

SERVICE BULLETIN



M-1217A

Safety Recall Code 0134

March 31, 2008

2005-07 POLICE MODEL ABS BRAKE LINE RECALL

Purpose

This revision expands brake line inspection requirements, defines brake line replacement criteria, provides recall kit contents and installation instructions, and updates crediting procedures. Please note that it immediately and entirely supersedes M-1217.

As advised in ML-438, Harley-Davidson Motor Company, Inc. has decided that a defect relating to motor vehicle safety may exist on certain 2005-07 police and escort motorcycles (models FLHP, FLHPI, FLHTP, FLHTPI, FLHPE and FLHPEI) built February 25, 2004 through July 1, 2007. These motorcycles are equipped with anti-lock brake systems (ABS), in which inconsistencies in the routing of the brake lines can cause abrasion of the brake lines and hoses. In some cases this condition has caused brake fluid leaks. Loss of brake fluid could lead to loss of brake function, which could lead to a crash resulting in injury or death.

Harley-Davidson has voluntarily declared this a defect related to motor vehicle safety (Safety Recall Campaign 0134) to allow us to formally recall all affected motorcycles.

The remedy is to inspect brake lines 40632-05/06 and 40610-05 for abrasion and replace if necessary. The remedy also includes installing the brake line retention and clutch cable positioning devices to prevent future abrasion.

Kit Ordering Information

Wave shipments of the brake line retention kit, Part No. 94669 (Kit A), which is needed to perform each of the required services on all motorcycles, will begin the week of April 1, 2008 and will continue until further notice. No wave shipments of brake line replacement kits, Part No. 94673 (Kit B) and Part No. 94674 (Kit C), will be made. If inspection determines that brake line replacement kits are needed, complete the attached order form and fax it to the Warranty Department at 414-343-8346. A VIN is required for each kit ordered.

Table 1. Brake Line Retention/Replacement Kits

Kit A	Kit B	Kit C
Part No. 94669	Part No. 94673	Part No. 94674
Routing and retention devices	Brake line assembly	Rear brake line
42891-07 (3), Short frame guide	40632-06, Brake manifold/rear master cylinder to ABS module	40610-05, ABS module to rear brake caliper
42890-07, Long frame guide	41731-01 (14), Steel/rubber washers	41731-01 (4), Steel/rubber washers
42898-07, Anti-rotation clip	9907 (2), Terminals	
42914-07, Anti-rotation clip		
44067-07, Double sided anti-rotation clip		
10053, P-clip		
6703 (2), Flat washer		
3594, Screw		
10006 (20), Cable strap		
4266A, Screw		
7667, Nut		

IMPORTANT NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	WARRANTY PROCESS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO.1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	RETURN THIS TO
INITIAL HERE									

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Motorcycles Affected

Certain 2005-07 ABS equipped police and escort model motorcycles built from February 25, 2004 through July 1, 2007, and affecting the following models: FLHP, FLHPI, FLHTP, FLHTPI, FLHPE and FLHPEI.

In the interest of customer safety and as required by law, you may sell but not deliver any affected new motorcycles to your customers until the remedy is completed. Harley-Davidson also recommends that you follow the same policy with any affected used motorcycles. If you choose to not follow this recommendation, please first consult your local legal counsel.

For an updated list of affected VINs involved in this recall, refer to the Service Page on h-dnet.com. In Service Toolbox, select Safety Campaign and Open VIN Lists link, followed by Safety Recall Campaign 0134.

Customer Notification

Harley-Davidson will send a letter to registered owners notifying them of this safety related condition and instructing them to contact their dealer for the recall service. A sample of the customer letter is attached.

Required Dealer Action

NOTE

The procedures which follow assume a basic understanding and familiarity with Police ABS parts and procedures. Carefully review and/or refer to the 2007 Police Models Service Manual Supplement where necessary (Part No. 99483-07SP).

Inspection

- 1. Place motorcycle on lift.
- 2. Remove right side saddlebag and side cover.

NOTE

To perform an accurate inspection, use a bright light and mirror and move split line tubing where necessary.

- 3. See Figure 1 and Table 2. Inspect three brake lines (Part No. 40632-05/06) leading from the brake manifold and rear master cylinder to the ABS module. Pay careful attention to the following areas:

NOTE

As soon as damage (as defined in Table 2) is found on any one of three brake lines, immediately stop inspection of Part No. 40632-05/06 and move to inspection of Part No. 40610-05. Since the three brake lines are replaced as a set, inspection of the remaining lines becomes unnecessary.

- a. Brake line to clutch cable inboard and/or rear of rear master cylinder/brake pedal frame weldment.
 - b. Brake line to bottom edge of aluminum guide at rear frame downtube.
 - c. Brake line hoses to adjacent hoses inboard of ABS module.
- 4. See Figure 2 and Table 2. Inspect the brake line (Part No. 40610-05) leading from the ABS module to the rear caliper. Pay careful attention to the following areas:
 - a. Brake hose to edge of saddlebag cut out.

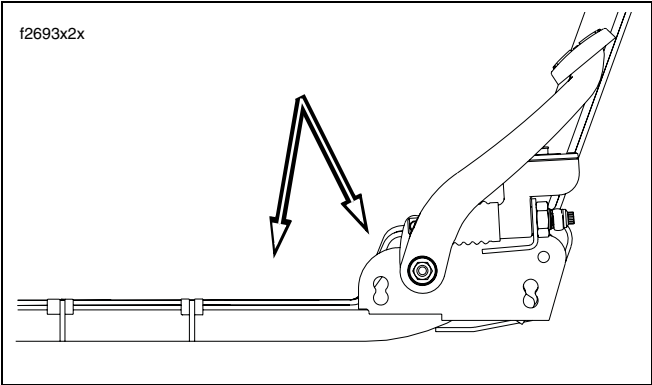


Figure 1. Brake Lines 40632-05/06 to Clutch Cable

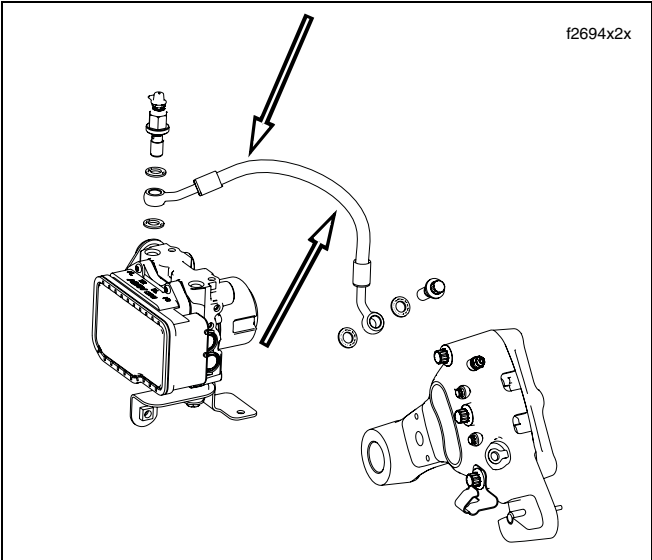


Figure 2. Brake Line 40610-05 to Saddlebag Cut Out and Adjacent Hoses

Table 2. Wear versus Damage/Action

Hard Line		
1	No mark or slight mark to black paint	Wear - Retain *
2	Copper colored (black paint worn)	
3	Silver, but no noticeable feel (paint and copper plating worn)	
4	Silver with noticeable feel	Damage - Replace
5	Leak or other obvious damage	
* Apply touch up paint to affected area using Part No.'s 98601DH (1/2 oz. applicator bottle) or 93936 (paint pen).		
Hose		
1	No marks	Wear - Retain
2	Slight dent or flattening of ribs	
3	Worn to bottom of ribs	Damage - Replace
4	Leak or other obvious damage	

- b. Brake hose to adjacent 40632-05/06 hoses.
- 5. Based on inspection results, proceed as follows:
 - a. No damage found. Use Kit A to install routing and retention devices. See Procedure A.

- b. Damage found on at least one of three brake lines from the brake manifold/rear master cylinder to the ABS module. Use Kit B to replace three brake lines and Kit A to install routing and retention devices. See Procedure A-B.
- c. Damage found on brake line from ABS module to rear caliper. Use Kit C to replace brake line and Kit A to install routing and retention devices. See Procedure A-C.
- d. Damage found on at least one of three brake lines from the brake manifold/rear master cylinder to the ABS module, as well as the brake line from the ABS module to the rear caliper. Use Kit B and Kit C to replace all four brake lines. Use Kit A to install routing and retention devices. See Procedure A-B-C.

