

# REAR SUSPENSION

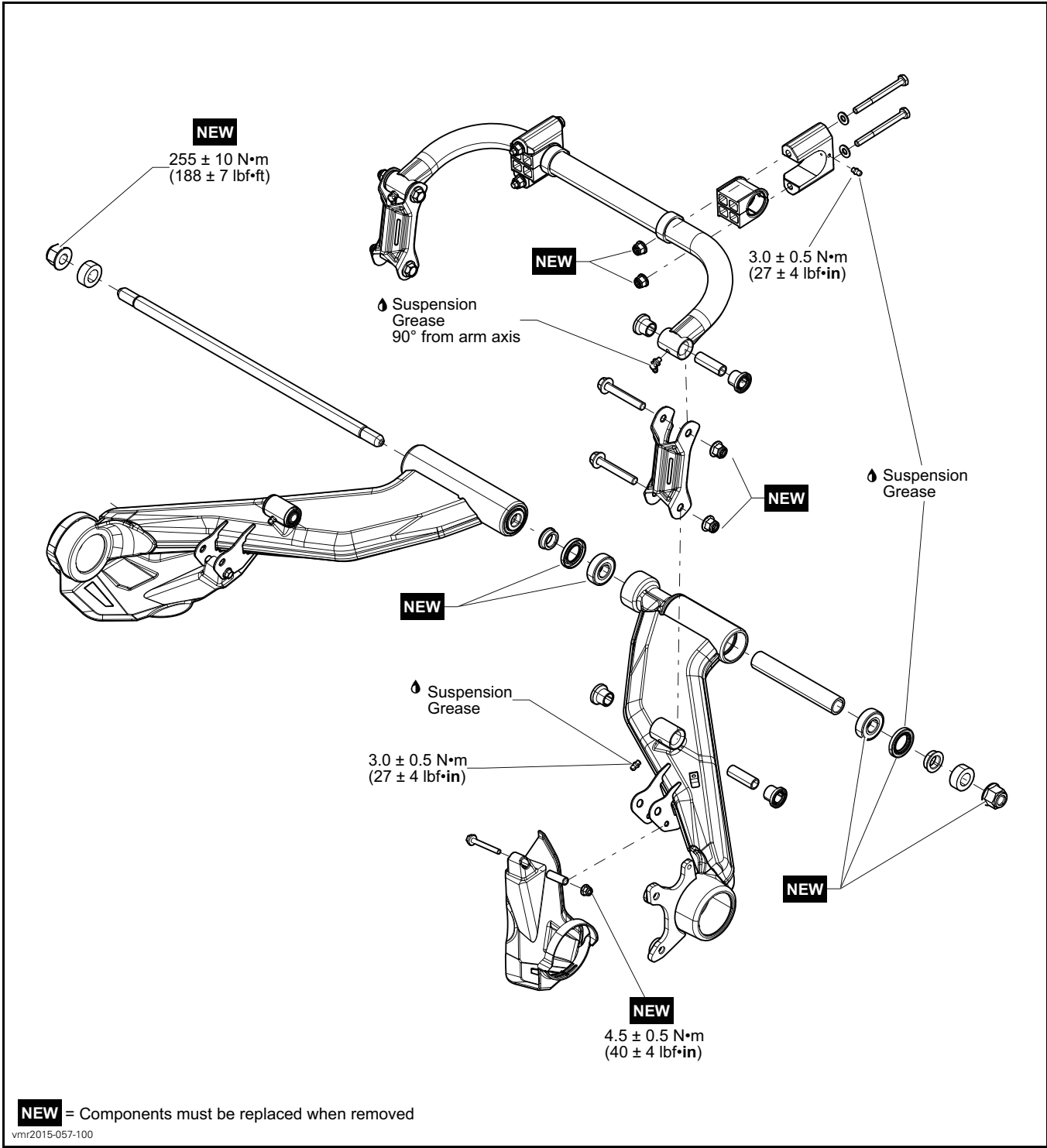
## SERVICE TOOLS

| Description             | Part Number       | Page |
|-------------------------|-------------------|------|
| SPRING COMPRESSOR ..... | 529 036 184 ..... | 681  |

