

# AMS PERFORMANCE AUDI R8 / LAMBORGHINI HURACAN SUSPENSION SYSTEM

## INSTALL INSTRUCTIONS

Lamborghini Huracán 2015+  
Audi R8 2017+

### Introduction ///

The goal of AMS Performance is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs AMS Performance will never compromise the quality or performance of our products. In addition, AMS Performance will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. AMS Performance was built on a foundation of integrity. This is who we are. This is what you can count on.

A vehicle modified by the use of performance parts and tuning may not meet the legal requirements for use on public roads. AMS Performance makes no claims of compliance unless otherwise stated on a per-product basis. Use or installation of performance parts and tuning may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty and new OEM part warranty. There is no stated or implied guarantee by AMS of continued OEM vehicle warranty, insurance coverage, or emissions compliance, due to the stress placed on your vehicle by performance parts and our inability to monitor its use, tuning or modification.

These instructions are not intended to be a comprehensive guide for installation as there are many variables that may affect your particular vehicle, including but not limited to model year differences, sub-model/trim/optional equipment differences, the presence of non-OEM parts, or other modifications that may have previously been completed. A basic understanding of automotive parts and systems and novice mechanical skills should be all that is necessary for installation, but certain circumstances may necessitate professional installation.

AMS Performance is committed to providing quality support for our products. If you are in need of technical support, installation help, or a replacement component, our Customer Service Team is available directly via telephone at 847-709-0530, or digitally via the contact form linked here: [amsperformance.com/support](https://amsperformance.com/support)

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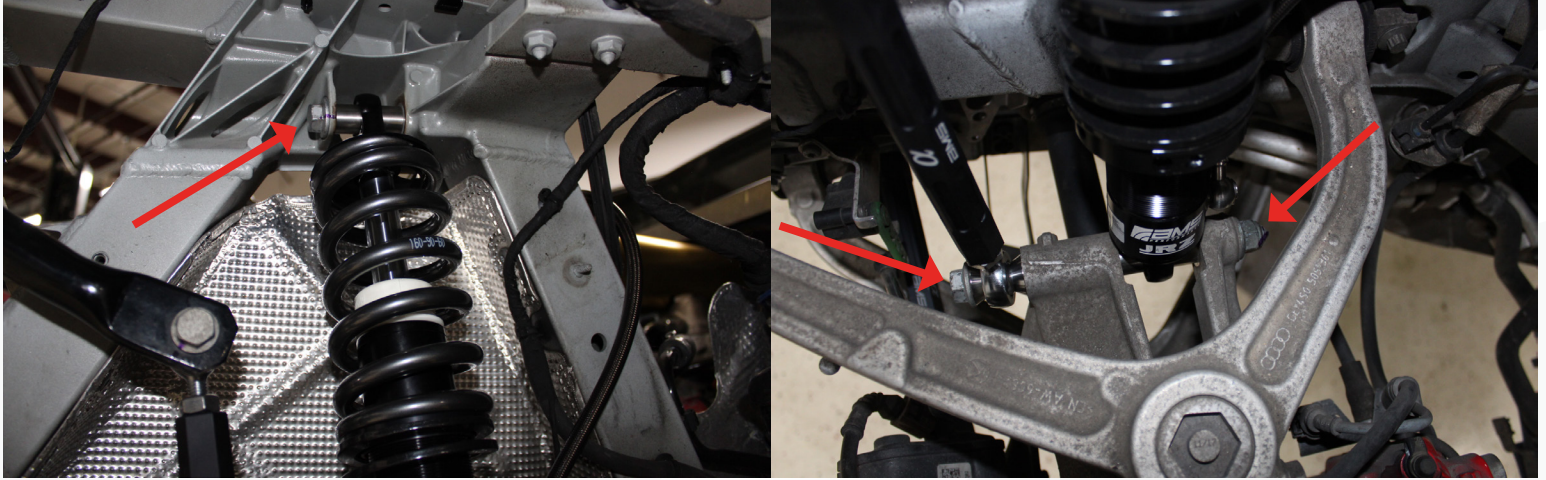
**\*SUSPENSION UNDER PRESSURE, DO NOT DISCONNECT QUICK CONNECT WITHOUT RELEASING PRESSURE. SUSPENSION WILL NEED TO BE REFILLED IF DISCONNECTED\***

