

1.8 M & 2.1 M

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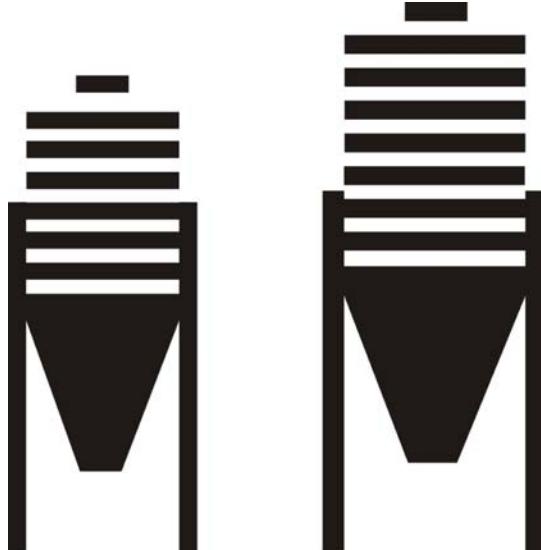


2416

BULK BINS

1.8M & 2.1M

USE AND ASSEMBLY GUIDE



ENGLISH

Original use and assembly guide

TABLE OF CONTENTS

DISCLAIMER

GENERAL INFORMATION

PART I : INSTRUCTIONS FOR THE USER

SAFETY	I-2
PRODUCT DESCRIPTION	I-3
USER DIRECTION	I-4
DIMENSIONS / WEIGHT / CAPACITY BULK BIN Ø1.8M & Ø2.1M	I-5
DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY	
EC-DECLARATION OF CONFORMITY	

PART II : COMPONENTS

GENERAL VIEW - COMPONENT NUMBERS	II-2
ASSEMBLY KIT FOR LADDER	II-5
ASSEMBLY KIT FOR SAFETY CAGE	II-5
ASSEMBLY KIT FOR ROOF LADDER	II-5
MECHANICAL OPENING SYSTEM	II-6
MECHANICAL FILL SYSTEM	II-7
OPENING TUBE	II-7
PNEUMATIC FILL SYSTEM	II-8
INLET ELBOW-BODY	II-9
CONNECTION PIPE INLET ELBOW	II-9
EXHAUST PIPE	II-9
INLET ELBOW-ROOF	II-9
INLET PIPE	II-9
EXHAUST PIPE	II-9
MECHANIC/PNEUMATIC FILL SYSTEM	II-10
LADDER - SAFETY CAGE	II-12
"HOOK ON" LADDER	II-13
BOLTS & NUTS (PARTS KITS)	II-14
HORIZONTAL BRACES	II-15
X-BRACES / HORIZONTAL BRACES	II-15
HOPPER VALVE	II-16
ANCHORING KIT M20	II-16
FEED VIEWER WINDOW (BODY)	II-17
FEED VIEWER WINDOW (HOPPER)	II-17
RING ACCESSORY KIT	II-18
SPECIAL COUPLING FOR INLET PIPE	II-18
BIN SET UP KIT	II-18
COUPLING ASS'Y FOR BIN INLET PIPE	II-18
ENTRY HATCH (OPTION)	II-19
SAFETY PLATFORM	II-21

PART III : INSTALLATION INSTRUCTIONS

GENERAL VIEW - COMPONENT NUMBERS	III-2
BIN Ø1.8M OEM	III-4
BIN Ø2.1M OEM	III-5
BEFORE ASSEMBLING YOUR BIN	III-6
ASSEMBLY PREPARATIONS	III-6
POSITION OF BOLTS, NUTS AND WASHERS	III-7
TOOLS	III-8
DETERMINATION SITUATION	III-9
CASTING THE FOUNDATION	III-10
TO ASSEMBLE THE BIN BODY	III-11
TO ASSEMBLE 1. RING	III-11
TO ASSEMBLE 2. RING	III-12
EXAMPLE FOR BINS Ø1.8M & Ø2.1M	III-13
TO INSTALL THE BIN ROOF	III-15
TO INSTALL THE COLLAR TO THE INTEGRATED HOPPER COLLAR	III-17
BOLT CONNECTION FOR FILLING COLLAR	III-17
TO INSTALL THE BIN LEGS	III-18
TO INSTALL THE HOPPER BRACES	III-20
TO INSTALL THE HORIZONTAL BRACES AND THE X-BRACES	III-21
OVERVIEW BRACES 601 & 602 & 603, 702 & 703 & 704, 705 & 706	III-22
POSITION OF THE FASTENING BRACES	III-23
POSITION OF INLET/EXHAUST PIPES - BIN LEGS	III-24
TO INSTALL THE HOPPER VALVE (OPTION)	III-24
TO INSTALL THE FEED VIEWER WINDOW	III-25
TO INSTALL THE INLET/EXHAUST PIPES	III-26
TO INSTALL THE COVER (PNEUMATIC FILLING)	III-27
TO INSTALL THE COVER (MECHANIC FILLING)	III-28
HOW TO ASSEMBLE THE LADDER	III-30
TO ASSEMBLE THE LADDER	III-31
TO INSTALL THE SAFETY CAGE	III-33
TO INSTALL THE ENTRY HATCH IN THE BOTTOM RING (OPTIONAL)	III-34
SAFETY PLATFORM	III-37
SECURITY DOOR	III-44
TO GROUND THE BIN	III-46
TO ASSEMBLE THE HOOK ON LADDER	III-47

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GENERAL INFORMATION

THESE INSTRUCTIONS MUST BE READ, UNDERSTOOD AND ALL POINTS OBSERVED BY THE USER, THE RESPONSIBLE AND OPERATING PERSONNEL.

1. OBEY THE LEGAL REGULATIONS AND THE APPLICABLE RULES!

This concerns, among other things, the European directives transposed into national legislation and/or the laws, safety and accident prevention regulations that apply in the user's country.

During assembly, operation and maintenance of the installation the legal regulations concerned and the applicable technical rules must be obeyed.

2. INTENDED USE

The installation has been designed solely for intensive livestock use and has been developed according to the applicable rules of good workmanship. Extra loading of the product is therefore prohibited. Any other use is considered to be improper use. The manufacturer is not responsible for damage resulting there from. The user bears sole responsibility.

3. NOT-INTENDED USE

All use different than described in point 2 "intended use" is at the responsibility of the end user.

4. LIABILITY

The (Extended) Warranty will not apply if any of the following has occurred: failure to conduct incoming goods inspection with regards to the Products, improper handling, transportation, modification or repair; accident, abuse or improper use; improper assembly, installation, connection or maintenance (having regard to Roxell's most current assembly, installation, connection and maintenance manuals); force majeure; negligence, lack of supervision or of maintenance on the part of customer; normal wear and tear; use of cleansing agents and disinfectants that are excluded in Roxell's most current use and maintenance manuals; use of cleansing agents and disinfectants in violation with the instructions received from the suppliers; or use of the Products in an ATEX-surrounding.

The (Extended) Warranty shall not apply in the event of a defect caused either by materials or accessories supplied by or services rendered by Customer; or by an intervention by a person or entity which is not authorised or qualified for carrying out such intervention. Furthermore, the (Extended) Warranty will only apply if the Products are used in livestock houses and if all parts or components of the Products are supplied by Roxell.

Roxell will not be liable for any damages caused due to improper use, assembly, installation, connection or maintenance of the Products. In this respect, the Customer expressly acknowledges that (i) all use, assembly, installation, connection or maintenance must be done in accordance with Roxell's most current assembly, installation, connection and maintenance manuals and (ii) the electrical installation on which the Products must be connected must be done in accordance with applicable local legislation on electrical installations. Furthermore, the Products must be tested both mechanically and electrically in accordance with state of the art techniques and applicable local legislation.

5. PERSONNEL QUALIFICATIONS

USER:

The person who uses a function or operation of a product for their work or who works on the product. The user must be able to read the instructions for use and fully understand them. The user has knowledge of the functioning and construction of the installation.

TECHNICALLY TRAINED PERSON:

An expert who can assemble and maintain the installation (**mechanically/electrically**), and resolve malfunctions. On the basis of his/her technical training and experience, he/she has sufficient knowledge to be able to assess activities, recognise possible dangers and rectify dangerous situations.

6. INFORMATION ABOUT THE RESIDUAL RISKS - USED SAFETY SIGNS

There are three levels of danger, which you can recognize from the signal word

- * **DANGER**
- * **WARNING**
- * **CAUTION**

The nature and source of the imminent danger and possible consequences of not obeying warnings is stated here!

 DANGER	DANGER indicates a direct imminent danger that can result in a serious or even fatal accident if the safety measures are not respected.
 WARNING	WARNING indicates a possible imminent danger that can result in a serious accident or damage to the product if the safety measures are not respected.
 CAUTION	CAUTION indicates possible, dangerous situations that can result in minor physical injury or material damage if the safety measures are not respected.
	This symbol refers to supporting information.
<input checked="" type="checkbox"/> allowed <input type="checkbox"/> not allowed	

7. STORAGE

Put all parts to be assembled in a room or at a location where the not yet assembled components are protected against weather influences.

8. TRANSPORT

Depending on the size of the parts and according to local circumstances and local legislation, the parts of the machine have to be transported with a forklift.

The forklift must be operated by a qualified person and in accordance with the rules of good workmanship. When lifting the load, always check if the center of gravity of the load is stable.

9. DISMANTLING

Dismantle the installation and its components in accordance with the environmental legislation of the country or the local authorities applicable at that time. All functioning products and exchange parts must be stored and disposed of in accordance with the applicable environmental regulations.

Environmental information for customers in the European Union



European directive 2002/96/EC amended by the Directive 2008/34/EC requires that equipment that bears this symbol on the product or packaging must not be disposed of with unsorted household waste. This symbol indicates that the product must be disposed of separately. You are yourself responsible for the destruction of this and other electrical and electronic equipment via the disposal channels designated for that purpose by the national or local government. The correct destruction and recycling of this equipment prevents any negative consequences for the environment and health. For more information about destroying your old equipment, contact your local authorities or waste disposal service.

Information about waste disposal - electrical/electronic material for companies

1. In the European Union

If you have used the product for commercial purposes and you want to dispose of it, contact Roxell who will give you information about the return of the product. It is possible that you will have to pay a disposal charge for the return and recycling. Small products (and small quantities) can be processed by the local collection agencies.

2. In other countries outside the European Union

If you want to dispose of this product, contact the local authorities for information concerning the correct disposal procedure.

10. THE LEVEL OF NOISE EMISSION

The noise level of the installation in operation does not exceed 70dB(A).

11. LOCK OUT TAG OUT – LOCK METHOD GENERAL

- Everyone needs his own lock and tag (label), which can't be removed by other persons.
- Inform all persons who are influenced by the procedure.
- Localize all sources of energy (electric, hydraulic, pneumatic).
- Switch off.
- Lock out and tag out.
- Check if the source of energy is switched off.
- Remove any remaining energy.

12. USE PERSONAL PROTECTIVE EQUIPMENT.

Ensure you wear personal protective equipment (gloves, dust masks...).

13. SUFFICIENT LIGHTING - ILLUMINANCE

- A minimum illuminance of 200 lux is necessary during usage, maintenance and installation.
- Provide at the installation (portable) emergency lighting in case of power failure.

14. ELECTRICAL EQUIPMENT, CONTROL PANELS, COMPONENTS AND DRIVE UNITS

- To operate control panels, there must be **at least 70 cm of free space**.
- Control panels **must always remain closed**. The key of the control panel must be in possession of an authorized person.
- The necessary measures must be taken by the user to keep out **rats, mice and other vermin from the control panels**
- If electrical equipment, control panels, components and drive units are damaged, the system must be stopped **IMMEDIATELY!**
- Electrical equipment, control panels, components and drive units should **NEVER be sprayed with water or other liquid!**
- Electrical equipment, control panels, components and drive units should **NEVER be covered with any material**.



PART I

INSTRUCTIONS FOR THE USER

Storage Line EFG**Metalen opslagsilo's voor opslag van veevoeder****Metal storage bins for animal feed**

For suppliers **SAFETY TOP PRIORITY**, for customers as well as for suppliers, employees and animals.

Read the Use and Assembly Guide carefully to work safely with the bin and related products.

PAY ATTENTION:

Security is everybody's responsibility:

You protect yourself and others by safely using the products for the daily activities.



**ATTENTION!
BE CAREFUL!
YOUR SAFETY IS AT STAKE!**

A. GENERAL INSTRUCTIONS

- When determining the location of the bin you should consider the following:
 - * install the bin in a safe location.
 - * avoid the proximity of electrical wiring that can come into contact with your bin.
 - * avoid installation of the bin on lowlying terrain. In this way the bin and possible electrical wiring cannot come into contact with water or other conductors.
- Earth all electrical material.
- Wear gloves, safety helmet and shoes, etc....when assembling and installing the bin.
- Wear safety glasses when drilling, sawing, grinding or other work where dust and burrs can occur.
- Secure the tooling when you are working up above at the bin.
- Only use tooling with protection hood.
- Do not tilt heavy weights that can cause back and muscle injuries.
- Put warning signs everywhere where there is a possible risk of danger.

B. INSTALLATION FACILITIES

- Check all tooling on proper operation and safety.
- Check the surroundings and take necessary safety precautions.

C. SAFETY AT THE INSTALLATION

- See that all electrical material is earthed.
- Avoid surprises by moving parts when putting the bin together.
- Anchor the body when assembling the sections and other parts.
- Make sure all safety provisions of the tooling are in good shape and operate properly.
- Install the bin only and fully according to the directions in the manual.

D. SAFETY DURING THE OPERATION OF YOUR INSTALLATION

- See that all safety precautions are in good shape and correctly placed.
- See that all electrical material is earthed.



To avoid electrical shock, place the equipment in a safe area. Use guards around control panels. Always shut off and lock out control boxes when working on the equipment.

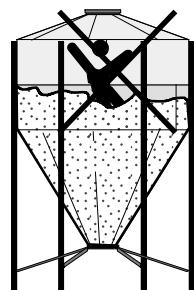
WARNING



You can suffocate under material in the bin. Never enter the bin when it contains material !

When it is empty, you can enter the bin only if you:

1. Shut off and lock out all power.
2. Use a safety harness and safety line.
3. Wear proper breathing equipment.
4. Station people to help form outside the bin.



- Always be alert for all warning signs.
- Contact your supplier before you wish to make changes that are not described.
- Do not use fastening material that is not supplied by your bin supplier. This can cause problems or danger not insured by our calculations.
- Take care of an easy contact in case of problems (emergency, injuries...).
- Keep the bin (and surroundings) free of:
 - * mud
 - * acid feed
 - * metal scratch
 - * contact with other metals (e.g. aluminum...)
- Make sure the supply is shut off when you do maintenance work at the bin.
- See that you keep the Use and Assembly Guide at a well accessible safe spot, immediately consultable when needed.
- Bin ladders :
 - * Authorized weight = **200 kg**
 - * **NEVER** step on a faulty installed ladder.
 - * Keep the rails free of mud or other slippery material.
 - * Wear antislip shoes.
 - * **NEVER climb onto a ladder when your physical condition is not optimal** (in case of fatigue, under influence of medication, alcohol, drugs, or an unstable health).
 - * Look at the ladder when climbing or descending it. Be sure of a good grip.
 - * **NEVER** use the **hook-in ladder** in another application. Hook the ladder only in an original vertical bin ladder.
 - * When climbing on a roof ladder it is compelled to wear a **safety harness**.
 - * **NEVER** step on the roof sections.

NEVER OPEN ENTRY HATCH WHEN THERE IS FEED IN THE BIN !!!



PRODUCT DESCRIPTION

The bins consist of four main parts (that you put together by means of bolts and nuts) :

- | | |
|---|---|
| <ul style="list-style-type: none"> * Roof sections 30° * Body sections made out of corrugated sheets * Legs and braces | <ul style="list-style-type: none"> * Hopper sections 60° |
|---|---|

The parts are made out of special galvanized construction sheet (DIN 18 800).

Optional parts that you can order with (details : see part II of the Use and Assembly Guide) :

- | | |
|---|--|
| <ul style="list-style-type: none"> * Ladder and safety cage * Entry hatch * Shut-off plate * Hopper valve * Safety platform * Security door | <ul style="list-style-type: none"> * Window for hopper * Bin raise set * Minimum switch |
|---|--|

USER DIRECTION

All parts of bin require little maintenance. You have to consider the used preservatives in the material stored. These could have a corrosive effect on the bin.

Check regularly the bin for corrosion and treat the affected parts. With heavy rust formation consult a specialist. In case of a rust degree of Ri4 (according to DIN 53 210) you can **NO LONGER USE** the bin.

The bin can be filled and emptied centrally only. All other methods have to be approved of in writing by the supplier.

The content of the bin can be checked through the feed viewer window.

You can only store following feed materials in a bin:

- * Concentrates according to DIN 1055.
- * The good **flowing** ingredients of the feed with a specific gravity of $\leq 6.5 \text{ kN} / \text{m}^3$ ($\leq 650 \text{ kg} / \text{m}^3$).

ATTENTION:

SOYA COARSE MEAL, MEAT SCRAPS AND MANY OTHER MATERIALS ARE NOT FREE FLOWING.

YOU CANNOT STORE THESE MATERIALS IN THE BIN !!!



WARNING

Contact the supplier of the materials you store for information regarding cohesion and bridging possibility.

In case you do **NOT** use the bin for a while see that it is empty and cleaned inside.

When you fill the bin pneumatically, use a good porous dust collector on the exhaust pipe. Your bin **CAN BE SERIOUSLY DAMAGED** if the exhaust is blocked.

The blowing pressure with pneumatic filling of the bin can be **maximum 1.2 bar**. With higher pressure the bin **CAN BE SERIOUSLY DAMAGED**.

Snow load : according to DIN 1055 TS.

Vertical weight on the roof of supports, tubes, scaffolds, platforms, etc... **must not exceed 5kN (500kg)**.

Put the bin at a minimum distance of 0.5m from existing buildings.

Check all received parts on damages and failures.

Take into account following points when determining the location of your new bin:

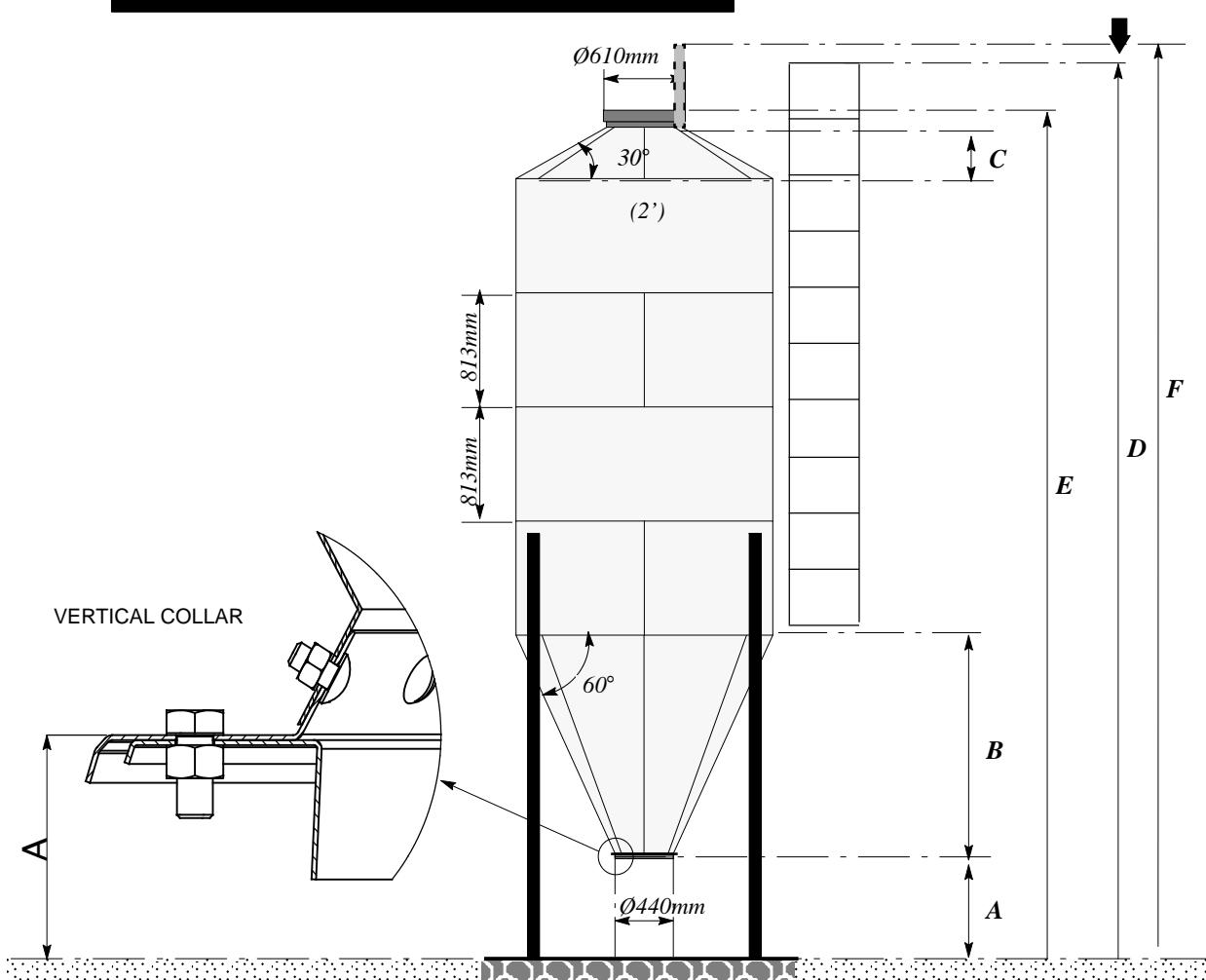
- Location of the inlet pipe.
- Location of the exhaust pipe.
- Place of the mechanical opening system.
- Place of the existing buildings.
- Direction of the transport system to be used.
- Location of the ladder.
- Location of the peripheral equipment such as bin valve and other options.
- Location of the body section with sign.

DIMENSIONS (mm) / WEIGHT (KG) / CAPACITY (m³)

BIN Ø

1.8M / 2.1M

ANCHORING 3mm INCLUDED



TYPE	601	602	603	604	
Weight Kg.*	300	336	384	429	
A	800	800	800	800	
B	1273	1273	1273	1273	
C	374	374	374	374	
D	3716	4529	5342	6155	
E	3405	4218	5031	5844	
F	4045	4858	5671	6484	
Contents - m³	3,9	6	8,1	10,2	
Contents - M.ton	2,5	3,9	5,3	6,6	
TYPE	702	703	704	705	706
Weight Kg*	396	447	524	648	714
A	800	800	800	800	800
B	1533	1533	1533	1533	1533
C	460	460	460	460	460
D	4789	5610	6415	7228	8041
E	4564	5377	6190	7003	7816
F	5204	6017	6830	7643	8456
Contents - m³	8,7	11,6	14,5	17,4	20,3
Contents - M.ton	5,7	7,5	9,4	11,1	13,2

*Max. weight (incl. ladders & safety cage).



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Inbouwverklaring betreffende niet voltooide machines (Richtlijn 2006/42/EG, Bijlage II.I.B)
Declaration of incorporation of partly completed machinery (Directive 2006/42/EC, Annex II.I.B)

Fabrikant/Manufacturer:

EFG, Industrielaan 13, 9990 Maldegem
Tel: +32 50 72 91 72
Fax: +32 50 71 67 21

Verklaart geheel onder eigen verantwoordelijkheid dat het product:

Declares on its own responsibility that the product:

Feed Bin EFG / Feed Bin PLUS EFG / Day Bin EFG Nr 5959.../5950.../5951...

Metalen opslagsilo's voor opslag van veevoeder

Metal storage bins for animal feed

Waarop deze verklaring betrekking heeft, in overeenstemming is met:

- de volgende richtlijnen: 2006/42/EG (Machinerichtlijn); 2004/108/EG (Elektromagnetische Compatibiliteit); de richtlijn 94/09 (ATEX) werd op zijn toepasselijkheid afgetoest.
- de geharmoniseerde Europese Normen: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN 547-1:1996 + A1: 2008; EN 547-2:1996 + A1: 2008; EN 547-3:1996 + A1: 2008; EN ISO 7250-1:2008; EN ISO 12100:2010; EN ISO 14122-1:2001; EN ISO 14122-2:2001; EN ISO 14122-3:2001; EN 60204-1:2006; EN 61439-1:2011; EN 61439-2:2011
- Feed Bin PLUS EFG : DIBt Prüfbericht Nr. TP-09/003 & TP-11-009

Het is verboden bovengenoemd product in gebruik te stellen voordat de machine waarin het wordt ingebouwd in overeenstemming met de bepalingen van de Machinerichtlijn is verklaard.

Tevens verbindt de fabrikant (of zijn gemachtigde) zich om op met redenen omkleed verzoek van de nationale autoriteiten de relevante informatie over deze niet voltooide machine door te geven. De wijze van doorgifte is digitaal. De wijze van informatieverschaffing laat de intellectueel-eigendomsrechten van de fabrikant van de niet voltooide machine onverlet.

(NL)

Relating to this declaration, is conform

- The following directives 2006/42/EC (Machinery Directive); 2004/108/EC (Electromagnetic Compatibility); directive 94/09 (ATEX) is checked on its applicability.
- The harmonised European standards: EN ISO 13857:2008; EN 349:1993 + A1:2008; EN 547-1:1996 + A1: 2008; EN 547-2:1996 + A1: 2008; EN 547-3:1996 + A1: 2008; EN ISO 7250-1:2008; EN ISO 12100:2010; EN ISO 14122-1:2001; EN ISO 14122-2:2001; EN ISO 14122-3:2001; EN 60204-1:2006; EN 61439-1:2011; EN 61439-2:2011
- Feed Bin PLUS EFG : DIBt Prüfbericht Nr. TP-09/003 & TP-11-009

This product must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery Directive.

The manufacturer (or its agent) also undertakes, at the duly reasoned request of the national authorities, to provide the relevant information concerning this partly completed machinery. The method of transmission will be digital. The manner in which the information is provided does not prejudice the manufacturer's intellectual property rights concerning the partly completed machinery.
(EN)

Plaats, Datum / Place, Date : Maldegem, 01/01/2016

Dhr. Gino Van Landuyt
Managing Director

"This part may only be filled out if all built-in subparts are delivered by EFG"

EG-verklaring van overeenstemming (Richtlijn 2006/42/EG, Bijlage II.I.A)

EC-declaration of conformity (Directive 2006/42/EC, Annex II.I.A)

Wij/We

(naam installateur/name fitter)

(volledig adres en land/complete address)

Verklaren geheel onder eigen verantwoording de
Declare completely on own justification that

(naam machine/name machinery)

(nummer CE-label/number CE-label)

In een installatie te hebben ingebouwd geheel volgens de EFG-voorschriften en in overeenstemming met de bepalingen van de Machinerichtlijn.

Has been incorporated in conformity with the provisions of the Machinery Directive and the prescriptions of EFG.

(plaats, datum/place, date)

(naam, handtekening/name, signature)

De EG-verklaring van overeenstemming / inbouwverklaring betreft uitsluitend de machine of niet voltooide machine in de toestand waarin zij op de markt is gebracht, met uitsluiting van de later door de verdeler en/of installateur en/of eindgebruiker toegevoegde componenten en/of verrichte bewerkingen.

The EC-declaration of conformity / declaration of incorporation relates exclusively to the machinery or partly completed machine in the state in which it was placed on the market and excludes components which are added and/or operations carried out thereafter for instance by the distributor and/or the installer and/or the final user.

PART II

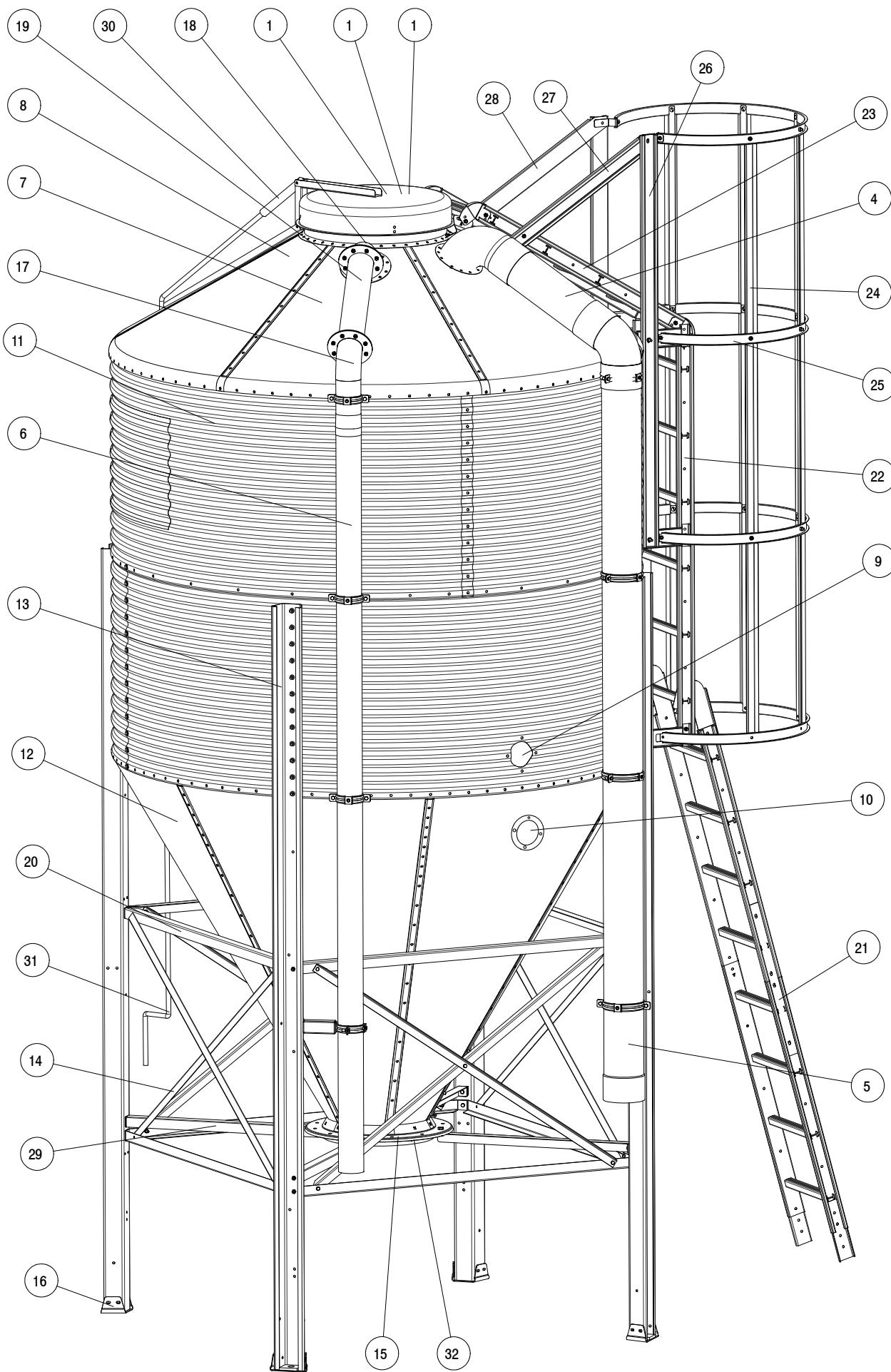
COMPONENTS

1. ENVIRONMENTALLY-FRIENDLY DESIGN

Roxell complies with the Commission Regulation (EU) No. 4/2014 of 6 January 2014, amending Regulation (EC) No 640/2009 implementing Directive 2005/32/EC (the European standard IEC 60034) of the European Parliament and of the Council with regard to eco design requirements for electric motors.

2. COMMUNICATION

For all communication concerning parts/spare parts refer to the appropriate part number (not part name).

GENERAL VIEW BINS

COMPONENT NUMBERS

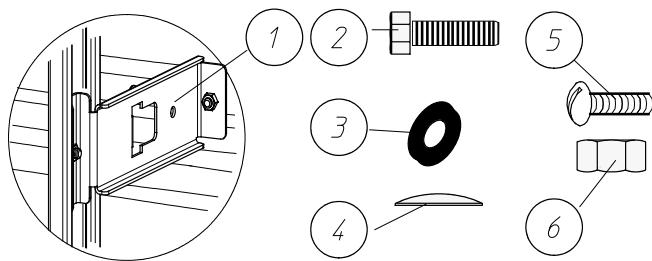
Key	Name	Number Bin	
		1.8M	2.1M
1	MECHANICAL FILL SYSTEM	5659990210	5659990210
2	PNEUMATIC FILL SYSTEM	5659990460	5659990460
3	MECHANICAL/PNEUMATIC FILL SYSTEM	5659990620	5659990620
4	EXHAUST PIPE Ø160 X 405 MM (1.8M) / Ø160 X 580 MM (2.1M)	5959993070	5950903440
5	EXHAUST PIPE Ø160 X 1950 MM	5950992550	5950992550
6	INLET PIPE - STANDAARD LENGTE 6 M	5950993130	5950993130
7	ROOF SECTION - PNEUMATIC FILL/EXHAUST	5959995540	5950907740
8	ROOF SECTION - STANDARD	5959995460	5950907660
9	FEED VIEWER WINDOW (BODY)	5948997880	5948997880
10	FEED VIEWER WINDOW (HOPPER)	5950998920	5950998920
11	TOP/MID RING SECTION 0.8 MM	5659991870	5650992930
	TOP/MID RING SECTION 0.8 MM WITH HOLE Ø103	5659992950	5650992010
	TOP/MID RING SECTION 1 MM	5959998510	5950907820
	TOP/MID RING SECTION 1 MM WITH HOLES FOR BIN LEG	-	5950907330
	TOP/MID RING SECTION 1 MM WITH HOLE Ø103	-	5950907910
	BOTTOM RING SECTION 0.8 MM WITH HOLES FOR BIN LEG	5659991200	5650992190
	BOTTOM RING SECTION 0.8 MM WITH HOLE Ø103 & HOLES FOR BIN LEG	5659992030	5650992270
	BOTTOM RING SECTION 1 MM WITH HOLES FOR BIN LEG	5959998940	5950906410
	BOTTOM RING SECTION 1 MM WITH HOLE Ø103 & HOLES FOR BIN LEG	5959997600	5950906340
	TOP/MID RING SECTION 1.25 MM WITH HOLES FOR BIN LEG	-	5950907400
	BOTTOM RING SECTION 1.25 MM WITH HOLES FOR BIN LEG	-	5950906830
	BOTTOM RING SECTION 1.25 MM WITH HOLE Ø103 & HOLES FOR BIN LEG	-	5950906750
12	HOPPERSECTION 1 MM	5959995620	-
	HOPPERSECTION 1.25 MM		5950908160
13	BIN LEG 2844 X 2.5 MM	5959997030	-
	BIN LEG 3107 X 2.5 MM	-	5950913680
	BIN LEG 3920 X 3.5 MM	-	5950913760
14	X-BRACE	5959912380	5950913500
15	HORIZONTAL COLLAR	5059909070	5059909070
16	ANCHORING KIT M20	5950900060	5950900060
17	INLET ELBOW - BODY	5948999600	5948999600
18	INLET ELBOW - ROOF	5948999780	5948999780
19	CONNECTION PIPE INLET ELBOW	5959995700	5950908080
20	HORIZONTAL BRACE	5959904870	5950910870
21	"HOOK ON" LADDER	5959995880	5950908240
22	ONE RING LADDER	5948999860	5948999860
	TWO RING LADDER	5948990940	5948990940
23	ROOF LADDER	5948999860	5950908810
24	SAFETY CAGE HOLDER	5948999370	5948999370
25	SAFETY CAGE RING	5948999290	5948999290
26	EXTENSION FOR SAFETY CAGE	5948999110	5948999110
27	RAIL FOR ROOF LADDER - L	5959909170	5959909170
28	RAIL FOR ROOF LADDER - R	5959909090	5959909090
29	HORIZONTAL HOPPER BRACE	5959905950	5950913930
30	MECHANICAL OPENING SYSTEM	5959991580	5950900470
31	OPENINGTUBE - 3M	5648999490	5648999490
32	INSIDE COLLAR DOWN	5050933880	5050933880

COMPONENT NUMBERS (NOT SHOWN)

Name	Part Nr.	
	1.8	2.1
ASSEMBLY KIT FOR LADDER	5948990430	5948990430
SHORT X BRACE	-	-
ASSEMBLY KIT FOR ROOF LADDER	5948990510	5948990510
ASSEMBLY KIT FOR SAFETY CAGE	5948990690	5948990690
HOPPER VALVE	5950998750	5950998750
CAULKING - ROLL 12 m	5948999030	5948999030
ENTRY HATCH	5659991380	5650990370
MECH.-PNEUMAT. FILL SYSTEM	5659990620	5659990620
COUPLING ASS'Y FOR BIN INLET PIPE	5950993540	5950993540
PARTS KIT FOR BIN : SEE PAGE	II-14	

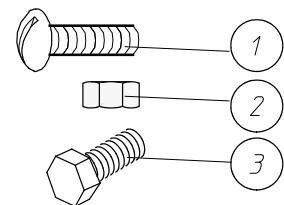
ASSEMBLY KIT FOR LADDER - 5948990430

Key	Part Nr.	Qt.
1	5048994710	2
2	5191990320	2
3	5191999330	2
4	5191999250	2
5	5191990650	4
6	5191990080	6



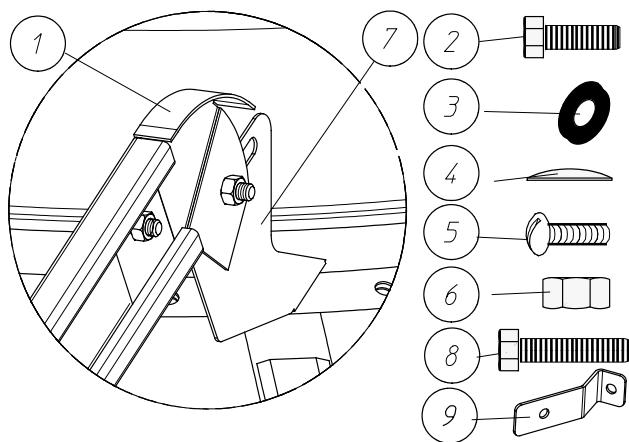
ASSEMBLY KIT FOR SAFETY CAGE - 5948990690

Key	Part Nr.	Qt.
1	5191990650	5
2	5191990080	7
3	5191991480	2



ASSEMBLY KIT FOR ROOF LADDER - 5948990510

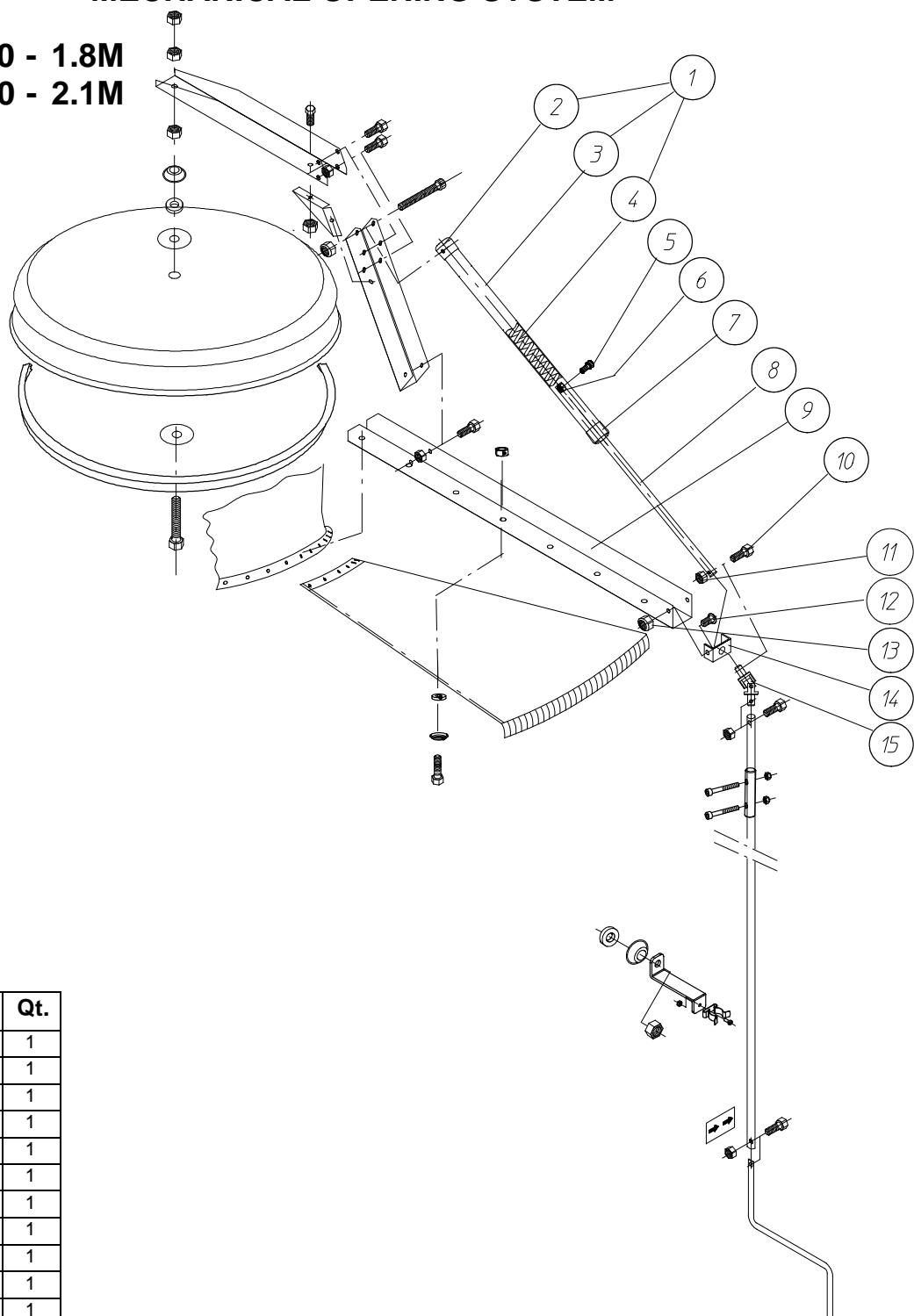
Key	Part Nr.	Qt.
1	5048998510	4
2	5191990320	6
3	5191999330	2
4	5191999250	2
5	5191990650	8
6	5191990080	18
7	5048995210	1
8	5048997370	1
9	5191990730	6
	5048997600	2



