000 PER VIOLATION.

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Among those acts presumed to constitute tampering are the acts listed below:

- Replacement of the original exhaust system or muffler with a component not in compliance with Federal regulations.
- Removal of the muffler(s) or any internal portion of the muffler(s).
- Removal of the air box or air box cover.
- Modifications to the muffler(s) or air intake system by cutting, drilling, or other means if such modifications result in increased noise levels.

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 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.

For the duration of your warranty period, especially, we recommend that all repairs and scheduled maintenance be performed in accordance with this service manual. Any owner maintenance or repair procedure not performed in accordance with this manual may void the warranty.

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 Special Tool 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.

How to Use this Manual

In preparing this manual, we divided the product into its major systems. These systems became the manual's chapters. All information for a particular system from adjustment through disassembly and inspection is located in a single chapter.

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.

The Periodic Maintenance Chart is located in the General Information chapter. The chart gives a time schedule for required maintenance operations.

If you want spark plug information, for example, go to the Periodic Maintenance Chart first. The chart tells you how frequently to clean and gap the plug. Next, 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 Spark Plug section.

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

WARNING

- This warning symbol identifies special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.

CAUTION

- This caution symbol identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.

This manual contains five more symbols (in addition to WARNING and CAUTION) which will help you distinguish different types of information.

NOTE

- This note symbol indicates points of particular interest for more efficient and convenient operation.

- 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 WARNING, CAUTION, or 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.
- ☆ Indicates a conditional sub-step or what action to take based upon the results of the conditional 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

Before Servicing	1-2
Model Identification	1-4
General Specification	1-6
Periodic Maintenance Chart	1-8

1-2 GENERAL INFORMATION

Before Servicing

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 (–) wire 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 wires from electrical parts, as well as damage to the electrical parts themselves. For reinstallation, first connect the positive wire 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.
- (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

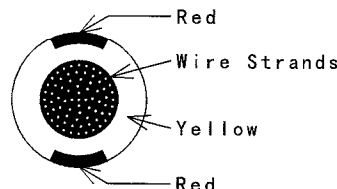

When there is a replacement instruction, replace these parts with new ones every time they are removed.

Replacement parts will be damaged or lose their original function once they are removed. Therefore, always replace these parts with new ones every time they are removed. Although the previously mentioned gasket, O-ring, ball bearing, needle bearing, grease seal, oil seal, circlip, and cotter pin have not been so designated in their respective text, they are replacement parts.

(18) Electrical Wires

All the electrical wires are either one-color or two-color. A two-color wire is identified first by the primary color and then the stripe 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. Unless instructed otherwise, electrical wires must be connected to wires of the same color.

Two-Color Electrical

Wire (cross-section)	Color Indicated on the Wire	Color Indicated on the Wiring Diagram
 <p>Red Wire Strands Yellow Red</p>	<p>Yellow/Red</p>	 <p>Y/R</p>

GB020601W1 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.

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

(20) Specifications

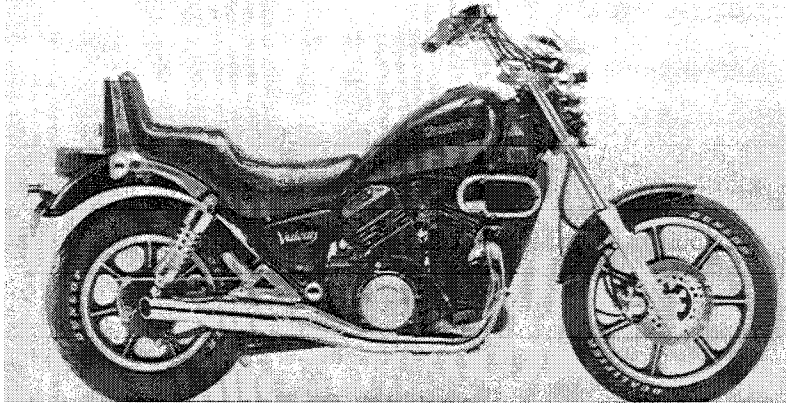
Specification terms are defined as follows:

