

LYNX[®]

1999

KÄYTTÄJÄN KÄSIKIRJA
ÄGAREHANDBOK
OWNER'S MANUAL

RAVE
150
2101299



Lynx®- yhteystiedot
Lynx®- kontakter
Lynx®- connections

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**CONGRATULATIONS ON
YOUR CHOICE
OF RAVE 150**

SAFETY

- Children's snowmobile is intended for use in an enclosed area. Driving it on open terrain or snowmobile routes is strictly forbidden. An enclosed area is an area where suitable measures have been taken to prevent access by unauthorized persons.
- Children should only be allowed to use the snowmobile in the presence of an adult. Children tend to quickly forget instructions. **Remember that you are responsible for their safety.**
- Instruct children thoroughly in the use of the snowmobile. Repeat the safety instructions every time children use the equipment.
- A snowmobile is a vehicle that calls for special driving techniques. Winter conditions, snow, low temperatures and the wind chill factor make it necessary for children to be properly attired.
- Always make sure that children wear a suitable helmet and safety glasses.
- Inform children of the dangers of getting their feet, hands or clothes caught in moving parts or of touching hot parts. Such contact may cause injury. **You are responsible!**
- The driver must not wear any loose-fitting or hanging items of clothing such as a scarf that could get caught in a moving part of the snowmobile or in bushes, branches, etc.

- Children's snowmobile is a single-seater and must not be used for carrying passengers. Never use it for towing a sledge or bobsleigh because they will hit the snowmobile in the rear on braking. Any passenger could be easily injured or get their limbs caught in the track, which may result in serious injuries.
- Teach children not to speed. A collision or fall at speed may cause serious injuries.
- Teach the children to keep their feet on the footboards and their hands on the handle bars. Trying to stop the snowmobile from tilting over by sticking out a foot may be more dangerous than falling with the snowmobile.
- The snowmobile is not designed for use on paved surfaces, uncovered ground or other highly abrasive surfaces. This will result in abnormal and excessive wear. Moreover, the snowmobile is practically impossible to turn on a paved surface.
- On smooth ice you may experience difficulty steering and turning and the stopping distance is greater.
- Remember that the fuel used is highly inflammable and potentially explosive under certain conditions. Always handle the fuel in a well-ventilated area. Avoid smoking, open lights and sparks. Never allow children to refuel the snowmobile. If any fuel finds its way into the engine compartment, make sure that it is drained through the water outlet holes. Leave the engine hood open for a sufficiently long time to allow any fuel to evaporate before restarting the engine. Never refuel with the engine running.

- If the snowmobile is kept out of doors, cover it with a tarpaulin. This will reduce the risk of the controls freezing.
- Running the engine without the chain guard or with the engine hood open may pose a risk to the user.
- Always stop the engine before service and lubrication.
- **To ensure safety, always comply with these instruction and observe due care. Children cannot be held responsible for damage due to improper use, and therefore the presence of an adult is always necessary. Remember that you are responsible for their safety.**
- This snowmobile is intended for the sole purpose of driving practice by children in an enclosed area under the supervision of an adult.

TECHNICAL DATA

BODY

Length	1650	mm
Width	670	mm
Height	700	mm
Number of passengers	1	

ENGINE	TECUMSEH HS 400
No. of cylinders	1
Displacement	173 cm ³
Output/r.p.m.	4 h.p./3800 r.p.m.
Cooling	Centrifugal fan

TRANSMISSION	
Clutch	COMET centrifugal clutch
Power transmission	single-gear

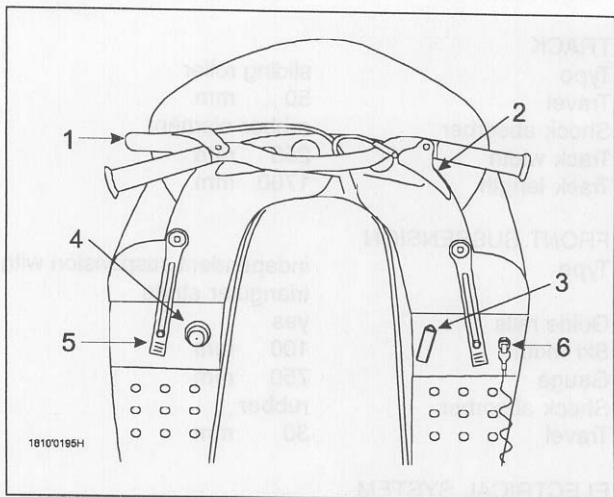
TRACK	
Type	sliding roller
Travel	50 mm
Shock absorber	rubber element
Track width	255 mm
Track length	1700 mm

