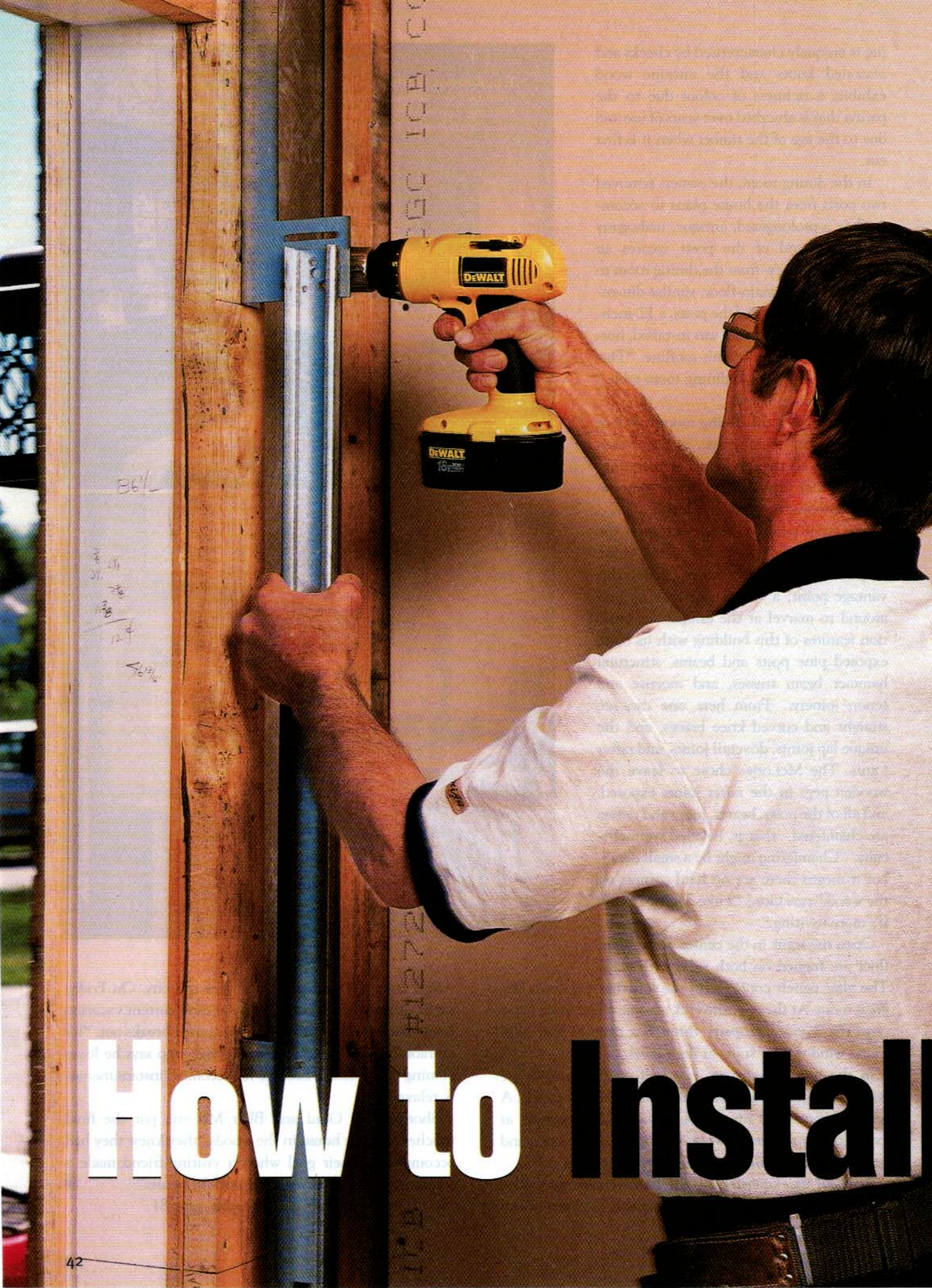


How to Install

a Garage Door

Story by Dennis McCloskey

Photos by Brian Barrer

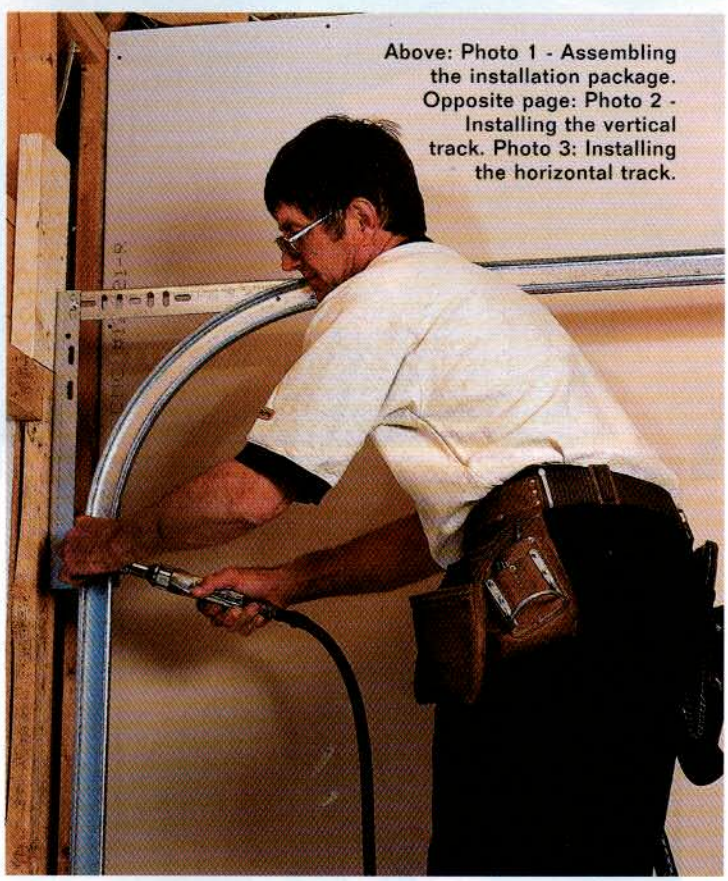
In the 13 years Don Jones has owned and operated Doors & Things in Wyevale, Ontario, 40 kilometres north of Barrie, he has installed hundreds of standard and custom garage doors. Many were among the 1,197,000 garage doors installed and repaired in Canada by Garaga Inc. of Ontario and Quebec.

Jones is an independent operator designated by the company as a 'Garaga Expert'. The veteran door installer is a stickler for detail and a die-hard proponent of quality work over quantity ("I can take up to a full day to install a garage door"). His friends tell him that hanging a garage door is not rocket science. "But you know what?" he says, "I treat it as rocket science."

Some other pros share his sentiment. In a popular U.S. home improvement video, by D.I.Y. Video Corp., two experienced remodellers and house builders give step-by-step instructions on how to build a garage. In one *Hands-On Series*, they demonstrate how to build framing for a garage wall and roof, how to install windows, shingle the roof, install siding, finish trim and install a garage door opener. There is only one piece of the project they left to another expert contractor: installing the door. "It's not that complex a task, but it should be done carefully if you don't know what you're doing," says host Avian Rogers.

Since Don Jones knows what he's doing, *Canadian Homes and Cottages* spent a day with him as he installed a high-durability, insulated steel, 14' X 7' double car garage door at a residence in the Barrie area. The Standard-Plus Garaga door of 26-gauge, hot-galvanized steel with wood grain finish on both sides came from the factory in four individual sections - or panels - packaged in pairs. Six decorative Caprice windows appear in the top panel.

Before picking up the ready-made sections at the factory, Jones had already pre-measured the job site because he knows you never use the



Above: Photo 1 - Assembling the installation package. Opposite page: Photo 2 - Installing the vertical track. Photo 3: Installing the horizontal track.

