

Agromelca



INSTRUCTION AND OPERATION MANUAL

VTL SIDE VERSION 2018

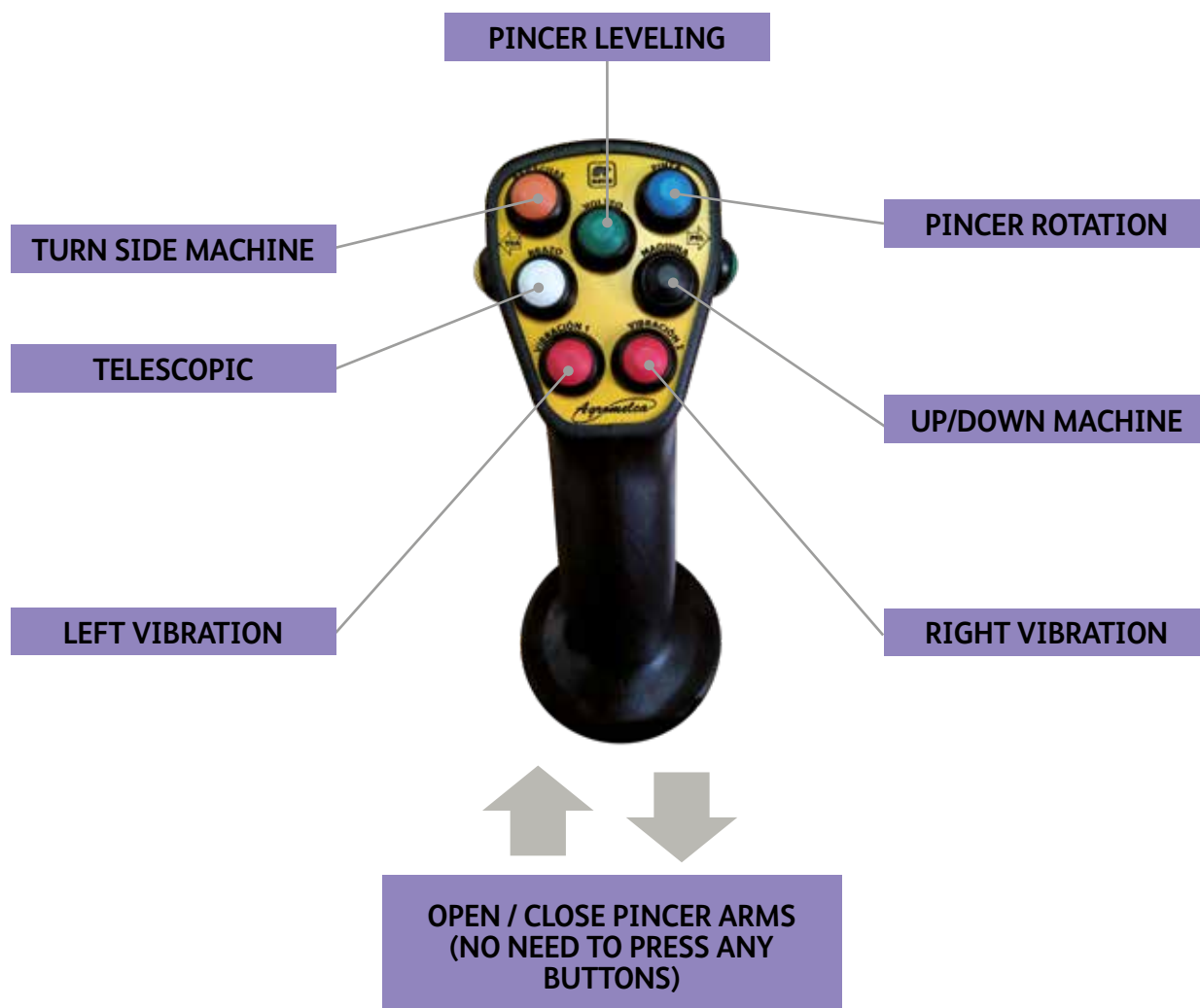
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Control unit functions



Adjustment of speed of movements

It is possible to change the speed of the movements using the flow controllers.



