

# 2-Stroke Service Bulletin

Sabiant:	RM100/125	LEFT	CRANKSHAFT	MAIN
u oject	BEARING			

Bulletin No: RM-27
Date: July 2, 1976
Read and Initial
Manager
Parts
Service AVP

#### NOTICE:

To further increase strength and durability of the 1975 RM100/125M models, the heat treatment process applied to the left crankshaft main bearing retainer has been improved.

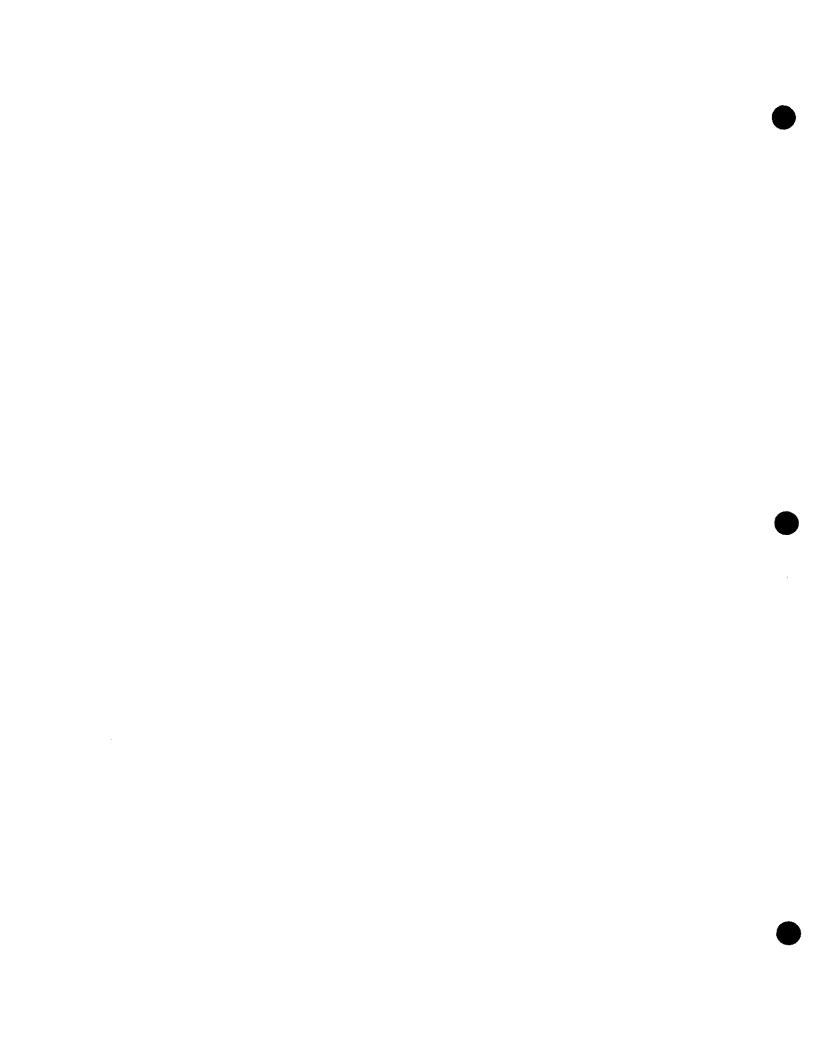
#### APPLICABILITY:

RM100M's on and after <u>Engine Number 11263</u>. RM125M's on and after <u>Engine Number 21167</u>.

#### PARTS:

The new style main bearing is now available from U. S. Suzuki's Parts Department, having a part number of 09262-25049.

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(2-Stroke)

# Service Bulletin

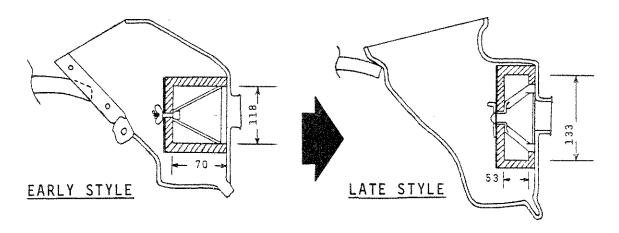
	RM250/370	MODIFIED AIR	
Subject:	CLEANER	ASSEMBLY	

Bulletin No	. KM-28	<b>ರ</b>	
Date:		27,	1976
	Read and Ini	tial	
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NOTICE: To further improve the air cleaner system and ease of maintenance on the RM250 and RM370's, the air cleaner assembly has been changed.

