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THE TECHNOLOGICAL PROCESS OF ASSEMBLING THE PANEL

There are 4 different types of electrical panels – the main breaker panel, fuse boxes, main lug panels, and subpanels. The electrical panel typically consists of a main breaker, circuit breakers and bus bars. The main breaker: is the large two-pole circuit breaker that limits the amount of electricity coming in from outside to protect the circuits it feeds. It also identifies your breaker panel's amperage capacity.

There are some signs when you should replace electrical panels, they are: you panel is more than 25 years old, it is warm or smells burnt, breakers trip all the time, see rust in your electrical panel, etc

The technological process of assembling the panel includes the following operations: 1) electrical installation; 2) assembly of the panel; 3) marking; 4) control.

At the first electrical installation operation, the harness is laid out on the assembly table according to the template in accordance with the electri-

cal connection diagram. After all the actions of making jumpers, stripping the wires with pliers, bending the ends of the wires and lengthening them, you need to make sure that the wiring is correct and fill in the accompanying label with the drawing number and the name, attach it to the harness with wire waste.

The second operation of assembling the panel, a metal structure is installed on the work table, on which the surface of the nuts for grounding is cleaned, after which they are lubricated with grease and screws with washers are installed to connect the grounding conductor. Install and fasten the angle to fix the panel in the open position. Panel brackets are attached with a screwdriver. We insert and fix the harnesses with strips and fingers on the metal structure of the panel. Then we install relays and blocks according to the electrical connection diagram. Install intermediate relays, current relays, and time relays in accordance with the specifications. Connect the ends of the wires to the relay and blocks according to the diagram. At the end of the operation, fill in and attach the accompanying label to the panel.

To start with, you need to have a label on the outside of the box indicating that it is a high voltage area to warn people not to open it unless they are qualified. In most cases, you also need to ensure nothing is placed anywhere within 3 feet of the box. Although most home owners may not have to operate circuit breakers in the electric panel too often, it is important to have proper labeling so that the circuit breakers in the panel can be easily identified in the case of emergency, or if electrical repairs or upgrades are being made. Always mark the panel schedule with an ink pen or marker. A sharpie is an ideal choice. If you simply write the information down with a pencil. When marking, the markings of relay blocks are applied with white enamel.

During the control operation, the presence of grounding of the devices and the panel and the absence of breaks are checked. This is done by touching the current-carrying wires of relay contacts, in order to see the installed equipment integrity, the presence of grease in the grounding places.