- 1.Raise vehicle and remove all 4 wheels and wheel liners, rear bumper, engine X-brace, and frunk compartment.
- 2.Remove your new AMS PERFORMANCE AUDI R8 / LAMBORGHINI HURACAN SUSPENSION SYSTEM from the 2 boxes, the smaller box will contain the springs for the suspension. When installing the springs, the smaller helper spring goes on the bottom and the main springs go on top. There is not a “top” and “bottom” side of the springs, they can be installed in either orientation.

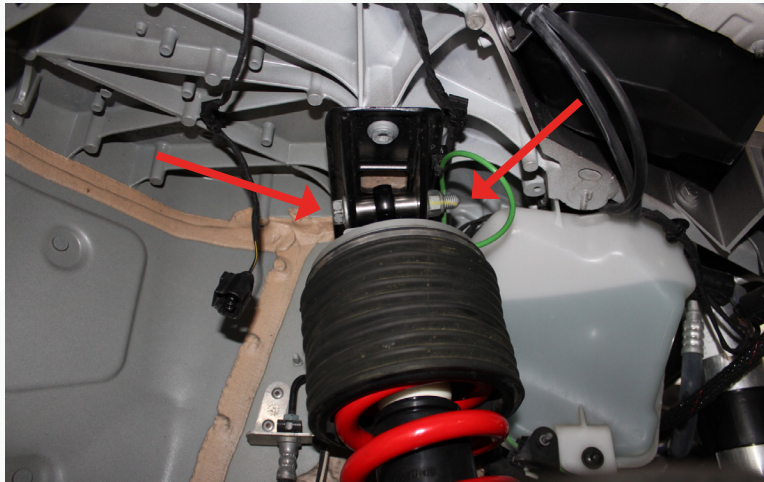




3. Begin with the rear suspension. And the correct spring labeled 160-90-60 to the shock. Remove the top and bottom 18mm bolts that hold on the rear suspension. Remove original suspension and install JRZ's. **Be sure to have the reservoir outlet on the body facing towards the front of the vehicle.** Route the reservoirs into the engine bay and lay them on top of the manifold for now. Torque the top bolt to 110 – NM and the bottom to 50 – NM. Repeat for the other side.



4. Moving on to the front suspension, add the correct spring to the strut labeled either Lambo hurva or 140-110 depending on your application. Remove the two 18mm bolts top and bottom and remove the strut. Install the JRZ's, replacing the bottom bolt with the longer provided bolt. Make sure that the adjustment opening is facing you when installing the suspension (third picture). And again, be sure to have reservoir outlet facing the front of the vehicle. Route the reservoirs into the fronk area. Torque both top and bottom bolts to 110 – NM. Repeat for the other side.





5. With the suspension installed, return to the rear to mount the external reservoirs, and secure the lines. Using the provided mounts loosely install them on the X-Brace. Please note that the mounts can be installed differently than pictured below, this is simply one example.

