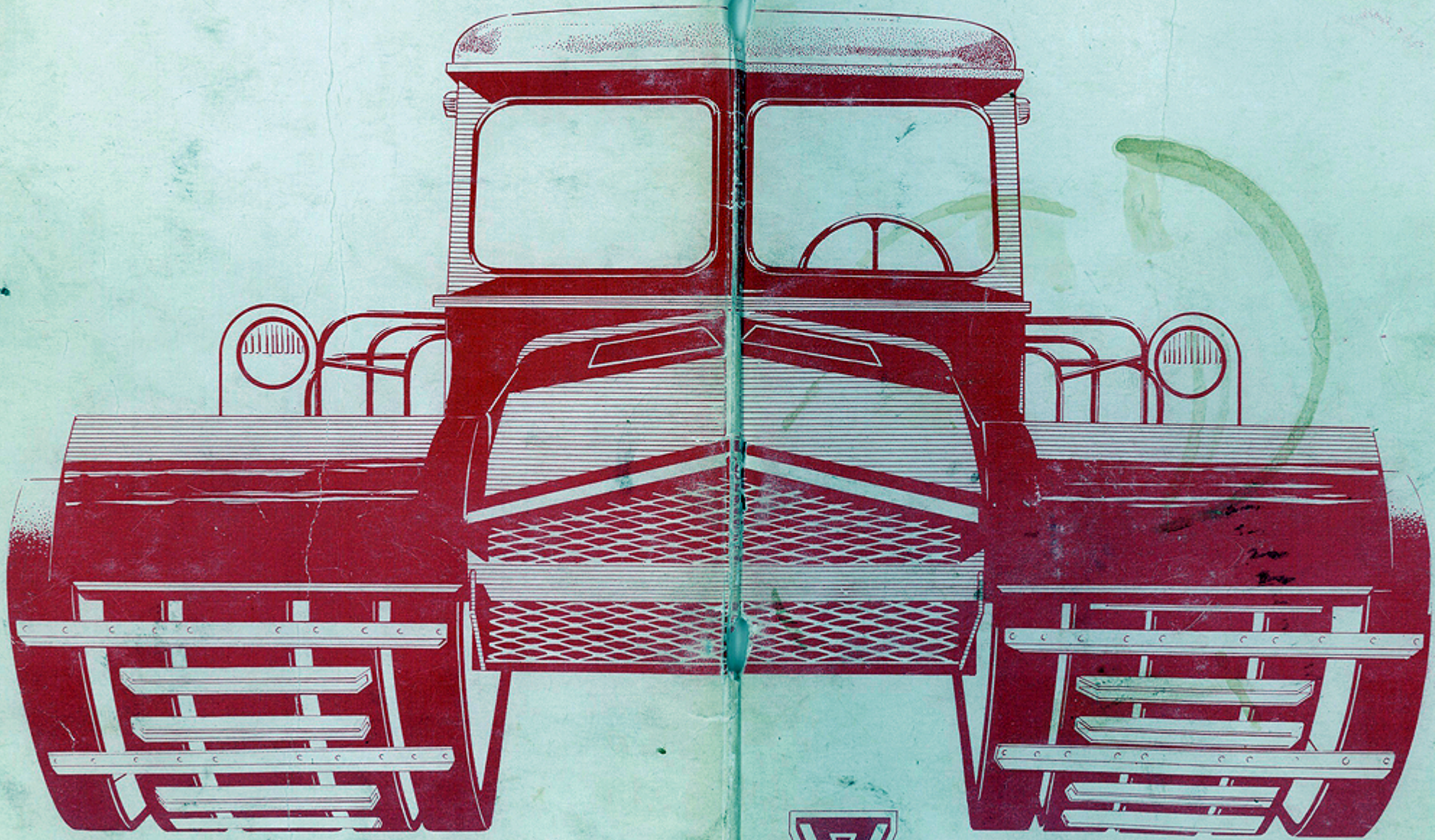
SNOW-MASTER

INSTRUCTION BOOK | ST4B



AB WESTERÅSMASKINER
MORGONGÅVA SWEDEN

CONTENTS

SNOW MASTER ST 4 B

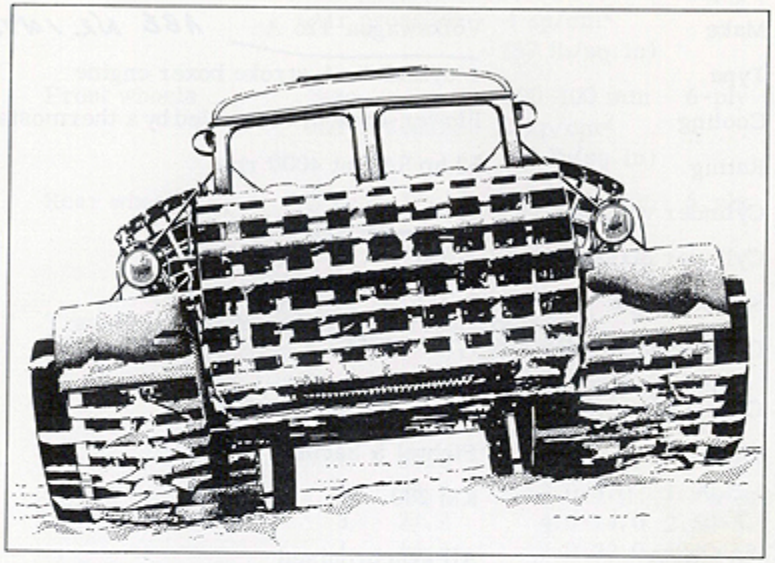
Manufacturing serial number .....

Engine manufacturing serial number .....

The weasel supplied by .....

Address: .....

Telephone number .....



The SNOW MASTER is built for travel in roadless snow-covered terrain and is capable of carrying heavy loads in difficult conditions. When equipped with snow packers, it is ideal for preparing downhill ski runs. The well-adapted ground pressure combined with low centre of gravity makes it very easy to control even on steep slopes.

Like any other vehicle it needs regular servicing and careful maintenance in order to function satisfactorily and to keep running costs low.

We therefore urge you to read this booklet, as well as the special engine manual, and to follow the instructions and advice given. In return your SNOW MASTER will give you good service and much enjoyment for many winters to come.

AKTIV - FISCHER AB

TECHNICAL DATA

3600 U/min

V967

MOTOR # 017877

ABE NR. 1078

ENGINE

Make	Volkswagen 126 A	
Type	4-cylinder, 4-stroke boxer engine	
Cooling	Blower-cooled, controlled by a thermostat	
Rating	53 hp SAE at 4000 rpm	
Cylinder volume	1584 cm^3	
Cylinder diameter	3.336"	(85,5 mm)
Stroke length	2.717"	(69 mm)
Compression ratio	7,7:1	

CLUTCH

Single dry-plate type

Make: Fichtel & Sachs

Type: KM 200

GEARBOX

All synchronised
4 forwards gears, 1 reverse

Gear ratios	1 st gear	3.80
	2nd "	2.06
	3rd "	1.32
	4th "	0.89
Reverse	Reverse	3.88

