

When deciding on your new pressure washer you've likely not given much thought regarding the two primary types of motors used to power your electric cleaning machine.

The differences in performance and the pricing should have your attention.

As in all considerations regarding power tools your ultimate decision should be based on your **USAGE**.

If you are using your pressure washer sporadically and for short periods of time then you maybe more price sensitive but on the flip side if you are using your pressure washer regularly and for longer periods of time selecting an induction motor maybe a much more cost effective purchase in the long run.

With this in mind here are some of the differences between **induction** and **universal** motors... without getting too technical.

1) Size and Weight

Universal motors are typically lighter than Induction motors making them ideal for smaller more compact machines that need to be transported around more. A heavier Induction motor in the right machine will however make it more stable and less prone to falling over.

2) Cost

Induction motors are more expensive and found often these days in the top-of-the-line pressure washers. There can be exceptions to this rule so its always worth looking at the type of motor before making your final decision. Induction motors are made with more copper, aluminum and steel than universal motors.

Universal motors are less expensive and found in just about every electric power tool known to man.

3) Speed

Induction motors typically have a slower max speed building in more longevity.

Universal motors are only limited by friction.

4) Torque at Start Up

Induction motors have less torque at start up, think of them as "high gear" on your car or bicycle. Once they're at cruising speed they're good to go.

Universal motors typically have great torque at start up that gets the motor spinning more quickly and they do cruise as well but the initial start-up will take its toll long term.

5) Noise

Induction motors are quieter, far quieter than universal motors.

Universal motors are widely known for their shriek but with an induction motor you can hear the quality.

6) Energy Efficiency

Induction motors are highly efficient motors that require less amperage per HP.

Universal motors require more amperage per HP than induction motors. All this extra energy requirement turns into heat in the motor which will sometimes burn them out, literally, if used for extended periods of time.

This is also a big consideration if you are using your pressure washer in conjunction with an extension lead or off an electric supply that may not be as up to date as it should be and has a drop in voltage. In this instant an induction motor powered pressure washer is less likely to pop or blow fuses.

7) Application: Your Final Decider

Typically if you are going to use your pressure washer regularly and for prolonged periods of time you should seriously consider a machine with an induction motor.

If you are purchasing a pressure washer and you expect it to last for years to come or you can foresee a time when you are going to need that unit more and rely on it then again look for a machine with an Induction motor.

If you need a pressure washer where storage is a driving factor and being able to move it around for occasional cleaning then a universal motor machine will work for you just fine.