



06/26/2007

My 5S training workshops comprises of two choices, 3 days or 6 hours. Both have 8 training modules and use the same focus and approach in adult learning and that is group sequence learning. Basically learn some, do some. Learning by doing.

The 3 days event is of course a lot more detailed in its focus and approach as it involves some implementation of the ideas generated from the participants in the class.

I've lost count on how many 5S training workshops I've conducted over the years, but two in particular stick out for me as lessons learned - don't conduct two back to back, three days 5S training workshops with 35 participants in each on your own - I was a mental and physical wreck afterwards...



I have several different training models and exercises that I have designed and built myself. This one illustrates the need for 5S. I set this demonstration out on a table for two participants to assembly 12 widgets and when you look on the next slide you can see who finishes first and why...



This participant finishes first... All evidence of Sort, Set in Order, Shine, Standardize and Sustain Okay, so it's a little model, but these principles can be applied in the real world. Everyday, hours are wasted, mistakes are made, accidents happen, morale is lowered because of poor housekeeping...

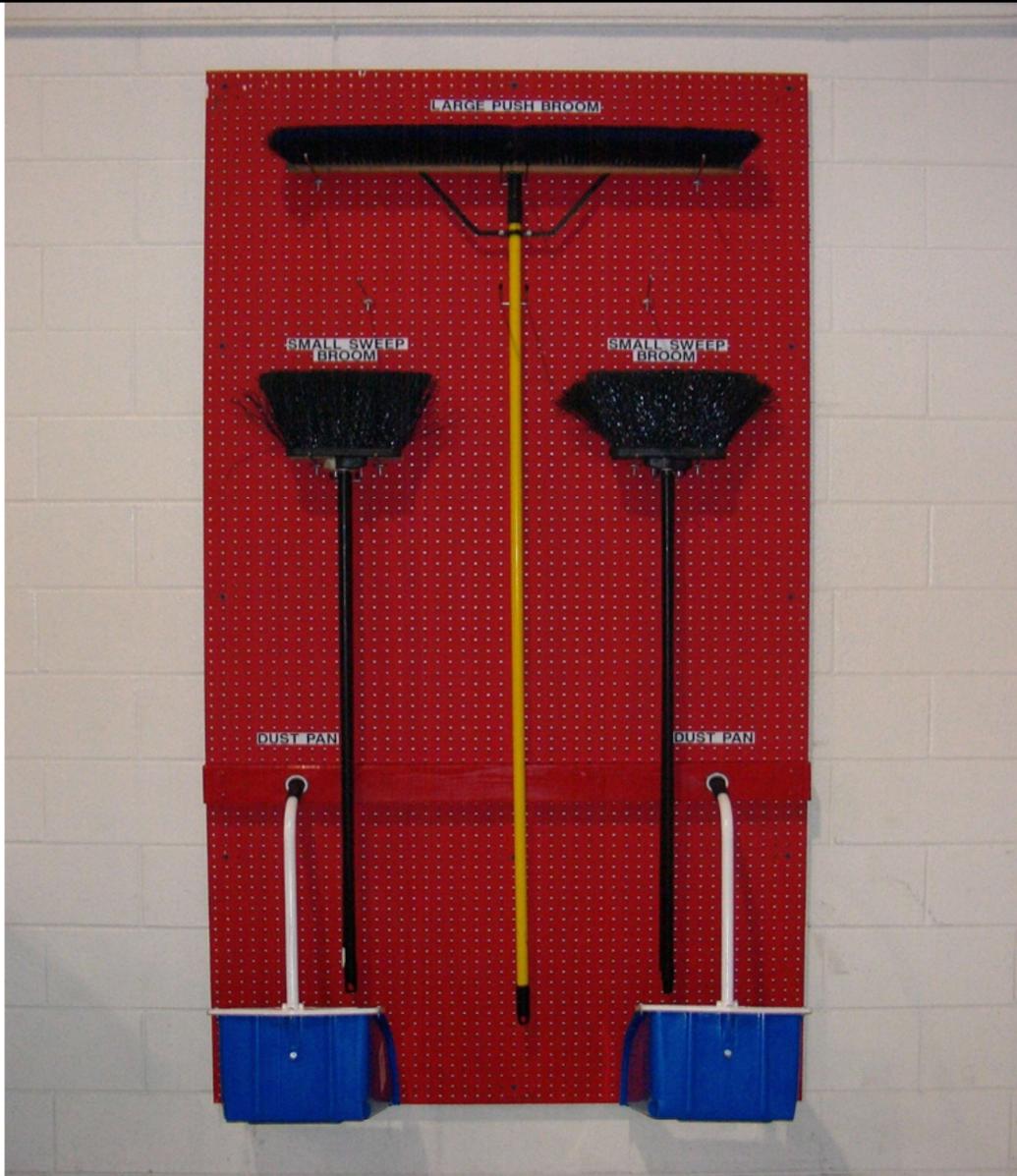
5S is a highly advanced systematized way of good housekeeping...



