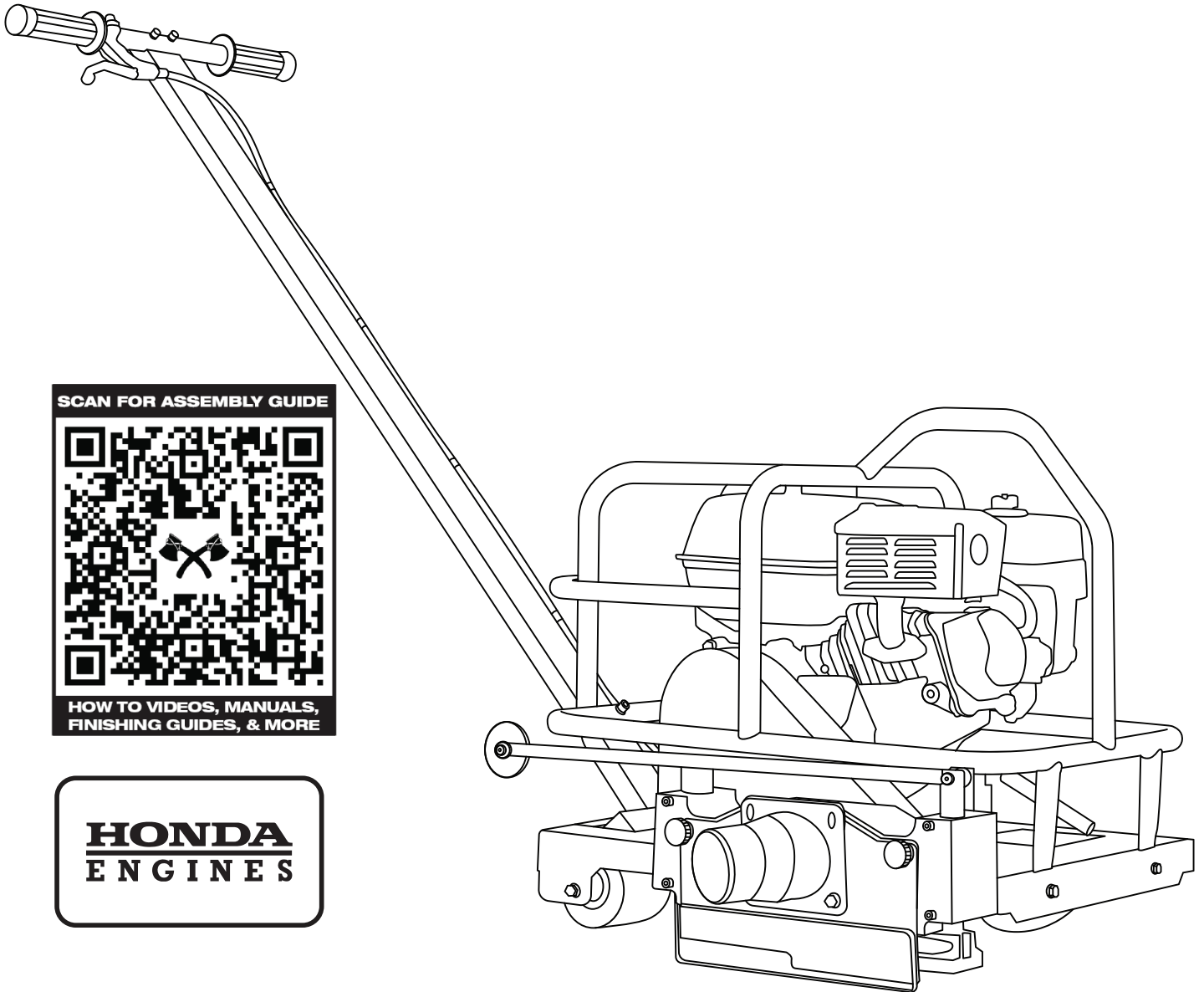


# TOMAHAWK

**6" EARLY ENTRY  
CONCRETE SAW**  
MODEL NUMBER: TFS6H

Operation Manual



SCAN FOR ASSEMBLY GUIDE



HOW TO VIDEOS, MANUALS,  
FINISHING GUIDES, & MORE

**HONDA**  
ENGINES



To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.

# TOMAHAWK

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# Register Your Equipment

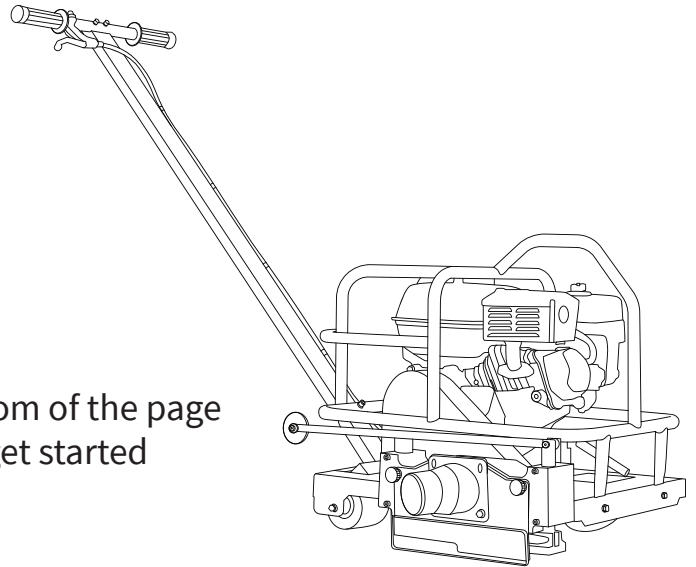
Thank you for purchasing TOMAHAWK equipment! Your product is covered by the TOMAHAWK Warranty policy, but in order to activate your warranty, we need you to register your product. In addition to activating your equipment warranty, product registration will grant you access to important product updates,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

## INCLUDED WITH YOUR REGISTRATION

- ✓ Equipment Warranty Activation
- ✓ Product Updates
- ✓ Streamlined Customer Service
- ✓ Exclusive Discounts and Sales

## STEPS TO REGISTER YOUR EQUIPMENT

1. Visit [www.tomahawk-power.com](http://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



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# 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](http://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 quick 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](http://www.tomahawk-power.com)**



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](http://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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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.

**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! 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 screed will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the screed with a damaged part.

**1.4.10 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.

**1.4.11 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.

**1.4.12 ALWAYS** keep boards clean when not in use and guards in place and in working order.

## **2. TECHNICAL DATA**

### **2.1 Design and Features**

Features such as high performance, reliability, innovative technology, advanced technical solutions and environmental considerations distinguish Tomahawk Power's products. Safe operation of this product requires the operator to read this manual carefully. Ask your dealer or Tomahawk Power if you need more information. Some of the unique features of your product are described below.

### **2.2 Low Noise and Low Dust**

Low noise, low dust blade block, and skid plate technology in conjunction with Tomahawk Power blades allows for ultra early entry sawing the same day while minimizing chipping and spalling.

### **2.3 Honda Engine**

Honda's GX120 engine is legendary for superior reliability and performance. And there's no doubt about it. Low noise levels, low vibration, and low emissions – without sacrificing power output or performance.

## 2.4 Machine Data

Engine Data	
Engine Brand	Honda
Engine Model	GX120
Engine Type	Air-cooled 4-stroke OHV
Displacement	122 cm <sup>3</sup>
Net Power Output*	3.2 hp (2.4 kW) @ 3,600 rpm
Net Torque	5.5 lb-ft (7.3 Nm) @ 2,500 rpm
Starting System	Recoil
Oil Capacity	0.59 US qt. (0.56 L)
Fuel Tank Capacity	2.1 U.S. qts (2.0 liters)
Saw Data	
Maximum Blade Diameter, in. (mm)	6 (152)
Maximum Depth Of Cut, in. (mm)	1-3/16 (30)
Average Bladeshaft, Rpm	3,800
Blade Flanges, in. (mm)	3 (76)
Arbor	Triangular
Bladeshaft Diameter, in. (mm)	3/4 (19)
Air Filter	Dry type dual element with pre-cleaner
Axle Front/Rear, in. (mm)	3/4 (19)/3/4 (19)
Wheels Front, in. (mm)	3 x 3 (76 x 76); 1 each
Wheels Rear, in. (mm)	3 x 3 (76 x 76); 2 each
Handlebar Adjustment	Fixed
Blade Guard Type	Enclosed
Number Of Belts	1
Blade Depth Control	Manual
Maximum Weight Uncrated, lbs (kg)	87 (39)

## 3. SAFETY EQUIPMENT



WARNING

The use of products such as cutters, grinders, drills, that sand or form material can generate dust and vapors which may contain hazardous chemicals. Check the nature of the material you intend to process and use an appropriate breathing mask. Long-term exposure to noise can result in permanent hearing impairment. Always use approved hearing protection. Listen out for warning signals or shouts when you are wearing hearing protection. Always remove your hearing protection as soon as the engine stops.



WARNING

### Other Protective Equipment

Sparks may appear and start a fire. ALWAYS keep fire safety equipment readily available.



WARNING

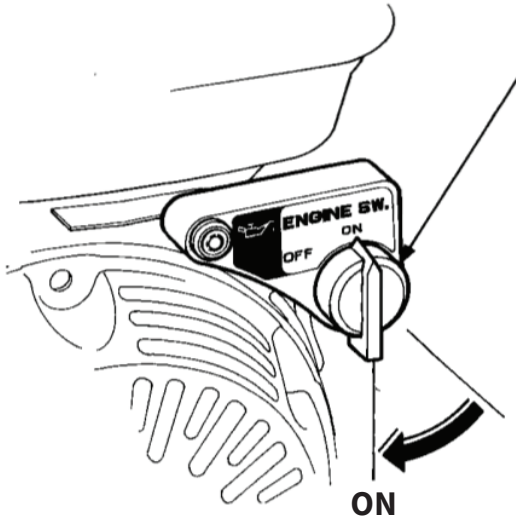
### General Safety Precautions

Operators must read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.



### 3.1 ON/OFF Switch

The ON/OFF switch is used to turn the engine ON and OFF.



