



Ural (Урал) - Днепр (Днепр) Russian Motorcycle Part 2: One-Wheel Drive (1WD)

***(Also See Part 1: Overall Drive-Chain, Part 3: Two-Wheel Drive (2WD),
Part 4: Gears and Gear Ratios, Part 5: Disassembly of Drive Chain,
Part 6: Drive Train Components, Part 7: Drive Train Maintenance and
Part 8: Chapter 7 of Bill Glaser's "Unofficial" URAL 750cc Motorcycle Service Manual)***

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Four Types of Final Drives in Russian Sidecars

- 1. Full-Time, Straight Final Drive (1WD) (Part 2)**
 - One-Wheel Drive (1WD)**
 - Available in Various Ural / Dnepr Models**
- 2. Full-Time, Two-Wheel Drive (2WD) with Non-Locking Differential (Part 3B)**
 - Dnepr MB-650M (1985-1991)**
 - Dnepr MT-12 (1977-1985)**
 - Dnepr MT-16 (1985-2005)**
 - Dnepr Rear Drive Casings Allow for Adding Locking Differential**
 - First Available in Ural: “Sportsman” IMZ 8.107 (1995-1998)**
 - Only True Differential for Ural**
 - Pre-“Patrol” Model**
- 3. Full-Time, Two-Wheel Drive (2WD) with Locking (Engageable) Differential (Part 3C)**
 - Dnepr MB-750 (1964-1973)**
 - Dnepr MB-650 (1968-1984)**
 - Dnepr MB-750M (1973-1977)**
- 4. Full-Time, 1WD with Engageable, Locking 2WD (non-Diff) (Part 3D)**
 - Available in Various Ural Models**
 - Production: Patrol (1998-Current), Gear-Up (2001-Current) and Patrol-T (2009-Current)**
 - Limited Editions with Engageable Sidecar Drive Shaft:**
 - Derivatives of Patrol or Gear-Up**
 - Basic (2005), Raven (Vorona) (2006), Pustinja (2007), Wjuga (2008), Sahara (2009) and Taiga (2010)**

Part 2 deals with the most popular sidecar, with a full-time 1WD final drive, where the sidecar wheel is not powered.

Ural (Урал) / Dnepr (Днепр) 1WD Drive Chain and Suspension

Ural (Урал) Model	Production	Engine	Voltage	Drive Train	Rear Suspension
M-72	1941-1950	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
M-72K	1952-1958	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
M-72M	1956-1961	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
M-61	1958-1961	650cc OHV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
M-62 (Ural-1)	1961-1965	650cc OHV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
M-63 (Ural-2)	1965-1971	650cc OHV	6-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
M-66 (Ural-3)	1971-1973	650cc OHV	6-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
M-67 (IMZ-8.101)	1974-1976	650cc OHV	12-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
M-67.36	1976-1984	650cc OHV	12-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
“Sportsman” IMZ 8.107	1995-1998	650cc OHV	12-Volt	Full-Time 2WD with non-Locking Differential	Swing Arm
8.103 Series “650”	1984-2002	650cc OHV	12-Volt	Full-Time 1WD with Engageable 2WD (No Diff)	Swing Arm
“750”Series	2003-Present	750cc OHV	12-Volt	Full-Time 1WD with Engageable 2WD (No Diff)	Swing Arm

Dnepr (Днепр) Model	Production	Engine	Voltage	Drive Chain	Rear Suspension
M-72	1951-1956	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
M-72N (H)	1956-1960	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Plunger
K-750	1959-1963	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
K-750M	1963-1977	750cc SV	6-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
MT-12 (Dnepr-12)	1974-1982	750cc SV	6-Volt	Full-Time 2WD with Non-Locking Differential * *	Swing Arm
MB-750	1964-1973	750cc SV	6-Volt	Full-Time 2WD with Locking (Engageable) Diff *	Swing Arm
MB-750M	1973-1977	750cc SV	6-Volt	Full-Time 2WD with Locking (Engageable) Diff *	Swing Arm
K-650/MT-8	1967-1971	650cc OHV	6-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
K-650/MT-9	1971-1976	650cc OHV	6-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
MB-650	1968-1984	650cc OHV	12-Volt	Full-Time 2WD with Locking Differential *	Swing Arm
MB-650M	1985-1991	650cc OHV	12-Volt	Full-Time 2WD with Non-Locking Differential * *	Swing Arm
MT-10	1973-1976	650cc OHV	12-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
MT-10.36	1976-1984	650cc OHV	12-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
MT-11 (Dnepr-11)	1984-2005	650cc OHV	12-Volt	Full-Time, Straight Final Drive (1WD)	Swing Arm
MT-16 (Dnepr-16)	1985-2005	650cc OHV	12-Volt	Full-Time 2WD with Non-Locking Differential * *	Swing Arm

* Locking Feature Deleted after Two Years of Production, * * Optional Kit Available to Add Locking Differential

Final Drive Functionality

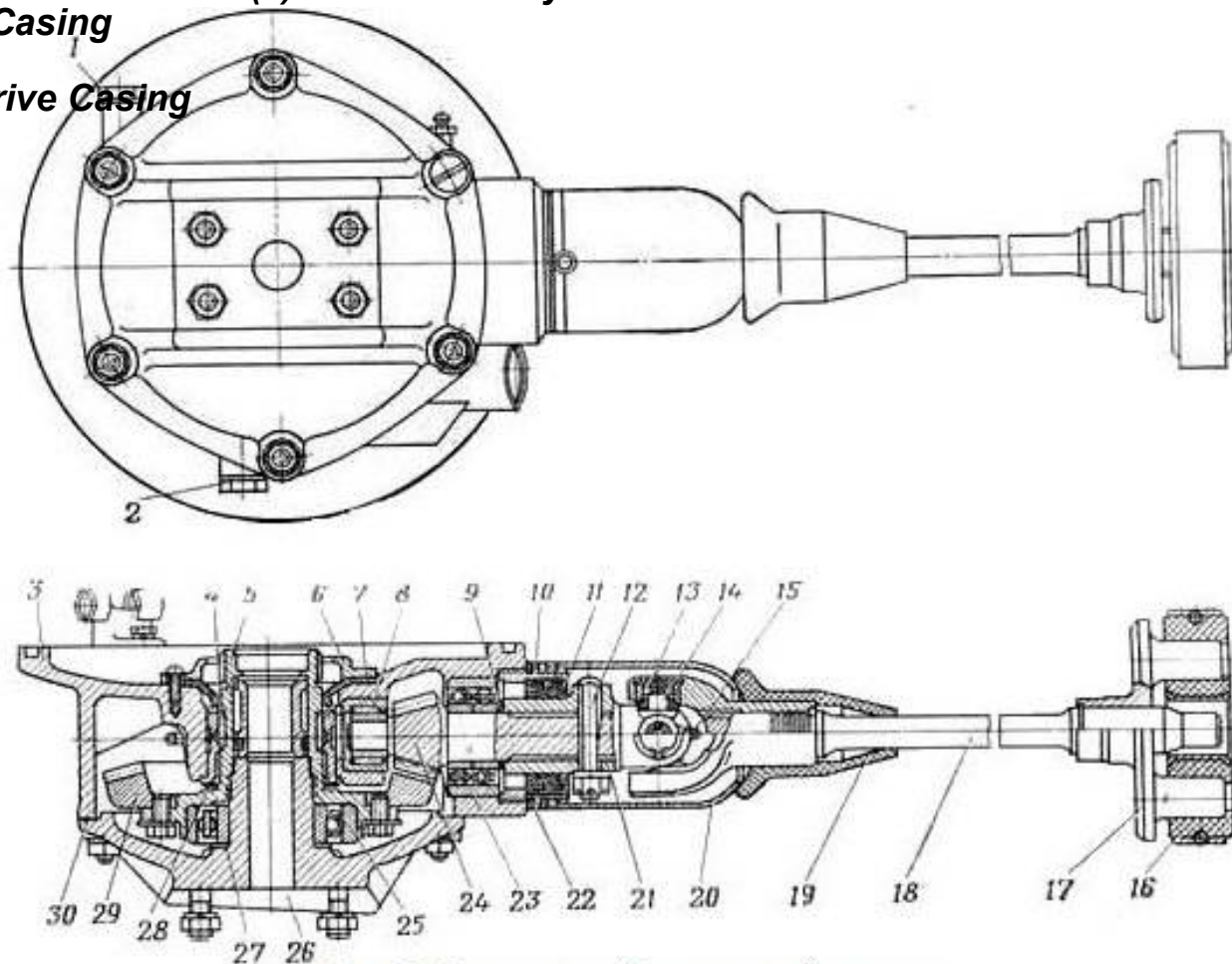
- ***Final Drive Designed to Transmit Torque to Rear Wheel***
 - ***Includes Drive Shaft (propeller shaft with two joints) and Rear (main) Drive***
- ***Propshaft Used to Transmit Torque from Gearbox to Rear Gear***
 - ***In addition, Propshaft Smooths Stresses of Gearbox as a Result of Uneven Torque Developed by the Engine and Interaction with Road Wheels***
 - ***Front Driveshaft Joint Consists of Two Flexible Forks, One Installed on Secondary Shaft of the Gearbox and the Second on the Cardan Shaft***
- ***Flexible Flanges Inter-Connected thru an Elastic Rubber Disc***
 - ***Prevents the Destruction of the Steel Band around the Elastic Disc***
 - ***Allows the Flexible Flanges to Make Angular Displacements Relative to Each Other, while Transmitting Torque Propeller Shaft Angle Variations***
 - ***Dynamic Loading in Two Fork Rotated Relative to Each Other***
 - ***Deformation of Rubber Smoothing Stresses Caused by Uneven Rotation, Due to Angle of Joint***
 - ***Thus Flexible Flanges Serve as Transmission of Swivel Torque and as a Stress Absorber***
 - ***To Prevent Radial Displacement of the Forks Relative to Each Other, Due to Deformation of the Rubber, Mating Flange Has Threaded Hole, Which Aligns the Shaft to the Ball of the Secondary Shaft of the Gearbox***
- ***Rear Drive Transmits Torque to Rear Wheel and Contains Gear Reduction***
 - ***Torque Transmitted to a Pair of Bevel Gears with Spiral Teeth***
 - ***Gear Ratio of 1:4.62 (8 pinion and 37 crown teeth)***
 - ***Each Gear Installed in Casing with Two Bearings: One Ball and One Roller (needle)***
 - ***Axial Forces Try to Push the Pair of Tapered Gears Apart***
 - ***To Contain these Forces and Ensure Proper Engagement, Angular-Contact, Double-Row Ball Bearings Are Set Outside Each Gear***
 - ***Internal Needle Bearings Prevent Misalignment of Gears and Only Incur a Radial Load***

The position of gears in the crankcase is solely determined by the position of ball bearings.

One-Wheel Drive (1WD) Drive Train

- **Rear Drive Has Pair of Bevel Gears (24 and 29) with Spiral Teeth mounted in Crankcase (3) without a Sidecar Wheel Drive**
 - Bevel Gear Ratio Is 4.62 (37/8 ring teeth /pinion teeth) for Russian Motorcycle with Sidecar
- **Changes Direction of Torque at Right Angles to Power the Drive Wheel**
- **Elastic Disc (16) Consists of Two Steel Discs (17), Mounted on a Splined End of Gearbox Shaft and Slave Disc Sitting on Splined End of the Drive Shaft (18)**
- **Cylindrical Fingers of Both Discs Connecting Them Between Elastic Coupling (17) in a Steel Cage**
- **Rear Brake Placed on Neck of Left-Hand Side of Rear Drive Casing**
- **Six Studs Attach Cover (26) to Right-Hand Side of Rear Drive casing**
- **Support for Ball Bearing (N207), Driven Gear Hub (5) and Stationary Shaft of Rear Wheel**
- **Oil Filler-Hole at Top of Rear Drive Casing**
 - Screwed into Threaded Plug (1)
- **Oil Drain-Hole at Bottom of Rear Drive Casing**
 - Gasket and Plug (2)

1. Filler Plug with Dipstick
2. Drain Plug
3. Rear Drive Casing
4. Needle Roller Bearing
5. Driven Gear Flange Hub
6. Follower
7. Collar Seal
8. Needle Roller Bearing, Pinion
9. Tightening Wedge Shims
10. Nut Bearing
11. Seal
12. Wedge-Bolt
13. Needle Bearing Universal Joint Cross
14. Cross Shaft
15. Grease Fitting
16. Elastic Disc (Doughnut)
17. Flexible Coupling Flange (Disc)
18. Propeller Shaft (Propshaft)
19. Rubber Boot
20. Cap Gimbal (Cowl)
21. Cardan Fork
22. O-ring
23. Pinion Bearing
24. Leading Bevel Gear (Small Pinion)
25. Ball Bearing Idler
26. Rear Drive Cover
27. Shims
28. Installation
29. Driven Bevel Gear (Crown)
30. Rear Drive Cover Gasket



Close-Up of 1WD Rear Drive

1. Rear Drive Casing

2. Seal (gland)

3. Bearings

Wedge Bolt and Nut

4. Universal Joint

5. Driver Bevel Gear

6. Crown Driven Bevel Gear

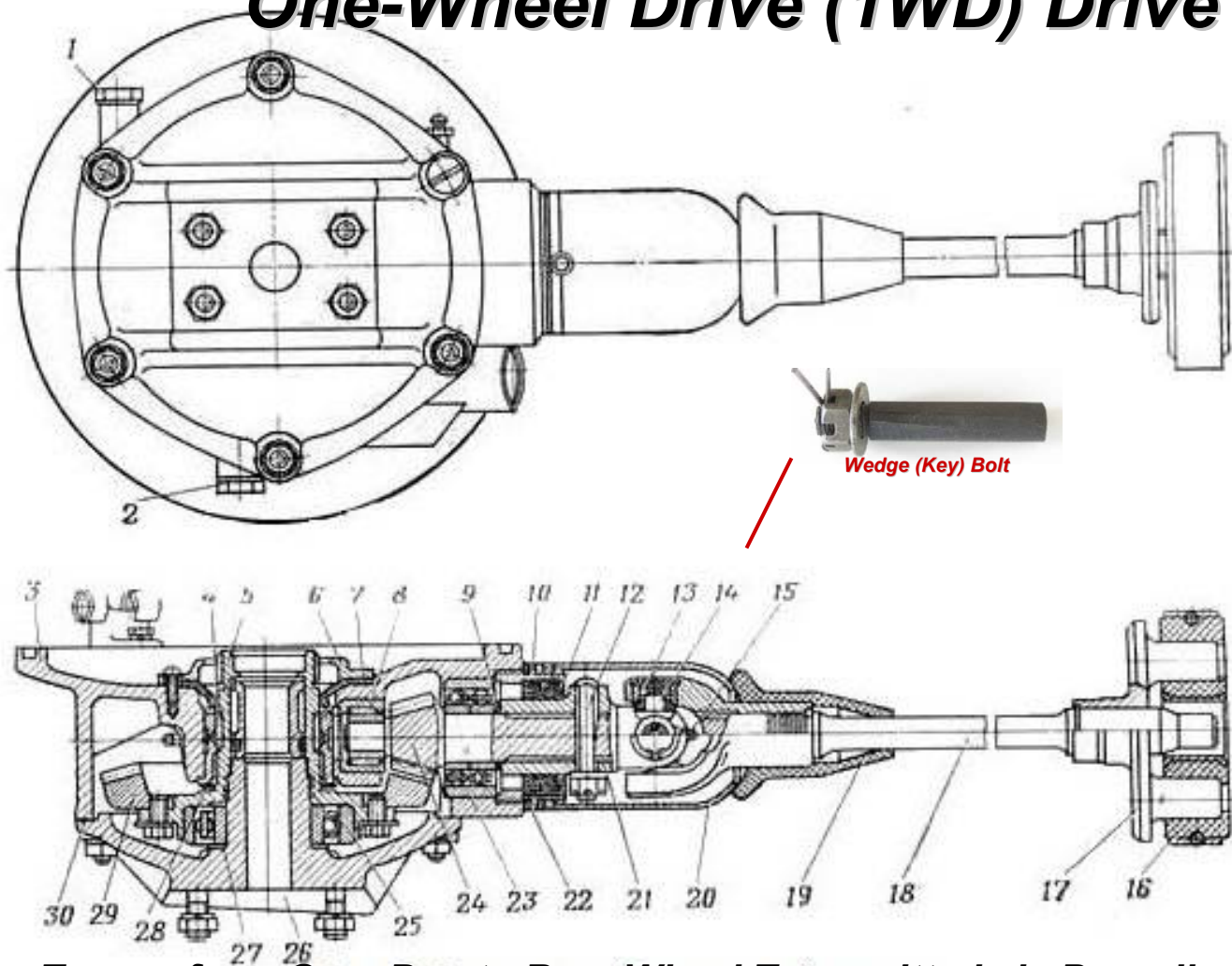
Output Hub

Shaft for
Rear Axle

Ball Bearing



One-Wheel Drive (1WD) Drive Train (cont.)



1. Filler Plug with Dipstick
2. Drain Plug
3. Rear Drive Casing
4. Needle Roller Bearing
5. Driven Gear Flange Hub
6. Seal Cap
7. Collar Seal
8. Needle Roller Bearing, Pinion
9. Tightening Wedge Shims
10. Nut Bearing
11. Seal
12. Wedge-Bolt
13. Needle Bearing Universal Joint Cross
14. Cross Shaft
15. Grease Fitting
16. Elastic Disc (Doughnut)
17. Flexible Coupling Flange (Disc)
18. Propeller Shaft (Propshaft)
19. Rubber Boot
20. Cap Gimbal (Cowl)
21. Cardan Fork
22. O-ring
23. Pinion Bearing
24. Leading Bevel Gear (Driving Pinion)
25. Ball Bearing Idler
26. Rear Drive Cover
27. Shims
28. Installation
29. Driven Bevel Gear (Crown)
30. Rear Drive Cover Gasket

- **Torque from Gear Box to Rear Wheel Transmitted via Propeller Shaft and Final Drive Helical Bevel Pinion and Gear**
- **Final Drive Should Not be Disassembled, If Not Necessary**
- **During Re-Assembly, Make Certain the Same Adjusting Washers (9 and 27) Are Re-Installed**
- **Washer (27) Used to Adjust Clearance between Gear Teeth**
 - **Lateral Backlash between Pair of Bevel Gear Teeth: 0.1-0.3mm (0.004-0.012")**
- **Clearance between Gear Teeth Should Be Felt by Hand When Rocking the Drive Shaft, with Hub (5) of the Driven Gear Locked in Position**

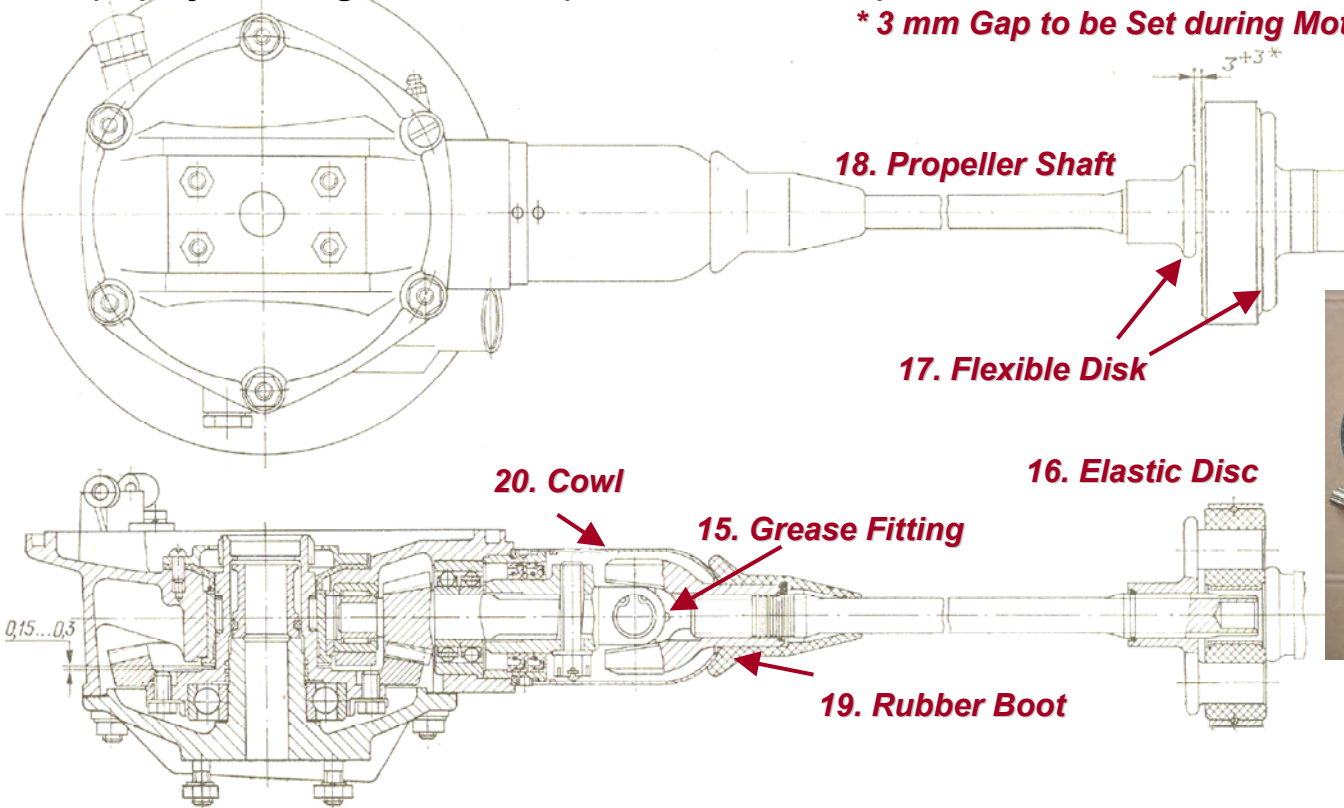
One-Wheel Drive (1WD) Drive Train (cont.)

- **Removable plug drive shaft sitting on its end is half cardan joints. Second coupling half is slotted fork 21, mounted on the splined shank pinion (24) main transmission and fixed wedge bolt 12.**
- **Cross between the forks mounted gimbal 14, which is worn on the fingers of needle bearings 13, the outer ring is inserted into the socket plugs and kept them in the lock ring**
- **Universal Joint Needle Bearing Lubricated thru Screwed Nipple (15) in Center of Cross (14)**
 - **Rubber O-ring in a Special Cage Keeps Grease at the Base of the Cross Fingers (shafts) (14)**
 - **Universal Joint Protected from Moisture and Dirt by Metal Cap (20) with Left-Hand Threaded Nut (10) Bearing and Rubber Boot (19)**
- **In Axle Hole, Bushing Pressed into Rear Drive Casing**
 - **Outer Race for 45 Needle Roller Bearings (3X10)**
 - **Inner Race Serves as Driven Gear Hub Flange (5)**
- **In Side Hole, Needle Roller Bearing (8) and Double-Row Ball Bearing (23) Supports Shank of Leading (Driver) Bevel Gear (24)**
- **Bearings and bushings Lubricated with oil coming thru the hole in Driving Pinion, is above the nest by sticking the needle bearing 8**
 - **Oil is sprayed by rotating gears**
- **Left collar seal (7) Spring, compresses against the hub of the driven gear to prevent any oil on the brake pads installed on the Rear Drive Casing**
 - **Outside a seal cap (6) Is Mounted**
- **Beveled gears Must Have a Backlash of 0.1-0.3 mm (0.004-0.0012")**
 - **washers 27 are set to adjust Backlash between Ball Bearing (25) Installed on the Cover and the Rear Drive gear inner race bearing**
 - **In addition, A Set of Shims (9) Establishes Invaetsya between angular contact ball bearing and pinion gear 23 and a plug 21 cardan tightened Wedge-Bolt (12) on Shank of Pinion Gear (24)**
 - **Tightening the nut wedge and choosing the right amount of washer tightening inner race radial ball bearings (23) and Selection of the required number of shims 9 and 27 in the main gear assembly Provided lateral clearance between the teeth of the conical couples within the required limits**
 - **Therefore, disassembly of the main transfer unnecessarily to use undesirable. If such disassembly, when the assembly is extremely important to put the same shims 9 and 27, Factory-Installed**
- **Outdoor cage clamped nut 10 bearing left-handed.**
- **To prevent oil leakage under the nut 10 is cork, and in the groove nut 10 on the neck of the fork 21 - a special gland.**
- **Crown Driven Gear (29) Is Mounted on Flange Hub (5) with Eight Bolts**
- **On Opposite Side of Hub's Flange (5) Are Slots Which sits stupntsa drive wheel.**
- **Axial Movement of the Hub Is Limited to the spacer, inside the hub 5**

One-Wheel Drive (1WD) Drive Train (cont.)

