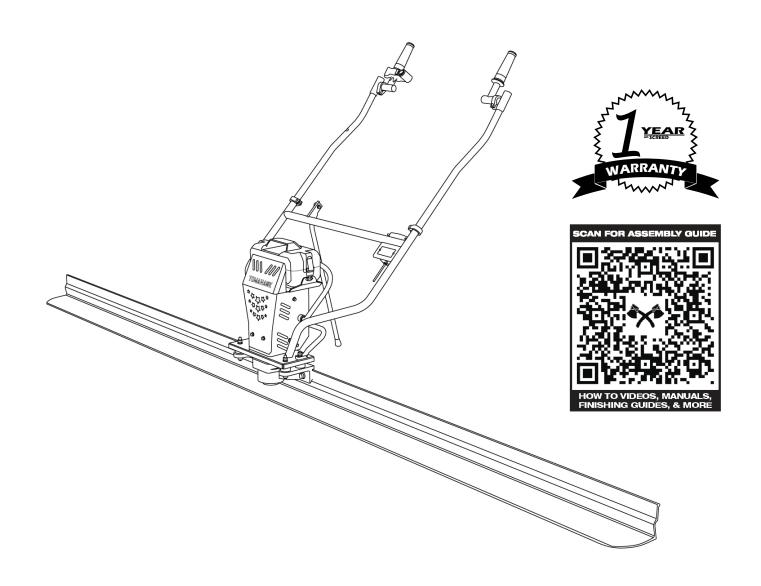
# TOMAHAWK

eTVSA
BATTERY POWER SCREED

**Operation Manual** 



# TABLE OF CONTENTS

1. Safety Information	4
1.1 Fire Safety	5
1.2 Operating Safety	5
1.3 Service Safety	6
2. Technical Data	7
2.1 Screed Board Data	7
2.2 Machine Data	8
3. Storage	8
4. Replacement Parts	8
5. Assembly and Operation	9
6. Limited Warranty	11
7. How to Wet Screed	13
7.1 Set the Elevation of the Slab	13
7.2 Make Wet Slabs	13
8. How to Screed Form-to-Form	14
9. How to Screed on Wet Concrete	15
10. Catalog and Coupon	18

# **Register Your Equipment**

Thank you for purchasing TOMAHAWK equipment! Your product is covered by the TOMAHAWK Warranty policy, but in order to activate your warranty, we need you to register your product. In addition to activating your equipment warranty, product registration will grant you access to important product updates, streamlined customer service and more.

#### **INCLUDED WITH YOUR REGISTRATION**

- **Equipment Warranty Activation**
- **Product Updates √**
- **√ Excusive Discounts and Sales**

### STEPS TO REGISTER YOUR EQUIPMENT

- 1. Visit www.tomahawk-power.com
- 2. Choose "Product Registration" at the bottom of the page
- 3. Enter your equipment's serial number to get started
- 4. Provide all required information
- 5. Submit Registration

# **Equipment Resources**

Tomahawk Customer Service doesn't stop at checkout. We understand to keep a job-site running smoothly - the proper equipment, spare parts, instruction manuals, and more are needed at the drop of a hat. Visit www.tomahawk-power.com to gain access to the incredible resources below.

### **How To Video Library**

More of a visual person? Visit our Video Library for equipment assembly instructions, troubleshooting tips, and more!

Found on each product listing or the Service Videos Page

# Manual and Assembly Guide Library

Visit our Manual Library if you are looking for a lost operations manual or a particular spare part? Found on each product listing or the Tomahawk Manuals Page

# **Service Requests**

In need of a guick fix or a service center referral? Submit a Service Request and a Tomahawk Technician will respond shortly to get you the help you need.

Choose "Service Request" at the bottom of www.tomahawk-power.com



This manual provides information and procedures to safely operate and maintain this model. For your own safety and protection from injury, carefully read, understand and observe the safety instructions described in this manual.