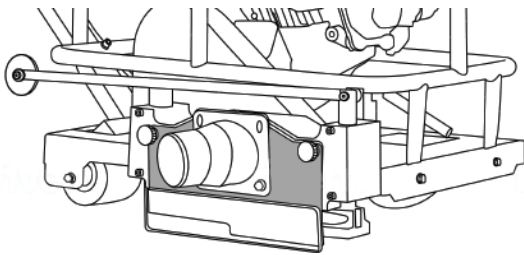
#### Checking the ON/OFF switch

- Turn the switch to the 'ON' ('1' position) to start the engine. The blade will rotate when the engine is turned on.
- Turn the switch to the 'OFF' ('0' position). Check that the engine stops.

### 3.2 Blade Block Guard

The blade block guard protects the operator from the rotating blade and controls dust.

#### Blade Block Guard Maintenance Check

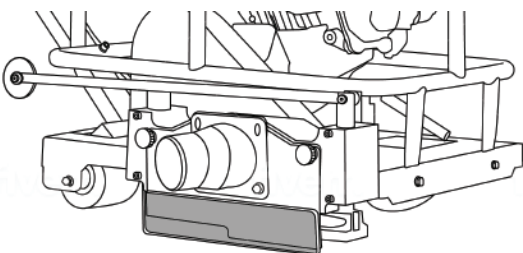


- Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.
- A damaged blade block assembly must be replaced to protect the operator and the machine.
- Always check that the guard is correctly fitted before starting the machine.

### 3.3 Poly Cover

The poly cover primarily controls dust, but also aids to deflect particle ejection.

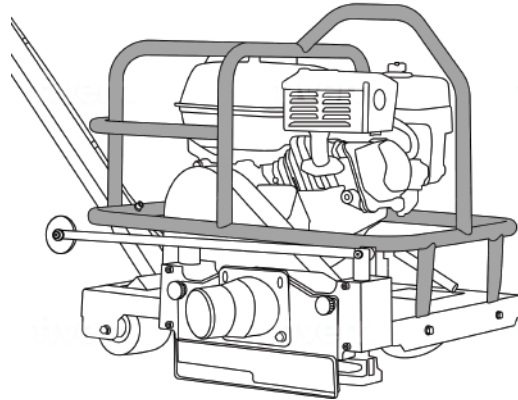
#### Checking The Poly Cover



- Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.
- Always check that the guard is correctly fitted before starting the machine.
- Ensure the poly cover moves freely up and down.

### 3.4 Roll Cage

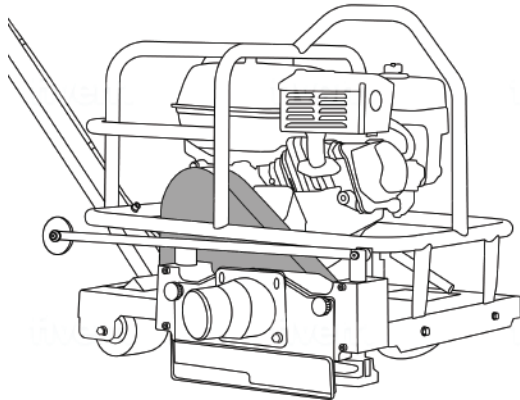
The roll cage protects the equipment, engine, and operator from damage.



### 3.5 Belt Guard

The belt guard protects the operator from rotating sheaves and the belt.

#### Checking The Belt Guard

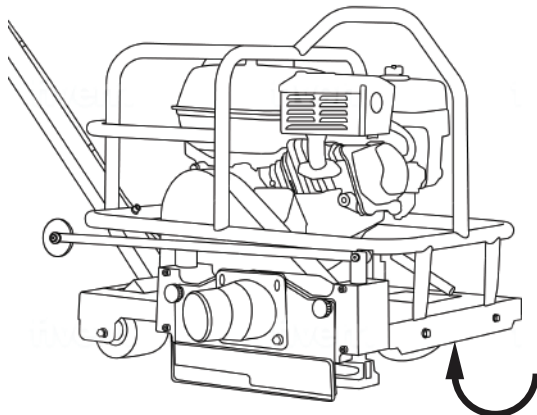


- Make sure the belt guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.
- Always check that the belt guard is correctly fitted before starting the machine.

### 3.6 Sheave Guard

The sheave guard protects the operator from rotating blade shaft sheaves.

#### Checking The Sheave Guard



- Check that the guard, located underneath the machine, is undamaged and not cracked. Replace the sheave guard if it has been exposed to impact or is cracked.
- Always check that the guard is correctly fitted before starting the machine.

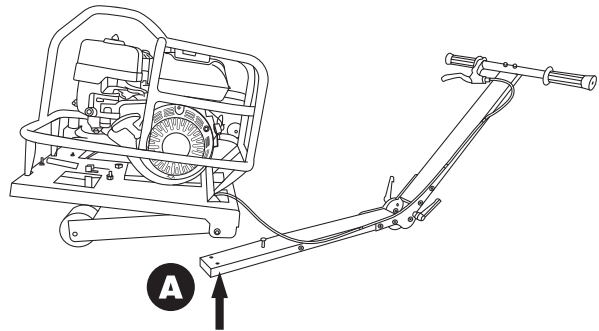
## 4. ASSEMBLY GUIDE



The engine should be switched off during operations described in this chapter unless otherwise stated. Remove the ignition cable from the spark plug to prevent accidental engine starting.

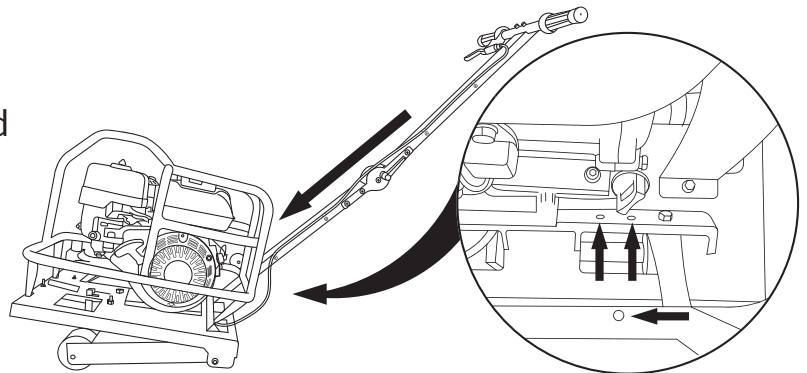
### 4.1 Unpacking

**5.1.1** Remove the Early Entry Green Concrete Saw from the package. The saw should be lifted from the center handle on the roll cage.



**4.1.2** Discard or recycle the packing material per your regional laws. No diamond cutting blade or skid is included with the saw.

**4.1.3** Purchase the appropriate blade and skid plate from our website at [www.tomahawk-power.com](http://www.tomahawk-power.com) or your local Tomahawk Power Construction Product dealer.

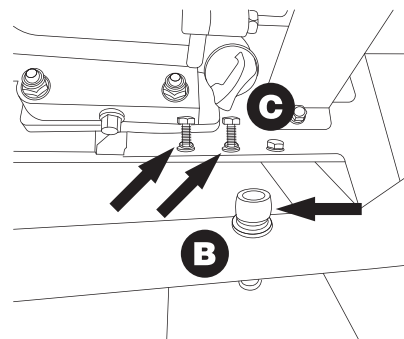


### 4.2 Handle Assembly

**5.1.1** Loosen the bolts (A) at the base of the handles using a 10mm wrench.

**4.1.1** Mount the handles to the back of the saw's roll cage (B) with the longer screw and a 5mm allen wrench.

**4.1.1** Connect the base of the handles by fastening the bolts and washers (C) – secure the bolts in place with a 10mm wrench.



### 4.3 Fit the Blade



Inspect the blade for damage, cracks, loss of segments, warping, overheating, excessive wear or a damaged tri-arbor hole. If the blade shows any of these problems, safely discard the blade.

Make sure the blade is marked with a maximum operating speed greater than 4450 rpm. Inspect blade flanges for damage, excessive wear and cleanliness. The blade should fit snugly on the clean, undamaged tri-arbor shaft.

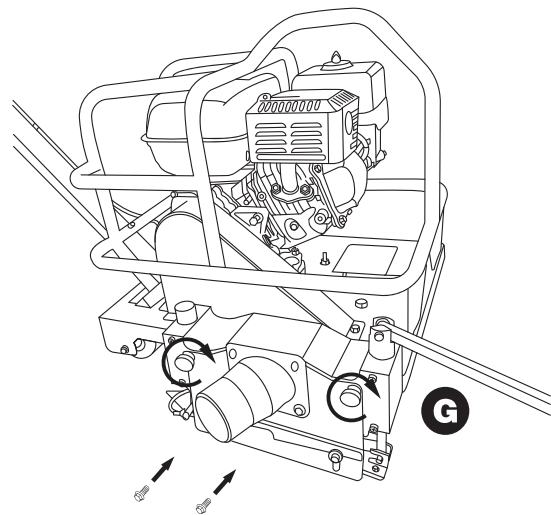
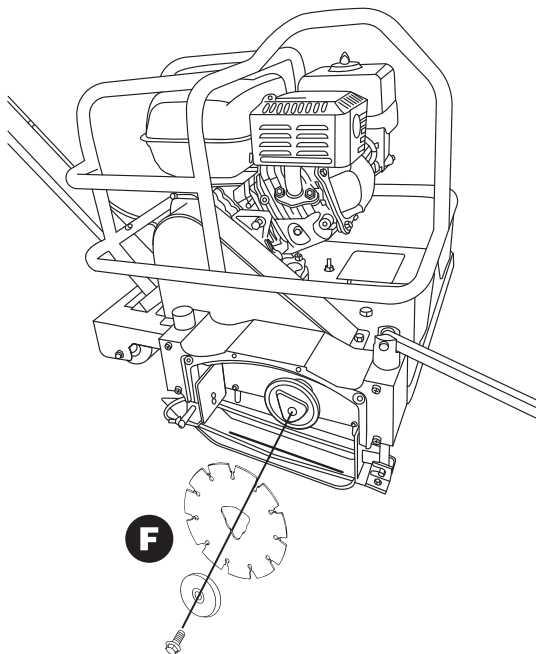
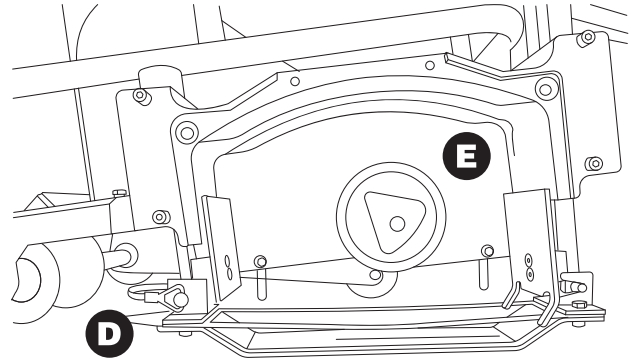
**4.3.1** Insert the locking pin (D).