FRONT SUSPENSION	
Type	independent suspension with triangular struts
Guide rails	yes
Ski width	100 mm
Gauge	750 mm
Shock absorber	rubber
Travel	30 mm

ELECTRICAL SYSTEM	
Coil	28 W
Headlights	28 W
Rear lights	no
Emergency stop	yes

CONTROLS

1. Mechanical brake
2. Throttle lever
3. Starter handle
4. Primer
5. Hood strap
6. Emergency stop



FUEL AND LUBRICANT

- * Use 98-octane unleaded fuel.
- * Use always a funnel with filter when filling the fuel tank.
- * Do not mix oil with the fuel, the engine has its own oil sump.
- * Engine oil SAE 10W50.
- * Synthetic oil may be used in cold conditions, but not during the first 50 hours of operation (break-in period).
- * To prevent fuel from freezing, add 1% of isopropane based anti-freezing agent.

BEFORE USE

Important! Routine check list

- * Make sure that the throttle and brake levers move easily and return freely to their initial positions when released. If they do not, repair them.
- * Make sure that there is no ice or snow in the rollers. Also make sure that the track is not frozen to the ground (tilt the snowmobile).
- * Make sure that all the covers are in place and the engine hood is closed.
- * Attach the emergency stop cord to the driver's right-hand wrist or clothing before starting the engine. When starting, make sure that the driver stands on the ground beside the machine to avoid any risk caused by a jammed throttle (The emergency stop will stop the engine.)

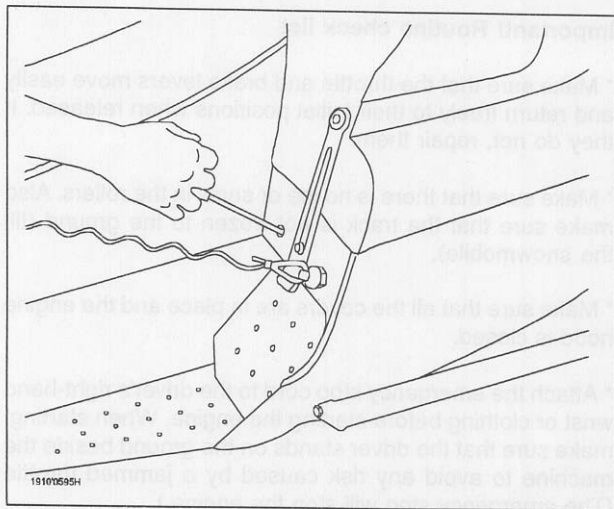
* Before starting off, make sure that the engine will stop when the emergency stop cord is pulled.

STARTING

Cold starting

* Attach the emergency stop cord to the driver's right-hand wrist or clothing. Then insert the cup, at the other end of the cord, to the emergency stop switch located on top of the right-hand foot support.

* Activate the primer 2 to 3 times.



* At low temperatures (-10°C), open the hood and turn the choke on the carburettor on. Make sure you turn off the choke as soon as the engine runs without it. Then close the hood.

* Pull the starter cord gently until it engages, then give it a strong pull. Hold the handle while the cord rewinds itself. If not, the starter may be damaged.

Hot starting

* Follow the instructions given for cold starting except that the primer or choke do not need to be used. If the engine fails to start at the first attempt, open the throttle completely and keep it open while starting. Remember that the snowmobile will start moving immediately unless you release the throttle. To avoid any accidents, make sure that the driver is standing beside the snowmobile during starting.

Half-cold starting

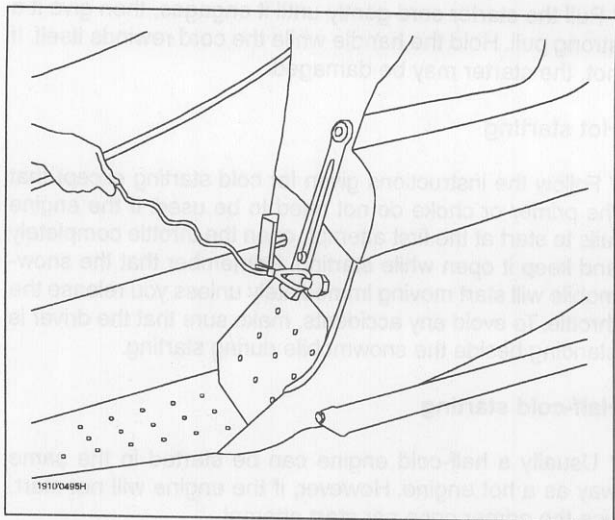
* Usually a half-cold engine can be started in the same way as a hot engine. However, if the engine will not start, use the primer once per start attempt.

