CHAPTER 5

BODY / STEERING / SUSPENSION

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### TORQUE SPECIFICATIONS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TORQUE VALUE ft. lbs. (Nm)</th>
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</thead>
<tbody>
<tr>
<td>Front Frame to Rear Frame Support Fasteners (CREW)</td>
<td>38-40 ft. lbs. (52-54 Nm)</td>
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<tr>
<td>Main Frame to Rear Frame Fasteners (6x6)</td>
<td>34-36 ft. lbs. (46-49 Nm)</td>
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<tr>
<td>Front Upper / Lower A-Arm Bolts</td>
<td>30 ft. lbs. (41 Nm)</td>
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<tr>
<td>Mid Upper / Lower A-Arm Bolts</td>
<td>30 ft. lbs. (41 Nm)</td>
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<tr>
<td>Rear Upper / Lower A-Arm Bolts</td>
<td>30 ft. lbs. (41 Nm)</td>
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<tr>
<td>Front Ball Joint Pinch Bolts</td>
<td>23 ft. lbs. (31 Nm)</td>
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<tr>
<td>Mid / Rear Lower Bearing Carrier</td>
<td>30 ft. lbs. (41 Nm)</td>
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<tr>
<td>Mid / Rear Upper Bearing Carrier</td>
<td>30 ft. lbs. (41 Nm)</td>
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<tr>
<td>Upper / Lower Shock Bolts</td>
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<tr>
<td>Stabilizer Bar to Frame</td>
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<tr>
<td>Stabilizer Bar Linkage Bushings</td>
<td>17 ft. lbs. (23 Nm)</td>
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<tr>
<td>Front Wheel Hub Castle Nut</td>
<td>80 ft. lbs. (108 Nm)</td>
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<td>Mid / Rear Wheel Hub Castle Nut</td>
<td>110 ft. lbs. (150 Nm)</td>
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<tr>
<td>Wheel Nuts (Cast Rims)</td>
<td>30 ft. lbs. + 90° (1/4 turn)</td>
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<tr>
<td>Wheel Nuts (Steel Rims)</td>
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<tr>
<td>Outer Tie Rod to Bearing Carrier</td>
<td>40 ft. lbs. (54 Nm)</td>
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<tr>
<td>Tie Rod End Jam Nut</td>
<td>12-14 ft. lbs. (17-19 Nm)</td>
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<tr>
<td>Seat Belt to Cab Frame</td>
<td>35-40 ft. lbs. (47-54 Nm)</td>
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<tr>
<td>Seat Belt to Seat Base</td>
<td>36-44 ft. lbs. (49-60 Nm)</td>
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<tr>
<td>Steering Wheel to Shaft</td>
<td>25-31 ft. lbs. (34-42 Nm)</td>
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<tr>
<td>Upper Steering Shaft to U-Joint Shaft</td>
<td>15-19 ft. lbs. (20-26 Nm)</td>
</tr>
<tr>
<td>Lower Steering Shaft to Steering Box</td>
<td>30 ft. lbs. (41 Nm)</td>
</tr>
<tr>
<td>Steering Box</td>
<td>17 ft. lbs. (23 Nm)</td>
</tr>
</tbody>
</table>

**NOTE:** Refer to exploded views throughout this chapter for more torque specifications, component identification, and location of components.

### SPECIAL TOOLS

<table>
<thead>
<tr>
<th>TOOL DESCRIPTION</th>
<th>PART NUMBER</th>
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<tbody>
<tr>
<td>Shock Spanner Wrench</td>
<td>2871095</td>
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<tr>
<td>Shock Spanner Wrench (W.E.)</td>
<td>2870803</td>
</tr>
<tr>
<td>Shock Spring Compressor Tool</td>
<td>2870623</td>
</tr>
<tr>
<td>Multi-Function Pliers</td>
<td>2876389</td>
</tr>
</tbody>
</table>

**SPX Corp:** 1-800-328-6657 or http://polaris.spx.com/

**Multi-Function Pliers**

Included in the tool kit, this multi-function pliers is designed to remove plastic push rivets and install body components.
CAB FRAME / SEAT BACK / HEADREST / PVT AIR INTAKE BAFFLE BOX

Exploded View / Assembly (XP / HD / 6x6)

1. Assemble RH / LH cab frame side hoops by sliding tube over the rear coupler. Secure using (2) 5/16” bolts and nuts. Line up front side hoop couplers with front frame couplers and secure using (4) 3/8” screws and nuts. Leave all fasteners finger tight.

2. Attach the front cab frame cross tube to the side hoops using (4) M10 bolts. Attach the rear cab frame cross tube to the side hoops using (4) M10 bolts. Leave all fasteners finger tight.

3. Loosely install the rear cab frame X brace to the side hoops using (8) M8 bolts and nuts. Leave all fasteners finger tight.

4. Tighten (8) front and rear cab frame cross tube fasteners installed during Step 2 to 25-28 ft. lbs. (34-38 Nm).

5. Tighten (2) 5/16” fasteners installed during Step 1 to 16-18 ft. lbs. (20-24 Nm) and (4) 3/8” fasteners to 25-28 ft. lbs. (34-38 Nm).

6. Tighten (8) M8 X brace fasteners installed during Step 3 to 16-18 ft. lbs. (20-24 Nm).

7. Fasten the seat back to the X brace using (8) #14 self-tapping screws. Tighten fasteners to 18-20 in. lbs. (2-2.25 Nm).

8. Slide the clutch air intake box over the clutch intake hose. Attach the clutch air intake box to the seat back using (4) #14 self-tapping screws. Tighten fasteners to 18-20 in. lbs. (2-2.25 Nm).

9. Attach each headrest to the rear cab frame using four 1/4” self-tapping fasteners. Place washers between the fastener head and headrest as shown below. Torque fasteners to 10 in. lbs. (1 Nm).
Exploded View / Assembly (CREW)

1. Assemble RH / LH front cab frame side hoops by sliding tube over the rear coupler. Secure using (2) 5/16” bolts and nuts. Line up front side hoop couplers with front frame couplers and secure using (4) 3/8” screws and nuts. Leave all fasteners finger tight.

2. Attach the front cab frame cross tube to the side hoops using (4) M10 screws. Install the rear cab frame cross tube to the side hoops using (4) M10 screws. Leave all fasteners finger tight.

3. Loosely install the rear cab frame K brace to the side hoops using (8) M8 screws and nuts. Leave all fasteners finger tight.

