

# Figure 1A: 6-Volt Electrical Systems (10/09)

**Motorcycle**

**Generator**

**Regulator**

**Ignition Coil**

**Breaker/Distributor**

Ural: M-72, M-72M, M-61  
Dnepr: M-72, M-72N

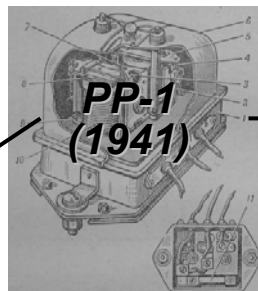


**Г-11/11А: 45 W  
(1941/1952)**

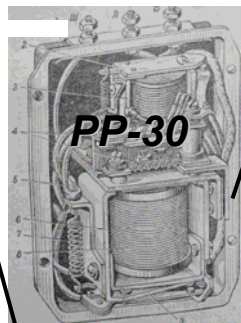
Ural: M-62, M-63, M-66  
Dnepr: K-750, K-750M, MB-750,  
MB-750M, K-650,  
MT-9, MT-12



**Г-414: 65 W  
(1957)**



**PP-1  
(1941)**



**PP-30**



**PP-31/PP-31A  
(1950/1956)**



**PP-302/302A  
(1963/197X)**



**KIM-01**



**IG-4085B  
and  
B11**



**B2B**



**B201/B201A**



**PM-05  
(1954)  
or  
PM-11A**



