

# Workman 2004 and up **ROPS Sunshade**

**Gas and Diesel Models** 

Model Number 07332



## A SAFETY INSTRUCTIONS

#### **BEFORE OPERATING**

1. Read and understand the contents of this material before operating the vehicle. Become thoroughly familiar with the controls, capabilities and proper use of the equipment. A free replacement manual is available by sending complete model and serial number to:

> The TORO Company 8111 Lyndale Avenue South Minneapolis, MN 55420-1196

- 2. This sunshade fits Toro Workman models with serial numbers starting with 24 or higher with gas or diesel engines.
- 3. **DO NOT** mount cab on units without ROPS (Roll Over Protective Structure).
- 4. **DO NOT** weld, cut, drill, modify or remove the ROPS in any matter.
- 5. DO NOT allow children to operate the vehicle. Do not allow adults to operate vehicle without proper instructions.
- 6. Keep all shields and safety devices in place. If a safety device, shield or decal malfunctions, becomes damaged or illegible, replace it before operation is commenced. To assure vehicle is in safe operating condition, tighten loose nuts, bolts and screws.

#### WHILE OPERATING

- 7. Verify capacity ratings for vehicle. Make sure GVW front axle and rear axle capacities are not exceeded.
- 8. Avoid sudden stops and sharp turns.
- 9. Always use safety belts while operating vehicle.
- 10. Stay alert for hidden hazards and traffic.
- 11. Avoid sudden starts, excessive speeds and sudden stops.
- 12. Use extreme care when working close to fences, ditches or on hillsides.
- 13. Check clearance carefully before driving under any objects.
- 14. Avoid operating sideways on a steep slope whenever possible.
- 15. Wait for vehicle to come to a full stop and engage parking brake before leaving vehicle.

#### **MAINTENANCE**

- 16. To ensure sunshade is in safe operating condition, keep all fasteners tight.
- 17. Replace a damaged sunshade. Do not repair or revise. Any alterations to the sunshade must be approved by the manufacturer.
- 18. If the sunshade is removed from vehicle, DO NOT remove the ROPS.
- 19. To be sure of optimum performance and safety, always purchase genuine TORO replacement parts and accessories. Replacement parts and accessories made by other manufacturers could be dangerous. Such use could void the product warranty of The Toro Company.
- 20. Thoroughly inspect sunshade and sunshade mounting periodically.

### **Rollover Protection Structures (ROPS) Inspection Guide**

ROPS, like any other safety device, needs to be periodically inspected to verify that the integrity of the device has not been compromised through normal machine use, misuse, age degradation, modifications, or rollovers.

Some mechanical discretion is essential, therefore personnel who inspect ROPS need to comprehend and understand the significance of issues like structural corrosion, cracks, and deformation. Conservatism is the essential rule – if in doubt, remove the machine from service and contact the ROPS manufacturer for assistance. Certain conditions will absolutely render the ROPS unusable. Examples are:

- Permanent deformation or twisting
- Missing, damaged, or loose mounting hardware
- Mounting hardware that is of a grade lesser than specified
- Any cracks in the structure (structural members and/or welds)
- Significant corrosion
- Modifications, i.e. unauthorized welds and holes
- Missing or unreadable ROPS label(s)
- Applicable ROPS/machine model not specified on the ROPS label
- Machine GVW (including attachments, restrained payload, fuel and operator) in excess of the maximum weight by unit specifications
- Missing, damaged or unusable operator restraint devices. (i.e. seatbelts)
- Any unauthorized repair
- Incomplete/improper installation

Other conditions may require imminent service but may not render the unit immediately unusable. Examples are:

- Faded paint
- Faded, hard to read ROPS label(s)
- Heavily soiled operator restraint (seatbelt)
- Slightly corroded mounting hardware

ROPS must be inspected immediately after any type of collision, rollover or impact. If any damage is evident, the ROPS must be removed from service, repaired and/or replaced.

When a ROPS is removed or reinstalled, mounting hardware must be examined for signs of over stressing. Damaged mounting hardware must be replaced before placing the ROPS back in service.

Operators are to be instructed to properly adjust and use restraints, seatbelts, at all times.