MECHANICAL OPENING SYSTEM

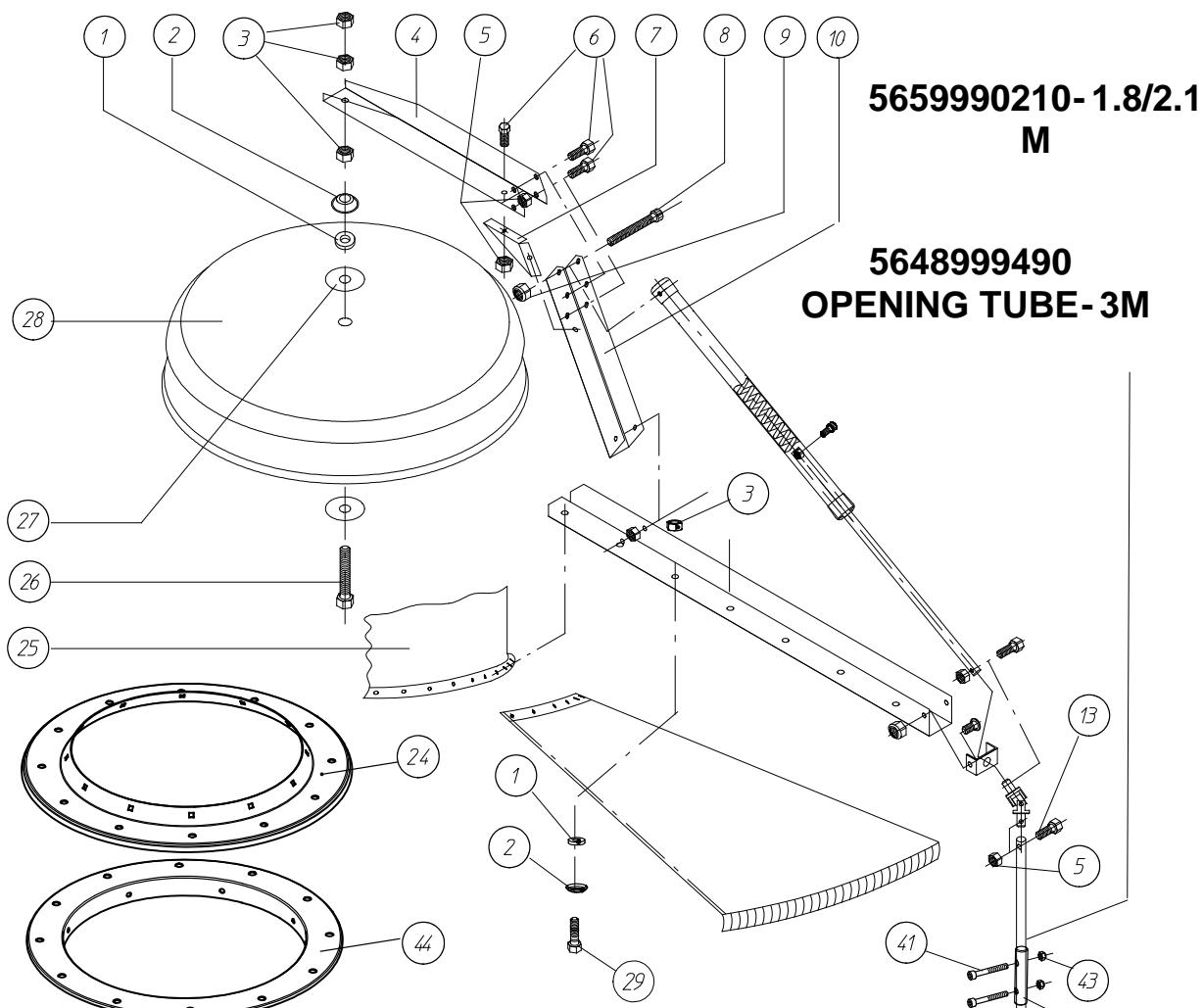
5959991580 - 1.8M

5950900470 - 2.1M

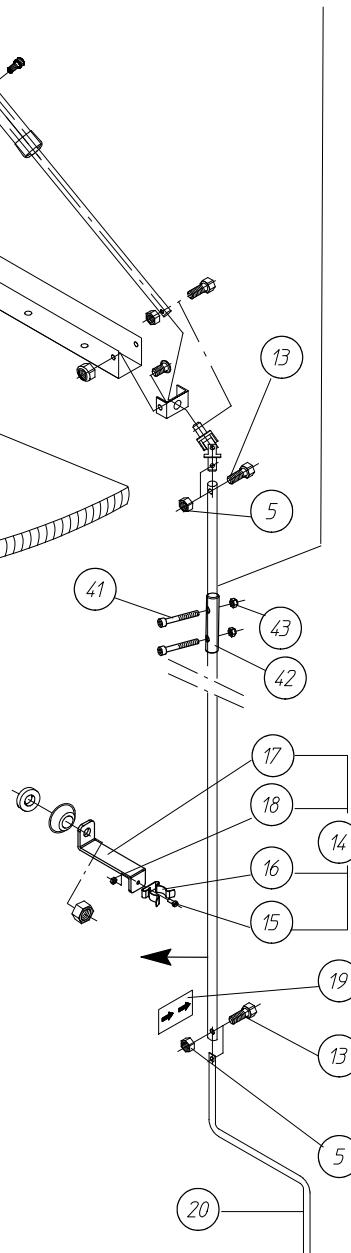


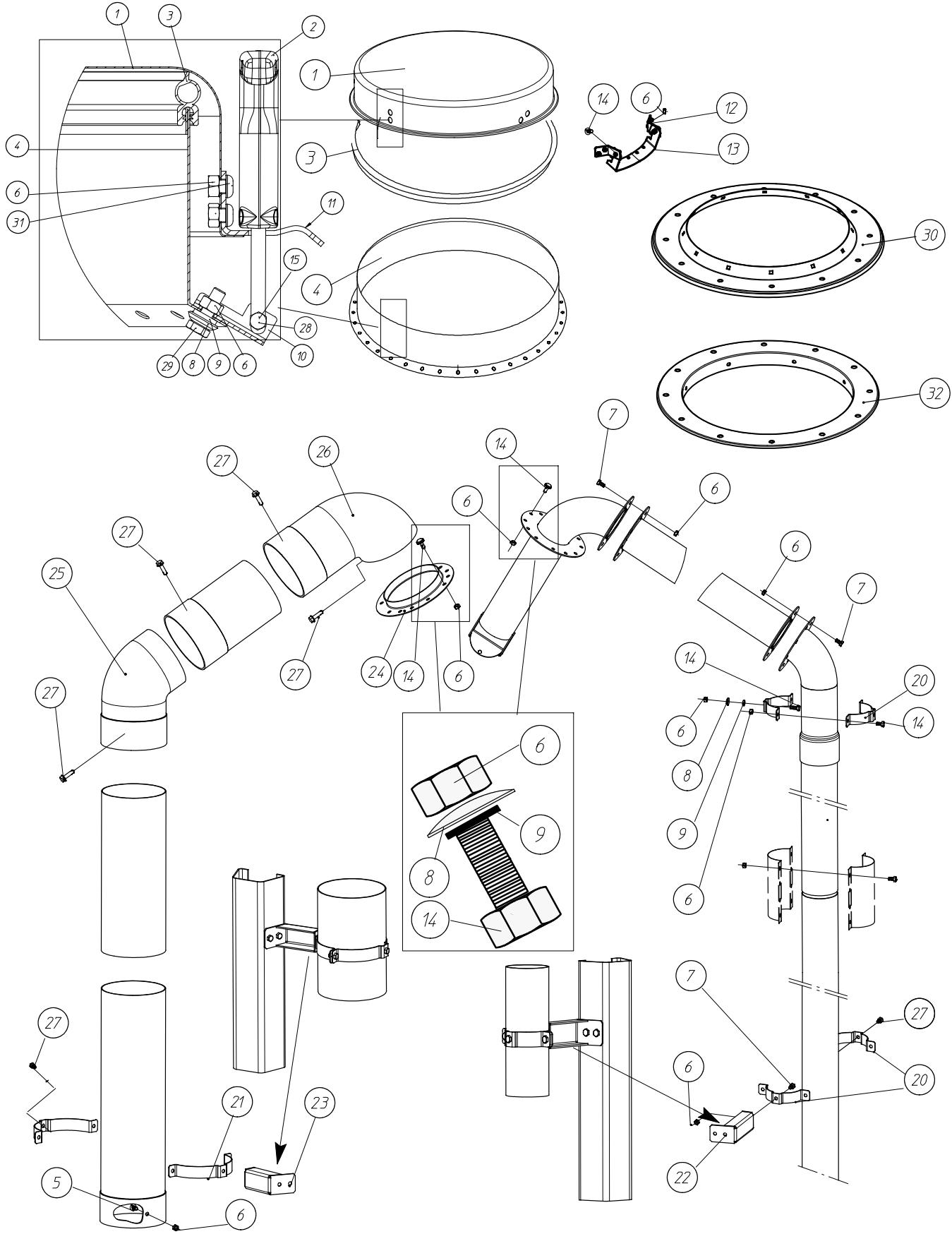
Key	Part Nr.	Qt.
1	5050930080	1
2	5020932170	1
3	5050921740	1
4	5050930160	1
5	5190920380	1
6	5190990410	1
7	5050922240	1
8	5059991990	1
8	5050921400	1
	5059990810	1
9	5050921330	1
10	5190990750	1
11	5190991090	1
12	5190914360	2
13	5190993990	2
14	5050923480	1
15	5050916550	1

MECHANICAL FILL SYSTEM



Key	Part Nr.	Qt.
1	5191999330	15
2	5191999250	15
3	5191990080	15
4	5050920670	1
5	5190991090	8
6	5190990590	8
7	5050923990	1
8	5190907190	1
9	5190993990	3
10	5050920750	1
13	5190990750	2
14	5050939820	1
15	5190995620	1
16	5191992140	1
17	5050939820	1
18	5190995970	1
19	5050917970	1
20	5050914490	1
24	5059909070	1
25	5050913330	1
26	5191990730	1
27	5191999820	2
28	5050920590	1
29	5191990320	12
41	5190907190	2
42	5022997490	1
43	5190992810	2
44	5050933880	1



PNEUMATIC FILL SYSTEM**5659990460 - 1.8/2.1M**

PNEUMATIC FILL SYSTEM

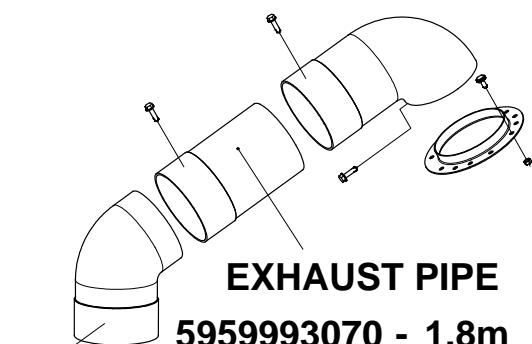
Key	Part Nr.	Qt.
1	5048912870	1
2	5048913950	3
3	5048904040	1
4	5050913330	1
5	5191990650	6
6	5191990080	80
7	5191991480	22
8	5191999250	40
9	5191999330	40
10	5048913110	3
11	5048913290	3
12	5048996610	2
13	5048996870	1
14	5191990320	52

Key	Part Nr.	Qt.
15	5190973670	3
20	5048997030	10
21	5048997110	10
22	5048998940	1
23	5048997860	1
24	5050993780	1
25	5050939660	1
26	5050939400	1
27	5990929660	24
28	5190911460	3
29	5191990320	3
30	5059909070	1
31	5191992710	6
32	5050933880	1

CONNECTION PIPE INLET ELBOW

INLET ELBOW- ROOF

5948999780



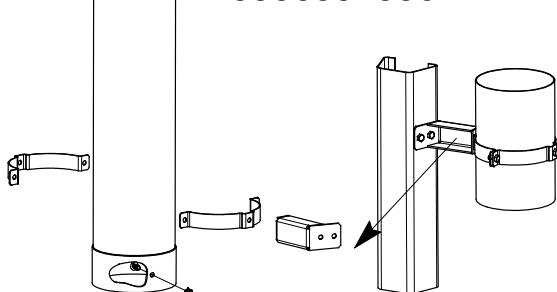
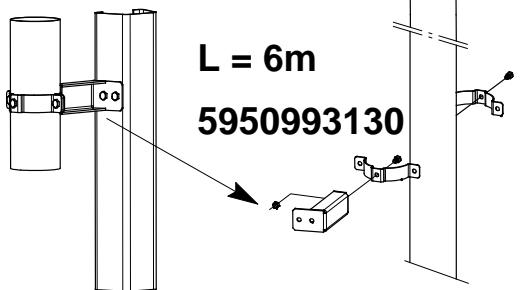
EXHAUST PIPE
5959993070 - 1.8m
5950903440 - 2.1m

5959995700 - L = 357 - 1.8M

5950908080 - L = 537 - 2.1M

INLET ELBOW- BODY

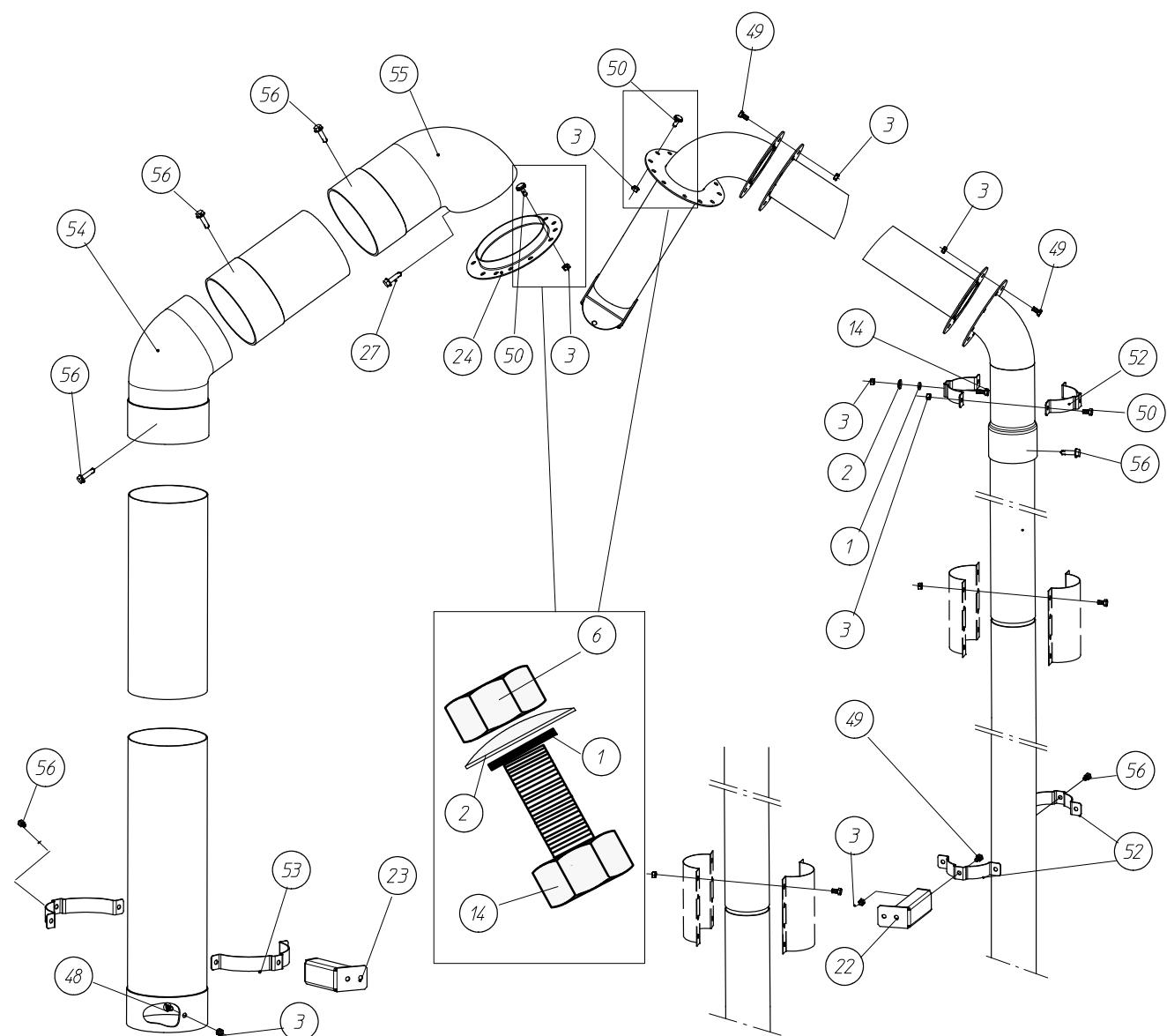
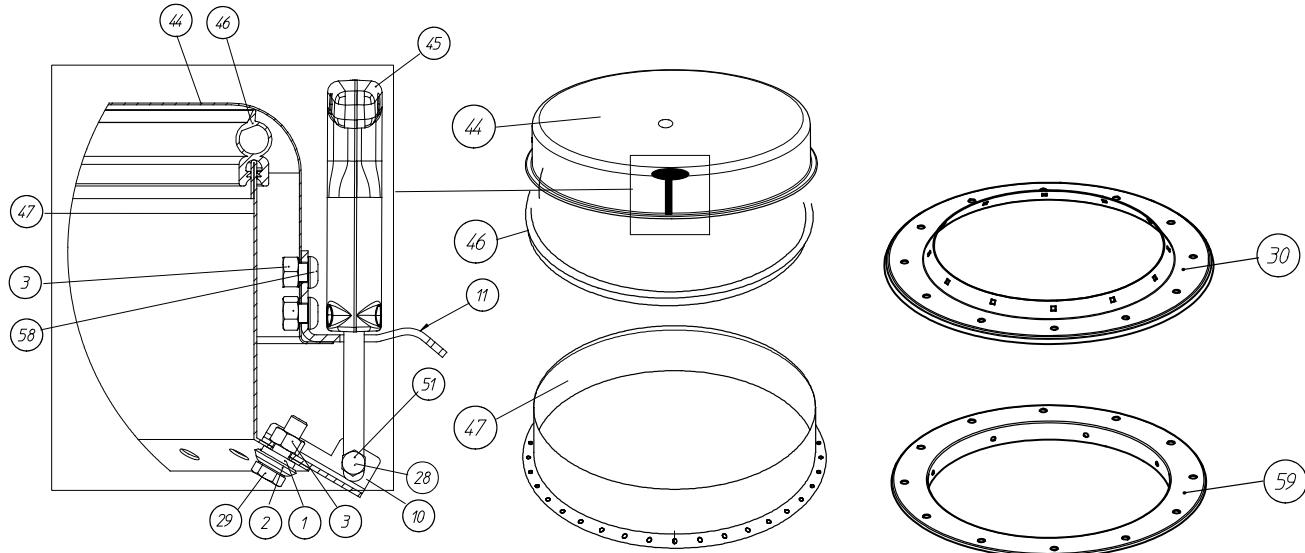
5948999600
INLET PIPE

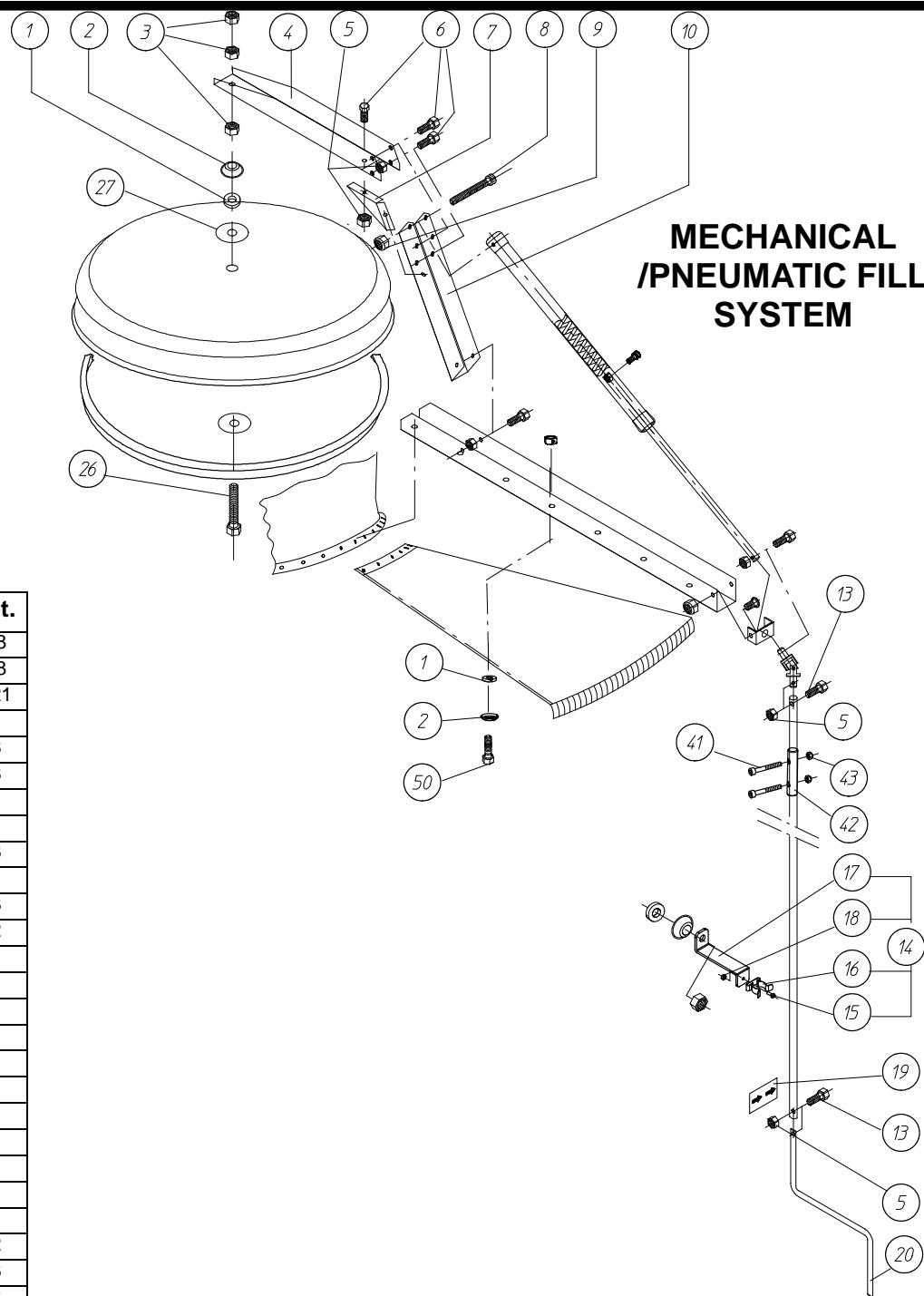


EXHAUST PIPE
Ø160mmx1950mm
- 5950992550

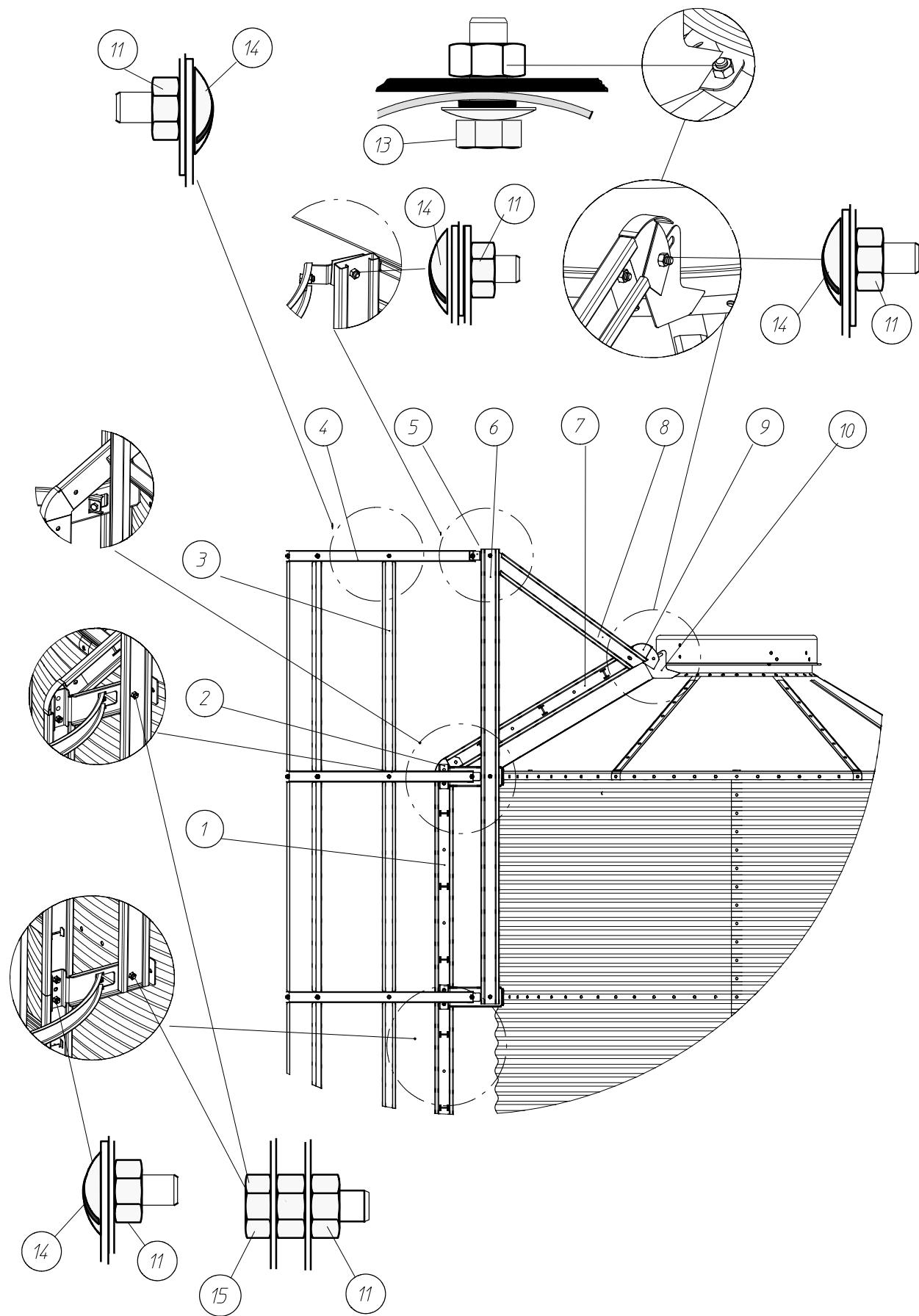
MECHANIC/PNEUMATIC FILL SYSTEM

5659990620 - 1.8M /2.1M





Key	Part Nr.	Qt.
1	5191999330	68
2	5191999250	68
3	5191990080	121
4	5050920670	1
5	5190991090	8
6	5190990590	8
7	5050923990	1
8	5190907190	1
9	5190993990	3
10	5050920750	1
11	5048913290	3
13	5190990750	2
14	5050939820	1
15	5190995620	1
16	5191992140	1
17	5050939820	1
18	5190995970	1
19	5050917970	1
20	5050914490	1
22	5048998940	1
23	5048997860	1
24	5050993780	1
26	5191990730	1
27	5191999820	2
28	5190911460	3
29	5191990320	3
30	5059909070	1
41	5190907190	2
42	5022997490	1
43	5190992810	2
44	5048900810	1
45	5048913950	3
46	5048904040	1
47	5050913330	1
48	5191990650	14
49	5191991480	22
50	5191990320	65
51	5190973670	3
52	5048997030	10
53	5048997110	10
54	5050939660	1
55	5050939400	1
56	5990929660	24
57	5048913110	3
58	5191992710	6
59	5050933880	1

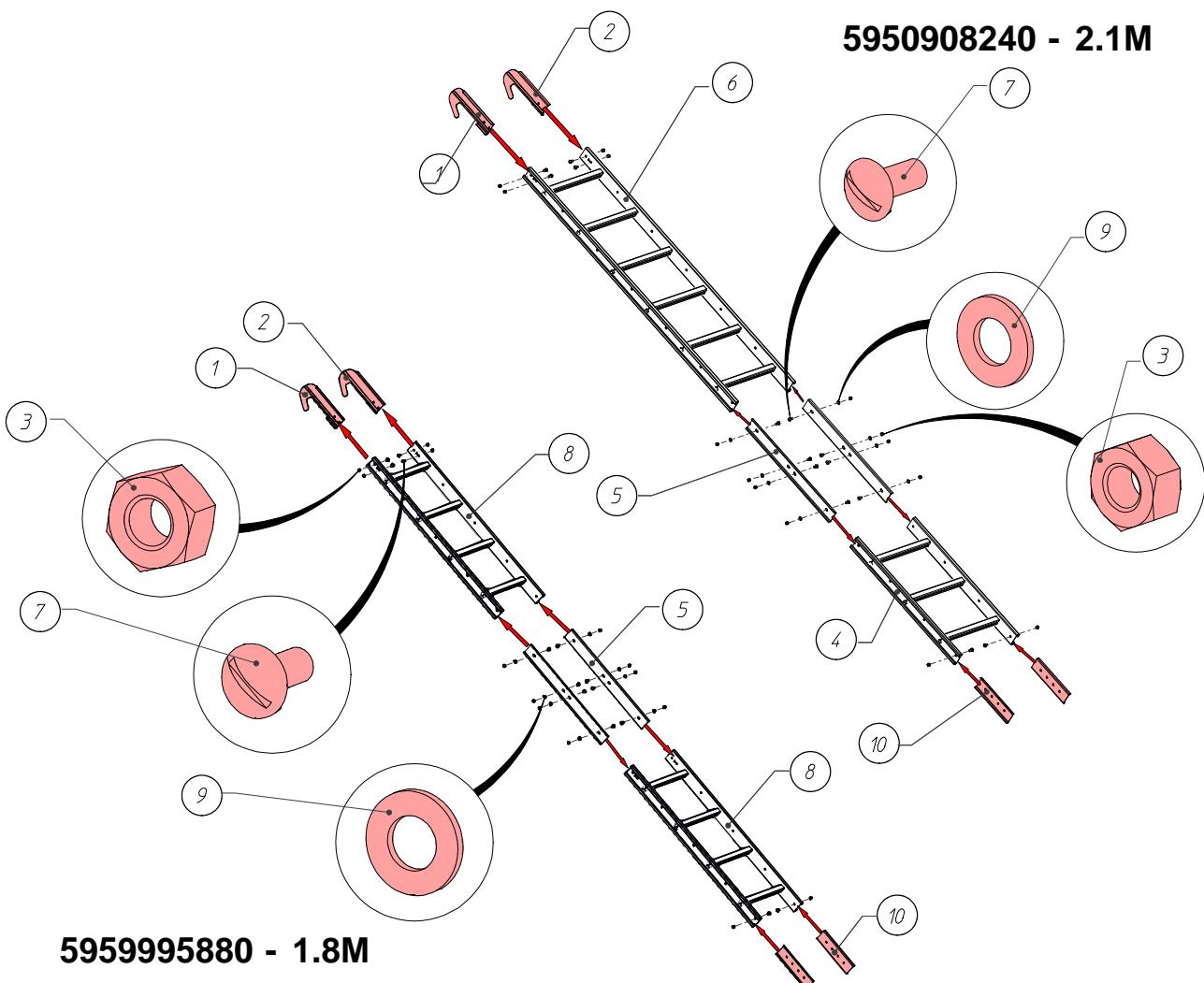
LADDER - SAFETY CAGE**1.8M/2.1M**

LADDER - SAFETY CAGE

Key	Name	Part Nr.	Qt.
*	DEPENDING ON THE TYPE OF BIN		
1	TWO RING LADDER	5948990940	*
	ONE RING LADDER	5948999860	*
2	LADDER MOUNTING BRACKET	5048994710	*
3	SAFETY CAGE RING HOLDER	5948999370	*
4	SAFETY CAGE RING	5948999290	*
5	SAFETY CAGE SUPPORT TOP	5048997600	2
6	SAFETY CAGE RING RAIL	5948999110	2
7	ROOF LADDER 9'	5951900790	1
	TWO RING LADDER	5948990940	1
	ONE RING LADDER	5948999860	1
	ROOF LADDER 7'	5950908810	1

Key	Name	Part Nr.	Qt.
*8	SAFETY RAIL FOR ROOF LADDER LH 6&7'	5959909170	1
	SAFETY RAIL FOR ROOF LADDER RH 6&7'	5959909090	1
9	LADDER CORNER 30°	5048998510	1
10	ROOF LADDER SUPPORT LEFT	5048997370	1
	ROOF LADDER SUPPORT RIGHT	5048995210	1
11	NUT M8 DIN 934 - SP.	5191990080	*
13	BOLT M8X25 - DIN 933 - SP	5191990320	*
14	TRUSS HEAD BOLT M8X20 - SP	5191990650	*
15	BOLT M8X40 DIN 933 - SP	5191990730	6

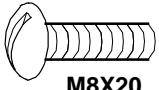
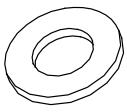
"HOOK ON" LADDER



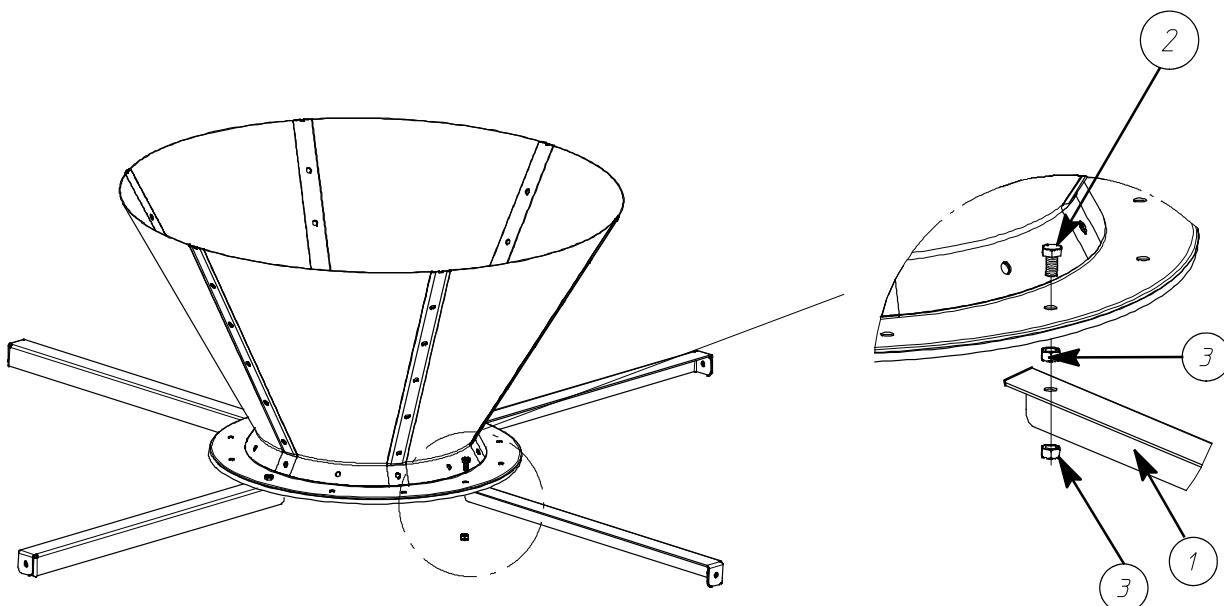
Key	Name	Part Nr.	Qt.
1	HOOK - LH FOR LADDER	5048996790	1
2	HOOK - RH FOR LADDER	5048997780	1
3	NUT M8 DIN 934 - SP.	5191990080	14
4	ONE RING LADDER	5948999860	1
5	CONNECTION PLATE LADDER	5048900160	2

Key	Name	Part Nr.	Qt.
6	TWO RING LADDER	5948990940	1
*7	TRUSS HEAD BOLT M8X20 - SP	5191990650	14
8	4 RUNG LADDER	5959905440	2
*9	WASHER D.9xD.16xL.6-DIN126	5190993560	8
10	LADDER FOOT	5048900080	2
*	ASSEMBLING KIT HOOK-IN LADDER	5048900320	1

BOLTS & NUTS (PARTS KITS)

		Part Nr.	1.8m		2.1m		
			Type	Parts Kit Nr.	Qt.	Type	
13	 M8X25	5191990320					
			601	5659991450	350	702	
			602	5659991530	409	703	
			603	5659991610	469	704	
			604	5659991790	528	705	
					706	5650991850	
5	 M8 EV	5191999170					
			601	5659991450	257	702	
			602	5659991530	317	703	
			603	5659991610	376	704	
			604	5659991790	436	705	
					706	5650991850	
6	 M8 SP	5191990080					
			601	5659991450	207	702	
			602	5659991530	207	703	
			603	5659991610	207	704	
			604	5659991790	207	705	
					706	5650991850	
8	 	5191999250					
			601	5659991450	403	702	
			602	5659991530	462	703	
			603	5659991610	521	704	
			604	5659991790	581	705	
					706	5650991850	
10	 	5191999330					
			601	5659991450	403	702	
			602	5659991530	462	703	
			603	5659991610	521	704	
			604	5659991790	581	705	
					706	5650991850	
2	 M8X20	5191990650					
			601	5659991450	114	702	
			602	5659991530	114	703	
			603	5659991610	114	704	
			604	5659991790	114	705	
					706	5650991850	
	 	5190993560					
			601	5659991450	21	702	
			602	5659991530	21	703	
			603	5659991610	21	704	
			604	5659991790	25	705	
					706	5650991850	
13	 M12X25 SP	5191990570					
			601	5659991450	13	702	
			602	5659991530	13	703	
			603	5659991610	13	704	
			604	5659991790	13	705	
					706	5650991850	
5	 M12 SP	5191990240					
			601	5659991450	17	702	
			602	5659991530	17	703	
			603	5659991610	17	704	
			604	5659991790	17	705	
					706	5650991850	
	STICKER		15902109				

