



Russian Motorcycle Speedometers Part I

(also see Russian Headlight Cavity Series Parts I – XII)

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(012/2011)***

Speedometer / Odometer Overview and Notes

- ***Part I:***
 - ***Three Types of Speedometers in Ural / Dnepr History***
 - ***СП-8 (SP-8) up to 1952, СП-8А (SP-8А) post-1952, СП-8Б (SP-8Б)***
 - ***СП-102 (SP-102), СП-102А (SP-102А)***
 - ***IMZ-8.1037-17004***
- ***Part II: Bill Glazer's Repair Manual***
 - ***MyUral. com (5.7 Speedometer Disassembly & Service)***
- ***Speedometer Accuracy***
 - ***Speedometer Isn't a Precision Instrument, More of a Gauge!***
 - ***For Accurate Speeds; Use GPS***
- ***Odometer Usefulness***
 - ***Reset Trip Odometer at Each Fuel Fill-Up and Know Typical Range***
- ***Lloyd Lounsbury at Ramco of Seattle has a LOT of new Dnepr speedometers with both MPH and KPH on the face, however the odometer is still KPH***
 - ***Contact Him thru Dneprheads (<http://autos.groups.yahoo.com/group/dneprheads/>)***

Ural (Урал) / Dnepr (Днепр) Speedometers and Flexible Drive Cables

<i>Ural (Урал) Model</i>	<i>Voltage</i>	<i>Speedometer Part #</i>	<i>Flexible Cable Part #</i>	<i>O-Ring Part #</i>
<i>M-72</i>	<i>6-Volt</i>	<i>СП-8 and 8А (72174)</i>	<i>ГВ-38 (72175)</i>	<i>7218414</i>
<i>M-72M</i>	<i>6-Volt</i>	<i>СП-8А and 8Б (72174)</i>	<i>ГВ-38 (72175)</i>	<i>7218414</i>
<i>M-72K</i>	<i>6-Volt</i>	<i>СП-8Б (72174)</i>	<i>ГВ-38 (72175)</i>	<i>7218414</i>
<i>M-61</i>	<i>6-Volt</i>	<i>СП-102 (6217004)</i>	<i>ГВ-127 (6217005А)</i>	<i>7218414</i>
<i>M-62</i>	<i>6-Volt</i>	<i>СП-102 (6217004)</i>	<i>ГВ-127 (6217005А)</i>	<i>7218414</i>
<i>M-63 (Ural-2)</i>	<i>6-Volt</i>	<i>СП-102 (6217004)</i>	<i>ГВ-127 (6217005А)</i>	<i>7218414</i>
<i>M-66 (Ural-3)</i>	<i>6-Volt</i>	<i>СП-102 (6217004)</i>	<i>ГВ-127 (6217005А)</i>	<i>7218414</i>
<i>M-67</i>	<i>12-Volt</i>	<i>СП-102 (6217004)</i>	<i>ГВ-127 (6217005А)</i>	<i>6218414</i>
<i>M-67.36</i>	<i>12-Volt</i>	<i>СП-102 (6217004)</i>	<i>ГВ-127 (6217005А)</i>	<i>7218414</i>
<i>8.103 and 8.107 Series "650"</i>	<i>12-Volt</i>	<i>IMZ-8.1037-17004</i>	<i>IMZ-8.101-17005-01</i>	<i>-</i>
<i>650 & 750 Series</i>	<i>12-Volt</i>	<i>IMZ-8.1037-17004</i>	<i>IMZ-8.101-17005-01</i>	<i>-</i>
<i>"750"Series</i>	<i>12-Volt</i>	<i>IMZ-8.1037-17004</i>	<i>IMZ-8.101-17005-01 (< 2005)</i> <i>IMZ-8.101-17005 (>= 2006)</i>	<i>-</i>
<i>Dnepr (Днепр) Model</i>	<i>Voltage</i>	<i>Speedometer Part #</i>	<i>Flexible Cable Part #</i>	<i>O-Ring Part #</i>
<i>M-72</i>	<i>6-Volt</i>	<i>СП-8 and -8А (72174)</i>	<i>72175-А</i>	<i>7218414</i>
<i>M-72N (H)</i>	<i>6-Volt</i>	<i>СП-8Б (72174)</i>	<i>72175-А1</i>	<i>7218414</i>
<i>K-750</i>	<i>6-Volt</i>	<i>СП-8Б (72174-А)</i>	<i>72175-А1</i>	<i>7218414</i>
<i>K-750M</i>	<i>6-Volt</i>	<i>СП-8Б (650174)</i>	<i>750179</i>	<i>7218414</i>
<i>MT-12 (Dnepr-12)</i>	<i>6-Volt</i>	<i>СП-8Б (650174)</i>	<i>750179</i>	<i>7218414</i>
<i>MB-750</i>	<i>6-Volt</i>	<i>СП-8Б (650174)</i>	<i>750179</i>	<i>7218414</i>
<i>MB-750M</i>	<i>6-Volt</i>	<i>СП-8Б (650174)</i>	<i>750179</i>	<i>7218414</i>
<i>K-650/MT-8</i>	<i>6-Volt</i>	<i>СП-8Б (650174)</i>	<i>750179</i>	<i>7218414</i>
<i>K-650/MT-9</i>	<i>6-Volt</i>	<i>СП-102 (3802010)</i>	<i>ГВ-127</i>	<i>7218414</i>
<i>MB-650</i>	<i>12-Volt</i>	<i>СП-102 (3802010)</i>	<i>ГВ-127</i>	<i>7218414</i>
<i>MT-10</i>	<i>12-Volt</i>	<i>СП-102 (3802010)</i>	<i>ГВ-127</i>	<i>7218414</i>
<i>MT-10.36</i>	<i>12-Volt</i>	<i>СП-102 (3802010)</i>	<i>ГВ-127</i>	<i>7218414</i>
<i>MT-11 (Dnepr-11)</i>	<i>12-Volt</i>	<i>СП-102 (3802010)</i>	<i>ГВ-127</i>	<i>7218414</i>
<i>MT-16 (Dnepr-16)</i>	<i>12-Volt</i>	<i>СП-102 (3802010)</i>	<i>ГВ-127</i>	<i>7218414</i>

GOST (ГОСТ) Number on Speedometer Faceplate

(en.wikipedia.org)

- **Word GOST is an Acronym for GOsudarstvennyy STandart, which means state standard**
- **ГОСТ (GOST) Standards**
 - **Set of Technical Standards maintained by the Euro-Asian Council for Standardization, Metrology and Certification (EASC), a Regional Standards Organization operating under the auspices of the Commonwealth of Independent States (CIS)**
- **Originally Developed by the Government of the Soviet Union as part of its National Standardization Strategy**
- **GOST 1578-XX**
 - **Speedometers with Flexible Shaft Drive for Cars and Cycles**
 - **Last Two Numbers Indicate Update (Year) of the Standard**
- **GOST Number Doesn't Help Much for Identifying the Speedometer Par#**



ГОСТ (GOST) Number

Speedometer / Odometer Accuracy

- ***Speedometer Drive Taken from Transmission Output Shaft***
- ***Speedometer / Odometer Accuracy Affected by Amount of Wear on Rear Tire***
 - ***As Rear Tire Wears, Circumference Decreases and Bike Covers Less Distance***
 - ***Appears to Be Going Faster, Overstating the Distance as Tire Wears***
 - ***Effect Should Be Minimal:***
 - ***Inherent Speedo Error Is Much More Influential than Tire Circumference / Final Ratio***
 - ***Assuming 19" Tire with 1.5" of Rubber on Each Side***
 - ***Total Diameter of a New Tire of 22" yields Circumference of 69"***
 - ***If 1/4" of Tread Wear, 21.5" Dia., Circumference of 67.5" (2.2% smaller)***
 - ***If 1/2" of Tread Wear, 21" Dia., Circumference of 66" (4.4% smaller)***
 - ***Oil Changes Occur Sooner with Tire Wear***

2011 Maintenance Manual

- **Speedometer Maintenance**

- **After every 10,000 km, remove the speedometer from the motorcycle and add five or six drops of oil into the speedometer where the cable inserts into the speedometer. This will lubricate the speedometer internally.**
- **To lubricate the speedometer cable, remove the cable from the speedometer and extend it in a straight line. Apply speedometer lubricating oil or light machine oil at one end and allow it to seep through the length of the cable.**



Speedometer / Odometer Repair (www.russianiron.com)

- **Repairing Speedometer and Odometer on Dnepr**
- **The problem:** the speedometer was jumping all over the place and so were the digits on the odometer, so that one day it would be at 12,000+ kms, the next at 73,000+ and so on.
- **First,** I disconnected the whole thing from the housing and the cable. Next, carefully and with a flathead screwdriver, I pried up the tabs on the ring holding the glass face in place. At this point it was possible to access all the moving parts of both the speedometer and odometer.
- **Speedometer Fix:** The shaft for the speedometer needle is held in place by an armature that is pinned to the housing covering the point where the cable connects. The armature was loose because the pin was loose. This was the cause of the jumping speedometer needle. By not being tight, the contact between the cable and the needle shaft was intermittent. Unfortunately, the pin fastening the armature could not be tightened. However, sliding a tiny, hardware store-variety retaining ring into the gap between the head of the pin and the armature made the whole thing snug. Constant contact now achieved. Speedo works fine.
- **Odometer Fix:** The same basic issue was the cause of the faulty, random odometer readings. The retaining clip that holds all the wheels tightly together was not up to the task, so the three or four wheels on the left side were loose and slipping off their gears. A new retaining ring tightened the whole thing up. Hasn't skipped a hair since.
- **Reassembly:** Before putting the whole thing back together on the bike, I lubed all the moving parts. On the plastic gears, I dabbed a little grease (Vaseline will work fine). For the other points of contact I used the same penetrating oil I make up for guns (sewing machine oil with a little cutting oil added for its anti-rust properties cut with a splash of kerosene). Be careful not to over tighten the plastic nut that secures the cable when reassembling. A little past finger tight seems to work fine.
- **This all turned out to be far easier than I thought and took about a half hour to fix--minus the trip to the hardware.**

Improving the Backlighting on Speedometers

- ***Having a Problem with Speedometer Lighting?***
 - ***Can Hardly See It at Night***
 - ***Two Bulbs in Speedometer***
 - ***Like to Keep an Eye on the Klicks, so You Don't Run Out of Gas***
 - ***Instrument Lights (speedometer face): Speedometer Bulb (65017401)
Replaced with Sylvania 3893 (4W vs. 3W)***
 - ***Go to www.myural.com and Look under Speedometer Repair***
 - ***Gives step-by-step Instructions***
 - ***Shouldn't Take but a Half-Hour***
- ***Older Speedometers Cast a Green Glow, Newer Rigs Cast Amber Glow***

Speedometer Repair (russianiron.com/Speedometer%20Repair.htm)

- **How to Reset the Odometer and Improve Speedometer Lighting**
 - *It's not hard to reset the odometer. It does require some patience and a steady hand, but you might as well do it while you have the unit open to punch out those stupid green bulb covers...*
- **Here's a Brief Outline of the Process:**
 - *1. Speedo face down on table. Bend the tabs on the back of the bezel so you can take it off. When you get it off, set it aside. Make sure you note the sequence of gaskets and O-rings.*
 - *2. Remove the bottom 2 screws on the housing that holds the mechanism in place. Slide the mechanism out.*
 - *3. If desired punch out the green plastic bulb covers for a brighter speedometer.*
 - *4. Set the speedometer face down (careful of the needle) or prop it in a convenient position. Look on the back of the odometer. You'll see a slide on clip on one end of the axle shaft that the gears are on. Remove the clip, taking care not to let it become airborne when it comes off.*
 - *5. Note that there are a little set of tabs sticking out, this MUST be back in that position when you put the odometer assembly back. Slide the axle to the side and work it a bit, it will come out as an assembly.*
 - *6. You have a choice here, either set the digits by spinning them to match the old one (this sometimes requires experimentation - some units will rotate either way, some only one way, etc) OR you can remove the one from your old speedometer and just install it in the new one, already lined up.*
 - *7. Make sure the tabs are lined up and work the assembly back into position. Slide the axle and replace the clip.*
 - *8. While you have the unit apart put some oil in the area where the cable enters the unit, around the cable drive.*
 - *9. Slide the unit back into the housing. Replace the 2 screws making sure the face is centered (it's easy to get off center if you're not watching).*
 - *10. Put the glass, gaskets, and bezel back on and bend the tabs to close the unit.*
 - *Vance Blosser: I've done this a couple of times, it's not bad, just takes a little patience.*