Procedure A

Removal

1. Remove screw to release aluminum guide (with rubber spacer) and saddlebag guard from weldment on rear frame downtube. Discard screw, aluminum guide and spacer.

NOTE

*Always install **new** screw from inboard side of frame weldment. Incorrect installation may cause threaded end of screw to contact and abrade brake line.*

2. Obtaining parts from Kit A, insert screw through frame weldment and saddlebag guard, install nut and tighten to 15-20 ft-lbs (20-27 Nm).
3. Cut cable straps to free three brake lines from two rubber spacers anchored on T-studs at top of lower frame tube. Remove and discard spacers.
4. Separate three brake lines removing all tape.

Installation

NOTE

The following procedure uses 14 cable straps which are numbered in the illustrations in order of installation. To enhance clarity, routing/retention devices appear gray instead of black.

1. Capture clutch cable in P-clip. Install flat washer on screw. Insert screw through P-clip and second flat washer into **INBOARD** hole at bottom of crankcase. Orient P-clip, so that clutch cable runs inboard of screw, and then tighten to 96-144 **in-lbs** (10.9-16.3 Nm).

NOTE

Short frame guides are a tight fit. Lubricate with glass cleaner prior to installation.

2. Install two short frame guides on T-studs at top of lower frame tube.
3. Place long frame guide against rear frame downtube, so that posts are in contact with inboard side of saddlebag guard weldment.
4. See Figure 4 and Figure 5. Adjust three brake lines on motorcycle. Handle one brake line at a time working from inboard to outboard side of lower frame tube as follows:

NOTE

As each line is positioned, cut away split line tubing from front of P-clip to rear of rear short frame guide.

- a. Route line from rear master cylinder through **INBOARD** slot in short frame guides and then up rear frame downtube through **INBOARD** slot of long frame guide.
- b. Route line to front calipers through **MIDDLE** slot in short frame guides and then up rear frame downtube through **OUTBOARD** slot of long frame guide.
- c. Route line from front master cylinder through **OUTBOARD** slot in short frame guides and then up rear frame downtube at rear of long frame guide.
5. Run main harness conduit along inboard side of lower frame tube.
6. See items 1 and 2 of Figure 6. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of two short frame guides. Do not capture main harness conduit.
7. See items 3 and 4 of Figure 6. Install **new** cable strap at rear of rear short frame guide and at front of front short frame guide capturing lower frame tube and main harness conduit only.
8. See items 5 and 6 of Figure 7. Capturing three brake lines and rear frame downtube, install **new** cable strap in slot on each end of long frame guide.
9. See item 7 of Figure 7. Install **new** cable strap capturing posts of long frame guide and saddlebag guard weldment.
10. See items 8 and 9 of Figure 7. At top and bottom of long frame guide, install **new** cable straps capturing three brake lines only.
11. See item 10 of Figure 8. At bottom of rear frame downtube, install **new** cable strap capturing three brake lines just above the bend.
12. See item 11 of Figure 9. Set third short frame guide on top of lower frame tube just rear of P-clip. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of short frame guide, but do not capture main harness conduit.

NOTE

Verify that brake lines do not contact rear master cylinder/brake pedal frame weldment; adjust position of third (unanchored) short frame guide if necessary. Verify that clearance between brake lines and clutch cable is approximately 3/8 in. (9.6 mm); adjust P-clip if necessary.

13. See item 12 of Figure 10. Install **new** cable strap capturing two front brake lines at bottom of front frame downtube. Position cable strap about 3/8 in. (9.6 mm) above rear master cylinder/brake pedal frame weldment.

NOTE

Anti-rotation clips are a tight fit. If necessary, lubricate with glass cleaner prior to installation.

14. See Figure 11. Install anti-rotation clip over banjo bolt in rear caliper. If necessary, loosen banjo bolt 1/2 turn to properly orient brake line. Holding brake line to prevent rotation, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
15. See Figure 12. Install anti-rotation clip over banjo bolt in rear inboard port of ABS module. If necessary, loosen banjo bolt 1/2 turn to properly orient brake line (from rear master cylinder). Holding brake line, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).

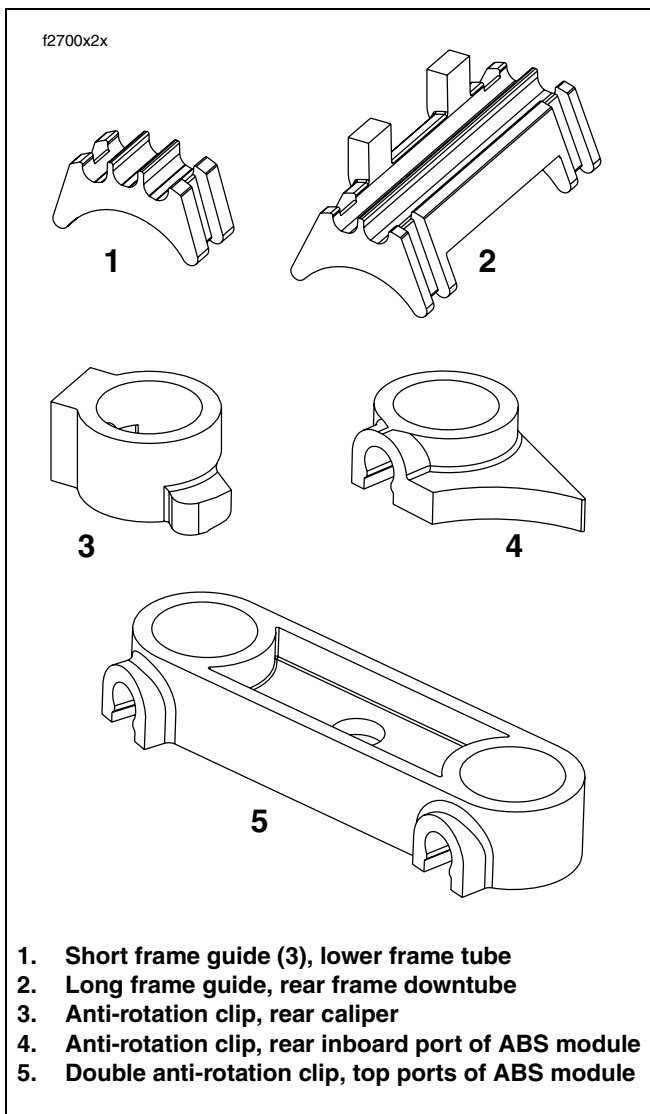
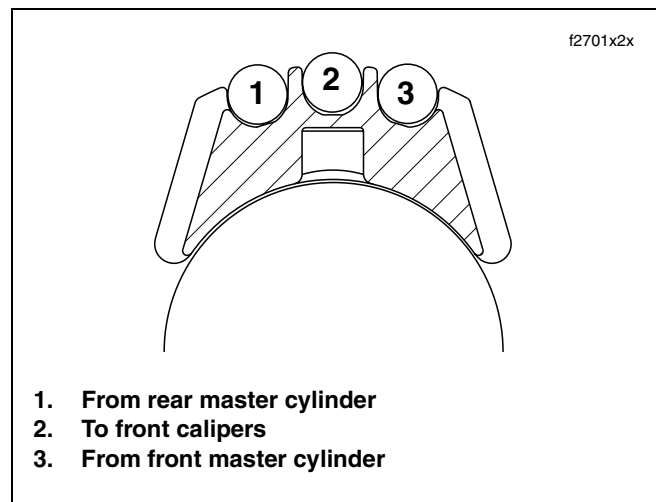
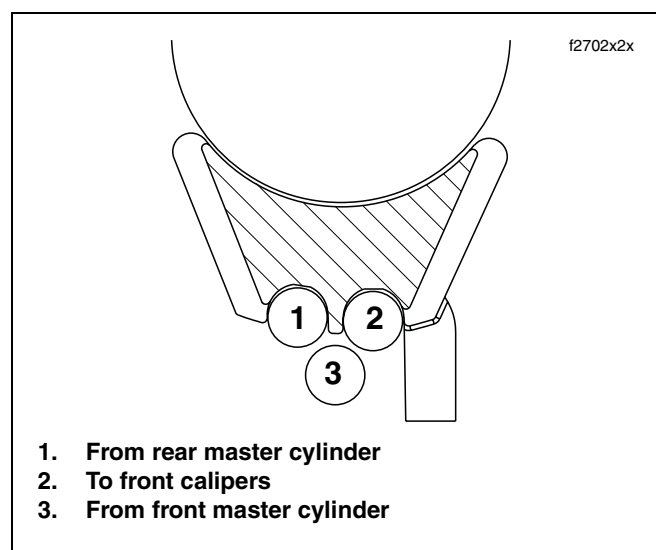


