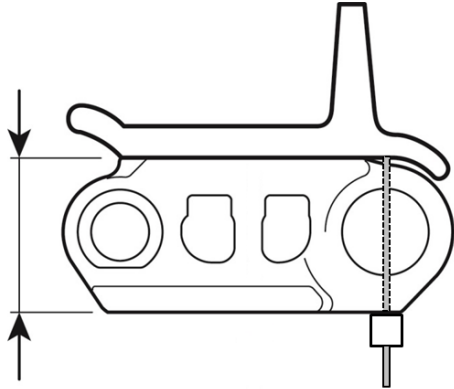


Link Measurement

Measuring the Link with a Depth Gauge

1. Make sure under surface is clean.
2. Measure the amount of material between the rail and the bush as shown in the following diagram



3. Place the depth gauge on the bottom of the rail with pin passing directly through the centre of the bush and touching the under surface of the shoe. This is demonstrated in the following image.

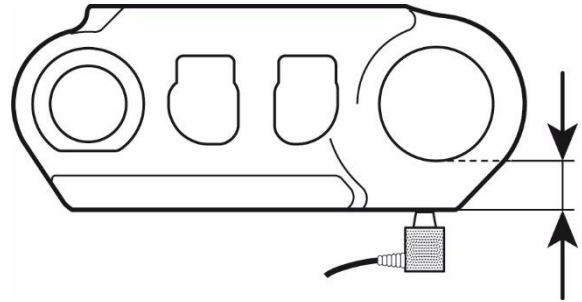


4. Then measure the Pin length exposed using a ruler as demonstrated below.



Measuring Link with an Ultrasonic Probe

1. Make sure surface is clean of debris, paint, rust and dirt using a scrapper or wire brush.
2. Place a small amount of gel on the probe surface then place the probe in the centre of the link, using the centre of the bush as a guide.



3. To ensure correct measurement is taken, always measure on the inside of the link joins.

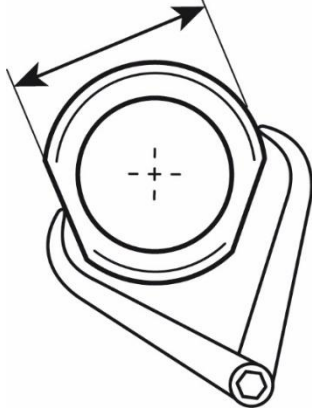


4. If the UT is not returning a reading, gently rotate the probe from left to right until reading is found.

Bush Measurement

Measuring with a Calliper

1. Tighten Calipers to rest at the centre of the bush and the worn surface.



2. Measure both forward and reverse wear surfaces

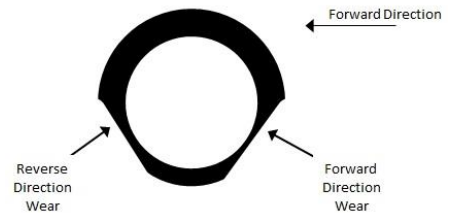


3. Use the ruler to measure the callipers tip gap.

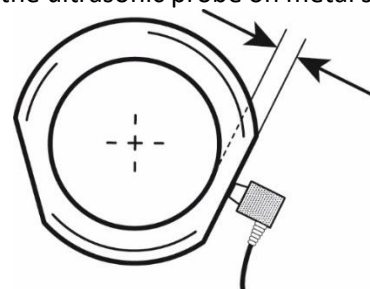


Measuring with an Ultrasonic Tool

1. Feel the bush with your hand to find the worst area of wear, whether it be the forward drive side, or the reverse side



2. Place the ultrasonic probe on metal surface.



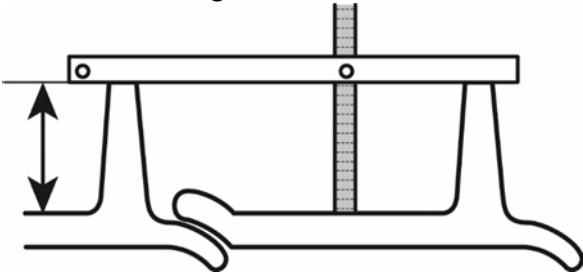
3. Twist the probe as necessary in order to ensure the good quality of the reading
4. Measure the worst side at different points to get the worst point of wear.