Note!

* If a half-cold or hot engine fails to start, you have probably flooded the engine.

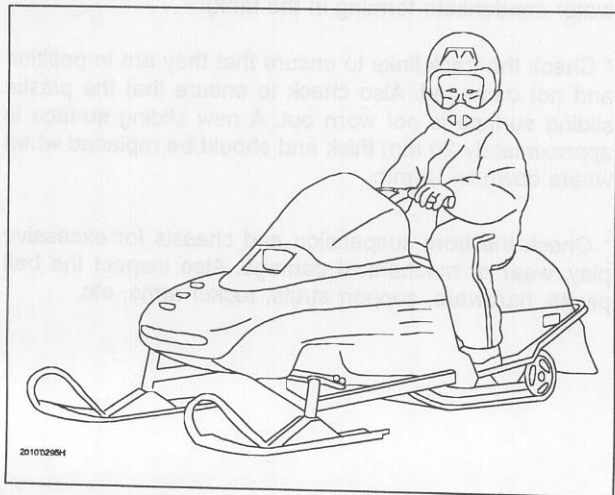
STOPPING THE ENGINE

The snowmobile has no ignition switch. To stop the engine, pull the emergency stop cord.



HOW TO DRIVE

- * The snowmobile starts moving when the throttle lever is depressed and stops when it is released. Teach children how to use the throttle - a gentle start takes some learning.
- * Teach children to lean on the inside when turning.
- * Children should drive in a sitting position. Remind them frequently to keep their feet on the footboards.



- * Make sure that children are properly attired.
- * Never allow children to use the snowmobile on their own.

AFTER USE

- * Remove any snow and ice from track and engine compartment. Make sure that the engine compartment water drainage holes are not blocked. Any frozen snow in the engine compartment or other structures may cause serious damage.
- * Check the track tension and fill the fuel tank (to avoid water condensate forming in the tank).
- * Check the track links to ensure that they are in position and not damaged. Also check to ensure that the plastic sliding surface is not worn out. A new sliding surface is approximately 20 mm thick and should be replaced when wears down to 12 mm.
- * Check the front suspension and chassis for excessive play, wear or mechanical damage. Also inspect the ball pivots, hardware, support struts, rocker arms, etc.

SERVICE AND MAINTENANCE

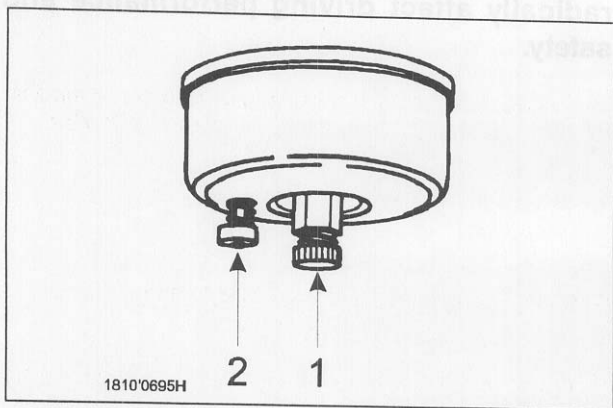
**Use only original parts for service and repair.
Caution: any unauthorized modifications may
radically affect driving performance and
safety.**



FUEL SYSTEM

* The snowmobile designed for children has no fuel pump or filter.

* The screw for adjusting the main nozzle is located on the underside of the carburettor float chamber. The float chamber discharge valve is located in front of the screw.



* The carburettor is factory-adjusted. If it is incorrectly adjusted, contact your dealer.

* Water in the fuel will cause problems. If you think there is any water in the fuel, do the following:

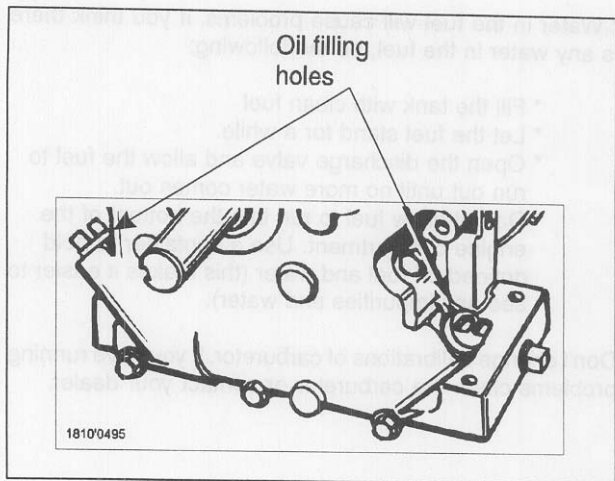
- * Fill the tank with clean fuel
- * Let the fuel stand for a while.
- * Open the discharge valve and allow the fuel to run out until no more water comes out.
- * Do not allow fuel to run into the bottom of the engine compartment. Use a container to hold drained-off fuel and water (this makes it easier to see any impurities and water).

