TP-TURBO-JET SUPER 6 electric
TP-TURBO-JET SUPER 8 electric
TP-TURBO-JET SUPER 12 electric

TP-TURBO-JET SUPER 6 hydraulic
TP-TURBO-JET SUPER 8 hydraulic
(TP-TURBO-JET SUPER 10 hydraulic)
TP-TURBO-JET SUPER 12 hydraulic

Instruction

Translation from original

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Serial no.: _____

Version 01/16

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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.

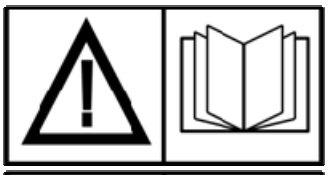
Please note: This instruction is valid for all TP-TURBO-JET SUPER 6/8/10/12 electric and hydraulic including the optional equipment. Not all described parts in this instruction must be included in your seeder. Please check the delivered model with equipment on your delivery note. The complete safety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

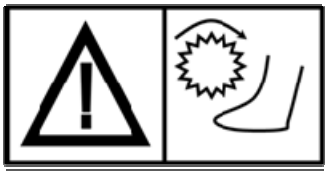
All the best and high harvest wishes

Your Technik-Plus -Team

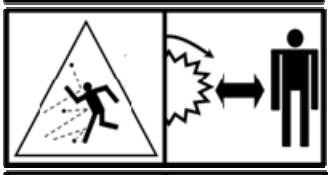
Description of the pictograms on your seeder:
Pictograms inform you about possible dangers. They ensure the safety of all persons working in any way with this machine. Pictograms always must be replaced and can be ordered with following order numbers:



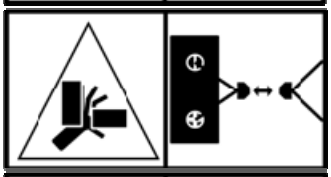
Before operation read the instruction carefully!
Order-No.: 10559906



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 amounts 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.

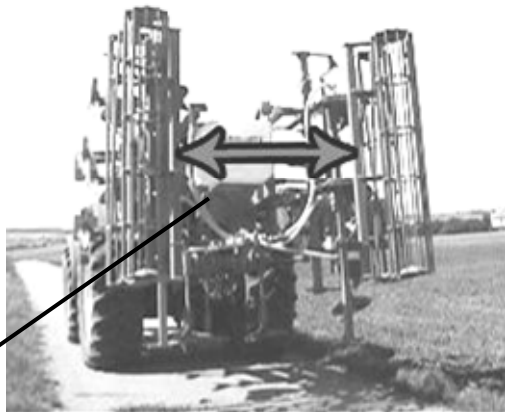
Short description and shipment : see delivery note
Techn. details: see technical data sheet

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:

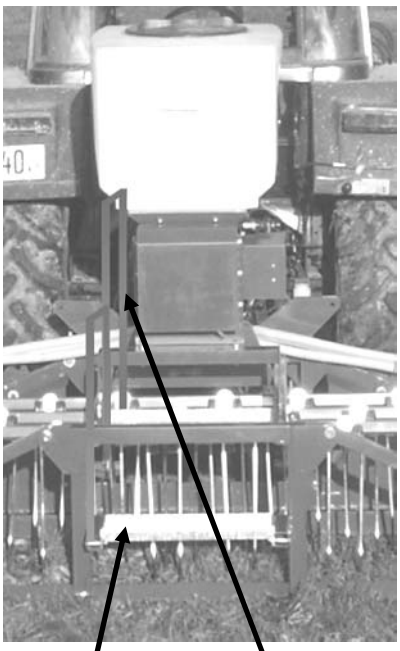
1. The frame must have enough carrying capacity. Consider the vibrations during driving!

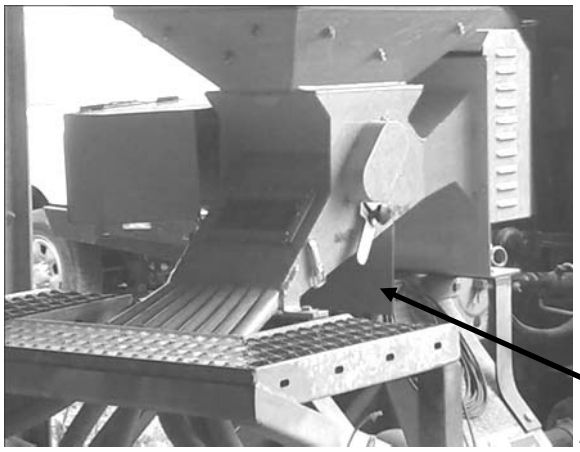
2. Take care to the possible space on folded Implements so that the seed has enough space.


Enough space!

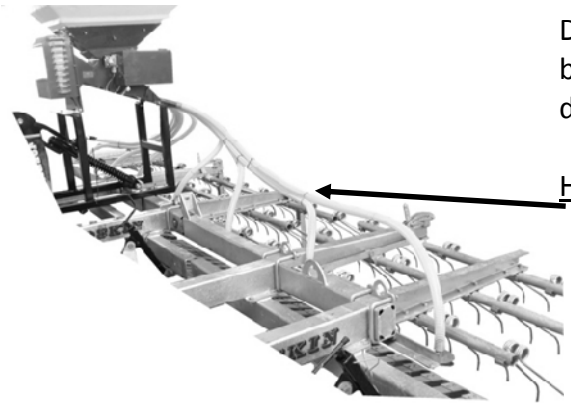
3. We recommend to mount the hopper as low as possible → Easier filling of hopper. Definitely mount antislip steps and a hand trail for filling the hopper according to DIN EN 14018 (available on request).

4. There must be enough space to open the bottom flap.


Steps and hand rail


Attention! Don´t obstruct the bottom flap.

5. The mounting height depends on the possibilities of mounting the hoses and the seeder.

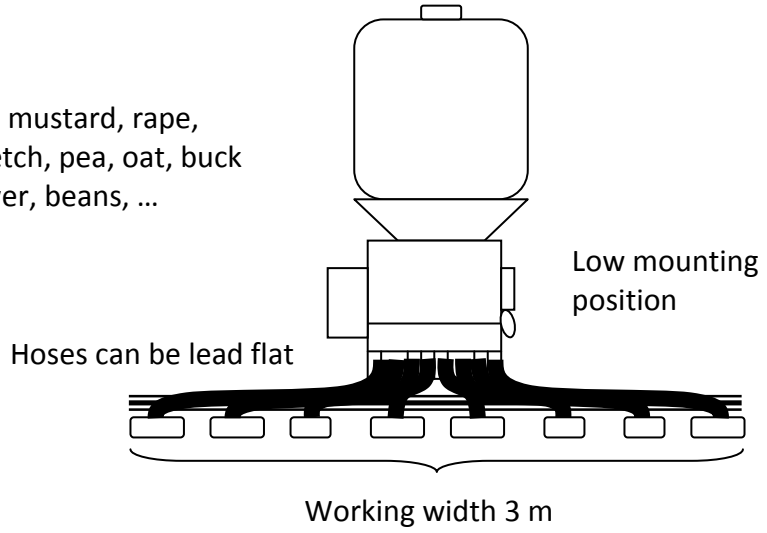


Don´t mount the hoses upwards and avoid sharp bendings. The best is to mount the hoses continuous downwards.

