



INSTRUCTIONS

-J03011

REV. 09-04-2003

Kit Number 56021-04

XL PULLBACK HANDLEBAR KIT

General

This kit fits all 2004 and later XL 883C and XL 1200C (Sportster® 883 and 1200 Custom) model motorcycles.

See the Service Parts list on the last page of these instructions for kit contents.

Kit Number **38732-04**, Braided Clutch Control Kit

Kit Number **56340-04**, Braided Idle and Throttle Control Kit must be purchased separately.

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

A Service Manual is necessary for installation of this kit. The rider's safety depends upon the correct installation of this kit.

We recommend that this kit be installed by a factory-trained technician at your Harley-Davidson dealership. Improper installation of this kit could result in death or serious injury.

NOTE

A Service Manual for your model motorcycle is available from any Harley-Davidson dealer.

Installation

Removing the Existing Front Brake Line

WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

1. Refer to the Service Manual and follow the instructions given to remove the seat and disconnect the negative battery cable. Retain all seat mounting hardware.

CAUTION

Direct contact of D.O.T. 5 brake fluid with eyes can cause eye irritation, swelling, and redness. 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. 5 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. **KEEP OUT OF REACH OF CHILDREN.** (00144a)

2. See Figure 1. Open the bleeder nipple cap on the front brake caliper. Obtain a length of plastic tubing. Install one end of the tubing over the caliper bleeder valve.

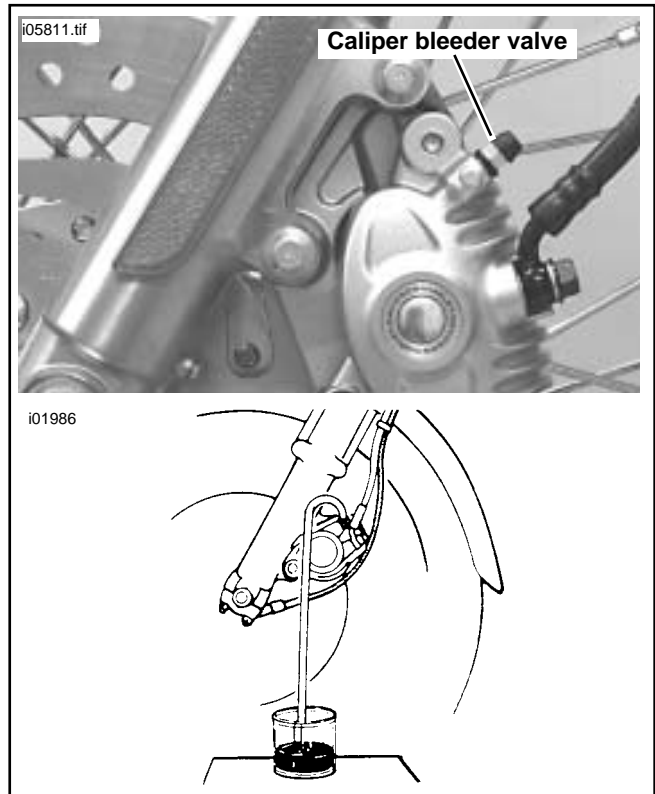


Figure 1. Draining Brake Fluid

Place the free end of the tubing into a suitable container.

Open the bleeder valve about 1/2-turn and pump the front-brake hand lever to drain the fluid out of the front brake system. Do not reuse brake fluid.

CAUTION

Cover the front fender and the front of the fuel tank with clean shop towels to prevent scratching. Damage to the finish could result.

CAUTION

Damaged banjo bolt surfaces will leak when reassembled. Prevent damage to seating surfaces by carefully removing brake line components.

3. Disconnect the brake line from the front brake caliper and the front brake master cylinder assembly. Discard the brake line sealing washers, but retain the banjo bolts. This kit contains all new sealing washers.

NOTE

Carefully compare the new brake line to the old line before removing the old line from the motorcycle. Make sure the banjo fittings on the new brake line will be oriented the same as the fittings on the old line.

