



SYNERGY MFG. 870 INDUSTRIAL WAY, SAN LUIS OBISPO, CA (805) 242-0397

8583 – 03-12 DODGE 2500/3500 4X4, 06-08 1500 MEGACAB 4X4 Long Arm Front Lower Control Arms

V3

GENERAL NOTES:

- These instructions are also available on our website; www.synergymfg.com. Check the website before you begin for any updated instructions and additional photos for your reference.
- These arms are designed to be installed with Synergy Dodge Long Arm Brackets (8581). Full long arm kit installation instructions are provided with the 8581 parts. Use 8581 Instructions for installation, save these for a quick reference guide.
- 2003-2009 trucks feature a 16mm bolt at the axle, while 2010-2012 trucks feature an 18mm bolt at the axle. Both bolt sleeves are included. The correct sleeves will need to be installed in the bushings.
- The use of this long arm kit eliminates the need for factory cam washers. We recommend using Synergy Cam Bolt Eliminator Kit (8560-16 or 8560-18) in conjunction with this long arm kit.

PARTS LIST:

- **8583-04 DODGE 03-12 LONG ARM, FRONT LOWER CONTROL ARMS**
 - (1) 858301-L Assembled Dodge Long Arm, Left FLCA
 - (1) 858301-R Assembled Dodge Long Arm, Right FLCA

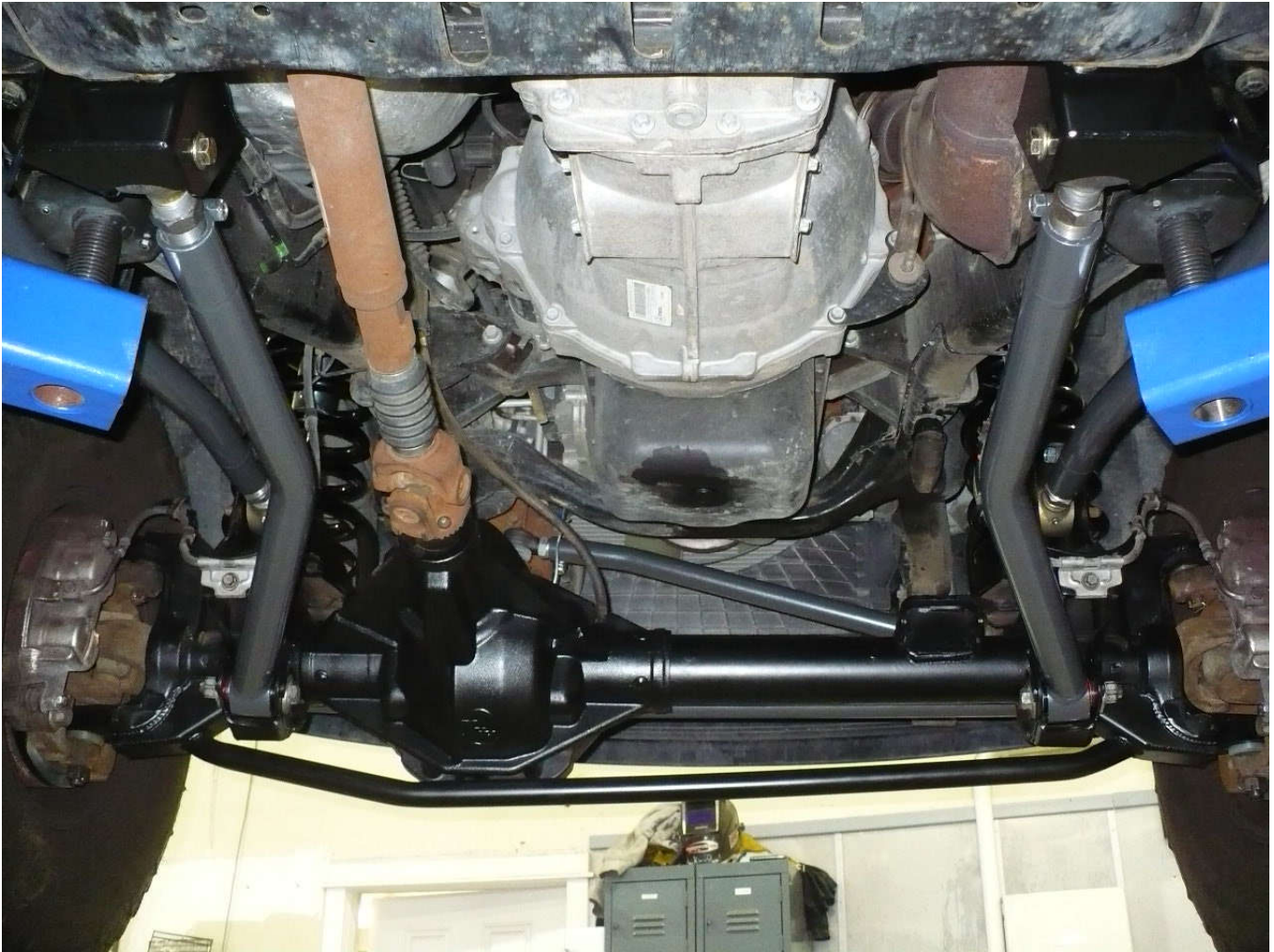
Parts / Tools Needed to complete installation:

- Basic simple hand tools.
- Quality jack and jack stands
- Torque wrench

APPROXIMATE INSTALL TIME: 1-2 hours

INSTALLATION:

- 1) *Lower Control Arm Installation* – Install the front lower control arm. Note, the control arms come assembled at their shortest length. Install them at their shortest length and make all length adjustments with the arms installed using the double adjuster assembly. The Synergy double adjuster assembly is designed to be adjusted without removal from vehicle. Turn the adjuster sleeve clockwise to shorten the arm, counter clockwise to lengthen it. Same as you would thread a bolt into the arm. The arms are left and right specific. The Johnny joint goes at the frame end with the pinch bolt bungs pointed up.



- 2) Use the factory control arm hardware at the axle and the 5/8-11 UNC x 4.5" long bolt provided with the 8581 kit at the bracket. Use a washer under both the bolt head and stover nut. Install all hardware. Do not fully tighten at this time.
- 3) Adjust control arm length by turning adjuster sleeve with the arm fully installed. Do not remove the control arm and unthread the forged joint by hand.
- 4) We recommend the following control arm lengths for proper caster settings and axle placement.

Stock Height Vehicles

- Lower Control arm = 34-1/8"
- Upper Control arm = 32-3/8"
- Factory = 38-7/8"

3" Lifted Vehicles

- Lower Control arm = 34-1/4"
- Upper Control arm = 32-3/4"
- TB length = 39-1/8"

6" Lifted Vehicles

- Lower Control arm = 34-1/2"
- Upper Control arm = 32-3/4"
- TB Length = 39-7/16"
- NOTE – 2-1/2" Bump Stop Spacer required

- 5) With control arms lengths set, torque control arm bolts as follows:
 - Lower Control Arm bolt at axle (18mm) = 160 ft-lbs
 - Lower Control Arm bolt at axle (16mm) = 145 ft-lbs
 - Upper Control Arm bolt at axle = 125 ft-lbs
 - Lower Control Arm bolt at frame = 160 ft-lbs

- Upper Control Arm bolt at frame = 125 ft-lbs
- 6) Reinstall wheels and tires and lower the truck to the ground. Be sure the Johnny joints are neutral at ride heights and torque the pinch bolt bungs to 80 ft-lbs. Put a wrench on the adjuster sleeve at this time and try to move the adjuster. Make sure pinch bolt has adequately clamped onto Johnny Joint shank so that the adjuster is not movable. If movable, increase torque on pinch bolt but do not exceed 90 ft-lbs
 - 7) Recheck all hardware after 100 miles of driving.

Installation is Complete