**4.3.2** Remove the blade shaft bolt and outer blade flange (E) using a 17mm socket or wrench.

**4.3.3** Next, mount the blade (F) on the blade shaft and then attach the outer blade flange.

**4.3.4** Tighten the bolt firmly using the 17mm socket or wrench.

**4.3.5** Mount the blade block guard (G) with vacuum port. Tighten with a 10mm wrench until fully seated against the blade block. (If you are replacing the blade, thoroughly clean the concrete from the shaft, blade block and guard).



## 4.4 Installing a New Skid Plate



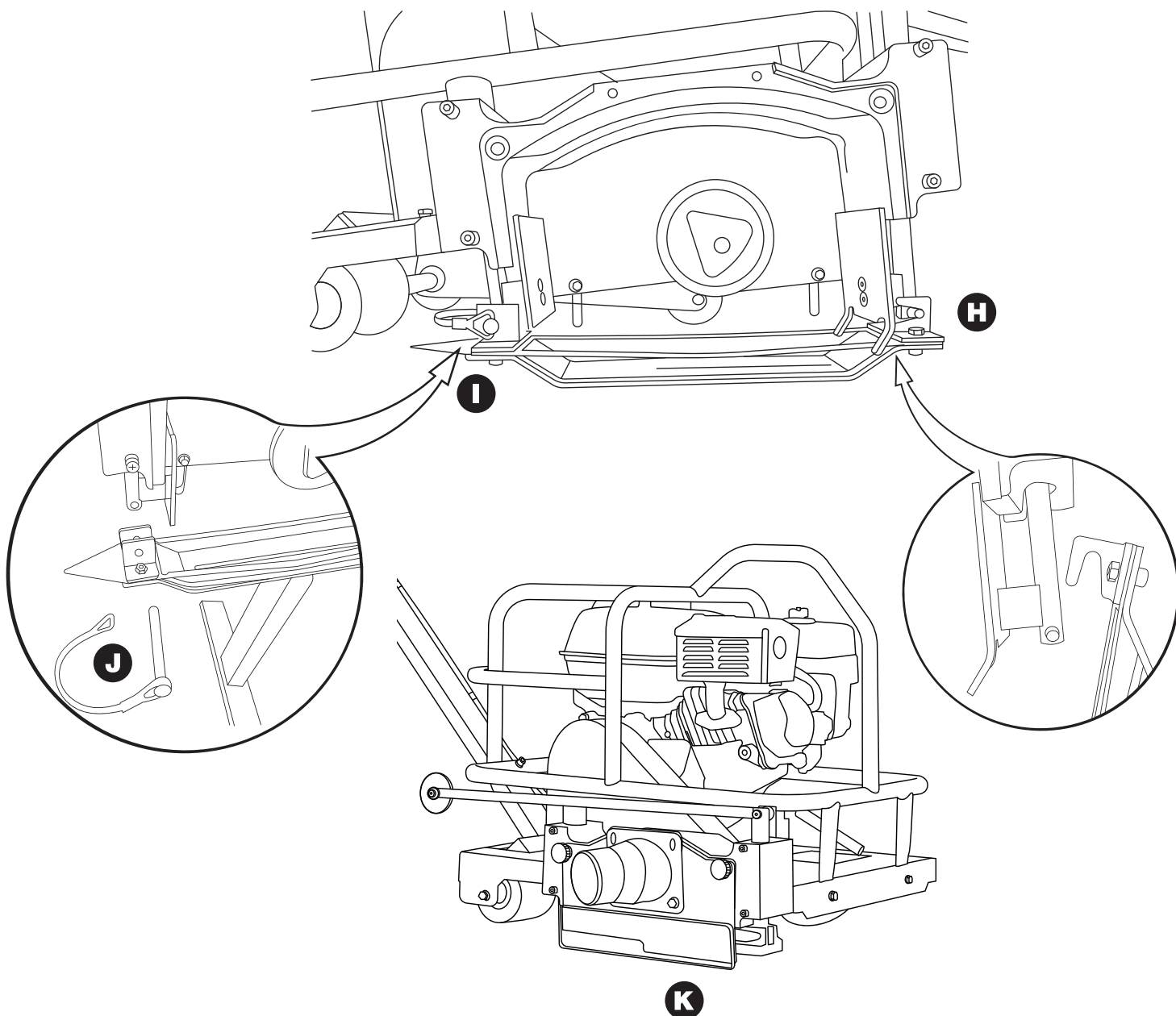
The patented skid plate is the most important part of the Early Entry Green Concrete Saw system. If it is bent, twisted, or damaged, cuts may spall or cause raveling. Store skid plates carefully and install them properly. Install a new skid plate with each new blade. Never reuse skid plates.

**4.4.1** Hook the front of the skid plate (H) on the front blade block shaft pin.

**4.4.2** Connect the rear blade block shaft (I) and the rear of the skid plate by installing the locking pin (J).

**4.4.3** Lift the front and rear of the skid plate to ensure the blade slides freely through the skid plate.

**4.4.4** Ensure the lexan cover (K) moves freely up and down.



## 5. FUEL HANDLING



Running an engine in a confined or badly ventilated area can result in death due to asphyxiation or carbon monoxide poisoning. Use fans to ensure proper air circulation when working in trenches or ditches deeper than one meter.

Fuel and fumes are highly flammable and can cause serious injury when inhaled or allowed to come in contact with the skin. For this reason, observe caution when handling fuel and make sure there is adequate ventilation.

The exhaust fumes from the engine are hot and may contain sparks which can start a fire. Never start the machine indoors or near combustible material!

Do not smoke and do not place any hot objects in the vicinity of fuel.

### 5.1 Fueling

**5.1.1** Use unleaded gasoline with an octane rating of 87 or higher.

**5.1.2** Unleaded gasoline with more than 10% ethanol should not be used. It may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system, as well as posing a fire hazard.

**5.1.3** DO NOT use gasoline containing methanol.

**5.1.4** DO NOT use fuel that is older than 30 days. Old fuel can cause running problems as well as fuel system damage

### 5.2 Refueling



Always stop the engine and allow it to cool for a few minutes before refueling. Refuel the engine in a well ventilated area. Never fuel the engine indoors.

When refueling, open the fuel cap slowly so that any excess pressure is released gently. Never overfill the fuel tank.

Clean the area around the fuel cap.

Tighten the fuel cap carefully after refueling. Check for fuel leaks.

Failure to follow these guidelines may lead to a fire.

When refueling, it's essential to take the equipment out of the vehicle and refuel it on the ground; if this isn't feasible, use a portable container instead of a petrol dispenser nozzle. Always use approved gasoline containers and never refuel inside a vehicle; place the container on the ground, away from the vehicle during filling. Maintain nozzle contact with the fuel tank or container opening throughout the refueling process, avoiding the use of nozzle lock-open devices. Additionally, properly dispose of used engine oil, antifreeze, and similar substances at a workshop or designated disposal site to prevent environmental and health hazards.

## 6. OPERATION

### 6.1 Before Starting

- Make sure the engine is filled with SAE10W30 4 Stroke Oil and 89 Octane Fuel. If the oil and fuel levels are too low, the low oil sensor will not allow the engine to start

## 6.1 Before Starting Continued

- Check that the handle is in a full upright position and pinned.
- Check that the front guide is rotated to the FORWARD position.



Please read the operator's manual carefully and make sure you understand the instructions before using the machine.

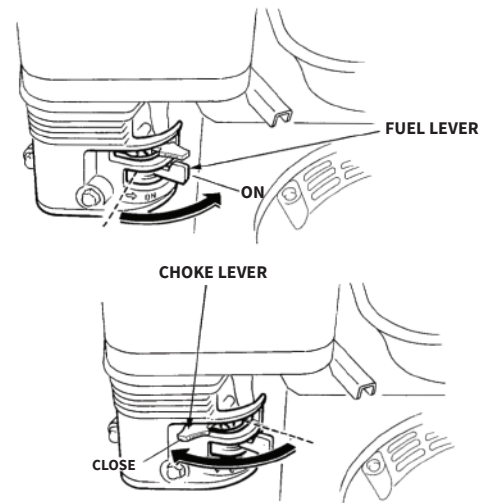
Wear personal protective equipment. Refer to the instructions under the "Personal Protective Equipment" heading.

Make sure no unauthorized persons are in the working area, otherwise there is a risk of serious personal injury.

Check that the guards are mounted correctly and do not show any signs of damage. See instructions in the section "SAFETY EQUIPMENT" and "ASSEMBLY GUIDE".

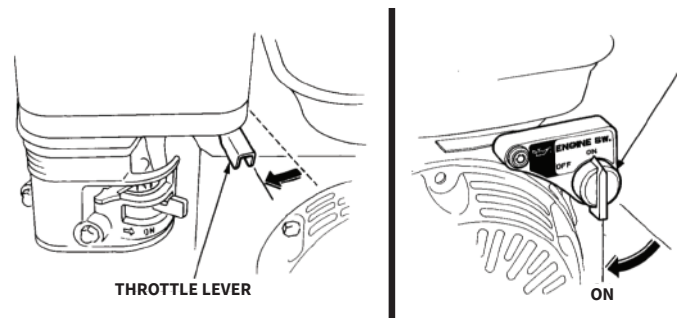
## 6.2 Starting

- Open the fuel valve.
- Raise the blade by pushing down on the handle bar, using both hands on the full and locked position.
- Turn the switch to the "ON" ('1' position) to start the engine. The blade starts to rotate when the engine is turned ON.
- Move the speed lever  $\frac{1}{3}$ rd of the way to the OPEN position.
- Close the engine choke lever.



