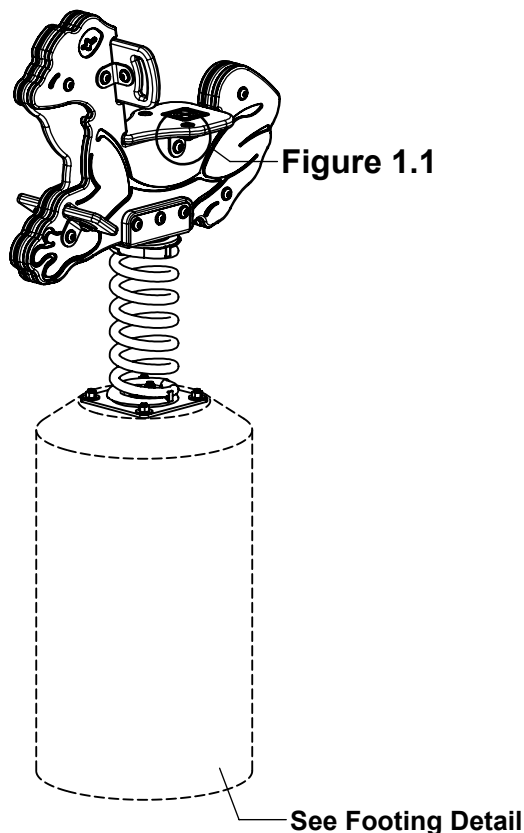


## **IMPORTANT NOTES: Read First**

- (A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.
- (B) Do not pour concrete until the equipment is completely assembled, leveled and plumbed. Concrete must be allowed to cure completely before using the equipment (at least 72 hours).
- (C) All bolt threads protruding beyond the nut must be cut and de-burred until end is smooth to the touch. Sharp edges and/or points of any kind must be eliminated. A maximum of two threads may be exposed beyond the end of the nut.
- (D) Height of seat while unloaded and at rest, must be between 14" [360mm] and 28" [710mm] above the finish grade.
- (E) An appropriate energy absorbing safety surface is required under and around all playground equipment. Loose fill protective surfacing is shown only as an example for the purpose of this assembly instruction. Other surfacing material may vary in thickness and/or compression depths. See free publication - The Handbook for Public Playground Safety, Publication #325 at [www.cpsc.gov](http://www.cpsc.gov) for the surfacing appropriate for the fall height of the equipment or consult your surfacing supply representative.

