



# INSTRUCTIONS

-J00119

REV. 9-1-95

Kit Number 44090-96

## DUAL DISC FRONT BRAKE KIT

### General

This kit is designed for installation on those of the following models which have original equipment 39mm front fork tubes and 19-in. cast-aluminum front wheels:

- 1996 and later XLH 883, XLH 883 Hugger and XLH 1200
- 1996 and later FXD (Super Glide)

This kit can also be installed on those of the above XLH and FXD models which have original equipment 39mm front fork tubes and 19-in. laced front wheels only after one of the following procedures is performed:

- The original **single-flange** hub of the 19-in laced front wheel is replaced with a new **double-flange** hub (H-D Part No. 43600-78 — purchased separately), which will accept the second brake disc.

OR

- The original 19-in. laced front wheel assembly, which has a **single-flange** hub, is replaced with a new 19-in. laced front wheel assembly (H-D Part No. 43321-79 — purchased separately), which has a **double-flange** hub designed to accept the second brake disc.

This kit contains the following components:

QTY	DESCRIPTION
1	Screw, hex socket head 3/8 - 16 x 2 in.
2	Cable strap, double loop
5	Screw, pan head 5/16 - 18 x 7/8 in.
1	Screw, hex socket head SEMS 1/4 - 20 x 1 in.
1	Washer 3/8 in. ID
6	Washer, banjo fitting sealing
2	Bolt, banjo fitting
1	Caliper assembly, right front brake
1	Disc, front brake (rotor)
1	Cylinder assembly, front brake master (incl. lever)
1	Screw, hex socket compress M8 - 1.25 x 27 mm
1	Slider assembly, front fork right
1	Fork tube seal
1	Dust seal
1	Anti-rotation guide
1	Retaining ring

This kit does not include the front brake line required for a dual disc system; the brake line must be purchased separately as follows:

- For XLH 883 motorcycle equipped with with low-rise (flat) handlebars, order dual disc brake line H-D Part No. 45148-96.
- For XLH 883 Hugger, XLH 1200, and FXD Super Glide models with "buckhorn" (pull-back) handlebars, order dual disc brake line H-D Part No. 45111-96.

### ⚠WARNING

The rider's safety depends on the correct installation of this kit. Follow the procedures in this Instruction Sheet and in the appropriate Service Manual(s). Service Manuals are available at your Harley-Davidson dealer. If the procedures are not within your capabilities, or if you do not have the correct tools, have your Harley-Davidson dealer perform the installation.

### Removal and Disassembly - Front Brake System

1. Block motorcycle underneath frame so that front wheel is raised off the ground slightly.
2. Remove original front brake caliper from left side of front fork according to appropriate Service Manual procedures. Let caliper hang loose on brake line. Save all components and fasteners for reinstallation.

### ⚠CAUTION

Do not operate the front brake lever with the front caliper removed because the piston may be forced from the caliper. Reseating the piston requires disassembly of the caliper.

3. Remove socket head screw which secures a clamp (retains front brake line) to underside of front fork lower bracket (lower triple clamp). Discard clamp and screw.
4. Remove screw, lockwasher, and clamp which secure front brake line to right rear side of front fork upper bracket (upper triple clamp). Save all components for reinstallation.
5. Remove right mirror and, if applicable, right turn signal lamp assembly from original front brake master cylinder casting. Save all components and fasteners for reinstallation.

