



# INSTRUCTIONS

-J05653

2017-02-17

## MODULAR BRAKE LINE KITS

### GENERAL

#### NOTE

ABS and non-ABS Sportster®, Touring, Trike, dual-front disc Dyna® and Softail® models share these upper brake line kits. Only the installation instructions for upper and lower brake lines on all 2014-later ABS and non-ABS Sportster models are found in this document.

Instructions for upper and lower brake line installation on remaining models are found in the Lower Brake Line Kit:

- Upper and lower brake line installation on **non-ABS Touring and 2013-earlier Trike** models are found on instruction sheet J04431.
- Upper and lower brake line installations on **any ABS Touring** model are found on the instruction sheet for the specific model, J04562 or J05790.
- Upper and lower linked brake line installations on **2014-later Trike** models are found on instruction sheet J05690 (Linked Lower Brake Line) or J05691 (Linked Adapter Kit).
- Upper and lower brake line installations on **dual-front disc Dyna** models are found on instruction sheet J04488.
- Upper and lower brake line installations on **Softail** models are found on instruction sheet J04284.

### Kit Numbers

Table 1. Upper Brake Line Kits - Banjo Angle 0° - Straight

Diamond-Black Kit	Diamondback Kit	Length
41800534	41800532	13 inch (33.0 cm)
41800248	41800234	15 inch (38.1 cm)
41800250	41800236	16.5 inch (41.9 cm)
---	41800464	18.5 inch (47.0 cm)
41800254	41800240	20.5 inch (52.1 cm)
41800440	41800424	22.5 inch (57.2 cm)
41800258	41800244	24.5 inch (62.2 cm)
41800260	41800246	26.5 inch (67.3 cm)
41800441	41800425	28.5 inch (72.4 cm)
41800456	41800453	30.5 inch (77.5 cm)
41800480	41800465	32.5 inch (82.6 cm)

Table 1. Upper Brake Line Kits - Banjo Angle 0° - Straight

Diamond-Black Kit	Diamondback Kit	Length
---	41800466	34.5 inch (87.6 cm)
41800481	41800467	36.5 inch (92.7 cm)

#### NOTE

Diamondback™ and Diamond-Black upper brake lines are available in various master cylinder banjo angles and brake line lengths. Shorter or longer lines are necessary when certain modifications (like optional handlebars) are made to the vehicle. See the P&A retail catalog or a Harley-Davidson dealer.

Table 2. Upper Brake Line Kits - Banjo Angle 35°

Diamond-Black Kit	Diamondback Kit	Length
41800252	41800238	18.5 inch (47.0 cm)
41800455	41800452	20.5 inch (52.1 cm)
41800256	41800242	22.5 inch (57.2 cm)
41800436	41800420	24.5 inch (62.2 cm)
41800437	41800421	26.5 inch (67.3 cm)
41800438	41800422	28.5 inch (72.4 cm)
41800439	41800423	30.5 inch (77.5 cm)
41800551	41800468	32.5 inch (82.6 cm)
41800482	41800469	34.5 inch (87.6 cm)
---	41800470	36.5 inch (92.7 cm)
41800483	41800471	40.0 inch (101.6 cm)
41800484	41800472	44.0 inch (111.8 cm)

Table 3. Upper Brake Line Kits - Banjo Angle 90°

Diamond-Black Kit	Diamondback Kit	Length
41800442	41800426	18.5 inch (47.0 cm)
41800443	41800427	20.5 inch (52.0 cm)
41800457	41800454	22.5 inch (57.2 cm)
41800553	41800473	24.5 inch (62.2 cm)
---	41800474	26.5 inch (67.3 cm)
---	41800475	28.5 inch (72.4 cm)
---	41800476	30.5 inch (77.5 cm)
41800485	41800477	32.5 inch (82.6 cm)
---	41800478	34.5 inch (87.6 cm)
---	41800479	36.5 inch (92.7 cm)

Table 4. Lower and Mid Brake Line Kits

Fitment	Diamond-Black Kit	Diamond-back Kit	Length, Caliper Banjo Angle	Instruction Sheet No.
<b>NON-ABS APPLICATIONS</b>				
<b>2012-Later</b> Sportster® 1200V models	41800413	41800412	20.5 in (52 cm) long, 10 mm x 65°	-J05653
<b>2004-Later</b> Sportster® models (except 1200V)	41800228	41800226	18.5 in (47 cm) long, 10 mm x 65°	
<b>2016-Later</b> Sportster® 1200CX models	41800592A	41800590A	16.5 in (43 cm) long, 10 mm x 65°	
<b>Lower &amp; Mid Brake Lines (Reference Only)</b>				