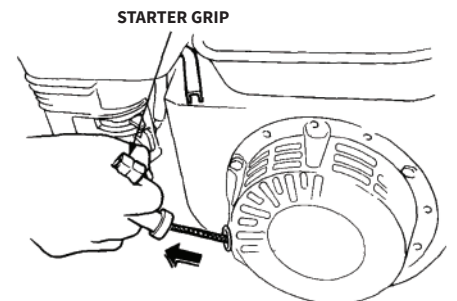
The closed choke position enriches the fuel mixture for starting a cold engine. The open choke position provides the correct fuel mixture for operation after the engine starts and for restarting a warm engine.

- Pull the recoil starter.
- After the engine starts, slowly open the choke. Allow the engine to warm for a few minutes.



## 6.3 Stopping

- To raise the blade, push down on the handle bar with both hands to the full and locked position.
- Move the engine throttle lever to the full closed position.
- Turn the switch to the 'OFF' ('O' position).
- Close the fuel valve.



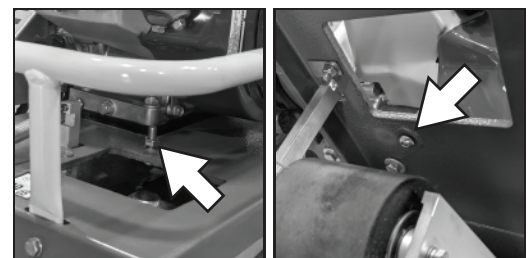
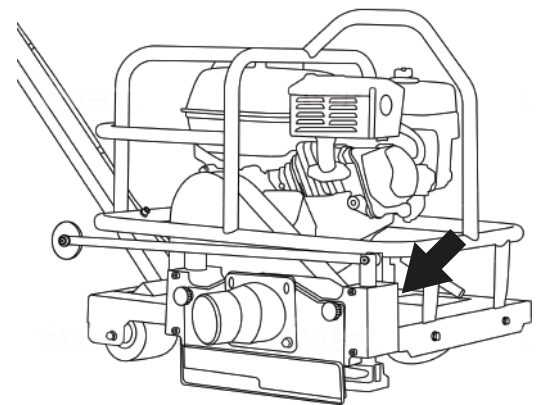
## 6.4 Cutting

- Open the engine throttle lever to full open position for maximum engine speed.
- Line up the saw with the cut line using the white wheel on the front guide and the triangle pointer on the back of the blade block.
- To lower the blade into the concrete slowly, push down on the saw handle and pull the blade release lever.
- Push the saw forward to cut, keeping the front guide wheel in the cut line.
- Push the saw at about half speed for the first 50 feet to allow the blade to develop good diamond exposure.
- Increase the forward speed of the saw until the blade and engine are working at maximum efficiency. DO NOT force the saw.
- When approaching a wall, raise the front guide and use the triangle guide at the back of the blade block to cut the last few feet.
  - DO NOT hit the blade block assembly against any object. Damage may result.

## 6.5 Adjusting the Blade for Shallower Cuts

The Tomahawk Early Entry Concrete Saws' default blade setting is adjusted to the max blade depth of 1-3/16" (ASTM Standard Specification for Portland Cement). If a shallower cut is desired, follow these steps:

- Loosen the depth adjustment nut (1) above the front right wheel, counter-clockwise with a 13mm wrench.
- Turn the depth stop adjustment bolt (2) clockwise with a Size 5 Metric Allen wrench. Each full revolution of the bolt will reduce the cut depth by 1/8".
- Make sure the rear wheels are flat on the ground by pushing down on the rear of main frame.
- Follow an existing saw joint cut for approximately one foot to confirm that the proper/desired cut is achieved.



**1**

**2**



## 7. BASIC CUTTING TECHNIQUES

### 7.1 Sawing Contraction Joints

As concrete hydrates or cures begin to set, it develops internal stress, which may cause random cracks.

Random cracks cast doubt on the quality and workmanship of the concrete. Contraction joints are cut in concrete to relieve these stresses before they seek their own relief in the form of random crack.

The Tomahawk Power Early Entry Green Concrete Saw system controls random cracking through the early timing of a saw cut at predetermined locations. This is to create weakened planes in the concrete that subsequently crack at the bottom of the cut to relieve stress.

Tomahawk Power sawed contraction joints should be a minimum of 1/8th the concrete depth and a minimum of 25 mm (1") deep.

Contraction joints should be cut as soon as the concrete will support the weight of the saw and the operator without marking or damaging the concrete.

There are many possibilities for joint layout. Joint layout should be provided, the contractor should submit a detailed joint layout for approval prior to cutting.

Several factors affect joint spacing including:

- Concrete thickness.
- Type, amount, and location of reinforcement.
- Shrinkage potential of concrete-cement (type, quantity), aggregate (size, quantity, quality), water to cement ratio, admixtures, concrete temperature.
- Base friction.
- Slab restraints.
- Layout of foundations, racks, pits, equipment pad, trenches, etc.
- Environmental factors: temperature, wind, humidity.
- Methods and quality of concrete curing.

## 7.1 Sawing Contraction Joints Continued

Generally, contraction joint patterns should divide slabs into approximate square panels per the recommended spacing shown.

Concrete thickness, mm(in.)	Maximum spacing, m (ft.)
90 (3.5)	2,4 (8)
100, 114 (4, 4.5)	3,0 (10)
125, 140 (5, 5.5)	3,6 (12)
150 (6) or greater	4,5 (15)

At all intersecting cross cuts, install a joint protector at each joint to prevent joint damage. Install an additional joint protector where the right wheel will cross the joint to prevent concrete damage.

## 7.2 Maximizing The Early Entry System

“The timing of concrete operations - especially finishing and jointing - is critical. Failure to address this issue can contribute to undesirable characteristics in the wearing surface, such as cracking” (Extract from the foreword of the American Concrete Institute (ACI) 302.1 R-96.)

In order for an operator to do a satisfactory job using the Tomahawk Early Entry Concrete Saw system, the following criteria must be met:

- A Tomahawk Power Early Entry Green Concrete Saw dry up-cut saw.
- A Tomahawk Power Excel Series dry-cutting diamond blade.
- A Tomahawk Power anti-ravel skid plate installed with every new diamond blade.
- An operator skilled in using the Early Entry Green Concrete Saw cutting system

Without this criteria, joints can not be cut clearly enough to control random cracking before it starts.

The ACI Spec 302.1R-96 says it best:

“Early-entry dry-cut saws use diamond-impregnated blades and a skid plate that helps prevent spalling. Timely changing of skid plates is necessary to effectively control spalling. It is best to change skid plates in accordance with manufacturer’s recommendations...The goal of saw-cutting is to create a weakened plane as soon as the joint can be cut...The timing of the early-entry process allows joints to be in place prior to development of significant tensile stress in the concrete...”

## 7.2 Maximizing The Soft-Cut System Continued

The Portland Cement Association (PCA) engineering bulletin, Concrete Floors on the ground, also states: “Proper jointing can eliminate unsightly random cracks. Aspects of jointing that lead to a good job are choosing the correct type of joint for each location, establishing a good joint pattern and layout, and installing the joint at the correct time.

Timing of joint sawing is critical...Lightweight, high-speed, early-cut saws have been developed to permit the joint sawing very soon after floor finishing, sometimes within 0 to 2 hours...if the cut is sawn within a few hours after the final finishing, random cracking can be controlled...”

## 8. TRANSPORTING THE MACHINE

### 8.1 Lifting the Machine

**8.1.1** Fold the handles over the saw’s cage.

**8.1.2** Lift from the CENTER handle on the roll cage.

**8.1.3** If two people are lifting the saw, use the roll cage bar on each side of the saw and lift with two hands.

### 8.2 Transportation & Storage

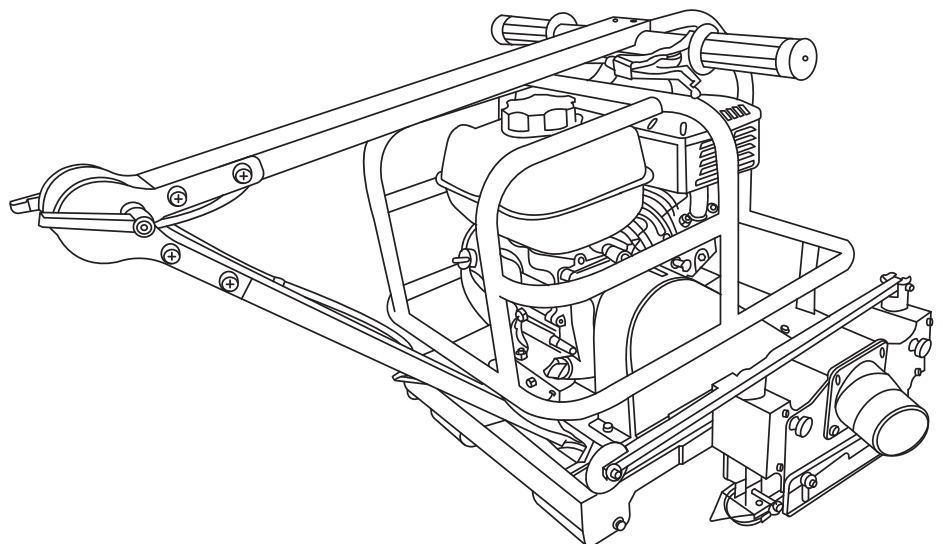
**8.2.1** Remove the blade BEFORE transportation or storage of the machine.

**8.2.2** ALWAYS store the saw in a completely lowered position and secured from moving.

**8.2.3** Close the fuel valve.

**8.2.4** Secure the equipment during transportation in order to avoid transport damage and accidents.

**8.2.5** Store the equipment in a lockable, dry area - out of reach of children and unauthorized persons.



## **9. MAINTENANCE**

### **9.1 Additional Engine Servicing**

Please see the engine Operator's Manual for additional information about servicing the engine.

