34 N-m (3.5 kgf-m, 25 lbf-ft)

34 N-m (3.5 kgf-m, 25 lbf-ft)

47 N-m (4.8 kgf-m, 35 lbf-ft)

39 N-m (4.0 kgf-m, 29 lbf-ft)
SERVICE INFORMATION

GENERAL

CAUTION

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.

• A contaminated brake drum or shoe reduces stopping power. Discard contaminated shoes and clean a contaminated drum with a high quality brake degreasing agent.
• When servicing the rear wheel, support the motorcycle using a safety stand or hoist.
• Use genuine Honda replacement bolts and nuts for all suspension pivots and mounting points.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>STANDARD</th>
<th>SERVICE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum tire tread depth</td>
<td>–</td>
<td>3.0 (0.12)</td>
</tr>
<tr>
<td>Cold tire pressure</td>
<td>125 kPa (1.25 kgf/cm², 18 psi)</td>
<td>–</td>
</tr>
<tr>
<td>Axle runout</td>
<td>–</td>
<td>0.20 (0.008)</td>
</tr>
<tr>
<td>Wheel rim-to-hub distance</td>
<td>25 ± 1.0 (1.0 ± 0.04)</td>
<td>–</td>
</tr>
<tr>
<td>Wheel rim runout</td>
<td>Radial</td>
<td>2.0 (0.08)</td>
</tr>
<tr>
<td></td>
<td>Axial</td>
<td>2.0 (0.08)</td>
</tr>
<tr>
<td>Drive chain</td>
<td>Size/link DID420MBK1/78</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Slack</td>
<td>15 – 25 (9/16 – 1)</td>
</tr>
<tr>
<td>Brake</td>
<td>Brake pedal free play</td>
<td>10 – 20 (3/8 – 13/16)</td>
</tr>
<tr>
<td></td>
<td>Brake drum I.D.</td>
<td>80 (3.1)</td>
</tr>
<tr>
<td></td>
<td>Brake lining thickness</td>
<td>3.5 (0.14)</td>
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</tbody>
</table>

TORQUE VALUES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>STANDARD</th>
<th>SERVICE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoke nipple</td>
<td>2.0 N·m (0.2 kgf·m, 1.4 lbf·ft)</td>
<td>–</td>
</tr>
<tr>
<td>Rear axle nut</td>
<td>47 N·m (4.8 kgf·m, 35 lbf·ft)</td>
<td>U-nut</td>
</tr>
<tr>
<td>Driven sprocket nut</td>
<td>32 N·m (3.3 kgf·m, 24 lbf·ft)</td>
<td>U-nut</td>
</tr>
<tr>
<td>Rear brake arm nut</td>
<td>5.9 N·m (0.6 kgf·m, 4.3 lbf·ft)</td>
<td>ALOC bolt: replace with a new one</td>
</tr>
<tr>
<td>Swingarm pivot nut</td>
<td>39 N·m (4.0 kgf·m, 29 lbf·ft)</td>
<td>U-nut</td>
</tr>
<tr>
<td>Shock absorber mounting nut</td>
<td>34 N·m (3.5 kgf·m, 25 lbf·ft)</td>
<td>U-nut</td>
</tr>
<tr>
<td>Drive chain slider nut</td>
<td>12 N·m (1.2 kgf·m, 9 lbf·ft)</td>
<td>U-nut</td>
</tr>
</tbody>
</table>
**TOOLS**

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoke wrench, 4.1 x 4.5 mm</td>
<td>07701-0020100</td>
</tr>
<tr>
<td>Bearing remover shaft</td>
<td>07746-0050100</td>
</tr>
<tr>
<td>Bearing remover head, 12 mm</td>
<td>07746-0050300</td>
</tr>
<tr>
<td>Driver</td>
<td>07749-0010000</td>
</tr>
<tr>
<td>Attachment, 32 x 35 mm</td>
<td>07746-0010100</td>
</tr>
<tr>
<td>Pilot, 12 mm</td>
<td>07746-0040200</td>
</tr>
</tbody>
</table>

or equivalent commercially available in U.S.A.

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**TROUBLESHOOTING**

**Soft suspension**
- Weak shock absorber spring
- Oil leakage from damper unit
- Tire pressure too low

**Stiff suspension**
- Bent damper rod
- Damaged swingarm pivot bushings
- Bent swingarm pivot
- Tire pressure too high

**Steers to one side or does not track straight**
- Bent rear axle
- Axle alignment/chain adjustment not equal on both sides

**Rear wheel wobbling**
- Bent rim
- Worn rear wheel bearings
- Faulty tire
- Unbalanced tire and wheel
- Tire pressure too low
- Faulty swingarm pivot bushings
REAR WHEEL

REMOVAL

Support the motorcycle securely using a hoist or equivalent and raise the rear wheel off the ground.

