WALK-BEHIND TROWELS

PRO WALK-BEHIND



OPERATIONS & PARTS MANUAL

Manual Part #: 064634 | Revision: G Language: English | Original Instructions



Walk-Behind Trowel

OPERATIONS-PARTS MANUAL

This manual covers the Trowels listed below:

Part No.	<u>Description</u>
069879	430 EDGER, 7HP KOHLER, RAPID PITCH
070340	430 EDGER, 7HP KOHLER, FINE PITCH
049781	PT, 436 EDGER, 9HP HONDA, LONG ADJ HANDLE (FINE)
063966	PT, 436 EDGER, 9HP HONDA, LONG ADJ HANDLE (RAPID)
049782	PT, 436, 5.5HP HONDA, LONG ADJ HANDLE (FINE)
063967	PT, 436, 5.5HP HONDA, LONG ADJ HANDLE (RAPID)
049783	PT, 436, 9HP HONDA, LONG ADJ HANDLE (FINE)
063968	PT, 436, 9HP HONDA, LONG ADJ HANDLE (RAPID)
076131	PT, 436, 9.5HP KOHLER, FINE PITCH
076132	PT, 436, 9.5HP KOHLER, RAPID PITCH
072820	PT, 436TC, 9HP HONDA, FINE PITCH
072825	PT, 436TC, 9HP HONDA, RAPID PITCH
049785	PT, 446, 9HP HONDA, LONG ADJ HANDLE (FINE)
049790	PT, 446, 9HP HONDA, LONG ADJ HANDLE (RAPID)
076133	PT, 446, 9.5HP KOHLER, FINE PITCH
076134	PT, 446, 9.5HP KOHLER, RAPID PITCH
055904	PT, 446TC, 13HP HONDA, LONG ADJ HANDLE (FINE)
058899	PT, 446TC, 13HP HONDA, LONG ADJ HANDLE (RAPID)

NOTICE

This manual, or a copy of it, must be kept with the machine at all times. There is a manual storage container located on the machine for your convenience.

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Allen Products are covered under one or more of the following patent numbers:

U.S. Design Patents: 344,736; 400,542; 400,544; 402,998; 402,999; 403,332; 404,041; 404,042; 410,931; 413,127; 416,564; 465,897; 466,909; 474,203.

U.S. Utility Patents: 5,108,220; 5,238,323; 5,328,295; 5,352,063; 5,405,216; 5,476,342; 5,480,257; 5,480,258; 5,533,831; 5,562,361; 5,567,075; 5,613,801; 5,658,089; 5,685,667; 5,803,658; 5,816,739; 5,816,740; 5,890,833; 5,934,823; 5,967,696; 5,988,938; 5,988,939; 6,019,433; 6,019,545; 6,048,130; 6,053,660; 6,089,786; 6,106,193; 6,857,815; 5,288,166; 6,582,153 B1, 7,108,449; 7,114,876; 7,316,523; 7,690,864 B2

Canadian Patents: 2,039,893. With other Patents Pending.

Printed in U.S.A.

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Limited Warrenty

GENERAL INFORMATION

Allen Engineering Corporation ("Allen") warrants its products to be free of defects in material or workmanship for:

TWO YEARS FROM END USER'S DATE OF PURCHASE

Warranty period begins on the date of purchase by the End User of the product. All warranty is based on the following limited warranty terms and conditions, including the disclaimer of implied warranties and consequential damages.



- 1. Allen's obligation and liability under this warranty is limited to repairing or replacing parts if, after Allen's inspection, there is determined to be a defect in material or workmanship. Allen reserves the choice to repair or replace.
- 2. If Allen chooses to replace the part, it will be at no cost to the customer and will be made available to the Allen Distributor, Dealer, or Rental Center from whom the End User purchased the product.
- 3. Replacement or repair parts, installed in the product, are warranted only for the remainder of warranty period of the product as though they were the original parts.
- 4. Allen does not warranty engines or batteries. Engine warranty claims should be made directly to an authorized factory service center for the particular engine manufacturer. Batteries are not warranted due to unknown treatment during transport, etc, and any battery claims should be directed to the battery manufacturer.
- Allen's warranty does not cover the normal maintenance of products or its components (such as engine tuneups and oil & filter changes). The warranty also does not cover normal wear and tear items (such as belts and consumables).
- 6. Allen's warranty will be void if it is determined that the defect resulted from operator abuse, failure to perform normal maintenance on the product, modification to product, alterations or repairs made to the product without the written approval of Allen. Allen specifically excludes from warranty any damage to any trowels resulting from an impact to the rotors.
- Impact damage to gear boxes is not covered under the Allen warranty and is deemed customer abuse.
- 8. Allen will pay shop labor on warranty items at the Allen Shop Labor Rate in existence on the date of the warranty claim. An Allen labor chart will determine the time allowed to complete a repair and will govern the shop labor hours that will be allowed.
- 9. Allen will pay freight on warranty replacement parts at worldwide standard ground rates. No warranty replacement parts will be shipped air freight at the expense of Allen. Allen only pays outbound freight charges when sending warranty replacement parts to the customer via ground service. Allen does not pay any inbound freight. However, if Allen determines this to be a warranted item, only then will Allen reimburse the customer for inbound freight at standard ground rates.
- 10. ALLEN ENGINEERING CORPORATION'S WARRANTY POLICY WILL NOT COVER THE FOLLOWING: TAXES; SHOP SUPPLIES; EN-VIRONMENTAL SURCHARGES; AIR FREIGHT; TRAVEL TIME; LOSS OF TIME; INCONVENIENCE; LOSS OF RENTAL REVENUE; RENTAL COSTS OF EQUIPMENT USED TO REPLACE THE PRODUCT BEING REPAIRED; LOSS OF USE OF THE PRODUCT; COM-MERCIAL LOSS; OR ANY OTHER CHARGES WHATSOEVER OR ANY LIABILITIES FOR DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGE OR DELAY.
- 11. ALLEN ENGINEERING CORPORATION MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED. THIS LIMITED WARRANTY IS IN LIEU OF THE WARRANTY OF MERCHANTABILITY AND FITNESS. THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THIS DOCUMENT.
- 12. No Allen employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Allen Engineering Corporation.

GENERAL INFORMATION

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GENERAL INFORMATION

Information Contained In This Manual

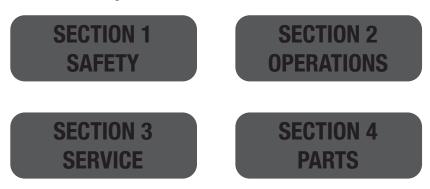


This manual provides information and procedures to safely operate and maintain the Allen Machine.

For your own safety and protection from personal injury, carefully read, understand, and observe the safety instructions described in this manual. Keep this manual or a copy of it with the machine at all times.

Always operate this machine in accordance with the instructions described in this manual. A well maintained piece of equipment will provide many years of trouble free operation.

This manual is divided into the following sections:



Complete any warranty requirements as specified by the engine manufacturer in their instructions found inside the manual box located on the back of the riding trowel operator's seat.

Your engine and clutch is not manufactured by Allen Engineering Corporation, Inc, and therefore is not covered under Allen Engineering Corporation, Inc warranty.

Your engine manufacturer should be contacted if you wish to purchase a parts manual or a repair manual for your engine.

Refer to enclosed owners engine manual for complete 0&M instructions. See your battery manufacturer for battery warranty.

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Dealer Information / Ordering Parts

GENERAL INFORMATION

Your Dealer has Allen Engineering Corporation trained mechanics and original Allen replacement parts. Always contact the Allen Dealer who sold you this machine for Allen Certified repairs and replacement parts.

Place Allen Dealer information below for future reference.

Dealer Name:		
Phone #: ()		
Address:		
City:		Zip:
Salesman:	Mobile Phone:	
Additional Comments:		



ALL INFORMATION, SPECIFICATIONS, AND ILLUSTRATIONS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE AND ARE BASED ON THE LATEST INFORMATION AT THE TIME OF PUBLICATION.

The "PARTS & DECALS MANUAL" contain illustrated parts lists for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to insure prompt and accurate delivery:

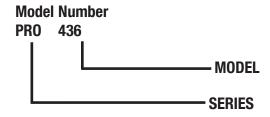
- 1. All orders for service parts include the serial number for the machine. Shipment will be delayed if this information is not available.
- 2. Include correct description and part number from the "PARTS & DECALS MANUAL"
- 3. Specify exact shipping instructions, including the preferred routing and complete destination address.
- 4. **DO NOT** return parts to AEC without receiving written authorization from AEC. All authorized returns must be shipped pre-paid.
- 5. When placing an order, please contact the AEC dealer nearest you.

GENERAL INFORMATION

Model Number - Serial Number Codes

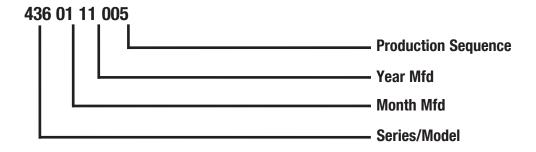
Manufacturer's Codes:

When ordering parts or requesting service information, you will always be asked to specify the model and serial numbers of the machine. The legends below specifically defines each significant character or group of characters of the Model Number and Serial Number codes.



Serial Number

The serial number found on the identification plate is a ten digit format. The model number identifies your machine and will ensure that you receive the correct replacement parts.



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Unit Identification

Unit Identification Plate Location:

An identification plate listing the model number and the serial number is attached to each unit and is located on the rear lower left side of mainframe. Refer to Figure 1 for serial number and model number location. This plate should not be removed at any time.

Please record the information found on this plate below so it will be available should the identification plate become lost or damaged. When ordering parts or requesting service information, you will always be asked to specify the model and serial numbers of the machine.

FILL IN FOR FUTURE REFERENCE

Model Number:	_
Serial Number:	
Date Purchased:	_
Purchased From:	
	//



Figure 1
Serial Number Location

GENERAL INFORMATION

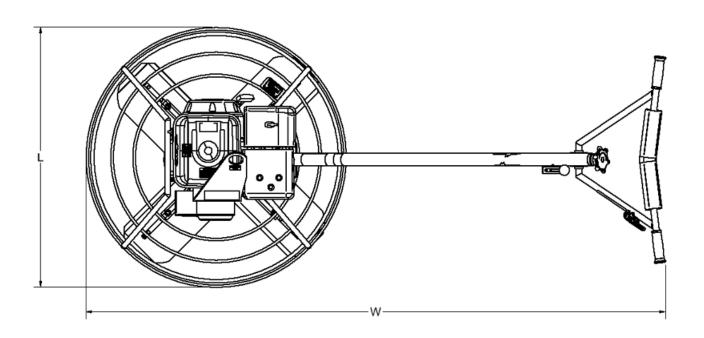
Technical Specifications

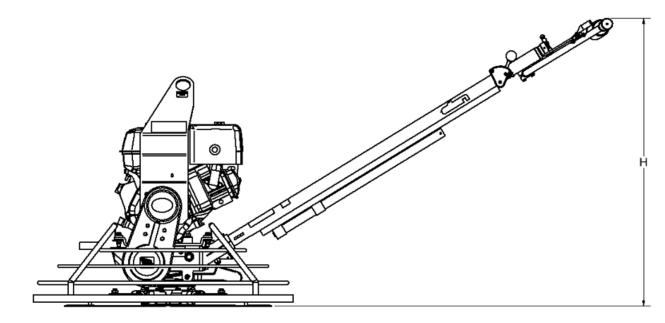
Measurements in this manual are in U.S. units and their customary metric units (i.e., metric units contained within brackets [8 mm]).

Machine Features:

•	Dimensions (L x W x H) inch [mm]	
	43672x38x36	54000 005 04 A
	44678x48x39	[1829x965x914]
		[1981x1219x990]
•	Rotor Speed (RPM)	110 - 135
•	Finish Blade	Standard
•	Gearbox	Standard Duty (STD)
•	Fixed Guard Rings	Standard
•	Fixed Seat Frame	Standard
•	Powered Retardant Spray System	Standard
•	Spray System Capacity gal [L]	6 [23]
•	Steering System	Dual Levers
•	Gearbox Rotation	Standard
•	Battery	12 Volt
•	Safety Shutdown Switch	Centrifugal / Dead Man
•	Fuel Capacity gal [L]	1.6 [6.05]
•	Run Time (Approximate) hr	2.5
•	Transmission Type	Clutch
•	Drive Belt Type	Kevlar Vee

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GENERAL INFORMATION

Engine Specifications, Honda

Honda GX160 Engine Information (5.5 HP)

 Bore x Stroke:
 .68 X 45 mm

 Displacement:
 .163 cm3

Compression Ratio:8.5:1Carburetor:Float TypeStarting System:Recoil

 Length (min):
 .12.0" (305mm)

 Width (min):
 .13.4" (341mm)

 Height (min):
 .12.5" (318mm)

Honda GX270 Engine Information (9 HP)

Engine Type Air-cooled 4-stroke OHV

 Net Power Output*
 8.5 HP (6.3 kW) @ 3,600 rpm

 Net Torque
 14.1 lb-ft (19.1 Nm) @ 2,500 rpm

 PTO Shaft Rotation
 Counterclockwise (from PTO shaft side)

Carburetor Butterfly Float Type

Starting System Recoil/electric
Governor System Centrifugal Mass Type
Air cleaner Dual element

Honda GX390 Engine Information (13 HP)

Engine Type Air-cooled 4-stroke OHV

Net Power Output*11.7 HP (8.7 kW) @ 3,600 rpmNet Torque19.5 lb-ft (26.4 Nm) @ 2,500 rpmPTO Shaft RotationCounterclockwise (from PTO shaft side)

Carburetor Butterfly Float Type

Air cleaner ... Dual element

Oil Capacity ... 1.16 US qt (1.1 L)

Fuel Tank Capacity ... 6.4 U.S. qts (6.1 liters)

Fuel ... Unleaded 86 octane or higher

an Woight CO III (21 E Ira)\

Engine Specifications, Kohler

GENERAL INFORMATION

Kohler CH395 Engine Information (9.5 HP)

Engine Type:	
Bore x Stroke:	
Displacement:	16.9 in 3 , 277 cm 3
Power Output:	
Gross Torque:	13.9 lb-ft (18.8 Nm)
Compression Ratio:	8.5:1
Oil Capacity:	1.4 Qts (1.3 L)
Starting System:	Recoil
Governor System:	Electronic
Fuel:	Unleaded 87 octane or higher
Dry Weight:	61.7 lb (27.8 kg)
Length (min):	15.9" (40.4 cm)
Width (min):	16.8" (42.7 cm)
Height (min):	

GENERAL INFORMATION

CE Sound and Vibration Data



Sound Pressure Level Information:

Sound pressure is "A" weighted . Measured at the operators ear position while the ride-on trowel is operating at full throttle on concrete in a manner most often experienced in "normal" circumstances. Sound pressure may vary depending upon the condition of the concrete. Hearing protection is always recommended.



Vibration Level Information:

The vibration level indicated is the maximum RMS (Root Mean Square) velocity value obtained at the handle grip while operating the ride-on trowel on curing concrete in a manner most often experienced in "normal" circumstances. Values were obtained from all three axes of motion. The values shown represent the maximum RMS value from these measurements.

	Summary Data Of Sound And Vibration Testing for CE Marking						
Test Machine	Engine Type	Distant Sound Press	Operator Ear SPL	Sound Power Level	Seat Vibration Overall	Foot Vibration Overall	Hand Vibration Maximum
436	Honda	dB (A) 60.4	dB (A) 90.5	dB (A) 88.9	m/sec² N/A	m/sec² N/A	m/sec² 2.34

This information was acquired from sound and vibration analysis tests conducted at Allen Engineering Corporation test facilities.

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CE Declaration of Conformity

GENERAL INFORMATION

We: Allen Engineering Corporation

819 South 5th St. Paragould, AR 72450

Tel: 800-643-0095 Fax: 800-643-0097



Declare under our sole responsibility that the product to which this declaration relates is in conformity with the following standard(s) or other normative documents.

98/37/EC Machinery Directive **2000/14/EC** Noise Directive

2001/95/EC General Product Safety Directive
2002/95/EC Reduction of Hazardous Waste Directive

The Technical Construction file is maintained at:

Allen Engineering Corporation

819 South 5th St. Paragould, AR 72450 Telephone: 800-643-0095 Facsimile: 800-643-0097

The authorized representative is:

ab lin-pro

Mr. Thomas Voeler Femvägsskälet 3 421 50 Västra Frölunda

Sweden

Tel: +4631694910 Mobile: +46 706694923 Fax: +4631298876 Email: tv@lin-pro.se

Scott Sugg

Signature of Authorized Person(s):

Typed name of Authorized Person(s):

Scott Sugg

Jay Allen

Title of Authorized Person(s):

Jay Allen - President Scott Sugg - VP of Operations

Date and place of issue:

4/21/2010 Paragould, AR

GENERAL INFORMATION

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SECTION 1 SAFETY

SECTION 1 SAFETY

State Regulations

A WARNING **A**

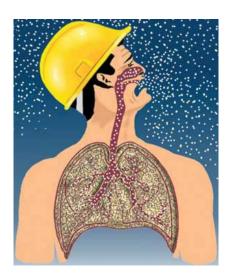
CALIFORNIA — Proposition 65 Warning

Engine exhaust and some of its constituents, and some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks.
- Cement and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: <u>ALWAYS</u> work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

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AWARNING

RESPIRATORY HAZARDS

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers or suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the materials being used.

AWARNING

SILICOSIS WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow the respiratory precautions mentioned above.

SECTION 1 SAFETY

General Safety Precautions

1.1 Safety-Alert Signs

This manual contains Safety-Alert Signs, as defined below, which must be followed to reduce the possibility of improper service damage to the equipment or personal injury. Read and follow all Safety-Alert Signs included in this manual.



NOTE defines an operating procedure, condition, etc. which is essential to highlight that contains useful or important information.

EMERGENCY

EMERGENCY is used for the identification of safety equipment, first aid, or emergency egress locations.

NOTICE

NOTICE used to convey safety information on labels and signs.



CAUTION is indicative of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



Potentially hazardous situations that could result in death or serious injury are indicated by the word WARNING.



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

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Spark Arrestor Notice

SECTION 1 SAFETY

1.2 Laws Pertaining to Spark Arrestors

Some states require that in certain locations arrestors be used on internal combustion engines. A spark arrester is a device designed to prevent the discharge of spark or flames from the engine exhaust. It is often required when operating equipment on forested land to prevent the risk of fires. Consult the engine distributor or local authorities and make sure that you comply with regulations regarding spark arrestors.



SECTION 1 SAFETY

General Safety

⚠ CAUTION

 NEVER operate this equipment without proper protective clothing, safety glasses, respiratory protection, hearing protection, steel-toed boots and other protective devices required by the job or city and state regulations.











- Avoid wearing jewelry or loose fitting clothes that may get caught on the controls or moving parts as this can cause serious injury.
- NEVER operate this equipment when not feeling well due to fatigue, illness or when under medication.



NEVER operate this equipment under the influence of drugs or alcohol.