**FIGURE 1**  
Toad Single Spring Rider



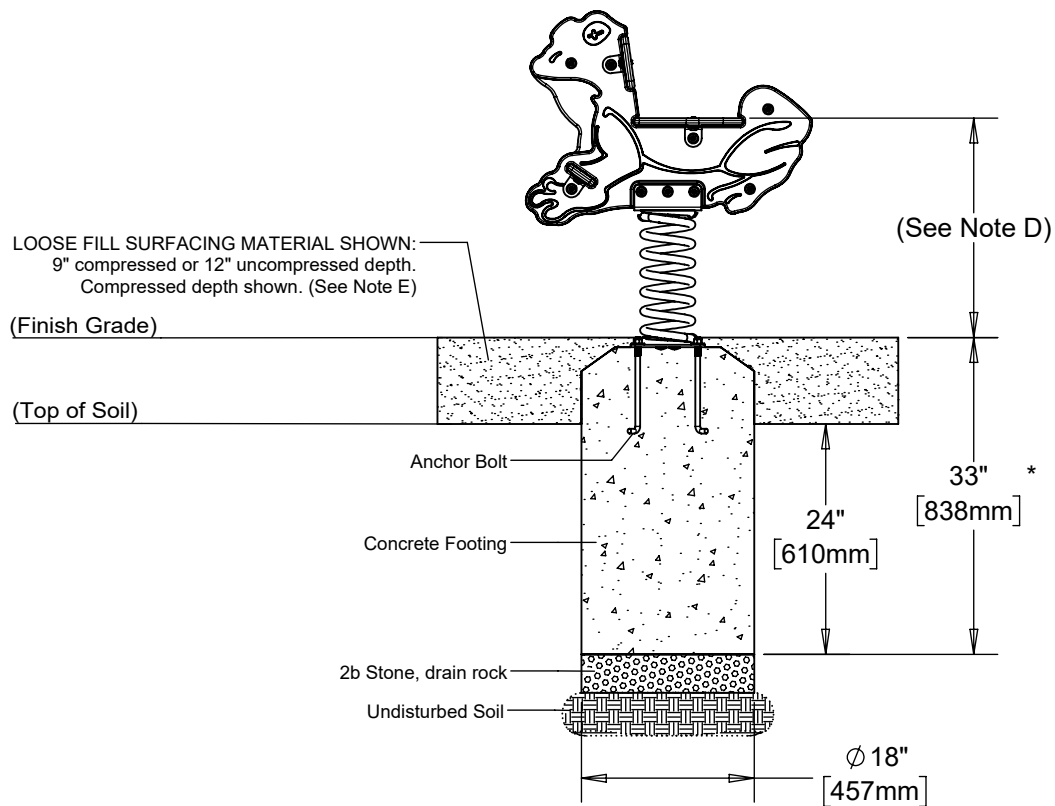
## Step 1

Refer to Footing Layout and mark footing hole location.  
Dig (1) Ø 18" footing hole. Refer to Footing Detail for  
depth and details.

**IMPORTANT:** For areas with soft soil conditions, larger  
footings may be required.

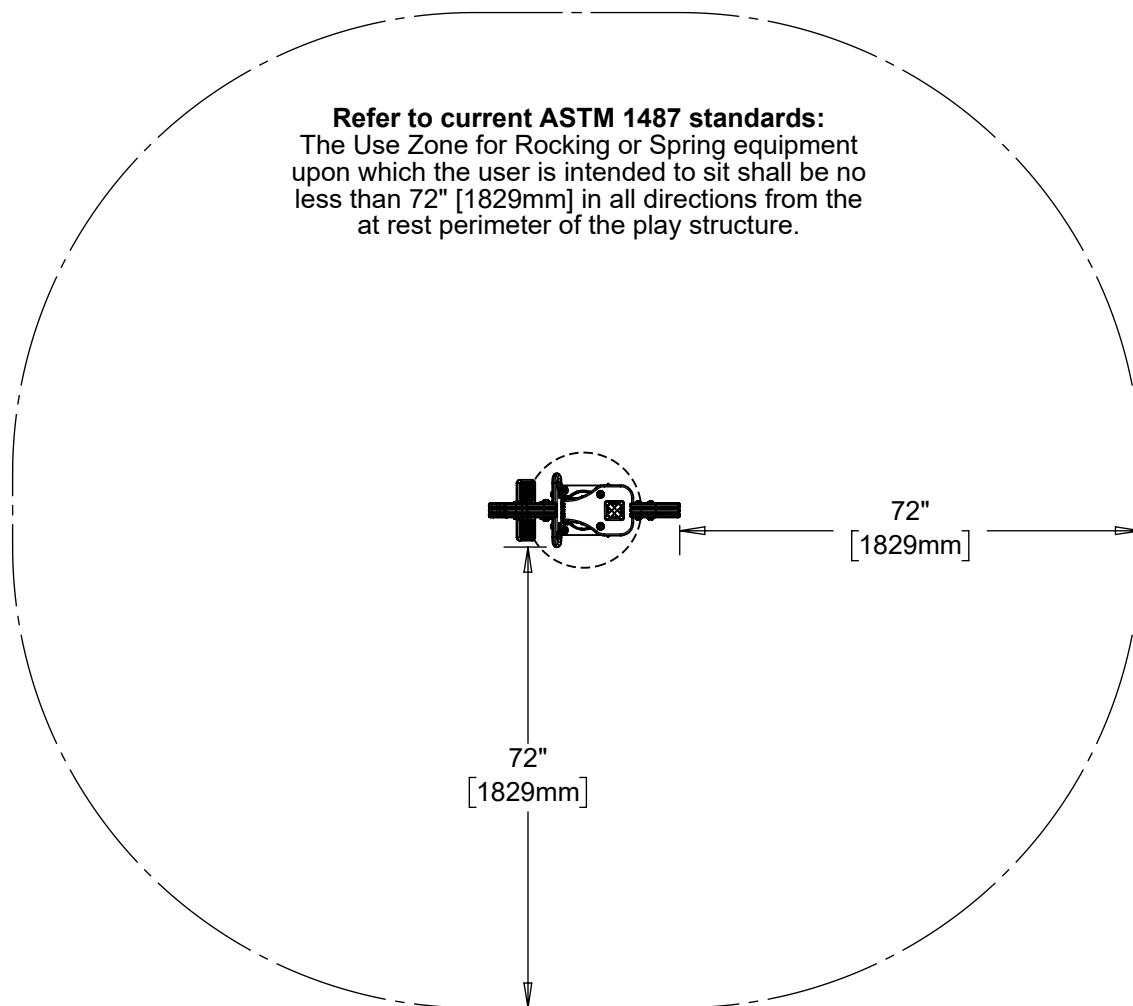
\* Footing depth must be adjusted to compensate for  
the depth/thickness requirements of selected safety  
surfacing. See Section 06.1 of the Installation Manual.

