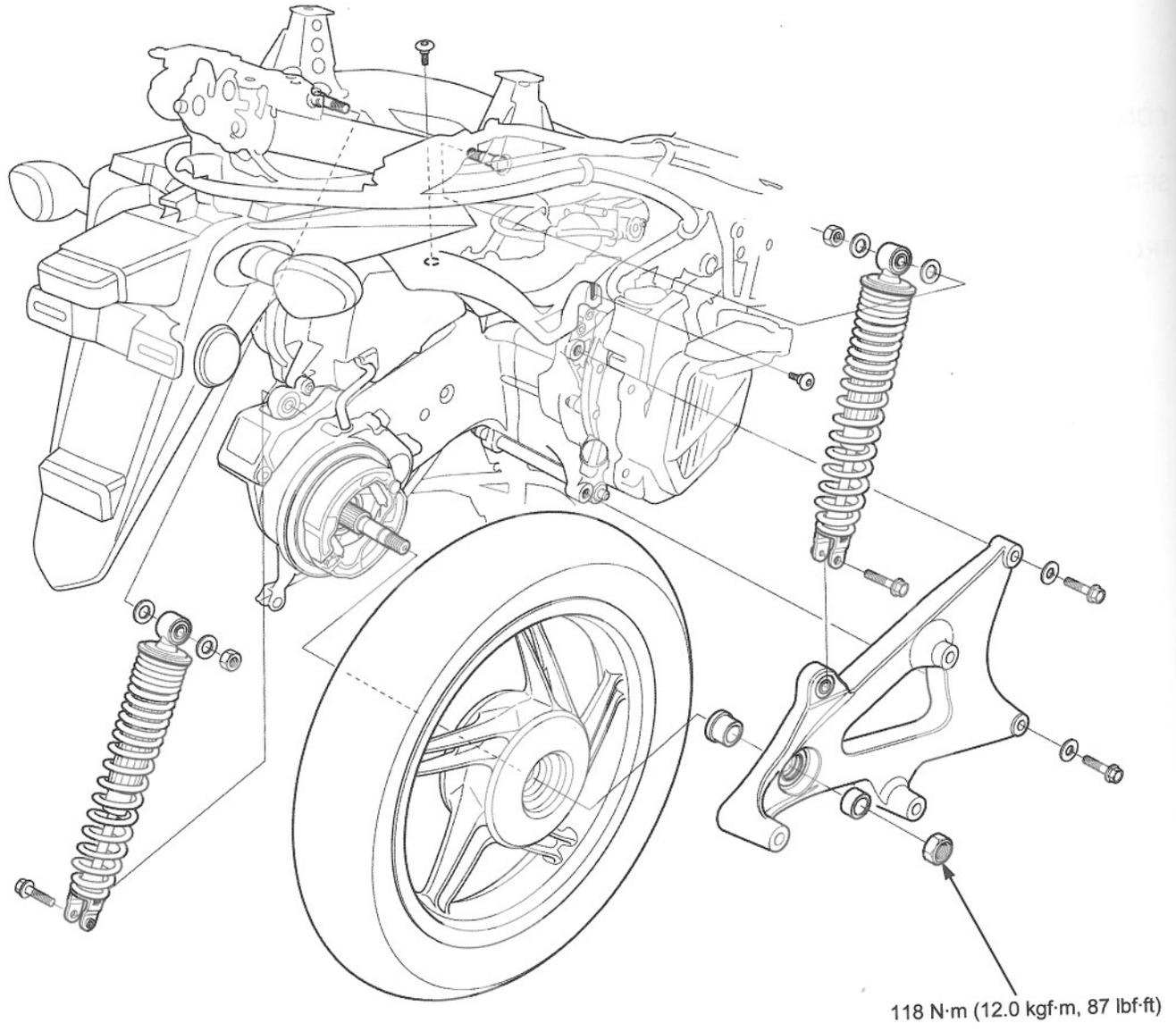


16. REAR WHEEL/BRAKE/SUSPENSION

COMPONENT LOCATION	16-2	REAR WHEEL/SWINGARM	16-5
SERVICE INFORMATION	16-3	REAR DRUM BRAKE	16-8
TROUBLESHOOTING	16-4	REAR SHOCK ABSORBER	16-12

REAR WHEEL/BRAKE/SUSPENSION COMPONENT LOCATION



SERVICE INFORMATION

GENERAL

⚠ WARNING

Frequent inhalation of brake shoe dust, regardless of material composition could be hazardous to your health.

- Avoid breathing dust particles.
- Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.

- Use genuine Honda replacement bolts and nut for all suspension pivots and mounting points.
- For brake system service, refer to section 16.

