Lower Control Arm Kit Installation Instructions SPL Porsche LCA

For Porsche:
1999-2005 911 (996) Front and Rear
2005-2012 911 (997) Front and Rear
1997-2004 Boxster (986) Front
2005-2012 Boxster (987) Front
2005-2012 Cayman (987) Front
2013-2016 Boxster (981) Front
2013-2016 Cayman (981) Front

www.splparts.com Questions?: 512-691-9002 tech@splparts.com

Tools needed:

16, 18, 19, 24mm wrench Deadblow hammer 3/16in allen wrench

A diagram is located after the warranty as a visual aid for terms and spacer usage.

Getting Ready to Install

1. Jack the car up. Place on jackstands and remove the wheels. Turn the steering to full lock in either direction. You need the access full lock provides. When done with the first side, turn the wheel to full lock in the opposite direction. The procedures are the same for each side otherwise. Place jackstands under the car and chock the rear wheels.

2. Remove the plastic undertray entirely (*not required but it makes it easier*). There are a series of plastic clips and nuts to do so. Once done, you can remove the nuts off the arms, but leave the bolts in place for now. These will require either a 16mm or 18mm wrench.

3. Remove the ball joint and arm as a unit on each side. A pickle fork, balljoint separator, or large hammer (*deadblow is preferred as it won't damage the end of the ball joint*) should pop the ball joint and arm loose. Once loose, remove the bolt holding the caster arm at the chassis end first, followed by the bolt holding the control arm to the chassis. The arm should be easy to remove at this point.

4. Try to get the new arms as close as possible to the length of the old ones. You can either measure the old arms from center of the chassis end bolt hole to center of the knuckle ends, or lay them side by side with the new arms. This will allow you to drive to your alignment shop and save excess wear on your tires.

Length adjustment of arms

5. Loosen the collar allen bolts on each end of the caster arm. Rotate the arm (turnbuckle) so as to thread in/out the rod ends (spherical bearings). Once the rod ends are long/short enough, tighten down the allen bolts in the collars with a 3/16” allen wrench. **Note:** For safe thread engagement, the **maximum** amount of exposed thread on the rod end should not exceed 0.7".

6. For the main arm, loosen the allen bolts in the arm, as well as the one in the collar of the adjuster. Rotate the adjuster (reverse thread) while holding the rod end/heim joint to extend/adjust the main control arm. Tighten everything down, being careful to not strip the allen bolts.

Installation of arms

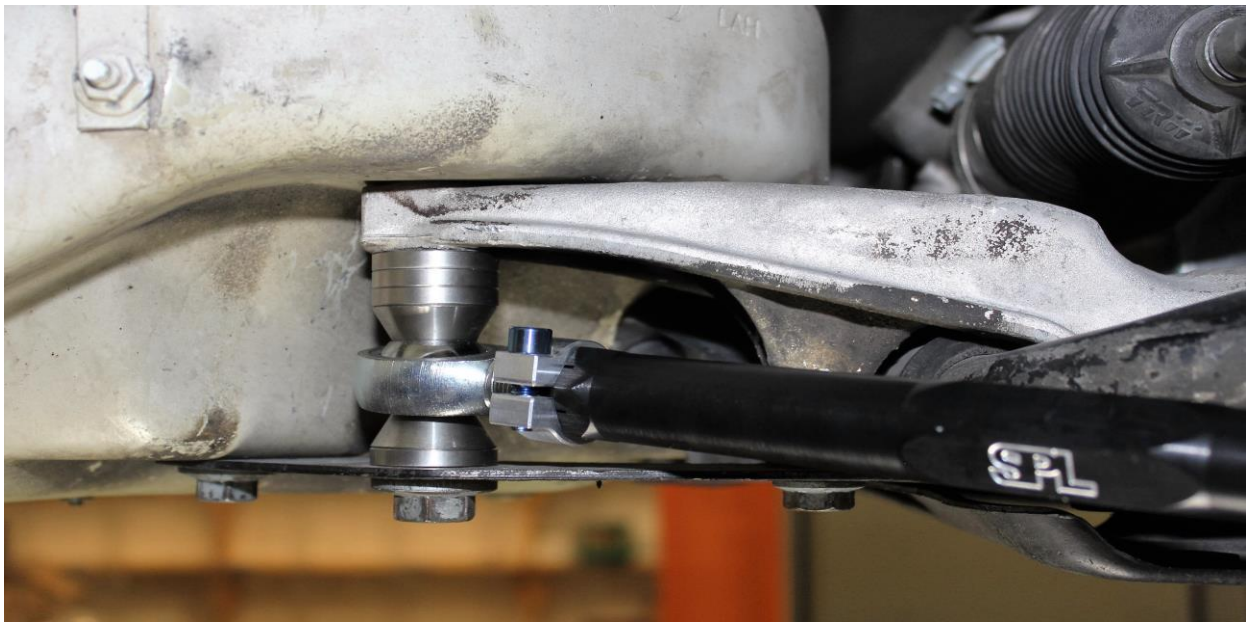
Now you are ready to install the new SPL arms. Installation is straightforward.

