



## Install Instructions

Fitment	Part Number	Part Number
Toyota Landcruiser 80/105 Series	Hydraulic Bump stop	HBS56-009
	Bracket Kit	HBS59-012FK
<i>Long travel setups may use longer 56mm bump stops ***</i>	Hydraulic Bump Stop	HBS56-006

### **Important!**

A coil tower brace should be fitted when install hydraulic bumps stops to prevent any bending or cracking of the tower

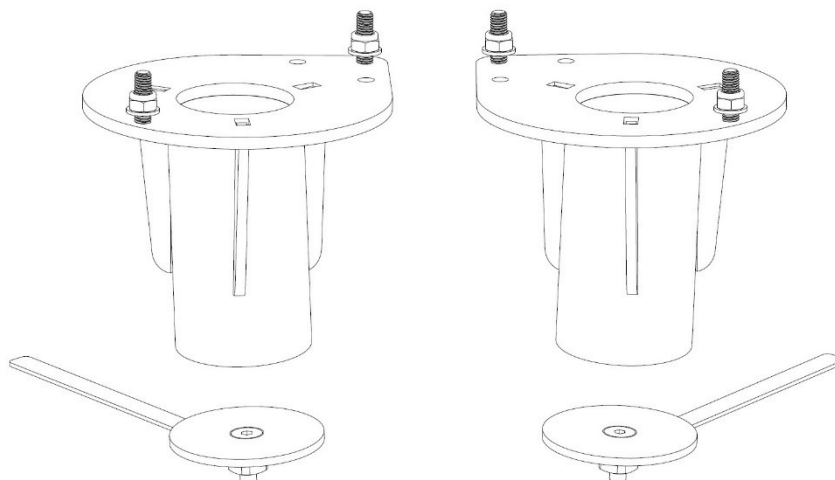
### **Tools Required:**

- Floor Jack and chassis stands
- Spanners, socket sets
- Allen Keys
- Ruler/Tape measure

**NOTE – Installation is always recommended by a competent technician. Failure to properly install may result in vehicle damage.**

**When fitting aftermarket replacement parts, it is important to note that your vehicle may behave and handle differently. Always follow relevant road rules and always use safe driving techniques and vehicle operating practices.**

**\*\*\* Long travel setups with a shock absorber with longer compression length, may need to use a longer travel bump stop such as HBS56-006 to be able to have the bump stop impact. Always make sure the bump stop is impacting and bottoming out completely before the shock shaft bottoms out. Make sure the original chassis rail rubber bump stop also bottoms out about 10-12mm (this can be changed depending on your setup) before the bump stop fully bottoms out.**



1. Undo the bottom shock bolts and rear sway bar brackets. Disconnect break line and diff breather from the diff.

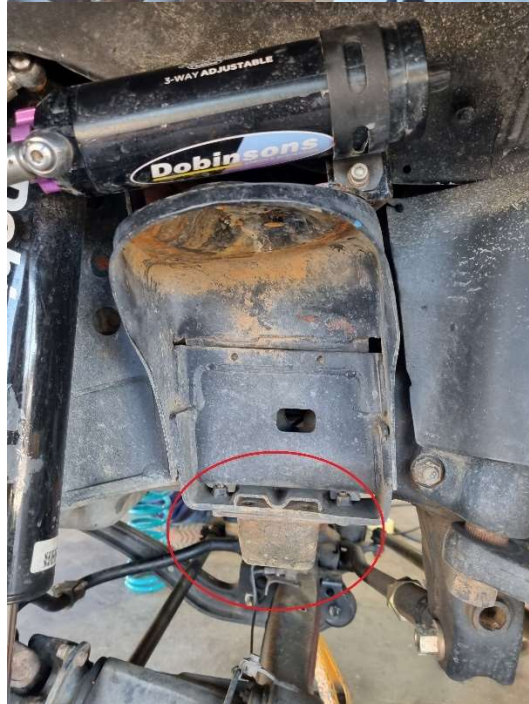


2. Jack up the front of the vehicle with the diff hanging enough so that the coils become loose and can be removed. Securely support the chassis with chassis stands.

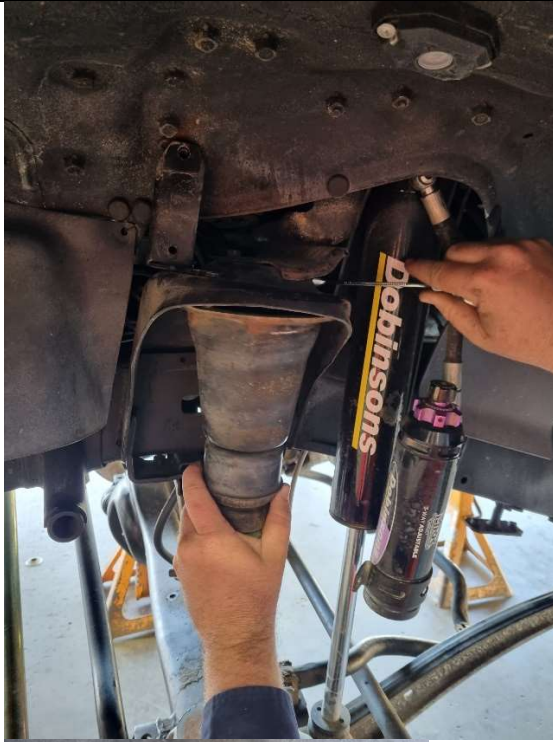
3. 80 series with inner chassis mounted bump stop skip this step.

80 series without inner chassis mounted bump stop, after the coil is removed and with the OEM bump stops still installed, slowly lower the vehicle down until it is fully resting on the OEM bump stops or until any other parts start to interfere i.e. shock travel, tyre and wheel arch...

