

14. Rear Wheel/Suspension

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Service Information

⚠ WARNING

- **Riding on damaged rims impairs safe operation of the vehicle.**

- Tubeless tire removal, repair, and remounting procedures are covered in the section 16 of the Common Service Manual. When remounting the tire, note the normal rotating direction indicated by the arrow.
- Refer to the section 15 for brake system information.
- Use only genuine Honda replacement bolts and nuts for all suspension pivot and mounting points.

Troubleshooting

Rear wheel wobbling

- Bent rim
- Worn rear wheel bearing(s)
- Faulty tire
- Unbalanced tire and wheel
- Low tire pressure
- Faulty swingarm pivot bearing(s)

Hard suspension

- Damaged shock absorber mount bushing
- Incorrect suspension adjustment
- Bent damper rod
- Damaged swingarm pivot bearing(s)
- Lack of lubrication in swing arm pivot bearings or suspension pivot points

Wheel turns hard

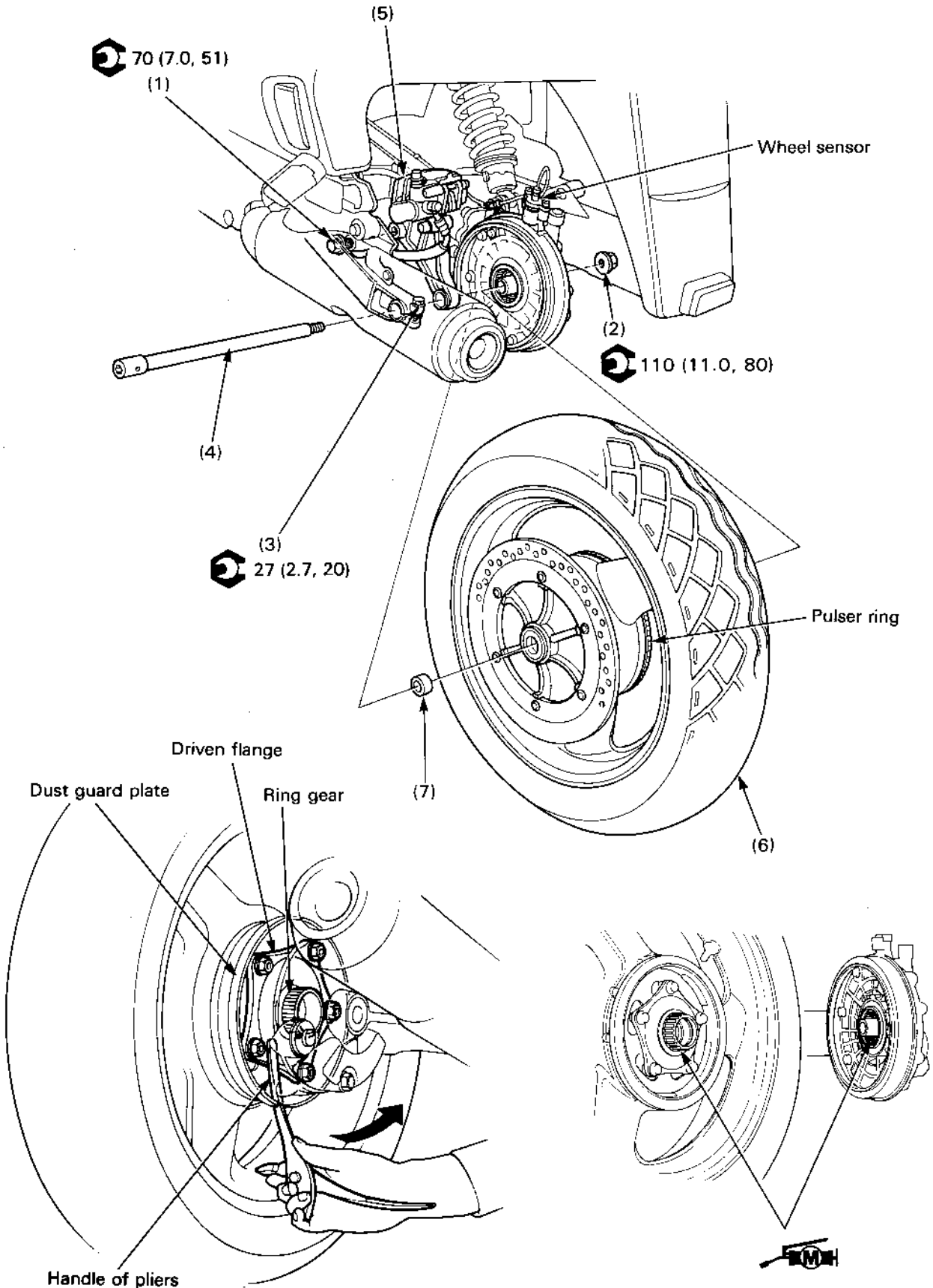
- Faulty wheel bearing(s)
- Brake drag (section 15)
- Bent rear axle

