1 Preamble

Thank you for purchasing the "SNOWDOG"!
To get the most of your motor tow, 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 motor tow, equipped with a quality Briggs & Stratton engines and ready for off-road work or recreation.

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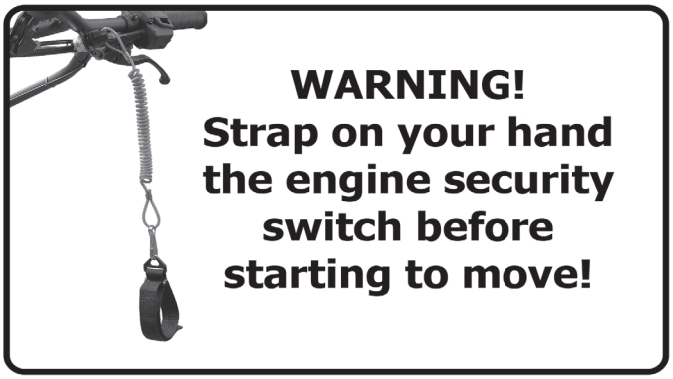
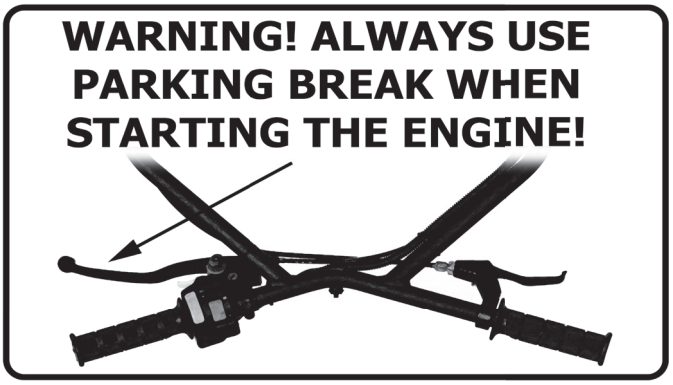
2 Safety tips

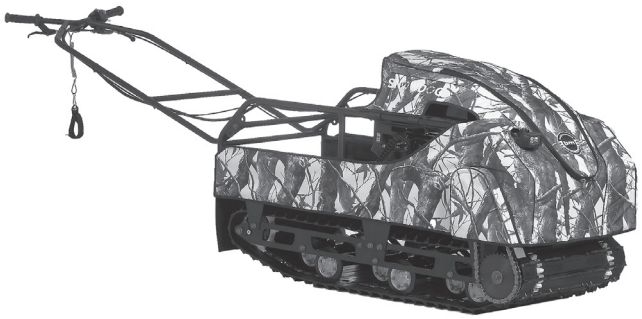
This Owner's manual contains important information on safety tips and operating instructions for motor tows. In case of resale, please transfer this document and the engine service manual to the next motor tow owner due to the importance of the information contained.
Please read this manual carefully before operating the motor tow. Non-compliance with the following rules and instructions may cause serious damage and even injuries. Motor tow operating safety tips and instructions are marked with "CAUTION!" tag listed herein.





SNOWDOG™

OWNER`S MANUAL
SNOWDOG STANDARD B13ME WR



Caution!

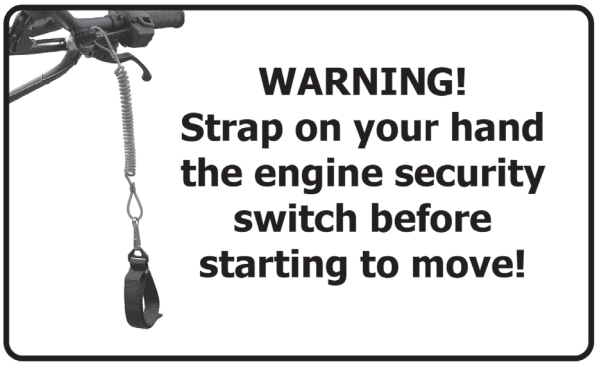
1. Before operating the motor tow you must read the Owner's manual and engine operator's manual.
2. It is prohibited to operate the motor tow for minors under 16 years old, and not recommended to operate motor tow for people who are not capable of safe operating due to different reasons.
3. It is prohibited to operate the motor tow under the influence of alcohol and/or drugs .
4. It's prohibited to use motor tow without the chain protection cover, mud flaps and emergency engine shutdown switch.
5. Operating a faulty or defective motor tow unit is prohibited.
6. Riding the motor tow on public roads and trails is strictly prohibited.
7. Motor tow is designated strictly for outdoor use. Indoor use is prohibited.

3 Introduction

The purpose of this manual is to familiarize you with the motor tow maintenance and operation procedures, and give you troubleshooting tips. Motor tows «SNOWDOG Compact» and «SNOWDOG Standard» are towing modules designed for transporting cargo in the luggage compartment, hauling cargo on sledge and skis over ice designated and snow-covered terrains. Motor tow is lightweight and compact, for convenient storage and transport.

Caution!

- Stay clear of the moving gears in the drive shaft and chain!
- Park the motor tow 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 motor tow.
- Do not start the engine if the steering handles are folded.
- Do not fold the steering handles while the engine is running.
- Do not use the parking brake during the ride - it may cause the motor tow to overturn.
- 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 must be fixed to a moto tow with rigid drawbars only.
- Wearing protective hand gloves when riding the motor tow is recommended.
- In order to avoid exposing ears to excessive noise while riding the motor tow we recommend using protective earpieces for both driver and passenger.
- Do not use SNOWDOG at air temperature above +5°C. If you need to use it at temperature higher than +5°C than the engine cover must be removed. Otherwise, it will cause the engine to overheat.



