

SUZUKI

OWNER'S MANUAL

GS1000/GS1000E

After reading this Foreword, please refer to the "Introduction" section of this manual.

THANK YOU for choosing Suzuki. We at Suzuki have designed, tested and produced this motorcycle using the most modern technology available to provide you with many happy, enjoyable, safe miles of riding. Motorcycling is one of man's most exhilarating sports and to insure your riding enjoyment, you should become thoroughly familiar with the information presented in this Owner's Manual before riding the motorcycle.

The proper care and maintenance that your motorcycle requires is outlined in this manual. By following these instructions explicitly you will insure a long trouble free operating life for your motorcycle. This motorcycle also conforms to the U.S. Environmental Protection Agency emission regulations which apply to new motorcycles manufactured after January 1, 1975. The proper adjustment of engine components is necessary for this motorcycle to comply with the EPA regulations. Therefore, please follow the maintenance instructions closely to ensure emission compliance. Your Suzuki dealer has experienced technicians that are trained to provide your machine with the best possible service with the right tools and equipment.

When you are ready to ride, please refer to the "Introduction" section of this manual for important information.

Always follow the instructions in this manual carefully to insure the safe operation of your motorcycle. The safety of you and others is always the top priority.

For more information, please refer to the "Introduction" section of this manual.

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SUZUKI MOTOR CO., LTD.

This manual covers two models of the GS1000 series: GS1000 and GS1000S.

GS1000: Sport wheel model

GS1000S: Car wheel model

GS1000S: Car wheel model

GS1000S: Car wheel model

Please read this manual and follow its instructions carefully.

To emphasize special information, the words **WARNING**, **CAUTION** and **NOTE** carry special meanings and should be carefully noticed.

WARNING.....The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

CAUTION.....These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

NOTE.....Special information to make maintenance easier or important instructions more clear.

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All information, illustrations, photographs and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies in this manual. Suzuki reserves the right to make changes at any time.

SUZUKI MOTOR COMPANY

REGISTERED TRADE NAME: SUZUKI MOTOR CO., LTD. (Incorporated in Japan)

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Telephone: 053-461-1111

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DOUBLE OVERHEAD CAM (DOC)

This lightweight design valve train allows higher rpm's, greater reliability and superior performance.

SEALED DRIVE CHAIN

The GS1000 is equipped with a special heavy duty drive chain which has lubricating grease sealed inside the chain rollers which reduces maintenance requirements and prolongs chain life.

AIR FORCE

Allows the rider the option of adjusting the ride for smooth, comfortable touring or high performance riding.

DISC BRAKES

Disc brakes front and rear insure safe, fade free, stopping ability.

HANDLING AND LOW OVERALL WEIGHT

The lightweight GS1000 offers superior handling which increases rider confidence and control.

REAR SUSPENSION

The rear suspension shock absorbers allow full adjustability for rebound damping and spring preload.

TIRES

V speed high speed tires are standard equipment to match the performance of the GS1000.

FUEL GAUGE

An accurate, electric gauge to monitor the fuel level to provide greater rider convenience.

SERIAL NUMBER LOCATION

The frame and/or engine serial numbers are used to register the motorcycle. They are also used to assist your dealer when ordering parts or referring to special service information.

The frame number is stamped on the steering head tube and steering head I.D. plate. The engine serial number is stamped on the right side of the crankcase assembly.



Frame Number



Engine Number

When ordering a new or used motorcycle, always ask your dealer to show you the frame and engine serial numbers. They should be stamped on the frame and engine. If they are not, the motorcycle is not a genuine Harley-Davidson motorcycle. If you are buying a used motorcycle, ask the dealer to show you the frame and engine serial numbers. They should be stamped on the frame and engine. If they are not, the motorcycle is not a genuine Harley-Davidson motorcycle.

For more information, contact your local Harley-Davidson dealer.

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Harley-Davidson

ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

There are a great variety of accessories available to Suzuki owners.

Suzuki cannot have direct control over the quality or reliability of accessories you may wish to purchase. The addition of unsuitable accessories can lead to unsafe operating conditions. It is not possible for Suzuki to test each accessory on the market or combinations of all the available accessories; however, your dealer can assist you in selecting quality accessories and installing them correctly.

Use extreme caution when selecting and installing the accessories for your Suzuki. We have developed some general guidelines which will aid you when deciding whether, and how to equip your motorcycle.

- (1) Never exceed the GVWR (Gross Vehicle Weight Rating) shown on the Safety Label Attached to the steering stem frame tube. The GVWR is the combined weight of the machine, accessories, payload, rider and passenger. When selecting your accessories, keep in mind the weight of the rider and passenger as well as the weight of the accessories. The additional weight of the accessories may not only create an unsafe riding condition but may also affect the steering axis.

GVWR SUSPENSION

GVWR is the maximum weight of the motorcycle.

GVWR - 650000 : 824 lbs (428 kg)

GVWR - 6500000 : 948 lbs (428 kg)

- (2) Anytime that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to insure that it provides for a rigid, non-movable mount. Weak mounts can allow the shifting of the weight and create a dangerous/unstable condition.

- (3) Inspect for proper ground clearance and fork angle. An improperly mounted load could critically reduce these two safety factors. Also determine that the "load" does not interfere with the operation of the suspension, steering or other control operations.

- (4) Accessories fitted to the handlebars or the front fork area can create serious stability problems. This extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the handlebars or front fork of the machine should be as light as possible and kept to a minimum.
- (5) Windshields, fairings, handguards, saddlebags, trunk, trunk, etc., may affect the stability of the motorcycle due to their aerodynamic effects. The motorcycle may be affected by a lifting condition or by an instability in crosswinds or when being passed or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore, caution should be used when selecting and installing all accessories.
- (6) Certain accessories displace the rider from his normal riding position. This limits the freedom of movement of the rider and may limit his control ability.
- (7) Additional electrical accessories may overload the existing electrical system. Excess overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.

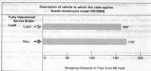
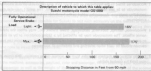
When carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity which is very dangerous and makes the motorcycle difficult to handle. The size of the "load" can also affect the aerodynamics and handling of the motorcycle. Balance the load between the left and right side of the motorcycle and fasten it securely.



VEHICLE STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicle to which it applies, without locking the wheels, under different condition of loading and with partial features of the braking system.

NOTICE: The information presented represents results obtainable by skilled driver under controlled road and vehicle conditions, and the information may not be correct under other conditions.

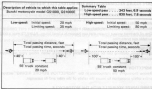


ACCELERATION AND PASSING ABILITY

The figure indicates passing times and distances that can be used or exceeded by the vehicle to which it applies, in the situations diagrammed.

The low-speed pass assumes an initial speed of 30 mph and a limiting speed of 35 mph. The high-speed pass assumes an initial speed of 50 mph and a limiting speed of 60 mph.

NOTE: The information presented represents results obtainable by skilled driver under controlled road and vehicle conditions, and the information may not be correct under other conditions.



SAFE-RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

Motorcycle riding is great fun and an exciting sport. Motorcycle riding also requires that some extra precautions be taken to insure the safety of the rider and passenger. These precautions are:

WEAR A HELMET

Motorcycle safety equipment starts with a quality safety helmet.

One of the most serious injuries that can happen is a head injury. **ALWAYS** wear a properly approved helmet. You should also wear suitable eye protection.

WEAR APPROPRIATE CLOTHING

Loose-fitting clothing can be uncomfortable and unsafe when riding your motorcycle. Choose good quality motorcycle riding apparel when riding your motorcycle.

INSPECTION BEFORE RIDING

Review thoroughly the instructions in the "INSPECTION BEFORE RIDING" section of this manual. Do not forget to perform an on-site safety inspection to insure the safety of the rider and the passenger.

FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

Your riding skill and your mechanical knowledge form the foundation for safe riding practices. We suggest that you practice riding your motorcycle in a non-traffic situation until you are thoroughly familiar with your machine and its controls. Remember practice makes perfect.

KNOW YOUR LIMITS

Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

Riding on bad weather days, especially wet ones, requires extra caution. Braking distances double on a rainy day. Stay off of the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery. Use extreme caution at railroad crossings and on metal gratings and bridges. Whenever in doubt about road conditions, slow down!

MOTORCYCLE SAFETY FOUNDATIONS "RIDING TIPS FOR THE MOTORCYCLIST" HANDBOOK

This special manual, supplied in the pouch with your Owner's Manual, contains safety tips on a wide variety of topics. This manual can increase your riding enjoyment and safety and should be read thoroughly.



The **ENGINE** is covered with two oil-filled caps. A number next to a number indicates the location of the cap.



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The **IGNITION** switch has two key positions: **LOCK** and **ON**.

All electrical circuits are powered "ON" when the key is in the **ON** position.

The **IGNITION** switch is equipped with a kill switch. The kill switch is located on the left handlebar.

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LOCATION OF PARTS

- | | |
|--------------------------------|-------------------------|
| ① Engine oil inspection window | ⑩ Fuel tank |
| ② Center stand | ⑪ Ignition switch |
| ③ Head brake cable | ⑫ Front brake lever |
| ④ Passenger handrail | ⑬ Throttle grip |
| ⑤ Footrest | ⑭ Speedometer |
| ⑥ Carburetor choke lever | ⑮ Clutch lever |
| ⑦ Gearshift lever | ⑯ Left handside switch |
| ⑧ Kick stand | ⑰ Right handside switch |

WORKING SAFETY

Before using, always read the instructions and please wear correct riding gear and protective gear.

INSPECTION BEFORE RIDING

Review thoroughly the instructions in the "INSTRUCTIONS BEFORE RIDING" section of this manual. Do not forget to read the safety and safety inspection for engine. Carry out the check and fix problems.

PRE-START CHECKS BEFORE RIDING

Before riding, please check the following items. If you find any problem, please stop the motorcycle and fix it before riding. If you find any problem, please stop the motorcycle and fix it before riding.



BIT www.bit.com



The 65000 comes equipped with two CD identical keys. Keep the spare key in a safe place.

