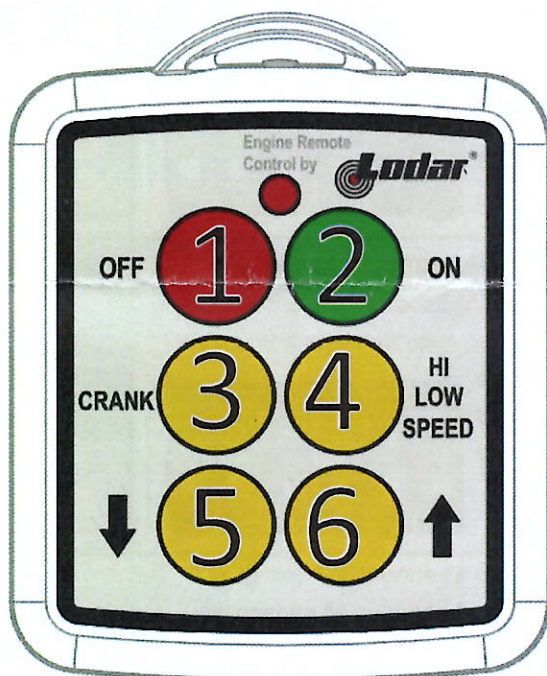


WARNING:

- The Lodar power cables **MUST** be connected directly to the battery and not any other power source.
- The Lodar is fused with a **7.5A** fuse and **MUST** be replaced with a **7.5A** fuse.
- The engine ignition key **MUST** be placed to the **OFF POSITION OR REMOVED** before operating the Lodar.
- The Transmitter and Receiver will both switch off after 120 minutes of inactivity.
- Mount the receiver as high as possible and avoid areas with high vibration and direct spray from wheels. If working in a hot environment, fit in a shaded position.
- Cable gland should face **DOWNWARDS**.
- Please refer to the **WIRING INSTRUCTIONS** before proceeding with this manual.
- Please make sure that the battery is fully charged before use.

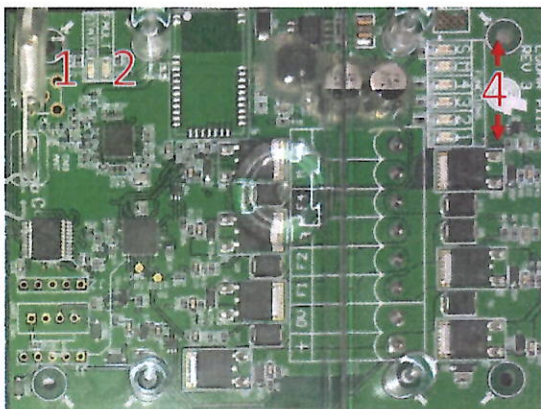
Transmitter



#	Function
1	STOP (OFF)
2	SET (ON)
3	(F1) CRANK
4	(F2) HI/LOW SPEED
5	(F3) Function 1 V+ latching ↓
6	(F4) Function 2 V+ latching ↑

Transmitter replacement PN# : LS2033CT

Receiver



#	Function
1	RECEIVER STATUS LED
2	RECEIVER FAULT LED
3	FUNCTION INTERFACE LEDs
4	RECEIVER POWER SWITCH
5	SPEED CONTROL

Receiver replacement PN# : LS2033CR

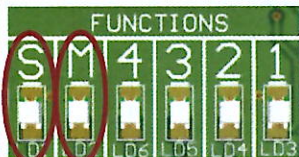
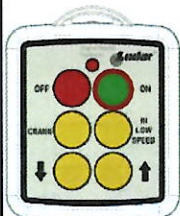
1

Reposition the switch's on the receiver as shown. The status light will flash. This indicates that the receiver is ready to pair. To check if the transmitter is paired, press the stop button on the transmitter and the status light will appear solid on the receiver, regardless of its state. If the transmitter is not paired, please refer to the pairing document. If the Fault light is on, please check that the battery is fully charged. If the problem still persists, then contact your dealer. The DIR1 position places the Honda engine into **SLOW SPEED** in **MANUAL** mode and enables access to Lodar remote control. DIR2 will place the Honda engine into **HIGH SPEED** in **MANUAL** mode but disables Lodar remote control. **RADIO CONTROL IS ONLY AVAILABLE IN THE DIR1 POSITION.**



2

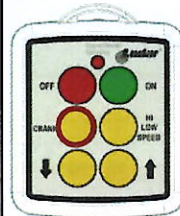
Upon pushing **SET (ON)** on the **TRANSMITTER**, the following lights will illuminate on the **RECEIVER** to indicate the ignition is on. A relay will simultaneously energise upon setting the receiver. If no sound is apparent, please contact your dealer. A safety feature has been placed on **SET** to prevent the user from reactivating the ignition while the engine is turning off. See '6' for more information.



