



## *Operator's Manual*

# **ELECTRA II 7570**

**July, 2009**

*Product Support:* 1020 Hwy 224; Humboldt, KS 66748  
1-888-422-5173 [humbindustries@sbcglobal.net](mailto:humbindustries@sbcglobal.net)

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## **SMITHCO TOURNAMENT ELECTRA II ROLLER**

The SMITHCO TOURNAMENT ELECTRA II ROLLER is a field developed tool designed to condition the surface of putting greens, lawn bowling greens, and grass tennis courts to a precise texture for tournament grade quality.

The ELECTRA II Roller utilizes two 8" rollers to achieve a "billiard table" surface. Both 8" rollers are driven and both are used for steering.

The TOURNAMENT ROLLER is built of the finest and heaviest material utilized on each part to insure longevity. The frame is fabricated out of seven gauge steel to provide weight to the machine and prevent warping. The steering has been especially engineered for operator comfort to alleviate fatigue during prolonged use. The specially designed, articulated steering rollers allow the rollers to follow the contour of the green to insure an even compaction over the entire surface.

Before placing the ELECTRA II Roller into service it must be charged to insure the batteries are at full charge.

Operator familiarization should be conducted before use of the ELECTRA II roller on the greens. Improper handling of the roller could cause damage to the turf. Do not allow the roller to stand idle on the putting surface for any length of time as the weight of the machine will cause indentions that will be difficult to smooth out. Place the roller into motion while off the green, and never attempt to turn the steering rollers sharply while the machine is on the green. Do not attempt to turn the steering wheel while the machine is not in motion.

Each Golf Course Superintendent should plan a pattern for the rolling of his greens so all greens would be compatible in speed and direction. Most Superintendents will probably decide that the best method of rolling would be back and forth in an alternate direction. When possible, the roller should be run up and down major undulations, not across. Each Superintendent can decide as to which method is best for his greens.

**The ELECTRA II roller should be lubricated frequently with any grade of machine oil at all moving joints, and the bearings that are furnished with grease fittings should be greased with any good grade Lithium or equivalent water repellent grease. The gear box will use 90 W. nondetergent oil.**

**THE SMITHCO ELECTRA II TOURNAMENT ROLLER IS TO BE USED ON GOLF COURSE GREENS, LAWN BOWLING AREAS AND GRASS TENNIS COURTS ONLY. IT IS NOT TO BE USED ON ASPHALT, CEMENT, OR GRAVEL AREAS.**

Good maintenance and regular servicing will insure that longevity of your SMITHCO ELECTRA II TOURNAMENT ROLLER. Support is readily available from your local distributor or SMITHCO.

# INTRODUCTION

Thank you for purchasing a **SMITHCO** Tournament ELECTRA II Roller.

Carefully read all manuals as they include safety, operating, assembly and maintenance instructions. Failure to do so could result in personal injury or equipment damage.

Keep manuals in a safe place after operator and maintenance personnel have read them. Right and left sides are from the operator's seat, facing forward.

All **SMITHCO** machines have a Serial Number and Model Number. Both numbers are needed when ordering parts. The serial number plate on the ELECTRA II Roller is located on the back of the unit.

For easy access, record your Serial and Model numbers here.

<b>SMITHCO</b>		DATE OF MFG.
WAYNE, PENNSYLVANIA 19087 USA		<input type="text"/>
610-688-4009 FAX 610-688-6069		
SERIAL NO.	kw/hp	
<input type="text"/>	<input type="text"/>	
MODEL NO.	kg/lb	
<input type="text"/>	<input type="text"/>	

Information needed when ordering replacement parts:

1. Model Number of machine.
2. Serial Number of machine.
3. Name and Part Number of part.
4. Quantity of parts.

# **SPECIFICATIONS**

## **TOURNAMENT ELECTRA II ROLLER SPECIFICATIONS**

**MODEL**        **7570**

### **Weights and Measurements**

Length            52"  
Width             49"  
Height            47"  
Ground Clearance 7"  
Weight            1200 lbs.

### **Ground Pressure**

4.5 PSI

### **Brakes**

Hand Brake

### **Seat**

High back; one piece for operator comfort

### **Body**

Welded steel frame; powder coated

### **Engine**

(2) 5 hp Motors

### **Electrical System**

48 volt electric start

### **Drive**

Electric motors to gear box with chain drive to (2) 8" rollers with both rollers driven

### **Steering**

10.2 Reduction; 16" soft grip steering wheel with tilt; 10' diameter turning radius

### **Rollers**

Two 8" steel powder coated rollers 36" long

### **Controls**

Foot operated controls

### **Speed Control**

Patented Speed Boss


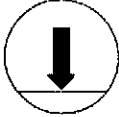
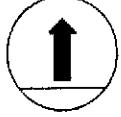





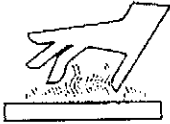
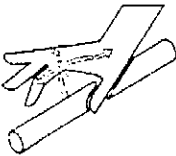

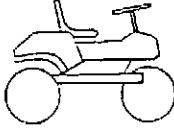
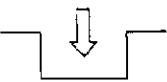

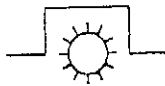
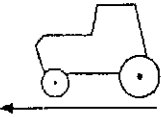



### **Trailer**

7510

### **Batteries**

(4) 12 Volts

# SYMBOLS

	Up/Down Arrow		Down/Lower		Up/Raise
	No Smoking		Moving Parts		Manual Operation
	Pinch Point		Step		Hot Surface
	Hydraulic Fluid Penetration		Lift Arm		Tractor
	Engage		Disengage		PTO
	Ground Speed		Fast		Slow
<b>H</b>	High	<b>L</b>	Low	<b>F</b>	Forward
<b>R</b>	Reverse	<b>N</b>	Neutral		Warning Danger Caution