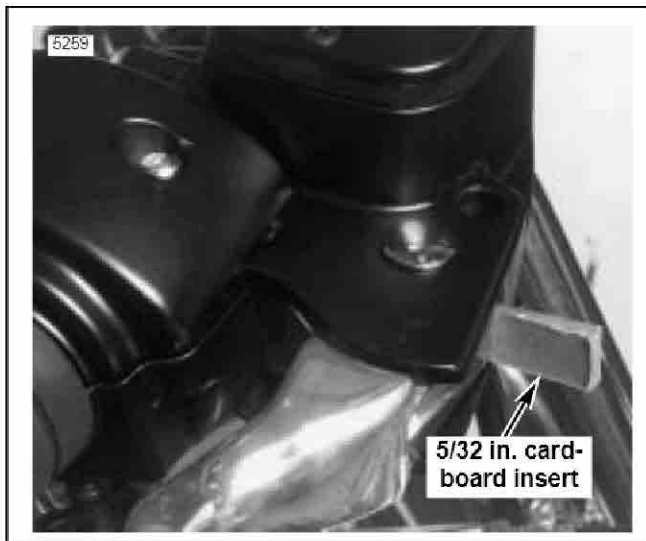
### ⚠CAUTION

See Figure 1. Do not remove or install the master cylinder assembly without first placing the 5/32 inch cardboard insert between the brake lever and lever bracket. Removal without the insert may result in damage to the rubber boot and plunger of the Front Stoplight Switch.

### NOTE

Use the eyelet of an ordinary cable strap if the cardboard insert is not available.

6. See Figure 1. Squeeze the brake lever and place the cardboard insert between the brake lever and lever bracket.
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.
8. Save screws and clamp for reinstallation.



**Figure 1. Install Insert Before Removing Master Cylinder**

9. Lift assembly of master cylinder, brake line, and caliper away from motorcycle. Disconnect front brake line from front brake caliper at banjo fitting. Discard original master cylinder, brake line, and banjo fitting sealing washers; save original caliper and banjo bolt for reinstallation.

### Removal and Disassembly - Front Wheel

1. Remove front wheel according to appropriate Service Manual procedures.
2. Remove and discard five T-40 TORX® screws which secure hub plate to right side of wheel hub. Remove and discard hub plate.

### Removal and Disassembly - Front Fork Right Slider/Tube

1. Remove front fork right slider/tube assembly from front fork upper and lower brackets according to appropriate Service Manual procedures.
2. Drain oil from front fork right slider/tube assembly according to appropriate Service Manual procedures.

#### NOTE

*Note the orientation of parts disassembled in Step 3. They will need to be reassembled in the same order in a later procedure.*

3. Disassemble slider from front fork right slider/tube assembly according to appropriate Service Manual procedures. Discard slider, fork seal, dust seal and retaining ring; save all other components and fasteners for reinstallation.

### Assembly and Installation - Front Fork Right Slider/Tube

1. Assemble new right slider using new fork seal, dust seal and retaining ring from kit to original front fork right tube assembly. Use new M8 - 1.25 x 27 mm hex socket compression screw from kit. Follow procedures listed in appropriate Service Manual.
2. Install front fork right slider/tube assembly onto front fork lower and upper brackets according to appropriate Service Manual procedures.

3. Fill front fork right slider/tube assembly with the proper "wet fork" amount of Harley- Davidson Type E Fork Oil. Follow procedures listed in appropriate Service Manual.

### Assembly and Installation - Front Wheel

1. Verify that new front brake disc from kit is clean. With counterbored side of brake disc mounting holes facing away from wheel, assemble brake disc to right side of front wheel hub using five new 5/16 - 18 x 7/8 in. pan head screws from kit. Use a T-40 TORX® drive to tighten each screw to 16-24 ft-lbs.
2. Install front wheel assembly onto front fork according to appropriate Service Manual procedures.