Figure 3. Brake Line Routing/Retention Devices

16. See Figure 12. Install double sided anti-rotation clip over banjo bolts in front top port and rear top port of ABS module. If necessary, loosen banjo bolts 1/2 turn to properly orient brake lines (to front and rear calipers, respectively). Holding brake lines, tighten banjo bolts to 17-22 ft-lbs (23.0-29.8 Nm). Verify that clearance between shock absorber and line to rear caliper is 1/8 in. (3.2 mm) minimum.
17. See item 13 of Figure 13. Install **new** cable strap to secure rear brake light switch wires to crimp of brake line hose (from rear master cylinder).
18. See item 14 of Figure 13. Install **new** cable strap to secure crimp of brake line hose (from front master cylinder) to split line tubing on ABS module connector conduit.
19. Remove anti-rotation clips. Exercise brake systems to verify that no leakage occurs around banjo bolts. If leakage is evident, confirm banjo bolt torque before replacing steel/rubber washers. Fill and bleed brake systems if necessary. Install anti-rotation clips.
20. Install right side cover and saddlebag.
21. See Credit Procedure A.



**Figure 4. Short Frame Guides
(Rear View at Lower Frame Tube)**



**Figure 5. Long Frame Guide
(Top View at Rear Frame Downtube)**

Procedure A-B

Removal

1. Drain brake systems.
2. Remove motorcycle from lift to access right side of steering head. Remove two banjo bolts (or acorn nuts) to release brake lines from manifold. Discard steel/rubber washers.
3. Place motorcycle back on lift.
4. Remove all routing and retention devices as follows:
 - a. Remove screw to release aluminum guide (with rubber spacer) and saddlebag guard from weldment on rear frame downtube. Discard screw, aluminum guide and spacer.

NOTE

*Always install **new** screw from inboard side of frame weldment. Incorrect installation may cause threaded end of screw to contact and abrade brake line.*

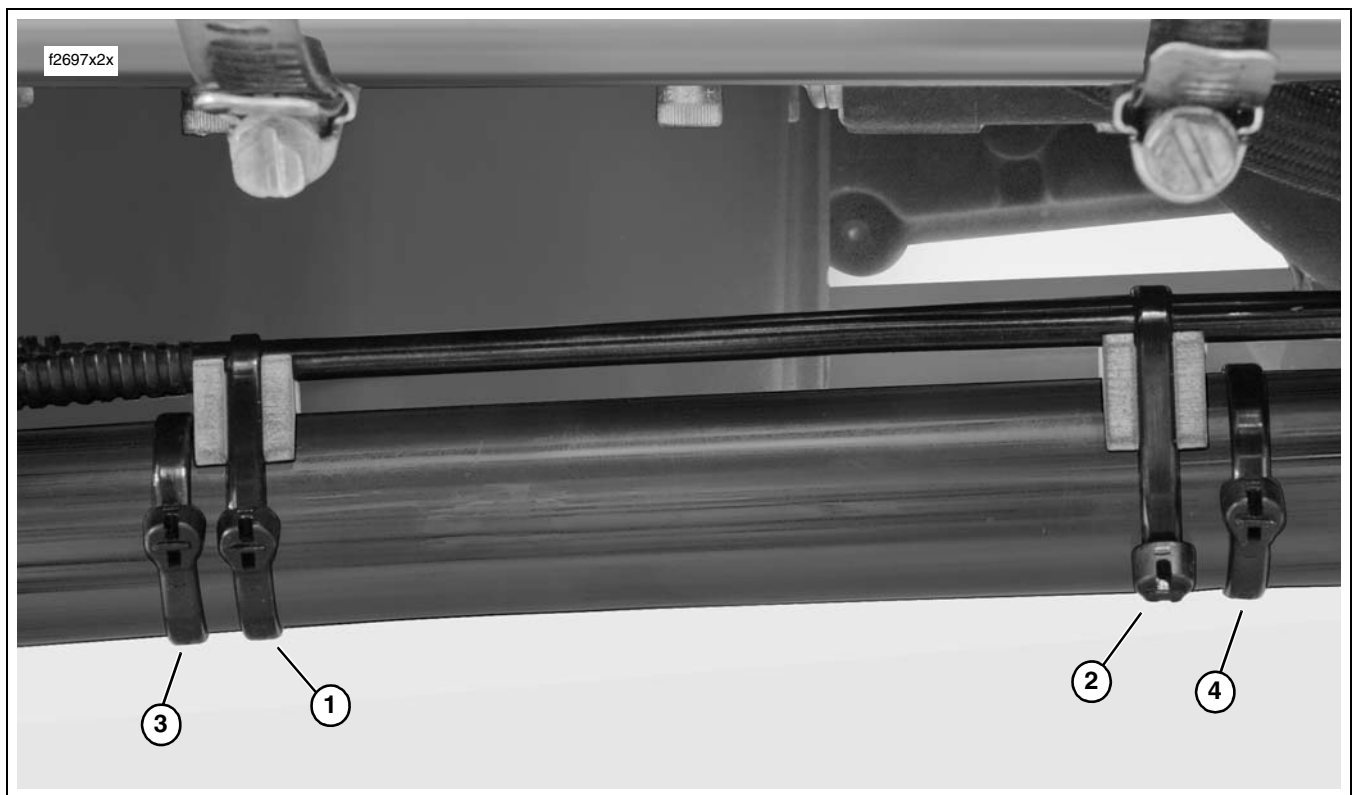


Figure 6. Install Two Short Frame Guides and Four Cable Straps at Lower Frame Tube

- b. Obtaining parts from Kit A, insert screw through frame weldment and saddlebag guard, install nut and tighten to 15-20 ft-lbs (20-27 Nm).
- c. Cut cable straps to free three brake lines from two rubber spacers anchored on T-studs at top of lower frame tube. Remove and discard spacers.
- d. Cut cable strap to free two brake lines from rubber spacer at front of front frame downtube. Save spacer for reuse.
- e. Remove any additional cable straps that may be present.
5. Remove right side rider footboard and rear master cylinder/brake pedal assembly. See REAR BRAKE MASTER CYLINDER in the Touring Models Service Manual.
6. Remove terminals from rear brake light switch.
7. Leaving rear top banjo bolt (brake line to rear caliper) intact, remove other three banjo bolts to release brake lines from ABS module. Discard steel/rubber washers.
8. Draw front brake line fittings down and out from under throttle cables and main harness conduit at right side of steering head, and then remove three brake lines as an assembly.

Installation

NOTE

The following procedure uses 15 cable straps which are numbered in the illustrations in order of installation. To enhance clarity, routing/retention devices appear gray instead of black.

1. Capture clutch cable in P-clip. Install flat washer on screw. Insert screw through P-clip and second flat washer into **INBOARD** hole at bottom of crankcase. Ori-

ent P-clip, so that clutch cable runs inboard of screw, and then tighten to 96-144 **in-lbs** (10.9-16.3 Nm).

NOTE

Short frame guides are a tight fit. Lubricate with glass cleaner prior to installation.

2. Install two short frame guides on T-studs at top of lower frame tube.
3. Place long frame guide against rear frame downtube, so that posts are in contact with inboard side of saddlebag guard weldment.
4. Obtain three **new** brake lines from Kit B. Separate brake lines and remove all tape.
5. See Figure 4 and Figure 5. Install one brake line on motorcycle at a time working from inboard to outboard side of lower frame tube as follows:

NOTE

As each brake line is positioned, cut away split line tubing from front of P-clip to rear of rear short frame guide.

