



# INSTRUCTIONS

-J02121

REV. 6-21-02

Kit Number 29489-99C

## SCREAMIN' EAGLE ELECTRONIC FUEL INJECTION (EFI) STAGE 1 KIT FOR 1450 TWIN CAM 88

### General

This kit is designed for installation on 1999-2001 Harley-Davidson Twin Cam 88 Touring motorcycles equipped with EFI.

Installation of this kit by an authorized Harley-Davidson Dealer will not impact your limited vehicle warranty. See your Harley-Davidson Dealer for more details.

#### CAUTION

Installation of this kit requires the ECM to be recalibrated. Failure to do so may result in severe engine damage. See your Harley-Davidson dealer for recalibration.

#### WARNING

This kit will allow the engine to power the motorcycle faster than the original equipment engine. Motorcycle stability decreases as speed increases. Therefore, do not exceed the following speeds on Electraglide models:

-80 mph with passengers or cargo,  
-90 mph solo.

Exceeding these limits will decrease stability which may lead to loss of control and death or serious injury.

#### CAUTION

This Stage 1 kit is intended for High Performance applications only. This engine related performance part is legal for sale or use in California on pollution controlled motor vehicles. Engine related performance parts are intended for the experienced rider only.

#### CAUTION

The air cleaner contained in this kit is designed to perform with this kit only. Any other combination of components is not confirmed to be legal for street use.

#### NOTE

The Product Information Label contained in this kit is required in the state of California only. This label is required to aid in passing the California Smog Check Program. Place the Information Label on the right side of the frame directly beneath the VIN sticker. Do not place the label on motorcycles other than those specified in the Instruction Sheet.

### Installation

#### Calibrating the ECM

Have dealer recalibrate ECM prior to air cleaner installation.

#### Installing High Performance Air Cleaner

#### WARNING

Using this kit with an air cleaner cover other than recommended below could lead to failure of element faceplate. The element in this kit is specifically designed for use with the OE (original equipment) cover. The kit may be used in conjunction with other H-D accessory covers provided the appropriate adapter recommended in those kits are used. If the element faceplate fails the cover could detach possibly distracting the rider which could result in death or serious injury.

1. Refer to instructions provided with High Performance Air Cleaner Kit for installation.

#### Setting Idle Speed

##### Warm-Slow Idle Speed Adjustment

1. Remove air cleaner cover.
2. Start vehicle and run until both engine and oil are fully warm. Using the Scanalyzer, verify that engine temperature is above 250° F. (121° C.). This step is very important or adjustment will be incorrect.

#### CAUTION

To ensure proper charging at idle, maintain an idle speed of approximately 950-1050 RPM. Insufficient idle speed may drain the battery in excessive idle situations, resulting in insufficient voltage to the ECM, ignition coil and fuel pump (which can result in a variety of operating problems).

3. See Figure 1. To adjust the warm-slow idle speed, locate the set screw through the hole in the air cleaner backplate (lower right corner of the intake air inlet).

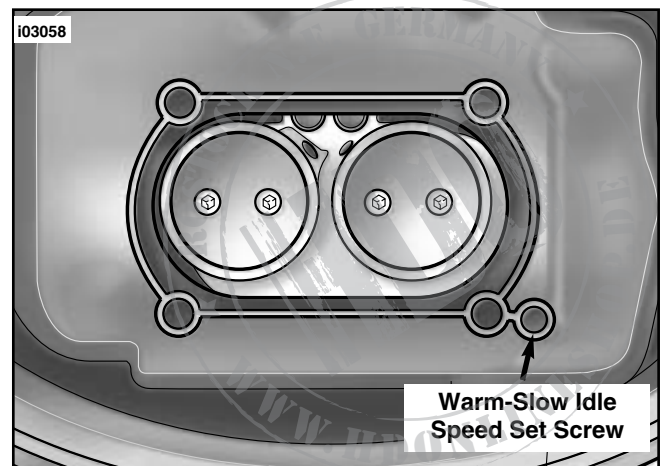


Figure 1. Air Cleaner Backplate

**NOTE**

For best results, use the Scanalyzer (HD-41325) or an external tachometer with an inductive pickup.

4. Using a T10 TORX drive head, turn the set screw clockwise to increase OR counter-clockwise to decrease idle speed.
5. When idle speed is set, turn the Ignition/Light key Switch to OFF.
6. Install air cleaner.

**NOTE**

Installation of air cleaner cover may affect idle speed.

7. Following the final idle speed adjustment, disconnect Scanalyzer and then remove both 5 amp and 15 amp fuses (ECM power and fuel pump) for 15 minutes. This step is necessary to clear the ECM memory of the previously learned minimum throttle position.
8. Verify correct idle speed after installing air cleaner assembly. Repeat adjustment procedure, if necessary.

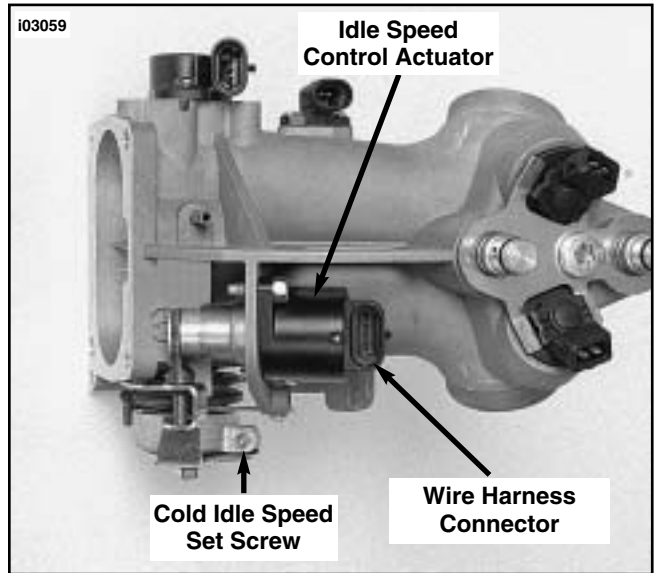
**Cold Idle Speed Adjustment**

**NOTE**

All sensors and actuators must be in proper working order and the engine must be in good condition in order for this procedure to have correct and consistent results.

1. Start vehicle and run until engine, primary case and transmission are fully warmed up. Using Scanalyzer, verify that engine temperature is above 250° F. (121° C.). Shut off engine.
2. Remove air cleaner and backplate assembly. Unplug wire harness connector from idle speed control actuator.
3. Start and run engine until idle speed has stabilized, approximately one minute.

4. See Figure 2. Using a T10 TORX drive head, turn the cold idle speed set screw until engine speed is 1500-1600 RPM. Be sure not to move the idle speed lever while turning the screw.



**Figure 2. Induction Module (Top View)**

5. Reconnect wire harness connector to idle speed control actuator.
7. Shut off engine and wait approximately 10 seconds.
8. Install air cleaner and backplate assembly.

