



INSTRUCTIONS

-J04938

2009-11-17

WHEEL BEARING REMOVAL AND INSTALLATION TOOL

GENERAL

Kit Number

94134-09

Models

- 2000 - present Twin Cam models
- 2000 - present Sportster models
- 2002 - present VRSC models
- 2007 - present wheels using 25 mm wheel bearing, ABS or non-ABS.
- **Does not** fit on 2009 or later rear wheel equipped with the integrated rear wheel compensation.

Additional Parts Required

Anti-Seize Lubricant (P/N 98960-97)

A service manual for your model motorcycle is available from a Harley-Davidson Dealer.

▲ WARNING

Rider and passenger safety depend upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00308b)

Kit Contents

See Figure 1 and Table 1.

BEARING REMOVAL

1. Place the wheel vertically in a vise and protect the rim from being marred.

NOTE

See Figure 1 for the tool lubrication locations before using.

2. Assemble the remover tool.
 - a. Install wheel bearing puller (1), (2) or (16) depending on the bearing I.D. See the service parts table for the size reference. Install the wheel bearing puller into the bearing by hand or use a rubber mallet (**not** a hard-faced hammer) to push through the bearing I.D. Stop pushing on the bearing puller as soon as it has cleared the inside of the bearing race. There will be a slight click.
 - b. Place main body puller (3) over bearing puller with the fingers of main body puller facing the wheel. Lightly oil all threads.
 - c. Place the large brass washer (10) and nut (13) onto the puller and hand-tighten the nut until it stops at the top face of the bridge.

3. Remove the front wheel bearings.
 - a. Apply a small amount of oil to the taper at the hex end of the expander dowel. Insert the expander dowel (7) through the other side of wheel bearings, and through the bearing puller.
 - b. Install the washer (15) and nut (14) to the expander dowel and torque to 100 **in-lbs** (11.3 Nm) with a 11/16 inch wrench or socket while holding the other side of the expander dowel by reaching the opposite side of the wheel with a 3/8 inch hex key.
 - c. Align the main body puller support fingers centered over the bearing to be removed. If main body puller will be directly on a finished chrome surface, protect the surface area.
 - d. If resistance is felt with a torque wrench set at 40 ft-lbs (54.2 Nm) of torque, you will need to apply heat to the hub area surrounding the bearing. Prior to applying heat, place 2 to 3 temperature stickers (P/N 94146-10) around the circumference of the hub. Apply indirect heat using a heat gun. Do not exceed 210 F. With a 1-1/8 inch socket and torque wrench, turn the nut (13) until the bearing is pulled free from the wheel hub.
 - e. Using a 3/8 in. hex key on an extension and torque wrench set on the expander dowel (7) and a 1-1/8 inch wrench. Turn the nut (13) until the bearing is free of the wheel hub.
4. Remove the wheel bearing spacer from the I.D. of the wheel hub.
5. Repeat steps 1 through 4 for the opposite bearing.

NOTE

Remove rear wheel belt sprocket before removing the bearings.

6. Rear wheel bearing removal is the same as steps 1 through 4 by using the correct size wheel bearing puller.

BEARING INSTALLATION

NOTE

Always install the first bearing on the left side of wheel.

1. Assemble the installer.
 - a. Apply oil to the threads of bolt (9) and nut (12). Place the installer backing plate (6) over bolt (9).
 - b. Insert this assembly through the wheel.
 - c. From the other side of the wheel (the side you will be first installing the new bearing from), lube O.D. of the new bearing and the I.D. of wheel with anti-seize lubricant.

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Many Harley-Davidson® Parts & Accessories are made of plastics and metals which can be recycled. Please dispose of materials responsibly.

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- d. Place the new bearing with the letter side facing out from the wheel over bolt (9) followed by bearing installer (number 4, for 1 inch I.D. bearing, number 5, for 3/4 inch I.D., or number 17, for 25 mm bearing) with the small diameter of installer, slipped inside the new bearing.
 - e. Place bearing (8), washer (11) and oiled nut (12), in that order, on the bolt.
2. Install the left side bearing.
 - a. Thread the nut (12) down until bearing is aligned straight into the bore, and with one 3/4 inch box-end wrench and one 3/4 inch socket and torque wrench, tighten the nut slowly making sure bearing is going in straight and bearing installer is staying centered over the bearing.
 - b. Tighten nut to no more than the required torque applied to the axle nut. Refer to torque specifications in the applicable service manual.
 3. Install the right side bearing.
 - a. Remove the installer tool. Leave installer backing plate (6) on bolt (9), and place the bolt and backing plate through the newly installed bearing.
 - b. Install the wheel spacer from the original wheel bearing assembly over bolt (9). The spacer must make contact with the inside of the newly installed bearing.
 - c. Install the next new bearing repeating the procedures in Steps 1 and 2 of "Bearing Installation". Make sure the bearing installer is staying centered over the bearing.
 4. Rear wheel bearing installment is the same as above except install the right wheel bearing first on the rear wheel.
 5. Install the rear wheel belt sprocket using the appropriate service manual information.

