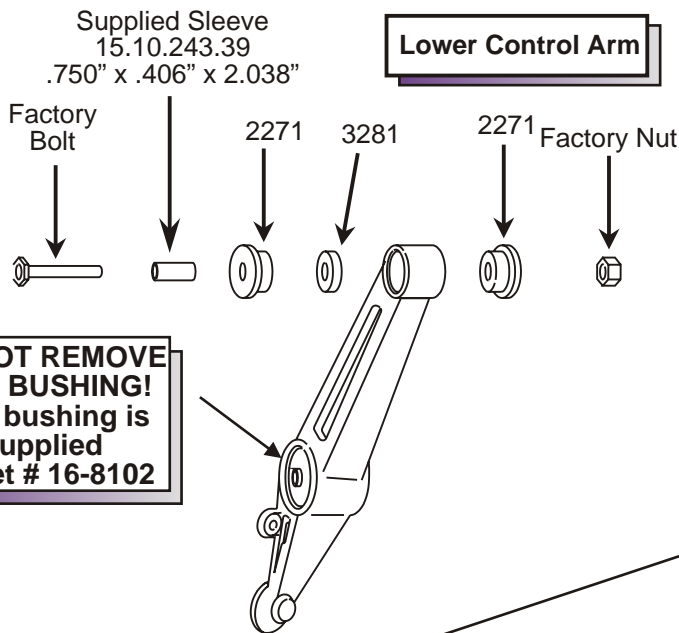


Installation Instructions for Set # 16-3103

1988-91 Honda Civic and CRX



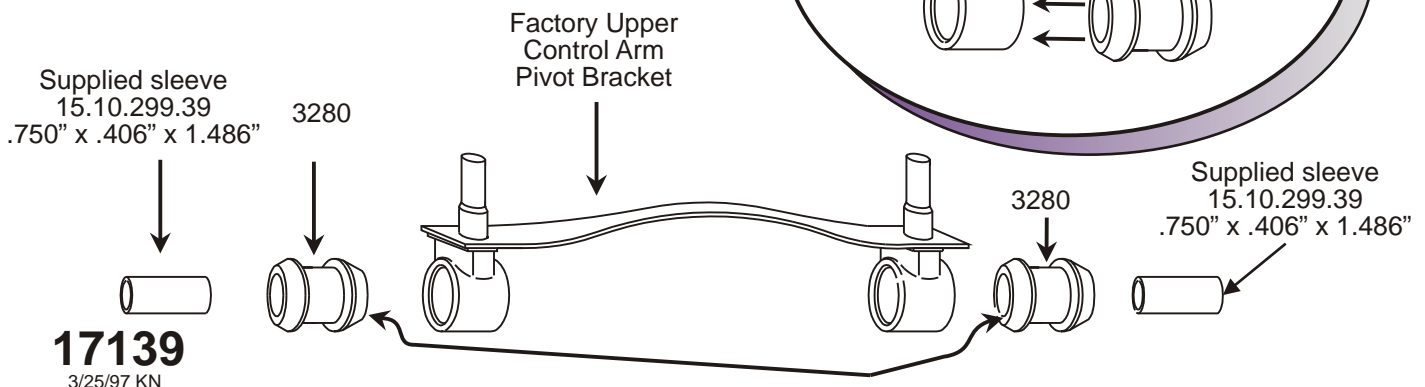
1. Properly support the vehicle on the frame.
2. Unbolt the upper control arm and pivot bushing assembly from the vehicle. Unbolt the upper control arm from the pivot bushing assembly.
3. Remove the rubber bushing and shells from the pivot bushing assembly. A hydraulic press will be needed. Clean the pivot bushing assembly and lubricate the inside of the barrel. Grease all sides of the bushing that contact metal. Press in the Energy Suspension bushing. Note: the bushings have a part number engraved in them. The engraved side on each bushing must be facing each other when fully assembled. See diagram.
4. Reassemble and reinstall the upper control arm assembly onto the vehicle.
5. Remove the lower control arm.
6. Press out the inner control arm bushing including its shell from the control arm.
7. Grease the I.D. of the lower control arm (where the shell was). Grease the Energy Suspension bushing. Grease all sides of the bushing that contact metal.
8. Install the bushings. There are three bushings for this location. Two will be the same and one is different. Install the bushing with the flange first then install the bushing without the flange next. Install the remaining part. Grease the sleeve and install the sleeve.
9. Reassemble the control arm onto the vehicle. Tighten all fasteners to factory specs.
10. Perform a complete wheel alignment after completion of work.



