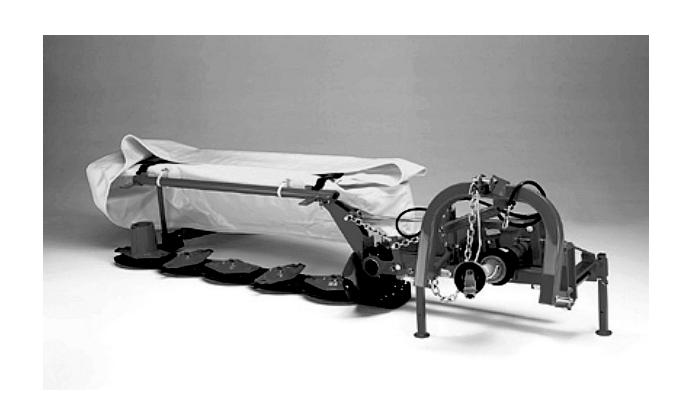
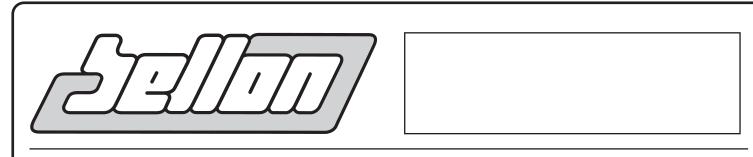


Disc mower D3L - D4L - D5L D6L - D7L - D8L

Operators manual





35010 CADONEGHE (Padova) - ITALIA - Via Belladoro, 17 Tel. 049/700930 - Fax 049/8870003 - http://www.bellon.it - e-mail: info@bellon.it





MAKE SURE THAT EVERYONE WHO OPERATES THIS MACHINE HAS READ THIS MANUAL COMPLETELY!

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1. SAFETY

The disc mowers models D3L D4L D5L D6L D7L and D8L should only be uses for the work they were designed for, which is cutting to obtain forage for animal feed.

The manufacturer is not responsible for any damage caused by improper use of the machine, nor for equipment used for any purpose other than the above mentioned one.

Most accidents can be avoided by observing the safety instructions. Always observe the safety instructions in this manual and on the decals. Always replace damaged or illegible decals immediately.

General points:

- 1 Always observe the highway code when on roads or in public places.
- 2 Never mow along the roadside, along railway lines, in public places such as schools or parks, and not on very stony ground to avoid the risk of accidents caused by materials or objects thrown up by the machine.
- 3 Before starting work make sure the operator is familiar with the machine and with the tractor controls. Do it while working it will be too late.
- 4 The operator should not wear loose clothing to avoid the risk of entanglement on rotating parts of the implement.
- 5 We recommend using a tractor with cab for added operator safety.
- 6 Make sure the area around the mower is clear of bystanders (Risk of projections of objects!)
- 7 Never let anyone ride on the mower at any time.
- 8 The mower must be attached to the tractor using the 3 point linkage.
- 9 Make sure the tractor can take the weight of the mower before attaching.
- 10 Never leave the machine unattended when running.
- 11 Make sure that forward speed is suited to the terrain. Never make sudden changes in direction.
- 12 Be extremely careful when changing direction bearing in mind weight, length and height of the machine.
- 13 Before starting work make sure that the mower is in good condition, that all guards are in place and in good condition. Always replace damaged guards immediately.
- 14 Before each use check that all bolts are tight, especially the knife bolts. Tighten if necessary.
- 15 Make sure that the area around the mower is free from bystanders when manoeuvring.
- 16 Always make sure that all moving parts have a complete standstill before working on the machine.
- 17 Never run the machine when it is in the transport position.

Work:

- 1 Keep a safe distance from the machine at work as the rotating parts can throw up objects.
- 2 Periodically inspect all parts subject to wear and replace worn parts with original BELLON parts.
- 3 Always use the mower with the safety tarp in lowered position.
- 4 Be extremely careful when changing the position of the mower from the transport to the working position and make sure that there are no bystanders.



