

Russian Headlight Assemblies

Part XII: Modern Ural Motorcycles

***(Also See Part I: Headlight Cavity, Early Central
Switch and Speedometer)***

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(09/2011)



2003-2007 Gear-Up, Patrol, Tourist and Troyka

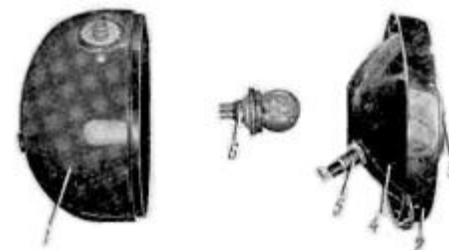
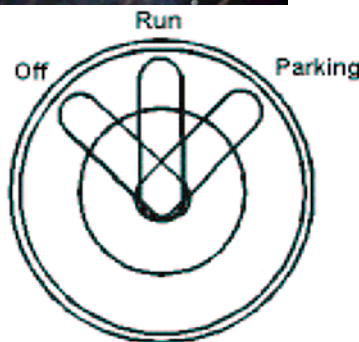
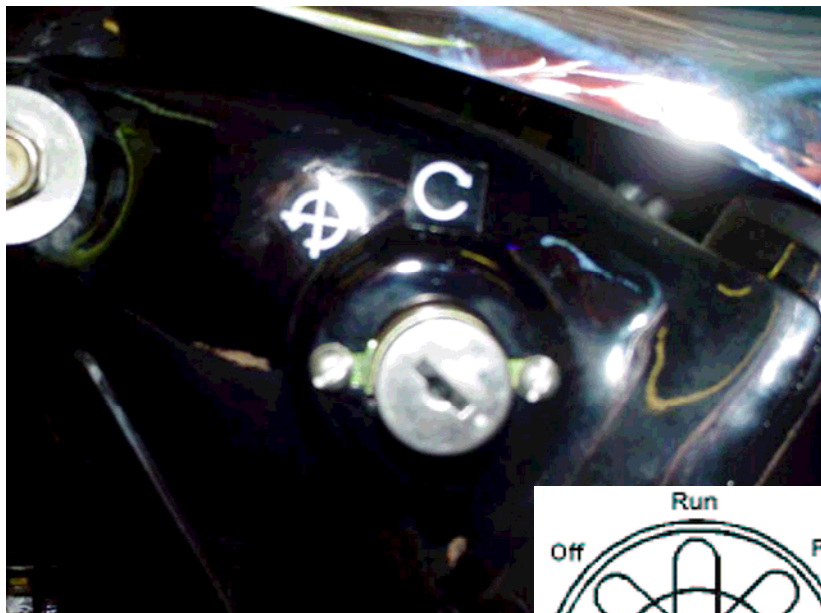


Note: Even though the speed is given in mph and in km/hr, the odometer reads in km's

The dashboard of a modern Ural motorcycle has four indicator lamps and a speedometer. The ignition switch is on the side of the headlight cavity.

2003-2007 Gear-Up, Patrol, Tourist and Troyka

- Ignition Switch Has Three Positions
 - Off: All Electrical Systems Are Off
 - Run: Voltage Supplied to All Electrical Systems
 - Parking: Voltage Supplied to Running Lights Only



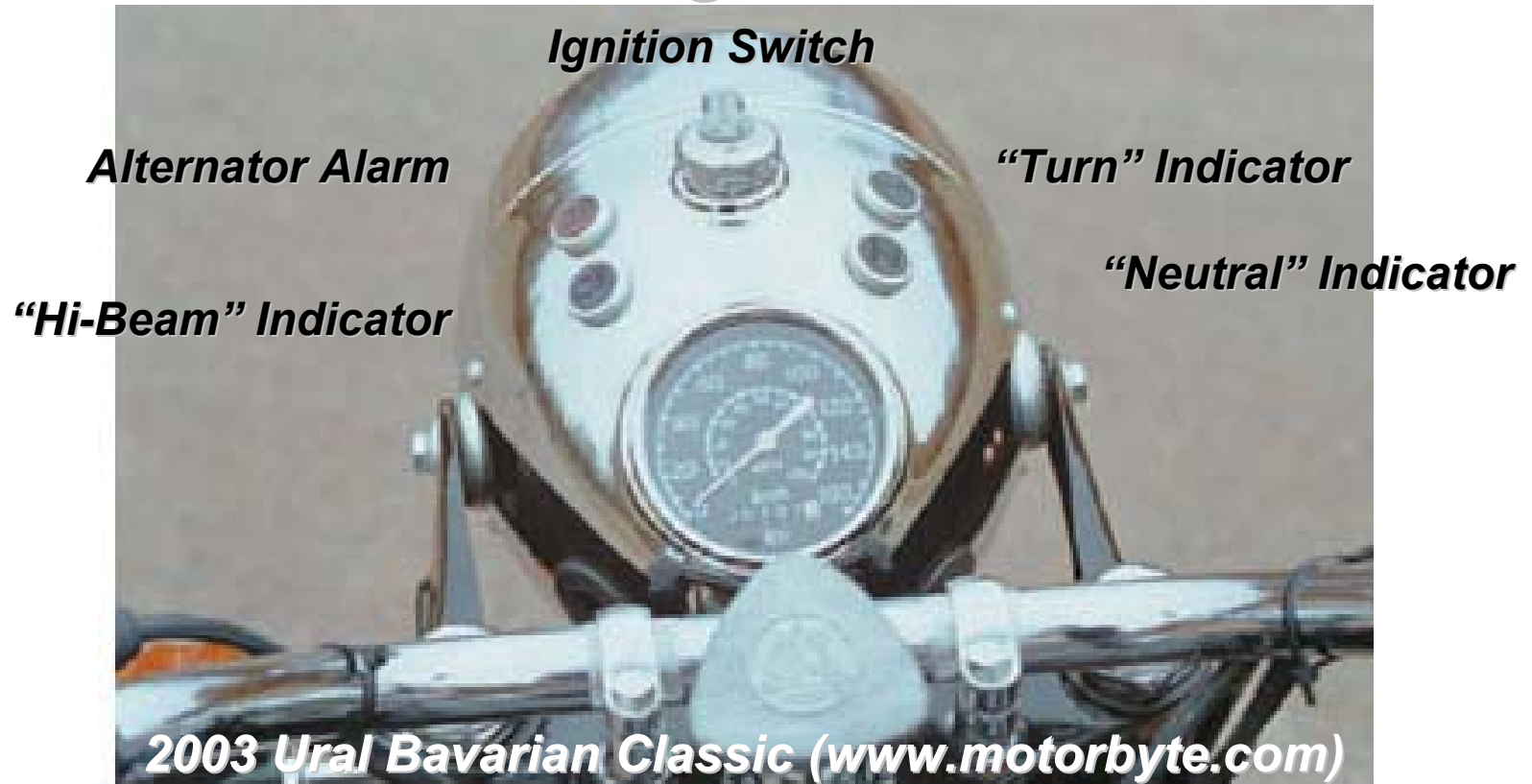
Φαπα ΦΓ-137 (www.scri.ru.com)

1. Headlight Body
2. Headlight Ring
3. Glass Lights
4. Reflector
5. Parking Lamp
6. Dual-Beam Lamp Holder

Φαπα ΦΓ-137 consists of a housing, rim, glass reflector, dual-filament (hi/lo) lamp beam and parking light. The housing is made of sheet steel with two threaded holes on the sides for attaching to the brackets of the front fork with rubber bushings, gaskets and bolts.