Before - this is one of my many 5S training 'Red Tagging' events that resulted in freeing up some 8,000sq thousand square feet of floor space in the core process. Sometimes I could kick myself for forgetting to take before, during and after pictures of these 'Red Tagging' events. 8,000sq thousand square feet is small by comparison to some that I have conducted...



After - all cleaned up, eventually this space was used as the installation site for a new process machine. Every square feet in the core process should be used for making stuff, not storing stuff...

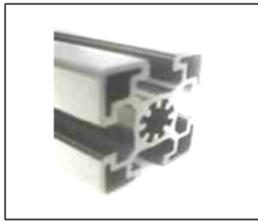


Everything has a place and everything in it - right...Here I have installed a 8' feet by 4' feet pegboard which I painted red for visibility on a wall to store dustpans and brooms. Good visual management of location indication. Cabinets and cupboards only hide disorganization and disorderliness...

It's important that when designing these pegboards, stands or racks to hold cleaning materials or anything for that matter that it's use is easy. Hang or drop in place is the goal...

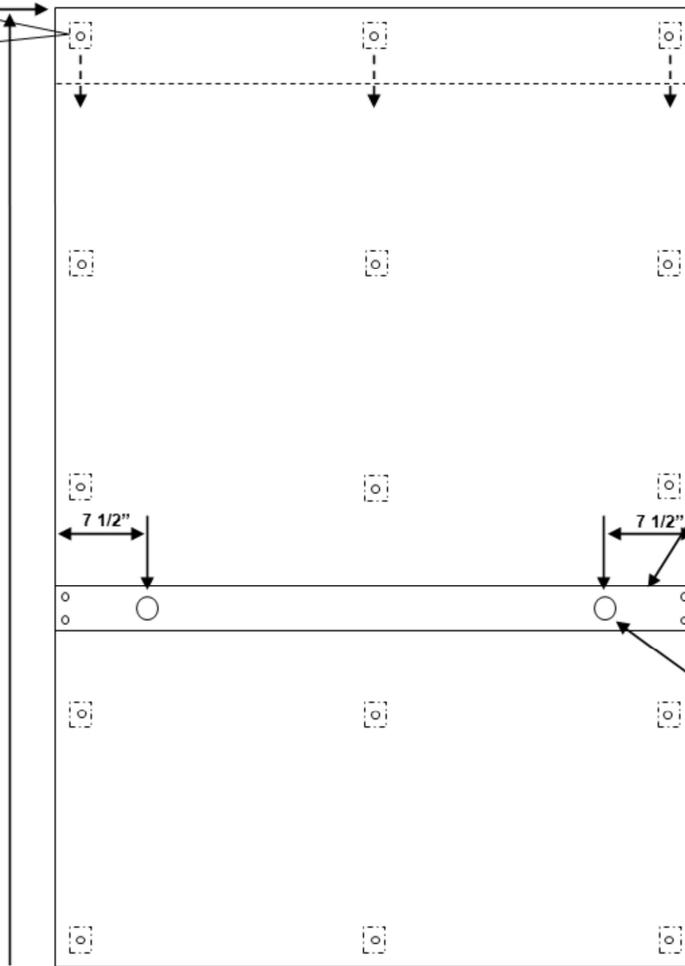
PROFILE STAND OFF

PEG BOARD SPECS.