- a. Route line from rear master cylinder through **INBOARD** slot in short frame guides, and then up rear frame downtube through **INBOARD** slot of long frame guide.
- b. Insert forward fitting of line to front calipers up and under throttle cables and main harness conduit to manifold at right side of steering head. Route line down front frame downtube, through **MIDDLE** slot in short frame guides, and then up rear frame downtube through **OUTBOARD** slot of long frame guide.
- c. Insert forward fitting of line from front master cylinder up and under throttle cables and main harness conduit to manifold. Route line down front frame

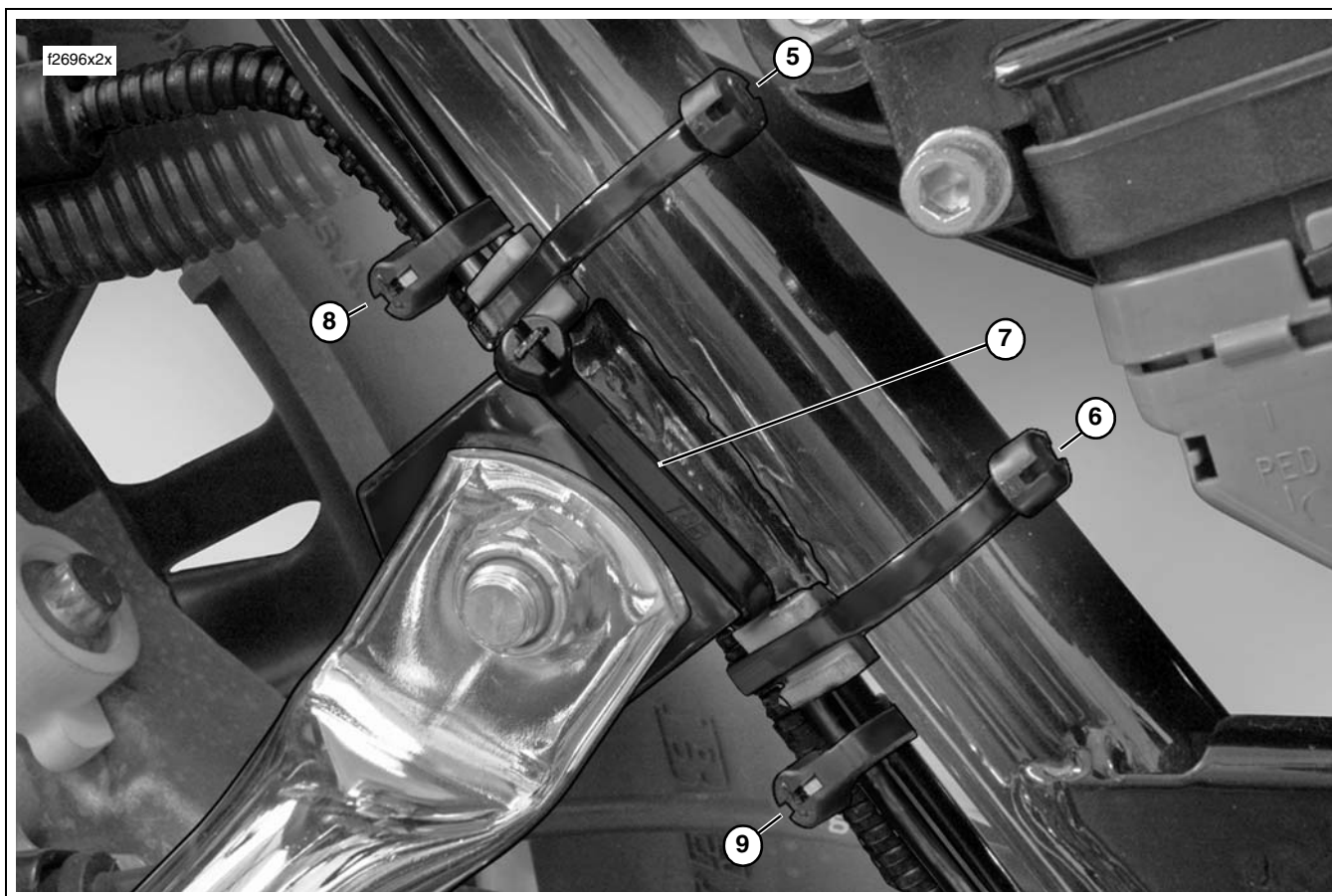


Figure 7. Install Long Frame Guide and Five Cable Straps at Rear Frame Downtube

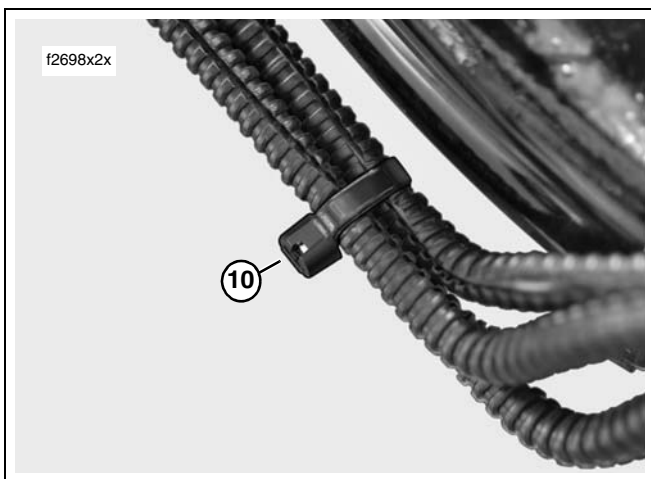


Figure 8. Install Cable Strap Above Brake Line Bend

downtube, through **OUTBOARD** slot in short frame guides, and then up rear frame downtube at rear of long frame guide.

6. Start banjo bolts (or acorn nuts) with **new** steel/rubber washers to install brake lines at manifold.
7. Install rear master cylinder/brake pedal assembly and right side rider footboard. See **REAR BRAKE MASTER CYLINDER** in the Touring Models Service Manual.
8. Using **new** steel/rubber washers, start banjo bolt to install brake line to rear master cylinder.
9. Run main harness conduit along inboard side of lower frame tube.

10. See items 1 and 2 of Figure 6. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of two short frame guides. Do not capture main harness conduit.

11. See items 3 and 4 of Figure 6. Install **new** cable strap at rear of rear short frame guide and at front of front short frame guide capturing lower frame tube and main harness conduit only.

NOTE

Without installing cable straps, verify that brake lines inboard of ABS module are positioned as shown in Figure 13.

12. See items 5 and 6 of Figure 7. Capturing three brake lines and rear frame downtube, install **new** cable strap in slot on each end of long frame guide.

13. See item 7 of Figure 7. Install **new** cable strap capturing posts of long frame guide and saddlebag guard weldment.

14. See items 8 and 9 of Figure 7. At top and bottom of long frame guide, install **new** cable straps capturing three brake lines only.

15. See item 10 of Figure 8. At bottom of rear frame downtube, install **new** cable strap capturing three brake lines just above the bend.

16. See item 11 of Figure 9. Set third short frame guide on top of lower frame tube just rear of P-clip. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of short frame guide, but do not capture main harness conduit.