**Leaving the key in the Run or Parking position will discharge the battery.
Always return the key to the Off position before removing it.**

Ural Headlight Evolution



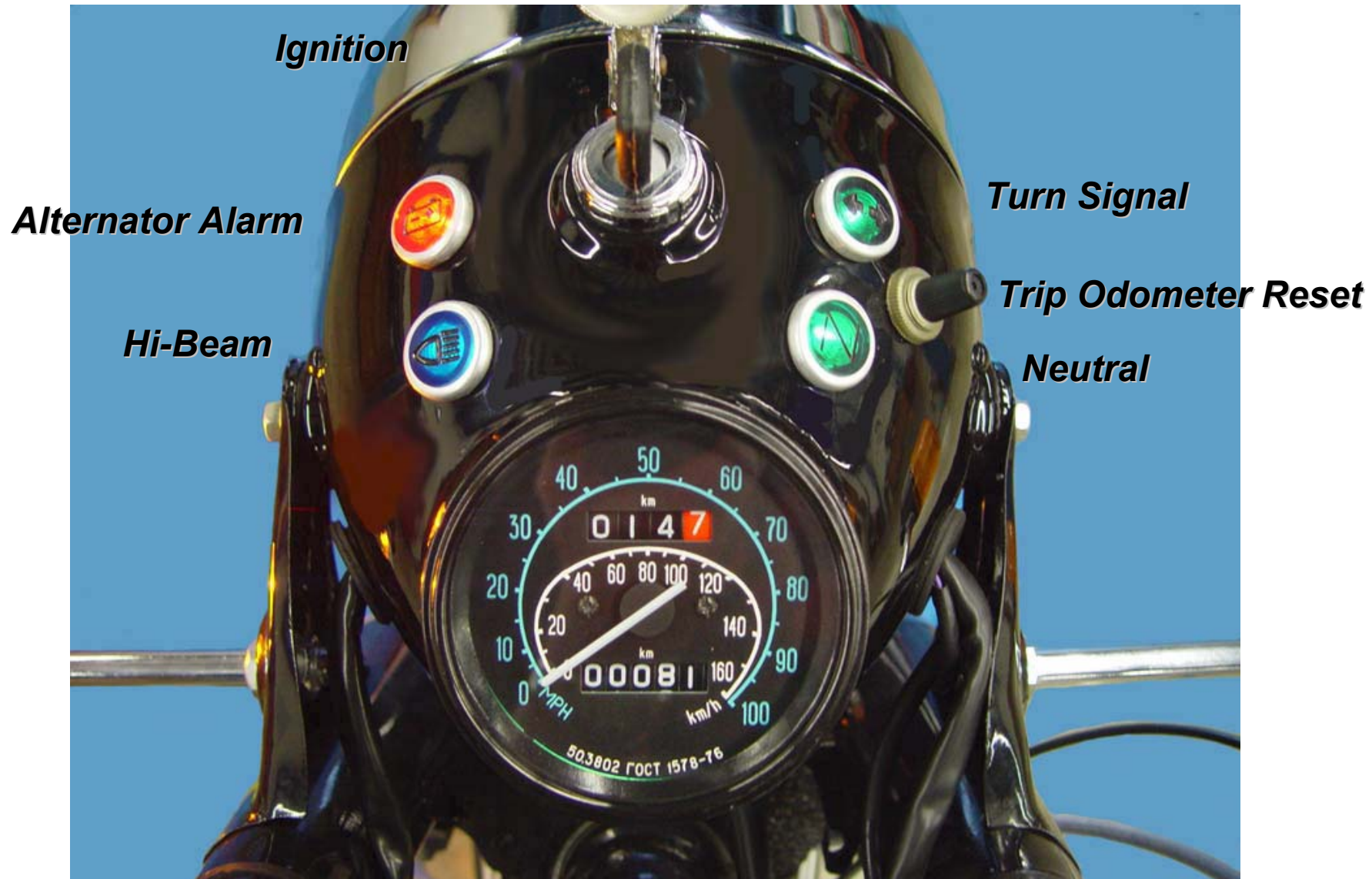
- ***Later Ural’s Have Modern Dash, Set above the Light, with more Indicator Lights than before***
- ***Ignition Key Re-Located to Left Headlight Support Bracket***
- ***Square Indicator Lights Replaced Round Ones around 1998***



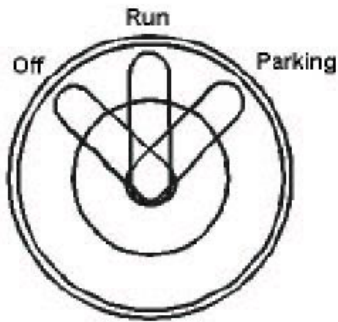
Ural Retro with Classic Instrument Array



Ural Retro



Ural 2002-2005 Ignition Switch



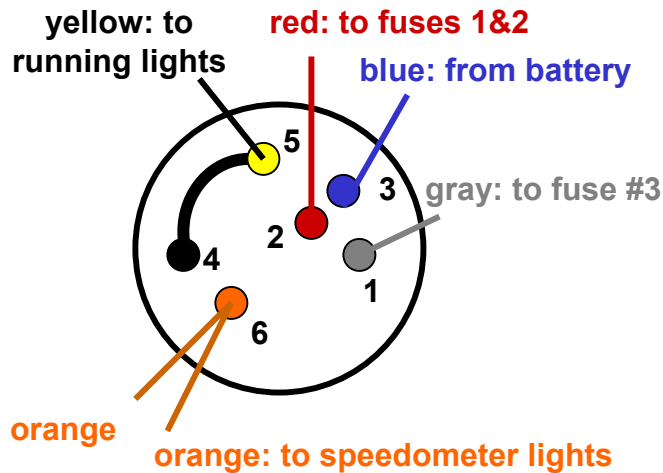
Ignition Switch	Headlight	Brake Light	Turn Signals	Running Lights
Off	Non-Op	Non-Op	Non-Op	Non-Op
Run	Operate	Operate	Operate	Operate
Park	Non-Op	Non-Op	Non-Op	Operate

Non-Op = non-Operational, Operate = Operational

Off: All electrical systems are off.

Run: Voltage is applied to all electrical systems.

Parking: Voltage is applied to running lights only.



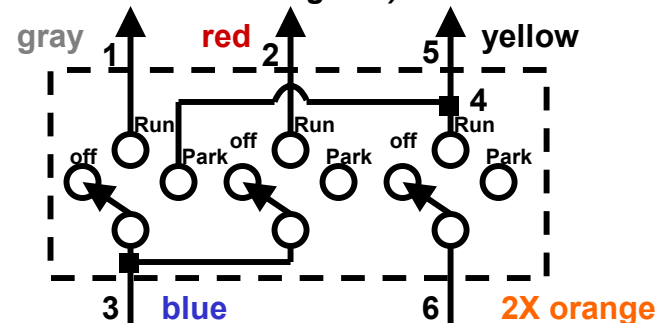
Back View of Ignition Switch

Switch Pin #	1	2	3	4	5	6
Wire Color	grey	red	blue	none	yellow	orange
Off	0 V.	0 V.	12 V.	0 V.	0 V.	0 V.
Run	12 V.	12 V.	12 V.	12 V.	12 V.	12 V.
Park	0 V.	0 V.	12 V.	12 V.	12 V.	0 V.

(to Fuse #1
Headlight
Control Relays)

(to Fuse #3&4
Ignition, Electric
Start Relays,
Brakes, Horn and
Turn Signals)

(to Fuse #4
Running Lights)



(from +12-Volt Battery and Alternator)

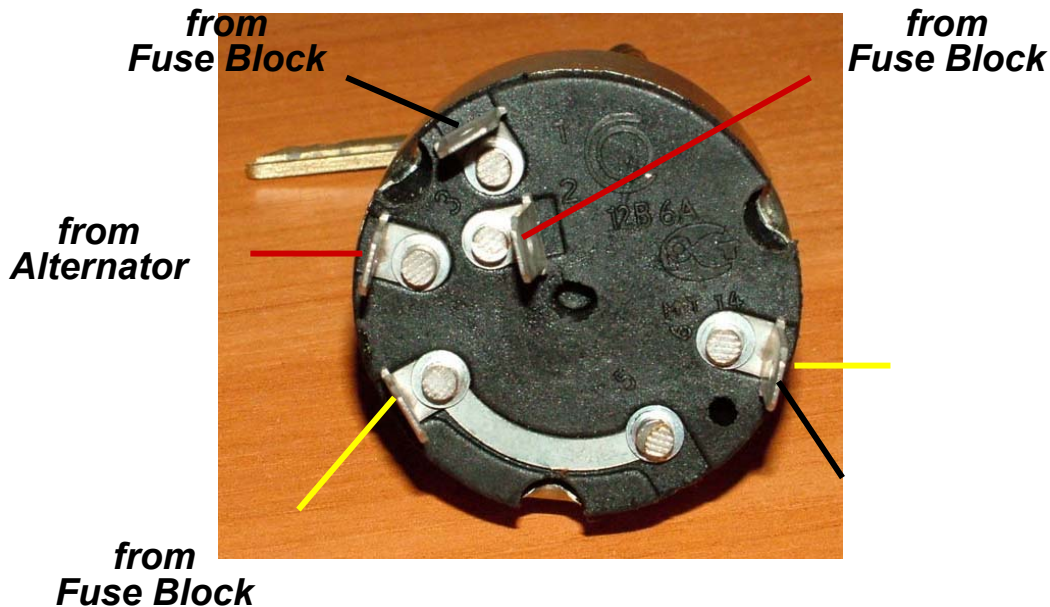
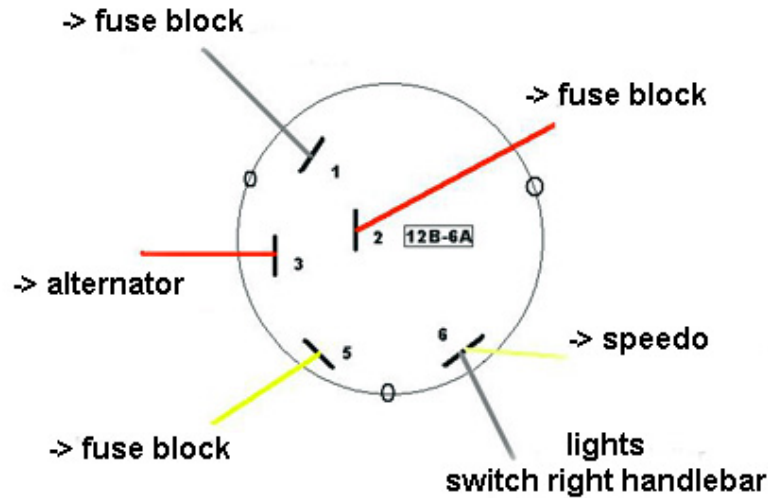
(to speedometer lights)