SPARE PARTS ORDER:

An order of spare parts must be given either by letter, fax or e-mail. Orders made by phone are valid only when confirmed in writing. When placing a spare parts order, the following must be specified:

- 1. Type of machine
- 2. Code number and name of part being ordered.

The manufacturer decides on the best way of shipment. Spare parts are always sold on a cash basis. The manufacturer has the right to determine the method of payment.

13. GENERAL WARRANTY CONDITIONS

The company BELLON SRL, Via Belladoro 17, 35010 Cadoneghe (PD) Italy, states that, as far as the products they manufacture are concerned, the general warranty conditions are as follows:

- a) The warranty covers our material for one whole year from the date of delivery to the operator (the valid document which proves delivery is the invoice, and warranty starts from invoice's date) and during this period up to a maximum of 500 hours.
- b) The warranty is limited to the replacement of the parts or reimbursement thereof (and not labour costs). The parts in question shall be acknowledged as faulty by our firm and by our technicians.
- c) Pieces which are part of the composition of the machine, but not manufactured by BELLON (like gear boxes and drive shafts), are subject to warranty conditions of the manufacturer.
- d) The warranty is valid neither for parts normally subject to wear, likeblades, knife supports, wings, discs Nor for faults which are the resul of improper use of the mower due to lack of maintenance.
- e) Any modification made without the BELLON's approval voids warranty.
- f) The BELLON company is not liable for damages occurred to the machine or its accessories during transportation. Machine and accessories travel at the customer's risk.
- g) The claim must be made within 60 days of the verification of the fault and the parts must be returned at the claimant's expense, together with a description of the failure to our firm. After the usual checks and inspections have been made, our company will decide whether or not the claim falls within the scope of the warranty.
- h) Customer has to bear the transport expenses to return pieces and the labour to demount and mount parts.

The purchaser undertakes to accept the decision made regarding the alleged fault, replacement of parts and reimbursement.

Our firm reserves the right to modify the design of its machines without any prior notice and without any obligation to modify the machines already sold and in use.



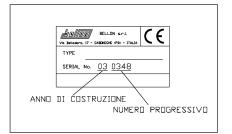
- 5 Worn or missing blades should be replaced, always replace the complete set to avoid the danger of the machine being out of balance.
- 6 When replacing knives or discs always check the fastening carefully.
- 7 Keep a regular check on the tarp guard. Worn or damaged tarps must be replaced immediately.
- 8 The guards, such as tarps, pipes, metal covers, are designed to avoid stones or objects being thrown up. They also guard from access to potentially dangerous parts of the machine and must therefore be in place and functioning correctly before the machine is used.

Maintenance:

- 1 Shut off the engine, remove the key and wait until all moving parts come to a complete standstill before undertaking any maintenance, adjustment or repairs.
- 2 Before carrying out any maintenance or repairs make sure that the machine can not accidentally be starter up.
- 3 All maintenance and repair work should only be carried out by competent and trained personnel who are familiar with the features and use of the machine. They must be aware of the safety instructions regarding the machine.



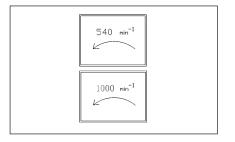
2. SAFETY DECALS



IDENTIFICATION PLATE

THE PLATE SHOWS THE MODEL OF THE MOWER, THE SERIAL NUMBER AND "CE" MARK, ACCORDING TO SAFETY REGULATIONS.

THE FIRST TWO FIGURES OF THE SERIAL NUMBER IDENTIFY THE YEAR OF PRODUCTION OF THE MACHINE.



1. SPEED AND DIRECTION OF ROTATION OF POWER TAKEOFF.



2. BEFORE CARRYING OUT ANY OPERATION, WAIT UNTIL ALL THE PARTS OF THE MACHINE HAVE COME TO A COMPLETE STOP.



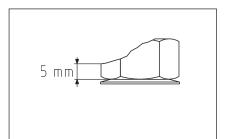
3. KEEP WELL CLEAR OF THE MOWER CUTTERS WHILE THE TRACTOR ENGINE IS RUNNING AND THE POWER TAKEOFF IS ENGAGED.