Soft suspension

- Weak shock absorber spring
- Oil leakage from damper unit
- Incorrect suspension adjustment

Rear Wheel Removal/Installation

ABS/TCS model shown:



⚠ WARNING

- A contaminated brake disc or pad reduces stopping power. Discard contaminated pads and clean a contaminated disc with a high quality brake degreasing agent.

NOTE

- ABS/TCS or LBS-ABS/TCS model: Do not remove the wheel sensor to remove and install the rear wheel.
- Do not depress the brake pedal when the caliper is removed, or it will be difficult to refit the disc between the brake pad.
- 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.
- Apply multipurpose NLGI No. 2 grease (molybdenum disulfide additive) to the driven flange and the ring gear engagement splines.

Requisite Service

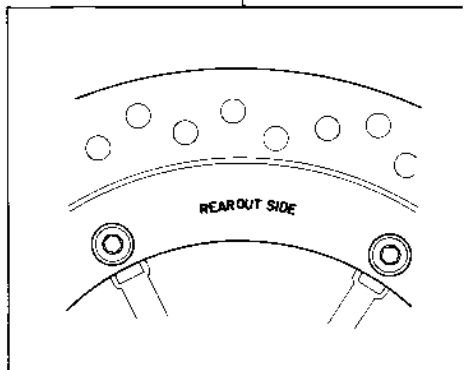
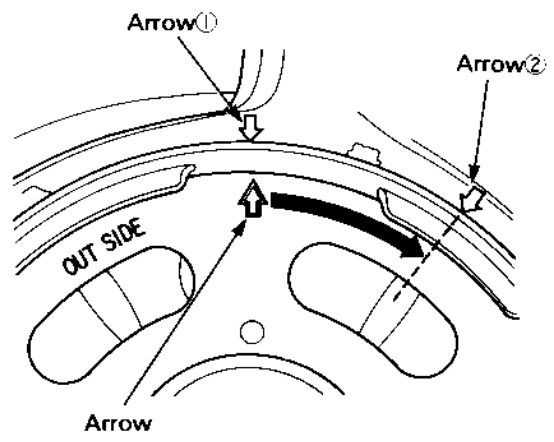
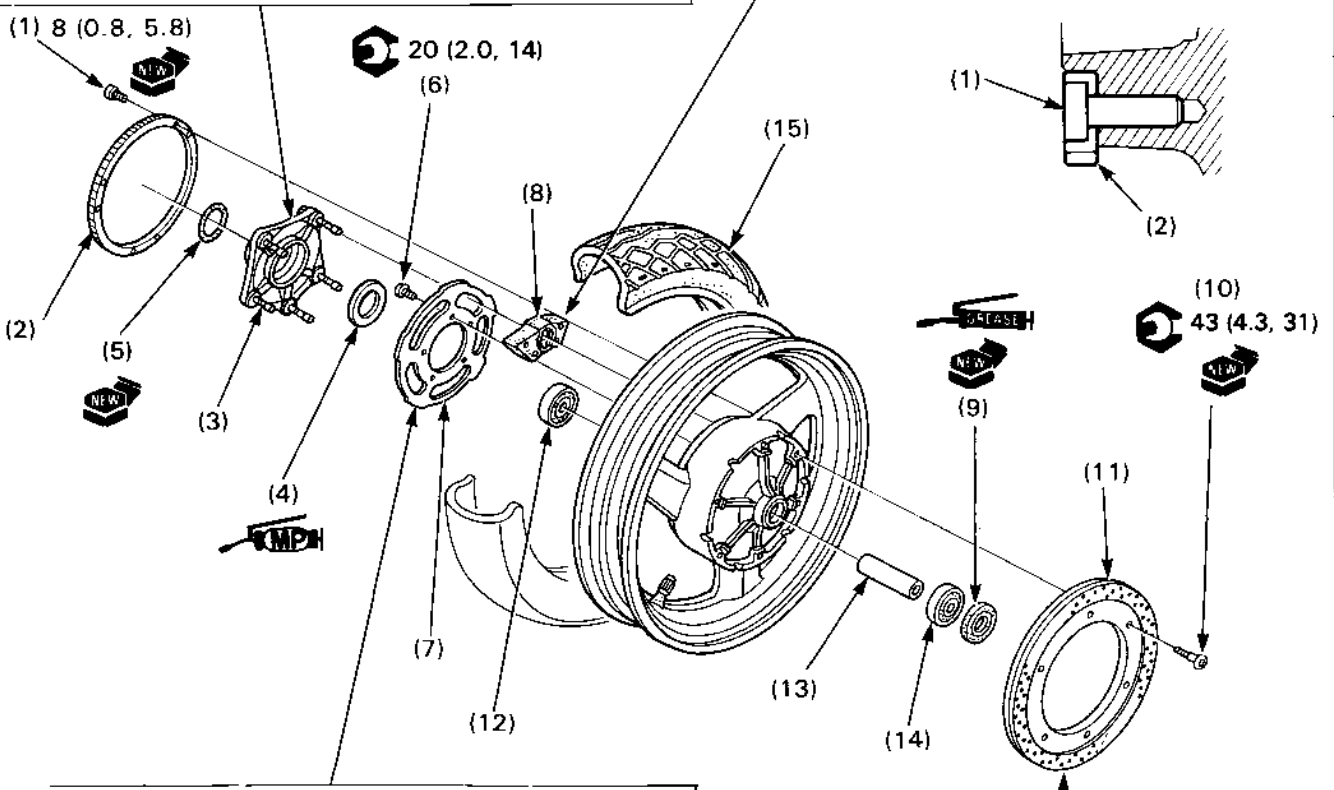
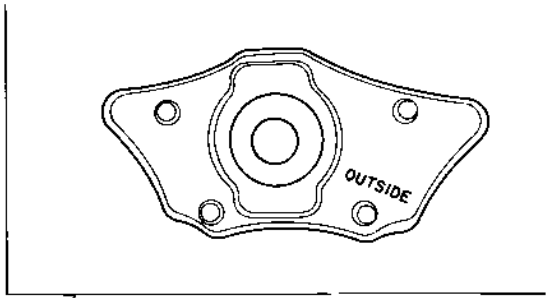
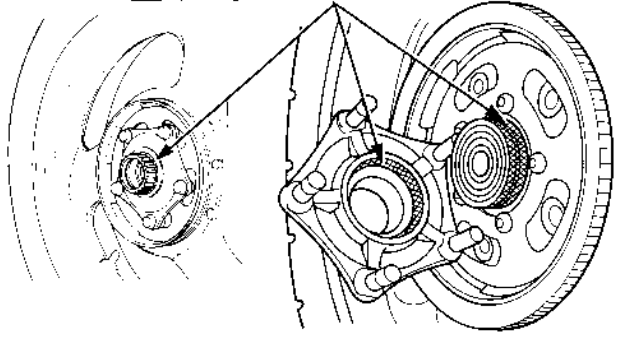
- Place the motorcycle on its center stand.

