

We have become aware that there is a consensus being reached in the market that a B58B30 spring kit cannot be used safely in the S58B30 head due to a different retainer being required to achieve the necessary installed height to run higher lift camshafts. This opinion is demonstrably false and we have created this document to address this misunderstanding.

One of our engineers, Richard, was willing to go through the measuring process again so we could publish the below information.

As the below figures demonstrate, our KVS58-BT spring kit sits at an installed height of 36.50mm in the S58 head. This achieves 90lb seat pressure which aligns with our proven target for seat pressure in boosted applications.

With this installed height even our 358-C cams with the highest lift currently offered would remain 2.10mm away from coil bind at maximum valve lift. This kit was designed to be easy to install and offer peace of mind that spring bind will not be hit whilst running our cams.

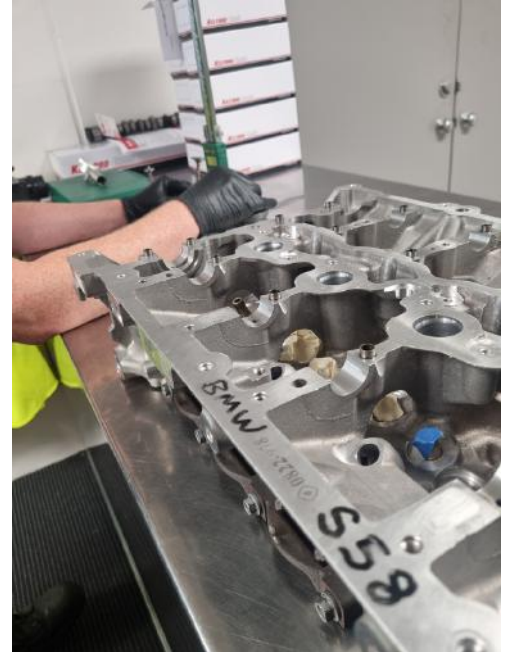
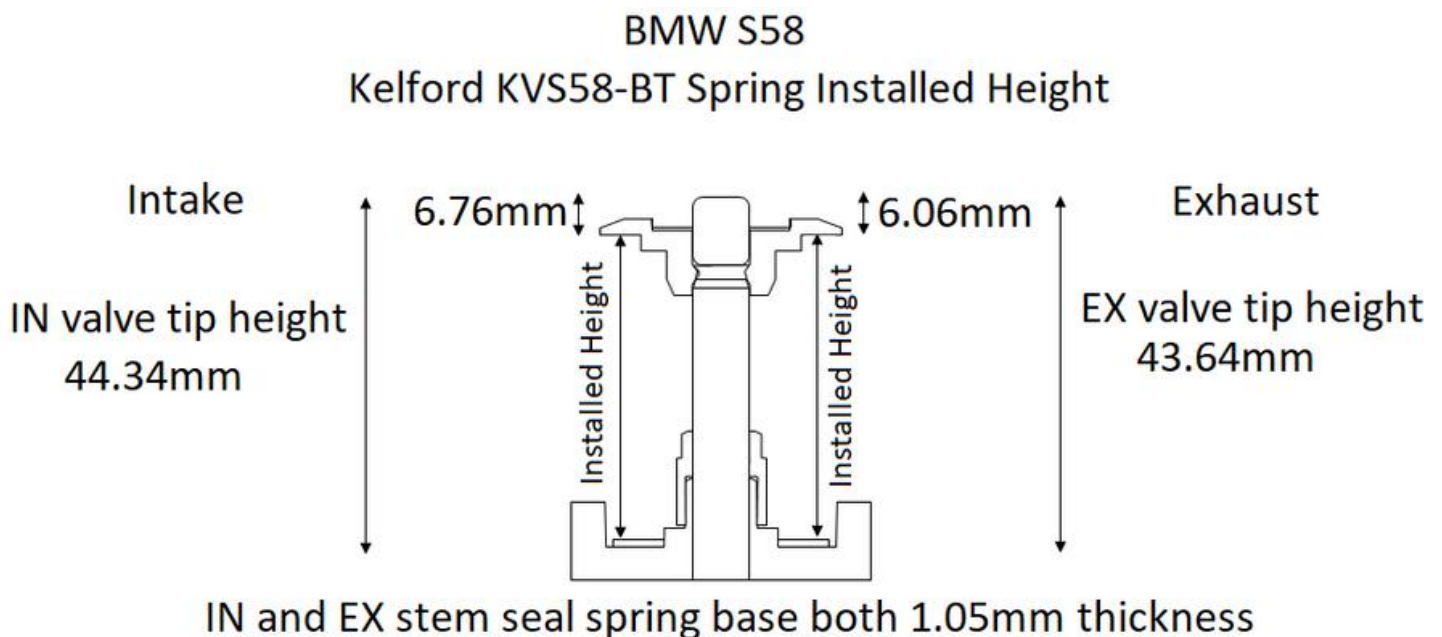


Figure 1: A complete run down of the measurements leading to the final calculation of the spring installed height



$$\text{Intake Installed Height} = 44.34 - 6.76 - 1.05 = 36.5\text{mm}$$

$$\text{Exhaust Installed Height} = 43.64 - 6.06 - 1.05 = 36.5\text{mm}$$



Figure 2: Intake Valve

**Figures 2 (Intake) & 3
(Exhaust) :
Measuring from the
valve tip to the
underside of the
retainer using a height
gauge**



Figure 3: Exhaust Valve



**Figure 4 : Confirming
Spring Base Stem Seal
Thickness**



**Figure 5 : Calibrating
Dial Gauge for Valve
Tip Height
Measurement**



**Figure 6 : Measuring
Valve Tip Height in the
S58 head**