Don't change calibrations of carburetor. If you have running problems clean the carburetor or contact your dealer.

ENGINE LUBRICATION SYSTEM

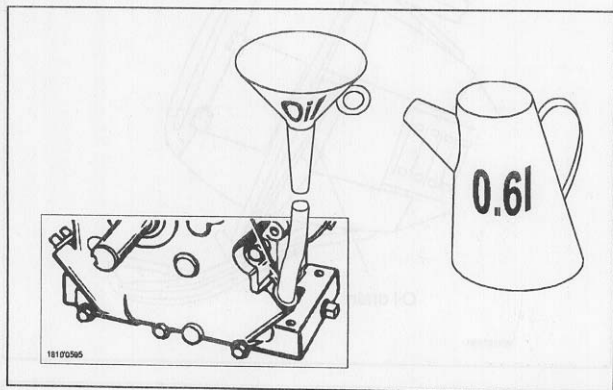
* The engine has no oil pump or filter. Lubrication is by means of splash oiling with the lubricating oil in the bottom of the crankcase.

* Check the oil level daily. Oil consumption increases when the snowmobile is in a tilted position or lies on its side. Make sure that the oil level comes up to the level of the filling opening.

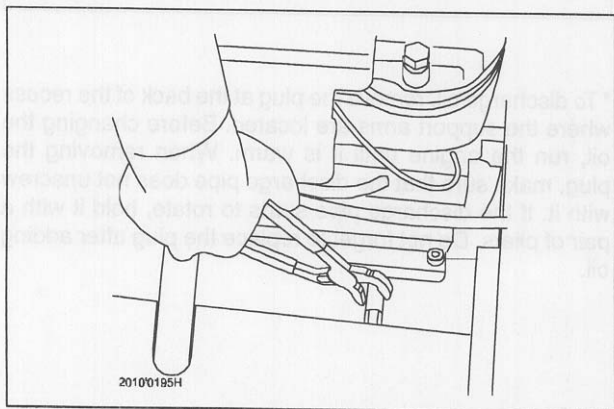
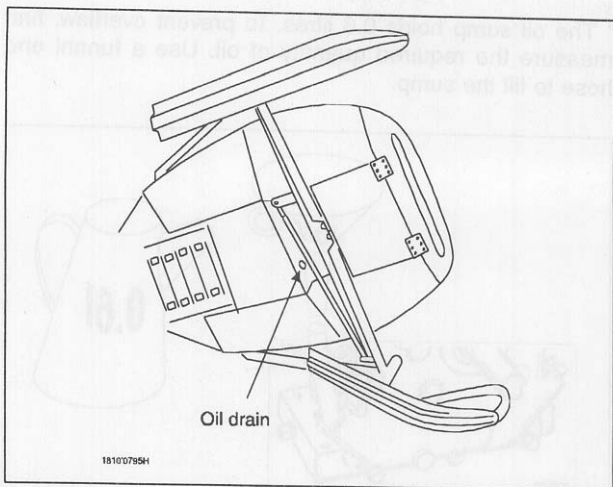


- * The first time you use the snowmobile, change the oil after two hours of operation.
- * Normally oil must be changed after every 25 hours of operation.
- * Use SAE 10W50 oil. Synthetic oils (to facilitate starting when cold) can be used after 50 hours of operation.

* The oil sump holds 0.6 litres. To prevent overflow, first measure the required quantity of oil. Use a funnel and hose to fill the sump.