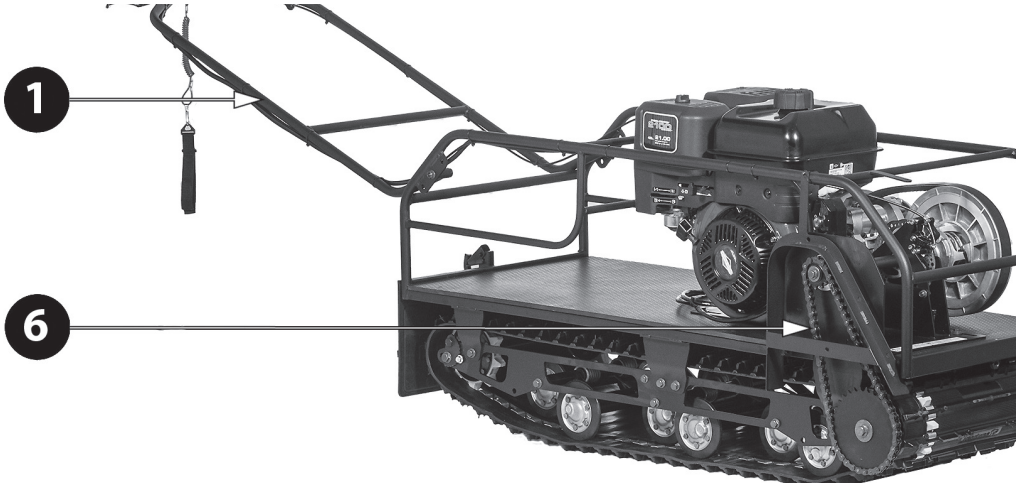
4 Technical specifications for "SNOWDOG" motor tows

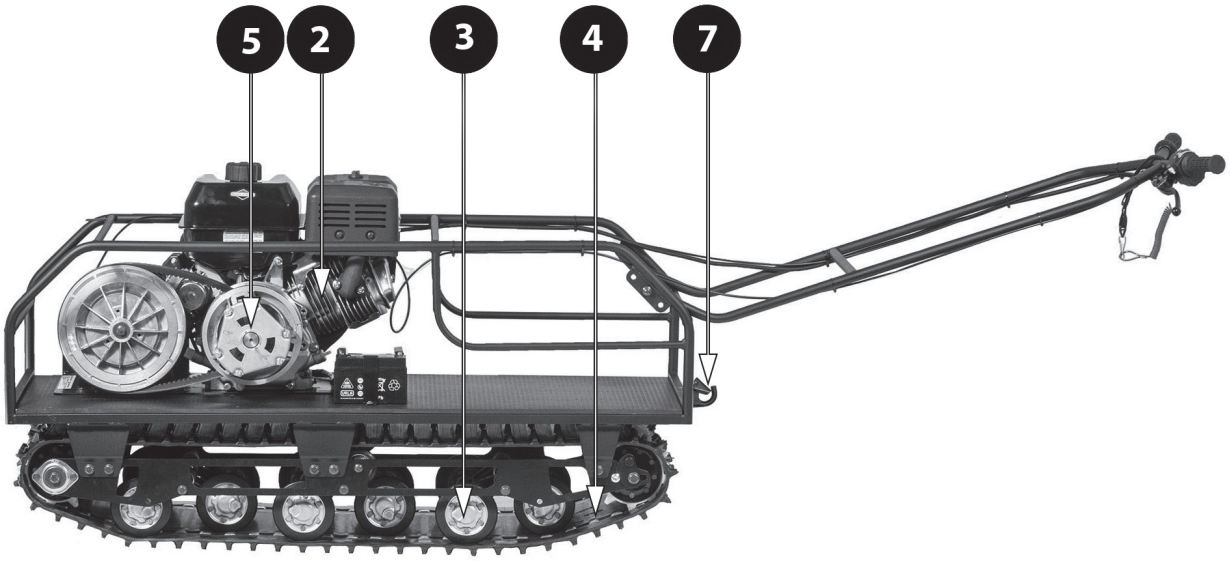
4.1 Technical specifications for «SNOWDOG» models

	Specs	SNOWDOG STANDARD B13 ME WR
1	Overall dimensions in transporting and operating position:	
	Length, in (mm)	58.0/ 94.5 (1470 / 2400)
	Width (including steering handles), in (mm)	23.50 (600)
	Height, in (mm)	30.0 (770)
2	Torque, ft-lbs (Н·м)	21.05 (28.54)
3	Engine Displacement, ci (cm³)	25.63 (420)
4	Track type	Standard
	Tread count	56
	Dimensions: length × width, in (mm)	111.3×19.69 (2828×500)
5	Weight, Lbs (kg)	295 (134)
6	Maximum speed, mph (km/h)	15.53 (25)
7	Maximum load capacity on top of the motor tow, Lbs	110 (50)
8	Maximum sledge load capacity (including the driver), Lbs	440 (200)
9	Fuel type (gasoline)	87 octane
11	Transmission type	CVT

5 Overview

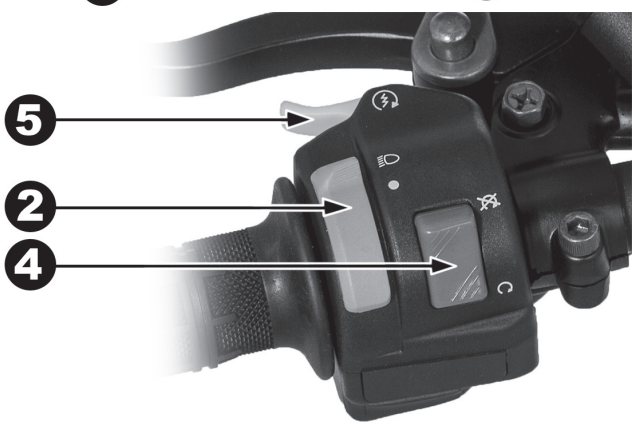
1. Steering handles.
2. Engine.
3. Supporting rollers.
4. Track (Caterpillar).
5. CVT.
6. Chain.
7. Hooking device.





