

# DOBINSON'S SPRING & SUSPENSION

## Adjustable Caster Kit / Bush Fitting Importance



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### PB59-503K Adjustable Caster Bush Kit

#### Installation Instructions

Standard / 2.5 degree / 3.5 degree

To suit standard height up to 4" lift

Offset radius arm bushes

Toyota Landcruiser 76, 78, 79, 80, 105 Series

Nissan Patrol GQ, GU

### **READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS PRIOR TO INSTALLATION OF SYSTEM AND OPERATION OF VEHICLE**

<b>Kit Contains</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
	PB59-503K	Polyurethane Half Bush	8
		Inner Steel Tube	4

#### **Safety Warning**

Dobinson's Spring & Suspension recommends this system be installed by a qualified technician. In addition to these instructions, professional knowledge of disassembly/reassembly procedures and post installation checks must be known and carried out.

*If fitting kit to a lifted vehicle, the kit must be fitted after installation of the lift kit to allow correct alignment.*

#### **Kit Installation**

1. Mark a vertical line 90 deg. to the level ground through the centre of the front bush on 1 arm. This line will be used to align the first bush with the holes in the highest (front) and lowest (rear) point of the arm to allow the most correction. Then, the rear bush is fitted according to the measurements in the following diagrams and the other arm is then fitted exactly the same as the first to prevent the diff "steering".
2. Safely raise the vehicle and support with jack stands for safety.

*Ensure all new parts received are correct before removal of existing parts*

#### **Removal**

3. Support differential with floor jack to prevent damage to brake hoses from over stretching.
4. Carefully unbolt front radius arm and remove from vehicle. It may be necessary to remove panhard rod and stabilizer bar in Nissan vehicles.

#### **Adjustable Caster Bush Kit Installation**

5. Remove the OE bushes from the leading arm using a workshop press or equivalent.

***Be sure to use all relevant Personal Protective Equipment when working***

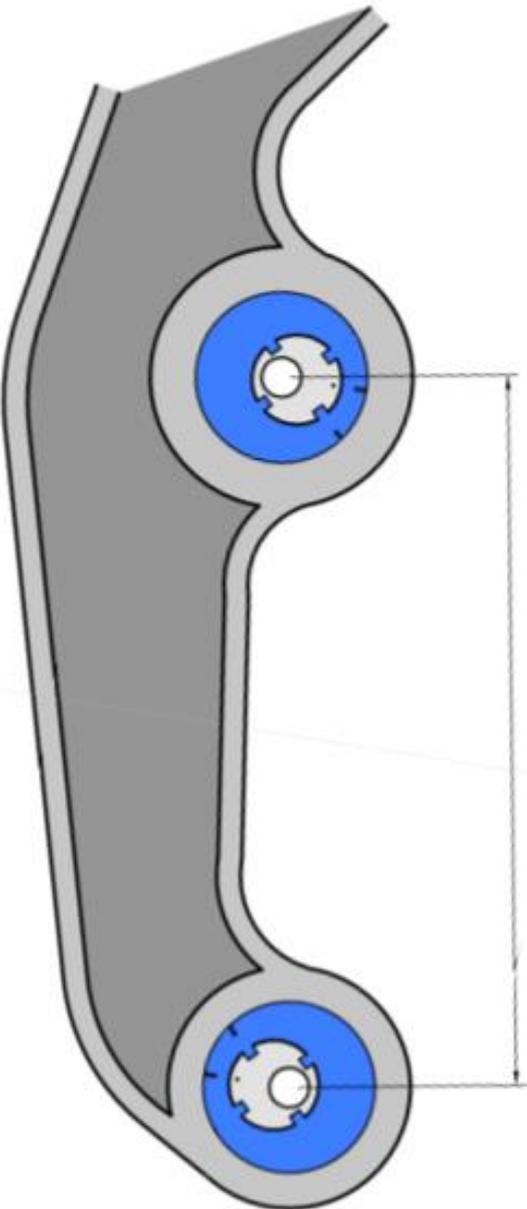
6. Carefully align the bushes to desired offset (see diagrams).
7. Do not grease the outside of the bushes, however, do grease the inside in which the tube is fitted with synthetic grease only. ***REMOVE EDGE BURRS FROM BUSH HOLES IN ARM WITH DIE GRINDER.***
8. Using a hammer tap in the bushes carefully making sure the positioning of the bolt holes is correct. The centre to centre measurement is 185mm for Toyota and 240mm for Nissan (see diagrams).
9. Refit leading arm to vehicle, but do not fully tighten at this stage. Fit bolts finger tight only.
10. Once both arms are fitted, carefully lower the vehicle to ground. Bounce the vehicle to settle the suspension.
11. Use thread locking agent on threads and torque all bolt mounts to manufacturer's specifications.
12. Check all fasteners for correct torque.
13. The vehicle will require a front end alignment.
14. Check all fasteners after initial drive and again in 500km.

