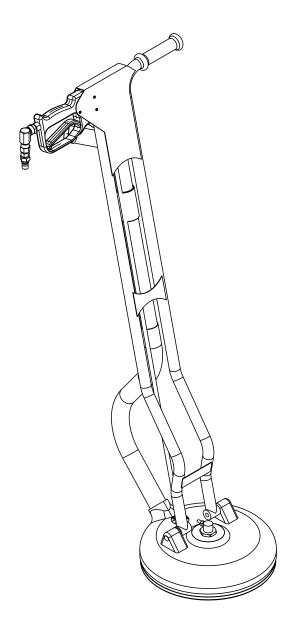
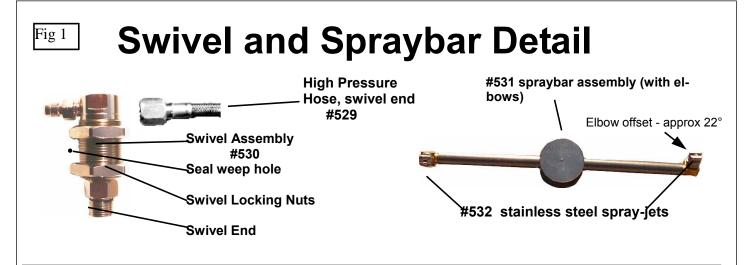


# Turbo Hard Surface Tool Owners Manual **HFT-40**



#### **Specifications:**

- \* Designed for cleaning ceramic tile and grout with your high pressure portable.
- \* Brush attachment allows for use on other flooring.
- \* Cleaning capacity 400 to 1000 square feet per hour depending on build up and texture of surface.
- \* Lightweight but solid, resistant to impact, no wheels to restrict travel in all directions.
- \* Stainless steel handle with fiber reinforced shell.
- \* Extra long life boot with NEW brush attachment.
- \* Operating pressure range 650 to 2500 psi.
- \* Water temperature up to 230°.
- \* Comfort grip non-slip handle.
- \* Patented automatic vacuum compensator leaves the floor drier.
- \* Easy access inline filter.



#### **Swivel Replacement Instructions**

To replace the swivel, start by removing hose from compression fitting. Turn tool over and using a stubby 3/4" open end wrench, hold spray bar nut while turning spray bar assembly (right hand thread). Loosen and remove top swivel lock nut. Remove swivel out through the bottom of the deck. (Do not use Top Flats on the swivel as wrench points for removing or tightening the lock nuts. You can damage the swivel by doing so). Place the upper lock nut so 1 or 2 threads are exposed above nut body before installing it in the deck. Tighten the swivel lock nuts. Install the spray bar by holding the spray bar nut with stubby 3/4" open end wrench and spinning the spray bar on. It is self seating and needs only to be hand tightened to "O" - ring. Do not use thread seal. Check that spray bar spins freely and jets are recessed approx 1/4" below inner deck edge. Install the pressure line and tighten the swivel hose nut. Do not over tighten as this is a compression fitting. Test and check for leaks.

#### CAUTION!

Do not aim Turbo Hard Surface Tool at anyone as high pressure water can cause serious injury! **#534 Ceramic Seal Replacement Kit** 

There is a seal kit available for the #530 swivel that replaces the "O" rings and the ceramic seals. It is intended to repair swivels that still spin freely, but have developed a leak visible at the weep hole. If a leaky swivel is not repaired, water can enter the bearing chamber and the swivel will need to be replaced.

#### Limitation of Liability

U. S. Products (U.S.P.) liability on any claim for loss or damage connected with the supplying of goods, or their sale, resale, operation, or use, warranty, tort (including negligence) or other grounds, shall not exceed the price allowable to such goods or part thereof involved in any claim.

U.S.P. shall not under any circumstances be liable for any labor charges, special or consequential damages including, but not limited to, bodily injury, loss of profits or revenues, loss of use of any product or associated product, cost of capital, cost of substitute products, facilities or services, downtime costs or costs of claims arising from Buyer or Buyer's customers.

