Ural (Урал) - Днепр (Днепр) Russian Motorcycle Generators and Alternators
Part III-1: Г-11 (G-11) and Г-11А (G-11A) Generators

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## Types of Generators/Alternators for Ural (Урал) and Dнепр (Днепр)

<table>
<thead>
<tr>
<th>Generator/Alternator</th>
<th>Type</th>
<th>Vintage</th>
<th>Nominal Voltage</th>
<th>Current</th>
<th>Nominal Power</th>
<th>Motorcycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Г-11 (G-11)</td>
<td>DC Generator</td>
<td>1941-1951</td>
<td>6-Volt (7-Volt)</td>
<td>7-Amp</td>
<td>45-Watts</td>
<td>M-72</td>
</tr>
<tr>
<td>Г-11А (G-11А)</td>
<td>DC Generator</td>
<td>1952-1957</td>
<td>6-Volt (7-Volt)</td>
<td>7-Amp</td>
<td>45-Watts</td>
<td>M-72, M-72M, M-61</td>
</tr>
<tr>
<td>Nippon Denso</td>
<td>Alternator</td>
<td>2004-present</td>
<td>12-Volt (14-Volt)</td>
<td>55-Amp</td>
<td>770-Watts</td>
<td>IMZ 8.103, 8.103X, 8.123, 8.123X “750” Series</td>
</tr>
</tbody>
</table>

### Notes:
1. **Nomenclature:** The Cyrillic letter “Г” transliterates (Russian-to-Latin) to “G” or “L” or “T.” Thus we see Г-414 or G-414 or L-414 or T-414, all the same part.
2. Cannot use Г-424 Alternator with discharged battery or without battery.
3. MB-750 = MW-750, MB-750M = MB-750M
4. The frame (case) of the Г-11/Г-11А generator is positive (positive-ground).
5. Г-414 Generator: P/N: 750181 6-Volt (negative ground), whereas P/N: 750181-A (positive-ground) for fitting Г-11А’s into early K-750’s.
Alternators have progressed in output voltage and power. From the Г-11 (G-11) generator of 6-Volts/45-Watts in 1941, the Г-11A in 1952, the Г-414 6V/65 W in 1957, the Г-424 of 12V/150W in 1974, the 14.3771 of 12V/500W in 1998.5, to the present-day Nippon-Denso alternator of 12-V/770W.
Г-11 and Г-11А (G-11 & G-11A) 6-Volt Generator (1941-1957)

- 6-Volt / 7-Ampere / 45-Watt Generator
- Positive-Ground Case
- Used on:
  - Ural (ИМЗ): M-72, M-72M, M-61
  - Днепр (КМЗ): M-72, M-72N, early K-750
- Used in Conjunction with PP-1, PP-30, PP-31 and PP-31A Regulators
Г-11 and Г-11A 6-Volt Generator Cross-Section

1. Pinion Drive
2. Armature
3. Armature Winding
4. Pole Extension or Shoe
5. Rotor
6. Carbon Brush
7. Commutator
8. Case
Г-11А (G-11A) Generator

The rotor is eccentrically located to allow a controlled meshing of the gears by minor rotation and clamping of the case.
Г-11A mounted on an M-72 (www.oldtimergarage.szn.pl)
Г-11A Generator Mounted on K-750, MB-750 Engine
(www.oldtimergarage.eu)
Γ-11A Generator Mounted on Very Early K-750 Engine (1951)
(www.oldtimergarage.eu)

Very Early K-750 Engine (1951)
Vendor ID: 003.476
List Price: 1,790 €
(www.oldtimergarage.eu)
The Г-11A generator is driven off a gear mounted on the timing cam.
M-72 Side-View Showing Г-11A Generator

Г-11А Generator
М-72 Top-View Showing Г-11А Generator

Г-11А Generator
Dnepr (Днепр) Early М-72 (1942)
with Г-11 generator and PP-1 voltage regulator

G-11 Generator
PP-1 Regulator
KM-01 Ignition Coil
PM-05 Breaker/Distributor
3MT-7 Battery

Manual Spark Advance
Hi/Lo Beam Switch
Generator (Г-11)
Regulator (PP-1)

