

SPINDLE FITTING INSTRUCTIONS

Your spindles have been carefully rebuilt to the highest standard possible and returned to you either stock or dropped as you requested. We have machined the king pin shafts and inserted oversized new bushes in the spindle bosses for perfect fitment. We have also installed new upper & lower trust washers, grease nipples and rubber O ring seals. Your spindles had a smear of grease on them when they were assembled but **MUST BE PUMPED FULL OF GREASE**. Failure to do so will destroy the new bushes quickly and will void our warranty.

It is vital that the link pins you refit are in perfect condition as these will drastically affect the steering and suspension. From 1950-63 (chassis number 1144303) the link pin diameter was increased from 20 to 22mm diameter. Both early and late link pins are back in production and can be bought now for reasonable prices. Be sure to shim them as per the chart below.

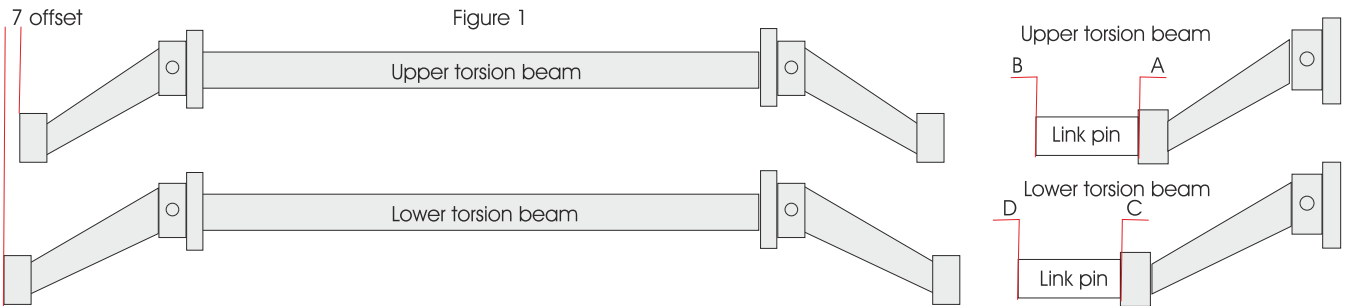
*Note: The heads on link pins can vary in size and it may be necessary to remove some material off the head of your link pin on **dropped spindles only**. Use a sanding disc and remove only enough material for clearance.*

When refitting the spindles to your bus, the spindle that takes the speedo cable stays on its original side (NS for RHD buses-OS for LHD buses) **If you spindles have been dropped**, the 8mm bolt that locks the upper king pin to the lower king pin must now be on the side of the spindle nearest the centre of the bus **as in the above photo**. If it is not simply rotate the king pin 180 degrees.

If you have asked for Dropped spindles, we have machined them so that the tie rod now fits from underneath the spindles steering arm. You will need to use 70-80 Bay window tie rod ends on the outer ends of your tie rods. Your single fixed tie rod will need to be replaced with an adjustable one so the rod end can be swapped as just explained.

Check offset of torsion arms as shown in figure 1.

The offset should be 7mm (.276") Tolerance on this dimension is +/- 1.5mm. Correct as necessary by inserting 0.5mm shims as in chart below.



Arrangement of shims on Spindles				
Offset	Upper Torsion Arm		Lower Torsion Arm	
	Inner A	Outer B	Inner C	Outer D
5.5	2	6	5	3
6.0	2	6	4	4
6.5	3	5	4	4
7.0	3	5	3	5
7.5	4	4	3	5
8.0	4	4	2	6
8.5	5	3	2	6

Spindle report	
Link pins sent to us	Yes <input type="checkbox"/> No <input type="checkbox"/>
Link pin condition	OK <input type="checkbox"/> No good <input type="checkbox"/>
Bearing surface cond.	Good <input type="checkbox"/> Average <input type="checkbox"/>
Dismantled by	
Assembled by	
Notes:	