

TROUBLESHOOTING MANUAL.  
ADVICE FOR EXTREME DRIVING

**Regular and timely servicing of your ATV will assure its reliable operation.**



**ATTENTION!**

This manual has been put together to help you in unforeseen situations and is highly recommended.



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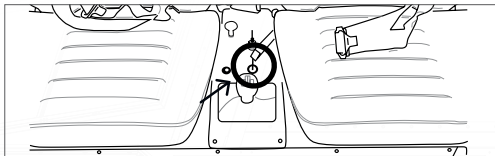
The manufacturer bears no responsibility for any damage that may be caused in any manner due to following these recommendations.



**ATTENTION!**

Before starting to operate this ATV, familiarize yourself thoroughly with the user's manual.

## 1. STARTING THE ENGINE IN COLD WEATHER

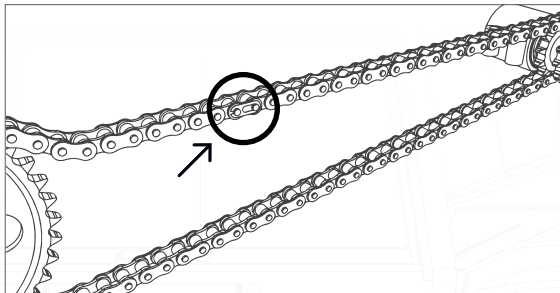


- Press the accelerator in about half-way.
- Insert the key into the ignition lock and turn it to the "ON" position.
- Turn the ignition key to the "GL" (preliminary heating) position and hold the key in this position until the spark plug incandescence indicator on the instrument panel lights up (about 10s).
- Press the clutch pedal in.
- Turn the ignition key to the "ST" (Start) position. The engine should start. After starting the engine, immediately return the key to the neutral "ON" position.

If the engine does not start after 10 seconds of holding the key in the "ST" (Start) position, wait 30 seconds and repeat the preliminary heating and attempt to start. Never allow the electrical starter to operate for more than 20 seconds at a time.

Preheat the engine not only in low temperatures, but also when the surrounding air temperature is high.

## 2. VEHICLE STOPS

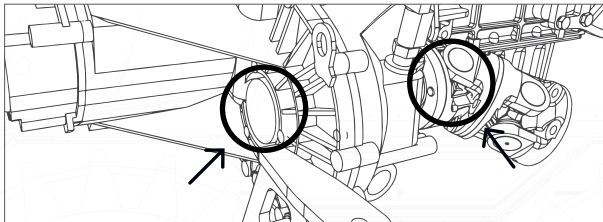


*The engine is operating, the gearbox shifts, but there is no motion on any of the transmissions — there may be a break in the central chain.*

- Replace the chain interlock.
- If you do not have a spare chain, remove one of the wheel chains.
- Measure off the required length and reconnect the chain, knocking out a link pin.

The vehicle can operate without one of the drive wheel chains. Any of the four chains may be removed.

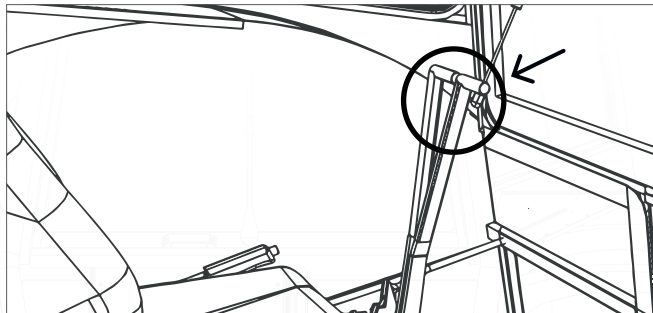
### 3. VEHICLE STOPS



*The engine is operating, the gearbox shifts, but there is no motion on any of the transmissions — the output shaft from the transmission gearbox may have broken.*

- Drain the oil from from the gearbox; unscrew and remove the end of the universal joint that is closer to the gearbox.
- From the opposite side of the gearbox input shaft, open the cap and push the broken piece of the shaft out using a small screwdriver or the collar.
- Replace the cap. If available, add sealant to the cap, or when the vehicle is taken in for service.
- Install a new shaft from the gearbox spare parts kit; reinstall the universal joint and tighten the bolts.
- Pour the oil back in.

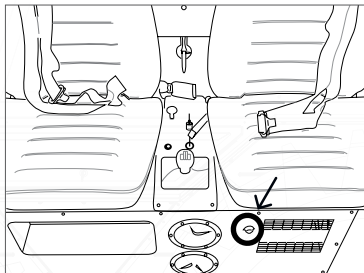
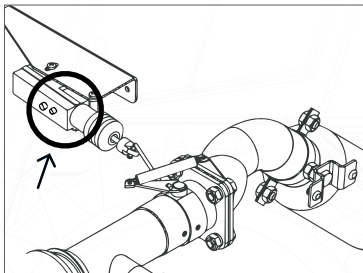
#### 4. TRANSMISSION DOES NOT SHIFT



*With the clutch pedal pressed in, the gears do not shift — the clutch working cylinder is faulty.*

- Press two control levers against each other.
- Engage a gear and smoothly release the levers.

