

**OWNER'S MANUAL SUPPLEMENT
1999 SPORTSMAN 500 RSE
PN 9915195**



IMPORTANT: This is a supplement to your owner's manual. This information should remain with your owner's manual at all times.

Specifications

		Sportsman 500
C A P A C I T I E S	Body Style	Gen IV
	Gross Vehicle Weight	1200 Lbs.
	Fuel Capacity	5.25 U.S. Gallons
	Gearcase Oil	32 Ounces
	Engine Oil Capacity	2 Quarts
	Front Rack (Maximum - Capacity)	90 Lbs.
	Rear Rack	180 Lbs.
	Tongue Weight	35 Lbs.
	Tow Hitch	Standard
	Tow Capacity	1225 Lbs.
	Turn Radius	65"
	Ground Clearance	11"
	Height	47"
	Length	85"
	Seat Height	34"
	Dry Weight	730
Wheel Base	50.50 "	
Width	46"	
D R I V E S Y S T E M	Drive System Type	EBS
	Shift Type	Side Lever (Hi/Lo-R-N)
	Gear Reduction - Low	6.69/1
	Gear Reduction - Reverse	5.17/1
	Gear Reduction - Forward	3.34/1
	Front Drive (ratio)	2:1
	Final Drive (ratio)	3.16:1
	Center Drive (ratio)	Not Applicable
Drive Chain	Not Applicable	
T I R E S	Front Tire	25 x 8-12
	Rear Tire	25 x 11-10
	Tire Pressure (front)	5
	Tire Pressure (rear)	5

		SPORTSMAN 500
S U S P	Front Susp. - Mac Strut	6.25"
	Rear Susp. - Progressive Rate Fully Independant w/ Anti-roll Bar	9.5"
	Shock Adjustment	CAM
B R A K E S	Front Brake	Fixed disc, hydraulic floating caliper
	Rear Brake	Hydraulic, opposed piston caliper, fixed disc
	Auxiliary Brake	Hydraulic, opposed piston caliper, fixed disc
	Park Brake	Hydraulic lock, all wheel
E N G I N E & C O O L I N G	Engine Model Number	EH50PLE-09
	Engine Type	4 Cycle, Single Cylinder
	Lubrication	Dry Sump
	Bore x Stroke	92 x 75
	Displacement	499
	Compression Ratio	10:2 Full Stroke
	Engine Cooling	Liquid
	Alternator Output (watts)	250
	Carburetion	1/BST34
	Main Jet	155
	Pilot Jet	40
	Needle Jet	Q-0
	Pilot Screw	2 5/8Turn
	Jet Needle	4HB41-3
	Ignition	CDI
	Timing	30 @ 3500
	Spark Plug Gap	.7 mm/.028 in.
Spark Plug Type	NGK BKR5E	
Exhaust	USFS Approved	
L I G H T S	Headlight (on Handlebar) (watts)	1 single beam, 60
	Headlight (on Grill) (watts)	2 single beam, 27
	Taillight (watts)	8.26
	Brake Light (watts)	26.9
F E A T U R E S	3-Point Hitch	Accessory
	Battery	12V 14AH
	DC Plug In - Rear	Standard
	DC Socket - Forward	Standard
	Electric Start	Standard
	High Beam Indicator	Standard
	High Temp Indicator	Standard


		Sportsman 500
F E A T U R E S	Windshield	Accessory
	Low Oil Light	Not Applicable
	Neutral Indicator	Standard
	Reverse Indicator	Standard
	Speedometer	Standard
	Tool Kit	Standard

**Sportsman 500
(Engine - EH50PLE-09)**

Carburetor Jetting

Clutching Chart

Altitude	Ambient Temperature	Below 0°F (Below -18°C)	0° to 40°F (-18°C to +5°C)	+40° to +80°F (+5°C to +26°C)	+80°F & Above (+26°C & Above)	Altitude		Shift Weight	Clutch Spring	Driven Helix
						Meters (Feet)	Meters (Feet)			
	0-900 (0-3000)	167.5	162.5	155	150		0-900 (0-3000)	10MH	Blue/Green	EBS
	900-1800 (3000-6000)	162.5	157.5	152.5	145		900-1800 (3000-6000)	10 BH	Blue/Green	EBS
	1800-2700 (6000-9000)	160	152.5	147.5	142.5		1800-2700 (6000-9000)	10 WH	Blue/Green	EBS
	2700-3700 (9000-12000)	155	147.5	142.5	137.5		2700-3700 (9000-12000)	10 RH	Blue/Green	EBS