05/11/2015 09:10



The authors wish to thank the following:

Year	Number of cases
1990	10
1991	15
1992	20
1993	25
1994	30
1995	35
1996	40
1997	45
1998	50
1999	55
2000	60
2001	65
2002	70
2003	75
2004	80
2005	85
2006	90
2007	95
2008	100
2009	105
2010	110
2011	115
2012	120
2013	125
2014	130
2015	135
2016	140
2017	145
2018	150
2019	155
2020	160
2021	165
2022	170
2023	175
2024	180
2025	185
2026	190
2027	195
2028	200
2029	205
2030	210

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

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The ignition circuit is completed and the engine can now be started. The headlight and taillight will automatically be turned on when the key is in this position. The key cannot be removed from the ignition switch in this position.

TABLE 5. DISTRIBUTION OF SPECIES

When parking the motorcycle, turn the handlebars all the way to the right or to

the left. Push down and turn the key to the parking position. The key can now be removed and the tailight will remain on and the steering will be locked. This position is for night time roadside parking to increase visibility.

TOTAL

To lock the steering, turn the handlebar all the way to the right or the left. Push down and turn the key to the "LOCK" position and remove the key. All electrical circuits are cut off.

Start the engine promptly after turning the ignition key to the "ON" position. The reason for this is that the headlight and taillight come on at the same time the ignition is turned on and will cause the battery to lose power.

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Before turning the ignition switch to the (P) "PARK" or "LOCK" position, stop the motorcycle and place the motorcycle on either the side stand or the center stand.

INSTRUMENT PANEL



SPEEDOMETER (2)

The speedometer indicates the road speed in miles per hour and kilometers per hour.

TACHOMETER (1)

The tachometer indicates the engine speed in revolutions per minute (RPM).

ODOMETER (3)

The odometer registers the total distance that the motorcycle has been ridden.

FUEL METER (4)

The trip meter is a variable odometer located in the speedometer assembly. It can be used to indicate the distance traveled on short trips or between full stops. Turning the knob counter-clockwise will return the meter to zero.

FUEL GAUGE (3)

The fuel gauge indicates the amount of gasoline remaining in the fuel tank. The "E" mark indicates the tank is empty or nearly so. The "F" mark indicates the fuel tank is full.

NEUTRAL INDICATOR LIGHT (6)

The green light will come on when the transmission is in neutral. The light will go out when you shift into any gear other than neutral.

HIGH BEAM INDICATOR LIGHT (7)

The blue indicator light will be lit when the headlight high beam is turned on.

TURN SIGNAL INDICATOR LIGHT (5)

When the turn signals are being operated either to the right or left side, the amber indicator light will flash.

OIL PRESSURE INDICATOR LIGHT (4)

With the ignition switch in the "ON" position but the engine not started, the oil pressure indicator light should be lit. As soon as the engine is started, the light should go out.

CAUTION:

Whenever the oil pressure indicator lights up, indicating no oil pressure, stop the engine immediately. First check the oil level and determine if the proper amount of oil is in the engine. If the oil level is low, refill the engine to the correct level. If the light still does not go out, then have your authorized Suzuki dealer inspect your motorcycle to determine the difficulty. Do not operate the motorcycle when the light is lit, as it may cause serious damage to the internal parts of the engine or transmission.

LEFT HANDLEBAR SWITCH



DIAMETER SWITCH

The headlight on the GS1000 will always be lit when the ignition switch is in the "ON" position. When the diameter switch is moved to the "HID" position, the high beam will be lit. At the same time that the high beam is lit, the high beam indicator light will also light in the center instrument panel. When the diameter switch is moved to the "LID" position, the low beam will be lit.

Consulting Page 100 for the correct headlight and beam settings.

TURN SIGNAL SWITCH (GS1000) ②

Sliding the switch to the "L" position will flash the left turn signal. Moving the switch to the "R" position will flash the right turn signal. The pilot or indicator light will also flash intermittently and the turn signal buzzer will sound intermittently.

WARNING:

Always use the turn signal when you intend to change lanes or make a turn. **ALWAYS** be sure to turn the turn signal switch to the "OFF" position after completing the turn or lane change.

TURN SIGNAL SWITCH (GS1000) ③

Sliding the switch momentarily to the "L" position will flash the left turn signal. Sliding the switch to the "R" position will flash the right turn signal. The switch will return automatically to the middle position after pushing the switch in either direction.

CAUTION: INTERLOCKING SYSTEM

The signals will flash for nine seconds and then be automatically cancelled. The motorcycle must be operated at a speed greater than 16 km/h (10 mph) in order to activate the automatic cancelling system. If the motorcycle is stopped or moving below 16 km/h the signals will continue to flash until manually cancelled by the rider. To manually cancel the signals momentarily push the turn signal switch downward.

WARNING:

Always use the turn signal when you intend to change lanes or make a turn.

HORN BUTTON ①

Press the button to honk the horn.

CLUTCH LEVER ④

The clutch lever is used to disengage the clutch from the rear wheel when starting the engine or shifting the transmission gear.

Squeezing the lever disengages the clutch.

RIGHT HANDLEBAR SWITCH



ENGINE KILL SWITCH (1)

The engine "kill switch" is located on the top of the right handlebar grip switch housing. This is a "rocker" style switch which pivots in the center.

In the "RUN" position the ignition circuit is on and the engine will operate. The switch is intended primarily as a safety or emergency switch. When the switch is in the "OFF" position the starter motor cannot be engaged, nor will the ignition circuit be energized.

Always use proper technique when operating.



THROTTLE GRIP (2)

Engine speed is controlled by the position of the throttle grip. Twist it toward you to increase engine RPM's. Turn it away from you to decrease the engine RPM's.

ELECTRIC STARTER BUTTON (3)

Push the electric starter button in to engage the starter motor.

The transmission should be in neutral for safety and the clutch disengaged during starting.

Always use proper technique when operating.

Always use proper technique when operating.

NOTE: The starter disengage switch is equipped on this motorcycle. If the clutch lever is not disengaged, the starter motor will not rotate.

CUTION:

Do not engage the starter motor more than five (5) seconds at a time as it may overheat the wiring harness and starter motor. If the engine does not start after several attempts, check the fuel supply and ignition systems. (Refer to the troubleshooting section).

FRONT BRAKE LEVER (4)

The front brake is applied by squeezing the brake lever gently towards the throttle grip. The GS1000 is equipped with a disc brake and maximum pressure is not required to slow the machine down properly. The brake light will be on when the lever is squeezed inward.

Always use proper technique when operating.

Always use proper technique when operating.

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Always use proper technique when operating.

Always use proper technique when operating.

Abstract



The fuel tank cap is a new low profile style which blends in smoothly with the lines of the fuel tank. To open the fuel tank cap insert the ignition key and turn the key clockwise. With the key still held in a clockwise position, lift up on the key and remove the filler cap. To install the fuel tank cap, simply line up the fuel tank cap guide pins and push down until the locking pins click into position. The key must be in the cap lock or turned before installing cap. Turn the key counter-clockwise and remove it.

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When re-fueling, always shut the engine off and leave the ignition key in the "OFF" position. Never re-fuel around an open flame.

2000 2001 2002



The GS1000 carburetors are equipped with a "choke" system to provide easy starting. When starting a cold engine, pull the choke knob all the way up and engage the electric starter. After the engine starts, try to limit the engine RPM to approximately 2,000 RPM by varying the choke knob position. The choke system will operate only when the throttle is in the closed position as opening the throttle will bypass the choke system. When the engine is warm, the choke system does not need to be used for starting. Always be certain to push the choke knob back to its normal position after the engine reaches normal operating temperature.

FUEL COCK



The GS1000 is equipped with an auto-matic type, diaphragm style fuelcock. There are three (3) positions: "ON", "RESERVE" and "PRIME".

"ON" The normal position for the fuelcock lever is on the "ON" position. In this position, no fuel will flow from the fuelcock to the carburetor unless the engine is running or being started.

"RESERVE"

If the fuel level in the tank is too low, turn the lever to the "RESERVE" position to use the 4.0 liters of reserve fuel supply. In this position, no fuel will flow from the fuelcock to the carburetor unless the engine is running or being started.

"PRIME"

If the motorcycle has run out of fuel or has sat for an extended period, there may not be any gasoline in the carburetor. In this instance the fuelcock lever should be moved to the "PRIME" position. This will allow the fuel to flow directly into the carburetor even though the engine is not operating. Upon starting the engine, be sure to return the lever to the "ON" position or, if necessary, to the "RESERVE" position.

CAUTION:

Leaving the fuelcock in the "PRIME" position may cause the carburetor to overflow and fuel to run into the engine. It is possible that fuel running into the engine may cause severe mechanical damage when the engine is started.

NOTE: After refueling the fuel tank properly to the "RESERVE" position, it is advisable that the tank be refilled at the closest gas station. After re-fueling, be sure to move the fuelcock to the "ON" position.

After refueling the fuel tank properly to the "RESERVE" position, it is advisable that the tank be refilled at the closest gas station. After re-fueling, be sure to move the fuelcock to the "ON" position.



The GS1000 is equipped with a 5-speed constant mesh transmission which operates as shown in the figure. The shift lever is attached to a ratchet type mechanism in the transmission. Each time that a gear is selected, the gear shift lever will return to its neutral position ready to select the next gear. Neutral is located between 1st and 2nd gear. Low gear is engaged by depressing the lever downward from the neutral position. Shifting into the higher gears is accomplished by lifting up on the shift lever once for each gear. It is not possible to up shift or down shift more than one gear at a time due the ratchet mechanism being used. When shifting from low to 2nd gear or 2nd gear to low, neutral will be automatically skipped. When neutral is desired, depress or lift the lever to a position halfway between low and 2nd gear.



CAUTION:

When the transmission is in neutral the green indicator light will be lit on the instrument panel. However, even though the light is lit, immediately release the clutch lever slowly to determine whether the transmission is positively in neutral.