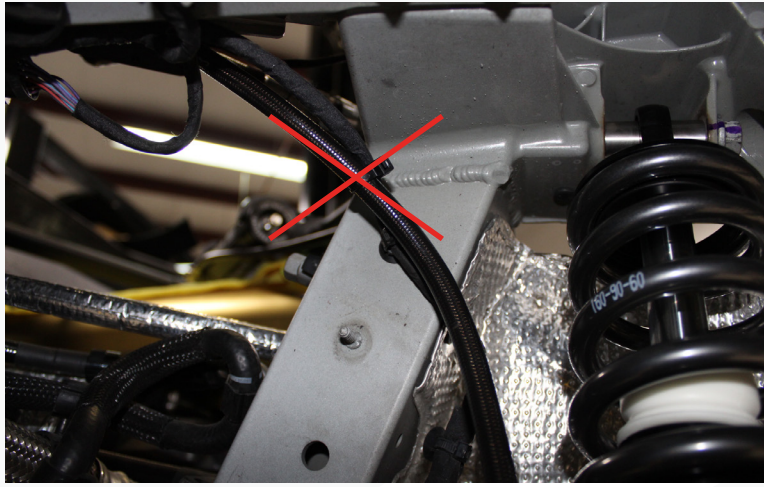


5a. With the mounts on the brace return the brace to the vehicle and slide the reservoirs into the mounts and tighten them down. Be sure that the mounts are clamping down on the correct spot on the canister (circled below). With the reservoirs mounted reattach the brace to the vehicle.





5b. Secure the lines for the rear reservoirs, based on your placement of the reservoirs on the brace how you secure the lines will be up to the end user. Be mindful since the lines will move with the shock body not the secure the lines to any harnesses, sharp edges, or fragile mounting points.

