

6. Tests and settings

5. Enter value for "Vehicle moves too far right" in the terminal

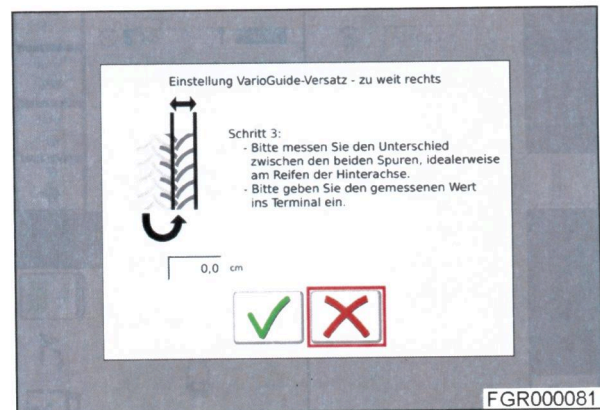


Fig. 11

6.1.7 Determination and correction of implement offset

This is the correction, by means of software, of the implement offset that arises due to:

- Mechanical production deviation of the implement
- Design-related crooked pulling of the implement (e.g. disc harrow etc.)

NOTE: The track guidance system controls the tractor, not the implement.

NOTE: With varying ground conditions (change between light and heavy soils), it may be, particularly in the case of implements with a large working width, that crooked pulling occurs (wayline deviation), and in rare cases the machine may sway. Purely for physical reasons, any adjustment/correction by the track guidance system is possible only to a limited extent.

NOTE: Depending on the situation and preference, use method 1 **and/or** method 2.

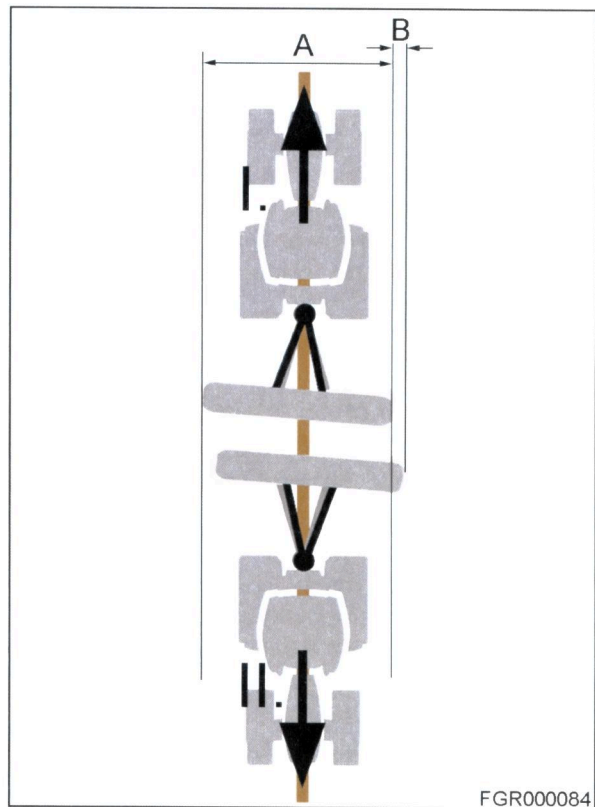
6.1.7.1 Determination and correction of the implement offset – method 1

Before starting the procedure

- Implement/implement combination adjusted in accordance with manufacturer's instructions
- Depending on the implement and application, lower linkage stabiliser open/closed
- Front axle is correctly ballasted
- Steering sensitivity is adjusted in the Steering Settings menu
- Left and right tyre pressures equal
- As far as possible, a level, evenly worked field.
- The most accurate correction signal available is set
- Track guidance system fully booted, i.e. maximum possible number of bars for location and correction signal