#### Set up instructions

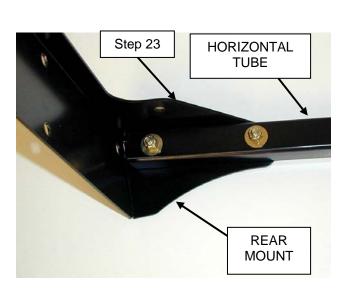
The sunshade is designed to be only used with a Workman vehicle equipped with a ROPS and all decals must be installed and legible.

#### **Preparation of Workman**

21. Position vehicle on a clean level surface, stop engine, engage parking brake and remove key from ignition switch.

#### **Assembly of Frame**

- 22. Pre-assemble the structural frame. Loosely attach, tighten all fasteners later in these instructions. Reference drawing 4-14770, sheets 1, 2 and 3.
- 23. Start by assembling horizontal support tubes into the rear mount bracket. Secure components with (4) 5/16" x 1.50" bolts, (8) 5/16" flat washers and (4) 5/16" nylock nuts. See Figure 1.
- 24. Secure front mount bracket to the front of horizontal support tubes and secure with (4) 5/16" x 2.00" bolts, (8) 5/16" flat washers and (4) 5/16 nylock nuts. See Figure 2.
- 25. Assemble front upright support tubes to the front mount bracket. Fasten with (4) 5/16" x 2.00" bolts, (8) 5/16" flat washers and (4) 5/16 nylock nuts. See Figure 2.
- 26. Assemble middle support bracket to middle of frame and fasten with (2) ¼ x 1.75" long bolts, (4) ¼" flat washers and (2) ¼" nylock nuts. See Figure 5.





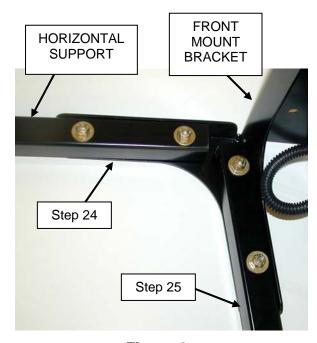
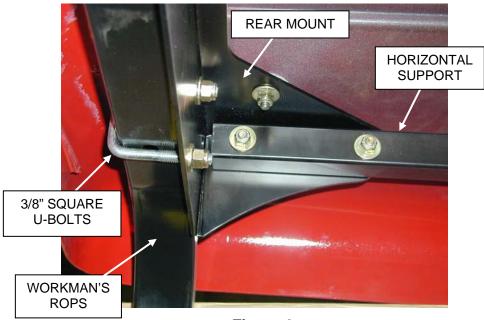


Figure 2

27. Secure the back of the frame structure onto workman ROPS (Roll bar). Center and secure with (2) 3/8" square U-bolts, (4) 3/8" flat washers and (4) 3/8-16unc nylock nuts. See Figure 3.



- Figure 3
- 28. Secure front of frame to front hood by removing (2) 5/16 x 1.50" long bolts which are to be reinstalled in Step 29. Also remove the inner rubber threaded grommet from each side of hood and discard.
- 29. Apply self adhesive foam pad to upright tube bracket hood side surface. Align bottom front upright bracket and re-install the (2) 5/16 x 1.50" long bolts with (4) 5/16" flat washers, and (2) 5/16" nylock nuts. See Figure 4. See drawing 4-14770 for proper installation of nylock nuts and flat washers.



Figure 4

30. Install (3) bubble rubber strips, 4.00" long onto the top center bracket as shown in Figure 5.

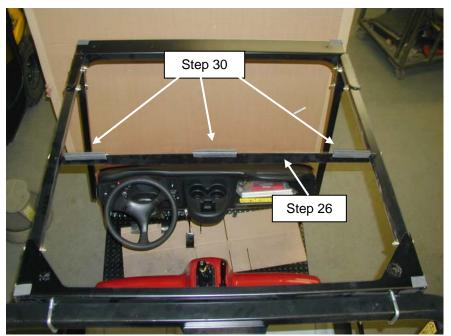


Figure 5

### Securing the Roof

- 31. The red roof may be supplied with a protective plastic covering. Remove if present.
- 32. Secure roof to frame using (4) 5/16" x 1.50" long, (8) 5/16" flat washers, (4) 5/16" nylock nuts, (8) soft rubber mount washers and (4) hard cap mount washers. See Figures 6 and 7.
- 33. Tighten roof bolts so rubber creates a water tight seal. Do not over tighten!
- 34. Tighten all remaining hardware at this time.



