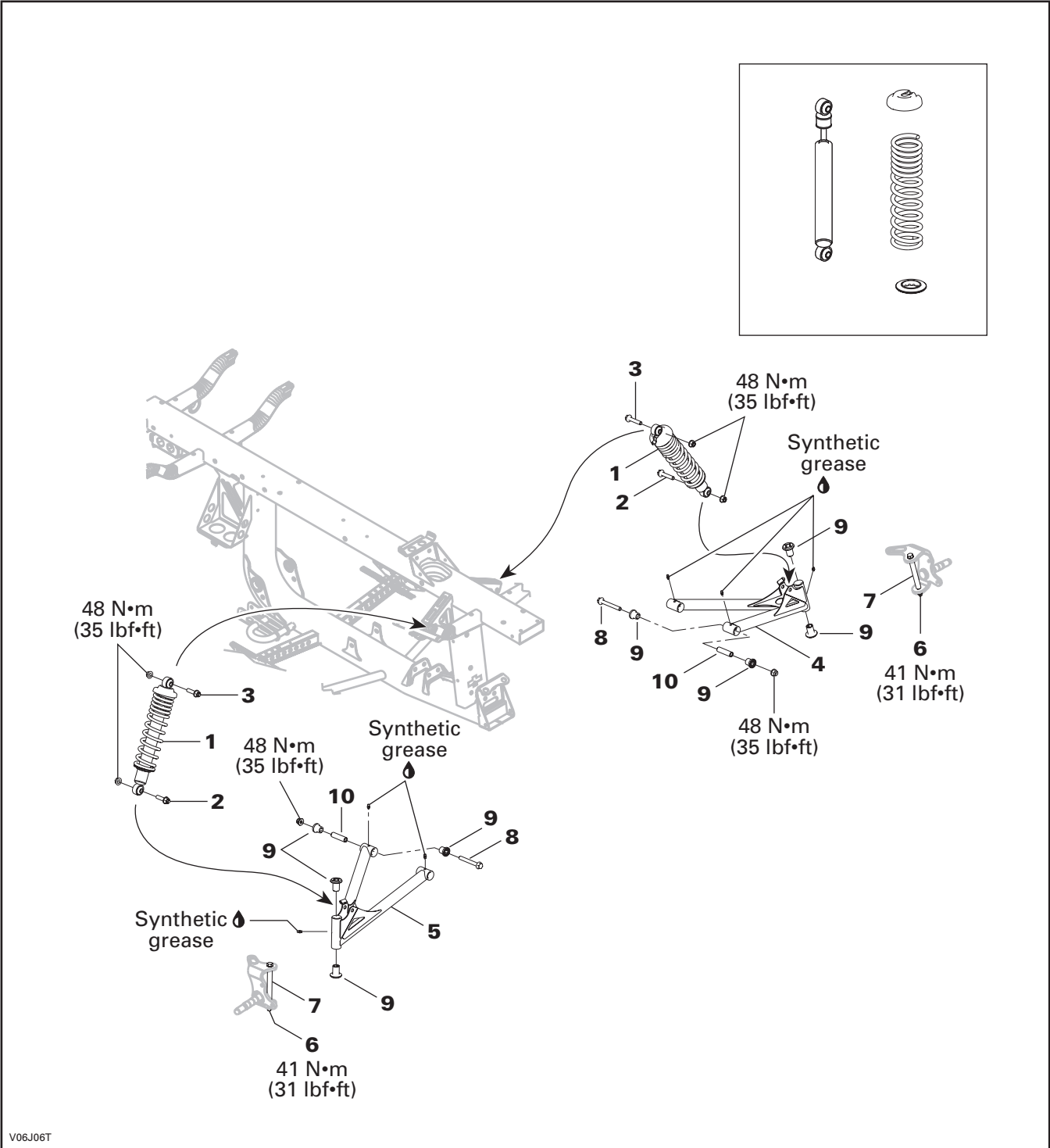


TABLE OF CONTENTS

FRONT SUSPENSION	08-02-1
GENERAL	08-02-2
FRONT SHOCK	08-02-2
LH/RH A-ARM	08-02-3
A-ARM CUSHIONS.....	08-02-3

REAR SUSPENSION	08-03-1
GENERAL	08-03-2
REAR SHOCK.....	08-03-2
SWING ARM	08-03-3

FRONT SUSPENSION



V06J06T

Section 08 SUSPENSION

Subsection 02 (FRONT SUSPENSION)

GENERAL

During assembly/installation, use the torque values and service products as in the exploded views.

