



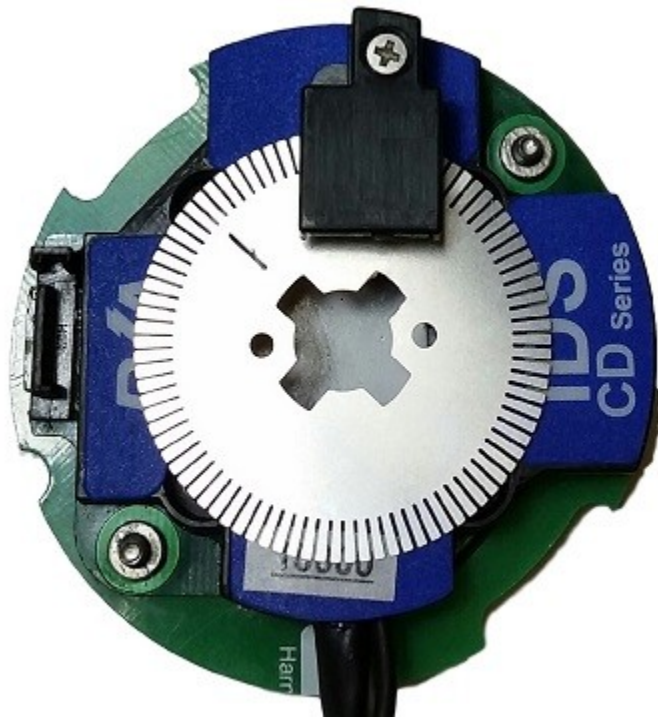
# Ural-Dnepr

Installation manual for

Ural & Dnepr 1960-2012 models

\*Fits 4 hole & 3 hole cam seal retainers

**12 VOLT NEGATIVE GROUND SYSTEMS**



**Your kit includes:**

**Ignition coil, tower springs, and plug wires.**

**Ignition module and adapter with hardware.**

**11mm I.D. encoder disc with spacers.**

**Electrical crimp connectors and eyelets for ground (earth).**

**Instructions.**

**You will need a basic understanding of motorcycle electrical systems, be able to accurately find TDC of the #1 piston, and perform quality crimps.**

**We recommend using shrink tubing or our flexible wire covering to protect the sensitive wires from damage.**

**We also recommend using a depth gauge or dial caliper to verify TDC if you don't have timing marks on your engine.**

**A test light is also recommended to find switched power from the cycle.**

## **Basic installation involves:**

Replace the standard ignition with the new ignition.  
Install new coil in a clean dry area of your choosing.  
Connect the ignition and coil leads  
Set #1 cylinder to TDC and calibrate timing using the encoder wheel.

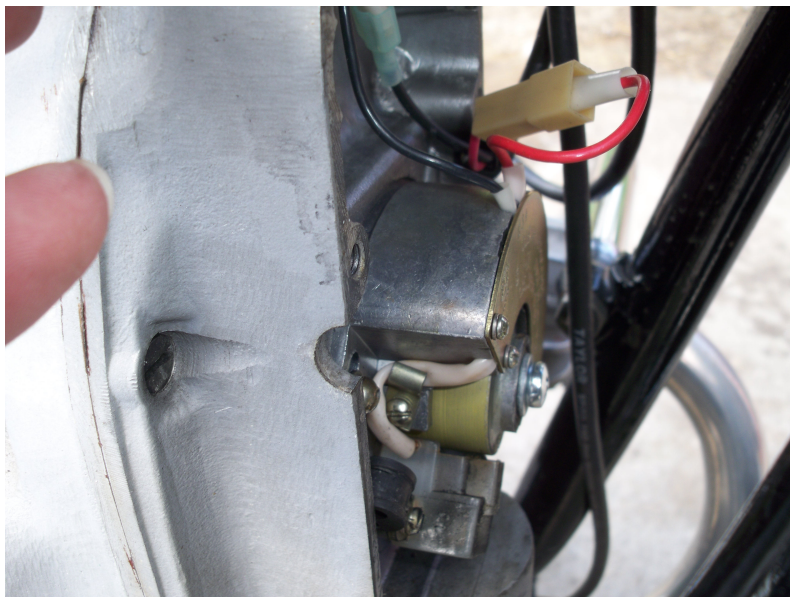
This job should be easy for most people with a basic understanding of ignitions and engines. If you have questions email [c5@c5ignitions.com](mailto:c5@c5ignitions.com) so we can assist you.

