



## WHITE PAPER

"SOLSONS" / "POP PROW" RATCHe WRENCH (# RWSAE12)



### PRODUCT

Invented Wrench / Spanner having ratchet mechanism & 4 sizes in one tool for DIY, Professionals & Industries. Set of 3 tools Covers 12 popular sizes in **SAE** and effectively 19 popular sizes including Metric.

Similar set of 3 wrenches is available in **Metric** sizes which effectively operate 17 popular sizes.

### Introduction

Less tools to carry. Only 3 wrenches required for operating 19 popular nuts & bolts. Unique ratchet mechanism provides great comfort as one need not take out and re-fit the wrench while tightening & loosening nut / bolt. A **Time Saving invention**. All these wrenches are life-time rust-proof as they are made out of stainless steel.



## The Design Approach

### Two-in-One Jaw Slots Opening

Wrench is Invented accommodating 2 sizes in one slot opening. Thus one tool covers 4 popular sizes. Less tools to carry for more sizes.



### Unique Ratchet Mechanism

The concept of geometry has been simply utilized for providing ratchet mechanism to this wrench. It was observed that any conventional wrench when in use, does not completely clamp both the parallel faces of a nut. While in use, the conventional wrench clamps only 1/3<sup>rd</sup> surface area of the face of a nut and 2/3<sup>rd</sup> area remains free / without any surface contact. For such 2/3<sup>rd</sup> area of nut, a cut / relief has been provided by SOLSONS in its wrench to allow it to go back smoothly.



Thus, one need not take out and re-fit the wrench while tightening & loosening nut / bolt. The wrench tightens nut in one direction & moves freely in another direction. Such ratchet mechanism is a great **Time Saving Invention.**



### **Operates various popular sizes of Nuts / Bolts.**

Set of 3 tools covers 12 popular sizes in **SAE** and effectively **19 popular sizes** including **Metric**.

Capacity : Across Flat (AF)

**(SAE):** 1/4", 5/16", 3/8", 7/16",  
1/2", 9/16", 19/32", 5/8",  
11/16", 3/4", 13/16", 7/8".

*Can also operate* **(Metric)**  
6, 8, 11, 14, 15, 19, 22, MM  
(Total **19** Effective Sizes).



All the sizes are clearly indicated upon the handle of each wrench for quick setting.

### **Hardened Jaw-Slots**

The Jaw-slots are hardened to resist wear & tear.

### **Torque**

The entire tool can withstand amazingly high Torque force as it is made from a high tensile & very ductile stainless steel material.

### **Material**

All the 3 wrenches are manufactured out of high tensile Stainless steel alloy (17-4 PH) which is hardened. They are polished by Electro-less Polishing process and are life-time rust proof.

### **Packaging**

Set of 3 wrenches are packed together on single card pack (eco-friendly & without any pvc shrink pack or bubble pack). Here, one can feel & touch the tools. Fifty (50) sets of such card pack fit in a carton.



## How does it operate ?

- For tightening, place the wrench on a right size of nut / bolt and rotate as indicated by arrow ( ← ). The wrench tightens nut in one direction & moves freely in another direction due to the invented ratchet mechanism.
- For loosening, place the wrench on a right size of nut / bolt and rotate as indicated by arrow ( → ). The wrench loosens nut in the opposite direction & moves freely in another direction.
- Each opening (end) of the wrench has 2 slots (sizes) and one can operate any size out of these two.
- All the sizes are clearly indicated upon the handle for quick setting.
- Please see the animation on this product page on [www.solsonsusa.com](http://www.solsonsusa.com)

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US Patent No : US D448,981 S  
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Note: All above mentioned specifications are subject to change without notice.

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