



# ***CultiPack Cultivators***

## **Operator's Manual**



**Read this manual before operating the machine!**

## **EC Declaration of Conformity**

**As manufacturer,  
TUME-AGRI Oy  
P.O. Box 77  
FI-14201 Turenki, Finland**

Hereby declares that the Tume CultiPack disc cultivator models 3001 and 4001 are compliant with the requirements of Machinery Directive 89/392/EEC and amendments 93/44/EEC and 93/68/EEC thereof and that the technical specifications referenced below have been applied:



Eero Tommila  
President



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## **1. To the machine operator and maintenance personnel**

Congratulations on your new Tume CultiPack cultivator! We are confident that CultiPack will give you the very best results on the field.

Please read this manual thoroughly before using the cultivator and follow the operating and maintenance instructions given in the manual. Doing so will ensure that you get the longest and most reliable service life from your machine.

Keep the manual near to hand when operating the machine. Make a note of the spare part serial number for this manual, which is shown at the top of the front cover. In the event that your original manual is lost or damaged, immediately order a new manual using this serial number.

### **Layout of this manual**

Due to varying national requirements, for example with respect to road transport regulations, the machines illustrated in the figures in this manual may differ slightly from your machine. All transport and work safety equipment fitted at the time of delivery of the machine must be kept in place and in good working condition even if they are not shown in the figures or text of this manual.

In this manual “left” and “right” refer to the respective side of the machine as viewed in the working direction from the rear of the machine.

Tume-Agri Oy develops its products continuously and reserves all rights to make product alterations without prior notification. Tume-Agri Oy is not required to make retrospective changes to its products other than repair work under the scope of warranty.

## **2. Safety instructions**



**All persons operating, servicing or repairing the Tume CultiPack disc cultivator must be thoroughly familiarised with the instructions of this manual and with the machine itself before starting work.**

**It is strictly forbidden to allow access to the machine to persons that are unfamiliar with its operation and safety hazards.**

**Observe caution when connecting the cultivator to the tractor’s 3-point hitch. To avoid having to go between the cultivator and the tractor when hitching, we recommend that the drawbars and push bar of the tractor should be equipped with a quick hitch device.**

**Ensure that the cultivator is correctly and securely attached to the tractor. Use only high-quality ring cotters. Ensure also that the hydraulics are correctly connected.**

**Raise the support leg only after the cultivator has been fully fastened to the tractor. Observe extreme caution and ensure that the tractor engine is switched off when going between the tractor and the cultivator unit.**

**It is strictly forbidden to go beneath the cultivator or cultivator parts while lifted on the tractor's lifter or whenever the unit is not mechanically supported.**

**Possible clogging of the coulter discs during work must be cleared to ensure that the discs can be hydraulically raised from the ground without catching on the cultivator. Before cleaning the discs, the tractor must be stopped and the engine turned off.**

**Position the cultivator on a level surface if possible. If working on sloped terrain, make sure that the machine cannot roll on its discs or wheels.**

**The cultivator's support leg must be always used when the cultivator is unhitched from the tractor. Before unhitching the cultivator from the tractor, first lower the cultivator with the tractor's lifter, then engage the tractor's parking brake and turn off the engine. Then go between the cultivator and the tractor and lower the support leg. The support leg must be lowered before continuing to unhitch the cultivator.**

**Whenever the cultivator is parked or is being serviced, repaired or adjusted, ensure the safety of people working on or near the machine by making sure that no other persons can access the tractor's cab or its controls.**

**Standing or sitting on the cultivator, or carrying out adjustments or repairs while the cultivator is in motion is strictly forbidden. The tractor engine must be turned off during maintenance and repair work.**

**Before moving or operating the cultivator or adjusting the disc working height, make sure that there are no people, buildings or objects within the danger area of the machine.**

**All safety devices and guards must be kept in place during operation.**

**Damaged parts must be repaired or replaced immediately. Pay special attention to the condition of the cultivator's fertilizer seed drill draw pin and the unit's own 3-point hitch and hydraulic hoses.**

**Make sure that sufficient weight rests on the tractor's front axle in all circumstances to ensure that the steering functions safely. Normally, at least 20% of the tractor's total weight must rest permanently on the front axle. Use extra weights if necessary.**

**The maximum allowable transfer driving speed for the cultivator is 30 km/h, irrespective of whether the unit is raised on the tractor's lifter or pulled on its own wheels. In poor conditions, or if the cultivator is loaded by a seed drill tow bar, the driving speed must be adjusted accordingly.**

**When transferring the cultivator at high speed on its own wheels, take into account that the cultivator can cause slight oversteering of the tractor and can also reduce the braking power of the tractor's rear axle. Take these factors into consideration and observe appropriate caution when driving.**

**Never reverse with the cultivator lowered – always raise the lifter before reversing!**

**The draw pin built onto the cultivator is designed for towing a Tume fertilizer seed drill equipped with a Tume multi-purpose drawbar. The working load limits for the draw pin are presented below in this manual. The working load limits must not be exceeded.**

**Maintain the fertilizer seed drill draw pin in good working order at all times. Replace worn or damaged parts as necessary. Use only original Tume spare parts.**

**Use of the cultivator's draw pin for any purpose other than that presented above is strictly forbidden.**

**If the unit is used in combination with a Tume CultiPlus hybrid cultivator, the rear wheels of the cultivator must be locked straight. If the required locking devices have not been delivered as standard equipment, they must be purchased as Tume spare parts and installed before connecting the cultivator to the CultiPlus unit.**

**The paint finish of the cultivator may emit harmful fumes upon heating. Ensure sufficient repair workshop ventilation and use personal protective equipment as necessary.**

**Demanding cultivator repair work must be carried out by an authorised Tume service workshop.**

**Only original Tume spare parts may be used.**

**Structural alteration of the cultivator may not be carried out without prior written permission of the manufacturer clearly specifying the changes to be made.**

### **3. Purpose of use and features of the cultivator**

The Tume CultiPack cultivator can be used for stubble or grass tillage as a lighter alternative to ploughing, and for tillage of previously prepared ground, e.g., seedbed preparation or fallow tillage. Tume CultiPack comes equipped with a draw pin suitable for towing trailed seed drills or fertilizer seed drills equipped with a Tume multi-purpose drawbar. This combination of cultivator plus seed and/or fertilizer drill enables seedbed preparation as well as sowing in a single pass.

