



**SUZUKI**

2-Stroke

# Service Bulletin

Subject: RM250/370 GENERAL MAINTENANCE

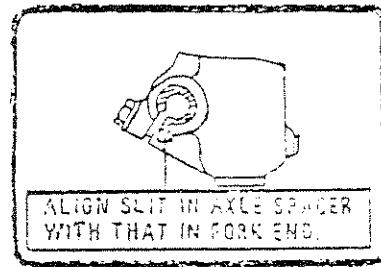
This bulletin contains general notes and information on the proper maintenance of the RM250 and RM370.

## FRONT AXLE INSTALLATION:

This is a reminder of the proper installation of the front axle as explained in Service Bulletin #RM-9.

When installing the front axle of the RM250/370 be sure to align the slot in the axle eye of the left fork leg with the slot in the spacer.

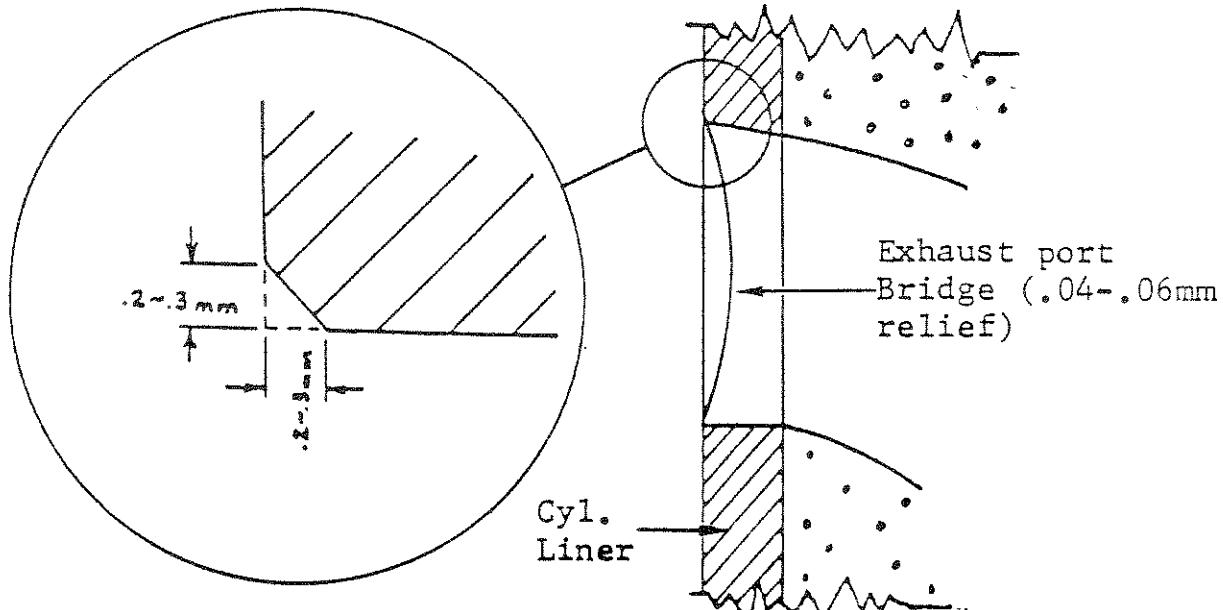
## PRIMARY DRIVE GEAR NUT:



This is to inform you that the RM250 and RM370 primary drive gear is secured with a nut having left hand threads, instead of the usual right hand threads. This requires that the nut be loosened by turning it in a clock-wise direction.