- When Position of Rear Wheel on Uneven Roads Moves Up-and-Down, Angle of Inclination of Propeller Shaft Varies
 - Universal Joint with Cross-Piece Transfers Torque with Deviations Up to 8°
- Combination of Deformation of Elastic Disc (16) and Propeller Shaft (18) Twisting Softens the Sharp Jolts and Bumps in Power Transmission
- Driveshaft Length Ensures Total Clearance (both sides) between Flexible Coupling (16) and Flexible Coupling Disk (17) that Horizontal Position of PTO (Power Take-Off) Shaft Must Be within 3 to 6 mm (0.11 to 0.24")
 - To Set the Clearance, the Rear End of Drive Shaft Has Several Annular Grooves for Retaining Rings, Locks the Propeller Shaft Splines Fork Drive Shaft and Enables the Desired Length of Shaft with Fork Attached, to Achieve the Value of the Gap in the Sleeve
- Maintenance of Universal Joint Bearing Lubrication Aided thru Grease Fitting (15)
 - Remove Rear Wheel, Slide the Rubber Boot (19) to Middle of Propeller Shaft and Unscrew the Cowl (20) by Turning Clockwise (Left-Hand Thread)

*** 3 mm Gap to be Set during Motorcycle Assembly**

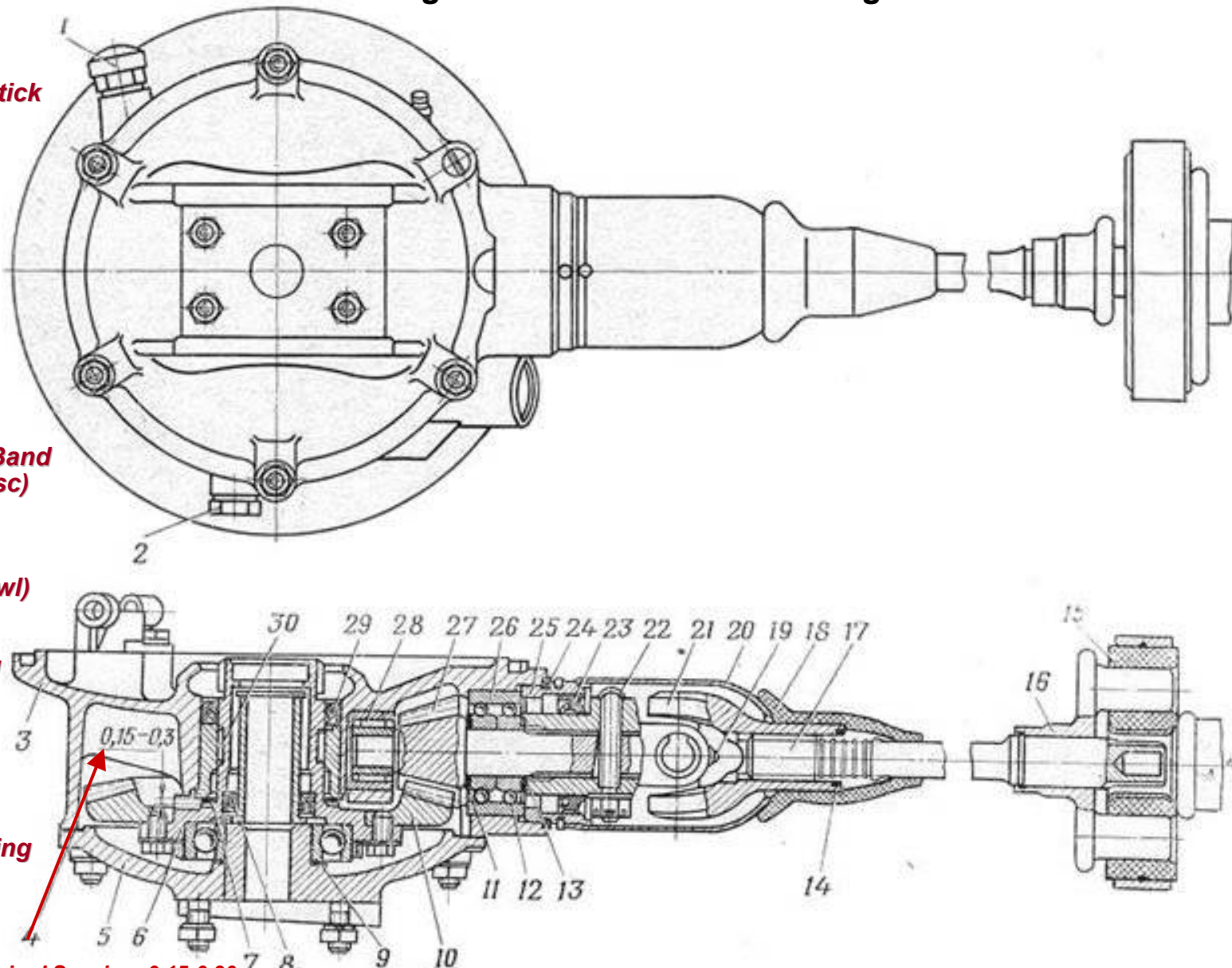


Main Drive (K-750)

Rear Drive (1WD) with Modified Seal Hub

- Collar Packing Gland (seal) Replaced Left Collar Seal, Starting with Dnepr MT-9
- New Design Mounts on Central Hub Casing with Needle Roller Bearings

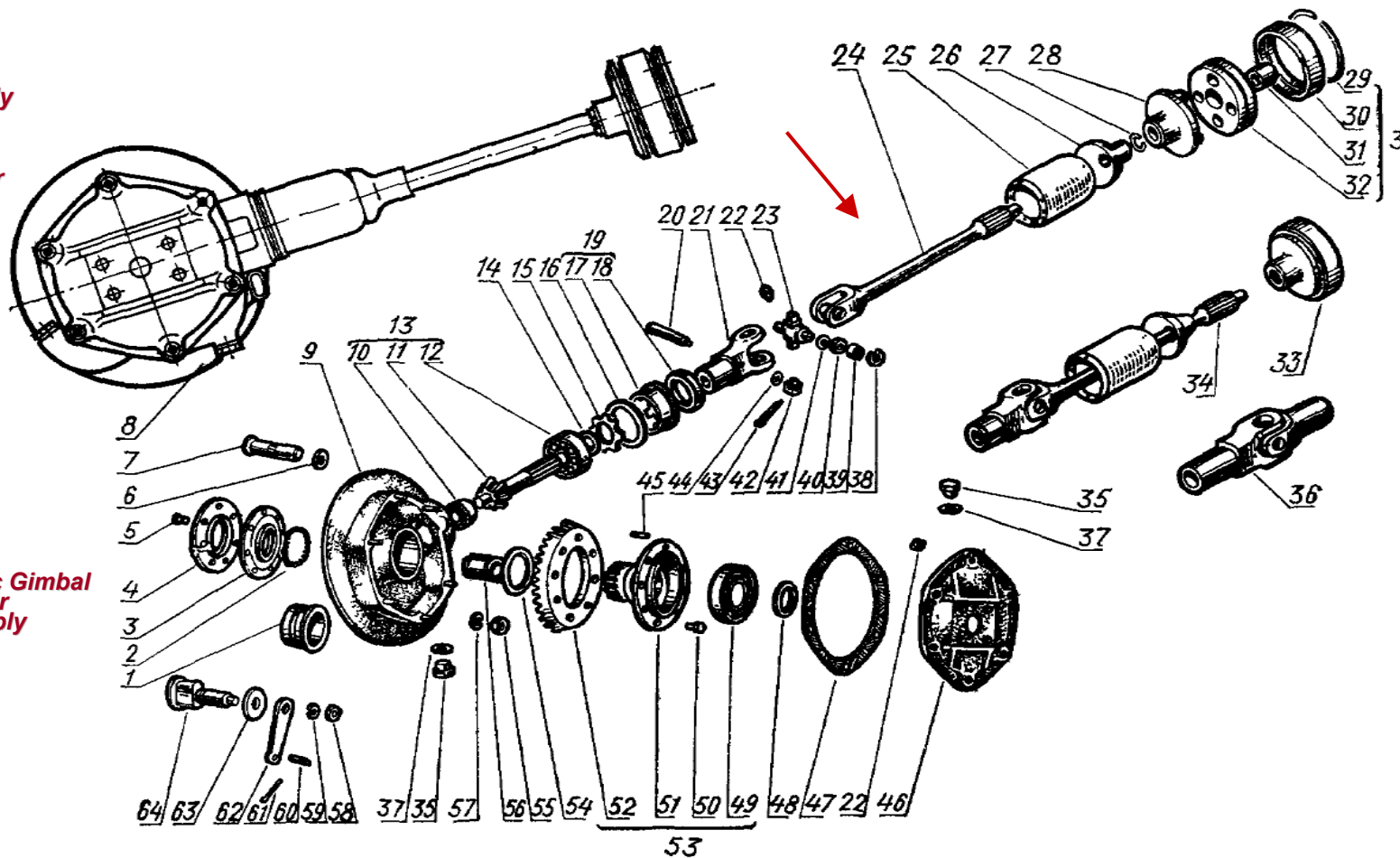
1. Filler Plug with Dipstick
2. Drain Plug
3. Rear Drive Casing
4. Gasket
5. Rear Drive Cover
6. Driven Gear Hub
7. Shim
8. Seals
9. Shim
10. Crown Wheel
11. Shim
12. Ball Bearing
13. Shim
14. Lock Ring
15. Flexible Coupling Band
16. Flexible Flange (Disc)
17. Drive Shaft
18. Rubber Boot
19. Grease Fitting
20. Protective Cap (Cowl)
21. Cardan Fork
22. Wedge Bolt
23. Pinion Ball Bearing
24. Seal
25. Nut Bearing
26. Ball Bearing
27. Pinion Gear
28. Needle Bearing
29. Seal
30. Needle Roller Bearing



Required Spacing: 0.15-0.30 mm

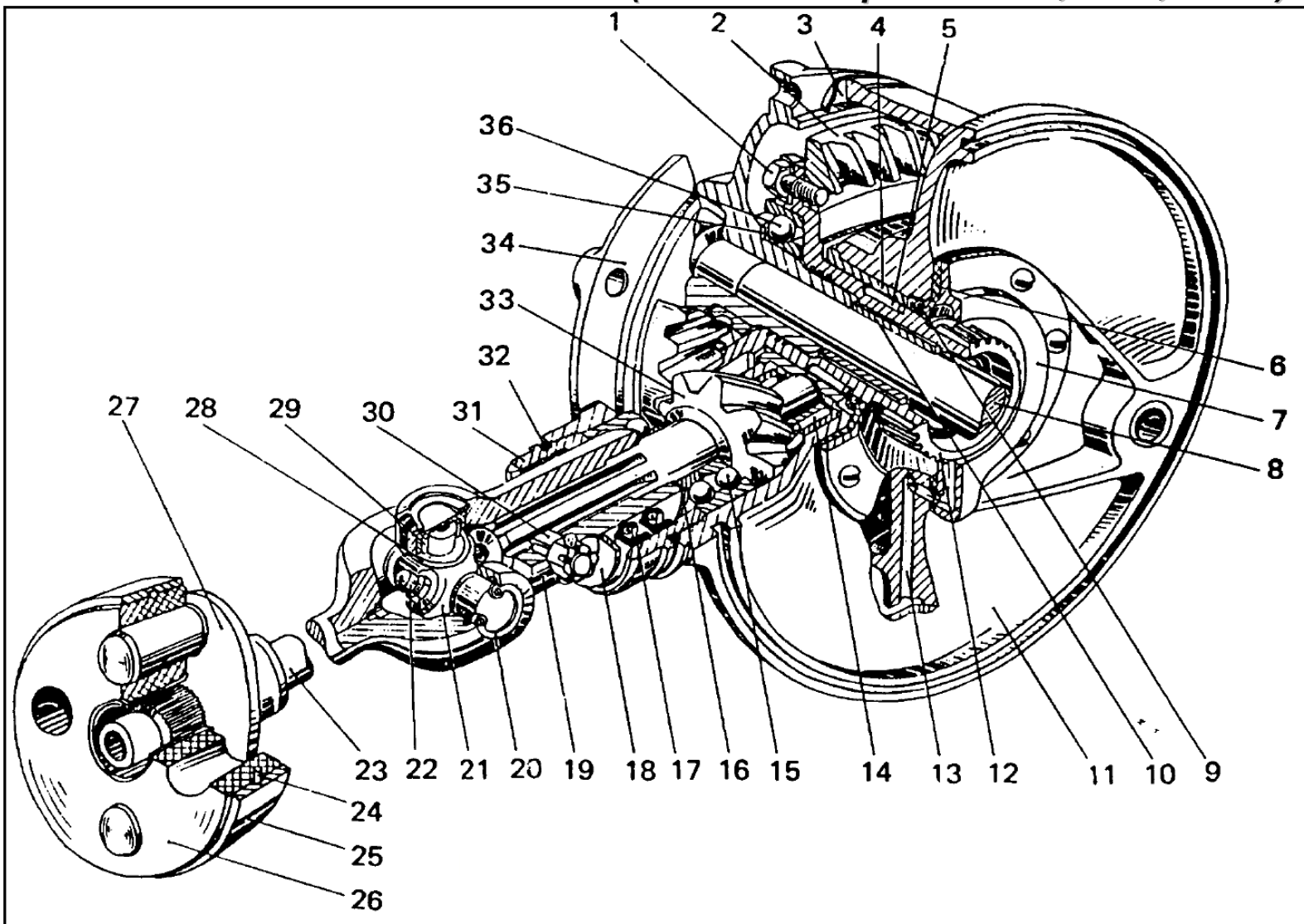
1WD Drive Chain Example: Ural M-63

1. Plug Housing
2. Spring Seal
3. Collar Gland (Seal)
4. Seal Follower
5. Screw M5H12
6. Washer
7. Axle Brake Pad Assembly
8. Final Drive
9. Rear Drive Assembly
10. Needle Bearing
11. Small Pinion Drive Gear
12. Double-Row Bearing
13. Pinion Gear Assembly
14. Adjusting Washer
15. Pressure Washer
16. Seal Nut
17. Nut
18. Seal Plug Assembly
19. Nut Bearing Assembly
20. Wedge Bolt
21. Slotted Cardan Fork
22. Oil Fitting
23. Cross
24. PTO Shaft
25. Drive Shaft Cover
26. O-Ring Gimbal
27. Locking Ring
28. Elastic Cardan Drive
29. Locking Clip
30. Clip
31. Sleeve Coupling Elastic Gimbal
32. Flexible Cardan Coupler
33. Elastic Coupler Assembly
34. PTO Shaft with Hinge
35. Plug In
36. Cardan Joint K-650
37. 44 and 57. Washer
38. Gimbal Lock Ring
39. Needle Bearing
40. O-Ring Holder
41. O-Ring
42. Slotted Nut
43. Pin
45. Needle Roller
46. Rear Drive Cover
47. Gasket
48. Puck Control
49. Bearing No. 207
50. Bolt
51. Hub of Driven Gear
52. Driven Gear
53. Rear Gear Transaxle
54. Spacer
55. Nut M8x1
56. Spacer



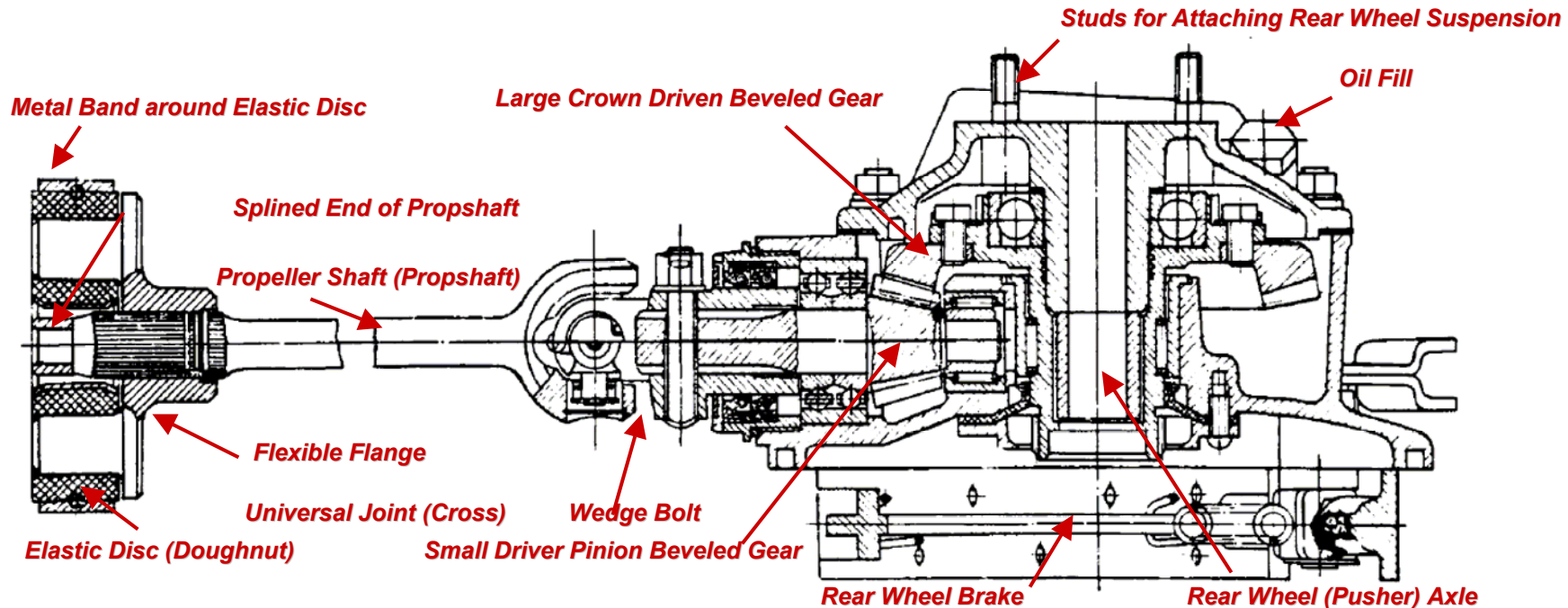
Dnepr (Kiev) driveshafts are made of a rod, with splined ends for mating forks, whereas Ural (Irbit) driveshafts have one end integral with the drive shaft.

1WD Ural Final Drive (Year 2000 Repair Manual, M-63, 650cc)



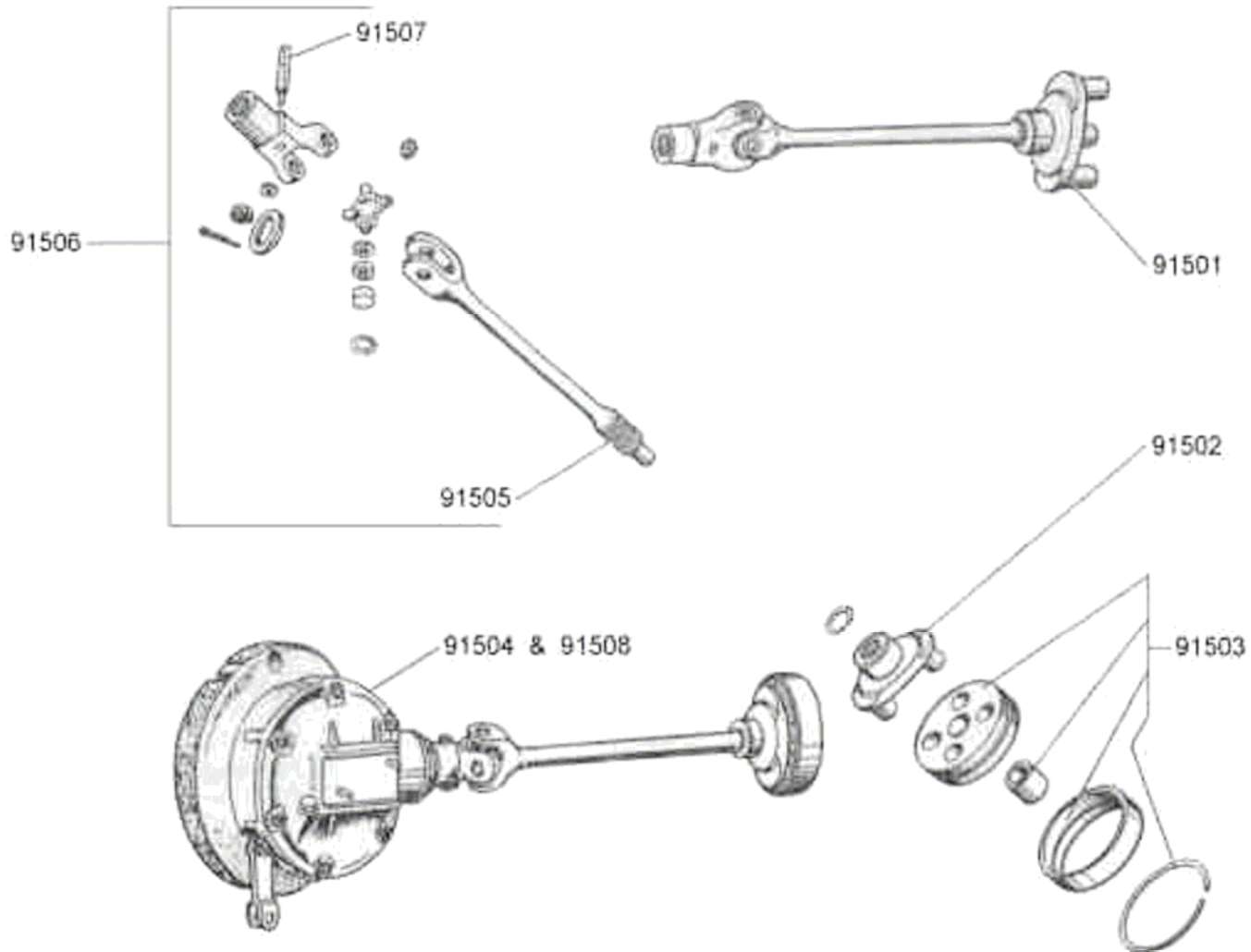
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|-------------------------------|-------------------------------|----------------------------------|----------------------|
| 1. Driven Gear Fastening Bolt | 10. Distance Bushing | 19. Universal Joint Splined Fork | 28. Packing Ring |
| 2. Driven Gear Rim | 11. Casing | 20. Lock Ring | 29. Needle Bearing |
| 3. Gasket | 12. Driven Gear Hub | 21. Universal Joint Cross | 30. Wedge Bolt |
| 4. Casing Bushing | 13. Oil Drain Duct | 22. Grease Cup | 31. Bearing Nut |
| 5. Needle Bearing Roller | 14. Needle Bearing | 23. Propeller Shaft | 32. Gasket |
| 6. Casing Seal | 15. Double-Row Ball Bearing | 24. Lock Ring | 33. Driving Gear |
| 7. Seal Cover | 16. Adjusting Washer | 25. Hood | 34. Casing Cover |
| 8. Rear Wheel Axle | 17. Universal Joint Fork Seal | 26. Propeller Shaft Collar | 35. Adjusting Washer |
| 9. Seal Spring | 18. Protective Washer | 27. Flexible Joint Driven Disk | 36. Ball Bearing |

1WD Ural Final Drive (cont.)



- Power Delivered from Gearbox to Rear Wheel by Drive Shaft (propeller shaft) and Rear Drive
- Drive Shaft Connected to Gearbox via Flexible Rubber Collar that Dampens Torque Impulses and a Universal Joint that Allow Suspension Travel (up/down) of Rear Wheel
 - Propeller Shaft Drive Incorporates the Flexible Joint (27), Propeller Shaft (23) and Universal joint (21)
 - Flexile Joint Is a Coupling Sleeve Fitted with Plates and Pins
 - Propeller Shaft (23) Is Aligned by Means of the Ball End of Main Shaft which Enters the Socket in the Front End of Propeller Shaft
- Cast Housing Containing Helical Bevel Gear Set that Turns Rear Wheel at Lower Speed than the Shaft
 - Casing Serves as Backing Plate for Brake Shoes, Oil Reservoir and Support for Right-Hand End of Rear Wheel Axle
 - Casing Has Oil Drain Hole at the Bottom with an Oil Plug
 - Oil Fill Hole Provided in the Cover
- Cover (34) Attached to Casing Has a Slot and Two Studs to Fasten Rear Drive to Swinging Fork Arm of Rear Suspension
- Gear Backlash Is Adjusted via Adjusting Washers (35) Installed between Side Portion of Casing Cover and Inner Race of Ball Bearing (36)
 - Backlash of 0.004" to 0.01" / 0.1 to 0.3 mm Needed between Active Faces of the Beveled Gears

Achsantrieb, Kardanwelle (Solo & Tourist)



Assembly Drawings Arranged by *1WD* and *2WD*

- **One-Wheel Drive (1WD)**
 - **Ural**
 - **M-72**
 - **M-61, M-62, M-63, M-66, M-67, M-67.36**
 - **Dnepr**
 - **M-72**
 - **K-750, K-750M**
 - **K-650 (MT-8 and MT-9)**
 - **MT-10, MT-10.36**
 - **MT-11 (1987-2005)**
- **Two-Wheel Drive *Shown in Part 3 (2WD)***
 - **Full-Time 2WD**
 - **MT-12 (1977-1985)**
 - **MT-16 (1985-2005)**
 - **MB-750 (1964-1973)**
 - **MB-750M (1973-1977)**
 - **MB-650 (1968-1991)**
 - **MB-650M1 (1985-2007)**
 - **Engageable Two-Wheel Drive *Shown in Part 3D (2WD)***
 - **Production: Patrol (1998-Current), Retro, Gear-Up (2001-Current), Patrol-T (2009-Current)**
 - **Limited Editions with Engageable Sidecar Drive Shaft: Basic (2005), Raven (Vorona) (2006), Pustinja (2007), Wjuga (2008), Sahara (2009) and Taiga (2010)**