**Table 4. Lower and Mid Brake Line Kits**

Fitment	Diamond-Black Kit	Diamond-back Kit	Length, Caliper Banjo Angle	Instruction Sheet No.
1994-2007 Road King®/ Road Glide® models	48938-10	45818-07	16.0 in (40.6 cm) long, 3/8 in x 78°	-J04431
1996-2007 Electra Glide®/ Street Glide® models	---	45820-07	16.0 in (40.6 cm) long, 3/8 in x 78°	
2008-2013 Road King®/ Road Glide® models	48942-10	44907-08	15.3 in (38.9 cm) long, 10 mm x 90°	
2008-2013 Electra Glide®/ Street Glide® models	41800280	44905-08	15.3 in (38.9 cm) long, 10 mm x 90°	
2008-2013 Street Glide® Trike/ Tri Glide™ Ultra Classic® models	--	83666-10	16.8 in (42.7 cm) long, 10 mm x 90°	
2008-Later FXDF, 2014-Later FXDL models	48928-10	42112-08A	18.5 in (47.0 cm) long, 3/8 in x 78°	-J04488
2014-Later Electra Glide®/ Street Glide®/ Road King® models	41800338	41800336	22.3 in (54 cm) long, 10 mm x 65°	-J05792
<b>ABS AND LINKED APPLICATIONS</b>				
2014-Later Sportster® 1200V models	41800417A	41800416A	21.3 in (54 cm) long, 10 mm x 65°	-J05653
2014-Later Sportster® models (except 1200V)	41800232A	41800230A	19.3 in (49 cm) long, 10 mm x 65°	
2016-Later Sportster® 1200CX models	41800587	41800585	16.9 in (43 cm) long, 10 mm x 65°	
<b>Lower &amp; Mid Brake Lines (Reference Only)</b>				
2009-2013 Electra Glide®/ Street Glide®/ Road King® models	48946-10	41825-09	15.0 in (38.1 cm) long, 10 mm x 90°	-J04652
2009-2013 Road Glide® models	---	46049-09	14.0 in (35.6 cm) long, 10 mm x 90°	
2012-Later FXDF, 2014-Later FXDL models	41800078	41800048	19.0 in (48.3 cm) long, 3/8 in x 78°	-J04488
2014-Later Electra Glide®/ Street Glide®/ Road King® models	41800321	Upper Mid (stock finish)	64.0 in (163 cm) long, 12 mm block	-J05790
	41800323	Lower Mid (stock finish)	68.5 in (174 cm) long, 10 mm block	
	41800333	41800332	14.9 in (37.8 cm) long, 10 mm x 90°	
2014-Later Tri Glide™ Ultra Classic®, (Linked brake system)	41600094 Adapter (chrome)		1.0 in (2.5 cm), 12 mm x 80°	-J05690
	---	41800292	16.8 in (42.7 cm) long, 10 mm x 60°	-J05691

**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).

**Installation Requirements**

Fresh, uncontaminated hydraulic brake fluid is needed. See owner's manual for the correct brake fluid.

**▲ WARNING**

Brakes are a critical safety component. Contact a Harley-Davidson dealer for brake repair or replacement. Improperly serviced brakes can adversely affect brake performance, which could result in death or serious injury. (00054a)

**▲ 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**

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 refers to service manual information. A service manual for this year/model motorcycle is required for this installation. One is available from a Harley-Davidson dealer.*

**Kit Contents**

See Table 5, Table 6 and Table 7.

**PREPARATION**

**▲ WARNING**

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

*NOTE*

- **WITH security siren:** With security fob present, turn ignition switch ON. See the service manual. Disarm security system. Turn ignition switch OFF. **IMMEDIATELY** remove the main fuse.

- **WITHOUT security siren:** See the service manual. Remove main fuse.

### ⚠ CAUTION

Direct contact of D.O.T. 4 brake fluid with eyes can cause irritation. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of D.O.T. 4 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. **KEEP OUT OF REACH OF CHILDREN.** (00240a)

### NOTICE

D.O.T. 4 brake fluid will damage painted and body panel surfaces it comes in contact with. Always use caution and protect surfaces from spills whenever brake work is performed. Failure to comply can result in cosmetic damage. (00239b)

### NOTE

If DOT 4 brake fluid contacts painted surfaces, IMMEDIATELY flush area with clear water.

Cover painted parts to protect finish.

1. See the service manual. Drain brake fluid from the front brake reservoir and lines.

## INSTALLATION, NON-ABS SPORTSTER MODELS

### Original Front Brake Line Removal

### NOTICE

Remove brake line components carefully. Damage to seating surfaces can cause leakage. (00320a)

1. Note front brake line routing and banjo bolt orientation.
2. See Figure 1 and Figure 2. Disconnect the front brake line from the front brake master cylinder and front brake caliper. Save the master cylinder and caliper banjo bolts. Discard all sealing washers.
3. See Figure 3 and Figure 4. Remove the existing P-clamps and mounting hardware from the following locations: Save the mounting hardware for later installation. Discard the P-clamps.
  - a. Under the lower fork clamp.
  - b. Along the right side of the steering head at the upper fork clamp.
4. Note front brake line routing and orientation of the banjo fittings. Remove the existing front brake line.

### Braided Front Brake Line Installation

### NOTICE

Avoid leakage. Be sure gaskets, banjo bolt(s) and brake line are clean and undamaged before assembly. (00323a)

1. Verify that the correct upper and lower Brake Line Kits have been obtained.
- In some cases, the Upper Brake Line Kit has already been specified.
- In other cases, determine the proper Upper Brake Line Kit (see Table 1, Table 2 or Table 3 ) by using the Cable and Brake Line Measurement Tool Kit. See a Harley-Davidson dealer for assistance.

- See Table 4 to verify the correct Lower Brake Line Kit for the specific model motorcycle.

### ⚠ WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

2. See Figure 1. Install the banjo fitting (1) of the upper brake line (2) at the master cylinder (3), using the sealing washers (5) from the Upper Brake Line Kit on each side of the banjo fitting.
3. Install the master cylinder banjo bolt (Item 4, saved earlier). Snug, but do not fully tighten now.

