



## Toro Groundsmaster 4500-D ROPS

\* Shown with optional components \*



NOTE: ROPS is compatible with both MY2008 and MY2009 designs.

### **Toro Groundsmaster 4500-D ROPS**

**This ROPS is designed and built to fit the Toro Groundsmaster 4500-D and 4700-D.**

**Designed and Built by:**

**Tektite Manufacturing Inc:**

**427 Buffalo Street**

**P.O. Box 639**

**Winkler, MB**

**R6W 4A8**

**Canada**

**PH: 204-331-3463**

**Fax: 204-331-4159**

**sales@tektite.ca**

**www.tektite.ca**

**One year standard product warranty provided by Tektite.**



Tektite Manufacturing Incorporated thanks you for purchasing a Toro Groundsmaster 4500-D Series ROPS! Tektite has worked very hard to design and build this ROPS product and we hope that it provides you with many years of ROPS protection.

Tektite's ROPS products are designed to provide safe and dependable service during operation when they are properly maintained according to the instructions. Please read this installation manual carefully before installing and using this ROPS product.

The photos/illustrations provided in this manual may not provide all the detail needed, and are for reference only.

All directions provided are from the reference point of the tractor seat facing the steering wheel. All left and right references are from this view point.

For reference, please fill in the information below. This will assist your dealer in providing service for this ROPS. It is advisable that this information be provided to your insurance company as well in the event that the tractor is lost or damaged.

Vehicle Model: \_\_\_\_\_

ROPS Serial Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Dealer Name: \_\_\_\_\_

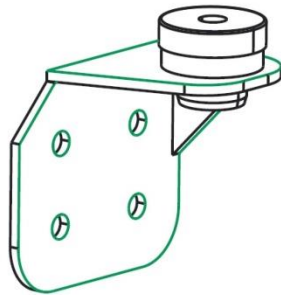


### Parts List:

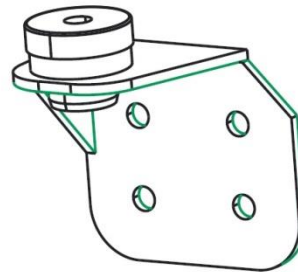
Description	Qty
Washer, Flat, 1/4" Thick x 2 1/2"	4
Bolt, Hex, 5/8" x 3", Gr. 8, YD	4
Nut, Flange, 5/8", Gr. 8, YD	4
Front Bracket	1
Rear Brackets (Two Isolators pre-installed)	L&R

### Electrical Option Parts List:

Description	Qty
Wire Loop, 1/4"	2



Left Rear Bracket



Right Rear Bracket



Front Bracket

### Installation Instructions:

1. Remove two-post ROPS from machine, if equipped. Save fasteners to re-use later.
2. Take the left rear mounting bracket and position it where the left 2-post was mounted onto chassis. The notch points forward and is at the top on the bracket.



3. Repeat step 2 for the right side mounting bracket.

4. Remove the front plastic fascia. It will need to be notched to clear the front mounting bracket.



5. Remove the roller mounting bracket fastened to the front of the platform in order to allow the front bracket to fit behind it. Re-install mounting bracket with ROPS bracket inside against platform and re-use original fasteners.



6. Attach a lifting strap or chains to the front and rear tube cross members prepare to lift the cab off of the shipping pallet.

7. Using an over-head hoist, lift the ROPS off the shipping pallet and over the machine. Slowly lower ROPS down onto the machine. The isolators will contact the front bracket at the front, and the rear frame will contact the isolators on the rear brackets. Use the provided 5/8" x 3" hex bolts, heavy washer, and 5/8" flange nut for the four isolator fasteners. NOTE: rear isolator gets heavy flat washer underneath the bracket. Front isolator gets heavy flat washer on top of isolator.

8. The 5/8" isolator bolts need to be torqued to 205 ft-lbs. The 1/2" fasteners need to be torqued to 95 ft-lbs.

If ROPS has electrical options installed, proceed with the following step.

9. Take red power and black ground wires that are at the bottom of the right rear tube and route along the mounting bracket and towards the battery. Connect the black ground wire to the negative post on the battery using provided 1/4" loop. Shorten wire if necessary, then solder connector to wire. Connect the red power wire to the positive post on the battery using provided 1/4" loop. Shorten wire if necessary, then solder connector to wire. There is fuse protection located behind the switch plate in the ROPS.