- ALWAYS clear the work area of any debris, tools, etc. that would constitute a hazard while the equipment is
 in operation.
- No one other than the operator is to be in the working area when the equipment is in operation.
- **DO NOT** use the equipment for any purpose other than its intended purposes or applications.
- This equipment should only be operated by trained and qualified personnel 18 years of age and older.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.
- AEC does not assume responsibility for any accident due to equipment modifications. Unauthorized equipment modification will void all warranties.
- NEVER use accessories or attachments that are not recommended by AEC for this equipment. Damage to the
 equipment and/or injury to user may result.

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General Safety, continued

SECTION 1 SAFETY

ALWAYS know the location of the nearest fire extinguisher.



ALWAYS know the location of the nearest first aid kit.



ALWAYS know the location of the nearest phone or keep a phone on the job site. Also, know the phone numbers of
the nearest ambulance, doctor and fire department. This information will be invaluable in the case of an emergency.











- Engine fuel exhaust gases contain very poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled.
- The engine of this equipment requires an adequate free flow of cooling air. NEVER
 operate this equipment in any enclosed or narrow area where free flow of the air is
 restricted. If the air flow is restricted it will cause injury to people and property and
 serious damage to the equipment or engine.



 NEVER operate the equipment in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe bodily harm or even death.





ALWAYS keep clear of rotating or moving parts while operating the trowel.



 DO NOT start or operate the trowel if the drive train will not disengage. Centrifugal force between the trowel and surface when starting can cause uncontrolled handle movement that can cause serious injury. The handle must not move while pulling the engine recoil starter.

SECTION 1 SAFETY

General Safety, continued

NEVER disconnect any emergency or safety devices. These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death. Disconnection of any of these devices will void all warranties.

⚠ CAUTION

- NEVER stand on trowel during operation.
- **NEVER** lubricate components or attempt service on a running machine.
- **NEVER** place your feet or hands inside the guard rings while starting or operating this equipment.

NOTE

- **ALWAYS** keep the machine in proper running condition.
- Fix damage to machine and replace any broken parts immediately.
- **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 and unauthorized personnel.
- A safety manual for operating and maintenance personnel of concrete power trowels produced by the Association of Equipment Manufacturers (AEM) can be obtained for a fee by ordering through their website at www.aem.org.

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Engine Safety

SECTION 1 SAFETY

MARNING

- **DO NOT** place hands or fingers inside engine compartment when engine is running.
- **NEVER** operate the engine with heat shields or guards removed.



- Keep fingers, hands hair and clothing away from all moving parts to prevent injury.
- **DO NOT** remove the radiator cap while the engine is hot. High pressure boiling water will gush out of the radiator and severely scald any persons in the general area of the trowel.



• **DO NOT** remove the engine oil drain plug while the engine is hot. Hot oil will gush out of the oil tank and severely scald any persons in the general area of the trowel.

⚠ CAUTION

- NEVER touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing equipment.
- **NEVER** run engine without an air filter or with a dirty air filter. Severe engine damage may occur. Service air filter frequently to prevent engine malfunction.
- **NEVER** tamper with the factory settings of the engine or engine governor. Damage to the engine or equipment can result if operating in speed ranges above the maximum allowable.
- ALWAYS use extreme caution when working with flammable liquids.
- DO NOT start the engine near spilled fuel or combustible fluids. Fuel is extremely flammable and its
 vapors can cause an explosion if ignited.
- **ALWAYS** refuel in a well-ventilated area, away from sparks and open flames.
- **NEVER** use fuel as a cleaning agent.
- DO NOT smoke around or near the equipment. Fire or explosion could result from fuel vapors or if fuel is spilled on a hot engine.

SECTION 1 SAFETY

Transportation Safety

• **NEVER** allow any person or animal to stand underneath the equipment while lifting.



NOTICE

- Some walk-behind trowels can be lifted or moved by two people utilizing lifting tubes or other special attachments. Generally, however, they must be lifted using lifting bales and cranes, hoists, or forklifts.
- NEVER transport trowel with float pans attached unless safety catches are used and are specifically cleared for such transport by the manufacturer.
- Before lifting, make sure that the lifting bales are not damaged.
- NEVER hoist the trowel more than three feet off the ground with float pans attached.
- Always make sure crane or lifting device has been properly secured to the lifting bales of the equipment.
- DO NOT lift machine to unnecessary heights.
- ALWAYS shutdown engine before transporting.
- NEVER lift the equipment while the engine is running.
- Use adequate lifting cable (wire or rope) of sufficient strength.
- **ALWAYS** tie down equipment during transport by securing the equipment with rope.

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Safety and Operation Labels

SECTION 1 SAFETY

The safety and operation labels shown in this section are placed in important areas on the machine to draw attention to potential safety hazards and service information. Should any of these labels become unreadable or damaged, replacement labels can be ordered from your distributor.

CAUTION

This is a multi-purpose label that requires the operator to have maximum eye, hearing, hand, and feet protection. Also, it highly recommends that the operator reads the manual.



⚠ WARNING

This label identifies the lift locations on the machine. No other locations or features on the machine are to be used as lifting points. This will cause damage to the machine.



<u>A</u> CAUTION

For gasoline-fueled machines, this label identifies the tank used for **GASOLINE** fuel only in the machine. **NO OTHER** type of fuel is to be used in this tank.



NOTE

This label is a maintenance reminder to grease the thrust bearing daily. This will ensure that the life span of the bearings will be maintained at their optimal performance level.

GREASE THRUST BEARING DAILY

SECTION 1 SAFETY

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SECTION 2 OPERATIONS

SECTION 2 OPERATIONS



This machine is built with user safety in mind. However, it can present hazards if improperly operated and serviced. Follow operating instructions carefully.

If you have any questions about operating or servicing this equipment, please contact your Allen Engineering Dealer or AEC Customer Service at 800-643-0095 or 870-236-7751.



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2.1.1 Description

- The Walk-behind trowel is a modern high production machine. Finishing rates will vary depending on the operator's skill and job conditions. This trowel has four finishing blades. Walk-behind trowels are designed for the floating and finishing of concrete slabs.
- The standard duty gearbox is designed to provide exceptional performance with low maintenance and trouble-free use under some of the worst conditions. Power is transferred from the engine to the gearbox input shaft via a V-belt pulley drive system. The pulley engages using a clutch, see the Parts Section (Section 4) of this manual for a breakdown.
- All Allen Engineering Walk-behinds are equipped with a safety shutdown switch.
- Operating time between fuel refills is approximately 2-1/2 to 3 hours with a rotor speeds of 110 to 135 RPM.
- The walk-behinds are the most technically advanced riding trowels on the market today. With proper maintenance and use, your trowel will provide you with exceptional service and dependability.

SECTION 2 OPERATIONS

Pre-Start Procedures

2.2.1 Pre-Start Procedures

Gearbox Oil

- 1. Determine if the gearbox oil is low by removing the oil plug located on the side of the gearbox. The correct level of the lubrication oil should be to the bottom of the fill plug.
- 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.
- 3. If lubrication oil does not seep out as the drain plug is being removed, fill with type Allen Oil Kit P/N 048386 gearbox lubricant oil until the oil filler hole overflows.

V-Belt Check

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

Belt Guard Check

1. Check for damage, lose or missing hardware.

Blade Check

1. Check for worn or damaged blades. Check to see if a blade is worn out while the others look new. If this is the case there could be a blade pitch issue. Replace any worn blades.

Engine Oil Check

- 1. To check the engine oil level, place the trowel on secure level ground with the engine stopped.
- 2. Remove the filler dipstick from the engine oil filler hole and wipe clean.

Air Filter Check

- 1. Check and clean cooling areas, air intake areas and external surfaces of engine (particularly after storage)
- Check air cleaning components and all shrouds, equipment covers, and guards are in place and securly fastened.

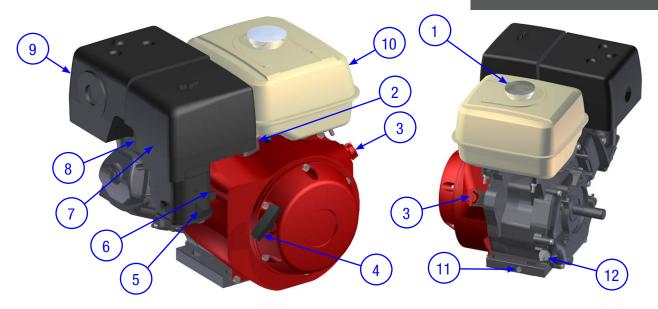
Verify Fuel Source

1. Verify "Fuel Selector Valve" is in the proper position (Horizontal) for the fuel source that is being used.

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Engine Controls

SECTION 2 OPERATIONS



- **1. Fuel Filler Cap** Remove this cap to add unleaded gasoline to the fuel tank. Make sure cap is tightened securely. DO NOT over fill.
- **2. Throttle Lever –** Used to adjust engine RPM speed (lever advanced forward SLOW, lever back toward operator FAST).
- **3. Engine ON/OFF Switch** ON position permits engine starting, OFF position stops engine operation.
- **4. Recoil Starter (pull rope)** Manual-starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly.
- **5. Fuel Valve Lever –** OPEN to let fuel flow, CLOSE to stop the flow of fuel.
- **6. Choke Lever –** Used in the starting of a cold engine, or in cold weather conditions. The choke enriches the fuel mixture.
- **7. Air Cleaner** Prevents dirt and other debris from entering the fuel system. Remove wing-nut on top of air filter cannister to gain access to filter element.
- **8. Spark Plug –** Provides spark to the ignition system. Set spark plug gap according to engine manufacturer's instructions. Clean spark plug once a week.
- **9. Muffler –** Used to reduce noise and emissions.
- **10. Fuel Tank –** Holds unleaded gasoline.
- **11. Oil Drain Plug –** Remove this plug to remove oil from the engine's crankcase.
- **12. Dipstick/Oil Filler Cap** Remove this cap to determine if the engine oil is low.

SECTION 2 OPERATIONS

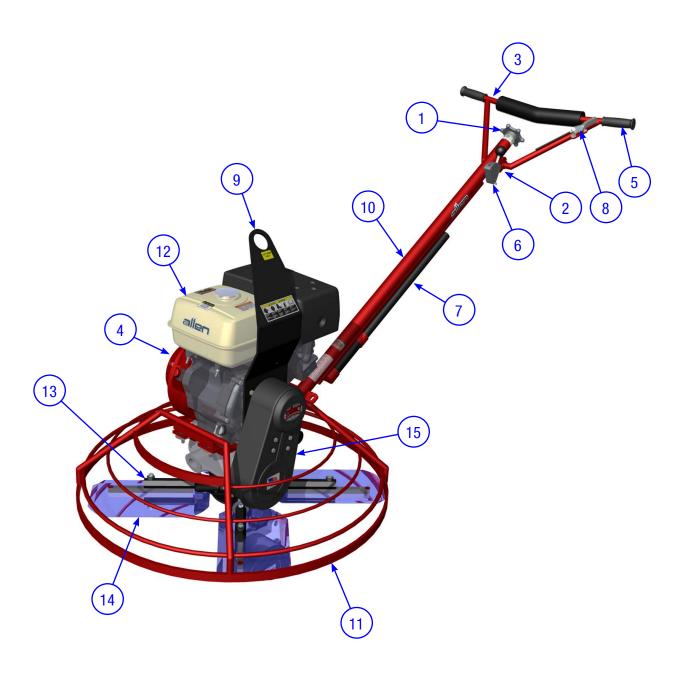
Trowel Controls

- Fine Pitch Control Handle To adjust the pitch of the blades, turn the handle either clockwise or counter-clockwise to achieve the desired blade pitch.
- **2. Handlebar Adjuster** Change the angle/height of the handle bars by loosening bolts, adjust handlebars to desired location, tighten bolts firmly to hold handlebars in that position.
- **3. Handle Bar** When operating the trowel, place both hands on each grip to maneuver the trowel.
- **4. Recoil Starter Housing** Automatically spools the recoil starter rope when using to start the engine.
- **5. Hand Grip** Replace hand grips when they become worn or damaged.
- **6. Centrifugal "Kill" Switch** In the event the operator loses control of the trowel, this switch will shut-down the engine.
- **7. Lifting Tube** Use this tube to lift the trowel onto a slab. Tube is to be inserted into socket located in front of the gearbox.
- **8. Throttle Lever** Controls engine speed. Returns engine to idle when released.
- **9. Trowel Lifting Point** The trowel is equipped with a lifting bail that can be used to safely lift and move the trowel.
- **10.Main Tube** When disassembling components inside the tube exercise caution.
- **11. Guard Ring** NEVER! put hands or feet inside guard ring while the machine is running.
- **12.Engine** This trowel uses a Honda engine.
- **13.Trowel Arm NEVER** operate the trowel with a bent, broken or out of adjustment trowel arm. If the blades show uneven wear patterns or some blades wear out faster than others, the trowel arm may need to be adjusted. Use the trowel arm alignment tool P/N 016863 to adjust the trowel arms.
- **14.Blades** This trowel is equipped with combination blades. These blades are versatile and should take care of most troweling needs. In addition, pans can be attached to the trowel arms that will allow the trowel to float on "wet" concrete.
- **15.Belt Cover** (NOTE SHOWN) Remove this cover to gain access to the drive belt. **NEVER** operate the trowel with this cover removed.

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Trowel Controls

SECTION 2 OPERATIONS



SECTION 2 OPERATIONS

Operating Instructions

2.6.1 Operating The Trowel

The following steps are intended as a basic guide to machine operation, and are not to be considered a complete guide to concrete finishing. We suggest that all operators (experienced and novice) read "Slabs on Grade" published by the American Concrete Institute, Detroit, Michigan. Read the "Training" section of this manual for more information.

- 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. 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 machine to the right, push down on the handle.
- 2. The best method for finishing concrete is to slowly walk backwards with the trowel, guiding the trowel from side to side. This will cover all footprints on wet concrete.
- 3. Remember that if you let go of the trowel, just step away and let the trowel come to a complete stop before trying to recover the trowel.

Stopping The Engine

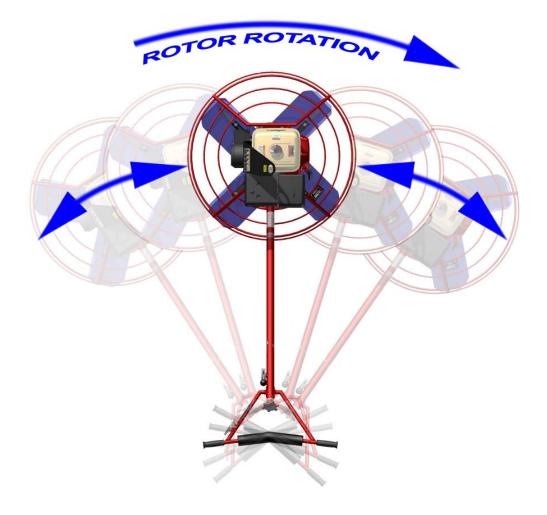
- 1. Move the throttle lever to the IDLE or SLOW position and run the engine for three minutes at low speed.
- 2. After the engine cools, turn the engine start/stop switch to the "OFF" position.

Working Conditions of Concrete	Suggested Working Pitch
Wet surface working stage	Flat (No Pitch)
Wet plastic working stage	Slight Pitch
Plastic working stage	Additional Pitch
Semi-hard working stage	Additional Pitch
Hard finishing stage (burnishing)	20° Maximum Pitch

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Operating Instructions, continued

SECTION 2 OPERATIONS



- Push down on the handle to move the rotor assembly to the right.
- Pull up on the handle assembly to move the rotor assembly to the left.

Pitch Adjustment

Different pitch angles are needed as you work the different stages of the concrete. When changing or setting pitch (angle of trowel blades), slow the machine down, set the desired degree of pitch on the left side of the machine and then adjust the right side to match.

To increase the pitch, turn the pitch control clockwise use the pitch indicator to adjust pitch equally on both right and left trowel blades.

SECTION 2 OPERATIONS

Notes

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SECTION 3 SERVICE

SECTION 3 SERVICE

Periodic Maintenance

3.1 Periodic Maintenance Schedule

The table below list basic trowel and engine maintenance. Refer to OEM engine manufacturer's Operation Manual for additional information on engine maintenance. A copy of the engine operator's manual was supplied with the machine when it was shipped.

TABLE 3.1.1 CHECK LIST							
ITEM	DAILY	EVERY 20 HRS	EVERY 50 HRS	EVERY 100 HRS	EVERY 300 HRS		
Grease towel arms	✓						
Check oil level in gearbox	✓						
Check engine oil level	✓						
Check & tighten external hardware	✓						
Check drive belt for wear		✓					
Check valve clearance					✓		
Change engine oil				✓			
Replace engine oil filter				✓			
Replace spark plug					✓		

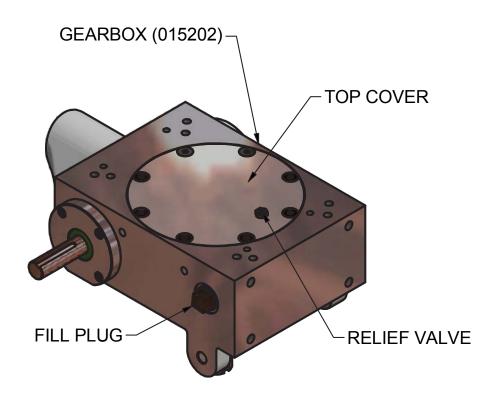
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3.2 Trowel Gearbox Maintenance

Check Oil levels in the gearbox daily (every 8 hours) Add oil if oil level is below the check sight glass.

1. To add oil, tilt gearbox to the side and remove the fill plug. Add oil through hole opening. Replace fill plug after proper level has been achieved. Fill so that there is oil 1/2 way in the sight glass. Use Kluber GH 6-460 synthetic oil.

FILL PLUG LOCATION



SECTION 3 SERVICE

Lift Lever Adjustment

3.3 Lift Lever Adjustment Procedure

Damage to and/or replacement of a trowel arm can change the adjustment of the lift lever. This can unbalance the trowel arms and cause the riding trowel to wobble during operation. To operate smoothly the lift lever on all trowel arms must be adjusted the same to ensure that the riding trowel is balanced correctly.

Adjusting the trowel arms is accomplished by using the optional trowel arm alignment jig (Part #: 016863). The service manual that is included with the alignment jig describes in detail the steps to preform this procedure and to check the flatness and straightness of the trowel arms.

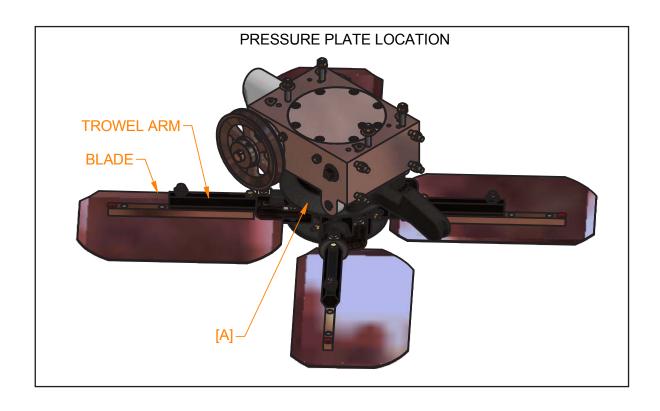
The steps below describe the general procedure to remove the trowel arms to be aligned.

