

# SNOWDOG™

## OWNER'S MANUAL SNOWDOG COMPACT SNOWDOG STANDARD



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### 1 Preamble

Thank you for purchasing the "SNOWDOG"!

To get the most of your SNOWDOG, please read this manual carefully. Following technical instructions and safety tips ensures continuous years of reliable product usage.

"SNOWDOG" is a compactly designed and highly reliable SNOWDOG, equipped with a quality Briggs & Stratton engines and ready for off-road work or recreation.

### 2 Safety tips

This Owner's manual contains important information on safety tips and operating instructions for SNOWDOG. In case of resale, please transfer this document and the engine service manual to the next SNOWDOG owner due to the importance of the information contained.

Please read this manual carefully before operating the SNOWDOG. Non-compliance with the following rules and instructions may cause serious damage and even injuries. SNOWDOG operating safety tips and instructions are marked with "CAUTION!" tag listed herein.

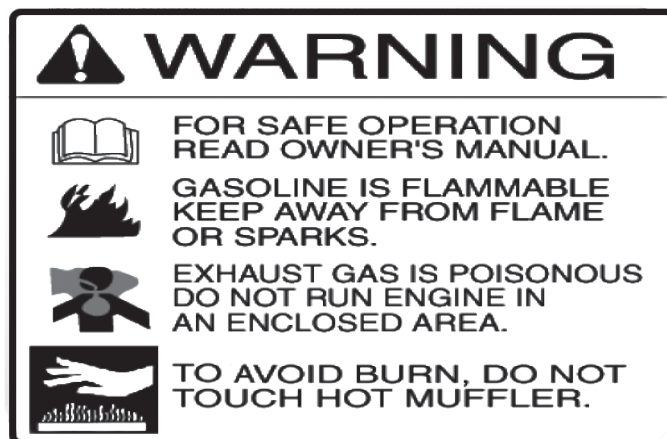
#### ⚠ **CAUTION!**

- Before operating the SNOWDOG you must read the Owner's manual and engine operator's manual.
- It is prohibited to operate the SNOWDOG for minors under 16 years old, and not recommended to operate SNOWDOG for people who are not capable of safe operating due to different reasons.
- It is prohibited to operate the SNOWDOG under the influence of alcohol and/or drugs.

- It is prohibited to use SNOWDOG without the chain protection cover, mud flaps and emergency engine shutdown switch.
- Operating a faulty or defective SNOWDOG unit is prohibited.
- Operating the SNOWDOG on public roads and trails is strictly prohibited.
- SNOWDOG is designated strictly for outdoor use. Indoor use is prohibited.

### 3 Introduction

The purpose of this manual is to familiarize you with the SNOWDOG maintenance and operation procedures, and give you troubleshooting tips. "SNOWDOG Compact" and "SNOWDOG Standard" are towing modules primarily designed for transporting cargo in the luggage compartment, hauling cargo on sledge or semi-trailer over different surfaces.



### 4 SNOWDOG purpose

The SNOWDOG is designed primarily to be used during winter time. For operating it during warm season it is necessary to remove the cover and to take measures to prevent engine overheating. SNOWDOG is designed for towing the sled or semi-trailer on multiple terrains. SNOWDOG isn't meant to be used on roads, sandy soils and on the water.

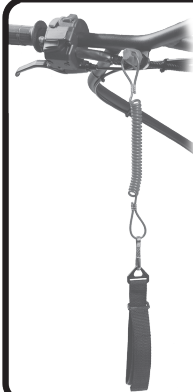
#### ⚠ **CAUTION!**

- Stay clear of the moving gears in the drive shaft and chain!
- Park the SNOWDOG at a safe distance from people and animals.
- Make sure the engine is stopped before removing the transmission protective cover.
- Make sure all the gear screws and drive shafts are tightened before operating the SNOWDOG.
- Do not start the engine if the steering handles are folded.
- Do not fold the steering handles while the engine is running.
- Please do not use the parking brake during the motion. It may cause the loss of control of SNOWDOG, trauma and damage the CVT.
- Before starting the engine please make sure the throttle control lever moves freely and is not fixed.
- Before starting the engine move the steering handles into the operating position.
- Always check the parking brakes.
- In case of any steering control malfunctions you should stop, locate the problem and fix it.
- Sled or semi-trailers must be fixed to a SNOWDOG with rigid drawbars only.
- Wearing protective hand gloves when riding the SNOWDOG is recommended.
- For safety reasons we recommend using the helmet.

**WARNING! ALWAYS USE  
THE PARKING BRAKE WHEN  
STARTING THE ENGINE!**



**WARNING!**  
**Strap on your hand  
the engine security  
switch before  
starting to move!**

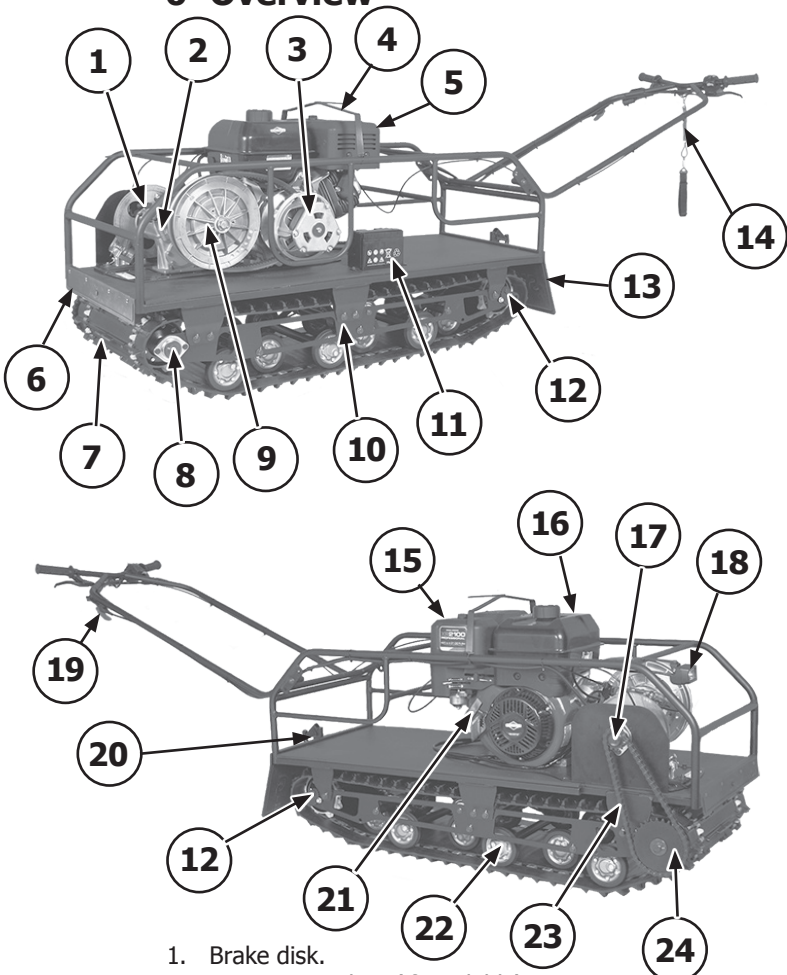


## 5 Technical specifications for "SNOWDOG"

### 5.1 Technical specifications for "SNOWDOG" models

|   | Specs  | SNOWDOG COMPACT<br>B13ME-WR    | SNOWDOG STANDARD<br>B13ME-WR   | SNOWDOG STANDARD<br>B13MER-WR7 |
|---|--|--------------------------------|--------------------------------|--------------------------------|
| 1 | Overall dimensions in transporting and operating position: |                                |                                |                                |
|   | Length, in (mm)  | 50.0 / 86.5<br>(1 270 / 2 200) | 58.0 / 94.5<br>(1 470 / 2 400) | 58.0 / 95<br>(1 470 / 2 400)   |
|   | Width (including steering handles), in (mm)                | 26 (650)                       | 26 (650)                       | 26 (650)                       |
|   | Height, in (mm)  | 33.5 (850)                     | 33.5 (850)                     | 33.5 (850)                     |
| 2 | Torque, ft-lbs (H·m)                                       | 21.05 (28.54)                  | 21.05 (28.54)                  | 21.05 (28.54)                  |
| 3 | Engine Displacement, ci (cm <sup>3</sup> )                 | 25.63 (420)                    | 25.63 (420)                    | 25.63 (420)                    |
| 4 | Track type   | Compact                        | Standard                       | Standard                       |
|   | Tread count  | 48                             | 56                             | 56                             |
|   | Dimensions:<br>length × width, in (mm)                     | 95.43×19.69<br>(2 424×500)     | 111.3×19.69<br>(2 828×500)     | 111.3×19.69 (2 828×500)        |
|   | Weight, Lbs (kg)   | 298 (135)                      | 320 (145)                      | 342 (155)                      |
| 5 | Maximum speed, mph (km/h)                                  | 15.53 (25)                     | 15.53 (25)                     | 15.53 (25)                     |
| 6 | Maximum load capacity on top of the SNOWDOG, Lbs (kg)      | 100 (40)                       | 110 (50)                       | 110 (50)                       |
| 7 | Maximum sledge load capacity, Lbs (kg)                     | 330 (150)                      | 440 (200)                      | 440 (200)                      |
| 8 | Fuel type (gasoline)                                       | 87 octane                      | 87 octane                      | 87 octane                      |
| 9 | Transmission type  | CVT                            | CVT                            | CVT                            |

## 6 Overview



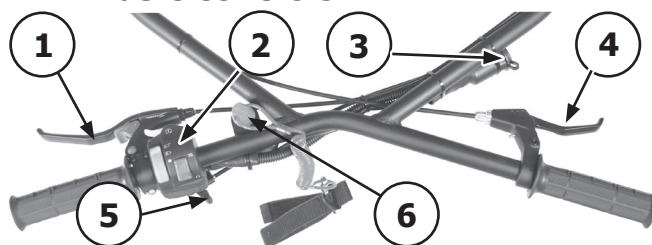
1. Brake disk.
2. Reverse gearbox (if available).
3. Driving pulley CVT.
4. Cover support bracket.
5. Muffler.
6. Front mud flap.
7. Track.
8. Axle bearings (self-centering).
9. Driven pulley CVT.
10. Side plate chassis.
11. Battery.
12. Track tensioner.
13. Rear mud flap.
14. Engine security kill switch.
15. Air filter.
16. Fuel tank.
17. Driving sprocket.
18. LED-headlight.
19. Reverse gearbox switching lever (if available).
20. Hooking device.
21. Manual starter handle.
22. Wheel trolley of suspension.
23. Transmission chain.
24. Driven sprocket.

