

## GEOSTAR G7 / G5

### Troubleshooting, Factory Settings and Maintenance

If your GEOSTAR automatic welder is not performing to your liking, please be sure to follow these steps to eliminate issues like:

- Maintenance issues
- Damages to the GEOSTAR G7 / G5
- Deviations from the factory setup

#### Step 1 – Clean the GEOSTAR G7 / G5

Simple things such as dirt or plastic which has melted on the rollers can affect the performance of your GEOSTAR and effect the welding quality.

Therefore, check the following parts for cleanliness and proper functioning:

- Drive rollers: These should be free of dirt/damage. Please replace the drive rollers if they are worn out or damaged
- All contact rollers on the upper and lower contact system should be clean and they should move freely. Remove any molten plastic (see fig. 1). If the bearings are damaged, please replace them.

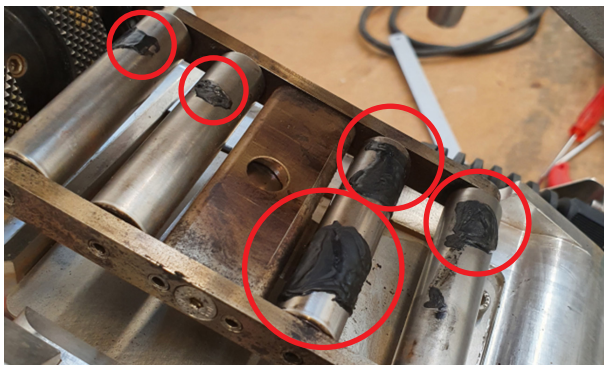


fig. 1

- Check the upper and lower contact roller adjustment to ensure it's working properly
- The upper and lower contact rollers should be straight and aligned with the direction of travel. Place it on a flat surface. When pressing along the arrows, nothing should move (see fig. 2).

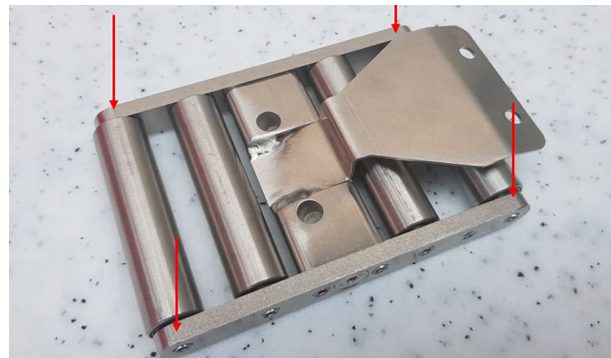


fig. 2

- The lower contact system should be able to tilt 4° in all directions parallel to the wedge face. It should be able to move all the way in and out. If this is not possible then take the system apart and clean or replace. The locking mechanism should be working properly if not clean or replace.
- Check the lower contact support system (remove assembly) that it has not been damaged. Place a ruler or similar straight object on the lower contact support system. By using the rear roller as a guide, you will see if the support system has been bent or damaged. The ruler and rear roller must be parallel (see fig. 3). If this part is damaged, then it must be replaced. The picture below shows how you can check this.

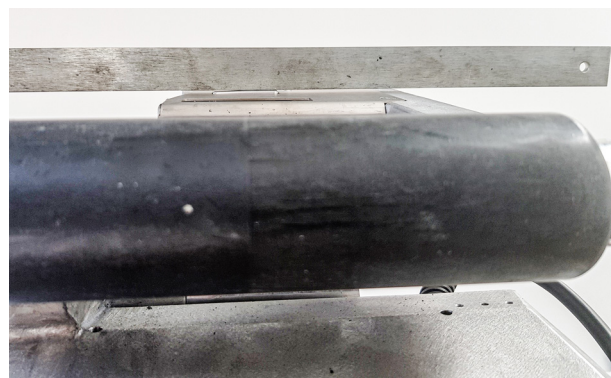


fig. 3

- Check the condition of the wedge. The wedge needs to be free of oxide and not showing any signs of excessive wear on the upper and lower tracks.
- The locking mechanism must work properly, otherwise please clean or replace it.
- Check the general condition of the power cord, replace as necessary

## Step 2 – Check the machines Error History

All errors occur for a reason. If you cannot find the reason for an error, please contact your Leister distributor. Many errors are caused by problems with the electrical supply. If you continue to receive error notifications that indicate electrical issues, please refer to the document on generators.

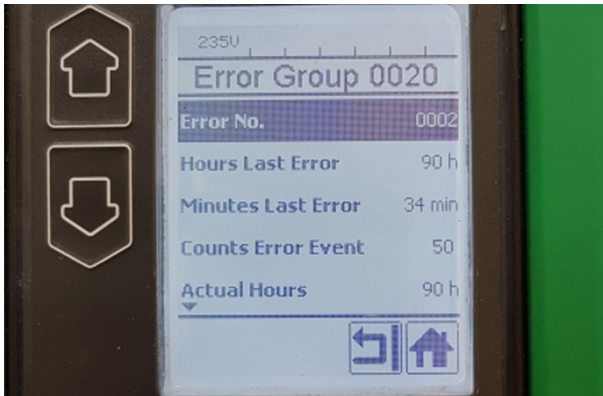


fig. 4

If you need to contact your Leister distributor, please make sure you provide the following information, shown in the General info menu (see fig. 5):