Procedure		Q'ty	Remarks
Removal Order			
(1)	Rear caliper stopper pin bolt	1	Loosen the bolt.
(2)	Rear axle nut	1	
(3)	Rear axle pinch bolt	1	
(4)	Rear axle	1	
(5)	Rear caliper assembly	1	Remove from the brake disc.
(6)	Rear wheel assembly	1	Separate the driven flange of the wheel from the ring gear of the final drive gear by prying the driven flange with the handle of the pliers through the slot in the dust guard plate as shown. CAUTION • ABS/TCS or LBS-ABS/TCS model: Be careful not to damage the pulser ring and wheel sensor.
(7)	Side collar	1	

Rear Wheel Disassembly/Assembly

ABS/TCS model shown:

MPH (3 g/0.11 oz to each surface)



NOTE

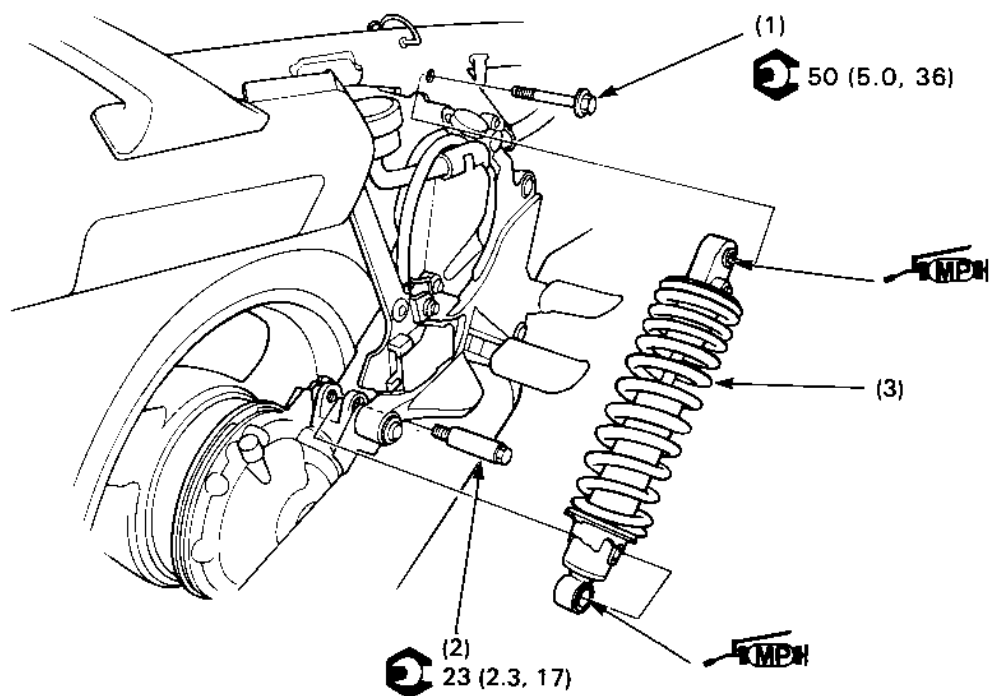
- Replace the rear wheel damper rubbers as a set.
- Replace the wheel bearings as a set.
- For wheel bearing replacement, refer to the section 1 of the Common Service Manual.
- ABS/TCS or LBS-ABS/TCS model: When the pulser ring is replaced, perform the wheel sensor air gap inspection (page 16-A-51 or 16-B-34) after installing the rear wheel.

Requisite Service

- Rear wheel removal/installation (page 14-2).

