

# shindaiwa®

## 66008

# Multi-Tool Tiller-Cultivator Attachment

FOR MODELS: M262, M235

ENGLISH

## *Operator's Manual*

### **WARNING**



***Users of this equipment risk injury to themselves and others if the unit is used improperly and/or safety precautions are not followed. ECHO provides an operator's manual. It must be read and understood for proper and safe operation. Failure to do so could result in serious injury.***

Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

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## INTRODUCTION

Welcome to the SHINDAIWA family. This SHINDAIWA product was designed and manufactured to provide long life and on-the-job dependability. Read and understand this manual. You will find it easy to use and full of helpful operating tips and SAFETY messages.

### The Operator's Manual

Keep it in a safe place for future reference. Contains specifications and information for safety, operation, maintenance, storage and assembly specific to this product.

## SERVICING INFORMATION

### Parts/Serial Number

Genuine SHINDAIWA Parts and Assemblies for your SHINDAIWA products are available only from an Authorized SHINDAIWA Dealer. When you do need to buy parts **always** have the Model Number and Serial Number of the unit with you. You can find these numbers on the engine housing. For future reference, write them in the space provided below.

Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_

### Service

Service of this product during the warranty period must be performed by an Authorized SHINDAIWA Service Dealer. For the name and address of the Authorized SHINDAIWA Service Dealer nearest you, ask your retailer or call: 1-877-986-7783. Dealer information is also available on [WWW.SHINDAIWA-USA.COM](http://WWW.SHINDAIWA-USA.COM). When presenting your unit for Warranty service/repairs, proof of purchase is required.



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## Consumer Product Support

If you require assistance or have questions concerning the application, operation or maintenance of this product you may call the SHINDAIWA Consumer Product Support Department at 1-877-986-7783 from 8:00 am to 5:00 pm (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

## Product Registration

To ensure trouble free warranty coverage it is important that you register your SHINDAIWA equipment on-line at [WWW.SHINDAIWA-USA.COM](http://WWW.SHINDAIWA-USA.COM) or by filling out the product registration sheet included in this manual. Registering your product confirms your warranty coverage and provides a direct link between you and ECHO if we find it necessary to contact you.

## Additional or Replacement Manuals

**Replacement Operator and Parts Catalogs** are available from your SHINDAIWA dealer or at [WWW.SHINDAIWA-USA.COM](http://WWW.SHINDAIWA-USA.COM) or by contacting the Consumer Product Support Department (1-877-986-7783). Always check [WWW.SHINDAIWA-USA.COM](http://WWW.SHINDAIWA-USA.COM) for updated information.

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## SAFETY

### Manual Safety Symbols and Important Information

Throughout this manual and on the product itself, you will find safety alerts and helpful, informational messages preceded by symbols or key words. The following is an explanation of those symbols and key words and what they mean to you.

#### **DANGER**

*The safety alert symbol accompanied by the word “DANGER” calls attention to an act or condition which WILL lead to serious personal injury or death if not avoided.*

#### **WARNING**

*The safety alert symbol accompanied by the word “WARNING” calls attention to an act or condition which CAN lead to serious personal injury or death if not avoided.*

**! CAUTION**

*The safety alert symbol accompanied by the word “CAUTION” calls attention to an act or condition which may lead to minor or moderate personal injury if not avoided.*

**NOTICE**

*The enclosed message provides information necessary for the protection of the unit.*

Note: This enclosed message provides tips for use, care and maintenance of the unit.









**CIRCLE AND SLASH SYMBOL**

This symbol means the specific action shown is prohibited. Ignoring these prohibitions can result in serious or fatal injury.

**International Symbols**

Symbol	Description	Symbol	Description
	Warning, See Operator's Manual		Safety / Alert
	Wear Eye, Ear and Head Protection		Finger Severing
	Wear Hand and Foot Protection		Rotating Cutting Attachment
	Wear Face Shield		Wear Slip Resistant Footwear
	Keep Feet Away From Blade		Do not operate closer than 15 m (50 ft.) from electrical hazards. Keep bystanders at least 15 m (50 ft.) away.

Symbol	Description	Symbol	Description
	DO NOT USE BLADES - Line Head Only		Thrown Objects
	Plan retreat path from falling objects.		Hot Surface
		<p>AVOID KICKOUT Keep Bystanders At Least 15 m (50 ft.) Away</p> <p>Beware Thrown Objects Wear Eye Protection</p>	
		<p>Keep Bystanders and Helpers Away 15 m (50 ft.)</p>	

**Personal Condition and Safety Equipment**

** WARNING**

*Users of this product risk injury to themselves and others if the unit is used improperly and/or safety precautions are not followed. Proper clothing and safety gear must be worn when operating unit.*

**Physical Condition**

Your judgment and physical dexterity may not be good:

- If you are tired or sick
- If you are taking medication
- If you have taken alcohol or drugs

Operate unit only if you are physically and mentally well.