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

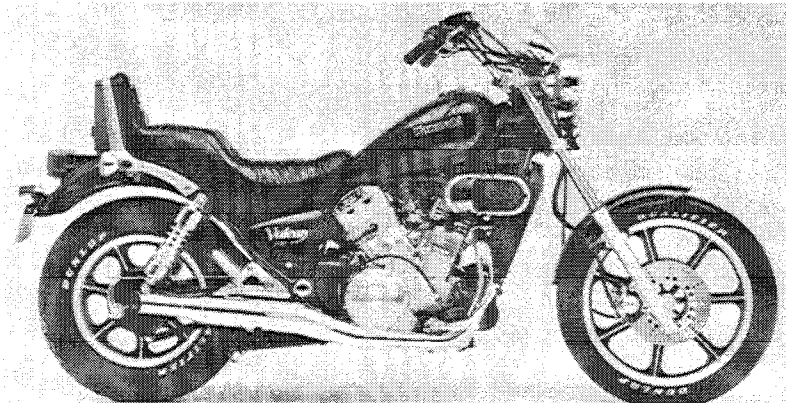
"Service Limits" indicate the usable limits. If the measurement shows excessive wear or deteriorated performance, replace the damaged parts.

1-4 GENERAL INFORMATION

.....
Model Identification
.....



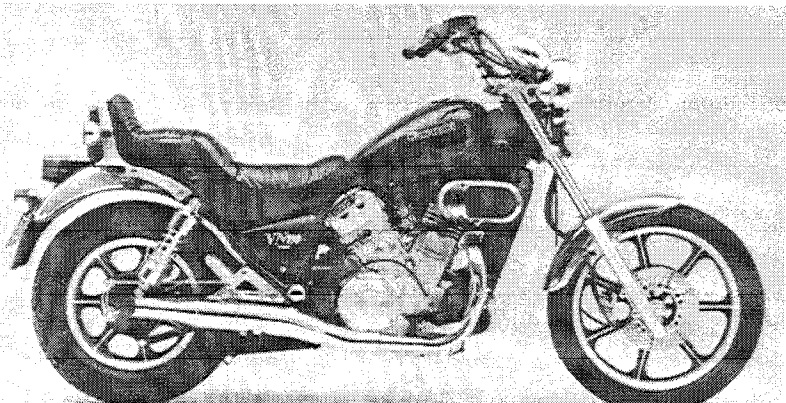
**VN700-A1 (US Model)
or VN750-A1 (Canada Model)**



**VN750-A2
(US, Canada Model)**

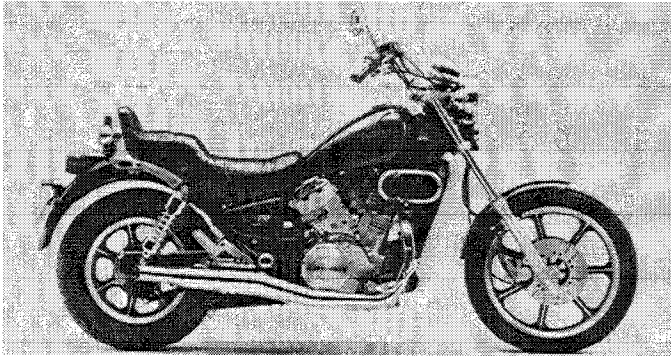


VN750-A3 (US, Canada Model)



