

User instruction book



KIEGO®

For Hosereel irrigator

St8



- Read this instructions for use imperatively before installing and to put in service this device. You will protect yourselves thus and will avoid to damage your device.

The manufacturer cannot be held for person responsible of the damages due to the failure to respect of the prescriptions of security and the warnings.

- The general and specific data, as well as the drawings and reproductions are only produced to title indicative.





- preamble

- Thank you for purchasing an IRRIMEC Water-Reel
- Read This Manual carefully to learn how to operate and service your Water-Reel properly. Failure to do so can result in personal injury and-or property damage.

This manual is a permanent part of your Water-Reel and should always be available for reference by the operator. This manual should remain with the Water-Reel when it is sold.
- Measurements in this manual are in metric units unless otherwise noted.
- Turbine side and Chain side sides of the Water-Reel are determined by the side of the machine where the fluid enters.
- The Serial Number of your machine should be written in the space provided in the specification section of this manual.
- If You Have A Problem of if you do not understand some feature of this equipment, contact your IRRIMEC dealer.
- Warranty is provided as part of the IRRIMEC product support. Please see specific warranty statement in this manual.

-The warranty
exclude:

- Alterations or modification not previously approved. Neither IRRIMEC dealers or representatives are authorized to make exceptions to warranty policy. Any deviations from standard warranty requires written authorization from an officer of IRRIMEC Irrigation tube which is longer, larger in diameter, or made from approved materials will void the warranty on the entire machine.
- Damage caused by normal wear, accident, lack of reasonable care and maintenance, neglect or abuse.
- The replacement cost of normal service items such as belts, gaskets, brake bands, etc. Unless these parts are know to be defective.
- Transporting, mailing, service call, diagnosis costs. Labor for repairs is also excluded unless unusual circumstances exist and then only if pre-approved.

- Introduction	- Preamble - Term and conditions	
- Safety	1) - Responsibilities of the user	- Page.01
	2) - Important recommendations with bodily risk.	- Page 01
	- Recommendations with the trolley	- Page.02
	- Recommendations when towing	- Page 02
	3) - Important recommendations with risk for the hosereel.	- Page.03
	- Do not damage: - the PE hose	- Page 03
	- Mechanism	- Page 03
	4) - Read serial number and model.	- Page 03
	5) - Stickers position.	- Page.04
- Operation	1) - Hydraulic command.	- Page.05
	- Operate the legs, lower the trolley.	- Page 05
	- The jack	- Page 05
	- Operate rotation	- Page 05
	- Unblocking, blocking turret rotation.	- Page 05
	2) - Adjusting of the trolley	- Page.06
	a) Gun	- Page 06
	b) Wheels chain clutches	- Page 06
	c) Anti-return pawl	- Page 06
	d) Raccording the hose to the trolley	- Page 06
	3) - Position & set up	- Page.07
	a) For a good positioning	- Page 07
	b) Well to fix the hosereel	- Page 07
	4) - Unwinding PE hose	- Page.08
	a) Wheels chain clutches	- Page 08
	b) Anti-return pawl	- Page 08
	c) Electronic speed control (push on)	- Page 08
	d) Unwinding	- Page 08
	e) Brake	- Page.09
	f) Unwinding summary	- Page 09
	5) - Winding and start up	- Page 10
	a) Anti-return pawl	- Page 10
	b) Pump group	- Page 10
	c) Start the watering	- Page 10
	d) Wheels chain clutches	- Page 10
	e) Engage gearbox and stop rod	- Page 10
	f) Electronic speed control (length unwound)	- Page 11
	6) - Choosing the winding speed	- Page 11
	a) The ESC Dosisdis	- Page 11
	b) The ESC Easydis	- Page 11
	c) The by-pass (without ESC)	- Page 11
	d) The tachometer (without ESC)	- Page 12
	7) - Depth of water	- Page 12
	8) - The speed	- Page 12
	a) Constructor data	- Page 13
	b) The by-pass	- Page 13
	c) Change gear	- Page 13
	d) ATTENTION suppress the hose tension	- Page 13
	e) Ratio speed	- Page 13
	9) - Rolling up with power take off	- Page 14
	a) Description	- Page 14
	b) ATTENTION suppress the hose tension	- Page 14
	c) Instructions	- Page 14
- Maintain	1) - Lubrication	- Page 15
	a) Lubrication points:	- Page 15
	2) - Dimension & weights	- Page 16
	a) Dimension	- Page 16
	b) Weight	- Page 16
- Warranty	1) - Warranty	- Page 17

- Important:

- The owner is responsible for the safe operation of this product. The important safeguards and instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors that cannot be built into any product. These factors must be supplied by the person(s) caring for and operating the product. The manufacturer cannot be held responsible for the damages due to the failure to respect the prescriptions of security and warnings.
- 1) Read and understand these instructions before installing and to put in service this device. You will protect yourselves thus and will avoid to damage your device.
- 2) Operate the machine according to prescribed limitations.
- 3) Properly train others who may be permitted to operate the machine.
If this machine is used by a third person, or if it is lent, either rented sold, ALWAYS provide the manual as well as the formation on the necessary security before use.
- 4) Heed rules of safety, including but not limited to those in these instructions.
To familiarize themselves with all regulations and local laws. To know the laws and the regulations applicable to the zone.
- 5) Exercise good judgement relating to safe operation and safe conduct by operators and spectators whether invited or not.
- 6) Always bring the safety decals and placards on the machine to the attention of operators and spectators.
- 7) The descriptions and the features contained in this manual are in force at the time of the stake under press. The equipment describes in this manual can be in option. Some illustrations are not able to apply to the machine. The general and specific data, as well as the drawings and reproductions are only produced for information only.
- 8) Keep All Guards and Shields In Place.

- Important recommendations with bodily risk:



- Do not approach the hands of the points of pinch:

Between the tube PE and the machine, the parts in movements as the legs of stabilizations, all hydraulic activation as well as the displacement with the tractor.

- Stay away from the pièces in rotation:

Still stop the machine and push the hosedrum on the anti-return key before to change report of pulleys. Ever to intervene on the belt during the working.

- Stay away from the mechanism:

Pay attention to the chains kinematics and mechanism in rotation, not to execute, of handlings on a machine in working or with the tube under tension

- Never Operate this machine with safety guards removed:

Do not put large clothes, ties, chains, watches that can himself, to take in the parts in movement of the hosereel.



- Recommendations with danger bodily:
(continuation)



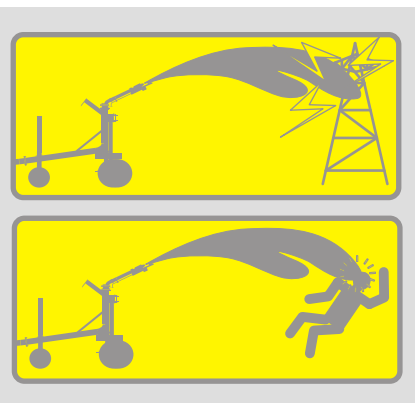
- Do not approach the feet of mobile part during the working:
Ever to approach the feet of the wheels and the jack during the displacement. Or of the stabilizing legs during their uses.

Stay away the children and all other no one no allow during the working.
hold the children counterparts aside the working and all other no one no especially allow in the phases of displacement and investment.

Never service or make adjustment while the PET tube is in tension:
It is necessary before each adjustment to execute the following:
Slowly remove tension on the drive belt to allow hose drum to ret against the anti-return pawl.

Attention to the hose under pressure:
Assure yourselves that the conducts of water are not anymore coins pressure before to disconnect. If the hosereel is plugged again, inside the tube FART it can to remain more pressure. Ever to make handlings when the hosereel be under pressure. To stop the pump of food before proceeding to some handling or regulating that it is..

Use caution to the fast return of the gun:
During the irrigation stay away from the trolley.



Use caution to the direction of the throw:
Verify that it is there no high-tension line or all other electric device on the trajectory of the spray of water during the winding. as well as of the no one, animals, dwelling, or all other construction that the pressure of the throw could damage

- Recommendations with the trolley



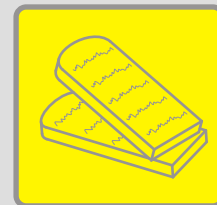
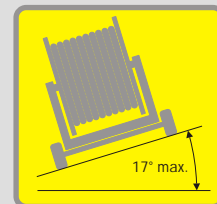
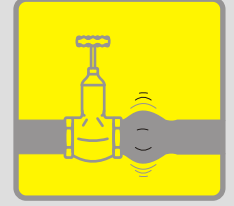
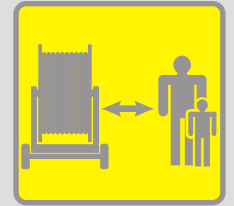
- Recommendations when towing:



Use caution to the slant of the hosereel during the towing:
Do not use on slopes of more than 17°

Use caution when towing:
Towing speed:
- 10 Km/h maximum on smooth surface.
- 5 Km/h maximum on rough surface.

Respect the highway code:
Respect the laws and the road codes of the country or you displace and use your water-reel.

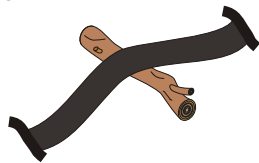


- Important recommendations for do not damage:

the PE hose



- 1) Always winding up the PE hose under pressure:
- The PE hose risks damage irreparably when a winding with the power take off if enough pressure in the hose. To prevent that him himself distort (elongation, flattent, bend etc...). Use a nozzle plugged or with an hole of 1 or 2 mm for not to irrigate the land and to permit the cooling of the pump.



- 2) Attention to the sticky land:

- The winding must take place in the 24 Hours after the unwinding for to avoid that the hose glues too much to ground, or if it rains on the extended hose, it is strongly counseled to place log of wood to regular interval under the tube before beginning the winding.

- 3) first winding:

- When conducted the first winding of the water-reel, it is important that the hose is completely unwound, in order to be able to roll up the hose in a compact and regular on the hosedrum.

- 4) laxity of the hose on the hosedrum:

- Do not transport the water-reel with the raised anti-return pawl! The tube will slacken and probably the spires will ride. Do not the starting up in such case.

- 5) Towing the water-reel:

- Never displace the water-reel if the hose was not previously and rolled up completely on the hosedrum.

- 6) attention to the PE hose:

- Don't pass on the hose with some vehicle that it is, don't crush it and don't roll up it around object

- 7) winding with the power take off:

- when winding with the power take off, think about to stop winding when trolley arrive.

- 1) change gear:

- Never change gear or pulley rapport during winding or unwinding, always to stop. and push the hosedrum on the non-return pawl change.

- 2) the anti-return pawl:

- Never low the anti-return pawl during the unwinding, only during the winding or when stopped.

- 3) the impeller of turbine:

- Attention do not inhale water too to charge in stone. Before beginning the winding let some minutes from the moment where the conduct is put under pressure. It allows all impurities or to some deposit is contained in the hose to be eliminated, without coming to damage, the impeller of the turbine

- 4) PTO think about to stop tractor:

- Attention during winding with the power take off The hose retention bar doesn't stop winding that is to the user to stop the tractor in time.

- 5) pressure and flow:

- Attention the pressure to inlet of the hosereel doesn't owe exeder 10 bar and flow:
 - 50 m³/h for the turbine 10/50
 - 130 m³/h for the turbine 25/130

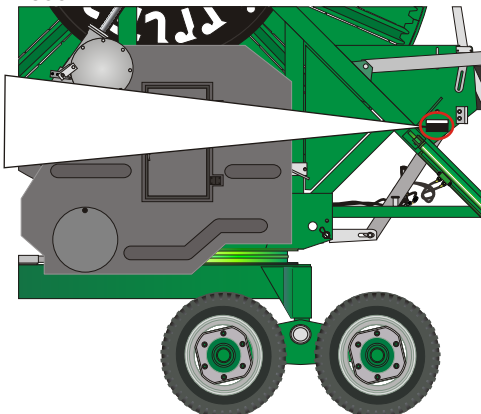
Mechanism



- Serial number and model

Water-reel model	Serial number	Ø of PE hose
S.R.L. CALENDASCO - PIACENZA - ITALY		
MOD./TYPE	ST 5	N. 467
DATA/DATE	18/10/2001	Ø PE 100
PESO TOTALE VUOTO		LENGHT LUNG. 340
TOTAL WEIGHT EMPTY	Kg	
PESO TOTALE PIENO		CE
TOTAL WEIGHT FULL	Kg	

- In case of a problem on the reel, you may be asked the model of hose-reel, the serial number, the diameter and the length of the hose.