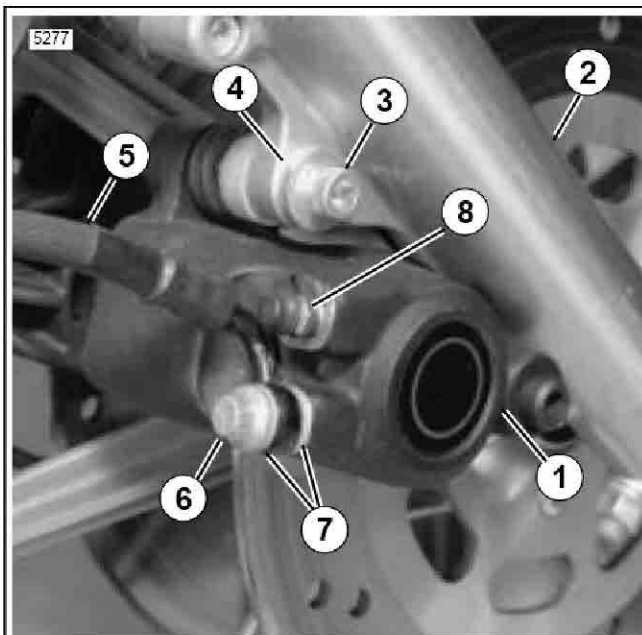
### Assembly and Installation - Front Brake System

1. Install original front brake caliper onto front fork left slider according to appropriate Service Manual procedures.
2. See Figure 2. Install new front brake caliper (1) from kit onto front fork right slider (2) in same manner as left caliper installation. Use new 3/8 - 16 x 2 in. hex socket head screw (3) and 3/8 in. ID washer (4) from kit in caliper upper mounting position. Tighten upper and lower mounting fasteners of caliper to 25-30 ft-lbs.

#### CAUTION

**See Figure 3. Do not install the master cylinder assembly without first placing the 5/32 inch cardboard insert (or cable strap eyelet) between the brake lever and lever bracket. Installation without the insert may result in damage to the rubber boot and plunger of the Front Stoplight Switch.**

3. See Figure 4. 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.
4. Align the holes in the handlebar clamp with those in the master cylinder housing and start the two screws (with flat washers). Position for rider comfort. Beginning with the top screw, tighten the screws to 70-80 in-lbs (7.9-9.0 Nm) using a T27 TORX drive head.
5. Install original right mirror and, if applicable, right turn signal lamp assembly onto new brake master cylinder casting. Adjust mirror and turn signal lamp as required; tighten each securely.
6. See Figure 5 and Service Parts Illustration. Insert new 1/4 - 20 x 1 in. hex socket head screw (1) from kit through central mounting hole in manifold section of new front brake line (specified in NOTE of GENERAL Section) and anti-rotation guide (16). Install assembly of screw, anti-rotation guide, and brake line onto underside of front fork lower bracket (5, Figure 3). Make certain forked end of anti-rotation guide engages center rib of front fork lower bracket.
7. Secure front brake line to right rear side of front fork upper bracket using original screw, lockwasher, and clamp (previously removed in Step 4 of REMOVAL AND DISASSEMBLY - FRONT BRAKE SYSTEM).



1. Right front brake caliper
2. Front fork right slider
3. Socket head screw 3/8-16 x 2 in.
4. Washer, 3/8 in ID
5. Lower right hose of dual disc front brake line
6. Banjo fitting bolt
7. Banjo fitting sealing washer (2)
8. Bleeder valve