Hint: Use the last hose to support the next hose.

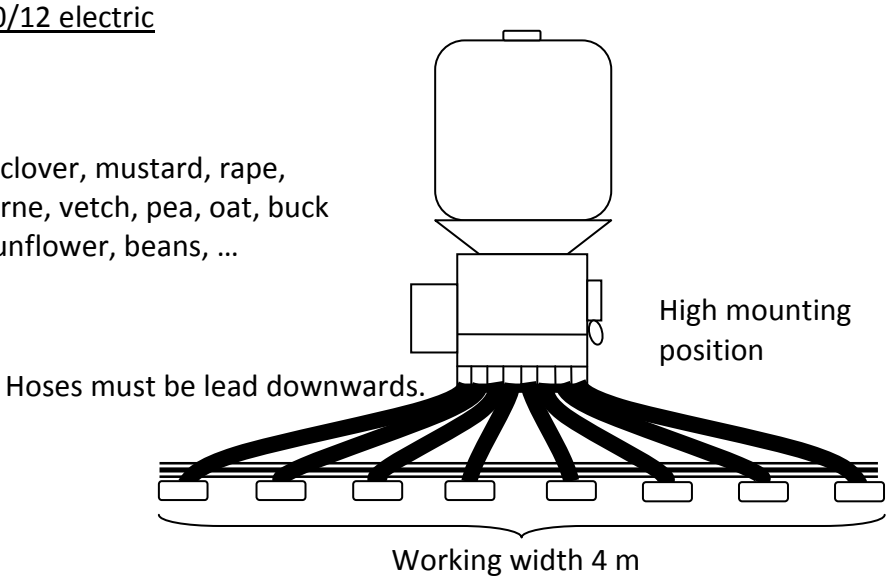
TP-Turbo-Jet Super 6/8/10/12 electric or hydraulic:

Possible for: Rye, grass, clover, mustard, rape, phacelia, oil radish, lucerne, vetch, pea, oat, buck wheat, wheat, barley, sun flower, beans, …
Up to 3m



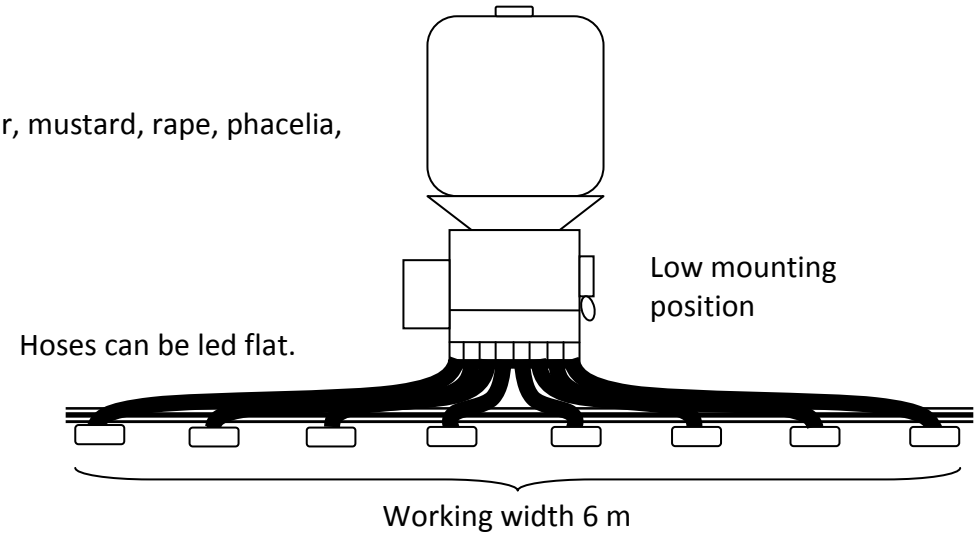
TP-Turbo-Jet Super 6/8/10/12 electric

Possible for: Rye, grass, clover, mustard, rape, phacelia, oil radish, lucerne, vetch, pea, oat, buck wheat, wheat, barley, sunflower, beans, …
Up to 4m



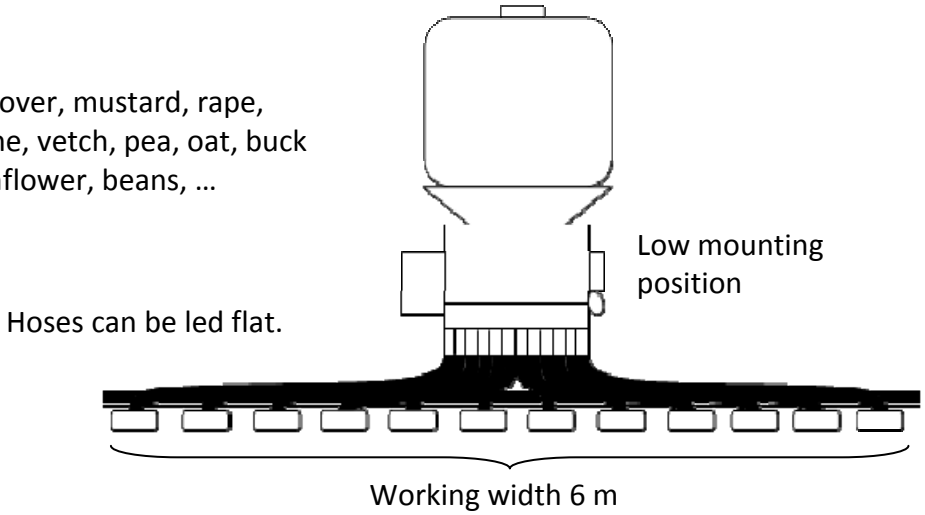
TP-Turbo-Jet Super 6/8/10/12 electric:

Possible for: Grass, clover, mustard, rape, phacelia, oil radish, lucerne, …
Up to 6m