# SYMBOLS

	Read Operator's Manual		Electrical Power		No Electrical Power
	Engine - Stop		Engine - Start		Engine - Run
	Engine Oil		Temperature Light		Water Temperature
	RPM		Gasoline		Diesel
	Glow Plug - On		Glow Plug - Off		Glow Plug
	Hour Meter		Hour Meter		Fuse
	Hand Throttle - Closed		Choke - Closed		Choke - Open
	Park Brake		Park Brake Release		Hydraulic Oil Level

## **SAFE PRACTICES**

1. **It is your responsibility to read this manual and all publications associated with this machine (engine and accessories).**
2. Never allow anyone to operate or service the machine or its accessories without proper training and instructions. Never allow minors to operate any equipment.
3. Learn the proper use of the machine, the locations and purpose of all the controls before you operate the equipment. Working with unfamiliar equipment can lead to accidents.
4. Wear all the necessary protective clothing and personal safety devices to protect your head, eyes, ears, hands and feet. Operate the machine only in daylight or in good artificial light.
5. Inspect the area where the equipment will be used. Pick up all debris you can find before operating. Beware of overhead obstructions and underground obstacles. Stay alert for hidden hazards.
6. Never operate equipment that is not in perfect working order or without decals, guards, shields, or other protective devices in place.
7. **Never disconnect or bypass any switch.**
8. This machine demands your attention. To prevent loss of control or tipping of the vehicle:
  - A. Make sure area is clear. Do not stop or start suddenly on any slope. Avoid driving sideways on hills as much as possible.
  - B. Reduce speed on slopes and in sharp turns. Use caution when changing directions on slopes.
  - C. Stay alert for holes in the terrain and other hidden hazards.
9. Before leaving operator's position for any reason:
  - A. Disengage all drives.
  - B. Shut off and remove the ignition key.
10. Keep hands, feet and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the machine.
11. Keep the area of operation clear of all bystanders.
12. Never carry passengers.
13. **Use parts and materials supplied by SMITHCO only. Do not modify any function or part.**

These machines are intended for professional maintenance on grass greens. Other use will void the warranty.



## **CONTROLS & INSTRUMENTS**

### **IGNITION SWITCH**

Located on the right hand side of the steering column. This is a two-position ignition switch; Stop – Start.

**A. Fuse & Fuse Holder:** Under seat cover.

### **STEERING**

Acquaint yourself with steering before operating machine. The automotive type steering wheel is connected to the roller assembly by a chain driven sprocket. This allows for quick turns and short turning radius.

### **SEAT ADJUSTMENT**

Seat adjustment lever is located under front of seat on left side. It provides seat adjustment forward or backward for operator's comfort.

### **FOOT PEDALS FOR 7570**

#### **RIGHT FOOT PEDAL**

The right foot pedal is used for going to the right. When the pedal is released the roller will come to a slow stop.

#### **LEFT FOOT PEDAL**

The left foot pedal is used for going to the left. When the pedal is released the roller will come to a slow stop.

## **DAILY CHECKLIST**

### **DAILY CHECKLIST**

**NOTE:**

**Use all procedures and parts prescribed by the manufacturers.  
Read all manuals before operation.**

The suggested maintenance checklist is not offered as a replacement for the manufacturer's list, but as a supplement. You must adhere to guidelines established by manufacturer for warranty coverage. In adverse conditions such as dirt, mud or extreme temperatures, maintenance should be more frequent.

1. Check oil level. Add as needed. **DO NOT OVERFILL.**
2. Examine vehicle for damage or anything unusual to normal wear.
3. Inspect electrical system for loose connections or frayed wiring, including battery cables. Replace any faulty equipment or tighten if loose.
4. Check hardware for loose or missing nuts, bolts, set screws, etc., and tighten or replace as needed.
5. Listen for any noise, such as rattles due to loose hardware, scraping sounds, or unusual motor noises. Be sensitive to abnormal performance.
6. Inspect all lubrication areas around pedal shafts, chassis parts, etc.
7. Inspect steering.
8. Assure that all switches are operating normally.
9. Check controls for smooth, proper working operation. Lubricate as needed.
10. Wash accumulated dirt **daily** from motor compartment and under body.
11. Check gear box for oil. Use 90W.

## **MAINTENANCE**



Before servicing or making adjustments to machine, stop and remove key from ignition.

### **NOTE:**

Use all procedures and parts prescribed by the manufactures. Read all manuals.

## **INSTALLATION AND SERVICING THE BATTERIES**

Electric vehicle batteries require CAREFUL maintenance to maximize their useful service life.

### **!!!CAUTION!!!**

**OVERFILLING BATTERIES WILL VOID THE WARRANTY. WE SUGGEST THE USE OF AN AUTOMATIC WATERING DEVICE THAT IS AVAILABLE FROM YOUR BATTERY DISTRIBUTOR.**

### **!!!WARNING!!!**

**HYDROGEN GAS IS FORMED WHEN CHARGING BATTERIES. DO NOT CHARGE BATTERIES WITHOUT ADEQUATE VENTILATION. DO NOT SMOKE IN AN AREA BEING USED FOR CHARGING BATTERIES. CONCENTRATIONS OF 4% HYDROGEN GAS OR MORE IS EXPLOSIVE.**

### **PREVENTIVE MAINTENANCE**

Batteries must be recharged after each day's use. See battery charging.

Check the electrolyte level at least once a week.

Inspect all wiring for breaks or deterioration of the insulation.

Before charging batteries, inspect all terminals for frayed conductors and loose or damaged connectors.

Before charging batteries, inspect all terminals to assure that they are both clean (corrosion free) and securely fastened to battery posts.