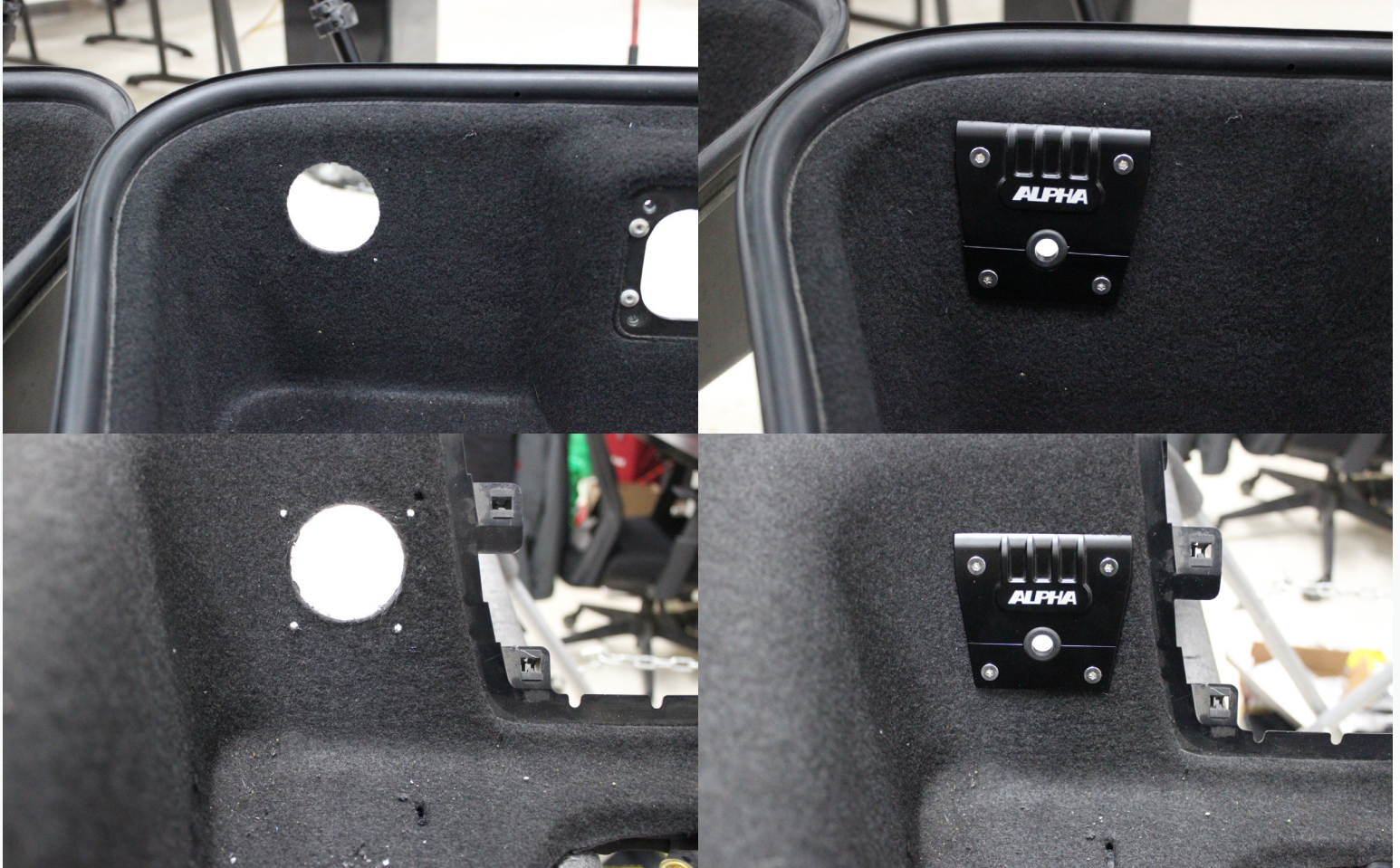


6. The front reservoirs can be installed in different orientations, the following outlines an example for Huracan and R8. For the Huracan do the following. To help you align the backer bar use the supplied template print out, and a combination square. Set the anvil of the square at 12" and measure on the outside from the rear of the fronk to the front, align the center mark on the template to 6" on the square. To set the height set the square to 3" and measure on the outside from the bottom of the fronk and align the center line on the template to 1 & 1/8th on the square. For the R8 set the square at 12" and measuring on the outside from rear to front align the center mark on the template to 4 & 5/8th" on the square. For the height set the square at 3" and center the template at 1 & 1/2".





7. Now using the supplied cover plate template, at the end of this guide, mark and drill out the hole for passing through the reservoirs into the fronk and securing the plates. The correct drill bit sizes are labeled on the printout. These can be installed in different locations and the following photo is one example of a possible installation location. Be mindful when installing that you have enough room behind your chosen location for the reservoirs and lines to pass through.



7a. With the backer bar in place and the cover plate holes drilled install the reservoir mounts and return the fronk shell into the vehicle and route the reservoirs through the created hole, secure the reservoirs being mindful that the mounts are clamping down in the correct place, see step 5A for details.