12. TROUBLESHOOTING

TROUBLES	PROBABLE CAUSE	SOLUTION		
Does not cut properly	Wrong inclination of the cutter bar	Reduce inclination of the cutter bar		
	Inadequate PTO speed	Increase PTO speed		
	Reversed blade direction	Check sense of rotation of the disc, with the arrow printed on the blade.		
	Inadequate discs speed	Check belt tension		
	Damaged or worn blades	Replace blades		
Too high cutting width	Inadequate inclination of the cutter bar	Increase inclination of the cutter bar		
Dragging of round on skids	Humid working conditions Mower to much heavy to the ground	Adjust chain to reduce the pressure to the ground		
Bad adaptation to the ground	Improper adjustment of the frame	Check adjustment of chains		
The safety break release without meeting obstacles	Improper tension of the rubber spring	Increase the tension of the spring		

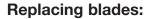




LOCKING NUTS

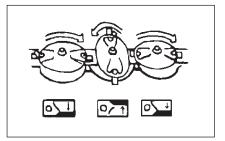
Replace locking nut when the washer looses its springiness. Replace locking nut if worn (see illustration)

BLADES



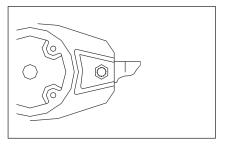
Turn the disc perpendicularly to the cutter bar and screw off the nut located over the disc with a key mm. 19.

Slip the pin knife support under the disc and remove the blade.



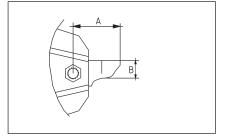
Check the sense of rotation of discs and mount blades with the same sense of rotation (as indicated in the arrow printed on the blade). Every disc mount the same blade.

Use original BELLON parts.

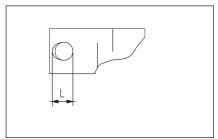


For your safety and for a good quality of cut, check methodically conditions of blades every time before starting work.

Replace immediately damaged blades, because if you are working in particularly hard conditions, there is an higher risk of accident due to thrown of objects, quality of cut is worse and vibrations can damage disc support too.



Replace immediately worn blades: the length's blades must be at least mm. 90 (A) and the width 30 mm. (B).



Replace blade if the hole is oversized more than 4 mm. (L).





4. ATTENTION: OBJECTS MAY BE EJECTED WITH FORCE BY THE ROTATING DRIVE PARTS OF THE MACHINE. KEEP WELL AWAY FROM THE MOWER WHILE IT IS BEING OPERATED. ALWAYS RESPECT SAFETY DISTANCES.



5. ATTENTION: ENTANGLEMENT WITH ROTATING DRIVE PARTS CAN CAUSE INJURY OR DEATH.



6. DO NOT OPEN OR REMOVE PROTECTIVE COVERS WHILE THE ENGINE IS RUNNING.



7. ATTENTION: KEEP WELL CLEAR OF THE MOWER WHEN IT IS LOWERED TO START WORK. ALWAYS RESPECT SAFETY DISTANCES.





8. SOUND LEVEL: BY LAW, THE EARS MUST BE PROTECTED WHEN THE TRACTOR IS OPERATED WITH THE WINDOWS OPEN.



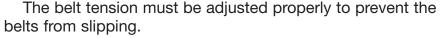
11. ADJUSTEMENTS AND MAINTENANCE

HYDRAULIC CONTROL VALVE

The hydraulic cylinder is equipped with a valve which stops movements of cylinder in case of breakage of an hydraulic tube. This valve can also reduce the cutter bar speed of drop.

ATTENTION! The hydraulic circuit is under pressure (the oil in the circuit can pierce the skin). Check the hydraulic hoses regularly. Damaged or worn hoses must be replaced immediately.