Wire Colors are shown, because switch numbers are very hard to read!

Ignition Switch for Ural 650, IMZ 8.103-10 and 8.103-40

(www.ill.privat.t-online.de)

Ignition Switch



€10 (moto-boxer.com)



Ural Speedometer IMZ-8.102-17004 (www.oldtimergarage.eu)

Part #: 000.807
List Price: €55.45

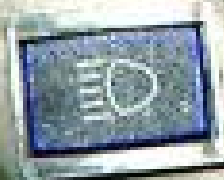


Ural 2006 Gear-Up

***Alternator
Alarm
Indicator***



***Hi-Beam
Indicator***



***Turn Signal
Indicator***

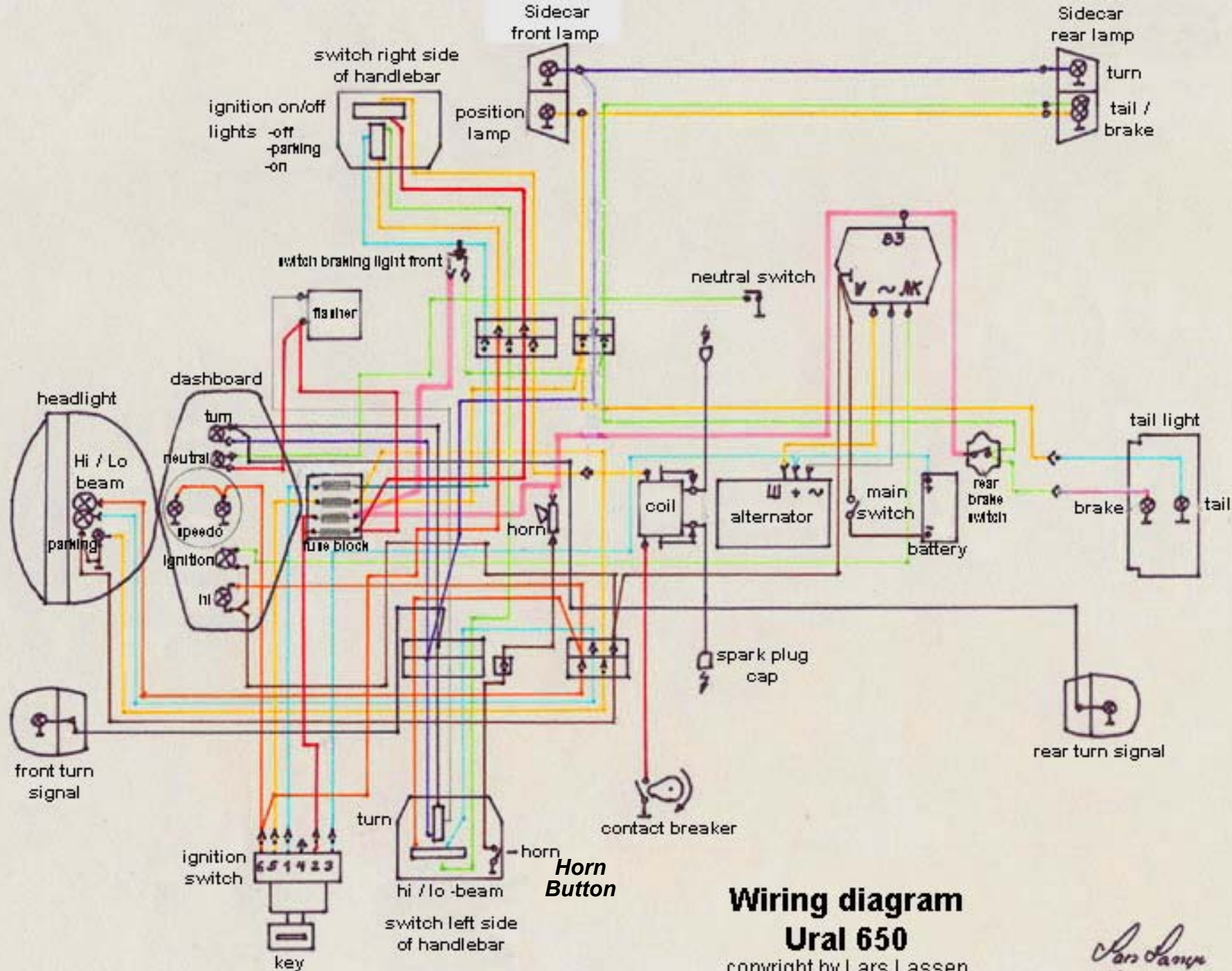


***Odometer
"Zeroing"
Knob***



***Neutral
Indicator***





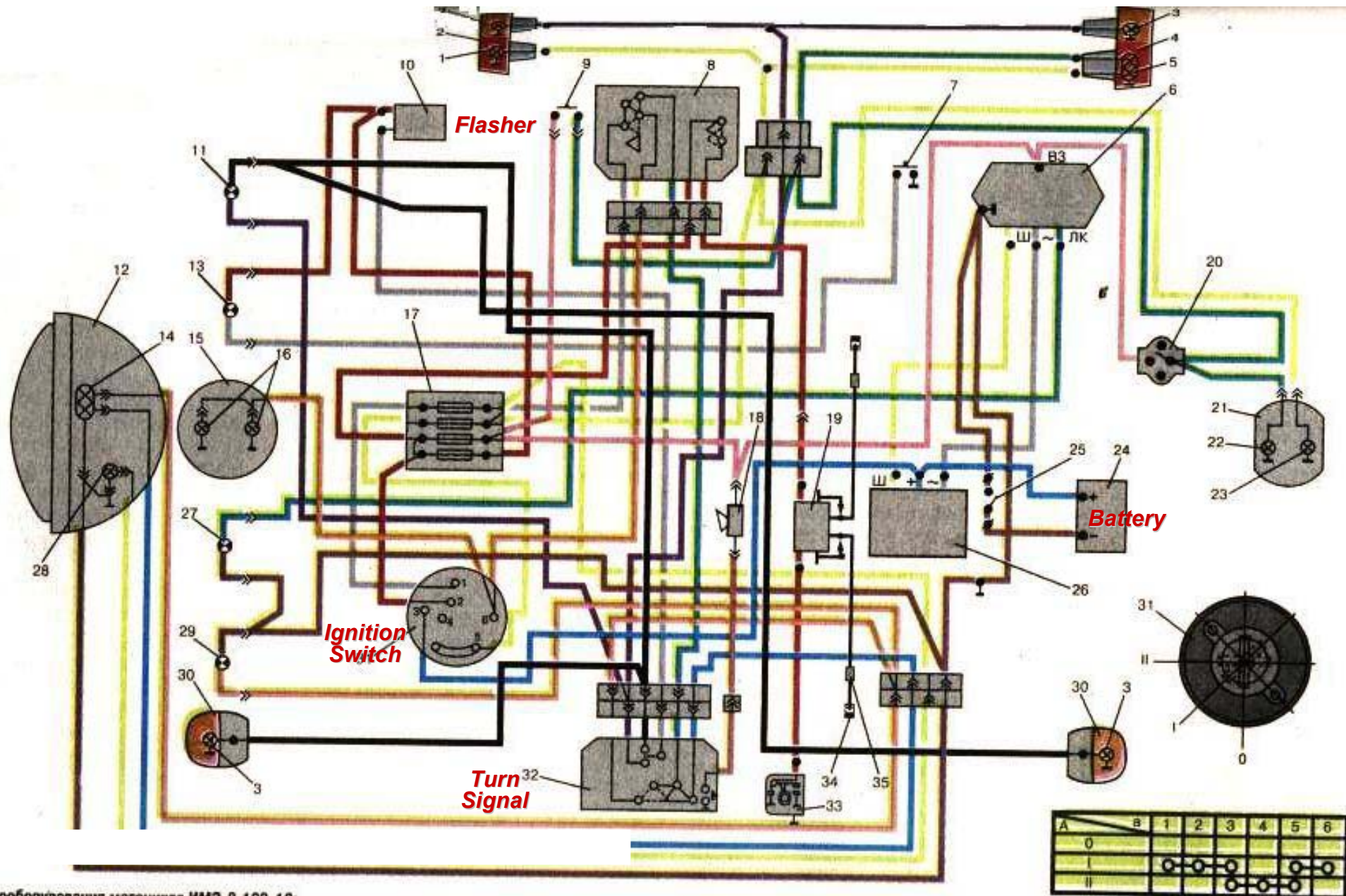
Wiring diagram

Ural 650

copyright by Lars Lassen

Lars Lassen
29.12.93

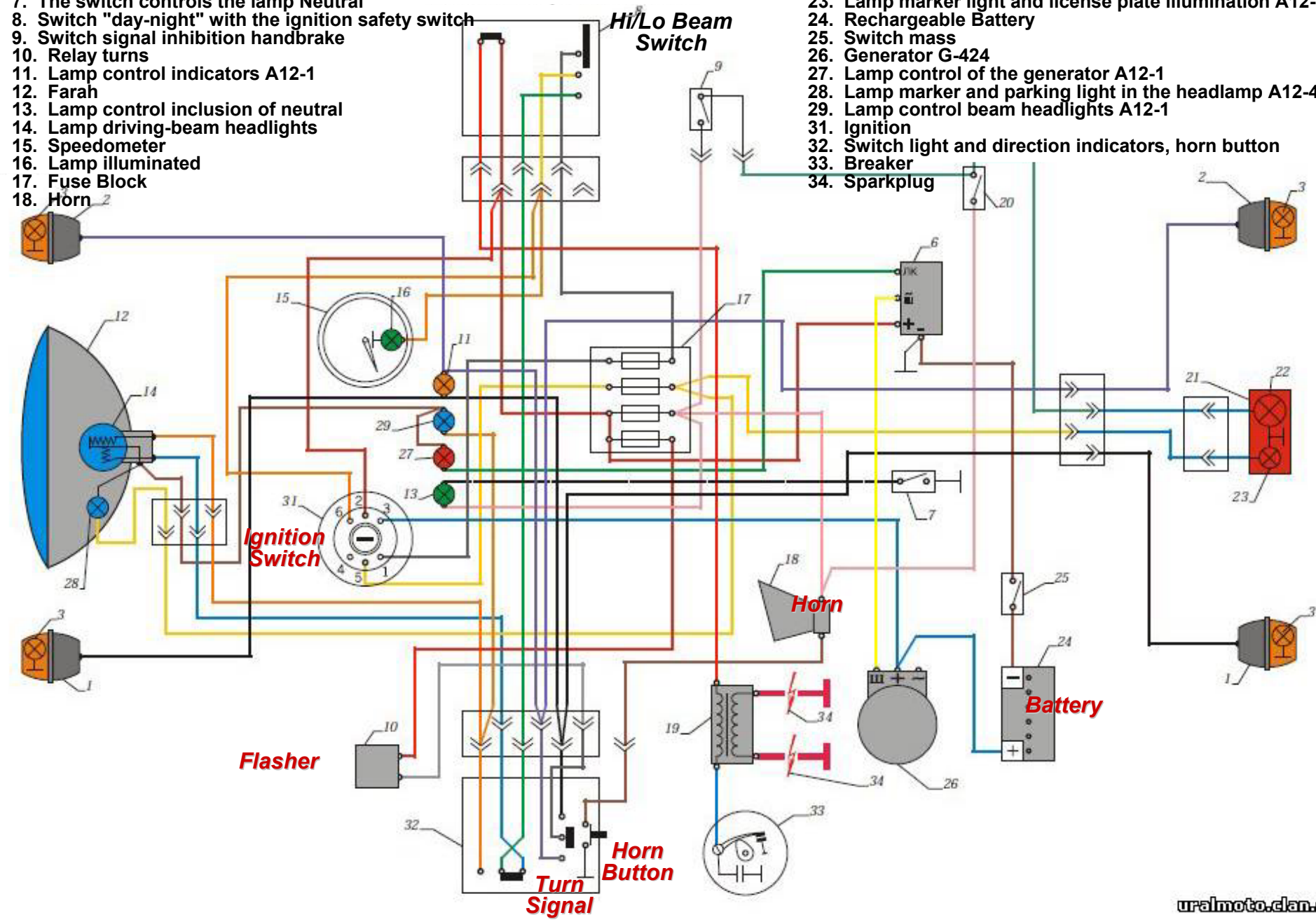
Ural (Урал) 1998 Deco Classic, Italia, Tourist, Sportsman, Solo, Utility (IMZ 8.103-10 or -40 (Deco or Tourist))



