



# INSTRUCTIONS

-J04065

REV. 2008-10-03

## FRONT THUNDERSTAR WHEELS

### GENERAL

#### Kit Number

43573-08, 43575-08, 43703-08, 43978-07, 43771-07, 43609-07, 44323-07, 44322-07, 44282-07, 43975-07, 43773-07, 43602-07, 40943-09, 40966-09, 40996-09

#### Models

For model fitment information, 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

These kits include the custom wheel, and depending on the kit, may also include a hub cap and hub plate.

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-A)
- Wheel Installation Kit (See 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 front wheel assembly. Save axle, axle nut, brake disc, and wheel spacers for kit installation. Refer to FRONT WHEEL in Service Manual.

**For FLSTC and FLSTN Models:** Discard moon-style hub cap.

**For FXSTD Models:** Discard the tapered right side wheel spacer.

### 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)**

2. See Figure 1. Install valve stem assembly (D) on wheel. Refer to TIRES in Service Manual.
3. Assemble wheel installation kit components and brake disc(s) to wheel, using the appropriate service parts table. Refer to FRONT WHEEL in Service Manual.

#### NOTES

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

*For Kits 43573-08, 43575-08, 43703-08, 43978-07, 43771-07, 43609-07, 40943-09, 40966-09 and 40996-09:*

- *The left side of the wheel has a machined groove in the hub face and/or DOT markings to identify it as the brake disc and primary bearing side.*
- *Install the wheel so that the valve stem is on the right side of the motorcycle.*

*For Kits 44323-07, 44322-07 and 44282-07:*

- *Install the wheel so that the hub markings are on the left side of the motorcycle. The left side of the wheel has a machined groove in the hub face and hub markings to identify it as the primary bearing side.*
- *These kits include one or two hub plates (Part Number 43985-00) to install between the brake disc and the wheel and a chrome hub cap (Part Number 43986-00) to install on the wheel opposite the brake disc side.*

*Hub covers must be installed to prevent water intrusion, which could cause an imbalance condition.*

**Dual brake disc models:** *Install one stainless steel hub plate (3) between each brake disc and wheel hub. Discard chrome hub cap (2). Install brake discs according to Service Manual procedures.*

**Single brake disc models:** *Install one stainless steel hub plate (3) between the brake disc and wheel hub. Install the brake disc according to Service Manual procedures.*

Install the chrome hub cap (2) on the side opposite the brake disc. Discard extra stainless steel hub plate (3).

- The gross axle weight ratings is unaffected by the installation of this wheel on a vehicle equipped with a 21-inch wheel.

For Kits 43975-07, 43773-07, and 43602-07:

- The wheel has a machined groove in the hub face to identify the right side.
- For 2007 and later FX Softail Models and 2008 and later FXDWG: The left side of the wheel is the primary bearing side. For all other models the right side of the wheel is the primary bearing side.
- For Kit 43602-07: An arrow is engraved into the right side hub to indicate the direction of rotation.
- For Kits 43975-07 and 43773-07: An arrow is cast between the spokes on the right side to indicate the direction of rotation.
- These kits include one or two hub plates (Part Number 43985-00) to install between the brake disc and the wheel and a chrome hub cap (Part Number 43986-00) to install on the wheel opposite the brake-disc side.

Hub covers must be installed to prevent water intrusion, which could cause an imbalance condition.

**Dual brake disc models:** Install one stainless steel hub plate (3) between each brake disc and wheel hub. Discard chrome hub cap (2). Install brake discs according to Service Manual procedures.

**Single brake disc models:** Install one stainless steel hub plate (3) between the brake disc and wheel hub. Install the brake disc according to Service Manual procedures. Install the chrome hub cap (2) on the side opposite the brake disc. Discard extra stainless steel hub plate (3).

4. Install wheel assembly parts from the appropriate Service Parts table for this fitment and stock brake disc. Discard parts from the installation kit that are not required. Refer to FRONT WHEEL in Service Manual.
5. **For FLSTC and FLSTN Models:** Install wheel kit and right side wheel spacer provided in kit installation.  
**For FXSTD Models:** Install wheel kit, stock left wheel spacer and right side wheel spacer from installation kit in place of the tapered right side wheel spacer discarded in Step 1. Refer to FRONT WHEEL in Service Manual.  
**For FXSTS Models:** Install the left side wheel spacer provided in the kit between the stock left wheel spacer and the left fork.  
**All other models:** Install wheel spacers previously removed.
6. Install front wheel (1), stock axle and stock axle nut. Refer to FRONT WHEEL in Service Manual.