- Machine model
- Serial Number
- Firmware HMI
- Firmware Machine

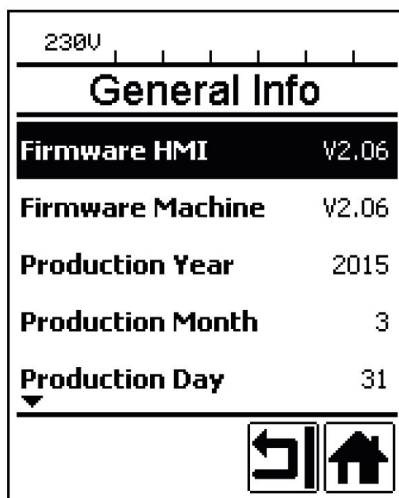


fig. 5

## Step 3 – Verify systems

- **Heating system:** Are all the heating cartridges working properly and is the machine able to hold the set temperature? Check the working temperature with a measure device and see if it matches the set temperature. If the temperatures aren't matching up or you believe there's a problem with the heating system, please contact your Leister distributor.
- **Drive system:** Is the machine reaching the correct speed? Is the speed of the machine remaining consistent? Check the chains for loud noises, excessive wear or unevenness. If this isn't possible or you believe there's a problem with the drive system, then please contact your Leister distributor.
- Is the fast/slow gear setting in the menu the same as the physical chain setting on the machine. If you are not sure, check the operational manual.
- **Pressure/load sensor:** Is the reading from the pressure/load sensor correct? If you feel the pressure is being displayed incorrectly, then the machine must be returned to your Leister distributor for re-calibration or repair.

## Step 4 – Check the Factory Settings

### Swivel Head

Check and ensure that the two adjustment screws are just below the surface (see fig. 6). The cover must be removed to check it. The surface of the movable swivel head must be parallel to the fix part behind.

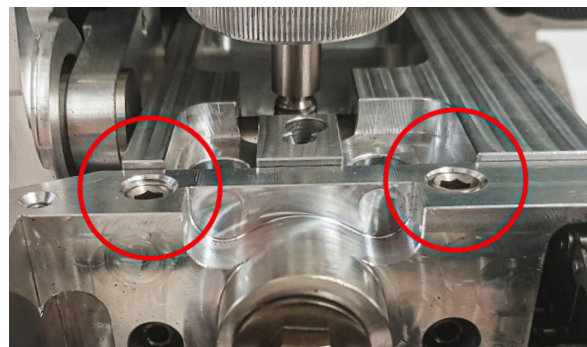


fig. 6

### Wedge position

The correct wedge position is critical during welding process.

- **Check the Vertical Positioning Screws**

It's important that the two upper, vertical positioning screws are in the center of the hole. It must not be loosened. The two lower screws are used to remove the wedge (see fig. 7).

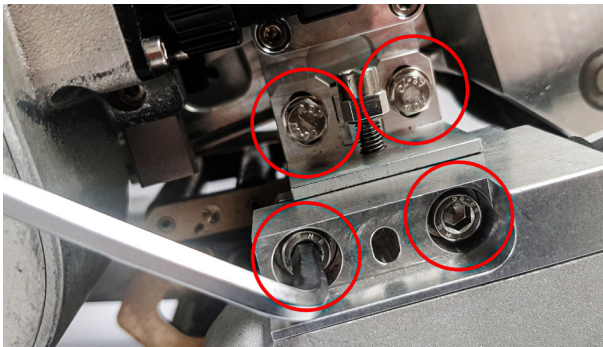


fig. 7

- **Check the Horizontal Positioning Screws**

The horizontal screw must be tightened so that there isn't a gap between the wedge and the screw (see fig. 8).

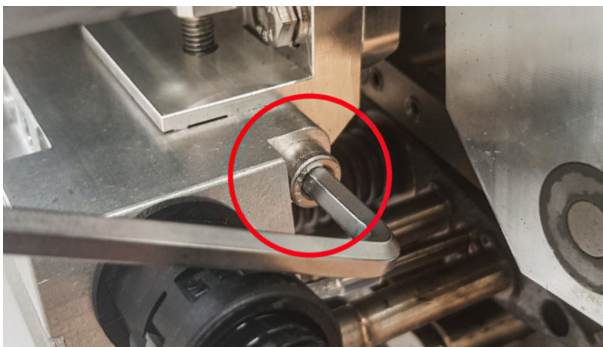


fig. 8

### Pressure roller – offset

The machine must have the correct offset of approximately 2 mm for the pressure rollers (see fig. 9).

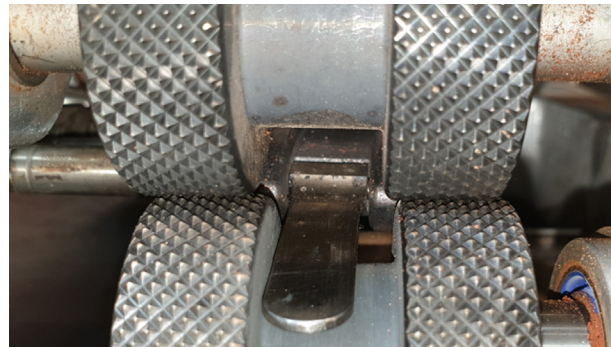


fig. 9

If not, refer to the repair manual for detailed instructions on how to adjust it. Make sure that you follow the instructions for your model.

- If all these points have been checked and there are no other problems, then please refer to the document “Setting up the lower contact system on the GEOSTAR with a flexible upper contact”. You can find this on the Leister website.

Alternatively, you can also watch the corresponding How to video:



Follow the contact system setup procedure, perform some test welds and verify the results with the COUPON CUTTER and EXAMO.

Welding parameter settings can be found on the “Geo Welding parameter chart”

- If your GEOSTAR is still not working the way you expect it to, please contact your Leister Distributor.