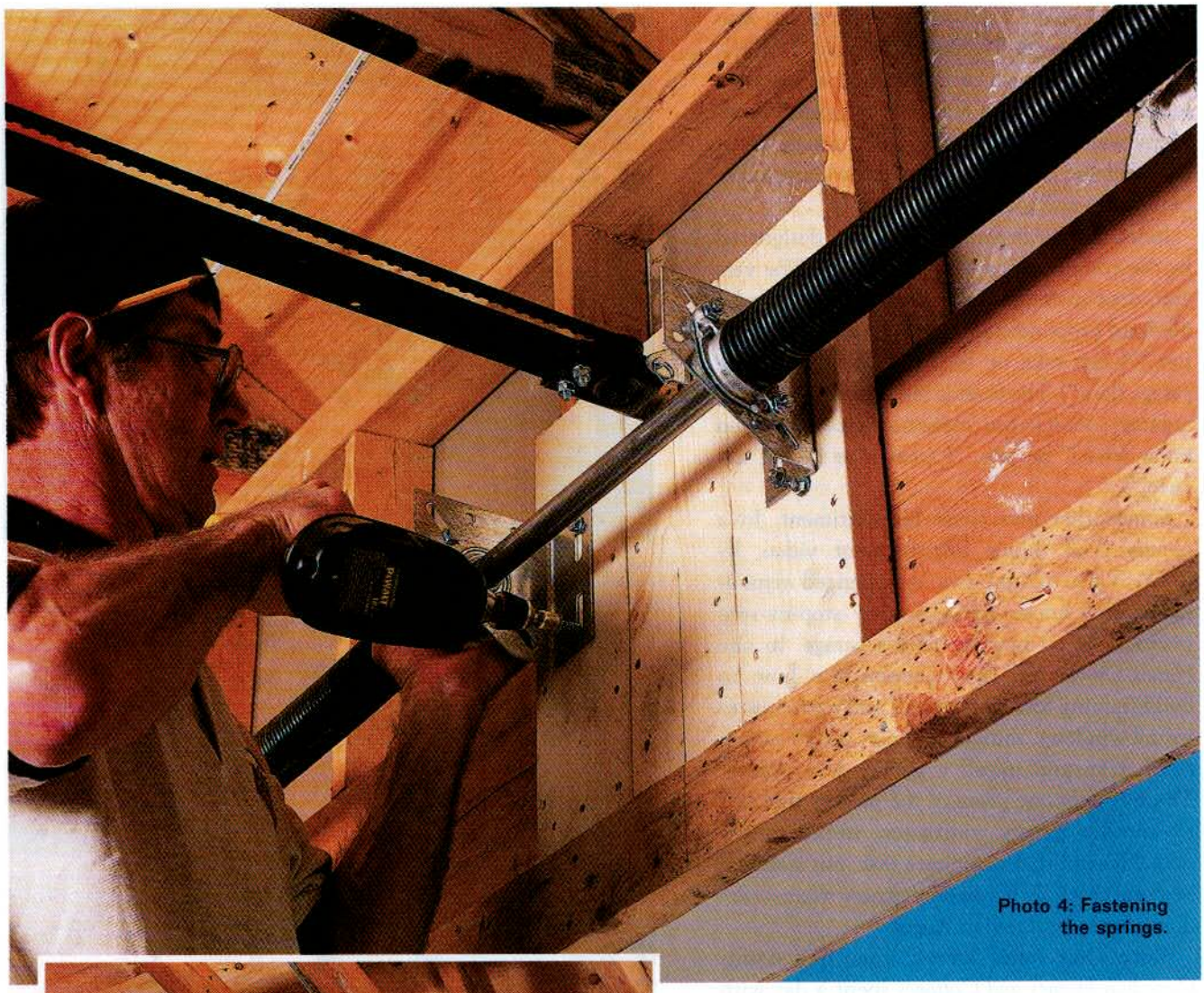


Photo 4: Fastening the springs.