## CYLINDER PORT CHAMFER:

Whenever inspecting an RM250 or RM370's cylinder port chamfer, you will notice that the chamfer is very slight as compared to other Suzuki models. Both the vertical and horizontal dimensions of the chamfer should be  $.2\text{-.3mm}$ , as shown below:





# SUZUKI 2-Stroke Service Bulletin

Subject: RM100 PRIMARY DRIVE/DRIVEN GEARS

Bulletin No: RM-19  
Date: Feb. 27, 1976

Read and Initial

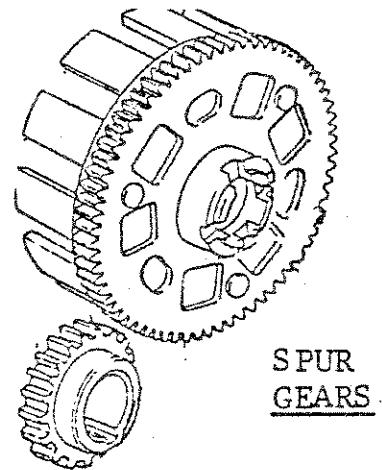
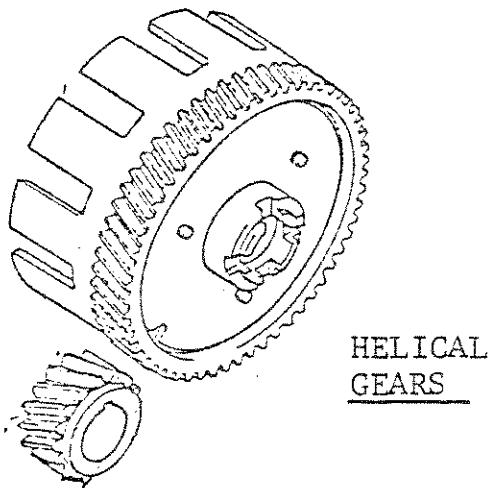
Manager

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Service *NP*

## NOTICE:

The mechanical efficiency of the RM100's primary drive and driven gears has been increased. This has been accomplished by changing the design of the helical type gears to spur type gears (commonly referred to as straight cut gears).



## APPLICABILITY:

Spur type primary drive and driven gears are installed on RM100's on and after the following Engine Number: RM100-11445.

## PARTS AND INTERCHANGEABILITY:

Both the helical and spur type primary drive and driven gears are now available from U. S. Suzuki's Parts Department. Their part numbers are listed below.

DESCRIPTION	PART NUMBER
Helical Primary Drive Gear	21111-28700
Helical Primary Driven Gear	21200-28300
Spur Primary Drive Gear	21111-41000
Spur Primary Driven Gear	21200-41001

Due to the major change in design, the individual gears are not interchangeable separately. However, they are interchangeable when both drive and driven gears are changed as a set.





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# **Service Bulletin**

**RM-20**

Bulletin No: April 1, 1977  
Date: \_\_\_\_\_

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Service AGR

**RM250/370 ENGINE MOUNT  
BOLTS AND BUSHINGS**

Subject: \_\_\_\_\_

This bulletin replaces the "Temporary RM-20", as it contains all pertinent information on the subject for both the RM250 and RM370.

## **NOTICE:**

Engine mounting bolts should be checked frequently for proper torque to prevent them from becoming loose.

Listed below, are the engine mounting bolt torque specifications for the RM250 and RM370.

8MM BOLT	200-250 KG-CM	14-18 FT.-LBS.
10MM BOLT	350-400 KG-CM	25-29 FT.-LBS.

To protect RM250 and RM370's crankcases against damage resulting from lack of proper torque applied to engine mounting bolts, bushings have been added to the engine crankcases.

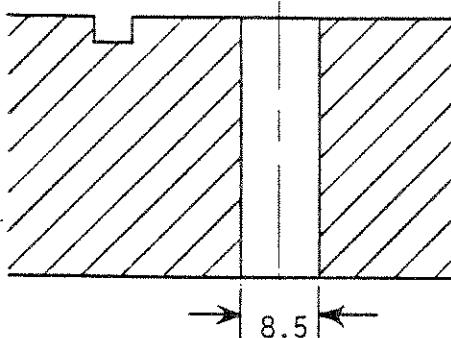
The history of the engine crankcase bushings and modifications are illustrated on pages 2 and 3 of this Service Bulletin, with the applicable frame numbers and notes.

(continued)

HISTORY:

I. RM250

A. RM250's having Frame Numbers RM250-10001 through 12172 do not have engine mount bushings installed. The dimensions of the engine bolt mounting holes are illustrated below.



