



Tennant Deployment and Training Checklist

Tennant Autonomous T380AMR

1. Client/site name and store number:

Click or tap here to enter text.

2. Dates of installation and training:

Click or tap to enter a date.

3. Site location:

Click or tap here to enter text.

4. Point of contact email and phone (Store Manager, 3rd shift Asst. Mgr., Maintenance Supervisor):

Name	Title	Email	Phone	Receive Weekly Summary Y/N

5. Tennant Deployment Team:

Click or tap here to enter text.

Click or tap here to enter text.

6. Machine Serial Number:

Click or tap here to enter text.

Unpacking

-Confirm shipment of scrubber, off-board charger, and packet of home markers. Verify storage location

-Verify charging and storage location has adequate ventilation and power outlet

-Confirm or determine permanent home location(s) with site supervisors



Robot Operator Training Process

This document outlines the proper deployment and training for each operator of a T380AMR scrubber. A Tennant trainer will instruct trainers and operators regarding the subject matter of each point below. After completing each of the listed points, the manager/supervisor will check off the box, confirming that the operator has received that instruction. The operator will then review the document in its entirety and only sign after confirming its truth and accuracy. The Tennant trainer will then sign confirming the completion of the form as described.

Installation, setup, and inspection of machine components

- Attach squeegees, pads or brushes, add water for ec-H2O Nanoclean or cleaning solution
- Inspect hoses for blockages
- Test connectivity (ROC Icon is illuminated)
- Test small section of floor space in manual mode
- Go over site preparation techniques to perform prior to scrubbing (pre-sweep, check for obstacles)

7. Does the user understand how to perform these steps? Mark only one box.

- Yes
- No

Approved Use Overview: Instruct the operator regarding the approved environments in which the robotic scrubber may be used:

- Only use to clean areas which can be reasonably cleaned by a manual scrubber of comparable build/design/size,
- Only use in spaces that are monitored and designed for cleaning using industry standard practices for machinery and wet floor cleaning, including caution signage and barriers,
- Do not use too close to and cleaning areas shall not include inclines, stairs, drops, cliffs, escalators,
- Do not leave temporary elevated platforms (scaffolds or ladders) or electrical cords (or other low profile items) near the path of the machine while operating in robotic mode,
- Do not operate in robotic mode when in environments requiring fail-safe performance (areas where machine failure could lead to personal injury or property damage), and
- Only use in areas in which there is adequate cell coverage permitting cellular data communication.

General Use Instructions:

- Do not attempt to ride the scrubber while in robotic mode.
- Remove key from ON/OFF key switch to prevent unauthorized use without disrupting robotic route.
- Do not grab steering wheel. Steering wheel may move rapidly and unexpectedly while in robotic mode.
- Do not leave electrical cords or low profile items (i.e. anything having a height of 4 centimeters from the ground) in the machine's area of operation.
- Always operate machine in manual mode when going into elevators or through automatic doors. Robotic routes should never include going into elevators or through automatic doors.
- The machine's onboard cameras may capture images of people who happen to be in its surrounding. There may be additional laws in your jurisdiction of operation relating to your use of technology with cameras. Please comply with all applicable laws, including using signage or obtaining consents as required.

8. Does the user understand the Approved Use Overview and General Use Instructions?

Yes

No

Review Scrubber Components- Review the following system components with the user:

-Power

-User Interface

-Battery light indicator

-Water flow indicator

-Warning light (!)

