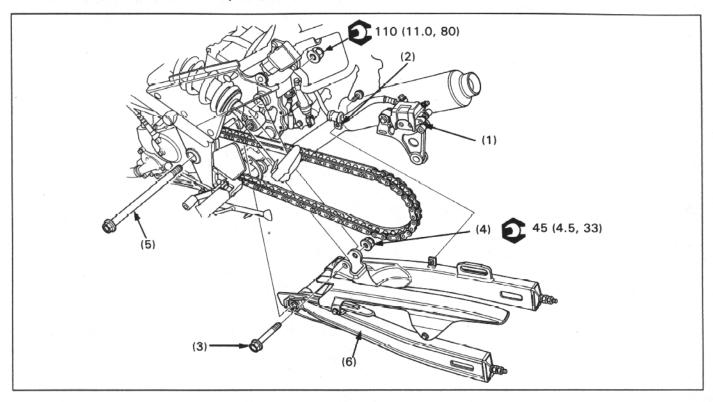
## SWINGARM REMOVAL/INSTALLATION



### NOTE

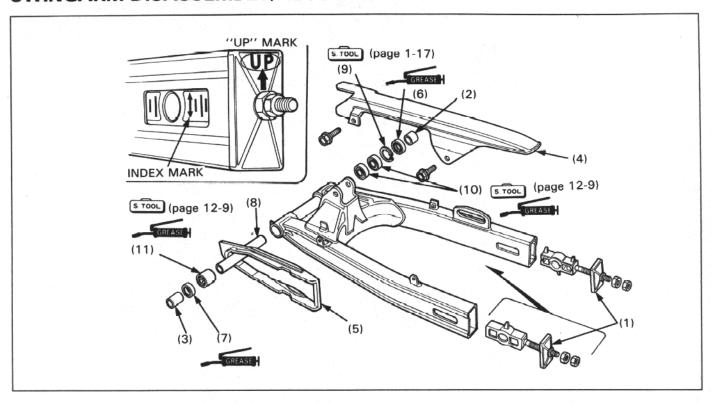
- · Put the motorcycle on its center stand.
- Do not depress the brake pedal when the caliper is removed, or it will be difficult to refit the disc between the brake pads.
- Support the removed caliper with a piece of wire so that it does not hang from the brake hose. Do not twist the brake hose.
- · If necessary, loosen the rear engine mounting nut near the swingarm pivot to ease the swingarm removal/installation.

### REQUISITE SERVICE

· Rear wheel removal/installation (page 12-2)

	PROCEDURE	Q'ty	REMARKS
	REMOVAL ORDER		Installation is in the reverse order of removal.
(1)	Rear brake caliper	1	
(2)	Brake hose clamp	1	
(3)	Shock absorber lower mounting bolt	1	
(4)	Swingarm pivot nut	1	
(5)	Swingarm pivot shaft	1	
(6)	Swingarm assembly	1	

# SWINGARM DISASSEMBLY/ASSEMBLY



### NOTE

· For pivot bearing replacement, see next page.

### REQUISITE SERVICE

Rear wheel removal/installation (page 12-2)
 Swingarm removal/installation (page 12-7)

	PROCEDURE	Q'ty	ASSEMBLY REMARKS
(1)	DISASSEMBLY ORDER Drive chain adjuster	2	Assembly is in the reverse order of disassembly.  Install them with the UP mark facing up and the index mark facing out.
(2)	Right pivot collar	1	
(3)	Left pivot collar	1	
(4)	Drive chain cover	1	
(5)	Drive chain slider	1	
(6)	Right dust seal	1	Apply grease to the lip.
(7)	Left dust seal	1	
(8)	Distance collar	1	
(9)	Snap ring	1	Install it into the groove securely.
10)	Ball bearing	2	Replacement (page 12-9)
(11)	Needle bearing	1	

12-8

### SWINGARM PIVOT BEARING REPLACEMENT

Press the right pivot bearings (ball bearings) out of the swing-

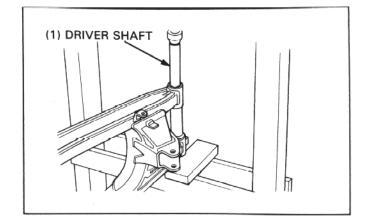
S TOOL

DRIVER SHAFT

07946-MJ00100 (Not available in U.S.A.)