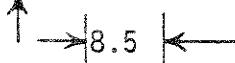
(Part Number 11300-41811)

All measurements are  
in millimeters

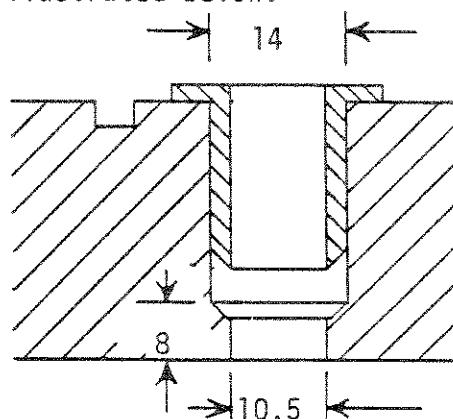
B. As of Frame Number RM250-12173 through 13750 a bushing was added to the upper rear crankcase engine mount only. The dimensions of the bushing are illustrated below.



(Part Number 11300-41812)



C. As of Frame Number RM250-13751 and after, the upper rear engine mounting bolt's size was changed to 10mm. The size of the bushing was also increased to accept the new bolt as illustrated below.



(Part Number 11300-41813)

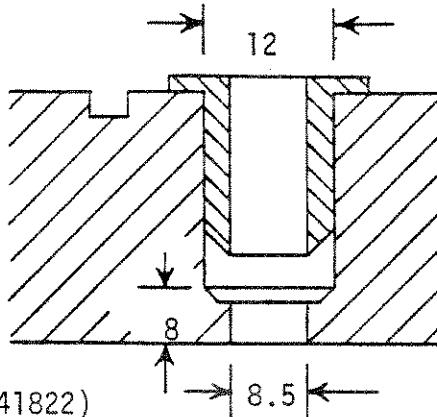
The frame was also modified to accept the larger diameter bolt.

NOTE: The RM250 has had a bushing added to the upper rear engine crankcase mount only.

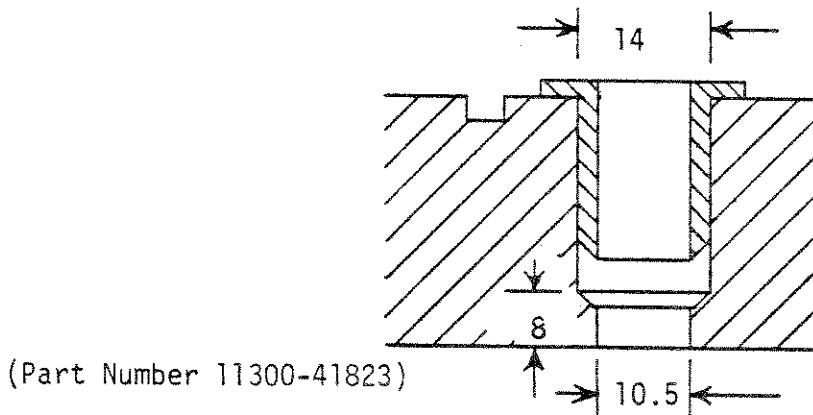
(continued)

## II. RM370 (Upper and lower rear engine mount)

A. RM370's from initial production through Frame Number 13708, had both an upper and lower rear engine mount bushing installed. They are illustrated below.



B. As of Frame Number RM370-13109 the upper rear engine mount bolt's size was increased from 8mm to 10mm. The inside diameter of the upper rear engine mount bushing was increased to accept the larger engine mount bolt.



NOTE: This change was for the upper rear mount only.

The frame was also modified to accept the larger diameter bolt.

PARTS AND INTERCHANGEABILITY:

DESCRIPTION	OLD PART NO.	NEW PART NO.
Frame	*41100-41100-019	41100-41101-019
Engine Mounting Bolt (10mm)	09103-08010	09103-10010
Nut (10mm)	N/A	09159-10018
Step Washer (use with new frame and old crankcases)	N/A	41999-41100
Washer (10mm)	08322-11088	08322-11108

\* The new style engine crankcases can be used on the early style frames, if the frame's upper rear engine mounting bolt holes are drilled 2mm larger in diameter to accomodate the larger bolt. Use an 11mm (.423") drill bit, available from most tool companies.