4. Make note of the front brake line routing and the orientation of the banjo fittings, then unfasten the brake line clamps at the right side of the front fork upper bracket and the underside of the front fork lower bracket, and remove the brake line assembly from the vehicle.

Save the upper clamp and all attaching parts, but discard the brake line.

Removing the Existing Throttle/Idle Cables and Right-Hand Controls

CAUTION

Do not remove or install the master cylinder assembly without first positioning a 5/32-inch (4 mm) thick insert between the brake lever and lever bracket. Removing or installing the master cylinder assembly without the insert in place may result in damage to the rubber boot and plunger on the front stoplight switch.

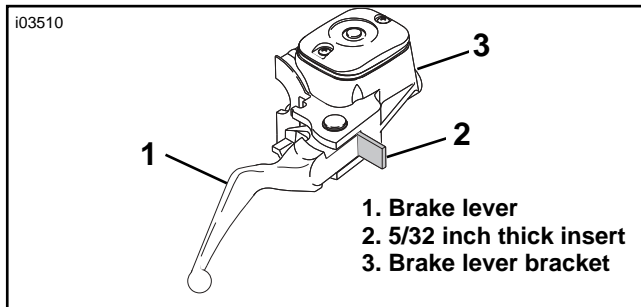


Figure 2. Install Cardboard Insert

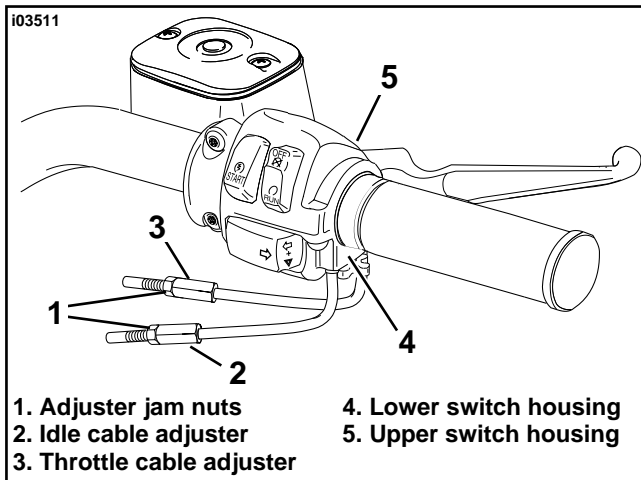


Figure 3. Handlebar Throttle Control

NOTE

A small section of corrugated cardboard or the eyelet of an ordinary cable strap can be used for this purpose.

5. See Figure 2. Squeeze the brake lever and place the insert between the brake lever and lever bracket.
6. See Figure 4. Loosen the cable adjuster jam nuts. Screw the cable adjusters in until they are as short as possible. This will provide enough slack for easy removal.
7. Using a T27 TORX drive head, remove the two screws with flat washers securing the handlebar clamp to the master cylinder housing. Remove the brake lever/ master cylinder assembly and clamp from the handlebar.

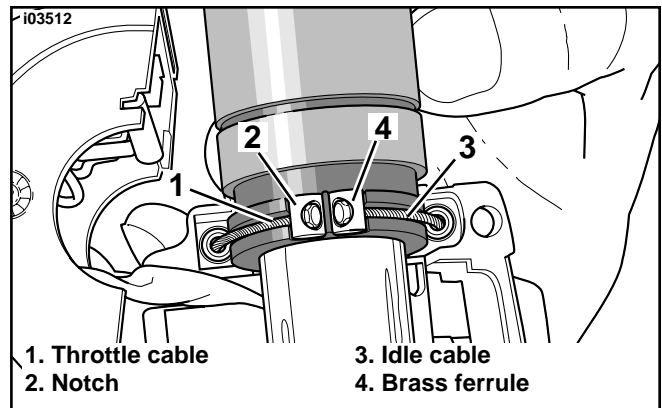


Figure 4. Throttle/Idle Control Cables

8. Using a T25 TORX drive head, remove the right-side upper and lower switch housing screws. Carefully set the switch assembly on the towel-covered fuel tank.