The cultivator's construction allows for different operating modes, such as in combination with a fertilizer seed drill, in which case several tons of drawbar weight can be directed onto the cultivator. For this reason, the cultivator has been given a lightweight base construction. The working angles of the discs have been carefully designed to ensure effective ground penetration despite the cultivator's low design weight, even without the added drawbar loading of a fertilizer seed drill. In addition to this, attachment points are provided on the cultivator frame for additional weights to facilitate tillage of harder soils.

The cultivator can be driven in the field on its own support wheels and at end turns, for example, the discs can be independently raised. This reduces end turn surface damage and speeds up the work process. When a fertilizer seed drill is hitched to the cultivator, full tractor steerability is consistently retained despite the extra drawbar load on the cultivator as there is no need for the cultivator to be raised by the tractor's lifter during driving.

Stubble tillage, as an alternative to ploughing, is typically achieved in a single pass. Pasture tillage requires two passes, ideally crosswise.

If tillage is not immediately followed by sowing, i.e. tilling is used as an alternative to ploughing, a relatively high working depth of 10–12 cm should be used.

If the purpose of tilling is seedbed preparation, the tilling must be carried out at sowing depth, i.e. usually max. 3–5 cm depending on the crop.

Use of a relatively high driving speed of 10 – 15 km/h typically gives the best results.

#### 4. Hitching the cultivator to the tractor

Tume CultiPack requires a normal ISO 730-1 category 2 compliant 3-point hitch and an ISO 5675 compliant dual-function ½ inch hydraulic power take off connection.



**Figure 1. A washer must be installed under the ring cotter due to the oval shape of the tow lug holes**

Hitching to the tractor is done in the normal manner. Due to the oval shape of the drawbar fastening pin holes, washers must be installed under the ring cotters.

The final hitching stages include connecting the hydraulic hoses and raising the support leg. Lift the cultivator slightly off the ground. Turn off the tractor and engage the parking brake.

Connect the hoses to a dual-function power take-off with non-locking lift and lower control lever positions. If the valve has a floating position, switch the lever to this position to facilitate hose connection.

Remove the pin from the cultivator's support leg, lift the leg and lock it in the raised position.



**Observe extreme caution when working between the tractor and the cultivator unit when adjusting the support leg and installing the hydraulic hoses!**

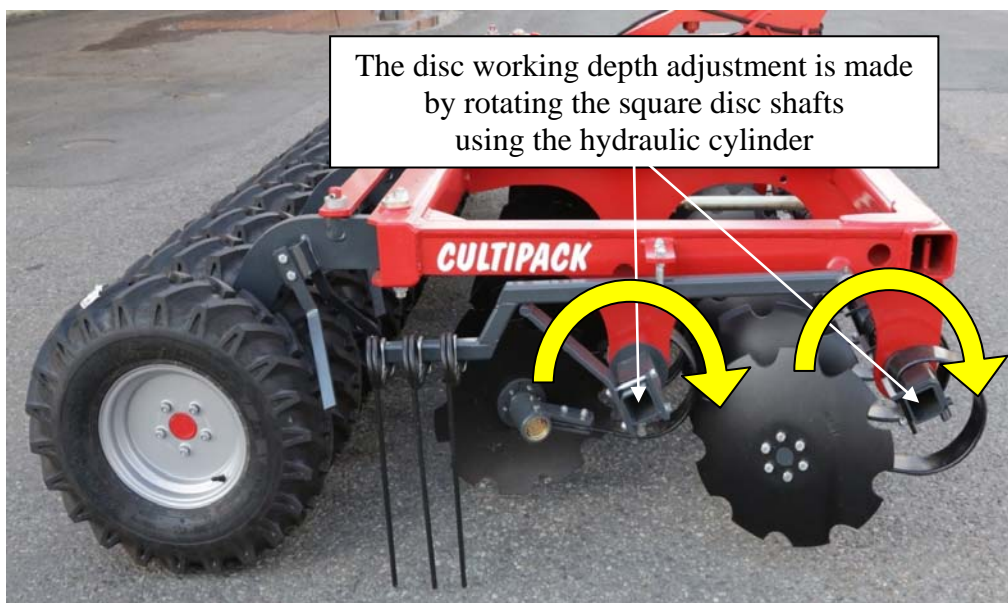
Adjust the levelness of the cultivator by adjusting the height bars of the tractor's push bar and drawbars. If the cultivator is to be used on very uneven terrain, set the tractor's height bars to a position which allows vertical free movement.

The lateral limiters of the drawbars can be set as either fixed or to allow some lateral movement.