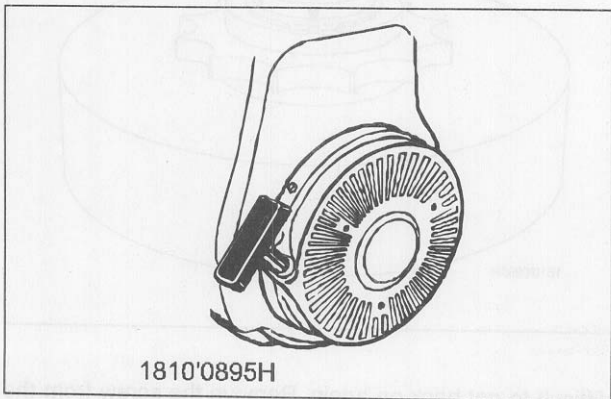


* To discharge oil, remove the plug at the back of the recess where the support arms are located. Before changing the oil, run the engine until it is warm. When removing the plug, make sure that the discharge pipe does not unscrew with it. If the discharge pipe starts to rotate, hold it with a pair of pliers. Do not forget to replace the plug after adding oil.



COOLING SYSTEM

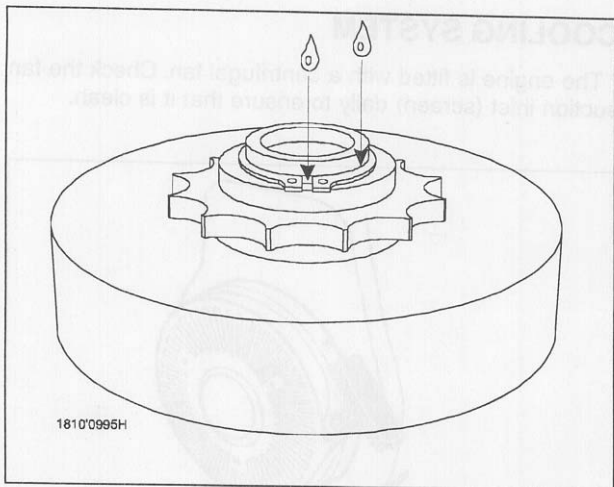
* The engine is fitted with a centrifugal fan. Check the fan suction inlet (screen) daily to ensure that it is clean.



TRANSMISSION

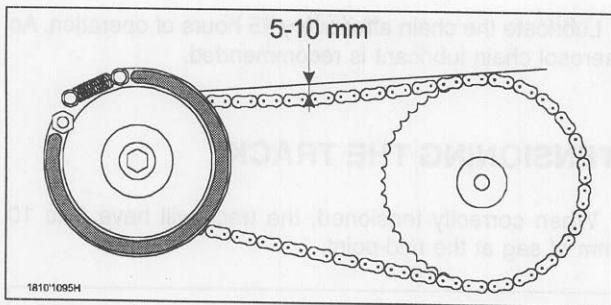
* The snowmobile has a COMET centrifugal clutch and single-gear chain transmission.

* Lubricate the clutch axle sleeve with engine oil after 25 hours of operation. To do this, remove the chain guard and then the chain from the clutch. Make sure that the chain does not drop off the main gearwheel because it is



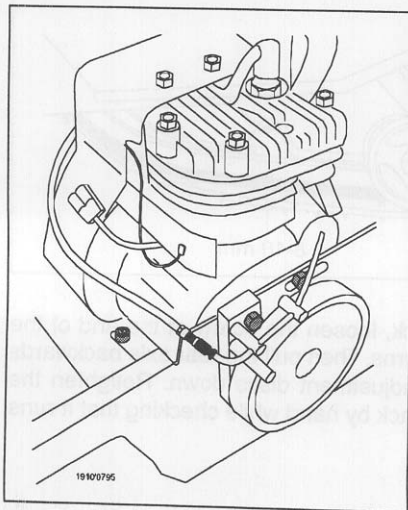
difficult to get back on again. Remove the screw from the end of the crankshaft. Remove the METALLOC nut from the end of the brake belt and slide the clutch out (leave the belt in position). Drip a few drops of oil into clutch sleeve and reassemble the unit in the reversed order.

* Check the chain tension after every 25 hours of operation. The chain is correctly tensioned when there is 5 to 10 mm of sag at the mid-point. To measure the play, apply the brake while pushing the snowmobile forward.



* To tension the chain, loosen the 3 Allen screws on the left-hand side of the mounting tunnel and the 4 Allen screws on the lower edge of the crankcase. (A ball-ended Allen key is supplied for this purpose).

