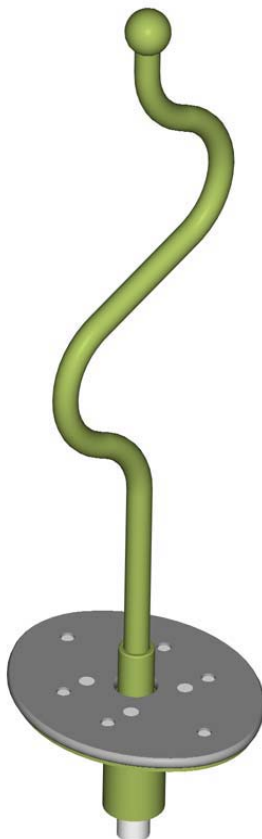




INSTALLATION INSTRUCTIONS

NEXUS WHIZZER

NXWZS - NXWZE



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1 SPECIFICATIONS

REFERENCE		NXWZS
OVERALL HEIGHT (H1)	m	1.55
LENGTH (L)	m	0.39
WIDTH (W)	m	0.48
WEIGHT	kg	47.00
HEAVIEST PART (SHAFT & BEARING ASSEMBLY)	kg	31.00
LARGEST PART (WHIZZER POLE ASSEMBLY)	m	0.36 X 0.48 X 1.30
CONCRETE	m ³	0.42
MINIMUM SPACE DIA (D1) x H	m	Ø3.50 x 2.08
MAX FREEFALL HEIGHT	m	0.30
FALLING SPACE AREA	m ²	9.50
IMPACT AREA (WET POUR)	m ²	10.25
RUBBER TILES (1m X 1m)		11
GRASS MATS (0.5m X 0.5m TILES)	m ²	11.25
LOOSE FILL AREA	m ²	10.5
MANHOURS	hr	4
MANPOWER		1
CONSTRUCTIONAL SPACE	m	3 x 3

NOTE: All dimensions in metres.

Concrete mix is recommended at:
 1 part cement;
 2 parts sand;
 4 parts aggregate;
 by volume with 20mm aggregate
 (20 N/mm² min compressive strength)

SMP Playgrounds Ltd recommends an effective *Impact Absorbing Surface tested to EN1177 & BS7188* beneath this play equipment. Refer to manufacturers instructions for details of installation. The surface should have a Critical Fall Height greater than the Maximum Freefall Height of the equipment.

Constructional Space (shown in the above table) is the approximate working area required to lay out and assemble the equipment.

Care should be taken when siting this equipment in order to discourage users in the surrounding area from unintentionally coming into contact with the equipment. This can be achieved, for example by placing the equipment at the perimeter of the play area.

For the safe operation of this equipment it must be installed on horizontal ground with the required minimum space.

If a loose fill surface is selected for this item it will require a very high level of maintenance to ensure a sufficient thickness is in place at all times to provide 'critical fall height' protection.

The concrete foundations indicated are for average ground. Care should be taken concerning abnormal conditions.

Tools: 5m tape measure, Spirit level, M10 Torx tool (Supplied with unit), 19mm A/F Socket, Extension bar, Torque wrench.

Minimum Personal Protective Equipment:- Gloves, Armoured boots.