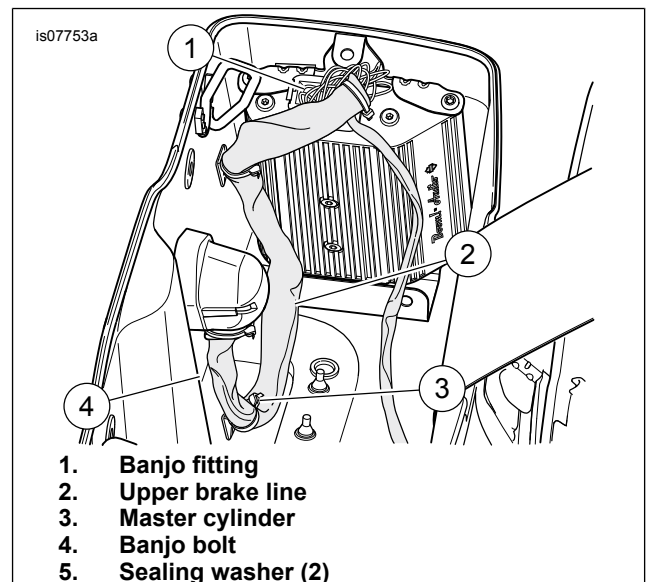


Figure 1. Upper Brake Line Master Cylinder

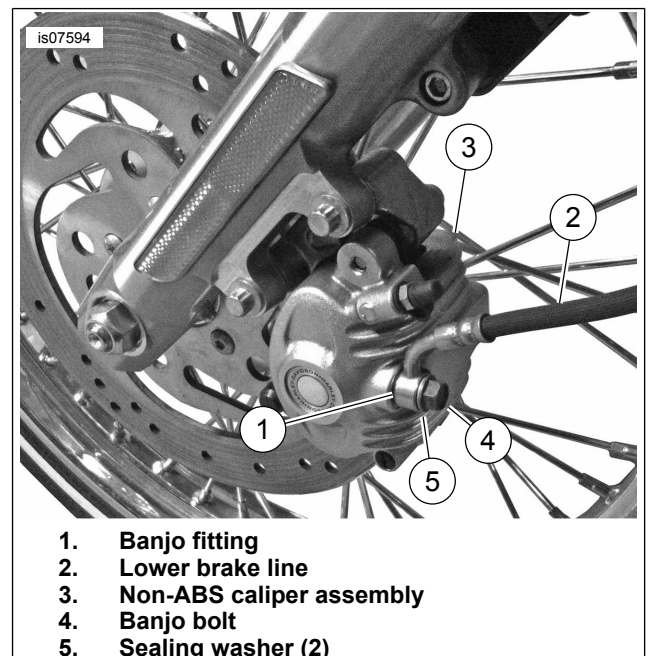


Figure 2. Non-ABS Lower Brake Line

4. See Figure 2. Install the banjo fitting (1) to the lower brake line (2) at the caliper (3), using the sealing washers (5) from the Lower Brake Line Kit on each side of the banjo fitting.
  - a. Position the banjo fitting away from the vehicle at an angle of approximately 10° from vertical.
  - b. Install the caliper banjo bolt (4, saved earlier). Tighten to 19–24.4 N·m (14–18 ft-lbs).
5. See Figure 4. Route the remainder of the lower brake line toward the lower fork clamp.

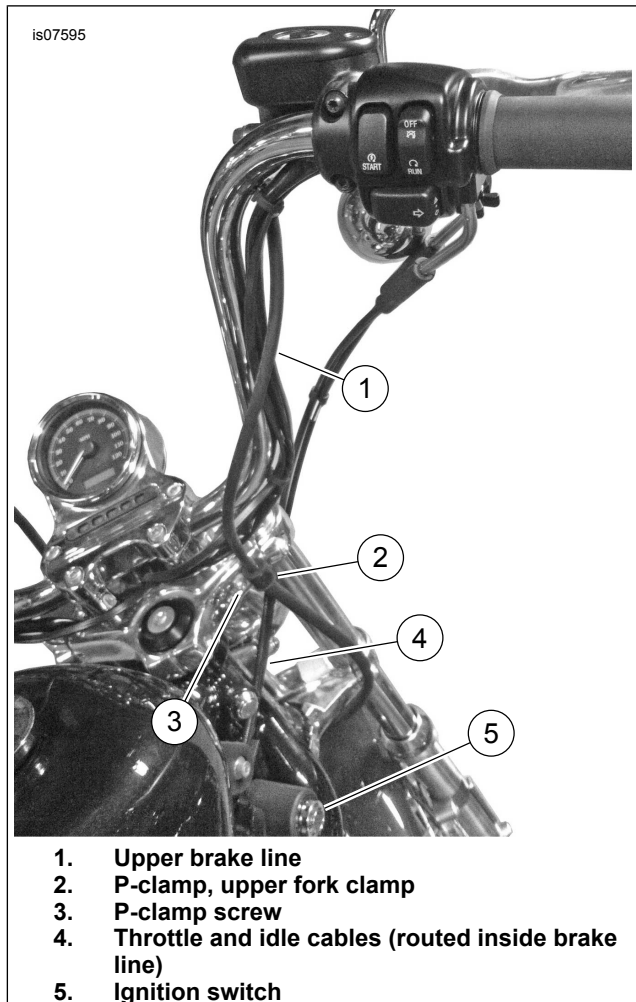


Figure 3. Upper Brake Line Routing

## Upper Front Brake Line Routing

### NOTE

When routing accessory brake lines, goals are:

- Gentle routing without any sharp bends or kinking
- Free uninhibited movement from steer lock to steer lock
- Clearance to any pinch-points throughout the steering motion
- Clearance to any potential snags such as the ignition switch with key installed

Adjust brake line routing with P-clamp and banjo fitting orientations and the line lengths between mounting locations.