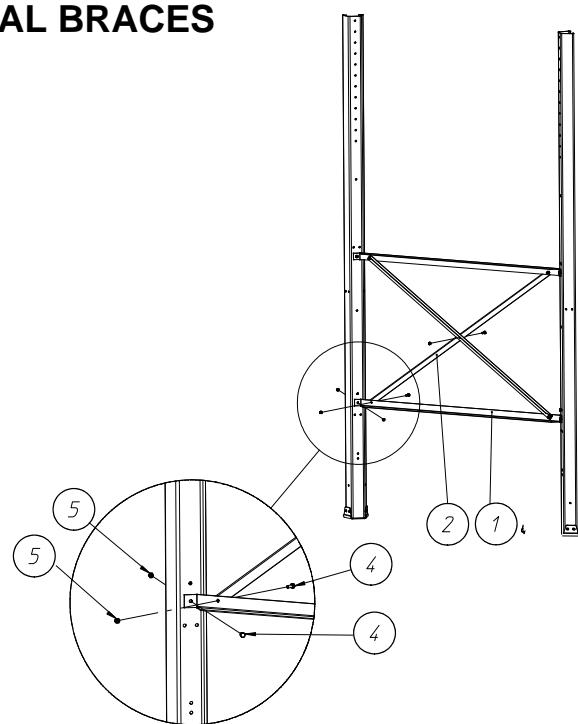
HORIZONTAL BRACES



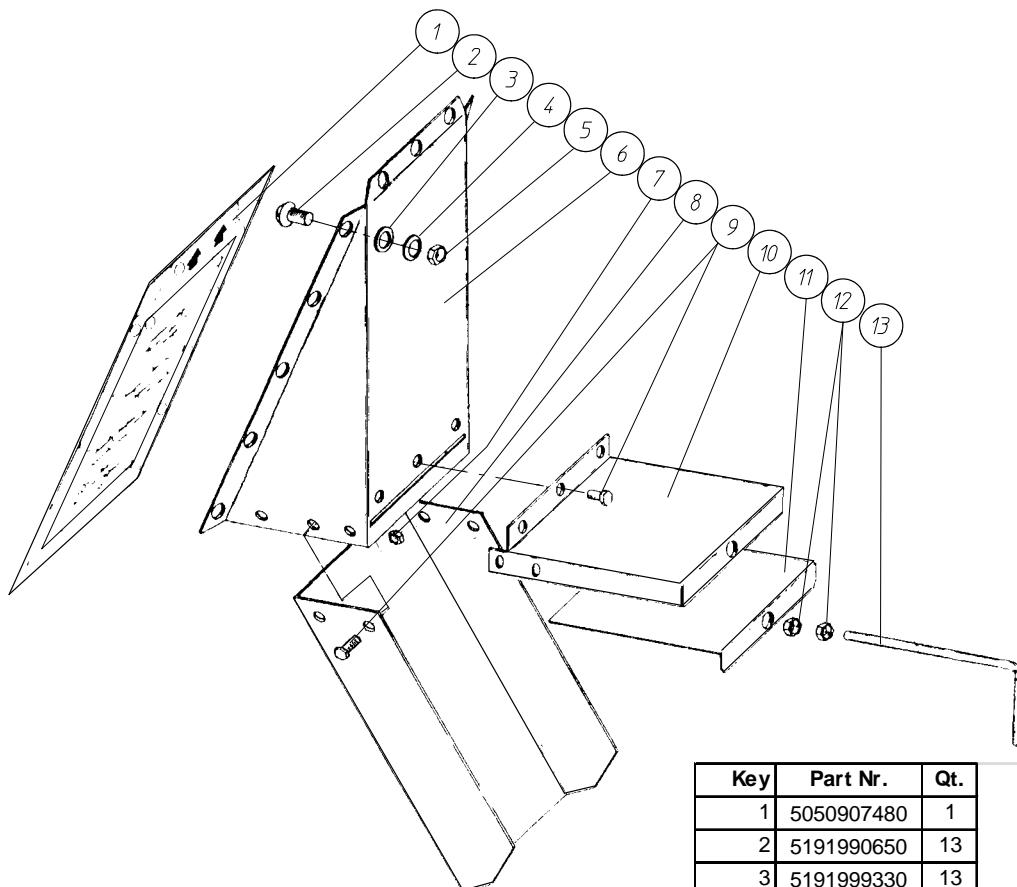
Key	Part Nr.
1	5959905950
	5950913930
*2	5191990570
*3	5191990240
*5	5191990080
*6	5191990320
*	PARTS KIT
**	NOT SHOWN

X-BRACES / HORIZONTAL BRACES

Key	Part Nr.
1	5959904870
	5950910870
2	5959912380
	5950913500
*4	5191990320
*5	5191990080
*	PARTS KIT



HOPPER VALVE - 5950998750

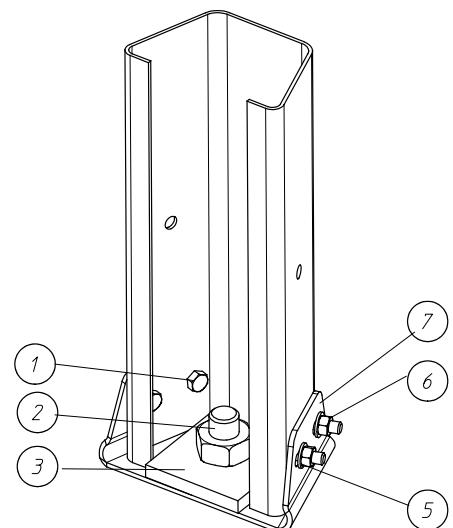


Key	Part Nr.	Qt.
1	5050907480	1
2	5191990650	13
3	5191999330	13
4	5191999250	13
5	5191990080	13
6	5050907310	4
7	5190991090	9

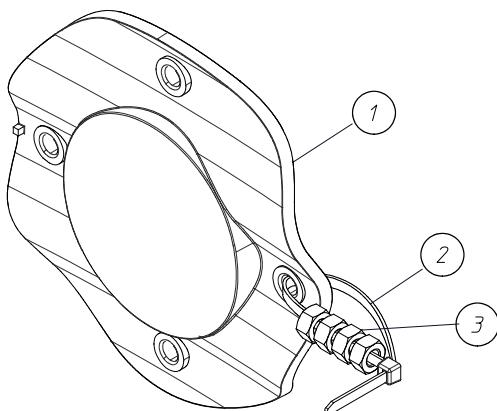
Key	Part Nr.	Qt.
8	5050907230	1
9	5190990590	9
10	5050907070	1
11	5050907150	1
12	5191990080	2
13	5050907990	1

ANCHORING KIT M20 - 5950900060 (DIA. 1.8M & 2.1M)

Key	Part Nr.	Qt.
		1.8/2.1
*1	5191991480	16
2	5191991150	4
*3	5050991620	4
*5	5190993560	16
*6	5191990080	16
*7	5048994630	4
*	INCLUDED IN PARTS KIT	

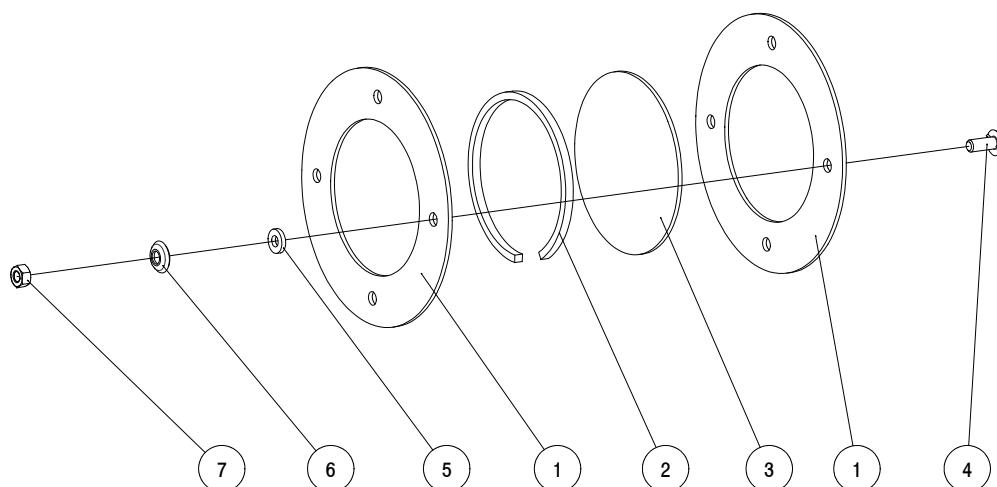


FEED VIEWER WINDOW (BODY) - 5948997880



Key	Part Nr.	Qt.
1	5048914850	1
2	5990900940	1
3	5190986700	4

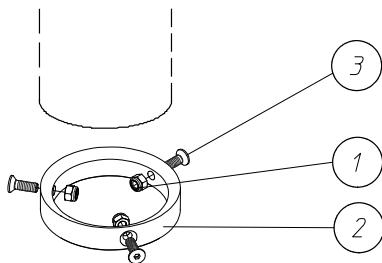
FEED VIEWER WINDOW (HOPPER) - 5950998920



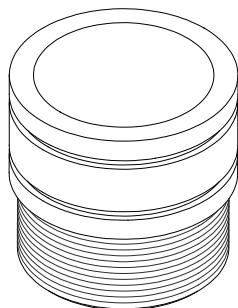
Key	Part Nr.	Qt.
1	5050900200	2
2	5050905740	1
3	5050900120	1
4	5191990650	4
5	5191999330	4
6	5191999250	4
7	5191990080	4

RING ACCESSORY KIT - 5950992630

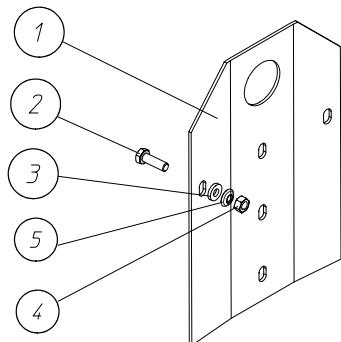
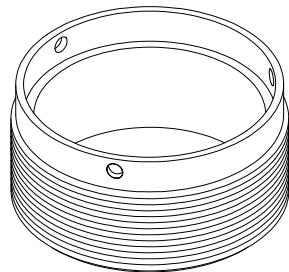
Key	Part Nr.	Qt.
1	5190993070	3
2	5050995270	1
3	5191999400	3



SPECIAL COUPLING FOR INLET PIPE - 3" - 5950997500



SPECIAL COUPLING FOR INLET PIPE - 4" - 5948995560



BIN SET UP KIT

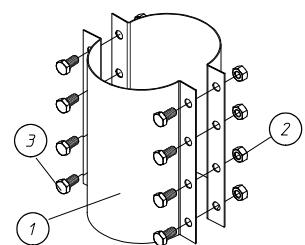
5650990860 - 1.8M & 2.1M

Key	Part Nr.	Qt.
1	5050998160	2
2	5191990320	10

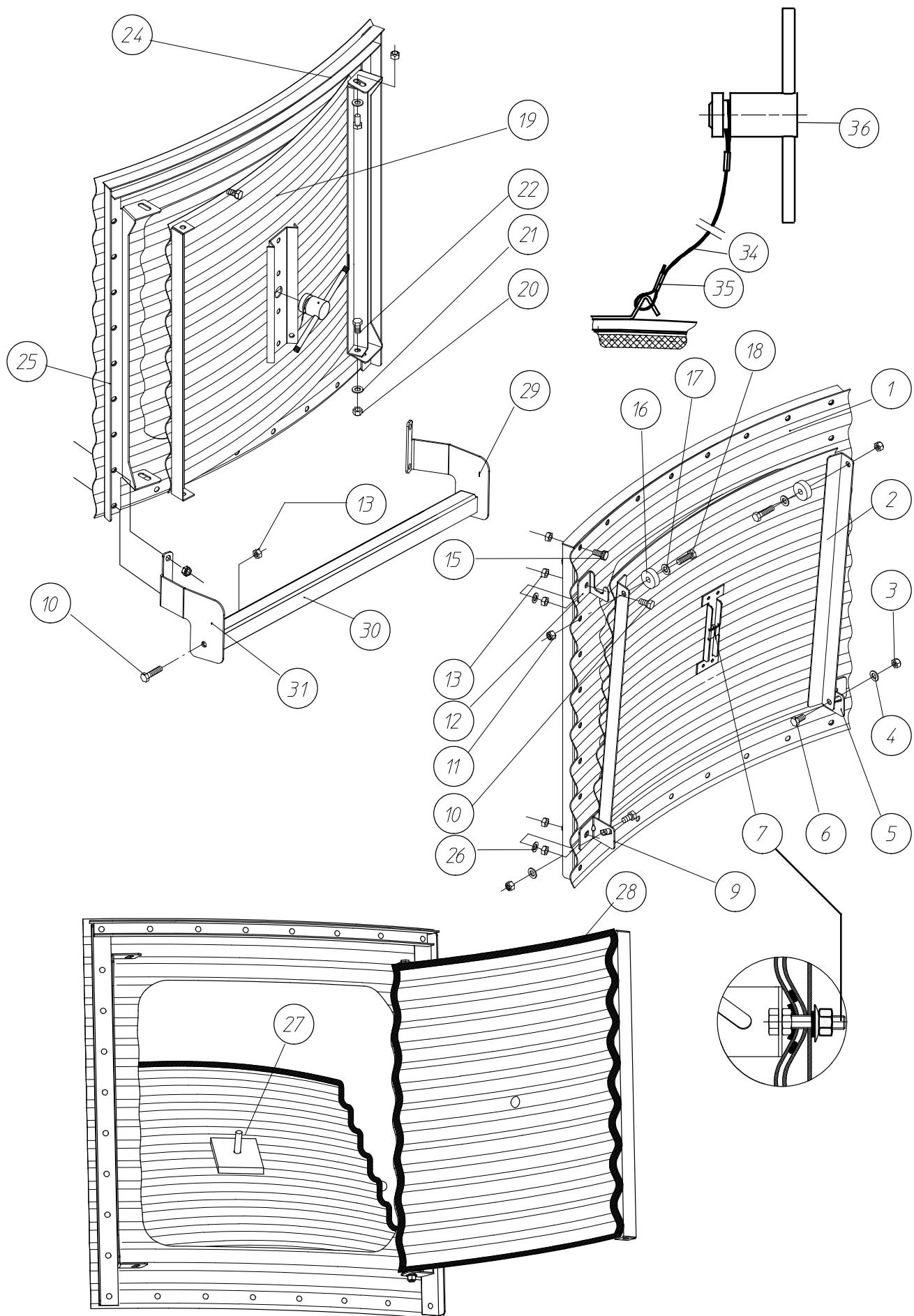
3	5191999330	10
4	5191999170	10
5	5191999250	10

COUPLING ASS'Y FOR BIN INLET PIPE- 5950993540

Key	Part Nr.	Qt.
1	5050993110	2
2	5191990080	8
3	5191991480	8



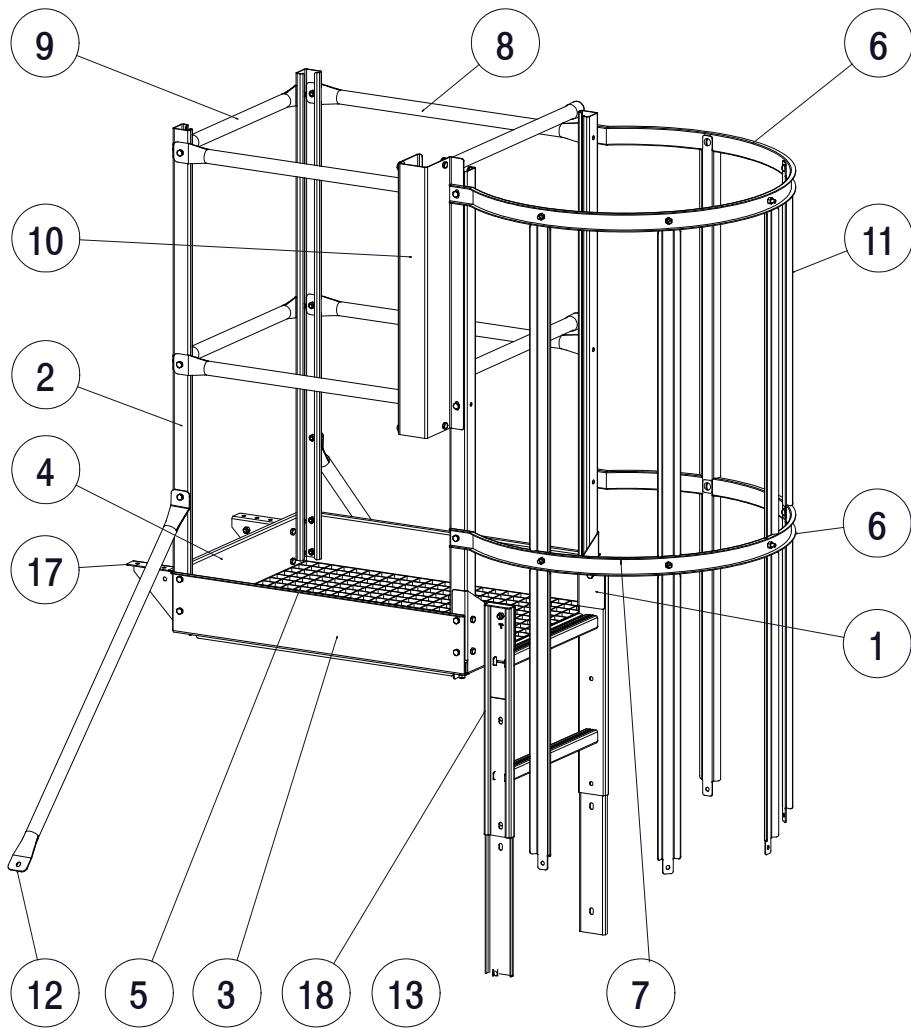
ENTRY HATCH (OPTION)



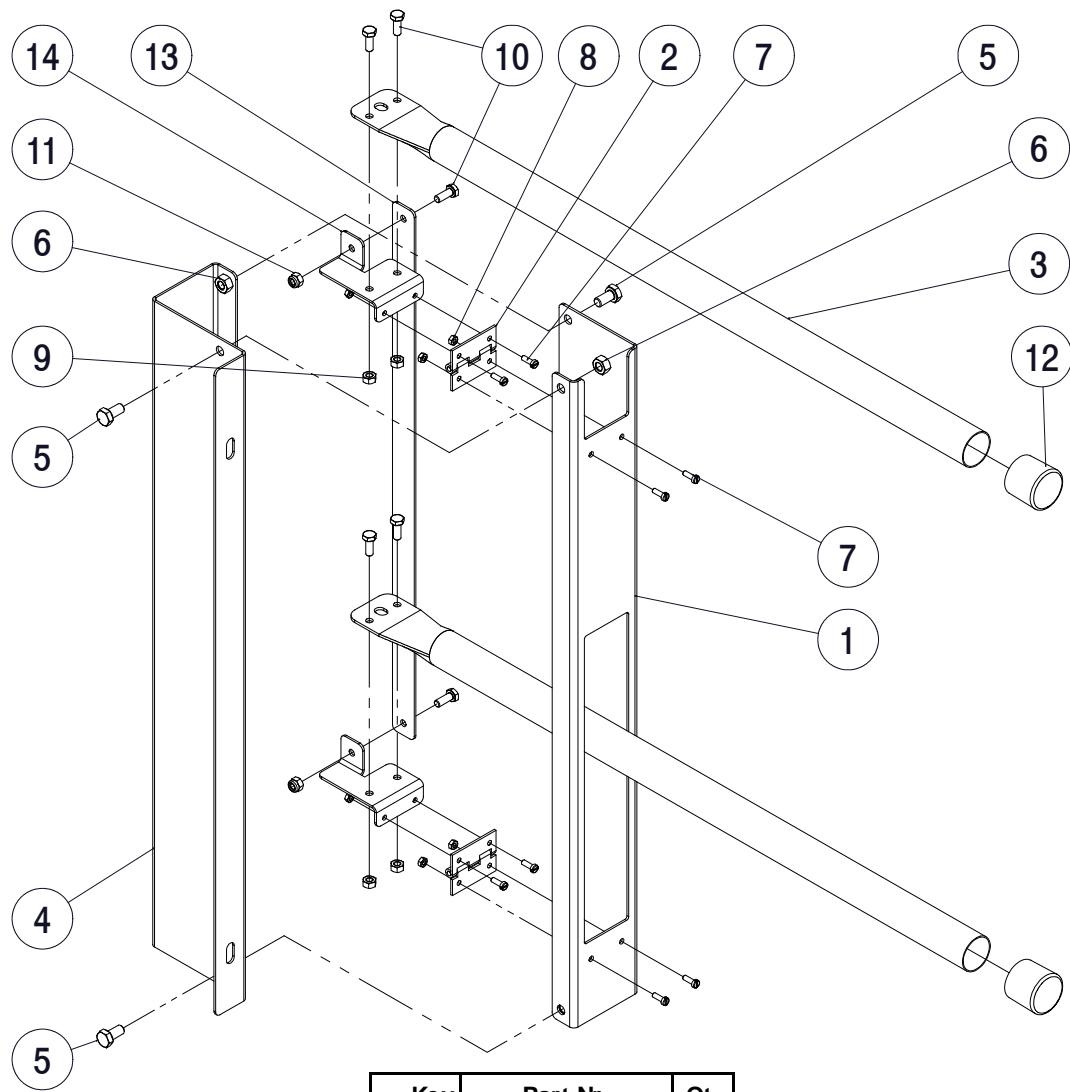
ENTRY HATCH (OPTION) -
5659991380 - 1.8 M
5650990370 - 2.1 M

Key	Part Nr.	Qt.
1	5048993150	1
	5048992810	1
2	5048991740	2
	5048999420	2
*3	5190917740	2
*4	5190917580	2
*5	5048991910	2
*6	5088980640	2
7	5048990920	1
*9	5048991090	1
*10	5190991330	5
11	5191999170	2
*12	5048991170	1
*13	5191990080	37
*15	5191990320	29
16	5048990000	2
17	5190993560	2
18	5190991400	2
19	5048992080	1
*20	5190917740	2
*21	5190917580	2
*22	5088980640	2
24	5048992160	1
25	5048990830	2
*26	5191999330	3
27	5048991330	1
28	5048991400	4.2m
29	5048902060	1
30	5048902140	1
31	5048902220	1
34	5993997420	1
35	5048999510	2
36	5048919150	1
*	5048991250	1

SAFETY PLATFORM 1.8M & 2.1M

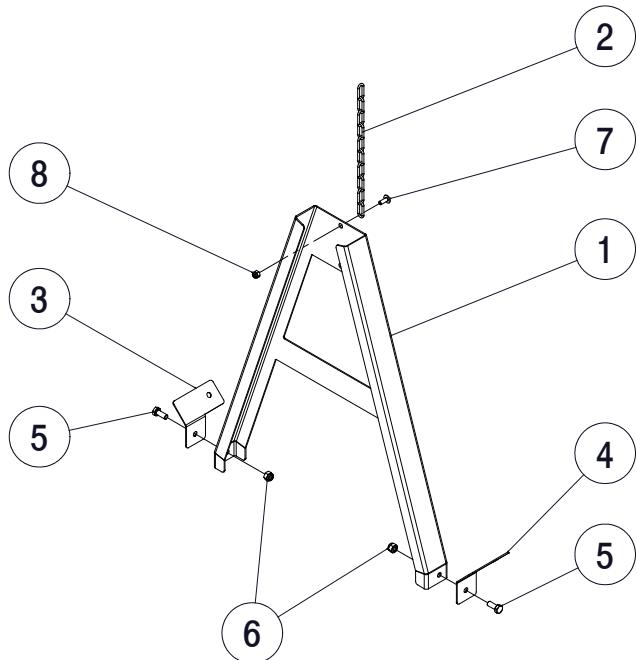


Key	Part Nr.	Part Nr.	Qty.
	1.8M	3.2M	
1	5948900340	5948900340	1
2	5948900260	5948900260	4
3	5959912770	5950916550	2
4	5948900410	5948900410	1
5	5959912790	5950916470	1
6	5948900480	5948900480	2
7	5950916710	5950916710	5
8	5959912850	5950916630	4
9	5948900560	5948900560	2
10	5948900640	5948900640	1
11	5948999370	5948999370	5
12	5959913930	5950916890	2
13	5048900160	5048900160	2
*14	5191990650	5191990650	10
*15	5191990080	5191990080	52
*16	5191991480	5191991480	42
17	5948900800	5948900800	2
18	5948900880	5948900880	1
*	NOT SHOWN	NOT SHOWN	

SELF CL. GATE-SAFETY PLATFORM - 5948900640

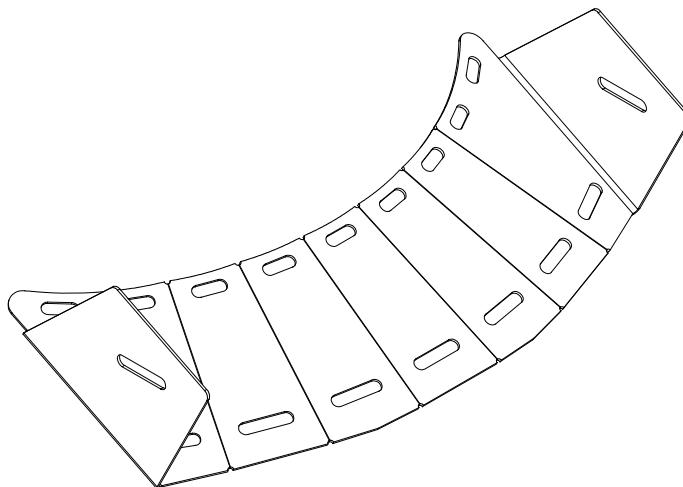
Key	Part Nr.	Qt.
1	5048915820	1
2	5907902040	2
3	5048916900	2
4	5048918140	1
5	5191991480	4
6	5191990080	4
7	5190981000	8
8	5190915350	8
9	5190911460	4
10	5190912120	6
11	5190908590	2
12	5020932170	2
13	5048918060	1
14	5048916980	2

SECURITY DOOR F/ LADDER - 5948901040



Key	Part Nr.	Qt.
1	5048918300	1
2	5048918550	1
3	5048918490	1
4	5048918470	1
5	5088980640	2
6	5190917740	2
7	5190980350	1
8	5190908590	1

SECURITY DOOR F/ LADDER - 5948900720



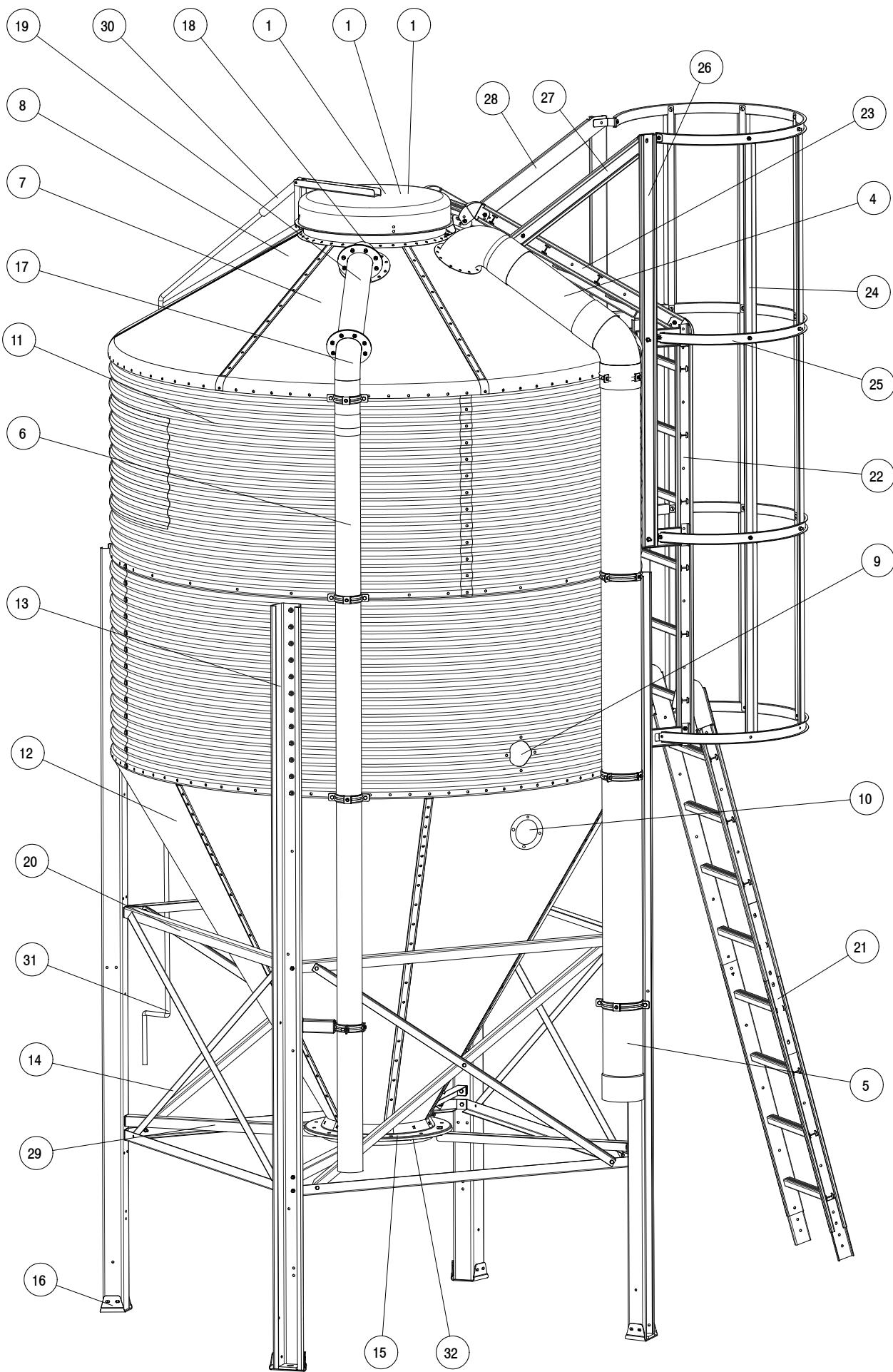
HARDWARE KIT- SAFETY PLATFORM - 5948901120

Key	Part Nr.	Qt.
1	5191990650	14
2	5191990080	74
3	5191991480	44
4	5191990320	20
5	5191999330	16
6	5191999250	16



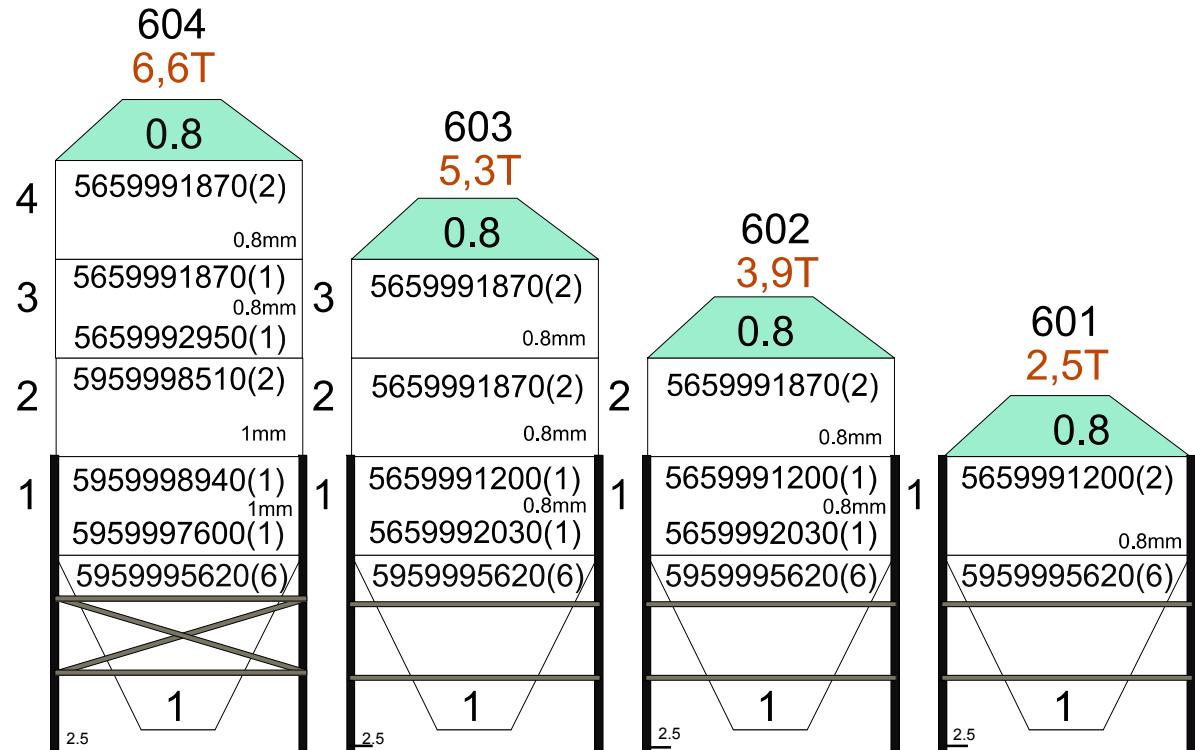
PART III

INSTALLATION INSTRUCTIONS

GENERAL VIEW BINS

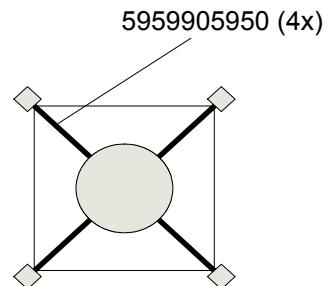
COMPONENT NUMBERS

Key	Name	Number Bin	
		1.8M	2.1M
1	MECHANICAL FILL SYSTEM	5659990210	5659990210
2	PNEUMATIC FILL SYSTEM	5659990460	5659990460
3	MECHANICAL/PNEUMATIC FILL SYSTEM	5659990620	5659990620
4	EXHAUST PIPE Ø160 X 405 MM (1.8M) / Ø160 X 580 MM (2.1M)	5959993070	5950903440
5	EXHAUST PIPE Ø160 X 1950 MM	5950992550	5950992550
6	INLET PIPE - STANDAARD LENGTE 6 M	5950993130	5950993130
7	ROOF SECTION - PNEUMATIC FILL/EXHAUST	5959995540	5950907740
8	ROOF SECTION - STANDARD	5959995460	5950907660
9	FEED VIEWER WINDOW (BODY)	5948997880	5948997880
10	FEED VIEWER WINDOW (HOPPER)	5950998920	5950998920
11	TOP/MID RING SECTION 0.8 MM	5659991870	5650992930
	TOP/MID RING SECTION 0.8 MM WITH HOLE Ø103	5659992950	5650992010
	TOP/MID RING SECTION 1 MM	5959998510	5950907820
	TOP/MID RING SECTION 1 MM WITH HOLES FOR BIN LEG	-	5950907330
	TOP/MID RING SECTION 1 MM WITH HOLE Ø103	-	5950907910
	BOTTOM RING SECTION 0.8 MM WITH HOLES FOR BIN LEG	5659991200	5650992190
	BOTTOM RING SECTION 0.8 MM WITH HOLE Ø103 & HOLES FOR BIN LEG	5659992030	5650992270
	BOTTOM RING SECTION 1 MM WITH HOLES FOR BIN LEG	5959998940	5950906410
	BOTTOM RING SECTION 1 MM WITH HOLE Ø103 & HOLES FOR BIN LEG	5959997600	5950906340
	TOP/MID RING SECTION 1.25 MM WITH HOLES FOR BIN LEG	-	5950907400
	BOTTOM RING SECTION 1.25 MM WITH HOLES FOR BIN LEG	-	5950906830
	BOTTOM RING SECTION 1.25 MM WITH HOLE Ø103 & HOLES FOR BIN LEG	-	5950906750
12	HOPPERSECTION 1 MM	5959995620	-
	HOPPERSECTION 1.25 MM		5950908160
13	BIN LEG 2844 X 2.5 MM	5959997030	-
	BIN LEG 3107 X 2.5 MM	-	5950913680
	BIN LEG 3920 X 3.5 MM	-	5950913760
14	X-BRACE	5959912380	5950913500
15	HORIZONTAL COLLAR	5059909070	5059909070
16	ANCHORING KIT M20	5950900060	5950900060
17	INLET ELBOW - BODY	5948999600	5948999600
18	INLET ELBOW - ROOF	5948999780	5948999780
19	CONNECTION PIPE INLET ELBOW	5959995700	5950908080
20	HORIZONTAL BRACE	5959904870	5950910870
21	"HOOK ON" LADDER	5959995880	5950908240
22	ONE RING LADDER	5948999860	5948999860
	TWO RING LADDER	5948990940	5948990940
23	ROOF LADDER	5948999860	5950908810
24	SAFETY CAGE HOLDER	5948999370	5948999370
25	SAFETY CAGE RING	5948999290	5948999290
26	EXTENSION FOR SAFETY CAGE	5948999110	5948999110
27	RAIL FOR ROOF LADDER - L	5959909170	5959909170
28	RAIL FOR ROOF LADDER - R	5959909090	5959909090
29	HORIZONTAL HOPPER BRACE	5959905950	5950913930
30	MECHANICAL OPENING SYSTEM	5959991580	5950900470
31	OPENINGTUBE - 3M	5648999490	5648999490
32	INSIDE COLLAR DOWN	5050933880	5050933880

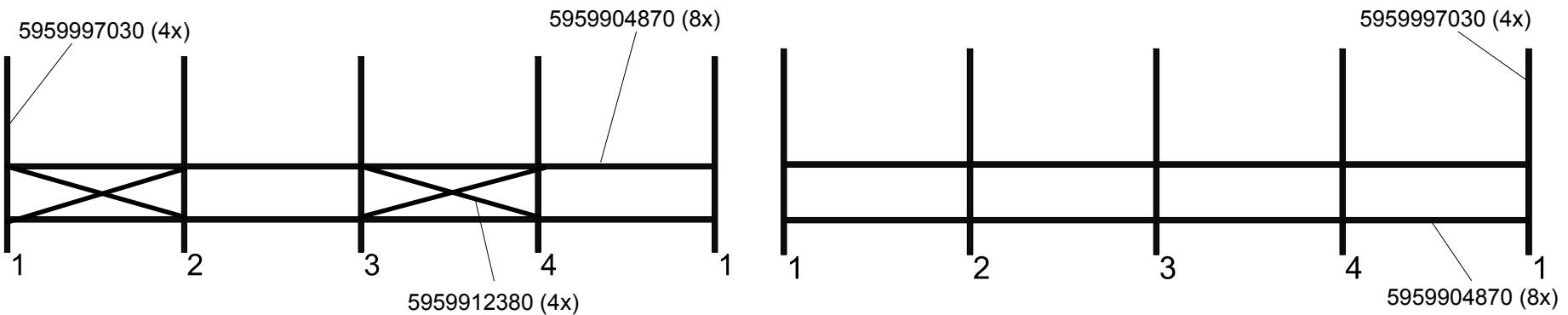


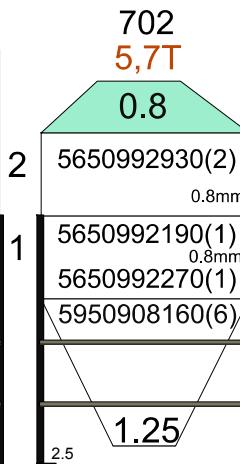
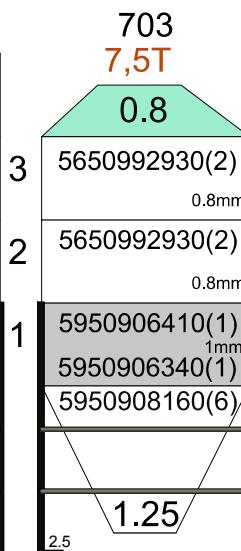
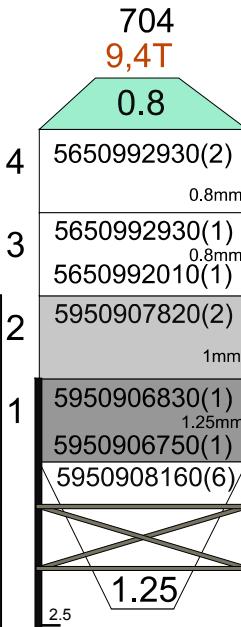
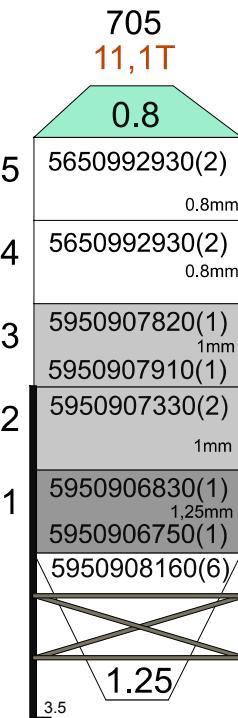
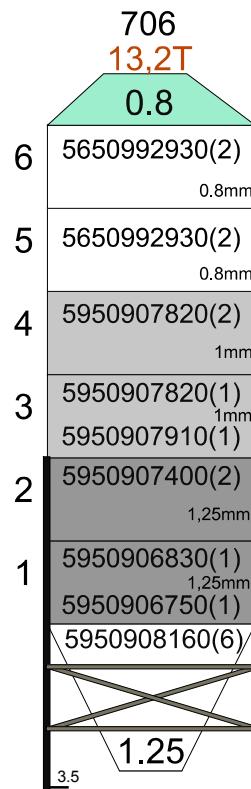
Mechanical Fillsystem:
6x 5959995460 Roof Section Standard
Pneumatic Fillsystem:
4x 5959995460 Roof Section Standard
2x 5959995540 Roof Section Inlet / Exhaust

HORIZONTAL HOPPER BRACES - BOTTOM VIEW



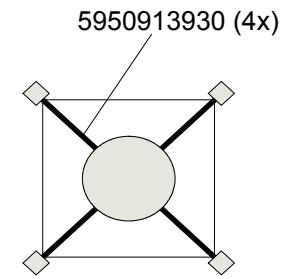
BIN Ø 1.8M OEM





Mechanical Fillsystem:
6x 5950907660 Roof Section Standard
Pneumatic Fillsystem:
4x 5950907660 Roof Section Standard
2x 5950907740 Roof Section Inlet / Exhaust

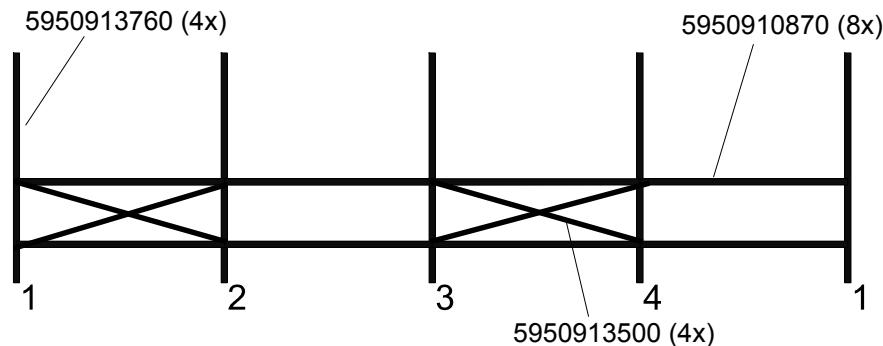
HORIZONTAL HOPPER BRACES - BOTTOM VIEW



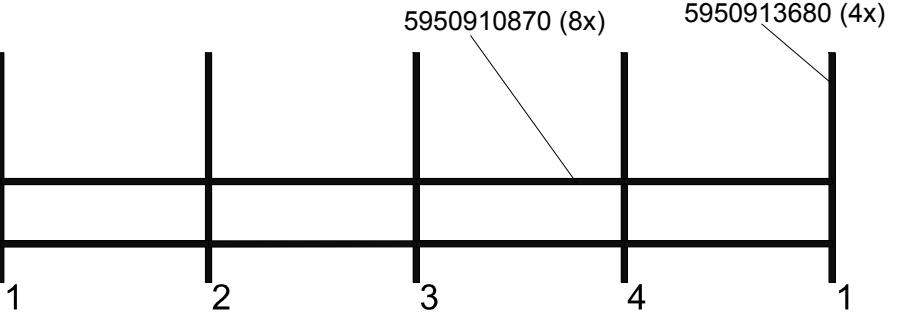
BIN Ø 2.1M OEM

1.8 M & 2.1 M

BRACES OEM FOR 706-705-704



BRACES OEM FOR 703-702



BEFORE ASSEMBLING YOUR BIN

1. Check shipment for quantities and damages upon arrival. If any complaints, contact the transport company.
2. Handle parts with care in order not to damage galvanization.