Any technical advice or assistance furnished by U. S. Products which concerns any goods supplied hereunder, will not subject U.S.P. to any liability, whether based on contract, warranty, tort (including negligence) or other grounds.

\*DO NOT PUT YOUR HANDS UNDER THE DECK WHILE THE TOOL IS IN USE AND AFTER THE TRIGGER HANDLE IS RELEASED (WAIT 2 MINUTES FOR THE SPRAY BAR TO COMPLETELY STOP), FAILURE TO DO SO CAN CAUSE SERIOUS INJURY AND U. S. PRODUCTS WILL NOT BE HELD LIABLE FOR DISREGARDING THIS WARNING WHICH RESULTS IN ANY BUT NOT LIMITED TO INJURIES, DAMAGE, LOSS OF LIMBS AND OR LIFE.

#### Warranty:

U. S. Products warrants that its product (s) (the Product) shall be free from defects in materials and workmanship under normal use, installation and maintenance in accordance with U.S.P. specifications for a period of 1 year from the date of purchase. Failure to maintain the tool as described herein void the warranty.

Exclusions: The swivel (#530) is a sealed item, and it will not be covered if factory seal if broken from improper adjustment or installation. Swivel must be returned to U.S.P. for evaluation. Swivel will be repaired or replaced at manufacturer's discretion. Swivels that show signs of abuse or misuse will not be warrantied. Interface ring or "boot" (#523 or #524) is covered from breakage or defect only for 90 days; there is no warranty against wear.

This warranty does not cover damage resulting from mishandling in transit, vandalism, misuse, abuse, neglect, alteration, dismantling, excess heat or cold, acts of God, or failure to exercise reasonable care in using or maintaining the Product. This warranty applies only to the original purchaser / owner of the Product. Original sales receipt / sales contract is required to validate warranty. To obtain service under this warranty, contact your dealer.

This warranty is in lieu of and excludes all other warranties, express or implied, arising by operation of law or otherwise, including any warranty of merchantability or fitness for particular purpose or otherwise, and no representation of warranty, expressed or implied, made by any sales representative or other agent of U.S.P. In no event shall U.S.P. be liable for incidental or consequential damages.

This warranty gives you specific legal rights which may vary from state to state.

## **Turbo Hard Surface Tool Disassembly**

To disassemble deck, first undo handle axle bolts with an 8mm Allen head wrench and a 17mm socket

Next undo the high pressure line at the swivel with a 9/16" open end wrench

9/16" compression fitting or quick-disconnect fitting

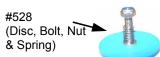
Spacer

#527 x 2 axle set w/ spacer

Remove the 3 deck securing bolts with a Phillips screwdriver

Using your thumbs, push the deck locking tabs outward and then tap the center section until the decks separate.

The vacuum disc assembly remains attached to the inner shell and does not need to be removed except if being replaced.



Swivel nut (under spraybar)

Deck locking tabs

Molded brass insert

To remove spraybar, use a 3/4" stubby wrench to hold the swivel nut, grab spraybar and loosen. (right hand thread)



Remove the boot ring (if replacing) and install new ring or brush. Inspect the inner deck passages for damage or clogs; clean as necessary. Check swivel lock nuts for tightness. Check jet elbows for tightness and consistent angles

Air / Water passageways

Snap shells together making sure they mate properly and locking tabs are securely seated. Install the 3 deck securing nuts & bolts. Re-attach high pressure line, handle and vac hose. **NOTE:** do not over-tighten the compression fitting when reattaching the hose. Hand tighten the fitting, then use a wrench to turn the fitting NO MORE than 1/4 TURN more. Be sure to re-install the spacer washer between the handle and the deck. Test, and check for leaks. \* **Note** - It is not necessary to remove the stainless steel handle to replace the boot or brush. Handle is removed here for illustration purposes.