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.

Other Energy Suspension Sets Available for this vehicle:

16-3104	Rear end control arm set (lower only)
16-8102	Front shock bushing set
16-8103	Rear shock bushing set
16-7102	Front strut bushing set
16-13101	Balljoint boot set
9-13103	Tie-rod boots
16-1102	Manual trans. shifter stabilizer
16-10102	Steering rack bushing



Installation Instructions

For set # 16-3104 / 16-3109



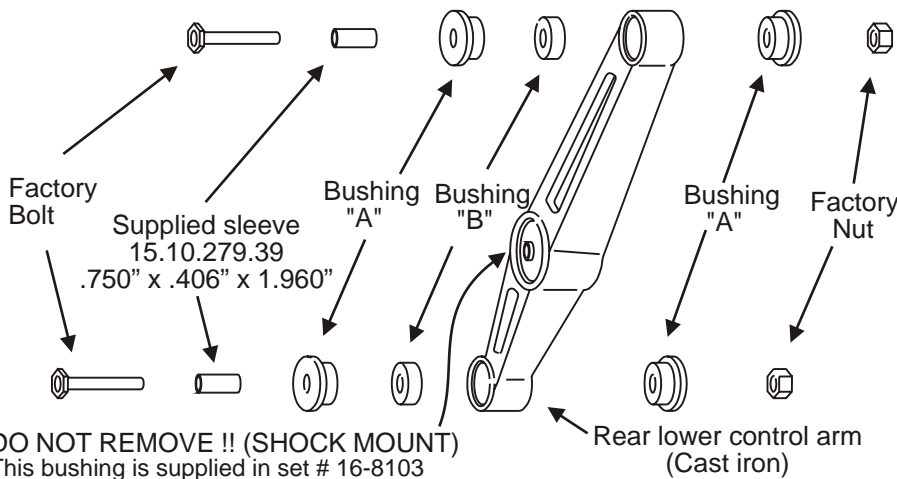
Note: This set will not fit 88 Civic/CRX with stamped steel lower control arm.

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.

1. Properly support the vehicle on the frame.
2. Disconnect the end link from the control arm if so equipped. Remove the inner pivot bolt and loosen the outer pivot bolt (wheel side). Remove the lower strut mount bolt. Remove the lower control arm.
3. Press out the rubber bushing and shells from the inner and outer pivot ends. A hydraulic press will be needed. Clean and lubricate the inside of the control arms (where the shells were). Grease all sides of the bushing that contact metal.
4. Install the bushings. There are three bushing for this location. Two will be the same and one is different. Install the bushing with the flange first then install the bushing without the flange next. Install the remaining flanged bushing. Grease the sleeve and install the sleeve. See diagram. Reassemble the control arm onto the vehicle.
5. Tighten all fasteners to factory specs.
6. Realign vehicle.



A hydraulic press was used to remove the original bushing, including the outer metal casing the rubber is bonded to. The inside diameter of the control arm in set # 16.3104 is \varnothing 31mm (1.220") and set # 16.3109 is \varnothing 35mm (1.378"). Go about .050" smaller when pressing out the bushing.