### 6.1 Snowdog identification

Serial no. is placed on the front part of the chassis. It is also shown on the back part of the chassis using point marking method.

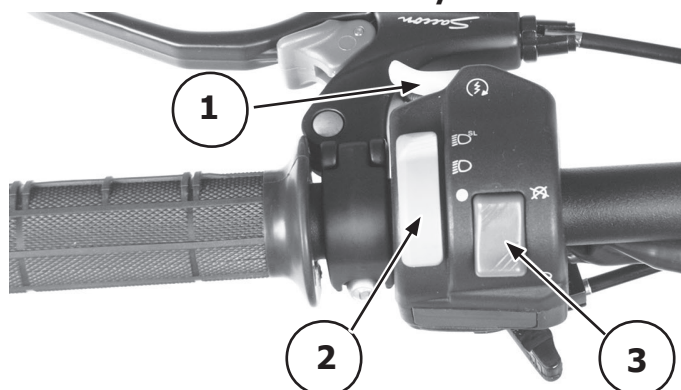


## 7 Basic controls



1. Parking control lever with lock
2. Handle switch assembly
3. DC outlet for external devices
4. Throttle control lever
5. Choke lever
6. Kill switch

### 7.1 Handle switch assembly



- (1) - Electric starter start button.

When this button is pressed the electric starter is working and the engine can be started. Do not hold the button down for more than 10 seconds.

- (2) - Headlight switch (front light).

When the switch is in position the light and DC outlet are working.

When switch is in position the light is working. DC outlet is not working.

When switch is in position both the light and DC outlet are off.

### ⚠ WARNING

**Do not turn on the headlight if the battery is not connected!**

- (3) - Ignition on / off switch.

When the switch is in position toward the operator the ignition is on. The engine can be started.

When the switch is in position away from the operator the ignition is off. The engine cannot be started.

### 7.2 Engine security kill switch

There is engine emergency kill switch in the middle of the handlebar, it consists of the button and the safety pin.



The operator of the SNOWDOG should always operate it with safety pin strap belt around his hand. If the operator should leave the tracksled during a motion, the safety pin will leave the button thereby turning the engine off.



### 7.3 DC outlet




The DC outlet can be used for plugging lighting devices, radio devices, etc. The outlet should be used only when the engine is running.

Maximum values of parameters permitted for using the outlet:

rated voltage — 12V;

maximum power — 20 W (1,6 A).

The power is only supplied to the DC outlet in  mode.

#### ▲ **WARNING**

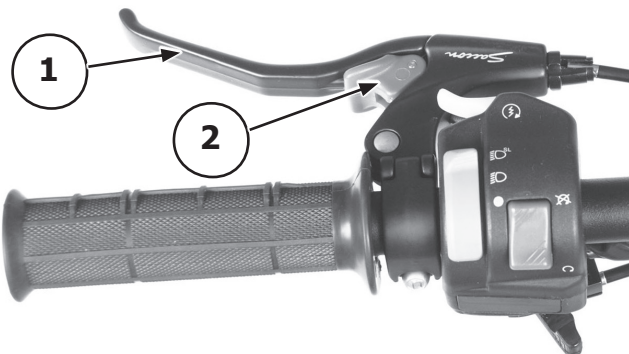
**When the outlet is not in use it must always be covered by a cap.**

Do not plug in external power consuming devices which require more power than the aforementioned maximum value.

If external power consuming devices will be used while the engine is not running, the battery may lose its charge and it will be impossible to start the engine using the electric starter.

Do not use car cigarette lighter and other accessories with plugs that can produce heat as this can damage the outlet.

### 7.4 Parking brake lever



1. Parking brake lever.
2. Parking brake lever lock.

#### 7.4.1 Switching the parking brake on:

1. Press the lever (1).
2. Press and hold the lock (2).
3. Release the lever (1).

#### 7.4.2 Switching the parking brake off:

1. Press the lever (1).
2. Release the lever (1).

#### ▲ **WARNING**

**Never start the engine while the parking brake is switched off or faulty.**

**Never start the motion while the parking brake is switched on.**

### 7.5 Reverse gearbox (if available)

To shift the gear into the "forward" position, stop the engine and switch on the parking brake. Switch the lever forward as shown on the picture.



To shift the gear into the "reverse" position, stop the SNOWDOG, stop the engine and switch on the parking brake. Switch the lever backward as shown on the picture.



If there are difficulties with the shift of the gear, switch the parking brake off and swing the SNOWDOG back and forth.

#### ▲ **WARNING**

**Never switch the direction of moving with the running engine.**

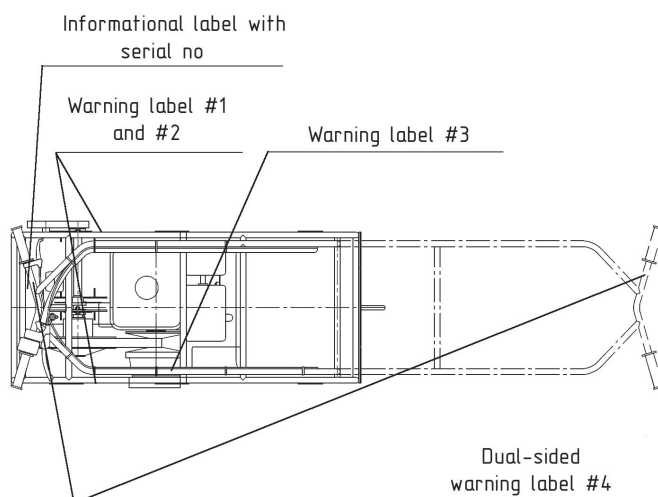
**Never switch the direction of moving when the parking brake is switched off.**

**Never start the moving while the parking brake is switched on.**

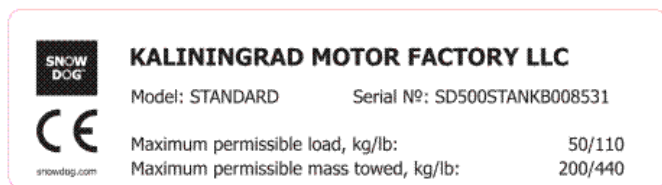
**Never use the full throttle immediately after the shift of the gear.**

**First dozen feet after the shift move with the lowest possible engine load.**

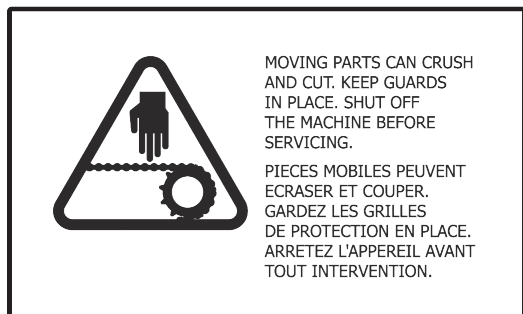
### 7.6 Informational labels displacement



## **Informational label with serial no.**



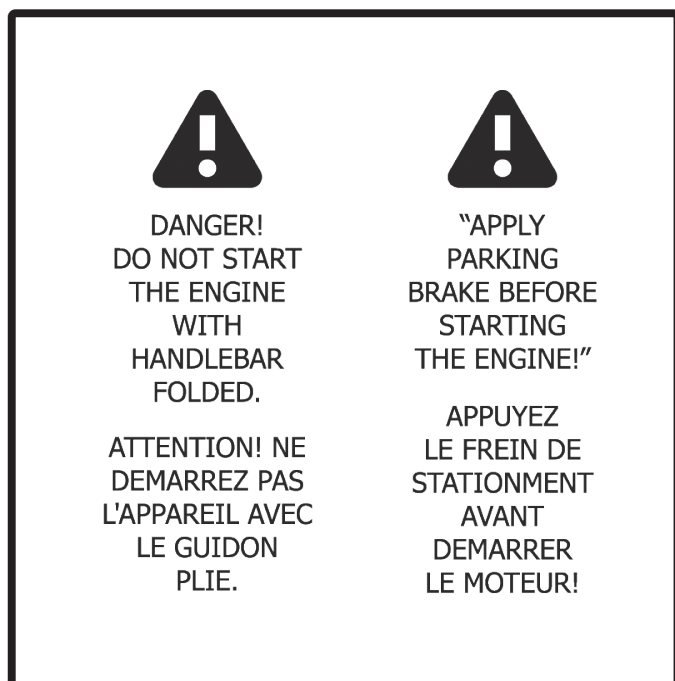
WARNING labels #1 and #2.



