TOMAHAWK

JXPT36K and JXPT46K POWER TROWEL

Operation Manual

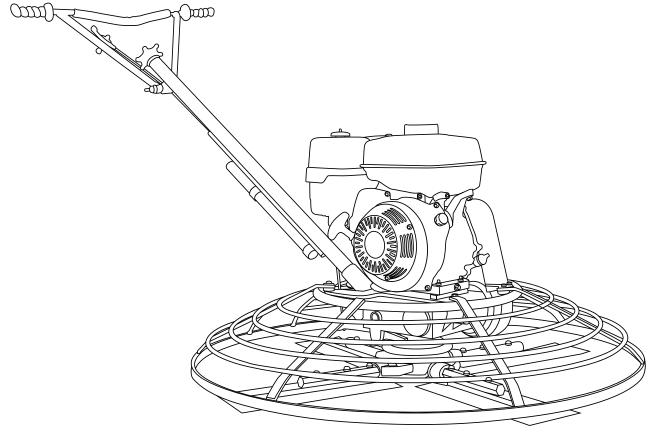












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This manual provides information and procedures to safely operate and maintain this equipment. For your own safety and protection from injury, carefully read, understand and observe the safety instructions described in this manual.

Keep this manual or a copy of it with the equipment. If you lose this manual or need an additional copy, please contact Tomahawk Power LLC or visit www.tomahawk-power.com
This equipment 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, contact Tomahawk Power.

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

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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.

CAUTION: Used without the safety alert symbol, **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in property damage.

1.1 Laws Pertaining to Spark Arresters

Notice: State Health Safety Codes and Public Resources Codes specify that in certain locations spark arresters be used on internal combustion engines that use hydrocarbon fuels. A spark arrester is a device designed to prevent accidental discharge of sparks or flames from the engine exhaust. Spark arresters are qualified and rated by the United States Forest Service for this purpose.

In order to comply with local laws regarding spark arresters, consult the engine distributor or the local Health and Safety Administrator.

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** touch the engine or muffler while the engine is on or immediately after it has been turned off. These areas get hot and may cause burns.
- **1.2.3 NEVER** use accessories or attachments that are not recommended by Tomahawk Power. Damage to equipment and injury to the user may result.
- **1.2.4 NEVER** leave machine running unattended.
- **1.2.5 ALWAYS** be sure operator is familiar with proper safety precautions and operation techniques before using machine.
- **1.2.6 ALWAYS** wear ANSI Z87.1-approved safety goggles or safety glasses with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- **1.2.7 ALWAYS** close fuel valve on engines equipped with one when machine is not being operated.
- **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 Safety while using Combustion Engines

Internal combustion engines present special hazards during operation and fueling!

DANGER Read and follow warning instructions in engine owner's manual and safety guidelines below. Failure to follow warnings and DANGER safety guidelines could result in severe injury or death.

- **1.3.1 DO NOT** run machine indoors or in an enclosed area such as a deep trenches unless there is adequate ventilation, through such items as exhaust fans or hoses are provided. Gasoline exhaust from the engine contains poisonous carbon monoxide gas; exposure to carbon monoxide can cause loss of consciousness and may lead to death.
- **1.3.2 DO NOT** smoke while operating machine.
- **1.3.3 DO NOT** smoke when refueling engine.
- **1.3.4 DO NOT** refuel hot or running engine.
- **1.3.5 DO NOT** refuel engine near open flame.
- **1.3.6 DO NOT** spill fuel when refueling engine.
- 1.3.7 DO NOT run engine near open flames.
- **1.3.8 ALWAYS** refill fuel tank in well-ventilated area.
- 1.3.9 ALWAYS replace fuel tank cap after refueling.
- **1.3.10 ALWAYS** check fuel lines and fuel tank for leaks and cracks before starting engine.
- 1.3.11 DO NOT run machine if fuel leaks are present or fuel lines are loose.

1.4 Service Safety

Poorly maintained equipment can become a safety hazard! In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

- **1.4.1 DO NOT** attempt to clean or service machine while it is running. Rotating parts can cause severe injury.
- **1.4.2 DO NOT** crank a flooded engine with the spark plug removed on gasoline-powered engines. Fuel trapped in the cylinder will squirt out the spark plug opening.

- **1.4.3 DO NOT** test for spark on gasoline-powered engines, if engine is flooded or the smell of gasoline is present. A stray spark could ignite fumes.
- **1.4.4 DO NOT** use gasoline or other types of fuels or flammable solvents to clean parts, especially in enclosed areas. Fumes from fuels and solvents can become explosive.
- **1.4.5 ALWAYS** keep area around muffler free of debris such as leaves, paper, cartons, etc. A hot muffler could ignite them, starting a fire.
- **1.4.6 ALWAYS** replace worn or damaged components with spare parts designed and recommended by Tomahawk Power.
- **1.4.7 ALWAYS** disconnect spark plug on machines equipped with gasoline engines, before servicing, to avoid accidental start-up.
- **1.4.8 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.
- **1.4.9 ALWAYS** check for damaged parts before each use. Carefully check that the trowel will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the trowel with a damaged part.
- **1.4.10 ALWAYS** inspect the screed prior to placing in storage and before re-use. Store the trowel in a dry, secure place out of the reach of children when not in use.
- **1.4.11 ALWAYS** use only accessories that are recommended by the manufacturer for use with the trowel. Accessories that may be suitable for one trowel may create a risk of injury when used with the screed equipment.
- **1.4.12 ALWAYS** keep blades clean when not in use and guards in place and in working order.

2. GENERAL INFORMATION

2.1 Intended Use

Leave laborious hand-finishing tasks in the past with the Tomahawk Power Trowels! Densify concrete floors with ease for your ideal finishing results on projects including driveways, basements, and commercial/industrial jobs.

2.2 Trowel Familiarization

Tomahawk Power Trowels are designed for the floating and finishing of concrete slabs. Analyze your trowel and take notice of each component: the engine, blades, quick pitch control, air cleaner, centrifugal stop switch, clutch and pulley system. Be sure that there is always oil in the engine.

2.3 Safety

Before using your power trowel, read all of the safety instructions carefully. Safety instructions are available throughout this manual and on the equipment. Safety information should remain in good, readable condition. Operators must be well trained on the operations and maintenance of the trowel.

Before starting, test the trowel on a flat, watered down section of finished concrete. Test on a section that is free of any debris and other objects.

The trial test run will increase operator confidence, while helping familiarize yourself with the trowel's controls. In addition, this will help operators understand how the power trowel functions under real conditions.

