



INSTRUCTIONS

J06577

2021-10-19



KNOCKOUT CUSTOM WHEEL KIT

GENERAL

▲ WARNING

The rider's safety depends upon the correct installation of this kit. Dealer installation is required for vehicles equipped with ABS brakes. Proper installation of this kit requires the use of special tools available only through a Harley-Davidson Dealer. An improperly serviced brake system can adversely affect brake performance, which could result in death or serious injury. (00578b)

▲ 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

43300494 and 43300496

Models

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

Kit Contents

See Figure 6, Figure 7 and Figure 8.

Installation Requirements

Proper installation of this kit requires the following special items.

Front Fork Lowering Requirements:

- Loctite[®] 565 Thread Sealant (99818-97)
- Harley-Davidson[®] Seal Grease (11300005)
- Fork Tube Holder (HD-41177)
- Fork Seal/Bushing Tool (HD-45305)
- Front Fork Oil Level Gauge (HD-59000B)
- Front Fork Spring Compressing Tool (HD-45966)
- Extension Tool (HD-45966-1)

Knockout 21" Front Wheel Requirements:

Accessory hub caps are not compatible with this wheel.

- Wheel Installation Kit NON ABS (41455-08C), With ABS (41454-08B)
- (10) Brake Disc/Hub Cap Screws (3655A) or (2) Chrome Screw kits (46646-05)

- Wheel Bearing Remover and Installer (94134-09)
- Tire: (43100008)
- Rotors: See catalog for approved rotor fitment.
- Fender: See catalog for approved fender fitment.

Knockout 18" Rear Wheel Requirements:

- Wheel Installation Kit NON ABS (41456-08C), With ABS (41453-08C)
- (5) Brake Disc Screws (43567-92 or 46647-05)
- Wheel Bearing Remover and Installer (94134-09)
- Tire: (44006-09)

RECOMMENDED ADDITIONAL PARTS

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)

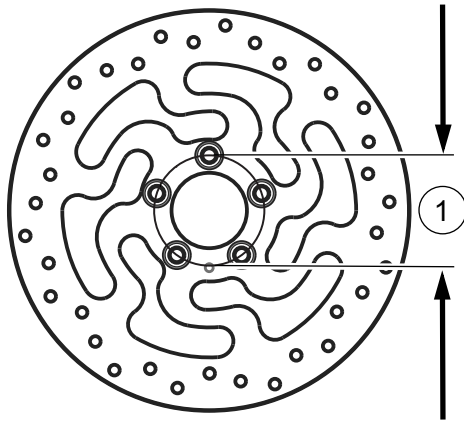
REMOVAL

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.