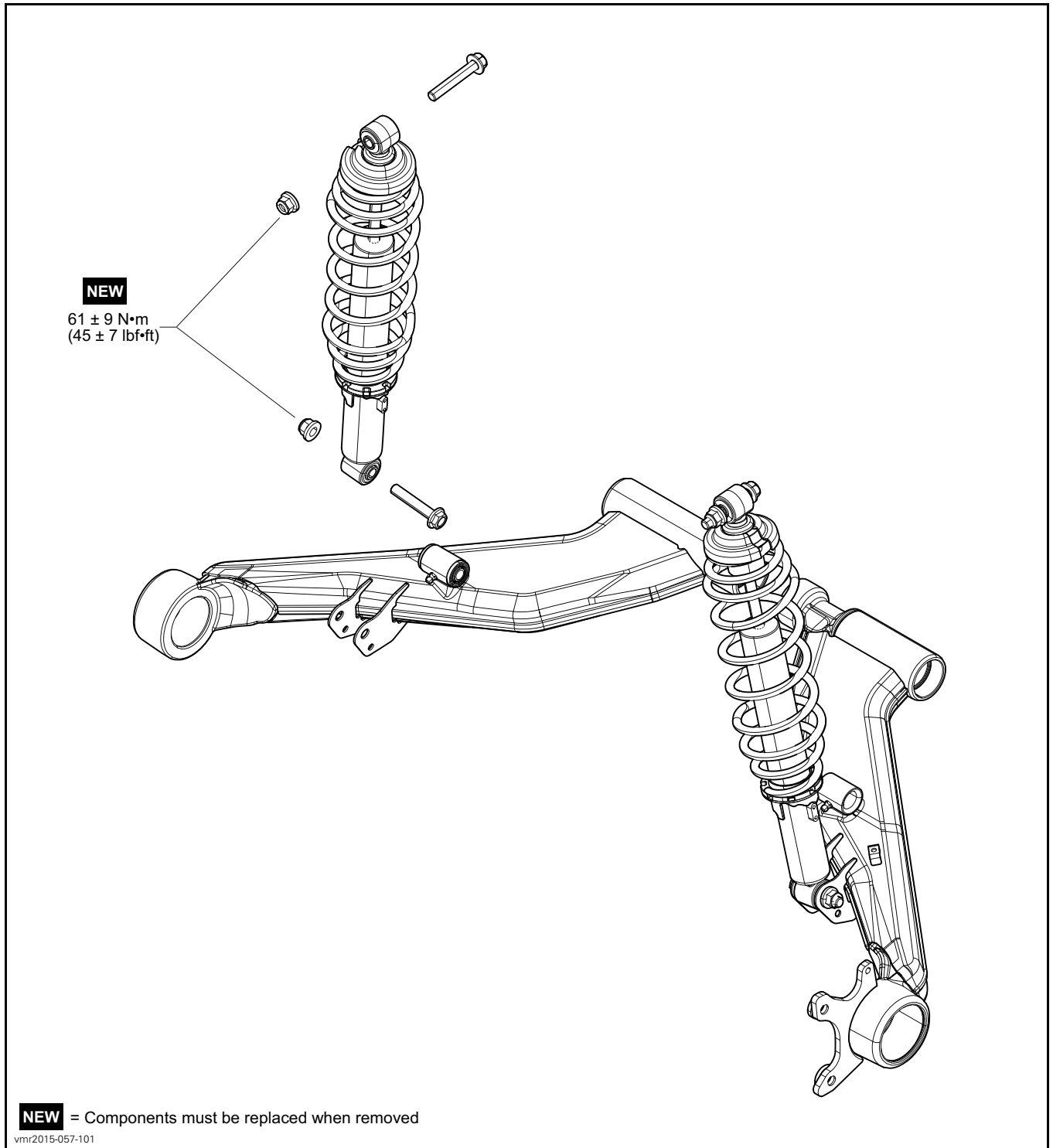
## SERVICE PRODUCTS

| Description             | Part Number       | Page |
|-------------------------|-------------------|------|
| SUSPENSION GREASE ..... | 293 550 033 ..... | 684  |