2.4 Engine

Tomahawk Power Trowels are powered by Honda and Kohler Engines. Refer to the engine owner's manual for instructions regarding the operation and maintenance of your engine. The engine manual is included with your trowel. For further assistance or to receive a new manual, contact Tomahawk Power customer service at (866) 577-4476 or refer to the Manuals Page on the Tomahawk Power website.

2.5 Drive System

The power is transferred from the engine to the gearbox input shaft via a V-belt pulley drive system. The pulley engages using either a centrifugal or manual clutch. Refer to the Parts section of this manual for more information.

2.6 Gearbox

The gearbox is located beneath the engine and transfers power to the rotor or spiderbox assembly. The gearbox controls the rotational speed of the trowel and is equipped with two shafts (input and output).

2.7 Spiderbox

The vertical output shaft of the gearbox connects to a cast hub called the spiderbox. The spiderbox has 4 arms that extend outward that are used for attachment of blades or other accessories. Remember: when the gearbox output shaft rotates, so does the spiderbox assembly.

2.8 Guard Ring

Some units are equipped with a special rotating guard ring. It is designed to allow the operator to run the machine alongside walls, pipes, and obstructions without marring the surface.

2.9 Blades

The blades of the trowel are used to finish the concrete as they rotate around your given surface. This trowel includes 4 combination blades (8 in./203mm wide) per rotor. They are equally spaced in a radial pattern and attached to the vertical rotating shaft by means of the spider assembly.

2.10 Centrifugal Clutch

In the event of a trowel runaway condition (the operator releases the handle), the centrifugal clutch will stop the engine and bring the trowel to a complete stop.

2.11 Training

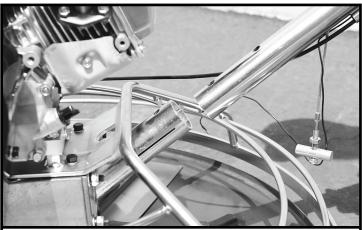
For proper training education, refer to the "TRAINING CHECKLIST" section located in the back of this manual. This checklist contains an outline for an experienced operators to provide training to a new operator.

3. TECHNICAL DATA

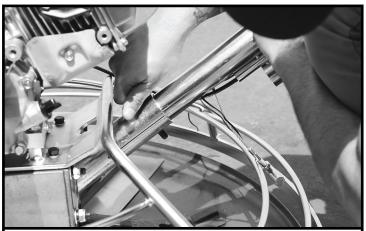
POWER TROWEL SPECIFICATIONS					
	MODEL	JXPT36K	JXPT46K		
	Number of Blades	4	4		
ions	Ring Diameter	36.0 in. (91 cm.)	46.0 in. (116 cm.)		
ficat	Rotor	70-130 RPM	70-130 RPM		
pecifications	Path Width	36.0 in. (91 cm.)	46.0 in. (116 cm.)		
S	Vibration (Hand/Arm)1	18.9 m/s2	18.9 m/s2		
Trowel	Sound Pressure (A-Weighted)2	83.5 dB(A)	83.5 dB(A)		
	Sound Pressure (Peak, C-Weighted)	90.5 dB(C)	90.5 dB(C)		
	Sound Power Level (A-Weighted)	97 dB(A)	97 dB(A)		

POWER TROWEL SPECIFICATIONS				
	Model	Kohler CH260	Kohler CH440	
	Туре	4-stroke, Overhead Valve, Single Cylinder	4-stroke, Overhead Valve, Single Cylinder	
10	hp (kW)	6 (4.5)	14 (10.5)	
Specifications	Displacement in3(cm3)	12.7 (208)	24.7 (429)	
ifica	Bore	2.8 (70)	3.5 (89)	
pec	Stroke in (mm)	2.1 (54)	2.7 (69)	
ne S	Gross Torque ft lbs (Nm)	10.42 (14.07)	22.7 (30.8)	
Engine	Oil Capacity US qts (L)	0.63 (0.6)	1.4 (1.3)	
ш.	Speed Control Method	Centrifugal Fly-Weight Type	Centrifugal Fly-Weight Type	
	Gearbox Oil Type	SAE 10W-30	SAE 10W-30	
	Starting Method	Recoil Start	Recoil / Electric	

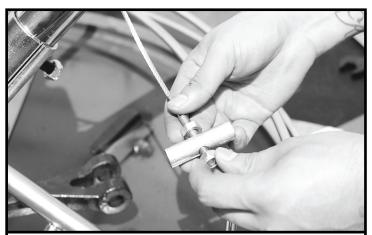
4. QUICK ASSEMBLY GUIDE



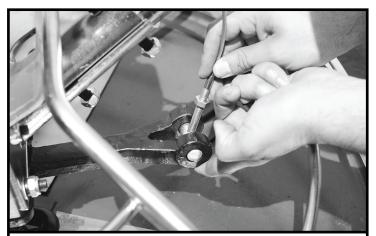
Insert the end of the handle bar column into the base of the trowel.



Insert the bolts and washers through the holes in the handle bar - fasten with a nut.



Unscrew the nut from the pin and insert the pin through the base of the trowel.



Fit the screw through the pin and fasten the nuts on the top and bottom to keep it in place.



Fit the handle bars around the eye towards the top of the handle bar column.

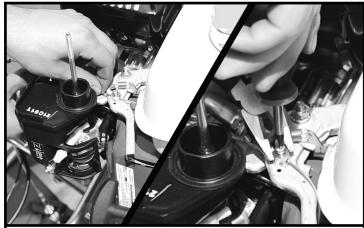


Place the bolt through the base of the handles and then fasten with a nut on the end.

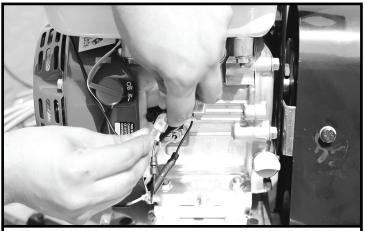
4. QUICK START GUIDE CONTINUED



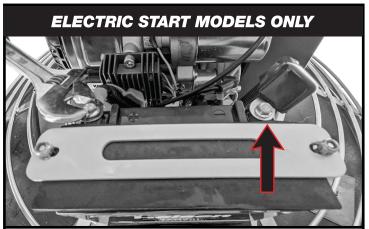
To attach the throttle cable, remove the air filter and the cover.



Feed the cable throughthe pivot nut and through the swivel stop, then fasten the screw.



Bring the kill switch wire to the front of the engine and connect it the the shut off switch.



10 Fasten the positive (red) and negative (black) engine leads to the battery.

5. CONTROLS AND COMPONENTS

1 Standard Handle

Includes a "starwheel" for manually adjusting blade pitch.

5.2 Foldable Quick Pitch Handle

Employs a lever handle to quickly adjust blade pitch. Handle folds for storage.

5.3 Centrifugal Kill Switch

In the event the operator loses control of the trowel, this switch will shut-down the engine.