DIFFERENTIAL

Coupled with the gearbox and variator controlled

Ratios: 4.125

SPROCKET WHEEL DRIVE

Chain drive with roller chain
25.4 x 17

Ratios: 3.91

SOLEX 32PCI
CARB #126/2902/C

DISTRIBUTER: BOSCH 0231/129018

TYRES

Carrier wheels	Size	4.00-4"	6-ply
	Air pressure	4 kp/cm^2 (57 lb/sq.in)	
Front wheels	Size	600-100 mm	6-ply
	Air Pressure	5 kp/cm^2 (71 lb/sq.in)	
Rear wheels	Size	600-100 mm	6, ply
	Air pressure	4 kp/cm^2 (57 lb/sq.in)	

Travelling speeds and overall reduction ratios

Gear	Overall reduction	Travelling speed km.p.h.	m.p.h.
1	61.3	1.5-4.5	.93-2.8
2	33.2	3.0-8.0	1.90-5.0
3	21.3	4.0-14.0	2.50-8.7
4	14.4	7.0-22.0	4.40-13.7
Reverse	62.6	–	–

Measurements, Weight, etc

Dimensions	Length	3760 mm	(148")
	Width	2600 "	(102 3/8")
	Ground clearance	300 "	(11 13/16")
	Height	1850 "	(72 27/32")
Weight	Service weight, approx.	1500 kg	(3307 lb.)
Performance	Load capacity	500 kg	(1102 lb.)
	Track ground pressure (with driver)	30 g/cm^2	(.426 lb/sq.in.)

POINTS = .017 "

PLUGS = .025"

SNOW ROLLERS

Dimensions	Working width of machine	12' 1 9/16"	(3,7 m)
	Total width with lifted rollers	8' 6 3/8"	(2,6 m)
	Total length with lifted rollers	16' 1 3/16"	(4,9 m)
	Width of front roller	3' 11 5/16"	(1,2 m)
	Width of rear rollers (each)	1' 11 5/8"	(0,6 m)
Weight	Total weight of roller equipment	430 lbs	(195 kg)
	Weasel with roller equipment	approx 3730 lbs	(1700 kg)
Performance	Pressure of front roller	approx 2280 lb/sq.in.	(160 kp/cm^2)
	Pressure of rear rollers (each)	approx 925 lb/sq.in.	(65 kp/cm^2)
Hydraulic system	Overflow valves opening pressure:		
	Lifting	1000 lb/sq.in.	(70 kp/cm^2)
	Rolling	285 lb/sq.in.	(20 kp/cm^2)

TUNE-UP PARTS	BOSCH P/N
CONDENSER	02006
STD. ROTOR	04033
POINTS	01001
DIST. CAP	(BORG WARNER C520)

TECHNICAL DESCRIPTION

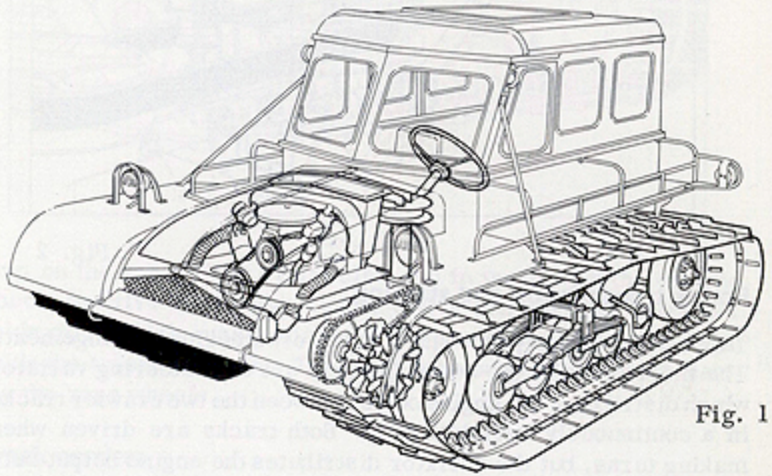


Fig. 1

The weasel is intended for use in roadless snow-covered terrain or for preparing downhill ski runs. It can carry a load of 500 kg (1102 lb.) and can also tow as much again. There is plenty of room in the cab for six people in addition to the driver.

Chassis and body

The chassis consists of a welded frame made of cold-drawn steel tubing. The body is made of aluminium alloy and is mounted on the frame by three-point suspension.

Engine

The weasel is powered by a Type 126 Volkswagen engine. It is an air-cooled, four-cylinder opposed unit and is mounted at the front with the drive on the front axle.

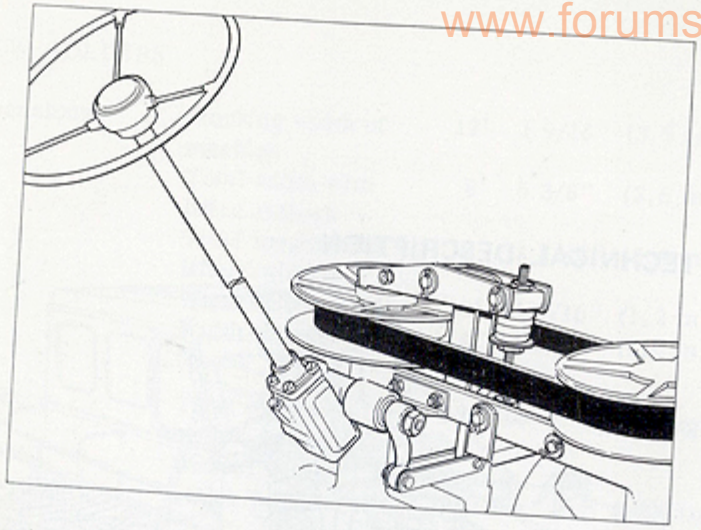


Fig. 2

Power transmission and steering

The weasel is equipped with a variator steering arrangement. The movements of the steering wheel act on a steering variator which distributes the engine output between the two crawler tracks in a continuously variable ratio. Both tracks are driven when making turns, but the variator distributes the engine output between them in proportion to the steering wheel movement. The variator works by means of a drive belt which runs between double V-belt pulleys, the flanges of which are adjustable for width. When the steering wheel is turned it acts on the variator pulleys in such a way that the flanges of one of them are pressed together while those of the other are moved apart a corresponding amount. The drive belt is thereby forced outwards towards the periphery of the pulley which is pressed together and at the same time forced inwards towards the shaft of the other pulley. This causes the drive shafts, and thereby also the crawler tracks, to run at different speeds so that the weasel turns.

Crawler tracks

The crawler tracks are made of rubber with interwoven rayon cord. The tracks are reinforced externally with spring steel cleats. These are shaped in such a way that they provide a good

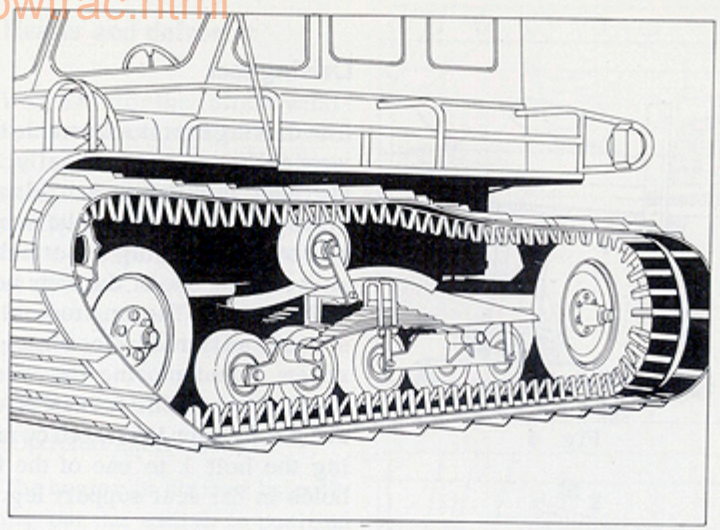


Fig. 3

grip on the snow. The cleats also run in mesh with the driving wheels to drive the tracks. On the inside of the tracks there is a guide ridge which runs against the flanges of the bogie wheels to guide the tracks laterally. The track tension is adjusted by moving the rear wheels.