 Pilot screw in 1/2 turn

Speedometer

Your Polaris ATV is equipped with a new electronic speedometer which senses vehicle speed from the right hand front wheel. The electronic speedometer measures distance in miles and kilometers as well as hours of operation. To display each mode, press the button on the face of the speedometer once to “toggle” through the functions. Each function will be displayed as shown:

Miles / Kilometers	00000.0
Trip Miles / Kilometers	000.0
Hours	00000.0

To reset Trip Miles / Kilometers:

1. Toggle to Trip Miles / Kilometers.
2. Hold down button approximately 4 seconds.

To change distance measurement from Miles to Kilometers or vice versa:

1. Toggle to odometer.
2. Hold down the button approximately 8 seconds until the word FARIA appears in the display, then release the button. If the last digit in the display is a “K”, the measurement is Kilometers, if the last digit is an “M”, the measurement is Miles.

The speedometer also includes a reverse speed limit function that limits the ATVs speed in reverse after approximately 7 to 9 mph. Refer to page 35 of your ATV Owner’s Supplement for more information.

ATTENTION

Do not wash the electronic speedometer with a high pressure washer. Wash the unit by hand or with a garden hose. High water pressure may allow water to enter the speedometer and cause damage to the electronic components.

The following information (page 35) of your ATV Owner's Manual, has been revised.

Engine Electrical Switches

1. Override Switch (Reverse Speed Limiter) - This vehicle is equipped with a reverse speed limiter system. To obtain additional power while backing up, depress the override button. **WARNING:** Never activate the override button while throttle is open as loss of control may result, causing severe personal injury or death.

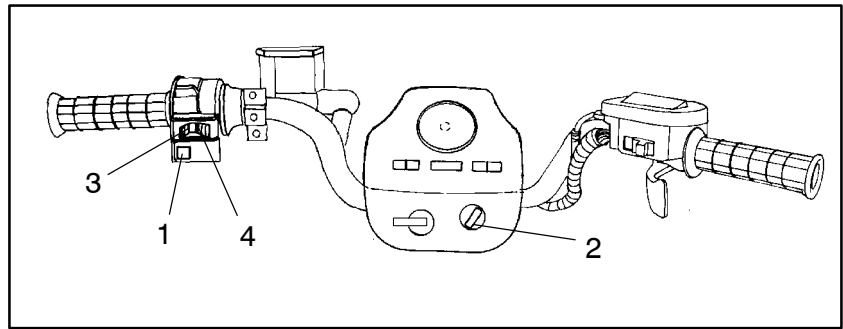
NOTE: The override switch also allows activation of Demand 4 Drive (All Wheel Drive) in reverse, if Demand 4 Drive switch is on.

2. Main Switch - This switch must be turned clockwise to the "on" position to start the engine.

3. Emergency Engine Stop Switch - The engine will not start or run when the switch is in its "off" position. Its purpose is to provide the operator with a quick means of engine shutdown in case of stuck throttle or other emergency.

NOTE: Both the main switch and the emergency engine stop switch shut off all electrical power to the entire vehicle including lights.

4. Engine Start Button - Slide the stop switch to the center "run" position and push up to start.



! WARNING

Backing your ATV can be dangerous!

You could hit an obstacle or person behind you; or the vehicle could tip over rearward on a steep incline causing severe injury or death.

Always back slowly avoiding excessive speed and do not use the reverse speed override switch system unless additional power is required for vehicle movement.

Avoid backing on steep inclines.

Avoid turning at sharp angles in reverse.

The following Throttle Lever information, taken from page 38 of your ATV Owner's Manual, has been revised.

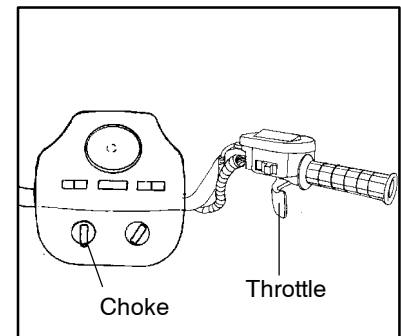
Engine Throttle and Choke

Throttle Lever

Engine speed and vehicle movement are controlled by pressing the throttle lever. The throttle system is spring loaded and engine speed returns to idle when the lever is released. This vehicle is equipped with a Polaris Electronic Throttle Control (ETC) which is designed to reduce the risk of a frozen or stuck throttle. In the event the throttle cable should stick in an open position, the engine will stop and power to the rear wheels will cease when the operator releases the throttle lever.