Clean threads before applying a threadlocker. Refer to SELF-LOCKING FASTENERS and LOCTITE APPLICATION at the beginning of this manual for complete procedure.

⚠ WARNING

Torque wrench tightening specifications must strictly be adhered to.

Locking devices (ex.: locking tabs, elastic stop nuts, self-locking fasteners, cotter pin, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

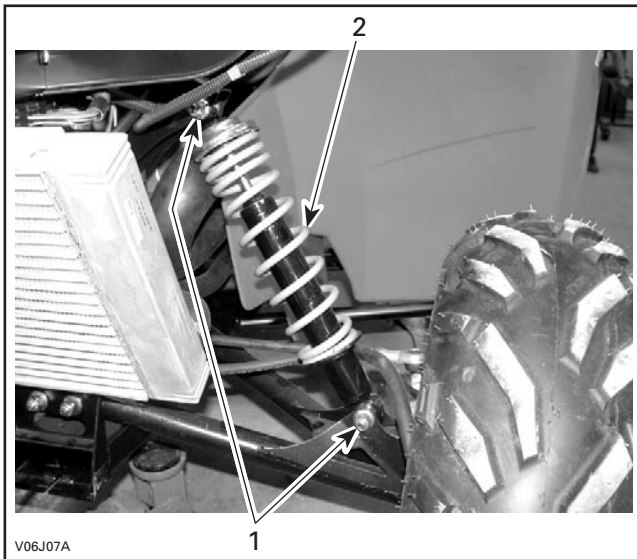
FRONT SHOCK

Removal

Lift front of vehicle until rear shock absorbers are fully extended then install a jack stand under the frame to support the vehicle off the ground.

NOTE: Do not remove front wheels to remove the front shocks.

Remove lower bolt no. 2 and upper bolt no. 3 of shock no. 1.

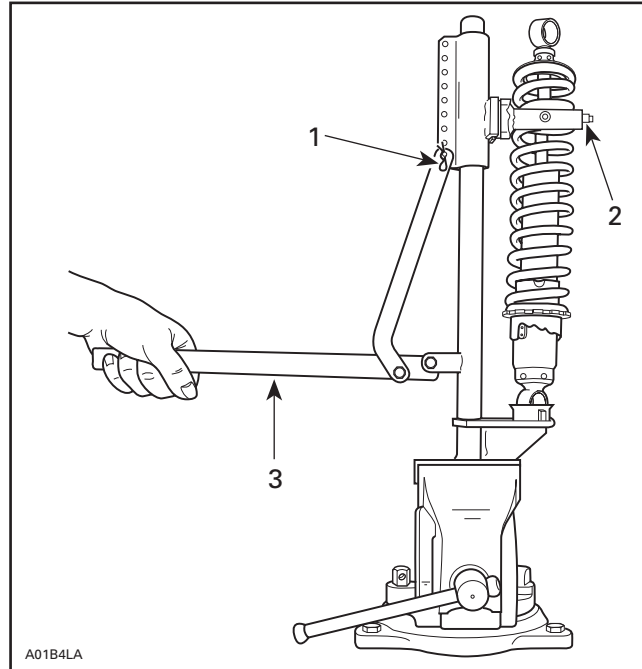


1. Remove bolts
2. Front shock assembly

Disassembly

For shock spring disassembly use shock spring remover (P/N 529 035 504) in a vise. Mount shock in it and turn shock so that spring coils matched spring compressor.

Close and lock the bar. Adjust the handle horizontal position by changing the position of the clevis pin.



TYPICAL

1. Clevis pin
2. Bar
3. Handle horizontal

Push down on the handle until it locks. Remove spring stopper then release handle.

Inspection

Inspect the spring for damage. Replace if necessary.

Inspect shock for oil leakage. Extend and compress the piston several times over its entire stroke. Check that it moves smoothly and with uniform resistance with its rod upwards. Any of the following conditions will denote a defective shock:

- A skip or hang back when reversing stroke at mid travel.
- Seizing or binding condition except at extreme end of either stroke.
- A gurgling noise after completing one full compression and extension stroke.

