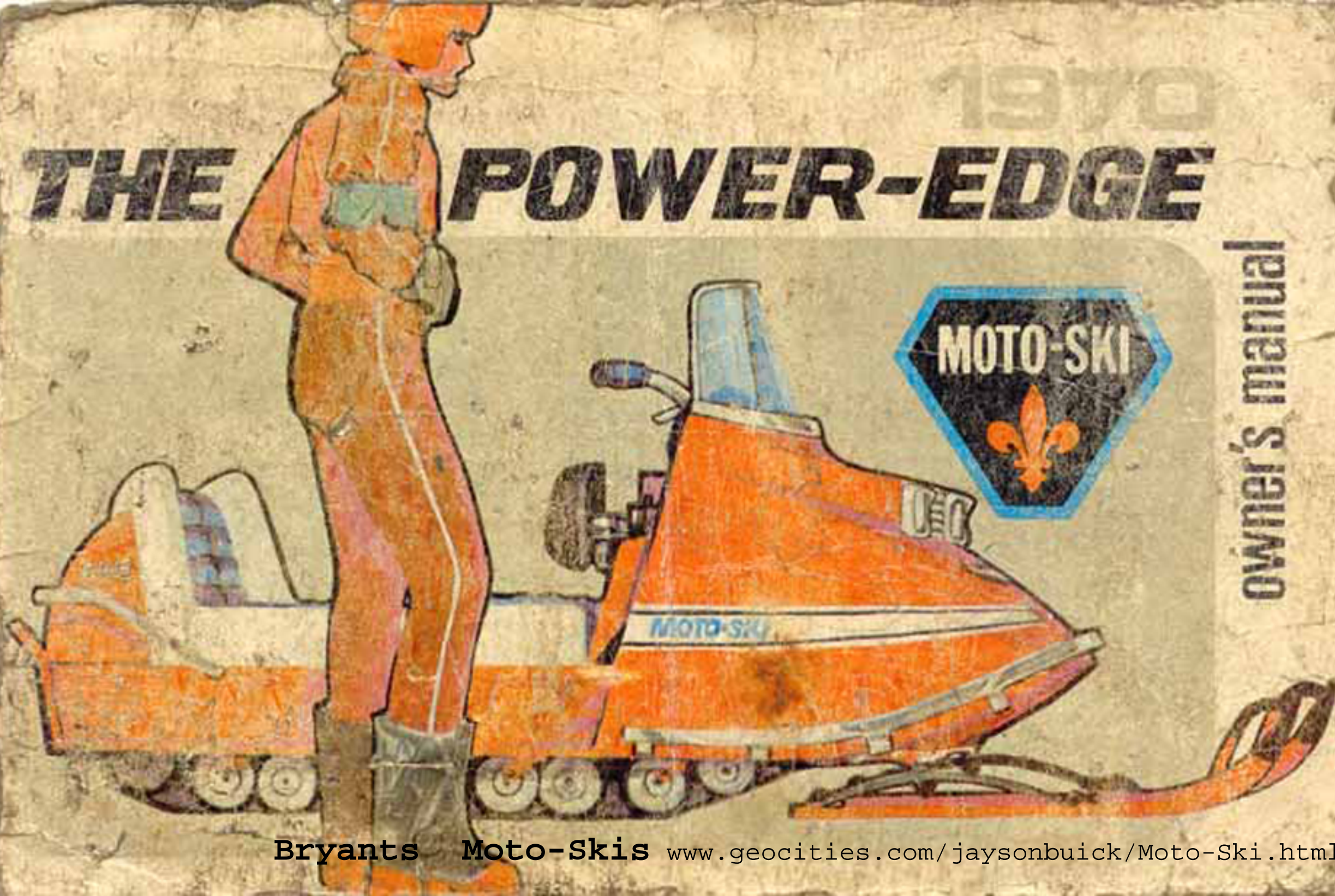


THE POWER-EDGE



MOTO-SKI

owner's manual

* GUARANTEE *

We guarantee the original retail buyer that each new MOTO-SKI snow vehicle is free of defects in material and workmanship, provided that there is no negligence in its maintenance and that it is used under normal conditions. The manufacturer's obligation under this guarantee is strictly limited to the replacement of any part or parts determined to be defective and this for a period of one (1) year from the date of delivery and registration.

