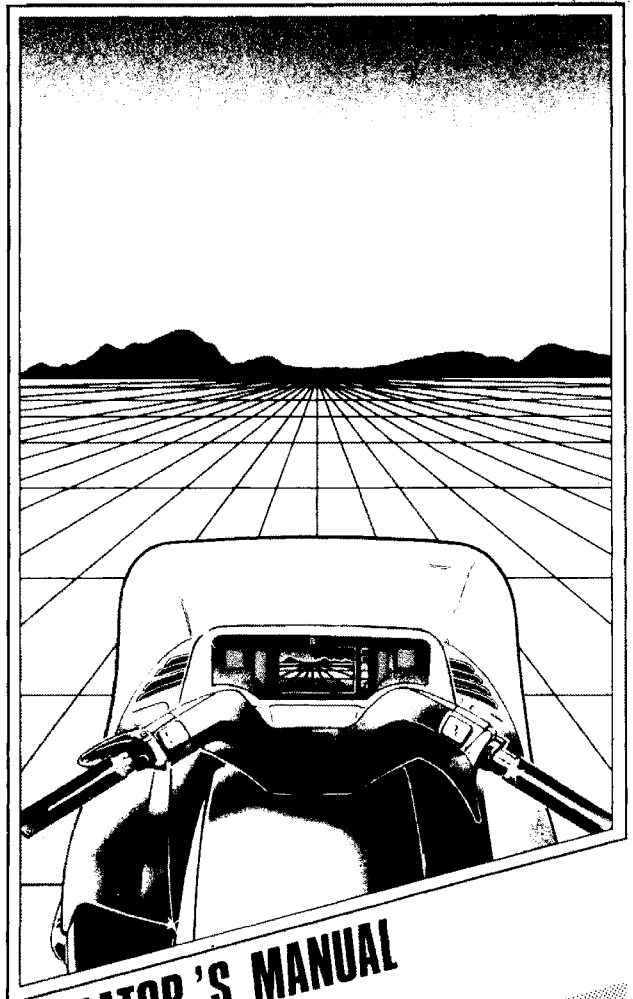


1985



OPERATOR'S MANUAL

**SUPPLEMENT FOR MODEL
FORMULA SP**

This correction booklet must be used in correlation with the 1985 Formula SS operator's manual (P/N 414 5619 00).

414 5667 00

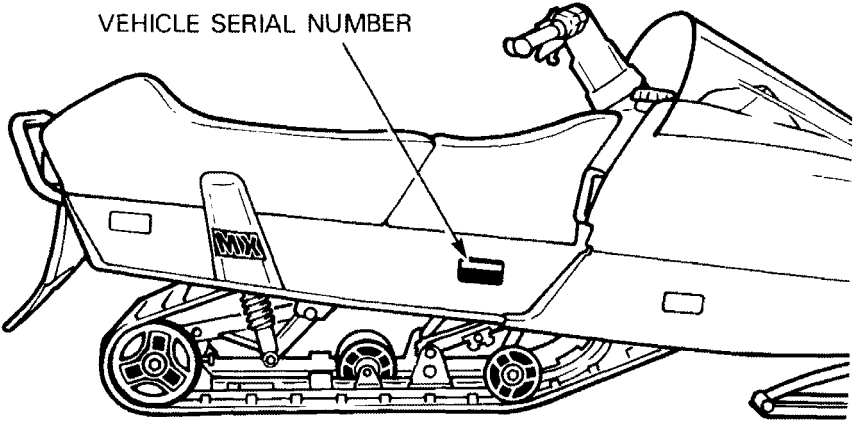
INDEX

○ **NOTE:** All informations and instructions regarding the Formula SS model contained in the 1985 Formula SS operator's manual also apply to the Formula SP model except those appearing in this booklet.

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HOW TO IDENTIFY YOUR SNOWMOBILE

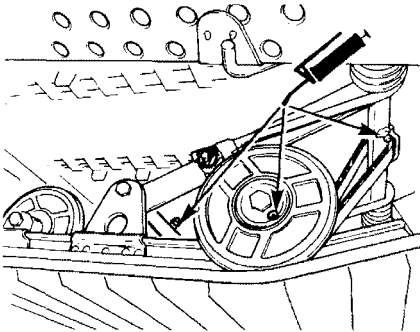
VEHICLE SERIAL NUMBER



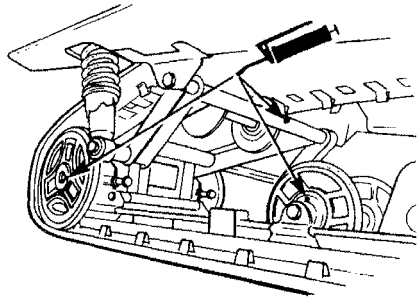
LUBRICATION

Slide suspension

Lubricate idler wheels at grease fittings until grease appears at joints. Use low temperature grease only.