At that point measure your hub to guard, this will be the set up position for the hydraulic bump stop.



4. Unbolt the two bolts on top of the coil tower and remove the OEM Bump stop.



5. Some early model 80 series have a threaded stud pressed into the top of the coil tower used to hold in the OEM bump stop. This will have to be removed by tapping out with a hammer to fit the hydraulic bump stop bracket



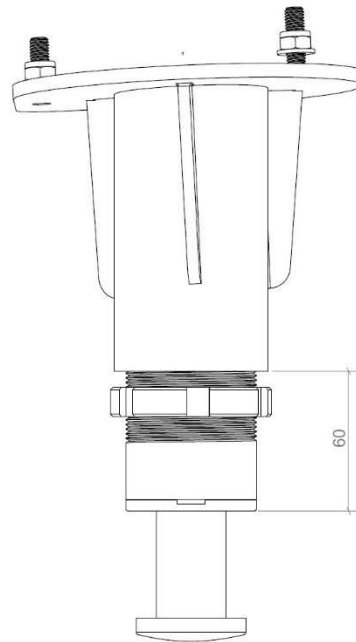
6. Install the new hydraulic bump stop bracket by holding the bracket in the OEM position and install the M8 counter sunk bolts, washer and nuts supplied. **Note** that the bump stops are labelled left and right



7. Install the striker plate onto the diff coil seat using the captive nut and M8 countersunk bolt provided. The captive nut will need to be bent so that the thread lines up with the hole on top of the coil seat. Trim off the excess length on the captive nut.

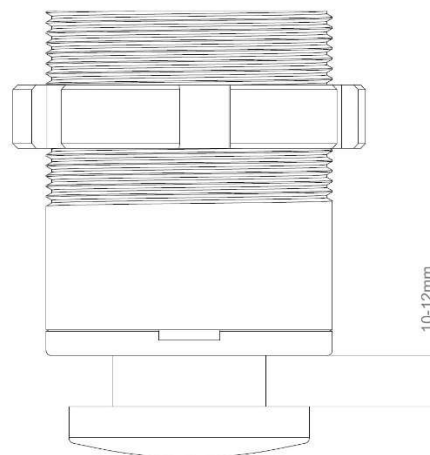


8. With one small locking ring installed thread the hydraulic bump stop into the bracket until it measures 60mm from the end of the bracket to the end of the bump stop body, this measurement is just a guide and may change depending on your vehicle setup.

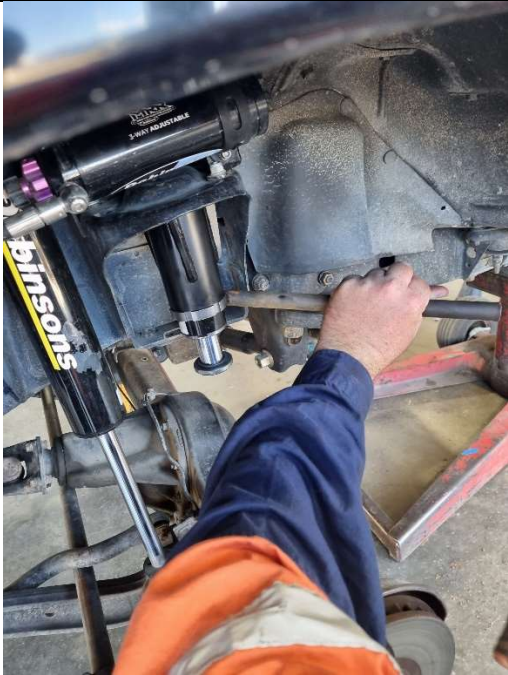


9. **80/105 series with inner chassis bump stop setup.**

With both hydraulic bump stops installed slowly lower the vehicle down checking that there is no interference with other parts and that the shocks are not bottoming out and have at least 10mm of travel remaining. Lower until the vehicle is resting on the inner chassis bump stop. There needs to be 10-12mm of travel (shaft exposed) on the hydraulic bump stop. Adjust the bump stop height by winding it in or out until the correct amount of remaining travel is achieved. Check this on both sides of the vehicle, each side may differ.





<p><b>10. 80 series without inner chassis bump stop setup.</b></p> <p>With both hydraulic bump stops installed slowly lower the vehicle down checking that there is no interference with other parts and that the shocks are not bottoming out and have at least 10mm of travel remaining. Lower until the vehicle until it is at the hub to guard height previously measured in step 3. At this height the hydraulic bump stop should be bottomed out. Check this on both sides of the vehicle, each side may differ.</p>	
<p><b>11. Once the hydraulic bump stop is set at the right height tighten the lock ring and grubs screw up against the bottom of the mounting bracket.</b></p>	
<p><b>12. Reinstall the coils shock absorbers and all other removed parts during the install</b></p>	
<p><b>13. Re-Check all fasteners after 100kms</b></p>	

## Maintenance

Dobinsons hydraulic bump stops are completely rebuildable and tuneable. The bump stops should be kept clean and the locking rings inspected regularly to ensure they are tight. For non-race applications the bump stops can be inspected periodically and at regular service intervals for signs of oil leaks, damage to the shaft and gas pressure. For race applications the bump stops should be inspected before and after each meet for signs of damage or oil leaks. Gas pressure should be checked before each race meet. For severe race applications it is recommended to rebuild and service the bump stops periodically.

## Warranty

Dobinsons hydraulic bumps tops have a limited 2 year warranty for non-race vehicle applications from date of original sale against faulty manufacture. For full warranty terms and conditions for hydraulic bump stops please visit [www.dobinsonsprings.com](http://www.dobinsonsprings.com)