## MAINTENANCE AND CLEANING

### NOTE

This wheel assembly includes plugs that have been installed in the openings between the brake disc mounting holes on one side of the wheel. Missing or damaged plugs can be replaced using the Wheel Plug Kit (44459-04).

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

1. Clean heavily-soiled wheel surfaces using Harley-Davidson Wheel and Tire Cleaner, applied with 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

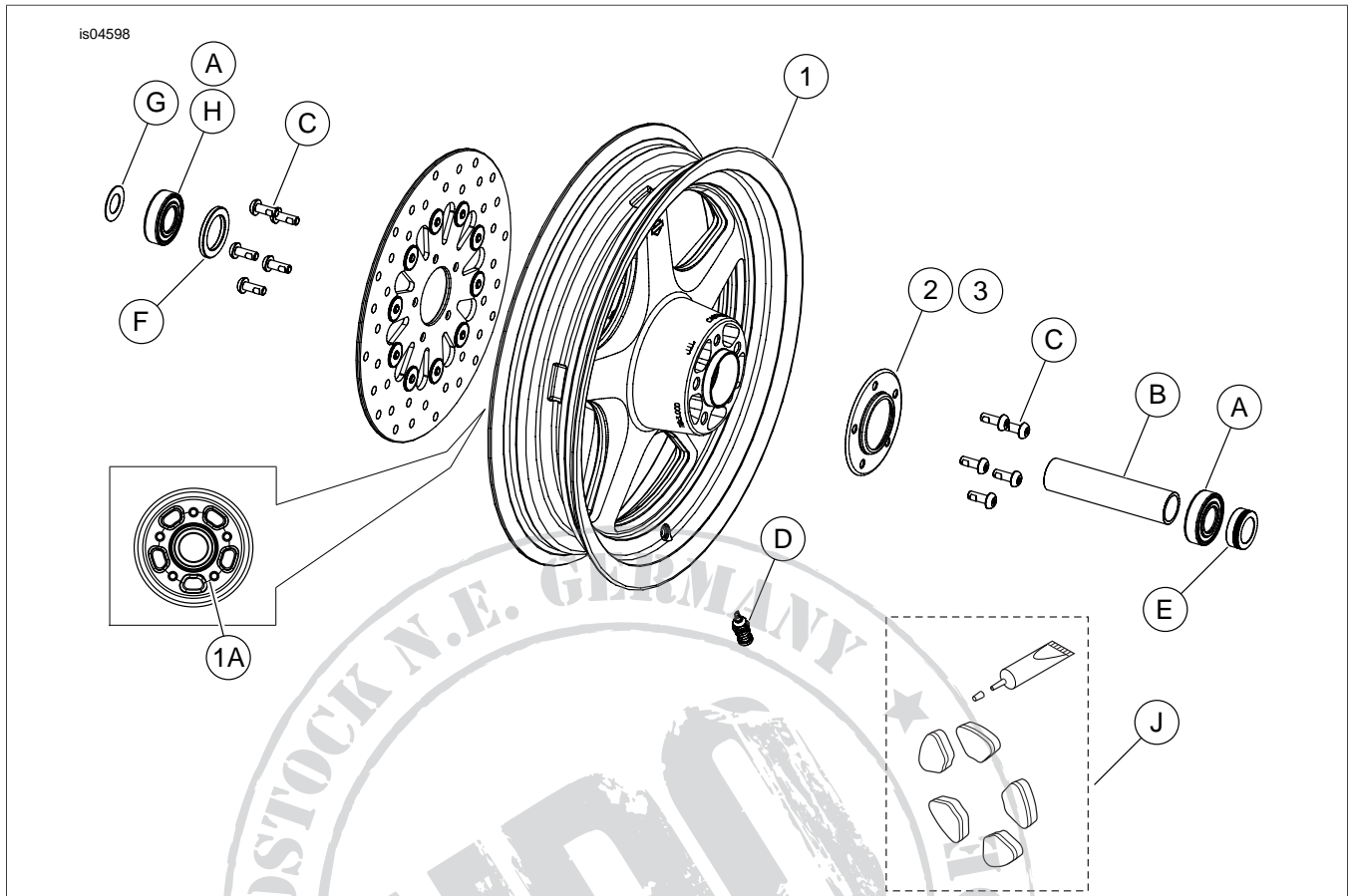


Figure 1. Service Parts: FRONT THUNDERSTAR WHEEL KITS (21-inch wheel shown)