Keep this manual or a copy of it with the machine. If you lose this manual or need an additional copy, please contact Tomahawk Power LLC or visit <a href="www.tomahawk-power.com">www.tomahawk-power.com</a> This machine is built with user safety in mind; however, it can present hazards if improperly operated and serviced. Follow operating instructions carefully. If you have questions about operating or servicing this equipment, please contact Tomahawk Power.

The information contained in this manual is based on machines in production at the time of publication. Tomahawk Power reserves the right to change any portion of this information without notice.

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Any type of reproduction or distribution not authorized by Tomahawk Power represents an infringement of valid copyrights and will be prosecuted. We expressly reserve the right to make technical modifications, even without due notice, which aim at improving our machines or their safety standards.

# 1. Safety Information

This manual contains DANGER, WARNING, CAUTION, and NOTE callouts which must be followed to reduce the possibility of personal injury, damage to the equipment, or improper service.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

### 1.1 Fire Safety

If your machine catches fire, turn off the electric supply. Using a dry powder or C02 fire extinguisher, put out the fire. If the fire cannot be put out, keep away and call the fire departement. If you are in any doubt about the safety condition of your machine, please consult Tomahawk Power.

# 1.2 Operating Safety

Familiarity and proper training are required for the safe operation of equipment!

Equipment operated improperly or by untrained personnel can be dangerous! Read the operating instructions contained in both this manual and the engine manual and familiarize yourself with the location and proper use of all controls. Inexperienced operators should receive instruction from someone familiar with the equipment before being allowed to operate the machine.

- **1.2.1 NEVER** allow anyone to operate this equipment without proper training. People operating this equipment must be familiar with the risks and hazards associated with it.
- **1.2.2 NEVER** use accessories or attachments for this equipment, which are not recommended by TOMAHAWK POWER. Damage to the rammer and/or injury to user may occur.
- **1.2.3 NEVER** leave machine running unattended.
- **1.2.4 ALWAYS** be sure operator is familiar with proper safety precautions and operation techniques before using machine.
- **1.2.5 ALWAYS** wear hearing protection when operating equipment.
- **1.2.6 ALWAYS** wear protective clothing appropriate to the job site when operating equipment.
- **1.2.7 ALWAYS** wear hearing protection when operating equipment.
- **1.2.8 ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.
- **1.2.9 ALWAYS** operate machine with all safety devices and guards in place and in working order. **DO NOT** modify or remove safety devices. **DO NOT** operate machine if any safety devices or guards are missing or inoperative.
- **1.2.10 ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.

### 1.3 Service Safety

For your own personal protection and for the safety of those around you, please read and ensure you fully understand the following safety information. It is the warning responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. If you are unsure about the safe and correct use of the eJXPC50 Plate Compactor, consult your supervisor.

- **1.3.1 DO NOT** attempt to clean or service machine while it is running. Rotating parts can cause severe injury.
- **1.3.2 ALWAYS** replace worn or damaged components with spare parts designed and recommended by Tomahawk Power.
- **1.3.3 ALWAYS** keep machine clean and labels legible. Replace all missing and hard-to-read labels. Labels provide important operating instructions and warn of dangers and hazards.
- **1.3.4** This equipment is heavy and must not be lifted single-handedly. Must be listed with two people or use suitable lifting equipment.
- **1.3.5** Cordon off the work area and keep members of the public and unauthorized personnel at a safe distance.
- **1.3.6** Personal Protective Equipment (PPE) must be worn by the operator whenever this equipment is being used.
- **1.3.7** Make sure you know how to safely switch this machine OFF before you switch it ON in case you get into diffculty.
- **1.3.8** Always switch OFF and unplug the motor before transporting, moving it around the site, or servicing it.
- **1.3.9** During use, the motor becomes very hot, allow the motor to cool before touching it. Never leave the motor running and/or unattended.
- **1.3.10 NEVER** remove or tamper with any guards fitted, they are there for your protection. Always check that guards are in proper condition, if any are damaged or missing, **DO NOT USE THE MACHINE** until the guard has been replaced or repaired.
- **1.3.11 NEVER** pull or guide the machine using the cable and never pull on the cable to disconnect the plug.
- **1.3.12 DO NOT** operate the machine when you are ill, feeling tired, or when under the influence of alcohol or drugs.
- **1.3.13** Ensure that any trailing cable is protected against damage and not liable to be tripped over or trapped underneath the machine.
- 1.3.14 DO NOT use the Motor Guard as a Lifting Point.
- **1.3.15 DO NOT** Jet Wash the machine as this could result in serious injury or even death!
- **1.3.16 DO NOT** use this machine in wet conditions. The electrical components of the machine **NEVER** be exposed to water or liquid of any kind as this could result in serious injury or even death!

