

READ ALL INSTRUCTIONS COMPLETELY AND THOROUGHLY UNDERSTAND THEM BEFORE DOING ANYTHING.
CALL CHASSISWORKS TECH SUPPORT (916) 388-0288 IF YOU NEED ASSISTANCE.

INSTALLATION GUIDE



6157 g-Machine Lower Control Arms for Billet Upright



Description: Lower g-Machine A-arms for billet upright, matte flat black with balljoints and stainless pivot pins for Street Machine crossmember

Notes: Installation requires use of Street Machine crossmember and billet spindle.

ITEM	QTY	PART NO.	DESCRIPTION
1	1	5078	gSTREET LOWER A-ARM, DRIVERS, MILD STEEL, BLACK
2	4	3333	PLASTIC BUSHING $\varnothing 1$ OD x $\varnothing 3/4$ BORE, $\varnothing 1 1/4$ x .156 FLANGE
3	2	1652	PIVOT STUD STAINLESS STEEL .75 X 2.50 X 5/8-18 THREAD
4	2	3106-31C00.38S	SET SCREW, 5/16-18 x 3/8, OVAL POINT, STAINLESS
5	2	3142-1.82-SA	PIVOT BALL RACE, 1.36 BALL X 1.82 OD
6	1	7964-066	PIVOT BALL, $\varnothing 1.36$ BALL x $\varnothing 9/16-18$ STUD x 2.965 LONG
7	1	7964-077	ADJUSTER NUT, PIVOT BALL 1 7/8-20 THREAD
8	1	3106-25FK0.38SP	HEX SOCKET SET SCREW, CUP POINT 1/4-28 x 3/8 SST, NYLON PATCH
9	1	7964-076	CAP, BALL PIVOT, 1.36 BALL, PRO/TOURING SUSPENSION
10	1	3116-1.051-07B	O-RING, #2-023, 1.051 ID x 1.191 OD x .070 WIDE, BUNA-N, 70 DUROMETER
11	1	3144-25-28-0-L	GREASE ZERK 1/4-28 STRAIGHT, 1 1/8 LONG
12	1	3120-056S-Y	FLAT WASHER, 9/16 SAE, HARDENED, YELLOW ZINC
13	1	3132-056-18P	FLANGED TOP LOCKNUT, 9/16-18, GRADE G, PHOSPHATE AND OIL

