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WARNING/CAUTION/NOTE

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol and the words WARNING, CAUTION and NOTE have special meanings. Pay special attention to the messages highlighted by these signal words.

▲ WARNING

Indicates a potential hazard that could result in death or injury.

▲ CAUTION

Indicates a potential hazard that could result in motorcycle damage.

NOTE:

Indicates special information to make maintenance easier or instructions clearer.

Please note, however, that the warnings and cautions contained in this manual cannot possibly cover all potential hazards relating to the servicing, or lack of servicing, of the motorcycle. In addition to the WARNINGS and CAUTIONS stated, you must use good judgement and basic mechanical safety principles. If you are unsure about how to perform a particular service operation, ask a more experienced mechanic for advice.

GENERAL PRECAUTIONS

▲ WARNING

- * Proper service and repair procedures are important for the safety of the service mechanic and the safety and reliability of the motorcycle.
- * When two or more persons work together, pay attention to the safety of each other.
- * When it is necessary to run the engine indoors, make sure that exhaust gas is forced outdoors.
- * When working with toxic or flammable materials, make sure that the area you work in is well ventilated and that you follow all of the material manufacturer's instructions.
- * Never use gasoline as a cleaning solvent.
- * To avoid getting burned, do not touch the engine, engine oil, and exhaust system until they have cooled.
- * After servicing the fuel, oil, exhaust or brake systems, check all of the lines and fittings related to the system for leaks.

▲ CAUTION

- * If parts replacement is necessary, replace the parts with Suzuki Genuine Parts or their equivalent.
- * When removing parts that are to be reused, keep them arranged in an orderly manner so that they may be reinstalled in the proper order.
- * Be sure to use special tools when instructed.
- * Make sure that all parts used in reassembly are clean. Lubricate them when specified.
- * Use the specified lubricant, bond, or sealant.
- * When removing the battery, disconnect the negative cable first and then the positive cable.
- * When reconnecting the battery, connect the positive cable first and then the negative cable, and cover the positive terminal with the terminal cover.
- * When performing service to electrical parts, disconnect the battery negative cable unless the service procedure requires the battery power.
- * When tightening the cylinder head and crankcase bolts and nuts, tighten the larger sizes first. Always tighten the bolts and nuts diagonally from the inside working out and to the specified tightening torque.
- * Whenever you remove oil seals, gaskets, packing, O-rings, self-locking nuts, locking washers, cotter pins, circlips and certain other parts as specified, be sure to replace them with new ones. Also, before installing these new parts, be sure to remove any left over material from the mating surfaces.
- * Never reuse a circlip. When installing a new circlip, take care not to expand the end gap larger than required to slip the circlip over the shaft. After installing a circlip, always ensure that it is completely seated in its groove and securely fitted.
- * Use a torque wrench to tighten fasteners to the specified torque. Wipe off grease and oil if a thread is smeared with them.
- * After reassembling, check parts for tightness and proper operation.

- * To protect the environment, do not unlawfully dispose of used motor oil and all other fluids, batteries and tires.
- * To protect the earth's natural resources, properly dispose of used motorcycles and parts.

SUZUKI VL1500W ('98-MODEL)