Track carriers

The weight of the vehicle is transferred to the tracks by means of 14 pneumatic rubber wheels. The wheels are mounted on spring-loaded track carriers which are arranged in such a way that the best possible weight distribution is obtained. Each track has a fixed support wheel against which the upper part of the track rests.

Brakes

The vehicle is equipped with hydraulic drum brakes. The handbrake is mechanical and acts on the front wheels.

Electrical system

The electrical system has a voltage of 12 V. The battery has a capacity of 85 Ah and the negative terminal is earthed. The electrical system includes circuits for charging, starting, lighting, brake lights, direction indicators, horn and windscreen wipers. A flashing warning light is available as optional equipment.

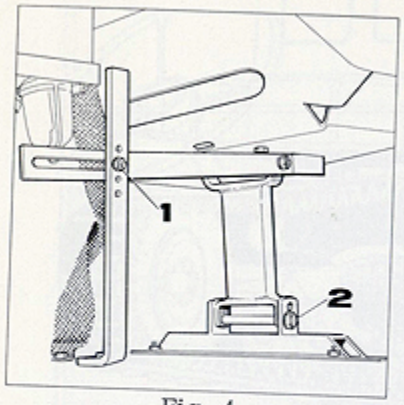


Fig. 4

Driving seat

The driving seat is adjustable both vertically and longitudinally, and the seat inclination can also be altered. The height of the seat is adjusted by moving the attaching screw 2 to one of the four holes in the frame. The longitudinal position is adjusted by loosening the screw 1 and moving the whole seat backwards or forwards. The seat inclination is altered by moving the bolt 1 to one of the four holes in the seat support leg.

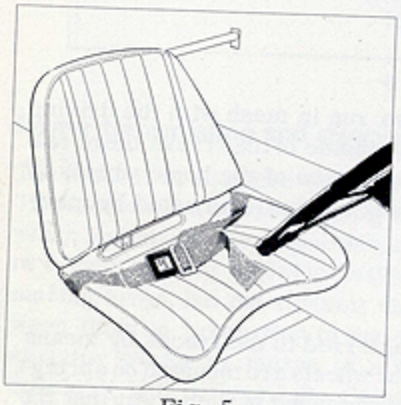


Fig. 5

Safety belt

The safety belt should be adjusted so that it holds the driver firmly to the seat. The length of the belt is adjusted by moving the locking buckle on the free end of the belt. The lock is released by lifting the rear edge of the black locking buckle.

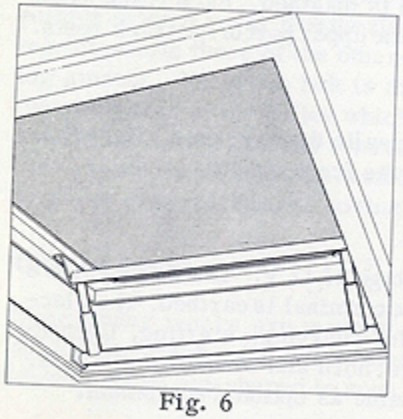


Fig. 6

Roof hatch

The roof hatch is opened by pressing the hatch support upwards. The hatch is locked in the open position by a springloaded ball. The roof hatch can be opened fully by releasing it from the front attachments and hinging it backwards.

Heater and defroster

Warm air for the cab and windscreens is obtained when both the controls are pulled outwards. By setting the controls to different positions warm air can be distributed in the cab as desired.

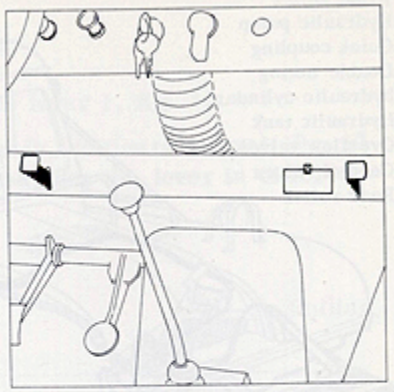


Fig. 7

Air heater unit

(Optional equipment)

The heater is started by pulling out the switch to position 2. This switches on an electric glow plug which ignites the fuel which runs in at the same time. Combustion starts and the heated air is blown into the cab. After about 45 seconds the heater reaches its full operating temperature. A thermostat cuts off the current to the glow plug at the same time that the control lamp on the switch lights to indicate that the unit is in full operation. When the switch is pushed in the fuel supply ceases and combustion is stopped. The fans continue to run in order to cool the heater. After 2-3 minutes when the temperature of the heater has fallen sufficiently, the current to the fan motor is cut off automatically and the control lamp on the switch goes out at the same time.

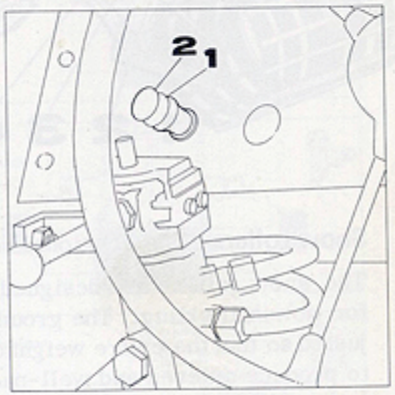


Fig. 8

N.B. On no account must the heater be switched on during the cooling period since the glow plug will not then be energized and the fuel flowing in will not be ignited. When the switch is in position 1, only the fans of the unit are in operation, whereby heated fresh air is blown into the cab.

1. Front roller
2. Hydraulic pump
3. Quick coupling
4. Double acting hydraulic cylinder
5. Hydraulic tank
6. Overflow valves
7. Control valves
8. Rear roller

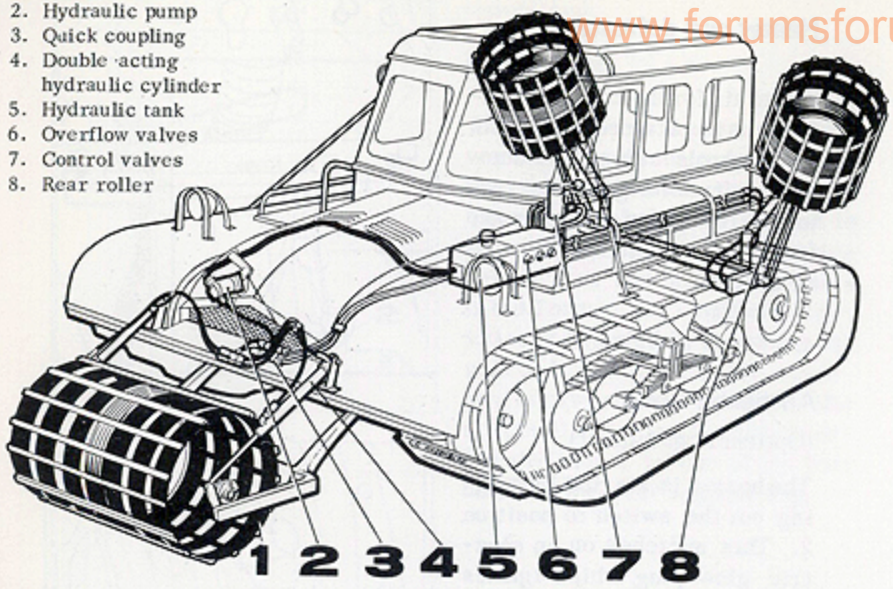


Fig. 9

Snow rollers (Optional equipment)

The snow rollers are designed for the preparation of ski pistes for downhill skiing. The ground pressure of the rollers is adjusted so that the entire weight of the machine is well distributed to produce an even and well-packed surface.