WARNING label #3.



Dual-sided WARNING label #4.



## **8 Packaging**

### **SNOWDOG delivery set contents:**

1. SNOWDOG — 1 pc.
2. Support bracket — 1 pc.
3. Battery — 1 pc.
4. Eye bolt — 1 pc.

### **Owner's documentation:**

5. Owner's Manual — 1 pc.
6. Warranty services agreement — 1 pc.
7. Operator's engine manual — 1 pc.

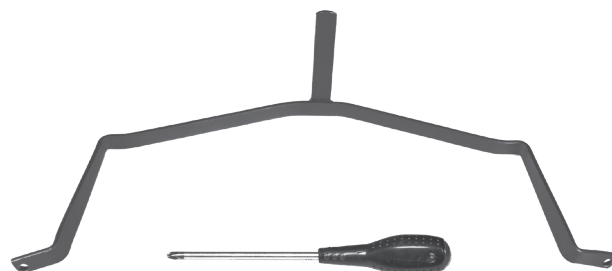
### **NOTE**

**Spare parts and accessories can be ordered from your dealer.**

## **9 SNOWDOG set-up**

### **9.1 Installation of the cover support bracket**

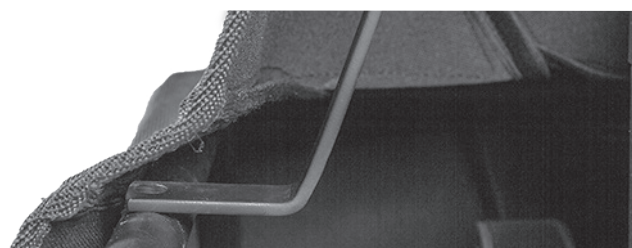
Prior to startup of SNOWDOG install the cover support bracket, which is supplied with SNOWDOG. You will need a Philips screwdriver for that (not included).



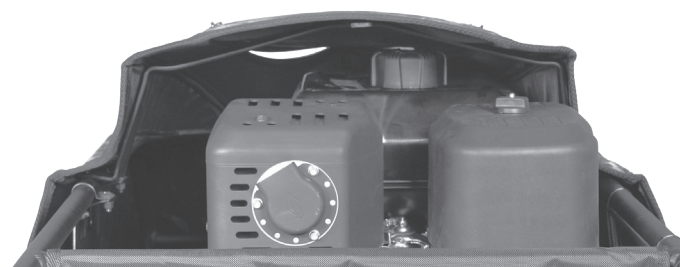
Unscrew the cover fixing screw in the top part of the chassis.



Insert the bracket under the cover, aligning the screw holes with the holes in the chassis. If necessary, bracket may be slightly bended to align the holes.



Screw the bolts, previously unscrewed from the chassis, so that the bracket would be placed between chassis and the cover, and would separate hot muffler from the cover.



Then put fabric cover on the SNOWDOG. When you put on the cover make sure that there is a distance between cover and muffler of not less than 4 inches (100 mm). If the distance is less than 4 inches (100 mm), bend the cover bracket.

## **▲ WARNING**

When operating the SNOWDOG at an ambient temperature of over 41 °F (+ 5 °C), it is necessary to open the zipper placed in the front part of the cover or remove the cover.

### **9.2 Battery installation**

It is necessary to install and connect the battery before using the SNOWDOG. You will need a battery (supplied with the SNOWDOG), a metric wrench (not included) and a Philips screwdriver (not included).

Unscrew 2 bracket mounting bolts using metric wrench.

Install the battery, and tighten it with the bracket using the metric wrench.

Connect the electric wires to the battery, strictly observing the polarity. Wire with the red cover is connected to the cleat marked with "+" sign, wire with black cover is connected to the cleat marked with "-" sign. Tightly secure the contacts.

General view of the assembled battery is shown below.



## **▲ WARNING!**

**Pay attention to the polarity when connecting the battery!**

**Do not turn on the headlight if the battery is not connected!**

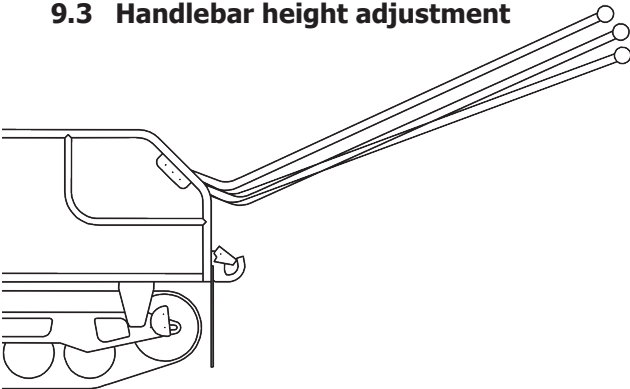
## **✓ NOTE**

**The voltage of the charged battery should be within the range of 12.6–12.9 volts. If the battery voltage is less than 12.6 volts, it must be charged.**

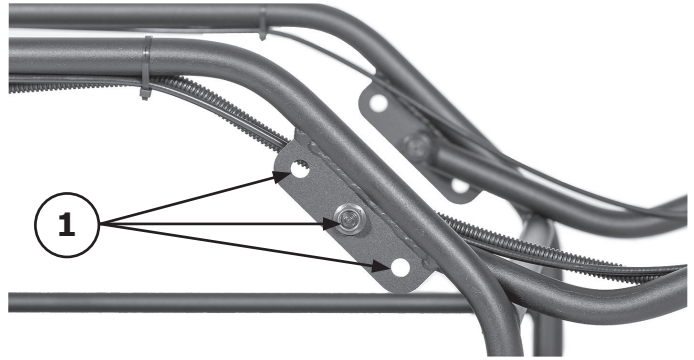
## **▲ WARNING**

**Use chargers designed for AGM batteries. Do not use chargers with voltages above 14.6 volts as they will damage the battery.**

### **9.3 Handlebar height adjustment**



To adjust the height of the handlebar you must rearrange fixture in one of the three holes (1). In order to raise the wheel higher, move the mounting holes in the bottom. In order to lower the wheel, move the steering wheel to the upper hole. Please NOTE, both mountings of the handlebar must be on the same level



## **▲ WARNING**

**Check fastening of wires and cables after adjusting height of handlebar. Wires and cables should not have any tension during transport or operating position of the handlebar.**

## **▲ WARNING**

**Do not push on the handlebar with the whole weight. Do not step on the handlebar. Do not use the handlebar as a lever for lifting front of SNOWDOG. Overloading the handlebar can damage it.**

### **9.4 Preparations, necessary to maintain before every start up**

1. Move the handlebar from the transporting position into the operating position.
2. Sleds or semi-trailers are mounted to the Snowdog using hitch.
3. Check the chain tension — the chain should be neither loose, nor tight.
4. Check the throttle and brake cable (lubricate if needed).
5. Check the parking brake.
6. Move the parking brake into the fixed position.
7. Be sure to follow all of the procedures specified in paragraph 9.5.
8. Prepare the engine for starting, as described in the engine manual.

### **9.5 Pre-start engine inspection**

#### **9.5.1 Checking oil level**

## **▲ CHECK THE OIL LEVEL IN THE ENGINE, ACCORDING TO THE ENGINE MANUAL BEFORE OPERATING.**

## **▲ CAUTION**

**Running the engine with insufficient oil level will cause damage and is not covered by warranty.**

#### **9.5.2 Fueling**

## **▲ FILL THE GASOLINE ENGINE ACCORDING TO THE ENGINE MANUAL.**

## **▲ NOTE**

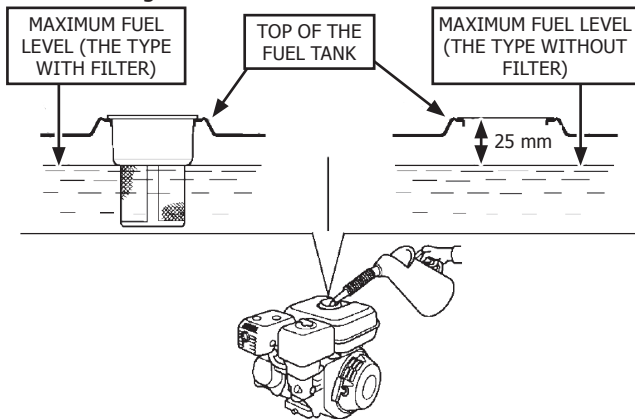
- Fuel is highly flammable and explosive, you should avoid getting burned and injured while working with it.
- Stop the engine before refueling. Make sure there are no heating appliances, sparks or flames around.
- Refuel only outdoors.
- Refuel only in a well-ventilated area and only if the engine is stopped. If the engine has been recently running, let it cool down first.



- **Spilled fuel is not only highly inflammable, but can also harm the environment. In case of spilled fuel, wipe down as soon as possible.**

Make sure that there is enough fuel in the tank.

Fill the fuel tank up to the bottom part of the filler neck, as shown in Figure.



### ⚠ **WARNING**

Do not fill the tank with fuel above the maximum level. The fuel expands when heated. If the tank is overfilled then the fuel heated by engine or sun can leak from the tank.

Do not spill fuel, especially on the engine and the muffler as it may cause fire and heavy injuries. Wipe the spilled fuel dry.

