

TOOL AND MACHINERY GUIDE



402-253-2772

WEBSITE: WCVRAIL.COM

Title: Out-Of-Level Detector

Prepared By: Wulf's Custom Welding

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SUBJECT: OUT-OF-LEVEL DETECTOR

Capacity: This detector does not require a rated capacity.

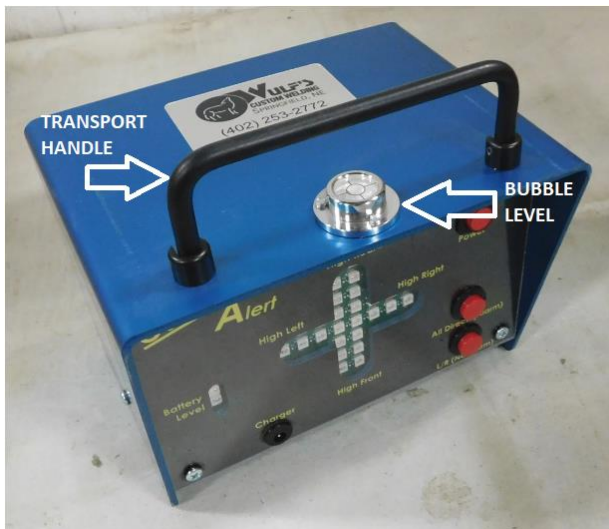


FIGURE 1



FIGURE 2

TECHNICAL SPECIFICATIONS:

Available Through:

Wulf's Custom Welding
19102 So. 156th Street
Springfield, NE 68059
Tel: 402-253-2772
Fax: 402-253-9092
Website: wcvrail.com
Reference Part Number: 0313

Detector Weight: 7 Pounds

Base Construction Material: Electronic Detector with Plastic Protective Transport Case, 110-Volt A.C, and 12-Volt D.C. Battery Chargers.

DESCRIPTION:

When "All Direct. (Alarm)" is selected, the detector is used to monitor movement in any direction on jacked equipment. When "L/R (No Alarm)" is selected, it is used as a jacking reference to ensure equipment is being raised evenly. The operating temperature of the device is rated between -20 degrees and 140 degrees Fahrenheit.

OUT-OF-LEVEL DETECTOR INSTRUCTIONS - JACKING REFERENCE:

WARNING: Ensure Blue Flag protection is set in accordance with current operating rules before fouling any track or performing any type of repair work.

WARNING: Apply blocking as necessary to form a solid jacking base and jack the equipment in accordance with current jacking rules.

1. Remove the detector from the plastic case. *Verify that the detector has sufficient battery charge to monitor the level condition of the equipment during repairs.* The detector will only work on battery power. It will not run off the chargers. The detector will operate for not less than twelve continuous hours if starting with a fully-charged battery. The Battery Level indicator lets the user know the status of the battery charge. The indicator has three LEDs beginning with a green LED at the top, followed by a yellow LED in the middle, and a red LED at the bottom. The detector should not be used if only the bottom red LED lights up when the unit is turned ON (Figure 3). **If the unit is on for an extended period of time with just the red light on, the red battery led will flash and the alarm will chirp steadily. This indicates that the device is getting too low on battery to function properly and is going to shut itself off soon.**
2. Use the built-in carrying handle to carry the detector to the equipment to be jacked (Figure 1). Place the detector on the cross-over platform, or magnetically attach it to the car with the magnets located on the back of the detector case. The detector should be as level with respect to the ground as possible. However, not being perfectly level will not prevent the detector from working. The detector establishes its own level reference whenever the L/R monitoring or All Direction monitoring buttons are pushed. Use the bubble level located on top of the detector case for placement reference (Figure 1).
3. Press the power button. It will take approximately 3 to 5 seconds for the detector to perform a self-check and become ready for use. When the self-check has completed, the colored battery level indicator lights will illuminate and the detector will chirp once to let you know it is ready for use. If the leveler power button does not illuminate and the unit does not turn on, this means that the battery is too low for operation and needs to be charge before the leveler can be used. **On startup, if all of the display lights don't flash white or the alarm does not chirp, there is an internal malfunction and the device should be sent back to Wulf's Custom Welding to be repaired. Otherwise this could result in unprotected conditions.**
4. Press the L/R (NO ALARM) button. The detector takes another 3 seconds to establish the baseline 'level' reference. The detector is ready when you see 4 bright, *steady* white lights at the center of the light display (Figure 3).
5. Use the jacks to raise the equipment. Observe the horizontal row of LEDs on the detector. The LED lights will radiate from green to yellow to red to indicate "High Left", or "High Right" if the equipment is being raised unevenly. The detector will only monitor side-to-side movement in the L/R (NO ALARM) mode.



FIGURE 3



FIGURE 4

OUT-OF-LEVEL DETECTOR INSTRUCTIONS - DETECTION:

1. Once the equipment has been raised, push the ALL DIRECT. (ALARM) button. The detector will take 3 seconds to go through a process to establish the baseline 'level' reference. The device is ready to detect equipment movement when you see 4 *pulsating* bright white lights at the center of the light display. The detector will now monitor equipment movement in either the side-to-side or front-to-rear direction.
2. At this point, the detector is armed and will emit a loud alarm if the established out-of-level reference is exceeded.

CAUTION – THE ALARM IS EXTREMELY LOUD - THE SOUNDER SPECS ARE SET TO ABOUT 123 DB - MAKE SURE TO WEAR HEARING PROTECTION!

3. If the alarm goes off, make sure you are completely clear of the jacked equipment. Check the jacks for settling and correct any unsafe condition before continuing repairs. When the alarm is going off, the entire display flashes green except for any directions the out of level condition is occurring. The directions that are out of level flash red until the out of level condition is corrected (Figure 4). Then they switch to flashing green. **This feature is there to help re-level the car and fix any unsafe conditions after everyone has gotten clear of the jacked equipment as a secondary action only!**
4. After the alarm goes off, pressing any button on the detector will shut off the alarm and disarm the detector. The ALL DIRECT. (ALARM) button must be pressed again and the detector display must be showing the pulsating bright white light at the center to re-establish movement detection.
5. When repairs have been completed, press the power button on the detector to turn it off, and lower the equipment off the jacks.
6. Place the detector back into its storage case. Make sure the detector is plugged into either the 12-Volt D.C. or 110- Volt A.C. charger to ensure it is fully charged for the next test. A charging port is provided in the plastic case to allow charger accessibility while the detector is in the case.

SAFETY PRECAUTIONS:

WARNINGS: Noncompliance could cause injury to employees.

CAUTIONS: Noncompliance could cause damage to equipment

NOTES: Pertinent information

1. **WARNING:** Wear personal protective equipment in accordance with all current Safety Requirements.
2. **WARNING:** Never place any portion of your body directly under any suspended equipment or load.
3. **WARNING:** Always establish a firm jacking base before placing jacks or raising equipment.
4. **WARNING:** Follow all instructions and safety precautions currently in place for jacking and securing equipment.
5. **CAUTION:** The level will not run using the charger. Do not plug in the charger when the unit is running, or attempt to run the level using the charger.
6. **CAUTION:** Make sure the detector has a battery charge sufficient to complete repair operations. The device will not zero or arm if the charge is not adequate.