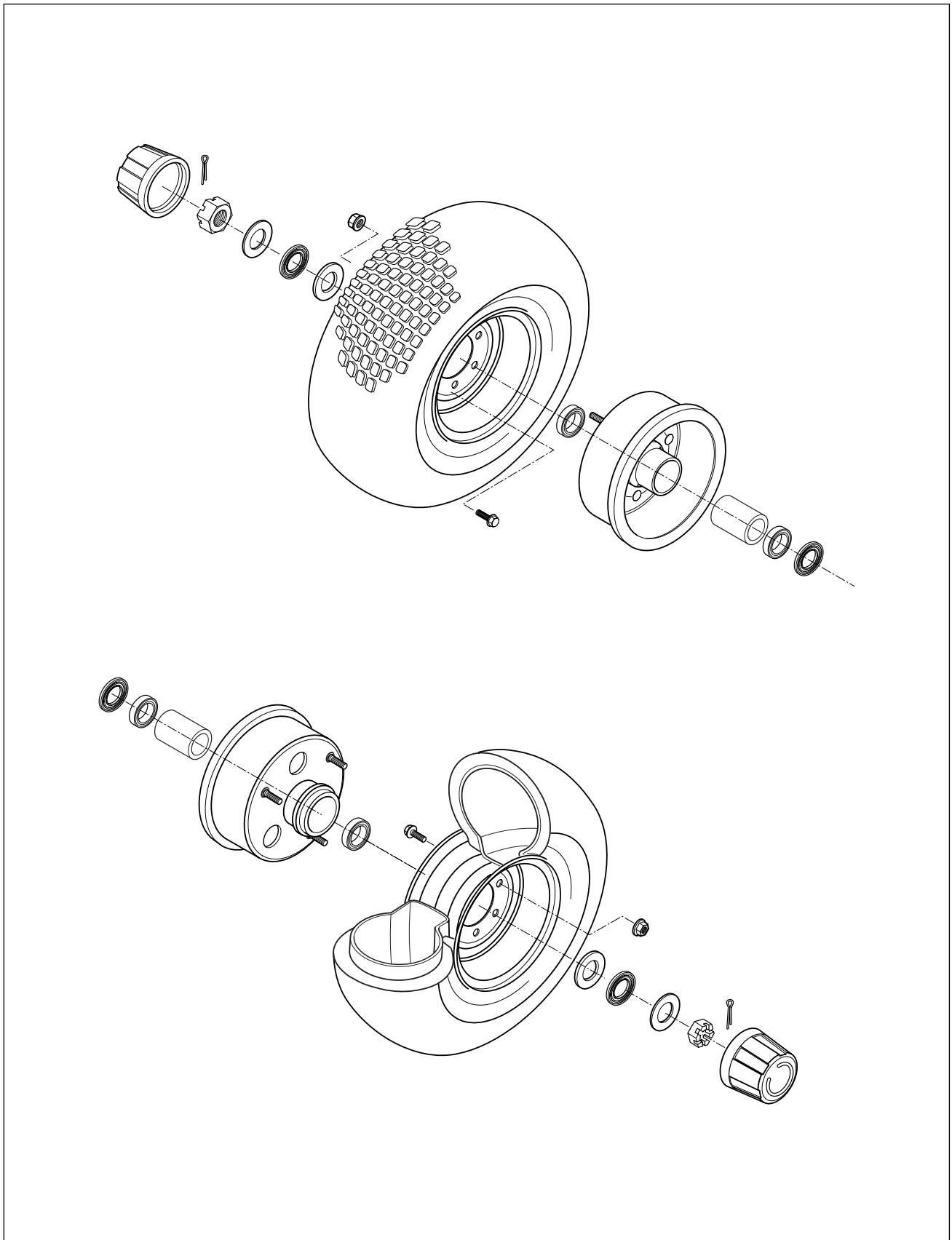


CHASSIS

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FRONT WHEEL AND BRAKE



REMOVAL

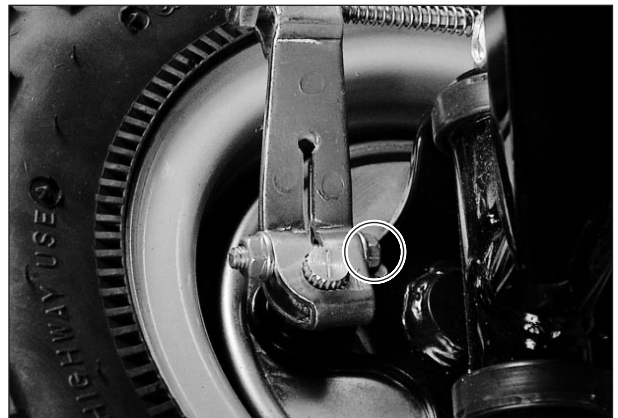
- Place the vehicle on level ground.
- Remove the wheel center cap.
- Remove the cotter pin and front axle nut.
- Support the vehicle by jack or block and remove the front wheel.



- Remove the brake shoe.



- Remove the brake cam lever.



- Remove the front brake plate.



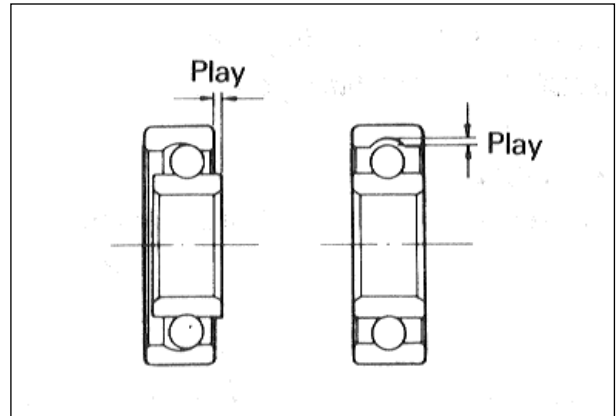
INSPECTION AND DISASSEMBLY

⊙ **WHEEL HUB BEARING**

Inspect the play of bearing inner ring by hand while mounted in the wheel hub.

Rotate the inner ring by hand to inspect if any abnormal noise occurs or rotating smoothly.

Replace the bearing if there is anything unusual.



- Remove the spacer.
- Remove the inner and outer dust seals with the special tool.


 **Oil seal remover : 09913-50121**

⚠ CAUTION

The removed dust seal should be replaced with new ones.



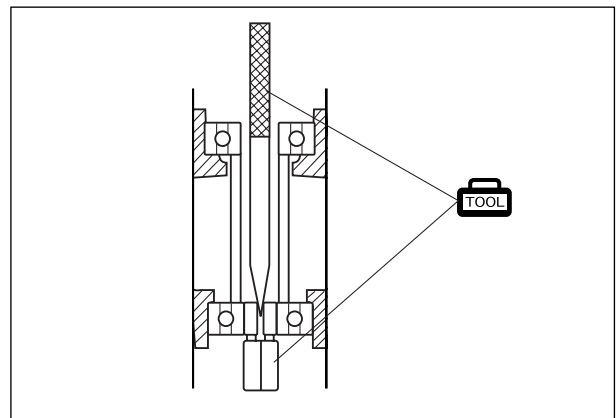
- Drive out the both bearings with the special tool in the following procedures.

