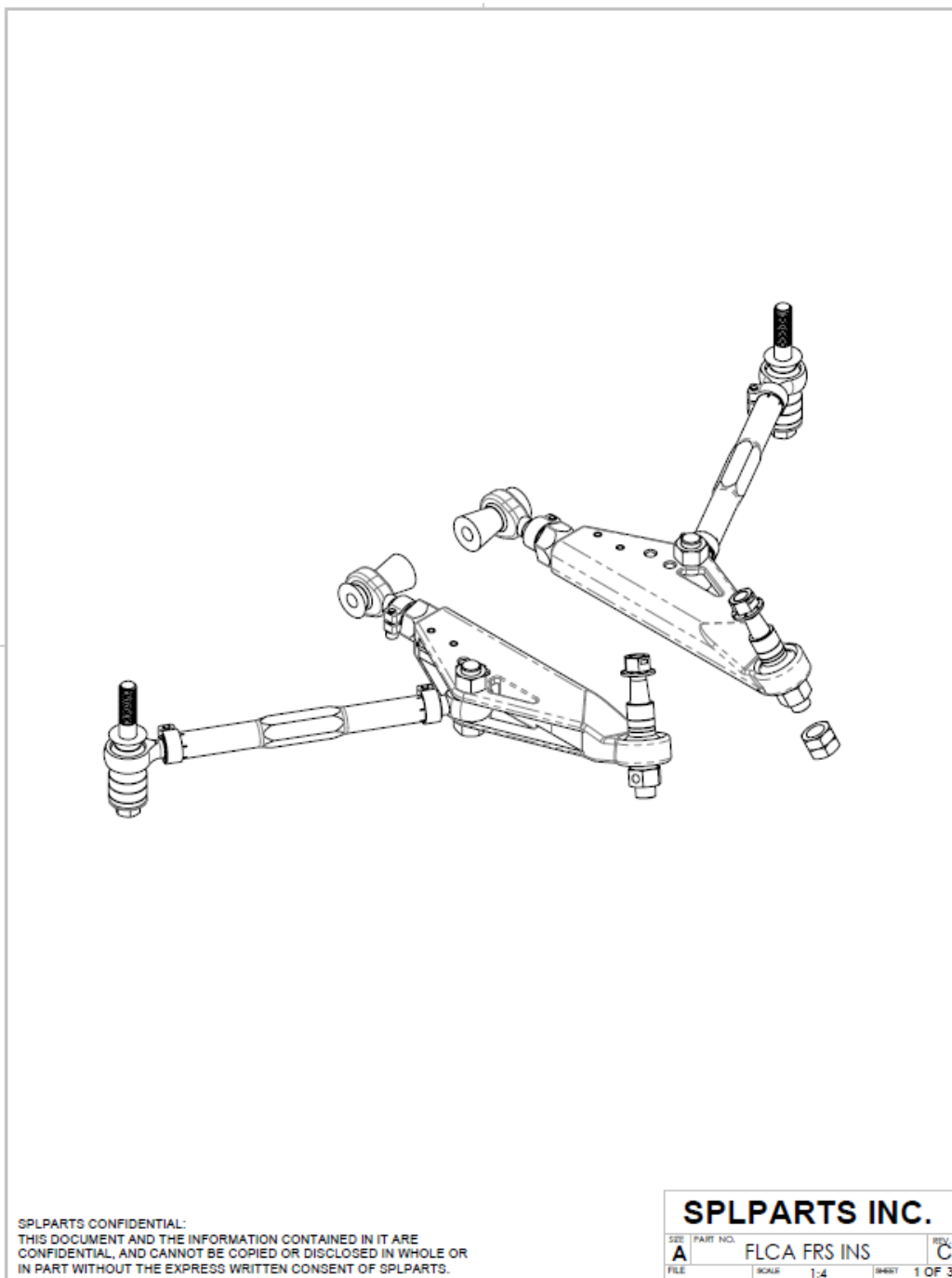




Front Lower Control Arm Kit Installation Instructions SPL FLCA FRS



CAMBER ARM ASSY - 2X PER KIT, 1 RIGHT, 1 LEFT

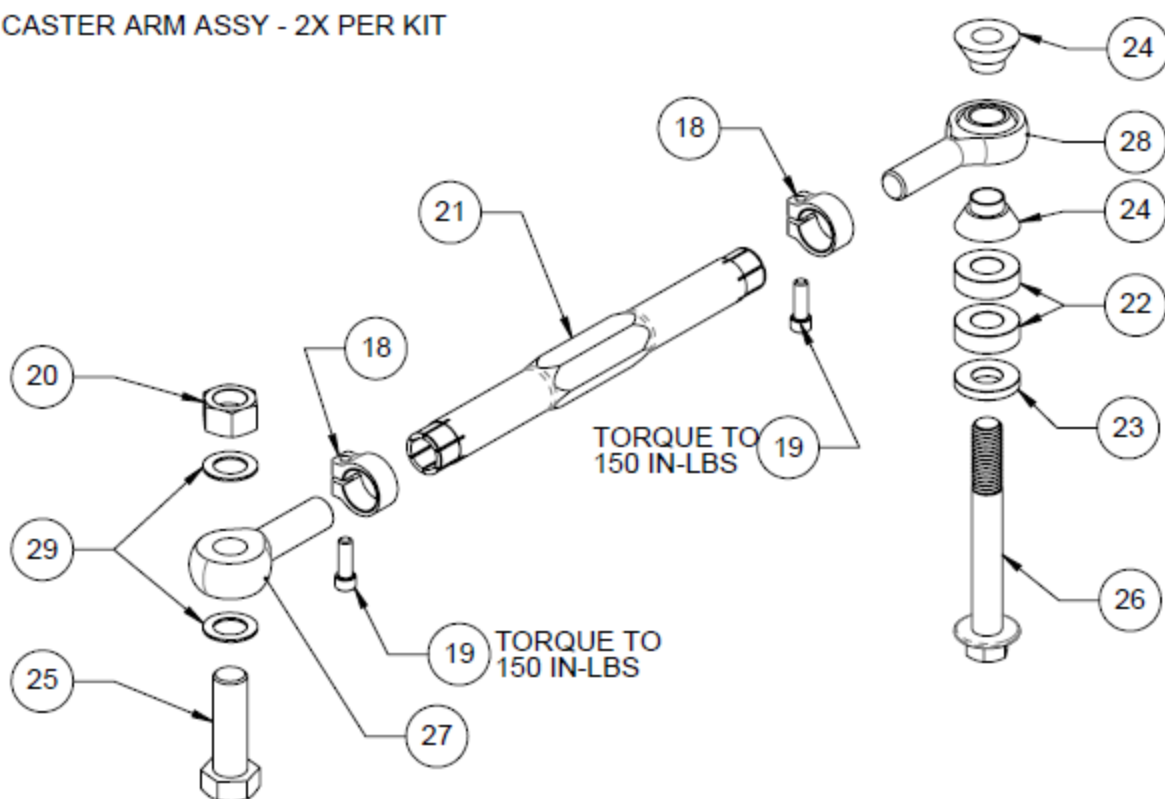
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	90010	CLAMP, SPLIT SHAFT, 5/8	1
2	52002	BOLT, CAP, SOC HD, 1/4-20 X 1.0L	2
3	52001	BOLT, CAP, SOC HD, 1/4-20 X .75L	1
4	HIN10T-F1	BEARING, SPHERICAL, HIGH MIS-ALIGNMENT, 5/8	1
5	62002	RETAINING RING, SPIRAL, INTERNAL, SST, 1.375 BORE	1
6	40010	STUD, 1/2-20, 5/8-18, 4.8 DEG X .744 TAPER	1
7	54003	NUT, HEX, CTR LOCK, ZNC, GR8, 5/8-18	1
8	54004	NUT, HEX, FLNG LOCK, ZNC, 1/2-20	1
9	90113	SPACER, FLAT, .125 THICK, 5/8 BORE	1
10	90114	SPACER, FLAT, .250" THK, 5/8 BORE	1
11	90115	SPACER, FLAT, .500 THICK, 5/8 BORE	1
12	25010R	ARM, FRT LWR CAMBER RIGHT, FRS/BRZ	1
13	90017	DOUBLE ADJUSTER, EXTENDED	1
14	JMX10T-F1	ROD END, MALE, 5/8 F1 FIT	1
15	90165	SPACER, LARGE, LWR CAMBER ARM, FRS	1
16	90166	SPACER, SMALL, LWR CAMBER ARM, FRS	1
17	54001	NUT, HEX, JAM, ZNC, 5/8-18	2

