

## WA59-585k Install Instructions

## **ENSURE PAGE SCALING IS TURNED OFF WHEN PRINTING**

NOTE – Installation is always recommended by a competent technician

It is easiest to fit this kit during the suspension install, whilst the springs are removed to allow both sides to be done simultaneously

This castor kit utilises the combination of castor bushes and castor plates to rotate the axle to provide the castor correction required for lifts between 3 and 5 inches whilst ensuring there is sufficient clearance between the OEM tie rod and radius arms.

This is a bolt in kit and requires a press to remove the Genuine radius arm front bushes and replace with the supplied offset bushes. This kit also requires a very small amount of grinding of the diff housing radius arm mounting plates.

## **Instructions**

- 1. Firstly park the vehicle on level ground with the wheels facing forward. Make sure the vehicle cannot move, by using the handbrake or wheel chocks as you will be under the vehicle.
- 2. It is recommend to raise the vehicle from the chassis until the wheels are almost off the ground, and then support the chassis on chassis stands. This is remove the vehicle weight from pushing down on the front axle and wanting to roll the axle out with the radius arms removed.
- 3. Carefully remove the radius arms. It is recommended to do 1 at a time to allow the axle to stay in place. Remove one side completely. If fitting to vehicle whilst springs are removed, both can be done at the same time
- 4. Press out the front 2 genuine radius arm bushes.
- 5. Lay the arm over the supplied template. Align one of the bushes with the template. Press the bush in just slightly around 10mm or so and ensure its square.
- 6. Lay the arm back over the template and align the second bush, ensure its square to the arm. Measure between the bushes to ensure from centre to centre the bush is 185mm (this is critical to fit in the vehicle mounts). It can be easier to measure from the inner rear edge of each sleeve rather than the centre. **The bushes are pressed in upside down to regular castor bushes this is normal**

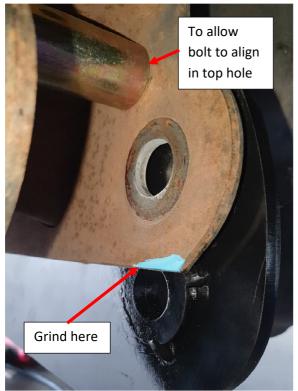


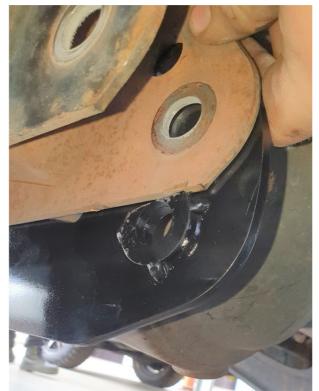
**Dobinsons Springs and Suspension** 

58 Hollingsworth Street NORTH ROCKHAMPTON QLD AUSTRALIA <u>admin@dobinsonsprings.com</u> 7. Press the second bush in also 10mm ensuring its square. Double check the 185mm centre measurement



- 8. Press both bushes in completely and recheck the 185mm centre measurement and alignment. Adjust now if needed.
- 9. Before refitting the arm to the vehicle, The castor plates now need to be fitted to the side with the arm removed.
- 10. You will notice that one castor plate looks different to the others and has a welded threaded sleeve in the front upper hole. This plate goes closest to the panhard rod mount on the diff housing, on the outer side of the left side. There is also one bolt shorter than the others at 85mm long and a 4mm thick washer it is very important that these are used on the front left upper side
- 11. With the arm still remove, install the castor plates to each side of the mount with the rear bolt (on the radius arm front mount) only installed.
- 12. You will see that the front upper bolt cannot quite be fitted to the upper hole as a small section of the diff housing radius arm mounting plates needs to be ground away at the front to allow the plate to go high enough to fit the top bolt in.
- 13. Mark the section that needs to be ground and using a grinder slowly grind away this section until on both sides until both plates can be fitted, with the <sup>3</sup>/<sub>4</sub> circle lug up against the base of the radius arm mounting plates and so that the top front bolt can then be fitted.





- 14. Remove the plates and paint the bare metal surfaces black to prevent rust.
- 15. Re-install the arm with offset bushes to the vehicle loosely installing the rear bolt and nut at the chassis.
- 16. On the diff housing end, Install the castor plates to either side of the radius arm mount, and install the new 90mm long bolt supplied to through the castor plates, radius arm mounts and radius arms on the rear bolt only and loosely install the nut supplied.
- 17. See diagram over page Install the front upper bolt on the castor plates through the castor plate, upper hole in the radius arm mounting plate, then install the spacer tube and then through the radius arm mounting plate and other castor plate.

IMPORTANT: on the left side upper front mount the 85mm bolt must be used here as it is shorter so it does not touch the panhard rod mount, with the 4mm thick washer under the bolt head. High strength Loctite MUST also be used on this bolt as it threads into the castor plate

- 18. Install the new 90mm long front bolt and nut supplied to the front castor plates and radius arm. This will generally require removing the rear bolt on the diff housing end of the other radius arm to allow the diff housing to rotate to the new position.
- 19. Remove the other radius arm and repeat this proceed.
- 20. Tighten the mounting bolts on the diff housing end only. Check the upper mounting bolt closest to the panhard rod mount is tight and check the spacer sleeve is also tight as using the incorrect bolt here will leave a gap.
- 21. Lower the vehicle back down to ride height and tighten the rear radius arm bolts.
- 22. Perform wheel alignment.