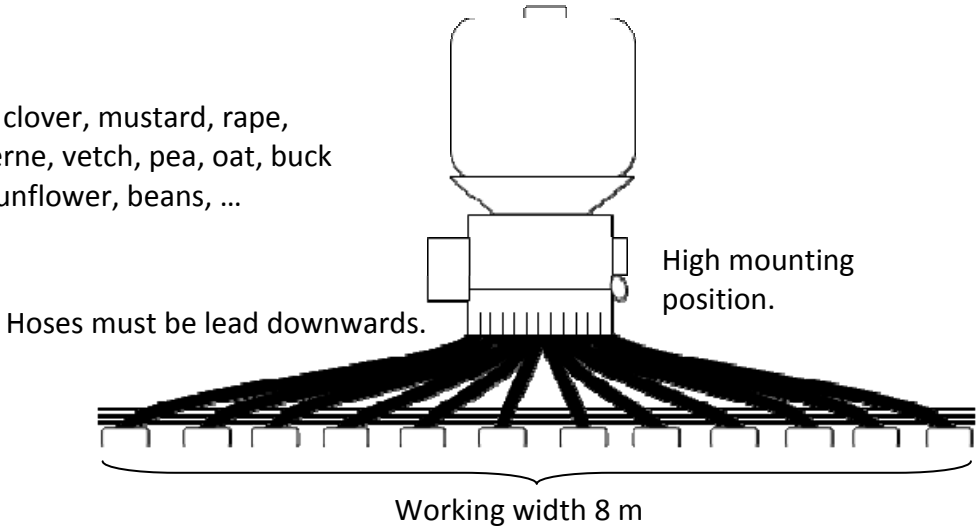
TP-Turbo-Jet Super 6/8/10/12 hydraulic:

Possible for: Rye, grass, clover, mustard, rape, phacelia, oil radish, lucerne, vetch, pea, oat, buck wheat, wheat, barley, sunflower, beans, …
Up to 6m



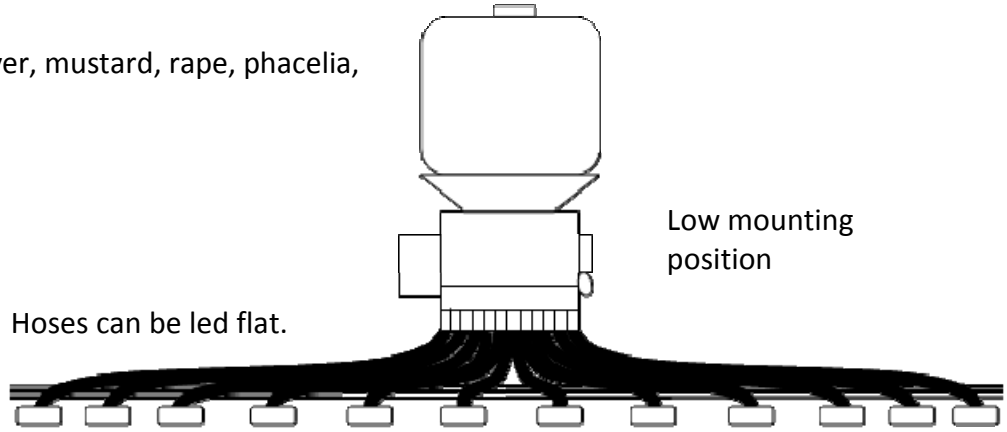
TP-Turbo-Jet Super 6/8/10/12 hydraulic:

Possible for: Rye, grass, clover, mustard, rape, phacelia, oil radish, lucerne, vetch, pea, oat, buck wheat, wheat, barley, sunflower, beans, …
Up to 8m



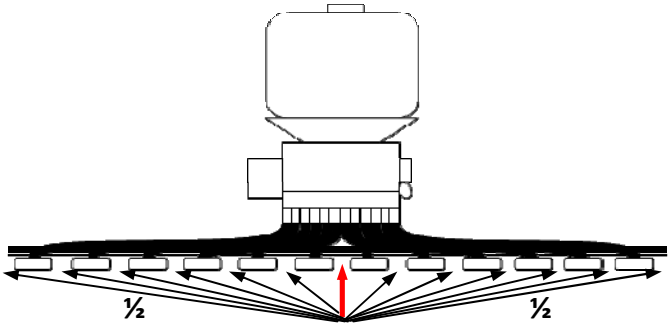
TP-Turbo-Jet Super 6/8/10/12 hydraulic:

Possible for: Grass, clover, mustard, rape, phacelia, oil radish, lucerne, …
Up to 12m



Symbole:

Implement Seeder Spreader plate hose



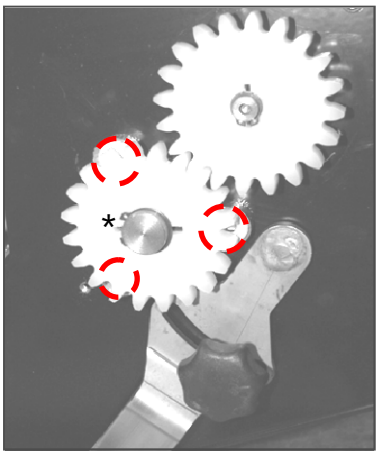
6. Start in the middle with measuring when mounting the spreader plates.

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.

The position oft he spreader plates can be horizontal or vertical.

Mounting the hose on the spreader plate.

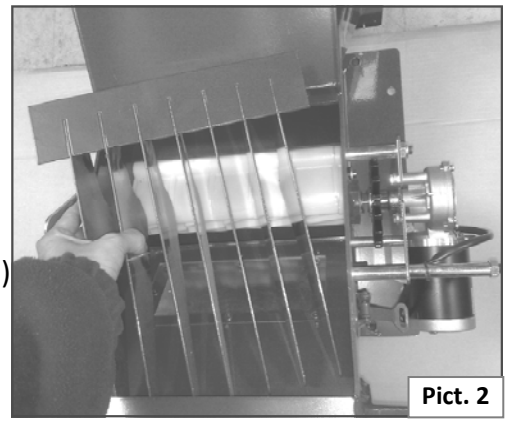
Changing of seed roll



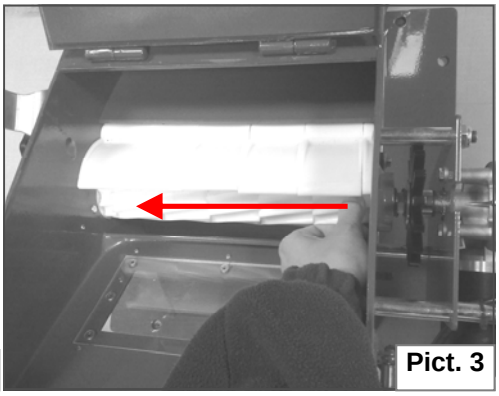
Pict. 1: Remove split pin*

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 geards,
   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

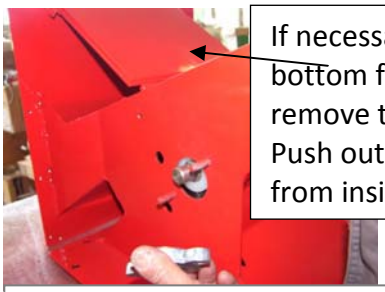


Pict. 3

TP-TURBO-JET Super 8/12

1. Open the tow 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.

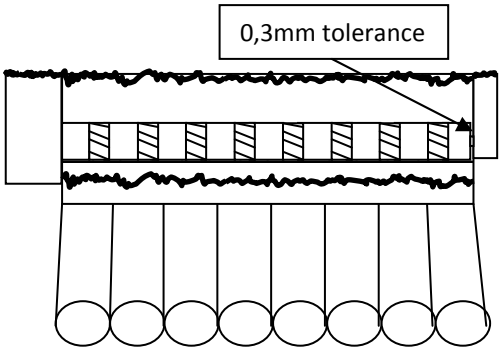
3. Remove bearing and remove the seed roll.

