



OPERATOR'S HANDBOOK

This Handbook is for the Utility Vehicle Model Brutus HD and HDPTO

A WARNING

AVOID INJURY OR DEATH

- Never use the vehicle without instructions. Read vehicle labels (decals), Owner's Manual and this Handbook.
- Always fasten seat belt before operating or riding in the vehicle.
- Keep hands and feet inside the vehicle.
- Polaris recommends using proper protective equipment such as helmets and eyewear when required.
- Never use vehicle without Occupant Protective Structure (OPS).
- Do not modify or remove OPS. Replace OPS if damaged.
- Keep away from drop-offs, steep slopes and unstable surfaces.
- Always carry bucket or attachment as low as possible. Slow down when turning. Do not make sharp turns. Look in the direction of travel. Never attempt jumps or other stunts with the vehicle.
- Load, unload and turn on flat, level ground. Keep load level when raising lift arm.
- Travel at appropriate vehicle speeds for the type of terrain, visibility, operating conditions and your operating experience.
- Carry a rider only in a passenger seat.
- Keep bystanders away from the work area.
- Secure load in cargo box.
- Do not exceed vehicle load capacities.
- No riders in cargo box.
- · Never modify the vehicle or add non-approved attachments.
- Keep PTO shields and all guards in place (if equipped). Keep away from moving parts.
- Before leaving the operator seat:

Park on flat level ground. Lower attachment arm. Put attachment flat on ground. Move gear selector lever to Park. Disengage the PTO (if equipped) and make sure all rotating components are completely stopped. Stop the engine and remove the key. Learn about the Utility Vehicle from this Handbook, Owner's Manual and safety labels (decals). See Owner's Manual for full detailed illustrations. Replace damaged or missing labels (decals) as shown in the Owner's Manual. Ask the dealer about equipment for each application. Refer to the Owner's Manual and dealer regarding attachments for Vehicle Load Capacity. For special jobs, ask your dealer about necessary approved equipment; such as enclosures or special lights. See your dealer for replacement manuals, safety labels and training materials.



[1] OPS - Occupant Protective Structure, per ANSI / OPEI B71.9-2012.

INSTRUMENT PANEL AND OPERATOR CONTROLS



REF.	FUNCTION	REF.	FUNCTION
1.	Instrument Panel (See Page 4)	11.	Cup Holder (3)
2.	Key Switch	12.	Fan Speed Switch (Optional)
3.	Gear Selector Lever A Move up for Low Gear B Move up for High Gear C Neutral Position D Move down for Park Position	13.	AC / Defrost Switch (Optional)
		14.	Temp Control Switch (Optional)
		15.	Steering Wheel
		16.	Brake Pedal
4.	Light Switch (OFF - Low - High)	17.	Travel Control Pedal (Forward / Reverse)
5.	Drive Mode Switch		
6.	Cargo Box - With Power Lift Assist Switch (Optional)	18.	Joystick (See Page 5)
		19.	Engine Speed Control (Page 5)
7.	Optional Switch Locations	20.	PTO Switch (Page 5)
8.	Optional Switch Locations	21.	Joystick Lock Switch (Page 5)
9.	12 Volt Accessory Outlet (2)	22.	Lift Lock Switch (Page 5)
10.	Storage Container (Owner's Manual and Tool Kit)	23.	Auxiliary Switch (Page 5)

TIP: Switch locations may vary from what is shown depending on options and accessories installed on your vehicle.

INSTRUMENT PANEL AND OPERATOR CONTROLS (CONT'D)



REF.	FUNCTION	REF.	FUNCTION
1	Speedometer (KM/H or MPH)	11	Hourmeter, Trip Meter, Odometer, Tachometer, Battery Voltage, Engine Coolant Temperature, Service Interval, Check Engine
2	Engine Coolant Temperature Indicator (Red Light)		
	Hydraulic Fluid Temperature Indicator (Red Light)	12	Not used for this model
3	Not used for this model (Orange Light)	13	Drive Mode Indicator
4	Engine Oil Pressure Indicator (Red Light)	14	Clock / PTO RPM
	Hydraulic Fluid Filter Plugged Indicator (Red Light)	15	PTO Indicator
5	High Beam Indicator (Blue Light)	16	Not used for this model
6	Engine Pre-Heat Indicator (Orange Light)	17	Hourmeter Symbol
7	Fasten Seat Belt Indicator (Red Light)	18	Service Interval Symbol
8	Check Engine Light (Orange Light)	19	Gear Selector Indicator
9	Mode Button	20	Trip Meter (KM or Mi), RPM Symbols
10	Fuel Level Indicator		