1. Route the upper portion of the upper brake line along the handlebars (similar to the routing shown in Figure 1 ):
  - a. **XL1200X models stock handlebar, accessory drag handlebar or other low rise handlebar:** If routed to upper P-clamp, brake line kinks. Route directly from master cylinder under the lower fork clamp without routing through the former P-clamp position.
  - b. **All other installations:** See Figure 3. Use a new P-clamp (2) from the upper brake line kit to install the brake line (1) to the upper fork clamp. Loosely install the screw (3) removed earlier into the upper fork clamp so brake line adjustments can still be made.

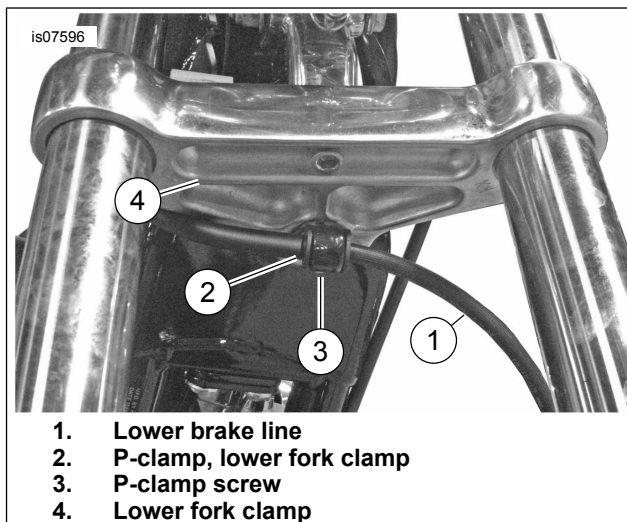


Figure 4. Non-ABS Lower Brake Line Routing (single caliper)

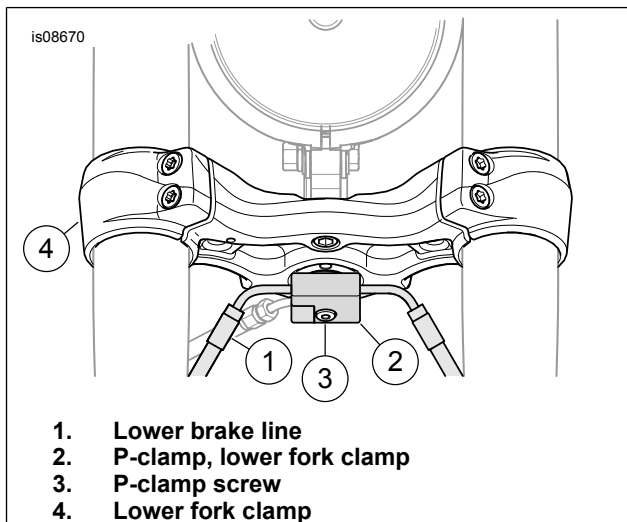
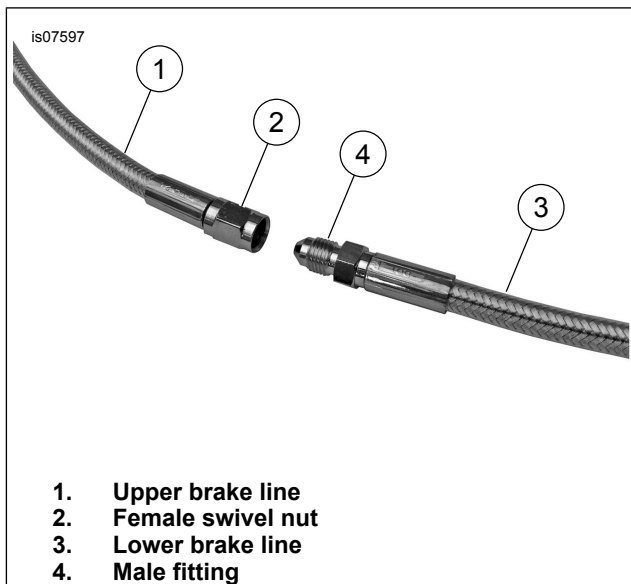


Figure 5. Non-ABS Lower Brake Line Routing (dual caliper)



**Figure 6. Upper to Lower Brake Line Fittings**

2. Route the remainder of the upper brake line under the lower fork clamp. See Figure 4. On single-caliper models, loosely install a new cushioned P-clamp (2) from the lower brake line kit over the swivel-nut end of the upper brake line. Position so that it can be mounted with fastener behind the brake line.

**NOTE**

When tightening the fitting, turn only the swivel nut. Do not allow the male fitting or manifold tubing to turn.