TRAILING ARMS AND SWAY BAR



## SHOCK ABSORBERS



GENERAL

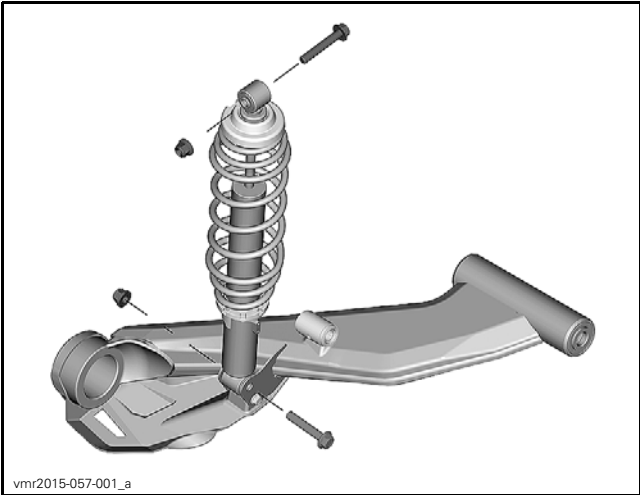
The procedure described below is the same for the RH and LH sides, unless otherwise instructed.

PROCEDURES

SHOCK ABSORBERS

Shock Absorber Removal

- 1. Safely lift and support the vehicle off the ground.
- 2. Remove screws and nuts retaining shock absorber.

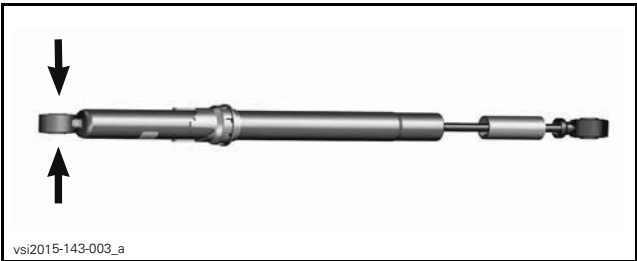


- 3. Remove shock absorber.

Shock Absorber Inspection

Remove spring from shock absorber. Refer to *SPRINGS* in this subsection.

Secure the end of shock body in a vise with its rod upward.



TYPICAL

**NOTICE** Do not clamp directly on shock body.

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

Check 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 if any faults are present.

Shock Absorber Installation

The installation is the reverse of the removal procedure. However, pay attention to the following.

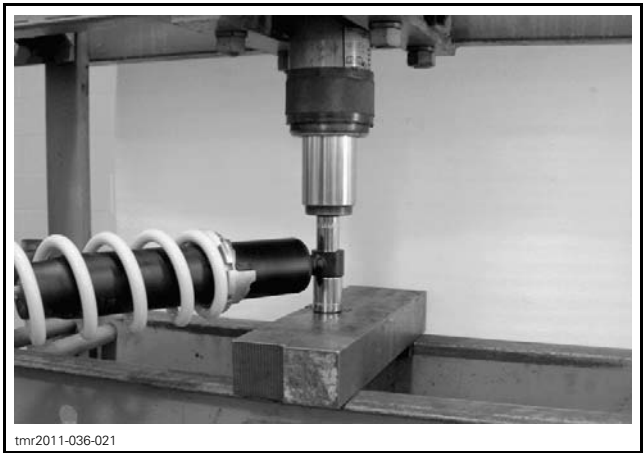
Tighten shock absorber nuts to specification.

| TIGHTENING TORQUE  |                                          |
|--------------------|------------------------------------------|
| Shock absorber nut | 61 N•m ± 9 N•m<br>(45 lbf•ft ± 7 lbf•ft) |

SHOCK ABSORBER BUSHINGS

Shock Absorber Bushing Replacement

- 1. Remove shock absorber from vehicle. Refer to *SHOCK ABSORBERS* in this subsection.
- 2. Install shock absorber on a press.
- 3. Use an appropriate socket to push bushing.



