

**OWNER'S MANUAL SUPPLEMENT
1999 SPORTSMAN 335**



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

Specifications

		Sportsman 335
C A P A C I T I E S	Body Style	Gen IV
	Gross Vehicle Weight	1200 Lbs.
	Fuel Capacity	3.75 U.S. Gallons
	Gearcase Oil	32 oz.
	Oil Capacity	2.25 U.S. Quarts
	Front Rack (Maximum - Capacity)	90 Lbs.
	Rear Rack (Maximum - Capacity)	180 Lbs.
	Tongue Weight	30 Lbs.
	Tow Hitch	Standard
	Tow Capacity	850 Lbs
	Turn Radius	65"
	Ground Clearance	9.5"
	Height	45.5"
	Length	81"
	Seat Height	34"
	D R I V E S Y S T E M	Weight
Wheel Base		50.50"
Width		46"
Drive System Type		PVT
Shift Type		Side Lever (L, R, H/F)
Gear Reduction - Low		6.89:1
Gear Reduction - Reverse		5.17:1
Gear Reduction - Forward		3.56:1
Front Drive (ratio)		2:1
Final Drive (ratio)	3.16:1	
T I R E S	Center Drive (ratio)	Not Applicable
	Drive Chain	Not Applicable
	Front Tire	23 x 7 - 10
	Rear Tire	24 x 11 - 10
	Tire Pressure (front)	5
	Tire Pressure (rear)	5

		Sportsman 335
S U S P	Front Susp. - Mac Strut	6.25" Travel
	Rear Susp. - Mono	Progressive Rate Fully Independent with Anti-Roll Bar
	Shock Adjustment	CAM
B R A K E S	Front Brake	Fixed Disc Hydraulic Floating Caliper
	Rear Brake	Single Lever Hydraulic Caliper
	Auxiliary Brake	Hydraulic Disc Dual Floating Caliper
	Park Brake	Hydraulic Lock / All Wheel
E N G I N E & C O O L I N G	Engine Model Number	ES33PFE01
	Engine Type	4 Cycle, Single Cylinder
	Lubrication	Dry Sump
	Bore x Stroke	78 x 70 mm
	Displacement	334 cc
	Compression Ratio	9.2:1 Effective
	Engine Cooling	Air Cooled with Fan Assisted Oil Cooler
	Alternator Output (watts)	200
	Carburetion	1/BST34 (CV Type)
	Main Jet	150
	Pilot Jet	40
	Needle Jet	P-9
	Cut Away	Not Applicable
	Air Screw	2.5
	Valve Seat	
	Jet Needle	5F14-3
	Ignition	CDI
	Timing	30° @ 3500
	Spark Plug Gap	.028
Spark Plug Type	BKR7E (NGK)	
Exhaust	UFSF Approved	
L I G H T S	Headlight (watts)	60 (1 pod headlight) (2 grill headlights)
	Taillight (watts)	8.26
	Brake Light (watts)	26.9

		Sportsman 335
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
	Windshield	Accessory
	Low Oil Light	Not Available
	Neutral Indicator	Standard
	Reverse Indicator	Standard
	Speedometer	Standard
	Tool Kit	Standard

SPORTSMAN 335
(Engine - ES-33PFE-01)
Carburetor Jetting

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)
Meters (Feet)	0-900 (0-3000)	162.5	155	150	145
	900-1800 (3000-6000)	155	150	145	137.5
	1800-2700 (6000-9000)	147.5	142.5	137.5	132.5
	2700-3700 (9000-12000)	140	135	130	125

- Pilot screw in 1/2 turn
- Pilot screw out 1/2 turn

Clutching

Altitude		Shift Weight	Clutch Spring	Driven Helix
Meters (Feet)	0-900 (0-3000)	16	Blue/Green	2-2
	900-1800 (3000-6000)	16	Blue/Green	2-1
	1800-2700 (6000-9000)	16 mod	Blue/Green	2-2
	2700-3700 (9000-12000)	16 mod	Blue/Green	2-2

Carrying Loads

Model	Total Load Capacity (includes driver & cargo)	Front Rack Cargo Maximum	Rear Rack Cargo Maximum
Sportsman 335	470 lbs. (213 kg)	90 lbs. (41 kg)	180 lbs. (82 kg)