6 Basic controls

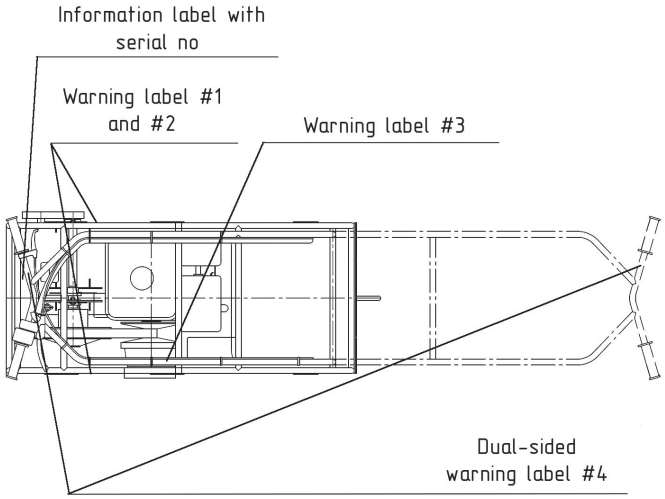
1. Parking control arm with lock.
2. Light switch button.
3. Throttle control trigger.
4. Engine stop button.
5. Electric starter button.



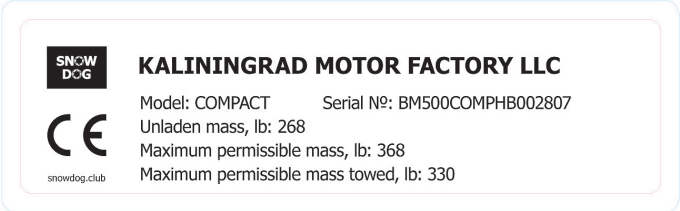
6.1 Snowdog identification

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.

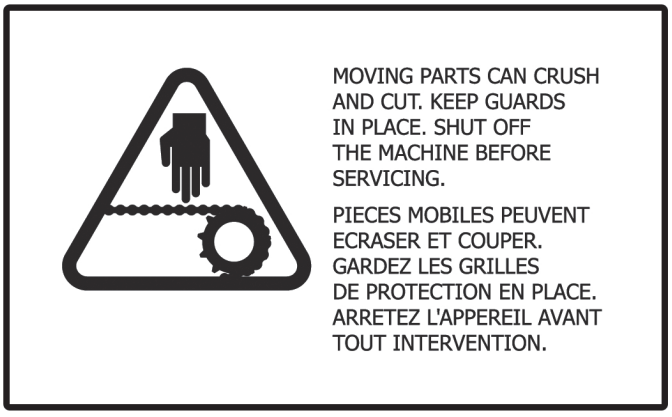
6.2 Information labels displacement



Information label with serial no.



Warning label #1 and #2



Warning label #3

Dual-sided warning label #4

7 Packaging

Motor tow delivery set contents:

1. Motor tow - 1 pc.
2. Support bracket - 1 pc.
3. Battery - 1 pc.

Owner's documentation:

4. Owner's Manual - 1 pc.
5. Warranty services agreement - 1 pc.
6. Operator's engine manual - 1 pc.

Note

Spare parts and accessories can be ordered from your dealer.

8 SNOWDOG set-up

8.1 Installation of the case support bracket

Prior to startup of Snowdog install the case 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.

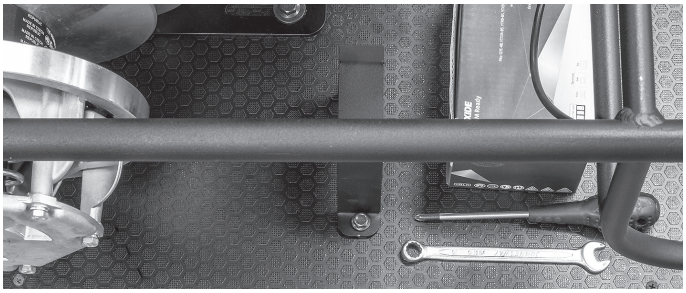
Screw the bolts, previously unscrewed from the chassis, so that the bracket would be places between chassis and the cover, and would separate hot muffler from the cover.

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 100mm. If the distance is less the 100mm, bend the cover bracket.

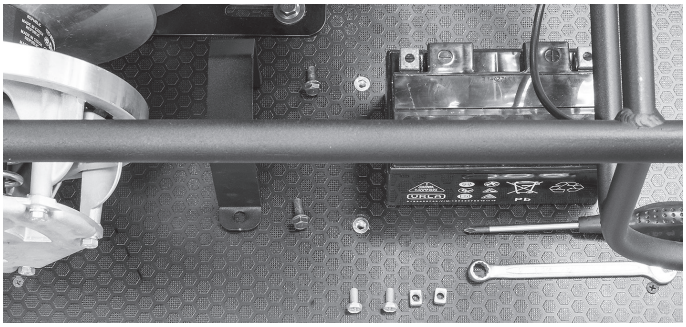
8.2 Battery installation

It is necessary to install and connect the battery before startup of Snowdog. You will need a battery (supplied with Snowdog), metric wranch 10mm (not included) and a Philips screwdriver (not included).

Unscrew 2 bracket mounting bolts using 100mm wrench.



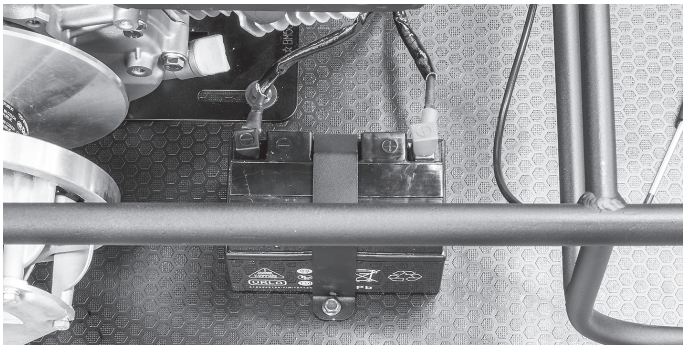
Install the battery, and tighten it with the bracket suign the 100mm wrench.



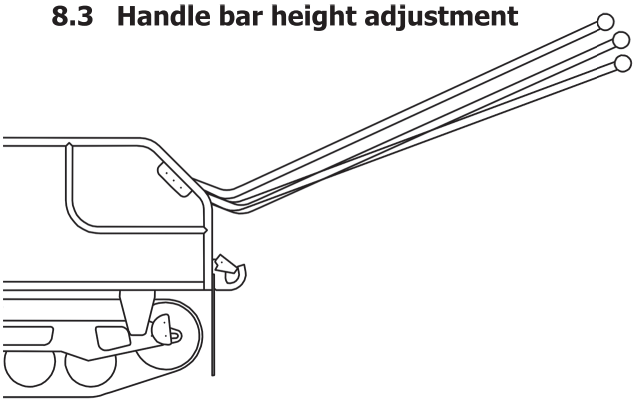
Connect the electric wires to the battery, strictly observing the polarity. Wire with the red cover is connected to the cleat market with + sign, wire with black cover is connected to the cleat marked with - sign. Tightly secure the contacts.