**DRIVER** 

07949-3710001



Set the needle bearing remover onto the left pivot bearing (needle bearing) as shown.

Press the bearing out of the swingarm.

S TOOL

NEEDLE BEARING REMOVER ATTACHMENT

07GMD-KT70200 

¬ (Not available

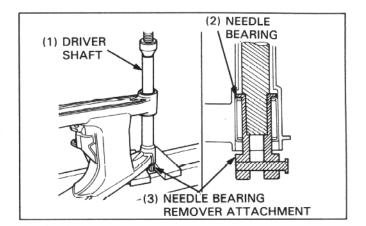
**DRIVER SHAFT** 

07946-MJ00100-in U.S.A.)

BUSHING REMOVER M967X-038-XXXXX

DRIVER

07949-3710001



Press the needle bearing into the swingarm with the marked side facing out.

### NOTE

· The bearing surface should flush with the pivot inside surface as shown.

S TOOL DRIVER

ATTACHMENT, 28 x 30 mm

07749-0010000

07946-1870100

PILOT, 22 mm

07746-0041000

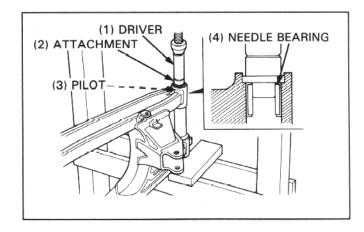
Press one ball bearing (inner bearing) into the swingarm first, then press in another on top of it (outer bearing).

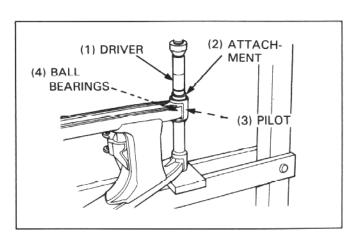
S TOOL

07749-0010000 DRIVER

07746-0010100 ATTACHMENT, 32 x 35 mm

07746-0040300 PILOT, 15 mm





## 13

# 13. BRAKES

	SERVICE INFORMATION	13-1	FRONT MASTER CYLINDER	
	TROUBLESHOOTING	13-1	REMOVAL/INSTALLATION	13-8
	FRONT BRAKE PAD REPLACEMENT	13-2	REAR MASTER CYLINDER REMOVAL/INSTALLATION	12.0
	REAR BRAKE PAD REPLACEMENT	13-3	FRONT MASTER CYLINDER	13-9
	FRONT BRAKE CALIPER REMOVAL/	13-4	DISASSEMBLY/ASSEMBLY	13-10
	REAR BRAKE CALIPER REMOVAL/	13-4	REAR MASTER CYLINDER DISASSEMBLY/ASSEMBLY	13-11
	INSTALLATION	13-5	BRAKE PEDAL REMOVAL/	
	FRONT BRAKE CALIPER DISASSEMBLY/ASSEMBLY	13-6	INSTALLATION	13-12
	REAR BRAKE CALIPER DISASSEMBLY/ ASSEMBLY	13-7		
_				