INSTRUMENT PANEL AND OPERATOR CONTROLS (CONT'D)

Hydraulic Controls

- 1. Raise attachment arm.
- 2. Lower attachment arm.
- 3. Float position:
 - Joystick pushed fully forward (Item 3)
 - Attachment will follow ground as vehicle moves backward.
 - Move joystick backward (Item 2) to deactivate float.
- 4. Tilt attachment forward.
- 5. Tilt attachment backward.
- 6. Press switch for joystick lockout.
- 7. Press switch for tilt lockout.
- 8. Press and hold switch (Item 8) to the left to activate the female coupler.
- 9. Press and hold switch (Item 9) to the right to activate the male coupler.



PTO Controls

- TIP: PTO switch must be in the OFF position to start engine.
- 1. Press center button and lift PTO knob UP to engage (ON).
- 2. Push PTO knob DOWN to disengage (OFF).
- TIP: Do Not engage PTO system at higher engine RPM with attachment under load. Always engage PTO system at lower engine RPM and attachment under NO load condition.
- 3. Increase the engine speed to the desired RPM specified for your attachment. See your attachment Owner's Manual for the correct PTO RPM.



DAILY INSPECTION

WARNING

Use the Occupant Protective Structure (OPS), which was designed for the Utility Vehicle. Non-approved OPS structure modifications can cause loss of operator protection and result in serious injury or death. Always fasten seat belt when operating.

- Check seat belts and replace if damaged.
- Check OPS structure and fasteners.
- Check Safety Labels (Decals). Replace if damaged.
- Check frame fasteners Inspect and insure tightness.
- Clean engine of flammable material.
- Clean pedals and operator's area.
- Check engine oil level, fuel level, hydraulic fluid level, brake fluid level, engine coolant level and engine air filter and pre-filter.
- Check tire condition and tire pressure. Check wheel fasteners for proper torque.
- Check the travel control system, brake system, engine speed control system and pedal travel.
- Check the front suspension, rear suspension and steering.
- Check the headlights, taillights, indicator lights and switches.
- Check PTO shaft splines, guards and shields. Replace if damaged or missing.

See Owner's Manual for complete daily check list and maintenance procedures.

AVOID INJURY OR DEATH

Never use the machine in an atmosphere with explosive dust or gases or where exhaust can contact flammable material. Explosion or fire can result.

STARTING AND DRIVING THE UTILITY VEHICLE







- 1. Be sure load (if any) is secured.
- 2. Connect the seat belt. Adjust so that the belt fits snug around the lower part of your hips and over the shoulder. Passenger must also fasten seat belt.
- 3. Put the gear selector lever in the PARK position.
- 4. Travel Control Pedal must be in Neutral and PTO must be disengaged (OFF).
- 5. Press and hold the brake pedal.
- Tip: Engine will not start unless: Gear selector is in Park or Neutral, travel control pedal is in neutral and PTO is OFF.

- 6. Turn the key to ON position and wait for the glow plug light to turn OFF, turn the key to START position (for improved cold weather starting, additional key cycles maybe required). Release key when the engine starts.
- 7. Allow engine to warm to operating temperature.
- 8. Move the gear selector lever to Low or High gear.
- 9. Release the brake pedal and slowly press the travel control pedal in the desired direction of travel. (The further the pedal is pressed, the faster the machine will move.)



Hitting obstructions at high speeds can cause serious injury or death. Always fasten seat belt when operating.





AVOID INJURY OR DEATH Keep bystanders away from the work area. DO NOT allow riders in the cargo box.

LEAVING THE VEHICLE



1. Lower the attachment arm and put the attachment flat on the ground.



2. Move the gear selector lever to Park. Disengage the PTO system (if equipped). Stop the engine and remove the key.



Always park vehicle on flat level ground.

PUTTING ON THE ATTACHMENT USING PRO-TACH



Attachment pins must be fully installed and secured with the retainer pins. Failure to fully install and secure pins can allow the attachment to come off and cause serious injury or death.

- 1. Slowly drive forward until the front edge of the attachment interface is completely under the top lip of the attachment.
- 2. Tilt the attachment interface backward until the attachment is slightly off the ground.
- 3. Move gear selector to PARK and stop the engine.
- 4. Remove the two pins from the storage location. Install the pin (Item 1) and retainer pin (Item 2), both sides, to secure the attachment to the attachment interface.
- 5. Keep pins in their storage location (Item 3) when no attachment is installed.