TYPICAL

- 4. Remove bushing from shock absorber.



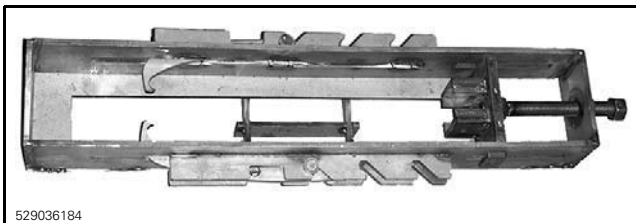
TYPICAL

5. Install a **NEW** bushing as the reverse of removal.
6. Install shock absorber on vehicle.

## SPRINGS

### Spring Removal

1. Remove shock absorber from vehicle. Refer to *SHOCK ABSORBERS* in this subsection.
2. Place the SPRING COMPRESSOR (P/N 529 036 184) in a vise.



3. Position the shock absorber in the tool.
4. Install the spring compressor pins.
5. Tighten spring remover screw until the spring is sufficiently compressed to remove spring cap.
6. Remove spring cap from shock absorber.
7. Release spring remover screw.
8. Remove spring from shock absorber.

### Spring Inspection

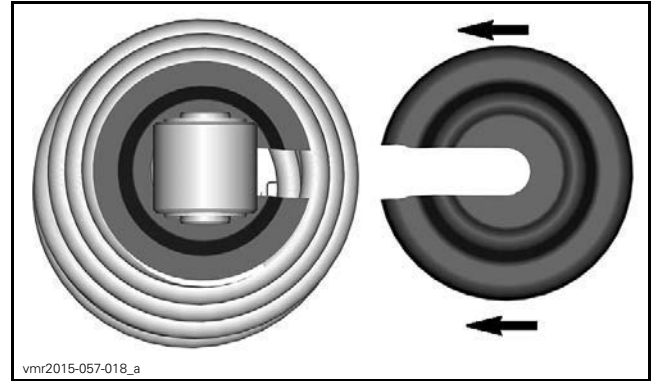
Inspect the spring for damage.

Replace if necessary.

### Spring Installation

The installation is the reverse of the removal procedure. However, pay attention to the following.

On applicable models, install spring cap opening at 180° from spring stopper opening.

