

CHAPTER 4 CHASSIS

WARNING

The parts of different types/ variants/ versions maybe un-interchangeable, even some parts have almost same appearance. Always refer to Parts Manual of each ATV model for spare parts information and service.

4.1 A-ARM REPLACEMENT

4.2 SWING ARM

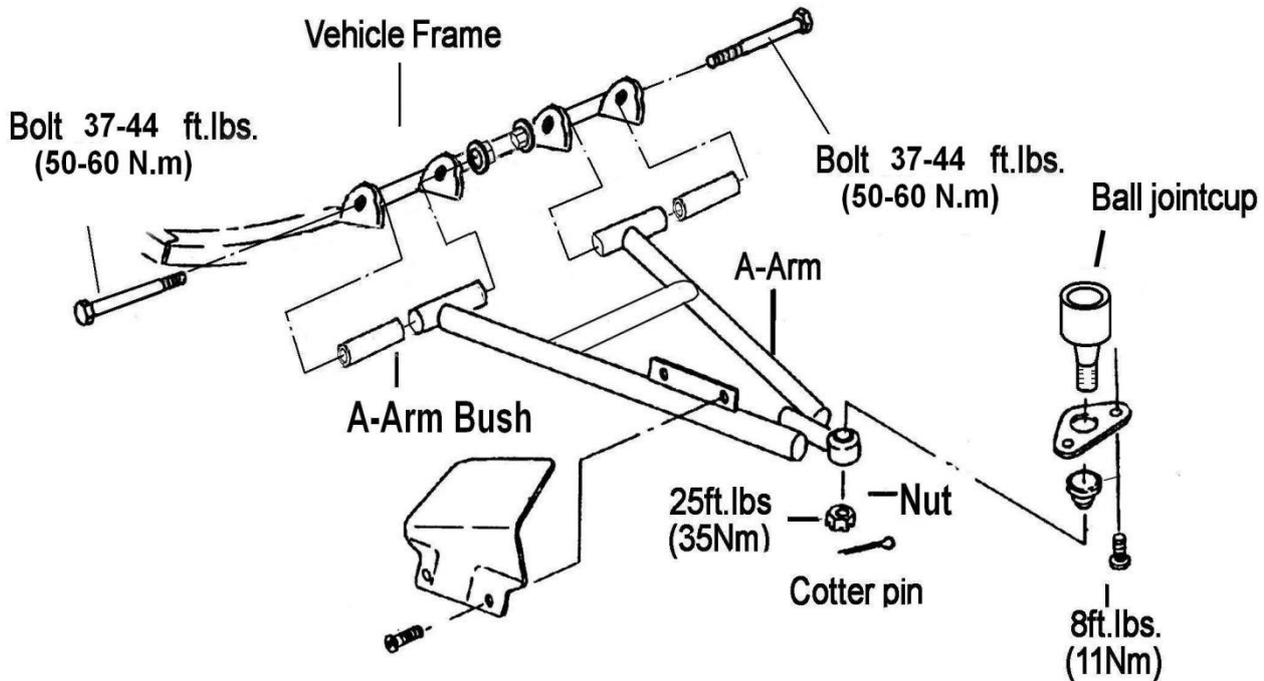
4.3 FRONT STRUT REPLACEMENT

4.4 FRONT STRUT BALL JOINT REPLACEMENT

4.5 STEERING POST ASSEMBLY

4.1 A-ARM REPLACEMENT (MacPherson)

MANTENANCE-FREE PIVOT DESIGN



1. Elevate and safely support vehicle
2. Remove cotter pin from ball joint cup at wheel end of A- arm and loosen nut until it is flush with end of cup.
3. Using a soft face hammer, tap nut to loosen A- arm from bolt. Remove nut and A-arm from hub strut assembly.
4. Loosen and remove two bolts on A-arm, and remove A-arm.
5. Examine bushing. Replace if worn or tore. Discard hardware.
6. Install new A-arm assembly onto vehicle frame. Install new bolts and new nuts.
NOTE. Tighten the nuts only finger-tighten at this time. They will be tightened to the final torque after the front wheels are installed and the vehicle is on the ground.