(continued)

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Page 4  
April 1, 1977

When using a new style frame with the old style engine crankcases, stepped washers listed on the previous page must be used in the upper rear engine mount holes of the frame.

When ordering the new style engine crankcases, the larger style (10mm) mounting bolt, and its securing nut and washer are included. Only the new style crankcases are available from U.S. Suzuki's Parts Department.

U.S. SUZUKI  
TECHNICAL SERVICE DEPARTMENT



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# **Service Bulletin**

Bulletin No: RM-21

Date: Mar. 12, 1976

Read and Initial

Manager \_\_\_\_\_

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Service 9102

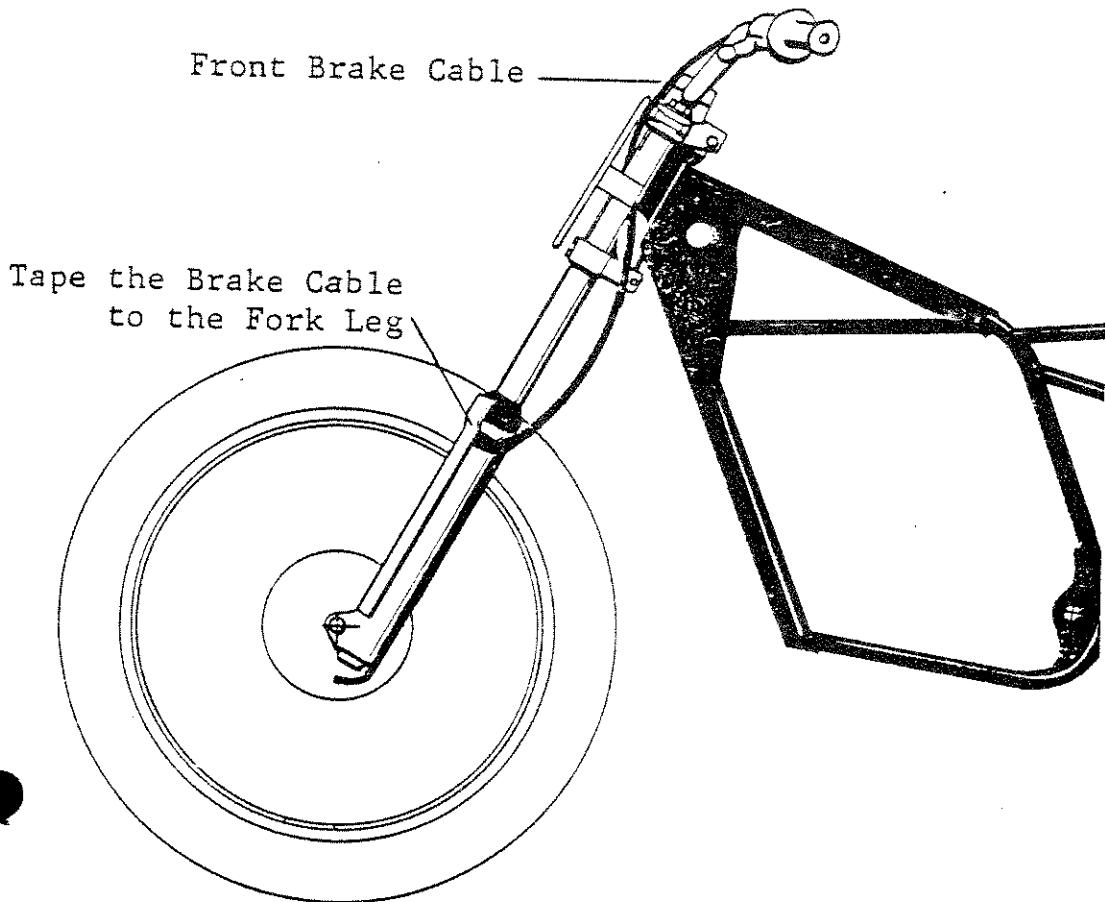
Subject: RM100 FRONT BRAKE CABLE ROUTING

## NOTICE:

Reports have been received indicating incorrect placement of the front brake cable on the RM100. When the cable is routed in front of the front number plate, there is the possibility of the cable hanging up on the upper left fork tube securing bolt when the forks are fully compressed. If the front brake cable is adjusted tighter than normal for off road riding, the brakes can become locked.