1. Starting with the caster arm (the tubular arm with "SPL" engraved on it), arrange the spacers so the rod end/heim joint is roughly centered. This will replicate the factory settings. At this point, that individual adjustment via spacer usage can progress to suit your needs and driving style. If the car is lowered, add spacers between the caster arm and the rod end/heim joint and chassis as shown in the picture below. This will adjust for anti-dive at the front of the car.

2. Insert the bolt and finger-tighten the nut.

3. Install the control arm, starting at the chassis end, and finger-tighten the nut on the bolt.

4. At this point, the shank should go into the strut housing easily. Thread the nut on the top of the shank. Using the two jam nuts, thread them on and tighten them against each other. Tighten the locknut on the top of the shank, then install spacers as needed and finish installing the arm.The idea for lowered cars is to keep the control arm parallel to the ground or sloping upwards to keep the roll center above ground. Depending on brake rotor size, you may have to remove brake pads and loosen the rotor to allow it to clear the shank during installation.



The picture above illustrates washers being used on the caster arm to account for anti dive on the front of the car by lowering the pivot point of the arm shown. Anti squat at the rear of the car is the same principle, except the spacers are placed below the pivot point of the arm for anti squat.

5. All that remains is to torque the nuts and bolts. Ensure everything has clearance before tightening. The caster arm bolt should be tightened to **110ft/lbs** and the chassis bolts to **74ft/lbs**. ALWAYS loosen this bolt and nut when adjusting caster and camber.

DO NOT OVERTORQUE! **SPL Parts is not liable for any issues due to overtorque.**

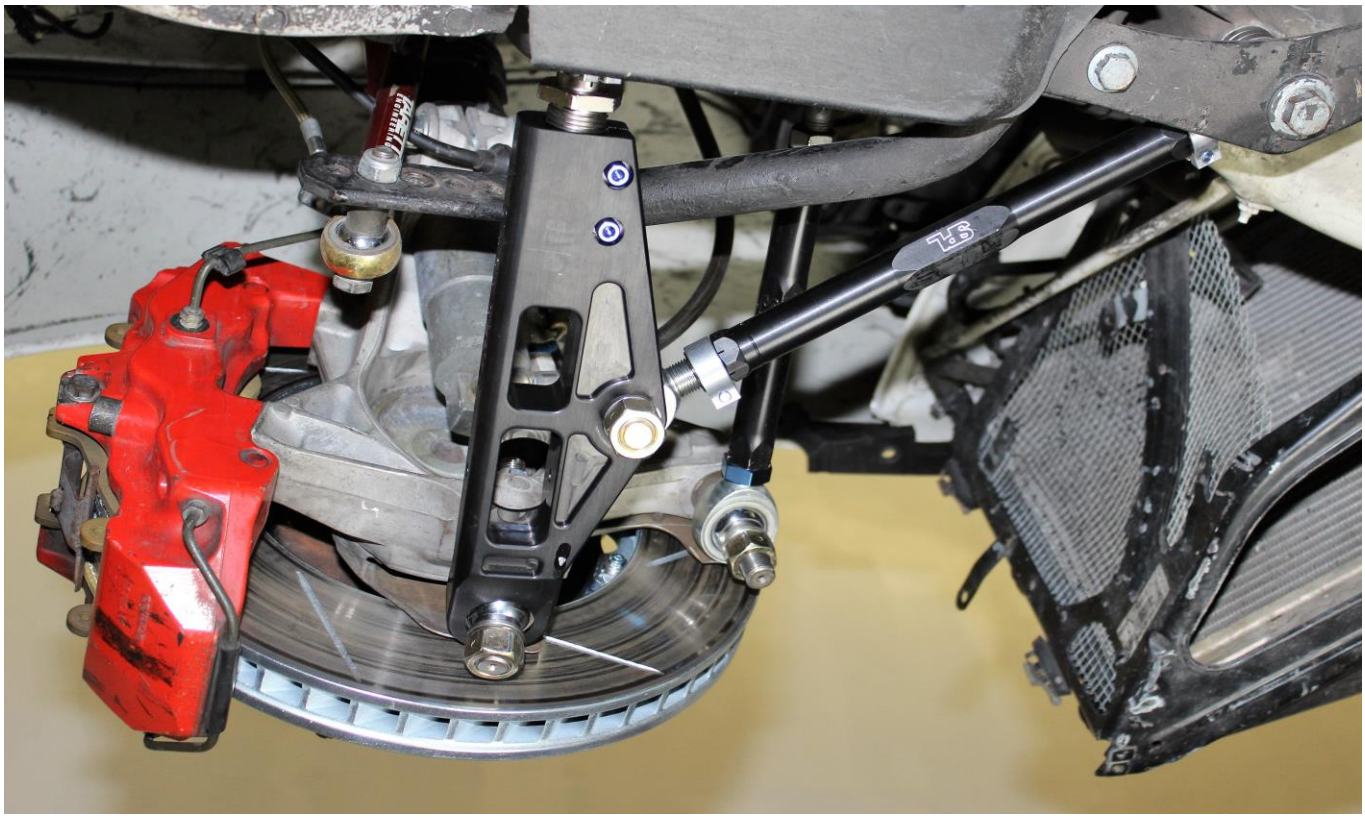
6. Go to the other side of the car and repeat the process. As long as no nuts or bolts are seized, this process should only take an afternoon.

