



# INSTRUCTIONS

J02179

2018-11-27



## TOURING LOW PROFILE REAR SUSPENSION KIT

### GENERAL

#### Kit Number

54631-02B

#### 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).

#### ⚠ WARNING

**Rider and passenger safety depend 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. (00333b)**

#### 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.*

#### Additional Parts Required

This kit requires the separate purchase of air pump part number 54630-03A. This part is available for purchase from any Harley-Davidson Dealer.

This kit requires LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97) for proper installation.

#### Kit Contents

See Figure 4 and Table 2.

### INSTALLATION

1. Remove seat. See owner's manual.

#### ⚠ WARNING

**Perform this installation when the engine is cool. Working on or near the exhaust system when the engine is hot could result in severe burns. (00311b)**

#### ⚠ WARNING

**Installation of any accessory suspension components can affect cornering clearance. This could distract the rider, causing loss of control and death or serious injury. (00431b)**

#### ⚠ WARNING

**To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)**

2. Remove main fuse. See owner's manual.
3. Raise the rear end of the motorcycle so that the rear wheel is just off the ground. Support the motorcycle with suitable blocking under the frame.

#### NOTE

*Retain the original fasteners for installation of new shocks.*

4. Remove the saddlebags from the motorcycle. See the Touring model's owner's manual for saddlebag removal.
5. Fasten the air pump, part number 54630-03A to the rear air suspension adjustment valve on the motorcycle. See the Touring model's owner's manual for valve location. Add 3-5 psi to clear the line but do **NOT** exceed 50 psi.
6. Using the pressure relief valve located below the gauge on the pump, release the air pressure from the rear suspension.

#### ⚠ WARNING

**Use caution when bleeding air from the suspension. Moisture combined with lubricant may leak onto the rear wheel, tire and/or brake components and adversely affect traction, which could result in death or serious injury. (00084a)**

7. See Figure 1 and Figure 2. Remove the air hoses from the shock absorber air hose fittings.

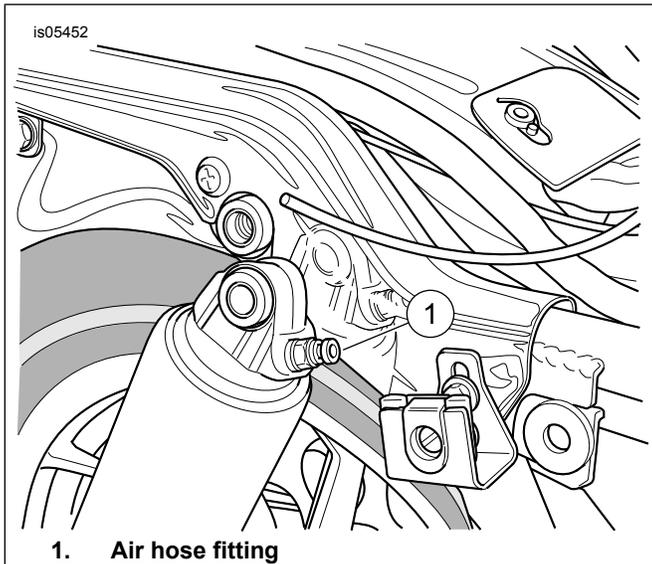
#### NOTE

*Press the plastic collar down on the air hose fitting to remove and install the air hose.*

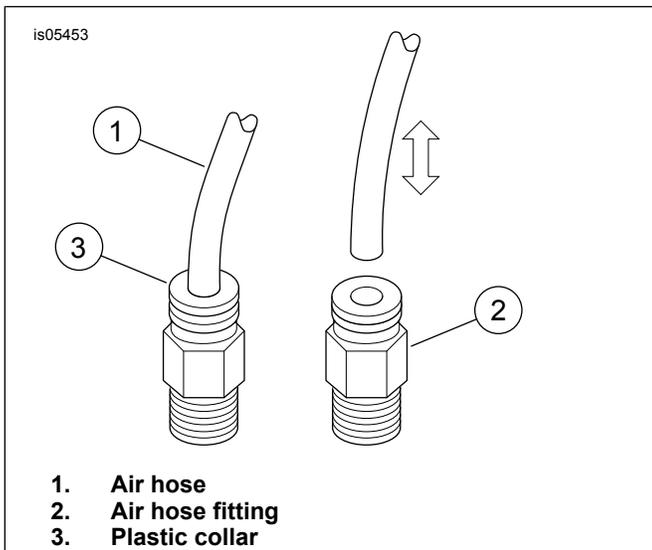
#### NOTE

*Air suspension shock absorbers are oil filled and must be kept upright at all times to prevent oil leakage.*