Reduce your road speed before down shifting. When down shifting, the engine RPM's should be increased before the clutch is engaged. This will prevent unnecessary wear on the drivetrain components and rear tire.

SUSPENSION

The front forks and rear shock absorbers are fully adjustable to compensate for rider, passenger, load, riding style, and road conditions. Please refer to the Periodic Maintenance Section, page 158, for complete information and instructions.

The front forks will automatically adjust fork pressure as the spring rate and pressure increase, resulting during the break-in period. The general operating rules are as follows:

- 1. Do not ride at high speeds for the first 100 miles (160 km).
- 2. Do not ride at high speeds for the first 100 miles (160 km) on a road that is "bumpy" with many potholes or other irregularities. The irregularities will cause the forks to be "bumped" with great frequency and force, increasing the shock and wear on the forks. The shock absorbers will not adjust to a condition that could result in a shock absorber being pushed into the wrong position, resulting in damage to the riding process. Increasing the impact of constant bumping from road wear can cause the fork to glow and not work properly.

STANDS



- ① Center stand
- ② Kickstand
- ③ Left foot
- ④ Right foot

1. Do not use the center stand on a road that is "bumpy" with many potholes or other irregularities.	2. Do not use the center stand on a road that is "bumpy" with many potholes or other irregularities.
3. Do not use the center stand on a road that is "bumpy" with many potholes or other irregularities.	4. Do not use the center stand on a road that is "bumpy" with many potholes or other irregularities.

The motorcycle is equipped with both a center stand and a side stand. To place the motorcycle on the center stand, place your foot firmly on the stand extension and then rock the motorcycle to the rear and upward with the lift bar with your right hand, while steadying the handlebars with your left hand.

CAUTION:

The hand rail is designed to be used as a passenger hand hold only. Attempting to place or remove the motorcycle on or from the center stand using the passenger hand rail will damage it.

FUEL AND ENGINE OIL RECOMMENDATION

Unleaded or low lead type gasoline is recommended. The gasoline should be at least 85 - 89 octane. If your engine coughs, a regular grade of fuel may be what's needed.

NOTE: Unmarked and over-bred positive will return your value 0.

100

Using a premium quality four stroke motor oil will increase the service life of your motorcycle. Use only oils which are rated **SAE** under the **API** classification system. The viscosity rating should be **SAE 10W-40** if the **SAE 100W-40** motor oil is not available, select an alternate as specified in the chart below.

Age	Mean	SD	95% CI
60+	30.0	10.0	20.0-40.0
50+	25.0	10.0	15.0-35.0
40+	20.0	10.0	10.0-30.0
30+	15.0	10.0	5.0-25.0
20+	10.0	10.0	0.0-20.0
10+	5.0	10.0	-5.0-15.0
0+	0.0	10.0	-10.0-10.0

Should parts are manufactured with the best possible materials. All machined parts are finished to a very fine tolerance. It is necessary to allow these mating parts to "break-in" before subjecting the engine to full throttle stresses. The ultimate performance and reliability of the engine depends on the special care and proper treatment exercised during the break-in period. The general operating rules are as follows:

During the break-in period, the engine speed should be fluctuated and not held at a constant speed. This allows the engine parts to be "loaded" with pressure and then the pressure is decreased and the parts can cool. This aids the mating process of the parts. It is essential that some stress be placed on the engine components during break-in to insure the mating process. Operating the engine at constant low rpm (light load) can cause the parts to glaze and not seat properly.

After the engine has been operated for 1,000 miles, the motorcycle can be subjected to full throttle operation for short periods of time. Under no circumstances should the engine red line of 8,500 rpm be exceeded.

Initial 500 miles (800 km)	Below 4,000 rpm
Up to 1,000 miles (1,600 km)	Below 6,000 rpm
Over 1,000 miles (1,600 km)	Below 8,500 rpm

Before riding the motorcycle, be sure to check the following items. Never underestimate the importance of these checks. Perform all of them before riding the machine.

WHAT TO CHECK	CHECK FOR:
Steering	1) Smoothness 2) No restriction of movement 3) No play or looseness
Brake	1) Proper pedal and lever play 2) No "sponginess" 3) No fluid leakage
Tires	1) Proper pressure 2) Adequate tread depth 3) No cracks or cut spots
Fuel	Enough fuel for the planned distance of operation.
Lighting	Operation of all lights – HEADLIGHT, TAILLIGHT, BRAKE LIGHT, LICENSE PLATE LIGHT, INSTRUMENT LIGHTS, TURN SIGNALS
Indicator Lights	Oil Pressure, High beam, Neutral, Turn signal
Horn and "Kill Switch"	Proper function
Engine-Oil	Proper level
Throttle	1) Proper play in the throttle cable 2) Smooth operation and positive return of the throttle grip to the closed position
Clutch	1) Proper play in the cable 2) Smooth and progressive action
Drive Chain	1) Proper tension in chain 2) Adequate lubrication
Air Forks	Smooth movement, proper air pressure "feel"

STARTING THE ENGINE

Check that the fuelcock lever is in the "OFF" position and that the engine kill switch is in the "RUN" position. Insert the ignition key into the ignition switch and turn it clockwise one notch to the "ON" position. The neutral indicator light will light if the transmission is in neutral.

CAUTION:

Always start the engine with the transmission in neutral, the clutch lever pulled in, and the rider in the normal riding position.

When the engine is cold:

Pull the carburetor choke knob to the engaged position all the way. Close the throttle completely and squeeze the clutch lever. Push the electric starter button and the engine will start. Immediately after the engine starts, keep the engine revolutions to a maximum of 2,000 rpm's by using the choke knob position for throttle control.

Push the choke knob all the way back

to its normal disengaged position approximately 60 seconds after the engine starts. In extremely cold weather it may be necessary to use the choke longer than 60 seconds.

When the engine is warm:

Open the throttle 1/8th to 1/4th turn and push the electric starter button. Operation of the carburetor choke system is usually not necessary when the engine is warm.

WARNING:

Do not run the engine idles when there is little or no ventilation available. Carbon monoxide fumes are extremely poisonous. Never leave the motorcycle running while unattended, even for a moment.

CLUTCH AND GEAR

STARTING OFF FROM A STATIONARY POSITION

Pull the clutch lever in and press momentarily. Engage first gear by depressing the gear shift lever downward. Twist the throttle grip toward you and at the same time release the clutch lever gently and smoothly. As the clutch engages, the motorcycle will start forward.

To shift to the next higher gear, accelerate gently, then close the throttle and pull the clutch lever in simultaneously. Lift the gear shift lever upward to select the next gear and release the clutch lever and open the throttle again. Select the gears in this manner until top gear is reached.

Do not shift to a higher gear until

the engine has reached the proper rpm.

Do not shift to a lower gear until the engine has reached the proper rpm.

1st	2nd	3rd	4th	5th	6th
00 - 02	02 - 04	04 - 06	06 - 08	08 - 9	9th

USING THE TRANSMISSION

The transmission is provided to keep the engine operating smoothly in its normal operating rpm range. The gear ratios have been carefully chosen to meet the characteristics of the engine. The rider should always select the most suitable gear for the prevailing conditions. Never slip the clutch to control road speed, but rather downshift to allow the engine to run within its normal operational range. The table below shows the approximate speed range for each gear.

Approximate speed ranges for the transmission gears are shown in the table below. These are approximate values and should be used as a guide only. The actual speed range for each gear will vary depending on the load and the condition of the engine and transmission.

Note: The table below shows the approximate speed range for each gear.

mile/h	0 ~ 12	12 ~ 19	19 ~ 25	25 ~ 31	Over 31
Gear position	1st	2nd	3rd	4th	5th
km/h	0 ~ 20	20 ~ 30	30 ~ 40	40 ~ 50	Over 50

See Page 10

See Page 10 for more information on the transmission.

RIDING ON HILLS

- When climbing steep hills, the motorcycle may begin to slow down and "lug" the engine excessively. At this point you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift rapidly to prevent the motorcycle from losing momentum.
- When riding down a hill, the engine may be used for braking by shifting to a lower gear.
- Be careful, however, not to allow the engine to over-rev.

WARNING:

- If this is the first time that you have ridden a machine of this type, we suggest that you practice on a non-public road to become thoroughly familiar with the controls and operation of the motorcycle.
- Before starting off, always return the side stand to its normal "up" position.
- Slow down to a safe speed before starting around a corner.
- Don't down shift in the midst of cornering.
- Over-hand riding is extremely dangerous. Keep both hands firmly on the handlebars and both feet securely on the foot rests. Under no circumstances should both hands be removed from the handlebars.

DO NOT attempt to start the engine when the motorcycle is on a hill. This is dangerous and may result in injury or death.

Always wear your seat belt.

And you will be a responsible rider.

USING THE BRAKES AND PARKING

- Pull the throttle grip away from yourself to close the throttle completely.
- Apply the front and rear brakes evenly and at the same time.
- Downshift through the gears as road speed decreases.
- Select neutral with the clutch lever squeezed towards the grip (downward position) just before the motorcycle stops. Neutral position can be confirmed by observing the neutral indicator light.

NOTE: Inexperienced riders tend to use the rear brake only. This can lead to premature brake wear and excessive stopping distances.

WARNING:

Using only the front or rear brake is dangerous and can cause skidding and loss of control.

Apply the brakes lightly and with great care on wet highway pavement or other slippery surfaces and at all corners. Any abrupt braking on slippery or irregular roads can be particularly dangerous.

- If the motorcycle is to be parked on the side stand and on a slight slope, you may wish to leave the motorcycle in 1st gear to prevent it from rolling off of the side stand. Return to neutral before starting engine.
- Turn the ignition switch to the "OFF" position to stop the engine.
- Lock the steering for security.
- Remove the ignition key from the switch.

HIGH SPEED RIDING

High speed riding requires that certain adjustments be made to the suspension system of the motorcycle to increase the stability. The front fork air pressure should be increased and the rear suspension setting should be adjusted to meet the expected road conditions and motorcycle speeds. Tire pressure should also be increased for high speed riding as described on page 45.