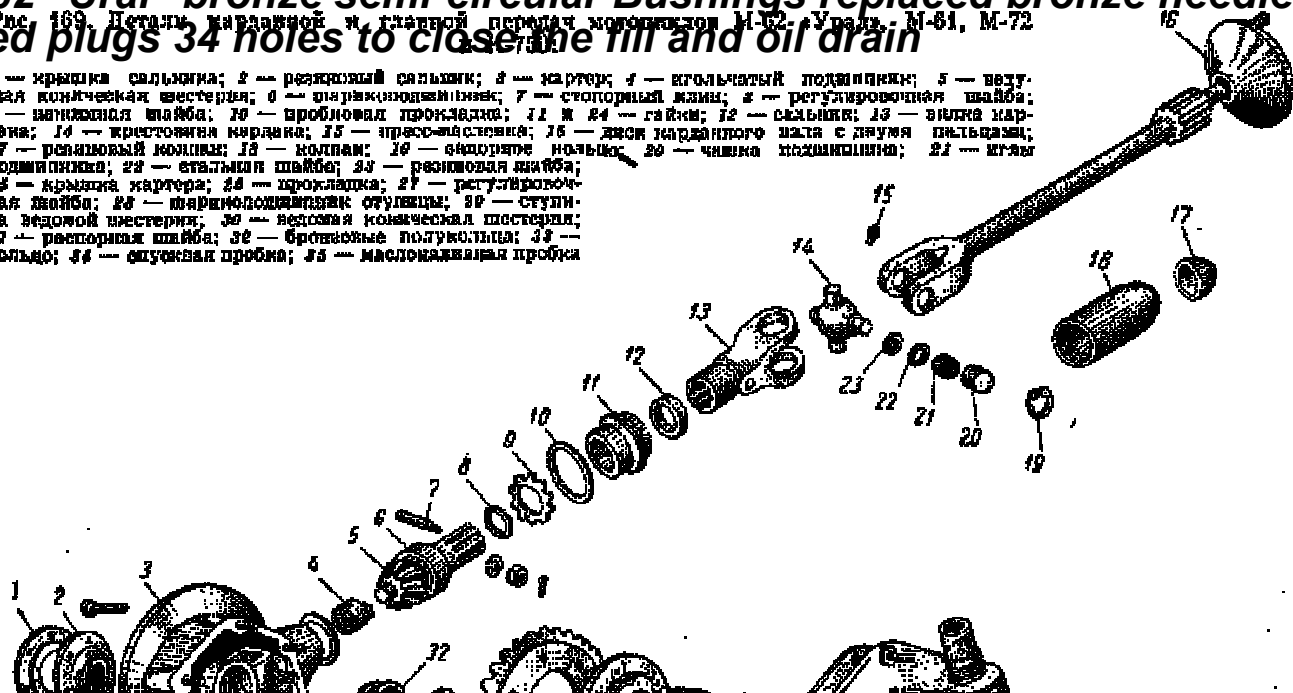
M-72, K-750, M-61 and M-62 Drive Train

<http://bike78.narod.ru/base17.html>

- Drive shaft is a thin steel rod with joints at the ends, twist while working at a small angle. The front end of the drive shaft is connected to the output shaft gear flexible coupling of the simplest type, the rear end - with a small bevel gear reducer main gear through a conventional double pedal hard. Cross 14 is movably installed in the fork drive shaft and the plug 13 with needles 21, 20 cups, 22 steel and rubber washers 23 and lock ring 19. Grease comes from a needle grease fitting 15.
- With a vertical movement of the rear wheel with the main gear in the spring suspension in the event of collision with bumps in the road distance between the main gear and the gearbox changes, while fingers of steel disks 16 are moved in a few holes of the rubber disk that protects the driveline from the axle loads.
- Leading Bevel gear (5) is set to dvuh.podshipnikah: front double-row angular contact ball bearings 4, delivered with preload and rear needle bearing (6)
- Driven bevel gear (10) is mounted on single-row radial thrust bearing (11) on a bronze bearing, consisting of two half-rings (9), rotating in a steel ring (33)
- Ural M-62 "Ural" bronze semi-circular Bushings replaced bronze needle bearing
- Threaded plugs 34 holes to close the fill and oil drain

Рис. 169. Детали карданной и главной передач мотоциклов М-62, Урал, М-61, М-72

1 — крышка сапунная; 2 — резиновый сапунчик; 3 — картер; 4 — игольчатый подшипник; 5 — ведущая коническая шестерня; 6 — шарикоподшипник; 7 — стопорный клин; 8 — регулировочная шайба; 9 — антифрикционная шайба; 10 — пробирная прокладка; 11 и 24 — гайки; 12 — сапунчик; 13 — вилка карданная; 14 — крестовина карданная; 15 — пресс-масленка; 16 — диск карданного вала с двумя пальцами; 17 — резиновый колпачок; 18 — колпачок; 19 — шариковый подшипник; 20 — чашка подшипника; 21 — иглы подшипника; 22 — стальная шайба; 23 — резиновая шайба; 24 — крышка картера; 25 — прокладка; 26 — регулировочная шайба; 27 — шарикоподшипник ступицы; 28 — ступица ведомой шестерни; 29 — ведомая коническая шестерня; 31 — распорная шайба; 32 — бронзовые полукольца; 33 — кольцо; 34 — сухая пробка; 35 — масляная пробка



M-72, K-750, M-61 and M-62 with Plunger Suspension Attached to rear drive casing168

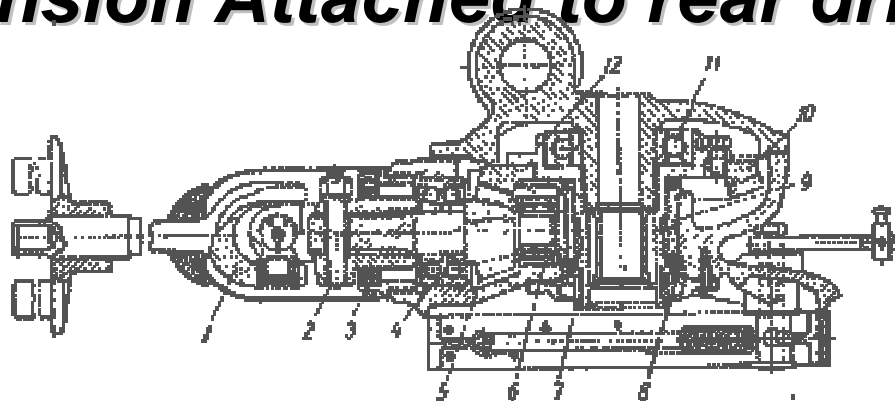
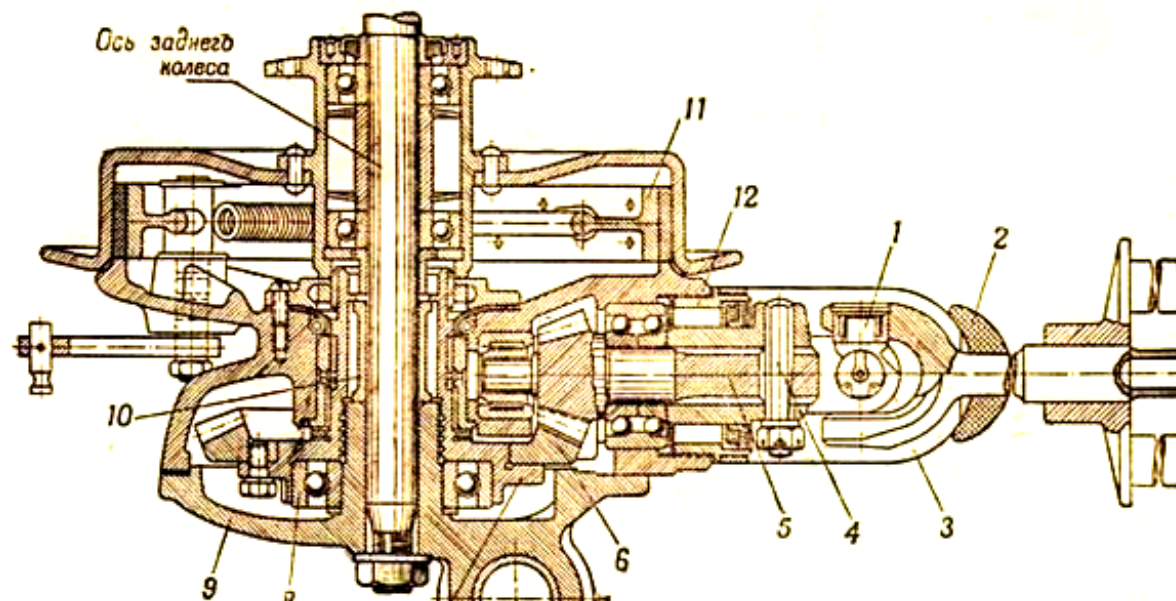


Рис. 168. Главная передача мотоцикла М-62 «Урал» и К-750:

1 — кардан; 2 — стопор; 3 и 4 — подшипники; 5 — радиально-упорный подшипник малой конической шестерни; 6 — малая коническая шестерня; 7 — клиновидный подшипник; 8 — шлицевая шестерня большой конической шестерни; 9 — фланцевые полуоси; 10 — фланцевый подшипник; 11 — радиально-упорный подшипник ступицы; 12 — ступица

1. Cardan Universal Cross
2. Rubber Cap
3. Protective Cowl
4. Wedge Bolt
5. Shank of Pinion Gear
6. Driven Gear
7. Hub
8. Ball Bearing
9. Casing Cover
10. Distance Sleeve (Spacer)
11. Brake Pad
12. Packing Nut



The plunger suspension is attached to the M-72, K-750, M-61 and M-62 rear drive casing.

M-72 Final Drive with Cardan Shaft (1WD)



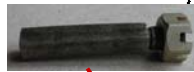
**72052-1
Needle Bearing**



**72052-2
Double-Row
Bearing**



**7201323
Conical
Bolt + Nut**



**7205224
O-Ring**



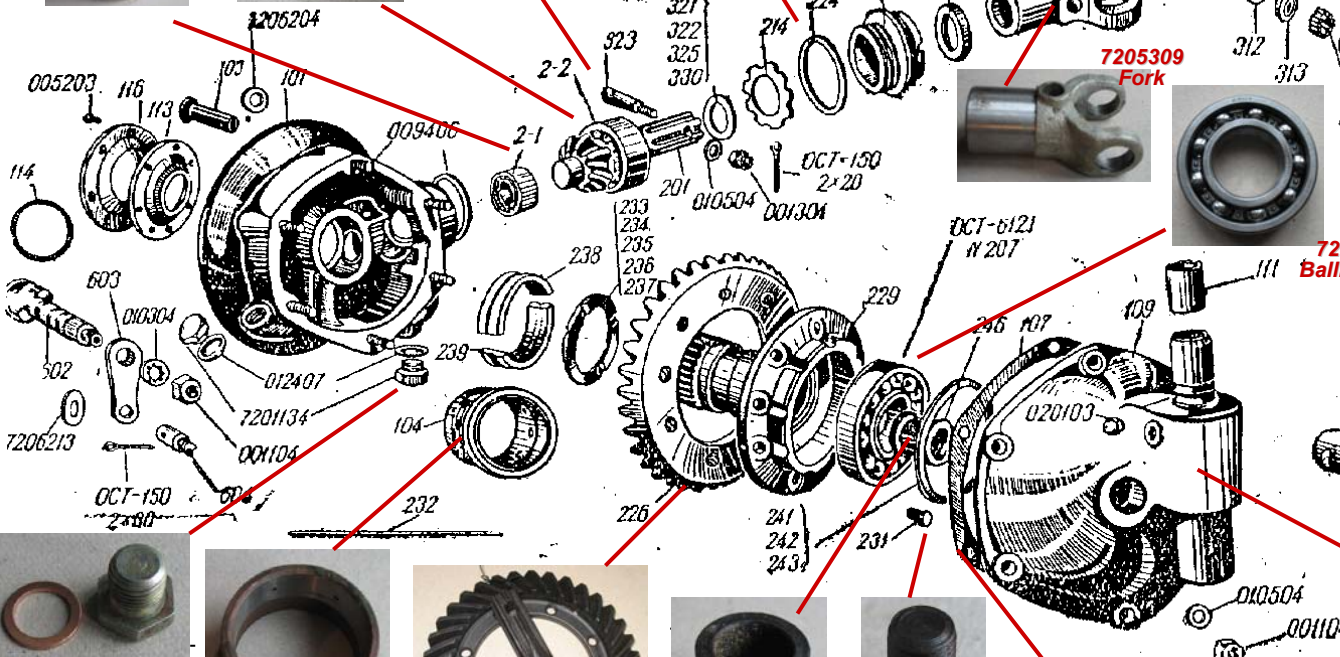
**7205223
Gland Seat**



**7205311
Cardan
Cross +
Clips**



**7205013
Anti-Shock
Disk**



**7205309
Fork**



**7205207
Ballbearing**



**7205304
Cover for Universal
Joint**



**7205306
Cardan
Rubber**



**7201134
Oil plug +
Washer**



**7205104
Outer Race for
Needle Bearing**



**7205226
Crownwheel Set**



**7205246
Bushing**



**7205231
Crown wheel Bolt ,
M8 x 1.0**



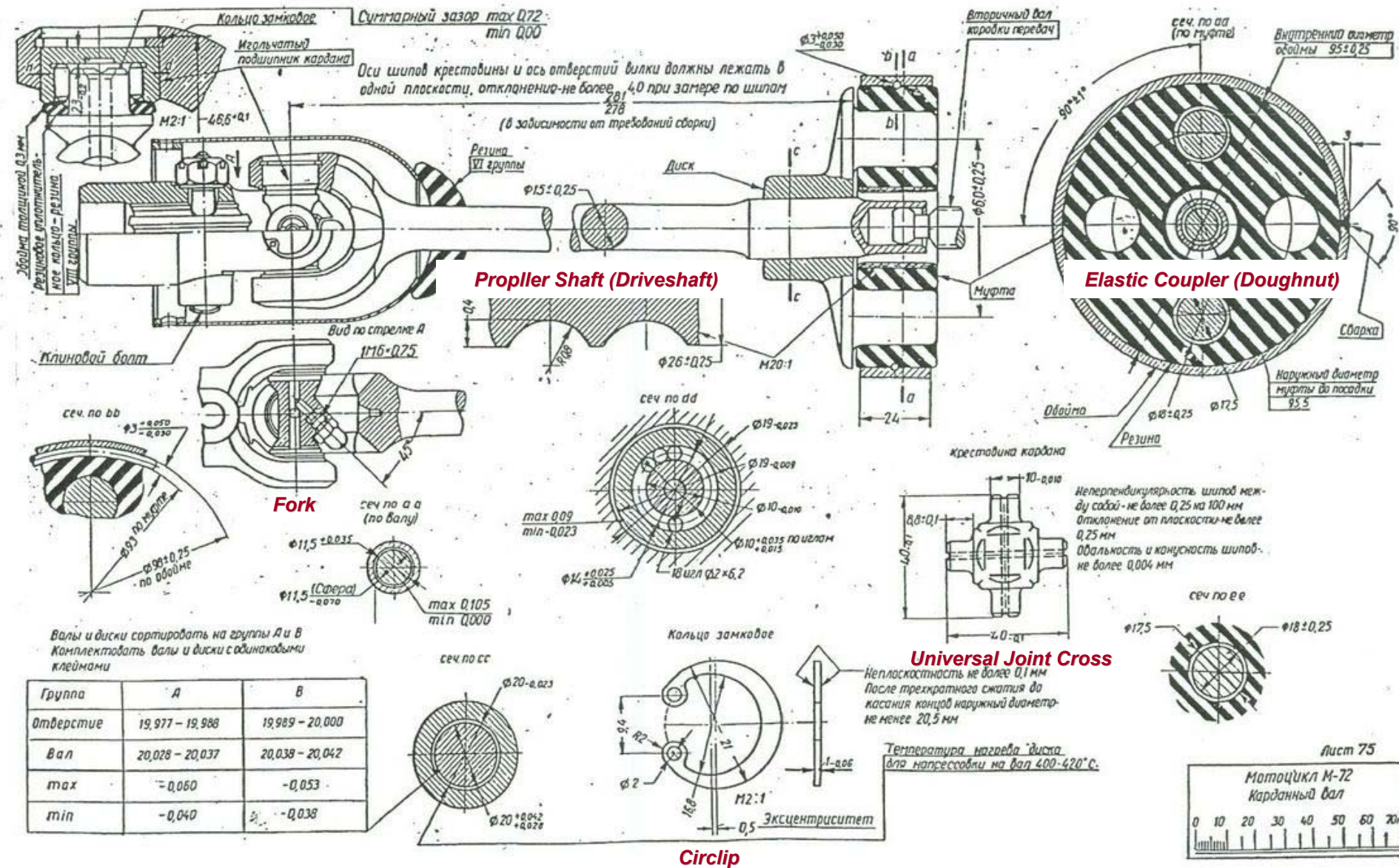
**7205107
Gasket for
Differential
Cover**



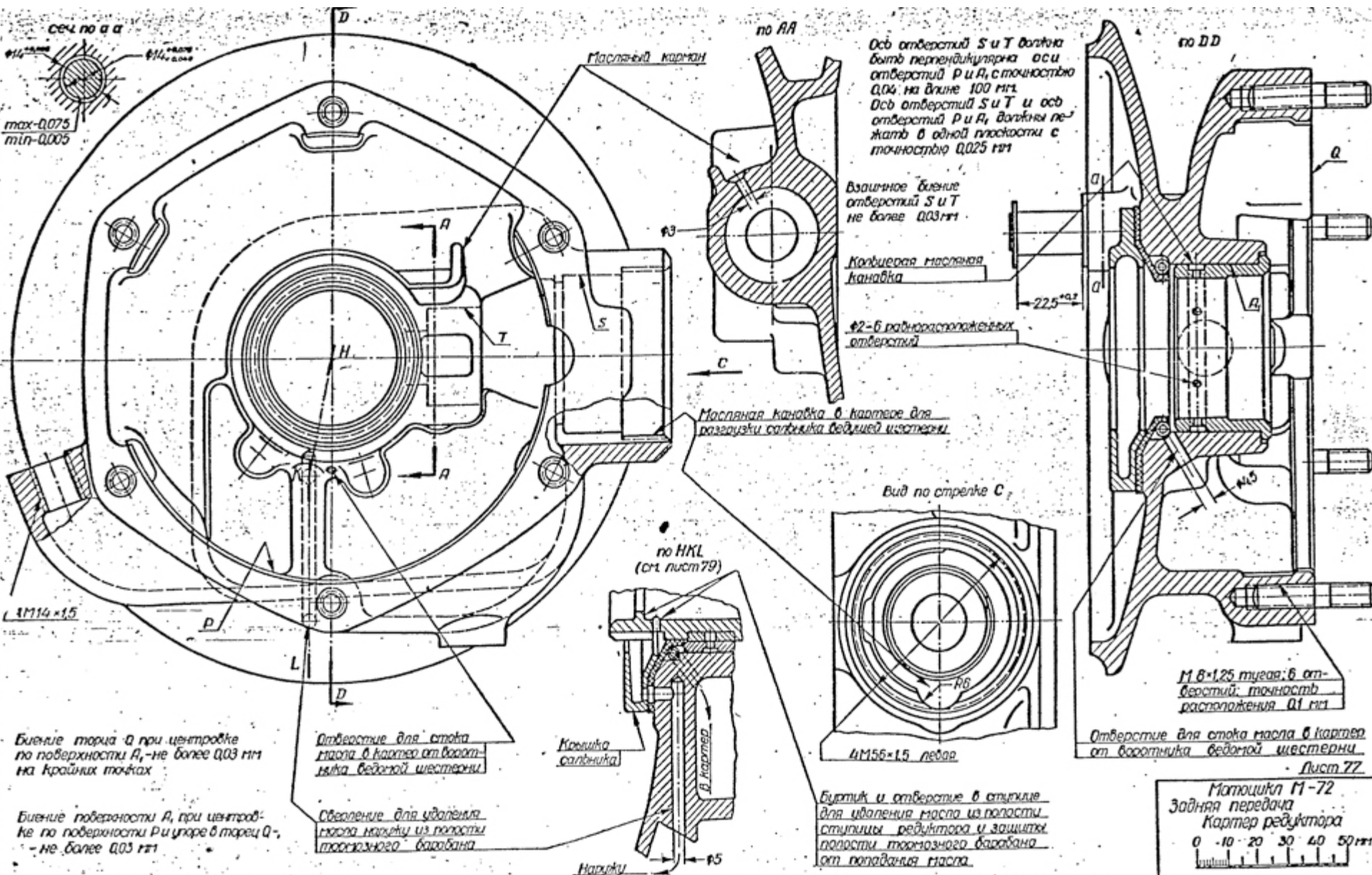
**7205109
Cover for Final Drive**



M-72 Doughnut in the Final Drive (Cardan) (1WD)

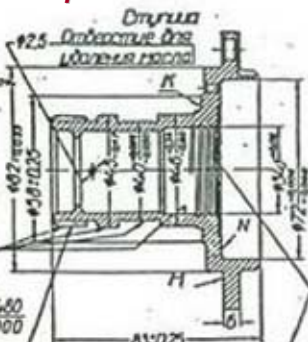


M-72 Final Drive Casing (1WD)



M-72 Final Drive (1WD)

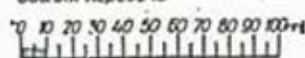
Output Hub Gear



Число зубьев	28
Модуль	1,5
Угол зацепления	30°
Диаметр начальной окружности	42
Диаметр окружности деления	42,42
Высота головки зуба	1
Высота зуба	2,3
Толщина зуба	2,35

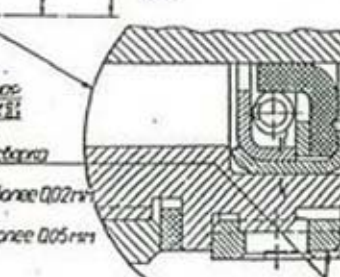
Экцентриситет диаметров 40 и 62 к диаметру 72 - не более 0,025 мм
 Экцентриситет диаметров 34,45 и 46 к диаметру 72 - не более 0,04 мм
 Экцентриситет диаметра 44 к диаметру 72 - не более 0,05 мм
 Непараллельность плоскостей H к поверхности диаметра 72 - не более 0,01 мм
 Непараллельность плоскостей H и H1 - не более 0,017 мм
 Непараллельность плоскостей K и H1 - не более 0,04 мм на радиусе 26 мм
 Внутренняя начальная окружность диаметра 42 относительно диаметра 72 - не более 0,1 мм

Материал Г-72
Задняя передача



Propeller Shaft (Driveshaft)

Установленные крылья - резина VI группы Шестерни прутятся и поперно заклиниваются Пробитность заклинивания пробития по крышке 281 (в зависимости от пробития) 276.

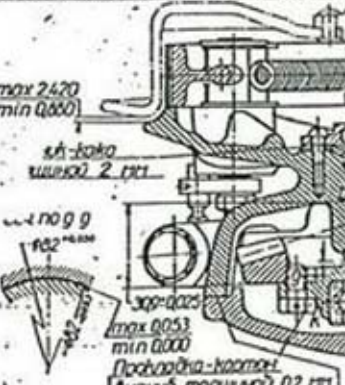


Взаимное биение поверхностей Ру Q - не более 0,02 мм
 Взаимное биение поверхностей Ру F - не более 0,05 мм

Параметры шестерен задней передачи

Род ступицы	Род шестерни
Число зубьев	8
Угол начального зацепления	21°12'
Диаметр начальной окружности	3,261
Диаметр окружности деления	3,261
Высота головки зуба	0,8
Высота зуба	1,73
Толщина зуба	2,462
Угол зацепления	17°30'
Угол наклона зуба	1°54'
Угол внутреннего зацепления	30°18'

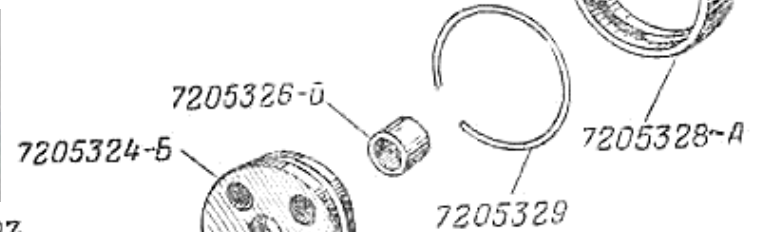
Угол наклона зуба	1°54'
Угол внутреннего зацепления	30°18'



M-72 (1WD)



7205306
Cardan
Rubber



Elastic Absorber



Grease Nipples M6



Fork



Cardan Cross + Clips



Cardan Shaft



Cover for
Universal
Joint



Flexible Flange

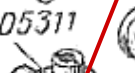


Conical
Bolt + Nut



010504-n8

020103-n8



7205312

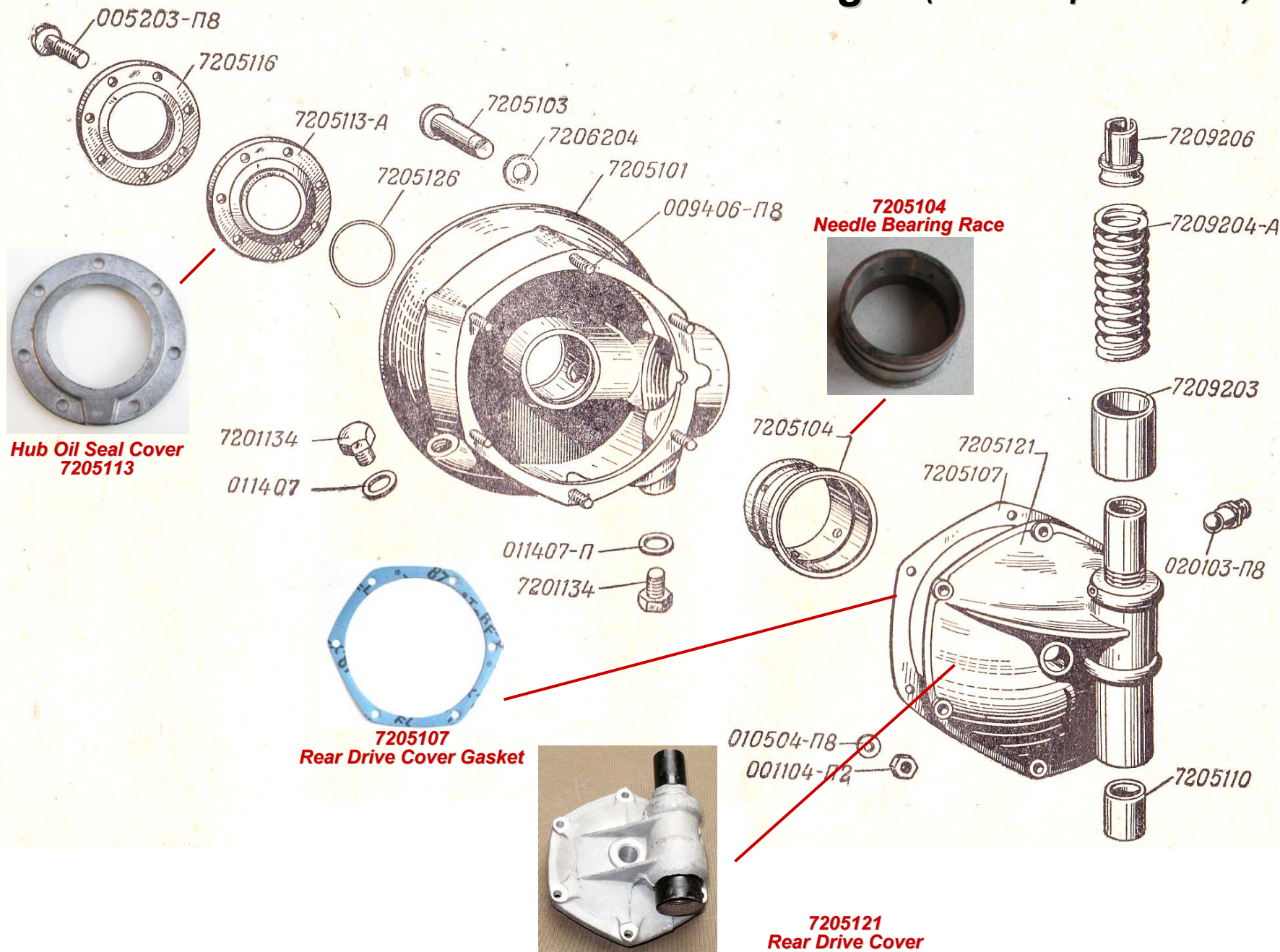
7205313

72053-2

7205317-A

One term describing carburetors is round-slide,
flat-slide or butterfly throttle valves.

