

CEDAR SUMMIT PREMIUM TNR III TUBE SLIDE – F24949

INSTALLATION AND OPERATING INSTRUCTIONS

WARNING

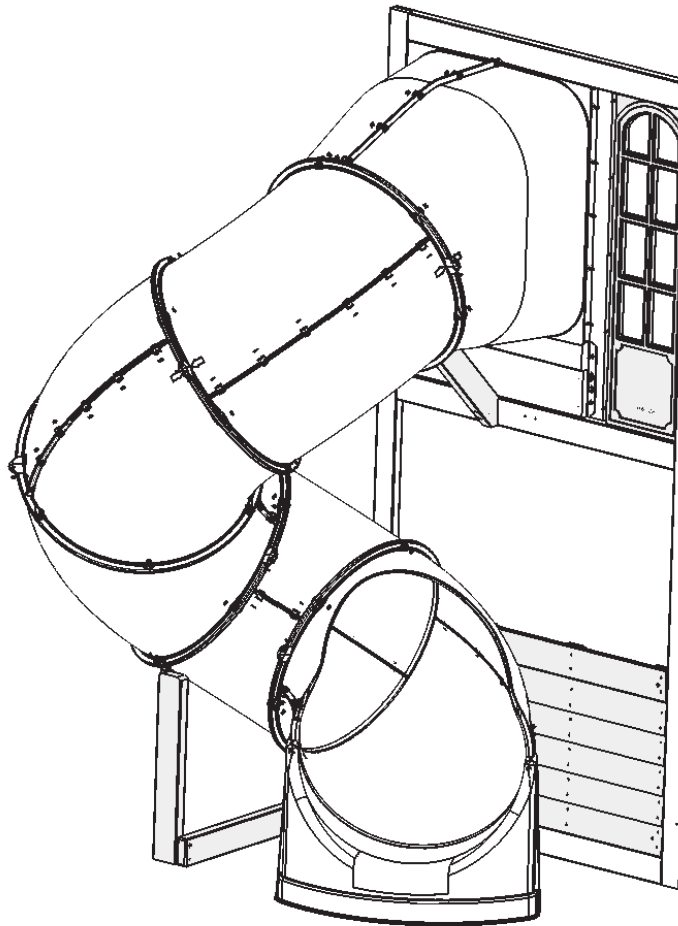
To reduce the risk of serious injury or death, you must read and follow these instructions. Keep and refer to these instructions often and give them to any future owner of this play system. Manufacturer contact information provided below.

FOR OBSTACLE FREE SAFETY ZONE AND MAXIMUM NUMBER OF USERS SEE - Fort Guides in Main Clubhouse and Swing instructions. See Page 3 for Protective Surfacing requirements.

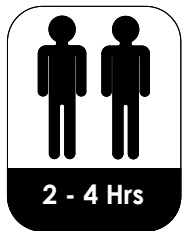
MAXIMUM VERTICAL FALL HEIGHT FOR ALL FORTS - **6'9"** Ages **3 to 10**; Weight Limit **110 lbs. (49.9 kg)** per child.

RESIDENTIAL HOME USE ONLY. Not intended for public areas such as schools, churches, nurseries, day cares or parks.

**See Fort Guide
for Installation
Location**



FORTS



Two person
assembly



Cedar Summit
c/o ©Solowave Design L.P.
Mount Forest, ON Canada
N0G 2L0

www.cedarsummitplay.com
support@cedarsummitplay.com
Customer Service
1-877-817-5682 (toll free)
1-519-323-2258

Table of Contents

Warnings and Safe Play Instructions.....	pg. 2
Protective Surfacing Guidelines.....	pg. 3
Instructions for Proper Maintenance.....	pg. 4
About Our Wood – Limited Warranty.....	pg. 5
Keys to Assembly Success	pg. 6
Metric Conversion Sheets	pg. 7,8
Part ID	pg. 9,10
Steps.....	pg. 11

Warnings and Safe Play Instructions



CONTINUOUS ADULT SUPERVISION REQUIRED. Most serious injuries and deaths on playground equipment have occurred while children were unsupervised! Our products are designed to meet mandatory and voluntary safety standards. Complying with all warnings and recommendations in these instructions will reduce the risk of serious or fatal injury to children using this play system. Go over the warnings and safe play instructions regularly with your children and make certain that they understand and follow them. Remember on-site adult supervision is required for children of all ages.



WARNING

SERIOUS HEAD INJURY HAZARD

Installation over concrete, asphalt, dirt, grass, carpet and other hard surface creates a risk of serious injury or death from falls to the ground. Install and maintain shock absorbing material under and around play-set as recommended on page 3 of these instructions.

COLLISION HAZARD

Place play-set on level ground at least 6 feet from any obstruction such as a garage or house, fences, poles, trees, sidewalks, walls, landscape timbers, rocks, pavement, planters, garden borders, overhanging branches, laundry lines, and electrical wires. (See OBSTACLE FREE SAFETY ZONE on cover)

CHOKING HAZARD/SHARP EDGES & POINTS

Adult assembly required. This product contains small parts and parts with sharp edges and points. Keep parts away from children until fully assembled.

WARNING LABEL

Owners shall be responsible for maintaining the legibility of the warning labels.

STRANGULATION HAZARD

- NEVER allow children to play with ropes, clotheslines, pet leashes, cables, chains or cord-like items when using this play-set or to attach these items to play-set.
- NEVER allow children to wear loose fitting clothing, ponchos, hoods, scarves, capes, necklaces, items with draw-strings, cords or ties when using this play-set.
- NEVER allow children to wear bike or sport helmets when using this play-set.

Failure to prohibit these items, even helmets with chin straps, increases the risk of serious injury and death to children from entanglement and strangulation.

TIP OVER HAZARD

Choose a level location for the equipment. This can reduce the likelihood of the play set tipping over and loose-fill surfacing materials washing away during heavy rains.

DO NOT allow children to play on the play-set until the assembly is complete and the unit is properly anchored.



WARNING – Safe Play Instructions

- ✓ Observe capacity limitations of your play-set. See front cover.
- ✓ Dress children with well fitting and full foot enclosing footwear.
- ✓ Teach children to sit with their full weight in the center of the swing seat to prevent erratic swing motion or falling off.
- ✓ Check for splintered, broken or cracked wood; missing, loose, or sharp edged hardware. Replace, tighten and or sand smooth as required prior to playing.
- ✓ Verify that suspended climbing ropes, rope ladders, chain or cable are secured at both ends and cannot be looped back on itself as to create an entanglement hazard.
- ✓ On sunny and or hot days, check the slide and other plastic rides to assure that they are not very hot as to cause burns. Cool hot slide and rides with water and wipe dry prior to using.
- ✗ Do not allow children to wear open toe or heel footwear like sandals, flip-flops or clogs.
- ✗ Do not allow children to walk, in front, between, behind or close to moving rides.
- ✗ Do not let children twist swing chains or ropes or loop them over the top support bar. This may reduce the strength of the chain or rope and cause premature failure.
- ✗ Do not let children get off rides while they are in motion.
- ✗ Do not permit climbing on equipment when it is wet.
- ✗ Do not permit rough play or use of equipment in a manner for which it was not intended. Standing on or jumping from the roof, elevated platforms, swings, climbers, ladders or slide can be dangerous.
- ✗ Do not allow children to swing empty rides or seats.
- ✗ Do not allow children to go down slide head first or run up slide.

⚠️ Protective Surfacing - Reducing Risk of Serious Head Injury From Falls

One of the most important things you can do to reduce the likelihood of serious head injuries is to install shock-absorbing protective surfacing under and around your play equipment. The protective surfacing should be applied to a depth that is suitable for the equipment height in accordance with ASTM F1292. There are different types of surfacing to choose from; whichever product you select, follow these guidelines:

Loose-Fill Materials

- Maintain a minimum depth of 9 inches of loose-fill materials such as wood mulch/chips, engineered wood fiber (EWF), or shredded/recycled rubber mulch for equipment up to 8 feet high; and 9 inches of sand or pea gravel for equipment up to 5 feet high. NOTE: An initial fill level of 12 inches will compress to about a 9-inch depth of surfacing over time. The surfacing will also compact, displace, and settle, and should be periodically raked and refilled to maintain at least a 9-inch depth.
- Use a minimum of 6 inches of protective surfacing for play equipment less than 4 feet in height. If maintained properly, this should be adequate. (At depths less than 6 inches, the protective material is too easily displaced or compacted.)

NOTE: Do not install home playground equipment over concrete, asphalt, or any other hard surface. A fall onto a hard surface can result in serious injury to the equipment user. Grass and dirt are not considered protective surfacing because wear and environmental factors can reduce their shock absorbing effectiveness. Carpeting and thin mats are not adequate protective surfacing. Ground level equipment -- such as a sandbox, activity wall, playhouse or other equipment that has no elevated play surface -- does not need any protective surfacing.

- Use containment, such as digging out around the perimeter and/or lining the perimeter with landscape edging. Don't forget to account for water drainage.
- Periodically rake, check and maintain the depth of the loose-fill surfacing material. Marking the correct depth on the play equipment support posts will help you to see when the material has settled and needs to be raked and or replenished. Be sure to rake and evenly redistribute the surfacing in heavily used areas.
- Do not install loose fill surfacing over hard surfaces such as concrete or asphalt.

Poured-In-Place Surfaces or Pre-Manufactured Rubber Tiles

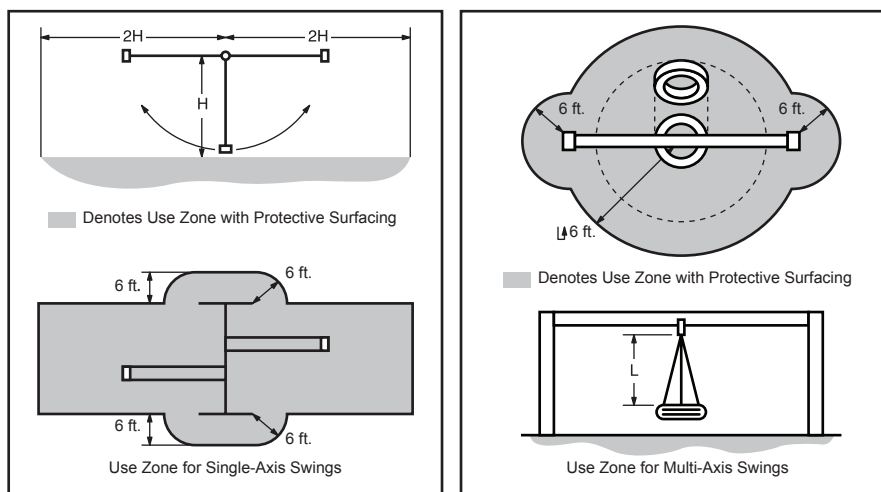
You may be interested in using surfacing other than loose-fill materials - like rubber tiles or poured-in-place surfaces.

- Installations of these surfaces generally require a professional and are not “do-it yourself” projects.
- Review surface specifications before purchasing this type of surfacing. Ask the installer/manufacturer for a report showing that the product has been tested to the following safety standard: ASTM F1292 *Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment*. This report should show the specific height for which the surface is intended to protect against serious head injury. This height should be equal to or greater than the fall height - vertical distance between a designated play surface (*elevated surface for standing, sitting, or climbing*) and the protective surfacing below - of your play equipment.
- Check the protective surfacing frequently for wear.

Placement

Proper placement and maintenance of protective surfacing is essential. Refer to diagram on front cover. Be sure to;

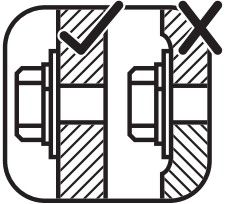
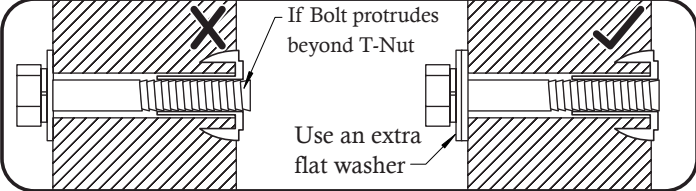
- Extend surfacing at least 6 feet from the equipment in all directions.
- For to-fro swings, extend protective surfacing in front of and behind the swing to a distance equal to twice the height of the top bar from which the swing is suspended.
- For tire swings, extend surfacing in a circle whose radius is equal to the height of the suspending chain or rope, plus 6 feet in all directions.



Instructions for Proper Maintenance

Your Cedar Summit Play System is designed and constructed of quality materials with your child's safety in mind. As with all outdoor products used by children, it will weather and wear. To maximize the enjoyment, safety and life of your Play Set, it is important that you, the owner, properly maintain it.

Check the following at the beginning of the play season:

<p>HARDWARE:</p> <ul style="list-style-type: none"> ✓ Check metal parts for rust. If found, sand and repaint using a non-lead paint complying with 16 CFR 1303. ✓ Inspect and tighten all hardware. On wood assemblies DO NOT OVER-TIGHTEN as to cause crushing and splintering of wood. ✓ Check for sharp edges or protruding screw threads, add washers if required.   <p>SHOCK ABSORBING SURFACING:</p> <ul style="list-style-type: none"> ✓ Check for foreign objects. Rake and check depth of loose fill protective surfacing materials to prevent compaction and maintain appropriate depth. Replace as necessary. (See Protective Surfacing, page 3) 	<p>GROUND STAKES (ANCHORS):</p> <ul style="list-style-type: none"> ✓ Check for looseness, damage or deterioration. Should firmly anchor unit to ground during use. Re-secure and or replace, if necessary. <p>SWING HANGERS:</p> <ul style="list-style-type: none"> ✓ Check that bolts are secure and tight. Quick clips should be completely closed and threaded clips screwed tight. ✓ If squeaking occurs lubricate bushings with oil or WD-40®. <p>SWINGS, ROPES AND RIDES:</p> <ul style="list-style-type: none"> ✓ Reinstall if removed during cold season. Check all moving parts including swing seats, ropes, chains and attachments for wear, rust and other deterioration. Replace as needed. ✓ Check that ropes are tight, secure at both ends and cannot loop back as to create an entrapment. <p>WOOD PARTS:</p> <ul style="list-style-type: none"> ✓ Check all wood members for deterioration, structural damage and splintering. Sand down splinters and replace deteriorated wood members. As with all wood, some checking and small cracks in grain is normal. ✓ Applying a water repellent or stain (water-based) on a yearly basis is important maintenance to maintain maximum life and performance of the product.
--	---

Check twice a month during play season:

<p>HARDWARE:</p> <ul style="list-style-type: none"> ✓ Inspect for tightness. Must be firmly against, but not crushing the wood. DO NOT OVER-TIGHTEN. This will cause splintering of wood. ✓ Check for sharp edges or protruding screw threads. Add washers if required. 	<p>SHOCK ABSORBING SURFACING:</p> <ul style="list-style-type: none"> ✓ Rake and check depth of loose fill protective surfacing materials to prevent compaction and maintain appropriate depth. Replace as necessary. (See Protective Surfacing, page 3)
---	---

Check once a month during play season:

<p>SWING HANGERS:</p> <ul style="list-style-type: none"> ✓ Check that they are secure and orientated correctly. Hook should rotate freely and perpendicular to support beam. ✓ If squeaking occurs lubricate bushings with oil or WD-40®. 	<p>SWINGS AND RIDES:</p> <ul style="list-style-type: none"> ✓ Check swing seats, all ropes, chains and attachments for fraying, wear, excessive corrosion or damage. Replace if structurally damaged or deteriorated.
--	---

Check at the end of the play season:

<p>SWINGS AND RIDES:</p> <ul style="list-style-type: none"> ✓ To prolong their life, remove swings and store inside when outside temperature is below 32°F/0°C. Below freezing, plastic parts may become more brittle. 	<p>SHOCK ABSORBING SURFACING:</p> <ul style="list-style-type: none"> ✓ Rake and check depth of loose fill protective surfacing materials to prevent compaction and maintain appropriate depth. Replace as necessary. (See Protective Surfacing, page 3)
--	---

If you dispose of your play set: Please disassemble and dispose of your unit so that it does not create any unreasonable hazards at the time it is discarded. Be sure to follow your local waste ordinances.