Figure 2. New Right Front Brake Disc and Caliper

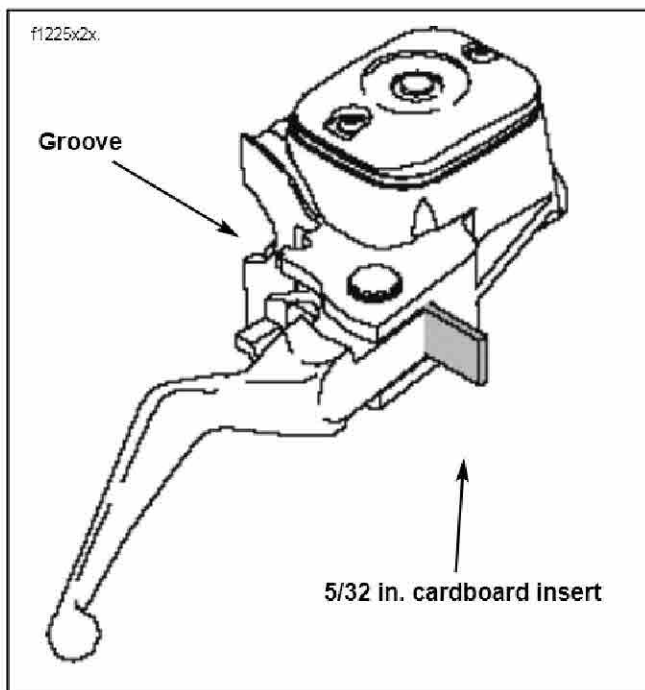


Figure 3. Install Cardboard Insert Before Installing Master Cylinder Assembly

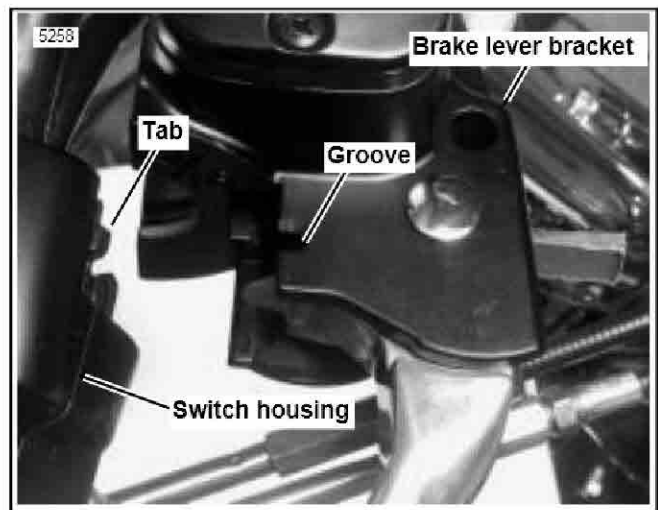


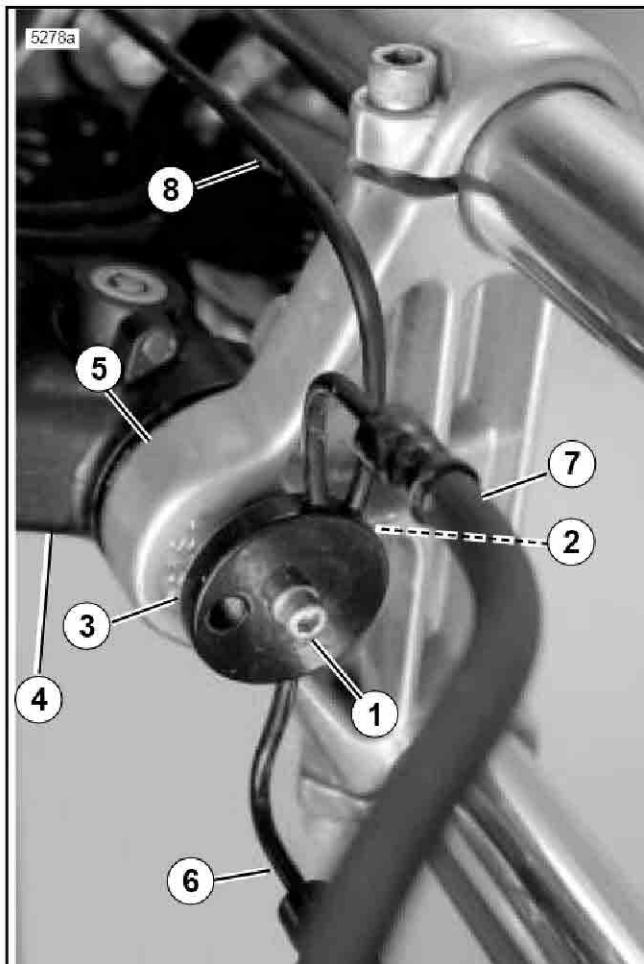
Figure 4. Fitting Master Cylinder To Switch Housing