Length of PE hose

Mistakes to avoid
Some advice

1	ДИМ НЕ ПОДЪЕМ ДО ПОСЛЕ	ДИМ НЕ ПОДЪЕМ ДО ПОСЛЕ
2	НЕ ВЪЗВРАЩАЙТЕ СЕБЕ НАЗАД	НЕ ВЪЗВРАЩАЙТЕ СЕБЕ НАЗАД
3	ПОСЛЕ ЗАВЕРШЕНИЯ РАБОТЫ	ПОСЛЕ ЗАВЕРШЕНИЯ РАБОТЫ
4	НЕ ЗАБЫВАЙТЕ ЗАКРЫВАТЬ ЗАЩИТНУЮ ПЛАЗИ	НЕ ЗАБЫВАЙТЕ ЗАКРЫВАТЬ ЗАЩИТНУЮ ПЛАЗИ

2 ERRORES A EVITAR - QUELQUES CONSEILS

Do not raise the boom after the operation is finished. Do not return to the starting position until the boom is lowered.

- Do not turn back to the starting position until the boom is lowered.
- Do not forget to close the protective plastic after the operation.
- Do not forget to close the protective plastic after the operation.

11 MISTAKE TO AVOID - A FEW WORDS OF ADVICE

Do not raise the boom after the operation is finished. Do not return to the starting position until the boom is lowered.

- Do not turn back to the starting position until the boom is lowered.
- Do not forget to close the protective plastic after the operation.
- Do not forget to close the protective plastic after the operation.

1 ERRORE DA EVITARE - QUALCHE CONSIGLIO

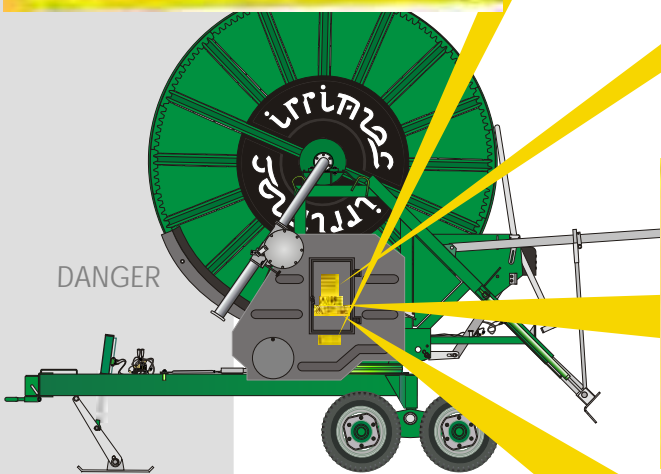
Non alzare il braccio dopo l'operazione conclusa. Non tornare alla posizione di partenza finché il braccio non è abbassato.

- Non tornare alla posizione di partenza finché il braccio non è abbassato.
- Non dimenticare di chiudere la plastica protettiva dopo l'operazione.
- Non dimenticare di chiudere la plastica protettiva dopo l'operazione.

1. ALLUMINARE IL CAPPOTTO DI SICUREZZA PRIMA DI INIZIARE L'OPERAZIONE.

2. NON TORNARE ALLA POSIZIONE DI PARTENZA FINCHÉ IL BRACCIO NON È ABBASSATO.

3. NON DIMENTICARE DI CHIUDERE LA PLASTICA PROTETTIVA DOPO L'OPERAZIONE.



7 DANGER

Always wear your seat belt when driving the tractor. Do not drink alcohol or use drugs before driving. Do not drink alcohol or use drugs before driving.

11 DANGER

Do not raise the boom after the operation is finished. Do not return to the starting position until the boom is lowered.

1 PERICOLO

Sempre indossare la cintura di sicurezza quando si guida il trattore. Non bere alcolici o usare droghe prima di guidare. Non bere alcolici o usare droghe prima di guidare.

ATTENTION

7 DANGER

Always wear your seat belt when driving the tractor. Do not drink alcohol or use drugs before driving. Do not drink alcohol or use drugs before driving.

11 DANGER

Do not raise the boom after the operation is finished. Do not return to the starting position until the boom is lowered.

1 PERICOLO

Sempre indossare la cintura di sicurezza quando si guida il trattore. Non bere alcolici o usare droghe prima di guidare. Non bere alcolici o usare droghe prima di guidare.

unwind right
To maintain the tight hose

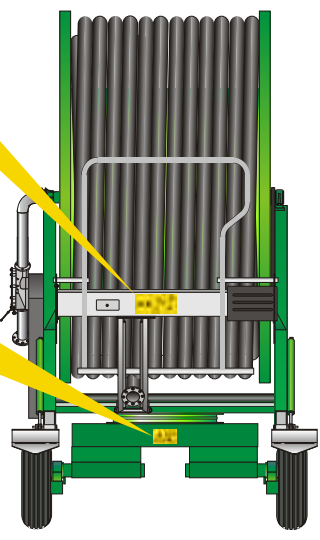
Maximum speed

7 VITESSE MAXIMUM

7 MAXIMUM SPEED

7 VELOCITÀ MASSIMA

10 km/h



a)

- Operate The legs

also see

- Synchronize the movement

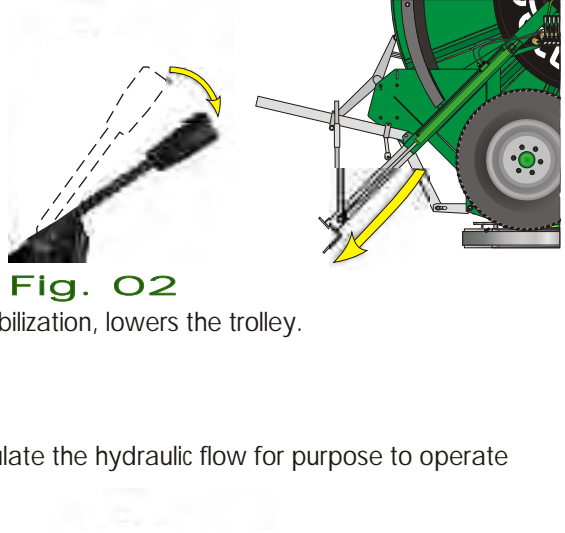
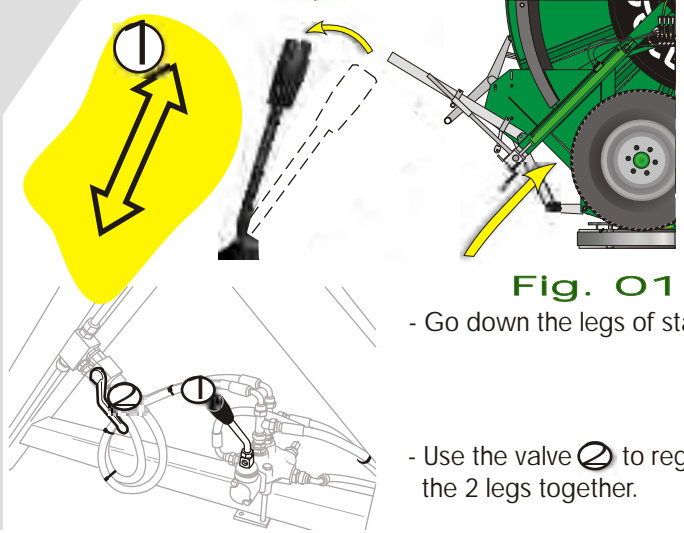


Fig. 01 Fig. 02

- Go down the legs of stabilization, lowers the trolley.

- Use the valve 2 to regulate the hydraulic flow for purpose to operate the 2 legs together.

b)

- Operate the jack

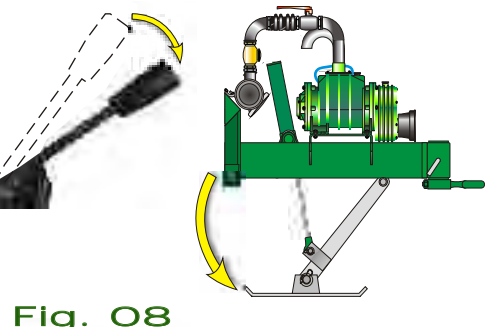
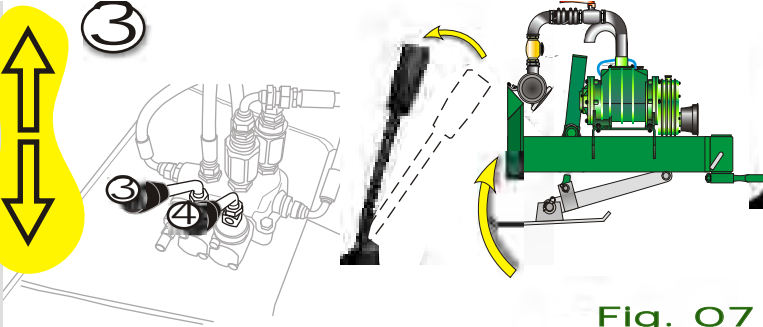


Fig. 07 Fig. 08

c)

- Operate the rotation

Before operating the rotation, to decontrol the turret.

- Unblocking turret rotation

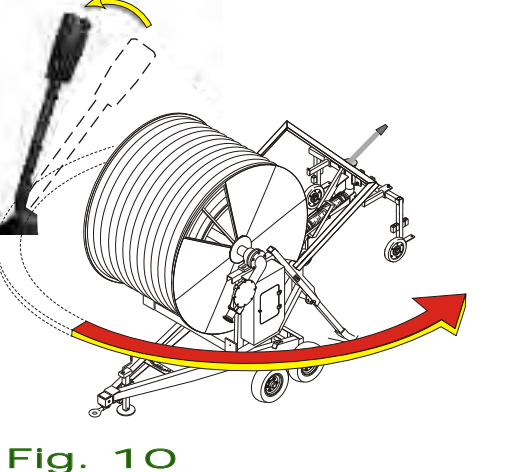
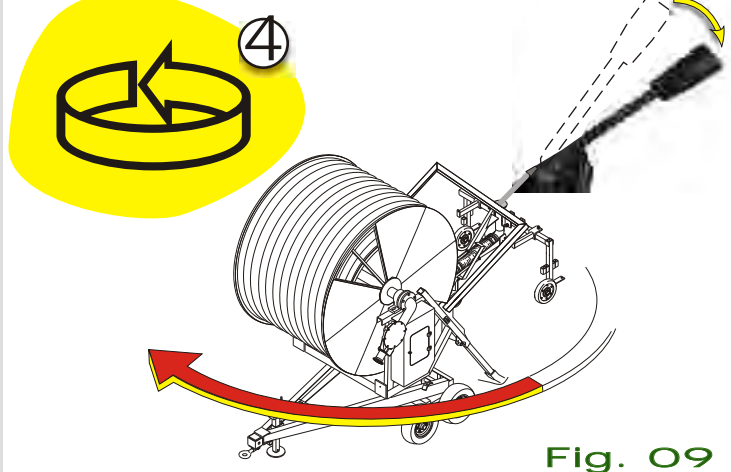


