

BOMBI OPERATOR'S MANUAL

The following are trademarks of BOMBARDIER LIMITED:

J-5

SAFARI ®

MUSKEG ®

SKIDOZER ®

SW ®

BOMBI *

Copyright © BOMBARDIER LIMITED 1976
All rights reserved.

TABLE OF CONTENTS

Introduction	2
General information	3
Identification	3
A word of caution	4
Off-Highway operation	4
Design limitations	4
Operation	5
Instrument	5
Controls	5-6
Safety tips	6
Daily check list	6
Starting the engine	7-8
Driving instructions	8
Gear shifting	8
Steering	8
Stability	9
Stopping	9
Slopes	10
Uphill	10
Downhill	11
Sidehill	11
Drop-off	11
Preventive maintenance	13
Adjustments	14
Minor repairs	15-16
Lubrication chart & Schedule	17
Maintenance schedule	18
Cold weather operation	19
Trouble-shooting	20-21
Storage	22
Specifications	23-24
Index	25

INTRODUCTION

This Manual has been prepared to give you a step by step procedure of operation and routine maintenance. Please take the time to read it and follow the instructions carefully.

This Manual does not concern itself with major repairs, which may be required over the life of the vehicle. For information on the removal and replacement of components, please contact your authorized Bombardier Industrial Distributor who is vitally interested in your complete satisfaction with the vehicle which you purchased from him. He has factory-trained service personnel available and maintains a stock of genuine replacement parts. Should you require advice or assistance, or encounter any problems concerning your vehicle, he will be pleased to help you.

The descriptions contained in this Manual were in effect at the time that this book was approved for printing. Bombardier Limited reserves the right to discontinue models at any time, or to change specifications without incurring obligations.

GENERAL INFORMATION

The Operator of a BOMBI must know the basic concept of the vehicle in order to operate it properly and avoid any abusive usage which could result in premature failures or costly maintenance.

To be an efficient over-the-snow and soft terrain vehicle, the BOMBI needs to be as light as possible; this is achieved by using a sheet metal frame adequately braced and supported by a strong tubular sub-frame to which the individual wheel suspensions are bolted.

Steering is effected by means of a controlled differential: pulling on one steering lever slows down the drive axle gear of that side and speeds up the one on the other side. With this type of differential, there is traction on both tracks at all times even in turning.

Snow tracks with wedge-shaped aluminum crosslinks provide the best traction in all types of snow and should be operated only on snow-covered surfaces; extensive use on other terrain will not only cause excessive wear and damage to the tracks, but will place undue strain on the drive mechanism, especially when making turns, due to the width of the tracks and their high degree of traction. Use of a BOMBI equipped with such tracks on bare ground is considered abusive and therefore any damage caused by such use is not covered by warranty.

IDENTIFICATION:

Each Bombardier vehicle carries a data plate identifying the model and giving the serial number of the chassis, as well as the engine number.

On the BOMBI, this plate is located on the right hand back side of the cab. The serial number is also stamped on the right hand side of the front bumper.

Always refer to the vehicle serial number when ordering parts or when corresponding.

A WORD OF CAUTION

OFF-HIGHWAY OPERATION:

The very nature of off-highway operation of a vehicle is dangerous. Any terrain, which has not been specially prepared to carry vehicles, presents an inherent danger where angularity, snow substance and exact steepness are unpredictable. The terrain itself presents a continual element of danger, which must be accepted with pre-meditation by anyone venturing over it.

An operator who takes a vehicle off-highway should always exercise the utmost care in selecting the safest path and keeping close watch on the terrain ahead of him. On no account should the vehicle be operated by anyone who is not fully conversant with the "Driving Instructions" applicable to the vehicle, nor should it be operated in steep terrain by anyone who has not become thoroughly familiar with the vehicle's performance on flat terrain.