**VN750-A2, A3
(European or General Model)**

GENERAL INFORMATION 1-5



**VN750-A4, A5
(European Model)**



**VN750-A6, A7
(US, Canada Model)**



**VN750-A8 ~ A12
(US, Canada Model)**



**VN750-A13
(US Model)**

1-6 GENERAL INFORMATION

General Specifications

Items	VN700-A1, VN750-A1 ~
Dimensions:	
Overall length	2,310 mm, (A) (C) (S) (U) 2,295 mm, ** (E) 2,300 mm, ** (G) 2,310 mm
Overall width	860 mm, (C) (U) 850 mm
Overall height	1,235 mm, (C) (U) 1,225 mm
Wheelbase	1,585 mm, (C) (U) 1,580 mm
Road clearance	135 mm, (C) (U) 150 mm
Seat height	750 mm, (C) (U) 735 mm
Dry weight	223 kg, (Ca) 219.5 kg, (C) (U) 219 kg
Curb weight	110 kg, (Ca) 108.5 kg, (C) (U) 108 kg
	131 kg, (C) (Ca) (U) 128 kg
Fuel tank capacity	13.5 L
Performance:	
Climbing ability	20°
Braking distance	12.5 m from 50 km/h
Minimum turning radius	2.9 m
Engine:	
Type	4-stroke, DOHC, V 2-cylinder
Cooling system	Liquid-cooled
Bore and stroke	*82.0 x 66.2 mm, 84.9 x 66.2 mm
Displacement	*699 mL, 749 mL
Compression ratio	10.3
Maximum horsepower	48.5 kW (66 PS), (C) (S) 50.0 kW (68 PS), (G) 36.8 kW (50 PS), (F) 45.9 kW (62.4 PS), @7,500 r/min (rpm), (U) -, (W) 27.2 kW (37 PS) @5,200 r/min (rpm)
Maximum torque	** (E) 44.0kW (60PS), (F) 43.0kW (58.5PS) @7,500r/min (rpm) 64.7 N-m (6.6 kg-m, 47.7 ft-lb) @6,000 r/min (rpm), (C) (S) 64.7 N-m (6.6 kg-m, 47.7 ft-lb) @6,500 r/min (rpm), (F) -, (G) 55.9 N-m (5.7 kg-m, 41.2 ft-lb) @3,000 r/min (rpm), (U) -, (W) 53.9 N-m (5.5 kg-m, 39.8 ft-lb) @3,000 r/min (rpm) ** (E) 61.0 N-m (6.2 kg-m, 44.8ft-lb) @5,500r/min (rpm), (F) -
Carburetion system	Carburetors, keihin CVK34 x 2
Starting System	Electric starter
Ignition system	Battery and coil (transistorized)
Timing advance	Electronically advanced
Ignition timing	From 5° BTDC @1,100 r/min (rpm) to 25° BTDC @3,500 r/min (rpm) ***From 5° BTDC @1,300 r/min (rpm) to 25° BTDC @3,500 r/min (rpm)
Spark plug	Standard Option
	NGK DPR7EA-9 or ND X22EPR-U9, (A) (Ca) (I) (S) (U) NGK DP7EA-9 or ND X22EP-U9 NGK DPR8EA-9 or ND X24EPR-U9, (A) (Ca) (I) (S) (U) NGK DP8EA-9 or ND X24EP-U9
Cylinder numbering method	Front to rear, 1-2
Firing order	1-2
Valve timing: Inlet	Open Close Duration
	30° BTDC 74° ABDC 284°
Exhaust	Open Close Duration
	66° BBDC 40° ATDC 286°
Lubrication system	Forced lubrication (wet sump)
Engine oil: Grade	SE, SF, or SG class
Viscosity	SAE10W-40, 10W-50, 20W-40, or 20W-50
Capacity	4.0 L

Items	VN700-A1, VN750-A1 ~
Drive Train:	
Primary reduction system:	
Type	Gear
Reduction ratio	2.428 (85/35)
Clutch type	Wet multi disc
Transmission: Type	5-speed, constant mesh, return shift
Gear ratios: 1st	2.250 (36/16)
2nd	1.600 (32/20)
3rd	1.230 (32/26)
4th	1.000 (26/26)
5th	0.857 (24/28)
Final drive system:	Shaft drive
Reduction ratio	2.454 (15/22 x 36/10), Ⓚ Ⓢ 2.522 (15/22 x 37/10)
Overall drive ratio	5.109, Ⓚ Ⓢ 5.251 @Top gear
Final gear case oil: Type	API GL-5 Hypoid gear oil SAE90 (above 5°C) SAE80 (below 5°C)
Capacity	150 mL
Frame:	
Type	Tubular, double cradle
Caster (rake angle)	32°
Trail	127 mm
Front Tire: Type	Tubeless
Size	100/90-19 57H
Rear Tire: Type	Tubeless
Size	150/90-15 74H, 150/90 B15 M/C 74H, 150/90-15 M/C 74H
Front suspension: Type	Telescopic fork (VN700-A1 and VN750-A1 ~ A4 : pneumatic)
Wheel travel	150 mm
Rear suspension: Type	Swing arm
Wheel travel	90 mm
Brake type: Front	Dual disc
Rear	Drum
Electrical Equipment:	
Battery	12 V 14 Ah
Headlight: Type	Semi-sealed beam
Bulb	12 V 60/55 W (quartz-halogen)
Tail/brake light	12 V 5/21 W x 2, Ⓢ Ⓚ Ⓢ 8/27 W x 2
Alternator: Type	Three-phase AC
Rated output	24 A @8,000 r/min (rpm), 14 V
Voltage regulator: Type	Short-circuit