Controlling arm clamping

- To prevent damage to the tree trunk (peeling of the bark), depending on the harvest season, climate, age of tree, type of tree, etc., it is possible to adjust the clamping pressure of the arms on the trunk.
- Press and hold the clamp arms button, the dial indicates the clamping pressure.
- Use the controller to increase or decrease the clamping pressure.
- In the event of queries, please refer to your dealer.



Clamping pressure head with parallel closing Z10/Z20

WITH HEAD Z10

MINIMUM: 140 bar

MAXIMUM: 180 bar

WITH HEAD Z20

MINIMUM: 140 bar

MAXIMUM: 180 bar



Increase or decrease vibration power, head with parallel closing Z10/Z20



Depending on the type of tree being harvested, the power can be increased or decreased, by adding supplements to the counterweight.

- Gentle vibration (1).
- Increased vibration (2 and 3). Fit one or both upper supplements and secure with screws. These counterweight supplements are attached using screws and split washers (tighten firmly).

Modification of block support on head with parallel closing Z10/Z20

Depending on the girth of the tree to be harvested, this option allows the Z10/Z20 head to be adjusted.

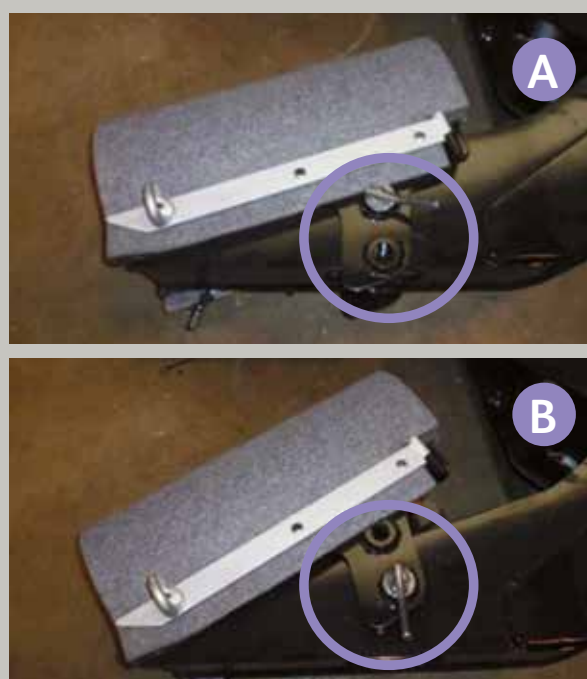
The position of the block support can be modified.

- Modification of the block support angle.

To ensure that the clamping blocks are correctly in contact with the trunk and and, therefore, transmitting the correct vibration and minimising the risk of debarking the trunk, etc., it is possible to change the angle of the supports.

On the whole, for trunks with a medium/large girth, the position is as shown in photo A and for trunks with a small/medium girth, as shown in photo B.

Remember that the clamping pressure of the arms should be between 140 and 180 bar.



Modification of the position of the clamping cylinder on head with parallel closing Z10/Z20

Depending on the girth of the tree to be harvested, this option allows the opening of the arms of the Z10/Z20 head to be increased or decreased.

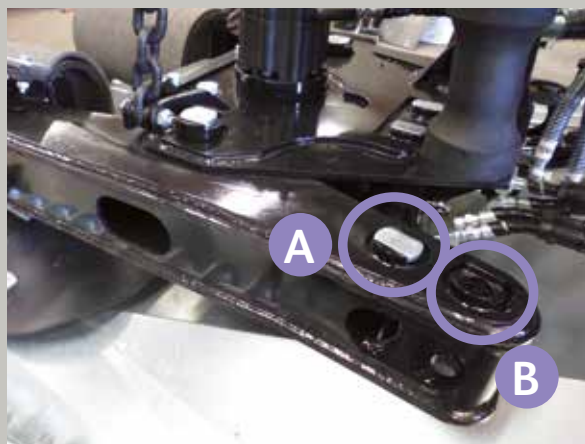
- Modification of the position of the clamping cylinder.