DESIGN LIMITATIONS:

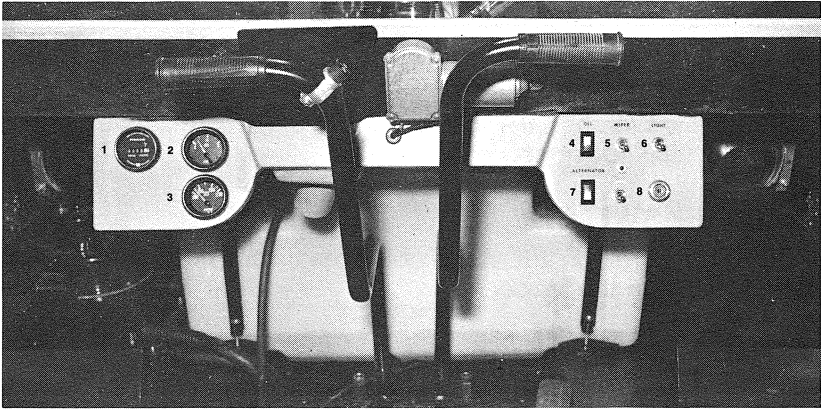
The BOMBI is designed primarily as a personnel carrier. The fundamental design concept is a compromise between ruggedness which calls for strength and weight and light-footedness to move over snow and very soft terrain.

The BOMBI is exceptionally rugged for its class but it is still a light vehicle by definition and its operation must be restricted to its proper purpose: transporting personnel or loads which should not exceed 1,000 lbs (454 kg) or pulling equipment or loads with a line pull not exceeding 1,500 lbs (681 kg).

It must be understood that the addition of weight to any part of the vehicle changes its gravitational stability and modifies its performance. Do not make radical changes to the centre of gravity of the vehicle without the approval of a Bombardier factory representative.

OPERATION

INSTRUMENTS AND CONTROLS:



INSTRUMENT PANEL

- | | |
|-------------------------------|---------------------|
| 1- Hour meter | 5- Wiper switch |
| 2- Fuel gauge | 6- Light switch |
| 3- Water temperature gauge | 7- Alternator light |
| 4- Oil pressure warning light | 8- Ignition switch |

HOUR METER:

It registers the number of hours the engine has been in operation. Service and maintenance operations detailed in the service schedule are to be performed on the basis of the number of hours registered on the hour meter.

FUEL GAUGE:

Indicates the approximate level of fuel in the tank.

WATER TEMPERATURE GAUGE:

Indicates the operating temperature of the engine's cooling system. The operating range is between 170 degrees F. and 210 degrees F. Should there be any over-heating condition, the engine should be stopped immediately to find the cause, and to bring remedy.

OIL PRESSURE WARNING LIGHT:

This light will turn on whenever the oil pressure drops below normal. Should it go on during normal driving operations, the engine

OPERATION

should be stopped immediately to find the cause of the low oil pressure, as extensive damage may result if the engine is operated with no oil pressure or abnormally low oil pressure.

SWITCHES:

All the toggle switches are pushed up for "ON" position and pushed down for "OFF" position.

STARTER SWITCH:

The key-type ignition and starter switch is turned completely to the right to activate the starter.

DIMMER SWITCH:

Located on the left hand steering lever.

DOMELIGHT:

The switch button is on the base of the dome light.

PARKING BRAKE:

Parking brake lever is located behind the gear shift lever. To engage, press the brake pedal and push the locking lever to the front.

CHOKE:

Located on the front part of the Operator's seat support plate.

SAFETY TIPS:

Keep a first-aid kit and a fire-extinguisher in a conveniently located place in the cab.

Never fill fuel tank when engine is running, near sparks or open flame, cigarette, etc.

Fasten and adjust seat belt and shoulder harness.

Do not attempt to perform repairs on a vehicle in motion.

Never leave engine running in an enclosed garage or shed.

Do not remove radiator cap when engine is hot.

DAILY CHECK LIST:

Preventive maintenance is most important and contributes to economical operating costs. A quick inspection of the vehicle before driving away will help to discover any abnormal wear or faulty operation, and corrective measures can be taken before failure occurs.

OPERATION

The following inspection should be made daily:

A- Before starting the engine, check:

- 1) the crankcase oil level
- 2) fan and alternator belts
- 3) coolant level in the radiator

B- Start the engine and while it is warming up, check:

- 1) all the gauges and instruments
- 2) undercarriage, suspensions and running gear
- 3) condition and tension of the tracks
- 4) broken or bent crosslinks and track-guards
- 5) loose or missing crosslink bolts
- 6) tires for abnormal wear or low pressure
- 7) alignment of the wheels
- 8) condition of drive sprockets; tightness of bolts
- 9) fuel or oil leaks
- 10) controls and levers for proper adjustment

Make all necessary corrections before driving off.