Replace shock if any of these conditions are found.

Installation

For assembly, reverse the disassembly and removal procedures.

LH/RH A-ARM

Inspection

Check LH and RH A-arm for distortion or damage. Replace as required.

Move A-arm from side to side. There should be no noticeable side play. Replace bushings if necessary.

Move A-arm up and down. There should be any noticeable play. Replace bushings if necessary.

Removal

NOTE: Both LH no. 4 and RH no. 5 A-arms can be removed without removing the tie rods.

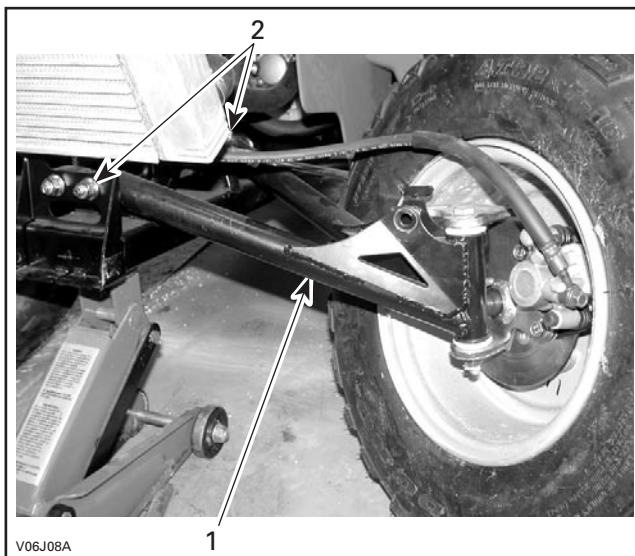
RH A-arm no. 5 and LH A-arm no. 4 has the same removal procedure.

Remove bolt no. 2 retaining the shock absorber no. 1 to A-arm.

Remove cotter pin on the axle screw and then, remove axle screw no. 7 from knuckle no. 6. Discard the cotter pin.

NOTE: Do not remove knuckle no. 6, tie rod and brake from the wheel.

Remove bolts no. 8 retaining A-arm to frame.



1. A-arm
2. Bolts

Remove A-arm from vehicle.

Installation

Position front A-arm on frame, then install bolts no. 8 and nuts.

Do not torque yet.

Install bolt and nut retaining shock absorber to front A-arm.

Attach front A-arm to knuckle no. 6. Install axle screw.

Torque all bolts and nuts.

Install a new cotter pin. Both ends of cotter pin must be folded.

Lubricate front A-arm with synthetic grease (P/N 293 550 033). Through greasers provided on A-arm pivots.

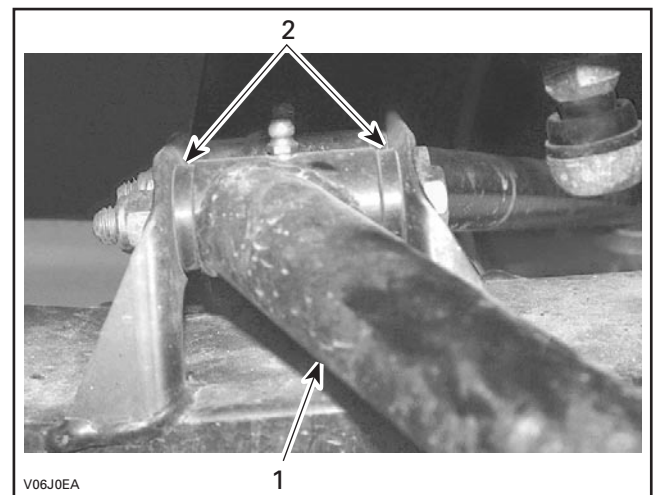
A-ARM CUSHIONS

Removal

Frame Side

Remove:

- A-arm (see above)
- inner bushings no. 10 (one on each branch)
- cushions no. 9 (two on each branch).