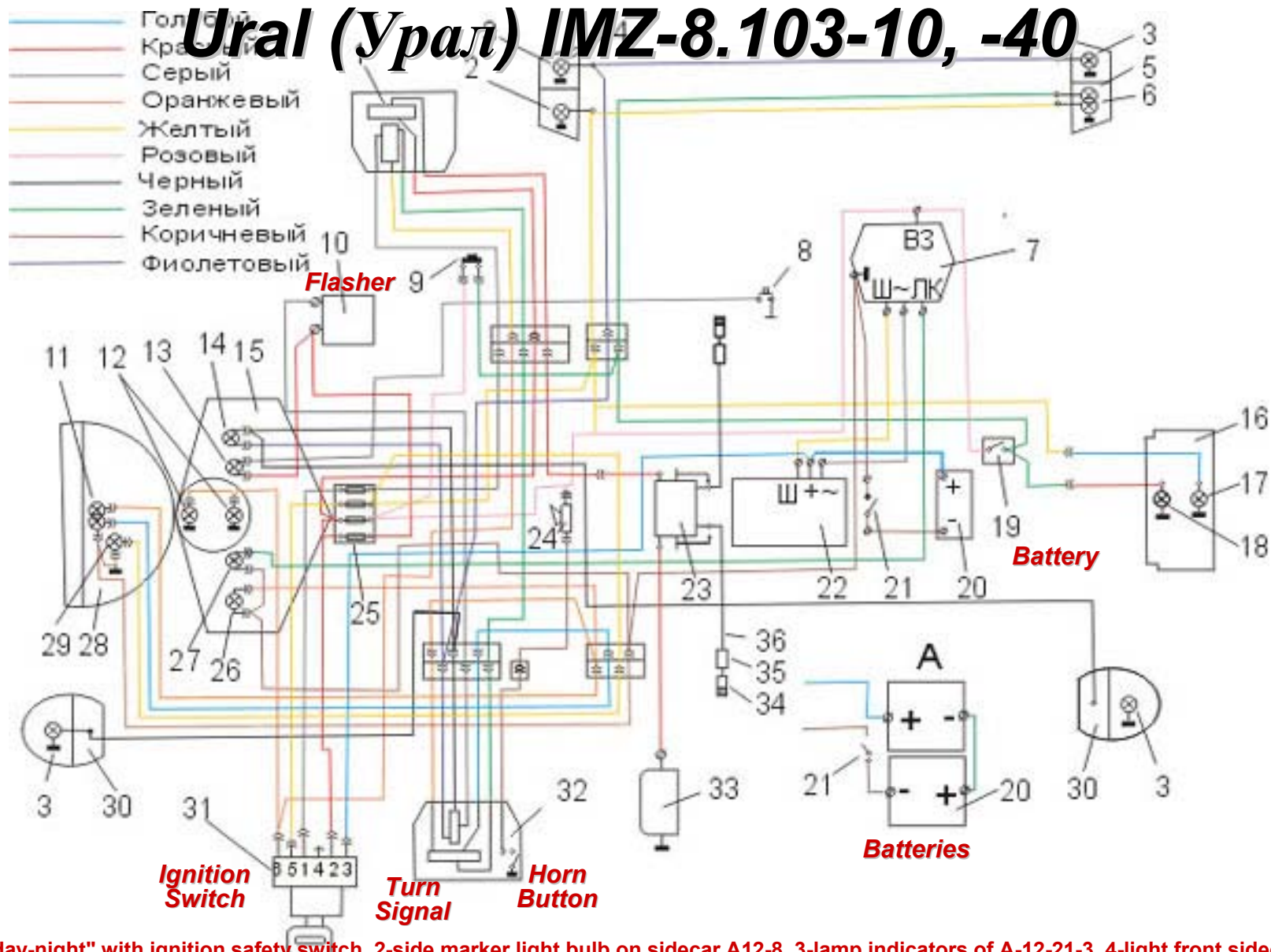
Ural 8.103-10, -40, 8.123-10

1. Left indicator lamp
2. Right direction indicator
3. Lamp indicators A12-21-3
6. Regulator
7. The switch controls the lamp Neutral
8. Switch "day-night" with the ignition safety switch
9. Switch signal inhibition handbrake
10. Relay turns
11. Lamp control indicators A12-1
12. Farah
13. Lamp control inclusion of neutral
14. Lamp driving-beam headlights
15. Speedometer
16. Lamp illuminated
17. Fuse Block
18. Horn

19. Ignition coil
20. Switch signal braking foot brake
21. Rear
22. Lamp braking signal A12-21-3
23. Lamp marker light and license plate illumination A12-5
24. Rechargeable Battery
25. Switch mass
26. Generator G-424
27. Lamp control of the generator A12-1
28. Lamp marker and parking light in the headlamp A12-4
29. Lamp control beam headlights A12-1
31. Ignition
32. Switch light and direction indicators, horn button
33. Breaker
34. Sparkplug

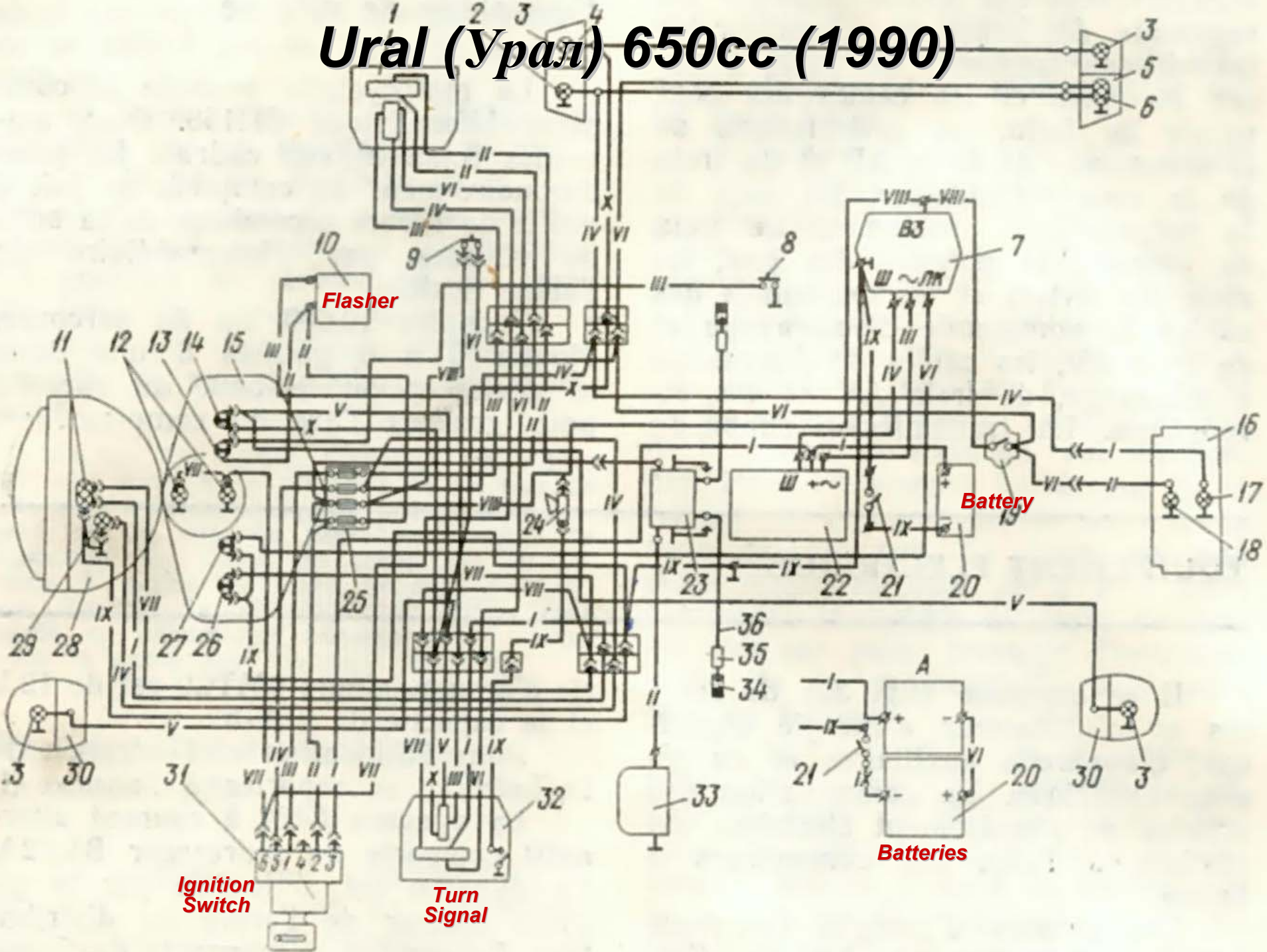


Ural (Урал) IMZ-8.103-10, -40



1-select "day-night" with ignition safety switch, 2-side marker light bulb on sidecar A12-8, 3-lamp indicators of A-12-21-3, 4-light front sidecar, 5-Rear sidecar, 6-bulb marker light and a braking signal in a wheelchair A12-212, 7-relays, lights, 8-contact (switch controls lamp neutral) 9-switch braking signal handbrake, 10-flashers, 11-driving lamp and low beam headlights A12-45 +40, 12-illumination speedometer A12-1, 13-light control switch neutral A12-1: 14-lamp control indicators A12-1, 15-dashboard; 16-Rear, 17-bulb marker light and license plate illumination A12-5, 18-brake signal A12-21-3, 19-switch braking signal; 20-rechargeable battery; 21-ground switch; 22-generator; 23-ignition coil, 24-horn; 25-fuse box, 26-light beam control A12-1, 27-generator lamp A12-1, 28-headlight; 29-side marker lamp and parking lamp SWERA in A12-4, 30-Index left turn; 31-ignition switch; 32-light switch and indicator lamps; 33-chopper; 34-spark plug; 35-tip of plug; 3-high voltage wire, and A-option to connect two batteries 3MT6.

