

**SUZUKI****Rotary**

Service Bulletin Index

RE

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RE

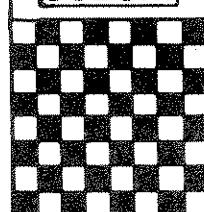
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SERVICE BULLETIN

U. S. SUZUKI TECHNICAL SERVICE

Bulletin No. RE-1
 Date DECEMBER 20, 1974
 Page 1 of 3



SUBJECT: RE5 INTRODUCTORY NOTES

Read & Initial

Affected Models:

Manager

Effective Engine No.:

Parts

Reference:

Service

The new Suzuki RE5 will be arriving at your dealership shortly. This bulletin contains RE5 oil recommendations and other points to note.

OIL RECOMMENDATIONS:

To provide excellent lubrication of apex seals and internal engine cooling, Suzuki Rotary Engine Motor Oil will be available from U. S. Suzuki's Accessory Department, after February 1, 1975. Its use in the Suzuki RE5 motorcycle is strongly recommended.

As an alternative until Suzuki Rotary Engine Motor Oil becomes available, we recommend: Shell Super X 10W-20W-50 Motor Oil. It is available at most Shell Oil Company dealers.

We are requesting that you inform your customers of this recommendation when they take delivery of their RE5. Also explain to the customer that the same oil is to be used in the engine oil sump and in the metering oil tank.

BATTERY VENT TUBE:

All RE5's are specially equipped with a rubber battery vent tube located under the right frame cover.

During pre-delivery service of RE5's, the original plastic battery vent tube is to be removed and replaced with the rubber vent tube. The rubber vent tube is pre-routed to prevent the possibility of battery fluid overflow, from contacting and damaging any component parts. Therefore, it should not be removed. If it is removed for any reason, be sure it is re-routed according to the illustration located on the rear fender, under the seat.

The battery vent tube clamp on the battery holder plate should not be used.

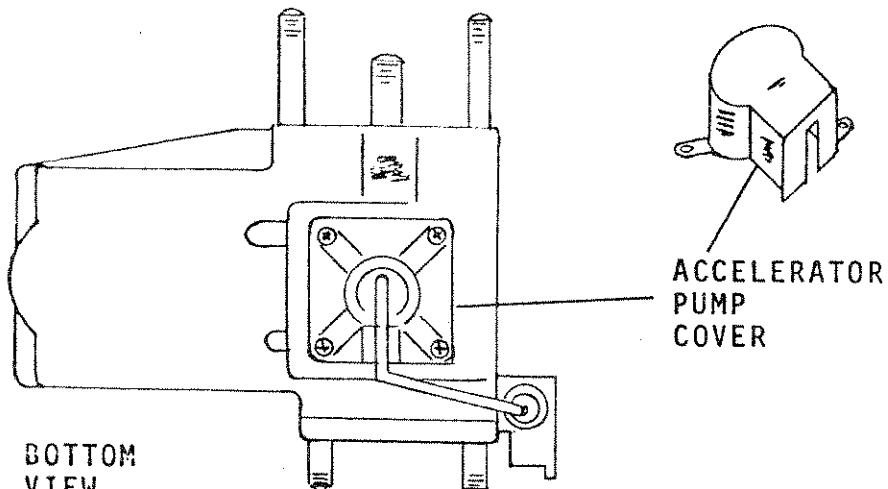
U. S. SUZUKI motor corporation

13767 Freeway Drive • Santa Fe Springs, California 90670 • Phone: (213) 921-4461

ACCELERATOR PUMP COVER:

To prevent dirt from accumulating on the carburetor's accelerator pump, we will ship your dealership a protective cover for each unit you are invoiced for, prior to Engine Number RE5 - 11738. The protective cover should be installed using two of the phillips head screws mounting the accelerator pump to the bottom of carburetor.

CARBURETOR: BOTTOM
VIEW

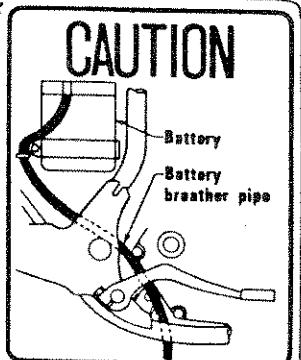


MISSING ITEMS:

1. Battery Vent Tube and Vent Tube Clamp:

RE5's prior to FRAME NUMBER RE5 - 10753 were shipped without the rubber battery vent tube (previously described) and its clamp.

