

**AIR LIFT**  
**PERFORMANCE**

**INSTALLATION GUIDE**



**Kit 78631**

## Hyundai Genesis Coupe

**REAR APPLICATION**

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

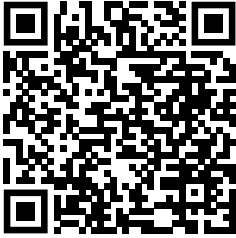
*Failure to read these instructions can result in an incorrect installation which could result in damage to the vehicle, minor to severe personal injury or death.*



**Watch the video**

Info on Table of Contents page

# **Protect your Air Lift Performance Purchase by Completing your Warranty Registration**



Thank you for purchasing an Air Lift Performance product!

Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

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## **Video-enhanced installation guides**

Visit [airliftcompany.com/workshop/category/install-videos](http://airliftcompany.com/workshop/category/install-videos) to access our installation video archive\*.

\* subject to availability

# Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Hyundai Genesis Coupe. Read these installation instructions to correctly and safely set up the vehicle for a #lifeonair.

Air Lift assumes that the installer has the mechanical knowledge and ability to work on vehicle suspension systems and has basic tools necessary to complete a suspension replacement project. Special tools needed to complete the installation are noted on the *System Overview* page.

Air Lift reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Performance at **(800) 248-0892** or visit **[www.airliftperformance.com](http://www.airliftperformance.com)**.

An Air Lift Performance air management system is highly recommended for this product. Learn more at **[air-lift.co/productlines](http://air-lift.co/productlines)**.

## NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information which is highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.



### **DANGER**

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



### **WARNING**

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



### **CAUTION**

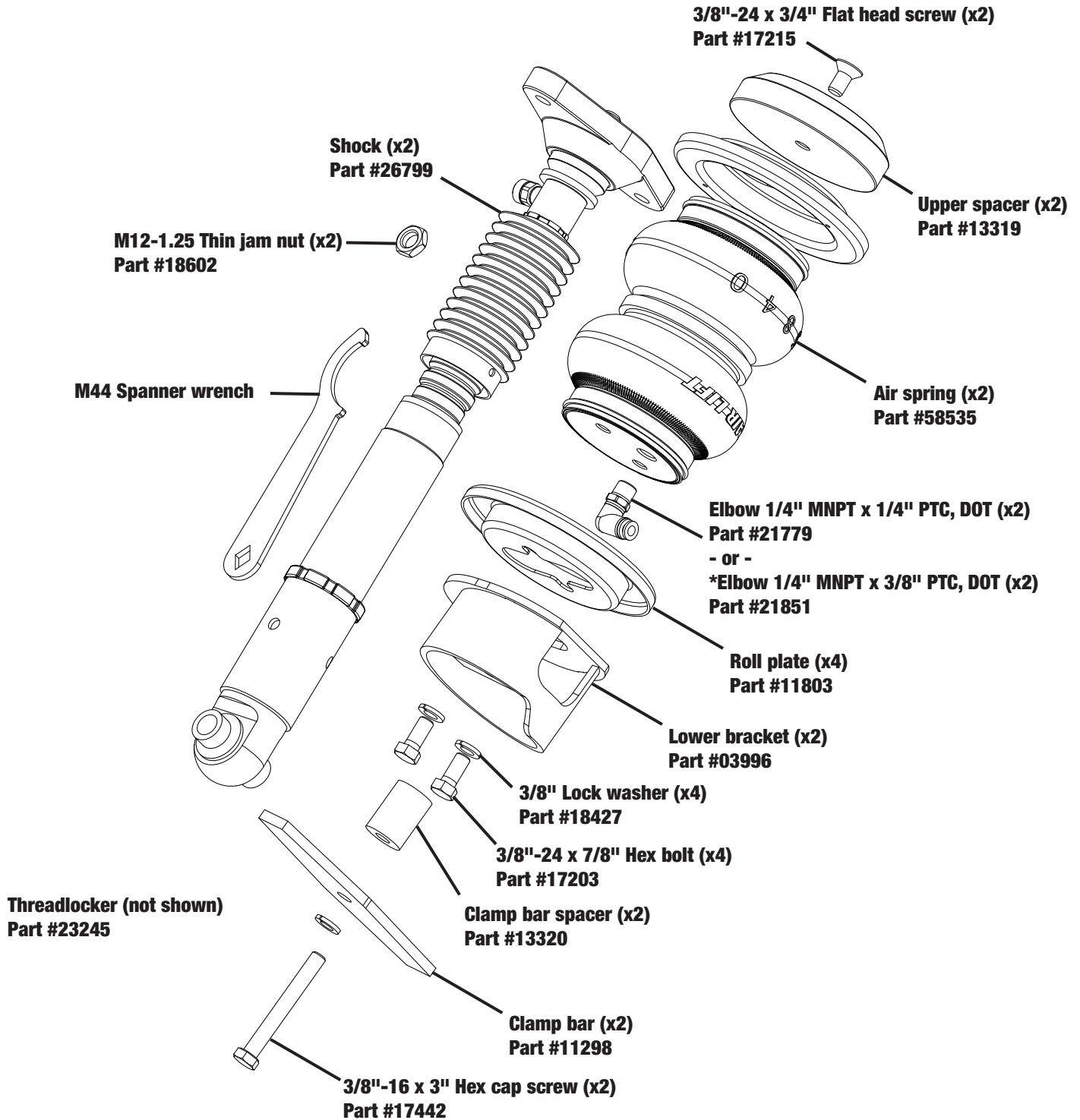
INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE VEHICLE OR MINOR PERSONAL INJURY.



