



## SPIDERTRAX SPOA SUSPENSION KIT (SOA-001) INSTRUCTIONS

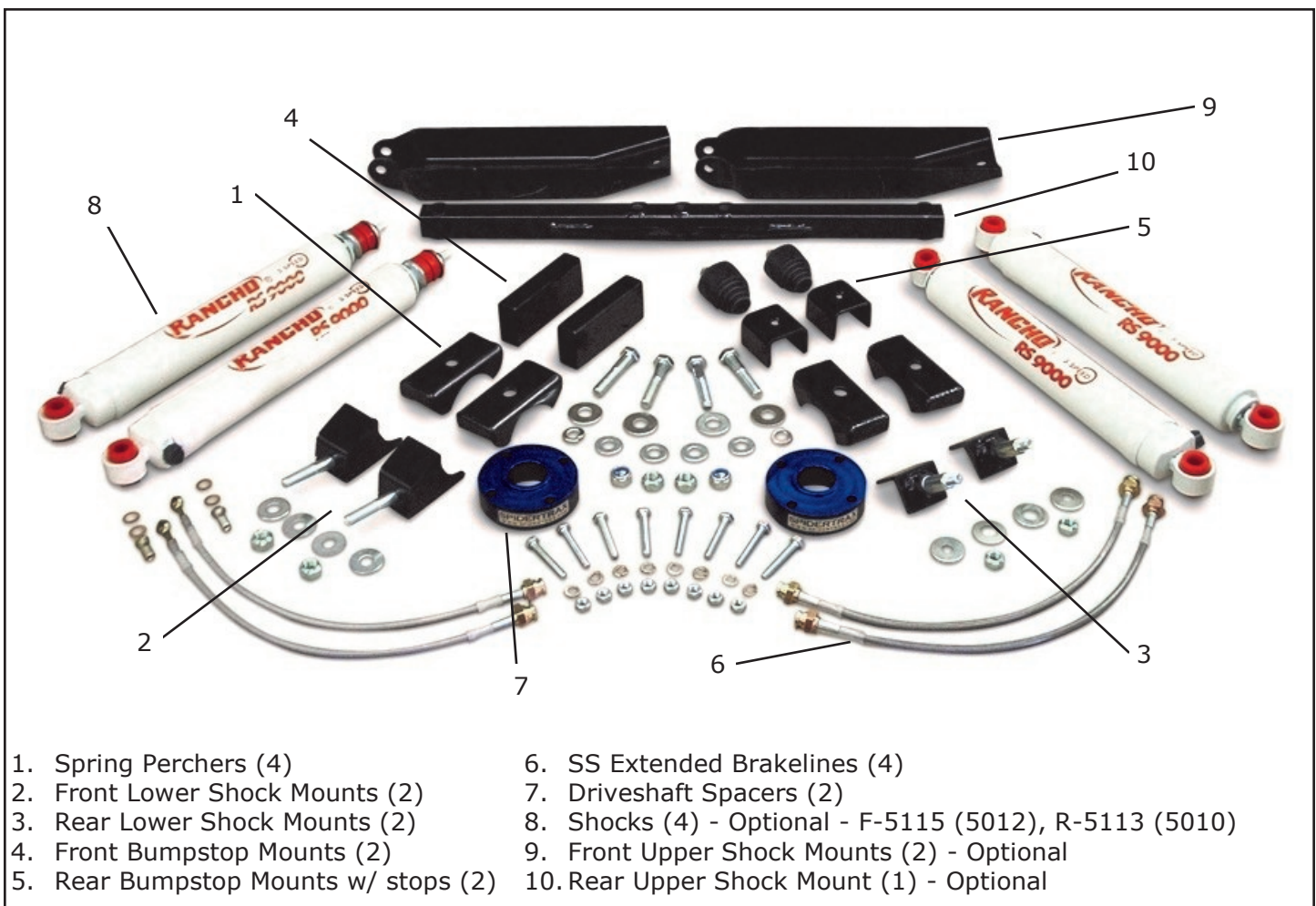
### GENERAL DESCRIPTION

The Spidertrax Spring Over Axle Suspension Kit (Spidertrax SPOA Suspension Kit) is an easy, functional, and cost effective solution for improving your Samurai's off-road performance. The idea behind the suspension is to position the springs on top of the axles which provides more lift and suspension articulation.

The Spidertrax SPOA Suspension Kit is a complete kit designed to properly give 4.5" of lift to your Samurai. It works with the OEM upper shock mounts, OEM springs, and OEM shackles.

The following instructions are set forth for a standard installation with the included components. Due to varying suspension setups, instructions included may be modified to match the vehicles needs. Only persons experienced in suspension installations should install this kit.