RIGHT SIDE

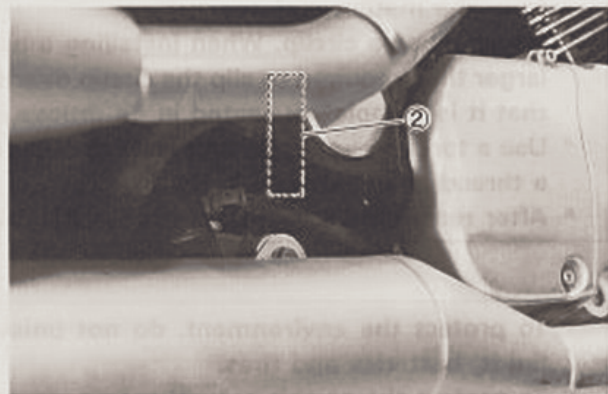
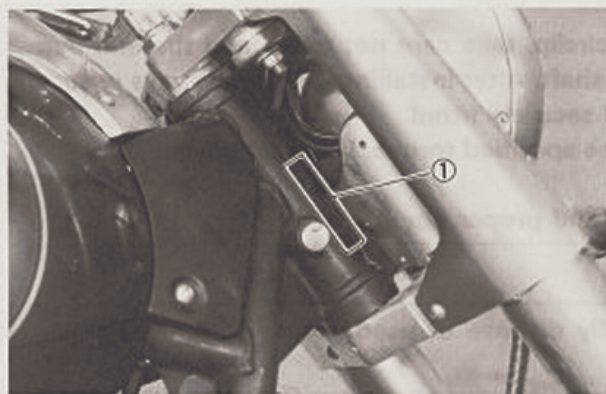


LEFT SIDE

*Difference between photographs and actual motorcycles depends on the markets.

SERIAL NUMBER LOCATION

The frame serial number or V.I.N. (Vehicle Identification Number) ① is stamped on the right side of the steering head pipe. The engine serial number ② is located on the rear side of the crankcase. These numbers are required especially for registering the machine and ordering spare parts.



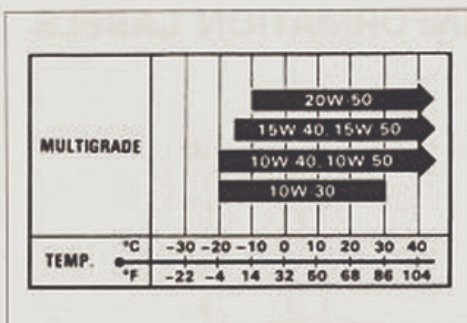
FUEL AND OIL RECOMMENDATION

FUEL

1. Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$) method or 91 octane or higher rated by the research method.
2. Suzuki recommends that customers use alcohol free, unleaded gasoline whenever possible.
3. Use of blended gasoline containing MTBE (Methyl Tertiary Butyl Ether) is permitted.
4. Use of blended gasoline/alcohol fuel is permitted, provided that the fuel contains not more than 10% ethanol. Gasoline/alcohol fuel may contain up to 5% methanol if appropriate cosolvents and corrosion inhibitors are present in it.
5. If the performance of the vehicle is unsatisfactory while using blended gasoline/alcohol fuel, you should switch to alcohol-free unleaded gasoline.
6. Failure to follow these guideline could possibly void applicable warranty coverage. Check with your fuel supplier to make sure that the fuel you intend to use meets the requirements listed above.

ENGINE OIL

SUZUKI recommends the use of SUZUKI PERFORMANCE 4 MOTOR OIL or an oil which is rated SF or SG under the API (America Petroleum Institute) service classification. The recommended viscosity is SAE 10W/40. If an SAE 10W/40 oil is not available, select an alternative according to the right chart.



GEAR OIL (FINAL DRIVE GEAR OIL)

Use SAE 90 hypoid gear oil which is rated GL-5 under API classification system. If you operate the motorcycle where ambient temperature is below 0°C (32°F), use SAE 80 hypoid gear oil.

BRAKE FLUID

Use DOT 4 brake fluid.

⚠ WARNING

This motorcycle uses a glycol-based brake fluid. Do not use or mix different types of brake fluid such as silicone-based and petroleum-based fluids for refilling the system, otherwise serious damage will result to the brake (clutch) system.

Never use any brake fluid taken from old, used or unsealed containers.

Never re-use brake fluid left over from the last servicing or which has been stored for a long period of time.

FRONT FORK OIL

Use SUZUKI FORK OIL SS-08 (#10) or equivalent fork oil.

