

VARI[®]

Tipping trailer *ANV-350*



Instructions for use

2006

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1 Basic information

Ask your dealer to provide unpackaging of the machine and briefing.

Fill in the following data on your machine. The data are important for ordering spare parts.

It is advised to make a copy of this page with all data on the machine purchase for the case of loss or theft of the original record.

Type/Model	ANV-350
Serial no./Year of manufacture	/
Date of delivery (sale)	
Supplier	
Address	
Phone/Fax/E-mail/Internet	

Your notes:

The manufacturer **reserves the right** of technical modifications and innovations not impacting the machine's function and operation safety. The changes need not be reflected in this Manual.

2 Foreword

Dear customer,

Thank you for trusting our products. You have become owner of a machine from a wide range of machines and attachments made by **VARI**, a.s. as a system of gardening, farming, small agricultural and communal machinery.

Please read the Instructions for use carefully. If you follow them properly, you will have our product performing a reliable work for you for years.

2.1 Basic warning

The user **is obliged** to get acquainted with the Instructions for use and to follow all instructions for the machine operation so that the user's and other persons' health and property cannot suffer any harm.

Safety instructions contained in this manual do not describe all situations or conditions possibly occurring in practical use. Safety factors such as common sense, diligence and scrupulousness are not included; it is assumed, however, that all persons authorized for the machine operation or maintenance do possess the intelligence.

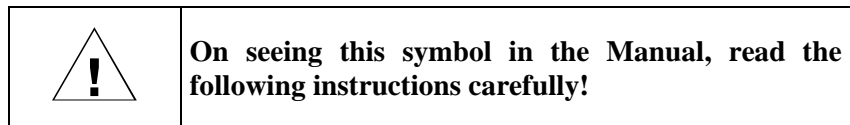
Only persons in good mental and physical condition can operate the machine. For the professional use of the machine the machine owner is obliged to ensure a work safety training and provide instructions on machine control for operators and to keep records on these trainings and briefings.

Should some instructions in the manual be unintelligible, you are encouraged to contact **your dealer** or directly the manufacturer of the machine. The contact address and telephone/fax connection are to be found at the end of the manual.

The manual of Instructions for use supplied with the machine is an integral part of the machine. It has to be available at any time, placed at a well accessible place with no risk of its damage. If the machine is sold to another person, the Instructions for use must be given to the new machine owner. If the above conditions are not met, the manufacturer bears no responsibility for possible risks, accidents and injuries resulting from the machine operation.

The manufacturer bears no responsibility for damages caused by unauthorized and incorrect use of the machine and for damages caused by any machine modifications not authorized by the manufacturer.

To prevent injuries to operators and other people occurring in the vicinity of the machine, it is absolutely necessary to follow safety regulations marked in the Instructions for use with the following warning safety symbol:



3 Safety regulations

- ⚠ This international symbol indicates important messages concerning safety. When you see the symbol, be aware of a possible injury threatening to yourself or to other persons and read the attached instructions carefully.
- ⚠ When working with the trailer, it is necessary to follow all the safety regulations and precautions included in “The rules of safety and health protection at work with machines and equipment used in agriculture and forestry”.

The minitractor meets the requirements of the Act No. 56/2001 Gaz. with the following exceptions:

- the set is not equipped with headlights
- the set is not equipped with sidelights
- the set is not equipped with stop lights
- the set is not equipped with winking lights; the driver of the set indicates changes in the drive direction with his arm

Note: The Ministry of Transport of the Czech Republic issued a certificate of technical capability for the set of the minitractor VARI IV and VARI IV PROFI with the trailer ANV-350. For operation on the public roads, it is possible to ask the manufacturer for an issue of the registration book or the technical certificate for the set of the single-axle minitractor with trailer.