4. Tighten (8) front and rear cab frame cross tube fasteners installed during Step 2 to 25-28 ft. lbs. (34-38 Nm).

5. Tighten (2) 5/16” fasteners installed during Step 1 to 16-18 ft. lbs. (20-24 Nm) and (4) 3/8” fasteners 25-28 ft. lbs. (34-38 Nm).

6. Tighten the (8) M8 K brace fasteners installed during Step 3 to 16-18 ft. lbs. (20-24 Nm).

7. Assemble the RH and LH rear cab frame side hoops by sliding the tube over the rear coupler. Secure using (2) 5/16” bolts and nuts. Line up the front upper rear hoop couplers with the rear cab frame cross tube holes and secure using (2) M10 screws and nuts. Leave all fasteners finger tight.

8. Install the rear cab frame cross tube to the rear side hoops using (4) M10 screws. Leave all fasteners finger tight.

9. Loosely install the rear cab frame X brace to the rear side hoops using (8) M8 screws and nuts. Leave all fasteners finger tight.

10. Tighten (2) 5/16” fasteners installed during Step 7 to 16-18 ft. lbs. (20-24 Nm) and (4) M10 fasteners to 25-28 ft. lbs. (34-38 Nm).

11. Tighten the (4) rear cab frame cross tube fasteners installed during Step 8 to 25-28 ft. lbs. (34-38 Nm).

12. Tighten the (8) M8 X brace fasteners installed during Step 9 to 16-18 ft. lbs. (20-24 Nm).

13. Fasten the seat back to the rear cab frame X brace using (8) #14 self-tapping screws. Tighten fasteners to 18-20 in. lbs. (2-2.25 Nm). Repeat this step to attach the front seat back to the mid cab frame K brace.

14. Slide the clutch air intake box over the clutch intake hose. Attach the clutch air intake box to the seat back using (4) #14 self-tapping screws. Tighten fasteners to 18-20 in. lbs. (2-2.25 Nm).

15. Attach the headrest to the rear cab frame using (4) 1/4” self-tapping fasteners. Place washers between the fastener head and headrest as shown below. Torque fasteners to 10 in. lbs.
BODY / STEERING / SUSPENSION

BODY EXPLODED VIEWS

Dash Instruments / Controls

A. Instrument Cluster (Speedo)
B. Headlight Switch
C. AWD / 2WD / TURF Switch
D. 12 Volt Accessory Receptacle (2)
E. Rubber Mount
F. Key Switch
G. Grommet
H. Push Rivet
I. Dash Plug
J. Dash Panel
Hood / Dash / Front Fenders / Front Fascia

- Hood Liner
- Cup Holder
- U-Type Speed Nut
- T27 Screws 4-6 ft. lbs. (6-8 Nm)
- Push Rivets
- T20 Screws
- T27 Screws 4-6 ft. lbs. (6-8 Nm)
- Front RH Fender
- Front LH Fender
- U-Type Speed Nut
- T27 Screws
- Fascia Screen
- T27 Screws 4-6 ft. lbs. (6-8 Nm)
- Dash
- Front Fascia
- Hinge
- T27 Screw 4-6 ft. lbs. (6-8 Nm)
INSTALLING NEW FOAM: Make sure surface is clean and has been flame treated. Be sure to compress foam > 50%, and make sure you don’t trap any air.

- Rear RH Fender Rocker Panel
- T27 Screws 4-6 ft. lbs. (6-8 Nm)
- Push Rivets
- Floor Cover
- Main Floor
- Wheel Well Panels
- Push Rivets
- Skid Plate
- Rear LH Fender Rocker Panel
- Push Rivets
- U-Type Speed Nut
- Foam
- Rear Floor
- Storage Container
- T27 Screws 4-6 ft. lbs. (6-8 Nm)
- Push Rivets

Screws 6-8 ft. lbs. (8-10 Nm)
2012 Floor / Rear Fenders (XP / HD / 6x6)

Rear RH Fender
Rocker Panel

T27 Screws
4-6 ft. lbs.
(6-8 Nm)

Floor Cover

Main Floor

Wheel Well Panels

Deflector

Screws
6-8 ft. lbs.
(8-10 Nm)

Push Rivets

Rear LH Fender
Rocker Panel

Skid Plate

Storage Container

U-Type Speed Nut

Heat Shield

U-Type Speed Nut

Plug

T27 Screws
4-6 ft. lbs.
(6-8 Nm)

T27 Screws
4-6 ft. lbs.
(6-8 Nm)

T27 Screws
4-6 ft. lbs.
(6-8 Nm)

T27 Screws
4-6 ft. lbs.
(6-8 Nm)
2011 Floor / Rear Fenders (CREW)

INSTALLING NEW FOAM: Make sure surface is clean and has been flame treated. Be sure to compress foam > 50%, and make sure you don’t trap any air.
2012 Floor / Rear Fenders (CREW)

- Underseat Storage box
- Floor Cover
- Main Floor
- Rear Floor
- RH Fenders Rocker Panels
- Grommet
- U-Type Speed Nut
- Rear LH Fender Rocker Panel
- Front LH Fender Rocker Panel
- Skid Plates
- T27 Screws 4-6 ft. lbs. (6-8 Nm)
- Push Rivets
- Deflector
- Wheel Well Panels
- U-Type Speed Nut
- Heat Shield
- Storage Container
- Plug
- U-Type Speed Nut Retainer
- Underseat Storage box
- Mid Floor
- Rear Lower Floor
- Push Rivets
- Screws 6-8 ft. lbs. (8-10 Nm)
- Screws 4-6 ft. lbs. (6-8 Nm)
Seat Mounting / Seat Belts (XP / HD / 6x6)

- RH 3-Point Seat Belt: Bolt 36-44 ft. lbs. (49-60 Nm)
- LH 3-Point Seat Belt: Bolt 35-40 ft. lbs. (47-54 Nm)
- T30 Screws: 18-20 in. lbs. (2-2.5 Nm)
- Lap Belt
- Bolt: 18-20 in. lbs. (1.6-2.3 Nm)
- Seat Base Frame
- Grommet
- Seat Support Bracket: 2012 Only
- Heat Shield: 2012 Only
Seat Mounting / Seat Belts (CREW)