5.4 Throttle Control Lever

The throttle controls the speed of the engine. Move the hand lever towards the operator to increase engine speed (high), away from the operator to decrease engine speed (low).

5.5 Bicycle Handlebars

The trowel's wider handlebars allow for higher stability, balance, and maneuverability. Replace handle grips if they become worn or damaged.

5.6 Engine

Tomahawk Power Trowels use Honda and Kohler engines and are backed by a 3-year engine warranty for reliable service.

5.7 Blade Pitch Control

Adjust the trowel's steel blades from 0-28 degrees to achieve a matte, light gloss, or gleaming finish.

5.8 Guard Ring

NEVER put hands and feet inside the guard ring.

5.9 Trowel Arm

Provides attachment points for the blades. If the blades show uneven wear patterns or if blades wear out faster than others, the trowel arm may need to be replaced.

5.10 Blades

This trowel is equipped with 4 combo hardened, steel blades designed for both float and finish operations. These blades are interchangeable with most manufacturers.

5.11 V-Belt Cover

Remove this cover to gain access to the V-Belt. NEVER operate the trowel with this cover removed.

5.12 Tee Handle

Loosen to fold handle.

5.2 Additional Components

5.2.1 Stabilizer Ring

The stabilizer ring reduces the vibrations from the trowel arm and keeps it balanced.

5.2.2 Float Pan

Designed to clip onto the combo blades, the float pan works to break down high spots, bringing mortar to the surface and producing a uniform and level slab.

5.2.3 Auxiliary Lifting Tube

Use this tube to lift the trowel onto a slab. Tube is to be inserted into the socket located in front of the gearbox. Available with select units.

6. ENGINE

6.1 Servicing

Tomahawk Power Trowels are powered by Honda and Kohler engines. The engine must be checked for proper lubrication and filled with fuel prior to operation. Refer to the manufacturers engine manual for instructions & details of operation and servicing. If a problem should arise, or if you have any questions about your engine, consult an authorized Honda or Kohler servicing dealer.

The Importance Of Maintenance

Good maintenance is essential for safe, economical and trouble-free operation. It will also help reduce pollution.



WARNING:

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed. Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

To help you properly care for your engine, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a Honda or Kohler technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your engine under severe conditions, such as sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any engine repair establishment or individual, using parts that are "certified" to EPA standards.

6.2 Maintenance Safety

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.



WARNING:

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed. Always follow the procedures and precautions in this owner's manual.



CAUTION:

NEVER attempt to lift the trowel by yourself. **ALWAYS** get assistance from another person to help lift the trowel.

6.2 Maintenance Safety Continued

6.2.1 Fuel Filler Cap

Remove this cap to add unleaded gasoline to the fuel tank. Make sure the fuel filler cap is tightened securely. **DO NOT** overfill.

6.2.2 Throttle Lever

The throttle lever is used to adjust engine RPM speed (lever advanced forward SLOW, lever back toward operator FAST).

6.2.3 Engine ON/OFF Switch

ON position permits engine starting, OFF position stops engine operations.

6.2.4 Recoil Starter (Pull Rope)

Manual-starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly.

6.2.5 Fuel Valve Level

OPEN to let fuel flow, CLOSE to stop the flow of fuel.

6.2.6 Choke Lever

Used in the starting of a cold engine or in cold weather conditions, the choke enriches the fuel mixture.

6.2.7 Air Cleaner

The air cleaner prevents dirt and other debris from entering the fuel system. To access the filter element, remove the wing-nut on top of the air filter canister.

NOTE:

Do not operate the engine without an air filter, with a damaged air filter, or a filter in need of replacement. This will allow dirt to enter the engine and cause rapid engine wear.

6.2.8 Spark Plug

The spark plug provides a spark to the ignition system. Clean the spark plug once a week. Set the spark plug gap to 0.6 - 0.7mm (0.028 - 0.031in).

6.2.9 Muffler

The muffler is used to reduce noise and emissions from the engine.



WARNING:

Engine components can generate extreme heat. To prevent burns, **DO NOT** touch these areas while the engine is running or immediately after operating. **NEVER** operate the engine with the muffler removed.



6.2 Maintenance Safety Continued

6.2.10 Fuel Tank

The fuel tank holds unleaded gasoline. For more information, refer to the engine owner's manual.

7. PRE-INSPECTION

NEVER operate the power trowel in a confined area or enclosed structure that does not provide ample free flow of air.

ALWAYS wear approved eyewear and hearing protection before operating the trowel.

NEVER place hands or feet inside the guard rings while the engine is running.

ALWAYS shut the engine down before performing any kind of maintenance on the trowel.

It is recommended that the trowel's kill switch be used to stop the engine after every use. Doing this will verify that the switch is working properly and presents no danger to the operator.

7.1 Before Starting

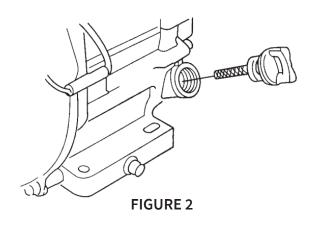
- **7.1.1** Read the safety instructions at the beginning of this manual.
- **7.1.2** Clean the power trowel by removing dirt and dust, particularly in the engine cooling air inlet, carburetor, and air cleaner.
- **7.1.3** Check the air filter for dirt and dust. If the air filter is dirty, replace it with a new one as required.
- **7.1.4** Check the carburetor for external dirt and dust. Clean it with dry compressed air.
- **7.1.5** Check fastening nuts and bolts for tightness.

7.2 Engine Oil Check

- **7.2.1** To check the engine oil level, place the power trowel on a secure level ground with the engine stopped.
- 7.2.2 Remove the filler dipstick from the engine oil filler hole (Figure 2) and wipe it clean.
- **7.2.3** Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
- **7.2.4** If the oil level is low (Figure 3), fill to the edge of the oil filler hole with the recommended with SAE10W-30 4 stroke oil. Maximum oil capacity is 400 cc.

NOTE:

Refer to Honda or Kohler Engine Manual for specific servicing instructions.



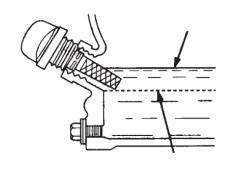
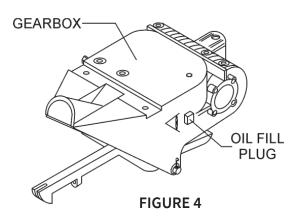


FIGURE 3

7.3 Fuel Check

Engine fuels are highly flammable and can be dangerous if mishandled. **DO NOT** smoke while refueling. **DO NOT** attempt to refuel the trowel if the engine is hot or running.