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

- * : VN700
- Ⓐ : Australia Model Ⓔ : Europe Model
- Ⓒ : Canada Model
- Ⓒₐ : California Model
- Ⓕ : France Model
- Ⓢ : West Germany Model
- Ⓚ : Italy Model
- Ⓢ : South Africa Model
- Ⓚ : US Model
- Ⓢ : Switzerland Model
- *** : VN750-A4, A5, Switzerland Model
- ** : VN750-A9~

1-8 GENERAL INFORMATION

Periodic Maintenance Chart

The scheduled maintenance must be done in accordance with this chart to keep the motorcycle in good running condition. **The initial maintenance is vitally important and must not be neglected.**

OPERATION	FREQUENCY	Which ever comes first ↓ →	* ODOMETER READING							
			1 000 km (600 mile)	6 000 km (4 000 mile)	12 000 km (7 500 mile)	18 000 km (12 000 mile)	24 000 km (15 000 mile)	30 000 km (20 000 mile)	36 000 km (24 000 mile)	See Page
Spark plug-clean	Every		●	●	●	●	●	●	15-21	
Spark plug-check †			●	●	●	●	●	●	15-21	
Air suction valve (U)(W)-check †			●	●	●	●	●	●	4-10	
Air cleaner element-clean		●	●		●		●		2-23	
Air cleaner element-replace	5 cleanings				●				2-23	
Throttle grip play-check †		●	●		●		●		2-5	
Idle speed-check †		●	●	●	●	●	●	●	2-9	
Engine vacuum synchronization-check †		●	●	●	●	●	●	●	2-10	
Fuel system-check †				●		●		●	2-13	
Fuel hoses, connections-check †			●	●	●	●	●	●		
Coolant-change	2 years							●	3-4	
Evaporative emission control system (CA)- check †		●	●	●	●	●	●	●	2-27	
Engine oil-change	year	●	●	●	●	●	●	●	6-5	
Oil filter-replace		●	●		●		●		6-6	
Oil screen-clean		●	●		●		●		6-5	
Radiator hoses, connections-check †	year	●	●		●		●		3-9	
Final gear case oil level-check †				●		●		●	10-6	
Final gear case oil-change		●						●	10-6	
Propeller shaft joint-lubricate			●					●	10-6	
Fuel hose-replace	4 years								-	
Clutch-adjust		●	●	●	●	●	●	●	5-4	
Brake hoses, connections-check †			●	●	●	●	●	●		
Brake lining or pad wear-check †			●	●	●	●	●	●	11-4,7	
Brake fluid level-check †	month	●	●	●	●	●	●	●	11-10	
Brake fluid-change	2 years					●			11-11	
Brake hose-replace	4 years								11-13	
Brake master cylinder cup and dust seal-replace	2 years								11-9	
Caliper piston seal and dust seal-replace	2 years								11-6	
Brake play-check †		●	●	●	●	●	●	●	11-4	
Brake light switch-check †		●	●	●	●	●	●	●	15-46	
Brake camshaft-lubricate	2 years					●			11-15	
Brake cable-replace	2 years								11-13	
Steering-check †		●	●	●	●	●	●	●	13-4	
Steering stem bearing-lubricate	2 years					●			13-8	
Front fork oil-change								●	12-5	
Tire wear-check †			●	●	●	●	●	●	9-10	
Swingarm pivot-lubricate				●				●	12-15	
Battery electrolyte level-check †	month	●	●	●	●	●	●	●	15-10	
General lubrication-perform			●	●	●	●	●	●	2-8,16-8	
Nut, bolt, and fastener tightness-check †		●	●	●	●	●	●	●	16-8	

* : For higher odometer readings, repeat at the frequency interval established here.