## **5. Cultivator adjustments**

### **5.1. Setting the working depth**

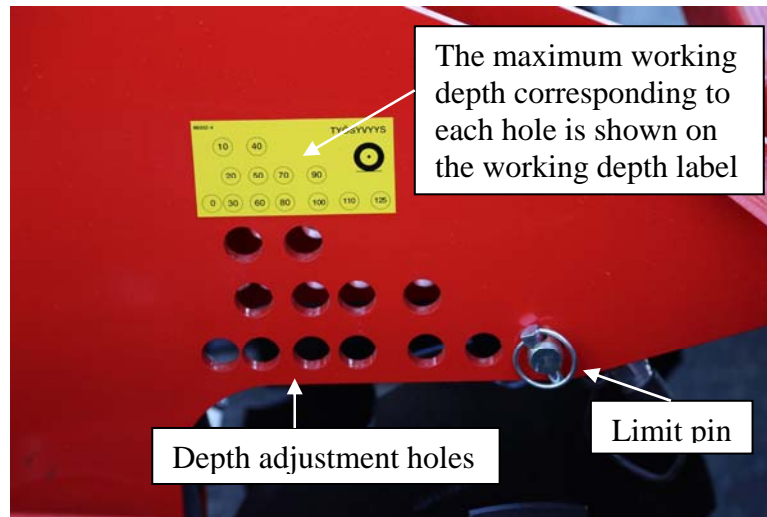
The cultivator's working depth is set by adjusting the position of the discs in relation to the cultivator frame and to the support wheels and press wheels at the rear of the frame. The adjustment is performed by rotating the square shafts to which the discs are attached using a hydraulic cylinder (see Figure 2).



**Figure 2. The working depth is adjusted by turning the square disc shafts. The figure shows the transport position.**

The maximum working depth is set by first limiting the stroke length of the working depth adjustment cylinder. See Figure 3





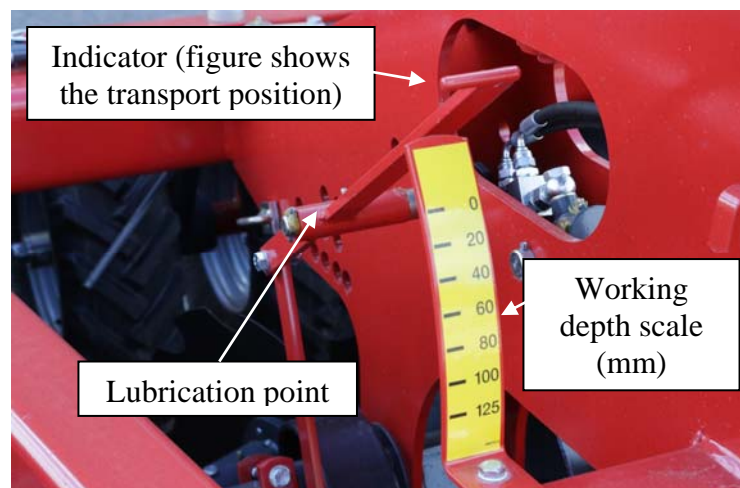
**Figure 3. The max. working depth is set by limiting the cylinder stroke length.**

First raise the discs to the upper position, i.e. transport position. Determine the required maximum working depth for the field plot and compare this value with the values marked on the label shown in Figure 3. Select the closed value and insert the limit pin into the corresponding hole.



**The cultivator must be lowered on the tractor's lifter and the tractor engine turned off before performing the basic working depth adjustment.**

The limit pin limits the cylinder stroke length, which in turn adjusts the working depth. Once the setting is made, the hydraulic cabin controls cannot exceed this chosen working depth. If necessary, the working depth can, however, be reduced hydraulically via the cab during tilling. The cultivator is equipped with a working depth scale and indicator which shows the theoretical working depth value. See Figure 4.



**Figure 4. Working depth indicator and scale**

**N.B.!** The value shown on the working depth indicator is a guideline value only. The actual working depth depends on the specific working conditions and can be only be accurately determined by examining the results of a trial run.

Factors affecting the acquired working depth include, e.g., the ground hardness and weighting of the cultivator. On hard soil the plate springs supporting the discs yield slightly, thus reducing the actual working depth.

### 5.2 Adjusting the weight and adding extra weights

If the cultivator is used on extremely hard ground without additional weights or the additional loading of a seed drill drawbar, the cultivator frame and wheels may rise above their base height. In this event, additional weights must be installed in the cultivator frame. See Figure 5. The maximum additional weight is 50 kg per working width metre.



**Figure 5. Additional weights can be inserted in the front beam of the cultivator**

### 5.3 Lateral adjustment of the front disc row

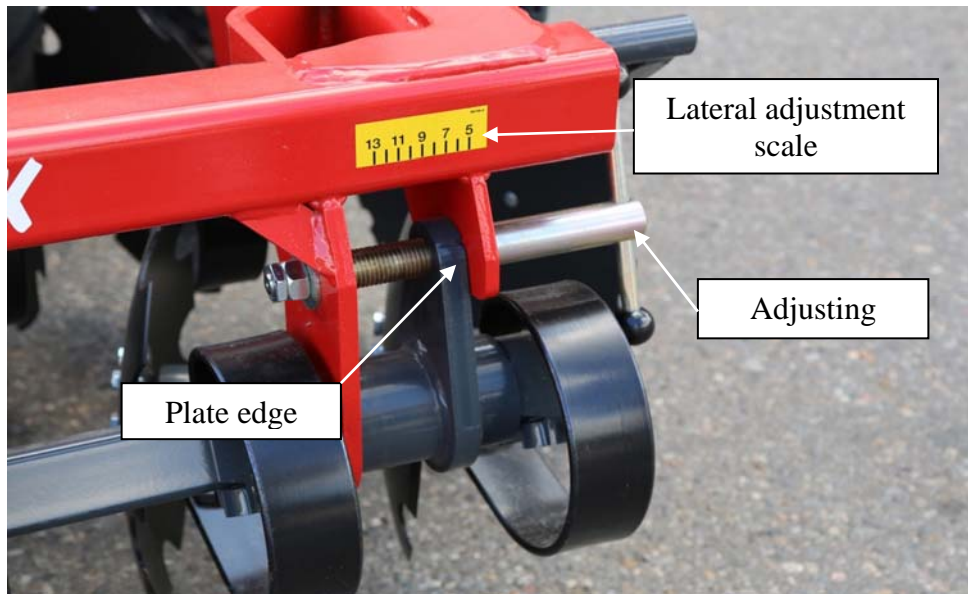
Adjusting the working depth of the Tume CultiPack cultivator by rotating the square disc attachment shaft at the same time also changes the angle of contact of the discs with the ground to some extent.