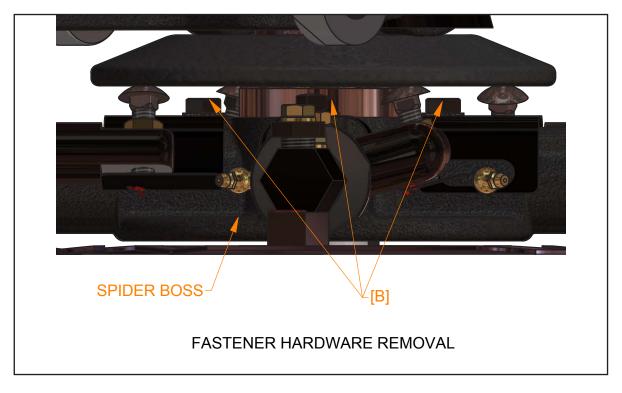
Make sure there is NO pitch in the blades before attempting to remove a trowel arm.

- 1. Block up pressure plate [A] using a wooden block.
- 2. Remove stabilizer ring from spider assembly (only on available models).
- Remove blades from trowel arms.
- 4. Loosen hex head cap screw [B] and remove it and the external star washer from the spider boss.
- 5. Remove trowel arms from spider boss with lift levers in place.
- 6. Clean flats on trowel arm before placing it in the trowel arm jig (Part #: 016863).
- 7. Preform the alignment procedures as outlined in the alignment jig service manual (Part #: 047427).
- Re-attach trowel arm to spider boss and blades to trowel arms.
- 9. Tighten down hex head cap screw to secure trowel arm in place.
- 10. Reattach stabilizer ring (only on available models).

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Lift Lever Adjustment, continued





SECTION 3 SERVICE

Trowel Transportation

3.4 Trowel Transportation Procedures

Extra care should be taken when lifting the trowel off the ground. Serious damage to the machine or personal injury could be caused by dropping a trowel.

⚠ CAUTION

The trowel is heavy and awkward to move around. Use proper heavy lifting procedures and **DO NOT** lift the trowel by the guard rings.

The lift bale(**A**) provides an optimal lift point for moving the trowel. A forklift can be used to lift a trowel up onto a building. 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, however. Serious damage to the machine or personal injury could be caused by dropping a trowel.

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

⚠ CAUTION

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



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Cleaning Procedure

Machine Cleaning Procedure

When cleaning the machine, please adhere to the following information to ensure proper cleaning and to keep the machine in the best condition possible.

Power Washing Procedure:

NOTICE

- Ensure that the water pressure is below 2000 PSI (14 MPa)
- Always keep the water temperature below 180°F (80°C)
- Use a spray nozzle with at minimum 40° wide spray angle
- Keep the nozzle at least 1 foot (300mm) away from the machine
- Avoid spraying water on the engine and electronic components. Examples include electronic displays, lights, switches, wiring, etc. The electronic components may be damaged if water is sprayed on them.
- Keep a perpendicular angle (90°) when cleaning over a decal.
 - Holding nozzle of a pressure washer at an angle different from 90° may lift the decal from the machine.
- Recommended using a safe cement dissolver, BACK-SET or similar, to remove hardened concrete.
- It is NOT recommended to use chemicals such as:
 - Muriatic Acid
 - Hydrochloric Acid
 - Hydrofluoric Acid
 - Sulfuric Acid
 - Phosphoric Acid
- To prevent build-up of concrete on the machine, use **BODY GUARD** or similar protection wax.

Filter Cleaning Procedure:

Remove air filters and blow out with compressed air, NOT to exceed 80 PSI.

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Factory Service Information

This section contains the illustrated drawings and parts list for help in identifying and/or ordering replacement parts for your machine. Follow the instructions in the front section of this manual "Ordering Parts" when ordering replacement parts to insure prompt and accurate delivery.



All set screws have blue (LOC-TITETM) applied at the factory. If set screw is removed or loosened for any reason re-apply blue (LOC-TITETM).



All grease fittings are capped with CAP PLUG GC-5 (AEC PN 015692) to protect the fitting. If cap becomes missing or damaged replace it as soon as possible.



Anti-Seize is applied at the factory to all drive line coupling, gear box main and counter shafts and pitch control threaded rod assemblies. If these parts are disassembled re-apply a light coat of a graphite based anti-seize.

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Replacement Part Procedures

SECTION 4 PARTS

We recommend AEC quality replacement parts, available from the AEC Customer Service Department or your nearest AEC Dealer.

Part numbers are subject to change without notice. Part numbers might be different outside of the United States of America. Use part numbers listed in the applicable parts list table when you place your order. If a part number changes, the AEC Customer Service Department or your nearest AEC dealer will have the latest part number for the replacement part.

Remember when you order replacement parts, you will need your model number and serial number. These are the numbers that you have recorded in the UNIT ID section of this manual. Please order replacement parts by the appropriate part number, not the key number.

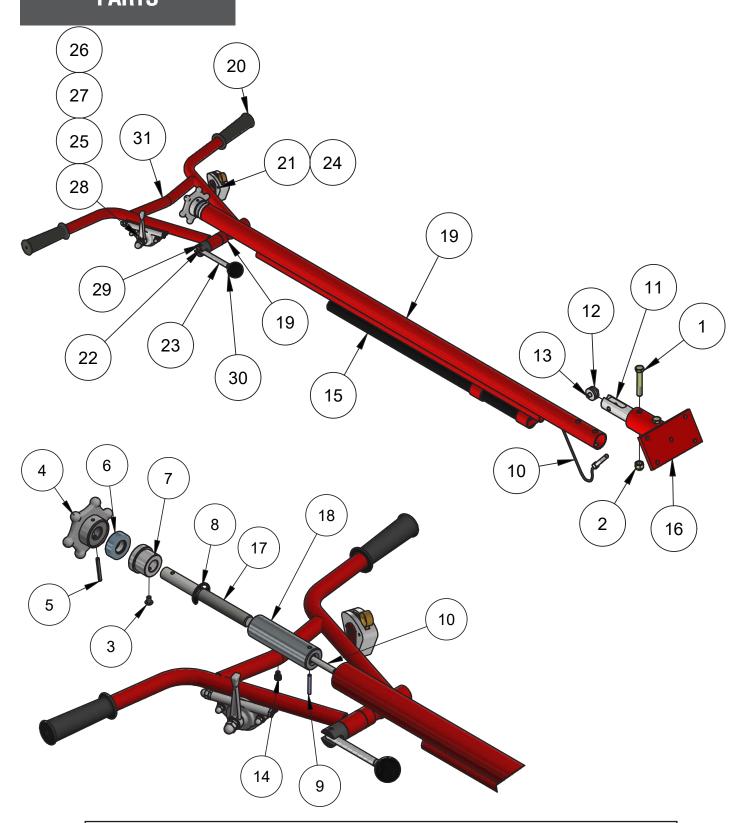
This manual contains an illustrated parts list for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to insure prompt and accurate delivery:

- 1. All orders for service parts include the serial number for the machine. Shipment will be delayed if this information is not available.
- 2. Include correct description and part number from the "PARTS" Section 4.
- 3. Specify exact shipping instructions, including the preferred routing and complete destination address.
- 4. **DO NOT** return parts to AEC without receiving written authorization from AEC. All authorized returns must be shipped pre-paid.
- 5. When placing an order, please contact the AEC Dealer nearest you.



All information, specifications, and illustrations in this manual are subject to change without notice and are based on the latest information at the time of publication.

Handle, Fine Pitch (2016) Illustration



Not all bubbled pieces may be available for sale. Drawing is for reference ONLY. Items on following page with associated part numbers may be available to be purchased from AEC.

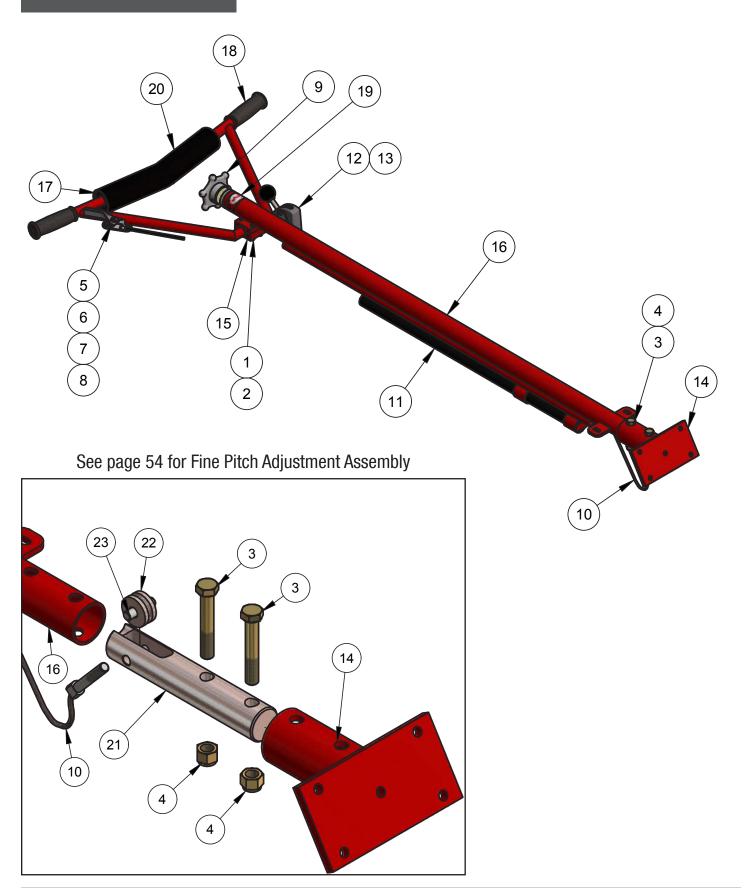
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Handle, Fine Pitch (2016) Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	063975	HANDLE, PRO WALK-BEHIND, FINE PITCH ASSEMBLY (2016)	1
-	070320	ASSEMBLY, MODIFIED FINE PITCH HANDLE W/ THROTTLE CABLE	1
1	010075	FASTENER, HHCS 1/2"-13 X 3"	2
2	011238	FASTENER, HEX NUT NYLOCK 12"-13	2
3	078505	FASTENER, SCREW HEX DRIVE 1/4"-20 X 3/8 W/ THREAD LOCKING (OLD PART 015410)	1
4	015739	KNOB FOR PITCH CONTROL	1
5	015740	FASTENER, PIN SPIRAL 3/16" X 1-3/4"	1
6	015742	THRUST BEARING	1
7	015743	BUSHING FOR PITCH CONTROL	1
8	015745	RETAINING RING	1
9	015747	PIN, SPIRAL 3/16" X 1-3/8"	1
10	015748	CABLE FOR PITCH CONTROL, LONG	1
-	059146	FASTENER, NUT M8 (NOT SHOWN)	2
11	015752	BLOCK, CABLE SUPPORT	1
12	015753	PULLEY FOR CABLE	1
13	015754	PIN, 3/8" X 1-3/8"	1
14	015768	FASTENER, SHCS 1/4"-20 X 1/4"	1
15	015769	CARRY BAR	1
16	034201	BRACKET, LONG HANDLE FOOT PAD MOUNT	1
17	061403	SCREW SHAFT FOR PITCH CONTROL	1
18	061404	SLIDE BUSHING	1
19	034285	WELDMENT, LONG HANDLE	1
20	048354	HANDLE BAR GRIP	2
21	065053	ASSEMBLY, SAFETY SWITCH	1
22	065054	BASE FOR HANDLE ADJUSTMENT	1
23	065055	STEM, HANDLE ADJUSTMENT	1
24	059168	SCREW M5 X 8MM	2
25	062705	FASTENER, BOLT M6x20 -8.8-DIN-2	2
26	062707	FASTENER, CAP NUT M6-DIN-2	2
27	065442	FASTENER, SPRING WASHER TANG ENDS	2
28	059105	ASSEMBLY, THROTTLE LEVER	1
-	070118	ASSEMBLY, THROTTLE CABLE (NOT SHOWN)	1
29	059172	PIN, SPRING	1
30	065056	BALL GRIP	1
31	066650	WELDMENT, HANDLE BAR	1

Handle, Fine Pitch, (Old Model) Illustration

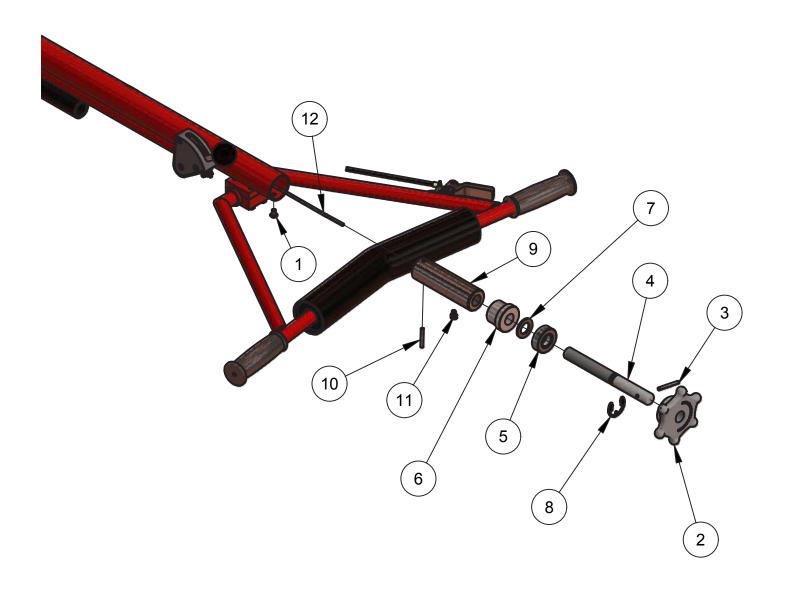


Handle, Fine Pitch, (Old Model) Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	034283	HANDLE, PRO WALK-BEHIND, FINE PITCH ASSEMBLY	1
1	010005	FASTENER, HHCS 1/4-20 X 1-1/2 GR 8	4
2	010089	FASTENER, LOCK WASHER, 1/4"	4
3	010075	FASTENER, HHCS 1/2-13 X 3 GR 8	2
4	011238	FASTENER, NUT HEX NYLOK 1/2-13	2
5	015735	THROTTLE AND CABLE ASSEMBLY FOR WALK-BEHIND	1
6	010568	FASTENER, RHMS, 10-32 X 1/2", GRADE 8	2
7	010570	FASTENER, HEX NUT, 10-32	2
8	032358	FASTENER, #10, EXTERNAL-TOOTH WASHER	2
9	015739	KNOB, ADJUSTABLE HANDLE	1
10	015748	CABLE, PITCH CONTROL LONG ASSEMBLY	1
11	015769	BAR, CARRY F/ WALK-BEHINDS	1
12	018409	ASSEMBLY, SWITCH SAFETY COMPLETE	1
13	013370	FASTENER, RHMS, 10-32 X 3/8"	2
14	034201	BRACKET, WALK-BEHIND LONG HANDLE FOOT PAD MTG	1
15	034279	BLOCK, CLAMP ADJ/HAND R/W 034277	1
16	034285	EXTENSION WELDMENT F/LNG HANDLE F/PT	1
17	034441	INSULATION, F/ HANDLEBAR	1
18	048308	GRIP, HANDLE (7/8"ID)	2
19	067306	DECAL, WALKER HANDLE, 4.25H X 1.22 H	1
20	049770	COVER, WALK-BEHIND HANDLE PAD (STRAIGHT)	1
21	015752	BLOCK, PITCH CONTROL CABLE SUPPORT	1
22	015753	PULLEY FOR PITCH CONTROL CABLE	1
23	015754	PIN, 3/8" X 1-3/8", FOR PITCH CONTROL CABLE PULLEY	1
24	010464	FASTENER, NUT, 3/8"-16, GRADE 8 - FOR SECURING POWER UNIT TO HANDLE (NOT SHOWN)	5

Fine Pitch Assembly, (Old Model) Illustration



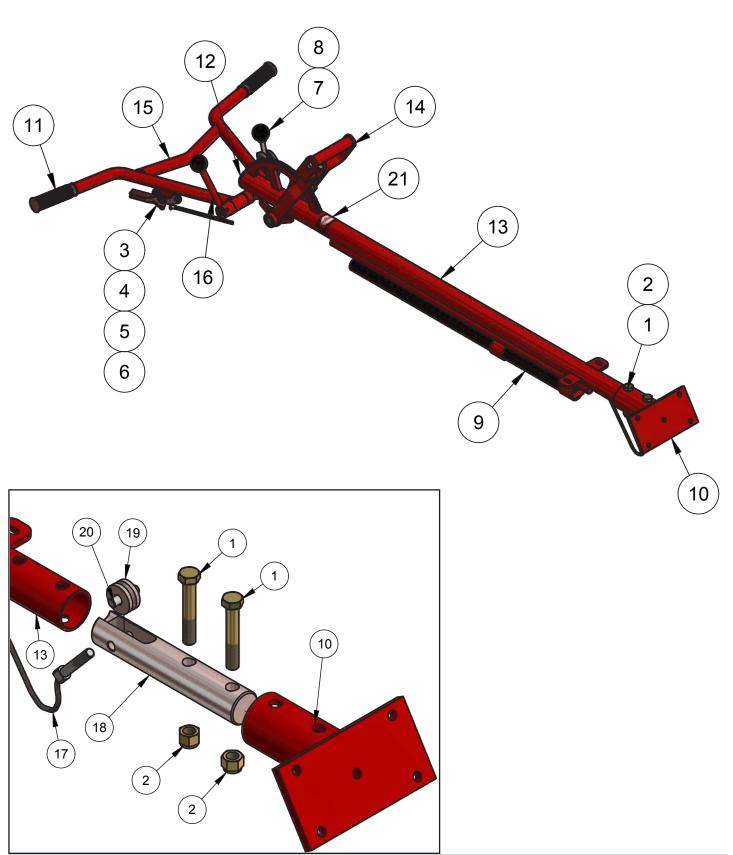
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Fine Pitch Assembly, (Old Model) Parts List

SECTION 4 PARTS

ITEM	PART #	DESCRIPTION	QTY
1	015410	FASTENER, RHMS 1/4-20 X 3/8	1
2	015739	KNOB, ADJUSTABLE HANDLE	1
3	015740	FASTENER, PIN SPIRAL 3/16 X 1-3/4	1
4	061403	SCREW SHAFT, PITCH CONTROL	1
5	015742	THRUST BEARING	1
6	015743	BUSHING, F/ PITCH CONTROL	1
7	015744	WASHER FINE PITCH CONTROL SPACER	1
8	015745	RING, RETAINING	1
9	061404	BUSHING, SLIDE	1
10	015747	PIN, ROLL 3/16" X 1-3/8" SPIROL	1
11	015768	FASTENER, SHCS 1/4-20 X 1/4 HOLO	1
12	015748	CABLE, FINE PITCH CONTROL	1