 **Wheel bearing remover : 09941-50111**

- Insert the adapter into the bearing.
- After inserting the wedge bar from the opposite side, lock the wedge bar in the slit of the adapter.
- Drive out the bearing by knocking the wedge bar.

⚠ CAUTION

The removed bearing should be replaced with new one.



⊙ **TIRE** : Refer to page 2-11

⊙ **BRAKE DRUM**

Measure the brake drum I.D. to determine the extent of wear and, if the limit is exceeded by the wear noted, replace the brake drum.

The value of this limit is indicated inside of drum.

| | |
|------------------------|---------------------|
| Brake drum I.D. | Service limit |
| | 110.7 mm (4.358 in) |



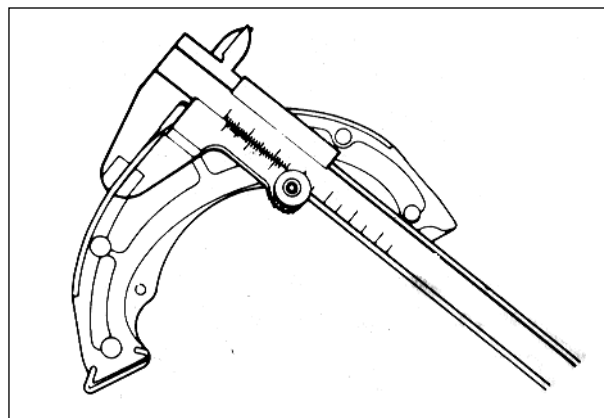
⊙ BRAKE SHOE

Check the brake shoe and decide whether it should be replaced or not from the thickness of brake lining.

| Brake shoe lining thickness | Service limit |
|-----------------------------|-----------------|
| | 2 mm (0.079 in) |

⚠ CAUTION

Replace the brake shoe as a set, otherwise braking performance will be adversely affected.

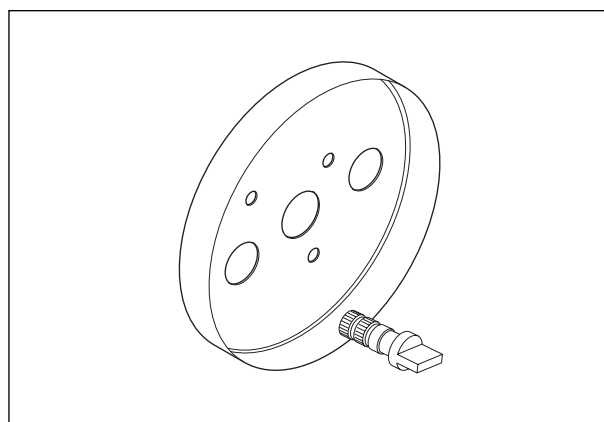


REASSEMBLY AND REMOUNTING

Reassemble and remount the front wheel and brake in the reverse order of removal and disassembly, and also carry out the following steps :

- When installing the brake camshaft, apply **SUPER GREASE A** to the camshaft and cam face.

 Super Grease "A"




- Install the brake shoes with spring hooks faced inside.

⚠ CAUTION

Be careful not to apply too much grease to the cam and pin. If grease gets on the lining, brake slippage will result.



- Install the brake cam lever to the brake camshaft.
- Tighten the brake cam lever nut to the specified torque.

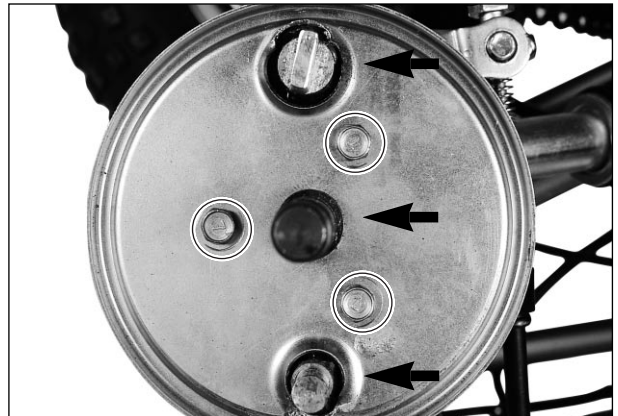
 Front brake cam lever nut
: 6~8 N · m (0.6~0.8 kg · m)



6-5 CHASSIS

- Apply **BOND 1215** to the front brake plate as shown photo.

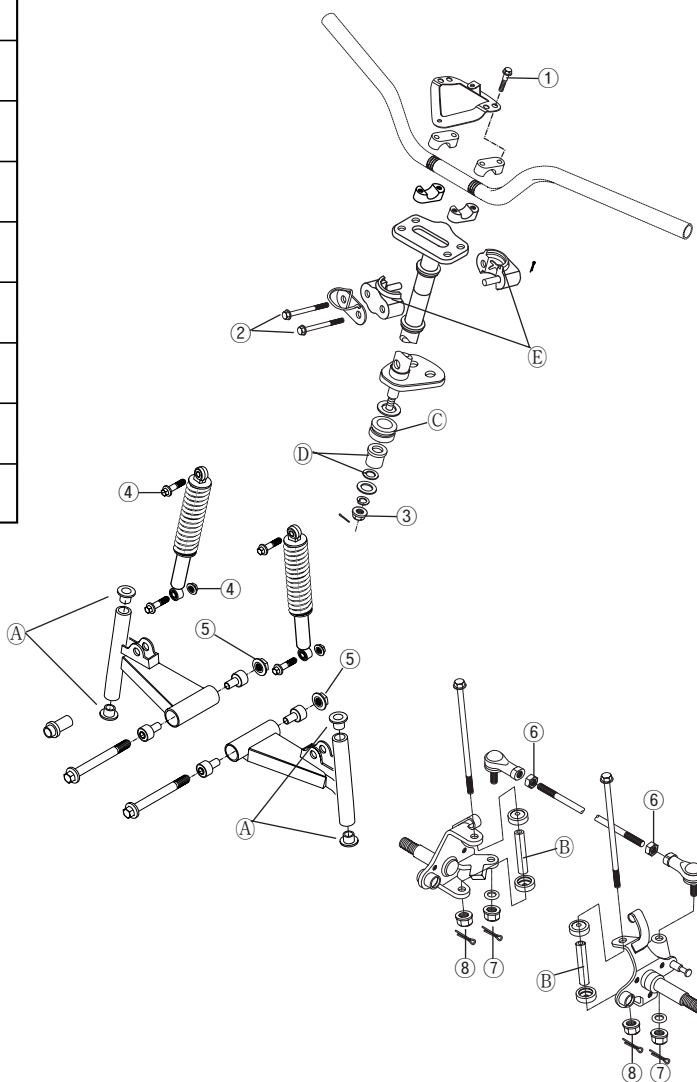
 **BOND 1215**



- Install the front brake drum and tire.