- **Seat Base**
- **Seat Back**
- **Foil**
- **Lap Belt**
- **T30 Screws** 18-20 in. lbs. (2-2.5 Nm)
- **Seat Support Bracket** 2012 Only
- **Heat Shield** 2012 Only
- **RH 3-Point Seat Belt (x2)**
- **LH 3-Point Seat Belt (x2)**
- **Bolt 35-40 ft. lbs. (47-54 Nm)**
- **Bolt 35-40 ft. lbs. (47-54 Nm)**
- **Bolt 36-44 ft. lbs. (49-60 Nm)**
- **Bolt 36-44 ft. lbs. (49-60 Nm)**
- **Bolt 36-44 ft. lbs. (49-60 Nm)**
- **Bolt 36-44 ft. lbs. (49-60 Nm)**
- **Bolt 36-44 ft. lbs. (49-60 Nm)**
- **LH 3-Point Seat Belt (x2)**
- **RH 3-Point Seat Belt (x2)**
- **LH 3-Point Seat Belt (x2)**
- **RH 3-Point Seat Belt (x2)**
- **Front Seat Supports**
- **Pad**
- **Grommet**
- **Grommet**
- **Grommet**
- **Grommet**
REAR CARGO BOX

Cargo Box - Panels

- RH Box Panel
- LH Box Panel
- Front Box Panel
- Tailgate Support
- Latch
- Cargo Box
- Foil (2012 Only)

T30 Screws
T20 Screws
T20 Screw
T20 Screws
Cargo Box - Tailgate / Box Support

- Tailgate Bracket
- Tailgate Cable
- Outer Panel
- Latch
- Rod
- Inner Panel
- Tailgate Cap
- Tailgate Tube
- T30 Screws
- T27 Screw
- Box Support
- Box Latch
- Heat Shield
- Springs
- Bushings
- Clip
- Shock Pins
- Bumper
- Screw
- Hinge Bolt (M10)

Screws:
- T20 Screws
- T30 Screws
- T27 Screws

Torque:
- 4-6 ft. lbs. (6-8 Nm)
Box Removal

1. Lift the cargo box into the dump position.

2. Disconnect the rear wire harness attached to the tail lights.

3. Remove the upper clip and pin attaching the shock to the cargo box.

4. Remove the lower clip and pin attaching the shock to the vehicle frame if replacing the box shock.

5. Remove nut (A) and bolt (B) that secure the box frame on both pivot points.

6. With both hinge bolts removed, lift the box from the frame. Two people or an appropriate hoist may be needed to remove the box from the frame.

**CAUTION**

Safely support the box during the remainder of the removal process. The box is not as stable with the shock removed.

**CAUTION**

Safely support the box during the remainder of the removal process. The box is not as stable with the hinge pins removed.

**CAUTION**

Use caution when removing the box. It is recommended to have two people carefully remove the box from the frame.
Box Installation

1. If the shock was removed, install the lower portion of the shock to the frame and secure it with the pin and clip.

2. Place the cargo box onto the frame. Align the hinges of the box with the bracket on the frame.

3. Install the box hinge bolts on both sides.

4. Install the hinge bolt nuts on both sides and torque the nut to 30 ft. lbs. (41 Nm).

5. With the hinge bolts installed, attach the shock to the cargo box by inserting the pin and clip.

6. Connect tail light harness connector.

7. Lower the box and secure the latch.
REAR STORAGE BOX (6X6)

Exploded View

- Rivets
- Latch
- Seal
- Hex Screws
- Plug
- Tabs
- Storage Box Base
- Mount Brackets
- RH Lid
- LH Lid
- T25 Screws
- Rivets
- Latch
- Hex Screws
- Plug
- Rivets
BODY COMPONENT REMOVAL

Lower Seat Base
1. Lift up on the front of the seat base to disengage the seat from the rubber grommets.
2. Pull the seat base forward to disengage the rear tabs and remove the seat base from the vehicle.

Wheel Well Panels
1. Using the multi-function pliers, remove the (6) push rivets from the LH panel and the (5) push rivets from the RH panel.
2. Pull both panels out from the wheel wells.

Front Bumper
1. Remove the (2) T27 Torx-head screws retaining the fascia screen and remove the screen.
2. Remove the (3) bolts from lower portion of bumper.
3. Remove the fasteners from each side of the upper portion of the bumper.
4. Carefully remove the bumper from the vehicle.

Front Fascia
1. Remove the (2) T27 Torx-head screws retaining the fascia screen and remove the screen.
2. Remove the remaining T27 Torx-head fasteners shown
3. Turn the headlight bulbs counter-clockwise 90° and remove the bulbs from the head lamps.
4. Carefully remove the fascia from the vehicle.
Front Fenders

1. Remove the lower T27 Torx-head screws retaining the front fascia (see “Front Fascia”).

2. Remove the (4) push rivets retaining the front fender and remove the fender from the vehicle.

3. Repeat this procedure to remove other front fenders.

Hood / Dash

1. Remove front fascia (see “Front Fascia” removal).

2. Unlatch the hood and remove the (2) T27 Torx-head screws to remove the hood assembly.

3. Remove the front portion of the cab frame on each side to allow dash removal (see “Cab Frame - Exploded View”).

4. Remove the (2) T25 Torx-head screws retaining the front of the dash to the hood liner.

5. Open the glove box and remove the (4) T20 Torx-head screws from the dash.

6. Remove the (5) T25 Torx-head screws retaining the rear portion of the dash.

7. Remove the (8) fasteners from each side of the dash where it attaches to the front and rear fenders.

8. Remove the rubber boots from around the parking brake and shift lever.

9. Remove the (2) push rivets from dash panel (see “Dash Instruments/Controls”). Unhook all electrical components to allow panel to be completely removed.

10. Carefully remove the dash assembly from the vehicle.

Glove Box / Storage Panel

1. Remove the hood / dash (see “Hood / Dash”).

2. Remove the (7) T27 Torx-head screws retaining the glove box storage panel.

3. Disconnect 12V power outlets and remove assembly.
Rear Fenders (XP / HD / 6x6)

1. Remove (11) T27 Torx-head screws and (3) push rivets retaining the rear fender.

NOTE: If removing the RH side, remove the fuel cap as well. Reinstall fuel cap after fender removal.
2. Repeat this procedure to remove other rear fender.

