



EVO-1050 JK Long Arm Upgrade w/ EVOlever



Recommended: All Vehicles that spend time on salted roads. It is recommended that removal of both threaded collar and joint on all arms. Apply a small amount of Anti Seize on threads and reassemble.

2010 and newer JK requires exhaust modifications. 2012 or Newer: Exhaust modifications required on front exhaust loop.

	QTY	PART#	DESCRIPTION
<input type="checkbox"/>	1	EVO-760009	BOX#1 40X9X9
<input type="checkbox"/>	2	EVO-11060B	31LA Tube Steel Front Lower JK
<input type="checkbox"/>	2	EVO-11061B	27LA Tube Steel Rear Lower JK
<input type="checkbox"/>	1	EVO-760009	BOX#2 40X9X9
<input type="checkbox"/>	1	EVO-11035B	Rear Upper LA, DRIVER BLK
<input type="checkbox"/>	1	EVO-11036B	Rear Upper LA, PASS BLK
<input type="checkbox"/>	1	EVO-11037B	Front Upper LA DRIVER BLK
<input type="checkbox"/>	1	EVO-11038B	Front Upper LA PASS BLK
<input type="checkbox"/>	1	EVO-760009	BOX#3 40X9X9
<input type="checkbox"/>	1	EVO-11047	Driver Rear LA Control Arm Bracket
<input type="checkbox"/>	1	EVO-11048	PASS Rear LA Control Arm Bracket
<input type="checkbox"/>	1	EVO-11049	Driver Front LA Control Arm Bracket
<input type="checkbox"/>	1	EVO-11050	PASS Front LA Control Arm Bracket
<input type="checkbox"/>	1	EVO-1045	3 Degree Axle Mount
<input type="checkbox"/>	4	EVO-10003-7	Shock Tab, Canti Sub-frame
<input type="checkbox"/>	2	EVO-10003- 8Alt	10003-8Alternative
<input type="checkbox"/>	1	EVO-770024	LA Upgrade HARDWARE Pack
<input type="checkbox"/>	4	EVO-100563263	Misalignment Spacer
<input type="checkbox"/>	2	EVO-11005CZ	JK Rear Upper Bolt Tab LA
<input type="checkbox"/>	2	EVO-11006CZ	JK Rear Lower Bolt Tab LA
<input type="checkbox"/>	8	EVO-900023	HHCS 3/8-24 x1.50 GrC Zinc
<input type="checkbox"/>	8	EVO-900221	Stover Lock Nut 3/8-24 GrC Zinc
<input type="checkbox"/>	2	EVO-900286	Black-Phosphate Internal Retain
<input type="checkbox"/>	4	EVO-900325	HHCS M12, 130MM, 1.75MM, Partial Thread

NOTE: 2012+ model JK's use 4qty EVO-900325 (HHCS M12, 130mm, 1.75mm Partial Thread 8.8 Zinc) Cross Member Bolts

1. Elevate the vehicle securely.
2. Secure axles on adjustable jack stands
3. Remove bolts retaining brakeline brackets from frame
4. Remove front and rear shocks
5. Remove front and rear swaybar endlinks
6. Remove front and rear springs
7. Mark and cut Front factory control arm brackets as shown on lines in above photos. Removal of the inner portions are only required. Lower front factory brackets need to be trimmed as shown leaving the outer factory portion of the bracket remaining on the vehicle.
8. Support transmission cross-member with adjustable jack stand. Remove two bolts on passenger side that hold in cross-member.
9. Install front passenger side brackets as shown.
10. Reinstall transmission bolts just as factory through new front control arm brackets
11. Install supplied ½" bolt at factory lower control arm tab toward front of vehicle.



12. Drill 3/8" hole in front side of factory transmission cross-member
13. Through access hole on underside of cross-member install 3/8" bolt, nut and washer through supplied control arm bracket to transmission cross-member.

Repeat steps on driver side.

Weld all control arm brackets to frame in all locations they touch

the frame top and bottom. DO NOT weld toward the center of bracket that touches the removable factory transmission cross-member.

14. Install front control arms upper and lower using factory hardware on factory mounting locations and supplied hardware on EVO Brackets. Front lowers starting length 34.5" and upper starting length 26.375", roughly fully threaded in. **FRONT UPPER ARMS SHOULD HAVE THE BEND OF THE ARM MOVING AWAY FROM THE FRAME ON BOTH DRIVER AND PASS SIDES.**

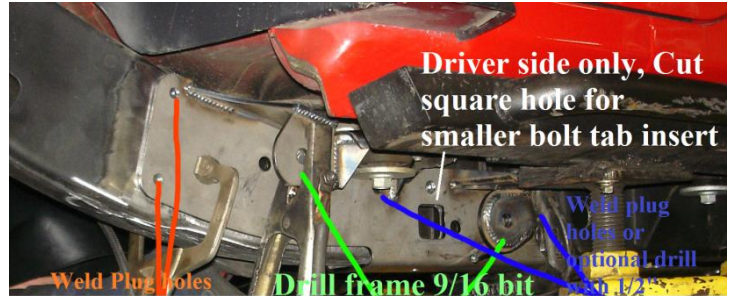
15. Front upper control arm mounts at the frame will have the bolt inserted from the ground up. Not left to right.