TRACK: In addition to the guarantee outlined in the preceding paragraph, the track with which the one cylinder MOTO-SKI is equipped is guaranteed for a period of two (2) years against track separation from the date of delivery.

ENGINE: The engine, its components, and the electrical system are guaranteed separately by the manufacturer for a period of 90 days against any defect in material and workmanship according to the terms specified in the first paragraph.

NOTE: This guarantee does not apply to any MOTO-SKI which participates in races, rallies, competitions, or which is rented

or driven on surfaces other than snow or ice.

This guarantee does not cover units repaired or modified by unauthorized persons; nor does it cover replacement of parts by parts other than genuine MOTO-SKI parts, which according to our judgment, can affect the efficiency, stability, and dependability of the machine; there is no guarantee on any MOTO-SKI which has been subjected to misuse, negligence, or accident. This guarantee does not cover the normal wear and tear of parts such as filters, spark plugs, points, belts, skis.

This guarantee supersedes all other legal guarantees, expressed or implied, and all other obligations or responsibilities. We do not assume, nor do we authorize anyone else to assume any other responsibilities, or to change the terms of this guarantee.

The Company cannot be held responsible for any loss or damage caused by a MOTO-SKI.

Any claim should be made to the MOTO-SKI dealer where the MOTO-SKI was bought. Claimants should include the serial number of both the motor and model of the MOTO-SKI concerned.

INDUSTRIES BOUCHARD INC.

GUARANTEE REGISTRATION

Name and address
of owner: _____

Name and address
of dealer: _____

Dealer's signature _____ Owner's signature _____

Name and address
of distributor: _____

Model: _____

Serial number _____

Motor: _____

Serial number: _____

Date of purchase: _____

Your 1970 Moto-Ski

THE POWER-EDGE



MOTO-SKI 1970 is a masterpiece of mechanical craftsmanship that's sure to thrill you.

MOTO-SKI 1970 means high performance, safe operation, and handsome styling all in one. Here are just a few of its outstanding features:

- MOTO-SKI's famous three-ply, rubberized nylon, steel-cleated tracks are warranted against track separation for two years on all (1) single cylinder models
- new rectangular twin headlights with instantly replaceable 35-Watt bulbs give safer, wider vision for night riding
- new tinted windshield for safer, glare-free visibility
- Thermo Safety Control Cables for accelerator lever and brake lever assure efficient operation and won't block up even in the coldest weather.

Your Owner's Manual is a valuable source of information. It will help familiarize you with the mechanical parts of your MOTO-SKI and provide you with some useful tips concerning maintenance and effective operation of your MOTO-SKI. Read the instructions carefully, then always keep the manual close at hand for easy reference.

NOTICE: To fully enjoy your MOTO-SKI and avoid problems, it is extremely important that you be familiar with State or Provincial laws governing the operation of a snowmobile.

THE POWER EDGE

The controls

- A. The **CONTROL LEVERS** are situated on the handle-bar itself (fig. 1, a); the accelerator lever (fig. 1, b) on the right; the brake lever (fig. 1, c) on the left. Press the former and your MOTO-SKI accelerates. Press the latter and your MOTO-SKI stops.
To slow down, simply release the accelerator lever (fig. 1, b) and press lightly on the brake lever (fig. 1, c).
- B. To **START** (fig. 1, d), turn the key from "OFF" to "ON". For models with an electric starter, turn the key from "OFF" to "ON", and then to "START".
- C. The **CHOKE** is located on the carburetor filter (fig. 4, r).
- D. The **PRIMER BUTTON** is located on the top of the carburetor (fig. 2, g). Press it twice (not more) to start your MOTO-SKI engine.
- E. The **COMPRESSION RELEASE LEVER** is located on the center of the handle-bar, (fig. 3, n). Pushing it to the left lowers the engine compression for easier starting. When the motor starts, move the lever back to its original position.
- F. Each MOTO-SKI is equipped with a **REWIND STARTER** located on the right side below the dashboard, (fig. 4, p). On MOTO-SKI models equipped with an electric starter, the manual starter can be used in emergencies (e.g. the battery is defective).

