

Corn Bins

Assembly & Maintenance Manual

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1. Health & Safety



Stages of the installation may require the use of personal protection.



Some stages of installation will require at least two people.



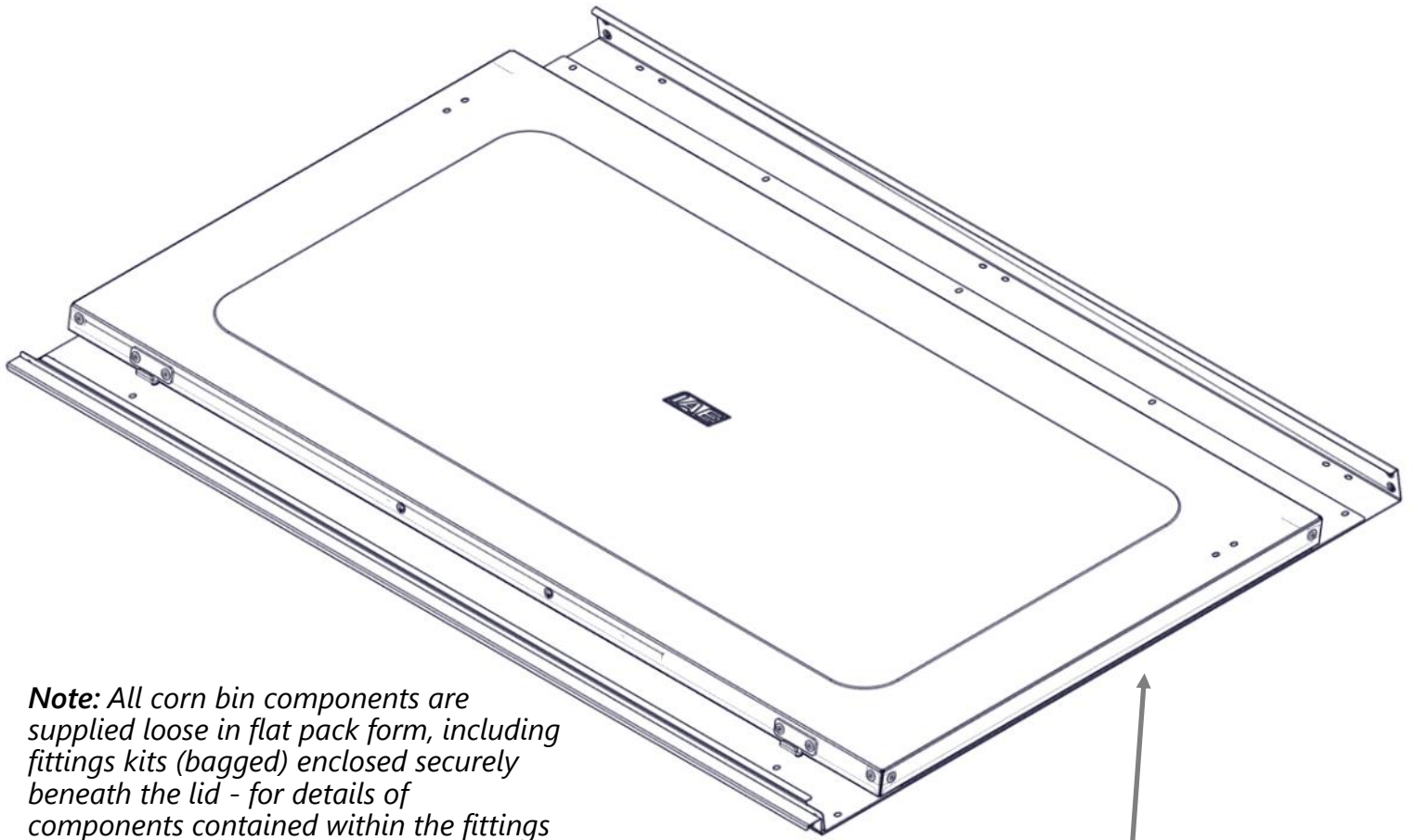
Do not lean on or exert undue pressure on partially assembled equipment until it has been fully assembled.



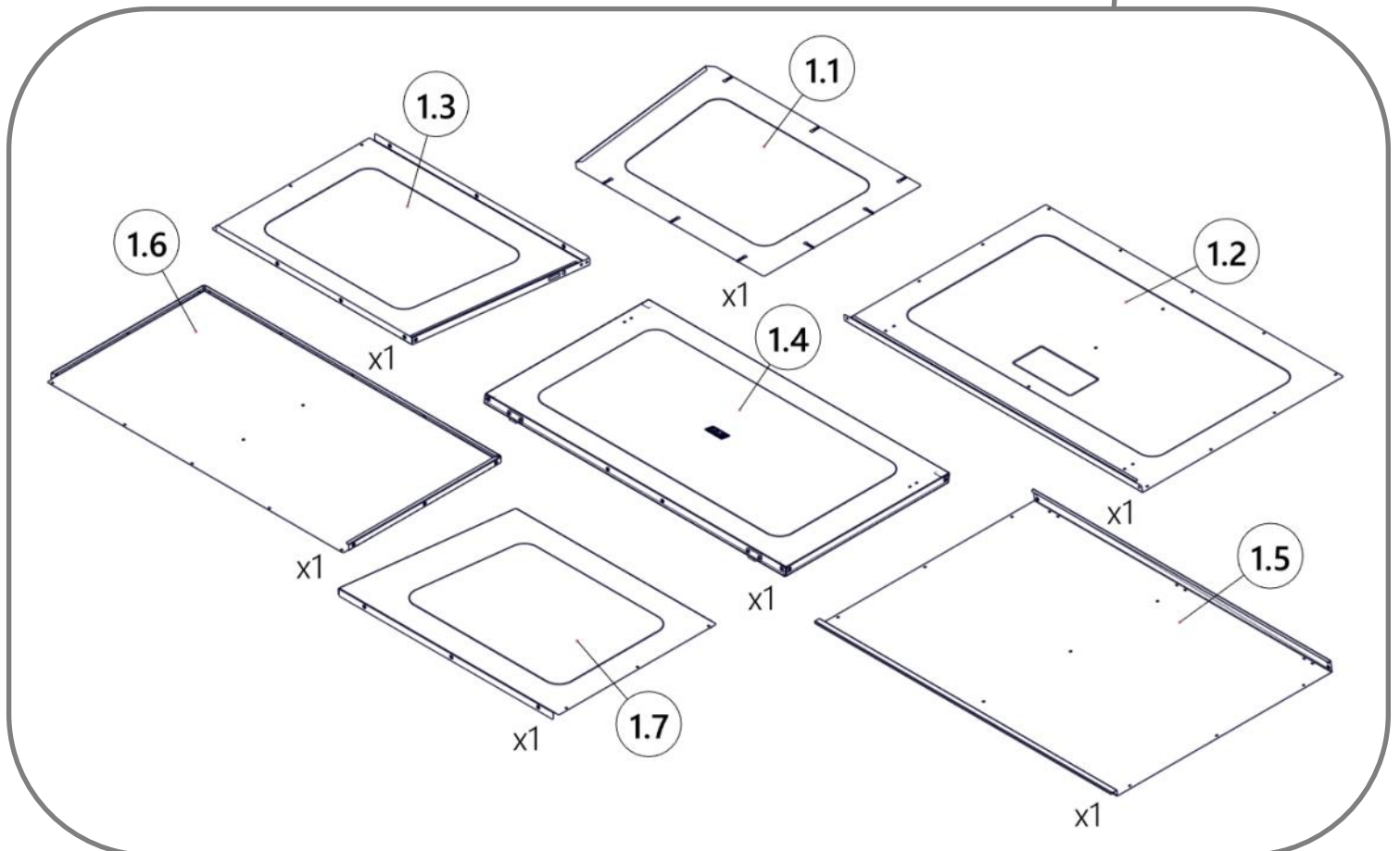
Refer to manual:- Always refer to the manual before adjusting/use of this equipment or if you are in any doubt regarding the operation or set up of the equipment. If you require any further assistance contact your IAE Dealer.

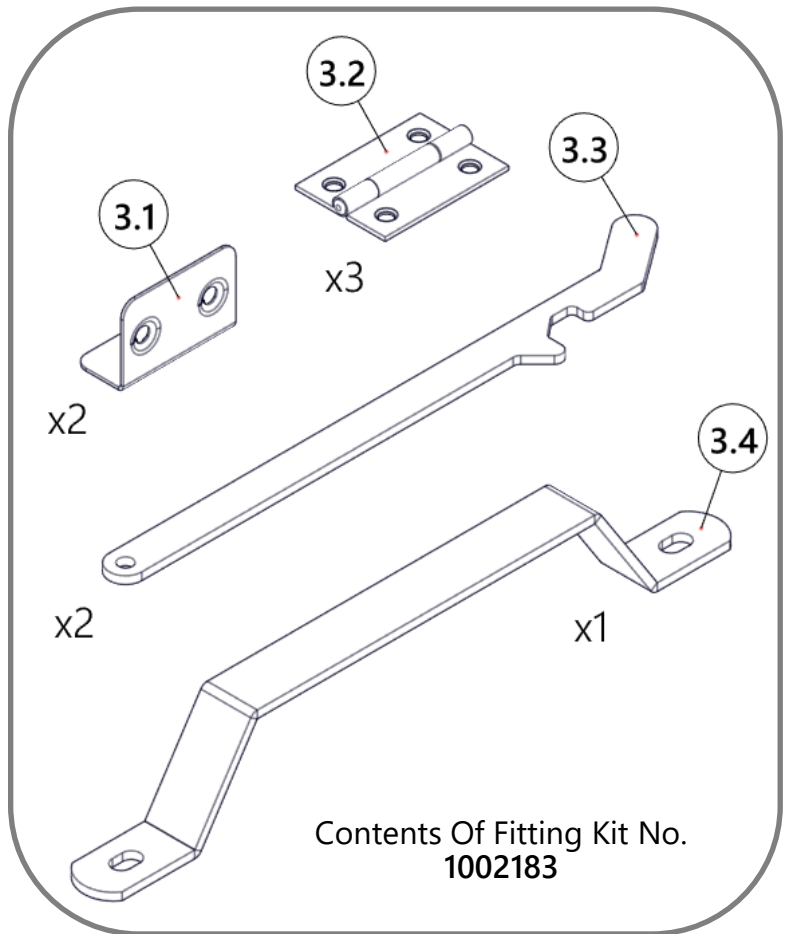
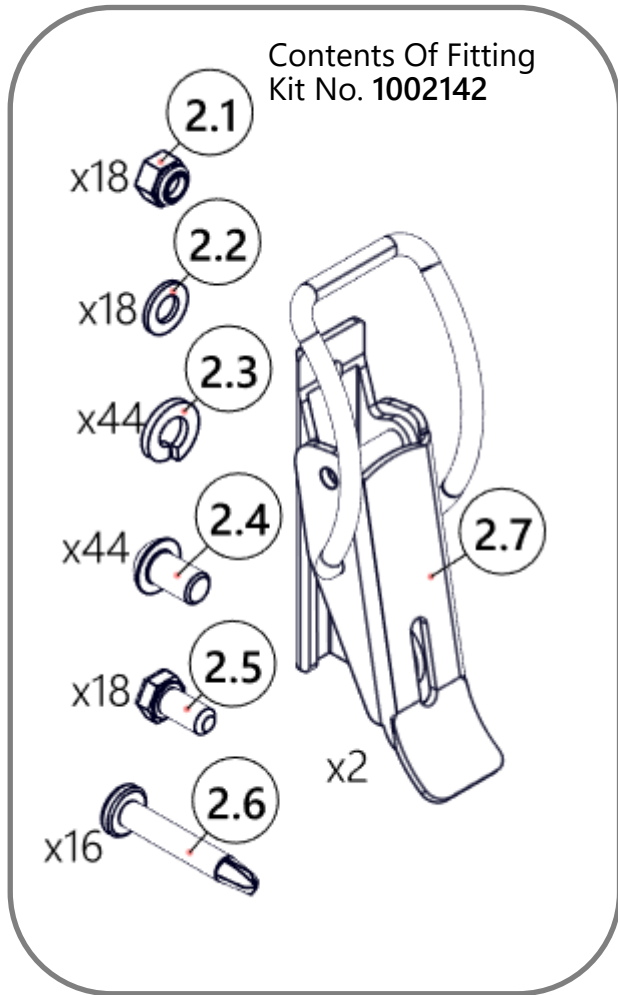
2. Parts Listing