M-72 Rear Drive and Cover with Plunger (www.dnepr-kiev.com)



M-72



Pinion Needle Bearing
72052-1/874901



72052-2/
3086304L
Double-Row
Bearing

72052-2

7205202

72052-1

7205238

7205239

Pinion Shaft Adjustment Shim
(Various Thickness)

7205227

7205229

7205235

7205237

7205233

7205234

7205236

7205232

7205231



7205227
Crownwheel Set



7205231
Crown wheel Bolt, M8 x 1.0

7205229
Final Drive Hub



7205214

7205320

7205325

7205330

7205318

7205319

7205321

7205322

Nº207 OCT 6121-39

7205246

7205241

7205242

7205243



7205246
Bushing

7205224
O-Ring



7205223
Seal Seat

720503

7205223

7205224

7205242 Shim 37x46x0.20mm
7205243 Shim 37x46x0.27mm



M-72, M-61 Final Drive (1WD)

Отверстие для
заливки масла
Отверстие для спуска
масла

Регулировочная
шайба

Картер
главной
передачи

Ведущая
шестерня

Гайка подшипника

Гнездо подшипника

Вкладыш ступицы

Распорное кольцо

Ведомая (большая)
шестерня

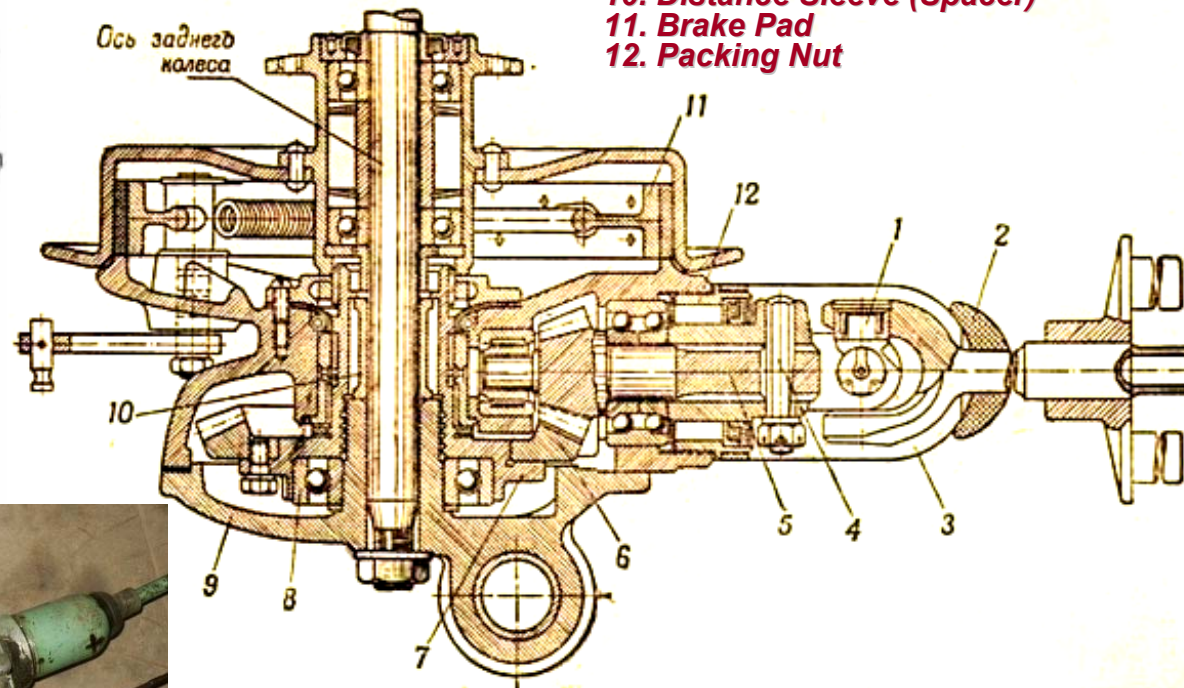
Ступица

Регулировочная
шайба

Крышка картера

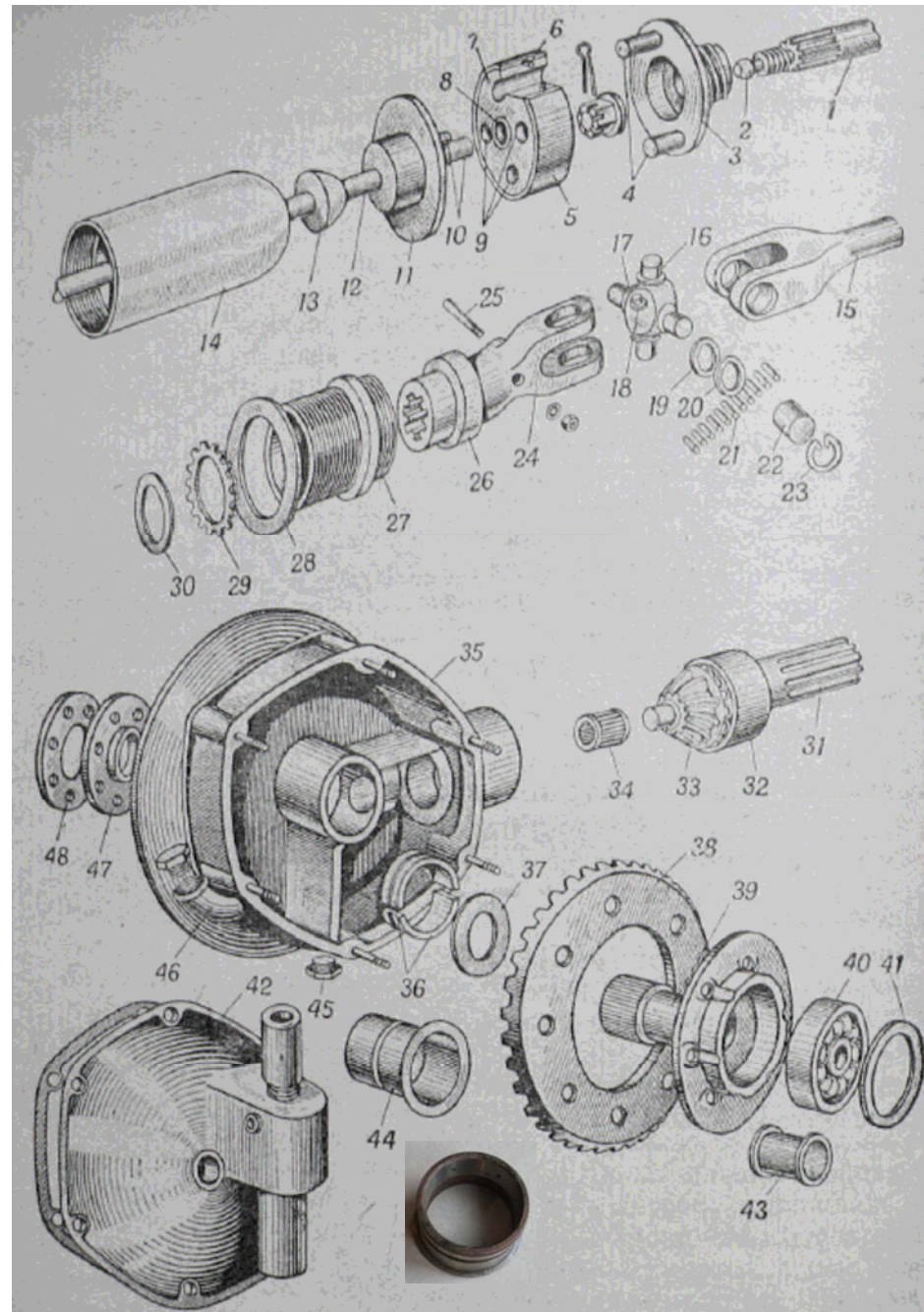
Ось заднего
колеса

1. Cardan Universal Cross
2. Rubber Cap
3. Protective Cowl
4. Wedge Bolt
5. Shank of Pinion Gear
6. Driven Gear
7. Hub
8. Ball Bearing
9. Casing Cover
10. Distance Sleeve (Spacer)
11. Brake Pad
12. Packing Nut



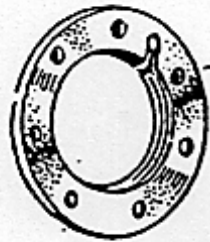
M-72 Final Drive (1WD)

1. Shaft from Gearbox
2. Pin Ball
3. Flexible Flange on Gearbox Side
4. Pins
5. Steel Band
6. Large Circlip
7. Elastic Coupler
8. Sleeve
9. Holes for Pins
10. Pins
11. Flexible Coupler
12. Propeller Shaft
13. Rubber Cap
14. Protective Cowl
15. Cardan Fork
16. Cross Shaft
17. Universal Cross
18. Grease Fitting
19. Washer
20. Steel Washer
21. Roller Bearings
22. Ferrule (Sleeve)
23. Circlip
24. Plug (Fork)
25. Wedge Bolt
26. Gland (Seal)
27. Packing Nut
28. Packing Washer
29. Special Washer
30. Shim
31. Spline of Pinion Gear
32. Bearing
33. Conical Bevel Gear
34. Bearing
35. Rear Drive Casing
36. Bushing
37. Regulatory Gasket
38. Slave Gear
39. Hub Flange
40. Ball Bearing
41. Shim Washer
42. Casing Cover
43. Distance Sleeve (Spacer)
44. Steel sleeve
45. Oil drain Plug
46. Bleed Hole
47. Gland (Seal)
48. Seal Follower

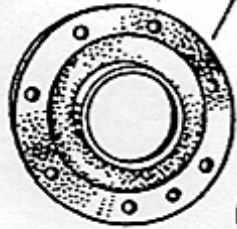


K-750, K-750M, K-750B (MT905-1) Final Drive Housing (1WD)

220078



7205116-51

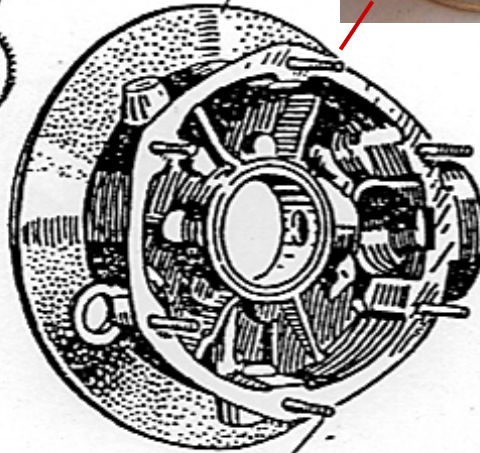


7205113-5

7205126



75005101-B



75005105

011407



290144 / 008406
Stud M8 x 33



008406-A



011407

7201134-A



252005

250511
Nut M8x1



75005104-B



7205107
Gasket for
Rear Drive Cover



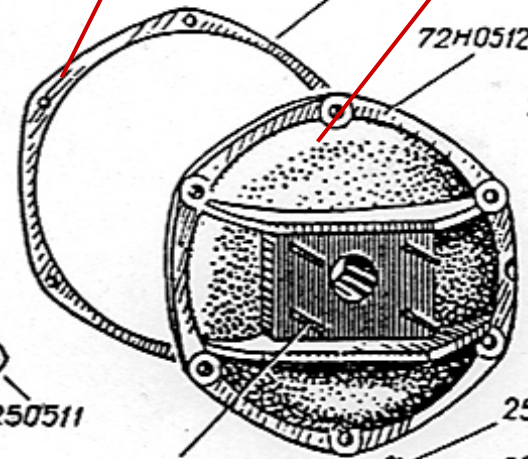
72H05121
Rear Drive Cover



7205107

72H05121

223126



250511

008406-A

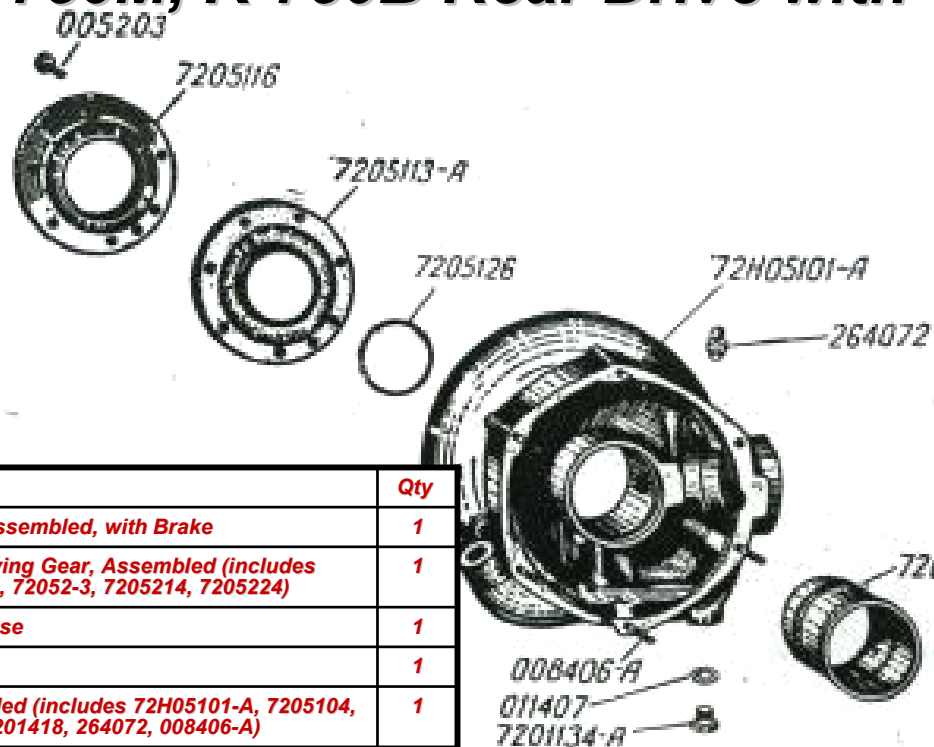
252155

250511



7201134
Oil Plug + Washer

K-750, K-750M, K-750B Rear Drive with Covers (1WD)



**72H05121
Rear Drive Cover**



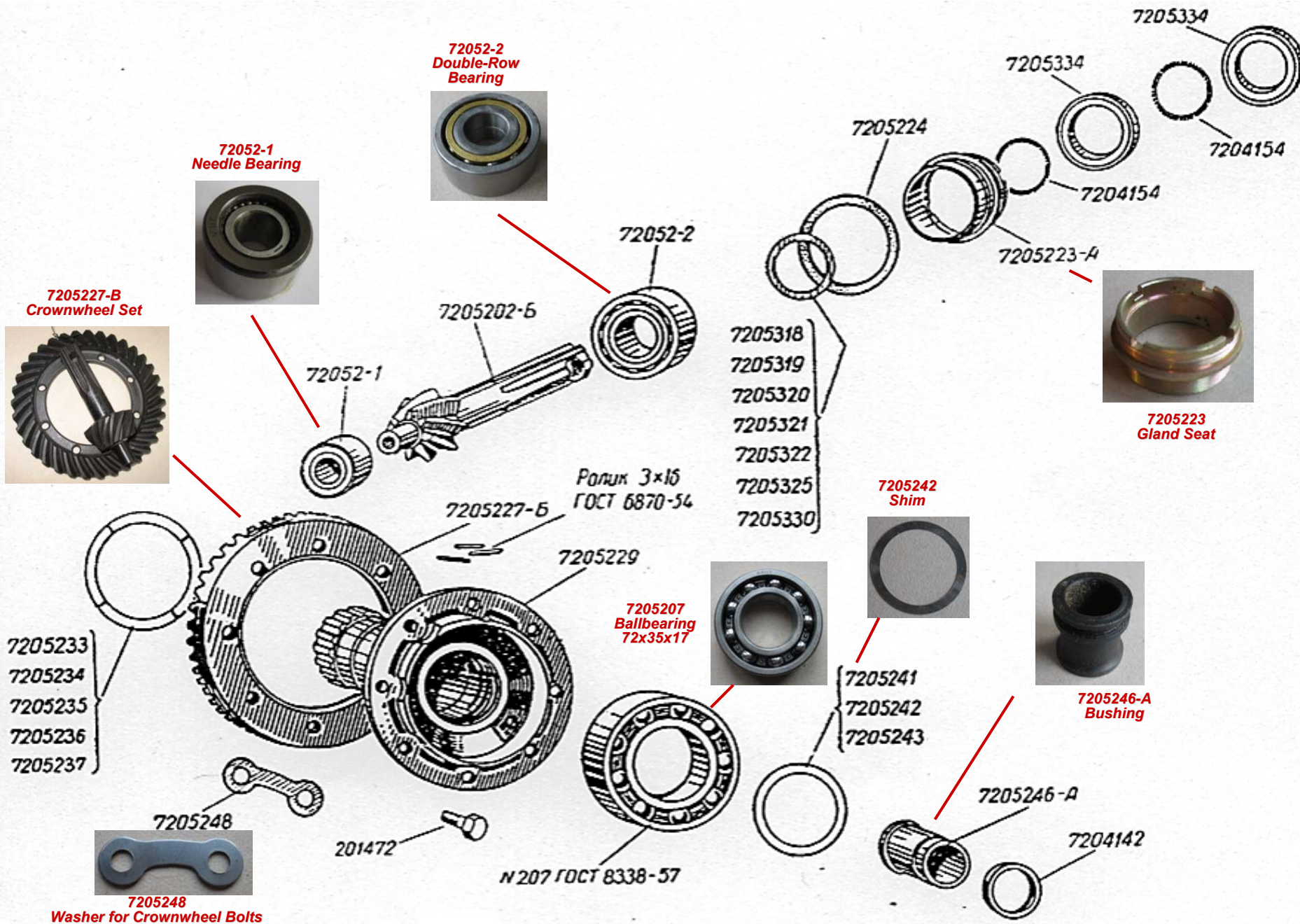
**7201134-A
Oil Plug + Washer**



**250511
Nut M8x1**

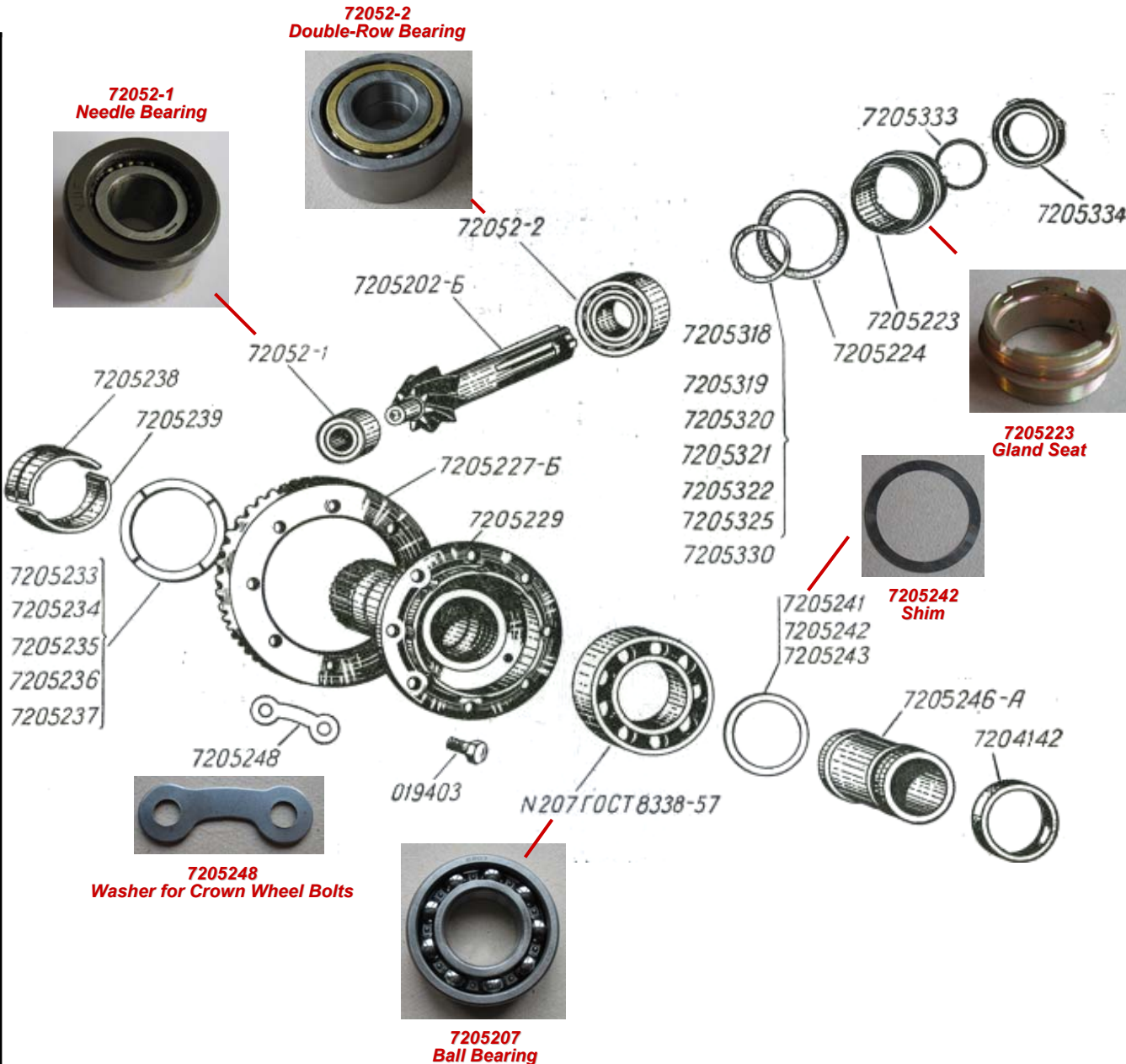
Part #	Description	Qty
72H05-A	Rear-Wheel Drive, Assembled, with Brake	1
72H05012-A	Drive Case, with Driving Gear, Assembled (includes 7205011, 72H05106A, 72052-3, 7205214, 7205224)	1
72H05101-A	Rear-Wheel Drive Case	1
7205104	Drive Case Bushing	1
72H05106-A	Drive Case, Assembled (includes 72H05101-A, 7205104, 5306206-A, 252154, 201418, 264072, 008406-A)	1
7205107	Drive Case Cover Gasket	1
7205113-A	Oil Seal Follower	1
7205116	Oil Seal Cover	7
005203	Oil seal Cover Fixing Screw	1
72H05121	Drive Case Cover	1
223126	Drive Cover Fixing Screw	1
008406-A	Drive Cover Fixing Stud	5
250511	Drive Cover Fixing Nut	5
252005	Rough Washer for Fixing Stud	5
72H05122	Drive Case Cover, Assembled (includes 72H05121, 008406-A)	1
252155	Spring Washer for Stud	4
7205126	Oil Seal Spring	1
7201134-A	Drain Plug	2
011407	Drain Plug and Filler Plug Spacer	2
264072	Brake Cam Lubricator	1

K-750, K-750M, K-750B Final Drive Reducer (Crownwheel Set)



K-750, K-750M, K-750B Rear Drive Reduction Gear with Bearings

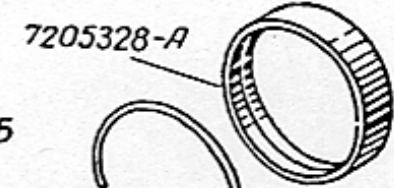
Part #	Description	Qty
7205011	Driving Gear with Bearings, Assembled (includes 72052-1, 72052-2, 7205202-5	1
7205202-5	Rear-Wheel Drive Gear	1
72052-1	Needle Bearing	1
72052-2	Double-Row, Radial-Thrust Ball Bearing	1
72052-3	Bearing Nut of Rear-Wheel Drive, Assembled (includes 7205033, 7205223)	1
7205223	Bearing Nut	1
7205224	Bearing Nut Washer	1
72052-4	Pinion, Assembled (includes 7205227-5, 7205229, 7205248, 019403, 2070	1
N0. 207	Single-Row radial Ball Bearing	1
7205227-5	Drive Pinion	1
7205229	Pinion Hub	1
019403	Pinion-to-Hub Fixing Bolt	8
7205233	Spacing Ring 1.7 - 1.6 mm	-
7205234	Spacing Ring 1.8 - 1.69 mm	-
7205235	Spacing Ring 1.2 - 1.12 mm	-
7205236	Spacing Ring 2.0 - 1.89 mm	-
7205237	Spacing Ring 1.5 - 1.41 mm	-
7205238	1 st Bearing Liner for Pinion Hub	1
7205239	2 nd Bearing Liner for Pinion Hub	1
7205241	Adjusting Washer 0.08 – 0.07 mm	-
7205242	Adjusting Washer 0.18 – 0.16 mm	-
7205243	Adjusting Washer 0.3 – 0.27 mm	-
7205246-A	Spacing Sleeve	1
7204142	Gear Shifting Pedal Oil Seal Ring	1
7205248	Special Safety Washer	4