About Our Wood

Cedar Summit Premium Play Systems uses only premium playset lumber, ensuring the safest product for your children's use. Although we take great care in selecting the best quality lumber available, wood is still a product of nature and susceptible to weathering which can change the appearance of your set.

What causes weathering? Does it affect the strength of my Play System?

One of the main reasons for weathering is the effects of water (moisture); the moisture content of the wood at the surface is different than the interior of the wood. As the climate changes, moisture moves in or out of the wood, causing tension which can result in checking and or warping. You can expect the following due to weathering. These changes will not affect the strength of the product:

1. **Checking** is surface cracks in the wood along the grain. A post (4" x 4") will experience more checking than a board (1" x 4") because the surface and interior moisture content will vary more widely than in thinner wood.
2. **Warping** results from any distortion (twisting, cupping) from the original plane of the board and often happens from rapid wetting and drying of the wood.
3. **Fading** happens as a natural change in the wood color as it is exposed to sun-light and will turn a grey over time.

How can I reduce the amount of weathering to my Play System?

At the factory we have coated the wood with a water repellent or stain. This coating decreases the amount of water absorption during rain or snow thus decreasing the tension in the wood. Sunlight will break down the coating, applying a water repellent or stain on a yearly basis is important maintenance. (see your local stain and paint supplier for a recommended product)

Most weathering is just the normal result of nature and will not affect safe play and enjoyment for your child. However if you are concerned that a part has experienced a severe weathering problem please call our consumer relations department for further assistance.

Complete and mail registration card to receive important product notifications and assure prompt warranty service.

5 Year Limited Warranty

Solowave Design warrants that this product is free from defect in materials and workmanship for a period of one year from the original date of purchase. In addition, lumber is warranted for 5 years against structural failure due to rot and insect damage. All other parts, such as hardware, swings, rides, accessories, and slides carry a one-year warranty only.

This warranty applies to the original owner and registrant and is non-transferable.

Regular maintenance is required to assure the integrity of your Play System. Failure by the owner to maintain the product according to the maintenance requirements may void this warranty. This warranty does not cover any inspection cost.

This Limited Warranty does not cover:

- Labor for replacement of any defective item(s);
- Incidental or consequential damages;
- Cosmetic defects which do not affect performance or integrity;
- Vandalism; improper use or installation; acts of nature;
- Minor twisting, warping, checking, or any other natural occurring properties of wood that do not affect performance or integrity.

Solowave Design products have been designed for safety and quality. Any modifications made to the original product could damage the structural integrity of the unit leading to failure and possible injury. Solowave Design Inc. cannot assume any responsibility for modified products. Furthermore, modification voids any and all warranties.

This product is warranted for **RESIDENTIAL USE ONLY**. Under no circumstance should a Solowave Design Play System be used in public settings such as schools, churches, playgrounds, parks, day cares and the like. Such use may lead to product failure and potential injury. Any and all public use will void this warranty.

Solowave Design disclaims all other representations and warranties of any kind, express or implied.

This Warranty gives you specific legal rights. You may have other rights as well which vary from state to state or province to province. This warranty excludes all consequential damages, however, some states do not allow the limitation or exclusion of consequential damages, and therefore this limitation may not apply to you.

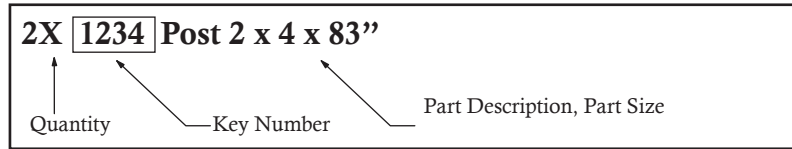
Keys to Assembly Success

Tools Required

<ul style="list-style-type: none"> • Tape Measure • Carpenters Level • Carpenters Square • Claw Hammer • Standard or Cordless Drill 	<ul style="list-style-type: none"> • #1, #3 Phillips or Robertson bit or Screwdriver • Ratchet(1/2" & 7/16" sockets) 	<ul style="list-style-type: none"> • Open End Wrench (1/2" & 7/16") • Adjustable Wrench • 1/8" & 3/16" Drill Bits 	<ul style="list-style-type: none"> • 3/16" Hex Key • 8' Step Ladder • Safety Glasses • Adult Helpers • Pencil
--	--	--	--

Part Identification Key

On each page, you will find the parts and quantities required to complete the assembly step illustrated on that page. Here is a sample.



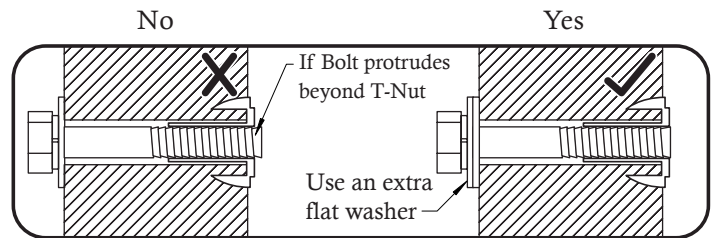
Symbols

Throughout these instructions symbols are provided as important reminders for proper and safe assembly.

<p>This identifies information that requires special attention. Improper assembly could lead to an unsafe or dangerous condition.</p>	<p>Check that set or assembly is properly level before proceeding.</p> <p>Use Level</p>
<p>Use Help</p> <p>Where this is shown, 2 or 3 people are required to safely complete the step. To avoid injury or damage to the assembly make sure to get help!</p>	<p>Pre-drill 1/8" & 3/16" Bit</p> <p>Pre-drill a pilot hole before fastening screw or lag to prevent splitting of wood.</p>
<p>Measure Distance</p> <p>Use a measuring tape to assure proper location.</p>	<p>Tighten Bolts</p> <p>This indicates time to tighten bolts, but not too tight! Do not crush the wood. This may create splinters and cause structural damage.</p>
<p>Check that assembly is square before tightening bolts.</p> <p>Square Assembly</p>	

CAUTION – Protrusion Hazard

Once the assembly is tightened, watch for exposed threads. If a thread protrudes from the T-Nut, remove the bolt and add washers to eliminate this condition. Extra washers have been provided for this purpose.

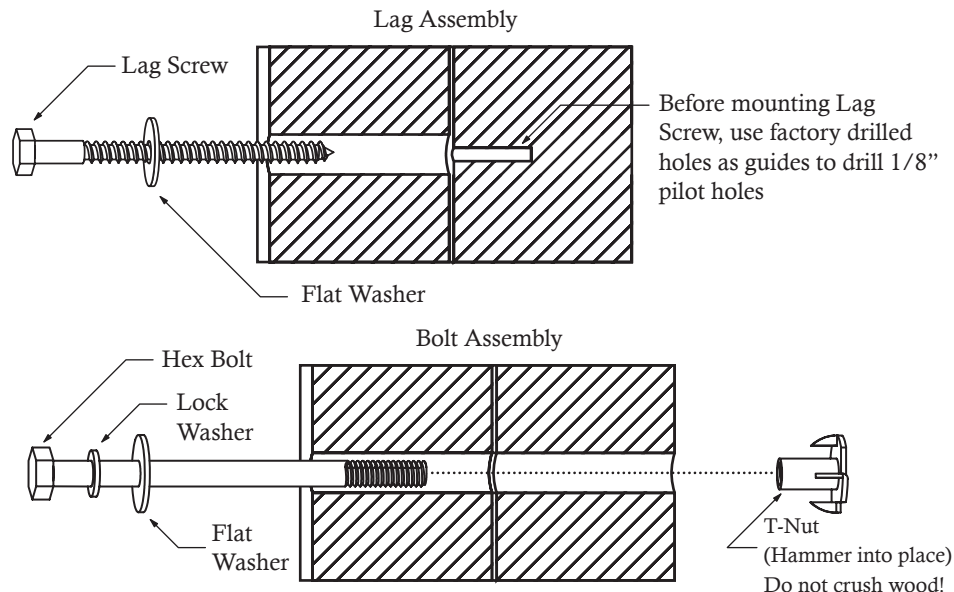


Proper Hardware Assembly

Lag screws require drilling pilot holes to avoid splitting wood. Only a flat washer is required. For ease of installation liquid soap can be used on all lag-type screws.

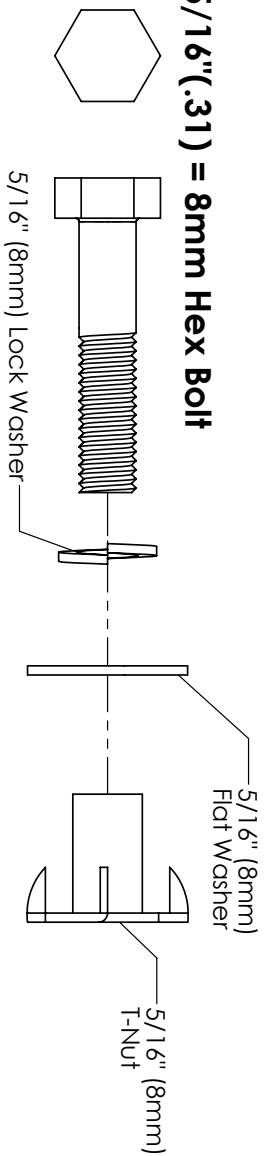
For bolts, tap T-Nut into hole with hammer. Insert the hex bolt through lock washer first then flat washer then hole. Because the assemblies need to be squared do not completely tighten until instructed. Pay close attention to diameter of the bolts. 5/16" is slightly larger than 1/4".

Note: Wafer head bolts with blue lock tight or a bolt with a Ny-Lok nut do NOT require a lock washer.

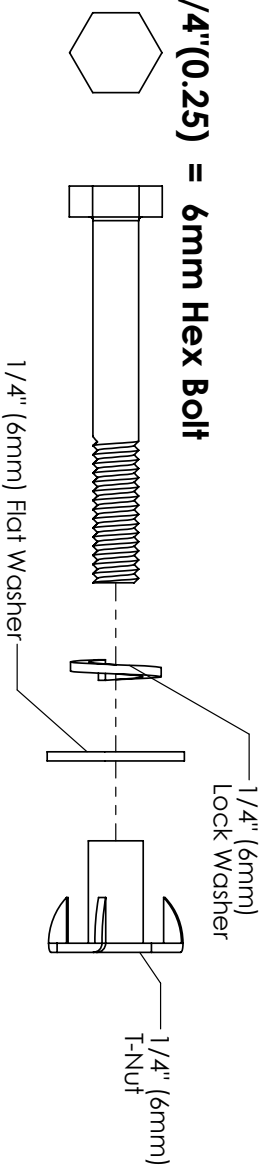


SOLOWAVE DESIGN HARDWARE

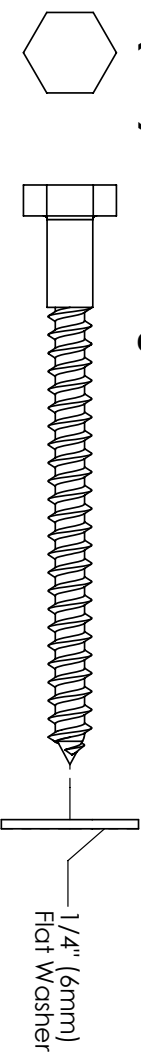
5/16"(.31) = 8mm Hex Bolt



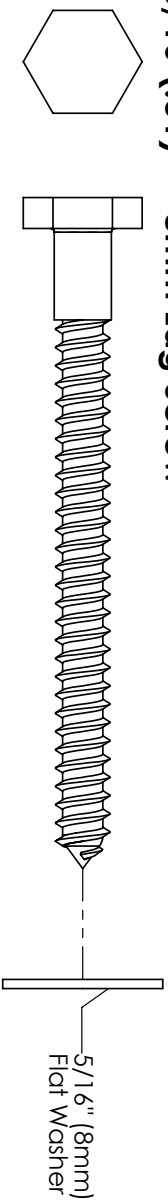
1/4"(0.25) = 6mm Hex Bolt



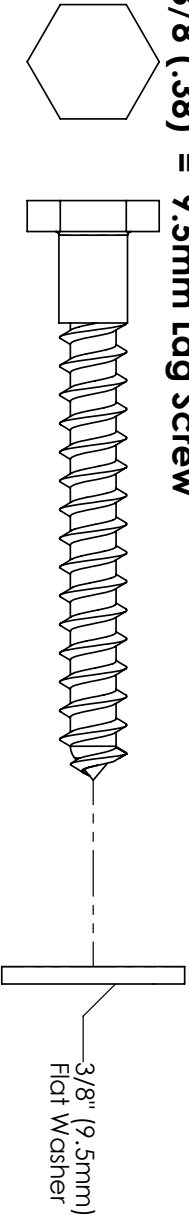
1/4"(0.25) = 6mm Lag Screw



5/16"(.31) = 8mm Lag Screw



3/8"(.38) = 9.5mm Lag Screw



HARDWARE LENGTH CHART inches vs millimetres

6	152
5½	140
5	127
4½	114
4	102
3½	89
3	76
2½	64
2	51
1½	38
1¼	32
1-1/8	29
1	25.4
7/8	22
3/4	19
1/2	12.7