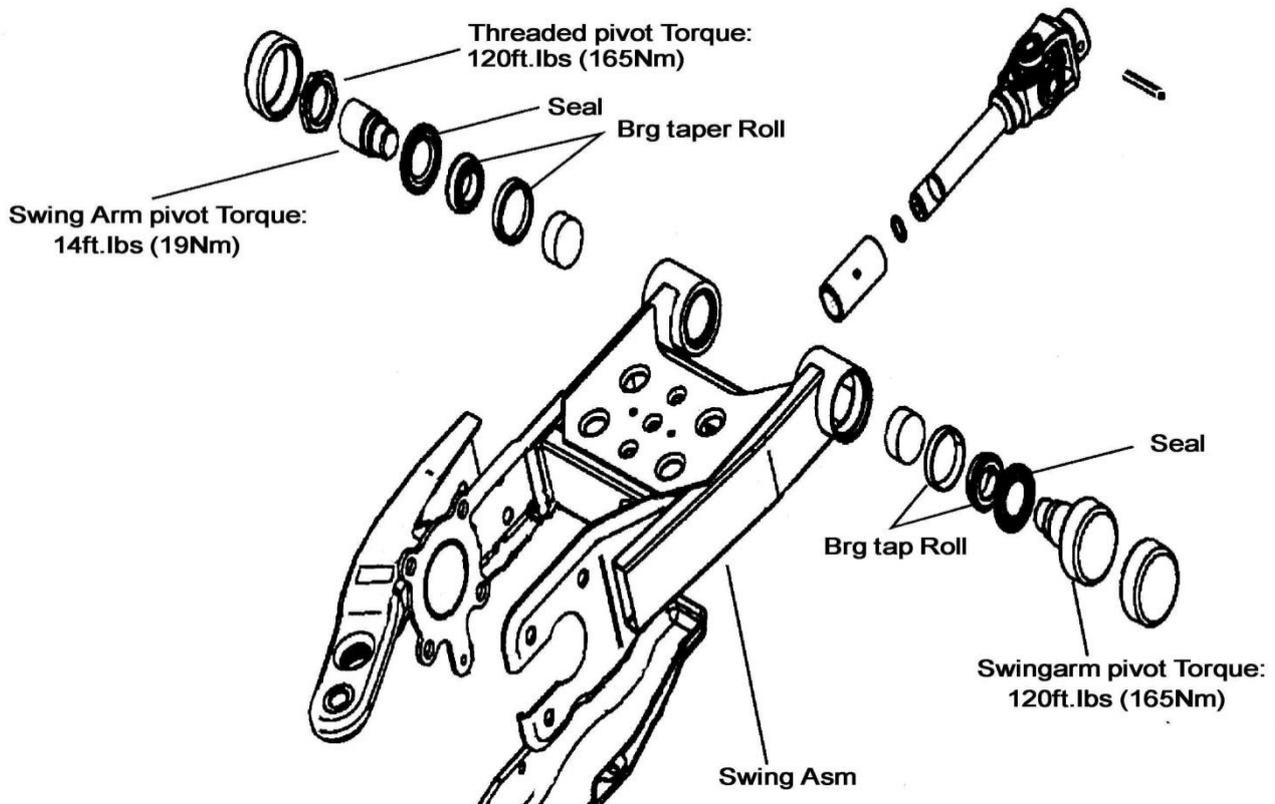
WARNING

DO NOT reuse old bolts. Serious injury or death could result if fasteners come loose during operation.

7. Attach A-arm to strut assembly. Tighten ball joint nut to 25 ft. lbs. (35 Nm). If cotter pin holes are not aligned, tighten nut slightly to align. Install a new cotter pin with open ends toward rear of machine. Bend both ends in opposite directions around nut.
8. Install hubs, calipers and wheels, lower the vehicle to the ground. Apply Loctite™ 242 to screw threads of the A arm bolts and torque bolts to 37-44 ft. lbs. (50-60 Nm).

WARNING

Upon A-arm installation completion, test vehicle at low speeds before putting into regular service.

