

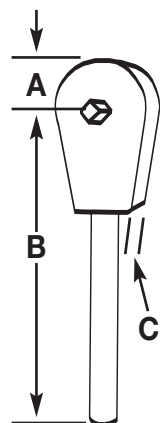
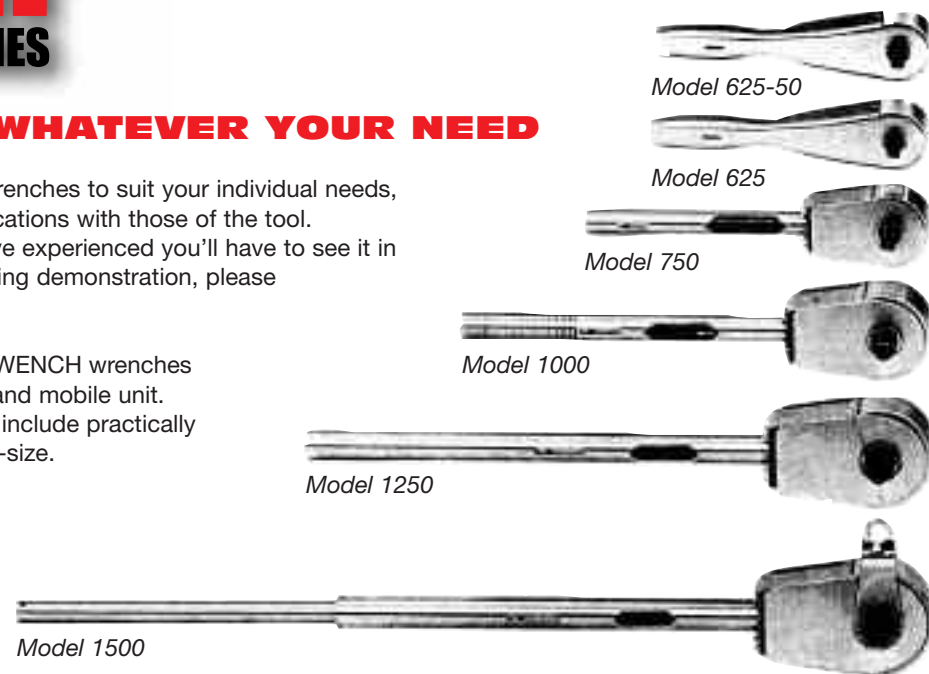
# SWENCH®

## MANUAL IMPACT WRENCHES

### A COMPLETE LINE...WHATEVER YOUR NEED

For quick, easy selection of SWENCH wrenches to suit your individual needs, review the chart and match your job specifications with those of the tool. SWENCH is so different from anything you've experienced you'll have to see it in action to believe it. For a quick and convincing demonstration, please contact PowerHawk Technologies, Inc.

This complete line of trouble-shooting SWENCH wrenches with accessories belongs in every tool crib and mobile unit. Models overlap in work range sufficiently to include practically any bolt and nut problem from small to king-size.



### SPECIFICATIONS Subject to change without notice

SWENCH MODEL	625-50	625	750	1000	1250	1500
A) Head Radius (inches)	1 1/8"	1 1/8"	2"	2 1/2"	3"	3 1/4"
B) Handle Length (inches)	12"	12"	16"	24"	36"	36"-60" with extension
C) Head Width (inches)	1 21/32"	1 21/32"	2"	2 5/8"	3 1/4"	3 3/4"
Size of Square Drive (inches)	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"
Bolt Diameter Capacity (inches)	Wide Range of Small Nut and Bolt Sizes		1/2" to 1 1/4"	3/4" to 1 3/4"	3/4" to 2"	1 1/4" to 2 1/2"
Max. Torque on "Frozen" Nuts (lb/ft)	500	500	800	2000	4500	7000
Max. Pull on Handles (lbs)	39	39	50	75	90	110 with extension
Weight (lbs)	6	6	11	23	46	78

### ACCESSORIES



**NUTRUNNER**

One furnished with each SWENCH except Models 1250 and 1500 to run fasteners on or off while in free running state.



**OFFSET**

Two offset lengths available for each SWENCH, except Model 1500. Used when lack of space prohibits using SWENCH directly over work.