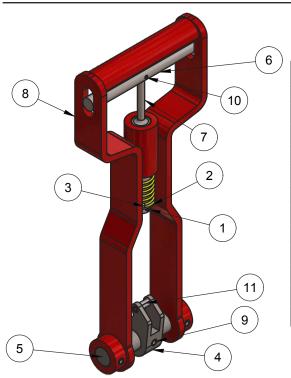
Rapid Pitch Assembly, Illustration



Rapid Pitch Assembly, Parts List

SECTION 4 PARTS

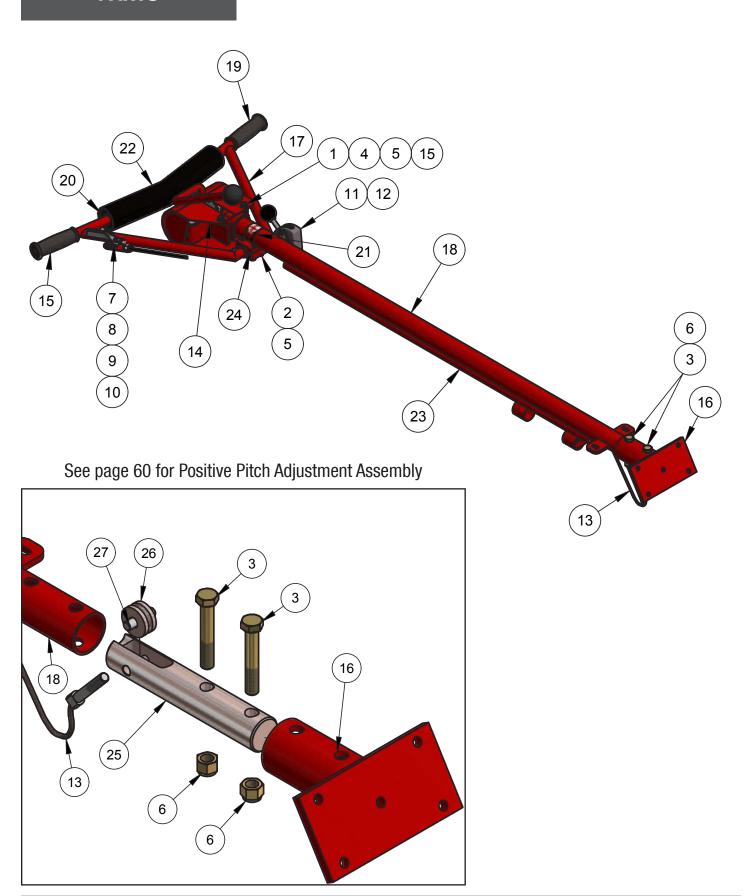
ITEM	PART NO.	DESCRIPTION	QTY
-	070300	ASSEMBLY, RAPID PITCH HANDLE	-
1	010075	FASTENER, HHCS 1/2-13 X 3 GR 8	2
2	011238	FASTENER, NUT HEX NYLOK 1/2-13	2
3	070118	THROTTLE AND CABLE ASSEMBLY	1
4	010568	FASTENER, RHMS 10-32 X 1/2", GRADE 8	2
5	010570	FASTENER, HEX NUT, 10-32	2
6	032358	FASTENER, NO. 10, EXTERNAL-TOOTH WASHER	4
7	065053	ASSEMBLY, SWITCH SAFETY COMPLETE	1
8	013370	FASTENER, RHMS, 10-32 X 3/8"	2
9	015769	BAR, CARRY F/ WALK-BEHINDS	1
10	034201	BRACKET, WB LONG HANDLE FOOT PAD MTG	1
11	048354	GRIP, HANDLE (7/8"ID)	2
12	061014	PLUG, FINISHING F/ 1-3/4 OD TUBING	1
13	066627	HANDLE WELDMENT	1
14	066639	PITCH ADJ. HANDLE	1
15	066650	HANDLE BAR WELDMENT	1
16	066655	ADJUSTING BOLT ASSEMBLY	1
17	065058	CABLE, PITCH CONTROL	1
18	015752	BLOCK, CABLE SUPPORT	1
19	015753	PULLEY, CABLE	1
20	015754	PIN, 3/8" X 1-3/8, CABLE PULLEY	1
21	067306	DECAL, ALLEN	1
22	059146	FASTENER, NUT, M8 (NOT SHOWN)	2



Item #14 Detail

ITEM	PART NO.	DESCRIPTION	QTY
-	066639	ASSEMBLY, PITCH HANDLE, RAPID PITCH	-
1	066628	ROLL PIN, 3/16" X 3/4"	1
2	066629	SHIM, ALUMINUM	1
3	066630	COMPRESSION SPRING	1
4	066635	LINKAGE F/ CABLE	1
5	066636	PIVOT PIN	1
6	066637	HANDLE, PLUNGER PULL	1
7	066638	GEAR STOP, PLUNGER	1
8	066643	HANDLE WELDMENT	1
9	066654	ROLL PIN, 1/4" X 1-1/4"	3
10	066660	ROLL PIN, 1/8" X 1/2"	1
11	069496	ROLL PIN, 1/4" X 3/4"	1

Handle, Positive Pitch, Illustration



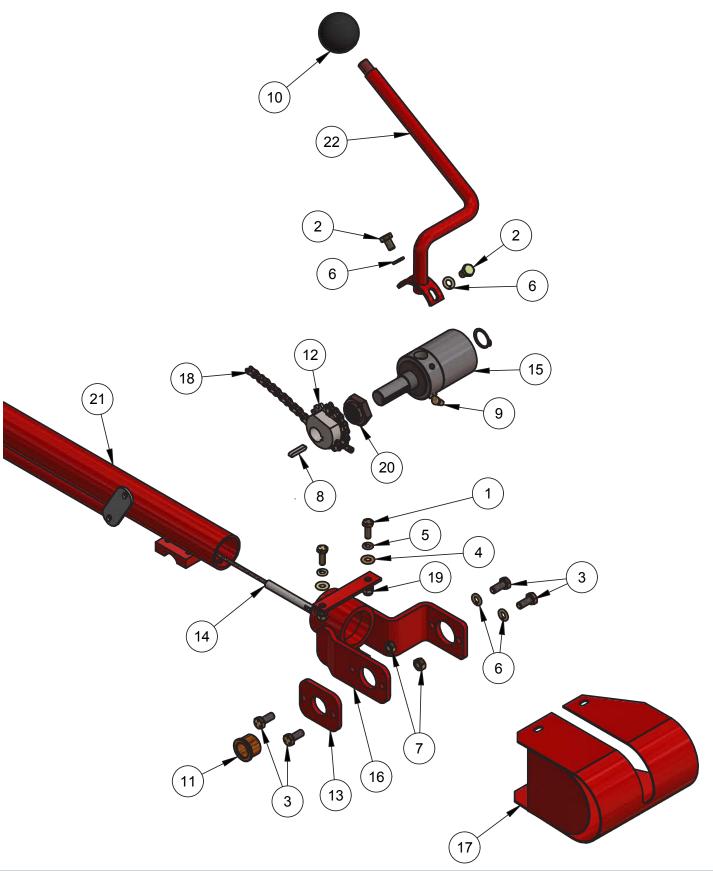
Handle, Positive Pitch, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	034451	HANDLE,PRO WALK-BEHIND, POSITIVE PITCH ASSEMBLY	1
1	010002	FASTENER, HHCS, 1/4"-20 X 3/4"	3
2	010005	FASTENER, HHCS, 1/4"-20 X 1-1/2" GRADE 8	4
3	010075	FASTENER, HHCS, 1/2"-13 X 3", GRADE 8	2
4	010081	FASTENER, FLAT WASHER, 1/4"	3
5	010089	FASTENER, LOCK WASHER ,1/4"	7
6	011238	FASTENER, NUT HEX NYLOK 1/2-13	2
7	015735	THROTTLE AND CABLE ASSEMBLY FOR WALK-BEHIND	1
8	010568	FASTENER, RHMS, 10-32 X 1/2", GRADE 8	2
9	010570	FASTENER, HEX NUT, 10-32	2
10	032358	FASTENER, #10, EXTERNAL-TOOTH WASHER	2
11	018409	ASSEMBLY, SWITCH SAFETY COMPLETE	1
12	013370	FASTENER, RHMS, 10-32 X 3/8"	2
13	027952	CABLE, PITCH CONTROL LONG ASSEMBLY	1
14	027963	POSITIVE PITCH CONTROL ASSEMBLY	1
15	029671	FASTENER, NUT HEX 1/4-20 NYLOC	3
16	034201	BRACKET, WALK-BEHIND, FOOT PAD MTG	1
17	034282	HANDLEBAR WELDMENT F/ADJ HANDLE - PT	1
18	034285	EXTENSION WELDMENT F/LNG HANDLE F/PT	1
19	048308	GRIP, HANDLE (7/8"ID)	2
20	034441	INSULATION, FOR HANDLEBAR	1
21	067306	DECAL, WALKER HANDLE, 4.25W X 1.22H	2
22	049770	COVER, WALK-BEHIND HANDLE PAD (STRAIGHT)	1
23	015729	TUBE, HANDLE STIFFENER	1
24	034279	HANDLE, ADJUSTMENT - CLAMP BLOCK	1
25	015752	BLOCK, CABLE SUPPORT	1
26	015753	PULLEY, FOR PITCH CONTROL CABLE	1
27	015754	PIN, 3/8" X 1-3/8", FOR PITCH CONTROL CABLE PULLEY	1
28	010464	FASTENER, NUT, 3/8"-16, GRADE 8 - FOR SECURING POWER UNIT TO HANDLE (NOT SHOWN)	5

NOTE: The Positive Pitch Handle is discontinued as of 1/27/2021.

Positive Pitch Assembly, Illustration



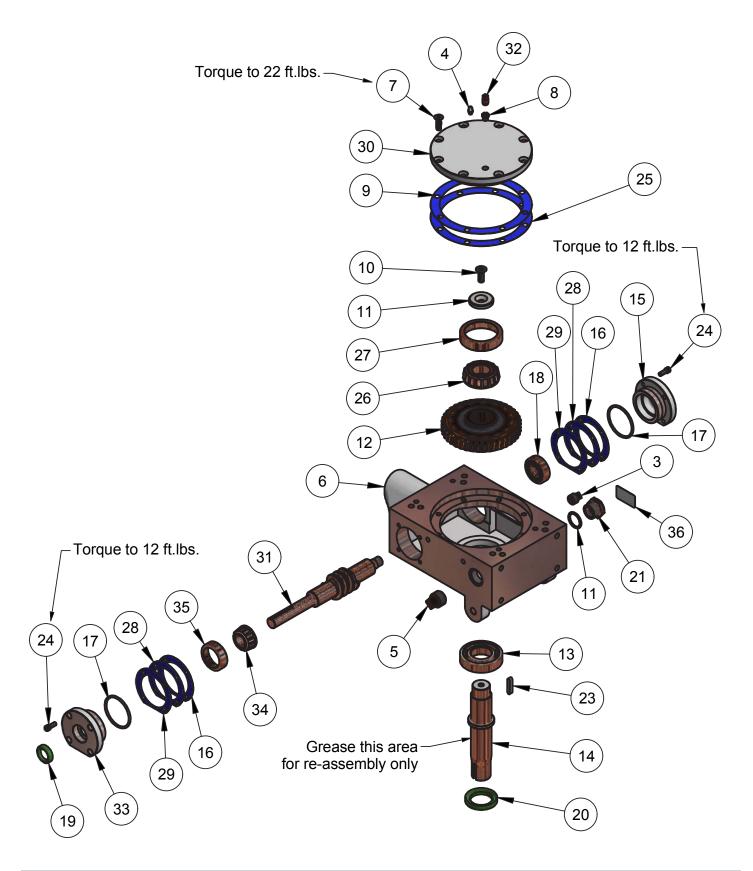
Positive Pitch Assembly, Parts List

SECTION 4 PARTS

ITEM	PART #	DESCRIPTION	QTY
1	010002	FASTENER, BOLT - HHCS 1/4-20 X 3/4	3
2	010018	FASTENER, BOLT - HHCS 5/16-18 X 1/2 GRADE 5	2
3	010002	FASTENER, BOLT - HHCS, 1/4"-20 X 3/4", GRADE 8	4
4	010081	FASTENER, FLAT WASHER -1/4	3
5	010089	FASTENER, LOCK WASHER - 1/4	3
6	010090	FASTENER, LOCK WASHER - 5/16	4
7	020542	FASTENER, NUT, STOVER LOCK, 1/4"-20	2
8	015813	KEY, 3/16" SQ X 1" LG	1
9	018510	FITTING,1/4-28 NPT 45° GREASE	1
10	019427	KNOB, BLACK, ROUND, PLASTIC, 1-7/8"	1
11	024630	BUSHING, 3/4x1x1/8 BRONZE	1
12	027946	SPROCKET, LEVER PITCH	1
13	027948	BUSHING, SUPPORT BRACKET	1
14	027952	CABLE, POSITIVE PITCH CONTROL	1
15	027958	CLUTCH, POSITIVE PITCH ASSEMBLY	1
16	027961	BRACKET, LEVER PITCH CLUTCH	1
17	027963	COVER, LEVER PITCH	1
18	028033	CHAIN, #35 R/V	13.25"
19	029671	FASTENER, NUT HEX 1/4-20 NYLOC	3
20	032346	FASTENER, NUT 7/8" FLEX LOC PLAIN	1
21	034285	SHAFT, EXTENSION FOR WALK-BEHIND HANDLE	1
22	036448	HANDLE, POSITIVE PITCH	1
23	028035	Link, Master, #35 S, For Chain	1

NOTE: The Positive Pitch Handle is discontinued as of 1/27/2021.

Gear Box Assembly, Illustration



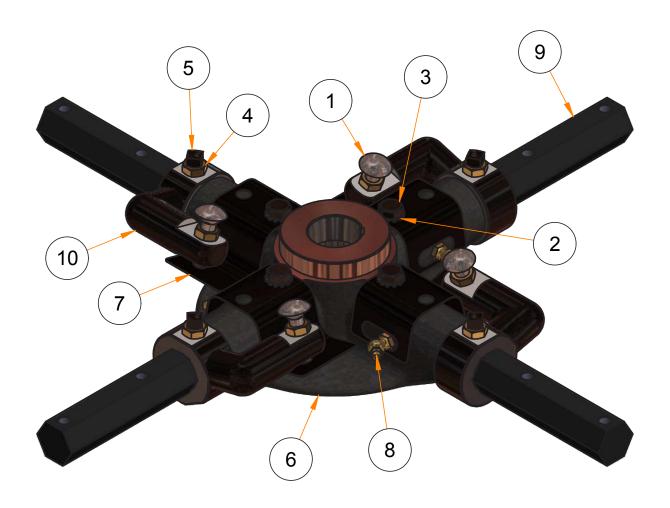
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Gear Box Assembly, Parts List

SECTION 4 PARTS

ITEM	PART #	DESCRIPTION	QTY
-	015202	ASSEMBLY, STANDARD GEARBOX	1
-	055647	(TEXAS WALKER) ASSEMBLY, GEARBOX	1
1	001003	GREASE, MOBILITH SCH220	.094
2	048299	OIL, ALLEN ENGINEERING GEARBOX	.757/LT
3	010498	PLUG, 3/8 NPT BI SQ HD PIPE	2
4	010513	FITTING, 1/4-28 NPT STR GREASE	1
5	012953	PLUG, 3/4 NPTF BI SQ HD PIPE	1
6	015204	GEAR BOX,MACHINE FINISHED	1
7	015205	FASTENER, SCREW FHSSS 5/16-18 X 1	8
8	015209	VALVE 1/8 NPT-27 RELIEF	1
9	015210	GASKET .005 THICK, TOP COVER	AS REQ.
10	015212	FASTENER, SCREW FHSS 3/8-16 X 1 LH	1
11	015213	WASHER PRESSURE	1
12	015216	GEAR,BRONZE RH	1
13	015217	BEARING, RADIAL BALL	1
14	015219	SHAFT, MAIN MACH FINISHED	1
15	015221	CAP, GEAR BOX END	1
16	015222	GASKET, END CAP & FLANGE .005	AS REQ.
17	015660	O-RING, GEAR BOX END CAPS	2
18	015663	BEARING ANGULAR CONTACT	1
19	015670	SEAL, OIL CR# 7455V	1
20	015671	SEAL, OIL CR# 13661	1
21	015672	GAUGE, 3/4-14 NPT PORTHOLE VIEW	1
22	015673	0-RING, 15/16x1-3/16x1/8 BUNA	1
23	015696	KEY, .25x1.25 LG HARD RAD	1
24	017314	FASTENER, SHCS 1/4-20 X 5/8	8
25	020018	GASKET .003 THICK, TOP COVER	AS REQ.
26	022073	BEARING TAPERED ROLLER	1
27	022074	BEARING RACE	1
28	022185	GASKET, END CAP & FLANGE .002	AS REQ.
29	022186	GASKET, END CAP & FLANGE .003	AS REQ.
30	015208	COVER-GEAR BOX MACH. FINISHED	1
21	026740	SHAFT, INPUT RH GEAR BOX	1
31	055646	(TEXAS WALKER) SHAFT, INPUT RH GEAR BOX	1
32	032745	PLUG, PLASTIC 1/8" P18-27 (TRANSPORT ONLY)	1
33	015223	FLANGE, GEAR BOX (4 HOLE)	1
34	015668	BEARING, TAPERED ROLLER	1
35	015669	BEARING RACE	1
36	067323	DECAL, GEARBOX OIL / SPIDER GREASE	1

Spider, 430, Edging, Illustration and Parts List

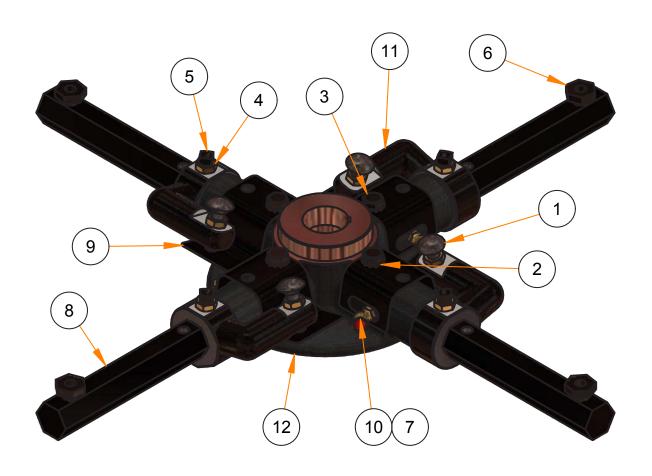


ITEM	PART #	DESCRIPTION	QTY
-	032235	ASSEMBLY, SPIDER, 430	-
1	012990	FASTENER, CABLT 3/8-16 X 1-1/4"	4
2	015682	External Tooth Lock Washer, Steel, 3/8 in	4
3	015683	BOLT, 3/8-16 X 7/8 DOG PT HEX HD CAP	4
4	015684	FASTENER, NUT HEX JAM 3/8-16	8
5	015686	FASTENER, SQHSS 3/8-16 X 1	4
6	015816	SPIDER, 4-BOSS MACH CW STD	1
7	016920	SPRING CLIP, UNIVERSAL SPIDERS	4
8	024755	FITTING, 1/8-27 NPT 45° GREASE	4
9	028751	TROWEL ARM, 750 STD SPIDER	4
10	033032	LIFT LEVER, STD UNIVERSAL	4