1200 Long Corn Bin Flat Pack - 1002137



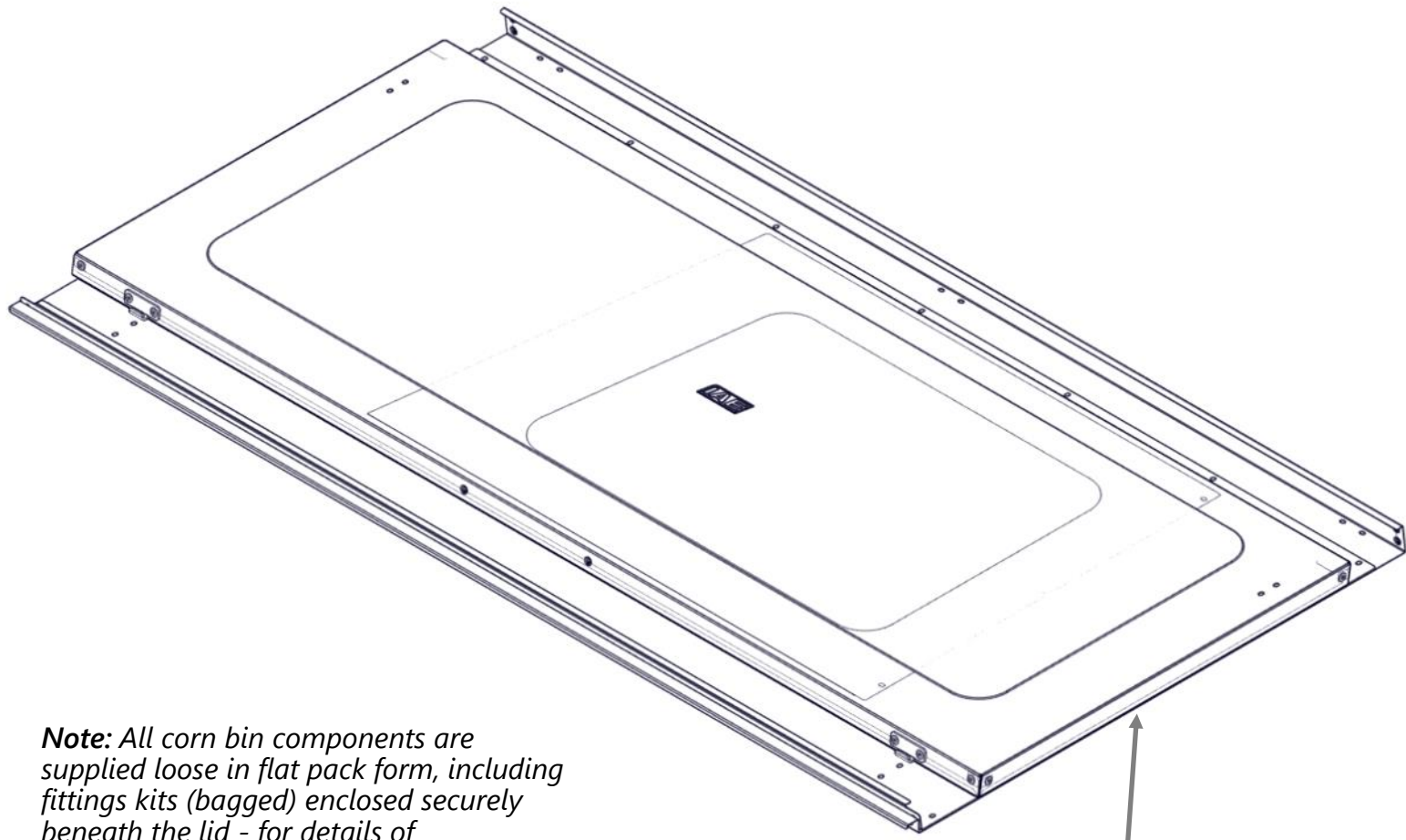
Note: All corn bin components are supplied loose in flat pack form, including fittings kits (bagged) enclosed securely beneath the lid - for details of components contained within the fittings kits and full parts listing see page 4