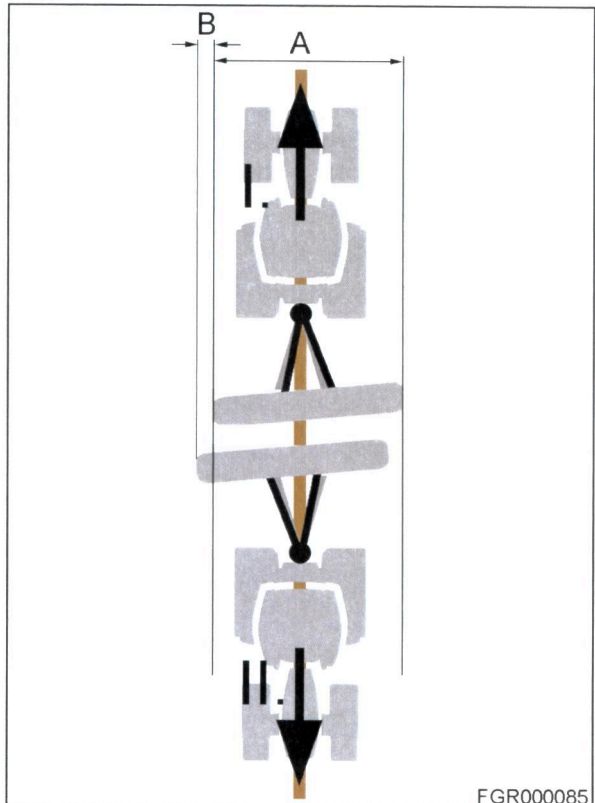
Procedure

1. Record A-B wayline
2. (I.): Drive for about 150 m in one direction with automatic track guidance activated and the implement lowered
3. After 150 m, raise the implement and continue driving for about 25 m with the implement raised so that the tractor tyre impressions remain visible
4. (II): Turn vehicle and approach on the same track (profile to profile)
5. Lower implement
6. Activate automatic track guidance
7. Drive about 50-100 m
8. Stop the tractor and measure the overlap **on the left or right**
 - Overlap on the left side of the tractor: **subtract** $B / 2$ from center distance (**K**)
 - Overlap on the right side of the tractor: **add** $B / 2$ to center distance (**K**)



FGR000084

Fig. 12 Implement offset left



FGR000085

Fig. 13 Implement offset right

9. Overlap on the **left** side: calculate input value (K) and enter in the terminal

Example: Implement width 6m, measured overlap (B) left of 0.40 m

==> Implement offset = $B / 2 = 0.40 \text{ m} / 2 = 0.20 \text{ m}$

==> Input value (K) = working width / 2 - implement offset = $6\text{m} / 2 - 0.20 \text{ m} = 3 \text{ m} - 0.20 \text{ m} = \mathbf{2.80 \text{ m}}$

- (I) Input of implement name
 (J) Input of attachment type and position (front/rear)
 (K) Input of center distance
 (L) Input value for track guidance:

- From the catch hooks (3-point attachment) to the center of the implement
- From the attachment point (implement attached) to the center of the implement

- (M) Input value for marking the worked surface:

- From the catch hooks (3-point attachment) to the end of the implement
- From the attachment point (device attached) to the end of the implement

- (N) Enter the working width

10. Overlap on the **right** side: calculate input value (K) and enter in the terminal

Example: Implement width 6 m, measured overlap (B) on right of 0.40 m

==> Implement offset = $B / 2 = 0.40 \text{ m} / 2 = 0.20 \text{ m}$

==> Input value (K) = working width / 2 + implement offset = $6\text{m} / 2 + 0.20 \text{ m} = 3 \text{ m} + 0.20\text{m} = \mathbf{3.20 \text{ m}}$

- (I) Input of implement name
 (J) Input of attachment type and position (front/rear)
 (K) Input of center distance
 (L) Input value for track guidance:

- From the catch hooks (3-point attachment) to the center of the implement
- From the attachment point (implement attached) to the center of the implement

- (M) Input value for marking the worked surface:

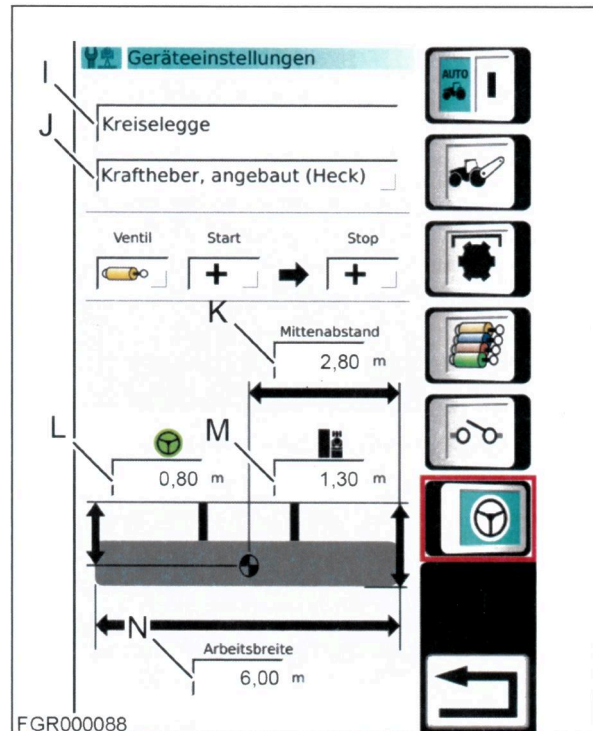


Fig. 14 Implement offset left

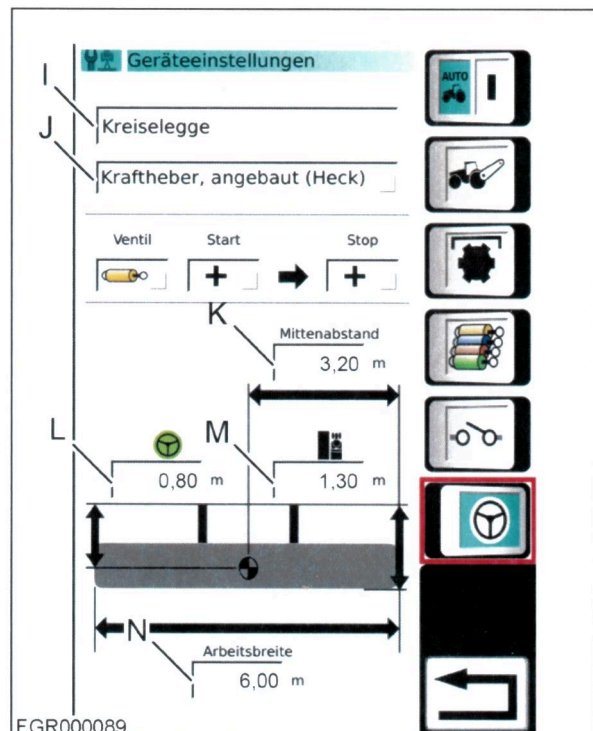


Fig. 15 Implement offset right

- From the catch hooks (3-point attachment) to the end of the implement
 - From the attachment point (device attached) to the end of the implement
- (N) Enter the working width

Result of the procedure

NOTE: Check setting and if necessary determine setting value (K) again and enter

6.1.7.2 Determination of the implement offset – Method 2

Before starting the procedure

- Implement/implement combination adjusted in accordance with manufacturer's instructions
- Depending on the implement and application, lower linkage stabiliser open/closed
- Front axle is correctly ballasted
- Steering sensitivity is adjusted in the Steering Settings menu
- Left and right tyre pressures equal
- As far as possible, a level, evenly worked field.
- The most accurate correction signal available is set
- Track guidance system fully booted, i.e. maximum possible number of bars for location and correction signal
- Wayline distance entered or implement created/selected in the terminal on the implement side

Procedure

1. Record A-B wayline
2. (I.): Drive for about 150 m in one direction with automatic track guidance activated and the implement lowered
3. Determine working width **A**
4. (II.): Turn vehicle and drive about the same distance on the adjacent right track with automatic track guidance activated and the implement lowered
5. Stop the tractor and determine the total working width **B**
 - $A + A > B$ ==> Implement offset left: **subtract** $C / 2$ from center distance (input value (K) in terminal)
 - $A + A < B$ ==> Implement offset right: **add** $C / 2$ to center distance (input value (K) in terminal)

