

TILMOR

OPERATORS MANUAL E-OX



Manufactured by
Tilmor LLC.
Made in the USA
Dalton, Ohio 44618



295 Kurzen Rd. N
Dalton, OH 44618
www.tilmor.com

Visit www.tilmor.com for the latest version of this operator's manual.

A downloadable parts manual is also available.

To the Owner Contact Information and Product Identification

If contacting Tilmor for information about servicing your product please provide the product and serial numbers.

Please complete the following information for future reference. See the pictures below to find the location of the identification numbers.

Date of Purchase: _____

Dealer / Distributor: _____

Dealer / Distributor Address: _____

Dealer / Distributor Phone Number: _____

Model# (A): _____
Serial# (B): _____
Engine Serial# (C): _____

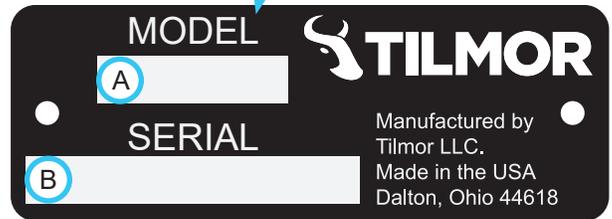


TABLE OF CONTENTS

INTRODUCTION	PAGE 5
Product Description	5
Using Your Manual	6
Manual Glossary	6
SAFETY	PAGE 7
Safety Decals	7
Training Required	8
Personal Protective Equipment Requirements	8
Operation Safety	8
Maintenance	9
Storage	9
General Battery Powered Tool Use and Care	9
GENERAL OPERATION	PAGE 11
Standard Operational Controls	11
Power Button (A)	12
Throttle (B)	12
Battery Charge Indicator (C)	12
Speed Selector (D)	12
Handlebar Adjustment Lever (E)	12
Cover Latches (F)	12
Circuit Breaker (G)	12
Hitch Pin (H)	12
Assembly	12
Replacing Batteries	12
Handlebar Adjustment	13
Hitch Use	13
Operating Procedure	13
Storage	13
Cleaning	13
SPECIFICATIONS	PAGE 14
Dimensions	14
WARRANTY	PAGE 15
Return Policy and Procedure	15
Warranty	15
Tilmor Warranty Period	15
Tilmor Warranty Policy	15
Tilmor Warranty Procedure	15

INTRODUCTION



Tilmor LLC. is pleased to provide you with your new Tilmor E-Ox Electric Wheel Hoe.

Please visit our website, www.tilmor.com for a complete list of available Tilmor products, and resources.

Product Description

The Tilmor E-Ox combines the simple functionality of a wheel hoe with the ease and power of a walk behind tractor. The E-Ox is a great solution for the small scale farmer that does not need the capabilities of a larger walk behind tractor, and is perfect for use in hoop houses where exhaust fumes can be a problem.

Why Do I Need an Operator's Manual?

This manual has been created to help you gain the important knowledge of what is needed to safely operate, maintain, and service your machine. It is divided into sections for convenient reference of the appropriate section.

You must read and understand the operator's manual for each piece of Tilmor equipment you own. Reading the operator's manual will help you become familiar with each specific piece of equipment. Understanding the operator's manual will help you, as well as others, avoid personal injury and/or damage to the equipment. Keep this manual with the machine at all times. The manual should remain with the machine even if it is sold. If this manual becomes damaged or unreadable, it should be replaced immediately. This manual is available on our website at www.tilmor.com

When using a Tilmor attachment, be sure to read and follow the safety and operating instructions of both the power unit and the attachment being used to ensure the safest operation possible.

The information in this manual provides the operator with the safest procedures to operate the machine while getting the maximum use out of the unit. Failure to follow the safety precautions listed in this manual may result in personal injury and/or damage to the equipment.

INTRODUCTION

Using Your Manual

Throughout this manual, you will encounter special messages and symbols that identify potential safety concerns to help you as well as others avoid personal injury or damage to the equipment.

SYMBOL DEFINITIONS



ATTENTION

This symbol identifies potential health and safety hazards. It marks safety precautions. Your safety and the safety of others is involved.

There are three signal words that describe the level of safety concern: Danger, Warning, and Caution. Safety should always be the #1 priority when working on or operating equipment. Accidents are more likely to occur when proper operating procedures are not followed or inexperienced operators are involved.

