

**V-Twin Mfg.
Wheel Bearing Puller/Installer Tool
Fits**

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.

VT Part No. 16-0558

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

Installation Instructions:

BEARING REMOVAL

1. Place the wheel vertically in a vise. Be sure and protect the rim from being marred.
2. Assemble the remover tool. Be sure to use anti seize when assembling.
 - 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 small rubber mallet 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 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 of torque, you will need to apply heat to the hub area surrounding the bearing. Apply indirect heat using a heat gun. Be sure not to 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.

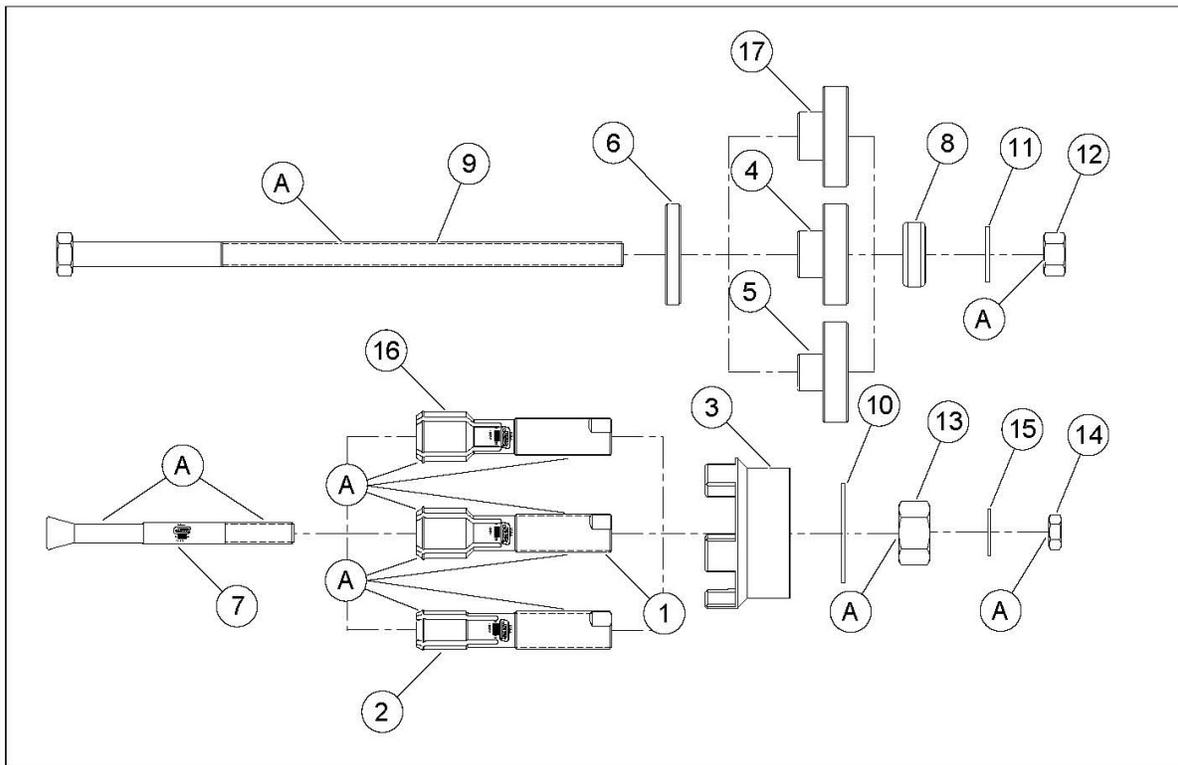
6. Rear wheel bearing removal is the same as steps 1 through 4 by using the correct size wheel bearing puller.

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.
 - 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.



Parts List

Item	Description (Quantity)
1	Wheel bearing puller, 1.00 inch I.D.
2	Wheel bearing puller, 0.75 inch I.D.
3	Main body pulley
4	Bearing installer, large, 1 in.
5	Bearing installer, small, 3/4 in.
6	Install backing plate
7	Expander dowel
8	Bearing
9	Bolt, 1/2-13 x 12 inches
10	Brass washer
11	Flat washer, 1/2 inch
12	Nut, 1/2-13
13	Nut, 3/4-16
14	Nut, 7/16-14
15	Washer, 7/16
16	Wheel bearing puller, 25 mm
17	Bearing installer, 25 mm