BELT TENSION ADJUSTAMNET



To adjust the tension move the nut of the threaded bar from the spring side.

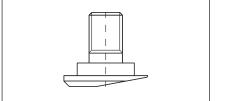
Turn in the sense showed in the illustration to increase belts tension.

It is important that the belt tension be checked during the first few hours of operation and periodically thereafter.

DISCS AND BLADES

Discs, blades and locking screws are manufactured with special high quality steel heat-treated to increase performances and durability and resistance to wear and tear.

Damaged or worn pieces must be replaced immediately with original BELLON parts, use of not approved parts could void warranty.



PINS KNIFE SUPPORT

Check regularly knife supports, and every 50 hours of working. Check them more frequently if you are working in rocky or hard conditions.

Check knife support immediately in case of collisions (stones, pieces of wood,...).

Replace knife support immediately if it is deformed or damaged.

Replace pin knife support if the head of the screw is deformed or damaged.

Replace pin knife support if the body of the screw is less than 13-15 mm. (D).





• Mod. D3L: 1,5 litre

• Mod. D4L: 2 litre

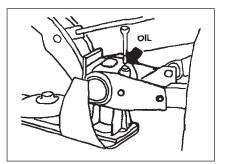
• Mod. D5L: 2,5 litre

• Mod. D6L: 3 litre

• Mod. D7L: 3,5 litre

• Mod. D8L: 4 litre

NOTE: while working it is normal an oil heating in the cutter bar and gear box, there are no problems if discs and gear turn freely by hands.



GEAR BOX: check the gear box oil with the cutter bar horizontal on the ground. Remove the dip stick from the top of the box and check the oil level.

When adding or replacing the gear box oil use SAE 80W90 gear oil.

Quantity: 0,75 litre.

DRIVE SHAFT LUBRICATION: grease the drive shaft according to the instructions supplied by the manufacturer.

ATTENTION! The operator must maintain proper shielding. Do not approach revolving shafts when in operation.

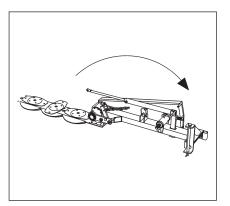


3. TECHNICAL FEATURES

	Cutting width	Power required HP	Discs N.	Blade/Disc N.	Drive shaft	Weight Kg.	PTO speed rpm	3- point hitch cat.	Oil cutter bar I.	Oil Gearbox I.
D3L	1.30m	25	3	2	1	260	540	I	1.5L	0.75L
D4L	1.67m	35	4	2 – 3	1	320	540	II	2L	0.75L
D5L	2.05m	40	5	2	1	370	540	II	2.5L	0.75L
D6L	2.45m	45	6	2 – 3	1	420	540	II	3L	0.75L
D7L	2.80m	50	7	2	1	490	540/1000	III	3.5L	0.75L
D8L	3.20m	70	8	2 - 3	1	600	1000	III	4L	0.75L



4. ASSEMBLY INSTRUCTIONS



General

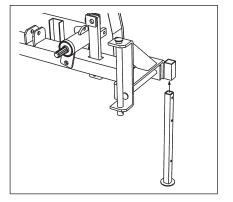
Generally nuts and screws of demounted pieces are already pre-assembled.

Grease always all threaded parts and shafts while mounting. For safety's sake mount the mower with two people using a fork lift or tackle.

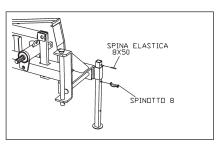
Mounting

1. Unpack the mower, carefully inspect parts an lay them out in a clean surface for assembly.

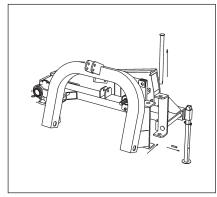
Use a belt to remove the mower from the package and turn the frame.