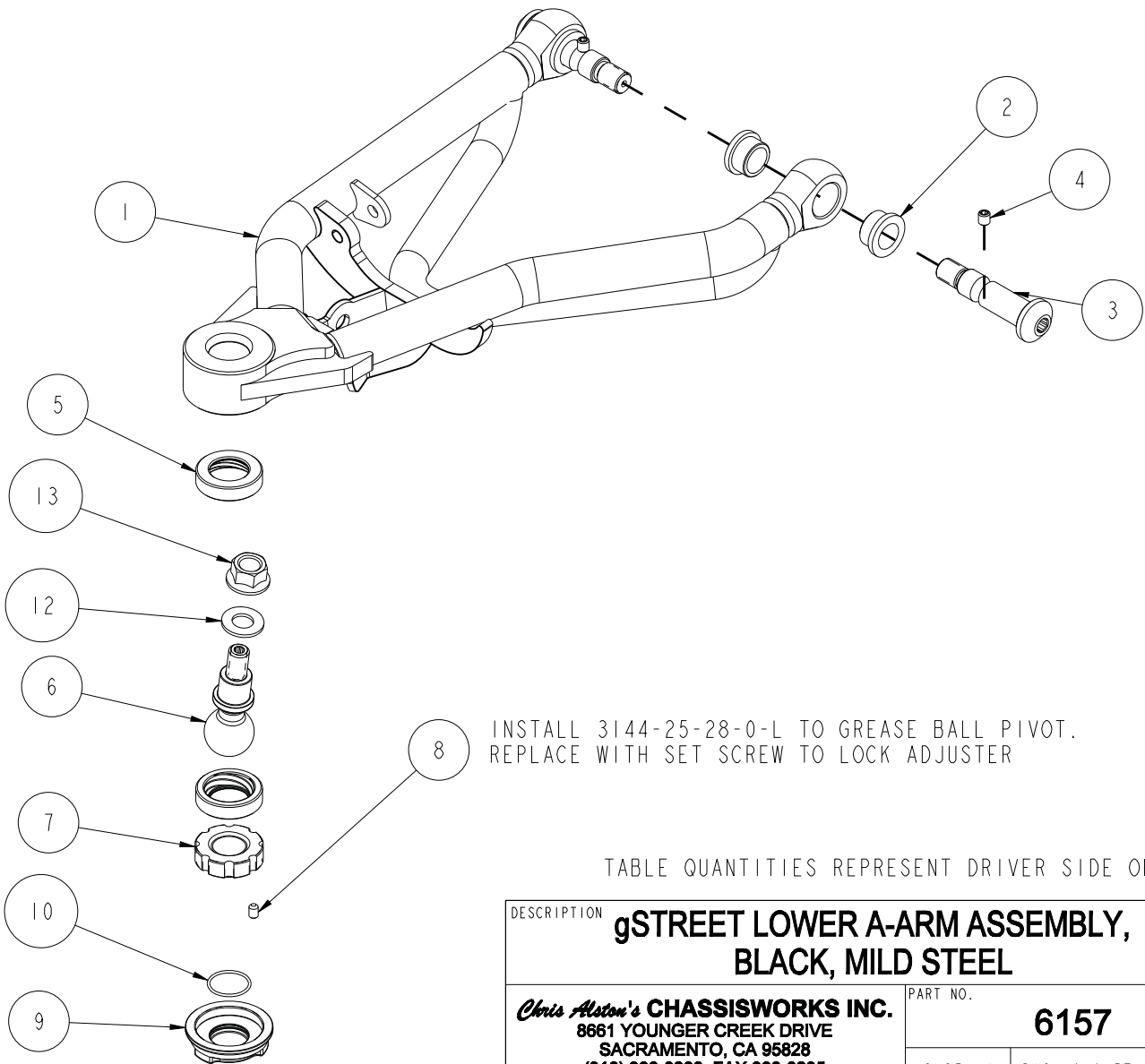


TABLE QUANTITIES REPRESENT DRIVER SIDE ONLY.

DESCRIPTION		gSTREET LOWER A-ARM ASSEMBLY, BLACK, MILD STEEL	
Chris Alston's CHASSISWORKS INC. 8661 YOUNGER CREEK DRIVE SACRAMENTO, CA 95828 (916) 388-0288 FAX 388-0295		PART NO. 6157	
		2/25/14	DWG: 916157

PARTS LIST

6157 - g-Machine Lower A-Arms for Billet Upright

Qty	Part Number	Description
2	3106-25FK0.38SP	Set screw, 1/4-28 x 3/8"
2	3116-1.051-07B	O-ring
4	3142-1.81-SA	Pivot-ball race
8	3333	Flanged eyebolt bearing
1	5078	Lower-arm weldment, driver side
1	5079	Lower-arm weldment, passenger side
2	7964-066	Ball-joint pivot
2	7964-076	Ball-joint adjuster
2	7964-077	Ball-joint nut

906157 - Hardware Bag Components

Qty	Part Number	Description
4	1652	Pivot Stud, Stainless Steel
4	3106-31CO0.38S	Set Screw, Oval Point, Stainless Steel, 5/16-18 x 3/8
2	3110-056-18-8Y	Hex nut, 9/16-18 Grade 8 (Not used in kit. Use as an assembly aid.)
2	3120-056S-Y	Washer, 9/16" Hardened Flat SAE
2	3132-056-18P	Toplock nut, 9/16-18 flanged

INSTRUCTIONS

Aluminum Upright Spindle Installation

Do not attempt to attach the A-arms to the spindle without reading their installation instructions. The assembly procedure is different than anything you have ever assembled. Failure to follow the instructions will result damage to the aluminum upright and will not be warranted.