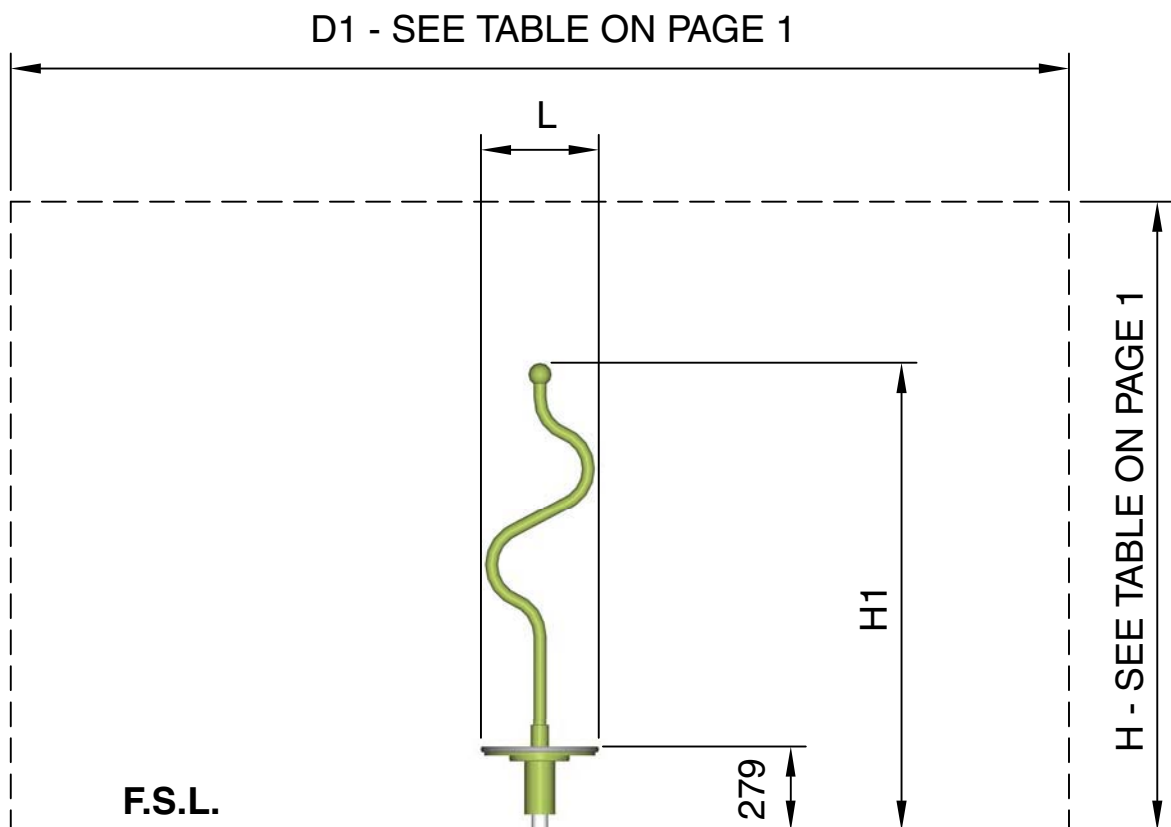
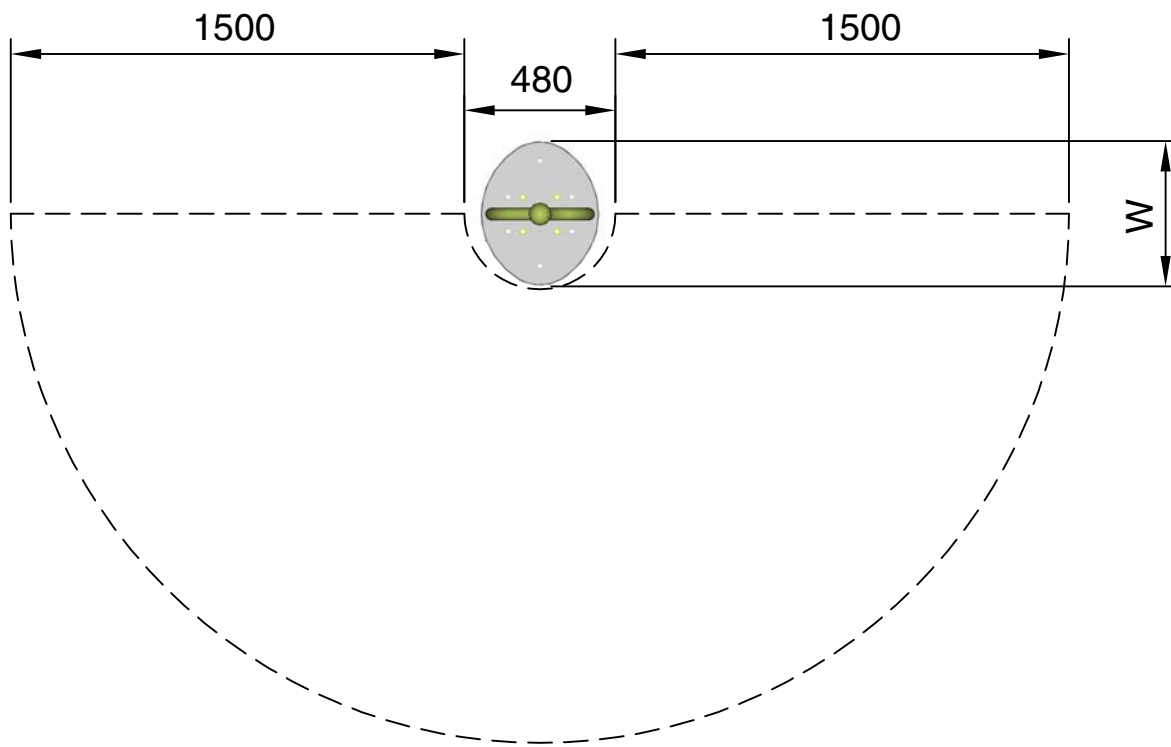