The manual also contains specific information about specifications, tune-up parts, engine warranty, emission compliance, and more.

### **9.2 Replacement Parts**

- For replacement parts and technical questions visit [www.tomahawk-power.com](http://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.

### 9.3 Maintenance Schedule

Maintain the screed in accordance with the following recommended procedures. Refer to the engine manufacturer's instruction manual for additional information about engine maintenance. The following chart is based on a normal operation schedule.

	<b>DAILY BEFORE STARTING</b>	<b>AFTER FIRST 20 HOURS OR 3 MONTHS</b>	<b>AFTER FIRST 50 HOURS OR 6 MONTHS</b>	<b>AFTER FIRST 100 HOURS OR EVERY YEAR</b>	<b>AFTER FIRST 200 HOURS OR EVERY 2 YEARS</b>
Check the fuel level	●				
Check the engine oil level	●				
Inspect the fuel lines	●				
Inspect the air filter and replace if needed	●				
Check and tighten the external hardware	●				
Change the engine oil		●			
Clean the air filter			●		
Change the engine oil			●		
Check and clean the spark plug			●		
Clean the fuel strainer				●	
Check and adjust the valve clearance					●
Clean the cylinder head					●
Replace the spark plug					●

## 10. TROUBLESHOOTING

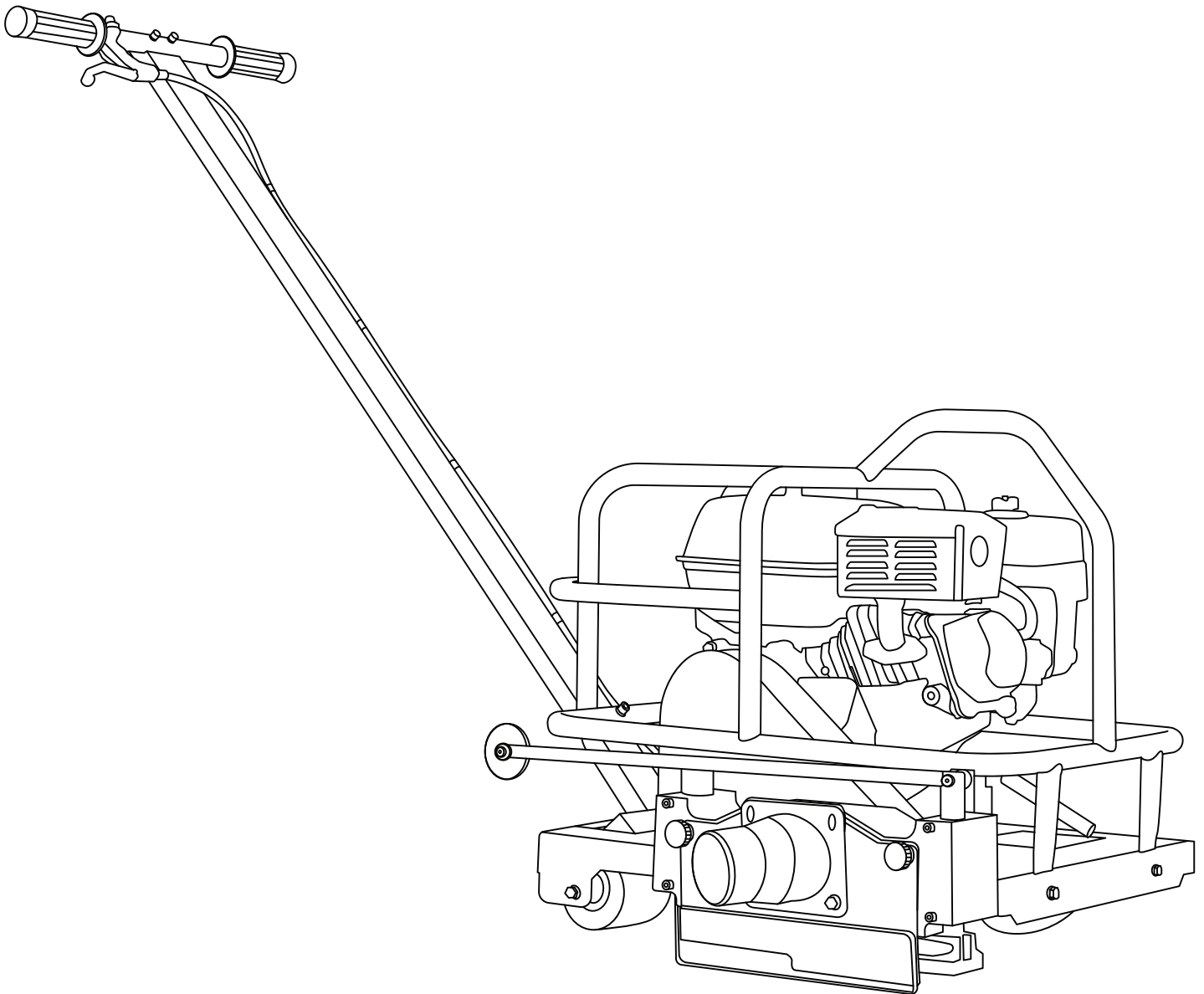
Please check the list below before addressing the problems to servicing personnel including local dealer. And if the problem continues after the troubleshooting as described below, call your local dealer for future assistance.

<b>Saw is spalling and raveling cut</b>	Check to see if the diamond blade is worn out, glazed, warped or damaged.
	Ensure skid plate moves freely up and down the entire shaft length without contacting the diamond blade.
	Check skid plate for excessive wear or gap around the diamond blade.
	Check bottom of skid plate for metal burrs or irregularities.
	Ensure skid plate is not twisted or bent.
	Check lexan covers for free movement up and down.
	Ensure there is spring down pressure at each end of the skid plate.
	Do not twist or move the saw sideways while cutting. Make gradual changes in pressure on the handlebar to control the saw in the cut.
	Check that the engine is running properly and at full throttle.
	Check belt and belt idler for proper tension.
	Ensure the diamond blade is properly mounted and secured with clean flanges.
	Ensure that the diamond blade is the correct specification for your area.
	Ensure the slab is in clean with no debris that could raise the skid plate or saw while cutting.
	Use Tomahawk Power joint protectors at all cut intersections.
	Clean excess concrete debris from the blade block assembly.
	Check that the scrapers in the blade block are not bent or binding.
Ensure that the blade block shafts are not bent or damaged.	
<b>Saw pulls to one side while sawing</b>	Check that the front guide is properly aligned with the center of the diamond blade.
	Check to see if the diamond blade is worn out, glazed, warped or damaged.
	Do not twist or move the saw sideways while cutting. Make gradual changes in pressure on the handlebar to control the saw in the cut
	Ensure that all wheels rolls freely and smoothly.
	Do not force the saw. Allow the diamond blade to cut at its own rate of speed.
	Check the skid plate for damage or burrs.
<b>Engine does not start</b>	Check if there is fuel in the tank and it is the correct fuel. Make sure there is no water in the fuel.
	Check if the fuel valve is turned to the 'on" position.
	Check if the ON/OFF switch is in the 'ON" position.
	Check that the spark plug wire is connected to the spark plug.
	Engine is flooded. Adjust the choke per the engine owner's manual.
	Check the choke is in the 'ON" position for cold starts. Adjust the choke per the engine owner's manual.
	Oil level is too low. Engine is equipped with an oil alert system that will not let the engine start unless the engine oil level is within the correct range.
	Check that air cleaner is not dirty or plugged.
Check that the blade shaft rotates freely and no concrete has built up in the blade block.	
<b>Engine runs rough, back fires or can not reach full speed.</b>	Check if there is fuel in the tank and it is the correct fuel. Make sure there is no water in the fuel.
	Oil level is too low. Engine is equipped with an oil alert system that will not let the engine start unless the engine oil level is within the correct range.
	Check that air cleaner is not dirty or plugged.
	Check that spark plug is clean and properly gapped.
	Check that throttle lever is properly set.
	Check the choke is in the 'ON" position for cold starts. Adjust the choke per the engine owner's manual.