NOTE:

This daily inspection is most important and it takes just about the time required for the engine to warm up before it is put to work.

STARTING THE ENGINE

COLD ENGINE:

Depress the clutch pedal and shift transmission in neutral.

Pull manual choke located below driver's seat.

Depress accelerator pedal part way and hold.

Turn ignition switch to "start" position and release immediately when the engine starts.

CAUTION:

The starter should not be operated for longer than 30 seconds at any one attempt to start the engine and a waiting period of at least one minute between attempts should be observed to protect the starter from overheating.

OPERATION

WARM ENGINE:

Same procedure as for cold engine except do not pull choke.

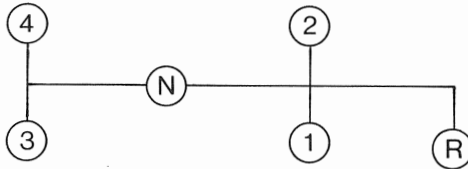
FLOADED ENGINE:

Depress accelerator pedal to the floor while cranking the engine.

DRIVING INSTRUCTIONS

GEAR SHIFTING:

The Bombi has a 4 speed synchromesh manual shift transmission. The clutch must be depressed for each gear change. The gear-shift lever positions are shown on the dash board; they are the following:



To engage into the reverse position, the gearshift lever has to be pressed down.

CAUTION:

The engine should never be allowed to lug. If the RPM drops and the engine lugs, shift into a lower gear ratio.

STEERING:

Steering is effected by means of the steering levers, through the planetary-type controlled differential. Applying the brake on one drum of the differential slows down the axle gear of that side, with a proportionate increase of the speed of the axle gear on the other side. One track running faster than the other makes the vehicle turn. With this type of differential, there is traction on both tracks, even when turning. Levers should be pulled sharply.

OPERATION

CAUTION:

Release steering levers completely when not in use for steering or braking. "Dragging" the bands will cause differential overheating and unnecessary wear of the bands.

STOPPING:

Stopping is effected by pulling on both steering levers simultaneously. Avoid sudden stops. Slow down the vehicle, using compression of the engine, whenever possible, and pull on both levers gradually and evenly.

WARNING:

The foot brake is an emergency brake ONLY: NOT A SERVICE BRAKE. The foot brake should be used only in extreme cases where a sudden stop is an absolute necessity.

STABILITY:

All tracked vehicles have a center of gravity. This is a calculated point, normally within the structure of the vehicle, about which all the weight of the vehicle is distributed. When the center of gravity of the vehicle passes beyond an imaginary line drawn vertically upwards from the further-most point of support of the tracks, the vehicle will tip over or roll over.

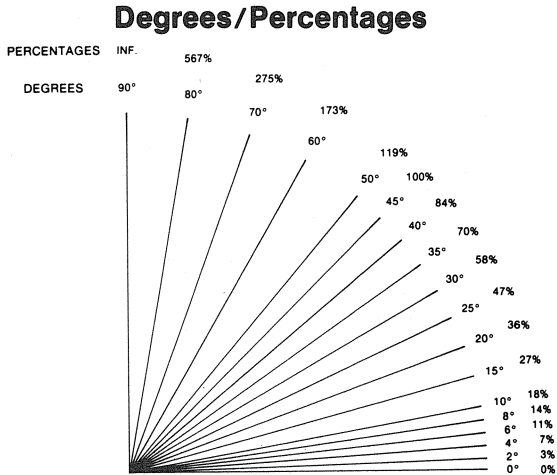
This can be likened to the action of a seesaw with the vertical line forming the center or pivot of the seesaw. When more weight is placed on one side than on the other the seesaw will move in that direction.

While these limits can be determined with accuracy under ideal conditions, the skill and ability of the operator, the loading of the vehicle and actual terrain conditions, constantly influence and change these limits during operation of the vehicle.

Therefore one must evaluate every situation carefully and as a separate case. Never assume that the vehicle can traverse a certain piece of terrain, because it has passed there previously, or because another vehicle has passed before it, or because the terrain appears to be within the known performance limits of the vehicle.

SLOPE CONVERSION CHART:

It is a general trade practice to discuss slope angularity in terms of percentage. For those who are not familiar with this form of measurement, the following chart converts percentage of slope into degrees of angle.



