

# MHC Bearing Checker

Parker's MHC\* Bearing Checker is a new, unique hand-held instrument, providing maintenance engineers with an easy-to-operate, simple to use, and quick method of analyzing bearing condition and lubrication state.

The MHC Bearing Checker monitors high frequency Acoustic Emissions (AE) signals naturally generated by deterioration in rotating machinery. The unique way of detecting and processing these signals provides condition-related information in the easiest possible form. It is a state-of-the-art condition monitoring instrument with extreme sensitivity to developing faults.

## How Does it Work?

As the mechanical condition of machinery deteriorates, energy loss processes such as impacts, friction, and crushing generate sound wave activity that spans a broad range of frequencies. By detecting only the high frequency part of this signal with special AE sensors, it is possible to detect miniscule amounts of activity (e.g. a slight rub, a brief impact, or the crushing of a single particle in the lubricant). The patented MHC sensor gives improved repeatability and is remarkably rugged. A magnetic front face allows easy attachment to multiple machines.

## Easy to Use and Interpret for Quick Analysis

Simply attach the unit via the magnetic sensor head and within 10 seconds both dB Level and Distress® values will be displayed. dB Level is an indication of the overall noise of the bearing and is dependent on speed. It increases with speed of rotation, but also with degradation of the bearing or inadequate lubrication. Distress® gives an instant indication of the state of the bearing's health. A reading below 10 generally indicates

normal operation, higher than 10 is usually indicative of bearing damage or the need for attention. Distress® and dB Level are the fundamental parameters of the pocket-sized MHC Bearing Checker.

The unit is powered by an internal rechargeable battery, offering up to 1000 measurements between charges. Recharging is accomplished through a micro USB port.

## Ordering Information

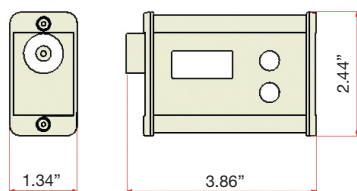
| Part Number | Description         |
|-------------|---------------------|
| FGH11510PA  | MHC Bearing Checker |

## Specifications

| Sensor                |  |             |            |
|-----------------------|--|-------------|------------|
| Sensing Element       | Resonant piezoelectric at 100 kHz  |             |            |
| Calibration           | Factory set  |             |            |
| Signal Measurement    | Description  | Range       | Resolution |
| Distress® (dst)       | Fault indicating parameter   | 0 to 40     | 1 unit     |
| dB Level (dB)         | Logarithmically scaled mean signal level   | 10 to 80 dB | 1 dB       |
| Features              |  |             |            |
| Display               | LCD, 2 lines by 8 characters   |             |            |
| Distress® Display     | Numeric or Text ("OK" if <10, "Suspect" if between 10 & 15, "Poor" if > 15)                        |             |            |
| Reading in progress   | Flashing LED indicator (in addition to LCD display message)  |             |            |
| Non-Volatile Memory   | Shows last taken readings when unit is switched on   |             |            |
| Auto Shut-Off         | Instrument auto switches off 30 seconds after last button press                                    |             |            |
| Internal Batteries    | NiMH rechargeable battery via micro USB port<br>- Typically over 1000 measurements between charges |             |            |
| Operating Temperature | 0°C to 65°C  |             |            |
| Overall Dimensions    | 3.86 in (98 mm) x 2.44 in (62 mm) x 1.34 in (34 mm)  |             |            |
| Weight                | 7.94 ounce (225 g)   |             |            |



\*MHC - Machinery Health Check



## Features and Benefits

- Last Measurement Recall
- Simple One-Handed Operation
- Rechargeable through USB Port
- Ease of Operation