

Weedy stocks?
Difficult lifting conditions?
Harvest what has grown - with the
HOLMER instructions for optimising the
quality of the lifting process.



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Demands



The requirements for beet harvesting and loading have changed in recent years:

- ▶ Expansion of organic sugar beet cultivation
- ▶ Climatic change (dry summer months and thus inhomogeneous populations)
- ▶ Increasing reduction in the use of herbicides in sugar beet cultivation

Especially stands with a high proportion of arable weeds that cause problems again and again during the harvest:

- ▶ Difficult cleaning of long structured weeds which increase risk of clogging due to additional plant material
- ▶ Often small beets that have special requirements for harvesting (see HOLMER information "Small beets - dry conditions").
- ▶ Increased risk of beet injuries due to more intensive cleaning performance



Examples of different stocks

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Weedy stock



Dead leaf

Different conditions:

- ▶ Weedy stock
- ▶ Dead leaf lies on the ground and lateral new shoots on the beets
- ▶ Difference in time of day and moisture content in weed (dew makes cleaning difficult)
- ▶ Small or large beets with cabbage trimmings

Tips for optimal adjustment of the **topper**



The topper is used to mulch the beet leaf and weed and place them between the rows (integral).

The following measures can be helpful if there is a lot of weed:

- ▶ Lowering deeper
- ▶ Increase topper speed
- ▶ Use leaf spreader (optional: only mounted on HS-KO or Kos-Ko)

The following effects are achieved:

- ▶ By deeper mulching weed and leaf are cut off deeper
- ▶ A higher speed of the topper shaft means that woody parts of the weeds are better sucked in and beaten off or crushed.
- ▶ Lateral ejection reduces weeds in the crop that have to be cleaned off (long-term storage!)



HS-KO Schlegler in weedy stock:
Integral storage between the rows

Hints for optimal adjustment of the **topper**



If the topper is used deeper than usual, the following effects may occur:

- ▶ High standing beets can be damaged.
- ▶ Loose topsoil is more strongly sucked in. This can lead to more dirt on the inside of the topper.
- ▶ Higher speeds increase fuel consumption during harvesting
- ▶ Wear on the topper knives increases



HS-KO Schlegler in the
weedy stock:
lateral ejection via leaf spreader

Tips for optimal adjustment of the DynaCut scalpers



The basic setting on the DynaCut should be set to a dimension of minus 5 mm.

For the basic setting, the scalpers must lie against the lower stop (Lifter unit lifted and secured). The scalpers comb should be set 5 mm below the bottom edge of scalpers knife.



A sharp scalpers knife is required to achieve good head quality.

The scalpers knives can be sharpened on the upper side. When sharpening, it is essential to ensure that the entire surface is always machined.

Tips for optimal adjustment of the DynaCut scalpers

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Measures:

- ▶ Close the end cap as far as necessary, adjust the distance between comb and knife if necessary (minus 5 mm).
 - ▶ The preload pressure of the springs must allow dynamic movement of the DynaCut.
 - ▶ Sliding of the scalpers can be prevented in such a way
- ▶ Pay attention to sharp scalpers

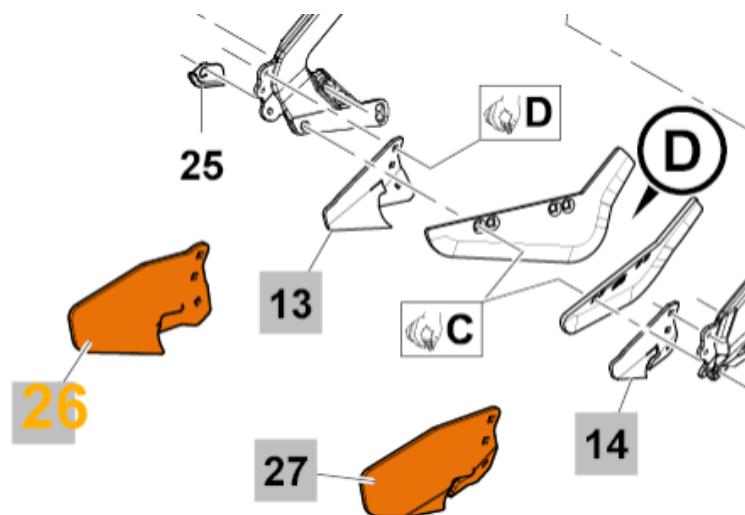
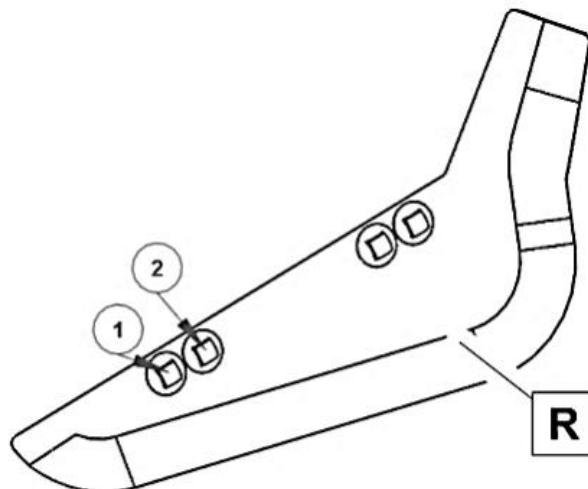