Set #	Bushing "A"	Bushing "B"
16-3104	2269	3283
16-3109	2301	3288

17140

3/25/97 KN
Updated 18/FEB/02 BRH
Updated 30/MAY/03 BRH

Installation Instructions for set # 16-10101, 16-10102, 16-10103 and 16-10104

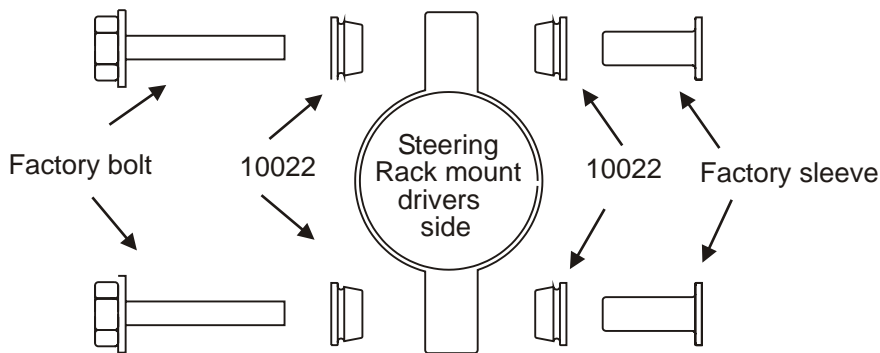


It is recommended that if you are unfamiliar with this type of work that you refer to a qualified service center specializing in this type of work. It is also recommended that if you choose to do this work yourself that a factory service manual be obtained for the proper procedures pertaining to removal, 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.

Steering rack bushing

1. Follow the factory manual for the procedure on removing the steering rack mount bushings.
2. Part # 10022 is used on the drivers side.(power steering and non-power steering models)
3. Part # 10023 or 10024 is used on the passengers side. Part # 10023 is used in set # 16-10101. Part # 10024 is used in set # 16-10102. Part # 10025 is used in set # 16-10103. Part # 10037 is used in set # 16-10104.

Note: Part # 10023, 10024 and 10025 will only fit on power steering equipped vehicles.(this bushing is not available for non-power steering models.)



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17153

7/25/96 KN
Updated 18/FEB/02 BRH
Updated 14/AUG/03 BRH

Installation Instructions for set # 16-10101, 16-10102, 16-10103 and 16-10104

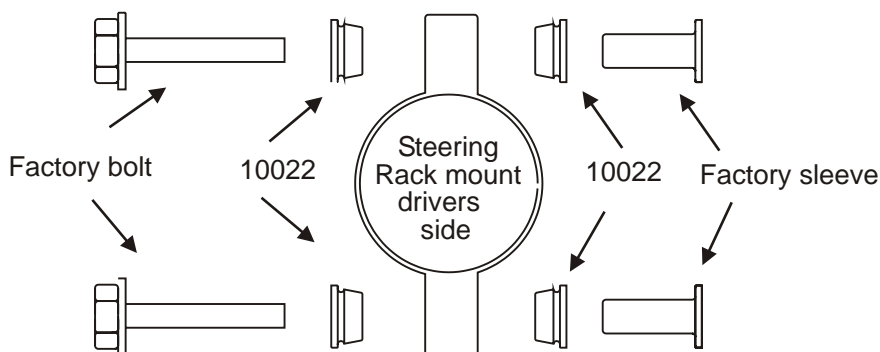


It is recommended that if you are unfamiliar with this type of work that you refer to a qualified service center specializing in this type of work. It is also recommended that if you choose to do this work yourself that a factory service manual be obtained for the proper procedures pertaining to removal, 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.

Steering rack bushing

1. Follow the factory manual for the procedure on removing the steering rack mount bushings.
2. Part # 10022 is used on the drivers side.(power steering and non-power steering models)
3. Part # 10023 or 10024 is used on the passengers side. Part # 10023 is used in set # 16-10101. Part # 10024 is used in set # 16-10102. Part # 10025 is used in set # 16-10103. Part # 10037 is used in set # 16-10104.

Note: Part # 10023, 10024 and 10025 will only fit on power steering equipped vehicles.(this bushing is not available for non-power steering models.)



17153

7/25/96 KN
Updated 18/FEB/02 BRH
Updated 14/AUG/03 BRH

OPEN FIRST!!



Parts list for Master set # 16-18102 88-91 Honda Civic / CRX

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.

Parts list:

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.

Transmission shifter stabilizer bushing set: 16.1102

- 1 - 1033 (mounts near shifter)
- 2 - 2277 (mounts at the transmission)
- 1 - 15.10.247.39 (.750" x 8mm x 1.200" sleeve)
- 1 - 17161 installation instructions

Front end control arm bushing set: 16.3103

- 4 - 2271 lower control arm pivot bushing
- 2 - 15.10.243.39 (.750" x .406" x 2.038" sleeve)
- 2 - 3281 lower control arm pivot bushing.
- 4 - 3280 upper control arm pivot bushing.
- 4 - 15.10.299.39 (.750" x .406" x 1.486" sleeve)
- 1 - 17139 installation instructions.

Rear end control arm bushing set: 16.3104 (89-91 Civic/CRX with cast iron control arms).