Batteries should be checked frequently to be sure that they are in a good state of charge. Full charge for a new battery should yield a hydrometer reading of 1.260 – 1.280 specific gravity while an older battery may give a reading of 1.250 specific gravity and still be fully charged.

When adding water, do not overfill. Overfilling will cause a loss of acid from the electrolyte. Use distilled water when adding water to batteries. We recommend that other water sources NOT be used since impurities can reduce the useful life of the batteries.

To prevent unnecessary drag on the vehicle, which will result in poor performance and a higher amperage draw, inspect for improperly adjusted wheel bearings, dragging brakes, and under-inflated tires.

In the "off season" the batteries should be FULLY CHARGED and stored in an unheated, covered area. Check the batteries during the "off season" at thirty-day intervals and recharge if a hydrometer shows a reading of less than 1.220 specific gravity.

## **STORAGE**

When storing, remove the key from the key switch to avoid unauthorized persons from operating machine.

1. Before storing, clean machine thoroughly.
2. Check bolts and nuts, tighten as necessary.
3. Make all repairs that are needed and remove any debris.
4. Remove the battery, disconnect the plug, adjust the electrolyte level and recharge it.
5. Store in a clean and dry area, but NOT near a stove, furnace or water heater which uses a pilot light or any device that can create a spark.

## **BATTERY CHARGING**

It is important to follow the following steps when charging batteries.

Check that electrolyte covers the plates in ALL cells.

Charging must be performed in a well ventilated area.

Inspect the charger DC plug for loose, bent, arced or dirty contacts.

Inspect the vehicle receptacle for loose wires or damage.

Inspect plug fully into receptacle and check that the connection is tight.

Be careful not to pull on the DC cord or place it in a position where it can be driven over or present a hazard to personnel working the area.

### **!!!WARNING!!!**

**WHEN CONNECTING OR DISCONNECTING THE CHARGER TO A VEHICLE, ALWAYS MAKE SURE THAT THE TIMER, ELAPSED TIME INDICATOR, OR POWER SWITCH IS SET IN THE OFF POSITION. IF IT IS NOT, AN ELECTRICAL ARC WILL OCCUR AND MAY CAUSE AN EXPLOSION OR FIRE.**

Observe the ambient temperature in the charging area. A battery requires a longer charge time than normal when the ambient temperature falls below 60 degree F. The time required increases as the ambient temperature decreases.

### **AC LINE VOLTAGE**

The battery charger's initial output is directly proportional to the input voltage. If a problem is encountered with several vehicles that indicates an insufficient initial start charge, it is suggested that the batteries be tested, and if found satisfactory, then the input AC voltage should be checked by the power company and their recommendations be followed. For additional information pertaining to the battery charger, see the "Battery Charger Section" in this manual.

### **ADDING WATER**

The electrolyte in the vehicle's batteries is a solution of sulfuric acid and water. Some of the water portion of this solution evaporates or is lost in the charging cycle but the acid is retained. In the life of a battery, it is only necessary to replenish water and not the acid.

In the life of an average battery, the water usage will be approximately 2-1/2 times the original electrolyte quantity, or approximately 16 quarts.

### **!!!WARNING!!!**

**IF A CONSIDERABLE AMOUNT OF BATTERY ELECTROLYTE IS SPILLED, IT MAYBE REPLACED. BE SURE TO OBSERVE ALL PROCEDURES, CAUTIONS, AND WARNINGS PROVIDED BY THE ELECTROLYTE MANUFACTURER.**

# **BATTERY CHARGER**

## **DESCRIPTION**

Type of charger: Lestronic II (Smithco model number 832-016)

The battery charger is semi-automatic and is designed specifically for charging electric vehicle batteries.

The charger type is known as a ferroresonant. The term ferroresonant is applied to a charge that starts the charge at a relatively high rate of charge and continuously reduces the rate as the battery or batteries become nearer the full charge condition. When batteries are fully charged the charger will automatically shut off.

If charger does not start charging after being plugged in then check these points.

1. Connection maybe loose. Check all connections making sure they are clean and secure.
2. Charge on batteries is too low. If the charge on the batteries is below 2 volts, they will need to be charged individually to bring the total charge of all batteries to a total of at least 15 volts. This should allow the charger to pickup and charge. Note: If (3) batteries have 5 volts of charge and (1) battery has 1 volt of charge then the charger may not charge.

## **CHARGER INSTALLATION**

Each charger requires an input of a dedicated 110 – 120 volt AC 60 cycle 15 Amp circuit.

### **!!!WARNING!!!**

**PORTABLE CHARGERS SHOULD BE MOUNTED ON A PLATFORM ABOVE THE GROUND, OR IN SUCH A MANNER AS TO PERMIT THE MAXIMUM AIR FLOW UNDERNEATH AND AROUND THE CHARGER. IF THE CHARGER IS MOUNTED IN SUCH A MANNER THAT SUFFICIENT AIR FLOW IS PREVENTED FROM ENTERING THE LOUVERS, OVERHEATING MAY RESULT WHICH COULD CAUSE SERIOUS DAMAGE TO THE CHARGER AND THE POTENTIAL FOR FIRE.**

If the charger is operated in an outdoor location, rain and sun protection must be provided.

The charging DC cord is equipped with a polarized connector which fits into a matching receptacle on the vehicle.

The power AC cord is equipped with a standard three prong UL listed grounded type plug. Electrical outlet receptacles installed for use at the battery charging locations must be of the three prong grounded type (NEMA 15-5R), which will ground the charger to eliminate any electrical hazard.

## FAULT FINDING

The MillipaK controller includes a number of features designed to help the user track down operational faults, wiring faults or internal controller faults.