## Eye Protection

### **WARNING**

- ◆ **Eye protection that meets ANSI Z87.1 or CE requirements must be worn whenever you operate the unit.**
- ◆ **For additional safety, a full-face shield may be worn over safety glasses or goggles to provide protection from sharp branches or flying debris.**

## Hand Protection

Wear sturdy, no-slip, rubber work gloves to improve your grip on the handles. Gloves also provide protection against cuts and scratches, cold environments, and reduce the transmission of machine vibration to your hands.

## Hearing/Ear Protection

ECHO recommends wearing hearing protection whenever unit is used.

## Breathing Protection

Operators who are sensitive to dust or other common airborne allergens may need to wear a dust mask to prevent inhaling these materials while operating unit. Dust masks can provide protection against dust, plant debris, and other plant matter such as pollen. Make sure the mask does not impair your vision, and replace the mask as needed to prevent air restrictions.

## Proper Clothing

Wear snug-fitting, durable clothing:

- Pants should have long legs, shirts should have long sleeves.
- **DO NOT WEAR SHORTS.**
- **DO NOT WEAR TIES, SCARVES, JEWELRY,** or clothing with loose or hanging items that could become entangled in moving parts or surrounding growth.
- Keep clothing buttoned or zipped, and keep shirt tails tucked in.

Wear sturdy work shoes with nonskid rubber soles:

- **DO NOT WEAR OPEN TOED SHOES.**
- **DO NOT OPERATE UNIT BAREFOOTED.**

Keep long hair away from engine and air intake. Retain hair with cap or net.

Heavy protective clothing can increase operator fatigue, which may lead to heat stroke. Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.

## WARNING

***The components of this machine generate an electromagnetic field during operation, which may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemakers should consult with their physician and the pacemaker manufacturer before operating this machine. In the absence of such information, ECHO does not recommend the use of this machine by anyone who has a pacemaker.***

### Extended Operation / Extreme Conditions

## CAUTION

***Prolonged exposure to cold and/or vibration may result in injury. Read and follow all safety and operation instructions to minimize risk of injury. Failure to follow instructions may result in painful wrist/hand/arm injuries.***

It is believed that a condition called Raynaud's Phenomenon, which affects the fingers of certain individuals, may be brought about by exposure to vibration and cold. Exposure to vibration and cold may cause tingling and burning sensations, followed by loss of color and numbness in the fingers. The following precautions are strongly recommended, because the minimum exposure, which might trigger the ailment, is unknown.

- Keep your body warm, especially the head, neck, feet, ankles, hands, and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks, and also by not smoking.
- Limit the hours of operation. Try to fill each day with jobs where operating the unit or other hand-held power equipment is not required.

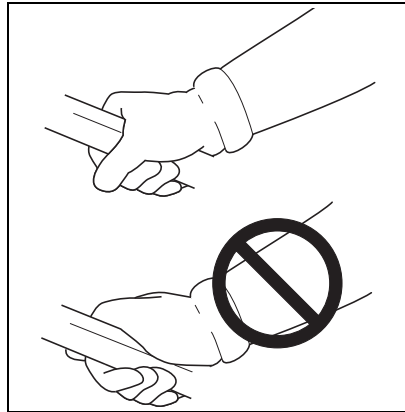




- If you experience discomfort, redness, and swelling of the fingers followed by whitening and loss of feeling, consult your physician before further exposing yourself to cold and vibration.

### Repetitive Stress Injuries (RSI)

It is believed that overusing the muscles and tendons of the fingers, hands, arms, and shoulders may cause soreness, swelling, numbness, weakness, and extreme pain in those areas. Certain repetitive hand activities may put you at a high risk for developing a Repetitive Stress Injury (RSI). An extreme RSI condition is Carpal Tunnel Syndrome (CTS), which could occur when your wrist swells and squeezes a vital nerve that runs through the area. Some believe that prolonged exposure to vibration may contribute to CTS. CTS can cause severe pain for months or even years.