## PREVENTION:

To eliminate the possibility of this happening, be sure the front brake cable is routed behind the front number plate, and that it exits through the rear side of the steering stem. Also, be sure that the cable is taped to the lower fork leg just below the dust seal.





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# Service Bulletin

Bulletin No: RM-22  
Date: April 15, 1976

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Service ANPSubject: 1976 RM125A IGNITION TIMING  
SPECIFICATIONS**NOTICE:**

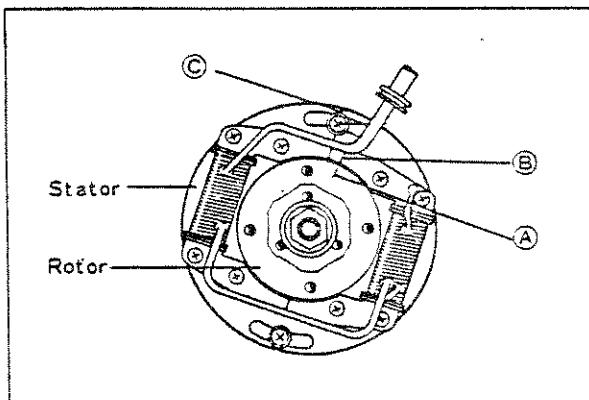
The 1976 RM125A incorporates several new engine design features not included on the "M" model RM125. Some of these features include the power reed intake system, six port scavenging system, restyled squash chamber of the cylinder head, and the piston dome.

In conjunction, the ignition timing specification has been changed on the 1976 RM125A to 0.31mm BTDC ( $8^\circ$  BTDC @ 11,000 rpm.) This differs from the 1975 RM125M ignition timing specification which is 3.80mm BTDC ( $29^\circ$  BTDC @ 6000 rpm).

**ADJUSTMENT:**

The procedure for adjusting the RM125A's ignition timing is as follows:

1. Remove the spark plug and install the Timing Guage (09931-00112). Position the piston at T.D.C. and adjust the Timing Guage to "0".
2. Turn the rotor clockwise until the Timing Guage indicates 0.31mm BTDC. Hold the piston in that position.



3. Adjust the stator so that line (A) aligns with rotor line (B). Next tighten the 2 stator base plate screws. This establishes the ignition timing as specified for the 1976 RM125A engine.

**NOTE:** An alternate method for setting the ignition timing is as follows: (This method eliminates the use of a Timing Guage.)

1. Loosen the two stator base plate screws.
2. Position the timing mark (C) to the center of the securing screws. This method approximates the ignition timing for this model.



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

Subject: 1976 RM125A CARBURETOR NEEDLE JET

Bulletin No: RM-23  
Date: April 23 1976  
Read and Initial \_\_\_\_\_  
Manager \_\_\_\_\_  
Parts \_\_\_\_\_  
Service *MP*

**NOTICE:**

To further increase the 1976 Model RM-125A's engine mid range performance, the needle jet size has been increased from an R-0 to an R-3.

**APPLICABILITY:**

All other carburetor jetting specifications remain the same. The larger R-3 needle jet has been installed on and from the following Engine Number: RM125-36597..

**PARTS AND AVAILABILITY:**

The part number for the R-3 needle jet is: 09494-00176.

In conjunction with the needle jet change, the part number for the RM125A carburetor assembly has been changed from 13200-41310 to 13200-41311.

As of this date, the R-3 needle jet is available from U.S. Suzuki's Parts Department.





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

Subject: TROUBLESHOOTING THE 1976 RM125A  
PEI SYSTEM

Bulletin No: RM-24  
Date: May 28, 1976

Read and Initial

Manager \_\_\_\_\_

Parts \_\_\_\_\_

Service \_\_\_\_\_

*APP*

This bulletin has been issued to provide troubleshooting instructions for the 1976 RM125A PEI system.