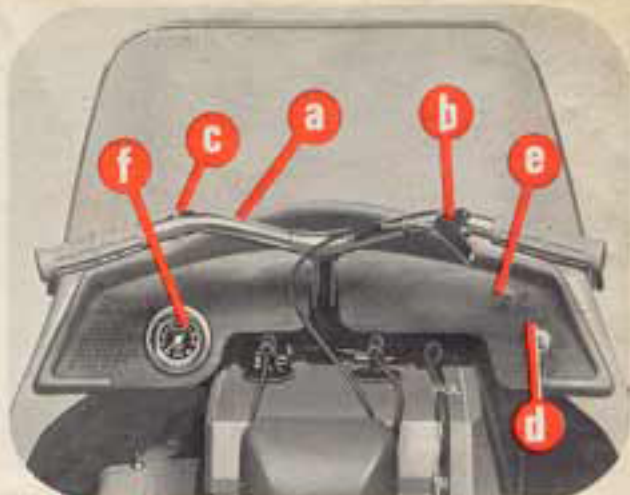


fig. 1

fig. 3



EDGE

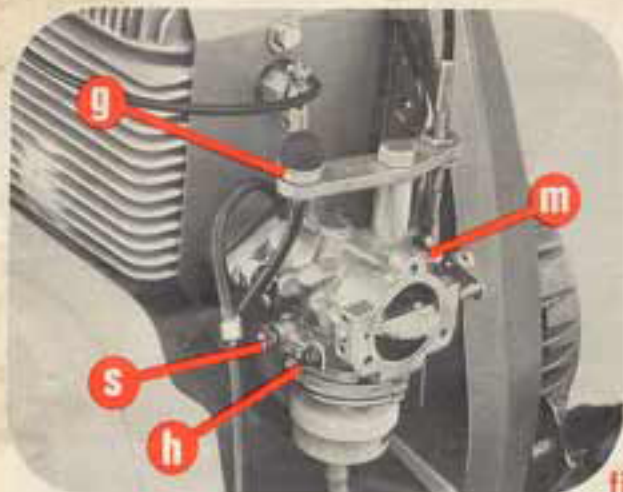


fig. 2

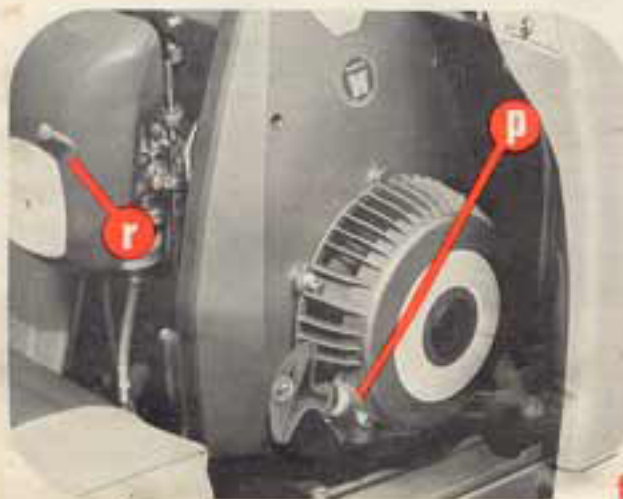


fig. 4

- G. **FRONT AND REAR LIGHTS** may be switched on by turning the ignition key to the "LIGHT" position (fig. 1, d). The engine, however, must be running when this is done. **SECURITY LIGHT** (fig. 1, e): It is possible that the bulb of one of the headlights may burn out, causing both lights to go out. If this happens, the headlight which is still good may be switched on again by moving the **SECURITY LIGHT** switch to the left or to the right.
- H. The **CARBURETOR ADJUSTMENT SCREWS** are located on the carburetor itself (fig. 2):
1. **IDLE ADJUSTMENT SCREW** (fig. 2, s); gradually turn screw clockwise, as far as it will go, then re-open it $\frac{3}{4}$ to 1 turn anti-clockwise.
 2. **MAIN ADJUSTMENT SCREW** (fig. 2, h); turn screw clockwise as far as it will go, then re-open it 1 to $1\frac{1}{2}$ turns anti-clockwise.
 3. **SPEED ADJUSTMENT SCREW** (fig. 2, m); loosen screw so it no longer touches the lever, then tighten it $1\frac{1}{4}$ to $2\frac{1}{2}$ turns.
- I. **SPEEDOMETER** (fig. 1, f), located on the left side of dashboard.

