

**SUZUKI**

2-Stroke

**T****Service Bulletin  
Index****TWO STROKE**

NO.	MODEL	SUBJECT
1	T500	TRANSMISSION REPAIR
2	T250/305/350	DRIVE SHAFT/TOP GEAR
3	T500	INCREASED TRANSMISSION OIL CAPACITY
4	T500	SWING ARM PIVOT SHAFT
5	T/GT500	SHIFT CAM GUIDE BOLT LOCATION
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

T

NO.	MODEL	SUBJECT
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		



**SUZUKI**

**2-Stroke**

# **Service Bulletin**

Subject: T500 TRANSMISSION REPAIR

Bulletin No: T-1  
Date: May 1, 1975

Read and Initial

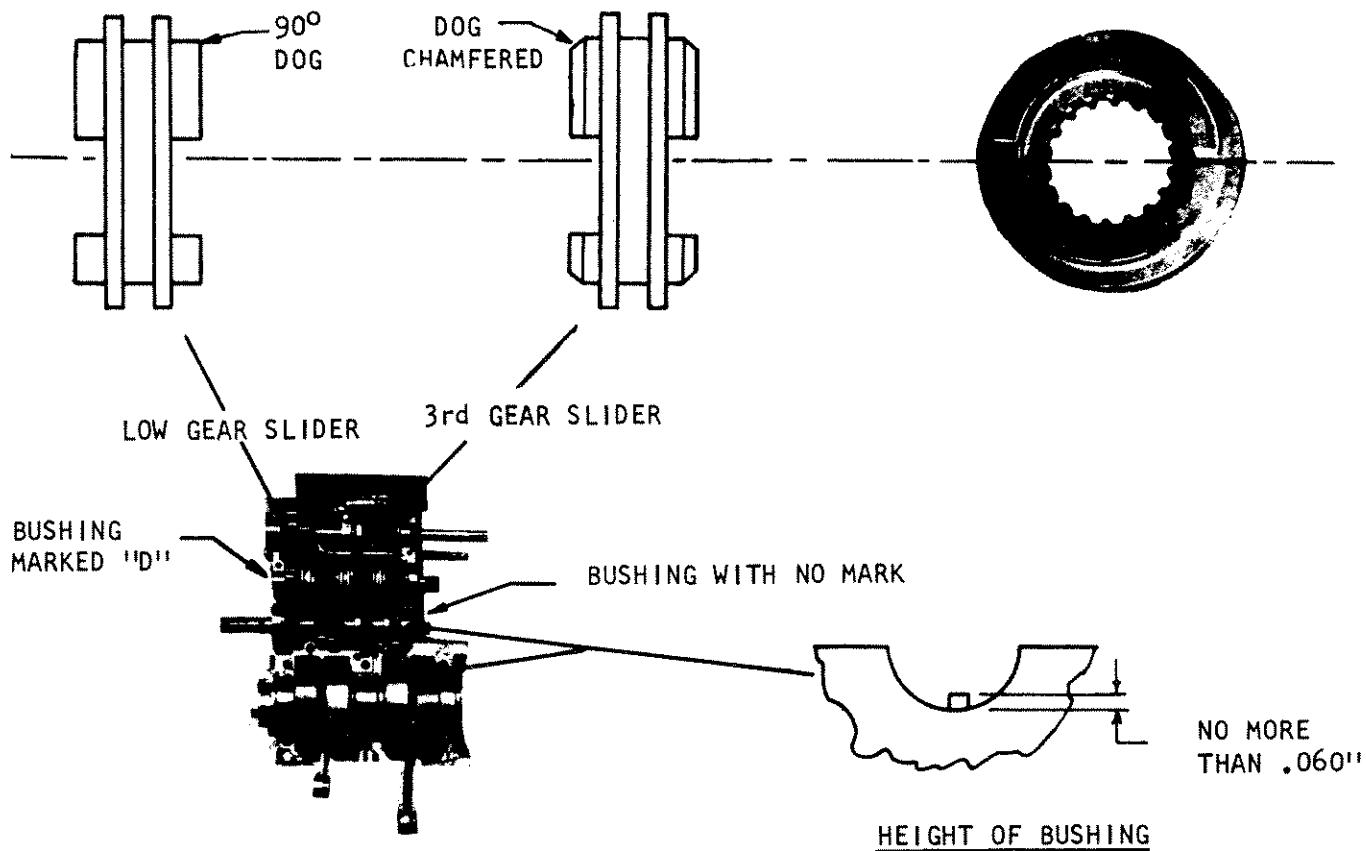
Manager \_\_\_\_\_

Parts \_\_\_\_\_

Service A4P

We would like to caution our service mechanics of the following problem areas when reassembling T500 transmissions:

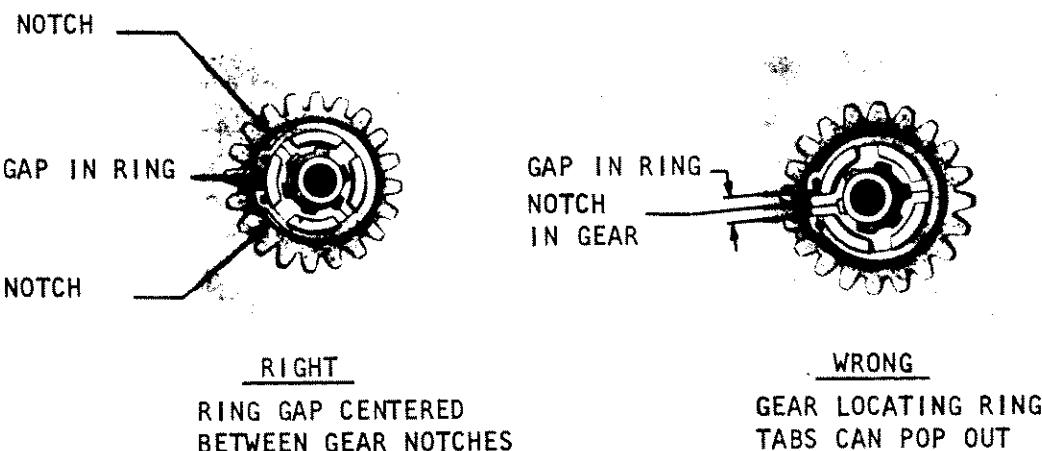
A. Do not interchange low gear slider wheel with 3rd gear slider wheel. If the transmission is assembled this way, the bike will jump out of first gear under any load. The difference between the two wheels is shown below:



B. Do not switch the small needle bearing bushings on the ends of the transmission shafts. One is marked with a "D", this should be installed on the driveshaft (shaft with sprocket). The height of the two bushing pins in the case should not be more than 1.5mm (.060"). File off any excess height.

T500 Transmission Repair

- C. Be absolutely sure that all bushings and bearings are properly located over the pins in the lower crankcase. We have had ruined crankcases from failure to follow this simple step. This is not a factory defect and we expect the servicing dealer to bear the expense of repair for this type of damage.
- D. Use new snap rings when assembling gear locating rings to transmission shaft.
- E. Locate the gap in the snap ring away from the notches in the gear. This keeps the snap ring from popping loose if the tabs move over. Be sure that the ends of the snap rings do not butt. If they do, cut off until there is at least a  $1/16"$  gap.



F. In event of transmission problems, inspect:

1. Pin in shift forks which rides in shift cam for galling. Remember that a little wear is inevitable.
2. Shift cam grooves.
3. Shift cam ratchet stop plate in right case for damage from hard shifting.
4. Shift ratchet pawls and springs for wear or weak tension.
5. Engagement of dogs and slots for wear or "rounding - off."
6. Bent shift fork rod.