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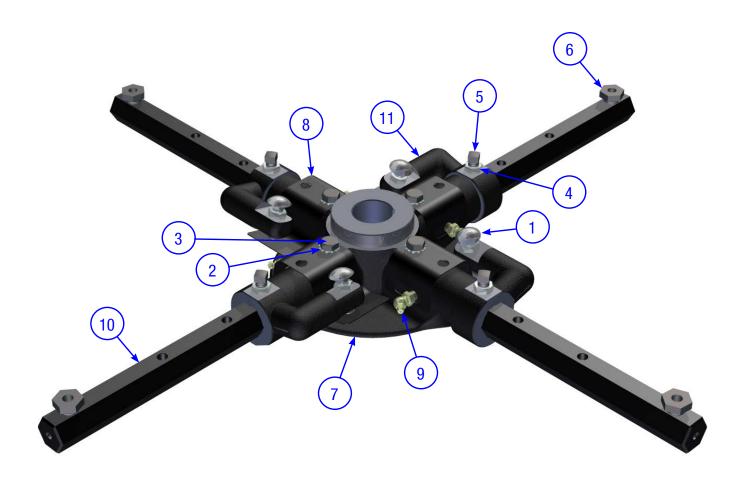
Spider, 436, Illustration and Parts List

SECTION 4 PARTS



ITEM	PART NO.	DESCRIPTION	QTY
-	015893	ASSEMBLY, SPIDER, 436	1
1	012990	FASTENER, CABLT 3/8-16 X 1-1/4"	4
2	015682	WASHER, 3/8 EXT TOOTH LOCK	4
3	015683	BOLT, 3/8-16 X 7/8 DOG PT HEX HD CAP	4
4	015684	FASTENER, NUT HEX JAM 3/8-16	8
5	015686	FASTENER, SQHSS 3/8-16 X 1	4
6	015688	FASTENER, 9/16-18 NF ADJ/MACH SCRW	4
7	015692	CAP, Ø1/4 RED GREASE	1
8	015818	TROWEL ARM, STD 36" SPIDER	4
9	016920	SPRING CLIP, UNIVERSAL SPIDERS	4
10	024755	FITTING, 1/8-27 NPT 45° GREASE	4
11	033032	LIFT LEVER, STD UNIVERSAL	4
12	064221	SPIDER, 4 BOSS UNIVERSAL	1

Spider, 446, Illustration and Parts List

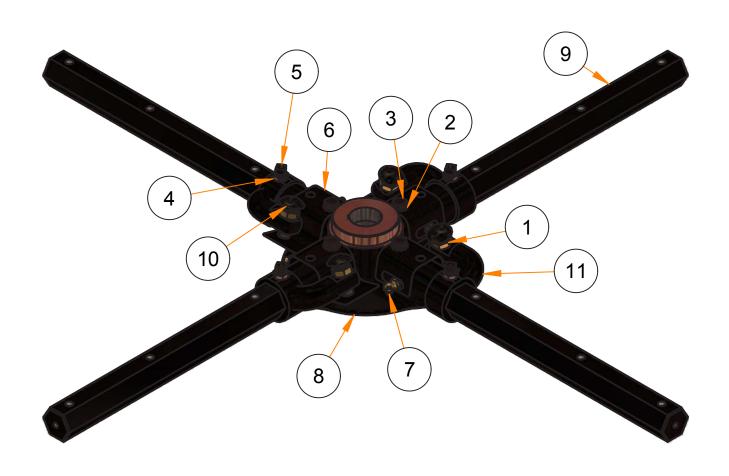


ITEM	PART #	DESCRIPTION	QTY
-	024812	ASSEMBLY, SPIDER, 446	-
1	012990	FASTENER, CABLT 3/8-16 X 1-1/4"	4
2	015682	WASHER, 3/8 EXT TOOTH LOCK	4
3	015683	BOLT, 3/8-16 X 7/8 DOG PT HEX HD CAP	4
4	015684	FASTENER, NUT HEX JAM 3/8-16	8
5	015686	FASTENER, SQHSS 3/8-16 X 1	4
6	015688	FASTENER, 9/16-18 NF ADJ/MACH SCRW	4
7	015816	SPIDER, 4-BOSS MACH CW STD	1
8	016920	SPRING CLIP, UNIVERSAL SPIDERS	4
9	024755	FITTING, 1/8-27 NPT 45° GREASE	4
10	024794	TROWEL ARM, STD 46" SPIDER	4
11	033032	LIFT LEVER, STD UNIVERSAL	4

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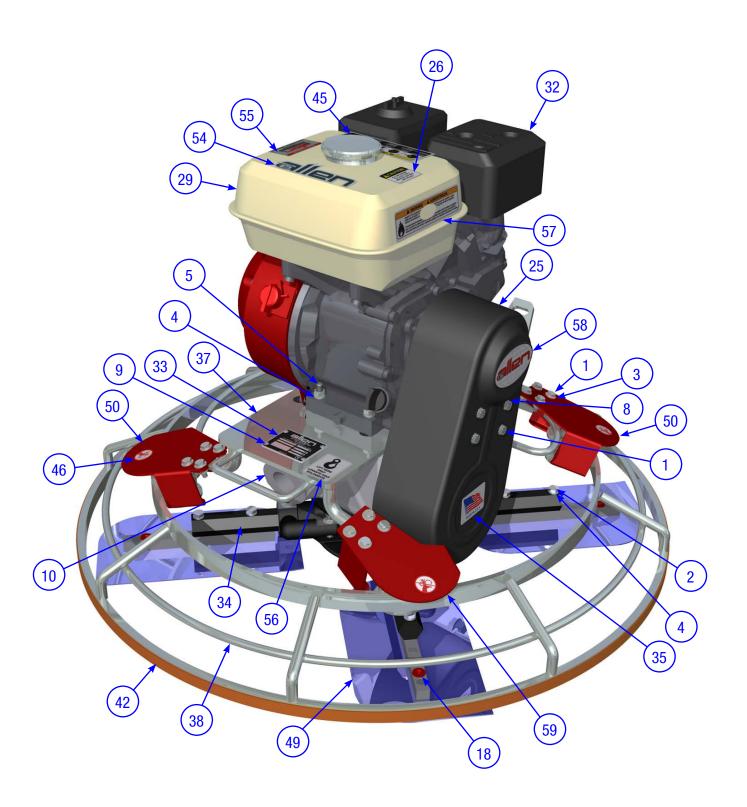
Spider, 446SD, Illustration and Parts List

SECTION 4 PARTS



ITEM	PART NO.	DESCRIPTION	QTY
-	026588	ASSEMBLY, SPIDER, 446SD	-
1	010050	FASTENER, NUT HEX JAM 1/2-13	4
2	015682	External Tooth Lock Washer, 410SS, 3/8 in	4
3	015683	BOLT, 3/8-16 X 7/8 DOG PT HEX HD CAP	4
4	015684	FASTENER, NUT HEX JAM 3/8-16	4
5	015686	FASTENER, SQHSS 3/8-16 X 1	4
6	016920	SPRING CLIP, UNIVERSAL SPIDERS	4
7	024755	FITTING, 1/8-27 NPT 45° GREASE	4
8	026942	SPIDER, 4-BOSS MACH CW SD	1
9	026944	TROWEL ARM, 1200 SD SPIDER	4
10	028216	FASTENER, CABLT 1/2-13 X 1-1/2 GR8	4
11	033034	LEVER, LIFT SD UNIVERSAL	4

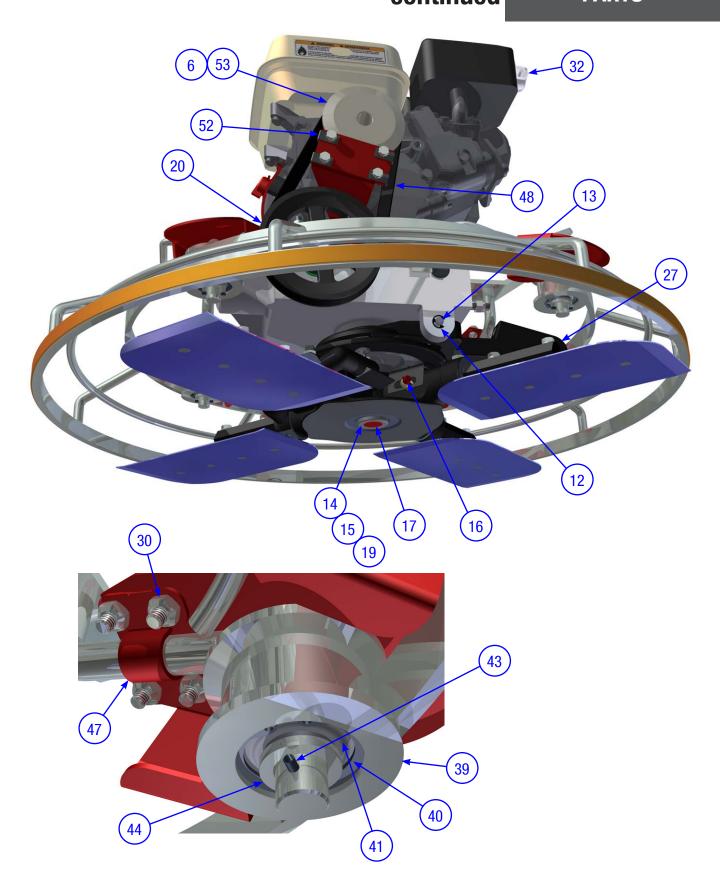
Power Unit, 430, Edging, Illustration



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Power Unit, 430, Edging, Illustration, continued

SECTION 4 PARTS



Power Unit, 430, Edging, Parts List

ITEM	PART NO.	DESCRIPTION	QTY
1	010002	FASTENER, HHCS 1/4-20 X 3/4	20
2	010022	FASTENER, HHCS 5/16-18 X 1 1/2" LONG	8
3	010081	FASTENER, FW 1/4	16
4	010090	FASTENER, LW 5/16	12
5	010100	FASTENER, NUT HEX 5/16-18	4
6	010273	KEY, 3/16 SQ X 2	1
7	010464	FASTENER, NUT NYLOK 3/8-16	4
8	012753	FASTENER, LW 1/4 INT/EXT	4
9	012994	RIVET, 1/8x3/8 ALUM DOME HD	4
10	015202	GEARBOX, STD WALK BEHIND	1
11	015674	FASTENER, STDBLT 3/8-16 X 1-3/4	4
12	015677	RING, Ø7/16 E-STYLE RETAINING	2
13	015678	PIN, YOKE ARM	1
14	015690	WASHER, RETAINING FOR TROWELS	1
15	015691	FASTENER, SHCS 1/2-13 X 1-1/2 RH	1
16	015692	CAP, Ø1/4 RED GREASE	4
17	015693	PLUG, PLASTIC CAP EC12	1
18	015694	PLUG W-1 RED PLASTIC TAPERD	4
19	015696	KEY, .25x1.25 LG HARD RAD	1
20	015707	PULLEY, 3/4 BOREx5.73 OD V-GRV	1
21	015711	FASTENER, FHSCS 3/8-16 x 3/4	4
22	015821	CAP, PRESSURE PLATE	1
23	015822	THRUST BEARING	1
24	015824	PLATE, PRO RIDER/WALKER PRESSURE	1
25	015987	GUARD BELT, SMALL PLASTIC	1
26	016191	DECAL, ALLOW ENG TO COOL	1
27	017264	YOKE, TROWEL	1
28	018012	FASTENER, STD BLT 5/16-18 X 1-3/4	4
29	018961	ENGINE, HONDA 5.5 HP	1
30	020542	FASTENER, NUT STOVER LOCK 1/4-20	16

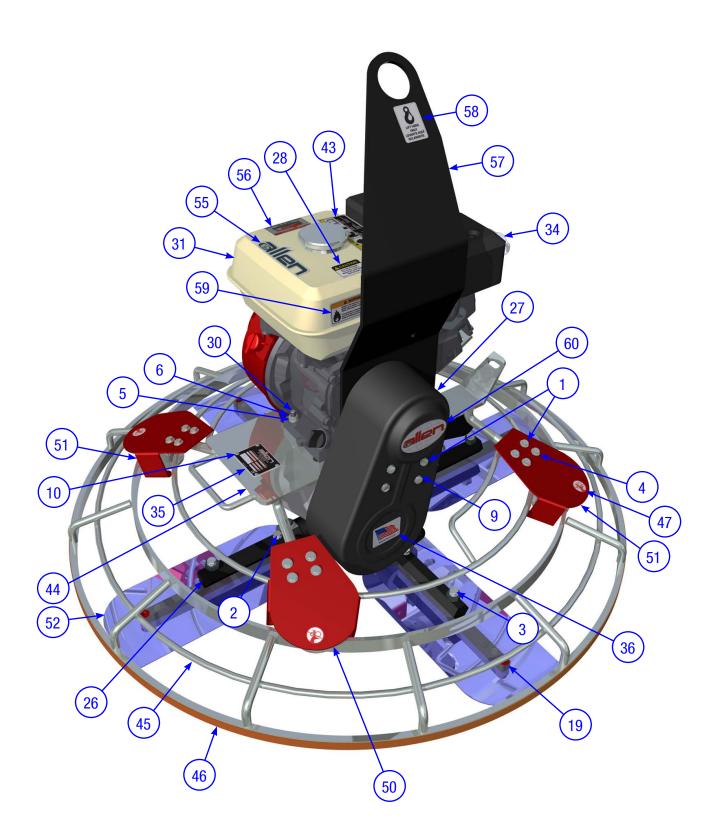
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Power Unit, 430, Edging, Parts List, continued

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
31	020977	BRACKET, BELT GUARD MTG TW	1
32	020983	MUFFLER, HONDA 5.5	1
33	032097	DECAL, SERIAL NUMBER PLATE	1
34	032235	SPIDER ASSY, STD 750 LH (SOM)	1
35	032896	DECAL, MADE IN USA-FLAG	1
36	036665	SPACER, WB .25 LG CLUTCH	1
37	037262	RING, UPPER PT 430 EDGER	1
38	037263	RING, LOWER PT 430 EDGER	1
39	037265	ROLLER HOUSING FOR EDGERS	4
40	037266	SNAP RING	8
41	037267	BEARING, FOR EDGER ROLLER	8
42	037268	BELT, URETHANE A/13x96"	1
43	037269	FASTENER, PIN SPRING 1/8" X 1"	4
44	037422	WASHER, ROLLER RETAINING	4
45	039048	DECAL, GEN PROTECTION WARNING	1
46	039251	DECAL, PINCH POINT SYM WARNING	4
47	040860	BRACKET, EDGER COVERS 430 & 436	4
48	041325	V-BELT	1
49	041696	TROWEL BLADE, 30" EDGER 6 X 10.5	4
50	042073L	GUARD, ROLLER LH 430 EDGER	2
51	042073R	GUARD, ROLLER RH 430 EDGER	1
52	047546	PAL NUT- 1/4-20	4
53	048239	CLUTCH, Ø3/4 ID BORE NR WE26	1
54	048379	DECAL, ALLEN 4 1/2 x 1 1/2	1
55	048937	DECAL, MFG. BY ALLEN ENG.	1
56	053448	DECAL, LIFT HERE ONLY (SP)	1
57	053453	DECAL, SPARK WARNING (SP)	1
58	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1
59	049771	PLATE, WALKBEHIND LIFTING (NOT SHOWN)	1

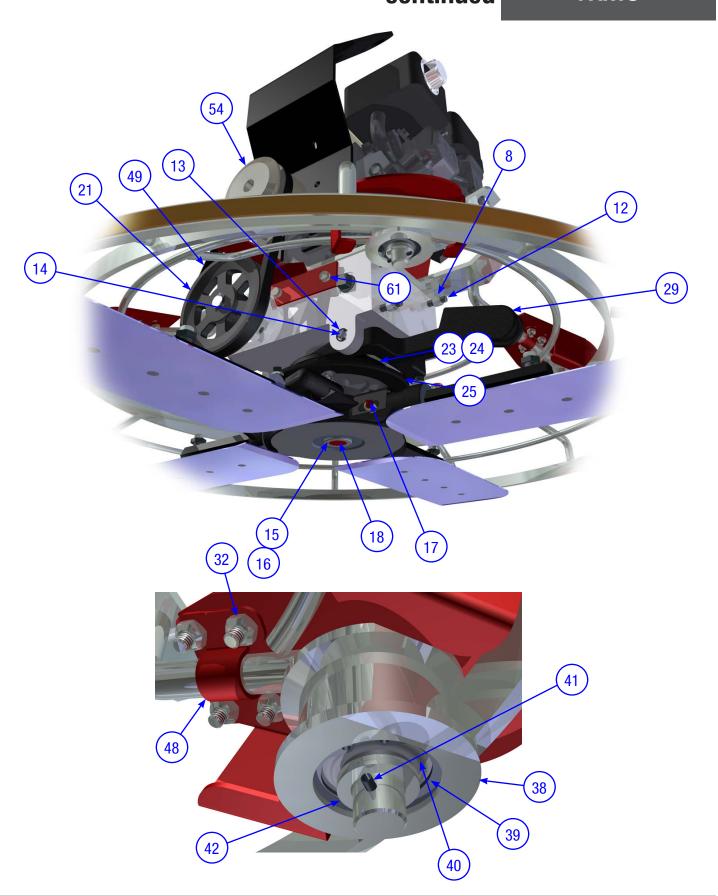
Power Unit, 436, Edging, Illustration



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Power Unit, 436, Edging, Illustration, continued

SECTION 4 PARTS



Power Unit, 436, Edging, Parts List

ITEM	PART NO.	DESCRIPTION	QTY
	043491	ASSEMBLY, 436 EDGING POWER UNIT, 5.5 HP MOTOR, COMBO BLADES	-
-	039212	ASSEMBLY, 436 EDGING POWER UNIT, 9 HP MOTOR, COMBO BLADES	-
1	010002	FASTENER, HHCS 1/4-20 X 3/4	20
2	010022	FASTENER, HHCS 5/16-18 X 1 1/2" LONG	4
3	010024	FASTENER, HHCS 5/16-18 X 2 GR 5	4
4	010081	FASTENER, FW 1/4	16
5	010090	FASTENER, LW 5/16	12
6	010100	FASTENER, NUT HEX 5/16-18	4
7	010273	KEY, 3/16 SQ X 2	1
8	010464	FASTENER, NUT NYLOK 3/8-16	4
9	012753	FASTENER, LW 1/4 INT/EXT	4
10	012994	RIVET, 1/8x3/8 ALUM DOME HD	4
11	015202	GEARBOX, STD WALK BEHIND	1
12	015674	FASTENER, STDBLT 3/8-16 X 1-3/4	4
13	015677	RING, Ø7/16 E-STYLE RETAINING	2
14	015678	PIN, YOKE ARM	1
15	015690	WASHER, RETAINING FOR TROWELS	1
16	015691	FASTENER, SHCS 1/2-13 X 1-1/2 RH	1
17	015692	CAP, Ø1/4 RED GREASE	4
18	015693	PLUG, PLASTIC CAP EC12	1
19	015694	PLUG W-1 RED PLASTIC TAPERD	4
20	015696	KEY, .25x1.25 LG HARD RAD	1
21	015707	PULLEY, 3/4 BOREx5.73 OD V-GRV	1
22	015711	FASTENER, FHSCS 3/8-16 x 3/4	4
23	015821	CAP, PRESSURE PLATE	1
24	015822	THRUST BEARING	1
25	015824	PLATE, PRO RIDER/WALKER PRESSURE	1
26	015893	SPIDER ASSY, 900-SFC LH-SOM	1
27	015987	GUARD BELT, SMALL PLASTIC (5.5 HP)	1
	015703	BELT GUARD, LARGE PLASTIC (9 HP)	1
28	016191	DECAL, ALLOW ENG TO COOL	1
29	017264	YOKE, TROWEL	1
30	018012	FASTENER, STD BLT 5/16-18 X 1-3/4	4
21	018961	ENGINE, HONDA 5.5 HP	1
31	042481	ENGINE, HONDA 9 HP	1

NOTE: The 5.5HP and the 9HP Edging Walk-behinds use different Clutch Guards, V-Belts, and Clutches.