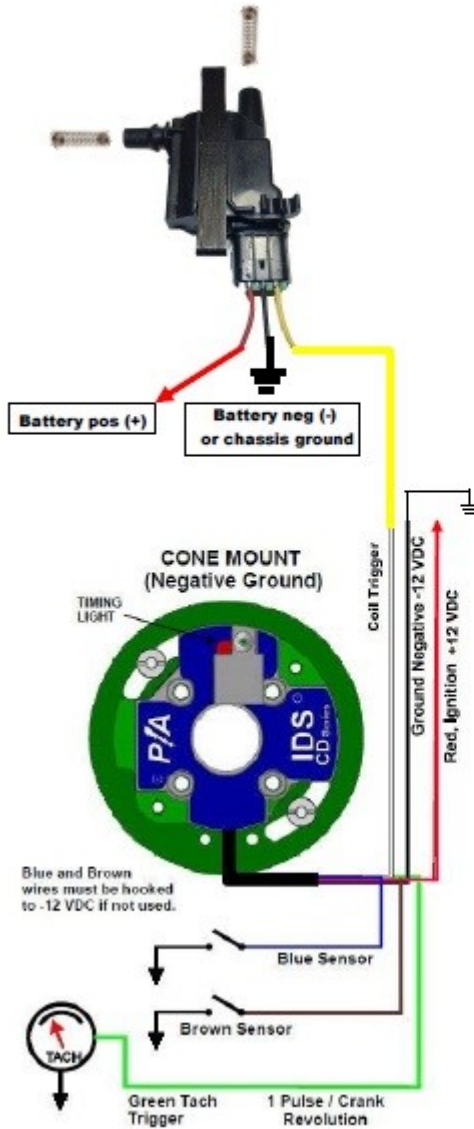
### **Step 1.**

Disconnect your battery.

Locate the ignition housing at the front of your engine and remove the cover.  
Carefully remove the stock ignition parts. On older engines you will need to plug the three (3) original ignition mounting holes that will not be used. Use your old hardware or similar.

Install the ignition adapter plate using spacers and hardware provided. You will use the 5mm (#10-32) flat head screws to mount the adapter to engine, and the small #6-32 screws to fasten the ignition onto the adapter plate.





**Sensor Control Wires**

2 Sensor Wires may be Grounded or Ungrounded to switch timing curves, between 4 timing curves.

Note: Grounded means attached to Neg (-)  
Chart below is based on a Negative Grounded System.

Progression from most to least advance	
Blue Sensor 1	Brown Sensor 2
Grounded (-)	Grounded (-)
Grounded (-)	UnGrounded
UnGrounded	Grounded (-)
UnGrounded	UnGrounded

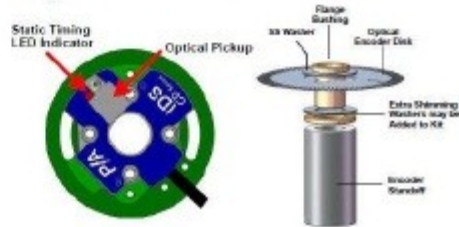
**Normal Stock Application**  
Ground (-) Blue and Brown Wires

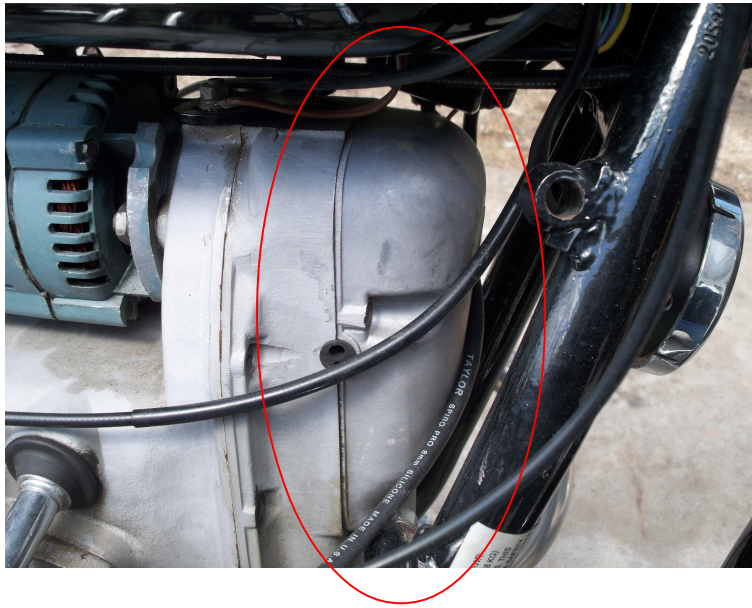
Higher Compression or lower octane fuels may require less advance. This can be achieved by ungrounding the appropriate Sensor wires or the addition of a VCES (vacuum switch) to change timing when engine is under load.