BREAK-IN PROCEDURES

During manufacture only the best possible materials are used and all machined parts are finished to a very high standard. It is still necessary to allow the moving parts to "BREAK-IN" before subjecting the engine to maximum stresses. The future performance and reliability of the engine depends on the care and restraint exercised during its early life. The general rules are as follows.

- Keep to these break-in throttle opening limit:

Break-in throttle operation

Initial 800 km (500 miles): Less than 1/2 throttle

Up to 1 600 km (1 000 miles): Less than 3/4 throttle

- Upon reaching an odometer reading of 1 600 km (1 000 miles) you can subject the motorcycle to full throttle operation.

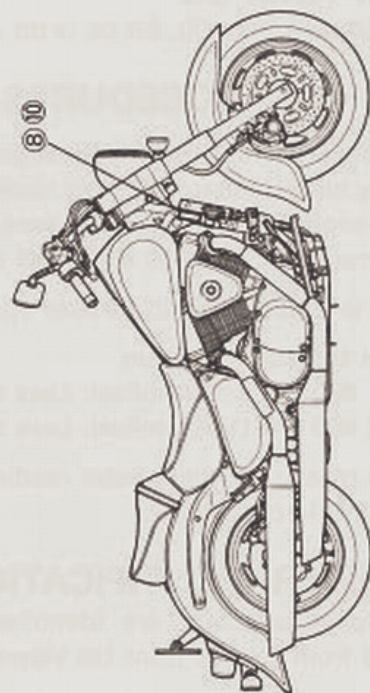
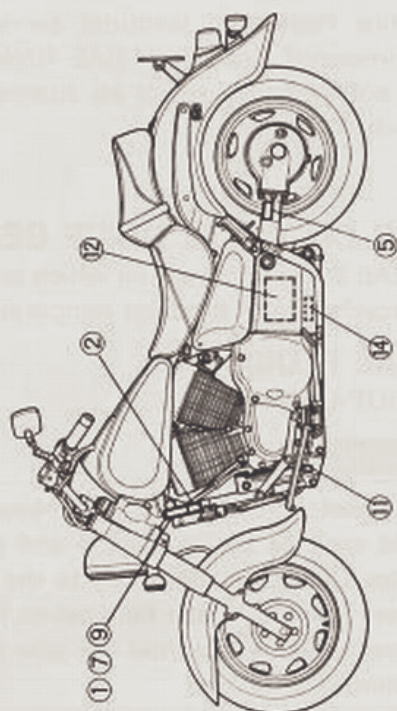
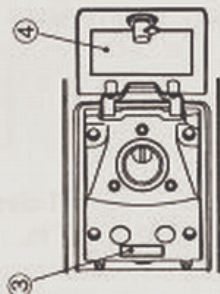
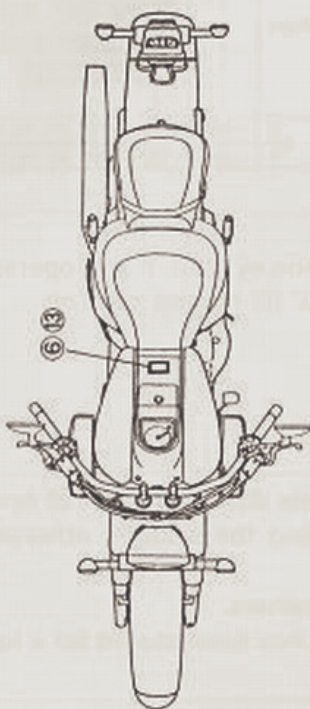
CYLINDER IDENTIFICATION

The engine cylinders are identified as #1 and #2, as counted from rear to front (as viewed by the rider on the seat).