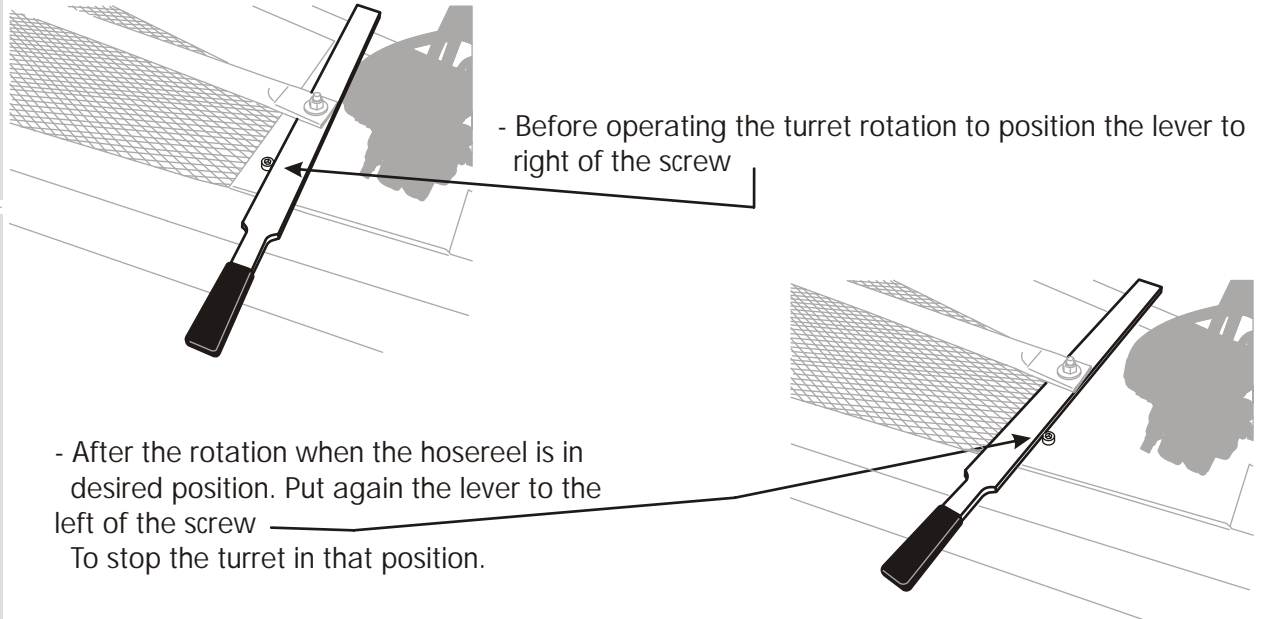
Fig. 09 Fig. 10

- Before operating the turret rotation to position the lever to right of the screw

d)

After the action of the rotation, to stop the turret.

- Block of the turret rotation



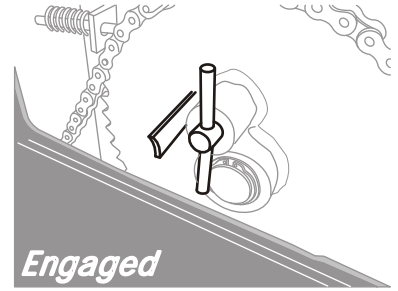
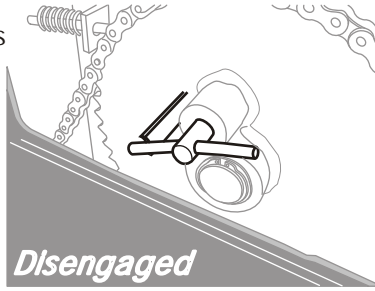
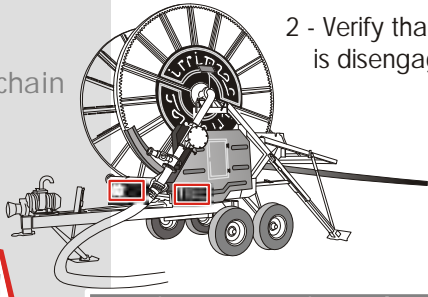
- After the rotation when the hosereel is in desired position. Put again the lever to the left of the screw To stop the turret in that position.

a) - Gun

1 - go up and adjust the gun as indicated on the note of this one.

b) - Wheels chain clutches

2 - Verify that the 2 clutches is disengaged



Disengaged

Engaged

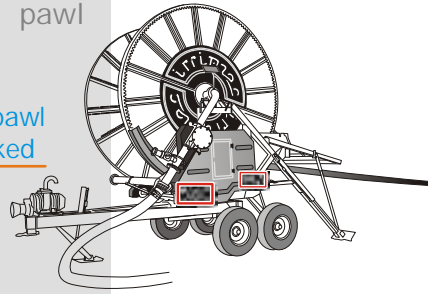


It's imperative then the clutch are engage or disengage on 2 side in even time to maintain the synchronization of mechanism

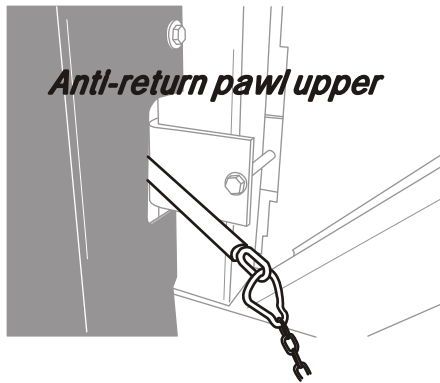
c) - anti-return pawl

3 - Raise the anti-return pawl

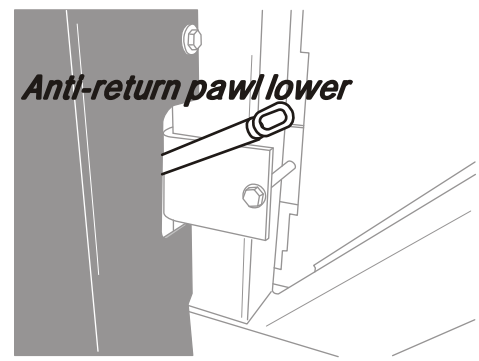
If the pawl is blocked



- Freeing the pawl

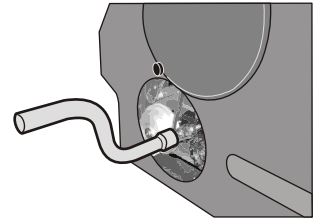


Anti-return pawl upper



Anti-return pawl lower

- If the anti-return pawl is hard to raise, engage the clutch on gearbox, pass a gear. Thread the crank on power take off turn the until the pawl is cleared. Turn the crank then in the inverse sense until has what one doesn't feel an effort anymore.



- Do not release a stroke the crank, but accompanied the effort. The polyethylene acting like a spring the crank would be able to retort brutally in the contrary sense with risk of injury

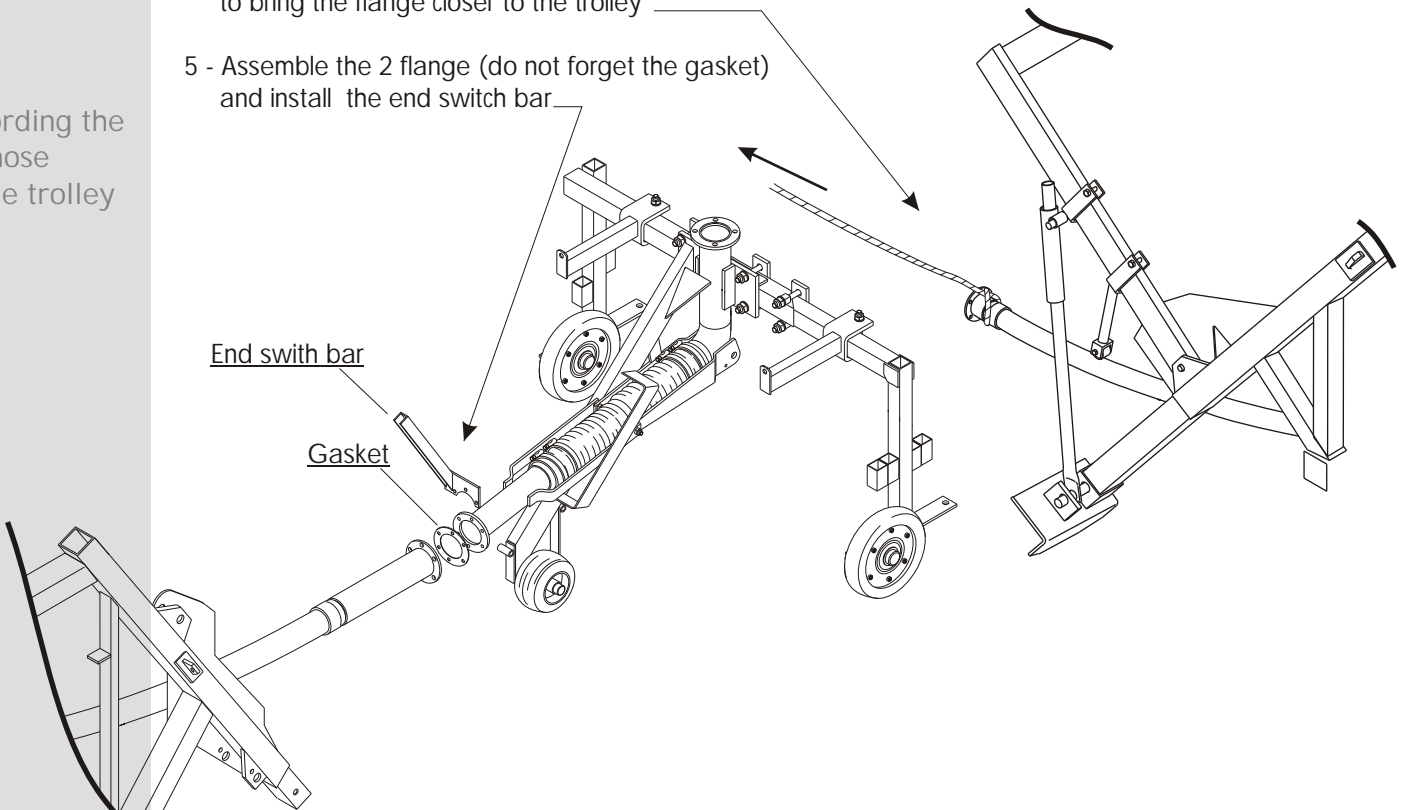
d) - raccording the hose to the trolley

4 - Pull on the hose with the help of a rope to bring the flange closer to the trolley

5 - Assemble the 2 flange (do not forget the gasket) and install the end switch bar

End swith bar

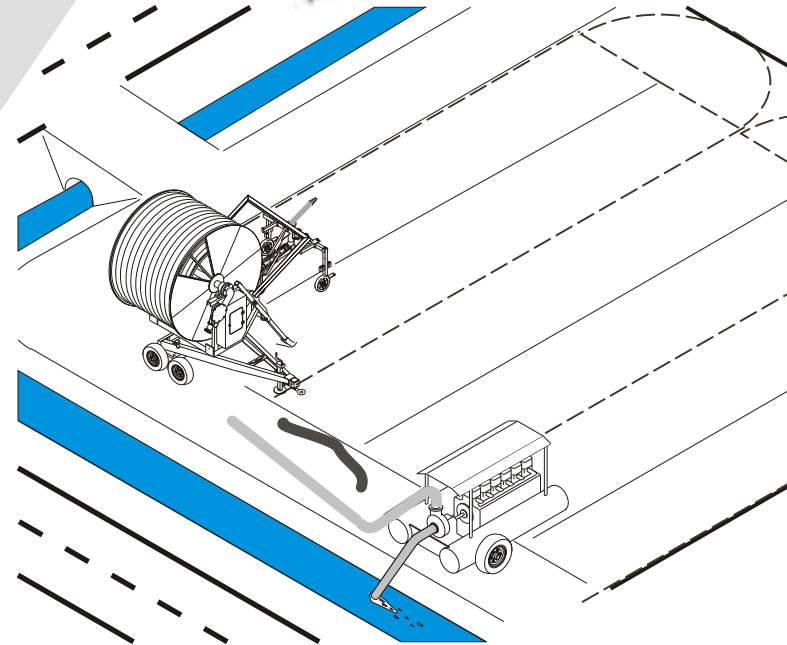
Gasket



a)

For a good positioning

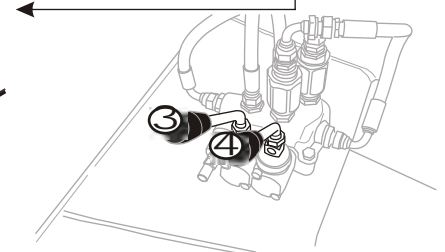
Fig. 11



- 1) Place the hosereel on the side of the land that you want to irrigate.