To reduce the risk of RSI/CTS, do the following:

- Avoid using your wrist in a bent, extended, or twisted position. Instead try to maintain a straight wrist position. Also, when grasping, use your whole hand, not just the thumb and index finger.
- Take periodic breaks to minimize repetition and rest your hands.
- Reduce the speed and force with which you do the repetitive movement.
- Do exercises to strengthen the hand and arm muscles.
- Immediately stop using all power equipment and consult a doctor if you feel tingling, numbness, or pain in the fingers, hands, wrists, or arms. The sooner RSI/CTS is diagnosed, the more likely permanent nerve and muscle damage can be prevented.

## **! DANGER**

***All over head electrical conductors and communications wires can have electricity flow with high voltages. This unit is not insulated against electrical current. Never touch wires directly or indirectly, otherwise serious injury or death may result.***

## ! DANGER

***Do not operate this product indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.***

### Read the Manuals

- Provide all users of this equipment with the Operator's Manual for instructions on safe operation.

### Clear the Work Area

- Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 15 m (50 ft.) while the unit is in use.

### Keep a Firm Grip

- Always hold throttle handle and support handle with thumbs and fingers tightly encircling the handles.

### Keep a Solid Stance

- Maintain footing and balance at all times. Do not stand on slippery, uneven or unstable surfaces. Do not work in odd positions or on ladders. Do not over reach.

### Avoid Hot Surfaces

- During operation, the drive shaft housing and attachment bearing housing may become very hot, too hot to touch. Avoid contact during and immediately after operation.



## Equipment

## ! WARNING

***Use only SHINDAIWA attachments. Serious injury may result from the use of a non-approved attachment combination. ECHO, INC. will not be responsible for the failure of cutting devices, attachments or accessories which have not been tested and approved by ECHO. Read and comply with all safety instructions listed in this manual and safety manual.***

- ◆ Check unit for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.

- ◆ Inspect guards and shields for damage and to ensure that they are securely in place. Replace if damaged or missing.
- ◆ Check that the attachment is firmly attached and in safe operating condition.
- ◆ Check that handle and harness (if included) are adjusted for safe, comfortable operation. See Assembly Section for proper adjustment.

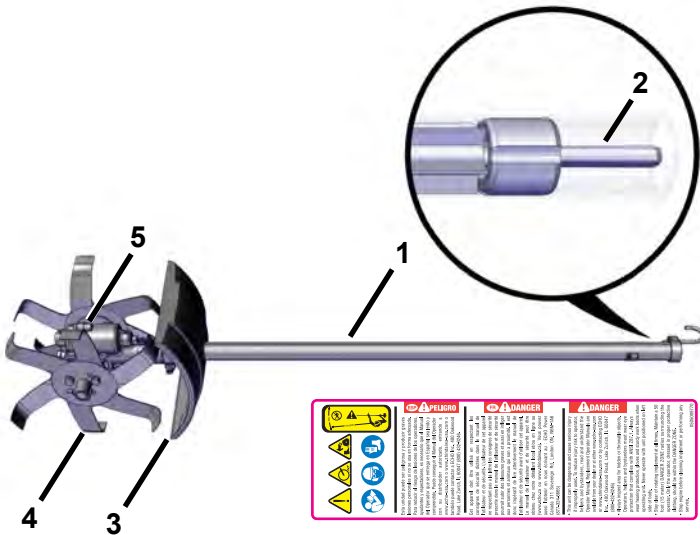
## **WARNING**

*Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings.*

- ◆ ALWAYS stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit.
- ◆ DO NOT start or operate unit unless all guards and protective covers are properly assembled to unit.
- ◆ NEVER reach into any opening while the engine is running. Moving parts may not be visible through openings.

## DESCRIPTION

Locate the safety decal(s) on your unit. Make sure the decal(s) is legible and that you understand and follow the instructions on it. If a decal cannot be read, a new one can be ordered from your SHINDAIWA dealer. Safety label is for example only. Your label may appear slightly different.



1. Lower Drive Shaft Assembly
2. Flexible Drive Cable
3. Shield
4. Tines
5. Gear Housing

## CONTENTS

The SHINDAIWA product you purchased has been factory pre-assembled for your convenience. Due to packaging restrictions, some assembly may be necessary.

After opening the carton, check for damage. Immediately notify your retailer or SHINDAIWA Dealer of damaged or missing parts. Use the contents list to check for missing parts.

