

# HICAS Eliminator Kit Installation Instructions

## SPL HCK Z32

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Steps to installing the HICAS eliminator kit:

1. Unbolt and remove HICAS actuator
2. Remove HICAS ball joint and install toe bushing
3. Install HICAS eliminator bracket and toe arms
4. For Hydraulic HICAS, remove HICAS impeller from power steering pump and remove HICAS hydraulic lines

### Installing toe bushing



Unbolt rear retaining washer on the HICAS ball joint. Press out stock HICAS ball joint using appropriate bushing press and driver.

Clean the bore and file down any nicks in the bore as necessary.



Measure bushing bore of knuckle.



Measure diameter of new bushing.

Confirm that the new bushing is between 1/1000 and 3/1000 inch (0.025mm to 0.076mm) larger than the bore on the knuckle. If this tolerance is out of spec, please contact us for a replacement bushing.



If the side of the knuckle which the new bushing goes in is not chamfered, use a round file to break the edge.



Lightly tap new bushing in place to start, making sure bushing is square against the bore.



Press in new bushing completely with appropriate press and driver.

## Installing HICAS bracket and toe arm

The following picture shows how the bracket and toe arms should be installed. Note the orientation of the toe arm to provide maximum clearance to the subframe bushings under suspension travel.

The HICAS brackets should be installed with the stock HICAS actuator bolt to the subframe. The bolt passing through the bearing of the toe arm should pass through the corresponding hole on the subframe (ie. it should pass through the bracket, bearing of toe arm and subframe). Torque both toe arm bolts to 35 ft-lbs. Torque bolt that was used to mount the HICAS actuator to 60 ft-lbs.

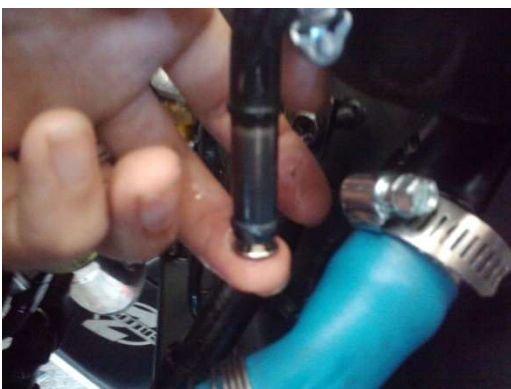


**Eliminating HICAS hydraulic circuit (hydraulic HICAS only)**

Remove back cover from pump.



Remove pump vanes by using needle nose pliers to remove them.  
Reinstall back cover, torque to 23-31 ft-lbs.  
Install plug with copper washer and torque to 36-51 ft-lbs.



Install metal plug onto barb for return hose of HICAS system on the power steering reservoir.  
Cover with rubber cap, and tighten cap with hose clamp.  
Remove Hydraulic HICAS valve unit and remaining HICAS lines.

## 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.

SPL PARTS INC makes no other warranties, either expressed or implied, including limitation warranties as to merchantability or fitness for a particular purpose. SPL PARTS INC shall not be liable for, and buyer assumes all risk of, any advice or failure to provide advice by SPL PARTS INC to buyer regarding the product or use and installation of product. SPL PARTS INC shall not be liable for any special, incidental or consequential damages.

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.**