DIAMETER CONVERSION

1 inch = 25.4mm

For example:

BOLT DIAMETER 5/16 (0.31) inches

0.31 inches x 25.4mm = 8mm

LENGTH CONVERSION

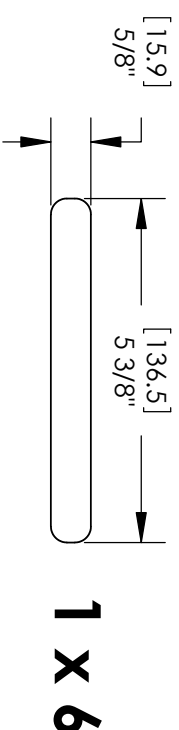
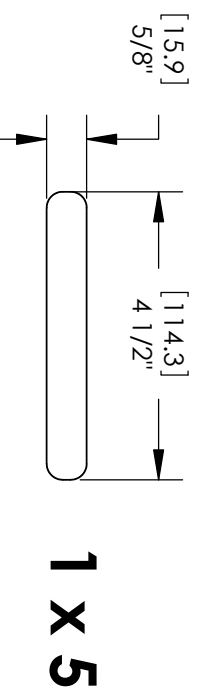
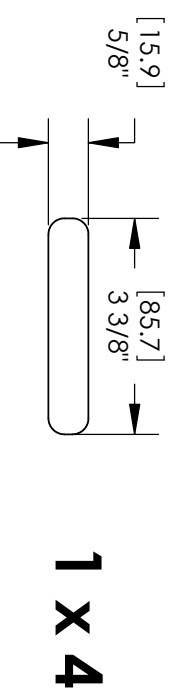
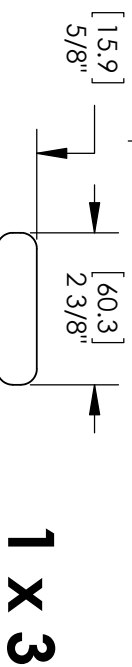
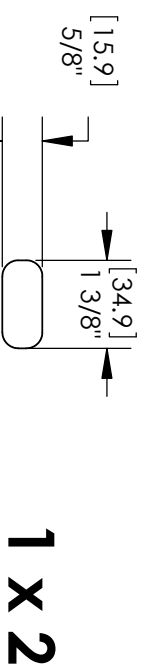
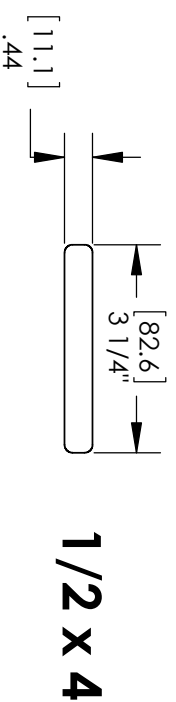
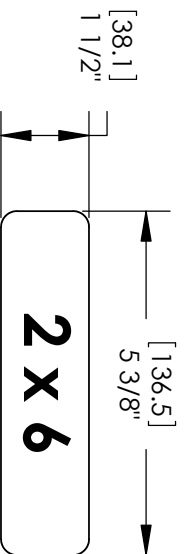
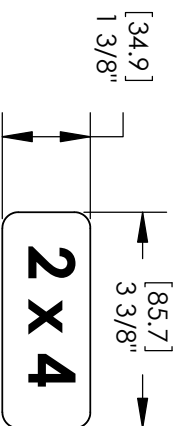
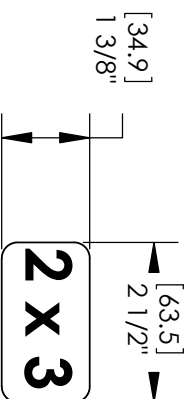
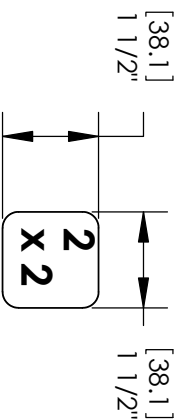
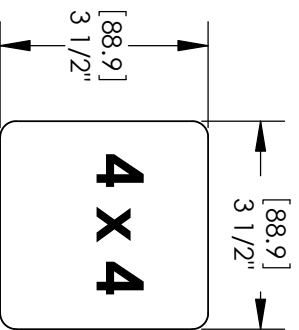
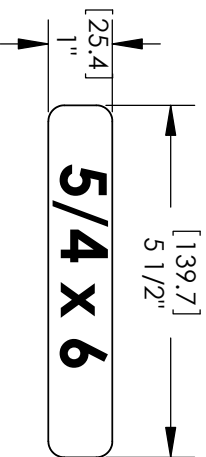
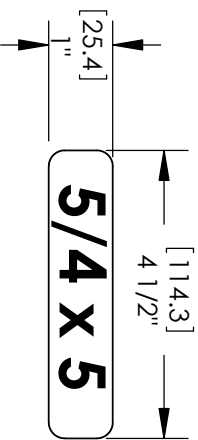
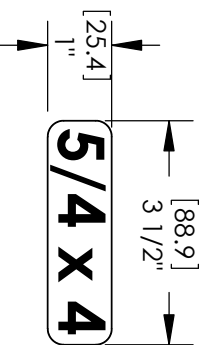
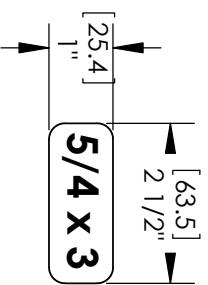
1 inch = 25.4mm

For example:

BOLT LENGTH 4½ (4.5) inches long

4.5 inches x 25.4mm = 114mm long

SOLO) WAVE DESIGN WOOD PROFILES



1 inch = 25.4mm

LENGTH CONVERSION

For example:

BOARD LENGTH 59 1/4 (59.25) inches

59.25 inches x 25.4mm = 1505mm

Dimensions in brackets [mm] represent millimetres.

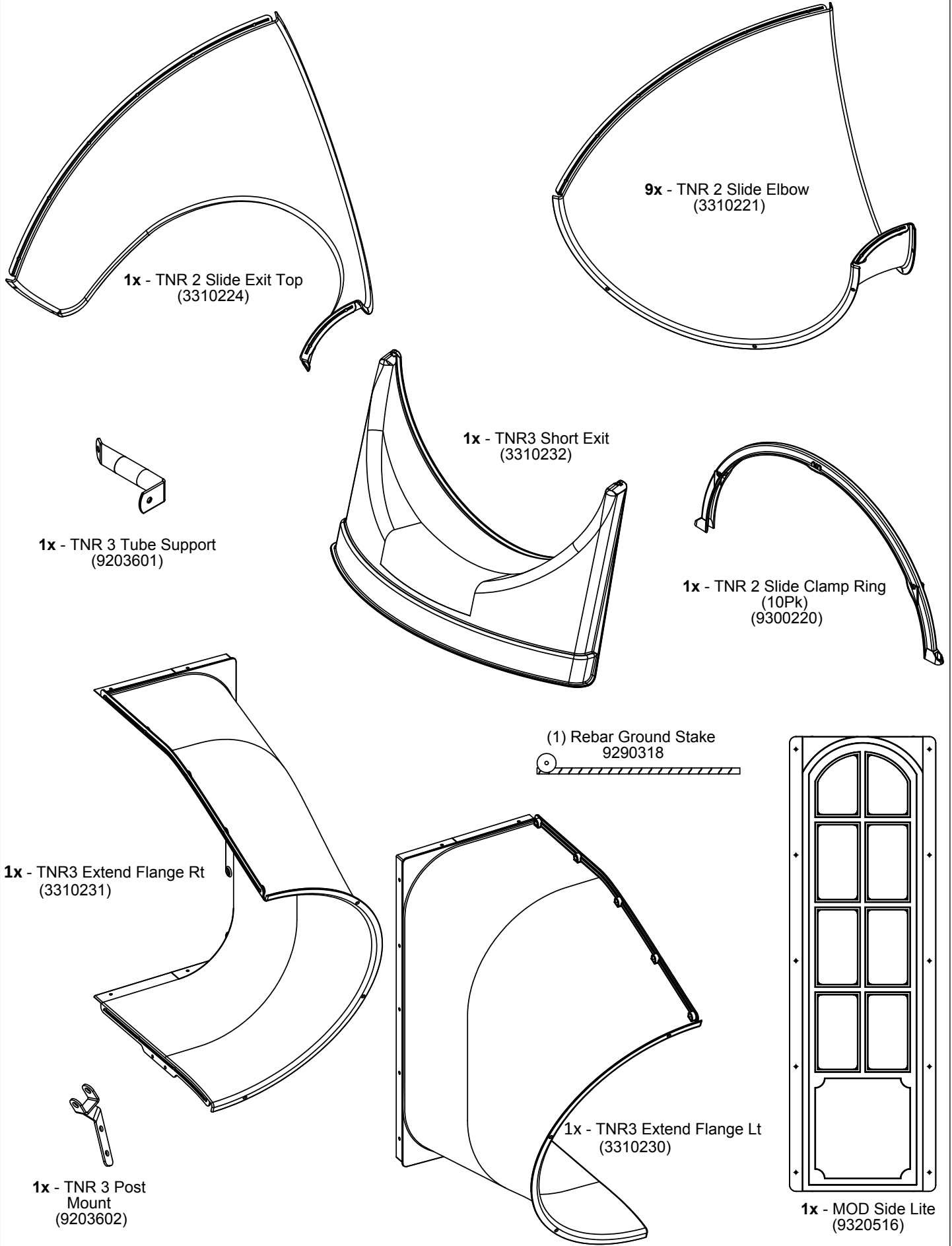
Part Identification (Reduced Part Size)

<p>8934 (1) SL Gusset 1¼ x 3 x 15¾" 3638934 Box 1</p> <p>8965 (1) TNR Upright 1¼ x 3 x 20¼" 3638965 Box 1</p> <p>8963 (1) TNR Ground Brace 1¼ x 3 x 32¼" 3638963 Box 1</p>	<p>8935 (1) Lower SL Insert 1.36 x 8-1/8 x 26¼" 37638935 Box 1</p>
---	---

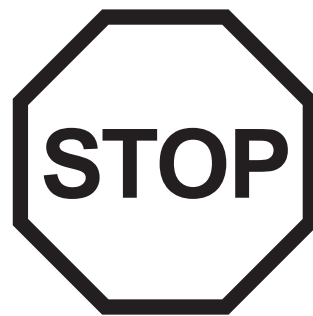
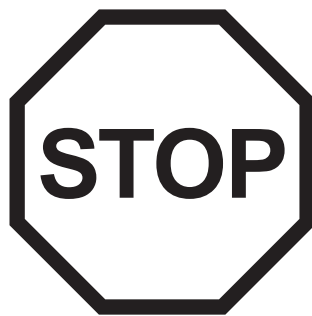
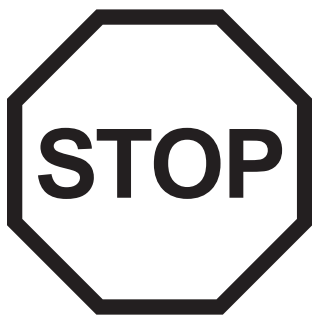
Part Identification (Actual Part Size)

<p>94pc. (PB1) - Pan Bolt 1/4 x 3/4" - (53453203)</p> <p>1pc. (PB6) - Pan Bolt 1/4 x 1" - (53413210)</p> <p>1pc. (PB2) - Pan Bolt 1/4 x 1-1/4" - (53433212)</p> <p>8pc. (FW6) - #12 Screw Bezel - (9299500)</p> <p>18pc. (S0) - Truss Screw #8 x 7/8" - (52933505)</p> <p>19pc. (S6) - Pan Screw #12 x 1" - (52433610)</p> <p>5pc. (S7) - Pan Screw #12 x 2" - (52433620)</p> <p>1pc. (S4) - Wood Screw #8 x 3" - (52043530)</p>	<p>1x (D1) - Quadrex Driver Bit (9200015)</p> <p>1pc. (H8) - Hex Bolt 1/4 x 4¼" - (53703241)</p> <p>1pc. (LN1) - 1/4 Lock Nut - (54303200)</p> <p>1pc. (TN1) - 1/4" T - Nut (54503200)</p> <p>3pc. (S11) - Wood Screw #8 x 2" - (52043520)</p>	<p>WL5</p> <p>(1) Wafer Lag Screw 1/4 x 2-1/2" (52613222)</p> <p>4pc. (FW1) - 1/4" Flat Washer - (51103200)</p> <p>1pc. (LW1) - 1/4" Lock Washer - (51303200)</p>
--	---	---

Part Identification (Reduced Part Size)



Step 1: Inventory Parts - Read This Before Starting Assembly



- A.** This is the time for you to inventory all your hardware, wood and accessories, referencing the parts identification sheets. This will assist you with your assembly.
- The wood pieces will have the four digit key number stamped on the ends of the boards. The wood pieces are referenced throughout the instructions with this number.
 - Please refer to Page 6 for proper hardware assembly.
 - Each step indicates which bolts and/or screws you will need for assembly, as well as any flat washers, lock washers, t-nuts or lock nuts.
- B.** If there are any missing or damaged pieces or you need assistance with assembly please contact the Consumer Relations Department directly. Call us before going back to the store.

1-877-817-5682
support@cedarsummitplay.com

- C.** Read the assembly manual completely, paying special attention to ANSI warnings; notes; and safety/maintenance information on pages 1 - 6.
- D.** Before you discard your cartons fill out the form below.
- The carton I.D. stamp is located on the end of each carton. The tracking number is located on the Big Backyard ID Plaque (3320356).
 - Please retain this information for future reference. You will need this information if you contact the Consumer Relations Department.