7. We strongly advise taking the car to your favorite alignment shop ASAP after the installation of the arms.

8. As always, be safe and enjoy the upgrade!

Finishing Up

This picture is finished installation on a 996 looking up from under the car. It's always good to take the opportunity to do a quick inspection of your suspension while everything is visible and accessible.



This picture shows the track arm with 2 spacers for anti dive installed, as well as spacers above the ball joint on the control arm for roll center correction.

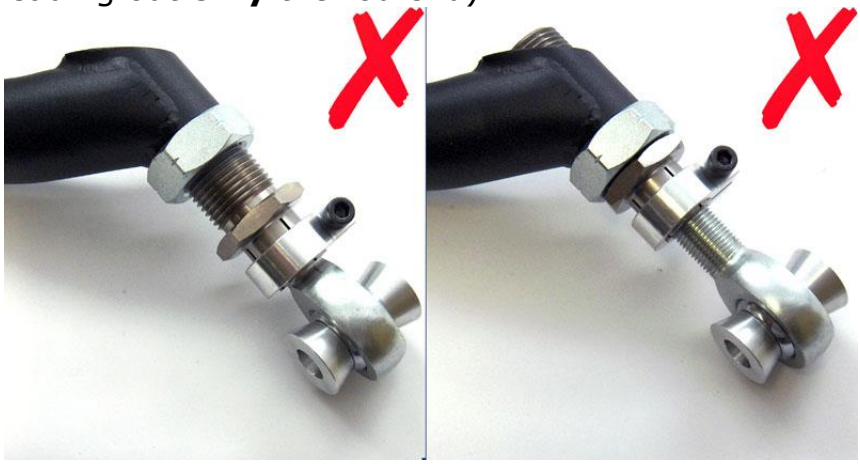
Headlight Adjuster Bracket

Your control arm will be supplied with a black 3d printed bracket that allows your headlight adjuster to continue working. Please utilize it in the locations shown, depending on which bracket you received. One fits into the groove cut into the arm, and is secured with an additional ¼-20 Blue Titanium Socket Head Cap Screw, while the other clips of the rod end and is tightened down with a bolt and nylon locking nut. Connect the headlight adjuster assembly to the other end of the 3d printed bracket.

SPL Hybrid Adjuster Installation Instructions

The hybrid adjuster is what is known as a **double adjuster**. On one side the thread is left-handed and on the other side the thread is right-handed. So when the suspension arm is installed, turning the hybrid adjuster will allow you to lengthen/shorten the assembly.

When lengthening/shortening, be sure to keep the arm and rod end from freely rotating when you turn the adjuster. Do not make the following mistakes (threading out **only** the adjuster or threading out **only** the rod end):



This picture shows a properly threaded adjuster. The rod end (heim joint) will thread out about 2/3 the length of the adjuster. Note also the maximum adjustment limits shown in the picture.

This jam nut should be tightened against the body of the arm. To properly tighten the jam nut, hold the adjuster hex with a wrench, then use a second wrench to tighten the jam nut.

The advantage of the hybrid adjuster is that you can easily keep the rod end bearing centered during and after alignment. Make sure to keep the bearing centered as shown.

ONE-YEAR LIMITED WARRANTY AND DISCLAIMER

*All SPL brand products are intended for **Off Road Use Only** and carry a one year limited warranty. See below for details. All other branded products carry their respective manufacturer warranty.*

SPL PRO suspension products warranted to be free of defects in material and workmanship for one (1) year from the date of purchase.

