

## ElmaTear detects wrong pendulum during calibration – ElmaTear2

**WARNING:** Any maintenance work undertaken on a James Heal instrument must be done so by a trained and competent person. Where electrical work is detailed, this should only be completed by a qualified engineer. James Heal is not responsible for damage or injury arising from work carried out by any person not qualified to do so. If in doubt, please contact James Heal or your local James Heal Agent.

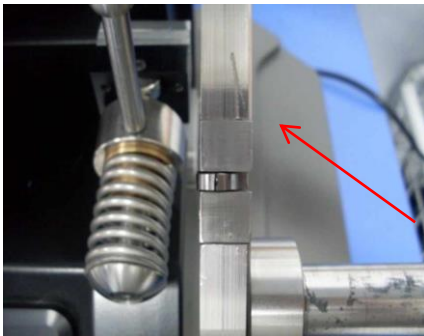
The ElmaTear detects which pendulum is fitted by measuring the time taken for the pendulum to drop after it is released. If there is any friction or delay in the release of the pendulum this will lead to the wrong pendulum being detected.

### 1.1

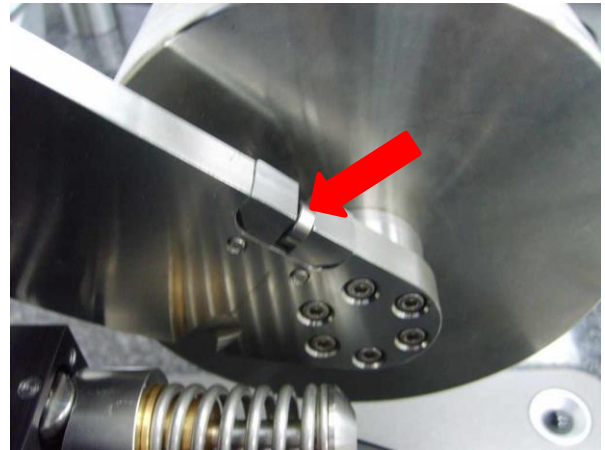
Inspect the release roller bearing on the pendulum.

The roller bearing should rotate freely.

The bearing surface should be free from dents or cracks.



Example of a cracked bearing



If any problem is found the bearing assembly should be changed. Stock code 794-738.

### 1.2

Inspect the upper surface of the release pin for dents or other damage.

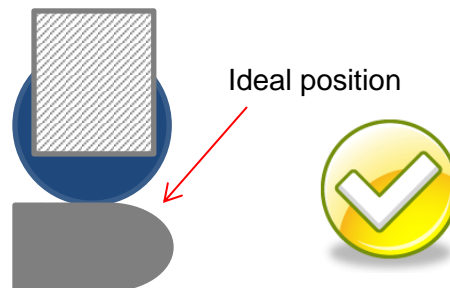
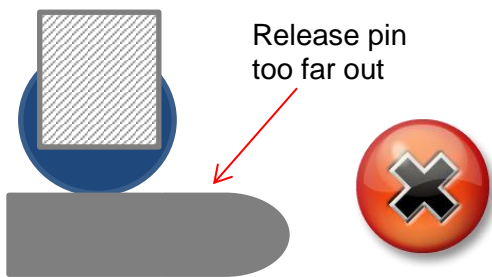
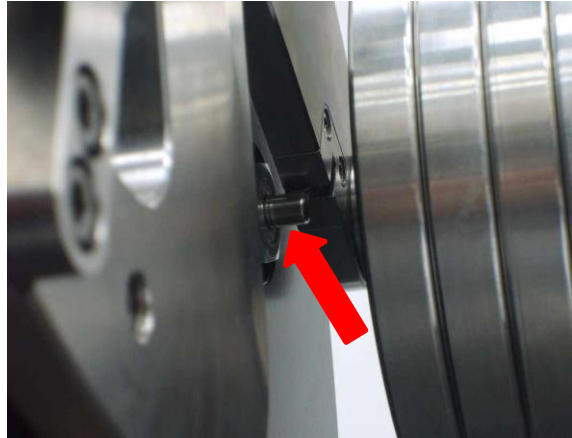
If any damage is found the solenoid should be changed. Stock code 390-237.



## 2.0 Check/Adjust the position of the release solenoid pin.

If the release pin is too far out this can lead to a delay.

The position of the pin is adjusted by fitting washers between the release solenoid and the right side wall of the Elmatear.



## 2.1

Unplug the electrical supply cable to the Elmatear

## 2.2

Using a 2mm Allen key slacken the grub screw on the cutting blade handle.

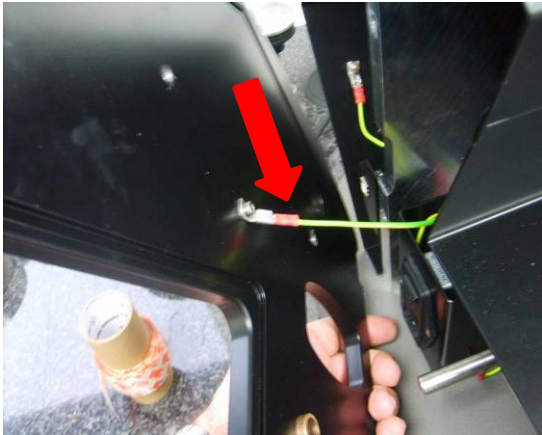
The handle can then be pulled off.



### 2.3

Using a 5mm Allen key remove the 3 screws holding the left side cover in place.

Carefully pull the cover away from the Elmatear a little



Pull the earth wire off the tab on the side panel.

### 2.4

Using a 24mm socket unscrew the large nut holding the release solenoid to the right side wall.



### 2.5



It should be possible to then remove the solenoid from inside the Elmatear.

Place a 16mm washer over the thread of the solenoid and refit the solenoid.

## 2.6

Check the pin has not been moved to far.

There should be no danger of the pendulum slipping off the edge of the release pin.



## 2.7

Refit the left side cover and cutting blade handle then test the Elmatear.