8. See Figure 5. Connect lower left hose (6) of new brake line (3) to original left front brake caliper using original banjo fitting bolt and two new banjo fitting sealing washers from kit. Refer to appropriate Service Manual for detailed installation procedures. Tighten banjo bolt to 17-22 ft-lbs.
9. See Figure 2. Connect lower right hose (5) of new brake line to new right front brake caliper (1) using one new banjo fitting bolt (6) and two new banjo fitting sealing washers (7) from kit. Follow same installation procedures specified for left side brake in appropriate Service Manual. Tighten banjo bolt to 17-22 ft-lbs.
10. Connect upper end of new brake line to new front brake master cylinder assembly using one new banjo fitting bolt and two new banjo fitting sealing washers from kit. Refer to appropriate Service Manual for detailed installation procedures. Tighten banjo bolt to 17-22 ft-lbs.
11. Fill master cylinder reservoir with D.O.T. 5 HYDRAULIC BRAKE FLUID to 1/8 in. of top.

**⚠WARNING**

Make sure relief port in master cylinder is operating properly. After filling master cylinder, actuate brake lever with reservoir cover removed. A slight spurt of fluid will break through fluid surface if all internal components are working properly. A covered relief port could cause brake drag, possible brake lockup, loss of control and personal injury.

12. Install master cylinder reservoir cover.
13. Bleed brake system according to procedures in appropriate Service Manual. Bleed both brake calipers, but bleed only one caliper at a time. Final tighten each bleeder valve (8) to 80-100 in-lbs torque.
14. Remove master cylinder reservoir cover. Add D.O.T. 5 HYDRAULIC BRAKE FLUID, if required, to master cylinder reservoir; fill to 1/8 in. of top.



1. Socket head screw 1/4-20 x 1 in.
2. Anti-rotation guide
3. Dual disc front brake line
4. Frame
5. Front fork lower bracket
6. Lower left hose (to left caliper)
7. Lower right hose (to right caliper)
8. Upper end of brake line (to master cylinder)

Figure 5. New Dual Disc Front Brake Line

15. Install gasket and cover onto master cylinder reservoir using two screws. Tighten screws to 10-15 in-lbs.
16. Test operation of rear brake lamp with both the front brake applied and the ignition/light switch turned to "LIGHTS" or "IGNITION" position.

**⚠WARNING**

Whenever the motorcycle brake system is serviced, always test it on dry, clean pavement at slow speeds before putting the vehicle into regular service.

17. Test ride the motorcycle. If brakes feel spongy, repeat bleeding procedure.
18. After you determine through testing that the motorcycle brake system is functioning properly, allow the new brake pads to "wear in" by avoiding hard stops for the first 100 miles.