NOTE

If possible, leave the friction shoe in place. The friction shoe is a loose fit and may fall out or become dislodged if the lower switch housing is turned upside down or shaken.

9. See Figure 3. Remove the brass ferrules from the notches on the inboard side of the throttle control grip. Remove the ferrules from the cable end fittings. Remove the grip from the handlebar.
10. Pull the crimped inserts at the end of the throttle and idle control cable housings from the lower switch housing. For best results, use a rocking motion while pulling. Remove the cables with retaining rings from the switch housing. Place a drop of light oil on the retaining ring, if necessary, to help in removal.
11. Follow the instructions in the Service Manual to remove the air cleaner and backplate.

NOTE

For the following steps, it may be necessary to raise the fuel tank to fully access the cables. Follow the instructions in the Service Manual to raise the fuel tank.

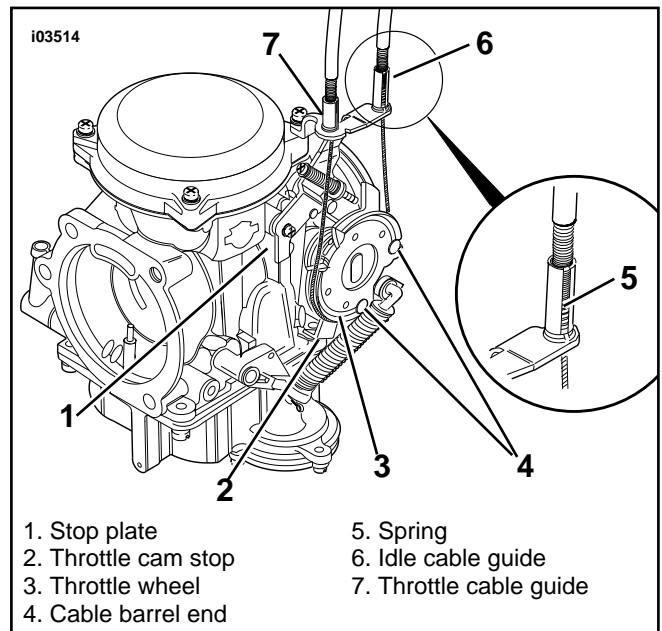


Figure 5. Throttle Cable Assembly

12. See Figure 5. Remove the cables at the carburetor. Using slots, remove the cable barrel ends from the holes in the throttle wheel and release the cable housings from the guides on the carburetor cable bracket.
13. Cut and discard the cable straps securing the cables to the frame backbone. If present, cut the strap securing the cable to the coil bracket. Remove the cables.

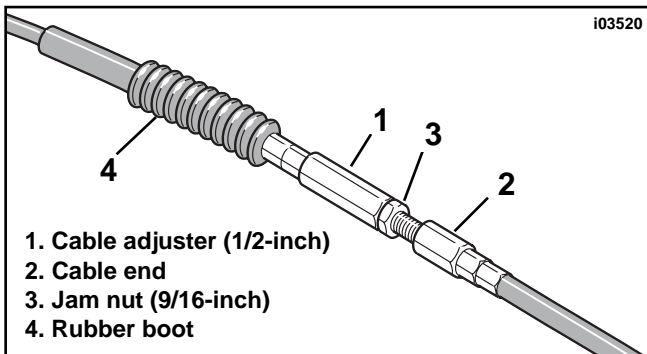


Figure 6. Clutch Cable Adjuster

Removing the Clutch Cable and Left-Hand Controls

NOTE

When performing cable disassembly procedures, make careful notes as to the existing cable routing. Pay special attention to existing cable strap locations before removing so new straps can be placed into the same locations.