3. See Figure 6. Loosely thread the upper brake line (1) female swivel-nut fitting (2) to the male fitting (4) on the lower brake line (3). Turn until finger-tight.
4. Making sure only the swivel nut turns, tighten the swivel nut past finger-tight by 45 degrees (1/8 turn) or:  
Torque: 5.1–7.3 N·m (45–65 **in-lbs**) *swivel nut*
5. Install the brake line assembly to the underside of the lower fork clamp stem.
  - See Figure 4. For single-caliper models, position the cushioned P-clamp over the fitting connection, and align with the underside of the lower fork clamp stem. The flat side of the clamp is up against the bottom of the lower fork clamp. The loop of the cushioned clamp faces toward the front of the vehicle.
  - See Figure 5. For dual-caliper models, place the manifold against the bottom of the lower fork clamp, making sure that the fastener hole is rearward of the brake lines.
11. Mount the brake lines using the original screw (3) removed earlier. Tighten the screw to:  
Torque: 10.8–13.6 N·m (8–10 ft-lbs) *screw*
12. To complete the installation, adjust the upper brake line routing by adjusting the master cylinder banjo rotation angle and orientation of the upper P-clamp. Goals are:
  - Gentle routing without any sharp bends or kinking
  - Free uninhibited movement from steer lock to steer lock
  - Clearance to any pinch-points throughout the steering motion

- Clearance to any potential snags such as the ignition switch with key installed
13. Tighten the master cylinder banjo bolt (installed earlier) to:  
Torque: 19–24.4 N·m (14–18 ft-lbs) *banjo bolt*
  14. Tighten the upper P-clamp fastener to:  
Torque: 4–5.4 N·m (3–4 ft-lbs) *P-clamp Screw*
  15. Secure the brake line routing with cable straps from the upper brake line kit.
  16. Go to **BRAKE LINE ROUTING CHECK AND ADJUSTMENT**.

## INSTALLATION - ABS SPORTSTER MODELS

**▲ 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)

### Original Front Brake Line Removal

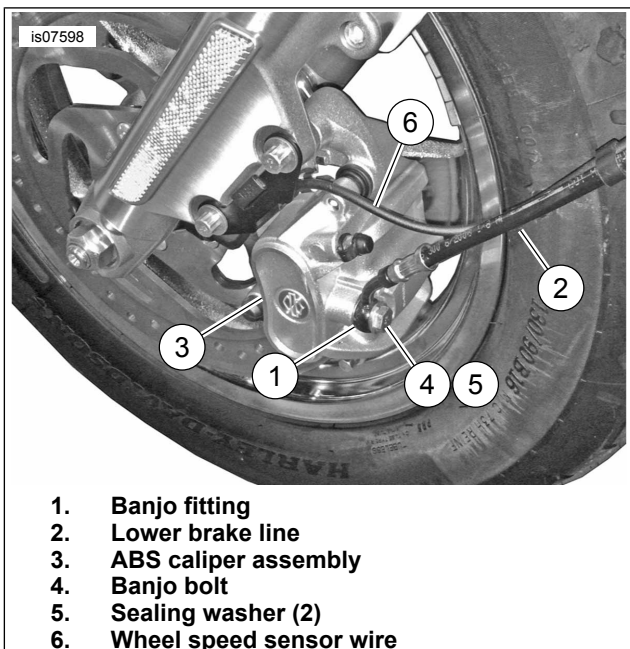
**NOTE**

Cover painted parts to protect finish.

**NOTICE**

**Remove brake line components carefully. Damage to seating surfaces can cause leakage. (00320a)**

1. Note the Wheel Speed Sensor (WSS) wire routing and cable strap location. Remove the cable straps and clips holding the WSS to the brake line. Save the clips.
2. See Figure 8. Remove the shoulder screw (2) holding the brake line manifold (1) to the lower fork stem. Save the shoulder screw for later installation with the new brake line.
3. Disconnect the brake line tube nut connections (3) at the rear of the lower brake line manifold.
4. See Figure 3. Remove P-clamp fastener (3) and P-clamp (2) from upper fork bracket. Save the fastener. Discard the P-clamp.
5. See Figure 1. Disconnect brake line (2) from the front brake master cylinder (3). Discard the sealing washers (5), but save the banjo bolt (4).



1. Banjo fitting
2. Lower brake line
3. ABS caliper assembly
4. Banjo bolt
5. Sealing washer (2)
6. Wheel speed sensor wire

**Figure 7. ABS Lower Brake Line Routing**

6. See Figure 7. Note the orientation of the banjo fitting. Remove banjo bolt (4). Discard sealing washers (5). Save banjo bolt.

