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PRODUCT AND MAINTENANCE MANUAL **BROBO HD STOP**



YOUR BROBO DISTRIBUTOR IS:		

- Precision Drilling Machines
 Tapping Machines
 Multi-Head Drills
 Tool Grinders
 - Tool Post Grinders Machine Vices Special Production Equipment ●
- ◆ Accessories
 ◆ Riveting Machines
 ◆ Pedestal Grinders
 ◆ Metal Cutting Saws
 ◆ Linishers

OPERATING MANUAL FOR BROBO GROUP BROBO HD STOP

TECHNICAL SPECIFICATION

CHAPTER 1: Handling & Installation

CHAPTER 2: Safety & Accident Prevention

CHAPTER 3: Main Functions & Operation

CHAPTER 4: Adjustment

CHAPTER 5: Maintenance & Troubleshooting





TECHNICAL SPECIFICATION

Brobo HD STOP Kit 3M

Stroke 2730 mm

• 9753000 Brobo HD Stop With Conveyor 3 m

Length
 Width
 Height
 Weight
 Weight

3.2 m

0.4 m

1.2 m

120 Kg



Width 0.12 m
 Height 0.6 m
 Weight 50 kg



Brobo HD STOP Kit 4.5M

Stroke 4230 mm

• 9754500 Brobo HD Stop With Conveyor 4.5 m

Length
 Width
 Height
 Weight
 4.7 m
 0.4 m
 1.2 m
 Weight
 180 Kg

• 9756310 Brobo HD Stop KIT 4.5 m

Width 0.12 m
 Height 0.6 m
 Weight 72 kg



_____ Brobo HD STOP Kit 6M __

Stroke 5730 mm

• 9756000 Brobo HD Stop With Conveyor 6 m

Length
 Width
 Height
 Weight
 Weight

6.2 m

0.4 m

1.2 m

230 Kg

9756320 Brobo HD Stop KIT 6 m

○ Width
 ○ Height
 ○ Weight
 0.12 m
 0.6 m
 94 kg





• 9701210

0	Length	3m
0	Width	0.289 m
0	Height	0.090 m
0	Weight	45.3 Kg
0	Pitch	150 mm
0	Roller Capacity	60kg eac



- Roller Quantity
 20
- o Roller load capacity is calculated on even weight distribution over the entire roller
- o Total load capacity is calculated on even weight distribution over the entire roller conveyor system

• 9704320

- o Conveyor Stand C8030
- Adjustable Length



• 9704320

o Pulley Assembly



- 9756440
 - Arm Assembly



• 9756210

o Rail 3m

- 9756230
 - o Rail 4.5m
- 9756250
 - o Rail 6m



o 25mm Heavy load Carrier



• 9756260

Stepper Motor

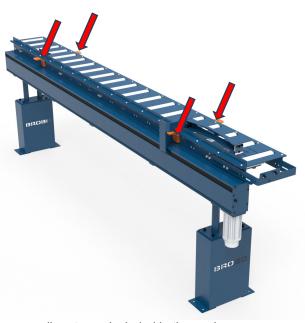




CHAPTER 1 – HANDLING AND INSTALLATION

- 1. The Brobo HD Stop must be <u>handled with care</u> during transport to avoid any damage.
- 2. Use the Lifting Points Provided.

Lifting Point Locations on Auto Length Stop



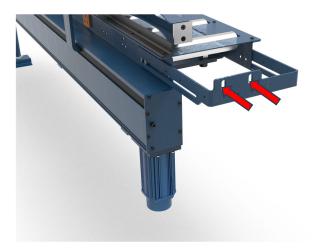
- 3. Before installation, ensure all parts are included in the package.
- 4. The conveyor stand must be securely fastened to the conveyor and anchored to the floor.