The weasel is provided with adjustable overflow valves which regulate the ground pressure of the rollers. The degree of compression can always be adjusted so that the ground pressure of rollers is equivalent to that of the weasel.

The lift mechanism of the rollers is designed so that the center of gravity of the weasel is the same when driven without rollers or with lifted rollers. Thereby the stability of the weasel is unaffected when driving on slopes. Having the rear rollers within the driving bands of the weasel also improves the steering when driving with lifted rollers. This facilitates accurate steering through narrow passages and reduces the risk of damage.

The open design of the rollers makes it easy to keep them free of ice and snow. Quick-couplings on the hydraulic hoses facilitate rapid dismounting of the rollers.

The rollers are controlled with the lever 1, fig. 11.

The lever has six working positions in addition to neutral. Fig. 10 shows how the rollers are affected with the lever in different positions.

Lifting Rolling

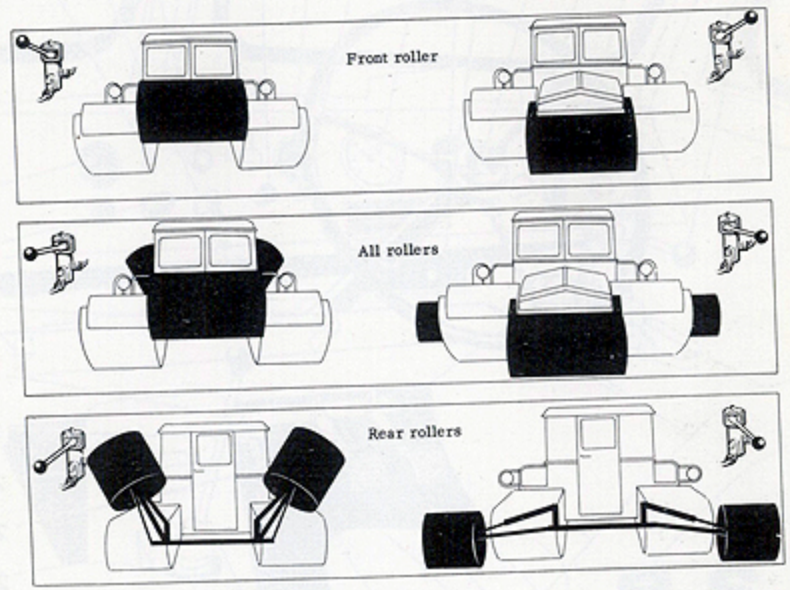


Fig. 10

When lifting, the lever should be placed in neutral when the rolls have been lifted to the desired position.

When rolling, the lever should be kept in the right hand position.

NOTE! After the lever has been moved to lift or low, all the rollers are not affected simultaneously. This is as it should be. The hydraulic lines to the rollers are connected in the lift position, and the roller that meets the least resistance is raised first.

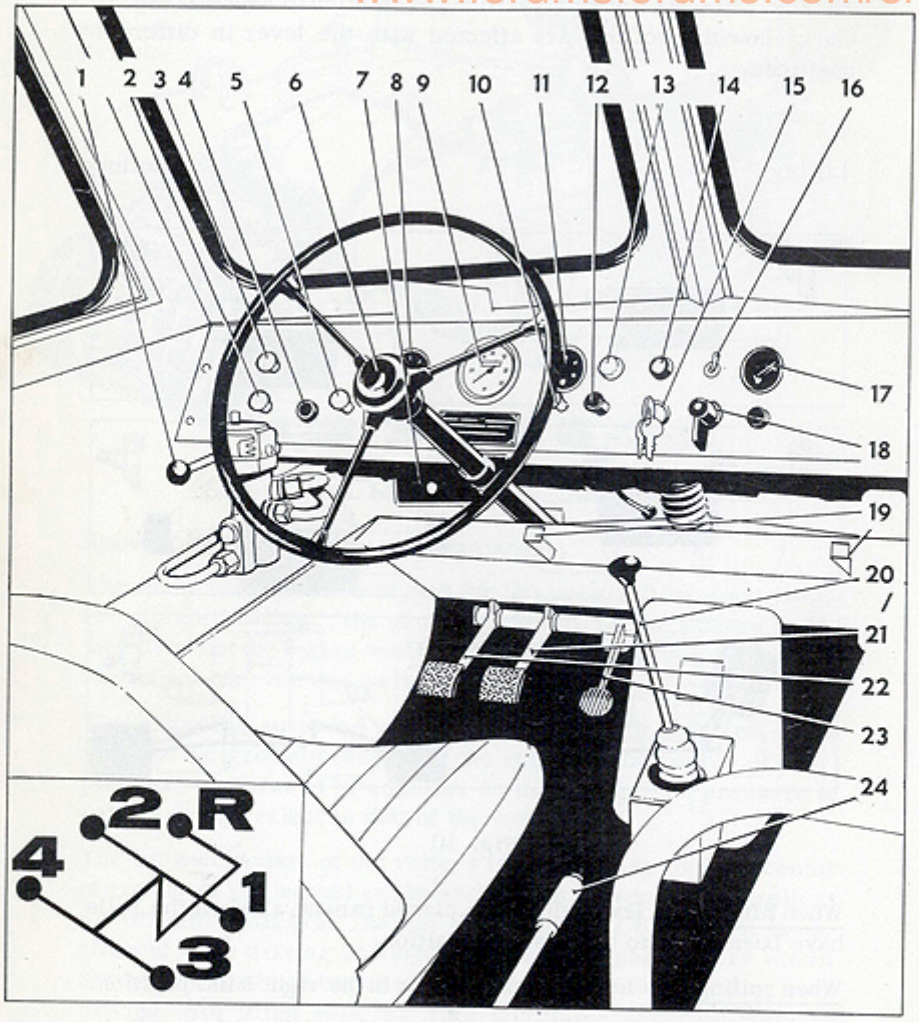


Bild 11

INSTRUMENTS AND CONTROLS

1. Control lever for snow rollers — Optional equipment, se page 13

2. Windscreen wipers — Two-speed

3. Petrol heater switch with indicator lamp — Optional equipment, se page 11

4. Starter button

5. Light switch — The parking lights are switched on by pulling out the switch to the first position and the headlights by pulling it fully out.

6. Horn

7. Fuse box

8. Fuel gauge

9. Speedometer — This indicates the speed in km. p. h.

10. Choke

11. Oil temperature gauge — The maximum permissible oil temperature when running is 120°. If the oil becomes hotter than this, stop the vehicle and let the engine run at idling speed until the temperature has gone back to normal.