⚠ **Warning!**
Pay attention to the polarity when connecting th battery!

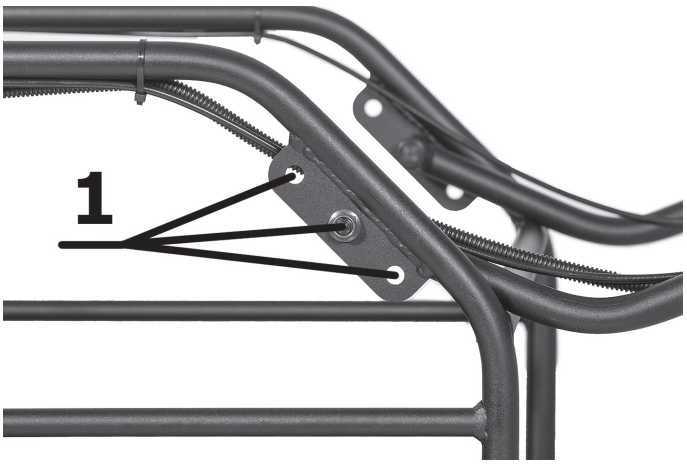
General view of the assembled battery.



8.3 Handle bar height adjustment

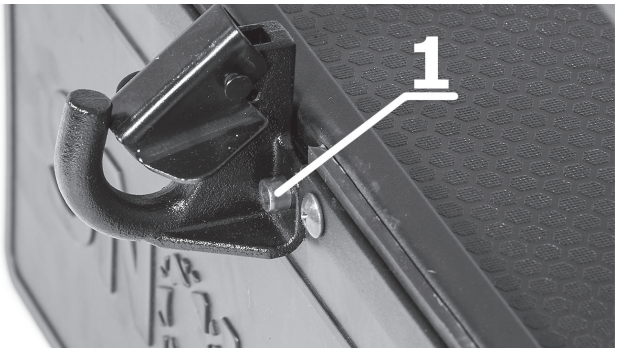


To adjust the height of the steering handle you must rearrange fixture in one of the three holes 1. In order to raise the wheel higher, move the mounting holes in the bottom. In order to lower the lower wheel, move the steering wheel to the upper hole. Please note, both the handlebar mounting must be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



8.4 Preparations, necessary to maintain before every star up

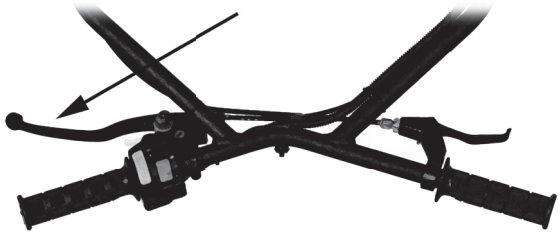
1. Move the steering handles from the transporting position into the operating position
2. Sleds are mounted to the motor using hitch.
3. Check the chain tension – the chain should be neither loose, nor tight.
4. Check the throttle and brake cable (lubricate if needed).
5. Check the parking brakes.
6. Move the parking brake into the fixed position.
7. Set up the engine according to the instruction manual of the engine.
8. Start the engine according to the instruction manual of the engine.
9. Strap the engine security switch on your hand before starting to move. Check how the kill switch is installed. Kill switch which is not installed completely may lead to incorrect work of the engine.
10. Release the parking brake from the fixed position before moving.
11. Check the hooking device and its 1 fastners.



9 Operating the SNOWDOG

Be sure to study the information regarding engine first and then start the engine as described in paragraph 14 of the manual. Let the engine warm up for 1-2 min.

WARNING! ALWAYS USE PARKING BREAK WHEN STARTING THE ENGINE!



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

9.1 Driving

Motor tow is operated by a driver in a standing position. Throttle arm on the right side of the steering handles controls take-off and speed change. Motor tow starts moving when the throttle arm is approximately in ¼ position. When starting to move on a crumbly snow, accelerate slowly in order to avoid slipping. To make a turn, steer the handles in the direction opposite to the turn. To stop the motor tow, release the throttle back - never apply the parking brake to stop the motor tow while driving.

9.2 Stopping the engine

To stop the engine, throttle back to minimal RPMs and flip the engine stop button to "OFF" position.

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

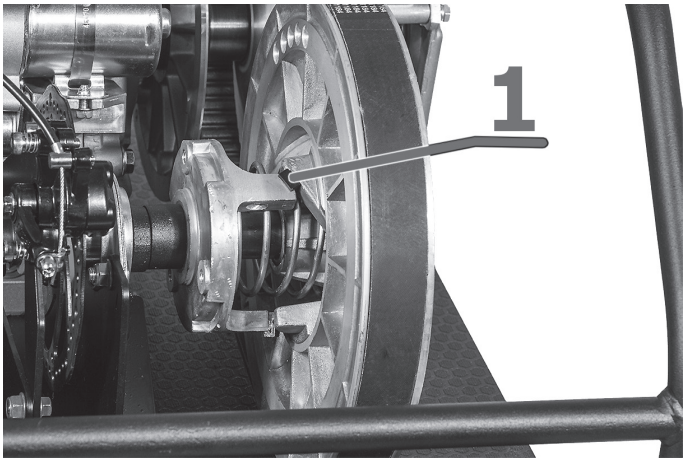
Maintenance

9.3 Before each trip

Check the secure connection of the parts and assemblies of the motor tow and tighten the screws if necessary. Check the parking brakes. Check the engine oil level. Check the drive chain, lubricate if necessary.
Pay particular attention:
Handlebar mounting and attachment the hitch.

9.4 After each trip

1. Shut down the fuel valve (if provided). Clean motor tow from any snow and/or dirt.
2. Lube the chain with a aerosol chain spray.
3. Visually check track tension.
4. Visually check the driver and driven shaft of the CVT, clean out of dirt if necessary. Be sure to check for plastic inserts 1 in CVT driver shaft. I plastic inserts are missing or worn out - insert new ones.



