

R60 Countryman | R61 Paceman

2" (50mm) Lift Kit - Installation Guide

M7 Speed engineers and manufactures the highest quality MINI Cooper performance products and accessories available on planet Earth! Please read these instructions completely BEFORE attempting to install this product. If you are not confident you can do the work described or do not have the tools necessary please contact a local M7 dealer (listed on our website www.m7tuning.com) or a local accessory installation center to perform this work.

This installation requires moderate mechanical skills, complete knowledge of strut type suspensions and some specialized tools.

Kit Includes:

- Qty-(2) M7 Front Riser Blocks with stude installed-p/n 96-1082
- Qty-(2) M7 Rear Riser Blocks-p/n 96-1081
- Qty-(1) Installation Kit p/n 90-1046
 - Qty-(4) M10-1.0 x 60 mm lg. Hex Head Flanged Bolts (for rear)
 - Qty-(6) M8-1.25 Flange Lock Nuts (for front)

NOTE: The front and rear lift blocks are designed to be different thicknesses than the rear. When installed your vehicle will be equally lifted 2" (50mm) front and rear.

We highly recommend a set of shorter MAXX-G HD Adjustable Front Sway Bar Links (PN 10-510400) be

installed at the same time you are adding this lift kit. It will eliminate any chance of the front anti-roll bar and front suspension from binding and help ease reassembly of the vehicle.

TOOLS NEEDED:

- R60 Service Manual with a detailed suspension repair section
- Coil spring compressor tools
- Complete metric wrench & 3/8" drive metric socket set
- ½" drive 18MM, 20MM, 22MM socket and breaker bar
- T30 TORX socket
- ½" drive (lb-ft & Nm) torque wrench
- Blue Loctite



Figure 1





The following instructions are only an outline of the installation procedure. The actual disassembly of the stock suspension components to be able to install this lift kit is better defined in a service manual written for your specific vehicle.



WHEN WORKING UNDER YOUR CAR ALWAYS USE THE RIGHT EQUIPMENT FOR THE JOB. DON'T BE TEMPTED TO TAKE SHORT CUTS OR USE INAPPROPRIATE ITEMS. NEVER WORK UNDERNEATH A VEHICLE THAT IS ONLY SUPPORTED BY A JACK. THIS MAY CAUSE SEVERE INJURY AND EVEN DEATH.



CAUTION:

SUPPORT YOUR CAR BY USING STABLE AND QUALITY AXLE STANDS THAT ARE IN GOOD CONDITION AND PROPERLY RATED FOR YOUR VEHICLE'S WEIGHT. THIS INSTALLATION IS BEST ACCOMPLISHED USING AN AUTOMOTIVE SERVICE LIFT.

DISASSEMBLY NOTES: Experience has proven that removal of the strut/spring/front spindle upright as one assembly is a preferred method for the installation of this kit. This method requires special tools and advanced knowledge of MINI front suspension assembly. This kit can be installed by removing only the strut/spring assembly from the spindle upright but requires compressing the spring and creative mechanical skills.

- a) If you choose to leave the upright on the vehicle and remove only the strut/spring assembly it is advised to remove the two piece inner wheel well liners from the each of the front wheel wells before suspension disassembly. This will give added room to work.
- b) BE CAREFULL of the CV joint, CV joint boot and wheel sensors as these are easily damaged if not disassembled properly and protected from damage during the disassembly and reassembly process.
- c) Removal of the spring from the strut is not necessary.

FRONT INSTALLATION:

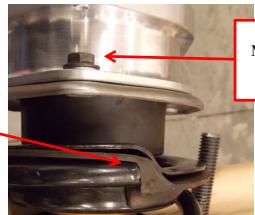
- 1) Remove wheels from the car.
- 2) Disconnect **BOTH RH & LH** sway bar links from the strut mounting points. This is necessary for both RH & LH suspension to go into full droop.

Work on one corner of the car at a time.

- 3) Locate the wheel sensors and sensor cables going to each wheel. Remove the sensors and cables from their mounting points. Move these sensors out of the way to protect them from damage.
- 4) Remove the complete front strut assembly from the vehicle per the service manual instructions.
- 5) Once the strut assembly is off the vehicle remove the plastic index pin from the top OE strut plate.
- 6) Install the M7 front lift block onto the top of the OE strut plate. Fasten it using the three (3) OE M8 Hex Nuts and tighten. Torque to 30 lb-ft [40 Nm]. Use a drop of Blue Loctite if available.
- 7) Using a white or silver marker draw index lines at the top and bottom of the spring and rubber isolators to use as reference index marks to verify all parts are indexed correctly at re-assembly.



- 8) Reinstall the strut/spring back onto the vehicle following the service manual instructions. Torque all fasteners to factory specifications.
- 9) Use the kit supplied three (3) M8 locking flange nuts on the top studs when fastening the top of the strut lift block to the body. Torque to 12 lb-ft [16.2Nm] DO NOT USE AN IMPACT GUN! HAND TIGHTEN ONLY!
- 10) Verify the spring is indexed properly on the top and bottom spring rubber isolators. See Figure #2
- 11) Reinstall the wheel sensors and cables into their original location.
- 12) Repeat the process for the opposite front suspension.
- 13) Reinstall the wheel well liners if removed.
- 14) Reinstall the wheels/tires. Torque wheels to 100 lb-ft [135 Nm]
- 15) Safety check all components for proper installation and fasteners for proper torque.