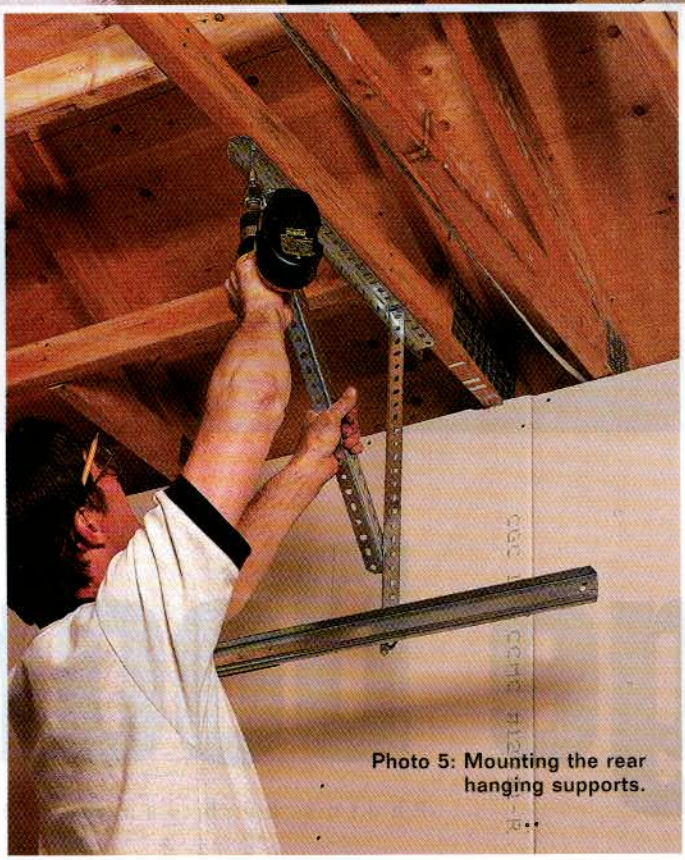
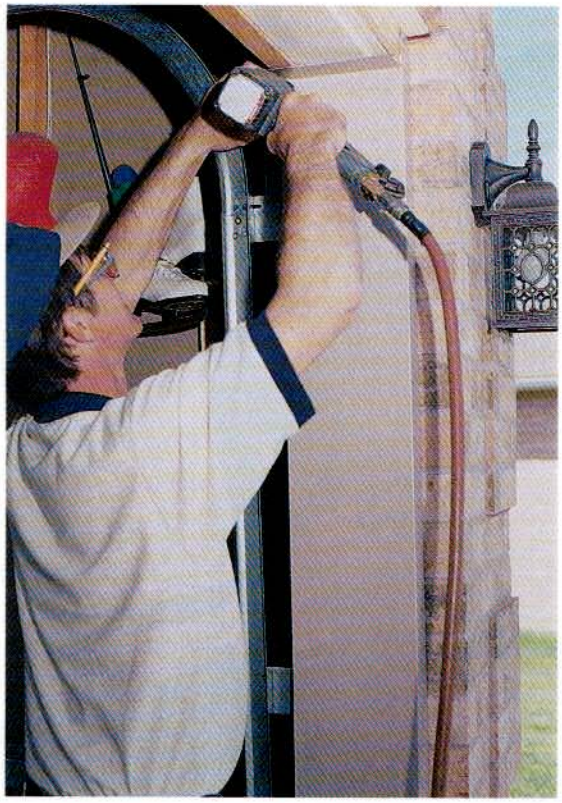


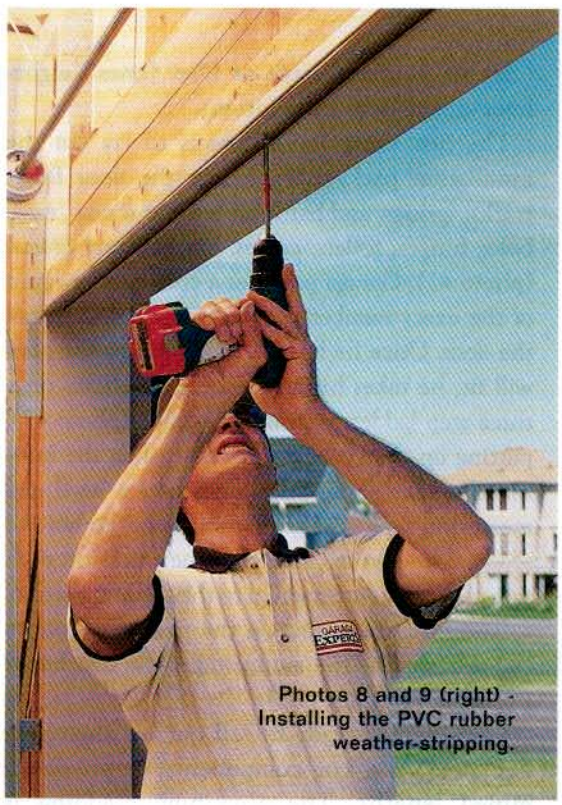
Photo 5: Mounting the rear hanging supports.

existing door as a correct measurement. (The best way to measure is to calculate the height from floor to frame in three locations: left, right and centre. Then, measure the width from frame to frame in three locations: bottom, middle and top. In both cases, use the largest of the three measurements.)

Jones also checked to see if there were any potential problems or deviations that needed to be corrected before installation, and ensured that the foundation was strong. He always keeps in mind the direction any access door opens, and checks lighting fixtures, water pipes or anything else that could hinder installation of the door.