**SUZUKI**

2-Stroke

# Service Bulletin

Subject: T250, T305, T350 DRIVE SHAFT/TOP GEAR

Bulletin No: T-2Date: May 1, 1975

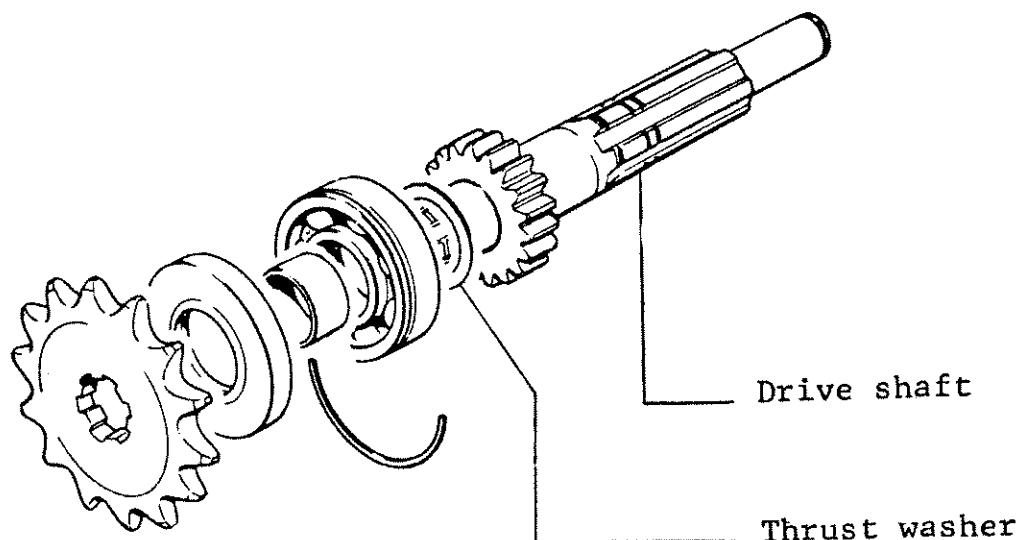
Read and Initial

Manager \_\_\_\_\_

Parts \_\_\_\_\_

Service JMP**NOTICE:**

Top gear, driven, on the subject models has been increased in thickness and strength.

**INTERCHANGEABILITY:**

When using the new style driveshaft #24131-18002 with old style crankcases, the thrust washer #08211-22341 must be eliminated.

In the event that new cases are fitted and the old driveshaft re-used, washer #08211-22341 must be retained.

**PARTS:**

PART DESCRIPTION	OLD PART NO.	NEW PART NO.	QTY
Drive shaft	24131-18001	24131-18002	1
Thrust washer	08211-22341		1





**SUZUKI**

2-Stroke

# Service Bulletin

Subject: T500 INCREASED TRANSMISSION OIL CAPACITY

Bulletin No: T-3  
Date: May 1, 1975

Read and Initial

Manager \_\_\_\_\_

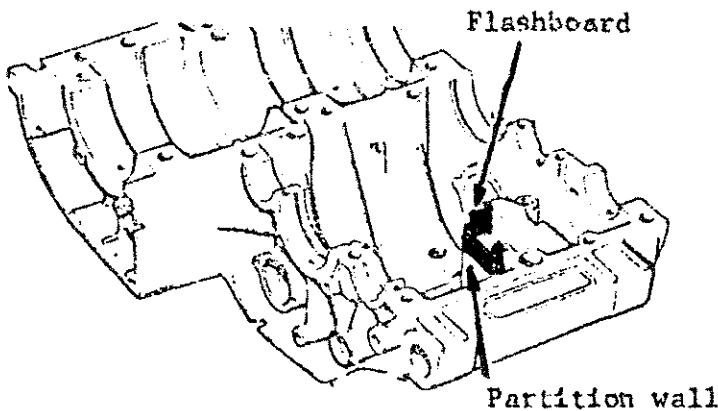
Parts \_\_\_\_\_

Service \_\_\_\_\_

To effectively increase the durability of the T500 4th and 5th gears, the transmission oil capacity has been increased from 1200cc to 1400cc. The increased oil capacity has been applied to the T500 since the beginning of the 1974 "L" model production.

A rubber flashback applied to the primary oil transfer chamber in the lower crankcase half is used to accommodate the increased oil capacity. The flashback keeps the additional oil from entering the primary case, and therefore protects the clutch from excessive drag.

The flashback in position is illustrated below.



The T500's manufactured after December 1973 production will have the primary oil transfer partition cast 10mm higher instead of using the rubber flashback.

The rubber flashback is now available from the U. S. Suzuki Parts Department for T500's prior to the 1974 "L" model. Its application is strongly recommended whenever the crankcases are disassembled.

The flashboard's PART NUMBER is: 99104-08800

To install the flashboard:

1. Clean the surface on which the flashboard is to be applied.
2. Apply a quick setting adhesive (such as Suzuki Thread Lock, etc.) on the mating surfaces of the flashboard and the chamber wall.
3. A metallic adhesive tape with 1400cc printed on it is supplied with the flashboard and should be placed over the embossed 1200cc on the upper crankcase half.
4. When the crankcases are re-assembled pour 1400cc of Suzuki Transmission Oil or a high quality 20W-40 motor oil.