### **NOTE**

*Used to help emphasize areas of procedural importance and provide helpful suggestions.*

# System Overview



\*Elbow, 1/4" MNPT x 3/8" PTC, DOT (21851) are NOT included in this kit, but are available as a special order.



Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

# Installing the System

## IMPORTANT SAFETY NOTICES



DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



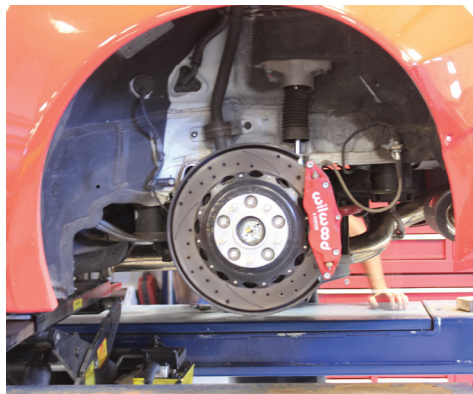
AFTER INSTALLATION, ENSURE ALL ORIGINAL EQUIPMENT VEHICLE SAFETY FEATURES ARE PROPERLY CALIBRATED BY A QUALIFIED TECHNICIAN. CHANGING VEHICLE HEIGHT MAY AFFECT FUNCTIONING OF SAFETY SENSORS AND CAMERAS.

## SECTION 1. PREPARE THE VEHICLE



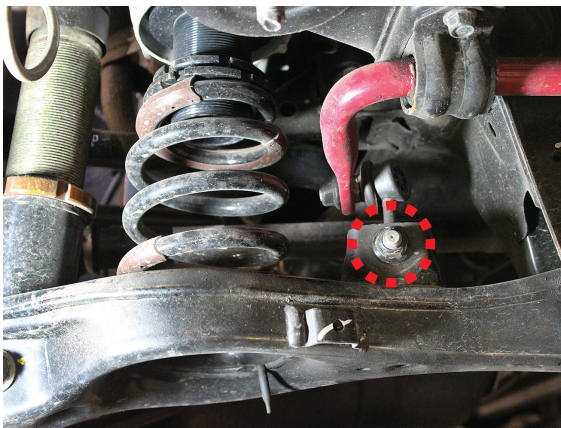
RAISE THE REAR OF THE VEHICLE WITH A JACK OR HOIST AT THE APPROVED LIFTING POINTS AND USE SAFETY STANDS TO SUPPORT THE VEHICLE.

1. Elevate and support the vehicle using its approved lifting points. Remove the rear wheel. Support the hub with a jack.

