## Installation instructions For set # 19.3105

2005-2009 Subaru Legacy/Outback Rear Control Arm bushing set ENERXY SUSPENSI®N®

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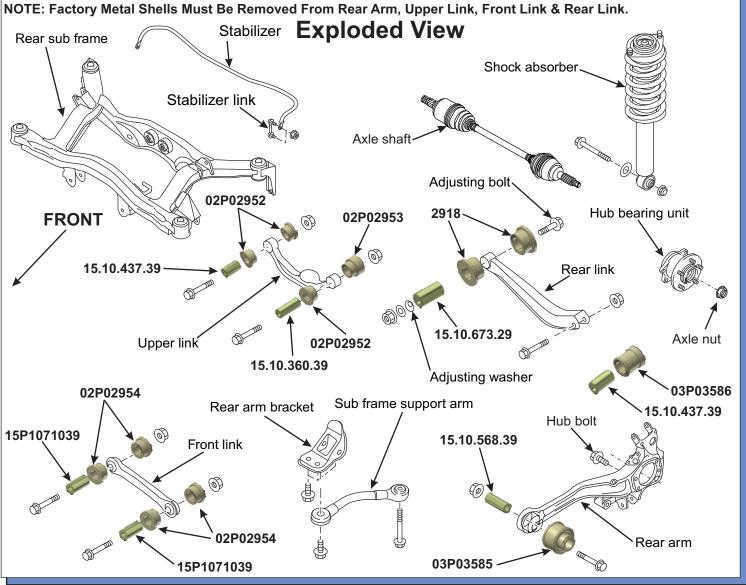
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It is recommended that if you are unfamiliar with this type of work that you refer to a qualified service center specializing in this type of work. It is also recommended that if you choose to do this work yourself that a factory service manual be obtained for the proper procedures for different model options, NOTES, CAUTION and WARNINGS 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 vehicle 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 vehicle 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: 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.

- 2 03P03585 (Rear Arm Bushing Front Pos.).
- 2 03P03586 (Rear Link Bushing At Rear Arm Rear Pos.).
- 4 2918 (Rear Link Bushing).
- 6 02P02952 (Upper Link Bushing).
- 2 02P02953 (Upper Link Bushing Outer Pos. Rear)
- 8 02P02954 (Front Link Bushing).
- 4 15P0206939 (1.587" x 1.375" x 1.250" Shell).
- 1 17P17692 (this instruction sheet).

- **2 15.10.568.39** (1.00" x .563" x 2.625" Sleeve).
- 2 15.10.437.39 (.875" x .500" x 1.650" Sleeve).
- 2 15.10.673.39 (1.00" x .563" x 1.650" Sleeve).
- **2 15.10.437.39** (.875" x .500" x 1.650" Sleeve).
- 2 15.10.360.39 (.875" x .500" x 2.250" Sleeve).
- 4 15P1071039 (.875" x .500" x 1.720" Sleeve).



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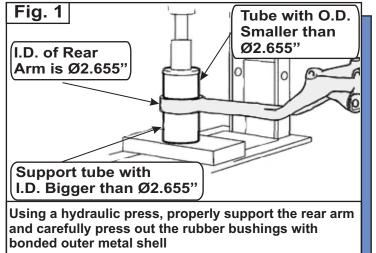
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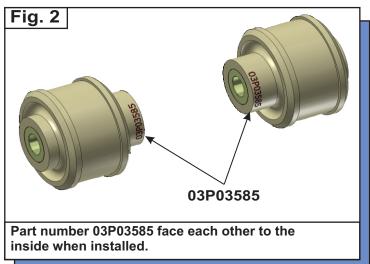