Fuel

Your MOTO-SKI engine is lubricated by the proper amount of oil added to the gasoline. During the first 10 hours of operation the

following ratio should be followed closely: one (1) quart of oil to three (4) gallons of gasoline. After 10 hours, maintain a ratio of one (1) quart of oil to four (5) gallons of gasoline (regular). If too much oil is added, the engine will carbonize. On the other hand, if too little oil is added, the engine will overheat with the result that certain working parts such as con-rod, piston, etc., may be damaged.

Use MOTO-SKI oil or its equivalent for two-cycle engines.

HOW TO MIX FUEL

1. Never mix oil and gasoline directly into the fuel tank (fig. 5, a) of your MOTO-SKI.
2. First, pour oil into a clean container, then add gas and shake well.
3. Now pour mixture into your MOTO-SKI's fuel tank using a filter funnel.

Engine starting and "breaking in" procedures

A. BEFORE STARTING, CHECK:

1. FUEL.
 - a) Make sure the fuel tank is full.
 - b) Rock the machine from side to side a couple of times to make sure the oil and gasoline are properly mixed.

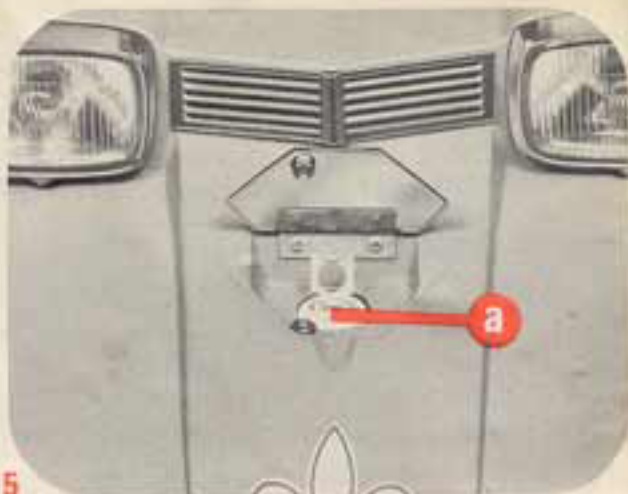


fig. 5

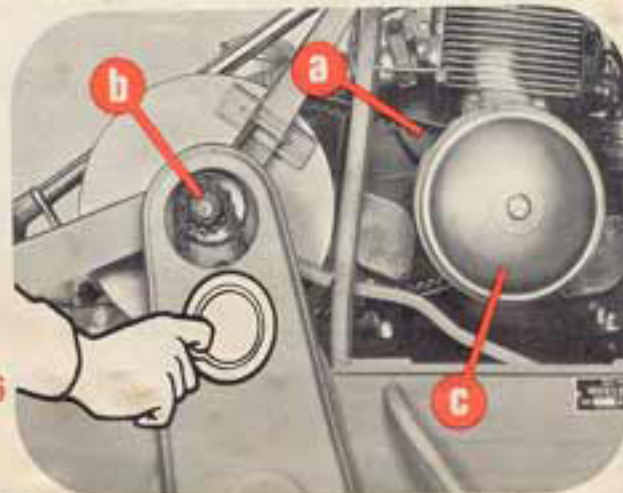


fig. 6



2. CONTROL LEVERS.

Be sure nothing interferes with the proper operation of the handle-bar, throttle lever, and brake lever.

3. DRIVE BELT.

(fig. 6, a) Check to see that it is properly aligned and that it does not show signs of wear. See page 6.

4. DRIVE CHAIN.

(fig. 6, b) Check for proper tension. See page 7.

5. TRACK.

Make sure that no rivets are missing and that track is not torn or damaged. Check also for proper tightness and alignment. See page 7.

Starting instructions

1. REWIND STARTER.

- a) Move the compression release lever to the left. (for motor 317cc only).

- b) Pull choke out (unless engine is already warm, in which case choke is unnecessary).
- c) Press primer button twice (no more) if engine is cold.
- d) Turn key to "ON" position.
- e) Grasp the rewind starter handle and take up slack until resistance is felt. Quickly pull the cord out (about 2 feet). Don't release handle as cord rewinds, but guide it back to its original position.
- f) When the engine starts, (1) move the compression release lever to the right and (2) push the choke back in.

