

# Installation instructions

## For set # 16.3120

### 00-09 HONDA S2000

### Front Control Arm Bushings



1131 VIA CALLEJON, SAN CLEMENTE, CA 92673

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It is recommended that if you are unfamiliar with this type of work that you refer to a qualified service center specializing in this type of work. It is also recommended that if you choose to do this work yourself that a factory service manual be obtained for the proper procedures pertaining to removal, replacement and proper torque specifications for your vehicle. This instruction set is intended as a guideline for the safe installation of Energy Suspension's polyurethane bushings, once you have removed the factory components from your vehicle. Wheel alignment is almost always disturbed when suspension components are removed or replaced. It is recommended that you have the alignment checked on your vehicle at a qualified alignment shop. Energy Suspension recommends that you read over all the installation instructions and check all P/N's and quantities in the parts list before you start. Call customer service at 949-361-3935 if the parts in your kit do not match this parts list. Prior to installation, make sure that your car is in excellent mechanical condition and that there are no suspension or steering related problems. This part has been designed to work only with a car that is in good state of repair. No matter how carefully we design our parts, this is one area we have no control over and cannot be held responsible.

#### Parts list:

- 4 - 2904 (Upper control arm bushings)
- 4 - 15.10.654.39 (.875" x .500" x 1.850" sleeve)
- 2 - 3518 (Lower control arm bushing frt.pos.)
- 2 - 3519 (Lower control arm bushing frt.pos. T/W)
- 2 - 15.10.491.39 (1.000" x .563" x 2.480" sleeve)
- 2 - 3520 (Lower control arm bushing rr.pos.)
- 2 - 15.10.655.39 (1.250" x .790" x 2.675" sleeve)
- 2 - 8381 (Lower control arm bushing strut.pos.)
- 2 - 8382 (Lower control arm bushing strut pos. T/W)
- 2 - 15.10.613.39 (1.000" x .500" x 1.960" sleeve)

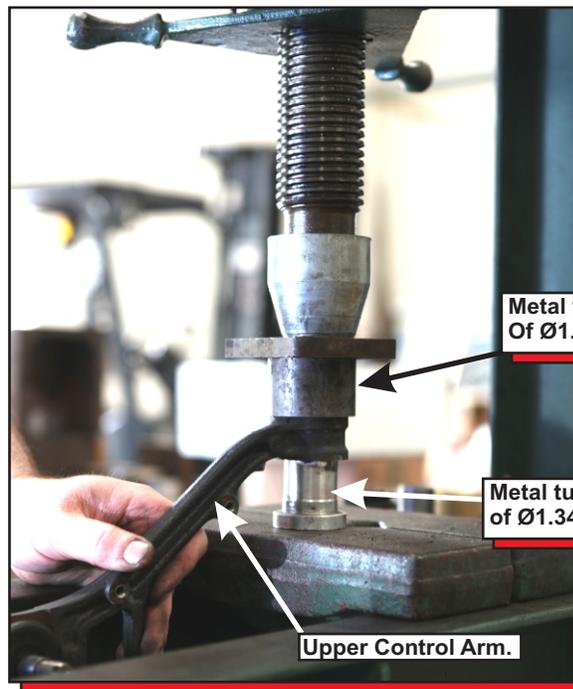
#### Torque values:

- Upper arm flange bolts (75.9 lbf-ft)
  - Upper ball joint castle nut (36-43 lbf-ft)
  - Wheel sensor harness & brake hose mounting bolts (7.2 lbf-ft)
  - Caliper bracket mounting bolts (79.6 lbf-ft)
  - Tie-rod end ball joint castle nut (40 lbf-ft)
  - Lower ball joint castle nut (43-51 lbf-ft)
  - Stabilizer end link nut at bar (28 lbf-ft) at control arm (22 lbf-ft)
  - Lower control arm damper flange bolt (47 lbf-ft)
  - Lower control arm cam adjusting nuts & cam adjusting bolts (58 lbf-ft)
- Note:** Tighten castle nuts to lower torque spec, then tighten only far enough to align slot with pin hole. Always install new cotter pins.

I.D. of front upper control arm is  $\varnothing 1.380$ ". Using a hydraulic press, properly support bushing with metal tubing with an O.D. of  $\varnothing 1.340$ " -  $\varnothing 1.375$ " and a larger metal tube with an I.D. of  $\varnothing 1.780$ " -  $\varnothing 1.800$ ". Slowly press down on control arm to remove the rubber bushing with bonded outer metal shell. Remove all sharp edges from I.D. Apply grease to all metal parts that will contact the new polyurethane bushings.



Factory bushing metal shell must be pressed out of upper control arm for Energy Suspension polyurethane bushings to fit properly.



