

# INSTALLATION INSTRUCTIONS

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Part #SAS013

## Notice to Dealer / Consumer

**Important! Read all instructions before attempting any work on the vehicle.**

**Disclaimer Notice:** Installing this suspension system on any vehicle implies that you are in agreement with the following term and conditions with respect to that vehicle, the vehicle owner, and any or all occupants of said vehicle at any time:

- Off-Road Direct is not responsible, and cannot be held responsible for any conditions of said vehicle including, but not limited to the following: 1) Any and all adverse behavior, premature failure, or breakage caused by oversized tires and wheels, improper installation, failure to follow instructions, or any general negligence caused by installer or owner of said vehicle. 2) Any breakage or premature failure caused by racing or driver negligence. 3) Any incident determined to be caused by an increase height in said vehicle's center of gravity. 4) Any incident determined to be caused by improper installation. 5) Any incident determined to be caused by a failure of materials.
- Off-Road Direct is to be held harmless by the installer of this suspension component, owner of said vehicle, and any parties related directly or indirectly to said vehicle or owner of said vehicle. Off-Road Direct is to be held harmless by all parties mentioned during the course of any and all circumstances or incidence resulting from the installation of this suspension component.
- It is not the intention of Off-Road Direct that said vehicle be modified for use on public highways sanctioned by the Department of Transportation, or any state or local governing body. Vehicle owner accepts sole responsibility for ensuring that said vehicle is not in violation of local, state, or federal laws or vehicle code. Please check local vehicle laws and regulations before modifying your vehicle.

**By installing this kit or having this kit installed on your vehicle, you are implying that you agree to the above terms and conditions. Please do not install this system if you do not agree.**

### WARNING:

Vehicle modified for Off-road use may handle differently and vehicle may roll-over.

Vehicles modified for off-road are generally not designed to improve cornering or maneuverability on the highway, therefore it is imperative to familiarize yourself and all operators of the vehicle of the special driving characteristics of the vehicle. Failure to operate vehicle in a safe and conservative manner may cause you, your passengers and third parties to suffer serious injury or even death if control is lost and vehicle overturns.

Always wear your seatbelt and shoulder harness. Seatbelts not only help to protect occupants from injury but also keep the driver behind the wheel and in control when operating in rough terrain. Always remain on trails and observe conservation techniques while operating your vehicle.

## Straight Axle Conversion Kit – SAS013 Bill of Materials

Part #	Qty	Description
SAS013-1	1	Front cross-member
SAS013-2	1	Rear hanger driver's side
SAS013-3	1	Rear hanger passenger's side
SAS013-4	2	Spring plates
SAS013-5	2	Shock hoops
SAS013-6	2	Shackles
SAS007H	1	Hardware Pack

Hardware Pack	
12	1/2" x 1.25" hex bolts
6	1/2" x 2.5" hex bolts
4	1/2" x 3.5" hex bolts
2	1/2" x 4.5" hex bolts
4	9/16" x 4.5" hex bolts
16	1/2" nylocks
8	1/2" frame nuts
4	9/16" nylocks
8	1/2" washers

Grade 8 nut torque specifications			
Standard		Metric	
5/16" nuts	20 ft. lbs.	M6	9 ft. lbs.
3/8" nuts	35 ft. lbs.	M8	23 ft. lbs.
7/16" nuts	60 ft. lbs.	M10	45 ft. lbs.
1/2" nuts	90 ft. lbs.	M12	75 ft. lbs.
9/16" nuts	160 ft. lbs.	M14	120 ft. lbs.
5/8" nuts	175 ft. lbs.	M16	165 ft. lbs.

### INSTALLATION NOTES:

- Inspect the contents of the kit and read the entire instructions before proceeding.
- We recommend this installation be performed by a qualified technician
- Torque all hardware to factory specifications
- We recommend using red Loctite on all bolts
- When removing wheels, support vehicle with jack stands
- Use only factory approved fluids
- Exhaust modifications may be necessary

Tools needed for proper installation:



Advanced Tools



Drilling



Grinding



Sawzall

1. Block the rear wheels, raise the front end of the vehicle and support the frame with jack stands behind the front wheels.
2. Remove all front suspension components including, brake calipers, rubber brake lines, steering assembly, sway bar (retain sway bar brackets), shocks and front drive shaft. Remove upper and lower A-arms and front differential (refer to the service manual for a more complete description of suspension component removal). Remove front tow hooks. Leave steering box attached.
3. Locate the passenger and drivers side rear lower control-arm mounting bracket. Using a die grinder or plasma cutter, cut off lower portion of factory bracket flush with bottom of frame and grind frame smooth. **DO NOT** remove factory upper control arm mounting brackets and front shock mounts as these will be used to mount the front shock hoops. **DO NOT** remove factory front cross member.
4. Locate front cross-member and align with factory holes. The ear tabs on the front cross-member should seat inside body mount bucket. Precisely align the front hanger and ensure that it is squarely on the frame then secure the front cross-member with the factory 3/8" bolts. Once the front cross-member is properly located on the frame, drill the 1/2" mounting holes on located on the ear tabs of the front cross-member. Use caution when drilling to avoid cutting wires. Install 1/2" x 1.25" hex bolts and washers. Torque to specification.



5. Align the rear hangers with the bottom hole on the frame. Once properly aligned, clamp in place then mark the new mounting holes on frame. Drill the 1/2" mounting holes use caution when drilling to avoid cutting wires or fuel lines inside or around the frame rail. Install 1/2" x 1.25" hex bolts, washers and frame nuts. Use frame nuts to position nut inside the frame using the access hole on bottom of the frame. Torque to specification.



6. Install rear spring shackles into the rear shackle brackets using a 9/16" x 4 1/2" bolt and nylock. Install new front leaf springs (NOT SUPPLIED IN KIT) into front hanger and rear shackles using the 9/16 x 4 1/2" bolts on the rear and 1/2 x 4 1/2" bolts on the front. Recommend springs: 73-87 Chevy front springs.
7. Install front axle assembly to leaf springs using the new u-bolt plates. Shock mounts on the spring plates should face down. Install U-bolts (NOT SUPPLIED IN KIT) bottom up and torque to spec.



8. Slide the front shock hoops onto the factory a-arm mounts. The rear mounting point will slide into the factory a-arm mount while the front shock hoop mounting point will slide on the outside of the a-arm mounts. Align the stringer support into the factory shock mounts. You will need to enlarge the a-arm holes to allow the  $\frac{1}{2}$ " bolts to slide in.



9. Install new front shocks (NOT SUPPLIED IN KIT) into shock tabs and lower spring mounts using  $\frac{1}{2}$ " x  $2 \frac{1}{2}$ " hex bolt and nylocks.
10. The use of a track bar is recommended (NOT SUPPLIED IN KIT).
11. Check and retighten u-bolts after first 100 miles.