(FRONT BRACKET UNDER SIDE)

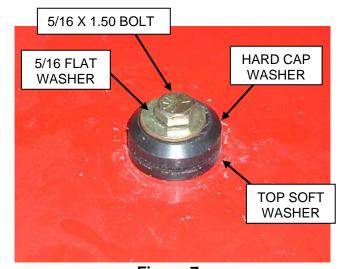
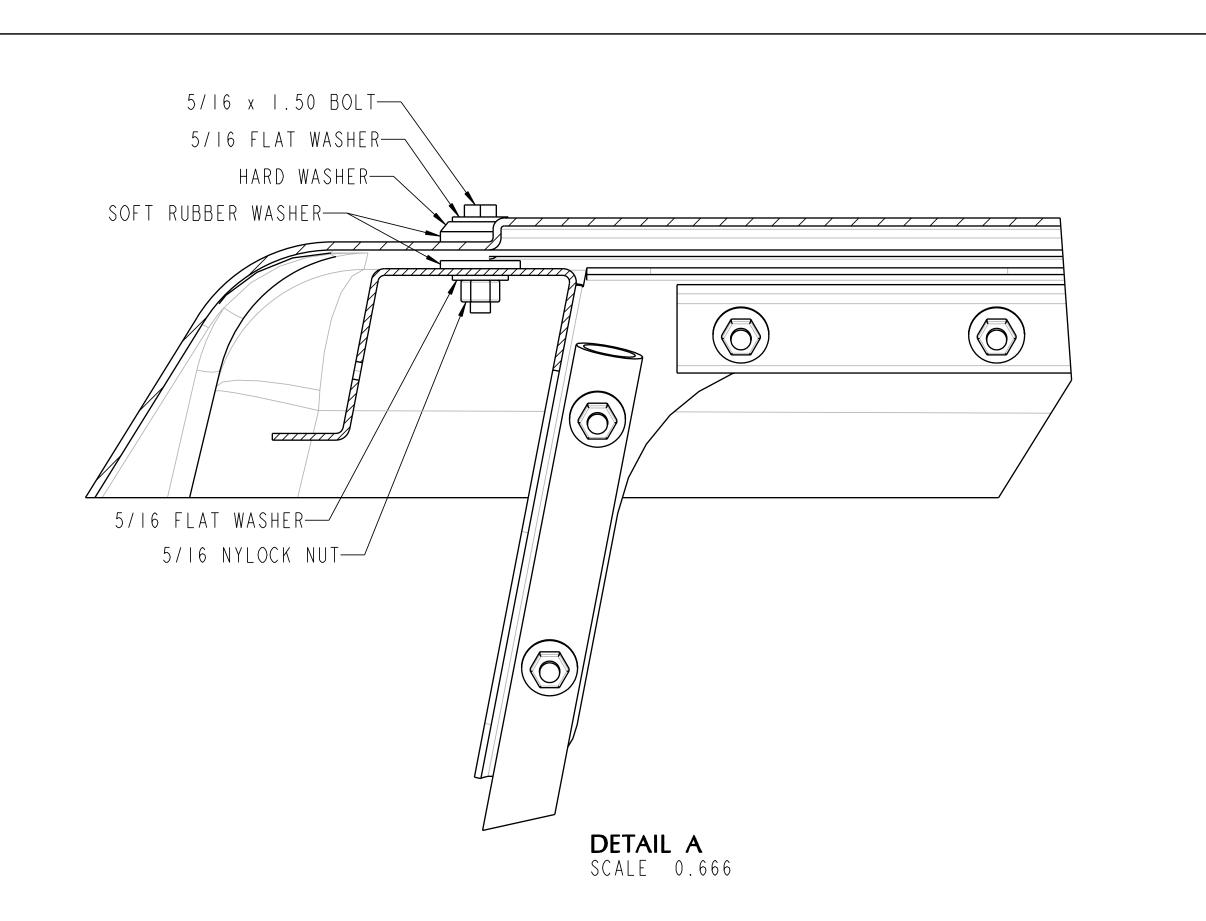


