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

## **INSTALLATION GUIDE**



# 300-2017

## **FAB9™ HOUSING HARDWARE SET** GM A & G BODY - SPHERICAL BEARING UPPER CONTROL ARMS

**Description:** Housing hardware includes: upper arm spherical bearings, hardware, third member mounting studs, O-ringed filler cap, magnetic drain plug

# PARTS LIST

### 300-2017 FAB9<sup>™</sup> Upper Control Arm Hardware (Spherical Bearing)

#### 90300-2017 - Hardware Bag for FAB9™ Spherical Bearing UCA

ltem	Qty	Part Number	Description
1	2	3100-050F4.00Y	Bolt 1/2-20 x 4" Hex Head Cap Screw, Grade 8
2	2	3101-050-20C	Locknut 1/2-20 Nylon Insert, Plated
3	4	3120-050S-Y	Washer 1/2" Hardened Flat SAE
4	4	3135-1628-049	Reducer Spacer 1/2" Bore x .766" Long for 3/4" Bore
5	2	3175-12-W-14-T	Spherical Bearing 1-3/8" OD x 3/4" Bore x 7/8" Ball, Teflon Lined
6	2	3183-RR-1.442	Spirolox Retaining Ring 1.442 OD x .043 Thick x .095 Radial Wall

#### 908203 - Hardware Bag for FAB9™ Housing

Item	Qty	Part Number	Description
12	1	1242	Stud 3/8-24 x 2.10" Long
13	1	1301	Housing Filler Cap
14	11	3101-038-24C	Locknut 3/8-24 Nylon Insert, Plated
15	11	3109-038-S-2-Y	Aircraft Washer 3/8" Small OD
16	9	3130-038F1.50B	Bolt 12-point Flange Screw 3/8-24 x 1-1/2"
17	1	3503	O-Ring for Filler Assembly
18	1	3566	Magnetic Drain Plug 1/2-20 (3/4" Hex)
19	1	3567	Copper Gasket for 1/2" Drain Plug

# INSTRUCTIONS

#### Loose Housing Ends (option)

If your housing was purchased with the housing ends uninstalled they will need to be installed before proceeding. A high quality rear end narrowing jig (P/N 6708) is available for purchase to accurately position the housing ends in relation to the carrier bearings.

All housings are pressure tested during assembly to ensure there are no leaks. The housing will need to be retested after welding the housing end joints. Begin by pressure washing the housing to remove any grease or contaminants. Seal all openings with duct tape, then lightly pressurize the housing (2-5 psi). Using a squirt bottle with soapy water, spray all welded joints while checking for air bubbles. Any leaks will need to be fixed before proceeding.

#### Painting/Powder-Coating

Housings must be sand-blasted and painted or powder-coated prior to installation of the spherical bearings. Housing end faces and bores, anti-roll bar bearing bores, as well as internal and external threads must be plugged or masked to prevent coating build-up in critical areas. Machined face of housing can be coated. Silicone will be used when mounting the third member to seal any inconsistencies of the coating.

- 1. Housing Hardware Installation Use the contents of hardware bag 908203. Refer to installation guide 918203 for additional instructions.
- HOUSING STUD From front side of housing face, screw the longest end of the double-ended stud (1242) into the faceplate mounting hole closest to the drain hole. The stud should extend outward from the housing face approximately 1-1/8". Secure the stud from inside the housing with a 3/8" washer and locknut.
- 3. The nine 3/8 x 1-1/2", 12-point bolts screw into the faceplate from inside the housing. Use Loctite<sup>™</sup> to secure them in place. They will act as studs to secure the third member housing.
- 4. The remaining 10 washers and locknuts are used to secure the third-member to the housing.
- 5. Stretch o-ring over threads and seat in groove under head of cap. Apply anti-seize or similar lubricant to threads and screw cap on to housing filler/inspection hole hand-tight.
- 6. Place the copper gasket over the magnetic drain plug. Apply anti-sieze to threads and screw drain plug into bottom of housing.
- 7. Spherical Bearing Installation Use the contents of hardware bag 300-2017.11.
- 8. Apply Loctite<sup>™</sup> or similar thread locking material to inside of bearing housing bore.
- 9. Insert bearing into bearing housing. A 1" hex x 1/2" drive socket or piece of tubing should be used to press against the outer race of the bearing. Applying pressure directly to the ball may damage the bearing. This will be a tight slip fit and should not require excessive force provided the bearing is straight in its bore. Do NOT force bearing into place. If necessary, clean housing bore with flap wheel. Verify that retaining ring groove is exposed and bearing race is completely seated at rear of bore.
- 10. Install sprial retaining ring. Separate coils and insert end of ring into groove. Wind ring into groove, then verify that ring has seated properly in the groove.
- The remaining hardware (1/2-20 x 4" Bolt, 1/2" Flat Washers, 1/2-20 Locknuts) will be used to secure the upper control arm at the housing mounts. Note: Some vehicles were equipped with 12mm control arm bolts. Do NOT use the stock size 12mm hardware. Upper control arms with 12mm holes will need to be drilled out to 1/2".
- **12. Control Arm Installation** Follow instructions provided by your upper and lower control arm manufacturer.
- **13. Shock Installation** OEM style pin mount shock hardware mounts directly to housing in standard position. Follow instructions provided by your shock absorber manufacturer.
- 14. Verify all components have been correctly installed and correctly torqued.

#### 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**.

Chris Alston's Chassisworks 8661 Younger Creek Drive Sacramento, CA 95828 Phone: 916-388-0288 Technical Support: sales@cachassisworks.com

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