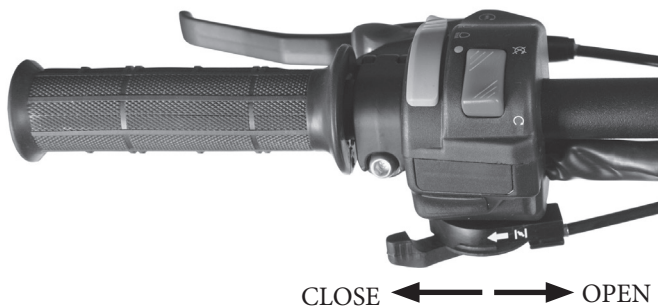
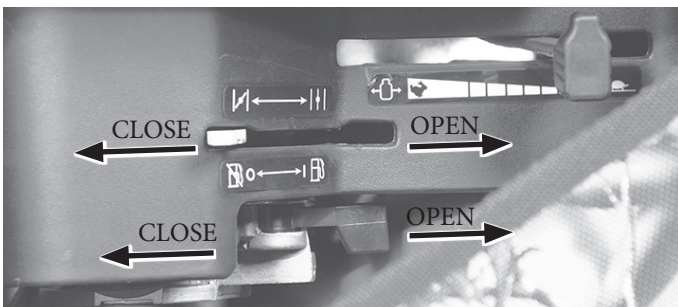
After refueling make sure that the cap of the fuel tank is sealed tightly.

### ⚠ **WARNING**

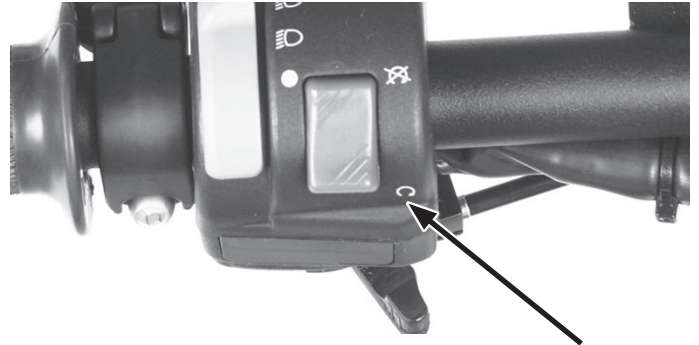
If the SNOWDOG will lean heavily or turn over it is possible for the fuel to leak through the fuel tank cap.

## 9.6 Starting the engine

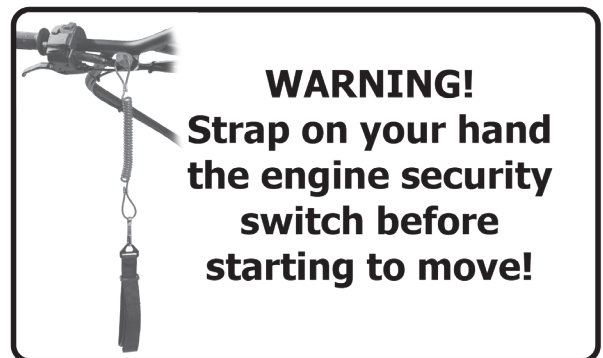
1. Open the fuel lock. Close the choke on engine or on handlebar.



2. Set the ignition switch located on the steering switch assembly to "ON" position.



3. Install the safety pin of the kill switch on the end switch, put the strap belt on your hand or attach it to your belt.
4. Check how the kill switch is installed. Kill switch which is not installed completely may lead to incorrect work of the engine.



**WARNING!**  
Strap on your hand  
the engine security  
switch before  
starting to move!



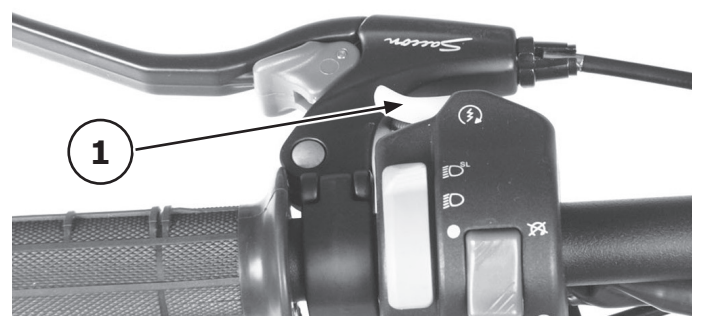
**WARNING! ALWAYS USE  
THE PARKING BRAKE WHEN  
STARTING THE ENGINE!**

5. Start the engine.
6. To start the engine press and hold the electric starter button (1) on the steering switch assembly. Release the button right after starting the engine.

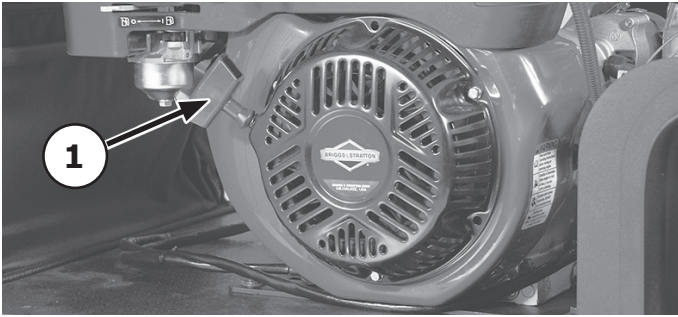
### ⚠ **WARNING**

When starting the engine with the electric starter do not rotate the engine for more than 10 seconds at each attempt.

If the engine does not start, release the starter button. Pause for 30 seconds before attempting the next try. Do not rotate the engine for more than 10 seconds at each attempt.



7. To start the engine with a manual starter pull out the starter handle (1) until first noticeable resistance. Without returning it to its place, swiftly pull the handle further out and start the engine. After starting the engine, slowly return the handle back to its initial position, allowing for the cord to wind-up.



### **⚠ WARNING**

**Do not twitch the handle when starting. Do not pull the cord out all the way until it stops. Do not release starter handle abruptly after starting.**

8. After 5 failed attempts to start, pause for at least 30 seconds before the next try.
9. Let the engine to run with choke for about a minute, and then gradually move away the choke. Let the engine to warm up for at least two minutes.
10. Release the parking brake from the fixed position before moving.
11. Check the hooking device and its fasteners (1).



### **⚠ WARNING!**

**When operating Snowdog at an ambient temperature of over 41 °F (+ 5 °C) it is necessary to open the zipper placed in the front part of the cover or remove the cover. Failure to do so will cause the engine to overheat and will not be covered by warranty.**

## **10 Operating the SNOWDOG**

### **10.1 Operation of the SNOWDOG**

SNOWDOG is operated in a standing position. Throttle arm on the right side of the steering handles controls take-off and speed change. SNOWDOG starts moving when the throttle arm is approximately in ¼ position.

Slowly squeeze lever to engage the transmission and to start the SNOWDOG moving. Increase pressure on the throttle lever until desired speed is reached.



When starting to move on a crumbly snow, accelerate slowly in order to avoid slipping. To make a turn, steer the handlebar in the direction opposite to the turn. To stop the SNOWDOG, release the throttle back — never apply the parking brake to stop the SNOWDOG while driving.

### **10.2 Stopping the engine**

#### **In case of emergency:**

To shut down the engine in case of emergency, flip the ignition switch located on the steering switch assembly to "OFF" position or pull out the engine security switch.

When the SNOWDOG will stop, turn the parking brake on.

#### **In normal cases:**

1. Adjust the throttle lever to lower RPMs.
2. Slowly release the throttle lever.
3. Flip the ignition switch located on the steering switch assembly to "OFF" position.



4. Turn the parking brake on.

### **⚠ WARNING**

**Never use the parking brake to stop the tracksled. This is dangerous!**

5. When stopping for more than 10 minutes close the fuel petcock (if available).
6. Turn off headlight.
7. Turn off the device, which may consume power from the DC outlet.

When raining or snowing, or the temperature is close to 32 degrees Fahrenheit or lower it is necessary to protect the SNOWDOG with cover for the time of parking. Otherwise snow and water can freeze on engine control levers and other parts of the SNOWDOG making controlling the SNOWDOG impossible.

In case the SNOWDOG was riding through water or wet snow it is necessary to clear it from snow and ice, otherwise the water can freeze and bind down the transmission resulting in inability to move.

### **⚠ CAUTION!**

**The first 20 hours of operating the SNOWDOG are needed for engine and transmission to adjust. During this period you should use SNOWDOG with lowest possible load. Prolonged lugging may cause transmission overload and SNOWDOG failure.**

## **11 Maintenance**

### **11.1 Before each trip**

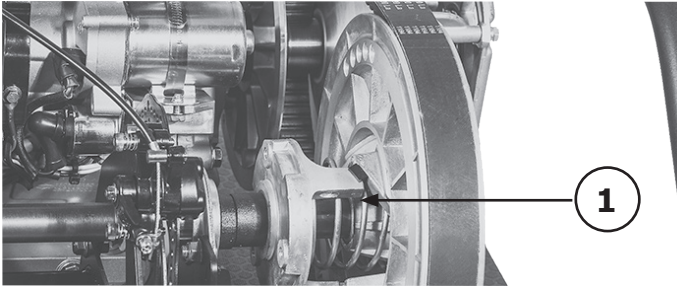
1. Check the secure connection of the parts and assemblies of the SNOWDOG and tighten the screws if necessary. Check the parking brake.
2. Check the engine oil level.
3. Check the drive chain, lubricate if necessary.
4. Pay particular attention to handlebar mounting and attachment of the hitch.

### **11.2 After each trip**

1. Shut down the fuel valve (if provided).
2. Clean SNOWDOG from any snow and/or dirt.
3. Lube the chain with an aerosol chain spray.
4. Visually check the track tension.



5. Visually check the driver and driven shafts of the CVT, clean out of dirt if necessary. Be sure to check for plastic inserts (1) in CVT driver shaft. If plastic inserts are missing or worn out — insert new ones.