Note: Right-Hand and Left-Hand orientations may be referred to at different places throughout this manual. Right-Hand and Left-Hand is determined as if facing forward from the operator station.

SIGNAL WORD DEFINITIONS

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme cases.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage. It may also be used to alert against unsafe practices.

Manual Glossary

Implement	A piece of Tilmor equipment that requires a Tilmor tractor for operation.
Accessory	A device that attaches to a Tilmor tractor or Implement to extend its capabilities.
Machine	Describes any "Implement" or "Accessory" that is used in conjunction with a Tilmor power unit.

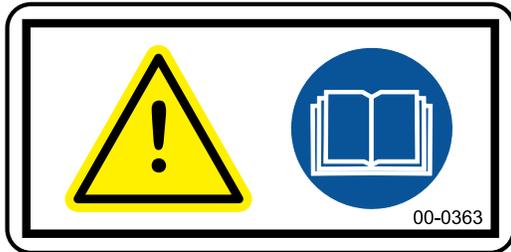
SAFETY

Safety Decals

The following safety decals must be maintained on your Tilmor AE-9001 E-Ox 36V.

Keep all safety decals legible. Remove all grease, dirt, and debris from safety decals and instructional labels. If any decals are faded, illegible, or missing, visit www.tilmor.com or call 1-844-255-5864 for replacements. When replacement or new components are installed, be sure that current safety decals are affixed to the replacement or new part.

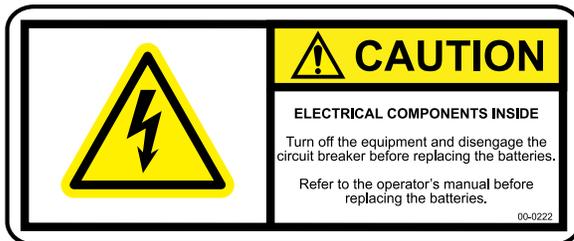
A



B



C



Decal	Description	Part Number	Quantity
A	Warning - Read Owners Manual	00-0363	1
B	Warning - General Safety	00-0221	1
C	Warning - Electrical Components	00-0222	1

SAFETY



General Safety Procedures for Tilmor Tractors, Attachments, & Accessories



Training Required

- The owner of this machine is solely responsible for properly training the operators.
- The owner/operator is solely responsible for the operation of this machine and prevention of accidents or injuries occurring to him/herself, other people, or property.
- Do not allow operation or service by children or untrained personnel. Local regulations may restrict the age of the operator.
- Before operating this machine, read the operator's manual and understand its contents.
- If the operator of the machine cannot understand this manual, it is the responsibility of this machine's owner to fully explain the material within this manual to the operator.
- Learn and understand the use of all of the controls.
- Know how to stop the power unit quickly in the event of an emergency.

Personal Protective Equipment Requirements

It is the responsibility of the owner to be sure that the operators use the proper personal protective equipment while operating the machine. Required personal protective equipment includes but is not limited to the following list.

- Prevent eye injury by wearing safety glasses while operating the machine.
- Closed toe shoes must be worn at all times.
- Long pants must be worn at all times.
- When operating in dusty conditions, it is recommended that a dust mask be worn.

Operation Safety

- Inspect all equipment before operation. Repair or replace any damaged, worn, or missing parts. Be sure all guards and shields are in proper working condition and are secured in place. Make all of the necessary adjustments before operating the machine.
- Some pictures in this manual may show shields or covers opened or removed in order to clearly illustrate any instructions. Under no circumstance should the machine be operated without these devices in place.
- Alterations or modifications to this machine can reduce safety and could cause damage to the machine. Do not alter safety devices or operate with shields or covers removed.
- Before each use, verify that all controls function properly and inspect all safety devices. Do not operate if controls or safety devices are not in proper working condition.
- Observe and follow all safety decals.
- Ensure all attachments or accessories are locked or fastened securely before operation.
- Ensure that all bystanders are clear of the machine before operation. Stop the machine if someone enters your work area.
- Always be alert to what is happening around you, but do not lose focus to the task you are performing.
- If you hit an object, stop and inspect the machine. Make all necessary repairs before continuing operation of the machine.
- Stop operation immediately at any sign of equipment failure. An unusual noise can be a warning of equipment failure or a sign that maintenance may be required. Make all necessary repairs before continuing operation of the machine again.
- Do not operate when there is a risk of lightning.
- Never allow riders on the power unit.