M8 FLANGE LOCK NUT
(3) PER SIDE

TOP OF SPRING INDEX SIMILAR AT BOTTOM

Figure 2

REAR INSTALLATION:

- 1) Remove both wheels from the car.
- 2) Disconnect BOTH RH & LH sway bar links from the sway bar. This is necessary for the suspension to go into full droop.
- 3) Remove the rear spring-over-shock assemblies per the service manual instructions. (2 bolts at the top and one at the bottom)
- Remove ring gasket from the top mounting plate.
 - NOTE: Removal of the spring off the shock is not necessary to install the lift block. NOTE: If installing a larger rear anti-roll bar now is the time to do it.
- 5) Place the M7 rear lift block onto the top of the spring-over-shock assembly.
- 6) Using (2) supplied M10x60mm long bolts per side fasten the top of the spring-over-shock unit with the riser block onto the car. Use Blue Loctite on the bolt threads. Do not install the ring gasket removed in step 4. Torque to 35 lb-ft [47 Nm]
- 7) Once the top bolts are installed align the bottom bolt with the lower swing arm by compressing the shock using an upward push from the bottom.
- 8) Reinstall the lower spring-over-shock bolt. Use Anti-seize or grease on the bolt threads to prevent galling. Torque all fasteners to factory specifications.
- 9) Verify the spring is indexed properly on the top and bottom spring seats-BOTH SIDES.



- 10) Reinstall the rear sway bar links. Torque all fasteners to factory specifications.
- 11) Reinstall the rear wheels/tires.



a) With 28.0" diameter or larger tires the tire will interfere with the front lower edge of the plastic rocker cover. Slight trimming may be necessary to eliminate this interference. See Figure #3

Trim this area for added tire clearance

Figure 3

- b) If installing a 22mm or larger rear anti-roll bar 12mm wheel spacers may be necessary for added wheel to anti-roll bar clearance.
- c) Torque wheels to 100 lb-ft [135 Nm]
- 12) Safety check all components for proper installation and fasteners for proper torque.

YOUR MINI IS NOW 2" HIGHER THAN THE FACTORY RIDE HEIGHT. THIS GIVES YOU ADDED CLEARANCE WHEN USING YOUR CAR FOR OFF-HIGHWAY AND ALL-TERRAIN SITUATIONS. IT ALSO MEANS YOUR MINI'S CENTER OF GRAVITY IS 2" HIGHER. CORNERING AND HANDLING WILL BE AFFECTED AND ROLL-OVER SITUATIONS MAY OCCUR. BE CAREFUL TO SLOWLY GET RE-ACCUSTOMED WITH YOUR CAR'S HANDLING AND ROAD BEHAVIOR CHARACTERISTICS.

M7 OFFERS A NUMBER OF LARGER REAR ANTI-ROLL BARS TO HELP COMBAT ADDED BODY ROLL. IF THE KIT YOU PURCHASED DID NOT INCLUDE A LARGER REAR ANTI-ROLL BAR AND YOU WANT TO ADD THIS PLEASE CALL OR VISIT OUR WEB SITE TO ORDER.

AFTER INSTALLATION OF THIS KIT AND YOUR FINAL TIRES & WHEELS ARE INSTALLED A COMPLETE 4 WHEEL ALIGNMENT IS HIGHLY RECOMMENDED.

Enjoy the Ride and stay *M7 Tuned*.....



Sway Bar Links Installation Notes Part Numbers: 10-510100 through 10-510800



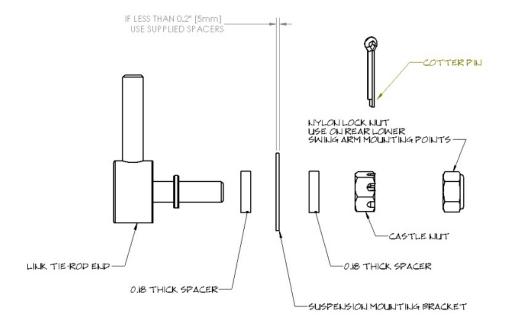
M7 Speed engineers and manufactures the highest quality and best fitting MINI Cooper accessories and performance parts available anywhere on Planet Earth! Please inspect your parts when you receive them to verify everything is included and no damage has happened during shipment. Read these instructions completely BEFORE attempting to install this product. If you are not confident you can do the work described or do not have the tools or skills necessary please contact a local M7 dealer (listed on or website www.m7speed.com) or a local MINI repair shop or automotive accessory installation center to perform this work. We acknowledge not everything is perfect but we work very hard every day to improve our products and make installations easier. If you have any comments please contact M7 Customer Service directly at 704-663-0094. We encourage and welcome any and all criticism, comments or product reviews. Thank you.