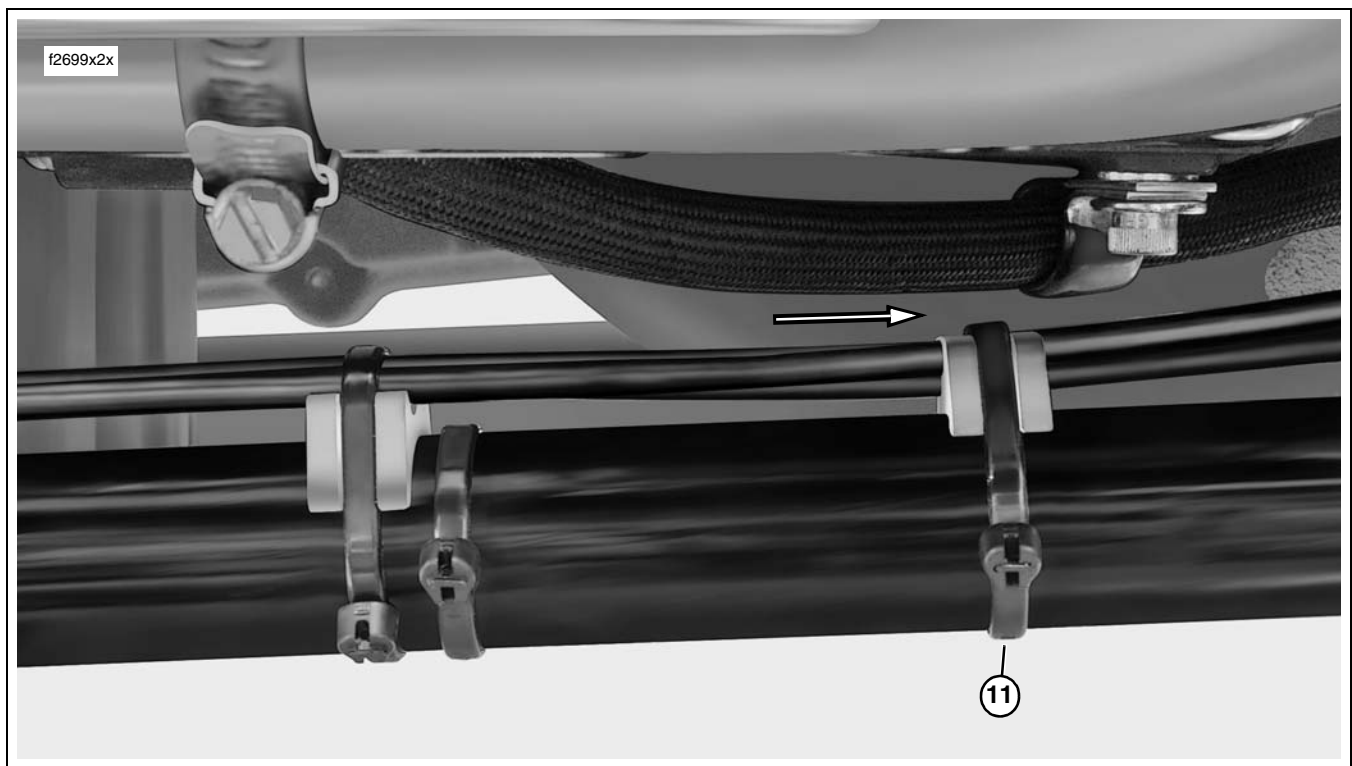


Figure 9. Install Third (Unanchored) Short Frame Guide and Verify Clutch Cable Clearance

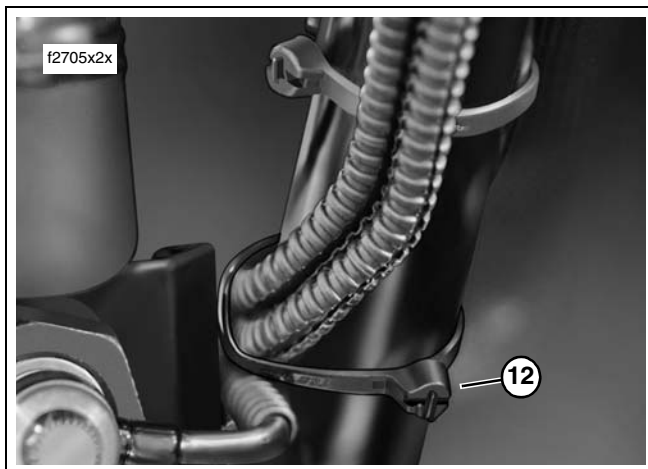


Figure 10. Install Lower Cable Strap at Front Frame Downtube

NOTE

Verify that brake lines do not contact rear master cylinder/ brake pedal frame weldment; adjust position of third (unanchored) short frame guide if necessary. Verify that clearance between brake lines and clutch cable is approximately 3/8 in. (9.6 mm); adjust P-clip if necessary.

17. See item 12 of Figure 10. Install **new** cable strap capturing two front brake lines at bottom of front frame downtube. Position cable strap about 3/8 in. (9.6 mm) above rear master cylinder/brake pedal frame weldment.
18. Tighten banjo bolt to rear master cylinder to 17-22 ft-lbs (23.0-29.8 Nm).

NOTE

Anti-rotation clips are a tight fit. If necessary, lubricate with glass cleaner prior to installation.

19. See Figure 11. Install anti-rotation clip over banjo bolt in rear caliper. If necessary, loosen banjo bolt 1/2 turn to properly orient brake line. Holding brake line to prevent rotation, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
20. See Figure 12. Start banjo bolt with **new** steel/rubber washers in rear inboard port of ABS module to install brake line (from rear master cylinder). Install anti-rotation clip over banjo bolt to properly orient brake line. Holding brake line, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
21. Start banjo bolt with **new** steel/rubber washers in front inboard port of ABS module to install brake line (from front master cylinder). Tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
22. See Figure 12. Start banjo bolt with **new** steel/rubber washers in front top port of ABS module to install brake line (to front calipers). Install double sided anti-rotation clip over banjo bolts. If necessary, loosen banjo bolt in rear top port 1/2 turn to properly orient brake line (to rear caliper). Holding brake lines, tighten banjo bolts to 17-22 ft-lbs (23.0-29.8 Nm). Verify that clearance between shock absorber and line to rear caliper is 1/8 in. (3.2 mm) minimum.

NOTE

If necessary, replace rear brake light switch terminals on 2005 and early 2006 models with those supplied in Kit B.

23. See item 13 of Figure 13. Install terminals onto rear brake light switch. Install **new** cable strap to secure brake light switch wires to crimp of brake line hose (from rear master cylinder).
24. See item 14 of Figure 13. Install **new** cable strap to secure crimp of brake line hose (from front master cylinder) to split line tubing on ABS module connector conduit.

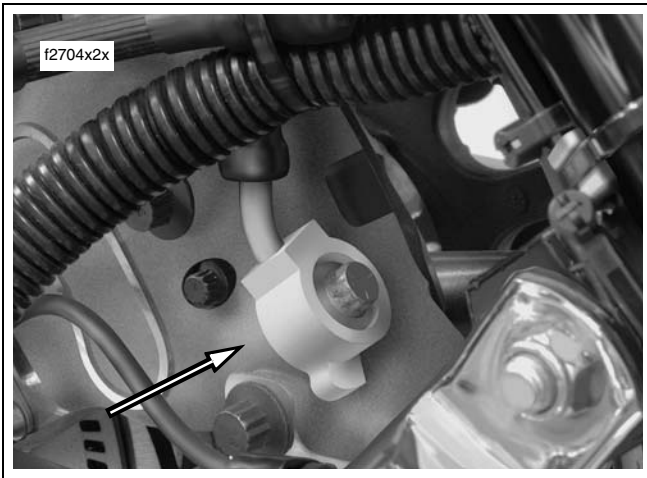


Figure 11. Install Anti-Rotation Clip at Rear Caliper

25. Remove motorcycle from lift. Turn front wheel to left fork stop and tighten manifold banjo bolts (or acorn nuts) to 17-22 ft-lbs (23.0-29.8 Nm).
26. See item 15 of Figure 14. Position front brake lines in rubber spacer held at front of front frame downtube about 5.5 in. (139.7 mm) above top of crossbrace, and install **new** cable strap. Properly oriented, brake line to front calipers runs from top fitting at manifold through **OUTBOARD** side of rubber spacer, while line from front

master cylinder runs from bottom fitting at manifold through **INBOARD** side of spacer.

27. Remove anti-rotation clips. Fill and bleed brake systems.
28. Exercise brake systems to verify that no leakage occurs around banjo bolts. If leakage is evident where banjo bolts were loosened, confirm banjo bolt torque before replacing steel/rubber washers. Install anti-rotation clips.
29. Install right side cover and saddlebag.
30. See Credit Procedure A-B.

Procedure A-C

Removal

1. Remove banjo bolts to release brake line between ABS module and rear caliper. Discard steel/rubber washers.
2. Remove screw to release aluminum guide (with rubber spacer) and saddlebag guard from weldment on rear frame downtube. Discard screw, aluminum guide and spacer.

NOTE

*Always install **new** screw from inboard side of frame weldment. Incorrect installation may cause threaded end of screw to contact and abrade brake line.*

3. Obtaining parts from Kit A, insert screw through frame weldment and saddlebag guard, install nut and tighten to 15-20 ft-lbs (20-27 Nm).