STEERING AND FRONT SUSPENSION

| TIGHTENING TORQUE | | |
|-------------------|-------------|-------------|
| ITEM | N · m | kg · m |
| ① | 18 ~ 28 | 1.8 ~ 2.8 |
| ② | 18.4 ~ 28.6 | 1.84 ~ 2.86 |
| ③ | 22.4 ~ 35.7 | 2.24 ~ 3.57 |
| ④ | 40 ~ 50 | 4.0 ~ 5.0 |
| ⑤ | 80 ~ 100 | 8.0 ~ 10.0 |
| ⑥ | 22 ~ 35 | 2.2 ~ 3.5 |
| ⑦ | 22 ~ 35 | 2.2 ~ 3.5 |
| ⑧ | 40 ~ 60 | 4.0 ~ 6.0 |



- Ⓐ : ASSEMBLING APPLY GREASE
- Ⓑ : ASSEMBLING APPLY GREASE
- Ⓒ : APPLY GREASE TO LIPS
- Ⓓ : APPLY GREASE
- Ⓔ : ASSEMBLING APPLY GREASE

REMOVAL AND DISASSEMBLY

- Remove the front fender.
- Remove the front wheel and brake. (Refer to page 6-2)
- Remove the tie-rod end nut.
- Remove the steering knuckle.



6-7 CHASSIS

- Remove the suspension arm mounting bolts and front shock absorber upper mounting bolt.
- Remove the suspension arm with shock absorber.



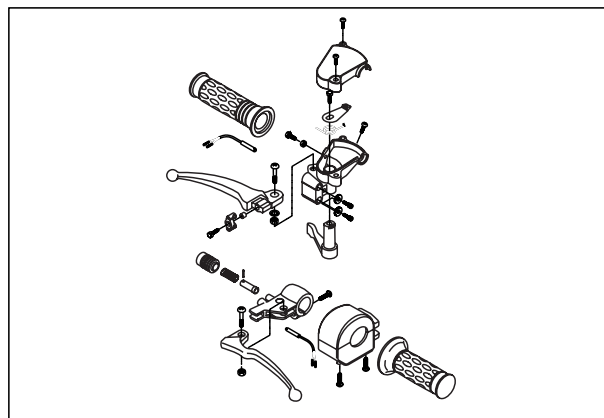
- Remove the shock absorber.



- Remove the dust seals and spacer.



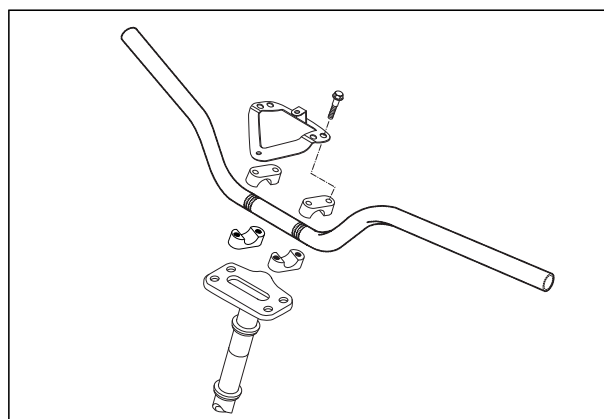
- Remove the handlebar switch.
- Remove the throttle lever case.
- Remove the brake lever holder.



- Remove the front brake cables.



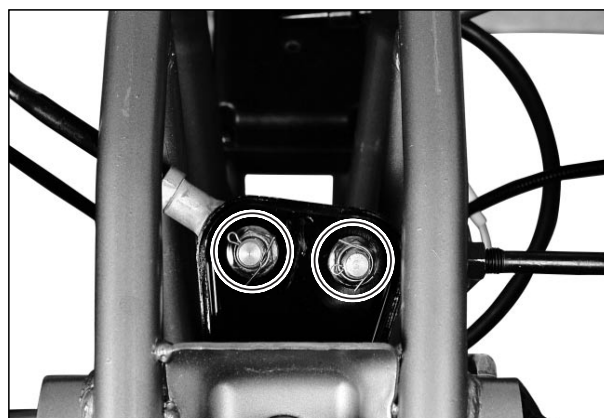
- Remove the steering head cover bracket and handlebar by removing the mounting bolts.



- Remove the tie-rods by removing the cotter pins and nuts.
- Remove the cotter pin and steering shaft lower nut.

⚠ CAUTION

The removed cotter pins should be replaced with new ones.

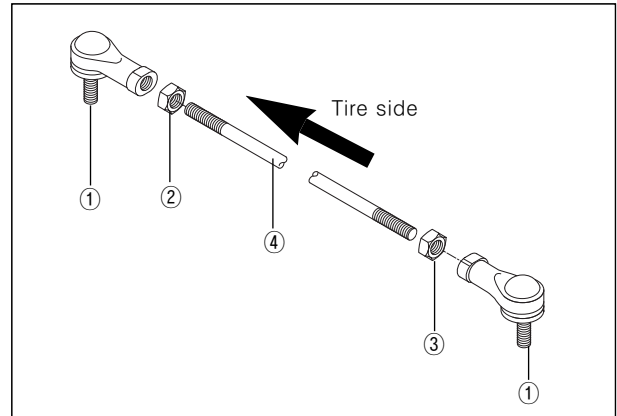


6-9 CHASSIS

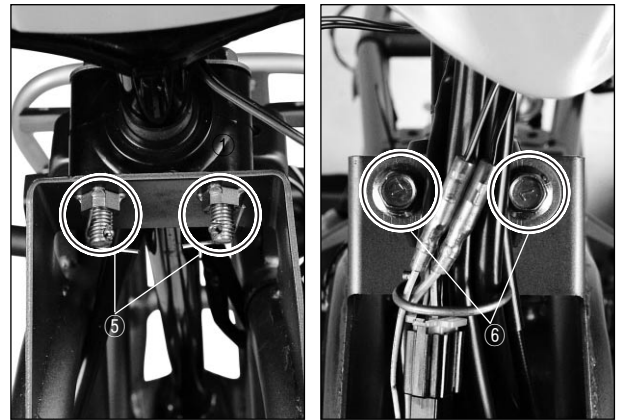
- Separate the tie-rod ends ①, nuts ②, ③ and steering tie-rods ④.

⚠ CAUTION

Inside lock nuts ② are left-hand thread.



- Remove the cotter pins ⑤, and remove the steering shaft holder bolts ⑥.
- Remove the steering shaft holders and steering shaft.



INSPECTION

Inspect the removed parts for the following abnormalities.

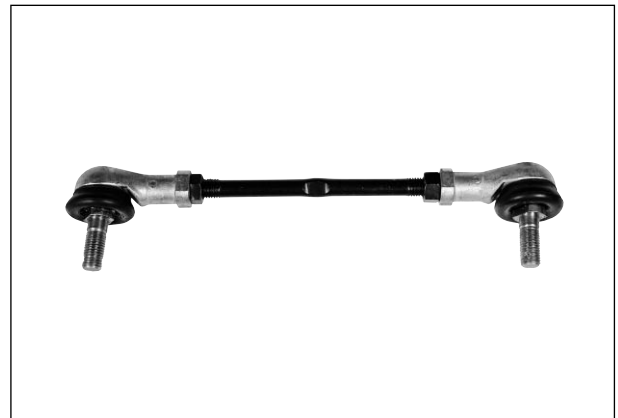
- ❖ Handlebar distortion
- ❖ Handlebar clamp wear

⊙ DUST SEAL

Inspect the dust seals for damage.