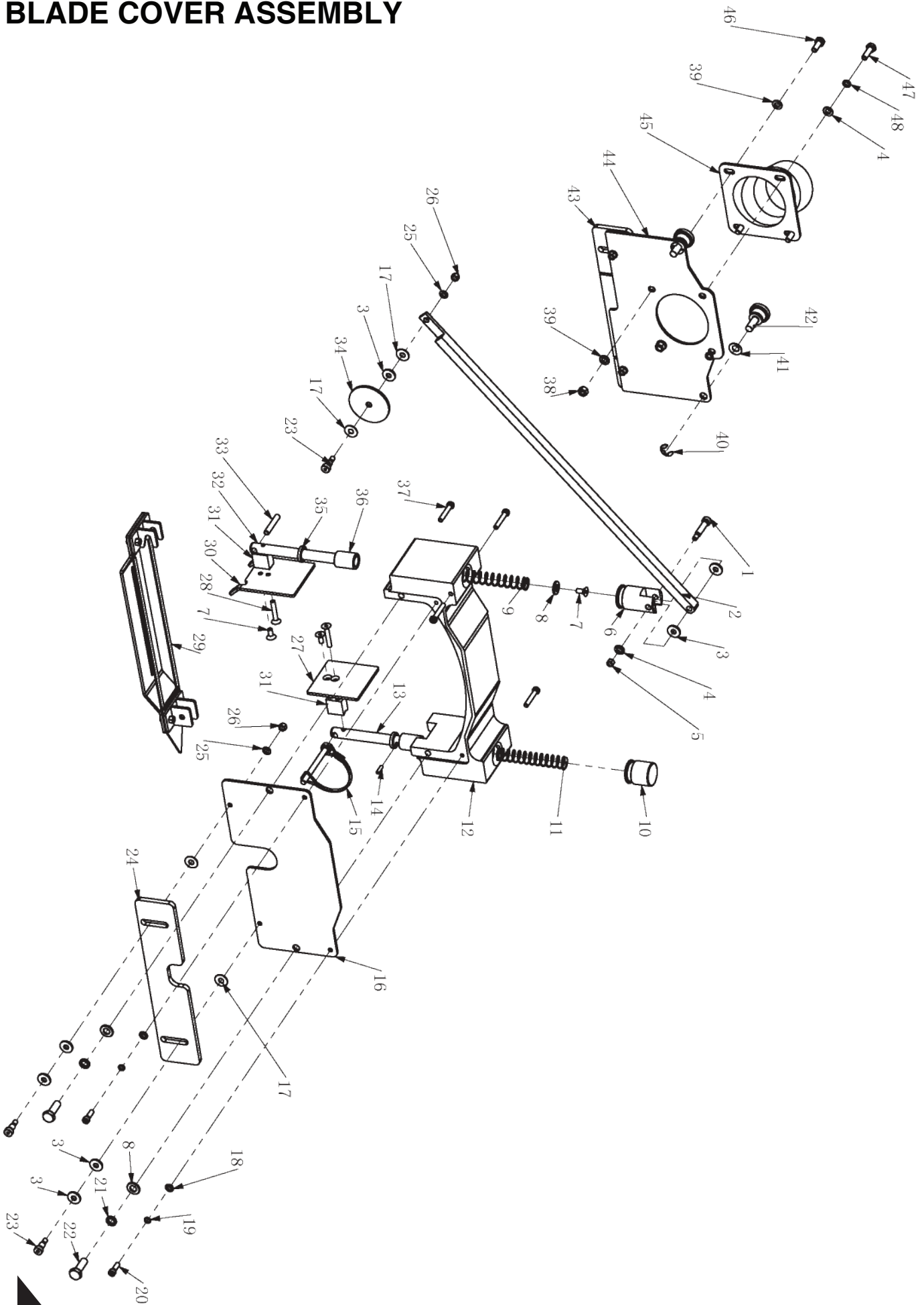
# TOMAHAWK

**6" EARLY ENTRY  
CONCRETE SAW**  
MODEL NUMBER: TFS6H

Parts Manual



# BLADE COVER ASSEMBLY





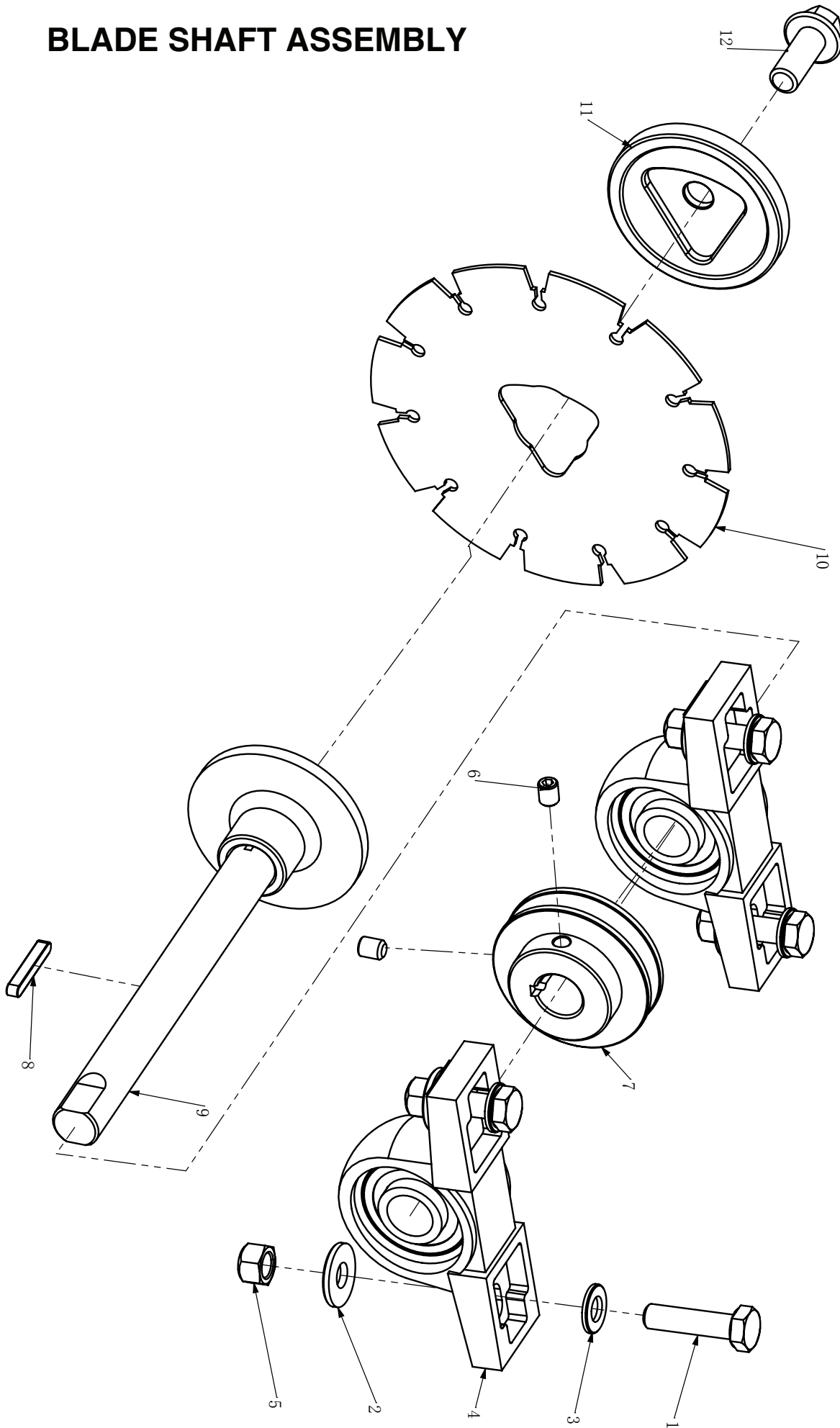
## BLADE COVER ASSEMBLY

No.	Description	Drawing No.	Qty
1	Shoulder Screw M5xΦ6x25	16052510	1
2	Pointer	1906-00022-1	1
3	Spacer	1906-00001-4	11
4	Washer M6	11060010	3
5	Lock Nut M5	13050011	1
6	Front Cap, Rod	1906-00021-1	1
7	Allen Screw M5x12	16051221	3
8	Washer M8	11080000	3
9	Spring (Long)	1906-00016-4	1
10	Rare Cap, Rod	1906-00039-1	1
11	Spring (Short)	1906-00035-4	1
12	Blade Cover	1906-00041-2	1
13	Rare Rod	1906-00043-1	1
14	Spring Pin Φ3x14	19031401	1
15	D Pin	1906-00014-4	1
16	Inner Shield	1906-00030-2	1
17	Spacer	1906-00015-4	6
18	Washer M5	11050010	2
19	Spring Washer M5	12050010	2
20	Allen Screw M5x16	16051620	2
21	Spring Washer M8	12080000	2
22	Bolt M8x25	15080250	2
23	Bolt M5xΦ6x10	16051010	5
24	Inner Plastic Shield	1906-00046-4	1
25	Washer M5	11050000	5
26	Lock Nut M5	13050001	5
27	Rare Shield	1906-00045-2	1
28	Allen Screw M5x30	16053021	2
29	Skid	1906-03000-4	1
30	Front Shield	1906-00018-2	1
31	Spacer, Front Shield	1906-00013-2	1
32	Front Rod	1906-00031-1	1
33	Pin Φ6.35x32	1906.353202	1
34	Guide Wheel	1906-00047-4	1
35	Oil Sealing Φ19xΦ12x3	1906-00048-4	2
36	Bushing	1906-00024-1	2
37	Allen Screw M5x30	16053020	5
38	Lock Nut M6	13060001	2
39	Washer M6	11060000	4
40	Circlip Φ8	18080003	2

## BLADE COVER ASSEMBLY

<b>No.</b>	<b>Description</b>	<b>Drawing No.</b>	<b>Qty</b>
41	Wave Washer M8x16x0.8	14080001	2
42	Bolt M8x20	16082008	2
43	Outside Plastic Shield	1906-00034-4	1
44	Outside Shield	1906-00040-3	1
45	Vac Port	1906-00051-4	1
46	Bolt M6x16	15060160	2
47	Bolt M6x20	15062011	2
48	Spring Washer M6	12060010	2