- 8 - 2269 lower control arm pivot bushing
- 4 - 3283 lower control arm pivot bushing
- 4 - 15.10.279.39 (.750" x .406" x 1.960" sleeve)
- 1 - 17140 installation instructions

Rear end control arm bushing set: 16.3111 (88 Civic/CRX with stamped steel control arms).

- 4 - 3321 small bushing.
- 4 - 3322 big bushing.
- 4 - 15.10.279.39 (.Use sleeves from set # 16.3104)
- 1 - 17389 installation instruction.

Front strut rod set(reuse all original hardware): 16.7102

- 4 - 7095 strut rod bushing (Install with P/N facing each other)

Front shock bushing set: 16.8102

- 4 - 2272 lower control arm shock mount
- 4 - 8096 upper shock mount(use O.E. sleeve and washers)
- 2 - 15.10.245.39 (.750" x .480" x 1.960" sleeve)
- 1 - 17162 installation instruction.

Rack and pinion bushing set: 16.10101

- 4 - 10022 drivers side (all models)
- 1 - 10023 passenger side
- 1 - 17153 installation instructions

Front balljoint boot set: 16.13101

- 2 - 13001 (lower balljoint)
- 2 - 13003 (upper balljoint)

Parts list continued:

Rear shock bushing set: 16-8103 (89-91 only)

- 4 - 2270 lower control arm shock mount.
- 4 - 8096 upper shock mount.
- 2 - 15.10.279.39 (.750" x .406" x 1.960" sleeve)
- 1 - 17163 installation instruction

Front endlink set: 16-8104

- 8 - 8072 endlink bushing.
- 2 - 15.10.226.39 (.562" x .375" x .400" sleeve)
- 8 - 15.03.03.40 cupped washer.
- 2 - 15.05.28.39 (3/8"-16 x 3-3/4" bolt)
- 2 - 15.07.01.40 (3/8"-16 nylock nut)
- 1 - 17039 installation instructions.

Tie rod boot set: 9-13103

- 2 - 13003 tie rod boots.

Please refer to our newest catalog for more information on custom applications including bump stops, shock bushings, universal mounts, tie rod boots, ball joint boots, transmission mounts, Formula 5 Prelube etc. Please ask to see our catalog at your place of purchase.

Front anti-swaybar bushing set (does not include endlinks):

Bar Dia.	Set #
19mm	16-5111
18mm	16-5110
16mm	16-5109

Rear anti-swaybar bushing set (does not include endlinks):

Bar Dia.	Set #
15mm	16-5112

Rear Trailing Arm bushing set: 16.7106

Motor Mount Inserts set: 16.1104
(Only torque positions supplied)

17155

17/MAR/10 BRH

Installation instructions

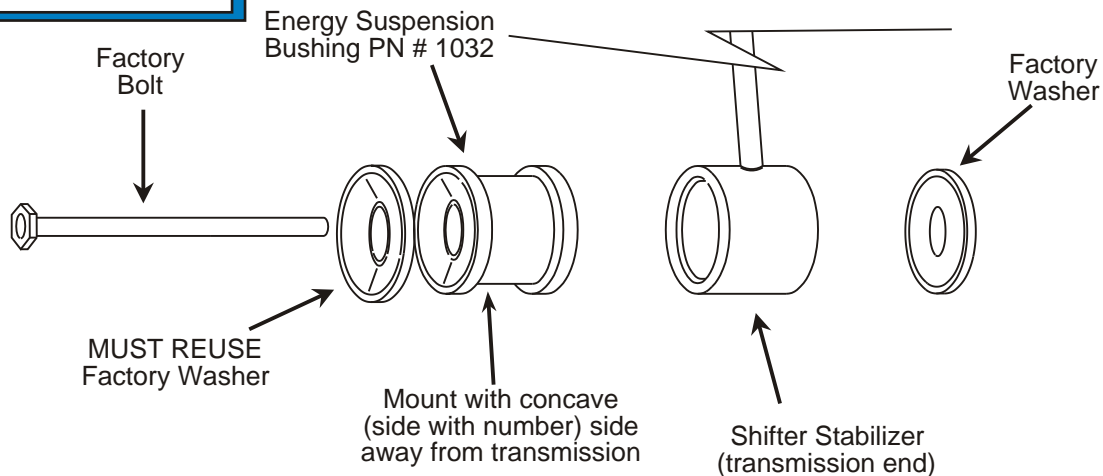
For set # 16.1101 & 16.1102



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.