TROUBLESHOOTING:

I. PEI Box

The PEI box can be checked dynamically on the Suzuki SSII Electro Tester. To check it statically, use a Suzuki pocket tester and use the procedure listed below. Set the pocket tester on the ohms (RX100) scale.

		POSITIVE TERMINAL					
NEGATIVE TERMINAL		Black/Yellow	Black/White	Black/Red	Red/White	Blue	White/Blue
	Black/Yellow		C	B	C	C	C
	Black/White	A		B	A	A	C
	Black/Red	A	C		C	C	C
	Red/White	B	B	B		B	B
	Blue	C	C	B	C		C
	White/Blue	A	A	B	A	A	

A: Continuity

B: No Continuity

C: Needle deflects once and returns immediately.

NOTE: When checking a wire combination which should give a meter reading designated by "C", the battery in the ohmmeter is charging the condenser in the PEI box. Before any further tests are performed the condenser must be discharged. This can be done by connecting a jump wire between the two wires that designate a reading of "C". Discharge time must be at least 30 seconds.

NOTE: Watch carefully for the slight needle deflection when a meter reading of "C" is designated.

## II. Magneto Coils

Using a Suzuki pocket tester on the RXI scale, check the following:

Exciter Coil	(B/R-R/W):	10- 90 ohms
*Pulser Coil (1)	(R/W-B/W):	200-300 ohms
Pulser Coil (2)	(Bl -B/W):	10- 90 ohms

\*If the pulser coil has been removed from the engine, a test of the R/W to B/W wires must be taken from the R/W wire to the eyelet tab located at the end of the B/W wire at the mount to the pulser coil.

## III. Ignition Coil

Again, using a Suzuki pocket tester, check the ignition coil as described below:

Primary	(RXI Scale):	0- 2 ohms	(W/Bl-B/W)
Secondary	(RX100 Scale):	7-13 K ohms	(**HTL-B/W)

\*\*High Tension Lead



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**NOTICE:**

Subject: 1975 RM125M KICK STARTER DRIVEN GEAR

Bulletin No: RM-25  
Date: May 28, 1976

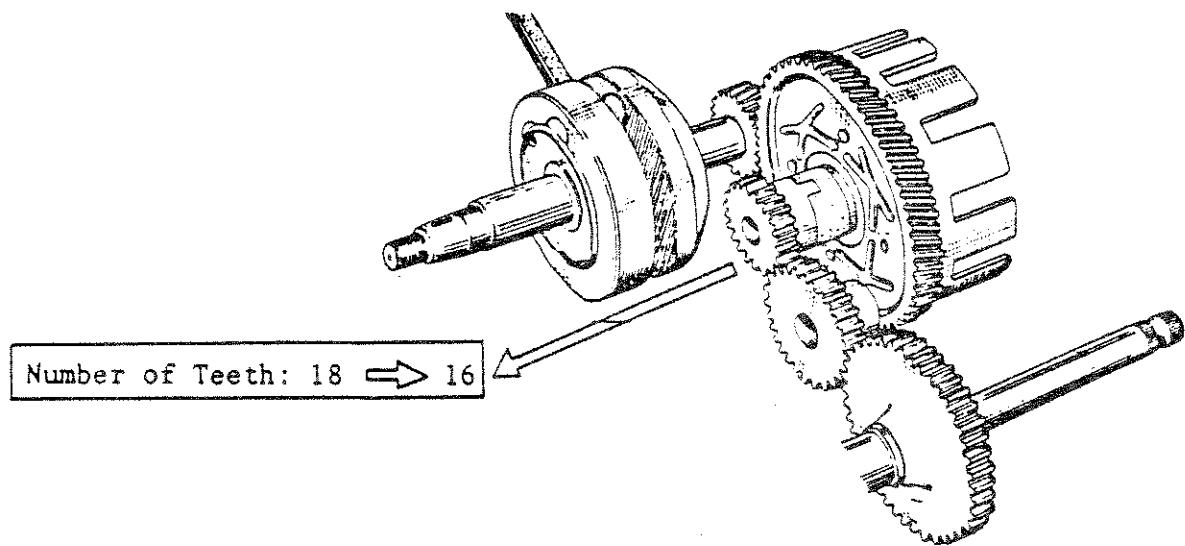
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Service *AWC*

To further increase durability of the RM125 kick starter driven gear, the number of teeth on the gear has been decreased from 18 to 16.



