Russian Headlight Assemblies

Part XXX-4: Headlight Cavity for the M-61, M-62, M-63 and M-66

(Also See Parts XXX-1 thru -12)

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The headlight cavity contains a speedometer, warning lights, and hi/lo headlight dimmer switching, but the center of interest is the central ignition switch.
Ural (Урал) Ural M-61 (1958-1963)

The headlight cavity of the M-61 resembles the cavity of a M-72 or K-750.
The headlight cavity of the M-62 resembles the cavity of a M-72 or K-750.
1. With the Ignition Key Pulled Out and Central Switch in the Mid-Point Position; All Instruments Are Off (day-time parking).

2. With the Key Pulled Out and Central Switch Turned to the Right; the Tail-Light, Sidecar Lights and Headlight “Dim” Bulb Are “On” (night-time parking).

3. With the Key Fully Pushed In, and Central Switch in the Mid-Point Position; Ignition is “on”, Horn Will Sound if Button Depressed (day-time driving).

4. With the Key Fully Pushed In and Central Switch Turned to the Left; Ignition, Tail-Light, Speedometer Dial Light and Sidecar Lights Are On and, Depending on the Position of the Dimmer Switch, Hi or Lo Beam Headlight.

5. With the Key Fully Pushed In and Central Switch Turned to the Right; Ignition, Tail Lamp, Speedometer Dial Light and Sidecar Lights and Lamp “dim” Bulb Are “on” (driving at night thru well-lighted streets), Horn Will Sound if Button Depressed.
Ural (Урал) M-63 and M-66

1. ignition coil
2. speedometer and odometer
3. front brake lever
4. throttle control twistgrip
5. turn indicator switch
6. rear brake pedal
7. gear change hand lever
8. kick starter
9. gear change floor pedal
10. clutch lever
The M-66 (Ural-3) was the first Ural to use the new paper oil filter cartridge at the front of the motor. Otherwise the machine was basically identical to the M-63 (Ural-2).
1. With Ignition Key Pulled Out and Central Switch in Mid-Point Position; All Instruments Are Off (day-time parking).

2. With Key Pulled Out and Central Switch Turned to Right; the Tail-Light, Sidecar Lights and Headlight “Dim” Bulb Are “On” (night-time parking).

3. With Key Fully Pushed In, and Central Switch in Mid-Point Position; Ignition is “on”, Horn Will Sound if Button Depressed (day-time driving).

4. With Key Fully Pushed In and Central Switch Turned to Left; Ignition, Tail-Light, Speedometer Dial Light and Sidecar Lights Are On and, Depending on the Position of of the Dimmer Switch, Hi or Lo Beam Headlight.

5. With Key Fully Pushed In and Central Switch Turned to Right; Ignition, Tail Lamp, Speedometer Dial Light and Sidecar Lights and Lamp “dim” Bulb Are “on” (driving at night thru well-lighted streets), Horn Will Sound if Button Depressed.
M-61 Headlight Assembly
M-62 (Ural-1) Headlight
1970's Urals (M-63 and M-66) have a very nice simple light, with the speedometer set into it and the ignition key in front.
Ignition Master Switch with “Deco” Covering

• Activated by a Key that Can Be Pulled Out
  – Insert the Key Straight Down and You Get Ignition-Only
  – Put the Key Half-Way In and Turn Left or Right without Activating the Ignition
  – Pull the Key Out in Any Position

• Black Dust Cover
  – Push Forward to See the Key-Slot

• Push-In to Turn-On Ignition

• Turn Right or Left to Turn-On Various Accessories
  – Left or Right Will Be Different Accessories, Depending upon Wiring

Chrome-Plated Ignition Lock/Switch Cover (moto-boxer.com)

Cover Closed

Cover Open

Slide Mechanism
Ural (Урал) Early M-61 with PM-05 Distributor/Breaker Points

1. Headlamp/Dash
2. High and lowbeam
3. Parking light
4. Fuse
5. Key
6. Dimmer switch
7. Horn
8. Generator charge indicator
9. Mechanical dimmer switch lever
10. Primary switch
11. Horn button
12. Speedometer bulb
13. Ignition coil (KM-01)
14. Condenser
15. Spark plugs A8Y
16. Points and distributor
17. Front sidecar fender light
18. Ignition coil
19. DC Generator
20. Battery
21. Horn
22. Regulator
23. Connector
24. Stop light switch
25. Rear sidecar fender light
26. Rear light

Hi/Lo Beam

Horn

Switch

Button
Ural (Урал) later M-61 with PP-302 Regulator

1. Turn Signal Switch
2. Flare Unit
3. 15. Generator (Г-11А)
4. 22. Battery (3MT-6 or 3MT-7)
5. Voltage Regulator
6. 17. Ignition Coil (B2B)
7. 27. Horn
8. 10. Hi/Lo Beam Switch
9. 11. Manual Spark Advance Lever
10. Breaker/Distributor PM-05
11. Horn Button
Ural (Урал) М-63 (Ural-2)

1. Lamp, 2. An incendiary spark, 3. Spark gap, 4. Ignition coil, 5. Breaker with automatic ignition advance, 6. Generator, 7. Taillight motorcycle, 8. Front position lamp sidecar, 9. Taillight sidecar, 10. Battery, 11. Relay-regulator, 12. Stop light switch, 13. Signal, 14. Light switch and button signal I-to the ignition coil (red); II-to the lamp (black); III-on “ground” (brown); IV-to-breaker (red); V-to sidecar lamp (black); VI-from generator to terminal; JS relay-regulator (green); VII-I to generator terminal (green); VIII-filament lamp to dim light (black); IX-filament lamp to beam (green); X-button on signal to the lamp (yellow); XI-to light switch (blue); XII-to-signal ratio (black); XIII-the signal to lamp (yellow); XIV-B switch to time-control (blue); XV-from relay controller to terminal W generator (brown); XVI-in battery (blue)
Ural (Урал) М-63 (Ural-2)

1-to terminal B relay control (blue); II-to coil; III-I to terminal of generator (green); IV-to-signal ratio (black); V-signal from headlamp; VI-to light switch (blue); VII-a button signal to lamp (yellow); VIII-filament lamp to dim light (black); IX-filament lamp to beam (green); X-on “ground” (brown); XI-bike to lamp (black); XII-lanterns to sidecar (black).
1 - sparkplug, 2 - circuit breaker, 3 - hammer breaker, 4 - anvil breaker, 5 - cam plugs, 6 - condenser, 7 - battery, 8 - headlight, 9 - ignition contact, 10 - ignition key, 11 - ignition coil, 12 - spark gap, 13 - secondary winding, 14 - primary winding
Ural (Урал) M-62, M-63 and M-66 without Turn Signals

- Breaker Points (PM-302)
- Ignition Coil (B201)
- Voltage Regulator (PP-302/PP-302A)
- Horn Button
- Foot Brake-Light Switch
- Generator “Charge” Alarm Indicator
- Fuse (15A)
- Horn
- Hi/Lo Beam Dimmer Switch
- Generator (Г-414)
- Breaker Points (PM-302)
- Spark Plug
- Battery
- Generator "Charge" Alarm Indicator

Fig. 49. Laying and Colour of the Wires:
1 — front side lamp; 2 — tail lamp; 3 — headlamp; 4 — storage battery; 5 — tail lamp; 6 — generator; 7 — stop light transmitter; 8 — regulating relay; 9 — spark plugs; 10 — distributor; 11 — ignition coil; 12 — horn; 13 — lights turn knob; I — white; II — black; III — brown; IV — blue; V — green; VI — yellow; VII — red
Ural (Урал) M-62, M63 and M-66 Parts