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Because every industry has a leader

## Replaceable Main Air Bleed for all S&S Super "E" and "G" Carburetors

The main air bleed passage in S&S Super "E" and "G" carburetors produced for the 2004 model year and later is fitted with a replaceable .040" jet in place of the .040" drilled main air bleed passage. The replaceable jet allows changing the size of the main air bleed. Carburetors with this modification can be identified by a serial number that begins with the letter E or higher.

The .040" diameter main air bleed hole was and continues to be the standard size on all S&S "E"& "G" carburetors. The purpose of the main air bleed is to provide a vacuum signal to the main fuel circuit. This vacuum signal determines the rpm point where the carburetor transitions from running on the intermediate jet and begins to draw fuel through the main jet.

The standard .040" diameter air bleed is the optimum size for most engine combinations, and should not be changed under most circumstances, regardless of intermediate and main jet selections.

The option of changing the size of the main air bleed allows tuners to address midrange rpm driveability problems caused by poorly performing exhaust systems, such as un baffled drag pipes. Radical cams can also increase the difficulty of tuning some exhaust systems.

An exhaust pipe that is not correct for the engine will have reversion pulses that interfere with the cylinder's ability to fill in the mid rpm range just at the time the main jet is coming in.

One way to improve the midrange rpm operation of an engine that runs rich in the midrange, is to enlarge the main air bleed.

Before the replaceable main air bleed was introduced, the main air bleed was enlarged by drilling to a larger size. Now, the air bleed size can be enlarged simply by changing the jet.

Enlarging the main air bleed hole decreases the vacuum signal to the main jet. Because of this, the engine has to reach a higher rpm to create enough vacuum to overcome the increased air bleed size and draw fuel through the main jet. This keeps the carburetor running on the intermediate jet to a higher rpm, and delays the start of main jet operation.

For tuning the main air bleed, S&S recommends an initial increase from the standard .040" jet to an .048" jet as a starting point. Available jets and part numbers are listed in the S&S catalog.

### NOTES:

- *Changing the main air bleed size should be done only after determining a mid range driveability problem cannot be corrected by changing the intermediate and main jets.*
- *It is never necessary to reduce the size of the main air bleed below .040".*
- *Shifting the start of main jet operation to a point higher up the rpm scale can lessen the effects of mid rpm driveability problems caused by mismatched cam and exhaust systems, but will not allow the engine to perform as well as it would with a well designed exhaust system.*