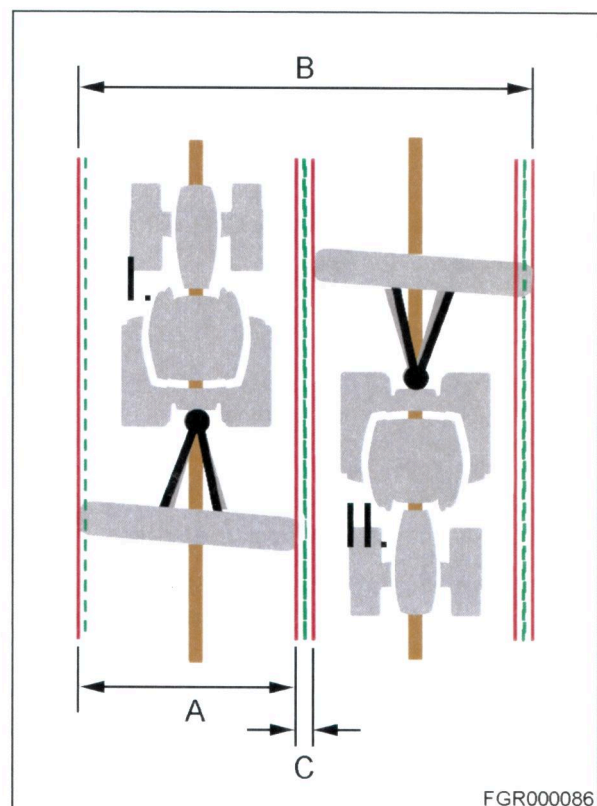


Fig. 16 Implement offset left

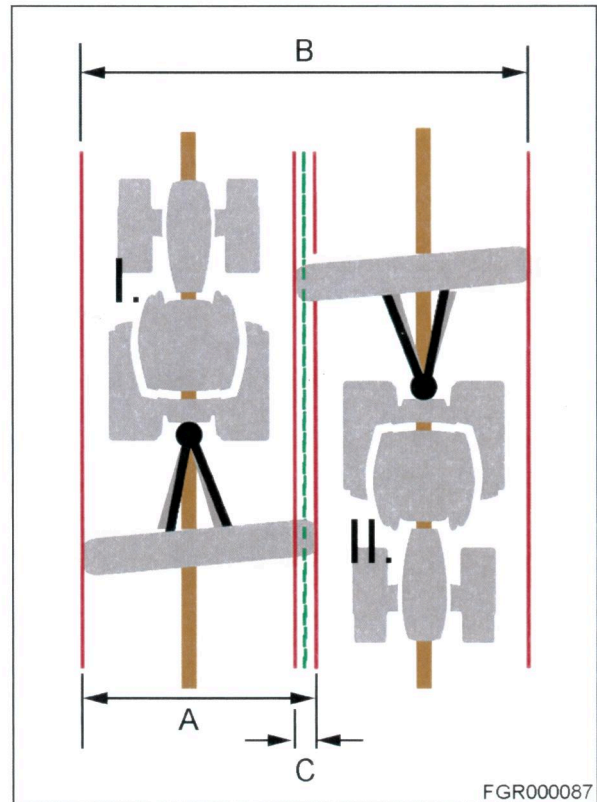


Fig. 17 Implement offset right

6. Implement offset **left**: Calculate input value **(K)** and enter in the terminal

Example: Measured working width A = 6 m, measured total working width B = 12.40 m:

$$C = B - (A + A) = 12.40 \text{ m} - (6 \text{ m} + 6 \text{ m}) = 12.40 \text{ m} - 12 \text{ m} = 0.40 \text{ m}$$

$$\Rightarrow \text{Implement offset} = C / 2 = 0.40 \text{ m} / 2 = \underline{0.20 \text{ m}}$$

$$\Rightarrow \text{Input value (K)} = \text{working width} / 2 - \text{implement offset} = 6 \text{ m} / 2 - 0.20 \text{ m} = 3 \text{ m} - 0.20 \text{ m} = \underline{2.80 \text{ m}}$$

- (I) Input of implement name
- (J) Input of attachment type and position (front/rear)
- (K) Input of center distance
- (L) Input value for track guidance:
 - From the catch hooks (3-point attachment) to the center of the implement
 - From the attachment point (implement attached) to the center of the implement
- (M) Input value for area marker of worked surface:

- From the catch hooks (3-point attachment) to the end of the implement

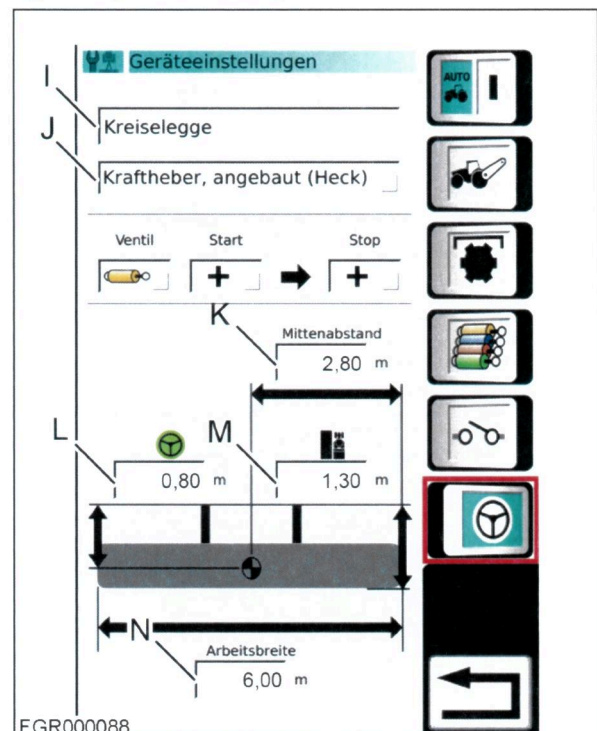


Fig. 18 Implement offset left

- From the attachment point (device attached) to the end of the implement
- (N) Enter the working width
7. Implement offset **right**: calculate input value (K) and enter in the terminal

Example: Measured working width A = 6 m, measured total working width B = 11.60 m:

$$C = (A + A) - B = (6 \text{ m} + 6 \text{ m}) - 11.60 \text{ m} = 12.00 \text{ m} - 11.60 \text{ m} = 0.40 \text{ m}$$

$$\Rightarrow \text{Implement offset} = C / 2 = 0.40 \text{ m} / 2 = 0.20 \text{ m}$$

$$\Rightarrow \text{Input value (K)} = \text{working width} / 2 + \text{implement offset} = 6 \text{ m} / 2 + 0.20 \text{ m} = 3 \text{ m} + 0.20 \text{ m} = \mathbf{3.20 \text{ m}}$$

- (I) Input of implement name
 (J) Input of attachment type and position (front/rear)
 (K) Input of center distance
 (L) Input value for track guidance:

- From the catch hooks (3-point attachment) to the center of the implement
- From the attachment point (implement attached) to the center of the implement

- (M) Input value for area marker of worked surface:

- From the catch hooks (3-point attachment) to the end of the implement
- From the attachment point (device attached) to the end of the implement

- (N) Enter the working width

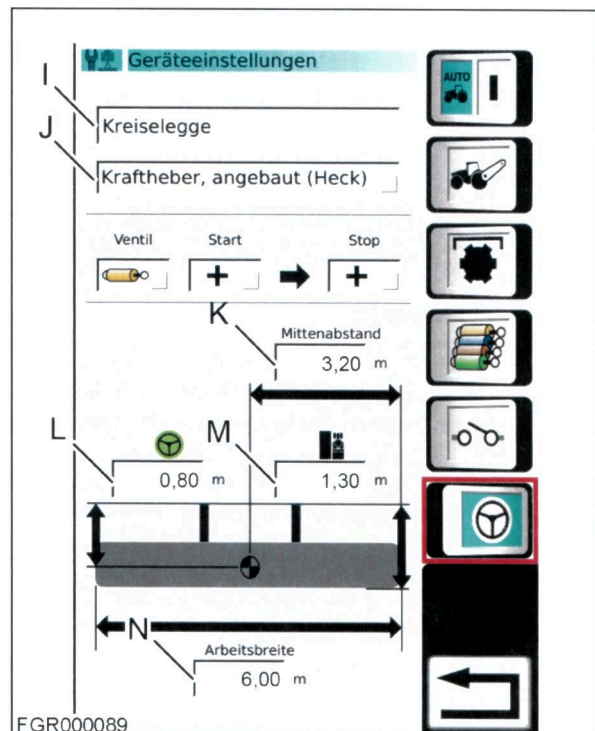


Fig. 19 Implement offset right

Result of the procedure

NOTE: Check setting and if necessary determine setting value (K) again and enter

6.1.8 Mechanical check of the front axle clearance, the steering angle sensor and the steering system

If the automatic way-line guidance is activated and the tractor does not follow the way-line, only moves slowly along or lurches along the way-line etc., there may be several causes, for example:

- Gyro calibration required
- Calibration of the steering angle sensor (2401) is not accurate enough (during calibration, the front wheels were not exactly in the center position)
- Steering valve is defective or
- Steering valve calibration (2403) required
- Steering sensitivity settings in the steering settings menu
- Steering angle sensor clearance
- Clearance in the front axle bearing