14. Loosen the clutch adjuster to obtain slack in the clutch cable (2) by performing the following:
 - a. See Figure 6. Locate the cable adjuster (1) and slide off the rubber boot (4).
 - b. While holding the cable adjuster with a 1/2-inch wrench, loosen the jam nut (3) using a 9/16-inch wrench.
 - c. Turn the cable adjuster until there is a large amount of free play at the hand lever.
15. See Figure 7. Remove the retaining ring (1), pivot pin (2) and clutch cable anchor pin (3) from the hand lever.

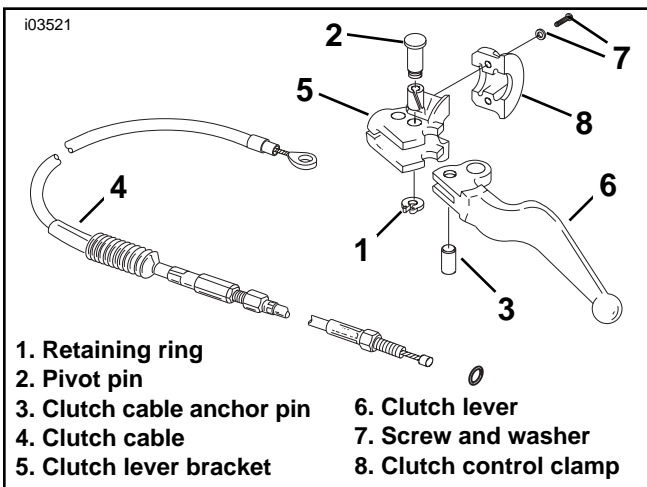


Figure 7. Clutch Cable Components

16. Remove the clutch lever from the clutch lever bracket.
17. Remove the clutch cable pin (2). Disconnect the upper section of the clutch cable (4) from the lever.