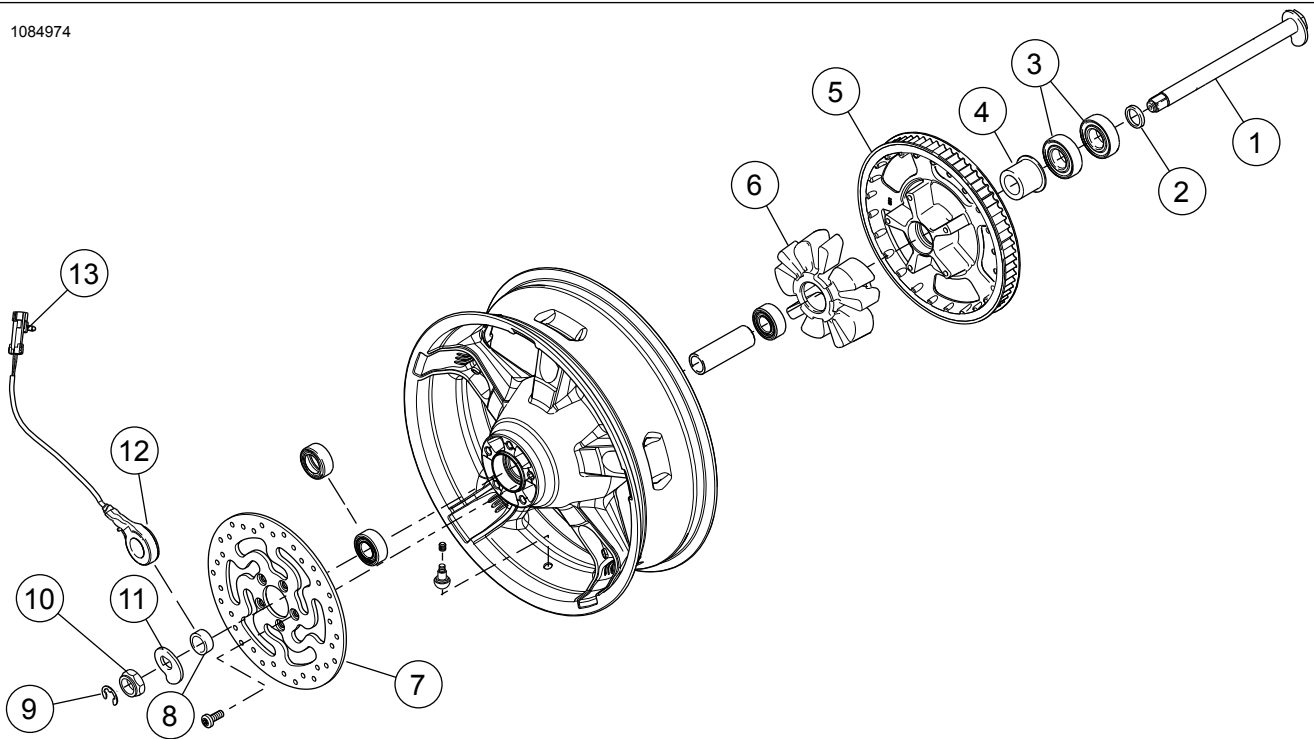
1. See Figure 1. Remove and disassemble existing front wheel assembly. If the front brake disc diameter does not measure 3.25 in., discard the discs. Save axle, axle nut, and wheel spacers for kit installation. See service manual.
2. See the I-sheet that came with new front fender or service manual. Remove front fender.
3. See Figure 2. Remove and disassemble existing rear wheel assembly. Parts listed are needed for reassembly. See service manual.
4. See the service manual. Remove front forks.





1. Diameter

Figure 1. Disc Mounting Hole Diameter



- 1. Rear Axle
- 2. Spacer
- 3. Bearing (2)
- 4. Spacer
- 5. Sprocket
- 6. Isolator
- 7. Brake disc

- 8. Spacer, non ABS
- 9. E-clip
- 10. Nut
- 11. Axle cam
- 12. Wheel speed sensor, ABS
- 13. Clip

Figure 2. Rear Wheel Parts for Reuse

PREPARATION

Prepare the Front Wheel

NOTE

Do not install the bearing shim included in the installation kit.

NOTICE

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

See Figure 7 and Table 2. for components needed for preparing new front wheel.

1. Install the wheel installation kit.
 - a. **ABS equipped:** 41454-08B.
 - b. **NON ABS equipped:** 41455-08C.

2. **NOTE**

See Figure 7. The machined groove on the front wheel indicates the primary bearing side of the wheel and will mount facing the left side on motorcycle.

See the service manual. Install primary bearing with a Wheel Bearing Remover and Installer.

3. See the service manual. Assemble front wheel components.

Prepare the Rear Wheel

NOTE

Do not install the bearing shim included in the installation kit.

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)

See Figure 8 and Table 3. for components needed for preparing new rear wheel.

1. Install the wheel installation kit.
 - a. **ABS equipped:** 41453-08C.
 - b. **NON ABS equipped:** 41456-08C.

2. **NOTE**

See Figure 8. The machined groove on the rear wheel indicates the primary bearing side of the wheel and mounts on the right side of the motorcycle.

See the service manual. Install primary bearing with a Wheel Bearing Remover and Installer.

3. See the service manual. Assemble rear wheel components.

Mounting the Tires

1. See Figure 7 and Figure 8 and the service manual. Install short valve stem (43157-83A) on front and rear wheels.

2. **NOTE**

Only install the required (separately purchased) tire.

If the wheel has a yellow dot sticker on the rim, orient the tire so the white dot on the tire is opposite of the sticker. If the wheel has a green dot sticker on the rim, orient the tire so the white dot on the tire is aligned with the sticker. If no rim dot sticker is present, see the service manual.

NOTE

Use plastic protectors on tire mounting tools and rim clamps when mounting a tire to a painted wheel.

When mounting tires, liberally use tire lube on the wheel and tire.

See the service manual. Mount new front and rear tire (purchased separately) to the wheels.