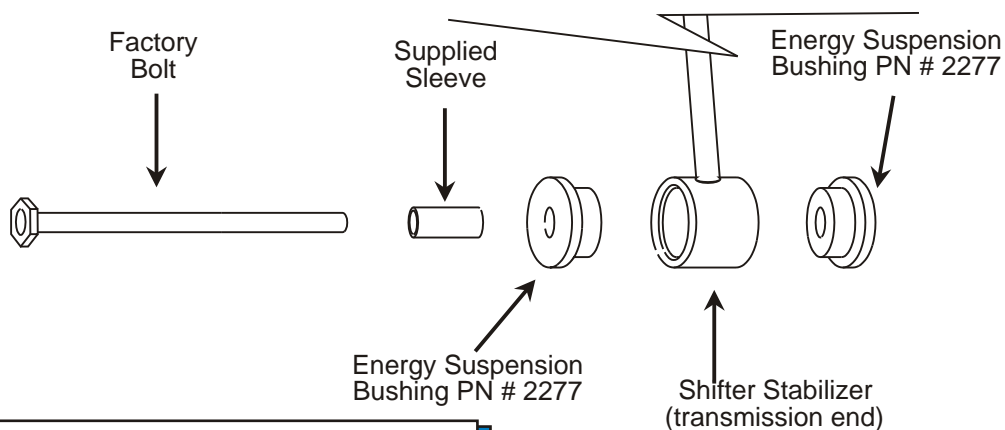
1. Properly support the vehicle on the frame.
2. Under the car next to the shifter assembly there is a bushing holding the shifter assembly to the floorplan of the car. This part is connected by two bolts and looks like the long rectangular part supplied in your kit. You **MUST** reuse the two bolts, the plate that covers the bushing and the two spacers located in the original rubber bushing that you removed. Install the Energy Suspension bushing.
3. Unbolt the end of the transmission shifter stabilizer, the end that is mounted to the transmission. Do not unbolt the shifter linkage. Press out the stock rubber bushing and install the new Energy Suspension bushing. (see diagram below) Note: to remove the rubber bushing a screwdriver inserted into the hole in the bushing or a pair of plyers should be all that is needed.
4. Tighten all fasteners to factory specs.

