

# Technik-Plus

## Instruction for seeder “FRONT-TURBO”



\*Translation  
from original\*



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For easier reading the following text will just contain the word seeder, which stands for: TP-TURBO-JET SUPER 6/8/10/12 electric or hydraulic. It is written with the name of the seeder if there is any information especially for one seeder.

TP-TURBO-JET Super 6/8/10/12 hydraulic = Seeder with 6, 8, 10 or 12 outlets and hydraulic driven fan.  
TP-TURBO-JET Super 6/8/10/12 electric = Seeder with 6, 8, 10 or 12 outlets and electric driven fan.

Please note: This instruction is valid for all TP-TURBO-JET SUPER 6/8/10/12 electric and hydraulic including the optional equipment. Not all described parts in this instruction must be included in your seeder. Please check the delivered model with equipment on your delivery note. The complete safety part is valid for all seeders.

### **Product handover:**

Hand over the seeding machine just with the complete instruction. The user has to be informed by the seller in all details about the machine and its functions. He must be sure to work with the seeder safe. Do a short testing and check all the functions of the seeder. Hand it over with all documents and safety mechanisms of the machine.

All the best and high harvest wishes

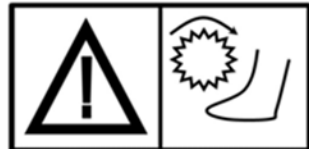
Your **Technik-Plus**-Team

### **Description of the pictograms on your seeder:**

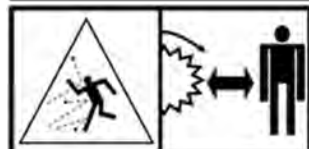
Pictograms inform you about possible dangers. They ensure the safety of all persons working in any way with this machine. Pictograms always must be replaced and can be ordered with following order numbers:



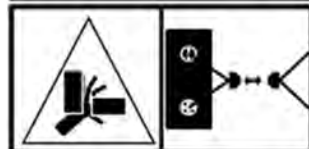
Before operation read the instruction carefully!  
Order-No.: 10559906



This pictogram shows you – Behind this cover are rotating parts. Take care!  
Order-No.: 10559907



Keep away from the rotating parts and leave the danger area before switching on the seeder! Don't enter the danger area during operation!  
Order-No.: 10559908



Before working on the seeder interrupt the driving connections (Electric, hydraulic)!  
Order-No.: 10559909



For filling in and during working on the seeder wear always your personal protective equipment (gloves, mouth and face protection, steel-toed shoes, ...)!  
Order-No.: 10559910

### **Danger area**

The danger area extends at a distance of 1m round the seeder. Round the spreader plates the danger area extends at a distance of minimum 2m, depending on the mounting of the spreader plates and the working width.

### **CE-Marking:**

With this CE-Marking the manufacturer records the conformity of the seeder with the provisions of the machines directive and other relevant CE-directives

CE-Declaration of conformity (see attachment).

With signing this CE-Declaration of conformity the manufacturer declares that the seeder, put on the market, corresponds to all essential safety and healthy requirements.



**First steps:**

Please check:

1. Has the seeder been damaged during transport?
  2. Is everything delivered according to the delivery note?
  3. Before starting read this instruction carefully and be sure you understand it.
  3. Do the start up, control and service as written in the instruction.
  4. Rotating parts must be screwed tight.
  5. Mount the seeder as written in the instruction and safety rules.
  6. Test the seeder before starting.
  7. After about all 40 operation hours or before every season check all rotating parts.
  8. Take care on this symbol “!”. Everywhere you see it, pay attention to your safety.
  9. On the seeder are the basic safety rules written. These stickers always have to be replaced. You can find all safety rules in the instruction.
- ! The relevant accident prevention rules and the other general accepted safety, employment medical and road traffic rules have to be obeyed.

**Generally safety rules:**

- ! Before start up read the instruction carefully!
- ! Take care to the safety and mounting hints from the implement and tractor you use!
- ! Keep enough safety distance during operation! The rotating parts are powerful and can catch fingers or clothes! Especially take care during adjustment and calibration of the seeder!
- ! Before turning on the seeder, be sure that no person, animal or parts, which can be damaged easy, are staying in the danger area!
- ! Before buying and using Agrochemicals read first the information written on the bag. Use safety clothes, breathing protection and your addition personal protective equipment when working with aggressive chemicals!
- ! The hopper must be empty after the done job to avoid any risk for persons or animals!
- ! Keep children away from the seeder!
- ! During operation: Don't open the cover, don't take a look into the hopper, don't look direct into the spreader plates.
- ! Before each operation on the seeder or any components of it interrupt the power and hydraulic supply!
- ! Use breathing and eye protection when filling in the hopper!
- ! For every operation on the seeder wear the correct gloves!
- ! Don't transport the seeder with filled hopper!

**Control unit and power supply:**

- Protect the control unit from wet conditions, from hints and fall downs to keep the functionality of the unit. Take care to the right polarity when connecting the unit to the battery (don't mix + and - !)
- ! Mount the control unit outside of the danger area! (f.e. in the tractor cab). When you have to longer the cable, take care to the correct cross section of the cable. The connections have to be clean, no free wires (have to be isolated), no distant wires, be sure that the wires are connected correct, so that enough power gets to the control unit and seeder!

! Be sure that the cables can't be rubbed and overheated. Is the isolation damaged, change the cable immediately!

### **Mounting and frame:**

Take care on following points when mounting the seeder:

- ! If the frame is made by your own it must have enough carrying capacity.
- ! During driving strong vibrations are coming to the seeder and frame → Frame and connections must withstand this vibrations; Check the connections, if they are tight, before and after every operation; Check the cross beams and frame if there are cracks or damages before and after every operation!
- ! Be sure that there is enough space around the seeder to do adjusting and workings without danger!
- ! The safety steps for filling the hopper must be done according to DIN EN 14018. (available on request)

### **Operation:**

- The seeder is not for aggressive seeding material developed (f.e. mineral fertilizer)
- To bring out rape, clover, mustard, slug pellets, phacelia, lucerne, rye, oat, peas, micro granulate, wheat, grass seed, ...
- To mount on striegle, disc harrow, grubber, roller, seed combinations, grass harrow, harvest machines, combine, ...
- The seeder is developed for agricultural use to bring out seed and not aggressive mineral granulate. For every other use expires the guarantee and product liability!

### **Hydraulic system (just for seeders with hydraulic system!)**

The hydraulic system on the fan wheel is made for max. 50lit/min and the motor max. 25lit/min. Don't exceed this amount otherwise the seeder can be damaged. No warranty!!

### **Warranty:**

See warranty request in attachment!

### **Product liability:**

The product liability is just valid when the machine is used appropriate. Is the machine not correct maintained and controlled (f.e.: regularly checking of spread pattern and functionality of all parts, ...) we don't take liability to the damages or accidents occurred because of that.

**Short description and shipment :** see delivery note

**Techn. details:** see technical data sheet

**Transport information:**

The seeder can be carried on the 4 mounting points. Take care that the belts for all 4 points have the same length and are strong enough. Are the differences in length too much the seed can overturn. You can also use the hopper frame for carrying. Use here as well belts with the same length and which are strong enough. If just two belts are used to carry the seed on the hopper frame, the carrying points must be in the middle.