Procedure		Q'ty	Remarks
Disassembly Order			Assembly is in the reverse order of disassembly.
(1)	Torx bolt (T25) (ABS/TCS or LBS-ABS/TCS model)	6	
(2)	Pulser ring (ABS/TCS or LBS-ABS/TCS model)	1	Install the pulser ring with the concave of bolt hole facing out. CAUTION • Be careful not to deform, distort, or damage the pulser ring.
(3)	Final driven flange	1	At assembly, apply 3 g (0.11 oz) of molybdenum disulfide paste to the driven flange mating surface of the hub, to the inside diameter of the driven flange and to the splines of the driven flange as shown.
(4)	Thrust washer	1	
(5)	O-ring	1	
(6)	Socket bolt	5	
(7)	Damper holder plate	1	Remove the plate by turning it counterclockwise and aligning the arrow on the plate with the arrow ① on the wheel as shown. Install the plate, aligning the arrow with the arrow ①, and turn it clockwise until the arrow aligns with the arrow ② as shown.
(8)	Rear wheel damper rubber	5	Install with the "OUTSIDE" mark facing out.
(9)	Dust seal	1	
(10)	Socket bolt	6	
(11)	Rear brake disc	1	Install with the "OUTSIDE" mark facing out.
(12)	Right wheel bearing (dual, 20x47x20.6 mm)	1	
(13)	Distance collar	1	
(14)	Left wheel bearing (6204UU)	1	At installation, drive a new left wheel bearing in the hub first, then drive a new right bearing in.
(15)	Rear tire	1	

Shock Absorber Removal/Installation



NOTE

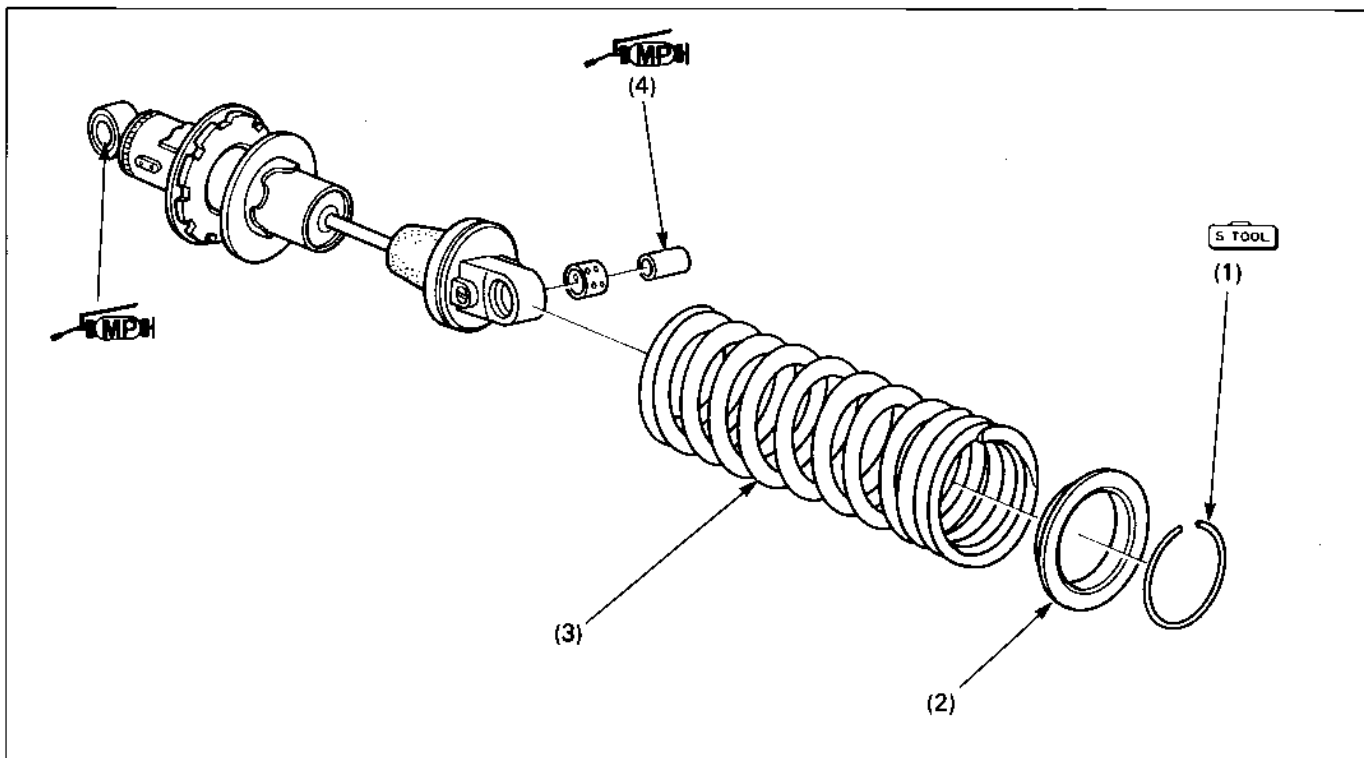
- Use a floor jack or other adjustable support under the final drive to relieve stress for ease of left shock absorber lower mounting bolt removal/installation.
- Note the position of the spring preload adjuster for future reference. Adjust the spring preload adjuster to the softest position for disassembly. Return the adjuster to the position noted before disassembly.

