

CORRECTIONS/CLARIFICATIONS TO
SUZUKI GT750 SERVICE MANUAL
#SR3100 Printed 03/79

In the Foreword to this manual, the authors make reference to the fact that this manual is for use by technicians/mechanics in the service departments of Suzuki dealerships. At the time this manual was printed, product liability and consumer litigation were not addressed with the degree of concern that manufacturers treat such matters today. Thus the following:

!! WARNING !!

All procedures outlined and/or detailed in this manual, and the corrections/clarifications attached hereto, are to be performed only by authorized/licensed/experienced persons in the motorcycle repair trade. All other persons are warned that any improperly performed procedure(s) may cause serious damage to, or destruction of, motorcycle components, motorcycle systems and/or the entire motorcycle. Improperly performed procedure(s) may also cause bodily harm to, or death of, the person attempting to perform such procedure(s) or persons subsequently riding the motorcycle. If you are not a licensed motorcycle mechanic, you are urged to take your motorcycle to your nearest authorized Suzuki dealer for the appropriate procedure(s) to be performed by suitably licensed and experienced mechanics/technicians.

Keep in mind that it is a smart idea to disconnect the ground cable at the battery terminal before starting any work so as to prevent starting the engine, or shorting a wire to ground, by accident.

I have tried to clarify the fractured syntax and/or to correct mistakes/omissions in this manual, some quite critical. Some of the items listed here are simple clarifications of choices by the Japanese authors of an imprecise (or confusing) word or phrase. This can lead to a lot of confusion on the part of someone who is a novice at interpreting the intent or word definition of those Japanese authors. The manual also contains various errors in measurement caused by faulty conversion from the metric system to the Imperial (English or “standard”) system of weights and measures. Any mistakes that you find during your reading of the manual will be incorporated into later revisions of this document since I make no claims to being all-seeing. Please forward your “finds” to me at h2rick@3web.net and I will make sure they are included in future revisions. One final note: the edition that I have was printed in 1979. Earlier editions of this manual may be slightly different. The publication/copyright date of your manual can usually be found on the back cover on the lower right hand edge thusly: Printed in Japan © XX-X, where the first two X’s denote the year and the third X denotes the month.

CLARIFICATIONS:

Page 12, Carburetor, para.2. This paragraph should read in part:....so that the top of the punch mark 'I' on the side of the throttle valve aligns with the top of the threaded hole in the throttle body as the throttle is wound open. All three punch marks should be aligned in their respective holes at the same throttle opening. This adjustment is to be made with the motor stopped.

Page 12, Carburetor, para. 3. This paragraph should read: Screw the pilot air adjusting screw gently inwards until it just bottoms. Do not force the adjusting screw in tightly. Then back it out 1 ½ turns. This adjustment is to be made with the motor stopped.

Page 20, On Frame Service, Cylinder Head, Removal, para. 5. This paragraph should read: Loosen cylinder head bolts in the reverse order of the numbers shown in Fig. 3-4, that is from #19 back to #1.

Page 27, Inspection & Repair, para. 4, Note. This should read: After reboring of the cylinder(s), all port edges are to be chamfered as shown in the diagram in the lower right hand portion of fig. 3-32.

Page 40, Inspection, para. 7. This should read in part:....diameter measured at any point on the drum is less than the minimum allowable measurement of 44.70mm (1.7598").

Page 48, SRIS. The Type 1 arrangement is used on machines up to engine #31343. The Type 2 arrangement is a better working system and was installed on all engines from #31344 until the end of production. There is a kit, part # 13100-31830, that contains all the parts necessary to convert an engine with the Type 1 system over to the Type 2 system.

As well, all the "J" models used SRIS check valves that are pressed into the crankcase. If any of these valves fail in the "open" position, there is an external style check valve available to take over the function of the failed valve. This external valve is available under part #16710-31990 and is inserted into the SRIS hose downstream of the failed valve. The problem of the pressed-in style valve failing in the "closed" position is not addressed in either the service manual or any service bulletins. Such a failure can happen if the bike has been standing for a long period and the valve becomes clogged with degraded injector oil and/or fuel. You may be able to somehow pry the failed valve out of the crankcase casting but I have never personally attempted this procedure. All the "K" and later models used a screw-in style check valve so that removal and cleaning of a valve failed in the "closed" position on those models is not a problem.