SAFETY



General Safety Procedures for Tilmor Tractors, Attachments, & Accessories



Maintenance

- Keep all safety decals legible. Remove all grease dirt, and debris from safety decals and instructional labels.
- If any decals are faded, illegible, or missing, contact Tilmor promptly for replacements.
- When new components are installed, be sure that current safety decals are affixed to the replacement components.
- If any component requires replacement use only original Tilmor replacement parts.
- Always turn the circuit breaker off and remove the batteries before performing any maintenance.
- Allow the power unit to cool after use, before performing any maintenance.
- Keep all bolts, nuts screws and other fasteners properly tightened.

Storage

- Store the E-Ox in an indoor dry place.
- Always allow the E-Ox to cool before storage.
- Always disconnect the circuit breaker and remove the batteries when storing the E-Ox.
- Keep the E-Ox clean, remove any debris and excess dirt / dust from the unit using compressed air. **(NOTE: Use caution when using compressed air around seals, and other fragile components.)**
- Do not wash the E-Ox with high pressure water.
- When washing the machine ensure that the circuit breaker is disconnected and the batteries are removed.
- When washing the E-Ox Do not get the electrical components wet.
- Dry the E-Ox thoroughly before storing.
- Do not store the E-Ox outdoors or in the rain or in direct sunlight.

General Battery Powered Tool Use and Care

- To prevent unintentional starting ensure that the circuit breaker is off when connecting the batteries, picking up, or carrying the unit, or folding the handlebars.
- Turn the circuit breaker off and remove the battery packs before making adjustments, changing implements, or storing the unit.
- Recharge the batteries with the battery charger specified by the battery manufacture. Using an unspecified charger or charger from a different manufacture may create a risk of fire.
- Keep unused battery packs away from other metal objects that may make a connection from one battery terminal to another. Shorting the battery terminals together could create the risk of fire or personal injury.
- Never use a damaged battery. A damaged battery may have liquids leaking from the battery. Avoid contact, if skin contact occurs flush with water. If liquid contacts eyes seek medical attention immediately.
- Do not expose a machine or battery to high temperatures. Temperatures greater than 130°C (265°F) can cause the battery to explode (See battery owner's manual for specific temperatures).
- Follow all battery charging instructions. Never charge a battery outside of the recommended temperature range. (See battery owner's manual for specific charging instructions).
- Do not modify or attempt to repair the machine, battery pack, or charging system, except as directed by instructions in the owner's manual of the machine, battery pack, or charging system.
- Never charge a battery in the rain or wet conditions.
- Never charge a battery in direct sunlight.
- Never open a battery.
- Dispose of batteries in accordance with local regulations.
- Never dispose of a battery in a fire.