**APPLICABILITY:**

This new style gear has been installed on and after Engine Number RM125-15145.

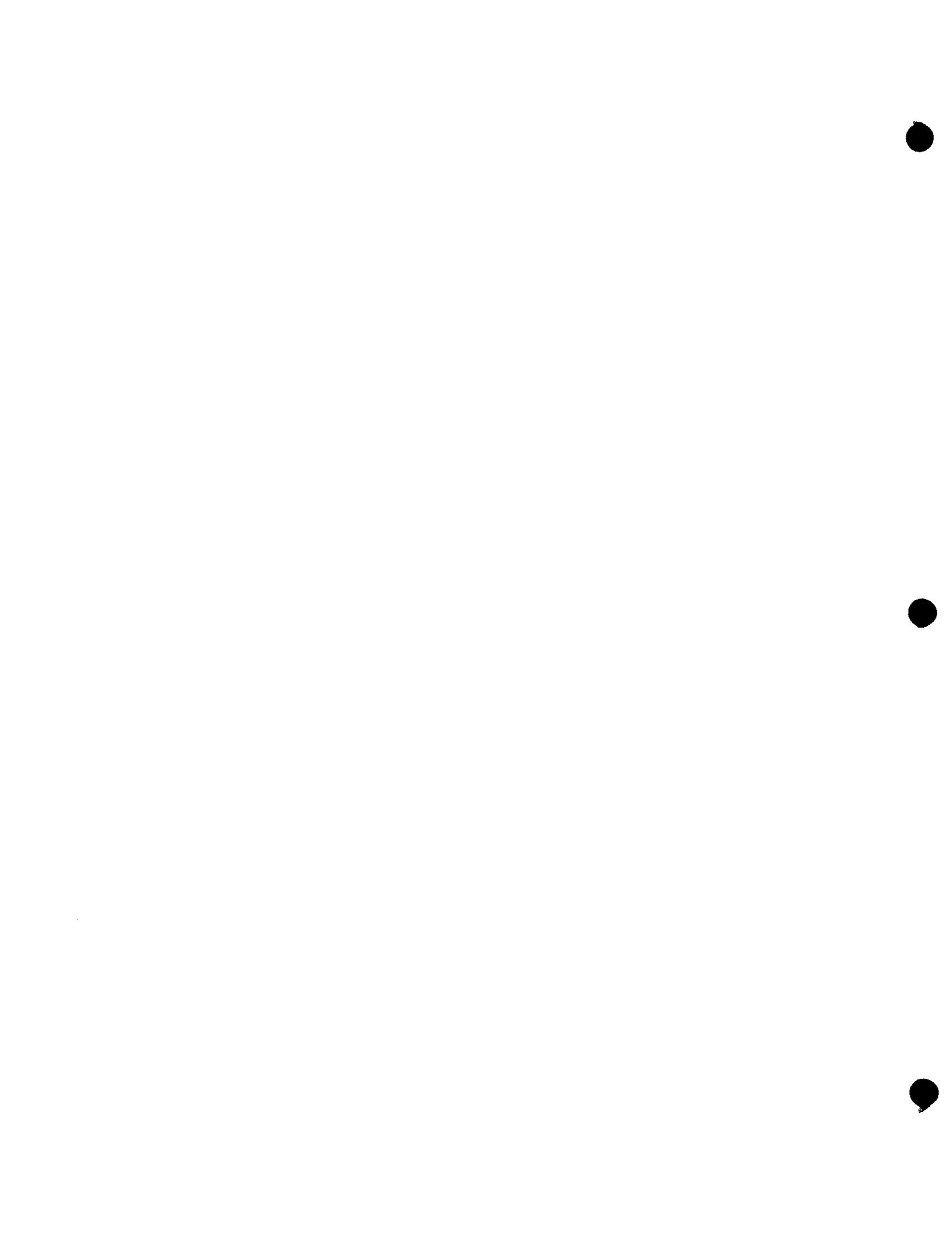
**PARTS AND AVAILABILITY:**

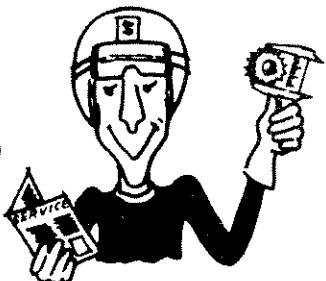
DESCRIPTION	OLD PART NO.	NEW PART NO.
KICK STARTER DRIVEN GEAR	26281-36200	26281-25001

Both the old and new style parts are now available from U.S. Suzuki's Parts Department.

**INTERCHANGEABILITY:**

The old and new style parts are interchangeable. It is recommended however that when the old style part needs replacement that the new style part be used.



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

# Service Bulletin

Subject: RM250/370 BOLT AND NUT INSPECTIONSBulletin No: RM-26Date: July 2, 1976

Read and Initial

Manager \_\_\_\_\_

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**NOTICE:**

We have received questions from time to time concerning periodic inspection of RM race machines. It is very important that these machines be visually checked for loose nuts and bolts after each motocross race, generally 30-45 minutes.

Included in this bulletin are several charts dealing with proper torque figures for specific bolts by location on the motorcycle and more generally, the size of the bolts. Also included is a guide to visual inspection of bolts for service life.

Bolt Dia. (mm)	TIGHTING TORQUE			
	NORMAL BOLT		"S" TYPE BOLT	
	kg - cm	1b. - ft.	kg - cm	1b. - ft.
5	20 - 40	1.5 - 2.9	30 - 60	2.2 - 4.4
6	40 - 70	2.9 - 5.1	60 - 100	4.4 - 7.3
8	90 - 140	6.5 - 10.2	130 - 230	9.4 - 17.0
10	180 - 280	13.0 - 20.5	250 - 400	18.0 - 29.0

**TORQUE CHART BY LOCATION ON MOTORCYCLE**

RM250/370	kg-cm.	1b-ft.