-Solution level

-Water level

-Scrub pressure level

-Forward/Reverse

-Vacuum button

-Scrub deck button- "1-Step button"

- Foot Pedals
- Horn
- Status Indicator

9. Does the user understand how to use each component listed?

- Yes
- No

Autonomous Components- Discuss the following components with the user:

- Yellow Safety Straps
- Emergency stop button (how and when to use)
- Blue start/stop button (how and when to use)
- Turn indicators
- Sensor locations
- Logging into Brain OS with PIN
- User Interface: Discuss the home screen and how to navigate it

10. Have all autonomous components been discussed?

- Yes
- No

Notifications and Alerts- Train the user on the use of the following options:

- Cellular Connectivity requirement for use
- UI Home Screen, Service option
- Notifications
- Text Message
- Verify ROC connectivity and explain how to know when uploads are in progress and complete

11. Does the user understand how to set up notifications and manage alerts?

- Yes
- No

Home Location Code Considerations- Go over the following topics:

- Home markers must be in the same location with each cleaning
- Product requirement that code is affixed to wall
- Code needs to be flat and not at an angle
- 40 inches from the ground and robot scanned from a minimum distance of 55 inches
- Location must be well lit, if used in dark area may need a flashlight
- Do not place in shiny sleeve or cover, photocopy or laminate (machine will not read the code properly)
- If a code is lost or misplaced, you can call service for a new one
- Stay clear of the front of the robot and sensors when scanning the home location code/starting route

12. Does the user understand how to properly setup their home markers?

- Yes
- No

Residual Water Prevention and Care- Demonstrate the following techniques:

- Inspect hoses and squeegee prior to use
- Adjust water and cleaning solution level for type of floor (*using minimum recommended levels)
- During initial use, check the squeegee's wiping and water pick up performance
- Check for and mop up any residual water after an assist
- Check for and vacuum or mop up any residual water post-scrubbing
- Place appropriate caution signage in areas where the scrubber is to be used

13. Does the user understand how to prepare the scrubber and mitigate residual water?

- Yes
- No

Training a Route- Show the operator how to:

- Teach a route via the User Interface (UI). Describe the home screen and selection options.
- Select a Color or letter to assign a route to
- Start/stop each route created at the same home location code
- Teach running consecutive routes. Select multiple routes on screen in order to be cleaned
- Teach how to label route. Remove select a letter

14. Does the user know how to create a route?

- Yes
- No

Running a Route- Show the operator how to:

- Select the home location code
- Select a route from the UI menu
- Select a route by color or letter
- Pull yellow safety straps to front screws
- Remove key front on/off switch to prevent unauthorized use
- Press the blue start/stop button

15. Does the user know how to run an autonomous route?

- Yes
- No

Deleting a Route- Show the user how to:

- Enter the Service menu from the UI home screen
- Select a route for deletion
- Delete a route
- Confirm the route has been deleted



16. Does the user understand how to delete a route?

- Yes
- No

How to Use in Manual Mode- Describe how (to):

-Use the scrubber in manual mode

-Describe when it may be advantageous to use manual mode. (Narrow aisle where scrubber will fit but not run properly)

17. Does the user understand manual mode and when it is best to use manual mode

- Yes
- No

Types of Notification Alerts Sent via LTE:

-Scrubber component faults

-Water/battery/solution/tank indicators

-Path is blocked

-Robot off path

-How to get a delocalized robot back on its intended path

-Route completion and time

18. Does the user understand alert types and how to address them? Mark only one oval.

- Yes
- No

Best Practices & Daily Requirements- Discuss the following:

-Allow machine to fully boot up until the Brain Logo UI fully loads

-Verify ROC connectivity prior to use

-Insure UI is fully booted before powering off the unit if quick shutdown is required

-Wipe sensors with soft dust cloth prior to DAILY use (no water, no solution on sensors or cloth)

-Pre-Sweep (clear zones of debris and small obstacles) in conjunction with clearing the environment

-Clear environment from obstacles, minimize autonomy hazards and any pinch points before use