INFORMATION LABELS

① Noise label (For E-03, 24, 33, 34)
② Information label (For E-03, 28, 33)
③ Fuel caution label (For E-02, 24)
④ Fuel information label
⑤ Tire pressure label
⑥ Warning safety label
⑦ ICES Canada label (For E-28)
⑧ ID label (Except for E-03, 28, 33)
⑨ ID label (For E-18)
⑩ Safety plate (For E-03, 28, 33)
⑪ Gearshift label
⑫ Vacuum hose routing label (For E-33)
⑬ Caution plate
⑭ Manual notice label (Except for E-03, 33)



SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 525 mm (99.4 in)
Overall width	965 mm (38.0 in)
Overall height	1 165 mm (45.9 in)
Wheelbase	1 700 mm (66.9 in)
Ground clearance	145 mm (5.7 in)
Seat height	700 mm (27.6 in)
Dry mass	296 kg (652 lbs)

ENGINE

Type	Four-stroke, Air-cooled with SACS, 3 valves, OHC, 45-degree V-twin
Number of cylinders	2
Bore	96 mm (3.780 in)
Stroke	101 mm (3.976 in)
Displacement	1 462 cm ³ (89.2 cu. in)
Compression ratio	8.5 : 1
Carburetor	MIKUNI BDSR36, Twin
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.490 (76/51)
Secondary reduction ratio	0.852 (29/34)
Final reduction ratio	2.666 (19/19 × 32/12)
Gear ratios, Low	3.000 (36/12)
2nd	1.823 (31/17)
3rd	1.333 (28/21)
4th	1.041 (25/24)
Top	0.884 (23/26)
Drive system	Shaft drive

CHASSIS

Front suspension	Telescopic, coil spring, oil damped.
Rear suspension	Link type, gas/coil spring, oil damped, spring pre-load fully adjustable
Steering angle	39° (right & left)
Caster	32°
Trail	138 mm (5.43 in)
Turning radius	3.1 m (10.2 ft)
Front brake	Disc brake
Rear brake	Disc brake
Front tire size	150/80-16 71H, tubeless
Rear tire size	180/70-15 M/C 76, tubeless
Front fork stroke	140 mm (5.5 in)
Rear wheel travel	118 mm (4.6 in)

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Ignition timing	2° B.T.D.C. at 1 000 r/min
Spark plug	NGK: DPR7EA-9 or DENSO: X22EPR-U9
Battery	12V 50.4 kC (14 Ah)/10HR
Generator	Three-phase A.C. Generator
Fuse	30/15/15/15/10/10A
Headlight	12V 60/55W
Position light	12V 4W Except for E-03,24,28,33
Front turn signal light	12V 21/5W E-03,28,33 12V 21W Others
Rear turn signal light	12V 21W
Brake light/Tail light	12V 21/5W
Speedometer light	12V 1.7W
Fuel level gauge light	12V 1.7W
Neutral indicator light	12V 1.7W
High beam indicator light	12V 1.7W
Turn signal indicator light	12V 1.7W
Oil pressure indicator light	LED

CAPACITIES

Fuel tank, including reserve	15.5 L (4.1/3.4 US/Imp gal)
Engine oil, oil change	3 700 ml (3.9/3.3 US/Imp qt)
with filter change	4 300 ml (4.5/3.8 US/Imp qt)
overhaul	5 000 ml (5.3/4.4 US/Imp qt)
Final gear oil	200-220 ml (6.8/7.0-7.4/7.7 US/Imp oz)
Front fork oil (each leg)	439 ml (14.8/15.5 US/Imp oz)

These specifications are subject to change without notice.

COUNTRY AND AREA CODES

The following codes stand for the applicable country(-ies) and area(-s).

CODE	COUNTRY or AREA
E-02	U.K.
E-03	U.S.A. (Except California)
E-04	France
E-17	Sweden, Finland (E-15), Norway (E-16)
E-18	Switzerland, Austria (E-39)
E-22	Germany
E-24	Australia
E-25	Netherlands
E-28	Canada
E-33	California
E-34	Italy, Belgium (E-21), Spain (E-53)