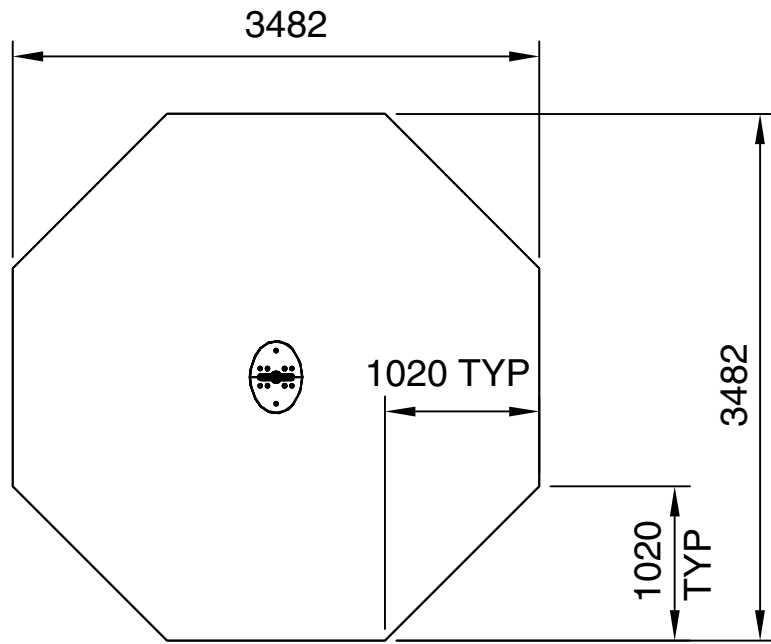
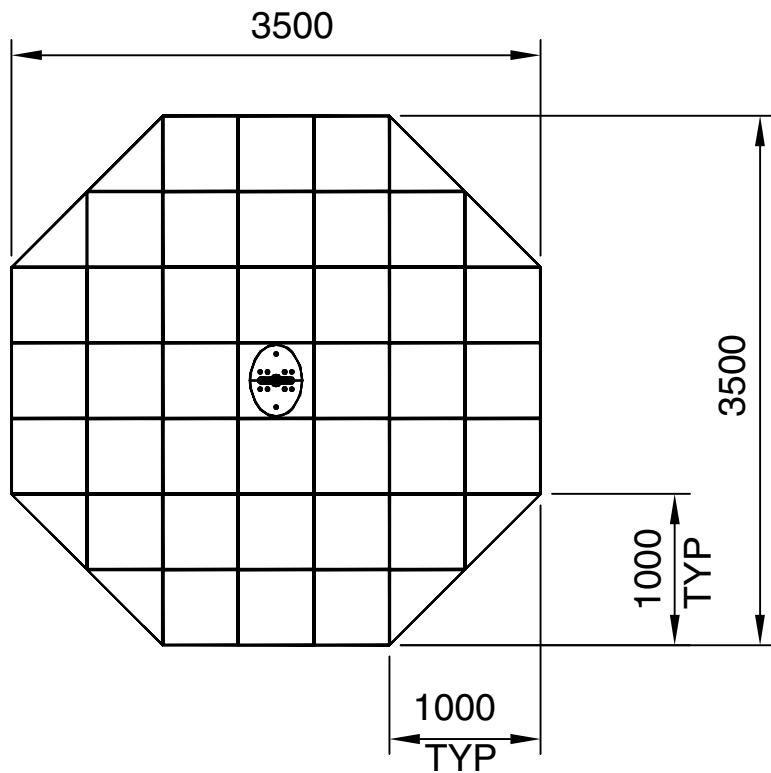