WARNING:

In addition to the general operational limits shown above, the published specifications for Bombardier tracked vehicles state maximum performance limits for uphill, downhill and sidehill operations. These limits are determined with the vehicle stationary on a firm, flat surface and the extent to which they can be approached in practice will depend on the expertise of the operator and his familiarity with the vehicle.

Moreover, under actual operating conditions, the slope of the terrain is constantly changing and sudden local variations may result in slopes which exceed operational limits, although the overall slope of the terrain is within safe operational limits.

UPHILL DRIVING:

Select the gear box range and transmission speed that will give you the necessary power to climb the slope. Gear changing at a critical point in a slope may cause track-slippage and digging in; therefore, select the gear ratio that will provide the power to climb the slope without stalling. Should the tracks start to spin and dig in, back off and choose an alternate route.

WARNING:

Beware of soil erosion or obstacles that suddenly increase the climbing angle beyond the point of balance of the vehicle, and could result in rearward roll-over.

OPERATION

DOWNHILL DRIVING:

As a rule, tracked vehicles can climb slopes that are steeper than they can safely descend. Therefore, it is essential to assure that a safe route exists to descend a slope before you climb it. Prior to descent, engage first gear and proceed slowly downhill, using the steering handles for additional braking.

WARNING:

Avoid using the foot brake in a downhill situation since its application may result in tip-over.

Always proceed very slowly and select the path with the least slope and minimum of obstacles. Avoid objects that could increase the steepness of the incline or cause the front of the vehicle to drop suddenly.

WARNING:

Sudden stops or too steep a slope can cause the vehicle to tip over forward. This possibility is increased as vehicle speed and/or hill steepness is increased.

NOTE:

If caught in a snow avalanche situation, or if the Bombi starts "tobogganning", accelerate slightly to move faster than the slide, in order to regain control.

SIDEHILL DRIVING:

Whenever possible, sidehill operation should be avoided. If such operation is necessary, do so with extreme caution. Side-hilling on steep inclines could result in roll-over. In addition, slippery or unfirm surfaces could result in uncontrollable side-sliding. Avoid all objects or depressions that will intensify the raising of one side of the vehicle higher than the other, thus causing roll-over.

DROP-OFFS:

The operation of a tracked vehicle differs greatly from that of a 4 wheeled vehicle. For example, a 4 wheeled vehicle will "bottom-out" and usually stop if either the front or rear wheels are driven over a drop-off. A tracked vehicle, however, will continue to proceed over the drop-off until its center of gravity passes the edge of the drop-off and the vehicle plunges forward. If the drop is sharp or deep, the vehicle will nose-dive and tip-over.

OPERATION

WARNING:

Avoid negotiating drop-offs. Reverse and select an alternate route.

PULLING EQUIPMENT:

Any equipment pulled behind the Bombi should be well secured. Safety chains should always be used.

PARKING:

Park on a flat surface, whenever possible. To apply the parking brake, depress the brake pedal and pull on the brake lever located near the gearshift lever. Engage the transmission in low gear or reverse.

PREVENTIVE MAINTENANCE

The following inspections and checks should be made weekly and any necessary corrections made immediately to prevent possible failures.

1- Differential Oil Level:

The oil filler plug is on the right hand side of the frame in front of the axle housing. The oil level should be up to this plug.

2- Battery Electrolyte Level:

If addition of water is necessary during freezing weather, it should be done at beginning of a working day so that it will mix with the electrolyte and will not freeze to cause battery damage.

3- Tire Pressure:

Should be 60 lbs in all tires.

4- Tracks:

Replace any broken crosslinks or track-guards. Check for loose bolts and tighten.

5- Sprockets:

Inspect for wear; check the bolts and tighten if necessary.

6- Suspensions and wheels:

Check the condition of the trailing arms; look for loose bearings and correct if necessary.

7- Driving Controls:

Check the free play of the steering levers which should be approximately 3 to 5 inches.

ADJUSTMENTS

ENGINE:

See engine Manufacturer's Maintenance and Operator's Manual supplied with vehicle.

TRACKS:

The tracks are adjusted by means of hydraulic track-tensioners located between the two rear wheels. To tighten the tracks, inject grease by means of a grease gun, in the grease fitting of the track-tensioner. To loosen the tracks, bleed the track-tensioner by means of the bleeder tool which releases grease through the grease fitting.

