

**KAWASAKI**

**INSTALLATION  
AND AIR BLEEDING  
FOR THE  
DUAL DISC BRAKES  
CONVERSION KIT  
FOR  
HI · 500 AND H2 · 750  
KIT No.99990-516**

Printed No. 99997-707.

**KAWASAKI HEAVY INDUSTRIES, LTD.  
MOTOR CYCLE DIVISION**

**Tools and Supplies:**

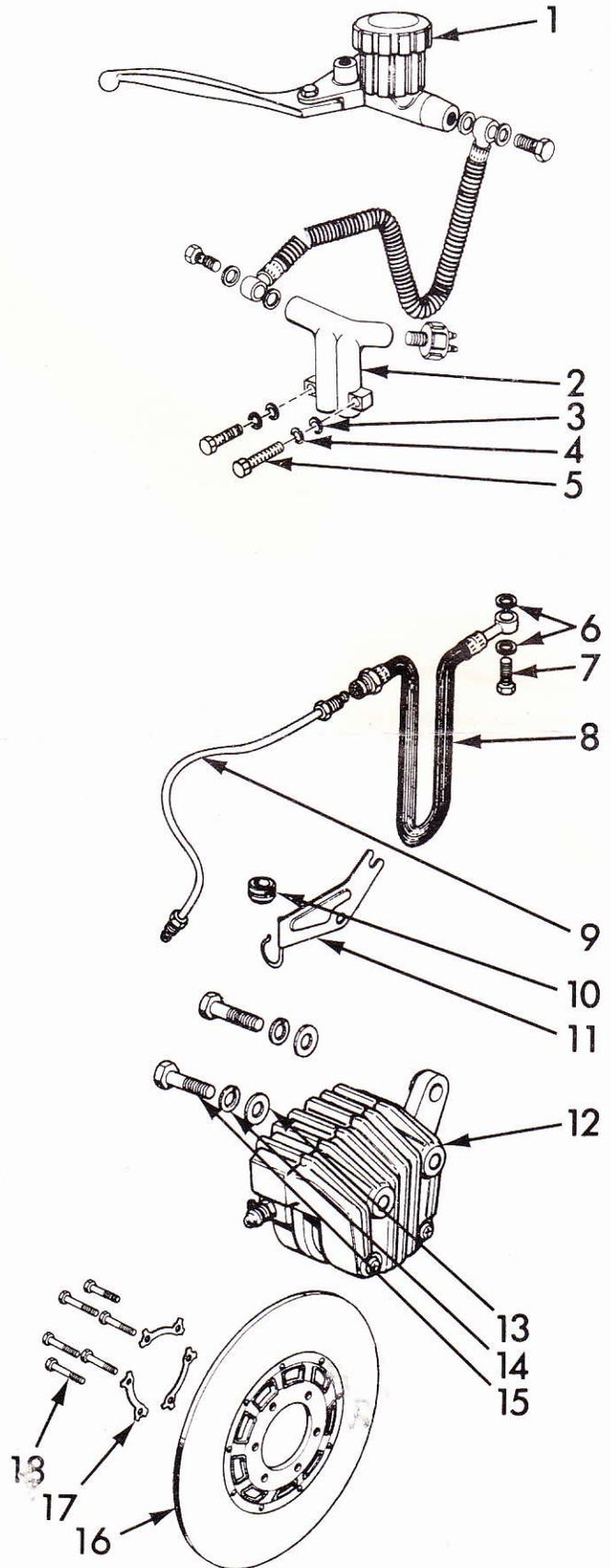
Wrenches, 10, 12, 13, 14, 17, 19mm  
 Common screwdriver  
 Phillips screwdriver, No. 2  
 Common pliers

Clean cloth  
 Clear plastic hose  
 Brake fluid  
 Rubbing alcohol  
 Wooden box  
 Container, 1 quart capacity

**Parts List:**

The following parts should be included in your dual disc brake conversion kit:

Description	Part No.	Quantity
Master cylinder assembly [1]	43015-002 <sup>007</sup>	1
Joint fitting, four-way [2]	43075-001	1
Washers, plain 6mm [3]	410B0600	50
Washers, spring 6mm [4]	461F0600	50
Bolts, hex head, 6 x 32 [5]	110N0632	10
Washers, oil bolt [6]	43067-001	10
Bolts, oil [7]	43066-001	5
Hose, front brake [8]	43059-002	1
Pipe, front brake RH [9]	43060-002	1
Rubber damper, brake hose [10]	43064-001	10
Hose bracket [11]	43063-003	1
Caliper brake assembly [12]	43041-002	1
Washers, plain, 10mm [13]	410B1000	10
Washers, spring, 10mm [14]	461F1000	10
Bolt, hex head, 10 x 48 [15]	43070-001	5
Disc plate [16]	41080-001	1
Washers, lock 8mm [17]	92088-014	5
Bolts, hex head 8 x 28 [18]	92001-104	10



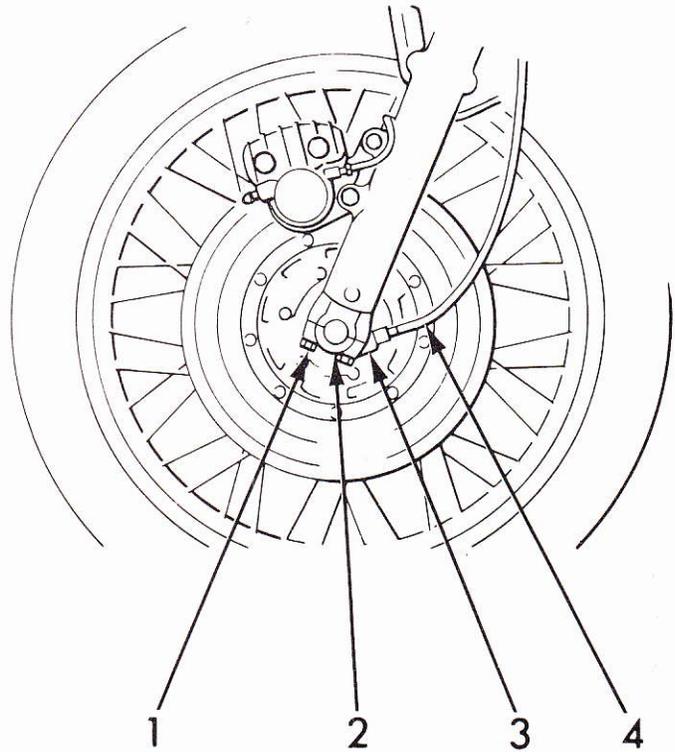
## REMOVE FRONT WHEEL

1. Disconnect speedometer cable [4] from speedometer drive gear assembly [3].
2. Place wooden box under engine to raise front wheel off ground.

In next step, wheel must be supported while removing right and left mounting caps [2].

3. Remove left and right 13mm nuts [1] and washers. Remove mounting caps [2]. Remove wheel.

REMOVE ENDS HERE



## REMOVE AND INSTALL JOINT FITTING

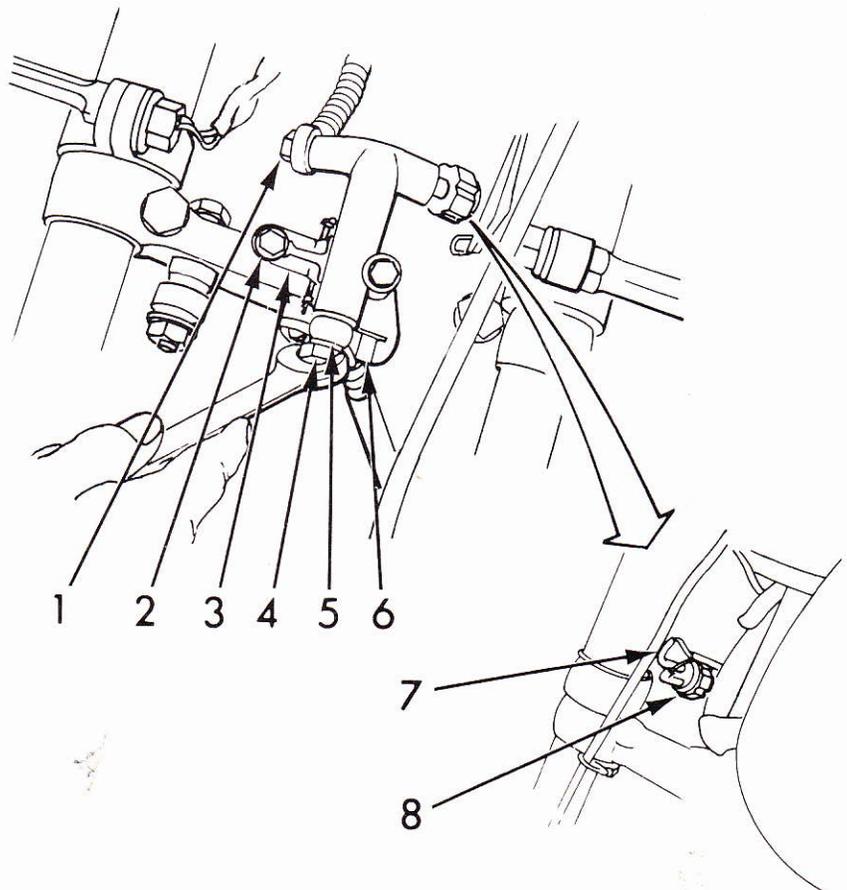
### Remove Joint Fitting.

