

## Subject

### Multifunction CKP (Speed Sensor) Gap Setting

## System or Parts affected

- Kubota®-powered Multifunction Power systems
- Cat®-powered Multifunction Power systems

## Overview

The Multifunction control system monitors engine rpm using a Hall-effect Crankshaft Position (CKP) sensor that reacts to the passing teeth on a ring on the engine flywheel.

In order to read the speed of the engine correctly, there must be a 0.025 in (0.64 mm) air gap between the sensor and the flywheel teeth.

## Kubota-Powered Multifunction

- ☐ Make sure key is in OFF position.
- ☐ Remove the service panel from the Multifunction.



Figure 1

- ☐ Locate the crank position sensor (Figure 1).
- ☐ Ensure the sensor is clean/free of debris.

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EXT-MF-007	C	Tech	Added Cat	BDJ	BDJ	N/A	2 Jan 2023

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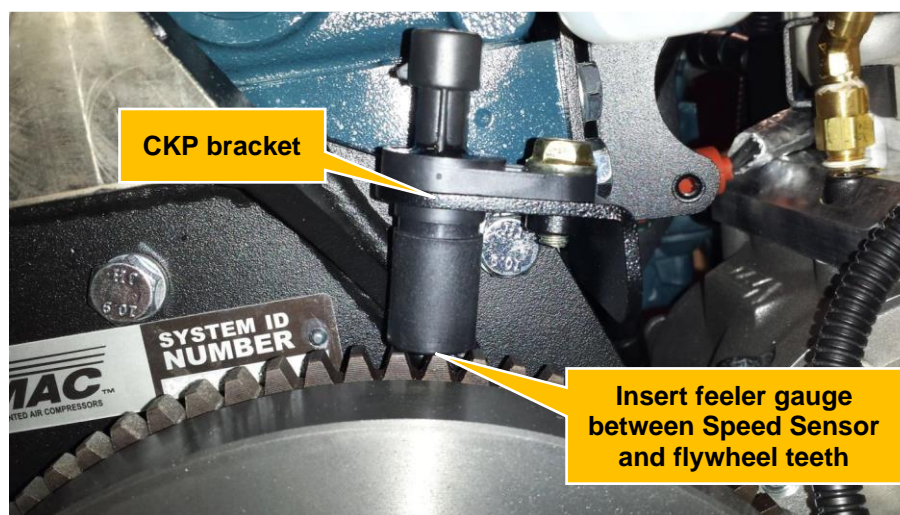


Figure 2

- ☐ Using feeler gauges check the distance between the sensor and the flywheel teeth. (Figure 2).
- ☐ If gap adjustment is required, gently bend the CKP bracket to achieve 0.025 in air gap.

## Cat-Powered Multifunction

- ☐ Make sure the key is in the OFF position.
- ☐ Remove the service panel.