To adjust the head to the girth of the trunks, the opening of the arms must be increased or decreased.

This action is performed by modifying the position of the clamping cylinders.

On the whole, use position A for trunks with a small/medium girth (smaller opening of arms), and position B for larger girths (wider opening of arms).

Remember that the clamping pressure of the arms should be between 140 and 180 bar.



General lubrication

The different points require regular lubrication:

- The joints of the clamping arms of the head should be greased once or twice a day. (Both arms).
- For all other joints and telescopic units, apply grease once every 15 days.
- Apply grease to the chains fastening the head once or twice a day.
- The covers of the head should be greased once every 15 days (Explication below).



This information is approximate as the time intervals should be increased or decreased depending on the frequency of use.

Lubrication of head covers

For the correct lubrication of the head covers (upper and lower), proceed as follows:

1. Remove screw (A).
2. Insert grease through the lubricator (B).
3. The level is correct when the grease comes out through the hole in which the screw was located.
4. Replace screw.

**Use SKF LGHB-2 grease
(3 pumps every 15 days)**



Hydraulic oil and filter elements

The oil level in the tank and gearbox should be checked at regular intervals.

This is done using the level located in the tank and the gearbox.

If the level is not correct, top up with oil.

The hydraulic oil in the tank should be changed every 3 years, depending on the level of use.

Check the level of dirt in the oil filter and if necessary, clean.

The filter cartridge should be replaced every year.



Steps for harvesting from a tree with head with parallel closing Z10/Z20



1. Placer le support du tampon et les vérins de serrage dans les positions convenant le mieux au diamètre des troncs pour lesquels il faut procéder à la récolte.
2. Positionner le tronc dans l'espace entre les tampons de serrage.
3. Fermer la pince

4. Vibration 1 et, si nécessaire, vibration 2.

6. Ouvrir la pince.

Remarque : le tampon arrière ne sert pas de butée pour le tronc, car il sert uniquement à protéger le châssis central contre les chocs.

Harvesting and transport

- The VTL harvester is equipped with side rotation, permitting the use of a number of positions.
- When driving, it is normally totally vertical.
- When harvesting, either the horizontal or vertical position can be used.



Recommended procedure in the event of debarking of trunk with head with parallel closing Z10/Z20

1. Reduction of the clamping pressure of the arms (caution as often if the pressure is set too low, debarking may occur as the arms are not correctly clamped to the tree – reduce the pressure gradually and check the effect constantly, e.g. if it is at 180 lower it to 150, if the damage continues reduce it to 130 until it no longer causes damage).
2. Correctly connect up, adjusting the head by turning the pincer to the slope of the trunk, etc.
3. Check that the trunk is correctly held between the clamping arm blocks, that is, when the trunk is clamped or vibrated, it does not move. The following point is essential for this.
4. Check that the position of the arm block support is the most appropriate for the size of the trees being harvested.
5. Do not change the vibration speed using the tractor accelerator and ensure that the maximum vibration interval is 5 seconds.
6. Installation of cloth and soft rubber guards (which must be fitted) and lubrication between the guards.
7. Soak the cloth guard in soapy water (keep it wet).
8. Remove one or both counterweight supplements to reduce the circumference of vibration (the vibration is more gentle).
9. If after all these steps, the machine continues to damage the trunks (this does not mean that any damage is permitted), the situation of the trees being harvested should be analysed; whether the trees are irrigated (the water supply should be stopped 7 days before harvesting), whether there is any water collected in the soil (change the zone), whether the ambient temperature is very high (the tree is feeding and is therefore vulnerable to damage).

COMMON GENERAL POINTS

Care should be taken to avoid an excessive clamping pressure (which could result in damage to the trunk when clamped by the arms or when the vibration starts) or a very low pressure (which could result in damage to the trunk during vibration as the head would drop, pulling the bark with it).

Do not place the arms at the height of the junction of the branches, as when they are clamped, if the block does not have a good straight grip, it will drop and may result in damage.