⊙ TIE-ROD

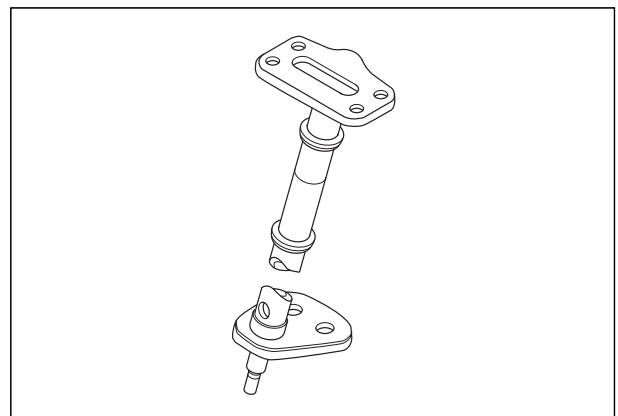
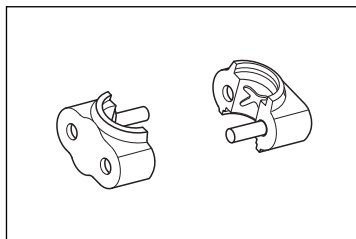
Inspect the tie-rod for distortion and the boot for wear.



⊙ STEERING SHAFT AND HOLDER

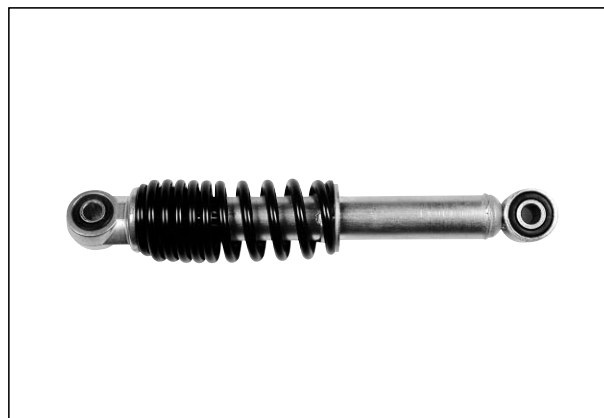
Inspect the steering shaft for distortion or bend.

Inspect the two steering shaft holders for wear.



⊙ SHOCK ABSORBER

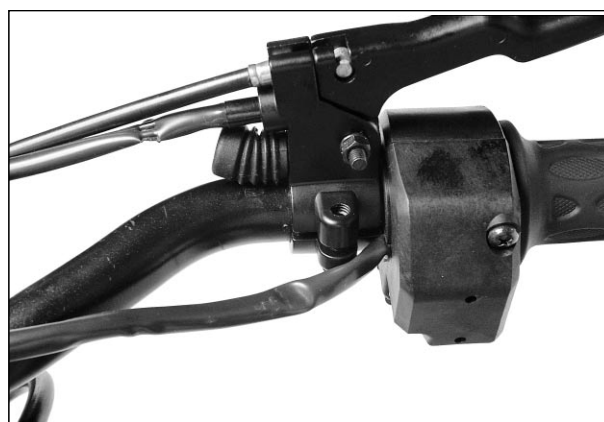
Inspect the shock absorber for oil leakage or other damage.



REASSEMBLY AND REMOUNTING

Reassemble and remount the steering system in the reverse order of removal and disassembly, and also carry out the following steps :

- Align the mating face of rear brake holder with the respective punch mark and tighten the bolt.

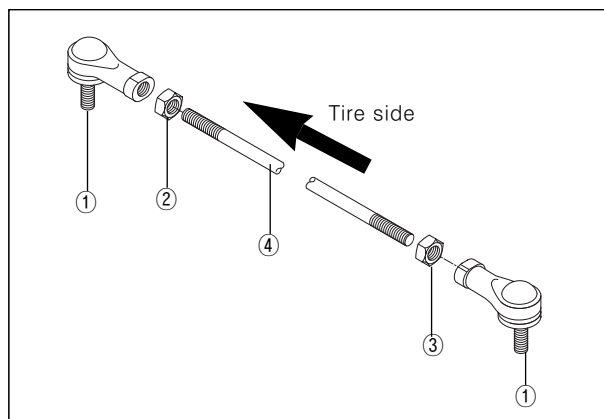


⊙ TIE ROD

- Install the tie-rod ends ①, nuts ②, ③ and steering tie-rods ④.

⚠ CAUTION

Inside lock nuts ② are left-hand thread.



⊙ HANDLEBAR

- Install the handlebar with the punch mark aligned with the handlebar holder as shown.
- Tighten the handlebar holder bolts to the specified torque.

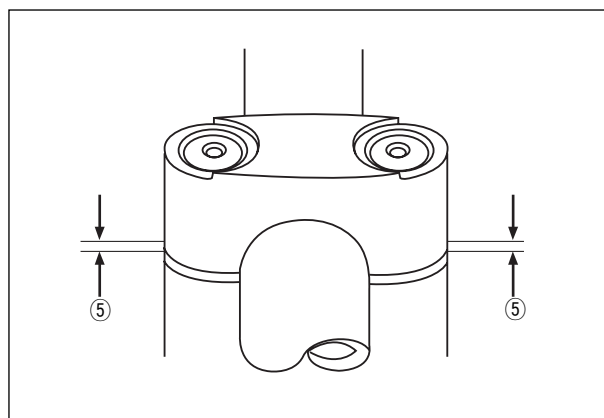


Handlebar holder bolt

: 18.4~28.6 N · m (1.84~2.86 kg · m)

NOTE :

The gap ⑤ between the handlebar holder should be even.



6-11 CHASSIS

TOE-IN ADJUSTMENT

The procedure for adjusting the toe-in as follows.

- Place the vehicle on level ground and set the handle-bar straight.
Make sure that all tires are inflated to the standard pressure.

| COLD INFLATION TIRE PRESSURE | | | |
|------------------------------|-----|---------------------|-----|
| | kPa | kgf/cm ² | psi |
| Front | 25 | 0.25 | 3.6 |
| Rear | 25 | 0.25 | 3.6 |

- Loosen the lock nuts ① on each tie-rod.

⚠ CAUTION

Inside lock nuts ① are left-hand thread.

- Measure the distances A and B of front wheels (in illustration) and adjust the tie-rods, right and left, to within the specified range.