Floor (XP / HD / 6x6)

1. Remove (7) T27 Torx-head screws retaining the rear floor. Disconnect ECU harness and remove the rear floor.
2. Remove (8) T27 Torx-head screws retaining the floor cover and remove the floor cover from the vehicle.
3. Loosen the glove box/storage panel fasteners to access the screws retaining the upper portion of the main floor (see “Glove Box / Storage Panel”).
4. Remove (14) T27 Torx-head screws retaining the main floor. Remove (4) nuts retaining the brake/throttle pedal mount and remove the main floor from the vehicle.
Mid / Rear Fenders (CREW)

1. Remove (19) T27 Torx-head screws and (6) push rivets retaining the fenders.

   NOTE: If removing the rear RH side, remove the fuel cap as well. Reinstall fuel cap after fender removal.
2. Repeat this procedure to remove the other fenders.

Floor (CREW)

1. Remove (7) T27 Torx-head screws retaining either rear floor. Disconnect ECU harness if removing the passenger rear floor.
2. Remove (8) T27 Torx-head screws retaining the floor cover and remove the floor cover from the vehicle.
3. Loosen the glove box/storage panel fasteners to access the screws retaining the upper portion of the main floor (see “Glove Box / Storage Panel”).
4. Remove (14) T27 Torx-head screws retaining the main floor and remove (4) nuts retaining the brake/throttle pedal mount. Remove main floor from vehicle.
5. See illustration if further disassembly is required.
STEERING ASSEMBLY

Exploded View

- Cap
- Steering Wheel
- 25-31 ft. lbs. (34-42 Nm)
- Thick Washer
- Thin Washer
- Bearing
- Pivot Tube
- 23 ft. lbs. (31 Nm)
- Bushing
- Steering Shaft
- 7 ft. lbs. (10 Nm)
- Oil Locking Shock Asm.
- 12 ft. lbs. (16 Nm)
- 23 ft. lbs. (31 Nm)
- Spacer
- Thin Washer
- Thick Washers
- Thin Washer
- Bearing
- Gear Box Asm.
- 30 ft. lbs. (41 Nm)
- Boot
- Tie Rod
- 40 ft. lbs. (54 Nm)
- Rod End
- Cotter Pin
- 12-14 ft. lbs. (16-19 Nm)
- 40 ft. lbs. (54 Nm)
- 17 ft. lbs. (23 Nm)
- 12-14 ft. lbs. (16-19 Nm)
Steering Wheel Removal (Non-EPS Models)

1. Remove the steering wheel cap.
2. Loosen the nut and back it half way off the steering shaft.
3. With a glove on your hand, place it under the steering wheel. Lift upward on the inner portion of the steering wheel while using a hammer to strike the steering shaft nut.

**IMPORTANT:** If the steering wheel will not pop loose, proceed to “Steering Shaft Removal”.

4. Once the steering wheel pops loose, completely remove the nut and lift the steering wheel off the shaft.

Steering Shaft Removal (Non-EPS Models)

1. Remove the pinch bolt retaining the lower portion of the steering shaft to the steering gear box assembly.
2. Remove the fastener retaining the upper portion of the steering wheel tilt shock to the pivot tube.
3. Remove the (2) fasteners that retain the pivot tube.
4. Remove the steering shaft, pivot tube and steering wheel from the vehicle as an assembly.
5. Refer to steps 11-13 of the “Steering Shaft Bearing Replacement” procedure for installation.
Steering Shaft Bearing Replacement

IMPORTANT: Replacement pivot tube assembly comes with new upper and lower bearings installed. Use this procedure if replacing just the bearings only.

1. Perform the “Steering Shaft Removal” procedure.
2. Remove the steering wheel cap and retaining nut.
3. Press steering shaft out of the steering wheel and pivot tube.
4. Note the order and location of the washers and spacers between the steering wheel and pivot tube.
5. Drive the bearings out of the pivot tube using a drift punch.
6. Inspect the pivot tube bearing surfaces for signs of excessive wear or damage.
7. Apply Loctite® 271™ (Red) to the outer circumference of the new lower bearing race. Slide the new lower bearing onto the steering shaft and install the steering shaft through the pivot tube.

NOTE: Use care not to allow any of the Loctite® to get in the bearing.

9. Reinstall the upper washers and spacers in the order in which they were removed.
10. Install the steering wheel and hand tighten the nut.
11. Reinstall the steering shaft assembly in the vehicle. Install the lower portion of the steering shaft onto the steering gear box assembly (see Figure 5-16). Torque the lower pinch bolt to 30 ft. lbs. (41 Nm).
12. Install the (2) fasteners that retain the pivot tube (see Figure 5-17). Torque fasteners to 23 ft. lbs. (31 Nm).
13. Install the fastener retaining the upper portion of the steering wheel tilt shock to the pivot tube (see Figure 5-17). Torque fastener to 7 ft. lbs. (10 Nm).
14. Be sure the front wheels are facing straight forward. Remove the steering wheel and align as needed. Torque the steering wheel nut to 28 ft. lbs. (38 Nm).
15. Wipe the pivot tube clean of any excess Loctite®.
16. Install steering wheel cap and field test steering operation.

NOTE: Bearings will be seated in the pivot housing upon tightening the steering wheel nut in step 14.

NOTE: Be sure the lower washers and spacers are still on the steering shaft.

8. Apply Loctite® 271™ (Red) to the outer circumference of the new upper bearing race. Slide the new upper bearing onto the steering shaft and press it into the pivot tube by hand.

NOTE: Use care not to allow any of the Loctite® to get in the bearing.
POWER STEERING ASSEMBLY (EPS)

Exploded View

To Pivot Tube

Upper PS Shaft

Power Steering Unit

Mounting Bracket

Lower PS Shaft

20-24 ft. lbs. (27-33 Nm)

30 ft. lbs. (41 Nm)

Nut

To Gear Box Asm.

15-19 ft. lbs. (20-26 Nm)

15-19 ft. lbs. (20-26 Nm)
Steering Wheel Removal (EPS Models)

1. Remove the upper steering shaft, pivot tube and steering wheel as an assembly *before* attempting to remove the steering wheel. Refer to “Power Steering Unit Removal (EPS Models)”.

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Striking the steering wheel or steering shaft while installed in the vehicle can permanently damage the EPS unit and cause a Power Steering Fault.</td>
</tr>
</tbody>
</table>

2. Remove the steering wheel cap.

3. Loosen the nut and back it half way off the steering shaft.

4. Place the assembly in a vise.

5. Using a large bronze drift and hammer, strike steering shaft nut to pop the steering wheel off the shaft taper.

6. Once the steering wheel pops loose, completely remove the nut and lift the steering wheel off the shaft.

Power Steering Unit Removal

1. Remove the cup holders from the upper dash panel.

2. Remove the fasteners retaining the lower dash panel and glove box.

3. Disconnect 12V outlets.
3. Carefully remove the lower dash panel assembly from the vehicle. Disconnect the 12V outlets upon removal.

