



# INSTRUCTIONS

-J04243

REV. 2007-04-19

## 80-SPOKE REAR WHEEL KIT

### GENERAL

#### Kit Number

42962-08, 42959-08 and 40750-08

#### Models

For model fitment information, please see the P&A Retail Catalog or the Parts and Accessories section of [www.harley-davidson.com](http://www.harley-davidson.com) (English only).

#### NOTE

*Accessory hub caps are not compatible with this wheel.*

#### Additional Parts Required

This kit includes the custom wheel only.

Proper installation of this kit requires the separate purchase of the following parts which are available at a Harley-Davidson dealer:

- Wheel Bearing Remover and Installer (HD-44060)
- Wheel Installation Kit (See Service Parts Tables for part number)

The following Harley-Davidson Genuine Motor Accessories are recommended for proper maintenance and cleaning:

- Harley® Bright™ Chrome Cleaner (94683-99)
- Harley® Glaze™ Polish and Sealant (99701-84)
- Harley® Wheel and Spoke Brush (43078-99)
- Harley-Davidson® Wheel and Tire Cleaner (94658-98)

### WARNING

**The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. 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. (00333a)**

#### NOTE

*This instruction sheet references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.*

#### Kit Contents

See the Service Parts section for kit contents.

### INSTALLATION

1. Remove existing rear wheel assembly. Save axle, axle nut, brake disc and wheel spacers for kit installation.

#### NOTE

*Remove the rear brake caliper before removing the wheel.*

### CAUTION

**Do not re-use sprocket mounting screws. Re-using sprocket mounting screws can result in torque loss and damage to the sprocket and/or belt assembly. (00480b)**

2. Install the tube and tire on wheel. Refer to REAR WHEEL in the Service manual.

### CAUTION

**Do not re-use brake disc screws. Re-using disc screws can result in torque loss and damage to rotor and/or brake assembly. (00319b)**

#### NOTES

*Install the primary bearing first using appropriate Service Manual and WHEEL BEARING REMOVER/INSTALLER.*

3. Assemble wheel installation kit components and brake disc(s) to wheel, using the appropriate service parts table. Refer to REAR WHEEL in Service Manual.
4. Install rear wheel (1), stock axle and stock axle nut. Refer to REAR WHEEL in Service Manual.

# WHEEL LACING PROCEDURE

## NOTE

If only the rim is to be replaced, tape the spokes together to hold the position on hub and remove spokes from rim. Install taped hub/spoke assembly to the new rim and tighten spokes. Then remove the tape and true wheels.

The nipple fitting of the spoke uses a standard T-30 TORX® bit for removal and installation.

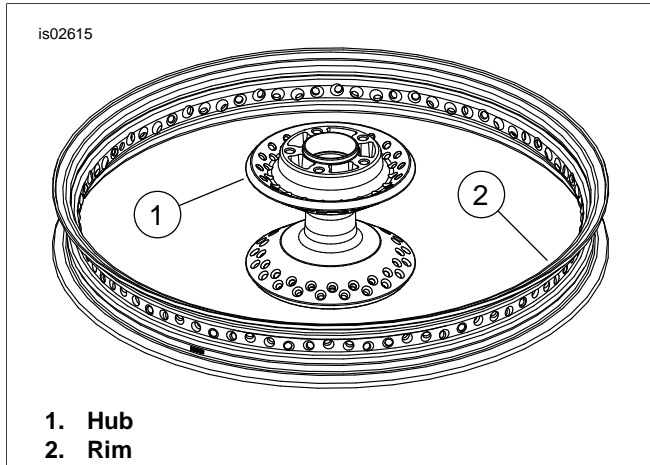


Figure 1. Spoke Wheel Components

The 80-spoke wheel uses two lengths of spokes, installed in the inner and outer rows on the hub. See Figure 2.