MODEL NUMBER: **F24949**

CARTON I.D. STAMP: _ _ _ _ 14459 _ (Box 1)

CARTON I.D. STAMP: _ _ _ _ 14459 _ (Box 4)

CARTON I.D. STAMP: _ _ _ _ 14459 _ (Box 2)

CARTON I.D. STAMP: _ _ _ _ 14459 _ (Box 5)

CARTON I.D. STAMP: _ _ _ _ 14459 _ (Box 3)

CARTON I.D. STAMP: _ _ _ _ 14459 _ (Box 6)

TRACKING NUMBER (from ID Plaque): _____

Step 2: Attach Slide Wall Inserts

A: In the narrow opening of (2622) End Panel Assembly (Upper Jamb should already be installed), place the MOD Side Lite from inside the assembly then attach to the panel and (2602) Upper Jamb with 14 (S0) #8 x 7/8" Truss Screws. (fig. 2.1 and 2.2)

B: In the wider opening of (2622) End Panel Assembly, tight to the bottom board place (8935) Lower SL Insert from inside the assembly then attach to the panel and (2602) Upper Jamb with 4 (S0) #8 x 7/8" Truss Screws. (fig. 2.1 and 2.2)

Fig. 2.1
Inside View

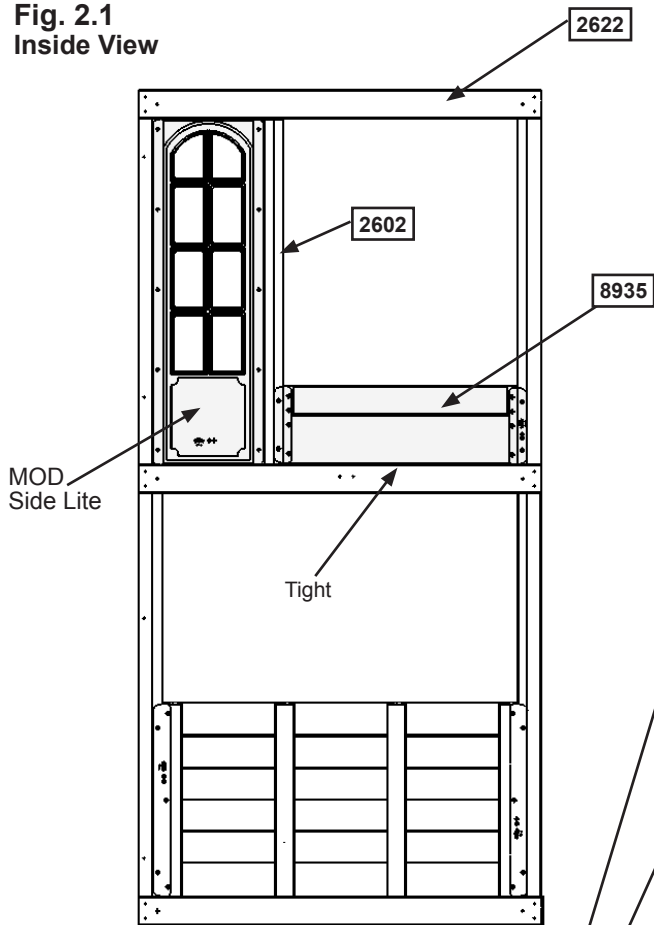
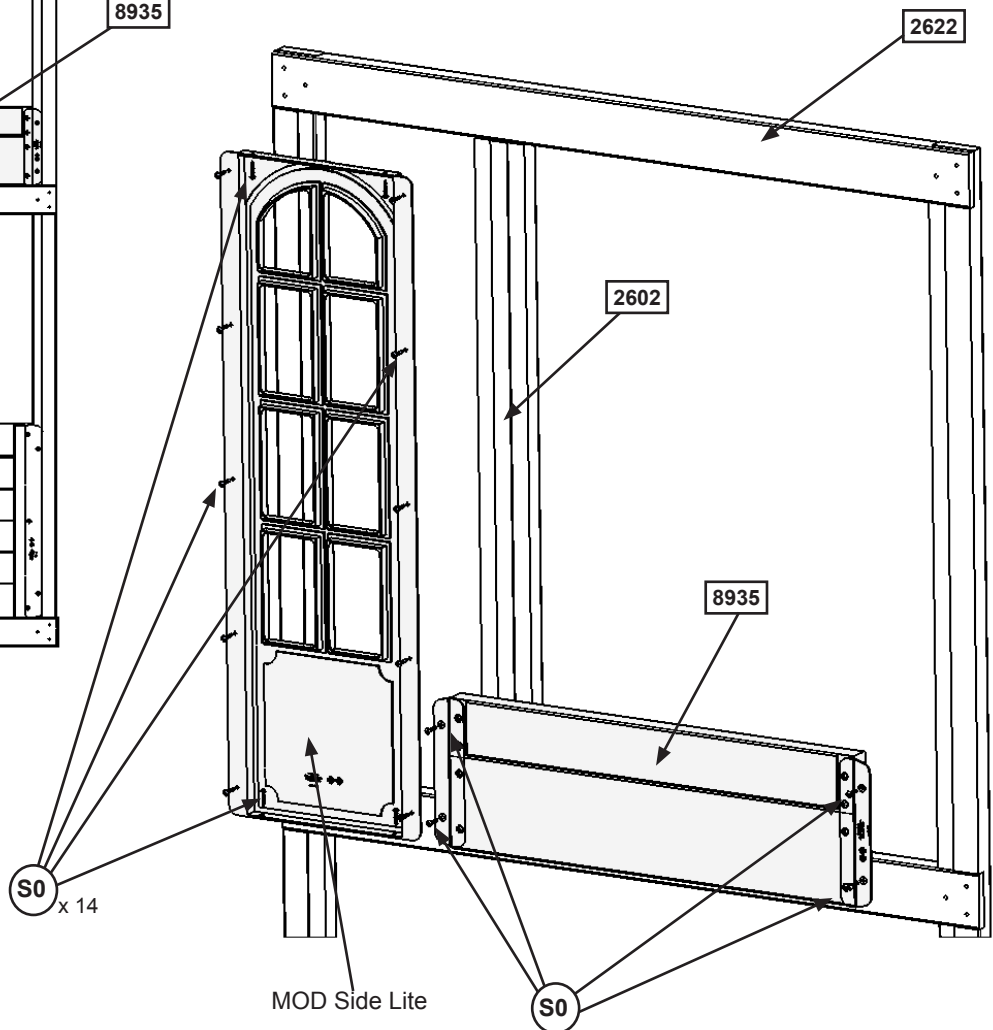


Fig. 2.2
Inside View



Wood Parts

1 x **8935** Lower SL Insert 1.36 x 8-1/8 x 26-1/4"

Hardware

18 x **S0** #8 x 7/8" Truss Screw

Other Parts

1 x MOD Side Lite

Step 3: Slide Section Assemblies Part 1



Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. (fig. 3.3)

A: Fit 2 TNR2 Slide Elbows together and attach with 8 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut) as shown in fig. 3.1. It is very important to attach bolts as indicated.

B: Repeat Step A 3 more times to create 4 Elbow Sections in total.

C: Attach TNR3 Extend Flange RT and TNR3 Extend Flange LT together using 9 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut) as shown in fig. 3.2. This creates the Flange Assembly.

Fig. 3.1

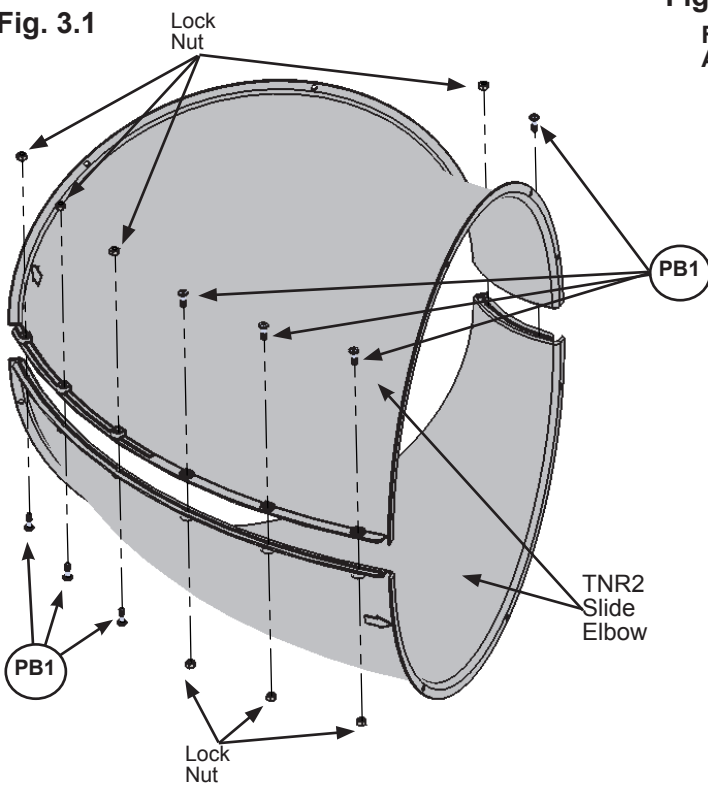


Fig. 3.2
Flange Assembly

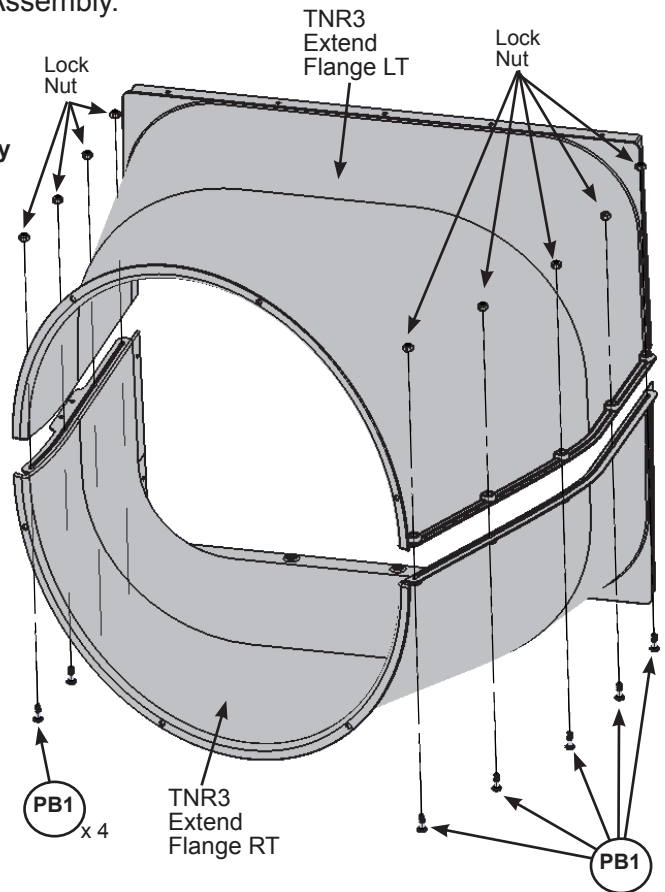
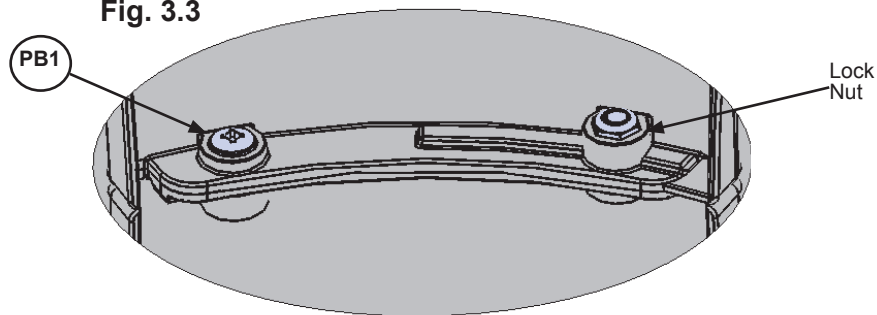


Fig. 3.3



Use a 7/16" open end wrench for nuts

Hardware

41 x (PB1) 1/4 x 3/4" Pan Bolt
(1/4" lock nut)

Other Parts

1 x TNR3 Extend Flange RT
1 x TNR3 Extend Flange LT
8 x TNR2 Slide Elbow

Step 3: Slide Section Assemblies Part 2

Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. (fig. 3.3)

D: Attach TNR2 Slide Exit Top and the remaining TNR2 Slide Elbow together using 8 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut) as shown in fig. 3.4. It is very important to attach bolts as indicated. This creates the Exit Elbow Assembly.

Fig. 3.4

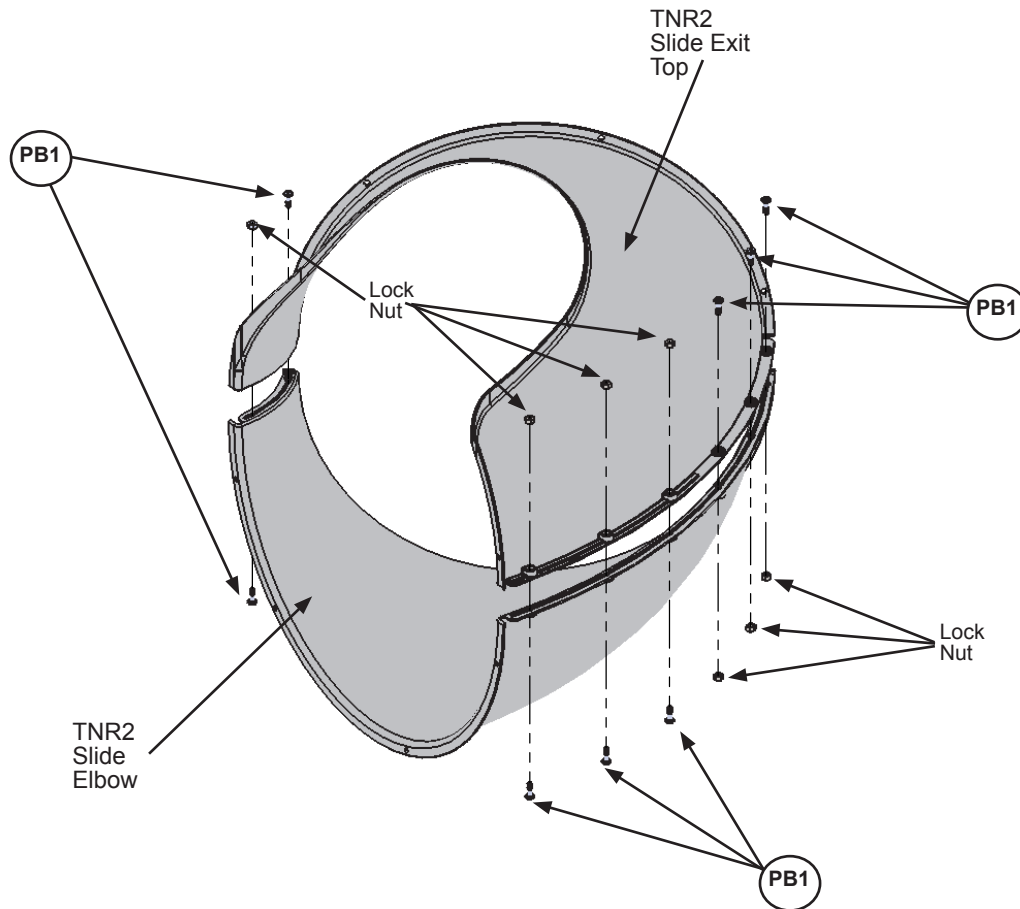
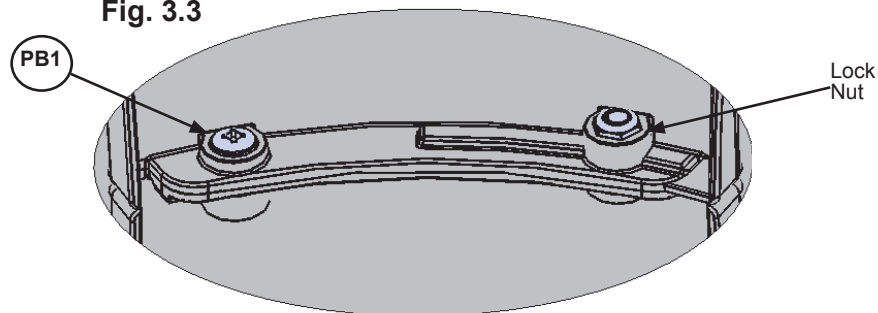