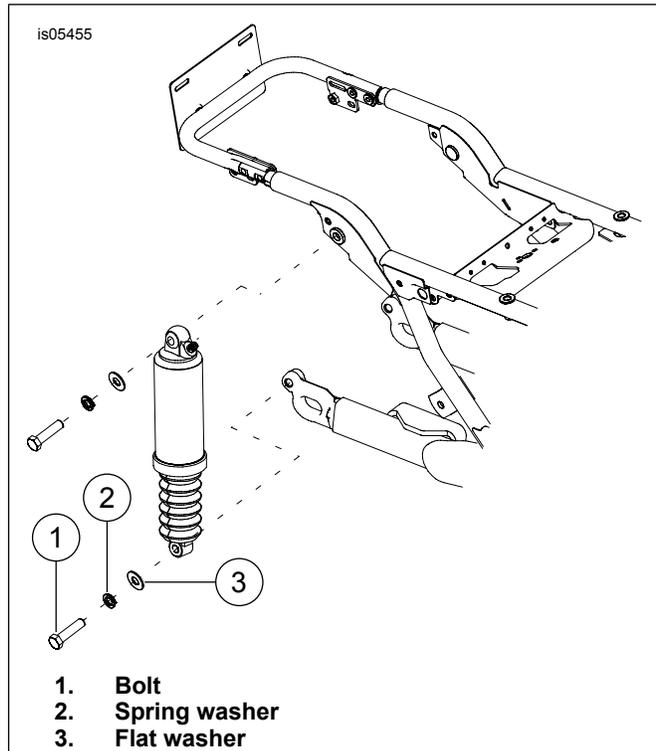




**1. Air hose fitting**  
**Figure 1. Rear Shock Absorber**



**1. Air hose**  
**2. Air hose fitting**  
**3. Plastic collar**  
**Figure 2. Air Hose Removal and Installation**



**1. Bolt**  
**2. Spring washer**  
**3. Flat washer**  
**Figure 3. Removing Rear Shock Absorber**

8. See Figure 3. Remove the lower mounting bolts (1), spring washers (2) and flat washers (3) from the shock absorbers.
9. Remove the upper mounting bolts and washers from the shock absorbers.
10. Install the washers removed in step 9 onto the upper shock bolts and push the bolts through the shock upper bushings.
11. Apply two or three drops of threadlocker to the exposed threads of the upper shock-mounting bolt.  
Consumable: LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97)
12. Fasten the top of the new shocks to the frame. Secure the upper shock bolts. Tighten.  
Torque: 47–54.2 N·m (35–40 ft-lbs)
13. Install the washers removed in step 8 onto the lower shock bolts and push the bolts through the shock lower bushings.
14. Apply two or three drops of threadlocker to the exposed threads of the lower shock mounting bolt.  
Consumable: LOCTITE 243 MEDIUM STRENGTH THREADLOCKER AND SEALANT (BLUE) (99642-97)
15. Fasten the bottom of the new shocks to the swingarm. Secure the lower shock bolts. Tighten.  
Torque: 47–54 N·m (35–40 ft-lbs)
16. Fasten the air hoses, removed in step 6, to the air hose fittings on the new shocks.

**NOTICE**

**Wipe all fingerprints off of exhaust system components after installation and before starting engine. Oil from hands can leave permanent marks on exhaust system finish. (00346a)**

**NOTICE**

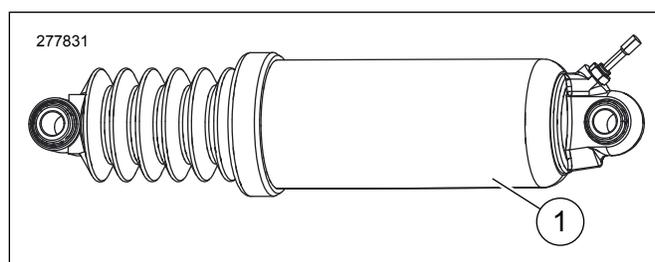
**Do not exceed maximum air pressure for suspension. Air components fill rapidly. Therefore, use low air line pressure. Failure to do so can result in possible damage to components. (00165b)**

17. Fasten the shock absorber air pump to the rear air suspension adjustment valve. Pressurize the rear air suspension system to check for air leaks. Adjust air pressure for rider comfort and to accommodate changing load conditions. Do not exceed 50 psi (241 kPa).
18. Install the saddlebags.
19. Install main fuse. See owner's manual.
20. Install seat. After installing seat, pull up on the seat to verify that it is secure. See owner's manual.

SHOCK LOAD	TOTAL WEIGHT		PRESSURE	
	LB.	KG	PSI	kPa
Solo Rider	under 160	up to 68	0-5	0-34
	160-200	68-91	0-10	0-69
	over 200	91-113	5-10	34-69
Rider plus passenger	150-200	68-91	25-35	172-206
	200-250	91-113	30-40	206-276
Rider plus passenger with capacity luggage	All	All	40-50	276-345
Maximum GVWR	All	All	50	345

If P&A Tour-Pak is installed, add 5-10 psi (34-69 kPa) to shock.  
Do not exceed 50 psi (345 kPa) rear shock pressure.

**SERVICE PARTS**



**Figure 4. Service Parts: Low Profile Rear Suspension Kit**

**Table 2. Service Parts**

Item	Description (Quantity)	Part Number
1	Low profile rear shock absorbers (2)	54662-02A