**Mounting hints:**

The seeder can be used for many seeds and granulates and with many implements according to the mounting. The advantage of an individual mounting on your implement is the best modulation of the seeder with the implement for your operation. The positioning of hopper, spreader plates and hoses are depending on the implement. Here some hints for the optimal mounting:



Free view ahead



Even optimized mounting on small space.



The stairs to the tank for filling are to be designed according to the DIN EN 14018 (You can get the German industrial standard at our firm on request).



Attention! Don't obstruct the bottom flap.



### TP-FRONT-TURBO mounting:



Working width 6 m



Hoses can be led flat.

Possible for: Grass, clover, mustard, rape, phacelia, oil radish, lucerne, ...Up to 24m

### TP-FRONT-TURBO

High capacity seeder for seed fertilizer.  
Seeding with strigle up to 24m  
Fertilizer spreading on now crop culture  
up to 40 rows. The most economical  
concept for professional agriculture.



Start in the middle with measuring when  
mounting the spreader plates.

Hint: Working width ÷ Quantity of hoses =  
Correct distance between the spreader plates. At  
the end ½ distances are left on the right and left  
side.

½



½



The position of the spreader plates can be horizontal or vertical.



Either  
horizontal

Mounting the hose on the spreader plate.



Or vertical



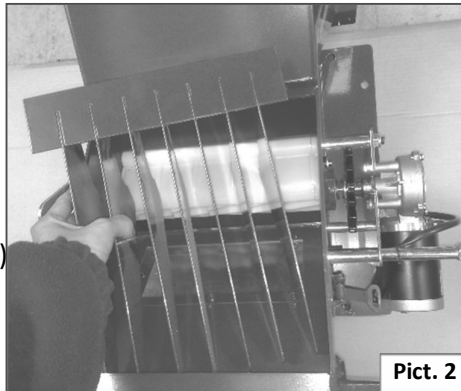
### Changing of seed roll

*TP-TURBO-JET Super 6/10*

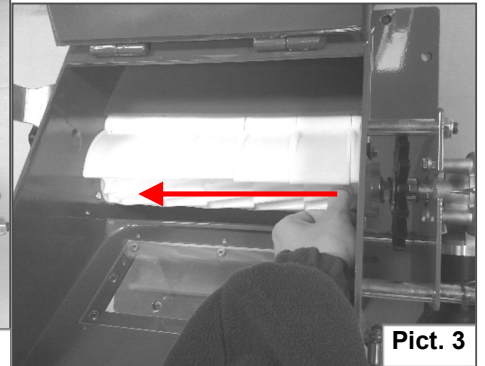
1. Remove the covers for the gears!
2. Remove the gears – Remove marked \*split pin! (Pict. 1)
3. Remove the bearing with the 3 screws (See markings-Pict. 1)
5. Open the bottom flap and remove the lamella. (Pict. 2)
6. Push out the seed roll from below and fit the correct seed roll from outside.

TAKE CARE TO THE AXIAL TOLERANCE!

8. Fix the bearing,  
Mount the gears,  
Mount the split pin,  
Mount the cover for the gears.
9. Check the axial tolerance  
(When the bottom flap is opened)
10. Check after 2 hours  
the screws and the split pin.



Pict. 2



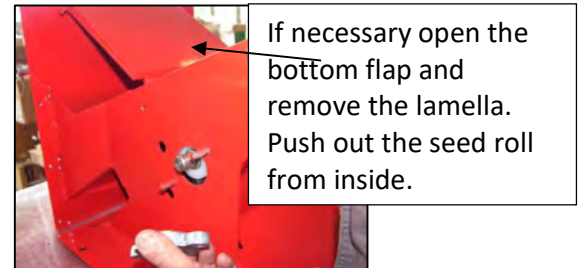
Pict. 3



1. Open the two nuts and remove the cover.



2. Remove safety split pin.



If necessary open the bottom flap and remove the lamella. Push out the seed roll from inside.

3. Remove bearing and remove the seed roll.

4. Fit the correct seed roll. Take care to the axial tolerance!
5. Mount the bearing.
6. Mount the split pin.
7. Mount the cover with the two nuts.

8. Check the axial tolerance! (When the bottom flap is opened)

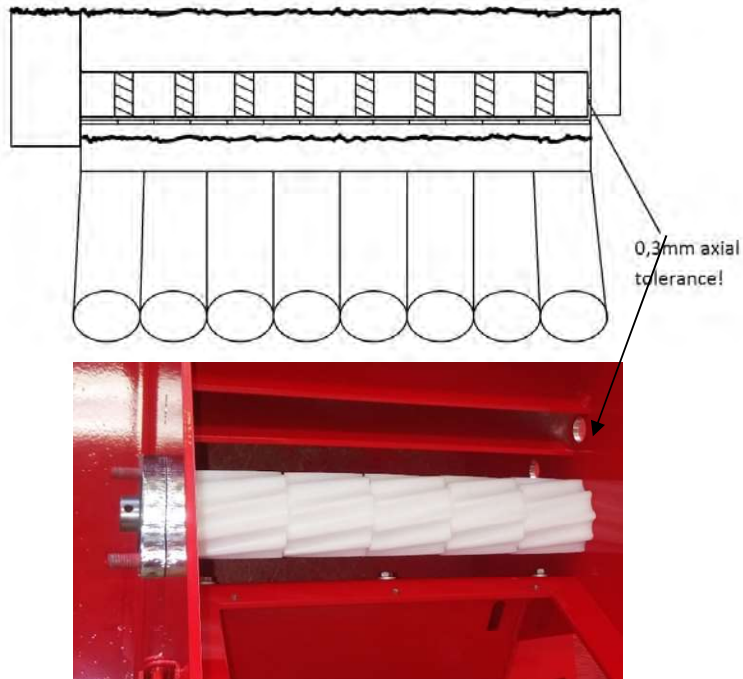
Dear Ladies and Gentlemen!

Plastic extends at high temperature and lowers less when cooling.

Please check when using the machine:

- ✓ The seed roll must have axial play.

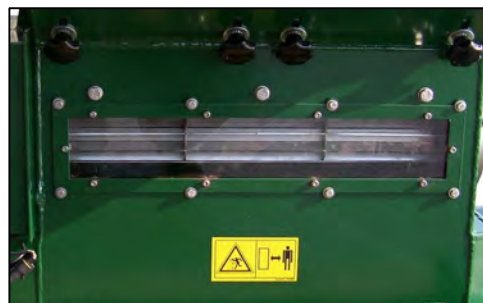
When fitting the seed roll check that you have an axial tolerance on the left side of about 0,3mm.



- ✓ The plastic gears must have 0,4 to 0,5mm play between plastic gear and hexagon (left and right side) seed axle.



Are this distances (plays) too low an unstable seed output is possible or the seed roll can stick.



**Bottom flap:**



Bottom flap is closed = small seed

z.B: grass seed, rape, oil radish, lucerne, ...

Open the bottom flap up to the marking for big seed

z.B: vetch, pea, wheat, rye, oat, beans, sun flower, barley, buckwheat, ...

For emptying open the bottom flap complete.



Mesh to keep foreign objects away from the seed roll.

