



# INSTRUCTIONS

-J04069

REV. 2010-10-30

## REAR THUNDERSTAR WHEELS

### GENERAL

#### **⚠ WARNING**

Install only wheels and installation kits approved for your model motorcycle. Contact a Harley-Davidson dealer to verify fitment. Mismatching wheels and installation kits or installing wheels not approved for your model can cause loss of control, which could result in death or serious injury. (00610c)

#### **Kit Number**

40831-08, 40833-08, 40835-08, 43649-08, 43780-08, 43794-08, 43795-08, 43979-08, 44544-08, 40881-09, 40880-09, 40885-09

#### **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).

#### **Kit Contents**

See Figure 1 and Service Parts Tables.

#### **Additional Parts Required**

These kits include the custom wheel only.

Proper installation of these kits require the separate purchase of the following parts which are available at a Harley-Davidson dealer.

- Wheel Installation Kit (See Table 3 through Table 8 to determine required installation kit.)
- Brake Disc Screws (See Table 1 to determine proper hardware.)
- Rear Sprocket Screws (See Table 1 to determine proper hardware.)
- Wheel Bearing Remover and Installer (94134-09)

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)
- Harley® Preserve Bare Aluminum Protectant (99845-07)

#### **⚠ 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.*

**Table 1. Rear Disc and Sprocket Hardware Fitment**

Hardware	Fitment
<b>Rear Disc Screws</b> (select stock or chrome hardware)	
5 Stock disc screws (43567-92)	All models
Chrome screw kit (46647-05) includes 5 screws	All models
<b>Rear Sprocket Screws</b> (select stock or chrome hardware)	
5 Sprocket screw, stock (3109)	2007 and later Dyna and Softail, 2007 Touring
Chrome screw kit (94773-07) includes 5 screws and washers	2007 and later Dyna and Softail
5 Sprocket screw, stock (3737A)	2000-2005 Dyna, 2000-2006 Softail, 2004-2006 Touring
Chrome screw kit (94773-00A) includes 5 screws and washers	2000-2005 Dyna, 2000-2006 Softail
5 Sprocket screw, stock (3814)	2008 Touring
5 Sprocket screw, stock (3873)	2006 Dyna
5 Sprocket screw, stock (3899)	2000-2003 Touring, 2001 and later Sportster (except Japanese models)
5 Sprocket screw, stock (40439-01)	2002-2006 VRSC and 2007 VRSCR models
5 Sprocket screw, stock (4552)	2007 and later VRSC models (except VRSCR and VRSCSE models)
<b>Rear Sprocket Washers</b>	
5 Sprocket washer, stock (6516HW)	2006 and earlier Dyna, Softail and Touring and 2000 and later Sportster models (except Japanese models)
5 Sprocket washer, stock (7039)	2002 and later VRSC

## INSTALLATION

1. Remove existing rear wheel assembly. Save axle, axle nut, brake disc and wheel spacers for kit installation. Refer to the service manual.

### NOTES

*Prior to removing or installing the wheel, the rear brake caliper must be removed.*

*The cotter pin or spring clip for the axle nut must be replaced. They are available for purchase from a Harley-Davidson dealer.*

### NOTE

*For kits 43649-08, 43780-08, 43979-08, 40881-09, 40880-09, and 40885-09 install short valve stem (43157-83A) included in the installation kit.*

*For kits 43794-08, 43795-08, 44544-08, 40831-08, 40833-08, and 40835-08 install long valve stem (43206-01) included in the installation kit.*

2. See Figure 1. Install valve stem assembly (H or I) on wheel. Refer to the service manual.

### NOTICE

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

### NOTICE

**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)**

3. Assemble wheel installation kit components, stock brake disc, and sprocket to wheel using the appropriate service parts table. Refer to the service manual.

