

# *TECHNICAL*

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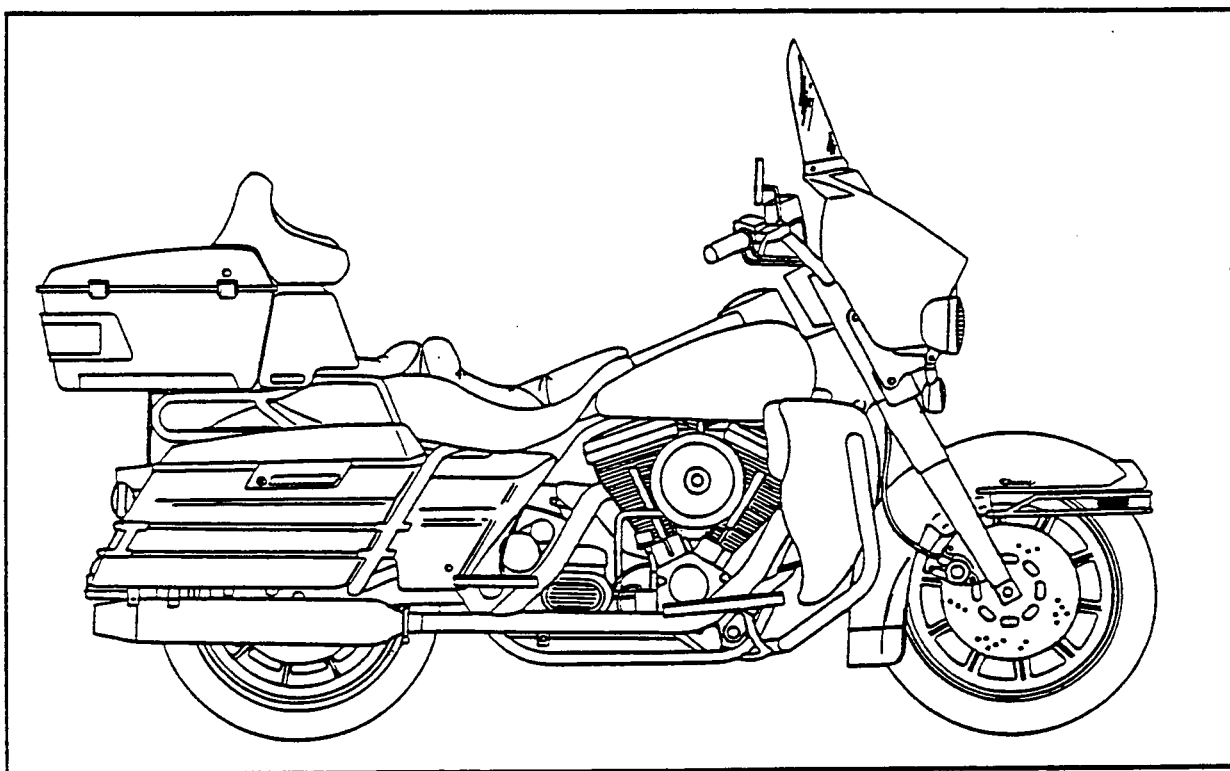
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# *TIPS*

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October 1997  
TT#46



# TECHNICAL TIPS #46

OCTOBER, 1997

## Head Torque Procedure

The new head torque procedure detailed in the '98 Parts and Service Manual Supplement handed out in Nashville is used on '98 XL models only and is not applicable to Big Twins. This is the same procedure used in Manufacturing.

## XL Fender Brace Kit

If you replace a rear fender on a '94 and later XL model because of cracking, use P.N. 59722-98 rear fender brace kit.

## Battery Drain on Dyna and XL Models

Battery drain on these models may be due to the ignition switch not placed in the "off" position when the key is removed. If a customer turns the switch to the "ACC" position, the key can be removed while instrument lights remain on.

## All Models

Before replacing a voltage regulator for improper output, check grounds for good connections. Only 30 percent of regulators replaced have failed output tests.

## Electronic Speedometers

Do not replace electronic speedometers for appearance of black dots in odometer display unless they alter numbers.

## FLHT Models

To clean fairing-mounted instruments and gauges, use water or Windex glass cleaner. Do Not use alcohol or ammonia based cleaners as the lens could become stained.

## **Brake Lights Staying On**

If you encounter a front brake light flickering or staying on without use of brake, it may be due to the piston return spring not returning to proper length. This leaves lever with free play and does not contact the brake light switch properly. To correct this situation, you should use a master cylinder rebuild kit. This condition also will cancel cruise control or not allow cruise to be set.

## **Barrel Locks**

We have had reports that customers sometimes cannot get the round key into the lock. It seems the tumbler shifts out of the index position when the key is removed. This does not, however, disable the lock permanently. These locks may still be operated by filing the ear from the key and inserting in the required lock position. This will help re-align tumbler. Customers should retain this key for future use in case it should happen again.

## **Tour Pack Mounting**

The adhesive backed foam strip under the tour pack is installed at York to prevent paint damage during assembly. We have had reports that the foam strip will slide out while riding. If this cosmetic problem occurs, you can simply remove the foam strip to eliminate this problem. Remove the foam strip carefully to avoid any possibility of paint damage.

## **FLHT Forks**

There is a misprint in the earliest version of the '97 FLT Service Manual and '98 FLT owners manual. The fork fluid capacity should read 9.7 ounces on '97 and later forks. '96 and earlier forks remain at 7.75 ounces.

## **Cruise Control**

On '97 models only, if cruise does not set above 60 mph or speeds up from 60 to 70 mph and then cancels, check cables for proper adjustment. If the adjustments are correct, the cruise module may need to be replaced. For replacement use P.N. 70989-98 and use existing cruise cable.

If you change an induction module P.N. 27202-98, it has the new '98 cruise cable connection. The '97 and earlier cruise cable requires that the throttle actuator plate on the '98 module be replaced with the one from the previous module. Use the instructions in the Service Manual listed for ISC replacement to accomplish this.

The ignition module on carbureted bikes does fire (at TDC) for the first few revolutions and does not ignore the first three sensor inputs as described in the cruise diagnostics.

## EFI Idle

If the hot idle speed on EFI models falls below preset values, you should check for low fuel pressure. Low fuel pressure could be caused by a hole in fuel hose inside the tank. If fuel pressure is low, it may require removal and inspection of fuel feed hose from pump to filter.

If the hot idle speed fluctuates or increases while running, you may have a problem with the engine temperature circuit. This problem can cause high idle, rough running, and black smoke coming from exhaust. You can verify this problem by monitoring scanalyzer readings when the problem occurs. Normal reading should be >284°F. If readings are observed to be lower, then diagnostics are required. Most of the time this condition will not register a trouble code. You should perform a thorough wiggle test on ETS circuit as described in Service Manual. Connections have been found to be the problem in most instances. If no problems are found with wiring or connections, then a new sensor may be necessary.

## '98 Model Diagnostic Codes

When you receive the '98 service manuals please notice that condition/labor codes now exist in flow charts. These 4-Digit codes include diagnostics and part replacement. This allows technicians to note condition/labor codes on repair orders for easier processing. There will, however, be only one code allowed per failure as each code identifies a particular problem. Accurate diagnostics is very important and should shorten repair time.