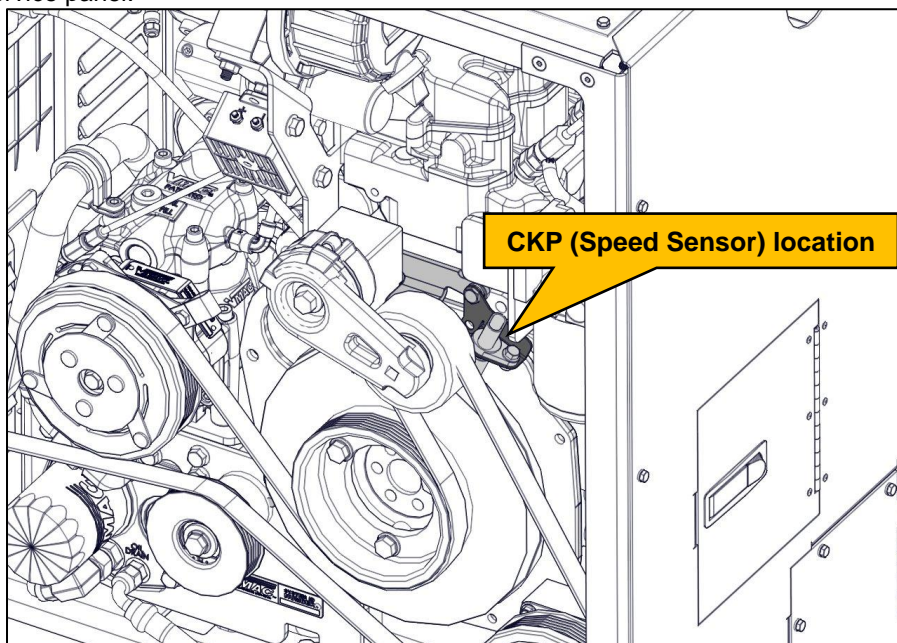


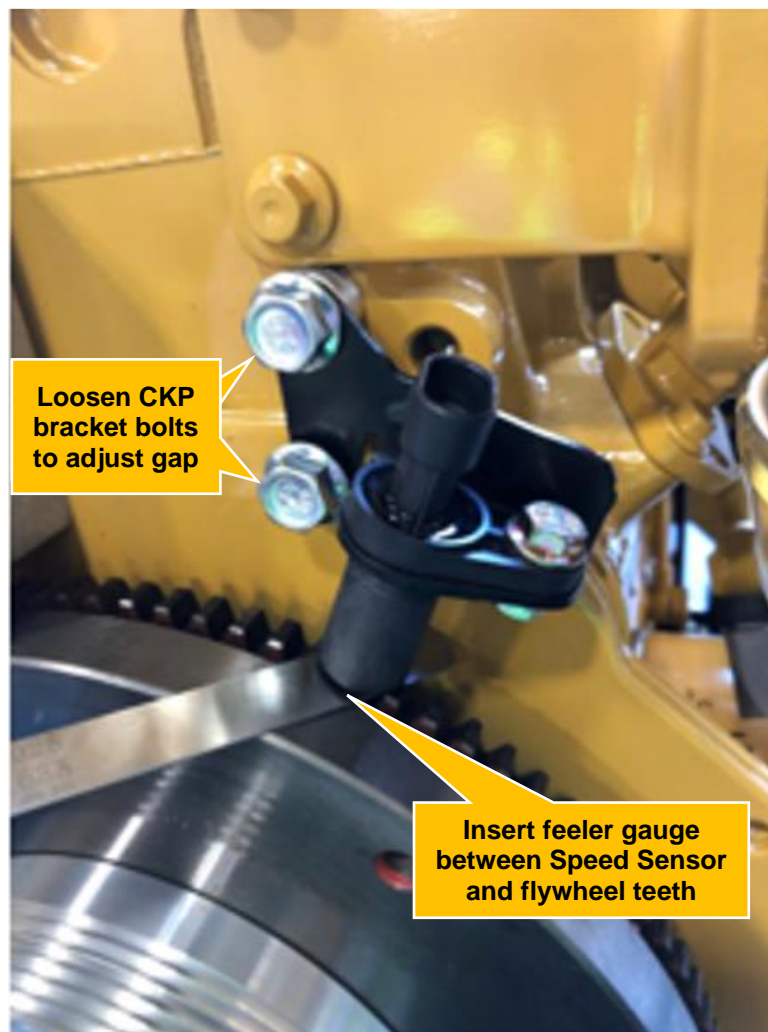
Figure 3

- ☐ Locate the crank position sensor on the engine block at approximately the 1:00 position of the flywheel (Figure 3).

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- ☐ Ensure the sensor is clean/free of debris.



**Figure 4**

- ☐ Using feeler gauges, check the distance between the sensor and the flywheel teeth (Figure 4).
- ☐ If air gap adjustment is required loosen the two bolts that hold the CKP bracket to the engine block. Place a 0.025 in feeler gauge between the top of a flywheel ring tooth and the CKP sensor, and gently set the CKP sensor on the feeler gauge. Tighten the two CKP bracket bolts.

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