### NOTES

*Install the primary bearing first, following the instructions in the service manual and using the WHEEL BEARING REMOVER/INSTALLER.*

*The machined grooves in the hub face indicate the primary bearing side.*

4. Install rear wheel (1), stock axle, and stock spacers to motorcycle. Refer to the 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 and in the compensator bowl of the 16x5 inch wheel. Missing or damaged plugs can be replaced using Wheel Plug Kit (44459-04) or individual plug (43871-09 - 16x5 inch wheel).*

Chrome parts must be maintained regularly so 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

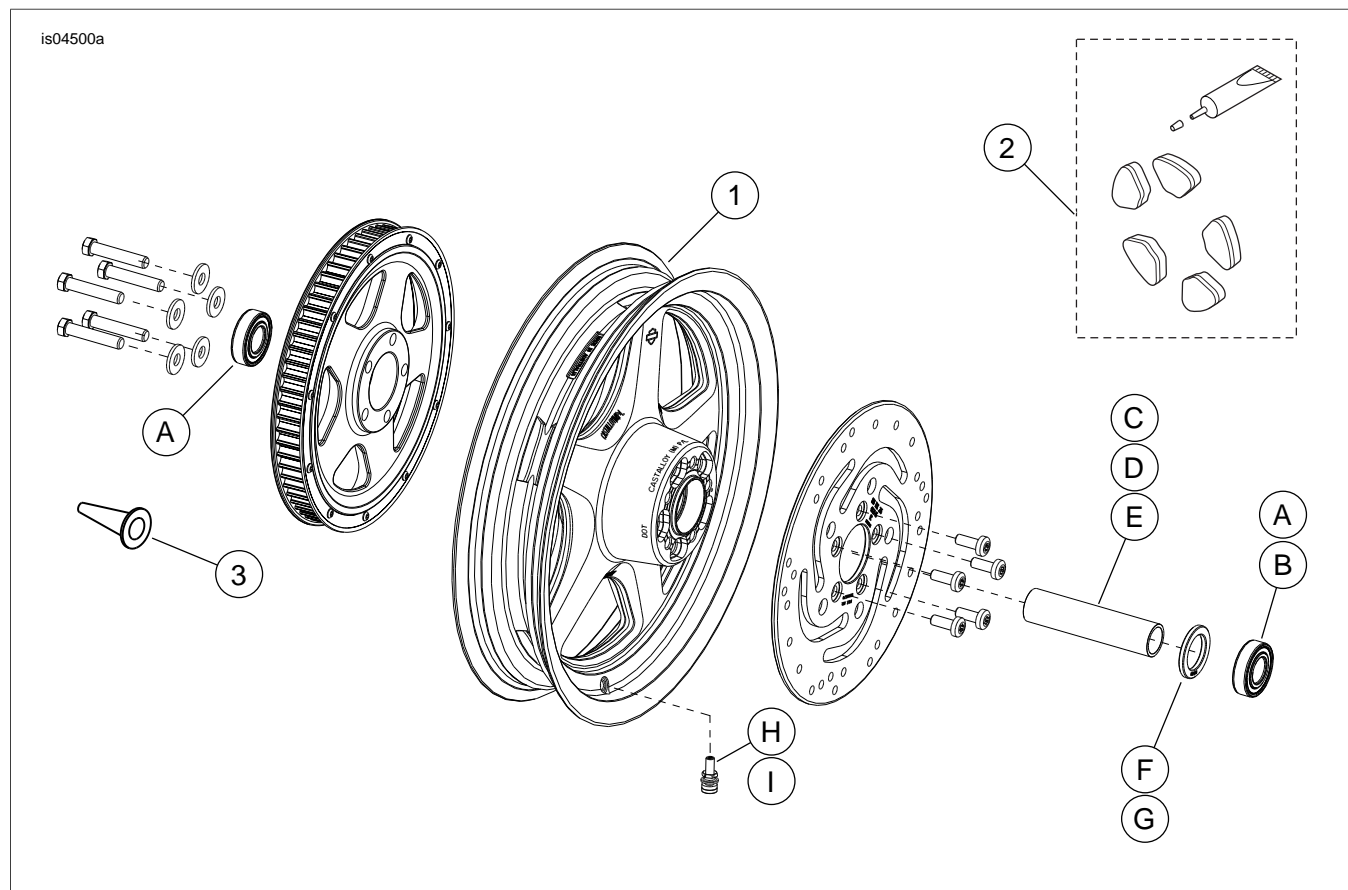


Figure 1. Service Parts: Rear Thunderstar Wheels

Table 2. Service Parts and Wheel Kit Contents

Kit	Item	Description (Quantity)	Part Number
43794-08, 43795-08, 44544-08, 43649-08, 43780-08, 43979-08, 40831-08, 40833-08, 40835-08	1	Wheel	Not Sold Separately
	2	Plug service kit	44459-04
40880-09, 40881-09, 40885-09	1	Wheel	Not Sold Separately
	3	Plug	43871-09

