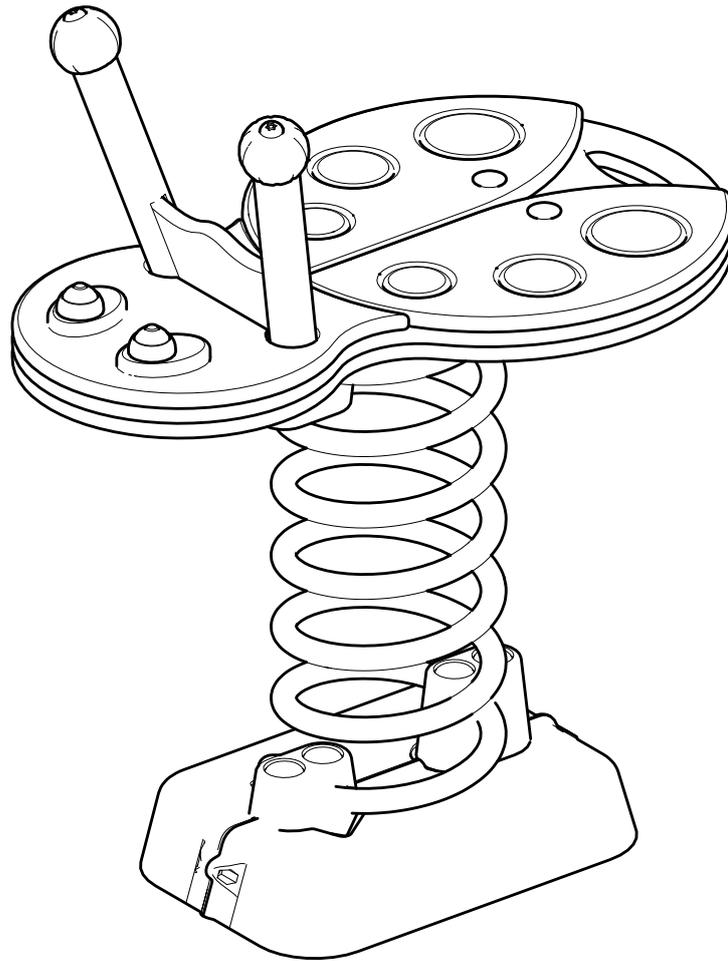


# Installation Instruction

INST Ladybird Springer SPR-LB\_iss02



Unit Specification		
<p>Equipment Dimensions</p>	<p>0.58m x 0.35m x 0.70m</p> <p>0.6m</p>	<p>FHF</p>
<p>Overall Weight</p>	<p>20.0kg</p> <p>12.4kg</p>	<p>Heaviest Part</p>
<p>Largest Part</p>	<p>0.22m x 0.33m x 0.45m</p> <p>0.45m</p>	<p>Longest Part</p>
<p>Concrete Required</p>	<p>0.16m<sup>3</sup></p> <p>1.5m x 1.5m x 1.8m</p>	<p>Construction Space</p>
<p>Manpower Required</p>	<p>1</p> <p>3</p>	<p>Estimated Time</p>
<p>Bolt length measured as diagram.</p>		