Front section



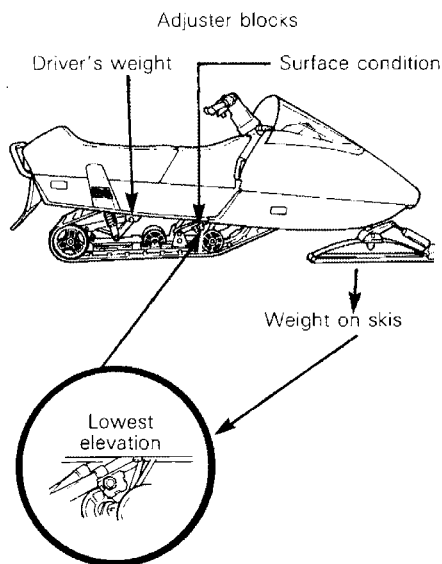
Rear section

Also lubricate front & rear arms at grease fittings.

MAINTENANCE

Suspension Adjustment

The suspension is adjustable. The front adjustment for surface condition, the rear for driver's weight. Use the special keys located in tool box.



When the front adjuster blocks are at the lowest elevation more weight is distributed on the skis. At the highest position the weight is transferred from the skis to the track.

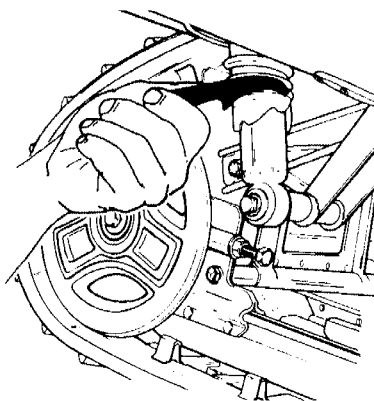
○ **NOTE:** For deep snow condition or hill climbing, it is recommended to place the front adjuster blocks on the highest position.

▼ **CAUTION:** Always turn the left side adjuster blocks in a clockwise direction, the right side blocks in a counter-clockwise direction. Left and right adjuster blocks of each adjustment must always be set at the same elevation.

The rear spring preload can be adjusted as follows:

lowest position: 68 kg (150 lbs) or less
middle position: 68 kg-82 kg (150-180 lbs)

highest position: 82 kg (180 lbs) and higher.