NOTE :

$A - B = \text{Toe-in}$

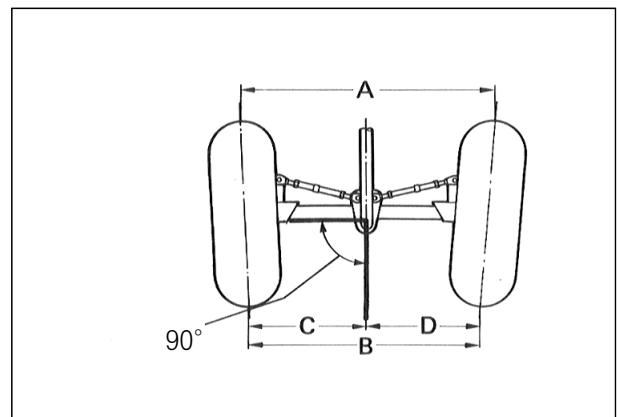
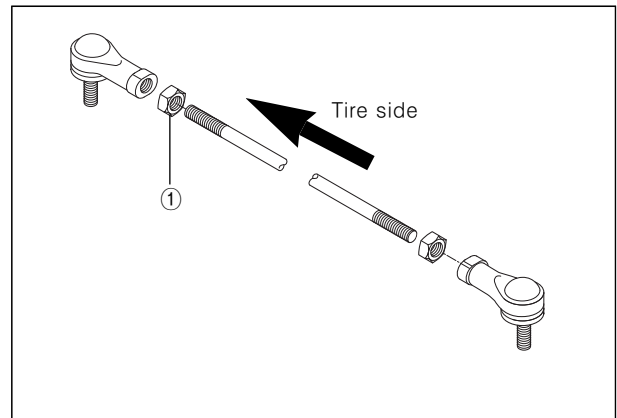
| | |
|----------|-----------------|
| Toe - in | 6 mm (0.236 in) |
|----------|-----------------|

- Temporarily tighten the four lock nuts.
- Check that the distances C and D (in illustration) are equal. If the distances C and D are not equal, readjust the tie-rod, right or left, whichever makes the toe-in value closer to the specification. Check the toe-in again by measuring the distances A and B.
- If the toe-in is not within specification, repeat the adjustment as above until proper toe-in value is obtained and at the same time the distances C and D become equal.
- Tighten the four nuts ① after adjustment of toe-in is made.



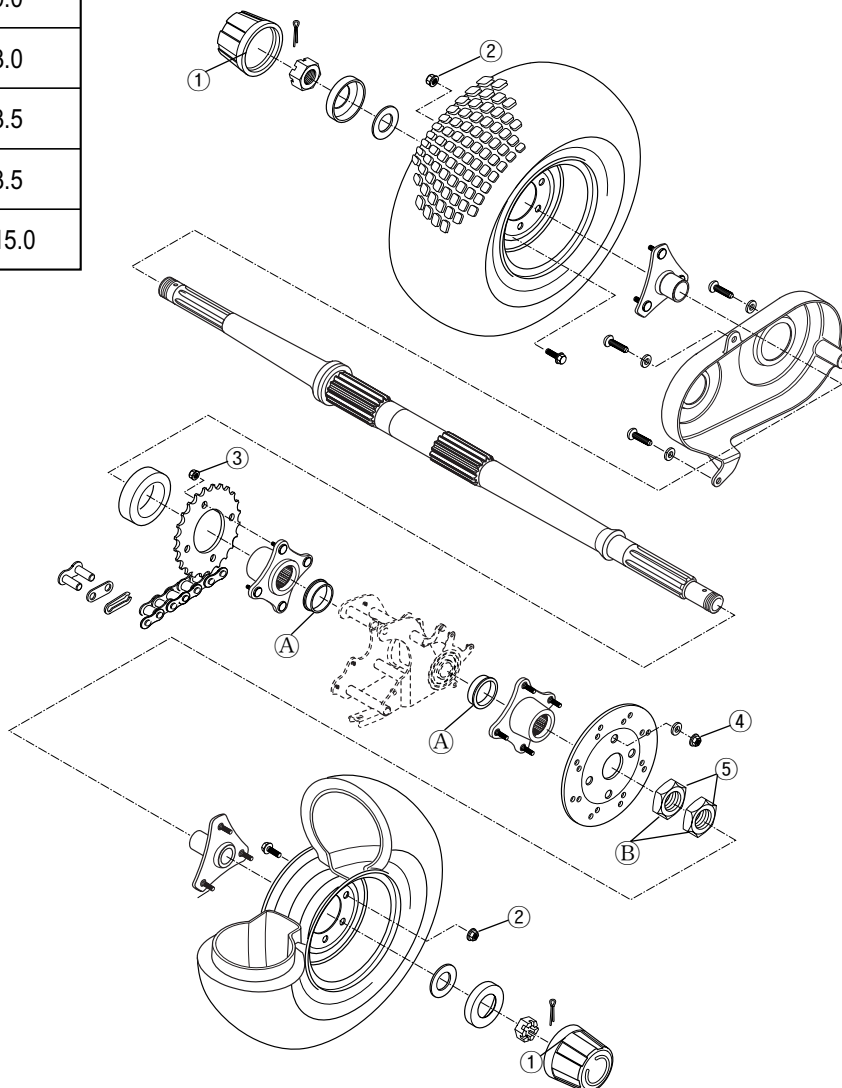
Tie-rod lock nut

: 22.4~35.7 N · m (2.24~3.57 kg · m)



REAR WHEEL

| TIGHTENING TORQUE | | |
|-------------------|-----------|-------------|
| ITEM | N · m | kg · m |
| ① | 60 ~ 90 | 6.0 ~ 9.0 |
| ② | 20 ~ 30 | 2.0 ~ 3.0 |
| ③ | 22 ~ 35 | 2.2 ~ 3.5 |
| ④ | 22 ~ 35 | 2.2 ~ 3.5 |
| ⑤ | 120 ~ 150 | 12.0 ~ 15.0 |



REMOVAL

- Place the vehicle on level ground.
- Support the vehicle by jack or block.
- Remove the wheel center cap.
- Remove the cotter pin and rear hub nut.