Clumpy fertilizer or seed is taken back to guaranty an equal material flow near the seed roll.

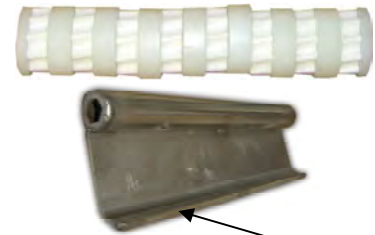
### **Combination – Bottom flap with seed roll:**



Metall seed roll with plastic bottom flap.



Standard seed roll with plastic bottom flap.



Seed roll for small amount with stainless steel bottom flap with stopper.

Between the plastic bottom flap and the seed roll should be a distance of 0,2 mm. The seed roll shouldn't rub on the bottom flap.

The stainless steel bottom flap with stopper must be pressed to the seed roll to stop the full elements. Just the geared seed roll elements turn.

### **Cover sheet:**

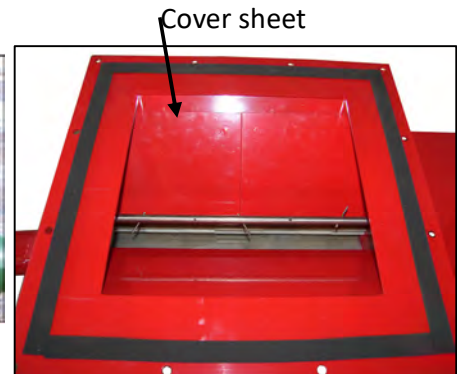
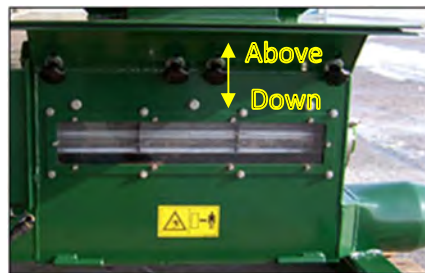
For correct output amount take care on following point:

Above the seed roll is the adjustable cover sheet. It can be moved upward or downward.

For small seed put it in the lower third.

The quicker the seed roll turns the more move the cover sheet upward. So the seed roll is surely completely filled every turn.

Adjusting knob



### **ATTENTION!!**

Do this Adjusting before calibrating the machine. Otherwise the seed output amount is not correct.



### Hydraulic system with **SEEDER+ control unit:**

The hydraulic system on the fan is configured for max. 50lit/min and the motor for max. 25lit/min. If this amount is exceeded, the fan can be damaged.

– NO WARRANTY!

Put the return pipe and the leak oil line absolutely non-pressurised to the hydraulic. Not through a double-acting-control-unit.

Note that oil filters of tractors can produce pressure.

Adjustable screw

Lock nut/threaded pin

#### ATTENTION!

The hydraulic motor turns with 4000 rpm when the valve is entirely open. To get the best air flow and avoid damages on the fan adjust the valve. Before starting always at an oil operating temperature of 60-80° ba following this instruction:

1. open lock nut/threaded pin
2. Close the valve with the adjustable screw till it is entirely closed. Turning the screw in (clockwise)- close  
Turning the screw out (counterclockwise) open
3. Open the valve slowly till 1,5-2,0 turns (max. 3000 rpm on the fan wheel)
4. Check that the lock nut /threaded pin is closed tight again to avoid self-adjustment of the oil volume

Valve

Leak oil line non-pressurised to the hydraulic

Connection to oil cooler

Non-pressurised return to the hydraulic

### Hydraulic system with **PROFI-Control unit**

50 bar approximate 2.000 U/min  
smallseeded plant to 30 bar

The hydraulic system on the fan is configured for max. 50 lit/min and the motor for max. 25 lit/min.

If this volume is exceeded the fan can be damaged – No WARRANTY

Put the return pipe and the leak oil line absolutely non-pressurised to the hydraulic. Not through a double-acting - control-unit.

Note that oil filters of tractors can produce pressure.

#### ATTENTION!

The hydraulic motor turns with 4000 rpm when the valve is entirely open. To get the best air flow and avoid damages on the fan adjust the valve before starting always at an oil operating

temperature of 60°-80° by following this instruction:

1. Open lock nut/threaded pin.
2. Close the valve with the adjustable screw till it is entirely closed. Turning the screw in (clockwise)-close  
Turning the screw out (counterclockwise) – open
3. Open the valve slowly till 1,5-2 turns (max. 3000 rpm on the fan wheel)

Seeder+/Twin the fan speed can be controlled on the display (see Seeder+/Twin instruction).

When using Profi control unit adjust the speed with a revolution counter to 2000 rpm.

### Important hints for laying cables:

Put the cables in rolls!

Don't bend the cables near sockets!

Take care when the implement is folded.

Cable can breakaway or clamp!

Avoid strong pulls on the cables! Don't bend the cable not to strong. Avoid clamps on the cables.

Use cable protection as needed!



Mount the control unit in a good position to reach it easy. Possible for mountings are cable ties or a locally done bracket. Protect against moisture.

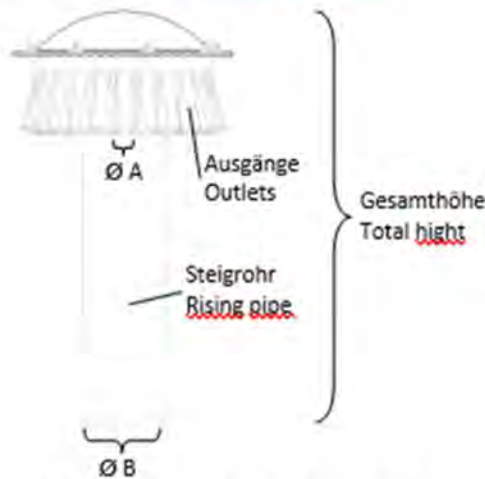
! Don't mount inside the danger area!



## INFORMATIONEN – TURM / INFORMATION TOWER

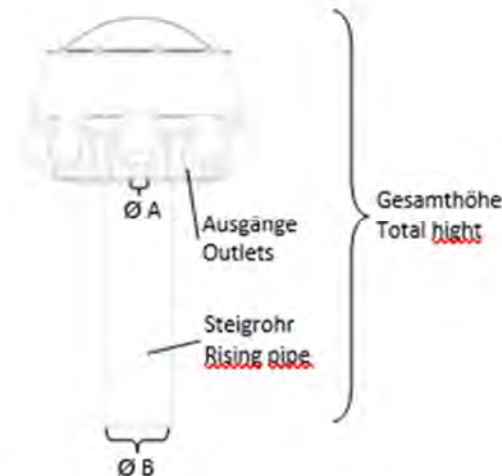
### Typ A: Turm mit geradem Steigrohr

Type A: Tower with straight rising pipe



### Typ C: Turm mit geradem Steigrohr und Luftableitung

Type C: Tower with straight rising pipe and air outlets

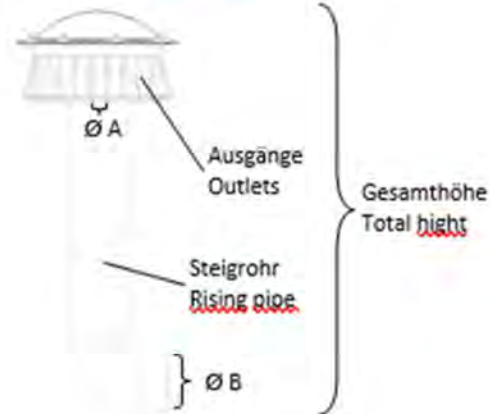


### Wir benötigen von Ihnen folgende Infos:

Type  
Gesamthöhe  
Anzahl der Ausgänge  
Außen-Ø der Ausgänge  
Innen-Ø des Steigrohres bzw Bogens  
Mit oder ohne Luftableitung