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

(Ca): California vehicle only

(U): US vehicle only

(W): Switzerland Model

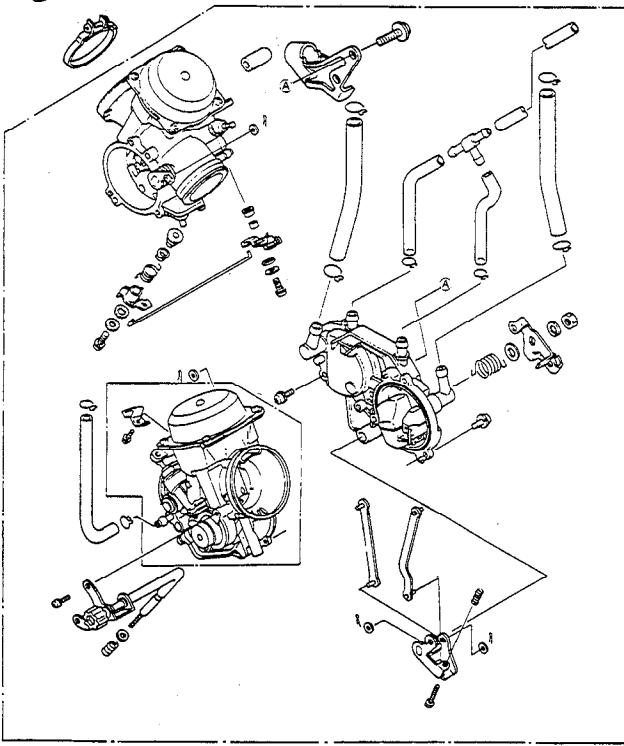
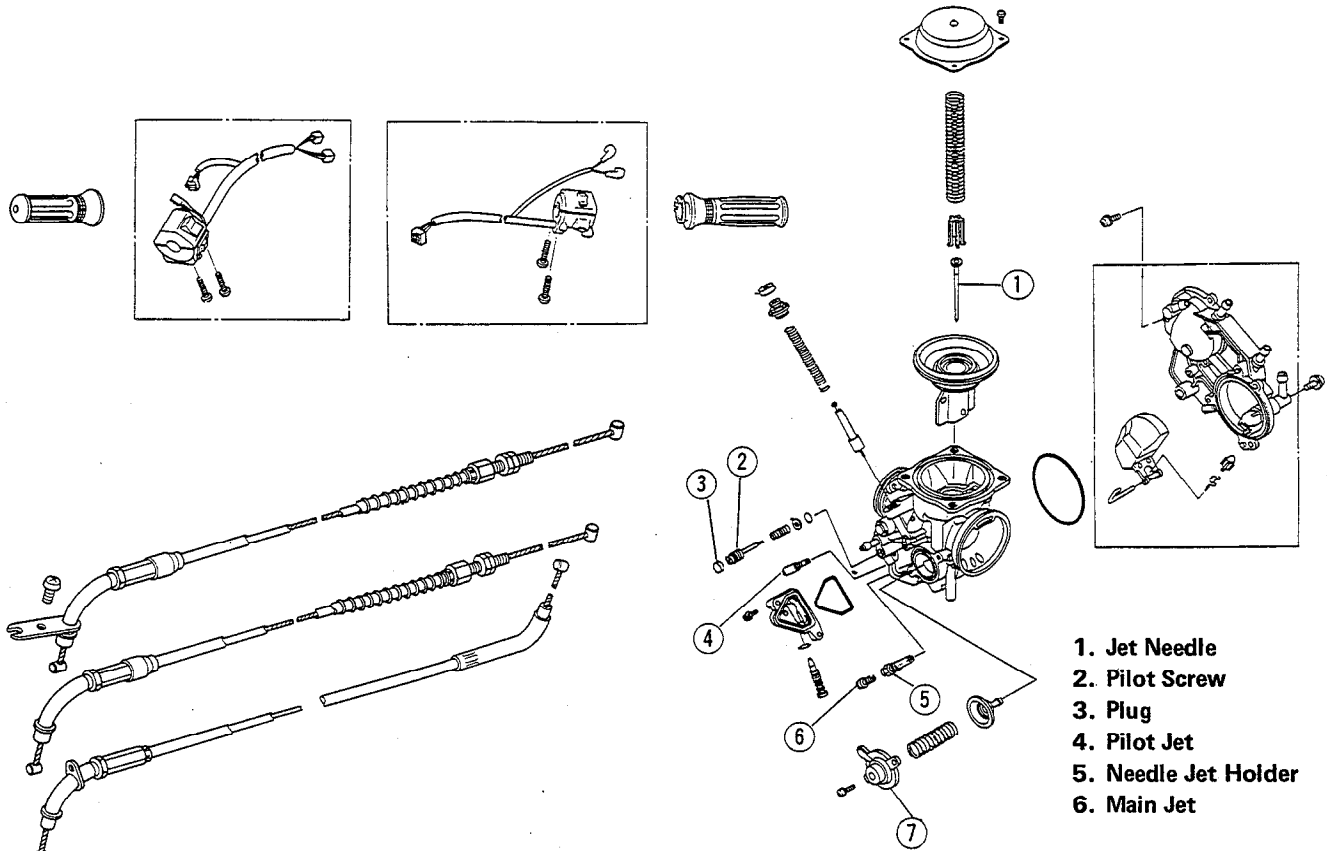
Fuel System