SAFETY



General Safety Procedures for Tilmor Power Units, Attachments, & Accessories

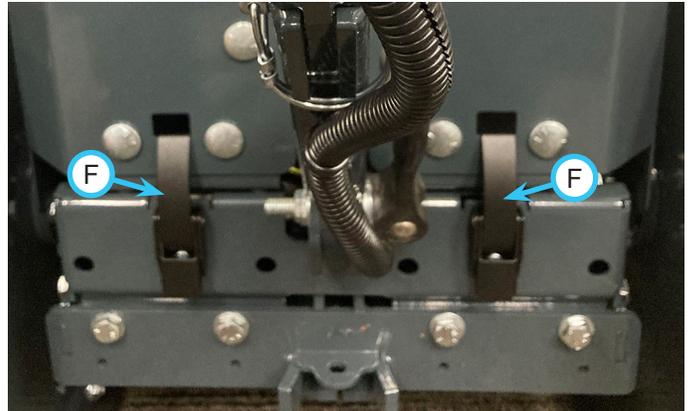
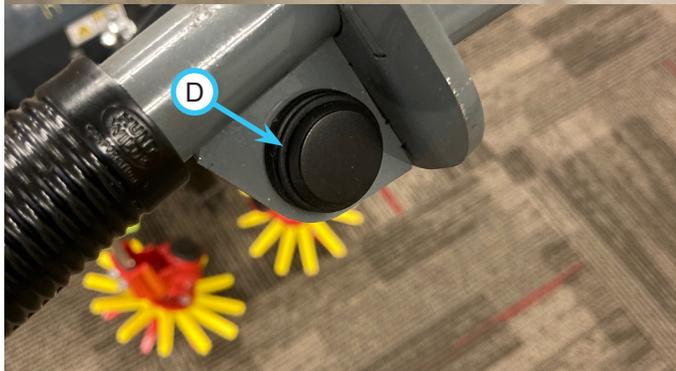
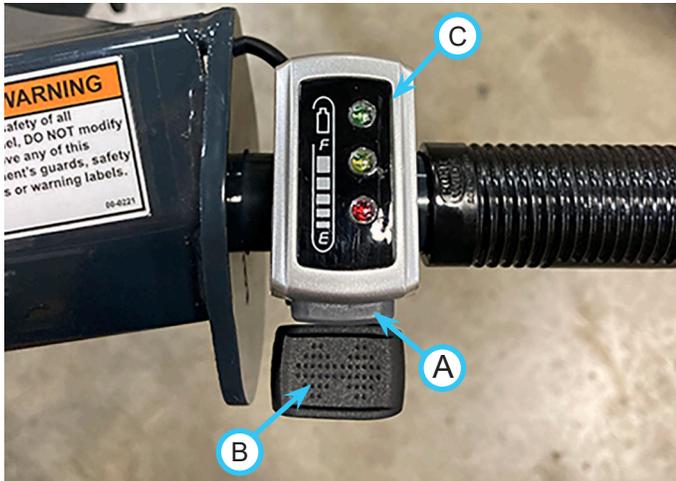


- Never handle a battery, charger or other associated components in the rain or with wet hands.
- Never submerge a battery in liquid, or expose the battery terminals to moisture. If liquid gets inside the battery, the battery is at risk of being short circuited resulting in overheating, fire, or explosion.
- Never attempt to repair, service, or modify battery packs.
- Never recharge a fully charged battery, over charging shortens the batteries life.
- Charge batteries before the battery is completely discharged.
- Charge the battery before use if the battery has not been used for more than six months.
- Do not remove and safety guards from the E-Ox or implements attached to the E-Ox.
- Do not operate the E-Ox without all shields properly installed.
- Moving parts can cause injuries. Keep hands and feet clear of moving parts.
- Pinch points, some parts can pinch or crush. Keep clear of pinch points and use caution during operation.
- Clear the area of all obstacles, hazards, and personnel before operating the E-Ox.
- Do not modify the E-Ox in anyway. Modifying the E-Ox could cause injury or damage to equipment. Any modification made to the E-Ox will void any warranty.
- Do not depress the thumb throttle when freewheeling the E-Ox foward or backwards.

GENERAL OPERATION

Standard Operational Controls

Use the following images to identify the locations of the operational controls. The letter next to each control can be referenced in the list that follows the images.



- A. Power Button
- B. Throttle
- C. Battery Charge Indicator
- D. Speed Selector
- E. Handlebar Adjustment Lever
- F. Cover Latches
- G. Circuit Breaker
- H. Hitch Pin

GENERAL OPERATION

Power Button (A)

Press the power button to turn on the machine. The battery charge indicator as well as the speed selector will illuminate.

Throttle (B)

Depressing the thumb throttle will gradually increase the speed of the unit to the maximum allowable speed selected by the speed selector button.

Battery Charge Indicator (C)

The battery charge indicator gives an estimated battery charge remaining, averaged between the two battery packs.

Speed Selector (D)

The speed selector allows the operator to select five different speeds for the unit.

Handlebar Adjustment Lever (E)

The handlebar adjustment lever allows the operator to adjust the handlebar height for optimal control.

Cover Latches (F)

The cover latches secure the cover in place. Opening the cover will give the operator access to the circuit breaker and batteries.

Circuit Breaker (G)

The circuit breaker / battery disconnect switch controls power to the electrical system. Pushing the blue button trips the circuit disabling the electrical system. Moving the yellow switch upwards engages the circuit breaker energizing the electrical system.

Hitch Pin (H)

The hitch pin secures a forward or rear mounted hitch to the unit.

Assembly

1. Remove the unit from it's packaging.
2. Unfold the handlebars and install the two pins (A) to secure the handle bar in place.