BILL OF MATERIALS

- X10 4'X8'X14" PEGBOARD
PLEASE USE THE 1/4" THICK BOARD MADE BY ECUCATE AVAILABLE AT HOME DEPOT OEM # 534560 VENDOR # 534-560
- X15 PIECES OF 2"X2" BOSCH/80/20 PROFILE 1" IN WIDTH STANDOFF - EACH BOARD
- X 15 1/4" DIA X 2/12" COUNTER SINK HEAD TAP-CONS - EACH BOARD
- X1 2"X4"X48" CONSTRUCTION LUMBER EACH BOARD
- X 2 1 1/2"X6 FLANGE SINK TAIL PIECE (BUSHING FOR DUST PAN HOLDER) - EACH BOARD
- 10oz TUBE OF JB WELD (TO BOND BUSHINGS IN LUMBER)
- X4 1/4"X2" COACH BOLTS (PLUS NUTS & WASHERS - EACH BOARD
- X 3 DOUBLE 6" PEGBOARD HOOKS MADE BY NATIONAL MANUFACTURING AVAILABLE AT EITHER ACE OR TRUE VALUE P/N: N234-732 - EACH BOARD
- X 6 SINGLE 6" PEGBOARD HOOKS MADE BY NATIONAL MANUFACTURING AS ABOVE P/N: N235-242 - EACH BOARD



FOR TUNNELS NEED TO CUT 9" FROM TOP OF PEGBOARD & RE-SPACING PROFILE STAND OFFS

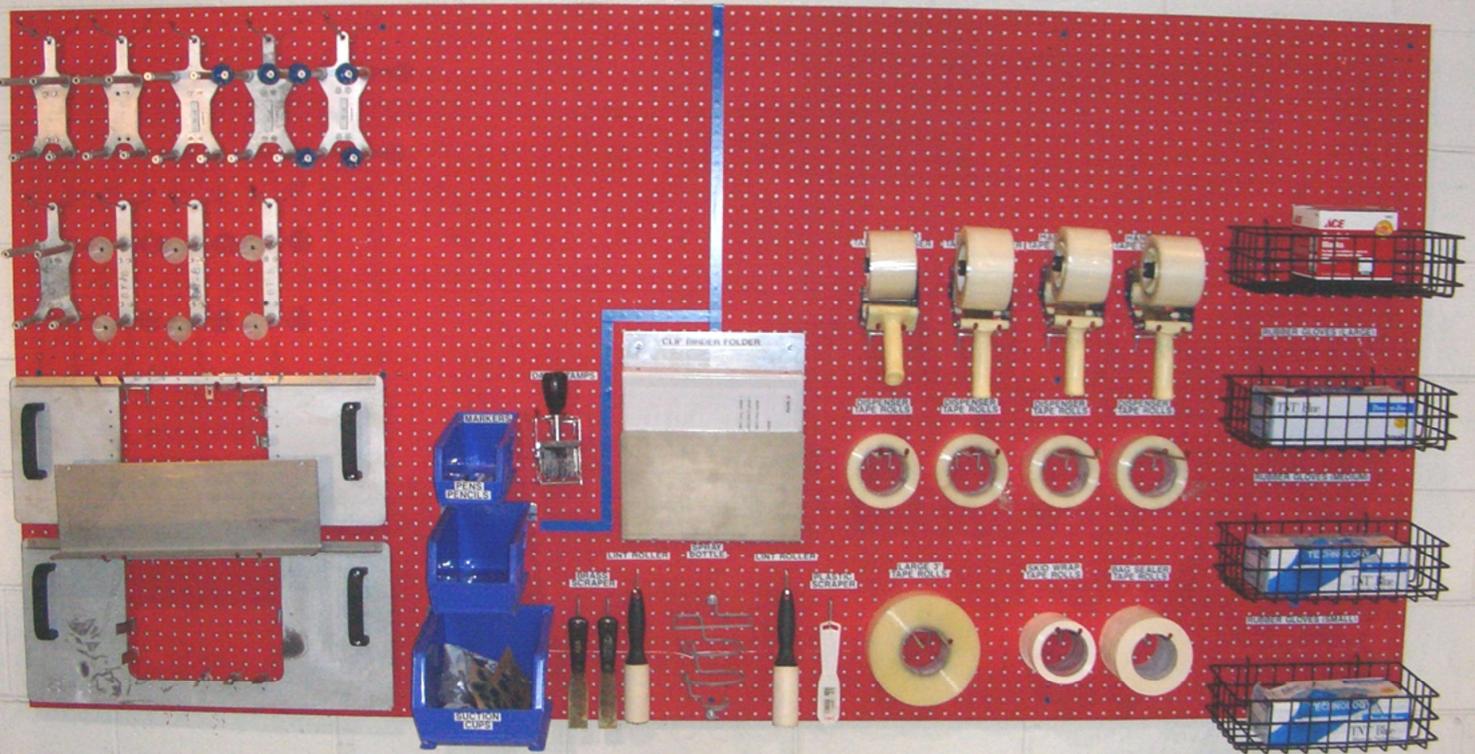
2"X4"X48" LUMBER

COACH BOLTS 1 1/2" IN FROM EDGE OF LUMBAR & SPACED 2" APART

PLASTIC BUSHING (1 1/2" X 6" SINK TAIL PIECE - HOME DEPOT P/N: 41193089168 MADE BY DEARBORN BRASS)