#### CAUTION

If brake fluid is spilled, it must be cleaned immediately from chromed, painted or rubber parts to prevent damage to these parts.

1. Place container under joint fitting [3]. Disconnect front brake hose [5] by removing 14mm oil bolt [4] and washers. Allow brake fluid to drain completely.
2. Disconnect two electrical wires [7] on stop light switch [8].
3. Remove 14mm oil bolt [1] and washers.
4. Using vise grip pliers, carefully remove stop light switch [8].
5. Remove two 10mm bolts [2] and washers. Remove joint fitting [3] and hose bracket [6]. Discard hose bracket.

REMOVE ENDS HERE



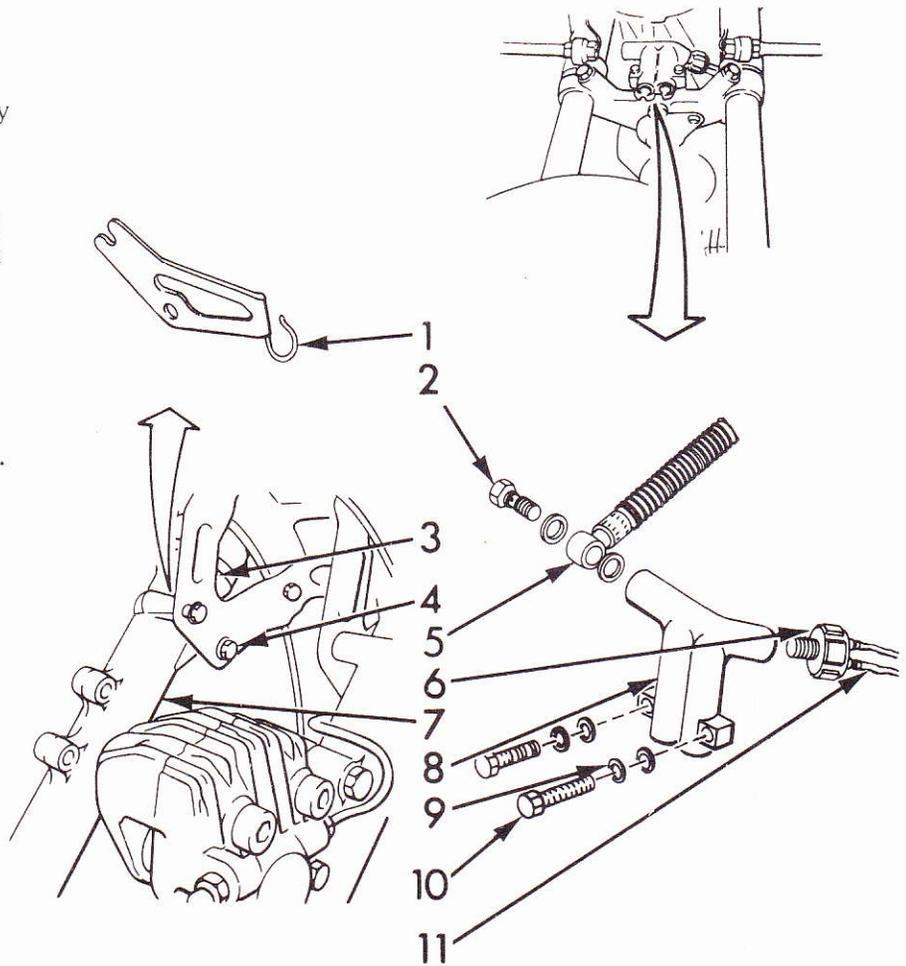
## REMOVE AND INSTALL JOINT FITTING

### Install Four-Way Joint Fitting.

1. Install stop light switch [6] in Four-Way joint fitting [8], fingertight.
2. Place washer and hose [5] at installed position. Install 14mm oil bolt [2] and washer. See Torque Value Chart on last page.
3. Install spring washer [9] and plain washer on two 10mm bolts [10].
4. Place Four-Way joint fitting [8] at installed position. Install two bolts [10]. See Torque Value Chart on last page.
5. Tighten stop light switch [6]. Connect two electrical wires [11].