FIG.1 FREE SPACE, FALLING SPACE & MAXIMUM FREEFALL HEIGHT

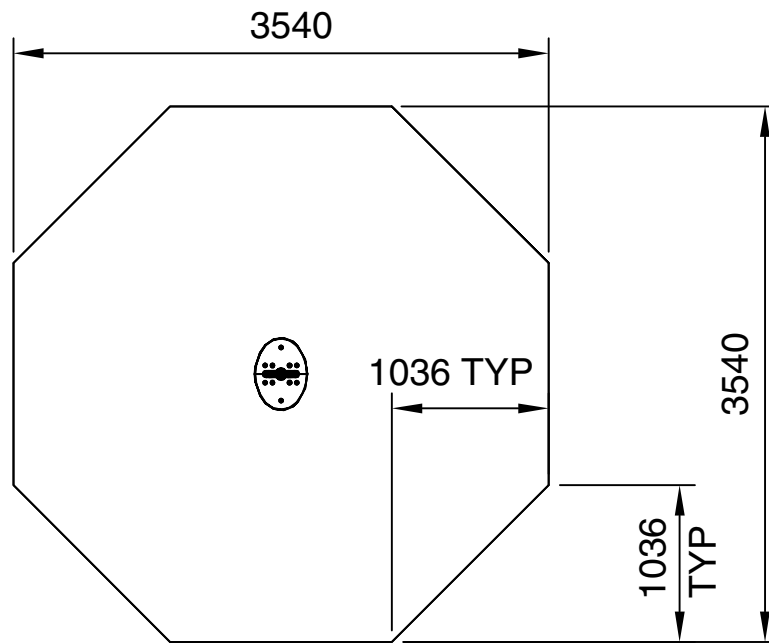


WET POUR AREA

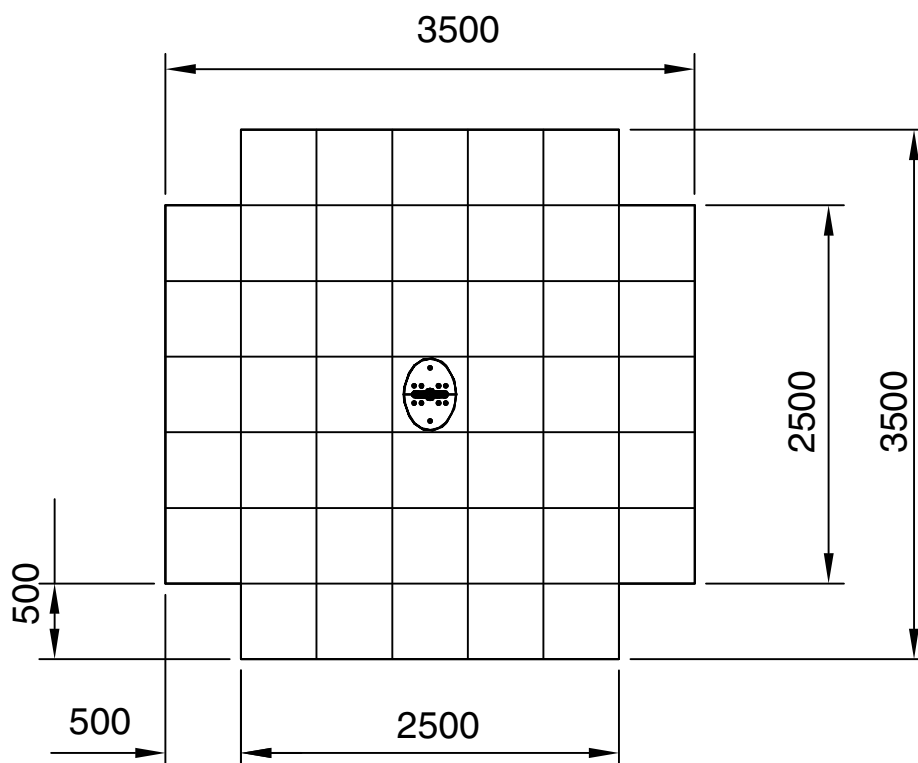


TILED AREA

FIG.2



LOOSE FILL AREA



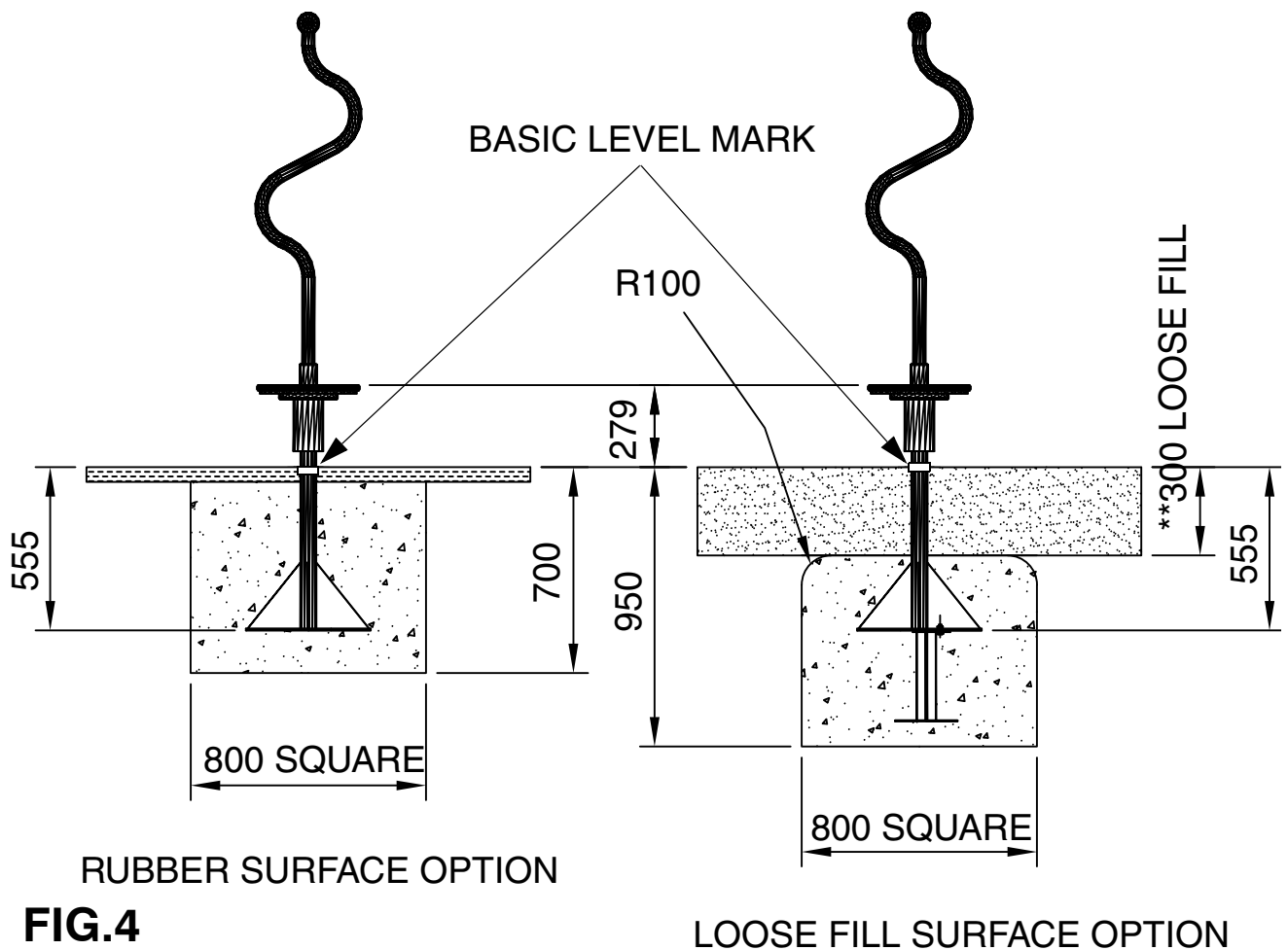
GRASS MAT AREA

FIG.3

2 PARTS LIST

UN-ASSEMBLED COMPONENTS					
ITEM	CODE	DESCRIPTION	RUBBER SURFACE	LOOSE FILL	WEIGHT(kg)
			NXWZS QTY	NXWZE QTY.	
1	38004051	WHIZZER POLE ASSEMBLY	1		16.000
2	38004000	SHAFT & BEARING ASSY *	1		31.000
3	38004031	EKO GRIP PLATFORM	2		0.500
4	SSGIL	GROUTING IN LUG		1	2.200
5	10251230	HEX HEAD BOLT M12 X 30	4		0.050
6	10121020	RESISTORX BOLT M10 X 20	6		0.020
7	10291200	WASHER M12	4		0.003
8	10291000	WASHER M10	6		0.002
9	10301200	SHAKEPROOF WASHER M12	12		0.002
10	10931000	TEE NUT M10	6		0.020
11	19028651	PLASTIC CAP	4		0.002
-	10121000	M10 TORX TOOL	1		-

* SEE APPENDIX 'A' FOR PT. No. BREAKDOWN



NOTE: **This allows for 300mm thickness of loose-fill surface, which will need to be confirmed is sufficient on the specific product selected.

3 INSTALLATION & ASSY PROCEDURES

3.1 SAFE WORKING PRACTICE:

A full risk assessment should be carried out prior to commencing the installation, which will be specific to the site selected. The major risks associated with purely the assembly of this product are highlighted below, which can form part of this overall assessment.

3.2 RISKS:

- i) Large parts which could be difficult to lift or handle.

3.3 CONTROL MEASURES:

- i) All staff working on installation to wear suitable Toe Protective Shoes and Gloves.