9.5 After the first 5 hours of motor tow operation

1. Lubricate the throttle and parking brake cables
2. Lubricate the drive chain and sprockets with a aerosol chain spray
3. Adjust throttle and parking brake arms (free motion 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 track tension.

9.6 After each 20 hours of motor tow running

1. Lubricate the throttle and parking brake cables
2. Lubricate the drive chain and sprockets with a aerosol chain spray
3. Adjust throttle and parking brake arms (free motion 0.19 - 0.27 in (5-7 mm))
4. Adjust the chain tension.
5. Check the track tension as described in paragraph 16.3
6. Change the engine and transmission oil.
7. Lubricate the bearings in supporting rollers via service hatch.
8. Service the engine as specified in the operating manual of the engine.

9.7 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 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.

10 Storage

Motor tow 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 9.6. In case of a long-term storage (over a month) perform all the procedures specified in paragraph 9.6 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 motor tow 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 motor tow for another period.
Also follow the engine manufacturer recommendations for long-term storage.

10.1 Track maintenance

Check the track condition and its tension after each trip. Excessive track tension is offen the reason for power loss and causes engine overload.
You should also check if the track's position is symmetrical to the motor tow. Never operate the motor tow 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 motor tow 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 motor tow under direct sunlight.
Loosen the track before storage.
We recommend storing the motor tow in suspended position. In case of a long-term storage the track must be rotated to a new position once a month.

10.2 Transportation

Drain the fuel from the tank or shut down the fuel valve before transporting. The motor tow must be in a horizontal position during loading and unloading. When transporting the motor tow, make sure it is secure.
Motor tows cannot be stacked during transportation.
Snowdog is equipped with connector for towing eyebolt in the front part of the chassis ot top part of the front mudflap. 1. It is designated to mount the Snowdog during transportations, etc.
Eye bolt is provided with SNOWDOG.

11 Pre-start engine inspection

11.1 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.

✎ **Note***
Automatic engine oil level protection system will switch off the engine if the oil level falls below a safe level, but to ensure the safe operation of the engine it is recommended to check the oil level before each trip.
***This function is disabled on Snowdogs, designated for USA and Canada.**

12 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 inflammable, but can also harm the environment. In case of spilled fuel, wipe down as soon as possible.

13 Starting the engine

1. Be sure to follow all of the procedures specified in paragraph 8.4.
2. Prepare the engine for starting, as described in the engine manual.
3. Lock the parking brake.
4. Set the engine switch to "ON" position.

If you have an electric starter, press the start button electric start (no more than 5 seconds) and start the engine.
To use the recoil starter rope, pull the cord slowly, before resistance, then pull strongly.
When the engine starts, allow it to warm up for 2-5 minutes After warming up the engine, remove the choke lever. Read more in the engine manual.

Caution
When starting the engine with an electric starter, do not hold the switch in "ON" position for more than 5 seconds. If the engine hasn't started, you can retry in 10 seconds.

14 Start drive

1. Strap the engine security switch on your hand.
2. Release the parking brake.

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

14.1 Automatic engine oil level protection*

This safety system shuts down the engine before the oil level falls below a safe level. The system will also detect a critical tilt of the engine and also shut it down. This will prevent possible damage to the interacting parts working with insufficient lubrication. Engine switch will remain in "ON" position. If the engine has stalled and does not start, check the engine oil level before performing diagnostic study.

✎ ***This function is disabled on Snowdogs, designated for USA and Canada.**

14.2 Safety device (if applicable)

The safety device protects the charging circuit of the battery in case of short circuit or improper connection. When triggered, the device shows green button switch. Before returning it back into place, you should locate and eliminate the cause.
To restore the circuit, press the breaker button.

15 Stopping the engine

In case of emergency:

To shut down the engine in case of emergency, turn the engine stop button switch to "OFF" position. Or pull out the emergency engine kill switch.

In normal cases:

1. Adjust the throttle lever to lower RPMs .
2. Turn the engine stop butto to switch to "OFF" position.

3. Close the fuel valve (if avalialable)

16 Maintenance tips

16.1 Changing the oil

Change the oil in the engine produce in accordance recommendations to the operator`s manual engine.

