

OMRON E3Z - Safety Sensors Operation & Alignment

The safety circuit consists of a reset switch and two rear side fences, each having 3 sensors. Your machine may or may not have a RED warning light, if not see the NC89 for display (Reset Rear Guard). When the main power is switched on the safety circuit must be reset before the hydraulic pump can be started.

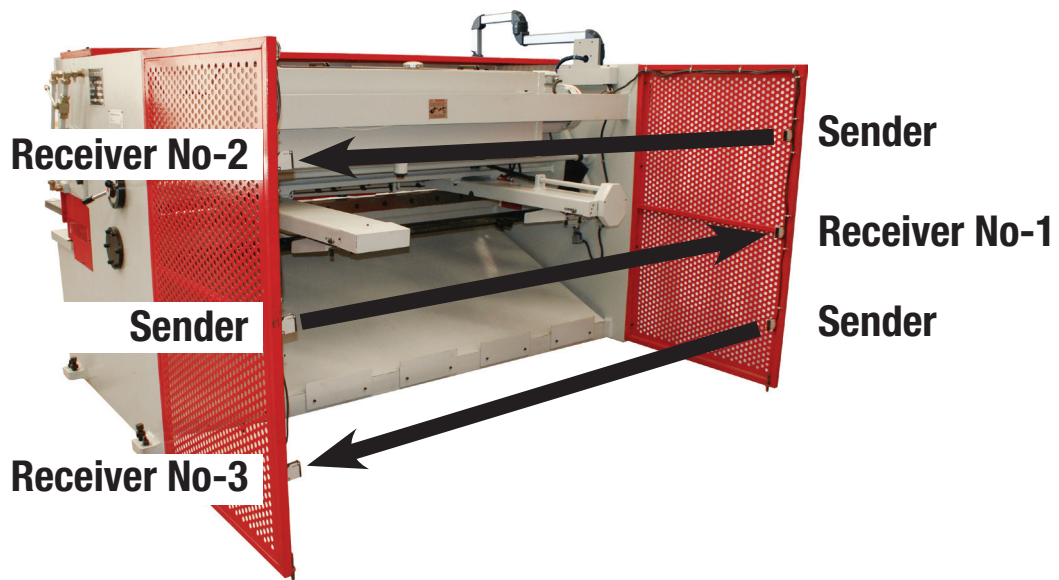
Indicates the safety circuit has not been Reset.



Reset Switch

The rear sensors must be aligned before this reset switch can be pressed.

Rear fences with sensors mounted

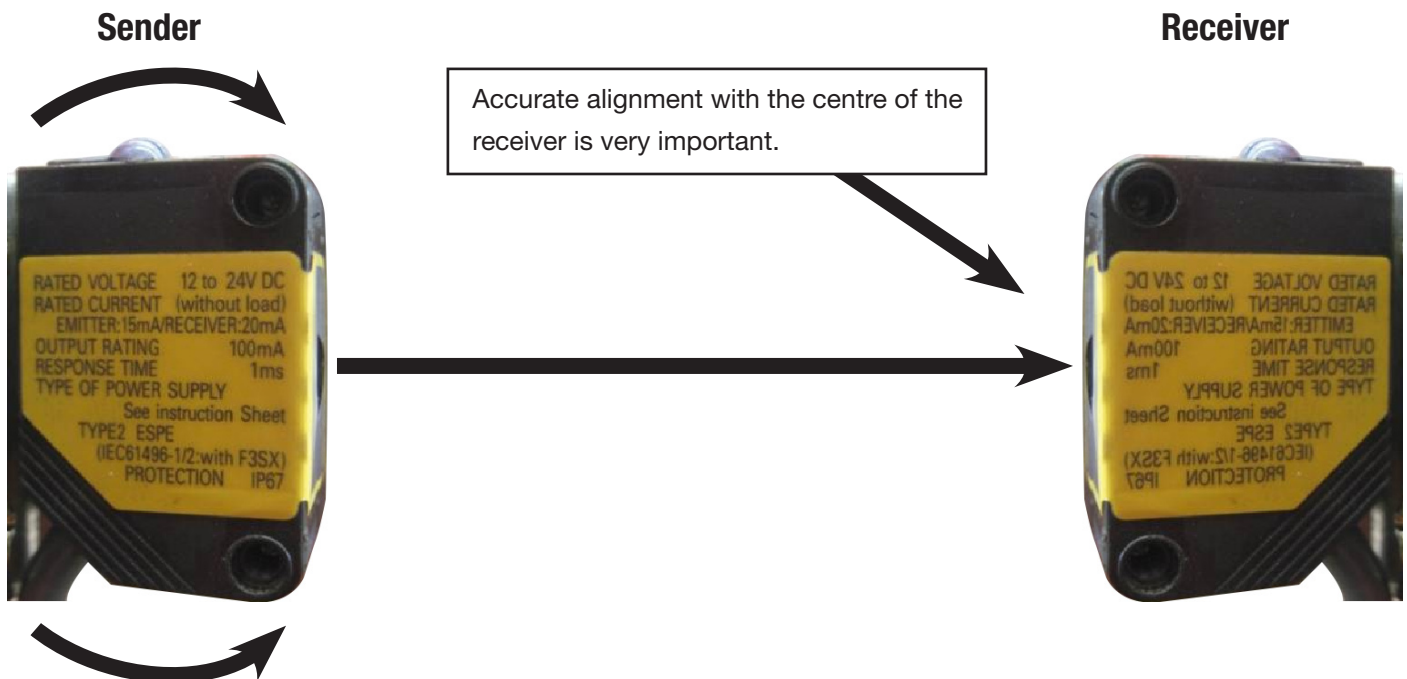


Machine Setup

First ensure that the machine is level and all four levelling jacking bolts are correctly adjusted. Ensure the rear fences are tight and the stabilizing bolt is on the ground to stop the fence moving around.

Alignment

The sensors are sensitive to alignment so try to align as accurately as possible. If the sender is only slightly aligned with the receiver any vibration when cutting will stop the pump and the safety circuit will have to be reset again. Alignment could involve loosening the sensor mounting screws or bending the mounting brackets to get the best alignment.



Identifying Sensors

Senders

Each sender has a red light on top of the unit and a red light on the front. These two lights will be on all the time while the machine has power.



Receiver

Each receiver has two lights on top of the unit. These lights indicate if the receiver has power and if it has been aligned correctly with the sender.

No lights on



No Power

Green light on



Power on & not aligned

Green & Orange lights on



Power on & aligned

Alignment order

The receivers are wired in series and must be aligned in the correct order. As each receiver is aligned correctly it will send power to the next receiver.

No-1 receiver (middle) A green light on indicates it has power. When it is correctly aligned with the sender a orange & green light will be on and it will send power to No-2 receiver.

No-2 receiver (top) A green light on indicates it has power. When correctly aligned with the sender a orange & green light will be on and it will send power to the No-3 receiver.

No-3 receiver (bottom) will have a green light on and when it is correctly aligned with the sender the orange & green light will be on and it will send power to the reset button.

Successful alignment When all 3 receivers are aligned correctly with their corresponding senders, they should all have orange and green lights on top.