

Hall Effect, Ferrous Target Crankshaft Signal Sensor Holley P/N 554-124



P/N 554-124 is designed to generate an RPM input signal when used in ferrous target crank trigger setups. This sensor is a Hall Effect sensor, meaning it outputs a square wave signal, which is ideal for use with most Electronic Fuel Injection Systems. This sensor is to only be used with trigger wheels with ferrous steel targets or teeth. It does not detect "flying magnets".

The sensor can operate from 8-20 volts. It is recommended to feed the sensor "clean" electrical power.

NOTE: This is not designed for systems requiring an inductive pickup as the sensor does not produce zero-crossings.

INSTALLATION:

- 1. Install the sensor into a receiving bracket containing M12x1mm threads. It is recommended to use a small crescent wrench on the sensor end & a 17 mm wrench on the nut.
- **NOTE:** If creating a custom sensor bracket an 11mm drill bit and M12x1 mm tap will be required. These taps are readily available. (McMaster-Carr P/N: 26015A222)
- 2. Using a feeler gauge, set the gap to .040"-.080" by backing the jam nut off and screwing the sensor in or out of the receiving bracket. The closer the better. Lock the sensor's position with the jam nut. Do not tighten the jam nut beyond 23 ft.-lbs.

NOTE: Ensure there will be no physical contact between the sensor and trigger wheel when the engine is operating.

 Loose pins and seals are included and must be crimped onto an existing harness like Holley P/N 558-431 or 558-306. Use the proper tools to crimp Metripak 150 style pins (Delphi P/N: 12155975-Available thru Waytek, Inc. Item No.: 509). It is advised to use shielded wiring (with drain wire grounded at the ECU end) to connect to this sensor. The pins are inserted into the back of the connector. Install the TPA lock after the wires are inserted.

The following is the proper wiring for this sensor:

- A Red 8V to 20V clean switched power. Pin B20 ("EST 12V Output") on Holley EFI systems would be a good choice. Pin E at the "Ignition" connector of Holley P/N 558-306.
- B White Sensor Output to ECU crank signal (Pin A30 on Holley EFI). Pin A at the "Ignition" connector of Holley P/N 558-306.
- C Black Sensor ground. Connect to a "clean" ECU ground, such pin A14 ("IPU Ground") on Holley EFI systems. Pin C at the "Ignition" connector of Holley P/N 558-306.
- 4. If using Holley EFI, set the crank sensor "Type" to "Digital Rising" or "Digital Falling" in *Ignition Type* under Ignition Parameters. "Digital Rising" is recommended.
- 5. Make sure to check the ignition timing and alter the ignition reference angles or crank sensor position after the engine is started.

HOLLEY TECHNICAL SUPPORT: 1-270-781-9741