With the hydraulic lever ④ revolve the turret until the trolley is in direction of the row that you want to irrigate.

Attention, make sure that the drum is aligned with the trolley and the row to irrigate

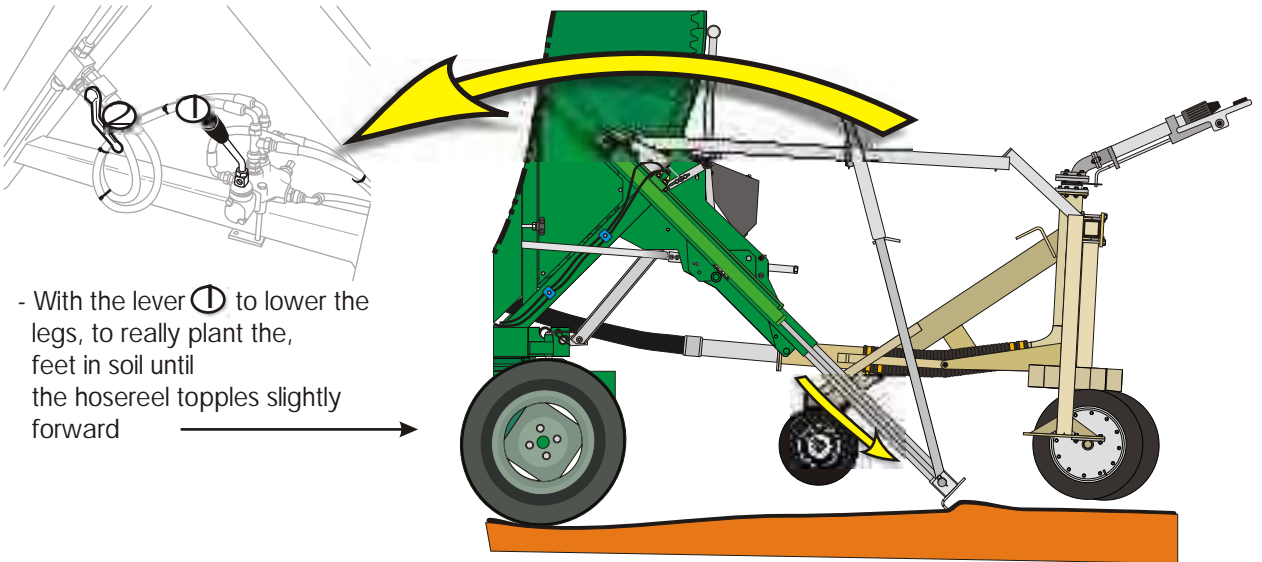


b)

- Well to fix the hosereel

- Plant the legs of stabilization.

- On the St8 a watering out of 260° maybe done. It is preferable to have the wheels to 90° in relation to the wheels of the trolley for a better stabilization.



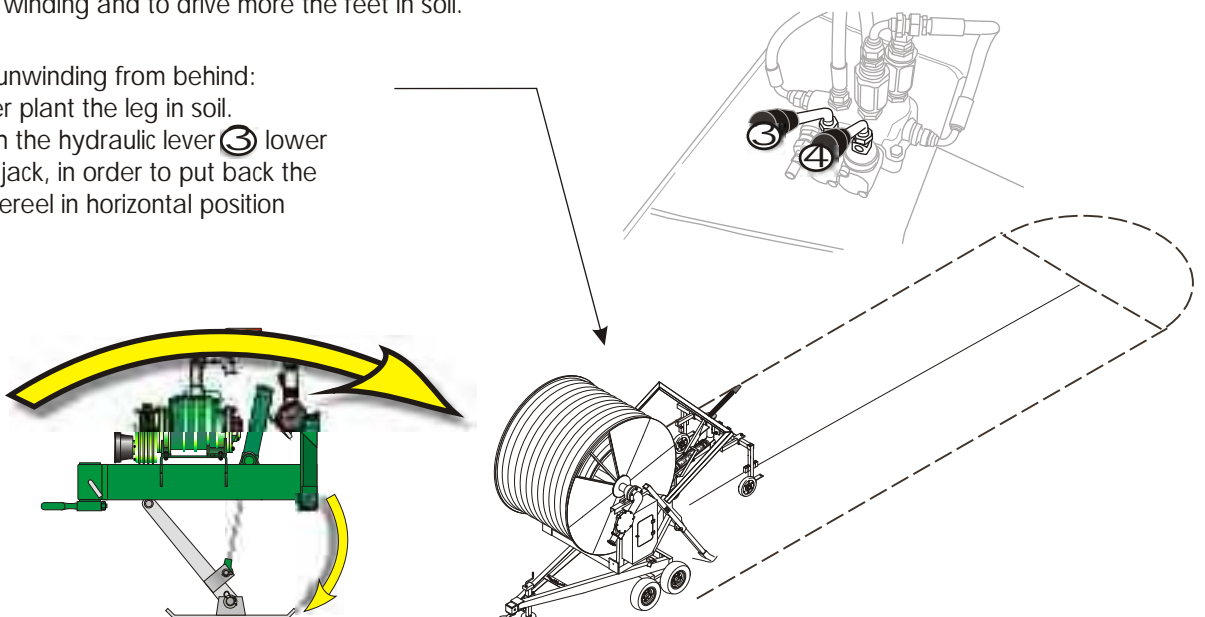
- With the lever ① to lower the legs, to really plant the feet in soil until the hosereel topples slightly forward

- Supervise the stability of the anchorage especially in the first meters at the time of the winding, the moment, or the effort of traction is the strongest. In the case or the hosereel gives signs of slip, to stop, the winding and to drive more the feet in soil.

When unwinding from behind

- Use of the jack for to increase the anchorage

- If unwinding from behind: after plant the leg in soil. With the hydraulic lever ③ lower the jack, in order to put back the hosereel in horizontal position

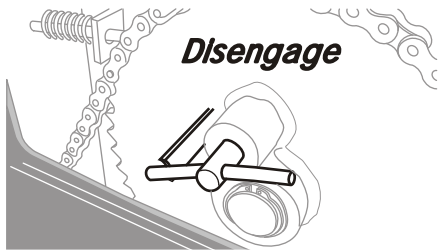


a) - Wheels chain clutches

- It is necessary to prepare the hosereel before unwinding:

- Disengage the clutch:

1 - Verify that the 2 clutches is disengaged

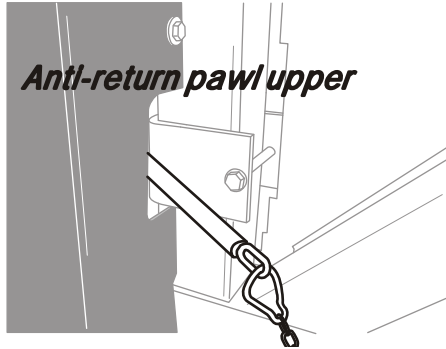


Disengage



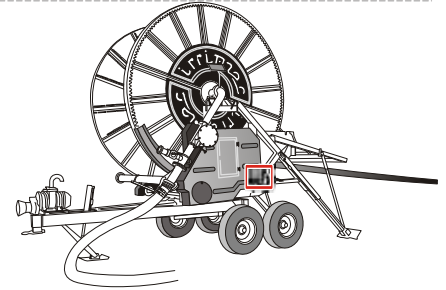
It's imperative then the clutch are engage or disengage on 2 side in even time to maintain the synchronization of mechanism

b) - Anti-return pawl



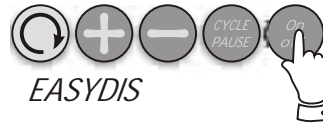
Anti-return pawl upper

2 - Raise the anti-return pawl



c) - La ESC Electronic speed control

3 - Push on the electronic speed control (ESC)



EASYDIS



DOSIDIS

Push ON

- To allow this one to count the length unwound.

d) - Unwinding - Evacuation of water

Water always remains in the PE hose, therefore it is preferable during unwinding to evacuate water in a nearby channel with the inlet hose.



DO NOT PARK IN FRONT OR BEHIND THE DRUM DURING UNWINDING

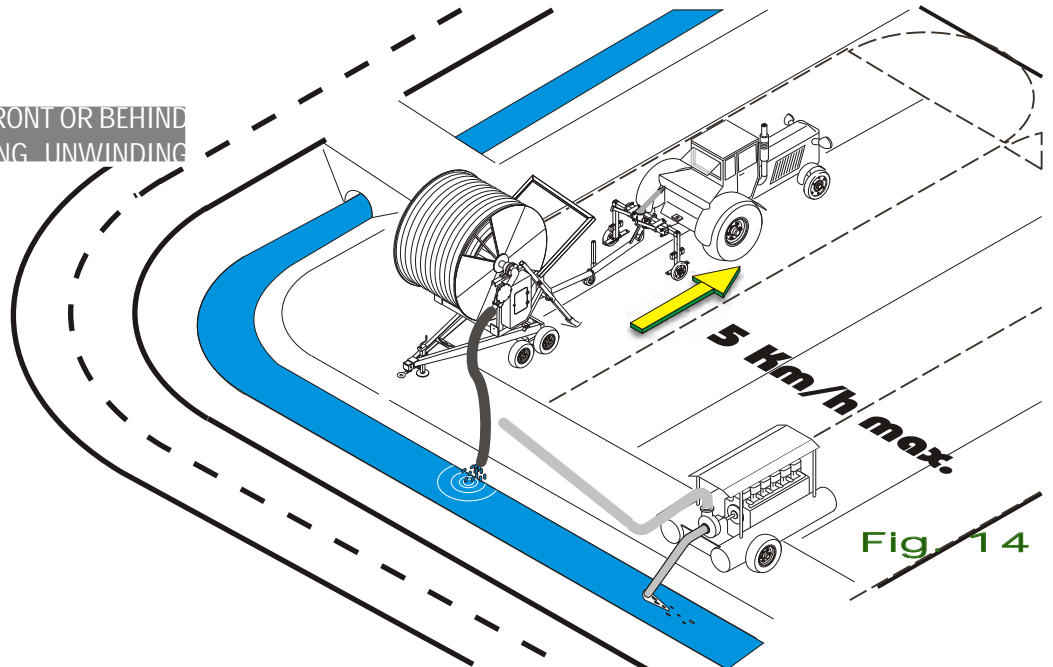


Fig. 14



DO NOT TO UNWIND HOSE WITH A TRACTOR THAT DOESN'T HAVE THE SUFFICIENT WEIGHT TO OVERCOME THE ADHESION THAT THE LAND GENERATES ON THE TUBE. THE STABILIZER LEGS WON'T BE ABLE TO TO FILL THEIR ROLE IF THE WHEELS OF THE REEL ARE NOT MORE OR LESS PERPENDICULAR TO THE TROYLEY

It is recommended to till or mow vegetation if the tube adhesion is very high soil. (Ex: pea, soy or beets ...)

- Align the drum with the furrow.

The variation of trajectory must be always progressive.