The Diagnostic LED mounted next to the calibrator connectors on the front of the controller serves as a simple diagnostic tool as explained below:

ON	No fault, normal condition
OFF	Internal controller fault
1 flash	Personality out of range
2 flashes	Illegal start condition (Traction)
3 flashes	MOSFET Short Circuit
4 flashes	Contactors fault, Motor Open Circuit or Field Open Circuit
5 flashes	Not used
6 flashes	Accelerator wire off fault
7 flashes	Low or High battery voltage, High Capacitor voltage
8 flashes	Over temperature or 12T cutback

### FLASH FAULT DESCRIPTIONS

In addition to the LED indication a more detailed description of any faults detected may be found by using the calibrator. Menu item number 13.01 gives a code which corresponds to the following detected faults.

ID	FAULT	DESCRIPTION	FLASH FAULT
0	System OK		On
1	Thermal Cutback	Maximum power available to the motor has been reduced due to excessive heat sink temperature.	8
2	I2t Current Limit Cutback	Maximum power available to the motor has been reduced by the I2t current limit cutback function.	8
3	Accelerator Wire Off	Input wire from accelerator has been disconnected.	6
4	Accelerator Pressed at Power Up	Accelerator pedal pressed at power up	6
5	Belly Fault	The belly switch function has occurred	2
6	Seat Fault	Drive selected and no seat switch closed	2
7	FSI Recycle Fault	FSI switch needs to be recycled after a direction change	2
8	SRO Fault	Direction switch selected for greater than 2 seconds with FSI open.	2
9	Two Direction Fault	Two directions selected together	2
10	Sequence Fault	Direction or FSI switch closed at power up.	2
11	Low Battery Fault	Battery voltage is too low.	7
12	High Battery Fault	Battery voltage is too high.	7



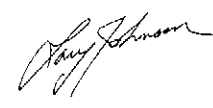
13	High Battery Fault with Line Contactor Open	Battery voltage is too high before the line contactor is closed.	7
14	Configuration Range Fault	A personality is out of range.	1
15	Configuration CRC Fault	The personality CRC is incorrect.	1
16	Line Contactor Welded Fault	Line contactor is welded.	4
17	Line Contactor did not close fault	Line contactor is open circuit.	4
18	No Fault		On
19	Field Open Circuit	Field Open Circuit detected.	4
20	MOSFET Short Circuit	Short circuit Armature MOSEFTs detected.	3
21	VA Detect Fail	12V supply failure	0
22	MOSFET Off	MOSFETs did not pulse during power on failsafe checks (failsafe circuit enabled.)	0
23	MOSFET On	MOSFETs pulsed during power on failsafe checks (failsafe circuit disabled).	0
24	MOSFET Short Circuit during Power Up	Short circuit armature MOSFETs detected during power on failsafe checks.	3
25	Drive 2 Off	Contactors 2 did not pulse during power on failsafe checks (failsafe circuit enabled.)	0
26	Drive 2 On	Contactors 2 pulsed during power on failsafe checks (failsafe circuit disabled.)	0
27	Drive 1 Off	Contactors 1 did not pulse during power on failsafe checks (failsafe circuit enabled.)	0
28	Drive 1 On	Contactors 1 pulsed during power on failsafe circuit disabled.)	0
29	Drive 3 On	Contactors 3 pulsed during power on failsafe checks (failsafe circuit disabled.)	0
30	Drive 3 Off	Contactors 3 did not pulse during power on failsafe checks (failsafe circuit enabled.)	0
31	High Capacitor Voltage	High capacitor voltage detected.	7

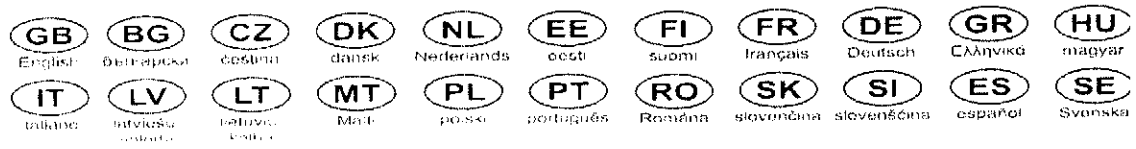
## FAULT CLEARANCE

Any fault indication will be cleared by re-initiating the start sequence after the cause of the fault has been removed.

**DECLARATION OF CONFORMITY • ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ • PROHLÁŠENÍ O SHODĚ • OVERENSSTEMMELSEERKLÆRING •  
 CONFORMITEITSVERKLARING • VASTAVUSDEKLARATSIOON • VAATIMUSTENMUKAISUUSVAKUUTUS • DECLARATION DE  
 CONFORMITE • KONFORMITÄTSEKLRÄRUNG • ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ • MEGFELELŐSÉGI NYILATKOZAT • DICHIARAZIONE DI  
 CONFORMITÀ • ATBILSTĪBAS DEKLARĀCIJA • ATITIKTIES DEKLARACIJA • DIKJARAZZJONI TAL-KONFORMITĀ • DEKLARACJA  
 ZGDNOŚCI • DECLARAÇÃO DE CONFORMIDADE • DECLARAȚIE DE CONFORMITATE • VYHLÁSENIE O ZHODEI Z JAVNA O SKLADNOSTI  
 • DECLARACIÓN DE CONFORMIDAD • DEKLARATION OM ÖVERENSSTÄMMELSE**