- ii) Any staff or other persons on site, not working directly on the installation, to be kept away from the installation.
- iii) Care should be taken when any awkward/heavy lifting may be required.

Pre Installation Inspection:-

- i) Inspect all parts for damage (that may have occurred during transportation & storage). Finish Coatings, if found to be damaged these should be made good before erection (Refer to maintenance instructions). Any damaged or missing parts must be replaced.
- ii) Warn the public of the risk of injury, by placing signs and fencing the surrounding area, before commencing installation.

3.4 INSTALLATION

- i) Refer to site layout for position and orientation of product, then, mark the outline of the position of the footings with eg. spray or chalk etc. Excavate the hole.
- ii) Position Shaft & Bearing Assembly (item 2) into excavation, pack up to height, level and plumb. (FIG.4 & 5).
- iii) Shim and brace Shaft & Bearing Assembly into position.
- iv) Fill the hole with concrete to the required level, taking into account any Impact Absorbing Surfacing requirements. Ensure that the full volume of concrete is used. The top of the concrete should gradually (1:100) slope down & outwards locally from the equipment upstand to the required level to form a watershed.

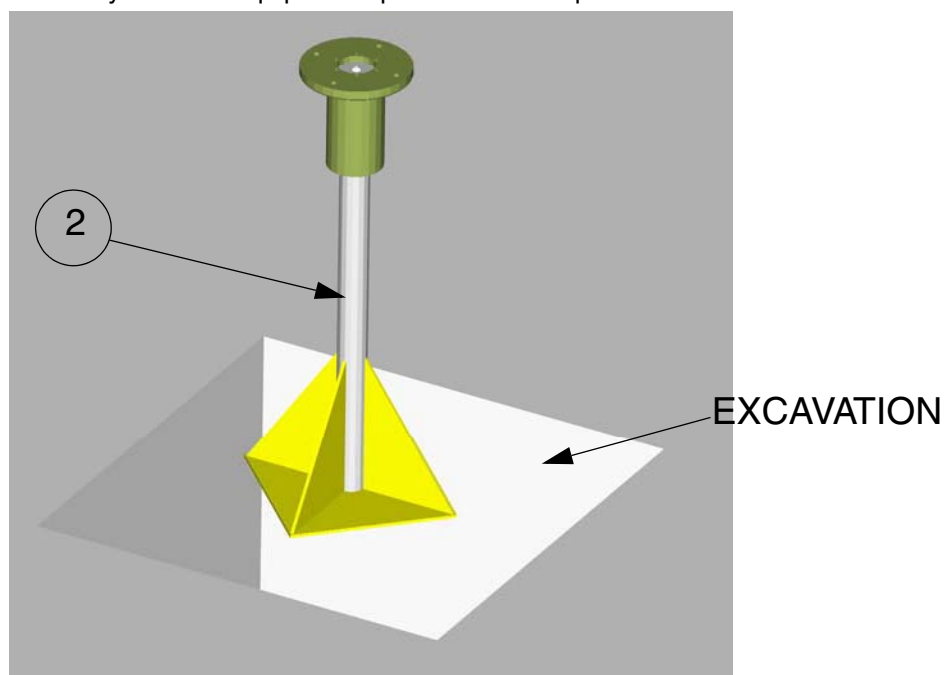


FIG.5

- v) Keep installation off limits to the public until the concrete has completely cured. (Recommended initial curing time is 48 hours).

