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

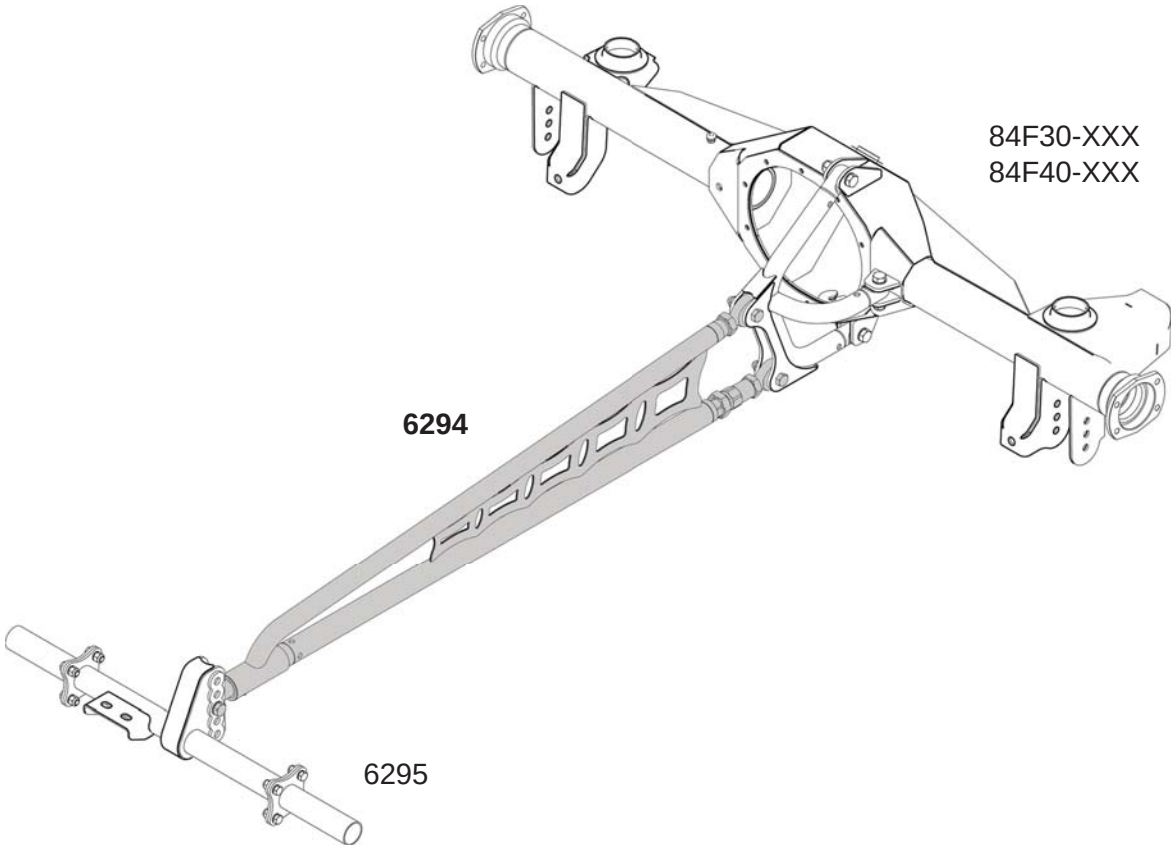
INSTALLATION GUIDE

CHRIS ALSTON'S Chassisworks
THE HOME OF HIGHER TECHNOLOGY

6294

Drag-Style Torque Arm for Gen3-4 Camaro

For use with Mounting Cross Assembly 6295-CAC and 84F30-FXX or 84F40-FXX FAB9 Housing



Description: Tubular drag-race torque arm for Chassisworks FAB9 Ford 9” rearend housing. Direct bolt-on with 6295-CAC crossmebmer assembly.

