

## 2010-2012 Polaris Ranger Crew Forward A-Arm Kit Installation Instructions

### www.skyjacker.com

#### **REQUIRED TOOL LIST:**

- Safety Glasses
- Floor Jack
- Jack Stands
- Metric / Standard Wrenches & Sockets
- Drill & Assorted Drill Bits
- Measuring Tape
- Retaining Ring Pliers
- Rivet Gun
- Hack Saw
- Arbor Press
- Torque Wrench



Before beginning the installation, thoroughly & completely read these instructions & the enclosed driver's WARNING NOTICE. Affix the WARNING decal in the passenger compartment in clear view of all occupants. Please refer to the Parts List to insure that all parts & hardware are received prior to the disassembly of the vehicle. If any parts are found to be missing, contact SKYJACKER<sup>®</sup> Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this product, contact SKYJACKER<sup>®</sup> Technical Assistance at 318-388-0816.

## **Component Box Breakdown:**

#### Part #: FAA301

Item #	Description	Qty	Item #	Description	Qty
P12LA-L	10-12 POL RGR LFT LWR ARM	1	P12USM-R	10-12 POL RGR RGT UPR SHK	1
P12LA-R	10-12 POL RGR RGT LWR ARM	1	PBE-3	10-12 POL RGR LWR BUMP BK	1
P12UA-L	10-12 POL RGR LFT UPR ARM	1	HB-P12A	HDW BG:P12 UPR & LWR ARMS	1
P12UA-R	10-12 POL RGR RGT UPR ARM	1	HB-P12BE	HDW BG:P12 FRT BUMPER EXT	1
P12UBE-L	10-12 POL RGR LFT UPR BMP	1	HB-P12SS	HDW BG:P12 STEERING STOPS	1
P12UBE-R	10-12 POL RGR RGT UPR BMP	1	HB-P12USM	HDW BG:P12 UPR SHOCK MTS	1
P12USM-L	10-12 POL RGR LFT UPR SHK	1	I-FAA301	INSTRUCTION SHEET: FAA301	1

## **Hardware Bag Breakdown:**

#### Part # HB-P12A

Item #	Description	Qty	Item #	Description	Qty
PA810	ARM BUSHING,10-12 POL RGR	16	RVT532-1	5/32" X .406 ALUM RIVET	2

I-FAA301 1-12 Pg 1

#### Part # HB-P12BE

Item #	Description	Qty
516X1FTB	5/16 X 1 FINE THRD BOLT	7
516FTN	5/16" FINE THRD N/I LOCKNUT	7
516SAEW	5/16 SAE WASHER	14
716X114FTB	7/16 X 1 1/4 FN THR BLT GR8	6

Item #	Description	Qty
716X312FTB	7/16 X 3 1/2 FINE THD,GR 8	2
716FTN	7/16-20 FINE N/I LOCK NUT	8
716SAEW	7/16 SAE WASHER	16

#### Part # HB-P12SS

Item #	Description	Qty
BTIE-K	BLACK BOOT TIE	2

Item #	Description	Qty
SS438	STEERING STOP,10-12 POL RGR	2

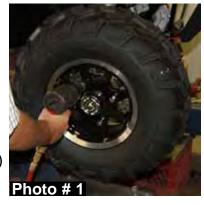
#### Part # HB-P12USM

Item #	Description	Qty
CS1281	CRUSH SLEEVE / 1.281	6
10MMX100MMB	10 X 100 METRIC BOLT/ 10.9	4
10MMN	10 MM N/I LOCKNUT	4

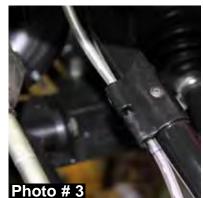
Item #	Description	Qty
38SAEW	3/8 SAE WASHER	8
516X34TCFB	5/16 X 3/4 THD CUT FLG BOLT	4

# **Installation:**

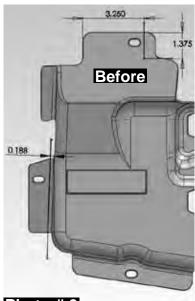
- 1. With the vehicle on flat level ground, set the emergency brake, & block the rear tires / wheels.
- 2. Raise the front of the vehicle & support the vehicle with jack stands.
- 3. Remove the front tires / wheels using a 17mm socket. (See Photo # 1)
- Remove the front bumper assembly using a 15mm socket for the two upper mounting bolts & a 13mm socket for the three lower mounting bolts.
- 5. Disconnect the front brake caliper assemblies using a 15mm socket. (See Photo # 2)
- 6. Disconnect the front brake lines from the plastic retaining brackets on the front upper A-arms. (See Photo # 3)

