Belarus
Operator’s Manual
505, 510, 512, 525, 532, 530, 570, 572, 800, 805, 820, 825, 900, 905, 920, 925, & 1025 Series

JENSALES
or Call 800-443-0625

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TRADE MARKS AND TRADE NAMES CONTAINED AND USED HEREIN ARE THOSE OF OTHERS, AND ARE USED HERE IN A DESCRIPTIVE SENSE TO REFER TO THE PRODUCTS OF OTHERS.
<table>
<thead>
<tr>
<th>Make/Model</th>
<th>HP</th>
<th>Years Made:</th>
<th>Engine</th>
<th>Fuel Type</th>
<th>PTO Type</th>
<th>Year</th>
<th>Beginning Serial Number</th>
<th>Year</th>
<th>Ending Serial Number</th>
</tr>
</thead>
</table>

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**Engine Data:**

- **HP-Engine:**
  - 59 HP
  - 65 HP
  - 75.15 HP
  - 81 HP

- **Hydrostatics:**
  - Type: OPEN
  - Type: CLOSED

- **Fuel Tank:**
  - Capacity: 34.3
  - Outlets: 2
  - 5.27 GAL

- **Cab:**
  - Standard A/C
  - Weight: **New Price:**

- **Tires:**
  - Std Wheelbase: **Inch:**

- **Hydraulic:**
  - Flow: **GAL:**

- **Transmission:**
  - Gears: 8
  - Optional: 2 Rops: RIGID

- **Case:**
  - Made: 1980
  - 1981
  - 1982
  - 1983
  - 1984

- **Engine Cylinders:**
  - 1975 ci (3.2 L)

- **Make:** Belarus
  - Model: 560
  - Model: 562
  - Model: 505
  - Model: 800
  - Model: 808

- **Years Made:**
  - 1980-1999
  - 1984-1989
  - 1990-1996
  - 1991-1996
  - 1992-1999

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**Additional Data:**

- **Price:**
  - New Price: **15610**
  - New Price: **15650**

- **Location:**
  - MFG Color Name: **252520**
  - MFG Color Name: **252527**

- **Beginning Serial Number:**
  - 470756
  - 532452
  - 65457
  - 673508

- **Beginning Serial Number:**
  - 532560
  - 543520
  - 56457
  - 58457

- **Beginning Serial Number:**
  - 605120
  - 613727
  - 615347
  - 655308

- **Beginning Serial Number:**
  - 655508
  - 656509
  - 658509
  - 705120

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**CLEAN gallery FOR MORE DETAILS**

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**Images:**

- **Case:**
  - **2030-2035**
  - **2035-2040**
  - **2040-2045**

---

**More Details:**

- **Contact:**
  - **2483-0625**
  - **2483-0625**

---

**License:**

- **DIESEL:**
  - **38**
  - **470756**

---

**Other:**

- **Hyd Flow:**
  - **470756**

---

**Specifications:**

- **Size:**
  - **1987 x 1936**
  - **1987 x 1936**

---

**Data Source:**

- **File:**
  - **ITvA:**
  - **HP-PTO:**
  - **HP-Engine:**
  - **HP-Drawbar:**
  - **Englne-Engine-Engine-Engine-Fuel:**
  - **Fwd/Rev:**
  - **Mfwd-Std/Opt:**
  - **Pto Type:**
  - **Ind:**
  - **Rops:**
  - **Tires-Std:**
  - **Wheelbase-Inch:**
  - **Price:**
  - **Beginning Serial Number:**
  - **Year:**
  - **Ending Serial Number:**

---

**Notes:**

- **Net Power:**
  - **TQ:**
  - **RPM:**

---

**Table:**

- **Columns:**
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**Contact:**

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To the Owner of a Belarus Tractor

Practical experience is the key to the successful design and manufacture of your new Belarus tractor. For many years Belarus tractors have been operating in all types of conditions in many parts of the world. However, any product will only be as good as the care and service that is provided you, the owner.

In order to get the optimum performance and efficiency that has been designed into the tractor, read this manual thoroughly before operating or servicing the tractor. Become familiar with all decals and safety messages within the manual and on the tractor. Keep this manual in a convenient place for easy reference when problems arise. Do not attempt to make repairs or adjustments you do not understand. Contact your Authorized Belarus Dealer if you require additional information or assistance.