Speedometer Cable Water Seal

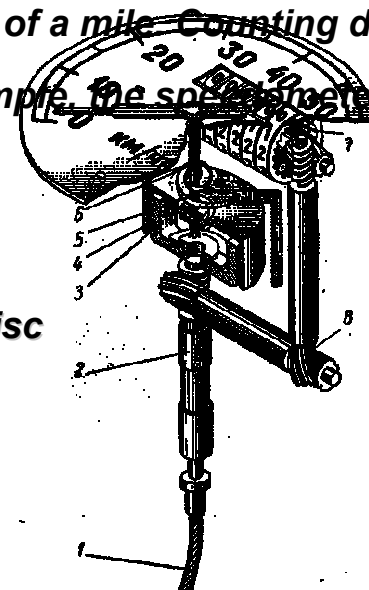
- ***Common Problem: Folks Report Water in the Gear Box***
 - ***Check the Grommet/Gasket where Speedometer Cable Enters Gearbox***
 - ***Water Enters the Gearbox Down the Speedometer Drive Cable***
 - ***Transmission Sucks Moisture In as It Cools***
 - ***Forms a Milky White or Grayish Emulsion with Oil (not good)***
- ***Cure***
 - ***Some RTV Will Cure It***
 - ***Packing Underside of the Boot with Silicone Dielectric Grease Works Too***
 - ***Can Make a Better Boot from a Heavy Rubber Boot Made to Seal the Spark Plug Wire that goes into a Automotive Ignition Coil. Slit with a Razor Blade Vertically. Place It Around the Speedometer Cable after Removing the Thin Old Boot. Apply a Bit of ZAP-brand Super Thin Super Glue and Press the Sides Together for a Minute to Seal the Slit Shut. Pack It Underneath with Silicone Grease and Slide It Down into Place so Boot and Silicone Grease Together Seal the Cable to the Transmission***
- ***2006 Improvements in Urals***
 - ***Improved Speedometer Cable Seal***

Speedometer and Tachometer (СПИДОМЕТР И ТАХОМЕТР)

- **Motorcycle Speedometer consists of two components: speed indicator and odometer**
 - **Speedometer**
 - The index has a speed of rotating magnetic disc (3), held in rotation by a flexible shaft from the wheel of the motorcycle or the output shaft gear.
 - Magnetic disc is located under the aluminum hood, compass rose (4), easily turning on its axis.
 - On a common axis (6) with a compass rose attached needle pointer speed.
 - Compass rose with an arrow is held at zero degrees of the scale of the spiral spring 5 hour type (filament).
 - When rotating magnetic disc to the power lines cross the compass rose and excite her current, which creates a magnetic field.
 - The interaction of magnetic fields, a disc carries away the compass rose, twisting of the spiral spring (5)
 - The faster the disc spins, the more power he drags the compass rose with an arrow that is moving on a scale that indicates the speed of the motorcycle.
 - **Odometer**
 - Counting device (7) consists of the usual type of computing drums (with the numbers on the rim), loosely mounted on a common axis and connected to one another gear transmission with a ratio of 1: 10.
 - When the rightmost drum makes one turn, neighboring drum rotated by 0.1 turns.
 - The right-drum unit counts the miles, nearby - dozens, etc.
 - Some speedometers rightmost drum with red numbers counting tenths of a mile. Counting device is driven by the worm gear (8) from the main shaft (2) speedometer.
- For technical conditions allowed the error speed indicator readings. For example, the speedometer **СП-8А (SP-8A)** must be within the following limits:

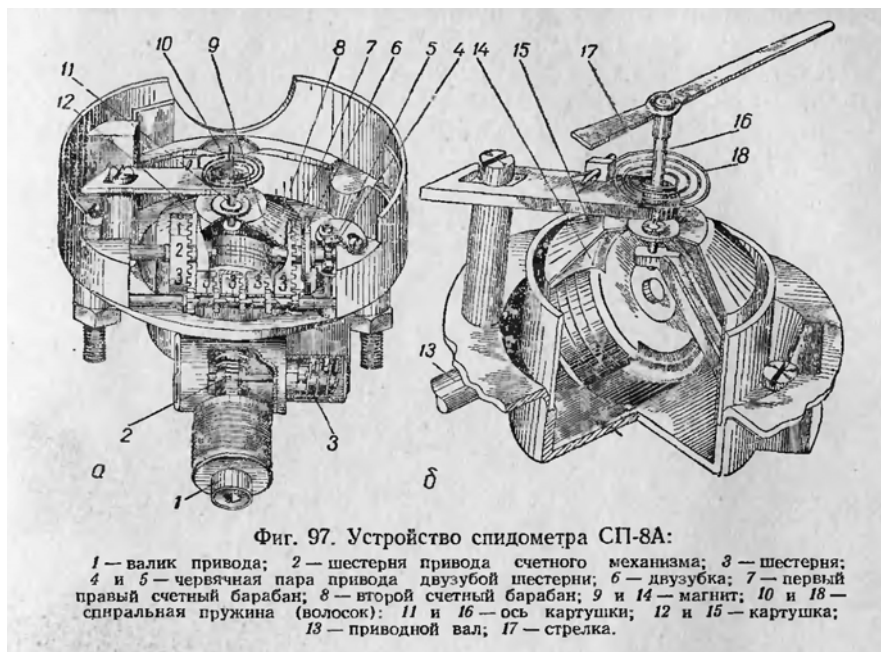
Speed	Accuracy	Speed	Accuracy
20 km/h	+1/-1 km/h	mph	mph
40 km/h	+3/-2 km/h	mph	mph
60 km/h	+3/-2 km/h	mph	mph
80 km/h	+5/-2 km/h	mph	mph
100 km/h	±10 km/h	mph	mph
120 km/h	±10 km/h	mph	mph

1. Cable
2. Main Shaft
3. Rotating Magnetic Disc
4. Compass Rose
5. Spiral Spring
6. Common Axis
7. Counting Device
8. Worm Gear



Speedometer / Odometer (СПИДОМЕТР / ТАХОМЕТР) СП-8

Note: СП-8 does NOT have a Trip Counter



Speedometer / Odometer (СПИДОМЕТР / ТАХОМЕТР) СП-8



Motorcycle: M-72, K-750
List Price: €59
(www.ebay.com.au)



Motorcycle: M-72
Part #: 002.505
List Price: €68
(www.oldtimergarage.eu)



Motorcycle: M-72, K-750
List Price: €49
(www.ebay.de)



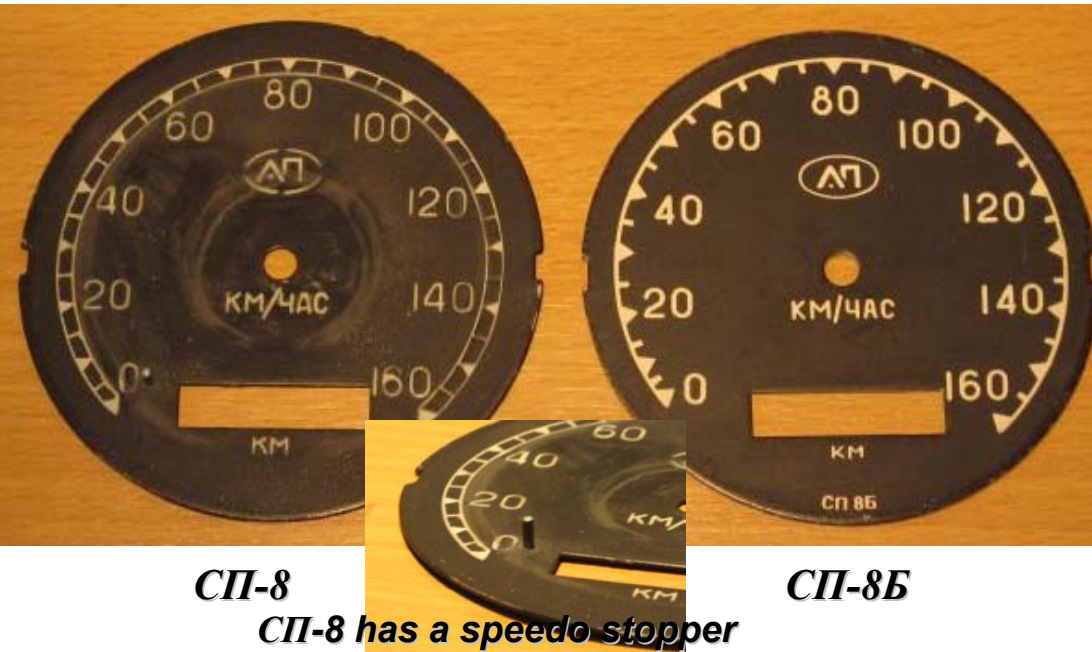
Speedometer
for M-72 and K-750
List Price: €59.50
Part #: S903
(www.ural-zentrale.de)



Reproduction: Fits
M-72 (80mm hole)
Part #: S3486
List Price: €59.50
(www.ural-zentrale.de)



СП-8, СП-8А, and СП-8Б Speedometers (www.retromoto.lv)



СП-8

СП-8 has a speedo stopper

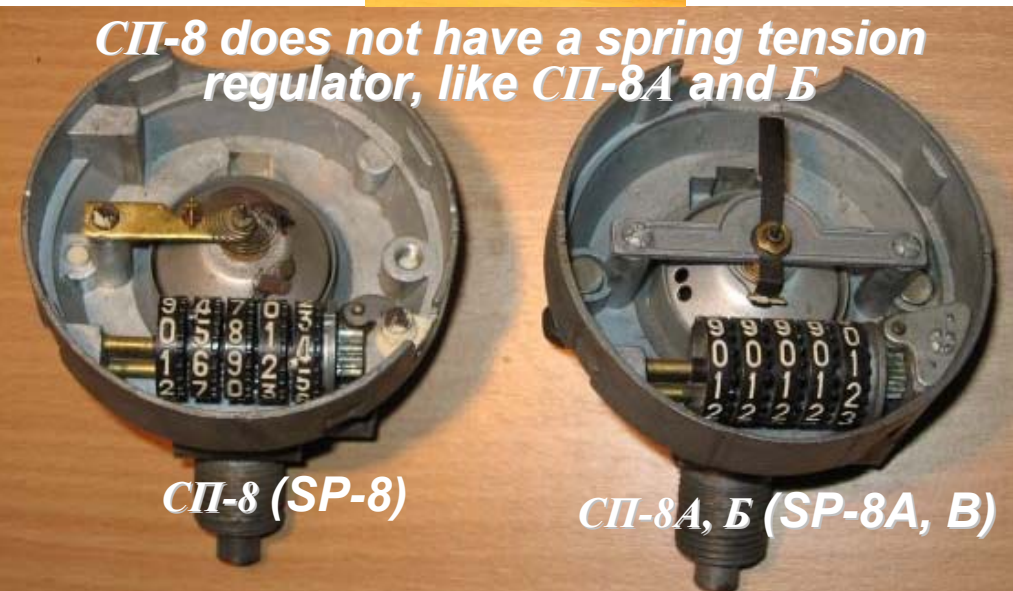
СП-8Б



СП-8А

СП-8Б

СП-8 does not have a spring tension regulator, like СП-8А and Б



СП-8 (SP-8)

СП-8А, Б (SP-8А, Б)