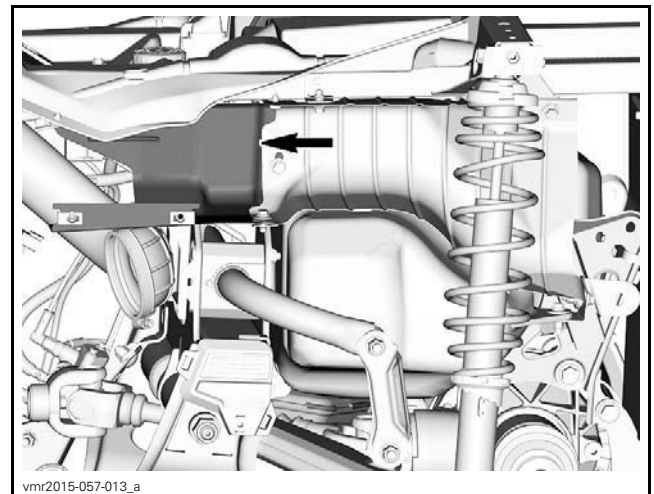


CAP OPENING AT 180°

## SWAY BAR

### Sway Bar Removal

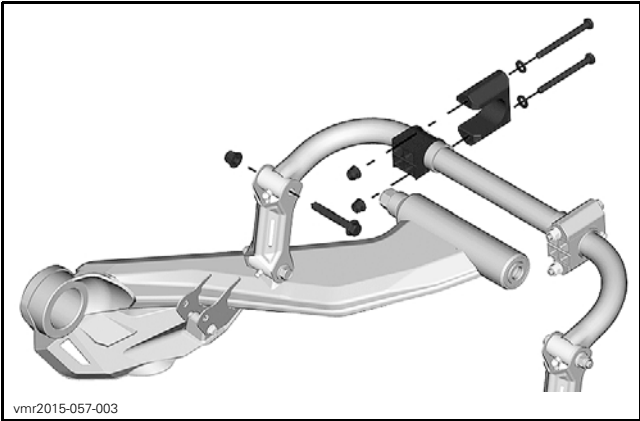
1. Safely lift and support the vehicle off the ground.
2. Remove rear wheels, refer to *WHEELS AND TIRES* subsection.
3. Refer to *EXHAUST SYSTEM* and remove:
  - Muffler
  - Exhaust pipe.
4. Remove the following inner heat shield.



SOME PARTS REMOVED FOR CLARITY

5. Remove fasteners and sway bar bushing holders.

**Section 08 CHASSIS**  
**Subsection 05 (REAR SUSPENSION)**



6. Remove sway bar.

**Sway Bar Inspection**

Check sway bar for cracks, bending or other damages.

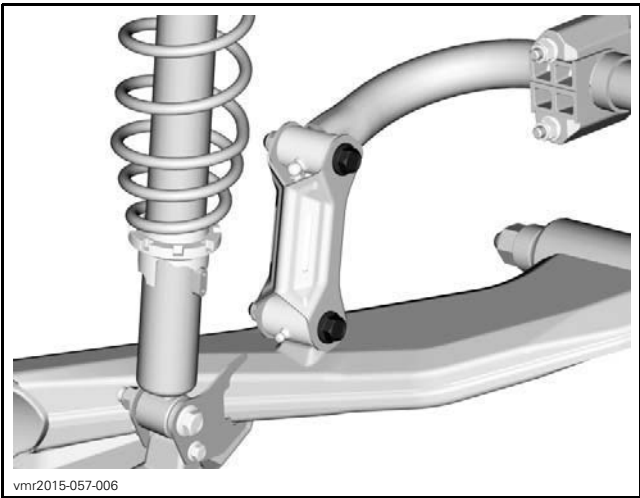
Replace if necessary.

**Sway Bar Installation**

The installation is the reverse of the removal procedure. However, pay attention to the following.

Install all retaining screws of sway bar loosely first.

Position link arm screws with their heads towards inside.



Tighten sway bar retaining screws to specification.

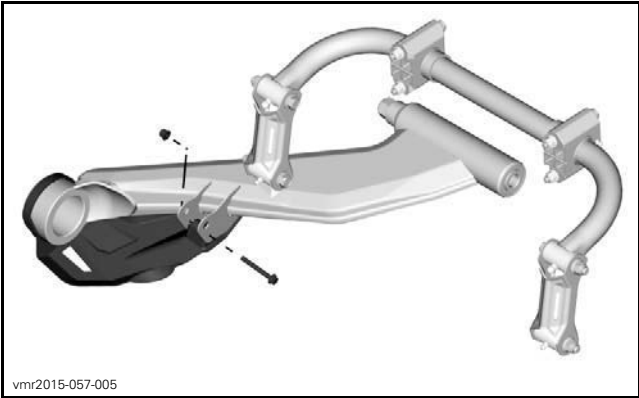
| TIGHTENING TORQUE                    |                                              |
|--------------------------------------|----------------------------------------------|
| Screws securing sway bar to frame    | 24.5 N•m ± 3.5 N•m<br>(18 lbf•ft ± 3 lbf•ft) |
| Screws securing sway bar to link arm | 61 N•m ± 9 N•m<br>(45 lbf•ft ± 7 lbf•ft)     |

Lubricate sway bar. Refer to *PERIODIC MAINTENANCE PROCEDURES* subsection.