### 11.3 After the first 5 hours of SNOWDOG operation

1. Lubricate the throttle and parking brake cables.
2. Lubricate the drive chain and sprockets with an aerosol chain spray.
3. Adjust throttle and parking brake arms (free motion should have a value of 0.19–0.27 in (5–7 mm)).
4. Adjust the chain tension.
5. Service the engine as specified in the operating manual of the engine.
6. Visually check the track tension.

### 11.4 After each 20 hours of SNOWDOG running

1. Lubricate the throttle and parking brake cables.
2. Lubricate the drive chain and sprockets with an aerosol chain spray.
3. Adjust throttle and parking brake arms (free motion should have a value of 0.19–0.27 in (5–7 mm)).
4. Adjust the chain tension.
5. Check the track tension as described in paragraph 13.3.
6. Change the engine and transmission oils.
7. Lubricate the bearings in supporting rollers via service hatch.
8. Service the engine as specified in the operating manual of the engine.

#### ▲ **WARNING**

- When operating under heavy duty conditions the maintenance should be carried out more often.
- Heavy duty operating conditions include:
  - Moving on deep loose snow (more than 16 inches in depth).
  - Moving at temperature below -13 and above 50 degrees Fahrenheit.
  - Moving on wet snow and on snow containing water.
  - Moving on surfaces flooded by water.
  - Moving on rocky terrain.
  - Moving on snow crust which cannot withstand the weight of the tracksled and sleds.
  - Participation in races and competitions.
  - Prolonged moving at low speed, "tightly strained".
  - Moving with a towed load more than 330 lbs.
  - Moving on hard-surfaced roads.
  - Moving in mud.
  - Moving in sand.
  - Prolonged moving uphill, downhill, or on slopes.
  - Short trips with frequent stops.

### 11.5 Washing and cleaning

Before washing and cleaning, remove the cover if necessary. Wash cover, if necessary.

Do not use high pressure for washing, it may damage some parts of SNOWDOG.

SNOWDOG should be washed with warm water and car detergent. Thoroughly rinse the detergent.

Wash using a bucket with a sponge or small water pressure hose. It is necessary to ensure that water is not suffused in parts, connectors and switches on the engine, in (on) the air filter and muffler. Do not use petrol or other solvents to clean the plastic and painted surfaces. Powertrain and chassis must be cleaned of twigs, leaves and other contaminants. Remove stains of oil and other fluids.

Start up and warm up the SNOWDOG after washing.

#### ▲ **WARNING!**

**Do not allow corrosive substances on the track, such as gasoline, solvents, acids, etc.**

## 12 Storage

SNOWDOG should be stored in a dry ventilated room or outdoors under a canopy with a waterproof cover.

In case of a short-term storage (up to one month), perform the procedures specified in paragraph 11.4.

In case of a long-term storage (over a month) perform all the procedures specified in paragraph 11.4 and lubricate non-coated parts with a preserving agent, as well as the parts where paint-and-lacquer coating is exposed. This ensures the safe preservation of the SNOWDOG for up to 12 months when stored normally. For the next 12 months of storage, reproduce the steps above. To do so, follow the engine depreservation procedures specified herein, remove the preserving agent from the parts, fill the tank with gas, start the engine and let run for 5 minutes, then stop it, change the engine oil, and preserve the SNOWDOG for another period.

Also follow the engine manufacturer recommendations for long-term storage.

### 12.1 Track maintenance

Check the track condition and its tension after each trip. Excessive track tension is often the reason for power loss and causes engine overload.

Never operate the SNOWDOG with severe track damage. In case of severe track damage, you should seal it to prevent moisture from ruining the track's cord.

The cord threads should not stick out of the track's side. If they do, cut them off.

Check the track's metal brackets after each trip. If bent, straighten. If a bracket is missing, replace it. Operating damaged tracks leads to their rapid deterioration.

Inspect and clean the track after each trip.

When operating the SNOWDOG in the wet snow, clean the track more often, especially before a prolonged stop. Do not expose the track to oil and various chemicals.

Do not store the SNOWDOG under direct sunlight.

Loosen the track before storage.

We recommend storing the SNOWDOG in suspended position. In case of a long-term storage the track must be rotated to a new position once a month.

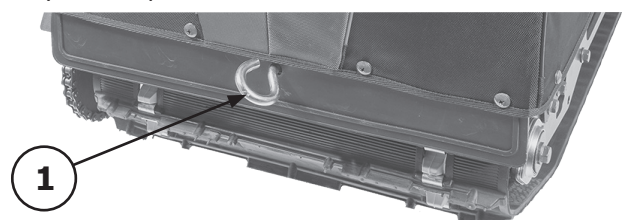
### 12.2 Transportation

Drain the fuel from the tank or shut down the fuel valve before transporting. The SNOWDOG must be in a horizontal position during loading and unloading. When transporting the SNOWDOG, make sure it is secure.

SNOWDOG cannot be stacked during transportation.

Snowdog is equipped with connector for towing eye bolt (1) in the front part of the chassis on top part of the front mudflap. It is designated to mount the Snowdog during transportations, etc.

Eye bolt is provided with SNOWDOG.



## 13 Maintenance tips

### 13.1 Changing the oil

Change the oil in the engine in accordance with recommendations from the engine owner's manual.

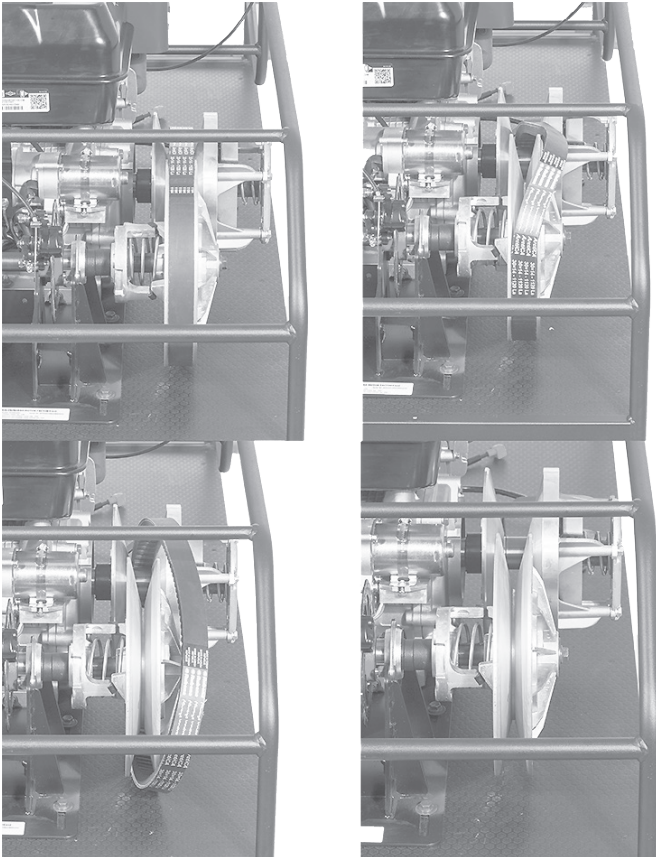
#### ⚠ CAUTION

**Do not touch the muffler immediately after the engine is stopped in order to avoid getting burned.**

### 13.2 Replacement of CVT belt

Turn off the engine. Lock the parking brake.

To replace the CVT belt, pull the belt off the large pulley and then from the CVT (as per picture below). Install the belt in the reverse order.

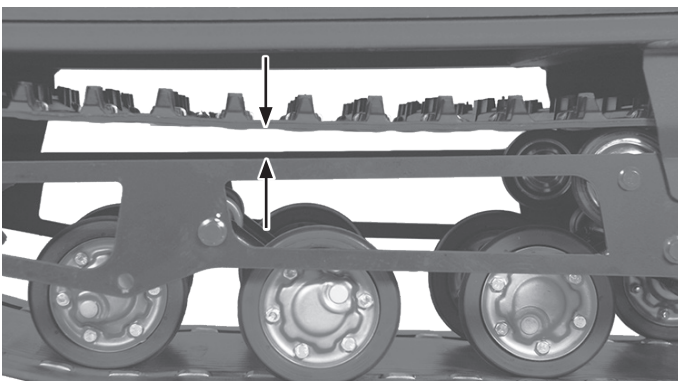


Replace the CVT belt, if it's worn out or its width is less than 1.06 in (27 mm).

### 13.3 Checking the track tension

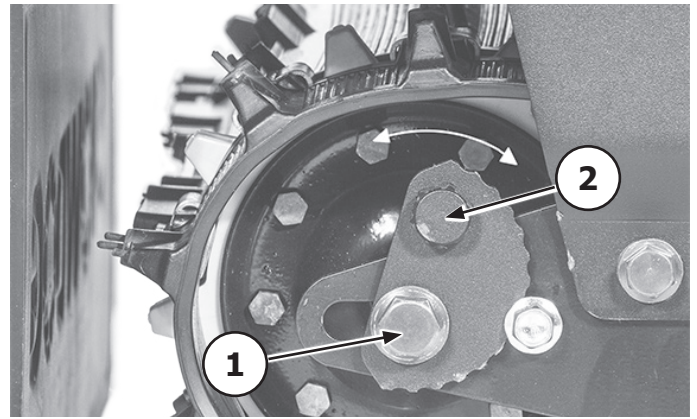
Before starting any movement check the condition and tension of the track. Overtension leads to engine power loss and causes overloads.