*Rear torque link nut, front & rear	200-300	15-21
Cylinder head nut	190-230	14-16
Magneto rotor nut	300-400	22-28
Engine sprocket nut	400-600	29-43
Clutch sleeve hub nut	400-600	29-43
Primary drive gear nut	500-700	37-50
Front axle	450-520	33-37
Front axle clamp bolt	150-250	11-18

TORQUE CHART BY LOCATION ON MOTORCYCLE (cont'd.)

RM250/370	kg-cm	1b- ft.
Front brake cam lever nut	60- 80	5- 6
Front fork cylinder securing bolt	150-250	11-18
Front fork upper clamp bolt	150-250	11-18
Steering stem head bolt	350-500	26-36
Front fork lower clamp bolt	200-300	15-21
Handlebar clamp bolt	130-190	10-13
Steering stem nut	450-550	33-39
Front fork cap bolt	180-270	14-19
Spoke nipple	40- 50	4- 5
Swingarm pivot nut	250-300	19-21
Rear axle	520-780	38-56
Rear axle sleeve nut	700-900	51-65
Rear brake cam lever nut	60- 80	5- 6
**Rear sprocket screw	200-300	15-21

\* Special attention should be given to the rear brake torque link bolts (front & rear). Due to the stresses imposed on those two bolts, they not only should be checked for proper torque after each race, but checked for wear around the neck area of the bolt.

\*\*The countersunk allen bolts of the rear sprocket should also receive special attention. When tightening the allen bolts make sure that they are torqued down in a criss cross pattern, such as cylinder head bolts.

There are no service life specifications for nuts and bolts. They must be removed and checked visually for cracks and/or thread stretch. If a bolt has been over torqued and the threads of the bolt have stretched, it is recommended that at that time it be removed and replacement installed.