**TRAILING ARM**

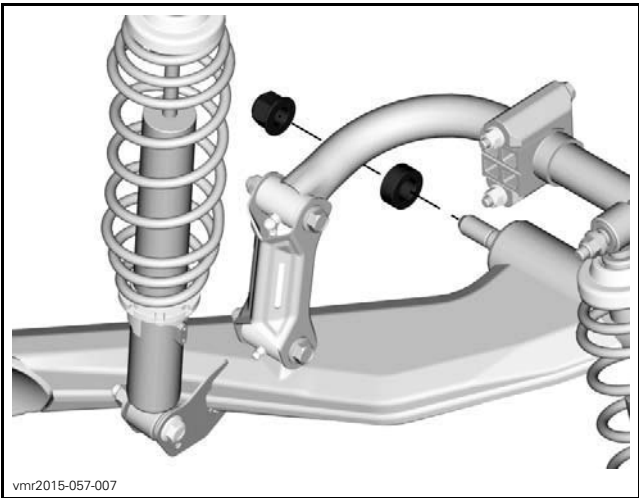
**Trailing Arm Removal**

1. Safely lift and support the vehicle off the ground.
2. Remove wheel hub, refer to *REAR DRIVE* subsection.
3. Remove protective plate from trailing arm.

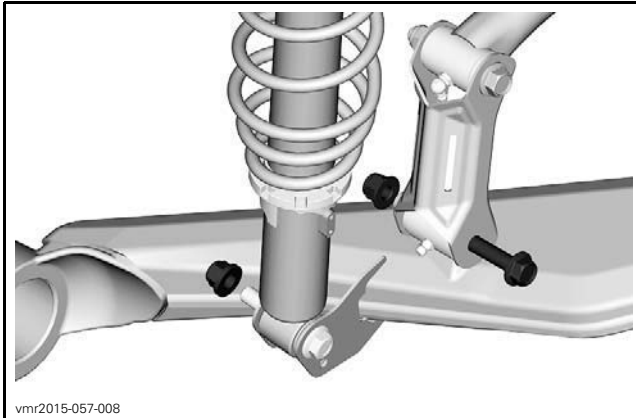


**NOTE:** If applicable, remove fasteners retaining brake hose to vehicle.

4. Remove nut and washer securing trailing arm pivot shaft.

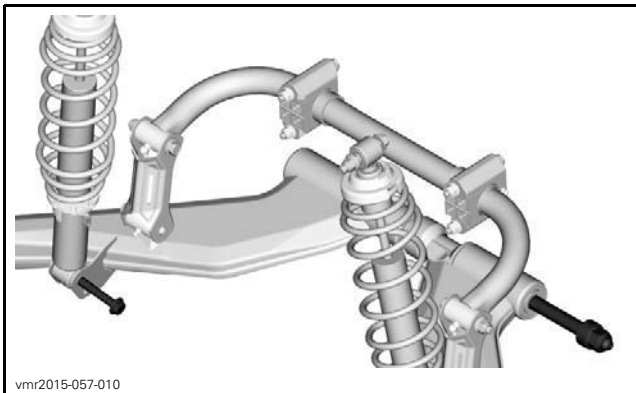


5. Detach trailing arm from link arm and remove lower nut retaining shock absorber.



6. Firmly hold trailing arm then remove:
- Shock absorber lower screw
  - Trailing arm pivot shaft (pull from opposite side).