Stainless Warning

Stainless steel threads are extremely prone to galling. You must use anti-seize. You must follow the thread cleaning and assembly procedure. Do not do multiple trial fits as this adds to the galling problem.

Prior to beginning installation, use the parts list to verify that you have received all components required for installation. The lower control arm will ship to you completely assembled. If you are not final assembling the suspension only hand tighten the studs to avoid over working the threads during trial fits. Keep trial fits to an absolute minimum.

1. Before installing the lower A-arms, the frame mount threads must be chased. Use a 5/8-18 RH tap to chase threads on the front and backsides of both lower A-arm mounts. Clear any debris left in the threads with an air hose.
Apply anti-seize onto threads of pivot studs (Item 8) and A-arm mounts. Test fit each pivot stud in the mounting hole it will use. Studs should screw in easily until they bottom out. Do not force.
NOTE: Always use anti-seize especially when working with stainless steel hardware. Failing to do so will cause damage to the threads. If the stud begins to tighten or seize before fully seated DO NOT use heavy force. Clean both male and female threads with a tap and die, apply anti-seize, then carefully assemble.
2. DO NOT grease the pivot bushings.

3. Position the A-arm at it's correct mount and insert the pivot studs by hand. If the bushing fit is too tight to press in by hand, a T-handle or regular Allen wrench can be used to apply pressure while turning the stud. Be careful not to damage the threads. Do not force or hammer.
NOTE: Refer to the assembly drawing to determine driver- and passenger-side arms. The tube with the anti-roll bar tabs is closest to the front of the car.
4. Once pivot studs are in place, use an Allen T-wrench to tighten them until they are fully seated. This will give the bushings the proper amount of crush. Check to be sure the A-arm swings freely throughout it's travel but with a small amount of resistance.
Apply a drop of Loctite™ onto threads of oval-point set screw (Item 5), then screw into A-arm mount to lock the pivot stud. Be careful not to get excess Loctite™ in the pivot stud bore.
Repeat the installation of the lower A-arm on the passenger side.
Suspension adjustment of caster and camber alignment is done with the upper A-arms.

ALIGNMENT

1. CAMBER: To adjust camber, turn adjustment couplers equally, in the same direction, until the correct camber is set.
2. CASTER: To adjust caster, turn adjustment couplers equally, in opposite directions, until the correct caster is set.
NOTE: Do not have more than two-turns difference between the adjusters to prevent binding the eye bolts.
3. Once alignment is correctly set, tighten all A-arm pivot studs until firmly seated. This will give the bushings the proper amount of crush, and allow the A-arm to move with a small amount of resistance.
4. Apply a drop of Loctite™ onto threads of oval-point set screw (Item 9), then screw into A-arm mount to lock the pivot stud. Be careful not to get excess Loctite™ in the pivot stud bore.

Alignment Starting Point	
Caster	8 to 9 degrees positive
Camber	1 to 1-1/2 degrees negative
Toe	1/16" to 1/8" toe in

WARRANTY NOTICE:

There are NO WARRANTIES, either expressed or implied. Neither the seller nor manufacturer will be liable for any loss, damage or injury, direct or indirect, arising from the use or inability to determine the appropriate use of any products. Before any attempt at installation, all drawings and/or instruction sheets should be completely reviewed to determine the suitability of the product for its intended use. In this connection, the user assumes all responsibility and risk. We reserve the right to change specification without notice. Further, Chris Alston's Chassisworks, Inc., makes **NO GUARANTEE** in reference to any specific class legality of any component. **ALL PRODUCTS ARE INTENDED FOR RACING AND OFF-ROAD USE AND MAY NOT BE LEGALLY USED ON THE HIGHWAY.** The products offered for sale are true race-car components and, in all cases, require some fabrication skill. **NO PRODUCT OR SERVICE IS DESIGNED OR INTENDED TO PREVENT INJURY OR DEATH.**

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