- The variation of trajectory

- The first 60 meters

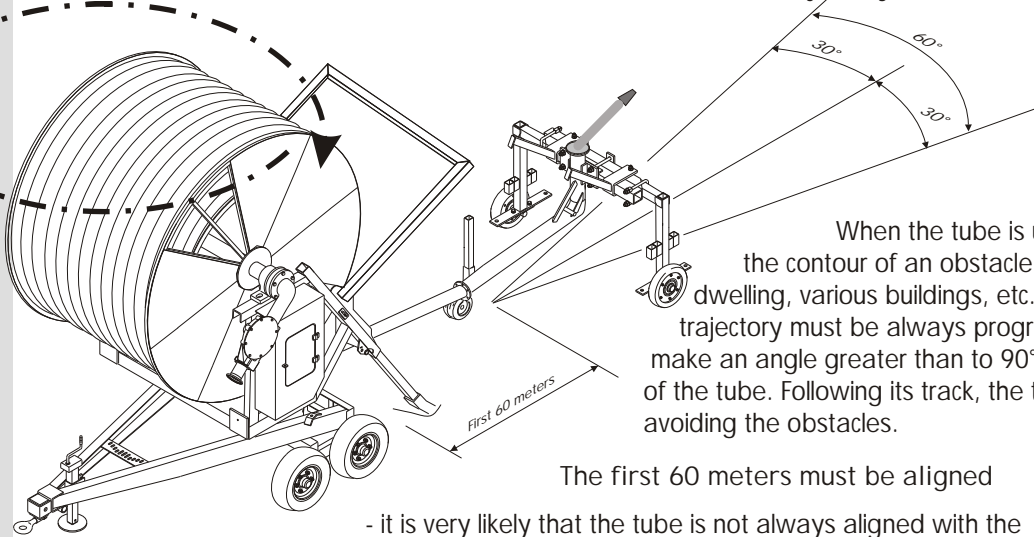


Fig. 15

When the tube is unwound to follow the contour of an obstacle (electric post, dwelling, various buildings, etc..) The variation of trajectory must be always progressive. Never make an angle greater than to 90° on the entire length of the tube. Following its track, the tube will roll up avoiding the obstacles.

The first 60 meters must be aligned

- it is very likely that the tube is not always aligned with the machine; the requirements of the land sometimes oblige some curves. It is important that the first 60 mt. of unwound tube are aligned. The disregard of this limitation may break the fork or levelwind and may damage the tube.

- Attention To the white part

- Harness the tractor to the trolley, and unwind the PE hose slowly and regularly (pic.14) until the white part painted on the drum appears (pic.16)



It is imperative to leave at least one wrap of hose on the drum to avoid the distortion of the hose at its connection. When starting a new hosereel for the first time. It is important that the tube be pulled nearly all the way out in order to tighten the new tube on the drum.

White part

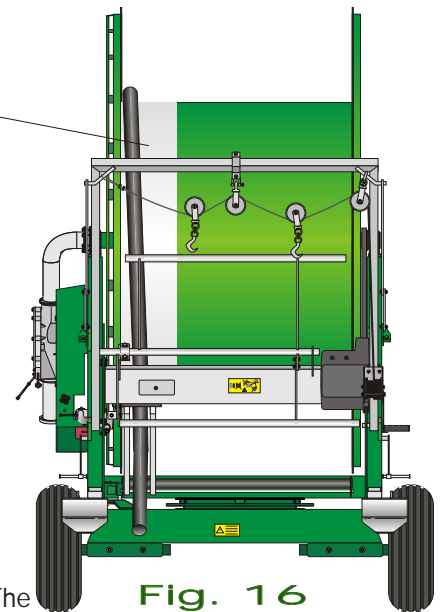


Fig. 16

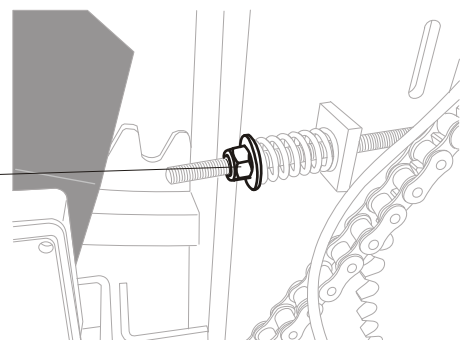
- During the unwinding to verify the brake.

- Brake

Never transport the hoseReel with the anti-return pawl disengaged! The tubing will become loose and tangled. Do not attempt to operate if there are any coils of tube that are loose or misplaced. If loose coils of tube are noticed after pulling the tube out, they must be tightened up by rotating the spool with the hand crank. If this is not possible, pull all of the tube out before attempting to rewind the tube. Never try to move or relocate the machine if the tube is not fully rewound onto the machine. Never run over the tube with any kind of vehicle and avoid pinching or pulling the tube around objects. Make it a point to never bend the tube sharper than 15 times the diameter of the tube. Avoid using the PTO or engine drive to rewind the tube when it is un-pressurized. When the tube is not pressurized the tube flattens and the rewind mechanism can not function properly. Keep the tube pressurized when rewinding!

- use of the brake: At the time of unwinding you must adjust the brake. The brake must be tightened sufficiently to avoid the PE tube relaxing on the drum.
- During unwinding, the spool must stopped turning at the same moment that the tractor stops pulling.

Nut (M10) for regulation



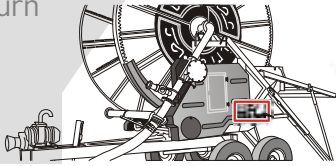
- Unwinding summary:

- 1) Spool perpendicular to the wheels and parallel to the furrow.
- 2) Plant the stabilizer legs, and lower the trolley.
- 3) Disengage the 2 wheels chain clutches .
- 4) Raise the anti-return pawl.
- 5) Block the turbine by-pass in the maximum open position. (Without ESC)
- 6) Attach the trolley to the tractor and unwind the first 60 meters aligned to the hose reel it. 5Km/h maximum speed without surges.
- 7) Stop when the white painted part appears on the spool. Allow at least one wrap of tube to remain.
- 8) Put down the anti-return pawl.

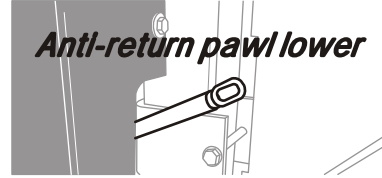
OPERATION

5) *Winding and start up*

a) - Anti-return pawl



- 1) after unwinding the hose, put down the anti-return pawl.



b) - Pump group

- 3) it is necessary to connect the hosereel now to the pump group.
- 4) Turn on the pump (see the pump group manual).

c) - Start the watering

- After all the air is purged from the system and the sprinkler is operating smoothly, you can start the drive system.

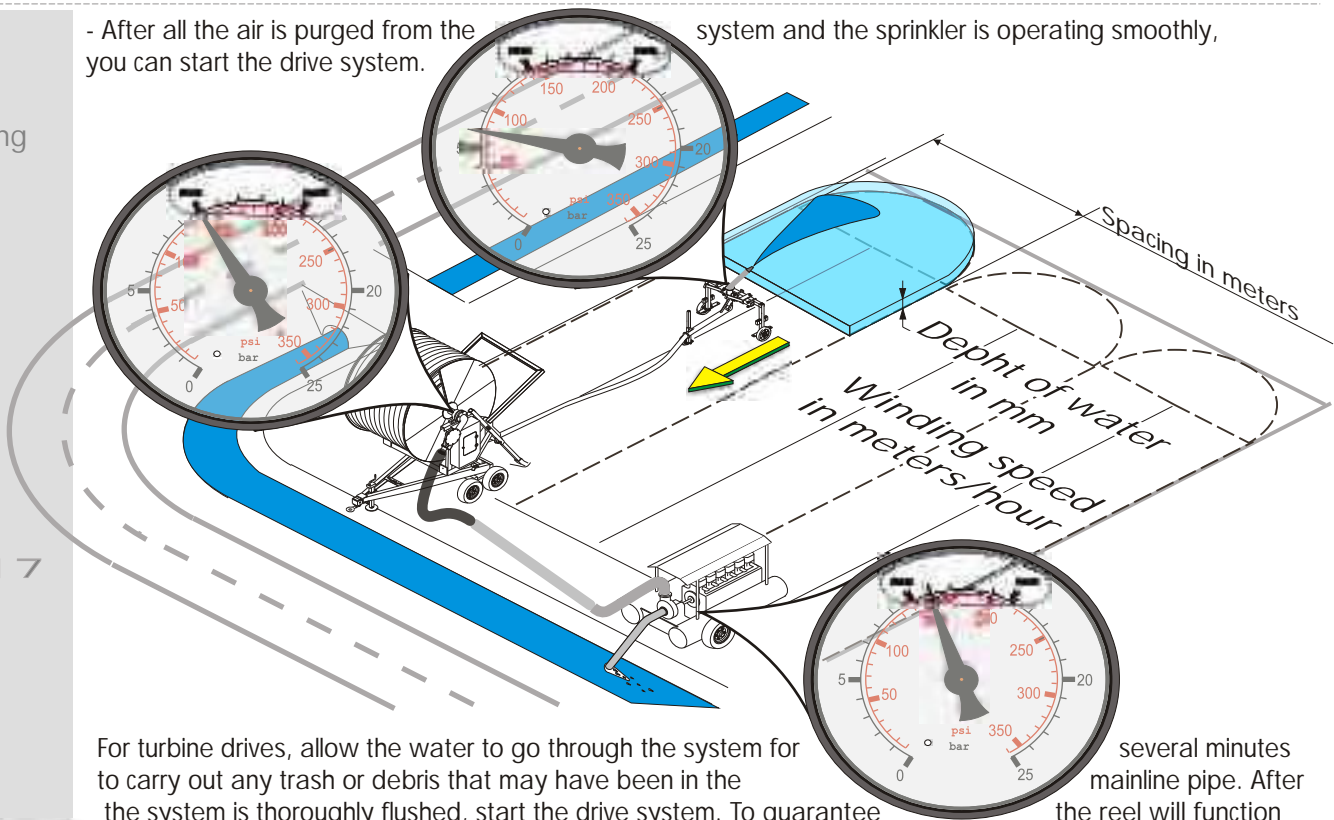


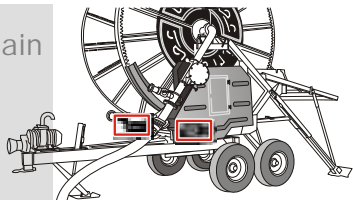
Fig. 17

IMPORTANT:

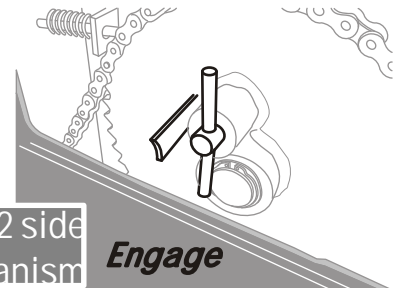
For turbine drives, allow the water to go through the system for several minutes to carry out any trash or debris that may have been in the mainline pipe. After the system is thoroughly flushed, start the drive system. To guarantee the reel will function for an entry pressure not exceeding 10 bars, take into account the pressure loss of the hose, turbine and layer change. (fig.17)

d) - Wheels chain clutches

Engage



4 - Engage the 2 wheels chain clutches

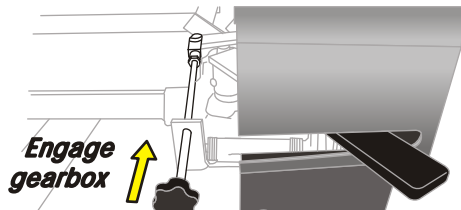
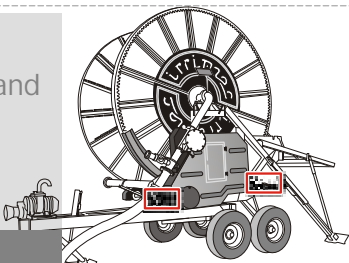


IMPORTANT:

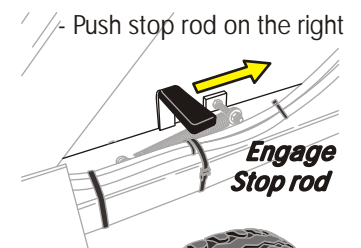
It's imperative then the clutch are engage or disengage on 2 side in even time to maintain the synchronization of mechanism

e) - Engage gearbox and stop rod

Engage



- Push lever of gearbox clutch.