Remove the rear brake adjusting nut and disconnect the rear brake rod from the brake arm, and remove the joint pin and spring.

Loosen the drive chain adjuster lock nuts and adjusting nuts.
Remove the axle nut and left chain adjuster.
Push the rear wheel forward and derail the drive chain from the driven sprocket.
Remove the axle from the right side and remove the rear wheel.

Remove the left side collar from the left wheel hub.

Remove the brake panel from the right wheel hub.
REAR WHEEL/BRAKE/SUSPENSION

INSPECTION

Axle
Place the axle in V-blocks and measure the runout. Actual runout is 1/2 the total indicator reading.
SERVICE LIMIT: 0.20 mm (0.008 in)

Wheel bearing
Turn the inner race of each bearing with your finger. Bearings should turn smoothly and quietly. Also check that the bearing outer race fits tightly in the hub.
Replace the wheel bearings in pairs.

Wheel rim runout
Check the rim runout by placing the wheel in a turning stand. Spin the wheel slowly and read the runout using a dial indicator. Actual runout is 1/2 the total indicator reading.
SERVICE LIMITS: Radial: 2.0 mm (0.08 in) Axial: 2.0 mm (0.08 in)

Driven sprocket
Check the condition of the final driven sprocket teeth. Replace the sprocket if worn or damaged.
- If the final driven sprocket requires replacement, inspect the drive chain and drive sprocket.
- Never install a new drive chain on a worn sprocket or a worn chain on new sprockets. Both chain and sprockets must be in good condition or the replacement chain or sprocket will wear rapidly.

NORMAL
**DISASSEMBLY**

Remove the nuts, bolts and driven sprocket.
Remove the left dust seal.

**Wheel bearing removal**

Install the bearing remover head into the bearing.
From the opposite side install the bearing remover shaft and drive the bearing out of the wheel hub.
Remove the distance collar and drive out the other bearing.

**TOOLS:**

- Bearing remover head, 12 mm 07746-0050300
- Bearing remover shaft 07746-0050100

**ASSEMBLY**

- **BEARING (6201U)**
- **DISTANCE COLLAR**
- **DUST SEAL**
- **DRIVEN SPROCKET**

32 N·m (3.3 kgf·m, 24 lbf·ft)

**REAR WHEEL/BRAKE/SUSPENSION**
Wheel bearing installation

Never install the old bearings, once the bearings have been removed, the bearing must be replaced with new ones.

Pack each wheel bearing cavity with grease.
Drive in a new right bearing squarely with the sealed side facing up using the special tools as shown.

TOOLS:
Driver 07749-0010000
Attachment, 32 x 35 mm 07746-0001000
Pilot, 12 mm 07746-00040200

Install the distance collar and drive in a new left bearing using the same tools.

Wheel center adjustment

Place the rim on the work bench.
Place the hub with the left side down and begin lacing with new spokes.
Adjust the hub position so that the distance from the hub right end surface to the side of rim is 25 ± 10 mm (1.0 ± 0.04 in) as shown.

TOOL:
Spoke wrench, 4.1 x 4.5 mm 07701-0020100
(Equivalent commercially available in U.S.A.)

TORQUE: 2.0 N·m (0.2 kgf·m, 1.4 lbf·ft)

Check the rim runout (page 13-6).
Apply grease to a new dust seal lips and install it into the left wheel hub.
Install the driven sprocket, bolts and nuts and tighten the nuts to the specified torque.

TORQUE: 32 N·m (3.3 kgf·m, 24 lbf·ft)
INSTALLATION

Install the left side collar into the left wheel hub.

Install the brake panel into the right wheel hub.

Place the rear wheel into the swingarm by aligning the brake panel groove with the swingarm boss.