1. A-Arm
2. Cushions

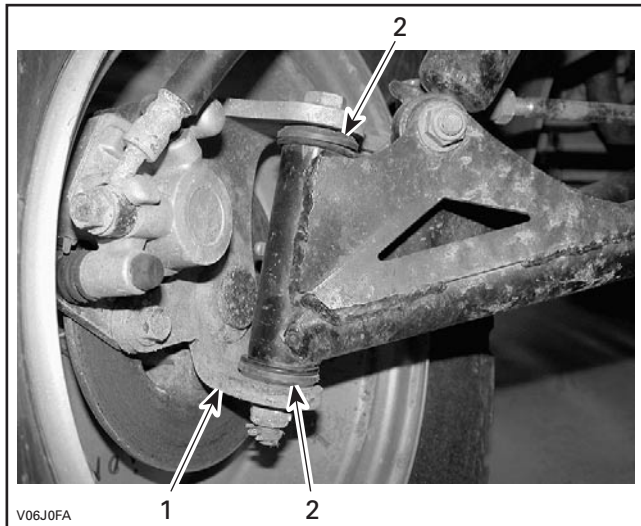
Section 08 SUSPENSION

Subsection 02 (FRONT SUSPENSION)

Knuckle Side

Remove:

- knuckle no. 6 from A-arm
- cushions no. 9.



1. Knuckle
2. Cushions

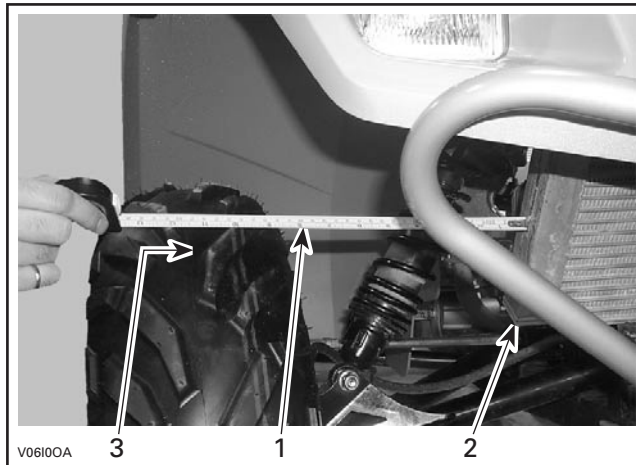
Inspection

Check cushions and bushings for wear or other damages. To check cushion wear, use the following procedure:

- Lift front of vehicle until front wheels are out of ground.

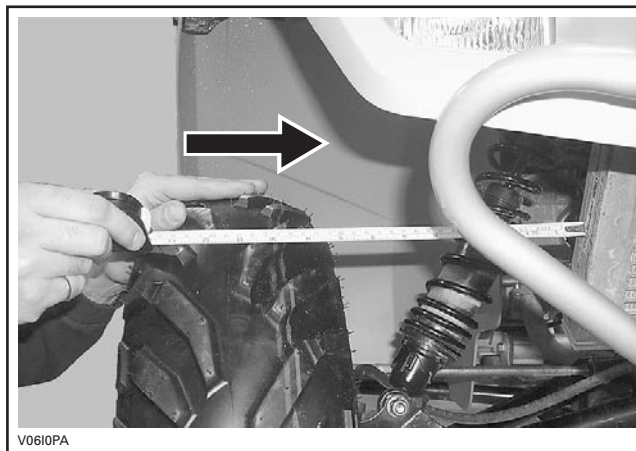
NOTE: Move the tire and check if the knuckle moves with the wheel (at the same time). If not, replace the bearing wheel before checking the cushion wear. If so, continue the procedure.

- Place the handlebar straight.
- Using a tape, measure the distance between the middle of the tire and the radiator side. Note this measure.



1. Tape
2. Radiator
3. Middle of tire

- Push on the top side of tire until all play is eliminated (without moving handlebar).
- Measure the distance between the middle of tire and radiator side.



PUSH TOWARD VEHICLE

- The difference between both measurements must be lower than $8 \text{ mm} \pm 1 \text{ mm}$ ($.315 \text{ in} \pm .039 \text{ in}$).
- If the difference is out of specification, replace cushions and both inner bushings.

