Diagnostic procedure is available at WWW.RIPTIDEVAC.COM in the following languages

English Spanish Portuguese French

Note: The motor running slow is the main symptom of a low/bad battery, if the vacuum doesn't turn on at all after cleaning your contacts there is probably a component problem, perform the diagnostic

### Before performing the diagnostic procedure:

- Load test your battery.
- Make sure your battery charger is fully charging your battery, use a charger that delivers a minimum of 10 amps to the battery.
- Clean and tightening the battery contacts.
- Using the round wire brush (included,) clean the contacts on the cord plug and the control panel.

## Load Testing the Battery

### We recommend all Riptide users own a battery load tester

- A load tester will determine if your battery is good or bad within 10 seconds, it is the only test we know of that will give absolute and conclusive test results. A good battery that has a full charge will put out around 13 volts and it will dip to around 11 to 12 volts when it is under load.
- Check your battery anytime you feel your Riptide isn't functioning at full power.
- Load testers are available at <u>www.riptidevac.com</u> as well as auto parts stores, Amazon and many other places.



## **Quick Diagnostic Procedure**

The procedure is the same for a model XP with a handheld battery box

If the vacuum does not turn on after cleaning the terminals and contacts perform the following diagnostic procedure. <u>Note: Battery terminals must</u> <u>be clean and very tight.</u>

### Step 1

Unscrew the large plastic grommet cap from the vacuum head.

### Step 2

Unscrew the watertight connection from the motor and pull the cord out of the vacuum case. Use pliers to loosen the connection and when you reinstall the cord later.

**Step 3** Plug the motor test cable directly into the motor.

> All replacement parts are available on the website WWW.RIPTIDEVAC.COM

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### Step 4

Touch the wires of the motor test cable to the posts on the battery.

- If the motor **DOES NOT** turn on it needs to be replaced.
- If the motor **DOES** turn on go to the next step.



### Step 5

Turn the control panel switch to the on position as shown and touch one wire of the motor test cable to each contact on the control panel plug, it doesn't matter which side the red and black touches.

- If the motor **DOES NOT** turn on there is a problem with the control panel.
- If the motor **DOES** turn on there is a problem with the cord.

Note 1: The control panel is sold as a complete assembled unit, but each component can also be purchased separately. (see diagnosing the control panel on page 4 if you wish to test further)

**Note 2:** If the cord is determined to be the problem it may be possible to repair it, the plug on the end of the cord is also replaceable. (see repairing the cord on page 6.)

All replacement parts are available on the website WWW.RIPTIDEVAC.COM



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## **Diagnosing the control panel**

Remove the storage bins from your cart for easy access to the back of the power switch. If you choose to replace a component of the control panel instead of the whole control panel you can remove it from the cart to make it easy to work on.

### Step 1

Carefully check all wires and contacts for wear and damage, repair or replace as needed.

### Step 2

Test the switch by plugging the vacuum into the plug and jumping across the lugs with pliers or any other metal object. It doesn't matter if the switch is in the on or off position.

- If the motor **DOES NOT** turn on, recheck the wires and connections and double check your test procedures.
- If the motor **DOES** turn on replace the entire control panel or just the switch. If the switch is bad it can be bypassed until you receive a replacement, (see bypassing the switch on page 5.)

# All replacement parts are available on the website WWW.RIPTIDEVAC.COM



## Bypassing the switch

#### Step 1

Using a 17mm socket and ratchet remove both nuts and washers from the back of the power switch as shown.

## Remove the long wire and place it on top of the short wire.



### Step 2

Take the longer of the two black wires (the wire that is connected to the negative terminal on the battery) and put it onto the other side of the power switch (on top of the short black wire) install the washers and nut. The switch is now bypassed, you will need to unplug the vacuum from the control panel to shut it of.

## **Repairing the cord**

### Step 1

Twist the spring counterclockwise and pull hard at the same time to remove it.



### Step 3

Cut the cord back beyond the damage and strip the wires as shown.

### Step 4

Insert the wires into the contacts and tighten the bolts.

### Step 2

Remove the 6 screws using the T-20 Torx tool (included.)



**Step 5** Clamp the cap on and reinstall the screws.