<p>Business name and full address of the manufacturer • Търговско име и пълен адрес на производителя • Obchodní jméno a plná adresa výrobce • Producentens firmanavn og fulde adresse • Bedrijfsnaam en volledige adres van de fabrikant • Tootja ärinimi ja täielik address • Valmistajan toiminnin ja täydellinen osoite • Nom commercial et adresse complète du fabricant • Firmenname und vollständige Adresse des Herstellers • Επωνυμία και ταχυδρομική διεύθυνση κατασκευαστή • A gyártó üzleti neve és teljes címe • Ragione sociale e indirizzo completo del fabbricante • Uzņēmuma nosaukums un pilna ražotāja adrese • Verslo pavadinimas ir pilnas gamintojo adresas • Isem kumneržal in indiriz shih tal-fabrikant • Nazwa firmy i pełny adres producenta • Nome da empresa e endereço completo do fabricante • Denumirea comercială și adresa completă a producătorului • Obchodný názov a úplná adresa výrobcu • Naziv podjetja in polni naslov proizvajalca • Nombre de la empresa y dirección completa del fabricante • Tillverkarens företagsnamn och kompletta adress</p>	<p style="text-align: center;">Smithco Inc              34 West Avenue              Wayne, PA USA              19087-3311</p>
<p>Product Code • Код на продукта • Kód výrobku • Produktkode • Productcode • Toote kood • Tuotekoodi • Code produit • Produktcode • Кодовόс προϊόντος • Термеккód • Codice prodotto • Produkta kods • Kodici tal-Prodott • Kod produktu • Código do Produto • Код продукта • Kód výrobku • Označka výrobka • Código de producto • Produktkod</p>	<p style="text-align: center;">7570</p>
<p>Machine Name • Наименование на машината • Název stroje • Maskinnavn • Machinenamen • Masina nimi • Laitteen nimi • Nom de la machine • Maschinenbezeichnung • Овојзакчи мулхивнујтос • Gépnev • Denominazione della macchina • Iekártas nosaukums • Mašinos pavadinimas • Isem tal-Magna • Nazwa urzadzenia • Nome da Máquina • Numele echipamentului • Názov stroja • Naziv stroja • Nombre de la máquina • Maskinens namn</p>	<p style="text-align: center;">Tournament Electra</p>
<p>Designation • Предназначение • Oznaceni • Betegnelse • Benaming • Nimetus • Tuuypintekintä • Pažymėjimas • Bezeichnung • Χαρακτηρισμός • Megnevezés • Funzione • Apzīmējums • Lithuanian • Denominazzjoni • Oznaczenie • Designação • Specificație • Označenje • Nomen stroja • Description • Beteckning</p>	<p style="text-align: center;">Green Roller</p>
<p>Serial Number • Серийн номер • Sériové číslo • Seriennummer • Seriennummer • Seriennummer • Valmistusnumero • Numéro de série • Seriennummer • Σειριακός αριθμός • Sorozatszám • Numero di serie • Sérijas numurs • Sérijos numeris • Numru Serjali • Numer serjnyj • Numero de Serie • Număr de serie • Sériový číslo • Serijska številka • Número de serie • Serianummer</p>	<p style="text-align: center;">TE246</p>
<p>Engine • Двигател • Motor • Motor • Motor • Motor • Motor • Motor • Motor • Motor • Мотор • Modulėv • Motore • Dzinėjs • Variklis • Sahha Natta installata • Silnik • Motor • Motor • Motor • Motor • Motor • Motor • Motor • Motor</p> <p>Net Installed Power • Нетна инсталирана мощност • Cistý instalovaný výkon • Installeret nettoeffekt • Netto geinstalleerd vermogen • Installalettud netovõimsus • Asennettu nettoteho • Puissance nominale nette • Installierte Nettoleistung • Καθαρή εγκαταστημένη ισχύς • Nettó beépített teljesítmény • Potenza netta installata • Paredzētā tīkla jauda • Grynojį galia • Wśsa' tal-Qtugh • Moc zainstalowana netto • Potencia instalada • Puterea instalată netă • Cistý inštalovaný výkon • Neto vgrajena moč • Potencia instalada neta • Nettoeffekt</p>	<p style="text-align: center;">3 KW</p>
<p>Conforms to Directives • В съответствие с директивите • Spĺňuje podminky směrníc • Er i overensstemmelse med direktivar • Voidet aan de richtlijnen • Vastab direktiividele • Direktiivien mukainen • Conforme aux directives • Entspricht Richtlinien • Ακολουθείται κατά τις Οδηγίες • Megfelel az irányelveknek • Conforme alle Direttive • Atbilst direktivām • Atitinka direktyvų reikalavimus • Valutazzjoni tal-Konformitā • Dyrektywy związane • Cumpré as Directivas • Respectă Directivile • Je v súlade so smernicami • Skladnost z direktivami • Cumple con las Directivas • Uiteviller direktiv</p>	<p style="text-align: center;">2006/42/EC;              2000/14/EC Annex VI Part 1</p>
<p>Conformity Assessment • Оценка за съответствие • Hodnocení plnění podmínek • Overensstemmelsesvurdering • Konformiteitsbeoordeling • Vastavushindamine • Vaatimustenmukaisuuden arviointi • Evaluation de conformité • Konformitätsbeurteilung • Αξιολόγηση Συμμορφωσης • Megfeleltőség-értékelés • Valutazione della conformità • Atbilstības novērtējums • Atitikties įvertinimas • Livell tal-Qawwa tal-Foss Imkajjel • Ocena zgodności • Avaliação de Conformidade • Evaluarea conformității • Vyhodnotenie zhodnosti • Ocena skladnosti • Evaluación de conformidad • Bedømming av overensstemmelse</p>	<p style="text-align: center;">2006/42/EC Annex VIII</p>
<p>Measured Sound Power Level • Измерено ниво на звукова мощност • Naměřený akustický výkon • Målte lydstyrkeniveau • Gemeten geluidsniveau • Mööditud heliõimsuse tase • Mitattu ääniteho taso • Niveau de puissance sonore mesuré • Gemessener Schalldruckpegel • Σημειωμένο επίπεδο ηχητικής ισχύος • Mért hangteljesítményszint • Livello di potenza sonora misurato • Izmērltais skaņas jaudas līmenis • Izmērotas garso stiprumo līgis • Livell tal-Qawwa tal-Foss Iggarantit • Moc akustyczna mierzona • Nivel sonoro medido • Nivelul măsurat al puterii acustice • Nameranā hlāidina akustiskāho výkonu • Izmerjena raven zvočne moči • Nivel de potencia sonora medido • Uppmätt ljudeffektstyrka</p>	<p style="text-align: center;">50 db(A)Lwa</p>
<p>Guaranteed Sound Power Level • Гарантирано ниво на звукова мощност • Garantovaný akustický výkon • Garantērt lydstyrkeniveau • Gegarandeerd geluidsniveau • Garantērtud heliõimsuse tase • Taattu ääniteho taso • Niveau de puissance sonore garanti • Garantierter Schalldruckpegel • Εγγυημένο επίπεδο ηχητικής ισχύος • Szavatolt hangteljesítményszint • Livello di potenza sonora garantito • Garantėtas skaņas jaudas līmenis • Garantuotas garso stiprumo līgis • Livell tal-Qawwa tal-Foss Iggarantit • Moc akustyczna gwarantowana • Nivel sonoro garantido • Nivelul garantat al puterii acustice • Garantovana hlāidina akustiskāho výkonu • Zajāmicena raven zvočne moči • Nivel de potencia sonora garantizada • Garantērt ljudeffektstyrka</p>	<p style="text-align: center;">55 db(A)Lwa</p>
<p>Conformity Assessment Procedure (Noise) • Оценка за съответствие на процедурата (Шум) • Postup hodnocení plnění podmínek (hluk) • Procedure for overensstemmelsesvurdering (Støj) • Procedure van de conformiteitsbeoordeling (geluid) • Vastavushindamismenetlus (müra) • Vaatimustenmukaisuuden arviointimenettely (Melu) • Procedure d'évaluation de conformité (bruit) • Konformitätsbeurteilungsverfahren (Geräusch) • Διαδικασία Αξιολόγησης Συμμορφωσης (Θορυβός) • Megfeleltőség-értékelési eljárás (Zaj) • Procedura di valutazione della conformità (rumore) • Atbilstības novērtējuma procedūra (troksnis) • Atitikties įvertinimo procedūra (garsas) • Procedura tal-Valutazzjoni tal-Konformitā (Foss) • Procedura oceny zgodności (poziom hałas) • Processo de avaliação de conformidade (nivel sonoro) • Procedura de evaluare a conformității (zgomot) • Postup vyhodnocovania zhodnosti (hluk) • Postopek za ugotavljanje skladnosti (hrup) • Procedimento de evaluación de conformidad (ruido) • Procedur för bedømming av overensstemmelse (bulter)</p>	<p style="text-align: center;">2000/14/EC Annex VI Part 1</p>