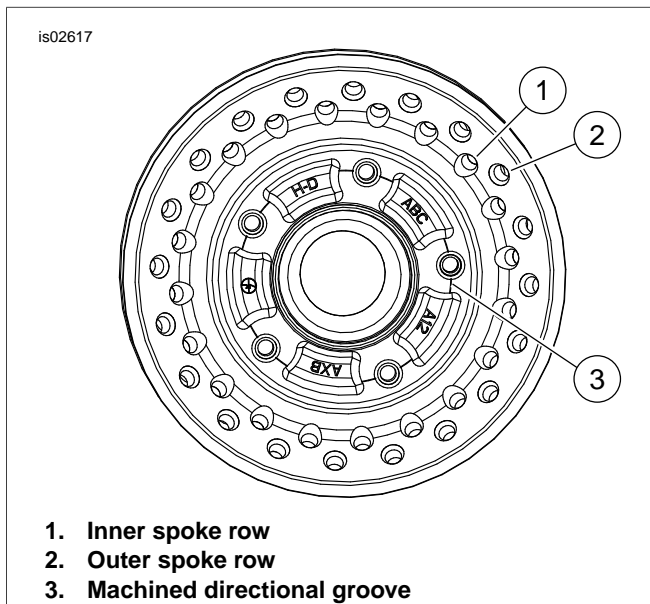


Figure 2. Spoke and Directional Groove Location on Hub

See Figure 3 and Table 1. Measure distance "A" (outer) to determine outer and inner spoke lengths. Separate outer and inner spokes in preparation for installation to hub and rim.

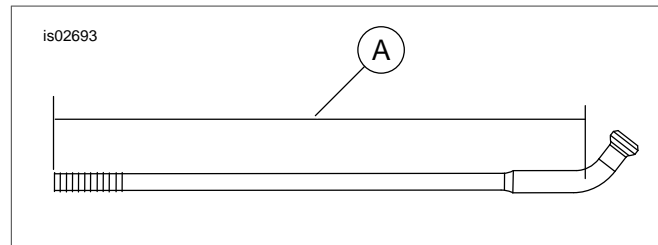


Figure 3. Spoke length

Table 1. Spoke Lengths

Spoke	Length (A)
Outer spoke	5.19 inch (132 mm)
Inner spoke	5.59 inch (142 mm)

1. See Figure 4. Place the hub on table with machined groove side up. Insert a spoke in each hole of the **outer** row as shown. Angle the spokes clockwise.
2. Center the rim over the hub assembly with the valve stem hole facing up. See Figure 5.
3. See Figure 4. Using any **outer** row spoke, insert the first spoke into the rim hole to the left of the valve stem hole on the upper half of the rim centerline. Loosely assemble the spoke nipple.

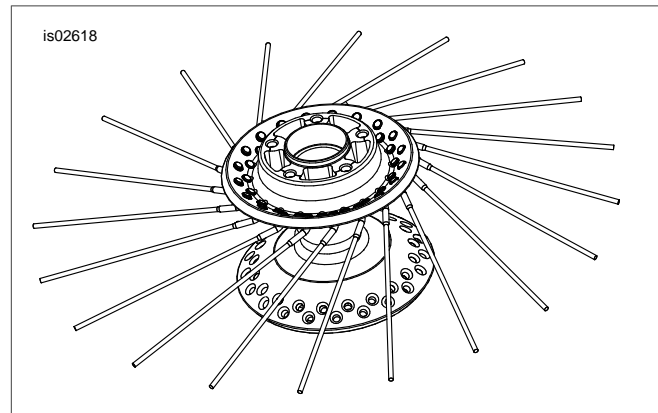
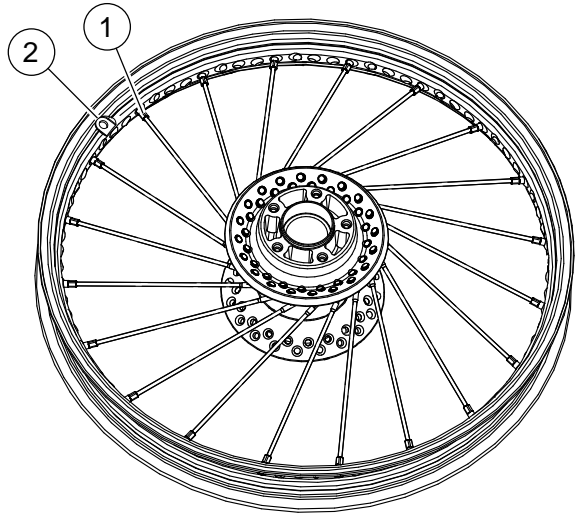


Figure 4. Install Outer Spokes on Hub

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1. Outer spoke location on rim
2. Valve stem hole

Figure 5. Install Outer Spokes

4. Install the rest of **outer** row spokes in every fourth hole. Loosely assemble the spoke nipples.
5. See Figure 6. Insert the first **inner** row spoke into the hub. Angle the spoke counterclockwise crossing **four** outer row spokes. Loosely assemble the spoke nipples.