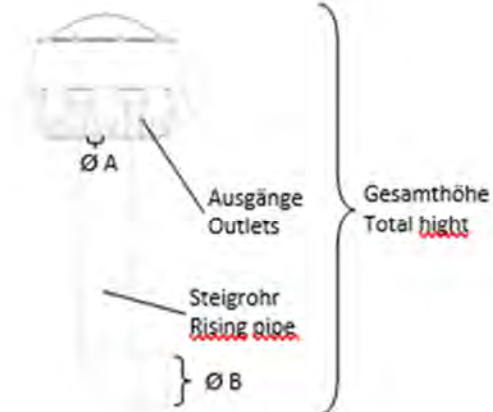
### Typ B: Turm mit Bogen

Type B: Tower with bow



### Typ D: Turm mit Bogen und Luftableitung

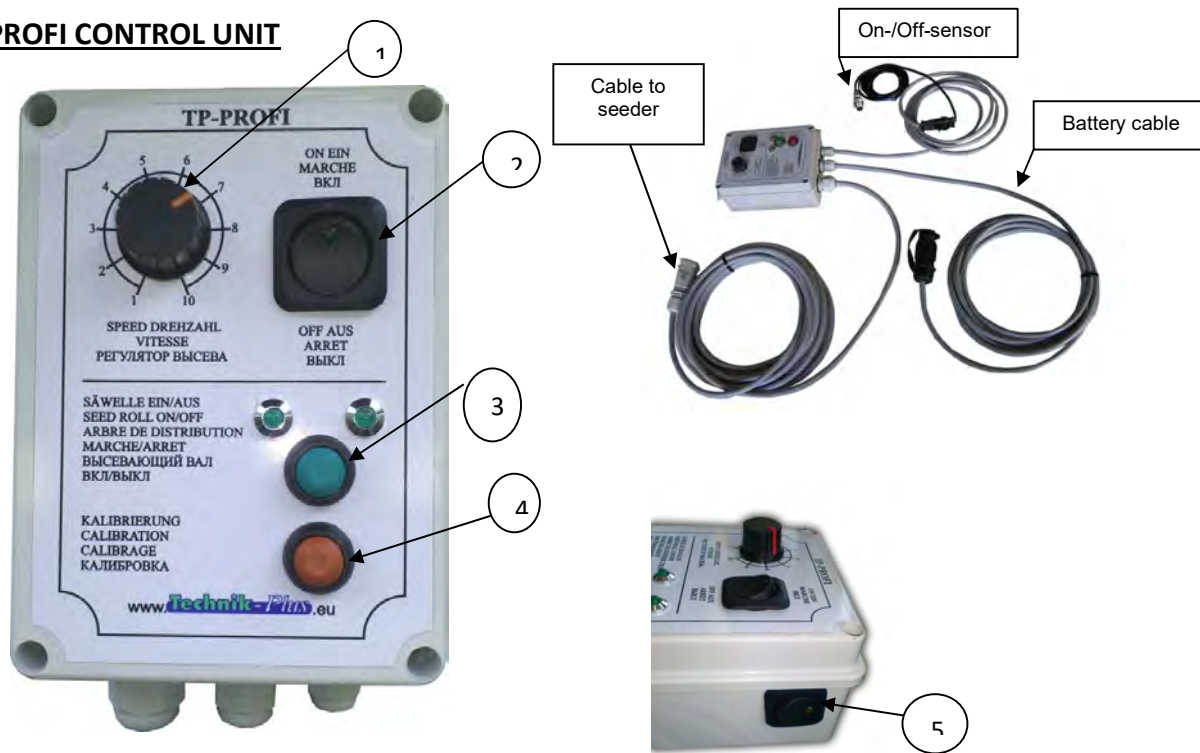
Type D: Tower with bow and air outlets



### We need following information:

Type  
Total height  
Number of outlets  
Outside-Ø from the outlets  
Inside-Ø from the rising pipe or bow  
With or without air outlets

## PROFI CONTROL UNIT



### ① Speed knob:

For adjusting the speed on the seed roll motor=adjusting of output amount. The amount can be changed during operation

The seed roll motor speed = output amount can be adjusted stepless with this **Poty**. This can be done during operation too to get the correct output amount. (Because of technical reason 0-3 without function.)

### Calibration of the seeder:

Before start working the seeder must be calibrated. Note this adjustments for future operations (driven speed, output amount, working width, poty adjustment, ...). Keep the fan turned off. Open the bottom flap on the seeder (two spanner nuts). Let the flap hang downwards and put a vessel for collection below. (Be sure that you have weighed this vessel). Fill in a small amount of seed into the seeder and close the hopper cover. Now switch the seed roll on (Main switch to on and choosing a poty position, press the red button). Collect the seed for 1 minute and weigh it accurate. The seed roll flap must be in correct position! Now calculate with following formula how many kg per min have to be in the vessel.

$$\frac{\text{Working width} \times \text{Driven speed} \times \text{Output amount/Ha}}{600} = \text{Output amount in kg/min}$$

z.B.:

$$\frac{6\text{m} \times 7\text{km/h} \times 20\text{kg/ha}}{600} = 1,4 \text{ kg/min}$$

$$6 \times 7 = 4,2 \text{ ha/h} \times 20 \text{ kg/ha} = 84 \text{ kg Output amount/h} : 60 \text{ min}$$

Is an amount of 1,4 kg/min which should be in your vessel.

z.B.: You know the working width, the driven speed and the output amount per hectare. As above mentioned you can put in the different values into the formula and you get the needed amount. During calibration the seed roll motor must run with the same speed during operation. Keep the cover closed! Is the calibration done, close the bottom flap with the two spanner nuts.

2. **Main switch:** This switch opens all functions on the unit.  
WHEN WORKING ON THE MACHINE DISCONNECT POWER SUPPLY!

3. For **switching ON/OFF the seed roll** and fan: When pressing this button the fan turns on first and after some seconds the seed roll starts turning. Press the button again for switching off. The seed roll stops and after some seconds the fan turns off. This avoids blocking in the hoses.

*Red LED on left side shines = Seed roll and fan is turned on*

*Green LED on right side flashes = Seed roll turns*

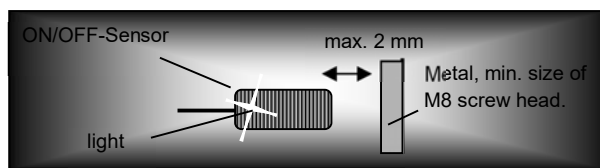
4. **Calibration function:** Only the seed roll turns on/off. Just for using during calibration. Don't use in general operation because the fan isn't working, the hoses will block.