**Encoder (rotor) Installation and Cam end play**

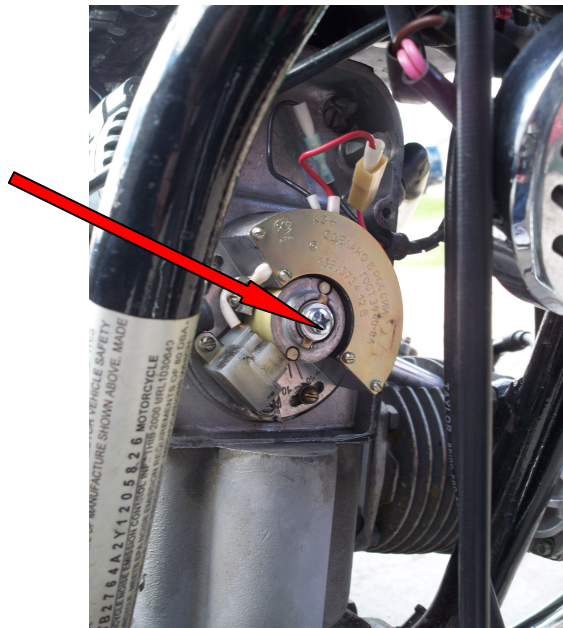


NOTE: The stock bolt is used to lock down the Encoder Adapter. Some aftermarket cams use a 1/4 x 25 SAE thread. If the bolt does not thread into the cam easily by hand, DO NOT USE A WRENCH TO TIGHTEN, since the cam may require a different bolt. Use care not to break the bolt off inside the cam. If you had a different aftermarket ignition installed the bolt may be incorrect in length and require the OEM bolt length.

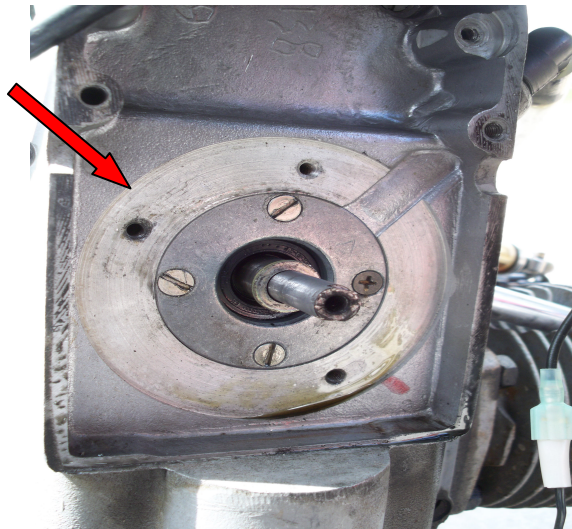




Remove this screw  
but save the washer  
for the new ignition.



**For 1960-  
2012 Urals  
plug the  
original  
mounting  
screws or  
similar.**





Remove mounting screws and  
Replace with the longer  
screws and spacers provided  
in our kit.



Install adapter plate as shown  
in the picture, using spacers  
provided.  
We recommend a small  
amount of low strength  
locking agent. Clean oil and  
dirt from holes before  
applying.



Using the #6-32 panhead screws  
CAREFULLY fasten the ignition onto  
the plate.  
DO NOT over tighten or you will  
crack the housing and possibly  
destroy the ignition.  
If you are unsure how to perform  
this step please STOP and ask  
someone for help.

## Step 2

Place one of the pistons at Top Dead Center (TDC) using the factory timing marks or a dial caliper in the sparkplug hole. Connect 12 volt battery power to the module. Now rotate the encoder (installed using the 1.0 inch tall spacer and short top spacer) making sure the disc is not contacting any part of the ignition.