Set # 16-1101



Must reuse factory hardware

Set # 16-1102



Must reuse factory hardware

17161

Updated 15/FEBB/02 BRH
Updated 13/AUG/03 BRH

Installation instructions

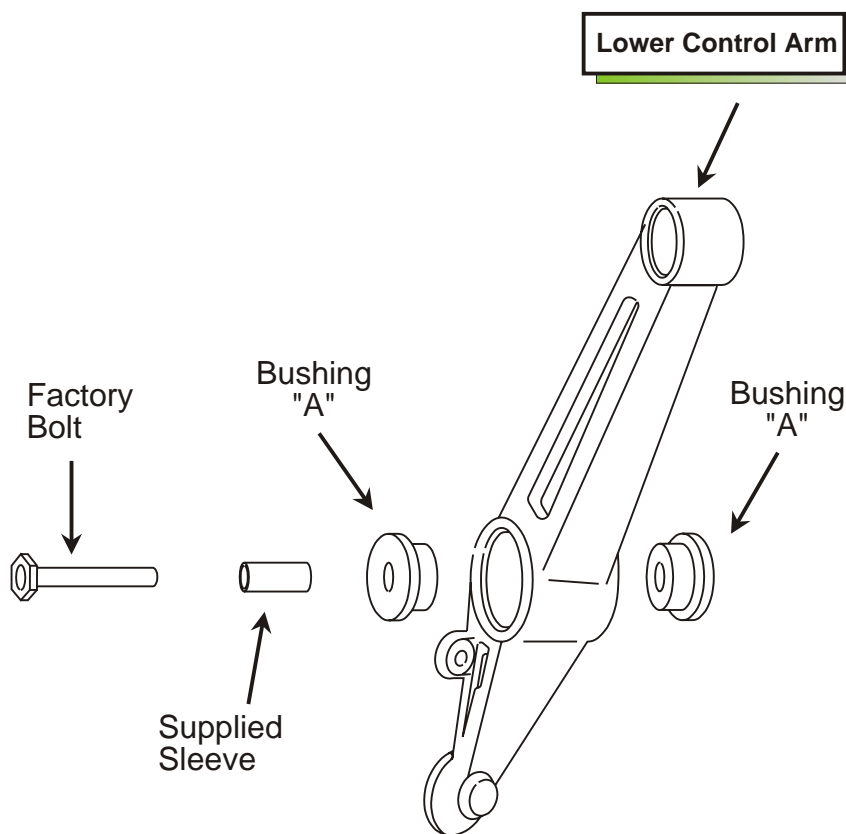
For set #'s
16.8102 & 16.8106



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.

1. Properly support the vehicle on the frame.
2. Unbolt the shock/strut assembly from the vehicle. Remove the top spring hat from the assembly. Use extreme caution!!! Follow procedure in Factory manual or major injury may occur!!!
3. Remove the rubber bushing at the top of the shock/strut. There will be two identical bushing. Replace the bushing using the original hardware. Reinstall the shock/strut assembly, but only tighten the top mounts.
4. Remove the lower control arm from the vehicle. Remove the lower shock/strut bushing including the shell from the lower control arm. A hydraulic press will be needed. Clean the hole/barrel in the control arm that you just removed the bushing from. Lubricate the inside of the hole/barrel. Grease all sides of the bushing that contact metal. Press in the Energy Suspension bushing. Grease the sleeve and press into the bushing. See diagram.
5. Reassemble the control arm onto the vehicle. Tighten all fasteners to factory specs.

Set #	Bushing "A"	Supplied Sleeve	Size
16-8102	2272	15.10.245.39	.750" x .480" x 1.960"
16-8106	2295	15.10.302.39	.750" x .480" x 2.040"



Inst.#17162

7/25/96 KN
Updated 15/FEB/02 BRH
Updated 14/AUG/03 BRH

Installation instructions

For set # 16.8103

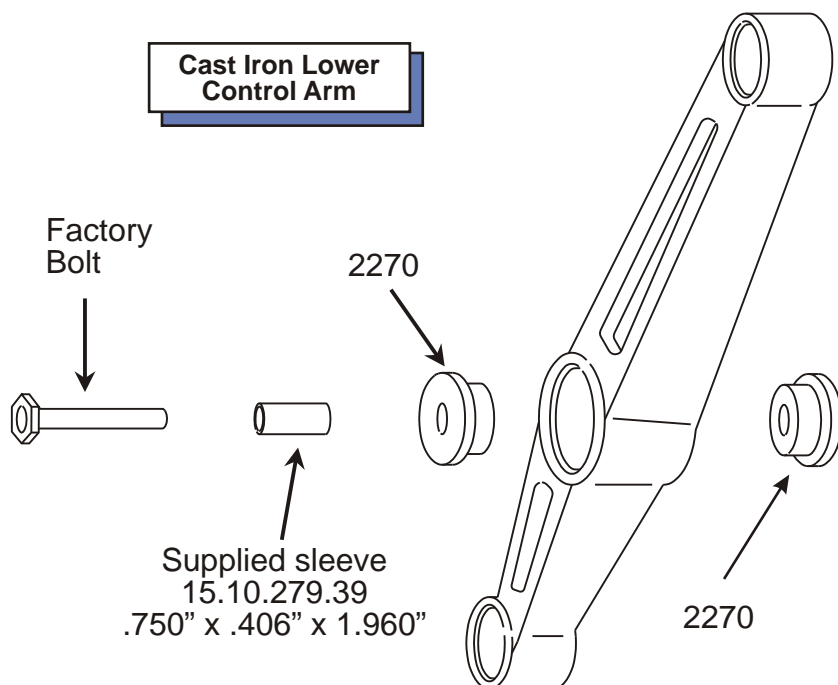
89-91 Civic/CRX
92-95 Civic/Del Sol

ENERGY
SUSPENSION 

Note: This set will not fit 88 Civic/CRX with stamped steel lower control arm.

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.