2. ELECTRIC STARTER.

- a) Press primer button twice (no more) if engine is cold (fig. 2, g)
- b) Turn key to "ON" position, then to "START" position.
- c) When engine starts, let the key return to the "ON" position. If the first attempt to start fails, wait a few seconds before attempting to start again. This precaution will prevent the electrical wiring system from overheating.

"Break in" procedures

Do not run engine at full speed during the first ten hours of operation of your MOTO-SKI. Only after this "break-in" period will your engine reach peak performance. Best results are obtained only when these precautions are followed. After the "break-in" period, be sure to adjust the idle adjustment screw and the main adjustment screw. See page 3.

3. If the drive belt is not correctly aligned, see your MOTO-SKI dealer for adjustment.

NOTE:

Never use the drive chain tension bolt (fig. 7, c) to adjust the tension of the drive belt.

WEAR OF THE DRIVE BELT.

A drive belt less than 1" wide should be replaced. This is done as follows:

- a) Pull the belt until you can disengage it from the driver pulley.
- b) Remove the belt completely.
- c) Reverse the procedure to install a new belt.

B. DRIVE CHAIN (fig. 6, b).

Check the drive chain periodically for proper tension and adjustment.

1. First, remove the chain guard cover (fig. 6, b)
2. Next, loosen the tensioner bolt (fig. 7, c)
3. To tighten the chain, push the bolt downwards; to loosen it, push the bolt upwards. Normally, the chain should have $\frac{3}{8}$ " free-play.
4. When adjustment is completed, retighten the bolt.

Maintenance

Regular maintenance should be performed on the following parts:

- A. DRIVE BELT (fig. 6, a).
 1. Remove clutch cover.
 2. There should be a free-play of one (1) inch in the tension of the drive belt.

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C. TRACK (fig. 8).

1. Lift rear of the MOTO-SKI so the track turns freely.
2. Start the engine and let track turn slowly.
3. The tension of the track should be such that the distance between the bottom of the frame and the bottom of the tension bracket is $2\frac{1}{2}$ " to 3" (fig. 8). If adjustment is needed, loosen the nut (fig. 8, a) and adjust the adjustment screw and the adjuster bracket (fig. 8, b).
4. To align the track, make sure that it is at equal distance on either side of the sprocket teeth.

D. ACCELERATOR.

The engine should be running at full speed before the throttle lever touches the handle-bar. To make any adjustments for this, tighten or loosen the throttle cable going from the accelerator to the carburetor (fig. 9, a)

E. CARBURETOR.

See page 3, "CARBURETOR ADJUSTMENT SCREWS".

F. SPARK PLUGS

Spark plug gap should be 0.025".

G. BATTERY

Check the battery fluid level periodically. Add distilled water only, if necessary.

Check all wires and battery connections.

Make sure the battery is tightly in place.

Lubrication

Lubricate the following parts periodically:

- A. STEERING MECHANISM (fig. 10, a) To check this, remove hood.
- B. SKIS. The linkage between the skis and the steering mechanism: bearings (fig. 10, b); the contact points between the skis and the springs (fig. 10, c).

C. SUSPENSION WHEELS AND THEIR AXLES
(fig. 8, c) Use MOTO-SKI "Special Grease" or its equivalent.

D. DRIVER PULLEY. Lubricate as follows:

1. Remove belt guard (fig. 11, b) as well as drive belt.

2. Slide inside disc of driver pulley (fig. 11, a)

3. Lubricate pulley axle.

4. Rotate inside disc to distribute the grease along and around the pulley axle.

E. ENGINE PULLEY. Lubricate as follows:

1. Remove outside disc of engine pulley axle (fig. 11, c) by removing the bolt holding the centrifugal clutch in place.

2. Lubricate the engine pulley axle.

3. Clean any dirt from counterweights and lubricate them.

4. Reinstall outside disc of engine pulley.

5. Reinstall drive belt.

F. DRIVE CHAIN

Be sure that the drive chain is well greased.
(fig. 6, b)



