

SU Eliminator II Rebuild Instructions

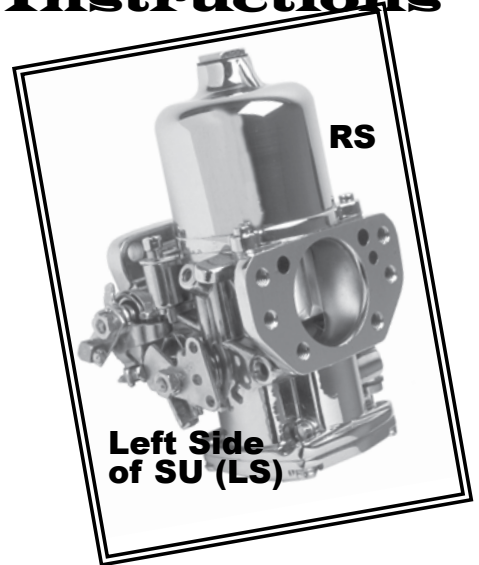
ASSEMBLY



1 Start with a cleaned, disassembled SU body.



2 Install Piston lift Pin from into top of the body.



Left Side of SU (LS)



3 Install Piston Lift Pin Spring.



4 Install Piston Lift Pin circlip.

Piston Lift Pin Installed.



6 Install oring on Idle Speed Screw..



7 Place Idle Speed screw in hole on left side rear.



8 Install Idle Speed screw with blade type screwdriver.



9 Place oring on Main Jet Adjusting Screw.



10 Main Jet Adjusting Screw with oring installed.



11 Put Main Jet Adjusting Screw in hole on RS lower front.



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12 Thread Main Jet Adjusting Screw in til you see the end.



13 Install Choke Body oring.



14 Install spindle into Choke Body threads first.



15 Place open end of seal on spindle first.



16 Choke Body ready for installation.



17 Note offset hole in Choke Body where the gasket locates.



18 Match slot in gasket to locating hole in Choke Body.



19 Note offset hole in body lines up with hole in Choke Body.



20 Now place Choke Body in carb body.



21 Choke Body lined up with screw holes.



22 Install (2) screws to secure Choke Body.



23 Place dust cap on installed Choke Body.

NOTE: Always work in a well ventilated area, away from any open flames or sparks. Be aware of the Choke Body hole alignment in Figures 17-19. The Choke Body Gasket (figure 18) has a notch cut in it which must be aligned with the hole in the Choke Body bracket. Choke body seal has an open end and a beveled end. The open end should go on the choke body spindle first. (See fig. 15).



Install spring on Choke Body.



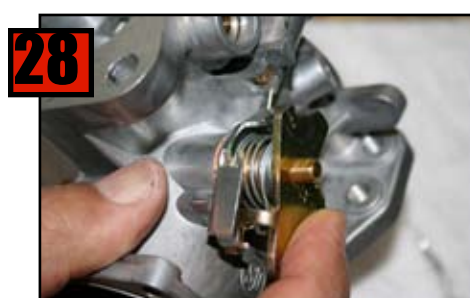
Locate spring on Choke Cam Lever.



Install Choke Cam Lever.



Line up spring coils close to Choke Body.



Choke Cam Lever & spring in place.



Install lock tab.



Install nut and tighten.



Bend lock tabs to secure nut.



Choke Cam Lever fully installed.



Spray a little WD on Throttle Shaft prior to installing.



Align Throttle Shaft with Shaft hole in body.



Slide Throttle Shaft through both shaft holes in body.

NOTE: Be sure that the Throttle shaft moves freely in the carb body prior to installing the Throttle Disc.



36 Prepare to install Throttle Disc in the proper way. See NOTE.



37 Use hole alignment tool too align shaft hole and disc hole.



38 Start first screw in aligned hole.



39 Use hole align. tool too align 2nd shaft hole and disc hole.



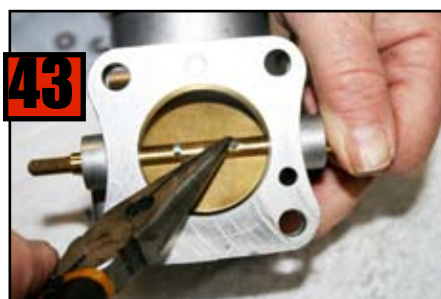
40 Start second screw.



41 Tighten both screws being careful not to overtighten.



42 Wedge a thin screwdriver between splits in screw to spread



43 Use a small needle nose pliers to break off all splits on screws



44 Fully installed Throttle Disc.



45 Prepare to install RS Throttle Shaft seal.



46 Fashion a tool to push the seal in until it bottoms.



47 Seal fully seated.

NOTE: Start to install the Throttle Disc in the Throttle Shaft with the number "5" facing up and first in the shaft slot. Use a straight pick to align the shaft hole with the Disc hole threading in the screws after aligning each hole. Flip the Shaft and disc upside down to access the end of the split screws. Wedge a thin blade screwdriver between the split ends of each screw and spread, being careful to NOT turn the screw. Next, use a small needle nose pliers to break the split ends of each screw.



Now install LS Throttle Shaft seal.



Push the seal in with your homemade tool.



Install Throttle Return Spring LS.