- vi) Place the Whizzer Pole Assembly (item 1) onto the Shaft & Bearing Assy (item 2). Secure the Whizzer Pole Assembly to the Shaft & Bearing Assy using 4-off M12 x 30 Hex Head Bolts (item 5) and M12 Washers (item 7). Fully tighten to 50-60 Nm. (FIG.6).

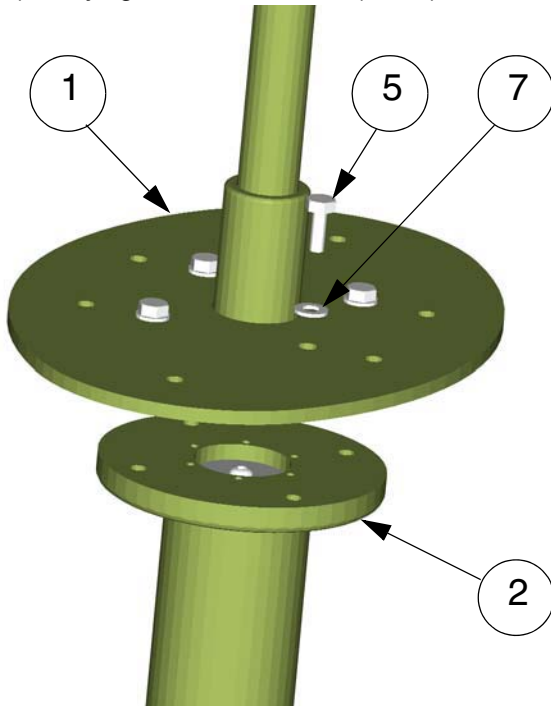


FIG.6

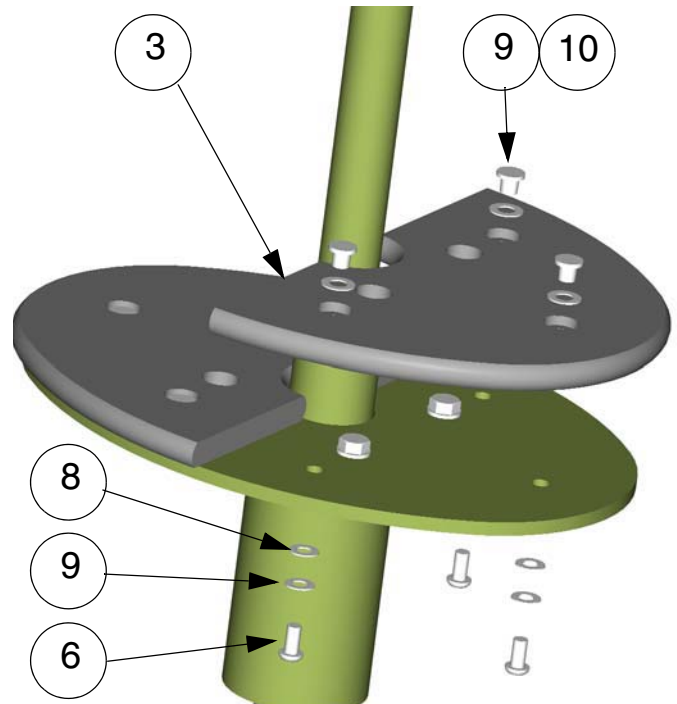


FIG.7

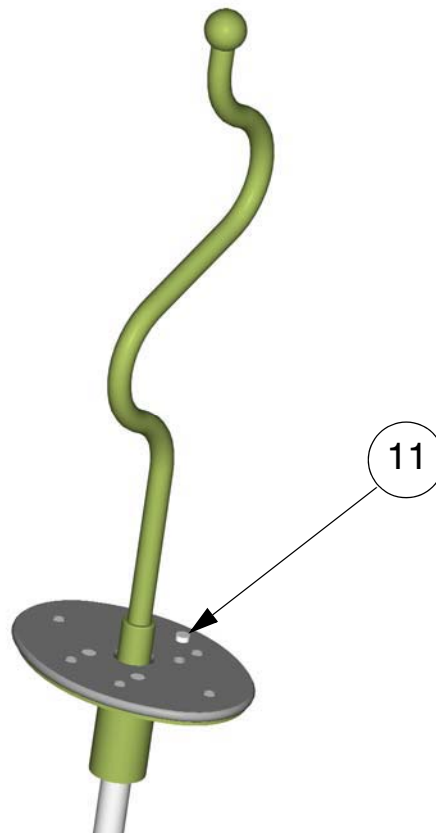


FIG.8

- vii) Fit 3 off Tee Nut (item 10) and Shakeproof Washer (item 9) into each Eko Grip Platform (item 3). (FIG.7).

- viii) Locate each Eko Grip Platform (item 3) into position on the Whizzer Pole Assembly plate (item 1) and secure into place with 3 off M10 x 20 Resistorx Bolts (item 6) and M10 Washers (item 8) and Shakeproof Washers (item 9) and fully tighten. (FIG.7 & 8).
- ix) Fit Pastic Cap (item 11) into holes in Eko Grip Platform (item 3) to cover heads of Hex Head Bolts (item 5). Ensure they fit flush with the surrounding plastic surface with no sharp edges. (FIG.8).