### **DO NOT TIGHTEN ENCODER YET.**

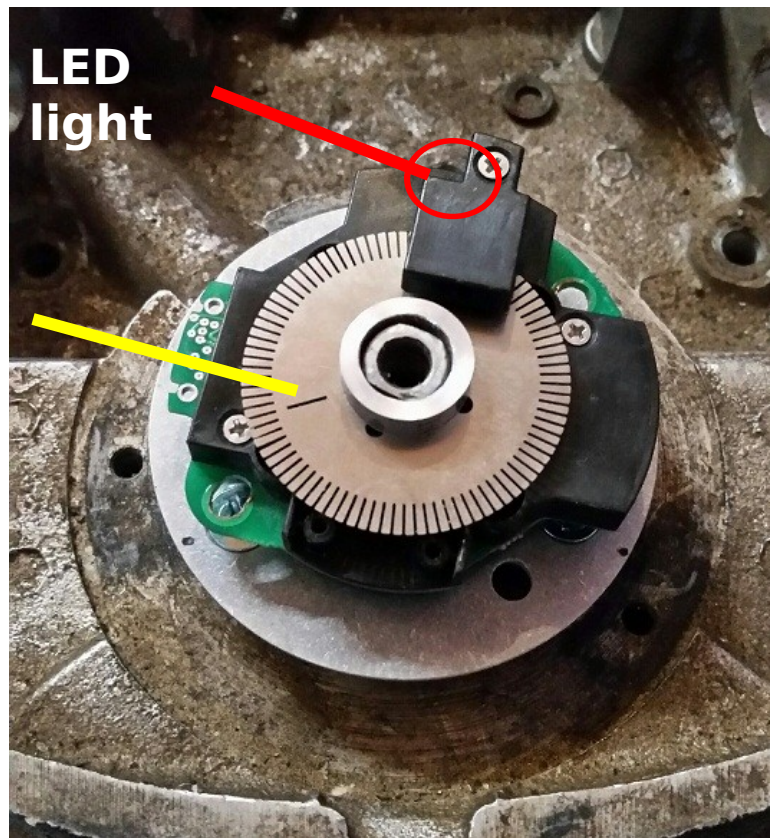
Connect the red power lead and black ground lead. Apply power to the ignition module. Rotate the encoder until the LED light comes on. Carefully hold the encoder and tighten the center screw/bolt using a small amount of locking agent.

If you are not using a tachometer, fold over the green lead and tape or shrink tube the lead so it cannot touch anything.

Connect the other wires according to the diagram provided with the kit.

As you rotate the encoder under the reader, a small LED light will come on when the SINGLE SLOT OF THE DISC is under the reader.

Carefully hold the encoder disc and tighten the screw using reasonable force and a small amount of "NON permanent" locking agent.



#### **Step 4**

Remove your stock coil and install the new multi fire coil.  
All Russian kits now come with our new MC-2 coil.  
There are three wire leads coming from the coil.

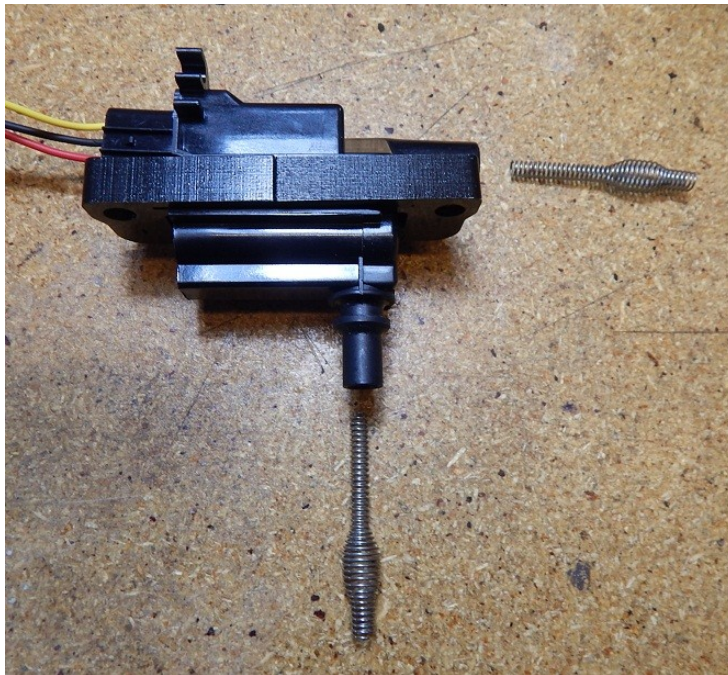
Red = (+) power lead to battery

Black = (-) ground lead to battery

Yellow = Trigger lead. ONLY connect this to the white trigger lead coming from the ignition module! DO NOT allow this yellow lead to touch a ground.

It would turn the coil on and destroy it, also causing a fire hazard.

Mount the coil where it cannot contact the fuel tank, and be sure to ALWAYS use the provided coil tower springs (this is a Coil On Plug style coil).



Our new springs should be mounted so the fat end fits into the sparkplug boot to keep them in place upon future removal.



We notice improved starting effort and often no longer need to “feed it throttle” when starting. Customers typically notice faster warm ups due to the multi-spark function of the ignition coil. If you regularly ride in wet weather apply a small amount of silicone where the wires exit the points area. The encoder is stainless steel and shouldn’t corrode under normal riding conditions. We have put forth great effort to design and build a quality product. We encourage suggestions or improvements to the kit and/or instructions.  
Happy & Safe Riding.

-C5 Performance Inc.

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