Speedometer Dial Plates for CII-8

**M-72 Speedometer Plate
Replica**
Product ID: 586
List Price: €14.16
(moto-boxer.com)



**Custom Speedometer Plate
M-72 (78 mm)**
Part#: 001.454
List Price: €12.60
(www.oldtimergarage.eu)



Speedometer Cable Rubber Grommet for M-72
List Price: €8.85
(moto-boxer.com)



Speedometer Gasket O-Ring
Product #: S851
List Price: €0.99
(www.ural-zentrale.de)



Flexible Speedometer Cable (Вал гибкий привода спидометра) for СП-8: ГВ-38 (Part# 72175)

- Consists of Cable with Connectors and Protective Shells***

***Speedometer Cable
for M-72, K-750
Part #: 1008
List Price: €11
(www.ural-hamburg.de)***



***Speedometer Cable
for K-750, MB-650\750, M-72
List Price: €7***



***Speedometer Cable (72175-A)
for M-72/K-750
Part #: 001.579
List Price: €19.50
(www.OLDTIMERGARAGE.eu)***



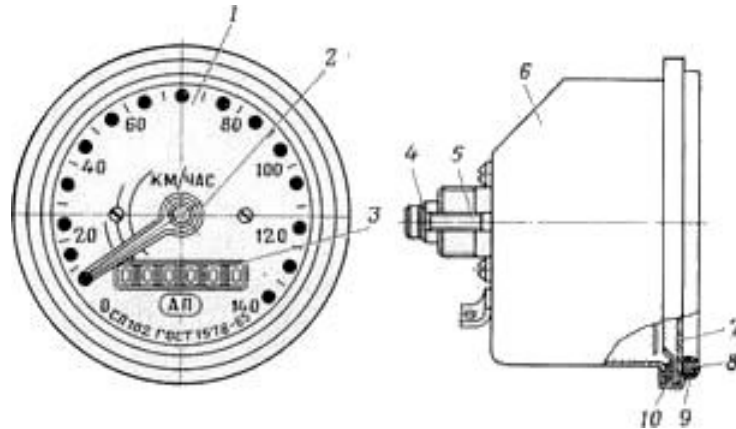
***002.837
Speedometer Cable (1055 mm)
for M-72 / K-750
Part #: 002.837
List Price: €25.20
(www.OLDTIMERGARAGE.eu)***



***Speedometer Cable, Old Style M-72
Cable tunnel is form-locking, no plastic or rubber cover
Generally painted
List Price: €12.50
Part #: S4151
(www.ural-zentrale.de)***



Speedometer (спидометр) СП-102 for Motorcycles M-72, K-750M, MB-750 and K-650 (motoizhtuning.ucoz.ru)



Speedometer СП-102:

- 1. Scale**
- 2. Arrow Pointer**
- 3. Odometer**
- 4. Connecting Sleeve of Flexible Shaft**
- 5. Stud Mount**
- 6. Housing**
- 7. Glass Scale**
- 8. Rim Body**
- 9. and 10. O-rings**



**Speedometer
For K-750, MB-750
Product ID: 583
List Price: €100
(moto-boxer.com)**



Speedometer (спидометр) СП-102

Note: СП-102 does NOT have a Trip Counter

List Price: €58
(www.ural-hamburg.de)



Speedometer for Dnepr and Ural
Part ID: 587
List Price: €59
(moto-boxer.com)



650174/SP102-3802010
for MB-750/MB-650
Part #: 000.671
List Price: €45
(www.OLDTIMERGARAGE.eu)



New Speedometer
for URAL DNEPR
List Price: \$39
(global.ebay.com)

NEW speedometer for DNEPR, URAL
Part ID: 457
List Price: €22
(russianspares.com)

Speedometer for Dnepr, Ural
(80mm hole)
List Price: €54.50
Part #: S901
(www.ural-zentrale.de)



Modern Speedometers with mph & kph Scales



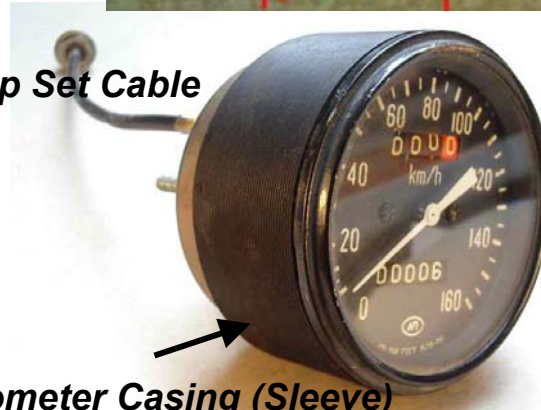
Modern Speedometers with km Scale



Speedometer for Ural/Dnepr
List Price: \$27
(www.ebay.com)



Trip Set Cable



Speedometer Casing (Sleeve)
IMZ-8.1031-17161

Speedometer for Ural IMZ8
List Price: €59
Product ID: 1730
(moto-boxer.com)



Trip Set Cable



Motorcycle: "8.103" Urals
Part #: IMZ-8.102-17004
List Price: €55.45
(www.oldtimergarage.eu)



Modern Speedometer Cables

Speedometer Cable
Product ID: 255
List Price: €7.08
(moto-boxer.com)

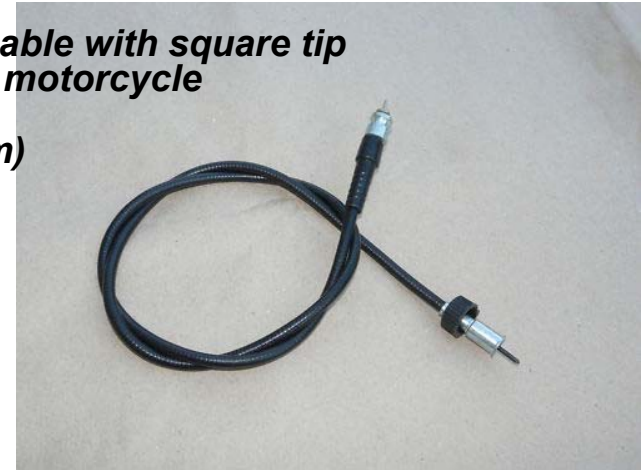
Motor End with Water-Protection Cap



Speedometer End



**Speedometer cable with square tip
for Ural, Dnepr motorcycle**
List Price: \$8
(www.ebay.com)



Flexible Speedometer Cable, up to 2005: IMZ-8.101-17005-01 (750/650 cc)
Flexible Speedometer Cable, from 2006: IMZ-8.103-17005 750cc only

Relative Prices of Speedometers over the Internet

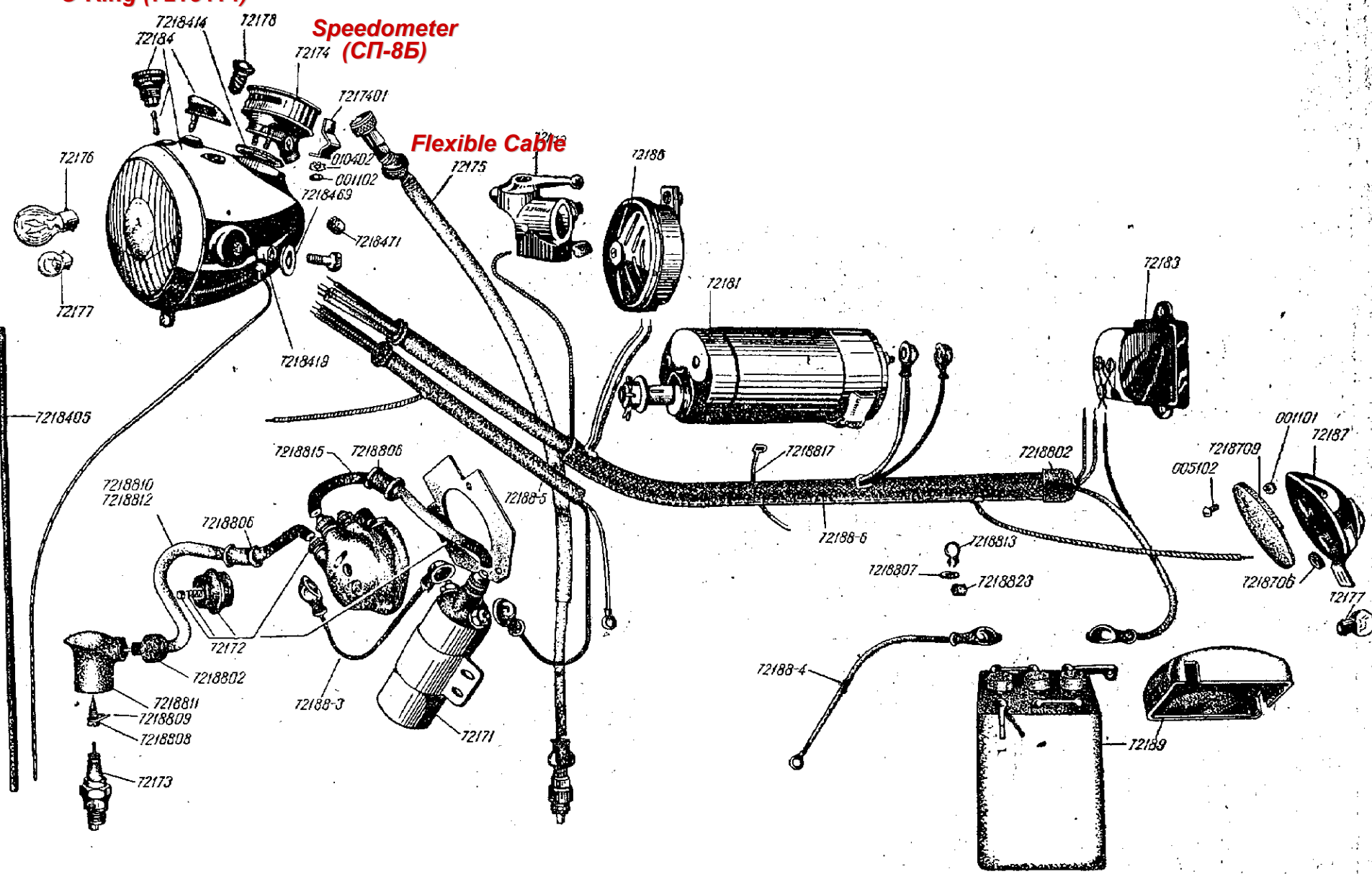
<i>Model</i>	<i>Part #</i>	<i>List Price</i>	<i>Supplier</i>
<i>CII-8</i>	<i>002.505</i>	<i>€68</i>	<i>www.oldtimergarage.eu</i>
<i>CII-8</i>	<i>M-72, K-750</i>	<i>€49</i>	<i>www.ebay.de</i>
<i>CII-8</i>	<i>M-72, K-750</i>	<i>€59</i>	<i>www.ebay.com.au</i>
<i>CII-8</i>	<i>S903</i>	<i>€59.50</i>	<i>www.ural-zentrale.de</i>
<i>CII-8</i>	<i>S3486</i>	<i>€59.50</i>	<i>www.ural-zentrale.de</i>
<i>CII-102</i>	<i>587</i>	<i>€59</i>	<i>moto-boxer.com</i>
<i>CII-102</i>	<i>000.671</i>	<i>€45</i>	<i>www.oldtimergarage.eu</i>
<i>CII-102</i>		<i>€58</i>	<i>www.ural-hamburg.de</i>
<i>CII-102</i>	<i>457</i>	<i>€22</i>	<i>russianspares.com</i>
<i>CII-102</i>	<i>S901</i>	<i>€54.50</i>	<i>www.ural-zentrale.de</i>
<i>CII-102</i>	<i>-</i>	<i>\$39</i>	<i>global.ebay.com</i>
<i>IMZ-8.102-17004</i>	<i>mph / kph Scales</i>	<i>\$50</i>	<i>www.caferacer.net</i>
<i>IMZ-8.102-17004</i>	<i>kph scale</i>	<i>\$27</i>	<i>www.ebay.com</i>
<i>IMZ-8.102-17004</i>	<i>kph scale</i>	<i>\$24</i>	<i>www.ebay.com</i>
<i>IMZ-8.102-17004</i>	<i>kph scale</i>	<i>€55.45</i>	<i>www.oldtimergarage.eu</i>
<i>IMZ-8.102-17004</i>	<i>kph scale</i>	<i>€59</i>	<i>moto-boxer.com</i>