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)

ATTENTION – Axial tolerance!!

Especially on the plastic seed rolls take care
to the axial tolerance of 0,3mm.

If all seed roll parts turn - okay
If the seed roll parts don´t turn – take the first piece and grind it a little bit down by hand.



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.

Combination – Bottom flap with seed roll:

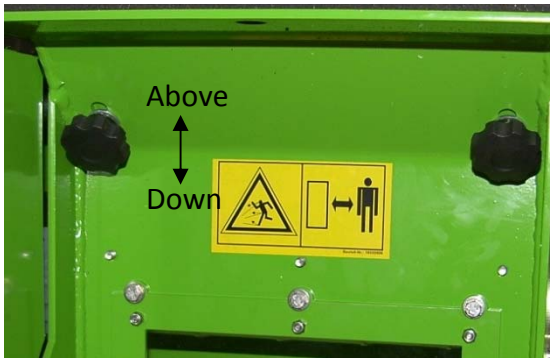
Metall seed roll with plastic bottom flap.

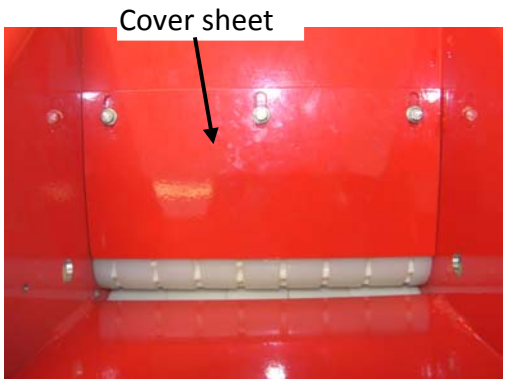
Standard seed roll with plastic bottom flap.

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.





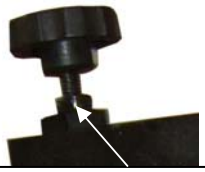
ATTENTION!!
Do this Adjusting before calibrating the machine. Otherwise the seed output amount is not correct.

Hydraulic system:

The hydraulic system is developed for max. 50lit/min and the motor for max. 25lit/min. If this amount is exceeded, the fan can be damaged. – NO WARRANTY!

Ventil

Use just a single acting control. The return must be absolutely free into the hydraulic system (Not over double acting control!)
ATTENTION! If the valve is completely open the rpm of the hydraulic motor can led too high. Don´t exceed the maximum speed of 2.000 rpm at an oil operation temperature of 50°-60°. Otherwise the fan can be damaged! Adjust the fan carefully with the valve. Check, if the screw/counter nut on the valve is thight, so that the valve cannot adjust by itself.



Wurmverschraubung / Kontermutter kontrollieren

On the 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.

Hydraulic with leaking line

Ingoing

Return

Leaking line

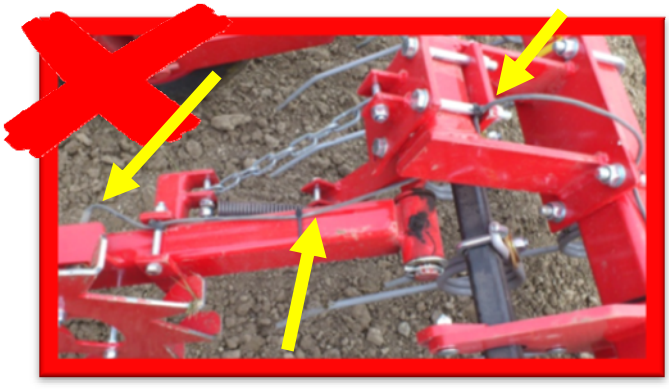
Hydraulic without leaking line

Ingoing

Return

Important hints for laying cables:

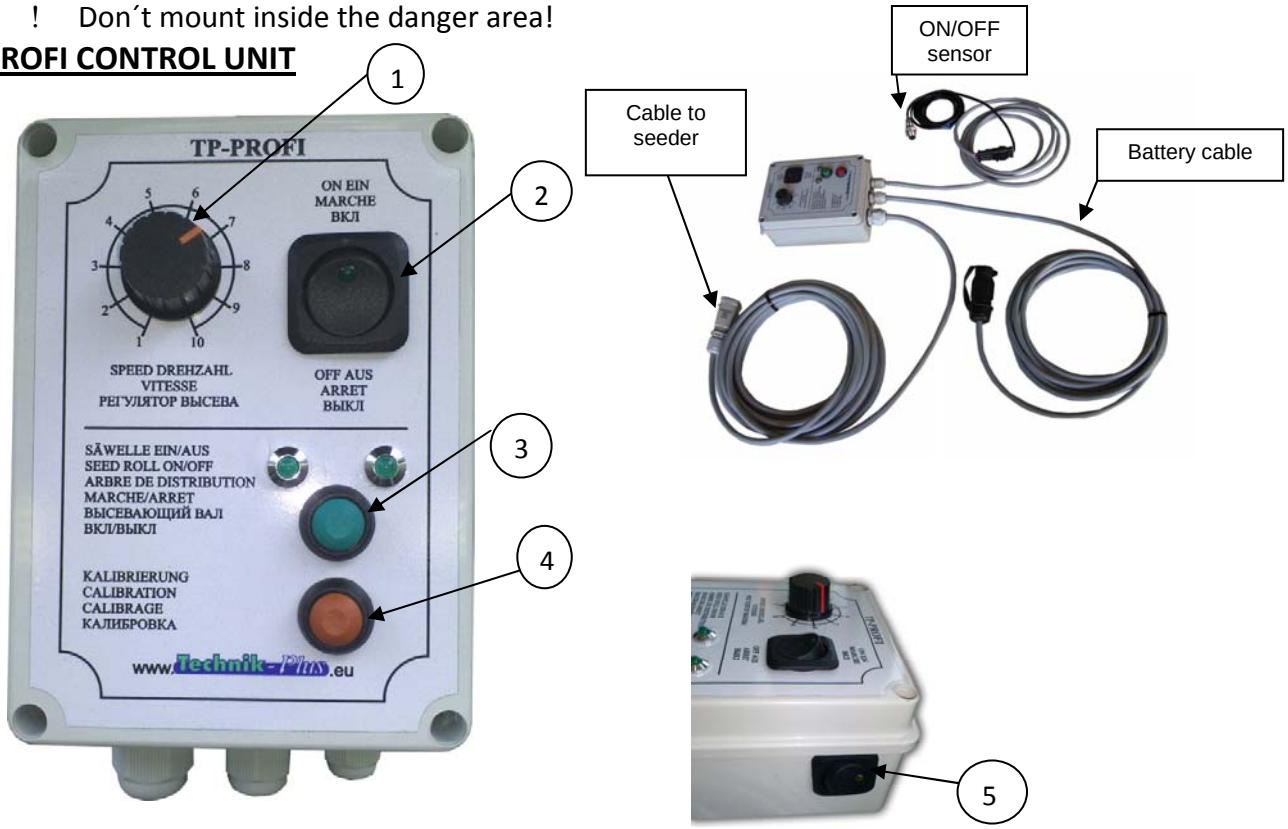
Put the cables in rolls!
Don´t bend the cables near sockets!
Take care when the implement is folded.
Cable can breakaway or clamp!
Avoid strong pulls on the cables! Don´t bend the cable not to strong. Avoid clamps on the cables.
Use cable protection as needed!