#### The changes are as follows:

- The shape of the <u>air cleaner element</u> has been changed to provide a more positive seal.
- 2. The shape of the air box has been changed to provide easier accessability to the element.



- 3. To provide easier installation and removal of the filter element, the fastening device has been changed from a wing nut to a snap pin.
- 4. The carburetor <u>air inlet hose</u> mounting surface dimensions have been changed for more positive sealing, however, it's overall length remains the same.

## PARTS AND AVAILABILITY:

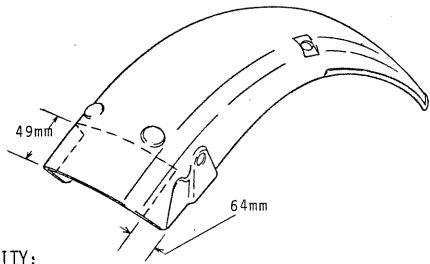
DESCRIPTION	OLD PART NO.	NEW PART NO.	AVAILABILITY
*Air Cleaner Assy. Air Filter Air Filter Cap Air Inlet Hose Rear Fender Wing Nut Snap Pin	13700-41110 13781-41110 13770-40001 13881-41100 63111-41101-163 09144-06001	13700-41111 13781-41111 13771-41310 13881-41101 63111-41102-163	NEW ONLY NEW & OLD NEW & OLD NEW ONLY NEW ONLY AVAILABLE AVAILABLE

\*The new style air cleaner assembly and individual components are now available from U.S. Suzuki's Parts Department.

The air box is included with the assembly. It is not available separately.

#### INTERCHANGEABILITY:

- 1. Due to the differences in dimensions the new and old air cleaner components are <u>not</u> interchangeable, with the exception that the new style fender may be used with an old style air cleaner assembly.
- 2. When installing a new style air cleaner assembly on a unit equipped with an old style rear fender, the rear fender must be cut as shown below.



# APPLICABILITY:

The new style parts have been installed on and after the frame numbers listed below:

RM250-15206 RM370-14483



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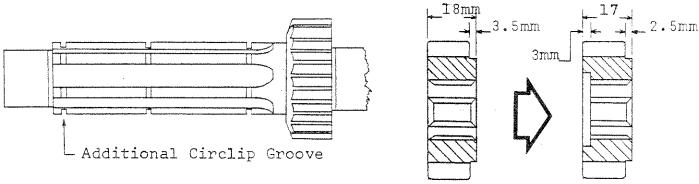
Subject:_	RM370	SECOND	DRIVE	GEAR

RM-29	
Bulletin Nept. 3, 1976	
Date:	
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New Style

#### NOTICE:

The countershaft and second drive gear have been modified in the manner illustrated below.



Old Style

#### PARTS AND INTERCHANGEABILITY:

		AND THE RESIDENCE OF THE PARTY	
DESCRIPTION	OLD PART NO.	INTERCHANGEABILITY	NEW PART NO.
Countershaft 2nd Drive Gear Circlip	24121-41200 24221-41200 09380-25006	*[]	24121-41201 24221-41201 SAME

\*These components are not interchangeable separetely, but they are interchangeable as a set.