4.2 SWING ARM**Swing Arm Assembly Installation**

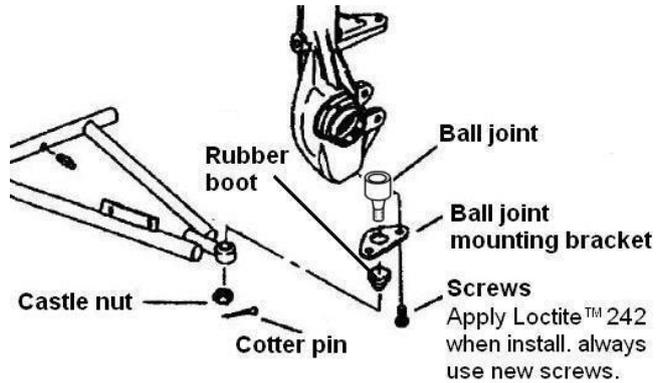
- 1, Screw swing arm pivots into frame on each side (about 3 turns).
- 2, Install swing arm assembly in frame with lubricated bearing taper roll, and install seal in each side of swing arm asm .
- 3, Apply Loctite 242 to R H swing arm pivot.
- 4, Tighten swing arm pivot until both are engaged in tapered roll.
- 5, Adjust right side swing arm pivot in ward until firmly seated against bearing, torque to 120 ft. lbs. (165Nm) and apply Loctite 271.
- 6, Torque left side swing arm pivot to 14 ft. lbs. (19 Nm) and apply Loctite 271 .
- 7, Apply Loctite™ 242 (Blue) to exposed threads of swing arm pivot and threaded pivot.
- 8, Torque threaded pivot to 120 ft. lbs. (165 Nm) and apply Loctite 271.

4.3FRONT STRUT BALL JOINT REPLACEMENT

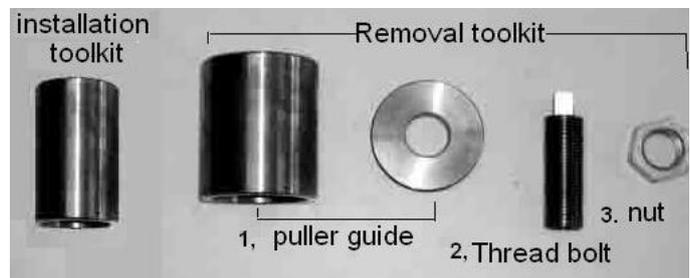
1. Loosen front wheel nuts.
2. Elevate and safely support ATV under footrest/frame area. .

CAUTION: Serious injury may result if ATV tips or falls. Be sure ATV is secure before beginning this service procedure.

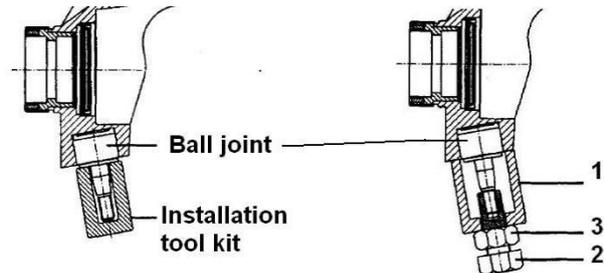
3. Remove wheel nuts and wheels.
4. Remove cotter pin from ball joint
5. Remove castle nut and separate A-arm from ball joint stud.
6. Remove screws and ball joint mounting bracket.



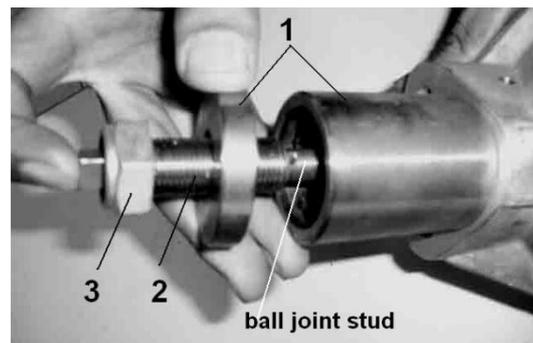
7. Using ball joint cup removal/installation toolkit, remove ball joint cup from strut housing. Refer to photos at right.



- Install puller guide (1) .
- Thread bolt (2) with nut (3) onto bal joint stud as shown .
- Hold bolt (2) and turn nut (3) clockwise until ball joint is removed from strut housing.



8. To install new ball joint cup.
 - Insert new ball joint into driver (installation toolkit).
 - Drive new bal joint cup into strut housing until fully seated.