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!

PROFI CONTROL UNIT



1 **Speed knob:**

For adjusting the speed on the seed roll motor=adjusting of output amount. The amount cann 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 adjustings 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 x 7 = 4,2 ha/h x 20 kg/ha = 84 kg Output amount/h : 60 min
Is an amount of 1,4 kg/min which should be in your vessel.

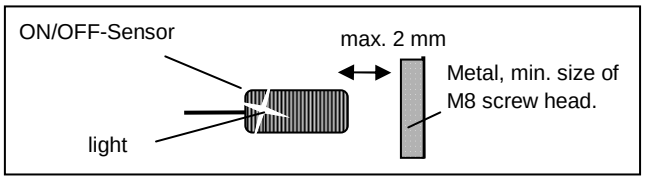
z.B.: You know the working width, the driven speed and the output amount per hectare. As above mentioned you can put in the different values into the formula and you get the needed amount. During calibration the seed roll motor must run with the same speed during operation. Keep the cover closed! Is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

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 dosn´t shine)



Activation and Dectivation 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.

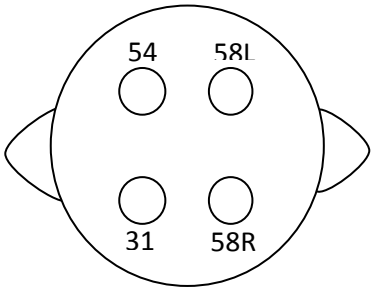
6. Fuses in the unit
For fan: 15A
For seed roll motor: 10A

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 -

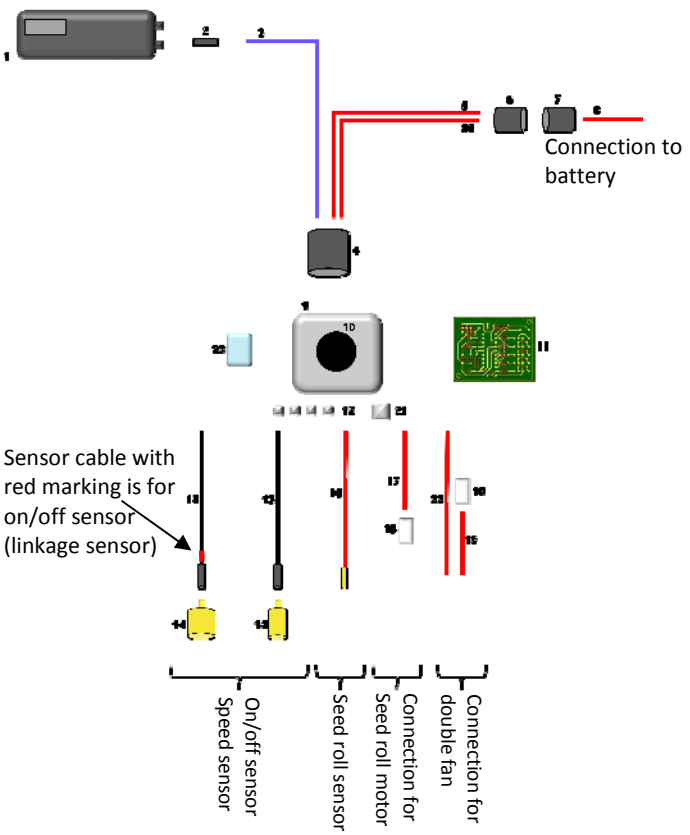
Configuration socket:

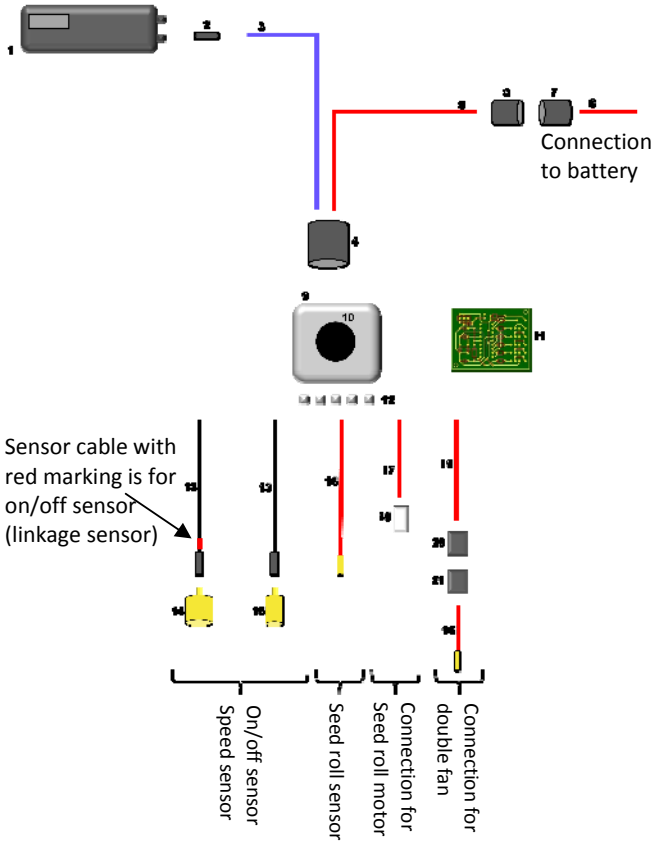
Hydraulic fan

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

SEEDER+ / TWIN Unit

READ THE SEPERATE OPERATION INSTRUCITION AS WELL SEEDER+/TWIN

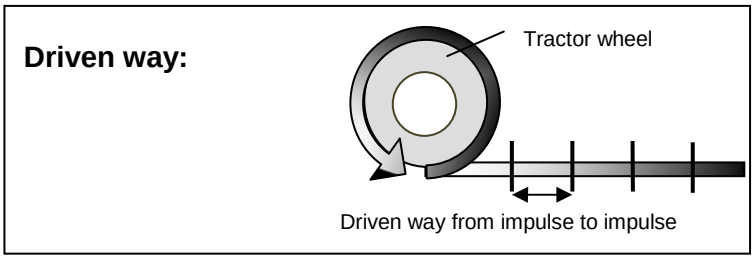




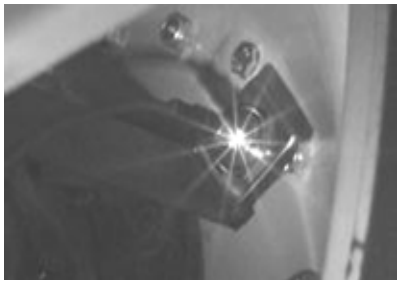
The speed sensor reacts to metall. For measuring the speed the sensor needs impulses (f.e. screw heads) That screw heads can be mounted on a roller or the inner side of the tractor rim of wheel. The calculation value is shown in mm/impulse. The driven way from impulse to impulse must be between 1 and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

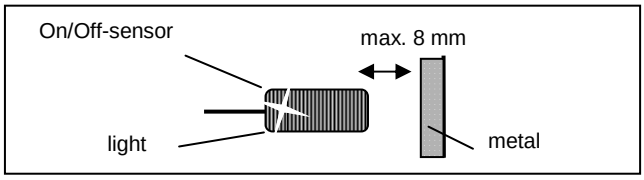
Pict. 2: Light off!

Errors:

1. If the light doesn´t shine the distance between sensor and metal can be to 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.

⑥ Configuration plug:

Electric fan

Nr. 54:	blue cable	(– from relay)
Nr. 58L:	brown cable	(+ from relay)
Nr. 31:	cable no. 1	(– from the control unit)
Nr. 58R:	cable no. 2	(+ from the control unit)

Hydraulic fan

Nr. 54:		
Nr. 58L:		
Nr. 31:	cable no. 1	(– from the control unit)
Nr. 58R:	cable no. 2	(+ from the control unit)

⑦ Configuration socket:

Electric/Hydraulic fan

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

⑩ Configuration plug:

Electric fan

Nr. 1	Battery -
Nr. 2	Battery +
Nr. 3	Control cable no. 1
Nr. 4	Control cable no. 4
Nr. 5	Control cable no. 2
Nr. 6	Control cable no. 3
Nr. 7-11	Not used
Nr. 12	fan –
Nr. 13	fan +

Configuration plug:

Hydraulic fan

Nr. 1	Battery -
Nr. 2	Battery +
Nr. 3	Control cable no. 1
Nr. 4	Control cable no. 4
Nr. 5	Control cable no. 2
Nr. 6	Control cable no. 3
Nr. 7-13	Not used

Configuration socket:

Electric fan

Nr. 1	- J2
Nr. 2	+ J1
Nr. 3	J44
Nr. 4	J46
Nr. 5	J45
Nr. 6	J47
Nr. 7-11	Not used
Nr. 12	Relay -
Nr. 13	Relay +

Configuration socket:

Hydraulic fan

Nr. 1	- J2
Nr. 2	+ J1
Nr. 3	J44
Nr. 4	J46
Nr. 5	J45
Nr. 6	J47
Nr. 7-13	Not used

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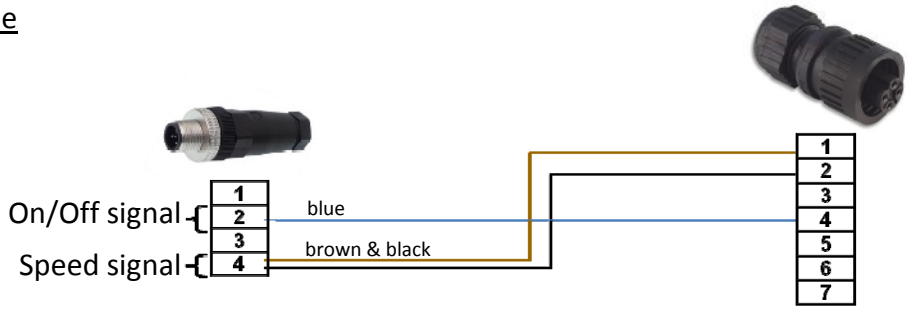
- Plugs and connections must correspond to the requirements.
- Plugs and connections must be mounted correct (No free wires, good isolation)
- Damages because of plugs and extensions mounted by the customer are NO warranty claim!

Signal connections:

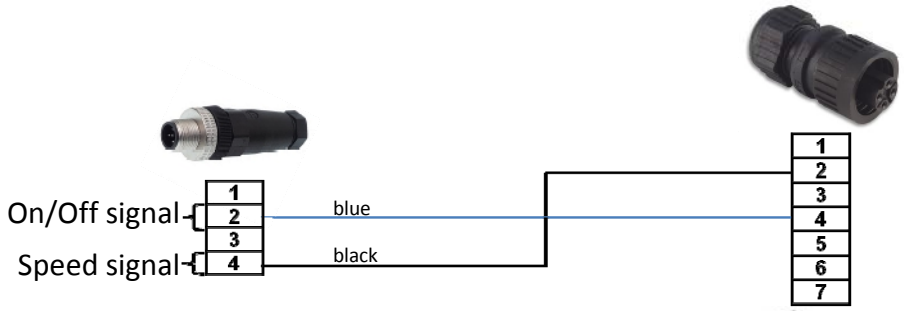
Signal plug cable

Version A:

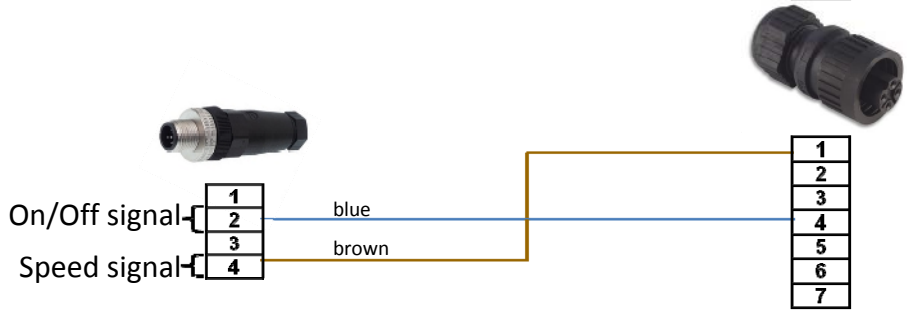


Some tractors have the speed signal on pin no. 1 and pin no. 2. In this case just connect to the radar signal. You can find more information regarding the configuration of the signal socket in the tractor´s instruction.