# Installation Instruction

INST Ladybird Springer SPR-LB\_iss02

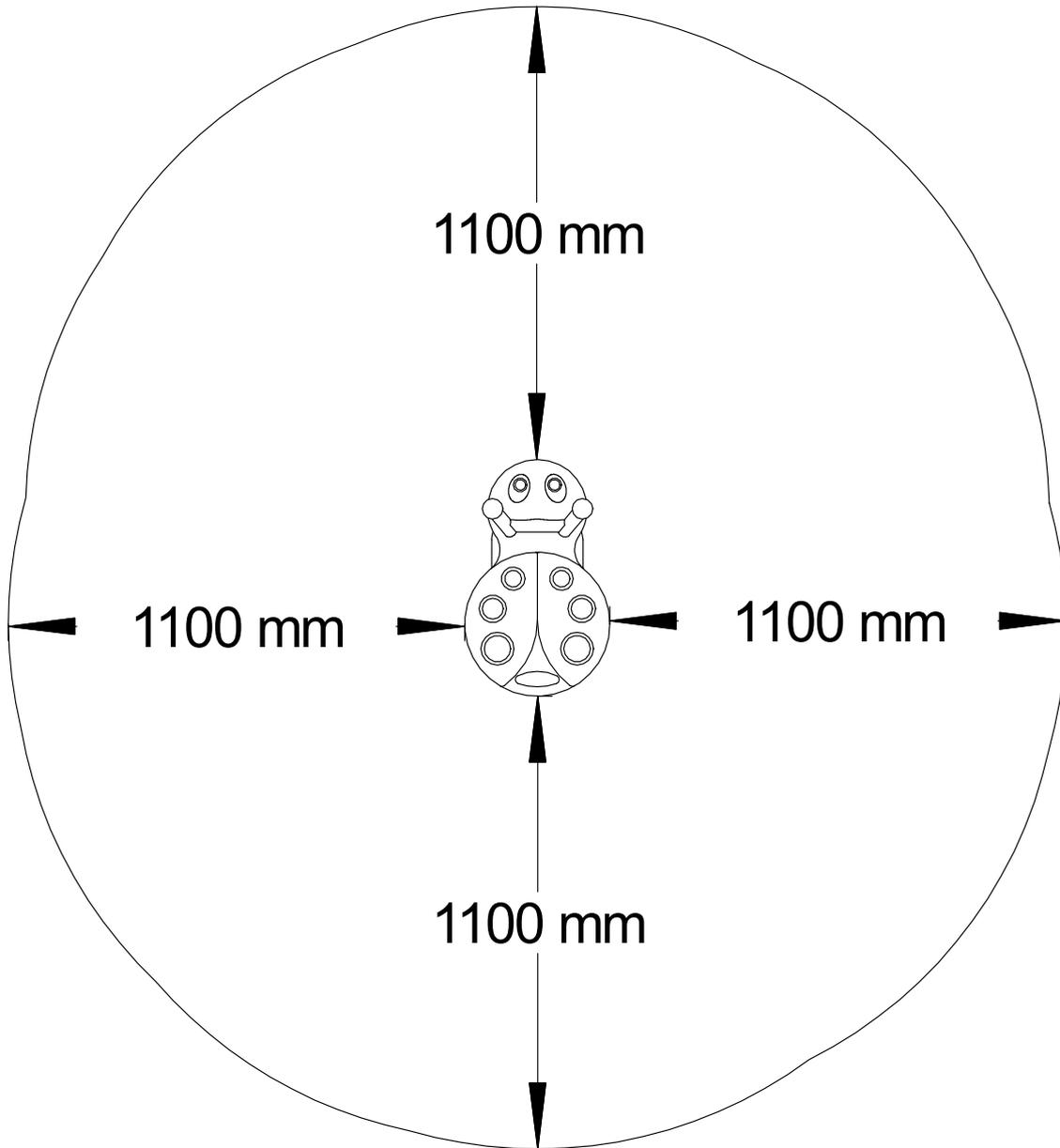
## Components

Common Parts List			
Part	Qty	Image	Description
SPR200	1*		Ladybird Springer CGL Bottom
SPR201	1*		Ladybird Springer CGL Middle
SPR213	1*		Ladybird Springer CGL Head
SPR214	1*		Ladybird Springer CGL Wing
SPR218	1*		Ladybird Springer CGL Wing
SPR215	2*		Ladybird Springer Spot 1
SPR216	2*		Ladybird Springer Spot 2
SPR217	2*		Ladybird Springer Spot 3
SPR205	2*		Insect Springer CGL Eye
SPR206	1*		Springer Handle Assembly Black
SPR207	1*		Ladybird Springer Handle CGL
SPR208	1*		Springer Handle 2 Assembly Black
SPR910	1		Spring 18mm
SPRX2	2		Grey Base Plate Cover
Kitting Pack			
F022	4*		M10 X 55mm S/S Coach Bolt
F006	2*		M10 X 65mm S/S Coach Bolt
F110	6*		M10 Washer
F137	2*		M10 Nylock Nut
F762	2*		M10 X 55mm Security Bolt
F601A	2*		Plastic Dome Cap Washer
F601B	2*		Plastic Dome Cap
F608	2*		City Springer Ball
F804	4		M10 Nylock Dome Nut
F600A	2*		Plastic Counterbore Housing Washer