Anchor Holes at the Conveyor Stand

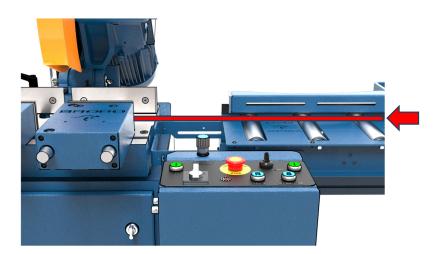


5. Use the adjustable connecting bracket to mount the Brobo HD Stop to the Cold saw.



Mounting hole locations - Adjustable

6. Ensure the conveyor is correctly <u>aligned/levelled</u> with the cutting machine before use.



- 7. Do not overload the conveyor beyond its specified weight limit.
- 8. Always handle the Brobo HD Stop with clean and dry hands.
- 9. Connect the Brobo HD Stop to the power supply
- 10. Test the Brobo HD Stop before use to ensure proper installation.
- 11. <u>Calibrate</u> the auto length stop to ensure accurate measurements related to the conveyor system. (refer to chapter 3)
- 12. Provide personnel with <u>training</u> on the use of the Brobo HD Stop

 Emphasise <u>safety procedures</u> and best practices for operating the Brobo HD Stop



CHAPTER 2 – SAFETY & ACCIDENT PREVENTION

2.1. Operation

All concerned must strictly adhere to ALL instructions, warnings, & accident prevention standards in this manual.

- 1. Wear appropriate personal protective equipment (PPE) when using the Brobo HD Stop
- 2. Keep hands and clothing away from the conveyor moving objects.
- 3. Disconnect the power source before making any mechanical adjustments to the Brobo HD Stop
- 4. Keep the work area clean and free from clutter to avoid tripping hazards.
- 5. Never reach over the conveyor while it is in operation.
- 6. Use caution when loading and unloading materials onto the conveyor.
- 7. Do not use Brobo HD Stop if you are tired, under the influence of drugs or alcohol, or not trained to operate them.
- 8. Do not allow untrained individuals to use the Brobo HD Stop.
- 9. Ensure the auto length stop is correctly calibrated and securely mounted to avoid accidents caused by inaccurate measurements or unexpected movements.
- 10. Always follow the manufacturer's instructions and recommendations for safe operation.



2.2. Advice for the Operator



Protective eyewear or goggles must be worn at all times while attending & operating the Brobo HD Stop.



Do not wear loose clothing with long sleeves & oversized gloves, bracelets, necklaces, or any other loose object. Long hair must be tied back or placed in a hair net.



Always disconnect the power supply to the machine before carrying out any maintenance work or adjustments. This includes cases of abnormal operations of the machine. Consult the Brobo Group Engineering Department in the country in which the machine was initially purchased.



This machine can start, move, and stop automatically. Keep hands and loose clothing clear of moving parts while operating. Moving parts can crush and cut. When used with a saw or other cutting equipment, bodily injury, and death may result if operated without safety guards on all machines. **Do not operate with guards removed**.



Always keep the workplace as clean as possible.

Remove equipment, tools, or any other objects from the cutting zone.



If any dangerous movement or process is creating further hazards, activate the emergency stop function immediately.



CHAPTER 3 – MAIN FUNCTION & OPERATION

The purpose of the BROBO HD STOP is to automate the process of controlling the cutting length of materials with accuracy, consistency, and efficiency in cutting operations and minimize errors that can occur with manual length control. This not only enhances the precision and quality of the cut materials but also streamlines production processes by reducing setup time and increasing overall productivity.

Brobo HD STOP Main Features:

- Eliminates the need for manual measurement, reducing human error and ensuring consistent, accurate results
- Programmable features enable operators to set specific cutting lengths, enhancing operational efficiency and adaptability to various production requirements
- Tolerance +/- 0.2

HMI Touch Screen

Main Menu



1. CALIBRATION

Calibration mode allows the operator to set/calibrate the length stop settings to align accurately with the actual physical dimensions of the material being cut.