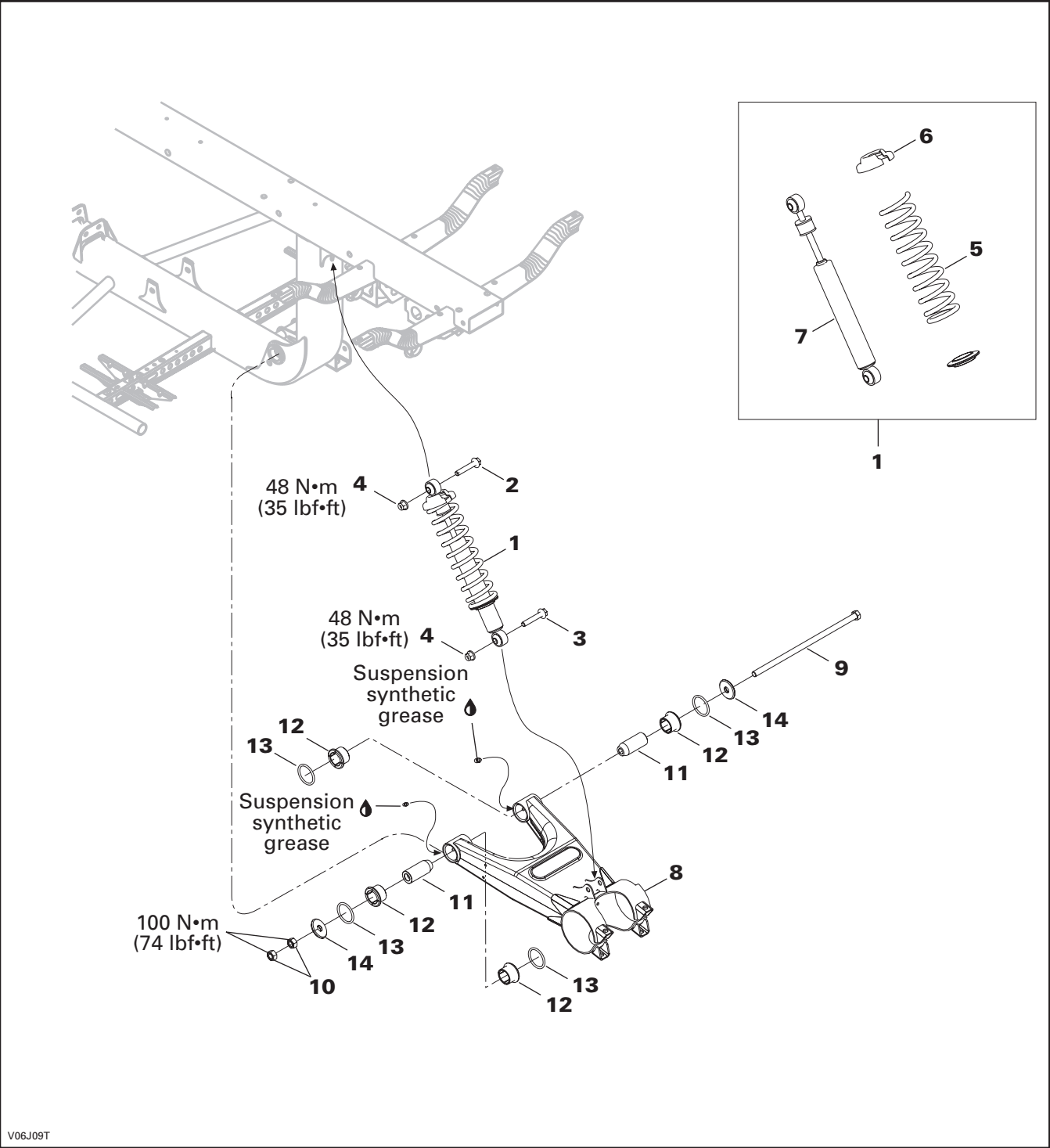
Replace all defectives parts.

Installation

The installation is the reverse of the removal procedure. Pay attention to the following details.

- Apply synthetic grease (P/N 293 550 033) on inner bushing before installation.
- Lubricate front A-arms with synthetic grease (P/N 293 550 033).

REAR SUSPENSION



Section 08 SUSPENSION

Subsection 03 (REAR SUSPENSION)

GENERAL

During assembly/installation, use the torque values and service products as in the exploded views.

Clean threads before applying a threadlocker. Refer to SELF-LOCKING FASTENERS and LOCTITE APPLICATION at the beginning of this manual for complete procedure.

WARNING

Torque wrench tightening specifications must strictly be adhered to.

Locking devices (ex.: locking tabs, elastic stop nuts, self-locking fasteners, cotter pin, etc.) must be installed or replaced with new ones where specified. If the efficiency of a locking device is impaired, it must be renewed.