- a. **Front Tire:** 43100008

- b. **Rear Tire:** 44006-09

3. See the service manual. Install front brake discs on the wheel.

4. See the service manual. Install the stock rear brake disc and sprocket on the wheel.

Prepare the Front Fork Assembly

1. See Figure 3. Install fork in Fork Tube Holder (HD-41177) as follows:

- a. Clamp end of tool (1) in vise in a horizontal position.
- b. See Figure 6. With the fork bolt (A) upward, clamp fork tube (9), between rubber pads on inboard side of tool. Tighten knobs until fork tube is securely held.

NOTE

Be aware that fork bolt (A) is under spring-pressure, so have a firm grasp on bolt as the last thread is turned.

▲ WARNING

Wear safety glasses or goggles when servicing fork assembly. Do not remove slider tube caps without relieving spring preload or caps and springs can fly out, which could result in death or serious injury. (00297a)

2. Slowly remove fork bolt and O-ring (1) from fork tube. Discard O-ring.
3. Remove the spring collar (F), flat washer (H) and spring (2) from the fork tube. Save spring collar and flat washer for later use.
4. Remove fork assembly from fork tube holder. Turn fork upside down over drain pan to drain oil. For best results, slowly pump fork tube and fork slider (G) at least 10 times.
5. Install fork spring and spring collar back into fork tube.
6. Put a shop rag on the floor. Turn the fork assembly upside down. Press the end of the spring collar against the rag. Compress the spring. Remove the screw (7) with copper washer (6) from the bottom end of fork slider. Use air impact wrench for best results. Discard screw and copper washer.
7. Remove and discard fork spring.

8. Push the damper tube (8) and rebound spring (5) free of fork tube by inserting a small diameter rod through the opening in the bottom of tube. Discard damper tube and rebound spring.
9. Using pick tool, remove retaining clip (C) between fork slider and fork tube. Do not expand or stretch retaining clip to remove from fork tube or clip may be damaged.

NOTE

To overcome any resistance, use the fork tube as a slide hammer: Push fork tube into fork slider and then pull it outward with a moderate amount of force. Repeat this sequence until fork tube separates from fork slider.

10. Remove fork tube from fork slider.
11. Slide fork oil seal (4), spacer seal (D) and slider bushing (E) off end of fork tube. Discard fork oil seal.
12. Remove oil lock (3) from the end of fork tube (9) or the inside of the fork slider. Discard oil lock and fork tube.

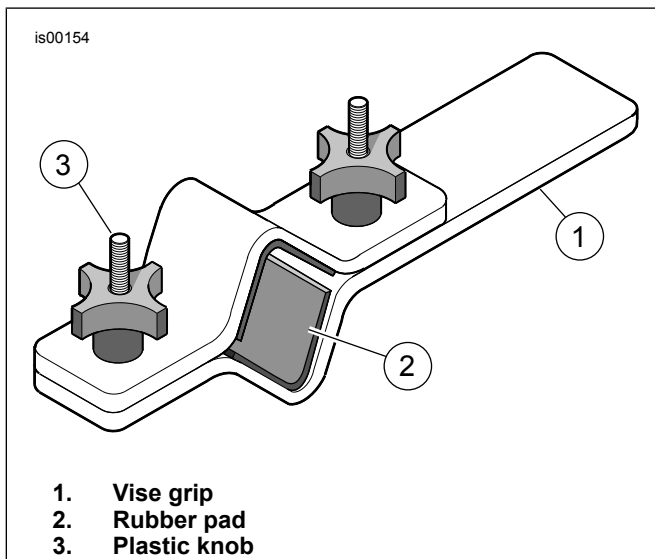


Figure 3. Fork Tube Holder (HD-41177)

Fork Assembly

NOTICE

Exercise caution to avoid scratching or nicking fork tube. Damaging tube can result in fork oil leaks after assembly. (00421b)

NOTE

Inspect parts for wear or damage. Replace or repair as necessary.

1. See Figure 6. Make sure that piston ring is installed on the damper tube with the cut-outs down. Place **new** rebound spring (5) on **new** damper tube from kit (8). Insert damper tube into **new** fork tube (9).