- **1.3.17 ALWAYS** replace worn or damaged components with spare parts designed and recommended by Tomahawk Power.
- **1.3.18 ALWAYS** keep machine clean and labels legible. Replace all missing and hard-to-read labels. Labels provide important operating instructions and warn of dangers and hazards.
- **1.3.19 ALWAYS** check for damaged parts before each use. Carefully check that the screed will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the screed with a damaged part.
- **1.3.20 ALWAYS** inspect the screed prior to placing in storage and before re-use. Store the screed in a dry, secure place out of the reach of children when not in use.
- **1.3.21 ALWAYS** use only accessories that are recommended by the manufacturer for use with the screed. Accessories that may be suitable for one Screed may create a risk of injury when used with the screed equipment.
- **1.3.22 ALWAYS** keep boards clean when not in use and guards in place and in working order.

#### 2. Technical Data

#### 2.1 Screed Board Data

For more board sizes and bundle discounts, visit www.tomahawk-power.com. Boards are interchangeable with battery-powered models and gas-powered Honda model Tomahawk Screeds.

Board Model	Length	Width	Height	Weight	Assembly Type
TSB4-P	4 ft (1224.4 mm)	5.9 in (149 mm)	3.15 in (80 mm)	8.6 lbs (3.9 kg)	Bolt & Nut
TSB6-P	6 ft (1824.5 mm)	5.9 in (149 mm)	3.15 in (80 mm)	10.1 lbs (6.1 kg)	Bolt & Nut
TSB8-P	8 ft (2438.4 mm)	5.9 in (149 mm)	3.15 in (80 mm)	13.7 lbs (6.2 kg)	Bolt & Nut
TSB10-P	10 ft (3048 mm)	5.9 in (149 mm)	3.15 in (80 mm)	17.2 lbs (7.8 kg)	Bolt & Nut
TSB12-P	12 ft (3657.6 mm)	5.9 in (149 mm)	3.15 in (80 mm)	20.5 lbs (9.3 kg)	Bolt & Nut
TSB14-P	14 ft (4267.2 mm)	5.9 in (149 mm)	3.15 in (80 mm)	24 lbs (10.9 kg)	Bolt & Nut

#### 2.2 Machine Data

Model	eTVSA
Vibration Speed	9000 VPM
Battery Type	Samsung Lithium Ion – 36V/5Ah
Battery Life	2 Hour
Recharge Time	2 Hours
Start Type	Button (Automatic)
Drive System	Flexible Shaft
Handles	Adjustable 360°
Machine Weight (w/o Blade)	40lbs
Warranty	1 Year

### 3. Storage

In case of storing the screed and board for a long period of time (for more than 30 days):

- **3.1** Clean the screed motor and handles.
- **3.2** Remove the board from the screed.
- **3.3** Store the screed and board separately in a clean, dry area.
- **3.4** Cover the screed and board completely with dry tarp.