3

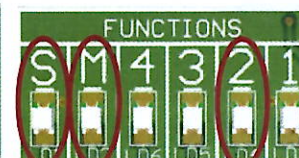
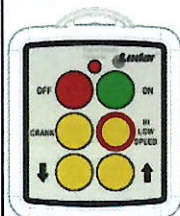
Once the ignition is on, and it is safe to do so, **F1 (CRANK)** can be pressed on the **TRANSMITTER** to crank the engine.

The following lights will be illuminate on the **RECEIVER**. The **F1** light will only be visible during the button press as it is not a latching function. A safety measure has been placed on this stage to prevent the user from cranking while the engine is running. There is a **THREE** second cranking time out placed on **F1** which negates any further presses of **F1** until the **STOP (OFF)** button has been pressed.



4

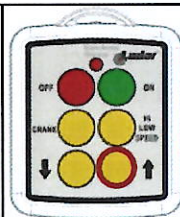
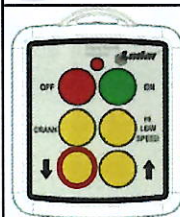
The **F2 (HI/LOW SPEED)** function will dictate the engine speed. A successful push will latch the function to **INCREASE** the engine speed and turn on the respective lights on the **RECEIVER**. A relay will energise at this point. If no sound is apparent upon pushing F2, then please contact your dealer. There is no time out requirements placed on this function which means the speed can be changed at any time during its operation. Note, the **RECEIVER** has to be placed into **DIR 1** to enable the Lodar to dictate the engine speed.



5

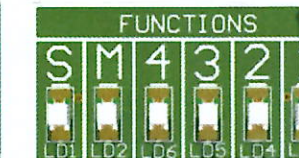
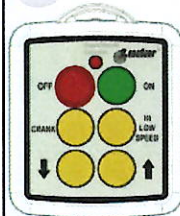
The **↓** key will operate **F3** on the Lodar receiver which in turn will activate the "FUNCTIONS 3" LED. The **↑** key will operate **F4** on the Lodar receiver which in turn will activate the "FUNCTIONS 4" LED. Please **NOTE** that the

Function keys will not operate unless the Lodar is **ACTIVE** and **SET**. Both **↓** **↑** are **POSITIVE LATCHING OUTPUTS** and will have the same voltage as the Lodars input. Another add-on board can be used if a different voltage is needed for these outputs. Please contact your dealer for more information.



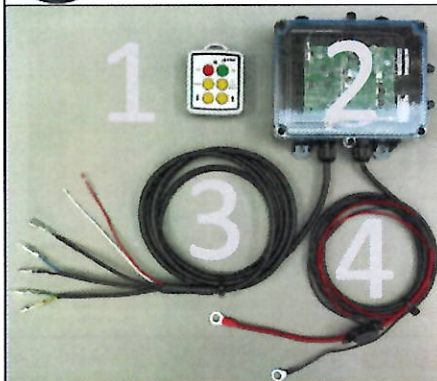
6

The **STOP (OFF)** button on the **TRANSMITTER** can be pushed to turn off the engine, all the lights on the **RECEIVER**, except the status light, will turn off to indicate that the ignition has been deactivated. The engine will **NOT** turn off using the transmitter if the key on the Honda engine is not set to the off position. The engine can not be restarted for a period of **THREE** seconds, this is a safety feature and **CAN NOT** be disabled.



Contact Information:
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60 Sandwell Street,
Walsall. WS1 3EB. UK

Tel. +44 1922 613633
Fax. +44 1922 626991
www.lodar.com



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#	Function
1	Transmitter
2	Receiver
3	Lodar Honda Loom
4	Lodar Power



ECU and Starter-motor



Lodar Power

Wire colour	Application
RED	12V DC positive supply
BLACK	0V



Before any connections are made, ensure the switches are set to **OFF** and **DIR 1**. This will ensure the Lodar is **OFF** and the engine is set to **LOW SPEED**.

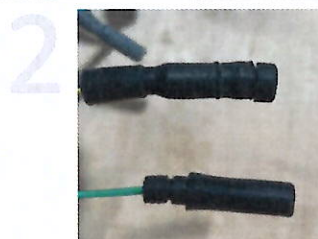
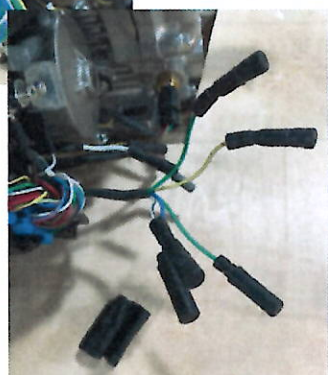
Honda Loom