Take care to position the head correctly on sloping trunks.

Lastly, remember all the points regarding vibration, counterweight supplements, lubrication, vibration, etc.

Sometimes, even when all the procedures are followed correctly, the trunk may still be damaged.

General recommendations

- In the event of adverse weather conditions, the control (if it is not fitted in a closed chamber) and the power box should be protected with plastic wrap. This is also the case if the vehicle is parked in the open air.
- Inspect the screws and hoses daily during the first 100 hours of operation.
- For young trees, we do not recommend prolonged vibrations of the tree, applying a maximum of 5-6 seconds in each direction. Longer vibrations may result in faults in the clamping cylinders, counterweight bearings, etc.
- This harvester is only designed to operate at 540 rpm power take-off. (If any other rotation speed is selected, this could result in damage to the counterweight bearings or the hydraulic system, motor, pumps, gearbox, etc.).
- Agromelca, s.l. does not accept liability for any damage, costs, etc. resulting from the use of a different rotation speed.
- At the start of the season, the harvester should be given an overall service and the correct operation of all the components be checked.
- At the start of the harvest, change the oil filter cartridge and check the oil level in the tank and the gearbox. If necessary, and depending on its condition, the oil should also be changed.
- This harvester has been checked and adjusted so that all its hydraulic, mechanical and electrical components, etc., operate correctly. Therefore, your dealer should be contacted before any manipulation.

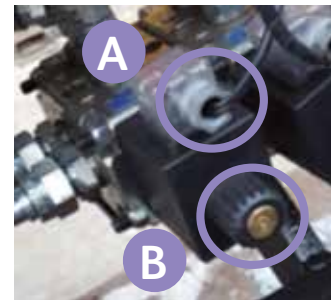
Troubleshooting

1. NONE OF THE MOVEMENTS OPERATE.

- A. Check the electricity supply of the tractor.
- B. Check that the controller electrical system is correct.
- C. Inspect the tractor oil pump.

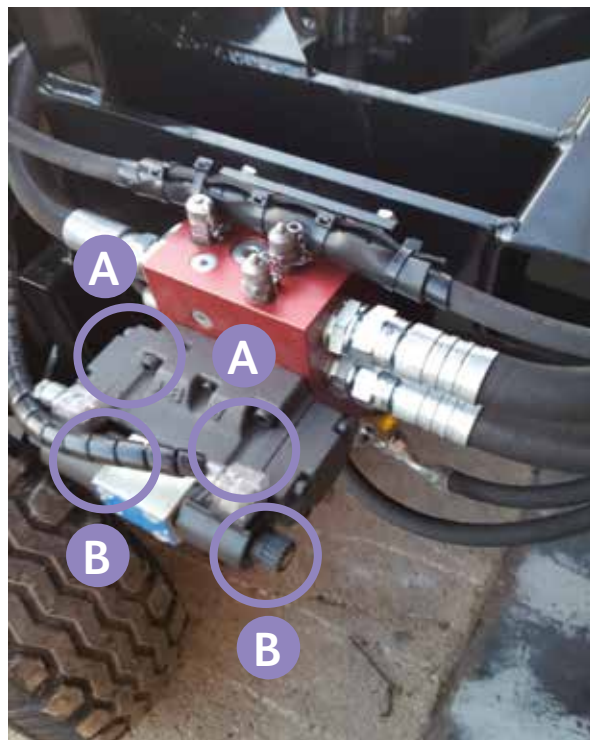
2. A PARTICULAR MOVEMENT DOES NOT OPERATE.

- A. Check that the connector for the movement is receiving electricity properly (A).
- B. If the power supply is correct, use a thin screwdriver or similar to prick the opening shown (B).
- C. If the power supply is not correct, check the wiring.



1. THE VIBRATION SYSTEM DOES NOT WORK.

- A. Check the electricity supply to the vibration block (A).
- B. If the power supply is correct, use a thin screwdriver or similar to prick the opening shown (B).
- C. Inspect the oil pump.





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