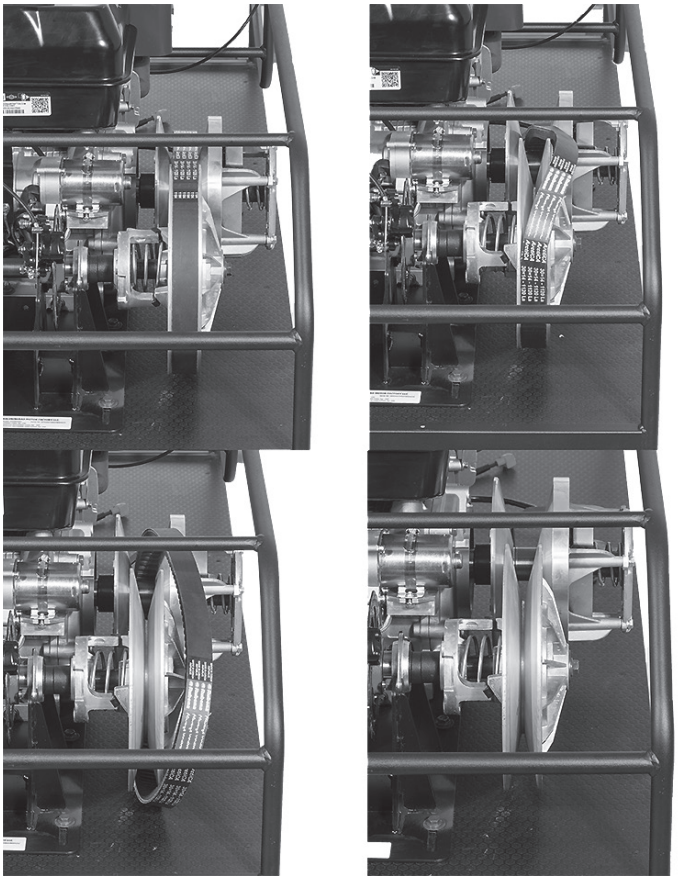
⚠ **Caution**

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

16.2 Replacement CVT belt

1. Turn off the engine,
2. 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 (27mm).

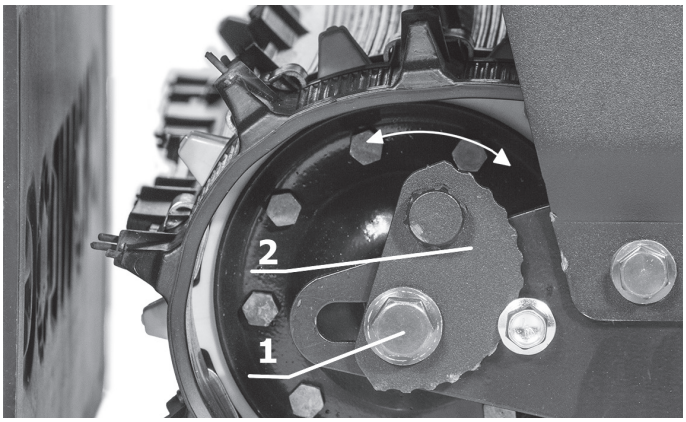
16.3 Track tension check

Before starting any movement check the condition and tension of the track. Over tension leads to engine power loss and causes overloads. Place the motor tow on a flat surface. Place a rigid metal of wooden «straight edge» on top of the track supported by the front and back rollers. Measure the distance between the «straight edge» and the track in the the middle of its length. Normally the track will sag on 0.6-0.8 in (15-20mm) in the middle of its length under its own weight.

☑ **If your model is equipped with a track support roller, its needs to be temporarily removed before measuring the tension.**

16.4 Track tensioning

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

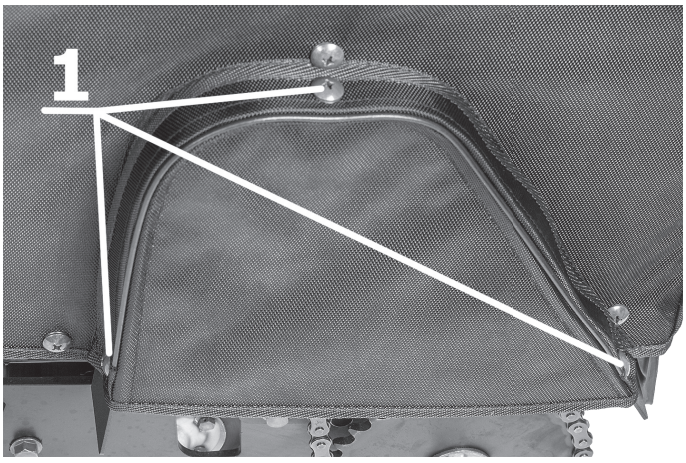


☑ **NOTE:**

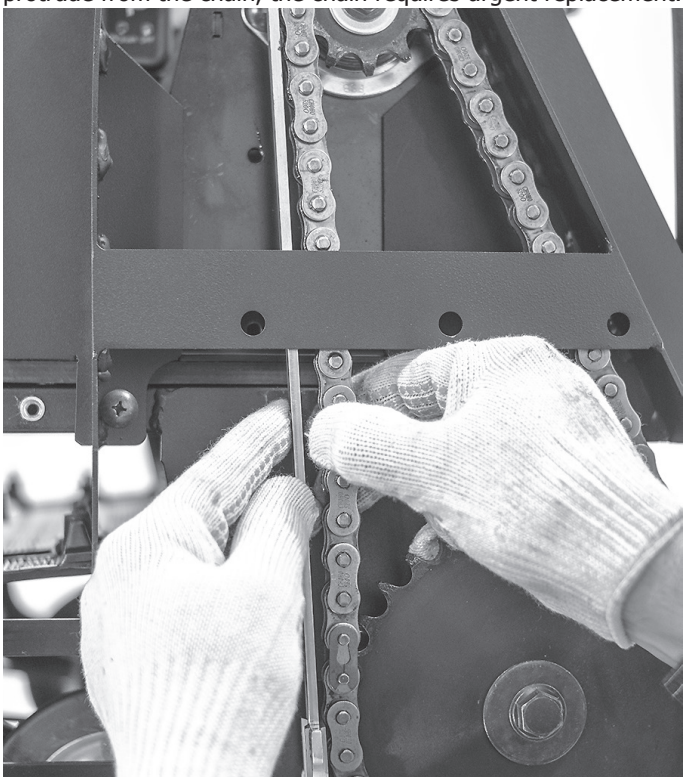
☑ **To eliminate track distortion, eccentric tensioner should be evenly set with the right and left side of the motor tow.**
Check the track tension. Tighten the bolts.

16.4.1 Check 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.

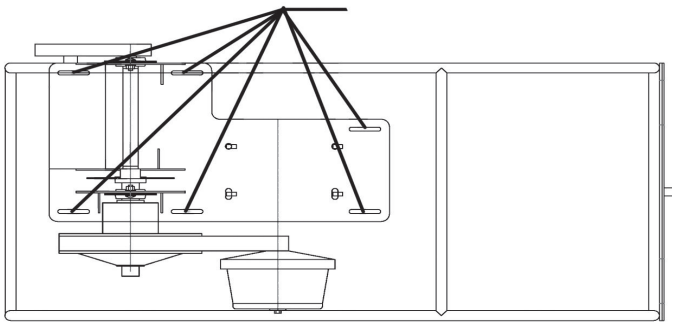


Correctly tensioned chain will have a loose lift of 0.4-0.8 in (10-20mm) between the sprocket. Loose lift less than 0,2 in (5mm) will result in rapid chain stretching, and will lead to fast sprocket wear. An excessively loose chain can fall off during operation. Loose chain needs to be tightened . While operating, the chain stretches, and the distance between chain links changes . If the adjustment range is not enough, then the chain should be replaced. Do not shorten the chain by removing one or more links. When cleaning chain, check the condition of the rubber seals between the plates. If the seals are damaged, and two tips protrude from the chain, the chain requires urgent replacement.