**TUBULAR EXTENSION** — One or more lengths available for each SWENCH model. For hard to reach recessed nuts and bolts

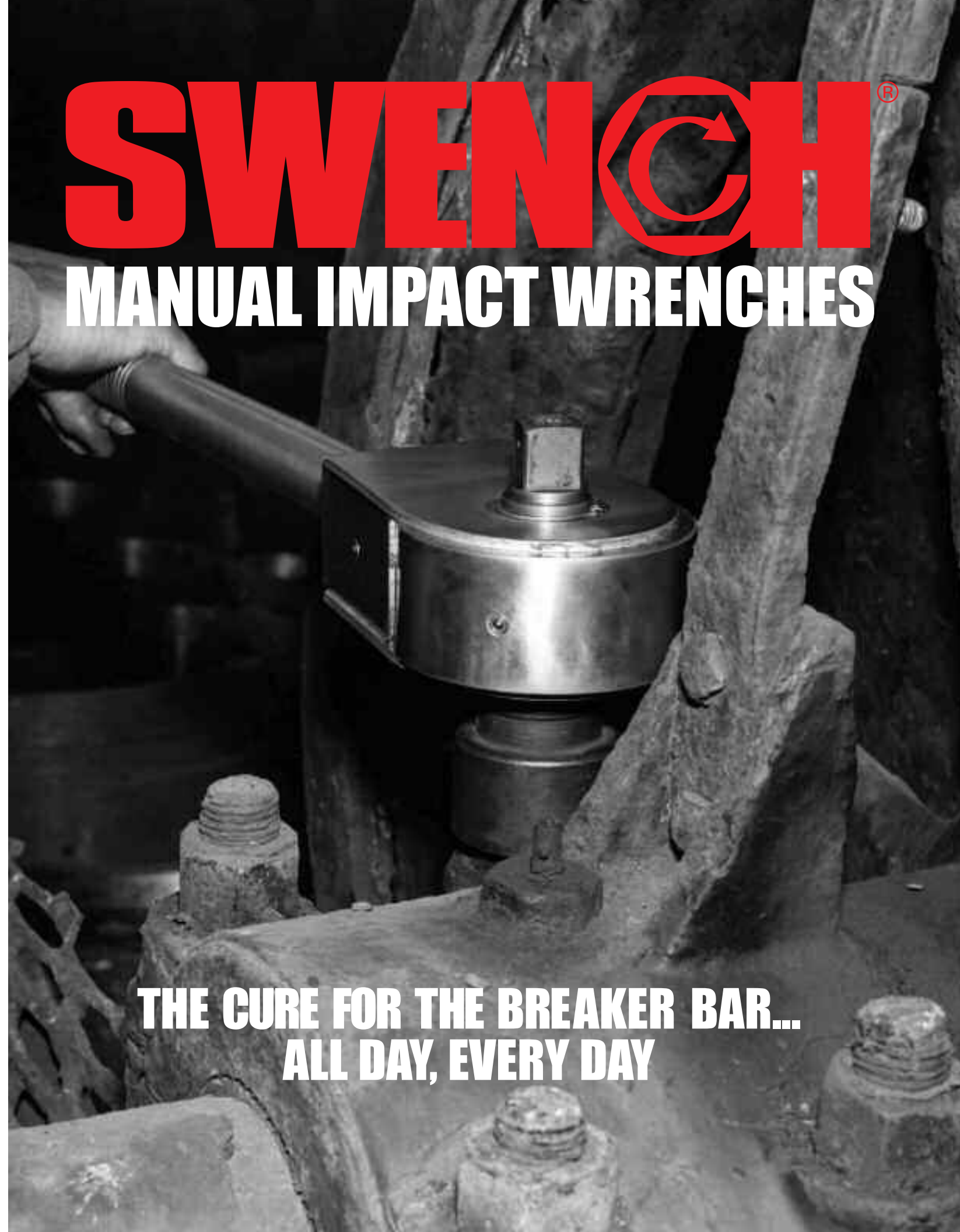


**BOX END WRENCH** — Six hex sizes from 1 1/8" to 1 1/16" for 3/4" drive. Eleven hex sizes from 1 1/8" to 2 1/8" for 1" drive. For nuts and bolts located with restricted horizontal and vertical clearances.

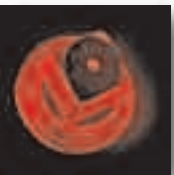
*Ranges of items shown pertain to standard price listings only. Other sizes and special accessories available upon request.*

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## MANUAL IMPACT WRENCHES



**THE CURE FOR THE BREAKER BAR...  
ALL DAY, EVERY DAY**



# SWENCH

## DELIVERS IMMENSE DRIVING IMPACT POWER... MANUALLY!

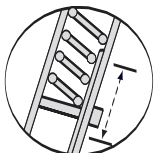
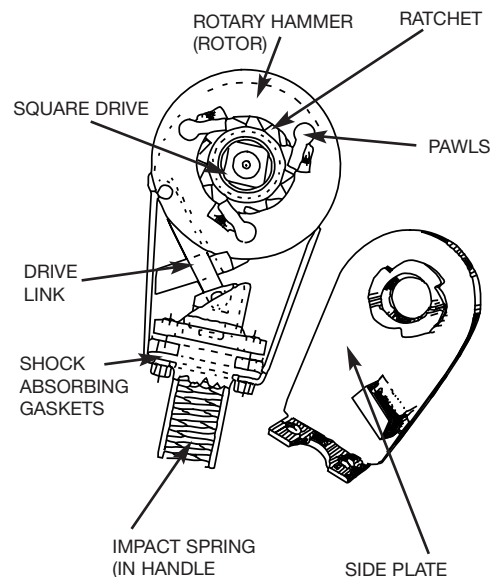
### THE INSIDE STORY OF SWENCH POWER

The "secret" of SWENCH super-performance is in its exclusive "Roto-Sledge™" Power Impact Head — a completely unique principle of converting spring power into more efficient torque impact.