1. Properly support the vehicle on the frame.
2. Unbolt the shock/strut assembly from the vehicle. Remove the top spring hat from the assembly. Use extreme caution!!! Follow procedure in Factory manual or major injury may occur!!!
3. Remove the rubber bushing at the top of the shock/strut. There will be two identical bushing. Replace the bushing using the original hardware. Reinstall the shock/strut assembly, but only tighten the top mounts.
4. Remove the lower control arm from the vehicle. Remove the lower shock/strut bushing including the shell from the lower control arm. A hydraulic press will be needed. Clean the hole/barrel in the control arm that you just removed the bushing from. Lubricate the inside of the hole/barrel. Grease all sides of the bushing that contact metal. Press in the Energy Suspension bushing. Grease the sleeve and press into the bushing. See diagram.
5. Reassemble the control arm onto the vehicle. Tighten all fasteners to factory specs.



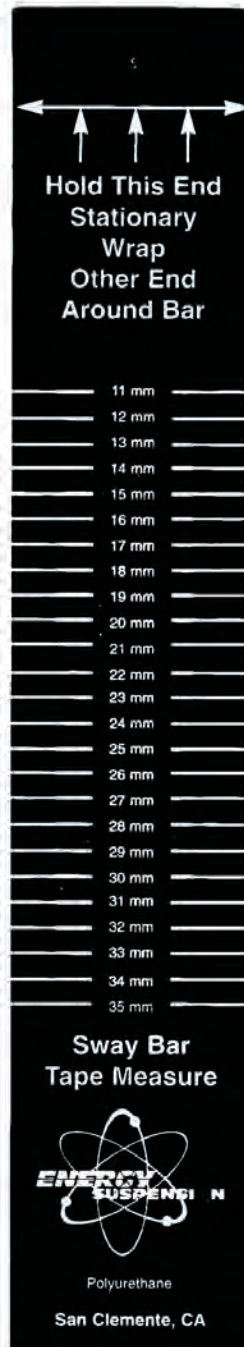
A hydraulic press was used to remove the original bushing, including the outer metal casing the rubber is bonded to. The inside diameter of the control arm is $\text{Ø } 37\text{mm}$ (1.457"). Go about .050" smaller when pressing out the bushing.

Inst.#17163

7/25/96 KN
Updated 15/FEB/02 BRH
Updated 29/MAY/03 BRH

17276

This instruction number pertains to the
“**SWAY BAR MEASURING TAPE**”



Installation instructions

For set # 16.3111
1988 Honda Civic / CRX



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.

Apply light heat evenly around the outside of the outer metal casing, just enough to break the bond with the rubber. When you 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. Let the outer metal casing cool off before cleaning the inside.

Do not remove outer metal shell, it must be reused for this bushing set to work.



Heat here only

To remove rubber bushing, evenly apply heat to outside casing. This heat will break the glue bond and the bushing will push out. At no time should there be flames, only steady heat.

The outer metal casing is stepped, be sure to install the new bushings correctly. P/N 3321 is the smaller bushing, install it on side with smaller inside diameter.

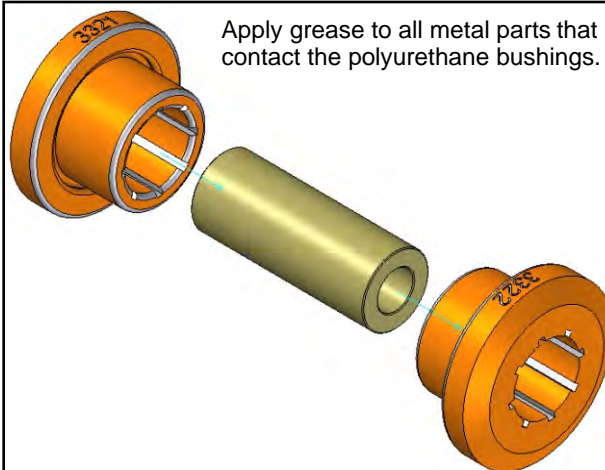


Let metal casing cool before cleaning inside. Remove any burrs and sharp edges before applying grease.

B.O.M.

- 4 - 3321 small bushing.
- 4 - 3322 big bushing.
- 4 - 15.10.279.39 (3/4"x 1/2"x 1.960") sleeve.
- 1 - 17389 installation instructions.
- 2 - 9.11108 grease.

Apply grease to all metal parts that contact the polyurethane bushings.



17389

13/JUN/03 BRH

View other performance suspension parts made by Energy Suspension on our website.