fig. 7

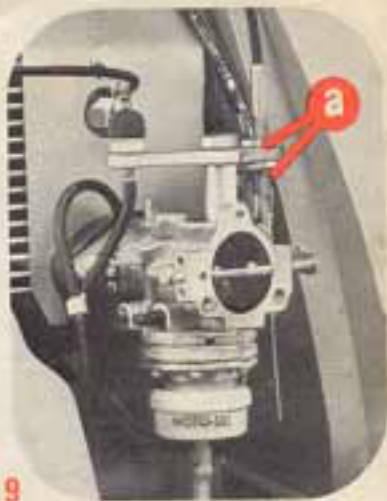


fig. 9

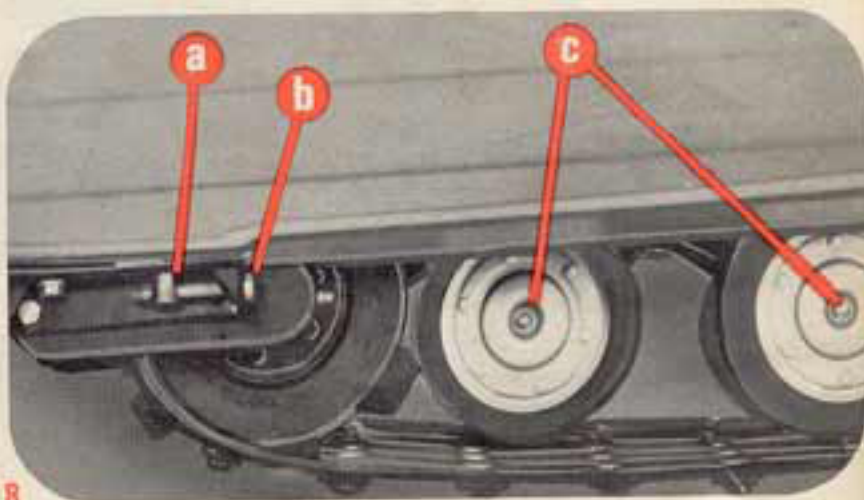


fig. 8

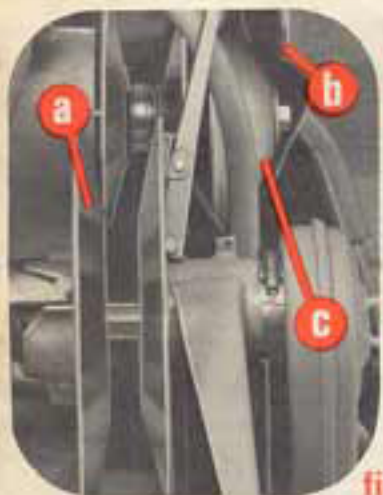


fig. 11



fig. 12

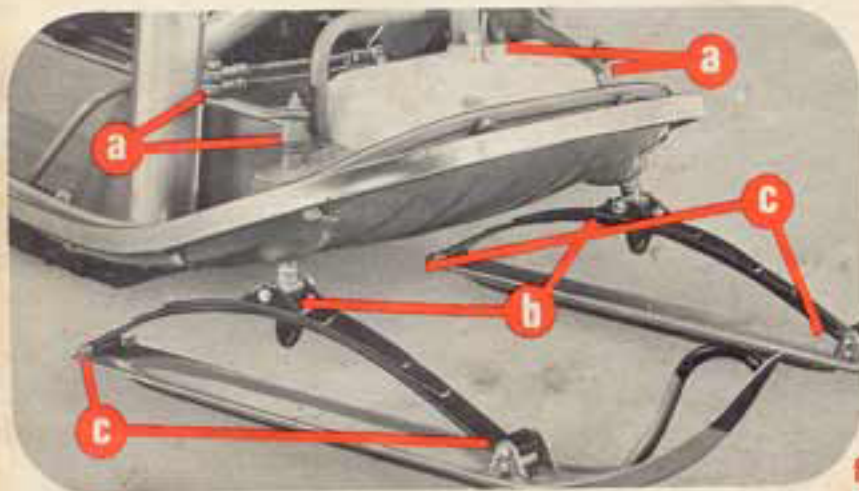


fig. 10

Some driving hints

While riding a snowmobile, you have to use the weight of your body to facilitate driving manoeuvres. Therefore, it is preferable to drive in a kneeling or standing position.

TURNING—Shift your weight to the inside of your turn as you steer, taking into consideration the surface on which you are turning and the speed of your MOTO-SKI.

DRIVING UPHILL—Shift your weight forward, putting your feet in front of the stirrups if necessary.

DRIVING ALONG A HILLSIDE—Stand with your feet in the stirrups and shift your weight towards the uphill side of the slope.

DRIVING DOWNHILL—Stand with your feet in the stirrups to keep your MOTO-SKI under perfect control. Maintain slow speed.