3. Store parts in a dry room.

4. Store caulking at room temperature. Also during **assembling**, keep caulking at room temperature.
5. Stack no more than two 1-ton packages of sheets on top of each other. This prevents distortion.
6. Store loose parts in racks/containers or on pallets.
7. Use our special design bin assembly frame.
8. Read all assembly instructions before starting the job. Proceed in steps as instructed in Part III of this manual.
9. **For European countries: stick the sticker (15902091, to find in Parts Kits) after the assembly on the inlet pipe, the exhaust pipe or at eye level on the bin hopper.**

ASSEMBLY PREPARATIONS

On the next pages you find all information (per bin model) regarding dimensions and position of bin parts (sheets, legs, bolts & nuts etc.)



Important ! : Tighten nuts with a moment between **minimum 13Nm and maximum 26Nm**.

POSITION OF BOLTS, NUTS AND WASHERS

Plaats van de bouten, moeren en rondsels
Position des boulons, écrous et rondelles
Position of bolts, nuts and washers
Position der Bolzen, Muttern und Unterlegscheiben
РАСПОЛОЖЕНИЕ БОЛТОВ, ГАЕК И ШАЙБ

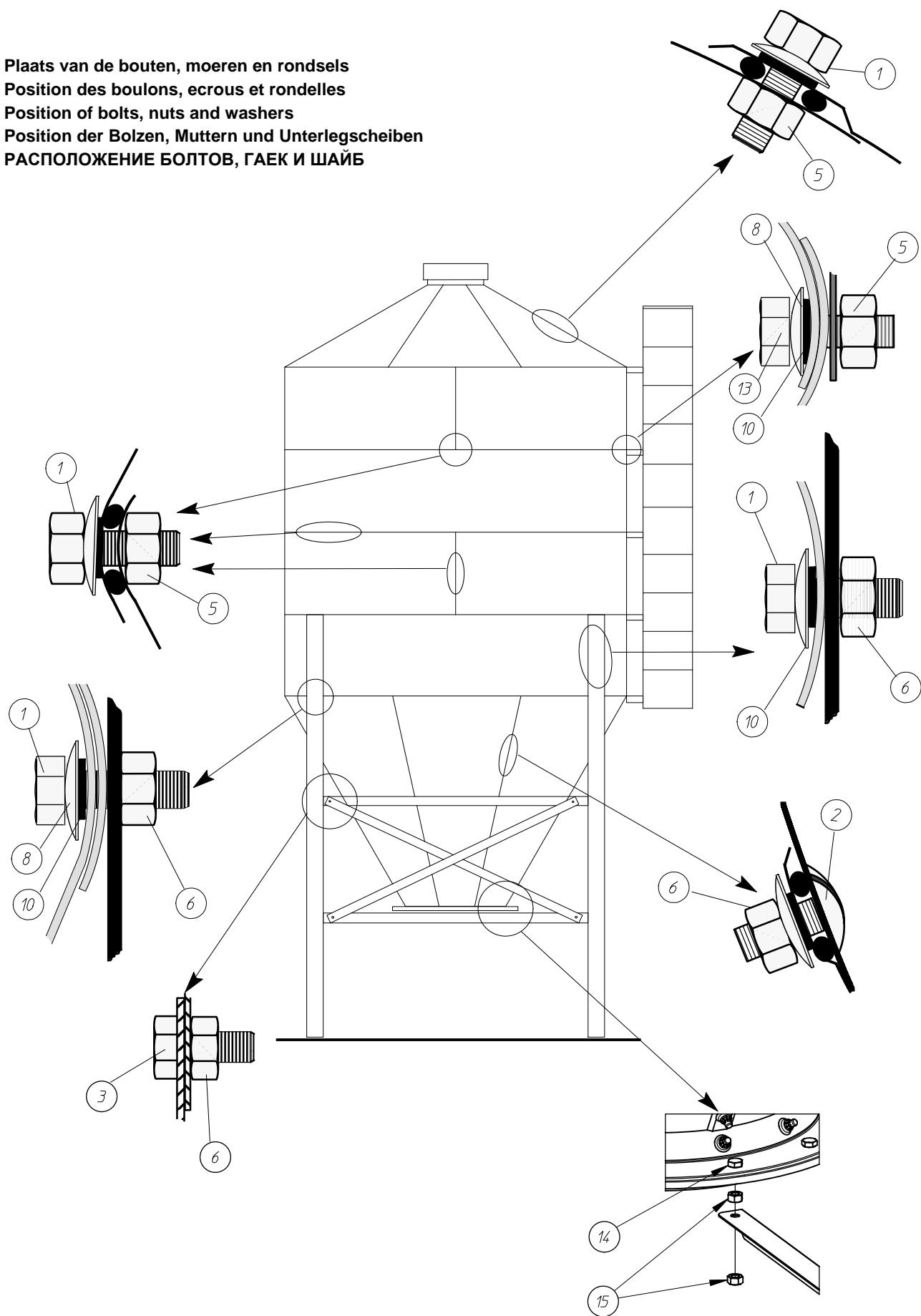
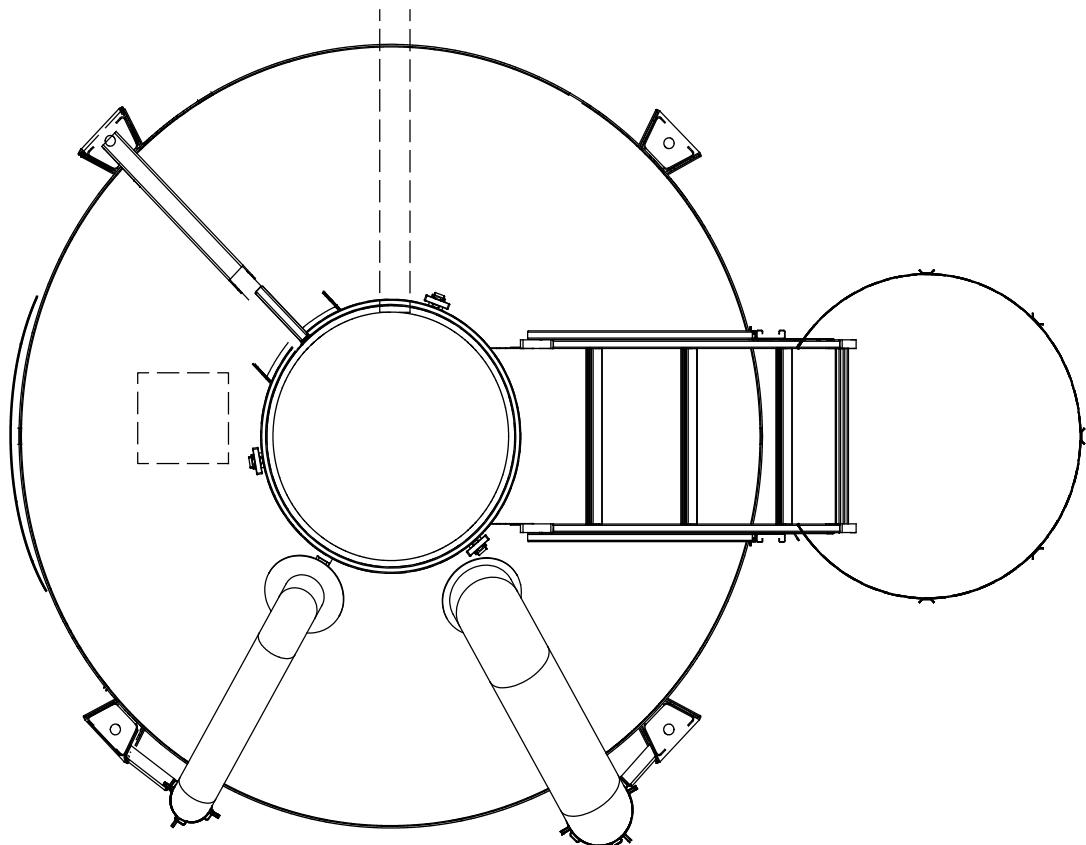
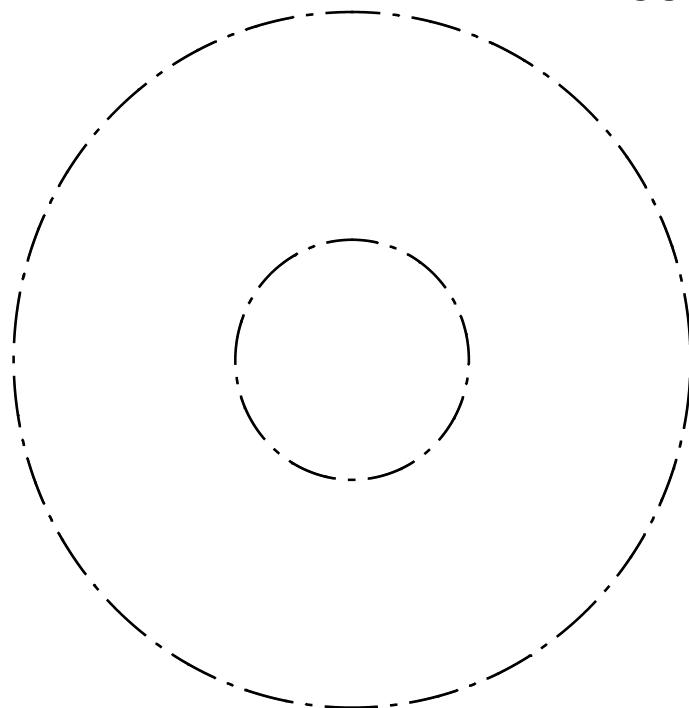


FIGURE 1.

Key	Name	Number
1	BOLT M8X25 - SP	5190991250
2	TRUSS HEAD BOLT M8X20 - SPECIAL PLATED	5191990650
3	BOLT M8X16 - DULL GREY - HOT DIP GALVANIZED	5191991480
5	NUT M8 - YELLOW OR WHITE - ZINC PLATED	5191999170
6	NUT M8 - DULL GREY - HOT DIP GALVANIZED	5191990080
8	METAL WASHER 5/16"	5191999250
10	RUBBER WASHER DIA. 16 X 7,5 X 3	5191999330
13	BOLT M8X25 - DULL GREY - HOT DIP GALVANIZED	5191990320
14	BOLT M12X25 - SP	5191990570
15	NUT M12X25 - SP	5191990240

TOOLS

1. Flat open end wrench 13
2. Ring wrenches 13, 17, 22 & 30
3. Drills dia. 9 + concrete dia. 20
4. Socket wrenches (13 & 22)
5. Electrical hammer drill (min. 450W).
6. 09700105 : bin assembly pin (2x) (s525)
7. Drilling machine
8. Long screw drivers (slot 10mm)
9. Speedwrench with corresponding spanners
10. Notching machine
11. Jigsaw

DETERMINATION SITUATION**EXAMPLE****FIGURE 2.****YOUR SITUATION****FIGURE 3.**

CASTING THE FOUNDATION

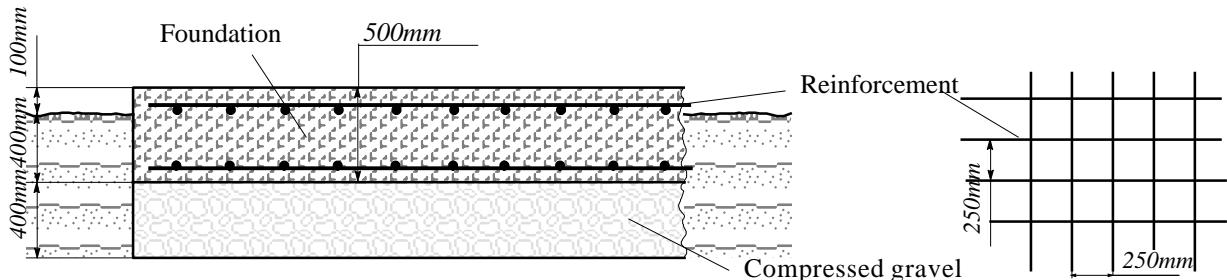
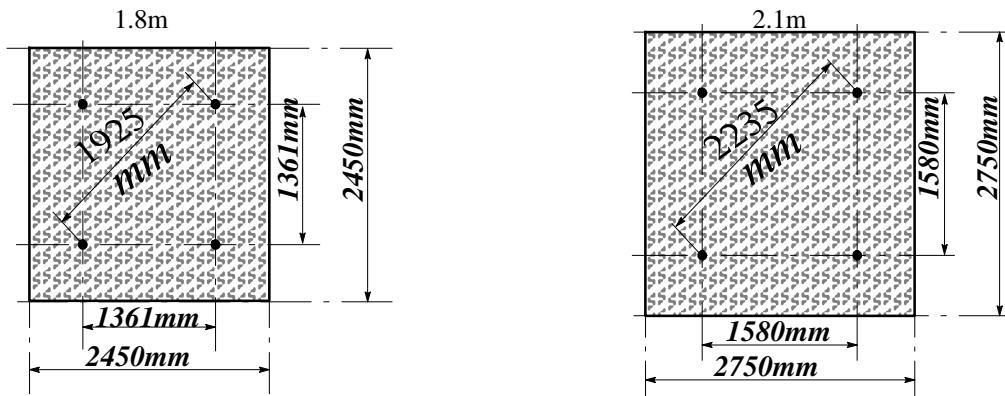
Important:

Subsoil must withstand a pressure of at least 0,05MN/m²

Make foundation frostproof.

Concrete strength : 250 kgs cement per m³ concrete - broken stone dia. 0-32 (mm - reinforcement netting Q131 (wire dia. 4-5 mm).

1.8M & 2.1M



When using expansion bolts :

First assemble the bin and put it on its final place.

Spot the holes.

Pull the bin aside

Drill the holes dia. 20 mm.

Push the bin (legs) over the holes.

Fix the legs with the expansion bolts M20X170

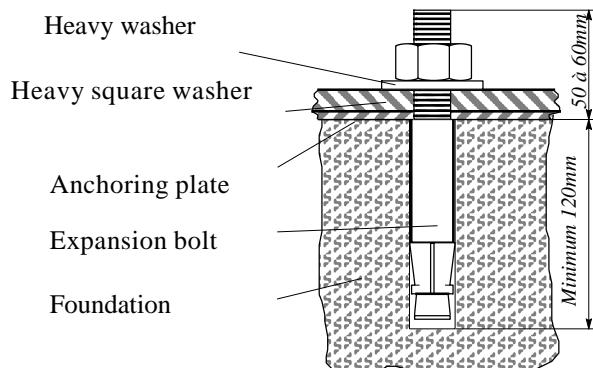
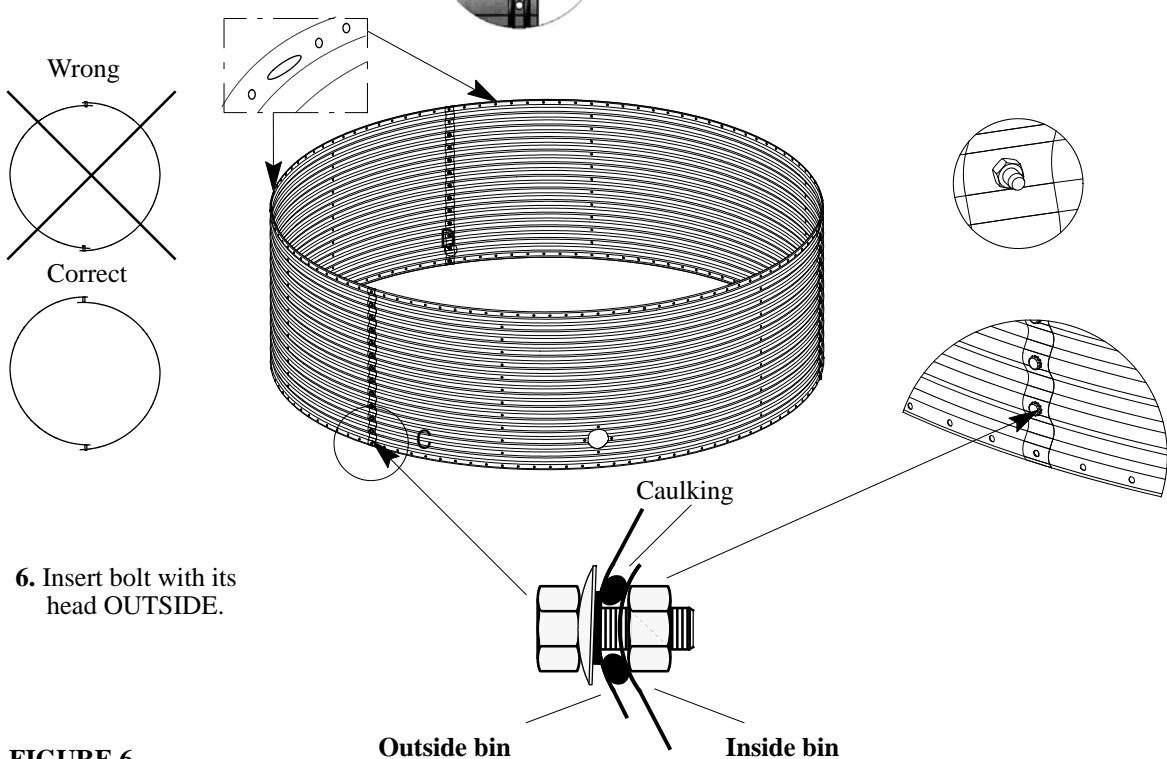
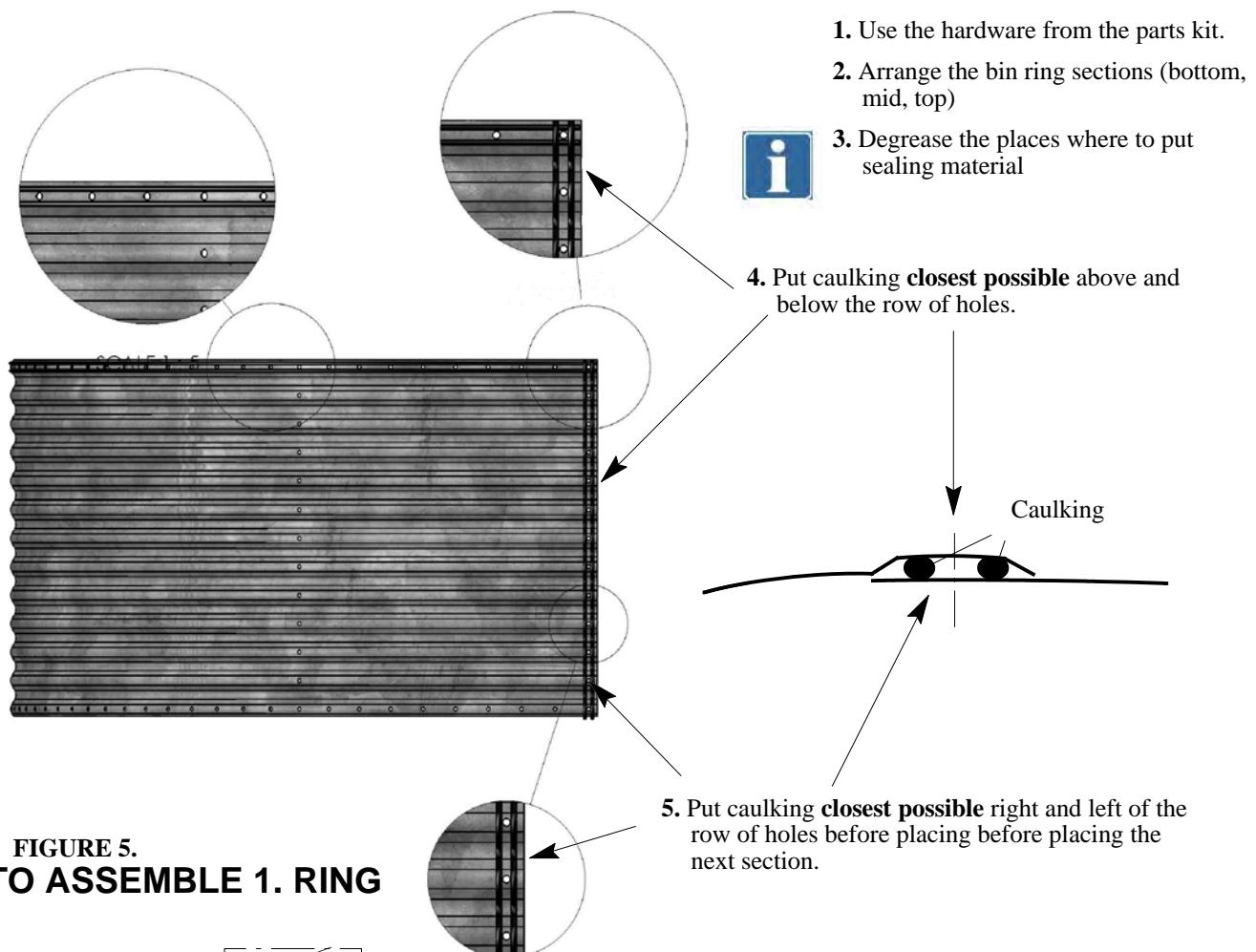
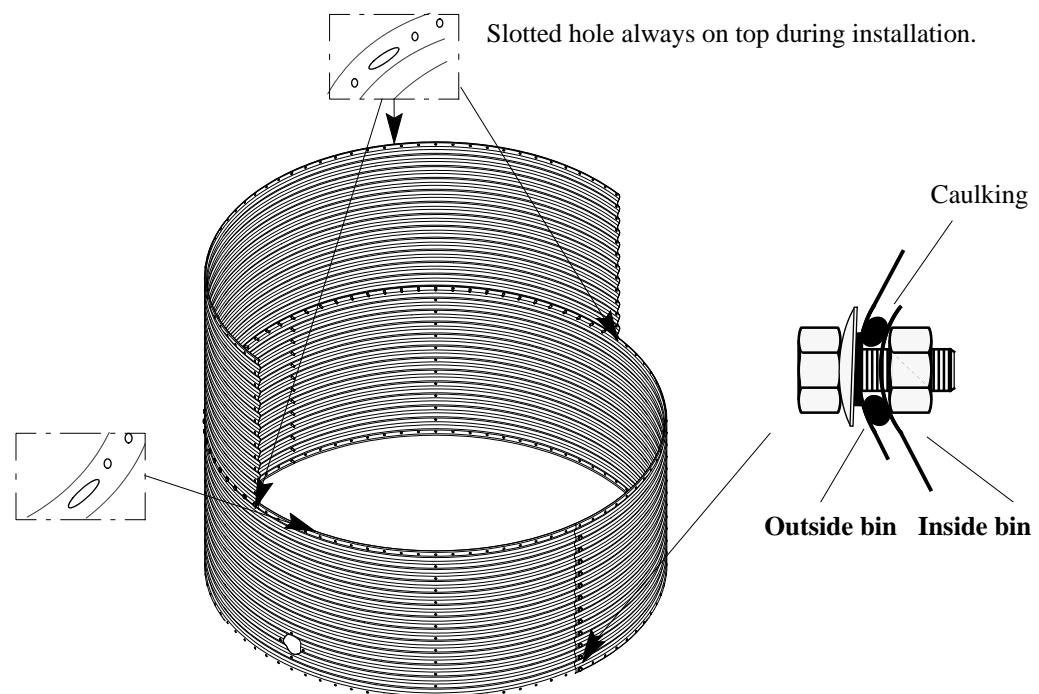
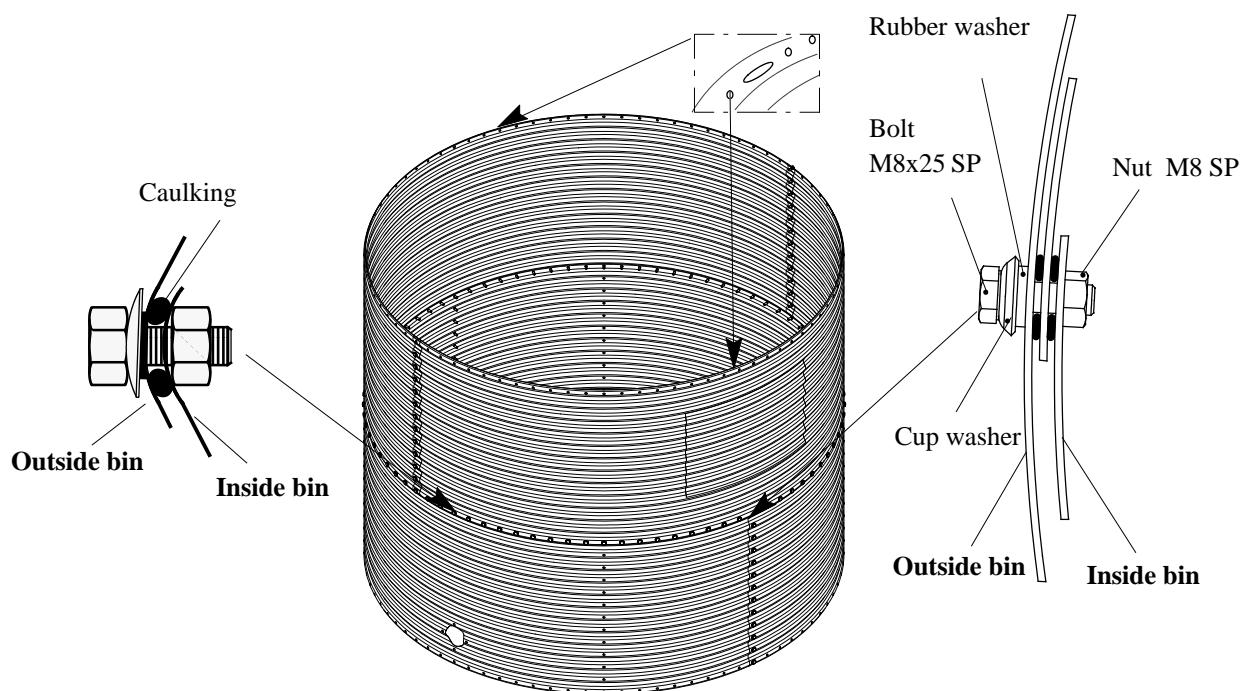


FIGURE 4.

TO ASSEMBLE THE BIN BODY

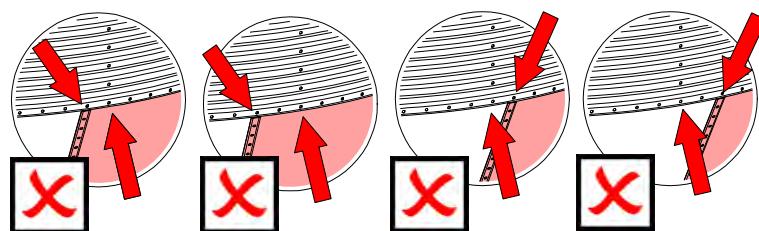
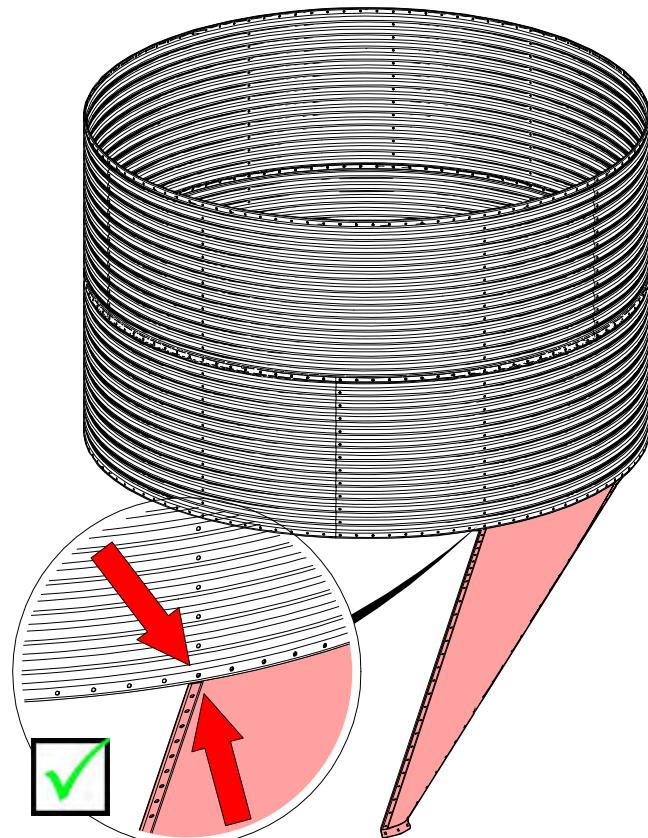
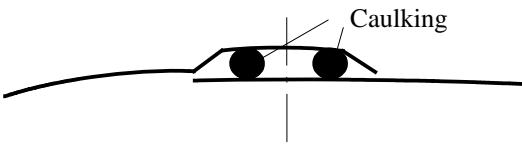


Tighten by hand. Only tighten nut inside the ring by means of wrench or spreewrench after assembling all bin parts. Inside the bin, tighten the nuts with a moment between 13 Nm and 26 Nm.

TO ASSEMBLE 2. RING**FIGURE 7.****FIGURE 8.**

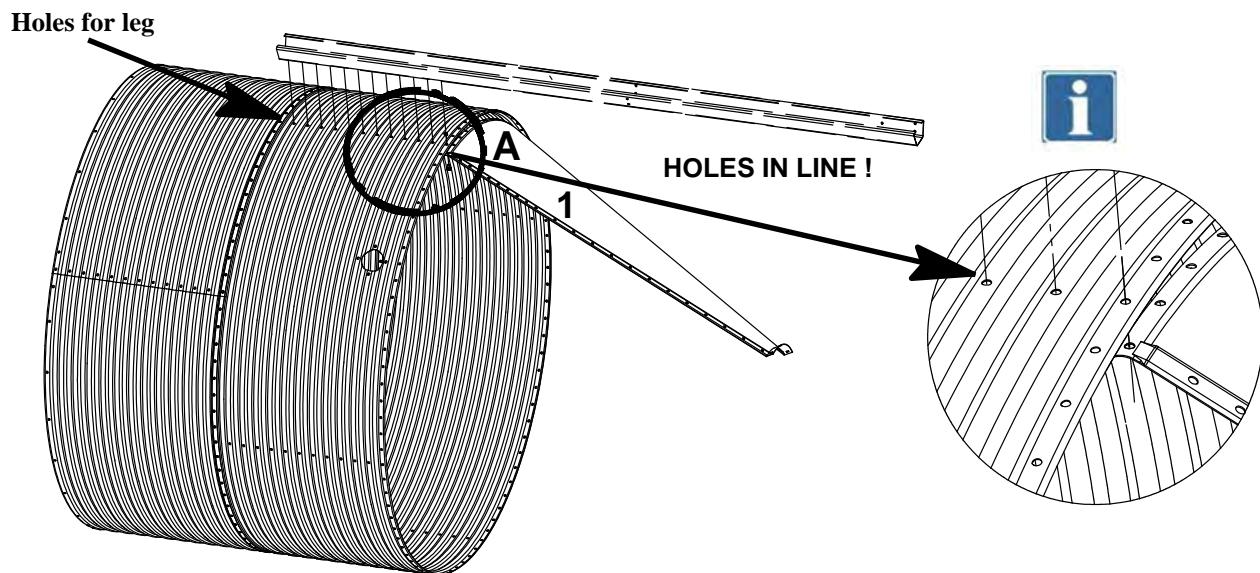
EXAMPLE FOR BINS Ø1.8M AND Ø2.1M**Start with hoppersection 1!**

1. Degrease the hopper sections where to put sealing material
2. Put caulking right and left of each row of holes.



3. Place the section at the inside of the bin body. Tighten bolts like those in the bin body.

FIGURE 9.



4. Place the next sections with kink positioned as shown in Figure 9.
5. Place all overlappings in the same direction.
6. Connect sections with truss head bolt heads at the inside of the hopper.

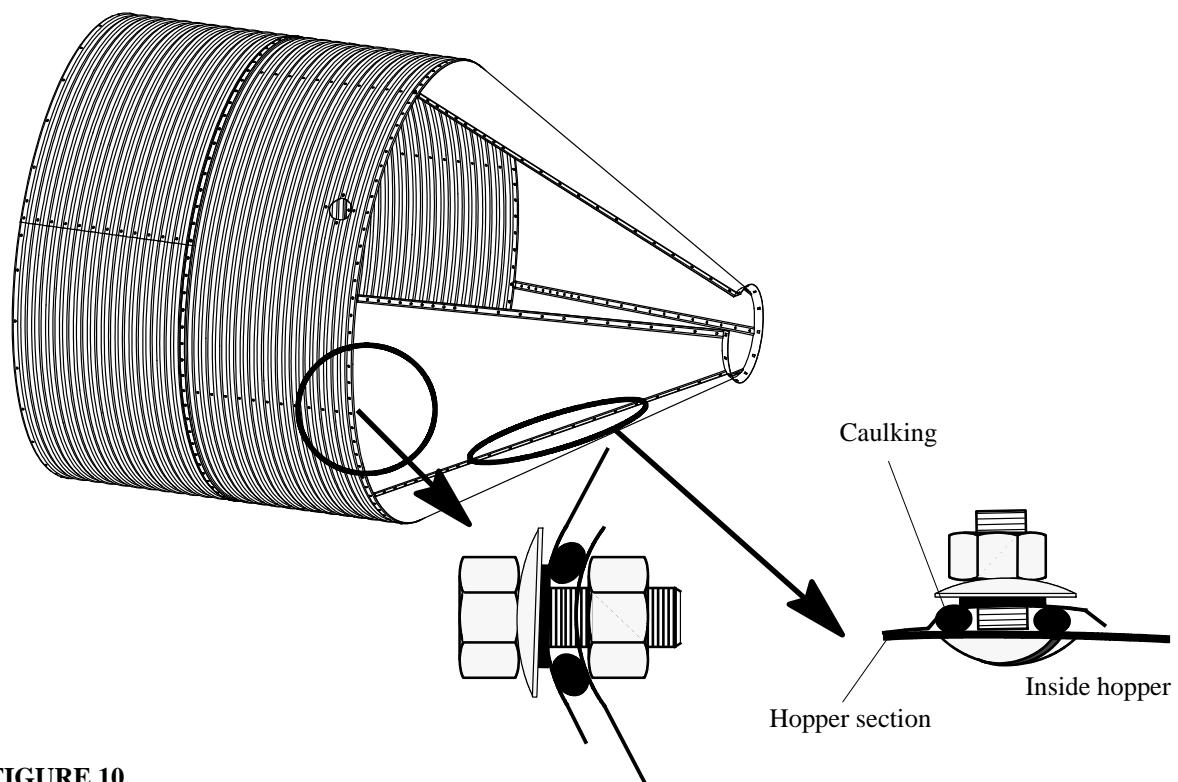


FIGURE 10.

TO INSTALL THE BIN ROOF



- Degrease the roof sections where to put sealing material

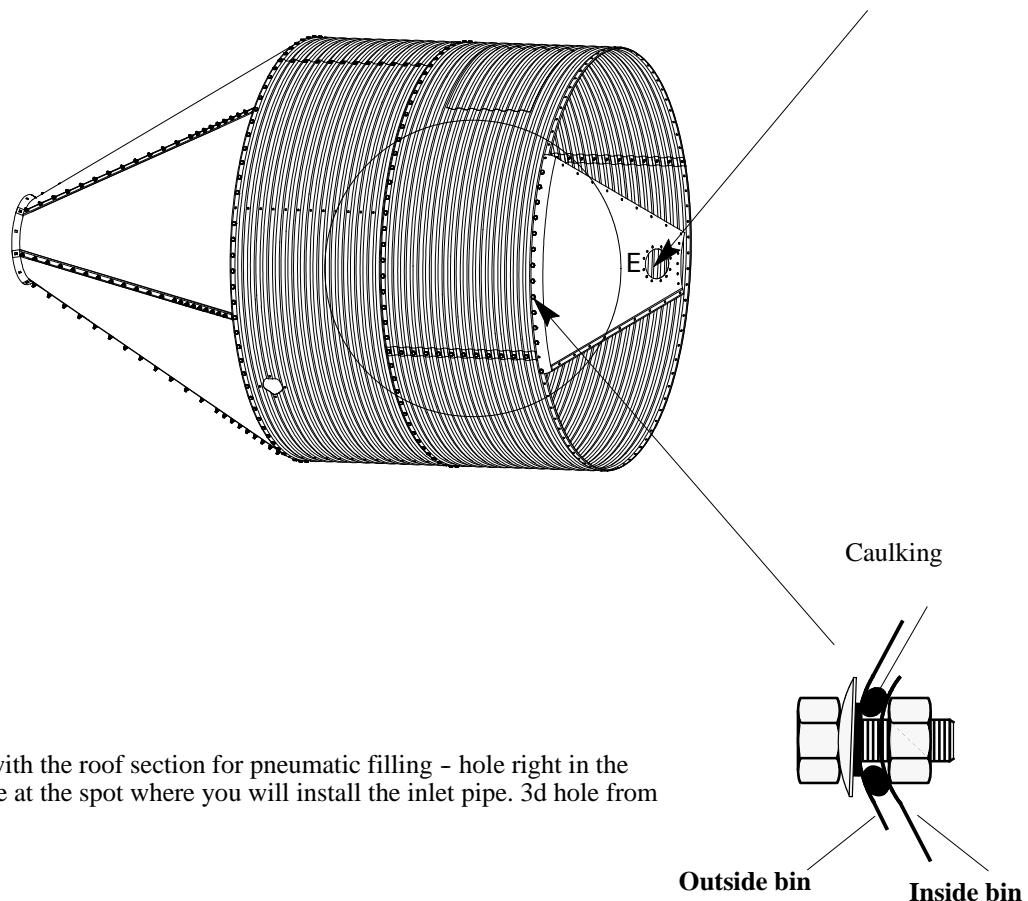


FIGURE 11.