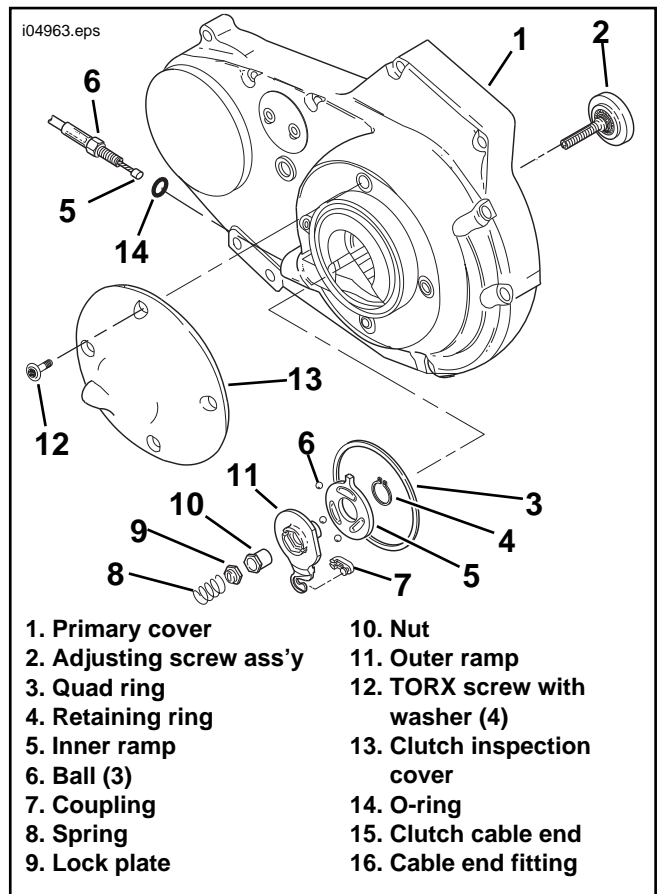


Figure 8. Clutch Release Mechanism

18. See Figure 8. Using a T-27 TORX driver, remove four TORX screws with washers (12) to remove the clutch inspection cover (13). Exercise caution to avoid damaging or dislodging the quad ring (3) in the primary cover (1).
19. Slide the spring (8) with attached hex lock plate (9) from the flats of the adjusting screw (2).
20. Turn the adjusting screw clockwise to release the ramp and coupling mechanism. As the adjusting screw is turned, the ramp assembly moves forward. Unscrew the nut (10) from the end of the adjusting screw.
21. Remove the hook of the outer ramp (11) from the bottom at the rear of the cable end coupling (7). Remove the cable end (15) from the slot in the coupling.
22. Turn the cable end fitting (16) counterclockwise to remove the clutch cable lower section from the primary cover (1). Remove the "O"-ring (14) from the cable end fitting.
23. Loosen the cable clip at the lower left front engine mount and remove the clutch cable from the vehicle.
24. Using a T27 TORX drive head, remove the two screws with flat washers securing the handlebar clamp to the clutch lever bracket. Remove the clutch hand lever assembly and clamp from the handlebar.
25. Using a T25 TORX drive head, remove the left-side upper and lower switch housing screws. Carefully set the switch assembly on the towel-covered fuel tank.

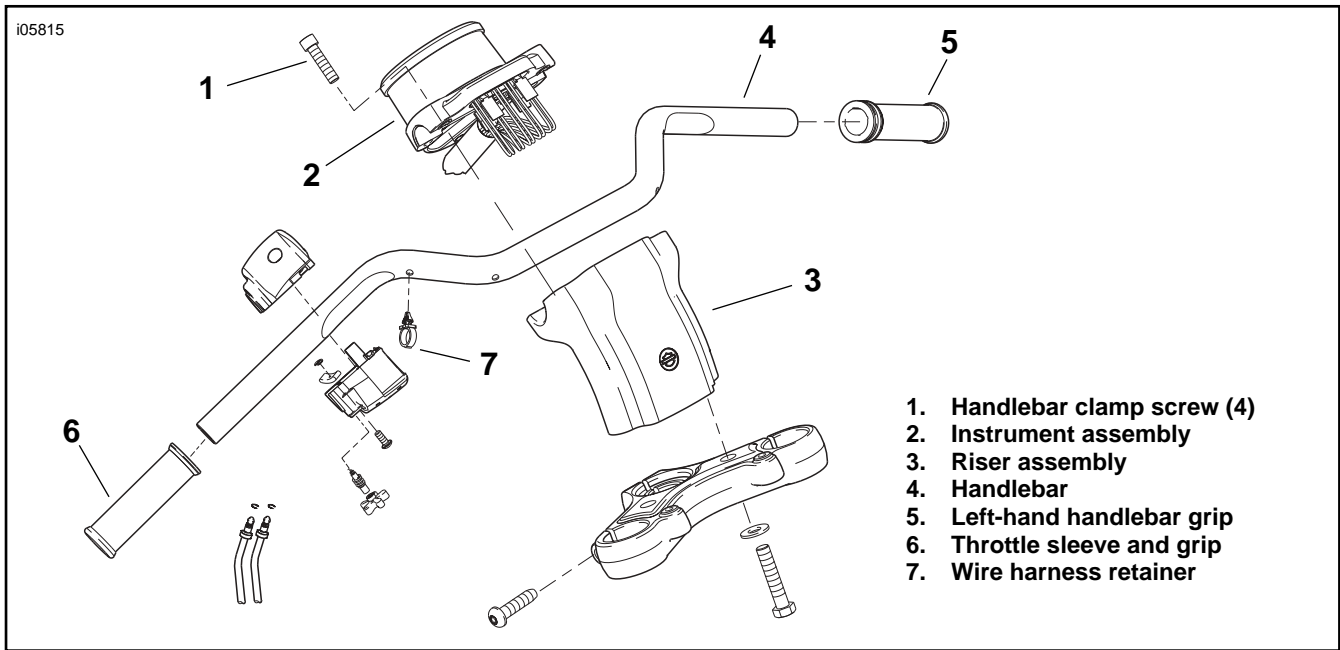


Figure 9. Handlebar Clamp and Risers

Replacing the Handlebar

26. See Figure 2. Remove the screws (1) that fasten the instrument assembly (2) to the riser assembly (3). Remove and retain the wire harness retainers (7) from the handlebar. Remove the handlebar (4) from the motorcycle.