Surface Fixed Additional Parts List			
Part	Qty	Image	Description
SPRX5	2		Surface Fix Plate

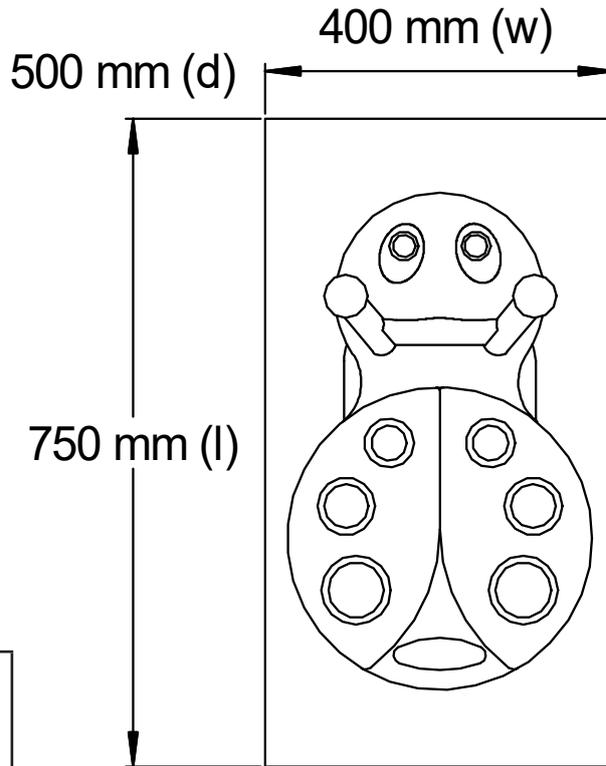
Parts marked \* may be supplied pre-assembled as SPR#LB(A)

## BS EN 1176 Impact Area



Surfacing Specification	
Finished Gradient	1 in 20 max
Free Height of Fall	0.6m
BS-EN1176 Impact Area	5.60m <sup>2</sup>
Impact Area Perimeter	8.40m
Loosefill Area	13.8m <sup>2</sup>
Loosefill Area Perimeter	13.50m

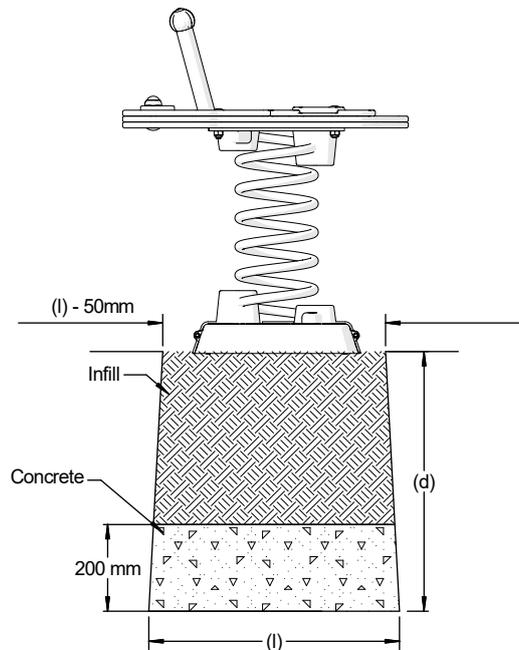
## Standard Foundation Plan



Minimum Concrete Specification: C16/20 (20 N/mm<sup>2</sup> min. compressive strength)  
Recommended Mix: 1 part cement/ 2 part sand/ 4 part stone.