Brake hose bracket [1] should be installed between fender brace [3] and lower fork leg [7].

6. Remove two 13mm bolts [4] and washers.
7. Place and hold hose bracket [1] at installed position. Install two 13mm bolts [4] and washers. See Torque Value Chart on last page.



INSTALL ENDS HERE

## REMOVE AND INSTALL MASTER CYLINDER

### Remove Master Cylinder.

1. Remove rear view mirror, if installed.
2. Slide rubber boot [7] down hose [8]. Remove 14mm oil bolt [6] and washers.
3. While holding master cylinder [4], remove two 10mm bolts [1] and washers. Remove holder [3]. Remove and discard master cylinder.

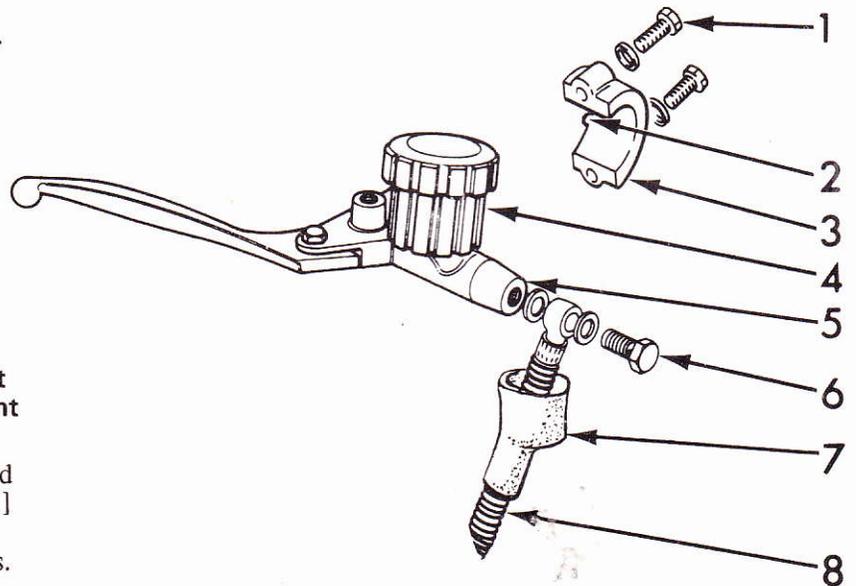
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### Install Master Cylinder.

#### **WARNING**

Be sure master cylinder Part Number 43015-002 is used. Old master cylinder must not be used. Cylinder's capacity is insufficient to safely operate both caliper brakes.

4. Place new master cylinder [4] at installed position. Install holder [3] with tab [2] facing to rear. Install two 10mm bolts [1] and washers. See Torque Value Chart on last page.
5. Place washer and brake hose [8] at installed position. Install oil bolt [6] and washer.
6. Slide rubber boot [7] over outlet [5].