Table 3. REAR 3/4 Inch Bearing Wheel Installation Kit (43854-08A)

REAR 3/4 Inch Bearing Wheel Installation Kit (43854-08A)		Item (Quantity Used and Description)					
Fitment	Wheel Size	A	C	D	E	H	I
2007 FLST, FLSTN and FLSTC	16 x 3.0 in	2	1	0	0	*	*
2003-2006 FLST, FLSTN and FLSTC; 2003-2006 FLSTF (except FLSTFSE2); 2003-2005 FXST, FXSTB and FXSTS	16 x 3.0 in	2	1	0	0	*	*
2000-2005 Dyna; 2000-2002 Softail (except FXSTD)	16 x 3.0 in	2	1	0	0	*	*
2000-2004 XL; 2000-2001 FLT	16 x 3.0 in	2	1	0	0	*	*
2000-2007 FXSTD	17 x 4.5 in	2	1	0	0	*	*
2006 FXST, FXSTB, FXSTS and FLSTFSEi	17 x 6.0 in	2	0	1	0	*	*

**Table 3. REAR 3/4 Inch Bearing Wheel Installation Kit (43854-08A)**

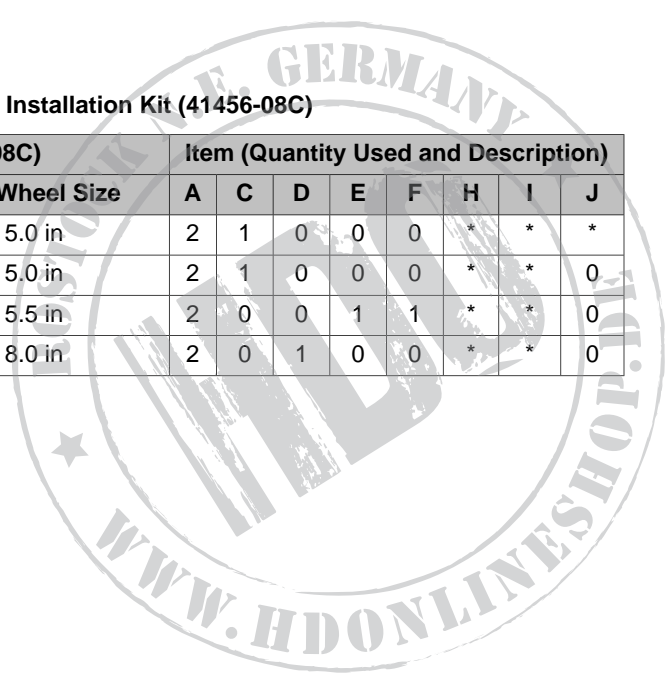
REAR 3/4 Inch Bearing Wheel Installation Kit (43854-08A)		Item (Quantity Used and Description)					
Fitment	Wheel Size	A	C	D	E	H	I
2007 FLSTF, FXST, FXSTB and FXSTC	17 x 6.0 in	2	0	0	1	*	*
Installation kits are designed to work with many different wheel styles and fitments. Contact a Harley-Davidson dealer to verify that the wheel and installation kits are both designed and approved for the motorcycle they are being installed on. NOTES: * See NOTE above valve installation step in INSTALLATION to determine which valve stem to use for your particular kit. Discard other valve stem(s).		A	Bearing, regular (2)		9267		
		C	Axle sleeve		43608-00		
		D	Axle sleeve		43618-06		
		E	Axle sleeve		43618-07		
		H	Valve stem, short		43157-83A		
		I	Valve stem, long		43206-01		