12. Hand throttle control

13. Oil pressure warning lamp (GREEN) — If this lamp lights while running, stop the engine at once and check the oil level. If this is correct, there is a fault in the oil circulation system or in the electrical circuit to the warning lamp. If the lamp flashes when the engine is idling, this is of no significance as long as it goes out when the engine speed is increased.

14. Charging control lamp (RED) — This lamp lights when the battery is being discharged.

15. Ignition switch — When the key is turned in the switch the ignition current is switched on, as well as current to the direction indicator flashers, measuring instruments, horn and brake lights.

16. Headlight dipper switch

17. Hour recorder — Optional equipment. This indicates the running time in hours.

18. Direction indicator switch with indicator lamp — The lamp flashes simultaneously with the direction indicator flashers. If any flasher is not functioning, the indicator lamp goes out.

19. Heater and defroster controls — See page 11.

20. Gear lever — The gear positions are shown in the insert in fig. 11.

21. Brake pedal

22. Clutch pedal

23. Accelerator pedal

24. Hand brake

STARTING AND DRIVING

Before driving

Check that:

- The oil level in the engine comes between the maximum and minimum marks on the dipstick
- The oil level in the hydraulic tank comes up to about 3/4" (2 cm) under the filler opening.
- There is sufficient fuel
- The brakes function properly

Starting the engine when cold

- Pull out the choke control fully
- Press down the clutch pedal
- Do not touch the accelerator pedal until the engine has started
- Switch on the ignition by turning the key
- Push in the starter button

If the engine does not start within 10 seconds, release the starter button and wait half a minute before making another attempt to start.

When the engine has started:

- Push in the choke control until the engine runs smoothly
- Operating temperature is reached most quickly by running the vehicle under moderate loading during the warming-up period
- Push in the choke successively until the engine runs smoothly with the choke pushed in fully

Starting the engine when warm

- Push down the accelerator pedal about halfway
- Switch on the ignition by turning the key
- Push in the starter button

If the engine does not start immediately when it is thoroughly warm, press down the accelerator pedal fully and make a fresh attempt to start.

Driving

The weasel can be started in any gear since it has low overall gear ratios. A suitable gear is chosen with regard to the snow and terrain conditions existing at the time. Make a habit of glancing at the instruments now and then. This will avoid any unnecessary engine breakdowns.

The engine oil temperature must not exceed 120° C (248° F) when running. If the oil becomes hotter than this, stop the weasel and let the engine idle until the temperature goes back to normal.

WARNING. On no account must the steering wheel be turned when the vehicle is not moving. If force is used to turn the steering wheel when the vehicle is stationary, this can cause breakage of the steering components.

After finishing driving

The engine is stopped by turning back the ignition key. When parking the vehicle for any length of time, for example, overnight, the crawler tracks should be cleaned free from snow and ice. This is particularly important when it is thawing. If the vehicle is provided with snow packers, these should also be freed from snow and ice. Fir twigs can be placed under the track to prevent them from freezing to the ground. The handbrake should not be used when parking for prolonged periods during the winter as there is a risk that it will freeze solid. At very low temperatures it is advisable to take the battery indoors during the night. At - 20° C (- 4° F), the battery capacity is only half of that at room temperature. A fully discharged battery freezes at about - 10° C (+ 14° F).

DRIVING TECHNIQUE

The weasel is very easy to drive on hard surfaces. However, the steering responds more slowly than that of a car. The delay in steering response is due to the fact that it takes a certain amount of time for the steering variator to alter the speed of the crawler tracks. This does not present any difficulty to the experienced driver, although it should be borne in mind by a driver who is not used to the vehicle.

Cross-country driving

Cross-country driving calls for greater judgement and caution on the part of the driver than travelling on level ground.

- Adapt the speed to suit the prevailing terrain conditions
- Avoid driving over treestumps and rocks to prevent the tracks and track carriages from being subjected to shock loads
- Always choose the easiest route even if it means going a longer way round

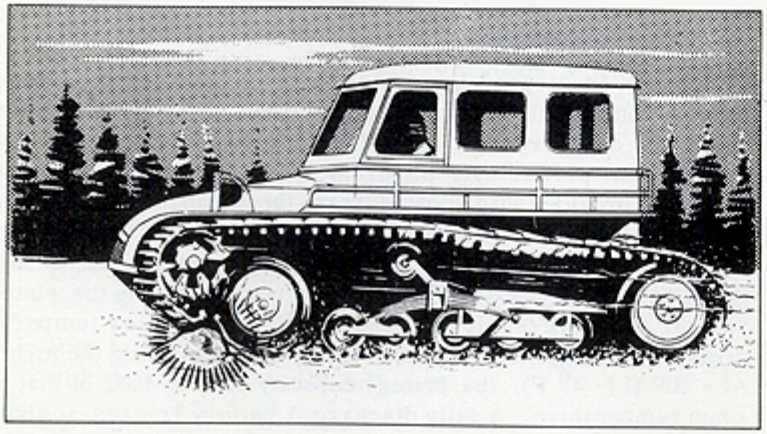


Fig. 12

Driving in mountainous country

When driving in mountainous or other hilly districts it should be remembered that the hill-climbing capacity of the vehicle is greatest on frozen and hard-packed snow. However, even in loose snow it can still negotiate slopes if the right driving technique is used.

Diagonal driving

If the tracks spin and bury themselves in when driving up a steep slope, a diagonal driving technique must be used.

- First reverse the vehicle while turning at the same time, and then choose a course which is less steep
- A zig-zag pattern can often be adopted for diagonal hill-climbing. In order to gain as much altitude as possible when turning on to a new leg of the zig-zag course, steer straight uphill as far as possible. As soon as the tracks begin to slip, reverse the vehicle while turning to bring it on to the new course

If when driving diagonally uphill in loose snow a course is selected which has too steep a gradient so that the lower track begins to spin and bury itself in, reverse the vehicle and choose a new course which is less steep. When driving diagonally uphill on frozen or hard-packed snow, take special care that the vehicle does not begin to side-slip down the slope.

Fig. 13

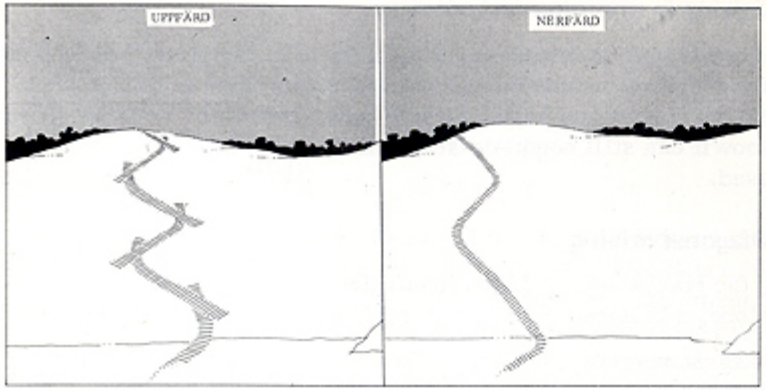


Fig. 14

Utilizing the terrain

Making zig-zag turns when driving up steep slopes is considerably facilitated by making use of the forward speed of the vehicle. The gradient of the slope will thus help the vehicle to turn while reversing. If it is necessary to drive repeatedly up a slope with loose snow which has a steeper gradient than the vehicle can manage, the following method can be adopted:

- Take a zig-zag course to the top. On the way down, take a shorter route with a steeper gradient
- On the next trip up, drive in the same tracks made on the way down. This will provide a much better grip for the crawler tracks, so that the vehicle will be able to climb to the top more quickly

At all times when driving the weasel, but especially in mountainous districts, remember to avoid jerky control movements and sudden acceleration.