2. Insert the parking stand as showed in the illustration.



3. Insert the elastic pin 8X50 and be sure that the is in the centre and the same distance goes out from both sides. Install the locking pin 8 to secure the frame, in this way the parking stand will hold up the frame.



4. Remove the pin pre-assembled and install the 3-point frame as showed in the illustration.

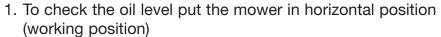


10. LUBRICATION

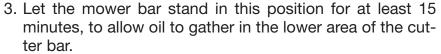
CUTTER BAR

Oil level check

Check the oil levels before starting the mower the first time, and then under normal operating conditions (in absence of oil leaking) annually.



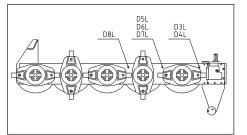
- 2. Lift one side of the cutter bar (B) with the hydraulic cylinder as showed in the illustration.
 - Mod. D3L: lift the cutter bar at 90° and the oil filling plug is the oil level indicator.
 - Mod. D4L: B= cm. 40
 - Mod. D5L: B= cm. 125
 - Mod. D6L: B= cm. 30
 - Mod. D7L: B= cm. 35
 - Mod. D8L: B= cm. 50



- 4. Remove the oil filling plug, the oil level in indicated by the
- 5. The oil level is correct when the oil arrives until the hole of this plug.

Position of the oil filling plug:

- Mod. D3L-D4L-D5L: between the gear box and the 1st disc.
- Mod. D5L-D6L-D7L: between the 1st and the 2nd disc.
- Mod. D8L: between the 2nd and the 3rd disc.



Changing oil

Change oil after the first 50 operating hours, or after 100 ha at the latest.

Raise the cutter bar to vertical position.

Remove the oil plug located in the lowest part of the cutter bar, let run out and duly dispose waste oil.

Change oil when at operating temperature. Too much old oil remains stuck to the gearwheels and because of this any suspended matter present cannot be removed from the gearing.

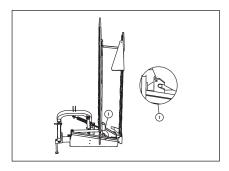
Lock the drain plug and refill from the oil filling plug.

When adding or replacing the cutter bar oil usa SAE 80W90 gear oil.





9. TRANSPORTATION AND STORAGE



TRANSPORT

Wait until the discs have stopped spinning.

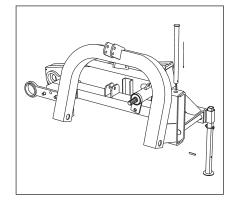
Lift the mower in vertical position using the hydraulic cylinder until the bar is locked by the safety hook.

Check the locking of the hook before moving. (see illustration)

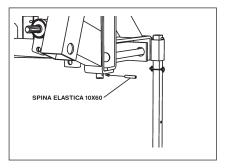
STORAGE

- 1. Clean the mower of all dirt and debris.
- 2. Drain the oil from the cutter bar and gearbox and replace with fresh SAE 80W90 gear oil.
- 3. Store the mower on a clean, dry surface in the down (working) position.
- 4. Loosen the drive belts or remove the belts and store in a dry place.

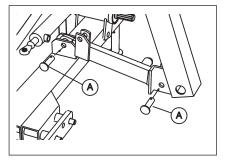




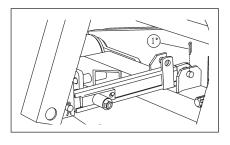
5. Install the pin again



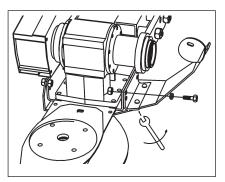
6. Lock the pin with the elastic pin 10X60



7. Connect the safety break to the appropriate brackets of the frame and 3-point hitch and lock with pins (A) of 70 mm. Length and diam. 22 (see illustration)

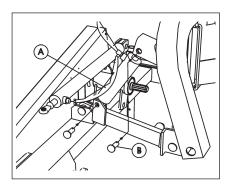


8. Insert the clip inside the hole of the pin and open the extremities to secure it

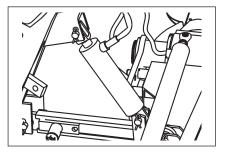


9. Mount the box support as showed in the illustration. Lock with screws M 12x25 and nuts M 12. Using a key n. 17 lock the two nuts of the support pre-mounted.