- 1 Multi-Tool Tiller-Cultivator Attachment
- 1 Operator's Manual
- 1 Warranty Sheet
- 1 Storage Hook Assembly

## ASSEMBLY

### Power Head Shaft to Lower Shaft Assembly

#### WARNING

***Do not perform maintenance or assembly procedures with engine running.***

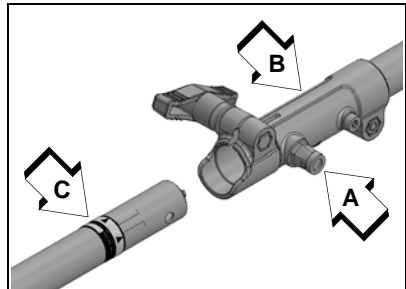
Parts Required: Multi-Tool Power Head Shaft and Coupling

1. Set Power Head/Shaft Assembly on a level surface.
2. Pull locator pin (A) out, and turn counter-clockwise ¼ turn to lock-out position.
3. Remove vinyl cap from attachment drive shaft.
4. Remove cardboard spacer, if necessary.

Note: Your coupler may appear different than coupler shown.

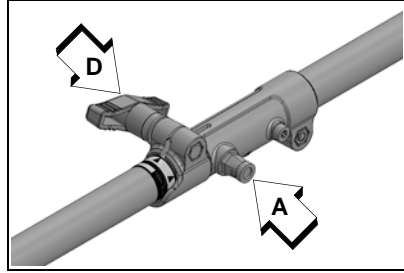
5. Carefully fit attachment drive shaft assembly into coupler (B) to decal assembly line (C), making sure that the inner lower drive shaft engages the square upper drive shaft socket.

Note: Earlier model power heads may have shorter couplings.



Note: Lower bearing housing and head assembly must be in line with the engine.

6. Rotate locator pin (A)  $\frac{1}{4}$  turn clockwise to engage lower shaft hole. Insure locator pin is fully engaged by twisting lower drive shaft. Locator pin should snap flush in coupler. Full engagement will prevent further shaft rotation.
7. Secure lower shaft assembly to coupler by tightening clamping knob (D).



## OPERATION

### WARNING

***Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit. Allow unit to cool before performing service.***

Note: Refer to your Multi-Tool power source Operator's Manuals for correct engine fueling, starting and stopping instructions.

### Operating Techniques

### WARNING

- ◆ ***When engine starts tines may rotate. Warn fellow workers and keep children and pets from coming nearer than 4.5 m (15 ft.).***
- ◆ ***Always grip throttle handle with right hand and support handle with left hand.***

- ◆ *Always stop engine when transporting unit to or between work areas..*
- ◆ *Do not perform maintenance procedures, unclog or clean cultivator tines while engine is running.*
- ◆ *Do not operate the cultivator above ground level or near feet.*
- ◆ *Do not allow the tines to contact large obstructions which may cause kickback and loss of control.*
- ◆ *Failure to follow these warnings may result in serious injury.*



1. The tilling width of the cultivator is approximately 165 mm (6.5 in.). Place cultivator in area to be tilled, hold unit firmly with left hand on front grip and right hand on rear grip and gradually engage throttle trigger. Guide the cultivator allowing the tines to pull forward. The soil hardness will control tilling speed.
2. The cultivator attachment is capable of tilling in the forward or reverse direction. For deep soil tilling, till forward then lightly pull unit rearward allowing the tines to make a deeper cut into the soil. Deep soil cultivating can also be enhanced by repositioning the tines.
3. To raise or aerate the soil, tilt engine closer to the ground which will raise cultivator tines higher relative to the soil surface.



## NOTICE

*Do not operate cultivator underwater. The gear housing is not sealed and water will wash away lubrication, damaging gears, bearings, and seals.*



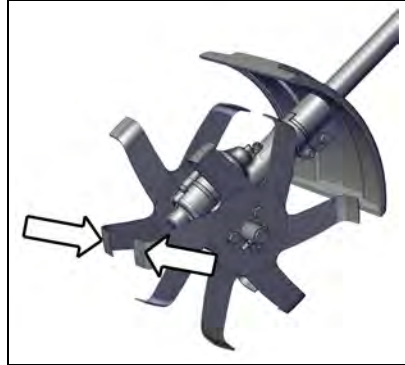
### Resetting Tines for Deep Cultivation

The tines are factory assembled with blade ends offset for standard cultivation. For deep cultivation, the left tine (viewed from the operator's position) must be repositioned on the hub aligning the left and right tine blade ends directly across from each other.

1. Remove three (3) bolts (A) mounting left tine to hub. The bolts will be mounted in hole labeled (1).



2. Rotate tine counter clockwise and position hole labeled (2) over hub mounting holes. The tine blade ends should be aligned directly opposite each other.
3. Install and tighten bolts.