### Footing Detail



**Top View - Footing Layout**  
**72" [1829mm] Use Zone Recommended**

**Refer to current ASTM 1487 standards:**  
The Use Zone for Rocking or Spring equipment upon which the user is intended to sit shall be no less than 72" [1829mm] in all directions from the at rest perimeter of the play structure.



## Step 2

Use the Single Spring Bottom Mount Plate as a template to create a plywood template for the placement of the anchor bolts. Attach anchor bolts to template as shown in Figure 2.

**NOTE:** Plywood not supplied.

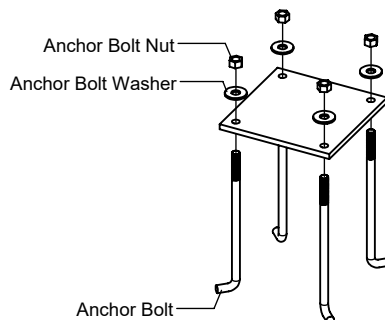


FIGURE 2

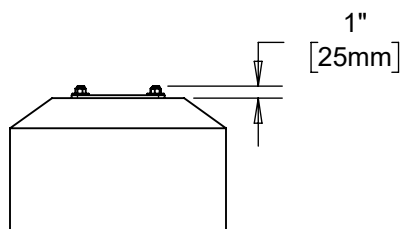


FIGURE 3

## Step 3

Pour concrete footing and level template on surface. Orient and set anchor bolts in concrete as shown in footing detail. Allow approximately 1" [25mm] of thread to protrude from the concrete as shown in Figure 3. Allow 72 hours to cure before proceeding to next step. (See Note B)

## Step 4 (Factory Assembled)

Insert Event Spring Retainers into Spring and attach to Top Mount Plate and Spring Mount Plate as shown in Figure 4. (See Note A)

