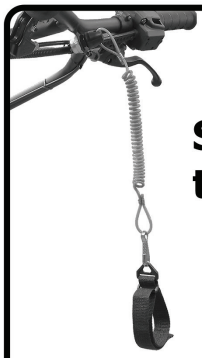
1 Preamble

Thank you for purchasing the "SNOWDOG" motor tow!
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.

Contents

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.



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

WARNING! ALWAYS USE PARKING BREAK WHEN STARTING THE ENGINE!

SNOWDOG

OWNER`S MANUAL

SNOWDOG COMPACT B10E
SNOWDOG STANDARD B10E

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.

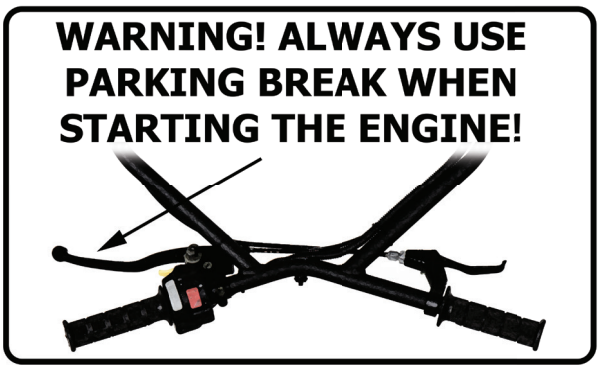
3 Introduction

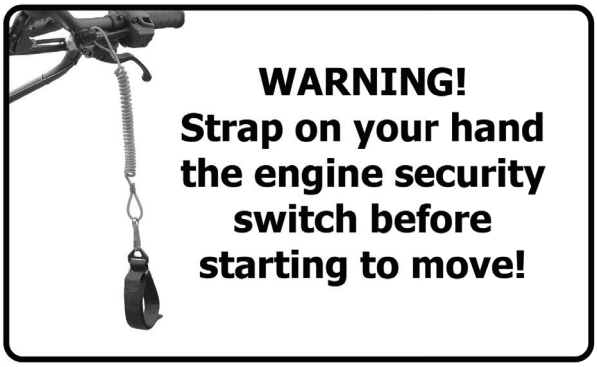
The purpose of this manual is to familiarize you with the motor tow maintenance and operation procedures, and give you troubleshooting tips. Motor tows «SNOWDOG Compact» and «SNOWDOG Standard» are towing modules designed for transporting cargo in the luggage compartment, hauling cargo on sledge and skis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

⚠ CAUTION
HOT MUFFLER CAN BURN YOU.
Stay away if engine has been running.

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.





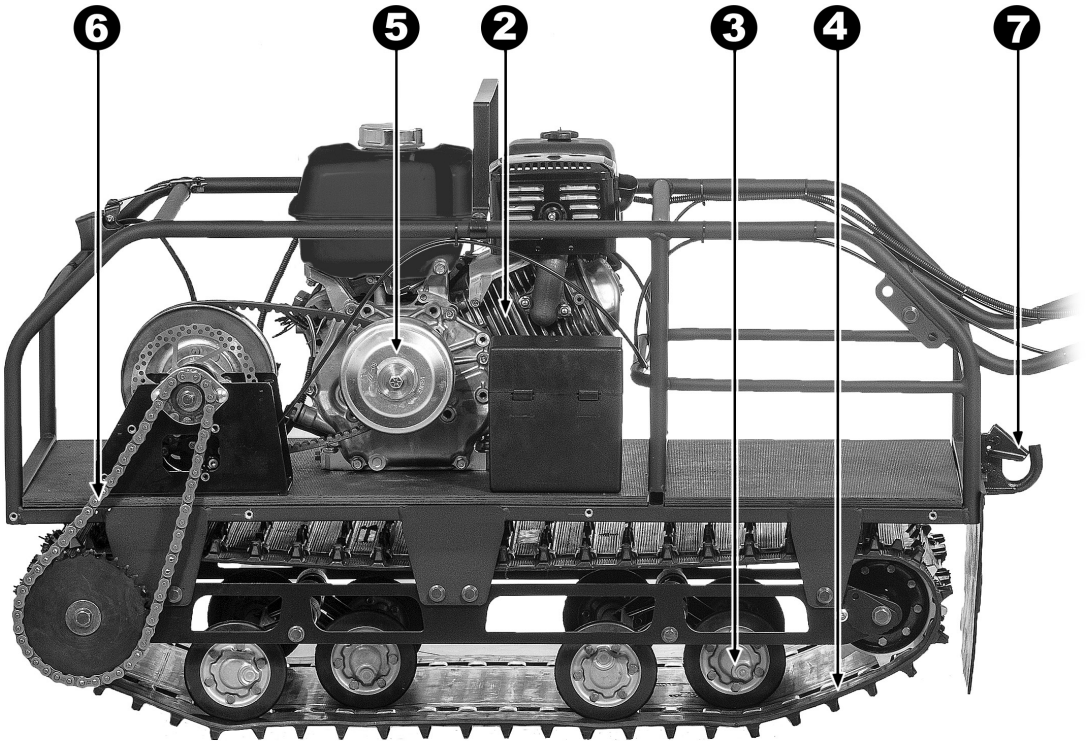
4 Technical specifications for "SNOWDOG" motor tows