- 5HP: Item 27 Guard (015987), Item 49 V-Belt (041325), Item 54 Clutch (048329 3/4"Bore)
- 9HP w/ Silver Clutch: Item 27 Guard (015703), Item 49 V-Belt (041324), Item 54 Clutch (047843 1"Bore)
- 9HP w/ Red Clutch: Item 27 Guard (015703), Item 49 V-Belt (078506), Item 54 Clutch (078507 1"Bore)

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Power Unit, 436, Edging, Parts List, continued

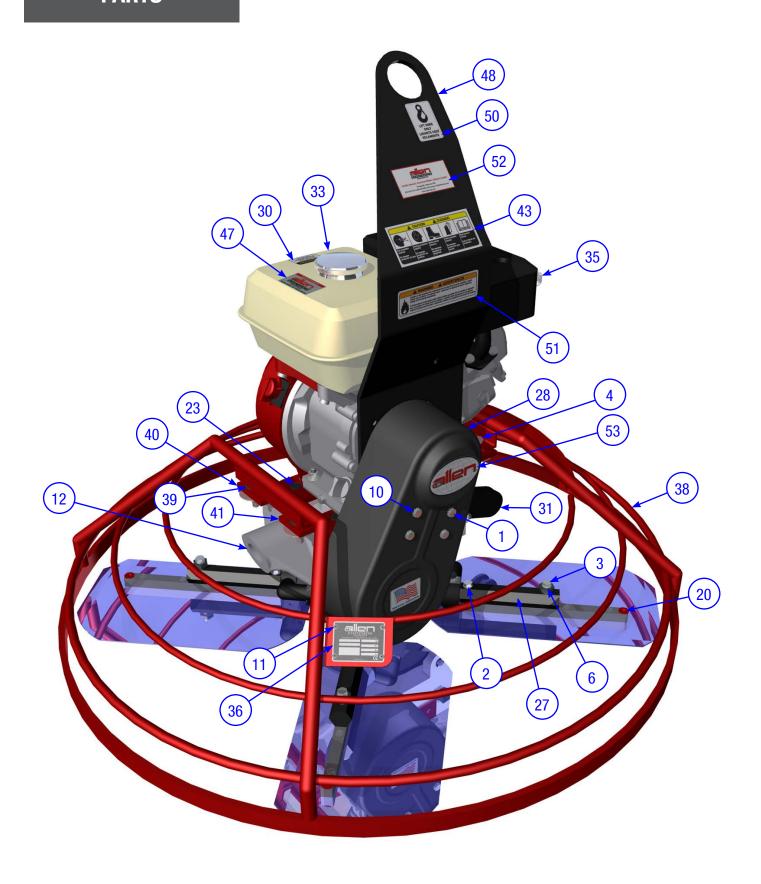
SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
32	020542	FASTENER, NUT STOVER LOCK 1/4-20	16
33	020977	BRACKET, BELT GUARD MTG TW	1
34	020983	MUFFLER, HONDA 5.5	1
35	032097	DECAL, SERIAL NUMBER PLATE	1
36	032896	DECAL, MADE IN USA-FLAG	1
37	036665	SPACER, WB .25 LG CLUTCH	1
38	037265	ROLLER HOUSING FOR EDGERS	4
39	037266	SNAP RING	8
40	037267	BEARING, FOR EDGER ROLLER	8
41	037269	FASTENER, PIN SPRING 1/8" X 1"	4
42	037422	WASHER, ROLLER RETAINING	4
43	039048	DECAL, GEN PROTECTION WARNING	1
44	039203	RING, UPPER PT 436 EDGER	1
45	039204	RING, LOWER PT 436 EDGER	1
46	039211	BELT, URETAHNE A/13x111"	1
47	039251	DECAL, PINCH POINT SYM WARNING	4
48	040860	BRACKET, EDGER COVERS 430 & 436	4
	041325	V-BELT, Gates #6929 (5.5 HP) w/ Silver Clutch	1
49	041324	V-BELT, Gates #6931 (9 HP) w/ Silver Clutch	1
	078506	V-BELT, Mitsuboshi B30 (9 HP) w/ Red Clutch	1
50	041681	ROLLER COVER LH SOM FRONT 900 EDGER	2
51	041683	ROLLER COVER RH SOM FRONT 900 EDGER	2
52	041695	TROWEL BLADE, 436/900 EDGER 6 X 14	4
53	047546	PAL NUT- 1/4-20	4
	048239	CLUTCH, Ø3/4 ID BORE NR WE26 (5HP)	1
54	047843	CLUTCH, 1" BORE NR WE25 (9HP)	1
	078507	CLUTCH, 1" BORE, Red (9 HP)	1
55	048379	DECAL, ALLEN 4 1/2 x 1 1/2	1
56	048937	DECAL, MFG. BY ALLEN ENG.	1
57	049771	PLATE, WALKBEHIND LIFTING	1
58	053448	DECAL, LIFT HERE ONLY (SP)	1
59	053453	DECAL, SPARK WARNING (SP)	1
60	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1
61	010019	FASTENER, HHCS 5/16-18 X 3/4 GR 5	2

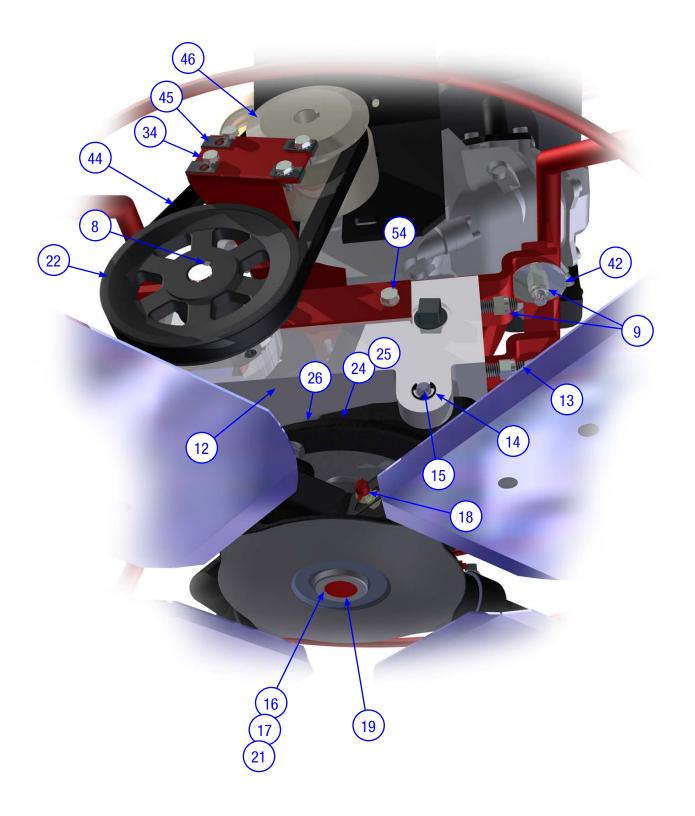
NOTE: The 5.5HP and the 9HP Edging Walk-behinds use different Clutch Guards, V-Belts, and Clutches.

- 5HP: Item 27 Guard (015987), Item 49 V-Belt (041325), Item 54 Clutch (048329 3/4"Bore)
- 9HP w/ Silver Clutch: Item 27 Guard (015703), Item 49 V-Belt (041324), Item 54 Clutch (047843 1"Bore)
- 9HP w/ Red Clutch: Item 27 Guard (015703), Item 49 V-Belt (078506), Item 54 Clutch (078507 1"Bore)

Power Unit, 436, Illustration



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Power Unit, 436, Parts List

ITEM	PART NO.	DESCRIPTION	QTY
	035724	ASSEMBLY, 436 BASIC POWER UNIT, 5.5 HP MOTOR, COMBO BLADES	-
-	035726	ASSEMBLY, 436 BASIC POWER UNIT, 9.0 HP MOTOR, COMBO BLADES	-
	035728	ASSEMBLY, 436 BASIC POWER UNIT, 9.0 HP MOTOR, LOW SPEED, COMBO BLADES	-
1	010002	FASTENER, HHCS 1/4-20 X 3/4	4
2	010022	FASTENER, HHCS 5/16-18 X 1 1/2" LONG	4
3	010024	FASTENER, HHCS 5/16-18 X 2 GR 5	4
4	010039	FASTENER, HHCS 3/8-16 X 1 3/4" LONG GR5	4
5	010082	FASTENER, FW 5/16	4
6	010090	FASTENER, LW 5/16	12
7	010100	FASTENER, NUT HEX 5/16-18	4
8	010273	KEY, 3/16 SQ X 2	1
9	010464	FASTENER, NUT NYLOK 3/8-16	8
10	012753	FASTENER, LW 1/4 INT/EXT	4
11	012994	RIVET, 1/8x3/8 ALUM DOME HD	4
12	015202	GEARBOX, STD WALK BEHIND	1
13	015674	FASTENER, STDBLT 3/8-16 X 1-3/4	4
14	015677	RING, Ø7/16 E-STYLE RETAINING	2
15	015678	PIN, YOKE ARM	1
16	015690	WASHER, RETAINING FOR TROWELS	1
17	015691	FASTENER, SHCS 1/2-13 X 1-1/2 RH	1
18	015692	CAP, Ø1/4 RED GREASE	4
19	015693	PLUG, PLASTIC CAP EC12	1
20	015694	PLUG W-1 RED PLASTIC TAPERD	4
21	015696	KEY, .25x1.25 LG HARD RAD	1
22	015707	PULLEY, 3/4 BOREx5.73 OD V-GRV	1
22	029102	PULLEY, BK90H (LOW SPEED)	1
23	015711	FASTENER, FHSCS 3/8-16 x 3/4	4
24	015821	CAP, PRESSURE PLATE	1
25	015822	THRUST BEARING	1
26	015824	PLATE, PRO RIDER/WALKER PRESSURE	1
27	015893	SPIDER ASSY, 900-SFC LH-SOM	1
	015987	GUARD BELT, SMALL PLASTIC (5.5HP)	1
28	015703	GUARD BELT, LARGE PLASTIC (9HP)	1
	027242	GUARD, BELT EPOXY (LOW SPEED, 9HP)	1

NOTE: The 5.5HP and the 9HP Walk-behinds use different Clutch Guards, V-Belts, and Clutches.

- 5HP: Item 28 Guard (015987), Item 44 V-Belt (041325), Item 46 Clutch (048329 3/4"Bore)
- 9HP w/ Silver Clutch: Item 28 Guard (015703), Item 44 V-Belt (041324), Item 46 Clutch (047843 1"Bore)
- 9HP w/ Silver Clutch: (Low Speed): Item 28 Guard (027242), Item 44 V-Belt (041353), Item 46 Clutch (047843 1"Bore), Item 22 Pulley (029102)
- 9HP w/ Red Clutch: Item 27 Guard (015703), Item 49 V-Belt (078506), Item 54 Clutch (078507 1"Bore)

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Power Unit, 436, Parts List, continued

SECTION 4 PARTS

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ITEM	PART NO.	DESCRIPTION	QTY
29	016095A	TROWEL BLADE, COMBO 8 X 14	4
30	016191	DECAL, ALLOW ENG TO COOL	1
31	017264	YOKE, TROWEL	1
32	018012	FASTENER, STD BLT 5/16-18 X 1-3/4	4
00	018961	ENGINE, HONDA 5.5 HP	1
33	042481	ENGINE, HONDA 9 HP	1
0.4	020977	BRACKET, BELT GUARD MTG TW	1
34	032693	BRACKET, GUARD EPOXY (LOW SPEED)	1
35	020983	MUFFLER, HONDA 5.5	1
36	032097	DECAL, SERIAL NUMBER PLATE	1
37	036665	SPACER, WB .25 LG CLUTCH	1
38	037619	RING WELDMENT, 36" WB	1
39	037648	BUSHING, NITRILE T-MOUNT 436 & 446	4
40	037656	PLATE, ADAPTER RH - 5HKR	1
40	037660	PLATE, ADAPTER - 8 HP HO	1
44	037659	PLATE, ADAPTOR LH - 5HKR	1
41	037661	PLATE, ADAPTER - 8 & 11 HP	1
42	037675	FASTENER, FENDER WASHER 3/8 X 1 1/4	4
43	039048	DECAL, GEN PROTECTION WARNING	1
	041325	V-BELT, Gates #6929 (5.5 HP) w/ Silver Clutch	1
,,	041324	V-BELT, Gates #6931 (9 HP) w/ Silver Clutch	1
44	041353	V-BELT, Gates #6937 LOW SPEED (9HP) w/ Silver Clutch	1
	078506	V-BELT, Mitsuboshi B30 (9 HP) w/ Red Clutch	1
45	047546	PAL NUT- 1/4-20	4
	048239	CLUTCH, Ø3/4 ID BORE NR WE26 (5HP)	1
46	047843	CLUTCH, 1" BORE NR WE25 (9HP)	1
	078507	CLUTCH, 1" BORE, Red (9 HP)	1
47	048937	DECAL, MFG. BY ALLEN ENG.	1
48	049771	PLATE, WALKBEHIND LIFTING	1
49	053446	DECAL, MADE IN USA (SP)	1
50	053448	DECAL, LIFT HERE ONLY (SP)	1
51	053453	DECAL, SPARK WARNING (SP)	1
52	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	1
53	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1
54	010019	FASTENER, HHCS 5/16-18 X 3/4 GR 5	2

NOTE: The 5.5HP and the 9HP Walk-behinds use different Clutch Guards, V-Belts, and Clutches.

- 5HP: Item 28 Guard (015987), Item 44 V-Belt (041325), Item 46 Clutch (048329 3/4"Bore)
- 9HP w/ Silver Clutch: Item 28 Guard (015703), Item 44 V-Belt (041324), Item 46 Clutch (047843 1"Bore)
- 9HP w/ Silver Clutch (Low Speed): Item 28 Guard (027242), Item 44 V-Belt (041353), Item 46 Clutch (047843 1"Bore), Item 22 Pulley (029102)
- 9HP w/ Red Clutch: Item 27 Guard (015703), Item 49 V-Belt (078506), Item 54 Clutch (078507 1"Bore)

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Kit, 436 With Kohler Engine

ITEM	PART NO.	DESCRIPTION	QTY
-	076131	KIT, 436 WITH 9.5HP KOHLER, FINE PITCH	-
1	071131	ASSEMBLY, PT, 436 WITH 9.5 KOHLER	1
2	070069	ENGINE, CH395 KOHLER	1
3	001005	OIL, ENGINE 10W30 (GAL)	0.32
4	064971	GEARBOX, PRO 436 & 446	1
5	064969	ASSEMBLY, SPIDER PRO 436	1
6	064972	ENGINE BASE AND CLUTCH	1
7	036757	BOX, TUBE	1
8	036756	BOX, TOP BOTTOM	2
9	036755	BOX, CORNER REINFORCEMENT PIECE	4
10	067316	KIT, DECAL PRO436	1
11	063975	ASSEMBLY, FINE PITCH HANDLE	1
12	070320	MODIFIED, FINE PITCH HANDLE, WITH THROTTLE CABLE	1
13	065732	BOX, 18" WIDE X 5.5" TALL X 61" LONG	1
14	073690	KIT, UNIVERSAL WALK BEHIND HARDWARE	1

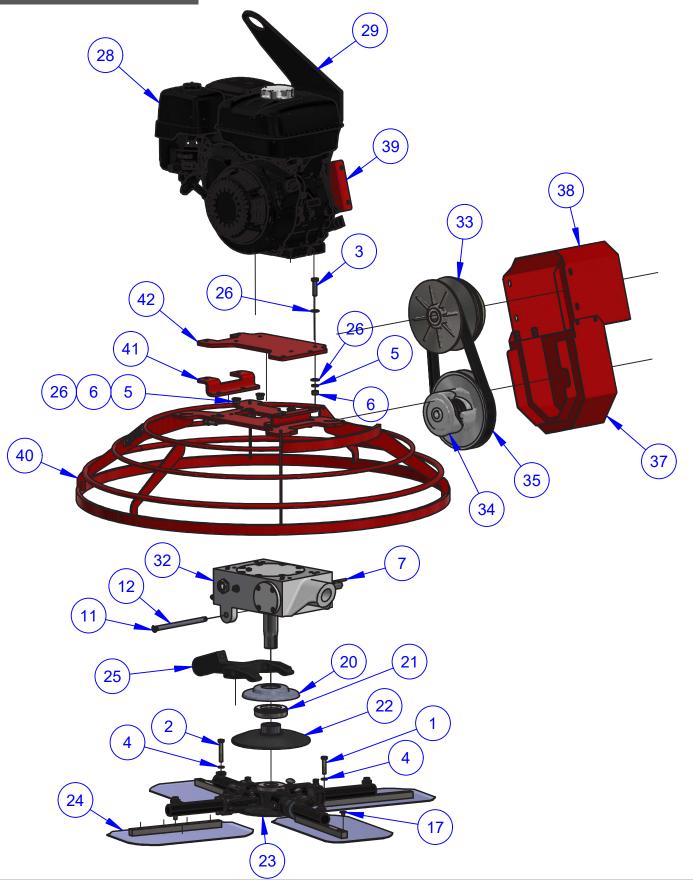
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Kit, 436 With Kohler Engine continued

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	076132	KIT, 436 WITH 9.5HP KOHLER, RAPID PITCH	-
1	071131	ASSEMBLY, PT, 436 WITH 9.5 KOHLER	1
2	070069	ENGINE, CH395 KOHLER	1
3	001005	OIL, ENGINE 10W30 (GAL)	0.32
4	064971	GEARBOX, PRO 436 & 446	1
5	064969	ASSEMBLY, SPIDER PRO 436	1
6	064972	ENGINE BASE AND CLUTCH	1
7	036757	BOX, TUBE	1
8	036756	BOX, TOP BOTTOM	2
9	036755	BOX, CORNER REINFORCEMENT PIECE	4
10	067316	KIT, DECAL PRO436	1
11	070300	ASSEMBLY, FINE RAPID HANDLE	1
12	036758	BOX, WALK BEHIND HANDLE	1
13	036759	BOX, WALK BEHIND SHAFT	1
14	070319	MODIFIED, FINE PITCH HANDLE, WITH THROTTLE CABLE	1
15	061014	PLUG, FINISHING FOR 1-3/4" OD TUBING	1
16	073690	KIT, UNIVERSAL WALK BEHIND HARDWARE	1