**NOTE:** Ensure Anti-Rotation Spacer is oriented with arrows pointing to the inside and end of the spring.

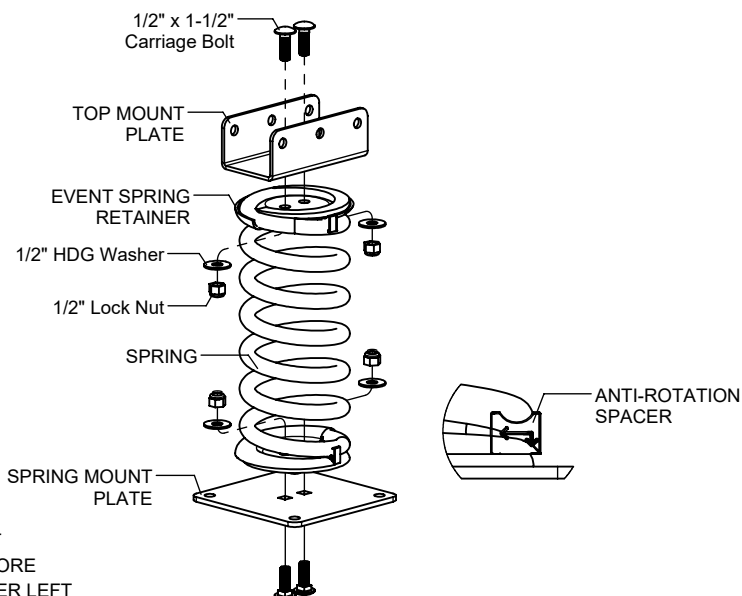


FIGURE 4

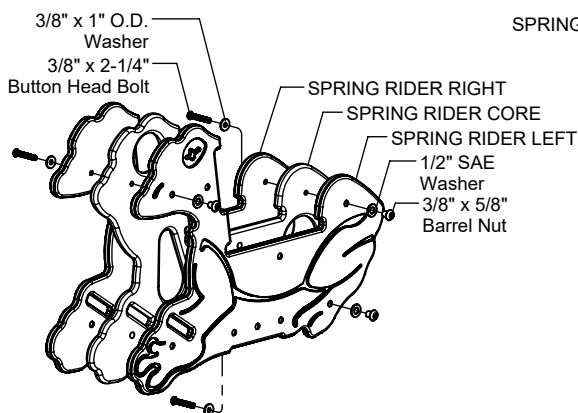


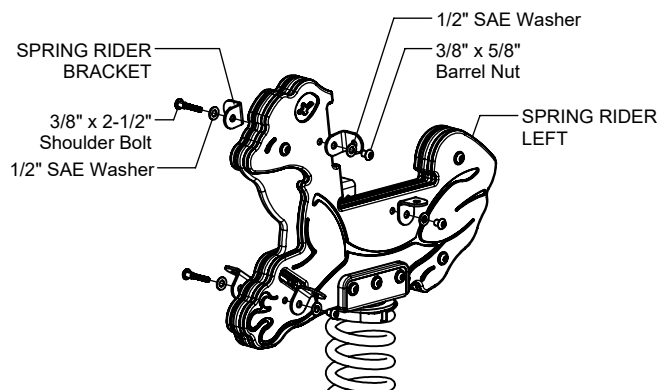
FIGURE 5

## Step 5 (Factory Assembled)

Attach Spring Rider Panels together as shown in Figure 5. (See Note A)

## Step 6

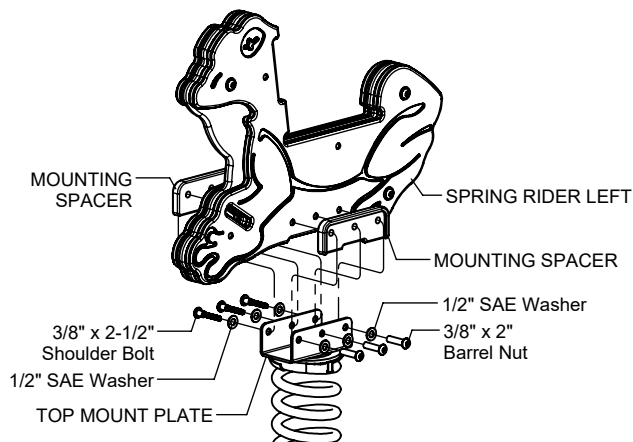
Attach Spring Rider Panels and Mounting Spacers to Top Mount Plate as shown in Figure 6.  
(See Note A)



**FIGURE 7**

## Step 8 (Factory Assembled)

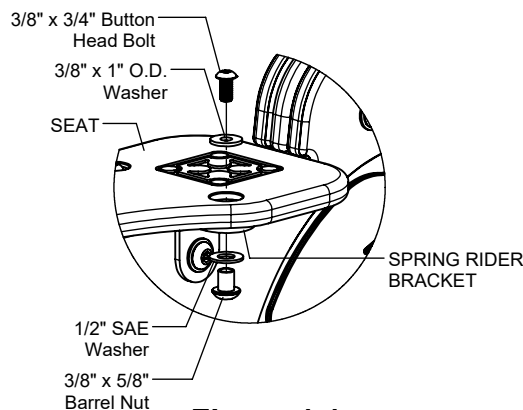
Attach Seat, Handles and Footrests to Spring Rider Brackets as shown in Figure 1.1. (See Note A)