Table 1. Service Parts Table

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
43573-08, 43575-08, 43703-08		1	Wheel	Not sold separately	
		J	Plug Service Kit	44459-04	
Items requiring separate purchase:					
2000-2007 Touring Models	43848-08 Front 16x3 inch Fitment	A	Bearing (2)	9247	
		B	Sleeve, bearing spacer	43517-00	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		Discard the following components which are provided with this installation kit but are not required for this fitment.			
			Sleeve, bearing spacer	43633-06	
			Sleeve, bearing spacer	43641-01	
			Sleeve, bearing spacer	43755-04	
			Screw, TORX® (10)	3762M	
			Washer (10)	6966M	
	Valve stem	43206-01			

**Table 1. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2008 Touring Models without ABS and 2009 FLHRC	43851-08 Front 16x3 inch Fitment	A	Bearing (2)	9276	
		B	Sleeve, bearing spacer	41900-08	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		F	Shim, bearing (install under primary bearing)	43903-08	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
	Shim, bearing			43315-07	
	Sleeve, bearing spacer			41349-07	
	Spacer, axle			41695-07	
	Spacer, axle			41504-07	
	Valve stem			43206-01	
	2008 Touring Models with ABS and 2009 FLHRC	41454-08 Front 16x3 inch Fitment	A	Bearing	9276
			B	Sleeve, bearing spacer	41900-08
C			Screws (10)	3655A	
D			Valve stem	43157-83A	
F			Shim, bearing (install under primary bearing)	43903-08	
H			Bearing, ABS (primary bearing) <b>(Red side must face inward)</b>	9252	
Discard the following components which are provided with this installation kit, but are not required for this fitment.					
Shim, bearing			41450-08		
Sleeve, bearing spacer			41748-08		
Screw, TORX (10)			3762M		
Washers (10)			6966M		
Valve stem			43206-01		

**Table 2. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number
43978-07, 43771-07, 43609-07		1	Wheel	Not sold separately
		2	Hub cap	43986-00
		J	Plug service kit	44459-04
		Items requiring separate purchase:		

**Table 2. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2000-2006 FLST, FLSTC, FLSTF and FLSTN (Not 2006 FLSTFSE2) <ul style="list-style-type: none"> <li>For FLSTC and FLSTN Models: Wheel spacer (43617-00A) is included to replace the moon-style hub cap.</li> </ul>	43833-07 Front 16x3 Fitment	A	Bearing (2)	9267	
		B	Sleeve, bearing spacer	43608-00	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		E	Spacer, axle (FLSTC and FLSTN only)	43617-00A	
		Discard the following components which are provided with this installation kit but are not required for this fitment.			
		Sleeve, bearing spacer			43536-00
		Sleeve, bearing spacer			43613-00
		Valve stem			43206-01
		Spacer, axle			43313-98
		Spacer, axle			40910-00A
2007 and later FLSTC and FLSTN <ul style="list-style-type: none"> <li>For FLSTC and FLSTN Models: Wheel spacer (41695-07) is included to replace the moon-style hub cap.</li> </ul>	43851-08 Front 16x3 Fitment	A	Bearing (2)	9276	
		B	Sleeve, bearing spacer	41349-07	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		E	Spacer, axle (FLSTN and FLSTC only)	41695-07	
		F	Shim, bearing (install under primary [left side] bearing)	43315-07	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
		Shim, bearing			43903-08
		Sleeve, bearing spacer			41900-08
		Spacer, axle			41504-07
		Valve stem			43206-01

**Table 3. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
44323-07, 44282-07, 44322-07		1	Wheel	Not Sold Separately	
		2	Hub cap	43986-00	
		3	Hub plate (2)	43985-00	
		Items requiring separate purchase:			
2000-2007 XL and 2000-2003 Dyna models (except FXDWG)	43833-07 Front 19Nx2.5 inch Fitment	A	Bearing (2)	9267	
		B	Sleeve, bearing spacer	43613-00	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		Discard the following components which are provided with this installation kit but are not required for this fitment.			
		Sleeve, bearing spacer			43536-00
		Sleeve, bearing spacer			43608-00
		Valve stem			43206-01
		Spacer, axle			43313-98
		Spacer, axle			40910-00A
Spacer, axle			43617-00A		