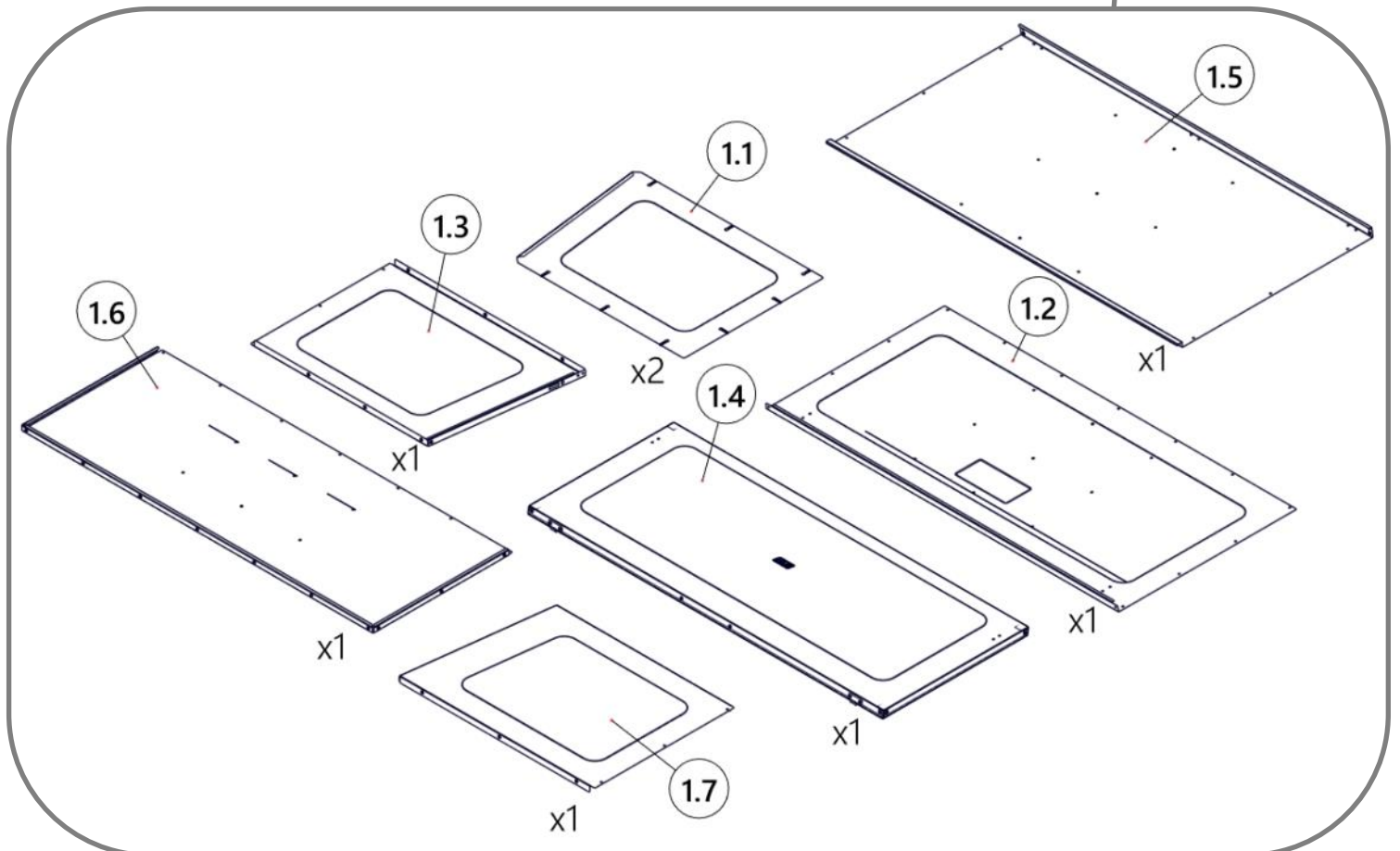


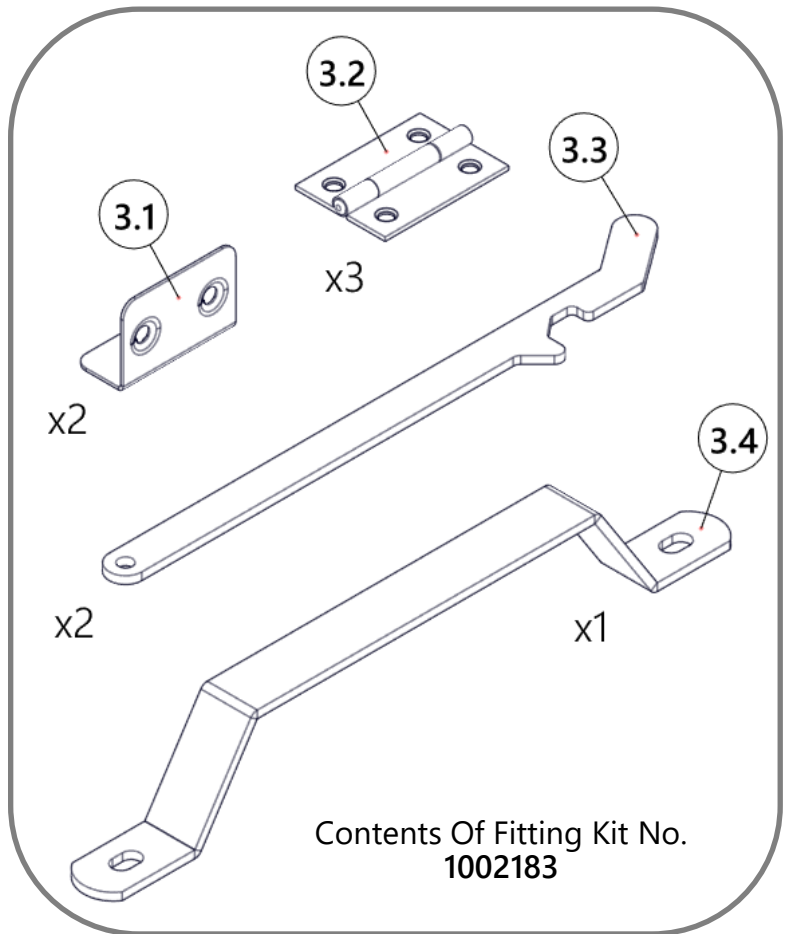
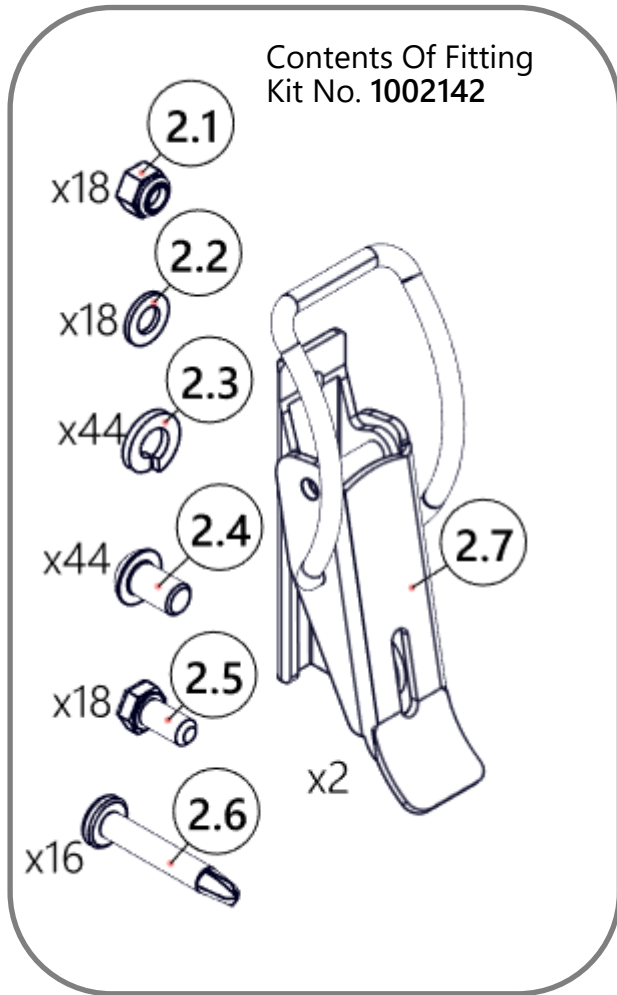
BOM ID	PRODUCT_NO	PART_NO	IAE_DESCRIPTION
1.1	1002137	1001726	Optional partition
1.2		1001733	Front panel
1.3		1001725	Right hand side panel
1.4		1002138	Lid Assembly
1.5		1001734	Back panel
1.6		1001741	Base
1.7		1001724	Left hand side panel
2.1	1002142	B040 3002 05	M5 Nyloc Nut BZP
2.2		B041 3001 05	M5 Washer Form A BZP
2.3		B041 3302 06	M6 Spring Washer Type B BZP
2.4		B029 3060 10	M6 X 10 Socket Button Head Screw BZP
2.5		1002144	M5 X 10 Setscrew BZP
2.6		1002143	4.8mm X 32mm Pan Head Self Tapping Screw
2.7		1001727	Spring Claw Latch
3.1	1002183	1001729	Lid stay bracket
3.2		B107 0200 20	2in Butt Hinge BZP
3.3		1001728	Lid stay
3.4		D075 2001 34	Lid handle

1600 Long Corn Bin Flat Pack - 1002140



Note: All corn bin components are supplied loose in flat pack form, including fittings kits (bagged) enclosed securely beneath the lid - for details of components contained within the fittings kits and full parts listing see page 6





BOM ID	PRODUCT_NO	PART_NO	IAE_DESCRIPTION
1.1	1002140	1001726	Optional partition
1.2		1001737	Front panel
1.3		1001725	Right hand side panel
1.4		1002141	Lid Assembly
1.5		1001736	Back panel
1.6		1001738	Base
1.7		1001724	Left hand side panel
2.1	1002142	B040 3002 05	M5 Nyloc Nut BZP
2.2		B041 3001 05	M5 Washer Form A BZP
2.3		B041 3302 06	M6 Spring Washer Type B BZP
2.4		B029 3060 10	M6 X 10 Socket Button Head Screw BZP
2.5		1002144	M5 X 10 Setscrew BZP
2.6		1002143	4.8mm X 32mm Pan Head Self Tapping Screw
2.7		1001727	Spring Claw Latch
3.1	1002183	1001729	Lid stay bracket
3.2		B107 0200 20	2in Butt Hinge BZP
3.3		1001728	Lid stay
3.4		D075 2001 34	Lid handle

3. Assembly

TOOLS REQUIRED:

Protective gloves

Ø8mm socket wrench/open end spanner

Ø10mm socket wrench

Hammer and punch

Step 1.

Unpack all corn bin components supplied shrink-wrapped in a flat pack form. See Fig. 1

Note: Timber battens are supplied positioned in the space on either side between the corn bin lid and the edges of the corn bin back serve no purpose other than to protect during transportation and therefore can be discarded once unpacked.

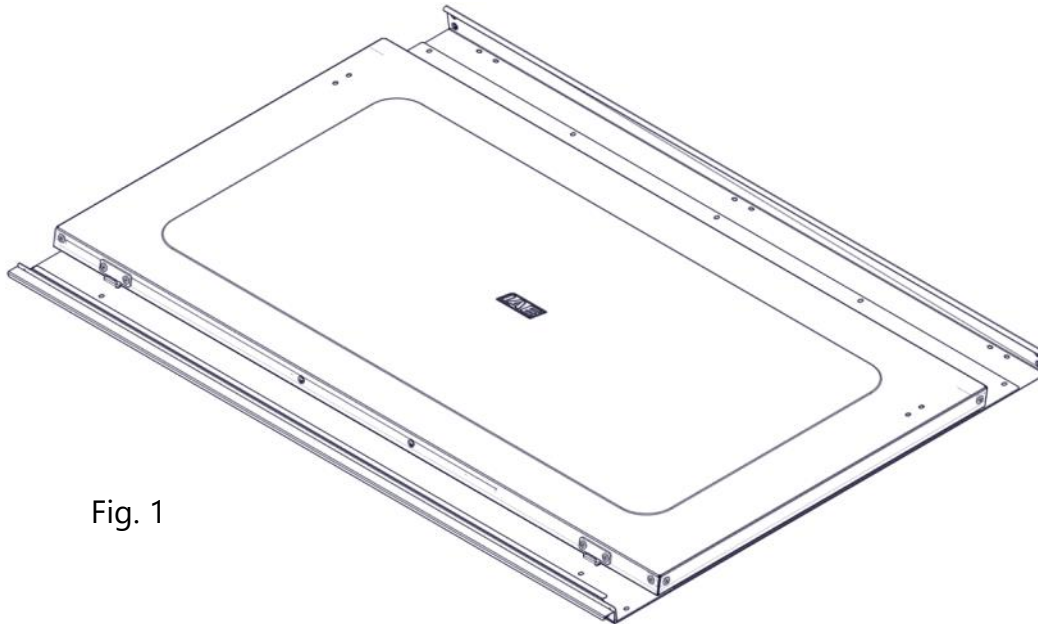


Fig. 1

Exploded view displays order of corn bin components comprised in flat pack. See Fig. 2

Note: Fittings kits will be bagged and situated beneath the corn bin lid.