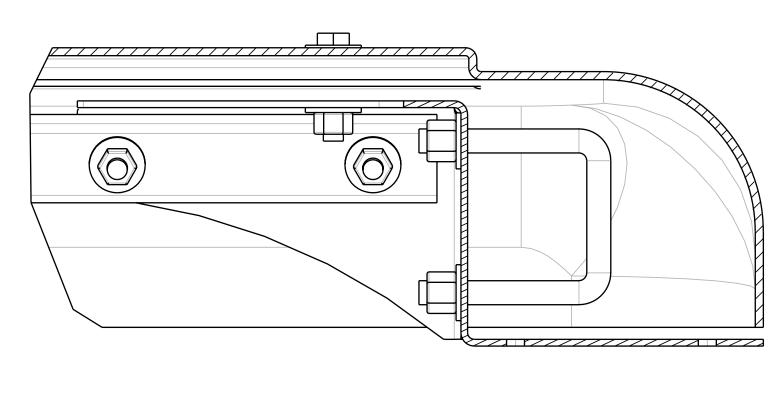
Figure 7 (ROOF TOP SIDE)

#### **Related Option Kits:**

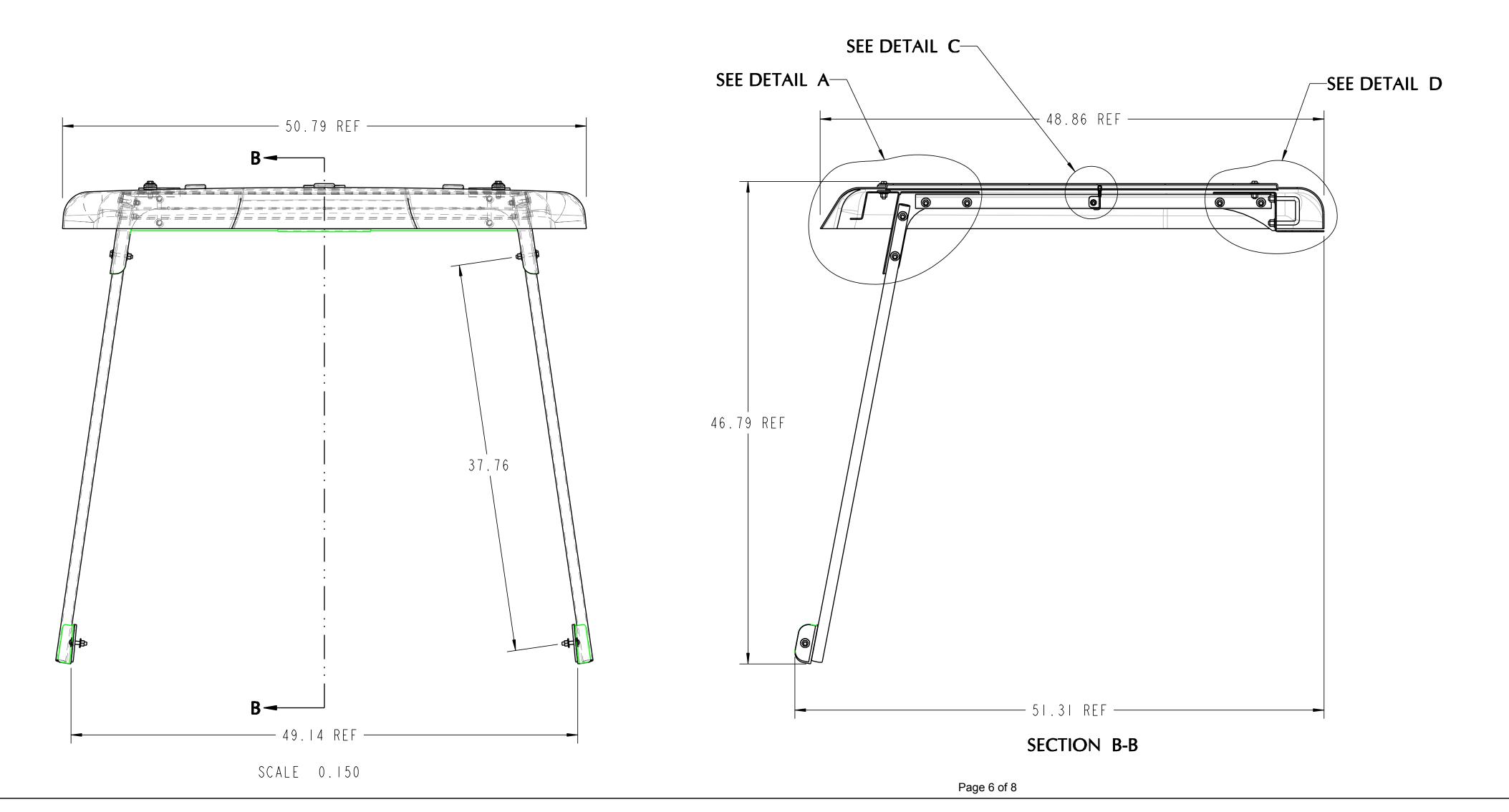
**110-2500 Front Fold-Down Windshield Kit** includes a front ABS fold-down windshield and (6) window retainers that secure windshield to front sunshade uprights.