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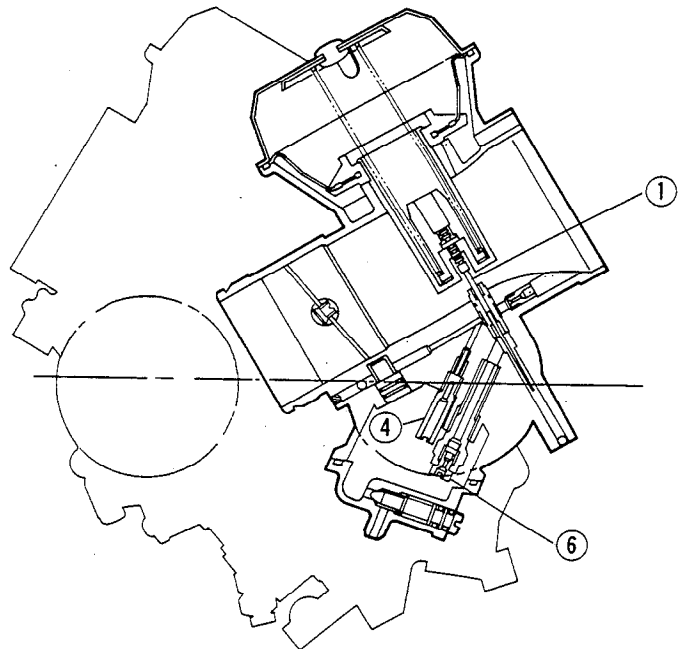
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2-2 FUEL SYSTEM