SPECIFICATIONS

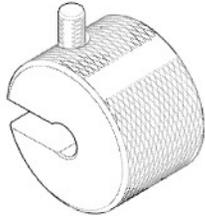
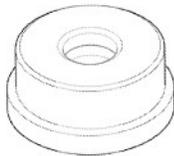
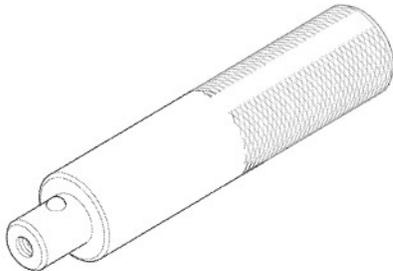
Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Minimum tire tread depth		—	To the indicator
Cold tire pressure	Driver only	225 kPa (2.25 kgf/cm ² , 33 psi)	—
	Driver and passenger	250 kPa (2.50 kgf/cm ² , 36 psi)	—
Wheel rim runout	Radial	—	2.0 (0.08)
	Axial	—	2.0 (0.08)
Brake	Brake lever freeplay	10 – 20 (0.4 – 0.8)	—
	Brake drum I.D.	130.0 – 130.2 (5.12 – 5.13)	131.0 (5.16)

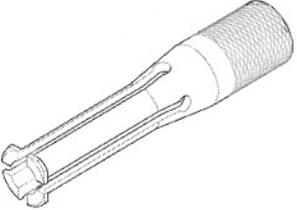
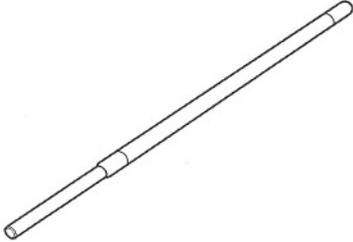
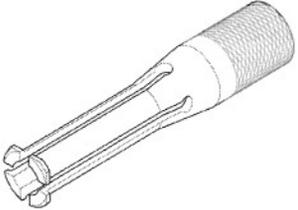
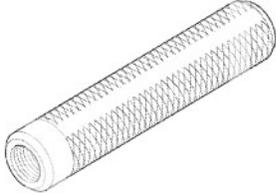
TORQUE VALUES

Rear axle nut	118 N·m (12.0 kgf·m, 87 lbf·ft)	U-nut, Apply engine oil to the threads and seating surface. ALOC bolt: replace with a new one.
Rear brake arm bolt	10 N·m (1.0 kgf·m, 7 lbf·ft)	

TOOLS

Remover weight 07741-0010201  or 07936-371020A (U.S.A. only)	Attachment, 42×47 mm 07746-0010300 	Pilot, 17 mm 07746-0040400 
Pilot, 20 mm 07746-0040500 	Driver 07749-0010000 	Bearing remover shaft, 15 mm 07936-KC10100  (Not available in U.S.A.)

REAR WHEEL/BRAKE/SUSPENSION

<p>Bearing remover head, 14 mm 07WMC-KFG0100</p>  <p>(Not available in U.S.A.)</p>	<p>Bearing remover shaft, 14 mm 07YMC-001010A (U.S.A. only)</p> 	<p>Bearing remover collet, 15 mm 07936-KC10200 (U.S.A. only)</p>  <p>(Collet only from 07936-KC10500)</p>
<p>Remover handle 07936-3710100</p> 		

TROUBLESHOOTING

Rear wheel wobbles

- Bent rim
- Faulty tire
- Axle nut and/or engine mounting bolt/nut not tightened properly
- Loose or worn final gear shaft bearing
- Insufficient tire pressure

Soft suspension

- Weak rear shock absorber spring
- Oil leakage from damper unit
- Low tire pressure

Stiff suspension

- Bent damper rod
- High tire pressure

Rear suspension noisy

- Loose mounting fasteners
- Faulty shock absorber
- Weak rear suspension bushings

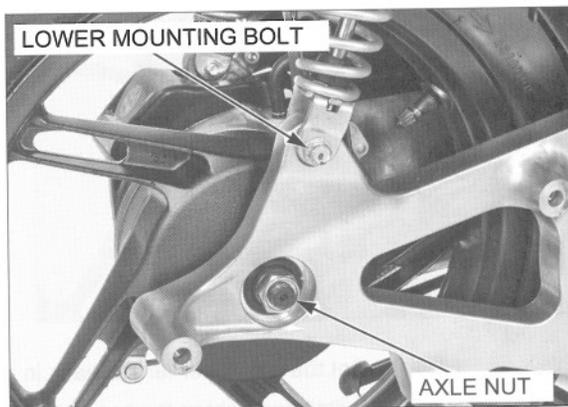
REAR WHEEL/SWINGARM

REMOVAL

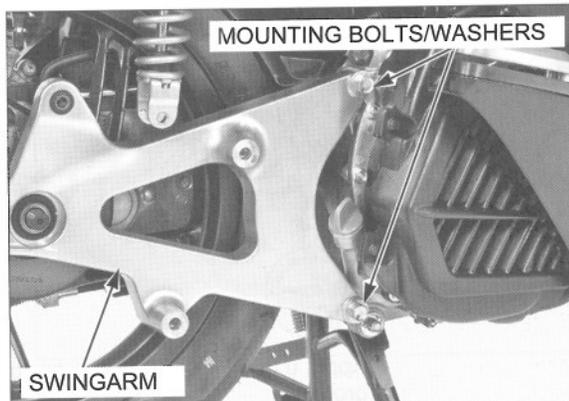
Remove the exhaust pipe/muffler (page 3-19).