Choke Lever

Refer to the engine starting procedure on page 56 for correct choke and throttle settings during starting.



WARNING

The Electronic Throttle Control (ETC) stops the engine in the event of a throttle system malfunction and is provided for your safety. Do not attempt to modify the ETC system or replace it with any after market throttle mechanisms.



WARNING

Do not start or operate an ATV with sticking or improperly operating throttle controls. A stuck or improperly operating throttle could cause an accident resulting in severe injury or death.

Always contact your dealer for service repairs whenever throttle problems arise.

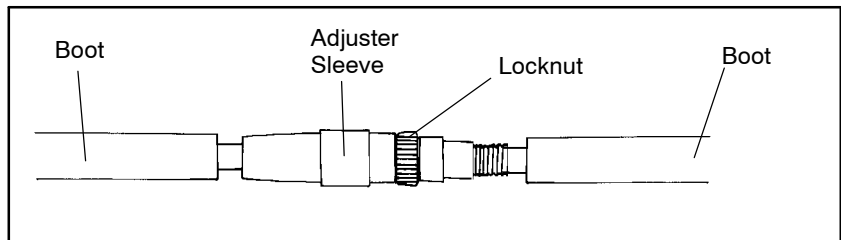
Failure to check or maintain proper operation of the throttle system can result in the throttle lever sticking during riding and cause an accident.

Always check the lever for free movement and return before starting the engine and occasionally during riding.

Throttle Cable Free Play Adjustment

Throttle cable free play is adjusted at the handlebar.

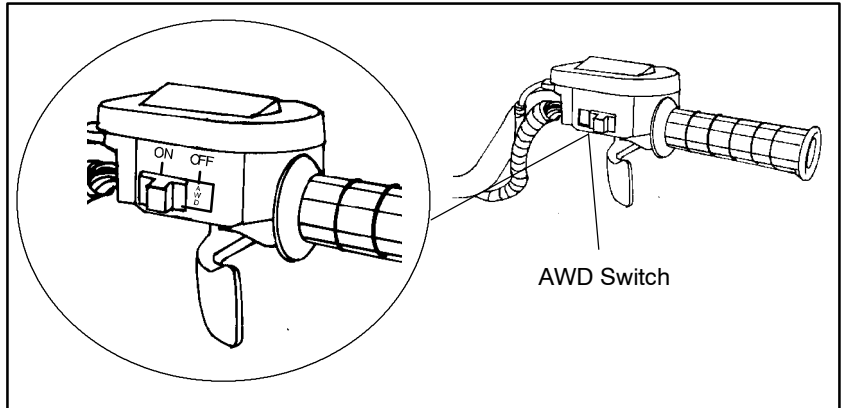
1. Slide the boots off inline cable adjuster sleeve. Loosen adjuster locknut.
2. Turn adjuster sleeve until 1/16" to 1/8" freeplay is achieved at thumb lever.
3. Tighten locknut and slide boots over cable adjuster until they touch at the middle point of adjuster.



Demand 4 Drive

Exclusive Demand 4 Drive System (All Wheel Drive)

This Polaris AWD is equipped with a unique, Polaris exclusive, Demand 4 Drive (AWD) system which is activated by a switch on the right handlebar. When the switch is "off" the 4x4 is in 2 wheel drive at all times. When the switch is "on" the 4x4 is in Demand 4 Drive and the front wheels will automatically engage anytime the rear wheels lose traction. When the rear wheels regain traction, the front wheels will automatically disengage. **NOTE:** The override switch also allows activation of Demand 4 Drive (AWD) in reverse, if Demand 4 Drive switch is on.



There is no limit to the length of time the vehicle may remain in Demand 4 Drive.

The Demand 4 Drive switch may be turned on or off while the vehicle is moving. If the switch is turned off when the front hubs are driving they will not release until the rear wheels regain traction.

CAUTION: Do not switch on Demand 4 Drive if the rear wheels are spinning. This may cause severe drive shaft and clutch damage. Engage the Demand 4 Drive switch before getting into conditions where front wheel drive may be needed. If the rear wheels are spinning, release the throttle before turning the Demand 4 Drive switch on.