JUMPING OBSTACLES—For your safety and the safety of others, never jump an obstacle with your MOTO-SKI unless you are absolutely sure that there are no people, soft spots or obstructions on the other side.

Some do's

1. Have a good knowledge of the rules and regulations governing the use of snowmobile. Be alert, thoughtful and courteous at all times.





2. Make sure your fuel tank is full.
3. Before leaving on a long trip, be sure you have a first-aid kit, tool kit, spare spark plug and driving belt, flashlight, snowshoes, a map of the area, a compass, matches, warm blanket, flares, a hatchet, gasoline, and some rope.
4. Before leaving, check the weather reports, and make sure you dress warmly.
5. Follow already established trails, or be sure to mark any new trails you take.
6. Instruct passengers to hold tightly to the rear handles.
7. When carrying children, always watch them closely and reduce your speed.
8. When towing another snowmobile, ease off on your accelerator. Running with it wide open not only wastes gas, but may prove to be dangerous.
9. When carrying your MOTO-SKI on a trailer, cover it tightly with a protective canvass. Also check your trailer coupling and lights before leaving.
10. See your dealer regularly to have your MOTO-SKI checked for proper maintenance and safe operation.

Some don't's

1. Don't go where there are skiers.
2. Don't cross railroads without first stopping and making sure the way is clear and safe.
3. Don't travel on public roads or highways.
4. Don't leave your keys in the ignition. It's a danger to children and an invitation to theft.
5. Don't overload your MOTO-SKI. A tow-sleigh can carry far more than you can.
6. Don't smoke while refuelling.
7. Don't cross frozen rivers or lakes without first checking the thickness of the ice.
8. Don't drive your MOTO-SKI while under the influence of alcohol.
9. Don't cut in front of another snowmobile.
10. Don't ride at night without having your headlights turned on and in good condition.

Storage

Once the winter is over, it's necessary to properly store your MOTO-SKI until the next season. The following storage procedures should therefore be followed closely:

1. Remove the hood.
2. Carefully clean the inside and outside of your MOTO-SKI.
3. Clean the track mechanism and lubricate the suspension wheels and axles.
4. Lubricate the steering mechanism.
5. Lubricate the driving wheels.
6. Drain the fuel tank. Run the engine until the carburetor is empty.
7. Dry out the carburetor.
8. Lubricate the engine cylinder(s) to prevent rusting. (Remove the spark plug(s), see fig. 12, a).
9. Remove the battery. (This applies to models with electric starter only.)
10. Clean battery.
11. Check level of solution in battery.
12. Store it in a cool, dry place.

Parts and service

Always ensure that defective or worn parts are replaced only by MOTO-SKI parts. In this way, your MOTO-SKI will give greater performance and longer life. After the first 10 hours of use, have your MOTO-SKI checked by your MOTO-SKI dealer. Subsequently, make a point of having it checked at regular intervals. Your MOTO-SKI is a spirited and peppy snowmobile which requires constant care and adherence to the maintenance advice contained in this manual.

THE POWER EDGE



Each part and assembly of your MOTO-SKI has been manufactured with the utmost care. In addition, your MOTO-SKI has been submitted to severe endurance tests... and it has come through with flying colours. Nevertheless, the following tables have been provided in case you should ever encounter engine troubles. It is always advisable though, to see your MOTO-SKI dealer the moment trouble occurs.

trouble shooting chart

Engine does not start.

- 1 Fuel tank is empty.
- 2 Engine is flooded.
- 3 Engine is flooded and hot.
- 4 Contact has not been established.
- 5 Spark plug does not work.
- 6 Magneto does not work.

Make sure there is gas in the tank. Check fuel lines. Hold accelerator lever open and pull on starter handle several times.

Remove spark plug. Dry it. Pull on starter handle several times while spark plug is removed.

Turn ignition key to "START" position.

Clean spark plug, or replace it.

Disconnect spark plug wire from spark plug. Hold loose end of wire $\frac{1}{4}$ " from cylinder. Pull on starter handle. If no spark comes, see your MOTO-SKI dealer.

Battery might not be properly charged. So, try to start engine with rewind starter. Be sure ignition key is in "ON" position.

Electric starter does not work.

- 1 Battery.

Motor runs at idle
but will not
accelerate.

