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2005 - 2019 Toyota Hilux, Tiger, & Vigo 3" Performance Strut Upper A-Arm Kit Installation Instructions

REQUIRED TOOL LIST:

- Safety Glasses
- Metric / Standard Wrenches & Sockets
- Floor Jack / Jack Stands
- Measuring Tape
- Strut Spring Compressor
- Ball Joint / Tie Rod Remover
- Cut Off Wheel (Some Models)
- Grinder (Some Models)
- Fastener Removal Tool (A-Arm Install)
- Adjustable Wrench (A-Arm Install)
- Grease Gun (A-Arm Install)
- 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[®] Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this lift kit, contact SKYJACKER[®] Technical Assistance at 318-388-0816.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is not level (side-to-side) from the factory & is usually not noticed until a lift kit has been installed, which makes the difference more visible. Using a measuring tape, measure the front & rear (both sides) from the ground up to the center of the fender opening above the axle. Record this information below for future reference.

Driver Side Front: _____ Passenger Side Front: _____
 Driver Side Rear: _____ Passenger Side Rear: _____

Important Notes:

- If larger tires (10% more than the OEM diameter) are installed, speedometer recalibration will be necessary. Contact your local Toyota dealer or an authorized dealer for details.
- After installation, a qualified alignment facility is required to align the vehicle to the OEM specifications.

Component Box Breakdown:

Part #: HL13ST / HL30ST / HL30STBB / HL30STBM / HL30STUB / HL30STUM

Item #	Description	Qty	Item #	Description	Qty
613STS	TOYOTA ADJ FRONT STRUT	2	HB-14ARM	HDWR BAG: 1/4 A-ARM	1
T53UCA-L	DRIVER UPPER A-ARM (Included With STU Boxes)	1	HB-916	HDWR BAG: 9/16 FINE THR NUT (Included With All Boxes Except HL13ST)	1
T53UCA-R	PASSENGER UPPER A-ARM (Included With STU Boxes)	1	B8527	BLK MAX SHOCK W/BLK BOOT (Included With STBB & STUB Boxes)	2
RBF125	1.25 FLAT REAR BLOCK (Included With All Boxes Except HL13ST)	2	M9527	MONOTUBE SHOCK (Included With STBM & STUM Boxes)	2
916X212X834U	9/16 X 2 1/2 X 8 3/4 U-BOLT (Included With All Boxes Except HL13ST)	4	I-HL13ST	INST SHEET: HL13ST / HL30ST	1
THFDD3	TOYOTA DIFF DROP KIT (Included With STB & STU Boxes)	1			

Hardware Bag Breakdown:

Part # THFDD3

Item #	Description	Qty	Item #	Description	Qty
TCLS10-B	DIFF LOWERING SPACER	2	14X150MMBG5	14MM X 150MM METRIC BOLT	2
CS0750	CRUSH SLEEVE	4	916SAEW	9/16 SAE WASHER	4
8X40MMB	8MM X 40MM METRIC BOLT	4	14MMN	14MM NYLON LOCK NUT	2
516USSW	5/16 USS WASHER	4	I-TFDD2		1

Part # HB-14ARM

Item #	Description	Qty	Item #	Description	Qty
14CTN	1/4 COARSE THREAD LOCK NUT	2	14SAEW	1/4 SAE WASHER	2

Part # HB-916

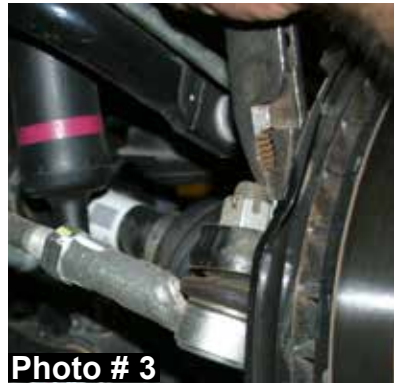
Item #	Description	Qty
916FTN	9/16 FINE THREAD LOCK NUT	8

Front Installation:

1. With the vehicle on flat level ground, set the emergency brake & block the rear tires / wheels.
2. Place a floor jack under the lower control arm's front cross member & raise the front of the vehicle. Place jack stands under the frame rails, behind the front wheel wells & lower the frame of the vehicle onto the jack stands.
3. Remove the front tires / wheels.
4. Remove the OEM ABS lines from the OEM upper A-arms & disconnect the OEM ABS / brake lines from the OEM steering knuckles. (See Photo # 1)
5. Disconnect the OEM sway bar end links from the OEM steering knuckles. (See Photo # 2)
6. Disconnect the OEM outer tie rod ends from the OEM steering knuckles using a tie rod remover or other suitable tool. (See Photo # 3)
7. Disconnect the OEM struts from the OEM lower A-arms. (See Photo # 4)
8. Disconnect the OEM upper ball joints from the OEM steering knuckles using a ball joint remover or other suitable tool. (See Photo # 5)

If installing a kit with the optional Skyjacker upper A-arms proceed to Step # 9, otherwise proceed to Step # 14.

9. Remove the OEM front inner fender liners using a fastener removal tool or other suitable tool. (See Photo # 6)



10. Remove the OEM nuts & washers from the OEM upper A-arms.
(See Photo # 7)
11. Push the OEM upper A-arm bolts forward until they contact the body & mark.
12. Bend the body outward at the previously made marks enough for the OEM upper A-arm bolts to clear the body using an adjustable wrench or other suitable tool & remove the OEM upper A-arms.
(See Photo # 8)
13. Install the new Skyjacker upper A-arms using the OEM hardware.
(See Photo # 9)
14. Remove the upper strut mount retaining nuts from the OEM upper frame mounts & remove the OEM strut assemblies. (See Photo # 10)
15. Using a spring compressor, unload the tension on the upper mounts of the OEM strut assemblies. Remove the upper strut retaining nuts & separate the OEM struts from the OEM coil springs. (See Photo # 11)



Photo # 7



Photo # 8



Photo # 9



Photo # 10



Photo # 11

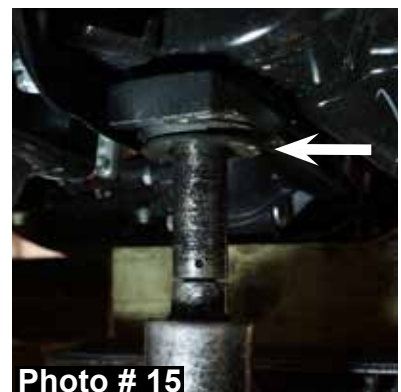
Note: There are multiple snap ring grooves located on the new Skyjacker strut bodies for 1" to 3" lift heights. The ring is installed in the second groove from the top when shipped. This will yield 2.5" - 3" of lift. The upper groove is only to be used when 2.5" - 3" of lift is desired, after aftermarket accessories have been added that weigh the front of the vehicle down (ie. winch, after market bumper, & etc). The lower grooves can be used if you would like to keep the OEM rake of the vehicle (front of the vehicle lower than the rear). **Once the coil spring seat retaining ring has been installed, check all suspension components for any contact or interference. If suspension component contact or interference is present, lower the coil spring seat by lowering the coil spring seat retaining ring until no contact or interference is present.**

16. Assemble the new Skyjacker strut assemblies using the new Skyjacker struts. (See Photo # 12) **Note:** The OEM upper stem bushings & hardware will be reused.