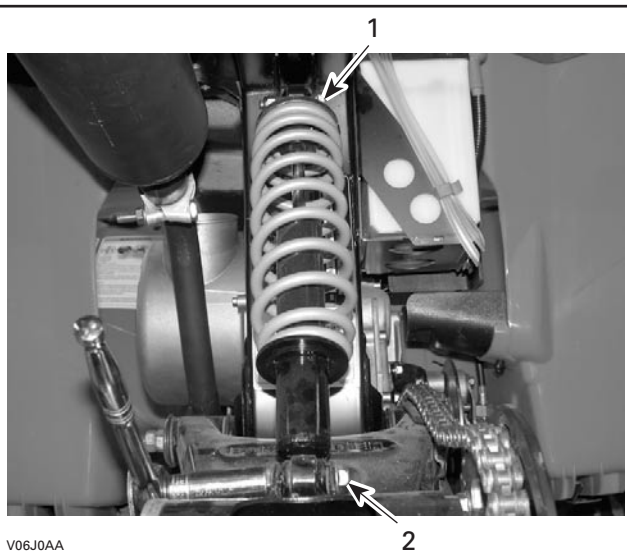
REAR SHOCK

Removal

Lift rear of vehicle until rear shock absorber no. 1 is fully extended.

Install jack stands or blocks under the frame to support the vehicle.

Remove upper no. 2 and lower no. 3 bolts as well as their nuts no. 4 then take out the shock absorber.



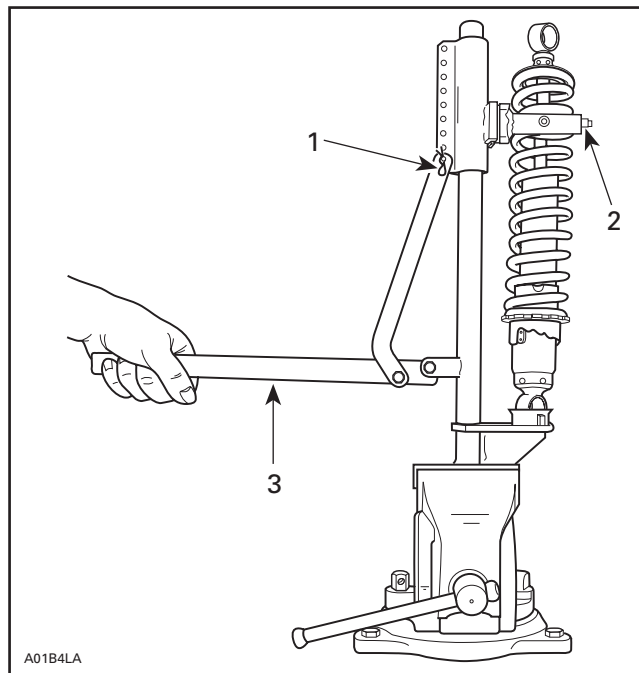
1. Upper bolt
2. Lower bolt

Disassembly

Use shock spring remover (P/N 529 035 504) and put it in a vise. Mount shock in it and turn shock so that spring coils no. 5 match spring compressor.

Close and lock bar. Adjust handle horizontal by changing position of clevis pin.

Push down on handle until it locks. Remove spring stopper no. 6 then release handle.

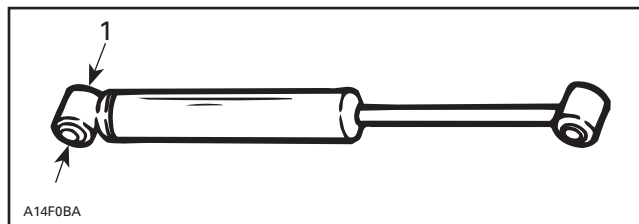


TYPICAL

1. Clevis pin
2. Bar
3. Handle horizontal

Inspection

Secure the shock body end no. 7 in a vise with its rod upward.



TYPICAL

1. Clamp here

CAUTION: Do not clamp directly on shock body.

Examine each shock for leaks. Extend and compress the piston several times over its entire stroke. Check that it moves smoothly and with uniform resistance with its rod upward.

Pay attention to the following conditions that will denote a defective shock:

- A skip or a hang back when reversing stroke at mid travel.
- Seizing or binding condition except at extreme end of either stroke.
- Oil leakage.
- A gurgling noise, after completing one full compression and extension stroke.