Replacing Batteries

Installation

1. Unlatch and open the cover.
2. Ensure the circuit breaker is tripped, push the blue button to ensure the yellow switch is fully visible.
3. Align the battery cartridge with the slot on the base. Slide the battery in place until it locks into place.
4. Close the cover and latch the latches.

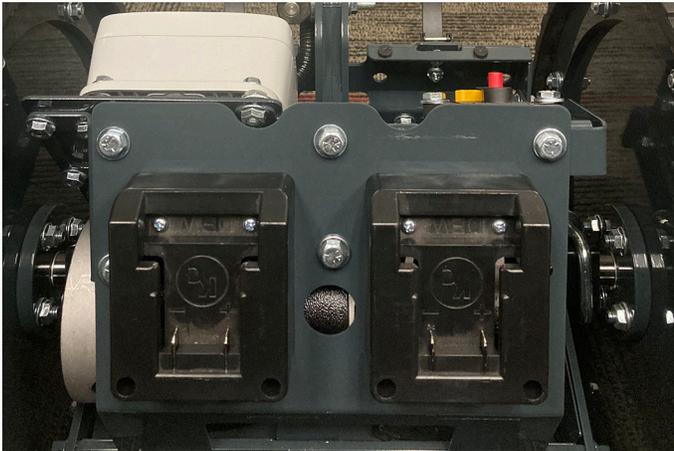


Batteries Installed

GENERAL OPERATION

Removal

1. Unlatch and open the cover.
2. Ensure the circuit breaker is tripped, push the blue button to ensure the yellow switch is fully visible.
3. Pull the battery cartridge from the machine while squeezing the release button(s).
4. Close the cover and latch the latches.



Batteries Removed

Handlebar Adjustment

1. Release the lever.
2. Position handle bars at the desired height.
3. Close the lever.

Hitch Use

1. Unlatch and open the cover.
2. Remove the hitch pin.
3. Remove or install the hitch.
4. Install the hitch pin.
5. Close the cover, and latch the latches.

Operating Procedure

1. Ensure the circuit breaker is tripped, push the blue button to ensure the yellow switch is fully visible.
2. Install two fully charged batteries.
3. Install the front or rear hitch as required. Secure the hitch in place using the hitch pin.
4. Enable the electrical system by resetting the circuit breaker, push the yellow switch upward to energize the electrical system.
5. Close and latch the cover securely in place.
6. Press the power button on the thumb throttle. Ensure that the battery indicator lights are illuminated.

7. Select the desired speed setting 1-5 using the speed selector button.
8. Gradually push the thumb throttle to accelerate the unit to the desired speed.
9. To stop the unit release the thumb throttle.
10. To turn off the machine press the power button on the thumb throttle. The battery charge indicator will no longer be illuminated when the power is turned off.

⚠ Attention

The unit is equipped with a sleep function. After a few minutes the machine will enter sleep mode. To exit sleep mode cycle the power button.

11. If the unit will no longer be used or placed in storage, ensure the circuit breaker is tripped, push the blue button to ensure the yellow switch is fully visible and remove the batteries from the unit.

Storage

1. Ensure that the circuit breaker is tripped by pushing the blue button to ensure the yellow switch is fully visible.
2. Remove the batteries from the unit.
3. Allow the unit to cool before storing.
4. Store the unit in a cool dry place.
5. Fold the handlebars down as required.
6. Position handle bars at the desired height.
7. Close the cam lever.