Fig. 3.3



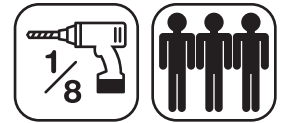
Hardware

8 x  1/4 x 3/4" Pan Bolt
(1/4" lock nut)

Other Parts

1 x TNR2 Slide Exit Top
1 x TNR2 Slide Elbow

Step 4: Attach Flange Assembly to Fort Part 1



A: With a helper place the Flange Assembly flush to the top opening in (2622) End Panel Assembly as shown in fig. 4.1, then pre-drill 1/8" pilot holes in (8935) Lower SL Insert for the 4 bottom mounting locations (approximate spots where circles are on figure), making sure the pre-drilled holes are a minimum of 1" deep. (fig. 4.2)

B: Attach Flange Assembly to (8935) Lower SL Insert using 4 (S7) #12 x 2" Pan Screws (with #12 Screw Bezel) in the pre-drilled holes. (fig. 4.2) Make sure the flat surfaces of the Flange Assembly are flush to the (2622) End Panel Assembly and (2602) Upper Jamb as shown in fig. 4.3.

C: Attach the Flange Assembly flush to top of (2622) End Panel Assembly using 4 (S6) #12 x 1" Pan Screws (with #12 Screw Bezel) and to (2602) Upper Jamb and side of (2622) End Panel Assembly using 5 (S6) #12 x 1" Pan Screws per side. (fig. 4.2)

Fig. 4.2
Inside View

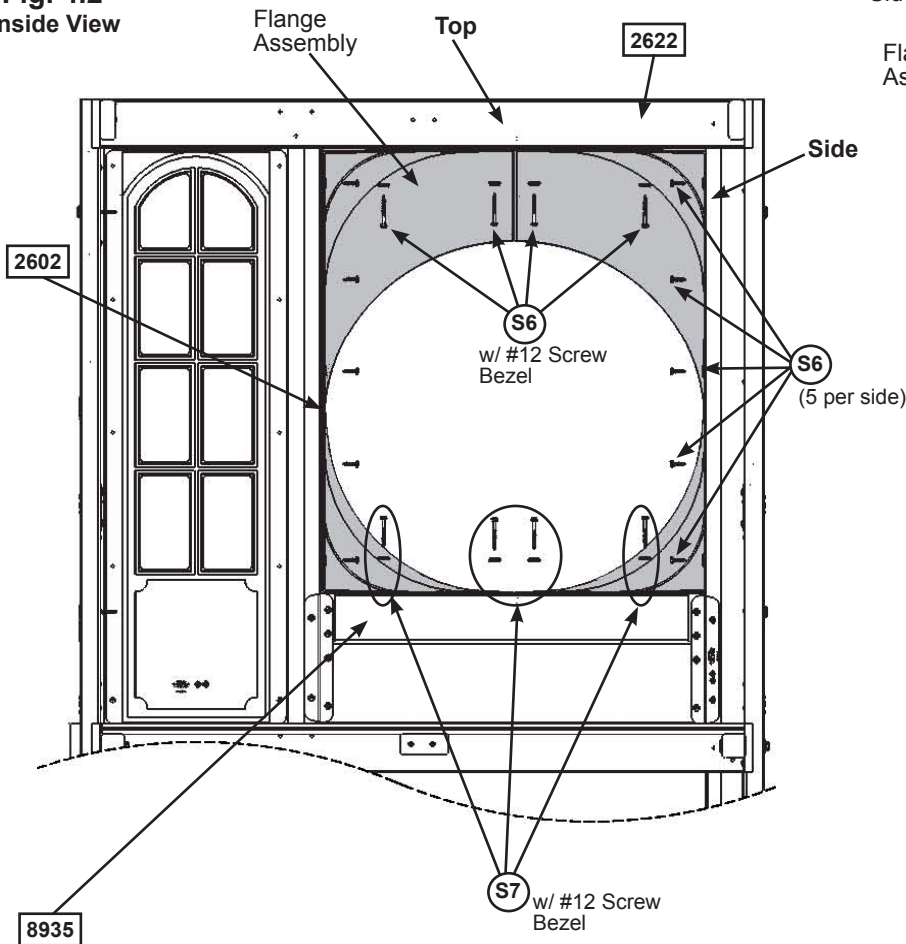


Fig. 4.1
Outside View

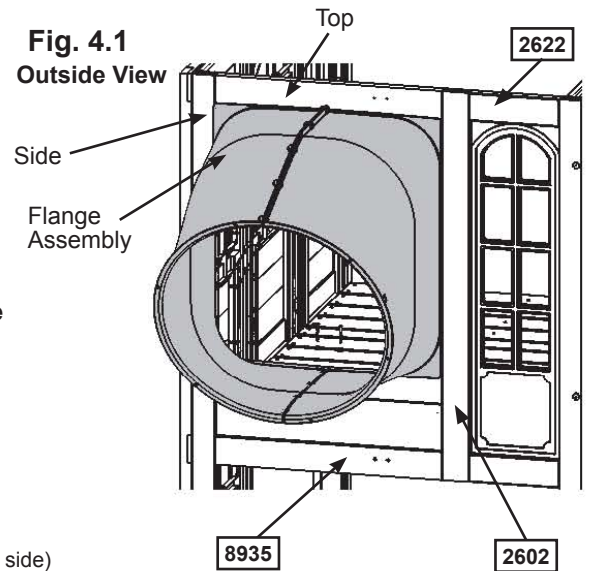
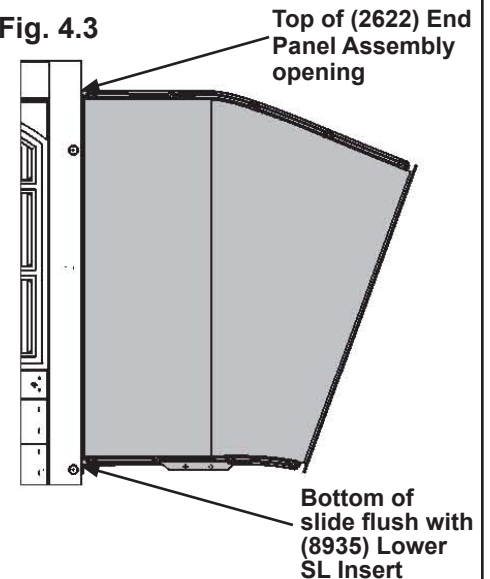


Fig. 4.3



Hardware

- 14 x **S6** #12 x 1" Pan Screw
- 4 x **S7** #12 x 2" Pan Screw
- 8 x #12 Screw Bezel

Step 4: Attach Flange Assembly to Fort Part 2



D: Place (8934) SL Gusset tight to (2622) End Panel Assembly, flush to the top of the bottom opening and attach to Flange Assembly with 2 (S6) #12 x 1" Pan Screws. (fig. 4.4 and 4.5)

E: Pre-drill pilot hole with a 3/16" drill bit then attach (8934) SL Gusset to (2622) End Panel Assembly with 1 (WL5) 1/4 x 2-1/2" Wafer Lag (with flat washer). (fig. 4.4 and 4.5)

Fig. 4.4

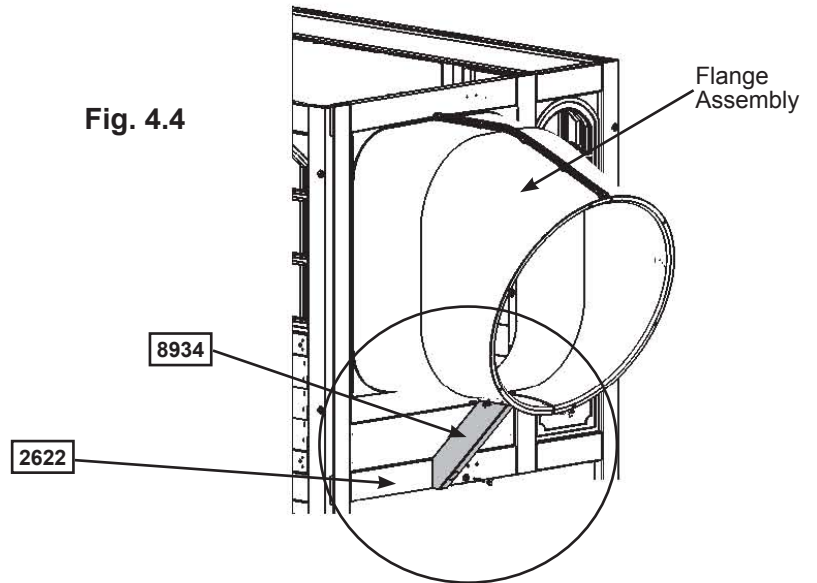
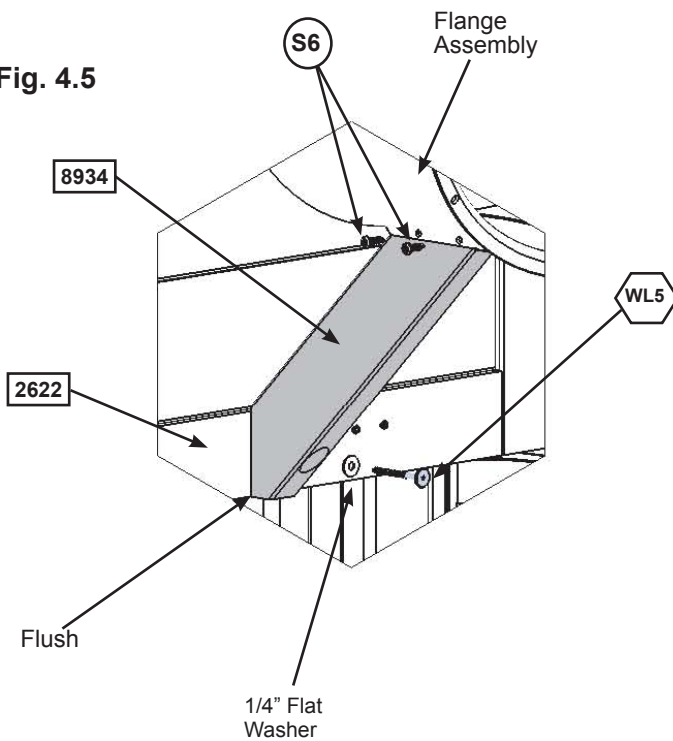


Fig. 4.5



Wood Parts

1 x **8934** SL Gusset 1-1/4 x 3 x 15-3/4"

Hardware

2 x **S6** #12 x 1" Pan Screw

1 x **WL5** 1/4 x 2-1/2" Wafer Lag (1/4" flat washer)

Step 5: Attach Elbow Assembly to Flange Assembly Part 1



Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. Keep all bolts loose until further step.

A: Fit one of the Elbow Assemblies to the Flange Assembly by lining up the arrows on each assembly. (fig. 5.2 and 5.3)

B: Attach 1 TNR2 Slide Clamp Ring to the top of the joined Assemblies using 3 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut), making sure to match the arrows up with the end of the clamp ring (where a seam will be) as shown in fig. 5.2 and 5.3.

Use Quadrex Driver as a guide pin for each hole before inserting bolt. (fig. 5.3)

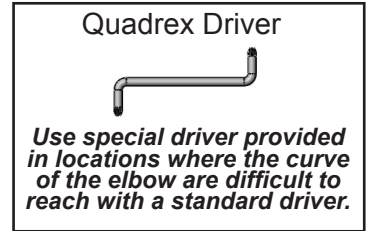


Fig. 5.1

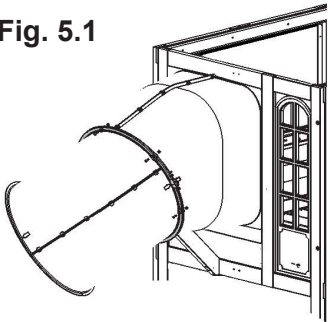
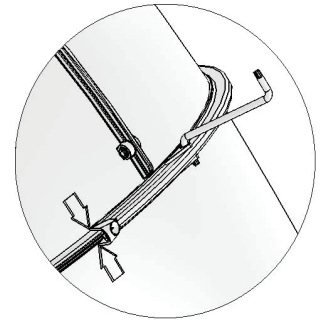


Fig. 5.4



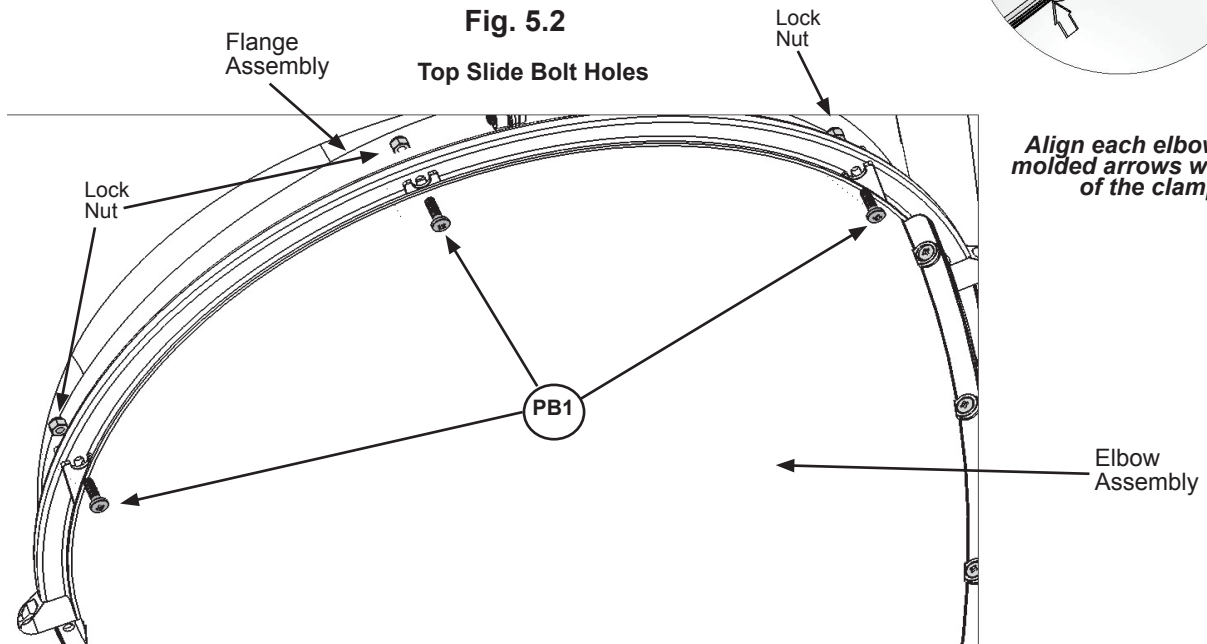
Do not install bolt in Clamp Ring ends until Step 5D

Fig. 5.3



Align each elbow using the molded arrows with the seam of the clamp ring.