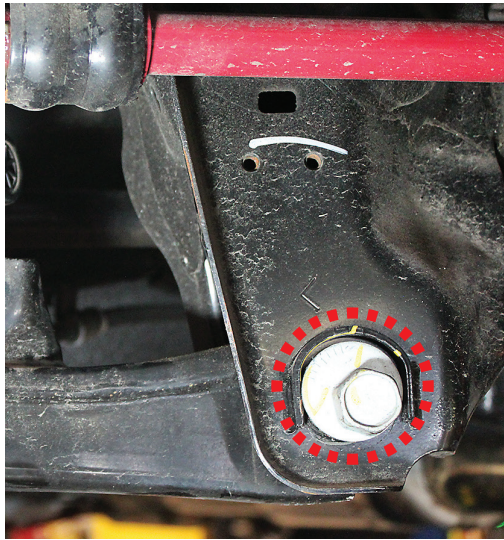


## SECTION 2. STOCK SUSPENSION REMOVAL

1. Remove the end link nut.

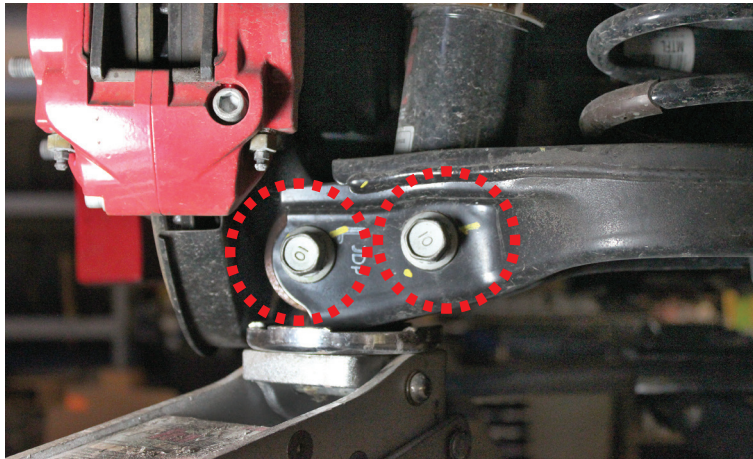


2. Loosen the control arm pivot bolt. Do not remove the bolt.



THE COIL SPRING IS UNDER COMPRESSION. THE COIL SPRING SHOULD BE REMOVED USING FACTORY PRESCRIBED GUIDELINES.

3. Support the lower control arm and remove the lower shock and attaching hub bolts.



4. Lower the control arm to remove the spring.



## **SECTION 3.**    **INSTALL THE AIR SUSPENSION**

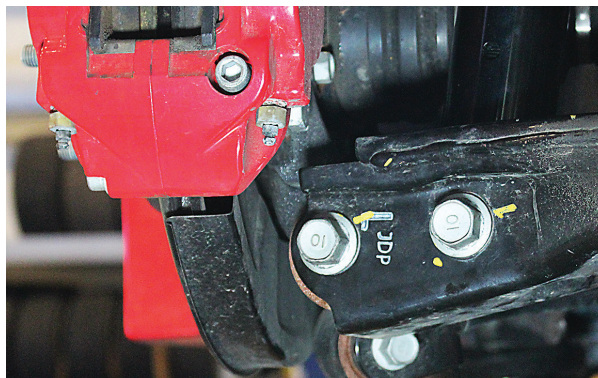
1. Apply thread sealant to the chosen fitting threads and install into the air spring port. Torque 1 3/4 turns beyond hand-tight.