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INSTALLATION NOTES:

- 1. The length of the links have not been preset and the jam nuts are not tight. Set the length of each link for your specific application and tighten the jam nuts at each end against the aluminum center body. Each link has a left hand and right hand thread for easy length adjustment. Make sure bolt links are the same length.
- 2. When attaching the sway bar tie-rod end to thin (0.2" or 5mm) stock suspension brackets use the supplied 0.18" thick hardened flat washers so that the nut tightens fully on the threads.
 - a. If access to install the cotter pin is not available use the supplied nylon lock nuts.
- 3. Torque to 35 lb-ft (47n-m)
- 4. Align the castle nut hole and the hole in the stud to properly install the cotter pin.
- 5. Install the supplied cotter pin.

If you have any questions or concerns, don't hesitate to call our office Monday – Friday, 9am—4pm Eastern Time. Or e-mail us techsupport@m7speed.com.

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Team M7



MAXX-G Rear Anti Roll Bar 2011-2016 R60 Countryman & R61 Pacemen Part # 60-520100, 60-520200, 60-520300 Installation Guide



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This installation is classified as a MODERATE to HIGH skill level task.



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P.N. 9.11109

Figure 2: Supplied Hardware Kit



INSTALLATION OUTLINE:

The following procedure is only an outline.

CAUTION: BE AWARE OF AND NOTE THE LOCATION OF ALL THE BRAKE LINES AND SENSOR WIRES DURING THE INSTALLATION PROCESS. USE CAUTION NOT TO DAMAGE THESE DURING THE INSTALLATION PROCESS.

NOTE: The rear wheels must be un-supported and in full droop for this installation.

NOTE: A two post automotive lift is highly recommended. If one is not available then support the vehicle on jack stands.

- 1. Raise the car off the ground with the rear suspension unsupported and in full droop (extension)
- 2. Remove the rear wheels.



3. Remove the two (left hand and right hand) plastic underbelly panels located before the front axle.

Figure 1: Plastic Underbelly Panels

- 4. Remove the left and right hand rear spring/shock assemblies by removing the two (2) upper bolts attaching the spring/shock to the body structure and the one (1) lower bolt attaching it to the suspension swing arm (21mm socket). **NOTE: The spring is mounted to the shock and will stay in-place if the assembly is removed as a complete unit.**
- 5. Disconnect the RH & LH rear sway bar links from the OE rear sway bar.





6. <u>4WD VEHICLES ONLY:</u> Remove the two bolts attaching the aluminum rear cross member to the main body structure. (16mm socket). This cross member is located at the very rear section of the vehicle behind the rear axle and is used on ALL4 Countryman only.

ALL4 cross member bolts

Figure 2: ALL4 Rear Cross member bolts

Place jack here

7. Place a floor jack under the center of the rear sub-frame assembly and raise it until it touches the sub-frame.



Figure 3: Sub-Frame Bolt (4 total)



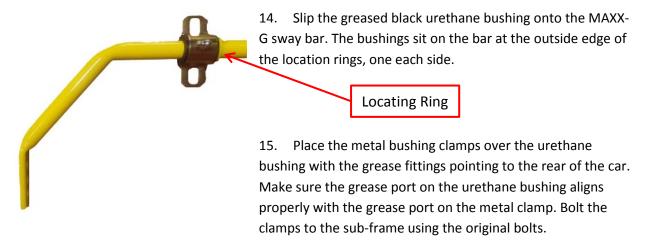
Figure 4: Sub-Frame Bolt (4 total)

- 8. Remove the four (4) bolts holding the rear sub-frame to the main body structure. E14 Inverted Torx Socket required.
- 9. Using the floor jack, slowly lower the rear sub-frame away from the vehicle until it is approximately 1.5" below the main structure and you have enough gap between the sub-frame and the body to slide the OE sway bay out and the new bar in.
- 10. Remove the factory rear anti-roll bar bushings and clamps that mount the sway bar to the sub-frame.
- 11. Slide the OE sway bar out through the gap between the sub-frame and the main body structure.

 NOTE: BE CAREFUL NOT TO DAMAGE ANY BRAKE LINES OR SENSOR WIRES DURING THE REMOVAL AND INSTALLATION.
- 12. Slide your new MAXX-G rear bar into its approximate operational location.



13. Coat the inside bore of each of the black urethane bushings with a liberal amount of silicone grease supplied with your kit.



16. Connect the sway bar links to the MAXX-G rear sway bar.

ASSEMBLY NOTE: We strongly recommend that all the chassis and suspension bolts be cleaned and the threads coated with anti-seize before assembly.

- 17. Jack up the rear cross member until it contacts the body structure and install the four (4) cross member bolts.
- 18. Finalize the installation by reversing the disassembly process from this point
- 19. Safety check each bolt that was removed and installed for proper tightness.

If anything seems unclear, please don't hesitate to call our office Monday – Friday, 9am—4pm EST. Or email us techsupport@m7tuning.com.

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