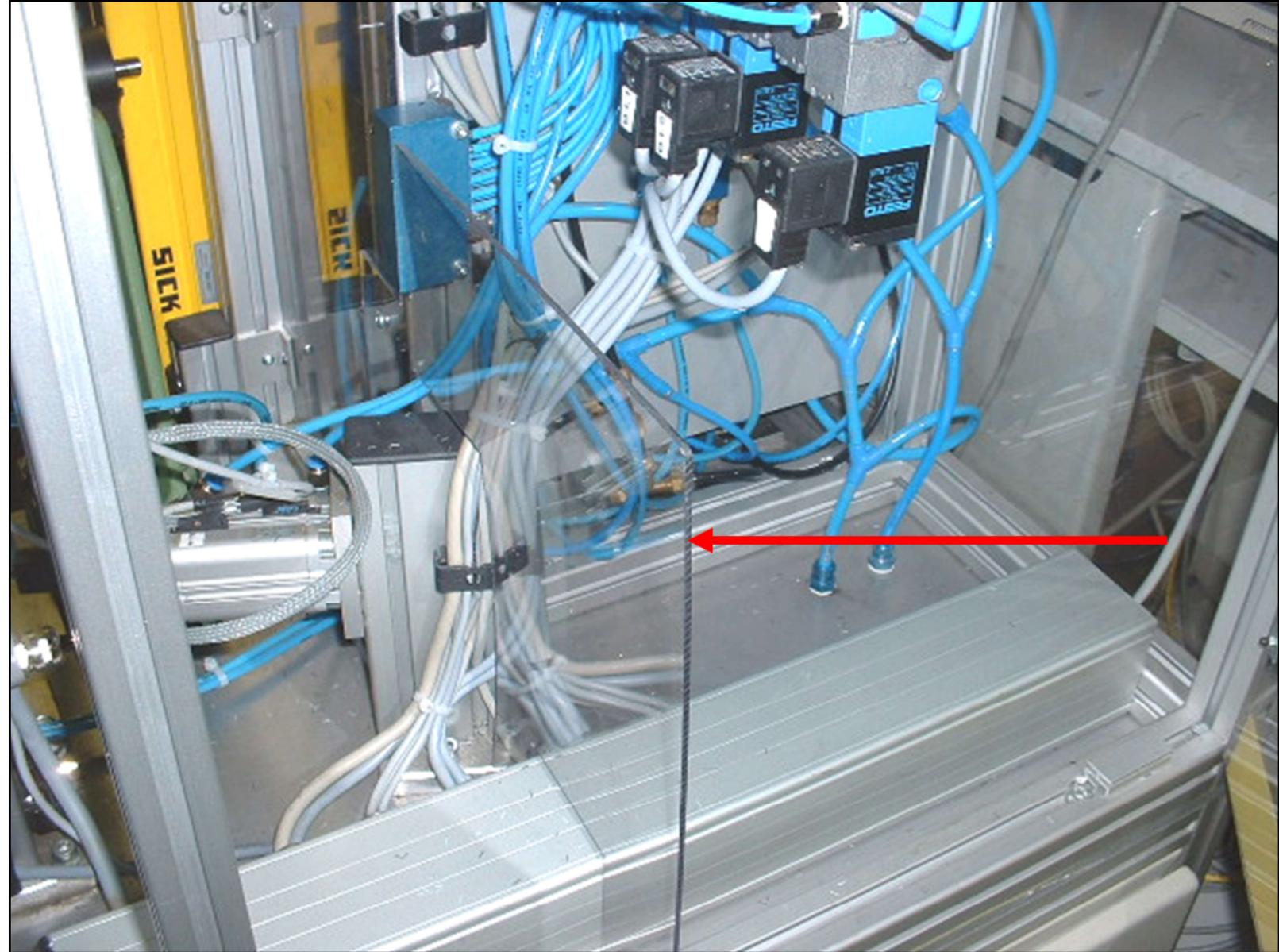
112" MOUNTED ON WALL FROM FLOOR (88" FOR TUNNELS)

This is the drawing that I drafted out first for the pegboards, complete with a bill of materials which I kept for future reference.