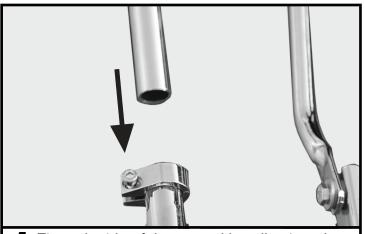
### 4. Replacement Parts

- For replacement parts and technical questions visit www.tomahawk-power.com or scan the QR code on the front of this manual.
- Not all equipment components are available for replacement. The illustrations within this manual are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following will be required: model number, serial number/lot date code, and description.
- The distributor reserves the right to make design changes and/or improvements to product lines and manuals without notice.

# **TOMAHAWK**

# eTVSA: Assembly and Operation 1

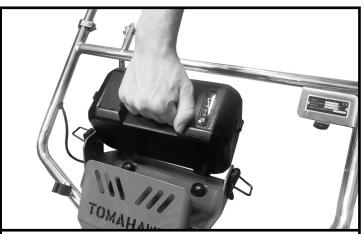
# www.tomahawk-power.com



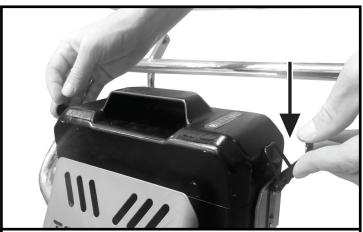
 Fit each side of the screed handles into the base of the screed assembly.



Pasten each side of the handles tightly using a Size 5 Allen Wrench included.



Place the lithium battery into it's dock on top of the screed's motor.



Secure the lithium battery securely on either side with the clasps.

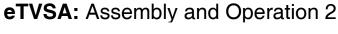


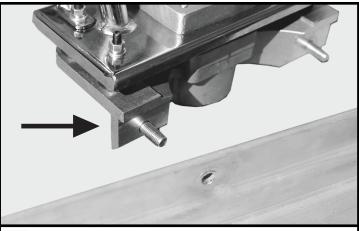
Connect the throttle cable to the back of the lithium battery securely.



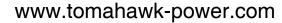
Adjust the 360° handles to find a comfortable position and tighten in place.

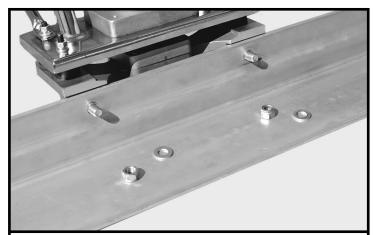
# <u>TOMAHAWK</u>



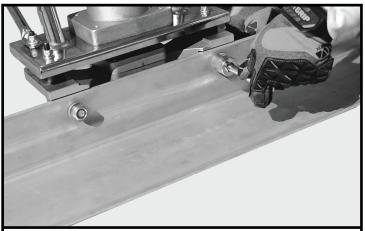


To attach the board, fit the bolts through the back of the screed's base.

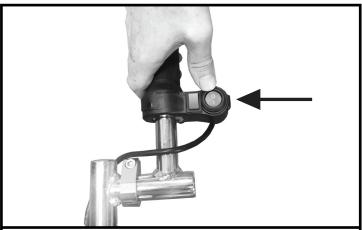




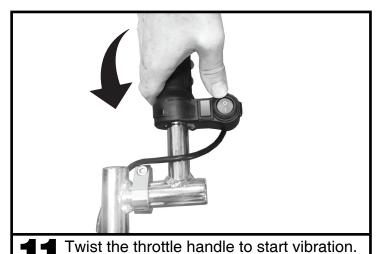
Align the bolts in the base to the holes in the back of the screed blade and fit them through.



To tighten, secure the back of a bolt with a wrench and tighten using a 19mm socket.



Press the circular button to start the screed's motor.



Press the square button to lock in place.



