

# INSTRUCTIONS

-J02014 REV. 11-19-03

Kit Number 29999-97B

# 45-AMP. UPGRADE ALTERNATOR ROTOR KIT

#### General

This 45-amp Rotor Kit is designed for installation on 1999 and later FLHT, FLHTC, FLHR, FLHRI, FLHRCI and FLTR Model Motorcycles.

#### NOTE:

1999 to 2001 Model Motorcycles: This Kit should be used in conjunction with Stator Kit (Part Number 29987-99A) as referenced in P and A Service Bulletin #P-50 distributed April 30, 2001.

#### **Kit Contents**

## QTY DESCRIPTION

1 Rotor assembly

1 Gasket, primary cover, FLT's

# **PART NUMBER**

29943-01

34901-94A

#### NOTE

A Service Manual for your model motorcycle is available from your Harley-Davidson Dealer.

## **WARNING**

The rider's safety depends on the correct installation of this kit. USE THE APPROPRIATE SERVICE MANUAL PROCEDURES. If the procedure is not within your capabilities or if you do not have the correct tools, have your Harley-Davidson Dealer perform the installation. Improper installation of this kit could lead to an accident and result in death or serious injury.

# **AWARNING**

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

## WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

# **Existing Rotor Removal**

- Remove seat and disconnect battery terminals, negative cable first.
- 2. Follow instructions in applicable Service Manual and remove the primary chaincase cover. Remove the clutch, primary chain, compensating sprocket and shaft extension as a single assembly.
- 3. Remove the alternator rotor spacer, if present.

## Installation

## CAUTION

The laminated high-output rotor in this kit contains magnets that are considerably more powerful than those used in most previous rotors. The ROTOR REMOVER/INSTALLER and SHAFT PROTECTOR SLEEVE (HD-41771) must be used to prevent parts damage during rotor removal and installation.

 See Figure 1. Verify threads are clean and thread the Shaft Protector and Rotor Remover/Installer, if removed.

#### NOTE

The Shaft Protector Sleeve not only protects the threads from the splines of the rotor, but acts as a guide to ensure that the rotor is properly centered.

Turn thumbscrews of Rotor Remover/Installer into threaded holes in rotor face.

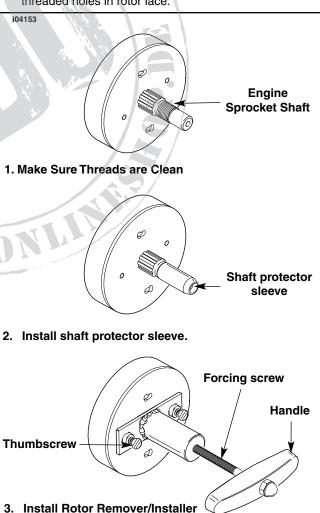


Figure 1. Install Shaft Protector and Rotor Installer

- Center ball on forcing screw in recess at end of engine sprocket shaft. Rotate the handle of the tool in a counterclockwise direction to ease rotor into position over stator.
- 4. Loosen thumbscrews and remove Rotor Remover/Installer. Remove Shaft Protector Sleeve.
- 5. Install the shaft extension on engine sprocket shaft. No alternator rotor spacer is necessary).
- Follow instructions in applicable Service Manual and install the clutch assembly, primary chain and shaft extension as a single assembly.
- Apply two drops of Red LOCTITE® 262 to threads of clutch nut and engine sprocket nut. Tighten nuts as follows:

Clutch nut- (left hand threads), 70-80 ft-lbs (94.9-105.5  $\,$  Nm)

Engine sprocket nut- 150-165 ft-lbs (203-223 Nm).

 Follow instructions in Service Manual and install the Primary Chaincase Cover using new gasket from kit, if necessary.

- 9. Follow instructions in applicable Service Manual and adjust primary chain tension and clutch freeplay.
- 10. Fill primary chaincase with lubricant until level reaches the bottom edge of the clutch plates.

# **A**WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

- 11. Connect the battery cables, positive cable first.
- 12. Refer to the Service Manual, and follow instructions to install the seat.

# **A**WARNING

After installing seat, pull upward on front of seat to be sure it is in locked position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070a)

12. Start engine and perform load test procedure given in Service Manual to verify correct alternator operation.



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