



# WS400 series, Universal Bracket. Also included accessories Template and Pointer.

Default Operator's manual

2-10

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## **Product description**

The WS400series universal bracket attaches the track of a wall saw to the material to be cut or to an adjacent surface.

**Note** The procedures in this operator's manual include 2 accessories, a template and a pointer.

## **Product overview**

#### Intended use

The WS400 series universal bracket is for professional operation only. Use the universal bracket when a standard mounting bracket is not applicable. Examples of intended use are door sawing, angle sawing, stair sawing, or sawing without full support.



- 1. Clamps, here in the position for angle sawing
- 2. Mounting hole for the clamps for other sawing tasks
- 3. Friction screw of the top joint
- 4. Bottom joint
- 5. Leveling screws
- 6. Adjustment spline of the mounting bracket
- 7. Graduation
- 8. Pointer (accessory)
- 9. Template (accessory)
- 10. Operator's manual

## **Product liability**

As referred to in the product liability laws, we are not liable for damages that our product causes if:

- the product is incorrectly repaired.
- the product is repaired with parts that are not from the manufacturer or not approved by the manufacturer.
- the product has an accessory that is not from the manufacturer or not approved by the manufacturer.
- the product is not repaired at an approved service center or by an approved authority.

## Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the manual.



**WARNING** Used if there is a risk of injury or death for the operator or bystanders if the instructions in the manual are not obeyed.

**CAUTION** Used if there is a risk of damage to the product, other materials or the adjacent area if the instructions in the manual are not obeyed.

**Note** Used to give more information that is necessary in a given situation.

## Assembly

## To attach the clamps

Attach the clamps differently for angle sawing and for other cutting tasks.

• For angle sawing, attach the clamps onto the mounting bracket as shown in the illustration.



• For other cutting tasks, attach the clamps onto the mounting bracket as shown in the illustration. Other sawing tasks include standard sawing, door sawing, stair sawing, or sawing without full support.



## To attach the pointer

 Push the pointer into the holes on one of the two empty sides of the mounting bracket. Make sure the distance (X) is 95 mm.



## Operation

## To use the template



**WARNING** There is a risk that the mounting bracket becomes loose if the anchoring bolt is not correct for the material. When you select an anchoring bolt, obey the instructions of the manufacturer. Use the template to help put the mounting bracket in the accurate position.

1. Align the template with the cut lines (A) on the material to be cut.



- 2. Make marks for the mounting bracket (B).
- 3. Make a mark in one of the anchoring bolt holes (C). If possible, make the mark in the hole that is nearest to the cut line.
- 4. Remove the template.
- 5. Drill a hole for an anchoring bolt.



6. Put the mounting bracket in position.



- 7. Align the mounting bracket with the marks.
- 8. Attach the mounting bracket with an anchoring bolt through the adjustment spline.

## To use the leveling screws

Use the leveling screws to help put the mounting bracket in the accurate position on a rough surface.

Attach the mounting bracket as shown in *To use the mounting bracket for standard sawing on page 4, To use the mounting bracket for door sawing on page 5, To use the mounting bracket for angle sawing on page 6, To use the mounting bracket for stair sawing on page 8, or To use the mounting bracket for stair for sawing without full support on page 9.* Before you tighten the anchoring bolt, turn the leveling screws of the mounting bracket to make it level.

## To use the mounting bracket for standard sawing



**WARNING** There is a risk that the mounting bracket becomes loose if the anchoring bolt is not correct for the material. When you select an anchoring bolt, obey the instructions of the manufacturer.

1. Make a mark for the cut line (A).



- Drill a mounting hole as shown in the illustration. Make the distance (Y) 135-165 mm or measure (X) to be 95 mm between the cutting line and the bracket.
- 3. Attach 1 mounting bracket with an anchoring bolt through the adjustment spline. Loosely tighten the anchoring bolt.
- 4. Make sure that the clamps of the mounting bracket are in the position for standard sawing as shown in *To attach the clamps on page 3*.
- 5. Attach the pointer to the mounting bracket.