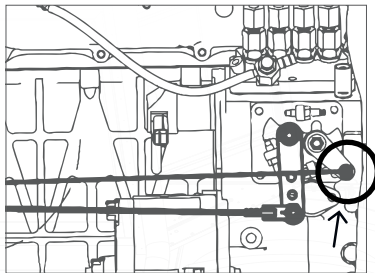
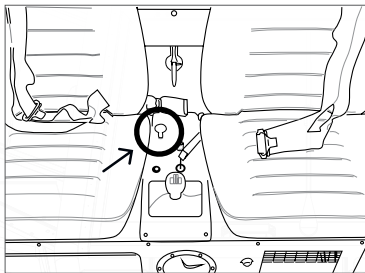
## 5. WHEELS DO NOT INFLATE WHEN INSTRUCTIONS ARE FOLLOWED



*Wheel inflation cover solenoid (located by the exhaust pipe in the motor compartment) is faulty.*

- Open the inflation valve at the driver's seat and manually move the valve on the exhaust pipe.
- After inflating the wheels to the required pressure, return the valve on the exhaust pipe to the open position and close the valve at the driver's seat.
- Under ordinary conditions the valve at the exhaust pipe should always be open and should not interfere with the exhaust gases.

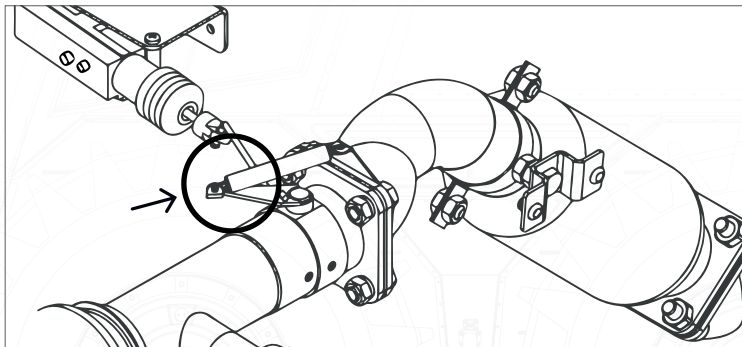
## 6. THRUST HAS FALLEN OFF; ENGINE DOES NOT REV UP



- Emergency engine stop lever shifted out of position.
- Move the lever back down to the peg.



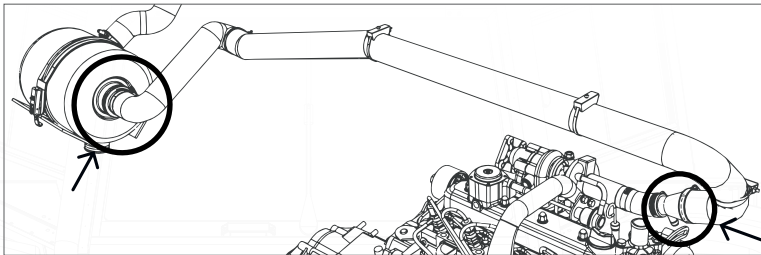
**7. THRUST HAS FALLEN OFF; BLACK SMOKE COMING FROM THE EXHAUST; ENGINE DOES NOT REV UP**



*Inflation valve on the exhaust pipe is closed.*

- Open the valve.

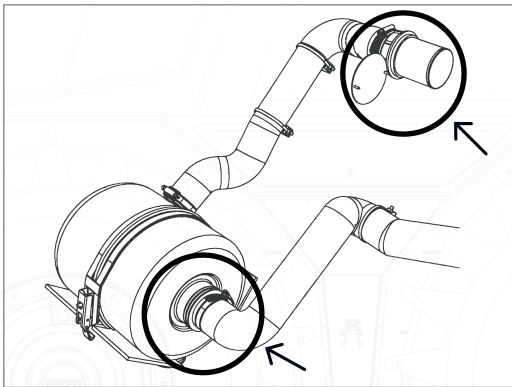
**8. THRUST HAS FALLEN OFF; WHITE SMOKE COMING FROM THE EXHAUST; ENGINE DOES NOT REV UP**



*Water has gotten into the air hose and filter.*

- Promptly turn the engine off.
- Stop the water from falling on it.
- Remove the air hose from the engine at the turbine entrance and remove the air filter from the housing.
- Remove any water from the housing and the air hose.
- Blow through the filter and dry it.
- Replace the air hose and filter.