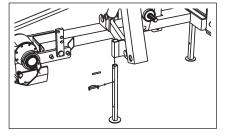




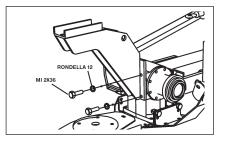
10. Mount the hydraulic cylinder as illustrated and connect it, through the shorter oil tube, to the second cylinder.



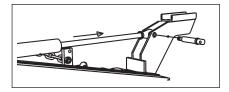
11. Lock pins with appropriate clips, and secure the opening the extremities.



12. Insert the second parking stand and lock it, as showed in illustration n. 2 and 3.



13. Mount the tube support locking it with 4 screws M 12x35 and four washers diam. 12 mm.

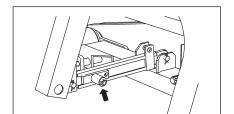


14. Extend the tube of the hydraulic cylinder until the frame support and secure it with the apposite pin.



Working advices:

- 1. Adapt the forward motion to working conditions.
- 2. Reduce the speed when working in humid conditions or grass layed down.
- 3. Be careful while working in slopes or in hard conditions.
- 4. Keep protection covers lowered and in good shape to avoid risk of projection of objects and reduce the inclination of the discs to increase the cutting height.
- 5. Be sure that blades can turn freely around the pins, when they meet an obstacle.
- 6. Check locking of external and internal disc convey covers and replace them immediately if they are worn, damaged or missing.



SAFETY BREAK AWAY

When the mower meets an obstacle during operation, the safety break away will release and allow the cutter bar to swing back in order to minimize damages. When this occurs stop the forward movement immediately.

To return to operating position, unscrew the bolt and move the tractor in reverse gear.

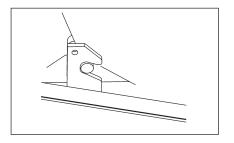
When the mower is in the right position lock the bolt again.

ATTENTION!

DO NOT REMOVE OBSTRUCTIONS WHILE THE DISCS ARE ROTATING. DO NOT LEAVE THE TRACTOR UNTIL THE DISCS HAVE STOPPED RUNNING.



8. WORKING POSITION AND ADJUSTMENT



ATTENTION!: Do not allow people to approach the operating area, while you are moving the mower from working or transport position.

- 1. Make sure the parking stand is up and secure.
- 2. Pull the rope and lift the hook.

Note: To make this operation easier, be sure that the hydraulic circuit is under pressure.

- 3. Lowering the cutter bar in working position using the hydraulic cylinder.
- 4. To adjust the cutting height, see chapter 6 connecting to tractor.

STARTING WORK

- 1. Engage the PTO drive and gradually increase the speed to 540 rpm.
- 2. Start the forward motion of the tractor. The high speed cutting ability of the mower allows faster ground speeds. Reduce the ground speed if the mower leaves uncut material. Reduce the ground speed when turning corners.
- 3. When the mowing is finished, gradually reduce PTO speed and disengage the PTO drive.

ATTENTION!

Before starting operation, make sure there are no people in the area of the mower.

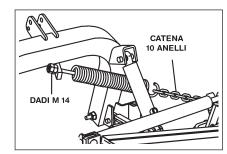
ATTENTION!

Before starting operation, make sure the cover sheet is in good shape and in the lowered position. Do not operate the mower without the cover sheet in place.

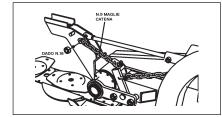
ATTENTION!

Do not operate the mower in extremely rocky conditions.