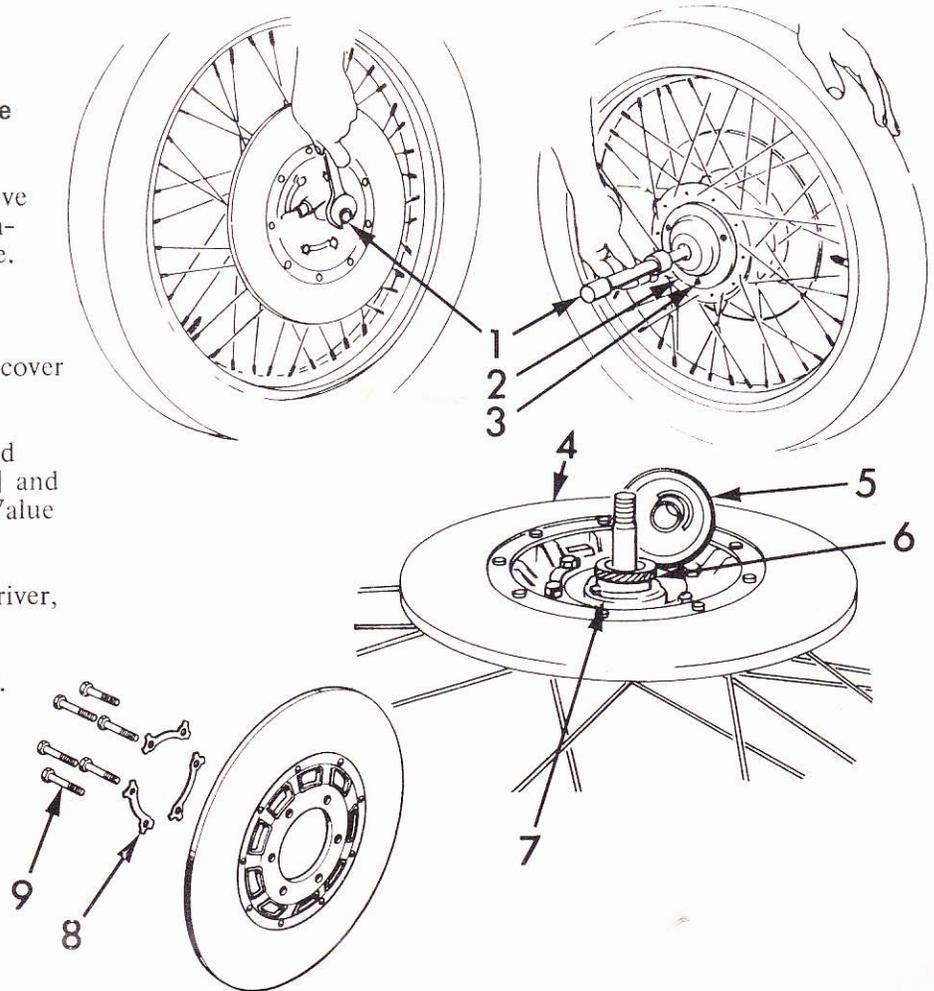
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## INSTALL BRAKE DISC PLATE

### CAUTION

When removing speedometer drive gear assembly [5], be careful not to drop drive gear [6].

1. While holding 19mm axle [1], remove 19mm speedometer drive gear assembly [5] by turning counterclockwise.
2. Remove axle [1] from hub [7].
3. Remove three screws [3]. Remove cover plate [2].
4. Place brake disc plate [4] at installed position. Install six 12mm bolts [9] and lock tab washers [8]. See Torque Value Chart on last page.
5. Using hammer and common screwdriver, bend lock washer tabs [8] up.
6. Clean disc [4] with rubbing alcohol.



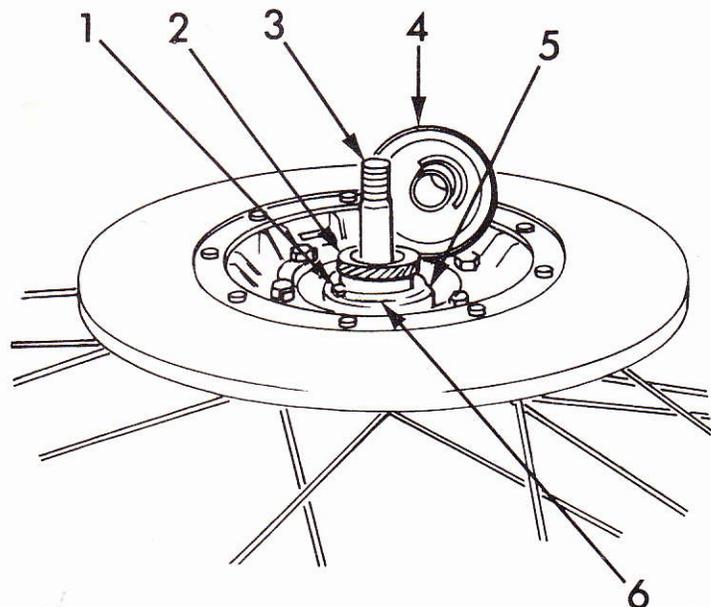
1. Place axle [3] in hub [5].