Ural (Урал) M-72 (1941) Speedometer and Flexible Drive Cable

O-Ring (7218414)

Speedometer
(СП-8Б)

Flexible Cable

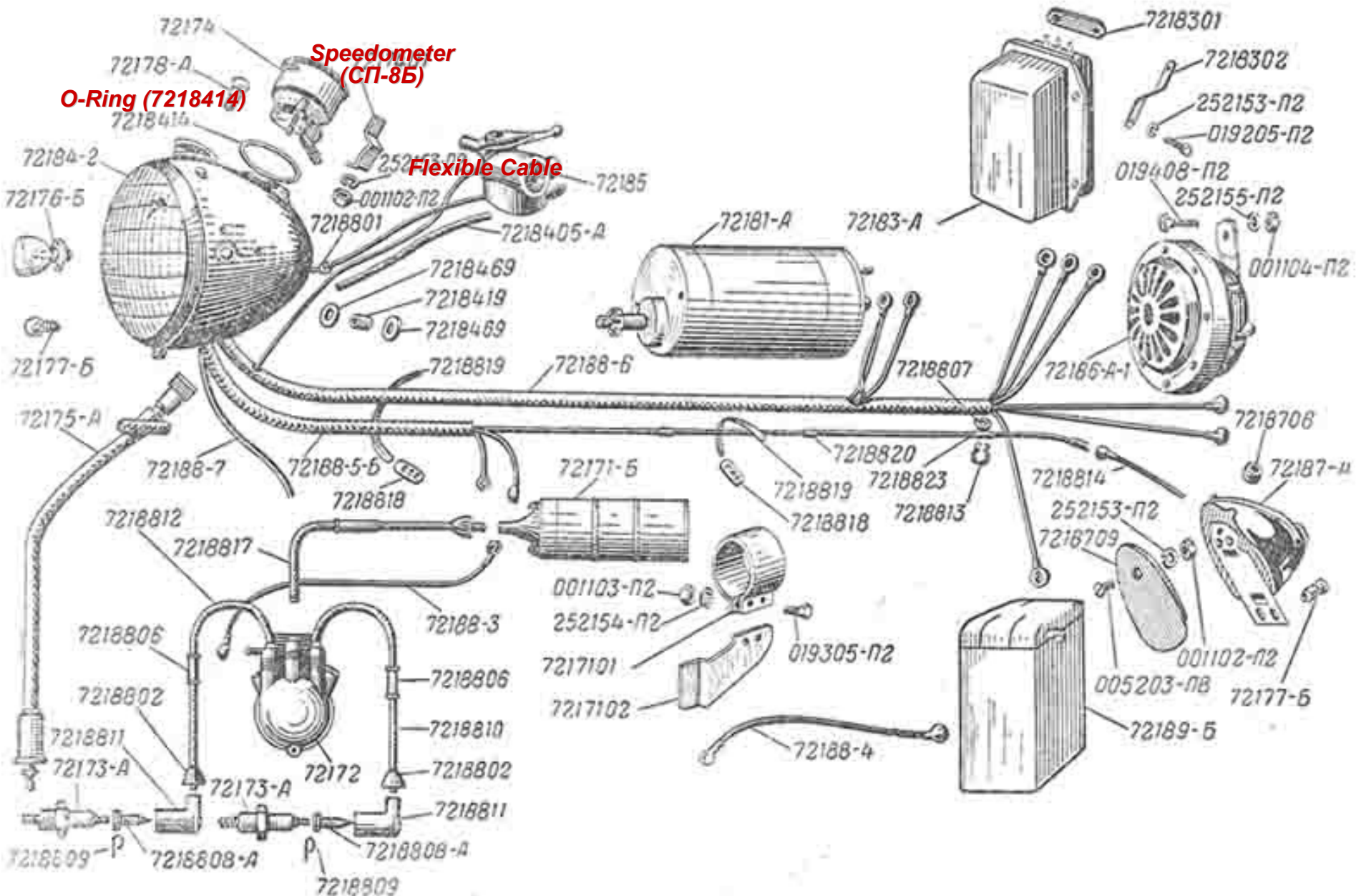


M-72 Headlight Assembly for an Old Soldier

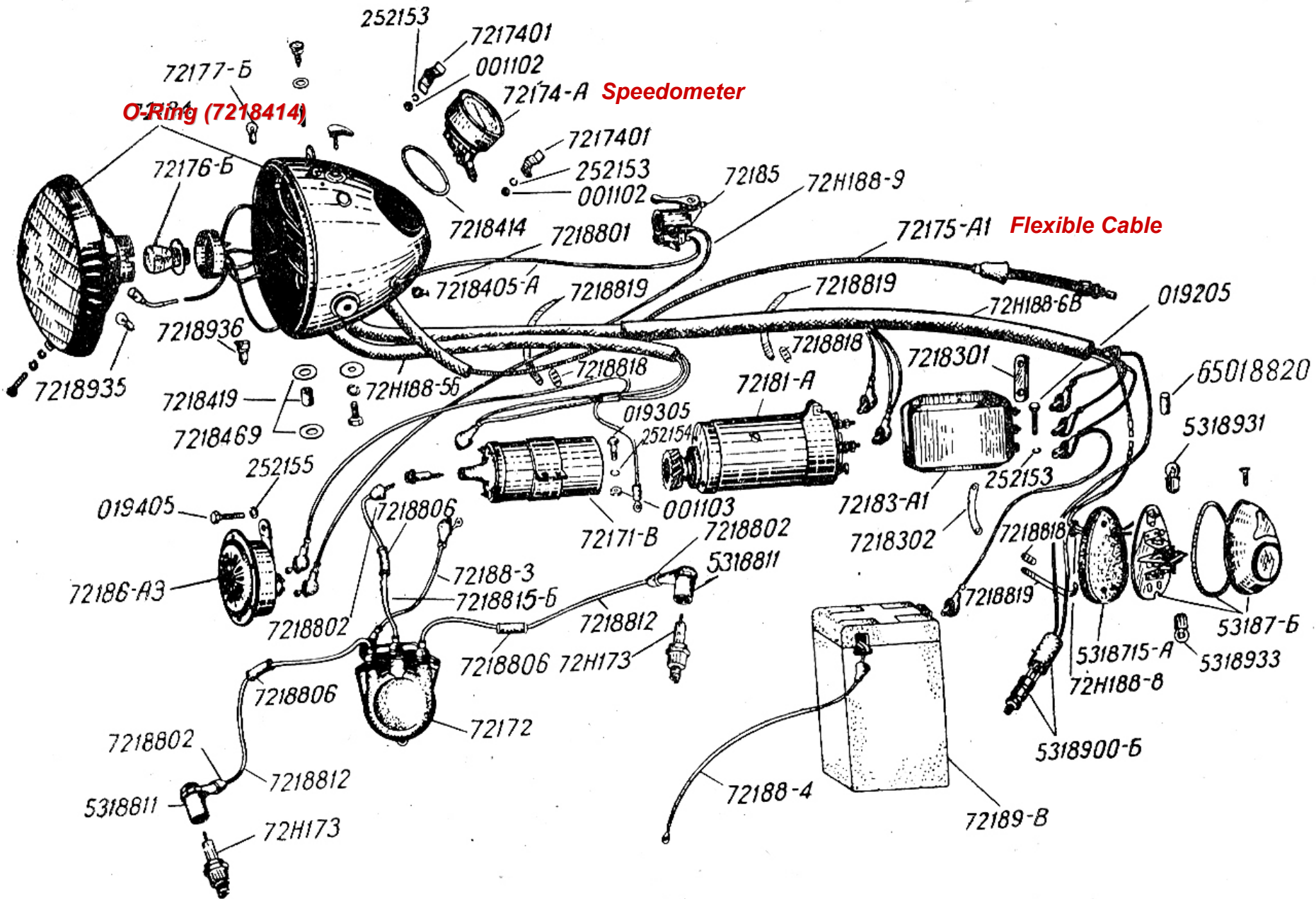


Speedometer CII-8

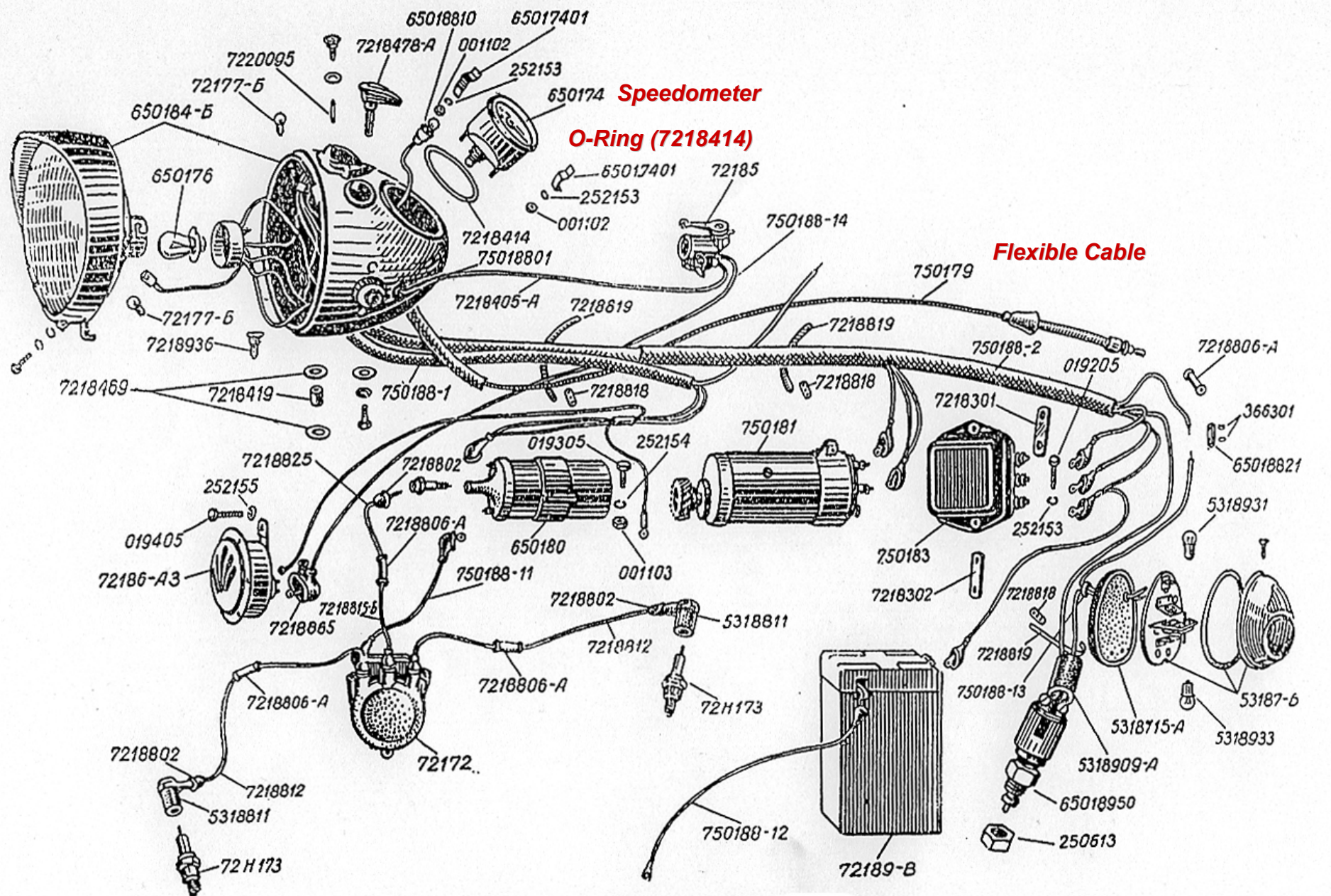
Dnepr (Днепр) M-72 (1955) Speedometer and Flexible Drive Cable



