



INSTRUCTIONS

J05609

2012-05-30



POLICE SEAT SPRING SUSPENSION KIT

GENERAL

Kit Number

91800040

Models

For model fitment information, see the Harley-Davidson Police and Fleet Motorcycle catalog or the Police and Fire/Rescue section of www.harley-davidson.com (English only).

Installation Requirements

Electrical Contact Lube (H-D Part No. 99861-02) or equivalent is required for the proper installation of this kit. This item is available from a Harley-Davidson dealer.

Kit Contents

See Figure 5 and Table 1.

AIR SUSPENSION SEAT REMOVAL

1. See Figure 1. Press the air valve (2) to relieve the air pressure from the seat air spring and reservoir (1). Disconnect the air line (3).
2. See Figure 2. Standing on the left side of the motorcycle, press down on the rear of the seat and pull the pin (1) from the post (3) on the top plate.

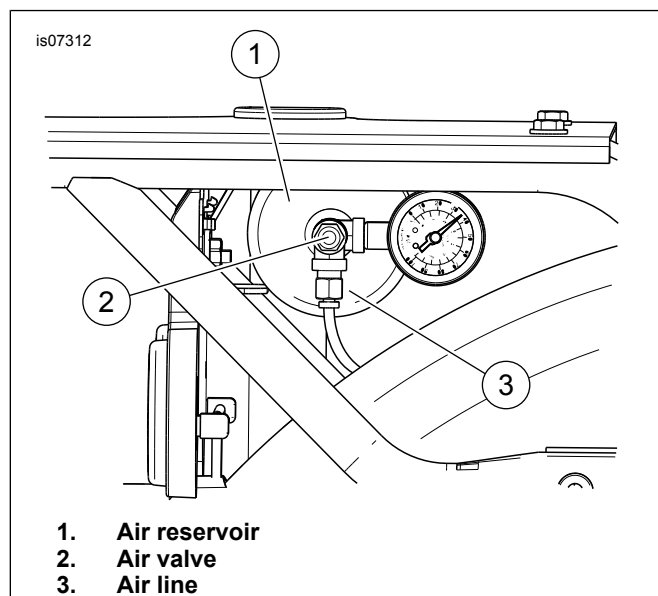


Figure 1. Seat Air Valve

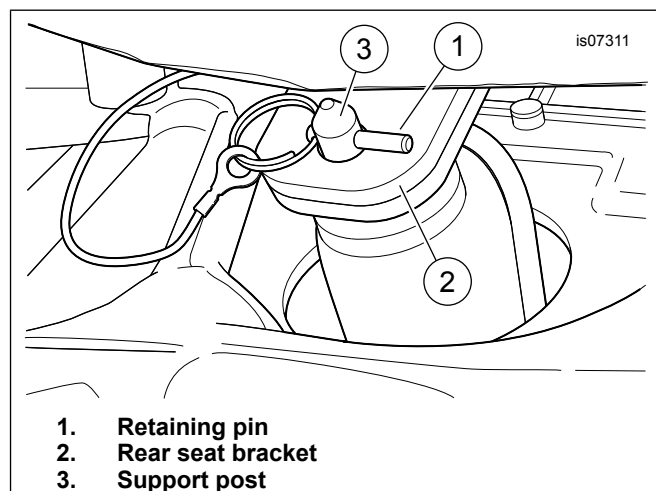


Figure 2. Seat Retaining Pin

3. See Figure 3. Remove the seat front pivot bolt (2) and acorn nut (3) from the seat bracket mount (1). Lift the seat and bracket (T-bar) assembly (16) from the motorcycle.
4. Remove two flange nuts (5) and washers (6), and remove the seat fairing (4) under the seat.
5. See the owner's manual to remove the top caddy from the top of the battery.