K-750, K-750M, K-750B Final Drive, Cardan Shaft (1WD)



Cardan Rubber
7205306



7205324-B

75005307-A

7205329

7205326-B

Grease Nipples M6



Cardan Joint Spider
7205311



Elastic Disk
7205324-B



Cardan Joint Fork
7205309

Coupling Cotter Pin w/Nut
7205323 + 250867



264072

7205323

7205311

7205309

75005305

75005301-A

75005305

75005306

75005304-A

Coupling
Dust Cover
7205304



Flexible Flange

Cardan Shaft

75005314

7205312

7205313

72053-2

75317

Universal Joint Circlip
7205317

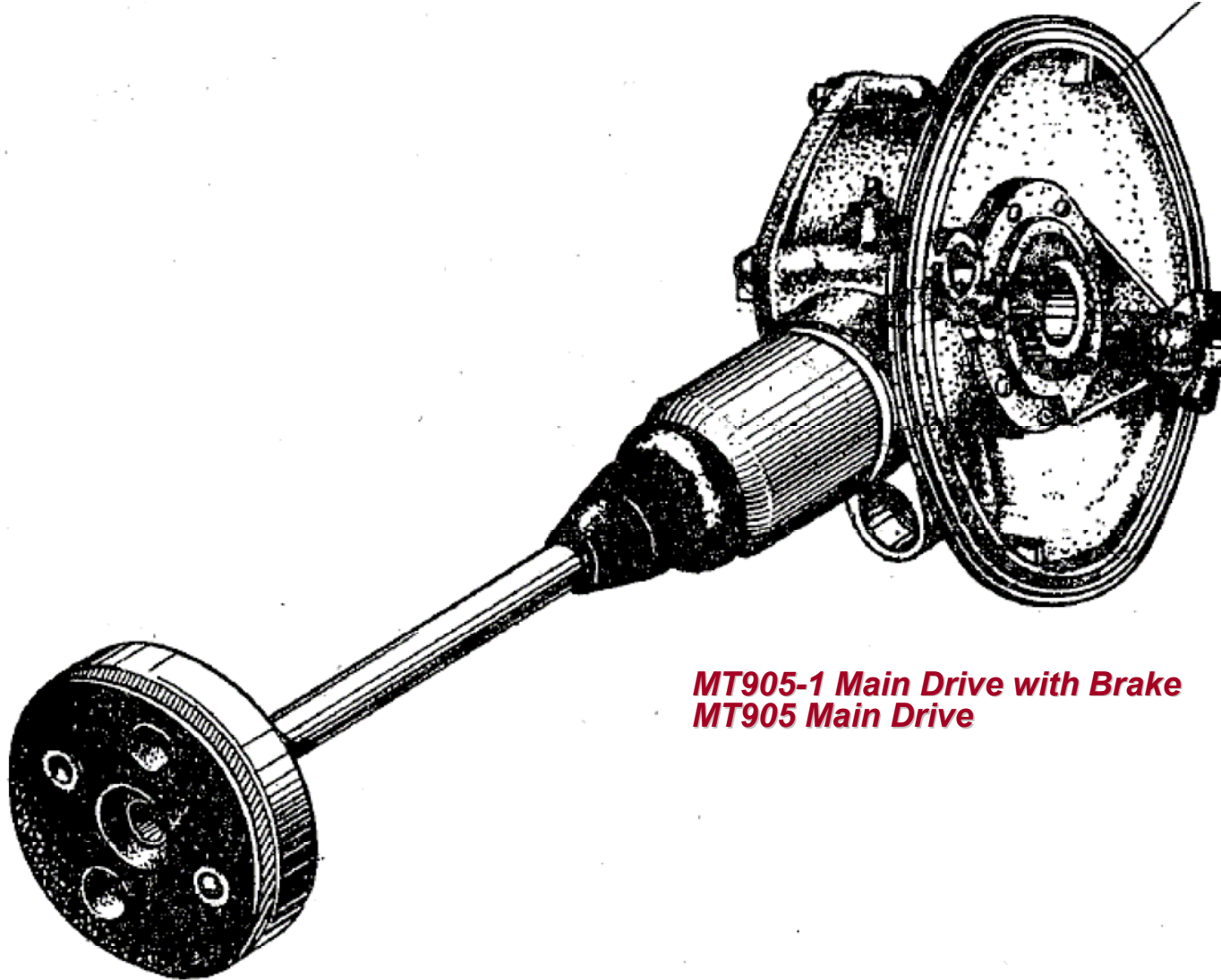
258014

250867

Part #	Description	Qty
72H053-1	Cardan Shaft with Joint, Assembled (includes 72H05301, 7205304, 7205306-B, 7205309, 7205311, 7205312, 7205313, 7205317, 72053-2, 264072)	1
72H05301	Cardan Shaft	1
7205304	Universal Joint Casing, Assembled	1
7205306-B	Cardan Shaft Packing Ring	1
72H05307	Elastic Cardan Disk	1
7205309	Universal Joint Splined Fork	1
7206311	Universal Joint Cross	1
264072	Cardan Shaft Lubricator	1

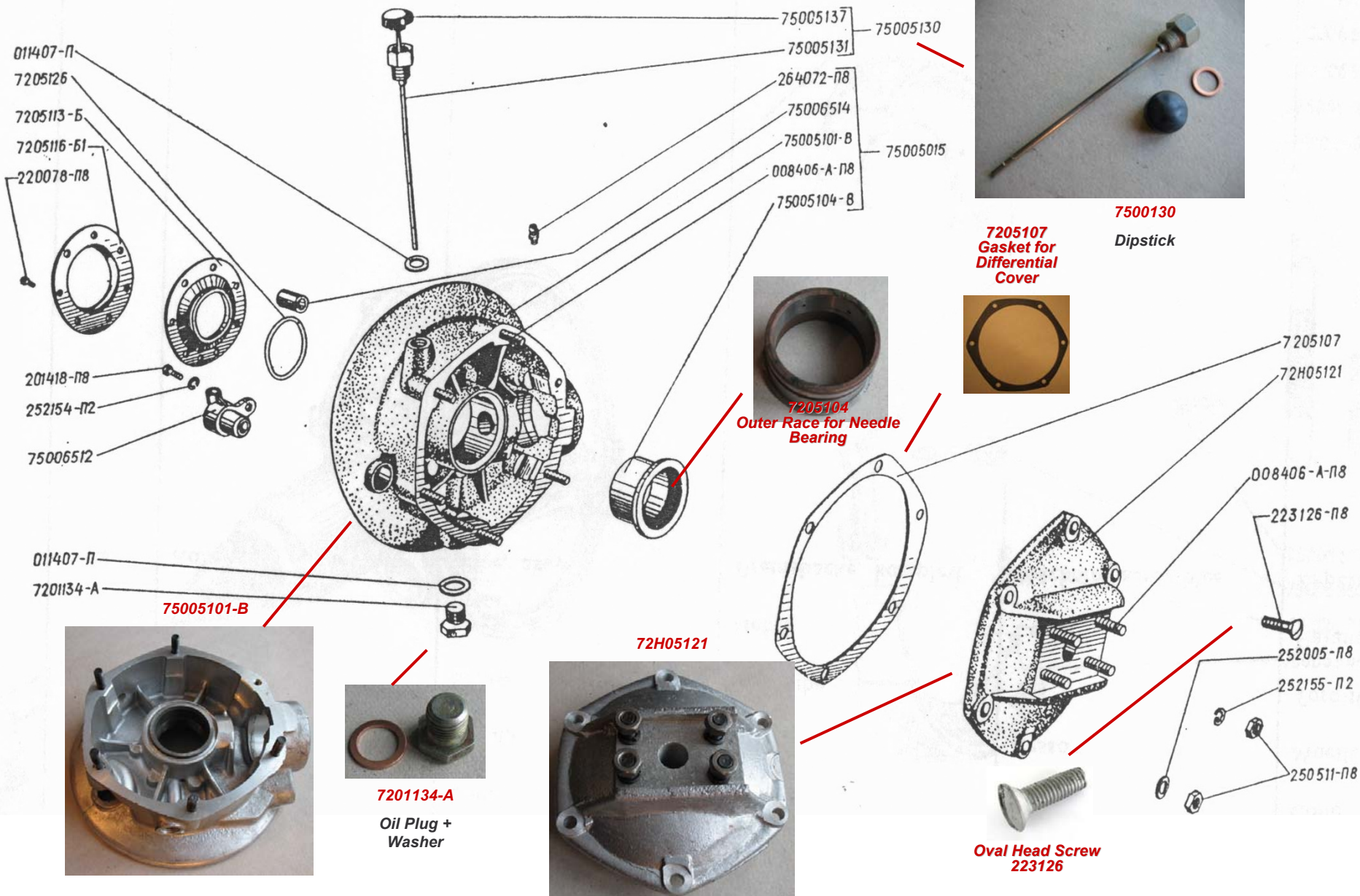
Dnepr MT-9, MT-10, MT-10.36, MT-11 Final Drive (1WD)

***MT905-1
Final drive***

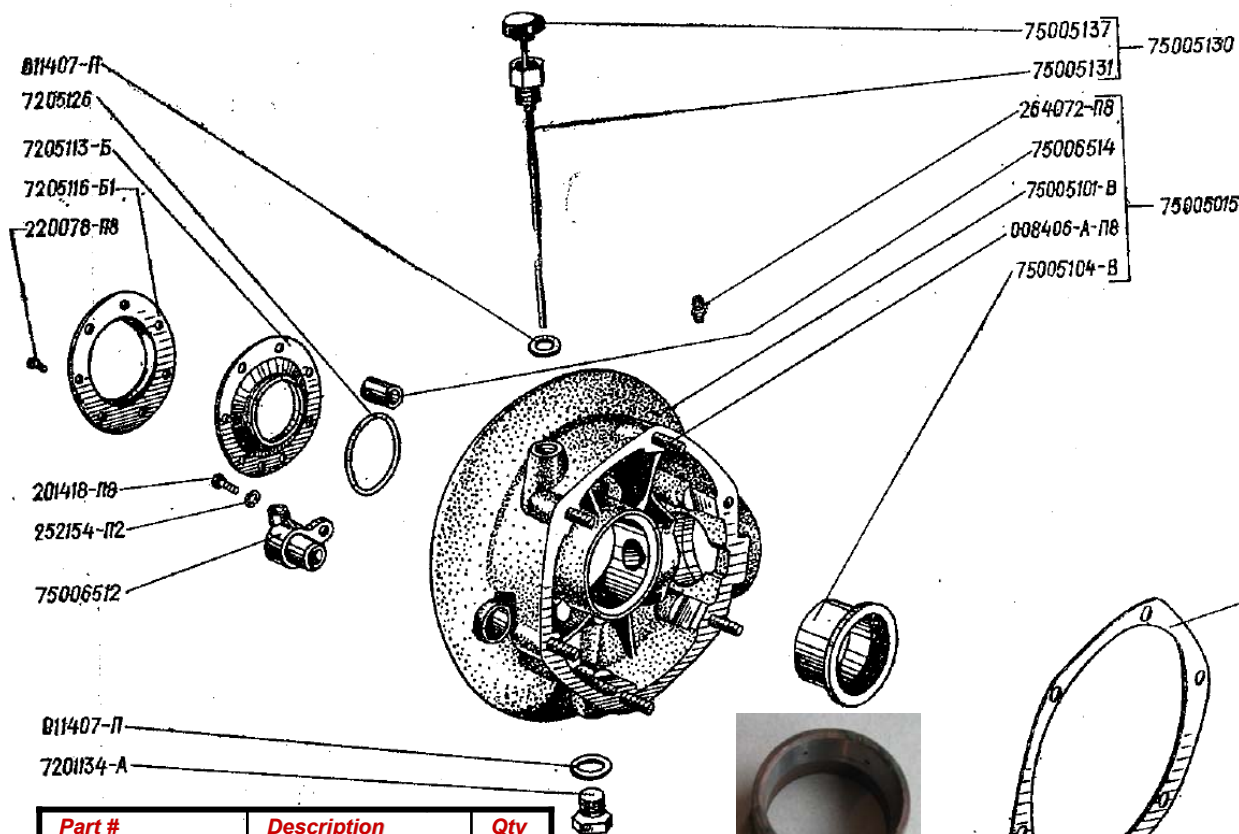


***MT905-1 Main Drive with Brake
MT905 Main Drive***

MT-9, MT-10, K-650 Final Drive Casings and Covers (1WD)



MT-9 / MT-10 / MT-10.36 / MT-11 / K-650 Casings and Covers of Final Drive (1WD)



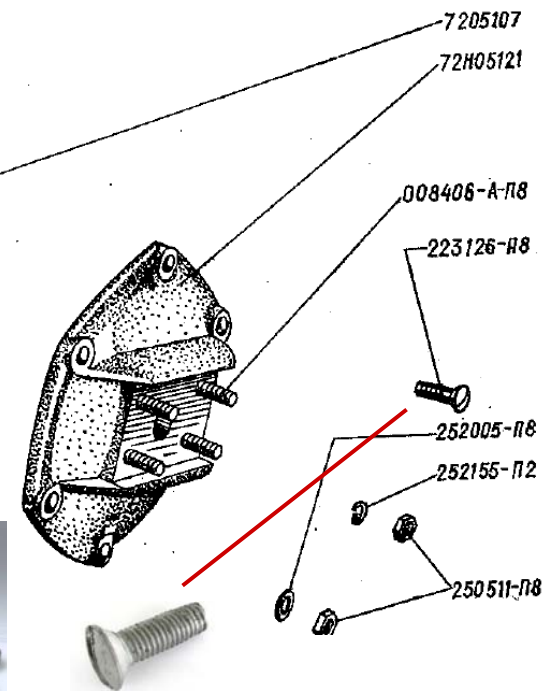
Part #	Description	Qty
7201134-A	Plug	1
7205107	Gasket	1
7205113-B	Gland	1
7205116-Б1	Cover	1
72H05121	Cover	1
7205126	Spring	1
75005015	Crankcase Assy	1
75005101-B	Crankcase	1
75005104-B	Bushing	1
75005130	Dip Stick Assy	1
75005131	Dip Stick	1
75005137	Plug	1
75006512	Bracket	1

Part #	Description	Qty
75006512	Bracket	1
75006514	Bushing	1
008406-П8	Stud	9
011407-П	Gasket 14.5	2
201418-П8	Bolt, M6X16	1
220078-П5	Screw, M5X12	7
223126-П8	Screw, M8X25	1
250511-П8	Nut, M8X1	9
252005-П8	Washer, 8	5
252154-П8	Washer, 6П	1
252155-П8	Washer	4
264072-П8	Lubricator	1

7205104
Outer Race for Needle Bearing



Rear Drive Cover
72N05121



Oval Head Screw
223126

MT-9 / MT-10 / K-650 Final Drive (Crownwheel Set) (1WD)

**7205227-B
Crownwheel Set**



**72052-2/
3086304L
Double-Row
Bearing**



**75005223
Final Drive Nut**



7205202-5/7205227-5
(7205202/7205227)

7205233
7205234
7205235
7205236
7205237

7205248

**7205248
Washer for
Crownwheel Bolts**



7205229

201473-П

7205229

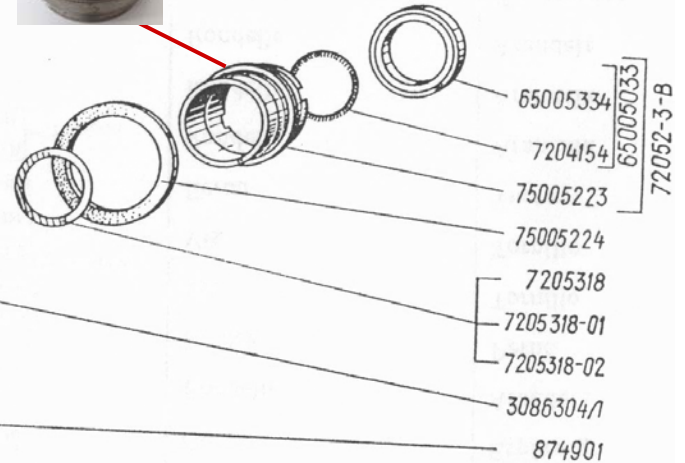
Final Drive Hub



**7205207
Ballbearing
72x35x17**



**7205246
Bushing**



65005334

7204154

75005223

75005224

7205318

7205318-01

7205318-02

3086304/1

874901

3x16

207

7205241

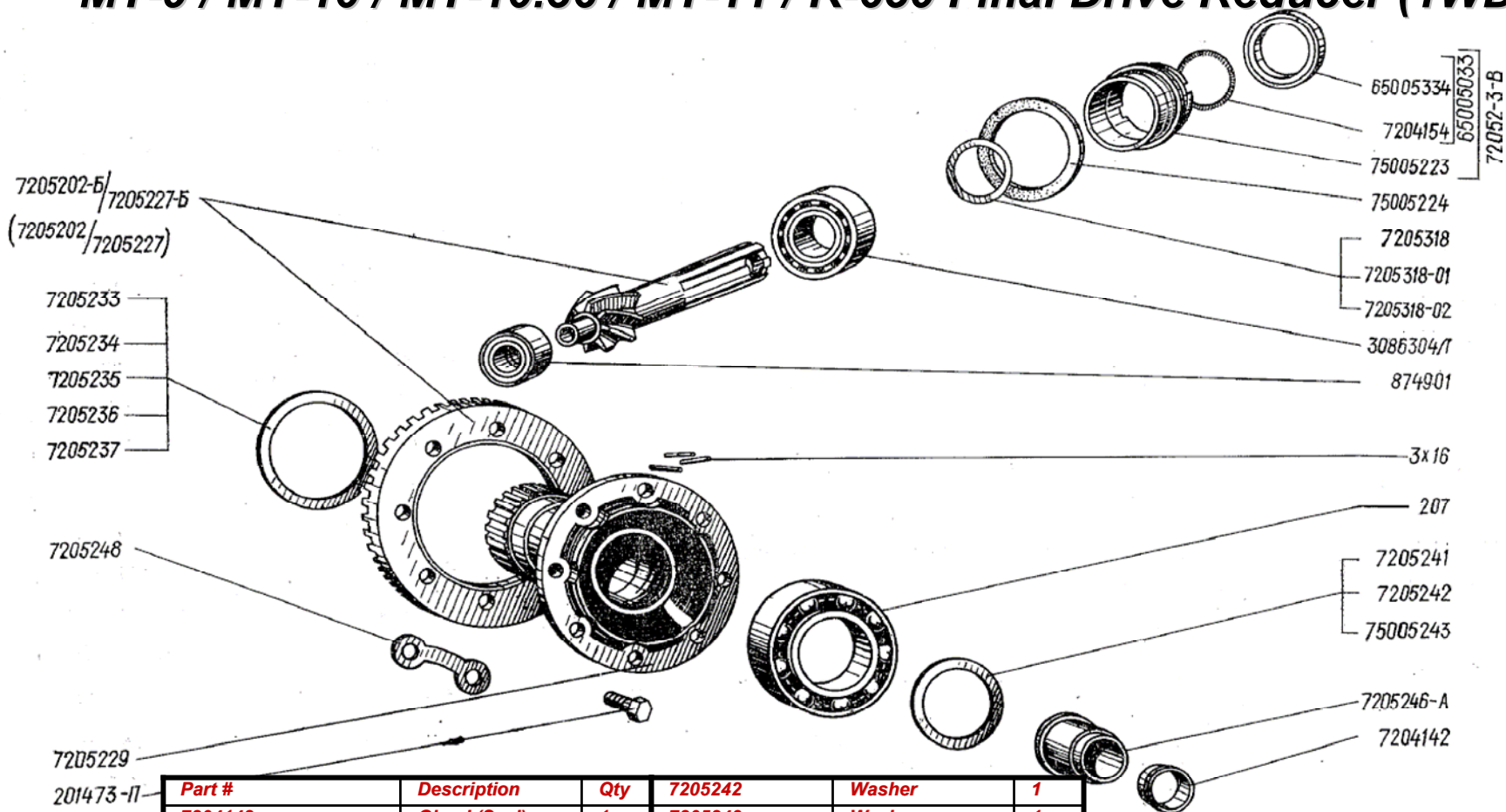
7205242

75005243

7205246-A

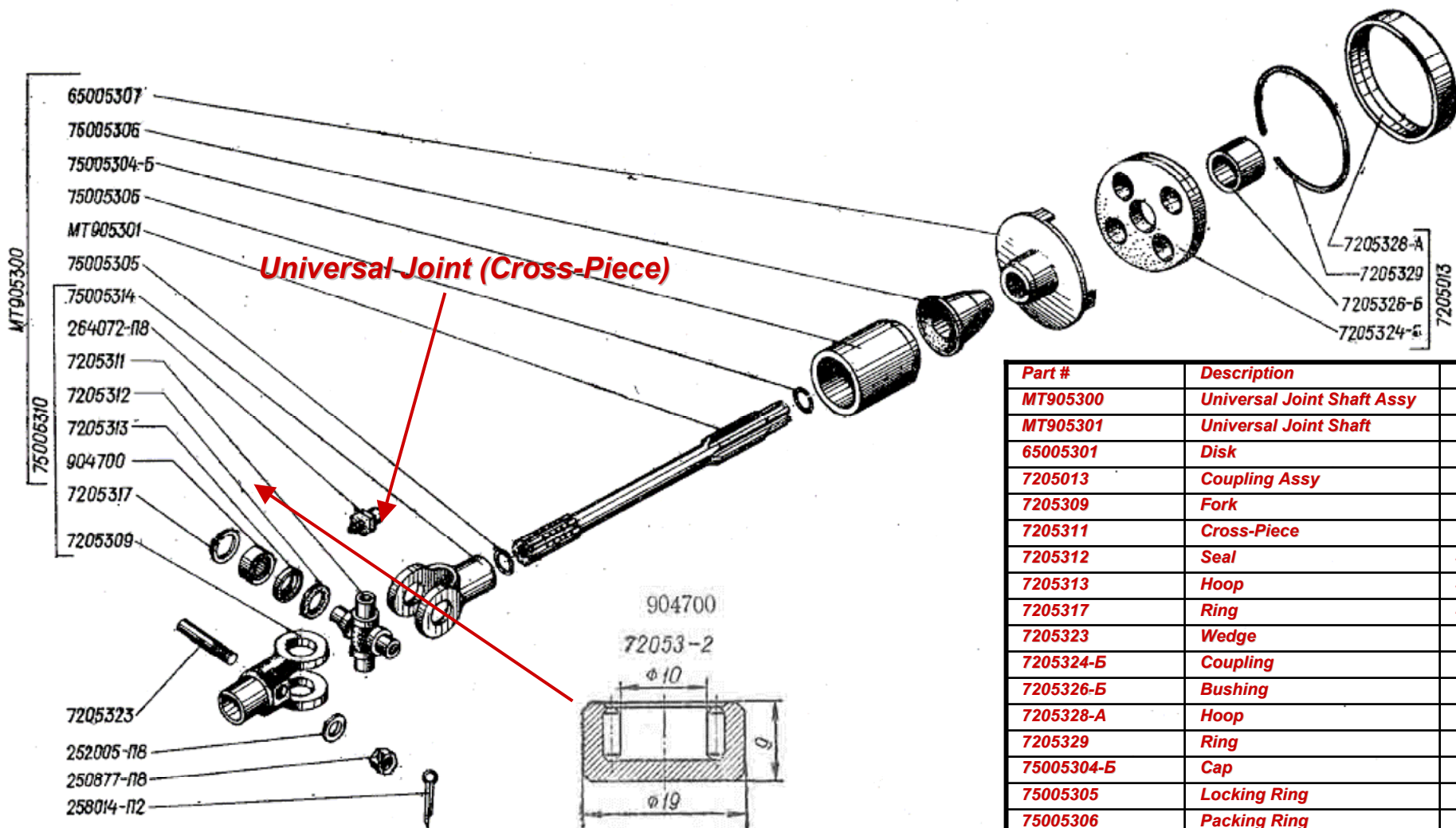
7204142

MT-9 / MT-10 / MT-10.36 / MT-11 / K-650 Final Drive Reducer (1WD)



Part #	Description	Qty	7205242	Washer	1
7204142	Gland (Seal)	1	7205243	Washer	1
7204154	Gland Spring	1	7205246-A	Bushing	1
65005033	Gland Assembly	1	7205248	Washer	4
65005034	Gland (Seal)	1	7205318	Washer	1
7205202-Б / 7205227-Б	Gears (pair)	1	7205318-01	Washer	1
7205202-A / 7205227-A	Gears (pair)	1	7205318-02	Washer	1
7205202 / 7205227	Gears (pair)	1	750052-3-Б	Nut Assembly	1
7205229	Hub	1	75005223	Nut	1
7205233	Washer	1	75005224	Ring	1
7205234	Washer	1	201473-П	Bolt	8
7205235	Washer	1	207	Ball Bearing	1
7205236	Washer	1	874901	Needle Bearing	1
7205237	Washer	1	3086304/П	Ball Bearing	1
7205241	Washer	1	3 X 15.8	Roller	45

MT-9 / MT-10 / MT-10.36 / K-650 Universal Joint Shaft (Cardan) (1WD)



Part #	Description	Qty
MT905300	Universal Joint Shaft Assy	1
MT905301	Universal Joint Shaft	1
65005301	Disk	1
7205013	Coupling Assy	1
7205309	Fork	1
7205311	Cross-Piece	1
7205312	Seal	4
7205313	Hoop	4
7205317	Ring	4
7205323	Wedge	1
7205324-B	Coupling	1
7205326-B	Bushing	1
7205328-A	Hoop	1
7205329	Ring	1
75005304-B	Cap	1
75005305	Locking Ring	2
75005306	Packing Ring	1
75005310	Hinge	1
75005314	Fork	1
250877-P18	Nut	1
252005-P18	Washer	1
258014-P18	Cotter Pin	1
264072-P18	Lubricator	1
9047007 (2053-2)	Needle Bearing	4