Tips for optimal adjustment of the HR lifter unit

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When lifting up heavily weedy stocks, blockages can occur on the lifter aggregate due to woody or winding accompanying herbs.

- ▶ Screw on the share pair in the front position (2) for large beets.
 - ▶ Larger distance between share pair and 1st lifting roller
- ▶ Additional share extension possible:
 - ▶ Better introduction of the weeds into the share
 - ▶ Cleaning at the roller table
- ▶ Increase vibration share



Special equipment for extreme conditions:
Extension right: 1203047250 (pos. 26)
Extension left: 1203047251 (pos. 27)

Tips for optimum adjustment of the HR lifter unit - harvesting depth

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The EasyLift that was developed by HOLMER automatically takes over the depth control of the individual share bodies so that each beet can be lifted at the optimum depth at all times.

Measures for heavily weeded conditions:

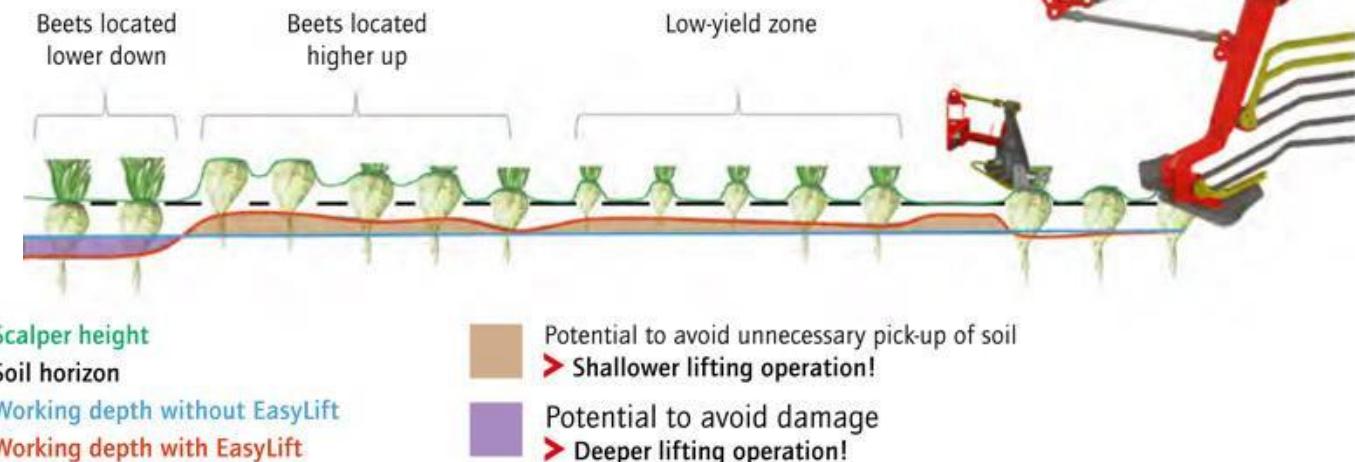
- ▶ Reduce working depth of EasyLift and lift as flat as possible
- ▶ Increase vibration share speed for a vibrating effect
- ▶ Caution: If the depth of the harvest is reduced, root fracture may occur!



Note:

- ▶ Tests have shown that harvesting with EasyLift causes 8.5 % less earth movement. This is up to 5.4 tonnes of soil per hectare, which requires less cleaning compared to the standard harvesting method.
- ▶ In addition, the system automatically adjusts the depth of harvesting during this time a total of 2,600 times per hectare. A significant relief for the.