Support the scooter on its centerstand and remove the following:

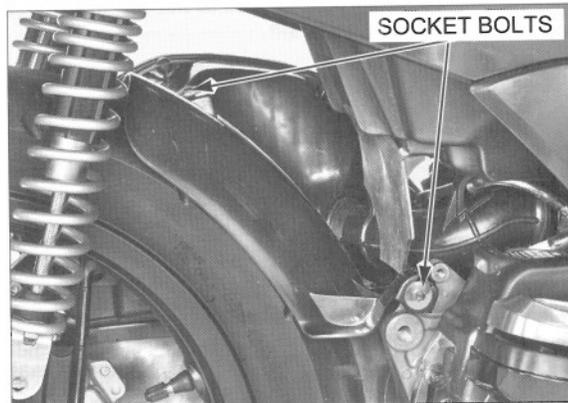
- axle nut
- right rear shock absorber lower mounting bolt



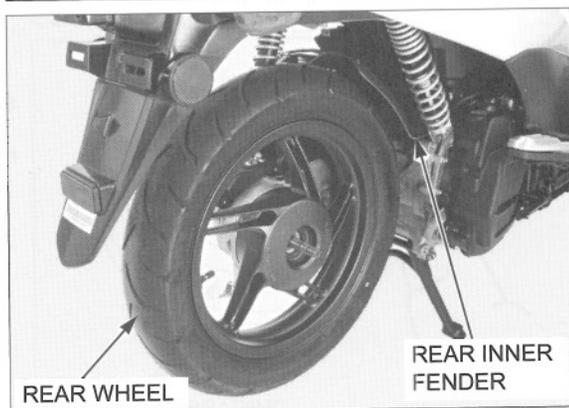
Remove the swingarm mounting bolts, washers and swingarm.



Remove the two socket bolts.



Be careful not to damage the rear inner fender. Slightly pull up the rear inner fender and remove the rear wheel.

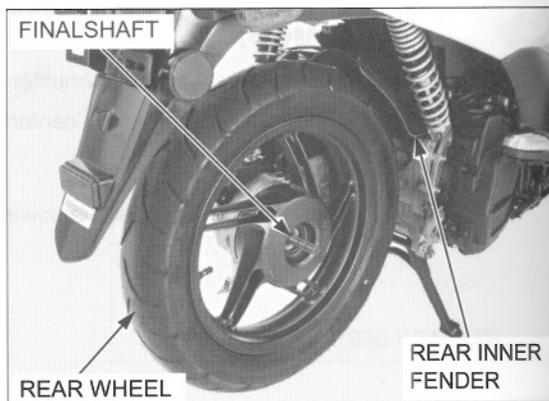


REAR WHEEL/BRAKE/SUSPENSION

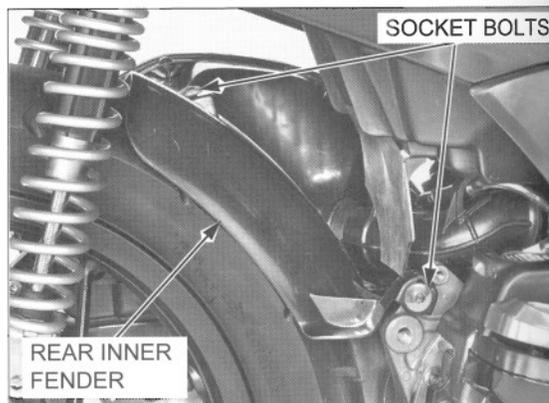
INSTALLATION

Be careful not to damage the rear inner fender and splines.

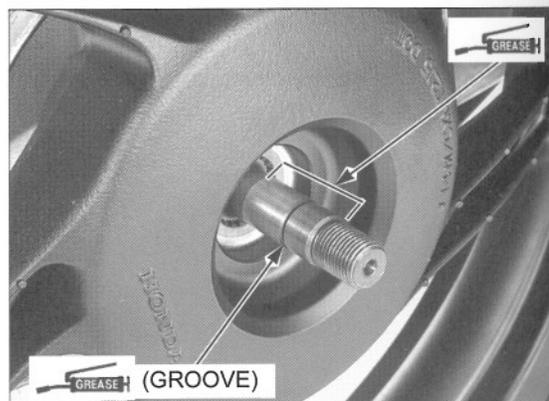
Slightly pull up the rear inner fender and install the rear wheel onto the finalshaft by aligning the splines.



Set the rear inner fender back in position. Install and tighten the two socket bolts.

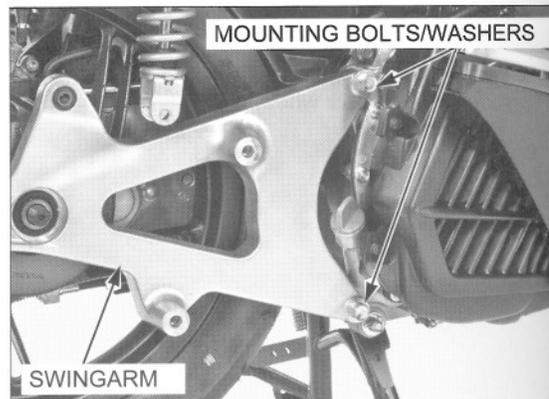


Apply 0.03 – 0.04 g of grease to the finalshaft grease groove. Apply grease to the swingarm bearing fitting area of the finalshaft.