2. Insert **new** spring (2) and spring collar (F) into fork tube, with dense section of coils toward damper tube. Push bottom of damper tube through the opening at the bottom end of the fork tube. Place **new** oil lock (3) over end of damper tube.
3. Apply Loctite 565 Thread Sealant to **new** screw (7). Position fork tube and damper tube in fork slider (G). Hold the assembly in place by exerting pressure on the spring. Install screw (7) with **new** copper washer (6) from kit.
4. Tighten screw.
Torque: 45 ± 5 N·m (33 ± 4 ft-lbs)
5. Coat inner diameter (ID) and outer diameter (OD) of slider bushing (E) with clean fork oil. Slide slider bushing down fork tube (either direction).
6. Slide spacer seal (D) down fork tube until it contacts slider bushing (either direction).
7. Coat the ID of the **new** fork oil seal (4) with clean fork oil. Coat the OD of the fork oil seal with Harley-Davidson Seal Grease. With the lettering side facing up, slide fork oil seal down the fork tube until it contacts the spacer seal.
8. See Figure 4. Obtain the Fork Seal/Bushing Tool (HD-45305) and proceed as follows:
 - a. Slide the fork seal installer down the fork tube until it contacts the fork oil seal.
 - b. See Figure 4. Using the tool like a slide hammer, drive fork oil seal (with spacer seal and slider bushing) down the fork tube until retaining clip groove is visible in fork slider ID.
 - c. See Figure 6. Slide the retaining clip (C) down the fork tube until it contacts the fork oil seal. Install retaining clip in the fork slider groove. Do not expand or stretch retaining clip to install on fork tube or clip may be damaged.
9. Remove spring collar and fork spring.

▲ WARNING

Incorrect amount of fork oil can adversely affect handling and lead to loss of vehicle control, which could result in death or serious injury. (00298a)

10. Fill fork tube as follows:
 - a. With fork tube compressed, pour Harley-Davidson Type E Fork Oil into the fork tube almost to the top.
 - b. Pump fork tube ten times to remove air from system.
11. Adjust the fork oil level, so that it is 91 mm (3.58 in) from the top of the fork tube with the fork tube compressed and the fork spring, spring collar and flat washer removed. Proceed as follows:
 - a. See Figure 5. Obtain the Front Fork Oil Level Gauge (HD-59000B).

- b. Loosen thumbscrew on metal ring and move it up or down the rod until the bottom of the ring is 91 mm (3.58 in) from the bottom of the rod. Tighten thumbscrew.
- c. Push the plunger on the cylinder all the way in.
- d. See Figure 6. Insert rod into top of fork tube until metal ring rests flat on top of fork tube.
- e. Pull plunger to remove fork oil from fork tube. Observe fork oil through transparent tube to verify that oil is being drawn from fork.
- f. Remove rod from fork tube. Push plunger into cylinder to eject excess fork oil into suitable container.
- g. If necessary, repeat Steps 11(c) through 11(f). Level is correct when no fork oil is observed being drawn through transparent tube.

- 12. Install fork spring into the fork tube with the dense end down.

NOTE

Verify the fork spring is installed with dense section of coils to the bottom.

- 13. Install flat washer (H) on top of spring.
- 14. Install spring collar (F) on top of washer.
- 15. Install **new** O-ring (1) onto fork bolt (A).
- 16. Install fork tube bolt. Tighten.
Torque: 55 ± 25 N·m (41 ± 18 ft-lbs)