- **7.3.1** Remove the gasoline cap that is located on top of the fuel tank.
- **7.3.2** Visually inspect to see if fuel level is low. If fuel is low, replenish with 89 Octane gasoline.
- **7.3.3** When refueling, be sure to use a strainer for filtration. DO NOT top-off the fuel. Wipe up any spilled fuel.



7.4 Gearbox Oil

- **7.4.1** Determine if the gearbox oil is low by removing the oil plug located on the side of the
- gearbox. This plug will be marked by the "check" decal. See Figure 4. The correct level of the lubrication oil should be to the bottom of the fill plug.
- **7.4.2** If lubrication oil begins to seep out as the drain plug is being removed, then it can be assumed that the gearbox has a sufficient amount of oil.
- **7.4.3** If lubrication oil does not seep out as the drain plug is being removed, fill with type ISO 680 gearbox lubricant oil until the oil filler hole overflows.

7.5 V-Belt Check

A worn or damaged V-belt can adversely affect the performance of your power trowel. If a V-belt is defective or worn out, simply replace the V-belt as outlined in the maintenance section of this manual.

7.6 Blade Check

Before starting, check for worn or damaged blades. If one blade is worn out while the others look new, this could be because of a blade pitch problem. Refer to the maintenance section of this manual for instructions on the blade pitch adjustment procedure. Replace any worn out blades.

7.7 SAFETY KILL SWITCHES

This power trowel has been equipped with a safety kill switch. Safety kill switches should be tested every time the engine is started.

NOTE

NEVER! disable or disconnect the kill switch. It is provided for operator safety. Injury may result if it is disabled, disconnected, or improperly maintained.

7.8 HANDLE PRESS KILL SWITCH

Located on the main handle tube is a red switch (Figure 5). The switching mechanism of this switch should operate freely and should always be kept in this condition. With the switch in the OFF position, the engine should not start or run. The purpose of this switch is to stop the engine in a runaway situation, (i.e.-the operator releasing the handle during operation).



FIGURE 5

DO NOT let the machine sit unused with the engine at high speed for an extended period of time. It will cause premature belt wear or may destroy the belt. **ALWAYS** set the engine speed to idle when the hand clutch is disengaged.

8. INITIAL START-UP Lifting the Trowel Onto a Slab

8.1 Auxiliary Lifting Tube

Remove the auxiliary lifting tube located on top of the main handle. Insert the tube into the socket located on the opposite side of the gearbox from the handle. Make sure that the hole in the tube engages with the pin in the socket. With one person lifting from the main handle, and another lifting from the auxiliary lifting tube, pick up the machine to move onto a slab.



WARNING:

The trowel must be stabilized by the person carrying the operator's handle. If it is not stabilized properly the handle may swing around and flip the trowel, thus causing damage to the trowel and bodily injury.

8.2 Lifting Bale

The lift bale is optional on new trowels. It provides an optimal lift point for moving the trowel. Lift bales or forklift can be used to lift a trowel up onto a building with a crane.

Using a crane to move a machine with a lift bale is highly recommended, and is perfectly safe for the machine. Extra care should be taken when lifting the machine off the ground, though. Serious damage to the machine or personal injury could be caused by dropping a trowel.

8.2 Lifting Bale Continued

This section is intended to assist the operator with the initial start-up of the walk-behind trowel. It is extremely important that this section be read carefully before attempting to use the trowel in the field.

DO NOT use your trowel until this section is thoroughly understood



WARNING:

DO NOT attempt to operate the trowel until the Safety, General Information, and Inspection sections of this manual have been read and thoroughly understood. Depending on the engine manufacturer, operating steps may vary. See engine manufacturer's operating manual.

9. STARTING THE ENGINE

- **9.1** Place the engine fuel valve lever (Figure 6) to the "ON" position.
- **9.2** Place the trowel's throttle lever (Figure 1) to the "IDLE" position.
- **9.3** Place the choke lever (Figure 7) in the "CLOSED" position if starting a cold engine.
- **9.4** Place the choke lever (Figure 8) in the "OPEN" position if starting a warm engine or the temperature is warm.
- **9.5** Place the engine ON/OFF switch (Figure 9) in the "ON" position.

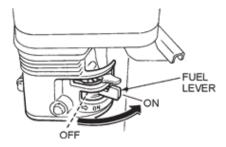


FIGURE 6

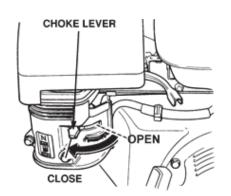


FIGURE 7

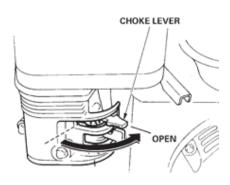


FIGURE 8

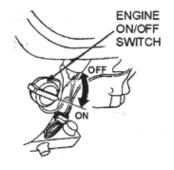


FIGURE 9

9. STARTING THE ENGINE CONTINUED

- **9.6** Grasp the starter grip (Figure 10) and slowly pull it out. The resistance becomes the hardest at a certain position, corresponding to the compression point. Pull the starter grip briskly and smoothly for starting.
- **9.7** If the engine has started, slowly return the choke lever (Figure 7) to the OPEN position. If the engine has not started repeat steps 1 through 6.
- **9.8** Before the trowel is placed into operation, run the engine for several minutes. Check for fuel leaks, and noises that would associate with a loose V-belt cover or component.
- **9.9** To begin troweling, move the throttle lever (Figure 11) toward the "FAST" position.

10. STOPPING THE ENGINE

- **10.1** Move the throttle lever to the IDLE or SLOW position (Figure 11) and run the engine for three minutes at low speed.
- **10.2** After the engine cools, turn the engine start/stop switch to the "OFF" position (Figure 12).
- **10.3** Close the fuel shut- off valve (Figure 13) by moving the fuel valve lever to the OFF position.