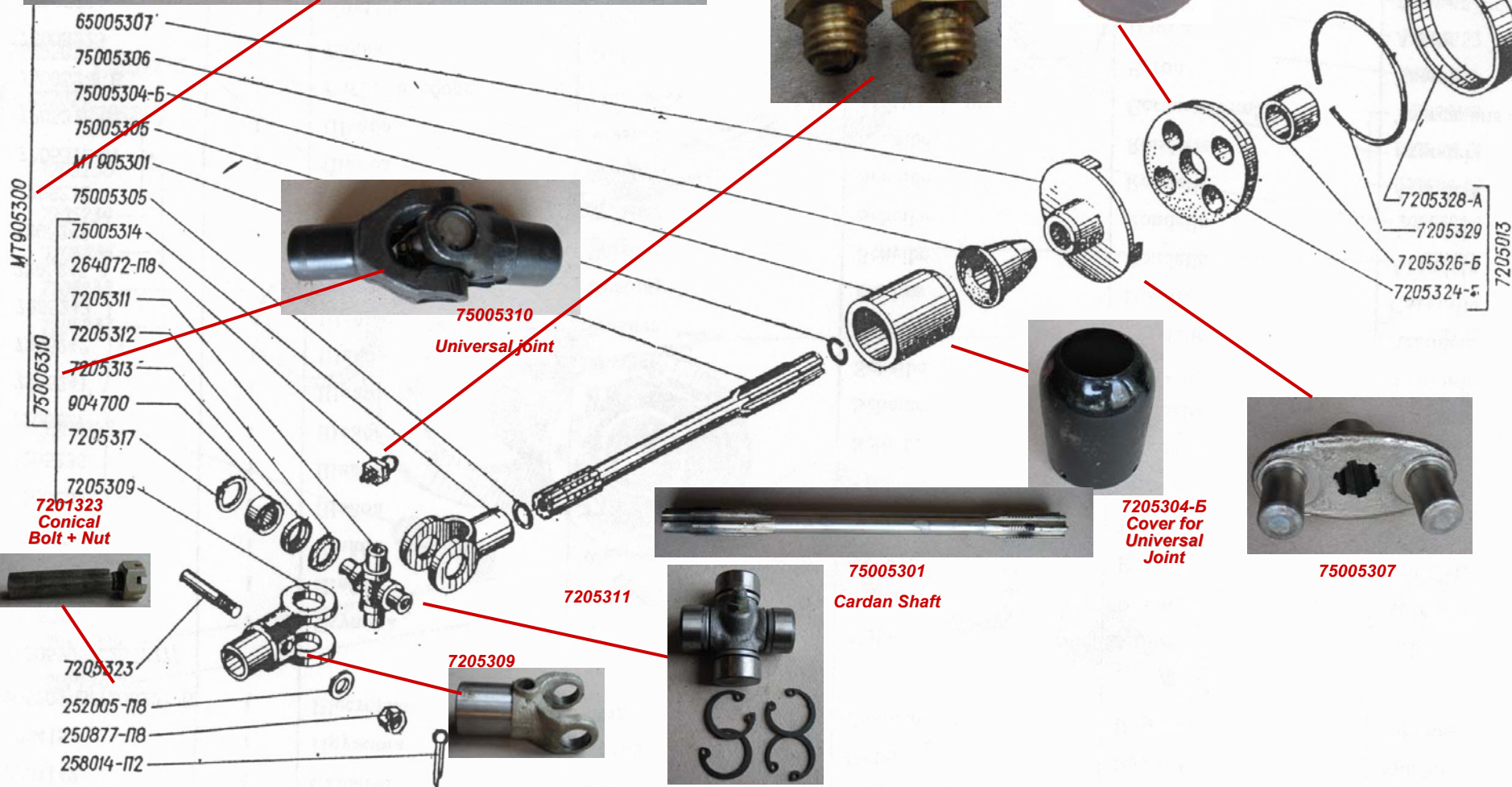
MT-9 / MT-10 / MT-10.36 / K-650 Universal Joint Shaft (Cardan) (1WD)



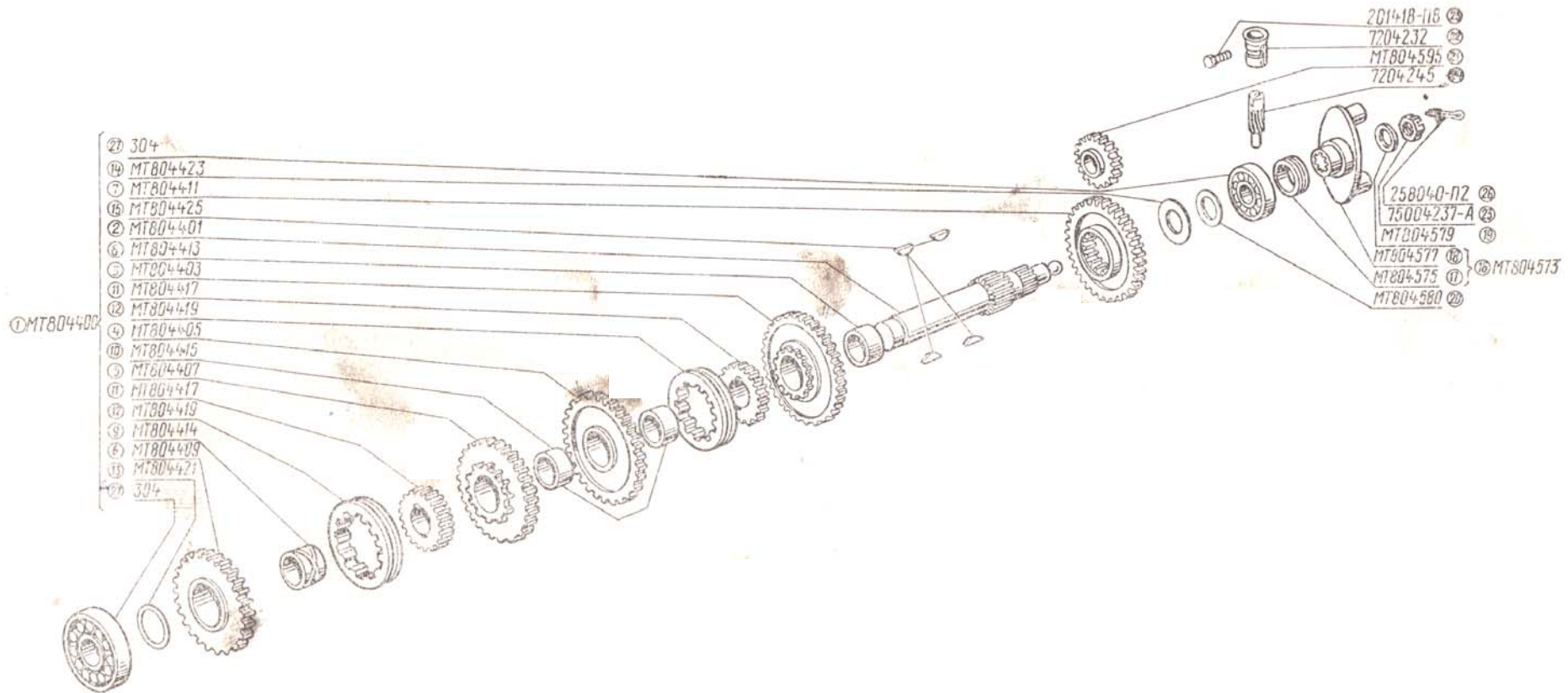
264072
Grease nipples M6



7205324-E
Elastic Absorber

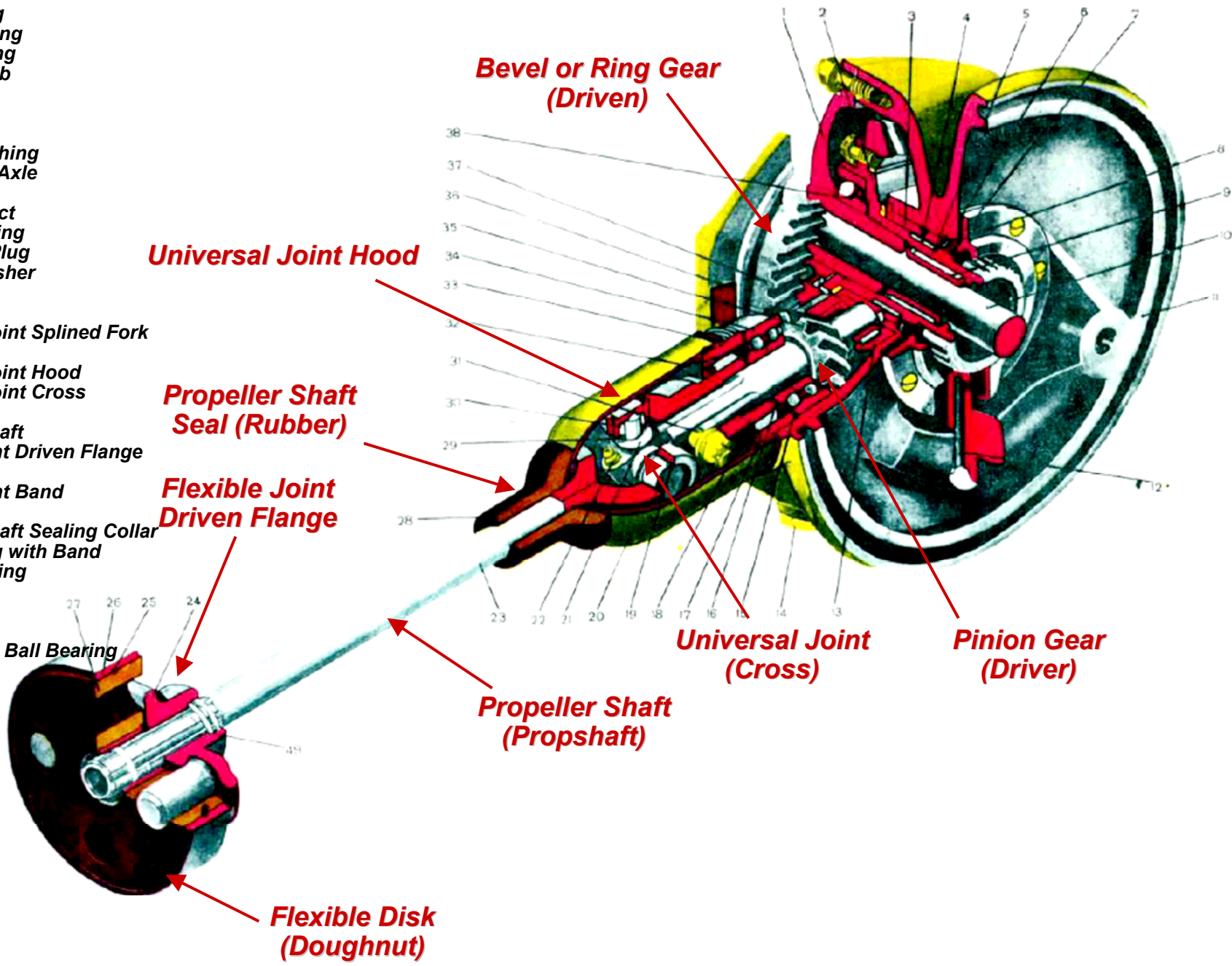


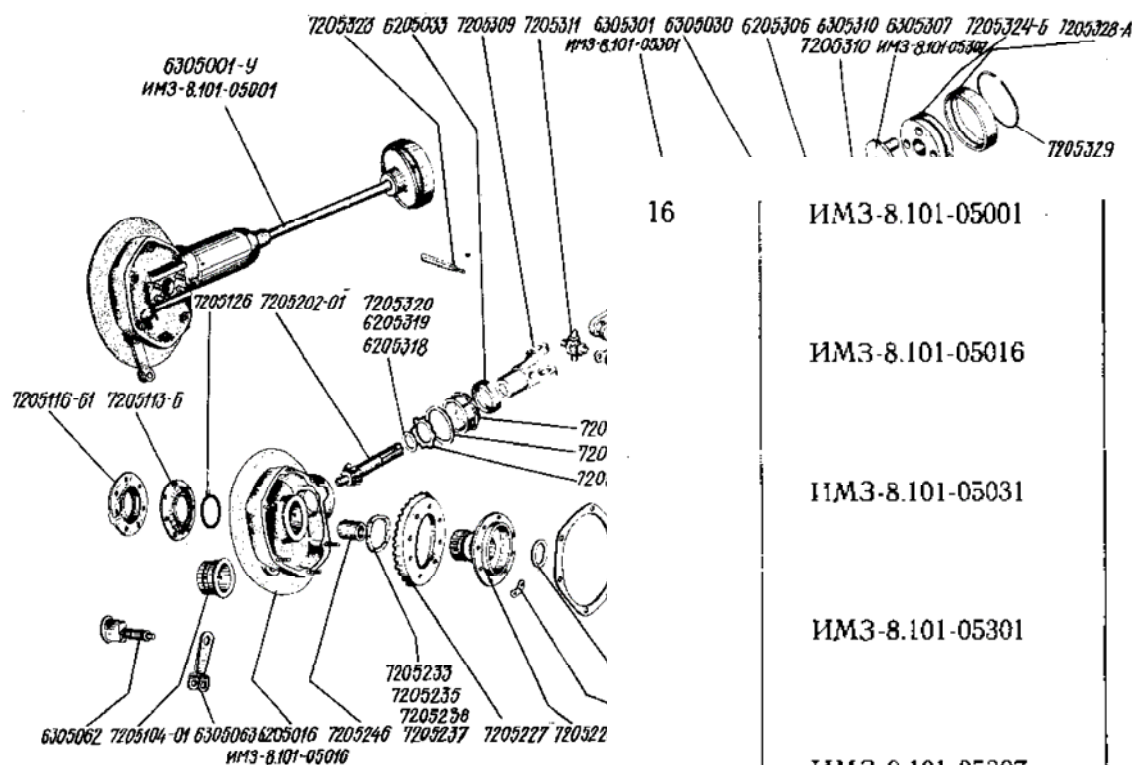
MT-10.36



Ural M-63 (Ural-2), M-66 (Ural-3) and M-67 Final Drive (Cardan)

1. Casing Cover
2. Distance Ring
3. Casing Bushing
4. Needle Bearing
5. Ring Gear Hub
6. Round Seal
7. Seal Cover
8. Seal Spring
9. Distance Bushing
10. Rear Wheel Axle
11. Casing
12. Oil Drain Duct
13. Needle bearing
14. Drain Hole Plug
15. Packing Washer
16. Shim
17. Bearing Nut
18. Universal-Joint Splined Fork
19. Circlip
20. Universal-Joint Hood
21. Universal-Joint Cross
22. Lubricator
23. Propeller Shaft
24. Flexible Joint Driven Flange
25. Circlip
26. Flexible Joint Band
27. Rubber Disc
28. Propeller Shaft Sealing Collar
29. Sealing Ring with Band
30. Needle Bearing
31. Wedge
32. Seal
33. Gasket
34. Double-Row Ball Bearing
35. Pinion Shaft
36. Gasket
37. Ring Gear
38. Ball Bearing





16

Part #	Description	M-62	M-
630121-Y	FD Casing Cover	-	1
6305301	Propeller Shaft	-	1
6305307	Flexible Joint Flange	-	1
6305310	Circlip	-	1
6205016	FD Casing	-	1
7205126	Casing Oil Seal Spring	1	1
7205202-01	FD Pinion Shaft	1	1
7205214	Pressure Washer	1	1
7205223	FD Bearing Nut	1	1
7205224-01	FD Bearing Nut Gasket	1	1
7205227	Ring Gear Driven	1	1
7205229	Ring Gear Hub Driven	1	1
7205233	Distance Ring 1.7 mm	1	1
7205235	Distance Ring 1.2 mm	1	1
7205236	Distance Ring 2.0 mm	1	1
7205237	Distance Ring 1.5 mm	1	1
7205241	Adjusting Shim 0.08 mm	1	1
7205242	Adjusting Shim 0.18 mm	1	1
7205246	Distance Bushing	1	1
7205309	Univ. Joint Splined Fork	1	1
7205310	Circlip	-	1

IM3-8.101-05001

Задняя передача в сборе
Final drive assy
Transmission secondaire assemblée
Conjunto transmisión trasera

IM3-8.101-05016

Картер задней передачи
Final drive casing
Carter de transmission secondaire
Cárter de la transmisión trasera

IM3-8.101-05031

Карданный вал с шарниром в сборе
Propeller shaft and universal joint assy
Arbre à cardan assemblé avec joint
Conjunto árbol cardán con articulación

IM3-8.101-05301

Карданный вал
Propeller shaft
Arbre à cardan
Arbol cardán

IM3-8.101-05307

Диск упругого кардана
Flexible joint flange
Disque du cardan élastique
Disco del cardán flexible

6305001-Y

Задняя передача в сборе
Final drive assy
Transmission secondaire assemblée
Conjunto transmisión trasera

6305030

Колпак кардана в сборе
Propeller shaft hood assy
Chapeau du cardan assemblé
Conjunto casquete del cardán

6305031

Карданный вал с шарниром в сборе
Propeller shaft and universal joint assy
Arbre à cardan assemblé avec joint
Conjunto árbol cardán con articulación

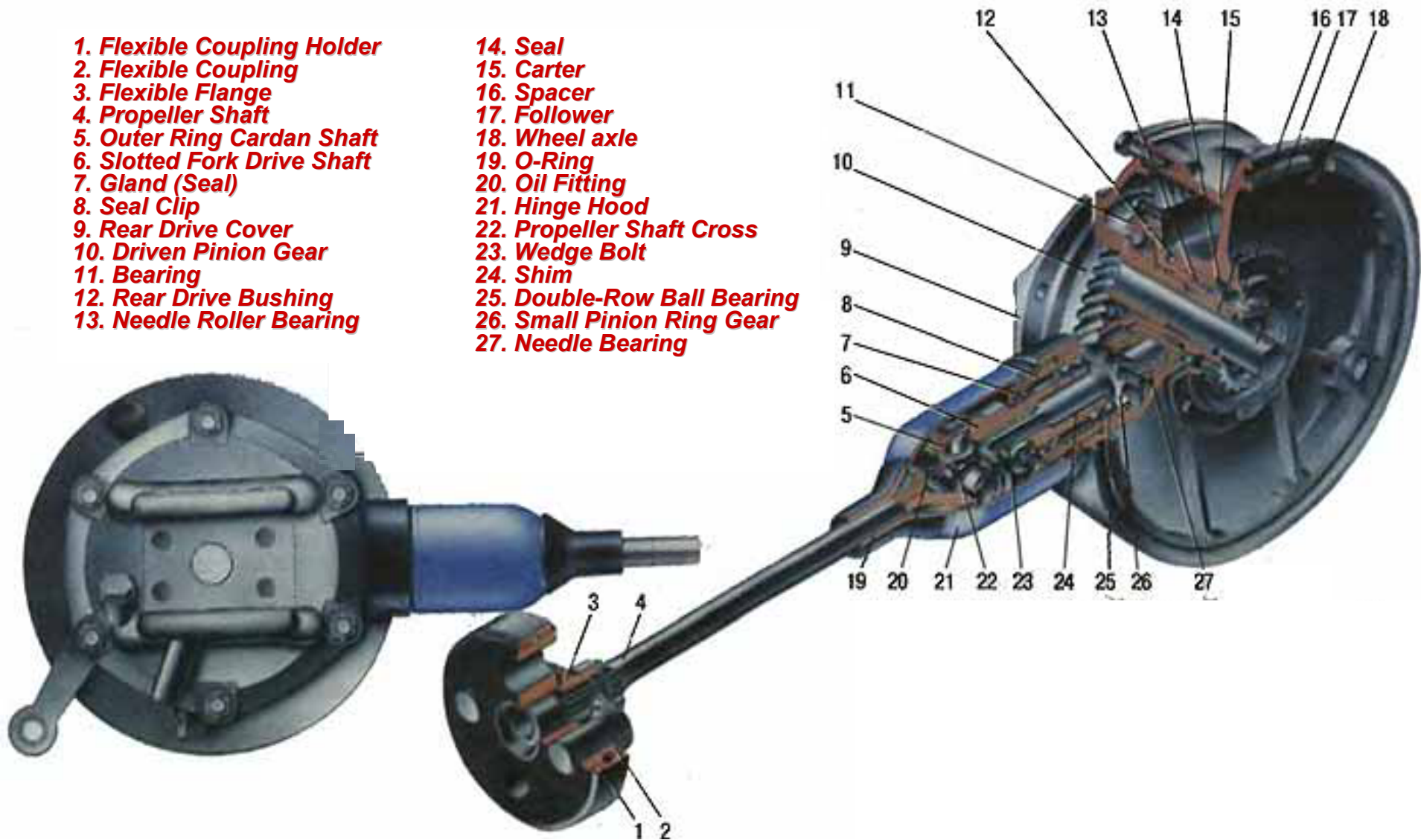
6305062

Кулачок заднего тормоза
Rear brake cam
Came du frein AR
Leva del freno trasero

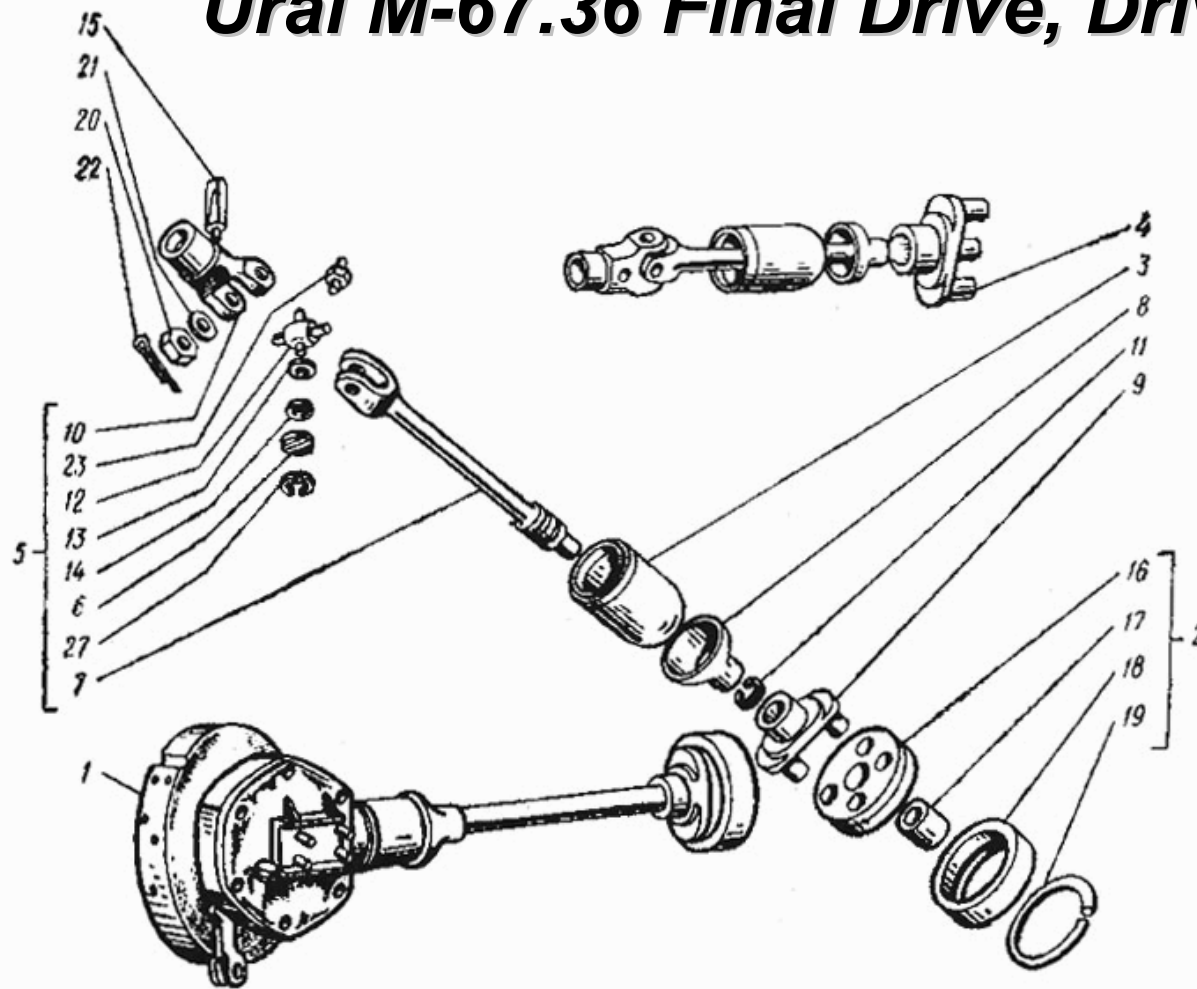
Cardan M-67.36

- 1. Flexible Coupling Holder
- 2. Flexible Coupling
- 3. Flexible Flange
- 4. Propeller Shaft
- 5. Outer Ring Cardan Shaft
- 6. Slotted Fork Drive Shaft
- 7. Gland (Seal)
- 8. Seal Clip
- 9. Rear Drive Cover
- 10. Driven Pinion Gear
- 11. Bearing
- 12. Rear Drive Bushing
- 13. Needle Roller Bearing

- 14. Seal
- 15. Carter
- 16. Spacer
- 17. Follower
- 18. Wheel axle
- 19. O-Ring
- 20. Oil Fitting
- 21. Hinge Hood
- 22. Propeller Shaft Cross
- 23. Wedge Bolt
- 24. Shim
- 25. Double-Row Ball Bearing
- 26. Small Pinion Ring Gear
- 27. Needle Bearing



Ural M-67.36 Final Drive, Drive Shaft (1WD)