After he removed the old, steel, non-insulated door of the Barrie residence, his experienced eye was able to ensure there would be panel symmetry and a good seal. He believes an experienced installer has the skills needed to balance a door properly, ensure optimal airtightness and





Photos 8 and 9 (right) - Installing the PVC rubber weather-stripping.

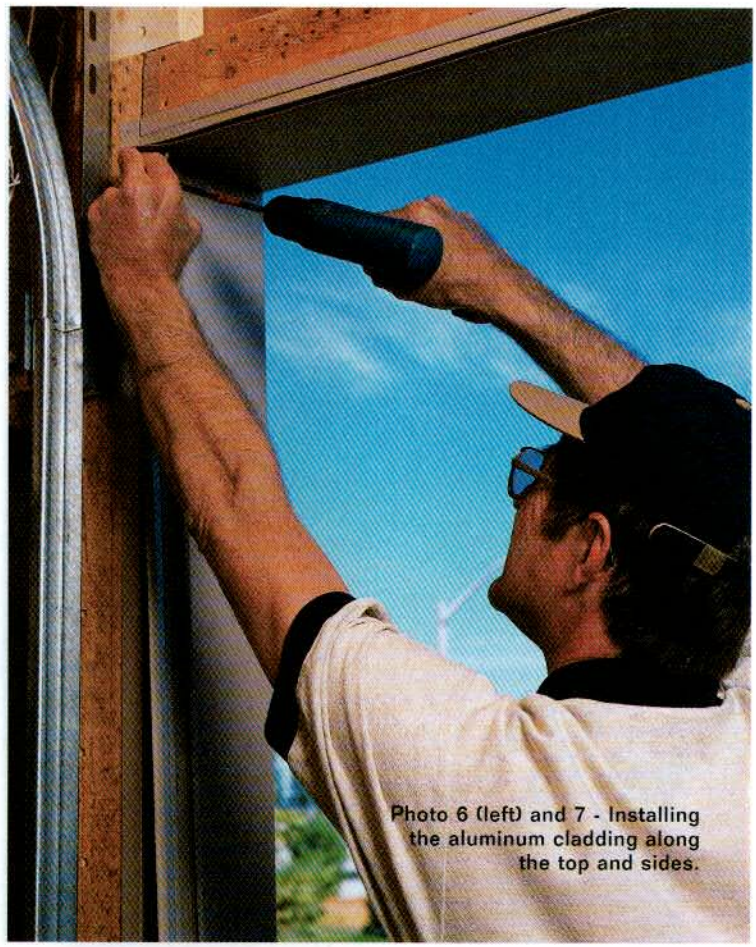
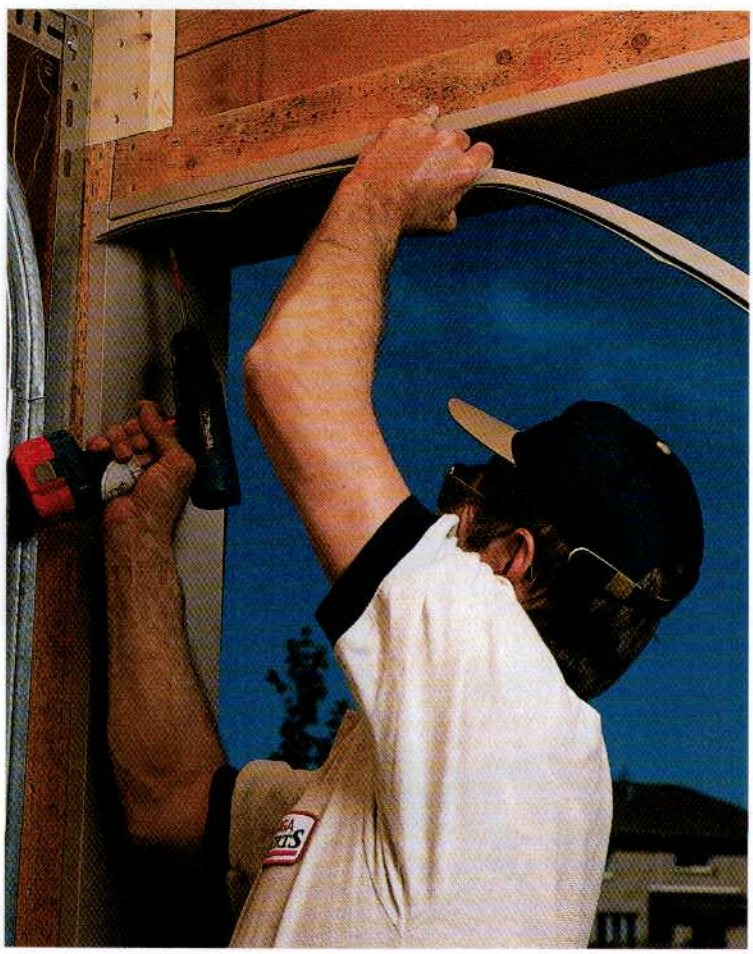