Requisite Service

- Place the motorcycle on its center stand
- Right side cover (page 2-2)

Procedure	Q'ty	Remarks
Removal Order		Installation is in the reverse order of removal.
(1) Upper mounting bolt	1	
(2) Lower mounting bolt	1	
(3) Shock absorber assembly	1	Disassembly/assembly (page 14-7)

Shock Absorber Disassembly/Assembly



NOTE

- Adjust the spring preload adjuster to the softest position before disassembly.

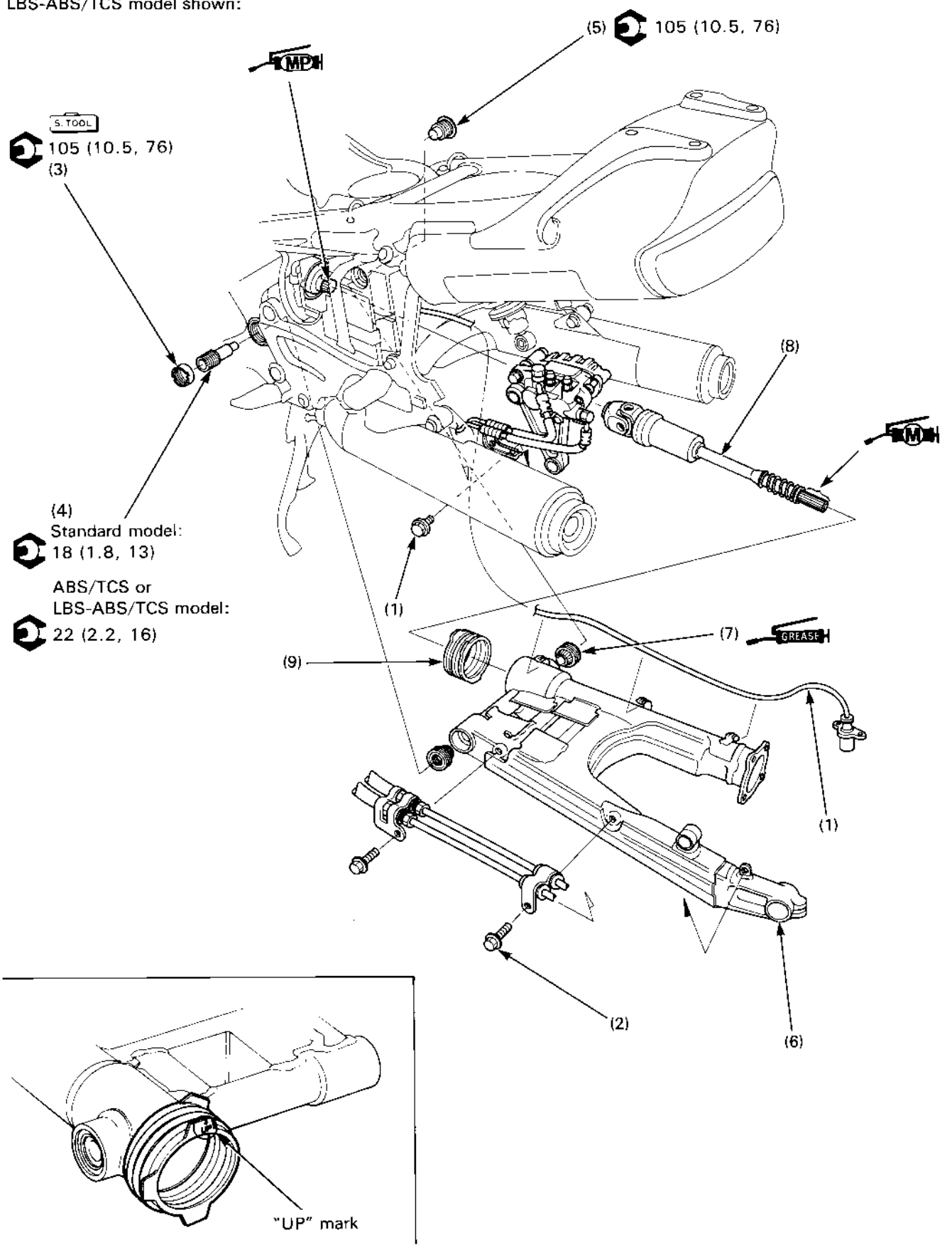
Requisite Service

- Shock absorber removal/installation (page 14-6)

Procedure	Q'ty	Remarks
Disassembly Order		
(1) Stopper ring	1	Assembly is in the reverse order of disassembly. Compress the shock absorber spring using the spring compressor (07GME-0010000) and attachment (07959-MB10000) and remove the stopper ring.
(2) Upper spring seat	1	
(3) Spring	1	Install with the tightly wound coil end facing up.
(4) Upper mount collar	1	

Swingarm Removal/Installation

LBS-ABS/TCS model shown:



NOTE

- Replace the pivot bearings and outer races as a set.

Requisite Service

- Final gear case removal/installation (page 12-3)

Procedure		Q'ty	Remarks
Removal Order			
(1)	Wheel sensor wire (ABS/TCS or LBS-ABS/TCS model only)	1	Installation is in the reverse order of removal. Remove the wire harness from the swingarm.
