



## Replacing Trapmaster driving rail (TM 79)



From November 2014, all driving rails (TM 79) will be supplied with four slotted holes of approximately 5.5mm width by 7.5mm length. This will allow for more adjustment according to the variations in diameter (108mm to 110mm) of clay targets used in the field.

**IMPORTANT** - Only suitably trained persons should carry out maintenance on Canterbury clay target trap machines.

*ALWAYS* read the owners manual and fully understand it before attempting to make any adjustments.

Pay special attention to the section **IMPORTANT SAFETY INSTRUCTIONS** Failure to do so can result in personal injury.

### **Tools required**

1/8 imperial allen key,  
3/8 ring spanner or adjustable crescent.  
Torch.

### **Fasteners required**

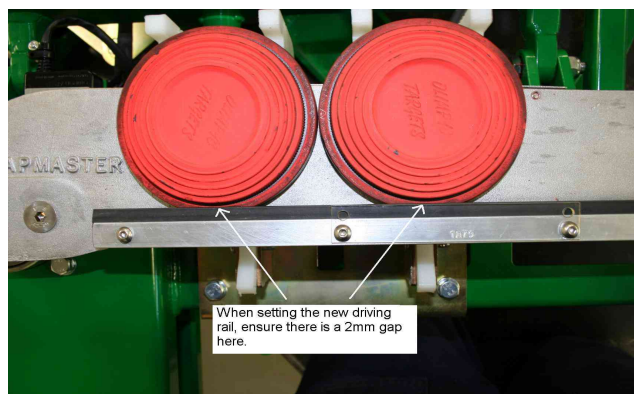
M5 spring lock washers (x4) Supplied  
3/16 UNF nylock nut (Stainless 304) (x1) Replace when changing driving rail recommended.  
3/16 x 3/4 inch UNF Button head capscrew (stainless 304) (x3), replace as required.

## Important note.

- Before you start any work make the trap safe by following the Important safety instructions outlined in the owners manual.
- To change the (TM79) driving rail you need to get the (TM80) arm into the released position, this is when the arm is pointing approximately at the 8 o'clock position when viewed from behind the trap.
- Turn the power off at the wall and remove the power lead to the (TM136) control box.



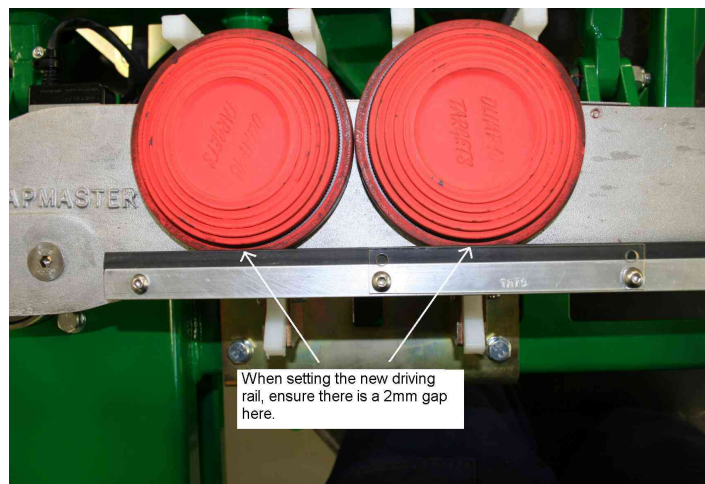
- Fully close the (TM15) singles/doubles gate and then remove all targets from the hopper.
- Remove the (TM132) Spring adjuster handle completely by rotating it counter clockwise and place it on the bench.
- Once the (TM132) adjuster handle is removed you will be able to rotate the (TM80) arm counter clockwise into a position that allows easy access to the fastenings. Use the (TM48) trigger manual release rod to allow the (TM80) arm to pass past the (TM52) trigger if required.
- Remove the four fastenings which secure the (TM79) rail to the (TM80) arm and put them aside to re-use.
- Install the new (TM79) driving rail making sure that the (TM144) blade brush deflector is fitted back in the original position. Install the four fastenings including the four supplied M5 spring washers BUT do not tighten them up at this point.
- Fully open the (TM15) singles/doubles gate so you can look down onto the (TM89) elevator assembly. You may have to rotate the hopper assembly by hand until you have a clear view.
- Place two targets onto the fingers and then bring the (TM80) arm around and under the two targets as in the photo below. The (TM80) arm should now be up against the (TM52) trigger.



- Now release the (TM52) trigger using the (TM48) trigger manual release rod and very slowly rotate the (TM80) arm counter clockwise until the front edge of the (TM80) arm just touches the back of the four front fingers. In the photo below the two targets have been removed for clarity.



- Making sure that the two targets are just touching the back of the fingers, what we are looking for is a 2mm gap between the (TM79) driving rail and the driving band on the targets as per the picture below. Adjust the (TM79) driving rail in or out until you have this 2mm gap. Once you are happy with the adjustments tighten up the four fastenings and re check your work.



- Once you are happy with the settings close the (TM15) singles/doubles gate and then rotate the (TM80) arm to the 12 o'clock position and re install the (TM132) Spring adjuster handle.
- Then rotate the (TM80) arm to the 10 o'clock position to activate the microswitch (TM131).
- Upon target release, the driving rail rubber (TM 79) should push the target forward and the arm finger guide (TM 81) attached under the throwing arm (TM80) should push the front fingers (TM 134, TM 130, TM 78, & TM 103) forward and down. What you need to avoid is the targets pushing the fingers forward as this can cause the targets to ride up on the fingers and throw the targets into the underside of the (TM29) hopper platform. Target trajectory can also be erratic if the target is pushing on the front fingers upon release.