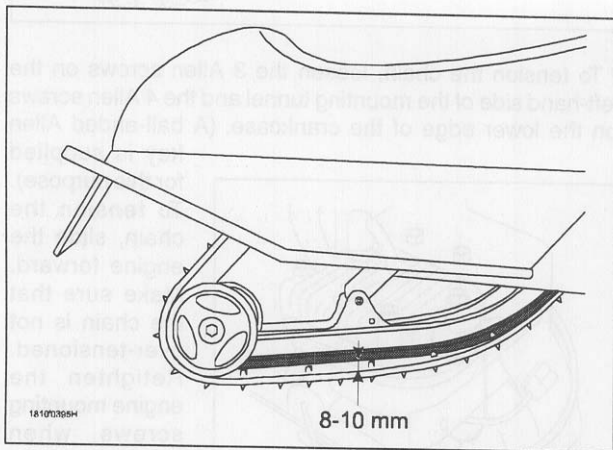
To tension the chain, slide the engine forward. Make sure that the chain is not over-tensioned. Retighten the engine mounting screws when finished.



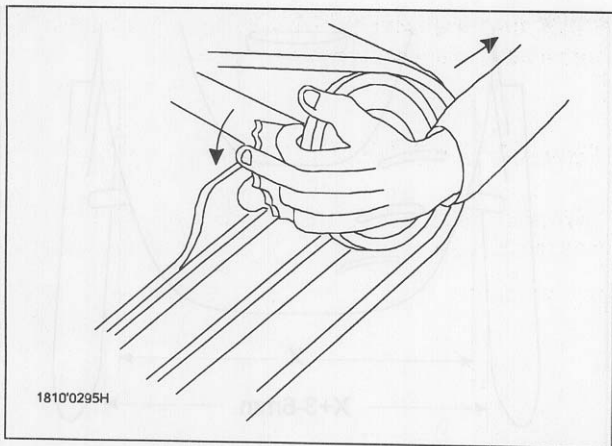
* Lubricate the chain after every 25 hours of operation. An aerosol chain lubricant is recommended.

TENSIONING THE TRACK

* When correctly tensioned, the track will have 8 to 10 mm of sag at the mid-point.



* To tension the track, loosen the screw at the end of the rear axle by 4 to 5 turns. Then pull the rear axle backwards while pushing the adjustment discs down. Retighten the screw. Rotate the track by hand while checking that it runs

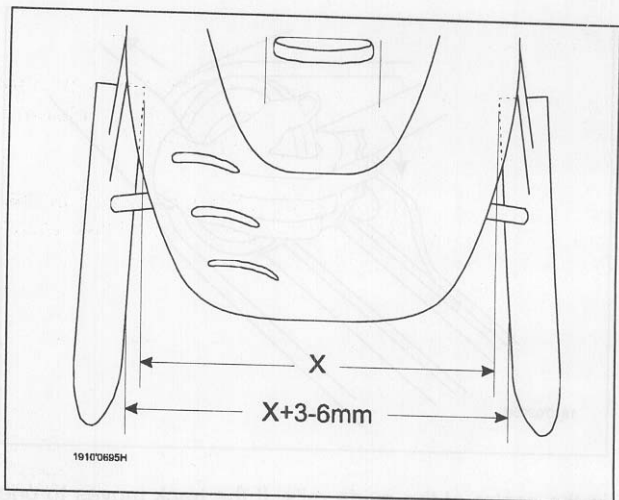


in the centre of the guide rails. If the track moves to one side, tighten it on the side where the clearance between the rail and link is greater.

CONTROLS

Ski toe-in

* The skis must have a toe-in of 3 to 6 mm when measured at the straight section of the skis.



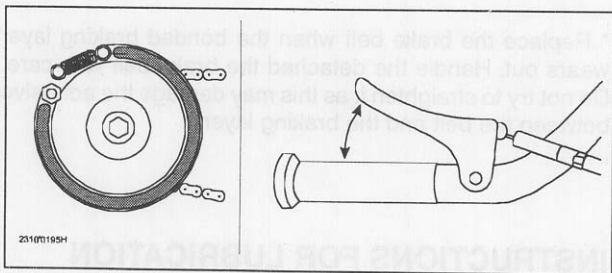
* If toe-in needs to be adjusted, check the track rods for straightness. Replace if necessary.

* To adjust toe-in, remove the swivel from the track arm. To increase toe-in, make the track arm shorter by turning the swivel inwards. To decrease toe-in, turn the swivel the other way. Do not forget to retighten all the nuts after adjustment. Always change the Nyloc nuts and spring washers when adjusting toe-in.

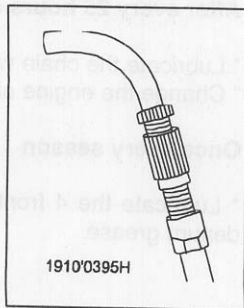
BRAKE SYSTEM

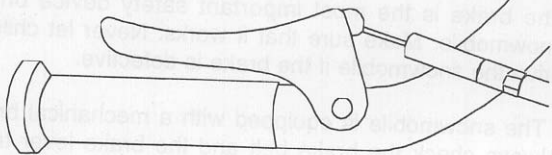
The brake is the most important safety device on the snowmobile. Make sure that it works. Never let children drive the snowmobile if the brake is defective.