- 6. Move the mounting bracket until the pointer touches the cut line. Make sure (X) is 95 mm.
- 7. Tighten the anchoring bolt.
- 8. Make sure that the friction screw of the top joint is loosely tightened.
- 9. Do steps 2-8 for the other mounting bracket.
- 10. Attach the track to the 2 mounting brackets.



11. Attach the saw to the track. Start to cut.

### To use the mounting bracket for door sawing



**WARNING** There is a risk that material falls onto the saw. Always cut in the given sequence.



**WARNING** There is a risk that the mounting bracket becomes loose if the anchoring bolt is not correct for the material. When you select an anchoring bolt, obey the instructions of the manufacturer.

**Note** It is necessary to use 4 mounting brackets for this procedure. It is necessary to use a pointer for this procedure.

**Note** The mounting bracket can be adjusted only in the direction of the adjustment spline. Make a decision if the precision of the width or the height of the door hole is most important.

1. Make marks for the cut lines (A), (B), (C), and (D).



- Drill the mounting holes (E), (F), (G), and (H) as shown in the illustration. If the precision of the width is most important, make the distances (I) 150 mm and (J) 115 mm. If the precision of the height is most important, make the distances (I) 115 mm and (J) 150 mm.
- Attach mounting bracket (K) in the mounting hole (E) with an anchoring bolt through the adjustment spline. Loosely tighten the anchoring bolt.

**Note** If the precision of the width is most important, make sure that the adjustment spline is in a horizontal position. If the precision of the height is most important, make sure that the adjustment spline is in a vertical position.

- 4. Make sure that the clamps of the mounting bracket are in the position for door sawing as shown in *To attach the clamps on page 3*.
- 5. Attach the pointer to the mounting bracket.
- 6. Move the mounting bracket until the pointer touches the cut line.
- 7. Tighten the anchoring bolt.
- 8. Make sure that the friction screw of the top joint is loosely tightened.
- 9. Do steps 3–8 for mounting brackets (L), (M), and (N) and mounting holes (F), (G), and (H).



10. Attach the track to mounting brackets (N) and (K).



- 11. Attach the saw to the track.
- 12. Cut (A). Cut as near the intersection of the cut lines (A) and (B) as possible.
- 13. Remove the track from mounting bracket (N).
- 14. Turn the track to mounting bracket (L).



- 15. Attach the track to mounting bracket (L).
- 16. Cut (B). Cut as near the intersection of the cut lines (B) and (C) as possible.
- 17. Remove the track from mounting bracket (K).
- 18. Do steps 14–17 for the cut lines (C) and (D). Cut as near the intersection of the cut lines as possible.

#### To use the mounting bracket for angle sawing



**WARNING** There is a risk that the cutting arm hits the material to be cut. Make sure that the cutting arm moves freely before you start the sawing operation.



**WARNING** There is a risk that the mounting bracket becomes loose if the anchoring bolt is not correct for the material. When you select an anchoring bolt, obey the instructions of the manufacturer.

**Note** The angle of the cut changes if the mounting bracket is put on the right side or the left side of the cut.

**Note** The mounting bracket can be adjusted only in the direction of the adjustment spline.

Note It is necessary to use a pointer for this procedure.

Note See table Dimensions for angle sawing on page 8.

- 1. Make a mark for the cut line.
- 2. Make sure that the clamps of the mounting brackets are in the position for angle sawing as shown in *To attach the clamps on page 3*.
- Use the graduation of the mounting bracket to adjust the angle of the top joint of the mounting bracket. Adjust the angle until it agrees with the correct sawing angle.



- 4. Tighten the friction screw to 70–120 Nm.
- 5. Attach the pointer to the mounting bracket.
- 6. Measure the distance between the pointer and the mounting bracket. Add 40–70 mm to the distance and make a mark for the mounting hole at this position.



- 7. Drill the mounting hole.
- 8. Attach 1 mounting bracket with an anchoring bolt through the adjustment spline. If the sawing angle is

an undercut, make sure that the mounting bracket tilts forward compared to the cut line. If the sawing angle is a slope, make sure that the mounting bracket tilts rearward compared to the cut line.