Install the swingarm onto the finalshaft.

Install the washers and swingarm mounting bolts, then tighten them.



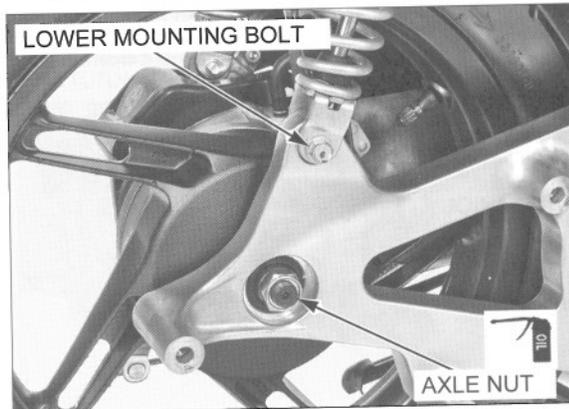
Install and tighten the right rear shock absorber lower mounting bolt.

Apply engine oil to the threads and seating surface of the rear axle nut.

Install the rear axle nut and tighten it to the specified torque.

TORQUE: 118 N·m (12.0 kgf·m, 87 lbf·ft)

Install the exhaust pipe/muffler (page 3-20).



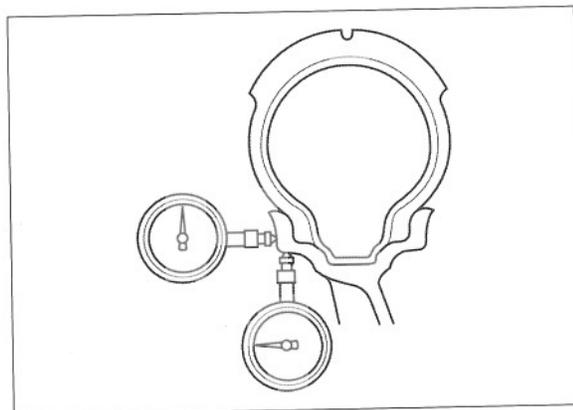
WHEEL INSPECTION

Check the wheel rim runout using dial indicators. Actual runout is 1/2 the total indicator readings.

SERVICE LIMITS:

Radial: 2.0 mm (0.08 in)

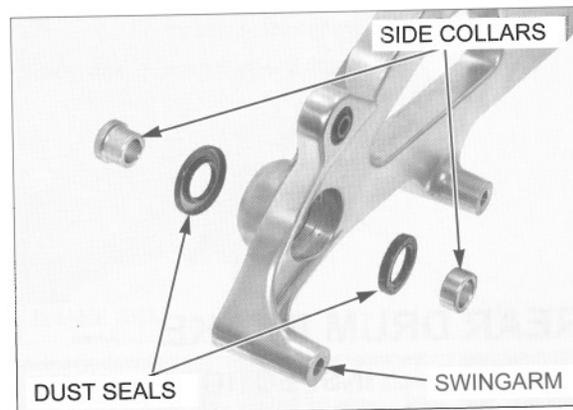
Axial: 2.0 mm (0.08 in)



SWINGARM BEARING INSPECTION/REPLACEMENT

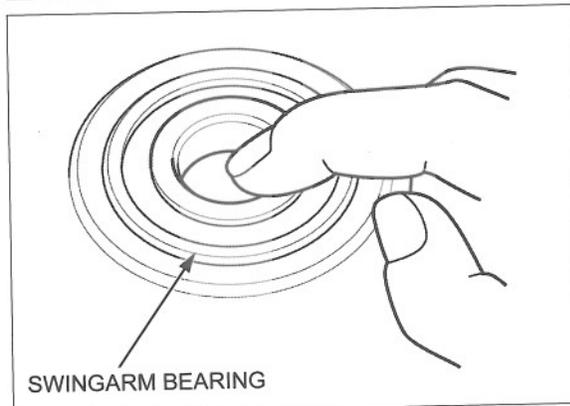
Remove the swingarm (page 16-5).

Remove the side collars and dust seals from the swingarm.



Turn the inner race of the bearing with your finger. The bearing should turn smoothly and quietly. Also check that the bearing outer race fits tightly in the swingarm.

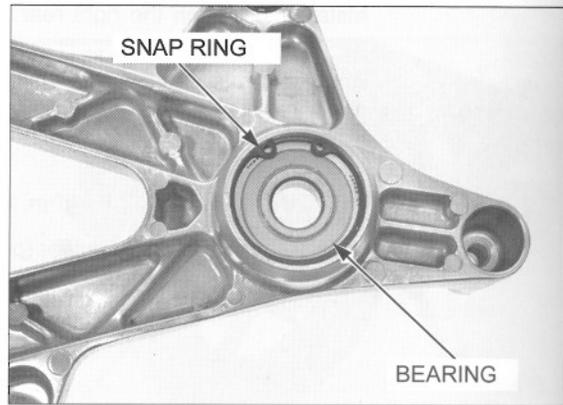
Replace the bearing if the inner race does not turn smoothly and quietly, or if the outer race fits loosely.