Fig. 5.2



Hardware

3 x (PB1) 1/4 x 3/4" Pan Bolt (1/4" lock nut)

Other Parts

1 x Quadrex Driver
1 x TNR2 Slide Clamp Ring

Step 5: Attach Elbow Assembly to Flange Assembly Part 2



Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. Keep all bolts loose until further step.

C: Attach 1 TNR2 Slide Clamp Ring to the bottom of the joined Assemblies using 2 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut) on one side and 1 (PB1) 1/4 x 3/4" Pan Bolt (with lock nut) in the other side, making sure to match the arrows up with the end of the clamp ring (where a seam will be) as shown in fig. 5.5, 5.6 and 5.7.

D: Connect the 2 TNR2 Slide Clamp Rings together in 2 spots using 1 (PB1) 1/4 x 3/4" Pan Bolt (with lock nut) per hole. Make sure seams and arrows line up and then tighten all bolts. (fig. 5.8 and 5.9).

Fig. 5.5

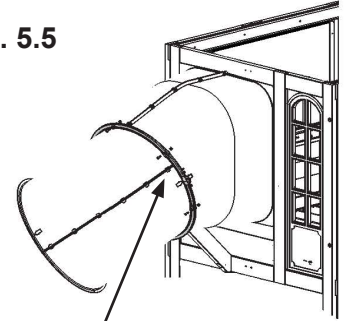


Fig. 5.6

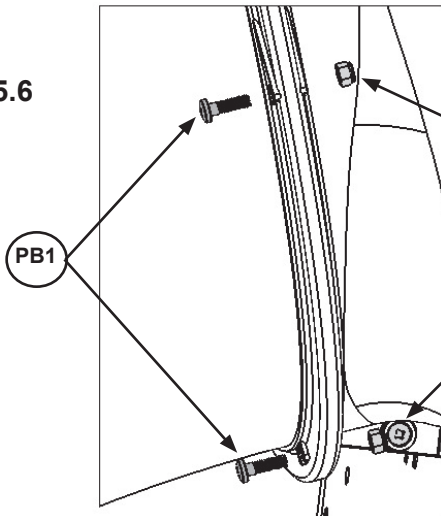
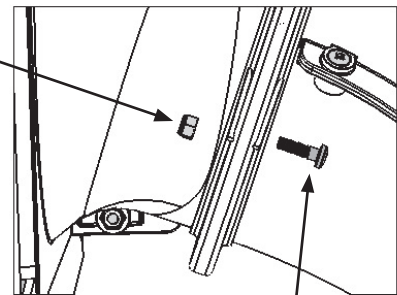


Fig. 5.7

(Side not shown)



Lock Nut
Bottom Slide Bolt Holes

Fig. 5.8

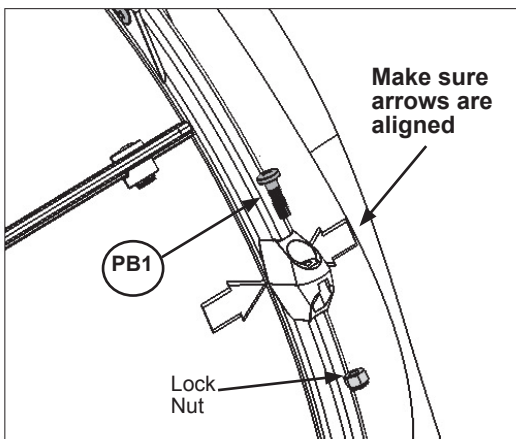
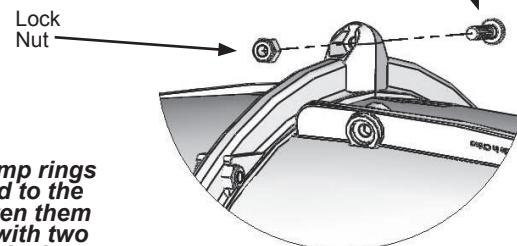


Fig. 5.9



After the clamp rings are attached to the elbows, fasten them end to end with two pan bolts and lock nuts

Hardware

5 x (PB1) 1/4 x 3/4" Pan Bolt
(1/4" lock nut)

Other Parts

1 x TNR2 Slide Clamp Ring

Step 6: Attach Elbow Assembly to Elbow Assembly Part 1



Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. Keep all bolts loose until further step.

A: Fit a second Elbow Assembly to the first Elbow Assembly by lining up the arrows on each assembly. Notice the elbow orientation. (fig. 6.1)

B: Attach 1 TNR2 Slide Clamp Ring to the top of the joined Assemblies using 3 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut), making sure to match the arrows up with the end of the clamp ring (where a seam will be) as shown in fig. 6.2 and 6.3.

Use Quadrex Driver as a guide pin for each hole before inserting bolt.

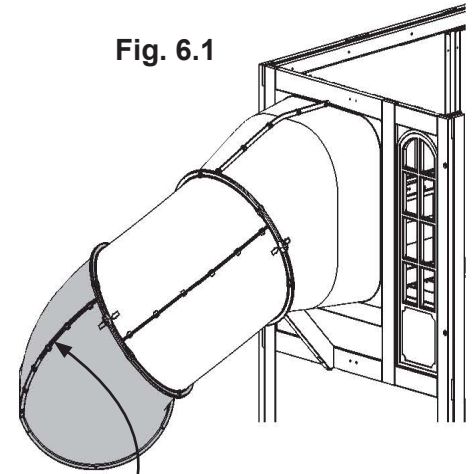


Fig. 6.1

Notice elbow orientation



Do not install bolt in Clamp Ring ends until Step 6D

Fig. 6.2
Top Slide Bolt Holes

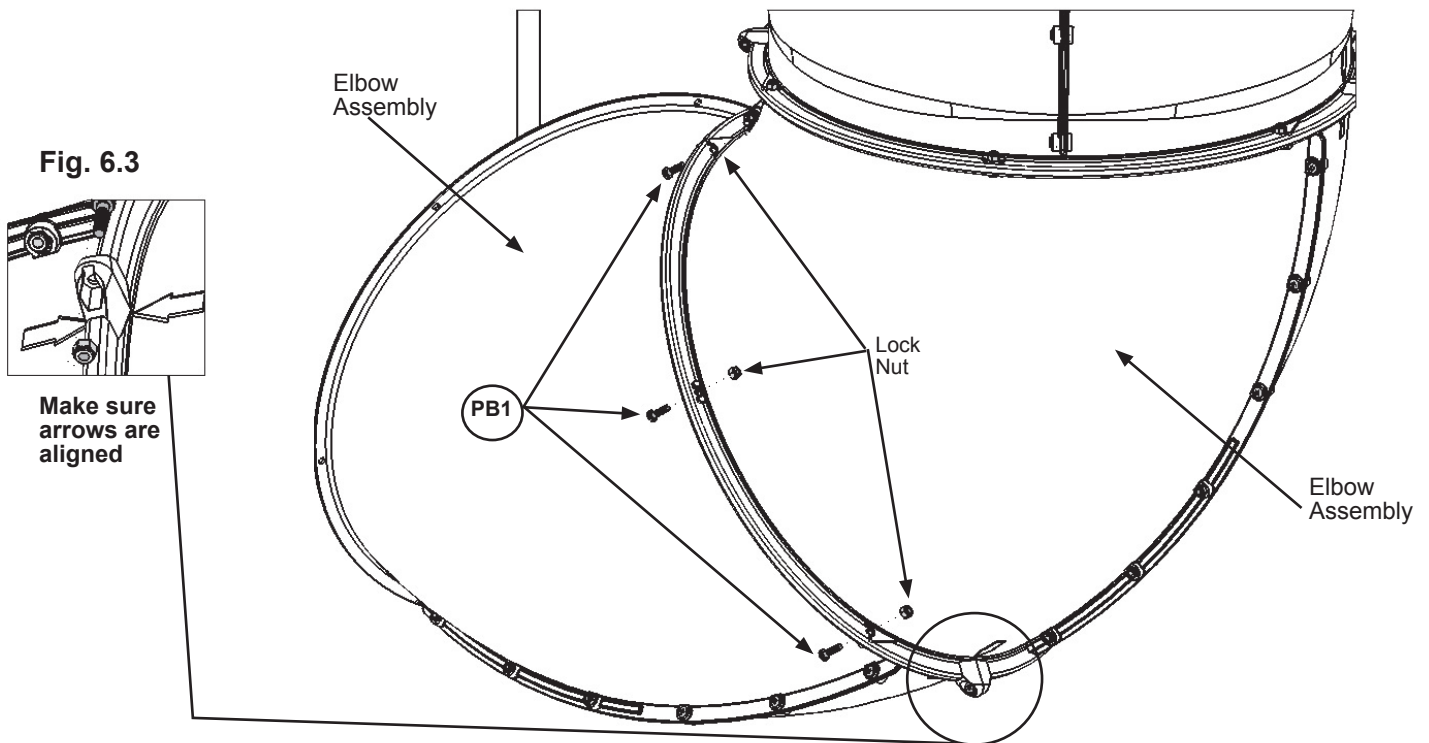


Fig. 6.3

Make sure arrows are aligned

Hardware

3 x (PB1) 1/4 x 3/4" Pan Bolt (1/4" lock nut)

Other Parts

1 x TNR2 Slide Clamp Ring

Step 6: Attach Elbow Assembly to Elbow Assembly

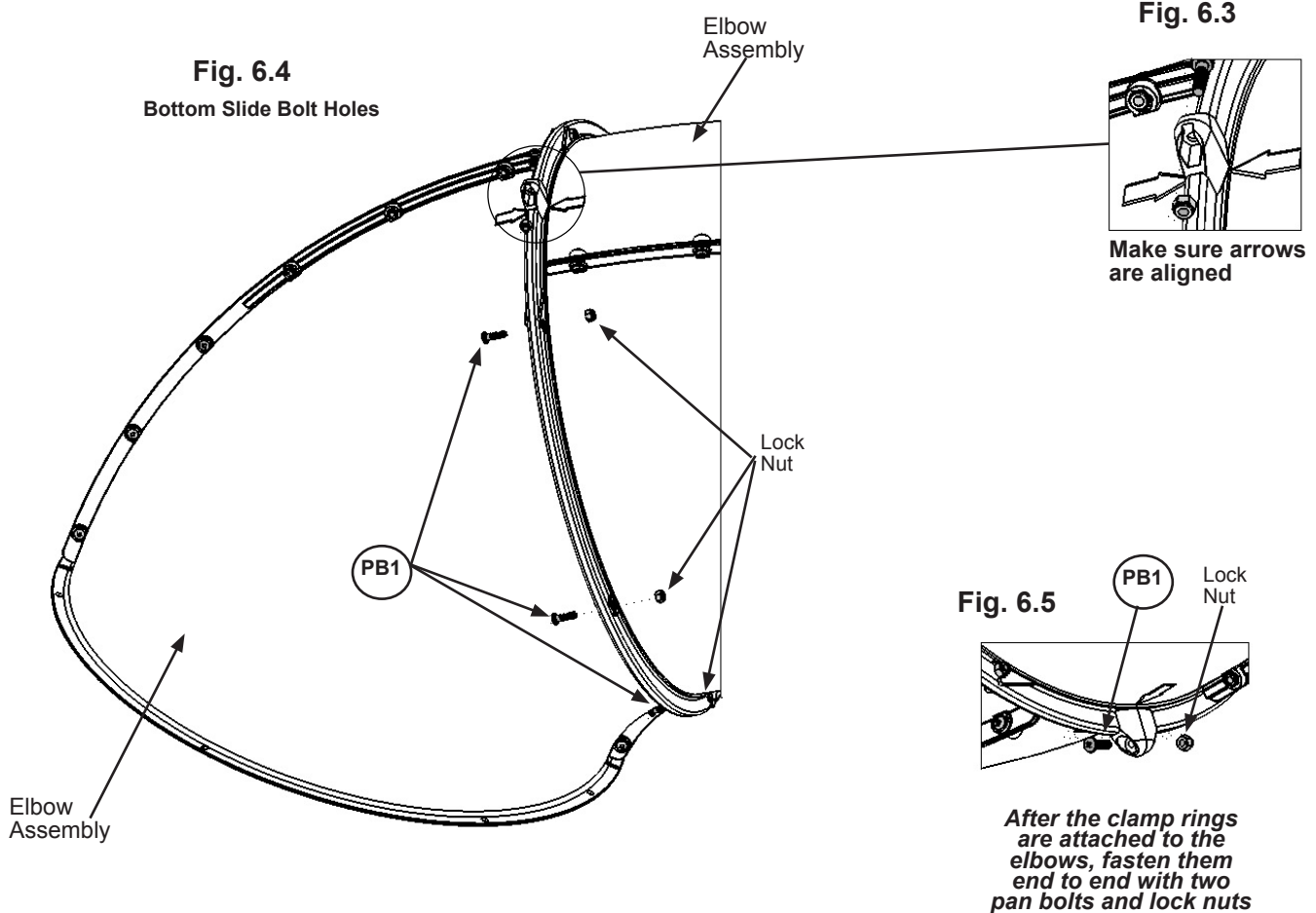
Part 2




Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. Keep all bolts loose until further step.