CAUTION:

Never allow the engine to exceed 8,000 rpm's in any gear.

WARNING:

High speed riding requires special care. Be sure that you review the pre-ride instruction chart and be sure that your machine is in top condition. Do not exceed the posted speed limits.

Capacity 2,000 miles (3,200 km) and engine oiling
 17,500 miles (27,900 km)

PERIODIC MAINTENANCE SCHEDULE

MAINTENANCE SCHEDULE

The chart indicates the intervals between periodic services in miles (kilometers) and months. At the end of each interval, be sure to inspect, check, lubricate and service as instructed. If your motorcycle is used under high stress conditions such as continuous full throttle operation, or operation in a dusty climate certain services should be performed more often to insure reliability of the machine as explained in the maintenance section. Your Suzuki dealer can provide you with further guidelines. Steering components, suspension and wheel components are key items and require very special and careful

servicing. For maximum safety we suggest that you have these items inspected and serviced by your authorized Suzuki dealer.

WARNING:

Proper break in maintenance (500 miles or 1,000 km) is a **MANDATORY** item for making certain that your machine is reliable and gives full performance at all times. Be sure that this periodic maintenance is performed thoroughly and in accordance with the instructions in this manual.

CAUTION:

Periodical inspections may reveal one or more parts that may need replacement. Whenever replacing parts on your motorcycle, it is recommended that you use genuine Suzuki replacement parts or their equivalent. Whether you are an expert or do-it-yourself mechanic, Suzuki recommends that these items on the Inspection Chart marked with an asterisk (*), be performed by your authorized Suzuki dealer. You may perform the unmarked items easily by referring to the instructions in this section.

INTERVAL. THIS INTERVAL SHOULD BE ADDED BY ODOMETER READING OR MONTHS, WHICHEVER COMES FIRST	miles	500	1,000	2,000	11,000	15,000
	km	1,000	2,000	4,000	18,000	24,000
	months	3	6	12	36	48
Battery		—	I	I	I	I
*Cylinder head nuts & exhaust pipe bolts		T	T	T	T	T
All chains checked						
		Clean every 2,000 miles (3,000 km), and replace every 7,500 miles (12,000 km).				

NOTE: T = Tighten, A = Adjust, I = Inspect, R = Replace, C = Clean.

INTERVAL - THIS INTERVAL SHOULD BE JUDGED BY ODOMETER READING OR MONTHS/WHICHEVER COMES FIRST	miles	500	1,000	1,500	11,000	15,000
	km	1,600	3,200	4,800	18,000	24,000
	months	2	12	24	36	48
" Tapered clearance		I	I	I	I	I
" Spark plug		—	C	R	C	R
" Fuel line		Replace every two years				
" Contact breaker points		I	I	I	I	I
" Ignition timing		I	I	I	I	I
" Engine oil		Change oil at initial 500 miles (1,600 km) and initial 2,000 miles (3,200 km), and thereafter change every 2,000 miles (3,200 km).				
" Engine oil filter		R	R	R	R	R
" Carburetor idle speed		A	A	A	A	A
" Clutch		I	I	I	I	I
" Drive chain		I	I	I	I	I
		Clean and lubricate every 500 miles (1,600 km)				
" Brake hose		Replace every two years				
" Brake		I	I	I	I	I
" Tire		I	I	I	I	I
" Steering		I	I	I	I	I
" Front lock		—	—	I	—	I
		Check air pressure every 8 months				
" Chassis bolts and nuts		I	I	I	I	I

NOTE: I = Tighten, A = Adjust, I = Inspect, R = Replace, C = Clean

TOOLS

To assist you in the performance of periodic maintenance, a tool kit is supplied and is located in the rear tail section under the seat. The tool kit consists of the following items:

Ref. No.	Item
1.	Tool Bag
2.	8mm Open End Wrench
3.	10/11 x 12mm Open End Wrench
4.	14 x 17mm Open End Wrench
5.	Spark Plug Socket Wrench
6.	10mm Ring Wrench
7.	24mm Ring Wrench
8.	Ring Wrench Handle
9.	Socket Wrench Handle
10.	Combination Screw Driver
11.	Cross Head Screw Driver
12.	Screw Driver Handle
13.	Pliers
14.	Front Fork Air Pressure Gauge



OILING CHART

Proper lubrication is important to smooth operation and long life of each working part of your motorcycle and also for safe riding. It is a good practice to oil the machine after a long tough ride and after getting it wet in the rain or after washing it. Major oiling points are indicated below.



Brake lever holder



Side stand pivot



Clutch lever holder



Rear brake rod link



Clutch cable



Drive chain

NOTES: 1 = 20 weight, 2 = 40 weight, 3 = 50 weight, 4 = 100 weight

AIR CLEANER



- ① Air cleaner case cover
- ② Spring

The air cleaner element used in the GS 1000 is a paper type. If the element has become stopped with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption due to the richer mixture. Check and clean the air cleaner element every 1,000 miles (1,600km) according to the following procedure.



- ③ Spring retainer
- ④ Cleaning spring

- (1) Open the case and remove the air cleaner case cover by unscrewing the one (1) Phillips head screw.
- (2) Remove the air cleaner element by pulling up on the spring retainer bracket.
- (3) Carefully use an air hose to blow the dust from the air cleaner element.



CAUTION:

Always apply air pressure to the inside of the air cleaner element only. If air pressure is used on the outside, dirt will be forced into the pores of the cleaner element restricting the air flow through the cleaner element.


CAUTION:

If driving under dusty conditions, the air cleaner element must be cleaned or replaced more frequently. **NEVER OPERATE THE ENGINE WITHOUT THE ELEMENT IN POSITION.** Operating the engine without the air cleaner element will increase engine wear. Always be sure that the air cleaner element is in excellent operational condition at all times. The life of the engine depends largely on this single component.

- (4) Reinstall the cleaned element or new air cleaner element in reverse order of removal, taking care to make sure that the spring loader is properly engaged with the securing spring. Be absolutely sure that the element is securely in position and is sealing properly. Replace the air cleaner element with a new one every 3,000 miles (3,000 km).



After cleaning the element, it should be replaced with a new one every 3,000 miles (3,000 km). The life of the engine depends largely on this single component.

SPARK PLUGS



At 4,000 miles (6,000km), remove the carbon deposits from the spark plug with a small wire brush or a spark plug cleaning machine. Reseal the spark plug gaskets

to 0.6 - 0.8 mm (0.024 - 0.031 in.) by using a spark plug gap thickness gauge. The spark plug should be replaced every 7,500 miles (12,000km).

When removing the carbon deposits, be sure to observe the operational color of each spark plug's porcelain tip. This color tells you whether or not the standard spark plug is suitable for your type of usage. If the standard plug is not appearing or very dark in color, the hotter spark plug may be more suitable. A normal operating spark plug should be very light gray in color. If the spark plug is very white or glazed appearing, then it has been operating much too hot. This spark plug should be replaced with the colder plug.

CAUTION:

The standard spark plug for the GS 1000 has been carefully selected to meet the vast majority of all operational ranges. If the spark plug color indicates that other than a standard spark plug is used, it is best to consult your Suzuki dealer before changing to a different heat range spark plug. The selection of an improper spark plug can lead to severe engine damage. Selecting another brand of spark plug other than NGK or Nippon Denso, may also lead to operational difficulties. You should consult your authorized Suzuki dealer before selecting an alternate brand.

NGK	NIPPON DENSO	REMARKS
BCPR6	WCPR6	If the standard plug is apt to get wet, replace with this plug.
BCPR5	WCPR5	Standard
BCPR7	WCPR7	If the standard plug is apt to overheat, replace with this plug.

ENGINE OIL



Drain plug

Superior engine life depends much on the selection of quality oil and the periodic changing of the oil. Daily oil level checks and periodic changes are two of the most important maintenance to be performed.

CAUTION:

Never operate the motorcycle if the engine oil level is below the "L" (Low) line in the inspection window. Never fill the engine oil level above the "F" (Full) line.

Oilings will be made at your oil filling as indicated in engine

CAUTION:



Oil filter cap

ENGINE OIL CHANGE (Without Filter Change)

Change the engine oil at the initial 600 miles (1,000km) and also at the initial 3,000 miles (5,000km) check up. Thereafter, the oil should be changed every 3,000 miles (5,000km). The oil should always be changed when the engine is hot so that the oil will drain thoroughly from the engine. The procedure is as follows:

- (1) Place the motorcycle on the center stand.
- (2) Remove the oil filter cap.
- (3) Drain the oil by removing the drain plug from the bottom of the engine.
- (4) Replace the drain plug and tighten securely after all the oil has been

CAUTION: OIL ADDITION AND REMOVAL



Engine oil inspection window

drained out. Add fresh oil through the filter hole. Approximately 3,400 cc (7.76 US pt.) of oil will be required.

- (5) Start the engine and allow it to idle for several seconds.
- (6) Turn the engine off and wait approximately one (1) minute, then recheck the oil level in the engine oil inspection window. The oil level should be at the "F" mark. If lower than the "F", add oil until it reaches the "F" mark.

CAUTION:

Be sure to always use the specified engine oil described on page 23.

ENGINE OIL AND FILTER CHANGE



(1) Filter (2) Drain plug

Change the oil filter at the initial 600 miles (1,000km) inspection and every 4,000 miles (6,000km) thereafter. The procedure is as follows:

- (1) Place the motorcycle on the center stand.
- (2) Drain the engine oil by removing the drain plug from the bottom of the engine.
- (3) Remove the three (3) nuts holding the filter cap in place.



(1) Cap (2) Element

- (4) Remove the filter cap, pull out the element and replace with a new oil filter element. The rubber sealing ring is installed facing the engine.
- (5) Before replacing the oil filter cover, check to be sure that the filter spring and the cap "O" ring are installed correctly.
- (6) Replace the oil filter cover and tighten the nuts securely.
- (7) Replace the drain plug and tighten it securely. Add fresh oil through the filler tube approximately 3,000 cc (8.00 USqt) if oil is required.