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### STANDARD HEIGHT NO OFFSET



185mm for Landcruiser  
240mm for Patrol

This position & setting is used to replace leading arm bushes with no change to the caster angle / vehicle lift. The hole in the steel sleeve will be central to the poly bush providing no change in caster.

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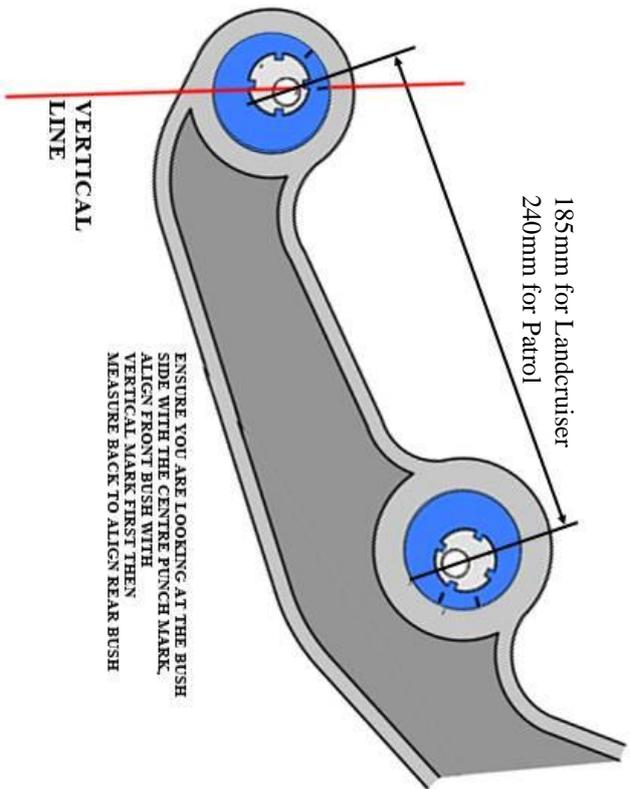
**PB59-503K Bush**

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### RAISED HEIGHT (1" - 3") 2.5 DEGREE OFFSET



This setting provides the required alignment correction to return caster angle to the OE setting after 1" - 3" vehicle lift is applied. Align the steel sleeve in the poly as shown above. Then align the front bush as shown, the hole should be towards the top at the front



First ensure you are looking at the Right side of the arm & the side of the bush with the centre punch mark. First align the front bush with the mark as shown to the previously marked vertical line (red). Then align the rear bush as seen above & measure the holes centres (either 240 or 185) to align the second bush exactly. Then duplicate this on the other arm

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**PB59-503K Bush**

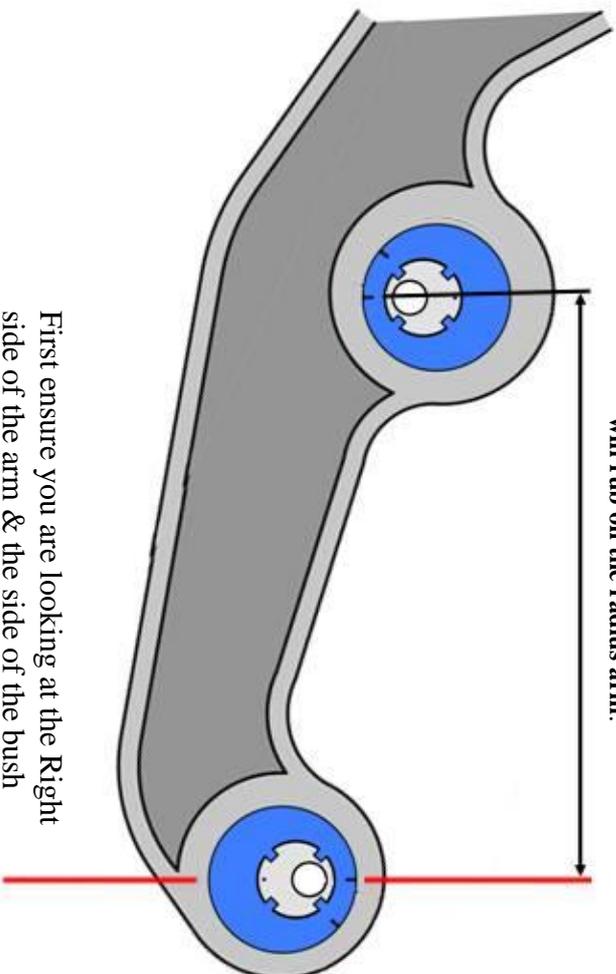
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### RAISED HEIGHT (3" - 4") 3.5 DEGREE OFFSET

185mm for Landcruiser  
240mm for Patrol  
Not recommended for  
Landcruiser as the Tie rod  
will rub on the radius arm.



First ensure you are looking at the Right side of the arm & the side of the bush with the centre punch mark. First align the front bush with the mark as shown to the previously marked vertical line (red). Then align the rear bush as seen above & measure the holes centres (either 240 or 185) to align the second bush exactly. Then duplicate this on the other arm

This setting provides the required alignment correction to return caster angle to the OE setting after 3" – 4" vehicle lift is applied.

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