4. Locate power steering unit under the steering column.

5. Disconnect the (2) electrical harnesses and remove the pinch bolt retaining the upper power steering shaft to the power steering unit.

6. Remove the upper fastener retaining the steering tilt shock to the pivot tube and swing the shock down out of the way.

7. Secure the steering wheel in the upward position to gain access to nuts (A) through the dash slot. Reach up under dash to gain access to shoulder bolts (B). Remove both nuts and pivot tube shoulder bolts (A and B). DO NOT REMOVE STEERING WHEEL.

8. Pull plastic dash up slightly and lift up on the steering wheel / pivot tube / upper steering shaft assembly. Remove assembly from vehicle and set in a suitable location.

9. Remove the pinch bolt retaining the lower power steering shaft to the power steering unit.

CAUTION

Striking the steering wheel or steering shaft can permanently damage the EPS unit and cause a Power Steering Fault.
10. Remove the (3) bolts retaining the power steering unit to the mounting bracket and remove the power steering unit from the vehicle.

2. Torque the mounting bolts to specification.

3. Install pinch bolt retaining the lower power steering shaft to power steering unit. Torque to specification.

**WARNING**
Electronic Power Steering (EPS) units are not interchangeable between ATV and RANGER product lines.

---

**Power Steering Unit Installation**

Refer to the “Power Steering Unit Removal” procedure for detailed photos and illustrations during installation.

1. Install power steering unit onto mount bracket and align skip-tooth spline on power steering stub shaft with the opening in the lower power steering shaft.

2. Torque the mounting bolts to specification.

3. Install pinch bolt retaining the lower power steering shaft to power steering unit. Torque to specification.

4. Position steering wheel / pivot tube / upper steering shaft assembly into the proper mounting location. Be sure front wheels are pointing straight ahead and that the steering wheel is straight when installing the upper steering shaft onto the upper power steering stub.

5. Align skip-tooth spline on power steering stub shaft with the opening in the upper power steering shaft.
6. Loosely install pivot tube shoulder bolts (B) and nuts (A).

7. Install upper shaft pinch bolt and torque to specification.

8. Verify that the pivot tube bushings are properly seated into the pivot tube. Torque the pivot tube shoulder bolts and nuts to specification.

9. Install tilt shock and torque fastener to specification.

10. Reconnect both electrical harnesses onto the power steering unit. Be sure the connectors snap into place and the wires are routed correctly.

11. Reinstall the lower dash panel and glove box. Be sure to reconnect the 12V outlets upon assembly.

12. Turn the key switch on and test EPS operation.

6. Loosely install pivot tube shoulder bolts (B) and nuts (A).

7. Install upper shaft pinch bolt and torque to specification.

8. Verify that the pivot tube bushings are properly seated into the pivot tube. Torque the pivot tube shoulder bolts and nuts to specification.

9. Install tilt shock and torque fastener to specification.

10. Reconnect both electrical harnesses onto the power steering unit. Be sure the connectors snap into place and the wires are routed correctly.

11. Reinstall the lower dash panel and glove box. Be sure to reconnect the 12V outlets upon assembly.

12. Turn the key switch on and test EPS operation.

FRONT A-ARMS

Removal / Replacement

The following procedure details upper and lower A-arm removal and replacement on one side of the vehicle.

1. Elevate and safely support the front of the vehicle and remove the front wheel.

2. Remove the lower shock fastener (A) from the upper A-arm.

3. Remove the brake line clamp from the A-arm.

4. Remove the upper ball joint pinch bolt (B) from the front bearing carrier.

5. Using a soft face hammer, tap on bearing carrier to loosen the upper A-arm ball joint end while lifting upward on the upper A-arm. Completely remove the ball joint end from the bearing carrier.

6. Loosen and remove the upper A-arm through-bolt fasteners (C) and remove the upper A-arm from the vehicle.

7. Examine A-arm bushings and pivot tubes (see “Exploded View”). Replace if worn. Discard hardware.

8. If not replacing the A-arm, thoroughly clean the A-arm and pivot tubes.

9. Install new ball joint into A-arm. Refer to “Ball Joint Replacement” section.

10. Insert new A-arm bushings and pivot tubes into new A-arm.

11. Install new upper A-arm assembly onto vehicle frame. Torque new bolts to 30 ft. lbs. (41 Nm).

12. Insert upper A-arm ball joint end into the bearing carrier. Install the upper ball joint pinch bolt (B) into the bearing carrier and torque bolt to 23 ft. lbs. (31 Nm).


14. Remove the lower ball joint pinch bolt (D) from the front bearing carrier.

CAUTION

Striking the steering wheel or steering shaft can permanently damage the EPS unit and cause a Power Steering Fault.

WARNING

The locking agent on the existing bolts was destroyed during removal. DO NOT reuse old hardware. Serious injury or death could result if fasteners come loose during operation.

= T

Upper Power Steering Shaft Pinch Bolt: 15-19 ft. lbs. (20-26 Nm)

Pivot Tube Shoulder Bolt: 23 ft. lbs. (31 Nm)

Tilt Shock Fastener: 12 ft. lbs. (16 Nm)
15. Using a soft face hammer, tap on bearing carrier to loosen the lower A-arm ball joint end while pushing downward on the lower A-arm. Completely remove the ball joint end from the bearing carrier.

16. Loosen and remove the lower A-arm through-bolt fasteners (E) and remove the lower A-arm from the vehicle.

17. Examine A-arm bushings and pivot tubes (see “Exploded View”). Replace if worn. Discard hardware.

18. If not replacing the A-arm, thoroughly clean the A-arm and pivot tubes.

19. Install new ball joint into A-arm. Refer to “Ball Joint Replacement” section.

20. Insert new A-arm bushings and pivot tubes into new A-arm.

21. Install new lower A-arm assembly onto vehicle frame. Torque new bolts to 30 ft. lbs. (41 Nm).

22. Insert lower A-arm ball joint end into the bearing carrier. Install the lower ball joint pinch bolt (D) into the bearing carrier and torque bolt to 23 ft. lbs. (31 Nm).