**9. THRUST HAS FALLEN OFF; BLACK SMOKE COMING FROM THE EXHAUST; ENGINE DOES NOT REV UP**



*Engine's air duct grid and air filter are clogged with debris.*

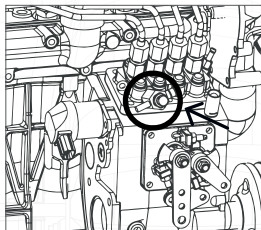
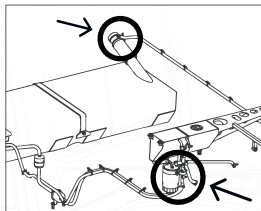
- Clean the air duct and air filter.

## 10. THRUST HAS FALLEN OFF, ENGINE DOES NOT REV UP AND RUNS UNEVENLY OR STOPS, WHITE SMOKE COMING FROM EXHAUST PIPE

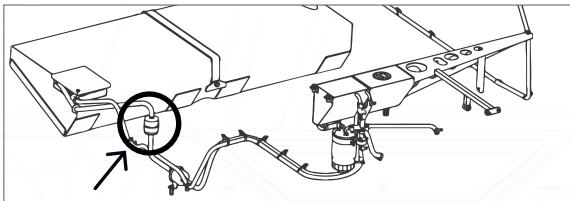
*Water has gotten into the fuel.*

- Replace the fuel in the tank.
- Check the seal of the fuel tank's filler plug on the filler neck.
- If available, replace the fuel filters. If lacking, blow through the small transparent filter and wash the metal filter on the engine; unscrew the drain plug below the filter.
- Bleed the fuel system. Turn the ignition on, unscrew the release bolt on the fuel pump feed line's motor in the fuel system, and pump fuel until all water and air is removed.
- Start the engine.

*This procedure may be repeated several times.*



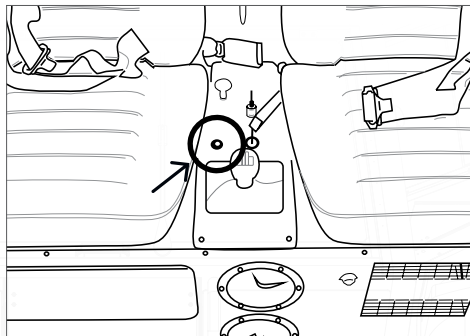
## 11. DURING WINTER, THRUST HAS FALLEN OFF, ENGINE STOPS



*The (transparent) fuel filter is blocked due to rough cleaning. Low-quality fuel. When the ignition is turned on, the electric pump is not heard operating.*

- Replace the fuel.
- Replace the filter or warm it by blowing through it.
- In an emergency involving waxing up of the filter, punch into the plastic filter, thus enlarging the opening the grid.
- Bleed fuel.
- Remove the electric pump, warm it, blow through it, and check it for good working order. If faulty, replace from the spare parts kit.
- If the pump is faulty, one can attach a container (can) above the engine, allowing gravity flow of the fuel through a hose to the pump.

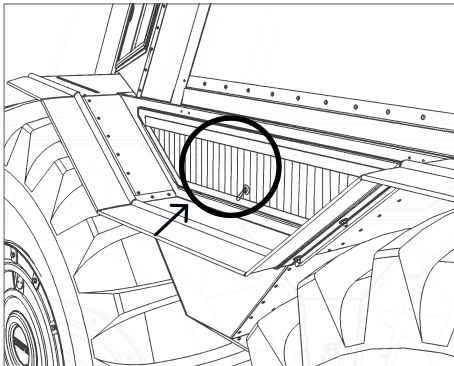
## 12. ENGINE DOES NOT START AFTER PROLONGED PARKING



*Battery may be discharged. Engine must be started from the spare battery.*

- Turn the ignition on.
- Press the button for the spare battery and, while holding that button, turn the ignition key until the engine starts.

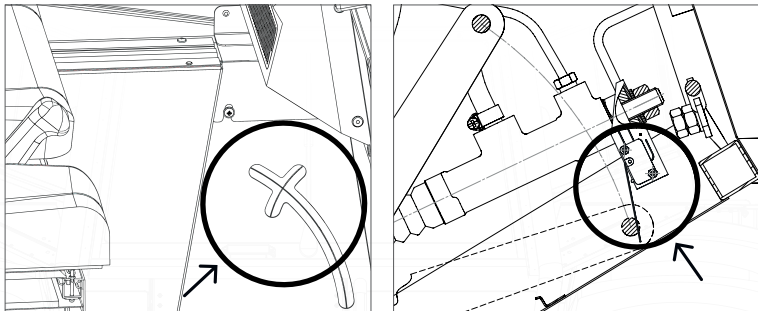
### 13. ENGINE OVERHEATED



*Radiator grid clogged.*

- Clean it.
- Check the level of the coolant fluid without opening the lid of the expansion reservoir.