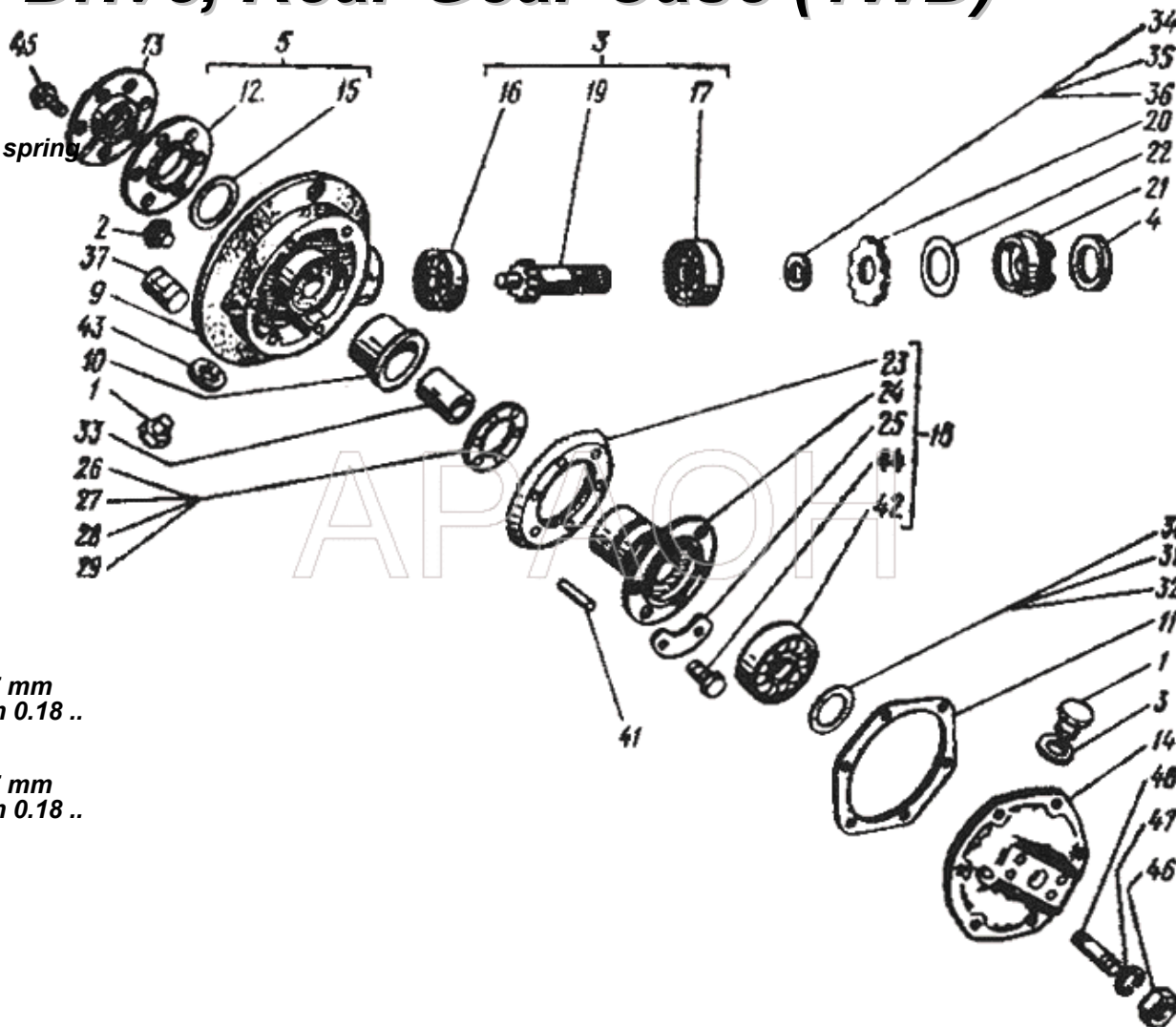


#	Part #	Description
1	IMZ-8.101-05001	Transaxle
2	7205013	Gimbal Assembly
3	6305030	Cap gimbal assembly
4	IMZ-8.101-05031	Cardan Shaft with universal joint assembly
5	IMZ-8.101-05040	Propeller shaft assembly
6	72053-2	Needle bearing
7	IMZ-8.101-05301	Cardan shaft
8	6205306	Propeller shaft sealing ring
9	IMZ-8.101-05307	Elastic cardan drive
10	7205309	Cardan fork Slotted
11	IMZ-8.101-05310	Retaining ring
12	7205311	Cardan shafts
13	7205312	Gimbal ring sealing
14	7205313	Holder of the O-ring gimbal
15	7205323	Wedge bolt
16	7205324-B	Flexible couplings cardan
17	7205326-B	Elastic sleeve couplings cardan
18	7205328-A	STRIPS elastic gimbal
19	7205329	Locking clips elastic gimbal
20	250867-A8	Castellated nut to M8x1 Wedge Bolt
21	252005-P29	Washer 8
22	258014-P	2x20 cotter pin
23	264072-A8	Oiler for cardan shafts
24	367 309 A19	locking gimbal ring

The M-67.36 rear gear drives the bike's pusher and not the sidecar wheel.

M-67.36 Final Drive, Rear Gear Case (1WD)

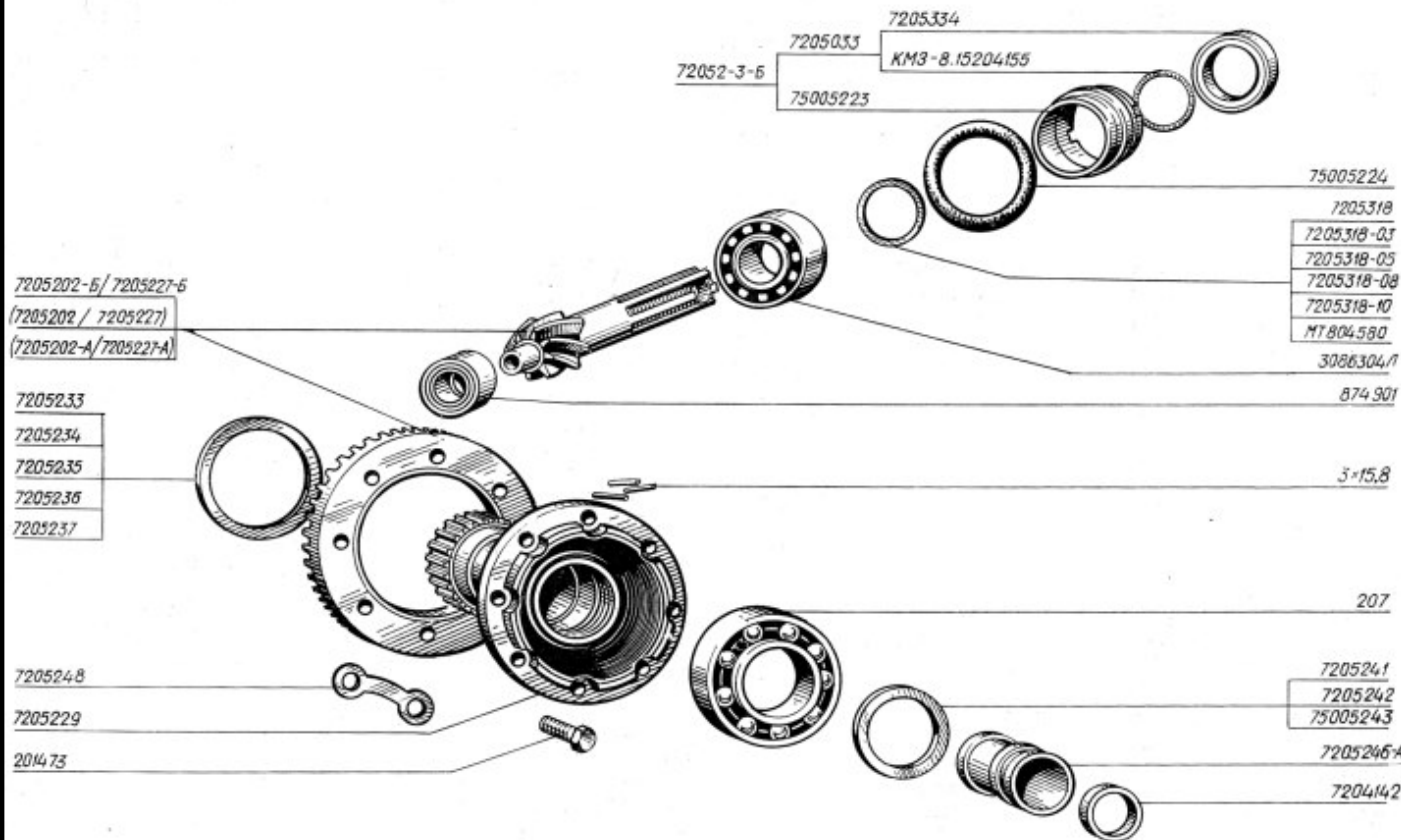
- 1 7201134-A Drain plug
- 2 6201254 Cap
- 3 7205011 Leading pinion assembly with bearings
- 4 6205033 Fork oil seal universal joint assembly
- 5 7205039 Crankcase oil seal collar Transaxle with spring
- 9 IMZ-8.101-05101 Carter's final drive
- 10 7205104-01 Carter's main transfer hub
- 11 7205107 Gasket crankcase main transmission
- 12 7205113-B Crankcase oil seal collar
- 13 7205116-B1 Gland crankcase
- 14 IMZ-8.101-05121 Crankcase cover
- 15 7205126 Spring seal crankcase
- 16 72052-1 Needle bearing
- 17 72052-2 Double row ball bearing
- 18 72052-4 Gear driven final drive assembly
- 19 7205202-01 Final drive leading
- 20 7205214 Washer push
- 21 7205223 Nut bearing final drive
- 22 7205224-01 O Rings
- 23 7205227 Final drive led
- 24 7205229 Gear driven hub of the main transfer
- 25 6205232 The safety plate
- 26 7205233 Spacer ring thickness 1.7 .. 1.6 mm
- 27 7205235 Spacer ring thickness of 1.12 mm 1.2 ..
- 28 7205236 Spacer ring thickness of 2.0 .. 1.89mm
- 29 7205237 Spacer ring 1.5mm 1.41mm ..
- 30 7205241 Adjusting washer thickness 0.08 .. 0.07 mm
- 31 7205242 Adjusting washer thickness of 0.16 mm 0.18 ..
- 32 6205243 Adjusting washer 0.4 .. 0.36 mm
- 33 7205246 Spacer
- 34 6205318 Adjusting washer thickness 0.08 .. 0.07 mm
- 35 6205319 Adjusting washer thickness of 0.16 mm 0.18 ..
- 36 7205320 Adjusting washer 0.4 .. 0.36 mm
- 37 IMZ-8.101-05610 Bush
- 39 IMZ-8.101-06204 Flat washer
- 41 3x15, 8SH Needle roller
- 42 207 Ball-bearing
- 43 11407 Washer 14 special
- 44 201453-P M8h14 bolt mounting idler
- 45 220078-P29 M5h12 screw fastening the gland
- 46 250511-P29 M8x1 nut
- 47 252155-P2 8L washer to the bolt handle positioning
- 48 365632-P29 M8h1h21 stud mount



The absence of satellite gears in the rear housing indicates that the rear drive is not a differential.

MT-11 (1WD)

Part #	Description	Qty
7204142	Gland (Seal)	1
KM3-8.15204155	Gland Spring	2
7205033	Gland Assembly	2
72052-3B	Nut Assembly	
7205202-B	Gears (pair)	1
7205227-B		
7205202-A	Gears (pair)	1
7205227-A		
7205202	Gears (pair)	1
7205227		
7205223	Nut	1
7205224	Ring	1
7205229	Hub	1
7205233	Washer	
7205234	Washer	
7205235	Washer	
2367205	Washer	
7205237	Washer	
7205241	Gasket	
7205242	Gasket	
7205243	Gasket	
7205246-A	Bushing	1
7205248	Washer	4
MT804580	Gasket	
7205318	Gasket	
7205318-03	Gasket	
7205318-05	Gasket	
7205318-08	Gasket	
7205318-10	Gasket	
7205334	Cup	2
201473	Bolt	8
207	Ball Bearing	1
874901	Needle Bearing	1
3086304/1	Ball Bearing	1
3 X 15.8	Roller	45



MT-11 is a One-Wheel Drive (1WD), whereas the MT-16 is Two-Wheel Drive (2WD)

MT-11 Rear Drive (1WD)

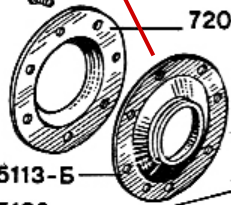


Hub Oil Seal Cover
7205113

011407

220078

7205116-B1



7205113-B

7205126

201418

252154

75006512



75005137

75005131

75005130



7500130
Dipstick

75006514

75005101-B

290144

75005104-P

75005015

7205107

72H05121

223126

291790

252005

250511

011407

7201134-A

Hub Needle Bearing Inner Race
75005104



7201134-A

Oil Plug +
Washer



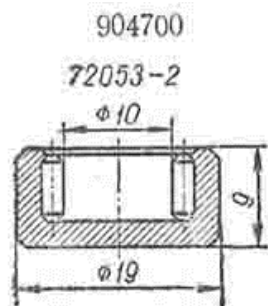
Rear Drive Cover Gasket
7205107



Rear Drive Cover
72N05121

Part #	Description	Qty
7201134-A	Plug	1
75005015	Casing Assy	1
75005101-B	Casing	1
75005104-B	Bushing	1
7205107	Gasket	1
7205113-B	Gland (Seal)	1
7205116-B1	Cover	1
72H05121	Cover	1
7205126	Spring	1
75005130	Dipstick Assy	1
75005131	Dipstick	1
75005137	Plug	1
75006512	Bracket	1
75006514	Bushing	1
216234	Stud	5
011407	Gasket	2
201418	Bolt	1
220078	Screw	7
223126	Screw	1
250511	Nut	5
252005	Washer	5
252154	Washer	1
264072	Lube Fitting	1
291790	Stud	4

MT-10, MT-10.36, MT-11 Propeller (Cardan) Shaft



7205304-B
Cover for
Universal
Joint

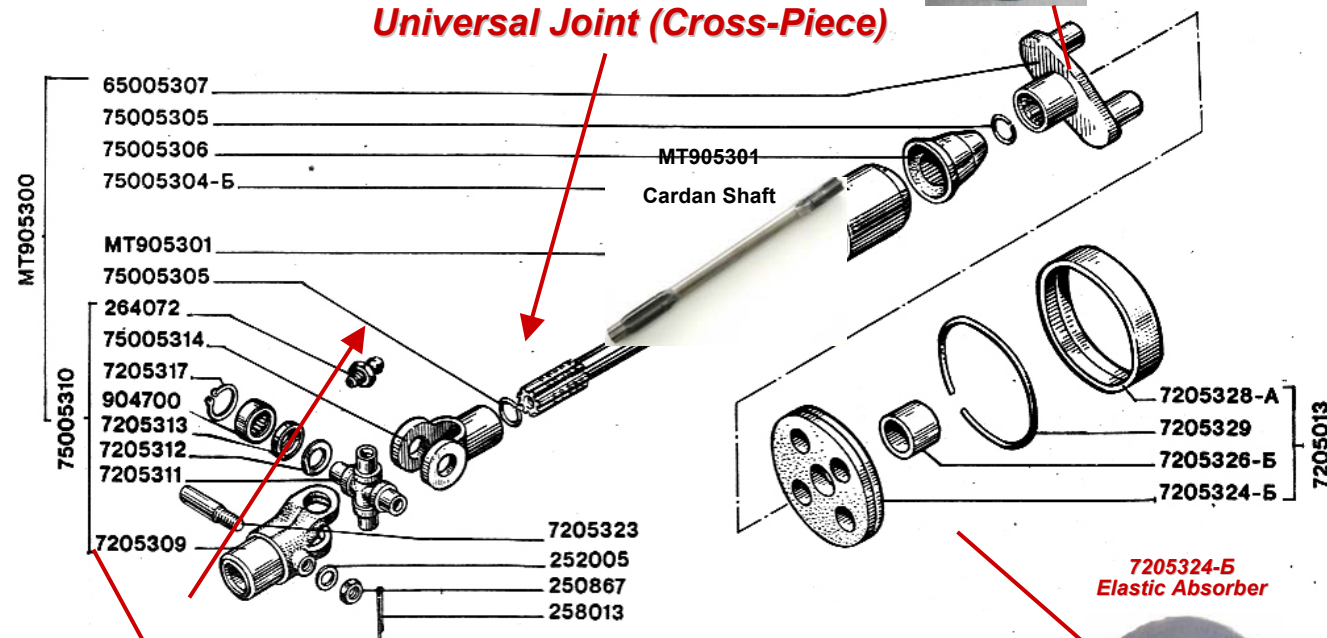


7205306



75005307-A
Disk

Universal Joint (Cross-Piece)



7205324-B
Elastic Absorber

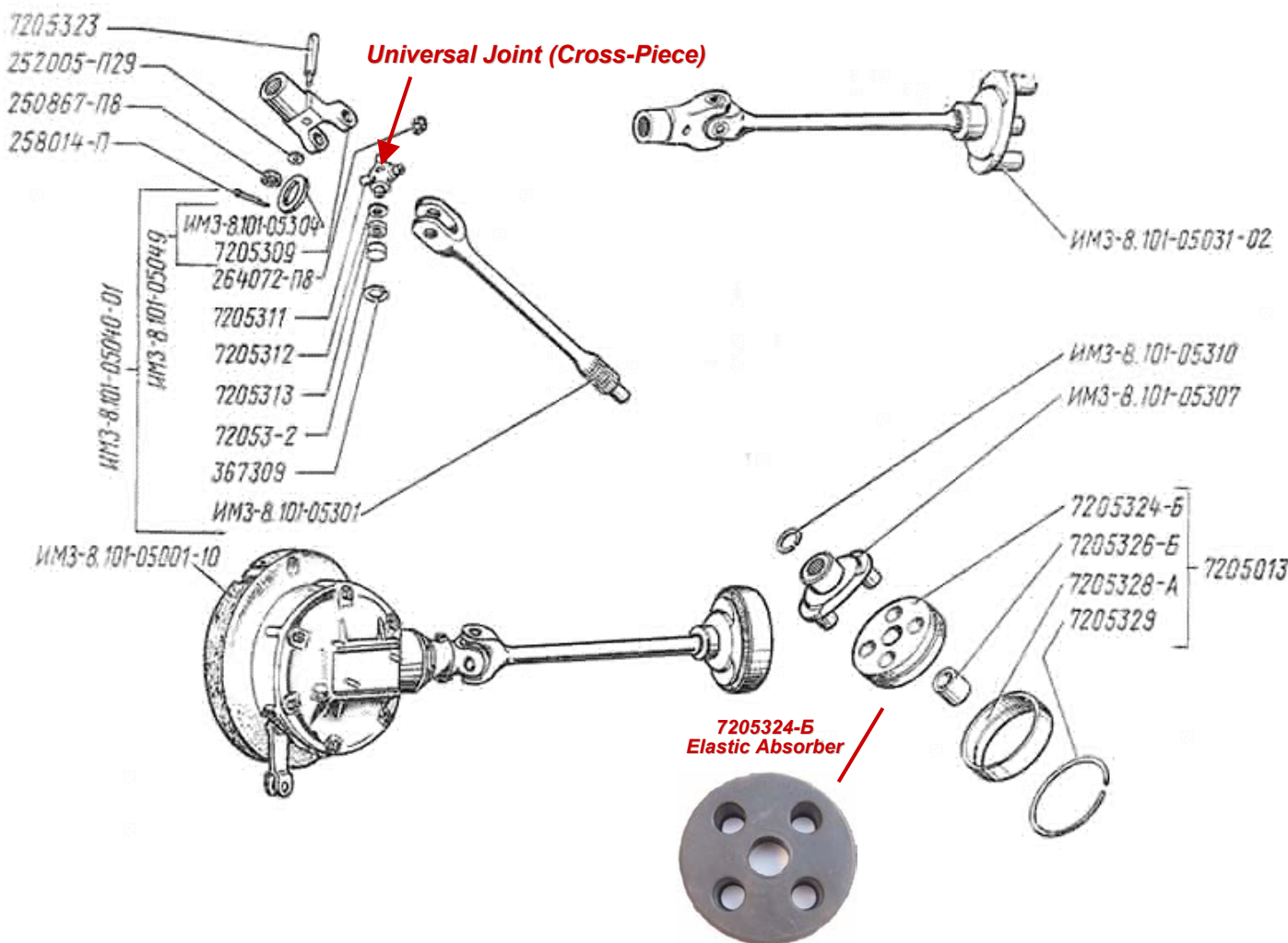


75005310
Universal joint

Part #	Description	Qty
7205013	Coupling Assy	1
MT905300	Cardan Shaft Assy	1
MT905301	Cardan Shaft	1
75005304-B	Cowl	1
75005305	Circlip	2
75005306	Sealing Ring	1
65005307	Disk	1
7205309	Fork	1
75005310	Hinge	1
7205311	Spider	1
7205312	Seal	4
7205313	Yoke	4
75005314	Fork	1
7205317	Ring	4
7205323	Wedge Bolt	1
7205324-B	Coupling	1
7205326-B	Bushing	1
7205328-A	Yoke	1
7205329	Ring	1
250867	Nut	1
252005	Washer	1
258014	Cotter Pin	1
264072	Lube Fitting	1
904700	Needle Bearing	4

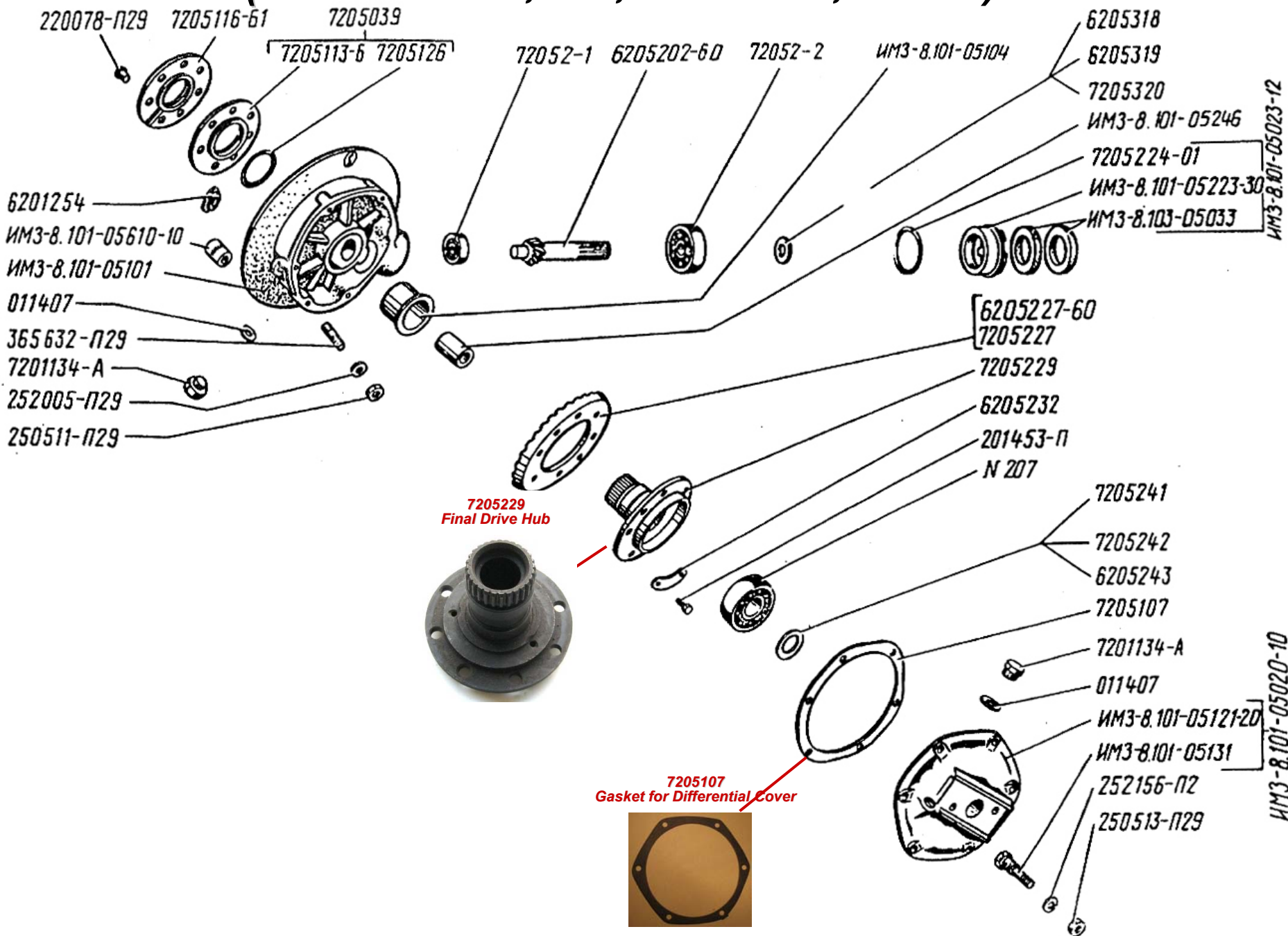
IMZ-8.1034/37 (650 cc) Final Drive and Drive Shaft