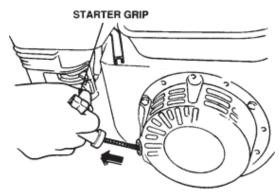


FIGURE 10

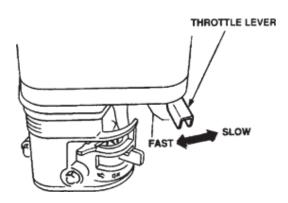


FIGURE 11

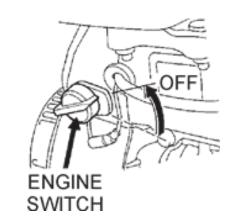


FIGURE 12

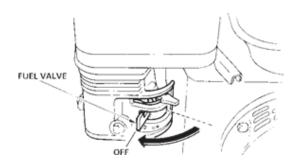


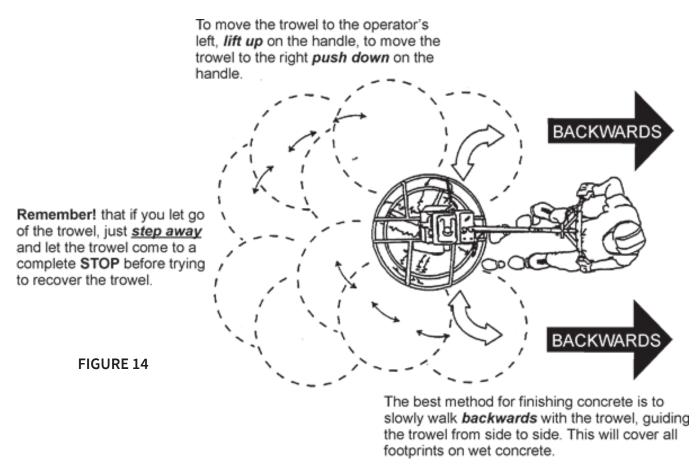
FIGURE 13

11. OPERATION

The following steps are intended as a basic guide to machine operation, and are not to be considered a complete guide to concrete finishing. Read the "Training" section of this manual for more information.

11.1 Maneuvering the Trowel

- **11.1.1** Get into the operator's position behind the handle. With a secure foothold and a firm grasp on the handles slowly increase the engine speed until the desired blade speed is obtained.
- **11.1.2** To maneuver the trowel, gently lift up on or press down on the main trowel handle. To move the machine to the operator's left, lift up on the handle, to move the machine to the right, push down on the handle.
- **11.1.3** Adjust the blade pitch on the Standard handle, by turn the Pitch Adjust Wheel clockwise or counter- clockwise.





WARNING:

NEVER place your feet or hands inside the guard rings while starting or operating this equipment.

ALWAYS keep clear of rotating or moving parts while operating this equipment.

12. ACCESSORY OPTIONS

12.1 Blades

NOTE

Blades should be changed when they fail to finish concrete in a satisfactory manner.

Blades are a vital part of finishing concrete. This Tomahawk Trowel has been designed to finish concrete and is built to stringent quality standards out of the finest trowel steel. If you need replacement blades, consult your parts list in this manual for part numbers and order them from the Tomahawk WebsiteFIGURE 4 your Tomahawk parts dealer.

12.2 Combo Blades

This trowel was equipped with combination FLOAT/FINISH (Figure 15) blades as original equipment. These blades have been designed for optimum performance in both the floating and finishing operations. These blades are versatile and should take care of most troweling needs.

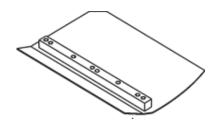


FIGURE 15

12.3 Finish Blades (Optional)

These blades have been specifically designed for finish operations with this trowel. They will provide a premium surface finishing capability from your trowel. They should only be used after the concrete has set to the point where the trowel does not sink into the concrete when placed on it.

12.4 Clip-On Float Blades (Optional)

These blades will clip (Figure 16) on to an existing installed blade, allowing your finisher to float on "wet" concrete so that the troweling operation can begin as early as possible. They are easily removable, so that after the floating operation, when the concrete is sufficiently cured, they can be removed to expose the finish blades for continued troweling.

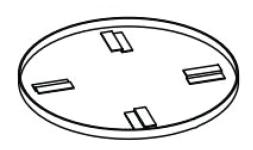


FIGURE 16

12.5 Float Discs (Optional)

These round discs attach to the spiders and allow the machine to "float" on "wet" concrete. The disc design allows early floating and easy movement from wet to dry areas. They are also very effective in embedding large aggregates and surface hardeners.

13. MAINTENANCE

13.1 Maintenance Schedule

Daily (8-10 Hours)

- 1. Check the oil level in the engine crankcase and gear box, fill as necessary.
- 2. Check V-belt.

Weekly (50-60 Hours)

- 1. Relube arms, thrust collar and clutch
- 2. Replace blades if necessary.
- 3. Check and clean or replace the engine air filter as necessary.
- 4. Replace engine oil and filter as necessary, see engine manual.

Monthly (200-300 Hours)

1. Remove, clean, reinstall and relube the arms and thrust collar. Adjust the blade arms.

Yearly (2000-2500 Hours)

- 1. Check and replace if necessary the arm bushings, thrust collar bushings and shaft seals.
- 2. Check pitch control cables for wear.
- 3. Adjust blade speed.

13.2 Trowel Arm Adjustment

Use the following procedure to check and adjust trowel arms, and check for worn or damaged components when it becomes apparent that the trowel is finishing poorly or in need of routine maintenance. Look for the following indications. Trowel arm alignment, worn spider bushings or bent trowel arms may the cause.

- Are blades wearing unevenly? Is one blade completely worn out while the others look new?
- Does the machine have a perceptible rolling or bouncing motion when in use?
- Look at the machine while it is running; do the guard rings "rock up and down" relative to the ground?

13.2.1 Place the trowel in a FLAT, LEVEL area.

A level, clean area to test the trowel prior to and after is essential. Any unlevel spots in the floor or debris under the trowel blades will give an incorrect perception of adjustment. Ideally, a 5×5 Ft. $(1.5 \times 1.5$ Meter) three-quarter inch (19 mm) thick FLAT steel plate should be used for testing.

13.2.2 Pitch the blades as flat as possible. The adjustment bolts should all barely make contact with the lower wear plate on the spiderbox. If one is not making contact, adjustment will be necessary. (Figure 17FIGURE 4).

13.2 Trowel Arm Adjustment Continued

Figure 17 illustrates, "incorrect alignment", worn spider bushings or bent trowel arms. Check that the adjustment bolt is barely touching (0.10" max. clearance) lower wear plate. All alignment bolts should be spaced the same distance from the lower wear plate.

- 1 Adjustment Bolt
- 2 Lower Wear Plate
- 3 Surface
- 4 "Dished" Effect on Finished Concrete

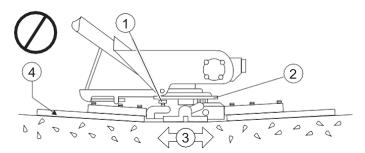


FIGURE 17

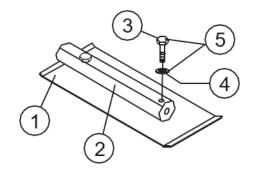
13.3 Trowel Blade Removal



WARNING:

Disconnect the spark plug wire from the spark plug and secure away from the engine before performing maintenance or adjustments on the machine.

- **13.3.1** Remove the trowel blades from the trowel arm by removing the two hex head bolts from the trowel arm. Set blades aside.
- **13.3.2** Wire brush any build-up of concrete from all six sides of the trowel arm. Repeat this for the remaining three arms.