In order to retain an even tilling result at different working depths, CultiPack enables adjustment of the lateral position of the first disc row with respect to the second disc row. If the working depth is altered considerably, the lateral position of the first disc row should also be adjusted. See Figure 6.

The lateral positioning can be checked by comparing the position of the plate edge shown Figure 6 with the scale on the front beam. If the working depth of the cultivator is 0...5 cm, the lateral setting can be at its minimum position (as shown in Figure 6). When increasing the working depth, lateral adjustment must be made by turning the adjustment screw until the plate edge (indicated in Figure 6 by the plate edge arrow) aligns with the figure on the scale which most closely corresponds to the desired working depth.

**Example:** The working depth is 9 cm. Lateral adjustment is made so that the edge of the plate, used as the measurement reference point, aligns with “9” on the scale.

Lateral adjustment of the disc shaft of the first disc row is easiest to perform when the cultivator is raised on the lifter and the disc working depth is initially set to the maximum position (working depth limit pin fully removed). After carrying out the adjustment, raise the discs to the transport position and lower the cultivator on the lifter. Finally, install the pin which limits the maximum working depth in the desired hole (see Figure 3).



**Figure 6. Lateral adjustment of the front disc row**



**Do not go beneath the cultivator when carrying out the adjustment while it is raised on the hydraulic lifter! Turn off the tractor engine and engage the hand brake before beginning work in the danger area of the tractor and cultivator. Make sure also that the tractor controls are not accessible to others while you are in the danger area!**

#### **5.4 Vallintasaimien säätö – vasen vallintasain**

See Figures 7-8.

The left furrow leveller is a revolving disc with adjustable ploughing, vertical and lateral positions. The disc rotates in its working position in the soil under its own weight. When the tillage discs are raised, the lift lever also automatically raises the levelling disc.

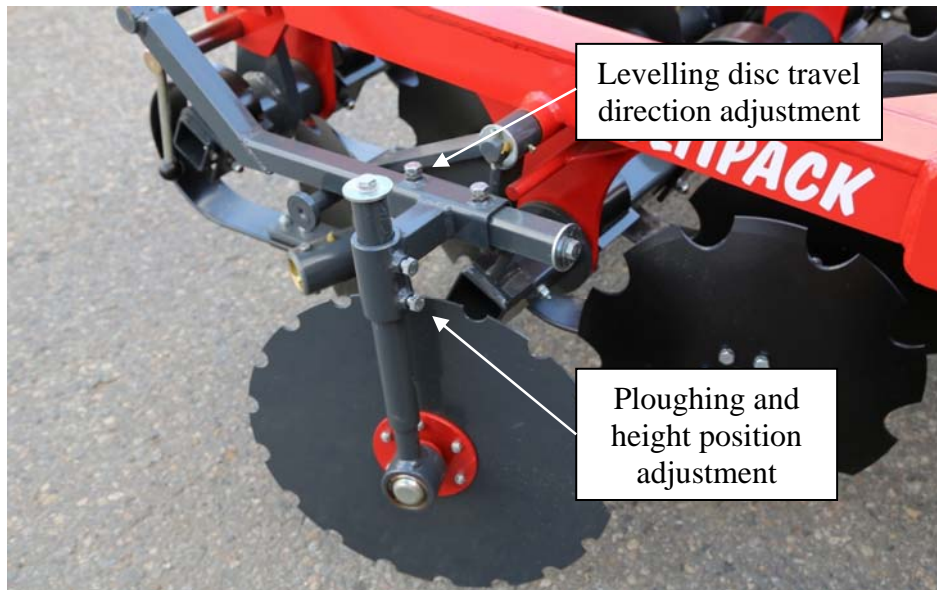
The ploughing position of the left furrow leveller is factory-set to 140 mm as shown in Figure 8.

To adjust the ploughing or height position of the disc, loosen the 2 bolts (see Figure 7) at the top of the disc arm and adjust to the desired value. Re-tighten the screws firmly in place.

Note! the disc must be angled outward in the direction of travel – i.e. not at an inward ploughing angle!

The travel direction setting of the levelling disc has also been carried out at the factory and does not normally need to be changed.