**NOTE:** If ROPS is equipped with a Golf Ball Protection Package, it may be necessary to adjust the door latch after installation is complete. The striker pin, door latch, and striker mounting plate may need to be loosened and adjusted slightly after install due to the ROPS frame flexing slightly during ROPS install.



## Toro Groundsmaster 4500-D ROPS

\* Shown with optional components \*



NOTE: ROPS is compatible with both MY2008 and MY2009 designs.

### **Toro Groundsmaster 4500-D ROPS**

**This ROPS is designed and built to fit the Toro Groundsmaster 4500-D and 4700-D**

**Designed and Built by:**

**Tektite Manufacturing Inc:**

**427 Buffalo Street**

**P.O. Box 639**

**Winkler, MB**

**R6W 4A8**

**Canada**

**PH: 204-331-3463**

**Fax: 204-331-4159**

**sales@tektite.ca**

**www.tektite.ca**

**One year standard product warranty provided by Tektite.**



Tektite Manufacturing Incorporated thanks you for purchasing a Toro Groundsmaster 4500-D series ROPS! Tektite has worked very hard to design and build this ROPS product and we hope that it provides you with many years of ROPS protection.

Tektite's ROPS products are designed to provide safe and dependable service during operation when they are properly maintained according to the instructions. Please read this operator manual carefully before using this ROPS product.

The photos/illustrations provided in this manual may not provide all the detail needed, and are for reference only.

All directions provided are from the reference point of the tractor seat facing the steering wheel. All left and right references are from this view point.

For reference, please fill in the information below. This will assist your dealer in providing service for this ROPS. It is advisable that this information be provided to your insurance company as well in the event that the tractor is lost or damaged.

Vehicle Model: \_\_\_\_\_

ROPS Serial Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Dealer Name: \_\_\_\_\_



## Tektite Limited Warranty

Tektite Manufacturing Inc. (“Tektite”) warrants to the original purchaser (the “Claimant”), that Tektite products will be free from defective materials or workmanship, under normal use and service, for a period of (1) full year from the original invoice date. Tektite’s liability under this Limited Warranty is limited to the repair or (at the discretion of Tektite) the replacement of those components of its products, which were manufactured by Tektite that are defective in materials or workmanship. Tektite shall have no liability under this Limited Warranty unless Tektite is notified of the defect during the stated Warranty Period.

Limitations and Exclusions: Tektite has no responsibility to a Claimant under this Limited Warranty or on any other basis for any of the following:

- a) defects caused, in whole or in part, by accident or misuse, negligence or failure to maintain the product or component;
- b) products or components sold to a customer on an “as is” basis;
- c) wiper blades, light bulbs, fuses, clear vinyl or other consumables;
- d) glass where the point of failure has not been preserved intact and delivered to Tektite for analysis of the cause of the failure;
- e) products or components which have been modified after shipping from Tektite to its customer;
- f) transportation charges for returned, repaired or replacement items;
- g) defects that are subject of a Tektite initiated recall where the Claimant fails to comply with the terms of the recall notice that comes to the attention of the Claimant;
- h) components of Tektite products that are manufactured by third parties (Tektite’s only obligation in relation to such components shall be to accord to the Claimant the benefit of any transferable warranty accorded to Tektite by third party manufacturer);
- i) defects in workmanship or materials in products or components that are repaired or replaced by Tektite unless Tektite is notified of the new defect within the Warranty Period that applied to the original product or component that has been repaired or replaced;
- j) defects that result, in whole or in part, from inadequate engineering or specifications provided to Tektite by its customer;
- k) any actual or alleged deficiency in technical or engineering services or advice provided by Tektite to its customer whether provided for valuable consideration or otherwise;
- l) consequential damages, or any other damages whether foreseeable or not, resulting from the defect or any delay in remedying the defect;
- m) any breach or alleged breach of any implied warranty of merchantability or fitness for particular purpose of use;
- n) defects or part failure due to misuse or failure to follow recommended cab installation procedures; and
- o) travel expenses, including mileage.