Applications: 1982-2002 Camaro and Firdbird

ITEM	QTY	PART NO.	DESCRIPTION
1	1	7959-0158	TORQUE ARM WELDMENT
2	1	1527	LINK ADJUSTER, 1-14 LEFT THREAD 7/8-14 RIGHT THREAD
3	2	3137-088X050-R	ROD END, 7/8-14 RIGHT x 1/2 BORE, 4130, TEFLON, RSMX12-8T
4	2	3102-088-14RC	JAM NUT, 7/8-14 RIGHT, CLEAR ZINC
5	1	3102-100-14LY	JAM NUT, 1-14 LEFT, YELLOW ZINC
6	1	899-016-1.125-W	WIPER, 1 1/8 PISTON ROD, HALLITE 8880710
7	1	7959-0175	SLIDING LINK ASSY, TORQUE ARM, 1.10 BALL PIVOT
8	1	3144-25-28-0	GREASE ZERK 1/4-28 STRAIGHT
9	12	3109-050-S-2-Y	AIRCRAFT WASHER 1/2 x .062 THICK
10	5	3100-050F2.25Y	HEX BOLT, 1/2-20 x 2 1/4, GRADE 8, YELLOW ZINC
11	1	3100-050F3.00Y	HEX BOLT, 1/2-20 x 3, GRADE 8, YELLOW ZINC
12	6	3101-050-20C	LOCKNUT, 1/2-20, GRADE 5, NYLON INSERT, CLEAR ZINC
13	1 [1]	7959-0155	CROSS WELDMENT, TORQUE ARM, FAB9 HOUSING
14	1 [1]	84F30-E01	FAB9 BOLT-IN REAREND, LBFS, 82-92 GM CAMARO/FIREBIRD, MILD STEEL
15	2 [2]	7959-0181	PIVOT BRACKET, .190 4130, TORQUE ARM
16	1 [2]	7959-0183	GUSSET, PIVOT BRACKET, 4130
17	2 [2]	7959-0182	DOUBLER, PIVOT BRACKET, 4130, TORQUE ARM
18	4 [2]	7959-0185	TUBE CONNECTOR FLANGE, 1 5/8 4130
19	16 [2]	3109-038-S-2-Y	AIRCRAFT WASHER 3/8 x .062 THICK
20	8 [2]	3100-038C1.00Y	HEX BOLT, 3/8-16 x 1, GRADE 8, YELLOW ZINC
21	8 [2]	3101-038-16C	LOCKNUT 3/8-16, GRADE 5, NYLON INSERT, CLEAR ZINC
22	1 [2]	230301	TRANSMISSION MOUNT BRACKET

[1] Included with 84FX0-XXX - '82-02 Camaro/Firebird FAB9 with Torque Arm Tubular Mount

[2] Included with 6296 - Torque Arm Crossmember Mount

Above parts NOT included in 6294 torque arm package:

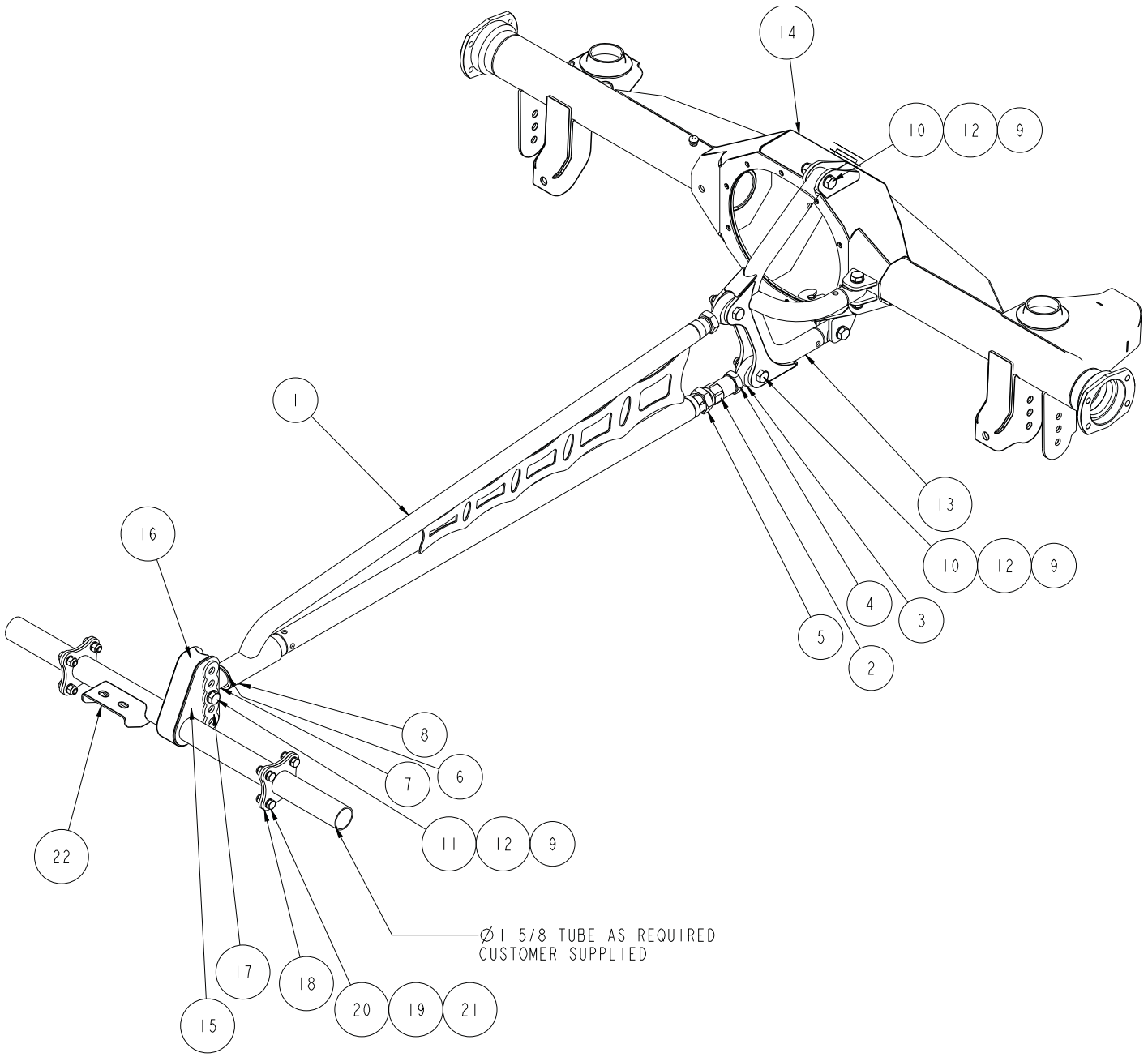
DESCRIPTION

TORQUE ARM, GEN 3 & 4 CAMARO, DRAG

Chris Alston's CHASSISWORKS INC.
8661 YOUNGER CREEK DRIVE
SACRAMENTO, CA 95828
(916) 388-0288 FAX 388-0295

PART NO. 6294

4/26/13 | DWG: 916294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PARTS LIST

6294 - Drag-Race Torque Arm for '82-02 Camaro and Firebird

Qty	Part Number	Description
1	1527	Link bar adjuster, 1-14 LH male x 7/8-14 RH female
2	3100-050F2.25Y	Bolt, 1/2-20 x 2-1/4", hex head, Grade 8
1	3100-050F3.00Y	Bolt, 1/2-20 x 3", hex head, Grade 8
3	3101-050-20C	Locknut, 1/2-20, nylon insert
2	3102-088-14RC	Jam nut, 7/8-14 RH with 1-5/16" hex, clear zinc
1	3102-100-14LY	Jam nut, 1-14 LH with 1-1/2" hex, yellow zinc
6	3109-050-S-2-Y	Aircraft washer, 1/2" small OD
2	3137-088X050-R	Rod end, 7/8" RH male thread x 1/2" bore
1	3144-25-28-0	Grease zerk, 1/4-28, straight
1	7959-0158	Torque arm weldment, 44"
1	7959-0175	Sliding-link pivot assembly

6296 - Drag-Race Torque Arm Crossmember Mounts (not included with 6294)

Qty	Part Number	Description
1	230301	Transmission mount bracket
8	3100-038C1.00Y	Bolt, 3/8-16 x 1", hex head, Grade 8
8	3101-038-16C	Locknut, 3/8-16, nylon insert
16	3109-038-S-2-Y	Aircraft washer, 3/8" small OD
2	7959-0181	Pivot bracket for torque arm, 4130
2	7959-0182	Pivot bracket doubler, 4130
1	7959-0183	Gusset pivot bracket, 4130
4	7959-0185	Tube connector 1-5/8", 4130

INSTRUCTIONS

Prior to Installation

A. Exhaust system components that may interfere with the installation of the torque arm should be removed from the vehicle before proceeding with installation.
   a. Modification to exhaust may be required for clearance.