4.1 Technical specifications for «SNOWDOG» models

	Specs	SNOWDOG COMPACT B10	SNOWDOG STANDARD B10
1	Overall dimensions in transporting and operating position:		
	Length, in	50.39/ 86.61	58.27/ 98.43
	Width (including steering handles), in	22.05	22.05
	Height, in	30.71	30.71
2	Torque, ft-lbs	14.5	14.5
3	Engine Displacement, ci	18.67	18.67
4	Track type	Compact	Standard
	Tread count	48	56
	Dimensions: length × width, in	95.43×19.69	111.3×19.69
5	Weight, Lbs	268	295
6	Maximum speed, mph	15.53	15.53
7	Maximum load capacity on top of the motor tow, Lbs	100	110
8	Maximum sledge load capacity (including the driver), Lbs	330	440
9	Fuel type (gasoline)	87 octane	87 octane
11	Transmission type	CVT	CVT

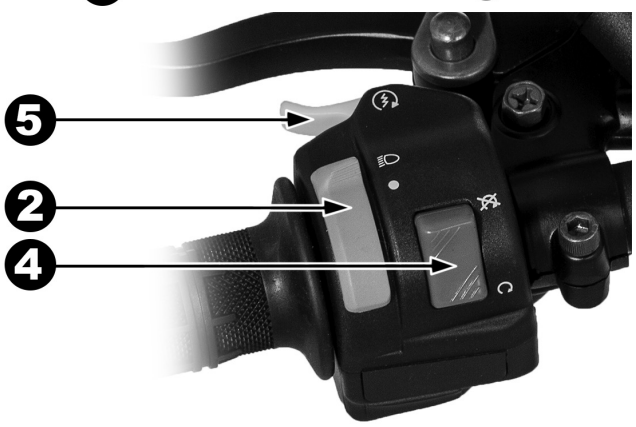
5 Overview p. 1

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



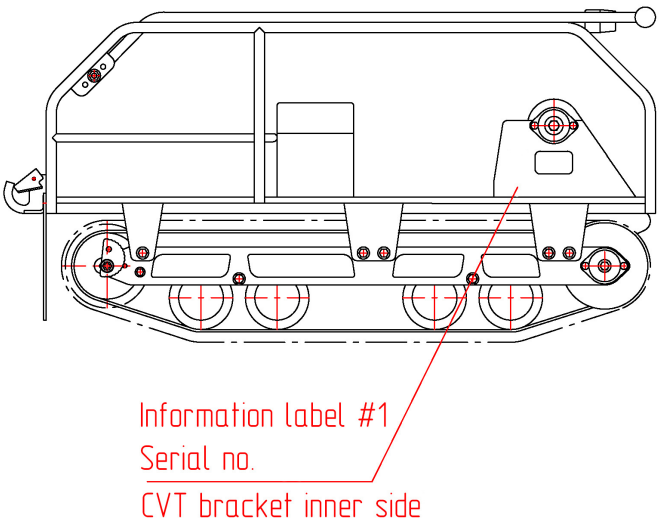
6 Basic controls

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 inner side of the CVT bracket.