Ural (Урал) 650cc (1990)



1995 Ural

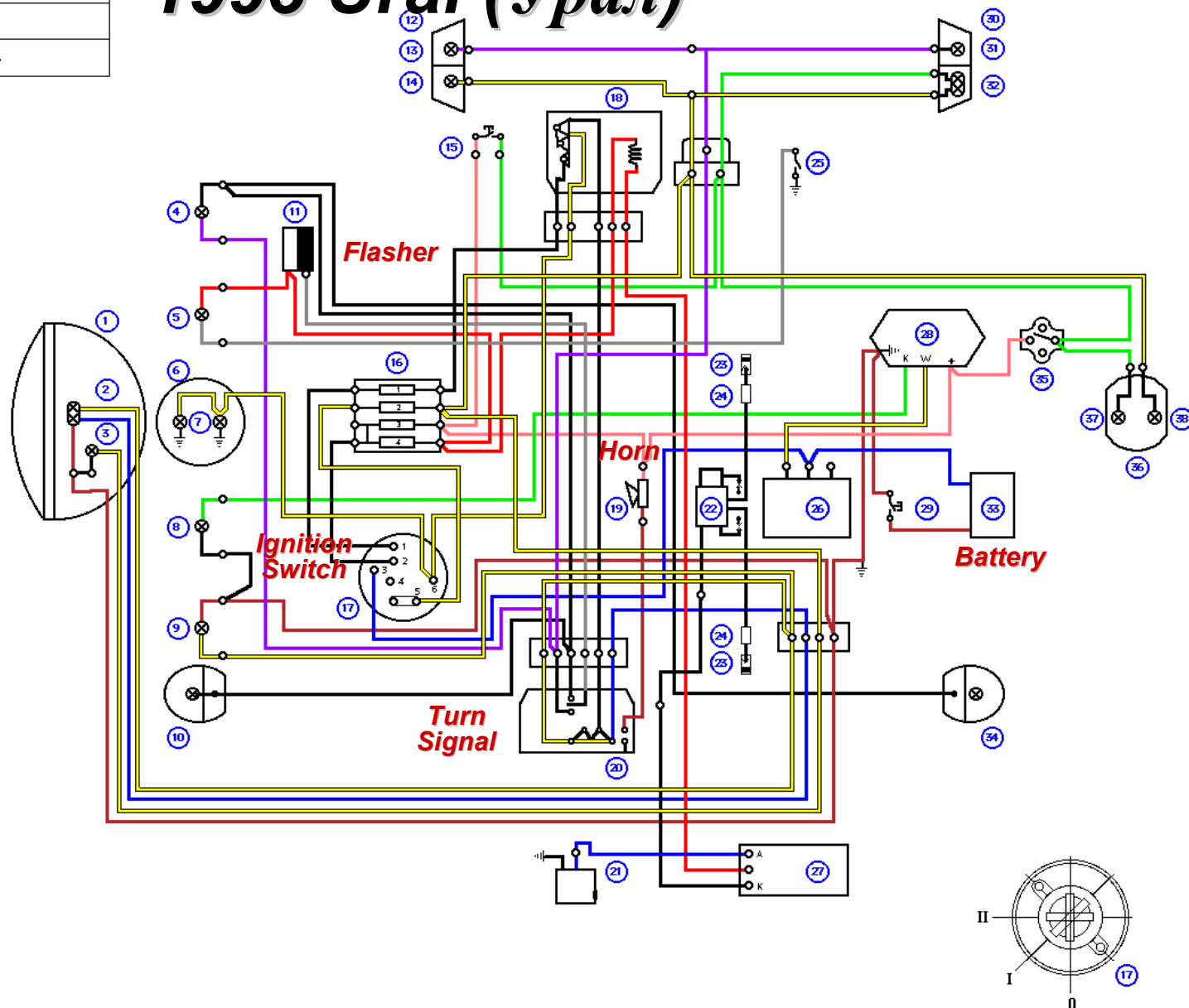
15 September 2007

Carl Allison

Absolutely no guaranty that wire colors are correct.

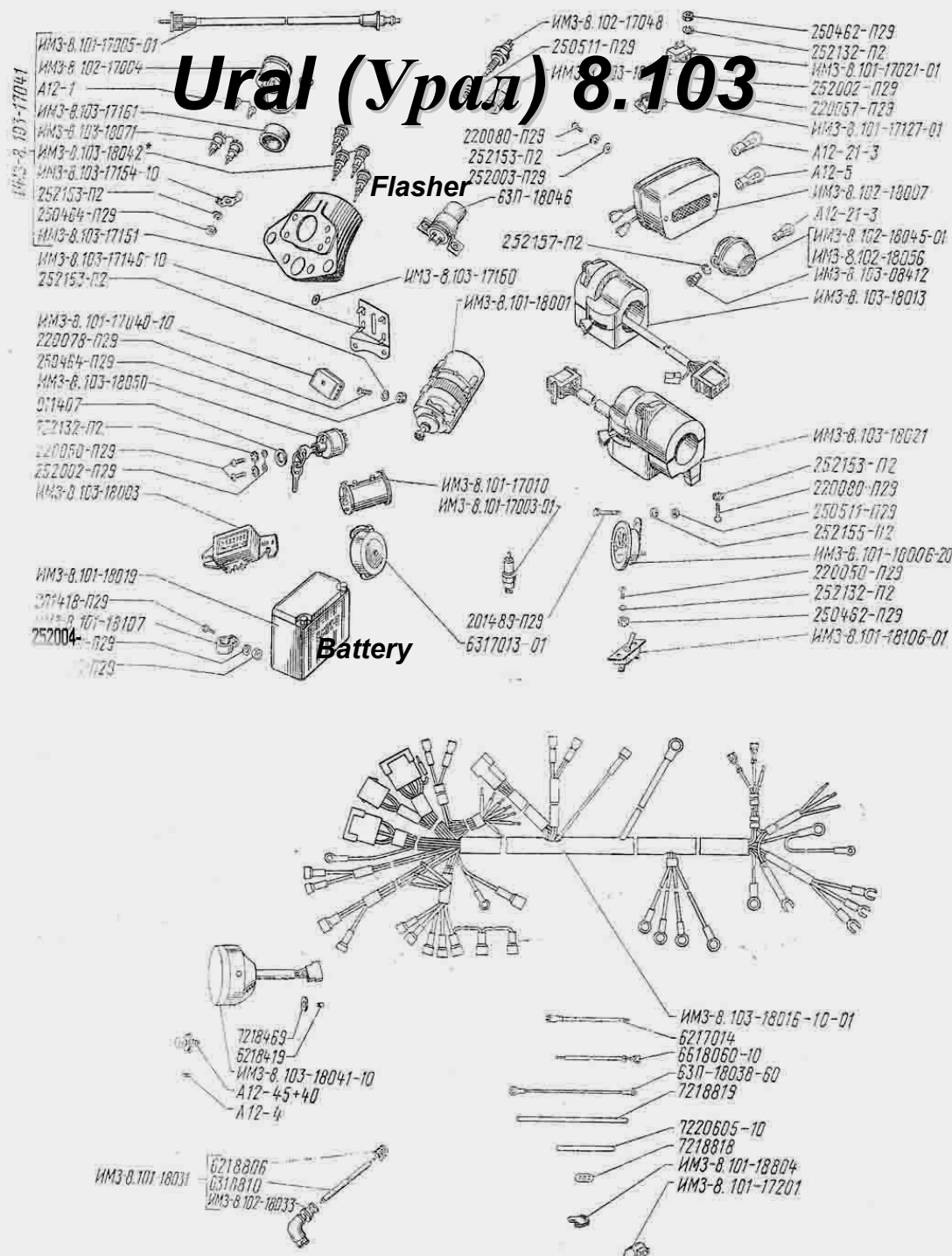
1995 Ural (Урал)

1. Motorcycle head lamp
2. High-low beam headlight bulb
3. Side and parking bulb in headlight
4. Turn indicator bulb
5. Neutral gear indicator bulb
6. Speedometer
7. Speedometer illumination bulb
8. Generator
9. Highbeam indicator lamp
10. Left turn indicator
11. Turn signal flasher
12. Sidecar front lamp
13. Sidecar side bulb
14. Traffic indicator bulb
15. Front brake light switch
16. Fuse plate
17. Ignition lock
18. "Day-night" switch with emergency "ignition out" switch
19. Horn
20. Light and turn indicator switch, horn button
21. Distributor
22. Induction coil
23. Spark plug
24. Spark plug cap
25. Neutral gear indicator switch
26. Generator
27. Ignition module
28. Voltage regulator
29. Earth disconnect switch
30. Sidecar rear lamp
31. Sidecar lamp
32. Sidecar side and brake bulb
33. Battery
34. Left rear turn signal
35. Foot brake signal switch
36. Motorcycle rear lamp
37. Brake light
38. Side bulb and number plate illumination bulb