REAR WHEEL/BRAKE/SUSPENSION

Remove the snap ring.

Drive the bearing out from the swingarm.



Drive in new bearing squarely with the marked side facing up until it is fully seated.

TOOLS:

Driver

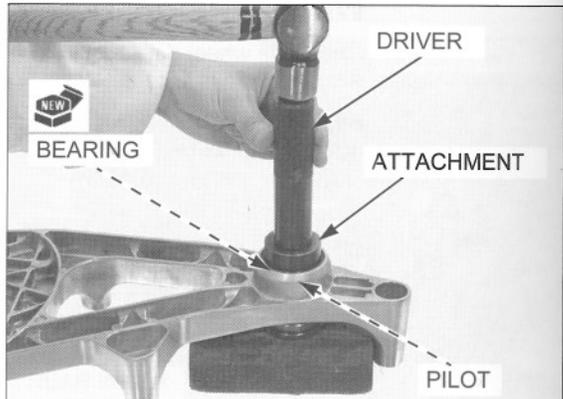
07749-0010000

Attachment, 42 x 47 mm

07746-0010300

Pilot, 17 mm

07746-0040400

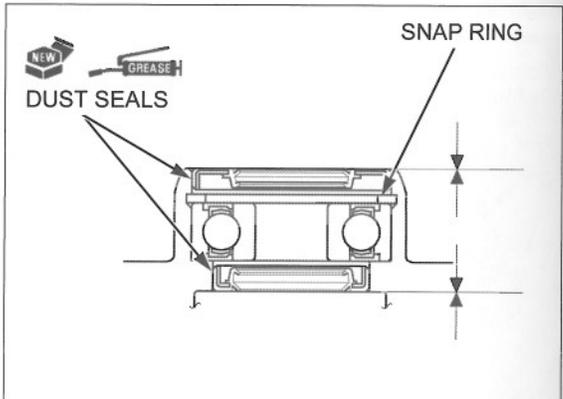


Install the snap ring into the swingarm groove securely with the chamfered side facing the bearing.

Apply grease to the new dust seal lips.

Install each dust seals until they are flush with the swingarm surfaces.

Install the swingarm (page 16-6).



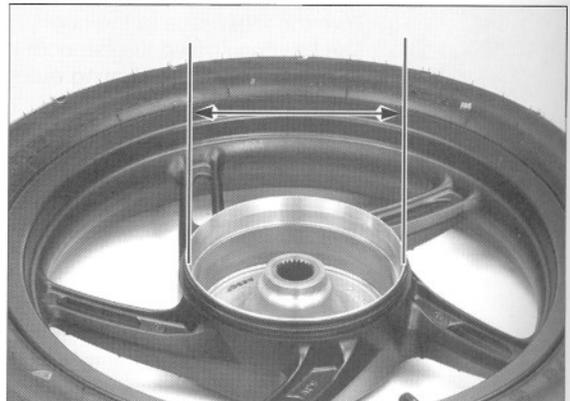
REAR DRUM BRAKE

INSPECTION

Remove the rear wheel (page 16-5)

Measure the rear brake drum I.D.

SERVICE LIMIT: 131.0 mm (5.16 in)

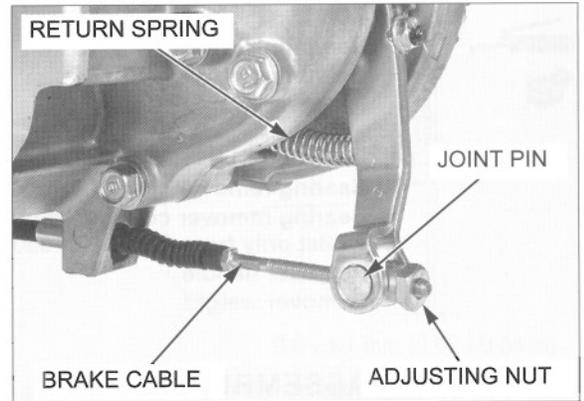


DISASSEMBLY

Remove the rear wheel (page 16-5).

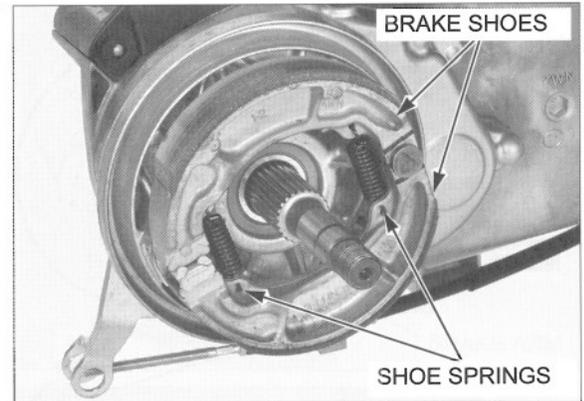
Remove the adjusting nut and brake cable from the joint pin.

Remove the joint pin and return spring.



