

## How to Test Traversing Shuttle Stop Positions

This instruction is for technicians responsible for setup and adjustment of traversing shuttles. This procedure requires the technician to work within the shuttle travel area while operating the shuttle in manual and automatic mode. The shuttle travel area is normally guarded and off limits to personnel while the shuttle has power. This instruction assumes specially qualified and authorized personnel who fully understand the hazards. Use extreme care when you enter the shuttle travel area.



**WARNING 1: Strike and Crush Hazards**—A traveling machine such as a shuttle can strike, crush, or entrap you if you ride on it or enter its path. Traveling machines or their components can move automatically in any direction. Placing a system machine on line by energizing the machine control may immediately summon a shuttle or other traveling machine.

- Do not attempt this procedure unless qualified and authorized.
- Ensure that bystanders do not enter the shuttle travel area.

Every shuttle installation is unique with regard to the positions at which the shuttle stops to receive and discharge goods. Each stop position must align with the device it receives from (typically a press) or discharges to (typically a dryer). After you configure the laundering system in the Miltrac, or other system controller and you initially define each stop position, use this procedure to test and adjust each stop position.

### Supplement 1

#### How Shuttle Stop Positions are Controlled

To initially define each stop position, you manually move the shuttle to that position, visually align it with the transferring device, then set the target. Shuttles manufactured prior to December 2010 use physical targets along the rail or shuttle path. Newer shuttles and some older, retrofitted shuttles, use a laser device that measures the distance between the stationary laser and a single target located on the moving shuttle. In the newer type, you read a distance value displayed on the laser and enter this value for that stop position in the Drynet software. The procedure described in this document applies to both the older and the newer technologies.






## 1. Prepare the Laundering System

This procedure involves:

- the shuttle to be tested,
- any device(s) that load(s) the shuttle, such as a:
  - » press (cake shuttle)
  - » washer-extractor (loose goods shuttle)
  - » storage belt (cake or loose goods)
  - » tunnel (wet goods shuttle)
- any device that receives goods from the shuttle, such as a:
  - » dryer (cake or loose goods conveyor)
  - » no-dry station
  - » storage belt.



For safety and to maintain the necessary control of the devices involved in the test, set the devices per [Table 1](#).

**Table 1: Initial Device Settings**

Device	Initial Setting		Comments
	Symbol	Description	
Shuttle to be tested	①	Start	Manual operation enabled
		Manual mode	
Any other shuttles that share this path		Master switch off.	Shut down. Ensure no movement.
Device(s) the shuttle receives goods from			Shut down. Not needed except to test this stop position
Device(s) the shuttle discharges to	①	Start	Not allowed to receive goods from the shuttle.
	 or 	Load Not Allowed or Manual mode	

## 2. Test the Home Position and Aligned Stop Positions

Every shuttle installation has a home position. This is true regardless of how the shuttle is configured to act after it discharges goods (*Always return home*, *Homeless—return home when empty*, or *Homeless*). If there is only one position that loads the shuttle, this always coincides with the home position. The home position may also coincide with a position that receives from the shuttle. Whenever the machine (the shuttle) is stopped (⓪) in Automatic mode (☐) and you start it (①), the shuttle returns home as part of the initialization procedure. To test the home position and any stop positions that coincide with it:




1. Move the shuttle manually () away from the home position, if it is at home.
2. Set the shuttle to the automatic mode (☐).
3. Stop, then start the machine (⓪, ①). The shuttle will seek the home position.
4. When the shuttle stops at the home position, set the shuttle to the manual mode (.
5. Check shuttle alignment and adjust as required.
6. Repeat these steps as necessary.

## 3. Test Stop Positions Where the Shuttle Discharges Goods

Choose a position (a device that receives goods from the shuttle) to test. The shuttle will go to this position if:

- this is the only available position to receive goods and
- the shuttle is encoded with batch codes that this position can accept.

With the shuttle at the home position, cause the shuttle to go to the test position as follows:

1. Set the device at the test position so it can receive a load ( and ☐). All other devices that can receive from the shuttle must be set so they cannot receive a load ( or - 2. Set the shuttle to the automatic mode (☐), then stop the machine (⓪).
- 3. Place a rag or similar object large enough to block the photo eye in the center of the top bed of the shuttle.
- 4. Start the machine (①). The shuttle bed will run until the photo eye is blocked. The *Cake Data* prompt will appear on the Drynet display or the 2 x 20 display.

5. Enter cake data for a dry code that the device at the test position can receive. Typically, a dryer can receive all but the no-dry code and a no-dry station can only receive the no-dry code. The shuttle will move toward the test position.
6. As soon as the shuttle stops at the test position and before a transfer can occur, stop the machine (⓪).
7. Remove the object from the shuttle bed.
8. Set the shuttle to the manual mode (↵) and start the machine (Ⓜ).
9. Check shuttle alignment and adjust as necessary.
10. Set the shuttle to automatic mode (⏪). The shuttle will return to the home position.
11. Repeat as necessary.

#### 4. Test a non-Home Position Where the Shuttle Receives Goods

If an installation has two loading positions for the shuttle, at least one of these will not coincide with the home position. In such a case, the shuttle will likely be loaded by a storage device such as an elevating shuttle. To cause the traversing shuttle to move to the non-home loading position:

1. Set the traversing shuttle to the automatic mode (⏪).
2. Place a rag or similar object in the center of the top belt of the device at the test position (the non-home device that loads the traversing shuttle).
3. Energize and start this device (Ⓢ, Ⓜ). The storage device bed will run until the photo eye is blocked. The *Cake Data* prompt will appear on the display for this device.
4. Enter cake data. This will summon the traversing shuttle.
5. As soon as the traversing shuttle stops at the test position and before a transfer can occur, stop the loading device (⓪).
6. Remove the object from the loading device bed.
7. Set the traversing shuttle to the manual mode (↵) and start the machine (Ⓜ).
8. Check shuttle alignment and adjust as necessary.
9. Set both the loading device and the traversing shuttle to automatic mode (⏪). The traversing shuttle will return to the home position.
10. De-energize the loading device (ⓧ).
11. Repeat as necessary.

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