

# INSTRUCTIONS

-J00090 REV. 6-24-96

Kit Numbers 40100-85, 40101-80, 40109-86, 40112-97, 40171-97

## SECONDARY BELT EMERGENCY KIT

#### General

Follow these instructions to temporarily replace damaged and/or broken belts.

#### MODELS THAT KIT FITS

The 40101-80 kit, with a 126 tooth belt, fits:

• 1980–1986 FXB and 1984–1986 FXWG models This kit may also be used on 1989–1992 international Softail models with a 127 tooth belt.

The 40171-97 kit, with a 130 tooth belt, fits:

- 1995 and later domestic Softail models
- 1994 and later international Softail models
- 1994 and later international Dyna models

The 40109-86 kit, with a 132 tooth belt, fits

- 1986-1992 and 1994 domestic Softail models
- 1989–1993 international FLT and FXR models This kit may also be used on the following models with 133 tooth belts:
- 1991 and later domestic Dyna models
- 1991–1992 international Dyna models
- 1994–1995 international FLT models

The 40100-85 kit, with a 136 tooth belt, fits:

- 1985-1994 domestic FXR models
- 1985–1996 domestic FLT models
- 1996 international FLT models

The 40112-97 kit, with a 139 tooth belt fits

DESCRIPTION

• 1997 FLT models

#### **PARTS INCLUDED**

QTY

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1	Spliced poly belt
1	Spliced feeder strip belt
16	Socket set screws
3	Hex socket keys
1	Poly belt splice tool
	A.L

#### Note

The parts included in this kit are not available separately.

## **AWARNING**

Before installation of the emergency belt, to avoid personal injury and/or vehicle damage, secure the motorcycle. Both stand and motorcycle must be on solid, level ground.

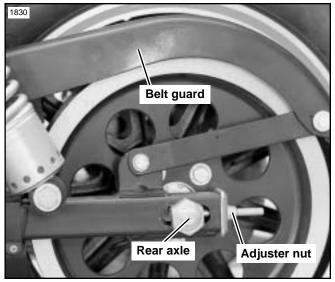


Figure 1. Axle Alignment

## Installation

- 1. Put transmission in 'Neutral'.
- Loosen rear axle nut. Loosen rear axle adjuster nut on each side of motorcycle, and move rear wheel to full forward position.
- 3. Remove the damaged/broken belt.
- Inspect sprockets and belt guard for damage and/or debris. Remove any debris. If sprockets and belt guard are not damaged, proceed with the installation.
- 5. See Figure 1. Remove belt guard.
- 6. See Figure 2. Install feeder strip on emergency belt. Feed strip around transmission sprocket in a counterclockwise direction over frame cross support.

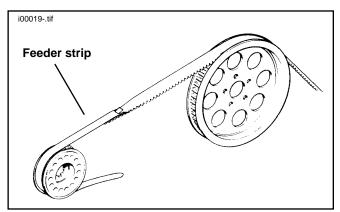


Figure 2. Belt Installation

- 7. See Figure 3. Join "v" ends of the emergency belt.
  - a. Insert a hex socket key in the fourth and ninth tooth holes.
  - b. Place the splice block over the seventh tooth hole.
  - c. Install a socket head set screw in the seventh tooth. Tighten using another hex socket key.
  - d. Move the block to the next tooth, and repeat installation steps (b) and (c) in each tooth until all 12 screws are installed.

#### NOTE

There are 16 screws included in this kit. However, only 12 screws will actually be installed in the belt. The remaining four screws are spares.

Measure the belt deflection by grasping the belt's bottom strand at midpoint, between your thumb and forefinger and moving the belt up and down.

 See Figure 4. When 10 lbs of force is applied at the midpoint of the belt's bottom span, belt deflection should be within the following measurement ranges, depending upon the vehicle model:

FLST, FXST/C 3/8 to 1/2 in. deflection FLT, FXR 5/16 to 3/8 in. deflection

See Figure 1. Tighten each rear axle adjusting nut an equal amount to maintain sprocket and wheel alignment. Turn adjusting nuts as necessary to move the axle and to correctly adjust belt tension.

- 9. See Figure 1. Tighten rear axle nut to a torque of 60-65 ft-lbs. Recheck belt tension.
- 10. Reinstall belt guard, tightening both bolts.

#### **AWARNING**

This is only an emergency repair kit. The approximate life expectancy of the belt is only 200 miles (322 kilometers). Limit the belt's usage to the distance to your nearest Harley-Davidson Service Center.

### **FOLLOW THESE PRECAUTIONS**

Failure to follow these precautions could result in personal injury.

- 1. Accelerate slowly.
- 2. Use the brake, not the engine to slow down.

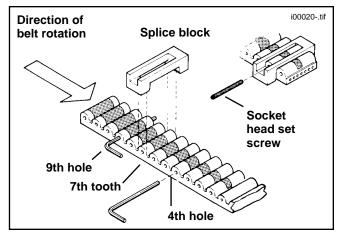


Figure 3. Belt Assembly

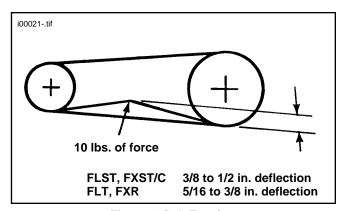


Figure 4. Belt Tension

- 3. Use moderate acceleration when going up hills.
- 4. Do not exceed the speed limit.
- 5. Shift smoothly.
- 6. Avoid dangerous traffic conditions.

CHECK BELT EVERY 50 MILES AND DO NOT OPERATE MOTORCYCLE IF:

- 1. The screws are not flush with the belt.
- The screws are broken off. Broken or protruding screws can cause damage to rear wheel sprocket and other vehicle components, and/or may result in personal injury.

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