Place the SNOWDOG on a flat surface. Measure the distance between the side plate chassis and the track. It should have a value of 0.4–0.8 in (10–20 mm).



### 13.4 Track tensioning

Loosen the screws (1) on both sides of the rear mounting shaft. Turn eccentric (2) to adjust the tensioner axis.



Check the track tension. Tighten the bolts.

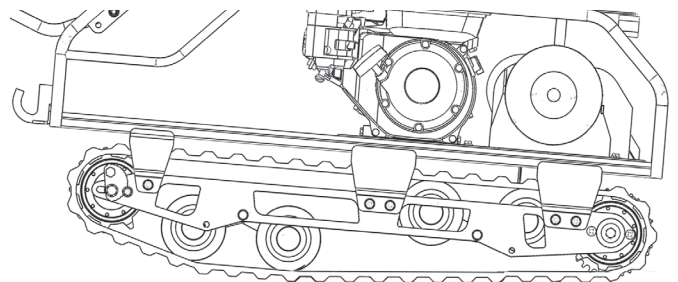
#### ✓ NOTE:

**If the tracksled is regularly falling to one side, increase the tension of the track on the same side. On the opposite side, loosen the tension of the track.**

### 13.5 Suspension trolleys diagnostic

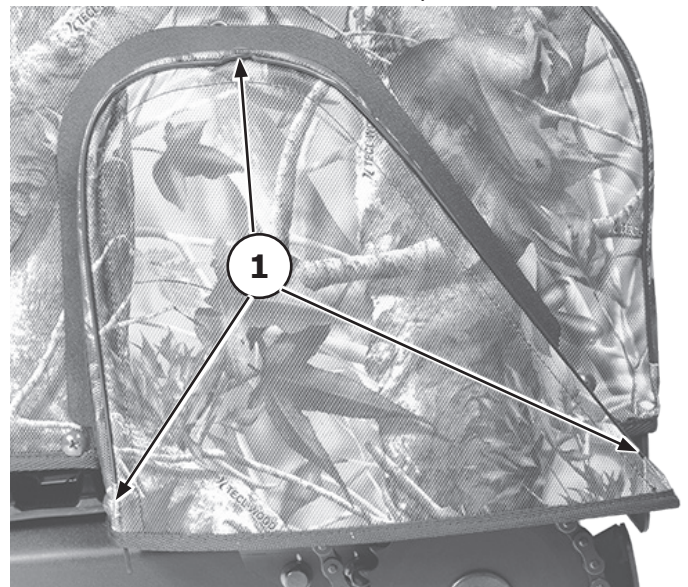
The three spring trolley may turn upside-down if SNOWDOG is driven over obstacles such as logs, rocks, etc.

In this case SNOWDOG leans forward, loses power and speed. Do not operate SNOWDOG if this happens. Return the three spring trolley into proper position.



### 13.6 Checking the chain tension

It is necessary to remove the protection cover to check the track tension or change the sprocket or chain. To do this, remove the three screws (1) that hold the chain cover and remove the cover. To install the cover do same steps in the reverse order.





Correctly tensioned chain will have a loose lift of 0.2 in (5 mm) between the sprocket.

Loose lift less than 0.2 in (5 mm) will result in rapid chain stretching, and will lead to fast sprocket wear. An excessively loose chain can fall off during operation. Loose chain needs to be tightened.

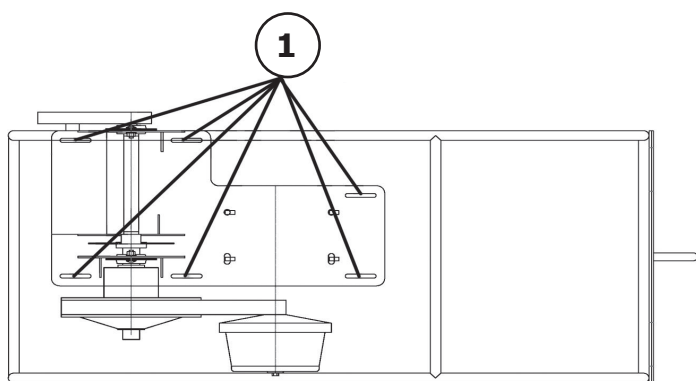
While operating, the chain stretches, and the distance between chain links changes. If the adjustment range is not enough, the chain should be replaced. Do not shorten the chain by removing one or more links.



### 13.7 Adjusting the chain tension

To adjust the chain tension:

1. Loosen six screws (1) that mount engine and CVT brackets with SNOWDOG's chassis platform.

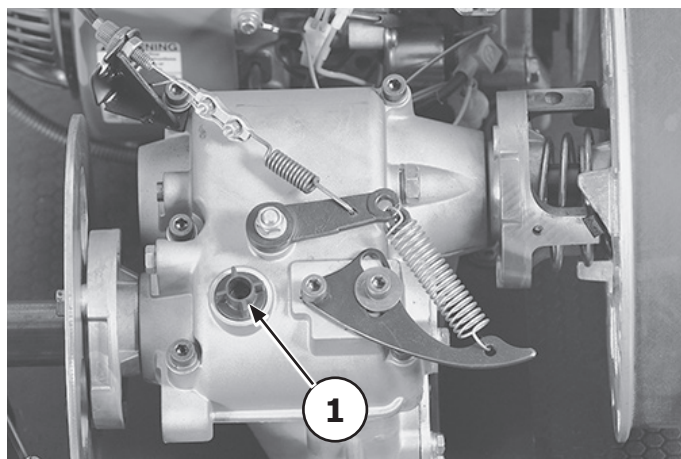


2. To loosen the chain you need to move the engine mount with the motor forward in the direction of movement; to tension the chain you need to move the chain tensioning engine mount with the motor back against the direction of SNOWDOG movement.
3. Check the chain tension. Repeat step 2 if necessary.
4. Tighten six bolts (1) to the engine mounts of the SNOWDOG chassis platform.

## 13.8 Reverse gearbox (if available)

### 13.8.1 Oil change

1. Unscrew the oil filling plug (1) of the reverse gearbox.



2. Pump out the used oil from the reverse gearbox.
3. Fill the gearbox with the new oil and close the oil filling plug.

**REQUIRED AMOUNT OF OIL IN THE EMPTY GEARBOX IS 100 ML (3.38 FL. OZ.). REQUIRED AMOUNT OF OIL WHEN CHANGING IS 80 ML (2.71 FL. OZ.).**

Recommended oil viscosity depending on the ambient temperature:

|  |                            |
|--|----------------------------|
| outside temperature – 14 °F and below        | engine oil SAE 5W30        |
| outside temperature – 23 °F and below        | engine oil SAE 15W40       |
| outside temperature – minus 4 °F and higher  | transmission oil SAE 80    |
| outside temperature – minus 22 °F and higher | transmission oil SAE 75W90 |

The oil level in the reverse gearbox can be checked with pumping oil out and pouring a measured amount of it.

### 13.8.2 Adjustment of the shift cable

If the shift cable of the reverse gearbox is sag or there are difficulties with switching gears, adjust the shift cable.

#### **▲ WARNING!**

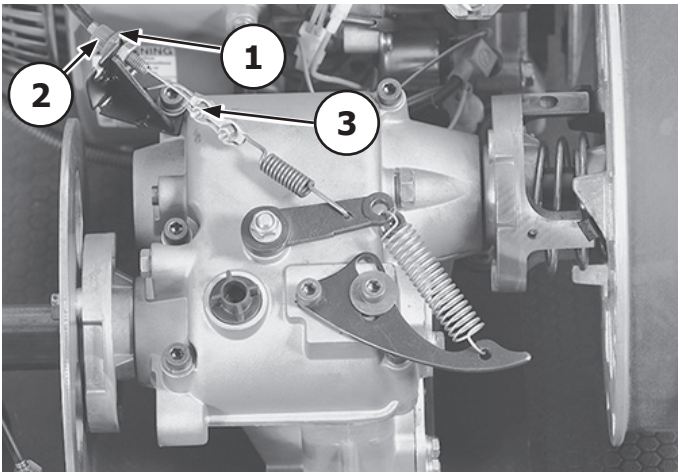
**Operating the SNOWDOG with insufficient adjustment of the shift cable will cause damage to the reverse gearbox.**

1. Shut down the engine. Switch the lever of the reverse gearbox into the "forward" position.

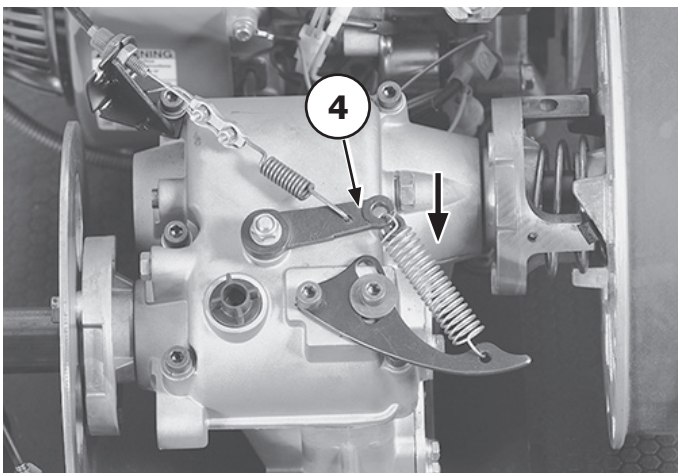




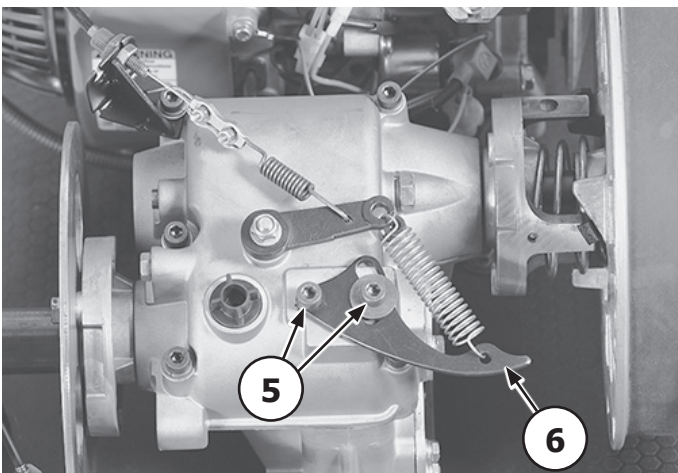
2. Loosen the locknut (1), tighten the adjusting screw (2). Loosen the cable fixing nut (3).