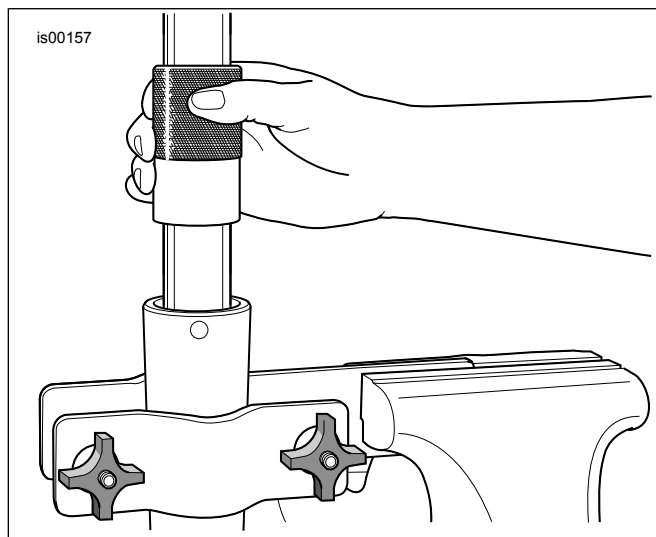


Figure 4. Install Fork Oil Seal

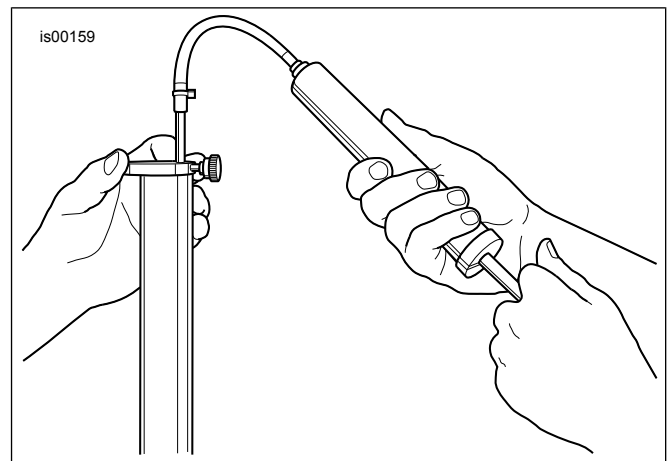


Figure 5. Remove Excess Fork Oil (HD-59000B)

LEFT SIDE

Repeat steps for prepare the front fork and fork assembly.

INSTALLATION

- 1. See the service manual. Install the front forks.
- 2. **NOTE**
IMPORTANT: ABS must be re-flashed.

Re-flash the system using Digital Technician II (DT II).
Special Tool: DIGITAL TECHNICIAN II (HD-48650)
 - a. Choose the REFLASH icon.
 - b. Follow the on-screen prompts.
- 3. See the information sheet that came with the new front fender. Install the front fender.
- 4. **NOTE**
Install the front wheel so that the valve stem is on the right side.

See the service manual. Install front wheel.
- 5. See the service manual. Install rear wheel.

⚠ WARNING

After repairing the brake system, test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury. (00289a)

⚠ WARNING

Whenever a wheel is installed and before moving the motorcycle, pump brakes to build brake system pressure. Insufficient pressure can adversely affect brake performance, which could result in death or serious injury. (00284a)

- 6. Pump brakes to build system pressure.