NOT TO SCALE

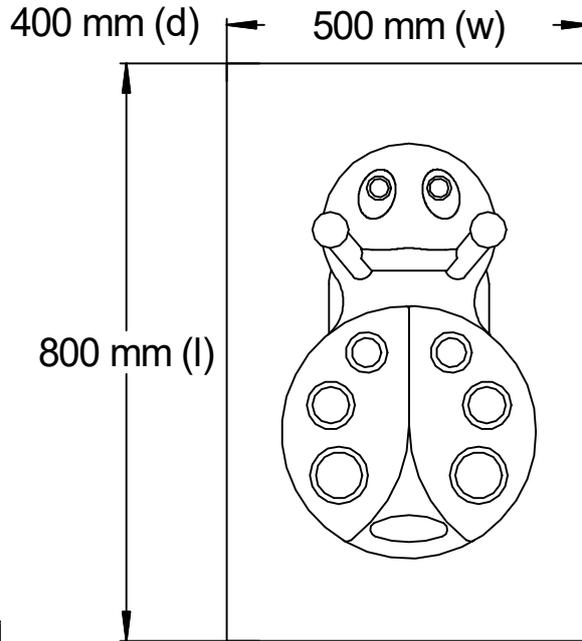
### Standard Foundation Detail



NOT TO SCALE

NOTE: All holes must taper out from hole width at top of hole (as shown) to give maximum stability. In loose or sandy ground all hole width dimensions should be increase by approximately 50%.

## Surface Fixed Foundation Plan



**Concrete Required**

**0.16m<sup>3</sup>**

Nominal Surfacing Depth (s) = 30mm  
 Allowance 30mm—60mm

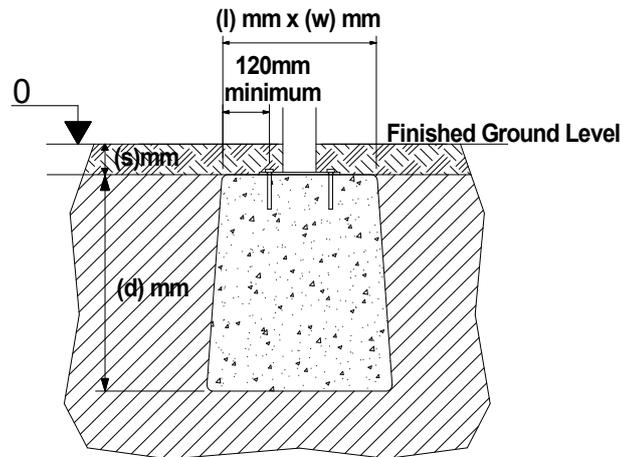
Foundations MUST be level, separate foundation MUST be level with each other. (maximum gradient 1 in 500) Minimum Concrete Specification: C20/25 (20 N/mm<sup>2</sup> min. compressive strength).

Jukebox+ Range: Maximum calculated compressive load [7kN] per foundation and tensile load [2kN] per fixing. Module specific loading figures to assess existing concrete foundations are available on request.

Playdale's surface fix system has been designed for use with an Resin/Adhesive Anchor system using appropriate threaded stud/rod and Anti-Vibration Nut.

Where a concrete slab is preferred over individual plinths/foundations the depth (d) can be significantly reduced.

All Plates and fixings should be covered appropriately as not to cause impact or trip hazard.