Replace the shock absorber if any faults are present.

Installation

Assembly and installation are essentially the reverse of disassembly and removal procedures.

NOTE: Install the spring **no. 5** with the color code on the top.

SWING ARM

Lubrication

The swing arm's lubrication is necessary. There are two grease fittings, one on each pivots.

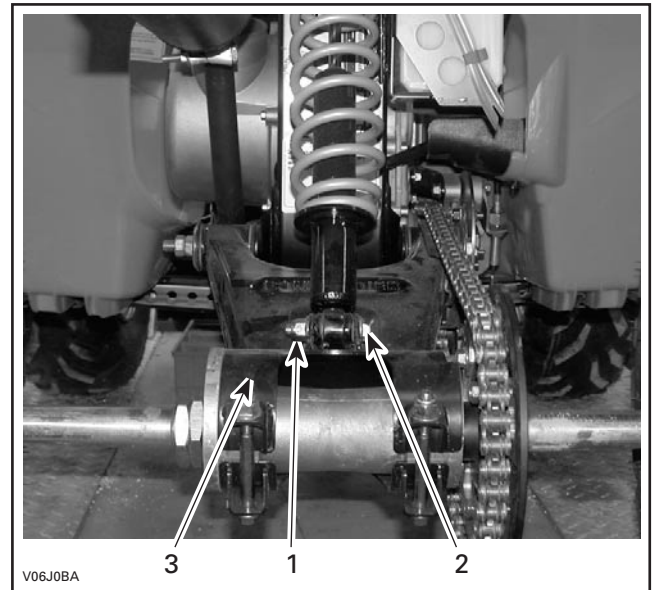
Use the suspension synthetic grease (P/N 293 550 033) to lubricate efficaciously the swing arm pivots.

Removal

Lift rear of vehicle until rear shock absorber **no. 1** is fully extended.

Install a jack stands or a blocks under the frame to support the vehicle.

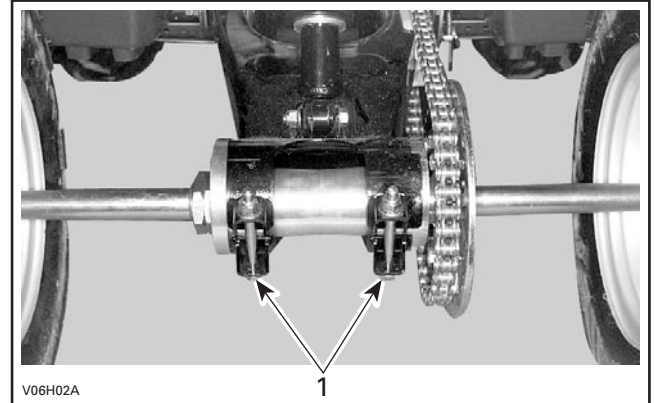
Remove the lower bolt **no. 3** and its nut **no. 4** to separate the shock absorber and the swing arm **no. 8**.



1. Lower nut
2. Lower bolts
3. Swing arm

Remove RH footwell (refer to BODY).

Loosen chain tensioner lock bolts.

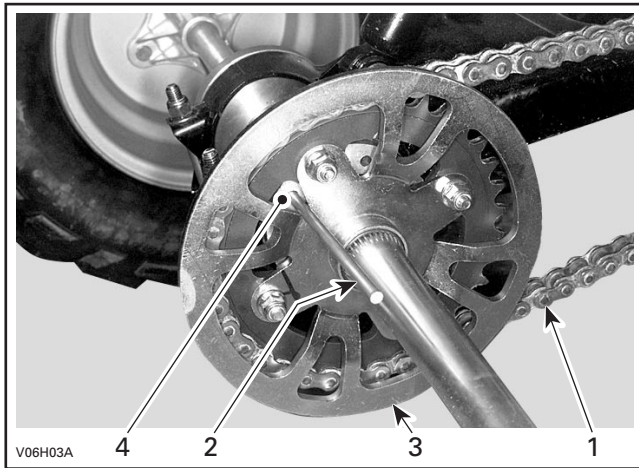


1. Chain tensioner lock bolts

Insert adjuster lock through sprocket hub and into chain tensioner.