These items will be shipped to your dealership, if you are invoiced for an affected unit. The clamp should be installed on the voltage regulator's bottom mounting bolt. (The voltage regulator is located under the right frame cover and on the left side of the battery.)



The rubber vent tube should then be routed according to the diagram shown, which is also located on the rear fender, under the seat. This should be done prior to delivering an affected unit to a retail customer.

2. Kick Start Lever:

Kick start levers were not installed on some units prior to FRAME NUMBER RE5 - 10753. These are the same units shipped without battery vent tubes and clamps.

The kick start lever will be shipped (with the vent tube and clamp) to your dealership for installation, if you are invoiced for an affected unit.

3. Owners Manual:

Some RE5 Owners Manuals were not included in the RE5 crate. Again, these will be shipped to your dealership, if you are invoiced for an affected unit.

It is important that the RE5 customer is supplied with an RE5 Owners Manual when he takes delivery of his motorcycle. We suggest that you stress to the customer, the importance of reading the Owners Manual.

SUMMARY:

A. RE5's prior to Frame Number RE5-10753, were shipped without the following items.

1. Battery vent tube
2. Battery vent tube clamp
3. Kick start lever

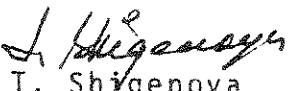
B. RE5's prior to Engine Number RE5 - 11738 requires the installation of a carburetor accelerator pump cover.

C. Some RE5's shipped without owners manuals.

All parts listed above will be shipped immediately, when your dealership is invoiced for an affected unit.

MAINTENANCE SCHEDULE CHART:

A Suzuki RE5 Maintenance Schedule Chart will be mailed to your dealership shortly. This chart should be hung in your service area and referred to whenever servicing an RE5.


T. Shigenoya
Manager
Technical Service Department



SERVICE BULLETIN

U. S. SUZUKI TECHNICAL SERVICE

Bulletin No. RE-2
Date March 12, 1975
Page 1 of 1

SUBJECT: RECOMMENDED SUMP AND METERING PUMP OIL

Read & Initial

Affected Models:

Manager

Effective Engine No.:

Parts

Reference:

Service

Suzuki Motor Company Ltd. has done extensive testing of most available oils for suitability in the Suzuki RE/5.

At the present time the ONLY approved oils for use in the sump and metering pump oil tank are: SHELL SUPER X 10W 20W-50 Motor oil and Suzuki Rotary Engine Motor Oil.

The use of any other oil in the sump or oil tank may result in severe damage to the rotary engine unit and may void the warranty.

Please be sure to impress upon the RE owner the necessity to use only the approved oils.

Your cooperation in this matter is greatly appreciated.

T. Shigenoya, Manager
Technical Service Department

SUZUKI

ROTARY ENGINE SERVICE BULLETIN

SUBJECT:

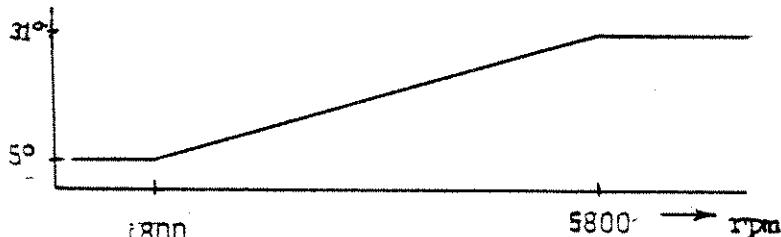
RES SERVICE MANUAL CORRECTIONS AND ADDITIONS

| | |
|----------------|----------------|
| RE-3 | Bulletin No. |
| March 15, 1975 | Date |
| 1 | Read & Initial |
| Manager | ____ |
| Parts | ____ |
| Service | ____ |

Please note that the ignition timing and its advance characteristic in the production type RE-5 are explained as follows:

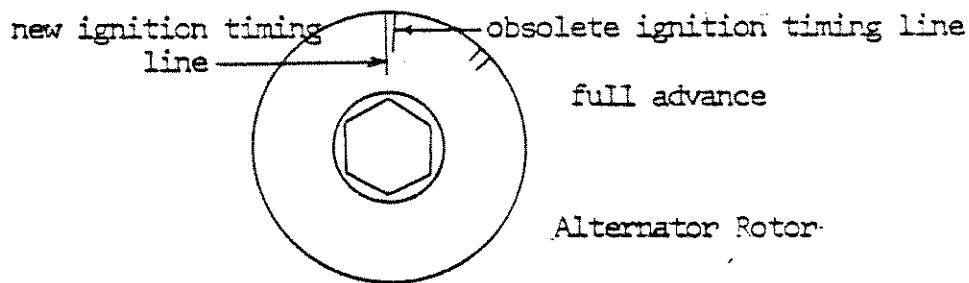
* IGNITION TIMING 5 degree B.T.D.C. at idling speed.

* TIMING ADVANCE CHARACTERISTIC



ADVANCE INDICATOR LINES

When checking the ignition timing advance, use the longest line shown in the illustration for setting the pointer wire to it referring to the idling ignition timing; the line next to it (obsolete line) will give 4 degrees difference from the specification.



CORRECTION OF SERVICE MANUALS

The above specification was decided after the service manuals were completed. Therefore, "RE-5 Service Manual" does not include current specifications.

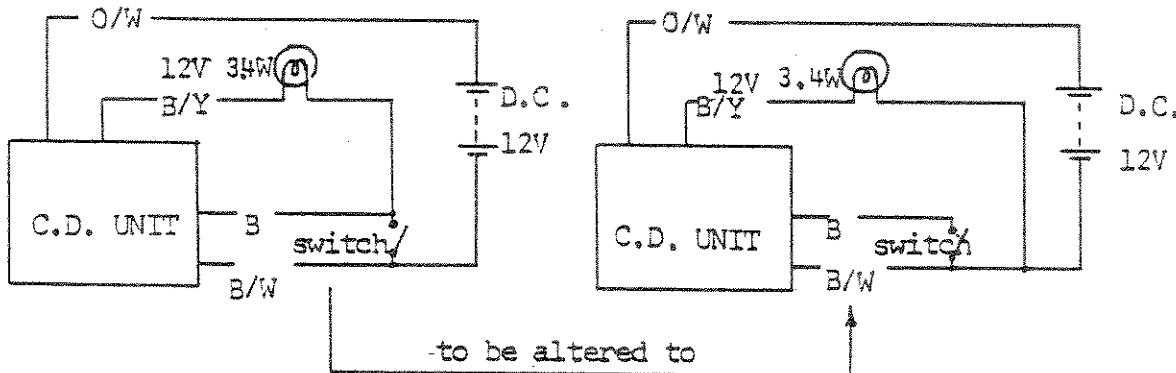
This information is used when checking the timing advance by the method shown on page 150, section 6 in the RES Service Manual.



* RE-5 SERVICE MANUAL

| PAGE | TO BE CORRECTED | CORRECT TO |
|------|---|--------------------|
| 74 | (SPECIFICATION) | |
| | Start-of-advance speed <u>1400 rpm</u> | 1800 rpm |
| | Full-advance speed <u>5000 rpm</u> | 5800 rpm |
| | Advance angle <u>22° ± 1°</u> | <u>26° ± 1°</u> |
| 79 | (6th line from the top) notch marked "11" | "13" |
| | (7th and 8th lines from the top) The weight spring may be hooked to either weight..... | delete |
| 150 | (Second paragraph) It should be <u>10° BTDC</u> | 5° |
| | (3rd paragraph) the specification (<u>10° BTDC</u>) | 5° |
| | (last paragraph) all the way to upwards of <u>5000 rpm</u> | 5800 rpm |
| | starts advancing at about <u>1400 rpm</u> | 1800 rpm |
| | when <u>the level of 5000 rpm</u> | more than 5800 rpm |
| | no further advance for speeds above <u>5000 rpm</u> | 5800 rpm |

Please alter the illustration "Fig 8-4 C.D. Unit check circuit" in the page 76 as shown below.