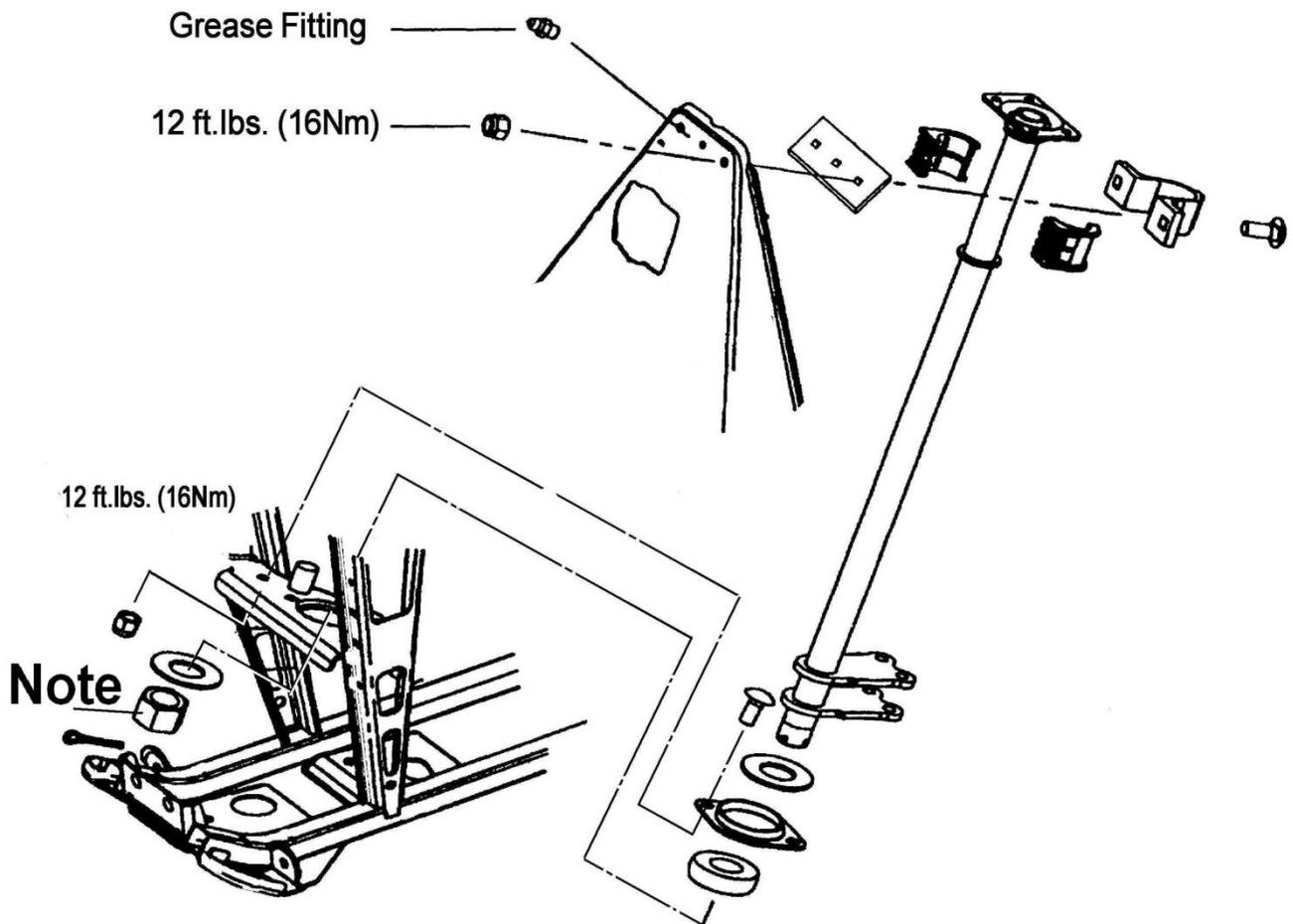
9. Apply Loctite 242 (blue) to threads of mounting bracket new screws. Torque screw s to 8 ft.lbs. (11 Nm).