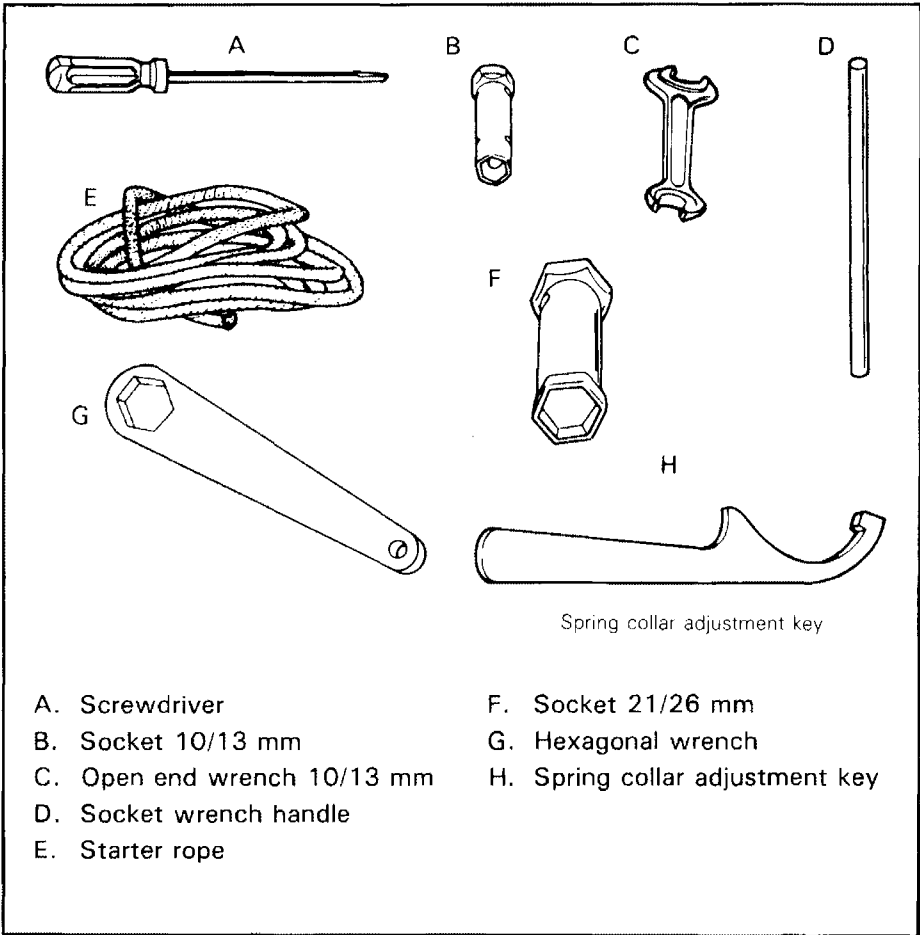


To adjust, use the adjustment key supplied and turn the spring collar accordingly.

TOOLS

As standard equipment each new snow-mobile is supplied with basic tools such as screwdriver, wrenches, emergency starter rope, etc...

Standard Tools



Spring collar adjustment key

- A. Screwdriver
- B. Socket 10/13 mm
- C. Open end wrench 10/13 mm
- D. Socket wrench handle
- E. Starter rope
- F. Socket 21/26 mm
- G. Hexagonal wrench
- H. Spring collar adjustment key

SPECIFICATIONS

ENGINE

Type	462
No. of cylinders	2
Bore	69.5 mm (2.736")
Stroke	61 mm (2.402")
Displacement	462.8 cm ³ (28.24 in ³)
Compression ratio (effective)	6.7:1
Maximum R.P.M.	7200
Carburetor type	Mikuni VM 34-334
Carburetor adjustment:	
— air screw	1 1/2 turn
— idle speed	1800-2000 R.P.M.
Rotary valve oil reservoir	— SI 568 ml — Imp. 20 ounces
Cooling system capacity	— SI 4.6 L — Imp. 162 oz — U.S. 156 oz
Antifreeze/water mixture (% by volume)	60/40
Thermostat	43°C (110°F)
Radiator pressure cap	90 kPa (13 lb/in ²)
Torque:	
— engine head nuts	M8: 23 N•m (17 lbf•ft)
— crankcase nuts	M8: 21 N•m (15 lbf•ft) M6: 9 N•m (7 lbf•ft)
magneto ring nut	M22: 95 N•m (70 lbf•ft)
— crankcase/engine support nuts	M10: 38 N•m (28 lbf•ft)
— exhaust manifold bolts	M8: 24 N•m (18 lbf•ft)

CHASSIS

Overall length	266.7 cm (105")
Overall width	96.5 cm (38")
Overall height	99 cm (39")
Ski stance (center to center)	81.9 cm (32.25")
Ski alignment (toe out)	3 mm (1/8")
Torque:	
— steering arm/ski leg bolt	50 N•m (37 lbf•ft)
— steering column/handlebar	26 N•m (19 lbf•ft)
Weight	192.8 kg (425 lb)
Bearing area	7065 cm ² (1095 in ²)
Ground pressure	2.73 kPa (.388 lb/in ²)

POWER TRAIN

Track:	
– width	41.9 cm (16 1/2'')
– length	289.5 cm (114'')
– tension	13 mm (1/2'') gap between slide and bottom inside of track.
– alignment	Equal distance between edges of track guides and slider shoes.
Standard gear ratio	21/37
Drive belt	
– number	414 5233 00
– Max. width	34.9 mm (1 3/8'')
– Min. width	31.7 mm (1 1/4'')
Chaincase oil	200 mL (7 oz)

ELECTRICAL

Lighting system (output)	12 V. 160 W
Bulb:	
– headlamp	60/55 W (halogen)
– tail/stop	5/21 W
– speedometer	5W
– tachometer	5W
Fuse:	
– tachometer	0.1 A
Spark Plug:	
– type	NGK BR8ES
– gap	0.4 mm (0.016'')
Ignition timing:	
– timing mark (B.T.D.C.)	1.76 mm (.069'') (17.5°)
– stroboscopic timing	6000 R.P.M.

FUEL

Gas type	Regular leaded or unleaded
Fuel tank capacity – SI	28.6 liters
– Imp.	6.3 gals
– U.S.	7.6 gals
Injection oil	
– type	Bombardier snowmobile injection oil
– tank capacity – SI	2.6 liters
– Imp.	92 oz
– U.S.	88 oz

BRAKE

Type	Disc, self adjusting
Lining minimum thickness	3 mm (1/8'')
Control lever adjustment	13 mm (1/2'') minimum distance from handle bar grip when fully applied.

Bombardier Inc. reserves the right to make changes in design and specifications and/or to make addition to, or improvements in its product without imposing any obligation upon itself to install them on its products previously manufactured.

NOTES