- ⚠ The technical examination of the vehicle has to be carried out before the ANV-350 trailer is used, especially:
 - attachment of the connecting pin to the towing unit
 - check of the correct operation of the brakes
 - tightening of the screws of the divided tow bar and the wheels
 - inflation of the tyres
 - separate examination of the driving unit
- ⚠ The standing trailer connected to a towing unit must always be secured with the parking brake.
- ⚠ The trailer cannot be overloaded over its maximum allowed payload (see the table of technical parameters). The maximum allowed weight ratio of the towing machine and the attached vehicle, according to the Act No. 341/2002 Gaz., § 14, subsection 1, is 1 : 2,5. It means the total current weight of the connected vehicle (= trailer + driver + load) cannot be higher than 2,5x the weight of the towing unit.
- ⚠ If the VARI IV and VARI IV PROFI minitractor is connected with the trailer, the turning radius cannot be smaller than 3 m.
- ⚠ Jumping in or off the trailer on the run is prohibited.
- ⚠ Transport of persons in the trailer is prohibited.
- ⚠ Voluminous materials have to be fixed with sufficiently solid, proof and for this purpose destined ropes.
- ⚠ Maximum slope accessibility of the trailer connected with a towing unit is 13 degrees. The slope accessibility means that you can work with the fully loaded trailer connected to a towing unit on the slopes with an inclination of 13 degrees.
- ⚠ Don't start the engine of the towing machine in enclosed places! Burnt gas contains toxic carbon monoxide. Sniffing up can lead to blackout or even death.
- ⚠ The exhaust system of the engine is warmed to a very high temperature when operated and it keeps this temperature long after it is switched off. Therefore prevent it from touch with other items – it could cause a fire. Touching any hot part could cause serious burns.
- ⚠ Petrol is very flammable and, under certain conditions, very explosive matter! Refuel in well-ventilated rooms with switched-off engine and prevent from access with open fire! Don't smoke! Be solicitous when refueling and prevent from petrol escape and

stain of engine parts! If it occurs, dry the stained parts or wait until the petrol evaporates!

- ⚠ Make all kinds of the machine repair, adjustment and lubrication when the machine stands still.
- ⚠ Use solid footwear, close-fitting clothes and utility gloves when working with the machine.

4 Use, technical specifications and technical description of the machine

4.1 Use

The single axle trailer ANV-350 is used for transport of various materials, subjects and tools in connection with the VARI IV minitractor. The hitch Z-01 is used for connecting these two machines.

4.2 Description

- 1) Body: the self-supporting body has a connecting front side. The rear side is tipping and removable. The connection to the chassis is made by rotary hinges bolted to the crossbeam of the chassis and also by a securing pin in the front part. The solution of the body suspension enables the trailer to be tipped by approx. 30 degrees to the back.
- 2) Chassis: tubular, self-supporting construction, divided. The base of the chassis consists of a longitudinal tube, divided into two halves with screwed connection – tow bar, and a cross tube – axle. The seat with a backrest and the locking of the body tipping are situated on the longitudinal tube. The tow bar is equipped with an exchangeable swinging adapter serving for a connection to the VARI IV minitractor. This swinging part of the tow bar enables side tilt of the trailer against the towing unit. The axle is manufactured from a thick-walled tube. The wheel half axles are situated on both sides of the axle. Also the body gripping is fastened to the axle. There are wheels, brake plates with shoes and the brake drum on the half axles. The foot supports and the braking mechanism are welded in the front part of the tow bar. The brakes are mechanical and operated from the driver’s place by a pedal or by the lever of the parking brake, which is situated under the seat. The wheels are equipped with appropriate tyres, see the table.

4.3 Technical specifications

Tipping trailer ANV-350	Unit	Value
Length	mm	2783
Width	mm	1192
Height (with the seat)	mm	1165
Body inner dimensions	mm	1330 x 1020 x 296
Wheel gauge	mm	930
Weight	kg	105
Tyres FAREEST, model F978	inch	16x7-8
Tyre pressure rating	kPa (atm.)	150 (1.48)
Total length of the set ANV-350 + VARI IV	mm	3375
Axle base of the set ANV-350 + VARI IV	mm	2215
Minitractor	-	VARI IV
Max. allowed total weight of the minitractor	kg	240
Max. allowed payload incl. the driver	kg	350
Max. allowed total weight of the set (minitractor + trailer + driver + load)	kg	695
Maximum allowed speed of the set	kmph	15