(2)	Rear brake hose clamp bolt	2	Remove the rear brake hose clamp from the swingarm.
(3)	Left pivot lock nut	1	Use the swingarm lock nut wrench (07908-4690003).
(4)	Left pivot bolt	1	
(5)	Right pivot bolt	1	
(6)	Swingarm	1	
(7)	Pivot bearing	2	Pivot bearing outer race replacement (page 14-10)
(8)	Driveshaft assembly	1	Disassembly/Assembly (page 12-2)
(9)	Rubber boot	1	
Installation Order			
(9)	Rubber boot	1	Install with the "UP" mark facing up.
(8)	Driveshaft assembly	1	Install into the swingarm
(7)	Pivot bearing	1	
(5)	Right pivot bolt	1	
(6)	Swingarm	1	Install in the frame and on the right pivot bolt while engaging the driveshaft joint with the countershaft.
(4)	Left pivot bolt	1	After installing the pivot bolts, fit the rubber boot tab into the transmission case groove properly.
(3)	Left pivot lock nut	1	Tighten the nut with the swingarm lock nut wrench (07908-4690003 or KS-HBA-08-469, U.S.A. only) while holding the left pivot bolt.
(2)	Rear brake hose clamp bolt	4	Install the clamp onto the swingarm.
(1)	Wheel sensor wire harness	1	Install the wire harness onto the swingarm.

Rear Wheel/Suspension

Pivot Bearing Outer Race Replacement

Punch or drill a 13 mm (1/2 in) hole into each grease retainer.