Dnpr (Днепр) K-750 Speedometer and Flexible Drive Cable



Dnepr (Днепр) K-750M Speedometer and Flexible Drive Cable



Dnepr (Днепр) MB-750 (Military Version of MT-12)

O-Ring (7218414)

Speedometer СП-8Б

Flexible Cable

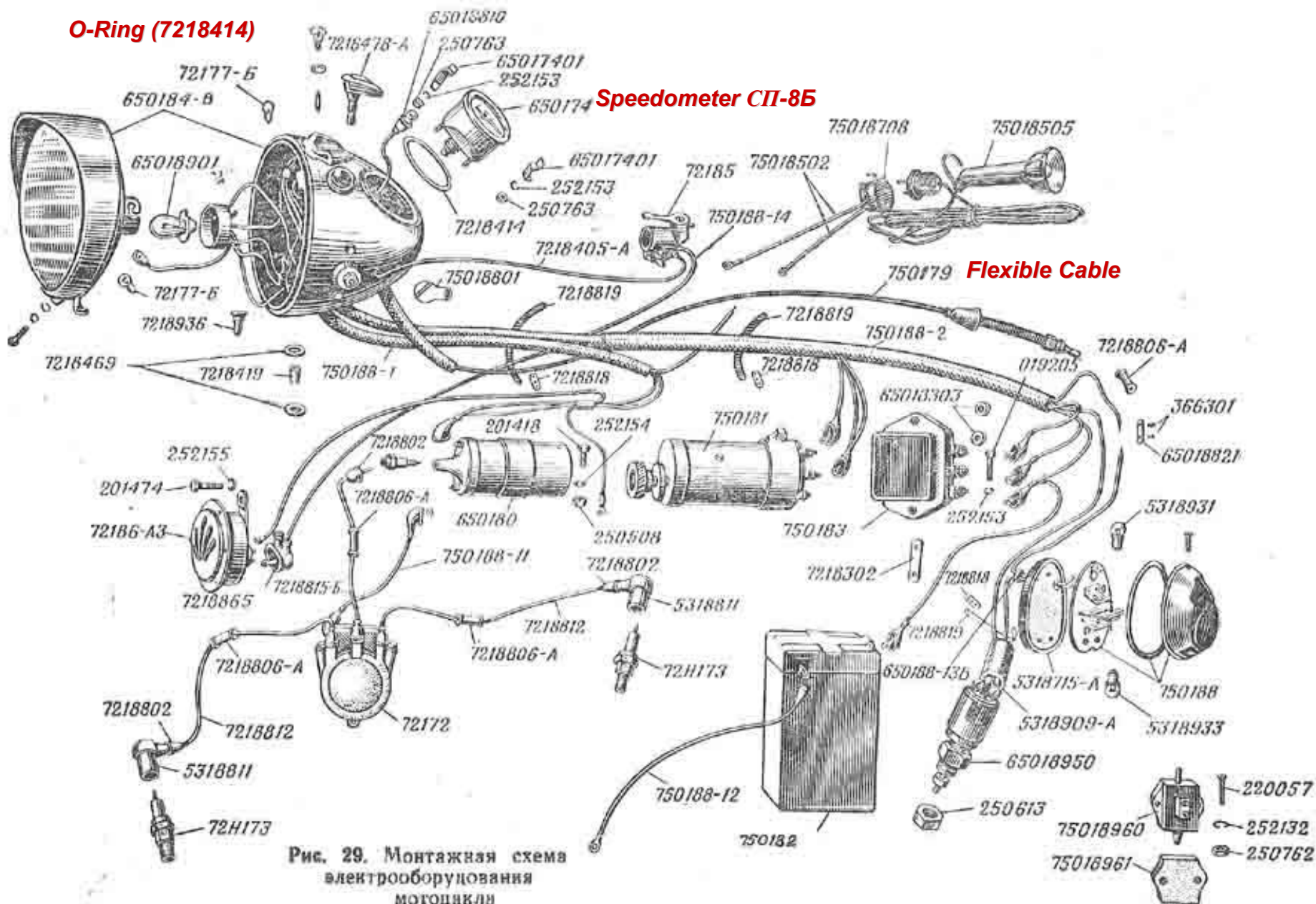
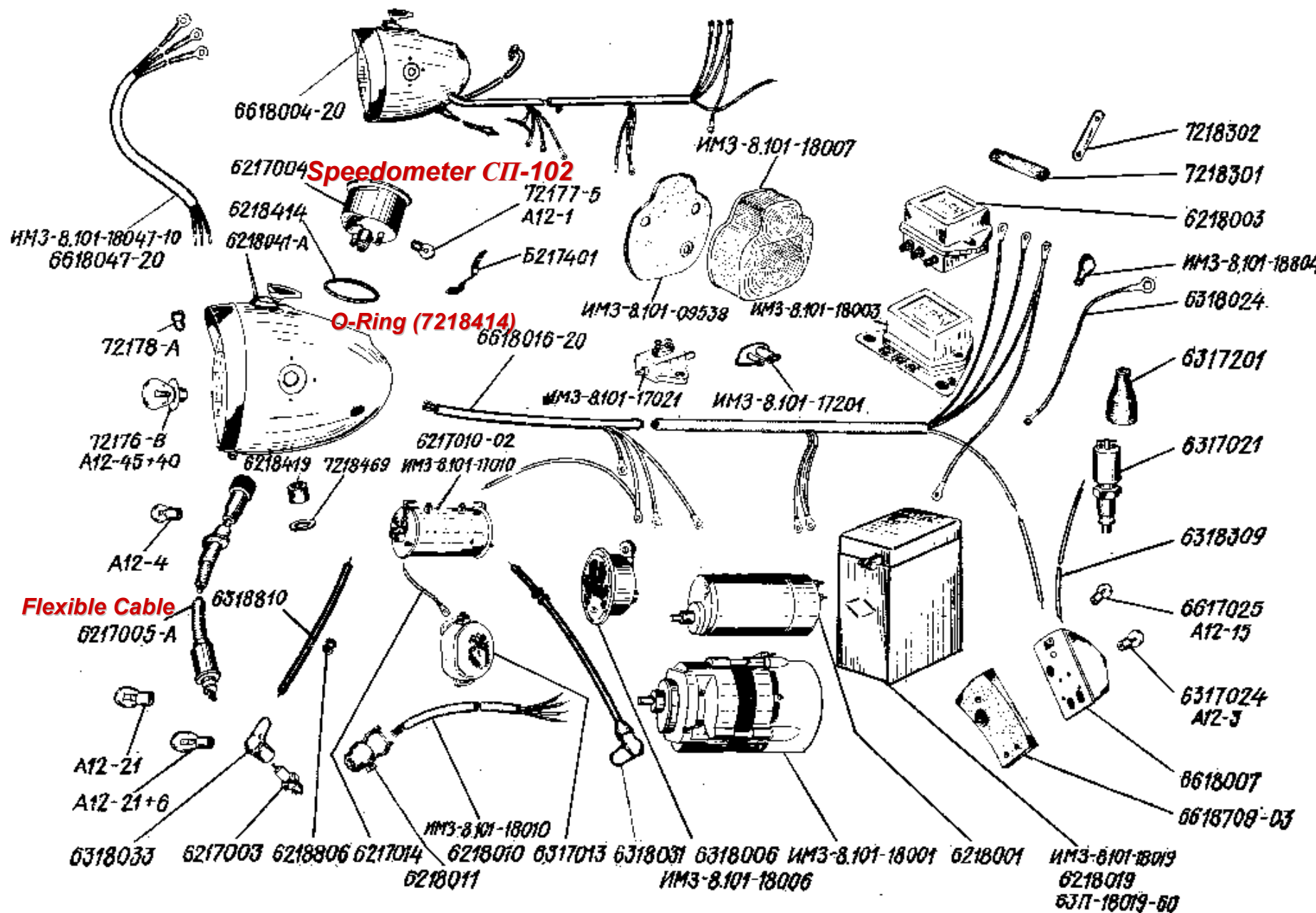


Рис. 29. Монтажная схема электрооборудования мотоцикла

Ural (Урал) M-62, M-63 and M-66 Parts

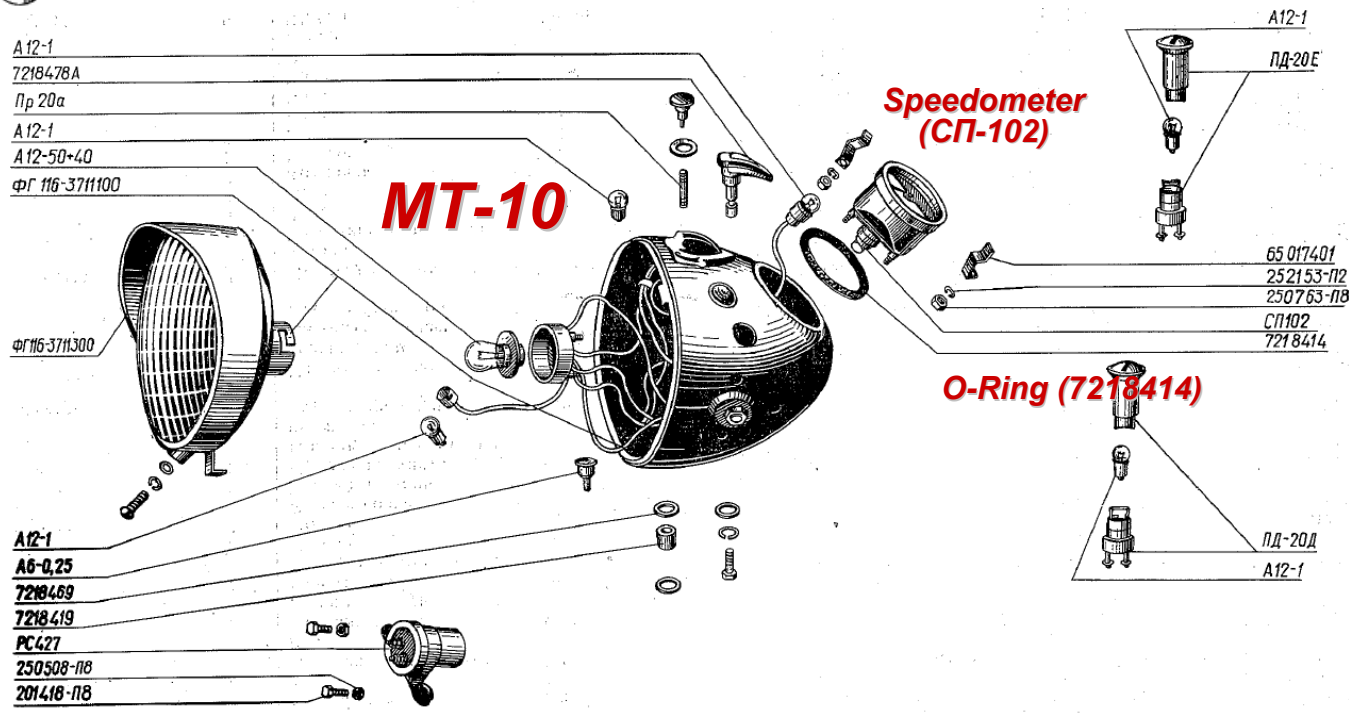
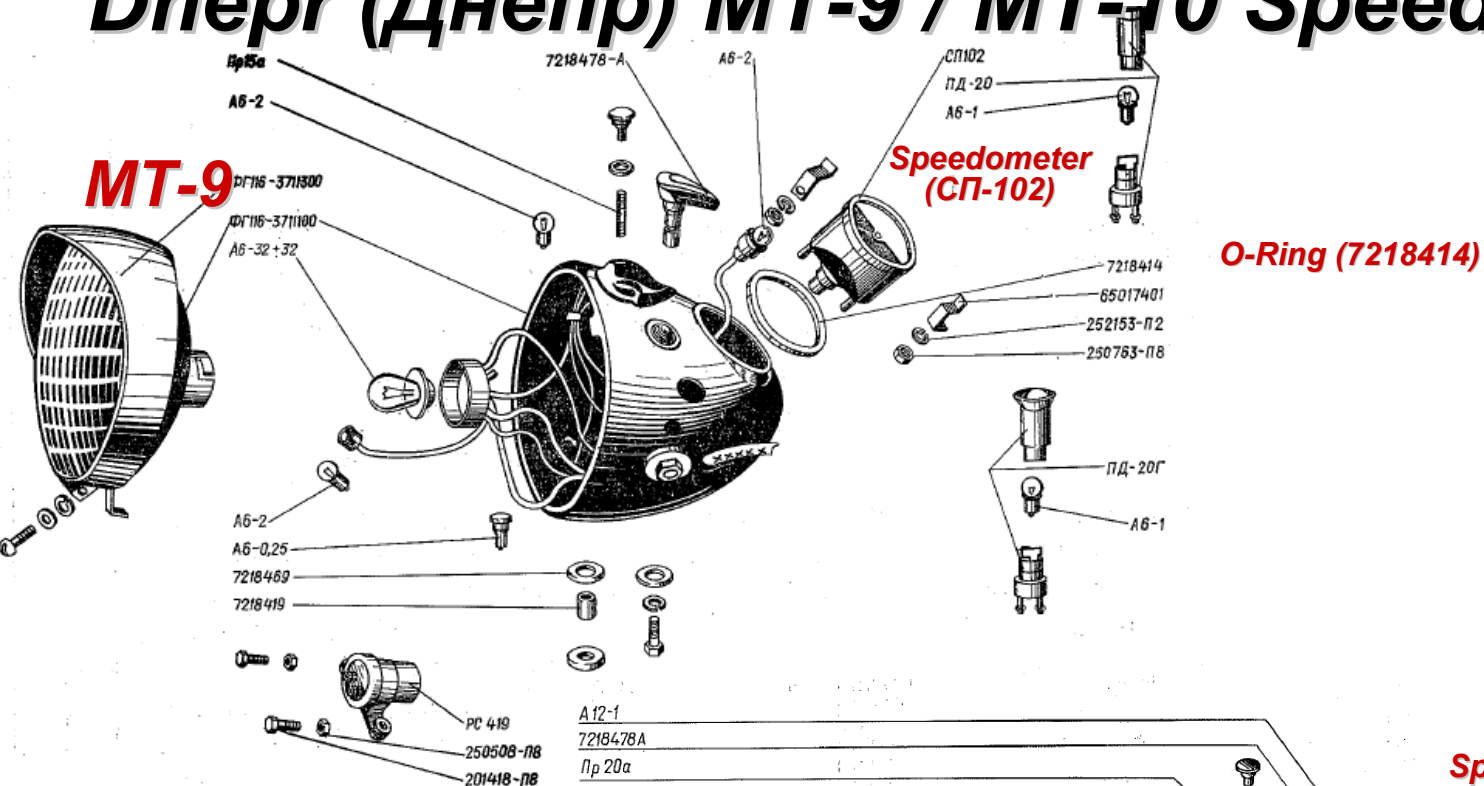