If the left-hand grip (5) is not glued to the handlebar, it can be removed and re-used.

27. Center the new handlebar on the riser. To make sure that the handlebar is centered, verify that the knurled areas on the outboard sides of the riser are equal.

28. Position the instrument assembly and install with the clamp screws removed earlier. Snug the screws, but do not fully tighten.

WARNING

Improperly aligned handlebars can contact the fuel tank when turned to the left or right. Contact with the fuel tank while riding can cause loss of vehicle control resulting in death or serious injury.

29. Slowly turn the front wheel to the full right fork stop and then the full left fork stop to be sure that neither the handlebar or the throttle/ idle cables will contact the fuel tank.

If contact occurs and the handlebars are properly centered, raise the handlebar angle as necessary until proper clearance is obtained.

30. Tighten the upper handlebar-clamp screws as follows:

- Tighten the front screws until the instrument assembly housing makes contact with the handlebar riser.
- Tighten the rear screws to 12-16 ft-lbs (16.3-21.7 Nm).
- Tighten the front screws to 12-16 ft-lbs (16.3-21.7 Nm).

NOTE

There will be a slight gap between the instrument housing and the riser toward the rear after tightening.

Installing the Throttle/ Idle Cables and Right-Hand Controls

31. Refer to Figure 4. Apply graphite lightly to the throttle grip inside the switch housing and on the throttle end of the handlebar.

NOTE

The throttle-control cable has a larger-diameter retaining ring crimped to the cable end than does the idle-housing cable.

NOTE

For assembly, place a drop of light oil on the retaining rings of the crimped inserts.

32. See Figure 10. Push the throttle-cable housing and retaining ring into the larger hole in the switch housing, in front of the tension-adjuster screw.

33. Push the idle-cable housing and retaining ring into the smaller hole in the switch housing, behind the tension-adjuster screw.

34. Push the throttle- and idle-control cable housings into the lower switch housing until each snaps into place.

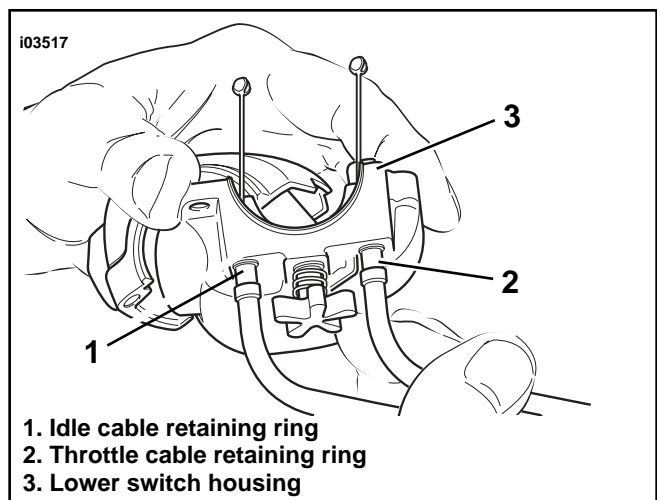


Figure 10. Install Cables to Lower Switch Housing

NOTE

If the friction shoe has fallen out or become dislodged, install the shoe with the concave side facing upward and orient so the pin hole is over the point of the adjuster screw.

