Before you install this AutoCav™ ensure you open the attached boxes and read the enclosed information carefully.
Quick Start

Before you begin: Contact the CS AutoCav Manager on (888) 466 0030 to go over installation notes specific to this unit.

SA#

Failure to follow the following steps carefully may be costly and time consuming.

1. **Read Before You Start**
   - Read the *Installation and Maintenance Manual* FULLY before beginning the installation.

2. **Install** (But Do Not Line!)
   - Install the unit the same as you would any pocket door, taking into account the following points:
     - **Extra height** above the track for packing and wiring
     - **Access** to motor & gearbox
     - **Connection** of switching devices and/or sensors
     - **Track** must be kept clean and free of dirt or swarf (no contamination at all)
     - **Door** slides freely without rubbing on anything. (Disconnect drive bar to check.)

3. **Do the Cycle Test**
   - Once the unit is physically installed into the opening, aligned correctly and has been checked that it is moving freely then it should be connected to the power temporarily (you can run an extension cord if required) and complete the cycle test.

4. **Rough in Wiring** (Before Lining Walls)
   - On page 5 there are individual explanations of the purpose of each cable and the most common locations to run them to.
   - Run all of your cables to the correct locations and ensure they are connected to the correct inputs on the red controller.

5. **Line & Finish**
   - Install drywall, taking care around access covers for a neat, tidy finish. Ensure you plug labelled switches correctly back together.
   - Take care not to pinch or stretch any electrical wiring when lining.

   **If the unit has been supplied with safety beams, take care not to paint over them! Ensure you inform your painter!**

   **Extra care must be taken in and around the safety beam wires located in the vertical door jambs.**

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*SA# This unit is supplied:*

- [ ] with all supplied switches pre-wired for plug & play
- [ ] with no switching devices supplied (Customer to organize)
- [ ] with some of the switching devices pre-wired and the rest to be organized by the customer.

*This unit has been tested in our factory and filmed in operation. To request a copy of the video, email info@csfordoors.co.nz and mention the SA# above.*
Preparation and Installation

BEFORE YOU START

Contamination of the top track.
CS Automatic Units require the track running surface to be clean and free of any contamination or damage. For smooth reliable service, the tires on the carriage should not be chipped, dented or have swarf embedded in the tire.

Check that both the box section and carriage running surfaces are free from dust or debris. If not done, this will affect the operation of the unit.

Please ensure you take extra care with the carriages to avoid any damage during the installation process.

If anything looks out of specification or you are unsure, contact Cavity Sliders before beginning your install.

1. Prepare the door.
In the centre of the top of your door leaf, router out a 140 x 30mm (5-1/2” x 1-3/16”) x 20mm (25⁄32”) deep hole for the drive bar mounting plate. Screw the drive bar mounting plate into the routered hole with #8 x 45mm timber screws (supplied).

Drill two holes 85mm (3-3/8”) in from either edge of the top of your door leaf in the positions as marked.

Screw both mounting plates to the door with the mounting plates placed exactly in the centre of the door thickness.

At the bottom of the door leaf cut a groove to the dimensions and tolerances shown. Make it central of the door thickness and absolutely straight.

2. Fix the Track.
Option 1 - Top Mount

Option 2 - Wall Mount
Installation

3. Fix the T-Guide.
Fix the T-Guide to the floor so that it is not visible when the door is in the pocket. The front edge of the T-Guide should sit flush with the final casings.

4. Fit the door.
Load the carriages into the notched end of the track and slide into place.
Position the door underneath the carriages and offer the mounting plate onto the wheel hanger shaft.
Depress the plunger using the bolt head and slide until the bolt snaps into locked position.

5. Adjust the door height.
When adjusting door height, the wrench should be horizontal to the nut. Use the small end of the wrench supplied to rotate the hexagonal nut at the bottom of the carriage hanger shaft.
To raise door: Rotate wrench from **left to right**.
To lower door: Rotate wrench from **right to left**.

Note: The top of the hanger pin screws into a self-locking Nyloc type nut in the carriage. For the assembly to remain in its adjusted position over time the hanger pin must be screwed into the nylon locking portion of the nut by at least 3 full turns. (The thread gets harder to turn once it reaches the start of the nylon locking ring).

6. Check door alignment.
For trouble free operation, perform the following checks:
Carefully move the door manually from fully open to Check that the alignment when fully closed and fully open is plumb and true.
7. Installing safety beams (if supplied)
Mark two mounting positions. Recommended height is 200mm (7-7/8”) and 900mm (35-7/16”) above floor.
Drill Ø13mm (1/2”) holes in each side of the door frame in the positions marked.
Slide the heads and the cables into the vertical jambs. Connect wires (see below).

Given the highly responsive nature of the safety beams they can be quite sensitive to installation damage such as pinching, friction damage and breakage.
Run the grey emitter cables to the safety beam heads on the closing jamb side.
Run the black receiver cables to the safety beam heads on the split jamb side.