**Table 4. REAR 1 Inch Bearing Wheel Installation Kit (43861-08A)**

REAR 1 Inch Bearing Wheel Installation Kit (43861-08A)		Item (Quantity Used and Description)				
Fitment	Wheel Size	A	C	D	H	I
2002-2007 FLT; 2005-2007 XL	16 x 3.0 in	2	1	0	*	*
2006-2007 Dyna	17 x 4.5 in	2	1	0	*	*
2002-2006 VRSC; 2007 VRSCD and VRSCR	18 x 5.5 in	2	0	1	*	*
2006 VRSCSEi; 2007 VRSCAW, VRSCX and VRSCDX	18 x 8.0 in	2	0	1	*	*
Installation kits are designed to work with many different wheel styles and fitments. Contact a Harley-Davidson dealer to verify that the wheel and installation kits are both designed and approved for the motorcycle they are being installed on. NOTES: * See NOTE above valve installation step in INSTALLATION to determine which valve stem to use for your particular kit. Discard other valve stem(s).		A	Bearing, regular		9247	
		C	Axle sleeve		43517-00	
		D	Axle sleeve		43704-01	
		H	Valve stem, short		43157-83A	
		I	Valve stem, long		43206-01	

**Table 5. REAR 25mm Bearing Wheel Installation Kit (41456-08C)**

REAR 25 MM Bearing Wheel Installation Kit (41456-08C)		Item (Quantity Used and Description)								
Fitment	Wheel Size	A	C	D	E	F	H	I	J	
2009 and later FLT without ABS	16 x 5.0 in	2	1	0	0	0	*	*	*	
2009 and later FLT without ABS	18 x 5.0 in	2	1	0	0	0	*	*	0	
2008 VRSCD without ABS	18 x 5.5 in	2	0	0	1	1	*	*	0	
2008 and later FXCW and FXCWC without ABS	18 x 8.0 in	2	0	1	0	0	*	*	0	



**Table 5. REAR 25mm Bearing Wheel Installation Kit (41456-08C)**

REAR 25 MM Bearing Wheel Installation Kit (41456-08C)		Item (Quantity Used and Description)								
Fitment	Wheel Size	A	C	D	E	F	H	I	J	
2008 and later VRSCAW, VRSCDX and VRSCF without ABS	18 x 8.0 in	2	0	0	1	**	*	*	0	
Installation kits are designed to work with many different wheel styles and fitments. Contact a Harley-Davidson dealer to verify that the wheel and installation kits are both designed and approved for the motorcycle they are being installed on. NOTES: * See NOTE above valve installation step in INSTALLATION to determine which valve stem to use for your particular kit. Discard other valve stem(s). ** See INSTALLATION to determine if shim is required. *** Bearing shim installed under primary bearing.		A	Bearing, regular (2)						9276	
		C	Axle sleeve						41349-07	
		D	Axle sleeve						41358-08	
		E	Axle sleeve						43704-08	
		F	Bearing shim***						41447-08	
		H	Valve stem, short						43157-83A	
		I	Valve stem, long						43206-01	
		J	Valve stem, pull thru						40999-87	

**Table 6. REAR 25mm Bearing Wheel Installation Kit (43878-08B)**

REAR 25 MM Bearing Wheel Installation Kit (43878-08B)		Item (Quantity Used and Description)								
Fitment	Wheel Size	A	C	D	F	H	I	J		
2008 and later FLSTN, FLSTC and FXS without ABS	16 x 3.0 in	2	1	0	0	*	*	0		
2008 FLT without ABS	16 x 3.0 in	2	0	1	1	*	*	0		
2008 and later XL (except 2011 and later XL883L)	16 x 3.0 in	2	0	1	**	*	*	*		
2008 and later FXSTB, FXSTC, FLSTF, FLSTSB and FLSTFB without ABS	17 x 6.0 in	2	1	0	0	*	*	0		
2008 and later FXSTB, FXSTC, FLSTF, FLSTSB and FLSTFB without ABS	18 x 6.0 in	2	1	0	0	*	*	0		
Installation kits are designed to work with many different wheel styles and fitments. Contact a Harley-Davidson dealer to verify that the wheel and installation kits are both designed and approved for the motorcycle they are being installed on. NOTES: * See NOTE above valve installation step in INSTALLATION to determine which valve stem to use for your particular kit. Discard other valve stem(s). ** See NOTES for your wheel kit above the wheel assembly step in INSTALLATION to determine which bearing shim to use for your particular wheel kit and fitment. *** Bearing shim installed under primary bearing.		A	Bearing, regular (2)						9276	
		C	Axle sleeve						41696-08	
		D	Axle sleeve						41900-08	
		F	Bearing shim***						43904-08	
		H	Valve stem, short						43157-83A	
		I	Valve stem, long						43206-01	
		J	Valve stem, pull thru						40999-87	