May be hard to reach after the CVT pulley is installed.

Information label #1

SNOW DOG

KALININGRAD MOTOR FACTORY LLC

Model: COMPACT Serial №: BM500COMPHB002807
Unladen mass, lb: 268
Maximum permissible mass, lb: 368
Maximum permissible mass towed, lb: 330

CE

snowdog.club

7 Packaging

Motor tow delivery set contents:

1. Motor tow - 1 pc.

Owner's documentation:

2. Owner's Manual - 1 pc.
3. Warranty services agreement - 1 pc
4. Operator's engine manual - 1 pc

Note

Spare parts and accessories can be ordered from your dealer.

8 Motor tow set-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
10. Release the parking brake from the fixed position before moving.
11. Check the hooking device.

9 Operating the motor tow

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.

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.

10 Maintenance

10.1 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.

10.2 After each trip

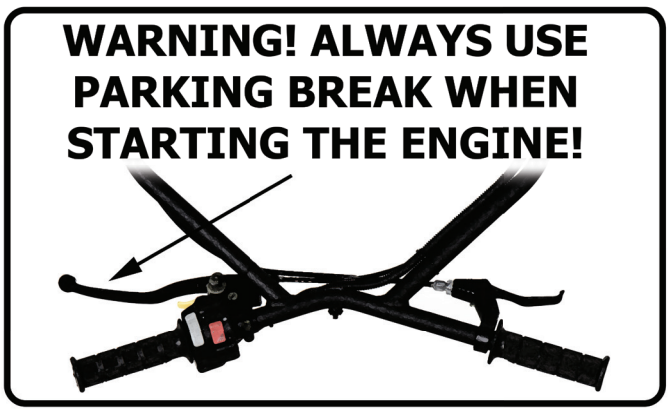
1. Shut down the fuel valve (if provided). Clean motor tow from any snow and/or dirt.
2. Lube the chain with a aerosol chain spray.
3. Visually check track tension.

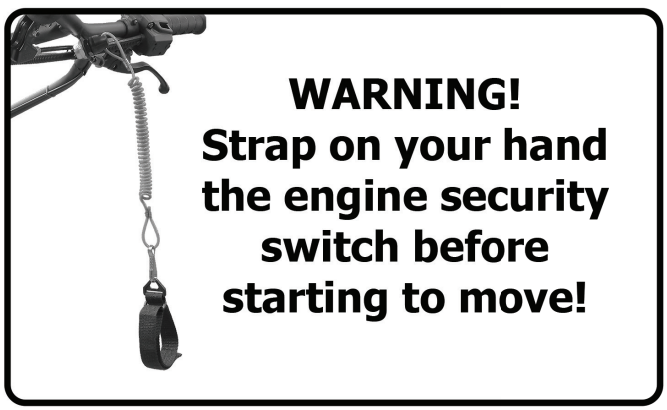
10.3 After the first 5 hours of motor tow operation

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)
4. Adjust the chain tension
5. Service the engine as specified in the operating manual of the engine.
6. Visually check track tension.

10.4 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 play 0.19 - 0.27 in)
4. Adjust the chain tension.
5. Check the track tension as described in paragraph 17.4
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.





11 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 10.4. In case of a long-term storage (over a month) perform all the procedures specified in paragraph 10.4 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 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.

11.1 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.

11.2 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.

12 Pre-start engine inspection

12.1 Checking oil level

⚠ **Check the oil level in the engine, according to the engine manual.**

⚠ **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.

13 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.

14 Starting the engine

1. Be sure to follow all of the procedures specified in paragraph 10.1.
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.

15 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.

15.1 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.

15.2 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.