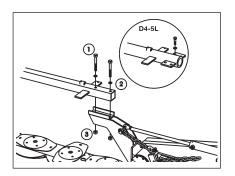




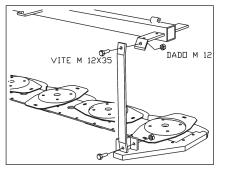
15. Hook the spring the chain with 10 rings, insert the screw at the other side of the spring in the apposite bracket of the 3-point hitch. Lock the screw with two nuts M 14.



16. Insert the chain with 9 rings to the pin at the extremity of the hydraulic cylinder and lock it with a nut M 16.

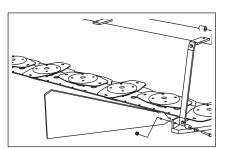


17. Mod. D4L – D5L: Attach the tube frame to the support locking the 4 screws M 10x35 with nuts M 10. Mod. D6L-D7L-D8L: Attach the tube frame to the support as showed in the illustration, locking with 2 screws M 14x100, washers M 14 and securing with nuts M 14.

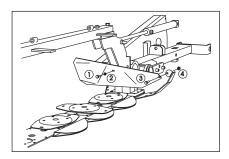


18. The support which connect the tube frame with the cutter bar has to be secured with 2 screws M 12x35 and 2 nuts M 12. As showed in the illustration.

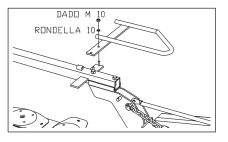




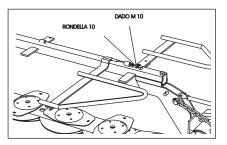
19. Mount the external deflector plate and be careful that the rubber spring is in the external side (see illustration 19)



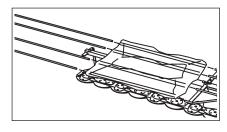
20. Mount the internal deflector plate locking it with a screw M 10x20 (pos. 1) and washer M 10 (pos. 2) in the centre of the plate. Then lock the end of the plate with a screw with round head M 10x20 and nut M 10.



21. Insert the fix frame in the screws of the frame tube and lock it with nuts M 10 and washer M 10.



22. Insert the mobile frame in the apposite hinge and lock with nut M 10 and washer M 10.



23. Insert the 4 distance tubes inside the covering canvas and the insert the tubes to the frames just mounted.



Rules for working

Never exceed maximum PTO speed when using the implement.

When the PTO is switched off, the implement hitched up may not stop at once.

Do not go close to the implement until all motion as stopped, only then may work be done on it.

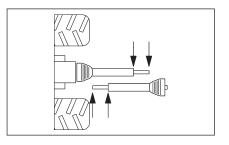
When the implement is parked, either remove the drive shaft and store it, or secure it with the apposite hook supplied with the mower (do not use retaining chain).



7. DRIVELINE

The drive shaft supplied with the mower usually is of the right size to couple with the most part of the tractors. In any case before starting work the first time check the length of the shaft.

If an adaptation is necessary please follow the instructions below:



Important!

Use only the indicated or accompanying drive shaft, use of not approved parts could void warranty.

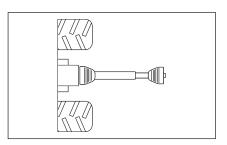
If the drive shaft is too long, open the shaft and hold the two halves side by side, in this way it will be possible to determine exactly the exceeding length of the shaft.

Cut both internal and external tubes of the same size, and safety covers too.

Clean with a file tubes, grease and close the drive shaft. Important!

The maximum operating length (L1) must allow the greatest possible shaft overlap (min. _ X)

Always check that drive shaft locks are securely engaged before starting work.

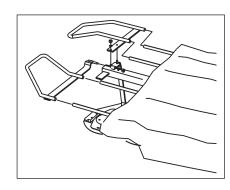


Retaining chain

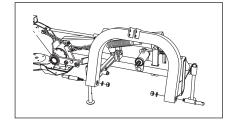
Use chain to prevent tube guard from rotating.