Metal tubing with an I.D. Of  $\varnothing 1.780$ " -  $\varnothing 1.800$ "

Metal tubing with an O.D. of  $\varnothing 1.340$ " -  $\varnothing 1.375$ "

Upper Control Arm.

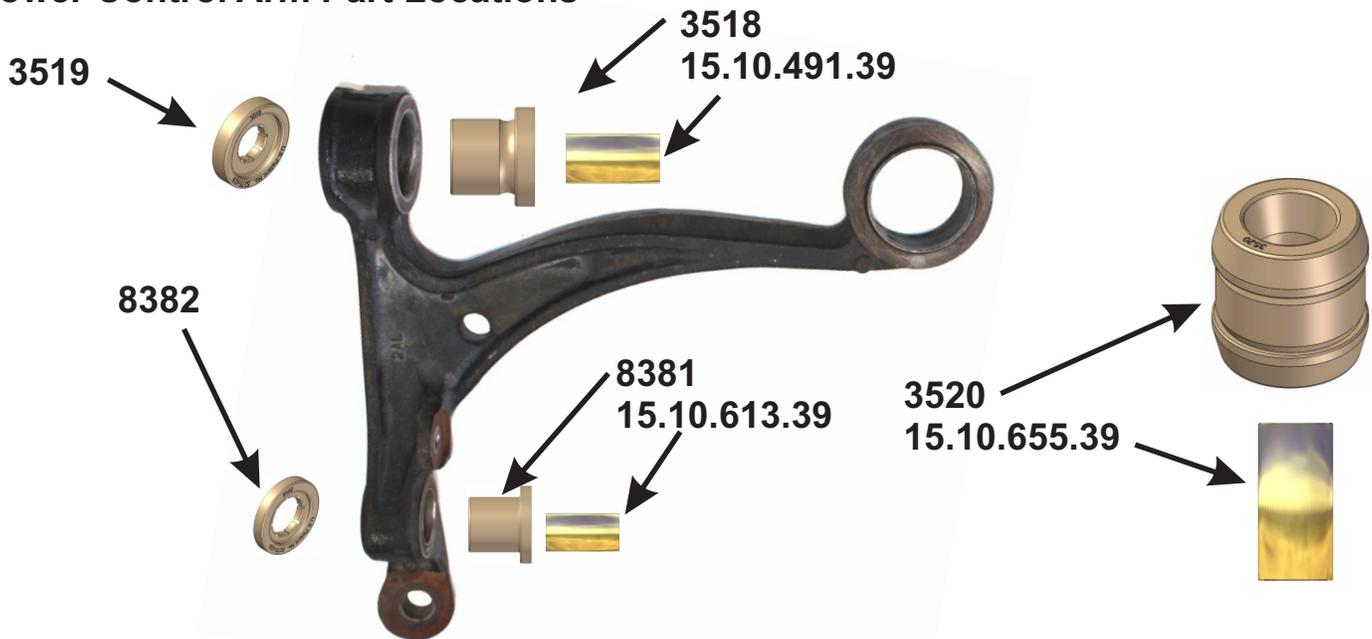
### Lower Control Arm:

Note: Do not remove outer metal shells from lower control arm, all 3 positions must be reused for the bushings to work. Descriptions on removing the rubber bushings and not the metal shells will be similar for all 3 positions. Use caution and common sense when removing bushings. Be in a well ventilated area. Have a friend help with a fire extinguisher and *you must satisfy yourself thoroughly* that nether personal safety nor vehical safety will be jeopardized.

Use a propane or acetylene torch and, with a fairly hot flame, slowly heat evenly around the outside of the outer metal shell (Pic 1), just enough to brake the bond with the rubber. Make sure to keep the flame moving and not to hold it in one spot for too long. When you hear a sizzling and see light smoke coming from the sides of the bushing the bond should be broken. At no time should there be any flames coming from the rubber, if there are any flames, you need to back off with the heat. Just push the old rubber and inner metal sleeve out with pliers or a screwdriver (Pic 2). Let the outer metal shell and control arm cool off before cleaning the inside. Once cool clean all scraps of rubber from ID of shell and remove any burrs and sharp edges with a file and emery paper as preparation for new bushing (Pic 3). You want the edges as smooth and rounded as possible to ease installation and prevent cutting the bushing. Apply grease to the I.D. of the lower control arm (where the shell is). Grease all sides of the bushing that will contact metal. Tighten all fasteners to factory specs. After installation is complete, Energy Suspension recommends an alignment be performed at a qualified alignment shop.



### Lower Control Arm Part Locations



17581

16/MAY/12 BRH

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