- Start with the roof section for pneumatic filling - hole right in the middle at the spot where you will install the inlet pipe. 3d hole from leg.

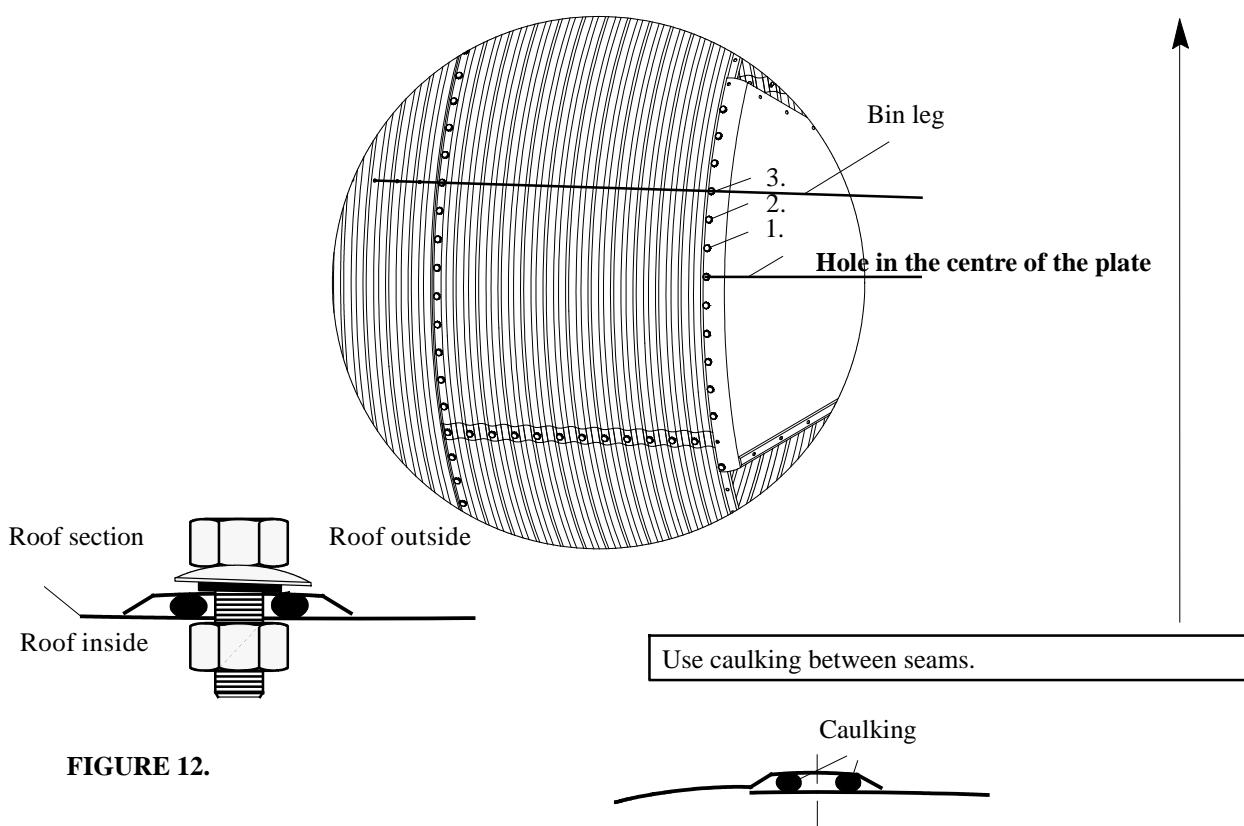


FIGURE 12.

TO INSTALL THE BIN ROOF

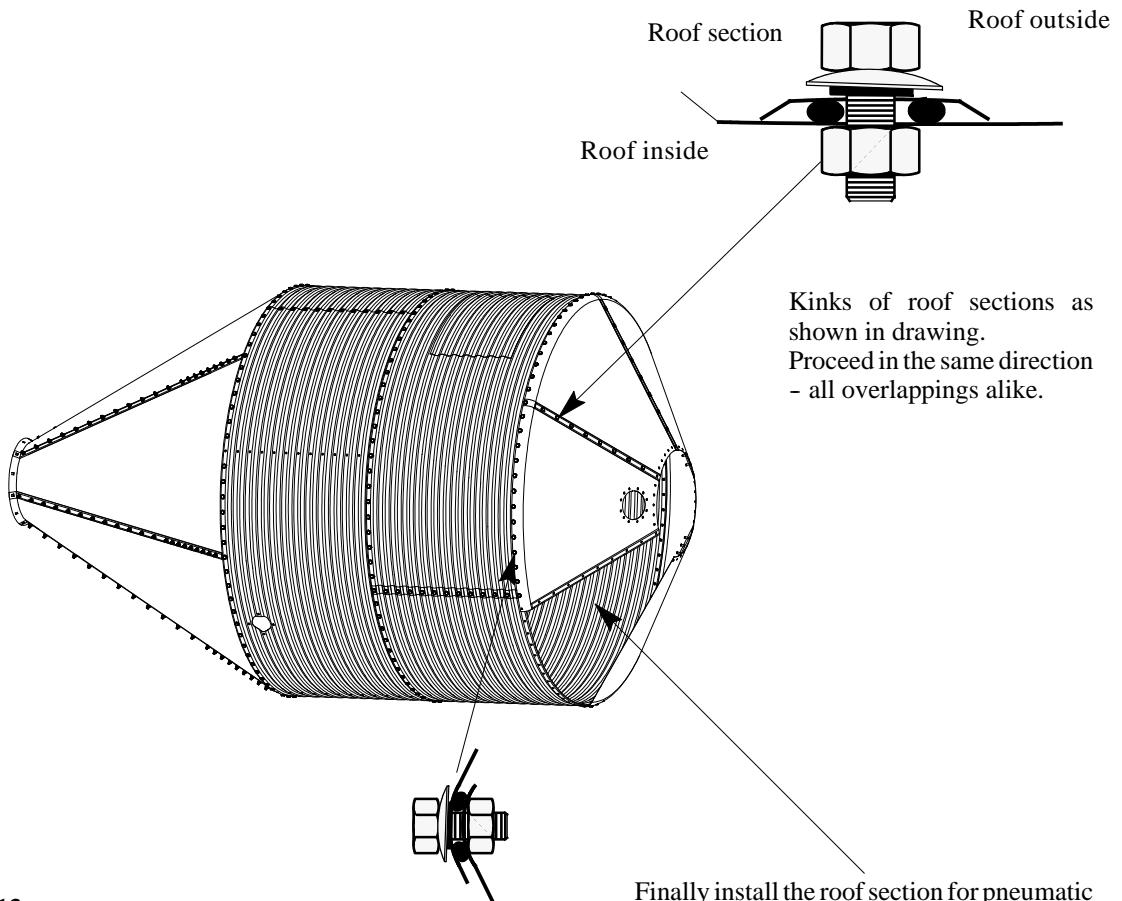


FIGURE 13.

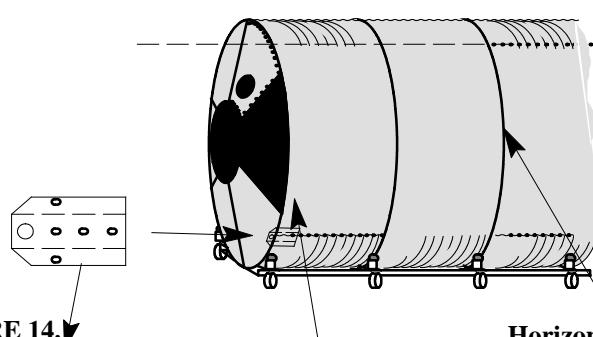


FIGURE 14.

i If you want a "Bin Set Up Kit" or roof ladder on your bin, now is the time to install it !

TIGHTEN ALL BOLTS (FIRST THOSE IN THE HORIZONTAL SEAMS) FROM THE CENTER (SLOT HOLE) OF EACH SECTION AT THE NUT SIDE.

END RESULT

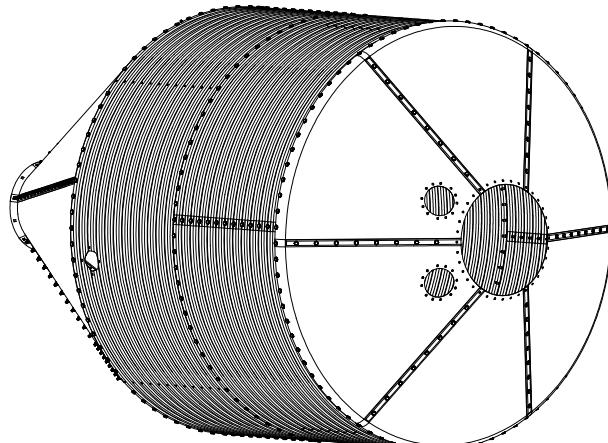
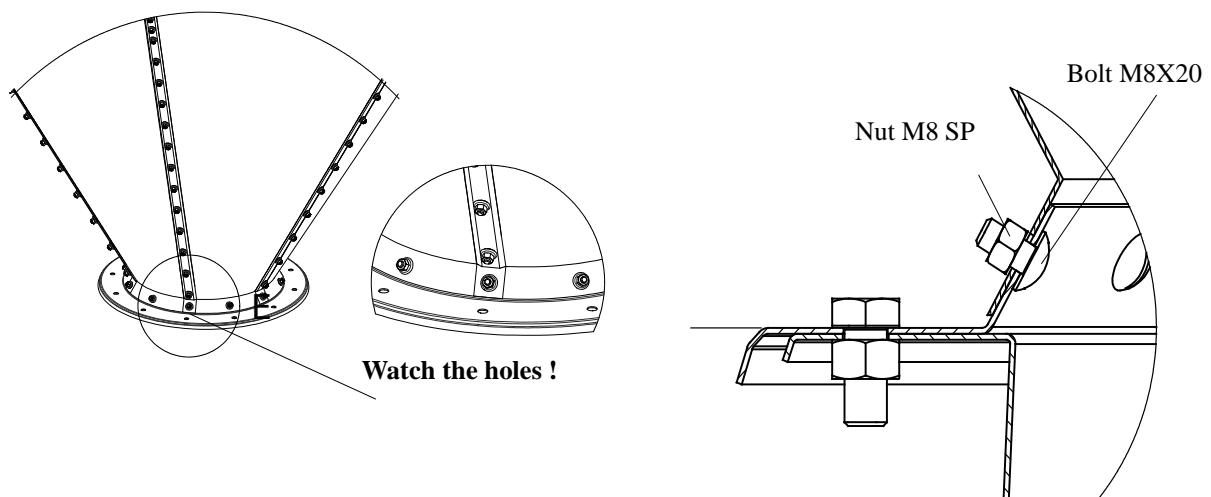
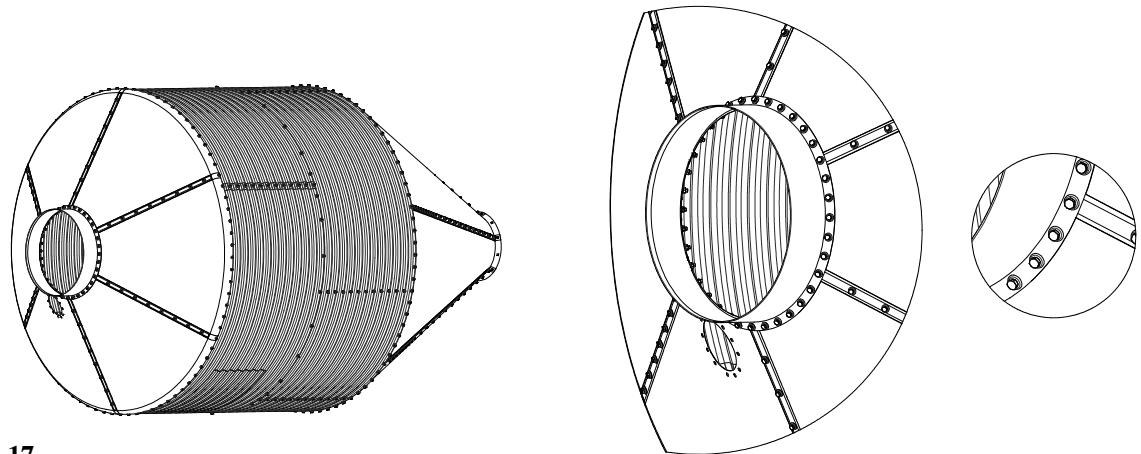
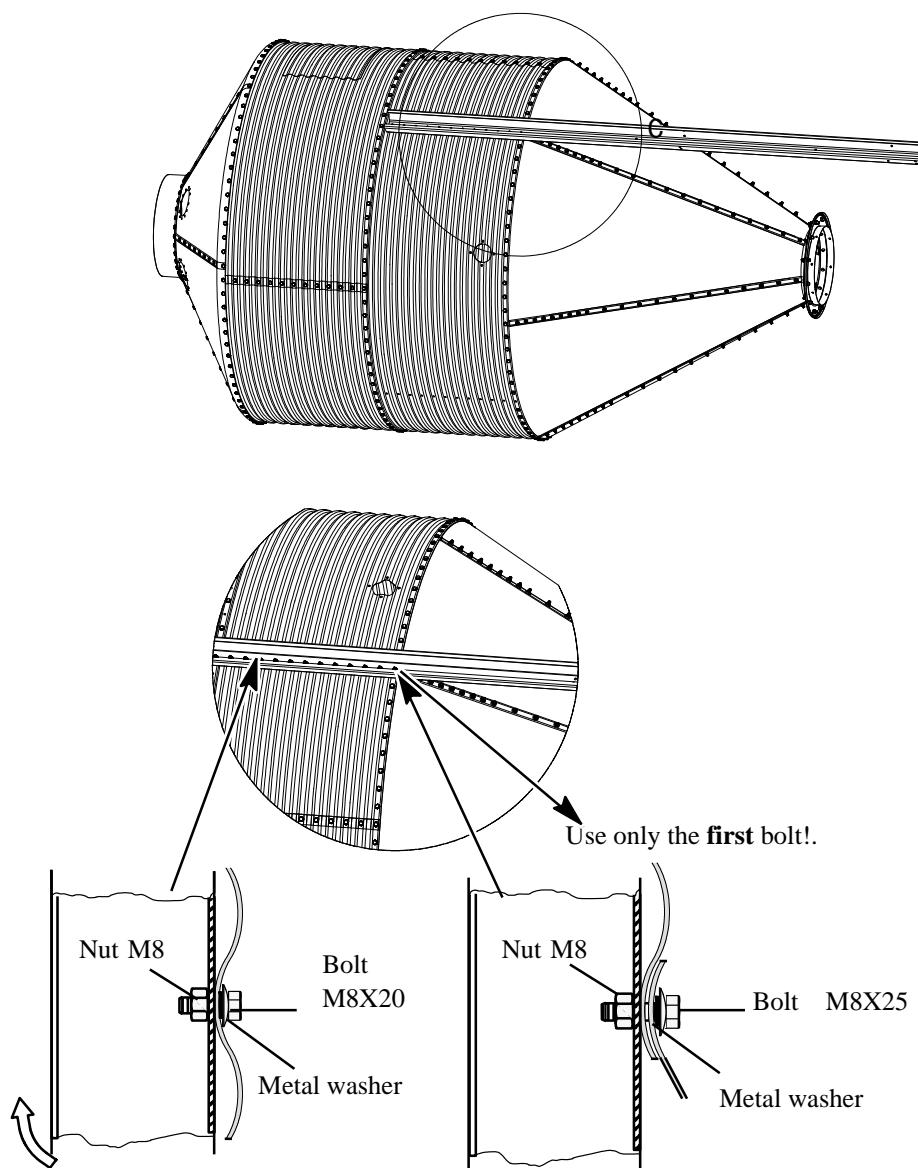
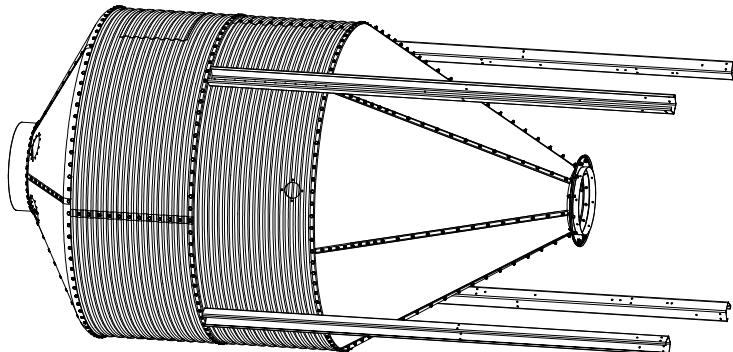


FIGURE 15.

TO INSTALL THE COLLAR TO THE INTEGRATED HOPPER COLLAR**FIGURE 16.****BOLT CONNECTION FOR FILLING COLLAR****FIGURE 17.**

TO INSTALL THE BIN LEGS**FIGURE 18.****TO INSTALL THE BIN LEGS****FIGURE 19.**

TO INSTALL THE BIN LEGS

Tighten bolts and nuts **after installing all braces !!!**

FIXED TO BODY

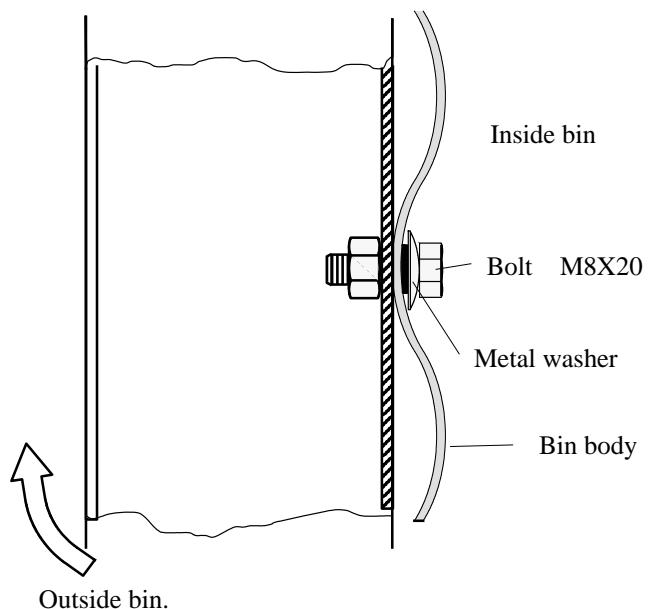


FIGURE 20.

FIXED TO BODY/HOPPER JOINT.

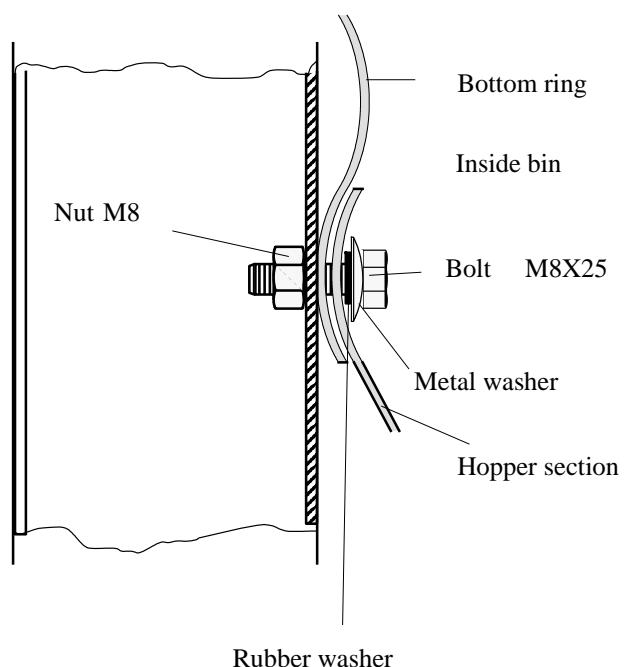
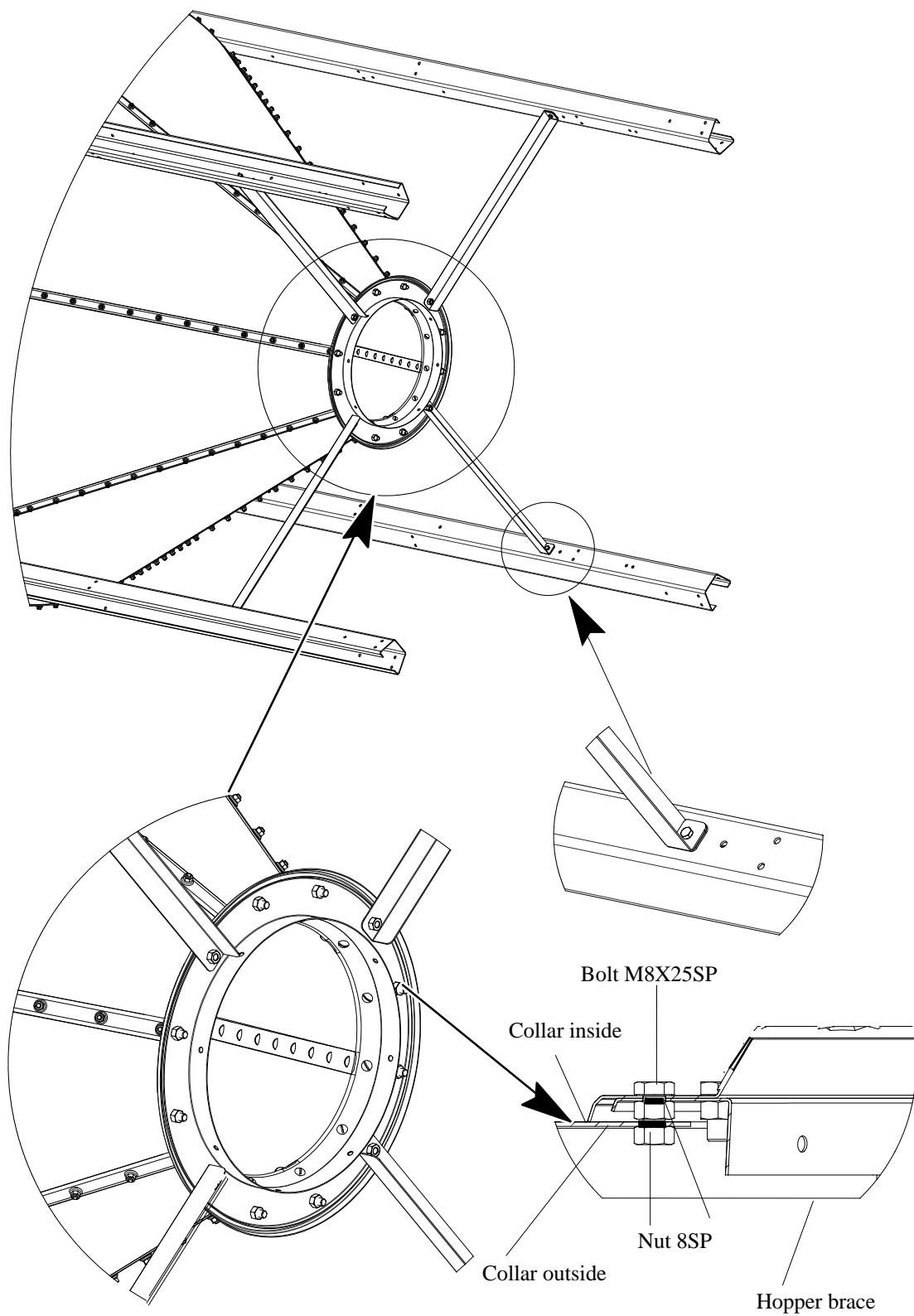


FIGURE 21.

TO INSTALL THE HOPPER BRACES**FIGURE 22.**

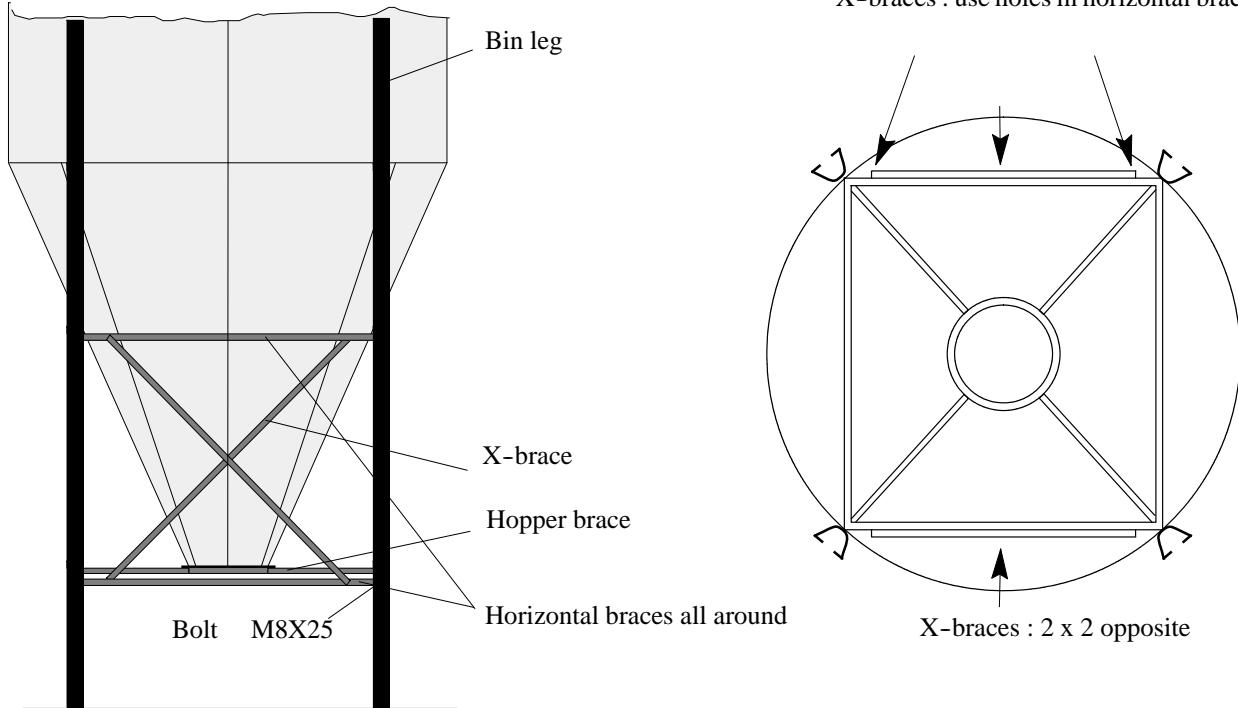
TO INSTALL THE HORIZONTAL BRACES AND THE X-BRACES

Ø 1.8M/2.1M

At the spot where you want the ladder, install the ladder standoff rail together with the horizontal brace.

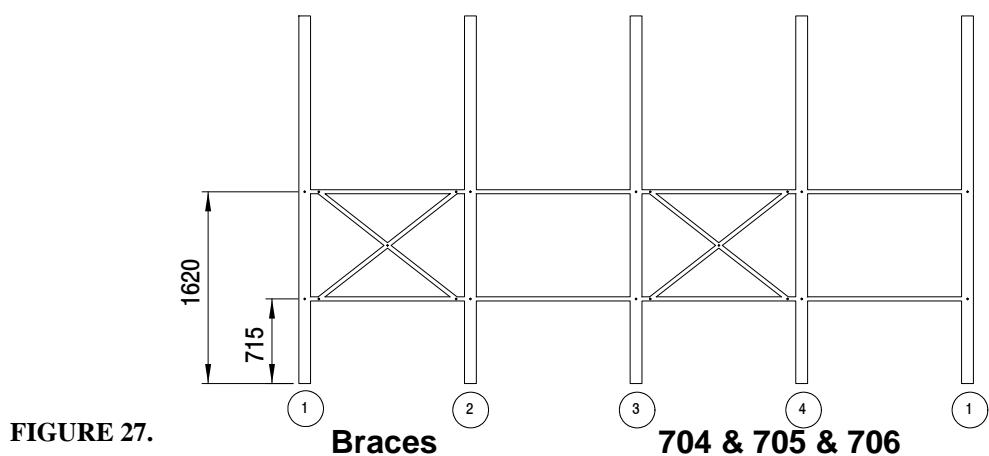
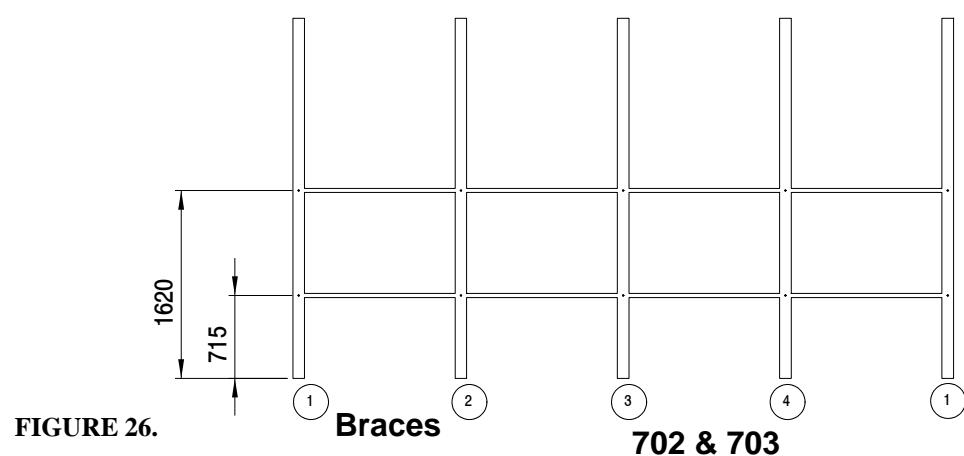
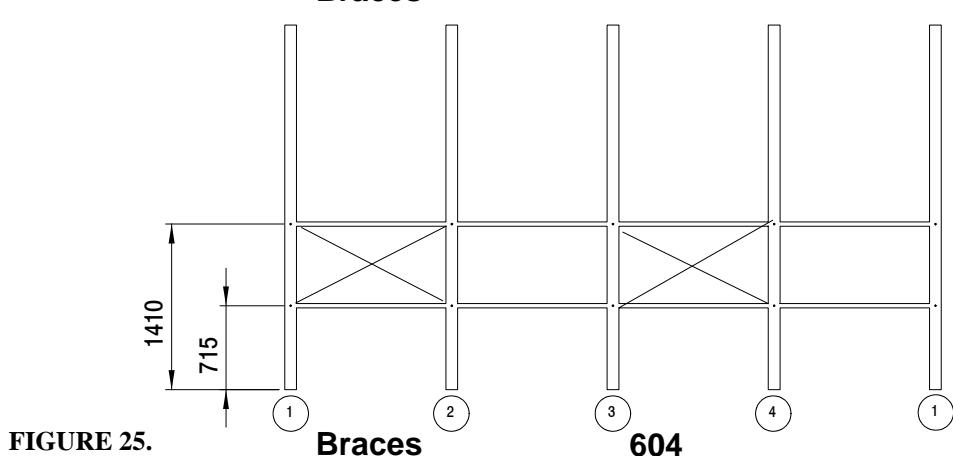
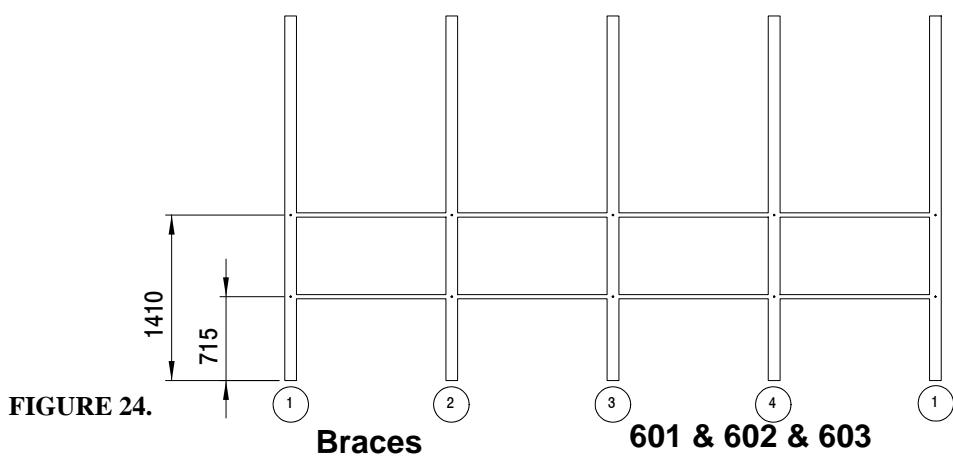
BOTTOM VIEW

X-braces : use holes in horizontal braces



Tighten bolts and nuts after installing all braces. Fix both inlet and exhaust pipes to the horizontal braces with the two appropriate braces supplied.

FIGURE 23.

OVERVIEW BRACES

POSITION OF THE FASTENING BRACES

Through each fastening brace, screw 1 self drilling screw into the inlet pipe.

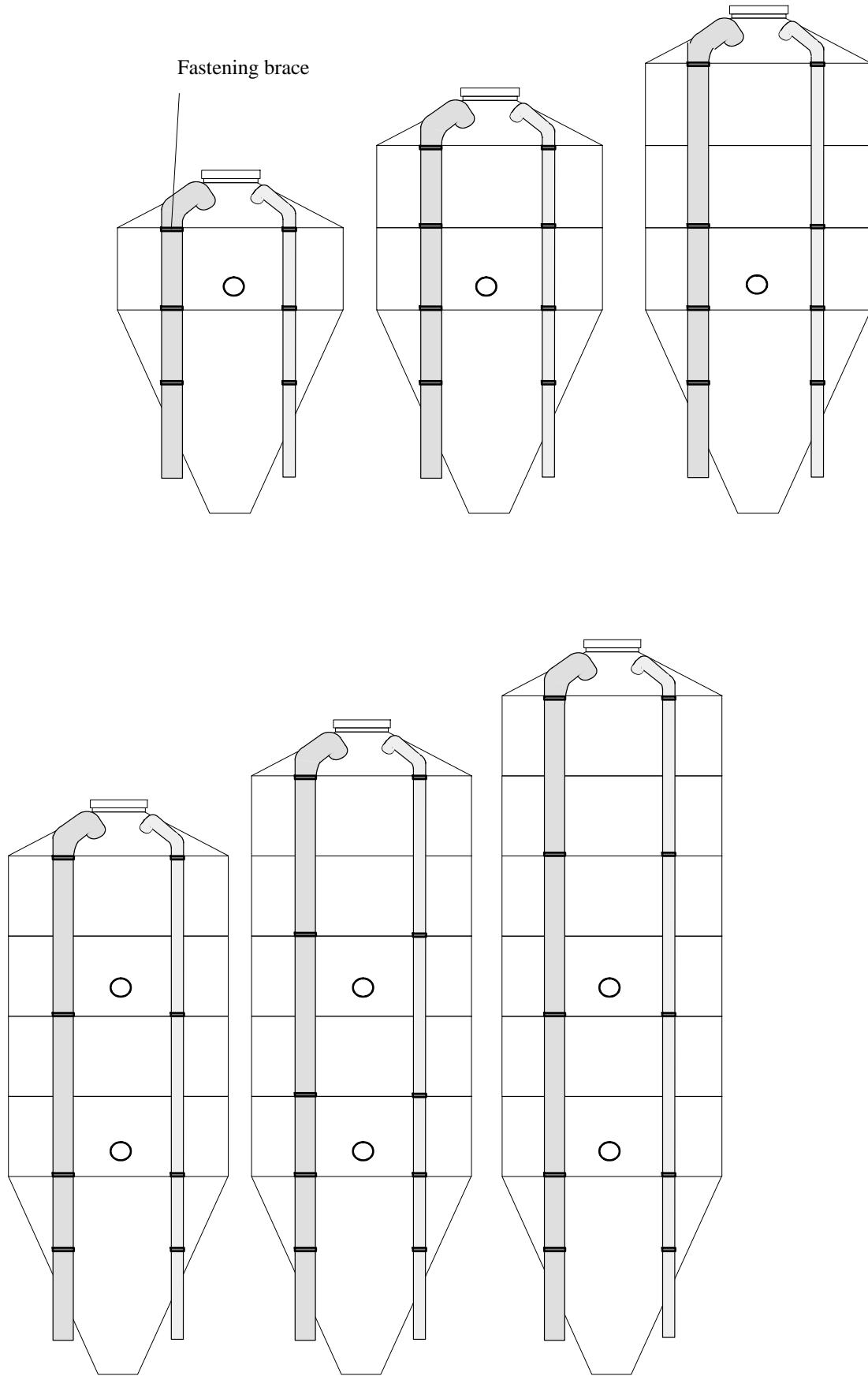


FIGURE 28.

POSITION OF INLET/EXHAUST PIPES - BIN LEGS

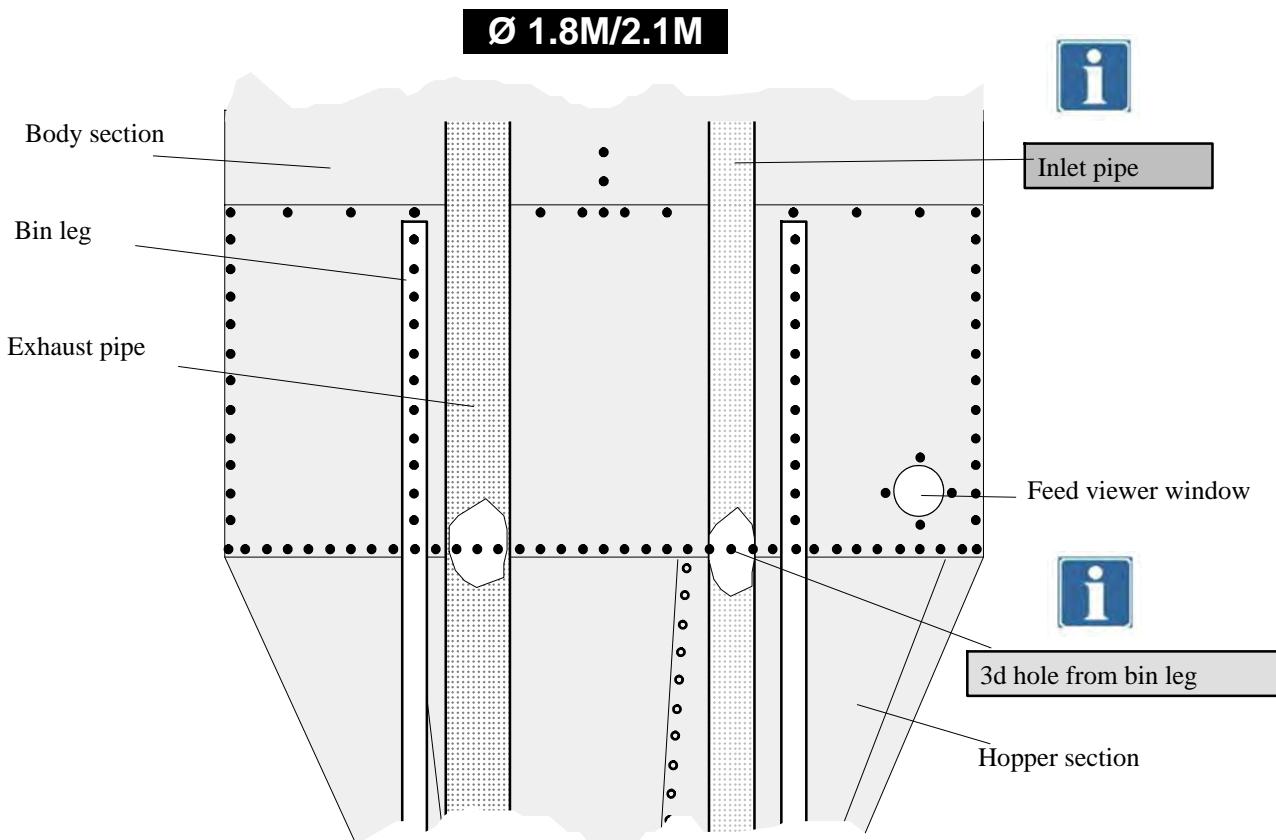


FIGURE 29.

