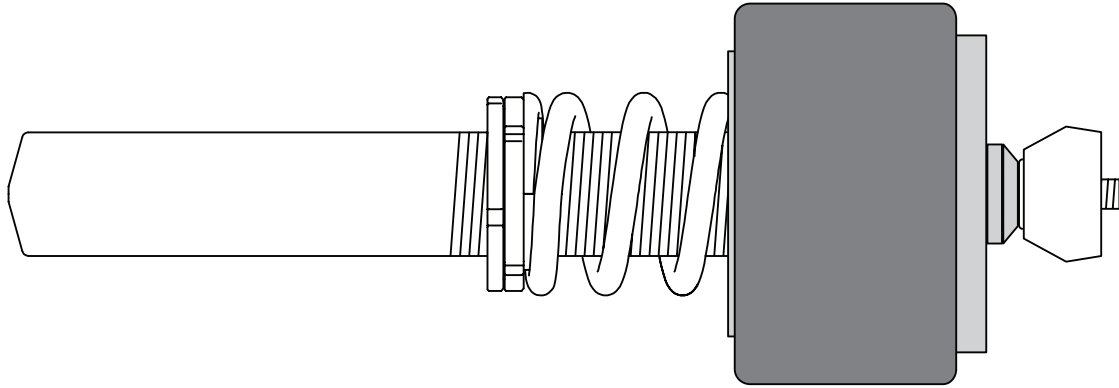




Coilover Lift System Installation Manual



IMPORTANT

HYBRIDair recommends that you have this kit installed by a qualified professional.

Deviating from the steps detailed in this installation guide will void your warranty and could result in damaging the HYBRIDair system, other parts of your suspension system, and/or your vehicle itself. HYBRIDair or its authorized agents are not responsible for damage or failure resulting from an improper or modified installation.

Before installing the HYBRIDair system, all suspension-related components must be inspected and confirmed to be in good working condition. You should inspect your coilover suspension kit when it is uninstalled from vehicle, as well as all bushings, tie rods, hubs, bearings, strut mounts, sway bar end links, wheels, tires, etc., and replace anything found to be worn or damaged. If there is pitting or rust on the shock rod, it may damage or reduce the life of the HYBRIDair seals.

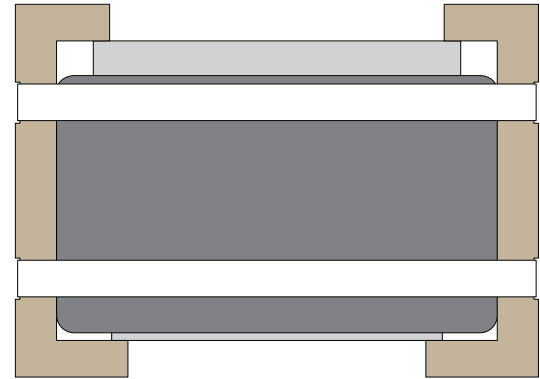
Please refer to your local laws and transport regulations regarding retrofitting and/or using air ride suspension in your state or province.

STEP 1

Unpack the HYBRIDair Coilover Lift Kit and ensure that all parts are accounted for:

- 2x HYBRIDair Coilover Lift base units
- 1x Installation centering cone
- 2x 1/4" tapered shock tower offset spacers
- 2x 1/16" shim
- 2x 1/8" shim
- 2x 1/4" shim
- 2x 1/2" shim

DO NOT remove banding and install brackets from base units until instructed.