Screed

### 7. Limited Warranty

Tomahawk Power LLC. ("We'' or "Us'') warrants to the original purchaser only ("You'' or "Your") that the Tomahawk product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of 1 year from date of ourchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

### Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

### **Obligations of Purchaser**

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at (866) 577-4476, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

### **Remedy Limits**

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

### **Assumption of Risk**

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

### Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of California, without regard to rules pertaining to conflicts of law. The state courts located in San Diego County, California shall have exclusive jurisdiction for any disputes relating to this warranty.

### 8. How to Wet Screed

#### 8.1 Set the Elevation of the Slab

- **8.1.1** Use grade pins (A) to set the height of the slab. Position in the middle of the pour.
- **8.1.2** To set the elevation around the walls, use chalk lines or expansion joints.
- **8.1.3** In areas where there are no walls, use form boards to set the elevation.



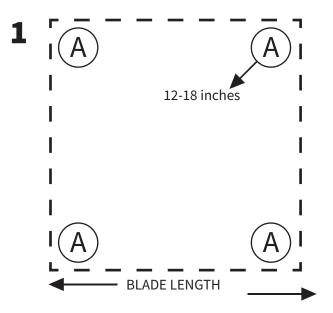
**8.2.1** Use the float to create wet pads around all of the grade pins (A).

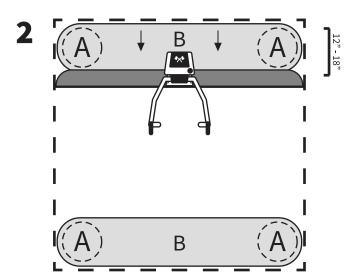
Make sure that the distance between the wet pads is shorter than the length of the blade being used.

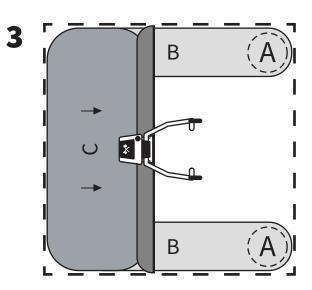
- **8.2.2** Form rows (B) with the blade to smooth from one wet pad to the next.
- **8.2.3** After all of the rows are formed, run the screed blade off of the two rows leveling the previously untouched concrete (C) in between.

Prior to running the blade off, make sure that the height of the concrete in area (C) is slightly taller than the wet pad rows in area (B).

**8.2.4** Once the floating is completed, the wet pads and concrete will all be smoothed out to the same height.

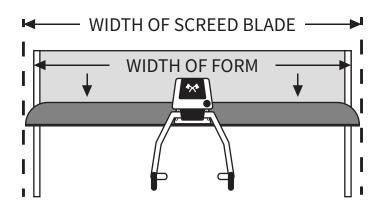


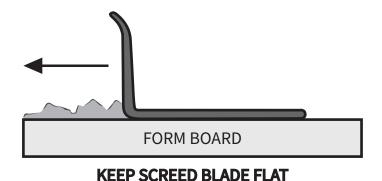




### 9. How to Screed Form to Form

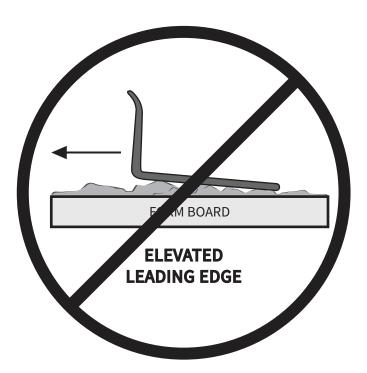
- **9.1** In order to screed form to form, the length of the blade should overlap both form boards on each side of the pour.
- **9.2** When screeding off of forms, keep the bottom of the blade as flat as possible.
- **9.3** Extend the life of your blade by using the lowest vibration setting in relation to the slump of concrete being used.







Be aware of elevated **trailing** edges. This can create an area for concrete to build up, resulting in an uneven slab elevation.



Be aware of elevated **leading** edges. This can trap rocks in between the blade, resulting in an uneven slab elevation.