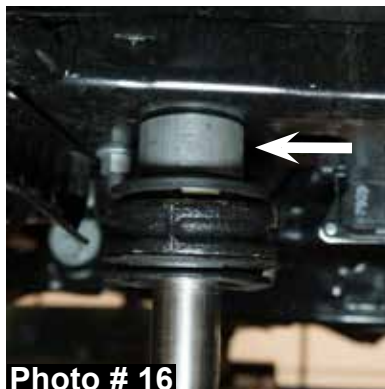


Photo # 12

17. Connect the new Skyjacker strut assemblies to the OEM lower A-arms using the OEM hardware. (See Photo # 13)
18. Attach the upper strut mounts to the frame using the OEM hardware.
19. Connect the OEM upper ball joints to the OEM steering knuckles using the OEM hardware.
20. **Kits with new Skyjacker upper A-arms:** Connect the new Skyjacker upper A-arms to the OEM steering knuckles using the supplied hardware & grease the new Skyjacker upper A-arm ball joints using a grease gun. (See Photo # 13)
21. Connect the OEM outer tie rods to the OEM steering knuckles using the OEM hardware.
22. Connect the OEM ABS / brake lines to the OEM upper A-arms using the OEM hardware.
23. **Kits with new Skyjacker upper A-arms:** Connect the OEM ABS / brake lines to the new Skyjacker upper A-arms using the supplied 1/4" nuts & 1/4 washers & install the OEM front inner fender liners using the OEM hardware.
24. Connect the OEM sway bar end links to the OEM steering knuckles using the OEM hardware.
25. Remove the OEM front skid plate bolts. (See Photo # 14)
26. If equipped, remove the OEM rear skid plate bolts.
27. Support the front differential using a floor jack.
28. Remove the OEM bolts from the OEM cross member & front differential mounts. (See Photo # 15)



29. Lower the front differential & install the new Skyjacker differential lowering spacers between the OEM cross member & front differential mounts using the large OEM washers, supplied 1/2" x 6 1/2" coarse thread bolts or 14mm x 150mm bolts, washers, & nuts. (See Photo # 16)



Note: Some models may require the OEM driver's side cross member / radiator support bracket to be trimmed in order to clear the OEM driver's side front differential mount when lowered. (See Steps # 30, # 31, & # 32)

30. Mark the OEM driver's side cross member / radiator support bracket for front differential mount clearance & trim using a cut off wheel or similar tool. (See Photo # 17)
31. Clean up any imperfections & round any sharp edges using a grinder or similar tool.
32. Prime / paint all raw metal exposed from trimming the OEM driver's side cross member / radiator support bracket.
33. Remove the floor jack from under the front differential.
34. Install the OEM front skid plate at the front mounting locations using the OEM hardware.
35. Install the OEM front skid plate at the rear mounting locations using the supplied crush sleeves, 8mm x 40mm bolts, & washers. (See Photo # 18) **Note:** One new Skyjacker crush sleeve will be placed between the OEM front skid plate & each OEM cross member / radiator support bracket.
36. If equipped, install the OEM rear skid plate at the front mounting locations using the supplied crush sleeves, 8mm x 40mm bolts, & washers.
37. If equipped, install the OEM rear skid plate at the rear mounting locations using the OEM hardware.
38. Install the front tires / wheels & lower the front of the vehicle to the ground.



Photo # 17

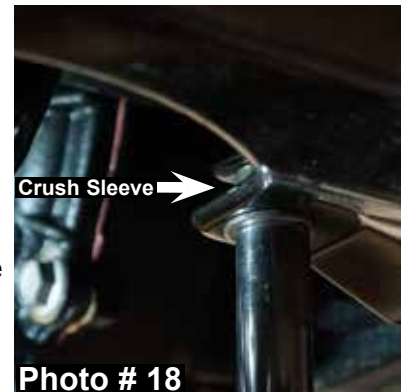


Photo # 18



Photo # 19

Rear Installation:

1. Block the front tires / wheels & raise the rear of the vehicle using a floor jack. Properly support the frame rails using jack stands & remove the rear tires / wheels.
2. Disconnect the OEM brake proportioning valve linkage from the rear differential. (See Photo # 19)
3. Support the rear differential & remove the OEM rear shocks. (See Photo # 20)
4. Remove the OEM rear u-bolts & lower the rear differential enough to allow for the installation of the new Skyjacker rear lift blocks. (See Photo # 21)



Photo # 20

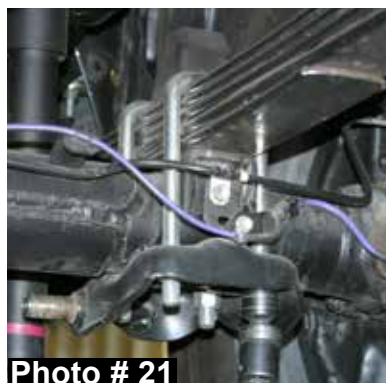


Photo # 21

5. Install the new Skyjacker rear lift blocks, raise the rear differential, & install the new Skyjacker u-bolts using the supplied 9/16" nuts. (See Photo # 22)
6. Install the new Skyjacker rear shocks using the supplied & OEM hardware.
7. Connect the OEM brake proportioning valve linkage to the rear differential using the OEM hardware.
8. Install rear tires / wheels & lower the rear of the vehicle to the ground.