5 Instructions for use

5.1 Trailer assembly

- Turn the trailer body upside down.
- Put on the back axle, so that the connecting part of the tow bar heads to the front side of the body. Secure the bolts and don't tighten them for now.
- Screw the front tow bar to the back axle; don't tighten for now, too. Secure the front tow bar with the tipping mechanism.
- Mount the wheels.
- Put the brake cable through the levers of the brake toggles. Wind the cable and secure the cable clips with the parking brake in the zero position.
- Turn the trailer on the wheels.
- Screw the seat, arrange it alongside the front side of the trailer before tightening. Carefully tighten the screws connecting the front tow bar with the back axle and the screws holding the body.
- Fasten the front solid side and the tipping rear side.
- Lock off the tipping mechanism and mount the securing chain.
- Unloose the sleeve and mount the trailer hitch.

5.2 Preparing for the ride

The driver is obliged to make a routine checking of the trailer before the ride. It especially concerns the pin of the body tipping, tightening of the screwed connections and the brake. Braking during ride is solely made with the pedal. After you stop, secure the trailer against moving with the parking brake. It is also advisable to secure the set with a trig.

5.3 Tyres

Care for correct inflation of the tyres (specified pressure 150 kPa) to ensure their reliable operation and long lifetime.

5.4 Driving with the trailer

Driving with the trailer is quite common, special driving properties are due to the towing unit. Pay special attention during **going back and turning**.

5.5 Rear side

The rear side of the trailer is tipping and removable. It is secured against tipping during travel with two securing levers.

5.6 Seat

The seat is situated on the front part of the tow bar and it is not spring-suspended, it is neither lengthwise nor height adjustable.

6 Maintenance, care and storage

6.1 Maintenance and care

6.1.1 Lubrication

The lubrication of the ANV-350 trailer involves only the travel wheels, the brake pedal and the pin of the parking brake. Lubrication of the travel wheels pin: remove the retaining ring, push out the wheel hub to side and smear the half axle of the travel wheels with grease 2 or 3 times a year.

⚠ **Be careful when lubricating the wheel pins, the grease may not get to the brake-shoe lining. Oily brake-shoe lining significantly reduces the effect of the brakes.**

The pin of the brake pedal shall be smeared 3 or 4 times a year accordingly. The wheels with the ball bearings don't need to be smeared.

6.1.2 Adjustment of the brake

As the brake shoe wear is small, it is not necessary to adjust it frequently. If any clearance appears, it can be taken up when the cable is pulled.

6.1.3 Tyres

The main danger for the tyres is their overloading. The tyres are the most sensitive part of the trailer, that's why it is important **not to overrun the payload**.

6.1.4 Cleaning

Clean the trailer from mud and dry dirt from time to time, wash if needed. Repair abraded places and unstuck paint in due time with suitable preserving agent or paint.

6.2 Storage

Store the machines and equipment in dry places. Access of unauthorized persons to the machine is to be prevented. Protect the machine from weather impacts but don't use airtight protection due to a possibly increased corrosion under it. Prior to any longer storage, clean the machine from all dirt and plant residues, repair damaged places on the painted parts and preserve the moving parts.

6.3 Disposal of packaging and machine after the end of service life

The following procedure is recommended for the machine disposal after the end of its service life:

1. Dismount all parts from the machine that can still be used.
2. Dismount plastic machine parts and parts made of non-ferrous metals. The dismantled machine remainder and the dismantled parts are to be disposed according to the Waste Law No. 185/2001 Gaz. (and its possible amendments) and with respect to the decrees of local town or municipal authorities.

7 Instructions for ordering spare parts

The following data are to be used for an easier identification when ordering the spare parts:

1. Machine type, engine type, machine serial number and the year of manufacture;
2. Ordering number given by the manufacturer and its name in the component list;
3. Number of ordered pieces separately for each item;
4. Precise address, eventually telephone number, fax number or e-mail address;
5. Should you be uncertain about the correct identification of the component, send the damaged component either to the nearest service shop or directly to the manufacturer.

If any hesitance concerning spare parts or technical problems occurs, VARI, a.s. sales, customer service or technical departments are prepared to answer all your inquiries.

8 Address of the manufacturer

VARI, a.s.
Opolanská 350
Libice nad Cidlinou
CZECH REPUBLIC
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