5. **This button** activates the **ON/OFF sensor**.

Yellow LED shines = sensor is active

#### **Mounting of the ON/OFF sensor**

The sensor stops the seed roll when no metal is opposite and switches the seed roll on when metal is opposite. Sensor-DM: 12mm; max. reacting distance: 2mm. Check if the sensor has contact. When the sensor has contact the led must shine. Be sure that the sensor switch off (Led doesn't shine)



#### Activation and Deactivation of ON/OFF sensor:

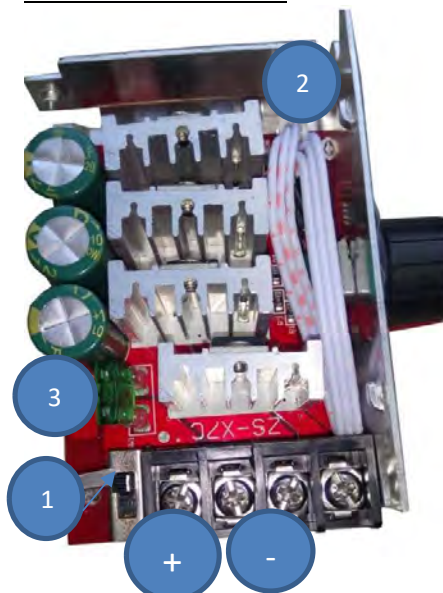
Switch off the unit with the main switch. Wait about 2 seconds. Switch on again and press immediately the yellow button for 2-3 seconds. When the yellow LED shines the sensor is active. Isn't it shining the sensor is not active.

6. Fuses in the unit

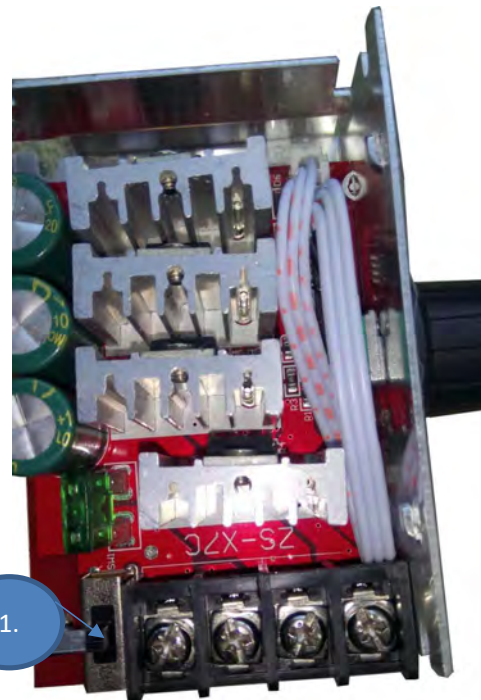
For fan: 15A

For seed roll motor: 10A

#### PROFI-CONTROL inside



1. Switch is up – on
2. Red light is on
3. Please check the fuse.



1. Switch is at the bottom = circuit board is deactivated

## Mounting possibilities On-/Off-sensor



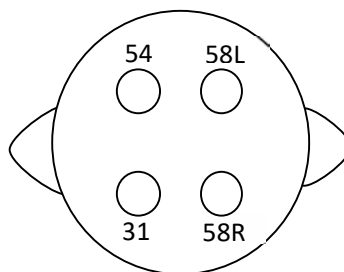
### ⑧ Configuration plug:

#### Electric fan

Nr. 54:	Blue cable	(– from relay)
Nr. 58L:	Brown cable	(+ from relay)
Nr. 31:	Cable No. 1	(– from the unit)
Nr. 58R:	Cable No. 2	(+ from the unit)

#### Hydraulic fan

Nr. 54:		
Nr. 58L:		
Nr. 31:	Cable No. 1	(– from the unit)
Nr. 58R:	Cable No. 2	(+ from the unit)



### ⑨ Electric/Hydraulic fan

Cable No. 1 = minus

Cable Nr. 2 = plus

30A fuse for electric fan used in the cable to battery plus

15A fuse for hydraulic fan used in the cable to battery plus

### ⑩ Configuration socket:

#### Electric/Hydraulic fan

Nr. 54	to minus
Nr. 58 L	to plus
Nr. 31	to minus
Nr. 58 R	to plus

Too short cables can be extended locally or ordered in a new length from us. Check following points when extending the cables locally:

- Use the correct cross-section!
- Plugs and connections must correspond to the requirements.
- Plugs and connections must be mounted correct (No free wires, good isolation)
- Damages because of plugs and extensions mounted by the customer are NO warranty claim!

### ⑪ Configuration socket:

#### Electric fan

Nr. 1	LED
Nr. 2	Seed roll motor +
Nr. 3	Seed roll motor -
Nr. 4	Relay +
Nr. 5	Relay -

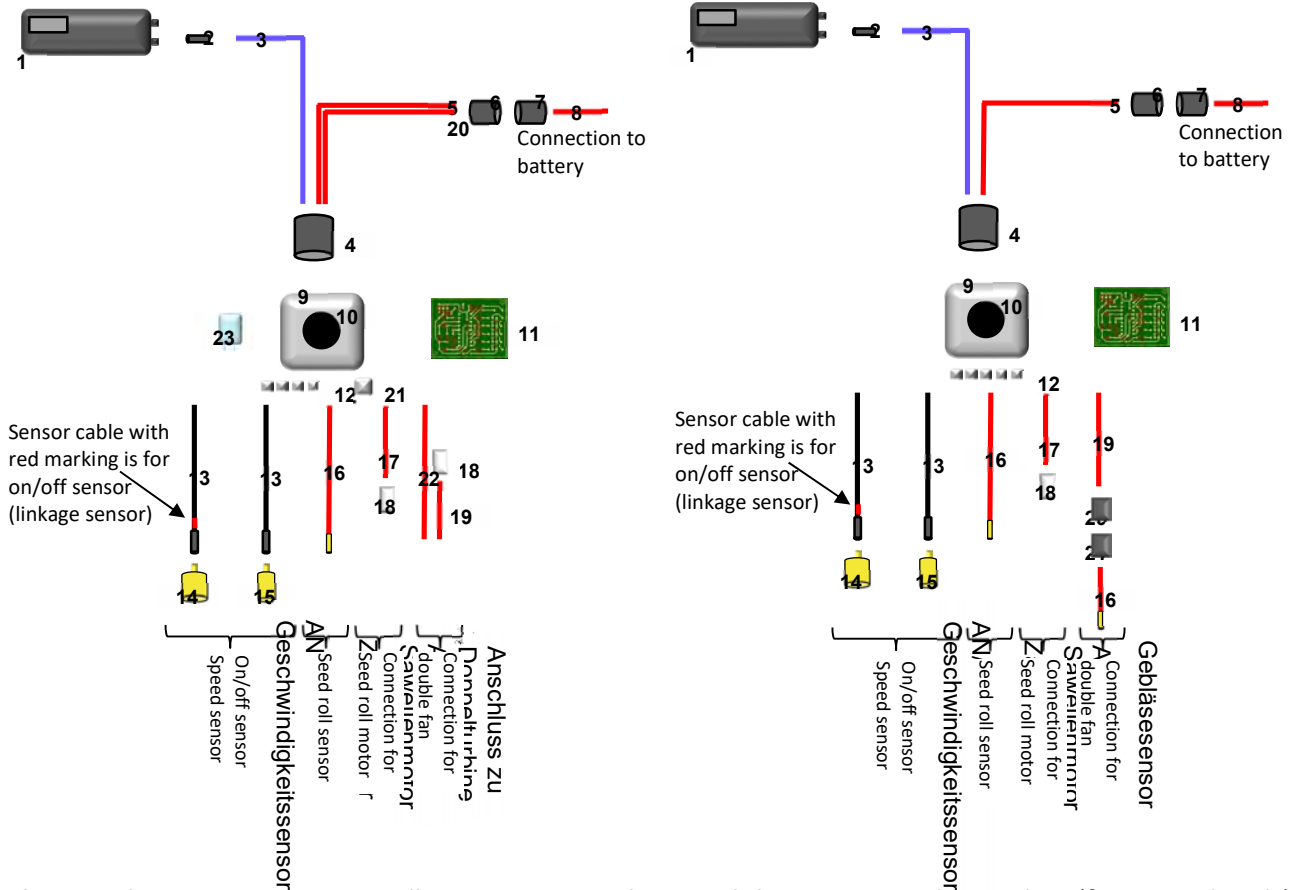
#### Configuration socket:

#### Hydraulic fan

Nr. 1	LED
Nr. 2	Seed roll motor +
Nr. 3	Seed roll motor -
Nr. 4	
Nr. 5	

## SEEDER+ / TWIN Unit

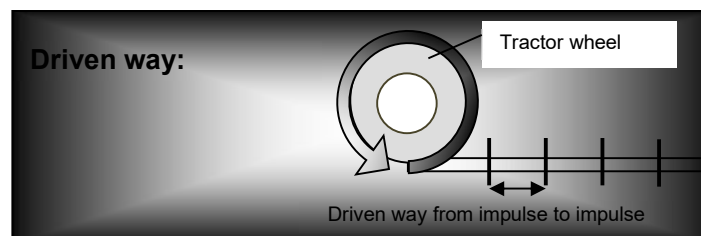
**READ THE SEPERATE OPERATION  
INSTRUCTION AS WELL  
SEEDER+/TWIN**



**The speed sensor** reacts to metall. For measuring the speed the sensor needs impulses (f.e. screw heads) That screw heads can be mounted on a roller or the inner side of the tractor rim of wheel. The calculation value is shown in mm/impulse. The driven way from impulse to impulse must be between 1 and 500.

Calculate the needed screw heads as follows:

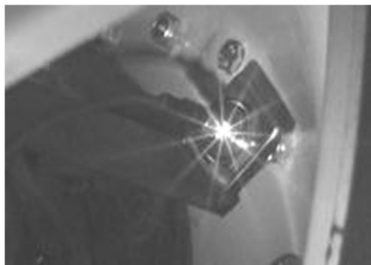
F.e.: Your wheel/roller with a diameter of 2m. -> Range (Diameter x 3,14 = range) is 6,28m = 6280mm. The maximum driven distance from impulse to impulse must be below 500. Because of that (6280/500=12,56) minimum 13 signals are needed. We recommend to use 20 signals. The signals can be mounted in any radius. The only thing: The sensor must switch off between the signals.





Check the impulses/signals before first use.

**Attention!** The sensor must count every signal (light shines) (Pict 1) and switch off between the signals (light off) (Pict 2)



Pict. 1: Light shines!



Pict. 2: Light off!

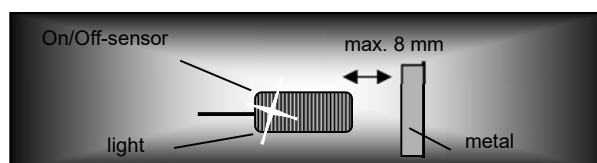
#### Errors:

1. If the light doesn't shine the distance between sensor and metal can be too big (max. 4mm).
2. If the light doesn't turn off, the distance between the impulses is too small. Mount the impulses in a bigger radius.

#### Mounting possibilities speed sensor:



**The on/off sensor** stops the seed roll if there is no metal on opposite. If there is metal opposite the sensor the seed roll turns. Sensor diameter: 30mm; max. reacting distance: 8mm. Check the sensor as follows: Is metal opposite the sensor the light on the sensor must shine. Otherwise the light doesn't shine.