# **10. Operating on Wet Concrete**

#### **10.1 Steps**

- **10.1.1** To begin, pour the concrete inside of the forms, slightly higher than the height of the forms themselves.
- **10.1.2** Place the screed on top of the concrete and start the engine.

Do not begin screeding until the engine is warm and running on its own with the choke OPEN.

**10.1.3** Increase the engine's RPM until the clutch engages. The screed will then begin to vibrate.



- **10.1.4** Start your screeding process by walking backwards. (Review pages 17 and 18 for detailed instructions.)
- **10.1.5** While the throttle level does not require consistent contact, you can adjust the engine's RPM and vibration to accommodate your concrete's moisture. Dry or low slump concrete may require high vibrations to level and screed correctly.
- **10.1.6** With the concrete in front of the blade, continue walking backwards to level and screed.
- **10.1.7** The blade's roll back feature ensures concrete does not slide over the blade. Concrete poured too high may cause the concrete to spill over the blade. If this happens, the screed will become too heavy to pull, resulting in unevenness.

For detailed instructions on How To Wet Screed and How To Screed Form To Form, refer to pages 17 and 18.

#### **CAUTION: DO NOT OVER-VIBRATE CONCRETE**

Have you used too much vibration? Here's how to know:



- Concrete is spilling excessively.
- The blade is sinking below the wet pads.
- Concrete is creating ripples or "wake marks" after screeding.
- Concrete is sliding under the form boards, creating dips and uneven form edges.

The less vibration, the better. Only use enough to comfortably pull the screed when walking backwards to leave a smooth, level surface.







# TOMAHAWK

# PRODUCT CATALOG



#### 3.550 lbs/ft Vibratory Rammer Part#: TR68H

3.6 HP Honda GXR120 Engine Easily achieve a 100% compaction rating 3-in-One Fuel System with carburetor protection 13" x 11" plate for narrow trenches and corners 3 Year Engine Warranty & 1 Year Product Warranty



5.5 HP Honda GX160 Engine Easily achieve a 100% compaction rating 22" x 20" cold, rolled steel beveled base plate Includes 3.5 gallon water tank for asphalt compaction 3 Year Engine Warranty & 1 Year Product Warranty



#### 3,000 lbs/ft Plate Compactor Part#: TPC80 & TPC80H

6 HP Kohler CH260 & 5.5 HP Honda GX160 Engines Easily achieve a 100% compaction rating 16.5" x 21.5" plate for narrow trenches and corners Optional Honda Engine model: TPC80H 3 Year Engine Warranty & 1 Year Product Warranty



Maintain constant, adjustable pressure up to 450 PSI Achieve superior concrete finishes with even spraying Spray 15,000 sq ft in less than 10 minutes Compatible with major manufacturer wands 1 Year Product Warranty



#### 1.6 HP Vibratory Concrete Screed Part#: TVSA-H

1.6 HP Honda GX35 Engine Aluminum Magnesium blades available from 8ft - 14ft Finish concrete 4X faster than other screed methods

360° adjustable handle placement 3 Year Engine Warranty & 1 Year Product Warranty



#### 6" Early Entry Green Concrete Saw Part#: TFS6H

5.5 HP Honda GX160 Engine Maximum cutting depth of 1 3/16 inches OSHA compliant vacuum port for dust collection Includes 6" early entry concrete blade 3 Year Engine Warranty & 1 Year Product Warranty



# 1.6HP Backpack Concrete Vibrator Part#: TVIBH + TVW10-P

1.6 HP Honda GX35 engine Consolidation with speeds of 10,000-12,000 VPM Quick Connect centrifugal clutch vibrator 1" and 2" Diameter Whips Available in 10ft Length 3 Year Engine Warranty & 1 Year Product Warranty