This manual has been compiled to assist the owner and/or operator with the correct operation, service and routine preventative maintenance procedures of the Belarus tractor. This manual has been designed into eight (8) major sections: Foreword, Safety, Specifications, Operating Controls and Instruments, Operating Instructions, Lubrication and Routine Maintenance, Troubleshooting and Index. A general contents page is located at the beginning of the manual for a quick reference to the major sections. For a specific item, there is an alphabetical index placed in the rear of the manual.

Throughout the manual references are made to left side and right side. These terms are used as viewed from the tractor seat looking forward. The right hand and left hand side of the tractor are the same as your right hand and left hand.

This Operators Manual covers the Model 500, 800, & 900 Series and the Model 1025 Belarus tractors listed below. These tractor models are all similar in appearance and have many common components and features. The tractors may be 2-wheel drive (2WD) or mechanical assist front wheel drive (MFD), and feature either ROPS certified Cabs or Frames.

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
</tr>
</thead>
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<td>510</td>
<td>2WD</td>
</tr>
<tr>
<td>512</td>
<td>4WD</td>
</tr>
<tr>
<td>530</td>
<td>2WD</td>
</tr>
<tr>
<td>532</td>
<td>MFD</td>
</tr>
<tr>
<td>505</td>
<td>2WD</td>
</tr>
<tr>
<td>525</td>
<td>MFD</td>
</tr>
<tr>
<td>570</td>
<td>2WD</td>
</tr>
<tr>
<td>572</td>
<td>MFD</td>
</tr>
<tr>
<td>800</td>
<td>2WD</td>
</tr>
<tr>
<td>805</td>
<td>2WD</td>
</tr>
<tr>
<td>820</td>
<td>MFD</td>
</tr>
<tr>
<td>825</td>
<td>MFD</td>
</tr>
<tr>
<td>900</td>
<td>2WD</td>
</tr>
<tr>
<td>905</td>
<td>2WD</td>
</tr>
<tr>
<td>920</td>
<td>MFD</td>
</tr>
<tr>
<td>925</td>
<td>MFD</td>
</tr>
<tr>
<td>1025</td>
<td>MFD</td>
</tr>
</tbody>
</table>

It is extremely important to record your tractor model, serial number and engine serial number on the following page for easy reference when requesting information, assistance, or ordering replacement parts from your dealer.

Your Authorized Belarus Dealer will strive to provide you with the finest assistance available, offering Genuine Belarus Parts and the support of service personnel with the factory training required to keep your tractor performing at its best.
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<td>Operating Controls &amp; Instruments</td>
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<td>Troubleshooting</td>
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ENGINE PREHEATER INDICATOR (3)
This indicator lamp will glow red when the engine preheat switch is energized. The lamp will glow red in proportion to glow plug or fuel flame heater element heating. When the lamp glows bright red it indicates the starting circuit should be energized. Do not energize longer than 30 seconds.

TACH-SPEEDOMETER/HOURMETER (4)
The hourmeter indicates the actual hours that the engine has run (up to 9999). It is the most reliable method of determining maintenance intervals of the tractor. The tachometer indicates engine speeds in revolutions per minute (lower scale) and approximate travel speeds. The dial of the tachometer has graduations of 100 RPM.

AMMETER GAUGE (5)
The ammeter indicates the charging rate of the alternator. When the engine is first started, the gauge should indicate a higher charge rate which should decrease as the batteries become fully charged. If the ammeter gauge indicates a discharge condition (in the left hand band from zero) with the engine running it means the alternator is not producing enough voltage to supply the applied load or is not charging at all. If the ammeter needle registers a continuous high charging rate (in the right hand band from zero) this indicates the alternator is overcharging and is not regulating correctly. If either of the above conditions exists, contact your dealer for service.

IMPORTANT: Always check alternator drive belt condition and tension whenever a no charge condition is indicated on the ammeter.

COOLANT TEMPERATURE GAUGE (6)
The engine coolant temperature gauge will indicate the coolant temperature in degrees Celsius. Normal engine operating temperature should be 75° - 100° C (167° - 212° F) and should register in the green band of the gauge. If the gauge indicates an overheating condition, correct the cause before continued operation. Overheating may be caused by low coolant level, overloading, loose fan belt or a plugged radiator.

NOTE: Overheating may also be caused by the radiator shutter curtain being raised.