Additionally, the check valves were not supplied with any kind of a filter or strainer on the crankcase side and problems arose in service with small foreign particles causing the valve to fail in the "open" position and thus causing improper operation of the system for that particular cylinder. The factory installed a plastic mesh strainer on the end of the check valve facing the inside of the crankcase beginning with the first "K" model engines with screw-in style check valves. Unfortunately, the plastic mesh would not stand up to the heat of the engine and metal strainers were supplied from engine #39084 and later. Thus, early "K" model engines from ~#31400 to #39083 should have the plastic mesh strainers replaced by the metal mesh style. Metal mesh strainers are available as single pieces under part #16521-31010. The plastic mesh strainer was discontinued entirely when the revised strainer began to be installed on production line engines during November, 1972.

Page 50, Oil Pump & Oil Pipe, Disassembly. This paragraph should have been written as: Do not disassemble this injection oil pump as it is a precision piece of equipment with no user serviceable/replaceable components inside. Disassembly/reassembly of the oil injection pump will void the warranty on the pump, the injection system and the engine. Should the oil injection pump fail in service, it should be replaced as a unit.

A note about field experience with oil injection pumps: The pump is generally quite durable provided that grit/dirt is kept out of the injection oil and oil tank. The weakest part of the pump is the cam on the control shaft, shown as item 1 in fig. 6-6 on page 45. Some shafts/cams are apparently made of softer material than one would expect and thus wear prematurely. Since the pump will actually pump more oil as the cam wears, this poses no dangers other than excess oil fouling of the spark plugs and excess exhaust smoke. This over-oiling can be compensated for by making the appropriate adjustment in the pump actuating cable (VM series carbs), or the pump actuating rod (BS series carbs), so that the pump control arm will actually start moving/opening slightly later than normal as when the pump setting marks are aligned per fig. 6-19 on page 51. Plug checks are important when making any changes to the pump setting and changes to the setting should be made in very small increments i.e. no more than $\frac{1}{2}$ turn of the cable adjusting bolt, or rod adjusting nut, at a time.

Page 50, Oil Pump & Oil Pipe, Inspection & Repair, para. 1 b). This paragraph should be written in part as:....oil is injected from a suitable oil can/squeeze bottle into the individual ports in the injection pump oil distribution ring until all air is expelled and only pure oil appears at the corresponding banjo fitting at the engine end of that particular oil line. It is a good idea to disconnect each oil line in turn from the engine block to insure that excess oil is not pumped into the engine during this operation. It is....etc.

Page 59, Water Pump, Assembly, para 1. This should have been written as: Before inserting the water pump holder into the cavity in the crankcase, apply a light coating of transmission lubricant to the o-rings on the outside of the holder body. Pay particular attention when inserting the holder that the coolant inlet hole in the holder body is aligned correctly with the appropriate hole in the crankcase casting. Note that the upper rim of the holder casting has a notch in it to mate with an indexing screw (item 6, figs. 7-10 & 7-14) protruding into the holder cavity thus insuring correct holder orientation. A slight back and forth twisting motion will help during installation of the holder body into the cavity.

CORRECTIONS:

Page 11, Carburetor, para. 1: the value for the play in the carb cable slack should read: 2-3mm (.08-.120 in.).

Page 35, Inspection & Repair, para. a: The STD thickness should read: 2.9-3.1mm (.112-.122"). The Wear Limit should read: 0.2mm (.008") less than the minimum of the above values.

Page 53, Description, para 4: the value shown for the radiator cap release pressure should read 0.9kg/cm² (12.78 lb/in²).

Page 58, Thermostat, Inspection & Repair, section 2. The Valve opening temperature T_2 should read: Valve opening temperature T_1 , and the value should read $82 \pm 1.5^\circ\text{C}$ ($179.6 \pm 2.7^\circ\text{F}$). Also the graph in the upper right corner of page 58 in figure 7-9 has the same temperature conversion error in it. The value of the temperature span between the arrow-headed lines should read: 8°C (14.4°F).

Page 59, Water Pump, Disassembly, para. 1. The temperature value here should read $75\text{--}85^\circ\text{C}$ ($167\text{--}185^\circ\text{F}$).

Page 61, Antifreeze & Summer Coolant: Any name brand antifreeze compatible with aluminum can be used in place of the impossible-to-obtain Golden Cruiser 1200 from Suzuki. Use of “reclaimed” or “recycled” antifreeze is not recommended. Distilled water should definitely be used instead of tap water when mixing up your coolant solution before filling the system. Distilled or deionized (not just filtered) water is cheap and readily available and will prevent corrosion of the aluminum radiator, cylinder block, etc. Do your cooling system and your wallet a favour and use distilled water in your coolant mix.