



# Tension Rod E9X Installation Instructions SPL TR E9X

NOTE: TWO ARM ASSEMBLIES PER KIT.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22705	DOGBONE, .875 HEX, 12.75L	2
2	90086	SPACER	4
3	HJMXL10T-4130	HIGH-MISALIGNMENT BEARING	2
4	90010	CLAMP, SPLIT SHAFT, 5/8	4
5	52001	BOLT, CAP, SOC HD	4
6	53001	WASHER, SHIM, ZNC, 5/8 ID X 1.0 OD X .048 THK	2
7	JM12T-F1	ROD END, 3/4 BRG, 3/4-16	2
8	90113	SPACER, FLAT,	4
9	40035	TAPERED STUD	2
10	90504	SPACER, KNUCKLE	2
11	54005	NUT	4

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**SPLPARTS INC.**

SIZE   PART NO. <b>A</b>   TR E9X INS	REV. B
FILE	SCALE   1:8   SHEET   1 OF 1



## Introduction

Thank you for your purchase of this SPL Parts performance suspension product. These products are intended to provide experienced chassis tuners enhanced performance and flexibility in dialing-in your suspension settings. Please read these instructions fully before attempting installation. If you have further questions contact us at: [tech@splparts.com](mailto:tech@splparts.com). The SPL team is here to help.

### A Few Words About Product Safety:

Within these Installation Instructions important safety information is generally preceded by one of three signal words indicating the relative risk of injury. The signal words mean:

**⚠️ WARNING** A hazardous situation which, if not avoided, could result in death or serious injury. You CAN be KILLED or Seriously HURT if you do not follow instructions.

**⚠️ CAUTION** A hazardous situation which, if not avoided, could result in minor or moderate injury. You CAN be moderately HURT and may suffer property damage if you do not follow instructions.

**NOTICE** Careful attention is required to this instruction or operation but does generally not relate to personal injury. Damage to you SPL product or other property may result if you do not follow instructions.

	<p><b>⚠️ WARNING</b></p> <p><b><u>Modified suspension settings:</u></b>  <b><u>Repetitive Inspection &amp;</u></b>  <b><u>Maintenance required to</u></b>  <b><u>reduce risk of accident.</u></b></p> <p><b>SPL</b>  <a href="http://www.splparts.com">www.splparts.com</a></p>	
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**⚠ WARNING**

Installation of your SPL components and enhanced suspension performance may result in your vehicle handling differently than as factory equipped. Your choice of tire and wheel combinations, camber and toe-in settings may reduce braking performance and/or result in excessive wear or damage to SPL and OEM components during competition, track day or high-stress on road use. Contacts with other vehicles, pot holes or uneven road surfaces may result in overload stresses to fasteners, heim joints and other components initiating either immediate or accelerated failures. ***To reduce risks of accident and serious injury always:***

- Routinely inspect OEM suspension and steering components, braking system and SPL components including control arms, fasteners and heim joints for indications of overload stress, bending or physical damage (however, slight). Remove fasteners and heim joints as necessary to reveal potential damage within sleeves and joints. Best practices for competition and track includes inspection before and after each session, capturing driver input regarding any impacts, unusual vibration, or suspension feedback.
- **Immediately remove and replace any OEM or SPL component or fastener with indicated or suspected damage (including bending or damaged threads).**
- Do Not modify or substitute SPL components, over torque fasteners through use of impact or air tools or configure suspension settings outside of those recommended by OEM or established through owner testing of vehicle.
- Use of oversize tire/wheel combinations may increase stopping distances, modify ride height, roll centers and/or compromise performance of vehicle stability control and other systems.
- **Certain states regulate on highway suspension modifications. Vehicle owner and driver responsible for compliance with all equipment laws and regulations.**
- **All Occupants Buckle UP, USE Supplemental Restraints, and required SCCA or other club crash protection.**

**⚠ WARNING** SPL recommends professional installation of these components by technicians having access to vehicle lift, safety glasses/personal protective gear and experience with OEM maintenance techniques, recommendations, safety messaging, torque & other specifications.

**⚠ WARNING** Cancer and Reproductive Harm – [www.P65Warnings.gov](http://www.P65Warnings.gov).



## Safety Requirements:

- **⚠ WARNING** Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- **⚠ CAUTION** Always use properly rated jack stands or an automotive lift when working under your Vehicle.