Motor can not be
adjusted properly.

Though engine
runs at maximum
speed, MOTO-SKI
moves only
slowly.

- 2 Loose connections.
- 3 Electric starter does not function.
- 1 Spark plug is defective.
- 2 Carburetor is not adjusted properly.
- 3 Gas filter clogged.
- 4 Water or dirt in fuel lines.
- 5 Too much oil in fuel.
- 6 Carburetor does not work.
- 7 Low engine compression.

- 1 Fuel leaks.
- 2 Carburetor is not properly adjusted.

- 1 Drive belt is damaged.
- 2 Pulleys do not function properly.

Make sure battery and starter wires are properly connected.

See your MOTO-SKI dealer.

Clean spark plug or replace it. Check carburetor adjustment screws.

Make sure screws are adjusted as they should be. See page 3.

Replace gas filter.

Clean and dry fuel lines.

Drain fuel tank completely and refill it with properly mixed fuel (20-1).

See your MOTO-SKI dealer.

See your MOTO-SKI dealer.

Check fuel lines and gaskets for leaks and loose connections.

See "Carburetor Adjustment Screws" on page 3.

Replace drive belt.

Remove belt and lubricate pulleys. See page 8.

TECHNICAL DATA

1. **TRAIL-ACTION-SUSPENSION SYSTEM.** Gives maximum traction under all conditions (the power-edge) and top stability on rough terrain at high speed.
2. **BOGIE WHEELS.** With easy - to - grease wheel bearings.
3. **EXCLUSIVE MOTO-SKI TRACK.** The rubberized, steel cleated track was designed by Industries Bouchard engineers. Unparalleled superiority.
4. **RUBBERIZED STEEL CLEAT.**
5. **ENGINE MOUNT.** Designed to eliminate vibration.
6. **POWER SAFETY SPRING.** A thicker, main leaf spring for improved control when crossing extremely bumpy terrain.
7. **COPPER ANGLE PLATE.** On front ski shackles for balance, suspension and noise elimination.
8. **REDESIGNED SKI.** Employs heavy gauge steel with larger grab handles on the tips.
9. **SLIP PROOF FOOT PADS.** Restricts ice build-up on running board.
10. **BALL AND SOCKET STEERING ASSEMBLY.** Combines safety with effortless steering.
11. **CHROME BUMPER.** Standard equipment (except Cadet).
12. **5 - GALLON AMERICAN POLYURETHANE TANK.** Rust-proof. Eliminates stalling from water condensation. Remove for summer storage.
13. **SAFETY STEERING SYSTEM.** Rally - tested for safety and handling ease.
14. **MUFFLER AND EXHAUST SYSTEM.** Performance tuned to give quietest ride ever.
15. **CAM-GLIDE CLUTCH.** Carefully matched to engine output (the power-edge!).
16. **DUAL HEADLIGHTS.** Mounted in new, rectangular housing. Safer, wider vision for nightriding. Snap-in bulbs replace quickly and inexpensively.
17. **SAFETY BRAKING SYSTEM.** Self-aligning shoe, long life brake arm.
18. **THERMO SAFETY CONTROL CABLES.** Assure low temperature efficiency for brake and accelerator hand controls.

19. **AIR FILTER.** Added protection for carburetor and engine.
20. **TINTED WINDSHIELD.** For safer, glare-free visibility.
21. **CONTINENTAL SEAT CUSHION.** Packed with thick, shock-absorbing foam rubber.
22. **REAR LENS.** Enlarged for safer lighting.
23. **CHROME WINDSHIELD MOLDING.**
24. **GASOLINE FILTER.** Will avoid mishaps caused by dirt in the gas tank.
25. **CHROME PASSENGER HANDLES.**
26. **STORAGE COMPARTMENT.**
27. **BODY CONSTRUCTION.** Heavy gauge steel.
28. Stamped ribbing provides greater rigidity.
29. Dura-strength Frontal Pan.
30. Double-walled construction gives unmatched concentration of strength to drive area (see dotted line).
31. **CLUTCH HOUSING SAFETY GUARD.**

PRE-DELIVERY CHECK LIST

- Windshield assembly.
- Ski alignment.
- Lights.
- Motor adjustment.
- Drive Belt tension.
- Drive chain tension.
- Track tension and alignment.
- Tool kit.
- Brake system.

dealer's signature