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Removal: Disconnect the ground cable from battery. Loosen the rear wheel lug nuts. Lift the vehicle up and support with jacks stands at the specified points. Put the gear shift lever to neutral. Release the parking brake. Remove the rear wheels and set aside. Remove the sub frame support arm and remove the axle nut, Remove the rear ABS wheel speed sensor and brake cable bracket. Remove the disc brake caliper from backing plate, and suspend it from stabilizer. Remove the disc rotor from hub. Remove the four bolts from rear arm to remove the rear hub unit. Hang the backing plate from the sub frame. Remove the bolt which secures the parking brake cable clamp, brake hose bracket and ABS wheel speed sensor bracket to rear arm. Remove the stabilizer link and the shock absorber from rear arm. Remove the rear arm bracket. Remove the bolts which secure rear arm to the front link, rear link and upper link, then remove the rear arm. NOTE: The O.E. bushings are bonded rubber with an inner metal sleeve and outer metal shell that is pressed into the rear arm both positions, front link, rear link, and upper link. The outer metal shell must be removed from the rear arm and the 3 links. To remove the O.E. rubber bushings from the rear arm, use a hydraulic press to press out the bushing. (Fig. 1) The front bushing of the rear arm gets installed with the P/N (03P03585) to the inside. (Fig. 2) Grease the I.D. of rear arm, I.D. & O.D. of bushing 03P03585 and O.D. of sleeve 15.10.568.39. Press in bushing 03P03585 first, then press in the sleeve. (Fig. 3) Squeeze the leading edge of bushing 03P03585 to help get it started into the eye. Then press in the inner metal sleeve 15.10.568.39. (Fig. 4) Rear arm rear position bushing part number 03P03585 faces to the rear when installed. (Fig. 5) Using a bearing puller, press the rear bushing out of the rear arm. The rough casting has sharp edges that need to be filed down to a smooth finish. (Fig. 6) Grease the I.D. of the rear arm, I.D. & O.D. of bushing 03P03586 and O.D. of sleeve 15.10.437.39. Using some all-thread, nuts and flat washers, press in bushing 03P03586 first, then press in the inner metal sleeve. 15.10.437.39. (flg. 7) Bushing layout for upper arm. (Fig. 8) Using a hydraulic press, properly support the upper arm and carefully press out the rubber bushings with the bonded outer metal shell. (Fig.9) Before removing the rear lower arm, place matchmarks on the front and rear of the adjusting cam bolts. You will need to use these matchmarks to reinstall the track arm back in the same position after the new polyurethane bushings are installed. (Fig. 10) Using a hydraulic press, support the rear lower link and carefully press out the rubber bushing with bonded outer metal shell. (Fig. 11) Grease the I.D. of rear lower link, I.D. & O.D. of bushing 2918 and O.D. of sleeve 15.10.673.39 Press in the bushing on both sides then press in the inner metal sleeve. (Fig.12) Using a hydraulic press, support the front lower link and carefully press out the rubber bushing with the bonded outer metal shell. (Fig.13) Using a hydraulic press, support the lower link and carefully press in the new outer metal shells (15P0206939). Shells need to be evenly spaced. (Fig.14) Grease the I.D. of rear lower link, I.D. & O.D. of bushings 02P02954 and O.D. of sleeve 15P1071039. Press in the bushings on both sides then press in the inner metal sleeve. (Fig.15) Installation is in reverse order. Torque all hardware to factory specifications. Check fluid level in the transmission and differential. After driving 100-200 miles, recheck all hardware for proper torque and tighten if needed.





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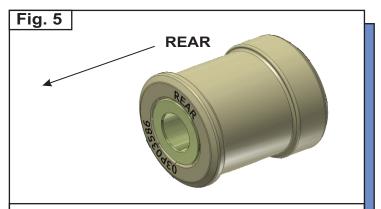
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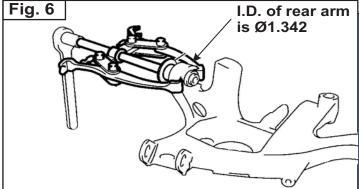
Grease the I.D. of rear arm, I.D. & O.D. of bushing 03P03585 and O.D. of sleeve 15.10.568.39.



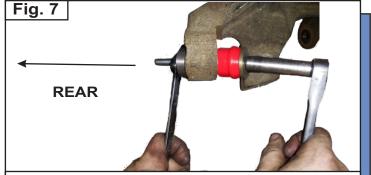
Squeeze the leading edge of bushing 03P03585 to help get it started into the eye. Then press in the inner metal sleeve 15.10.568.39.



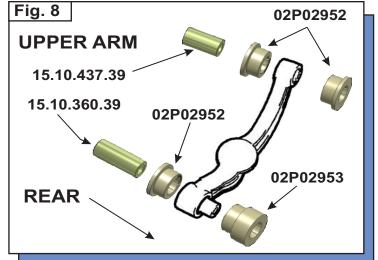
Rear arm rear position bushing part number 03P03585 faces to the rear when installed. Thick flange to the front.



Using a bearing puller, press the rear bushing out of the rear arm. The rough casting has sharp edges that need to be filed down to a smooth finish.