REV.	DCR NO.	DESCRIPTION	DRAF I SMAN	DATE
С	-	-	-	6 - 6 - 0 5
D	-	-	CAD	11-17-05



**DETAIL D**SCALE 0.666



DETAIL C SCALE 0.666

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NOT BE COFIED, REFRODUCED OR DISCLOSED IN ANI MATTER WITHOUT EXPRESSED WRITTEN CONSENT FROM CUSTOM PRODUCTS OF LITCHTIELD, INC.							
TOLERANCES UNLESS NOTED	CUSTOMER NAME & MOD NO: A - 1 1 2 9 3 TO	RO WOR	RKMAN MATL SPEC:				
OTHERWISE	CUSTOM PRODUCTS 1715 SOUTH SIBLEY AVE. LITCHFIELD, MN 55355						
$.$ X $\pm$ $.$ 09 $.$ XX $\pm$ $.$ 06	TILE .	DRWG SIZE	DRWG NO.	REV LEVEL			
.XXX ± .03 HOLE SIZE +.015/010 ANGLE ± .5°	SUNSHADE KIT ASM DETAIL	D	4-14770 2 of 3	D			
ANGLE ± .5		DRAWN: CA	AD <b>DATE</b> 2-23	- 0 5			

REV.	DCR NO.	DESCRIPTION	DRAFTSMAN	DATE
С	-	REPLACED HOOD FASTENERS; 5/16 WAS 3/8	CAD	6 - 6 - 0 5
D	-	UPDATED MANUAL	CAD	11-17-05