## Tools Required:

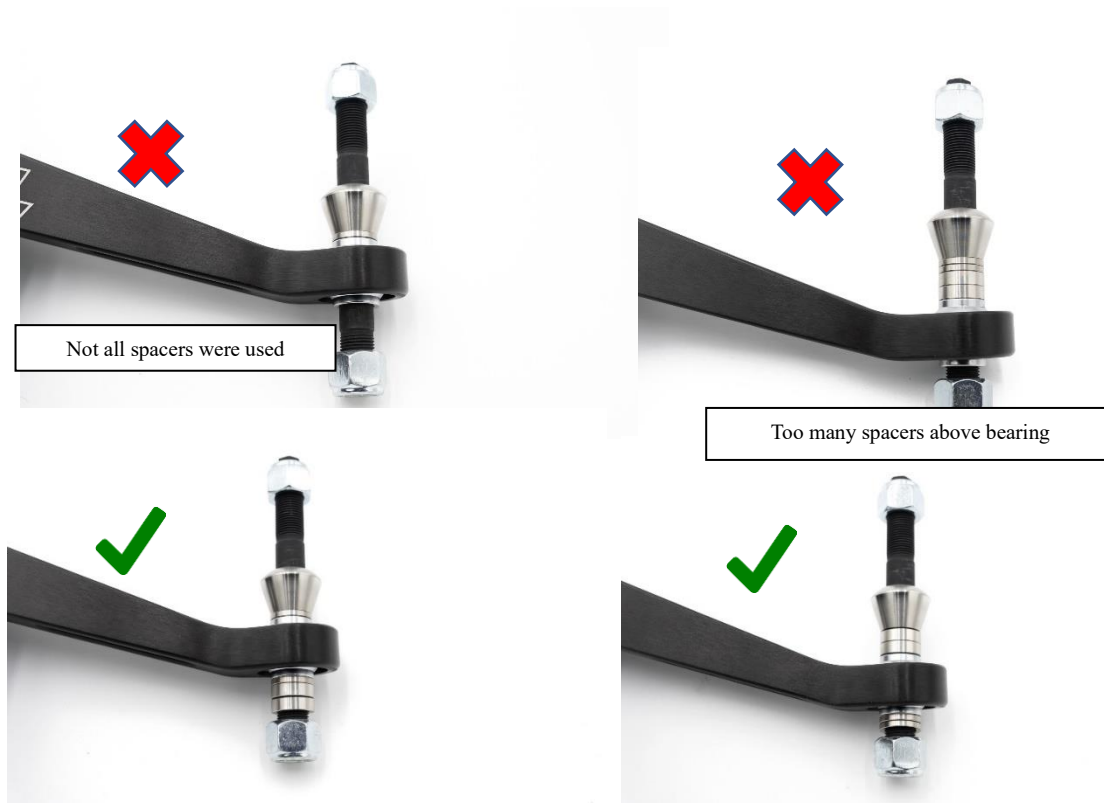
- Ratchet
- Ratchet Extension
- Sockets (8mm, 12mm, 18mm, 21mm, 24mm)
- Torx Socket (T40)
- Torque Wrench
- Wrench (21mm, 24mm)
- Zip ties or bungies

## Procedure:

1. **⚠ CAUTION** Raise and secure the front end of the car and remove the front wheels.
2. Remove the fender front fender liner and lower fender liner to gain access to the bracket on the front of the vehicle that holds the control arm to the chassis using an 8mm socket.
3. If your vehicle is equipped with an auxiliary cooler, you may find it easier to move this out of the way, which can be accomplished by removing the bracket at the top of the cooler and lifting it out of its supports. Zip tie it in place to ensure you do not snag the lines.
4. Using an 18mm socket, remove the bolt that goes through the tension rod, best accomplished with a ratchet and an extension. Take note of the crash bolt bracket orientation, if the vehicle is equipped with it. This is a hook shaped piece that needs to be returned to this location during installation of the SPL arm.
5. Remove the tension rod from the knuckle by loosening the OEM nut with a 21mm socket. If the ball begins to spin, you will need to place a Torx bit in the top of the stud and a wrench on the nut to remove the arm completely.
6. Begin installation of the stud (9) into the knuckle. Place the tapered spacer (10) onto the stud, then slide this assembly into the knuckle so that the rounded portion mates to the knuckle.

Place the washer over the stud on the bottom of the knuckle, then tighten the nylock nut (11) with your fingers until the hex at the end of the stud is exposed. Use a 12mm socket and a 24mm wrench to tighten this assembly down. Once seated, torque to 180ft-lb.

7. Now you will determine the number of anti-dive spacers (8) you will use below the rod end (3). Using none mimics OEM anti-dive. Any spacers installed between the bearing and the knuckle spacer (10) will increase anti-dive. Any spacers not used above the bearing must be placed above the bearing to allow the assembly to be tightened. Below are pictures showing how to properly install the stud. Once you have spacer orientation decided, tighten the lock-nut (11) to 180 ft-lb.



8. Install the other end of the assembly (2, 8) into the bracket on the chassis that the OE arm was removed from, making sure to replace the crash bolt in the same orientation it was removed. Torque the OE bolt to 100Nm.
9. Replace the fender liners.
10. Loosen the socket head cap screws (5) and adjust the length of this arm to adjust your castor and the position of the tire in the wheel well. Once the arm has been adjusted to proper length, torque the socket head cap screws (5) to 150in-lb.

11. **NOTICE** Following installation have the car professionally aligned, as replicating the original settings is nearly impossible. It may be necessary to adjust the toe in order to drive the car to an alignment shop if you either added or subtracted camber. Take these instructions with you to ensure that the parts are adjusted correctly.
  
12. **WARNING** Check all torques after the first 100 and 500 miles of driving, or after your first two sessions at the track if it is a track car, to make sure that nothing has loosened up due to vibrations. Maintain a full copy of SPL Instructions and product safety messaging with your vehicle maintenance records.