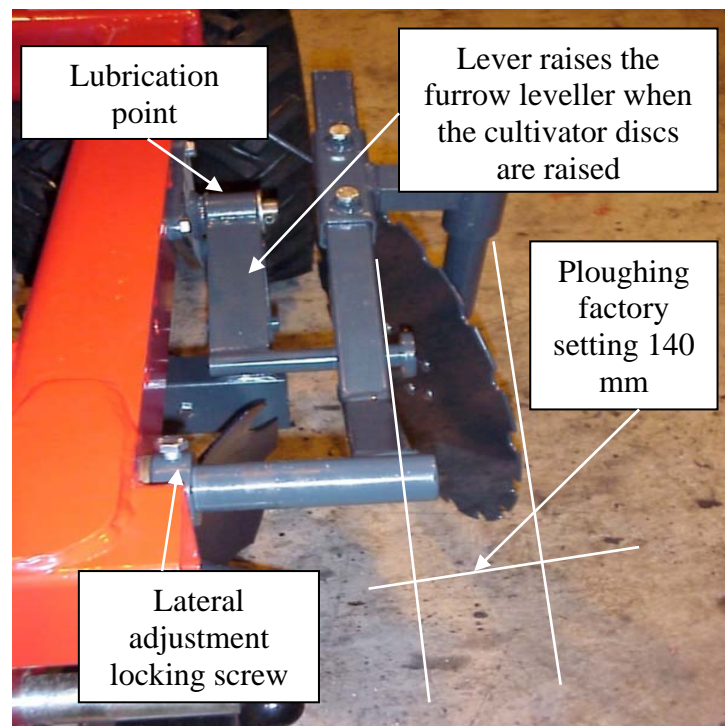
If adjustment is needed, loosen the two bolts (see Figure 7 “Levelling disc travel direction adjustment”), adjust slightly in the direction of travel and lock firmly in the new position.



**Figure7. Left furrow leveller**

Lateral adjustment of the levelling disc is also possible (see Figure 8). Loosen the bolt on the locking sleeve of the disc arm shaft and slide the shaft inward. Secure the sleeve firmly in the desired position.

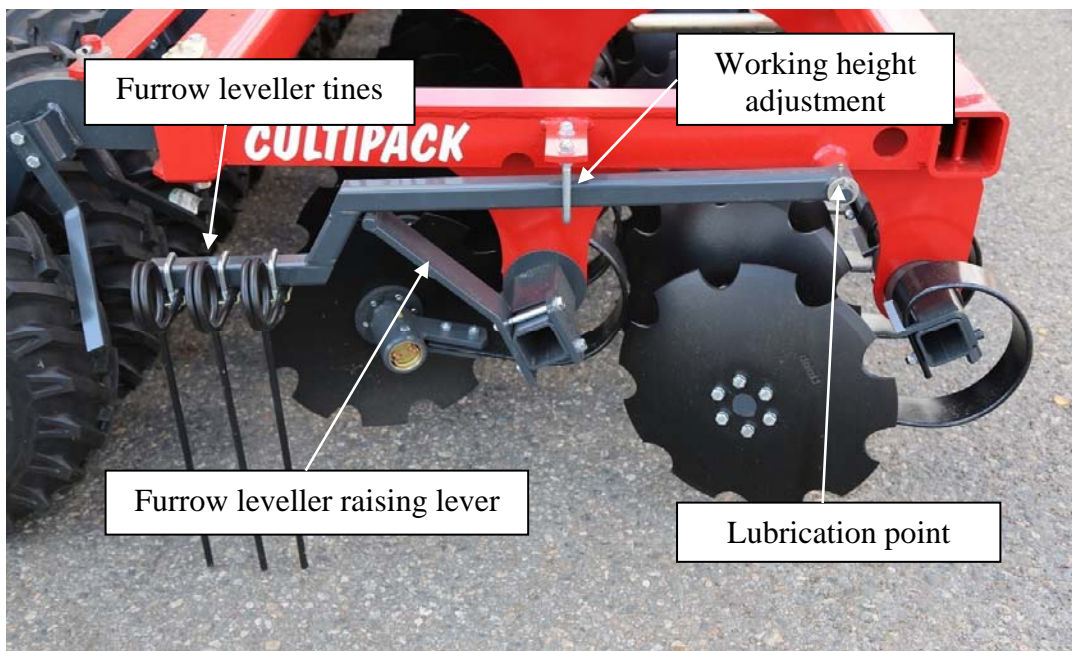
Lateral adjustment can be used to fully retract the levelling disc to within the working width of the cultivator, for example for transport.



**Figure 8. Left furrow leveller viewed from the front**

### 5.5 Adjusting the furrow leveller – right furrow leveller

The right furrow leveller has been factory-set and does not normally need changing. See Figure 9.



**Figure 9. Right furrow leveller**

The working height and travel direction positions can, however, be adjusted if necessary.

To change the working height, adjust the position of the locking U-bolt on the leveller shaft. Perform the adjustment when the tillage discs are at the desired working depth.

The leveller tines should be set so that the tine tips are 20–40 mm above the soil surface in the working position.

Re-tighten the hex bolts firmly.

### **5.6 Setting the disc raising and lowering speed**

Adjustment of the working depth and the raising and lowering speeds of the cultivator discs during operation are carried out using the dual-function hydraulic cylinder. The cylinder speed is adjusted using the choke on one of the hydraulic hoses. Depending on the model, the choke may be fitted with a hex screw lock. If so, loosen the hex screw before carrying out the adjustment and then re-tighten it once the setting is made.

### **5.7. Adjusting the wheel scrapers**

The cultivator's support wheels are each equipped with a scraper which cleans the wheel when operating in muddy conditions. The scrapers are factory-set for normal operating conditions with a wheel/scraper clearance of 10–20 mm. The setting may require subsequent adjustment as the scrapers wear or, in some cases, due to the operating conditions. The setting should nevertheless be kept within the reference factory values where possible.

## 6. Using the cultivator's draw pin

### 6.1 Draw pin use and structure

The CultiPack cultivator comes equipped with a draw pin suitable for towing trailed Tume seed drills and fertilizer seed drills equipped with a multi-purpose drawbar. See Figure 10.