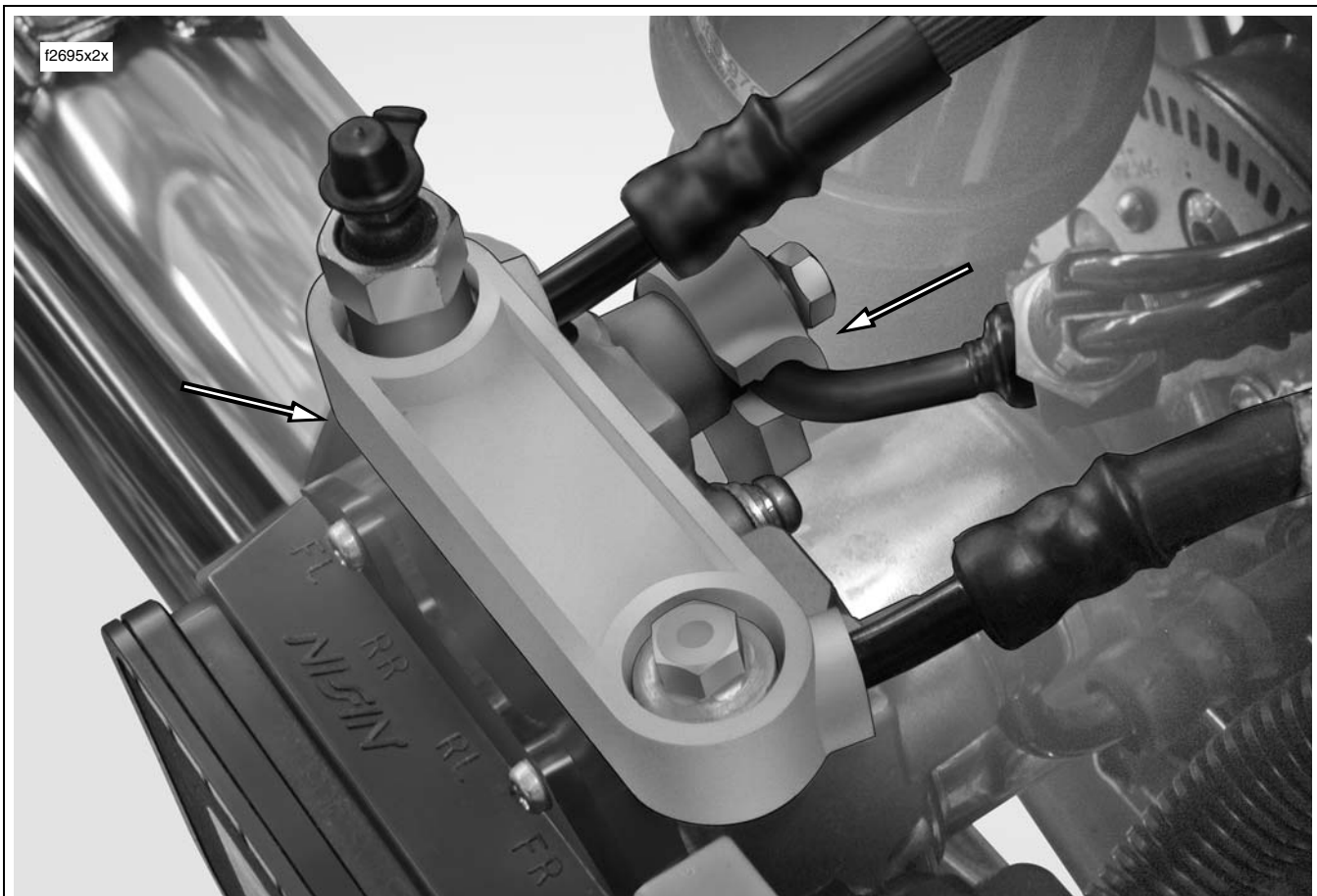


Figure 12. Install Two Anti-Rotation Clips at ABS Module

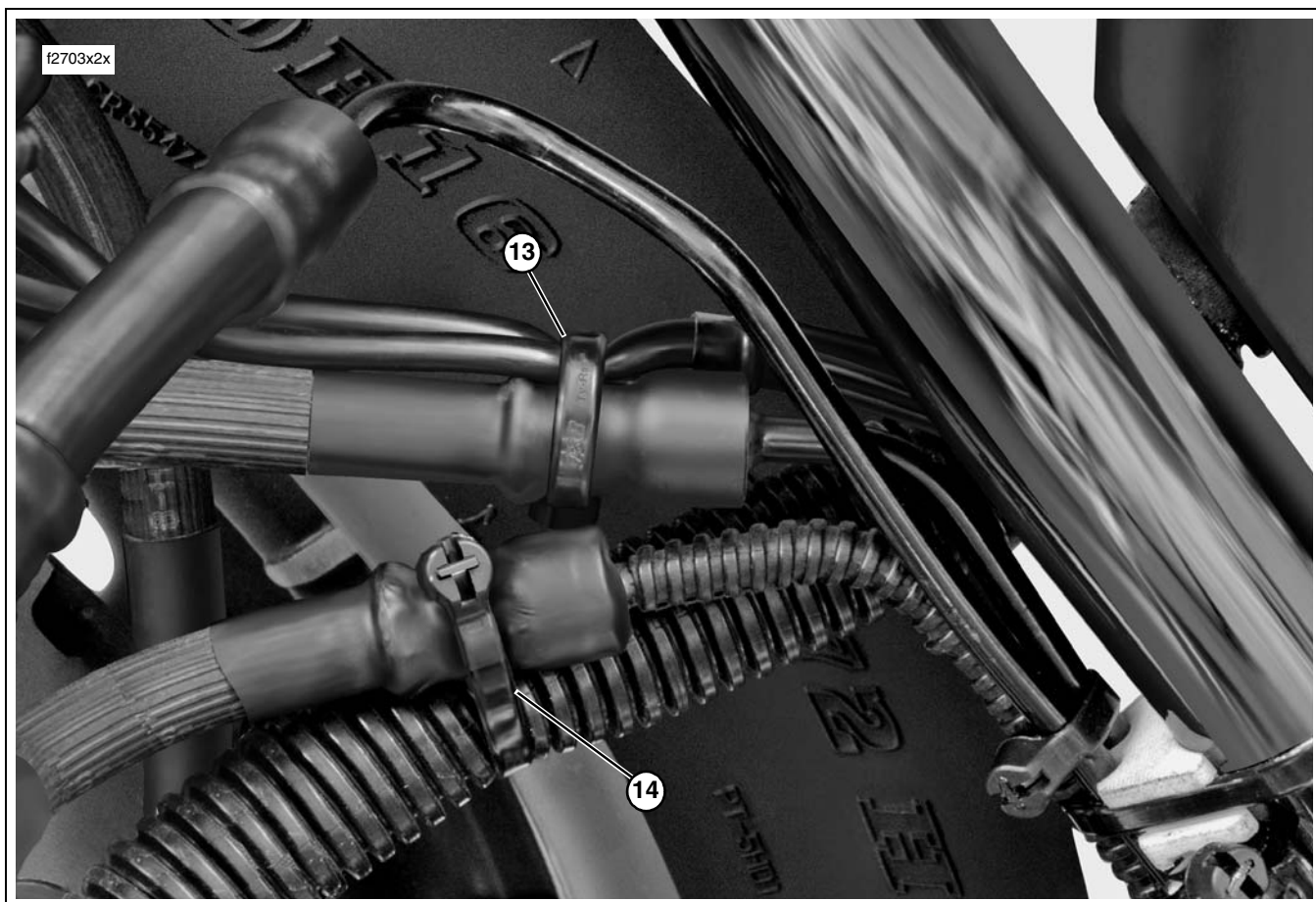


Figure 13. Install Two Cable Straps at Brake Hose Crimps

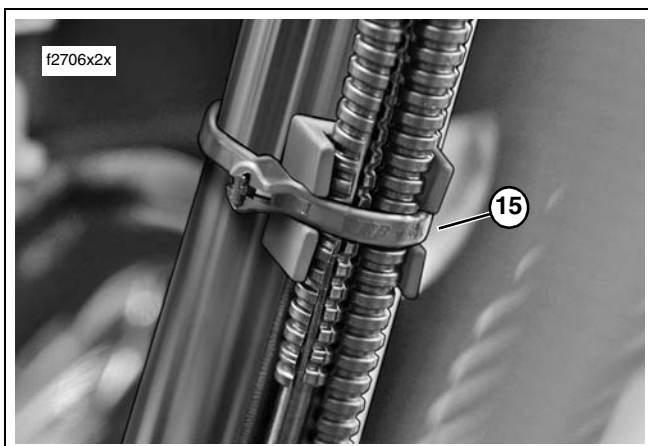


Figure 14. Install Upper Cable Strap at Front Frame Downtube

4. Cut cable straps to free three brake lines from two rubber spacers anchored on T-studs at top of lower frame tube. Remove and discard spacers.
5. Separate three brake lines removing all tape.