## Braided Front Brake Line Installation

### ▲ WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

### NOTICE

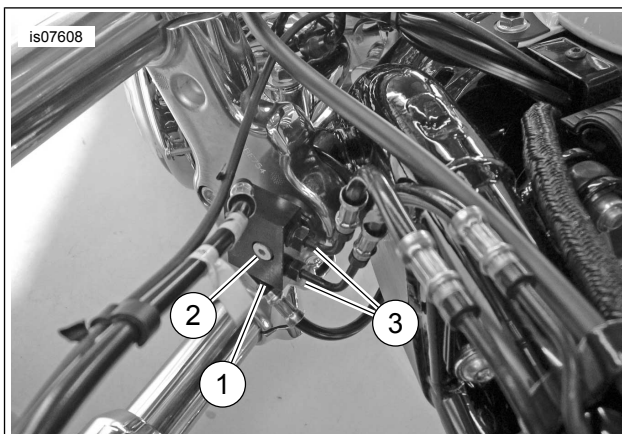
Avoid leakage. Be sure gaskets, banjo bolt(s) and brake line are clean and undamaged before assembly. (00323a)

### NOTE

When routing accessory brake lines, goals are:

- Gentle routing without any sharp bends or kinking
- Free uninhibited movement from steer lock to steer lock
- Clearance to any pinch-points throughout the steering motion
- Clearance to any potential snags such as the ignition switch with key installed

Adjust brake line routing with P-clamp and banjo fitting orientations and the line lengths between mounting locations.



1. Brake line manifold
2. Shoulder screw
3. ABS line tube nut connections (2)

**Figure 8. Brake Line Manifold**

1. See Figure 8. Position the brake line manifold (1) on the underside of the fork stem with the lower leg of the brake line coming down the rear of the front forks to the brake caliper.
2. Secure the manifold to the fork stem with the previously removed shoulder screw (2). Tighten the screw to:  
Torque: 4.1–5.4 N·m (36–48 in-lbs)
3. Connect the ABS brake lines tube nut fittings (3) to the braided brake line manifold. Tighten the tube nuts to:  
Torque: 14.5–19.3 N·m (10.7–14.4 ft-lbs) *Tube Nuts*
4. See Figure 7. At the brake caliper(s), install a new sealing washer (5) from the Lower Brake Line Kit on each side of the brake line banjo fitting (1). Insert the banjo bolt (4, removed earlier) through the washers and fitting. Thread the bolt into the caliper. Tighten to:  
Torque: 19–24.4 N·m (14–18 ft-lbs) *Banjo Bolt*
5. Obtain the new upper brake line assembly. Route the upper brake line from the master cylinder along the front of the handlebar, behind the upper fork clamp and down to the male fitting on the upper end of the lower brake line.
6. See Figure 1. Install the banjo fitting (1) of the new upper brake line at the master cylinder. Use a new sealing washer (5) from the Upper Brake Line Kit on each side of the fitting.
7. Install the banjo bolt (4, removed earlier) snug, but do not fully tighten now.
8. Route the upper portion of the upper brake line along the handlebars (similar to the routing shown in Figure 1).
  - a. **XL1200X models stock handlebar, accessory drag handlebar or other low rise handlebar:** If routed to upper P-clamp, brake line kinks. Route directly from master cylinder under the lower fork clamp without routing through the former P-clamp position.

- b. **All other installations:** See Figure 3. Use a new P-clamp (2) from the upper brake line kit to install the brake line (1) to the upper fork clamp. Loosely install the screw (3) removed earlier into the upper fork clamp so brake line adjustments can still be made.
9. Check the routing of the upper brake line from the master cylinder, along the handlebar and through the P-clamp, to the junction of the upper and lower brake lines. Verify that the routing of the brake line is smooth and does not interfere with any vehicle components. If necessary, adjust the orientation of the P-clamp.

#### NOTE

*When tightening the fitting, turn only the swivel nut. Do not allow the male fitting or manifold tubing to turn.*

10. Connect the female fitting on the upper brake line to the male fitting on the manifold. Thread the female fitting onto the male fitting finger-tight.
11. Turning only the swivel nut, tighten the nut past finger-tight by 45 degrees (1/8 turn) or  
Torque: 5.1–7.3 N·m (45–65 in-lbs)
12. To complete the installation, adjust the upper brake line routing by adjusting the master cylinder banjo rotation angle and orientation of the upper P-clamp. Goals are:
  - Gentle routing without any sharp bends or kinking
  - Free uninhibited movement from steer lock to steer lock
  - Clearance to any pinch-points throughout the steering motion
  - Clearance to any potential snags such as the ignition switch with key installed
13. Tighten the master cylinder banjo bolt (installed earlier) to:  
Torque: 19–24.4 N·m (14–18 ft-lbs) *banjo bolt*
14. Tighten the upper P-clamp fastener to:  
Torque: 4–5.4 N·m (3–4 ft-lbs) *P-clamp Screw*
15. Secure the brake line routing with the cable straps from the upper brake line kit.

### Brake Line Routing Check and Adjustment

1. Raise the vehicle so that the front forks reach maximum extension. Verify that the lower brake line is not pulled tight when the forks are fully extended.
2. Check the upper and lower brake line routing and banjo fitting orientation:
  - a. Verify that the lower brake line is long enough to allow full fork extension without pulling the brake line.
  - b. Fully compress the forks to check that the lower brake line does not interfere with motorcycle components.
  - c. Slowly turn handlebars to full left lock and full right lock. Verify that there is no binding.

3. Adjust the brake lines and/or banjo fitting orientation as needed. If the brake line contacts the inserted key or key fob during full right turn of the handlebars:
  - a. When adjustments are complete, tighten the master cylinder banjo bolt to:  
Torque: 19–24.4 N·m (14–18 ft-lbs) *Banjo bolt*
  - b. While holding the P-clamps in the proper orientation, tighten the P-clamp screw at the fork clamp to:  
Torque: 4–5.4 N·m (3–4 ft-lbs) *Banjo bolt*
  - c. Install cable straps at the same locations as the original cable straps or as necessary to maintain proper brake line routing.
  - d. Turn the cushioned clamp under the lower fork clamp toward the left side of the vehicle. Move the vertical portion of the brake line between the upper and lower clamps as far to the right as possible. This adjustment keeps the brake line away from the ignition key.
  - e. If the brake line contacts the lower fork clamp, turn the cushioned clamp toward the right side of the vehicle.