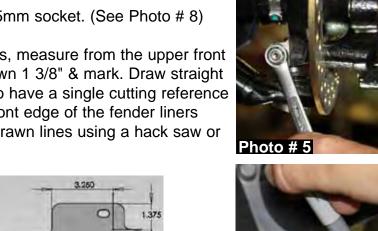






- 7. Remove the front shock assemblies using a 15mm socket. (See Photo # 4)
- 8. Disconnect the front lower A-arms from the steering knuckles using a 13mm socket. (See Photo # 5)
- 9. Mark a line around the radius of the front lower A-arm bushings that are inline with the cv-shafts & remove the front lower A-arms using a 15mm socket. (See Photo # 6)
- 10. Disconnect the front upper A-arms from the steering knuckles using a 13mm socket. (See Photo # 7)
- 11. Remove the upper A-arms using a 15mm socket. (See Photo # 8)
- 12. Remove the plastic inner fender liners, measure from the upper front of the fender liners back 3 1/4" & down 1 3/8" & mark. Draw straight lines to connect the marks in order to have a single cutting reference line. Also, measure from the lower front edge of the fender liners forward 1/8" & mark. Cut along the drawn lines using a hack saw or similar tool. (See Photo # 9 & # 10)











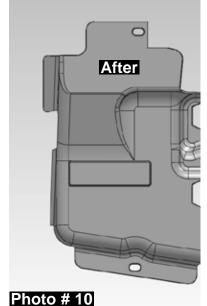


Photo # 9
Photo # 7

- 13. Remove the outer clamp & inner plastic tie from the rack & pinion boots. Slide the rack & pinion boots toward the outer tie rods. (See Photo # 11)
- 14. Rotate the steering wheel to full lock to the passenger side & install the new Skyjacker driver side steering stop spacer onto the rack & pinion shaft behind the inner tie rod. (See Photo # 12)
- 15. Rotate the steering wheel to full lock to the driver side & install the new Skyjacker passenger side steering stop spacer onto the rack & pinion shaft behind the inner tie rod. (See Photo # 12)
- 16. Slide the rack & pinion boots toward the inner tie rods & install the rack & pinion boots using the OEM outer clamps & supplied plastic ties. (See Photo # 11)
- 17. Install the previously trimmed plastic inner fender liners using the OEM hardware.
- 18. Remove the bushings & sleeves from the OEM upper & lower A-arms. (See Photo # 13)
- 19. Install the new Skyjacker bushings & OEM sleeves into the new Skyjacker upper & lower A-arms. (See Photo # 13)
- 20. Remove the retaining ring from the ball joint of each OEM upper & lower A-arm. (See Photo # 14)
- 21. Remove the ball joint from each OEM upper & lower A-arm using an arbor press or similar tool. **Note:** Be careful not to damage the ball joints. (See Photo # 15)
- 22. Install a ball joint into each new Skyjacker upper & lower A-arm using an arbor press or similar tool. **Note:** Be careful not to damage the ball joints. (See Photo # 16)
- 23. Install a retaining ring to each ball joint of the new Skyjacker upper & lower A-arms. (See Photo # 14)













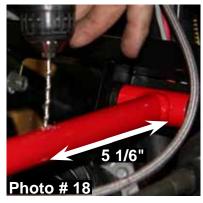
- 24. Remove the brake line retaining bracket from each OEM upper A-arm using a 5/32" drill bit to remove the rivet head. (See Photo # 17)
- 25. Measure from the rearward eyelet of each new Skyjacker upper A-arm 5 1/6". Mark, center punch, & drill each new brake line retaining bracket mounting location using a 5/32" drill bit. (See Photo # 18)
- 26. Install an OEM brake line retaining bracket to each new Skyjacker upper A-arm using the supplied 5/32" rivets. (See Photo # 19)
- 27. Refer to the marked lines made on the front lower A-arm mounting tabs in Step # 9 & grind to the outer edge of these previously marked lines. **Note:** Be careful not to damage the cv-boots. (See Photo # 20)
- 28. Install the new Skyjacker upper shock brackets to the OEM upper shock brackets using the supplied 10mm x 100mm bolts, washers, nuts, & a 17mm socket. **Note:** Do not tighten at this time. (See Photo # 21)
- 29. Mark, center punch, & drill the new frame mounting locations for the new Skyjacker upper shock brackets using a 1/4" drill bit. (See Photo # 22)
- 30. Attach each new Skyjacker upper shock bracket to the frame using the supplied 5/16" x 3/4" thread cutter bolts & a 1/2" socket. **Note:** Do not tighten at this time. (See Photo # 23)