EasyLift 
Die neue Leichtigkeit des Rodens.



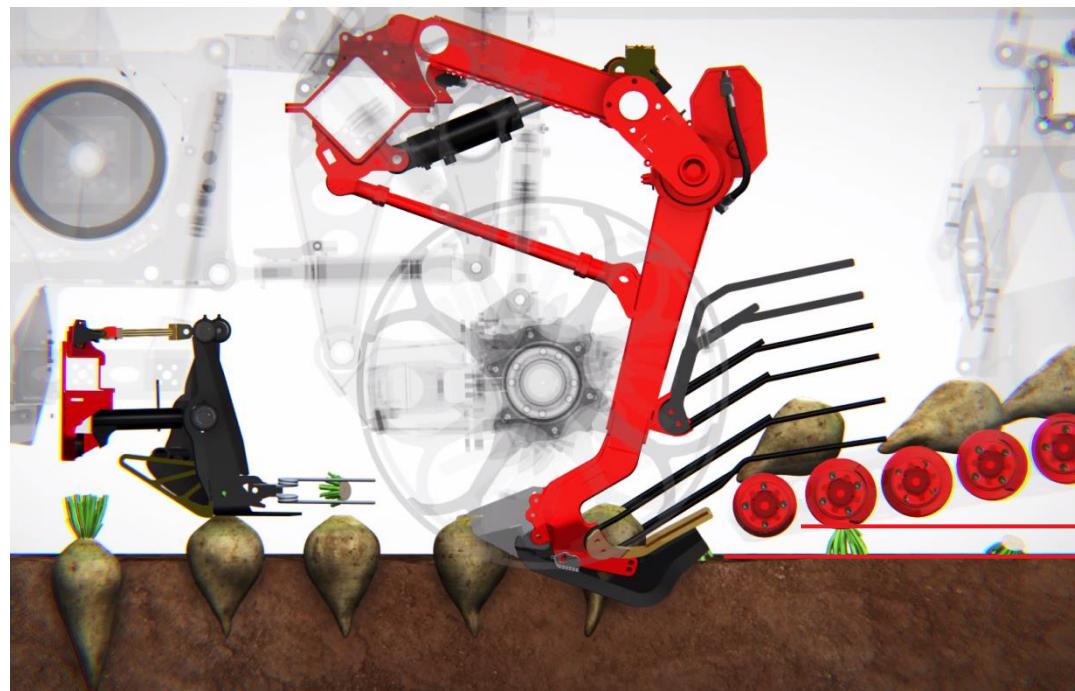
Tips for optimum adjustment of the HR lifter unit – roller speed



When lifting up heavily weedy stocks, blockages can occur on the lifter aggregate due to woody or winding accompanying herbs.

Several measures can be taken to prevent this:

- ▶ Adapt the roller unit to the crop with the aid of forced infeed:
 - ▶ Small beets: lower roller speed
 - ▶ Big beets: higher roller speed
- ▶ Adjust the roller speed only as low as necessary.
- ▶ Principle: As deep as necessary, as high as possible!



Increase distance if
possible

Tips for optimum adjustment of the HR clearing unit - Speed of lifting rollers



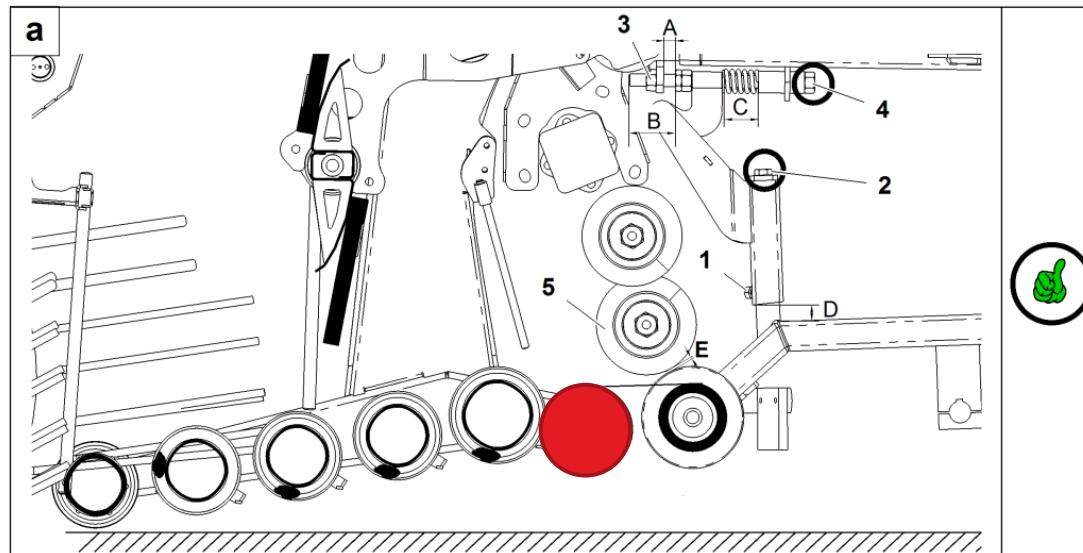
The speed of the lifting rollers influences the beet stocking on the rollers as well as the conveying volume.

