

# Fitting Instructions

## Roll Centre/Bump Steer Kit

Code: Z5029

### Application:

#### - Ford Mustang 05 - On

Always refer to current catalogue for complete application listing

**IMPORTANT:** Please note which product part number you purchased - there are 3 variations regarding the 'Roll Centre/Bump Steer kit'.

Available to be purchased separately -

1. Tie Rods and associated components only.
2. Ball Joints only.
3. Complete kit - Ball joints and Tie Rods with associated components.

### Tie Rod components:

- 4 x M12 x 1.25 Nyloc Nuts
- 2 x 2.5mm Thick Spacers
- 4 x 5mm Thick Spacers
- 2 x Spherical joints
- 2 x Tie rod pins
- 2 x Steering rod seal

NOTE: Both Tie Rod and Ball Joint assemblies are engineered to work together delivering a desired roll-centre height combined with a calculated bump-steer. The images on the right display 3 possible situations (3 different ride heights).

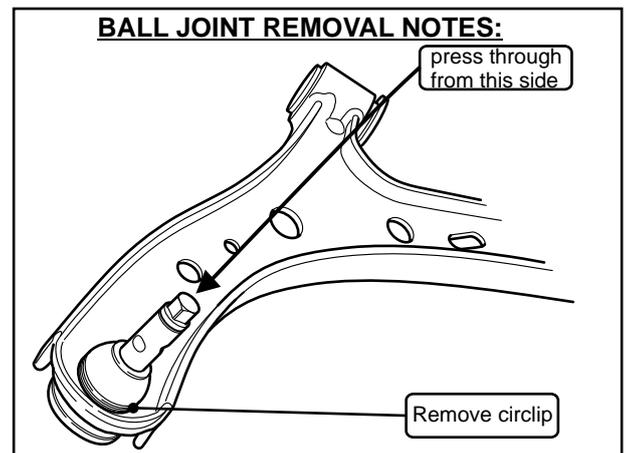
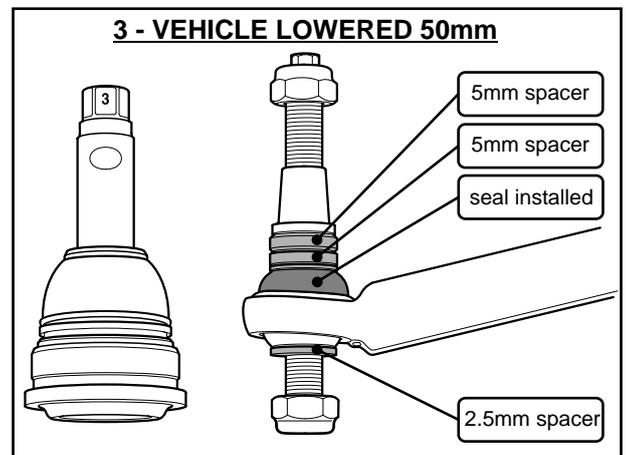
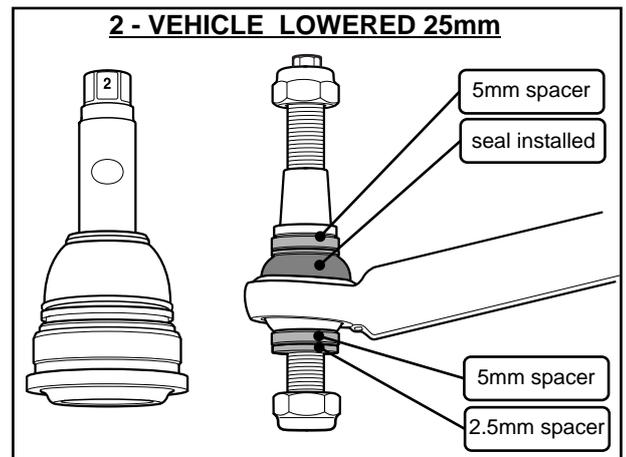
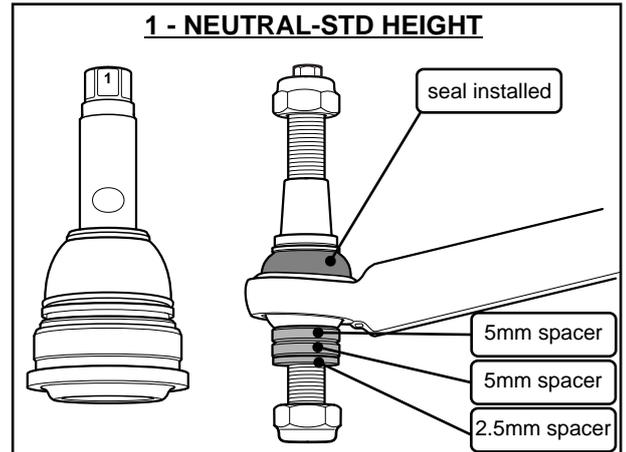
FITMENT OF BALL JOINTS OR TIE RODS ONLY MAY INDUCE UNDESIRABLE FRONT SUSPENSION GEOMETRY RENDERING THE VEHICLE UN-SAFE. INDEPENDENT CALCULATIONS MAY BE REQUIRED (DEPENDING ON APPLICATION) FOR OPTIMUM RESULTS.

### Fitting Instructions: Ball Joint

1. Raise vehicle and support on suitable chassis stands.
2. Remove road wheels from the vehicle.
3. Remove the lower ball joint clevis bolt, lower control arm bolt and 2 x rear control arm bolts.
4. Remove the front control arm from the vehicle.
5. Remove the circlip from the ball joint.
6. Using suitable press tools, remove the ball joint from the vehicle.
7. Inspect the control arm for damage and burrs, repair or replace as necessary.
8. Install the ball joint into the arm and fit the circlip, ensuring the circlip seats correctly into the groove.
9. Re-fit the arm back into the vehicle. Position ball joint into hub according to vehicle ride height - see images on right. Re-torque all bolts to manufacturers specs.

### Fitting Instructions: Tie Rod

1. Loosen the steering arm retaining nut.
2. Loosen the tie rod nut.
3. Using a suitable puller or tie rod separate, remove the tie rod pin from the wheel knuckle.
4. Remove the tie rod from the steering arm counting roughly the number of turns to remove.
5. Install the supplied pin into the hub and torque the top nyloc nut up to the same torque specification the manufacture stipulates for the oe tie rod nut.
6. Fit the supplied tie rod to the vehicle counting the same amount of turns as removal.
7. Install the spacers and tie rod onto the steering arm pin relative to the installation position of the ball joint.
8. Torque the nyloc nut to manufacturers tie rod nut torque setting.
9. Tighten steering arm nut.
10. Settle the vehicle on the ground and carry out a wheel alignment.



**Warning:** Products using steel spherical bearings are designed to offer minimal compliance, which does equate to higher levels of NVH (Noise Vibration Harshness)