The tracks are correctly tensioned when the top part is straight; they are too tight if the crosslinks make an indentation in the rear tires.

WHEEL BEARINGS:

To correctly adjust a wheel bearing, tighten the axle nut firmly, then back it off approximately a 1/4 of a turn to allow the installation of the cotter pin.

STEERING BRAKE BANDS:

Steering brake levers should have a free play of approximately 3 to 5 inches at the handle. The adjusting nut is located at the bottom of the levers. Do not adjust too light as dragging bands will cause rapid wear of the lining and will generate excessive heat.

MINOR REPAIRS

REMOVAL OF TRACK:

- 1- Release the tension of the track by bleeding both track-tensioners.
- 2- Remove the bolts of the two crosslinks which are on the overlap-joint; the two ends of the track will come apart and the track can be removed.

INSTALLATION OF TRACK:

A- STANDARD TRACK:

- 1- Assemble the overlap-joint.
- 2- Jack up the Bombi.
- 3- Place the track alongside the Bombi so that the angle of the crosslinks faces the front.
- 4- Install the track over the sprocket, then on top of the wheels and over the rear wheel.
- 5- Adjust by injecting grease with a grease gun in the fitting of the hydraulic track-tensioner.

B- SNOW TRACK WITH ALUMINUM CROSSLINKS:

- 1- Assemble the overlap-joint.
- 2- Remove 2 consecutive crosslinks and track-guards.
- 3- Jack up the Bombi.
- 4- Place the track alongside the Bombi, so that the narrow belt is on the inside.
- 5- Place the section of the track where the 2 crosslinks were removed over the sprocket.
- 6- Pull track to the rear while passing it over the wheels and around the rear wheel.
- 7- Start engine, engage transmission and turn track to bring section with crosslinks removed to a convenient place for reinstalling the crosslinks.
- 8- Adjust tracks by means of the hydraulic track-tensioners.

CHANGING A SPROCKET:

To change a sprocket, the track has to be removed. It is then a matter of removing the nuts that hold the sprocket to the hub.

CHANGING A TIRE:

To change a tire, the complete wheel has to be removed from the vehicle. Proceed as follows:

MINOR REPAIRS

- 1) Loosen the track by bleeding the hydraulic track-adjuster.
- 2) Jack up the vehicle to raise the wheel higher than the track-guard.
- 3) Spread both sides of the track apart, and hold them apart by means of a board or a piece of 2 × 4 about 27" long.
- 4) Remove the hub cap, the cotter pin and the spindle nut, and pull the wheel out.

NOTE:

To remove the rear wheel, the track has to be removed.

To reinstall the wheel, proceed in reverse order to the removal.

CAUTION:

Care should be taken to protect the wheel seal, and to prevent dirt from getting into the wheel bearing.

CHANGING A TRAILING ARM:

Remove the wheel as per instructions for changing a tire. Remove the bolt that tightens the trailing arm to the Flexitor shaft. Pry the trailing arm off the Flexitor shaft.

When reinstalling the trailing arm, make sure that it is installed at the correct angle. The best way to insure that the new trailing arm is installed at the correct angle is to make a mark on the Flexitor shaft, where the slot of the trailing arm is located. The slot in the new trailing arm should be at the same location.

NOTE:

There are R and L trailing levers and this indication is stamped on each trailing lever. Be sure to use the proper one when making a replacement.

LUBRICATION CHART AND SCHEDULE

Lubrication points	Change or service interv.	Capacity	Specifications of recommended lubricants
Engine including Filter	Every 100 hrs	3.12 imp. qts. 3.75 U.S. qts. 3.5 litres	SAE 20W-40 at 32°C & above SAE 10W-30 betw. 32°C & 0°C SAE 5W-20 below 0°C
Transmission	Every 1000 hrs	1 imp. qt. 1.2 U.S. qts. 1.136 litres	EP SAE 80
Differential	Every 200 hrs	7 imp. qts. 8.4 U.S. qts. 8 litres	Esso Torque Fluid Number 56 or equivalent
Wheel bearings	Every 50 hrs (daily if working in water)	8 fittings	Good Quality Multi-purpose grease with superior shear stability and water-resistant qualities
Driveshaft U-joints	Every 100 hrs	3 fittings	
Steering levers	Every 100 hrs	Smear grease under lever plates	
Pedals	Every 100 hrs	5 fittings	

