

## Heavy-duty S-foot for the BPW Landing Leg

BPW Axles introduced the heavy-duty S-foot (S-foot HD) as an alternative to the standard S-foot for heavy duty applications. Photo 1 shows the two feet standing next to each other, Foot 1 is the standard S-foot while Foot 2 is the S-foot HD. Both the S-foot HD and S-foot are made up of two parts, the foot base plate and foot side plates. The difference between the two feet only comes in through the foot base plate as the foot side plate is the same on both feet.

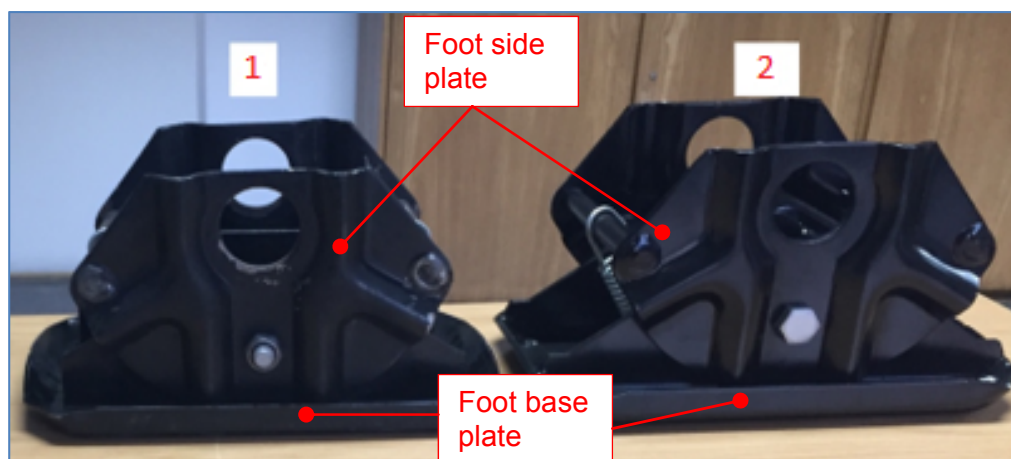


Photo 1

### Comparison between the S-foot and the S-foot HD's foot base plate

The bottom plate (see blue arrow, Photo 2) of the S-foot HD is thicker (5mm) than that of the S-foot (3.5mm). The red arrows in Photo 2 show the bent side plate which is welded to the bottom plate. The side plate thickness of the S-Foot HD is 6mm while that of the S-Foot is 3.5mm.

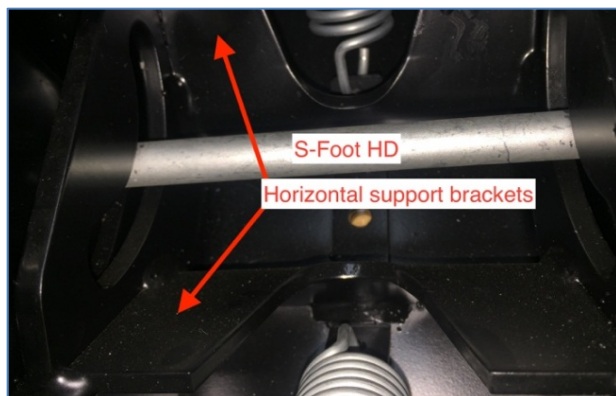


Photo 2

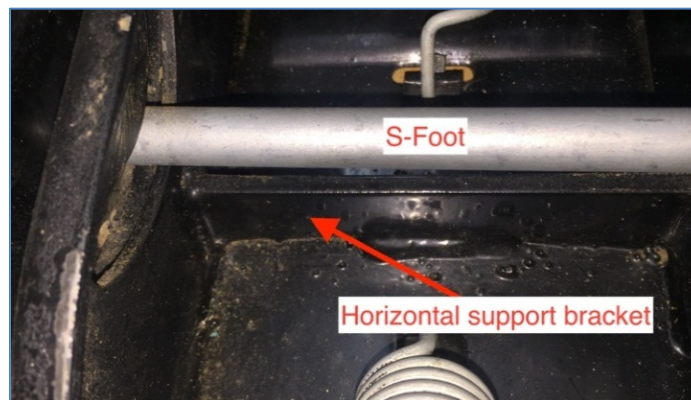
Photo 3 shows a close-up view of the horizontal stiffeners used in the S-foot HD and S-foot. The S-Foot HD uses two horizontal support brackets (5mm thick), which extend to the top of the

two side plates. This creates a “box” type section which prevents the S-foot HD from bending sideways if a large lateral load is applied to the leg.