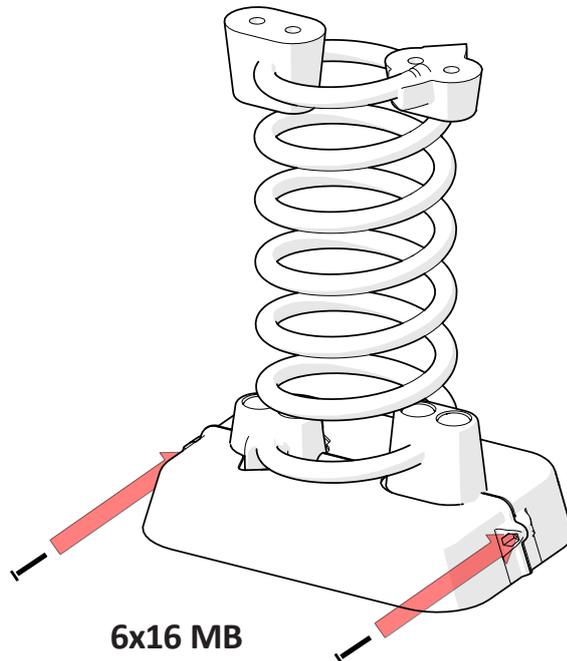
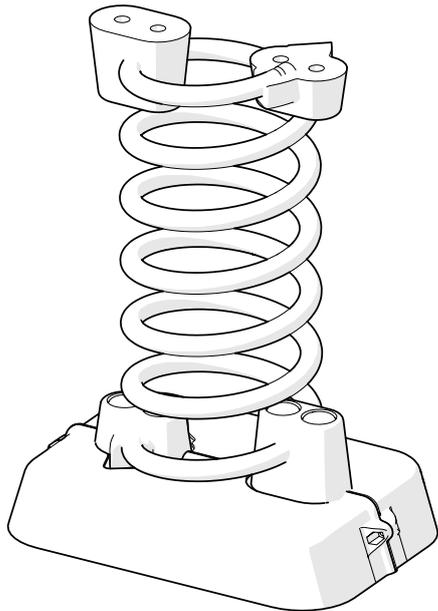
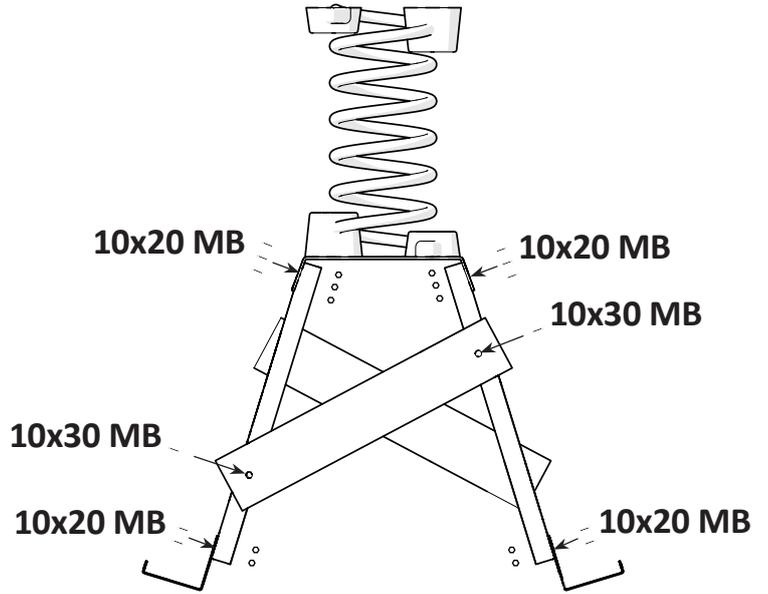
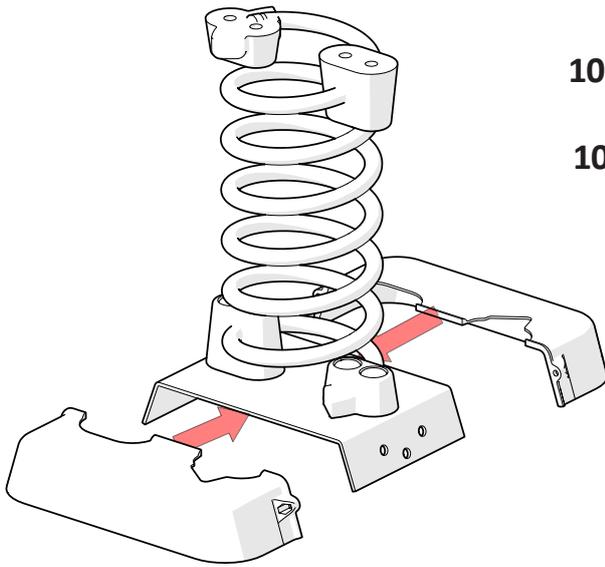


**NOT TO SCALE**

NOTE: All holes must taper out from hole width at top of hole (as shown) to give maximum stability. In loose or sandy ground all hole width dimensions should be increase by approximately 50%.