Section 08 SUSPENSION

Subsection 03 (REAR SUSPENSION)



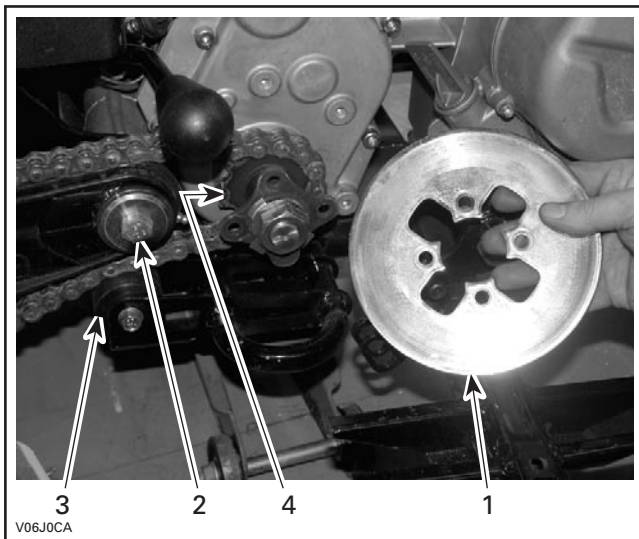
1. Drive chain
2. Adjuster lock
3. Sprocket hub
4. Chain tensioner

Slack drive chain.

Remove rear brake (refer to BRAKES).

Remove swing arm bolt **no. 9** and its two nuts **no. 10**.

Remove chain roller.



1. Brake disc
2. Swing arm bolt
3. Chain roller
4. Sprocket

Pull back rear drive train assembly to detach swing arm assembly with drive chain from the frame.

If necessary, remove rear axle from swing arm. Refer to REAR AXLE.

NOTE: The rear axle must be removed only if the swing arm is replaced.

Inspection

Check swing arm for distortion, rust, cracks, bend or other damages. Change if necessary.

Check busings **no. 11** and cushions **no. 12** for wear or damages. Replace if necessary.

Check if the O-rings **no. 13** are brittle, hard or otherwise damaged.

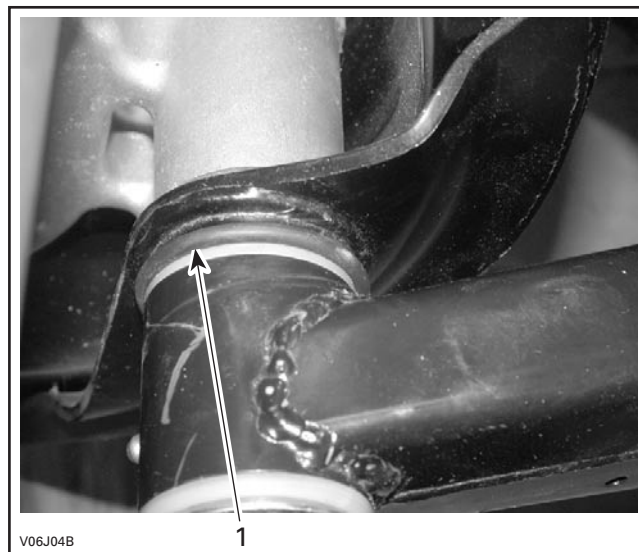
Installation

Installation is the reverse of removal procedure. However, pay attention to the following details.

Insert O-rings **no. 13** in the groove into frame.

Place cushions **no. 12** and bushings **no. 11** then install the swing arm.

Install the swing arm bolt **no. 9** with washers **no. 14** then push the O-rings **no. 13** between frame and bushings.



1. O-ring

Install the first swing arm nut **no. 10**. Torque to 100 N•m (74 lbf•ft).

NOTE: Check if the swing arm moves freely.

Install the other nut **no. 10** and torque to 100 N•m (74 lbf•ft).

NOTE: Take the first nut with a key when the second nut is torqued.

Install rear shock and drive chain. Torque nut **no. 4** to 48 N•m (35 lbf•ft) to install rear shock.

If necessary, join the rear axle and the swing arm together. See the REAR AXLE section for the proper procedure.

Apply suspension synthetic grease (P/N 293 550 033) to swing arm.

Reinstall brake. Check brake pedal adjustment. Refer to BRAKES for complete adjustment procedure. Install RH footwell (refer to BODY).