Power Unit, 436 TC, Illustration



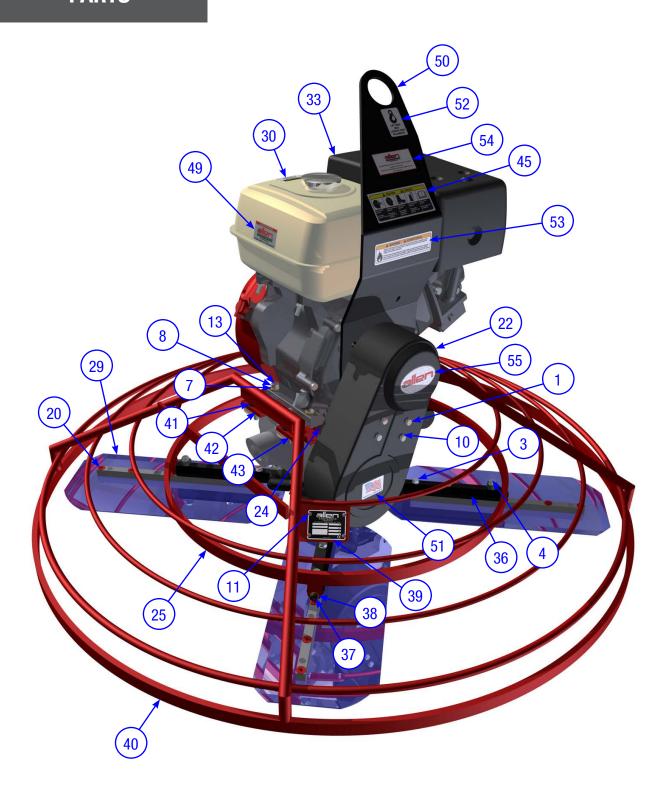
Power Unit, 436 TC, Parts List

SECTION 4 PARTS

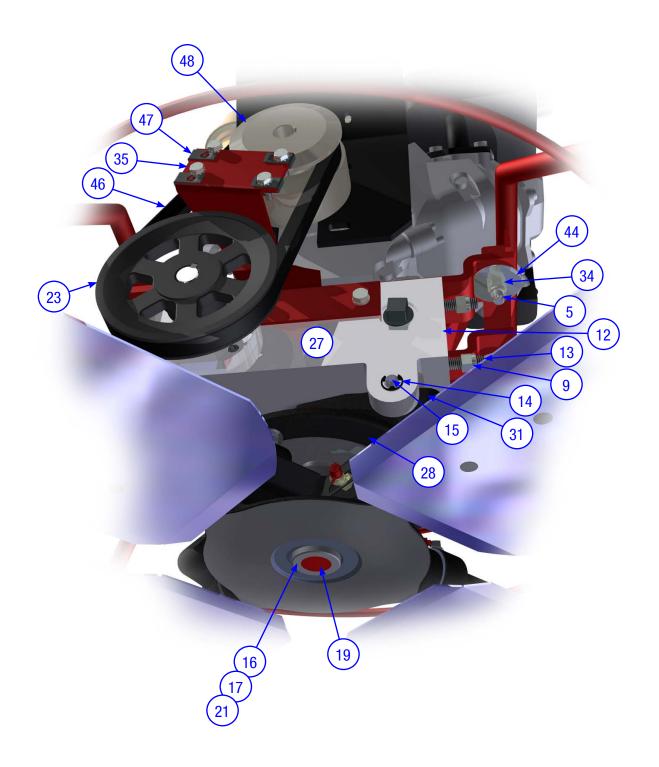
ITEM	PART NO.	DESCRIPTION	QTY
1	010022	FSTN, HHCS 5/16-18 X 1 1/2" LONG	4
2	010024	FSTN, HHCS 5/16-18 X 2 GR 5	4
3	010038	FSTN, HHCS 3/8-16 X 1-1/2 GR 5	1
4	010090	FSTN, LW 5/16	8
5	010091	FSTN, LW 3/8	4
6	010102	FSTN, NUT HEX 3/8-16	4
7	010273	KEY, 3/16" SQ X 2" LG	1
8	010464	FSTN, NUT NYLOK 3/8-16 GR 8	4
9	012994	RIVET, 1/8x3/8 ALUM DOME HD [closed]	4
10	015674	FSTN, STDBLT 3/8-16 X 1-3/4	4
11	015677	RING, Ø7/16 E-STYLE RETAINING	2
12	015678	PIN, YOKE ARM	1
13	015690	WASHER, RETAINING FOR TROWELS	1
14	015691	FSTN, SHCS 1/2-13 X 1-1/2 RH	1
15	015692	CAP, Ø1/4 RED GREASE	1
16	015693	PLUG, PLASTIC CAP EC12	1
17	015694	PLUG W-1 RED PLASTIC TAPERD	1
18	015696	KEY, .25x1.25 LG HARD RAD	1
19	015711	FSTN, FHSCS 3/8-16 x 3/4	4
20	015821	CAP, PRESSURE PLATE	1
21	015822	THRUST BEARING	1
22	015824	PLATE, PRO RIDER/WALKER PRESSURE	1
23	015893	SPIDER ASSY, 900-SFC LH-SOM	1
24	016095V	TROWEL BLADE COMBO 8X14 SILVER	4
25	017264	YOKE, TROWEL	1
26	017751	FSTN, FW HARD A325 3/8 (p)	5
27	032097	DECAL, SERIAL NUMBER PLATE	1
28	042481A	ENGINE, HONDA GX270	1
29	049771	PLATE, WALKBEHIND LIFTING	1
30	053274	SPACER PLATE F/ ENGINE	1
31	053446	DECAL, MADE IN USA (SP)	1
32	055647	GEARBOX W/ SPECIAL SHAFT	1
33	055900	CVT DRIVER FOR TEXAS WALKER	1
34	055901	DRIVEN PULLEY FOR TEXAS WALKER	1
35	055902	BELT, CVT F/ TEXAS WALKER	1
36	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1
37	056458	GUARD F/CVT TEXAS WALKER (BOTTOM)	1
38	058051	CLUTCH GUARD (TOP)	1
39	058052	CLUTCH GUARD MNTG BRKT	1
40	072852	RING, 436 WALK BEHIND WITH TORQUE CONVERTER	1
41	073328	RISER, REAR ENGINE PLATE F/ 436 TC	1
42	073329	MOTOR PLATE FOR 36" W/ 9 H.P. TC	1

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Power Unit, 446, Illustration



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Power Unit, 446, Parts List

ITEM	PART NO.	DESCRIPTION	QTY
	035735	ASSEMBLY, 446 BASIC POWER UNIT, 9.0 HP MOTOR, COMBO BLADES	-
-	035732	ASSEMBLY, 446 BASIC POWER UNIT, 11.0 HP MOTOR, COMBO BLADES	-
1	010002	FASTENER, HHCS 1/4-20 X 3/4	4
2	010019	FASTENER, HHCS 5/16-18 X 3/4 GR 5	2
3	010022	FASTENER, HHCS 5/16-18 X 1 1/2" LONG	8
4	010024	FASTENER, HHCS 5/16-18 X 2 GR 5	4
5	010039	FASTENER, HHCS 3/8-16 X 1 3/4" LONG GR5	4
6	010090	FASTENER, LW 5/16	14
7	010091	FASTENER, LW 3/8	4
8	010102	FASTENER, NUT HEX 3/8-16	4
9	010464	FASTENER, NUT NYLOK 3/8-16	4
10	012753	FASTENER, LOCK WASHER 1/4 INT/EXT	4
11	012994	RIVET, 1/8x3/8 ALUM DOME HD	4
12	015202	GEARBOX, STD WALK BEHIND	1
13	015674	FASTENER, STDBLT 3/8-16 X 1-3/4	8
14	015677	RING, Ø7/16 E-STYLE RETAINING	2
15	015678	PIN, YOKE ARM	1
16	015690	WASHER, RETAINING FOR TROWELS	1
17	015691	FASTENER, SHCS 1/2-13 X 1-1/2 RH	1
18	015692	CAP, Ø1/4 RED GREASE	4
19	015693	PLUG, PLASTIC CAP EC12	1
20	015694	PLUG W-1 RED PLASTIC TAPERD	12
21	015696	KEY, .25x1.25 LG HARD RAD	1
22	015703	BELT GUARD, LARGE PLASTIC	1
23	015707	PULLEY, 3/4 BOREx5.73 OD V-GRV	1
24	015711	FASTENER, FHSCS 3/8-16 x 3/4	4
25	015805	RING, 446 STD STABILIZER	1
26	015821	CAP, PRESSURE PLATE	1
27	015822	THRUST BEARING	1
28	015824	PLATE, PRO RIDER/WALKER PRESSURE	1

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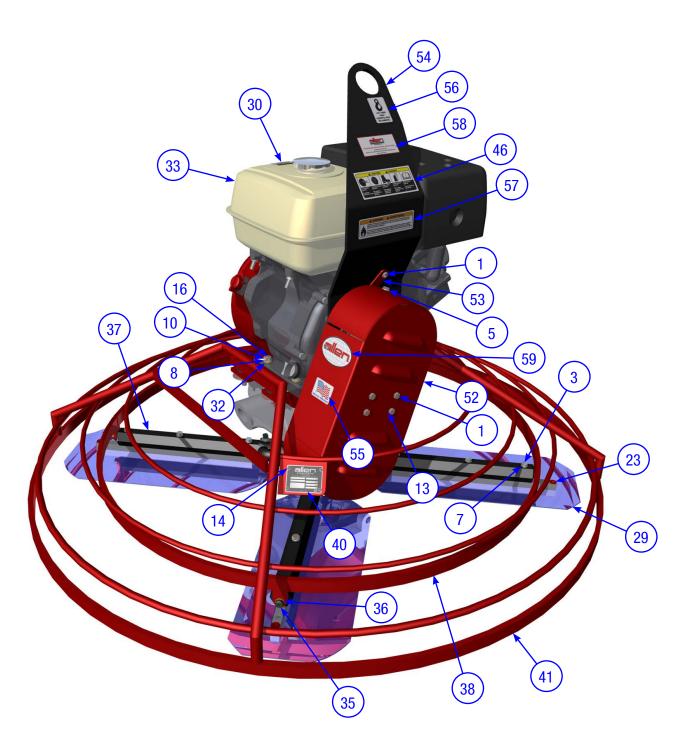
Power Unit, 446, Parts List, continued

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
29	016094A	TROWEL BLADE, COMBO 8 X 18 AEC BLUE	4
30	016191	DECAL, ALLOW ENG TO COOL	1
31	017264	YOKE, TROWEL	1
32	017751	FASTENER, FW HARD A325 3/8	4
00	018967	HONDA, 11 HP	1
33	042481	HONDA, 9 HP	1
34	020514	FASTENER, NUT STOVER LOCK 3/8-16	4
35	020977	BRACKET, BELT GUARD MTG TW	1
36	024812	SPIDER ASSY, 1200 SFC LH-SOM	1
37	025091	FASTENER, 5/16-18x1/2xØ3/8x3/8 SHLDR SCR	4
38	025092	BUSHING, 3/8x1/2x5/16 BRONZE	4
39	032097	DECAL, SERIAL NUMBER PLATE	1
40	037626	RING, W/B 446 SERIES 3	1
41	037648	BUSHING, NITRILE T MOUNT 436 & 446	4
40	037661	PLATE, ADAPTOR - 9 & 11 HP	1
42	037660	PLATE, ADAPTOR - 9 & 11 HP	1
43	037665	PLATE, ADAPTOR - 11 HP HO	1
44	037675	FASTENER, FENDER WASHER 3/8 X 1 1/4	4
45	039048	DECAL, GEN PROTECTION WARNING	1
46	041324	V-BELT, Gates #6931 (9 HP & 11 HP) w/ Silver Clutch	1
46	078506	V-BELT, Mitsuboshi B30 (9 HP) w/ Red Clutch	1
47	047546	PAL NUT- 1/4-20	4
40	047843	CLUTCH, Ø1 ID BORE NR WE25	1
48	078507	CLUTCH, 1" BORE, Red (9 HP)	1
49	048937	DECAL, MFG. BY ALLEN ENG.	1
50	049771	PLATE, WALKBEHIND LIFTING	1
51	053446	DECAL, MADE IN USA (SP)	1
52	053448	DECAL, LIFT HERE ONLY (SP)	1
53	053453	DECAL, SPARK WARNING (SP)	1
54	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	1
55	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1
56	068124	WELDMENT, GUARD RING PRO446	1

Power Unit, 446SD, Illustration

Note: The PRO446SD is discontinued as of 05/09/2023



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Power Unit, 446SD, Illustration, continued

SECTION 4 PARTS



Power Unit, 446SD, Parts List

ITEM	PART NO.	DESCRIPTION	QTY
-	042037	ASSEMBLY, 446SD BASIC POWER UNIT, 11.0 HP MOTOR, COMBO BLADES	-
1	010002	FASTENER, HHCS 1/4-20 X 3/4	6
2	010019	FASTENER, HHCS 5/16-18 X 3/4 GR 5	2
3	010024	FASTENER, HHCS 5/16-18 X 2 GR 5	12
4	010039	FASTENER, HHCS 3/8-16 X 1 3/4" LONG GR5	4
5	010081	FASTENER, FW 1/4	3
6	010089	FASTENER, LW 1/4	2
7	010090	FASTENER, LW 5/16	14
8	010091	FASTENER, LW 3/8	4
9	010098	FASTENER, NUT HEX 1/4-20	2
10	010102	FASTENER, NUT HEX 3/8-16	4
11	010464	FASTENER, NUT NYLOK 3/8-16	4
12	012387	BUSHING, H-3/4" BORE, BROWNING	1
13	012753	FASTENER, LW 1/4 INT/EXT	4
14	012994	RIVET, 1/8x3/8 ALUM DOME HD	4
15	015202	GEARBOX, STD WALK BEHIND	1
16	015674	FASTENER, STDBLT 3/8-16 X 1-3/4	8
17	015677	RING, Ø7/16 E-STYLE RETAINING	2
18	015678	PIN, YOKE ARM	1
19	015690	WASHER, RETAINING FOR TROWELS	1
20	015691	FASTENER, SHCS 1/2-13 X 1-1/2 RH	1
21	015692	CAP, Ø1/4 RED GREASE	4
22	015693	PLUG, PLASTIC CAP EC12	1
23	015694	PLUG W-1 RED PLASTIC TAPERD	4
24	015696	KEY, .25x1.25 LG HARD RAD	1
25	015711	FASTENER, FHSCS 3/8-16 x 3/4	4
26	015821	CAP, PRESSURE PLATE	1
27	015822	THRUST BEARING	1
28	015824	PLATE, PRO RIDER/WALKER PRESSURE	1
29	016094A	TROWEL BLADE, COMBO 8 X 18 AEC BLUE	4

Note: The PRO446SD is discontinued as of 05/09/2023

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Power Unit, 446SD, Parts List, continued

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
30	016191	DECAL, ALLOW ENG TO COOL	1
31	017264	YOKE, TROWEL	1
32	017751	FASTENER, FW HARD A325 3/8	4
33	018967	HONDA, 11 HP	1
34	020514	FASTENER, NUT STOVER LOCK 3/8-16	4
35	025091	FASTENER, 5/16-18x1/2xØ3/8x3/8 SHLDR SCR	4
36	025092	BUSHING, 3/8x1/2x5/16 BRONZE	4
37	026588	SPIDER ASSY, 1200SD LH-SOM	1
38	028003	RING, 446 SD 4 BL STAB	1
39	028899	PULLEY, 2BK60	1
40	032097	DECAL, SERIAL NUMBER PLATE	1
41	037626	RING, W/B 446 SERIES 3	1
42	037648	BUSHING, NITRILE T MOUNT 436 & 446	4
43	037661	PLATE, ADAPTER - 8 & 11 HP HK FORMED	1
44	037665	PLATE, ADAPTER - 8 HP HO & KA FORMED	1
45	037675	FASTENER, FENDER WASHER 3/8 X 1 1/4	4
46	039048	DECAL, GEN PROTECTION WARNING	1
47	042057	CLUTCH, WALK BEHIND 2 GROOVE	1
48	042058	SPACER, 446SD 11/13Hp W/B 2GR ENGINE	1
49	042060	SHIM, 446SD 11/13Hp W/B 2GR ENGINE	1
50	042065	BRKT, 446SD 11HO 2GR BELT GUARD MTG	1
51	042070	V-BELT, B-30	2
52	048437	GUARD, 446SD 2GROOVE CLUTCH BELT	1
53	048438	TAB, 446SD 2GR BELT GUARD	1
54	049771	PLATE, WALK-BEHIND LIFTING	1
55	053446	DECAL, MADE IN USA (SP)	1
56	053448	DECAL, LIFT HERE ONLY (SP)	1
57	053453	DECAL, SPARK WARNING (SP)	1
58	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	1
59	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1
60	068124	WELDMENT, GUARD RING, PRO446	1

Note: The PRO446SD is discontinued as of 05/09/2023

Kit, 446 With Kohler Engine

ITEM	PART NO.	DESCRIPTION	QTY
-	076133	KIT, 446 WITH 9.5HP KOHLER, FINE PITCH	-
1	071132	ASSEMBLY, PT, 446 WITH 9.5 KOHLER	1
2	070069	ENGINE, CH395 KOHLER	1
3	001005	OIL, ENGINE 10W30 (GAL)	0.32
4	064971	GEARBOX, PRO 436 & 446	1
5	064973	ASSEMBLY, SPIDER PRO 446	1
6	064974	ENGINE BASE AND CLUTCH	1
7	036754	BOX, TUBE	1
8	036753	BOX, TOP BOTTOM	2
9	036755	BOX, CORNER REINFORCEMENT PIECE	4
10	067313	KIT, DECAL PRO446	1
11	063975	ASSEMBLY, FINE PITCH HANDLE	1
12	070320	MODIFIED, FINE PITCH HANDLE, WITH THROTTLE CABLE	1
13	065732	BOX, 18" WIDE X 5.5" TALL X 61" LONG	1
14	073690	KIT, UNIVERSAL WALK BEHIND HARDWARE	1