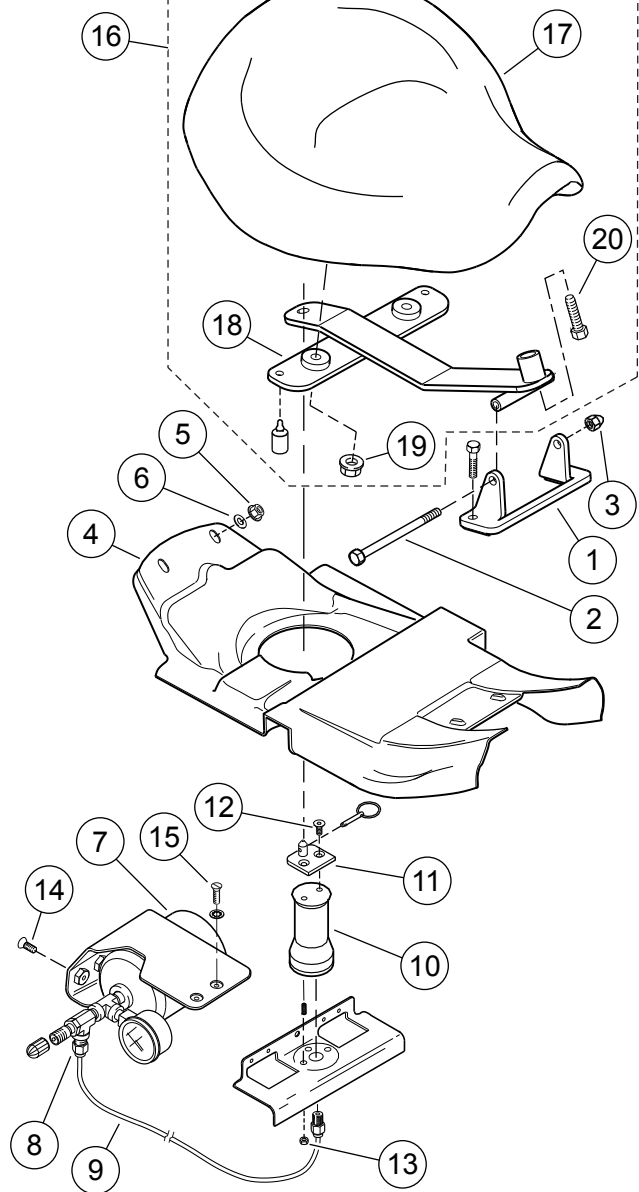
NOTE

For vehicles equipped with security siren: Verify that the Hands-Free Fob is present. Turn the ignition key switch to IGNITION.

⚠ WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

6. Disconnect the battery cables, negative (-) cable first. Remove the battery per the owner's manual.
7. Compress the collar on the compression fitting (8), and remove the air tube (9) from the air reservoir (7).
8. Holding the air spring (10) to prevent twisting, remove two flat head screws (12) to release the top plate (11) from the air spring.
9. Remove two flange nuts (13) under the frame weldment (at the rear of the battery box). Remove the air spring from the motorcycle.



1. Seat bracket mount
2. Seat front pivot bolt
3. Acorn nut
4. Seat fairing
5. Flange nut (2)
6. Flat washer (2)
7. Air reservoir
8. Compression fitting
9. Air tube
10. Air spring
11. Top plate
12. Flat head screw (2)
13. Flange locknut (2)
14. Pan head screw (2)
15. Oval head screw (2)
16. Seat and bracket assembly
17. Seat
18. Seat bracket (T-bar)
19. Flange locknut (2)
20. Hex head bolt

Figure 3. Air Suspension Seat Removal

10. Remove the Tour-Pak or any other items attached to access the top of the luggage rack.

11. Remove the license plate.

12. Place a clean shop towel between the air reservoir and fender to protect the finish.

13. Remove two screws (14).

NOTE

Be sure to hold the air reservoir as the last screw is removed or damage to fender paint can occur if the air reservoir assembly (7) is dropped.

14. Remove two screws (15) to release the air reservoir bracket.

15. Carefully remove the reservoir from between the fender and luggage rack.

16. Install the license plate. Install the Tour-Pak or any other items removed from the luggage rack.

17. Get the seat and bracket assembly removed from the vehicle earlier. Remove the two flange nuts (19) and hex head bolt (20) to release the seat (17) from the seat bracket (18).

SPRING SUSPENSION SEAT INSTALLATION

1. See Figure 5. Place the seat spring (2) on the vehicle frame weldment. Align the holes on the bottom plate of the spring with the holes in the frame. Install two **new** screws (8) from the kit. Tighten the screws to 4.1–6.8 N·m (36–60 **in-lbs**).

⚠ WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

2. Install the battery per the owner's manual. Attach the battery cables (red positive cable first). Apply a light coat of Harley-Davidson electrical contact lubricant (Part No. 99861-02), petroleum jelly or corrosion retardant material to the battery terminals.
3. See the owner's manual to install the top caddy to the top of the battery.
4. See Figure 3. Install the seat fairing (4) with the washers (6) and flange nuts (5) removed earlier. Tighten the nuts to 6.8–10.8 N·m (60–96 **in-lbs**).
5. See Figure 5. Install the seat onto the **new** seat bracket (1). Secure with the two flange nuts and one hex head bolt (Figure 3, Items 19 and 20) removed from the air suspension seat bracket. Tighten the flange nuts to 10.9–16.3 N·m (96–144 **in-lbs**). Tighten the bolt to 6.8–13.6 N·m (60–120 **in-lbs**).

6. Place the seat and bracket assembly on the motorcycle. Install the front pivot bolt (2) and acorn nut (3). Tighten to 5.4–9.5 N·m (48–84 in-lbs).
7. See Figure 5. Rotate the top of the seat spring (2) so the upper threaded studs (5) are offset to the rear of the vehicle.
8. Align the seat bracket with the studs and install the washers (7) and acorn nuts (6). Tighten to 6.8–9.5 N·m (60–84 in-lbs).