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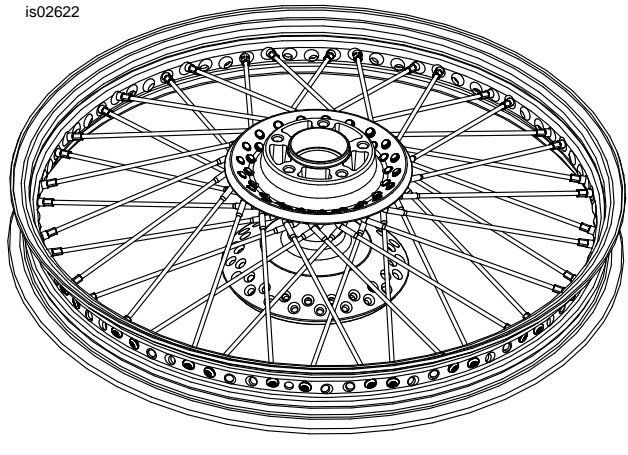


Figure 6. Install Inner Spokes

6. Install the inner row spokes into every **fourth** remaining hole above the rim centerline. Loosely assemble the spoke nipples.
7. See Figure 7. Turn rim over so brake disc side faces **down**. Place any **outer** row spoke into hub. Angle spoke counterclockwise and insert into rim hole angled to accept it. Loosely assemble the spoke nipple.

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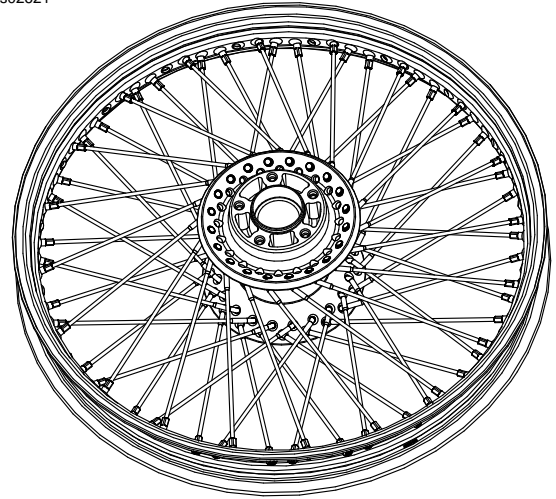


Figure 7. Install Outer Spokes

8. Insert the remaining **outer** row spokes, angled counterclockwise, into hub and rim. Loosely assemble the spoke nipples.
9. Insert **inner** row spoke into hub and angle spoke clockwise, crossing over 4 outer row spokes. Place spoke into appropriate rim hole. Loosely assemble the spoke nipples.
10. See Figure 8. Install remaining **inner** row spokes. Loosely assemble the spoke nipples.
11. Tighten spoke nipples to 19-35 **in-lbs** (2.2-4 Nm).

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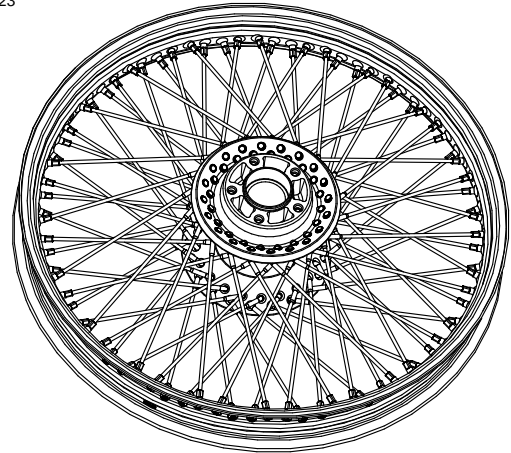
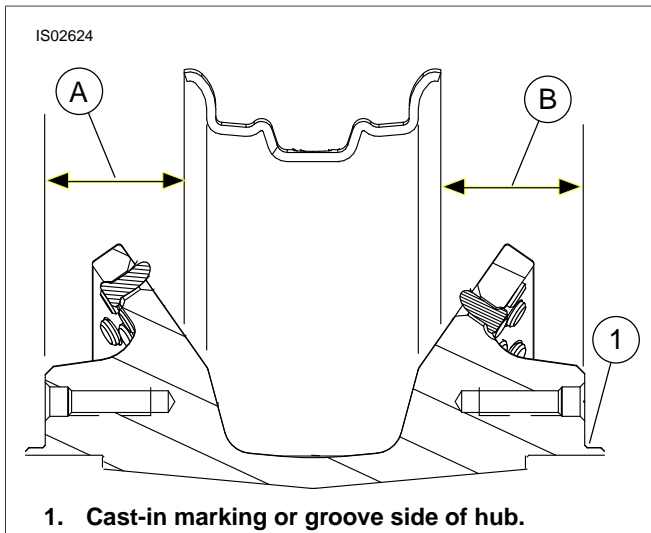


Figure 8. Remaining Inner Spoke Installation

## TRUING LACED WHEELS

The rim must be trued both laterally and radially. If new bearings were installed, wheels may be trued with only the bearings and center spacer installed. See Figure 9 and Table 2 for the proper offset dimensions for your wheel.