This Limited Warranty expresses the entire obligation of Tektite, its officers, directors, agents and employees, to its customer or any Claimant in respect of any defect in workmanship, or materials of any product or component sold or manufactured by Tektite whether on grounds of breach of contract, negligence or other tortious liability, breach of express or implied warranty or other basis in law of any jurisdiction.

Acceptance by a customer of delivery of products of Tektite constitutes acceptance of this Limited Warranty in lieu of all other warranties express or implied including without limitation all implied warranties of merchantability or fitness for particular purpose or use and constitutes acceptance by customer of the exclusions and limitations of the liability of Tektite set out above. Once received, the cab should have ALL exterior cardboard, Styrofoam wrapping removed for immediate inspection of product to ensure that no damages have occurred during transportation. Outer coverings should stay off the cab and the cab be stored indoors in a controlled environment. The warranty card must be completed and returned to Tektite.

---

Warranty claims should be reported to [parts@tektite.ca](mailto:parts@tektite.ca). A warranty claim form and instructions will be provided at this time. Warranty work not pre-authorized by Tektite may not be covered by this warranty agreement. Labor rate and time allowances are fixed by Tektite. Approved warranty claims will be issued in the form of credits applied to customer account.





## Safety Precautions

### *Safety First*

Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use the features that are on this cab/ROPS.

**Danger:** Indicates an immediate hazardous situation which, if not avoided, will result in death or serious injury.

**Warning:** Indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.

**Caution:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**Important:** Indicates that cab or property damage may result if instructions are not carefully followed.

**NOTE:** All products are designed to give safe, dependable service if they are operated and maintained according to instructions. It is the owner's responsibility to be certain anyone operating this product reads this manual, and all other applicable manuals, to become familiar with this cab and all safety precautions. Failure to do so could result in serious personal injury or cab damage. If you have any questions, consult your dealer. Read and understand this manual before operation.

**NOTE:** A safe operator is the best assurance against accidents. All operators, no matter how experienced they may be, should read this operator manual and all other related manuals before attempting to operate features in this cab/ROPS and operate the base tractor. Please read the following section and pay particular attention to all safety recommendations contained in this manual and those labelled on the cab and on the tractor.



## General Safety

1. Never let an unqualified or untrained driver operate the reel mower.
2. Keep a fire extinguisher, with ABC rating securely fastened in the ROPS. Maintain it and be familiar with its use.
3. Do not carry passengers.
4. Never operate the mower in a closed building for a prolonged period. Ensure adequate ventilation is present, as engine exhaust fumes are poisonous and can kill.
5. Always keep sleeves, jackets or other loose clothing relatively tight and belted. Loose clothing may catch on moving parts and result in severe personal injury or death.
6. Provide a first-aid kit, securely attached inside of the ROPS for use in case of accident.
7. Never jump from the mower. There is a danger of tripping or falling on protruding parts.
8. Use steps and hand holds when mounting and dismounting the mower, or for servicing components too high to reach from the ground.
9. When seated in the ROPS, fasten seat belt before starting the engine. A proper seat belt must be worn at all times when using a ROPS.
10. Safety devices and shields are intended to protect operators from injury or death. Under no circumstances should they be modified, disabled or removed.

## Operating Safety

1. Always operate the mower controls while sitting in the operator's seat.
2. Lock seat in position and buckle seat belt before operating the mower.
3. Avoid abrupt sharp turns at high speeds.
4. On sloped terrain, do not make sharp turns as machine stability could be compromised.
5. Operate the mower smoothly, avoid abrupt starts and stops.
6. Keep all shields in place when operating the mower.
7. Do not operate the mower when you are tired, sick, or impaired.
8. Never operate the mower in confined areas; visibility next to the tractor is reduced. Injury to bystanders or damage to the ROPS or equipment may result.

## Safety

Carefully review the procedures given in this manual and the reel mower operator's manual with all operators annually. It is important that all operators become familiar with and follow safety precautions. Operating instructions must be given to everyone using the tractor before operation and at least once yearly thereafter in compliance with OSHA Regulations 1928.57 (United States).