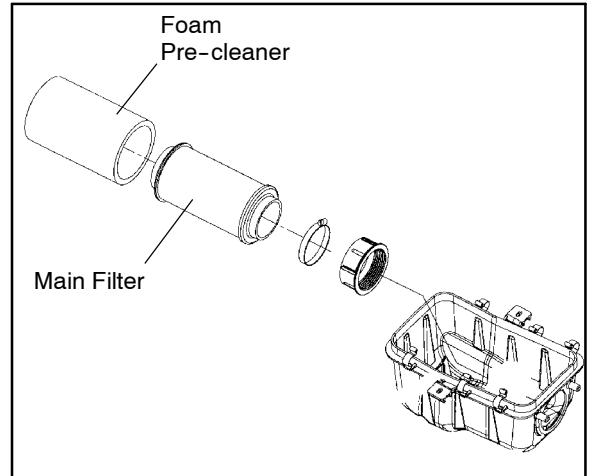
Optional Suspension Springs

SOFT ←————→ FIRM

Sportsman 335 4x4 - Rear Compression Spring	7041517-067 OPTION 80 lb/in	7041546-067 STANDARD 100 lb/in	7041519-067 OPTION 140 lb/in
Sportsman 335 4x4 - Front Strut Spring	7041238-067 OPTION 61 lb/in	7041375-067 STANDARD 64/113 lb/in	7041450-067 OPTION 101 lb/in

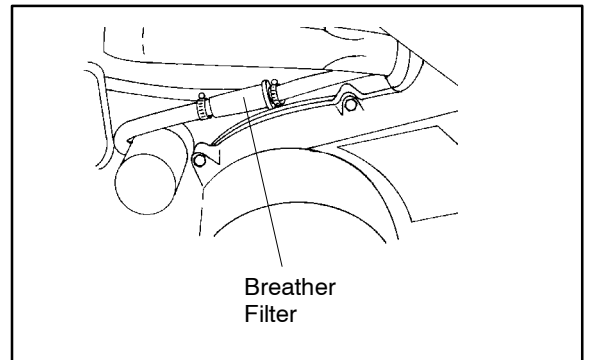
Air Filter Service

1. Remove seat.
2. Remove wingnuts securing the airbox lid and remove lid.
3. Pull foam breather filter out.
4. Loosen clamp and remove filter.
5. Remove foam pre-cleaner from main filter.
6. Wash the pre-filter in soapy water and dry it.
7. Install dry pre-filter over new main filter and reinstall.
8. Push foam breather filter straight down into airbox until flush with upper edge of box. Make certain foam is flush with front edge of airbox so air cannot enter engine breather fitting hole without first passing through the foam.



