



## UNDERCARRIAGE MEASUREMENTS

with manual tools

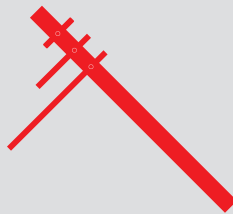
TOOLS NEEDED



SCRAPER



OUTSIDE CALIPER



DEPTH GAUGES

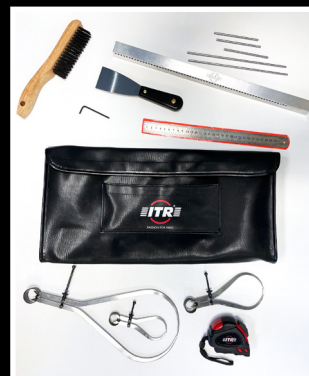


SCALE RULER



TAPEMEASURE

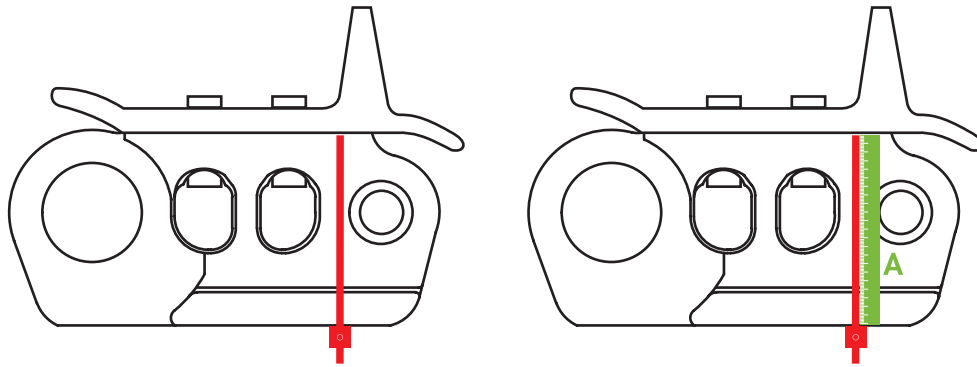
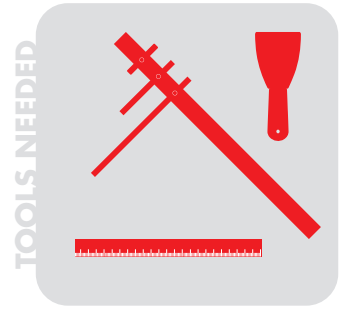
**ITR Tool Kit**  
for undercarriage  
management



Article part number:  
UO001

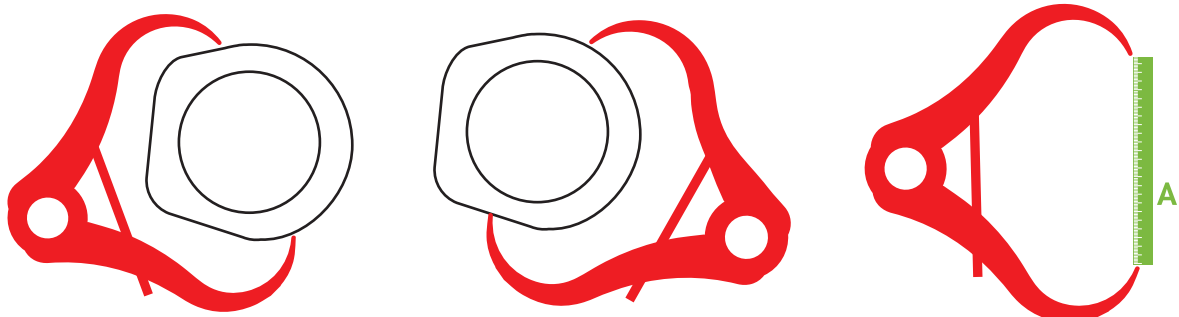
## Link Height Measurement

- » Use the scraper to clean the parts involved.
- » Place the depth gauge next to the pin boss area of the link, as close as possible.
- » Make sure that the crossbar is flat against the rail surface and the rod is perpendicular to the shoe surface.
- » Measure the height value and write it down on the appraisal form. The measurement is taken from the rod end to the crossbar edge (see dim. "A").  
*We suggest you to measure 3 height values and then calculate the average value.*
- » Repeat this measurement on the other track chain.



## Bushing O. D. Measurement

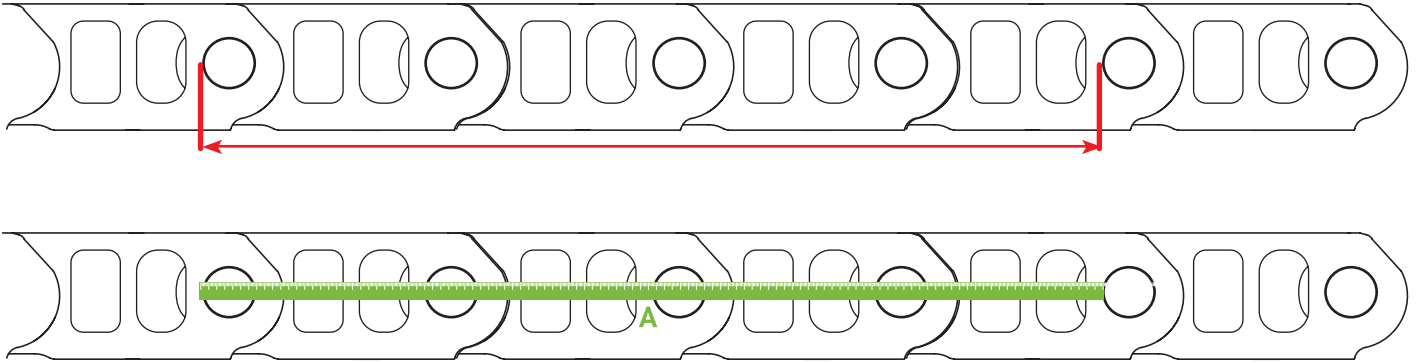
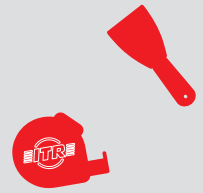
- » Use the scraper to clean the parts involved.
- » Place the caliper in the most worn position of each wear pattern as in the image beside.
- » Measure the value for each pattern and write it down on the appraisal form (see dim. "A").  
*We suggest you to measure 3 values and then calculate the average value.*
- » Repeat this measurement on the other track chain.