Grease the I.D. of rear arm, I.D. & O.D. of bushing 03P03586 and O.D. of sleeve 15.10.437.39. Using some all-thread, nuts and flat washers, press in bushing 03P03586 first, then press in the inner metal sleeve. 15.10.437.39.



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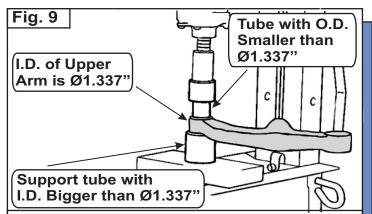
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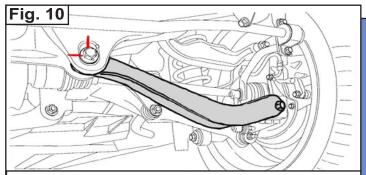


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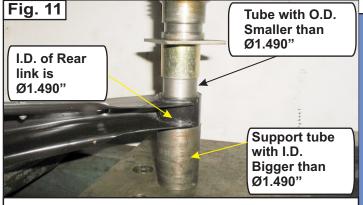
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Using a hydraulic press, properly support the upper arm and carefully press out the rubber bushings with bonded outer metal shell



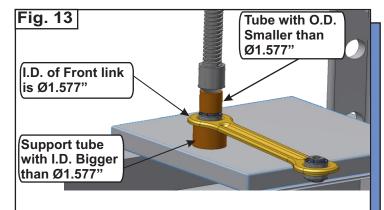
Before removing the rear lower arm, place matchmarks on the front and rear of the adjusting cam bolts. You will need to use these matchmarks to reinstall the track arm back in the same position after the new polyurethane bushings are installed.



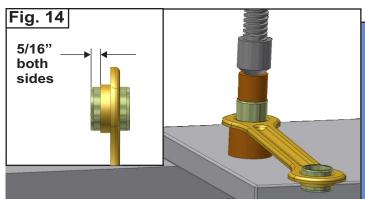
Using a hydraulic press, support the rear lower link and carefully press out the rubber bushing with bonded outer metal shell.



Grease the I.D. of rear lower link, I.D. & O.D. of bushing 2918 and O.D. of sleeve 15.10.673.39 Press in the bushings on both sides then press in the inner metal sleeve.



Using a hydraulic press, support the front lower link and carefully press out the rubber bushing with bonded outer metal shell.



Using a hydraulic press, support the lower lower link and carefully press in the new outer metal shells (15P0206939). Shells need to be evenly spaced.

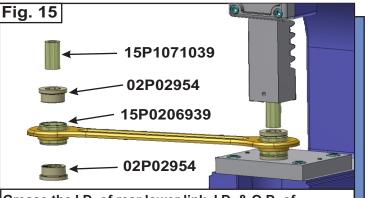
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Grease the I.D. of rear lower link, I.D. & O.D. of bushings 02P02954 and O.D. of sleeve 15P1071039 Press in bushings both sides then press in the inner metal sleeve.

#### Fig. 16

Installation is in reverse order. Torque all hardware to factory specifications. Check fluid level in the transmission and differential. It is recommended that you have the alignment checked on your vehicle at a qualified alignment shop. After driving 100-200 miles, recheck all hardware for proper torque and tighten if needed.

#### Torque Spec.

Axle nut 140 ft-lb then lock it securely.

Rear hub to backing plate bolts 47.9 ft-lb

Brake caliper to backing plate bolts 39.1 ft-lb

Lug nuts 66 ft-lb

Upper shock mount nuts 22.4 ft-lb

Lower shock lock nut 46 ft-lb

Stabilizer link lock nut 42 ft-lb

Stabilizer bushing bracket bolts 30 ft-lb

Rear link outer lock nut 42 ft-lb

Rear link inner lock nut 89 ft-lb

Upper link outer lock nut 48 ft-lb

Upper link inner lock nut 42 ft-lb

Front link lock nuts 42 ft-lb

Rear arm front position lock nut 111 ft-lb

Rear arm bracket bolts 92 ft-lb

Sub frame support arm to body bolts 59 ft-lb

Support plate to body bolts 48 ft-lb

Front and rear sub frame bolts 129 ft-lb

Center bearing to body bolts 38.3 ft-lb

Flange yoke to differential nuts & bolts 23.1 ft-lb

Hub bolt to rear hub unit bearing 47.9 ft-lb

Differential front member to sub frame nut & bolt 81 ft-lb

Differential member plate nuts 38 ft-lb

Rear differential cover mounting stud nuts 51 ft-lb