Test Ride

1. Test ride motorcycle to verify fork travel and rebound.

SERVICE PARTS

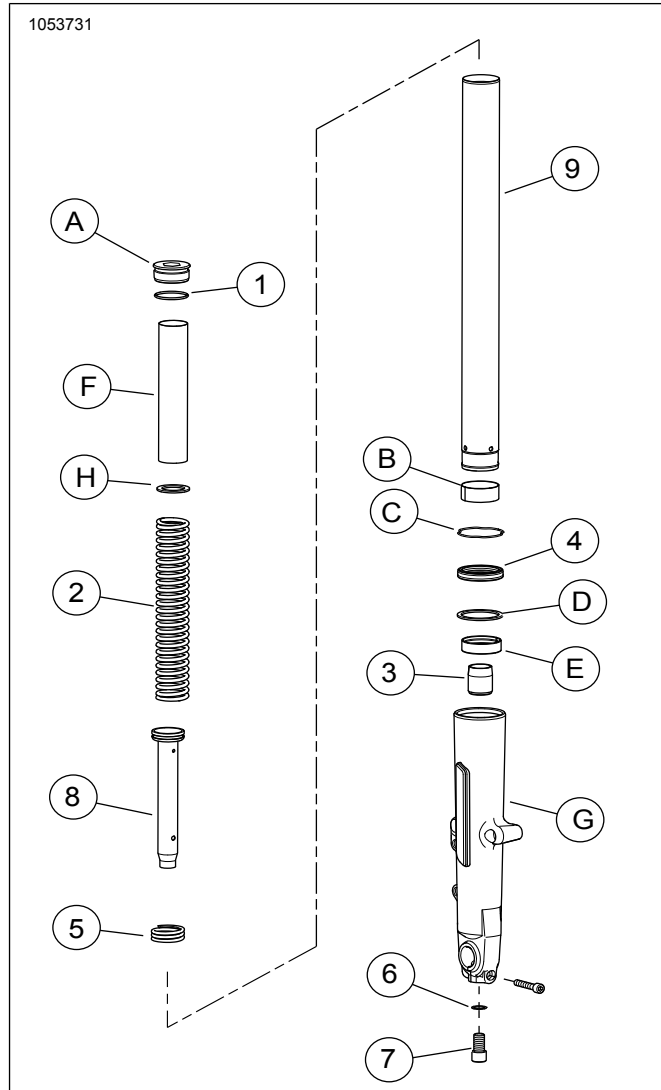


Figure 6. Service Parts: Touring Cartridge Front Fork

Table 1. Service Parts Table: Touring Cartridge Front Fork

Item	Description (Quantity)	Part Number
	Stock Fork Assembly, Non-cartridge Fork from Kit	
Front fork items included in kit:		
1	O-ring (2)	46508-01
2	Fork spring (2)	Not sold separately
3	Oil lock (2)	Not sold separately
4	Fork oil seal (2)	46514-01A
5	Rebound spring (2)	Not sold separately
6	Washer (2)	46615-06
7	Screw, M14 (2)	45500118
8	Damper tube with piston ring (2)	Not Sold Separately
9	Fork tube (2)	45500537
Front fork items mentioned in text, but not included in kit:		
A	Fork bolt (2)	
B	Bushing, fork tube (2)	
C	Retaining clip (2)	
D	Spacer seal (2)	
E	Slider bushing (2)	
F	Spring collar (2)	
G	Fork slider (2)	
H	Flat washer (2)	