# 01

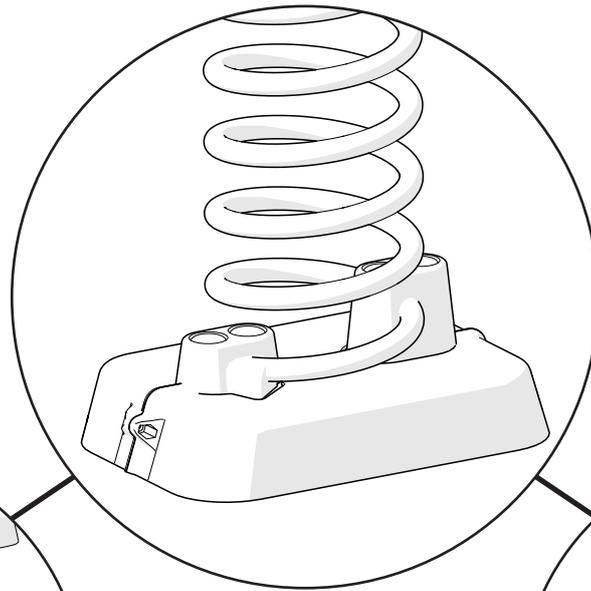
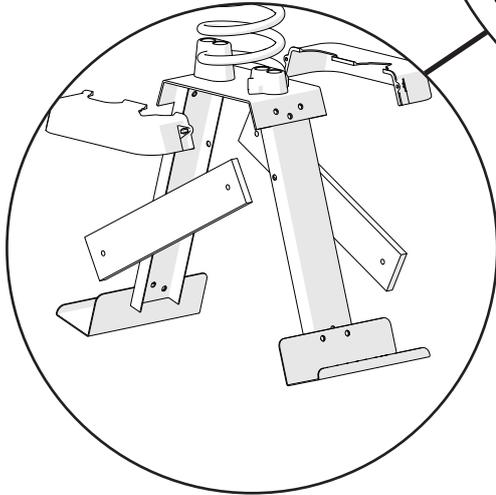
SPR910	1
SPRX2	2