I did the same here for production sundries and inter-changeable tools for a high speed packaging and labeling machine.

What you can do as I had done here is take a picture of the pegboard, color print it out, laminate it and then post it on the wall next to the pegboard as a photographic standard to show where everything is stored on the pegboard – photographic reference standard...



5S. The 3rd 'S' Shine is a challenge because dirt, dust and debris comes from three sources: People generated trash, process excess and environmental. We should always strive to either first eliminate the source or second control the effect. Why settle for the second if the first is possible...

These next few sides show my efforts on both. The current side shows a barrier that I made and installed in a machine to prevent the operator from having to clean inaccessible areas of the machine and in this particular case opening a door that was not part of the normal safe guarding inter-locking electric control circuit.



Installing plates over access areas of a machine prevents dirt, dust and debris from entering under machines and other difficult places to get to and clean.

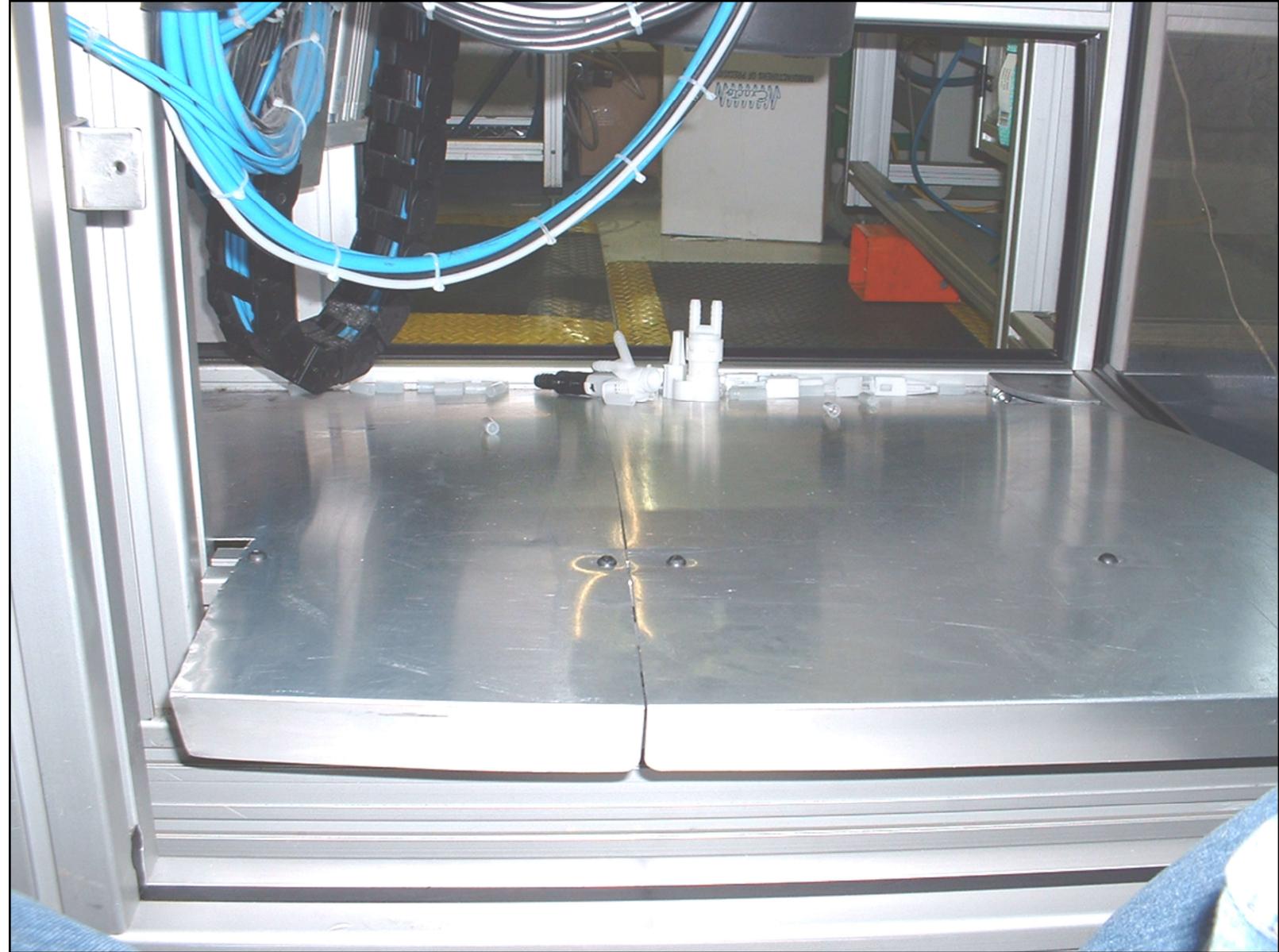


My use of a barrier again. One of our customers was very concerned about having my maintenance workshop too close to the process where we made their products. So, rather than move the maintenance workshop I asked if they would be satisfied if I installed a curtain to separate the maintenance department from the process where we made their parts. They were satisfied.

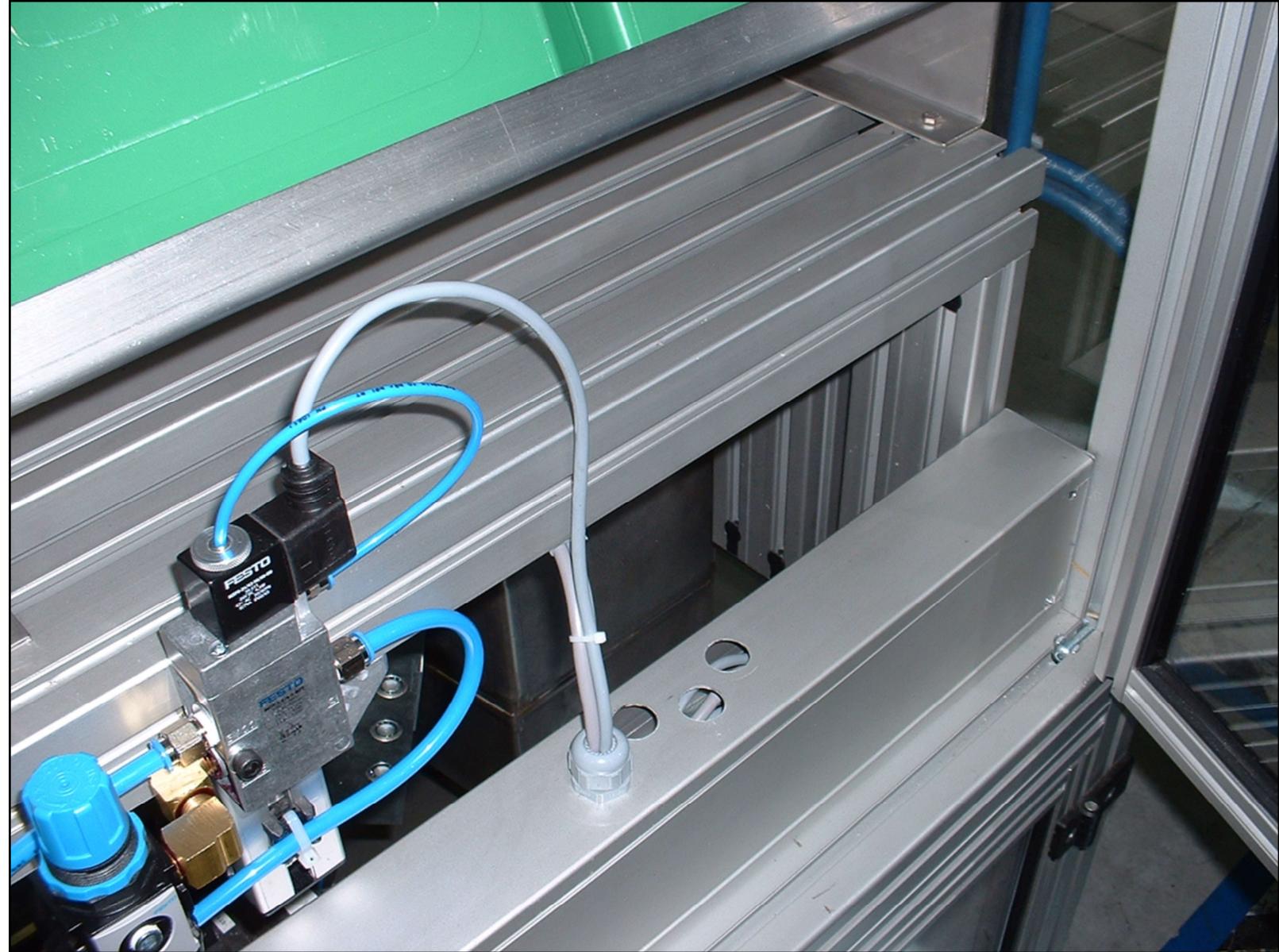


Always looking for ways to improve - Operators of this process occasionally dropped components while installing them in the assembly machine and the components would fall down into inaccessible areas of the 'bowls' of the machine.