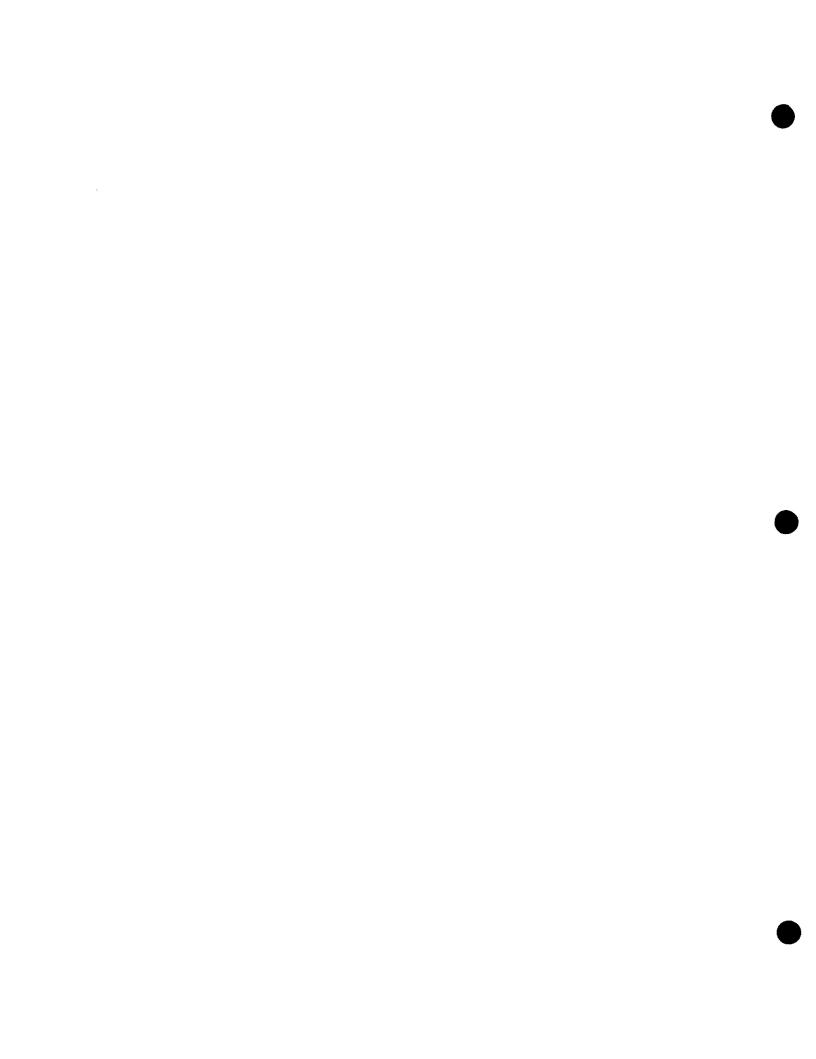
Only the new style countershaft is available from U. S. Suzuki's Parts Department. However, both the old and new style second drive gears are available at this time.

#### APPLICABILITY:

RM370's on and after ENGINE NUMBER-13644 will have the modified components installed.

#### ASSEMBLY:

When installing circlip on end of shaft all other components must be slide towards 1st gear. Then, position all circlips correctly and reslide everything back towards 2nd drive gear.



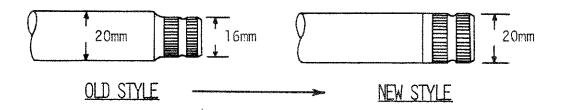


# SUZUKI 2-Stroke Service Bulletin

Subject: <u>RM250/370</u>	KICK	STARTER	SHAFT
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Bulletin No:	KM-31	U	
Date:	_	7.	1977
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We have received reports of RM250/370 kick starter shafts breaking. To prevent this from happening, the splined end of the kick starter shaft has been increased in size as illustrated below.



Along with the kick starter shaft modification, the kick starter lever has also been modified to accommodate the increased dimensions of the new shaft.

### PARTS AND INTERCHANGEABILITY:

DESCRIPTION	OLD PART NO.	INTERCHANGEABILITY	NEW PART NO.
Kick Starter Shaft RM250	26211-41100	*	26211-41101
Kick Starter Shaft RM370	26211-41200		26211-41201
Kick Starter Lever RM250/370	26300-40002		26300-41201

<sup>\*</sup>The new style kick starter shaft can be interchanged with the old style kick starter shaft only if the new kick starter lever is used and vice versa.

Only the <u>new style RM250</u> and RM370 kick starter shafts will be available after the existing stock of the old style parts are exhausted. Both the old and new style kick starter levers are now available from U.S. Suzuki's Parts Department.

# APPLICABILITY:

The new style parts have been installed on and after the Engine Numbers listed below:

RM250-21024

RM370-17949

U.S. SUZUKI TECHNICAL SERVICE DEPARTMENT



(2-Stroke)

# Service Bulletin

	RM125	"AIR"	FRONT F	ORK
Subject:	SERVI (	CING PR	ROCEDURE	S

Bulletin No:_	RM-31		
Date:	January	7,	1977
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#### NOTICE:

The RM125 model has been significantly improved by the addition of "Air" front forks. The use of the air forks provides an infinite variety of spring characteristics and greater sensitivity to small bumps and quick movements of the fork assembly than conventional forks.

To achieve maximum performance from these new air forks, the following <u>precautions</u> and service procedures should be carefully studied and followed.

#### AIR PRESSURES AND ADJUSTMENTS:

Months of testing under racing conditions has shown that to achieve the proper suspension characteristics from the front forks, the air pressure <u>must</u> be maintained at the following levels. Remember that the <u>spring</u> and <u>air pressure</u> support the weight of the motorcycle and the <u>oil amount</u> and <u>viscosity</u> the dampening rate.