Rear:

16. Remove all rear factory control arm brackets as shown in lines on photos. All rear control arm brackets need to be removed and grinded flush to the frame.
17. Carefully remove gas tank from vehicle. This can be heavy depending on fuel level. Be very careful as this contains highly flammable gasoline. Store in a safe place.
18. Cut rear body mount as shown in photo. The rear most tab of the body mount needs to be trimmed all the way to the top. Grind all cuts smooth to frame.
19. Paint all exposed metal.
20. Remove two factory body mount bolts. The two outer small ones.
21. Install driver and pass side brackets on frame.
22. Tighten two body mount bolts to factory specifications.
23. Mark center of all the two control arm holes, 9/16", and drill through outer frame side only.



24. Driver side will need a square hole cut into frame (same as the hole on the frame on passenger side). This is for nut access for the driver side rear lower arms. Use bracket as template for cut. Use plasma cutter or drill corners of square with drill and complete the straights of the square with cut off wheel.



25. Reinstall brackets to body mounts if removed and weld all edges of the brackets completely to frame inside and out.

26. Paint all bare metal.

27. Reinstall gas tank to its factory location using factory hardware. Be extremely careful in doing so, no flames, sparks or cutting etc at this time.

28. Cut off rear lower control arm bracket on the axle and grind smooth to axle tube.

29. Install rear upper and lower control arms into all remaining control arm mounts on axle and frame. Rear lower mounts at axle will not exist at this time. Use small nut plate with bend for rear lower arm nuts at frame through the square holes and longer nut plates for rear upper nuts at frame through factory small square access hole on underside of frame.

30. Adjusts rear lower control arms to 30.5" from center to center and uppers to 20.5" center to center. Roughly fully threaded in...

31. Install rear EVO axle bracket onto remaining control arm joints with factory hardware. Hold up to axle tube where control arm bracket once was.

32. Set pinion angle on vehicle so that the driveshaft and the pinion are inline within 3 degrees with the axle at an approximate right height and centered to vehicle.

33. With rear wheels and tires installed pivot lower control arm to axle tube and move outward on axle tube while radius on brackets are still around tube until the rear control arms and the inner sidewall of the tire are 1.0" apart. Tack new lower control arm mounts into place on axle tube. Roughly ends of brackets will be close the end flanges on the axle tube ends.

34. Thick rear swaybar tab should be installed on outside sheet metal edge of factory bumpstop pad and straight rearward of tube. Tack into place.

35. If installing with EVOlever or rear DTD. There are 4 smaller tabs that will be used for the new limit strap location. 2 per strap, one on each side of strap tab. They should be installed and tacked into place in line with tabs on subframe above, straight off the back of the axle tube. When cycling later on, make sure shocks do not contact subframe at full droop/extension. If so, rotate tabs lower on axle tube and slightly inward until no contact is made of shocks to subframe.



36. Weld on all axle brackets/tabs to axle once axle has been cycled up and down and verification is made that all components clear each other.

37. Cycle front and rear suspension up and down while turning front tires left and right to verify no interference with any components and that all wires, hoses etc are clear and are long enough.

38. Very carefully set vehicle back on ground

39. Torque all suspension bolts to factory specifications including wheels

2012 or Newer: Exhaust modifications required on front exhaust loop. Custom exhaust fabrication or below required. Exhaust loop needs to be cut perpendicular to floor straight through factory exhaust loop on both the forward side of the loop and rearward near coupling flange. The loop then needs to be flipped 180 so that the previous front is now welded to the rear and vice versa. Rotate and make sure loop clears front upper control arm bracket and arms before fully welding around to reconnect to exhaust system.



Size	Recommended Torque											
	Grade 2		Grade 5		Grade 8		18-8 S/S		Bronze		Brass	
	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
#4*	-	-	-	-	-	-	5.2	-	4.8	-	4.3	-
#6*	-	-	-	-	-	-	9.6	-	8.9	-	7.9	-
#8*	-	-	-	-	-	-	19.8	-	18.4	-	16.2	-
#10*	-	-	-	-	-	-	22.8	31.7	21.2	29.3	18.6	25.9
1/4	4	4.7	6.3	7.3	9	10	6.3	7.8	5.7	7.3	5.1	6.4
5/16	8	9	13	14	18	20	11	11.8	10.3	10.9	8.9	9.7
3/8	15	17	23	26	33	37	20	22	18	20	16	18
7/16	24	27	37	41	52	58	31	33	29	31	26	27
1/2	37	41	57	64	80	90	43	45	40	42	35	37
9/16	53	59	82	91	115	129	57	63	53	58	47	51
5/8	73	83	112	128	159	180	93	104	86	96	76	85
3/4	125	138	200	223	282	315	128	124	104	102	118	115
7/8	129	144	322	355	454	501	194	193	178	178	159	158
1+	188	210	483	541	682	764	287	289	265	240	235	212