## Track Pitch Measurement (Not SALT chains)

- » Place a hard block in a sprocket tooth root and move the machine in reverse drive until the chain becomes tight. Observe four sections of a straight portion of chain, at least 2 joints far from the master section. Measure the distance between the left edge of the first track pin and the left edge of the fifth track pin (see dim. "A") or use the center of the pins in case of excessive wear on the external surface.
- » Measure the value write it down on the appraisal form.  
*We suggest you to measure 3 values and then calculate the average value.*
- » Repeat this measurement on the other track chain.

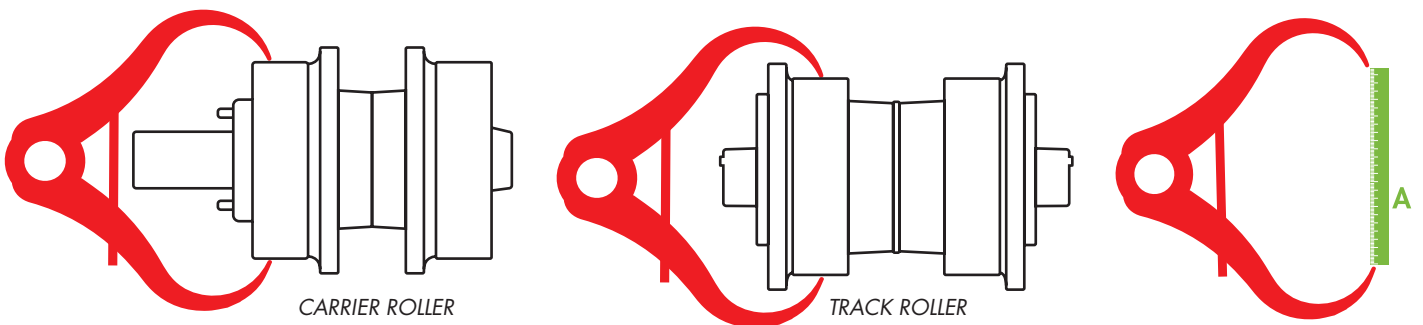
TOOLS NEEDED



## Rollers Measurement

- » Carefully raise the machine from the ground.
- » Use the scraper to clean the parts involved.
- » Place the caliper on the roller tread perpendicular to the shaft and measure the most worn diameter, as in the picture below (see dim. "A").
- » Measure the value for each roller and write it down on the appraisal form.
- » Check for flat spots on roller tread (due to roller seizing).

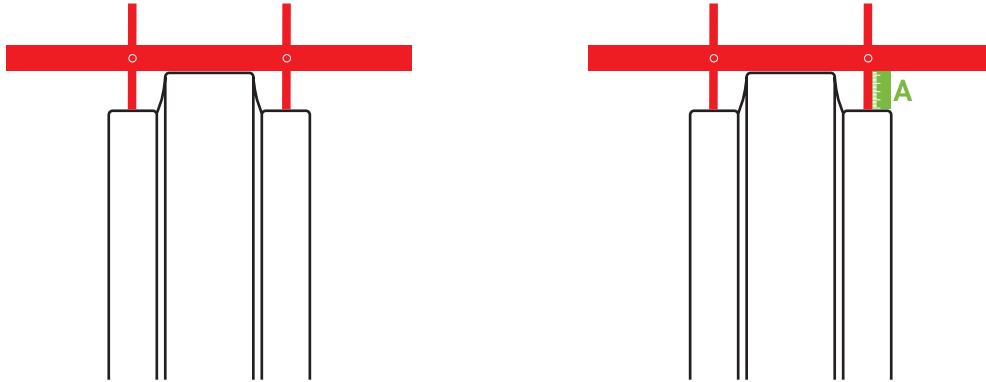
TOOLS NEEDED



## Idler Measurement

- » Use the scraper to clean the parts involved.
- » Place the depth gauge crossbar on the central flange cleaned area making sure that the crossbar is flat against the surface and parallel to the idler shaft, and the rod on radial direction.
- » Measure the idler tread heights, from the rod end to the crossbar edge (see dim. "A"), and write it down on the appraisal form.  
*We suggest you to measure 3 values and then calculate the average value.*
- » Repeat this measurement on each idler.

TOOLS NEEDED



## Grouser Height Measurement

- » Place the depth gauge at about 1/3 of the grouser width from both the side edges, making sure the rod is perpendicular to the shoe plate and the chain is tight.
- » Measure the value for each shoe, from the rod end to the crossbar edge (see dim. "A"), and write it down on the appraisal form.  
*We suggest you to measure 3 values and then calculate the average value.*
- » Repeat this measurement on the other side.

TOOLS NEEDED