(1) Filter cap (2) Spring (3) "O" ring

- (8) Start the engine and allow it to idle for several seconds.
- (9) Turn the engine off and wait approximately (5) minutes, then recheck the oil level in the engine oil inspection window. The oil level should be at the "F" mark. If lower than the "F" mark, add oil until it reaches the mark.

CAUTION:

Be sure to always use the specified engine oil described on page 22.



THROTTLE CABLE ADJUSTMENT

A twin throttle cable system is used in your SE1000. One cable (2) is the pulling and the other cable (3) for returning.

Putting cable play

The throttle cable should be adjusted to have a slack (1) of 3–5 mm (0.12–0.20 in.) at the middle point between adjusting holder (2) and throttle cable and (3) of the carburetor side.



NOTE: Inspect the cable slack at times, and if necessary, adjust it to the specified value. The cable end must come out when the key is inserted.

- (1) Loosen lock nut (4).
- (2) Turn adjusting nut (5) to introduce a cable play (1) of 1.0–1.8 mm (0.04–0.08 in.).
- (3) Tighten lock nut (4).

Returning cable play

- (1) Reduce the play (1) to zero by turning its adjusting nut, and securely tighten the lock nut.



- (2) Turn the adjusting nut (4) clockwise.
- (3) Start the engine and pull the throttle lever several times.
- (4) Turn the adjusting nut (4) clockwise slowly (1) more, then check the oil level in the engine oil inspection window. The oil level should be at the "F" mark. If lower than the "F" mark, add oil until it reaches the mark.

CAUTION

Be sure to always use the specified torque as described on page 22.

CLUTCH ADJUSTMENT



(1) Check cable play

At initial 500 miles (1,000 km) and every 4,000 miles (6,000 km), adjust the clutch by means of clutch cable adjuster.

The play (1) of the clutch should be 2 - 3 mm (0.08 - 0.12 in) as measured at the clutch lever holder before the clutch begins to disengage. If you find the play of the clutch incorrect, adjust it in the following way.

- (1) Loosen clutch cable adjuster lock nut (2).

REVERSE CLUTCH CABLE



(1) Lock nut (2) Cone adjuster

- (2) Turn the clutch cable adjuster (2) to provide the specified play (2 - 3 mm).
- (3) Tighten the lock nut (1).

At the same intervals, lubricate the clutch cable with motor oil.

CAMSHAFT DRIVE CHAIN TENSIONER



The camshaft drive chain is kept in proper adjustment by an AUTOMATIC camshaft drive chain tensioner. This automatic tensioner never needs servicing by the customer and the camshaft drive chain itself need not be checked for stretch or wear.

CUTION:

Never attempt to turn the tensioner wheel in either direction. Turning the wheel even slightly can jam the mechanism which will prevent it from adjusting the chain properly. An improperly adjusted chain can cause severe engine damage.

DRIVE CHAIN

The GS1000 is equipped with a special drive chain. It is an endless type that does not use a master link. We recommend that you take your GS1000 to your authorized Suzuki dealer to have the drive chain replaced when it becomes worn.

The drive chain is also constructed of special materials and has grease permanently sealed inside it by the use of special sealing "O" rings.

Always use the correct oil and oil grade for your GS1000 engine and transmission.

WARNING:

For maximum safety, the drive chain condition and adjustment should be checked prior to operating the motorcycle. Always follow the manufacturer's recommendations for replacement and for proper lubrication.

Adjusting master link sprockets will not adjust belt/chain. Adjusting all sprockets will not adjust chain tension.

At the periodic inspections, performed at the initial 600 miles (1,000 km) and every 4,000 miles (6,000 km), the drive chain should be inspected for the following conditions.

- 
- (1) Excessive pin
 - (2) Damaged rollers
 - (3) Dry or rusted links
 - (4) Kinked or binding links
 - (5) Excessive wear
 - (6) Improper chain adjustment

If the drive chain has any of these items along with it, then there is a strong possibility that the sprockets will have some damage to them also. Inspect the sprockets for the following:

- 
- (1) Excessively worn teeth
 - (2) Broken or damaged teeth
 - (3) Loose sprocket mounting nut/bolt



DRIVE CHAIN CLEANING AND OILING

Grease is permanently sealed inside the rollers of the GS1000 chain by the use of special "O" rings. At intervals of 800 miles (1,000 km) clean and oil the chain, as follows:

- 
- (1) Cleaning the chain with kerosene is strongly recommended. If the chain tends to rust, the interval must be shortened. Kerosene is a petroleum product and will provide some lubrication as well as cleaning action.

CAUTION:

Do not use gasoline, kerosene or other commercial cleaning solvents. These fluids have a strong dissolving power that could damage the "O" rings in the chain. This will allow the grease to run out of the chain and the chain would have to be replaced.

- (2) Oiling the chain. After thoroughly washing the chain and allowing it to dry, oil the links with a heavy weight motor oil, 40 or 50 weight.

CAUTION:

Do not use any of said commercially as drive chain oil. These oils contain solvents and additives which could damage the "O" rings in the chain.

ADJUSTING DRIVE CHAIN



- (1) Adjuster nut (2) Sprocket (3) Chain adjuster tool (4) Sprocket (5) Reference mark (6) Sprocket



At the initial 500 miles (1,000 km) and a

minimum of every 4,000 miles (6,300 km) adjust the drive chain to the proper specification. The chain may require more frequent adjustments depending upon your riding conditions.

WARNING:

These recommendations are the maximum intervals between the adjustment periods. The drive chain adjustment should be checked every time that the machine is operated. Excessive chain slack could cause the chain to come off the sprockets and result in an accident or serious engine damage. To adjust the drive chain, follow these steps:

- (1) Place the machine on the center stand.
(2) Remove the adjuster pin and loosen the adjuster.

Adjust the drive chain to the proper specification by measuring the distance between the sprockets.

- (3) Loosen the lock nuts.
- (4) Adjust the slack in the drive chain by turning the right and left chain adjuster bolts in after loosening the lock nut. At the same time that the chain is being adjusted, the rear sprocket must be kept in perfect alignment with the front sprocket. To assist you in performing this procedure, there are reference marks on the swing arm and each chain adjuster which are to be aligned with each other and to be used as a reference from one side to the other. After aligning and adjusting the slack in the drive chain to 20 mm (0.8 in.), retighten the lock nut securely and replace the cotter pin with a new one. Tighten the chain adjuster lock nuts and perform a final inspection.



CAUTION:

Never allow the drive chain slack to exceed 50 mm (2 in.). If the slack is allowed to be greater than this figure, the chain may come off the sprockets and cause severe engine damage or an accident. When the indicator mark on the chain adjuster aligns with the end of the swing arm, the drive chain should be replaced with a new one as it has become worn extensively. Refer to the drive-chain information label on the chain guard.

CAUTION:

The drive chain for the 600000 is made of a special material. The chain should be replaced with either a **DAIDO CHAIN** or a **YAMAGUCHI RINGS**. Use of another chain may lead to premature chain failure.

NOTE: The rear sprockets should be inspected for wear when a new chain is installed and replaced if necessary.

SPARE



The GS1000 utilizes front and rear disc brakes. Properly operating brake systems are vital to safe riding. Be sure to perform the brake inspection requirements as scheduled. The brakes should be inspected at the initial 600 miles (1,000 km) inspection and every 4,000 miles (6,000 km) thereafter, by your authorized Suzuki dealer.

Oil level should be checked at the following intervals:
• After every 1,000 miles (1,600 km) or 10 days, whichever comes first.
• After every 4,000 miles (6,000 km) or 40 days, whichever comes first.
• After every 8,000 miles (12,000 km) or 80 days, whichever comes first.



BRAKE FLUID

WARNING:

Brake fluid may be harmful if swallowed or if it comes in contact with skin or eyes. Contact your physician immediately. If swallowed induce vomiting. If brake fluid gets into the eyes or in contact with the skin, it should be flushed thoroughly with plenty of water.

Check the brake fluid level at the following intervals:
• After every 1,000 miles (1,600 km) or 10 days, whichever comes first.
• After every 4,000 miles (6,000 km) or 40 days, whichever comes first.
• After every 8,000 miles (12,000 km) or 80 days, whichever comes first.

CAUTION:

The GS1000 uses a glycol-based brake fluid. Do not use or mix different types of brake fluid such as silicone-based or petroleum-based fluid, otherwise serious damage will result to the brake system. Never use any brake fluid that has been stored in a used or unsealed container. Never reuse brake fluid left over from the last servicing and stored for long periods as it absorbs moisture from the air. Use only DOT 3 or DOT 4 brake fluid. Do not spill any brake fluid on painted or plastic surfaces as it will damage the surface severely.

Be sure to check the brake fluid level in the front and rear reservoirs. If the level was found to be lower than the full mark, replenish with the proper brake fluid that meets Suzuki's requirements. As the brake pads wear, the fluid level will drop to compensate for the new position of the brake pads. Replenishing the brake fluid reservoir is considered normal periodic maintenance.



Inspect the front brake pads by noting whether or not the friction pads are worn down to the red limit line. If a pad is worn to the red limit line it must be replaced with a new one.



Inspect the rear brake pads for wear by noting whether or not the pad is worn down to the shoulder of each pad. If the shoulder is gone or nearly gone, the pad must be replaced with a new one. It is necessary to remove the pad inspection cap.

WARNING:

If the brake system or pads need to be repaired or serviced we strongly advise you to have your authorized Suzuki dealer perform service. He has the proper tools and proper training to perform the job in a safe and economical manner.



CAUTION:

Disc brake systems operate under extremely high pressures. For safety, the brake hose and brake fluid should be changed at intervals of no longer than two (2) years. Inspect your brake system for the following items daily.

- (1) Inspect the front and rear brake system for signs of fluid leakage.
- (2) Inspect the brake hose for leakage or a cracked appearance.
- (3) The brake lever should have the proper stroke and be firm at all times.
- (4) Check the wear of the disc brake pads.