### CAUTION

Be sure keys [1] are inserted in cutouts [6] of hub [5].

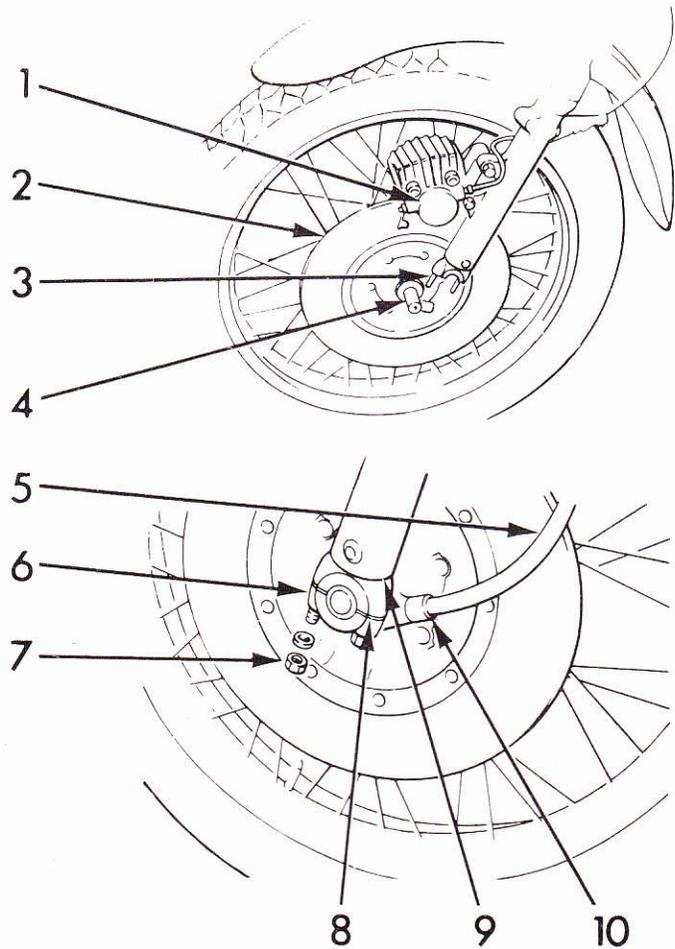
2. Install speedometer drive gear assembly [4] by turning clockwise.
3. While holding speedometer drive gear assembly [4], tighten 19mm axle [3]. See Torque Value Chart on last page.

**INSTALL ENDS HERE**



## INSTALL FRONT WHEEL

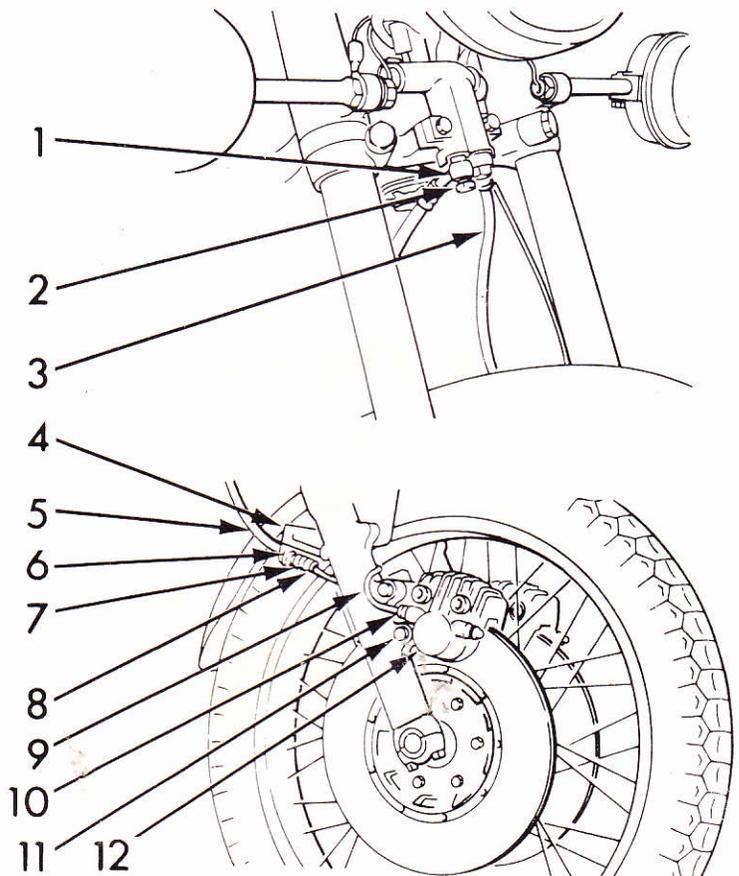
1. Lift wheel to installed position with left disc [2] between caliper brake pads [1].
  2. Check that axle ends [4] are between mounting studs [3].
- Flat side of nut [7] must face lock washer.
3. Place left and right mounting caps [6] at installed position. Install lock washers and nuts [7].
  4. Check that gap [8] between mounting caps [6] and front fork [9] is equal.
  5. Loosen or tighten nuts [7] until gap [8] is equal. See Torque Value Chart on last page.
  6. Insert speedometer cable [5] into drive gear assembly [10]. While spinning wheel, tighten speedometer cable.