### MAINTENANCE

#### WARNING

***Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit. Allow unit to cool before performing service. Wear gloves to protect hands from sharp edges and hot surfaces.***

Your SHINDAIWA unit is designed to provide many hours of trouble free service. Regular scheduled maintenance will help your unit achieve that goal. If you are unsure or are not equipped with the necessary tools, we recommend that you take your unit to a SHINDAIWA Servicing Dealer for maintenance. To help you decide whether you want to DO-IT-YOURSELF or have the SHINDAIWA Dealer do it, each maintenance task has been graded. If the task is not listed, see your SHINDAIWA Dealer for repairs.

**Skill Levels**

**Level 1** = Easy to do. Common tools may be required.

**Level 2** = Moderate difficulty. Some specialized tools may be required.

**Level 3** = See your dealer.

**Maintenance Intervals**

Component/ System	Maintenance Procedure	Skill Level	Interval
Drive Shaft	Grease	1	Every 25 hours of use <sup>1</sup>
Gear Housing			Every 25 hours of use <sup>2</sup>
Gear Housing/ Tines	Clean		Daily or every 4 hours
Screws/ Nuts/Bolts	Inspect/Tighten/Replace		Before each use

**IMPORTANT** - Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance.

<sup>1</sup>Apply lithium based grease.

<sup>2</sup>Apply lithium based EP00 grease every 25 hours of use.

**Lubrication**

**Level 2.**

Parts Required:                      Lithium-based EP00 Grease for gear case;  
    Lithium Base Grease for drive shaft

**Gear Housing**

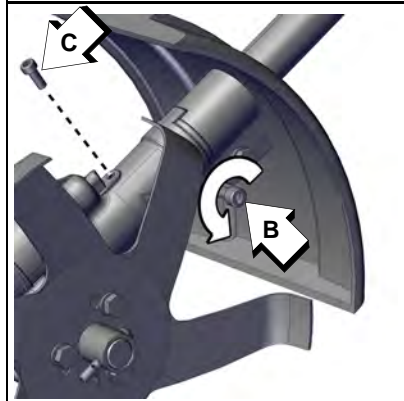
1. Clean all loose debris from gear box.

2. Remove grease access bolt (A) and check level of grease.
3. Add grease if necessary. DO NOT over-fill.
4. Install the grease access bolt.

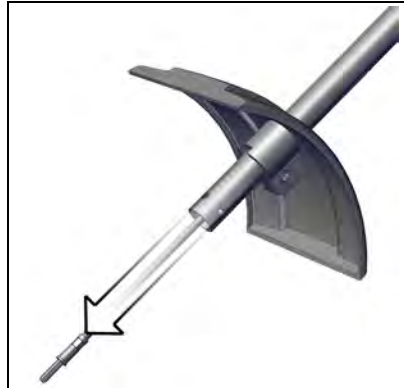


**Drive Shaft (Lower)**

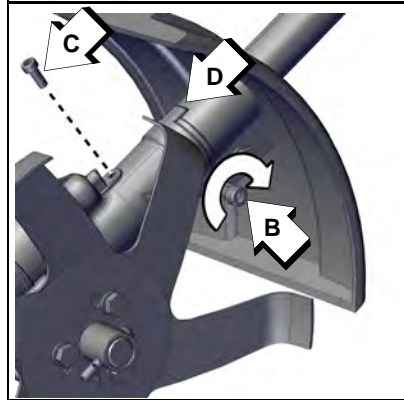
1. Loosen gear housing mounting bolt (B) and remove gear housing locator screw (C).
2. Pull gear box from drive shaft housing. Shield will remain on drive shaft.



3. Pull flexible cable from the drive shaft housing, wipe clean and apply 15 ml (0.5 oz.) of grease.
4. Slide the flexible cable back in the drive housing. **DO NOT** get dirt on the flex cable.



5. Assemble gear housing onto drive shaft correctly matching gear housing to shield cutout (D).
6. Install and tighten locator screw (C).
7. Tighten gear housing mounting bolt (B).