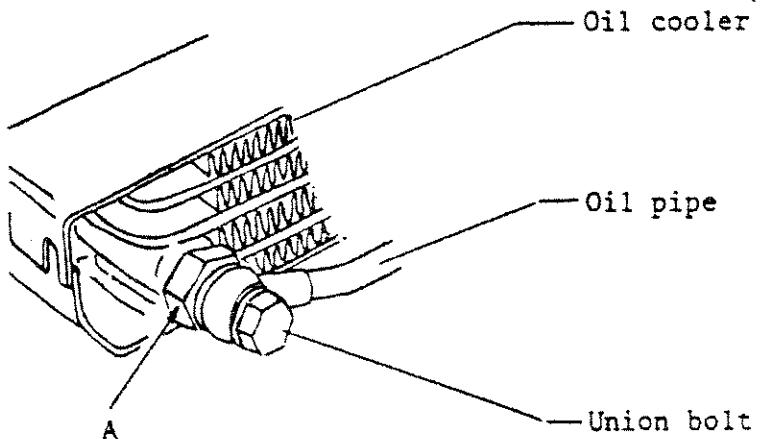


The existing check circuit in the manual can still be operable and the lamp lights as good as the altered circuit shown above. This operation, however, may damage the element inside the C.D. unit; whereas the altered one does no harm.

| <u>PAGE</u> | <u>TO BE CORRECTED</u> | <u>CORRECT TO</u> |
|-------------|---|--|
| 5 | (1. General information) Special tool #24..... Special tool #25..... Special tool #26..... Special tool #27..... | #25 #26 #27 #24 |
| 65 | (Paragraph b., item 4.) Remove P.P.A.J.; S.P.A.J.; etc..... | add S.P.F.J. |
| 77 | (b. Inspection) diagram shows continuity between C and GR in "on" pos....no continuity here | |
| 78 | only one spring pictured..... | should be two |
| 82 | (1st paragraph, 6th line) <u>infinity</u> (1st paragraph, 7th line) is <u>open</u> ; with the switch <u>close</u> ,..... (1st paragraph, 8th line) <u>0 ohm</u> (1st paragraph, 9th line) contact is <u>closed</u> | 0 ohms is <u>closed</u> with the switch <u>closed</u> , infinity contact is open |
| 148 | (4. Service Spark plug, Item 4.) Gap specification is 0.55 mm (<u>0.06</u>)..... | 0.55mm (0.0165 in.) |
| 149 | (5. check & adjust ignition timing, 9th line) <u>ccw</u> (counter clockwise)..... | cw (clockwise) |
| 150 | (1st paragraph, 1st line) <u>ccw</u> | cw |
| 156 | (1st paragraph, 2nd column. & Item #7, 2nd column) ADD:..... The quantity of bars leak to be added is 1/2 oz. | |

ADDITIONAL INFORMATION

This is intended to call your attention to a proper procedure to tighten the oil pipe joint at the oil cooler on the model RE5.



Please be sure to hold the indicated "A" securely with a wrench when tightening the union bolt. Tightening the union bolt with part "A" unrestrained applies undue stress to the oil cooler which may result in damage.

Damage of the oil cooler can also result in serious damage to the engine. Therefore, please follow the above instructions whenever tightening the oil pipe.

BATTERY VENT TUBE

We have had some reports of dealers cutting the slit portion of the battery vent tube off thinking that it was not supposed to be slit. This left the battery vent tube about 1" too short allowing battery acid to damage the mufflers and frame.

The vent tube is supposed to be slit at the end of the tube which attaches to the battery. This is to prevent the battery from cracking or exploding in the event the vent tube is pinched or otherwise restricted.

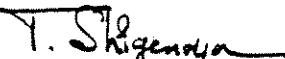
Please be sure that all battery vent tubes do have this slit at the battery end of the tube.

IDLE MIXTURE SCREW ADJUSTMENT

During set-up and each service check the idle mixture screw should be adjusted. This is the angled screw on the back of the carburetor underneath the air filter hose.

PROCEDURE

1. Warm up engine and shut off.
2. Screw in idle mixture screw until it lightly bottoms.
3. Back screw out 3/4 - 1 turn.
4. Start engine and adjust screw for the smoothest idle at approximately 1200 rpm.