To check for proper jet operation, <u>point jets away from face</u> while observing spray pattern: turn tool upside down, grab spray-bar securely, and with high pressure source hooked up, pull trigger. You should see 2 well defined, flat, narrow fans. If not, one or both jets may be clogged and will need to be cleaned. Be careful not to score or damage the orifice. Badly clogged jets need to be removed from the elbows, blown out and inspected. The jets can wear out over time depending on pressure, heat, and mineral content in the water. Make sure you are using filters on your water supply, and check the Turbo Hard Surface Tool's inline filter screen after heavy usage.



#### CLEANING PROCEDURE FOR CERAMIC TILE\*:

Carefully move all furniture as over-spray can damage wood finishes and rust can leave a stain. Having a clear area to work in makes a better job and minimizes tangled hoses.

Evaluate the floor or countertop to clean, look for damage i.e. soft grout, cracks, holes and loose grout. Making recommendations for repair first is better than trying to explain why later.

Pre-spray cleaning chemical in a small area to test first. Sometimes stronger stripping agents may be necessary if old waxes or polymers need to be removed. For regular or restoration cleaning, apply pre-treatment to the tile area to be cleaned. Avoid getting pre-treatment chemical on carpet or dark wood, as the ph can cause problems that require additional effort to remedy. Never pre-spray more than 30 to 50 square feet ahead of your extraction. Do not let pre-spray dry on floor.

Make steady controlled passes guiding the Turbo Hard Surface Tool head along the floor, overlapping as needed. Accuracy and speed will improve as you become efficient at using the Hybrid.

When cleaning next to a carpet or wood floor, avoid lifting the Turbo Hard Surface Tool to prevent water from over spraying.

Avoid walking on pre-sprayed area as this will track the material onto other areas. The chemical makes the floor extremely slippery.

Edges can be detailed by using the smaller detail tools – Hard Surface Combo Tool, Hard Surface Detail Tool and Mini Turbo Hard Surface Tool.

Extract up as much water and pre-spray along with the dirt as possible, and towel dry any puddles and damp spots as you go. Using a towel and a carpet brush or rake, dry any small puddles that remain. Water left to dwell on grout can bring up efflorescence, a white chalky residue that precipitates to the surface.

#### **CARE AND REPAIR**: See parts lists & diagrams for replacement parts & order numbers.

Check and clean the steel mesh filter just after the quick connect fitting using two wrenches. It is important to check and clean the filter screen frequently, as a dirty filter will drastically reduce tool efficiency.

Your Turbo Hard Surface Tool has an automatic patented vacuum compensator mounted on the bottom side of the deck. The deck relief is pre-set to most job situations and should not need further adjusting, however, using two wrenches.

The new ceramic seal swivel has a weep hole to indicate when it is time to replace the seals. A seal rebuild kit is available separately, from your dealer. If the seals are worn and water is allowed to enter the bearing surfaces, damage to the bearings will occur and the swivel will need to be replaced. See Figure (1) for more details

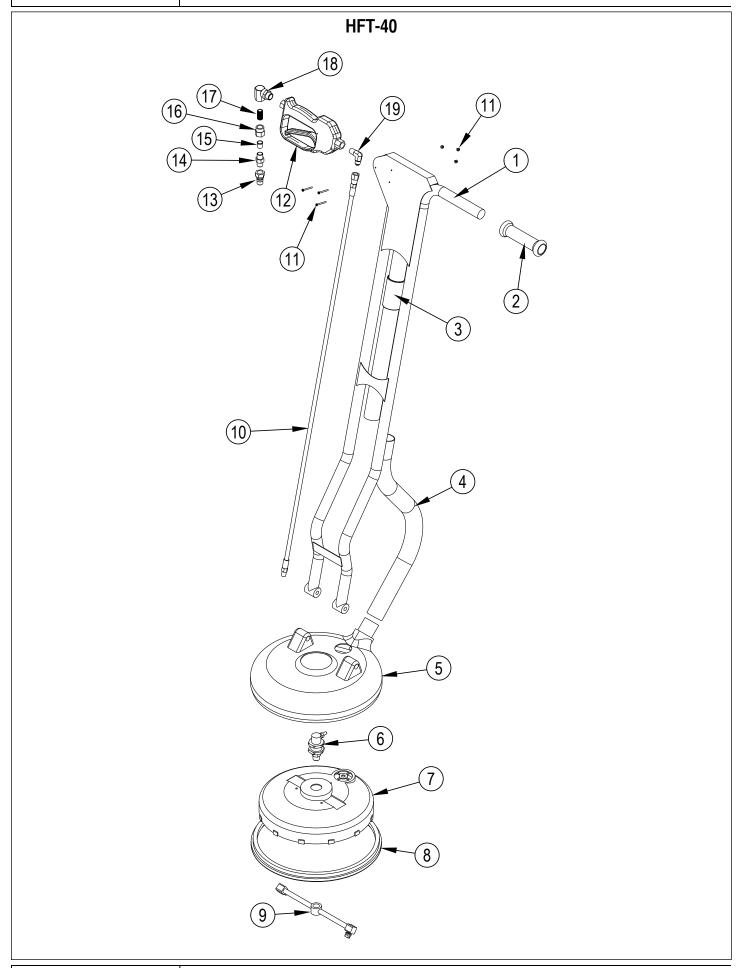
Keep the swivel mounting nuts tight, as a loose spinner will reduce efficiency of the tool.