Ural (Урал) M-63 Speedometer (opposit.ru)



Speedometer СП-102

Dnepr (Днепр) MT-9 / MT-10 Speedometers



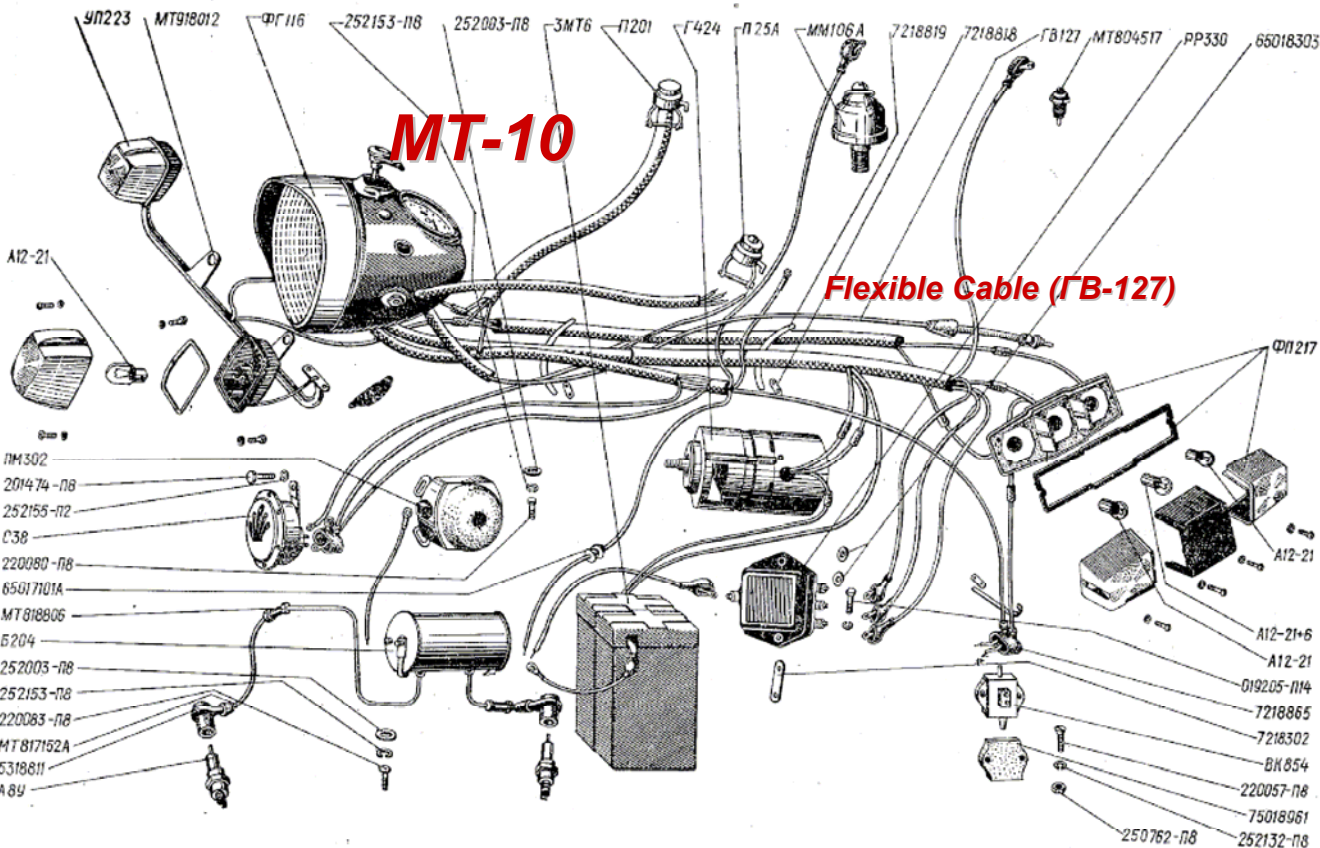
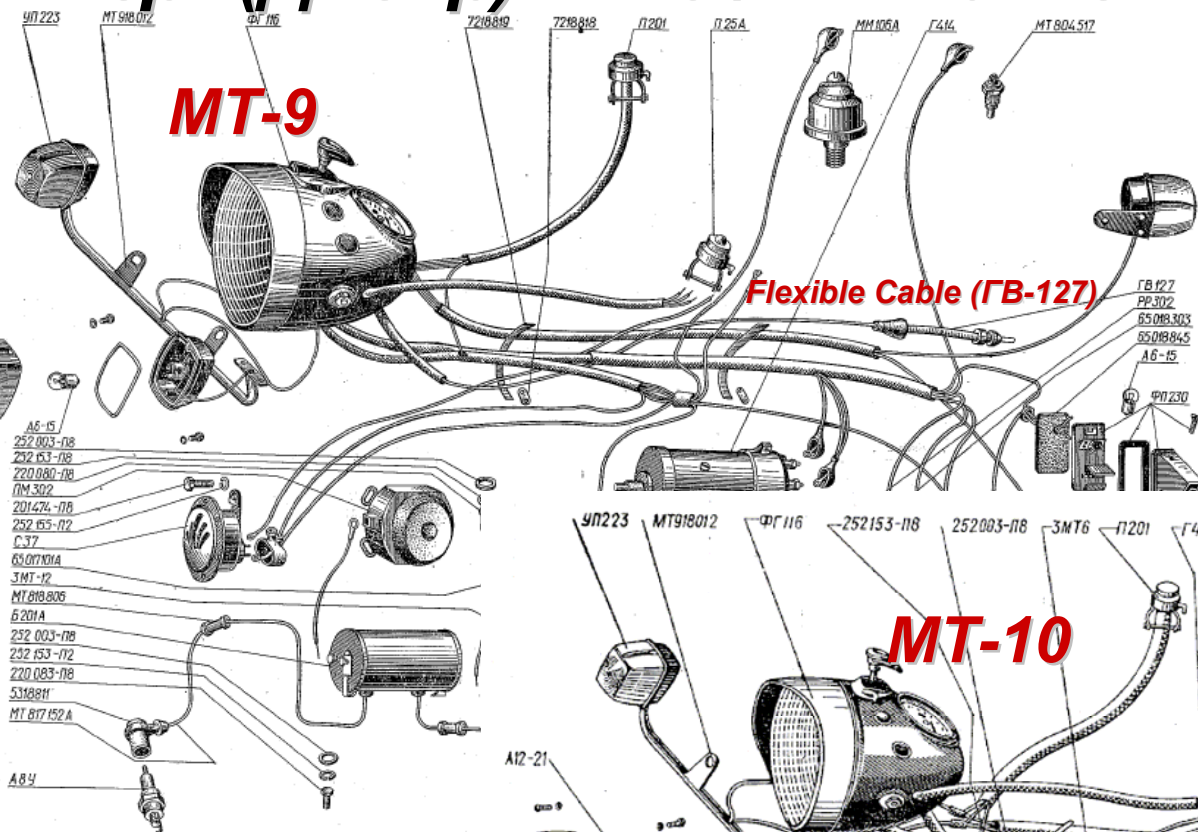
Днепр (Днепр) MT-9 / MT-10 Flexible Drive Cables