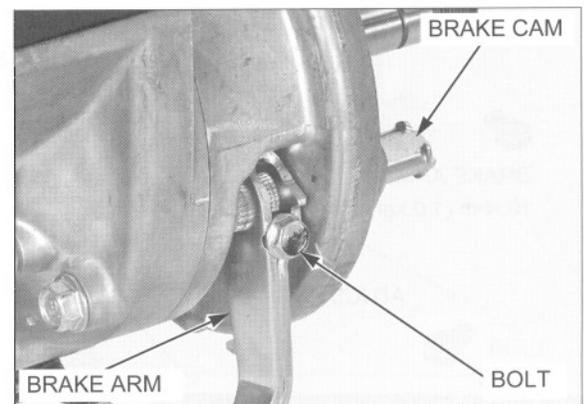
Mark all parts during disassembly so they can be placed back in the original locations.

Expand the brake shoes and remove the brake shoes/shoe springs from the brake panel.

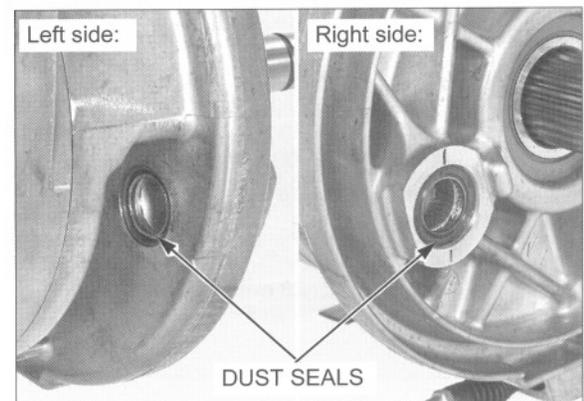


Remove the brake arm bolt.

Slightly pull out the brake cam and remove the brake arm, then remove the brake arm.



Remove the both dust seals.



REAR WHEEL/BRAKE/SUSPENSION

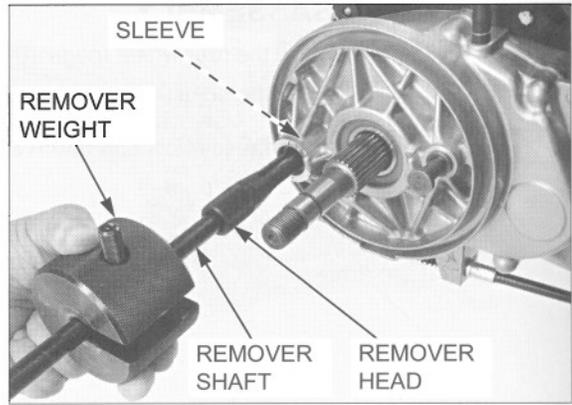
Remove the sleeve using the special tools.

TOOLS:

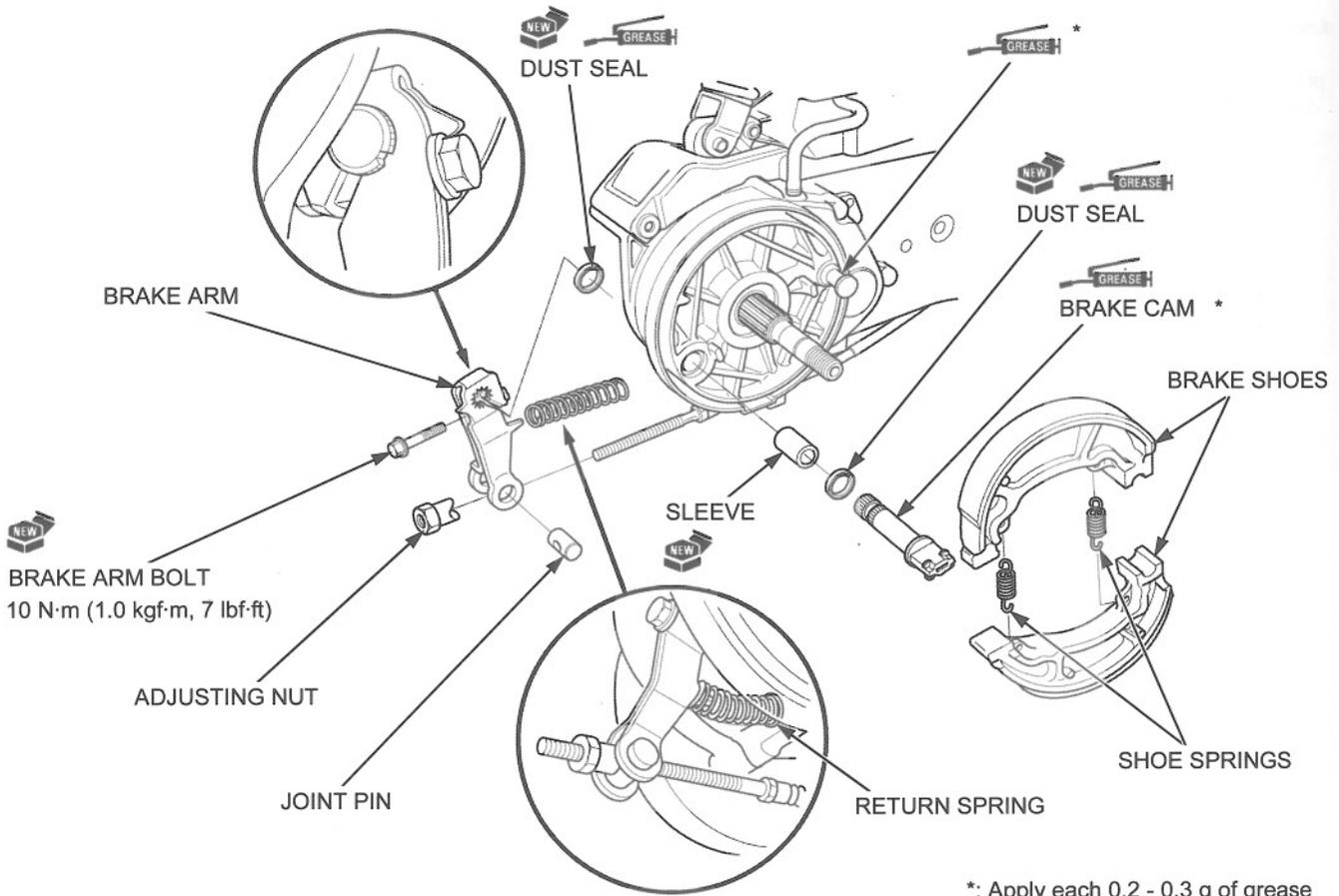
- Bearing remover shaft, 15 mm 07936-KC10100
- Bearing remover head, 14 mm 07WMC-KFG0100
- Remover weight 07741-0010201