SERVICE PARTS

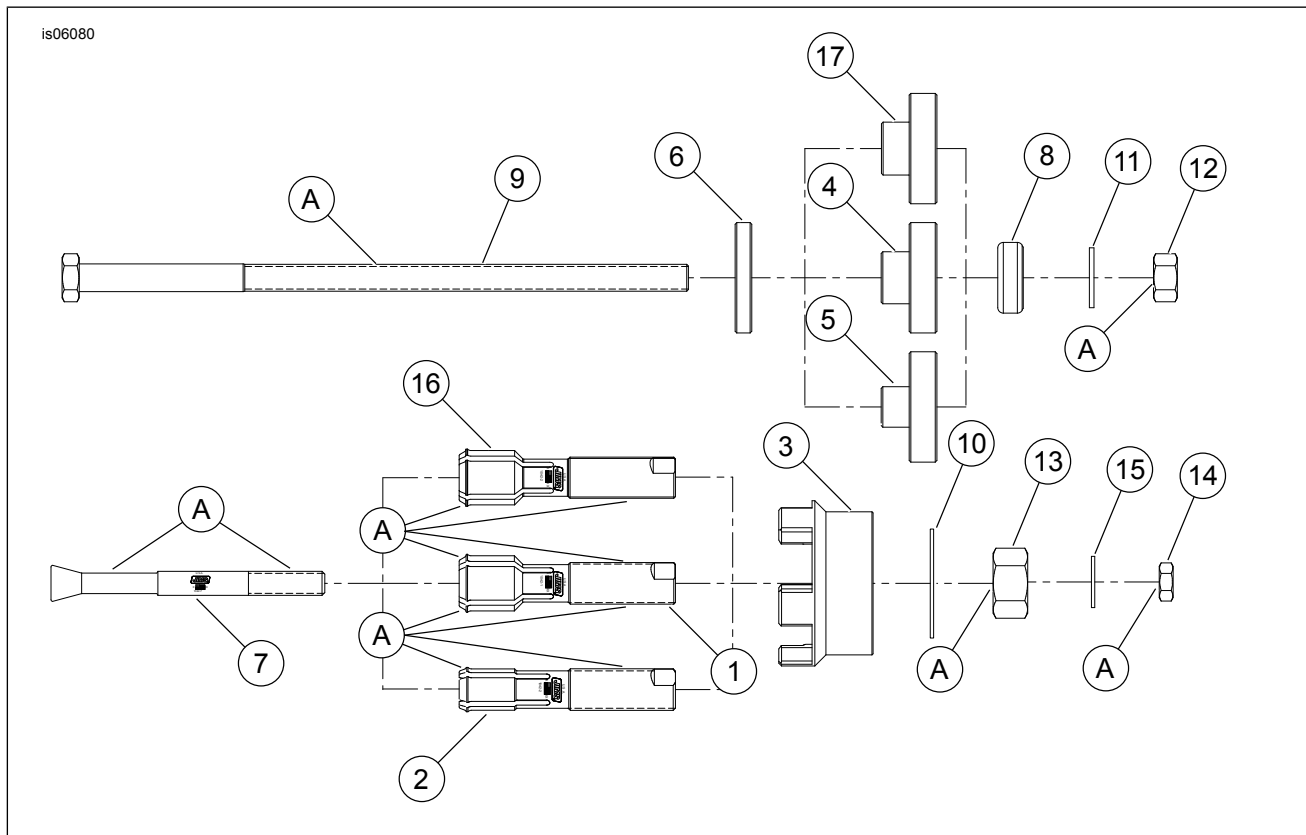


Figure 1. Service Parts: Wheel Bearing Removal and Installation Tool

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Wheel bearing puller, 1.00 inch I.D.	1042-1H
2	Wheel bearing puller, 0.75 inch I.D.	1042-2H
3	Main body puller	1042-3
4	Bearing installer, large, 1 in.	1042-4
5	Bearing installer, small, 3/4 in.	1042-5
6	Install backing plate	1042-6
7	Expander dowel	1042-7H
8	Bearing	2010
9	Bolt, 1/2-13 x 12 inches	2138
10	Brass washer	1099
11	Flat washer, 1/2 inch	2038
12	Nut, 1/2-13	2136
13	Nut, 3/4-16	1098
14	Nut, 7/16-14	7515
15	Washer, 7/16	2037

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
16	Wheel bearing puller, 25 mm	1042-8H
17	Bearing installer, 25 mm	1042-9
18	Temperature stickers, 30 pack (not shown)	94146-10
"A" Items require lubrication of threads or other surfaces as indicated.		
If replacement parts are needed, contact JIMS [®] at 805-482-6913 or www.jimsusa.com		