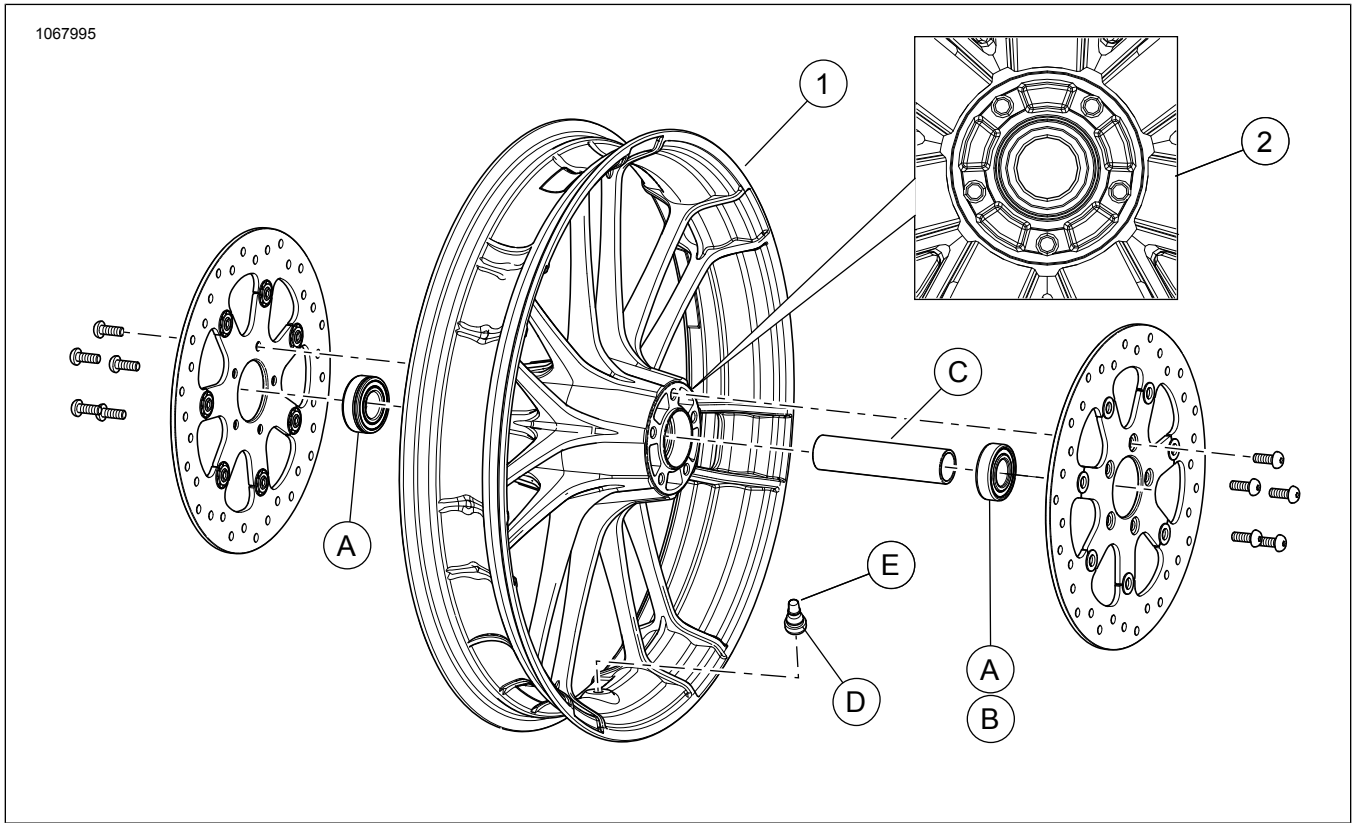


Figure 7. Service Parts: Knockout Front Wheel

Table 2. Service Parts: Knockout Front Wheel

Item	Description (Quantity)	Part Number
Front wheel items included in kit:		
1	Wheel	Not sold separately
2	Machined groove	
Front wheel installation kit item, discard extra items:		
A	Bearing (2 non ABS models, 1 ABS models)	9276A
B	Bearings (1 ABS models)	9252
C	Axle sleeve	41900-08
D	Short valve Stem	43157-83A
E	Valve stem cap	41123-79

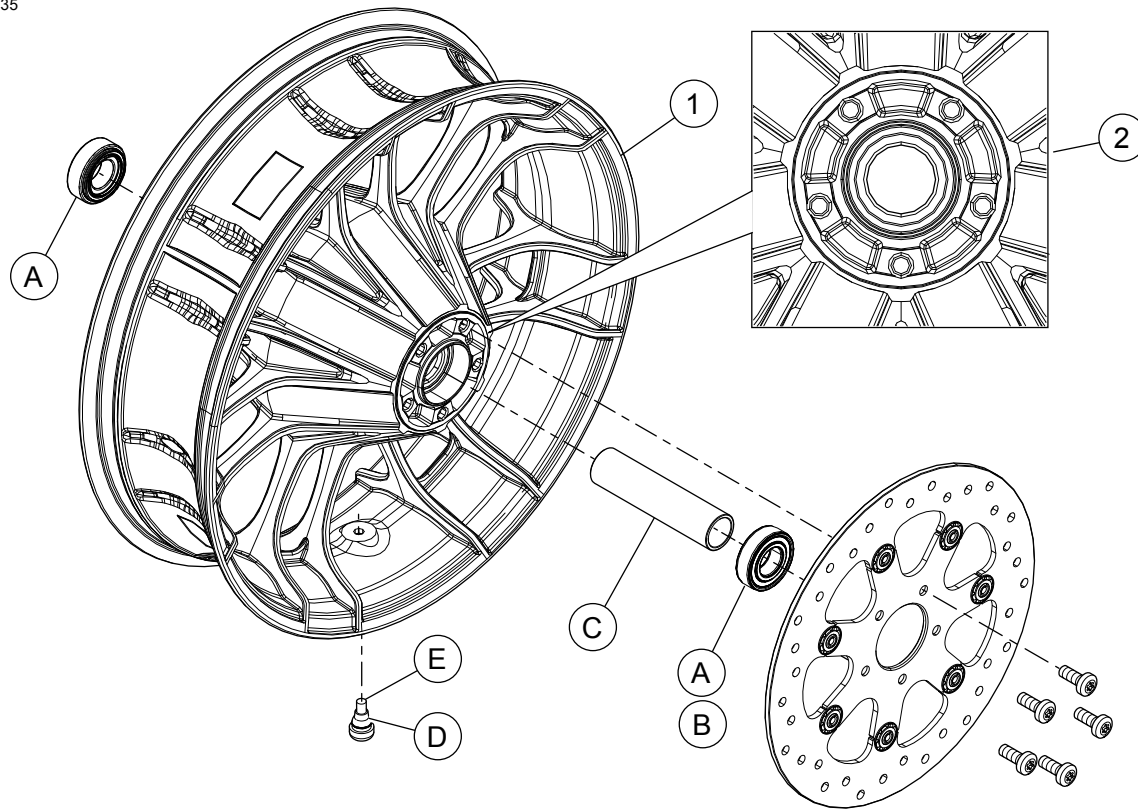


Figure 8. Service Parts: Knockout Rear Wheel

Table 3. Service Parts: Knockout Rear Wheel

Item	Description (Quantity)	Part Number
Rear wheel items included in kit:		
1	Wheel	Not sold separately
2	Machined groove	
Rear wheel installation kit items, discard extra items:		
A	Bearing (2 non ABS models, 1 ABS models)	9276A
B	Bearing (1 ABS models)	9252
C	Axle sleeve	41349-07
D	Short Valve Stem	43157-83A
E	Valve stem cap	41123-79