Cleaning

1. Keep the E-Ox clean. Remove any debris and excess dirt / dust from the unit using compressed air.

⚠ CAUTION

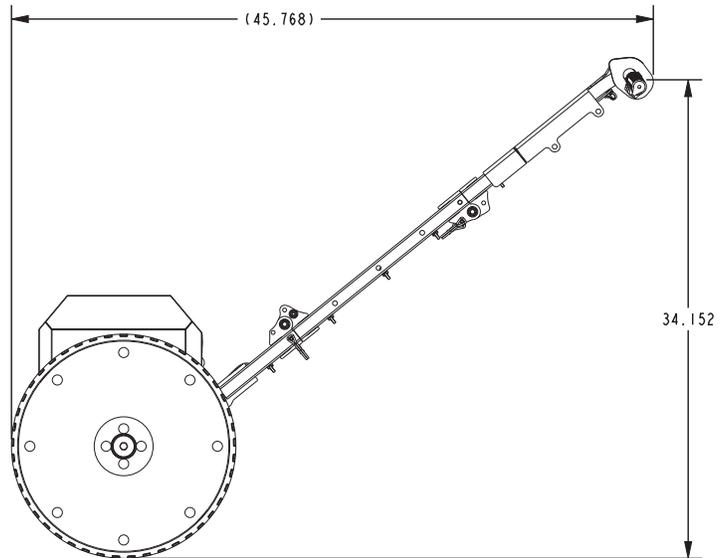
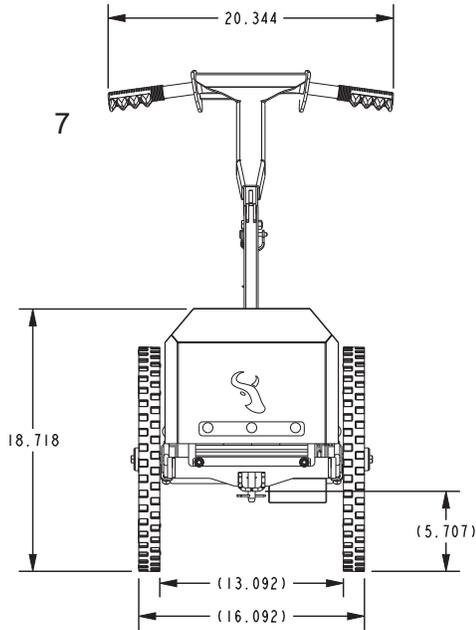
Use caution when using compressed air around seals, and other fragile components.

2. Do not wash the E-Ox with high pressure water.
3. When washing the machine ensure that the circuit breaker is disconnected and the batteries are removed.
4. When washing the E-Ox do not get the electrical components wet.
5. Dry the E-Ox thoroughly before storing.
6. Do not store the E-Ox outdoors or in the rain or in direct sunlight.

SPECIFICATIONS

Dimensions

Overall Height	34.1 in
Overall Length	45.7 in
Overall Width (Handlebars)	20 in
Overall Width (Wheel Base)	16 in
Weight (Without Batteries Installed)	85 lbs



WARRANTY



Return Policy and Procedure

All new and unused products may be returned within 30 days of the ship date for a refund. If returning an item, first contact a Tilmor customer support representative at 1-844-255-5864 to obtain a return merchandise authorization (RMA) prior to shipping the item to Tilmor. Shipping costs for returns will be incurred by the customer. Refunds may be subject to a 10% restocking fee.

Warranty

Contact a Tilmor customer support representative at 1-844-255-5864 immediately if a product purchased on www.tilmor.com should fail during the defined warranty period. Items purchased on www.tilmor.com may be manufactured by Tilmor LLC or one of our trusted partners. For all products not branded by Tilmor, the original equipment manufacturer's warranty statement will define period, policy, and procedure.

Tilmor Warranty Period

Non-serialized Product - 1 Year

Unless otherwise stated, all non-serialized Tilmor products are protected against defects in materials and workmanship, under ordinary and normal use, for a period of one year from the shipping date. Warranties on non-serialized Tilmor products are not transferable.

Serialized Product - 2 Year or 1000 hours

Unless otherwise stated, all serialized Tilmor products are protected against defects in materials and workmanship, under ordinary and normal use, for a period of two years from the shipping date or 1000 hours on tractor hour meter (whichever comes first). Warranties on serialized Tilmor products are transferable.

Tilmor Warranty Policy

Tilmor LLC may opt to repair, replace, or issue a refund for Tilmor products that are defective or have sustained damage in shipping. The following actions and damages are excluded from warranty:

- Deterioration due to normal wear and tear
- Damage caused by an act of nature (fire, flood, wind, etc.)
- Damage caused by accident, improper usage or negligence

Tilmor LLC reserves the right to approve warranty repair time, decide whether to send new parts and/or request old parts for review. Our intention is to be fair to all parties (i.e. customer, repair shop, and Tilmor).

Tilmor Warranty Procedure

Contact a Tilmor representative immediately if a Tilmor product should fail during the defined warranty period. The representative will initiate a claim and determine the quickest method to resolve the issue. Tilmor does not have local dealerships and will work directly with the customer to resolve the problem. If the customer prefers, we will work with a technician of the customer's choice to perform the repair.