4 POST INSTALLATION INSPECTION

CHECK	CHECK	✓
1 The unit is installed at the correct height. - See FIG.4	<input type="checkbox"/>	
2 All fixings are tightened to the correct torque and have no protruding sharp edges.	<input type="checkbox"/>	
3 Paint work is not damaged.	<input type="checkbox"/>	
4 The Eko Grip Platform is not damaged.	<input type="checkbox"/>	
5 The Whizzer rotates freely.	<input type="checkbox"/>	
6 Concrete foundations are secure.	<input type="checkbox"/>	
7 Adequate provision of Impact Absorbing Surfacing with no obstructions or other hazards within the equipments minimum space.	<input type="checkbox"/>	
8 Site is clear of all tools and rubbish.	<input type="checkbox"/>	
9 Remove any warning signs.	<input type="checkbox"/>	

Appendix A: SHAFT & BEARING ASSY (CODE 38004000)

The assembly described below is for the Shaft & Bearing Assy. This will be supplied complete by SMP. Instructions are included should the unit need to be dis-assembled.

NOTE: A suitable Bearing Fit Adhesive (Loctite 641) is required for mounting the bearings to the shaft.
(Not supplied).

ASSEMBLED COMPONENTS				
ITEM	CODE	DESCRIPTION	QTY.	WEIGHT (kg)
1	71000102	SHAFT & BASE FABRICATION	1	20.000
2	38004001	BEARING ASSEMBLY	1	11.000
3	71000109	HOLDING WASHER	1	0.080
4	10121030	RESISTORX HEAD M10 x 30	1	0.030
5	10309999	HEAVY DUTY WASHER M10	2	0.011

NOTE: The Bearing Assembly item 2 contains the following items.

38004001 BEARING ASSEMBLY				
ITEM	CODE	DESCRIPTION	QTY.	WEIGHT (kg)
1.1	38004012	BEARING HOUSING	1	10.100
1.2	71022208	SPHERICAL ROLLER BEARING	1	0.60
1.3	71022210	SPHERICAL ROLLER BEARING	1	0.70
1.4	71000110	OIL SEAL	1	0.015

1 BEARING REMOVAL

- i) Dis-assemble the Eko Grip Platform from the Shaft & Bearing Assy by removing 6 off M10 x 20 Resistorx Bolts. See Section 1 FIG.7.
- ii) Dis-assemble the Whizzer Pole Assembly from the Shaft & Bearing Assy by removing 4 off M12 x 30 Hex Head Bolts and M12 Washers. See Section 1 FIG.6.
- iii) Undo the M10 x 30 Resistorx bolt (item 4) in the centre of the Shaft & Base Fabrication (item 1) and remove the Holding Washer (item 3) and Heavy Duty Washer (item 5). (FIG.3).
- iv) Slide the Bearing Assembly (item 2) off the Shaft & Base Fabrication (item 1).
- v) Remove the Oil Seal (item 1.4) from the Bearing Housing (item 1.1). Inspect for signs of wear and replace if necessary. (FIG.1 & 2).
- vi) Using a suitable bearing extractor, remove the Spherical Roller Bearing (item 1.3) from the Bearing Housing (item 1.1). Inspect for signs of wear and replace if necessary.
- vii) Using a suitable bearing extractor, remove the Spherical Roller Bearing (item 1.2) from the Bearing Housing (item 1.1). Inspect for signs of wear and replace if necessary. (FIG.1 & 2).

2 BEARING REPLACEMENT

- viii) Press the Spherical Roller Bearing (item 1.2) into the Bearing Housing (item 1.1) ensuring it is fully in position. (FIG.1 & 2)
- ix) Press the Spherical Roller Bearing (item.1.3) into the Bearing Housing (item 1.1), ensuring it is fully in position. (FIG.1 & 2)
- x) Slide the Oil Seal (item 1.4) into the Bearing Housing (item 1.1), (FIG.1 & 2).

NOTE: Ensure the oil seal is the correct way up. (FIG.1 & 2)