Compacting of ski pistes

Compacting can be done in any direction on the slope. However, transverse driving should be avoided because precision driving of the weasel is more difficult with the rollers engaged. In deep snow it is advantageous to compact downhill and drive uphill with the rollers lifted.

PERIODIC MAINTENANCE

Every day

Before driving

Check that:

- The oil level in the engine comes between the maximum and minimum marks on the dipstick
- The oil level in the hydraulic tank comes up to about 3/4" (2 cm) under the filler opening
- There is sufficient fuel
- The brakes function properly

After driving

Remove snow and ice from the rollers.

After every 50 hours running

Change the engine oil.
Lubricate all points as shown in the lubrication chart.

Check that:

- The variator belt is correctly tensioned
- The drive chains are correctly tensioned
- The crawler tracks are correctly tensioned
- The pressure in the front tyres is 5 kp/cm^2 (71 lb/sq.in.) and in the other tyres 4 kp/cm^2 (57 lb/sq.in.)
- Both the fan belts and drive belts for the hydraulic pump (optional equipment) are correctly tensioned. It should be possible to press down the belts with the thumb about 7/16" (1-2 cm) at a point halfway between the belt pulleys
- The battery acid reaches 3/8" (10 mm) above the cell plates. Top up with distilled water if necessary. After topping up, let the engine run for a while to allow the water to mix properly so that freezing is avoided

Service the engine as described in the engine manual.

End- of -season maintenance

1. Thoroughly clean the weasel both internally and externally. Examine the vehicle and make a note of any parts which need replacing. Order the parts at once or in good time before the next season.
2. Check:
   - Crawler tracks for damage
   - Adjustment of track carriers
   - Bogie spring clamps
   - Rim bolts
   - Nuts for idler wheel bolts
   - Gearbox stay bolts
   - Gearbox attaching bolts
   - Engine mounting bolts
   - Variator frame bolts
   - Variator pulley bolts
   - Bolted joints on engine and exhaust system
   - Body bolts
3. Protect the engine against rust as described in the engine manual.
4. Change the oil in the gearbox. Drain the oil as soon as possible after running while it is still warm and flows easily.
5. Touch up the paintwork where necessary.
6. Carry out all-round lubrication in accordance with the lubricating chart.
7. Block up the vehicle and release the tension on the crawler tracks.

LUBRICANTS

Engine	Summer SAE 30, API specifikation: "For service MS" Winter SAE 10 W, API specifikation: "For service MS"
Gearbox	SAE 80 gear oil
Steering box	SAE 80 gear oil
Air cleaner	SAE 10 W engine oil
Hydraulic brakes	BLUE quality brake fluid
Points lubricated with grease gun	Ball bearing grease Aero-Shell Grease No. 14, Texaco Grease 5542 B, BP Grease LS 1
Points lubricated with oil can	SAE 20 engine oil
Hydraulic system	Texaco Rando Oil A or equivalent oil according to MIL-H-46001 Typ 1

Fuel and oil volumes

Fuel tank	40 l
Engine	2,8 l
Gearbox	6,5 l
Steering box	0,3 l
Brake system	0,3 l
Hydraulic system (Optional equipment)	6,0 l

LUBRICATION CHART

After 50 hour's running

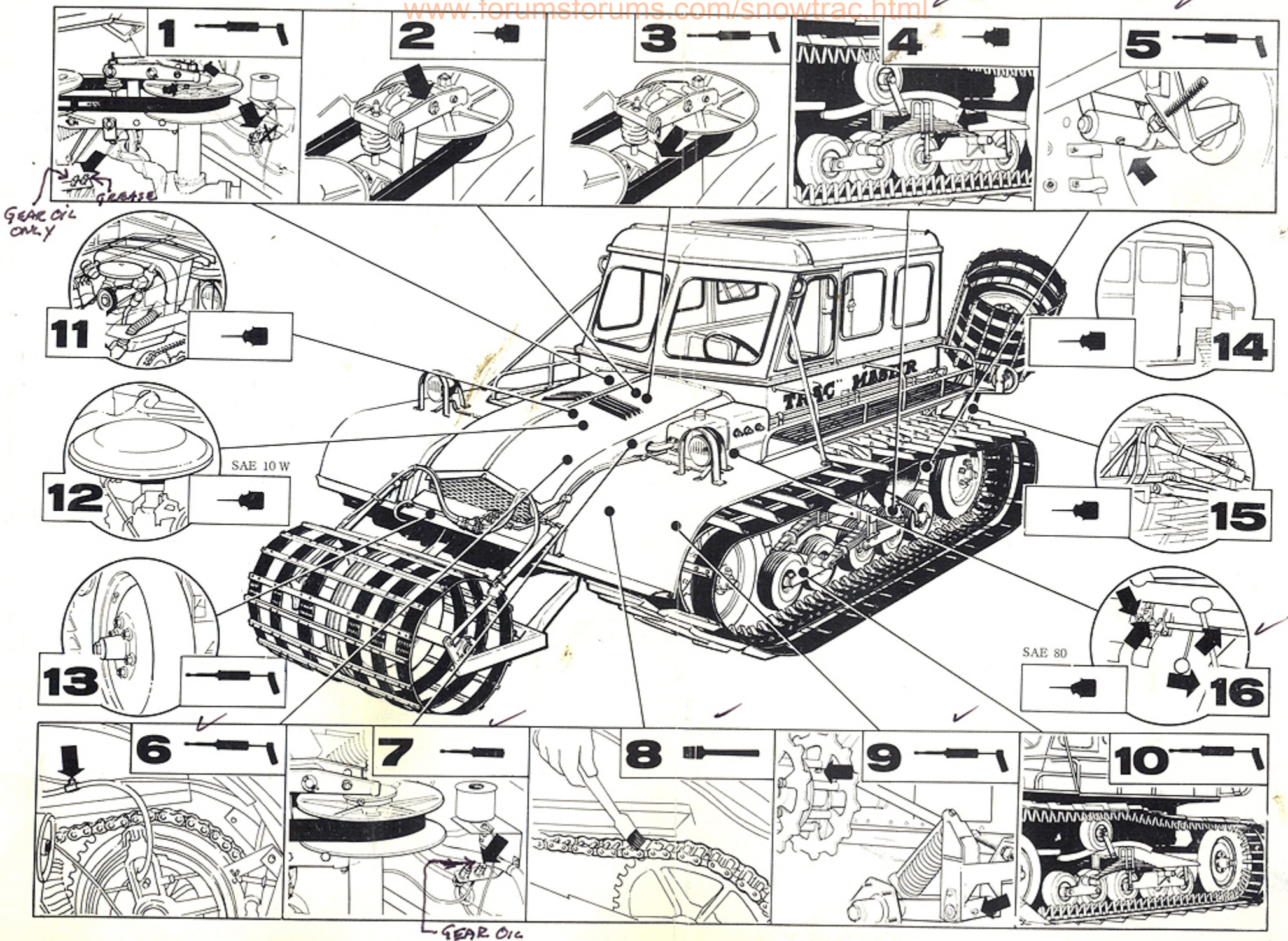
Pos. No.		Lubrication points Left	Right
● 1	Steering shaft upper bearing	1	1
	Thrust bearing bracket	1	1
	Variator pulleys	1	1
● 2	Variator, adjustment arms and links	12	
● 3	Link arm	1	
● 4	Bogie springs	1	1
● 5	Rear wheel suspension	1	1
● 6	Brake wire	1	1
● 7	Steering box	1	
● 8	Driving chains	1	1
● 9	Front axle bearing housing	1	1
	Front wheel suspension	1	1
● 10	Track carriers and idler wheel	7	7