<p>UK Notified Body for 2000/14/EC • Нотифициран орган в Обединеното кралство за 2000/14/EC • Úřad certifikovaný podle směrnice č. 2000/14/EC • Del britiske bemyndigede organ for 2000/14/EF • Engels adviesorgaan voor 2000/14/EG • Uhendkuningnigi teavitatud asutus direktiivi 2000/14/EÜ mõistes • Direktiivin 2000/14/EY mukainen ilmoitettu tarkastuslaitos Isoossa-Britanniassa • Organisme notifié concernant la directive 2000/14/CE • Britische benannte Stelle für 2000/14/EG • Κοινωνιάρχειο Οργανισμός Ηγυμένου Βασιλείου για 2000/14/ΕΚ • 2000/14/EK – egyesült királyságbeli bejelentett szervezet • Organismo Notificato in GB per 2000/14/CE • 2000/14/EK AK registrētā organizācija • JK notifikuotošios istaigos 2000/14/EC • Korp Notifikat tar-Renju Unit għal 2000/14/KE • Dopuszczona jednostka badawcza w Wielkiej Brytanii wg 2000/14/AE • Entidade notificada no Reino Unido para 2000/14/CE • Organism notificat în Marea Britanie pentru 2000/14/CE • Notifikovaný orgán Spojeného královstva pře směrnici 2000/14/EG • Britanski prijavljeni organ za 2000/14/ES • Cuerpo notificado en el Reino Unido para 2000/14/CE • Anmält organ för 2000/14/EG i Storbritannien</p>	<p>Smithco / Humboldt Inc. 1020 Hwy 224 Humboldt Ks 66748 USA</p>
<p>Operator Ear Noise Level • Оператор на ниво на доловим от ухото шум • Hladina hluku v oblasti uši operátora • Stejniveau i førers ørehøjde • Geluidsniveau oor bestuurder • Mérésate operatortól kőrvas • Melutaso käyttöjään korvan kohdalla • Niveau de bruit à hauteur des oreilles de l'opérateur • Schallpegel am Bedienerohr • Επίπεδο θορύβου σε λειτουργία • A kezelő fülénél mért zajszint • Livello di potenza sonora all'orecchio dell'operatore • Trokšņa līmenis pie operatora auss • Dirbančiojo su mašina patiriama triukšmo lygis • Livell tal-Floss fil-Widna tal-Operatur • Dopuszczalny poziom hałasu dla operatora • Nivel sonoro nos ouvidos do operador • Nivelul zgomotului la urechea operatorului • Hladina hluku pősoblaca na sluch operatora • Raveň hrupa pri ušesu upravljalca • Nivel sonoro en el oído del operador • Lurtdugur átt (faragás) ora</p>	<p>50 db(A)Lwa (2006/42/EC)</p>
<p>Harmonised standards used • Използвани хармонизирани стандарти • Použité harmonizované normy • Brugte harmoniserede standarder • Gebruikte geharmoniseerde standaards • Kasutatud ühlistatud standardid • Käytetyt yhdenmukaistetut standardit • Normes harmonisées utilisées • Angewandte harmonisierte Normen • Εγκρινομενών πρότυπων που χρησιμοποιήθηκαν • Harmonizált szabványok • Standard armonizzati applicati • Izmantotie saskaņotie standarti • Panaudoti suderinti standartai • Standarts armonizzati uzati • Normy spojne powiązane • Normas armonizadas usadas • Standardele armonizate utilizate • Použité harmonizované normy • Uporabljene usklajeni standardi • Estándares armonizados utilizados • Harmoniserade standarder som används</p>	<p>BS EN ISO 12100-1 BS EN ISO 13857 BS EN 349 BS EN ISO 5349-1 BS EN ISO 5349-2</p>
<p>Technical standards and specifications used • Използвани технически стандарти и спецификации • Použité technické normy a specifikace • Brugte tekniske standarder og specifikationer • Gebruikte technische standaards en specificaties • Kasutatud tehnilised standardid ja spetsifikatsioonid • Käytetyt tekniset standardit ja eritelmät • Spécifications et normes techniques utilisées • Angewandte technische Normen und Spezifikationen • Τεχνικά πρότυπα και προδιαγραφές που χρησιμοποιήθηκαν • Műszaki szabványok és specifikációk • Standard tecnici e specifiche applicati • Izmantotie tehniskie standarti un specifikācijas • Panaudoti techniniai standartai ir techninė informacija • Standards und specificazzjonijiet teknici uzati • Normy i specyfikacje techniczne powiązane • Normas técnicas e especificações usadas • Standardele tehnice și specificațiile utilizate • Použité technické normy a specifikace • Uporabljene tehnični standardi in specifikacije • Estándares y especificaciones técnicas utilizadas • Tekniska standarder och specifikationer som används</p>	<p>2002/95/EEC 2008/385/EEC</p>
<p>The place and date of the declaration • Место и дата на декларацията • Misto a datum prohlášení • Sted og dato for erklæringen • Plaats en datum van de verklaring • Deklarācijas vieta un datums • Deklarācijas vieta ir data • Il-post u d-data tad-dikjarazzjoni • Miejsce i data wystawienia deklaracji • Local e data da declaração • Local și data declarației • Miesto a dátum vyhlásenia • Kraj in datum izjave • Lugar y fecha de la declaración • Plats och datum för deklARATIONEN</p>	<p>Smithco / Humboldt 1020 Hwy 224 Humboldt Ks 66748 USA 3-Dec.-09</p>