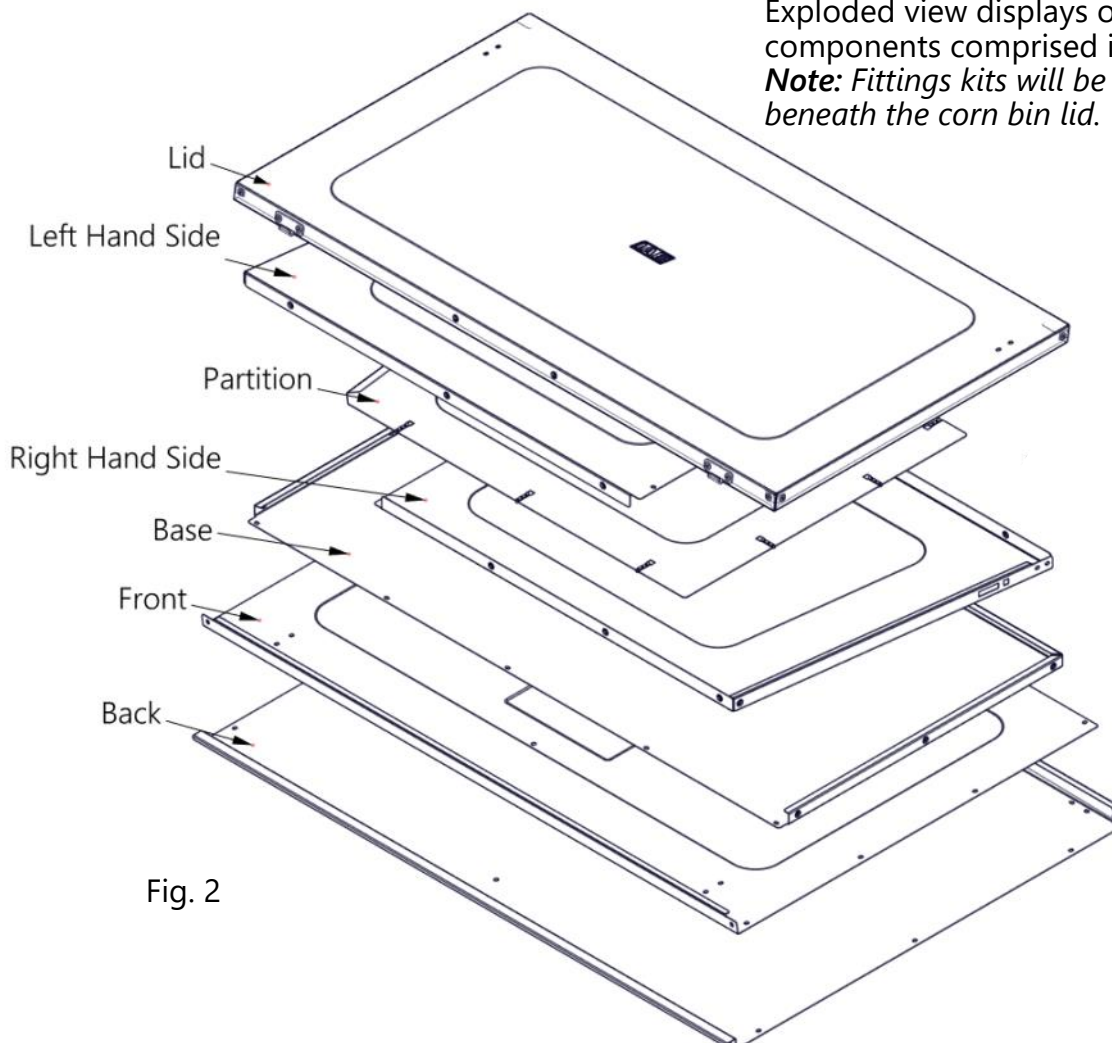


Fig. 2

Fittings kit 1002183



Fittings kit 1002142



⚠️ Prep For Partitions (If Required)

Partitions are supplied as an optional component to allow personnel to divide the internal body into 2 sections on the 1200mm long corn bins and up to 3 sections on the 1600mm long corn bins.

The **FRONT**, **BASE** and **BACK** components feature hole locators along the width of the sheet metal which will need to be punched out to allow for fastening the partitions with self tapping screws (see assembly step 9 on page 14).

IMPORTANT use the instructions in this section before continuing with the next stage of assembly

Step 1 - Lay the sheet metal on top of supports
(user to source separately, dimensions not specified)

- x2 supports spaced approximately 50mm apart with the hole locators directly over the centre
- x2 additional supports placed at each end for stability

Step 2 - Punch out holes in the steel metal

- Using a centre punch and hammer



⚠️ Ensure holes are tapped out leaving a nice clean finish for inserting M6 button head screws

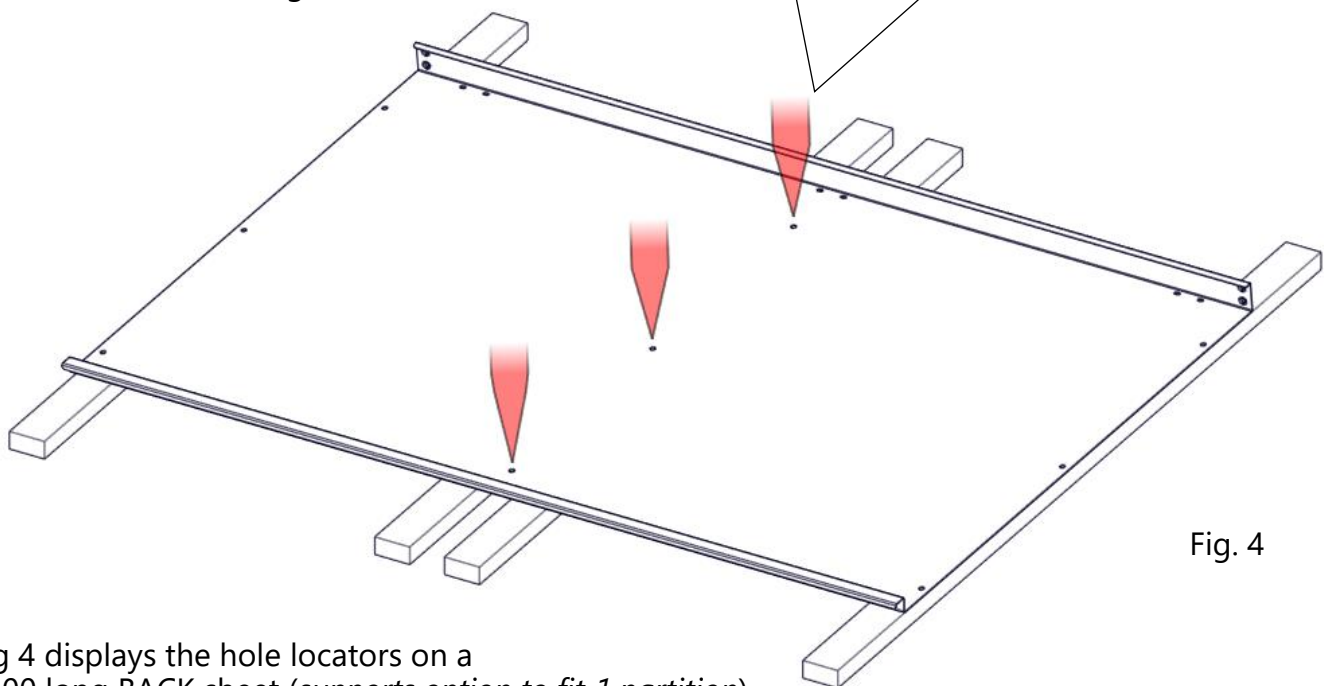
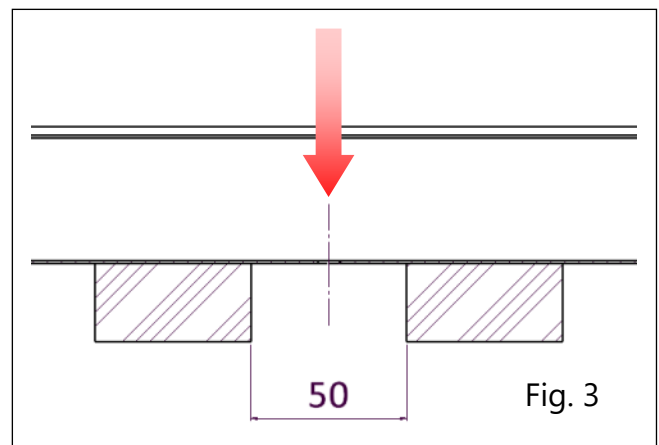


Fig 4 displays the hole locators on a 1200 long BACK sheet (supports option to fit 1 partition)

IMPORTANT 1600 long components feature x3 rows of hole locators as they provide the user with option to fit 1 or 2 partitions, dividing the internally body into either 2 or 3 sections

Step 2.

Start by offering the back up to the base and insert M6 x 10 socket button head screws into pre-punched fixing holes at each extremity to secure. See Fig. 5 and 5a

PRE-PUNCHED THREADED HOLES:
The feature of thread form tool used in the manufacturing process on some sheet metal corn bin parts ensures that bolts are secured at insertion - eliminating the need for nuts.

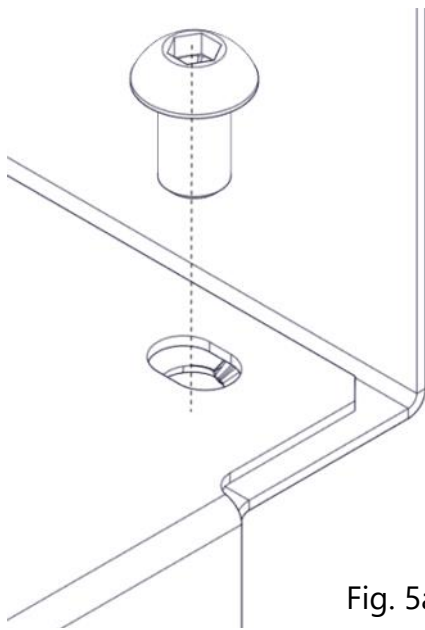
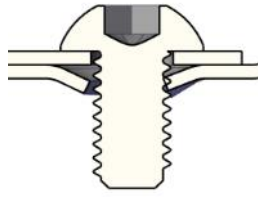


Fig. 5a

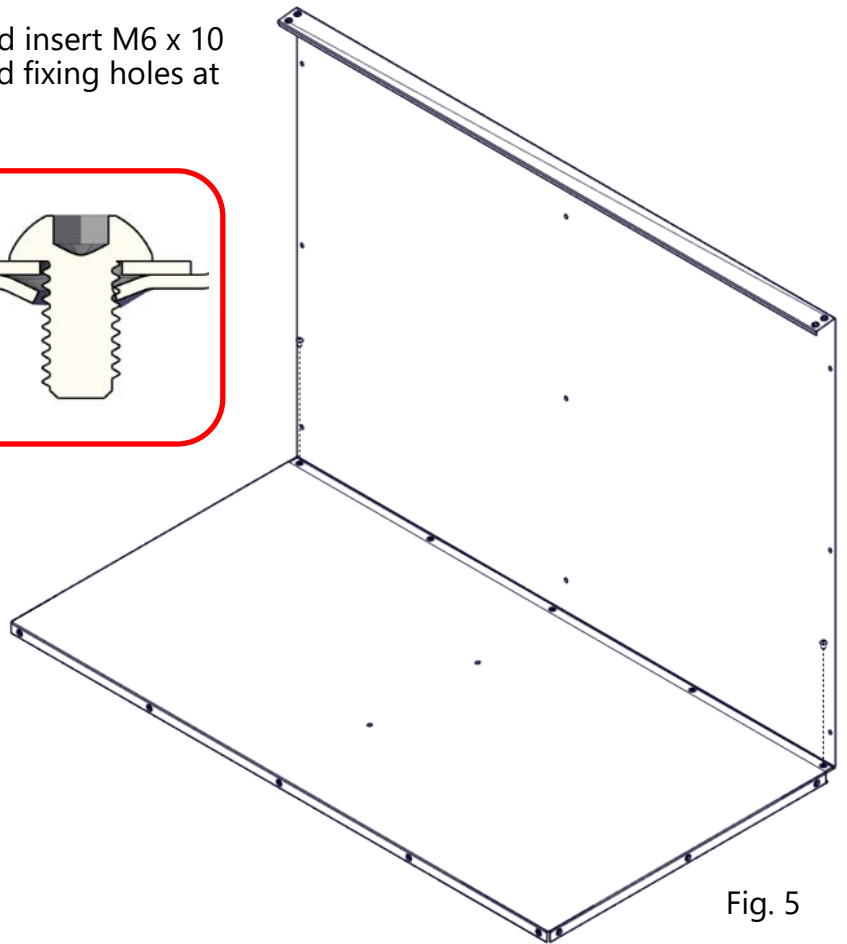


Fig. 5

Step 3.