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**Fig. 1**

## TOOLS NEEDED

- Basic socket & wrench set
- 3/8" Ratchet wrench
- Welder
- Torque Wrench
- Incidence Meter (measures angles)
- Tape Measure

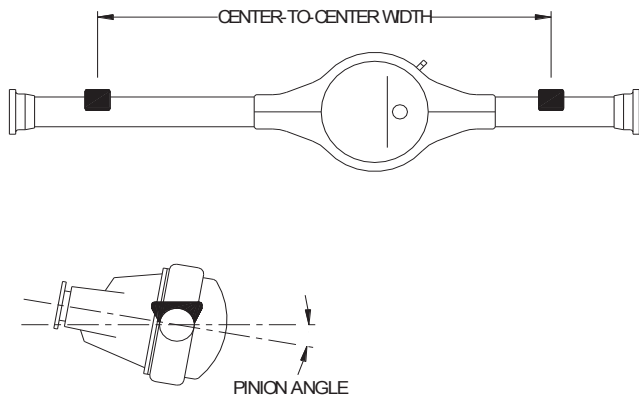
## REMOVAL

1. Jack up vehicle and support vehicle by chassis. Remove wheels so axle is suspended.
2. Disconnect suspension components so front and rear axles can be removed from vehicle. This includes removing any brakelines that connect between axle and chassis.

It is a good idea to have a clean and organized work bench to perform the welding needed to both front and rear axle housings. Housings can be left assembled for these welding operations.

## AXLE HOUSING COMPONENTS

1. Locate all 4 spring perches. Weld perches on top of axle and use the following dimensions for correct center-to-center width and pinion angle:
  - Front** - Match Stock C-to-C (28-1/4"), Match Stock Pinion Angle
  - Rear** - Match Stock C-to-C (37-3/8"), Stock Pinion Angle plus 4 degrees



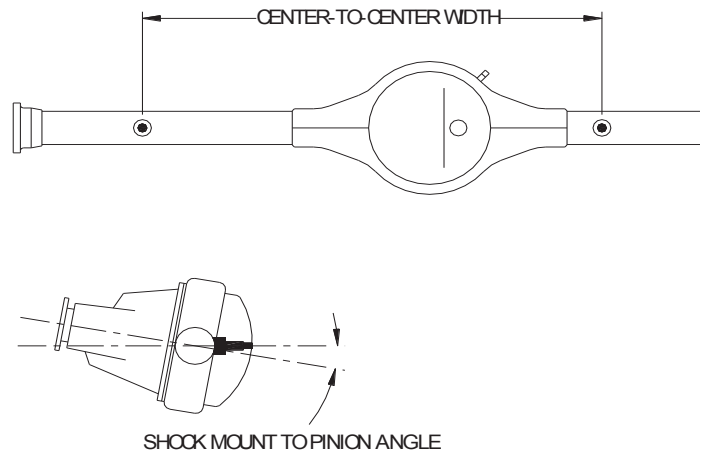
**Fig. 2**

2. Locate both front and rear lower shock mounts. Weld shock mounts behind axle [**shock bolt should end up below axle center line**] and use the following dimensions for correct center-to-center width and pinion angle:

**Front** - 34" C-to-C, Match New Spring Perch Pinion Angle (parallel with new spring perch)

**Rear** - 32" C-to-C, Match New Spring Perch Pinion Angle (parallel with new spring perch)

Be sure there is clearance for u-bolts before welding in place.



**Fig. 3**

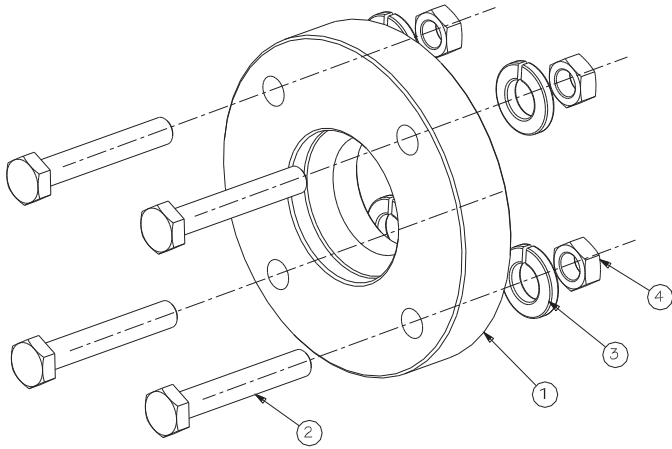
3. With axle components welded in place reinstall axle housings to vehicle.

## BUMP STOP MOUNTS

1. Locate front bumpstop platforms. Front bumpstop platforms are designed to weld on top of u-bolt plates in an upright position. Position these platforms inline with upper bumpstops and weld in place.
2. Locate rear bumpstop platforms. Rear bumpstop platforms are designed to weld on top of u-bolt plates. Position these platforms inline with upper bumpstop platform and weld in place. Bolt bumpstops provided to rear bumpstop platforms.

**DRIVESHAFT SPACERS**

1. Install driveshaft spacers on axle end of drive-shaft.



**Fig. 4**

**SS EXTENDED BRAKELINES**

1. Install SS Extended Brakelines in place of existing brakelines.