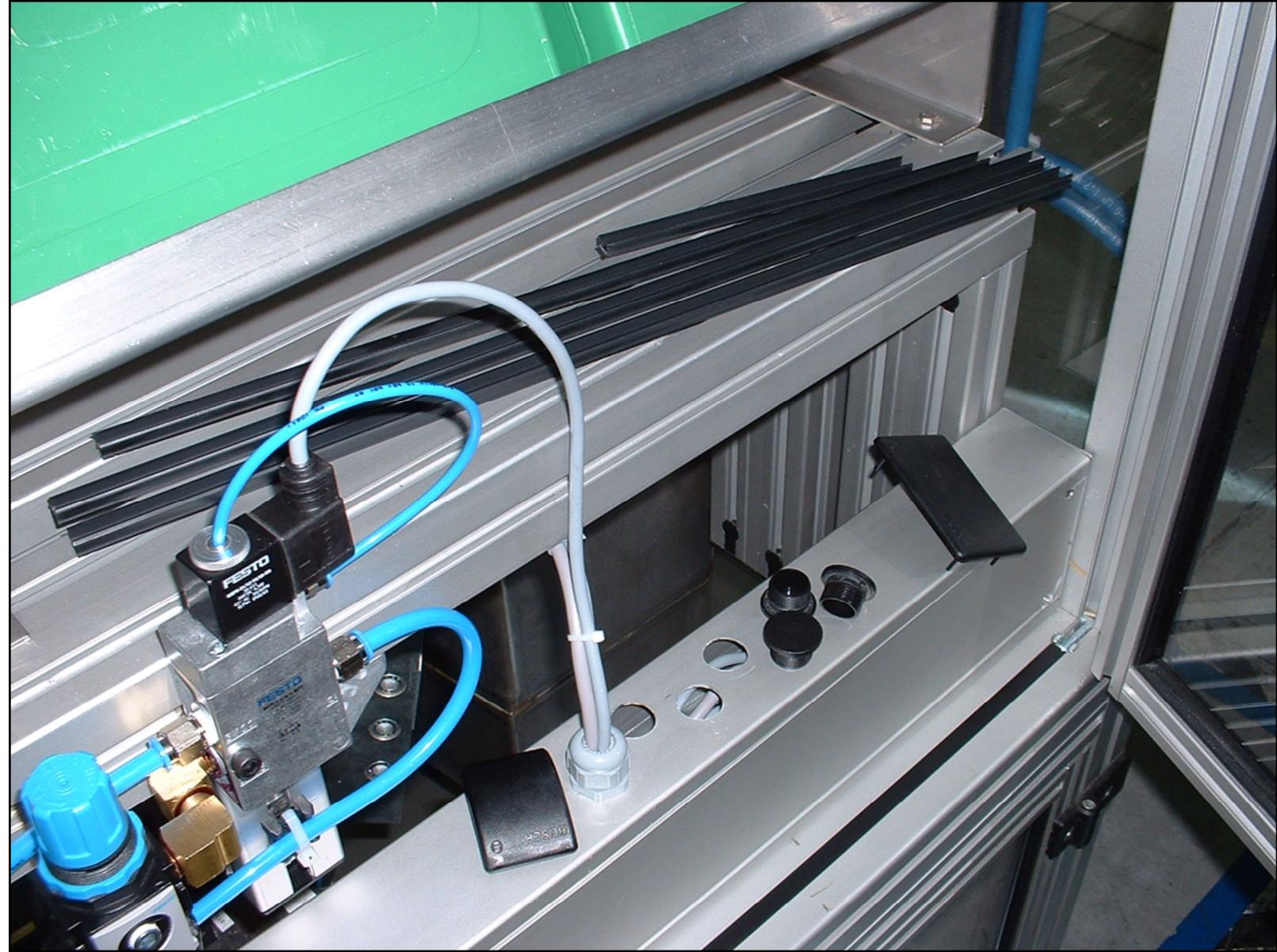
I made a deflector plate to prevent components falling into those out-of-reach areas and the component would be deflected back to the front of the operator's side of the machine.



