Miracle Installation Guide

September 8, 2014

Rev. D

Surfer

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IMPORTANT! Prior to installation of <u>any</u> components, refer to **Playsystem Installation Guidelines and Tips** in the *Install 101* section of your manual. This section will provide important tips pertaining to site preparation, footings, system stabilization, and other necessary information vital to the success of your installation.

Models included in this installation guide:

<u>MODEL #</u> 946-1 DESCRIPTION Surfer Freest

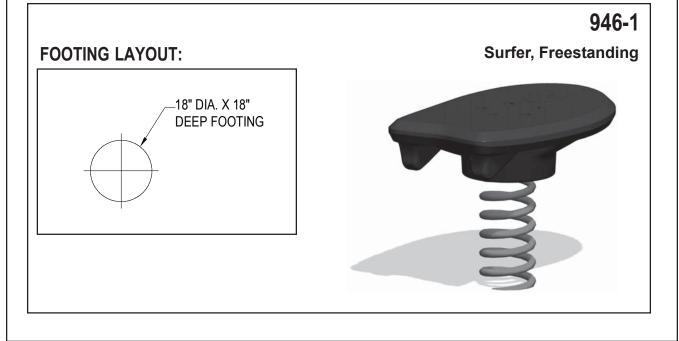
Surfer, Freestanding

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TOOLS AND EQUIPMENT REQUIRED

Also see 'Suggested Tools & Equipment' (Doc. # D70052) in 'Installations 101'

- 1. Digging equipment for footing hole (spade shovel, post hole digger, auger)
- 2. Concrete for footing, wheelbarrow or mixer, 5 gallon bucket, water supply
- 3. Drill, 3/8" masonry drill bit, extension cords, power supply
- 4. Rubber mallet
- 5. Tape measure and level
- 6. Open end wrenches, Allen and 6-lobe wrenches or bits, socket set, screwdrivers
- 7. Pen, pencil or marker
- 8. Adult installers 2 minimum



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Rev. D

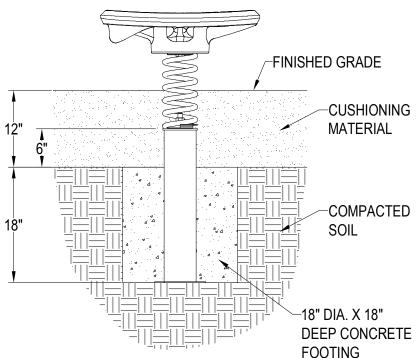
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STEP 1 DIG FOOTINGS

Footing assembly instructions for <u>natural surfacing</u> in ground ONLY:

Locate and dig one 18" diameter footing, 18" deep.

NOTE: Surfer shown below for correct footing dimensions only. Do not yet pour concrete!



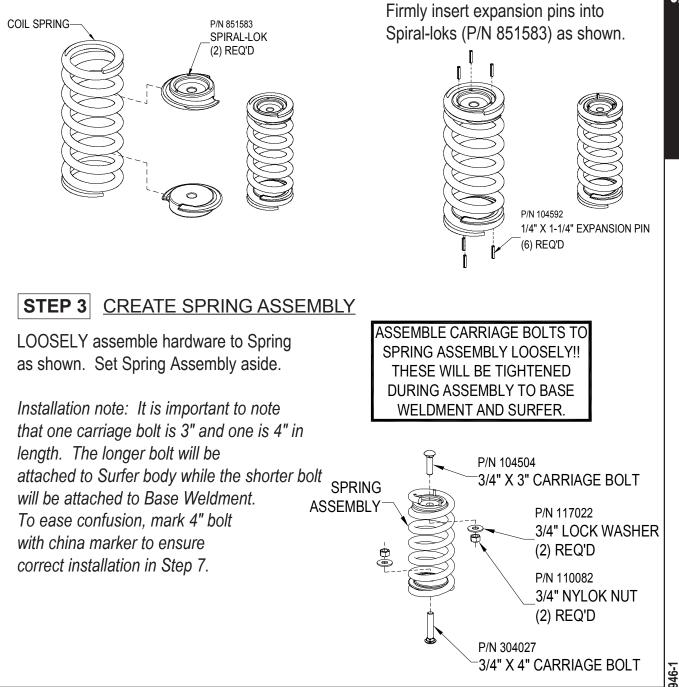
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STEP 2INSERT SPIRAL-LOKS IN SPRING;INSERT EXPANSION PINS IN SPIRAL-LOKS