Shoe

Measuring Shoe with Depth Gauge

1. Place the Depth Gauge a third of the way across the grouser bar.



2. Make sure the Depth Gauge is flat against the grouser bar to obtain an accurate reading.



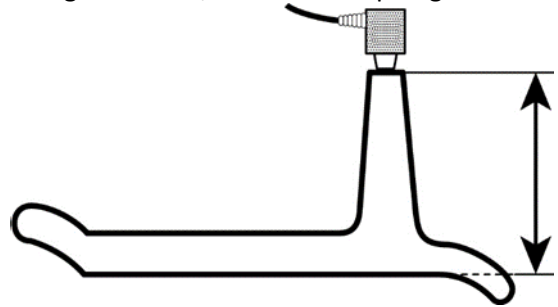
3. Once the Depth Gauge is flat against the grouser bar, use your free hand to push the pin down to firmly rest against the plate.



4. Use a ruler or tape measure to measure the pin length.

Measuring Shoe with UT tool

1. Place a small amount of gel on the probe face.
2. Place the probe a third of the way inwards across the grouser bar, and on the top of grouser bar

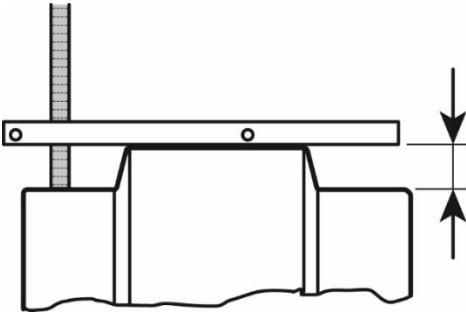


3. If the shoe has been re-barred/re-grousered, the Ultrasonic Tool is no longer effective. This is because the signal is interrupted at the point at which the bar has been welded.

Idler

Measuring the Idler with Depth Gauge

1. Place the Depth Gauge against the higher centre of the idler.



2. Making sure the Depth Gauge is flat against the Idler, push the pin down to rest firmly against the lower section of Idler.



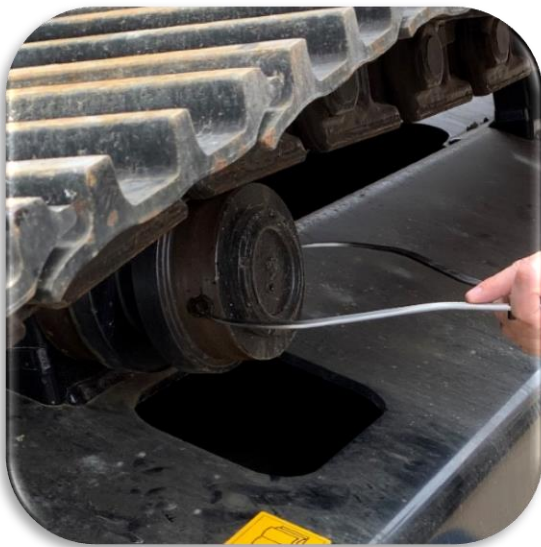
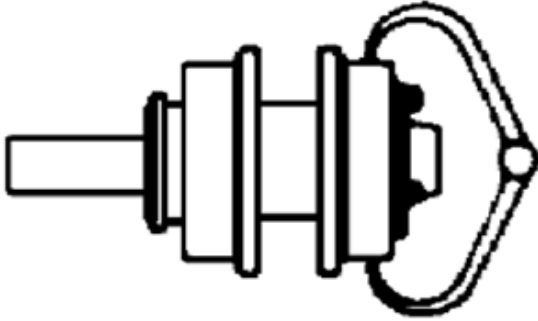
3. Measure the pin length with a ruler or tape measure.



Carrier Roller

Measuring the Carrier Roller with Callipers

1. Facing the Carrier Roller, place the Callipers at the centre, making sure they are centralised both in height and width.