INSPECTION

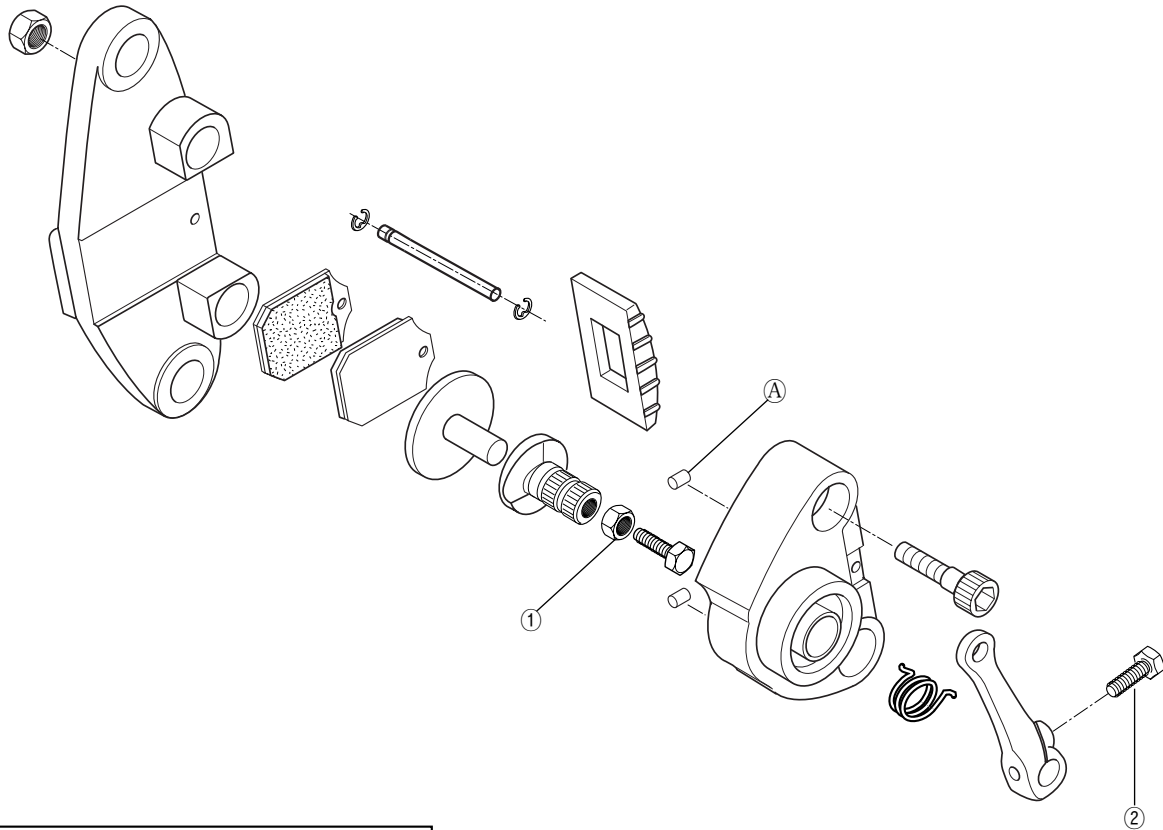
- ⊙ TIRE : Refer to page 2-11

REMOUNTING

Remount the rear wheel in the reverse order of removal.



REAR BRAKE



TIGHTENING TORQUE

| ITEM | N · m | kg · m |
|------|-------|-----------|
| ① | 2 ~ 4 | 0.2 ~ 0.4 |
| ② | 6 ~ 8 | 0.6 ~ 0.8 |

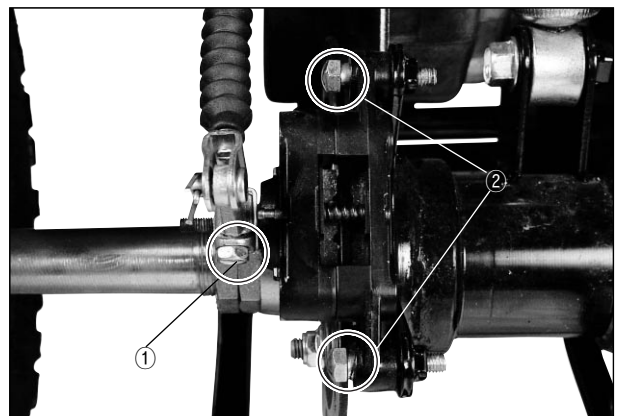
Ⓐ : ASSEMBLING APPLY GREASE

BRAKE PAD REPLACEMENT

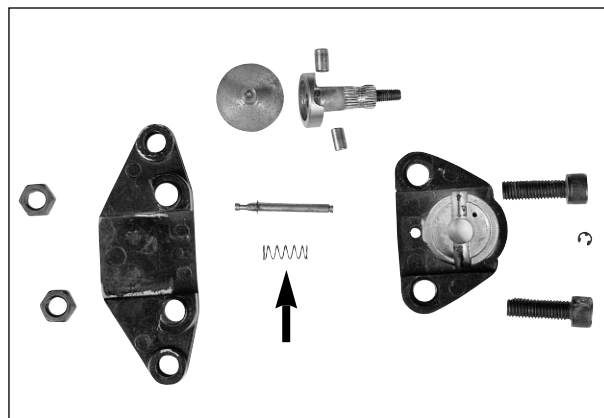
- For replacing procedure of brake pad : Refer to page 2-9

CALIPER DISASSEMBLY

- Remove the brake lever bolt ① and caliper mounting bolts ②.
- Remove the caliper.
- Remove the brake pad. (Refer to page 2-9)




- Remove the rear caliper lever return spring .

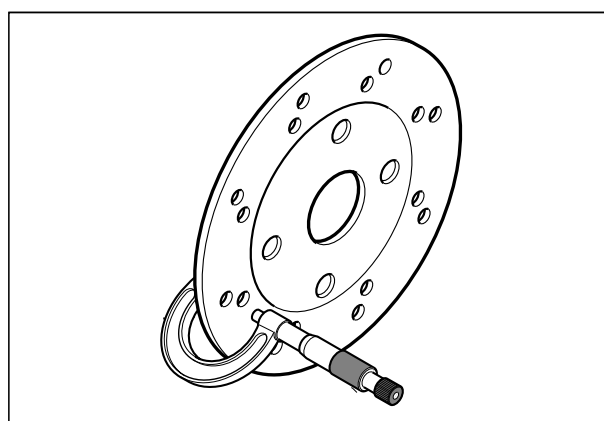


DISC PLATE INSPECTION

- Check the disc for wear with a micrometer. Replace the disc if the thickness exceeds the service limit.

| | |
|-----------------------|-------------------|
| Disc thickness | Service limit |
| | 2.5 mm (0.098 in) |

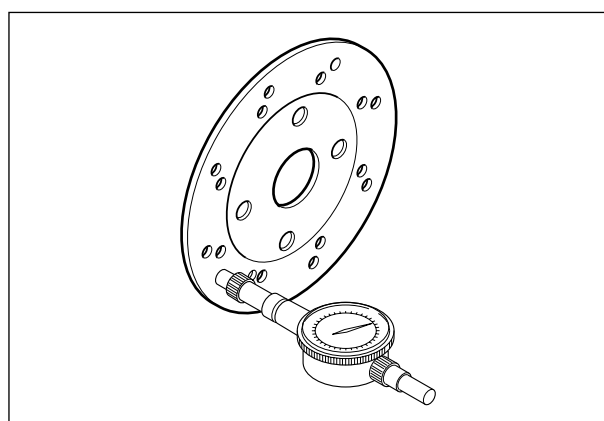
 **Micrometer(0~25mm) : 09900-20201**



- Check the disc for face runout with a dial gauge as shown. Replace the disc if the runout exceeds the service limit

| | |
|--------------------|-------------------|
| Disc runout | Service limit |
| | 0.3 mm (0.012 in) |