## 14. STARTER DOES NOT TURN

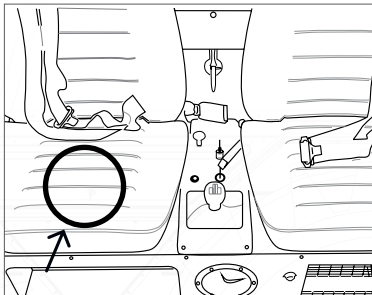
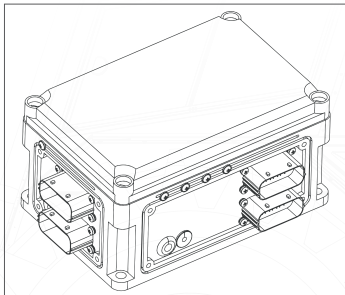


*The clutch limit switch may be faulty.*

- Its end is located behind the clutch pedal panel.
- If it is faulty, short-circuit the wires that lead to the switch. The wires can be clamped using any metal object (a key, a paper clip, etc.).



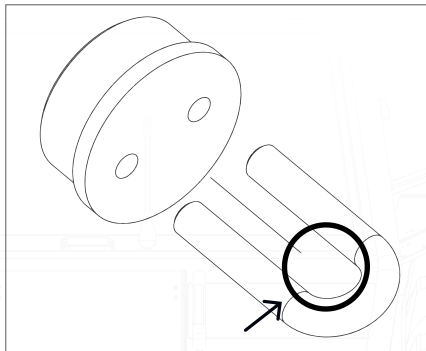
## 15. ELECTRICAL EQUIPMENT FAILURES



*If the lights go off, if the pump solenoid or windshield wipers, etc., do not work.*

- First check the fuses in the box below the right seat.

## 16. THE SUPPLEMENTAL TANK CAP DOES NOT UNSCREW



*In order to unscrew the cap of a wheel tank, insert an extender into the wrench (screwdriver etc.).*

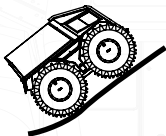


ADVICE FOR EXTREME DRIVING



## 1. TRAVELLING IN MOUNTAINS

When facing a slope, orient the vehicle perpendicular to the slope, so as to provide maximum stability and to avoid as much as possible having to turn the vehicle while on the slope. Drive on the slope in first gear, which provides the best engine driving thrust. On a steep slope the possibility of overturning the vehicle is increased, the front wheels are lifted up, and there is a likelihood of rolling backward over the rear axle. One must pay attention to the engine's RPMs and thrust, and use the gas pedal very precisely.



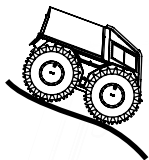
## 2. STOPPING AND STARTING WHEN DRIVING ON A SLOPE

Stopping on a slope is done by pressing the clutch pedal and one of the vehicle's control levers simultaneously. When starting up, smoothly and **simultaneously** release the clutch pedal and the control lever.



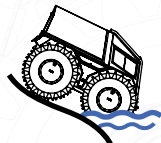
## 3. STEEP SLOPE AND DRIVING ON A SLOPE

The wheels should be pressurized to a minimum pressure of 100 mm of mercury ( $0.13 \text{ kg/cm}^2$ ).



#### 4. COMING BACK DOWN THE MOUNTAIN

On a steep downgrade, drive in first gear, without pressing the clutch or the gas pedal. In first gear the vehicle will not run away and will move smoothly. Use light braking and light steering using one lever at a time. Press two control levers together only if the vehicle comes to a halt.



#### 5. MOVING FROM A STEEP DOWNSLOPE

When moving from a steep downslope into water, close the windows and use first gear.



#### 6. MOVING UP THE HILL FROM WATER

Proceed in first gear and with low engine RPM, being extra careful! The maximum angle of tilt **should not exceed 35°**.



## 7. MOVING FROM ICE ONTO WATER

To move from ice onto water, close the windows and use first gear with minimum RPM.



## CLIMBING OUT ONTO ICE FROM WATER

To climb onto ice, proceed with tire pressure between 60 to 0 mm of mercury ( $0.08 - 0 \text{ kg/cm}^2$ ) in 1st, 2nd, or 3rd gear, depending on conditions. Ice after rain or snowfall thaws a bit and becomes very slippery. In this case one can completely deflate the tires, which makes it easiest to climb out onto ice. The same parameters apply when climbing out onto ice with a fully loaded vehicle.



## DRIVING OVER LARGE ROCKS

Drive over large rocks in first gear. Tire pressure 90 – 100 mm of mercury ( $0.12 - 0.13 \text{ kg/cm}^2$ ).