Measures:

- ▶ Increase the speed of the lifting rollers in order to achieve a higher conveying speed.
- ▶ Activate the pinch roller (last rode roller) for better weed cleaning
- ▶ Reduce driving speed under certain circumstances

Note:

- ▶ A more intensive cleaning increases the risk of damage to the beets.



Activating the Pinch Roller

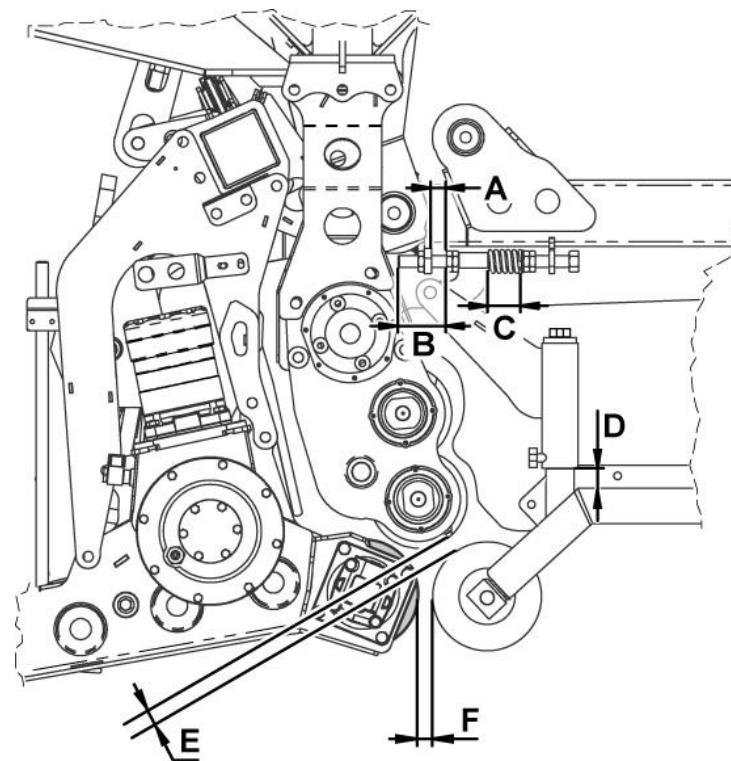
Note: When the harvester lifted, the last lifting roller always runs in synchronism with the remaining rollers, even when the pinch roller is activated.

Tips for optimum adjustment of the transfer web

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- ▶ Check distance between last lifting roller and transfer-web belt for correct setting (see table).
- ▶ By weeded stocks, increase the distance slightly (only for large beets!).
 - ▶ Make use of the possibility of weed separation