Tension Throttle Return Spring.



Engage Throttle Return Spring onto Spring Retainer.



Install spacer onto Throttle Return Spring Retainer.



Install locktab onto Throttle Return Spring Retainer.



Install nut onto Throttle Return Spring Retainer.



Tighten nut onto Throttle Return Spring Retainer.



Bend locktabs to secure nut.



Prepare to install Seat & Gasket.



Apply one drop of blue thread locker to seat threads.

NOTE: If the lock tabs are worn, you should replace it with new ones. Be careful when removing any spring that is under load, as it may pose eye injury risk.



Thread the Seat in by hand.



Use 7/16" deep socket to tighten Seat in place.



Drop needle into the seat with the rubber tip first in.



Needle installed in seat.



Now position float for installation of Float Spindle Screw.



Position Float Spindle Screw for installation.



Tighten Float Spindle Screw with blade type screwdriver.



Check Float level and adjust as necessary. See #68.



Bend Float tab to adjust Float level as needed.



Install Bi-Metallic Lever onto Main Jet as shown.



Note slot at bottom of Bi-metallic Lever for main jet adj. screw



End of Main Jet Adj. Screw lines up with Bi-metallic Lever.

NOTE: Line up the small slot in the end of the Bi-Metallic Lever with the end of the Main Jet Adjusting Screw protruding into the inside of the carb body. See Figure 70 & 71.



Note that slot in Lever and end of Adjusting screw are aligned.



Use the Screw & Spring to hold down Bi-metallic Lever.



Bi-metallic Lever & Main Jet installed.



Place oring into Float Bowl Cover.



Note the relief for the top of the Main Jet.



Float Bowl Cover in place for installation.



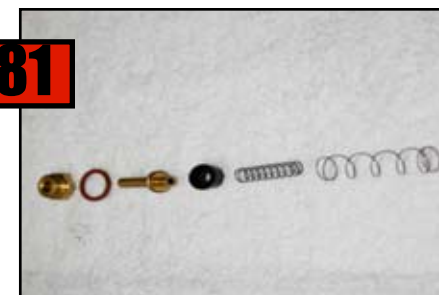
Install Float Bowl Cover with (4) screws & lock washers.



Adjust the Main Jet Adjusting Screw to set the Main Jet.



Set the Main Jet so that it is flush with the seat bevel.



Tickler Pump parts.



Install Viton Cup on Tickler Stem.



Squeeze end of small Tickler Spring so it will stay on Stem.

NOTE: When installing the Bi-metallic hold down screw, just thread it in until it stops. Care must be taken to not overtighten as the screw might break. Install Viton Cup on Tickler Stem with open end of Cup pointed away from stem. Using a pliers, squeeze the end of the small tickler spring so that it will "pop" on the stem and stay. Install the fiber gasket onto the Tickler Nut and then slide the Stem, Cup & Spring into the Nut.



Slide the Tickler Stem with Viton Cup & Spring into Nut.



Put small amount of lube on Viton Cup to ease installation.



Install Large Spring over Small Spring.



Completed assembly.



Now insert the Tickler Pump Assy into Tickler Pump Body.



Hand tighten, then tighten with a 5/8" wrench.



Install Jet Needle Spring on blunt end of Jet Needle.



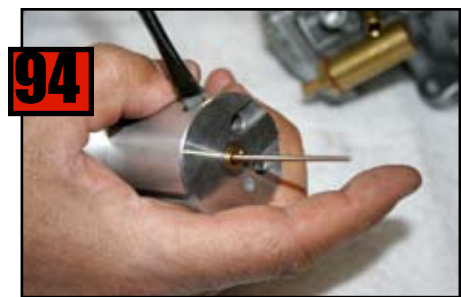
Install Jet Needle Guide on Jet Needle as shown.



Install Jet Needle Ay. with Guide slot facing Screw.



Jet Needle Guide should be flush with the piston surface.



Tighten Jet Needle Retaining Screw into the Guide slot.



Now install the Piston with slot facing the Piston Guide.

NOTE: Align the Needle Jet Guide slot with the Needle Jet Retaining Screw (Fig. 90). Adjust the Main Jet Adjusting screw (Fig. 94) until the Main Jet is flush with the bevel in the seat (Fig.95). Then turn the Main Jet Adjusting Screw two turns in or out to fine tune when dialing the carb in once mounted on a motorcycle.



Install the proper weight Piston Return Spring. (See Note).



Position the Dome over the spring & slide it down.



The Dome can only be put on one way for all 3 holes to align.



Align all 3 holes, then fasten Dome to body with 3 screws.



After securing the Dome, insure that Piston moves freely.



Spray a small amount of WD in top of Dome onto the piston.



Install Dome cap snuging it up by hand only!



Newly rebuilt SU Carburettor!

NOTE: Piston Return Springs come in (3) different weights; 4 ounce, 8 ounce, and 12 ounce. The normal configuration is with an 8 ounce spring. It may be necessary to change the spring to affect the idle mixture. The 4 ounce is leaner and the 12 ounce is richer (in comparison to the 8 ounce spring). For instance, if you have a shovel that is not idling properly due to insufficient fuel, you might put in a 12 oz spring.

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