2. Attach the upper shock mount to the chassis. Torque bolts to 44-59Nm (33-44 lb.-ft.).

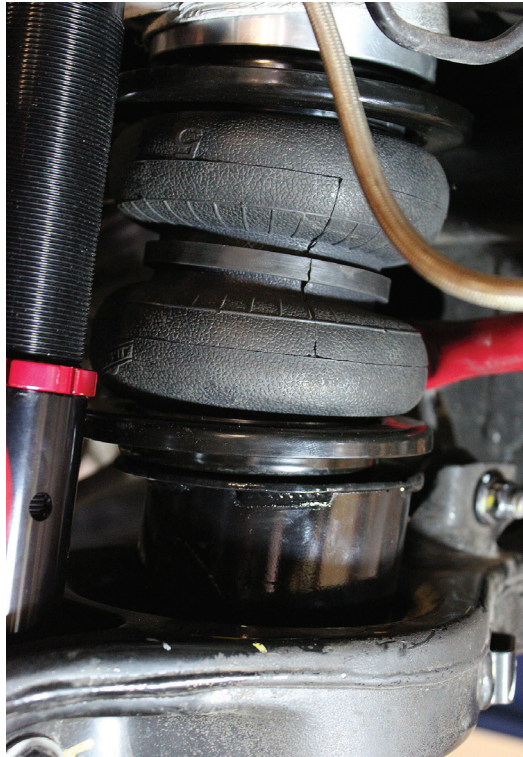


3. Reinstall the control arm-to-hub bolt and lower shock bolt. Do not torque until the ride height is set. See Table 1 for torque specifications.

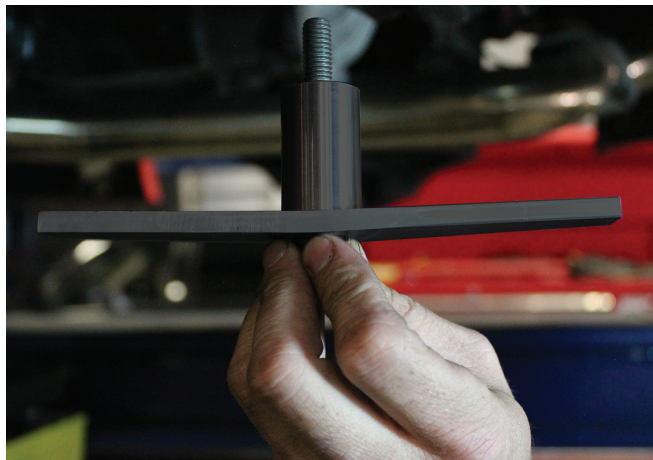




4. Reattach the stabilizer end link to the control arm. Torque nut to 98-118Nm (72-87 lb.-ft.).
5. Insert the pre-assembled air spring between the upper and lower spring perches. Index the assembly so that the lower bracket aligns with the control arm coil spring seat.



6. Use the provided bolt and lock washer to attach the clamp bar with spacer to the air spring's bottom bracket. Torque to 27Nm (20 lb.-ft.).



7. Inflate the air spring to a maximum of 30 PSI (2.1BAR) and locate the upper spacer into the upper spring seat.



**STEP 7 MUST BE PERFORMED WHEN THE VEHICLE IS LIFTED OFF THE GROUND BY THE CHASSIS AND THE AIR SPRING PRESSURE IS BELOW 20 PSI (1.4BAR). THE AIR SPRING MUST BE SEATED IN THE UPPER SPRING SEAT BEFORE DRIVING.**

## SECTION 4.

## CHECKING STABILIZER END LINK CLEARANCE

1. Cycle the suspension through its complete travel and check the air spring clearance to the stabilizer end link.



2. Maintain at least 1/2" (12mm) clearance from the spring to other components. Loosen the lower mount fastener and adjust as needed. Re-torque to 27Nm (20 lb.-ft.).
3. If clearance is still an issue, replace the end link nut with the thin jam nut with red threadlocker supplied with the kit. Trim the end link threaded stud to this nut. Torque to 98-118Nm (72-87 lb.-ft.).



## SECTION 5.

## ROUTE THE AIR LINES



AFTER INSTALLATION, ENSURE ALL ORIGINAL EQUIPMENT VEHICLE SAFETY FEATURES ARE PROPERLY CALIBRATED BY A QUALIFIED TECHNICIAN. CHANGING VEHICLE HEIGHT MAY AFFECT FUNCTIONING OF SAFETY SENSORS AND CAMERAS.