STANDARD ATR PRESSURE	MAXIMUM AIR PRESSURE
1.4 KG/CM (20 1bs/in <sup>2</sup> )	2.5 KG/CM (36 lbs/in <sup>2</sup> )

The maximum difference between the right and left fork leg air chambers should be

A	LOWABLE	DIFH	RENCE	
0.1	KG/CM <sup>2</sup>	(1.4	lb/in <sup>2</sup> )	

### NOTE:

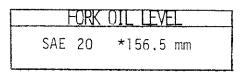
When measuring the pressure in the forks, remember that some of the air pressure will escape through a conventional air pressure gauge. Pressure measurements will vary from a "cold" to a "hot" condition after the motorcycle has been ridden. Always be consistent when measuring the fork pressure for best results.

(continued)

#### SERVICE PROCEDURES:

The amount of fork oil in the RM125 front air forks is critical for proper operati To obtain maximum performance from the forks, it is necessary to measure the level of oil in the front forks, rather than rely on the volume or cc's of oil in the forks. The following procedure should be followed when changing the fork oil on the air forks.

- 1. Release the air pressure in both forks by pushing in the air valve.
- 2. Remove the lower leg drain plugs and allow the oil to drain out. Slowly pump the forks up and down to force out the remaining fork oil.
- 3. Replace the fork leg drain plugs.
- 4. Measure the correct amount of high quality 20W fork oil into a graduated beaker and then pour it into each leg. If fork oil is unavailable then the recommendations are: 20W-20 Motor Oil.



\*NOTE: Approximately 264 cc of oil is required to achieve the 156.5 mm oil level.

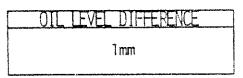
- 5. After filling the fork legs, slowly pump the forks up and down to distribute the oil.
- 6. To check the fork oil <u>level</u>, use the following procedure:
  - A. Remove the fork springs, allowing the oil to drain back into the leg as they are removed.
  - B. Allow the front of the motorcycle to settle on to the fork inner stops.
  - C. The fork leg must then be placed in a vertical position, either by removing it from the motorcycle, or by raising the back of the motorcycle.

The oil level is then measured from the <u>fork cap seating surface</u> to the actual fluid level. This measurement should be:

STANDARD OIL LEVEL	ADJUSTIMENT LEVELS
156.5mm + or - 5mm	161.5mm Maximum 151.5mm Minimum

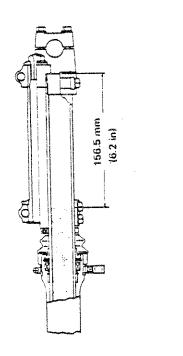
NOTE: To achieve maximum suspension performance, the fork oil level <u>must</u> remain within the specified maximum and minimum levels. This measurement is critical and should not be deviated from.

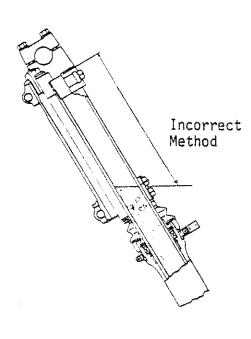
The amount of oil in each fork leg must be as equal as possible. The  $\underline{\text{maximum}}$  difference may be:



#### EASURING NETHOD:

Correct Method





#### PRECAUTION'S:

- The air forks should only be pressurized with either regular air or nitrogen gas only.
- 2. NEVER use pure oxygen or any other explosive gas.
- 3. A manual air pump must be used to pressurize the front forks. The use of a high pressure system will damage the fork seals.

- 4. Be sure to release the air pressure from the fork assembly before any service work is attempted.
- 5. Be careful when removing the fork cap bolt, as there is some fork spring preload on this cap.
- 6. <u>NEVER</u> discard or store pressurized forks near high temperatures.
- 7. Do not substitute conventional fork seals with the "air" fork seals, as while they are similar in appearance, their construction features are different.



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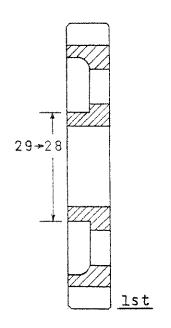
RM250 1st AND 5th DRIVEN GEARS

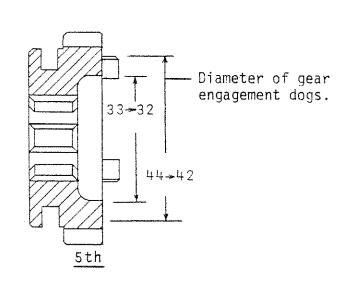
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Bulletin No:			
Date:	JAN.	28, 1977	
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## NOTICE:

lst and 5th driven gears of the RM250 transmission have been changed to provide added strength and reliability. Although the actual gears ratios remain the same, certain structural dimensions have been changed as illustrated below.