### **SERVICE INFORMATION**

### AWARNING

- A contaminated brake disc or pad reduces stopping power. Discard contaminated pads and clean a contaminated disc with a high quality brake degreasing agent.
- Inhaled asbestos fibers have been found to cause respiratory disease and cancer. Never use an air hose or dry brush to
  clean brake assemblies. Use an OSHA-approved vacuum cleaner or alternate method approved by OSHA designed to
  minimize the hazard caused by airborne asbestos fibers.
- Spilled brake fluid will severely damage instrument lenses and painted surfaces. It is also harmful to some rubber parts. Be
  very careful whenever you remove the reservoir cap: make sure the front reservoir is horizontal first.
- Never allow contaminants (dirt, water, etc.) to get into an open reservoir.
- Once the hydraulic system has been opened, or if the brakes feel spongy, the system must be bled.
- Always use fresh DOT 4 brake fluid from a sealed container when servicing the system. Do not mix different types of fluid
  as they may not be compatible.
- Always check brake operation before riding the motorcycle.

### **TROUBLESHOOTING**

### Brake lever/pedal soft or spongy

- Air bubbles in the hydraulic system
- Leaking hydraulic system
- Contaminated brake pad/disc
- Worn caliper piston seal
- Worn master cylinder piston cups
- Worn brake pad
- Contaminated caliper
- Caliper not sliding properly
- Worn brake pad/disc
- Low fluid level
- Clogged fluid passage
- Warped/deformed brake disc
- · Sticking/worn caliper piston
- Sticking/worn master cylinder piston
- Worn brake disc
- Contaminated master cylinder
- Bent brake lever/pedal

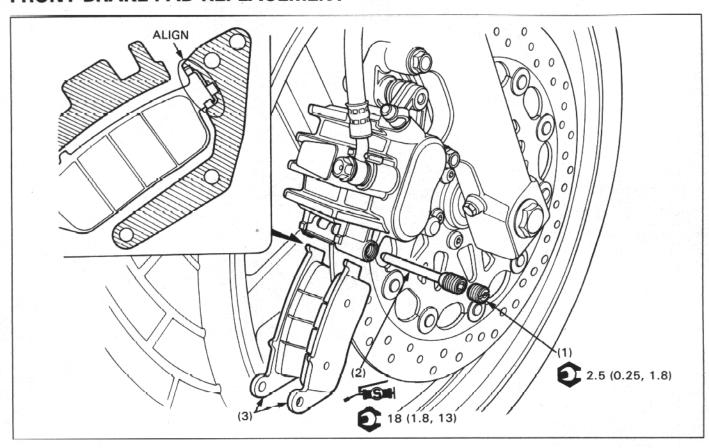
#### Brake lever/pedal hard

- · Clogged/restricted brake system
- Sticking/worn caliper piston
- · Caliper not sliding properly
- Clogged/restricted fluid passage
- Worn caliper piston seal
- Sticking/worn master cylinder piston
- Bent brake lever/pedal

#### Brakes drag

- Contaminated brake pad/disc
- Misaligned wheel
- Worn brake pad/disc
- · Warped/deformed brake disc
- Caliper not sliding properly

### FRONT BRAKE PAD REPLACEMENT



### AWARNING

- A contaminated brake disc or pad reduces stopping power. Discard contaminated pads and clean a contaminated disc with a high quality brake degreasing agent.
- Inhaled asbestos fibers have been found to cause respiratory disease and cancer. Never use an air hose or dry brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner or alternate method approved by OSHA designed to minimize the hazard caused by airborne asbestos fibers.
- · After replacement, operate the brake lever to seat the caliper pistons against the pads.

### NOTE

- Do not depress the brake lever when the caliper is removed, or it will be difficult to refit the disc between the brake pads.
- · Replace brake pads as a set.
- · Apply a thin of silicone grease onto the pad pin so as not to rust it.

### REQUISITE SERVICE

· Pushing the caliper against the disc, push the caliper pistons all the way in to allow the installation of new brake pads.

PROCEDURE		Q'ty	INSTALLATION REMARKS
(1)	REMOVAL ORDER Pad pin plug	1	Installation is in the reverse order of removal.
(2)	Pad pin	1	Insert the pin, pushing the pads against the pad spring.
(3)	Brake pad	2	Align the pad lug with the pad retainer as shown.