2x HYBRIDair Coilover Lift base units
(pictured with banding and install brackets)



1x Installation centering cone



2x 1/4" tapered offset spacers



2x 1/16" shim



2x 1/8" shim



2x 1/4" shim



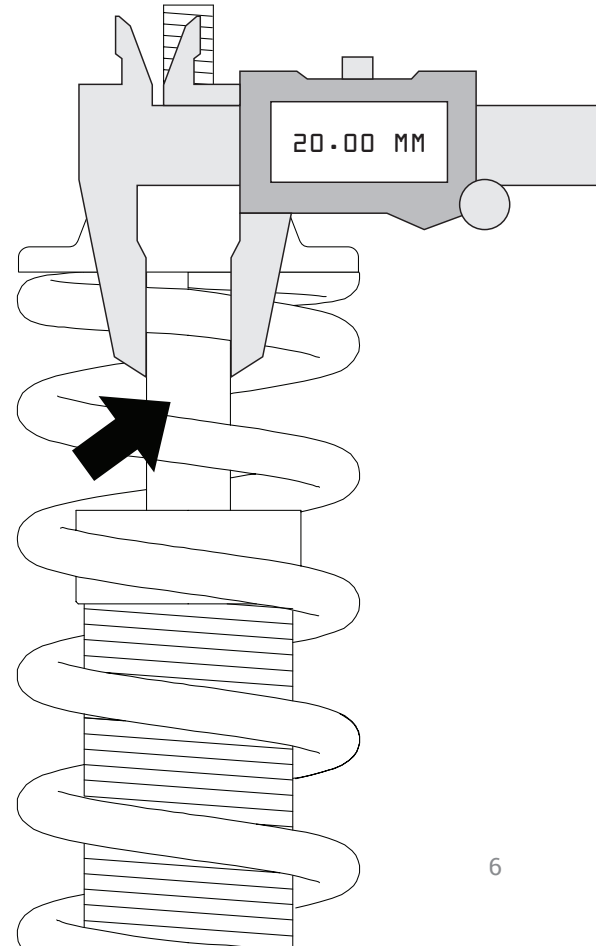
2x 1/2" shim

STEP 2

Measure the coilover shock rod diameter to ensure you have the correct sized HYBRIDair Coilover Lift kit for the application.

STEP 3

Remove all coilovers that you will be adding lifts to from the vehicle.



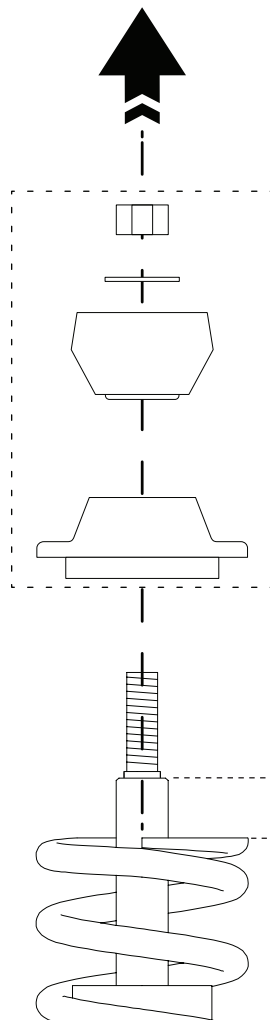
STEP 4

Remove all parts above the coil spring including the spring hat, strut bearing, any washers, strut bushings or camber plates (if applicable).

Take note of the disassembly order.

STEP 5

Installation of the HYBRIDair Coilover Lift Kit is easiest when the shock rod protrudes 1-2 inches above the spring. Take note of the location of the spring perch and lock collar on the coilover body and lower them to the lowest threaded area of your coilover body, or until 1-2 inches of the shock rod is visible past the top of the coilover spring.



NOTE
Parts above coil spring
will vary per vehicle

STEP 6

Place the installation centering cone over the threaded portion of the shock rod. This centering cone is to allow a smooth transition for the seals as they slide on to the shock rod.