Installation

NOTE

The following procedure uses 14 cable straps which are numbered in the illustrations in order of installation. To enhance clarity, routing/retention devices appear gray instead of black.

1. Capture clutch cable in P-clip. Install flat washer on screw. Insert screw through P-clip and second flat washer into **INBOARD** hole at bottom of crankcase. Orient P-clip, so that clutch cable runs inboard of screw, and then tighten to 96-144 **in-lbs** (10.9-16.3 Nm).

NOTE

Short frame guides are a tight fit. Lubricate with glass cleaner prior to installation.

2. Install two short frame guides on T-studs at top of lower frame tube.
3. Place long frame guide against rear frame downtube, so that posts are in contact with inboard side of saddlebag guard weldment.
4. See Figure 4 and Figure 5. Adjust three brake lines on motorcycle. Handle one brake line at a time working from inboard to outboard side of lower frame tube as follows:

NOTE

As each line is positioned, cut away split line tubing from front of P-clip to rear of rear short frame guide.

- a. Route line from rear master cylinder through **INBOARD** slot in short frame guides and then up rear frame downtube through **INBOARD** slot of long frame guide.
- b. Route line to front calipers through **MIDDLE** slot in short frame guides and then up rear frame downtube through **OUTBOARD** slot of long frame guide.

- c. Route line from front master cylinder through **OUT-BOARD** slot in short frame guides and then up rear frame downtube at rear of long frame guide.
5. Run main harness conduit along inboard side of lower frame tube.
6. See items 1 and 2 of Figure 6. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of two short frame guides. Do not capture main harness conduit.
7. See items 3 and 4 of Figure 6. Install **new** cable strap at rear of rear short frame guide and at front of front short frame guide capturing lower frame tube and main harness conduit only.
8. See items 5 and 6 of Figure 7. Capturing three brake lines and rear frame downtube, install **new** cable strap in slot on each end of long frame guide.
9. See item 7 of Figure 7. Install **new** cable strap capturing posts of long frame guide and saddlebag guard weldment.
10. See items 8 and 9 of Figure 7. At top and bottom of long frame guide, install **new** cable straps capturing three brake lines only.
11. See item 10 of Figure 8. At bottom of rear frame downtube, install **new** cable strap capturing three brake lines just above the bend.
12. See item 11 of Figure 9. Set third short frame guide on top of lower frame tube just rear of P-clip. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of short frame guide, but do not capture main harness conduit.

NOTE

Verify that brake lines do not contact rear master cylinder/brake pedal frame weldment; adjust position of third (unanchored) short frame guide if necessary. Verify that clearance between brake lines and clutch cable is approximately 3/8 in. (9.6 mm); adjust P-clip if necessary.

13. See item 12 of Figure 10. Install **new** cable strap to secure two front brake lines at bottom of front frame downtube. Position cable strap about 3/8 in. (9.6 mm) above rear master cylinder/brake pedal frame weldment.
14. Obtaining parts from Kit C, start banjo bolts with **new** steel/rubber washers to install **new** brake line to rear caliper and to rear top port of ABS module.

NOTE

Anti-rotation clips are a tight fit. If necessary, lubricate with glass cleaner prior to installation.

15. See Figure 11. Install anti-rotation clip over banjo bolt in rear caliper to properly orient brake line. Holding brake line to prevent rotation, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
16. See Figure 12. Install anti-rotation clip over banjo bolt in rear inboard port of ABS module. If necessary, loosen banjo bolt 1/2 turn to properly orient brake line (from rear master cylinder). Holding brake line, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
17. See Figure 12. Install double sided anti-rotation clip over banjo bolts in front top port and rear top port of ABS module. If necessary, loosen banjo bolt in front top port 1/2 turn to properly orient brake line (to front calipers).

Holding brake lines, tighten banjo bolts to 17-22 ft-lbs (23.0-29.8 Nm). Verify that clearance between shock absorber and line to rear caliper is 1/8 in. (3.2 mm) minimum.

18. See item 13 of Figure 13. Install **new** cable strap to secure rear brake light switch wires to crimp of brake line hose (from rear master cylinder).
19. See item 14 of Figure 13. Install **new** cable strap to secure crimp of brake line hose (from front master cylinder) to split line tubing on ABS module connector conduit.
20. Remove anti-rotation clips. Fill and bleed rear brake system.
21. Exercise brake systems to verify that no leakage occurs around banjo bolts. If leakage is evident where banjo bolts were loosened, confirm banjo bolt torque before replacing steel/rubber washers. Fill and bleed front brake system if necessary. Install anti-rotation clips.
22. Install right side cover and saddlebag.
23. See Credit Procedure A-C.

Procedure A-B-C

Removal

1. Drain brake systems.
2. Remove motorcycle from lift to access right side of steering head. Remove two banjo bolts (or acorn nuts) to release brake lines from manifold. Discard steel/rubber washers.
3. Place motorcycle back on lift.
4. Remove all routing and retention devices as follows:
 - a. Remove screw to release aluminum guide (with rubber spacer) and saddlebag guard from weldment on rear frame downtube. Discard screw, aluminum guide and spacer.

NOTE

*Always install **new** screw from inboard side of frame weldment. Incorrect installation may cause threaded end of screw to contact and abrade brake line.*

- b. Obtaining parts from Kit A, insert screw through frame weldment and saddlebag guard, install nut and tighten to 15-20 ft-lbs (20-27 Nm).
- c. Cut cable straps to free three brake lines from two rubber spacers anchored on T-studs at top of lower frame tube. Remove and discard spacers.
- d. Cut cable strap to free two brake lines from rubber spacer at front of front frame downtube. Save spacer for reuse.
- e. Remove any additional cable straps that may be present.
5. Remove right side rider footboard and rear master cylinder/brake pedal assembly. See REAR BRAKE MASTER CYLINDER in the Touring Models Service Manual.
6. Remove terminals from rear brake light switch.
7. Remove four banjo bolts to release brake lines from ABS module. Discard steel/rubber washers.

8. Draw front brake line fittings down and out from under throttle cables and main harness conduit at right side of steering head, and then remove three brake lines as an assembly.
9. Remove banjo bolt to release brake line from rear caliper. Discard steel/rubber washers.

Installation

NOTE

The following procedure uses 15 cable straps which are numbered in the illustrations in order of installation. To enhance clarity, routing/retention devices appear gray instead of black.

1. Capture clutch cable in P-clip. Install flat washer on screw. Insert screw through P-clip and second flat washer into **INBOARD** hole at bottom of crankcase. Orient P-clip, so that clutch cable runs inboard of screw, and then tighten to 96-144 **in-lbs** (10.9-16.3 Nm).

NOTE

Short frame guides are a tight fit. Lubricate with glass cleaner prior to installation.

2. Install two short frame guides on T-studs at top of lower frame tube.
3. Place long frame guide against rear frame downtube, so that posts are in contact with inboard side of saddlebag guard weldment.
4. Obtain three **new** brake lines from Kit B. Separate brake lines and remove all tape.
5. See Figure 4 and Figure 5. Install one brake line on motorcycle at a time working from inboard to outboard side of lower frame tube as follows:

NOTE

As each brake line is positioned, cut away split line tubing from front of P-clip to rear of rear short frame guide.

- a. Route line from rear master cylinder through **INBOARD** slot in short frame guides, and then up rear frame downtube through **INBOARD** slot of long frame guide.
 - b. Insert forward fitting of line to front calipers up and under throttle cables and main harness conduit to manifold at right side of steering head. Route line down front frame downtube, through **MIDDLE** slot in short frame guides, and then up rear frame downtube through **OUTBOARD** slot of long frame guide.
 - c. Insert forward fitting of line from front master cylinder up and under throttle cables and main harness conduit to manifold. Route line down front frame downtube, through **OUTBOARD** slot in short frame guides, and then up rear frame downtube at rear of long frame guide.
6. Start banjo bolts (or acorn nuts) with **new** steel/rubber washers to install brake lines at manifold.
 7. Install rear master cylinder/brake pedal assembly and right side rider footboard. See REAR BRAKE MASTER CYLINDER in the Touring Models Service Manual.
 8. Using **new** steel/rubber washers, start banjo bolt to install brake line to rear master cylinder.
 9. Run main harness conduit along inboard side of lower frame tube.