16 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)

17 Maintenance tips

17.1 Changing the oil

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

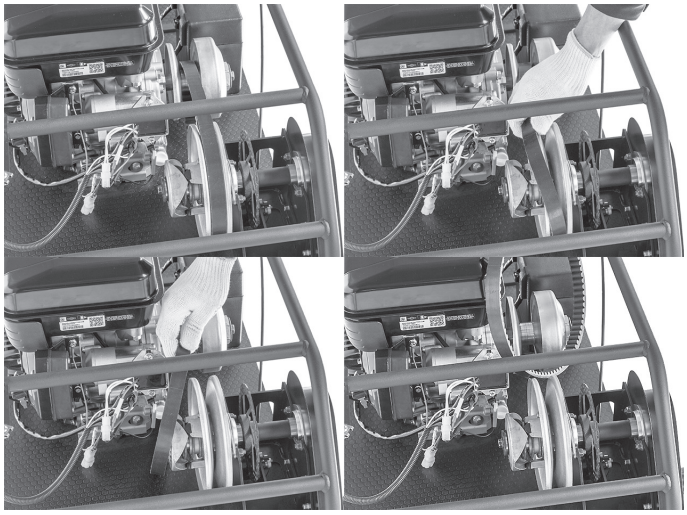
⚠ **Caution**

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

17.2 Replacement CVT belt

1. Turn off the engine,
2. lock the parking brake.

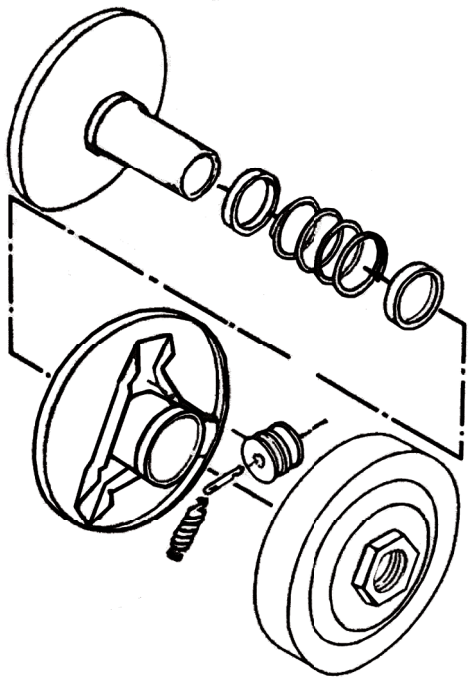
To replace the CVT belt, pull the belt off the large pulley and then from the CVT (as per picture below). Install the belt in the reverse order.



Replace the CVT belt, if it`s worn out or its width is less than 0,78 in.

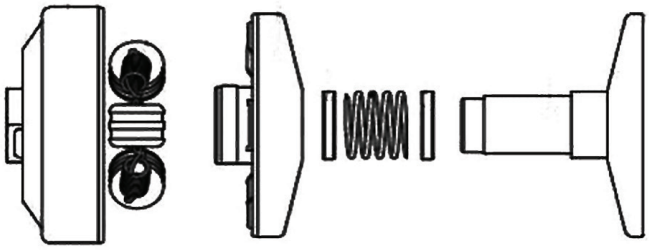
17.3 Servicing the CVT (ZM184)

As the CVT belt wears, it reduces performance of the Snowdog and can cause overheating and jamming.
When replacing a worn belt or when you notice a reduction in performance caused by a worn belt, clean and grease the CVT as described below.

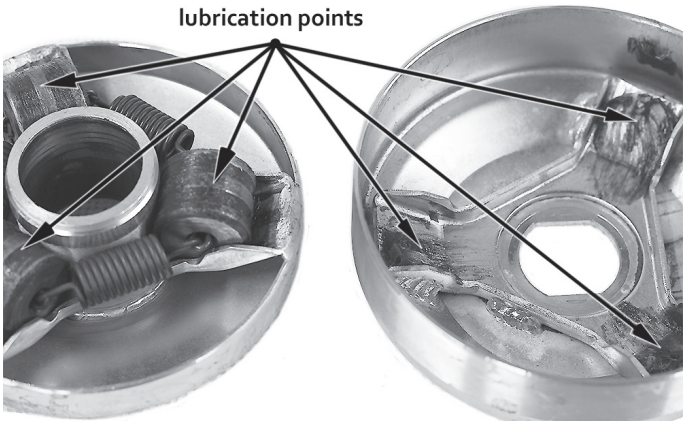


1. Remove the CVT pulley from the crankshaft of the engine
2. Remove the washer, unscrew the nut, disassemble CVT
3. Rinse the CVT mounting seats rollers and rolling places with gasoline.