OIL PRESSURE GAUGE (7)
Use this gauge to monitor engine oil pressure during operation. Normal oil pressure should be in the green band (1.0 - 4.0 Kg/cm²) when the engine is at normal operating temperature. The engine should not be operated in the white or red zones of the gauge at rated engine speed. If little or no oil pressure is indicated on the gauge, shut down the engine immediately and correct the cause.

FUEL LEVEL GAUGE (8)
The fuel gauge will indicate the approximate volume of fuel remaining in the tank. Never allow the fuel tank to run dry.
Tractor Lighting

The standard tractor is equipped with two front head lights. These are 2 stage lights (Hi and Lo beam) for field or highway use.

There are front combination white park lamp and amber colored turn signal lamps mounted on the left and right side of the tractor.

The rear of the tractor is equipped with two flood lamps for field work. There are amber colored turn signal lamps and red tail/stop lamps for night driving. Two red reflectors are also mounted on the rear of the tractor.

Highway Driving

Whenever traveling on public roadways, a slow moving vehicle emblem (SMV) should be displayed from the rear of the tractor. If the SMV emblem is not visible from the rear when implements or trailers are attached, the implement or trailer should also be equipped with a SMV emblem. Always check and keep all lights and reflectors clean and in proper working order before driving on public roadways.

Know and comply with local and state laws regulating day or night travel on public roads with towed equipment.

CAUTION: Do not use rear field (flood) lights when driving on public roadways. Use front road lights only. Towed equipment should be equipped with stop/tail and clearance lights.

IMPORTANT: Some tractor models are not factory equipped with four-way warning lamps. If this tractor is not equipped with four-way amber warning (hazard) lamps, check your local and state regulations regarding the use of amber warning lamps for highway travel. If amber warning lamps are required, arrangements must be made to have them installed before traveling on public roads.
Lubrication and Routine Maintenance

Front Wheel Bearing Hubs (2WD Models)

Every 500 service hours (or 6 months) remove the front wheel hub bearing cover. Check the front wheel bearing end play and condition. If necessary, remove the spindle nut cotter key and adjust the bearings to zero clearance.

Every 1000 service hours (or 12 months) remove the wheel hub, inspect and/or repack bearings and replace the hub seals.

Fill the hub cover with grease before installing the cover.

Three Point Hitch Lubrication

Every 125 service hours (or 3 months) lubricate the pressure grease fittings for the 3-Point hitch rockshaft. Use No. 2 Multi-Purpose Lithium grease.

At the same interval, grease the right side lift link adjusting gear box. Inject grease until resistance is felt on the hand grease gun.
Air Conditioner System (If equipped)

If your tractor is equipped with an optional air conditioner system, the filter screen should be serviced daily when the air conditioner is used.

Procedure:

1. Release and remove the filter grille.

2. Remove the mesh filter screen, wash the screen in mild detergent and water. Use compressed air to dry. Reinstall the filter and grille cover.

Air Conditioner Condenser (If equipped)

Periodically, remove the grille from the engine hood. Inspect and if necessary clean the condenser fins of debris. Use high pressure water or compressed air for cleaning.

To check the level of refrigerant in the Air Conditioner System, turn on the air conditioner system and run the engine at 1000 - 1200 rpm. After the system has operated 10 - 15 minutes to stabilize, check the sight glass in the receiver/drier. The sight glass should appear clear with no bubbles or frothing. If the sight glass is full of bubbles or frothing, contact your Belarus dealer for service.
Cab Air Filter Service (If equipped)

The cab ventilation filter should be removed and cleaned daily in adverse conditions.

To remove and clean the filter:
1. Release and open the cab top.
2. Fold back the curtain to expose the filter element.
3. Release the spring retaining clips located on each end of the filter.
4. Remove the filter assembly. Tap the filter on a flat surface to shake out and remove the heavy debris. Use compressed air to blow through the filter from the back side (opposite air flow). Inspect the filter for damage. Install the filter in the reverse order of removal.

IMPORTANT: Be sure to install the filter correctly. The air flow directional arrows must point toward the cab interior.
Lubrication and Routine Maintenance

Tires and Rims

Check the inflation pressure of the front and rear tires every 125 hours of service (or 3 months). Check the condition of the tires and rims for wear or damage. Keep the tires inflated to the recommended pressures.

NOTE: See General Specification section of this manual for recommended inflation pressures.

Visually check the tires daily for damage or noticeably low pressure.

For tires equipped with liquid ballast, use an air-water gauge. The valve stem must be positioned at the bottom to get an accurate reading.