C: Attach 1 TNR2 Slide Clamp Ring to the bottom of the joined Assemblies using 3 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut), making sure to match the arrows up with the end of the clamp ring (where a seam will be) as shown in fig. 6.3 and 6.4.

D: Connect the 2 TNR2 Slide Clamp Rings together in 2 spots using 1 (PB1) 1/4 x 3/4" Pan Bolt (with lock nut) per hole. Make sure seams and arrows line up and then tighten all bolts. (fig. 6.3 and 6.5).



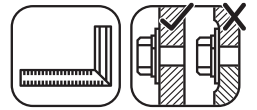
Hardware

5 x  1/4 x 3/4" Pan Bolt
(1/4" lock nut)

Other Parts

1 x TNR2 Slide Clamp Ring

Step 7: TNR Brace Assembly



A: Attach (8965) TNR Upright to (8963) TNR Ground Brace with 1 (H8) 1/4 x 4-1/4" Hex Bolt (with lock washer, flat washer and t-nut) in the top hole. Make sure both boards are square then attach with 1 (S11) #8 x 2" Wood Screw. (fig. 7.1)

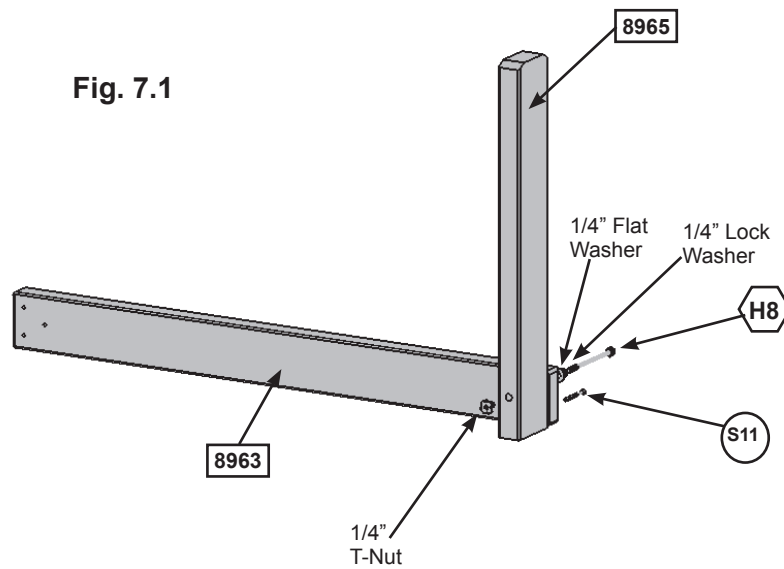


Fig. 7.1

Wood Parts

- 1 x TNR Ground Brace 1-1/4 x 3 x 32-1/4"
- 1 x TNR Upright 1-1/4 x 3 x 20-1/4"

Hardware

- 1 x #8 x 2" Wood Screw
- 1 x 1/4 x 4-1/4" Hex Bolt (1/4" lock washer, 1/4" flat washer, 1/4" t-nut)

Step 8: Attach Elbow Assemblies and TNR2 Slide Support



Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. Keep all bolts loose until further step.

A: Attach the two remaining Elbow Assemblies as instructed in Steps 5 and 6.

B: Place TNR Brace Assembly against (2618) Front Back Panel so it sits under the slide. It is not attached yet. (fig. 8.1)

C: On the fourth Elbow Assembly attached remove the pan bolt and nut which is facing the fort (installed in Step 3). (fig. 8.1) **The bolt will no longer be needed, but keep the lock nut.**

D: Loosely attach TNR3 Tube Support (at the slightly bent end) to the Clamp Ring using 1 (PB6) 1/4 x 1" Pan Bolt (with flat washer and the previously removed lock nut). (fig. 8.2)

E: Rotate TNR3 Tube Support and attach to (2622) End Panel Assembly using 1 (S6) #12 x 1" Pan Screw as shown in fig. 8.2.

F: Fully tighten screw and bolt.

Remove PB1 (1/4 x 3/4" Pan Bolt) first then install PB6 (1/4 x 1" Pan Bolt with flat washer)

Fig. 8.2

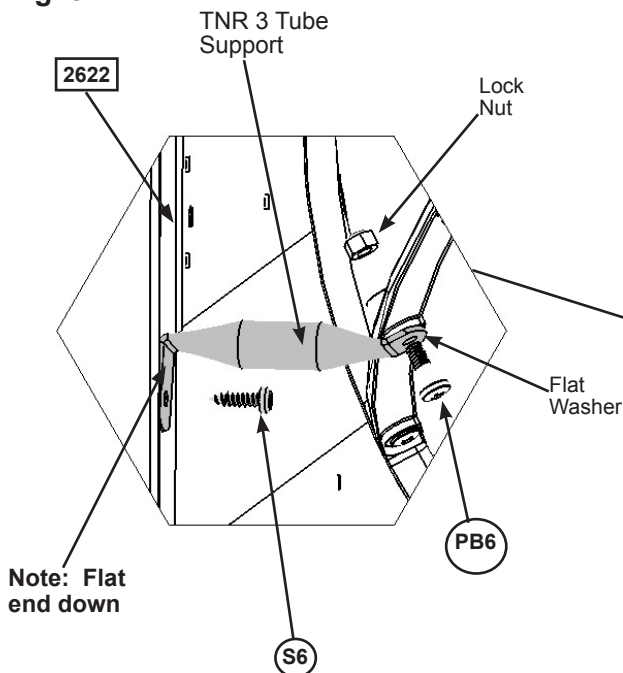
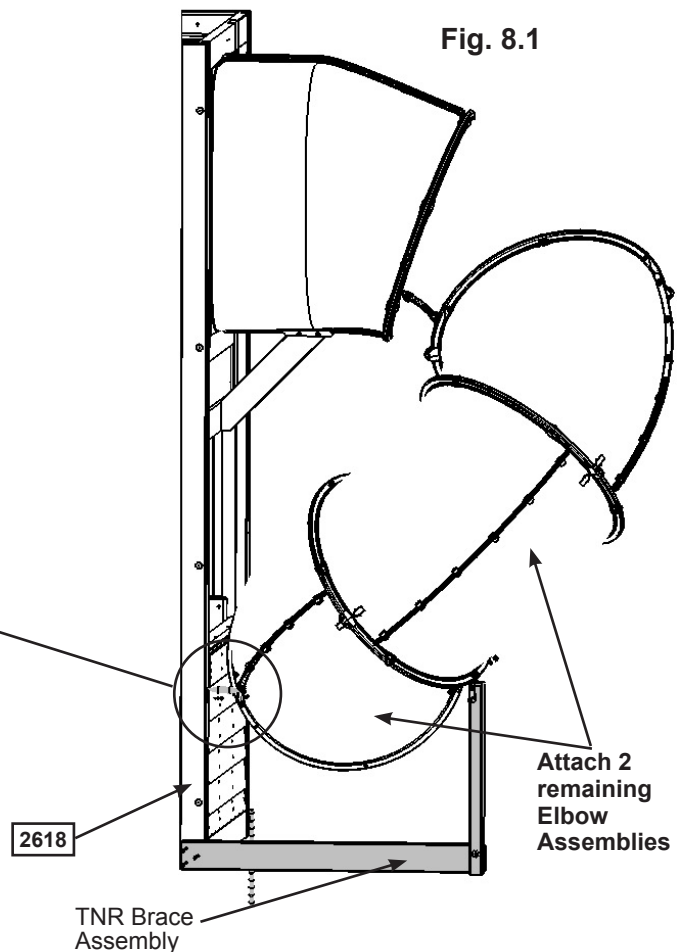


Fig. 8.1



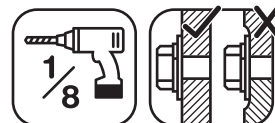
Hardware

- 1 x (S6) #12 x 1" Pan Screw
- 1 x (PB6) 1/4 x 1" Pan Bolt (1/4" flat washer & 1/4" lock nut - previously removed)
- 16 x (PB1) 1/4 x 3/4" Pan Bolt (1/4" lock nut)

Other Parts

- 1 x TNR3 Tube Support
- 4 x TNR2 Slide Clamp Ring

Step 9: Attach TNR Brace Assembly



A: Use (8965) TNR Upright as a guide to judge the proper bolt location, remove the bottom pan bolt and nut. **The bolt will no longer be needed, but keep the lock nut.** (fig. 9.1 and 9.2)

B: Attach the top of the TNR3 Post Mount to TNR2 Slide Clamp Ring using 1 (PB2) 1/4 x 1-1/4" Pan Bolt (with the previously removed lock nut and 1 flat washer). (fig. 9.2)

C: Insert TNR3 Post Mount on (8965) TNR Upright, pre-drill with a 1/8" drill bit then attach with 2 (S6) #12 x 1" Pan Screws. (fig. 9.2)

D: Attach (8963) TNR Ground Brace flush to the bottom of (2618) Front Back Panel with 2 (S11) #8 x 2" Wood Screws and 1 (S4) #8 x 3" Wood Screw. (fig. 9.1 and 9.3)

Remove PB1 (1/4 x 3/4" Pan Bolt) first then install PB2 (1/4 x 1-1/4" Pan Bolt with previously removed lock nut)

Fig. 9.1

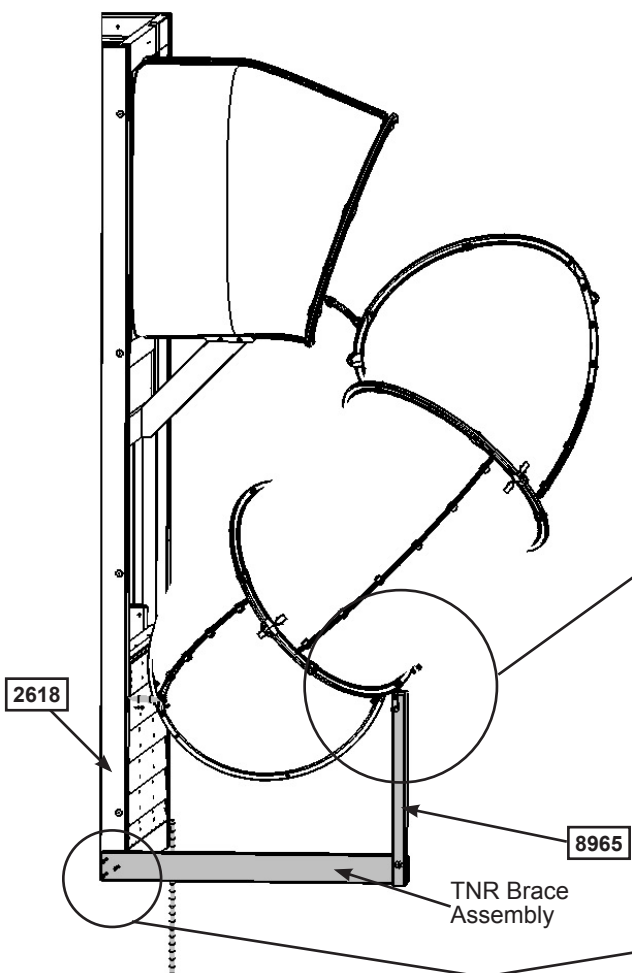


Fig. 9.2

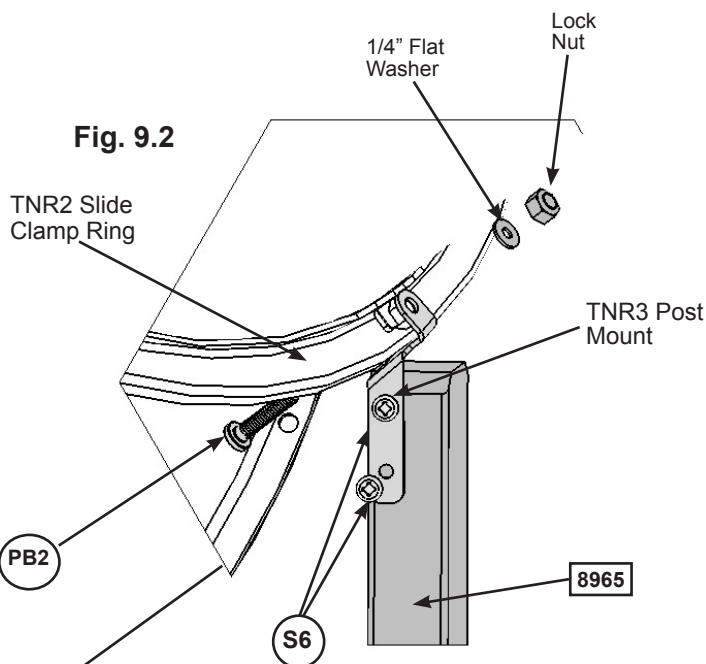
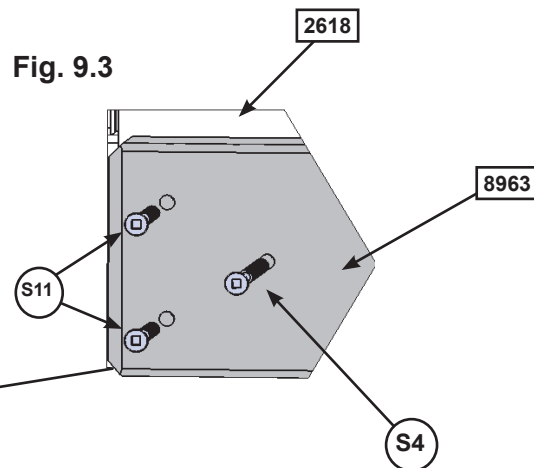


Fig. 9.3



Hardware

- 1 x (PB2) 1/4 x 1-1/4" Pan Bolt
1 - (1/4" flat washer, 1/4" lock nut - previously removed)
- 2 x (S6) #12 x 1" Pan Screw
- 1 x (S4) #8 x 3" Wood Screw
- 2 x (S11) #8 x 2" Wood Screw

Other Parts

- 1 x TNR3 Post Mount

Step 10: Attach TNR2 Slide Exit to Exit Elbow Assembly



A: Insert flange of Exit Elbow Assembly (slide elbow) into the slots on TNR3 Short Exit. (fig. 10.1)

B: Rotate Slide Exit and use Quadrex Driver as a guide pin so the holes are aligned and attach with 5 (PB1) 1/4 x 3/4" Pan Bolts (with lock nuts) starting with the bottom middle hole and working up each side. (fig. 10.2 and 10.3)