## FINAL ASSEMBLY

### Bleed and Test Front Brake Line

#### NOTE

*Cover painted and chrome parts to protect finish.*

1. Remove the front brake master cylinder cover, unless already done.
2. Stand motorcycle upright (not leaning on jiffy stand) on a level surface.

#### ⚠ WARNING

**Use only DOT 4 hydraulic brake fluid in the brake master cylinder. Use of other types of fluid can cause brake system damage and adversely affect braking, which could result in death or serious injury. (00597c)**

3. Add DOT 4 hydraulic brake fluid **only** to the master cylinder reservoir until fluid level is 3.2 mm (1/8 in) from the top. Do not reuse brake fluid. Use only brake fluid from a sealed container.

#### ⚠ WARNING

**Be sure the master cylinder relief port is not plugged. A plugged relief port can cause brake drag or lockup and loss of vehicle control, which could result in death or serious injury. (00317a)**

#### NOTE

**ABS Models:** *ABS models require special tools to bleed the brakes that are only available to Harley-Davidson dealers.*

4. Verify proper operation of the master cylinder relief port by actuating the brake pedal or lever. A slight spurt of fluid will break the fluid surface in the reservoir if internal components are working properly.

**▲ WARNING**

After servicing brakes and before moving motorcycle, pump brakes to build brake system pressure. Insufficient pressure can adversely affect brake performance, which could result in death or serious injury. (00279a)

- Bleed the brake system following the instructions in the service manual.
- Check the master cylinder and caliper banjo fittings and male/female connection under the lower fork clamp for any signs of leakage.
- Tighten the bleeder screw. Install the bleeder cap.  
Torque: 3.9–6.9 N·m (34.5–61 in-lbs) *hex nut*

**NOTE**

Before installing the master cylinder cover, verify that the cover gasket bellows is not expanded. If bellows is expanded, brake fluid is ejected from the reservoir during cover installation, which could damage the vehicle finish.

- Add brake fluid to the master cylinder reservoir until the fluid level is about 3.2 mm (1/8 in) from the top.
- One end of the master cylinder cover is thinner than the other. Install the cover (with gasket compressed) on the master cylinder reservoir, with the **thicker** end positioned above the brake line fitting. Tighten screws to:  
Torque: 1–2 N·m (8.8–17.7 in-lbs) *screws*

**COMPLETION**

**NOTE**

To prevent possible damage to the sound system, verify that the ignition is OFF **before** installing the main fuse.

- See the service manual. Install main fuse.

**▲ 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)

- See the service manual. Install seat.

**▲ 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)

- Test ride motorcycle at low speed. Repeat the bleeding procedure if brakes feel spongy.

**SERVICE PARTS**

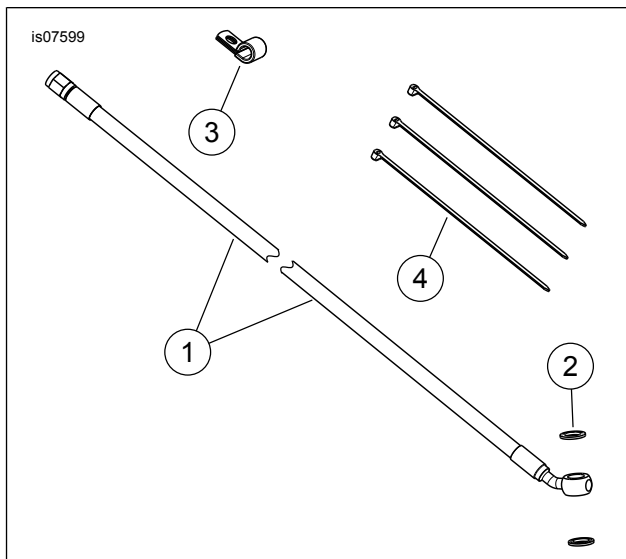


Figure 9. Service Parts: Upper Brake Line Kit

Table 5. Service Parts: Upper Brake Line Kit

Item	Description (Quantity)	Part Number
1	Upper brake line	Not Sold Separately
2	Sealing washer, 10 mm (2)	41756-08
3	P-clamp	10059A
4	Cable strap (3)	10065

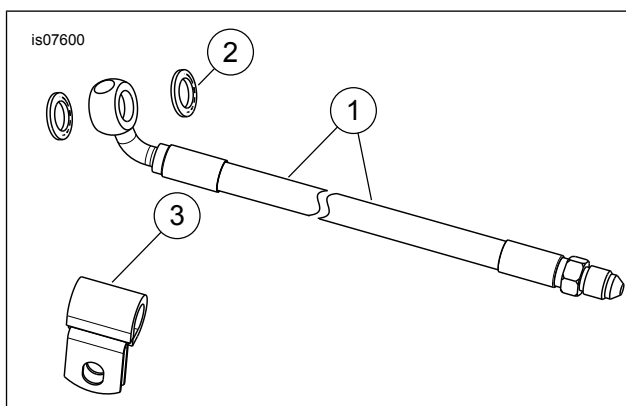


Figure 10. Service Parts: Sportster Non-ABS Lower Brake Line Kit

Table 6. Service Parts: Sportster Non-ABS Lower Brake Line Kit

Item	Description (Quantity)	Part Number
1	Lower brake line, non-ABS	Not Sold Separately
2	Sealing washer, 10 mm (2)	41756-08
3	P-clamp, cushioned	42364-07