**WARNING**

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

**Upper / Lower A-arm Bolt Torque:**
30 ft. lbs. (41 Nm)

**Ball Joint Pinch Bolt Torque:**
23 ft. lbs. (31 Nm)
BALL JOINT SERVICE

Removal

IMPORTANT: Do not reuse a ball joint if it has been removed for any reason. If removed, it must be replaced. Use this removal procedure only when replacing the ball joint.

1. The A-arm must be removed to perform this procedure (see “FRONT A-ARMS - Removal / Replacement”).

2. Remove the retaining ring from the ball joint.

3. A driver must be used for the removal of the ball joint. Use the dimensions below to fabricate or locate the correct size driver to use in the following process.

4. Use a press and correct size driver to remove the ball joint from the A-arm.

NOTE: The driver must fit the ball joint housing in the A-arm. This will allow the ball joint to be properly pressed out of the A-arm without damaging the A-arm.

- Outside diameter of driver cannot be any larger than 1.75 in. (4.45 cm).
- Inside diameter cannot be any smaller than 1.375 in. (3.49 cm).
- Driver must be at least 3 in. (7.62 cm) tall.
Installation

1. Place the A-arm in the correct position for ball joint installation. Face the A-arm end flat on top of the driver. Carefully drive the ball joint into place until the ball joint is properly seated.

2. After the new ball joint is installed into the A-arm, install a NEW retaining ring.

3. Reinstall the A-arm (see “FRONT A-ARMS - Removal / Replacement”).

4. Repeat the ball joint service procedure for any additional A-arm ball joint replacements.
MID / REAR A-ARMS

Removal / Replacement

The following procedure details upper and lower A-arm removal and replacement on one side of the vehicle. Repeat the following steps to remove the A-arm(s) from the opposite side.

NOTE: Use the exploded view in this section as a reference during the procedure.

1. Elevate and safely support the rear of vehicle off the ground and remove the mid or rear wheel.

Upper A-arm Removal

2. Remove the fastener retaining the lower portion of the shock and stabilizer linkage to the upper A-arm.

3. Remove the fastener attaching the upper A-arm to the bearing carrier.

4. Remove the fasteners attaching the upper A-arm to the frame and remove the upper A-arm from the vehicle.

5. Examine A-arm and bearing carrier bushings and pivot tubes (see “Exploded View”). Replace if worn. Discard hardware.

WARNING

The locking agent on the existing bolts was destroyed during removal. DO NOT reuse old hardware. Serious injury or death could result if fasteners come loose during operation.

6. If not replacing the A-arm, thoroughly clean the a-arm and pivot tubes.

7. Insert new A-arm bushings and pivot tubes into the new A-arm.
Lower A-arm Removal

8. Remove the fastener attaching the lower A-arm to the bearing carrier.

9. Remove the fasteners attaching the lower A-arm to the frame and remove the lower A-arm from the vehicle.

10. Examine A-arm and bearing carrier bushings and pivot tubes (see “Exploded View”). Replace if worn. Discard hardware.

11. If not replacing the A-arm, thoroughly clean the a-arm and pivot tubes.

12. Insert new A-arm bushings and pivot tubes into the new A-arm.

Installation

1. Install lower A-arm assembly onto vehicle frame. Torque new fasteners to 30 ft. lbs. (41 Nm).

2. Attach lower A-arm to bearing carrier. Torque new fastener to 30 ft. lbs. (41 Nm).

3. Route the brake line over the top of the lower A-arm and secure it in the retainer.

4. Install upper A-arm assembly onto vehicle frame. Torque new fasteners to 30 ft. lbs. (41 Nm).

5. Attach upper A-arm to bearing carrier. Torque new fastener to 30 ft. lbs. (41 Nm).

6. Reinstall the lower portion of the shock and stabilizer linkage to the upper A-arm. Torque shock / linkage fastener to 30 ft. lbs. (41 Nm).

7. Install wheel and torque wheel nuts to specification (see Chapter 2).

**WARNING**

Upon A-arm installation completion, test vehicle at low speeds before putting into service.
REAR STABILIZER BAR / LINKAGE

Removal / Installation

1. Elevate and safely support vehicle with weight removed from the rear wheel(s).

2. Remove the retaining nut from the upper portion of the stabilizer bar linkage bushing on each side of the vehicle.

3. Remove the two fasteners that secure the stabilizer bar to the main frame on each side.

4. Remove the stabilizer bar from the frame and inspect the stabilizer bar for straightness.

5. Inspect the stabilizer bar bushings and replace if needed.

6. Inspect the rubber bushings on the stabilizer linkage rod and replace if needed. If replacing the stabilizer linkage, remove the lower shock bolt from the upper A-arm.

7. Reverse this procedure for installation.

8. Torque the stabilizer bar retaining bolts and upper rubber linkage bushing nuts to specification.

<table>
<thead>
<tr>
<th>Component</th>
<th>Torque Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stabilizer Bar Retaining Bolts</td>
<td>17 ft. lbs. (23 Nm)</td>
</tr>
<tr>
<td>Upper Linkage Bushing</td>
<td>17 ft. lbs. (23 Nm)</td>
</tr>
<tr>
<td>Shock Mounting Bolts</td>
<td>30 ft. lbs. (41 Nm)</td>
</tr>
</tbody>
</table>

9. If the stabilizer linkage was removed, torque the lower shock retaining bolt to specification.

Exploded View
DECAL REPLACEMENT

The side panels, front and rear fender cabs are plastic polyethylene material. Therefore, they must be “flame treated” prior to installing a decal to ensure good adhesion. A bonus of the flame treating procedure is it can be used to reduce or eliminate the whitish stress marks that are sometimes left after a fender or cab is bent, flexed, or damaged.

To flame treat the decal area:

1. Pass the flame of a propane torch back and forth quickly over the area where the decal is to be applied until the surface appears slightly glossy. This should occur after just a few seconds of flame treating. Do not hold the torch too close to the surface (2-3 inches from the flame tip is recommended). Keep the torch moving to prevent damage.

2. Apply the decal on one edge first. Slowly lay down remainder of the decal while rubbing lightly over the decal surface to eliminate any air bubbles during the application.
Shock Removal / Installation

1. Elevate the vehicle far enough off the ground to relieve the suspension load and support the A-arm.
2. Remove the upper and lower fasteners retaining the shock and remove the shock from the vehicle. Discard nuts and replace with new upon installation.
3. Reverse the procedure to reinstall the shock. Torque new fasteners to specification.