**Table 3. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2004-2005 Dyna models (except FXDWG)	43848-08 Front 19Nx2.5 inch Fitment	A	Bearing (2)	9247	
		B	Sleeve, bearing spacer	43755-04	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
		Sleeve, bearing spacer			43517-00
		Sleeve, bearing spacer			43633-06
		Sleeve, bearing spacer			43641-01
		Screws, TORX® (10)			3762M
		Washers (10)			6966M
2008 and later XL	41452-08 Front 19Nx2.5 inch Fitment	A	Bearing (2)	9276	
		B	Sleeve, bearing spacer	43906-08	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		F	Shim, bearing (install under primary bearing)	43315-07	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
		Valve stem			43206-01

**Table 4. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
43975-07, 43602-07, 43773-07		1	Wheel	Not Sold Separately	
		2	Hub cap	43986-00	
		3	Hub plate	43985-00	
Items requiring separate purchase:					
2000-2006 FX Softail (except FXSTDSE) and 2000-2005 FXDWG <ul style="list-style-type: none"> <li>For FXSTS Models: Install spacer (43313-98) on the left side of the vehicle between the stock wheel spacer and fork.</li> <li>For FXSTD Models: Wheel spacer (40910-00A) is included to replace the tapered spacer.</li> </ul>	43833-07 Front 21Wx2.15 inch Fitment	A	Bearing (2)	9267	
		B	Sleeve, bearing spacer	43536-00	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		E	Spacer, axle (FXSTD only)	40910-00A	
		G	Spacer, axle (FXSTS only)	43313-98	
		Discard the following components which are provided with this installation kit but are not required for this fitment.			
		Sleeve, bearing spacer			43608-00
		Sleeve, bearing spacer			43613-00
		Valve stem			43206-01
Spacer, axle			43617-00A		

**Table 4. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2006-2007 FXDWG	43848-08 Front 21x2.15 inch Fitment	A	Bearing (2)	9247	
		B	Sleeve, bearing spacer	43633-06	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
		Sleeve, bearing spacer			43517-00
		Sleeve, bearing spacer			43755-04
		Sleeve, bearing spacer			43641-01
		Screws, TORX® (10)			3762M
		Washers (10)			6966M
		Valve stem			43206-01
2007 and later FX Softail and 2008 and later FXDWG <ul style="list-style-type: none"> <li>For 2007 and later FXSTD Models: Wheel spacer (41504-07) is included to replace the tapered spacer.</li> <li>The left side of the wheel is the primary bearing side for this fitment.</li> </ul>	43851-08 Front 21x2.15 inch Fitment	A	Bearing (2)	9276	
		B	Sleeve, bearing spacer	41349-07	
		C	Screws (10)	3655A	
		D	Valve stem	43157-83A	
		E	Spacer, axle (FXSTD only)	41504-07	
		F	Shim, bearing (install under primary [left side] bearing)	43315-07	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
		Shim, bearing			43903-08
		Sleeve, bearing spacer			41900-08
		Spacer, axle			41695-07
		Valve stem			43206-01

**Table 5. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
40943-09, 40966-09, 40996-09		1	Wheel	Not Sold Separately	
2009 and later Touring Models (non-ABS) (except FLHTCUTG)	43851-08 Front 17x3 inch Fitment	A	Bearing (2)	9276	
		B	Sleeve, bearing spacer	41900-08	
		C	Screws (10)	3655A	
		D	Valve stem (long)	43206-01	
		Discard the following components which are provided with this installation kit, but are not required for this fitment.			
		Shim, bearing			43903-08
		Shim, bearing			43315-07
		Sleeve, bearing spacer			41349-07
		Spacer, axle			41695-07
		Spacer, axle			41504-07
		Valve stem (short)			43157-83A

**Table 5. Service Parts Table**

Kit	Installation Kit	Item	Description (Quantity)	Part Number	
2009 and later Touring Models (ABS) (except FLHTCUTG)	41454-08 Front 17x3 inch Fitment	A	Bearing	9276	
		B	Sleeve, bearing spacer	41900-08	
		C	Screws (10)	3655A	
		D	Valve stem (long)	43206-01	
		F	Bearing, ABS (primary bearing) <b>(Red side must face inward)</b>	9252	
	Discard the following components which are provided with this installation kit, but are not required for this fitment.				
		Shim, bearing		43903-08	
		Shim, bearing		41450-08	
		Sleeve, bearing spacer		41748-08	
		Screw, TORX (10)		3762M	
	Washers (10)		6966M		
	Valve stem (short)		43157-83A		

