



INSTRUCTIONS

-J02189

REV. 2-05-04

Kit Numbers 40100-85, 40101-80, 40109-86, 40112-97, 40171-97, 40146-00

EMERGENCY DRIVE BELT REPLACEMENT KIT

General

The Emergency Drive Belt Replacement Kit is used to temporarily replace the secondary drive belt should it be damaged or broken. The emergency belt allows the rider to ride the motorcycle to the nearest (less than 200 miles) Harley-Davidson service facility.

Kit Contents

QTY	DESCRIPTION
1	Spliced poly belt
1	Spliced feeder strip belt
16	Socket set screws
3	Hex socket keys
1	Poly belt splice tool

NOTE

The parts included in this kit are not available separately.

Kit Number 40101-80 (126 tooth belt)

1980–1986 FXB Models

1982–1984 FLH Models

1984–1986 FXWG Models

This kit may also be used on 1989–1992 International Softail Models with a 127 tooth belt.

Kit Number 40171-97 (130 tooth belt)

1995–1999 Domestic Softail Models

1994 International Softail Models

1994–1996 International Dyna Models

Kit Number 40109-86 (132 tooth belt)

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

1997 and later International Dyna Models

1999–2000 Domestic FXR Models

2000 and later Domestic Dyna Models

Kit Number 40100-85 (136 tooth belt)

1985–1994 Domestic FXR Models

1985–1996 Domestic FLT Models

1996 International FLT Models

Kit Number 40112-97 (139 tooth belt)

1997 and later FLT Touring Models

Kit Number 40146-00 (135 tooth belt)

2000 and later Domestic Softail Models

Installation

1. Shift transmission to neutral.

⚠ WARNING

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. Failure to follow instructions could result in death or serious injury.

2. See Figure 1. Remove spring clip (4) (if present) and loosen rear axle nut (1).
3. Loosen rear axle adjuster (3) (or adjuster nut, if so equipped) on each side of motorcycle, and move rear wheel to full forward position.
4. Remove the damaged/broken belt.
5. Inspect sprockets and belt guard (2) for damage and/or debris. Remove any debris. If sprockets and belt guard are not damaged, proceed with the installation.
6. Remove belt guard.

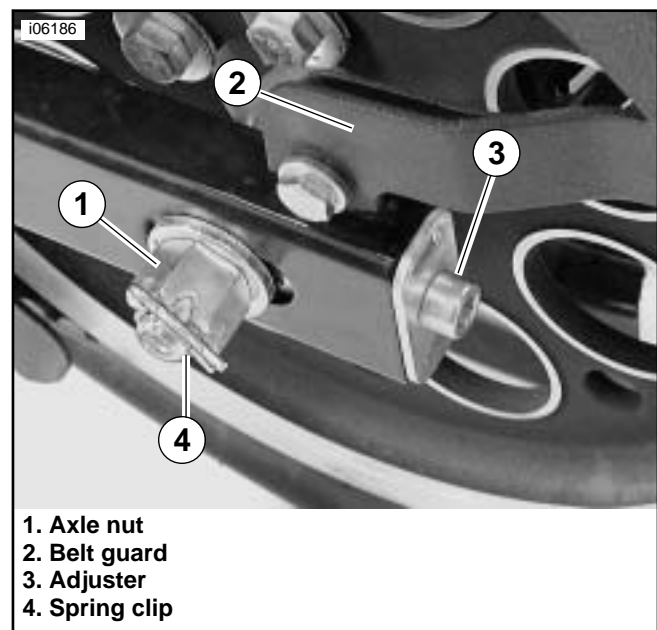


Figure 1. Axle

7. See Figure 2. Install feeder strip on emergency belt.
8. Feed strip around transmission sprocket in a counterclockwise direction over frame cross support.

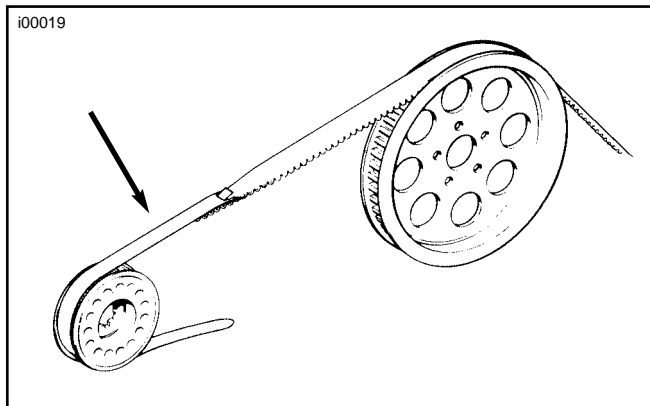


Figure 2. Emergency Belt Feeder Strip

9. See Figure 3. Interlock the “v” ends of the emergency belt.
 - a. Insert a hex socket key in the fourth (4) and ninth (6) tooth holes.
 - b. Place the splice block (2) over the seventh (5) tooth hole.
 - c. Install a socket head set screw (3) 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.