Wire colour	Application
GREEN	Data ground (female bullet)
YELLOW	Data input (male bullet)
BROWN	Starter solenoid (duplex spade)
BLUE	Engine on (female bullet)
BLACK	Engine on (male bullet)
RED	Aux output one
WHITE	Aux output two

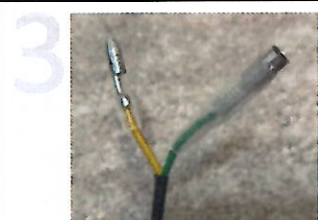
Honda IGX 700/800 SERIES DATA CONNECTIONS



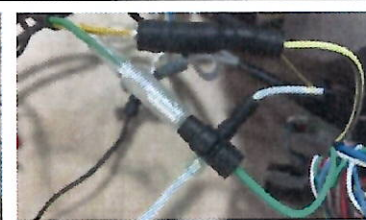
Control data inputs are located inside a black tube behind the switch box and held on with a re-usable zip tie. Push down to release the lever to free the cables.



Find the green and the yellow/black wires. Remove the plugs and caps.

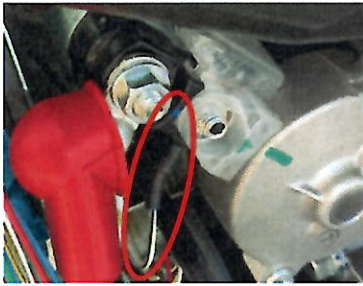


Mate the yellow and green Lodar Honda loom wires with the green and yellow/black wires on the IGX 700/800. Tuck and wrap the unused wires back into the tube. Re-attach the zip tie.



Honda IGX 700/800 SERIES STARTER MOTOR CONNECTIONS

1



The solenoid on the electric starter motor has a 1/4" male stud connection.

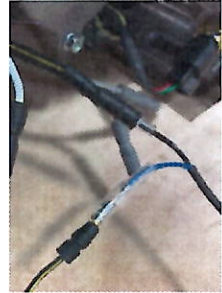
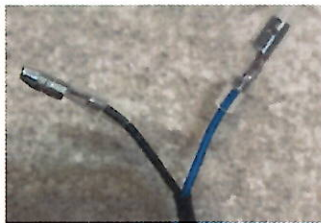
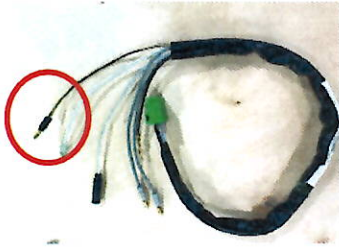
Remove the 90° black rubber covered female spade white/black wire to expose the connection. It is located on the rear side of the starter motor.

2



Connect the white and black wire onto the back of the brown wire from the Lodar Honda loom. Connect the brown wire onto the 1/4" male stud.

Honda IGX 700/800 SERIES STANDARD WIRE CONNECTIONS (17A COIL)



Locate the Honda engine rectifier harness. Connect the blue female bullet wire from the Lodar Honda loom to the black/yellow male bullet wire on the rectifier harness. Connect the black male bullet wire from the Lodar Honda loom to the black/yellow wire Honda

Honda IGX 700/800 SERIES WIRE CONNECTIONS (26A COIL)

1



Locate the ECU and remove the 2 X 8mm Hex head

2



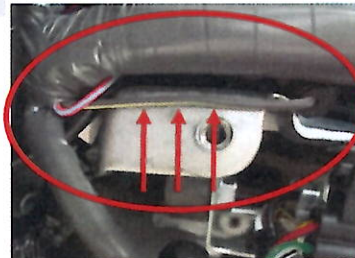
Gently pull out the grey bundle to expose the yellow/black wire and break the connection.

3



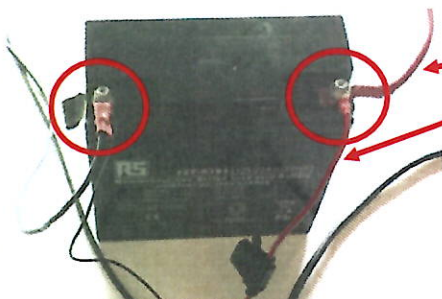
Mate the blue female bullet connector from the Lodar Honda loom to the male yellow/black wire. Mate the male black connector from the Lodar Honda loom to

4



Gently push back the wires behind the grey bundle. Route the black and blue wires out the back end of the channel. Re-install the ECU making sure not

Honda IGX 700/800 SERIES FINAL CONNECTION FOR ALL SYSTEMS



ENGINE

LODAR

The Lodar and the engine **MUST** be connected to the battery as shown.

PLEASE ENSURE THE ENGINE IS ALSO CONNECTED TO THE SAME SUPPLY.

Secure the cables to the engine with the provided cable tie.