Take care that chain does not impede drive shaft pivoting.

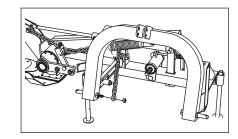




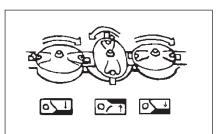
24. Insert the other two frames into the tubes and then place them in the apposite seat. Lock with nuts and washers M 10. Stretch the covering canvas along the tubes and find the right tension adjusting the elastic ropes fixed under the canvas.



25. Insert pin of 3-point hitch and the cardan shaft hook. Secure the 3-point pins with nut M 24x2 and washers.



26. Secure the chain with 20 rings with nut M 18 and mount to the other side the hook mm. 12.



27. Mounting blades

Check the direction of rotation of the discs and install the blades as indicated in the drawing.

For longer service life, carefully check discs, blades and bolts daily. When replacements are needed, use only original parts. Use not approved parts could void the warranty.

ATTENTION! A BENT BLADE CAN SERIOUSLY EFFECT THE OPERATION OF THE MACHINE AND THROW OBJECTS. REPLACE BENT BLADES AT ONCE.



5. GENERAL INFORMATION

If the power of the tractor is not enough, it is possible that the mower is not performing at the best.

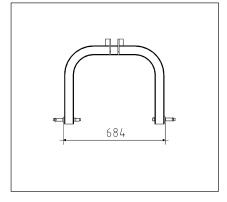
Mowers mod. D3L-D4L-D5L-D6L are conceived to couple with tractors working at 540 rpm.

Mowers mod. D7L are conceived to couple with tractors working at 540 rpm, or on demand at 1000 rpm.

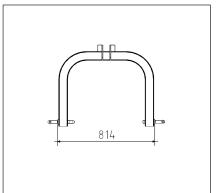
Mowers mod. D8L are conceived to couple with tractors working at 1000 rpm.

All our models are equipped with hydraulic lifting.

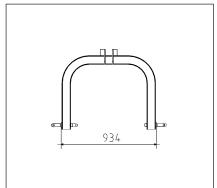
3-Point-hitch's sizes:



D3L



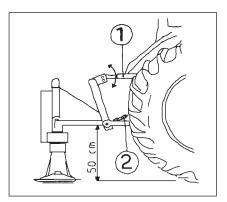
D4L - D5L - D6L



D7L - D8L

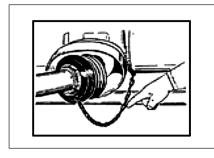


6. ATTACHING TO TRACTOR



Note: The disc mower require 540 rpm (or 1000 rpm according to the model) PTO power and are designed to mount on 3 point hitches.

- 1. Connect the mower's 3 point frame to the lower links of the tractor's 3 point hitch and secure.
- 2. Connect the tractor's top link to the mower's 3 point frame and secure.
- 3. Connect the hydraulic cylinder hose to the appropriate port of the tractor hydraulic system.
- 4. Install the IID shaft on the tractor and mower.



ATTENTION! KEEP HANDS AND BODY PARTS AWAY FROM PRESSURIZED HYDRAULIC LINE. HYDRAULIC FLUID UNDER PRESSURE CAN CAUSE SERIOUS INJURY. DAMAGED OR WORN HOSES MUST BE REPLACED IMMEDIATELY.

- After attaching the mower to the tractor and raising the mower with the tractor's 3 point hitch, raise the mower's parking stand and lock it in place.
- Adjust the lower link of the tractor's 3 point hitch until level.
- Lower the mower and lay it on the ground. In working position the lifting spring must be in tension, otherwise adjust it screwing nuts.
- Connect the chain with 20 rings to the tractor's 3 point hitch, and adjust to maintain always the same height from the ground.
- Adjust the mowing height by adjusting the top link of the 3 point linkage to move the front portion of the cutter bar up or down.

IMPORTANT: do not allow the disc blades to touch the ground during operation