## STORAGE

### Storage Hook Installation

1. Insert small end of hook into locating hole on attachment shaft.
2. Slide plastic cap onto end of attachment shaft.



**SPECIFICATIONS**

MODEL	66008
Length (with tines)	907 mm (35.7 in.)
Width	160 mm (6.3 in.)
Height (with tines)	220 mm (8.37 in.)
Weight (with tines)	2.34 kg (5.2 lb.)
Drive Shaft	6.35 mm (0.25 in.)
Tines (diameter)	220 mm (8.7 in.)
Tines (working width)	160 mm 6.3 in.)
Gear Case Ratio	42.75:1
Lubrication	EP00 grease

ENGLISH

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**PRODUCT REGISTRATION**

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**Thank you for choosing Shindaiwa Power Equipment**

Please go to <http://www.shindaiwa-usa.com> to register your new product online. It's **FAST** and **EASY!** NOTE: your information will never be sold or misused by ECHO, Inc. Registering your purchase enables us to contact you in the unlikely event of a service update or product recall, and verifies your ownership for warranty consideration.

If you do not have access to the Internet, you can complete the form below and mail to:

***ECHO Inc., Product Registration, PO Box 1139, Lake Zurich IL 60047.***

# shindaiwa®

PRODUCT REGISTRATION CARD : TARJETA DE REGISTRO : CARTE D'ENREGISTREMENT DU PRODUIT

**ONLINE OPTION:** Register online and save a stamp! You will be alerted of product updates and/or be sent new Shindaiwa product information and special offers. Simply go to: [www.shindaiwa-usa.com](http://www.shindaiwa-usa.com)

**OPCIÓN POR INTERNET:** Regístrese en la página web y ahorre una estampilla. Le alertarán sobre actualizaciones del producto y/o se le enviara información sobre los nuevos productos Shindaiwa y las ofertas especiales. Simplemente visite: [www.shindaiwa-usa.com](http://www.shindaiwa-usa.com)

**OPTION EN LIGNE:** Enregistrez en ligne et épargnez un timbre. Vous serez alerté(e) des mises à jour de produits ainsi que les offres spéciales. Simplement visitez le: [www.shindaiwa-usa.com](http://www.shindaiwa-usa.com)

Please Print : Por Favor Escriba Con Letra De Molde : En Lettre Carré S.V.P.

Confidential: Information provided will not be shared or sold

Purchaser's Name : Nombre del Comprador : Nom de l'acheteur	
Address : Dirección : Adresse	
City : Ciudad : Ville	State : Estado : Province
Zip Code : Código Postal : Code Postal	
E-Mail Address : Dirección De Correo Electrónico : Courrier Electronique	
Phone Number : Número De Teléfono : Téléphone	Date of Purchase : Fecha de la Compra : Date de l'achat
Where Purchased : Nombre del Almacén donde fue Comprado : Lieu d'achat	

Model Number : Numero del Modelo : No. de modèle	Serial Number : Numero de Serie : No. de série

Registering your purchase enables us to contact you in the unlikely event of a service update or product recall and verifies your ownership in the event of loss. El registrar su compra nos permite estar en contacto con usted en caso de cualquier evento de actualización de servicio o llamado de atención de un producto. El registro de su compra también verifica su propiedad. L'enregistrement de votre achat nous permettra de vous contacter dans le cas improbable de modifications des instructions d'entretien ou de rappel du produit et vérifier que vous êtes le propriétaire en cas de vol ou de perte.

Primary use of tool:  Professional  Homeowner  Rental Equip.  
 Uso primario de la herramienta:  Profesional  Dueño de casa  Alquiler  
 Usage principal:  Profesional  Residential  Location

Do you wish to receive periodic Shindaiwa product information and special offers by e-mail?  Yes  No

¿Desea usted recibir información periódica y ofertas especiales por correo electrónico sobre el producto Shindaiwa?  Yes  No

Souhaitez-vous recevoir périodiquement de l'information sur les produits Shindaiwa et les offres spéciales par courrier électronique?  Oui  Non

Did you visit the Shindaiwa website before purchasing your product?  Yes  No

¿Visitó usted la página web Shindaiwa antes de comprar su producto?  Si  No

Avez-vous visité le site d'Shindaiwa avant de procurer votre produit?  Oui  Non

What factor(s) most influenced your purchase?  
 Performance  Price  Dealer  
 Reliability  Quality  Warranty  
 Friend/Family  Brand

¿Qué factor(es) influenció más en su compra?  
 Funcionamiento  Precio  Distribuidor  
 Confiabilidad  Calidad  Garantía  
 Amigo/Familia  Marca

Quel facteur (facteurs) vous a influencé le plus?  
 Performance  Prix  Marchand  
 Fiabilité  Expérience  Qualité  
 Ami/Famille  Garantie

1.877.966.7783

[www.shindaiwa-usa.com](http://www.shindaiwa-usa.com)

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