4. Grease with non-freezing lithium lubricant (for example, TEXACO STARPLEX EP 2) the places where the shaft bushings slide both on inside and outside surfaces.



5. Grease the rollers and rolling surfaces with a non-freezing lithium lubricant (for example, TEXACO STARPLEX EP 2).

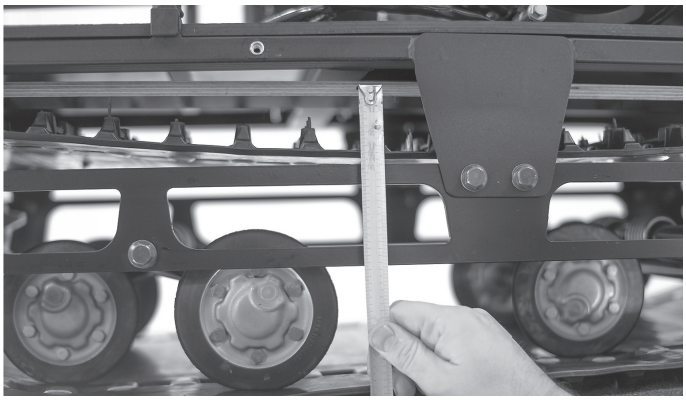


6. Assemble the CVT.

⚠ **Warning :**
NEVER ALLOW THE LUBRICANT TO GET ON THE WORKING SURFACE OF THE CVT (where the belt runs.)

17.4 Track tension check.

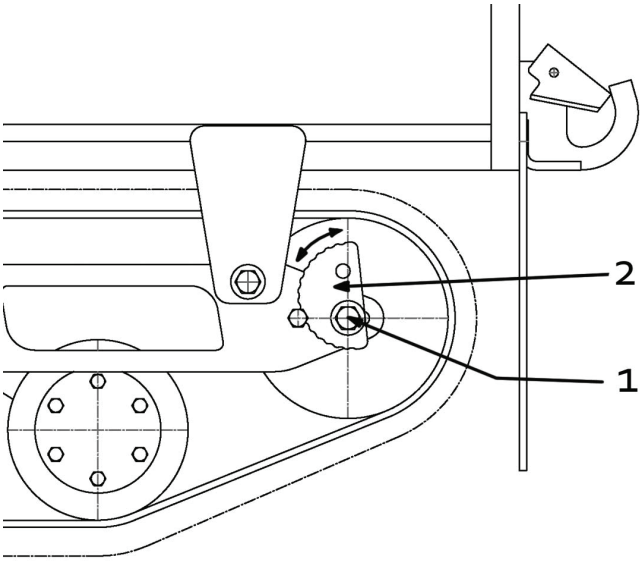
Before starting any movement check the condition and tension of the track. Over tension leads to engine power loss and causes overloads. Place the motor tow on a flat surface. Place a rigid metal of wooden «straight edge» on top of the track supported by the front and back rollers. Measure the distance 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 (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.**