### **Safe Operation on Rough Terrain**

1. Drive the mower slowly on hillsides and curves to eliminate the danger of tipping. Avoid slopes which are too steep for safe operation. Avoid sharp uphill turns.
2. Always drive slowly enough over rough ground or obstructions. Drive at speeds slow enough to ensure your safety.
3. When driving out of a ditch, gully, or up a steep hillside, engage the clutch slowly. Avoid sharp uphill turns.
4. When descending steep grades, select a sufficiently low gear to maintain control with minimum use of braking.
5. Use caution when driving near the edge of a ditch or gully. It may cave in, causing the mower to roll over.
6. Be alert when operating near trees, slopes and around obstructions. Tree branches can cause damage to ROPS components.

### **Maintenance Safety**

1. Remove mud, crop residue, chains, and tools from steps and operator's platform. They may interfere with pedal operation or entry/exit from mower.
2. When servicing components are too high to reach from the ground use steps and handholds. Do not use fenders or shields that are not designed as steps.

### **Safe Highway Operation**

1. Before operating the mower on, or near, public roadways check with your local authorities for any local regulations that will affect you.
2. Equip towed implements with slow moving vehicle (SMV) signs when traveling on public roads.
3. Install additional lights on implement rear to safeguard against rear end collisions.
4. Use hazard warning flashers as required by law when transporting or driving on public roads. If the mower had warning flashers removed when mounting the ROPS, they must be replaced prior to operation on public roads.
5. Keep to the right, yielding right-of-way traffic, especially if pulling implements. Pull off the road and stop to allow motorists to pass. Drive on the road shoulder, if permitted by law.
6. Use extreme caution when pulling heavy loads at road speeds. Avoid hard application of the mower brakes at high speed.
7. Always drive slowly near curbs, approaches or ditches.
8. If equipped, ensure headlights are aligned so they will not blind the operators of oncoming vehicles. If the mower is not equipped with turn signals and law requires them, install them prior to operating on or near public roads.



9. Use your turn signals, checking for traffic well in advance of turning. If the mower is not equipped with turn signals and law requires them, install them prior to operating on or near public roads.

### **Safety Decals**

1. Keep decals clean. Remove dirt with a wet clean cloth when necessary.
2. Replace safety decals if destroyed, missing, painted over or unreadable. If any safety decals are covered or obscured when the ROPS is mounted, it is recommended that you purchase replacement decals from the mower manufacturer. Mount them in a readable location at, or near, their original location before operating the mower.
3. New ROPS decals and mower decals are available from your mower dealer.

### **ROPS Safety**

1. Install the ROPS in accordance with Tektite mounting instructions. Failure to do so may affect the ROPS ability to withstand a roll over.
2. If the ROPS is subjected to alteration, structural damage or involved in an over turn accident, the entire structure must be replaced. Failure to do so may result in injury or death in the event of a roll over.
3. If the mower is not equipped with seat belts, purchase approved seat belts from the mower manufacturer or Tektite prior to operating the mower.
4. Always fasten seat belts prior to operating the mower.
5. Always operate the mower from the operator's seat.
6. Remove mud, crop residue, chains and tools from steps and operator's platform. They may interfere with pedal operation or entry/exit from the mower.
7. Remove all loose chains, tools, and equipment from the operator's platform. Failure to do so may cause injury or death in the event of a roll over.
8. Do not install the ROPS on a mower model that the ROPS is not designated for (compatible mower designations are printed on the ROPS serial number plate). The ROPS is designed specifically for individual models to ensure ROPS requirements will be met. Installing the ROPS on a non designated mower may result in injury or death.

### **Emergency Exits**

This ROPS has 2 exits, which may be used in an emergency: left and right doors.



## **Operating Instructions**

### **Important**

The following section locates, identifies and briefly describes the functions of all ROPS controls. All operators should familiarize themselves with control location and function prior to operating the mower. Failure to do so may result in unsafe operation of the mower and possible injury or death to operators and bystanders.

The switch plate is located beside the upper A-A cross member near the ROPS roof only if electrical options are ordered. The following switches are available and their functionality is described.