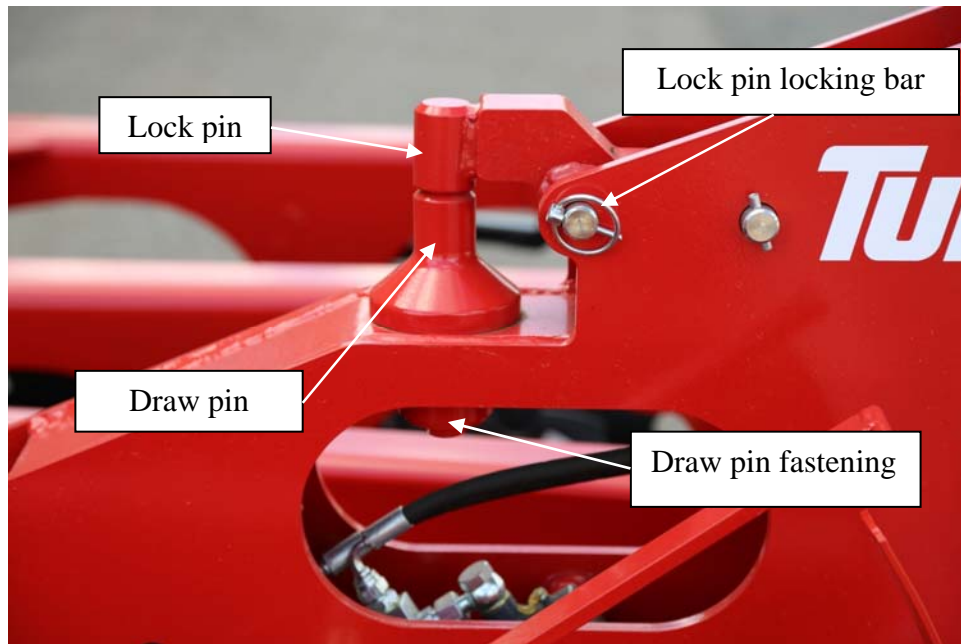


Figure 10. CultiPack cultivator's draw pin for trailed machines

### 6.2 Hitching a seed drill drawbar:

- Open the lock pin by removing its locking bar and lifting up the pin
- Drive the cultivator beneath the drawbar and raise the cultivator with the lifter so that the cultivator's draw pin slots into the drawbar ring
- Pull down the lock pin and secure the coupling with the locking bar
- Connect the seed drill's hydraulic hoses and lighting and electronics cable
  - Position the cables and hoses so that they will not be damaged during operation of the combined machine units

### 6.3 Unhitching a seed drill from the cultivator:

- Park the seed drill on a level base and secure it in place. When parking, raise the drawbar high enough to enable the cultivator to be driven away from beneath it.
- Using the tractor's hydraulics, release the pressure from the seed drill's lifting cylinders. If the machine has a hydraulic drawbar, leave it at a suitable height
  - If the seed drill's drawbar is single-functional, lock the cylinder using the cylinder cock
- Disconnect the hydraulic hoses and lighting and electronics cables
- Raise the cultivator so that the draw ring of the seed drill's drawbar does not force up the lock pin of the cultivator's draw pin
- Remove the lock pin's locking bar and lift up the pin
- Lower the cultivator and drive it out from beneath the drawbar
- Pull down the lock pin and fasten the locking bar in place



**Observe extreme caution when hitching and unhitching trailed machine units from the cultivator's draw pin!**

**Never go beneath the structures raised on hydraulics. Use mechanical supports if necessary.**

**When working between the tractor and the cultivator, the tractor must be parked with the hand brake engaged and the engine off.**

**Make sure that there are no unauthorised people in the danger area of the machine or in the tractor cab during hitching and unhitching!**

**Check the hitch regularly. It is strictly forbidden to operate the machine with a non-secure hitch. Worn or damaged parts must be replaced immediately.**

## **6.4 Working load limits of the draw pin**

The draw pin is intended for towing Tume seed drills and fertilizer seed drills that are equipped with a multi-purpose drawbar.

### **Working load limits at the end of the seed drill drawbar:**

Tensile load backwards at a 0–45 degree lateral angle:	100 kN
Tensile load forwards at a 0–45 degree lateral angle:	50 kN
Downward load:	50 kN
Upward load:	1 kN



**Exceeding the above-mentioned working load limits is hazardous and strictly forbidden.**

## **7. Operating the cultivator**

### **7.1 Transferring the cultivator**

The cultivator can be transferred either on its own wheels or raised on the tractor's lifter. **If a seed drill is connected to the cultivator, however, the cultivator must be transferred on its own support wheels.** During transfer, the cultivator discs must be fully raised. The discs are raised using the tractor's hydraulics and the cultivator's dual-function cylinder.

The maximum allowable transfer driving speed is 30 km/h. Always lower the speed as necessary on uneven terrain and in accordance with the prevailing conditions.

**Follow the safety instructions given in this manual concerning machine transfer and tractor front axle loading!**

The cultivator must be sufficiently cleaned before transfer from the work site onto public roads and to other public areas. Mud and other debris falling from the unit can be hazardous to other road users!

**N.B.! Always raise the cultivator on the lifter before reversing!**

## 7.2. Tilling

The CultiPack cultivator can be used solo or, using a Tume multi-purpose drawbar, in combination with a Tume seed drill or fertilizer seed drill to enable both seedbed preparation and sowing in a single pass.

Begin by setting the maximum tilling depth (working depth) as described above in this manual.

The set working depth can be steplessly reduced hydraulically via the cab during tilling if necessary.

A suitable cultivator working speed without a seed drill is 10-15 km/h, or 8-12 km/h with a trailed seed drill.

During operation, let the cultivator run on its own wheels, also during end turns. The cultivator's hinged support wheels can accommodate sharp turning angles. See Figure 11.

If necessary, raise the cultivator discs using the cultivator and tractor hydraulics.