Adjusting chain tension

To adjust the chain tension:
1. Loosen the screws that mount motor and CVT brackets with Snowdog chassis platform.



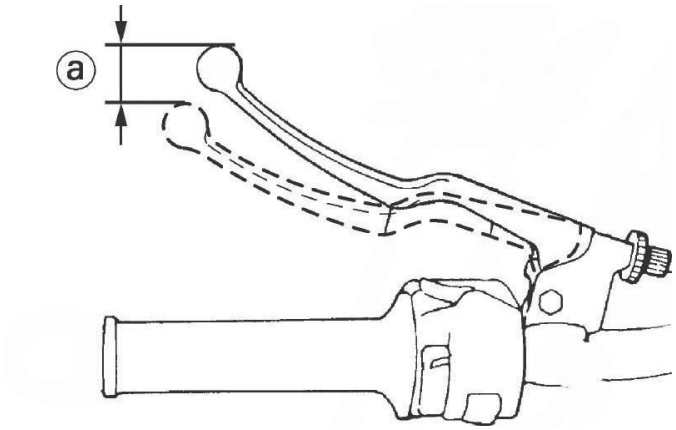
1. To loosen the chain you need to move the engine mount with the motor forward in the direction of movement, to tension the chain move the chain tensioning engine mount with the motor back against the direction of Snowdog movement.
2. Check the chain tension. Repeat step 2 if necessary.
3. Tighten six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

16.5 Parking break

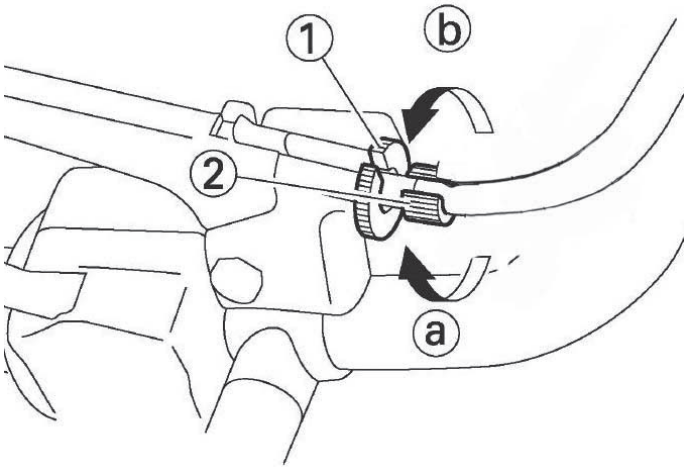
Parking break consists of brak caliper with pads, brake disc, brake cable and brake lever with a lock.

16.5.1 Brake actuator. Ckeck, 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 movement of lever A. It should be 0.2-0,4in (5-10mm).



If the braking force on the lever is not sufficient, for example, when brake pads worn out, or tensile steel cable, you need to adjust the brake lever stroke.
To do this, loosen the locknut 1 and counterclockwise rotation of the adjusting screw 2 pull cable so that the brake lever has a free wheeling within 0.2-0,4in (5-10mm).



To loosen the brake cable loosen the locknut 1 and clockwise rotation of the adjustment screw 2.
If the adjustment is not enough on the lever to adjust the freeк running, adjust the brake caliper and check on the condition of pads.

16.5.2 Brake caliper. Checking and service

Before setting up caliper loosen as much as possible the brake cable as specified in paragraph **16.5.1**

Caliper parts

1. Bolts adjust the position of the caliper (brake pads parallel to the brake disc)
2. Fastening bolts of a caliper
3. Brake cable fixing bolt
4. Brake cable stop
5. Bolt adjusting the distance between the pads.
6. Lock nut of the adjusting bolt.

Adjusting the brake caliper

Fully loosen the tension of the brake cable on the lever, as described in paragraph **16.5.1.** Ensure ease of pushing and return to the starting position of the lever and the parking brake cable.

At the complicated movement of the lever parking brake, lubricate or replace cable. If the parking brake lever is in the starting position, and the cable has slack - adjust the tension of the cable on the parking brake caliper. Loosen the bolt 3 and pull the cable to remove slack. Do not create tension on the cable.

Tighten the bolt and check the operation of the parking brake lever.

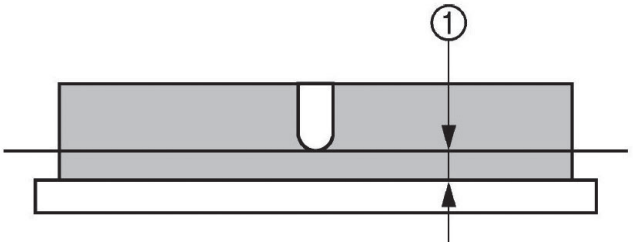
Turn the screws 1 to adjust the position of the caliper to the brake disc. The fixed brake shoe should be parallel to the brake disc pad surface. Adjust minimum possible distance between the fixed brake pad and brake disc.

It`s allowed to graze on the disc brake pads is not obstructing its rotation.

Loosen the lock nut 5. Tighten the screw 6 until touching the movable brake pads on the brake disc. Hold the bolt 6, tighten the locknut 5. Check the brake disk rotation. Allowed to graze on the disc brake pads is not obstructing its rotation.

Check the movement of lever parking brake. If necessary, adjust the tension of the cable as described in section 16.5.1.

Check the condition of the brake pads. Limit the working of the material thickness of the brake pads 0,02 in (0.5mm). 1. If the brake pads are worn, replace them.

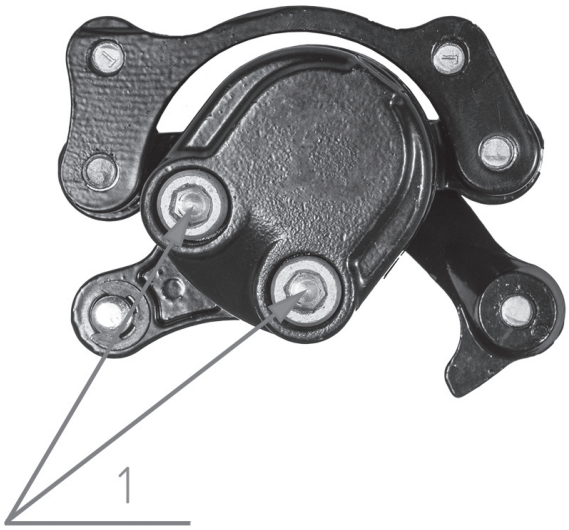


If the brake pads in order to adjust the brake caliper as described in p.16.5.2.

