

Global West Suspension 655 South Lincoln Ave. San Bernardino, CA. 92408 PHONE: 877-470-2975 FAX: 909-890-0703 globalwest.net

## TUBULAR UPPER CONTROL ARM KIT # **TLC-42** 64-72 Chevelle, GTO, Skylark, Olds 442, A-body **DRAG RACE ONLY**

The TLC-42 kit is a fully assembled control arm complete with bushings, cross shafts, upper ball joints, and bump stops. **This designed for drag race use only not intended to use on the street!** Installation is simple and straight forward.

- 1. Lift the front of the vehicle up and support the frame with jack stands.
- 2. Remove the front tires and place a floor jack under the lower control arm out by the ball joint. Using the floor jack lift the lower arm up until the upper control arm is off the upper
  - the upper control arm is off the upper frame bump stop. (Place an additional floor jack under the control arm for safety.)
- 3. Remove the upper ball joint nut and separate the ball joint from the spindle by using a pickle fork.
- 4. Remove the two bolts supporting the upper control arm cross shaft. (Remove the alignment shims located next to the shaft and remember what position they came from. NOTE: Don't worry about it if you forget. The alignment shop is going to adjust them anyway).
- 5. Remove the upper control arm by sliding the shaft off the frame studs. (If the exhaust is in the way, press the studs out. Do <u>NOT</u> put a socket to them and turn them out. The bolts are knurled. Spinning them out will damage the studs and possible the frame).
- 6. Install your new upper arm. There is a right and a left. The upper arms are marked (D) for driver and (P) for passenger. The letters are found on the bottom side of the ball joint plate or on the strap around the bushing housing.
- 7. If you had to remove one or both of the upper frame bolts, simply take a drift and tap them back into the frame. Make sure the new arm is in position first.
- 8. Place the alignment shim back on the bolts and tighten down the upper shaft to the frame. (The shims go between the frame and upper shaft).
- 9. Slip the upper ball joint through the spindle and tighten the ball joint nut. Torque to 50 ft-lbs, lubricate the ball joint and install the cotter pin.
- 10. Remove the safety floor stand and lower the floor jack. Repeat the same procedure for the other side. After completion you must get the car aligned.



## Drag Race upper control arm alignment specifications:

DRIVER SIDE: Caster 5 1/2 degree's positive Camber 0 degree's Toe – in (1/64 in per side) PASSENGER SIDE: Caster 5 1/2 degree's positive Camber 0 degree's

- 1. Raise the car with a floor jack located at the cross member <sup>3</sup>/<sub>4</sub> of an inch. Set the camber to zero both sides.
- 2. Set toe by pushing out the front of the tires. Notice the deflection in the steering system. There should be very little. The toe should measure 1/32 in (total) at this point.



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The following instruction sheet applies to the following applications:

## Part # TLC-42H

## LOWER CONTROL ARM INSTALLATION

This lower arm is used with coilover shocks.

- 1. Use the floor jack to raise the car and wheels off the ground.
- 2. Place the jack stands on appropriate areas of the frame to support the car. Do **NOT** place the stands under the lower control arms. Lower the car on to the jack stands and remove the floor jack.
- 3. Remove both front wheels and tires.
- 4. Remove the nuts, bolts, bushings, washers and spacer tube from the front sway bar end links and set aside.
- 5. Starting on one side of the care, remove the upper shock mounting nuts, washers and bushing. Remove the shock absorber lower mounting bolts and slowly lower the shock and remove from the bottom of the lower control arm and set aside.
- 6. Using a coil spring compressor, install the spring compressor inside the coil spring. Using suitable tools compress the spring until pressure is removed off the lower arm.
- 7. Using suitable tools remove the lower ball joint cotter pin and loosen the slotted hex nut. Only loosen the lower ball joint nut so you can see about a 1/8 of an inch gap between the nut and spindle.
- 8. Use a ball joint pickle fork and separate the lower ball joint from the brake/spindle assembly. Place the floor jack under the lower ball joint and raise the jack enough to relieve pressure on the lower ball joint. Remove the lower ball joint nut. Slowly lower the jack and swing the spindle out of the way. Allow the upper control/spindle assembly to rest on the bump stop against the frame.
- 9. Remove the floor jack and coil spring.
- 10. Loosen and remove the lower control arm pivot bolts and nuts. Remove the lower control arm.
- 11. Install the new lower control arm using the factory bolts and nuts. Torque both bolts to 70 ft-lbs. Del-a-lum bushings can be tightened with the arm hanging.
- 12. For springs: The top of the coil spring will index in the frame pocket. **NOTE: The spring is conical wound so the large end (3.625 id) goes up into the frame and the small flat ground side (2.5 id) indexes on the shock adjusting collar.** Place the spring on the shock with the shock collars already assembled on the shock body. Adjust the collars all the way down to the bottom of the shock. Slide the spring over the shock with the small end down, extend the shock shaft all the way out of the shock body until it stops, and install the steel shock shaft washer and rubber bushing. Next slide the shock into the frame shock hole and



index the spring in the pocket. Place the upper rubber shock bushing on the shock shaft and then the steel washer. Install the shock nut so the shock is supported in the frame. Recheck the spring index in the frame. Raise the lower control arm up to the shock and install the lower shock bolts through the shock cross shaft and into the lower arm. Note: The shock bolts on the top of the lower arm.

- 13. Slowly raise the arm to fit the ball joint into the spindle. Install the castle nut on the ball joint and torque to 90 ft-lbs. Next, tighten the nut to line up the slot in the nut and hole in the ball joint and install a new cotter pin.
- 14. Repeat steps 6 through 12 on the other side
- 15. This lower arm has no provisions for a front sway bar.