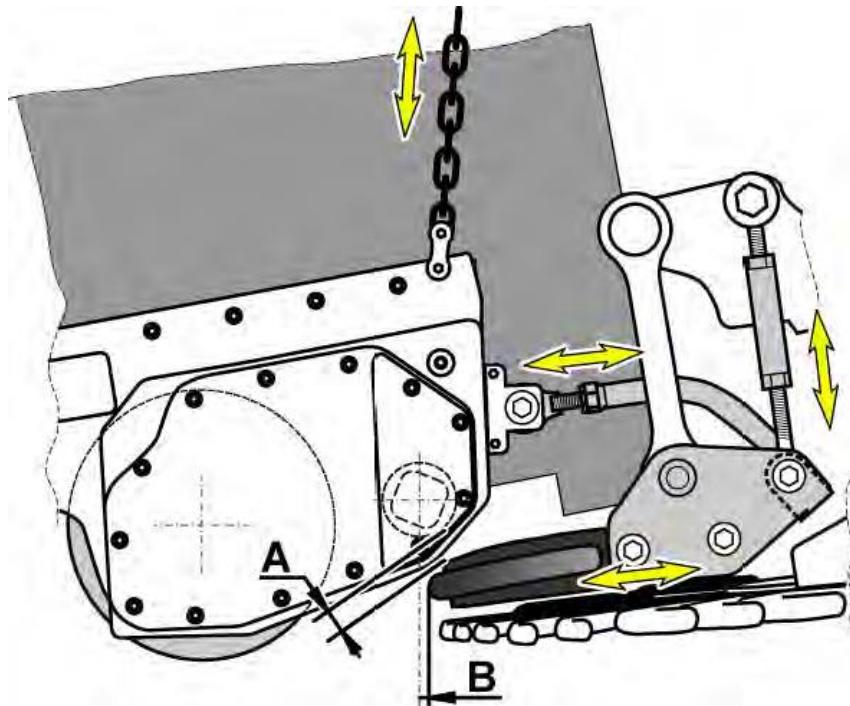
Position	Default in mm
A	25
B	80
C	55
D	25 +5
E	10 +5
F	15



Tips for optimum adjustment of the transfer web

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- ▶ Losses often occur at the transition from transfer web to 1st turbines. Here it helps to make or check the correct settings.

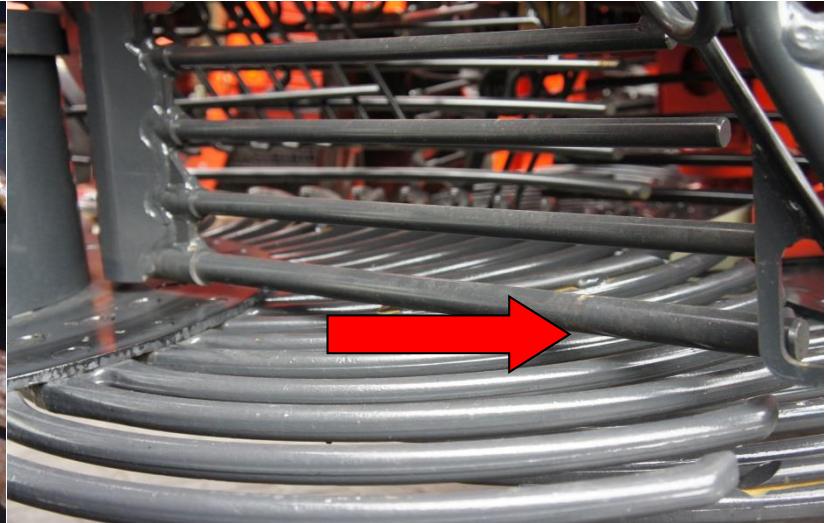


- ▶ Lower the harvester completely (working position).
- ▶ Adjust the distance between the transfer web and the turbine and the spring steel bow using the turnbuckle on the rear chain.
- ▶ The distance height (value A) from the transfer web square roller to the spring steel bow on the 1st turbines should be approx. 30 mm.
- ▶ Place the spring steel bow on the first 1st turbines forward until it is halfway under the square roller (value B).

Tips for optimal adjustment of the turbines

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- ▶ Place the inner grids on the 1st and 2nd turbines downwards so that the driving tine does not touch.