10. See items 1 and 2 of Figure 6. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of two short frame guides. Do not capture main harness conduit.
11. See items 3 and 4 of Figure 6. Install **new** cable strap at rear of rear short frame guide and at front of front short frame guide capturing lower frame tube and main harness conduit only.

NOTE

Without installing cable straps, verify that brake lines inboard of ABS module are positioned as shown in Figure 13.

12. See items 5 and 6 of Figure 7. Capturing three brake lines and rear frame downtube, install **new** cable strap in slot on each end of long frame guide.
13. See item 7 of Figure 7. Install **new** cable strap capturing posts of long frame guide and saddlebag guard weldment.
14. See items 8 and 9 of Figure 7. At top and bottom of long frame guide, install **new** cable straps capturing three brake lines only.
15. See item 10 of Figure 8. At bottom of rear frame downtube, install **new** cable strap capturing three brake lines just above the bend.
16. See item 11 of Figure 9. Set third short frame guide on top of lower frame tube just rear of P-clip. Capturing three brake lines and lower frame tube, install **new** cable strap in slot of short frame guide, but do not capture main harness conduit.

NOTE

Verify that brake lines do not contact rear master cylinder/brake pedal frame weldment; adjust position of third (unanchored) short frame guide if necessary. Verify that clearance between brake lines and clutch cable is approximately 3/8 in. (9.6 mm); adjust P-clip if necessary.

17. See item 12 of Figure 10. Install **new** cable strap capturing two front brake lines at bottom of front frame downtube. Position cable strap about 3/8 in. (9.6 mm) above rear master cylinder/brake pedal frame weldment.
18. Tighten banjo bolt to rear master cylinder to 17-22 ft-lbs (23.0-29.8 Nm).

NOTE

Anti-rotation clips are a tight fit. If necessary, lubricate with glass cleaner prior to installation.

19. See Figure 11. Obtaining parts from Kit C, start banjo bolt with **new** steel/rubber washers to install **new** brake line to rear caliper. Install anti-rotation clip over banjo bolt to properly orient brake line. Holding brake line to prevent rotation, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
20. See Figure 12. Start banjo bolt with **new** steel/rubber washers in rear inboard port of ABS module to install brake line (from rear master cylinder). Install anti-rotation clip over banjo bolt to properly orient brake line. Holding brake line, tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).
21. Start banjo bolt with **new** steel/rubber washers in front inboard port of ABS module to install brake line (from front master cylinder). Tighten banjo bolt to 17-22 ft-lbs (23.0-29.8 Nm).

22. See Figure 12. Start banjo bolts with **new** steel/rubber washers in front top port and rear top port of ABS module to install brake lines (to front and rear calipers, respectively). Install double sided anti-rotation clip over banjo bolts to properly orient brake lines. Holding brake lines, tighten banjo bolts to 17-22 ft-lbs (23.0-29.8 Nm). Verify that clearance between shock absorber and line to rear caliper is 1/8 in. (3.2 mm) minimum.

NOTE

If necessary, replace rear brake light switch terminals on 2005 and early 2006 models with those supplied in Kit B.

23. See item 13 of Figure 13. Install terminals onto rear brake light switch. Install **new** cable strap to secure brake light switch wires to crimp of brake line hose (from rear master cylinder).
24. See item 14 of Figure 13. Install **new** cable strap to secure crimp of brake line hose (from front master cylinder) to split line tubing on ABS module connector conduit.
25. Remove motorcycle from lift. Turn front wheel to left fork stop and tighten manifold banjo bolts (or acorn nuts) to 17-22 ft-lbs (23.0-29.8 Nm).
26. See item 15 of Figure 14. Position front brake lines in rubber spacer held at front of front frame downtube about 5.5 in. (139.7 mm) above top of crossbrace, and install **new** cable strap. Properly oriented, brake line to front calipers runs from top fitting at manifold through **OUTBOARD** side of rubber spacer, while line from front master cylinder runs from bottom fitting at manifold through **INBOARD** side of spacer.
27. Remove anti-rotation clips. Fill and bleed brake systems.
28. Exercise brake systems to verify that no leakage occurs around banjo bolts. Reinstall anti-rotation clips.
29. Install right side cover and saddlebag.
30. See Credit Procedure A-B-C.

Credit Procedures for all Talon/ h-dnet.com/Lightspeed Warranty Claim Systems Users

Referencing Service Bulletin M-1217A, complete an electronic warranty claim using the applicable table below.

**Table 3. Procedure A,
Kit Part No. 94669 Only**

***VIN Required**

Claim Type	SRC
Event Problem Part No., Description	40632-06
Quantity	Leave blank
Primary Labor Code	2262
Time	1.2 hrs.
Customer Concern Code	0134
Condition Code	9981

**Table 4. Procedure A-B,
Kit Part No.'s 94669 and 94673**

***VIN Required**

Claim Type	SRC
Event Problem Part No., Description	40632-06
Quantity	Leave blank
Primary Labor Code	2264
Time	2.6 hrs.
Customer Concern Code	0134
Condition Code	9982

**Table 5. Procedure A-C,
Kit Part No.'s 94669 and 94674**

***VIN Required**

Claim Type	SRC
Event Problem Part No., Description	40610-05
Quantity	Leave blank
Primary Labor Code	2266
Time	1.5 hrs.
Customer Concern Code	0134
Condition Code	9983

**Table 6. Procedure A-B-C,
Kit Part No.'s 94669, 94673 and 94674**

***VIN Required**

Claim Type	SRC
Event Problem Part No., Description	40632-06
Quantity	Leave blank
Primary Labor Code	2268
Time	2.9 hrs.
Customer Concern Code	0134
Condition Code	9984

Retain parts removed for 60 days from date of credit per normal warranty procedures.

Upon receipt and processing of the properly completed recall claim information, you will receive credit for labor plus appropriate market administrative time. Labor time includes use of any touch up paint, brake fluid or steel/rubber washers.

NOTE

Providing that the procedures were performed prior to receipt of M-1217A, claims for performing the preliminary inspection procedures defined in M-1217 will continue to be accepted up to 30 days from the date of this bulletin.

Credit Procedures for all other Warranty Claim System Users

For each vehicle serviced, file a claim supplying all necessary information as follows.

Installation of Kit A Only

- Dealer Number
- Repair Order Number
- Claim Date
- Product Campaign (0134)
- Fix I.D. (F) - Fixed
- Full seventeen-character V.I.N.

Upon receipt and processing of the transmitted information, you will receive appropriate credit for your market, including 1.2 hours labor, plus appropriate market administrative time.

Installation of Kits A-B

- Dealer Number
- Repair Order Number
- Claim Date
- Product Campaign (0134)
- Fix I.D. (R) - Repaired
- Full seventeen-character V.I.N.

Upon receipt and processing of the properly completed recall claim information, you will receive appropriate credit for your market, including 2.6 hours labor, plus appropriate market administrative time.

Installation of Kits A-C

- Dealer Number
- Repair Order Number
- Claim Date
- Product Campaign (0134)
- Fix I.D. (C) - Corrected
- Full seventeen-character V.I.N.

Upon receipt and processing of the properly completed recall claim information, you will receive appropriate credit for your market, including 1.5 hours labor, plus appropriate market administrative time.

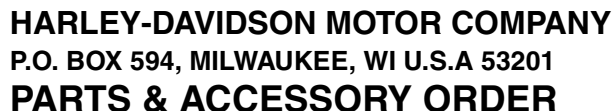
Installation of Kits A-B-C

- Dealer Number
- Repair Order Number
- Claim Date
- Product Campaign (0134)
- Fix I.D. (A) - Max Kits
- Full seventeen-character V.I.N.

Upon receipt and processing of the properly completed recall claim information, you will receive appropriate credit for your market, including 2.9 hours labor, plus appropriate market administrative time.

NOTE

Each vehicle recall completion must be filed on an individual claim. Please do not submit additional warranty events on these claims.



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TYPE CODE	ORDER TYPE	VEHICLE IDENTIFICATION NUMBER
R	REGULAR	
P	POLICE	
D	DOWN VEHICLE	
W	WARRANTY	
RC	RECALL	

DEALER ORDER	
ORDER DATE	
DEALER NO.	
ORDER TYPE	RC
WARRANTY CLAIM NO.	

FOR OFFICE USE ONLY	
ACCT.	1744134
FRT. ACCT	1744134

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F-1040

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