- 13.4 Re-Assembly
- **13.4.1** Clean and examine the upper/lower wear plates and thrust the collar.
- **13.4.2** Examine the entire spider assembly. Wire brush any concrete or rust build-up. If any spider components are found to be damaged or misshaped, replace it.
- **13.4.3** Reinstall bronze bushing on the trowel arms.
- **13.4.4** Repeat above steps for each trowel arm.
- **13.4.5** Make sure that the spring tensioner is in the correct position to exert tension on the trowel arm.
- **13.4.6** With the bronze bushing already installed, insert all the trowel arms with levers into the spider plate.
- **13.4.7** Use care to align the grease hole on the bronze bushing with the grease hole fitting on the spider plate.
- **13.4.8** Lock the trowel arms in place by tightening the hex head bolt with zerk grease fitting and jam nut.
- **13.4.9** Re-install the blades onto the trowel arms.
- **13.4.10** Install the stabilizer ring onto the spider assembly.

1 Blade

5

- 2 Blade Arm
- 3 Hex Head Bolt
- 4 Lock Washer
 - Remove from Arm

FIGURE 18

13.5 Changing Blades Only

We recommend that all of the blades are changed at the same time. The trowel may wobble or bounce if not.

13.5.1 Place the machine on a flat, level surface. Adjust the blade pitch control to make the blades as flat as possible.

NOTE

Pay attention to the blade orientation on the trowel arm.

- **13.5.2** Remove the two bolts and lock the washers that secure the blade to the trowel arm.
- 13.5.3 Remove the blade.
- **13.5.4** Using a wire brush, scrape all concrete particles and forgein debris from the trowel arm.
- **13.5.5** Install the new trowel blade onto the trowel arm. Make sure the blade is installed correctly, maintaining the proper orientation for direction of rotation.
- **13.5.6** Reinstall the two bolts and lock washers that secure the blade to the trowel arm. Tighten the bolts securely.
- **13.5.7** Repeat steps for all remaining blades.

13.6 Installing Pans onto Finisher Blades



WARNING:

Lifting/Crush Hazard.

Do not lift the trowel with the pans attached.

ALWAYS install the pans on the work area or an area that is next to/level with the work area. **DO NOT** lift the trowel when the pans are attached.

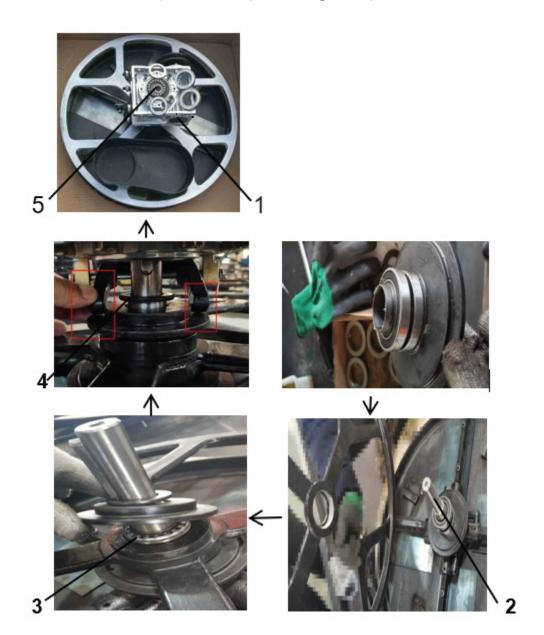
- **13.6.1** Lift the trowel just enough to slide the pan under the blades. With the blades adjacent to the Z-clips, lower the finisher onto the pan.
- **13.6.2** Rotate the blades into position under the Z-clips. Ensure that the blades are rotated in the direction of travel when the machine is in operation. Or, use the engine to rotate the blades into position.
- **13.6.3** Attach the blade tie-downs to the far side of the Z-clip brackets with tie-down knobs.
- **13.6.4** Before the machine is put back into operation, check to make sure that the blade edges are secured under the Z-clips.
- **13.6.5** Before the machine is put back into operation, check to make sure that the tie-downs are secured firmly over the edges of the blade.

13.7 Spider Box Removal

- **13.7.1** Once it is determined that an adjustment is required, remove the spider assembly from the gearbox shaft as follows:
- 13.7.2 Remove the zerk fitting and allen head screw designated by the letter "S".
- **13.7.3** On the opposite side of the spider block, there is another zerk fitting and allen head screw. Remove both of these components.
- **13.7.4** Lift the upper trowel assembly off of the spider assembly.

NOTE

A slight tap with a rubber mallet may be necessary to dislodge the spider from the main shaft of the gearbox.



14. TRAINING CHECKLIST

This checklist lists the requirements for proper machine maintenance and operation. Please feel free to detach it and make copies. Use this checklist whenever a new operator is to be trained.

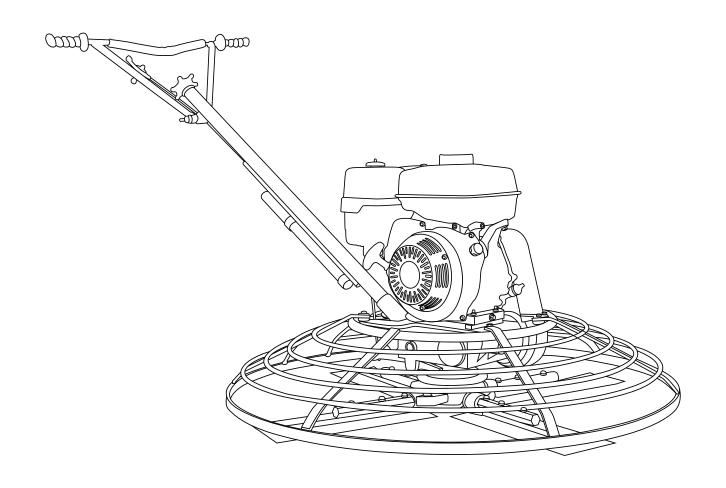
TRAINING CHECKLIST			
NO.	DESCRIPTION	COMPLETED	DATE
1	Read Operator's Manual completely		
2	Understand machine layout, location of components, check engine and gearbox fluid level		
3	Understand fuel system, refueling procedure		
4	Understand how to operate machine		
5	Understand safety controls		
6	Understand emergency stop procedures		
7	Start Up the machine		
8	Properly Maneuver the machine		
9	Understand blade bitch adjusment		
10	Understand proper proper finishing techniques		
11	Understand how to shutdown of machine		
12	Understand how to safely lift the machine		
13	Understand proper machine transport and storage		

Operator	Trainee
Comments:	