<table>
<thead>
<tr>
<th>Shock Mounting Bolts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 ft. lbs. (41 Nm)</td>
</tr>
</tbody>
</table>

Shock Replacement

1. Remove shock and note the spring preload distance or setting (see Chapter 2 for factory settings).
2. Remove spring tension in order to remove retainer:
   - **Standard**: Using a spring compressor, compress shock spring far enough to remove spring retainer.
   - **Walker Evans™**: Loosen the preload adjustment ring until the spring is loose. If needed, use a spring compressor to compress the spring far enough to remove the spring retainer.
3. Remove spring and other components from existing shock and install components onto the new shock.
4. Install the spring and spring retainer. If needed, use the spring compressor to compress the spring far enough to install the spring retainer.

**IMPORTANT**: The spring retainer gap should be 180° from the end of the spring upon installation.
5. Tighten spring preload adjustment ring (Walker Evans) or turn adjustment cam (Standard) to set preload distance noted in Step 1 (see Chapter 2 for factory settings).
6. Reinstall shock onto vehicle and torque new fasteners to specification.
SELF-LEVELING SUSPENSION (HD)

Nivomat® Shock Operation

The self-leveling Nivomat® shocks eliminate rear-end squat when carrying heavy loads.

When the RANGER HD starts moving, the Nivomat® shocks start working, automatically adjusting the box to near its unloaded height.

Nivomat® Shock Disposal / Replacement

1. Make an indentation 2 in. (50 mm) from the top of the tube using a center punch.

2. Clamp the shock absorber in a vise horizontally with the shock absorber completely extended.

3. Drill a hole in the shock absorber at the center punch using a 3/16" (5 mm) drill bit. Gas or a gas/oil mixture will exhaust when the drill bit penetrates the shock absorber. Use an oil pan and shop towels in order to contain the escaping oil.

4. Make another indentation 1 in. (25 mm) from the bottom of the tube with a center punch.

5. Drill a second hole in the shock absorber at the indentation using a 3/16" (5 mm) drill bit. Oil will exhaust when the drill bit penetrates the shock absorber. Use an oil pan and shop towels in order to contain the escaping oil.

6. Remove shock absorber from the vise. Hold the shock absorber horizontally with the holes down to drain the oil from the tube. Move the shock rod in and out of the tube to completely drain the oil from the shock.

7. Properly dispose the oil and discard the shock.
### WALKER EVANS™ SHOCK EXPLODED VIEW

**Walker Evans™ Compression Adjust Remote Reservoir Shock (RANGER L.E.)**

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Qty</th>
<th>Description</th>
<th>Ref.</th>
<th>Qty</th>
<th>Description</th>
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<td>1</td>
<td>Body Loop</td>
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<td>Detent Ball</td>
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</tbody>
</table>
WALKER EVANS™ SHOCK SERVICE

Recommended Service Intervals

Walker Evans™ Racing Shocks will perform the best if serviced at regular intervals:
- Every ride - Wash and dry the vehicle and suspension
- Every 100 hours - Visually inspect shock seals
- Every 500 hours or Annually - Change shock oil and replace seals

Front Shock Service Information

Rear Shock Service Information

<table>
<thead>
<tr>
<th>SHOCK DESIGN DETAILS</th>
<th>Travel (Stroke)</th>
<th>Extended Length</th>
<th>IFP Location</th>
<th>Nitrogen Pressure</th>
<th>Gas Shock Oil</th>
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<tbody>
<tr>
<td>Front Shock</td>
<td>5.985”</td>
<td>18.035”</td>
<td>3.375” (85.725 mm)</td>
<td>200 ± 10 psi</td>
<td>2874522 (qt.) WE 5 wt.</td>
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<td>16.385”</td>
<td>3.375” (85.725 mm)</td>
<td>200 ± 10 psi</td>
<td>2874522 (qt.) WE 5 wt.</td>
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<table>
<thead>
<tr>
<th>SHOCK VALVING</th>
<th>COMPRESSION</th>
<th>REBOUND</th>
<th>CLICKER</th>
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<td>NOTE: Valve shim stacks listed as they would appear on the shaft when shock rod is locked in a vise (eyelet down, threaded end up).</td>
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<td>Piston Bleed Orifice: .073</td>
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<th>SHOCK VALVING</th>
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<th>CLICKER</th>
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<td>.750 x .065</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.50 x .100</td>
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<tr>
<td>Piston Bleed Orifice: .073</td>
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</tbody>
</table>

Piston Bleed Orifice: .073
Walker Evans™ Shock Rebuild Information

When performing maintenance on Walker Evans™ shocks, use the Gas Shock Recharging Kit (PN 2200421), as it contains the necessary valves, pressure gauge, and fittings to deflate and pressurize shocks.

[WARNING]

Walker Evans™ shocks contain high pressure nitrogen gas. Extreme caution must be used while handling and working with Walker Evans™ shocks and related high pressure service equipment. The pressure must be released from the shock before disassembly. It is strongly recommended you wear safety glasses and ear protection during these procedures.

Valve Shim Arrangement

Shown below is an example of how valving stacks are arranged.

**NOTE:** The rebound and compression valve stacks will always be positioned as shown in the illustration, regardless of how the shock assembly is installed.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2200421</td>
<td>Gas Shock Recharging Kit</td>
</tr>
<tr>
<td>2201640</td>
<td>Shock Shaft Seal Protector .625&quot; Diameter</td>
</tr>
<tr>
<td>2870803</td>
<td>Shock Spring Pre-Load Adjustment Tool</td>
</tr>
<tr>
<td>PS-45908</td>
<td>IFP Tool</td>
</tr>
</tbody>
</table>

Piston Orientation

The face of the piston with the greater number of relief ports will always face the rebound valve stack.
Walker Evans™ Shock Disassembly

IMPORTANT: To prevent damage or marks to the shock, the use of soft jaws on a vise is recommended.

**WARNING**

Walker Evans™ shocks contain high pressure nitrogen gas. Extreme caution must be used while handling and working with Walker Evans™ shocks and related high pressure service equipment. The pressure must be released from the shock before disassembly. It is strongly recommended you wear safety glasses and ear protection during these procedures.