This allows the system to make necessary adjustments to ensure that when a certain length is indicated or programmed, it accurately corresponds to the real-world dimensions of the material being processed.

2. LENGTH STOP MODE

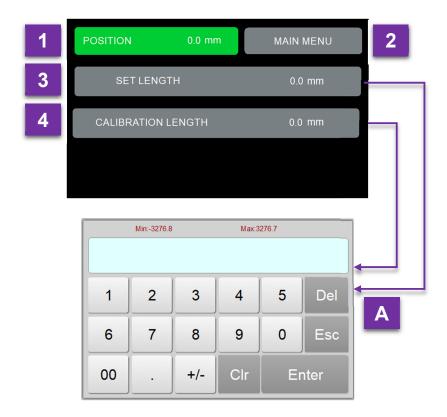
Length Stop Mode in the control panel refers to a feature that allows the operator to set specific lengths at which the length stop arm will automatically stop.

3. PROGRAM LIST

The Program List feature serves as a repository for storing and accessing pre-configured or frequently used settings for the length stop function.



1. CALIBRATION



1. Position

Displays the current position of the Length Stop. It is designed to track the real-time movement of the length stop.

2. Main Menu

Return to the Main Menu Screen

3. Set Length:

Allows operators to input and define the specific length at which the length stop arm will automatically stop. Panel A will be displayed to enter the desired measurement into the control panel. When Enter is pressed, the length stop will automatically move to the desired location.

4. Calibration Length

Allows the operator to input the correct measure length. Panel A will be displayed to enter the corrected measurement into the control panel. When Enter is pressed, the system is adjusted or aligned to match its measurements.



CALIBRATION EXAMPLE

For example, Calibration with Material Cut Length L= 100mm



Place the workpiece over the blade for the squared end cut





3

Push the workpiece to touch the Length Stop



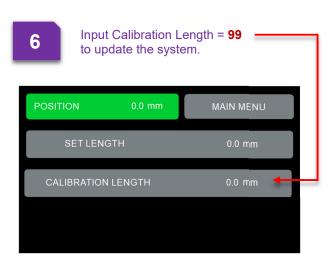
4 Cut the workpiece 100



5

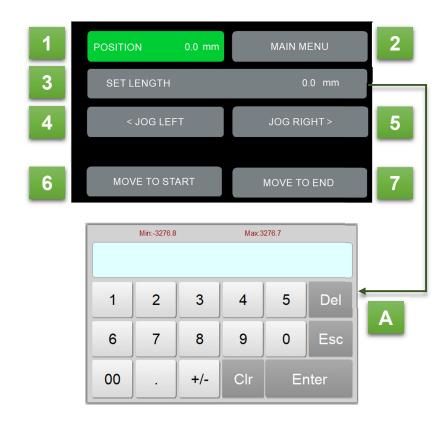
Measure the actual cut length







2. LENGTH STOP MODE



1. Position

Displays the current position of the Length Stop. It is designed to track the real-time movement of the length stop.

2. Main Menu

Return to the Main Menu Screen

3. Set Length:

Allows operators to input and define the specific length at which the length stop arm will automatically stop. Panel E will be displayed to enter the desired measurement into the control panel. When Enter is pressed, the length stop will automatically move to the desired location.

4. Jog Left:

Allows the operator to incrementally move the length stop to the left, in 1mm precise increments.

5. Jog Right:

Allows the operator to incrementally move the length stop to the right, in 1mm precise increments.

6. Move To Start:

Move the length stop arm back to the start position.

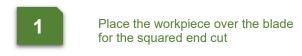
7. Move To End

Move the length stop arm back to the end position.