 **Dial gauge : 09900-20606**
Magnetic stand : 09900-20701

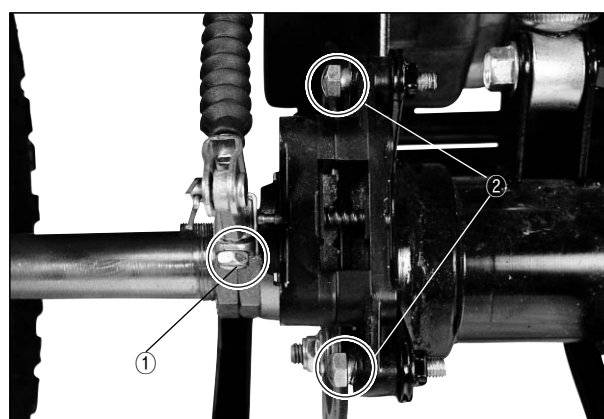


CALIPER REASSEMBLY

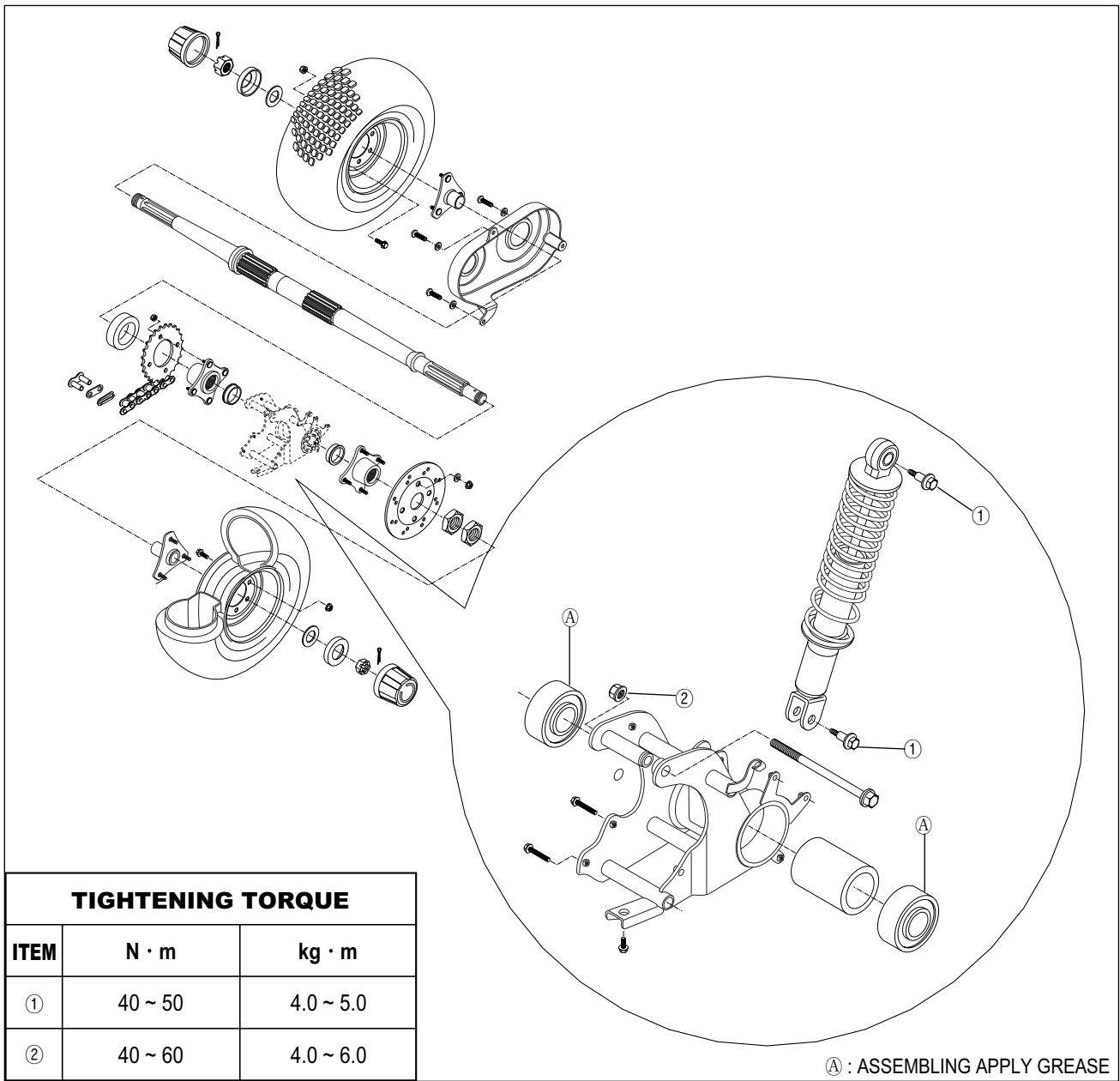
Reassemble and remount the caliper in the reverse order of removal and disassembly, and also carry out the following steps.

- Tighten the brake lever bolt ① and caliper mounting bolts ② to the specified torque.

| SPECIFIED TORQUE | | |
|------------------------------------|-------|-----------|
| Item | N · m | kg · m |
| Rear brake lever bolt ① | 6 ~ 8 | 0.6 ~ 0.8 |
| Rear brake caliper mounting bolt ② | 5 ~ 7 | 0.5 ~ 0.7 |

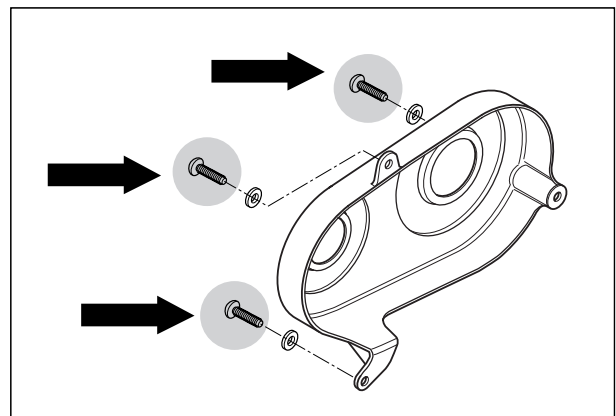


REAR AXLE HOUSING, AXLE SHAFT AND SHOCK ABSORBER

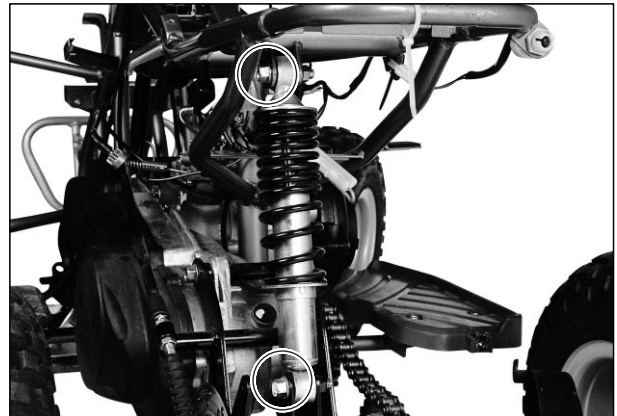


REMOVAL

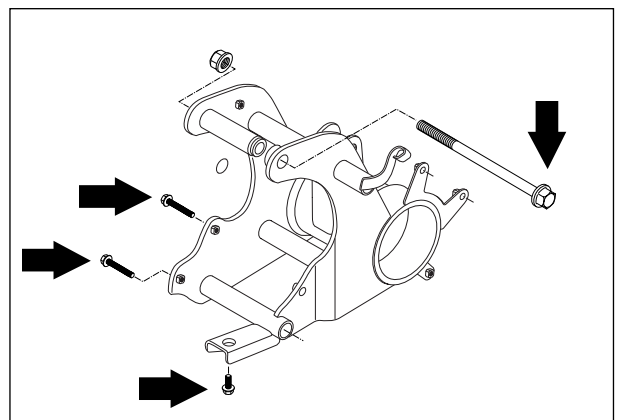
- Remove the rear wheel. (Refer to page 6-12)
- Remove the rear brake. (Refer to page 6-13)
- Remove the chain cover.
- Remove the axle shaft with rear sprocket.