Next, present the right hand side to the base and back. To ensure all fixing holes are aligned, insert 4No. M6 x 10 socket button head screws to secure. This will add support to rear panel whilst adding the remaining socket button head screws. See Fig. 6 and 6a

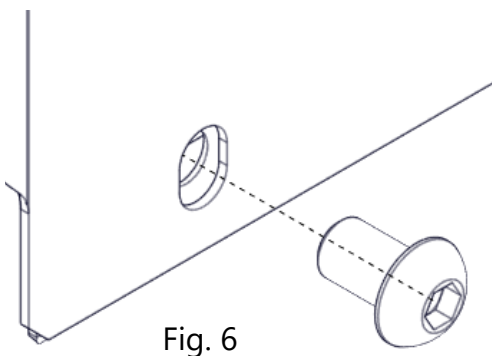


Fig. 6

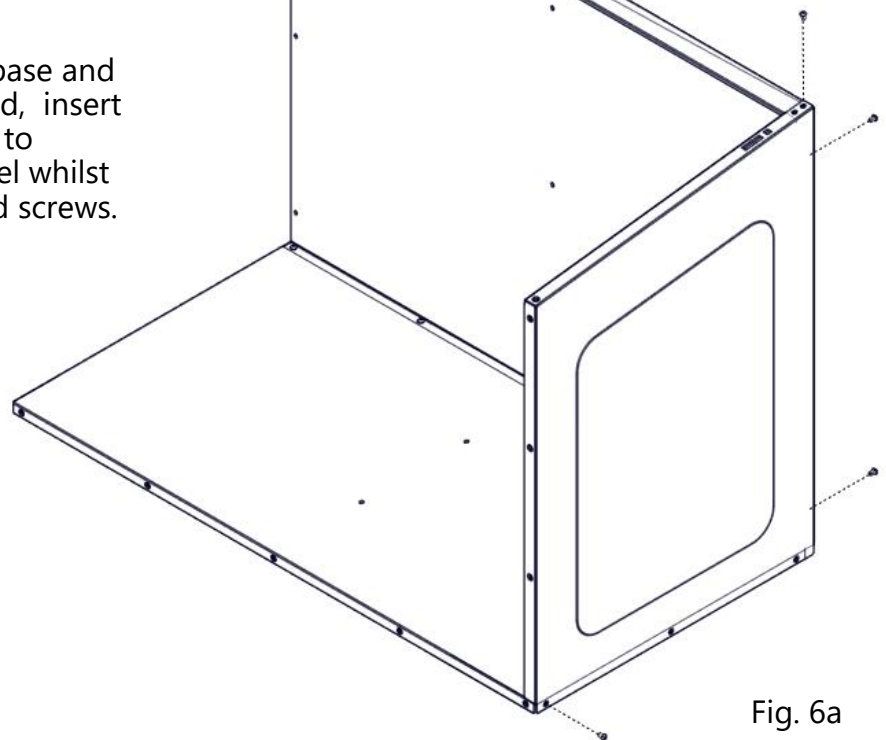


Fig. 6a

Step 4.

Offer left hand side panel to the unit in the same way as the right hand panel. Fit the remaining M6 x 10 socket button head screws to secure side panels and rear panel. See Fig. 7

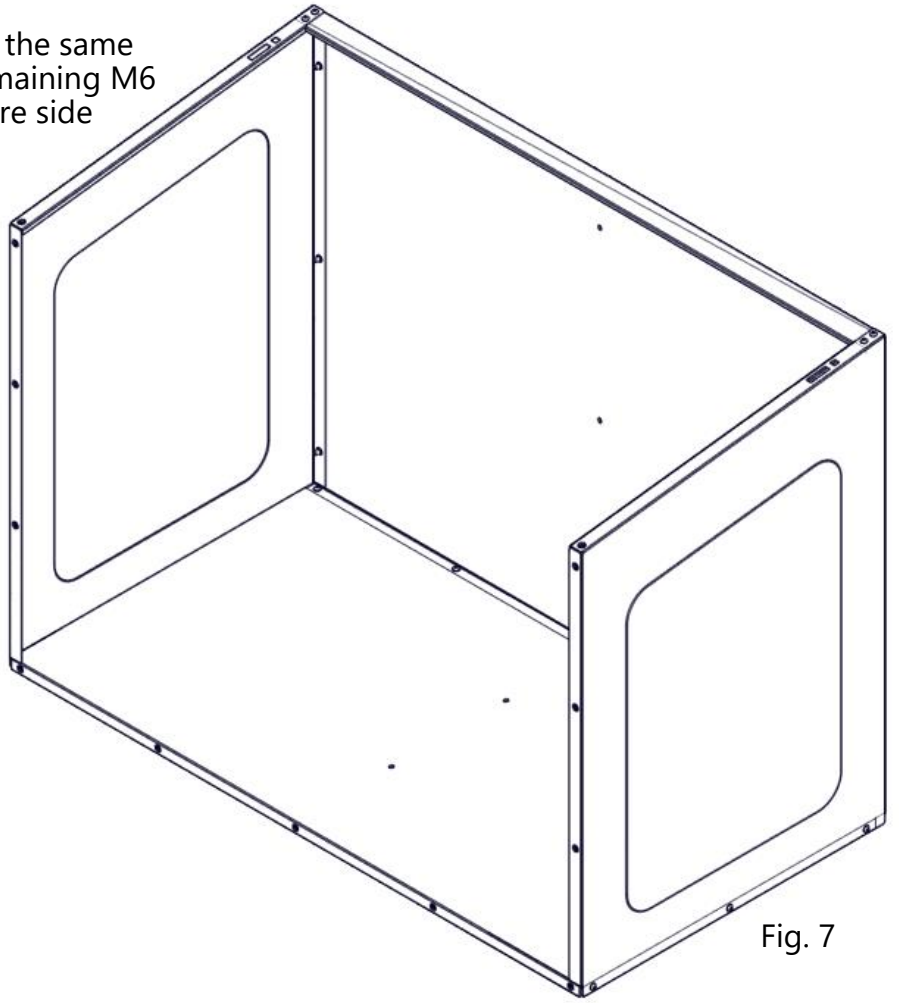


Fig. 7

Step 5.

Fit the front by inserting M6 x 10 socket button head screws into corresponding fixing holes in the base, right hand and left hand side to secure. See Fig. 8 and 8a