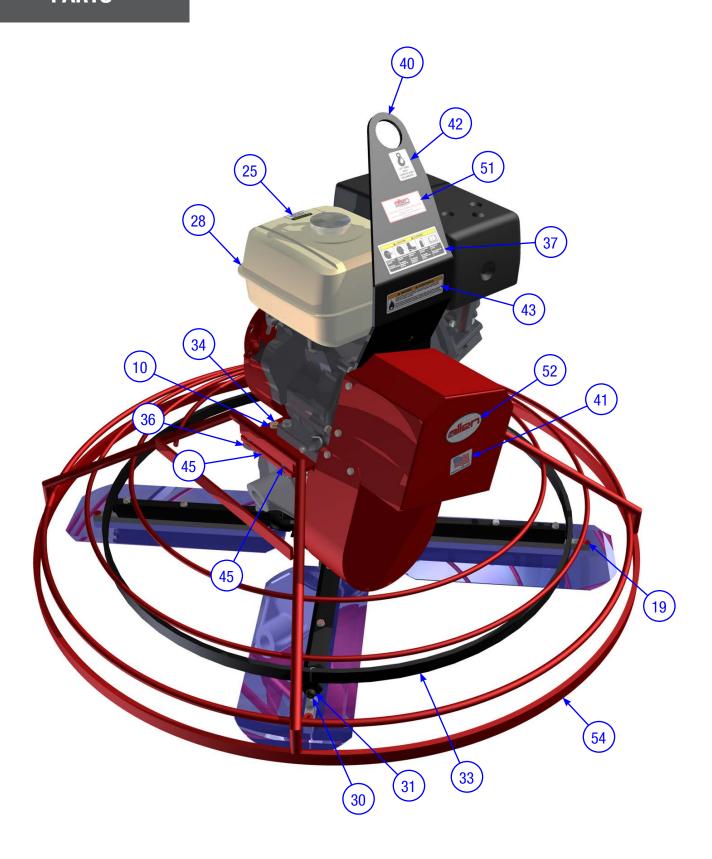
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Kit, 446 With Kohler Engine continued

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	076134	KIT, 446 WITH 9.5HP KOHLER, RAPID PITCH	-
1	071132	ASSEMBLY, PT, 446 WITH 9.5 KOHLER	1
2	070069	ENGINE, CH395 KOHLER	1
3	001005	OIL, ENGINE 10W30 (GAL)	0.32
4	064971	GEARBOX, PRO 436 & 446	1
5	064973	ASSEMBLY, SPIDER PRO 436	1
6	064974	ENGINE BASE AND CLUTCH	1
7	036754	BOX, TUBE	1
8	036753	BOX, TOP BOTTOM	2
9	036755	BOX, CORNER REINFORCEMENT PIECE	4
10	067313	KIT, DECAL PRO436	1
11	070300	ASSEMBLY, FINE RAPID HANDLE	1
12	036758	BOX, WALK BEHIND HANDLE	1
13	036759	BOX, WALK BEHIND SHAFT	1
14	070319	MODIFIED, FINE PITCH HANDLE, WITH THROTTLE CABLE	1
15	061014	PLUG, FINISHING FOR 1-3/4" OD TUBING	1
16	073690	KIT, UNIVERSAL WALK BEHIND HARDWARE	1

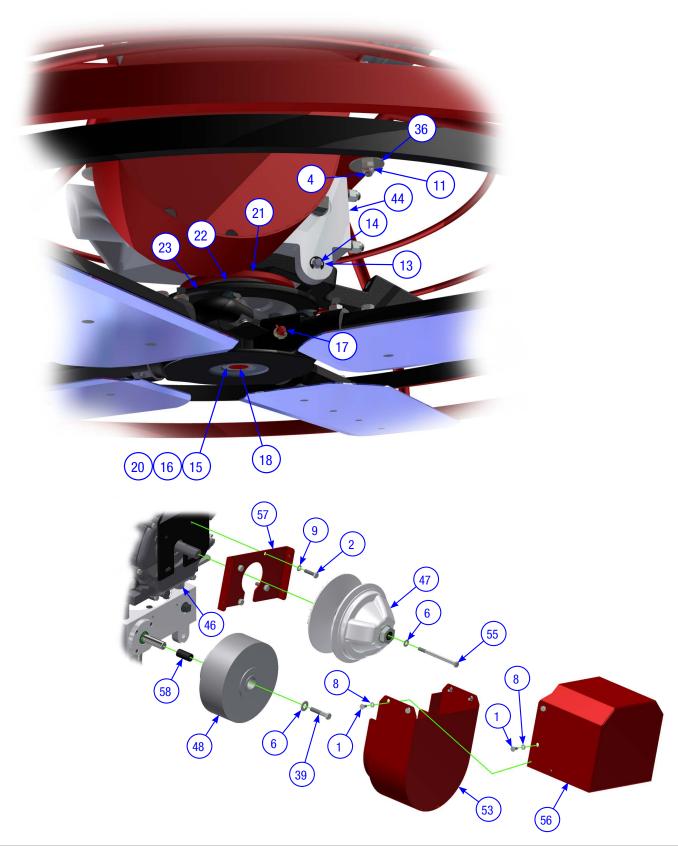
Power Unit, 446SD-TC, Illustration



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Power Unit, 446SD-TC, Illustration, continued

SECTION 4 PARTS



Power Unit, 446SD-TC, Parts List

ITEM	PART NO.	DESCRIPTION				
-	055643	ASSEMBLY, 446TC BASIC POWER UNIT, 11.0 HP MOTOR, COMBO BLADES	-			
1	010001	FASTENER, HHCS 1/4-20 X 1/2 GR 5	8			
2	012975	FASTENER, HHCS 5/16-24 X 1 GR 5	4			
3	010024	FASTENER, HHCS 5/16-18 X 2 GR 5	12			
4	010038	BOLT, 3/8-16x1-1/2 GR 5 HHCS				
5	010045	FASTENER, HHCS 3/8-16 X 3-1/4	2			
6	010082	FASTENER, FW 5/16	1			
7	010083	FASTENER, FW 3/8	1			
8	010089	FASTENER, LW 1/4	8			
9	010090	FASTENER, LW 5/16	16			
10	010091	FASTENER, LW 3/8	6			
11	010464	FASTENER, NUT NYLOK 3/8-16	8			
12	015674	FASTENER, STDBLT 3/8-16 X 1-3/4	4			
13	015677	RING, Ø7/16 E-STYLE RETAINING	2			
14	015678	PIN, YOKE ARM	1			
15	015690	WASHER, RETAINING FOR TROWELS				
16	015691	FASTENER, SHCS 1/2-13 X 1-1/2 RH				
17	015692	CAP, Ø1/4 RED GREASE				
18	015693	PLUG, PLASTIC CAP EC12				
19	015694	PLUG W-1 RED PLASTIC TAPERD	4			
20	015696	KEY, .25x1.25 LG HARD RAD	1			
21	015821	CAP, PRESSURE PLATE	1			
22	015822	THRUST BEARING	1			
23	015824	PLATE, PRO RIDER/WALKER PRESSURE	1			
24	016094A	TROWEL BLADE, COMBO 8 X 18 AEC BLUE	4			
25	016191	DECAL, ALLOW ENG TO COOL	1			
26	017264	YOKE, TROWEL	1			
27	017751	FASTENER, FW HARD A325 3/8 (p)	6			
28	018967	HONDA, 11 HP	1			
29	020514	FASTENER, NUT STOVER LOCK 3/8-16	4			

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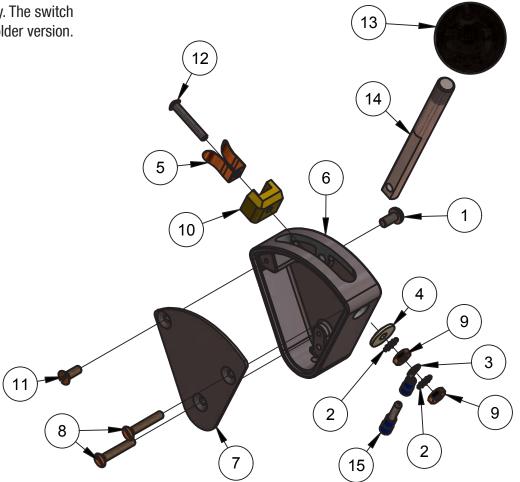
Power Unit, 446SD-TC, Parts List, continued

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION				
30	025091	FASTENER, 5/16-18x1/2xØ3/8x3/8 SHLDR SCR	4			
31	025092	BUSHING, 3/8x1/2x5/16 BRONZE	4			
32	026588	SPIDER ASSY, 1200SD LH-S0M	1			
33	028003	RING, 446 SD 4 BL STAB	1			
34	032875	FASTENER, HHCS 3/8-16 X 1-1/2 GR 8	2			
35	037648	BUSHING, NITRILE T MOUNT 436 & 446				
36	037675	FASTENER, FENDER WASHER 3/8 X 1 1/4	4			
37	039048	DECAL, GEN PROTECTION WARNING	1			
38	039740	BOLT, 3/8-16 X 2-1/4 GR 8 HHC	4			
39	046866	SCR, 3/8-24X2 YZ HEXHD CAP	1			
40	049771	PLATE, WALKBEHIND LIFTING	1			
41	053446	DECAL, MADE IN USA (SP)	1			
42	053448	DECAL, LIFT HERE ONLY (SP)	1			
43	053453	DECAL, SPARK WARNING (SP)	1			
44	055647	GEARBOX W/ SPECIAL SHAFT	1			
45	055648	MOTOR PLATE				
46	055649	SPACER				
47	055900	PULLEY, DRIVER				
48	055901	DRIVEN PULLEY	1			
49	055902	BELT, CVT F/ TEXAS WALKER	1			
50	055903	EXT RETAINING RING	1			
51	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	1			
52	056341	DECAL ALLEN OVAL 2" X 3.34" WHITE	1			
53	056458	PULLEY GUARD	1			
54	056459	RING, 446SD-TC	1			
55	056484	HHCS, 5/16-24 X 4 1/2	1			
56	058051	CLUTCH GUARD	1			
57	058052	CLUTCH GUARD MNTG BRKT	1			
58	058055	SPACER, 3/4 X 5/32 X 1 1/2	1			
59	068124	WELDMENT, GUARD RING, PRO446	1			

Safety Switch Assembly, Illustration & Parts List

NOTE: This illustration is for reference only. The switch shown is an older version.

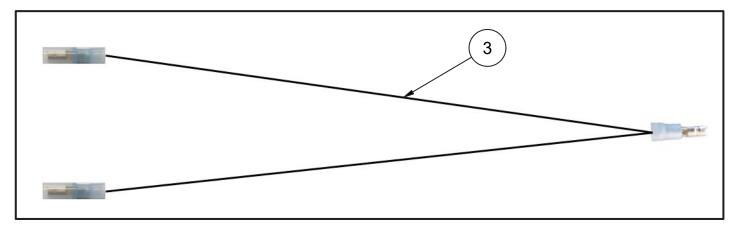


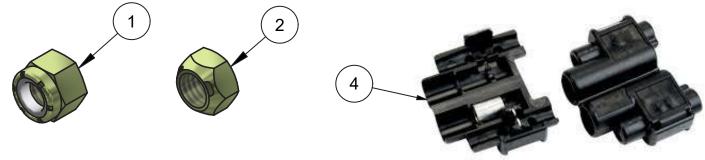
ITEM	PART NO.	DESCRIPTION	QTY
-	018409	SAFETY SWITCH ASSEMBLY	1
1	013370	FASTENER, RHMS 10-32 X 3/8	1
2	013704	FASTENER, LOCK WASHER EXT STAR 8-32	2
3	016137	TERMINAL, #10 14-16 GA RING	1
4	018264	INSULATOR RUBBER SAFETY SWITCH	1
5	018267	CLIP CONTACT - PT SAFETY SWITCH	1
6	018324	HOUSING SAFETY SWITCH MF	1
7	018326	COVER SAFETY SWITCH MF	1
8	018404	FASTENER, FHMS SLT BRASS 8-32 X 1	2
9	018406	FASTENER, NUT BRASS HEX 8-32	2
10	018407	BLOCK CONTACT FOR PT SAFE SWITCH	1
11	018623	FASTENER, FHMS BRASS 8-32 X 3/8	1
12	018624	FASTENER, RHMS SLT 8-32 X 1	1
13	034072	KNOB, POSITIVE LOCK	1
14	034316	LEVER, SAFETY SWITCH F/ PT	1
15	038947	CONN, .156 BULLET MALE 16-14 (Used on opposite end of wire)	1

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Universal Walk-Behind Hardware Kit, Illustration and Parts List

SECTION 4 PARTS





ITEM	PART NO.	DESCRIPTION			
-	073690	KIT, UNIVERSAL WALK-BEHIND HARDWARE	1		
1	010464	FSTN, NUT, NYLOK, 3/8-16 GR8	4		
2	020514	FSTN, NUT STOVER LOCK 3/8-16	1		
3	066370	VP QP HANDLE WIRE CONNECTOR	1		
4	036673	CONNECTOR, 2-1 SPLICE (W/B)	1		

Filter Kits, Parts List

PR0436 5.5 HP GX160					
ITEM	PART NO.	DESCRIPTION	QTY		
-	066571	KIT, FILTER F/ PRO436 5.5 HP GX160	1		
1	066431	FILTER, VP424 GX120 AIR	1		
2	066437	FILTER, FUEL F/ AR16 BUGGY	1		
		PR0436 9 HP GX270			
ITEM	PART NO.	DESCRIPTION	QTY		
-	066573	KIT, FILTER F/ PRO436 9 HP GX270	1		
1	066588	FILTER, PRO436 9HP GX270	1		
2	066437	FILTER, FUEL F/ AR16 BUGGY	1		
		PR0446 9 HP GX270			
ITEM	PART NO.	DESCRIPTION	QTY		
-	066574	KIT, FILTER F/ PRO443 9 HP GX270	1		
1	066588	FILTER, PRO436 9HP GX270	1		
2	066437	FILTER, FUEL F/ AR16 BUGGY	1		
		PRO436 EDGER 9HP GX270			
ITEM	PART NO.	DESCRIPTION	QTY		
-	066575	KIT, FILTER F/ PRO436 EDGER 9 HP	1		
1	066588	FILTER, PRO436 9HP GX270	1		
2	066437	FILTER, FUEL F/ AR16 BUGGY	1		
		PR0446 11HP GX340			
ITEM	PART NO.	DESCRIPTION	QTY		
-	066577	KIT, FILTER F/ PRO446 11 HP GX340	1		
1	066440	FILTER, AIR F/ AR16 BUGGY (17210-ZE3	1		
2	066437	FILTER, FUEL F/ AR16 BUGGY	1		
		PR0446TC 13HP GX390			
ITEM	PART NO.	DESCRIPTION	QTY		
-	066578	KIT, FILTER F/ PRO446TC 13 HP GX390	1		
1	066440	FILTER, AIR F/ AR16 BUGGY (17210-ZE3	1		
2	066437	FILTER, FUEL F/ AR16 BUGGY	1		
PRO446 PROPANE EX-27					
ITEM	PART NO.	DESCRIPTION	QTY		
-	066579	KIT, FILTER F/ PRO446 PROPANE EX-27	1		
1	066449	FILTER, AIR F/ PRO446 PROPANE	1		
2	066432	FILTER, FUEL F/ PRO446 PROPANE	1		

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Decals, PR0436 (Kit #: 067316)

BRAND DECAL PART #: 067317 (6.42" x 2.072")



LIFTING HOOK 0.75" x 0.986" PART #: 067322



AEC INFO / WARRANTY PART #: 067308



ENGINEERING CORPORATION

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Allen® Products are covered under one or more of the following potent numbers: U.S. Patents: 5,934,823,5,988,938; 5,967,696; 6,053, 660; 6,089,787; 6,106,193; 6,048,130; 6,019,545; 6,089,786; 6,582,153; 6,857,81582; 6,955,404; 7,108,44961; 7,114,87681; 7,316,52381; 7,890,864; 8,360,880; 9,068,300; 9,068,301 With other Patents Pending. 08/17

ENGINE WARNINGS PART #: 067309

(5.15" x 2.471")

REFUELING INSTRUCTIONS

Allow engine to coof for 2 minutes before refueling.
Do not overfill or start engine near spilled gasoline.
Do not add gasoline while engine is hot or running.

Do not operate while fuel cap is removed.

Coperation of this equipment may create sparks that can eath fires are und dry vogotation. A spark arrestor where are under the gasoline or leading to fire penetric for laws or regulations rolating to fire penetric for laws or regulations rolating to fire prevention requirements.

A DANGER

Engines produce carbon monoxide which is an odorfess deadly poison. Do not operate in an enclosed area.

GEARBOX OIL / SPIDER GREASE PART #: 067323

(1.5" x 0.903")



AEC GLOBE PART #: 056341 (0.75" x 0.986")

(alen)

AEC HANDLE PART #: 067306



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Decals, PR0436E (Kit #: 067312)

SECTION 4 PARTS

BRAND DECAL PART #: 067310 (6.42" x 2.072")



LIFTING HOOK 0.75" x 0.986" PART #: 067322



AEC INFO / WARRANTY PART #: 067308

(6.45" x 1.55")

PINCH WARNING PART #: 067324

(1.0" Dia.)





PART #: 067309

(5.15" x 2.471")

REFUELING INSTRUCTIONS Allow engine to cool for 2 minutes before refueling. Do not overfill or start engine near spilled gasoline. Do not add gasoline while engine is hot or running. Do not operate while fuel cap is removed. Operation of this equipment may create sparks that can start fire a mound dry vegetation. A spark arrestor may be required. The operator should contract local fire spencies for laws or regulations regulations regulations regulations regulations regulations regulations regulations or regulations regulations regulations regulations regulations regulations regulations regulations regulations as parts are stored and the prevention regulations regulat

GEARBOX OIL / SPIDER GREASE PART #: 067323

(1.5" x 0.903")



AEC GLOBE PART #: 056341

(0.75" x 0.986")



AEC HANDLE



Decals, PRO446 (Kit #: 067313)

BRAND DECAL PART #: 067307 (6.42" x 2.072")



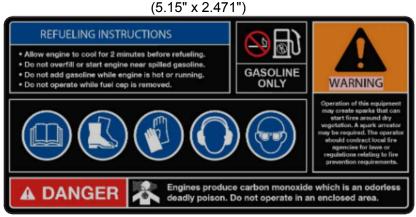
LIFTING HOOK 0.75" x 0.986" PART #: 067322



AEC INFO / WARRANTY PART #: 067308



PART #: 067309



AEC HANDLE PART #: 067306



GEARBOX OIL / SPIDER GREASE PART #: 067323

(1.5" x 0.903")



AEC GLOBE PART #: 056341 (0.75" x 0.986")



Decals, PRO446TC (Kit #: 068355)

SECTION 4 PARTS

BRAND DECAL PART #: 068468 (6.42" x 2.072")



LIFTING HOOK 0.75" x 0.986" PART #: 067322



AEC INFO / WARRANTY PART #: 067308



ENGINE WARNINGS PART #: 067309

(5.15" x 2.471")



SPIDER GREASE PART #: 067323 (1.5" x 0.903")

GEARBOX OIL /



AEC GLOBE PART #: 067325 (6.0" x 3.595")

(shown 1:2 scale)



AEC HANDLE PART #: 067306



Revision Detail

MANUAL REVISION DETAIL					
REVISION #	REVISION # REVISION DATE REVISION REFERENCE #				
-	11/15	Initial Release	AW		
Α	07/17	-	AW		
В	B 07/18 -		MW		
С	C 01/22 Updated Covers		MK		
D	06/22	Updated Trowel Arm PNs	MK		
E	10/22	Updated Handle Part Lists	MK		
F	10/23	Corrected/Added PT436, 446 Power Unit PNs. Added discontinued note for 446SD.	MK		
G	02/24	MN 24-057	MK		

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