Exploded View

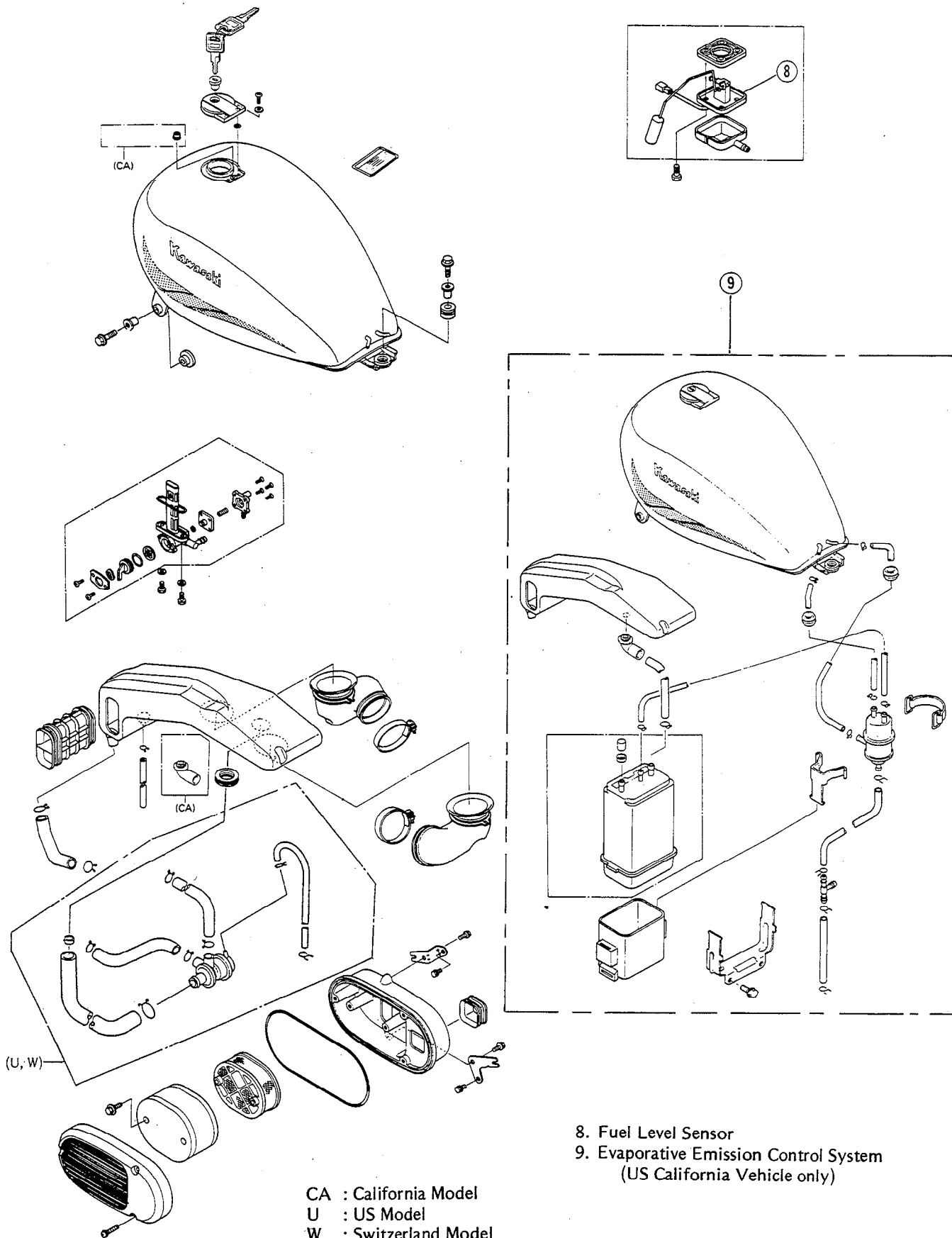


Slanted Carburetor



7. Coasting Enricher

The system prevents back firing during engine braking by supplying a rich fuel mixture to the engine.



2.4 FUEL SYSTEM

Specifications

Throttle Grip Play

Standard: 2 – 3 mm

Choke Cable Free Play

Standard: 2 – 3 mm

Carburetor Specifications for VN700A

Make/Type	Keihin CVK34
Main Jet	135
Main Air Jet	(100)
Jet Needle	Front: N27H, Rear: N27M
Pilot Jet	38
Pilot Air Jet	(95)
Pilot Screw (turns out)	–
Starter Jet	(52)
Service Fuel Level	see P. 2-12
Float Height	see P. 2-12
Optional Main Jet	125, 128, 130, 132, 138, 140

Carburetor Specifications for VN750A

Models	A1	A2	A3	A4	A5 ~ A8	A9 ~
Make/Type	Keihin CVK34					
Main Jet	© 132	Ⓞ Ⓡ ← Ⓞ 108 Ⓜ 108	← ← ← Ⓜ 105	← ← ← ←	← ← ← ←	110 Ⓞ Ⓡ 132 ← * Ⓜ 108
Main Air Jet	(100)	←	←	←	←	←
Jet Needle Front	© N27J	← N31F Ⓡ N27U	← Ⓞ Ⓡ N53A	← ← Ⓜ N60D	← ← ←	N31F Ⓞ Ⓡ N53A * Ⓜ N96E
Jet Needle Rear	© N27K	← N31F Ⓡ N27V	← Ⓞ Ⓡ N53B	← ← Ⓜ N60D	← ← ←	N31F Ⓞ Ⓡ N53B * Ⓜ N96E
Pilot Jet	38	←	←	←	←	←
Pilot Air Jet	(95)	←	←	←	←	←
Pilot Screw (turns out)	1 ⁵ / ₈	←	← Ⓞ 2	← ← Ⓜ —	← ← ←	1 ¹ / ₂ Ⓞ 2 ←
Starter Jet	(52)					
Fuel Level (for reference)	1.5 mm above float chamber					
Service Fuel Level	see P. 2-12					
Float Height	see P. 2-12					

© : Canada Model Ⓡ : US Model
 Ⓞ : West Germany Model Ⓜ : Switzerland Model
 * Ⓜ : VN750-A10~ Austria and Switzerland Models

Idle Speed

Standard: 1,100 ±50 r/min (rpm)
 ***1,300 ±50 r/min (rpm)

Air Cleaner Element Oil

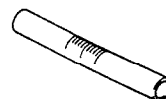
Grade: SE class
 Viscosity: SAE 30

*** : VN750-A4, A5 Switzerland Model

Special Tools

Along with common hand tools, the following more specialized tools are required for complete fuel system servicing.

Fuel Level Gauge: 57001-1017



Vacuum Gauge Set: 57001-1198