35. Push the throttle-control grip over the end of the right handlebar until it bottoms against the closed end. Rotate the grip until the ferrule notches are at the top. To prevent binding, pull the grip back about 1/8 inch (3.2 mm).
36. Refer to Figure 4. Position the lower switch housing beneath the throttle-control grip. Install two brass ferrules from the throttle/ idle cable kit onto the cables, seating the ferrules in their respective notches on the throttle control grip. The cables must be captured in the grooves molded into the grip.
37. Position the upper switch housing over the handlebar and lower switch housing. Route the wire harness conduit through the depression at the bottom of the handlebar.
38. Loosely fasten the upper and lower switch-housing screws.
39. Position the brake lever/ master cylinder assembly inboard of the switch housing assembly, engaging the tab on the lower switch housing in the groove at the top of the brake-lever bracket.
40. Align the holes in the handlebar clamp with those in the master-cylinder housing and loosely fasten the lower screw and flat washer. Position for rider comfort. Beginning with the top screw, tighten the screws to 60-80 **in-lbs** (6.8-9.0 Nm) using a T27 TORX drive head.
41. Torque the lower and upper switch-housing screws to 35-45 **in-lbs** (4-5 Nm).

NOTE

Always tighten the lower switch housing screw first so that any gap between the upper and lower housings is at the front of the switch assembly.

42. Remove the 5/32 in (4 mm) insert placed between the brake lever and lever bracket.
43. Route the control cables past the left side of the right turn signal. Loop back through the area between the headlight and the right-side fork tube. Route rearward under the gas tank and secure at the clip under the ignition switch, then downward to the carburetor.
44. Refer to Figure 5. Install the idle cable housing and spring into the longer cable guide on the carburetor cable bracket. Drawing the idle cable downward, fit the barrel end into the hole in the throttle wheel (farthest from the cam stop).

Install the throttle cable housing into the shorter cable guide inserting the barrel end into the remaining hole in the throttle wheel.
45. Tighten the cables as necessary to keep the barrel ends from dislodging. Verify that the cables are seated in the channel of the throttle wheel. Verify operation by turning the throttle grip and observing cable action.
46. If loosened, follow the instructions in the Service Manual to tighten the fuel tank hardware.
47. Following the instructions in the Service Manual, install the backplate and air cleaner assembly.

48. Adjust the throttle and idle cables according to Service Manual instructions.

NOTE

If the handlebar grips are patterned, align the pattern on the left grip with the pattern on the right grip with the throttle in the fully closed position.

49. Install a new or original handlebar grip on the left end of the new handlebar according to the handlebar grip instruction sheet or LEFT HANDLEBAR SWITCH, INSTALLATION in the Service Manual.

Installing the Clutch Cable and Left-Hand Controls

50. See Figure 8. Obtain the braided clutch cable and "O"-ring from the clutch cable kit. Apply a light coat of oil on the "O"-ring (14) and install the "O"-ring onto the threaded portion of the clutch cable end (16). Turn the fitting clockwise to install into the primary cover (1). Tighten the fitting to 3-5 ft-lbs (4-7 Nm).
51. Fit the coupling (7) over the cable end with the rounded side inboard and the ramp connector button outboard. With the retaining ring side of the ramp assembly facing inward, place the hook of the ramp around the coupling button and rotate the assembly counterclockwise until the tang on the inner ramp (5) fits in the slot of the primary cover (1).
52. Thread the nut (10) onto the adjusting screw (2) until the slot of the screw is accessible with a screwdriver. Fit the nut hex into the recess of the outer ramp (11), and turn the adjusting screw counterclockwise.
53. Route the clutch cable forward from the primary cover upward through the clip on the lower left front engine mount to the outboard side of the left front slider tube, and then rearward to the clutch lever. Tighten the cable clip.
54. See Figure 7. Connect the end of the clutch cable upper section to the clutch lever (6) using the clutch cable anchor pin (3) from the clutch cable kit.
55. Position the lever within the clutch lever bracket (5).
56. Follow instructions in the Service Manual and perform the clutch cable adjustment.

Installing the Front Brake Line

57. Carefully inspect the new brake line for damage or defects, and replace the brake line if damaged.

WARNING

Do not re-use brake-line sealing washers. Use of original washers could cause front brake failure and loss of control which could result in death or serious injury.