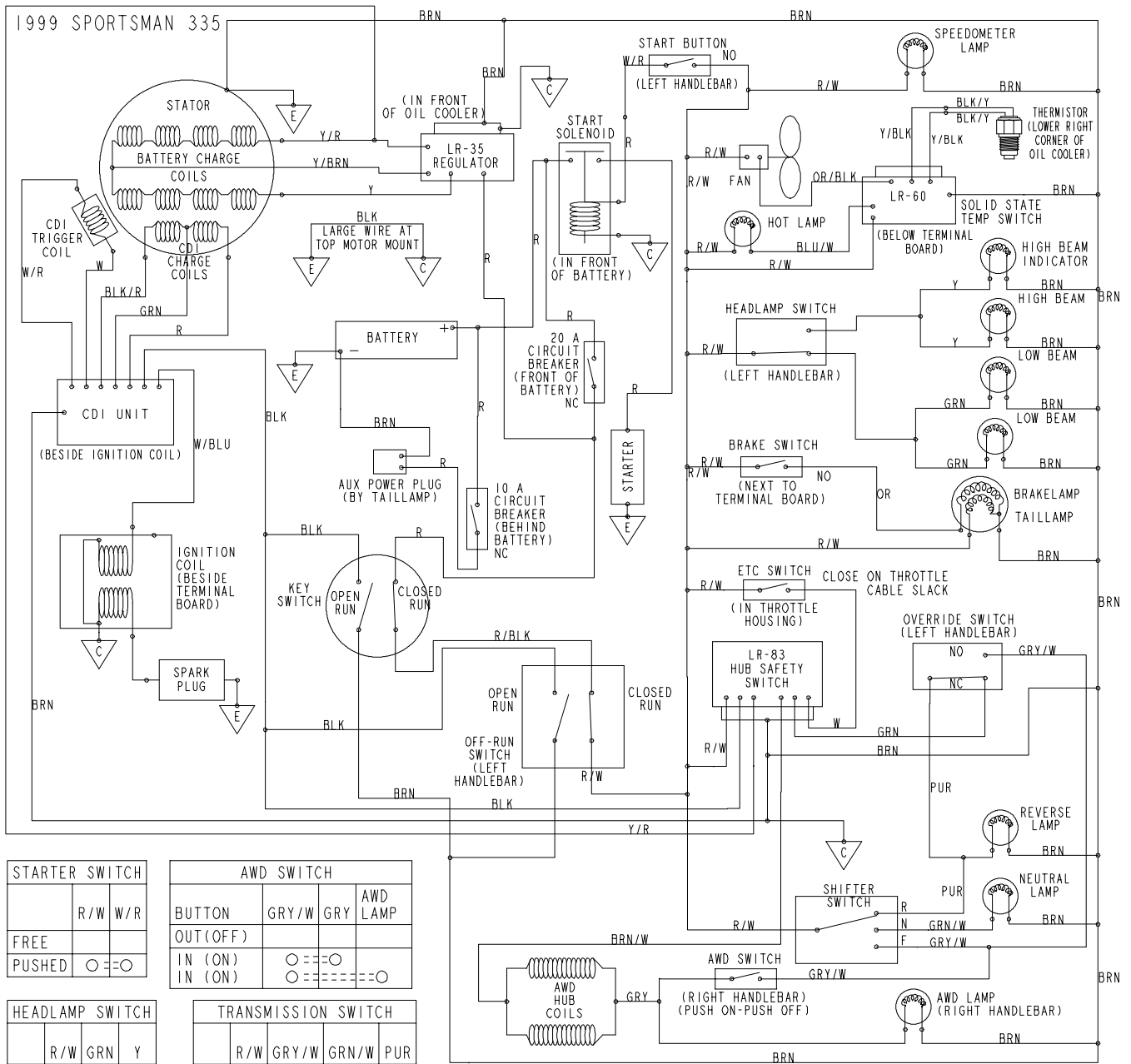
Breather Filter and Hose

1. Remove the clamps and pull the filter out of the hoses. **NOTE:** It will not be necessary to remove the lower hose from the engine.
2. Inspect filter for debris. Blow through gently in direction of arrow on filter to check for clogging. Replace as needed.
3. Check hoses for cracks, deterioration, abrasion, or leaks. Replace as needed.
4. Reinstall filter and clamps with arrow pointing toward engine. **NOTE:** The breather filter is intended to be used with airbox pre-filter in place. Without the pre-filter, the breather filter can clog quickly. Never operate the ATV without the pre-filter.



PN 9914987 Rev 02 12/98

Printed in U.S.A.



STARTER SWITCH	
	R/W W/R
FREE	
PUSHED	○══○

AWD SWITCH			
BUTTON	GRY/W	GRY	AWD LAMP
OUT(OFF)			
IN (ON)	○══○		
IN (ON)	○══	====○	

HEADLAMP SWITCH			
	R/W	GRN	Y
OFF			
LO	○══○		
HI	○══	====○	

TRANSMISSION SWITCH				
	R/W	GRY/W	GRN/W	PUR
FWD	○══○			
N	○══	====	====○	
REV	○══	====	====	====○

AUX SHUT OFF SWITCH				
	BLK	BRN	R/W	R/BLK
OFF	○══○			
RUN			○══	====○

KEY SWITCH				
	BLK	BRN	R/BLK	R
OFF	○══○			
ON			○══	====○

OVERRIDE SWITCH			
	PUR	GRY/W	GRN
FREE	○══	====	====○
PUSHED	○══○		

THERMISTOR RESISTANCE			SOLID STATE RELAY OUTPUTS
°F	°C	OHMS (±3%)	
77	25	100,000	
240	116	3466	FAN OFF (TEMP FALLING)
260	127	2519	FAN ON (TEMP RISING)
290	143	1607	HOT LIGHT ON/OFF

BOTH LAMP AND FAN SHOULD BE ON WITH THERMISTOR LEADS SHORTED TO EACH OTHER. CHECK THAT FAN ROTATION DIRECTION IS CLOCKWISE VIEWED FROM FRONT OF ATV.

ETC SWITCH		
	R/W	W
NORMAL		
FAULT	○══○	

= ENGINE GROUND
 = CHASSIS GROUND
 NC = SWITCH NORMALLY CLOSED
 NO = SWITCH NORMALLY OPEN

RESISTANCES (±20% @ 68°F/20°C)			
S	CAPACITOR CHARGE COIL	GRN TO BLK/R	446 OHMS
		GRN TO R	3.2 OHMS
		GRN TO GROUND	NO CONNECTION
T	TRIGGER COIL	W TO W/R	97 OHMS
		W TO GROUND	NO CONNECTION
A	BATTERY CHARGE COIL	Y TO Y/BRN	0.17 OHMS
		Y/R TO Y/BRN	0.17 OHMS
		Y TO GROUND	NO CONNECTION
R	IGNITION COIL	PRIMARY	0.3 OHMS
		SECONDARY	6300 OHMS PLUS 5000 OHMS (CAP)
	FRONT WHEEL DRIVE COILS	GRY TO BRN	24 OHMS (EACH)

COLOR CODE

BLK = BLACK
 BRN = BROWN
 GRN = GREEN
 PUR = PURPLE
 BLU = BLUE
 GRY = GRAY
 OR = ORANGE
 Y = YELLOW
 R = RED
 W = WHITE

TWO COLOR WIRES ARE SHOWN WITH MAIN/TRACE COLORS.
 EXAMPLE:
 R/Y = RED WITH YELLOW TRACER.

1998 SMAN 335
 JDC 1/19/97