T. Shigenoya, Manager
Technical Service Department





SERVICE BULLETIN

U. S. SUZUKI TECHNICAL SERVICE

Bulletin No. RE-4
Date March 15, 1975
Page 1 of 3

SUBJECT: RE5 THROTTLE CABLE ADJUSTMENT PROCEDURE

Read & Initial

Affected Models:

Manager

Effective Engine No.:

Parts

Reference:

Service

This throttle cable adjustment procedure bulletin will serve to summarize the adjustment procedures in the RE5 Service Manual and those presented at the RE seminars and schools.

The proper adjustment of the carburetor and associated cables is critical to the performance of RE5 and the importance of proper attention to these adjustments cannot be over-emphasized.

PROCEDURE:

1. Loosen and run all of the adjusters all the way in.
2. Install carb. angle indicator "A" (09913-13710) on the primary throttle plate shaft of the carburetor.
3. Run the idle speed screw out until it no longer contacts the cable pulley and make sure that the choke is in the "off" position.
4. Check to see if the notch in the short arm is aligned with dot #1 cast on the carburetor body. If a protractor is used, the pointer should be set to 0°.

If the arm does not align with the dot re-check the cable adjusters to be sure that they are all run in. Check to see that all of the cable ends are properly inserted in all of the adjusters. Re-check the idle speed screw to assure that it is not contacting the cable pulley.

5. Turn adjuster P1 out approximately 1/8" and lock it.
6. Turn the throttle grip completely open. Check to see if the long arm of the indicator corresponds with the last dash mark (#5, figure 2 or 62° if using a protractor).
 - a. If the arm does not reach mark #5, turn out adjuster P2 until it does reach the mark. If there is not enough adjustment in adjuster P2 to align the arm and the mark, turn out cable adjuster P1 until they can be brought into alignment.
 - b. If the arm goes past the mark and adjuster P2 is all the way in, turn cable adjuster P1 in until the arm and mark align.

7. Lock adjuster P2 and re-check to see if indicator will return to dot #1 and open to mark #5.
8. Turn adjuster R1 out approximately the same distance as P1.
9. Push choke lever down. This will advance the cable pulley 22.5° and at the same time it will remove a corresponding amount of slack from the return cable.

note: With the choke lever in the "down" position the short indicator arm should align with dot #2 (22.5°). If it does not, adjust the fast idle linkage as per the RE5 Service Manual before proceeding with any further cable adjustments.

10. Turn out adjuster R2 until approximately 1 mm of slack remains in the return cable at R2.
 - a. If enough slack cannot be taken out of the cable, re-adjust R1 out until proper adjustment is obtained.
 - b. If there is no slack, even with R2 all of the way in, turn in R1 until the proper adjustment is obtained.

Lock adjuster R2 & R1

11. The accelerator pump may now be checked in accordance with the service manual.
12. Remove the port valve cover. Turn the throttle grip until the long arm of the indicator aligns with the 36° mark, #4 shown in fig. 2. If there is a dot and a dash use the dot. If there is only a dash, use it.
 - a. If the tab of the port valve cable pulley has not reached the port valve lever, turn adjuster P3 out until the tab on the cable pulley just contacts the port valve lever.
 - b. If the port valve begins to open too soon and adjuster P3 is all the way in, this indicates that adjuster P1 is adjusted out too far. It must be turned in and the procedures 6-12 must be re-done.

Lock P3 and re-check accuracy of the adjustment.

13. Adjust R3 so there is approximately 1mm or more free play in the port valve return cable.
14. Turn throttle grip completely open and adjust P4 so that the mark on the oil pump arm aligns with the mark on the oil pump body.