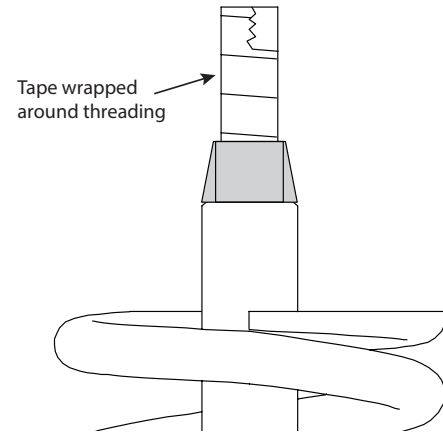
If the centering cone is loose on the threaded rod, add electrical tape around the diameter of the threaded section so that the cone centers and sits firmly in place against the sealing surface. Use the same tape to cover any remaining exposed thread to protect the HYBRIDair seals during installation. All tape will be removed after install of the lift unit.

IMPORTANT

Improper alignment of this centering cone, or failure to cover thread with tape, can damage the internal seals of the HYBRIDair Coilover Lift unit.

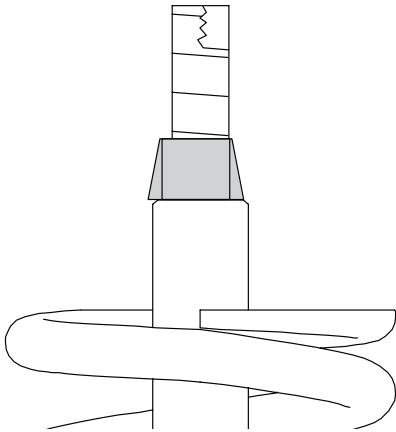
YES

Centered



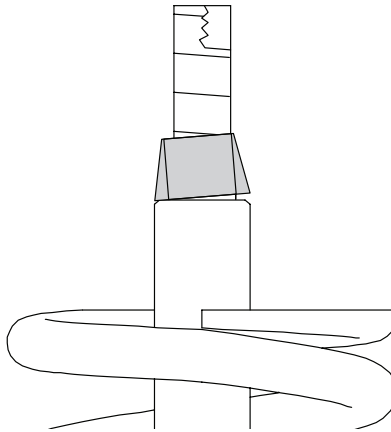
NO

Off center



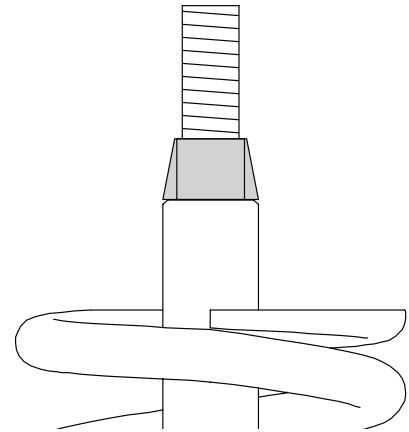
NO

Tilted



NO

Tape missing



STEP 7

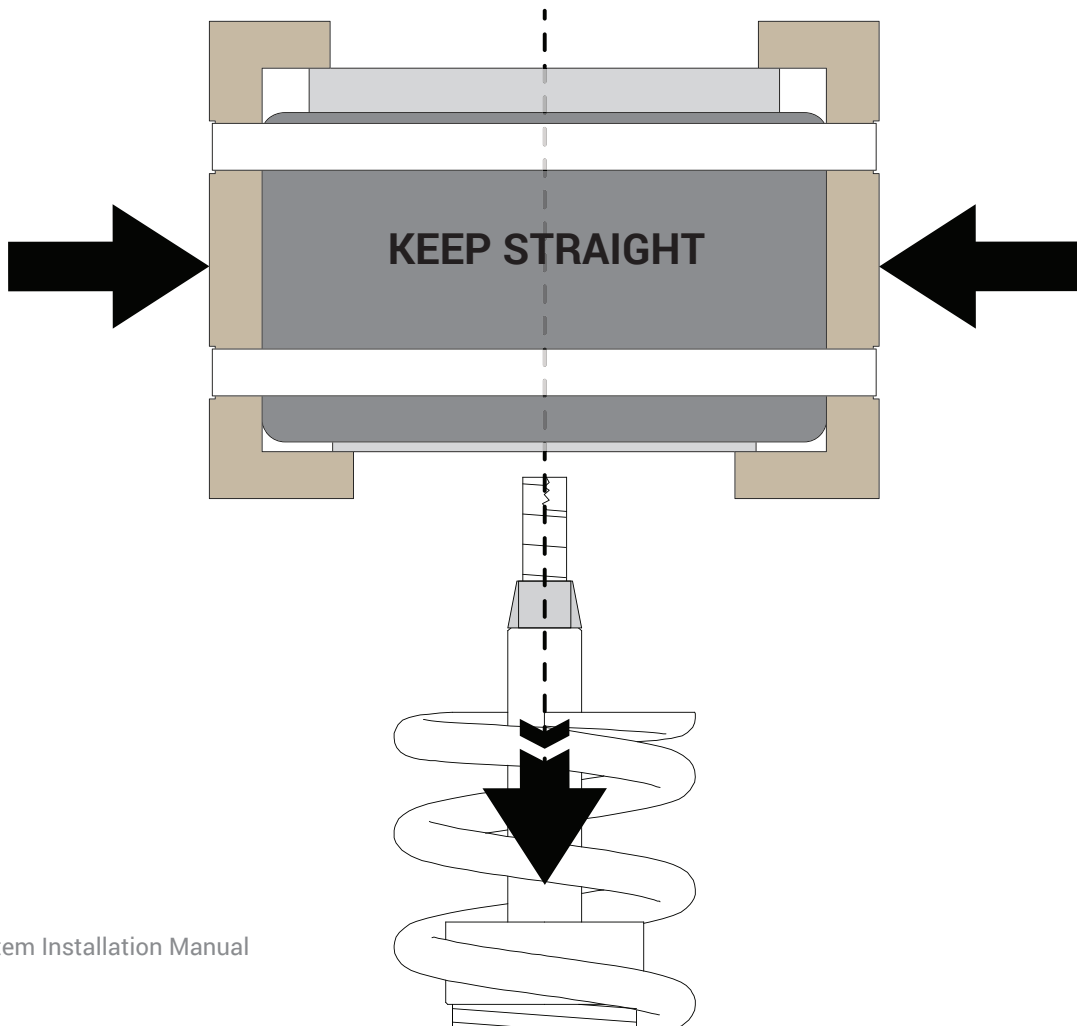
Lightly lubricate the centering cone and the top inch of the shock rod with assembly lube or a few drops of clean motor oil.

STEP 8

Slowly and carefully lower the Coilover Lift unit down over the threaded rod and onto the centering cone. Take special care to keep the Coilover Lift centered and perpendicular to the shock rod during installation to avoid any damage to the internal seals.

Once the Coilover Lift unit is resting on the centering cone, it will require very little force to transition onto the shock rod. **Gently** but firmly guide the coilover lift down onto the shock rod. If you experience resistance during install, remove the coilover lift from the shock and inspect the centering cone to ensure it has not moved out of alignment.

Do not force over centering cone!