U.S.A. TOOLS:

- Bearing remover shaft, 14 mm 07YMC-001010A
- Bearing remover collet, 15 mm 07936-KC10200
(collet only from 07936-KC10500)
- Remover handle 07936-3710100
- Remover weight 07936-371020A



ASSEMBLY

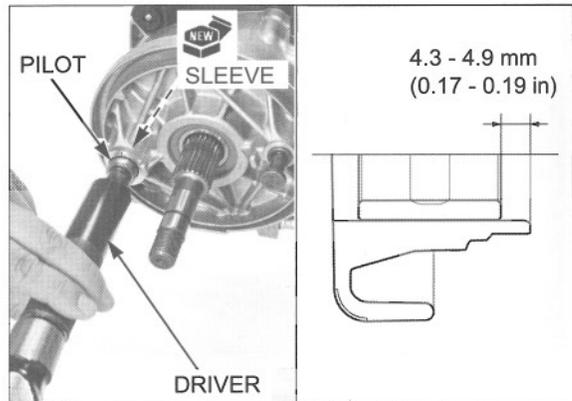


*: Apply each 0.2 - 0.3 g of grease

Drive the sleeve so that the depth from the final reduction case surface is 4.3 - 4.9 mm (0.17 - 0.19 in), using the special tools.

TOOLS:

- Driver 07749-0010000
- Pilot, 20 mm 07746-0040500



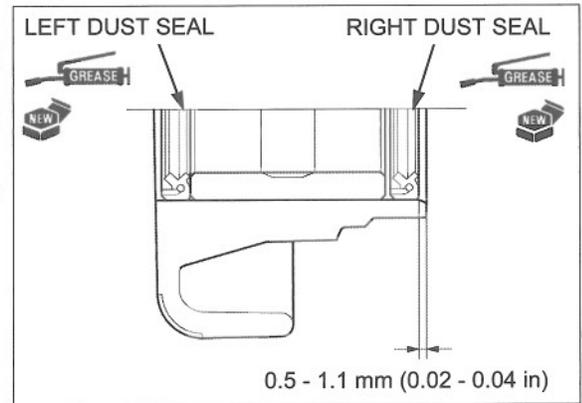
REAR WHEEL/BRAKE/SUSPENSION

Apply grease to the both new dust seals.

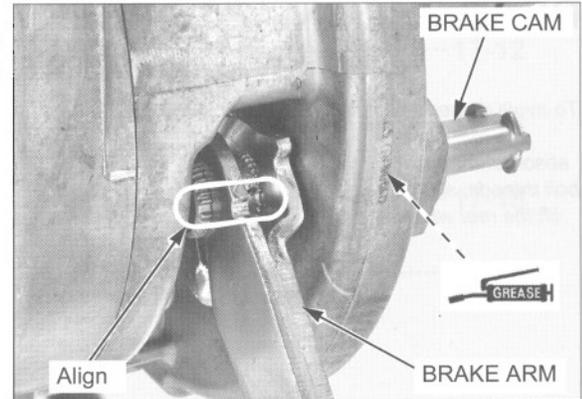
Install the left dust seal into the final reduction case until it is fully seated.

Install the right dust seal so that the depth from the final reduction case surface is 0.5 - 1.1 mm (0.02 - 0.04 in).

- Install the dust seals in the correct direction as shown.

