

# KF09129 Ford SVT Raptor 1.5" Leveling kit



#### Thank you for choosing Daystar Products

<u>Daystar recommends</u> a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post instruction checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating of the vehicle.

Please read all the instructions before beginning the installation. Check the kit hardware against the parts list. Be sure you have all the needed parts and understand where they go. If anything is missing, do not proceed with the installation, call Daystar Products to obtain needed items.

#### Product Use Information

As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend, because of rollover possibility, that seat belts and shoulder harness be worn at all times. Avoid situations where a side rollover may occur.

Braking performance and capabilities are decreased when significantly large/heavyer tires and wheels are used. Take this into consideration while driving, also, speedometer recalibration is necessary when larger tires are installed.

Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Daystar Product purchased. Mixing component brands, lifts, and/or combining body lift with suspension lift voids all warranties. Daystar makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any products that is al-tered.

#### Notice to Dealer and Vehicle Owner

Any vehicle equipped with any Daystar Product must have the "Warning to driver" decal installed on the sun visor or dash. The decal is to act a constant reminder for whoever is operating the vehicle of its unique handling characteristics. INSTALLING DEALER— Its is your responsibility to install the warning decal and forward these instructions on to the vehicle owner for review and to be kept in the vehicle for service life.

After installation occurs, a qualified alignment facility is required to align the vehicle to factory specs.

#### Ford SVT Raptor 1.5" Leveling Kit Instructions

Your new Daystar Leveling kit will allow the installation of 37" tires. After completion make sure to have your vehicle aligned to factory specs.

The tools needed for installation are on the last page. A list of parts in the kit are under the BOM, verify that you have all parts prior to installing your new leveling kit. Make sure you have all of the proper tools and understand these directions before proceeding. Place Vehicle on level ground. Be sure that the wheels are blocked and the vehicle is in park.

#### **Measuring Vehicle**

You will want to measure your vehicle before and after installation in the same area. We recommend taking your measurements from the center of your wheel to the bottom of your fender well, and from the ground to the bottom of your bumper. Once you have pre-measured your vehicle proceed to raising the truck.

## Raising your Vehicle-Fig 1-3

Your Svt Raptor is fitted with two front skid plates, if you are using a jack and jack stand's we recommend that you remove these two skid plates and raise the vehicle from the front cross member. Place your Jack stands' underneath the frame rails just behind the front tires.







### Disassembly

- 1. Begin by removing your tires and wheels. Once they are removed, place a jack under the lower control arm for support.
- 2. Loosen and remove the brake line clamp that is located at the strut bucket and the two clamps that hold the ABS line and Hub vent that are on the spindle. Also carefully remove the two Christmas tree push-in clips that are located on the upper control arm, and the spindle (using a pair of side cutters, apply light pressure and slowly pry them out, failure to be careful will result in these snapping off) Fig 4-6







3. Loosen and remove the sway bar nut that is attaching the end link to the sway bar. Loosen and remove the outer tie rod; you will want to leave the nut on by a couple of threads, strike the side of the tie rod mount to free it, then remove the nut the rest of the way. Fig 7-8





4. Loosen and remove the lower strut bolt. Fig 9-10





- 5. Loosen the upper ball joint nut but leave the nut in place by a couple of threads. Place pressure to the lower control arm using your jack. With the upper ball joint nut loose, strike the knuckle where the ball joint sits to loosen it from its mount. You will know when the ball joint is loose when it pops. Remove the ball joint nut and swing the upper control arm away from the knuckle.
- 6. Once the upper control arm and the knuckle are free from each other, support the knuckle and keep it from flopping around using a ratchet strap. This will help to keep the CV shaft in place. It is important to not spin the rotor or the CV shaft while the CV shaft is at this angle, use caution to not rotate it!

  Fig 11-12





#### **Strut Removal-**Fig 13-14

7. Prior to removing the upper strut bolts you will want to make a reference line on the top cast plate and the strut plate (note that when you remove the strut there is a second cast plate and you will want to mark this in reference to the line made on the strut plate.) These lines will help to realign the strut plates when you re-assemble your Strut and Spacer.





8. With the plates marked remove the three nuts that are holding the strut in place. With these removed you will now be able to remove the strut. -Fig 15



Trimming the Studs and Installing Stud Extenders-fig 16-18 9. The factory studs on the strut will need to be trimmed down. Start by re-installing the factory nuts on the studs and then run them all the way down until they bottom out against the strut plate. Next, cut the factory studs (using a cut off wheel or hack saw) just above the top of the factory nuts (do not cut into the nut). With the cutting complete, remove the nuts and clean up the threads if necessary. Next, apply red loctite to the factory studs and install the supplied stud extenders and tighten to 25 lb-ft.







## Spacer Installation-Fig 19-21

10. With the stud extenders installed and torqued, you are now ready to install the spacer. Place the supplied Daystar spacer on the strut. Next, the stock cast plate will go on top of the Daystar spacer; make sure to line up the marks you had previously made. With the spacers and plates installed and aligned, place the upper end of the strut back in the frame bucket. Position the factory top strut plate over the studs (aligning it with the other lines made) and secure the strut in the bucket using the factory nuts. Do not tighten the nuts at this time.







- 11. Once the Strut is back in the strut bucket you will repeat the steps above in reverse to install the strut back into the vehicle. Be sure to tighten the upper strut nuts once the lower end of the strut and control arm are reconnected.
- 12. When the strut assembly, upper control arm, outer tie rod end, and sway bar are back into place tighten them to factory torque specs. Repeat these steps for the opposite side of the vehicle.

- 13. Reinstall the tire and wheels, remove the jack stands and place the vehicle back on the ground. Note that the vehicle will need to settle, you will want to drive the truck for a short distance to let it settle.
- 14. After driving the truck place it back to where you originally took your measurements and measure the truck. Recheck that all bolts are tight and that there is no interference with other suspension components.
- 15. Have a professional wheel alignment performed. The vehicle should be aligned to factory specifications.
- 16. Double-check all fasteners for proper torque after 500 miles and periodically thereafter.

#### **TOOLS NEEDED**

#### **BILL OF MATERIALS**

Description	Qty	Part No.	Description	Qty
Pry Bar	1	M03875	Front Spacer	2
Small Sledge Hammer	1	S10010	M10-1.5 washer	6
30mm wrench or deep socket	1	S10292	10mm –1.5 lock nut	6
26mm wrench or deep socket	1	P20723	Instruction Sheet	1
		P11153	Red Loctite	1
21mm wrench or deep socket	1			
8mm wrench	1	7		
10mm wrench	1			
Heavy Duty Jack	1			
Jack Stands	2			