STEP 9

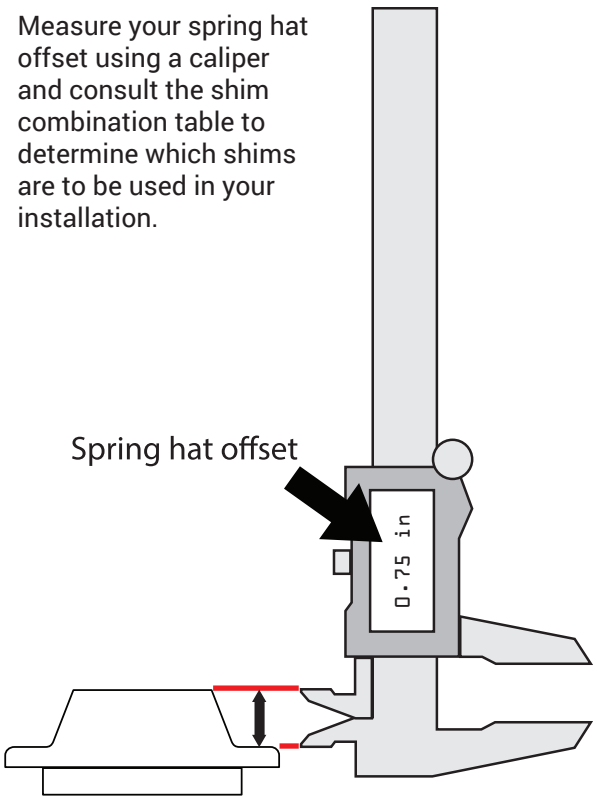
Remove the centering cone and tape from the threads of the coilover. Store the centering code in a safe location. **Do not throw away.**

STEP 10

Before reassembly, a combination of shims will need to be selected to make up the offset height of the spring hat that the HYBRIDair unit will be replacing.

If you have a FLAT (zero offset) spring hat, you will not need to add the tapered offset spacer or any of the shims. In all other cases, use the 1/4" height tapered offset and use a combination of the provided shims to achieve the same dimension as the original spring hat offset.

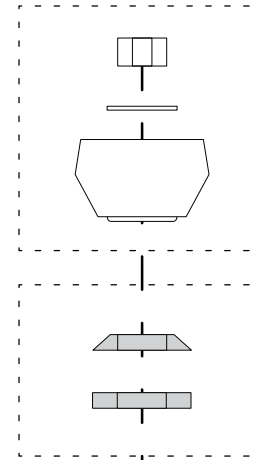
Measure your spring hat offset using a caliper and consult the shim combination table to determine which shims are to be used in your installation.



		Shims included in kit				
		1/4" tapered	1/16"	1/8"	1/4"	1/2"
Spring hat offset	1/16"	•				
	1/8"	•				
	3/16"	•				
	1/4"	•				
	5/16"	•	•			
	3/8"	•		•		
	7/16"	•	•	•		
	1/2"	•			•	
	9/16"	•	•		•	
	5/8"	•		•	•	
	11/16"	•	•	•	•	
	3/4"	•				•
	13/16"	•	•			•
	7/8"	•		•		•
	15/16"	•	•	•		•
	1"	•			•	•
1-1/16"	•	•		•	•	
1-1/8"	•		•	•	•	
1-3/16"	•	•	•	•	•	

STEP 11

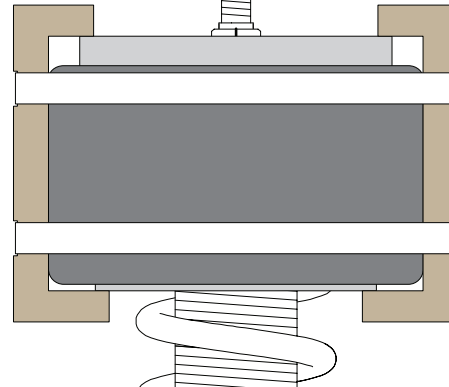
Reinstall the coilover components removed in step 2, **EXCEPT** for the spring hat. Start with the shock tower offset spacer(s) chosen in step 10 and place on top of the Coilover Lift unit, then reassemble the coilover as per manufacturer's specification.



NOTE

Parts above spring hat will vary per vehicle

The spring hat offset parts will vary per vehicle (see Step 10)



STEP 12

Wind the spring perch and lock collar back to the original position as previously noted in in step 5.

STEP 13

Once all parts have been installed on the coilover and the retaining nut is in place and torqued to manufacturer's specifications, remove the banding and install brackets from the coilover lift base unit. Be careful not to damage the rubber bag when removing these components.