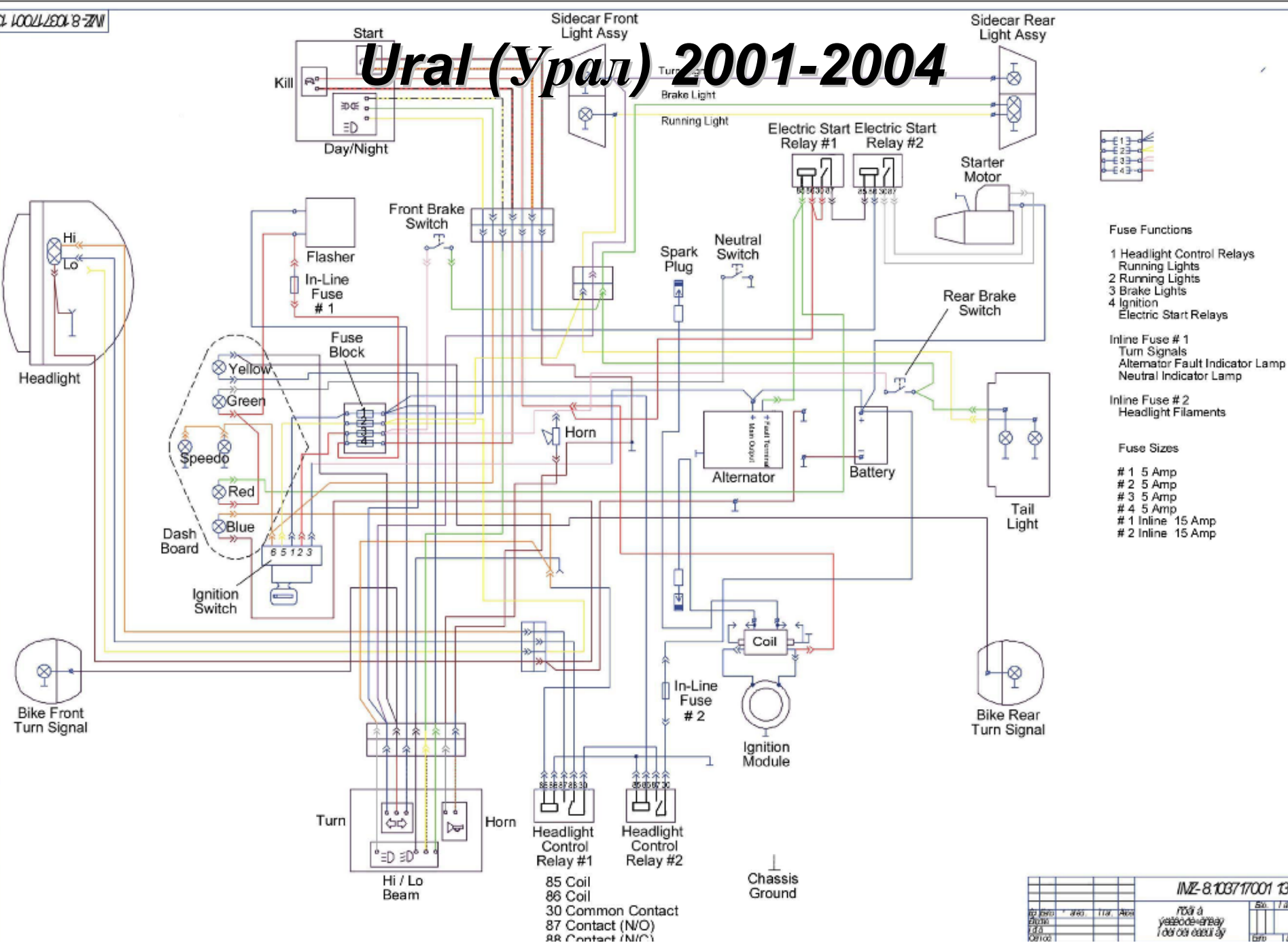


A	a	1	2	3	4	5	6
0							
I		○	○	○		○	○
II				○	○		

G-424 Alternator
33.3702 Regulator
B204 Coil
PM-302 Breaker
6MTS-9 Battery

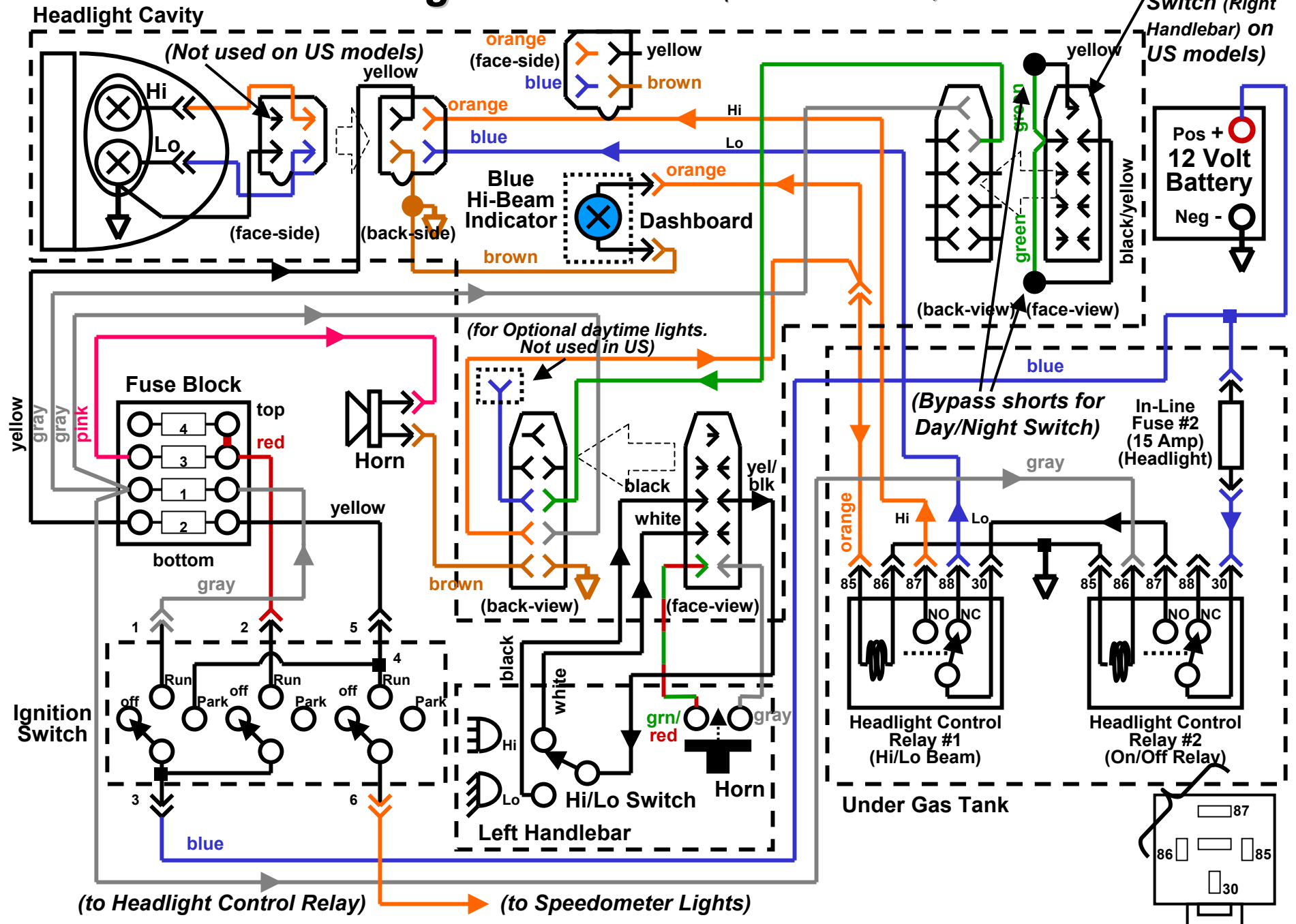


Ural (Урал) 2001-2004



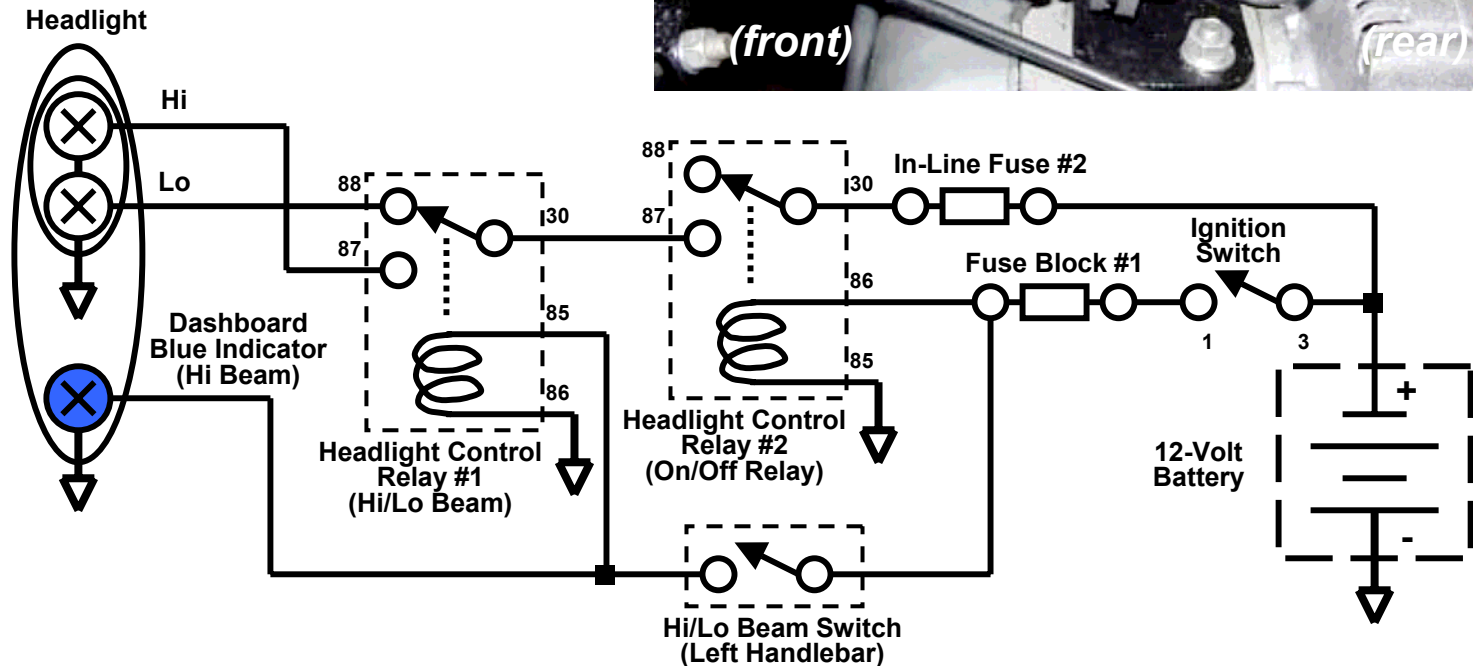
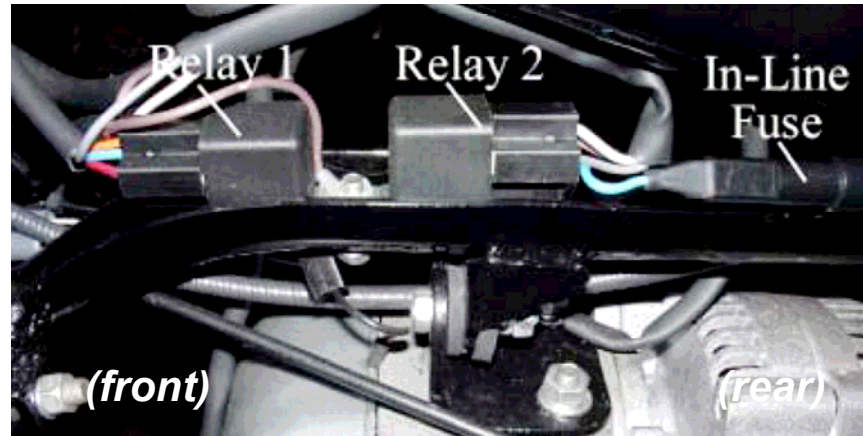
2002-2005 Ural High/Low Beam (IMZ-8.103717001-13, 2002-2005 Owner's Manual, (No Day/Night Switch, Right))

2002-2005 Ural High/Low Beam (IMZ-8.103717001-13, 2002-2005 Owner's Manual, (No Day/Night Switch, Right))