Photo 6 (left) and 7 - Installing the aluminum cladding along the top and sides.



avoid friction that causes premature wear and tear and allow effortless opening and closing for years to come.

"The quality of the installation is as important as the quality of the product," he says.

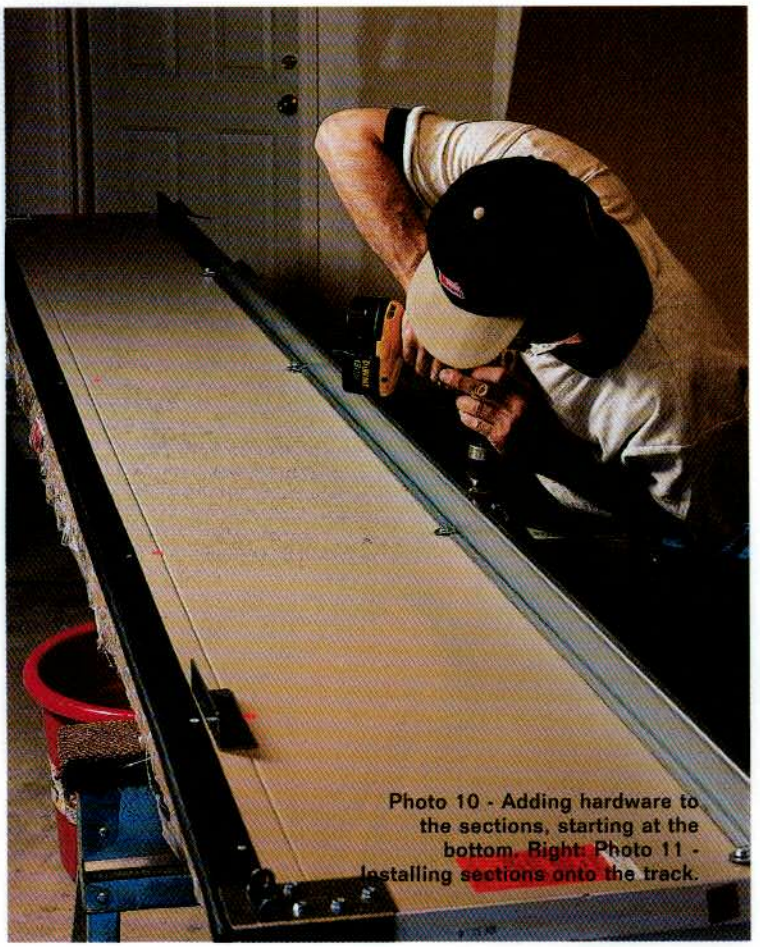
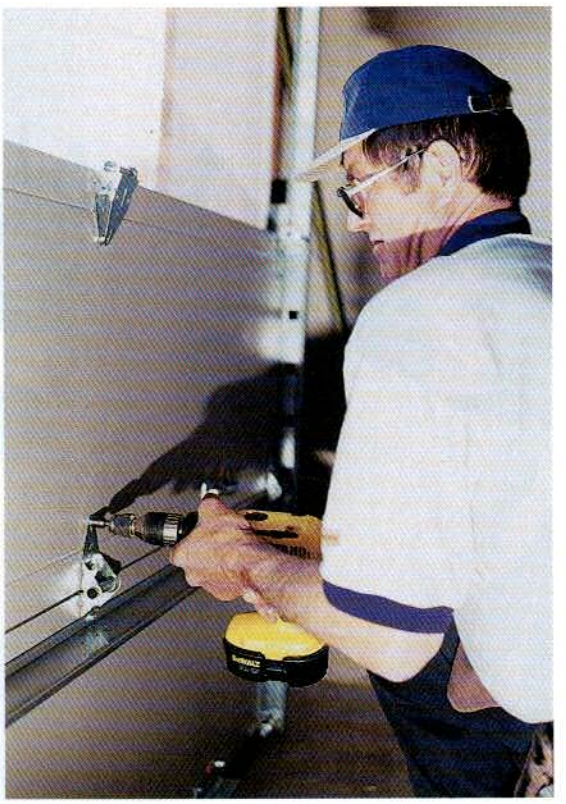