**NOTE:** If only one trailing arm is removed, pull pivot shaft just enough to clear trailing arm.

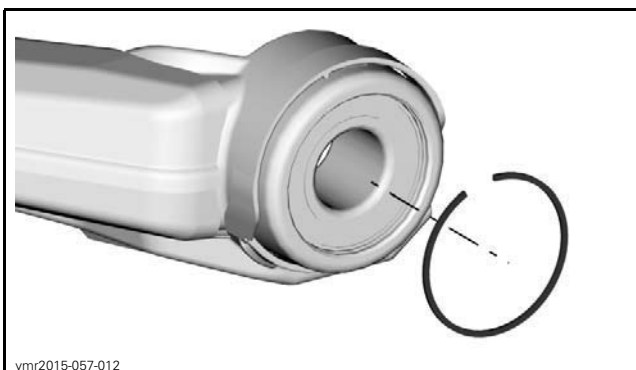


7. Remove trailing arm from vehicle.

### Trailing Arm Disassembly

#### Drive Shaft Bearing Removal

1. Remove circlip securing bearing into trailing arm.

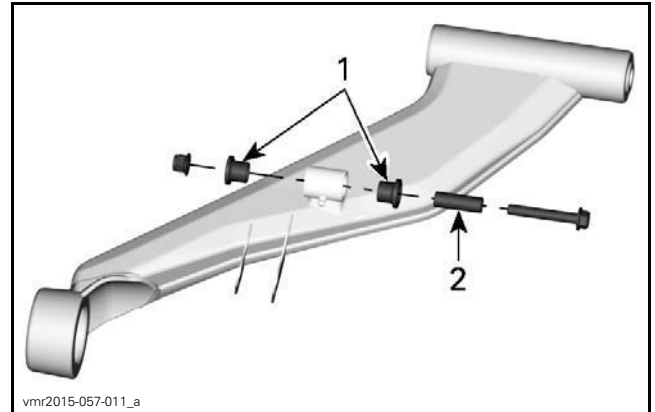


2. Install trailing arm on a press.  
 3. Use an appropriate bearing remover.

4. Remove drive shaft bearing from trailing arm.

#### Link Arm Inner Bushing Removal

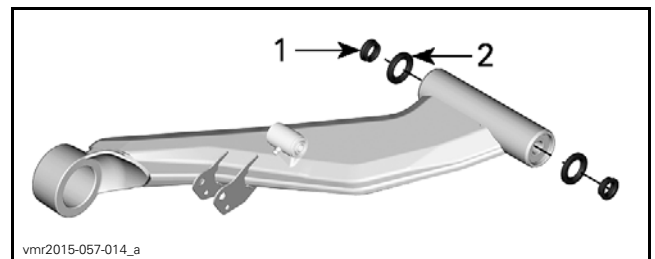
Remove both bushings and sleeve from trailing arm.



1. Bushings  
 2. Sleeve

#### Trailing Arm Pivot Bearing Removal

1. Remove both spacers and seals from trailing arm pivot.

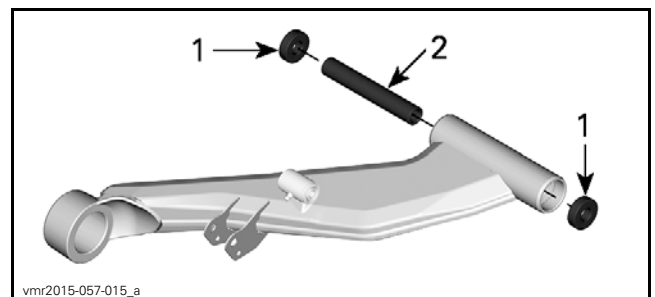


1. Spacer  
 2. Seal

2. Remove bearing with an appropriate bearing remover.

**NOTE:** Remove one bearing at a time.

3. Remove inner spacer from trailing arm.



1. Pivot bearings  
 2. Inner spacer

Section 08 CHASSIS

Subsection 05 (REAR SUSPENSION)

Trailing Arm Inspection

Check trailing arms for:

- Cracks
- Bending.

Check seals condition.

Check inner race of each pivot bearing with your finger. Bearings should turn smoothly and quietly.

Replace all damaged parts.

Trailing Arm Assembly and Installation

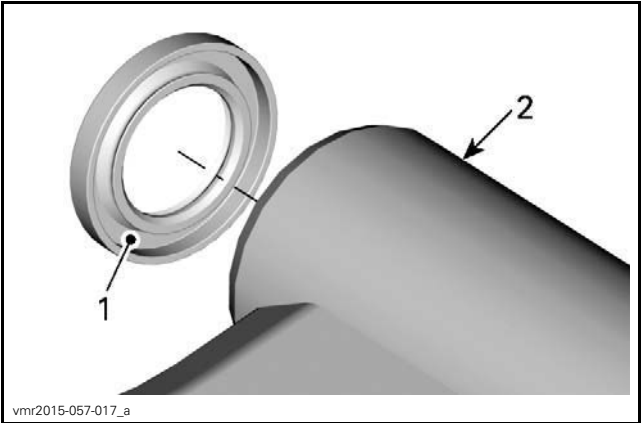
The installation is the reverse of the removal procedure. However, pay attention to the following.