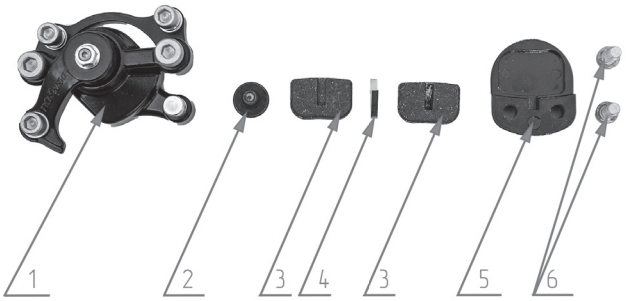
Loosen the cable clamp bolt brake 3, pull the brake cable by removing the slack and tighten the screw 3.

16.6 Brake caliper dismantling

Loosen the screws 1 and disassemble the caliper.



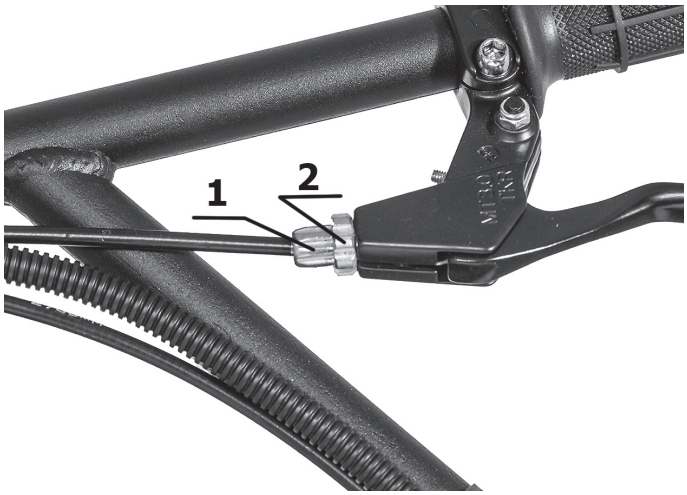
1. Caliper
2. Stop
3. Brake pad
4. Spring
5. Caliper cover
6. Caliper cover bolts.



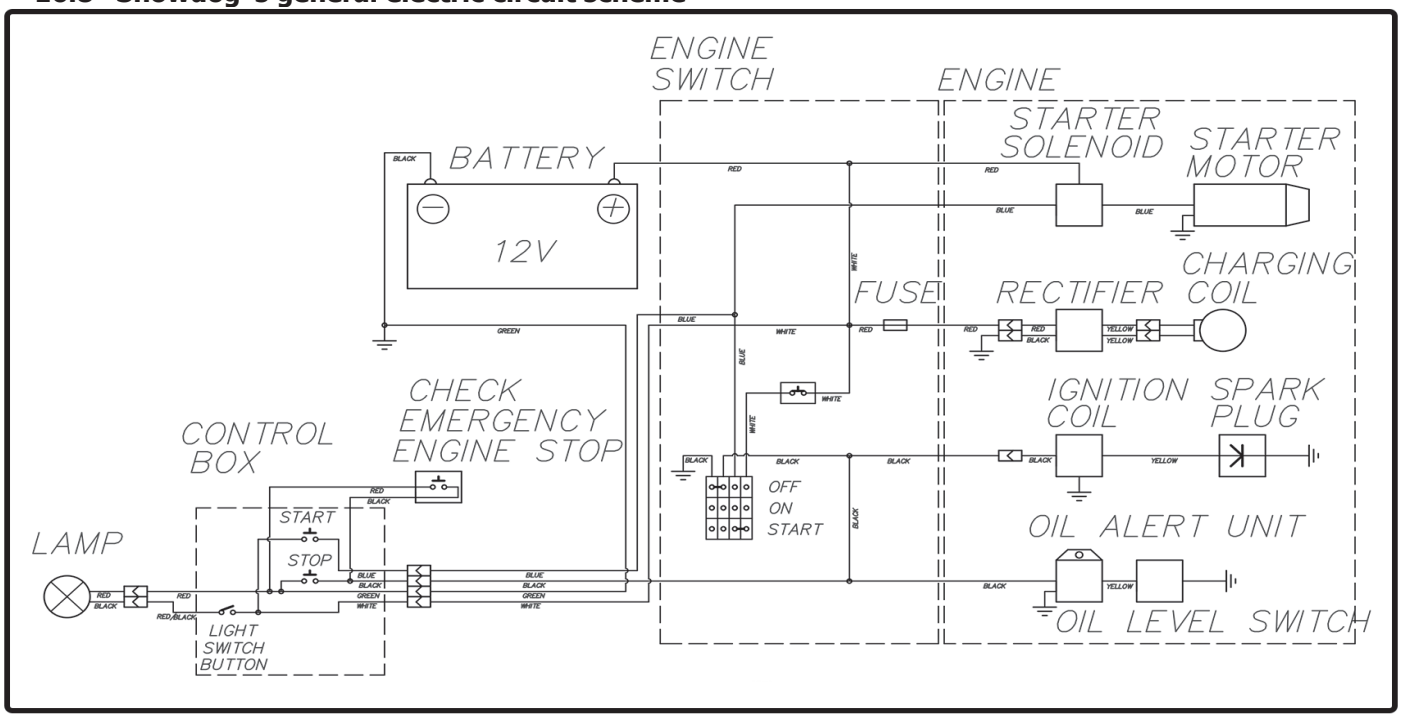
16.7 Adjusting the throttle

To adjust the gas lever to loosen the locknut 2 and counterclockwise rotation of the adjusting screw 1 Pull the rope so that the throttle had free running within 0,2 - 0,3 in (5-7mm).

To loosen the throttle cable, loosen the locknut 2 and clockwise rotation of the adjusting screw 1 to loosen the cable.



16.8 Snowdog`s general electric circuit scheme*



*For engines detailed electric circuit please contact Briggs&Stratton dealers