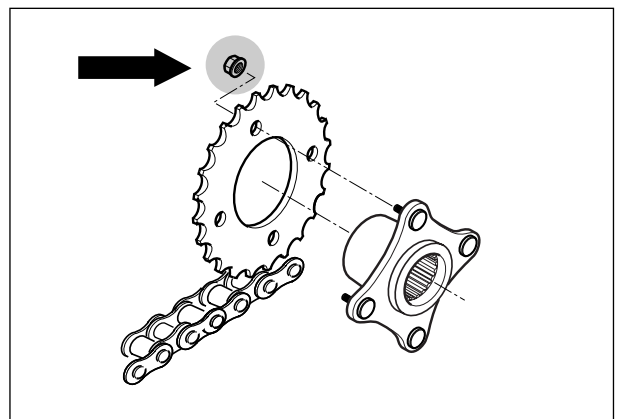
- Remove the shock absorber.



- Remove the rear axle housing.



- Remove the sprocket mounting flange by removing the nut.



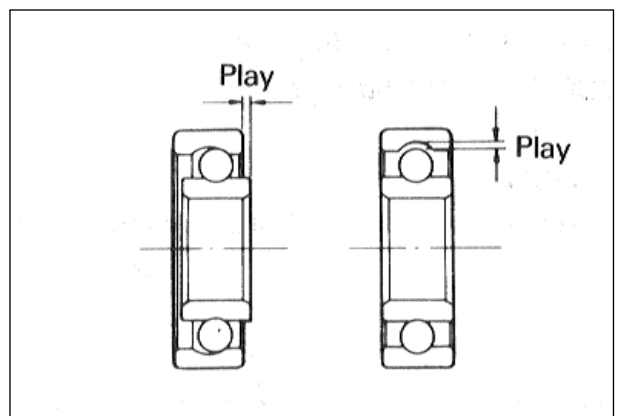
INSPECTION AND DISASSEMBLY

⊙ AXLE HOUSING BEARING

Inspect the play of bearing inner ring by hand while mounting in the axle housing.

Rotate the inner ring by hand to inspect if any abnormal noise occurs or rotating smoothly.

Replace the bearing if there is anything unusual.



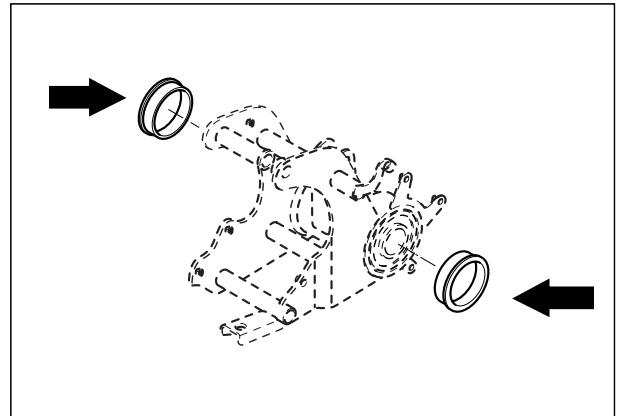
6-17 CHASSIS

- Remove the dust seals with the special tool.

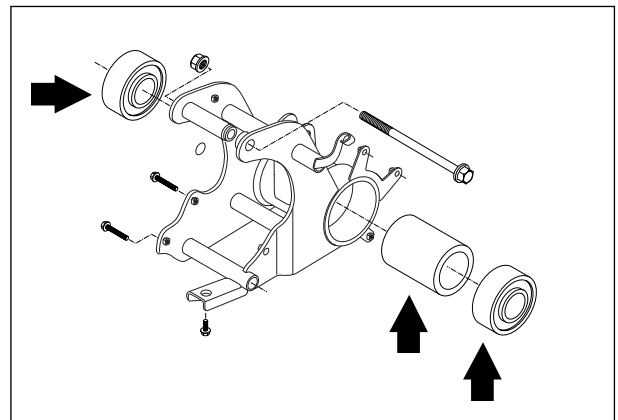
 Oil seal remover : 09913-50121

⚠ CAUTION

Replace the removed dust seals with new ones.



- Remove the right and left bearings and spacer.



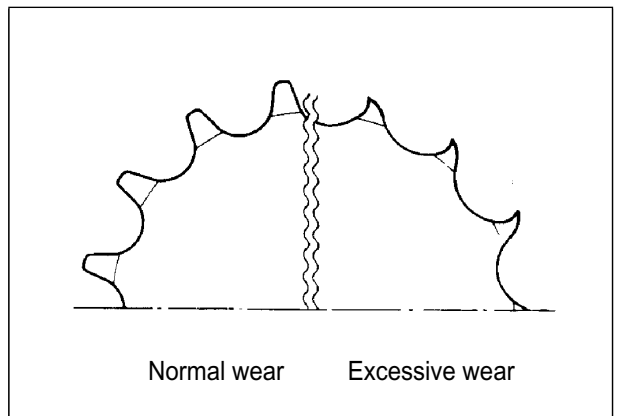
⊙ SHOCK ABSORBER

Inspect the rear shock absorber for oil leakage or other damage.



⊙ REAR SPROCKET

Inspect the sprocket's teeth for wear. If they are worn as illustrated, replace the sprocket and drive chain as a set.



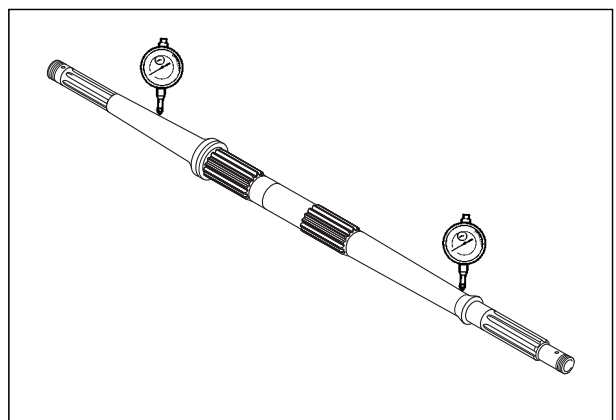
- Remove the rear sprocket.



⊙ REAR AXLE SHAFT

Using a dial gauge, check the axle shaft for runout and replace it if the runout exceeds the limit.

| | |
|---------------------------|-------------------|
| Rear axle shaft runout | Service limit |
| | 8.0 mm (0.315 in) |



REASSEMBLY AND REMOUNTING

Reassemble and remount the rear axle housing in the reverse order of removal and disassembly.