## Adjusting the Length of the Links for Alignment

Loosen the clamps on both ends of the dogbone. Turn the dogbone to thread in/thread out the rod ends. Once the assembly is the correct length, tighten the clamps by torquing the socket head cap screws to 150 IN-LBS maximum or until the assembly cannot be rotated easily.

**CAUTION** Note that the thread engagement exposed on the rod end should not exceed .625" as shown in the photo.

Maximum Roll Center Correction





**SPL™ LIMITED WARRANTY<sup>1</sup>**

**What is Covered?** Subject to the terms, exclusions and limitations herein, SPL Parts, Inc. (“SPL”) exclusively warrants to the owner of the vehicle SPL components are initially installed on, SPL will, according to terms herein, repair or replace defects in SPL materials or workmanship that upon SPL’s inspection are determined to exist as of the date of sale to the initial end user/customer (hereafter “Customer”).

- The term of this Limited Warranty shall be twenty-four months from SPL delivery to first end user/Customer.

**What is Not Covered?:** Your SPL Limited Warranty does not cover: (1) defect in a SPL component causing or contributing to damage to the motorized chassis, body, emissions, belting/airbags, electrical system or other vehicle system or component separately warranted or supplied by a manufacturer other than SPL, (2) SPL components used in competition or other events which may involve unforeseen vehicle components, suspension set ups and contact between vehicles and obstacles, (3) damage to SPL components or your vehicle from additions, alterations, or other products or components not supplied by SPL, (4) damage or degradation of performance from failure to adequately inspect, maintain, adjust or service as recommended or required, damage resulting from improper suspension set-up, loading, accident, collision, vandalism, abuse, misuse, neglect, fire, flood, normal wear, (5) damage caused or related to use of SPL control arms or other parts as a tie-down for dyno testing or transport (6) labor, consequential, incidental, punitive or other damages or costs, including those incurred in removing or delivering your SPL component to SPL for inspection, repair or replacement.

**Obtaining Warranty & Customer Service:** For questions or claims contact: SPL Warranty, 30307 Ranch Road 12, Unit 100, Dripping Springs, Texas 78620; [Tech@splparts.com](mailto:Tech@splparts.com). Please have proof of purchase available.

**Remedy Limited to Repair/Replacement by SPL. Limited time for Filing Warranty Claims. BINDING, SINGLE CLAIM**

**ARBITRATION-Venue:** Upon Customer’s removal and delivery to SPL, SPL inspection and SPL determination of a covered defect, the exclusive remedy provided hereunder shall at SPL’s option be repair or replacement of the defective SPL component. *Written notice of any claim for breach/damages related to this Limited Warranty must be provided SPL within 20 days of customer notice or concern with a defect and in all instances within 30 days of the date your Limited Warranty expires (i.e. not later than twenty-five months from delivery). For separate, valuable consideration received; all claims arising from or related to purchase or use of SPL components shall exclusively be maintained as a separate action by each Customer with jurisdiction, venue and determination applying Texas state law (without reference to treaties or conflict of law provisions) through binding arbitration before a neutral selected by Customer from the JAMS® panel closest to Austin, Texas. To the extent permitted by law, each party shall bear its own costs and fees.*

**Other Exclusions –Limitation of Damages - Your Rights Under State Law.**

In consideration of the purchase price negotiated, SPL shall not be liable for: costs incurred by Customer removing, transporting or presenting components to SPL for repair or replacement under this Limited Warranty (expedited or other shipping is Customer’s responsibility), any time loss, rental costs, towing or for any incidental, consequential, punitive or other damages Customer may incur arising or in any way related to Customer’s negotiation, purchase and use of SPL components. Your exclusive remedy hereunder is repair or replacement as described above. By claiming the benefits of this Limited Warranty Customer agrees: (a.) your sole and exclusive remedy in any proceeding for *breach* of this express Limited Warranty is money damages in an amount equal to the *lesser* of the purchase price of the covered SPL part or the reasonable cost for material and labor necessary to repair or replace SPL components that Customer proves at *arbitration* should have been done hereunder but were not; (b.) your sole and exclusive remedy in a proceeding for *breach* of any applicable implied warranty is money damages in an amount equal to the *lesser* of the purchase price of the covered SPL part or the amount Customer proves at *arbitration* equal to the reasonable cost for material and labor necessary to correct the defect(s) in SPL components upon which the finding of breach of implied warranty is based. This Limited Warranty of repair or replacement shall not be construed as a representation or warranty of future performance. The duration of any implied warranty shall be limited to the term of express Limited Warranty provided above. By making a claim under this Limited Warranty you acknowledge receipt of these terms and agreement to be bound thereby.

No employee or other agent of SPL is authorized to amend or waive this written Limited Warranty or make additional representations or warranties regarding any SPL features, performance, workmanship or materials. This Limited Warranty shall be construed according to Texas Law without reference to treaties or conflict of law principles.

*This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, some states do not allow limitations of how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you. All other warranties are hereby disclaimed, except to the extent prohibited by applicable law.*

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