If a product fails to meet specifications, SPL PARTS INC will, at its election, repair, replace, or make appropriate adjustment, if SPL PARTS INC determines to its satisfaction that the product is defective in material or workmanship, i.e. contains a defect arising out of the manufacture of the product and not a defect caused by other circumstances, including, but not limited to accident, misuse, abuse, unforeseeable use, neglect, alteration, improper installation, improper adjustment, improper repair, or failure caused by other equipment or interaction with other equipment. SPL PARTS INC is not responsible for labor charges, removal charges, installation, or other incidental or consequential costs. In no event shall the liability of SPL PARTS INC exceed the purchase price of the product.

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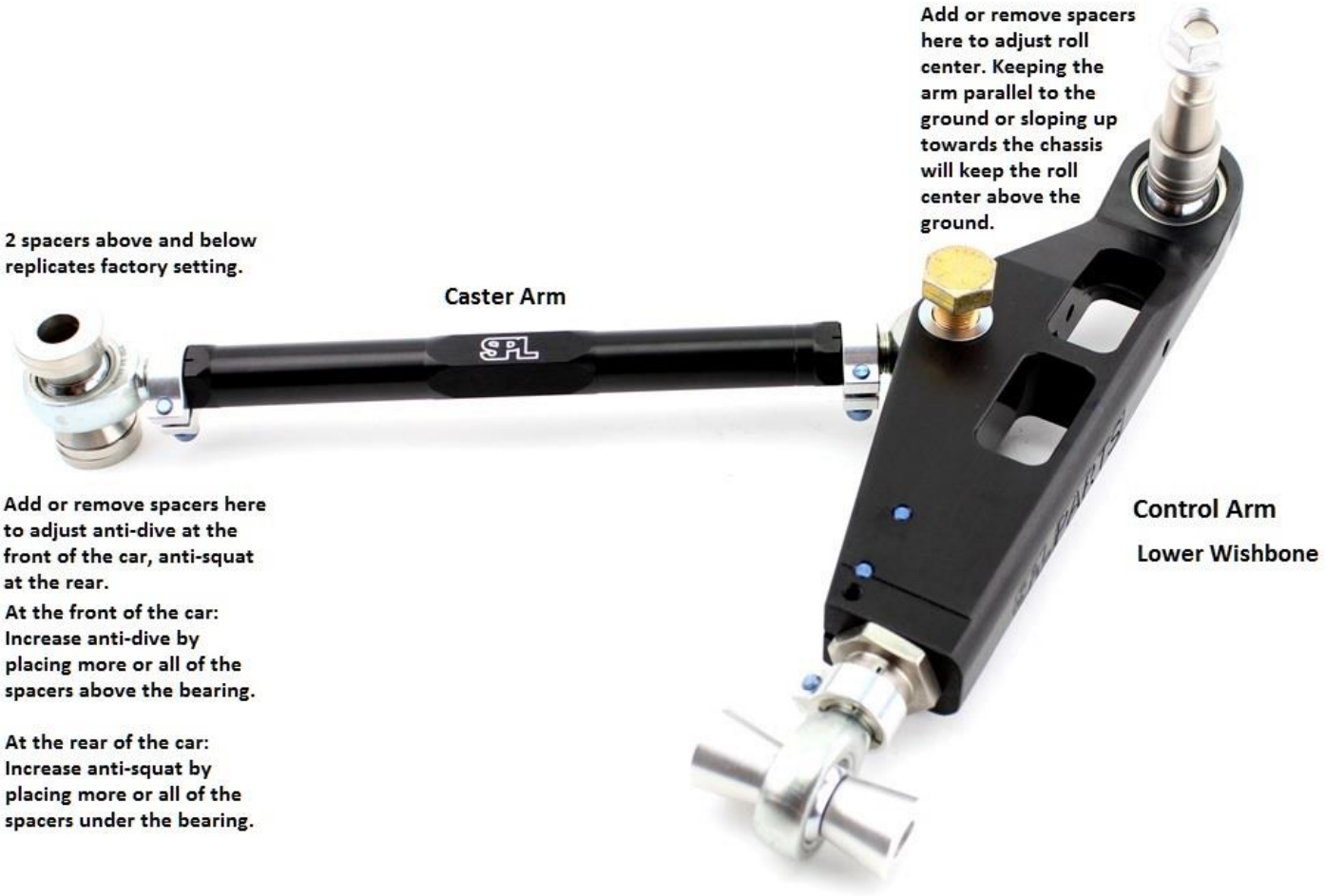
If the purchaser of the product shall fail to pay when due any portion of the purchase price, or fail to meet any terms required under contract agreed on at time of purchase, all warranties and remedies granted may be terminated.



Using any SPL arm as a tie/strap down point for a dyno session or transport will void the warranty.