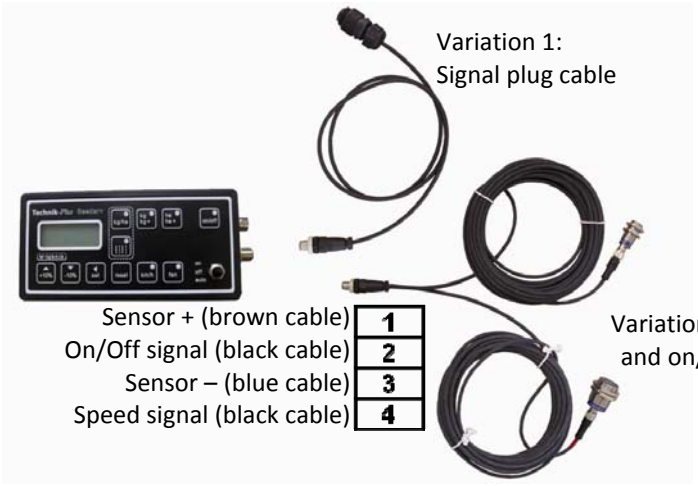
VersionB:



VersionC:



Possible variations:



Variation 2: Speed- and on/off-Sensor

Note:
It can be that John Deere and Class 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 woks 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.

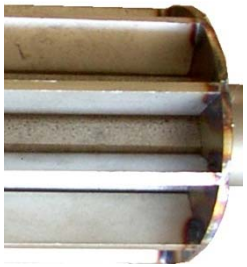
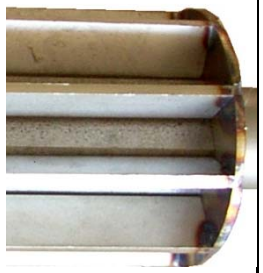
· Clean the fans daily or after every operation with pressurised air (Dust can be the cause for an unbalanced fan wheel. As result the fan wheel can be damaged.

· 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)?

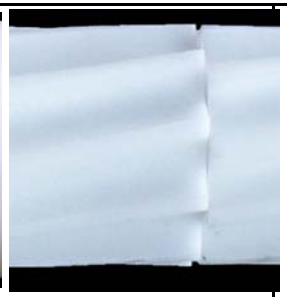
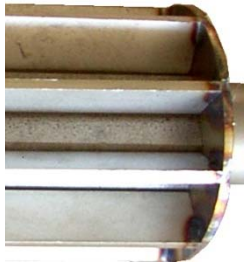
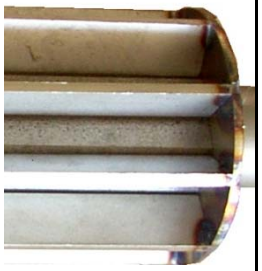
· Don´t clean the seeder with pressure washer or too much water. Electric connections, hydraulic components or bearings can get damages during the time (oxidation, rust)

· Damaged hydraulic hoses (f.e. rubbed through, leaking) or electric cables must be changed immediately

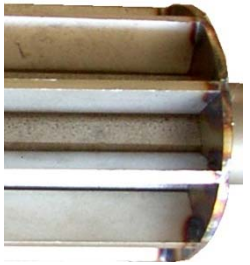
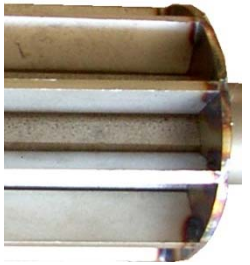
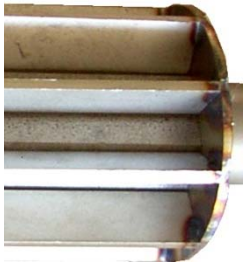
ATTACHEMENT 1 SEED CHART

TP-Turbo-Jet Super 6		**5mm seed roll** (Rape)		**10mm seed roll** (Rape)		**15mm seed roll** (Rape)		**Standard seed roll** (Mustard)		 **Metal seed roll** (Wheat)		**Metal seed roll** (Grass seed)		 **Metal seed roll** (Soya beans)	
Working Width	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	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha
3m	5	1,90	21,00	3,60	41,00	5,40	71,00	27,00	189,00	28,00	468,00	19,00	210,00	90,00	487,00
	10	1,50	10,50	3,00	21,00	4,50	35,00	15,00	94,00	22,00	232,00	15,00	105,00	53,00	247,00
	15	1,20	6,70	2,30	13,00	3,30	26,00	9,00	63,00	15,00	156,00	12,00	71,00	38,00	157,00
4m	5	1,50	16,00	2,40	31,00	4,00	53,00	15,00	107,00	18,00	351,00	27,00	157,00	68,00	337,00
	10	1,10	7,90	2,30	16,00	3,00	26,00	9,80	61,00	15,00	151,00	23,00	81,00	49,00	165,00
	15	0,85	4,50	1,90	9,00	2,45	19,00	6,00	31,00	12,00	117,00	15,00	52,00	34,00	112,00
6m	5	1,90	10,00	1,80	20,00	2,60	35,00	12,00	94,00	16,00	234,00	19,00	105,00	53,00	247,00
	10	1,50	5,30	1,50	11,00	2,25	17,00	6,80	47,00	13,00	116,00	12,00	52,00	38,00	120,00
	15	1,15	3,40	1,15	6,70	1,65	13,00	4,50	32,00	9,80	75,00	7,50	37,00	30,00	82,00
8m	5	0,75	8,20	1,20	16,00	2,05	26,00	7,50	55,00	9,00	176,00	14,00	81,00	34,00	157,00
	10	0,60	4,10	0,85	8,20	1,50	13,00	5,30	23,00	7,50	75,00	12,00	37,00	27,00	90,00
	15	0,45	2,25	0,95	4,50	1,25	9,70	3,00	13,00	5,70	58,00	7,50	27,00	19,00	60,00