**PM-302/PM-302A**

# Figure 1B: 12-Volt Electrical Systems (10/09)

**Motorcycle**

**Alternator**

**Regulator**

**Breaker/Distributor - Ignition Coil**

**Ural: M-67, M-67.36,  
IMZ 8.103 Series  
Dnepr: MB-650, MT-10,  
MT-10.36, MT-11, MT-16**



**Ural: IMZ 8.103 Series  
(1999-2003)  
Dnepr: None**



**Contact-less**



**Type I**



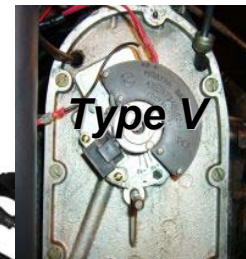
**Type II**



**Ural: IMZ 8.103 Series  
(2004-present)  
Dnepr: None**



**Nippon Denso: 770 W  
(2004)**



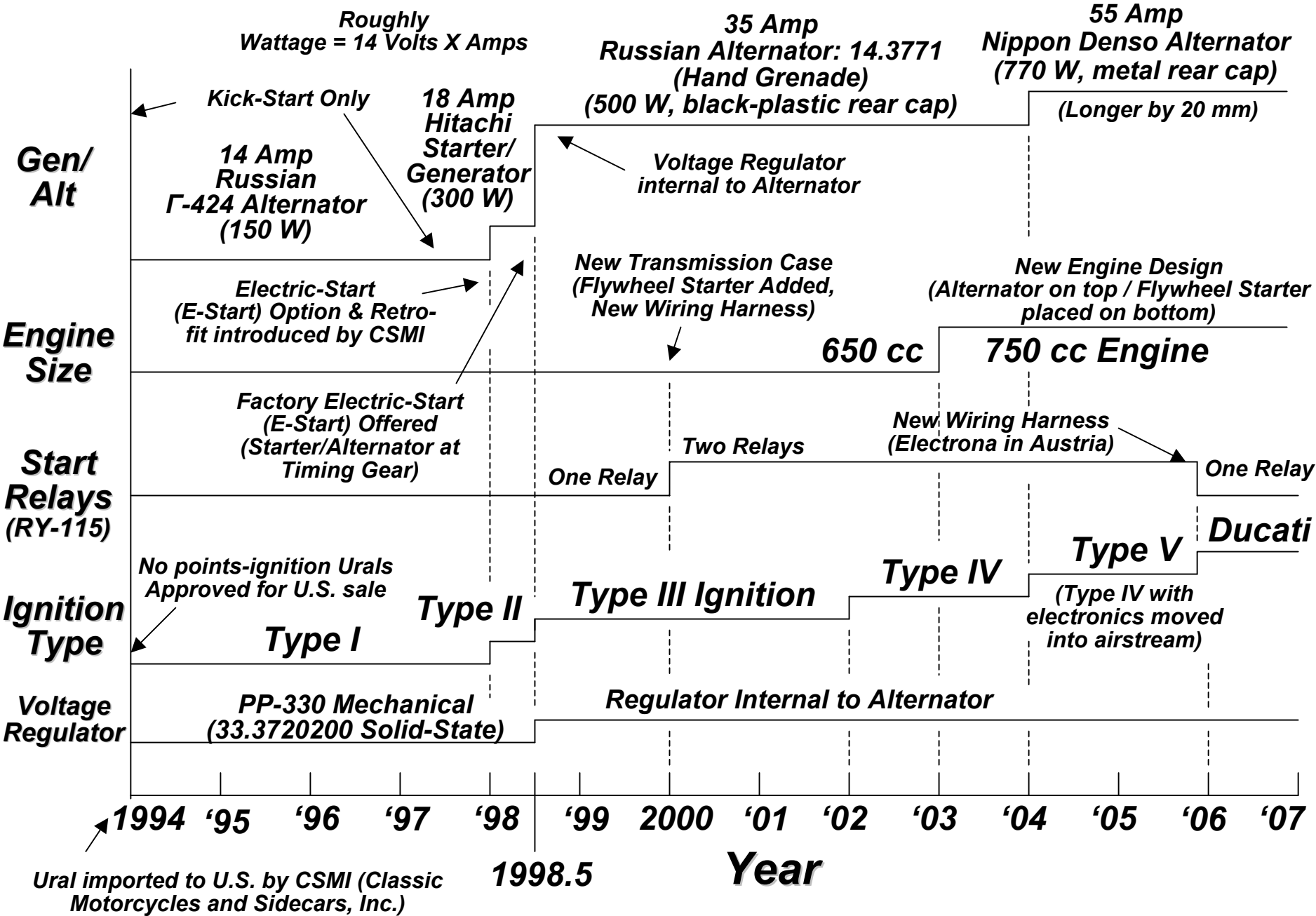
**Internal to  
Alternator**



**Raceway Services  
Power Arc**



# Figure 2: Ural Starter / Generator / Alternator Time-line (10/09)



## **Figure 3A: Upgrading from a Mechanical PP-330**

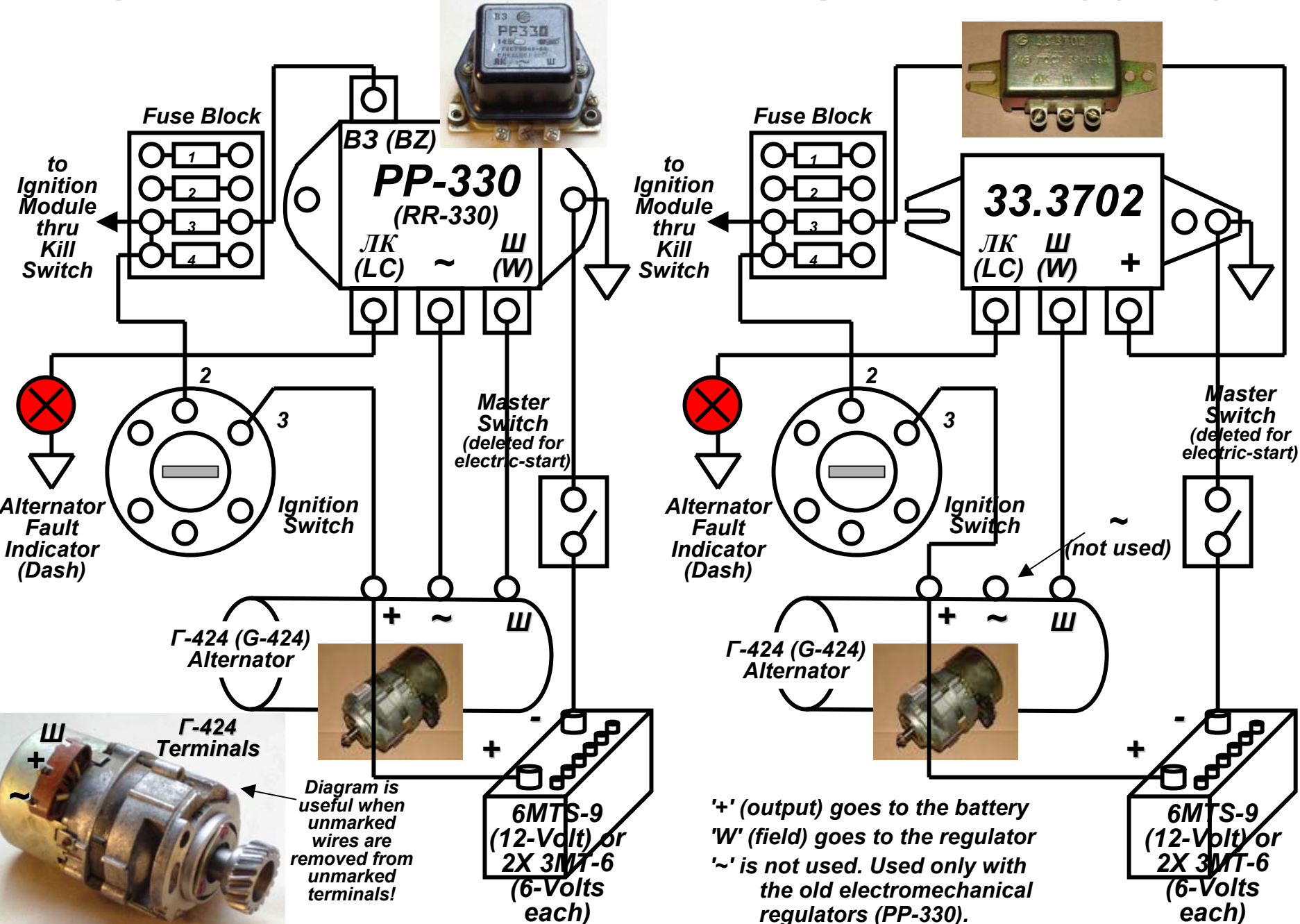