TOMAHAWK

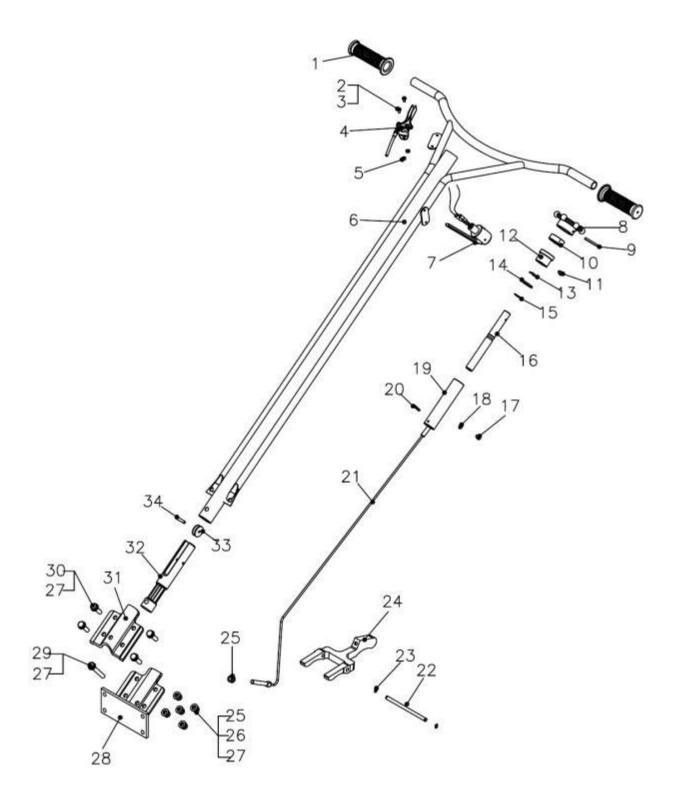
JXPT36K and JXPT46K POWER TROWEL

Parts Manual



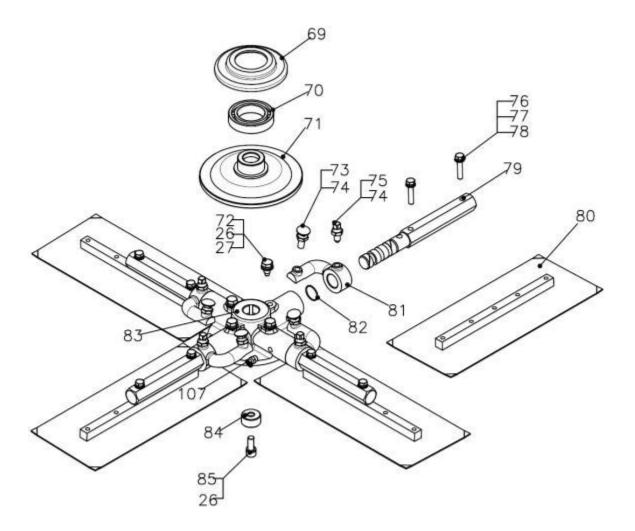
Parts Diagram

Handle



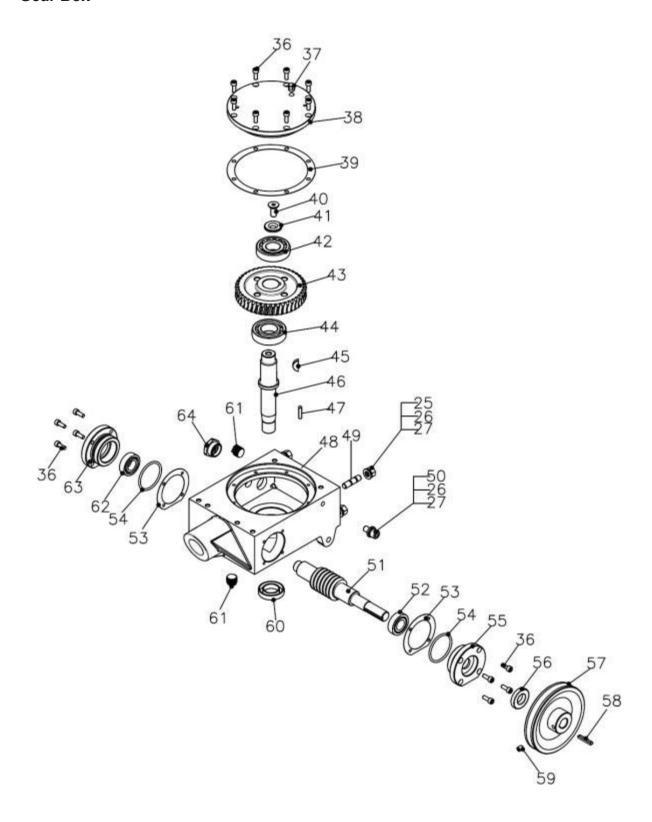
REF	Parts No.	Description	Q'TY	Dimension
1	RG-003	Plastic Cover	2	
2	QSC-M4*8	Screw	2	M4x8
3	QWS-PM4	Plate Washer	2	M4
4	TSA-01	Throttle Assy.	1	
5	QNT-NM4	Nylock Nut	2	M4
6	W436F-001	Handle WA	1	
7	PAS-02	Stop Switch(release bar Type)	1	
8	436F-01-001	Adjust Knob	1	
9	QSP-5X50	Spring Pin	1	5x50
10	QBR-51104	Bearing	1	
11	QBL-M6X10	Bolt	1	M6x10
12	436F-01-004	Aluminium Guide	1	
13	QWS-WM19	Wave Washer	1	M19
14	QWS-PM19	Plate Washer	1	M19
15	QSR-S18	Snap Ring	1	S18
16	436F-01-002	Adjust Screw Pipe	1	
17	QBL-M6X8	Bolt	1	M6x8
18	QWS-PM6	Spring Washer	1	M6
19	436F-01-003	Screw Guide	1	
20	QSP-5X30	Spring Pin	1	5x30
21	436F-01-007 WT	Steel Wire	1	
22	436F-02-004	Yoke Arm Pin	1	
23	QSR-S10	Snap Ring	2	S10
24	436F-02-003B	Yoke Arm	1	
25	QNT-NM10	Nylock Nut	10	M10
26	QWS-SM10	Spring Washer	14	M10
27	QWS-PM10	Plate Washer	18	M10
28	436F-02-001	Handle Support Base	1	
29	QBL-M10X70	Bolt	1	M10x70
30	QBL-M10X35	Bolt	4	M10x35
31	436F-02-002	Upper Bracket	1	
32	436F-01-005	Alumium yoke	1	
33	436A-01-010	Wheel	1	
34	QSP-3X30	Spring Pin	1	3x30
	1			