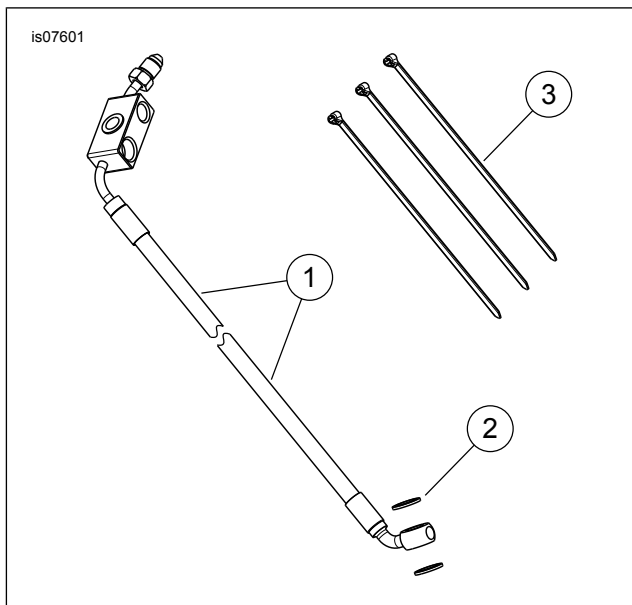


Figure 11. Service Parts: Sportster ABS Lower Brake Line Kit

Table 7. Service Parts: Sportster ABS Lower Brake Line Kit

Item	Description (Quantity)	Part Number
1	Lower brake line, ABS	Not Sold Separately
2	Sealing washer, 10 mm (2)	41756-08
3	Cable strap (3)	10065

## SERVICE PARTS

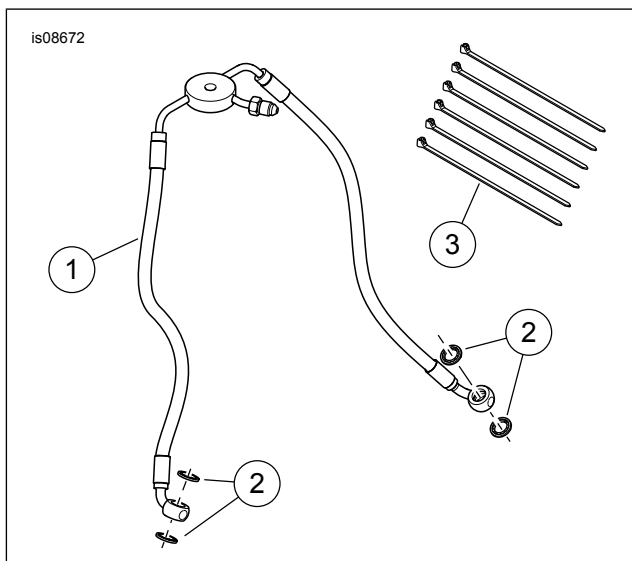


Figure 12. Service Parts: Non-ABS Dual Disk Lower Brake Line

Table 8. Service Parts: Non-ABS Dual Disc Lower Brake Line Kit

Item	Description (Quantity)	Part Number
1	Lower brake line, Non-ABS	Not Sold Separately
2	Sealing washer, 10 mm (4)	41756-08
3	Cable strap (6)	10065

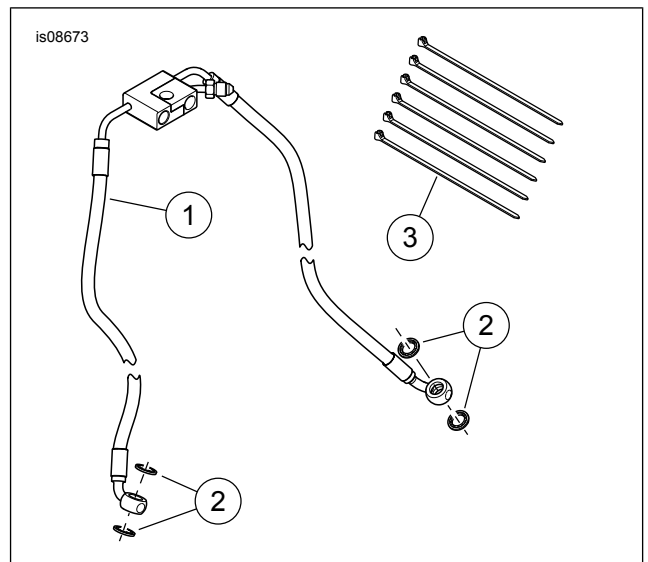


Figure 13. Service Parts: ABS Dual Disk Lower Brake Line

Table 9. Service Parts: ABS Dual Disc Lower Brake Line

Item	Description (Quantity)	Part Number
1	Lower brake line, ABS	Not Sold Separately
2	Sealing washer, 10 mm (4)	41756-08
3	Cable strap (6)	10065