10. Install A- arm on bal joint cup and torque castle nut to 25 ft. lbs. (35 Nm).

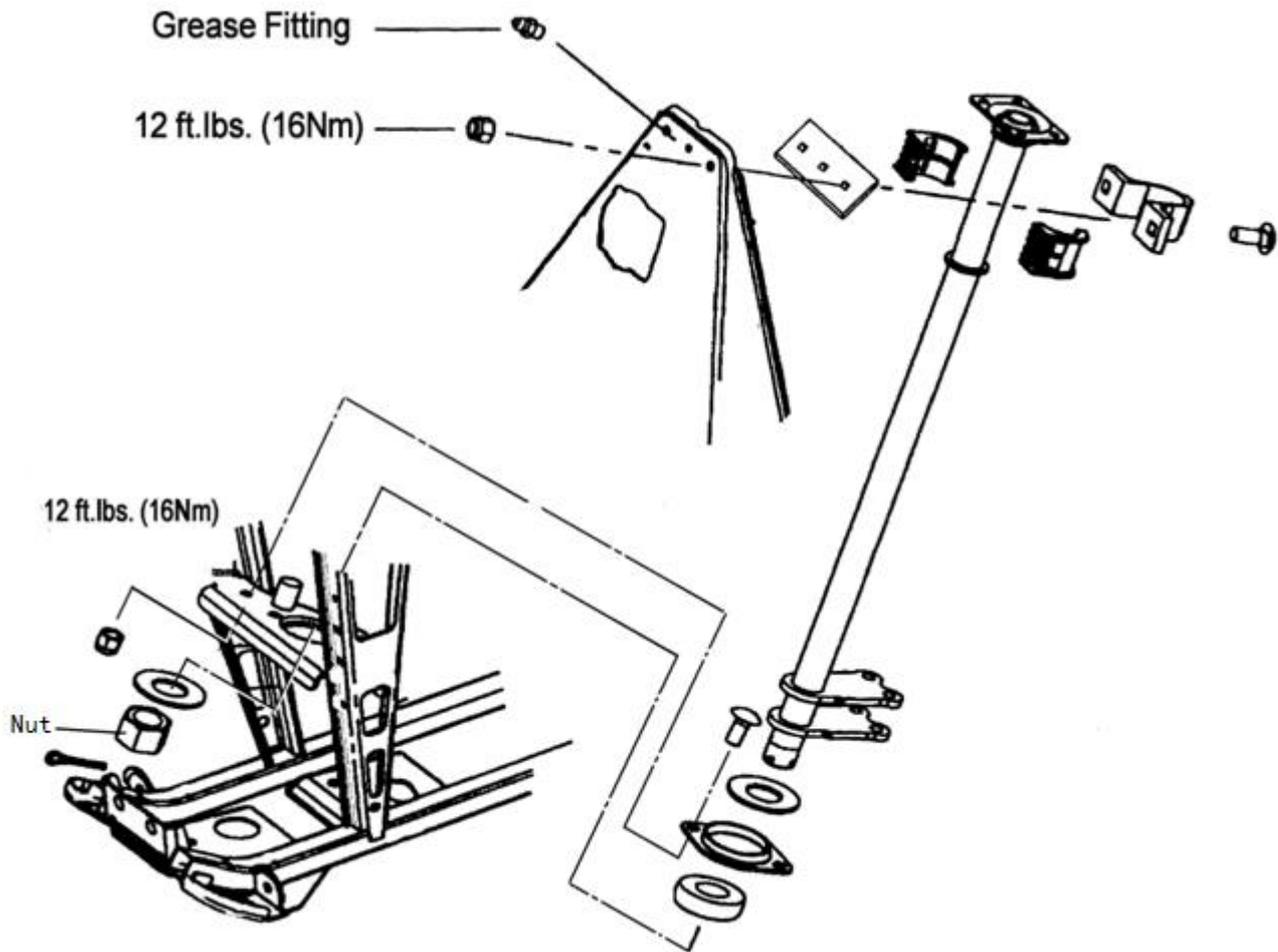
11. Reinstall cotter pin with open ends toward rear of machine.



4.4 STEERING POST ASSEMBLY

**Note:**

- 1, Hand tighten the crown nut of the steering post.
- 2, Align cotter pin hole.
- 3, Install cotter pin. Bend both ends of cotter pin around nut in opposite directions.
- 4, Check steering, must move freely and easily from full left to full right without binding.

4.5 STEERING POST ASSEMBLY**Note:**

- 1, Hand tighten the crown nut of the steering post.
- 2, Align cotter pin hole.
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