Once a year

● 11	Engine control	3	
● 12	Clean and oil air filter	1	
● 13	Rear wheel hub	1	1
	Front wheel hub	1	1
● 14	Engine hood and door hinges	5	
● 15	Rollers	5	5
● 16	Pedal shaft	3	
	Gear box	1	

Symbols

Grease gun with Aero-Shell Grese No. 14,
Texaco Grease 5542 B, BP Grease LS 1
Oil can with SAE 20 engine oil
Grease gun with gear oil SAE 80
Brush dipped in engine oil SAE 20



ELECTRICAL EQUIPMENT

Fuses

The fuses are placed in a fusebox under the instrument panel to the left of the steering wheel jacket tube.

If a fuse "blows", first find out the reason and correct the fault before fitting a new fuse.

Never use fuses with a rating higher than 8 A – this can result in danger of fire!

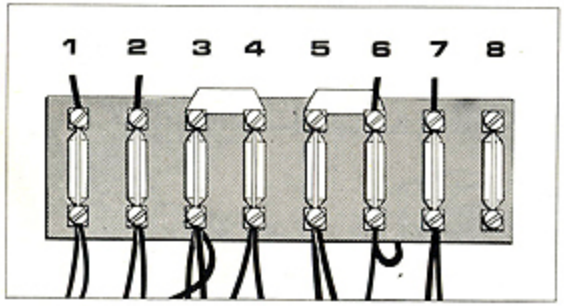


Fig. 16

Fuse	Circuits protected
1	Dipped-beam headlights
2	Full-beam headlights
3	Parking lights, number plate lamp
4	Rear lamps, instrument lights
5	Ignition coil
6	Horn
7	Windscreen wipers, interior light
8	Spare

Bulbs

Head lamps	Holder: BA 20d		12V - 45/40 W
Stop lights	"	BA 15s	12V - 18 W
Rear lights	"	BA 15s	12V - 5 W

MAINTENANCE INSTRUCTIONS

Engine

All adjustments and servicing work should be carried out in accordance with the instructions in the engine manual.

Variator

Variator belt tension

Check the tension of the variator drive belt occasionally. When correctly tensioned, it should be possible to press in the belt by thumb 20 mm (3/4") as shown in fig. 17.

The belt is tensioned by slackening the two nuts 1, fig. 18, an equal amount. The lower nut is slackened from inside the cab through an opening on the right-hand heater and defroster control, see fig. 7.

N. B. Do not adjust the nuts 2. These are properly adjusted when the variator is installed and their adjustment must not be altered when the belt is tensioned.

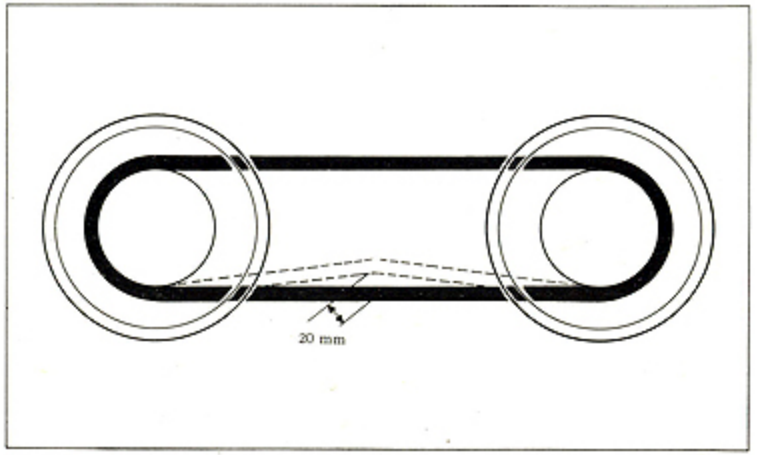


Fig. 17

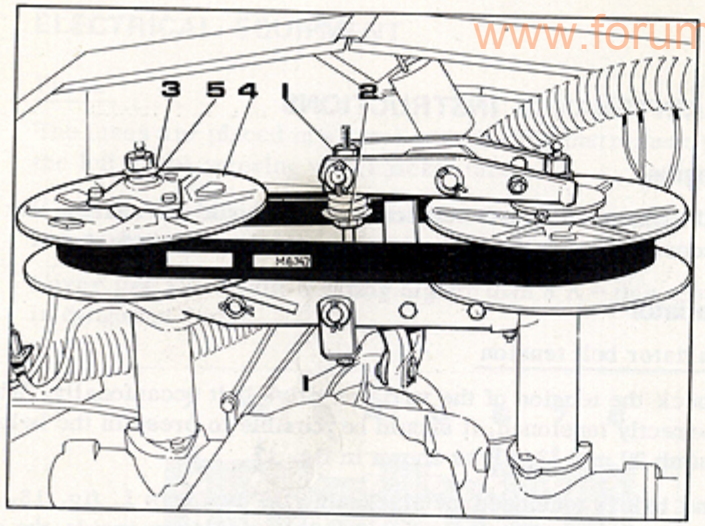


Fig. 18

Changing the variator belt

1. Unscrew the cooling air intake from the engine.
2. Bend down the tab washer 3, fig. 18, screw off the shaft nut on the right-hand steering shaft and pull off the upper half 4 of the variator pulley.
3. Remove the defective belt. Clean the variator pulleys if necessary.
4. Put on the new belt. Push the variator pulley 4 on the shaft. Put on the washer 5 and the tab washer 3. Screw on the shaft nut by hand.
5. Tighten the shaft nut while rotating the variator pulleys by hand or driving them round with the engine. If they are to be turned by hand, one driving chain must be taken off.
6. Check the belt tension and adjust if necessary.
7. Tighten the shaft nuts finally with a torque wrench to a torque of 23-26 kpm (166-188 lb. ft.), and lock with the washer 3.
8. Fit the cooling air intake.

Crawler tracks

Crawler track tension

Check the tension of the track once a week as follows:

1. Drive the weasel straight forward about 25 yards/metres on level ground so that the driving wheels pull evenly on both tracks.
2. The tension is checked on the upper part of the track between the front support wheel and rear drive wheel. Place a straight-edge or similar on top of the track between the points at which it is supported. The tension of the track is correct when it sags 4-5 cm (1 3/16"-1 9/16") as shown in the figure 19.
3. Tighten the tracks if necessary by moving the rear wheels with the nuts on the adjusting screws 1, fig. 19.
4. Drive the weasel another 10 yards/metres straight forward and check the track tension again.

If after a long period of use the tightening mechanism no longer suffices to produce the required tension, the tracks must be shortened. To do this, remove the track joining bolts, lap the track ends over each other one pitch more and then refasten the joint. Tension the tracks as described above.