1. Clean and carefully remove shock from the vehicle.
2. Secure shock in a vise using soft jaws to prevent cosmetic damage. Back preload adjuster all the way down and carefully remove spring retainer and spring.
3. Remove the valve cap from the end of the reservoir.
4. Carefully depressurize the shock.
5. Using a snap ring pliers, remove the retaining ring from the reservoir.
6. Carefully remove the cap from the reservoir body.
7. Using a 1" open-end wrench, loosen and remove the bearing cap from the shock body.
8. Slowly lift up and remove the shock rod assembly from the shock body.

9. Remove the used oil from the shock body.

NOTE: Insert the IFP Tool (PS-45908) and cycle the Internal Floating Piston (IFP) a few times to purge the shock oil from the line and reservoir.

10. Remove the floating piston from the shock reservoir using the IFP Tool (PS-45908).

IMPORTANT: Seal kits are available and should be installed at this time if seals or O-rings are damaged or worn.

12. Place the shock rod in a vise so the threaded part is facing up. Using an 11/16" socket, remove the nut retaining the valve stack and piston.

IMPORTANT: Keep the rebound and compression valve stacks in the order they were removed. If unsure of order, refer to “Shock Valving” under the “Shock Service Information” provided earlier in this section.

13. Place the valve stack on a clean shop towel in order of removal.

14. Inspect the valves for kinks, waves, pits or foreign material.

15. Inspect the piston wear band and replace if damaged or worn.

11. Clean and inspect ALL parts and replace as needed.
16. Using a 9/16" socket w/extension, remove the fastener retaining the clicker valve stack. Place the valve stack on a clean shop towel in order of removal.

**IMPORTANT:** Keep the valve stack in the order it was removed. If unsure of order, refer to “Shock Valving” under the “Shock Service Information” provided earlier in this section.

17. Inspect the valves for kinks, waves, pits or foreign material.

18. Thoroughly clean all shock components and shock body prior to assembly.

**Walker Evans™ Shock Assembly**

1. Secure the shock rod in a vise with the threads of the rod facing up.

2. Place the compression valve stack on the rod in the reverse order of disassembly.

3. Place the valve piston on top of the compression stack.

**IMPORTANT:** If unsure of the valve stack order, refer to “Shock Valving” under the “Shock Service Information” provided earlier in this section.

4. Place a new lock nut onto the shock rod. Torque the new lock nut to specification.

**IMPORTANT:** Do not over torque the nut or damage to the valve stack can occur.

**NOTE:** Make sure “Top-Out” washers are orientated as shown.

5. Assemble the clicker valve stack on top of the fastener and install the assembly into the reservoir body. Tighten the valve stack fastener securely.

**LOCK NUT:**

14 ft. lbs. (19 Nm)

**NOTE:** Actual valve stack may differ from what is shown here.
6. Turn the compression adjuster knob counterclockwise (soft) until it stops, so damping is in the full open position.

7. Secure the shock body in a vise by its lower mount.

8. Fill the shock body and remote reservoir 1/2 full of the recommended gas shock oil.


10. Apply a thin film of oil to the IFP O-ring and wear band. Insert the IFP into the reservoir until it is completely submerged. Allow air to escape as you install the piston.

11. Screw the IFP Tool (PS-45908) onto the floating piston.

Recommended Shock Oil:
Racing Gas Shock Oil (PN 2874522) (Quart) 5 Weight for Walker Evans Shocks
12. Slowly cycle the IFP up and down.
   • Be sure to bottom out the piston in the reservoir body.
   • Allow time for the bubbles to dissipate.
   • Repeat the process until all the air has been removed.

13. Pull the IFP up until its top is approximately 1" (2.54 cm) from the top of the reservoir and remove the IFP Tool. Using a 3/32" Allen wrench, install the IFP bleed screw.

14. Fill the shock body with oil approximately 1/4" below the threads.

15. Apply a thin film of oil to the wear band on the damping piston. Slowly insert the shock rod assembly into the body until the damping piston assembly is approximately 1" below the oil surface.
   • Move the rod up and down slowly over a range of about 1" until no air bubbles rise from the damping piston. Be careful to keep the damping piston at least 1/4" below the surface of the oil during this process.
   • While holding the shock rod, apply 2 - 3 sharp blows to the rod eyelet with a rubber mallet driving the piston down into the shock body. This opens the valves on the damping piston. You will see the released air bubbles come to the surface of the oil.

16. Add oil to the body tube until the surface of the oil is at the top of the shock body threads.

17. Pull the damping piston up until it is just below the surface of the oil.

18. Hold the rod eyelet with one hand. With other hand, slide the bearing cap down the shaft until contact with the body is made. Oil will overflow from around the bearing cap.

19. Screw the bearing cap assembly into the shock body by hand, holding the rod up so that the bearing cap is in contact with the bottom of the damping piston assembly. Be careful not to cross-thread the bearing assembly.

20. Using a 1" open-end wrench, tighten the bearing cap.

22. Set the IFP depth to the specified length from the top of the reservoir.

\[ \text{IFP Depth: } 3.375" \pm 0.13" \]


**NOTE:** Apply grease to the end of the Allen wrench so the bleed screw sticks to it during installation.

24. Pour the residual shock oil out of the reservoir into a proper disposal container.

25. Install the reservoir cap. Push down on the reservoir cap using even pressure until the retaining ring groove is exposed.

26. Install the retaining ring and check to make sure retaining ring is seated properly.

27. Push the shock rod assembly completely into the shock body. It should go all the way down smoothly without interference. If it does not, disassemble and reassemble per this procedure.

28. Secure the shock body in a vise by its lower mount.

29. Pressurize the shock reservoir through the Schrader® valve using the Gas Shock Recharging Kit (PN 2200421).

30. Continue filling until the shaft has fully extended and the reservoir pressure is at 200 psi.

31. Reinstall the Schrader® valve cap.

32. Clean all oil residue from the shock and reservoir with solvent, and dry with low pressure compressed air in a well ventilated area.

33. Check shock for any leaks.
34. Reinstall the compression spring and the spring retainer.

35. Thread the spring preload adjuster down against the spring and set the preload to the specified measurement (see Chapter 2).

36. Set the compression adjuster knob to the recommended setting or the original setting upon removal (see Chapter 2).

37. Remove the shock from the vise.

38. Reinstall spherical bearing O-rings and polyurethane bushings.

**NOTE:** After installation, be sure to RIDE SLOWLY initially to ensure the shock and the vehicle’s suspension is performing correctly.