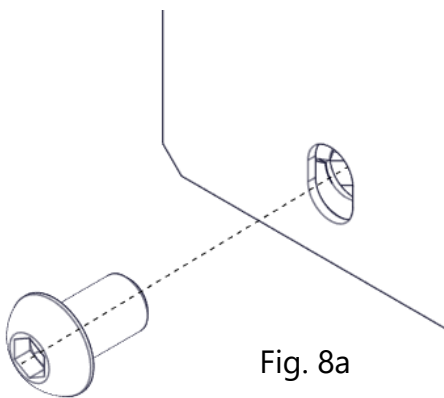


Fig. 8a

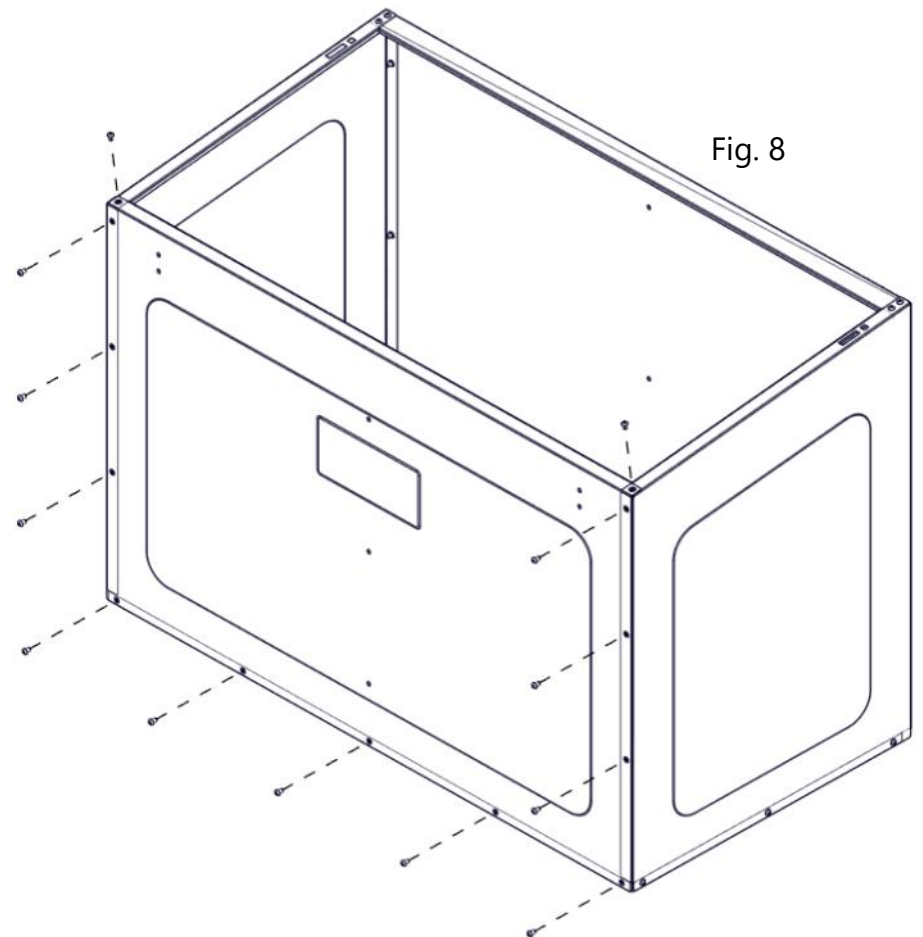


Fig. 8

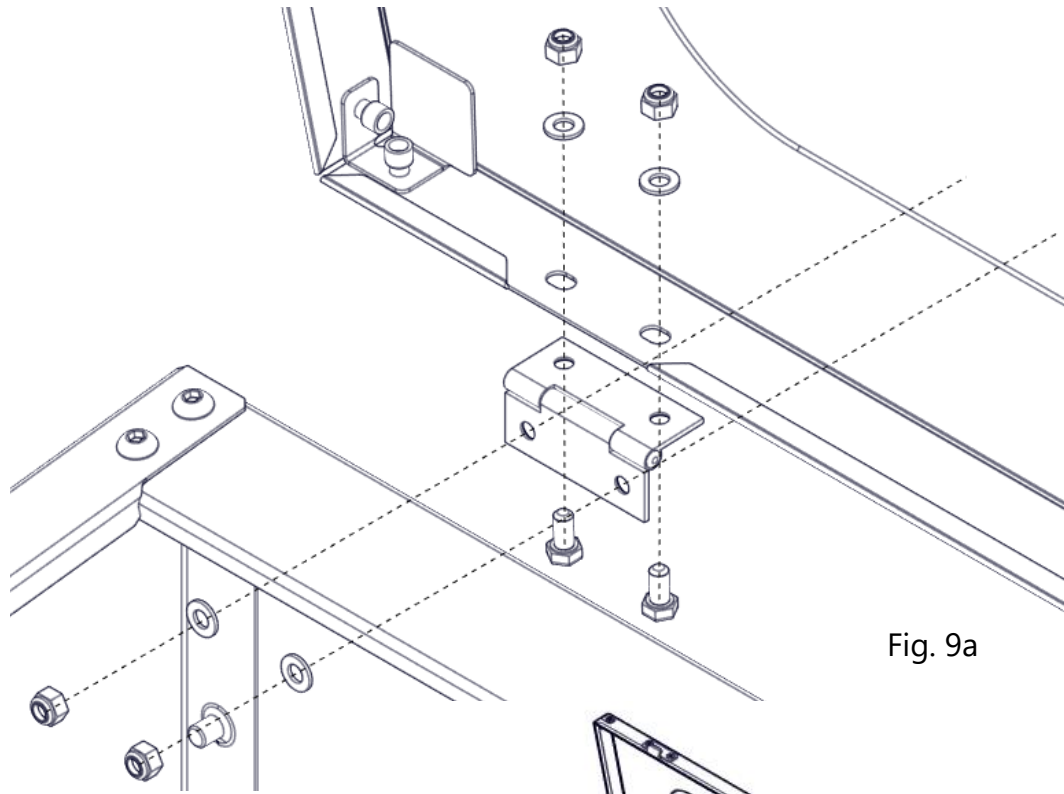


Fig. 9a

Step 6.

Fit the hinges connecting the lid and the back together by inserting 12no. (4no. per hinge) M5 x 10 setscrews, nyloc nuts and washers through the relative fixings holes as shown in Fig. 9 and 9a. **Fit hinge to lid before fitting to back panel.**

Fully tighten the M5 nyloc nuts with a spanner from finger tight.

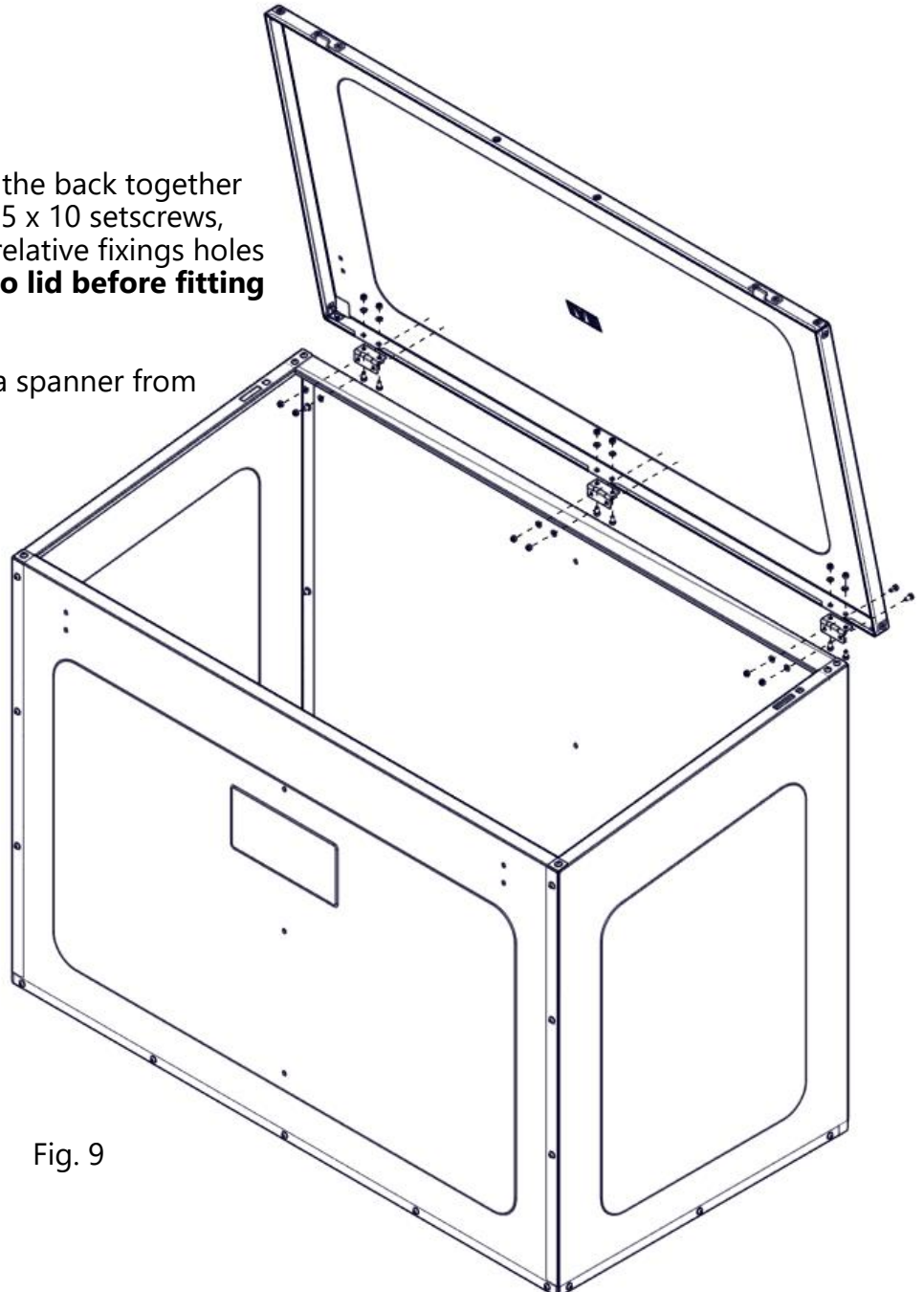


Fig. 9

Step 7.

Before fastening the lid stays to the lid and sides, fit the stay plate to the L-shaped bracket by inserting M5 x 10 setscrew and nyloc nut, ensure the lid stay pair are handed accordingly as shown in Fig. 10.

Fully tighten the M5 nyloc nuts carefully with a spanner from finger tight. **DO NOT OVER TIGHTEN**

Next fasten the lid stays to the lid. To do so, slide the angled end of the stay plate into the longest slot in the top folded edge of each side panel, then offer the L-shaped bracket up to the pre-punched fixing holes in the lid and insert 4no. M6 x 10 socket button head screws (2no. per bracket) to secure lid. See Fig. 11a

Finally, use 2no. M6 x 10 socket button head screws to fit the handle to lid. See Fig. 11b

Note: Some users may prefer to operate the lid with either one or two lid stays. This is entirely down to user preference, there is no detriment to the product if only using one.