MAINTENANCE SCHEDULE

C—Check
I—Inspect (adjust or correct if necessary)

L—Lubricate
R—Replace

ITEM	Every 10 hours or daily	Every 50 hours or weekly	Every 100 hours	Every 200 hours	Every 600 hours	Once a year
Engine oil	C		R (incl filt)			
Transmission oil		C			R	
U-Joints			L			
Wheel bearings		L				
Differential oil		C		R		
Steering levers			L			
Radiator Coolant	C					R
Battery		C				
Brake Bands				I		
Air Filter						I
Fuel Filter						R
Hydraulic oil		C				R
Tracks	C	I				
Tires	C	I				
Sprockets	C	I				
Suspensions	C	I L				

COLD WEATHER OPERATION

When a vehicle is called upon to work in exceedingly cold temperatures, certain basic precautions should be taken in order to protect it, as well as to prolong its useful life.

Bombardier vehicles leave the factory with anti-freeze solution in the cooling system for protection up to -35°F (-37°C). Make certain that if colder temperatures are anticipated, additional anti-freeze is added for adequate protection.

The battery should be kept fully charged at all times and should never be allowed to run down.

The oil in the crank case should be of the recommended viscosity. Refer to the Operator's Manual supplied by the engine manufacturer.

A thermostat installed as original equipment is suitable for cold temperatures.

If the vehicle is left outdoors, in extremely cold temperatures, special precautions should be taken when it is started after having been idle for quite sometime. The engine should be warmed up at slightly faster than idle before putting it to work. This will give a chance to the oil in the crank case to warm up for proper lubrication. Driving a cold engine at full throttle will cause excessive wear on all the moving parts, and will result in premature failure.

TROUBLE—SHOOTING

ENGINE: See engine manufacturer's Manual.

CLUTCH:

Trouble	Probable Cause	Suggested Remedy
Slipping	1- Faulty adjustment of release lever. 2- Weak or broken pressure plate springs. 3- Worn or glazed clutch disc facings. 4- Oil or grease on disc facings	Adjust linkage Repair Replace Replace

TRANSMISSION:

Trouble	Probable Cause	Suggested Remedy
Hard to shift	1- Improper adjustment of clutch pedal. 2- Wear in gearshift housing 3- Incorrect grade of lubricant	Adjust Replace Change

DIFFERENTIAL:

Noisy	1- Worn, pitted or chipped gears 2- Worn, pitted or chipped bearings 3- Worn shafts 4- U-joints not aligned properly	Replace gears Replace bearings Replace Align
Noisy	1- Scored crown and pinion gears 2- Bearings worn or pitted 3- Improper adjustment of crown and pinion	Replace Replace Adjust
Excessive Back Lash	1- Worn gears 2- Worn carrier bearings 3- Worn U-joints	Replace Replace Replace
Oil Leaks	1- Faulty gaskets or seals	Replace

TROUBLE—SHOOTING

PROPELLER SHAFT:

Vibration or Noise	1- Joints not aligned 2- Bent 3- Out of balance 4- Worn bearings and cross	Correct Replace Correct or replace Replace
STEERING:		
Does not steer	1- Steering brake bands too loose 2- Faulty differential	Adjust Repair
Steers to One side only	1- Broken axle - 2- Broken axle gear 3- Broken steering band	Replace Repair differential Replace
Veers to Side	1- Uneven track-tension 2- Trailing levers at incorrect angle 3- Broken wheel bearings 4- Low tire pressure on 2 or 3 tires on same side 5- Faulty track belts	Adjust tracks Correct Replace Correct Correct or replace

PRECAUTIONS FOR STORAGE

If the vehicle is to remain idle for a prolonged period of time, certain precautions have to be taken so that it will not deteriorate during this idle period. The following storage procedure is recommended.

- Clean the machine thoroughly
- Make a thorough inspection and make all the necessary repairs.
- Lubricate all points mentioned in the lubrication schedule.
- Prepare the engine according to the instructions found in the Maintenance and Operator's Manual prepared by the engine Manufacturer.
- Check the oil in the differential; if it is contaminated, drain and refill with new oil.
- Lift the vehicle off the ground and block it to take the weight off the suspension and tracks.
- Release the track-tension on both tracks
- Remove the battery and put it on a trickle charge or check and charge monthly.