STEP 14

Repeat steps 4-13 on any remaining coilovers.

STEP 15

Reinstall the coilover/lift assemblies to the vehicle as per manufacturer's specifications.

STEP 16

Connect the air supply lines from your air management system to the air input port of the HYBRIDair units.

STEP 17

Post install checklist:

- Thoroughly check for any clearance issues before operating the vehicle. Test “lock to lock” steering while the air system is deflated and inflated, with suspension hanging and while resting on the ground, to make sure there is no binding of air lines or any interference of the lift system to the body of the car or any other suspension components.
- Do a full leakdown test of your system. Inflate the HYBRIDair system with 2-3psi of air pressure and listen for any escaping air. Use soapy water on any air connection points to ensure all fittings are properly sealed.
- With the vehicle resting on the ground, test for smooth operation of the HYBRIDair system during lifting and lowering.

WARNING

Do not inflate bags when the vehicle’s weight is off the suspension.

HYBRIDair 12 Month Warranty

1) Warranty Scope:

HYBRIDair products are covered by a 12 month warranty beginning on the original purchase date. This warranty covers all HYBRIDair products and accessories against manufacturing and material defects resulting in a failure that impacts the advertised functionality of the product. Upon an instance where such a failure were to occur, HYBRIDair will replace or repair the defective product pending its failure is not a direct result of any of the exclusions listed in section 2 (Failure Cause Exclusions) of this warranty.

HYBRIDair does not warranty any labour associated with removing and/or reinstalling the product or associated components as a result of repair/replacement. Warranty holder is responsible to cover any shipping and/or duty costs incurred as a result of the repair or replacement process unless otherwise instructed by HYBRIDair. This warranty does not cover loss of time/revenue, loss of use of vehicle during replacement/repair process, claimed damage to the vehicle or its components, or any other consequential, incidental, or indirect damages claimed to relate to failure of HYBRIDair product(s).

2) Failure Cause Exclusions:

This warranty does not cover any warranty claim for failure as a result of the below listed factors:

- Product improperly installed to vehicle and/or suspension system
- Product has been improperly serviced and/or repaired and/or altered
- Product has been installed on a vehicle outside of the scope of HYBRIDair or authorized vendor's documentation/advertising materials
- Product has been intentionally damaged

3) Coverage on Second-Hand Product(s):

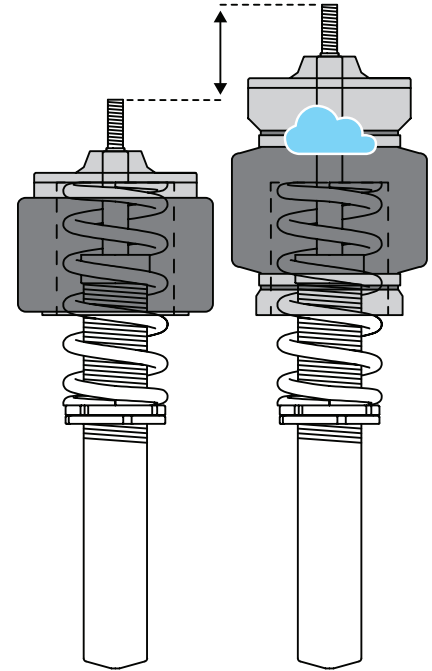
HYBRIDair warranty is bound to the product itself, not the buyer! All we need to know is the original date of purchase and vendor in order to qualify your claim.

4) Warranty Claim Procedure:

Simply send an email to contact@hybrid-air.ca with a subject of "WARRANTY CLAIM" including the following information:

- Original purchase date and vendor
- Good quality pictures and detailed description of failure
- Your name & contact info
- Year, Make, Model of vehicle the product was used on

Upon receiving your submission we will review, evaluate the best course of action, and be back in touch as soon as possible. Do not ship or deliver components for repair/replacement before submitting your claim as defined in this procedure.





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rev/B 17-05