### PARTS AND INTERCHANGEABILITY:

DESCRIPTION	OLD PART NO.	INTERCHANGEABILITY	NEW PART NO.
lst Driven Gear	24311-41100		24311-41101
5th Driven Gear	24351-41100	*[]	24351-41101

\*First and fifth driven gears are interchangeable, but only as a set.

(cont.)

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# PARTS AND INTERCHANGEABILITY (CONTINUED):

Only the new style gears are available from U.S. Suzuki's Parts Department.

# APPLICABILITY:

RM250's on and after  $\underline{\text{Engine Number 13800}}$  have the modified driven gears installed.

U.S. SUZUKI TECHNICAL SERVICE DEPARTMENT





(2-Stroke)

# Service Bulletin

TROUBLESHOOTING THE RM "B" MODEL PEI SYSTEMS
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	RM-33
Bulletin N	<sup>lo</sup> March 4, 1977
	Read and Initial
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### NOTICE:

This bulletin has been issued to provide instructions to properly troubleshoot the 1977 "B" model RM Nippon Denso P.E.I. systems using the Suzuki Pocket Tester (09900-25001).

# TROUBLESHOOTING:

The ND P.E.I. "Box" can be tested statically by adjusting the Suzuki Pocket Tester to the RX100 scale, and following the Tester connections listed below.

Ι.

RM80, 100, 250, 370

		(	Connect (+) Tester Lead To:			
Connect (-) Tester Lead To:		B/W-B/Y	B/R	В	BL/W	
nect r Lea	B/W-B/Y		8	В	С	
Con	B/R	8		В	About 5M 🔨	
	В	А	Α		С	
	BL/W	A	A	А		

A = Continuity

B = No Continuity

C = Pointer deflects once and returns immediately



To:			Conn	ect (+) Tester Le	ad To:	
Lead 1		B/Y	B/W	B/R	R/W	W/BL
(-) Tester	B/Y		С	About 2M ohms	С	С
-) Te	B/W	Α		About 2M ohms	А	С
	B/R	Α	C		С	С
Connect	R/W	В	В	В		В
ٽ -	W/BL	А	A	About 2M ohms	A	

NOTE: When checking a wire combination which should give a meter reading designated by "C", the battery in the pocket tester (ohmmeter) is charging the condensor of the P.E.I. box. Before any further tests can be performed, the condensor must be  $\underline{\text{dis-charged}}$ . This is done by connecting a jump wire across the B/W and W/BL wires. The condensor must be  $\underline{\text{discharged}}$  for at least 15 minutes.

You must watch very closely for the needle deflection when a meter reading of "C" is designated.

#### III.

# MAGNETO OHMMETER SPECIFICATIONS

SET POCKET TESTER TO R x 1

MODEL	CONNECTIONS	VALUES
RM80	B/W - B/R B/W - B B/R - B	10 - 50 chms 330 - 530 " 300 - 500 "
RM100	B/W - B/R B/W - B B/R - B	10 - 50 " 330 - 530 " 300 - 500 "
RM125	B/W - B/R B/W - R/W B/R - R/W	200 - 400 " 130 - 330 " 30 - 80 "
RM250/370	B/R - B/W B/W - B B/R - B	10 - 50 " 350 - 550 " 320 - 520 "
PE250	R/W - B/W B/R - B/W B/R - R/W Y/R - Ground 0 - Ground	80 - 280 " 100 - 300 " 0 - 40 " 0 - 3 " 0 - 10 "



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# Service Bulletin

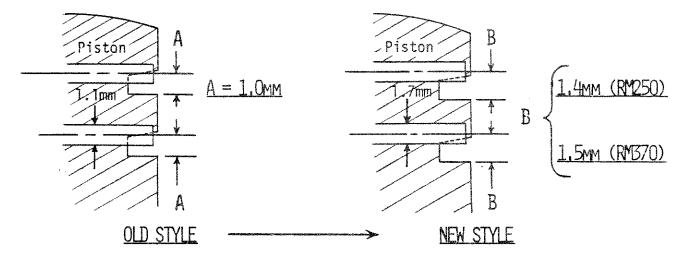
Subject:\_\_

PISTON RING LOCATING PINS

	KM-3	54		
Bulletin N	March	11,	1977	
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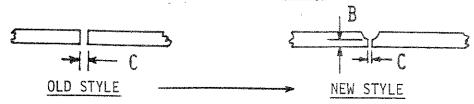
# NOTICE:

- I. To increase their durability, the RM250 $\underline{A}$  and RM370's piston ring locating pins have been changed as indicated below:
  - a. The piston rings' locating pins have been <u>increased</u> in diameter 0.6mm, from 1.1 to 1.7mm.
  - b. At the same time, the locating pin position has been raised 0.4/0.5mm (RM250A/370) further from the bottom of the ring groove.