**to a**

## **Solid-State 33.3702 Voltage Regulator**

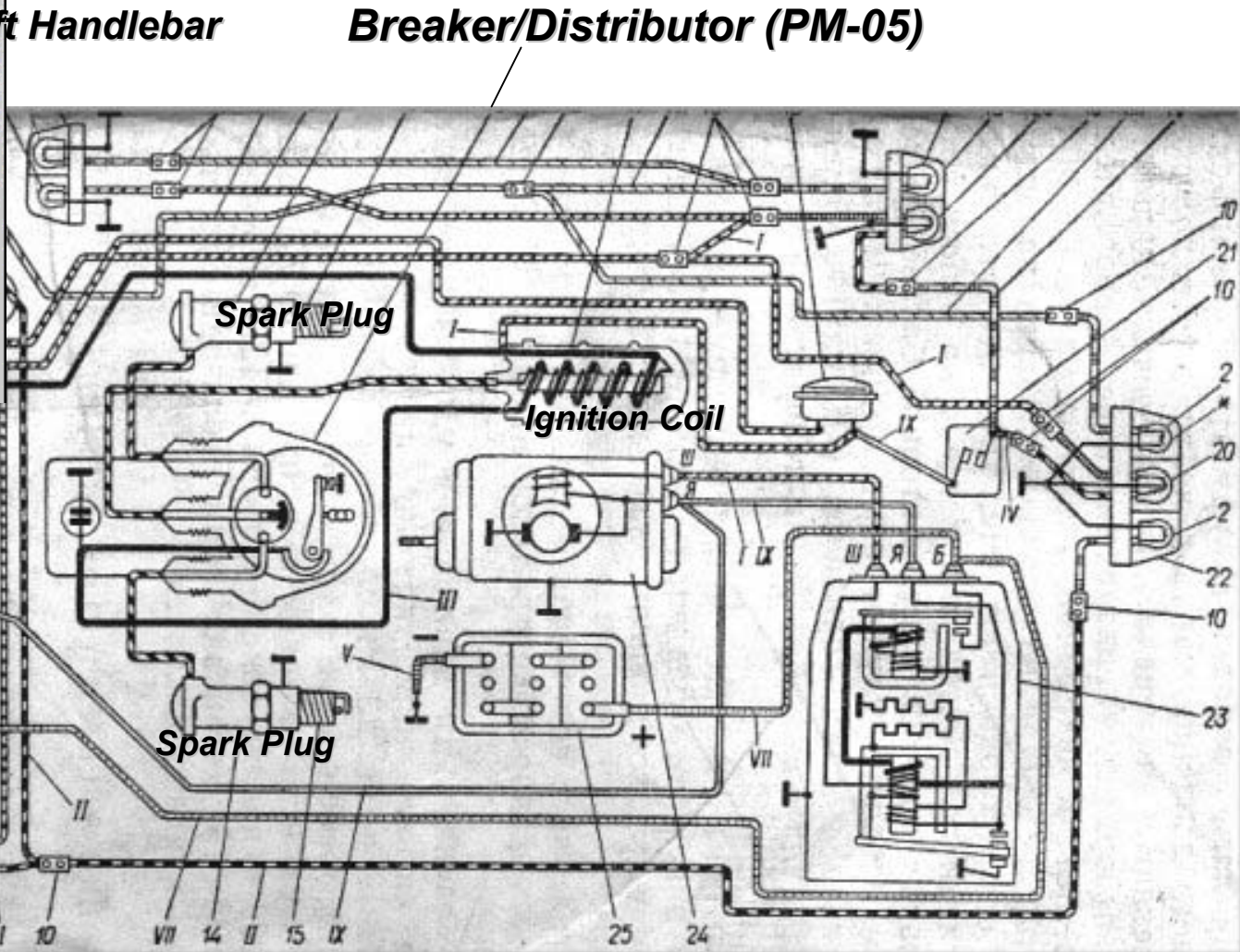
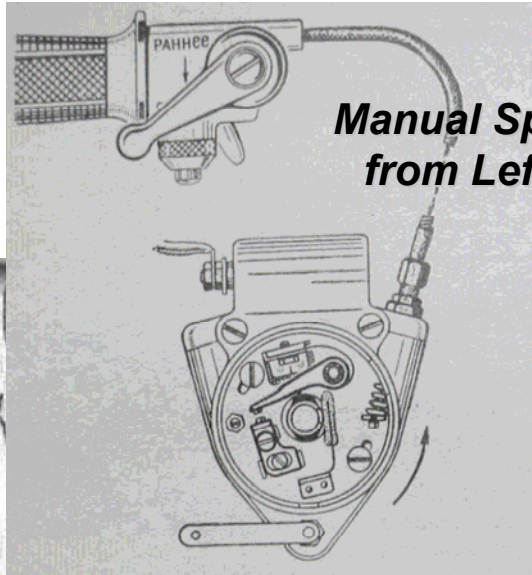


- **Pro (in favor of 33.3702)**
  - **No Adjustments Necessary**
  - **Eliminates Burnt Contacts and Over-Charged (boiling) Battery**
  - **Easily Swapped**
    - **Same Footprint, 2-3 times smaller than the RR330**
    - **Easy Wiring Swap**
    - **Retains Red “Alternator-Fault” Lamp Indicator Function**
  - **Applies to All 12-Volt Urals and Dneprs**
    - **Ural: M-67, M-67.36, 8.103 Series (1994-1998)**
    - **Dnepr: MT-10, MT-10.36, MT-11, MT-16, MW-650 (MB-650)**
  - **Newer Manufactured MT-11’s and MT-16’s Already Have Solid-State 33.3702 Regulator**
  - **Not Subject to Environment (Moisture, Vibration, Dirt)**
- **Con (against 33.3702)**
  - **Not as Robust or Forgiving**
    - **Doesn’t Like to See Incorrect Wiring**
    - **Doesn’t Like to See Momentary Shorts between Pins**
    - **Operation of Alternator without a Battery Strongly Discouraged**

**Figure 3B: MT-11 and MT-16 Alternator/Regulator Circuitry (10/09)**



**Figure 4A: MT-9: Manual Control of Firing Angle  
(B2B Ignition Coil and PM-05 Breaker/Distributor)**



**Figure 4B: MT-9: Automatic Control of Firing Angle**  
(B201A Ignition Coil and PM-302 Breaker)