17.5 Track tensioning.

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

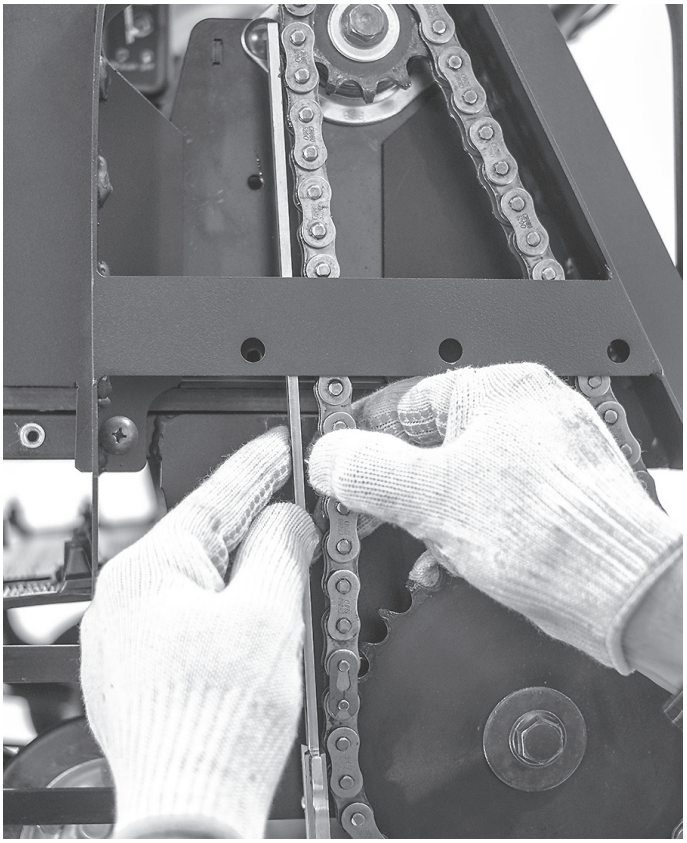


☑ **NOTE:**

☑ **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.

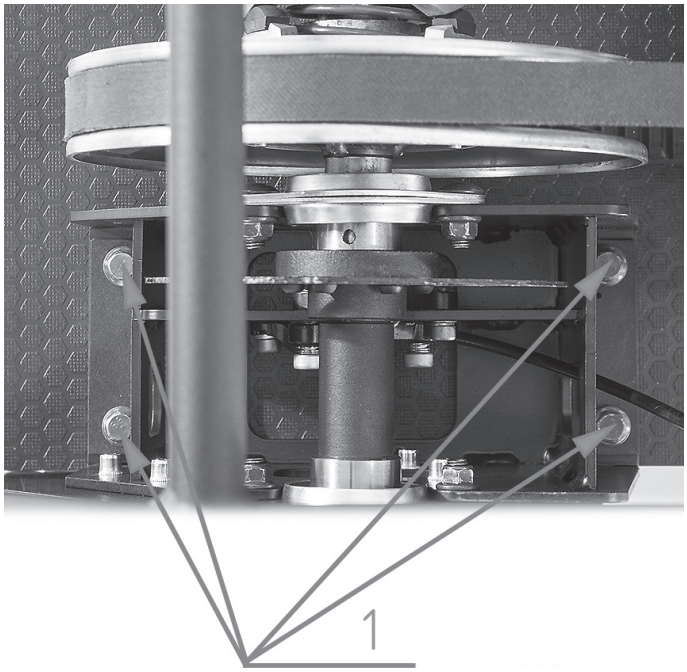
17.5.1 Check the chain tension



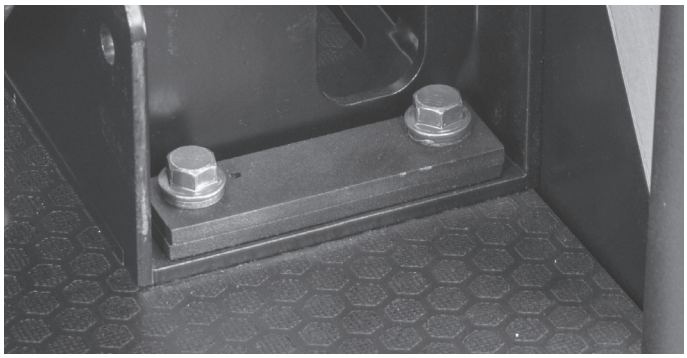
Correctly tensioned chain will have a loose lift of 0.4-0.8 in between the sprocket. Loose lift less than 0,2 in will result in rapid chain stretching, and will lead to fast sprocket wear. An excessively loose chain can fall off during operation. Loose chain needs to be tightened . While operating, the 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.

17.5.2 Adjusting chain tension

To adjust chain tension, loosen the four screws bolt attaching the CVT bracket to it`s chassis.



Remove the adjusting plates and move them under the arms of the CVT.



Tighten the four mounting bolts