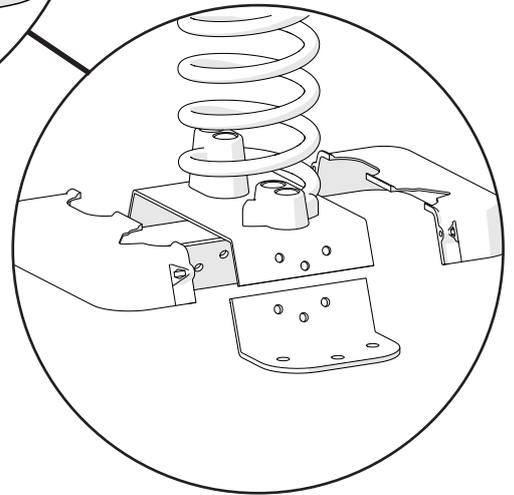
# 02

SPR910	1
SPRX2	2

**Steel Ground Fixed (SGF) Only**

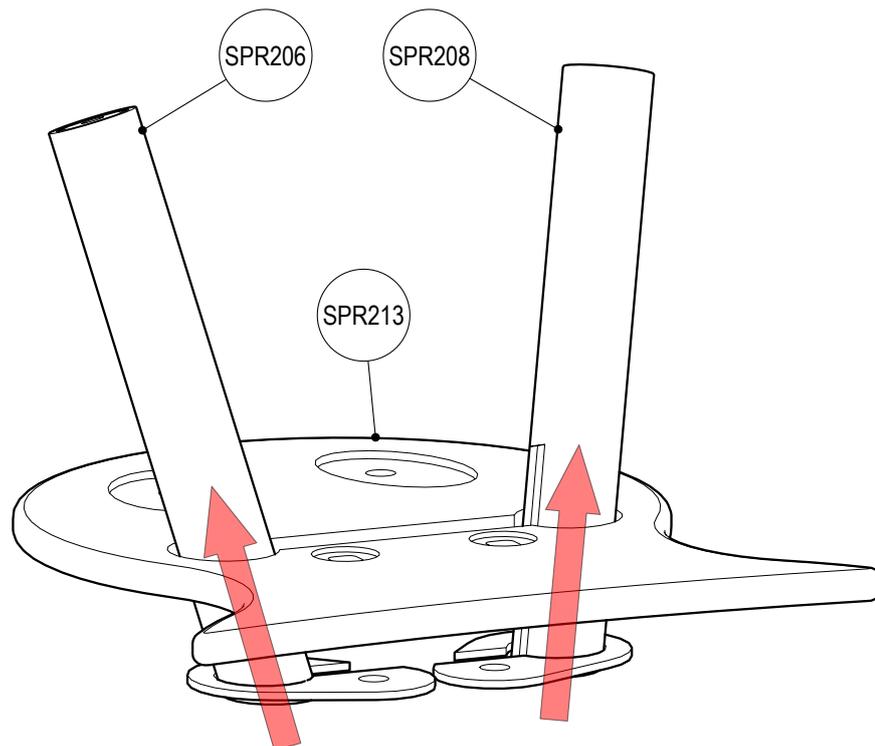


**Surface Fixed (SGF) Only**



# 03

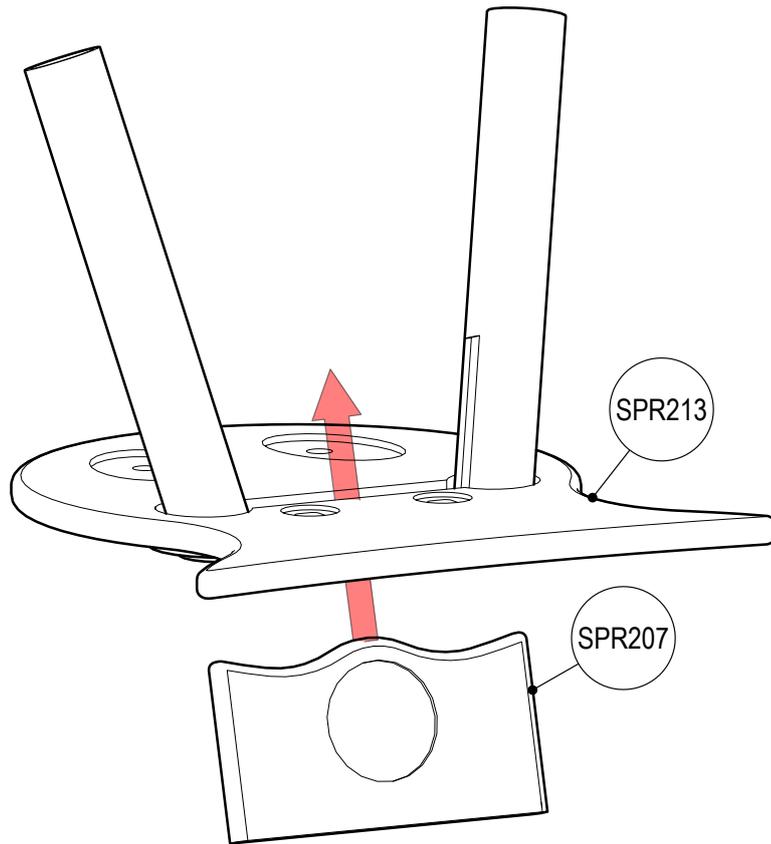
SPR213	1
SPR206	1
SPR208	1



# 04

SPR207

1

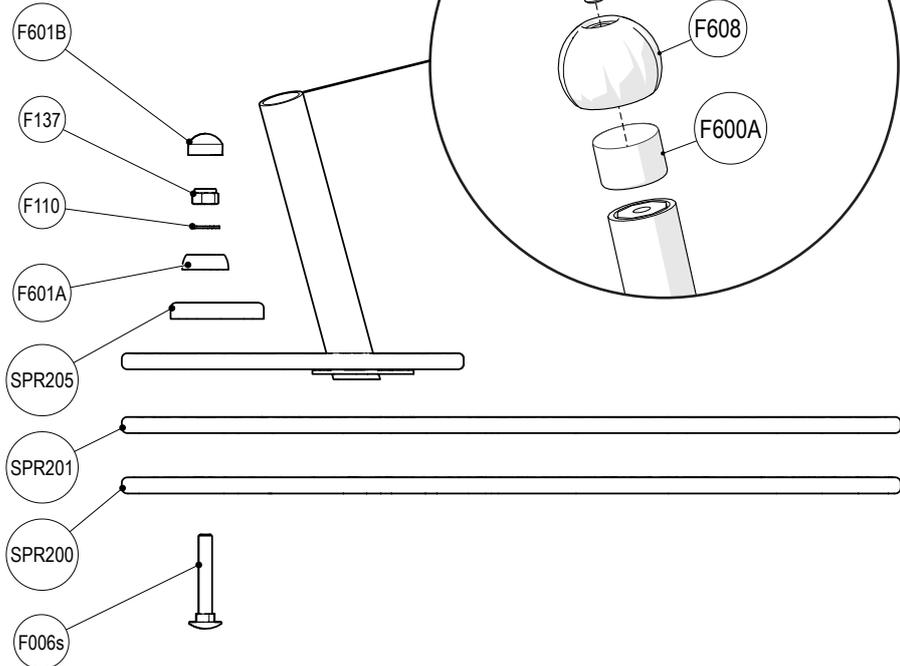


# 05



Torque to 20Nm

F601B	2
F137	2
F110	2