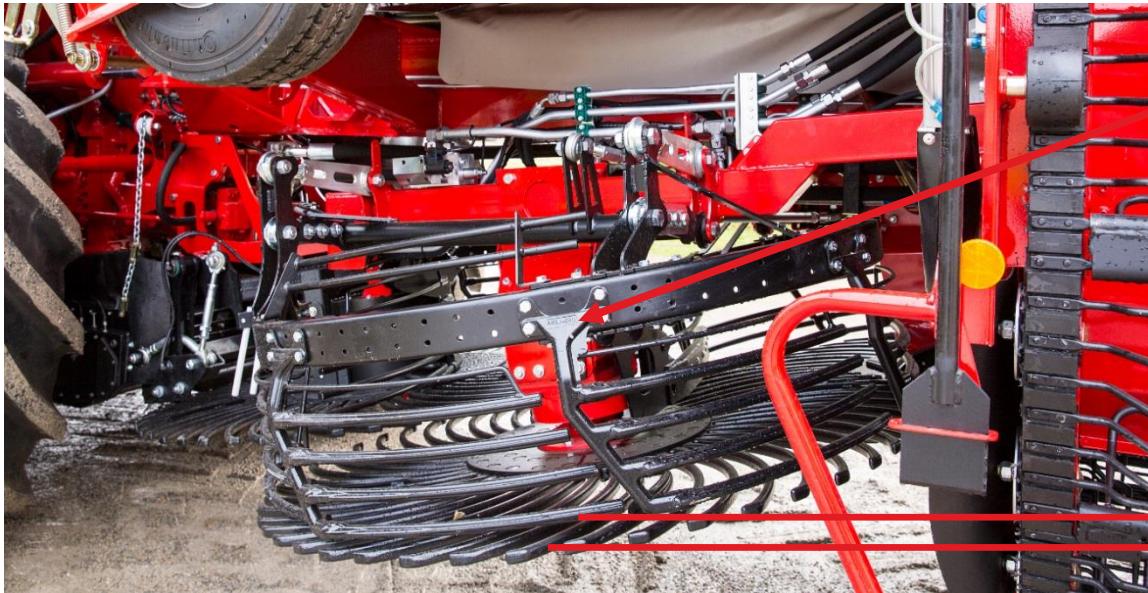
- ▶ General increase of turbines speed
 - ▶ Small beets do not fall through between the turbines tines (turbines speed min. 30-40 %).
 - ▶ More intensive cleaning and higher flow rate due to higher rotational speed
- ▶ Setting the different turbines speeds of the individual turbines
 - ▶ Creates movement in the extracted beets. This makes it easier to convey and clean the herbage contained in the beets to the outside.

Note:

- ▶ Spring tine segments clean beet more intensively. Root fracture and superficial damage can increase as a result.

Tips for optimum adjustment of the gaide rails

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Equip turbines with spring tine segments if necessary.



Increase distance if possible

- ▶ Open the gaide rails further in order to be able to clean dry leaves and weeds or stems.
- ▶ If necessary, use spring tine segments (quick-change kit) for large beets.

Note:

- ▶ Spring tine segments clean beet more intensively. Root fracture and superficial damage can increase as a result.

Unloading

For an additional cleaning effect during unloading, the Terra Dos sugar beet harvesters are equipped with a so-called cleaning or transfer shaft. Here, soil and loose stalk parts can also be cleaned off.

With the three-axis Terra Dos T4-40, the centrally positioned unloading belt also ensures uniform, continuous feeding of the entire belt. The beets thus form an even mat on the entire belt and can take full advantage of the sieve effect of the belt during unloading.

Measures:

- ▶ Reduce scraper floor speed
- ▶ Increase unloading belt speed
- ▶ Feed on beet on the unloading belt is reduced

Note:

- ▶ This means that there are fewer beets on the unloading belt.
- ▶ More intensive cleaning possible.
- ▶ The risk of beet injury increases.

Rental plant:

- ▶ If the beets are loaded promptly, the width of the beet heap can be reduced somewhat → a lower flow of beets in the Terra Felis enables more intensive cleaning, especially if there is a lot of weed in the beets.



Communication



Not only technical settings and driving skills are important during the beet harvest. The consultation with the beet grower is also of decisive importance - especially for crops that are difficult to grub up due to high weed stocking.

- ▶ Discuss options and risks with the grower.
 - ▶ A more intensive cleaning of the weed can cause a higher risk of damage to the beets.
 - ▶ Diesel consumption and wear costs can be higher than normal.
- ▶ Make pictures of the stock for documentation.
- ▶ Optional EasyHelp 4.0: Enter a note about the crop in "farmpilot".



We are here for you!



► You made the right choice:

The correct setting of the digging unit and cleaning is crucial when harvesting weeded sugar beet stands. It is important to find the right balance between weed removal and avoidable beet damage. The patented single row depth guide HOLMER EasyLift supports and relieves you decisively at this point.

► Admittedly:

Under difficult conditions, wear is higher. However, you shouldn't save on the wrong end here, because only a well-equipped and adjusted machine can harvest what has grown.

► Any more questions? Your local HOLMER service partner will be happy to help you.

► HOLMER customer service in Eggmühl is always there for you!

Free 24-hour hotline:

+49 (0)9451 - 9303 3900





Much success and good luck with the
2019/20 campaign!



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