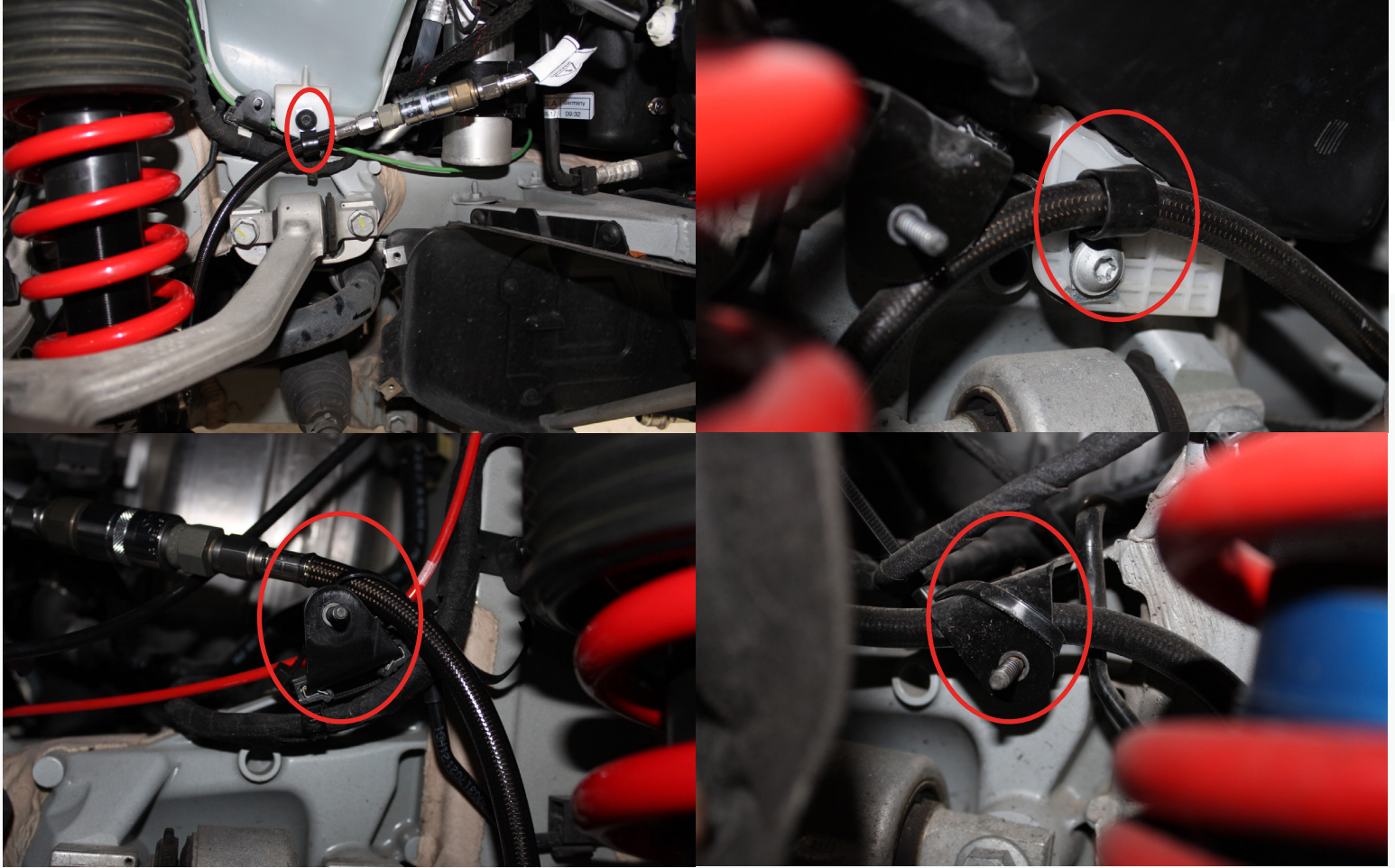


7b. Install the line cover plates, you will need to cut the supplied grommet to install it over the reservoir line. With the cover plates installed now secure the reservoir lines. On the passenger side use the provided p-clamp and secure it to the bolt above the control arm. On the driver's side secure the line to the bracket pictured below (7th & 8th photo) using a zip-tie. These locations are the same between Huracan and R8, below are photos of each example. Reinstall wheels and check ride height (refer to JRZ manual included with your suspension). If satisfied, reinstall the rear bumper, wheel liners and wheels. Set your suspension to your desired settings or to the factory settings listed in the provided manual.





7b. Continued



This completes the install, enjoy your AMS PERFORMANCE AUDI R8 / LAMBORGHINI HURACAN SUSPENSION SYSTEM





# Settings Adjustment Quick Start Guide

Suspension tuning is an art form in its own right. Listed below are some basic recommendations for specific damping settings that can be used to get you 90% of the way there. As with most things however, on-track testing and tuning is required to maximize results. While we are happy to give these basic recommendations for setting up this suspension system, an experienced suspension professional who is hands-on with the vehicle is always the best solution.

Each front strut has two adjustments, and each rear strut has three adjustments which can be manipulated to control damping characteristics. Below is a chart showing suggested “click” number settings for each adjustment point. Starting from the lowest setting, “click” up to the suggested number for your preferred vehicle characteristics.

**Strip** – Optimizes launching when drag racing

**Sport** – Intended for spirited street driving or road course use

**Street** – Best for regular street driving to balance comfort and handling

Important Notes:

- One click goes a long way. Make small adjustments (one click on one setting at a time if possible) before testing and readjusting again.
- Despite popular belief, a softer suspension setting does not equate to increased traction.
- When dialing in settings, note that there can be different kinds of “bouncy” suspension reactions. Consider whether things are skipping, or won’t stop moving.
- Optimal suspension settings for the drag strip are very dependent on the drive train. Wheel & tire combinations, TCU tunes, clutch setups, etc. can greatly affect how the vehicle behaves. As every vehicle behaves differently, testing and tuning will be necessary to achieve the best results.



