# **Automatic Vacuum Switch**

(03J62.10)

The following instructions were provided by the manufacturer.

## **Warnings**

Please read the operating instructions before use. The iVac Switch Box unit is intended for indoor use, in dry locations only. This unit may use more than one live circuit. When not in use, the Mode switch should be set to the 'Off' mode position and the Vacuum system should also be turned off. Do not connect hazardous devices to the 'Vacuum Power' receptacle. Only connect to 120Vac grounded ac mains supply rated at 15 Amps. Do not connect to mains circuits that have a capacity of greater than 15 Amps.

## **General Description and Operation**

The 'iVac' Switch Box is primarily intended to be used in conjunction with a power tool, such as a table saw, router or sander and an associated vacuum or dust collection system. The unit has the following Inputs, Outputs and Controls. The unit is provided with two input power cords; one for the power tool, Tool Input (6 feet) and one for the vacuum system, Vacuum Input (1.5 feet). There are three AC receptacles: Auxiliary, Tool Power and Vacuum Power.

There are also three user controls: a Mode switch and two Circuit Breakers. Two power cords are provided. Each power cord is individually protected by a 15 Amp circuit breaker. The Tool Input cord is the prime cord and is used to supply the power to the tool being used. The Vacuum Input cord is used to supply power that will be used to power the vacuum system.

If the combined power requirement of the tool and the vacuum is less than 15 Amps, then the Vacuum Input cord can be plugged into the Auxiliary receptacle. In some cases, the combined power requirement of the power tool and the vacuum system may exceed the 15 Amp rating of the AC mains supply circuit. If this situation occurs, then the two input power cords should be connected to two separate 15 Amp circuits, with separate circuit breakers. The Auxiliary receptacle is powered from the Tool Input cord and can be used to power the vacuum system, as described above.

The Tool Power receptacle is used to provide power to the tool being used. The Vacuum Power receptacle is used to provide power to the vacuum system. The Mode switch is used to determine the mode of operation of the vacuum system. There are three modes of operation: Auto – Off – On. In the 'Auto' mode, when the power tool is activated, power is automatically supplied to the vacuum system. When the power tool is turned off, the power to the vacuum system will be maintained for approximately a further six seconds, in order to clear all dust from the work surface. In the Off mode, power is permanently disconnected from the vacuum system. In the On mode, power is permanently connected to the vacuum system.

There are two Circuit Breakers accessible on the top surface of the unit; each is rated at 15 Amps. The Tool Breaker is used to prevent overload conditions to the Tool Input cord. In the event that the breaker operates, the button will be raised. It is recommended that the tool be disconnected from the Tool Power receptacle and the Tool Breaker be reset by pressing the button down. The tool can now be reconnected. If the Tool Breaker operates again, the configuration needs to be checked. If under these conditions the Vacuum Input cord is connected to the Auxiliary outlet, it may be necessary to connect the Vacuum Input cord to a separate AC mains outlet, which is fed from a different household circuit breaker. The Vacuum Breaker is used to prevent overload conditions to the Vacuum Input cord.

In the event that the breaker operates, the button will be raised. It is recommended that the vacuum system be disconnected from the Vacuum Power receptacle and the Vacuum Breaker be reset by pressing the button down. The vacuum can now be reconnected. If the breaker operates again, it indicates that the vacuum system is taking in excess of the rated 15 Amps and is beyond the rating of the iVac Switch.

#### Set Up

In a typical set up, the following sequence can be followed.

- The two input power cords are disconnected from the AC mains supply.
- The Mode Switch is set to OFF.
- The Power Tool is switched off and is then plugged into the Tool Power receptacle.
- The Vacuum system is plugged into the Vacuum Power receptacle.
- The Vacuum Input cord is either plugged into the Auxilliary receptacle or into a separate AC mains outlet, as described above.
- The Tool Input cord is plugged into an AC mains outlet.
- The Mode Switch is now set to the required mode and the system is ready to use.

#### **Specification**

- The iVac Switch Box has received ETL safety approval and conforms to UL STD 244A and is certified to CSA STDC22.2 No 14.
- The iVac Switch Box has been designed so that it can operate in a continuous mode.
- There are three modes of operation. AUTO OFF ON
- The iVac Switch Box is designed to operate on 120 Vac. from a 15 Amp circuit.
- The maximum ac current to the tool should not exceed 12 Amps. (The labeling on the top surface of the iVac Switch Box indicates a rating of 12 Amps. All appliances that interface with this style of receptacle are rated at 12 Amps or less.)
- Turn on delay time 0.5 seconds to 2.0 seconds.
- Turn off delay time is approximately 6 seconds.
- Turn on Tool current, in Auto mode, is 0.3 Amps to 15 Amps.