B. Installation of FAB9 torque-arm housing and tubular mount, and forward crossmember with mounting bracket must be completed before proceeding.

Torque Arm Assembly

1. Thread 1"-14 jam nut onto adjustment coupler until loosely seated.
2. Screw male end of adjustment coupler into lower tube of torque arm weldment (Item 1) until loosely seated. Use anti-sieze or similar thread lubricant.
3. Thread a 7/8"-14 jam nut onto each rod end until loosely seated.
4. Screw one of the rod ends into the female end of adjustment coupler until loosely seated. Use anti-sieze or similar thread lubricant.

Torque Arm Installation

5. Bolt adjustment coupler assembly to the lower mounting brackets of rearend housing.
   a. Use 1/2-20 x 2-1/4" hex head cap screw and 1/2-20 locknut.
   b. Do not torque at this time.

6. Bolt upper rod end into upper mounting bracket of rearend housing.
   a. Use 1/2-20 x 2-1/4” hex head cap screw and 1/2-20 locknut.
   b. Do not torque at this time.
7. Grease the sliding pivot link shaft and insert into the front of the torque arm weldment. The sliding mechanism allows free movement of the rear suspension without binding the torque arm.
8. Secure the pivot link to the crossmember bracket using the 1/2-20 x 3” hex head cap screw and locknut.
9. All mounting hardware can now be tightened.
10. Set pinion angle to **1-2 degrees down** using adjustment coupler. (Refer to Pinion Angle section)
    a. Rear suspension must be in ride height postion when measuring pinion angle.
    b. Adjustment coupler jam nuts must be loosened prior to adjusting.
    c. Torque jam nuts to 60 lb. ft. once adjustment is properly set.

Fastener Torque Specifications

Fastener Description	Location	Torque Value
Hex Head Cap Screw, 1/2-20 x 2”	Rear End Housing Brackets	60 lb. ft.
Jam Nut 1”-14	Adjustment Coupler	60 lb. ft.
Jam Nut 3/4”-16	Adjustment Coupler	60 lb. ft.

Pinion Angle

Our recommended pinion angle of one to two degrees down, as compared to the engine crankshaft angle, serves as a starting point for your particular application. Installed components, available traction, and specific application will have some affect on the correct settings for your vehicle.

Pinion angle is to be set at ride height using the torque arm adjustment coupler. Torque arm mounting hardware at the housing must be loosened before adjusting the length of the coupler. Be sure to tighten the jam nuts and mounting hardware to the torque value specified in this installaion guide.

Understanding Pinion Angle
The pinion angle is a very misunderstood measurement. The pinion angle is simply the difference in degrees of the engine crankshaft or drivetrain angle and the third member. The pinion angle is not a tuning aid. It is something that has to be set, but you do not adjust it for bite.

Measuring the Drivetrain Angle
This can be taken from the vertical suface of the transmission tailshaft, the oil pan rail, or the front face of the harmonic balancer. Most production vehicle drivetrain angles will run slightly downhill towards the rear bumper. A typical measurement may be 2 degrees.

Adjusting the Third Member Angle
The third member should be adjusted so that at ride height there is a one to two degree difference in the measured drivetrain angle and the third member angle. As an example, the two degrees downhill drivetrain angle previously established would require the third member to be set at zero degrees or parallel to the ground for a difference of two degrees. Shortening the torque arm adjustment coupler to tilt the pinion upward to a measurement of one degrees would give a difference of one degree when compared to the drivetrain angle.

Greater traction from wider or softer tire compounds combined with higher horsepower levels will require a greater pinion angle than low traction, low horsepower applications.

WARRANTY NOTICE:
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