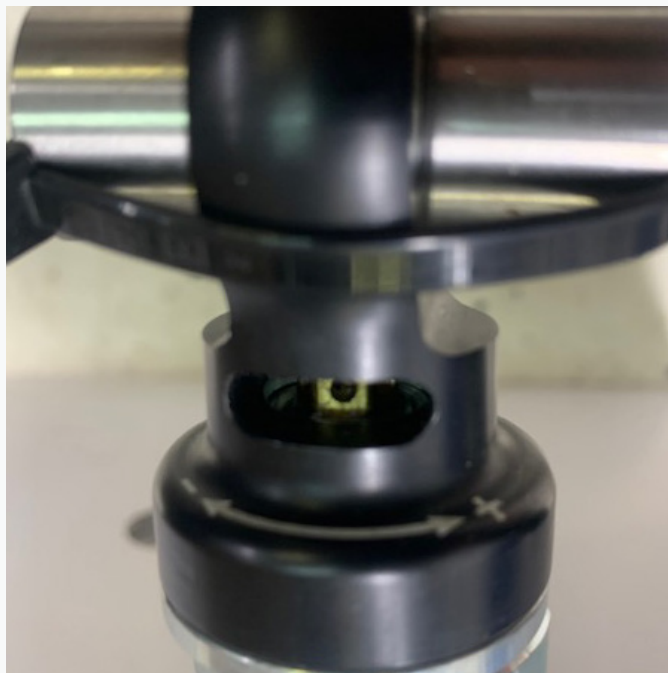
| Application |       | High Speed Compression | Rebound | Shaft Compression | Reservoir Nitrogen Pressure (PSI) |
|-------------|-------|------------------------|---------|-------------------|-----------------------------------|
| Strip       | Front | 7 / 15                 | 14 / 22 | N/A               | 200                               |
|             | Rear  | 4 / 15                 | 10 / 27 | 10 / 27           | 200                               |
| Sport       | Front | 6 / 15                 | 10 / 22 | N/A               | 200                               |
|             | Rear  | 4 / 15                 | 8 / 27  | 8 / 27            | 200                               |
| Street      | Front | 4 / 15                 | 7 / 22  | N/A               | 200                               |
|             | Rear  | 2 / 15                 | 6 / 27  | 6 / 27            | 200                               |



Rear Shock:  
Sliver Knob - Shaft Compression  
Red Knob - Rebound



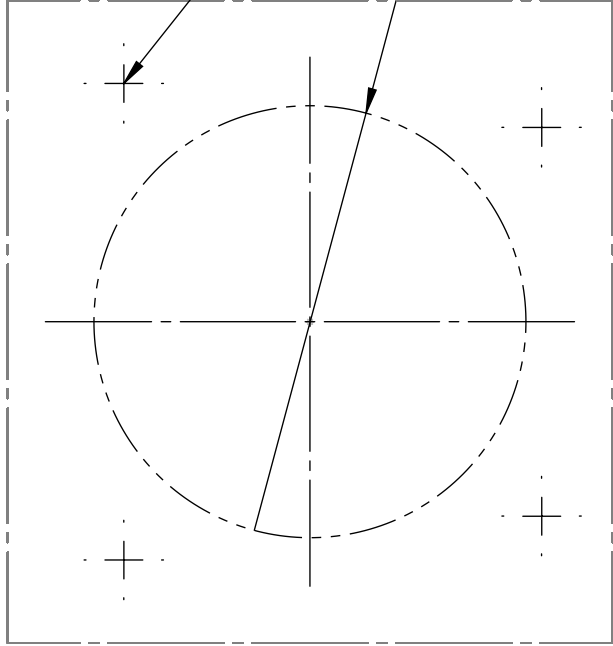
High Speed compression



Front Shock:  
Rebound



P4823/P4824 COVER PLATE



Step 1: Drill 7/32" on center (x4)

Step 2: Drill  $\phi 57.2 (2 1/4'')$



Line measures 1" if scale OK

P4709 Backer Bar

Drill 1/4" on center (x4)

Drill 7/32" on center (x2)