TO INSTALL THE HOPPER VALVE (OPTION)

1. Stick decal at the desired location.
2. Cut hole in hopper section and remove burrs.
DO NOT USE A GRINDING WHEEL : IT COULD MELT THE GALVANIZING !
3. Drill 17 holes Ø9mm.
4. Put 1 row of caulking on both sides of the holes and install the hopper valve.

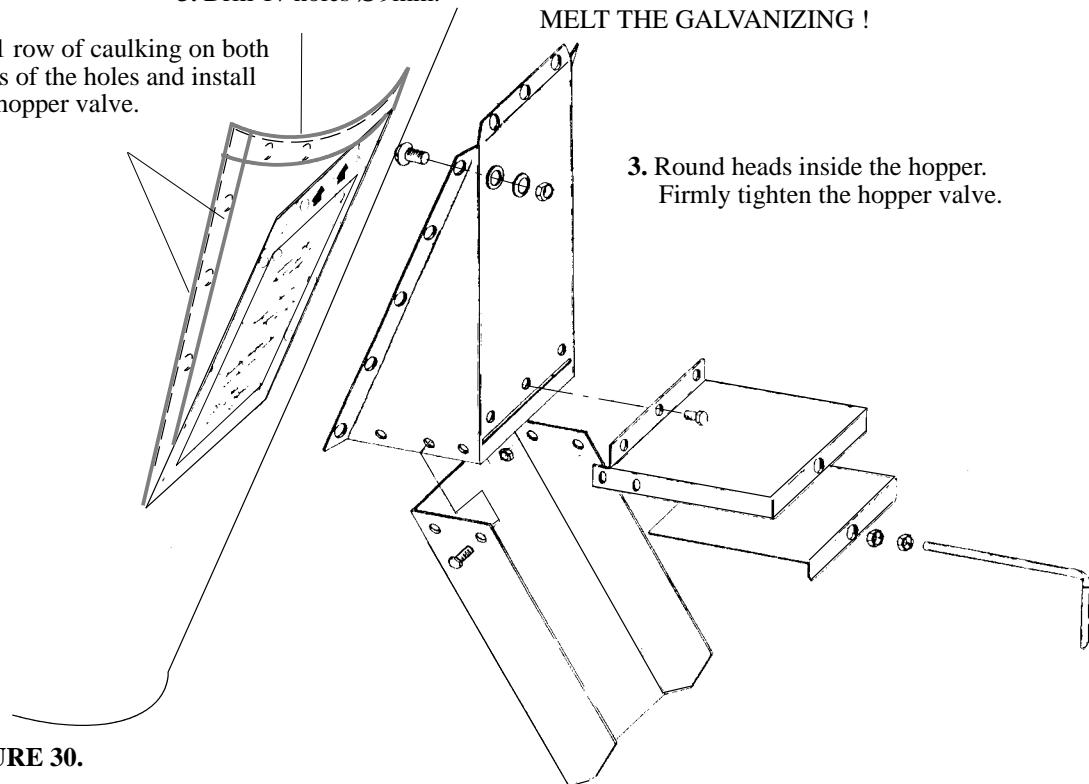
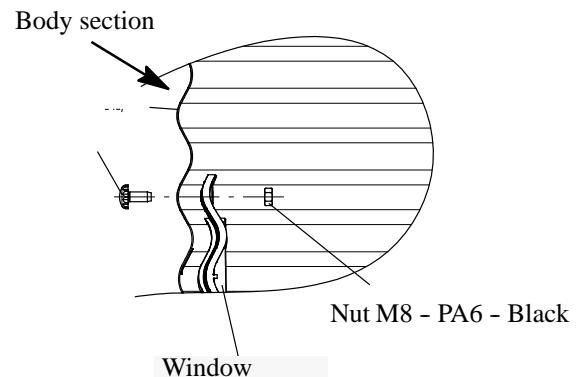
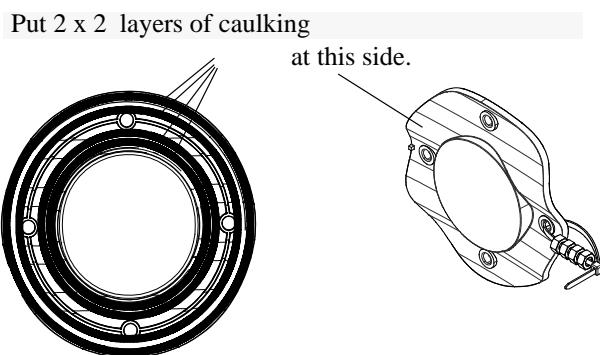


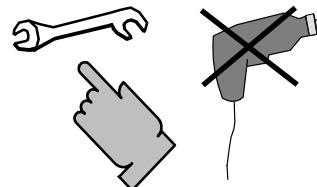
FIGURE 30.

TO INSTALL THE FEED VIEWER WINDOW

IN BODY

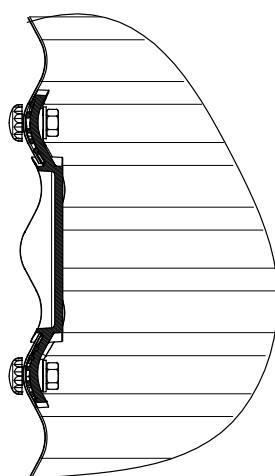


Stretching manually

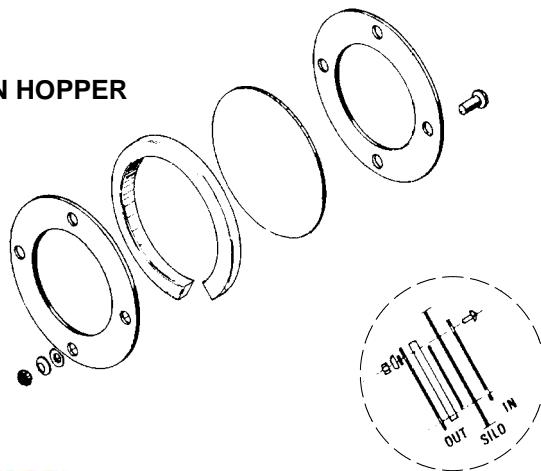


Outside bin

Inside bin



IN HOPPER



Stretching manually

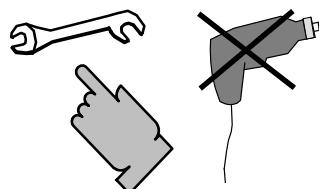


FIGURE 31.

TO INSTALL THE INLET/EXHAUST PIPES

- Fix the exhaust pipe flange to the roof section pneumatic exhaust.

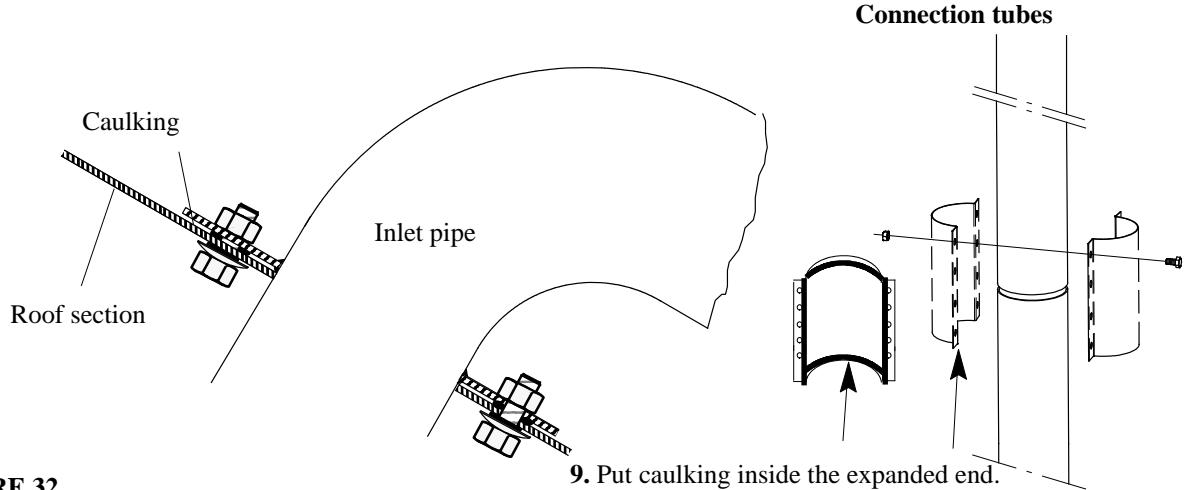
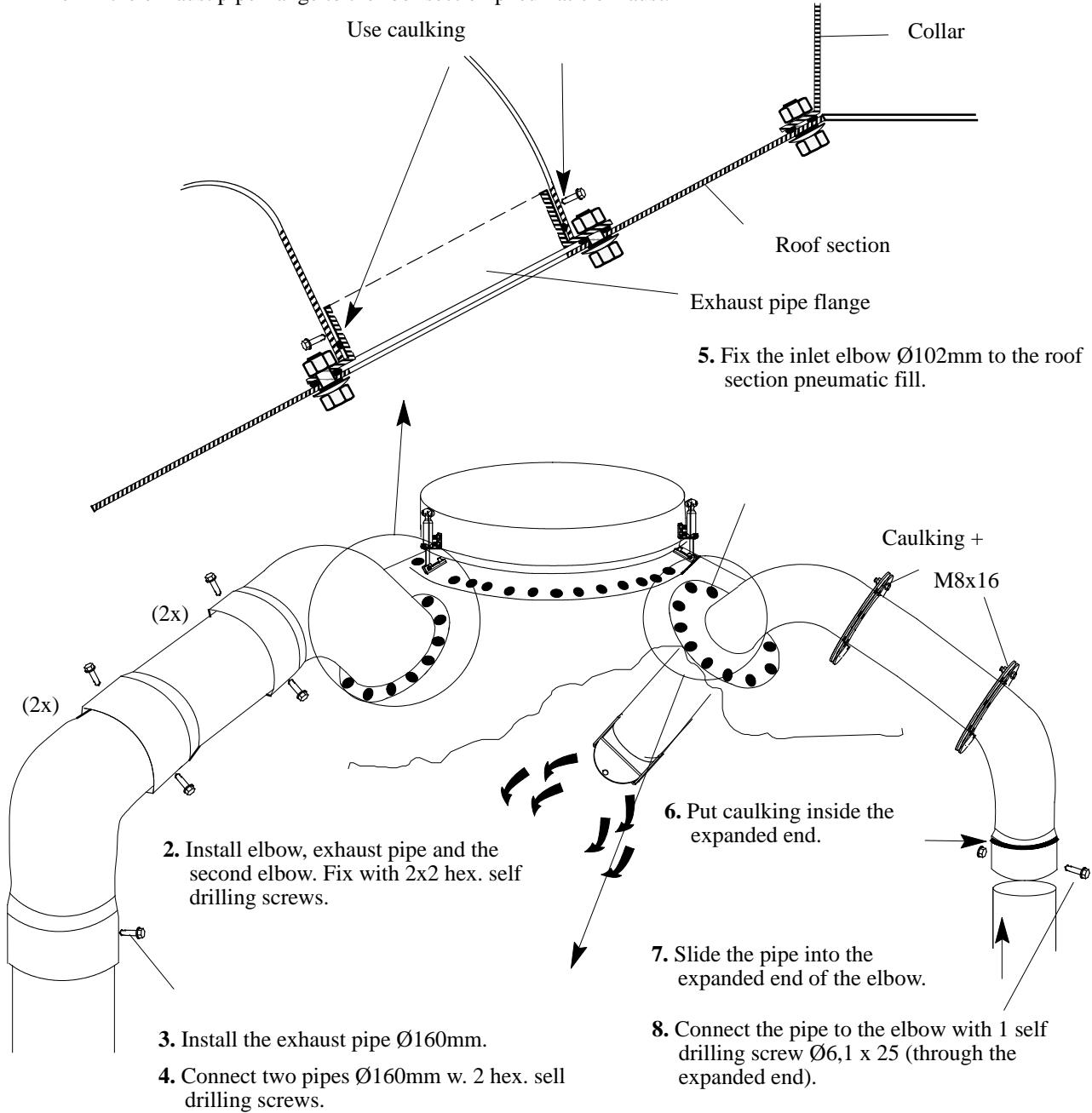
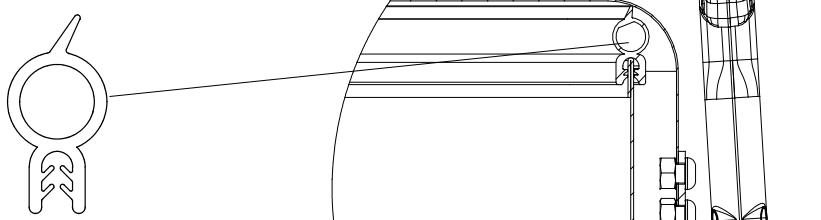


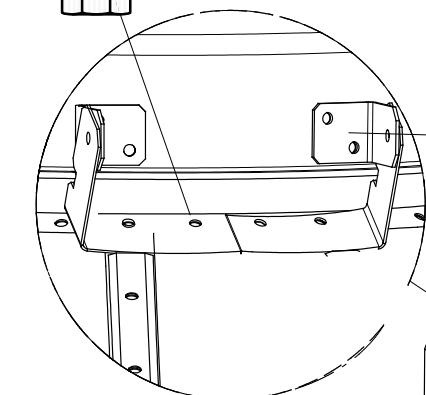
FIGURE 32.

TO INSTALL THE COVER (PNEUMATIC FILLING)

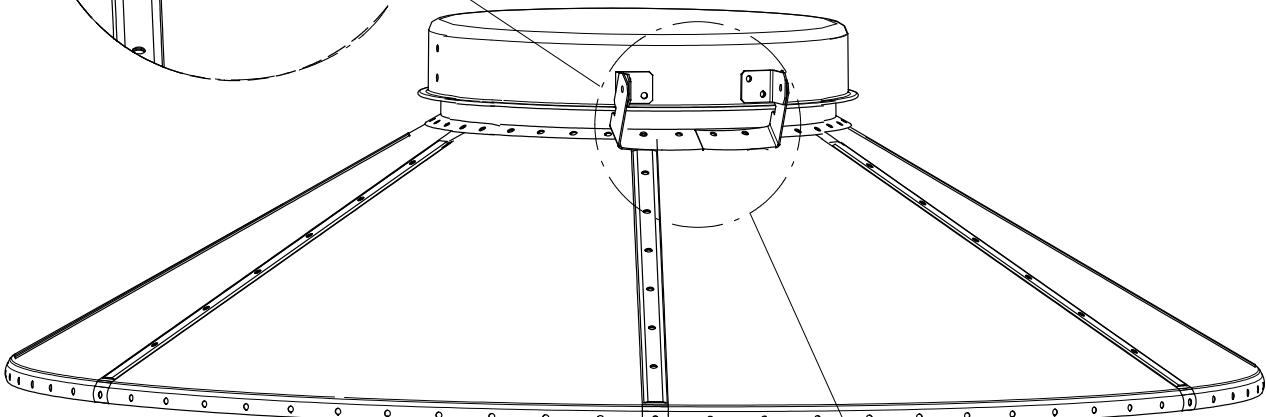
1. With the *combination pneumatic/mechanical filling*, the rubber clip must be fixed firmly on the collar.
5. Put the cover on the collar, then fix with the 3 clamping hooks.



2. Assemble the hinge to the roof section and the adjustment collar.



3. Fasten the cover hinge to the cover.



4. Put the hinge for the spring lock.

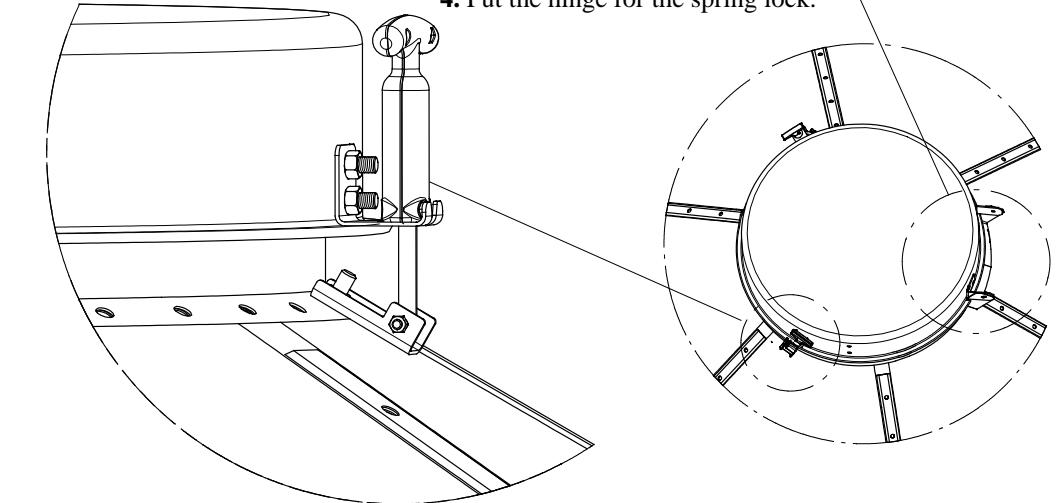


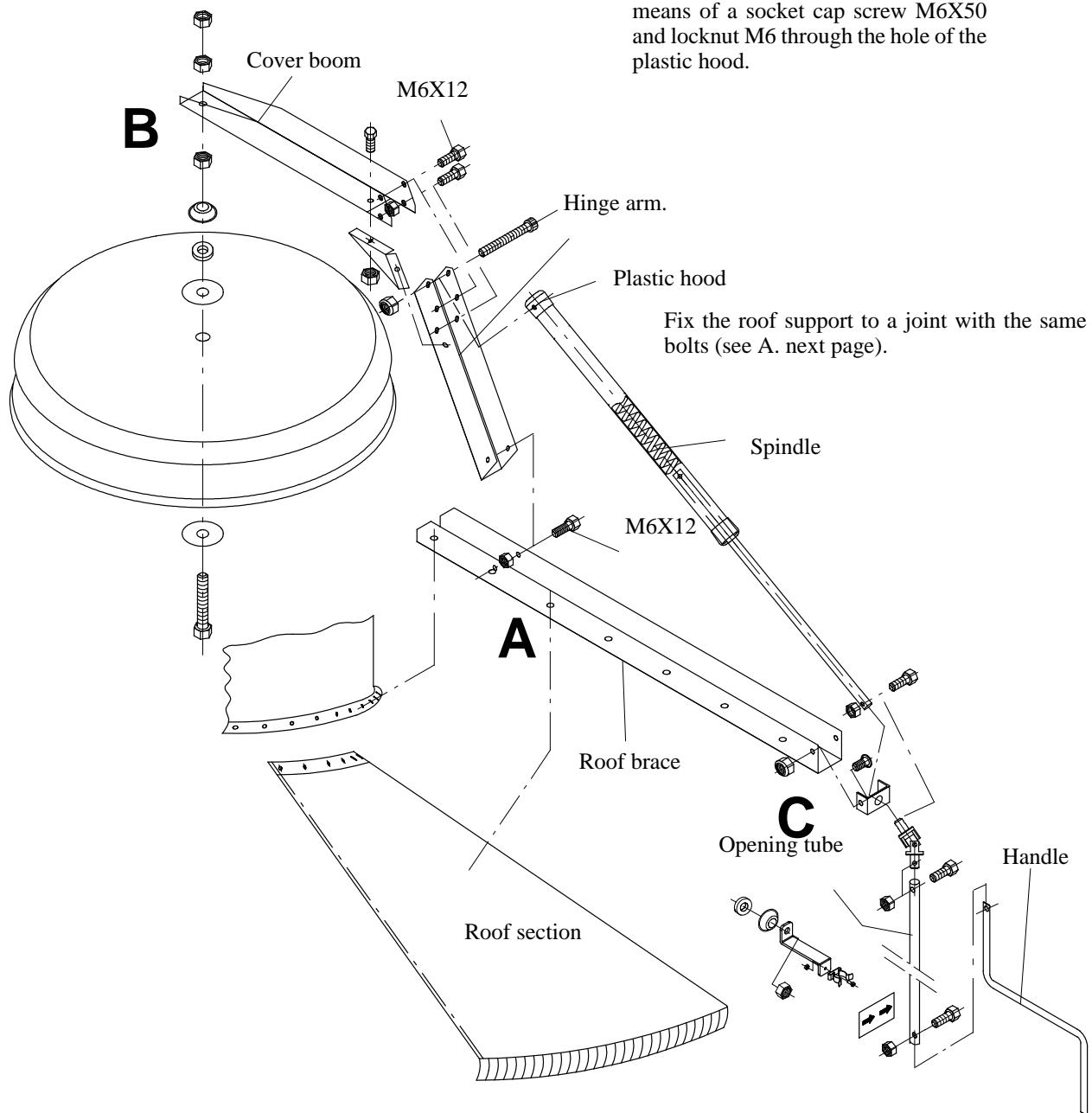
FIGURE 33.

TO INSTALL THE COVER (MECHANIC FILLING)

Fix the cover boom to the hinge arm by means of 4 bolts M6X12 and nuts.

Make a hinged connection of this assembly with the roof brace by means of bolts M6X12 and locknut M6.

Connect the spindle to the hinge arm by means of a socket cap screw M6X50 and locknut M6 through the hole of the plastic hood.

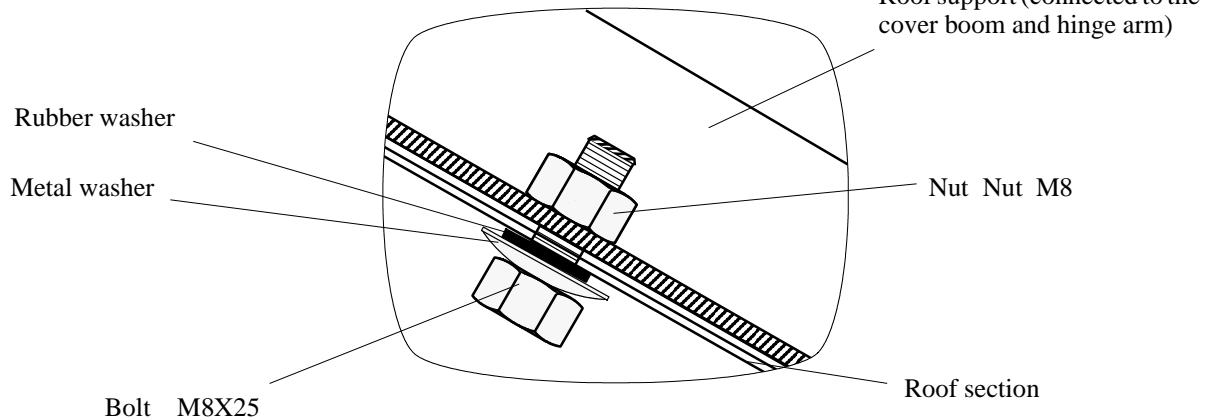
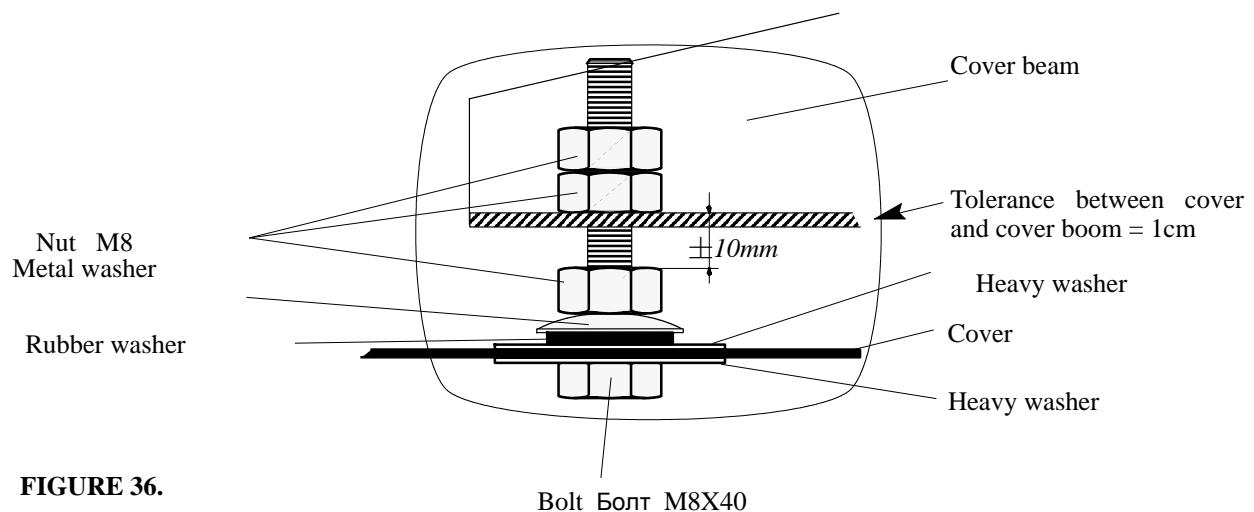
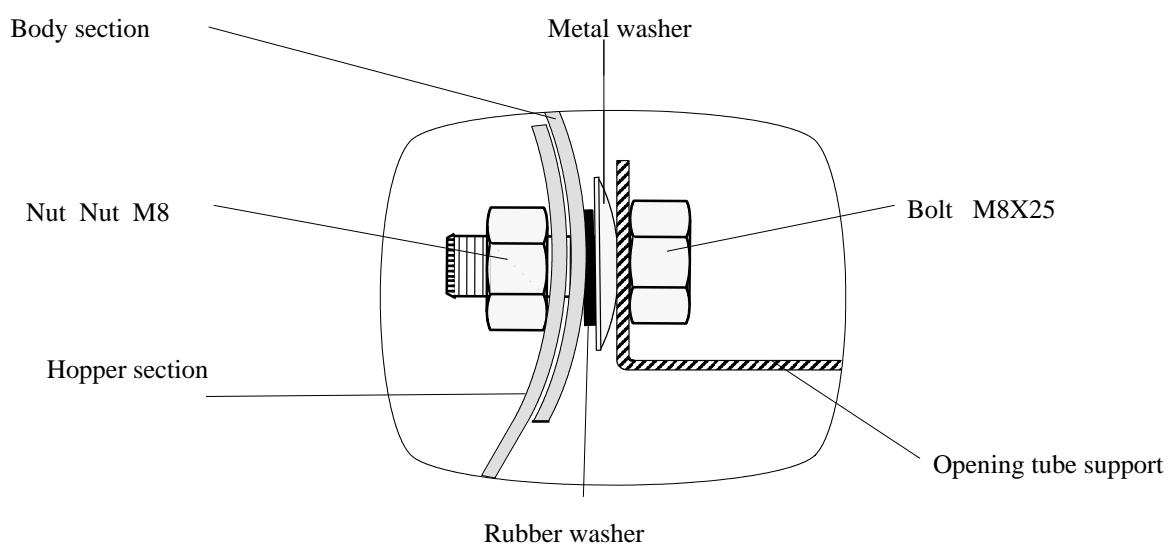


Adapt the length of the opening tube. Connect the handle by means of bolt M6X20 and nut.

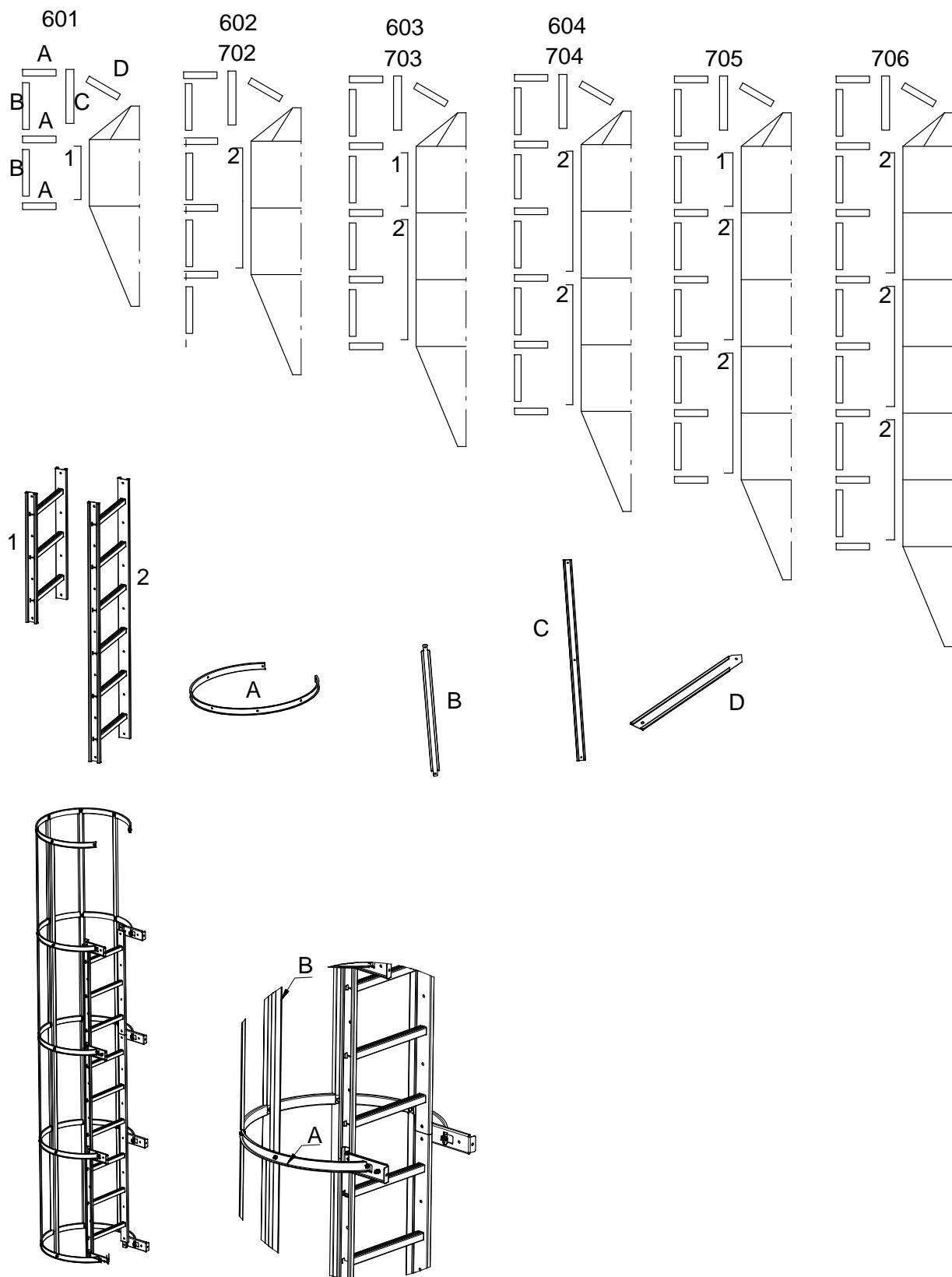
FIGURE 34.

A. FIXING THE ROOF SUPPORT TO THE ROOF SECTION

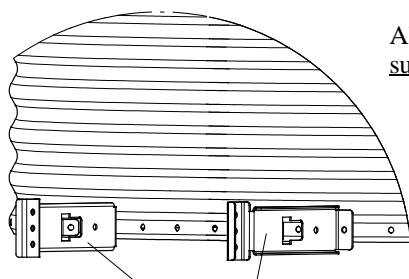
Put the complete assembly on to a roof section joint.

**FIGURE 35.****B. FIXING THE COVER TO THE COVER BEAM****FIGURE 36.****C. FIXING THE OPENING TUBE SUPPORT (BODY/HOPPER JOINT)****FIGURE 37.**

CHECK WHETHER THE SYSTEM OPERATES SATISFACTORY !!!

HOW TO ASSEMBLE THE LADDER**FIGURE 38.**

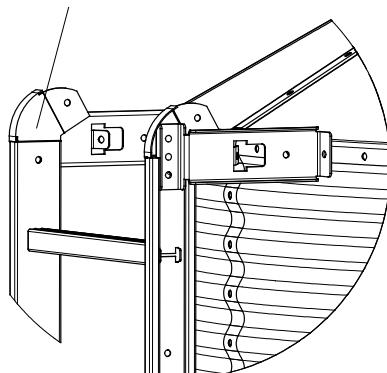
TO ASSEMBLE THE LADDER



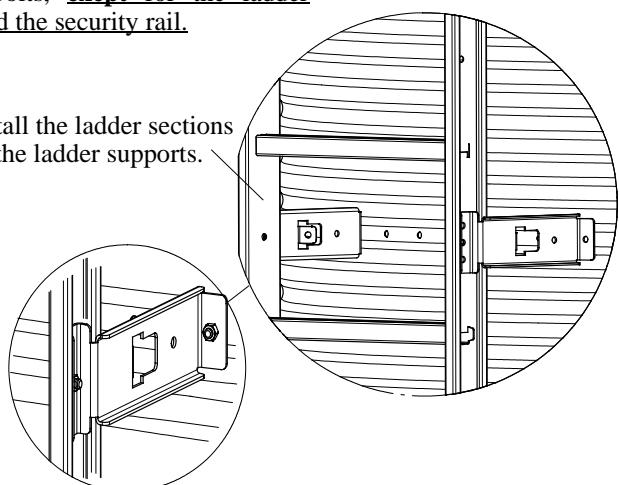
Always use M8x16 bolts, except for the ladder supports to the body and the security rail.

1. Install the ladder supports on the bin body (5 holes in between).

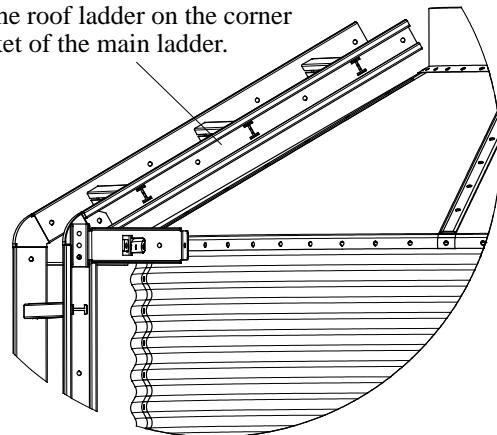
3. Install the corner bracket on top of the ladder.



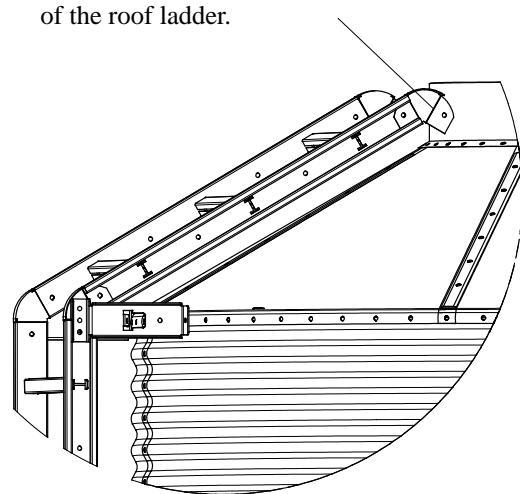
2. Install the ladder sections in the ladder supports.



4. Put the roof ladder on the corner bracket of the main ladder.



5. Mount the corner bracket at the end of the roof ladder.



6. Mount the connector on the roof ladder and the fill collar.

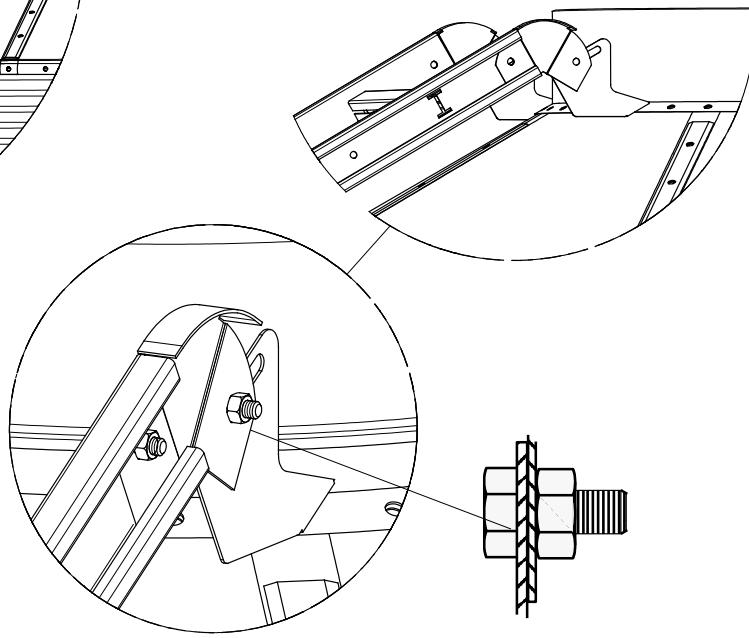


FIGURE 39.

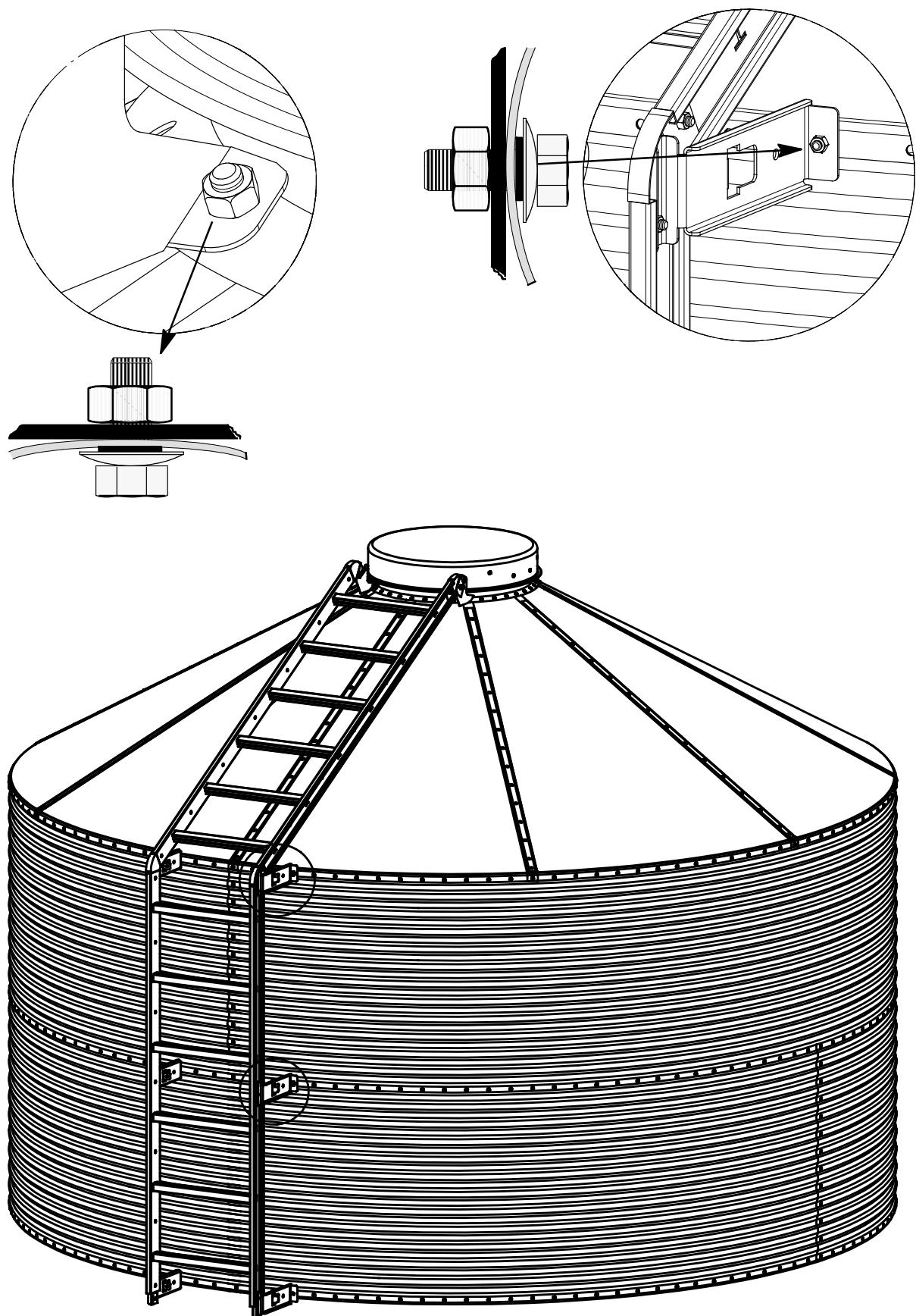
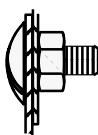


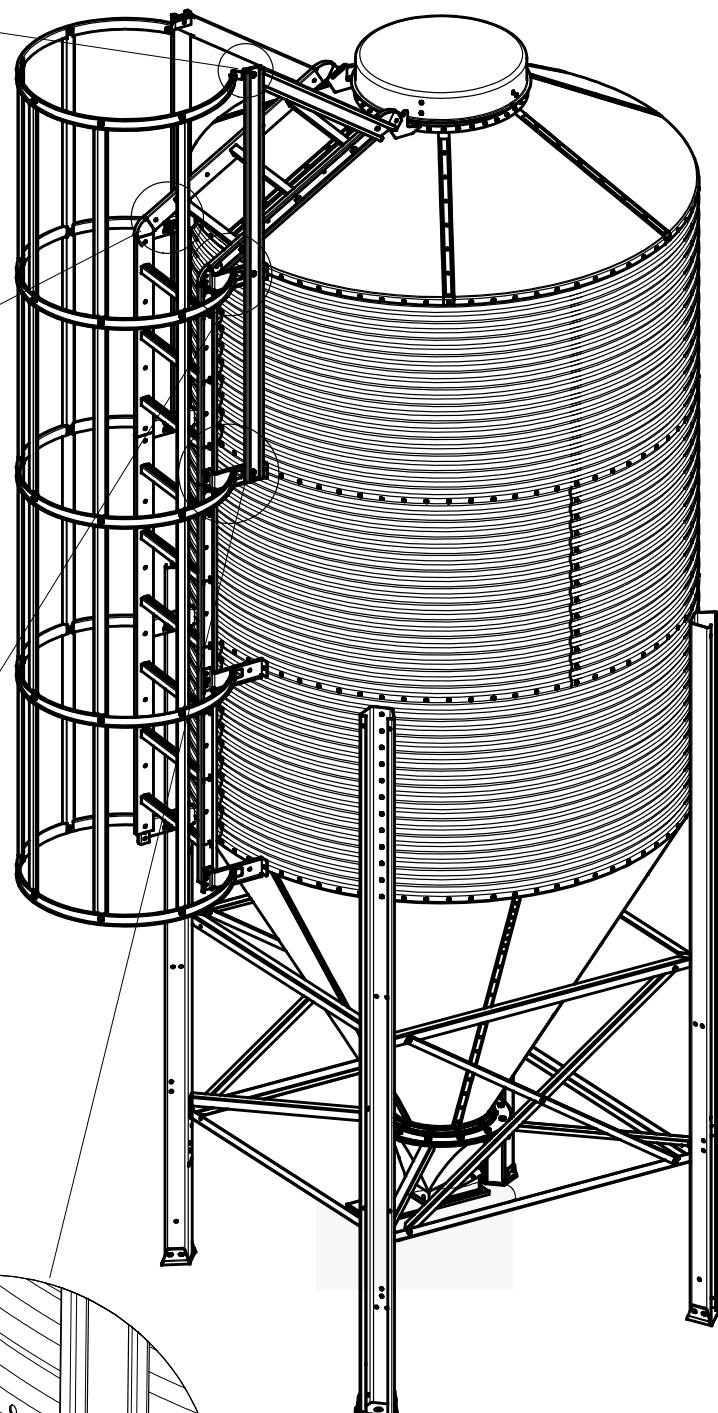
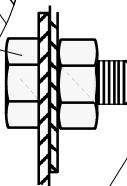
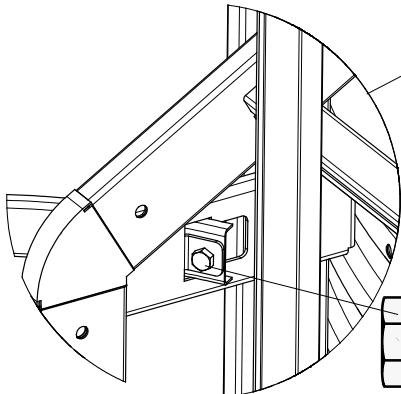
FIGURE 40.