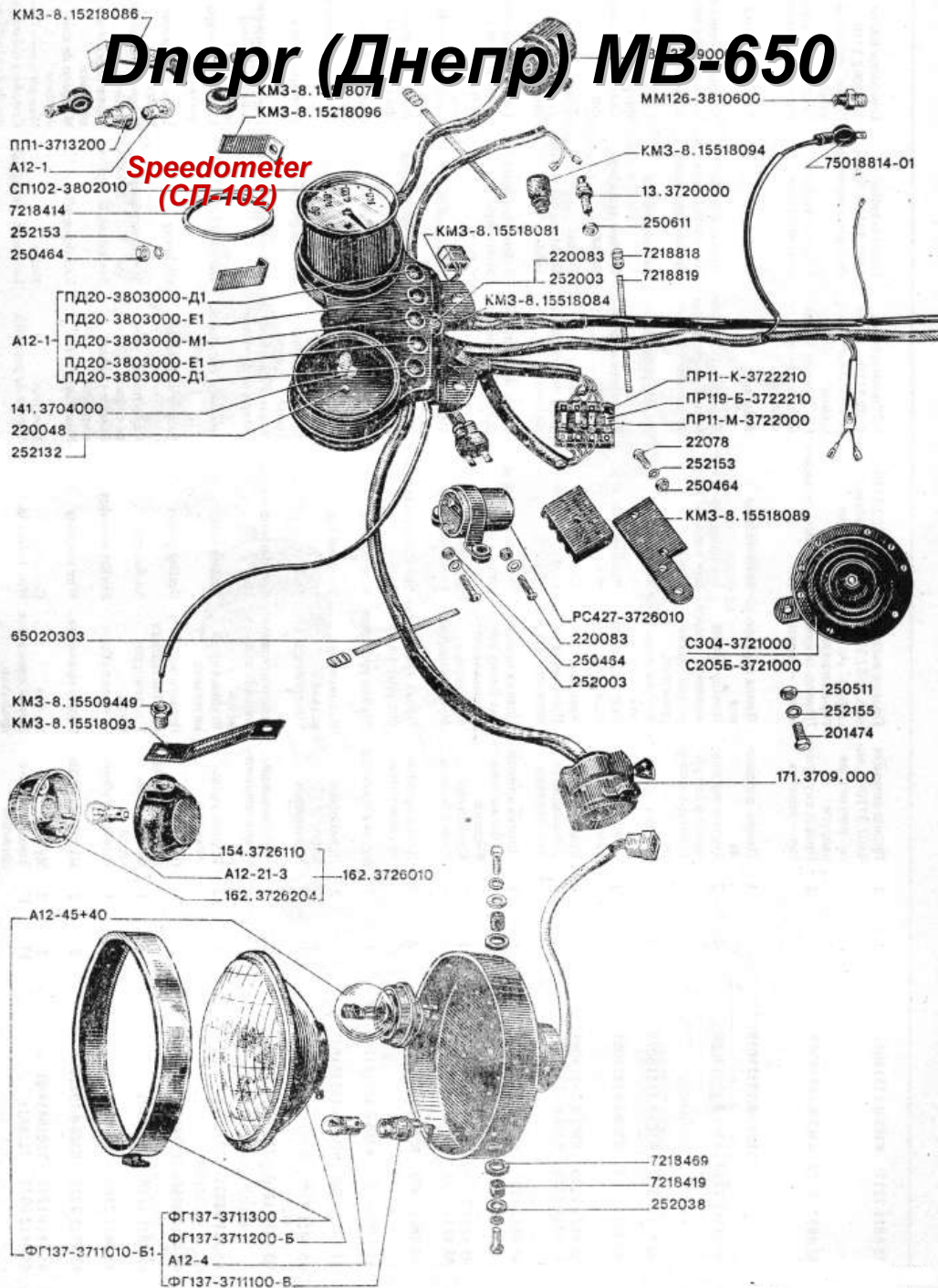
MT-9

Flexible Cable (ГБ-127)

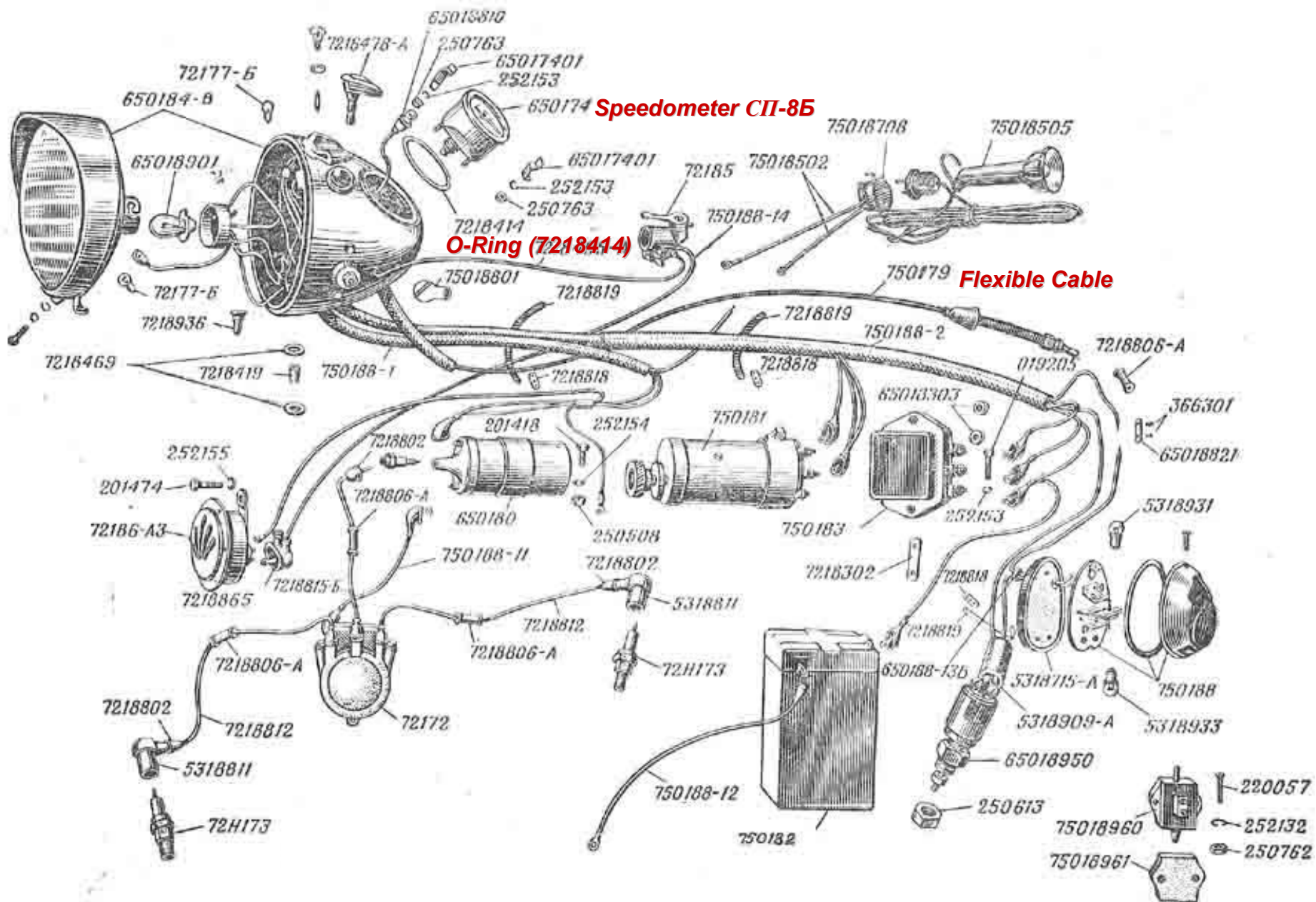
MT-10

Flexible Cable (ГБ-127)

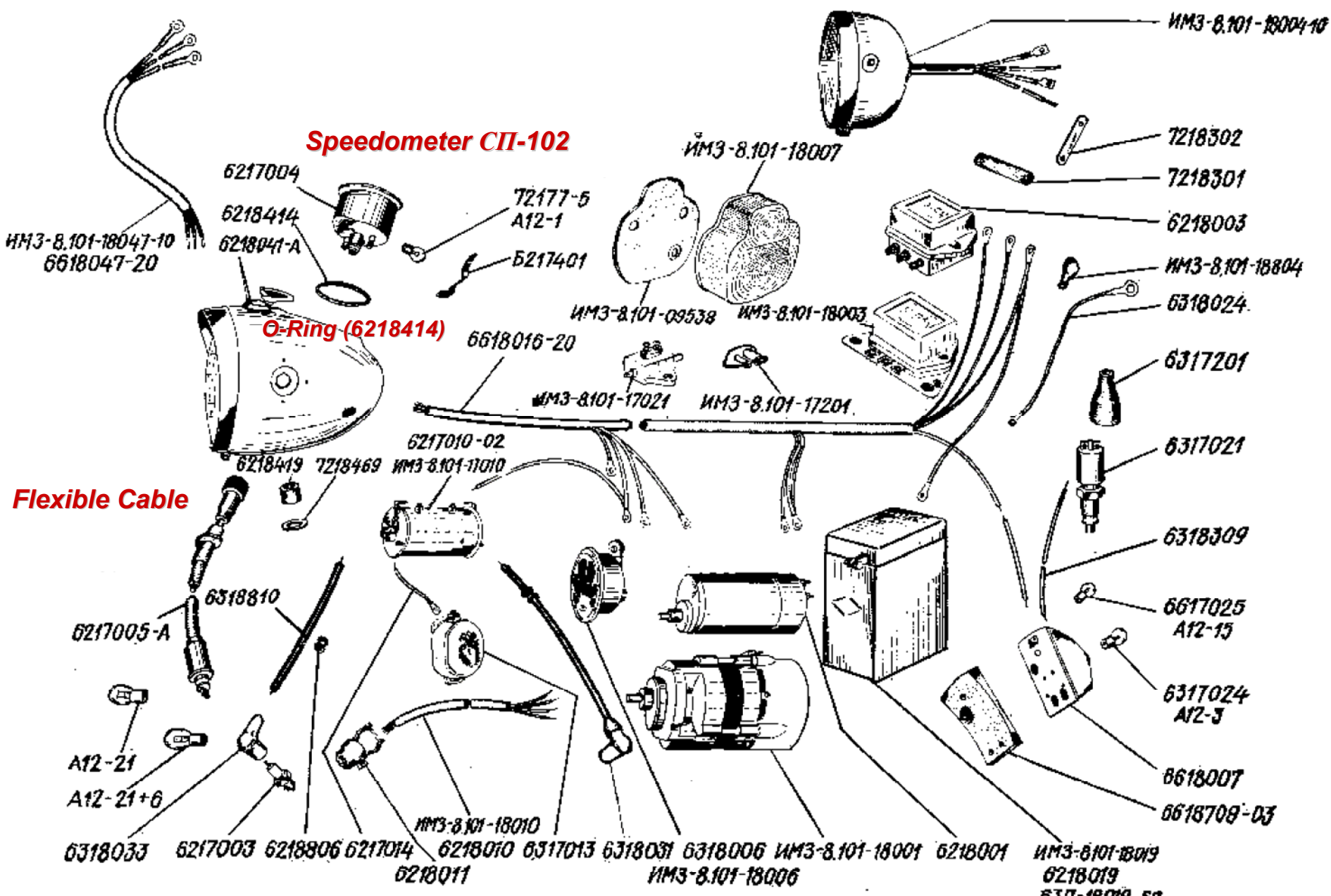




Днепр (Днепр) МТ-12 (1961)