CAUTION

To avoid brake fluid leakage, verify that the sealing washers, banjo bolts and brake lines are completely clean.

58. Place the new braided brake line assembly into position.
59. Route the brake line behind the right side of the front fork upper bracket, and under the front fork lower bracket to the left side of the vehicle to the front brake caliper.

60. Using only the **new** brake-line sealing washers from the kit, lubricated with D.O.T. 5 Silicone Brake Fluid, position a washer on each side of the hydraulic fitting at the master cylinder.

Insert the banjo bolt saved earlier through the washers and fitting. Thread the bolt into the master cylinder casting and tighten to 17-22 ft-lbs (23-30 Nm).

Repeat at the front brake caliper with **new** brake-line sealing washers and the saved banjo bolt.

61. Using the saved upper clamp and attaching parts, fasten the front brake line to the motorcycle.

62. Using a motorcycle lift, raise the bike frame so that the front forks reach full extension. Verify that the brake line is of sufficient length to allow full fork extension without pulling the brake line.

Fully compress the forks to check that the brake line does not interfere with or catch on motorcycle components. Turn the front wheel to the full right fork stop and then the full left fork stop to be sure the brake line, throttle cables and clutch cable do not interfere with or catch on motorcycle components.

CAUTION

Direct contact of D.O.T. 5 brake fluid with eyes can cause eye irritation, swelling, and redness. 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. 5 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. KEEP OUT OF REACH OF CHILDREN. (00144a)

63. Bleed the front brakes. See BLEEDING HYDRAULIC BRAKES in the Service Manual.

64. Refer to the Service Manual and follow the instructions given to re-attach the negative battery cable and install the seat.

WARNING

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

WARNING

After disturbing the brake system, BEFORE moving motorcycle, you must pump brake fluid until the pistons push the pads against the brake disc. If you don't pump fluid pressure up again, the brake will not be available to stop the motorcycle which could result in death or serious injury.

65. Turn the Ignition/Light Key Switch to IGNITION and apply the front brake hand lever to test operation of the brake lamp.

WARNING

Because new handlebars (different from original configuration) have been installed, prior to riding the motorcycle, you must check the following points.

Turn the handlebars fully to the left and right locks and check the following items.

- a. **Make sure the cables do not catch on headlamp hardware or pass in front of the headlamp.**
- b. **Make sure the cables do not catch on the turn signals or turn signal mounting hardware.**
- c. **Make sure the cables do not catch on the fuel cap or fuel gauge.**
- d. **Make sure the cables do not catch on the speedometer or tachometer.**
- e. **Make sure the cables are not pinched between the frame and/ or the forks.**

Failure to follow the above instructions could result in death or serious injury.

WARNING

Whenever the brake system is serviced, always test the brakes on clean, dry pavement at low speeds before putting the motorcycle back into use. If the brakes are not operating properly, or braking efficiency is poor, testing at high speeds could result in death or serious injury.

66. Test ride the motorcycle. If the brake feels spongy, repeat the bleeding procedure.



Service Parts

Part No. 56021-03

Date 09/03

XL Pullback Handlebar

Item	Description (Quantity)	Part No.	Item	Description (Quantity)	Part No.
1	Handlebar	Not sold separately	8	Throttle/ idle cable kit	56340-04
2	Brake line kit (includes items 3-7)	45113-03		(includes items 9-12)	Not sold separately
3	Brake line, braided (single)	45107-03	9	Cable, throttle (braided)	
4	Sealing washer, 10 mm (4)	41732-04	10	Cable, idle control (braided)	
5	Clamp, long, large hole	68562-84	11	Ferrule, brass (2)	
6	Clamp, short, small hole	71795-63A	12	Clip, dual conduit	
7	Tie strap, black, 5.5 in (14 cm) long	10065	13	Clutch cable kit	38732-04
				(includes items 14-16)	Not sold separately
			14	Cable, clutch (braided)	
			15	"O"-ring	
			16	Pin, clutch cable anchor	