AUXILIARY HYDRAULIC CONTROL

Auxiliary Operation:

Press switch (Item 1) to the left to activate the female coupler. Press switch (Item 1) to the right to activate the male coupler.

Relieving Hydraulic Pressure:

With engine stopped (key switch ON) and attachment flat on ground, move auxiliary hydraulic switch (Item 1) to the right and left several times.



INSTALLING THE PTO DRIVELINE (If Equipped)

- Tip: The PTO has a rated speed of 2000 RPM.
- 1. Install the attachment on the interface. See Page 8.
- 2. Connect the PTO driveline (Item 1) to the utility vehicle PTO shaft.
- Tip: The PTO driveline must have a means to retain it to the attachment PTO shaft. Make sure the driveline is of adequate length and that the ujoints are in the correct phase.



AVOID INJURY OR DEATH

- Keep PTO shields and all guards in place.
- Keep hands, legs, feet and clothing away.
- Replace damaged or missing shields and guards.

See Owner's Manual for more information.



IMPORTANT

Do not exceed the rated attachment PTO speed of 2000 RPM. Damage to the attachment could occur from over speeding. Disengage PTO for road travel.

AWARNING

- Do Not exceed maximum Cargo Box Load.
- Do Not drive vehicle with Cargo Box raised.
- Make sure loads in Cargo Box are secured.
- Slow down when turning. Do Not make sharp turns.

RAISING AND LOWERING THE CARGO BOX

Cargo Box - With Lift Assist:

- 1. Ensure cargo is positioned evenly and toward the front of the cargo box.
- 2. Stand clear of the side of the cargo box and pull up on the cargo box release lever (Item 1).
- 3. Lift the front of the cargo box to dump the cargo.
- 4. To lower cargo box, push down on the front of the cargo box until securely latched.

Cargo Box - With Power Lift Assist Switch:

- 1. Press and hold the power lift assist switch (Item 1) in the raised position. Hold the switch in the raised position until the cargo box reaches the desired height.
- 2. To lower cargo box, press and hold the switch (Item 1) to the lower position. Hold the switch in the lower position until the cargo box is fully lowered.



DRIVING UP AND DOWN SLOPES

WARNING

AVOID INJURY OR DEATH

- Keep heavy end of vehicle uphill.
- Do not drive across slopes.
- Go directly up or down a slope.
- Look in the direction of travel.

With Loaded Attachment AND Cargo Box Empty



With Empty Attachment AND Cargo Box Loaded



With Empty Attachment AND Cargo Box Empty OR

With Loaded Attachment AND Cargo Box Loaded

When both are empty OR when both are loaded, the front and rear of the vehicle are close to the same weight. You can either move forward OR backward up and down slopes.

DRIVING UP AND DOWN SLOPES (CONT'D)

AWARNING

- Do Not make sharp turns.
- Do Not exceed Vehicle Load Capacity.
- Keep bystanders away.
- Do not leave vehicle with engine running, attachment arm up or gear selector not in PARK.



LOADING AND TRANSPORTING THE VEHICLE

When loading a vehicle with an attachment, drive forward onto transport vehicle.

Lower attachment to floor. Press the brake pedal and move the gear selector lever to PARK. Stop the engine. Securely fasten vehicle to trailer or truck. Be sure transport and towing vehicles are of adequate size and capacity.





A WARNING

AVOID INJURY OR DEATH

- Stop and cool the engine before adding fuel. NO SMOKING!
- Do not service the machine or attachment with the PTO system engaged.
- Keep the engine area clean of flammable material and other debris.
- Do not wear loose clothing, long uncovered hair or jewelry near vehicle.
- Wear eye protection or other protective equipment as needed when servicing.
- Never use ether or starting fluid on diesel engine with glow plugs. Use only starting aids as approved by the engine manufacturer.
- When connecting the booster battery for *jump start*, always connect the negative cable <u>last</u> to the engine, never at the battery. When removing the *jump start* cables, always remove the negative cable (-) from engine first. Never charge or *jump start* a frozen battery.
- Lead-acid batteries produce flammable and explosive gases. Keep arcs, sparks, flames and lighted tobacco away from battery.
- Battery acid causes severe burns. In case of acid contact, wash immediately with water for several minutes and get medical attention in case of eye contact.
- Use a piece of cardboard to check for leaks. Leaking fluids under pressure can enter the skin and cause serious injury. If fluid enters skin or eyes, get immediate medical attention from a physician familiar with this injury.

This Handbook is available in an English edition or one of many other languages. See your dealer for more information on translated versions.

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