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SPLPARTS INC.

SIZE	PART NO.	REV.
A	FLCA FRS INS	C
FILE	SCALE	SHEET
	1:3	2 OF 3

CASTER ARM ASSY - 2X PER KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
18	90010	CLAMP, SPLIT SHAFT, 5/8	2
19	52001	BOLT, CAP, SOC HD, 1/4-20 X .75L	2
20	54003	NUT, HEX, CTR LOCK, ZNC, GR8, 5/8-18	1
21	25011	DOGBONE, .875 HEX, 9.00L	1
22	90019	SPACER, SST, 1.20 OD X .59 ID X .375 THK	2
23	90020	SPACER, 1.20 OD X .561 ID X .188 THK	1
24	90018	SPACER, 5/8 ROD END, .369 SHOULDER, 14MM ID	2
25	52004	BOLT, CAP, HEX, ZNC, GR8, 5/8-18 X 2.00L	1
26	52005	BOLT, CAP, HEX FLNG, M14 X 1.5 X 110L	1
27	REL 10	ROD END, SOLID, 5/8, 5/8-18 LH	1
28	CM10T-F1	ROD END, MALE, 5/8, F1	1
29	53001	WASHER, SHIM, ZNC, 5/8 ID X 1.0 OD X .048 THK	2

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SPLPARTS INC.

SIZE: **A** PART NO.: **FLCA FRS INS** REV: **C**
FILE: _____ SCALE: **1:3** SHEET: **3 OF 3**



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. 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.

	<div> WARNING</div> <p><u>Modified suspension settings:</u> <u>Repetitive Inspection &</u> <u>Maintenance required to</u> <u>reduce risk of accident.</u></p> <p>SPL www.splparts.com</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. Torque settings of cap bolt/control arm and other fasteners may change as a result of vehicle use. Torque settings below 180 ft-lbs on SPL cap bolt/lower control arm and settings other than recommended for other suspension components may result in bending, premature wear and failure. ***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.