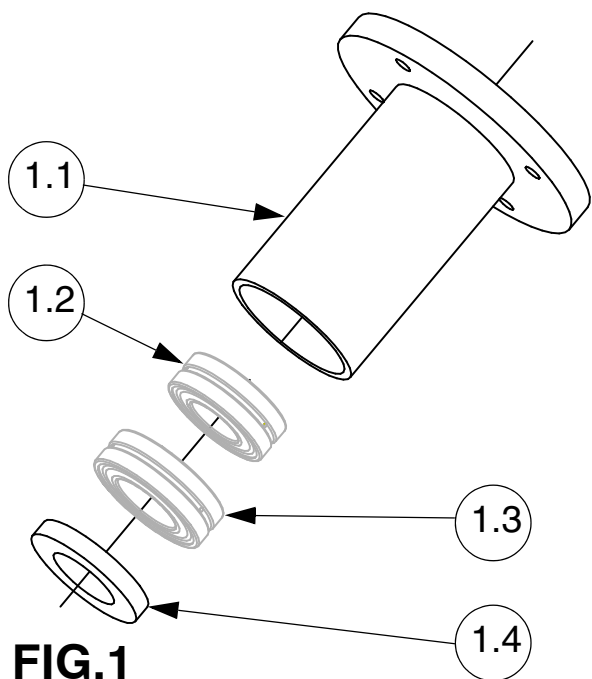


FIG.1

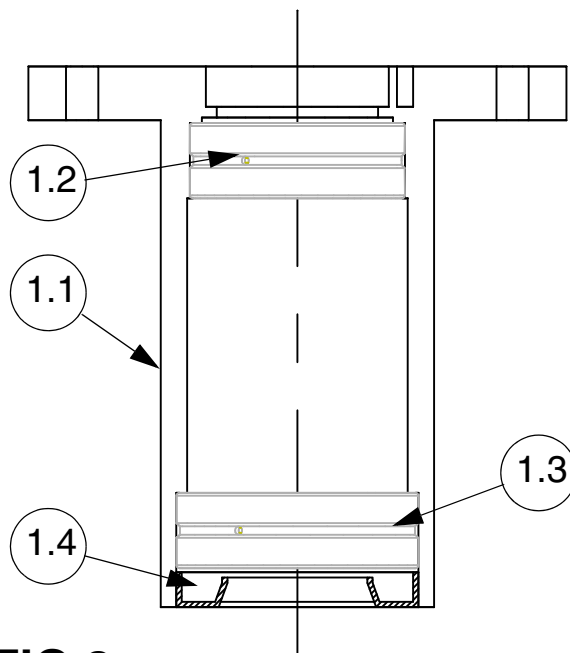


FIG.2

- xi) Apply a suitable Bearing Fit Adhesive (Loctite 641) to the mounting diameters on the Shaft for the two bearings and slide the Bearing Assembly (item 2) over Shaft. (FIG.3).

NOTE: Ensure that the Bearing Assembly is fully pressed home.

- xii) Secure the Bearing Assembly (item 2) in place with the Holding Washer (item 3), Heavy Duty Washer (item 5) and a Resistorx M10 x 30 bolt (item 4). Fully tighten to 20-25 Nm. (FIG.3).

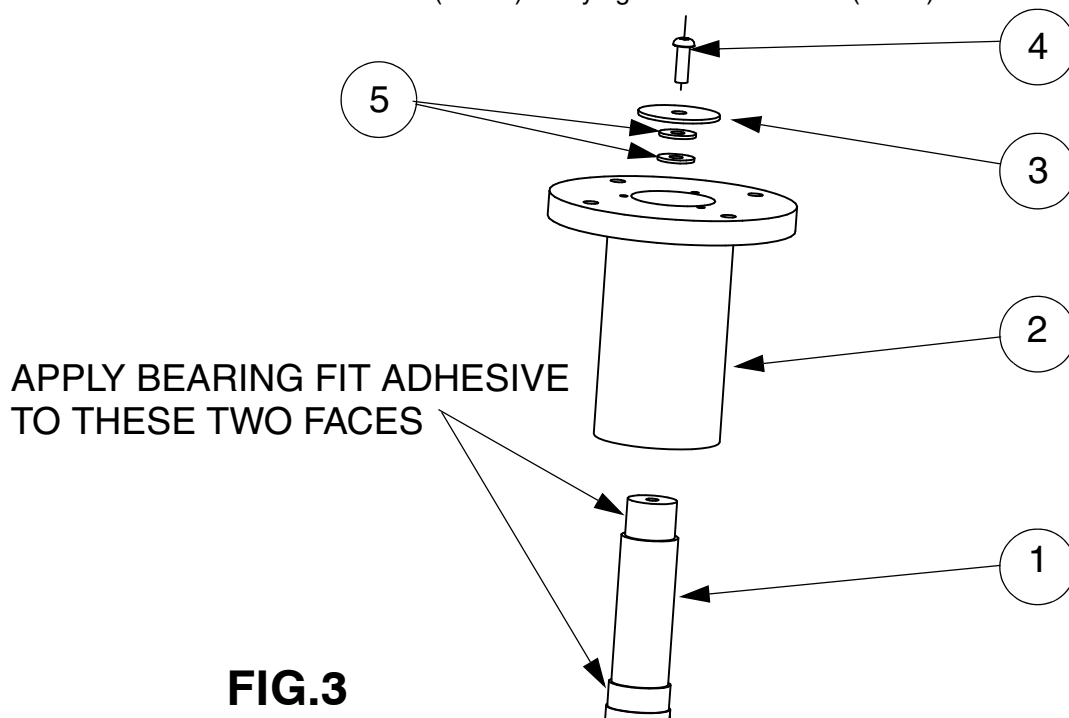


FIG.3

- xiii) Re-assemble the Whizzer Pole Assembly on to the Shaft & Bearing Assy using 4 off M12 x 30 Hex Head Bolts and M12 Washers. See Section 1 FIG.6.
- xiv) Re-assemble the Eko Grip Platform on to the Shaft & Bearing Assy using 6 off M10 x 20 Resistorx Bolts. See Section 1 FIG.7.
- xv) Ensure all fixings are fully tightened.