2002-2005 Ural: Simplified Hi/Lo Beam Circuit

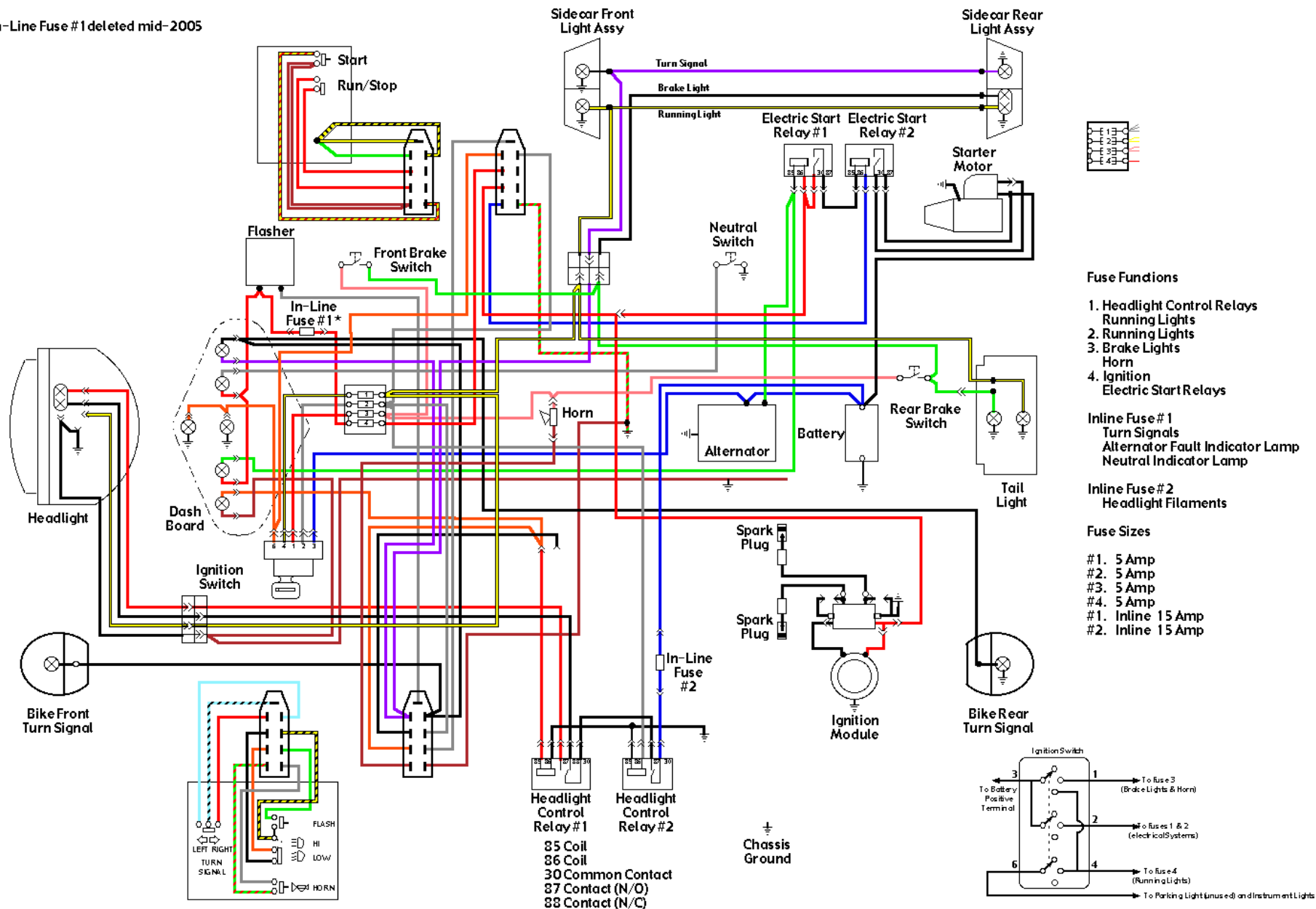
The headlight relays and in-line fuse are inconveniently located on the center bar under the gas-tank.



The relays, controlled by the ignition switch and the Hi/Lo beam switch, are used to make high-current connections. Thus the ignition switch and Hi/Lo handlebar switch last longer because their contacts only handle relay coil current.

Ural (Урал) 2005 Patrol

*In-Line Fuse #1 deleted mid-2005



Ural (Урал) 2006 Patrol

**Sidecar
Front Light
Assembly**