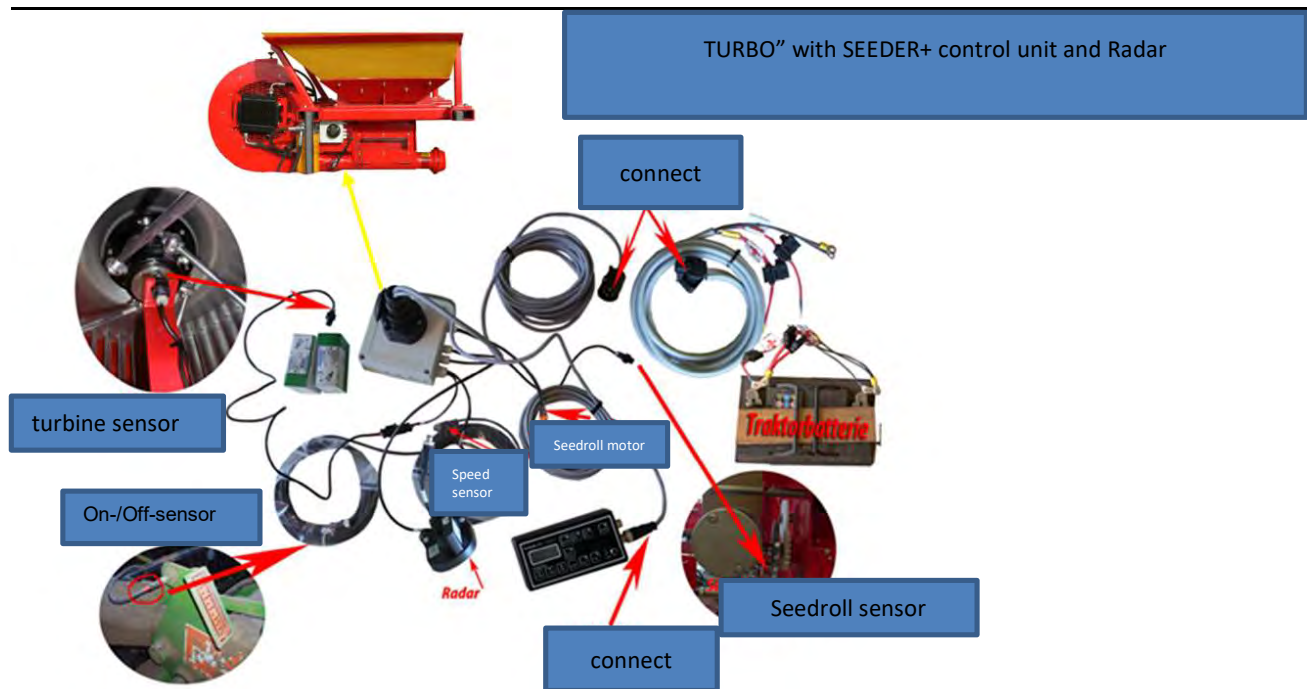
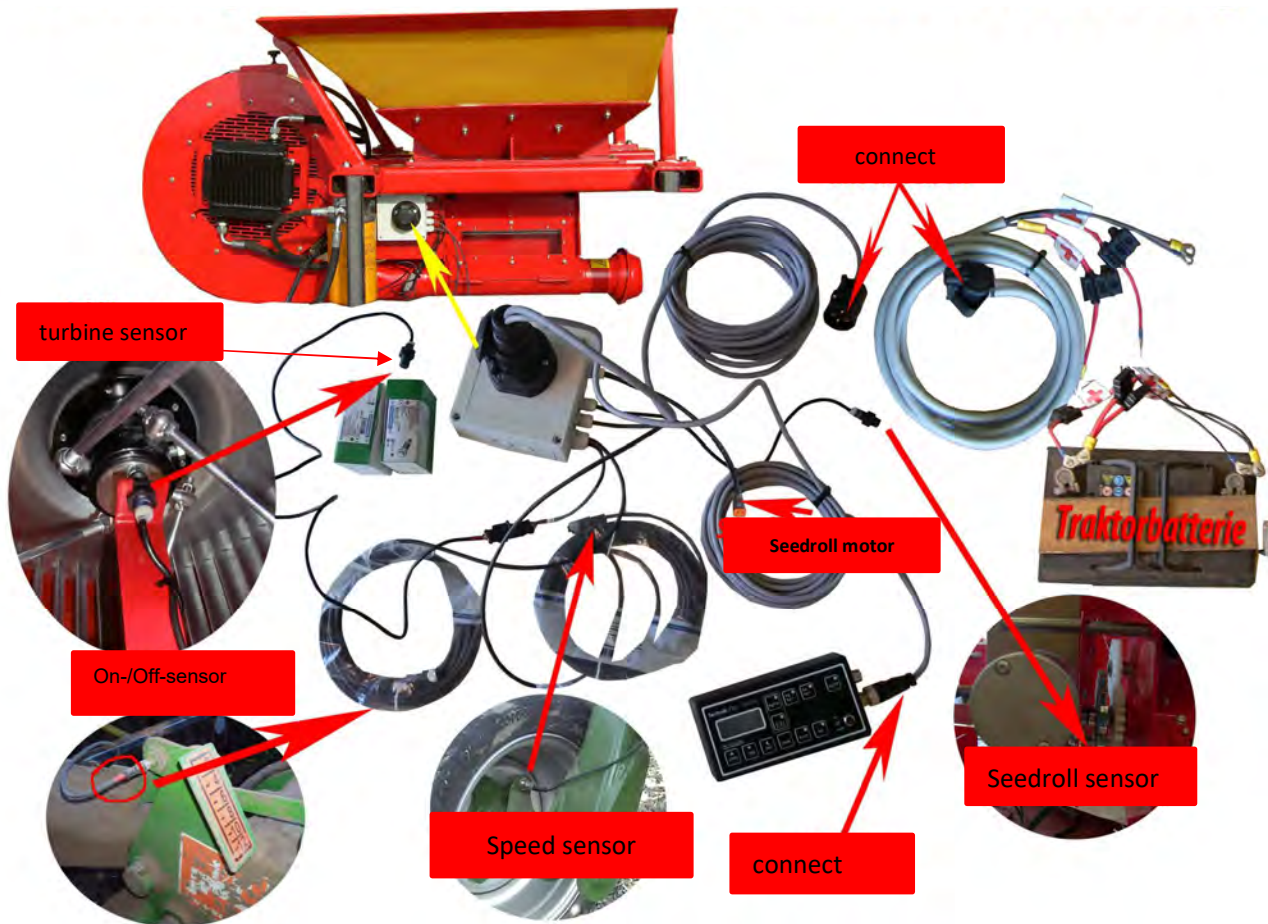
It is possible to change the polarity from the on/off sensor. Check parameter no. 02 (Seeder+) respectively parameter no. 04 (TWIN) in the instruction for Seeder+/Twin.

**Mounting possibilities On-/Off-sensor**



The on/off sensor and speed sensor itself are the same except their diameters. One sensor has a diameter of 18mm and a reacting distance of max. 4mm the other one has a diameter of 30mm and a reacting distance of max. 8mm.

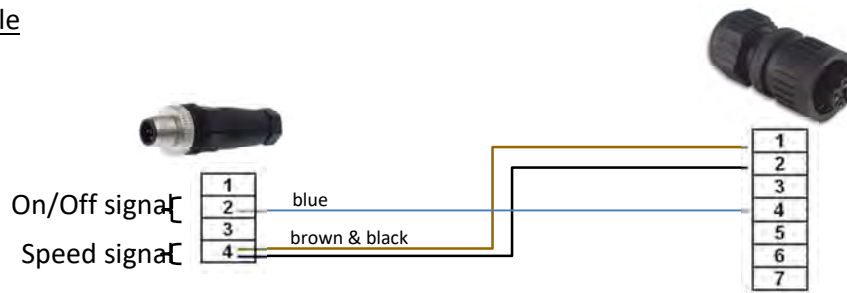
## TURBO" with SEEDER+ control unit



## Signal connections:

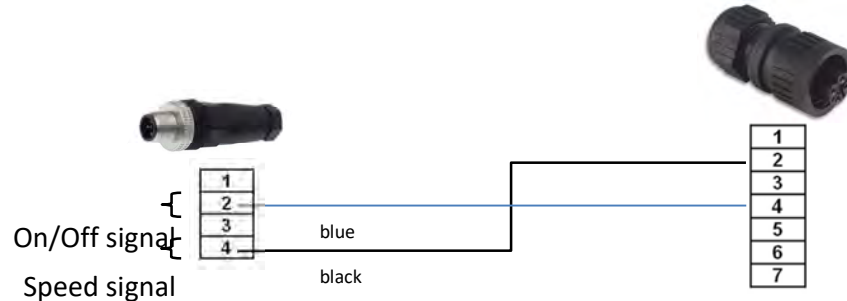
### Signal plug cable

Version A:

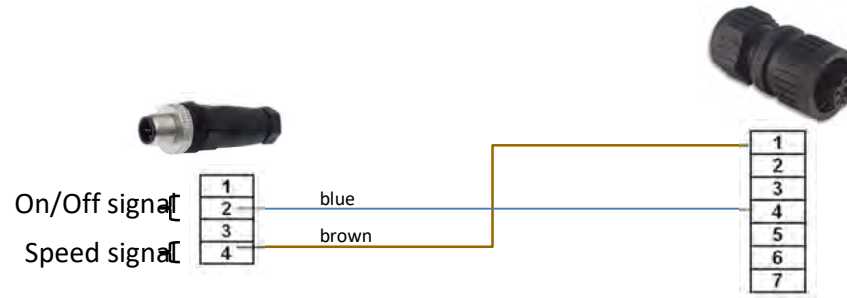


Some tractors have the speed signal on pin no. 1 and pin no. 2. In this case just connect to the radar signal. You can find more information regarding the configuration of the signal socket in the tractor's instruction.