SPECIFICATIONS

Displacement 98 C.I.D. 1600 cc
Horsepower-Brake 57 HP to 4000 RPM (SAE)
Governed RPM 4500
Torque 80.5 ft. lbs. 11.1 kg m

POWER TRAIN:

Transmission
 — Type Manual — 4 Speed Synchronmesh
 — Model Ford
 — Ratios 1st — 3.58 to 1
 2nd — 2.01 to 1
 3rd — 1.397 to 1
 4th — 1.00 to 1
 Rev. — 3.321 to 1
Clutch Dry, single disc
 7-1/2" dia. (19.05 cm)
Differential Planetary controlled —
 — RATIO: 5.89 to 1
Drive Sprockets Rubber and fabric
Type Disc brake on drive line.
 — Service Simultaneous pulling of steering levers.
 — Parking Locking device on brake disc

DIMENSIONS:
Overall Length 102" 2.59 m
Overall Width
 Summer Tracks 60" 1.52 m
 Winter Tracks 70" 1.78 m
Overall Height
 Winter Tracks 71-3/4" 1.82 m
 Summer Tracks 70-1/2" 1.79 m
Ground Clearance 12-1/2" 32 cm
Shipping Weight 2375 lbs. 1075 kg
 (Basic Vehicle)

OPERATIONAL:

Load Capacity 1000 lbs. 453.6 kg
Maximum Speed 20.5 MPH 33 Km/hr
Inside Turning Radius 4 ft. 1.22 m
Maximum
Gradeability: Up to 60%
 Sidehill Up to 60%
 Uphill

ENGINE:

Make Ford
Model 1600 cc
No. of Cylinders 4

SPECIFICATIONS

STEERING:

Manual through controlled differential.

Width Summer: 18" 45.72 cm
 Winter: 23" 58.42 cm
 Type of Belts Rubber and fabric
 Width Summer: 6-3/4" 17.14 cm
 Winter: Inner 6-3/4" 17.14 cm
 Winter: Outer 11-3/4" 29.85 cm

ELECTRICAL:

Voltage 12 volts
 Battery Capacity 85 amps
 Alternator Capacity 28 amps
 Ground Negative

SUSPENSION:

Wheels independently mounted on rubber torsion.

CHASSIS:
 Type Toboggan
 Forging Depth 20" 50.80 cm

WHEELS:

Quantity 8
 Type of Tire Pneumatic
 Size 4.60 x 10
 Ply Rating 6 ply

CAB:
 3 individual seats each equipped with safety belts.
 Metal ROPS approved.

TRACKS:

Type Summer: Rubber belts with steel crosslinks
 Winter: Rubber belts with aluminum crosslinks.

CAPACITIES:

	Imp.	U.S.	Liters
Cooling System	9 qts	10.8 qts	10.22
Fuel Tank	9.57 gal.	11.5 gals.	43.53
Engine Crankcase	3.12 qts	3.75 qts	3.55
Transmission	2 qts	2.36 qts	2.23
Differential	1.75 qts	2.1 qts	1.99

INDEX

ITEM	PAGE	ITEM	PAGE
Adjustments.....	14	Panel	5-6
Band steering	14	Parking	6-12
Battery	13	Pressure tires	13
Bearings	14	Propeller shaft	21
Caution	4	Repairs	15
Check list	6	Safety tips.....	6
Choke	6	Shifting gears	8
Cold weather	19	Slopes	10-11-12
Controls	5	Specifications	23-24
Differential	20	Sprocket	13
Driving.....	8-10-11	Stability.....	9
Fuel gauge	5	Starting	7
General information.....	3	Steering	8
Hour meter	5	Stopping	9
Identification	3	Storage	22
Instruments	5	Suspension	13
Introduction.....	2	Switches	5-6
Limitations	4	Temperature	5
Lubrication chart	17	Tires.....	13-15
Maintenance	13-18	Tracks	13-14-15
Off-Highway operation	4	Trailing arm	16
Oil level	13	Transmission	20
Oil pressure	5	Trouble-shooting	20-21
Operation	5-6-7	Wheel.....	13-14

NOTES