**Figure 9. Offset Dimension**

**Table 2. Wheel Offset Dimensions**

Kit Number	"A"	"B"
42959-08	1.29 inch (33.6 mm)	1.13 inch (28.6 mm)
42962-08	1.41 inch (35.7 mm)	1.05 inch (26.6 mm)
40750-08	1.86 inch (47.3 mm)	1.05 inch (26.6 mm)

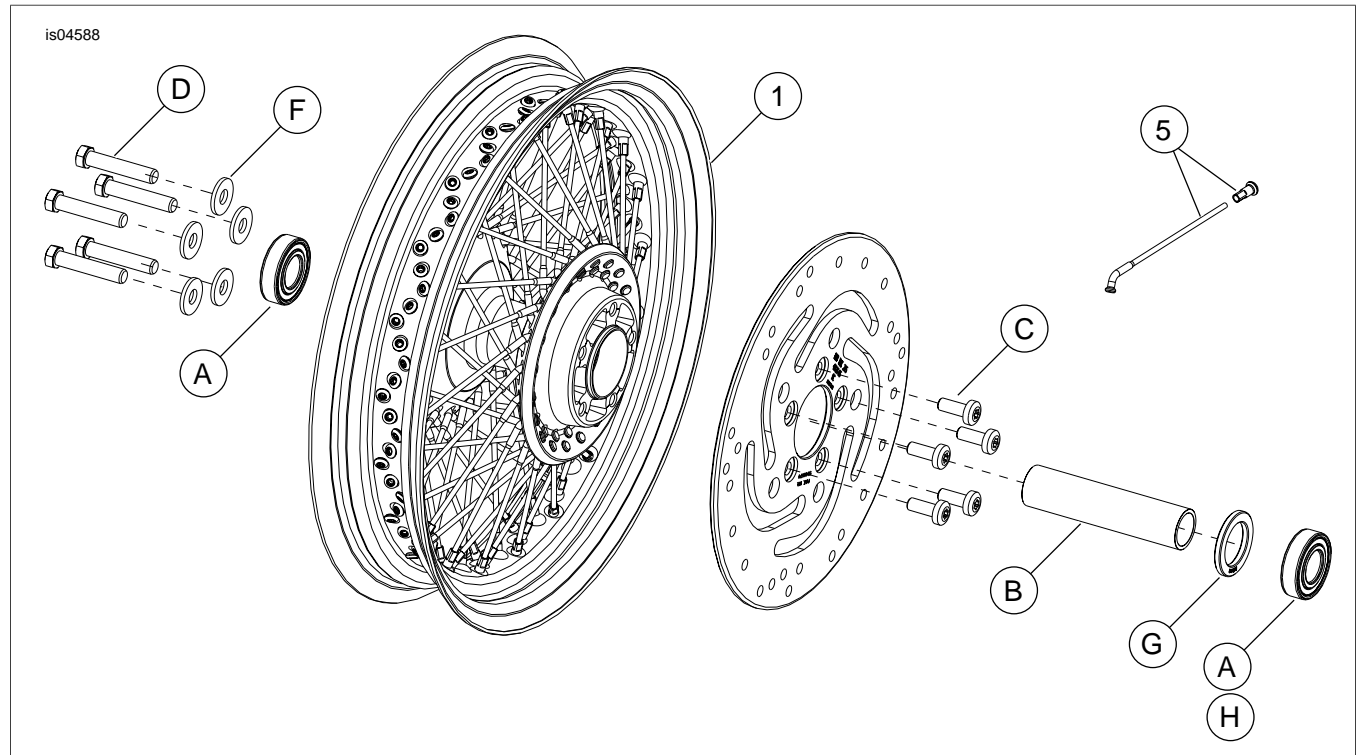
See TRUING LACED WHEELS the Service Manual for your model motorcycle.

## MAINTENANCE AND CLEANING

Chrome parts must be maintained regularly to ensure that they keep their original shine and luster.

1. Clean heavily-soiled wheel surfaces using Harley-Davidson Wheel and Tire Cleaner applied with the Harley Wheel and Spoke Brush.
2. Thoroughly clean chrome with a good quality chrome cleaner, such as Harley Bright Chrome Cleaner.
3. After cleaning and polishing, seal the finish with a good quality sealer, such as Harley Glaze Polish and Sealant.