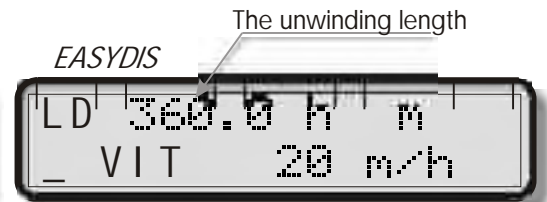
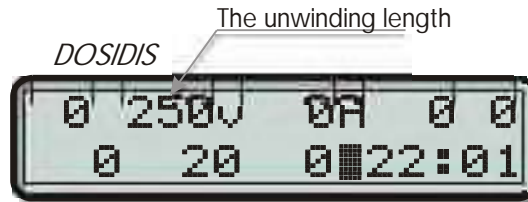


f) - The ESC

Electronic speed control

Visualization of the length unwound

After unwinding the hose appear



OPERATION

User instruction book S13

b) Choosing the winding speed

a) - The ESC
Electronic speed control

1) Press the function button until the speed

appears on the display:



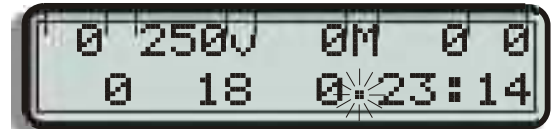
- The DOSIDIS



2) Using the and buttons enter the speed required



3) Press to memorize the change of speed and up to the main screen position.



4) Press and the hose reel will start working a small flashing square replace the black rectangle.

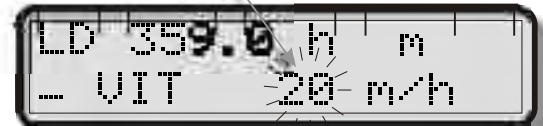


b) - The ESC
Electronic speed control

1) Press the mode button two time to blink the speed.

The speed is blinking

2) Using the and buttons enter the speed required



- The speed is blinking a few seconds after the last adjustment then it becomes fixed and set in memory.



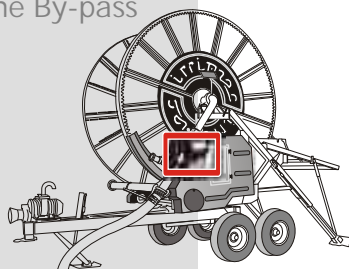
3) Press the cycle/pause button to start the winding.



When a small square is blinking the winding is going on.

c) Without ESC

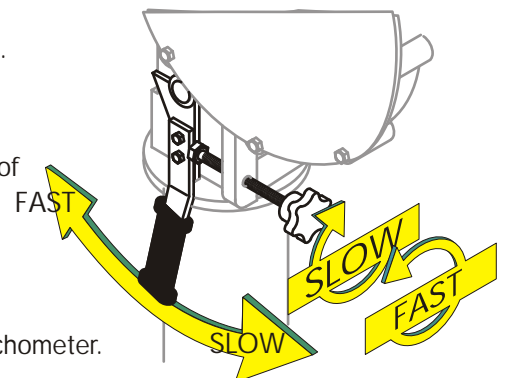
- The By-pass



- Use of the regulating screw to act on the speed of winding.

- Without electronic speed control, one can adjust the speed some acting on the lever of by-pass with the help of the screw of regulating.

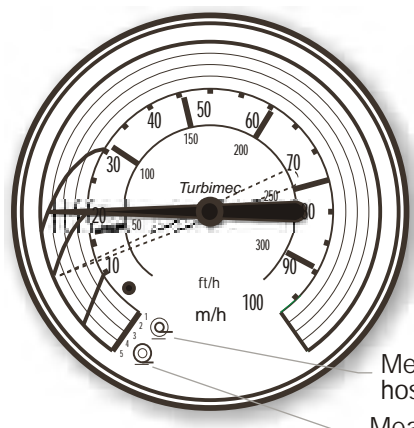
- The reading of the speed is made on the tachometer.



d) Without ESC

- The tachometer:

- The account-meter is the instrument which is used to read speed, in meter / hour (m/h) of rolling up the tube PET.
- The reading speed is done by finding the point of intersection between the needle and the curve representing the whorl on which is the tube PET to follow the curve until speed nearest written on the account-meter.



- For a speed of 20 m/h
- Unrolled, the needle is in position 20
- Rolled up, the needle is in position 13

Mean that the hose-reel is unrolled

Mean that the hose-reel is rolling up

OPERATION 7) *User instruction book St3*
Depth of water

- Depth of water

- The depth of water applied by the hoseReel is regulated by the speed the sprinkler moving over the ground (Pic.17). It is also affected by the amount of water being discharged by the sprinkler head.

hosereel

Your hosereel is an **St5 110 TG 380**:



St5 110 TG 380

Hosereel data

- Gun is RANGER
- with Ø28 for nozzle
- your turbine pressure gauge is on 9 bar
- The travel speed is 20 m/h

Depth of water

- Note that the application rate is 40 mm.

Choose the nozzle

- The amount of water discharged is determined by the sprinkler nozzle size and the water pressure. These two factors are determined by the available water and the capability of the water pump at the water supply. The selection of the sprinkler nozzle needs to be made based on the water supply and pump performance.

Bocaglio Buse Nozzle (mm)	Pressione bocaglio Pression buse Nozzle pressure (bar)	Portata Debit Flow (m ³ /h)	Pressione ingresso Pression entree Inlet pressure (bar)	Striscie Ecartement Spacing (m)	Pluviometria in (mm)							
					Pluviometrie en (mm)							
					Depth of water in (mm)							
					10	20	30	40	50	60	velocità d'avanzamento / vitesse d'avancement / winding speed	
24	2	32	3	56	57	28	19	14	11	9		
	3	39	4,3	66	59	29	19	14	11	9		
	4	45	5,5	75	60	30	20	15	12	10		
	5	51	6,8	82	62	31	20	15	12	10		
26	2	37	3,2	63	58	29	19	14	11	9		
	3	46	4,6	70	65	32	21	16	13	10		
	4	53	5,9	78	67	33	22	16	13	11		
	5	59	7,2	87	67	33	22	16	13	11		
28	3	53	4,9	75	70	35	23	17	14	11		
	4	62	6,3	82	75	37	25	18	15	12		
	5	69	7,7	88	78	39	26	19	15	13		
	6	76	9,1	94	80	40	26	20	16	13		
30	3	61	5,3	78	78	39	26	19	15	13		
	4	71	6,8	85	83	41	27	20	16	13		
	5	79	8,3	92	85	42	28	21	17	14		
	6	87	9,8	97	89	44	29	22	17	14		
32	4	81	7,4	88	92	46	30	23	18	15		
	5	90	9	95	94	47	31	23	18	15		
	6	99	10,7	100	99	49	33	24	19	16		
	7	107		105	101	50	33	25	20	16		
34	4	91	8,1	90	101	50	33	25	20	16		
	5	102	9,9	97	105	52	35	26	21	17		
	6	112		104	107	53	35	26	21	17		
	7	121		109	111	55	37	27	22	18		

- After the nozzle has been selected, the "depth of water" decal on the machine can be used to determine the travel speed settings to give the desired depth of water. See the example.

OPERATION 8) *User instruction book St3*
The speed

- The speed

- The trolley speed is variable and several factors intervene:

- Flow
- Pulley
- Land
- The ESC (Electronic Speed Control))
- Pression
- Gearbox

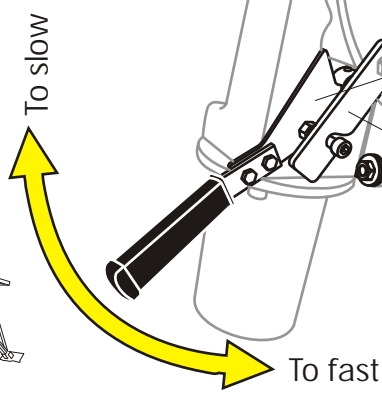
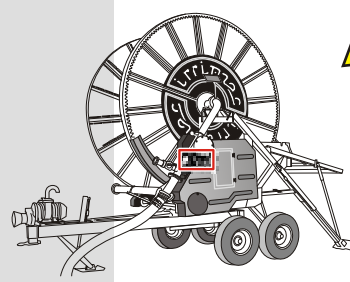
a) - constructor data:

- With an IRRIMEC hosereel

- The flow minimum / maximum:
 Turbine 10/50: from 10 to 50 m³/h
 Turbine 25/130: from 25 to 130 m³/h

- the pressure minimum / maximum:
 From 0 to 10 Bars

b) - The by-pass



By-pass lever
 (actionned with ESC with the actuator).

Adjustment speed screw
 (Usable in case of problem on the ESC or without ESC). Or to limit the maximum speed

Stop by-pass plate
 (Without ESC, for block the by-pass and **STOP WINDING**)

c) - Change gear

- Before change gear, Stop winding. (With ESC)

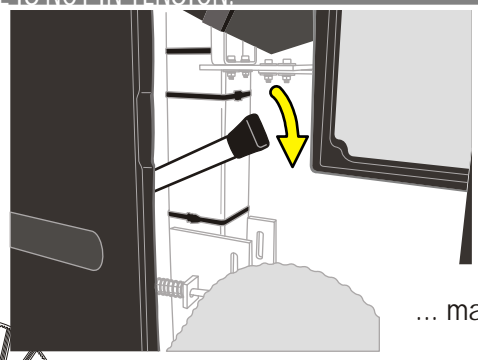


- Before change gear, Stop winding. (Without ESC)



BEFORE ALL INTERFERENCE, TO STOP THE HOSEREEL, TO PUSH THE HOSEDRUM ON THE ANTI-RETURN PAWL AND TO VERIFY THAT THE PE HOSE IS NOT IN TENSION.

Stop winding and suppress the hose tension

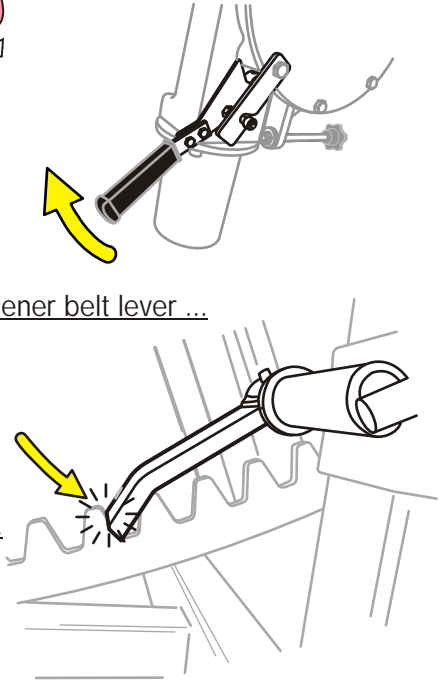
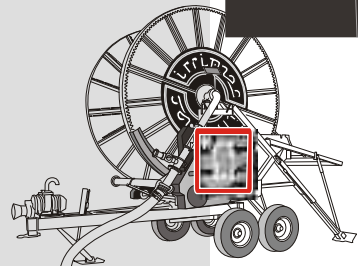


- While lowering the tightener belt lever ...

... made push the hosedrum on the anti-return pawl.

- Once the hosedrum push on the anti-return pawl.

- Lower the tightener belt lever, change gear on the gearbox or change ratio position for belt on pulley, loosen the tightener belt and resume winding.



e) - Ratio speed

Turbine pulley:

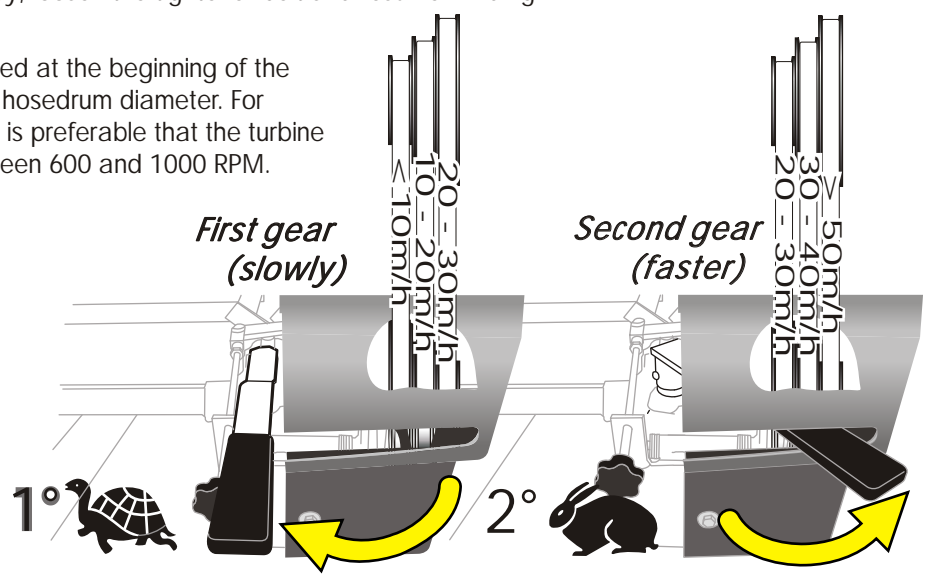
Gear change lever

Gearbox pulley:

IMPORTANT:

Page 13

- The speeds are calculated at the beginning of the winding with a minimum hosedrum diameter. For efficiency and economy it is preferable that the turbine rotation is included between 600 and 1000 RPM.