<p>Signature of the person empowered to draw up the declaration on behalf of the manufacturer, holds the technical documentation and is authorised to compile the technical file, and who is established in the Community. Подпис на човека, уълномощен да състави декларацията от името на производителя, който поддържа техническата документация и е оторизиран да изготви техническия файл и е регистриран в общността • Podpis osoby oprávněné sestavit prohlášení jménem výrobce, držel technickou dokumentaci a osobu oprávněné sestavit technické soubory a založene v rámci Evropského společenství. Underskrift af personen, der har fuldmagt til at udarbejde erklæringen på vegne af producenten der er indehaver af dokumentationen og er bemyndiget til at udarbejde den tekniske journal, og som er baseret i nærområdet. Handtekening van de persoon die bevoegd is de verklaring namens de fabrikant te tekenen, de technische documentatie bewaart en bevoegd is om het technische bestand samen te stellen, en die is gevestigd in het Woongebied. Уһендусе регистриссэ кантуд иску алкiri, kes on volitatud tootja nimel deklaratsiooni koostama, kes omab tehnilisdokumentatsiooni ja kellel on õigus koostada tehniline toimik. Sen henkilö allkirjoitus, jolla on valmistajan valtuutus vakuutuksen laadintaan, jolla on hollussaan tekniset asiakirjat, joka on valtuutettu laatimaan tekniset asiakirjat ja joka on sijoittautunut yhteisöön. Signature de la personne habilitée à rédiger la déclaration au nom du fabricant à détenir la documentation technique, à compiler les fichiers techniques et qui est implantée dans la Communauté. Unterschrift der Person, die berechtigt ist, die Erklärung im Namen des Herstellers abzugeben, die die technischen Unterlagen aufbewahrt und berechtigt ist, die technischen Unterlagen zusammenzustellen, und die in der Gemeinschaft niedergelassen ist. Υπογραφή σπομου εξουσιοδοτημένου για την σύνταξη της δήλωσης εκ μέρους του κατασκευαστή, ο οποίος κατέχει την τεχνική έκθεση και έχει την εξουσιοδότηση να τηρείται τον τεχνικό φάκελο και ο οποίος είναι ιδιοκτήτης στην Κοινότητα. A gyártó nevében meghatalmazott személy, akinek jogában áll módosítani a nyilatkozatot, a műszaki dokumentációt őrizi, engedéllyel rendelkezik a műszaki fájllal összeállításához, és aki a közösségben telepedett személy. Firma della persona autorizzata a redigere la dichiarazione a nome del fabbricante, in possesso dell'adocumentazione tecnica ed autorizzata a costituire il fascicolo tecnico, che deve essere stabilita nella Comunità. Tās personas paraksts, kura ir pilnvarota deklarācijas sastādīšanai ražotāja vārdā, kurai ir tehniskā dokumentācija, kura ir pilnvarota sagatavot tehnisko reģistru un kura ir apstiprināta Kopienā. Asmuo, kuris yra gana žinomas, kunam gamintojas suteikė įgaliojimus sudaryti šią deklaraciją, ir kuris įjapirasė, turi visą techninę informaciją ir yra įgaliojtas sudaryti techninės informacijos dokumentą. Il-firma tal-persuna awtorizzata li ffassal id-dikjarazzjoni fiseh il-fabrikant, għandha d-dokumentazzjoni teknika u hija awtorizzata li tikkompila l-fajll tekniku u li hija stabbilita fil-Komunità. Podpis osoby upowaznionej do sporządzenia deklaracji w imieniu producenta, przechowującej dokumentację techniczną, upowaznioną do stworzenia dokumentacji technicznej oraz wyznaczonej ds. wspólnotowych. Assinatura da pessoa com poderes para emitir a declaração em nome do fabricante, que possui a documentação técnica, que está autorizada a compilar o processo técnico e que está estabelecida na Comunidade. Semnătura persoanei împuternicite să elaboreze declarația în numele producătorului, care deține documentația tehnică, este autorizată să compileze dosarul tehnic și este stabilită în Comunitate. Podpis osoby poverenej vystavenim vyhlásenia v mene výrobcu, ktorá má technickú dokumentáciu a je oprávněná spracovať technické podklady a ktorá je umiestnená v Spoločenstve. Podpis osebe, pooblašene za izdelavo izjave v imenu proizvajalca, ki ima tehnično dokumentacijo in lahko sestavlja spis tehnične dokumentacije, ter ima sedež v Skupnosti. Firma de la persona responsable de la declaración en nombre del fabricante, que posee la documentación técnica está autorizada para recopilar el archivo técnico y que está establecido en la Comunidad. Undertecknas av den som bemyndigad att upprätta deklarationen a tillverkarens vägnär, innehar den tekniskadokumentationen och är bosatt i gemenskapen. doi teknični dokumentaciji, ki je stabilna v skupnosti.</p>	<p>2004/42/EC/Annex II 1A:2 Tim Lansdell Technical Director 19th March 2009 Ransomes Jacobsen Limited West Road Ransomes Europark, Ipswich</p>  <p>2006/42/EC Annex II 1A:10 Larry Johnson Technical Director Smithco Inc. 34 West Avenue Wayne, PA 19087-3311 10-Dec-09</p>
<p>Certificate Number • Номер на сертификат • Číslo osvědčení • Certifikatnummer • Certificaatnummer • Serifikatadi number • Hyväksyntänumero • Número de certicat • Bescheinigungsnummer • Αριθμός Πιστοποίησης • Hitelesítési szám • Numero del certificato • Serifikata numurs • Serifikato numēns • Numru tac-Certifikat • Numero do Certificado • Număr certicat • Číslo osvědčena • Številka certifikata • Número de certificado • Certifikatnummer</p>	<p>75702009</p>