Choose an appropriate working depth. For seedbed preparation the working depth must not exceed the sowing depth



Figure 11. Hinged support wheels allow end turns without raising the cultivator

### N.B.!

- **The cultivator must always be raised on the lifter before reversing.**
- **The cultivator discs must not contact the ground when reversing!**
- **Raise the cultivator discs also when traversing large stones or other obstacles!**



## 8. Operating the cultivator in combination with a Tume CultiPlus hybrid cultivator

The Tume CultiPack cultivator serves as a module of the Tume CultiPlus hybrid cultivator. CultiPlus is specially designed to replace ploughing with a lighter soil preparation. The first module in the hybrid consists of a ground-breaking coulter knife section.

The CultiPack module is hitched to the rear frame of this first section via a 3-point hitch. Detailed instructions on hitching and operation are provided in the Tume CultiPlus hybrid cultivator operator's manual.

If the CultiPack cultivator unit is used as a Tume CultiPlus hybrid module, the rear wheels of the cultivator must be locked straight. A locking kit is available for this purpose as extra equipment.

## 9. Servicing, maintenance and repair of the CultiPack cultivator

### 9.1 Lubrication

The Tume CultiPack 3001 and 4001 cultivator models have a total of 31 and 41 grease nipples respectively. See Figures 12 – 15.

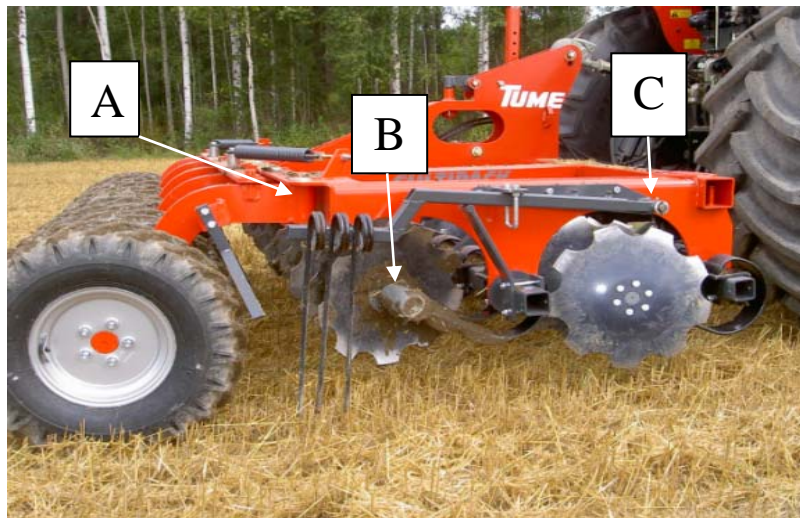
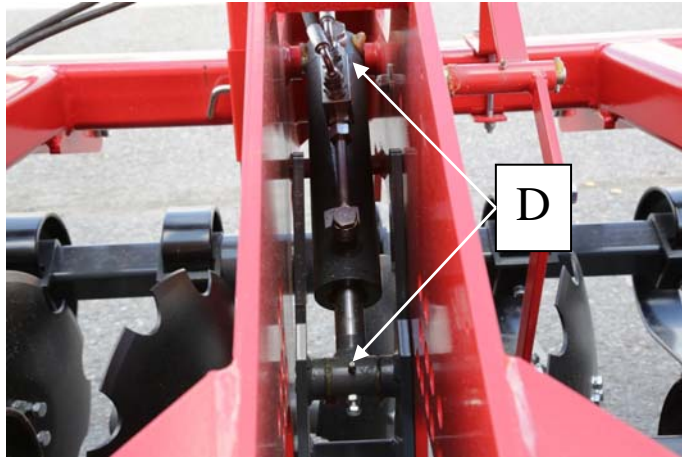


Figure 12. Lubrication points A-C

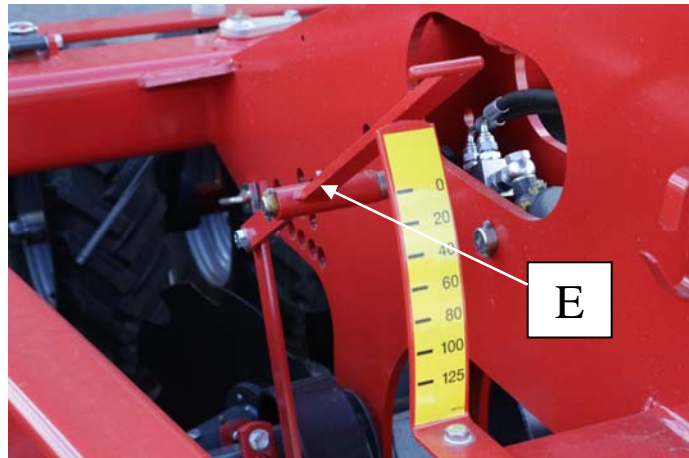
<b>Lubrication point</b>	<b>Lubricant</b>	<b>Maintenance interval (h)</b>	<b>nipple pcs*</b>
A = top of wheel support arm	Vaseline Multi-Purpose	25	5 – 7
B = disc bearings	Vaseline Multi-Purpose**	100	21 –29
C = Right furrow leveller arm	Vaseline Multi-Purpose	100	1
D = Hydraulic cylinder heads	Vaseline Multi-Purpose	100	2
E = Working depth indicator	Vaseline Multi-Purpose	100	1
F = Lifter joint	Vaseline Multi-Purpose	100	1
G = Lateral adjustment screw thread	Vaseline Multi-Purpose	50	thread