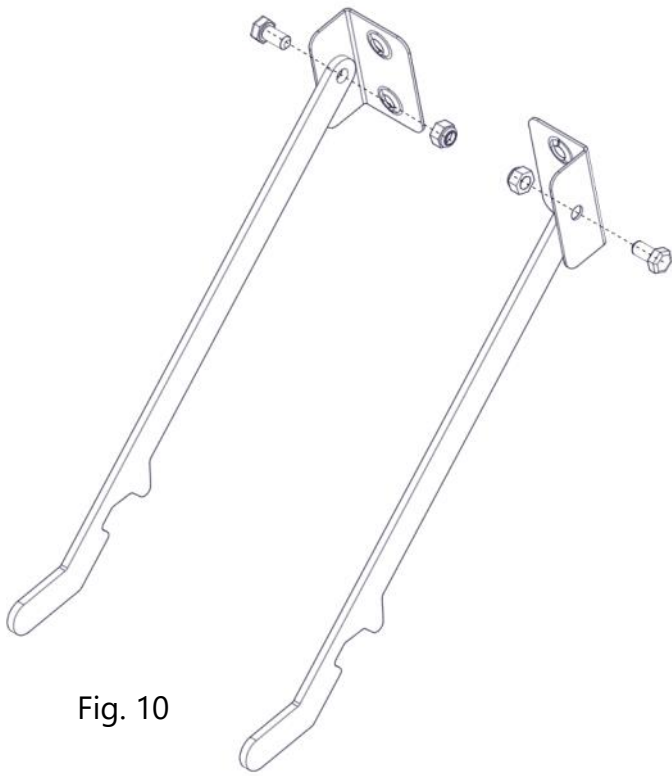


Fig. 10

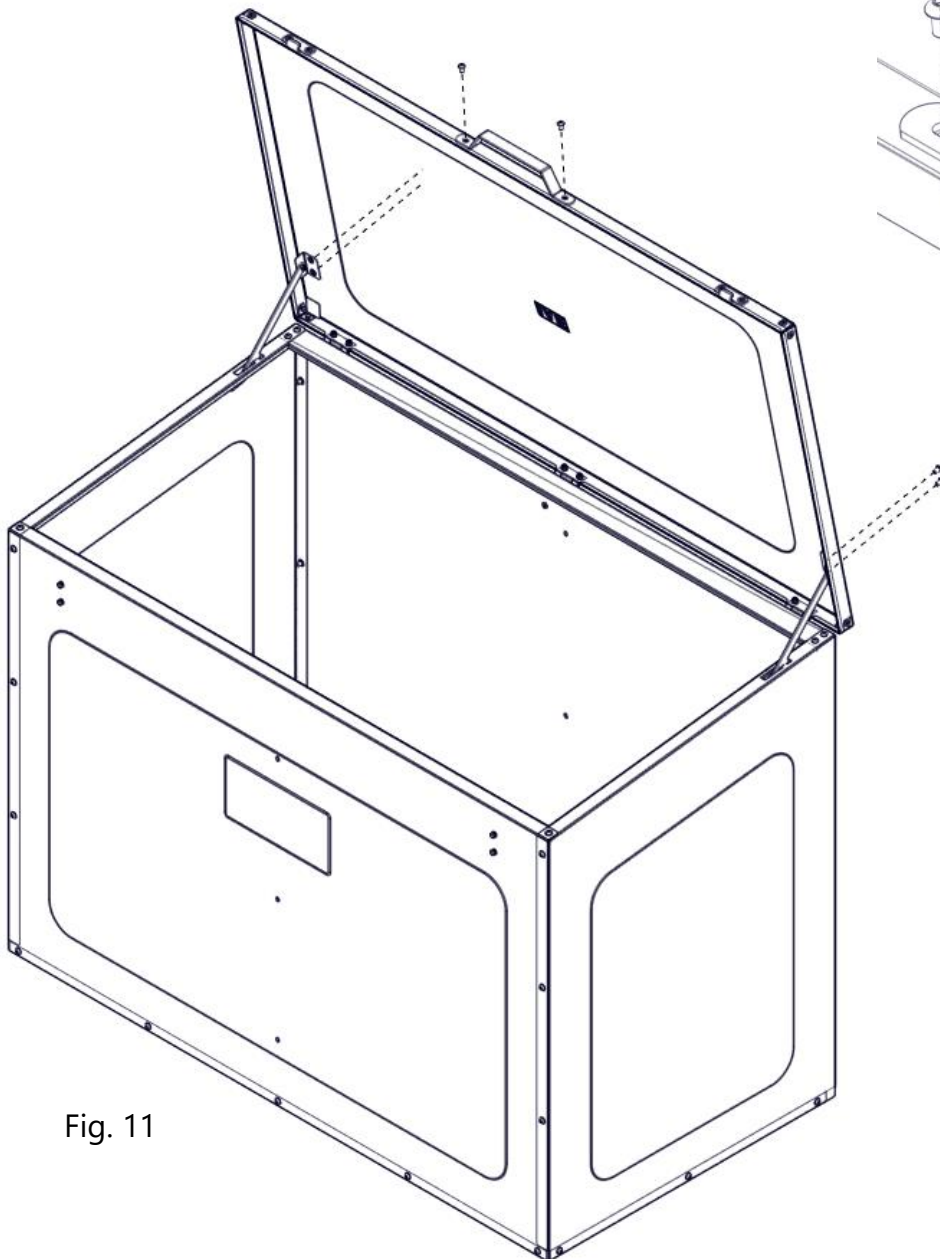


Fig. 11

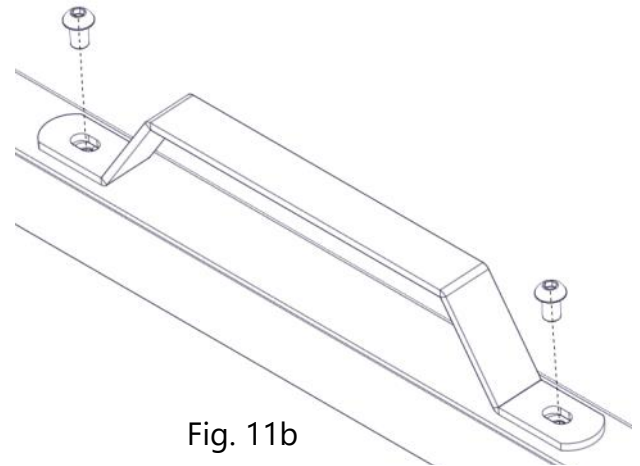


Fig. 11b

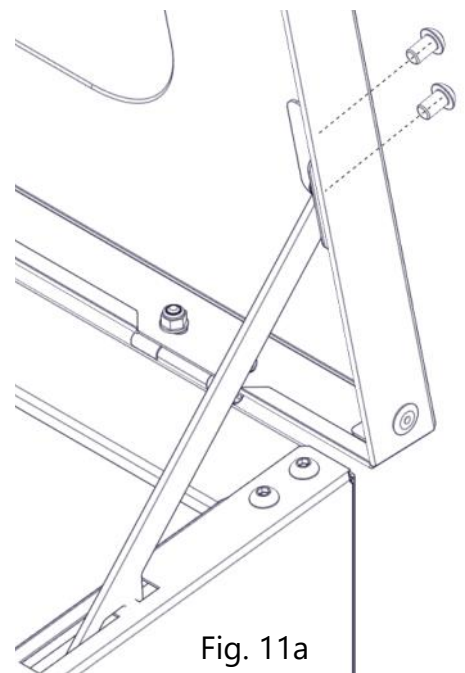


Fig. 11a

Step 8.

Fit the spring claw latches to the front using 4no. M5 x 10 setscrews, nyloc nuts and washers (2no. per spring claw latch) as shown in Fig. 12 and 12a