Photo 10 - Adding hardware to the sections, starting at the bottom. Right: Photo 11 - Installing sections onto the track.



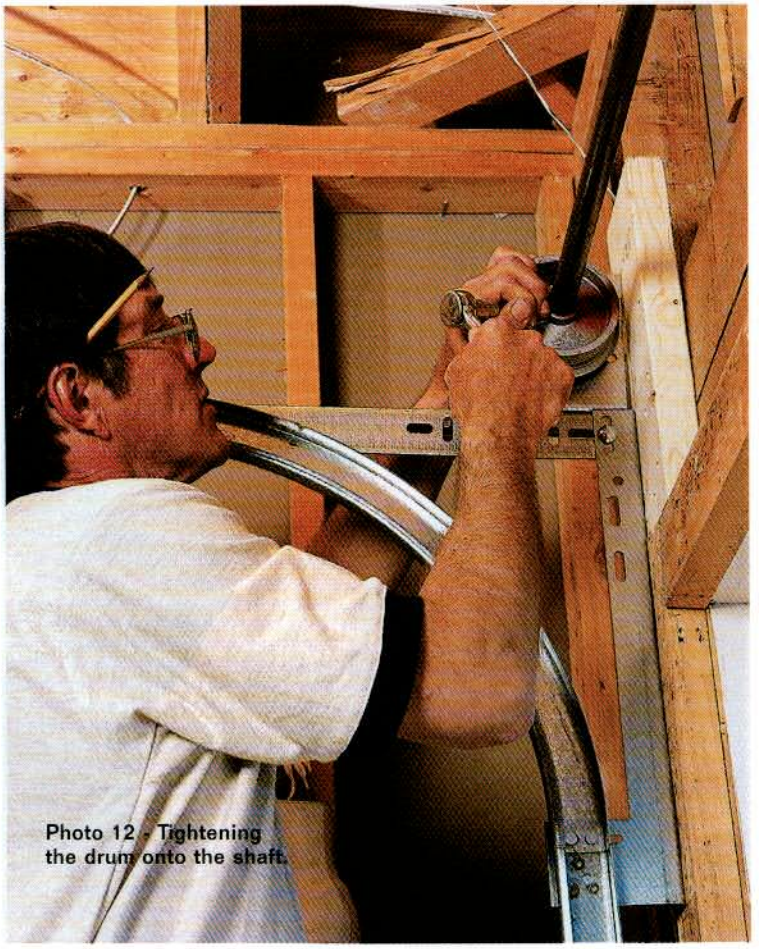


Photo 12 - Tightening the drum onto the shaft.

Here's a photo essay of Don Jones's eight-hour garage door installation:

The first thing Jones does is to lay out the installation package, including the door faces, tracks, springs, and hardware such as screws, nuts, bolts, hinges, rollers, cables, brackets and drums. (photo #1). Garaga provides a computer printout of the exact number of pieces required to install the door. Once he has 'a vision' of how the door will fit, he takes his air ratchet and climbs on a three-step ladder to install the track (photo #2), putting up the vertical track first, then the horizontal track (photo #3). Jones uses a level and measuring tape and even though he knows the spacing, he says it's vital that the tracks on each side of the door are parallel to the top and bottom.

Fastening the springs is the next step (photo #4) followed by the mounting of the rear hanging supports (photo #5).

Jones is now ready to roll out his aluminum flat stock and cut components to pre-determined lengths. The aluminum cladding is installed along the sides and top (photos #6 and #7.) A large piece of weather-stripping, made of quality PVC rubber, is attached to the top of the door (photos #8 and #9) to seal it, keeping out wind, rain and snow. Rubber weather-stripping on the bottom sections is flexible enough to adapt to an uneven floor.