F601A	2
SPR205	2
SPR201	1
SPR200	1
F006	2
F762	2
F608	2
F600A	2



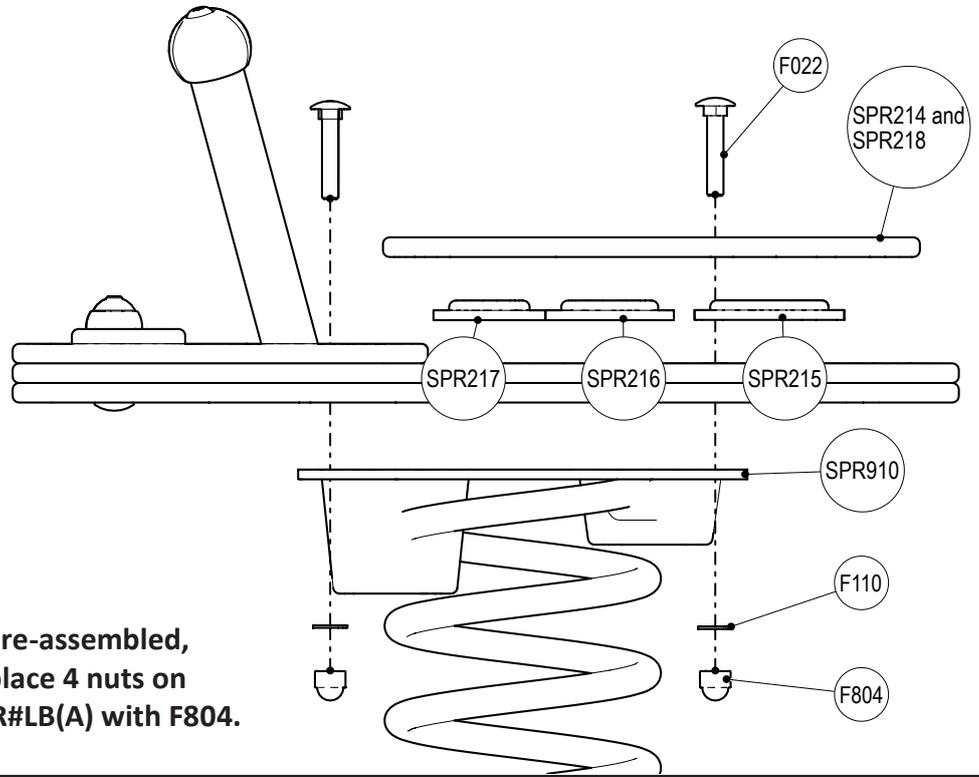
# 06

F022	4
SPR218	1
SPR214	1
SPR217	2
SPR216	2
SPR215	2
SPR910	1
F110	4
F804	4

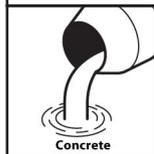


Torque to 20Nm

If pre-assembled, replace 4 nuts on SPR#LB(A) with F804.



# 07



500mm  
+/- 20mm

0

Finished Ground Level