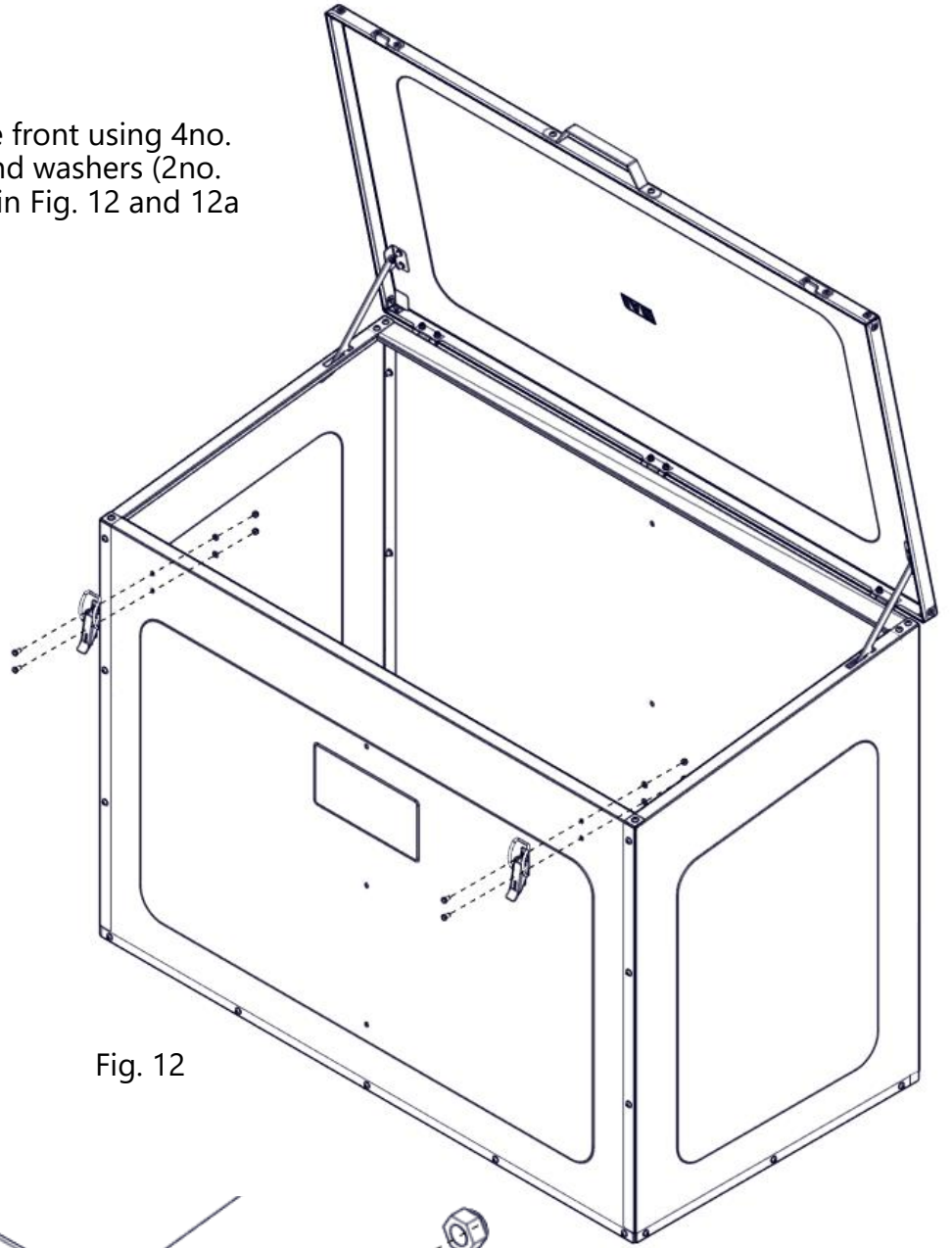


Fig. 12

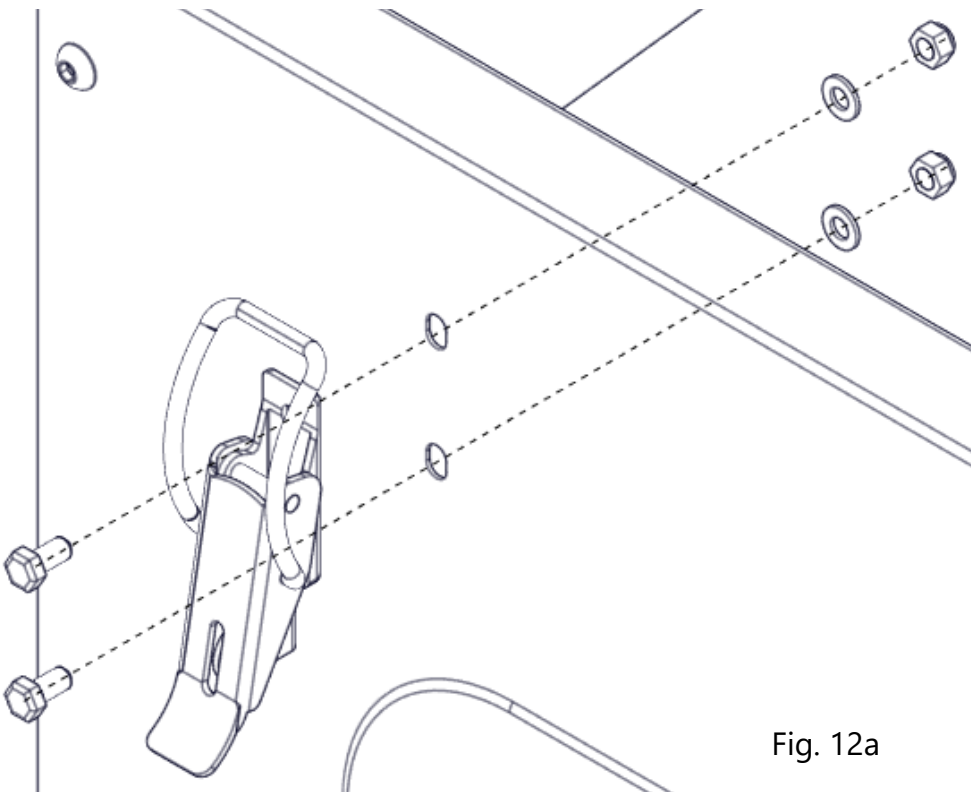


Fig. 12a

Step 9.

Fit partition (if required); simply tap out the steel inside the bolt hole locators on front, base and back, carefully lower the partition inside corn bin and ensure bolt holes are aligned with the thread loop integrated in the partition (see Fig. 13a) and then insert M5 x 32mm pan head self tapping screws to secure. See Fig. 13

Fig. 13

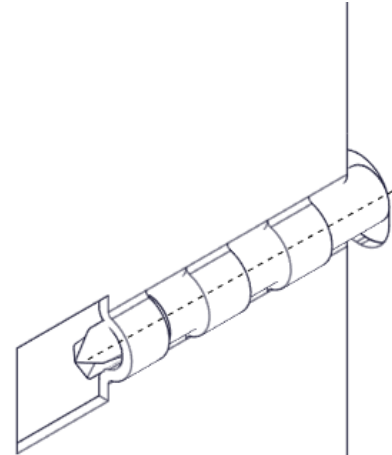
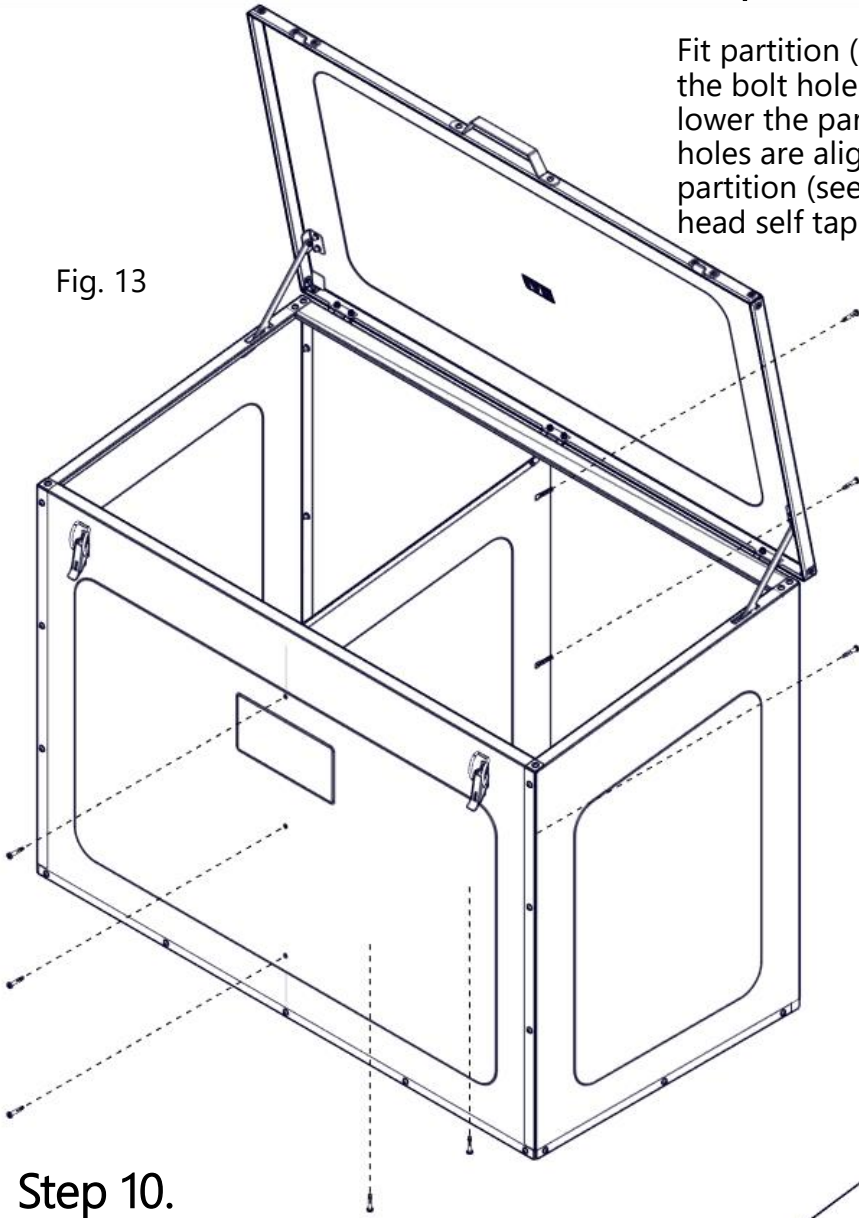


Fig. 13a

PARTITIONS:

Partitions are supplied as an optional component to allow user to divide the body into x2 parts, as shown in Fig. 13. 1600mm long corn bin can be divided into x2 or x3 parts as required.

Step 10.

Close and lock the lid down using the spring claw latches to complete assembly as shown in Fig. 14

MAINTENANCE INFO:

Spare spring washers supplied to be fitted only if the setscrews start to become loose. See Fig. 14a

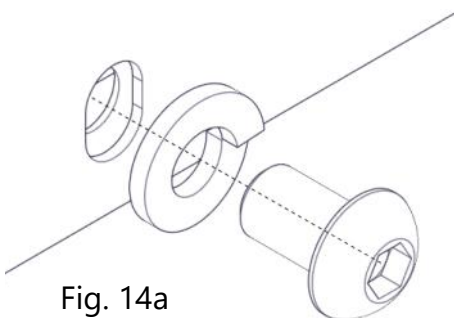


Fig. 14a

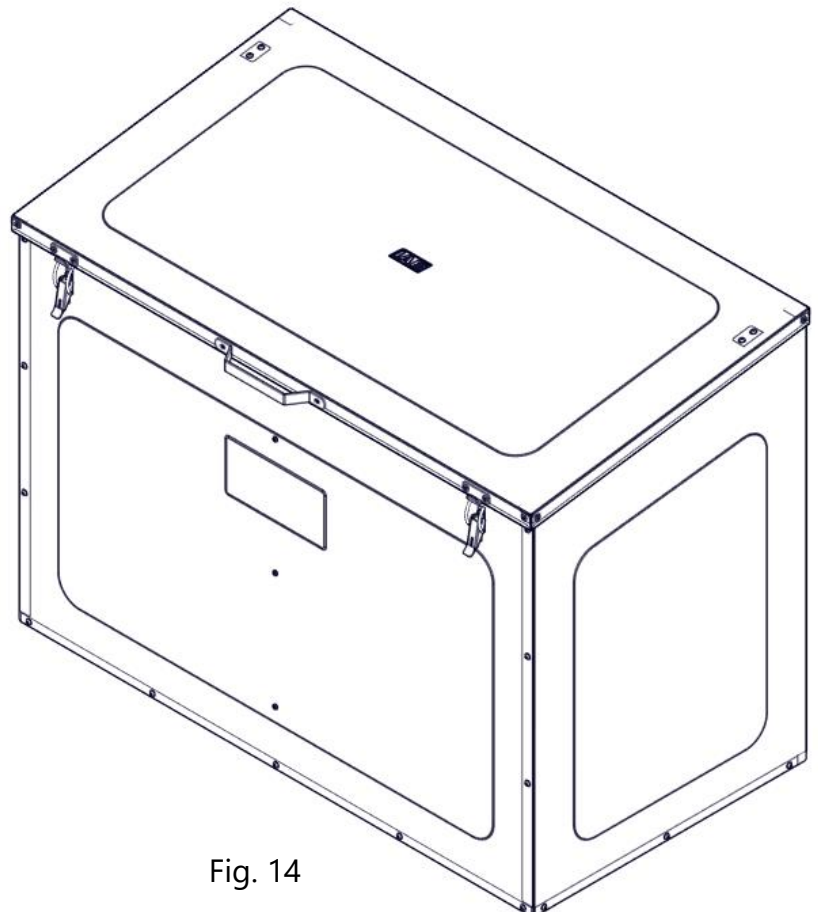


Fig. 14

4. Maintenance & Storage

Maintenance

Although IAE equipment is designed to withstand adverse weather conditions and prolonged heavy usage, monthly inspections and regular maintenance will help to extend the longevity of the product. The following checklist may be useful:

- Check steel framework for any signs of corrosion, distortion or wear. Replace or repair using galv paint.
- Pressure wash or steam wash all equipment after each usage.
- Lubricate all moving parts at regular intervals.
- Check all nuts, setscrews, socket button head screws & pan head self tapping screws, pay particular attention to the nyloc nuts. Over time the nylon contained can degrade. Replace nylocs if required.
- **Some feeds are corrosive and may damage the galvanised finish. Check regularly and treat if required.**

Storage

- Clean off any excess contaminants with water and pressure wash all components before storing.