TO INSTALL THE SAFETY CAGE

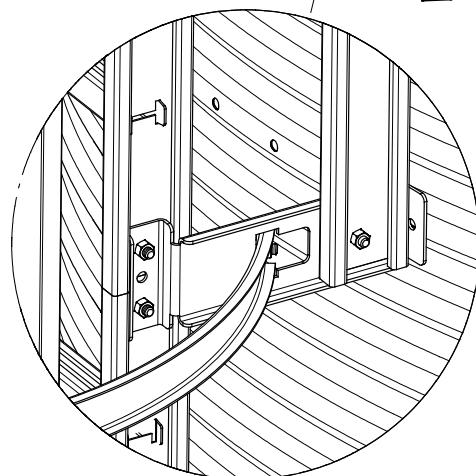
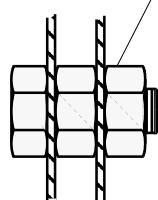
1. Mount the rings for safety cage on the ladder supports.



2. Mount the vertical supports on the safety cage rings.



3. Install the safety rail on the cage and the roof ladder.

**FIGURE 41.**

TO INSTALL THE ENTRY HATCH IN THE BOTTOM RING (OPTIONAL)

A. Put the frame at the desired spot and mark the hole.

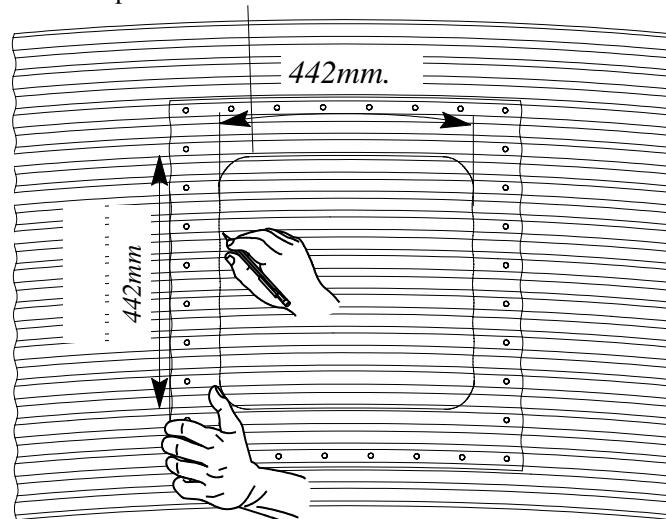


FIGURE 42.

B. Remove the frame and cut the hole with a nibbling machine or grinding wheel (outside the mark (max.10mm).

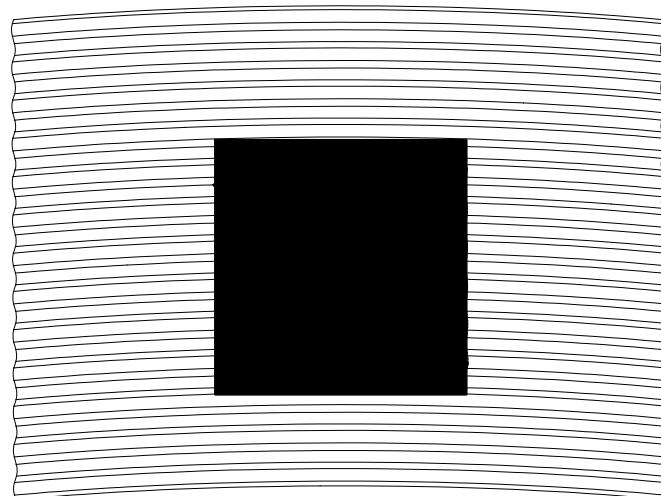


FIGURE 43.

C. Put 2 layers of caulking at the inside of the frame, on both sides of the holes.

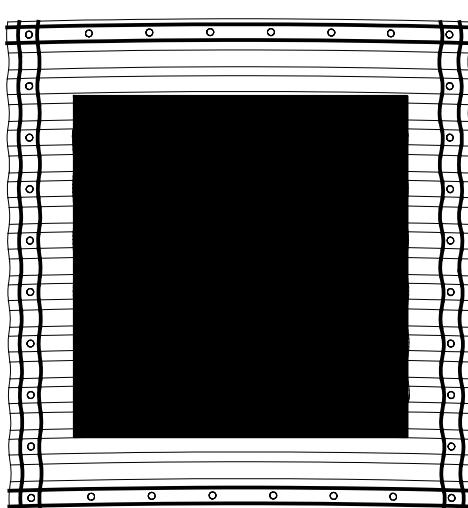


FIGURE 44.

D. Fix the frame with tightening screws on the outside of the bin ring and drill the holes.

E. Put 2 layers of caulking at the back of the sealing profile, on both sides of the holes (**1**).
Put 2 rows of caulking on the two side profiles.

F. Fix the sealing profile and the frame to the bin ring with bolt, nut and **4.** washers **5.** seal cap (**1**).

Caulking

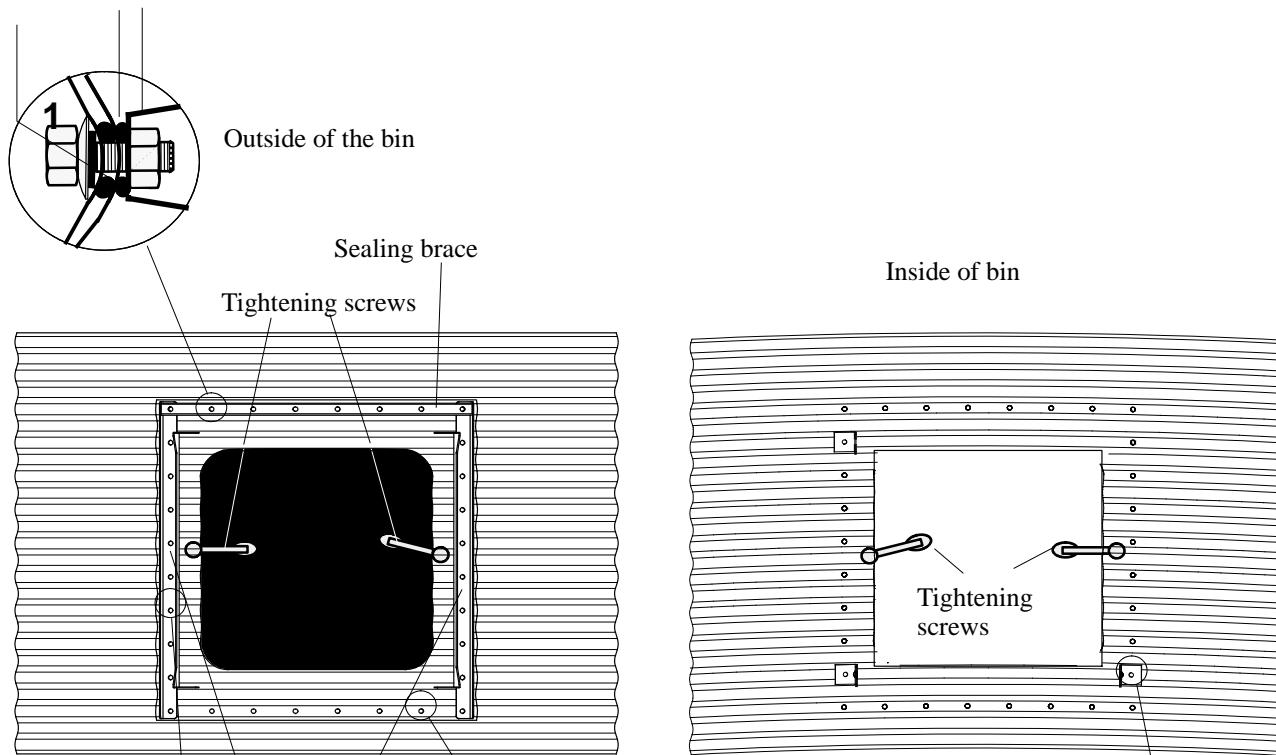
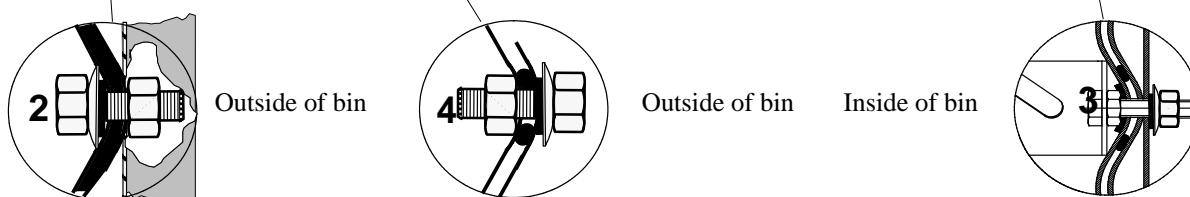


FIGURE 45.

FIGURE 46.



G. Fix both vertical reinforcement profiles (**2**), together with the two inner door hinges (**3**).

H. Fix the bottom side of the frame (**4**).

I. Fix the bottom side of the frame (**4**).

J. Install the inner door. When tightening the self-tapping screws, make sure that the door keeps somewhat tolerance (see detail).

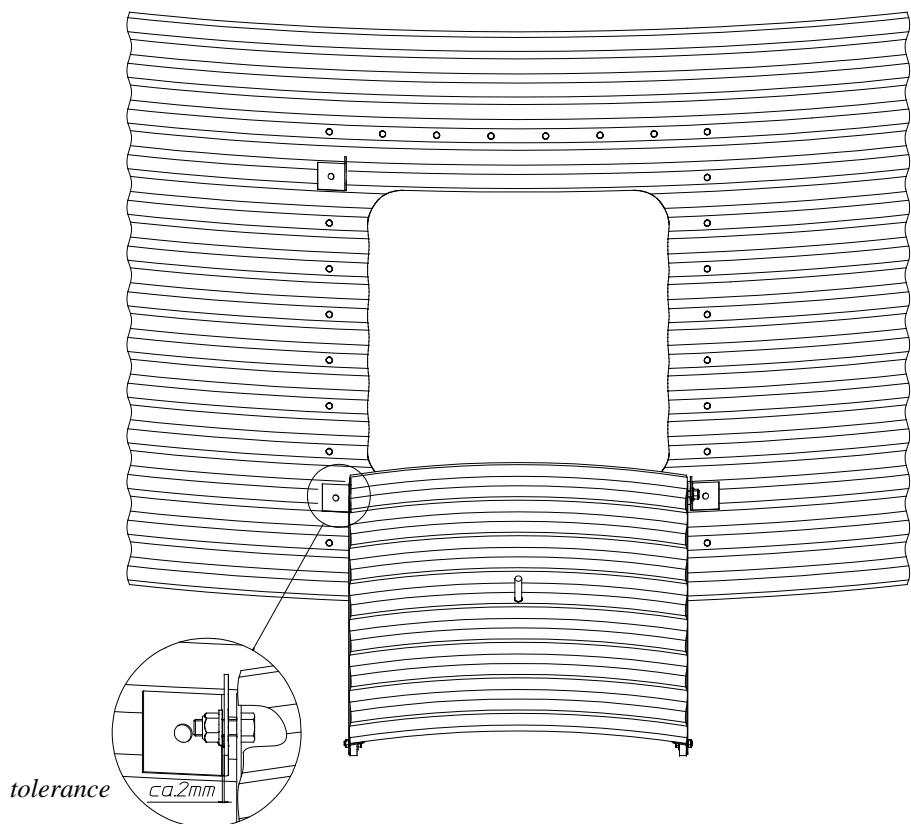
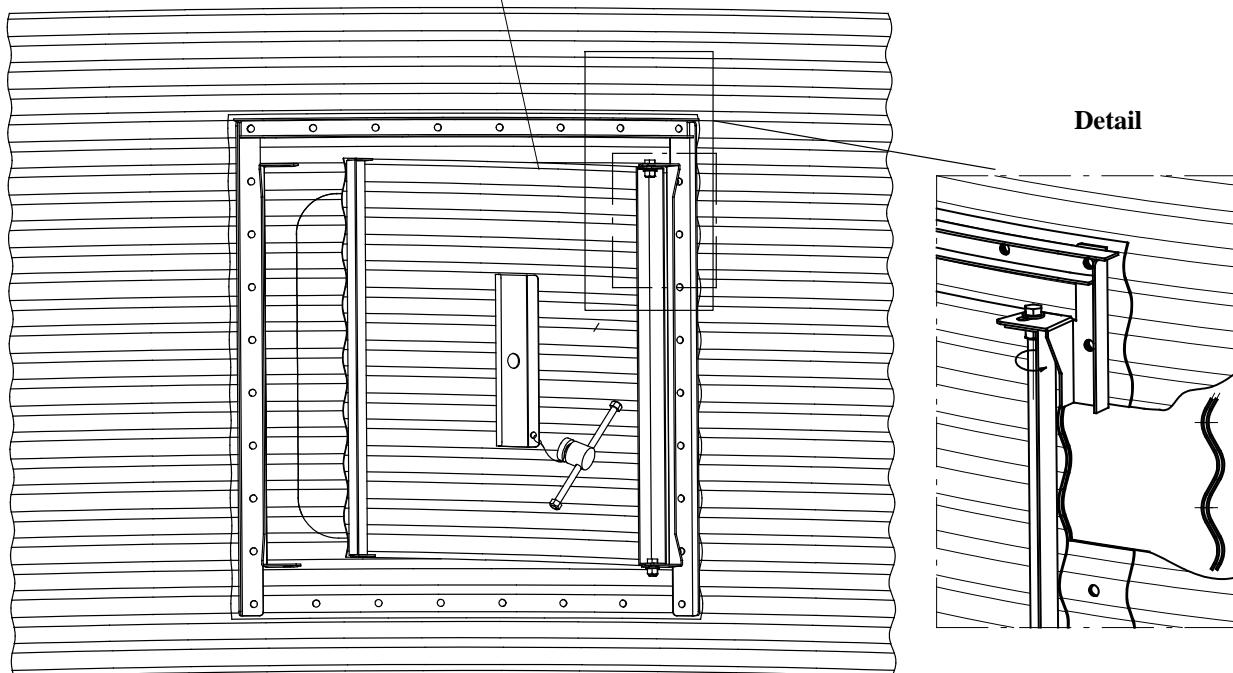


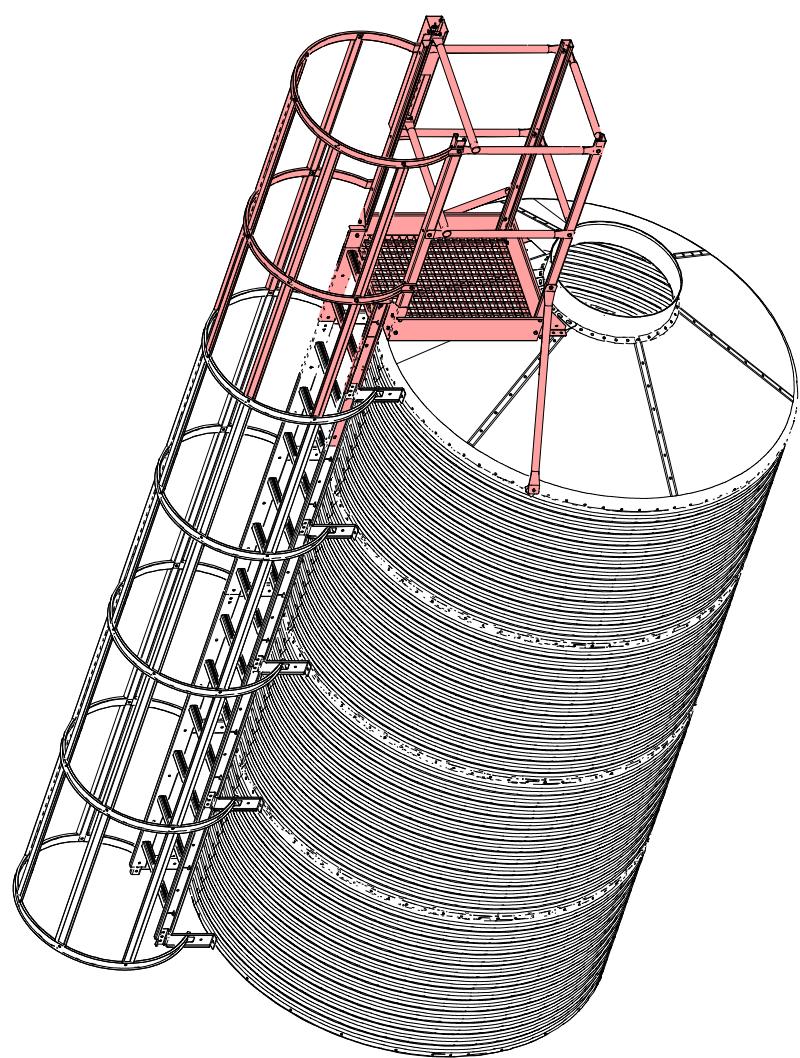
FIGURE 47.

K. Install the outer door (turning to the left or the right). Adjust the hinge points so that the corrugations of the outside door fit into the corrugations of the frame (see detail).



L. Successively close the inner and the outer door. Secure the lock by turning both doors against each other with the door-handle.

FIGURE 48.

SAFETY PLATFORM 1.8M & 2.1M**FIGURE 49.**

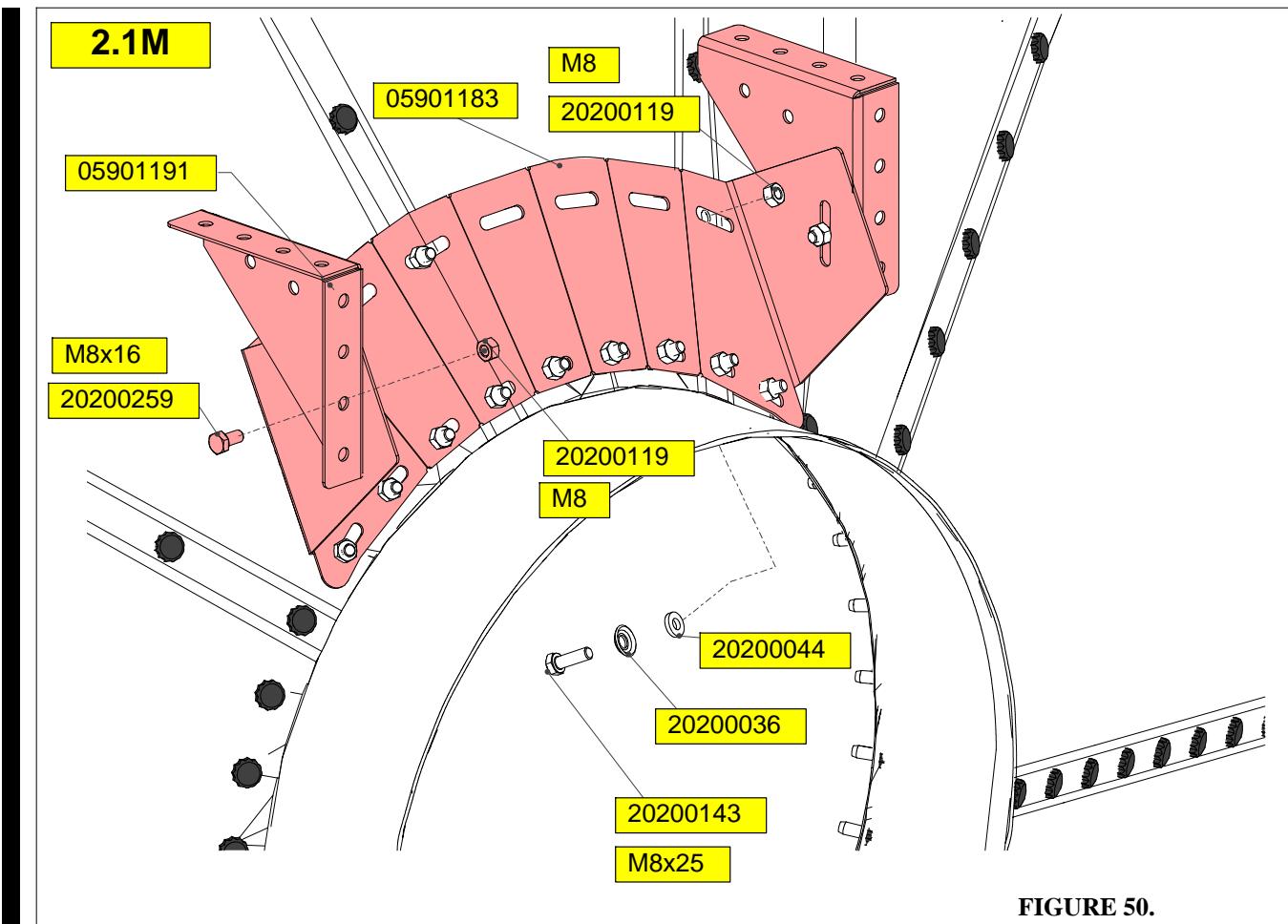


FIGURE 50.

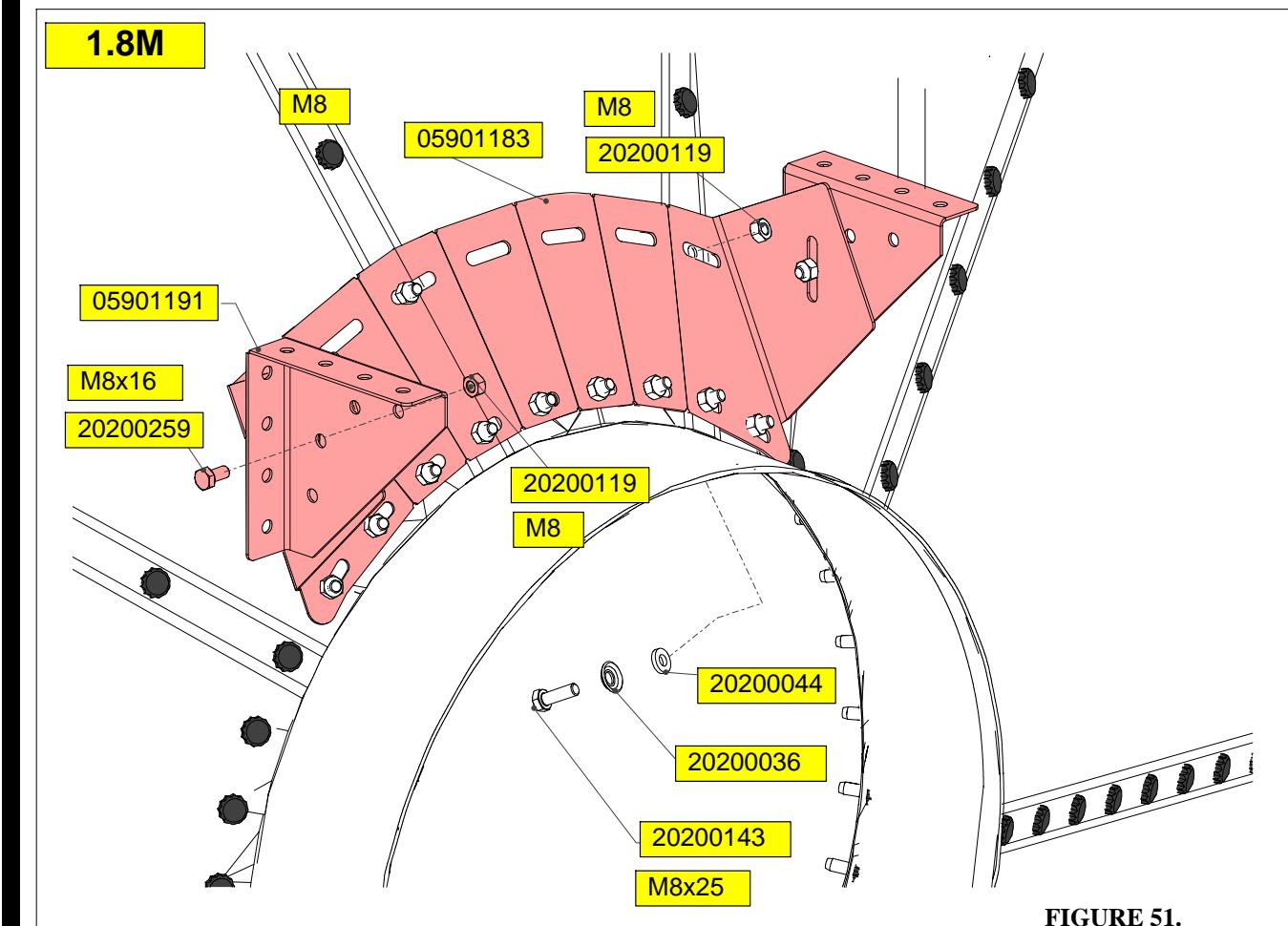


FIGURE 51.

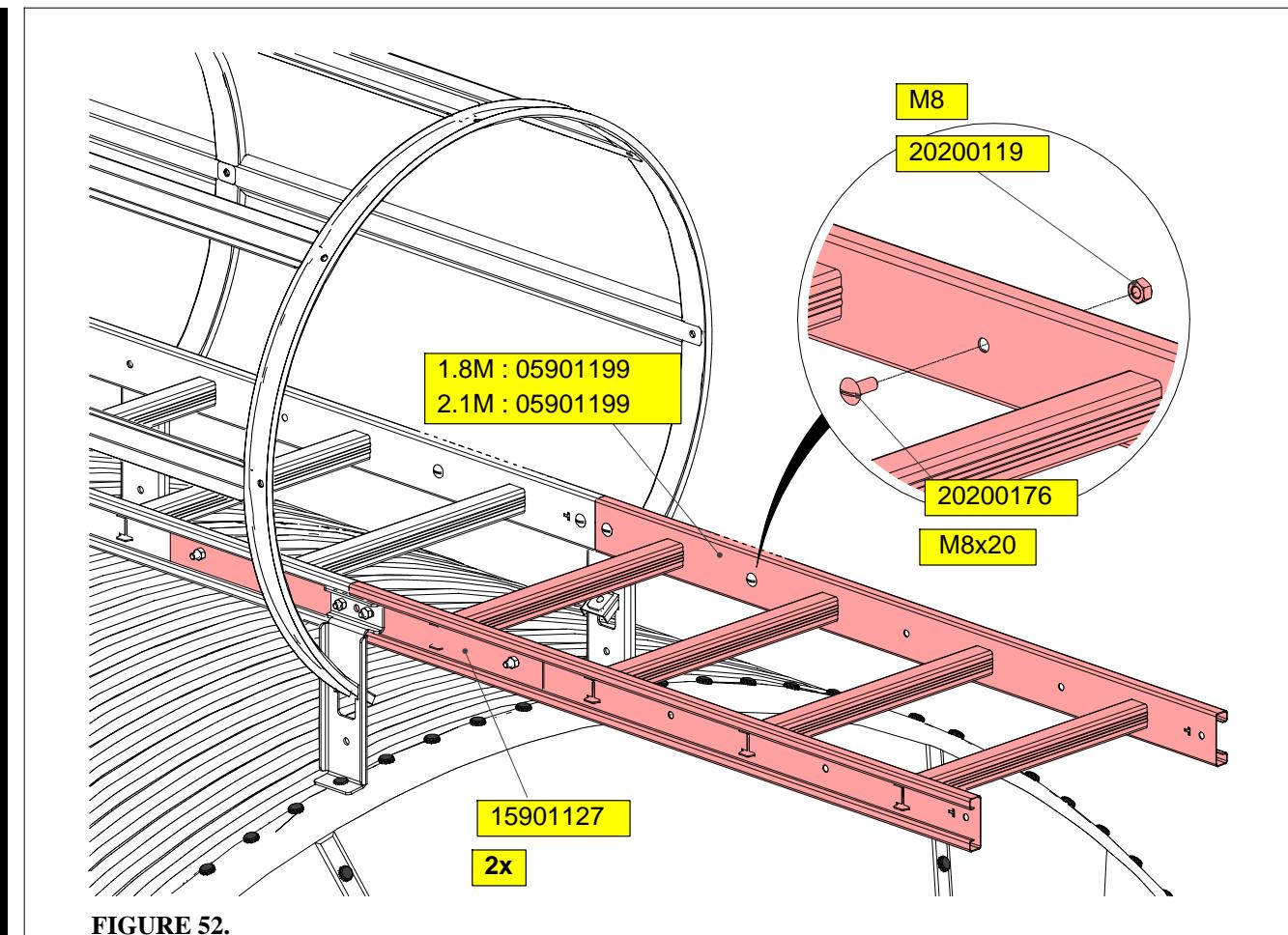


FIGURE 52.