The values reported in these tables are averages for a hose-reel with a standard pulley. It is always possible to make modifications and variations on the diameter of a pulley according to the needs of each customer.

a) - The PTO

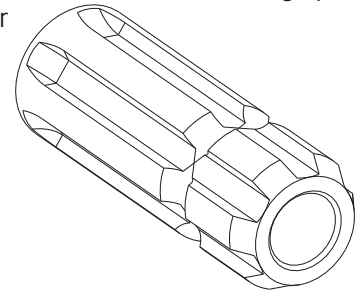
Power take off

Description

- All the Irrimec hose reel models are provided with a power take off (pto) shaft to allow manual rolling up. This operation must be carried out only in the event of extreme need: for a normal operation of the Hosereel, it is absolutely discouraged to roll the tube up completely from the start.

- In case the turbine or the motor fails or, in the case of a problem on the computer, or in case of a relaxation of the tube or a trancanage failure, it is possible to roll up the tube to move the reel.

- To carry out the winding operation with the power take off, follow these instructions:

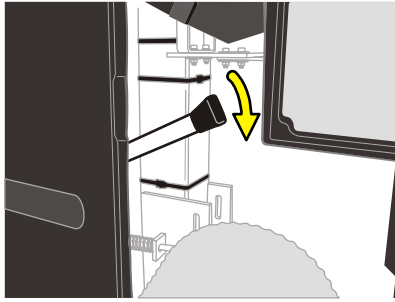


b)

Stop winding and suppress the hose tension



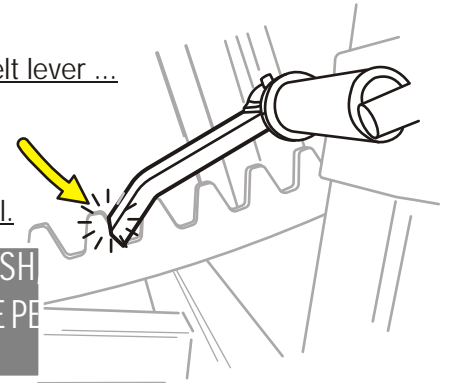
- l) Lower the anti-return pawl and push the the ring gear tooth on.



- Stop winding

- While lowering the tightener belt lever ...

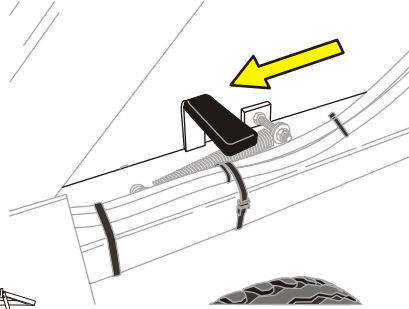
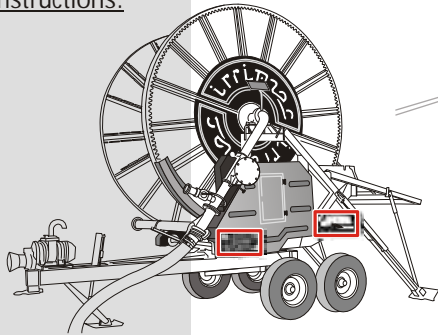
... made push the hosedrum on the anti-return pawl.



BEFORE ALL INTERFERENCE, TO STOP THE HOSEREEL, TO PUSH THE HOSEDROM ON THE ANTI-RETURN PAWL AND TO VERIFY THAT THE PE HOSE IS NOT IN TENSION.

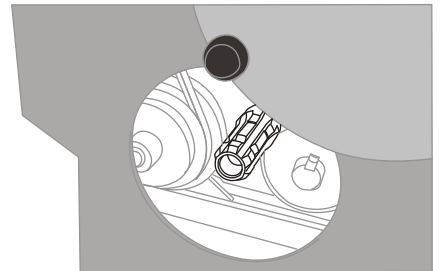
c)

Instructions:



- 2) disengage, Push the stop rod on the left.

3) Insert the crank, the wheel, or the universal joint to the power take off shaft.



4) Start the winding with a constant speed.

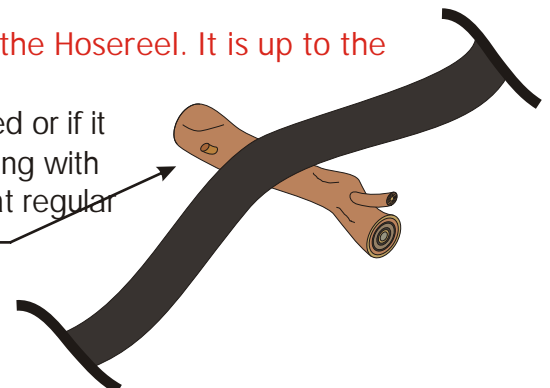
5) Make sure the wraps are tight to one another. And that the hose guide mechanism is not in advance or late in comparison with the hose.

6) At one meter from the end of the tube, stop the tractor and use the crank to finish rolling up the last meter with the hand wheel.

- ATTENTION: The hose retention bar in this case does not stop the Hosereel. It is up to the user to stop the tractor in time.

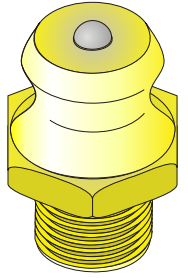
- ATTENTION: If the hose remained unwound for a long time unrolled or if it rained sticking the hose on the ground, before winding with the PTO, raise the hose by putting pieces of wood at regular intervals under the hose.

- ATTENTION: Never roll up the tube with the PTO if the hose is not under pressure.



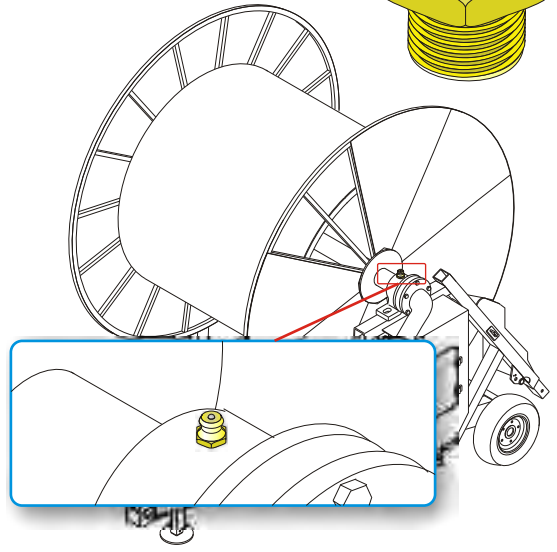
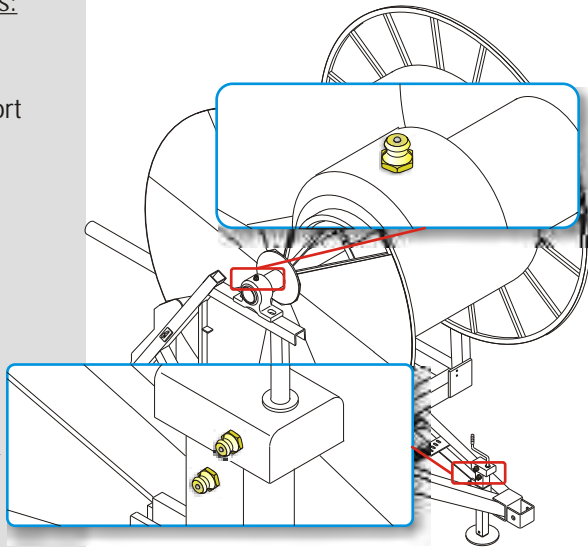
- Lubrication

- To maintain the self-moving to you acquired in efficient conditions, is fundamental doing on the water-reel an lubricate (with resistant fats to water) periodic (advised each 500 hours).

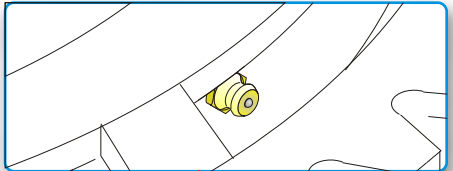


- Lubrication points:

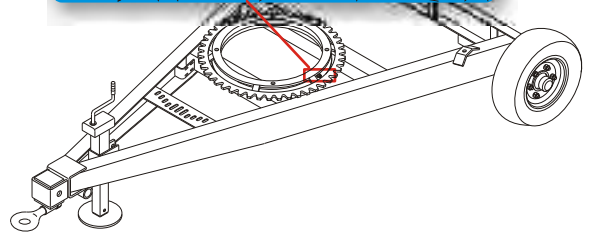
- Drum support



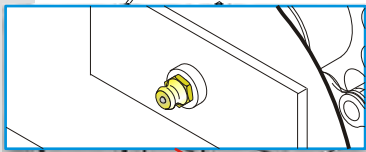
- Jack



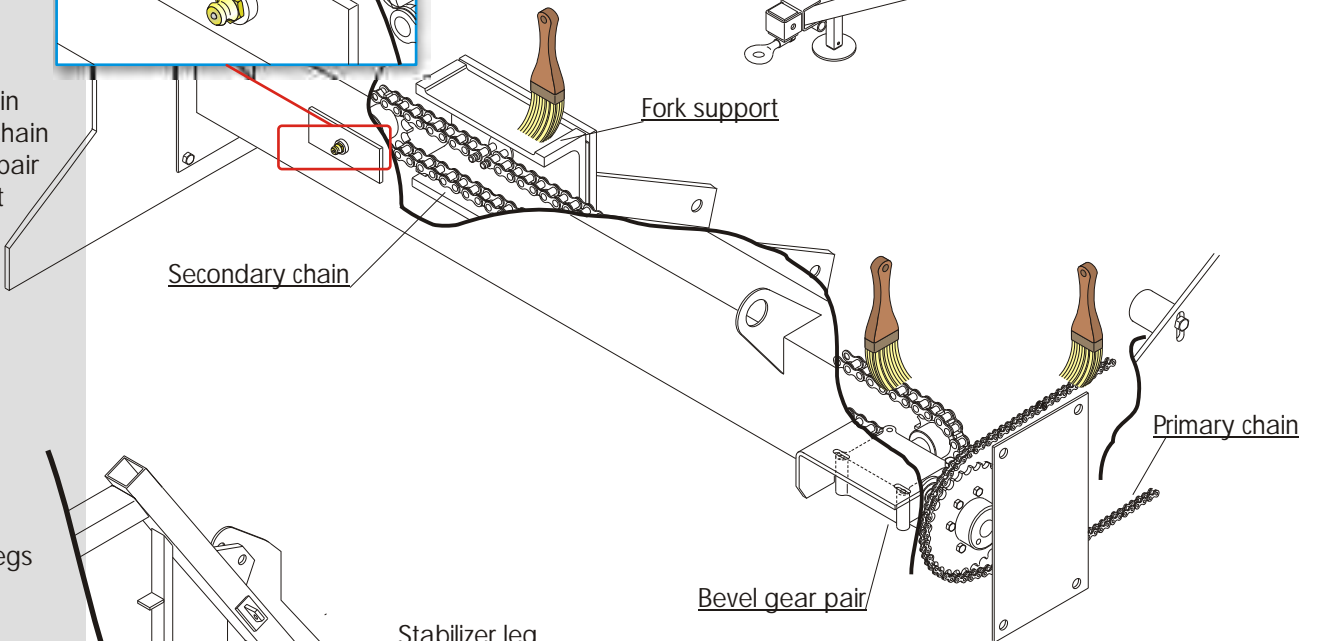
- Fifth wheel



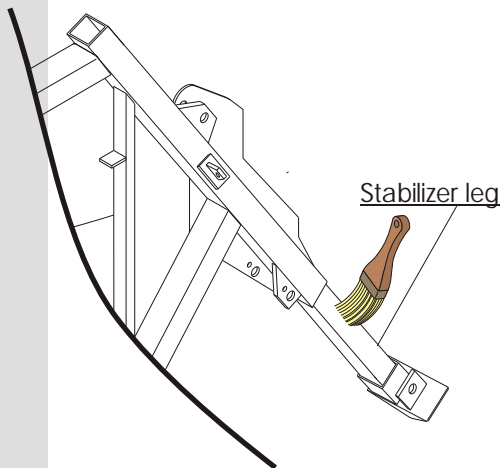
- Hoseguide mechanism:



- primary chain
- secondary chain
- bevel gear pair
- fork support



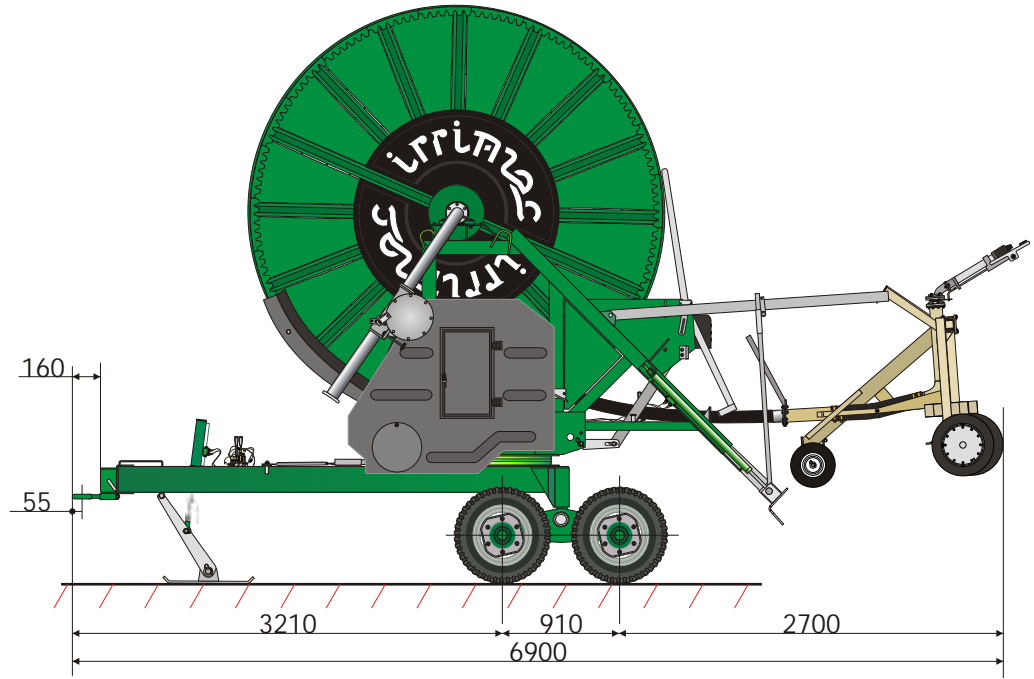
- Stabilizer legs



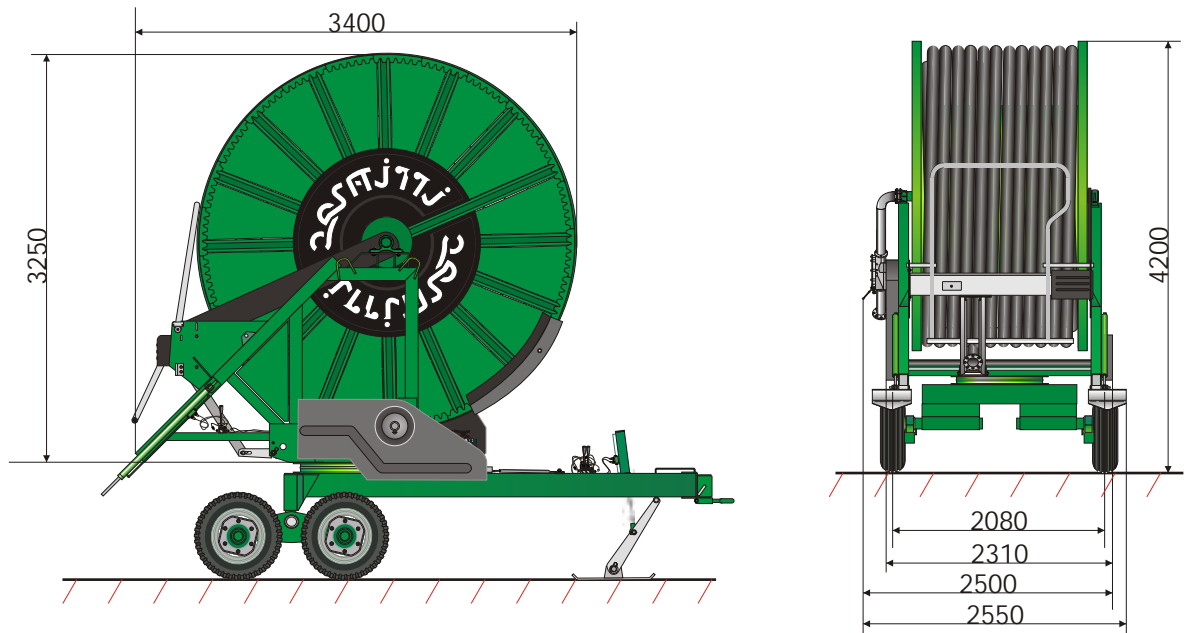
- Gearbox: maintain full (to oil level sight gauge) with oil SAE 90

a)

Dimension:
Lenght



Height
width



b)

Weight

PE Hose	Weight without PE hose	Weight with hose without water	Weight with hose with water on 70%
110/550	3422 Kg	4930 Kg	7480 Kg
110/580	3422 Kg	5010 Kg	7700 Kg
110/600	3422 Kg	5060 Kg	7885 Kg
12/530	3422 Kg	5380 Kg	8135 Kg
120/550	3422 Kg	5455 Kg	8310 Kg
125/430	3422 Kg	4800 Kg	7480 Kg
125/450	3422 Kg	4870 Kg	7670 Kg
135/400	3422 Kg	5050 Kg	7860 Kg

- Hosereel

- Irrimec especially recalls several points in reference to the general conditions of sale.

- 1) The IRRIMEC Hosereel is guaranteed for the duration of an irrigation season from the startup date which must be specified on the warranty CARD supplied by the retailer and turned over to IRRIMEC within 8 days after the startup.

- 2) The IRRIMEC Guarantee covers all the mechanical parts of the machine against defect in design, manufacture or material. All damages coming from misuse conditions mentioned in paragraph 5 hereafter are not covered.

- PE hose

- 3) The polyethylene tube accompanying the IRRIMEC Hosereel is completely guaranteed for 3 years from startup and covers any manufacturing or material defect other than the damage which has occurred during transport, misuse or bad adjustments of the Hosereel.

-4) IRRIMEC guarantees to replace deficient or faulty material after the verification and agreement by a representative of IRRIMEC.
IRRIMEC reserves the right to choose the method and timing of delivery of replacement material.

- 5) conditions of use:

Above all, immediately read "The User Instruction Book".

Refer to the "instruction of use" decals on the machine cover.

Maintain minimum operating pressure according to the types of machine and nature of the soil conditions (see technical information.)

Maximum machine pressure is 10 bars.

Maximum coefficient of friction is 0,8

Maximum PE hose unwinding 3Km/h without sudden starts & stops.

The hose is always winding in live with the spool.

Maximum road speed is 10Km/h

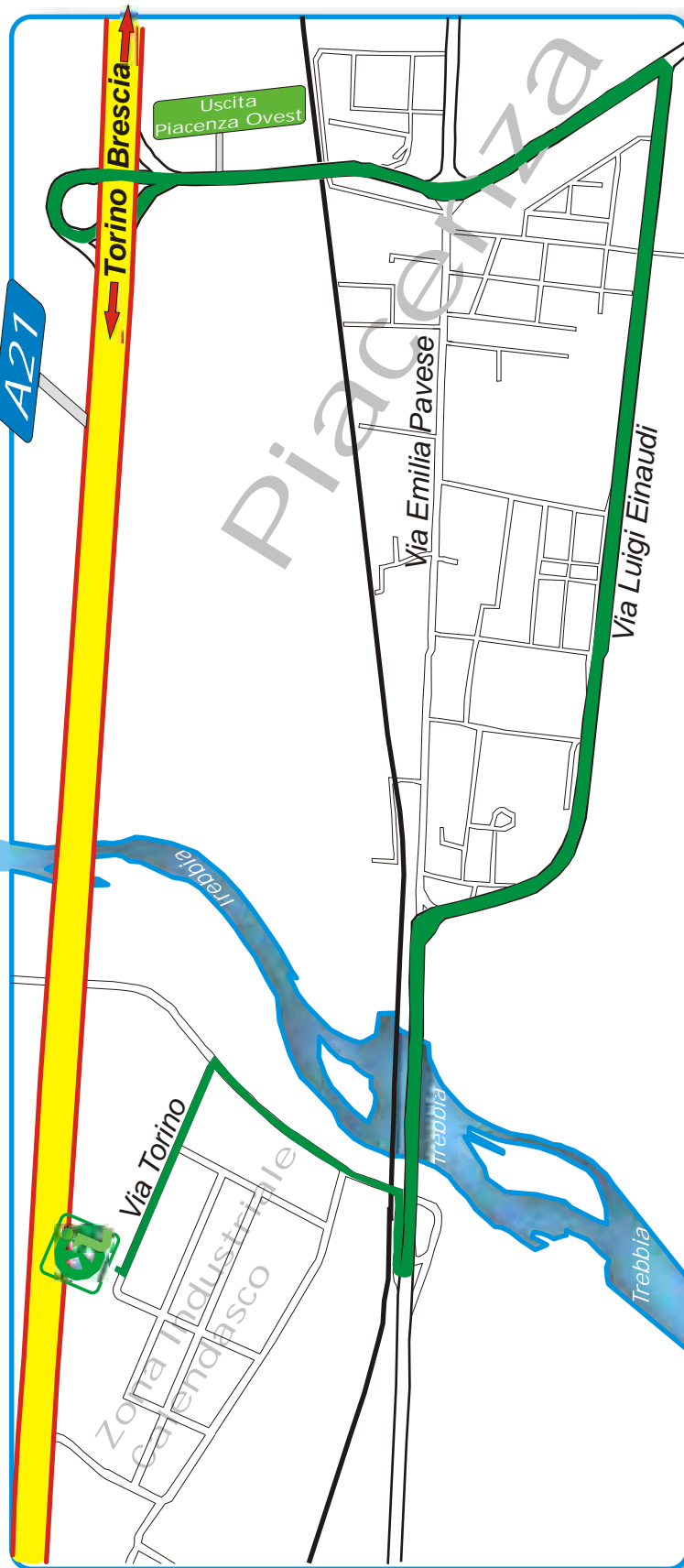
Maximum angle of rear wheels is 10%

The hose retention shut off bar according to the user instruction book.

- Conditions
of use

- IMPORTANT: Any transformation or modification machine without the authorization of IRRIMEC and consent its Engineering Department voids our conditions of guarantee.





IRRIMEC

S.R.L.

Sede Amministrativa e Operativa: Via Torino, 3 - Z.I. Ponte Trebbia - 29010 CALENDASCO (Piacenza)
Tel. 0523-760441 (4l.r.a.) - Fax 0523-760444 (Amm.ne-vendite) 0523-768324 (Acquisti-Gest.ne merci)
www.irrimec.com - Email: irrimec@tin.it