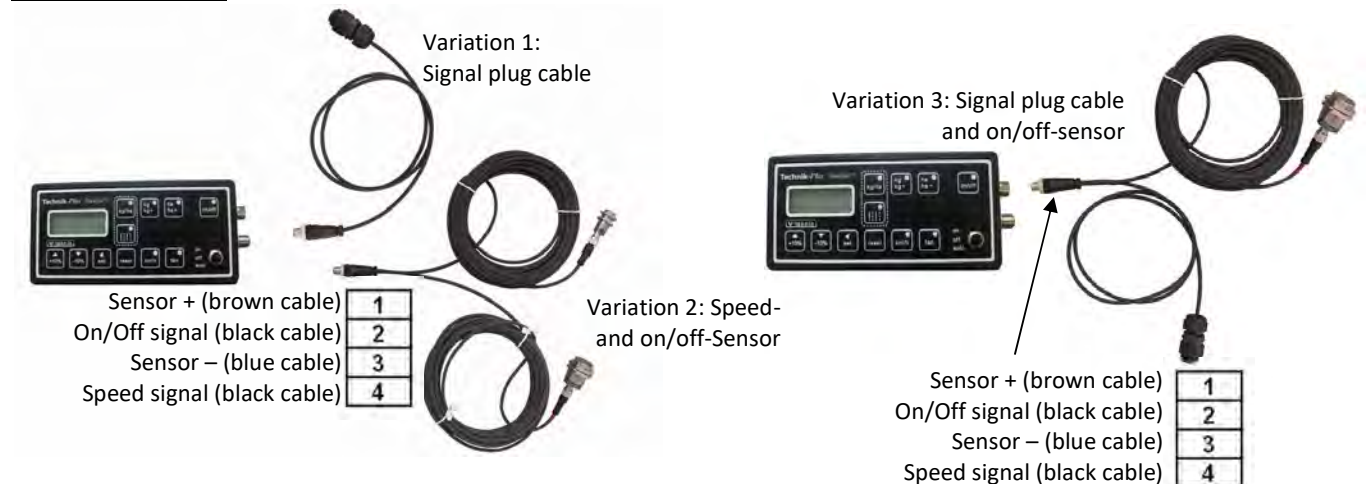
VersionB:



VersionC:



### Possible variations:



### Note:

It can be that John Deere and Claas tractors have no linkage signal! In this case use the on/off sensor. New tractors can need an additional cable. Please contact us.

**Working on the field:****Hint:**

To achieve the best spreading, mix bad running grass seed with easy running seed or use mixtures which are highly productive for the soil and harvest.

**Before start working:**

Take the effort to calibrate the machine as written. Note the adjusting for future.

If you use the Profi control unit, note the driven speed. The more constant the driven speed is the more accurate the output amount is.

After done calibration drive a short way – STOP:

**CHECK**

- if the seed or granulate is spread regularly.
- if the seed amount seems correct on the soil.
- if visible the correct seed amount has been gone from the hopper.

**REPEAT**

all above mentioned checks in constant intervals until you are sure that the seeder works correct.

**CLEAN**

the seeder after work every day. Use a brush, not “your hands”! to clean the bottom of the hopper. Wear your personal protective equipment if necessary.

**ATTENTION**

The seed rolls can catch fingers, hair or loose clothes. The motor is very strong and can't be stopped.

**TAKE CARE**

During working is the fan always in operation. Just the seed roll turns on and off. Otherwise it can be that the hoses get blocked.

**Cleaning and Service**

All hydraulic information are just for seeders with hydraulic driven fan:

- Before every service: Lower the implement, disconnect the power supply, disconnect the hydraulic connections. Disconnect mechanical connections (f.e. PTO, ...), take away the ignition key from the tractor or disconnect the implement from the tractor.
- Just use original spare parts. For damages because of imitation parts we take no responsibility.
- Clean the fans daily or after every operation with pressurised air (Dust can be the cause for an unbalanced fan wheel. As result the fan wheel can be damaged).
- Check all 40 operation hours: Are the screws and mounting still fixed? Have the hoses and cables chafes? Does the hydraulic leak out? Is there any heavy rust visible (Especially the mounting points and spreader plates)? Have the hoses any damages? Are the electric connections okay (no free wires)?
- Don't clean the seeder with pressure washer or too much water. Electric connections, hydraulic components or bearings can get damages during the time (oxidation, rust)
- Damaged hydraulic hoses (f.e. rubbed through, leaking) or electric cables must be changed immediately



# **ATTACHEMENT 1 SEED CHART**

TP-FRONT-TURBO									
		<b>Standard Säwelle (Dünger)</b> x)Kalibrierung 4,5kg/10sec.	<b>Metal Säwelle (Dünger)</b> x)Kalibrierung 10,45kg/10sec.	<b>Standard Säwelle (Soja)</b> x)Kalibrierung 3,4kg/10sec.	<b>Metal Säwelle (Soja)</b> x)Kalibrierung 6,1kg/10sec.				
Arbeits- breiten	Km/h	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha
3m	5	332,00	996,00	836,00	2508,00	272,00	816,00	488,00	1464,00
	8	208,00	623,00	523,00	1568,00	170,00	510,00	305,00	915,00
	10	166,00	498,00	418,00	1254,00	136,00	408,00	244,00	732,00
4,5m	5	200,00	598,00	558,00	1672,00	182,00	544,00	326,00	976,00
	8	139,00	415,00	344,00	1031,00	114,00	340,00	204,00	610,00
	10	110,00	332,00	279,00	836,00	91,00	272,00	163,00	488,00
6m	5	221,00	664,00	418,00	1254,00	136,00	408,00	244,00	732,00
	8	139,00	415,00	262,00	784,00	85,00	255,00	153,00	458,00
	10	111,00	332,00	209,00	627,00	68,00	204,00	122,00	366,00
6,75m	5	148,00	443,00	372,00	1115,00	121,00	363,00	217,00	651,00
	8	93,00	277,00	333,00	997,00	76,00	227,00	136,00	407,00
	10	74,00	222,00	186,00	558,00	61,00	182,00	109,00	326,00

The amounts are rounded calculated values and can change because of different seed characteristics!





**ATTACHEMENT 2 Declaration of conformity**

**ATTACHMENT 3    Warrant request**

CLAIMANT:

Company/Name:

Agent:

Address:

Country:

Phone number:

E-Mail:

Machine details:

Typ:

Serialno:

Failure description (maybe with picture - E-Mails not over 4MB!!):

[illegible]

DONE WORK – USED PARTS

[illegible]

### **Warranty Terms:**

The manufacturer warranty is 1 year and valid when:

- within this time, spare parts are damaged because of wrong installation from the manufacturer or material defects.
- using the original spare parts.

The warranty expires when:

- wearing parts must be changed in normal use regularly.
- spare parts, which are defect because of an accident, carelessness, misuse and improper use or installation.
- using not original spare parts (imitation spare parts).
- not observing the instruction and mounting hints.

Damages because of transport must be announced immediately but latest within 5 days after delivery. It must be done in written form and is valid after a written receipt.

Additional is valid:

In case of a warranty claim, spare parts will be changed free of charge. Working time or additional costs won't be replaced.

In case of an technical defect and thus resulting harvest and machine loss, there is no recourse!

Used, defect parts must be sent "free of charge" with the warranty claim!

Warranty claim must be filled in complete!