Remove the attachment from the bearing remover. Slide the shaft through the hole and install the attachment onto the shaft.

Install the sliding weight and remove the outer race with the grease retainer.

Repeat for the other side.

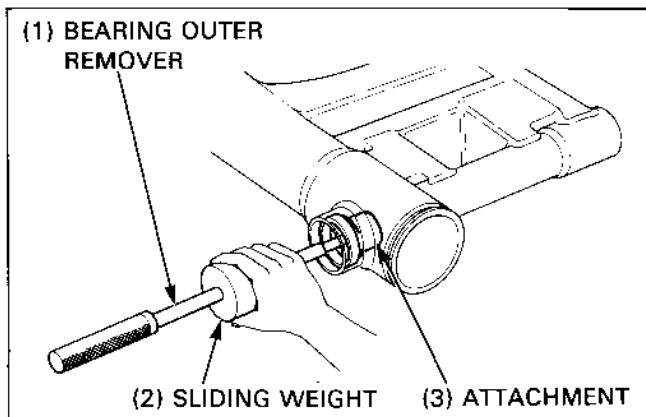
S TOOL

Pivot bearing outer remover

07936-415000

Sliding weight

07741-0010201



Install new bearing outer races into the swingarm pivot.

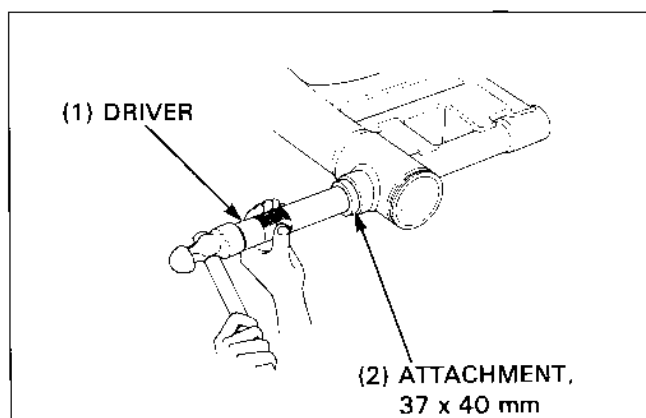
S TOOL

Driver

07749-0010000















Attachment, 37 x 40 mm

07746-0010200



Symbols

The symbols used throughout this manual show specific service procedures. If supplementary information is required pertaining to these symbols, it would be explained specifically in the text without the use of the symbols.

	<p>Replace the part(s) with new one(s) before assembly.</p>
	<p>Use special tool</p>
	<p>Use optional tool. Use the same procedure you use to order parts.</p>
 <p>10 (1.0, 7.2)</p>	<p>Torque specification. 10 N·m (1.0 kg-m, 7.2 ft-lb)</p>
	<p>Use recommended engine oil, unless otherwise specified.</p>
	<p>Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1 : 1).</p>
	<p>Use multi-purpose grease (Lithium based multi-purpose grease NLGI #2 or equivalent)</p>
	<p>Use molybdenum disulfide grease (containing more than 3% molybdenum disulfide, NLGI #2 or equivalent) Example: Molykote® BR-2 plus manufactured by Dow Corning, U.S.A. Multi-purpose M-2 manufactured by Mitsubishi Oil Japan</p>
	<p>Use molybdenum disulfide paste (containing more than 40% molybdenum disulfide, NLGI #2 or equivalent) Example: Molykote® G-n Paste manufactured by Dow Corning, U.S.A. Honda Moly 60 (U.S.A. only) Rocol ASP manufactured by Rocol Limited, U.K. Rocol Paste manufactured by Sumico Lubricant, Japan</p>
	<p>Use silicone grease</p>
	<p>Apply a locking agent. Use a middle strength locking agent unless otherwise specified.</p>
	<p>Apply sealant</p>
	<p>Use brake fluid, DOT 3 or DOT 4. Use the recommended brake fluid, unless otherwise specified.</p>
	<p>Use Fork or Suspension Fluid.</p>