INSTALL ENDS HERE

## INSTALL CALIPER BRAKE ASSEMBLY

1. Place lock washer and plain washer on two 14mm bolts [11].
2. Place caliper brake assembly [12] at installed position. Install two 14mm bolts [11]. See Torque Value Chart on last page.
3. Carefully install hydraulic brake pipe [9] in caliper brake assembly [12] fingertight.
4. Insert front brake hose [5] through rubber grommet [6]. Install grommet in hose bracket [4].
5. Connect hose [5] to pipe [9].
6. Place washers and brake hoses [1,3] at installed position. Install washers and two 14mm oil bolts [2].
7. While holding 17mm union-nut [7], tighten 10mm union-nut [8]. Tighten 10mm union-nut [10]. See Torque Value Chart on last page.
8. Install rear view mirror, if removed.



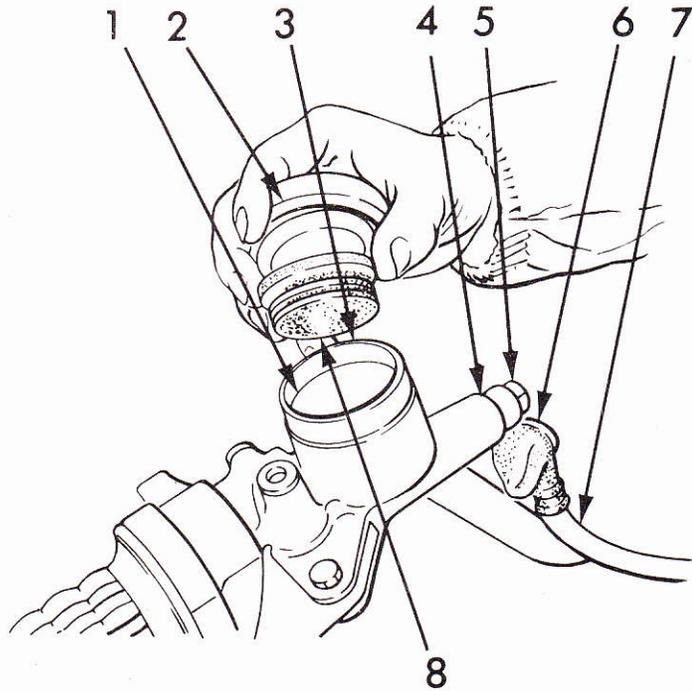
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## AIR BLEEDING INSTRUCTIONS

Following brands of brake fluid are recommended for use on your motorcycle:

Atlas Extra Heavy Duty  
Shell Super Heavy Duty  
Texaco Super Heavy Duty  
Wagner Lockheed Heavy Duty