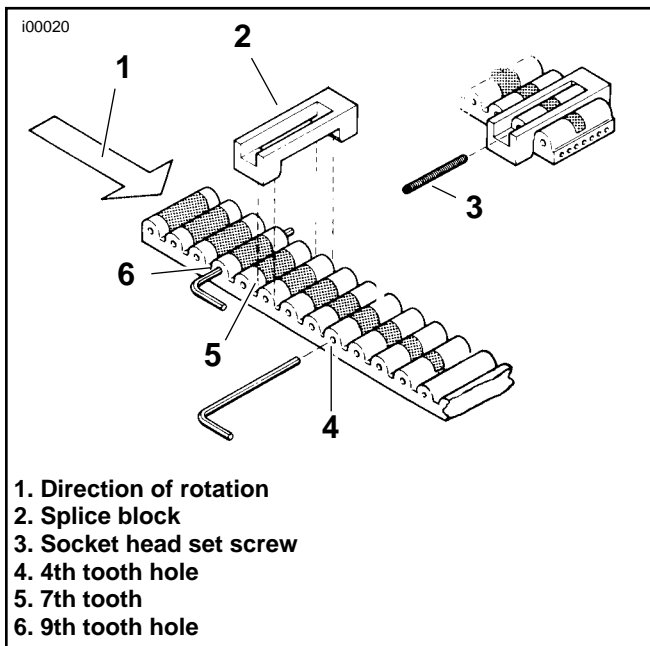


Figure 3. V Ends of Emergency Belt

10. See Figure 4. Grasp the emergency belt at the mid point of the lower run between your thumb and forefinger and lift the belt up to take up any slack in the belt.

Measure the distance that the belt deflects (2) under tension (1). When two pounds of tension is applied to the lower run of the emergency belt, the belt deflection should be within the following measurements:

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

NOTE

If available, use Belt Tension Gauge (Part No. HD-40006-85).

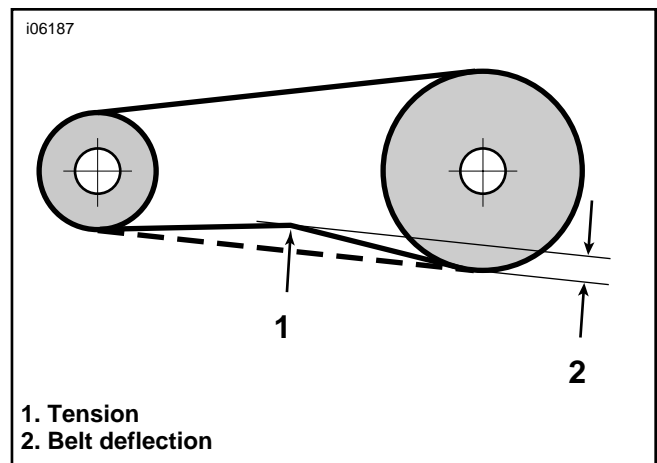


Figure 4. Rear Belt Deflection

11. If the deflection is out of specification at two pounds of tension, turn the left and right axle adjusters (or nut, if so equipped) in or out as necessary, in equal amounts, to move the axle to adjust belt deflection.
12. When the deflection is within specification at two pounds of tension, tighten each rear axle adjuster (or nut, if so equipped) an equal amount to maintain sprocket and wheel alignment.
13. See Figure 1. Firmly tighten the rear axle nut and install the spring clip. Recheck belt deflection and re-adjust as necessary.

NOTE

If a torque wrench is available, the rear axle nut should be tighten to a torque of 60-65 ft-lbs (81.3 - 88.1 Nm).

14. Install belt guard and tighten mounting fasteners.

Riding Instructions

WARNING

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

FOLLOW THESE PRECAUTIONS:

1. Accelerate slowly.
2. Use the brakes, not the engine to slow down.
3. Use moderate acceleration when going up hills.
4. Do not exceed the speed limit.
5. Shift smoothly.
6. Avoid dangerous traffic conditions.

Failure to follow these precautions could result in death or serious injury.

WARNING

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

1. The screws are not flush with the belt.
2. 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.

Failure to follow these precautions could result in death or serious injury.