**Table 7. REAR 25 MM Bearing ABS Wheel Installation Kit (41453-08C)**

REAR 25 MM Bearing ABS Wheel Installation Kit (41453-08C)		Item (Quantity Used and Description)										
Fitment	Wheel Size	A	B	C	D	E	F	G	H	I	J	
2008 FLT with ABS	16 x 3.0 in	1	1	0	1	0	0	1	*	*	0	
2009 and later FLT with ABS	16 x 5.0 in	1	1	1	0	0	0	0	*	*	*	
2009 and later FLT with ABS	18 x 5.0 in	1	1	1	0	0	0	0	*	*	0	
2008 VRSCDa with ABS	18 x 5.5 in	1	1	0	0	1	1	0	*	*	0	

**Table 7. REAR 25 MM Bearing ABS Wheel Installation Kit (41453-08C)**

REAR 25 MM Bearing ABS Wheel Installation Kit (41453-08C)		Item (Quantity Used and Description)									
Fitment	Wheel Size	A	B	C	D	E	F	G	H	I	J
2008 and later VRSCAWa, VRSCDXa, VRSCXa and VRSCFa with ABS	18 x 8.0 in	1	1	0	0	1	1	0	*	*	0
Installation kits are designed to work with many different wheel styles and fitments. Contact a Harley-Davidson dealer to verify that the wheel and installation kits are both designed and approved for the motorcycle they are being installed on. NOTES: * See <i>NOTE</i> above valve installation step in <i>INSTALLATION</i> to determine which valve stem to use for your particular kit. Discard other valve stem(s). ** Primary bearing. Bearing must be installed with red side facing the wheel. *** Bearing shim installed under primary bearing.		A	Bearing, regular							9276	
		B	Bearing, ABS**							9252	
		C	Axle sleeve							41349-07	
		D	Axle sleeve							41900-08	
		E	Axle sleeve							43704-08	
		F	Bearing shim***							41447-08	
		G	Bearing shim***							43904-08	
		H	Valve stem, short							43157-83A	
		I	Valve stem, long							43206-01	
		J	Valve stem, pull thru							40999-87	

**Table 8. REAR 25 MM Bearing ABS Wheel Installation Kit (43077-11)**

REAR 25 MM Bearing ABS Wheel Installation Kit (43077-11)		Item (Quantity Used and Description)						
Fitment	Wheel Size	A	B	C	D	H	I	
2011 and later FLSTN, FLSTC and FXS with ABS	16 x 3.0 in	1	1	0	1	*	*	
2011 and later FXST, FLSTF and FLSTFB with ABS	17 x 6.0 in	1	1	0	1	*	*	
2011 and later FXST, FLSTF and FLSTFB with ABS	18 x 6.0 in	1	1	0	1	*	*	
2011 and later FXCWC with ABS	18 x 8.0 in	1	1	1	0	*	*	
Installation kits are designed to work with many different wheel styles and fitments. Contact a Harley-Davidson dealer to verify that the wheel and installation kits are both designed and approved for the motorcycle they are being installed on. NOTES: * See <i>NOTE</i> above valve installation step in <i>INSTALLATION</i> to determine which valve stem to use for your particular kit. Discard other valve stem(s). ** Primary bearing. Bearing must be installed with red side facing the wheel.		A	Bearing, regular				9276	
		B	Bearing, ABS**				9252	
		C	Axle sleeve				41358-08	
		D	Axle sleeve				41696-08	
		H	Valve stem, short				43157-83A	
		I	Valve stem, long				43206-01	