## The Smithco Commercial Products Two-Year Limited Warranty

Smithco, Inc. (Smithco) warrants your 2007 or newer Smithco Commercial Product ("Product") purchased after January 1, 2007, to be free from defects in materials or workmanship for the period of time listed below. Where a warrantable condition exists, Smithco will repair the Product at no cost to you including diagnosis, labor (at the Smithco standard labor rate, subject to the Smithco flat rate schedule), and parts.

### Warranty Duration is:

- (1) Two years, 1500 operational hours\* from the date of delivery to the original purchaser or three years from the date of original manufacturer of the product, whichever occurs first. (\*Products equipped with hour meter).
- (2) Products used in rental situations are covered for 90 days from date of delivery to original user/renter.

### Owner Responsibilities:

As the Product owner, you are responsible for required maintenance and adjustments stated in your Owner's Manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim. **You are particularly responsible to train all present and future operators of this product on the safe operation of this product at your location.**

### Instructions for Obtaining Warranty Service:

You are responsible for notifying the Authorized Smithco Products Distributor from whom you purchased the Product as soon as you believe a warrantable condition exists and not later than 30 days from discovery of the condition.

If you need help locating an Authorized Smithco Distributor, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:





Smithco Product Support Department  
Highway 55 @ Poplar St.  
Cameron, Wisconsin 54822  
Telephone: 715-458-4192 E-Mail: [ProductSupport@Smithco.com](mailto:ProductSupport@Smithco.com)

### Maintenance Parts:

Parts scheduled for replacement as required maintenance ("Maintenance Parts"), are warranted for the period of time up to the scheduled replacement time for that part.

### Items/Conditions Not Covered:

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. The items/conditions listed below are not covered by this warranty:

-  Product failures which result from the use of non-Smithco replacement parts, or from installation and use of add-on, modified, or unapproved accessories are not covered.
-  Product failures which result from failure to perform required maintenance and/or adjustments are not covered.
-  Product failures that result from operating the Product in an abusive, negligent or reckless manner are not covered.
-  This warranty does not apply to parts subject to consumption through use, unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to: blades, tines, teeth, scarifiers, rakes, plates, wear plates, castor wheels, tires, batteries, filters, belts, nozzles, etc.

- ~~✳~~ This warranty does not apply to failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.
- ~~✳~~ This warranty does not apply to normal "wear and tear" items. Normal "Wear and Tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.
- ~~✳~~ Smithco may require the return of failed parts or components in order to determine the validity of any warranty claim.
- ~~✳~~ Smithco will not be obligated to replace components of other manufacturers if inspection by the original component manufacturer indicates that failure was due to normal wear and tear, expected consumption through use or improper care or service.

**Other Legal Disclaimers:**

The above remedy for product defects through repair or replacement by an authorized Smithco distributor or dealer is the purchaser's sole remedy for any defect. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**THERE ARE NO OTHER EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH ABOVE. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE LIMITED WARRANTIES CONTAINED HEREIN.**

Some states may not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**THE SMITHCO COMPANY IS NOT LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT, INCLUDING ANY COST OR EXPENSE OF PROVIDING A SUBSTITUTE PRODUCT OR SERVICE DURING PERIODS OF MALFUNCTION OR NON-USE.**

Some states may not allow the exclusion of indirect, incidental or consequential damages, so the above exclusion may not apply to you.

**Smithco neither assumes, nor authorizes any person to assume for it, any other liability in connection with the sale or use of this product.**

**SMITHCO, INC.**

**Wayne, PA 19087**