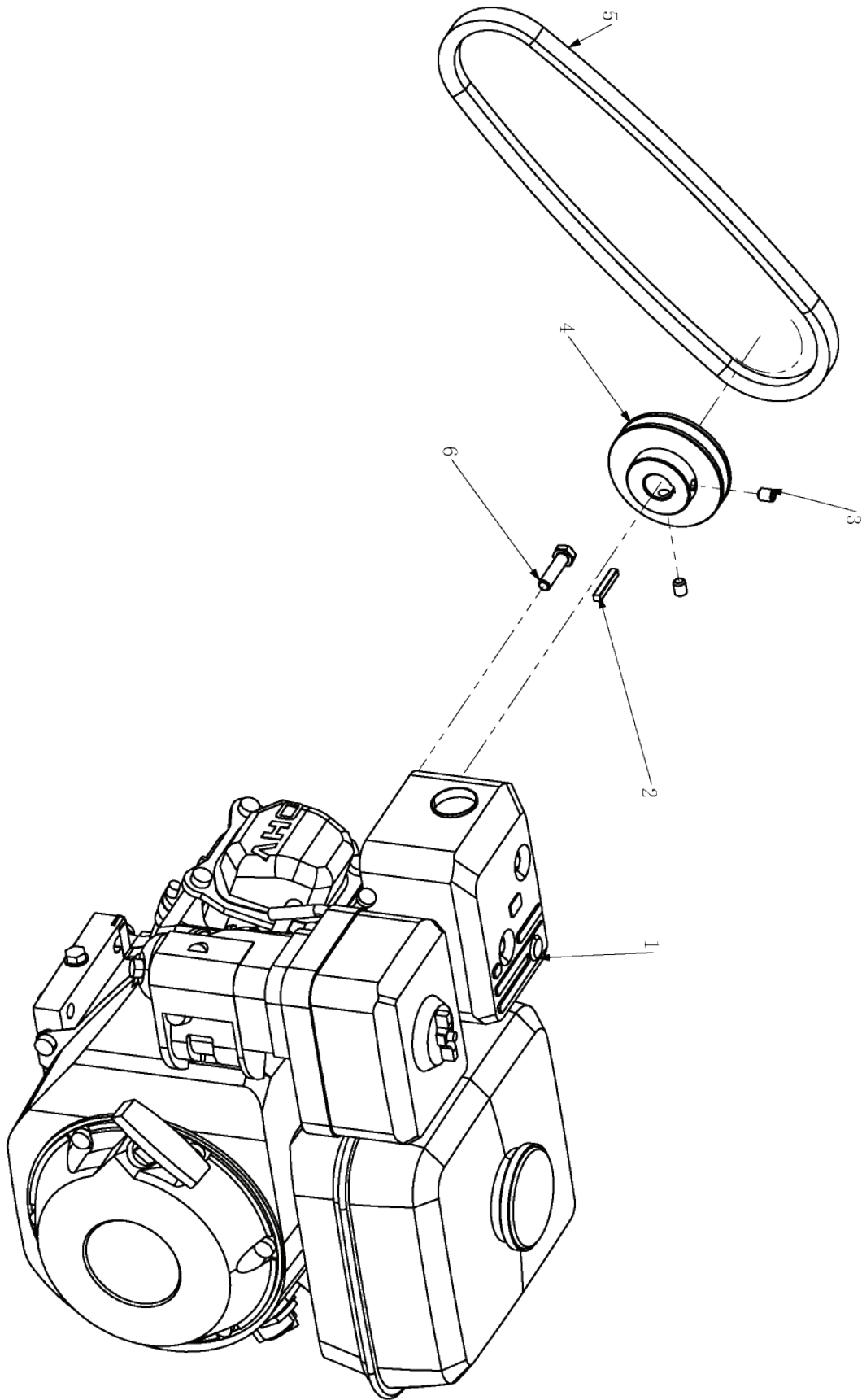
# BLADE SHAFT ASSEMBLY



## BLADE SHAFT ASSEMBLY

No.	Description	Drawing No.	Qty
1	Bolt M10x40	15100400	4
2	Washer M10x25x3(10x26x3)	11102503	4
3	Washer M10	11100000	4
4	Bearing UCP204	21UCP204	2
5	Lock Nut M10	13100001	4
6	Set Screw M8x10	16081005	2
7	Driven Pulley	1906-00006-4	1
8	Key 5x35	12050535A	1
9	Blade Shaft	1906-04000-3	1
10	Blade 8"	1906-00050-4	1
11	Flange (Outside)	1906-00036-1	1
12	Bolt M12x30	15123002	1

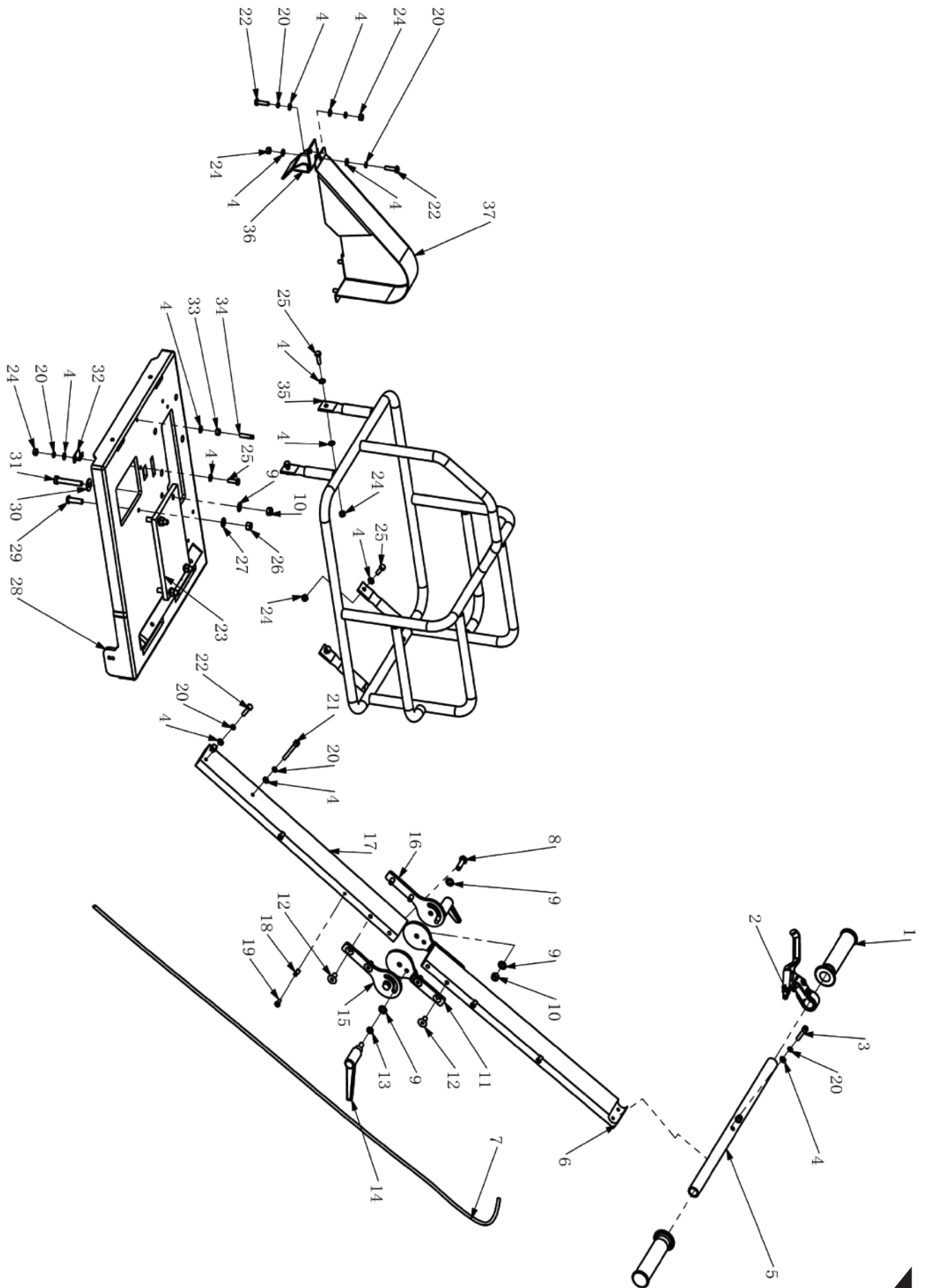
# ENGINE ASSEMBLY



## ENGINE ASSEMBLY

No.	Description	Drawing No.	Qty
1	Engine	25120002	1
2	Key 4.76x30	204.7630C	1
3	Set Screw M8x10	16081005	2
4	Drive Pulley	1906-00005-4	1
5	Belt	27XPZ7103VX280	1
6	Bolt 5/16-24x1-1/4	15080350Y	1