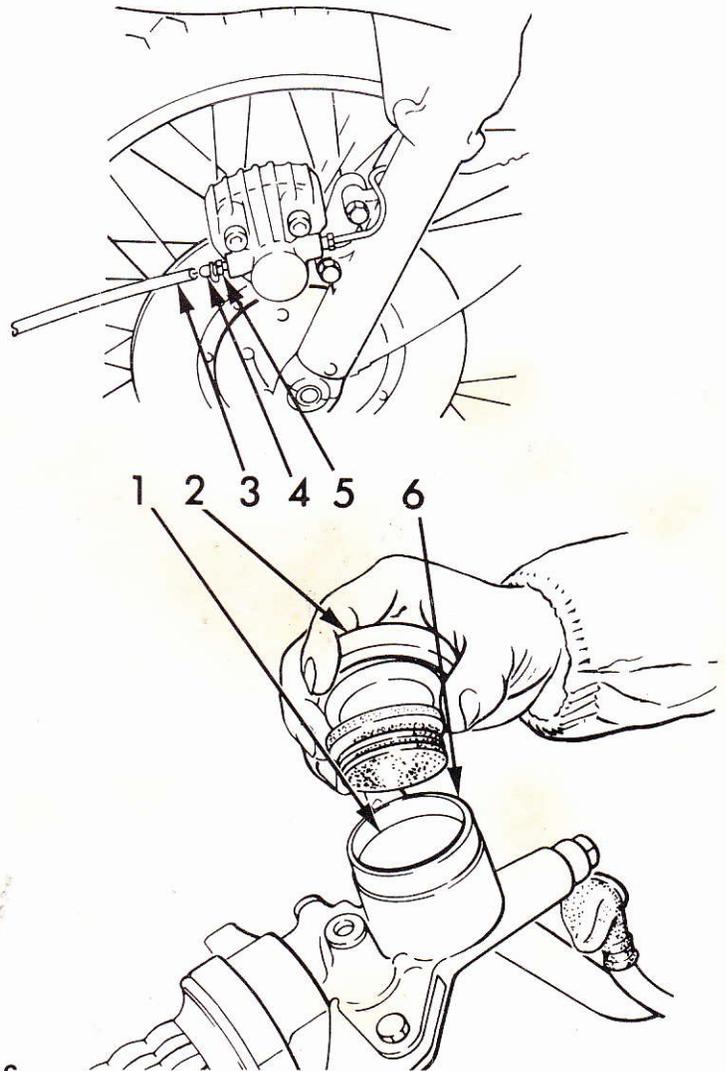
1. Remove cap [2]. Remove rubber liner [8]. Fill reservoir [3] to full line [1]. Install rubber liner. Install cap.
2. Slide rubber boot [6] down hose [7]. Remove 14mm oil bolt [5] and washers.
3. Cover master cylinder outlet [4] with finger. Operate brake lever several times until brake fluid starts to flow from outlet.
4. Place brake hose [7] and washer at installed position. Install washer and 14mm oil bolt [5].
5. Slide rubber boot [6] over outlet [4].



1. Pull left rubber cap [4] off. Connect clear plastic hose [3] to left caliper bleeder valve [5].
2. Insert other end of hose [3] into receptacle containing brake fluid.

Be sure brake reservoir [6] is kept filled to full line [1] at all times during bleeding operation.

3. Open bleeder valve [5]. Operate brake lever until hose [3] is full of fluid. Close bleeder valve.
- Steps 4 and 5 should be repeated three times only before reservoir must be filled.
4. Operate brake lever until lever becomes hard to squeeze.
  5. While depressing brake lever, open bleeder valve [5]. Allow fluid to flow until it stops. Close valve. Release brake lever.
  6. Repeat steps 4 and 5 until no air is visible in plastic hose [3].
  7. Remove cap [2]. Fill reservoir [6].
  8. Repeat this page of instruction to air bleed the right caliper brake.



1. Spin wheel. Check that wheel spins freely.

If wheel does not spin freely, have your brakes and wheels inspected by a Kawasaki dealer.

2. Remove wooden box from under motorcycle and carefully lower motorcycle to ground.

### END OF ACTIVITY

TORQUE VALUE CHART

Description	Tool Size	Torque Value	
		Ft-Lb	Kg-M
Master cylinder bolts	10mm	4.3- 5.1	0.6- 0.7
Brake bleeder valve	10mm	5.8- 8.7	0.8- 1.0
Pipe fittings	10mm	12.5-13	1.7- 1.8
Four-Way fitting bolts	10mm	4.3- 5.1	0.6- 0.7
Front disc mounting bolts	12mm	10 -13	1.4- 1.8
Front fender mount bolts	13mm	14.5-15.5	2.0- 2.2
Front axle clamping nuts	13mm	14.5-15.5	2.0- 2.2
Oil bolts	14mm	18 -24	2.5- 3.3
Caliper brake assembly mounting bolts	14mm	18 -24	2.5- 3.3
Front axle	19mm	50 -60	7.0- 8.2