* The snowmobile is equipped with a mechanical brake. Always check the brake belt and the brake lever travel before using the snowmobile.



* Adjust the brake if the brake lever is within 10 mm of the handle bars when the brake is fully on. To adjust the brake, rotate the barrel adjuster at the lower end of the brake cable. Do not forget to retighten the barrel adjuster lock nut.





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- * Replace the brake belt when the bonded braking layer wears out. Handle the detached the brake belt with care. Do not try to straighten it as this may damage the adhesive between the belt and the braking layer.

INSTRUCTIONS FOR LUBRICATION

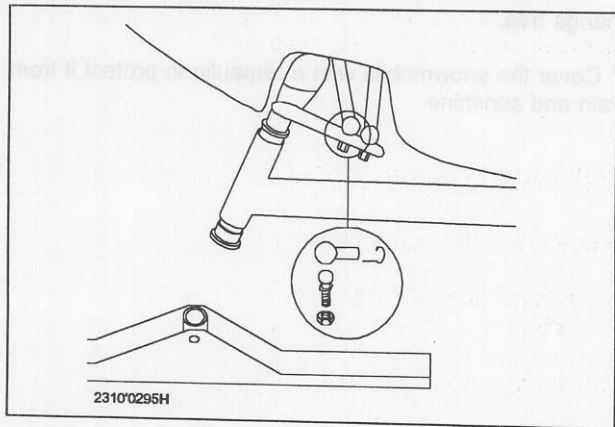
After every 25 hours of operation

- * Lubricate the chain with an aerosol chain spray.
- * Change the engine oil. Use 0.6 litres of SAE 5W50 oil.

Once every season

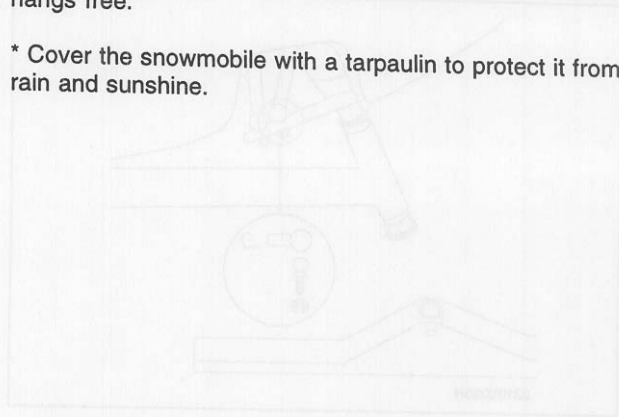
- * Lubricate the 4 front support arm sleeves with molybdenum grease.

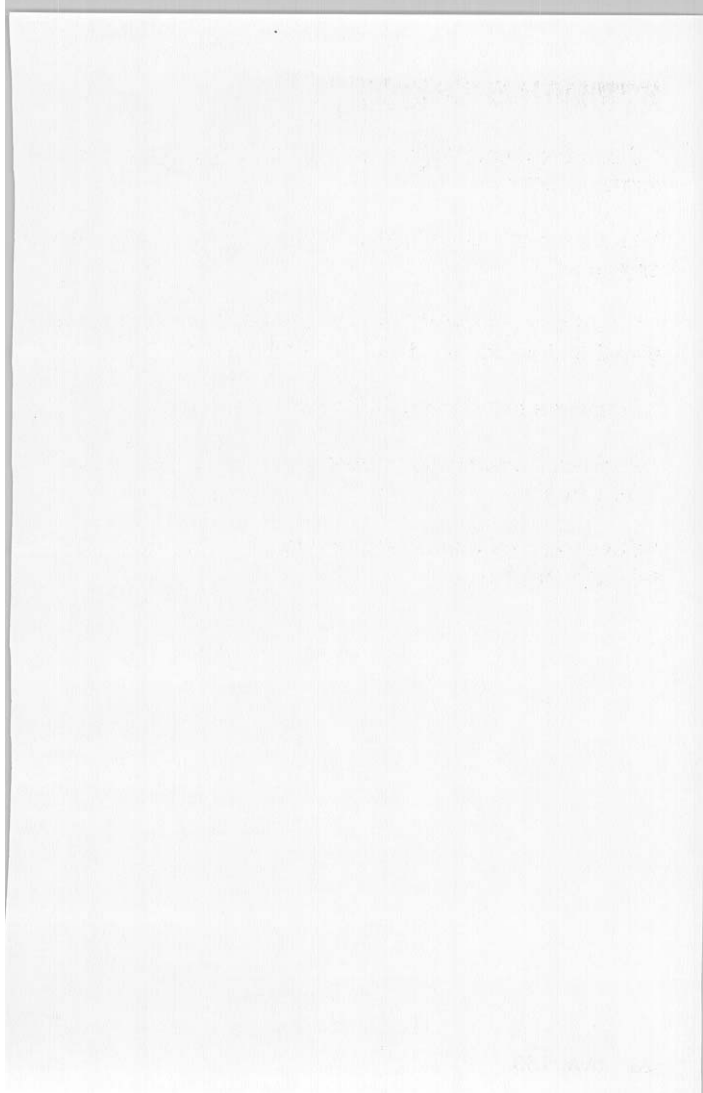
- * Lubricate the 4 travel stop sleeves as above.
- * Lubricate the ski mounting screws with molybdenum grease. To ensure correct lubrication, remove the screws.
- * Lubricate the 4 track arm swivels with molybdenum grease. To remove the swivel, pull the locking ring out and yank the ball pivot out. **Note! When reassembling, do not forget to replace the locking ring. Even though the ball pivot seems to stay in place without it, it will fall out when loaded!**
- * Lubricate the handle bar bearings with oil.