#### **1. Front Work Lights Rocker Switch (optional)**

Low position: Off

High position: On

#### **2. Rear Work Light (s) Rocker Switch (optional)**

Low position: Off

High position: On

#### **3. 4 - way Flashers Rocker Switch (optional)**

Low position: Off

High position: On

#### **4. Turn Signal Rocker Switch (optional)**

Left position: Left

Centre position: Off

Right position: Right

#### **5. Front Wiper Rocker Switch (optional)**

Low position: Low speed

Center position: Off

High position: High speed

#### **6. Head Lights Rocker Switch (optional)**

Low position: Off

High position: On

#### **7. Beacon Rocker Switch (optional)**

Low position: Off

High position: On



## **After your ROPS has been installed:**

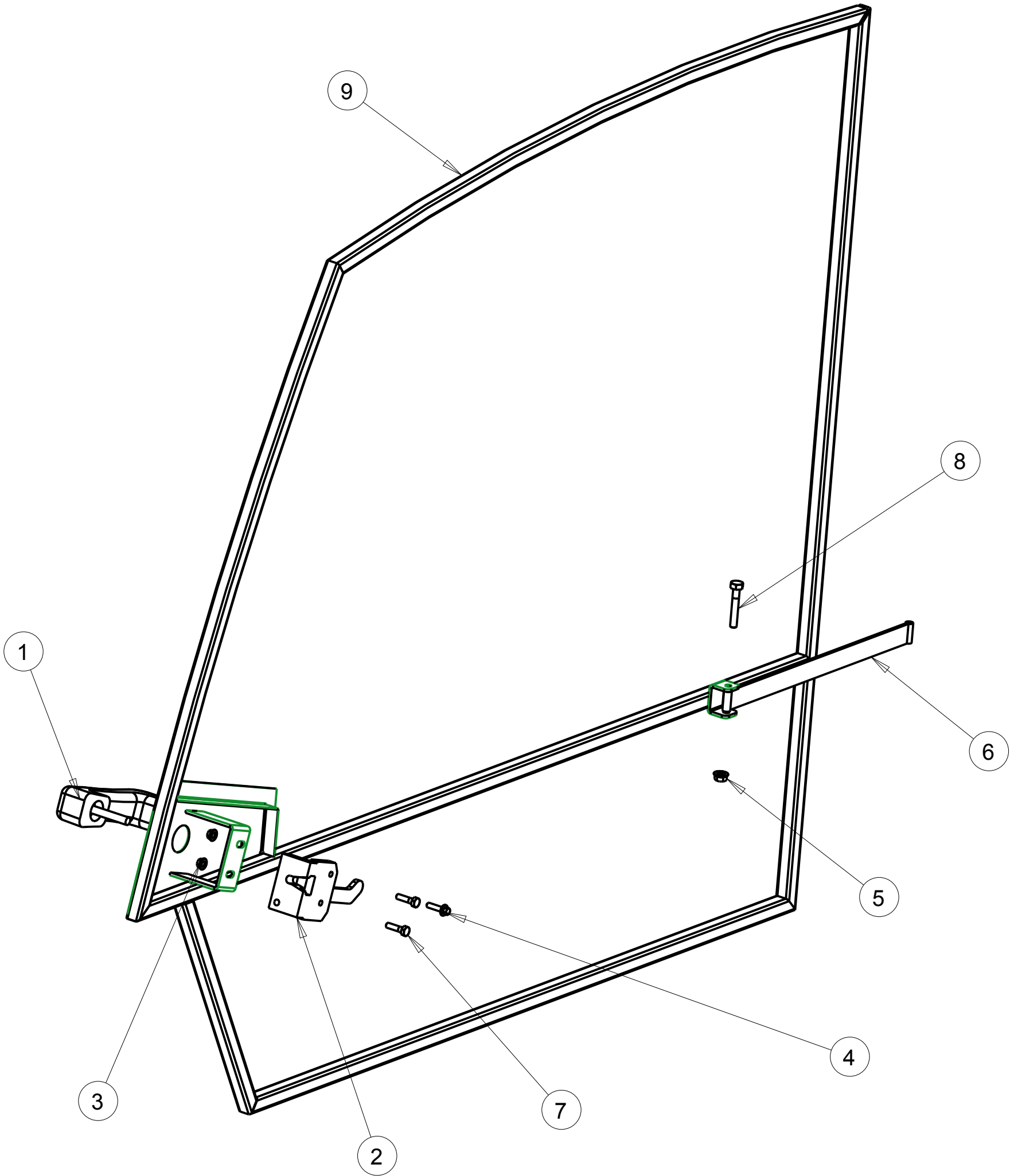
Before starting a reel mower equipped with a Tektite ROPS:

1. Clear the operator platform of all tools. Tools left in or around the ROPS and mower can cause operator interference which could lead to bodily injury and/or damage the machine.
2. Inspect the ROPS and mower to ensure all bolts are tight and re-tighten if required.
3. Ensure that all pedals, levers, and controls have adequate clearance for normal operation.
4. Ensure that all electrical components of both the ROPS and mower operate normally.
5. Ensure your door latches properly onto the striker pin. Immediately after installation, the ROPS frame may flex slightly from installation, and the door latch will need to be re-aligned for proper operation. Loosen the striker pin, striker mounting plate and door latch as necessary to get a proper alignment of the door striker.

## **Service Parts Breakdowns:**

Following are parts breakdowns for components that may require service parts replacement during the life of the ROPS. If you require replacement parts, please contact the dealer that you purchased the ROPS from and indicate which parts you require.

Index	Service Part #	File Name	Description	Qty
1	A00-0001	DLP-HANDLE	Outside Push Button Handle	1
2	A00-0003	RIGHT-LATCH	Suicide Door Right Latch	1
3	A00-0021	FLANGE-NUT-1-4	Flange Nut, 1/4", YD	2
4	A00-0022	FLANGE_BOLT_M6X25	Flange Bolt, M6x25, YD	1
5	A00-0059	FLANGE-NUT-5-16	Flange Nut, 5/16", YD	1
6	A00-0096	TEKT-0055	Door Strap, 14"	1
7	A00-0118	HEX-BOLT_1-4X1	Hex Bolt, 1/4" x 1"	2
8	A00-0137	HEX-BOLT_5-16X2	Hex Bolt, 5/16" x 2", YD	1
9	T05-0002	TO4500-ASM-006R	Right Door Weldment	1



SCALE 0.190

Notice of Confidentiality

This material is property of Tektite Manufacturing Inc and is not to be used by the recipient for any purpose other than the purpose for which it was transmitted. The material remains the property of Tektite and shall be returned upon request. The material may not be reproduced or disclosed to third parties without the written consent of Tektite.

Tolerances:

Unless otherwise specified

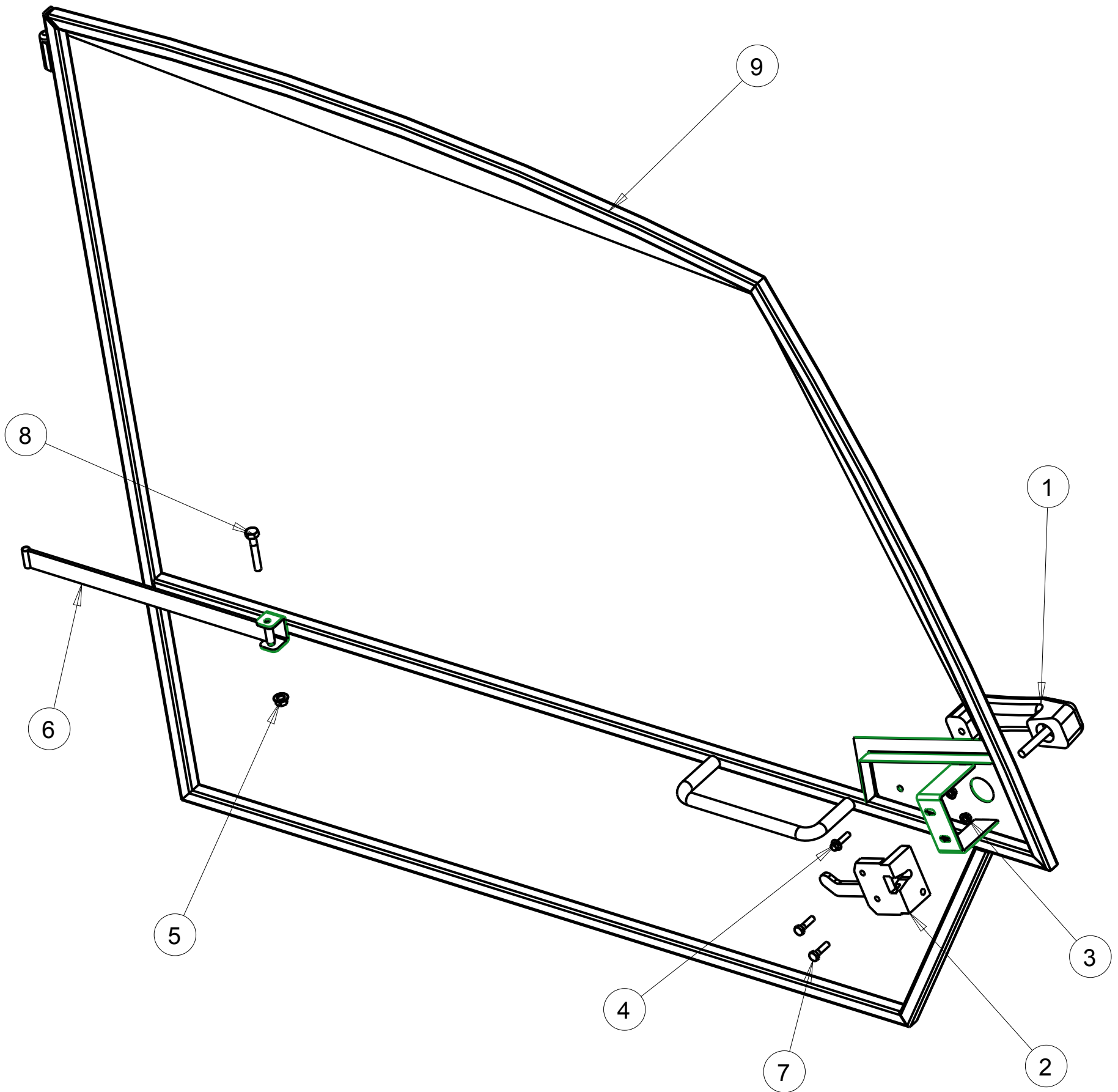
X.X = ± 1/16"  
Angular = ± 1.0 °

Tektite Manufacturing Inc.

24157 Hwy 3, Box 639, Winkler MB, R6W 4A8, Canada

Req'd:	CNC:	Description: <b>Right Door Assembly</b>	
Drawn By: <i>Daryl Furkalo</i>	Date: 2012-03-27	Units: <b>Imp.</b>	File Name: TO4500-ASM-008_OP
Checked By:	Date:	Size: <b>B</b>	

Index	Service Part #	File Name	Description	Qty
1	A00-0001	DLP-HANDLE	Outside Push Button Handle	1
2	A00-0002	LEFT-LATCH	Suicide Door Left Latch	1
3	A00-0021	FLANGE-NUT-1-4	Flange Nut, 1/4", YD	2
4	A00-0022	FLANGE_BOLT_M6X25	Flange Bolt, M6x25, YD	1
5	A00-0059	FLANGE-NUT-5-16	Flange Nut, 5/16", YD	1
6	A00-0096	TEKT-0055	Door Strap, 14"	1
7	A00-0118	HEX-BOLT_1-4X1	Hex Bolt, 1/4" x 1"	2
8	A00-0137	HEX-BOLT_5-16X2	Hex Bolt, 5/16" x 2", YD	1
9	T05-0001	TO4500-ASM-006	Left Door Weldment	1



SCALE 0.180

Notice of Confidentiality

This material is property of Tektite Manufacturing Inc and is not to be used by the recipient for any purpose other than the purpose for which it was transmitted. The material remains the property of Tektite and shall be returned upon request. The material may not be reproduced or disclosed to third parties without the written consent of Tektite.

Tolerances:

Unless otherwise specified

X.X = ± 1/16"  
Angular = ± 1.0 °

Tektite Manufacturing Inc.

24157 Hwy 3, Box 639, Winkler MB, R6W 4A8, Canada

Req'd:	CNC:	Description: <b>Left Door Assembly</b>	
Drawn By: <i>Daryl Furkalo</i>	Date: 2012-03-27	Units: <b>Imp.</b>	File Name: TO4500-ASM-007_OP
Checked By:	Date:	Size: <b>B</b>	