- 9. Make sure that the adjustment spline is perpendicular to the cut line. Loosely tighten the anchoring bolt.
- 10. Move the mounting bracket until the pointer touches the cut line.
- 11. Tighten the anchoring bolt.
- 12. Do steps 2–11 for the other mounting bracket.
- 13. Attach the track to the 2 mounting brackets.





14. Attach the saw to the track. Start to cut.

## Dimensions for angle sawing



A (°)	B [cm]	C [cm]				
		Blade (ø) [mm]				
		800	1000	1200	1600	
0	16.7	32.5	42.5	52.5	72.5	
5	17.6	30.9	40.8	50.8	70.7	
10	18.7	28.9	38.8	48.6	68.3	
15	19.9	26.7	36.4	46	65.4	
20	21.3	24.2	33.6	43	61.8	
25	23	21.5	30.5	39.6	57.7	
30	24.9	18.5	27.1	35.8	53.1	
35	27.2	15.3	23.5	31.7	48	
40	30	11.9	19.5	27.2	42.5	
45	33.4	8.3	15.4	22.5	36.6	

## To use the mounting bracket for stair sawing



**WARNING** There is a risk that the mounting bracket becomes loose if the anchoring bolt is not correct for the material. When you select an anchoring bolt, obey the instructions of the manufacturer.

Note It is necessary to use a pointer for this procedure.

1. Make a mark for the cut line (A).



- 2. Drill a mounting hole as shown in the illustration. Make the distance (B) 135-165 mm.
- 3. Attach 1 mounting bracket with an anchoring bolt through the adjustment spline. Loosely tighten the anchoring bolt.
- 4. Make sure that the clamps of the mounting bracket are in the position for stair sawing as shown in *To attach the clamps on page 3*.
- 5. Attach the pointer to the mounting bracket.



- 6. Move the mounting bracket until the pointer touches the cut line.
- 7. Tighten the anchoring bolt.
- Use the graduation of the mounting bracket to adjust the angle of the top joint of the mounting bracket. Adjust the angle until it agrees with the correct sawing angle.



- 9. Tighten the friction screw to 70-120 Nm.
- 10. Do steps 2–9 for the other mounting bracket.
- 11. Attach the track to the 2 mounting brackets.



12. Attach the saw to the track. Start to cut.

## To use the mounting bracket for sawing without full support



**WARNING** There is a risk that the mounting bracket that is attached to the floor moves. Be careful when you operate the saw.



**WARNING** There is a risk that the mounting bracket becomes loose if the anchoring bolt is not correct for the material. When you select an anchoring bolt, obey the instructions of the manufacturer. **Note** It is necessary to use a measure rod for this procedure.

1. Make a mark for the cut line (A).



- 2. Drill a mounting hole in the material to be cut as shown in the illustration. Make the distance (B) 135-165 mm.
- 3. Attach 1 mounting bracket with an anchoring bolt through the adjustment spline. Loosely tighten the anchoring bolt.
- 4. Make sure that the clamps of the mounting bracket are in the position for sawing without full support as shown in *To attach the clamps on page 3*.
- 5. Attach the pointer to the mounting bracket.
- 6. Move the mounting bracket until the pointer touches the cut line.
- 7. Tighten the anchoring bolt.
- 8. Make sure that the friction screw of the top joint is loosely tightened.
- 9. Attach the track to the mounting bracket.
- 10. Drill a mounting hole for the other mounting bracket in a surface that is perpendicular to the material to be cut.
- 11. Attach the mounting bracket with an anchoring bolt through the adjustment spline. Loosely tighten the anchoring bolt.
- 12. Make sure that the clamps of the mounting bracket are in the position for sawing without full support as shown in *To attach the clamps on page 3*.
- 13. Tilt the top joint of the mounting bracket until it is parallel to the material to which it is attached.



14. Do steps 5–9 for the other mounting bracket.



15. Attach the saw to the track. Start to cut.

Original instructions