II. To accommodate the piston ring locating pin changes, the piston ring ends have been changed as illustrated below:

## PISTON RING END SIDE VIEW



MODEL	DIMENSION B NEW STYLE	NEW DIMENSION (	(RING END GAP)
RM250A	0.4 mm	1.4-1.7mm	0.2-0.4mm
RM370	0.5 mm	0.2-0.4mm	0.2-0.4mm

(continued)

#### APPLICABILITY:

These changes are applicable as indicated below:

<u>RM250A</u> - Spare parts stock only. RM250A production was completed prior to these changes.

The changes do not apply to RM250B's because of the difference in its bore and stroke, and subsequently its use of a different piston. However, ring end gap is the same as RM250A models new style piston rings.

RMS70 - The new style piston and rings have been installed on and after Engine Number RM370-17946.

#### PARTS AND INTERCHANGEABILITY:

RM250A

DESCRIPTION	LOLD PARI NO.	*INIERCHANGEABILITY	NEW PARE NO.
STD. Piston STD. Piston Ring Set 0.25 0.S. Piston 0.25 0.S. Piston Ring Set 0.50 0.S. Piston 0.50 0.S. Piston Ring Set	12110-41101 12140-40010 12110-41701 12140-40700 12110-41709 12140-40720		12110-41102 12140-40011 12110-41702 12140-40701 12110-41749 12140-40721

\*The old style and new style <u>piston</u> and <u>piston ring set</u> must be interchanged as a set. They are not interchangeable separately.

Note: The RM250A and B piston and piston ring sets are not interchangeable because of the difference in the two models bore and stroke. The parts listed are for the 1976 RM250 'A' model only.

RM370

DESCRIPTION	OLD PARI NO.	*INIERCHANGEABILFIY	NEW PART NO. 1
STD. Piston	12110-41201		12110-41202
STD. Piston Ring Set	12140-41210		12140-41211
0.25 O.S. Piston	12110-41711		12110-41712
0.25 O.S. Piston Ring Set	12140-41710		12140-41711
0.50 O.S. Piston	12110-41780		12110-41781
0.50 O.S. Piston Ring Set	12140-41780		12140-41781
0.75 O.S. Piston	12110-41790		12110-41791
0.75 O.S. Piston Ring Set	12140-41790		12140-41791

\*The old style and the new style <u>piston</u> and <u>piston</u> ring sets must be interchanged as a set. They are not interchangeable separately.

After the existing stock of old style piston and rings is depleted, only the new style will be available.





2-Stroke

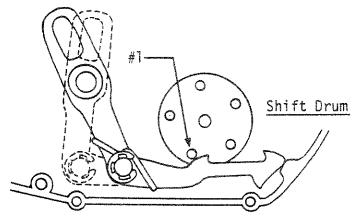
# Service Bulletin

RM80	GEARSHIFT
PAWL	MODIFICATION

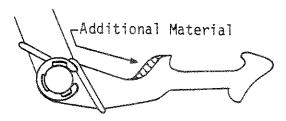
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#### NOTICE:

We have had reports of RM80's gear shift lever sticking in the up position, when shifting into higher gears; 3rd, 4th, or 5th. When this happens, the shift drum of the transmission is actually rotating past the normal stopping point, which allows the next shift drum pin (#1 in illustration) in rotation to restrict the shifting pawl's movement back to its original position.



This situation has been cured by the addition of a small amount of material applied to the gear shift pawl, which restricts the shift drum from rotating too far.



## PARTS:

<u>DESCRIPTION</u>	OLD PARI NO.	NEW PART NO.
Gear Shifting Pawl	25513-46002	25513-46003

Only the new style gear shifting pawls are available from U.S. Suzuki's Parts Department.

## APPLICABILITY:

The new style gear shifting pawls have been installed on and after <u>Engine No. 16441</u>. U.S. SUZUKI

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