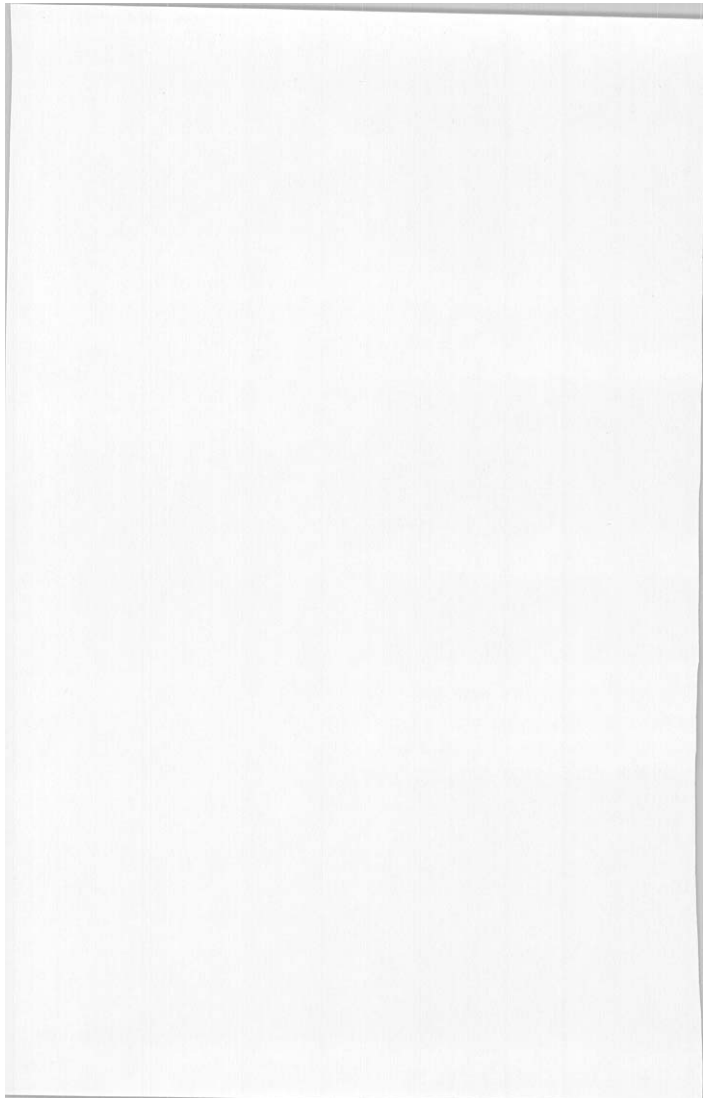


SUMMER STORAGE

- * Clean the snowmobile and touch up any scratches and surface damage.
- * Lubricate the snowmobile as instructed. Change the engine oil.
- * Run the engine with the new oil and at the same time give 2 to 3 squirts of oil into carburettor intake.
- * Empty the fuel system and clean the fuel tank.
- * Place the snowmobile on trestles to ensure that the track hangs free.
- * Cover the snowmobile with a tarpaulin to protect it from rain and sunshine.







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RECREATIONAL PRODUCTS