8. Power supply & drive system
The CS AutoCav system uses DC motor control to drive a toothed belt to which the door(s) are connected. The drive system is housed within the head section of the door installation. This allows for either in wall fitting (pocket door) or on wall mounting (surface slider).
The CS AutoCav requires a standard 10A General Power outlet. This powers a 110V with 24V tap Transformer housed within the head section of the track. The door controller uses this transformer to drive the motor and ancillary devices connected to the auto door. Battery back up is not included on these types of units. Consideration of wiring of externally mounted activation devices is required prior to door installation.

9. Initial cycle test
Move door to centre of opening.
Plug in 3 pin lead from power supply into a main plug to turn on power (you can run an extension cord if required).
Controller will display “TEACH” on LED display.
Door will slowly fully open and pause (Door is learning open position).
Door will then return to the position it started in then slowly fully close and remain closed (Door is learning close position).
“TEACH” will disappear from LED display, putting controller into normal operation.
Press switch or activation device.
Door will open fully, pause, then close fully.
This completes the test proving that the door is functioning. Power down unit.
Ensure unit is wired up correctly as to current electrical standards by electrician.

10. Rough in wiring before lining walls
A CS Autocav unit will have a combination of the following cables, which will be clearly labelled and referenced on a wiring diagram provided.
The most common cables are individually explained below:

A. External activation (White 4 core security cable): Run this to where activation is desired to be positioned on the ‘outside’ or ‘secure’ side of the unit. May be identified by red sticker.
B. Internal activation (White 4 core security cable): Run this to where activation is desired to be positioned on the ‘inside’ or ‘exit free’ side of the unit. May be identified by green sticker.
C. Lock activation (White 2 core security cable): Run this to where activation of the motor mounted lock is desired to be positioned on either or both left and right side of the unit. May be identified by Blue sticker.
D. Custom activation (White 10 core security cable): Run this to where activation of the custom door functions is desired to be positioned on either or both left and right side of the unit. May be identified by orange sticker.
Cable only supplied upon request, check with your site’s security or automation technician first, but typically running into the ceiling space is a safe bet to allow for future connection.
Electrical Installation

10. **E. Power Supply Cable** (Black with 3 Prong Plug end): Run this to the location a main plug to turn on power. Get electrician to remove plug end and wire in properly to the mains line as per electrical standards.

**F. Power Supply Coms Cable** (Grey Back 20 core): Cable is mounted inside the head section to connect power supply to the controller. This will be pre-fitted by CS.

**G. Safety Beam Receiver Cables:**
- **Emitter**: Grey cable to head with white & black wire
- **Receiver**: Black cable to head with white & black wire

**H. Fire** (2 Pin Molex Mini Female plug): This input is to use with building fire alarm system to hold door open in event of fire. Check with your site’s fire alarm technician first, but to 2 core fire communication cable will need to be run to the auto unit and mounted to the plug end provided.

Finishing the Installation

11. **Access to components.**
Access to the belts, drive bar connector, gearbox and auto tensioner are through access panels above the opening and pocket. The access cover should sit flush with the drywall. Take care not to cover up access to removable/serviceable parts when finishing the wall.

12. **Painting.**
**Don’t paint over the safety beams!**
The access cover door has been powder coated “Flat White”. If you need to paint the access cover, remove it and Scotch Brite the powder coated finish before undercoating. Avoid paint build up on the edges of the door. This is very important for a neat finish.

13. **If you need to remove the door:**
Remove the head jamb from one side (if fitted). Disconnect the drive bar from the socket on top of the door. Loosen the 2x front screws on the belt clamp. Lift the belt clamp off the drive bar. Remove the 2x cap screws. Lift the drive bar up and out of the track through the access hole. Fit the club end of the adjusting spanner over the hexagonal nut at the bottom of the hanger pin. Use the extended part of the spanner to press down the plunger pin that protrudes up from the mounting plate. Once this plunger is fully depressed, slide the spanner sideways towards the plunger pin.

14. **If you need to remove the belt:**
Release the tension on the belt using a 16mm (5/8”) ring wrench on the tension bolt. Remove the belt. (Instructions supplied on tensioner.)

Call the CS team on (888)466 0030 if you have any questions or concerns.
Servicing of the CS AutoCav Residential should be carried out every 18 months. Results can be recorded below. A simple maintenance guide is given below. These checks should be integrated into a maintenance schedule.

## Maintenance Checklist

**Door Leaf**
1. Check the carriages are running freely. Wipe/clean the track if necessary.
2. Check the door has floor clearance, and runs clear of the floor guide.
3. If door seals are fitted check for excessive wear.

**Door Controller**
1. Ensure cables are free from the moving drive bar and belt.
2. Check and record cycle count on unit.
3. Check for loose plugs/terminals.

**Door Motor**
1. Ensure the motor mounts are secure.
2. Check for oil leaks.
3. Ensure belt and pulley is in good condition.
4. Check belt tension.

**Door Operation**
1. Check safety devices are operational.
2. Ensure the door and associated equipment are functioning correctly.

### Date Checked

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**Door Leaf**

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**Door Controller**

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**Door Motor**

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**Door Operation**

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