C: At this point make sure all the slide bolts are tight. *Use a 7/16" open end wrench to hold nut and then tighten bolt with Quadrex Driver on Clamp Rings.*

Fig. 10.1

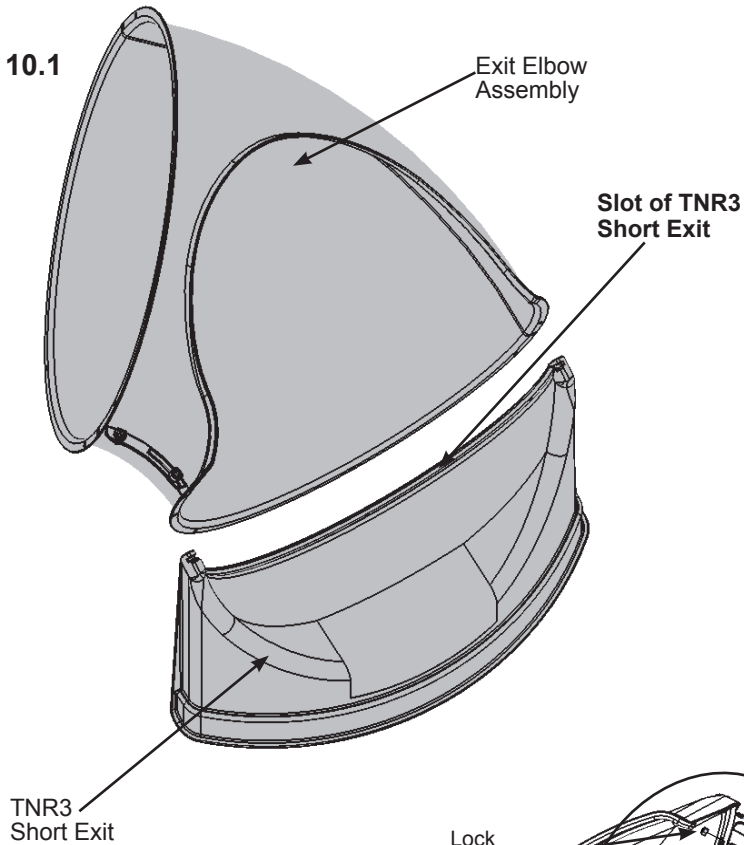


Fig. 10.3

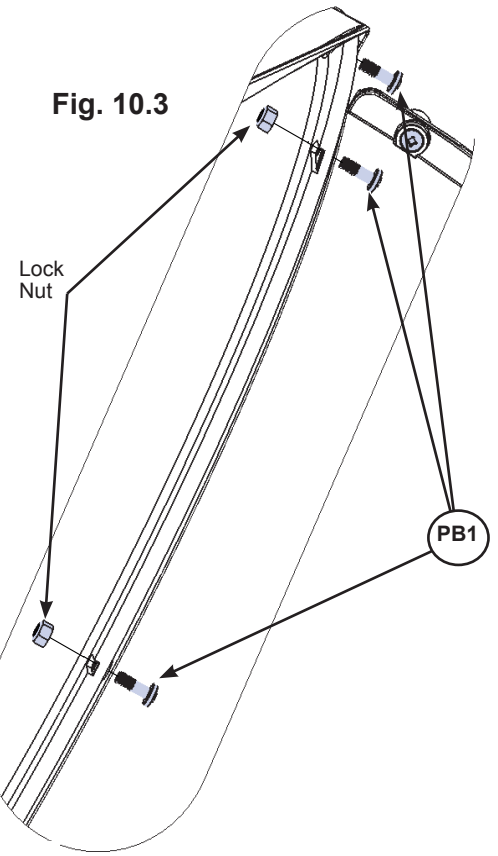
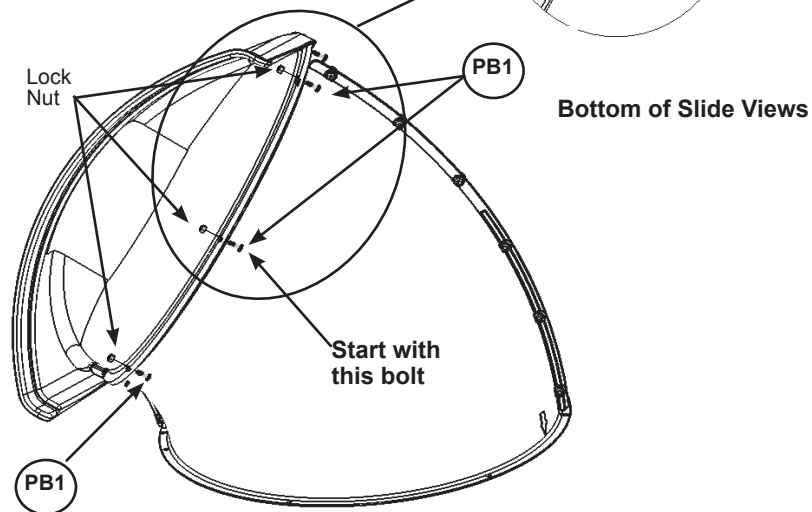


Fig. 10.2



Hardware

5 x (PB1) 1/4 x 3/4" Pan Bolt
(1/4" lock nut)

Other Parts

1 x TNR3 Short Exit

Step 11: Attach Exit End Assembly to Fort



Note: When installing Pan Bolts make sure to look at holes so bolts go through the side with the round recess and the lock nuts go through the side with the hexagonal recess. Keep all bolts loose until further step.

A: Fit the Exit End Assembly to the last Elbow Assembly by lining up the arrows on each assembly. Notice the elbow orientation. (fig. 11.1)

B: Place 1 TNR2 Slide Clamp Ring to the top of the joined Assemblies, rotate counter clockwise 1 hole location then attach with 3 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut) as shown in fig. 11.1.

Use Quadrex Driver as a guide pin for each hole before inserting bolt.

C: Attach 1 TNR2 Slide Clamp Ring to the bottom of the joined Assemblies using 3 (PB1) 1/4 x 3/4" Pan Bolts (with lock nut) as shown in fig. 11.2.

D: Connect the 2 TNR2 Slide Clamp Rings together in 2 spots using 1 (PB1) 1/4 x 3/4" Pan Bolt (with lock nut) per hole. Make sure seams and arrows line up and then tighten all bolts. (fig. 11.3).

Fig. 11.1

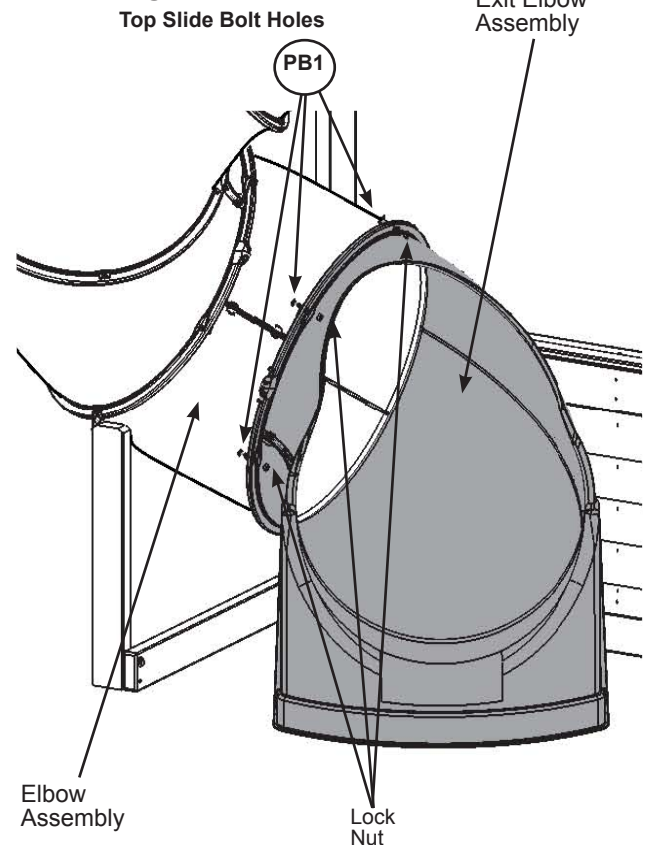


Fig. 11.2

Bottom Slide Bolt Holes

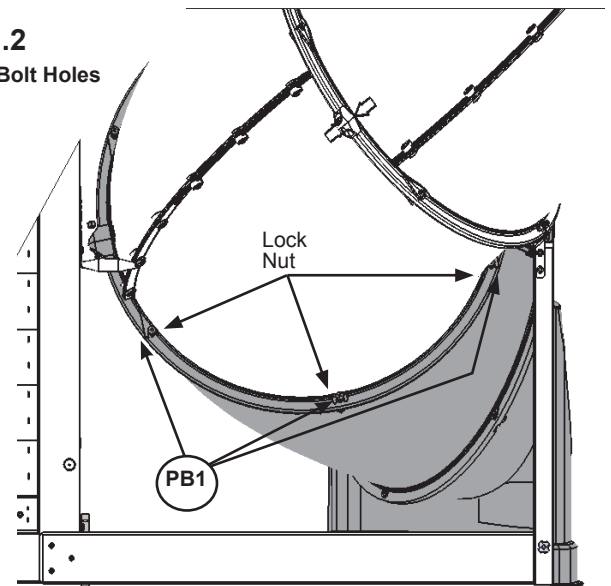
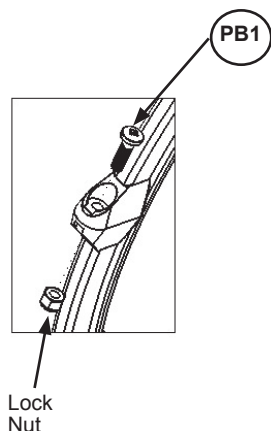


Fig. 11.3

After the clamp rings are attached to the elbows, fasten them end to end with two pan bolts and lock nuts



Hardware

8 x (PB1) 1/4 x 3/4" Pan Bolt (1/4" lock nut)

Other Parts

2 x TNR2 Slide Clamp Ring

Step 12: Attach Ground Stake to TNR Upright

A: In the spot shown in fig. 12.1 drive 1 Rebar Ground Stake 13" into the ground against the (8965) TNR Upright. Be careful not to hit the washer while hammering stake into the ground as this could cause the washer to break off.

B: Attach the ground stake to (8965) TNR Upright just below the t-nut using 1 (S7) #12 x 2" Pan Screw as shown in fig. 12.2.

C: After driving stakes into the ground, check for sharp edges caused by the impact of the hammer. Smooth any sharp edges from impact area and touch up with outdoor paint.



Warning! To prevent tipping and avoid potential injury, stakes must be driven 13" into ground. Digging or driving stakes can be dangerous if you do not check first for under-ground wiring, cables or gas lines.

Fig. 12.1

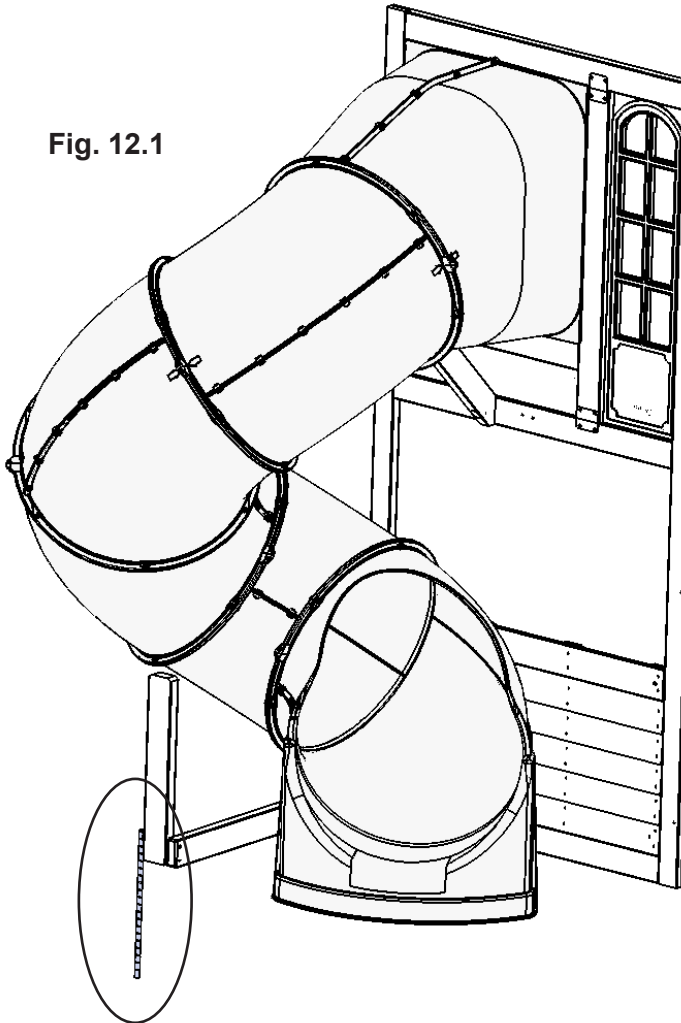
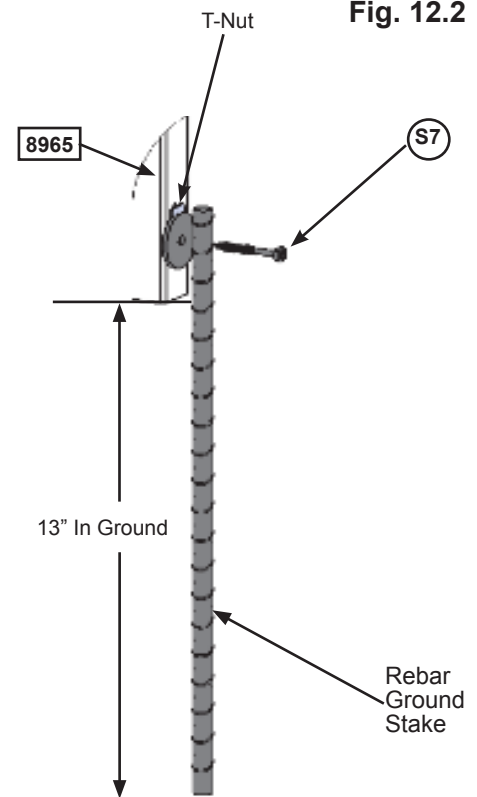


Fig. 12.2



Hardware

1 x (S7) #12 x 2" Pan Screw

Other Parts

1 x Rebar Ground Stakes