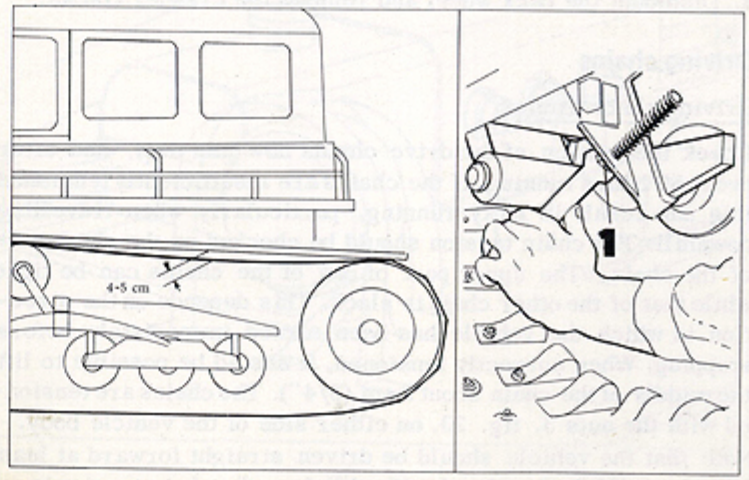


Fig. 19

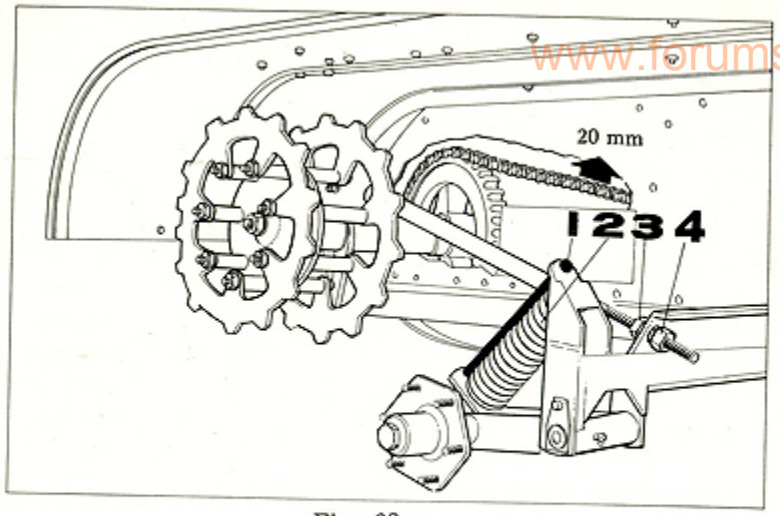


Fig. 20

Dismounting of crawler tracks

1. Mount the black tightening bolt 1, which is placed in the tool box, in the holes over the spring 2 behind the front wheel, fig. 20.
2. Slacken the chain tension with the nut 3 and the locking nut 4.
3. Slacken the crawler track tension with the nut 1, fig. 19.
4. Dismount the back wheel and remove the crawler tracks.

Driving chains

Driving chain tension

Check the tension of the drive chains now and then, and after every 50 hours running. If the chains are insufficiently tensioned this can result in jerky running, particularly when travelling downhill. The chain tension should be checked on the slack part of the chain. The upper part of one of the chains can be tight while that of the other chain is slack. This depends on the direction in which the vehicle has been turned immediately before stopping. When correctly tensioned, it should be possible to lift the middle of the chain about 2 cm (3/4"). The chains are tensioned with the nuts 3, fig. 20, on either side of the vehicle body.

Note that the vehicle should be driven straight forward at least 10 metres (33 ft.) on level ground before the chain tension is adjusted.

Rollers

The ground pressure and lifting force of the rollers are determined by the pressure in the hydraulic system. The pressure can be read off on a pressure gauge in the engine compartment. The ground pressure is limited by two overflow valves, one for the front roller and one for the two rear rollers. The lifting power is limited by a common valve for the front and rear rollers. The ground pressure of the front roller is 160 kp/cm^2 and the the ground pressure of the two rear ones is 65 kp/cm^2. as adjusted when the weasel leaves the factory.

Fig. 21 shows how the overflow valves are placed.

Increasing the ground pressure

To increase the ground pressure of the front roller loosen adjusting screw 1 och 3.

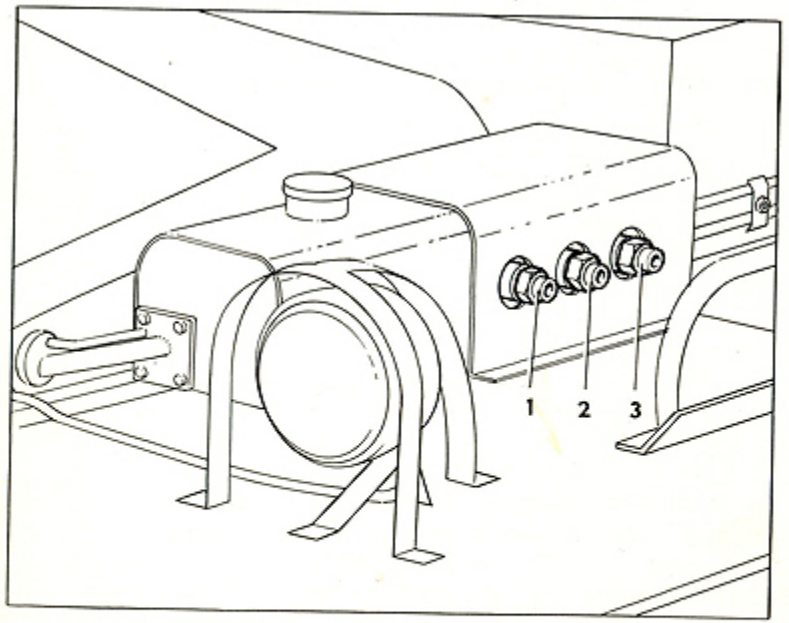


Fig. 21

Reducing the ground pressure

Tighten the adjusting screws 1 and 3 or both until a suitable pressure is obtained.

Increasing the lifting power

To increase the lifting power under difficult conditions when the rollers become filled with snow loosen screw 2, fig. 21. When conditions improve, the screw should be turned back to its former position to reduce the risk of overloading the hydraulic system.

Venting the hydraulic system

Air in the hydraulic system may be the cause of noise in the overflow valves when the rollers are engaged.

NOTE! When the rollers are being lifted the overflow valves may shriek even when the system is vented if the lever is not put in neutral immediately after lifting.

After changing the hydraulic oil or when the hydraulic system has been dismounted, the system is vented as follows:

- Put the overflow valves into hydraulic pressure
- Press in the adjusting screw of one overflow valve at a time until the oil emerges at the screw, fig. 21
- When oil has emerged at all screws the entire system is vented

OPTIONAL EQUIPMENT

Snow rollers	Description on page 12
Flashing warning light	Recommended when driving in places where there is a risk of colliding with skiers, for example, when preparing ski runs
Air heating unit	See page 11
Engine speed limiter	Prevents the engine from running at an excessive speed
Hour recorder	Registers the number of running hours
Spare parts kit	Contents:

Spare part and tool kit
Variator belt
Head lamp bulb
Oil pressure warning bulb
Fuse 25 A

Hub nut
Idler wheel, complete with hub bolt
1 metre jointing track

5 pcs. track grippers ST 7379
5 " track grippers ST 7380
5 " screws U6S 5/8"x38
5 " screws U6S 5/16"x32
5 " screws U6S 5/16"x25
5 " lubricators 1/8" 40°
5 " lubricators 1/8" straight