3. Move the lever (4) all the way down. Rotating the driven pulley of CVT, make sure the gear "forward" is switched on.



4. Loosen the bolts (5) and move the bracket (6) down until the moment of a significant tension of the spring. Tighten the bolts (5).



5. Pull the shift cable and tighten the cable fixing nut (3).
6. Create the required tension using the adjusting screw (2) and tighten the locknut (1).
7. Switch the lever of the reverse gearbox into the "reverse" position. Rotating the driven pulley of CVT, make sure the gear "reverse" is switched on.



Repeat the adjustment if necessary.

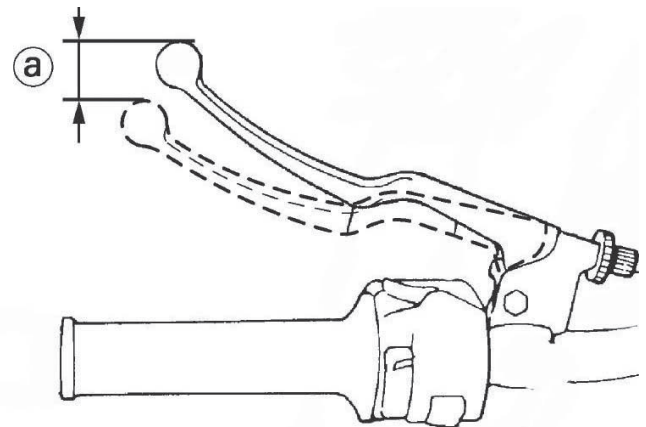
### 13.9 Parking brake

Parking brake consists of brake caliper with pads, brake disc, brake cable and brake lever with a lock.

#### 13.9.1 Brake actuator. Checking, service

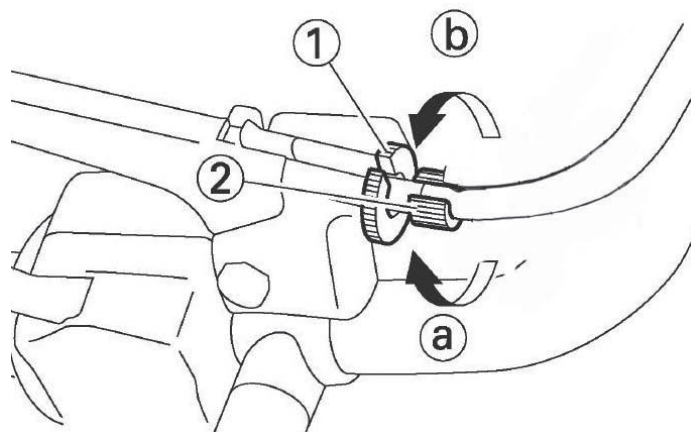
The brake is a combination of a steel disk on the driven shaft of the variator, and a device that compresses the disc brake caliper pads. The braking force is transmitted via the brake lever cable.

The parking brake is actuated by a lever with the clamp on the left handlebar. Check the free movement of lever A. It should have a value of 0.2–0.4 in (5–10 mm).



If the braking force on the lever is not sufficient, for example, when brake pads are worn out, you need to adjust the brake lever stroke.

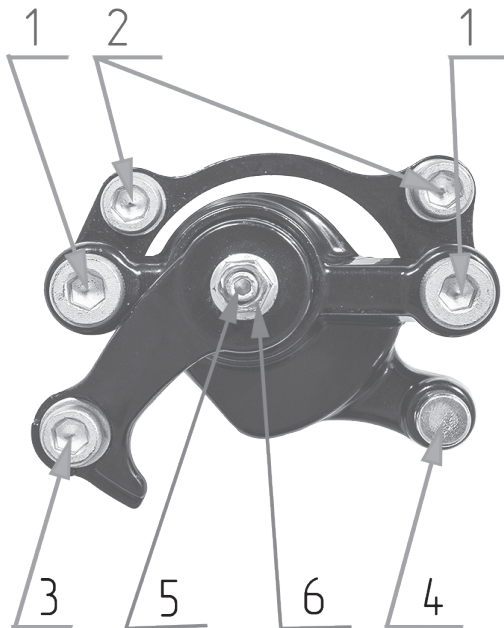
To do this, loosen the locknut (1) and rotate the adjusting screw (2) counterclockwise to pull cable so that the brake lever has a free wheeling within 0.2–0.4 in (5–10 mm).



To loosen the brake cable, loosen the locknut (1) and rotate the adjusting screw (2) clockwise.

If the lever adjustment is not enough to set up the free lever motion, adjust the brake caliper and check the condition of pads.

### 13.9.2 Brake caliper type 1. Checking and service



#### Caliper parts:

1. Bolts that adjust the position of the caliper (provide parallelism of brake pads and the brake disc).
2. Fastening bolts of a caliper.
3. Brake cable fixing bolt.
4. Brake cable stop.
5. Bolt that adjust the distance between the pads.
6. Locknut of the adjusting bolt.

#### Adjusting the brake caliper:

Fully loosen the tension of the brake cable on the lever, as described in paragraph 13.9.1. Ensure ease of pushing the lever and the parking brake cable and ease of returning them to the starting position.

1. If the movement of the lever is complicated, lubricate or replace cable.

2. If the parking brake lever is in the starting position, and the cable is slack — adjust the tension of the cable on the parking brake caliper. To do this, loosen the bolt (3) and pull the cable to remove its slackness. Do not create tension in the cable. Tighten the bolt (3) and check the operation of the parking brake lever.

3. Turn the bolts (1) to adjust the position of the caliper to the brake disc. The fixed brake pad should be parallel to the brake disc. Adjust minimum possible distance between the fixed brake pad and brake disc. The brake pad is allowed to graze on the brake disk if it is not obstructing the disk's rotation.

Loosen the locknut (6). Tighten the bolt (5) until the moment of touching of the movable brake pads to the brake disc. Holding the bolt (5), tighten the locknut (6). Check the rotation of the brake disk. The brake pads are allowed to graze on the brake disk if they are not obstructing the disk's rotation.

4. Check the movement of the parking brake lever. If necessary, adjust the tension of the cable as described in paragraph 13.9.1.

5. Check the condition of the brake pads. Limit the working thickness of the brake pads' material to 0,004 in (1 mm).

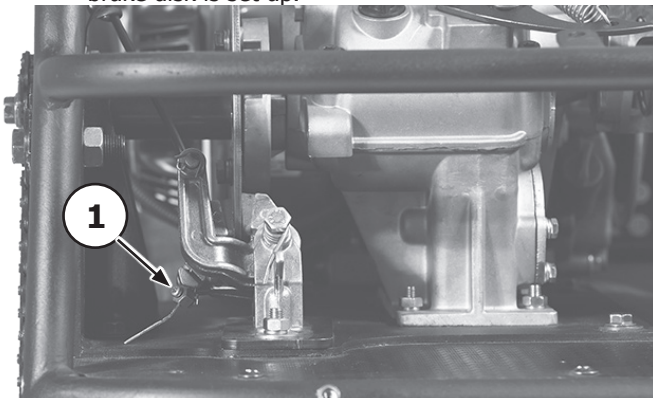
If the brake pads are worn, replace the brake caliper.

If the brake pads are in order adjust the brake caliper as described in paragraph 13.9.2, subparagraph 2.

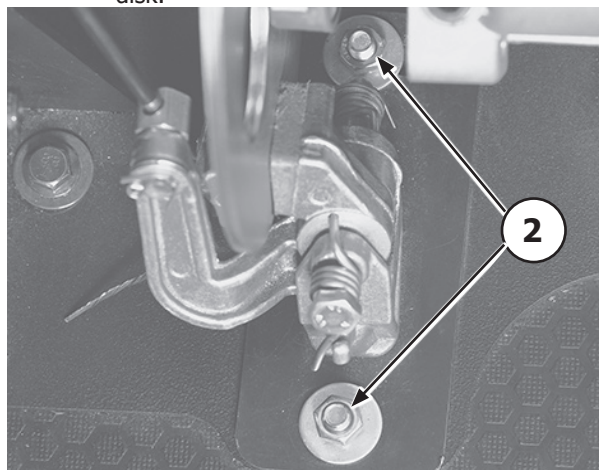
### 13.9.3 Brake caliper type 2. Checking and service

Fully loosen the tension of the brake cable on the lever, as described in paragraph 13.9.1. Ensure ease of pushing the lever and the parking brake cable and ease of returning them to the starting position.

1. If the movement of the lever is complicated, lubricate or replace cable.
2. Loosen the bolt (1) and pull the cable until the necessary clearance between the brake pads and the brake disk is set up.