The S-foot, on the other hand, uses only one horizontal stiffener (5mm thick), welded in the middle of the two side plates and which extends halfway up (see Photo 3). This type of stiffener will prevent the foot from buckling but won't prevent it from bending sideways.



S-foot HD



S-foot

Photo 3

A further difference between the two feet is the shape of the bottom plate (see Photo 4). The S-Foot has two indentations to add strength to the bottom plate (in addition to the horizontal stiffener) as it is thinner. The S-Foot HD does not have these indentations as its thickness provides adequate strength. The holes cut into the base plate are drainage holes to allow water to drain through.



Photo 4

Lastly the S-foot HD weighs 10 kg while the S-foot weighs 7.5 kg. This is because the S-foot HD is made up of thicker plates. Figure 1 shows an isometric view of the S-foot HD highlighting the differences between the S-foot HD and the S-foot.

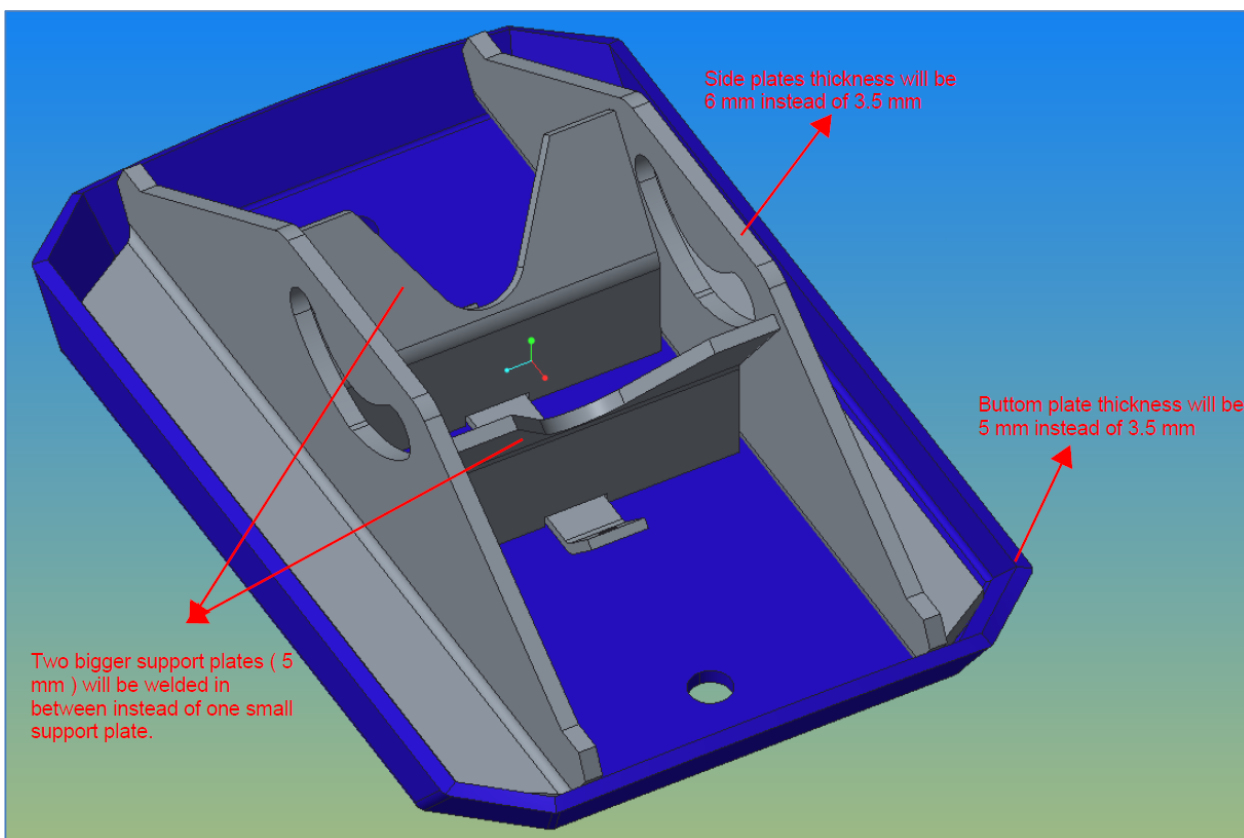


Figure 1