Ural (Урал) M-67 Parts



Ural (Урал) M-67



***Alternator
"Charge" Alarm***

Turn Signal

Speedometer CII-102

***Speedometer Separate from
Headlight Cavity***

Ural (Урал) M-67.36 Speedometer

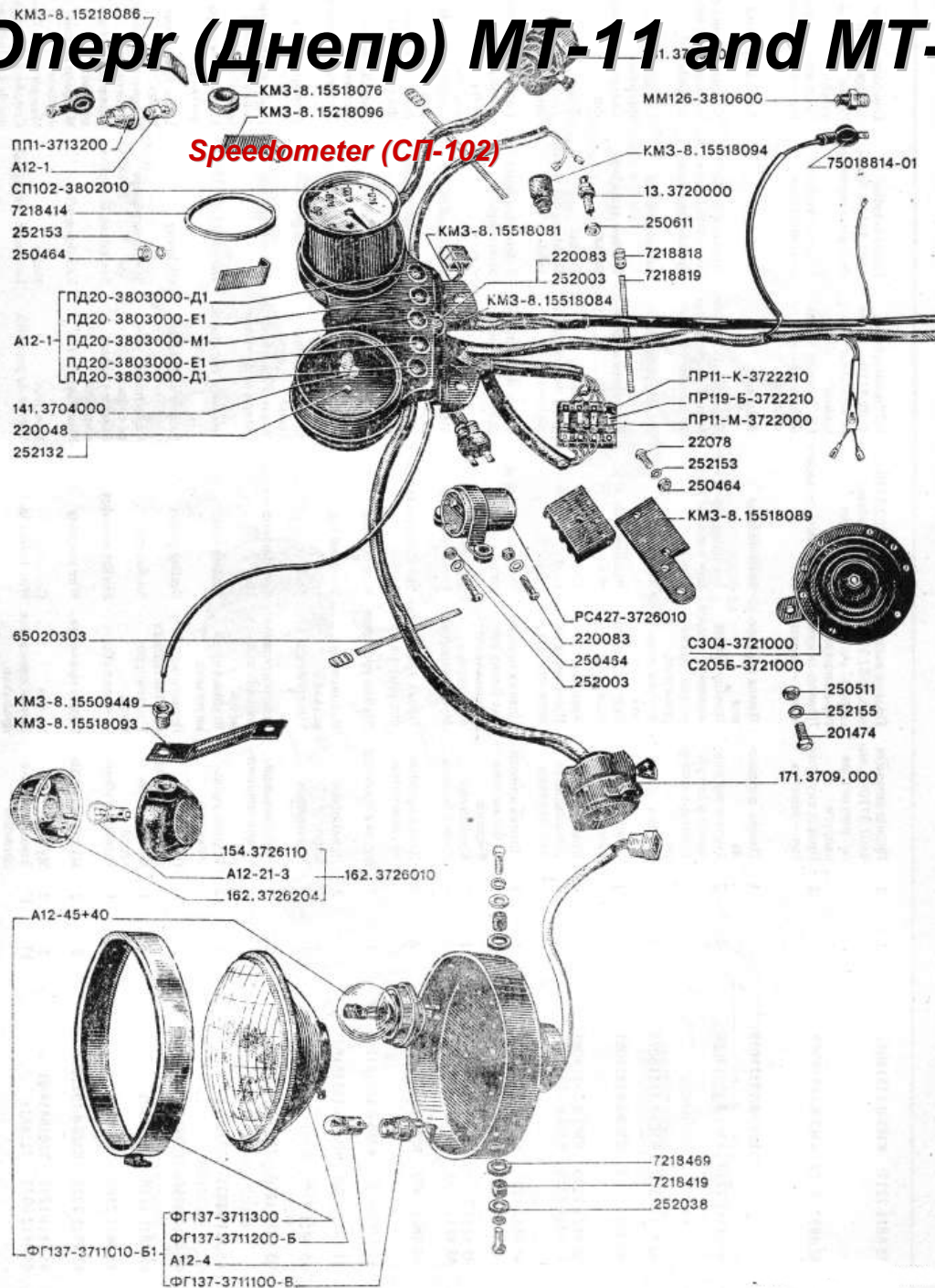


Speedometer СШ-102

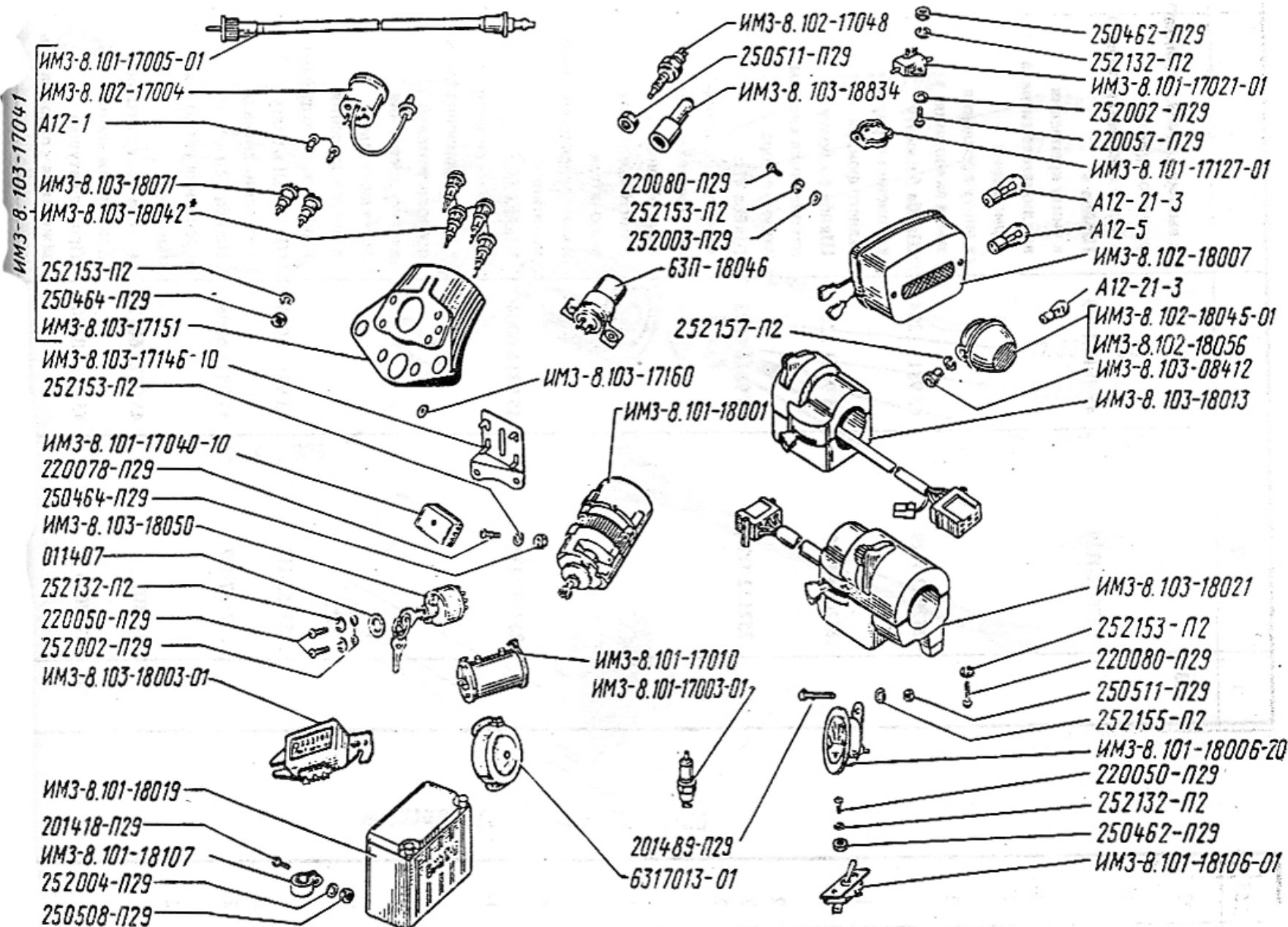
Днепр (Днепр) MT-11 and MT-16

O-Ring (7218414)

Speedometer (СП-102)



Ural "650"



Dash-Board for Днепр (Днепр) MT-11 / MT-16

**Ignition Lock
(141.3704)**



**Speedometer
(СП-102)**



**Turn (green)
ПД20 3803000-Д1 (A12-1)**

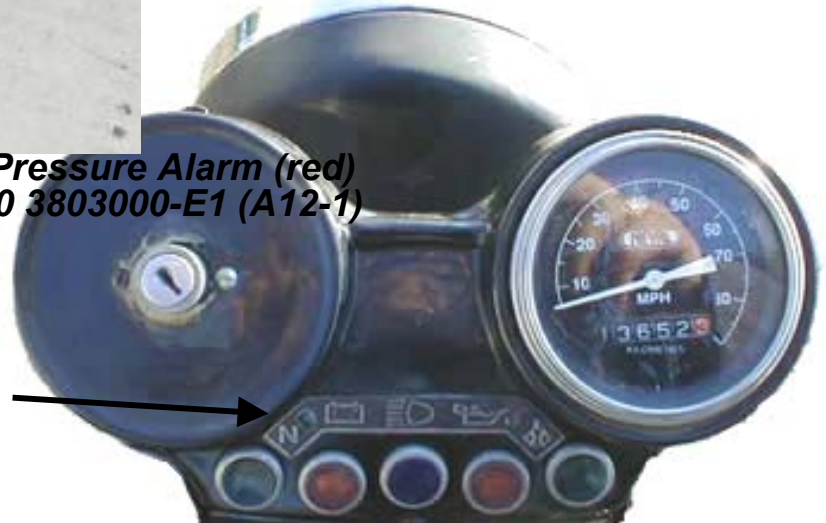
**Neutral (green)
ПД20 3803000-Д1 (A12-1)**

**"Charge" Alarm (red)
ПД20 3803000-Е1 (A12-1)**

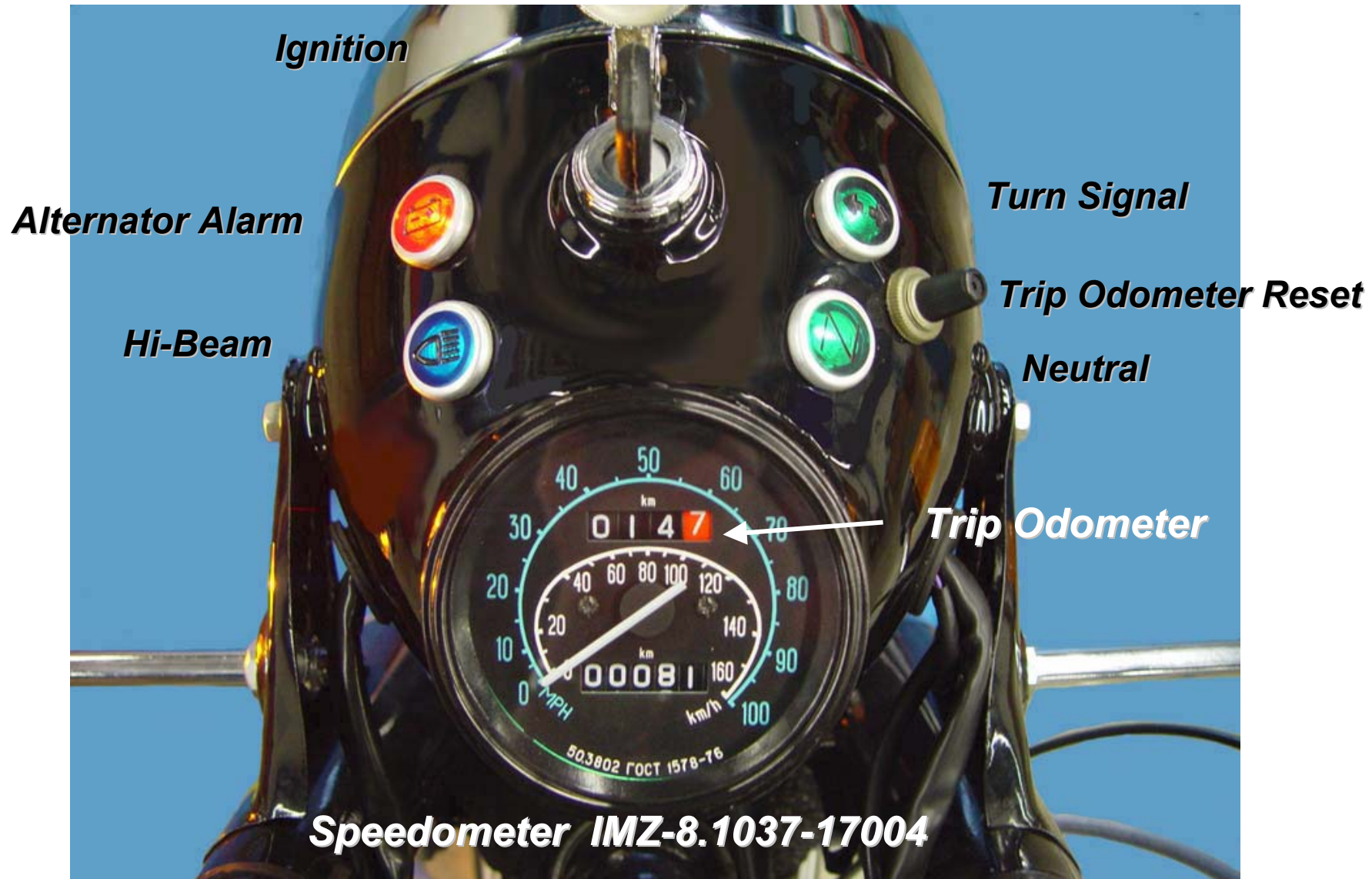
**Neutral (blue)
ПД20 3803000-М1 (A12-1)**

**Oil-Pressure Alarm (red)
ПД20 3803000-Е1 (A12-1)**

**Helpful "Cheat-Sheet" Added to Indicators
(www.cossackmotorcycles.com)**



Ural Retro



Ural 2006 Gear-Up



**Alternator
Alarm
Indicator**



**Hi-Beam
Indicator**



Trip Odometer



**Turn Signal
Indicator**



**Odometer
"Zeroing"
Knob**



**Neutral
Indicator**



Speedometer IMZ-8.1037-17004