

Instruction Sheet No. 400A  
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## Installation Instructions for S&S Super E & G Series “Shorty” Carburetors On Harley Davidson Twin Cam 88 Engines

S&S Super E and Super G “Shorty” carburetors are compatible with all carburetor-type Twin Cam 88 engines. Easy adjustment makes S&S carburetors suitable for TC88 engines regardless of cubic inches or most other modifications. S&S carburetor cannot be installed on fuel-injection (EFI) models without significant changes to OEM wiring harness and other parts.

### NOTES

- *Stock TC88 throttle cables are not compatible with S&S carburetors. Cables are same as those designed for S&S carb installed on '96-up Big Twin, and are available from S&S and other aftermarket sources.*
- *Certain combinations of exhaust and camshaft timing can cause erratic carburetion, making correct tuning difficult or impossible. S&S recommends exhaust system with 1-3/4" head pipes and full mufflers for most street applications. Because of tuning difficulties and reduced performance at lower speeds, S&S does not recommend exhaust systems with no mufflers, headpipes larger than 1-3/4", or overall length greater than 40" (excluding 2-into-1 collector style systems) for general street use. These recommendations are based strictly on performance, and do not take into account looks, sound, or personal taste.*

With exceptions noted below, procedure for installing S&S carburetor on TC88 engine is same as described on pages 4-14, Instruction Sheet No.

400. Tuning carburetor for TC 88 engine is identical to procedure described in Instruction Sheet No. 400, pages 14-20.

Read Instruction Sheets No. 400 and 400-A before beginning installation. Certain sections of Instruction Sheet No. 400 apply only to Sportster, Knucklehead, Panhead, or Shovelhead engines and may be overlooked.

### WARNINGS

- **Gasoline is extremely flammable, explosive under certain conditions, and the fumes toxic when inhaled. Disconnect battery ground cable before installation to prevent sparks, do not smoke around gasoline, and perform installation in a well-ventilated area away from sparks or open flame.**
- **If motorcycle has been running, wait until engine and exhaust have cooled to avoid getting burned during installation.**

### Installation

Majority of installation is described in Instruction Sheet No. 400. Differences specific to TC88 models apply to manifold fittings and breather hardware, and are described in detail after following section.

Shut off fuel petcock and remove gas tank to access OE manifold, carburetor, etc. On some models, slightly elevating rear of gas tank will be sufficient.



Picture 1

Remove air cleaner and drain fuel from existing carburetor. Disconnect wiring harness from map sensor and remove fuel petcock vacuum hose from manifold. Remove carburetor, manifold, choke cable, and any carburetor mounting hardware. Remove map sensor from manifold.

Prepare S&S air cleaner backplate as explained on Page 5 in Instruction Sheet No. 400.

### TC88

Install stock map sensor in S&S manifold. **See Picture 1.**

Secure sensor to manifold with stock clip and screw. **See Picture 2.**

Install manifold on engine with stock hardware. Connect fuel petcock vacuum hose to manifold



Picture 2

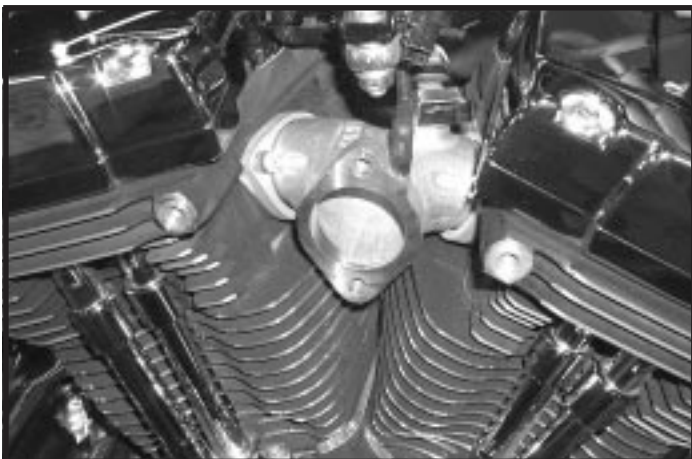
fitting and connect wiring harness to map sensor. **See Picture 3.**

Install insulator block, carburetor, throttle cables, and overflow hose as described in Installation Sheet No. 400. Observe all notes, cautions, and warnings regarding overflow hose.

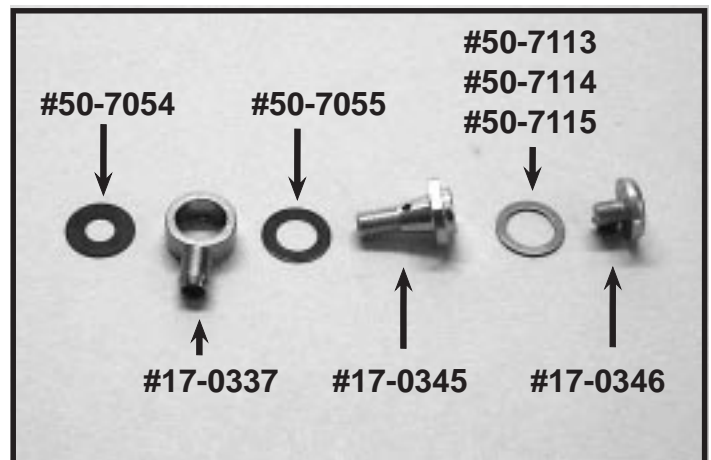
### NOTES

● *Stock cables are not compatible with S&S carburetor. Correct cables are available from S&S and other aftermarket suppliers. In models equipped with fairings, it is usually possible to remove old cables and "snake" new ones into place without removing fairing. Once cables are adjusted, throttle must operate freely and without bind.*

**CAUTION - If insulator block is omitted, lower manifold bolt may damage carburetor bowl causing possible gasoline leak.**



Picture 3



Picture 4



Picture 5



Picture 6

### WARNINGS

- If throttle does not return to fully closed position when released, it may inadvertently stick open, causing possible loss of control of motorcycle and personal injury to operator or others.
- Any gasoline leak or spill constitutes a serious health and fire hazard.

Install breather fittings in cylinder heads. See **Picture 4** and **Picture 5**.

Install air cleaner backplate and gasket on carb body as described on page 9 in Instruction Sheet No. 400. See **Picture 6**. Tighten backplate screws #17-0346.

Determine which of provided shims correctly fills gap between backplate and breather fitting. See **Picture 7**.

Remove backplate and attach breather hose, install

backplate shims, and reinstall backplate. Read following note and caution.

*NOTE - Backplate screws supplied with kit have thread locking compound on threads. If screw without thread locking compound is used, a thread locking compound such as Loctite 242 must be applied, and screws properly tightened.*

**CAUTION - Failure to apply thread locking compound or properly tighten screws may cause screws to loosen and fall into engine, causing engine damage not covered under warranty.**

Install front and rear backplate screws #17-0346. See **Picture 8**.

Install air filter element and cover, and complete final assembly, checks, and tuning according to pages 11-19 in Instruction Sheet No. 400.



Picture 7



Picture 8