# Service Parts

Part No. 44090-96

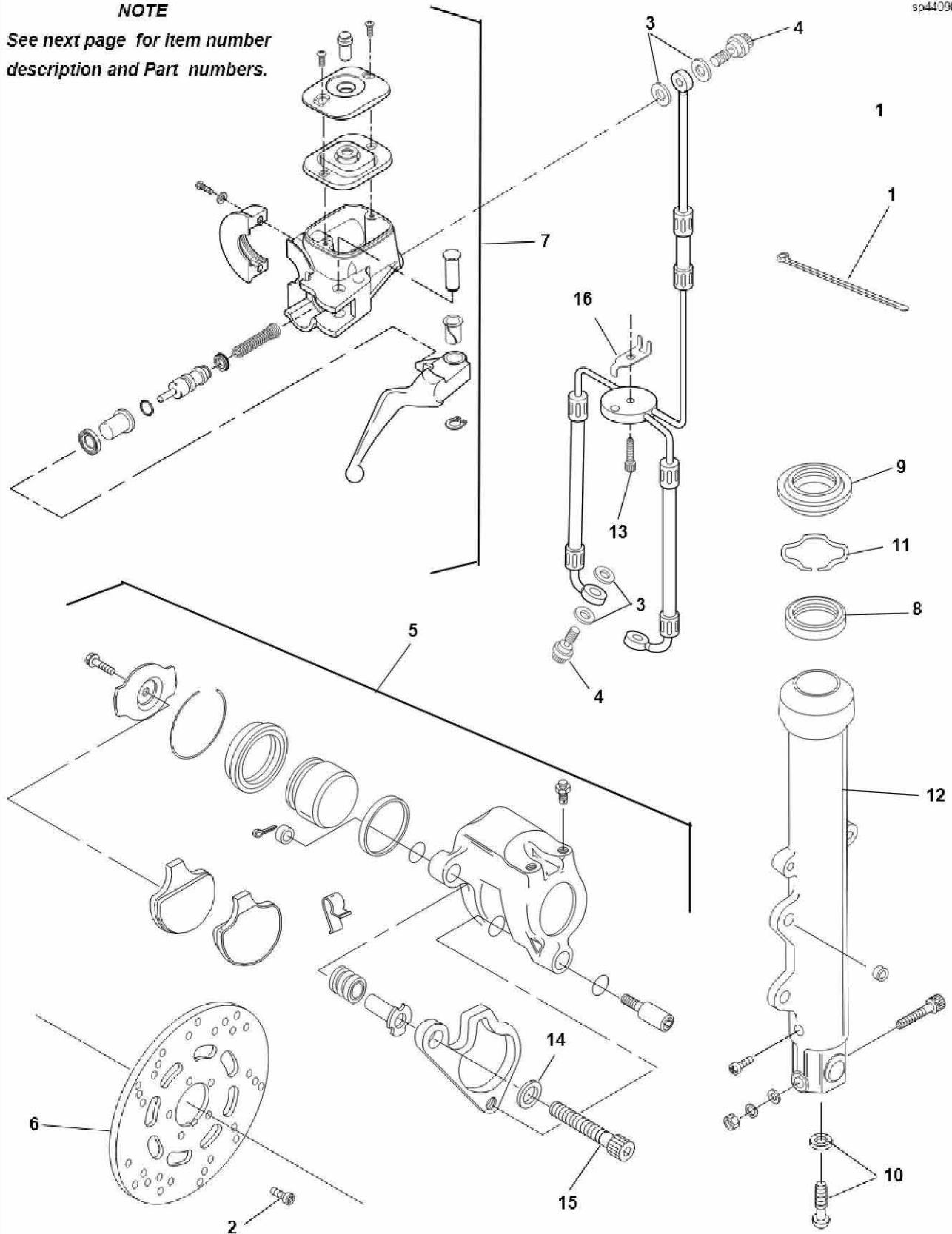
Date 9/95

## Dual Disc Front Brake Kit

sp44090A

### NOTE

See next page for item number description and Part numbers.





# Service Parts

Part No. 44090-96

Date 9/95

## Dual Disc Front Brake Kit

Item	Description	Part No.	Item	Description	Part No.
1	Cable strap (2)	10081	9	Dust seal	45401-87
2	Screw, TORX (5)	3655	10	Screw SEMS	45405-75A
3	Gasket, brake line (6)	41731-88A	11	Stopper ring	45905-87
4	Bolt, banjo (2)	41747-82A	12	Slider complete, right	45922-87
5	Caliper assembly, front – right	44023-83C	13	Screw, SEMS hex socket,	4741A
6	Disc, front brake	44136-92	14	Washer	6019
7	Master cylinder assembly, front	45013-96	15	Screw, hex socket	855B
8	Oil seal	45378-87	16	Anti-rotation guide	45074-95

### NOTE

Refer to Sportster Parts Catalog for Service Parts for:

Caliper assembly: Part No. 44023-83C

Master cylinder assembly: Part No. 45013-96