IMZ-8.103-10, -40,-8.123-10, -8.107



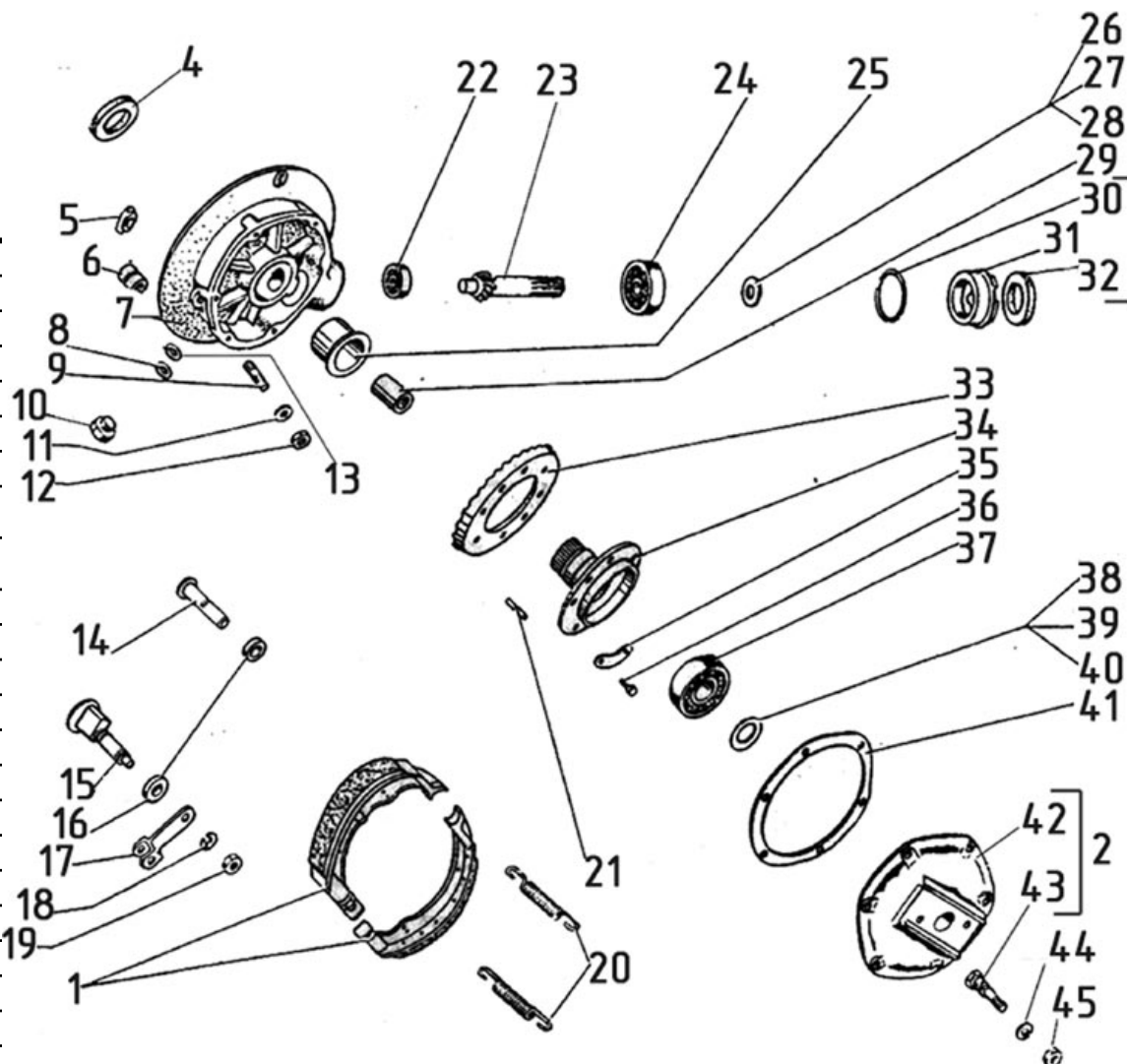
IMZ-8.103-05001-01	Final Drive Assy
72-05013	Flexible U-joint coupling
IMZ-8.101-05031-02	Drive Shaft with U-Joint Assy
IMZ-8.103-05040	Drive Shaft Assy
IMZ-8.101-05032	Filler plug
72-05323	Wedge Bolt
252005-P29	Washer 8 to Wedge
250867-P8	Slotted nut M8x1 to Wedge
258014-P2	Cotter Pin 2x20 to Wedge
IMZ-8.101-05304	Protective Washer
IMZ-8.101-05049	Drive Shaft Fork Assy
72-05309	Universal Joint Splined Fork
264072-P8	U-Joint Cross Greaser
72-05311	U-Joint Cross
72-05312	U-Joint Sealing Ring
72-05313	Sealing Ring Band
72053-2	Needle Bearing
367309	U-Joint Lock Ring B19
IMZ-8.103-05301	Drive Shaft
IMZ-8.101-05310	Circlip
IMZ-8.103-05307	Flexible U-Joint Plate
72-05324-B	Flexible U-Joint Coupling Sleeve
72-05326-B	Flexible U-Joint Coupling Sleeve Bushing
72-05328-A	Flexible U-Joint Holder
72-05329	Flexible U-Joint Holder Lock Ring

Ural 650 (IMZ-8.103-10, -40; -8.123-10; -8.107) Differential



IMZ-8.1034/37

Final drive and rear brake (Fig. 15)

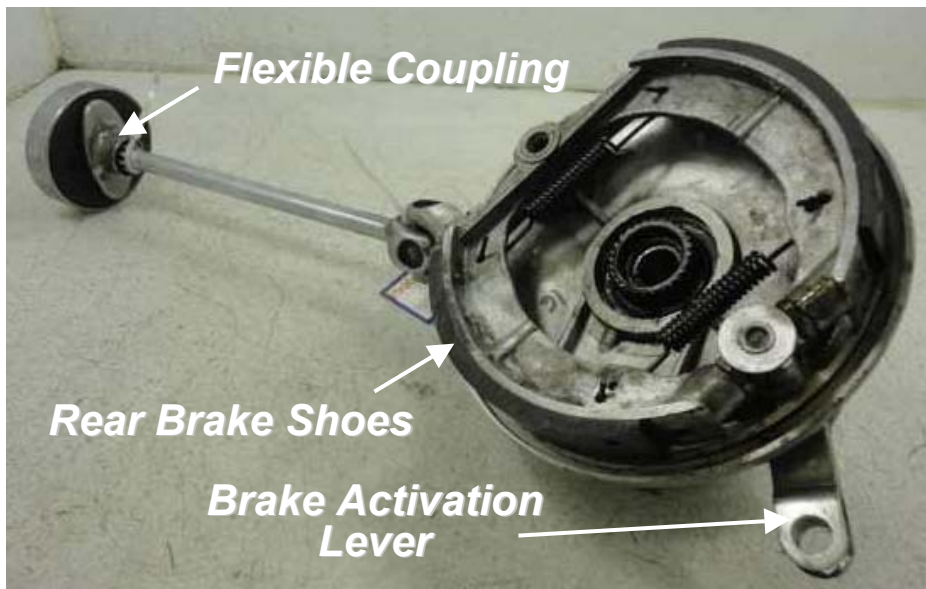
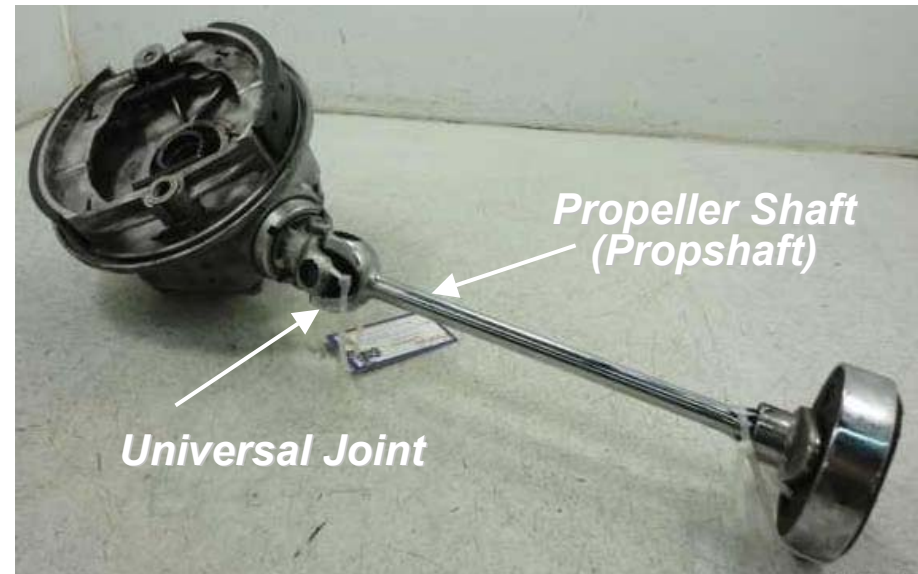
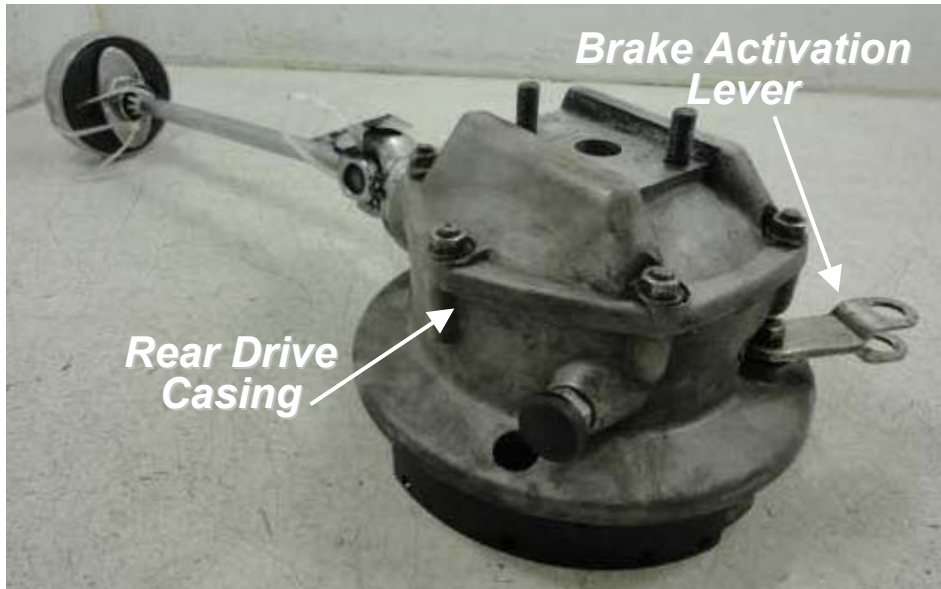


	750/650
	IMZ-8.101-06024
	IMZ-8.103-05020
	IMZ-8.103-05020-10
	IMZ-8.101-05023-12
	'IMZ-8.103-05023
	'7205039
	IMZ-8.101-05039
	IMZ-8.103-05039
	'6201254
	IMZ-8.101-05610-10
	IMZ-8.101-05101
	IMZ-8.103-05101-10
	'11407
	E01546
	'365632-P29
0	'HU-7201134-A
0	IMZ-8.101-01134
0	IMZ-8.101-01134-08
1	'252005-P27C
2	'250511-P27C
3	IMZ-8.101-01135
4	IMZ-8.101-05067

5	IMZ-8.101-05062-10	Rear wheel brake cam
6	IMZ-8.101-06204	Driving plate
7	IMZ-8.101-05063	Rear wheel brake lever
8	'252155-P2	Washer 8L
9	'250511-P27C	Nut M8x1-6H
0	'7206223	Return spring (Russian, fades out)
	'7206223-08	Return spring (Italian)

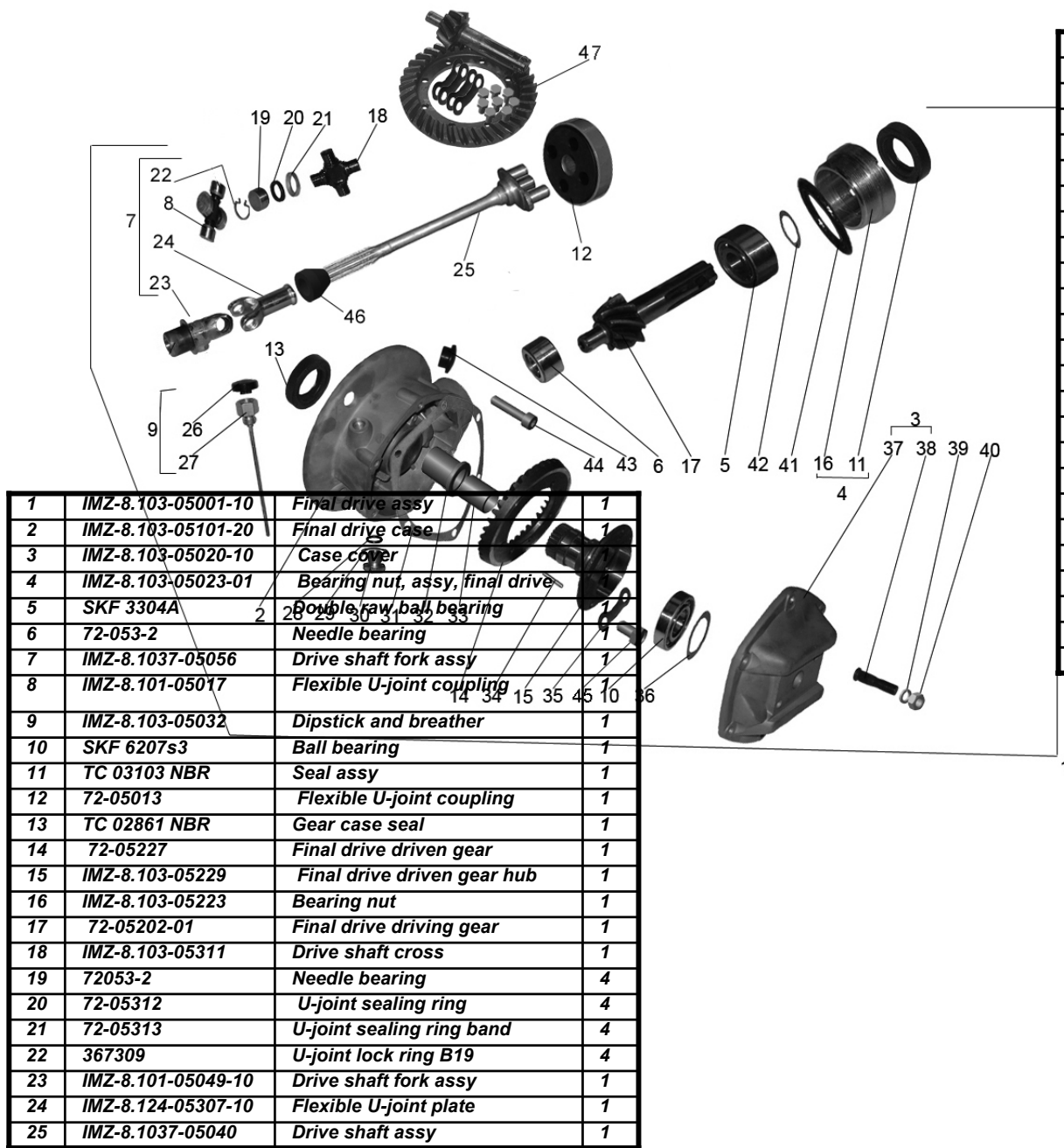
26	'6205320
27	'6205319
28	'7205320
29	IMZ-8.103-05246
30	'7205224-01
31	IMZ-8.101-05223-30
31	IMZ-8.103-05223
32	'IMZ-8.103-04015-10
32	'IMZ-8.101-05033
33	'IMZ-8.123-05047
34	IMZ-8.103-05229
35	'6205232
36	'201457-P
37	'6207-2RSR-C3
38	'7205241
39	'7205242
40	'6205243
41	'7205107
42	IMZ-8.103-05121-20
43	IMZ-8.101-05131
43	'IMZ-8.103-05131
44	'252156-P2
45	'250513-P29
45	E00871
46	'7205116-61
47	'220078-P27C
48	'IMZ-8.103-05032
48	'IMZ-8.103-05032-08
49	'IMZ-8.103-04380

2005 Ural Tourist 750 cc Final Drive (1WD)



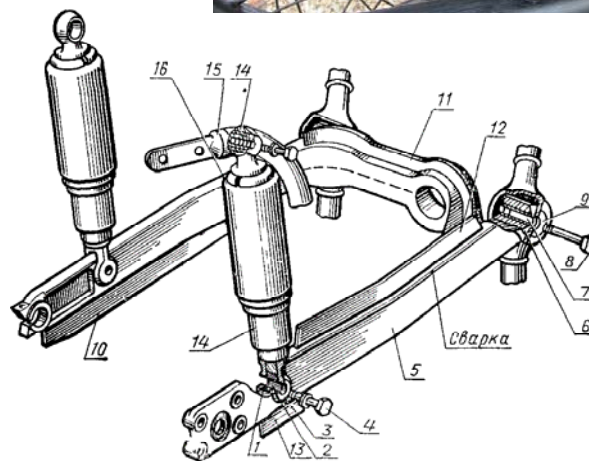
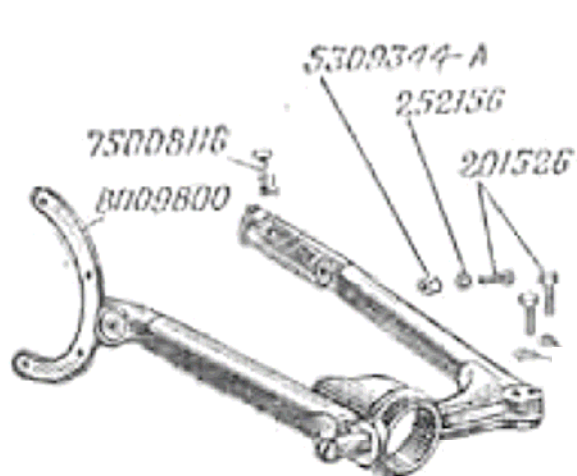
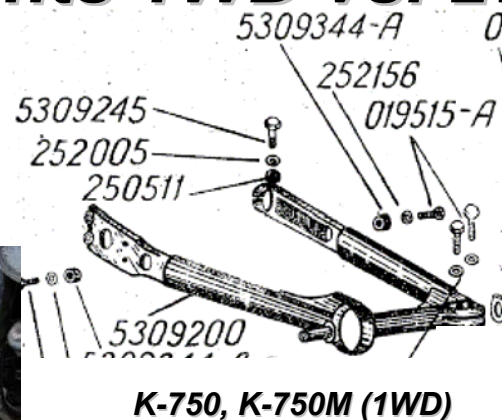
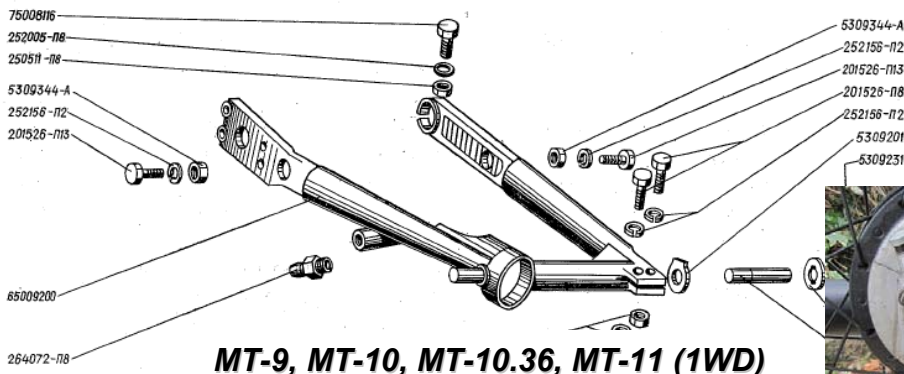
Ural Retro and Tourist motorcycles use a One-Wheel Drive (1WD) drive chain.

Ural Final Drive One-Wheel Drive (1WD)



26	IMZ-8.103-04380	Breather plug	1
27	IMZ-8.103-05034	Dipstick assy	1
28	IMZ-8.101-01135	Ring	1
29	AMP 20327A	Special washer	1
30	AMP 20326	Drain plug	1
31	IMZ-8.1037-05107	Gear case gasket	1
32	IMZ-8.107-05104-20	Gear case bushing	1
33	IMZ-8.103-05246	Distance bushing	1
34	RN 3x15.8B	Roller 3x15.8B	45
35	6205232	Lock plate	1
36	7205241	Shim 0,08...0,07 mm	1
36	7205242	Shim 0,18...0,16 mm	1
36	6205243	Shim 0,4...0,36 mm	1
37	IMZ-8.103-05121	Gear case cover	1
38	IMZ-8.103-05131	Special bolt M10x1,25-6g	2
39	252156-P2	Washer 10L	2
40	4,595,651,308	Nut M10x1,25 -6H,	2
41	7205224-01	Bearing nut gasket	1
42	6205319	Shim0,18...0,16 mm	1
42	7205320	Shim 0,4... 0,36 mm	
43	62-01254	Stopper	1
44	DIN 912 M8x 30	Screw M8x30x8,8	6
45	201453-P	Bolt M8x14	8
46	IMZ-8.1037-05302	Protective cover	1
47	IMZ-8.101-05047	Bevel gears set	1

Rear Drive Swing-Arm Attachments 1WD vs. 2WD

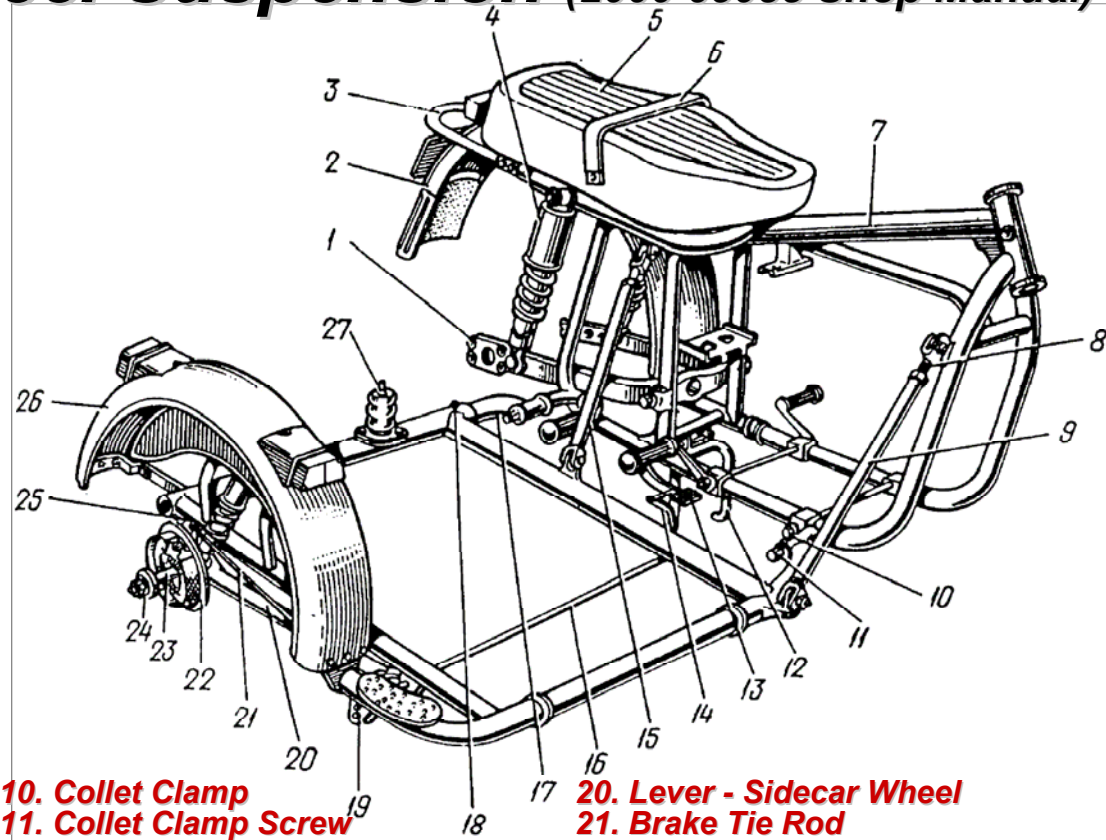
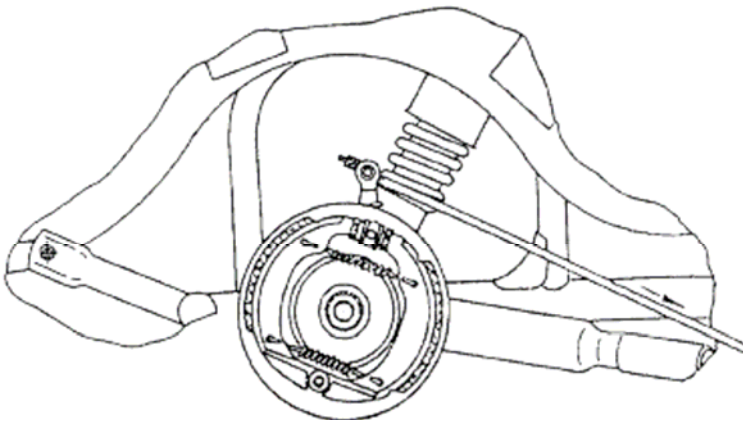


Ural 650cc / 750 cc

Note: M-72, M-61 and M-62 Have Plunger (non-Swingarm) Rear Drive Suspensions

1WD swing-arms have a straight bracket attachment to the rear drive casing, whereas the 2WD rear drive swing-arms attach with a C-shaped bracket.

Rear and Sidecar Wheel Suspension (2000 650cc Shop Manual)



1. Rear Suspension Swingarm
2. Rear Mud Flap
3. Rear Grab Bar
4. Spring-Loaded Hydraulic Shock Absorber
5. Seat (Saddle or Tractor)
6. Strap
7. Motorcycle Frame
8. Sidecar Adjusting Strut
9. Sidecar Frame Legs

10. Collet Clamp
11. Collet Clamp Screw
12. Motorcycle Stand
13. Brake Pedal
14. Sidecar Wheel Brake Lever
15. Sidecar Frame Legs
16. Sidecar Wheel Brake Rod
17. Rear Collet Clamp Bracket
18. Rear Bracket Fastening Bolt
19. Lever Pins (Long Bolts)
20. Lever - Sidecar Wheel
21. Brake Tie Rod
22. Brake Drum cover
23. Sidecar Wheel Axle
24. Protective Hood
25. Tie Rod Nut
26. Sidecar Fender
27. Rubber Body Suspension
28. Parking Brake

The rear wheel is suspended on a trailing swing-arm, pivoting on rubber (silent block) bushings located by removable pins in the frame and is supported by dual hydraulic shocks/springs. The final drive bolts onto the right-hand side of the swing-arm.

The sidecar wheel is carried on a forked, trailing-link swing-arm, supported by a single hydraulic/shock/spring, pivoting in silent block bushings around long bolts ("lever pins").