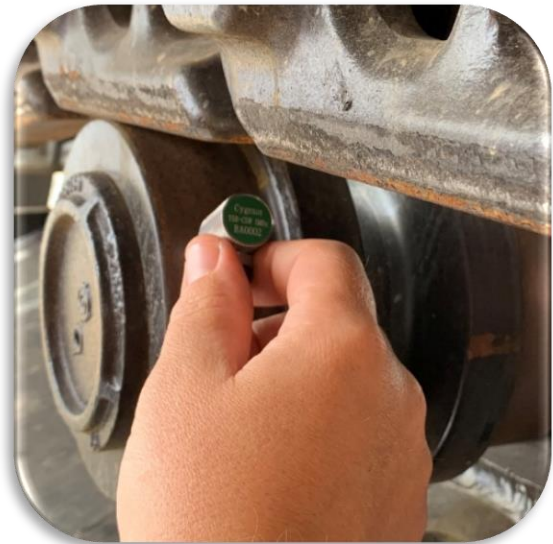
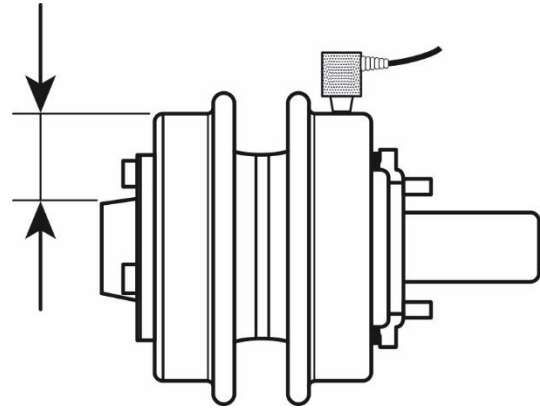


2. Measure the distance between Calliper tips with a ruler




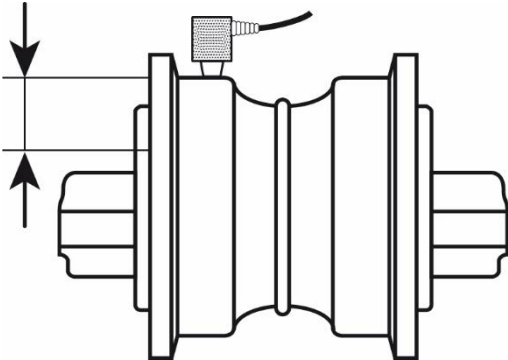

Measuring the Carrier Roller with UT

1. Place a small amount of gel on the probe.
2. Place the probe in the centre of the path on which the link rides.



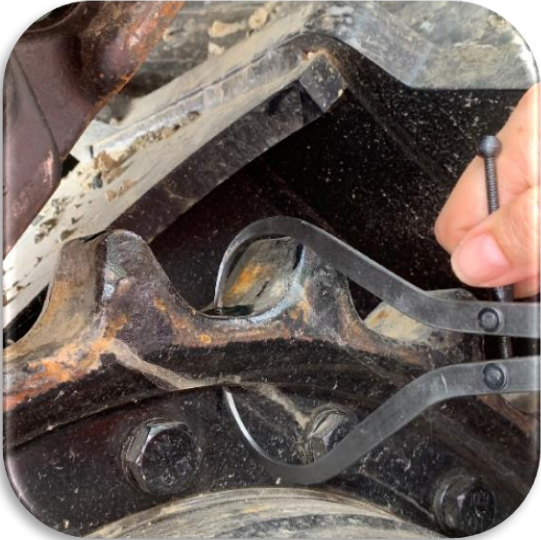
Track Roller

Measuring the Track Roller with Callipers	Measuring Track Roller with Depth Gauge
<p>1. Lightly tighten the calliper tips to rest on the Track Roller</p>   <p>2. Measure the distance between the Caliper tips using a ruler or tape measure</p> 	<p>1. Place the Depth Gauge flat against the highest part of the Track Roller</p>  

Measuring Track Roller with Depth Gauge Continued	Measuring the Track Roller with UT
<p>2. Measure the length of the pin using a ruler or tape measure.</p> 	<ol style="list-style-type: none"> 1. Looking through the hole in the guard rail, clear the Track Roller of any debris. 2. Place a small amount of gel on the probe face.  <ol style="list-style-type: none"> 3. Place the probe in the centre of the left or right, ensuring probe is making as much even contact with the surface as possible. 

Sprocket

Measuring the Sprocket with Callipers

Sprocket Bottom	Sprocket Tooth
<p>1. Place Callipers with one tip on the Sprocket Bottom and the other resting at the outer most edge. Ensure Calliper tip is not resting on the curved area between the Sprocket plate and teeth.</p> 	<p>1. The same method is used as the Sprocket Bottom except the upper tip of the Calliper will now rest on the Sprocket Tooth.</p> <p>2. Use a ruler or tape measure to record the measurements for both the Sprocket Bottom and Sprocket Tooth</p> 