# 36" & 46" Concrete Power Trowel Part#: TPT36H/K & TPT46H/K

6 HP/14HP Kohler & 5.5HP/8.5HP Honda Engines Adjust trowel blade pitch from 0-28° 60-115 RPM rotor speed for superior concrete finishes Includes float pan and trowel blades 3 Year Engine Warranty & 1 Year Product Warranty



#### 8" Gas Powered Concrete Scarifier Part#: TSCAR8H

5.5 HP Honda GX160 Engine Remove traffic lines at 800 - 1,000 linear ft/hr Tungsten Carbide Blade Kit Available OSHA approved dust port for silica vacuum removal 3 Year Engine Warranty & 1 Year Product Warranty

# HAVE QUESTIONS?





#### 2000 Watt Inverter Generator Part#: TG2000i

2000 Max Watts, 1600 Rated Watts Run Time of 8 hours on 1 gallon of gas OSHA and GFCI Compliant Parallel technology capable for double the power 2 Year Product Warranty



#### 210 Amp Portable Welder Generator Part#: TWG210A

Steady 50 - 210 Amp DC welding output 60% Duty Cycle for extended use Suitable for welding rods from 6010 to 7024 Electric Key Start with battery included 2 Year Product Warranty



#### 7000 Watt Generators Part#: TG7000

7000 Max Watts, 5500 Rated Watts Voltage Selector gives Full Wattage for 120V or 240V Run Time of 8 hours at 50% Load

OSHA and GFCI Compliant 2 Year Product Warranty



#### 3.7 Gallon 3HP Backpack Fogger Part#: TMD14

Turbo Boosted Pump with 40ft + Horizontal Reach Sprays 1 acre in 30 minutes 10X Faster than Manual Pump Sprayers Converts to Leaf Blower with 200 MPH Air Velocity 1 Year Product Warranty



#### 4.75 Gallon Battery Power Sprayer Part#: eTPS18

Reach Up to 30ft Horizontal Reach Sprays 6000 sq ft in 10 minutes 10X Faster than Manual Pump Sprayers 70 PSI Commercial Grade Pump 1 Year Product Warranty



#### 5 Gallon Backpack Power Sprayer Part#: TPS25

Reach Up to 30ft Horizontal Reach Sprays acres in 10 minutes 10X Faster than Manual Pump Sprayers 50-435 Adjustable PSI Commercial Grade Pump 1 Year Product Warranty



#### 4 Gal. Backpack Fertilizer Spreader Part#: TGS30

Reach up to 30ft Horizontally Sprays 1 acre in 30 minutes 20X Faster than push spreaders Converts to Leaf Blower with 200 MPH Air Velocity 1 Year Product Warranty



## Part#: TW3H

Moves liquids at a rate up to 375 gal/min Handle solids up to 1.5" Silicone carbide seals and a chrome plated volute 8 HP engine protected by rugged all purpose frame 3 Year Engine Warranty & 1 Year Product Warranty



#### Commercial 38" Push Sweeper Part#: TOS38

Collect up to 14.5 gallons of dust and debris Can be used indoors & outdoors on wet or dry surfaces Includes integrated airflow control and fine dust filter Lightweight design, capable of fitting through doorways 1 Year Product Warranty



\* All coupons in this manual are valid only for orders placed on www.tomahawk-power.com, unless otherwise noted. Coupon codes may only be used once per customer and may not be combined with any other offer. Coupons may expire at any time without notice.



# **Power Your World**

Tomahawk understands to keep a job-site running smoothly the proper equipment and spare parts are needed at the drop of a hat. With same day shipping and faster delivery times, count on Tomahawk to keep you powered throughout the day! With long lasting parts and engines, Tomahawk equipment will be the star of your fleet for years to come. Visit www.tomahawk-power.com to get started today!

Tomahawk Power, LLC San Diego, CA

# Sales Support

(866) 577-4476 sales@tomahawk-power.com

# **Equipment Support**

(866) 577-4476 support@tomahawk-power.com

www.tomahawk-power.com









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