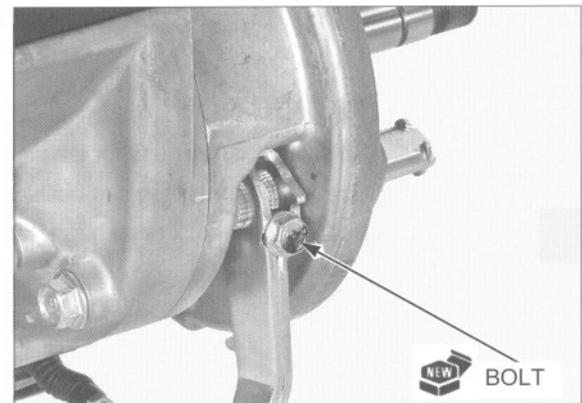


Apply 0.2 - 0.3 g of grease to the brake cam pivot area. Install the brake cam and brake arm by aligning the wide tooth of the brake cam with the groove of the brake arm.

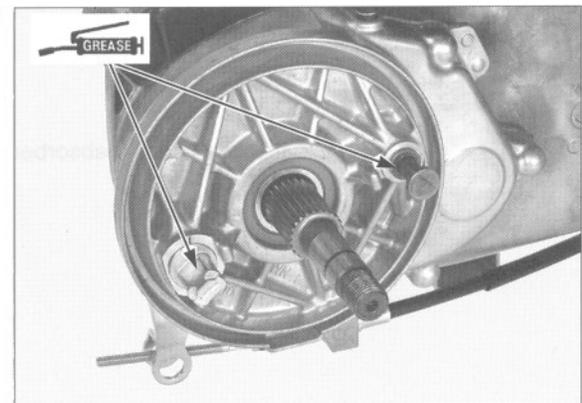


Install a new brake arm bolt and tighten it to the specified torque.

TORQUE: 10 N·m (1.0 kgf·m, 7 lbf·ft)



Apply 0.2 - 0.3 g grease to the anchor pin and brake cam sliding surface.



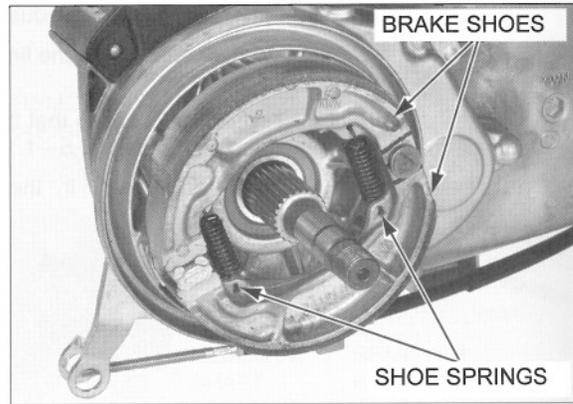
REAR WHEEL/BRAKE/SUSPENSION

Always replace the brake shoes as a set. When not replaced the brake shoes, install to the original direction.

Assemble the brake shoes and springs in the direction as shown.

Wipe any excess grease from the brake cam and anchor pin.

Install the rear wheel (page 16-6).



REAR SHOCK ABSORBER

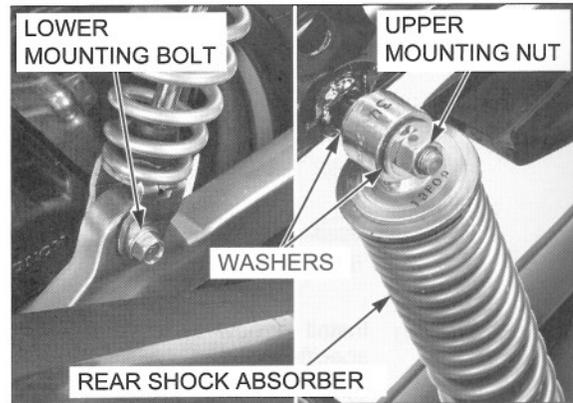
REMOVAL/INSTALLATION

To avoid damage to the rear shock absorber mounting bolt threads, slightly lift the rear wheel.

Remove the following:

- luggage box (page 3-17)
- lower mounting bolt
- upper mounting nut
- washers
- rear shock absorber

Installation is in the reverse order of removal.

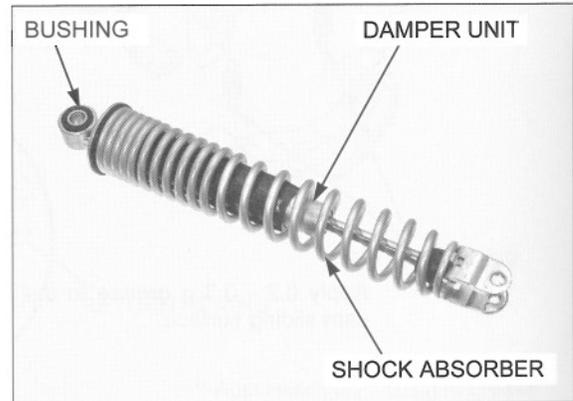


INSPECTION

Check the damper unit for leakage or other damage.

Check the shock absorber bushing for wear or damage.

Replace the shock absorber assembly if necessary.



Check the rear shock absorber mount bushings for wear or damage.