Install the following **NEW** parts:

- Trailing arm pivot nuts
- Pivot bearings
- Pivot seals
- Circlip.

Use an appropriate shaft to center trailing arm inner spacer during pivot bearings installation.

Install pivot bearings and inner spacer as per the following sequence.



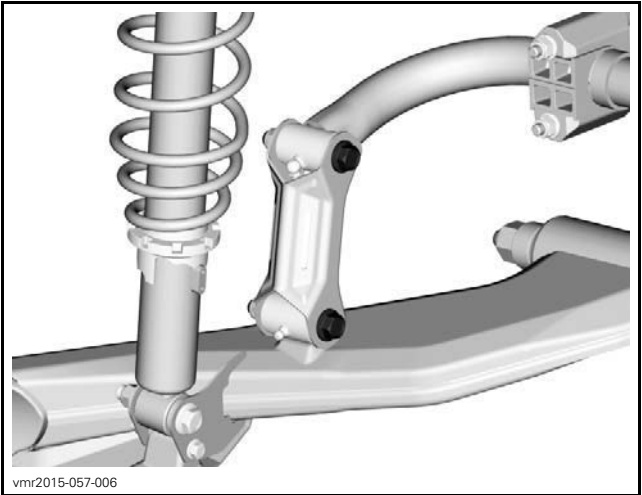
1. Seal cavity  
2. Trailing arm

Center trailing arm pivot shaft.

Tighten trailing arm pivot nuts as per the following sequence.

| TIGHTENING SEQUENCE     |             |                                             |
|-------------------------|-------------|---------------------------------------------|
| Trailing arm pivot nuts | RH side nut | Tighten nut until it reaches end of threads |
|                         | LH side nut | 255 N•m ± 10 N•m<br>(188 lbf•ft ± 7 lbf•ft) |

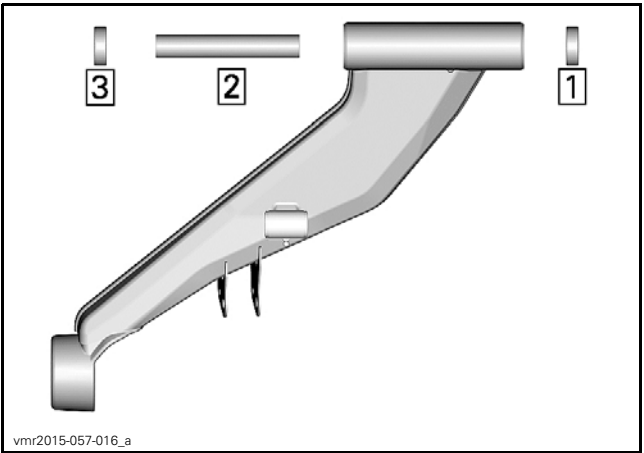
Position link arm bolts with their heads towards inside.



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Tighten trailing arm fasteners to specification.

| TIGHTENING TORQUE                       |                                             |
|-----------------------------------------|---------------------------------------------|
| Bolts securing trailing arm to link arm | 61 N•m ± 9 N•m<br>(45 lbf•ft ± 7 lbf•ft)    |
| Shock absorber nuts                     | 61 N•m ± 9 N•m<br>(45 lbf•ft ± 7 lbf•ft)    |
| Protective plate retaining nuts         | 4.5 N•m ± 0.5 N•m<br>(40 lbf•in ± 4 lbf•in) |



**TYPICAL - LH TRAILING ARM**  
Step 1: Insert bearing on RH side  
Step 2: Center inner spacer with RH side bearing using a shaft  
Step 3: Insert bearing on LH side

Lubricate trailing arm pivot seals.

| LUBRICATION |                                        |
|-------------|----------------------------------------|
| Pivot seals | SUSPENSION GREASE<br>(P/N 293 550 033) |

Install trailing arm pivot seal with its cavity facing inwards.