Horn
Positive Ground

Breaker/Distributor (PM-05)
Ignition Coil (KM-01)
Battery
Ural (Урал) М-72 with Г-11 Generator (through 1949)

1 - generator: Г-11
2 - relay-regulator: PP-1
3 - rechargeable battery
4 - valve
5 - breaker/distributor: PM-05
6 - ignition coil: KM-01
7 - spark plugs (candles)
8 - signal
9 - lamp
10 - driving lamp and low light
11 - the parking light bulb
12 - tail light
13 - tail light sidecar
14 - front light sidecar
15 - control lamp
16 - ignition switch
17 - key
18 - fuse
19 - switch beam and dipped beam
20 - lever switch near and far light
21 - horn button signal
22 - Ignition control stick
23 - fuse lamps
24, 25 and 26 - high voltage wires
27, 28, 29 and 30 - bundle of low voltage wires
31 and 32 wire lanterns sidecar

Generator (Г-11A, 1950+)

Positive-Ground

Battery

Regulator (PP-1)

Breaker/Distributor (PM-05)

Hi/Lo Beam Switch

Horn Button

Sidecar Fuse

Spark Plug (candle)
Ural (Урал) Later М-72 (1955) with Г-11A generator and PP-31 voltage regulator

- **Generator (G-11A)**
- **Regulator (PP-31A)**
- **Ignition Coil (IG-4085B)**
- **Hi/Lo Beam Switch**
- **Manual Spark Advance**
- **Breaker/Distributor PM-05**
- **Battery**
- **Horn**
- **Positive Ground**
- **G-11A Alternator**
- **PP-31A Regulator**
- **IG-4085B Coil**
- **PM-05 Breaker/Distributor**
- **3MT-14 Battery**
1 – generator: Г-11А
2 - relay-regulator: PP-31
3 - rechargeable battery
4 – valve
5 – breaker: PM-05
6 - ignition coil: B2B
7 – spark plugs (candles)
8 – signal
9 – lamp
10 - driving lamp and low light
11 - the parking light bulb
12 - tail light
13 - tail light sidecar
14 - front light sidecar
15 - control lamp
16 - a central switch
17 – key
18 – safety
19 - switch beam and dipped beam
20 - lever switch near and far light
21 - button signal
22 - Ignition control stick
23 - fuse lamps
24, 25 and 26 - high voltage wires
27, 28, 29 and 30 - bundle of low voltage wires
31 and 32 wire lanterns stroller
Dnepr (Днепр) Early K-750
with PP-31 Voltage Regulator, PM-05 Breaker/Distributor and B2B Ignition Coil

Generator (Г-11А)

Hi/Lo Beam Switch

Battery

Breaker/Distributor (PM-05)

G-11A Generator
PP-31A Regulator
B2B Ignition Coil
PM-05 Breaker/Distributor
3MT-7 Battery
Dnepr (Днепр) Early K-750 and K-750М
(with Ignition Coil B2B and Distributor PM-05 for Manual Control of Firing Angle)

1 - lamp beam and dipped beam, 2 – key, 3 – fuse, 4 - lamp, 5 - central switch, 6 - wire “ground”, 7 - high voltage wire, 8 – spark plugs, 9 - high voltage 10 - ignition coil, 11 - front light sidecar, 12 – horn, 13 - wire front canopy sidecar, 14 - tail light sidecar, 15 – motorcycle tail lamp, 16 - gauge stoplight, 17 - Relay-regulator, 18 – generator, 19 – battery, 20 - low voltage wiring loom, 21 - wire "battery – ground, 22 - breaker, 23 - valve, 24 - high voltage wire and 25 – horn button, 26 - wire signal 27 - advance ignition; 28 - cord switch driving and parking light, 29 - switch to driving and parking light, 30 - control lamp, 31 - parking light bulb, 32 - lamp illuminated; 33 - connecting Jack wires, 34 - cable sidecar lamps, 35 - wire from sensor to stop lamp, 36 - wire from connector to lamp lighting plate
Components of the Г-11 and Г-11A 6-Volt Generators
Brush Set for Г-11А Generator for M-72, K-750, and MB-750