# MAIN BODY ASSEMBLY

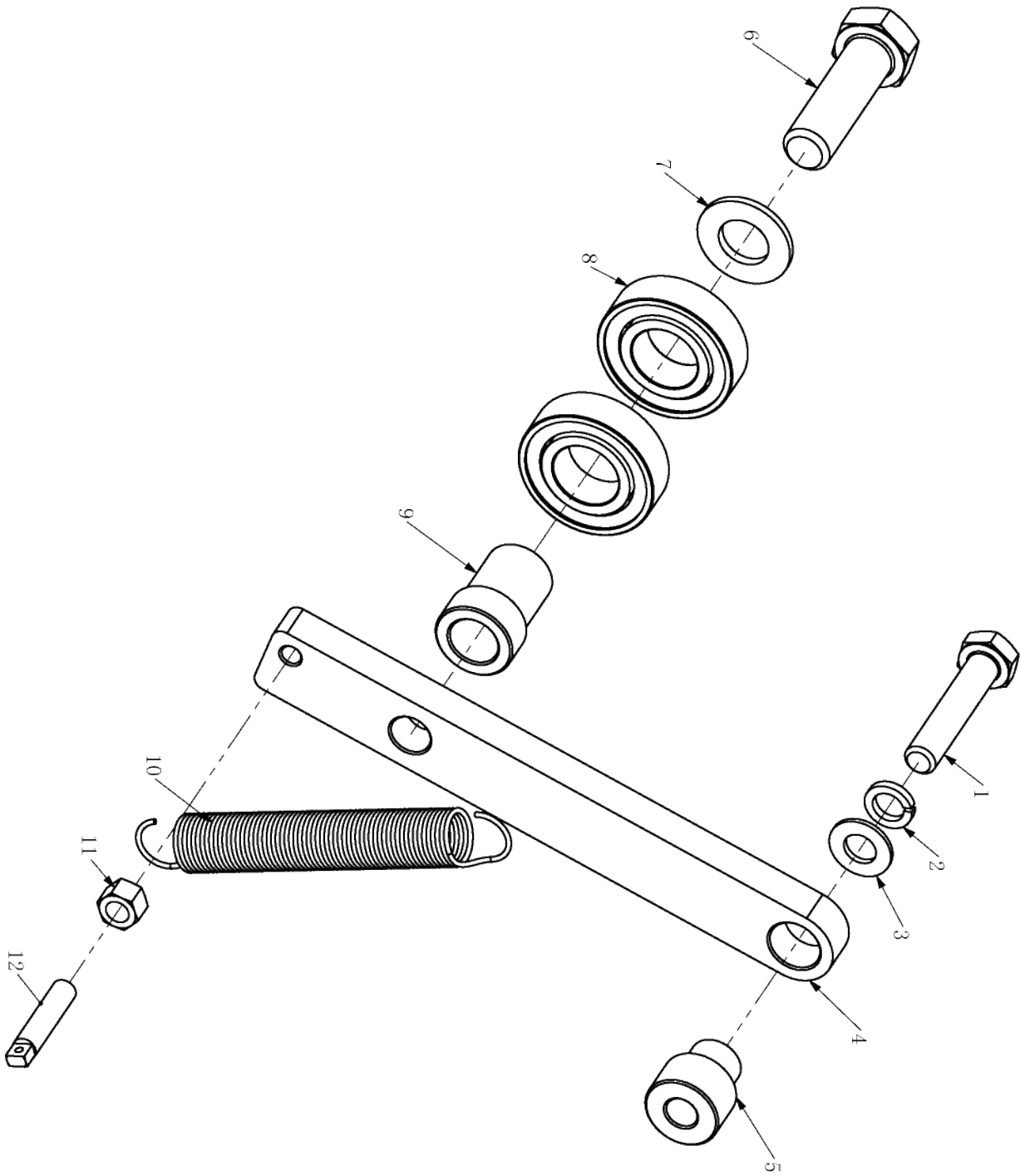


## MAIN BODY ASSEMBLY

No.	Description	Drawing No.	Qty
1	Handle Grip	70220000	2
2	Brake Grip	1906-00011-4	1
3	Allen Screw M6x30	16063020	2
4	Washer M6	11060010	21
5	Handle Bar	1906-00044-1	1
6	Upper Handle	1906-00038-1	1
7	Wire	1906-00009-4	1
8	Bolt M8x25	15080250	2
9	Washer M8	11080000	10
10	Lock Nut M8	13080001	6
11	Connecting Plate, Upper	1906-00054-2	2
12	Allen Screw M8x16	16081604	8
13	Spring Washer M8	12080000	2
14	Locking Handle M8x16	28080164	2
15	Connecting Plate, Lower Left	1906-00053-2	1
16	Connecting Plate, Lower Right	1906-00052-2	1
17	Lower Handle	1906-00023-1	1
18	Wire Clip	1906-00002-4	4
19	Bolt M5x12	16051201	4
20	Spring Washer M6	12060010	11
21	Allen Screw M6x50	16065020	1
22	Bolt M6x25	15062511	4
23	Rubber Engine Spacer	1906-00010-4	1
24	Lock Nut M6	13060011	7
25	Bolt M6x20	15062011	7
26	Nut M8	13080012	1
27	Washer M8	11080010	1
28	Engine Base	1906-00032-1	1
29	Allen Screw M8x30	16083019	1
30	Washer M8x22x2	11082202	4
31	Bolt M8x55	15080550	4
32	Anchor, Position Bar	1906-00027-2	1
33	Nut M6	13060012	1
34	Bolt M6x30	1906-00003-4	1
35	Frame	1906-05000-3	1
36	Lower Shield	1906-00019-2	1
37	Belt Cover	1906-00029-2	1



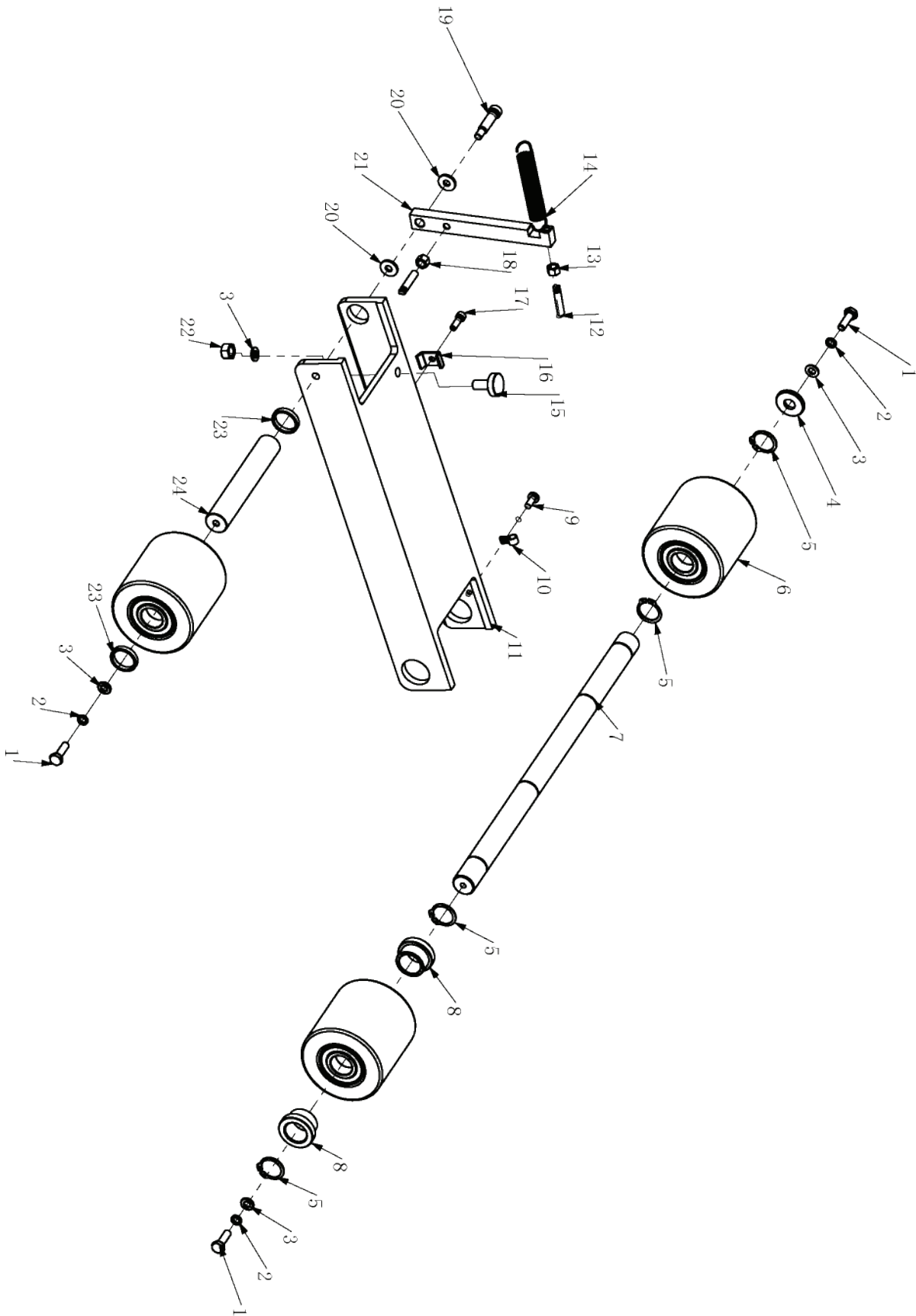
# TENSIONER



## TENSIONER

No.	Description	Drawing No.	Qty
1	Bolt M8x40	15080400	1
2	Spring Washer M8	12080010	1
3	Washer M8	11080010	1
4	Tensioner Rod	1906-01001-2	1
5	Bushing	1906-01002-1	1
6	Bolt M12x40	15120400	1
7	Washer M12	11120000	1
8	Bearing 6003-2R	216003-2Z	2
9	Bushing	1906-01003-1	1
10	Spring	1906-00008-4	1
11	Nut M6	13060012	1
12	Bolt M6x30	1906-00003-4	1

# ADJUSTMENT SYSTEM



## ADJUSTMENT SYSTEM

No.	Description	Drawing No.	Qty
1	Bolt M6x20	15062011	3
2	Spring Washer M6	12060010	3
3	Washer M6	11060010	4
4	Washer M10x25x3(10x26x3)	11102503	1
5	Circlip $\Phi$ 20	18200001	4
6	Wheel	1906-02000-1	3
7	Rare Shaft	1906-00017-1	1
8	Nylon Bushing	1906-00020-1	2
9	Bolt M5x12	16051201	1
10	Wire Clip	1906-00002-4	1
11	Carriage	1906-00028-1	1
12	Bolt M6x30	1906-00003-4	2
13	Nut M6	13060000	1
14	Spring	1906-00007-4	1
15	Bolt M8x18	16081823	1
16	Wire Clip	1906-00012-2	1
17	Allen Screw M5x16	16051620	1
18	Nut M6	13060012	1
19	Bolt M6x $\Phi$ 8x25	16062510	1
20	Spacer	1906-00001-4	2
21	Position Bar	1906-00025-1	1
22	Lock Nut M8	13080001	1
23	Spacer	1906-00026-2	2
24	Front Shaft	1906-00042-1	1



# NEVER PUMP NEVER LOSE PRESSURE

Lose the manual pump and gain the power to spray **15,000 ft<sup>2</sup> 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**

[www.tomahawk-power.com](http://www.tomahawk-power.com)



# TOMAHAWK

## PRODUCT CATALOG

### COMPACTION



HONDA  
ENGINES

**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



HONDA  
ENGINES

**3,400 lbs/ft Plate Compactor**  
Part#: TPC90H

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



HONDA  
ENGINES

KOHLER  
ENGINES

**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

### FINISHING



**6.5 Gal Backpack Concrete Sprayer**  
Part#: TCS6.5

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



HONDA  
ENGINES

**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

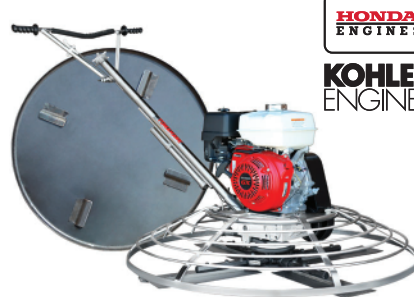
### FINISHING



HONDA  
ENGINES

**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



HONDA  
ENGINES

KOHLER  
ENGINES

**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



HONDA  
ENGINES

**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?

Contact us. *We're here to help!*

Email us at [sales@tomahawk-power.com](mailto:sales@tomahawk-power.com)

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**WWW.TOMAHAWK-POWER.COM**

**POWER / WELDING**

INVERTER SERIES



**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

INVERTER SERIES



**210 Amp Portable Welder Generator**  
Part#: TWG135Ai

Steady 50 - 135 Amp DC welding output  
3300 Watt Inverter Generator  
60% Duty Cycle for extended use  
Suitable for welding rods from 6010 to 7024  
2 Year Product Warranty



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

Steady 50 - 210 Amp DC welding output  
2000 Watt Inverter Generator  
60% Duty Cycle for extended use  
Suitable for welding rods from 6010 to 7024  
2 Year Product Warranty

**PEST CONTROL**



**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

**AND MORE**



**4 Gal. Motorized 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



**3" Full Trash Water Pump**  
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

ASSEMBLED IN THE  
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