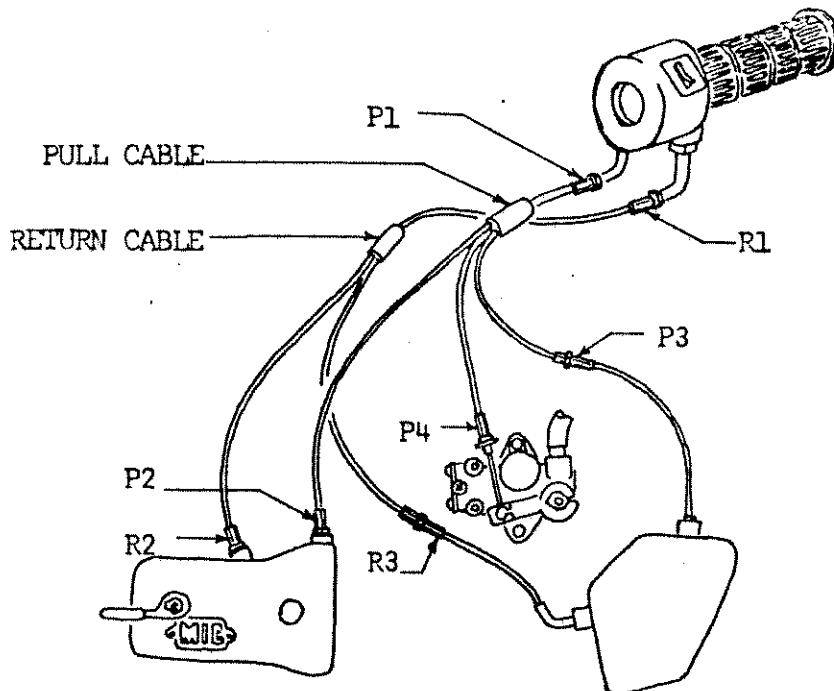
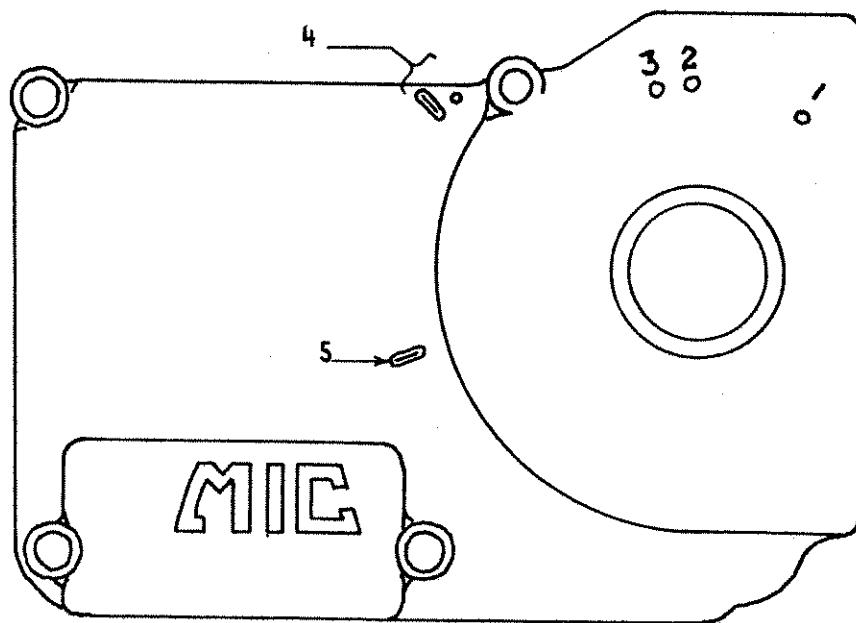


fig 1



- 1. = 0°
- 2. = 22.5°
- 3. = 35°
- 4. = If dot and dash use dot 36°
If only dash = 36°
- 5. = 82°

fig 2

T. Shigenoya
T. Shigenoya, Manager
Technical Department





SERVICE BULLETIN

U. S. SUZUKI TECHNICAL SERVICE

RE-5
Bulletin No. _____
Date March 27, 1975
Page 1 of _____

SUBJECT: CARBURETOR FUEL FILTER

Read & Initial

Affected Models: _____

Manager _____

Effective Engine No.: _____

Parts _____

Reference: _____

Service _____

I. PROBLEM:

Carburetor fuel filter blockage with foreign particles.

CAUSE:

In the process of manufacturing the fuel tank, some very fine particles adhere to the inside surface. These particles are loosened by the initial fuel filling and flow to the carburetor, where they are caught by the filter.

SOLUTION:

All fuel tanks are now washed out prior to assembly and the filter mesh has been modified from #200 mesh to #120 mesh. The #120 mesh is coarser.

This implies that the modified filter will allow more particles to enter the carburetor and the jets. This will not cause any problems, however, as the particles passing through the mesh are smaller than any jet holes or orifices in the carburetor.