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

TP-Turbo-Jet Super 8		**5mm seed roll** (Rape)		**10mm seed roll** (Rape)		**15mm seed roll** (Rape)		 **Standard seed roll** (Mustard)		 **Metal seed roll** (Wheat)		**Metal seed roll** (Grass seed)		 **Metal seed roll** (Soya beans)	
Working width	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	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha
3m	5	2,50	28,00	4,80	55,00	7,10	95,00	35,00	253,00	35,00	624,00	25,00	280,00	120,00	650,00
	10	2,00	14,00	4,00	29,00	6,00	47,00	19,00	126,00	29,00	310,00	20,00	140,00	70,00	330,00
	15	1,50	9,00	3,00	18,00	4,30	35,00	12,00	85,00	20,00	208,00	15,00	95,00	50,00	210,00
4m	5	1,90	21,00	3,20	41,00	5,40	71,00	20,00	143,00	24,00	469,00	35,00	210,00	90,00	450,00
	10	1,50	10,50	3,00	22,00	4,00	35,00	13,00	82,00	20,00	202,00	30,00	108,00	65,00	220,00
	15	1,15	6,00	2,50	12,00	3,30	26,00	8,00	42,00	15,00	156,00	20,00	70,00	45,00	150,00
6m	5	2,50	14,00	2,40	27,00	3,50	47,00	15,00	126,00	21,00	312,00	25,00	140,00	70,00	330,00
	10	2,00	7,00	2,00	15,00	3,00	23,00	9,00	63,00	17,00	155,00	15,00	70,00	50,00	160,00
	15	1,50	4,50	1,50	9,00	2,20	17,00	6,00	43,00	13,00	101,00	10,00	50,00	40,00	110,00
8m	5	1,00	11,00	1,60	22,00	2,70	35,00	10,00	74,00	12,00	235,00	18,00	108,00	45,00	210,00
	10	0,75	5,50	1,50	11,00	2,00	18,00	7,00	31,00	10,00	100,00	15,00	50,00	35,00	120,00
	15	0,60	3,00	1,25	6,00	1,70	13,00	4,00	18,00	7,50	78,00	10,00	36,00	25,00	80,00

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

TP-Turbo-Jet Super 12		**5mm seed roll** (Rape, clover, etc.)		**10mm seed roll** (Rape, clover, etc.)		**15mm seed roll** (Rape, clover, etc.)		**Standard seed roll** (Mustard, etc.)		 **Metal seed roll** (Crops, fertilizer**,** etc**.)**		 **Metal seed roll** (Peas)		 **Metal seed roll** (Grass seed)	
Working width	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	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha	Min. kg/ha	Max. kg/ha
3m	5	3,80	42,00	7,20	82,00	10,70	143,00	53,00	380,00	63,00	936,00	200,00	700,00	43,00	320,00
	10	3,00	21,00	6,00	43,00	9,00	71,00	28,00	190,00	44,00	465,00	90,00	300,00	27,00	170,00
	15	2,30	13,50	4,50	27,00	6,50	53,00	18,00	126,00	30,00	312,00	60,00	220,00	20,00	115,00
4m	5	2,90	32,30	4,70	62,00	8,00	108,00	30,00	214,00	36,00	704,00	150,00	525,00	40,00	200,00
	10	2,30	15,80	4,50	33,00	6,00	54,00	20,00	123,00	30,00	303,00	68,00	225,00	34,00	140,00
	15	1,70	9,00	3,80	18,00	4,90	40,00	12,00	63,00	23,00	234,00	45,00	165,00	28,00	40,00
6m	5	3,80	21,00	3,60	40,50	5,30	71,00	23,00	189,00	32,00	468,00	100,00	350,00	29,00	160,00
	10	3,00	10,50	3,00	22,50	4,50	35,00	14,00	95,00	26,00	233,00	45,00	150,00	20,00	85,00
	15	2,30	6,80	2,30	13,50	3,30	26,00	9,00	65,00	20,00	152,00	30,00	110,00	16,00	65,00
8m	5	1,50	16,50	2,40	33,00	4,00	53,00	15,00	111,00	18,00	353,00			22,00	125,00
	10	1,20	8,30	2,30	16,50	3,00	27,00	11,00	46,00	15,00	150,00			20,00	65,00
	15	0,90	4,50	1,80	9,00	2,50	20,00	6,00	27,00	12,00	117,00			14,00	48,00

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

ATTACHEMENT 2 Declaration of conformity

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
8480 Mureck, AUSTRIA
☎ 0043 (0) 3472 21120
– 0043 (0) 3472 21123
E-Mail: technik-plus@europart.at
http://www.technik-plus.eu
http://www.europart.at
UID-Nr.: ATU24080401
Firmenbuch: FN 328568 p

EC - Declaration of conformity

in terms of EG-directive machines 2006/42/EG, appendix II A

This declaration is our confirmation that the products specified here

TP0630IN

in the delivered model are conform tot he following relevant directives:
2006/42/EG

The products comply with the following standards, specially:

Used national technical specifications, specially:

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
A-8480 Mureck
www.technik-plus.eu

Mureck, 14.01.2010 .....
Ort und Datum der Ausstellung

Unterschrift (Firmenchef Josef Großauer)

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
8480 Mureck, AUSTRIA
☎ 0043 (0) 3472 21120
– 0043 (0) 3472 21123
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http://www.europart.at
UID-Nr.: ATU24080401
Firmenbuch: FN 328568 p

EC-Declaration of conformity

in terms of EG-directive machines 2006/42/EG, appendix II A

This declaraition is our confirmation that the products specified above

TP0830IN

in the delivered model are conform to the following relevant directives :
2006/42/EG

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
A-8480 Mureck
www.technik-plus.eu

Mureck, Jänner 2013 .....
City and date signing

Signature (Director Josef Großauer)

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
8480 Mureck, AUSTRIA
☎ 0043 (0) 3472 21120
– 0043 (0) 3472 21123
E-Mail: technik-plus@europart.at
http://www.technik-plus.eu
http://www.europart.at
UID-Nr.: ATU24080401
Firmenbuch: FN 328568 p

EC-Declaration of conformity

in terms of EG-directive machines 2006/42/EG, appendix II A

This declaraition is our confirmation that the products specified above

TP-Turbo-Jet-Super 10

in the delivered model are conform to the following relevant directives :
2006/42/EG

The products comply with the following standards, specially:

Used national technical specifications, specially:

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
A-8480 Mureck
www.technik-plus.eu

Mureck, 17.03.2010 .....
City and date signing

Signature (Director Josef Großauer)

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
8480 Mureck, AUSTRIA
☎ 0043 (0) 3472 21120
– 0043 (0) 3472 21123
E-Mail: technik-plus@europart.at
http://www.technik-plus.eu
http://www.europart.at
UID-Nr.: ATU24080401
Firmenbuch: FN 328568 p

EC-Declaration of conformity

in terms of EG-directive machines 2006/42/EG, appendix II A

This declaraition is our confirmation that the products specified above

TP1230IN

in the delivered model are conform to the following relevant directives :
2006/42/EG

The products comply with the following standards, specially:

Used national technical specifications, specially:

Technik-Plus
Sämaschinen e.U.
Industrieparkstrasse 6-8
A-8480 Mureck
www.technik-plus.eu

Mureck, 14.01.2010 .....
City and date signing

Signature (Director Josef Großauer)

ATTACHMENT 3 Warranty 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!!):

DONE WORK – USED PARTS

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!