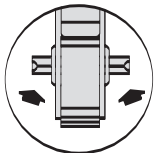
When the SWENCH is engaged with a nut through a standard square drive socket and the handle is advanced:

- A heavy rotary hammer moves with the handle until the nut offers sufficient resistance to hold the hammer stationary against the initial force of a strong spring.
- As the handle advances, the spring is compressed further through a drive link causing the applied energy to be stored in the spring.
- With continued movement of the handle, a set of cams attached to the side plates of the wrench raise the three pawls from their engagement with the ratchet teeth.
- When the handle has been advanced slightly more than 30°, the pawls are suddenly disengaged from the ratchet teeth.
- At this point, the heavy rotary hammer snaps forward rapidly through an arc of 30° under the drive of the powerful spring. The pawls then engage the next set of ratchet teeth delivering to them all of the momentum of the swiftly rotating, spring-driven rotor.

The result is a tremendous, sharp torsional blow equal to many times the force applied to the SWENCH handle which is transmitted directly to the socket and nut as pure torque.



Spring Adjustment



Square Drives (clockwise for tightening shown, counterclockwise for loosening on opposite side.)



Rotary Hammer (Rotor)

Swench instantly frees "sweated on" 2 inch studs exposed to 1000°F on cracking unit preheater exchanger with few impacts.



### WHAT SWENCH MEANS TO YOU

The combination of magnified force and precise control give the SWENCH scope and versatility of application far exceeding that of any other wrench — manual or power.

**SPEED** — SWENCH loosens "frozen" nuts and bolts instantly! Saves burning, hacking, chiseling. Saves man-hours, machine hours and downtime. Always ready to work — anywhere.

**PORTABILITY** — Only SWENCH in its impact torque class is truly portable — operates anywhere it's needed including under water — no auxiliary equipment — no power connections.

**EASY** — SWENCH is the simple answer to complex bolt and nut problems. Operator strength and skill is not essential. Adapters and accessories are available to fit most typical applications. "Special" designed for individual needs.

**SAFETY** — SWENCH protects you from back-breaking, knuckle-knocking exertion. No loose, "breaker" bars, no sudden release of a frozen nut—no shocks transmitted through the handle.

**POWER** — SWENCH, size for size, delivers greater, more effective torque than other power wrenches. Magnifies up to 63 times the force applied to the handle. Varies proportionately with each size wrench. Power is built-in constant, direct and free.

**VERSATILITY** — One SWENCH can handle more bolt sizes than any other comparable power tool. Can be used one minute for applying brute force to loosen a frozen nut and be switched immediately to the precise task of tightening a bolt to desired tension.

**ACCURACY** — SWENCH tightens bolts and nuts to maximum, practical tightness or to precise degree of tightness as desired.

**UTILITY** — SWENCH belongs wherever heavy-duty wrenching of nuts and bolts is required, wherever power wrenches are used—or indicated. As a "companion" tool, it takes over when others are inadequate. The tougher the job, the better. Rapidly replacing less efficient, more expensive methods everywhere.

**ECONOMY** — SWENCH saves you money at every level. No auxiliary equipment maintenance and man-hours; no costly upkeep on the wrench; reduces man-hours fighting frozen nuts — AND SWENCH costs much less than comparable power tools!



One person breaking torque on the M1 Abrams tank drive sprocket nuts using the 1000 model, 1 inch drive Swench wrench set.



Swench breaking torque on a frozen main rotor mast nut on a UH-60 helicopter using the 750 model, 3/4 inch drive wrench set.

### APPLICATIONS

Military Field Equipment

Artillery

Tanks

Armor

Airborne Application

Wheel & Track Vehicle

Earthmoving Equipment

Trucks & Automotive

Railroads

Aircraft

Ship & Shipyards

Haz-Mat Response Teams

Machine Manufacture & Maintenance



Loosening blowout preventers, christmas tree bolts and nuts on pumps are a cinch for Model #1000 SWENCH. Thin wall box end wrenches are used to reach those "hard to get at" nuts and bolts.

National Stock Numbers assigned and available through GSA.