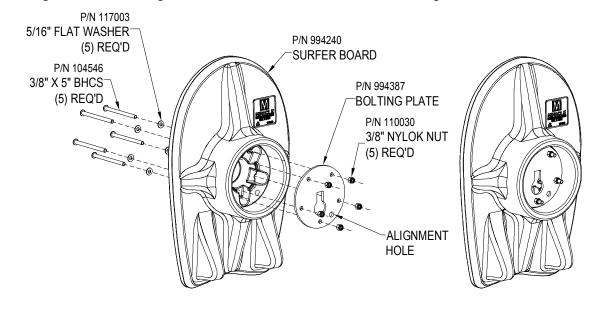
Place Spiral-Loks through Coils in each end of Coil Spring, with flat sides facing each other inside Spring, and pin holes facing outward. **Gently thread Spira-Loks into Spring by** hand, ensuring Spira-Lok remains fairly horizontal. Thread Spiral-Loks as far as they will go by hand into respective ends of Spring. **DO NOT USE EXCESSIVE FORCE.**



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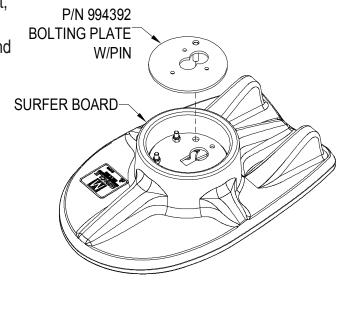
STEP 4ATTACH BOLTING PLATE TOSURFER BOARD

Note orientation of Bolting Plate without Pin (P/N 994387) to Surfer Board. Alignment hole in Bolting Plate MUST align with vent hole in Surfer. Attach Bolting Plate as shown.



STEP 5 FIT BOLTING PLATE'S PIN INTO VENT HOLE

Turn Surfer Assembly upside down on a flat, smooth surface. Slide Bolting Plate's (P/N 994392) pin through alignment hole and vent hole in Surfer Board. This second Bolting Plate will sit on top of the hardware used to affix Bolting Plate without pin onto Surfer in previous Step.





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STEP 6 SECURE SPRING ASSEMBLY TO SURFER ASSEMBLY

Orient Spring Assembly so that **3" Carriage Bolt (P/N 104504)** is on Base Weldment Side and **4" Carriage Bolt (P/N 304027)** is on Surfer Assembly Side.

TO ATTACH BASE WELDMENT

Place 3" carriage bolt in round end of keyhole in Base Weldment. Slide into square end and lock in place.

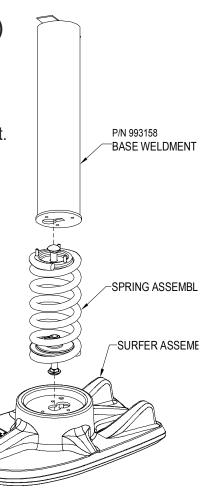
Align Expansion Pins in Spira-lok with holes in Base Weldment and tighten 3" carriage bolt into place in square end of keyhole.

TO ATTACH SURFER ASSEMBLY

Place 4" carriage bolt in bottom (larger) keyhole in top Surfer Bolting Plate. **Ensure carriage bolt also goes into the round end of keyhole in bottom Surfer Bolting Plate (attached in Step 5.)** Slide carriage bolt into square end of keyhole in bottom Bolting Plate and lock in place.

NOTE: The 4" carriage bolt must go through BOTH Bolting Plates.

Align Expansion Pins in Spira-lok with holes in Surfer Assembly Bolting Plate and tighten 4" carriage bolt into place in square end of keyhole in bottom Bolting Plate.



STEP 7 LEVEL BASE WELDMENT IN FOOTING; POUR CONCRETE

Ensure Base Weldment is completely plumb and level prior to pouring concrete. Pour concrete to required distance from Base Weldment top (see Step 1 illustration) and allow to cure completely (minimum 72 hours) prior to allowing play.

FINAL STEP

Proceed with *Final Assembly* installation located behind *Installations 101* in Installation Manual.

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Bill of Materials

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QUANTITY	MODEL/COMPONENT	DESCRIPTION
1	 993158GV	BASE - COIL SPRING RIDER GALVANIZED
1	994240P	SURFER BOARD - ROTOMOLDED
1	994394	PARTS CARTON 9461
PARTS CARTO	ON # 994394 CONTENTS:	
1	994387ZP	PLATE-BOLTING SPRING, ZINC PLATE
1	994392ZP	PLATE ASSY-BOLTING SPRING, ZINC PLATE
5	104546	BOLT 3/8-16 X 5 BHCS 6 LOBE 18-8 SS
5	117003	WASHER 5/16 FLAT 18-8 SS
5	110030	NUT 3/8-16 HEX NYLOK 18-8 SS
1	304027	BOLT 3/4-10 X 4 CARR CHEMSEAL
2	851583RD	SPIRALOK-RED
1	851582RD	COIL SPRING-RED
1	104504	BOLT 3/4-10 X 3 CARR CHEMSEAL
2	117022	WASHER 3/4 LOCK MG
2	110082	NUT 3/4-10 NYLOK CHEMSEAL
6	104592	PIN EXPANSION 1/4 X 1-1/4
1	116021	LABEL MIRACLE ID - GENERIC
1	116022	LABEL WARNING - PLAYGROUND
1	104480	BIT 6 LOBE T-45 FOR 3/8 BOLTS
1		