# SERVICE PARTS



**Figure 10. Service Parts: 80-Spoke Rear Wheel**

**Table 3. Wheel Assembly Service Parts Table**

Item	Description	Part No. 42959-08	Part No. 42962-08	Part No. 40750-08
1	Wheel assembly (consists of items 2, 3, 4 and 5)	Not Sold Separately		
2	Rim strip (not shown)	43147-40	43147-40	43147-40
3	Rim	43087-04	43087-04	43087-04
4	Hub	41137-04A	41137-04A	40752-08
5	Spoke and nipple kit (contains 20 inner spokes, 20 outer spokes and 40 nipples)	41899-05	41899-05	41899-05

**Table 4. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number
42959-08		1	Wheel	Not sold separately
Items requiring separate purchase:				

**Table 4. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2000-2005 Dyna, 2000-2004 XL, 2000-2002 Softail (except FXSTD) and 2000-2001 Touring Models	Kit 43854-08 16x3 inch Rear Wheel	A	Bearing (2)	9267	
		B	Sleeve, bearing spacer	43608-00	
		C	Disc screw (5)	43567-92	
		D	Sprocket screw (5) (Dyna and Softail models)	3737A	
			Sprocket screw (5) (XL and Touring models)	3899	
		F	Washer (5)	6516HW	
		NOTE: Discard the following components which are provided with this installation kit, but are not required for this fitment.			
			Sprocket screw (5)	3109	
			Sleeve, bearing spacer	43618-06	
			Sleeve, bearing spacer	43618-07	
			Valve stem	43206-01	
			Valve stem	43157-83A	
		2002-2007 Touring and 2005-2007 XL Models	Kit 43861-08 16x3 inch Rear Wheel	A	Bearing (2)
B	Sleeve, bearing spacer			43517-00	
C	Disc screw (5)			43567-92	
D	Sprocket screw (5) (2004-2006 Touring models)			3737A	
	Sprocket screw (5) (2007 Touring models)			3109	
	Sprocket screw (5) (XL and 2002-2003 Touring models)			3899	
F	Washer (5) (XL and 2006 and earlier Touring models)			6516HW	
NOTE: Discard the following components which are provided with this installation kit, but are not required for this fitment.					
	Valve stem			43157-83A	
	Valve stem			43206-01	
	Sprocket washer (5)			7039	
	Sprocket bolt (5)			4552	
	Sprocket bolt (5)			40439-01	
	Sprocket screw (5)	3873			
	Sleeve, bearing spacer	43704-01			
2008 and later Touring (without ABS) and 2008 and later XL Models	Kit 43878-08 16x3 inch Rear Wheel	A	Bearing (2)	9276	
		B	Sleeve, bearing spacer	41900-08	
		C	Disc screw (5)	43567-92	
		D	Sprocket screw (5) (Touring models)	3814	
			Sprocket screw (5) (XL models)	3899	
		F	Washer (5) (XL models)	6516HW	
		G	Shim, bearing (install under primary bearing)	43904-08	
		NOTE: Discard the following components which are provided with this installation kit, but are not required for this fitment.			
			Valve stem	43157-83A	
			Valve stem	43206-01	
	Sprocket screw (5)	3109			
	Sleeve, bearing spacer	41696-08			

**Table 4. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2008 and later Touring Models with ABS	Kit 41453-08 16x3 inch Rear Wheel	A	Bearing	9276	
		B	Sleeve, bearing spacer	41900-08	
		C	Disc screw (5)	43567-92	
		D	Sprocket screw (5)	3814	
		G	Shim, bearing (install under primary bearing)	43904-08	
		H	Bearing, ABS <b>(Red side of bearing must face inward)</b>	9252	
		NOTE: Discard the following components which are provided with this installation kit, but are not required for this fitment.			
			Valve stem	43157-83A	
			Valve stem	43206-01	
			Sprocket screw (5)	7039	
			Sleeve, bearing spacer	43704-08	
			Shim, bearing	41447-08	
			Screw, TORX®	4552	

**Table 5. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
40750-08		1	Wheel	Not sold separately	
Items requiring separate purchase:					
2008 and later FLSTN and FLSTC	Kit 43878-08 16x3 inch Rear Wheel	A	Bearing (2)	9267	
		B	Sleeve, bearing spacer	41696-08	
		C	Disc screw (5)	43567-92	
		D	Sprocket screw (5)	3109	
		NOTE: Discard the following components which are provided with this installation kit, but are not required for this fitment.			
			Valve stem	43157-83A	
			Valve stem	43206-01	
			Sprocket screw (5)	3899	
			Sprocket screw (5)	3814	
			Sleeve, bearing spacer	41900-08	
			Shim, bearing	43904-08	
	Washer (5)	6516HW			