CAUTION: A tire can explode during inflation and cause serious injury or death. Replace a wheel rim which has cracks, wear, or severe rust. Never use force on an inflated or partially inflated tire. Be sure the tire is correctly seated on the bead before inflating. Never exceed tire manufacturers maximum recommended inflation pressure.

When inflating tires, use an air hose with a remote shutoff valve and a "clip-on" air chuck. Stand behind the tread of the tire while inflating and make sure other persons are away from the side of the tire before inflating.

Wheel Bolt Torque

Tighten the front and rear wheel lug nuts and/or wheel rim bolts to specifications every ten hours for the first 20 hours of operation. Repeat whenever the wheels are removed and remounted. Check the wheel bolt torque every 125 service hours thereafter.

CAUTION: Never operate the tractor with a loose wheel or rim.

Wheel Bolt Torque Specifications:
Front (2WD) 88 - 103 lb ft (120 - 140 Nm)
Front (MFD) 148 - 184 lb ft (200 - 250 Nm)
Rear (All) 190 - 210 lb ft (258 - 285 Nm)
## Troubleshooting

### HYDRAULIC SYSTEM TROUBLESHOOTING

PROBLEM: System will not operate, or will not operate under load

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Probable Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pump not engaged</td>
<td>1. Engage pump drive</td>
</tr>
<tr>
<td>2. Low oil level</td>
<td>2. Fill with oil</td>
</tr>
<tr>
<td>3. Bypass valve stuck</td>
<td>3. Clean, polish or replace pin valve</td>
</tr>
<tr>
<td>4. Pressure relief valve dirty, damaged or out of adjustment</td>
<td>4. Clean, inspect or adjust as required</td>
</tr>
<tr>
<td>5. Faulty hydraulic pump</td>
<td>5. Repair or replace pump</td>
</tr>
</tbody>
</table>

PROBLEM: System fails to operate in one direction or operates slowly in one direction

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Probable Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cylinder limit collar out of adjustment</td>
<td>1. Adjust and tighten limit collar</td>
</tr>
<tr>
<td>2. Loose quick coupler causing check balls not to unseat</td>
<td>2. Tighten quick coupler</td>
</tr>
<tr>
<td>3. Weak quick coupler spring causing one check ball to remain seated</td>
<td>3. Replace with matched set of springs</td>
</tr>
<tr>
<td>4. Bad cylinder packing</td>
<td>4. Replace cylinder packing</td>
</tr>
<tr>
<td>5. Wrong grade of oil for cold weather operation</td>
<td>5. Install proper grade of oil. (Bypass the oil for several minutes to allow oil to warm)</td>
</tr>
</tbody>
</table>

PROBLEM: Control lever will not or slowly picks up 3-point hitch

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Probable Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Low oil level</td>
<td>1. Fill with oil</td>
</tr>
<tr>
<td>2. Plugged bypass or pressure relief valve</td>
<td>2. Remove and clean bypass or pressure relief valve</td>
</tr>
</tbody>
</table>

PROBLEM: 3-Point Hitch will not lower using control lever

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Probable Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Blockage in return line</td>
<td>1. Remove and clear or replace return line</td>
</tr>
</tbody>
</table>

PROBLEM: Hitch will not lower using either control handles

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Probable Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drop retard valve plugged (end of cylinder lift hose)</td>
<td>1. Clean or replace drop retard valve</td>
</tr>
<tr>
<td>2. Hitch linkage froze at bearing blocks</td>
<td>2. Free up bearing blocks and lubricate</td>
</tr>
</tbody>
</table>

PROBLEM: Hitch leaks down

<table>
<thead>
<tr>
<th>Possible Cause</th>
<th>Probable Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Low hydraulic pressure</td>
<td>1. Clean and inspect the bypass and/or pressure relief valve</td>
</tr>
<tr>
<td>2. External hydraulic connections leaking</td>
<td>2. Tighten and/or repair connecting as required</td>
</tr>
<tr>
<td>3. Hitch cylinder packing bad</td>
<td>3. Repair or replace hitch cylinder</td>
</tr>
<tr>
<td>4. Hitch control valve internal leak</td>
<td>4. Repair or replace hitch control valve</td>
</tr>
<tr>
<td>5. Low hydraulic oil level</td>
<td>5. Fill with oil to the proper level</td>
</tr>
</tbody>
</table>