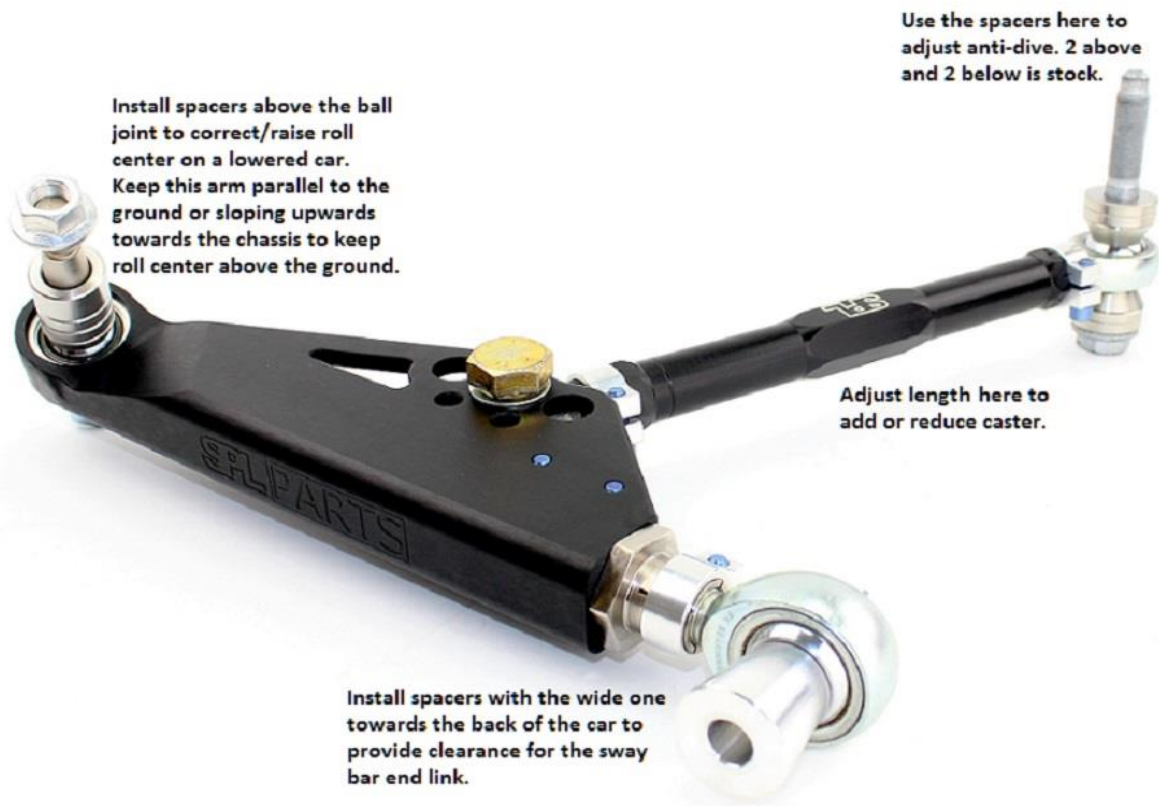
⚠ WARNING Cancer and Reproductive Harm – www.P65Warnings.gov.

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.

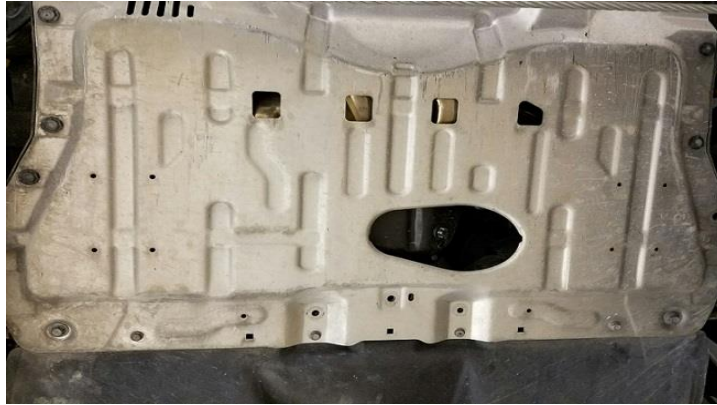
Tools Required:

- Ratchet
- Ratchet Extension
- Sockets
- 3/16 Allen Wrench
- Wrenches (10mm, 12mm, 17mm, 19mm)



Procedure:

1. **⚠ CAUTION** Raise and secure the front end of the car and remove the front wheels.
2. Remove the front splash guard. This will require the 10mm and 12mm wrenches/sockets, as well as a flat head screw driver.



3. Remove the cotter pin, the 17mm ball joint nut, and then the 17mm nut at subframe end of the arm. (The corner of the arm with the Double Adjuster and the Rod End.) Remove the 19mm stud mount nut and stud. Also remove the lower arm support plate.
4. Remove the arm from the steering knuckle, then remove the control arm.
5. Remove the pictured stud, as it will be replaced with the supplied 110mm long bolt (Item 26).