1. Fully compress the suspension using a jack. With the suspension compressed, review the best routing for the air line that is clear of all suspension components and axle.
2. Routing should allow for the suspension to extend and steer without kinking, pulling the line tight or rubbing on other components. Following the brake line routing is often a good place to start. Check clearances to all other components.

# Before Operating

## SET THE RIDE HEIGHT

1. Refer to the User Guide supplied with this kit to set up the suspension.

Torque Specifications		
Location	Nm	lb.-ft.
Air fitting	1 3/4 turns beyond hand-tight	
Upper shock mount bolts to chassis	44-59	33-44
Lower control arm to hub bolt and lower shock bolt	137-157	101-116
Lower control arm cam bolt	137-157	101-116
Clamp bar to air spring	27	20
Rear upper arm to hub bolt	98-118	72-87
Rear upper arm to subframe	98-118	72-87
Stabilizer end link nuts	98-118	72-87
Wheel studs	88-108	65-80

2. Upon successful completion of the installation, follow these pressure requirements for the air springs.



**Suggested Driving Air Pressure**



**Maximum Air Pressure**



FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND **WILL VOID THE WARRANTY.**

## CHECK FOR BINDING



MAKE SURE THE FRONT WHEELS ARE STRAIGHT WHEN DEFLATING AND REINFLATING AIR SPRINGS.

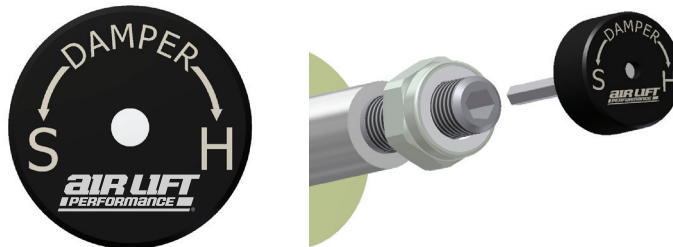
1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch brake lines, vent tubes, etc. Clear lines if necessary.
2. Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks.

## INSTALLATION CHECKLIST

- Clearance** — Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and make sure there is at least 13mm (1/2") clearance from anything that might rub against the air spring. This should be checked with the air spring fully inflated and fully deflated.
- Leak** — Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks. All leaks must be eliminated before the vehicle is road tested.
- Heat** — Be sure there is sufficient clearance from heat sources, at least 152mm (6") from air springs and air lines. If a heat shield was included in the kit, install it. If there is no heat shield, but one is required, call Air Lift customer service at **(800) 248-0892**.
- Fastener** — Recheck all bolts for proper torque.
- Road** — Inflate the air springs to recommended driving pressures (see previous page). Drive the vehicle 16km (10 miles) and recheck for clearance, loose fasteners and air leaks.
- Operating instructions** — If professionally installed, the installer should review the operating instructions with the owner. Be sure to provide the owner with all paperwork that came with the kit.

## DAMPING ADJUSTMENT

1. The dampers in this kit have 30 settings, or “clicks,” of adjustable compression and rebound damping characteristics. Damping is changed through the damper rod using the supplied adjuster (example shown here) or a 3mm hex key (not included).



2. Turn the adjuster clockwise (H) and the damping settings are hardened, reducing oscillations and body motion. Turn the adjuster counterclockwise (S) and the damping is softened.
3. Each damper in this kit is preset to “-30 clicks.” This means that the damper is adjusted 30 clicks away from full stiff, which starts at 0. Counting up from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2014 Hyundai Genesis Coupe four cylinder turbo.

For more information, refer to the User Guide.

# Notes

# Limited Warranty and Return Policy

Air Lift Company provides a 1-year limited warranty to the original purchaser of Air Lift Performance damper kits from the date of original purchase, that the products will be free from defects in workmanship and materials when used on vehicles as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy that is available online at [www.airliftperformance.com/warranty](http://www.airliftperformance.com/warranty).

For additional warranty information contact Air Lift Company customer service.



*Thank you for purchasing Air Lift Performance products!*

## Need Help?

The Air Lift Company customer service department is open from 8 a.m. to 8 p.m. ET Monday through Friday. Call (800) 248-0892 or (517) 322-2144 for calls from outside the U.S. and Canada.



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