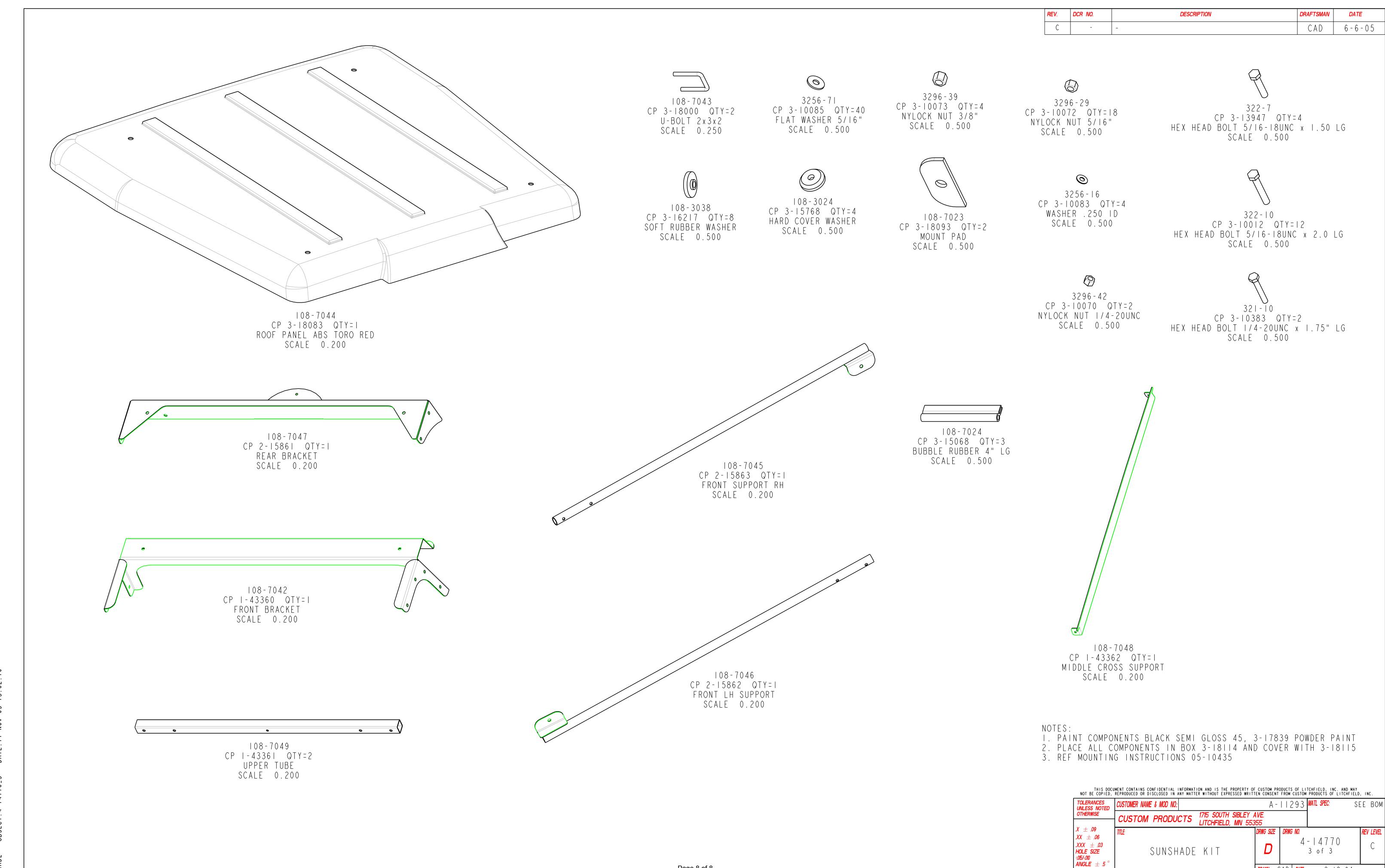
ITEM #	DESCRIPTION	QTY	TORO No.
	2-15861_REAR_WELDMENT	[	108-7047
2	3-18000_U-BOLT_SQ_2X3X2	2	108-7043
3	3-10085_3125_WASHER	40	3256-71
4	3-10073_375_NYLOCK	4	3296-39
5	I-4336I_TUBE_UPPER_MID	2	108-7049
6	I-43360_FRONT_MOUNT_BRACKET	[	108-7042
7	3-18083_PLASTIC_ROOF	[	108-7044
8	I-43362_MIDDLE_SUPPORT	[	108-7048
9	2-15862_FRONT_VERTICAL_LH_SUP	[	108-7046
10	2-15863_FRONT_VERTICAL_RH_SUP	[	108-7045
	3-18093_MOUNT_PAD	2	108-7023
12	3-16217_GLASS_WASHER	8	108-3038
13	3-15768_GLASS_MOUNT	4	108-3024
4	3-13947_313_HHCS_X150	4	322-7
15	3-10072_3125_NYLOCK	18	3296-29
16	3-10012_313_HHCS_X2	12	322-10
17	3-10083_WASHER_NOIO	4	3256-16
18	3-10070_25_NYLOCK	2	3296-42
19	3-10383_25_HHCS_175	2	321-10
20	3-15068_BUBBLE_RUBBER_4_00	3	108-7024
2	REF_RE-USE_313_PHCS_1_50_LG	2	REF
22	05-10435_MOUNT_INSTRUCTIONS	SEE BOM	3353-669

- NOTES: I. CUSTOMER TO ASSEMBLE 2. TORO MODEL NUMBER 07332 3. TORO DRAWING NUMBER 108-7025

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TOLERANCES UNLESS NOTED	CUSTOMER NAME & MOD NO.:	A-11293 TO	RO WOF	RKMAN	MATL SPEC:	
OTHERWISE	CUSTOM PRODUCTS	1715 SOUTH SIBLEY A LITCHFIELD, MN 553				
.X $\pm$ .09 .XX $\pm$ .06	TTLE:		DRWG SIZE	DRWG NO.	1 1770	REV LEVEL
.XXX ± .03 HOLE SIZE +015/-010 ANGLE ± .5°	SUNSHADE	KIT	D	4	-   4770   of 3	D
ANOLL 1.3			DRAWN: C	AD DATE:	2-23-05	-

SCALE 0.250



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Page 8 of 8

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