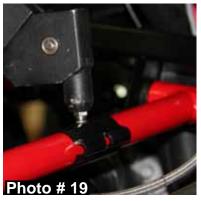


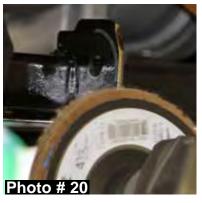




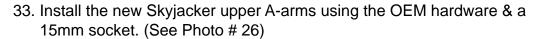


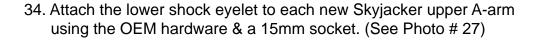


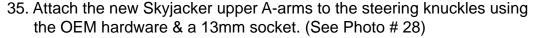




- 31. Remove the 10mm x 100mm bolt, washers, & nut that are to the inside of the frame on each new Skyjacker upper shock bracket & install two of the new Skyjacker sleeves (Part # CS1281) into the two inside upper shock mounting locations. Reinstall the 10mm x 100mm bolt, washers, & nut through each new Skyjacker upper shock bracket & new Skyjacker sleeves using a 17mm socket. Note: Do not tighten at this time. (See Photo # 24)
- 32. Remove the 10mm x 100mm bolt, washers, & nut that are to the outside of the frame on each new Skyjacker upper shock bracket. Install the new Skyjacker sleeve (Part # CS1281) into the rear outside upper shock mounting location & the shock assembly into the forward outside upper shock mounting location. Reinstall the 10mm x 100mm bolt, washers, & nut through each new Skyjacker upper shock bracket, upper shock eyelet, & new Skyjacker sleeve using a 17mm socket. Note: Tighten all upper shock bracket mounting hardware at this time. (See Photo # 25)







36. Install the new Skyjacker lower A-arms using the OEM hardware & a 15mm socket. (See Photo # 29)









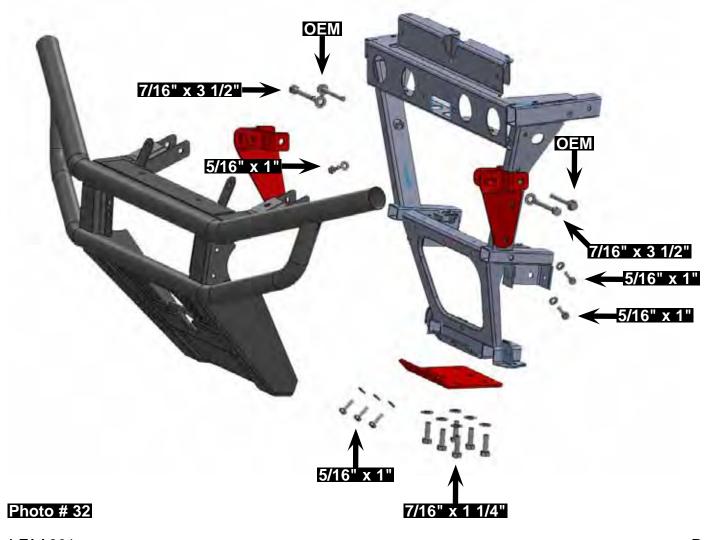




- 37. Attach the new Skyjacker lower A-arms to the steering knuckles using the OEM hardware & a 13mm socket. (See Photo # 30)
- 38. Attach the brake caliper assemblies using the OEM hardware & a 15mm socket. (See Photo # 31)
- 39. Install the new Skyjacker upper bumper brackets to the frame using the supplied 5/16" x 1" bolts, washers, nuts, OEM hardware, 1/2" socket, & a 15mm socket. (See Photo # 32)
- 40. Attach the front bumper assembly to the new Skyjacker upper bumper brackets using the supplied 7/16" x 3 1/2" bolts, washers, nuts, & a 5/8" socket. (See Photo # 32)
- 41. Install the new Skyjacker lower bumper bracket using the supplied 5/16" x 1" bolts, 7/16" x 1 1/4" bolts, washers, nuts, 1/2" socket, & a 5/8" socket. (See Photo # 32)
- 42. Install the front tires / wheels using a 17mm socket & lower the front of the vehicle to the ground.







#### **FINAL NOTES**:

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart below for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, brake lines, front & rear drivelines, fuel lines, & wiring harnesses for proper operation, tightness, & adequate clearance.
- Have a qualified alignment center realign the front end to the factory specifications.
- Retorque all the bolts after the first 100 miles.

TORQUE SPECIFICATIONS						
	INCH SYSTEM			METRIC SYSTEM		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	<b>Class 10.9</b>	
<u>5/16</u>	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB	
3/8	30 FT LB	35 FT LB	8MM	18 FT LB	23 FT LB	
7/16	45 FT LB	60 FT LB	10MM	32 FT LB	45 FT LB	
1/2	65 FT LB	90 FT LB	12MM	55 FT LB	75 FT LB	
9/16	95 FT LB	130 FTLB	14MM	85 FT LB	120 FT LB	
<u>5/8</u>	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB	
<u>3/4</u>	185 FT LB	280 FT LB	<u>18MM</u>	170 FT LB	240 FT LB	

<sup>•</sup> The above specifications are not to be used when the bolt is being installed with a bushing.

Seat Belts Save Lives, Please Wear Your Seat Belt.