



KLXCDI User Manual



Contents

Overview 2

Distinctive features 3

Installation 4

Warranty 6

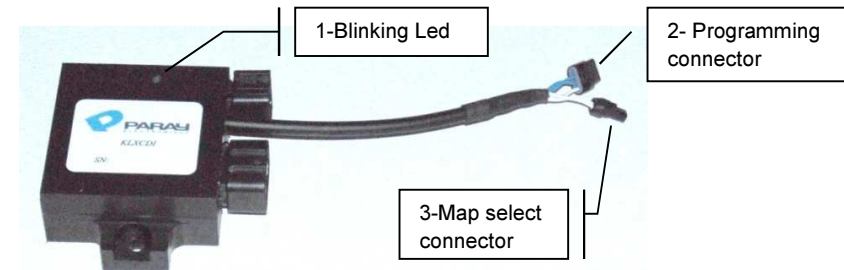
Overview

The *PaRay KLXCDI* is a plug and play replacement unit for the stock CDI igniter on North American and Australian KLX250S/250SF Kawasaki motorcycles. It bolts directly in the place of the stock CDI module and connects directly in its place.

In addition to fit and behave like the stock igniter, the *PaRay KLXCDI* offers flexibility in timing advance curves in two ways:

- a jumper permits selecting between two factory programmed timing maps: main and alternate. The main map is programmed for 25 degree advance @5000 rpm, the alternate map is 35 degrees;
- a programming connector permits arbitrary timing map programming, with the help of a *PCLink* interface (purchased separately) that connects to the USB port of a PC computer and our proprietary software suite. The ignition cutoff rpm can also be programmed at will.

Distinctive features



Note: *KLXCDI* pictured here is for North American 2006-2007 model years. 2009 and later have only one six pin connector on the unit. Australian models have flying leads with connectors.

- 1- **Blinking Led:** When power is applied:
 - a. Blinks once per second when engine is stalled and the main timing map is selected
 - b. Blinks twice per second when engine is stalled and the alternate timing map is selected
 - c. When the engine is cranking or running, a short blink is produced at every engine revolution (useful to diagnose trigger pickup coil problems!). At cranking speed and idle speed, distinct blinks can be observed. At 3000 rpm and above, the led appears continuously lit, with an intensity gradually increasing up to 6000 rpm.
 - d. When the engine is stalled and the engine stop switch is engaged or the safety interlock is on (sidestand down, transmission in gear and clutch engaged)¹, the led is

¹ The safety interlock is disabled if you selected that option at purchase time

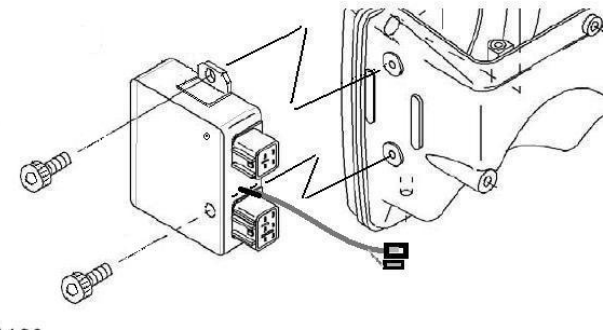
continuously on.

- 2- **Programming connector:** if you purchased the *PCLink* interface for the programming option, this is the place to connect it. The unit comes from factory with a dummy plug at this connector to avoid dirt going in. Programming the unit with the *PCLink* interface and our proprietary software is covered in another set of documents.
- 3- **Map select connector:** the *KLXCDI* unit offers two different timing advance curves through this connector. Leave the dummy plug on it to select the main timing map, or install the supplied short to select the alternate timing map. The main timing map is usually the same as stock US and Canada KLX250S (25 degree advance @ 5000 rpm), while the alternate timing map is usually that of the Australian KLX250S (35 degree advance @ 5000 rpm). These may be specified differently at purchase time.

Installation

- 1- Remove seat and left side panel;
- 2- Remove the two screws holding the original CDI to the airbox and disconnect the wire harness from it. **Ensure the ignition switch is off before disconnecting the CDI;**

- 3- Connect the wire harness to the *KLXCDI* in the same manner that the original CDI unit was connected. These connectors are keyed and there is no danger for mixing them or misorientating them;
- 4- Install the *KLXCDI* unit in its place, as pictured below²;



- 5- Attach the programming connector and map select connector cable to the wiring harness with the supplied tie, so as to not have these connectors floating around;
- 6- Turn the ignition switch on, verify that the led blinks at a rate of once per second. If the led is continuously on, you probably have the kill switch engaged or the safety interlock on. Clear those conditions, then make this test again;

² Note: cdi pictured here is for 2006-2007 model years (model G1). 2009 and later have a single six pin connector on the unit (model G2)

- 7- Crank the engine and verify that the led produces short blinks at every engine revolution;
- 8- Start and run the engine, verify proper operation;
- 9- If desired, remove the dummy plug at the end of the Map Select connector and install the short supplied with the unit. You can disconnect and reconnect the dummy plug or the short plug while the unit is powered (ignition key at ON) without problem (even while the engine is running);
- 10- Reinstall side panel and seat.

Warranty

PaRay Electronique warrants that this product is free of manufacturing defects for one year after the date of purchase. Should the unit stop functioning correctly during the warranty period, *PaRay Electronique* will replace it without fee.

This warranty does not cover defects induced by abnormal use, especially mechanical shocks leading to deformation of the unit or long term immersion.

The warranty does not cover damages to the engine that may occur due to improper use of the *KLXCDI* unit or its malfunctioning.

Revision history
Rev 1.4a, April 2020

Rev 1.4, March 12, 2015

Included picture and mention of KLXCDI A1 for Australian KLX250S

Rev 1.3, Oct. 30, 2013

Edited to take account of new plastic box introduced in 2013 (vs aluminum before).

Rev 1.2, April 30, 2012

Revised installation procedure with allen hex screws

Covers all model years from 2006 to 2012.

Rev 1.1, March 6, 2012

Mentioned possible safety interlock disabled

Minor formatting improvements.

Rev. 0.9, Feb. 27, 2012