Photo # 22

Final Notes:

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart 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 the headlights readjusted to the proper settings.
- Have a qualified alignment center align the vehicle to the OEM specifications.
- After the first 100 miles, check all hardware for the proper torque & periodically thereafter.

<u>TORQUE SPECIFICATIONS</u>					
<u>INCH SYSTEM</u>			<u>METRIC SYSTEM</u>		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
5/16	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
5/8	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB
3/4	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB

- 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.



**Jesus Forgives,
Rocks Don't**

Jesus Christ Died For You.

John 3:16

For God so loved the world that He gave His only Son, so that everyone who believes in Him should not perish, but have everlasting life.
Romans 3:23

For all have sinned; all fall short of God's glorious standard.
Ephesians 2:8

God saved you by his special favor when you believed. And you can't take credit for this; it is a gift from God.
Psalms 18:2

The Lord is my Rock, my fortress, and my savior; my God is my Rock, in whom I find protection. He is my shield, the strength of my salvation, and my stronghold.
Romans 10:9-10

That if you shall confess with thy mouth the Lord Jesus, and shall believe in your heart that God hath raised him from the dead, you shall be saved. For with the heart man believeth unto righteousness; and with the mouth confession is made unto salvation.

Pray This Simple Prayer:

God, I come to You admitting I have sinned against You and I need you to take control of my life. The Bible says anyone who calls on the name of the Lord will be saved. I am calling on You, Jesus. I ask that You come live in my heart and be the Lord over my life today. I do believe You died on the cross for me and came back to life to give me life! Thank You, Lord Jesus for a new life in You!

Now, go and tell somebody about your new life in Jesus, get a Bible, begin to read it, and go to a Bible believing church.

If you would like someone to pray with you, call Kenneth Copeland Ministries anytime at 800-600-7395.

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Jesús murió por ti.

Juan 3:16

“Porque tanto amó Dios al mundo, que dio a su Hijo unigénito, para que todo el que cree en él no se pierda, sino que tenga vida eterna.”
Romanos 3:23

“Pues todos han pecado y están privados de la gloria de Dios.”
Efesios 2:8

“Porque por gracia ustedes han sido salvados mediante la fe; esto no procede de ustedes, sino que es el regalo de Dios.”
Salmos 18:2

“El Señor es mi roca, mi amparo, mi libertador; es mi Dios, el peñasco en que me refugio. Es mi escudo, el poder que me salva, ¡mi más alto escondite!”
Romanos 10:9-10

“9 Que si confi esas con tu boca que Jesús es el Señor, y crees en tu corazón que Dios lo levantó de entre los muertos, serás salvo. 10 Porque con el corazón se cree para ser justificado, pero con la boca se confi esa para ser salvo.”

Ahora dí esta simple oración:

Dios, vengo a Ti y admito que he pecado contra Ti, necesito que tomes el control de mi vida. La Biblia dice que todo aquel que invoca el nombre del Señor escapará con vida. En este momento yo clamo ante Ti, Jesús; te pido que vengas a vivir en mi corazón y que tomes el control de mi vida. ¡Yo creo que tu moriste en la cruz y resucitaste para darme vida! ¡Gracias Señor Jesús, por una nueva vida que tengo en Ti! Amen.

Ahora ve y dile a alguien sobre la nueva vida que tienes en Cristo. Compra una Biblia y empieza a leerla. Busca una Iglesia que cree en la Biblia y hazte parte de esa Iglesia.

Si te gustaría orar con alguien, puedes llamar a este número 800-600-7395

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