Jones now begins 'hardwaring' the sections (photo #10) from bottom to top. He says every section is different, depending on the handles and hinges. Garaga provides 14-gauge steel reinforcement plates for the interior of the door where hinges and handles are attached. And, because this is a double door, Jones installed reinforcing struts. He now lifts each panel and installs the bottom three sections onto the track. (photo #11.)

With three panels in place, Jones tightens the drum onto the shaft (photo #12) starting on the left side. He sets the cable on the drum, draws the door off the ground and clamps off the shaft. He then moves over to the right side (photo #13), sets the cable of the drum and uses a level to pull the right side cable drum up tight, so the door is level. Now the pre-hardwared top section can be fitted into place. Winding the torsion springs is the next step (photo #14). Since every door is a different weight, a spring is needed to lift that weight. For a seven-foot-high door, the spring will unwind seven to eight times to open the door.

When the door is up and running, Jones checks the alignment and makes any necessary adjustments to the side tracks.

It's now time to install, re-connect or remount the existing garage door opener. The choice of an electric operator is important to the smooth operation of a garage door. A model with a rubber belt, reinforced with metal wire, is highly recommended by the pros. The motor of this model is insulated from the metal case in order to cut out vibration. This type of belt is much quieter than the traditional steel chain. Another way to reduce the noise of a garage door while opening and/or closing is to ensure that nylon rollers are used instead of steel. They allow a softer rotation on the tracks. For a door 12 feet or more, the Garaga Experts recommend white nylon rollers with ball bearings.

The last thing Jones does is a lube job. He lubricates all springs, rollers and hinges with a specially made lubricant or a small amount of motor oil, such as 10W30. Jones doesn't recommend applying excessive WD-40 because it acts as a degreaser as well as a lubricant. The garage door opener track that holds the chain or cable should also be lightly lubricated with a special lubricant or grease. ■

See For Your Information, page 81.

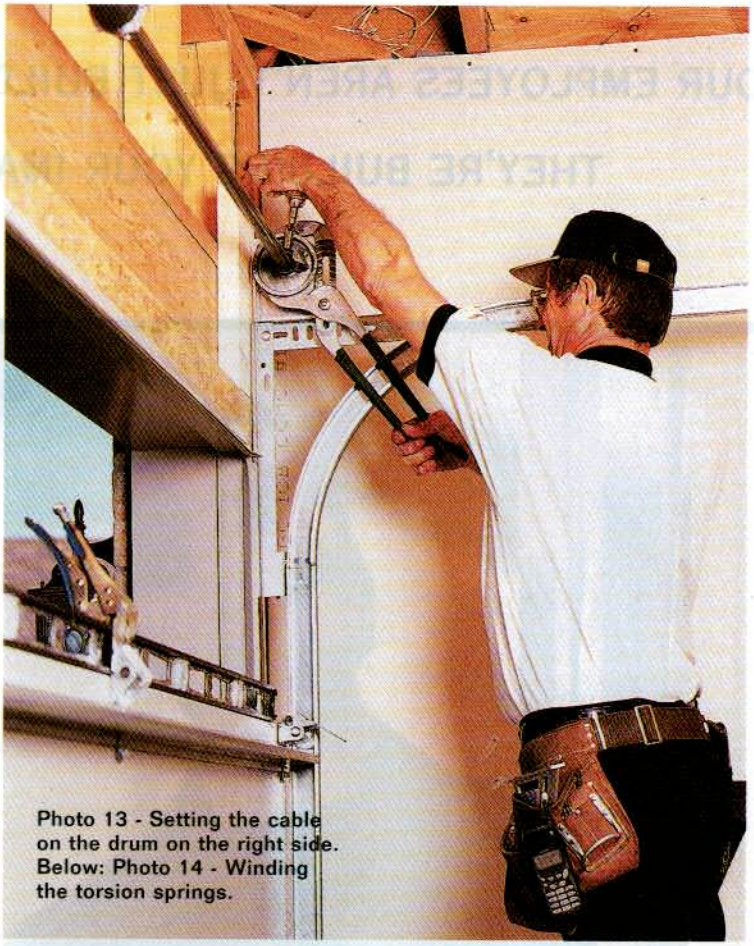


Photo 13 - Setting the cable on the drum on the right side. Below: Photo 14 - Winding the torsion springs.