3. Tighten the bolt (1) and check the movement of the parking brake lever.
4. Loosen the nuts (2) of the brake caliper bracket and adjust the position of the brake pads to the brake disk.



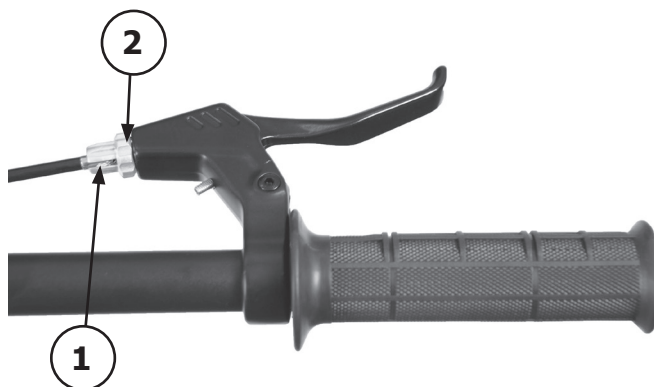
Check the functioning of the parking brake.

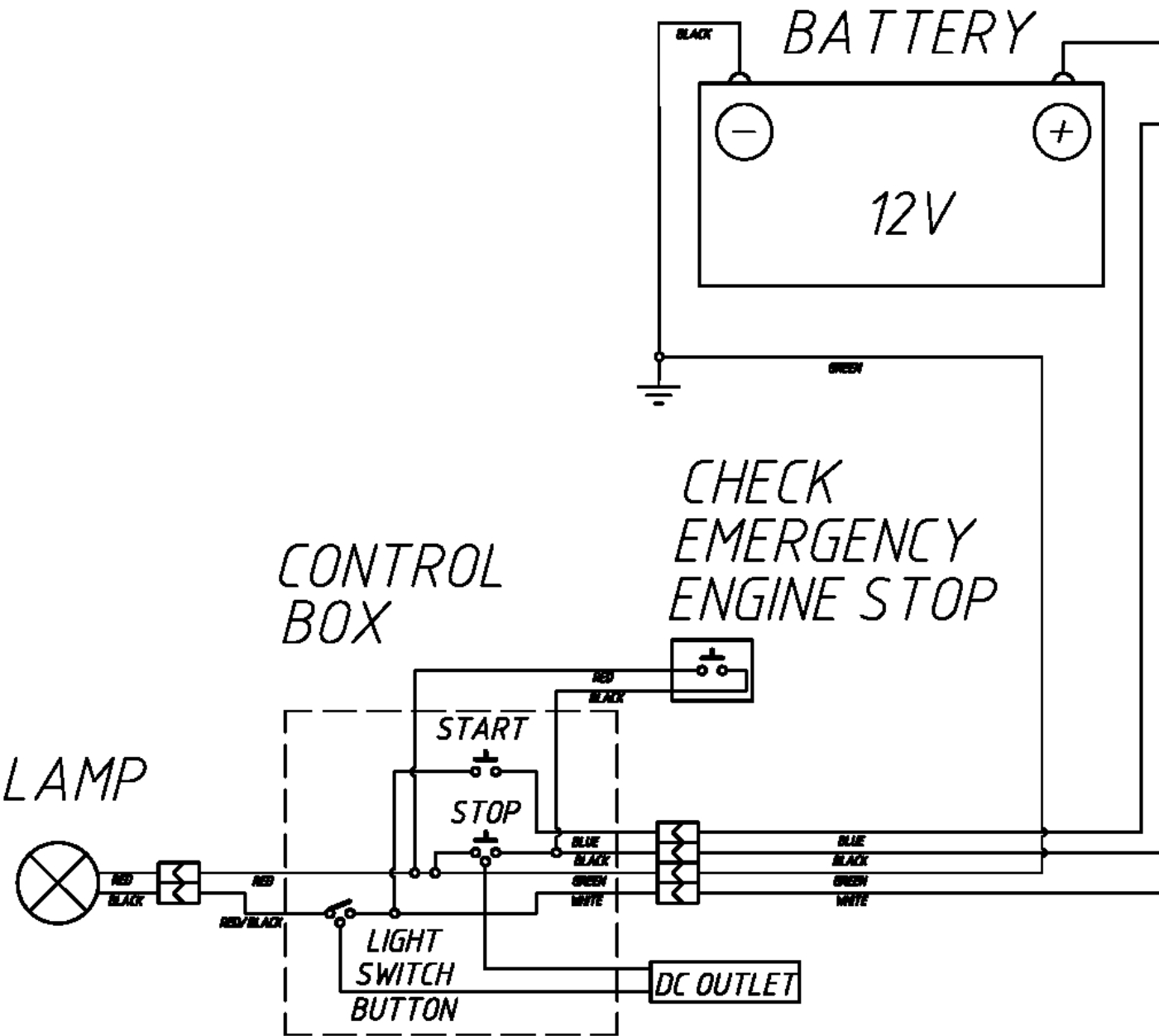
If the brake pads are obstructing the brake disk's rotation, increase the brake lever stroke.

### 13.10 Adjusting the throttle

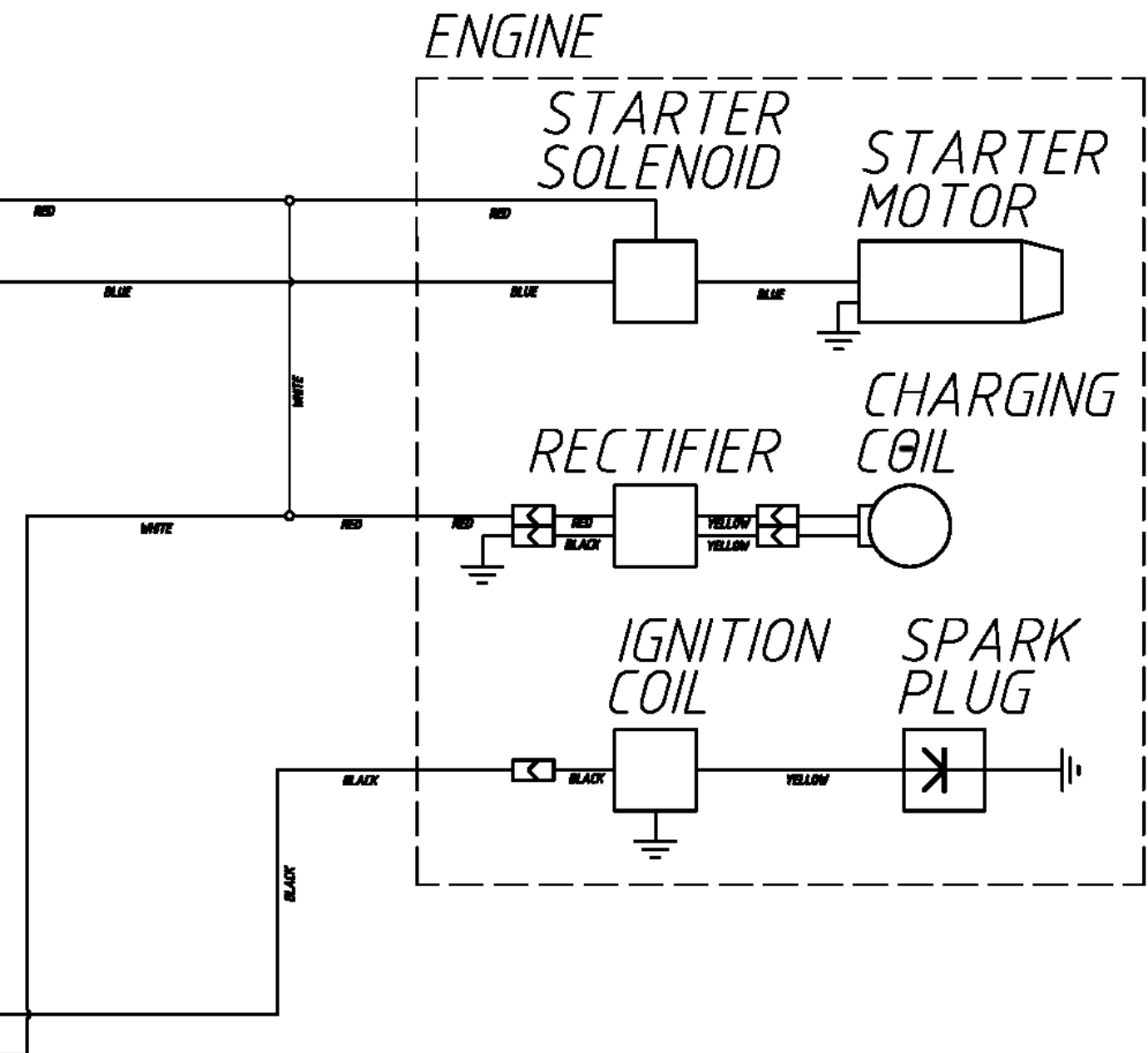
To adjust the throttle lever, loosen the locknut (2) and rotate the adjusting screw (1) counterclockwise. Pull the rope so that the throttle has a free running within 0,2–0,3 in (5–7 mm).

To loosen the throttle cable, loosen the locknut (2) and rotate the adjusting screw (1) clockwise. Loosen the cable.









All information in this manual corresponds to the state of the products at the date of signing and printing the document. The manufacturer reserves the right to make changes to design without prior notice and without any obligations. If a difference is found between this Manual and your Snowdog, please contact your Snowdog dealer for the latest information. The service life of the Snowdog, subject to the rules of operation and maintenance specified in the Manual, is 5 years.

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