- Adjust solution, water and scrub deck pressure levels with each cleaning
- 7.5 feet required for U-Turns, 4.5 feet to make turns around a corner, 3.5 feet minimum aisle width
- Do not add more than recommended cleaning solution amount to tank
- Do not add additional cleaner to unused portion of cleaning solution (will become too concentrated)
- Optimize cleaning routes (make gradual left turns while in teaching mode)
- Avoid Water Alerts: Longer routes use lower solution flow setting, shorter routes can accommodate higher solution flow
- Monitor the unit for the 1st 10 feet of use for normal operation when cleaning in automated mode
- Stop if squeegee needs adjustments
- Check charger light is on before use and when connected to a wall outlet
- Flush hoses after each use to reduce clog potential
- Drain and rinse recovery tank after each use
- Do not top off, always drain before refilling tank
- Prep machine for next day (or empty solution tank if not used daily)
- Charge for a minimum of 8 hours after use
- Customer understands product warning and cautions for scrubber use
- Refer to best practice document (leave a copy in a conspicuous area for display)

19. Have the best practices been reviewed and a copy left near where the scrubbers is to be stored?

Yes

No

Service- Confirm the Users Know How To:

- Wallchart is hung and reviewed
- Perform basic troubleshooting steps prior to contacting service
- Locate the service phone number and know how to locate the unit serial number.
- Replace consumables as needed (pads, squeegees, etc.)
- Perform the brake release procedure using the brake release wedge

20. Does the user understand how to maintain their machine and contact service if needed?

Yes

No

21. Has the Site Manager Been Informed About Receiving Weekly Summary Reports?

Yes

22. Has the Site Been Given Zone/Route Information? Include Tested and Verified Route Info with a Summary of Route Info. (Location, Time, Verified Error Free Route, Etc.)

Yes

23. Trainer Sign-off (Tennant signature, printed name and date)

Click or tap here to enter text.

CUSTOMER COPY- Detach report here and leave behind with site manager



Tennant Deployment Summary

Brain Enabled Robotic Floor Scrubber

1. Client/site name and store number:

Click or tap here to enter text.

2. Dates of installation and training:

Click or tap to enter a date.

3. Site location:

Click or tap here to enter text.

4. Point of contact email and phone (Store Manager, 3rd shift Asst. Mgr., Maintenance Supervisor):

Name	Title	Email	Phone	Receive Weekly Summary Y/N

5. Implementation Team:

Click or tap here to enter text.

Click or tap here to enter text.

6. Machine Serial Number:

Click or tap here to enter text.

7. SW Version deployed:

Click or tap here to enter text.



Site Details: Routes, Markers, Verification

8. Provide Zone/Route Tested and Verified along with description of route information and time (hours). For example: 1A-Grocery 1:15, 1B- Produce 0:45, 2A- Tools 1:10. (Ran each 2 times with ≤ 1 assist/30 min.)

Marker	Route	Location	Pass/Fail	Notes
1	A			
	B			
	C			
	D			
	E			
	F			
2	A			
	B			
	C			
	D			
	E			
	F			
3	A			
	B			
	C			
	D			
	E			
	F			
4	A			
	B			
	C			
	D			
	E			
	F			



9. Indicate location and number of "Home Location Codes" utilized at this site. Provide Detail and Pictures of Home Markers (Upload as a single Zip File<1GB):

MARKER	LOCATION	NOTES ON AREA COVERED
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

10. Total Location Time Needed for Full Coverage:

Click or tap here to enter text.

11. Environmental Notes for Individual Routes, Obstacles, Suggestions (Automate vs. Manual), Challenges, Considerations, Workflow Suggestions, Any Open Items, Etc. Identify and Note any Potential Adaptions Needed, Environmental Considerations and Workflow Changes *

Click or tap here to enter text.
 Click or tap here to enter text.
 Click or tap here to enter text.
 Click or tap here to enter text.

12. The undersigned has reviewed this form and confirms its truth and accuracy. By signing above, the undersigned acknowledges receipt and knowledge of the training described herein. Check all that apply.

Manager/Trainer/Operator confirms receipt of training (please initial here)

Click or tap here to enter text.

Customer confirms receipt of training (please initial here)

Click or tap here to enter text.