FRONT BRAKE LIGHT SWITCH

The front brake light switch (1) is located beneath the front brake lever. Loosen the switch fitting screws and adjust the actuating point by moving the switch body to the right or to the left so that the brake lights will come on just before a pressure rise is felt at the lever.



REAR BRAKE PEDAL ADJUSTMENT

The rear brake pedal must have a specified amount of clearance at all times or the disc brake pads will rub the disc causing damage to the pads and to the disc surface. Adjust the brake pedal in the following manner:

- (1) Loosen lock nut (A) and turn the stopper bolt (B) away from the stopper leg.
- (2) Loosen lock nut (C), and rotate the push rod (D) to locate the pedal 20 mm below the top face of the foot rest.



Be sure to measure this clearance carefully.

- (3) Retighten lock nut (C) to secure the push rod (D) in the proper position.
- (4) Adjust the clearance between the tip of the return stopper bolt (B) and the stopper leg so that the clearance is zero. Retighten the lock nut (A).

LUBRICATING AND ADJUSTING THE FRONT AND REAR BRAKE			
Front Brake	Disc Brake	Drum Brake	Drum Brake
1	2	3	4



REAR BRAKE LIGHT SWITCH

The rear brake light switch is located under the right frame cover. To adjust the brake light switch, raise or lower the switch so that the brake light will come on just before a pressure rise is felt when the brake pedal is depressed.

TIRES

Check the tire inflation pressure and the tread condition at the initial 600 miles (1,000 km) and each 4,000 miles (6,000 km) inspection. For maximum safety and good tire life, the tire pressures should be inspected more often.

Properly inflated tires provide the best grip, absorb bumps, and reduce wear. They also help reduce fuel consumption and noise. Check the tire pressure at least once a month and before long trips. The correct tire pressure is listed in the table below.

TIRE INFLATION TIRE PRESSURE	FRONT				REAR			
	LOADS/CONDITIONS		SAGG/LOADING		SAGG/LOADING		SAGG/LOADING	
	P.S.I.	BAR/MPA	P.S.I.	BAR/MPA	P.S.I.	BAR/MPA	P.S.I.	BAR/MPA
NORMAL RIDING	26	1.75	26 - 32 (2000) 26 - 32 (2000)	1.75 - 2.20 (2000) 1.75 - 2.20 (2000)	26	1.75	32	2.20
LOW SPEED/LOW WIND SPRING RIDING	26	1.75	26 - 32 (2000) 26 - 32 (2000)	1.75 - 2.20 (2000) 1.75 - 2.20 (2000)	26	1.75	40	2.80

PSI = Pounds per Square Inch
BAR = Bar
MPA = Megapascals
2000 = 2000 lbs (907 kg)

TIRE PRESSURE

Inefficient air pressure in the tires not only hampers the rider but also seriously affects the stability of the motorcycle. Under inflated tires make smooth cornering difficult and overinflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control. Be sure that the tire pressure is within the specified limits at all times. Tire pressure should only be adjusted when the tires are cold.

Check the tire pressure at least once a month and before long trips. The correct tire pressure is listed in the table below.

- 1) Turn the handle brake switch from the "ON" position to the "OFF" position.
- 2) Check the rear of the tire pressure gauge.



TIRE TREAD CONDITION

Operating the motorcycle with excessively worn tires will decrease riding stability and can lead to loss of control. It is recommended that the front tire be replaced when the remaining depth of tire tread becomes 1.6 mm (0.06 in.) or less. The rear tire should be replaced when the tread becomes 2.0 mm (0.08 in.) or less.

WARNING: GS1000

The use of a tire type which is other than original equipment can lead to various stability problems and possibly loss of control. Use only a 1.25V19-4PR front tire and a 4.50V18-4PR rear tire. V-rated tires are used on the GS1000 due to the high speed capability and handling ability of the GS1000. Suzuki strongly recommends that you use I.R.C. brand V-rated tires on your GS1000.

WARNING:

Tire inflation pressure and the general tire condition are extremely important to the proper performance and safety of the vehicle. Check your tires frequently for both wear and inflation pressure.

WARNING: GS1000E

The use of a tire type which is other than original equipment can lead to various stability problems and possibly loss of control. Use only a 1.60V19-4PR front tire and a 4.50V17-4PR rear tire. V-rated tires are used on the GS1000E due to the high speed capability and handling ability of the GS1000E. Suzuki strongly recommends that you use I.R.C., Bridgestone or Dunlop brand V-rated tires on your GS1000E.

NOTE: Refer to the tire information label on the chain guard.

FRONT SUSPENSION

The GS1000 front suspension is pneumatic-fork spring or more commonly referred to as "air" forks. Each fork tube contains compressed air and a light coil spring as well as fork oil. The air pressure is adjustable so that you can obtain the degree of softness or firmness suitable to your type of riding and condition.

The GS1000 is serviced at the factory with 0.8 kg/cm^2 (11 psi) of air pressure in the front forks. This is the optimum pressure setting for the average rider in solo riding on the highway at about 55 mph (90 km/h), with no accessories added to the motorcycle.

This factory-set pressure may be too "soft" for faster or high performance cruising. The pressure should be increased to make the suspension more firm when you are planning on operating the machine hard or at a high speed.



(1) Air valve protection cap (2) Air valve
(3) Air pressure gauge

ADJUSTING FORK AIR PRESSURE

The motorcycle should be placed on its center stand and all weight removed from the front end by jacking up the front of the chassis or angles. Remove the air valve protection caps and use the air pressure gauge to check the front fork air pressure. To raise the pressure, use a hand pump to add air to each fork leg. To lower the pressure, bleed the air out from the valves. Double check the pressure and make sure that it is at the setting you desire.

CAUTION:

Do not attempt to alter the front fork air pressure setting by using a high pressure tire filler such as is available in gas stations. A hand type pump must be used so that no damage will occur to the fork assembly. Never use any air containing inflammable gases. Instead of ordinary air, nitrogen gas may be substituted if available. When pumping air in, never increase the pressure above 2.0 kg/cm^2 (29 psi). This is the maximum permissible pressure to avoid fork oil seal and valve damage. Never allow the operational fork air pressure to drop below 0.8 kg/cm^2 (11 psi) or to exceed 1.2 kg/cm^2 (17 psi) or internal fork damage will result.

1000

- (1) Equalize the air pressures of the two fork tubes. The maximum allowable difference is 0.04 kg/cm² (1.4 psi). This will prevent unnecessary stress on the front axle and on the fork leg assemblies.
- (2) Be sure to balance the suspension between the front and rear. Changing the air pressure setting on the front suspension requires that the spring and damper settings of the rear shock absorbers be altered according to the guidelines of this manual. For safe and comfortable riding, the recommended air pressure range is from 0.8 to 1.2 kg/cm² (11–17 psi).

(NOTE: First air pressure, as with tire pressure, should be checked periodically (weekly) and especially after periods of in-use. When checking the pressure, be sure to apply the pressure gauge squarely to the air valve. After taking a reading, remove the gauge quickly. This must be done as soon as pressure is lost when removing the gauge. The loss ranges from 2.08 to 2.70 kg/cm² (2.9–3.8 psi). Take this loss of air pressure into consideration when adjusting the valve first air pressure.)

REAR SUSPENSION

The rear shock absorber's spring preload and damping rate are adjustable. Spring preload can be altered to five different settings and the damping rate to four different settings.

These two variables can be adjusted to optimize the handling of the machine and the smoothness of the ride (based on the speed, load, and road conditions).

When the spring preload is adjusted, the damping rate is also affected. The damping rate is the resistance to the shock absorber's movement. The damping rate is adjusted by turning the damping rate adjuster. The damping rate is adjusted by turning the damping rate adjuster. The damping rate is adjusted by turning the damping rate adjuster.

The factory-set settings may be too "soft" for loads or high performance driving. The damping rate should be increased to make the suspension stiffer than when you are plowing or operating the machine hard or at a high speed.



Adjusting the rear shock absorber spring preload.



Adjusting the rear shock absorber spring preload.

SPRING ADJUSTMENT

Turn the bottom spring nut, as shown in the photo, to the desired notch. This will change the preload on the spring and increase or decrease the stiffness of the ride. The Q50 800 is delivered from the factory is adjusted so that both springs are on the number 1 notch for the softest possible ride.

The Q50 800 is delivered from the factory is adjusted so that both springs are on the number 1 notch for the softest possible ride. The Q50 800 is delivered from the factory is adjusted so that both springs are on the number 1 notch for the softest possible ride. The Q50 800 is delivered from the factory is adjusted so that both springs are on the number 1 notch for the softest possible ride.



DAMPING ADJUSTMENT

Pull the rubber dust cap up and away from the adjusting ring. To increase or decrease the damping force, turn this adjusting ring as shown in the photo. Damping adjustments are indicated by the numbers 1 thru 4 engraved on the adjusting ring. As you turn the adjusting ring, you will notice a click as you reach each number position. When changing the damping, always be sure that the adjusting ring stops with the number visible, that a click is noticed and the ring feels as if it were strong in position or a notch.

Position 1 (halfway) provides for the smallest amount of damping force, and position 4 (halfway) for the largest amount. The GSXR600 is delivered from the factory with both rear dampers adjusted to the number 1 position (halfway position). This combination of spring and damper will give maximum comfort and handling for the average solo rider of 80kg (176 lbs) at about 55 mph (90 km/h) on the highway without any accessories mounted.

CAUTION

Do not operate rear damper units in any positions other than the click or detented positions. If position 2 1/2, 3 1/2, etc. is used, the damping force will automatically have the same damping force as number 4 (halfway) position.



The rear suspension must be made stiffer if two persons are to ride the motorcycle or if accessories have been fitted to the motorcycle.

If the machine is to be used for high performance cruising, then the rear suspension should also be stiffened. A list of the recommended combinations is provided and should be followed.