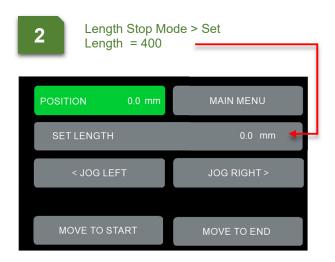


OPERATION EXAMPLE

For example, cut the material with a Length of 400 mm







Push the workpiece to touch the Length Stop

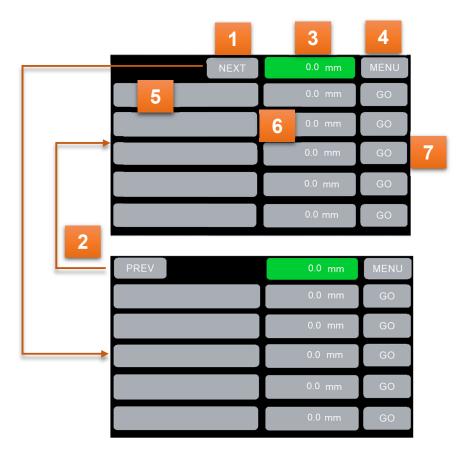








C. PROGRAM LIST



1. Next

Move to the Next Page

2. Prev

Return to the Previous Page

3. Green Display

Displays the current position of the Length Stop. It is designed to track the real-time movement of the length stop

4. Menu

Return to the Main Menu Screen

5. Name Of The Cut Length (B)

Enter the name of the Cut Length. It will be stored when pressed Enter Press Alt to interchange to Letter and Number Screen

6. Cut Length (C)

Enter the Cut Length in mm. It will be stored when Enter is pressed

7. Go

To command the length-stop to move to the stored location.





C D

Q R

v w x

K L

s

Y Z

E F G Del

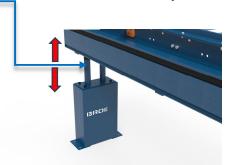
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CHAPTER 4 – ADJUSTMENT

Height Adjustment

- 1. Adjust the conveyor height to be level with the cold saw cutting table for optimal performance.
- 2. Use the height-adjustment Stand to raise or lower the conveyor as needed.



3. Ensure the conveyor is level before beginning any cutting operations.

CHAPTER 5 – MAINTENANCE & TROUBLESHOOTING

1. Regular Maintenance:

- Clean the device regularly to prevent dust or debris from interfering with its function.
- Check for any loose or damaged components and tighten or replace them as needed.
- Proper lubrication of a linear carrier is crucial for optimal performance and longevity. it's
 recommended to use lithium-based or calcium sulfonate grease. Synthetic greases are also suitable
 for high-performance applications. Lubrication should typically occur every 12 months, depending
 on the usage conditions.

2. Calibration:

• Periodically check and recalibrate the length stop device to ensure accurate measurements. Follow the manufacturer's guidelines for calibration procedures.

3. Troubleshooting:

- If the device is not responding or providing inaccurate measurements, check the power supply and connections to ensure everything is properly connected.
- Inspect for damage, wear or misalignment, and adjust or replace items as necessary.

4. Consult Manufacturer's Support:

• If troubleshooting steps do not resolve the issue, reach out to the manufacturer's support team for guidance and assistance.



5. Training and Documentation:

Ensure that operators are trained in the proper use and maintenance of the auto-length stop device,
 and keep documentation on hand for reference.

Always prioritise safety when performing maintenance and troubleshooting tasks on industrial equipment. If you encounter any challenges that are beyond your expertise, seeking support from a qualified technician or the manufacturer is recommended.



Belt Tensioning

- 1. Inspection: Inspect the belt for any signs of wear, damage, or misalignment. Ensure that the pulleys are properly aligned and free from debris or contamination.
- 2. Adjustment
 - 1. Loosen 4 top Screws
 - 2. Tensioning the belt by turning the ending Screw
 - 3. Tighten 4 top Screws when done
- 3. Testing: After adjusting the tension, perform a test run to ensure that the belt operates smoothly, without slippage or excessive noise.
- 4. Monitoring: Regularly monitor the tension in the belt drive system and make adjustments as needed, as tension levels may change over time due to wear, temperature variations, or other factors.