⚠ WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

IN USE

Seat Suspension Adjustment

NOTE

- Use a drift and hammer, or a spanner wrench (Part No. HD-94820-75A or equivalent) to loosen and tighten nuts.
- See Figure 4. Range of adjustment (3) must be kept within 17.7–27.7 mm (0.7–1.1 in) from the top of the shock absorber (4, part of the seat spring assembly). Settings outside this range may result in failure of seat suspension components.
- Factory preset is approximately 21.7 mm (0.9 in), which is suitable for a 90.7 kg (200 lb) rider.

1. Loosen the seat spring jam nut (1).
2. Rotate the adjustment nut (2) clockwise to compensate for a heavier rider, or counterclockwise for a lighter rider. Each full rotation adjusts for approximately 5.7 kg (12.5 lb) of rider weight.
3. Tighten the jam nut.

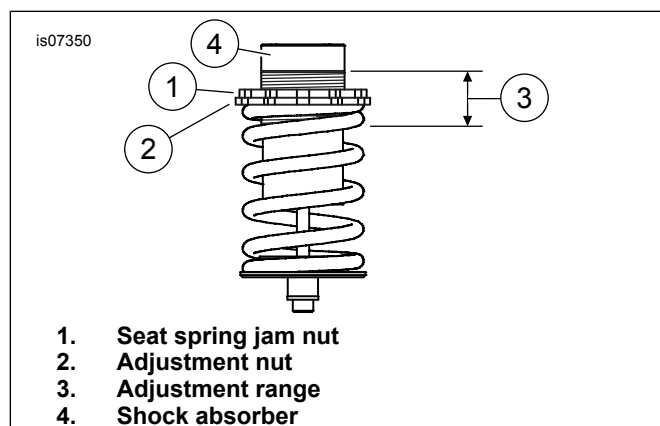


Figure 4. Seat Adjustment

NOTE

See Figure 5. Seat bracket bumpers (9) provide cushioning under certain riding conditions. If seat system is modified, ride comfort may be affected.

Seat Spring Repair

NOTE

Only the upper studs and rubber cap are available as replacement parts. If the spring unit is damaged, replace the entire spring assembly.

1. See Figure 5. Remove the rubber cap (4). Remove the studs (5).
2. **If re-using the original studs**, clean all threadlocking compound from the threads. Apply a drop of Loctite® 262 Threadlocker and Sealant - Red (Part No. 94759-99) to the threads of the stud.
3. Install the upper studs until bottomed in the threaded holes. Allow the threadlocker (if used) to cure before installing the spring assembly.
4. Push the upper rubber cap into place.

SERVICE PARTS

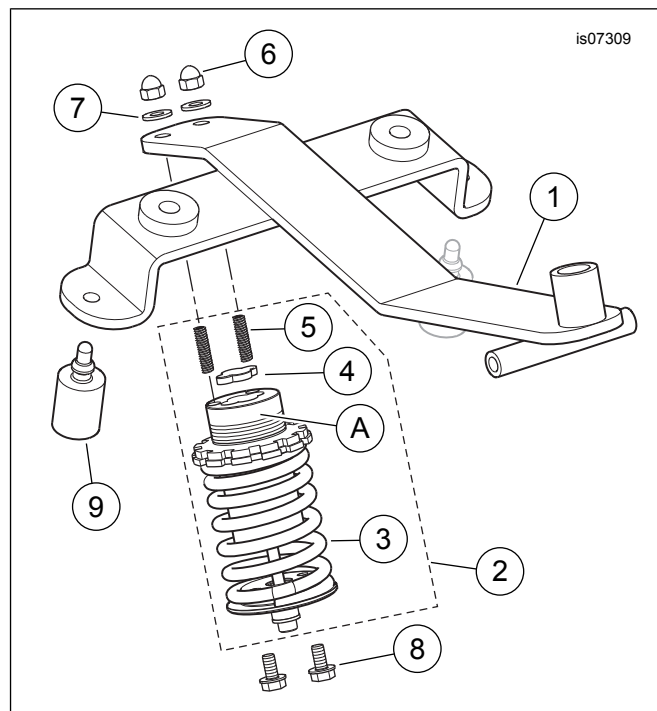


Figure 5. Service Parts, Police Seat Suspension Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Bracket, police seat	52100006
2	Seat spring assembly (includes items 3-5)	52100008
3	• Spring, seat suspension	Not sold separately
4	• Cap, rubber	52100009
5	• Threaded stud (2)	66290-06
6	Acorn nut (2)	7737W
7	Washer (2)	6110
8	Hex flange head screw (2)	10200135
9	Bumper, police seat, rubber (2)	11495
Items mentioned in text.		
A	Spring assembly shock absorber	