APPLICATION:

This modification has been incorporated from and including engine number RE5-10547.

CORRECTION TO MACHINES IN USE:

Since the blockage usually takes place in the early stages of use, most of the trouble may be avoided if the filter is replaced during the 750 mile service.

SPARE PARTS:

| PART NAME | PART NUMBER | | AVAILABILITY |
|-------------------|-------------|-------------|---------------|
| | OLD | NEW | |
| VALVE SEAT FILTER | 13376-37010 | 13376-37012 | NEW TYPE ONLY |

U. S. SUZUKI motor corporation

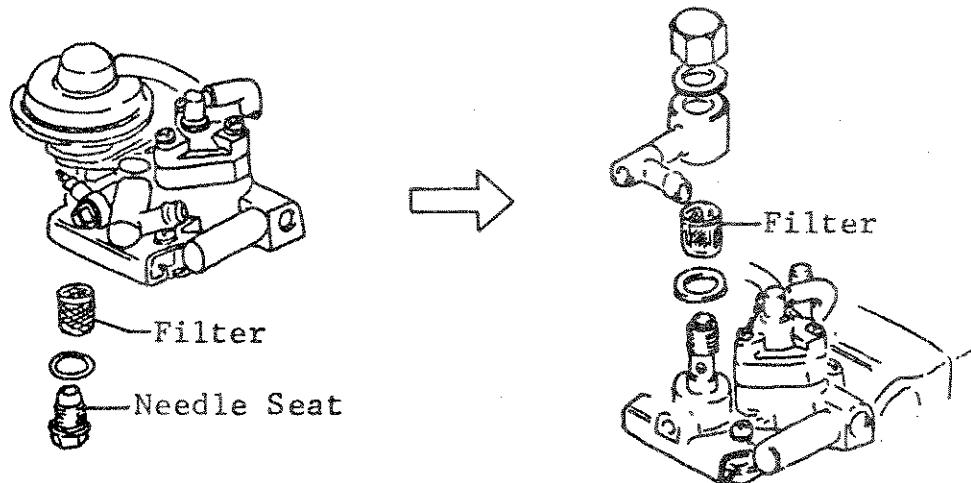
13767 Freeway Drive • Santa Fe Springs, California 90670 • Phone: (213) 921-4461

II. PROBLEM:

To service the carburetor fuel filter requires removal of the float chamber top and the needle seat.

MODIFICATION:

The construction of the carburetor fuel inlet has been modified to provide easy access to the fuel filter.



APPLICATION:

This modification has been included from and including engine number RE5-13054.

SPARE PARTS:

| PART NAME | PART NUMBER | | PARTS SUPPLY |
|-------------------|-------------|-------------|---------------------------------------|
| | OLD | NEW | |
| VALVE SEAT FILTER | | 13376-37012 | New type only |
| CARBURETOR ASS'Y | 13200-37012 | 13200-37013 | New type only, after stock exhausted. |

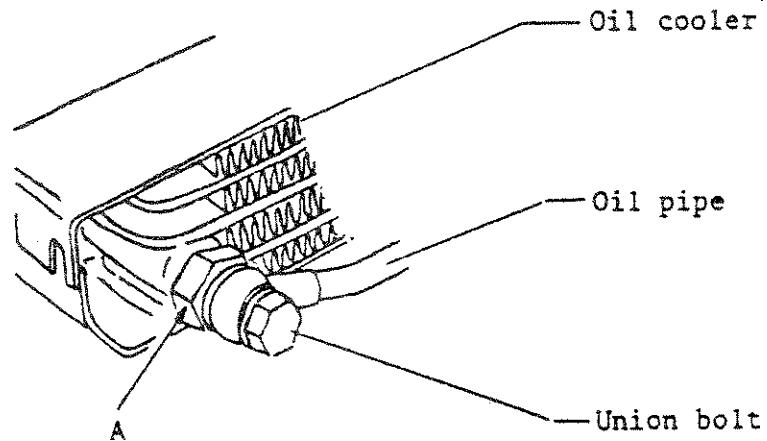
NOTE: Both the old and new style carburetors use the same filter.

T. Shigenoya
T. Shigenoya, Manager
Technical Service Department

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