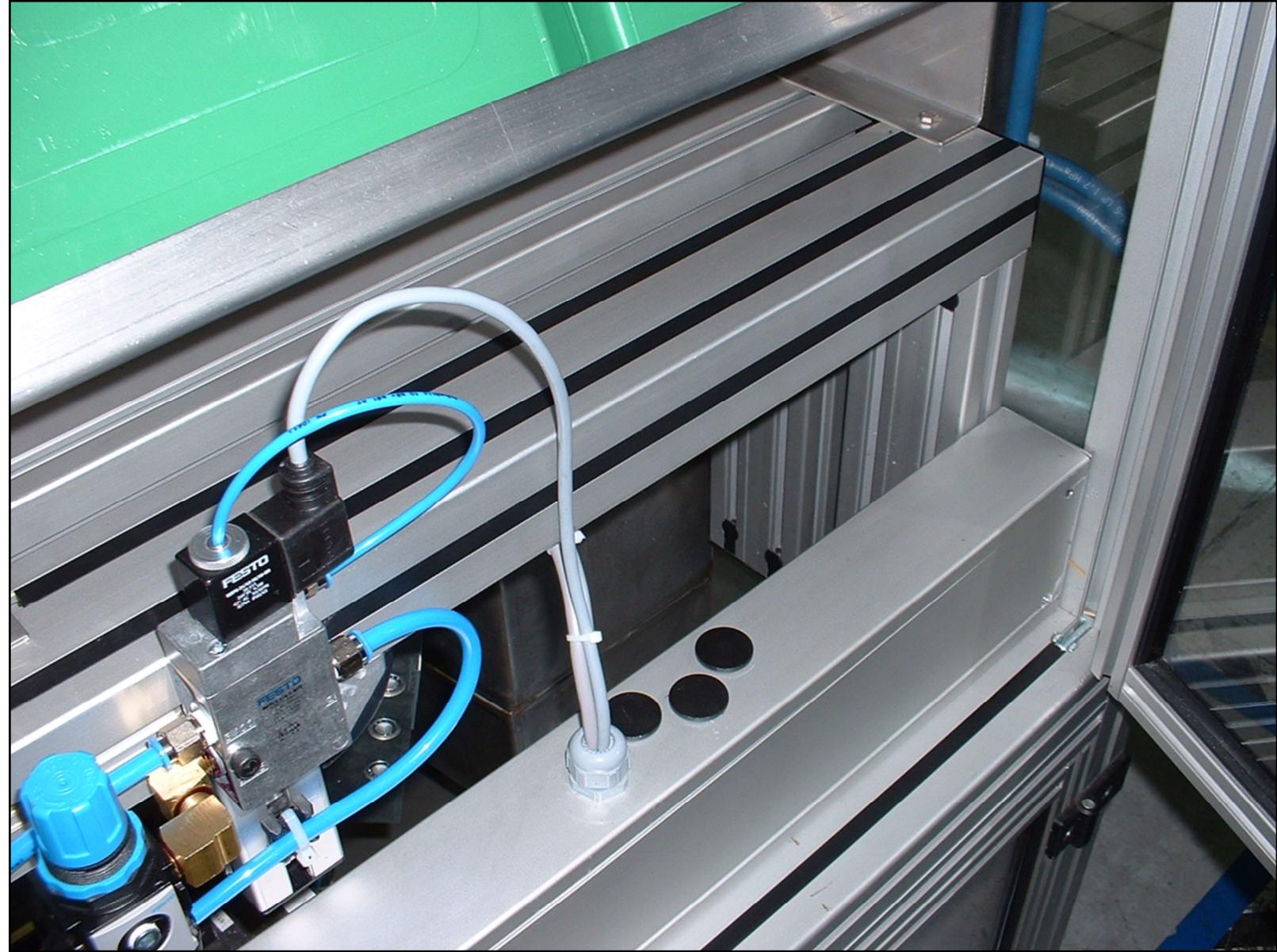
Again using a deflector plate to prevent components from falling down into inaccessible areas of a machine making it easier to clean and to retrieve falling components.



Installing plastic covers in nooks and crannies as in this case of aluminum profile used to as the framing structure to this assembly machine makes the whole cleaning process a lot easier.



Ready to install...



Voilà! Done...