Spring Setting	Damper Setting
I	1 or 2
II	2 or 3
III	3 or 4
IV	3 or 4
V	4

WARNING:

- (1) Any combination other than those listed can be extremely dangerous and lead to loss of control of the motorcycle. For safe riding, be sure to follow the recommendations.
- (2) Be sure to adjust the springs and dampers of the two shock absorbers equally. Making one shock absorber harder than the other will severely disturb the running stability of the machine.
- (3) Match the front suspension to the rear suspension for a balanced ride and stability. Adjusting the shock absorbers alone or the front forks alone can be very dangerous. Always set the front and rear suspension according to the recommended list.

MATCH THE FRONT AND REAR SUSPENSIONS

Spring Setting	Damper Setting	Front Fork Air Pressure
I	1	0.8 kg/cm ² (11 psi)
I	2	0.8 – 0.9 kg/cm ² (11 – 12 psi)
II	2	0.8 – 0.9 kg/cm ² (11 – 12 psi)
II	3	0.8 – 0.9 kg/cm ² (11 – 12 psi)
III	3	1.0 – 1.1 kg/cm ² (14 – 16 psi)
III	4	1.0 – 1.1 kg/cm ² (14 – 16 psi)
IV	3	1.0 – 1.1 kg/cm ² (14 – 16 psi)
IV	4	1.0 – 1.1 kg/cm ² (14 – 16 psi)
V	4	1.2 kg/cm ² (17 psi)

CAUTION

Fork oil viscosity and level is critical to proper air fork operation. Draining or adding fork oil is best left to your Suzuki dealer as special tools and knowledge are necessary to perform this task.

FRONT WHEEL REMOVAL



(1) Place the bike on the center stand.

(2) Remove either one of two calipers, left or right, from the fork by unfolding its two mounting bolts. (only for C215000).



(3) Disconnect the speedometer cable from the front wheel. When the cable is released, prevent the inner drive cable from sliding out of the outer cable housing.



(4) Remove the axle holders, both right and left by unfolding the two nuts on each of the axle holder caps.

CAUTION
When removing the axle holders, be careful not to damage the brake pads or the brake disc. If the brake pads or the brake disc are damaged, they must be replaced.



- 44 Lift the front end of the motorcycle up and place a jack or a block under the engine or chassis tubes.

CAUTION: Do not use a jack to support the vehicle. If the jack slips, the vehicle will fall back to the ground.



- 45 Slide the front wheel forward. To re-install the wheel assembly reverse the sequence as described.

CAUTION: Do not use a jack to support the vehicle. If the jack slips, the vehicle will fall back to the ground.

WARNING:

If the front wheel has to be removed, it is very important to have the loosened nuts and bolts torqued to the proper specifications. We suggest that you have this performed by a authorized Suzuki Dealer.

CAUTION:

Before tightening the axle holders in place, locate the speedometer drive gear box so that the arrow on the gear box housing points up. This will align the speedometer cable properly when installed. To secure the axle properly, the axle holders should be tightened down so that the gap on each side of the cap is equal.

CAUTION:

Never operate the front brake lever with the front wheel removed. It is very difficult to force the pads back into the caliper assembly.

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REAR WHEEL REMOVAL



(1) Place the machine on the center stand.

(2) Remove the two chain guard bolts and then remove the chain guard cover.

(Remove right-side chain cover.)



1. Pinion pin 2. Axle nut 3. Support bolt
4. Caliper mounting bolt 5. Caliper
6. Torque link bolt

(3) Remove the center pin that links the axle nut into position, then loosen the axle nut.

(4) Remove the caliper mounting bolts, the torque link bolt center pin and the torque link bolt. Place the caliper out of the way.

(If the vehicle is being stored, remove the axle nut and torque link bolt. Do not remove the axle nut and torque link bolt if the vehicle is to be ridden.)



(5) Place both chain adjusters downward, allowing the wheel to be pushed forward.



- (B) Remove the support bolts from each chain adjuster block and remove the adjuster block from swing arm.
- (C) With the wheel moved forward, remove the chain from the sprocket by slowly rotating the wheel, at the same time pulling the chain to the side.

- (B) Pull the wheel assembly forward and remove it from the swingarm. Slide the drive chain off of the hub when the wheel is far enough to the rear to provide the clearance required.
- (B) To replace the wheel reverse the complete sequence listed.

WARNING:

If you have found it necessary to remove the rear wheel, it is very important that the nuts and bolts be torqued to the proper specification. We strongly recommend that you have these bolts checked and retorqued by your authorized Suzuki Dealer.

CUTION:

- (C) When reinstalling the rear wheel, be sure to follow the procedure outlined in the drive chain adjustment section. Double check all nuts, bolts and adjust pins after reinstalling the rear wheel.
- (C) While removing the caliper from the mounting bracket it is possible for the brake hose to touch the muffler. If the muffler is still hot, the hose could be damaged. Protect the hose with a cloth or wait until the muffler cools.
- (C) When reinstalling the rear caliper, be careful not to twist the brake hose or route it improperly.

LIGHT BULB REPLACEMENT

The wattage rating of each bulb is shown on the chart below. When replacing a burned out bulb, always use the exact same wattage rating. Using other than the specified rating can result in overloading the electrical system or premature failure of a bulb.

Headlight	12V 80/50W
Turn/side light	12V 5/20W (5/21) wpt
Lensless plate light	12V 8W (3 wpt)
Turn signal light	12V 23W (22 wpt)

HEADLIGHT



- 1) Remove these screws (1) - take off the headlight assembly.
- 2) Roll up the rubber cap (2) and unhook the bulb holder spring, and you can pull out the bulb (3).

CAUTION:

In this model GS1000, the halogen light is used for the headlight. When replacing the headlight bulb, be careful not to touch the lens of the bulb.

TAIL/BRAKE LIGHT



- 1) Lensless plate light
- 2) Turn/side light

To replace the tailbrake light bulb or 4-wheel plate light bulb, follow these directions:

- (1) Remove the four screws and take off the lens.
- (2) Push the bulb in, twisting it to the left until the engagement pins are disconnected and remove the bulb. To fit the replacement bulb into position, push the bulb in firmly and twist it to the right while pushing in.

CAUTION:

When replacing the lens, do not overtighten the four securing screws.

TURN SIGNAL LIGHT



- (1) Remove two screws and take off the lens.
- (2) Push the bulb, twisting it to the left, and pull it off.
- (3) To fit the replacement bulb, push it in and twist it to the right while pushing.

CAUTION:

After setting the lens, be careful not to overtighten the two securing screws lest the lens should break.

OUTPUT TERMINAL



For attaching electric accessories, the output terminal is provided under frame cover.

When feeding current to an electric accessory from this output terminal, first remove terminal cover. Then, connect it to the terminal with extreme care not to confuse its positive (+) and negative (-), following marks positive (+) and negative (-) on the terminal. After that, replace the terminal cover. The allowable current is 10A (12V).

CAUTION:

This output terminal is strictly provided for electric accessories, and so, any other usage are forbidden. In actual use for any electric accessory, please consult Suzuki dealer. It should be noted that a burnt out fuse should be replaced, removing terminal cover.

CAUTION:

Like other fuses, use none other than specified 10A fuse.

HEADLIGHT



The headlight beam can be adjusted both horizontally and vertically if necessary.

To adjust beam horizontally:

Turn the cross head screw (1) located on the left side of the headlight unit clockwise or counter-clockwise.

To adjust beam vertically:

Loosen the headlight housing fitting bolt (2) and move the headlight housing up and down as required.

FUSE



The fuse box (1) is located inside the left hand frame cover. There are four fuses. If there is a sudden halting of the engine while running or any electrical system failure then the fuses must be checked. In case one or more of the fuses blow there are two fuses (2) , a 15A and a 10A fuses, located in the fuse box cover.

CAUTION:

Always be sure to replace the blown fuse with the correct amperage fuse. Never use a substitute, for example aluminum foil or wire, to replace a blown fuse. If the spare fuse installed blows out in a short period of time it means that you could have a major electrical problem. You should consult your (DZ 20) dealer immediately.

FUSE LIST

1. 15A 10A/10 Fuse protects all electrical systems.
2. 10A 10A/10 Fuse protects headlight, taillight, license plate light, instrument lights and high beam indicator light.
3. 10A 10A/10 Fuse protects brake light, turn signal lights, turn signal indicator light, turn signal buzzer and horn.
4. 10A 10A/10 Fuse protects the ignition system and electrical start system.

If the engine refuses to start, perform the following inspections to determine the cause.

- (1) Is there enough fuel in the fuel tank?
- (2) Is the fuel reaching the carburetor from the fuelcock?
- (3) Disconnect the fuel line from the carburetor, turn the fuelcock to the "PRIME" position and see if gasoline flows from the hose.
- (4) Then turn the fuelcock to the "ON" position and crank the engine for a brief moment and see if fuel will flow.
- (5) If it has been determined that fuel is reaching the carburetor, the ignition system should be checked next.

WARNING:

Do not allow the fuel to spill, catch the fuel in a container.

- (1) Remove a spark plug and re-attach it to the spark plug lead.
- (2) While holding the spark plug firmly against the engine, push the starter button with the ignition switch in the "ON" position and the engine "kill" switch in the "PRIME" position. If the ignition system is operating properly, a blue spark should jump across the spark plug gap. If there is no spark, consult your Suzuki Dealer for repairs.

WARNING:

Do not hold the spark plug close to the open spark plug hole in the cylinder head as gasoline vapor inside the cylinder could be ignited, creating a fire hazard.



ENGINE STALLING

- (1) Check the fuel supply in the fuel tank.
- (2) Check the ignition system for intermittent spark.
- (3) Check the engine idle speed.

It is best to consult your Suzuki dealer before attempting to troubleshoot any problem. If the machine is still within the warranty, then the Suzuki dealer should definitely be consulted before any repairs are attempted on the machine by yourself. Tampering with the machine while in warranty may affect warranty consideration.

For more information, contact your Suzuki Dealer.