Blade



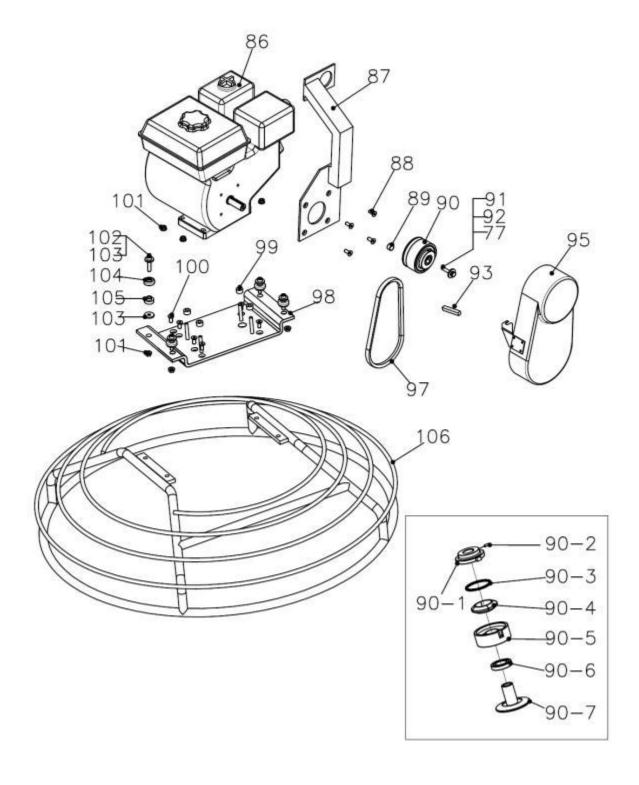
	_			
REF	Parts No.	Description	Q'TY	Dimension
26	QWS-SM10	Spring Washer	5	M10
27	QWS-PM10	Plate Washer	4	M10
69	436F-02-005B	Press Plate Cap	1	
70	QBR-6009	Bearing	1	6009
71	436F-02-006B	Press Plate Cap	1	
72	QBL-M10X20	Bolt	4	M10x20
73	QBL-BBM10X35	Round Head Bolt	4	M10x35
74	QNT-TM10	Thin Nut	8	M10
75	QBL-SHM10X30	Square Head Bolt	4	
76	QBL-7/16X11/2	Bolt	8	7/16*3/2L
77	QWS-SM8	Spring Washer	8	M8
78	QWS-PM8	Plate Washer	8	M8
79	436F-02-009B	Blade Arm	4	
80	436F-02-014	Blade Assembly	4	
81	436F-02-008	Tilt Arm	4	
82	QOR-S22	O-ring	4	22x1.5t
83	436F-02-007B	Spider	1	
84	436F-02-010	Spider Bushing	1	
85	QBL-LM10X30	Socket Bolt	1	M10x30

Gear Box



REF	Parts No.	Description	Q'TY	Dimension
	436F-03	Gear Box Assembly	1	
25	QNT-NM10	Nylock Nut	4	M10
26	QWS-SM10	Spring Washer	5	M10
27	QWS-PM10	Plate Washer	5	M10
36	QBL-M6X16	Bolt	16	M6x16L
37	QRV-M8	Release Valve	1	
38	436F-03-004	Big Cover	1	
39	436F-03-005	Gasket of Big Cover	1	
40	QBL-FHM10x25	Flat Socket Head Bolt	1	M10x25
41	QWS-SSM10	Washer	1	M10
42	QBR-30305	Bearing	1	30305
43	436F-03-008	Worm Gear	1	
44	QBR-6206	Bearing	1	6206
45	QKY-W6X10X25	Wood Key	1	6x10x25
46	436F-02-012	Main Shaft	1	
47	QKY-6X25	Key	1	6x25
48	436F-03-001	Shell	1	
49	QBL-STM10x40	Stud Bolt	4	M10x40
50	QBL-M10X16	Bolt	1	M10x16
51	436F-03-007	Worm Shaft	1	
52	QBR-32004	Bearing	1	32004
53	436F-03-006	Gasket of Side Cover	2	
54	QOR-P55	O-Ring	2	55x3.5t
55	436F-03-003	Output Side Cover	1	
56	QOS-20X40X8	Oil Seal	1	20x40x8t
57	436F-04-005	Pulley	1	
58	QKY-5X35	Key	1	5x35
59	QBL-M8X10	Bolt	1	M8x10
60	QOS-27X47X10	Oil Seal	1	27x47x10t
61	436A-03-008WT	Oil Drain	2	
62	QBR-6004	Bearing	1	6004
63	436F-03-002	Side Cover	1	
64	QOCW-M27x1.5	Oil Check Windows	1	M27x1.5

Safety Ring



REF	Parts No.	Description	Q'TY	Dimension
77	QWS-SM8	Spring Washer		M8
86	GX160	Engine GX-160	1	
87	W436F-005	Hook Lift	1	(Option)
88	QBL-SHM8X20	Socket Head Cap Bolt	4	(Option)
89	436F-04-013	Clutch Busing	1	
90	CA-01	Clutch	1	
90-1	CA-01-004	Face Plate	1	
90-2	QBL-AM8x16	Set Screw	2	M8x16
90-3	CA-01-005	Clutch Spring	1	
90-4	CA-01-003	Shoe Weight	1	
90-5	CA-01-002	Clutch Drum	1	
90-6	QBR-6006	Bearing	1	6006
90-7	CA-01-001	Clutch Shaft	1	
91	QBL-M8X35	Bolt	1	
92	QWS-SPM8	Special Plate Washer	1	
93	QKY-5x5x50	Key	1	
95	436F-04-006	Belt Cover	1	
97	QBT-A26	V-Belt	1	A26
98	W436F-002	Engine Mount Plate		
99	436F-04-107	Engine Mount Bushing		
100	QBL-FHM8X20	Flat Head Cap Bolt	4	
101	QNT-M8	Nut	8	M8
102	QBL-LM8X40	Socket Head Bolt	4	M8X40
103	QWS-PM8	Plate Washer	8	M8
104	436F-04-004	Сир	4	
105	436F-04-003	Rubber	4	
106	W436F-004B	Safety Ring	1	





NEVER PUMP NEVER LOSE PRESSURE

Lose the manual pump and gain the power to spray **15,000 ft² in 10 minutes** or less while maintaining constant, adjustable pressure from 50-435 PSI with your ideal concrete sealant, cure, top cast, form release, and more!





Item #: TCS6.5

6.5 GAL MOTORIZED CONCRETE SPRAYER

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MAKE FLAT WORK, LESS WORK Perfect for concrete finishing of basements, decks, driveways, and







Item #: JXPT24K 24" - 36" - 46" POWER TROWELS

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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

HONDA ENGINES 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.



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