\* = Lower no. for CultiPack 3001 models, higher for 4001 models

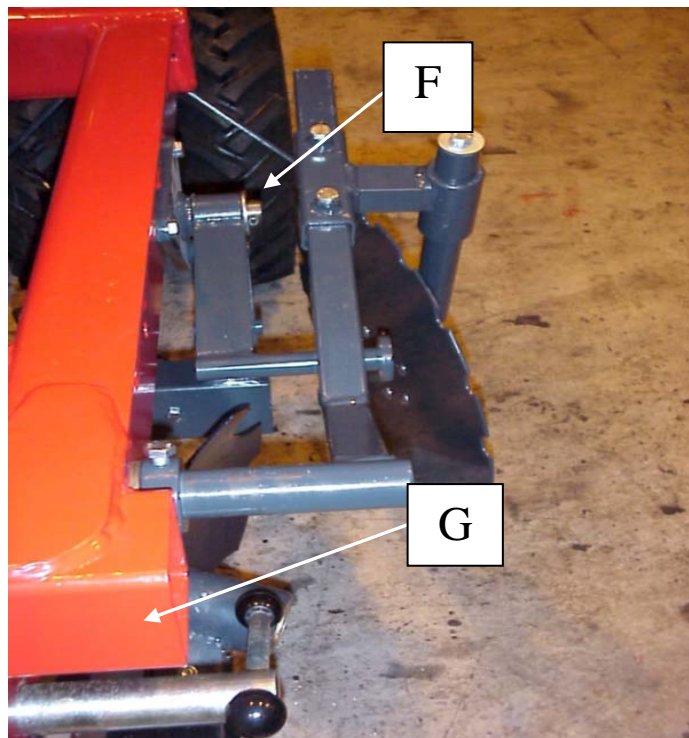
\*\* = Grade suitable for rolling bearings



**Figure 13. Lubrication point D, cylinder heads**



**Figure 14. Lubrication point E, working depth indicator**



**Figure 15. Left end lubrication points F - G**

## 9.2 Other servicing and maintenance

- Ensure correct air pressure of the support wheels (1.5–2.0 bar). Add or reduce pressure as necessary.
- Replace worn or damaged parts immediately. Use original Tume parts.
- Wash and grease the cultivator at the end of the operating season. Do not aim pressure washer jets at bearings (support wheel and disc bearings)
- Between operating periods, store the cultivator under cover and treat ideally with water-dispersing protective oil

## 9.3 Repairs

- Demanding cultivator repair work must be carried out by an authorised Tume service workshop.
- Traversing large stones or earth mounds etc, can bend or break the disc plate springs
  - Do not attempt to repair cultivator disc plate springs. Replace damaged springs with new original parts
  - Keep 1-2 spare springs in storage in case of spring damage

## 9.4. Structural alterations

The cultivator construction may not be altered without the prior written permission of Tume-Agri Oy. If the structure is altered without prior permission Tume-Agri Oy shall not be liable for the safety of the cultivator's construction and the manufacturer's warranty granted for the cultivator will be voided.

## 10. Technical specifications

<b>Model</b>	<b>CultiPack 3001</b>	<b>CultiPack 4001</b>
Working width, mm	3000	4000
Transport width, mm	3000	4000
3-point hitch	Category 2	
Power demand kW/hp (max. working depth)	59/80	80/10
Weight with standard equipment, approx. kg	1270	1710
Depth adjustment range, mm	0...120	
Coulter disc diameter, mm	455	
No. of coulter discs	21	29
Coulter disc bearings	tapered roller bearing	
Coulter disc suspension	plate springs, steel	
Depth control while driving	standard equipment, hydraulic	
Disc cutting angle	according to working depth, automatically adjustable.	
No. of support wheels	10	14
Support wheel size and type	7.00-12 PR6 AS	7.00-12 PR6 AS
Alternative tyre size	685/190R-15	685/190R-15
Tyre pressure, bar	1,5 – 2,0	
Hydraulic PTO	1 kpl 2-toiminen	1 kpl 2-toiminen
Required hydraulic pressure	160	

## 11. Terms of warranty

Tume-Agri Oy grants a one (1) year warranty for Tume CultiPack cultivators.

The warranty enters into force from the date of delivery of the cultivator to the end customer. The scope of warranty does not cover damage or faults identified and claimed more than three years after the time of delivery of the product from the manufacturer's factory to the seller.

The warranty applies to identified material defects and factory defects. The warranty does not cover faults or damage caused by normal wear, carelessness or by improper use, installation or maintenance. The warranty also does not cover faults or damage due to use of the cultivator in exceptionally difficult or demanding conditions. Wearing parts such as coulter discs, hoses, rings, connectors, seals etc. are not covered by warranty.

Information regarding incidences of fault or damage must be notified immediately to the manufacturer or to the manufacturer's representative in order to determine whether the fault or damage is within the scope of warranty. If the manufacturer deems the fault or damage to be warrantable, the cultivator or part in question shall be returned to the factory for warranty repair. The following information must be included with the warranty repair delivery: machine type, serial number, verifiable date of delivery to the customer, owner's name and address, and the machine dealer's details.

Warranty compensation comprises the replacement of the damaged or faulty part with a new part. If the part has already been replaced with a new part, the machine dealer shall be compensated for the net factory price of the part. The dealer shall then provide due compensation to the end customer.

The warranty covers only the cost of parts. The customer is liable for all parts removal, installation and freight costs. The scope of warranty does not include warranty compensation claims valued at less than EUR 20.

The warranty will be voided if the cultivator construction is altered or if non-design equipment or non-original spare parts are added to the machine without the manufacturer's specified written consent.

If the first end customer sells the machine during the abovementioned warranty period the warranty shall lapse.

## 12. Notes

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# ***TUME-AGRI OY***

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