Install the drive chain over the driven sprocket. Apply thin layer of grease to the axle. Install the axle with the right drive chain adjuster from the right side. Install the left drive chain adjuster and axle nut.
REAR WHEEL/BRAKE/SUSPENSION

Install the spring onto the brake rod and the joint pin into the brake arm.
Connect the brake rod and install the adjusting nut.
Adjust the drive chain slack (page 3-13).
Tighten the axle nut to the specified torque.
TORQUE: 47 N·m (4.8 kgf·m, 35 lbf·ft)

REAR BRAKE

INSPECTION
Remove the brake panel from the rear wheel (page 13-5).
Measure the rear brake drum I.D.
SERVICE LIMIT: 80.5 mm (3.17 in)

Measure the brake lining thickness.
SERVICE LIMIT: 2.0 mm (0.08 in)

DISASSEMBLY
Remove the brake shoes and spring.
Remove the brake arm cover if necessary. Remove the nut, bolt and brake arm. Remove the indicator plate, dust seal and brake cam.

**ASSEMBLY**

- Apply grease to the brake cam spindle.
- Install the brake cam into the brake panel.

![Diagram of Rear Wheel/Brake/Suspension Components]

**Specifications**

- 5.9 N·m (0.6 kgf-m, 4.3 lbf-ft)

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13-11
REAR WHEEL/BRAKE/SUSPENSION

Apply oil to a new dust seal and install it onto the brake panel.
Install the wear indicator plate onto the brake cam by aligning its wide tooth with the wide groove in the brake cam.

Install the brake arm by aligning the punch marks on the arm and brake cam.
Install a new brake arm pinch bolt and nut as shown and tighten it to the specified torque.

TORQUE: 5.9 N·m (0.6 kgf·m, 4.3 lbf·ft)
Install the brake arm cover onto the arm.

Assemble the brake shoes and spring as shown and install them onto the brake panel.
Wipe any excess grease off the brake cam and anchor pin.
Install the rear wheel (page 13-9).

SHOCK ABSORBER

REMOVAL
Support the motorcycle securely using a hoist or equivalent and raise the rear wheel off the ground.
Remove the seat (page 2-3).
Remove the shock absorber lower mounting nut and bolt.
Remove the upper mounting nut and bolt and the shock absorber.

**INSPECTION**

Visually inspect the for following:
- Spring for fatigue or damage.
- Damper rod for bend or damage.
- Damper unit for deformation or oil leaks.
- Bump rubber for wear or damage.
- Mounting bushings for damage.

Replace the shock absorber assembly if necessary.

**INSTALLATION**

Install the shock absorber into the frame and swingarm.
Install the upper and lower mounting bolts from the left side.

Install the nuts and tighten them to the specified torque.
**TORQUE:** 34 N·m (3.5 kgf·m, 25 lbf·ft)
REAR WHEEL/BRAKE/SUSPENSION
SWINGARM

REMOVAL
Remove the drive chain (page 3-14).
Remove the rear wheel (page 13-5).
Remove the bolts and drive chain cover.
Remove the bolts and drive chain guard.

Remove the shock absorber lower mounting nut and bolt.
Remove the swingarm pivot nut, bolt and swingarm.

Remove the nut and bolt and the drive chain slider.

INSPECTION
Inspect the swingarm for wear or damage.
Inspect the pivot bushings for wear or damage.
INSTALLATION

Install the drive chain slider and tighten the nut to the specified torque.

**TORQUE:** 12 N·m (1.2 kgf·m, 9 lbf·ft)

Install the swingarm over the frame, then install the pivot bolt from the right side and the shock absorber lower mounting bolt from the left side.

Apply grease to the seating surface of the swingarm pivot nut.

Install and tighten the swingarm pivot nut to the specified torque.

**TORQUE:** 39 N·m (4.0 kgf·m, 29 lbf·ft)

Tighten the shock absorber lower mounting nut to the specified torque.

**TORQUE:** 34 N·m (3.5 kgf·m, 25 lbf·ft)

Install the drive chain guard and tighten the bolts.

Install the drive chain cover and tighten the bolts.

Install the rear wheel (page 13-9).

Install the drive chain (page 3-15).

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BRAKE PEDAL

REMOVAL

Remove the rear brake adjusting nut and disconnect the rear brake rod from the brake arm, and remove the joint pin and spring.
REAR WHEEL/BRAKE/SUSPENSION

Remove the cotter pin, joint pin and brake rod.

Unhook the brake pedal return spring from the brake pedal.
Remove the cotter pin, washer and brake pedal.

INSTALLATION

Apply grease to the pivot surface and install the brake pedal.

Install the washer and a new cotter pin to secure the brake pedal.
Install the return spring as shown.
Connect the brake rod to the pedal with the joint pin and secure it with a new cotter pin.

Install the spring onto the brake rod and the joint pin into the brake arm. Install the rod to the joint pin with the adjusting nut. Adjust the brake pedal free play (page 3-16).