6. Install the SPL Parts Control Arm at subframe end first. The large Offset Spacer should go to the rear of the car, and the small offset spacer to the front of the car on the joint. Place the bolts through, but do not tighten yet as this will make it more difficult to finish the installation.
7. The end of the Caster Arm comes with 3 Spacers (Items 22 and 23). One Item 22 and one Item 23 above and one Item 21 below the Rod End (Item 28) replicates the factory setup. If you need more anti-dive, put more spacers above the Rod End.
8. Place the bolt (Item 26) through the rod end assembly (Items 22, 23, 24, 28) followed by the lower arm support plate that came with the vehicle. Without the support plate, it can damage the frame of the vehicle. Tighten the stud into the chassis with the full assembly to 81 ft. lbs. (110/Nm).
9. Install the camber arm onto the knuckle. The locknuts will require quite a bit of effort to thread on, as per their design. There are two Jam Nuts supplied with the kit. Their purpose is to allow you to tighten the Flange Locknut (Item 8) on top of the Ball Joint Shank (Item 6). Thread both Jam Nuts onto the lower part of the Shank, then tighten them against each other with a large wrench. Now tighten the top Flange Locknut (Item 8) onto the Shank Item 6) to 81 ft. lbs.
10. Place the roll center spacers (Items 9, 10, 11) between the knuckle and the Spherical Ball Joint (Item 4). The lower your car, the more spacers you will need. You want to try and replicate the angle of the OEM lower control arm set at OEM ride height. Once you have your desired ball joint height, install the 5/8-18 Jam Nut (Item 7) to the stud and tighten to 110 ft-lbs.
11. Tighten the bolts at the subframe to 63 ft-lbs. (85/Nm) and Center lock Jam Nuts (Items 7, 19) to 110 ft-lbs. (150/Nm). **DO NOT OVERTORQUE** any nuts or bolts! *SPL Parts is not liable for any issues due to over torque.*
12. Tighten all Blue Titanium Socket Head Cap Screws (Items 2, 3, 19) to 150 in- lbs.
13. **FOR THIS PARTICULAR APPLICATION**, do most of the adjustment with the Double Adjuster (Item 13), while leaving as little of the Rod End (Item 14) exposed as possible. This is for increased strength of the entire assembly.
14. Ensure clearance to anti-roll bar and all other suspension components by sweeping the suspension through its travel before putting the vehicle back on the ground. Caster may need to be adjusted in some set ups for anti-roll bar clearance.



15. **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.
16. **⚠ 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.
17. Using calibrated torque wrench (never air or impact tools) gradually tighten retaining nut to 110 ft. lbs. **NOTICE** Make inspection and confirmation of 110 /ft. lbs. torque setting part of your routine pre-use and race preparations and maintenance. Consult you SPL instructions and tech@splparts.com for additional set-up recommendations, warnings, and product safety information.

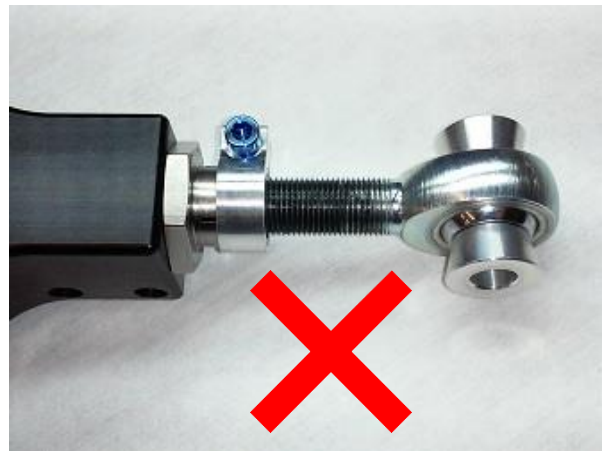
SPL Double Adjuster

The hybrid adjuster is what is known as a **double adjuster**. On the outside, the thread is left-handed. On the inside, the thread is right-handed. 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):



Overextended adjuster.



Overextended rod end.

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



You'll notice in the pictures that the threads of the rod end and the adjuster have some dark material on them. That is anti-seize compound we apply to all of our products so that adjustments should be easy and trouble free for quite some time.

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.





SPL™ LIMITED WARRANTY¹

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. 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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