The glide boot on your Turbo Hard Surface Tool is constructed of a very abrasion resistant plastic and should give long life. A brush ring is included for certain types of flooring such as marble, travertine and other softer materials that could be scratched from grit caught under the hard boot.\* The Turbo Hard Surface Tool brush ring has a vinyl skirt that maintains proper air flow leaving the floor drier.

When excessive wear occurs, the boot should be replaced. See below for boot replacement instructions. Using your Turbo Hard Surface Tool with a badly worn boot will tend to catch some tile edges. CAUTION: Floor damage will occur if you allow the boot to wear so thin that the spinning jets contact the floor.

Use the vacuum relief slider on the stainless tube to adjust for very smooth floors or truckmounts with extreme suction.

\* It is up to the operator to decide what kind of flooring can be cleaned. U.S. Products makes no warranty or claims as to the specific types of flooring that can be cleaning. U. S. Products shall not be held liable for any damage or injury claims resulting from the use, misuse or abuse of the cleaning tools. There is always a risk of floor damage when using extreme pressure and heat. Experience and proper training are essential to avoid costly damage claims including scratching of softer stone or other surfaces.



### HFT-40

Kit	Item	Ref. No.	Qty	Description
	1#	520	1	Handle Stainless Steel Turbo
	[]#	527	1	Bolt Set 2 Ea. Stainless Bolt
	2#	521	1	Handle Grip Rubber Hft-40\
	3#	545	1	Vacuum Slide Turbo Hard Surfa
	4#	522	1	Vac Hose Steel Coil 1-1/2 I.
	5#	525	1	Outer Shell Turbo Hard Surfac
	[]#	544	1	Deck Securing 3 Ss Bolts Tur
	[]	528	1	Vacuum Compensator Assy 1ea
	6#	530	1	Ceramic Seal Swivel Side Port
	[]#	542	1	Seal Re-Build Kit For 530 Swi
	7#	526	1	Inner Shell Turbo Hard Surfac
	8#	523	1	Boot Ring Hard Hft-40 Turbo
	[]#	524	1	Brush Ring Turbo Hard Surface
	9#	531	1	Spray Bar Assy With Elbows T
	[]#	532	2	Spray Tip S/S Size 0502 Hf
	10#	529	1	Solution Hose Braided S/S Tu
	11#	543	1	Bolt Set Gun Mounting 3 S/S
	12#	534	1	Valve Gun Turbo Hard Surface
	13#	45USP	1	Quick Disconnect Plug 1/4 NPT
	14#	540	1	Filter Body Turbo Hard Surfac
	15#	539	1	Filter Screen Turbo Hard Surf
	16#	538	1	Adapter Filter Turbo Hard Sur
	17#	92USP	1	Nipple 1/4 Pipe Brass
	18#	558	1	Swivel Brass Chrome Plated
	19#	533	1	Adapter Swivel 90 Degree Hf

<sup>[] =</sup> Not Shown # = Revised or new since last update



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