U. S. SUZUKI  
TECHNICAL SERVICE DEPARTMENT

**SUZUKI****2-Stroke**

# Service Bulletin

Bulletin No: T-4Date: Oct. 24, 1975

Read and Initial

Manager \_\_\_\_\_

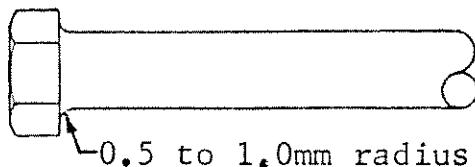
Parts \_\_\_\_\_

Service AMRSubject: T500 SWING ARM PIVOT SHAFT

REFERENCE: Service Bulletin #TC/TS-17

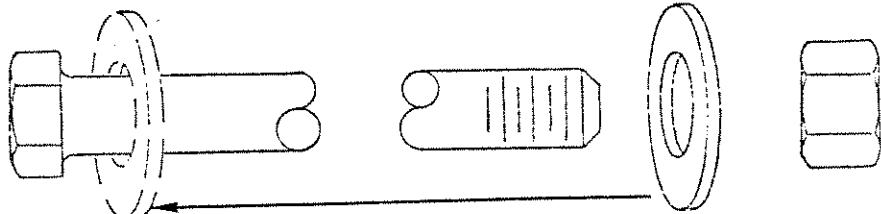
**NOTICE:**

The shoulder radius of the T500 swing arm pivot shaft has been increased from 0.5mm to 1.0mm.



To accept the new type pivot shaft, the frame boss chamfer has also been increased 0.5mm.

**NOTE:** Should it be necessary to install a new type pivot shaft through an old type frame boss, simply move the washer from the nut side to the head side of the swing arm pivot shaft. The washer will conform to the shoulder radius of the pivot shaft.

**PARTS:**

The new type pivot shaft is now available from U. S. Suzuki's Parts Department. The part number is listed below:

**DESCRIPTION****PART NUMBER**

T500 swing arm pivot shaft

61211-15006

**APPLICATION:**

The new type swing arm pivot shaft has been installed on and from the following Frame Number:

T500-84046





**SUZUKI**  
2-Stroke  
**Service Bulletin**

Bulletin No: T-5  
Date: Mar. 19, 1976

Read and Initial

Manager \_\_\_\_\_

Parts \_\_\_\_\_

Service MAP

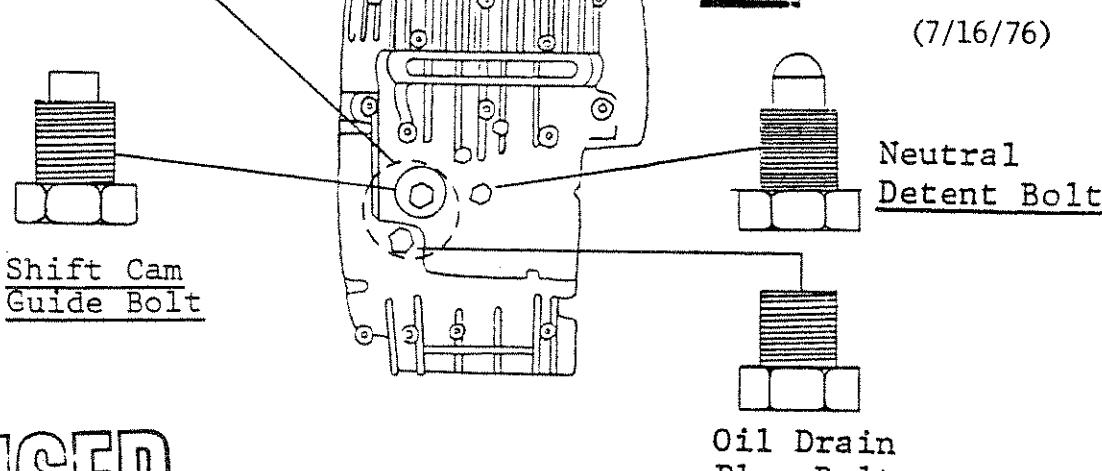
Subject: T500 AND GT500 SHIFTING CAM  
GUIDE BOLT LOCATION

REVISED: July 16, 1976

We have received occasional reports of T500 transmission failure immediately after an engine or transmission overhaul. Upon disassembling and inspecting the transmission, two situations have been found. The first reason a transmission would fail was that an oil drain plug bolt from another model Suzuki (Example TS185/250) had been interchanged with the shift cam guide bolt during the overhaul. The second reason for the transmission failure was due to a magnetic oil drain plug that had been substituted instead of the shift cam guide bolt.

Note: Remove both  
bolts to drain  
transmission  
oil.

Bottom View of  
Lower Crankcase Half



**REVISED**

(7/16/76)

In both situations the bolt did not extend into the locating groove of the shift cam drum far enough to restrict the shift drum from sliding from side to side in the crankcases. When this happens the shifting forks slide with the shift cam, allowing two sets of gears to become engaged at the time. This results in severe damage to the gears, and requires their replacement.

Therefore, whenever a T500 is overhauled, or the transmission oil changed by your service department, the final inspection after reassembly should be the proper placement of the shift cam guide bolt.