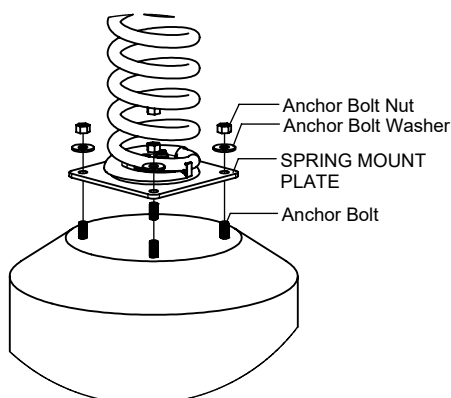
**FIGURE 6**

## Step 7

Attach Spring Rider Brackets to Spring Rider Panels as shown in Figure 7. (See Note A)



**Figure 1.1**



**FIGURE 8**

## Step 9

Attach Spring Mount Plate to Anchor Bolts as shown in Figure 8. (See Notes A & C)

## Step 10

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.

## Step 11

Place required protective surfacing under and around Single Spring Rider. (See Note E)

# TOAD SINGLE SPRING RIDER INSTALLATION INSTRUCTIONS

**PC-1383**  
Page 6 of 6

## Parts List

Part #	DESCRIPTION	QTY.
BE-4466	Spring Rider Bracket	6
EE-4938	Spring Rider Seat	1
EE-4939	Spring Rider Handle	1
EE-4940	Spring Rider Footrest	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	6
9143112-TR	Bolt Shoulder 3/8" x 2-1/2" BH	6
9175393	Bolt Anchor 1/2" x 9-1/2" w/ Washer and Nut	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	6
9345002	Washer Flat SAE 1/2"	18
9443022-TR	Nut Barrel 3/8" x 5/8" BH	9
9443092-TR	Nut Barrel 3/8" x 2" BH	3

## Assembled Parts List

Part #	DESCRIPTION	QTY.
AE-4533	Single Spring Bottom Mount Plate	1
BE-4514	Event Spring Retainer	2
BE-4515	Single Spring Top Mount Plate	1
EE-0537	Toad Single Spring Rider - Core	1
EE-0538	Toad Single Spring Rider - Left	1
EE-0539	Toad Single Spring Rider - Right	1
EE-4941	Spring Rider Mounting Spacer	2
HE-4498	Playground Event Spring	1
IE-0101	Anti-Rotation Spacer	2
9103102-TR	Bolt Button Head 3/8" x 2-1/4"	3
9115072	Bolt Carriage 1/2" x 1-1/2"	4
9315003	Washer Cut 1/2" HDG	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	3
9345002	Washer Flat SAE 1/2"	3
9415132	Nut Lock 1/2"	4
9443022-TR	Nut Barrel 3/8" x 5/8" BH	3

## Specifications

**SINGLE SPRING BOTTOM MOUNT PLATE:**  
Shall be made using 1/4" thick sheet steel. The Single Spring Bottom Mount Plate shall have a multi-stage baked-on powder coat finish.

**SPRING RIDER BRACKET:**  
Shall be made from precision cut and formed 3/16" thick sheet steel. The Spring Rider Bracket shall have a multi-stage baked-on powder coat finish.

**SINGLE SPRING TOP MOUNT PLATE:**  
Shall be made from precision cut and formed 3/16" thick sheet steel. The Single Spring Top Mount Plate shall have a multi-stage baked-on powder coat finish.

**PLAYGROUND EVENT SPRING:**  
Shall be 5-3/4" O.D. with a free height of 14". The Playground Event Spring shall have a multi-stage baked-on powder coat finish.

**EVENT SPRING RETAINER:**  
Shall be precision cut and formed from 1/8" thick sheet steel. The Event Spring Retainer shall have a multi-stage baked on powder coat finish.

**ANTI-ROTATION SPACER:**  
Shall be machined from high-strength aluminum.

**SPRING RIDER PANEL SET:**  
Shall be made from high density 3/4" sheet plastic specially formulated for optimum UV stability and color retention.

**HARDWARE:**  
Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

## Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



www.playcraftsystems.com  
For Customer Service Call  
800.333.8519 (U.S.A.) or 541.955.9199 (International)

**Rev A**  
12/6/2018