PROCEDURE FOR STORAGE

Materials Needed

1. Motor Oil.
2. Commercial Gasoline Stabilizer.
3. Commercial Rust Preventative Fogging Oil. (Equivalent motor oil).
4. Commercial Aerosol Rust Preventive (moisture displacing lubricant).
5. Commercial Vinyl and Rubber Preservative.
6. Hydrometer for Checking Battery Condition.
7. 1 Amp Battery Charger.

1. Place the motorcycle on its center stand.
2. Thoroughly clean the entire motorcycle. Run the bike until all traces of moisture are gone.
3. Pour the gasoline stabilizer into the fuel tank using the amount of stabilizer recommended by its manufacturer. Unstabilized fuel will form "gum" or "varnish" deposits that will plug the fuel cock and carburetor passageways.

Adjustment and maintenance

is in the "on" or "reserve" position. If the lever is left in the prime position, fuel may leak into the engine.

NOTE: Steps 4a and 4b are for protecting the top end engine components from rust and corrosion. Step 4b is to be used only if fogging oil is not available. Use either 4a or 4b, but **DO NOT** do both.

- 4a. Remove the air cleaner element. While the engine is running at idle, spray the rust preventative fogging oil into the air cleaner box. Try to give each cylinder equal amounts of fogging oil. Do this until the engine starts to emit smoke.
- 4b. Run the engine for a few minutes to get the stabilized fuel into the cylinders. Then, remove the spark plugs and pour 1 to 2 tablespoons of motor oil into each spark plug hole. Reinstall the spark plugs. **DO NOT** reinstall the spark plug caps at this time. Turn the engine over a few times with the electric starter. Now reinstall the spark plug caps.

1970 Yamaha 250cc 2 stroke engine and 1970

5. Drain the old engine oil and remove the oil filter, but **DO NOT** replace it at this time. With fresh oil, refill the crankcase all the way up to the filler cap hole. This step is necessary because the old oil contains acid, moisture and other contaminants that will damage the engine while it is stored.
6. Refill the fuel tank as completely as possible to eliminate any air space and to reduce the chance of the fuel becoming contaminated.
7. Remove the battery. Make sure to remove the negative terminal before the positive terminal. This will remove the battery from the circuit and will eliminate the chance of grounding the positive terminal with the armature or wrench. Clean the outside of the battery with a mild baking soda and water solution and dry it carefully. Be sure not to get any solution inside the cells. Remove any corrosion from the terminals and from the wiring harness connections. Store the battery in a room that

NOTE: Make sure that the fuelcock lever

steps above freezing, off the floor, and preferably on a wooden dunnage.

8. Spray all of the vinyl and rubber parts with the rubber preservative.
9. Spray the unpainted surfaces of the motorcycle with the rust preservative.
10. Deflate the tires to approximately 20 PSI and block up the front of the motorcycle so both front and rear tires are off of the ground. This will keep the tires from developing permanent "flat" spots.

STORAGE AND STORAGE

During the storage period, be sure to do the following things:

Once A Week

Turn the engine over a few times by removing the spark plug and putting the transmission in 5th gear and turning the rear wheel. This will keep the piston rings free and top end coated with oil. Reinstall the spark plug and visually inspect your machine for any other things that would be detrimental to the condition of your GS 900R.

Once A Month

Recharge the battery with the one amp

battery charger until it is fully charged. If the battery is not kept fully charged, it may become permanently damaged and will have to be replaced.

PROCEDURE FOR RETURNING TO SERVICE

1. Clean the entire motorcycle.

NOTE: Use of a commercial degreaser may stain the finish on the engine. Instead, use a mild detergent and water solution.

2. Drain the oil that was in the engine during the storage period. Install a new oil filter and fill the engine with oil as outlined in your owner's manual.
3. Reinstall the battery. Make sure that the vent hose is connected and routed properly. Install the positive terminal before the negative terminal.
4. Lubricate all points as instructed in the lubrication table in the owner's manual.
5. Inflate the tires to the correct pressure.

6. Before starting the engine, remove the four spark plugs and slowly turn the engine over by putting it in 5th gear and turning the rear wheel. Listen for any abnormal noises and check for smooth movement. If you think a problem has occurred, contact your local authorized Suzuki dealer for assistance. If there are no problems, reinstall the spark plug and return the transmission to neutral.

7. Do the "Inspection Before Riding" as listed in the owner's manual.

Often times it's easier to let these sort of services be done by your dealer. Most dealers in the areas where motorcycle storage is common are set up to properly prepare motorcycles for storage. Whether you do it yourself, or have your dealer do it, we sincerely hope you follow our suggestions. This is the only way that your GS can serve you in the market it was designed. If your dealer does the service for you, you should be among the first to be back on the road when winter becomes spring.

CAUTION:

Clean the brake disc with alcohol only. This will ensure positive braking.

GENERAL INFORMATION

DIMENSIONS AND WEIGHT

Overall length	2,725 mm (89.6 in)
Overall width	890 mm (35.0 in)
Overall height	1,185 mm (46.7 in)
Wheelbase	1,305 mm (51.3 in)
Ground clearance	185 mm (7.3 in)
Dry weight	230 kg (507 lbs.) (GVWR)
	234 kg (516 lbs.) (GVW)

ENGINE

Type	Four-stroke cycle, air-cooled, OHVC
Number of cylinders	4
Bore	73.8 mm (2.909 in)
Stroke	94.8 mm (3.731 in)
Piston displacement	592 cm ³ (35.8 cu. in)
Compression ratio	9.2 : 1
Carburetor	MIKUNI VM2655, four
Air cleaner	Paper element
Starter system	Electric
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Overdrive pattern	1-down 4-up
Primary reduction	1.735 (57/33)
Final reduction	2.800 (42/15)
Gear ratios, Low	2.500 (35/14)
2nd	1.771 (32/18)
3rd	1.350 (26/21)
4th	1.105 (22/20)
Top	0.901 (20/22)
Drive chain	SAFARI D.L.D. 530Y, or TANABE 530/530X, 95 links

CHASSIS

Front suspension	Telescopic, pneumatic shock spring, oil damped
Rear suspension	Swinging arm, oil damped, dampers 4-way/steering 5-way adjustable

NOTE: Make sure that the front/rear axle

WE COOLER

WE COOLER

Steering angle	40° (right & left)	
Center	65°	
Trail	113 mm (4.45 in)	CG1000
	118 mm (4.67 in)	CG1000H
Turning radius	2.6 m (8.5 ft)	
Front brake	Disc brake, single	CG1000
	Disc brake, twin	CG1000H
Rear brake	Disc brake	
Front tire size	2.25V18-4PR	CG1000
	2.50V18-4PR	CG1000H
Rear tire size	4.00V18-4PR	CG1000
	4.50V13-4PR	CG1000H

Fuse	10/10/10/15A
Headlight	12V 60/55W
Tail/Brake light	12V 5/21W (3/21 W)
Turn signal light	12V 21W (21 W)
License plate light	12V 5W (5 W)
Speedometer light	12V 3.6W
Tachometer light	12V 3.6W
Neutral indicator light	12V 3.6W
High beam indicator light	12V 3.6W
Turn signal indicator light	12V 3.6W
Oil P. indicator light	12V 3.6W

ELECTRICAL

Ignition type	Battery ignition
Ignition timing	11° B.T.D.C. before 1,500 rpm and 11° B.T.D.C. above 2,500 rpm
Spark plug	NOR. 8883 or NIPPON DENSO NGK
Battery	12V 14Ah/180hours
Generator	Three-phase A.C. generator

CAPACITIES

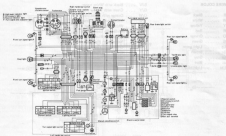
Fuel tank including reserve	18 lit (4.8 US gal)
oil	4.8 lit (1.2 US gal)
Engine oil when changing	3.4 lit (0.9 US gal)
Front fork oil	241 cc (8.15 US oz) in each leg

WIRE COLOR

B	Black
W	White
Y	Yellow
R	Red
O	Orange
G	Green
LG	Light green
Br	Brown
Gr	Gray
Bl	Blue
LB	Light blue

B/W	Black with White tracer
G/Y	Green with Yellow tracer
O/W	Orange with White tracer
Y/G	Yellow with Green tracer
W/R	White with Red tracer
W/G	White with Green tracer
W/B	White with Blue tracer
Y/B	Yellow with Black tracer
O/G	Orange with Green tracer
O/R	Orange with Red tracer
B/Y	Black with Yellow tracer
G/W	Green with White tracer

WIRING DIAGRAM(GS1000E)



WINE COLOR

B	Black
W	White
Y	Yellow
R	Red
O	Orange
G	Green
Lg	Light green
Br	Brown
Gr	Grey
Bl	Blue
LM	Light blue

B/W	Black with White trace
O/Y	Orange with Yellow trace
O/W	Orange with White trace
Y/O	Yellow with Orange trace
W/R	White with Red trace
W/G	White with Green trace
W/Bl	White with Blue trace
Y/R	Yellow with Red trace
O/O	Orange with Orange trace
O/R	Orange with Red trace
Bl/Y	Black with Yellow trace
Gr/W	Green with White trace
Bl/R	Black with Red trace
Bl/Bl	Black with Blue trace
Bl/R	Blue with Red trace
Bl/Y	Blue with Yellow trace
Bl/W	Blue with White trace
Y/R	Yellow with White trace
Br/Y	Brown with Yellow trace
Lp/R	Light green with Black trace

Prepared by
SUZUKI MOTOR CO., LTD.

Service Department
 Technical Operations Division
 July, 1979
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SUZUKI MOTOR CO., LTD. warrants to the ultimate purchaser and each subsequent purchaser that his vehicle (SUZUKI or SUZUKI) is designed, built, and equipped so as to conform at the time of sale with all U.S. emission standards applicable at the time of manufacture and that it is free from defects in materials and workmanship which would cause it not to meet those standards within the period of 5 years or 30,000 km (18,641 miles), whichever occurs first. Failures, other than those resulting from defects in material or workmanship, which arise solely as a result of wear, abuse and/or lack of proper maintenance are not covered by the warranty.

SUZUKI MOTOR CO., LTD.

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