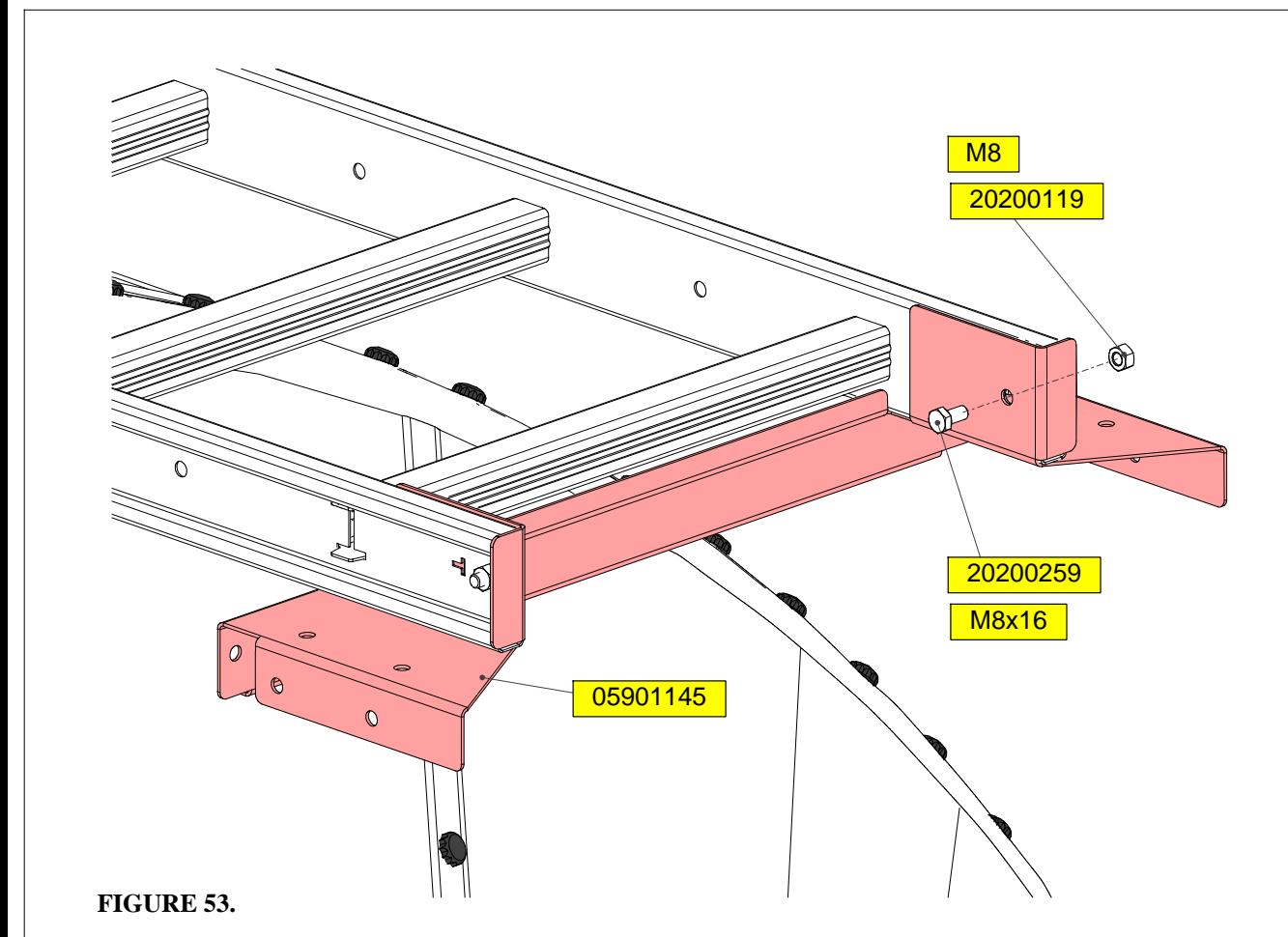
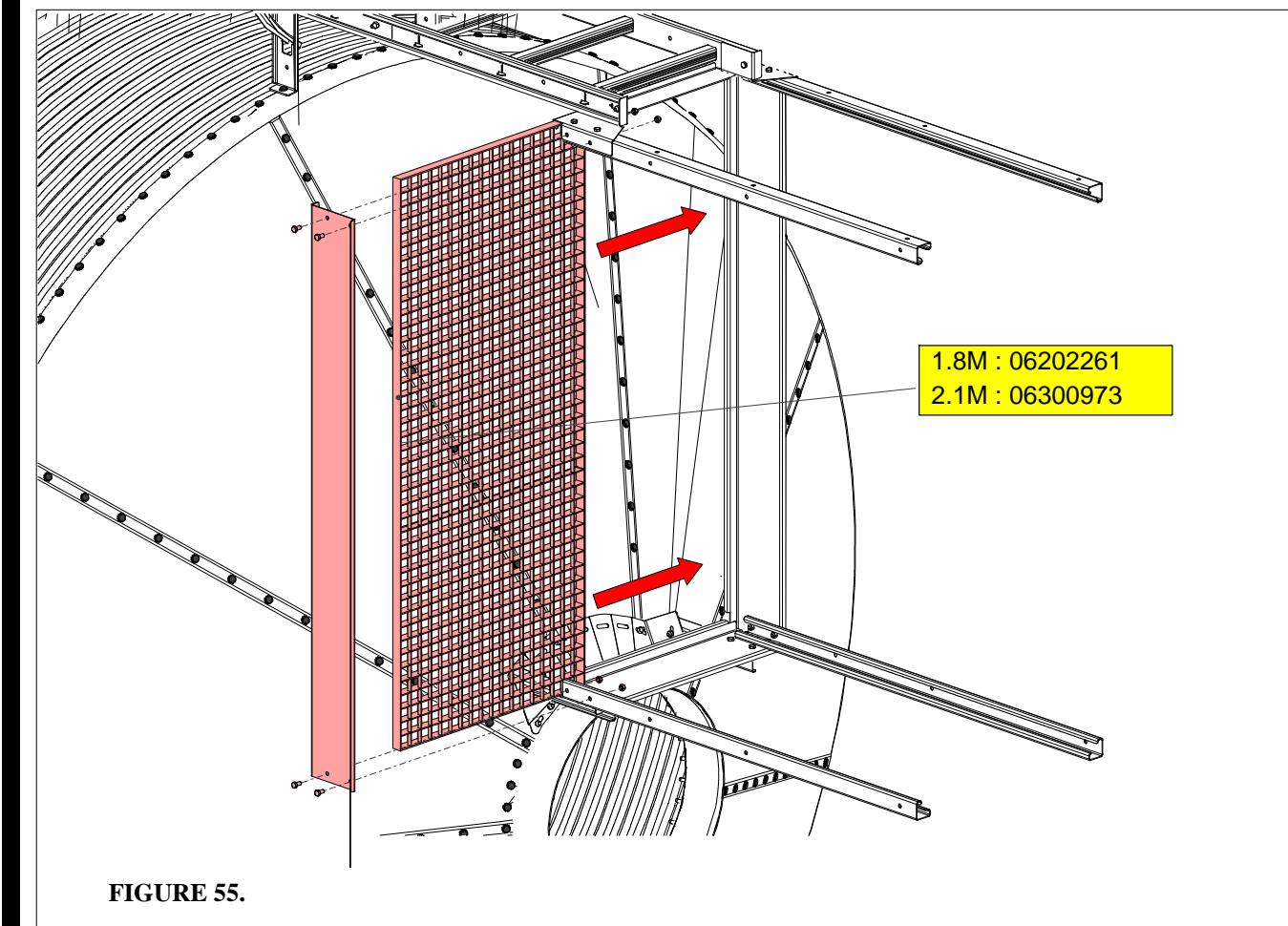
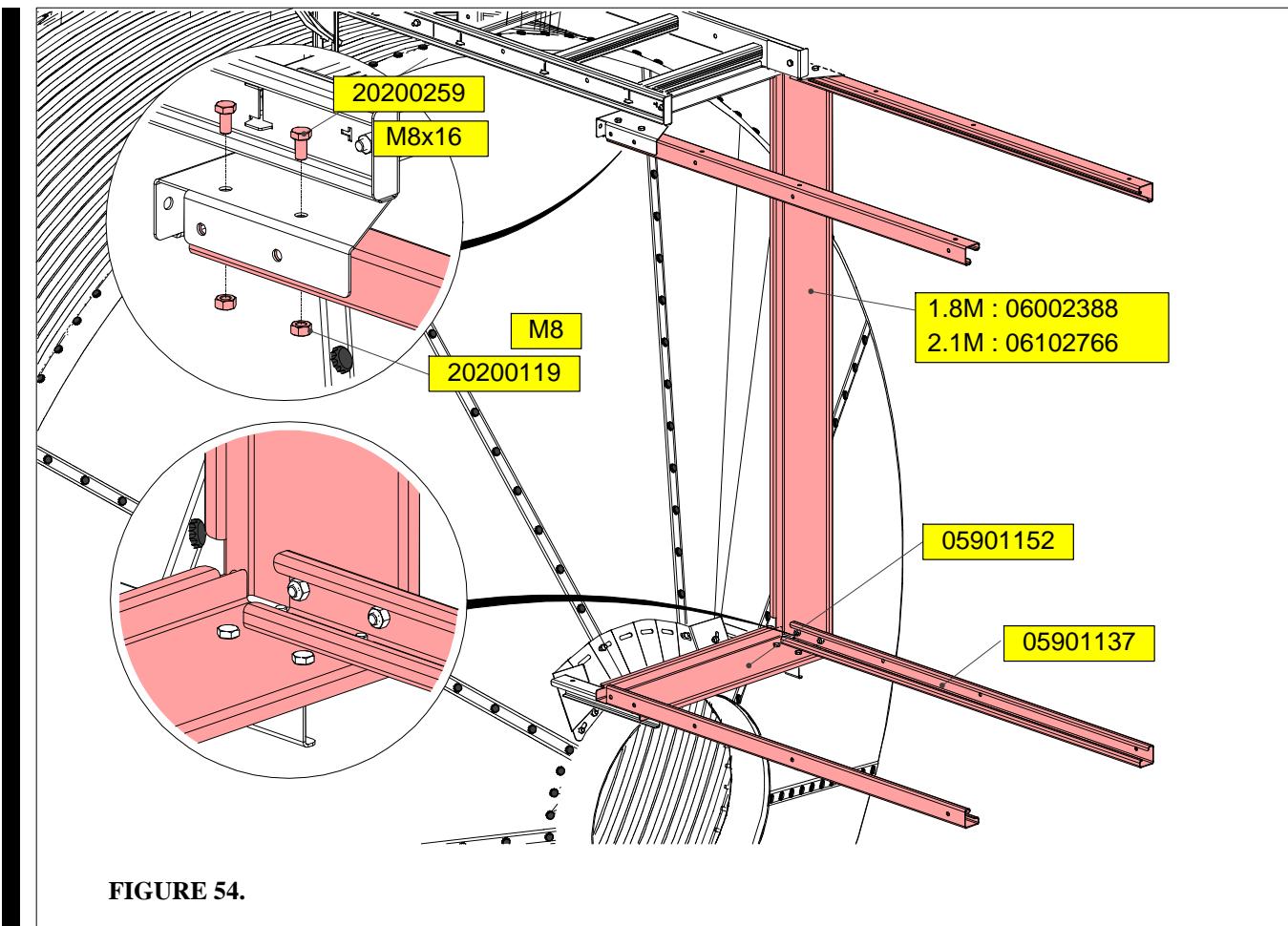
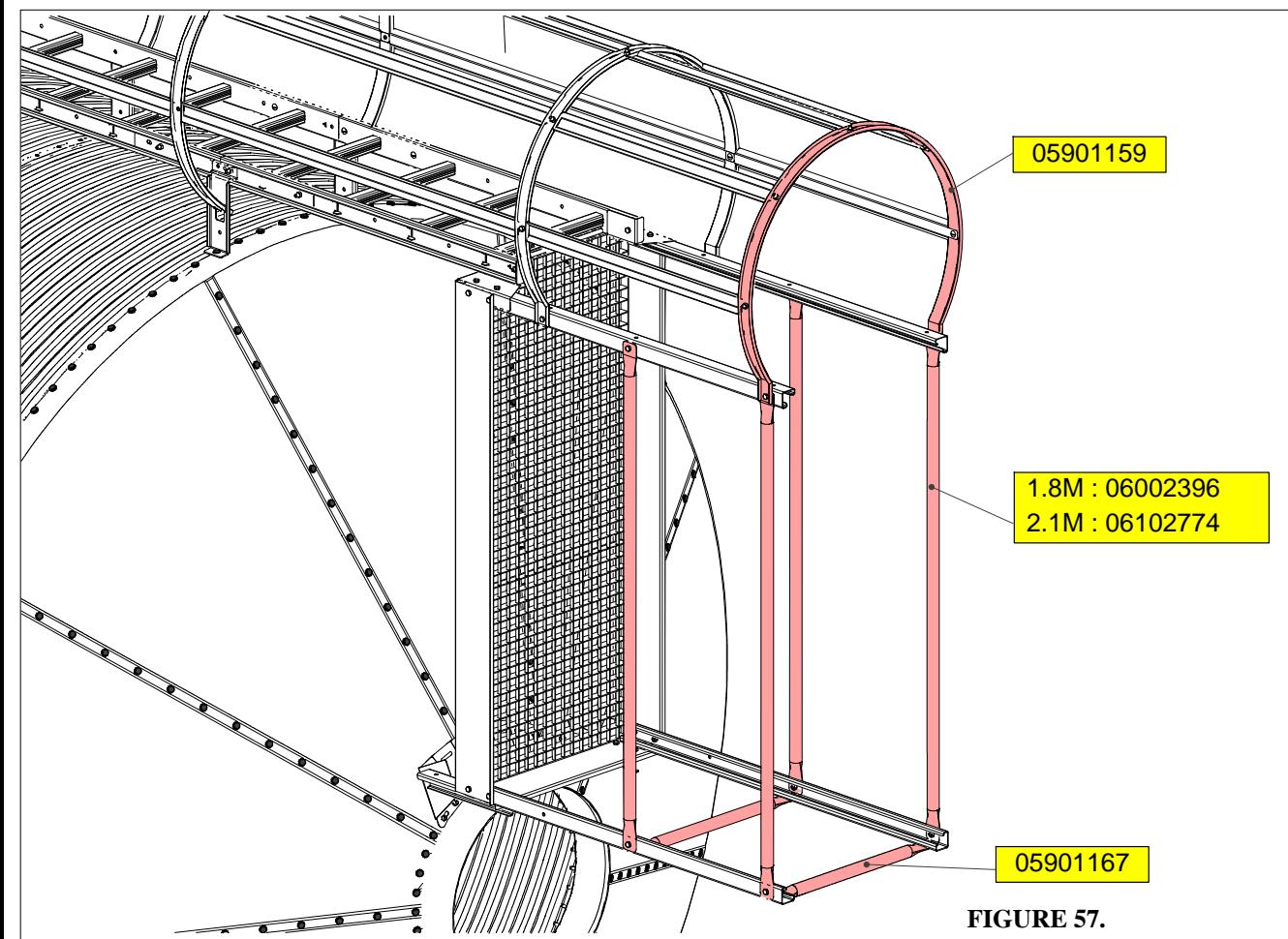
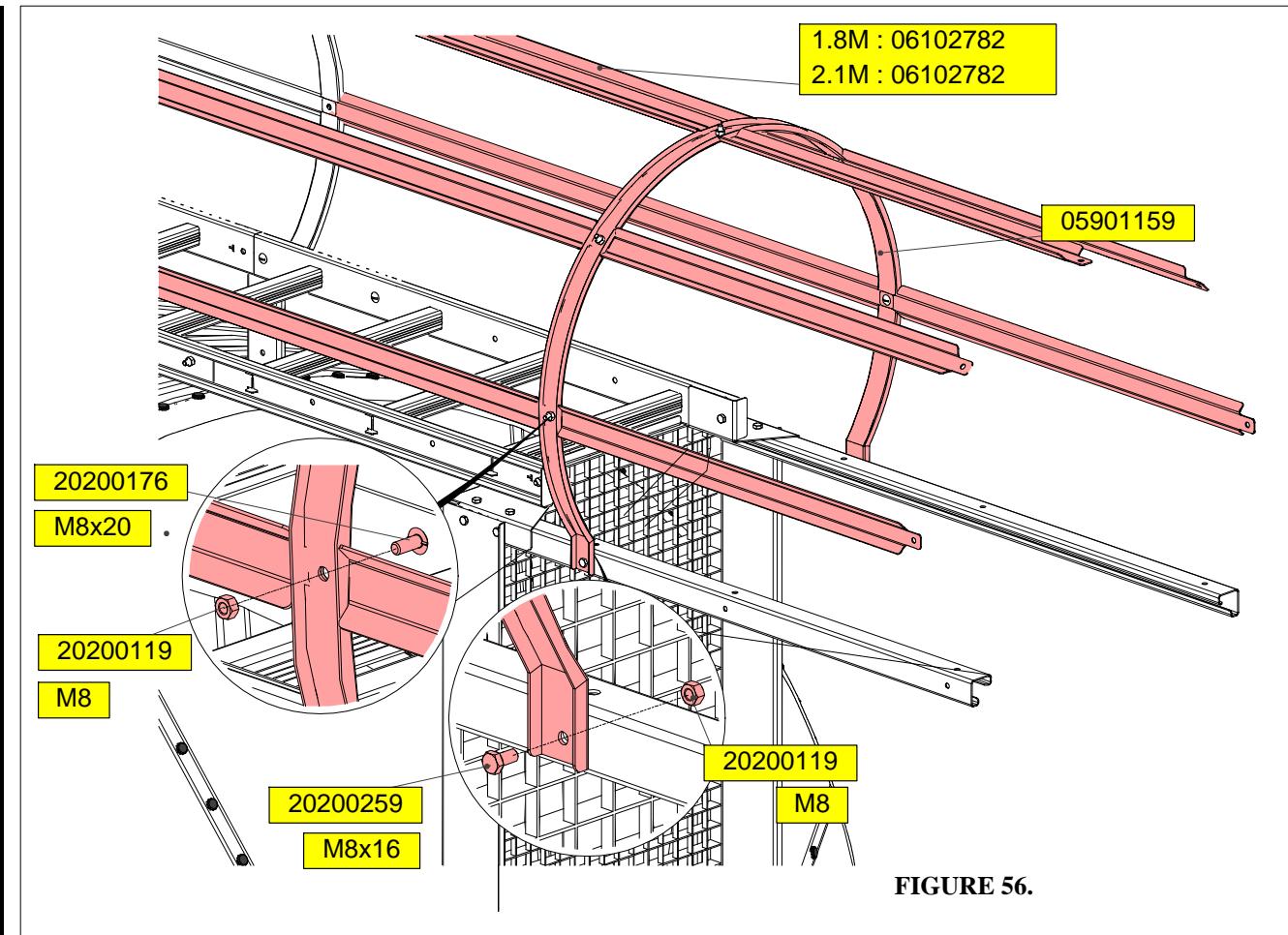


FIGURE 53.





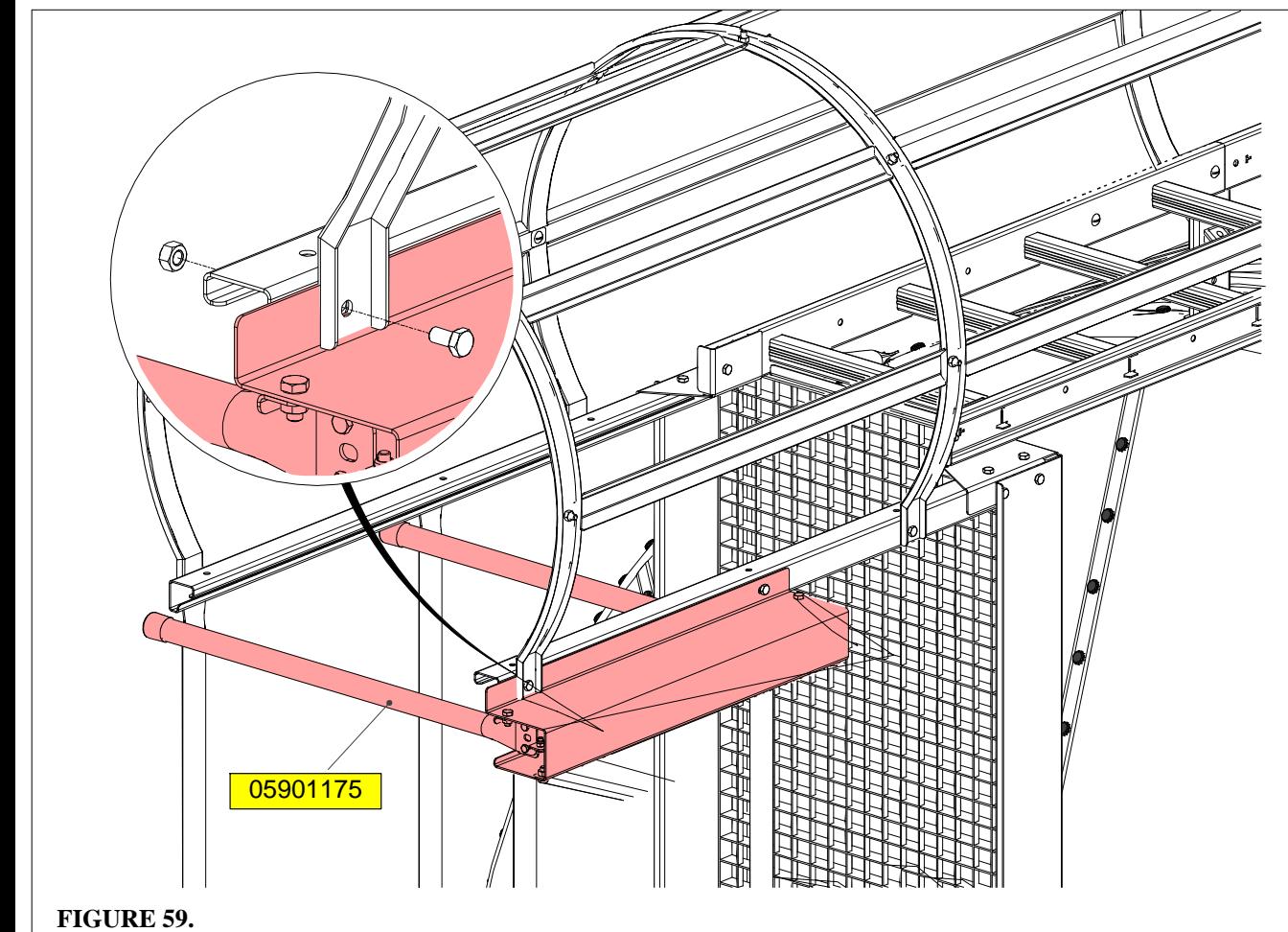
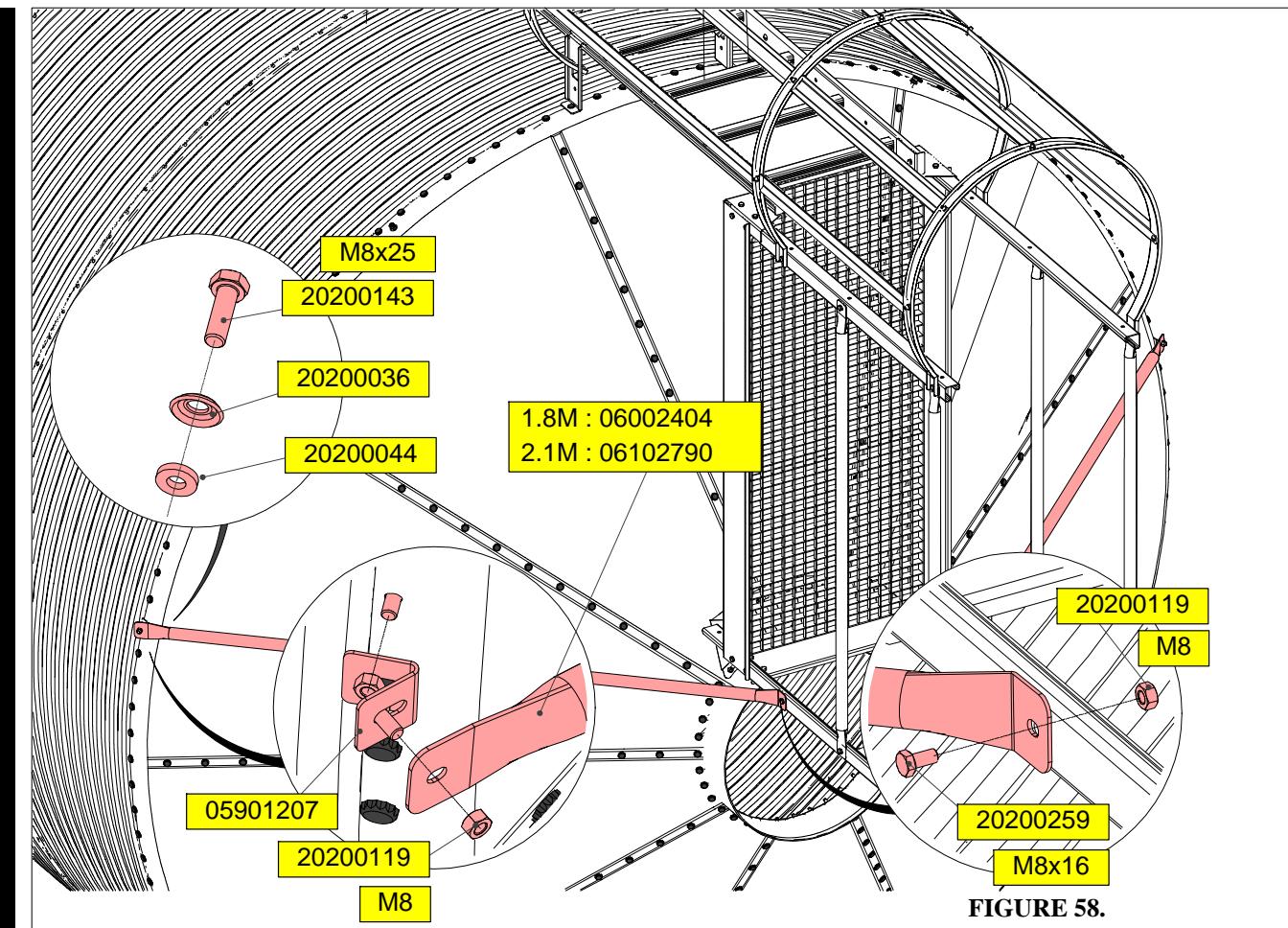


FIGURE 59.

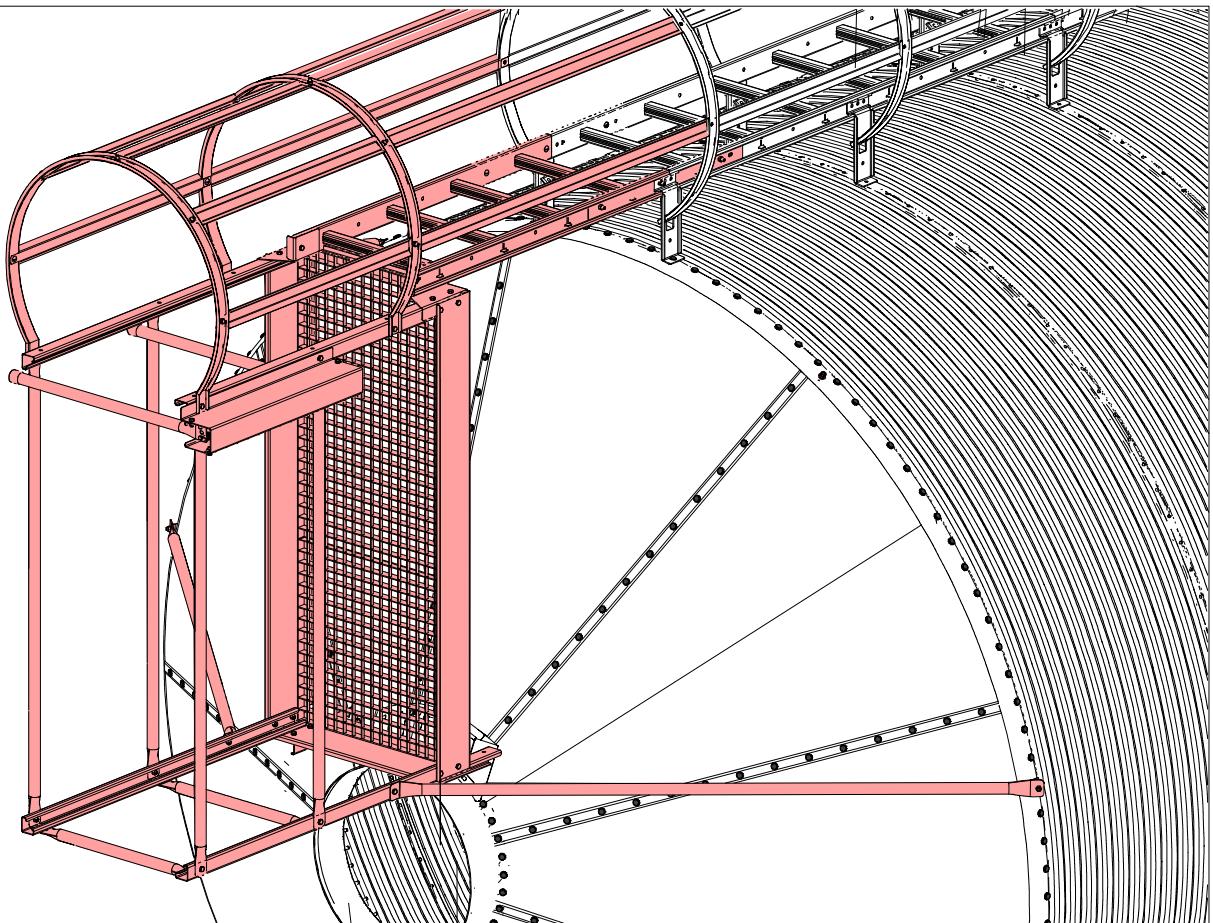
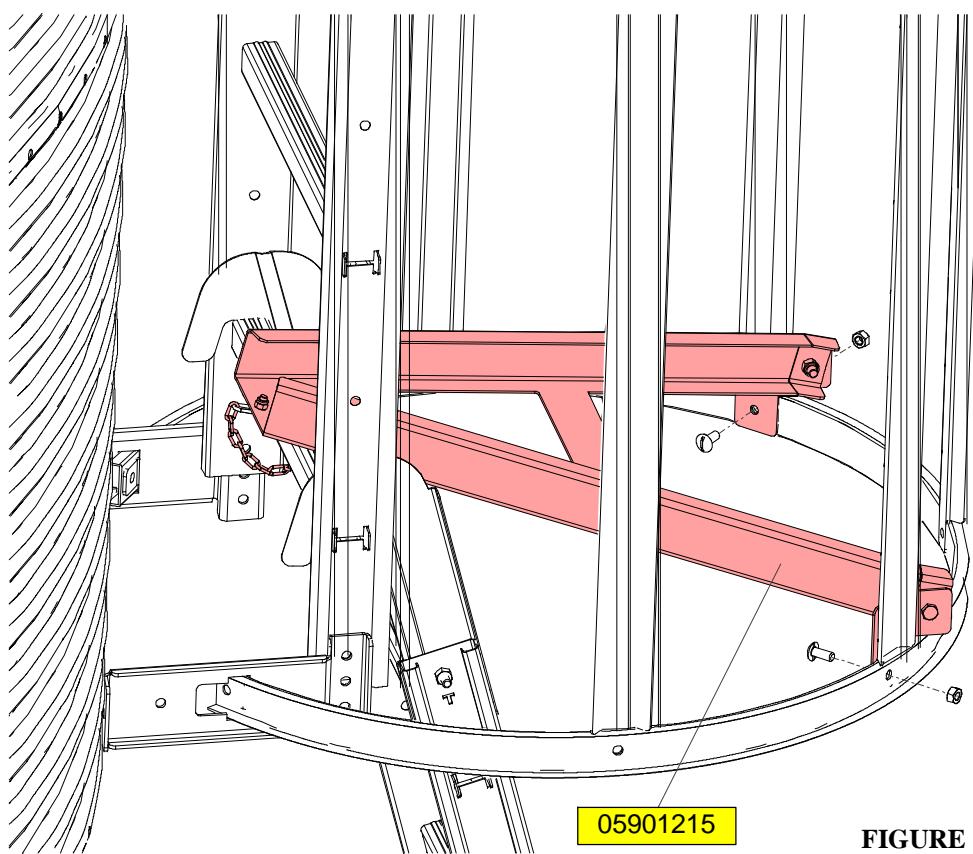
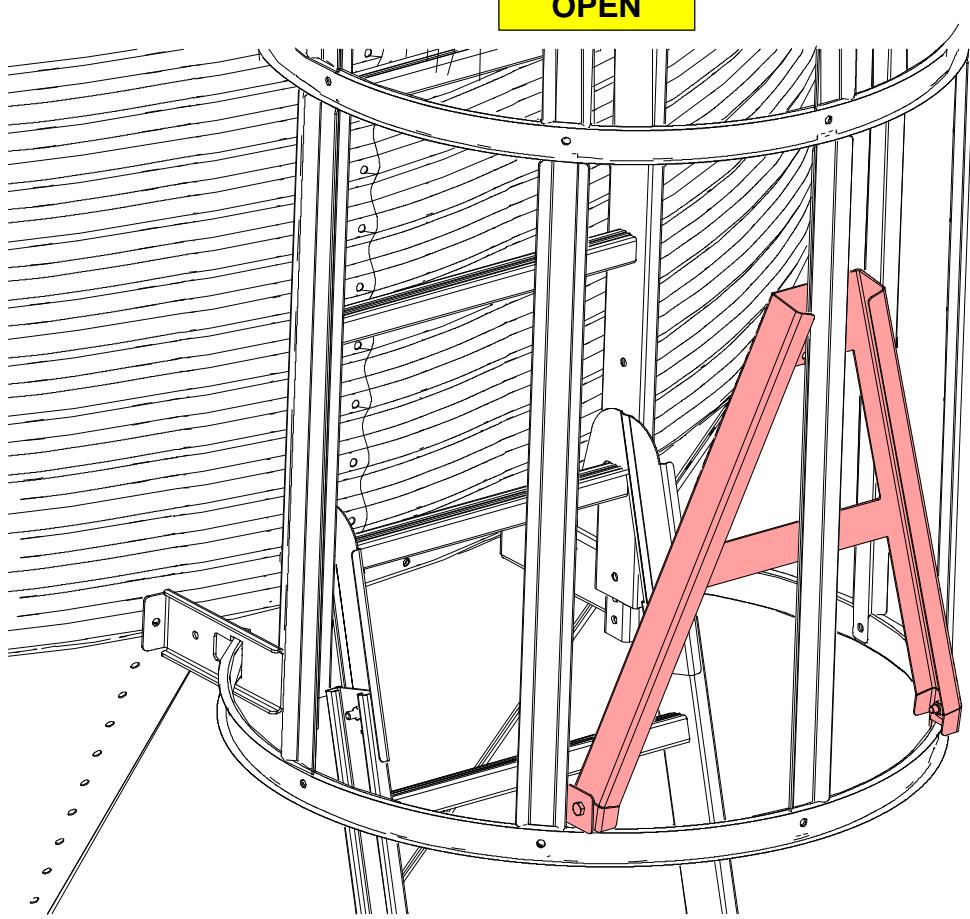


FIGURE 60.

SECURITY DOOR**FIGURE 61.****FIGURE 62.**

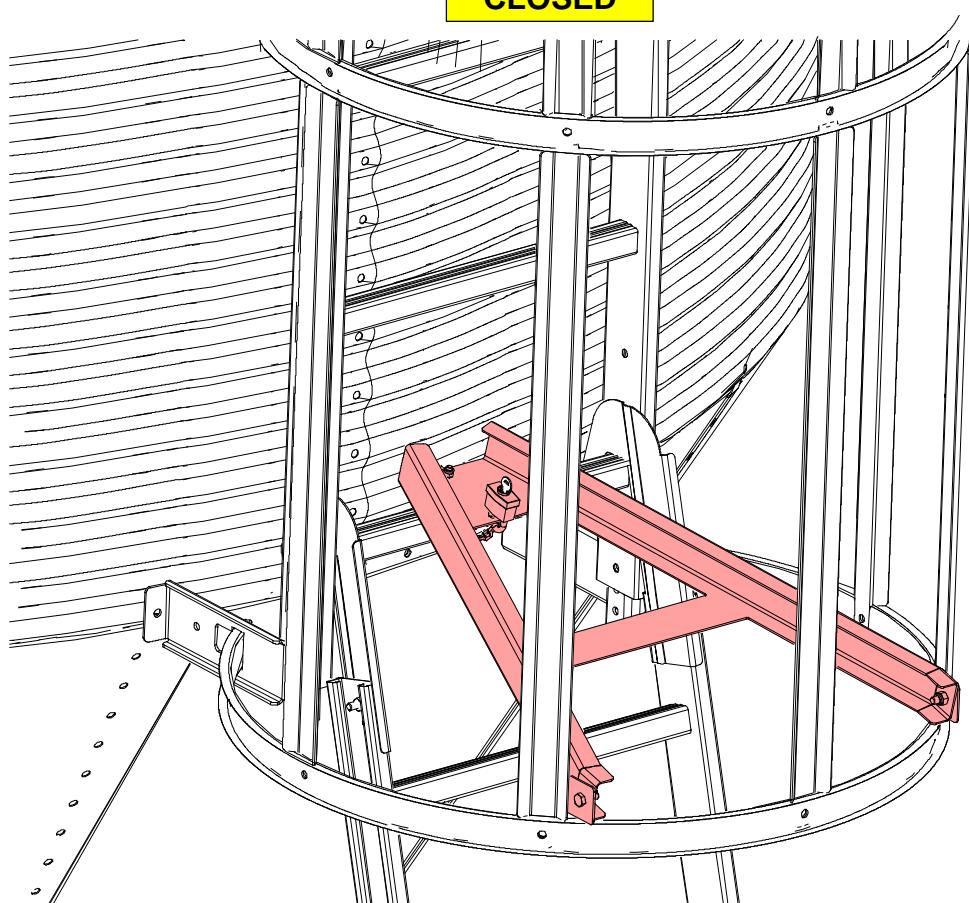


FIGURE 63.

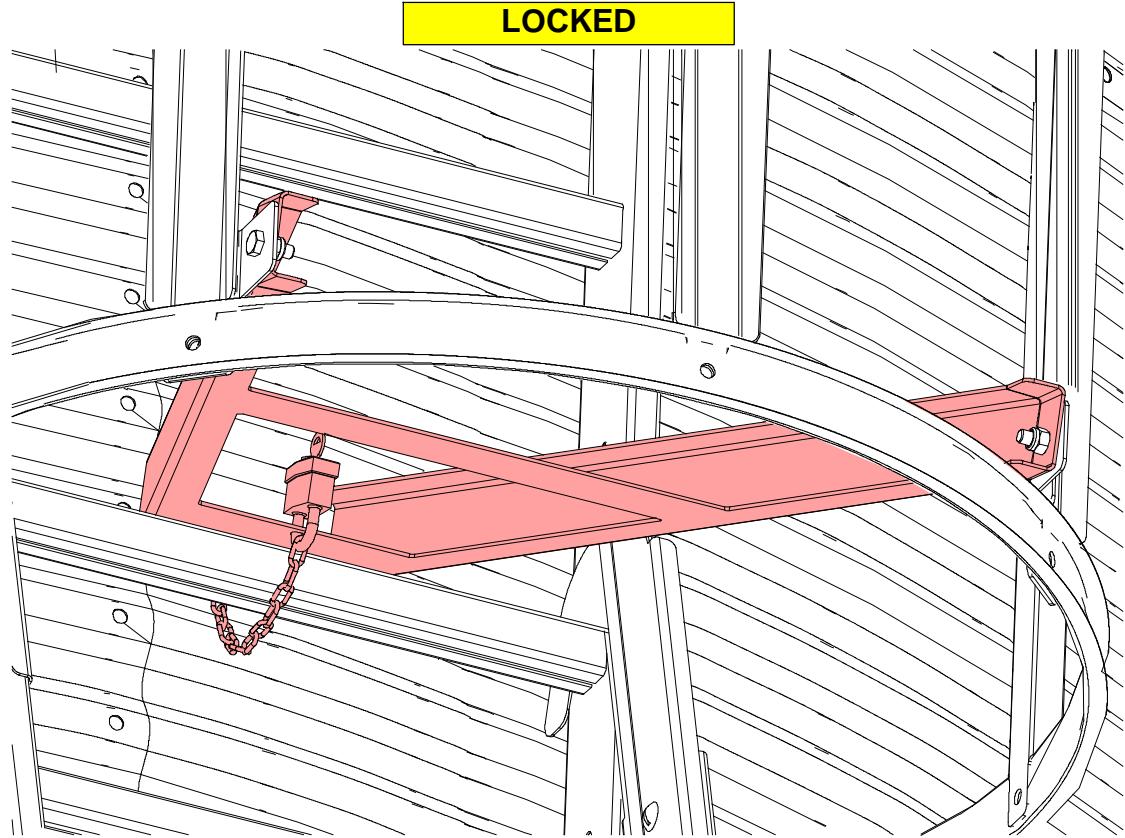


FIGURE 64.

TO GROUND THE BIN

Each bin should have two groundings, equally spread around the bin.



Make sure that all electrical equipment is properly installed and grounded by a qualified electrician according to the National and local Electrical Code.

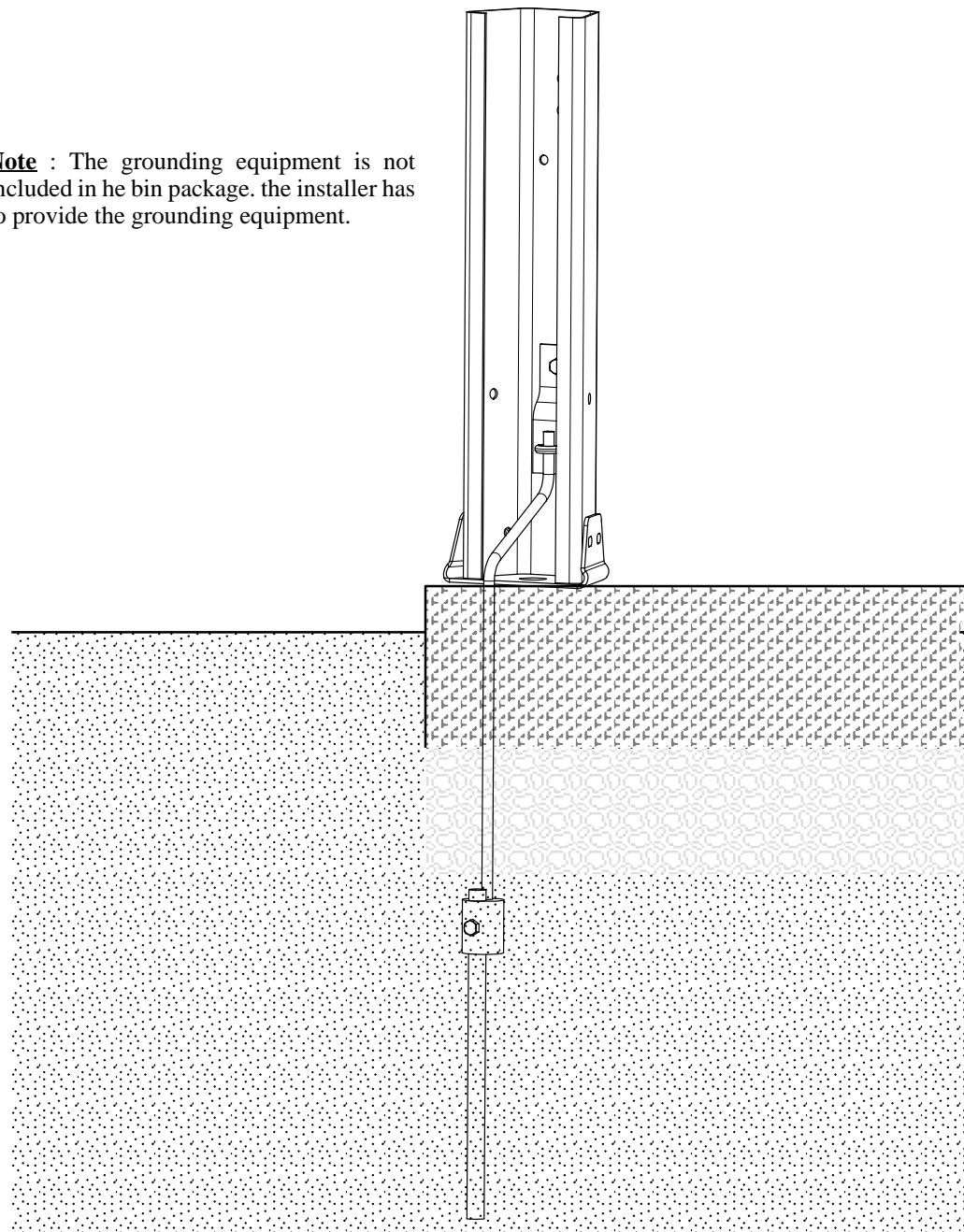
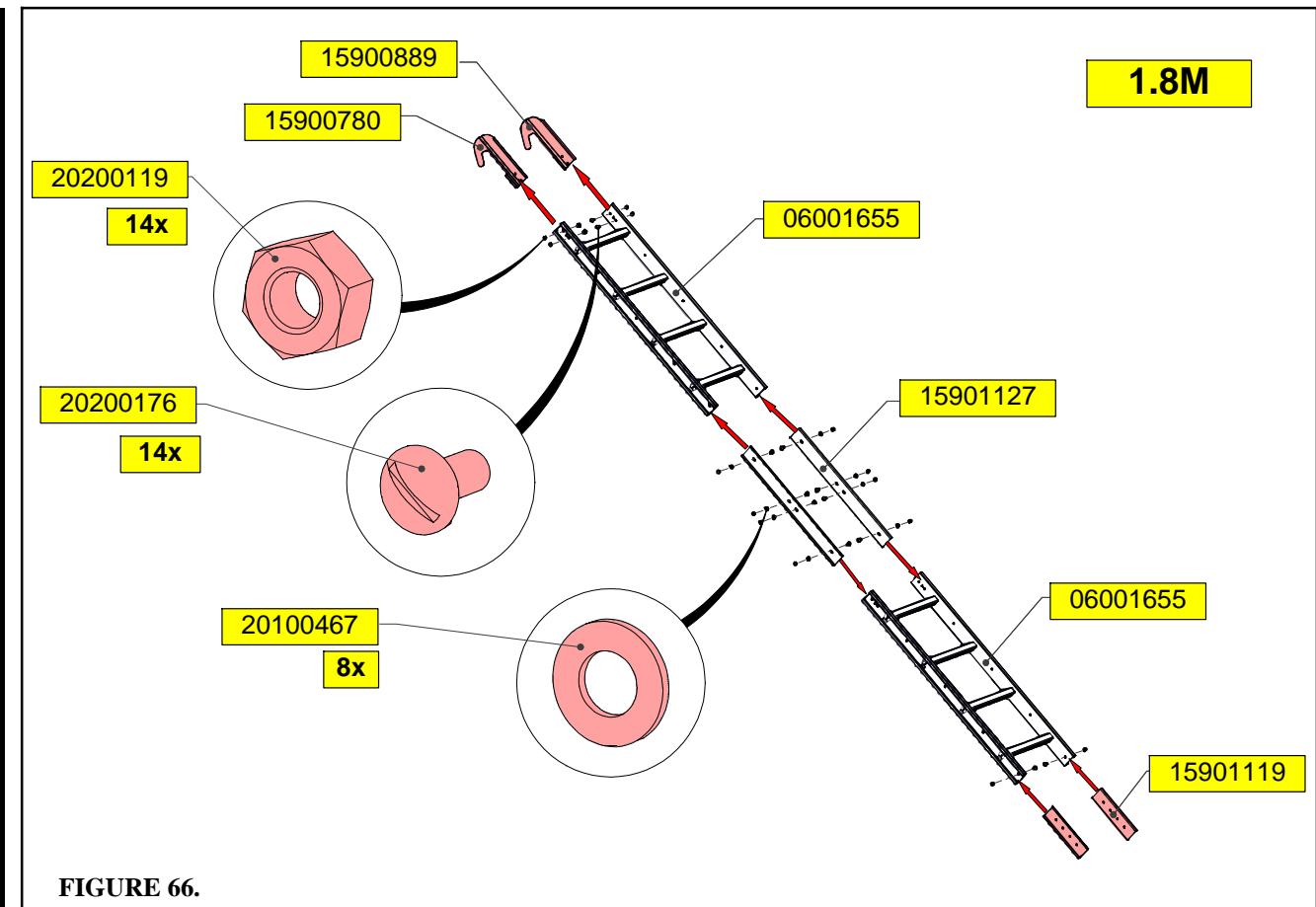
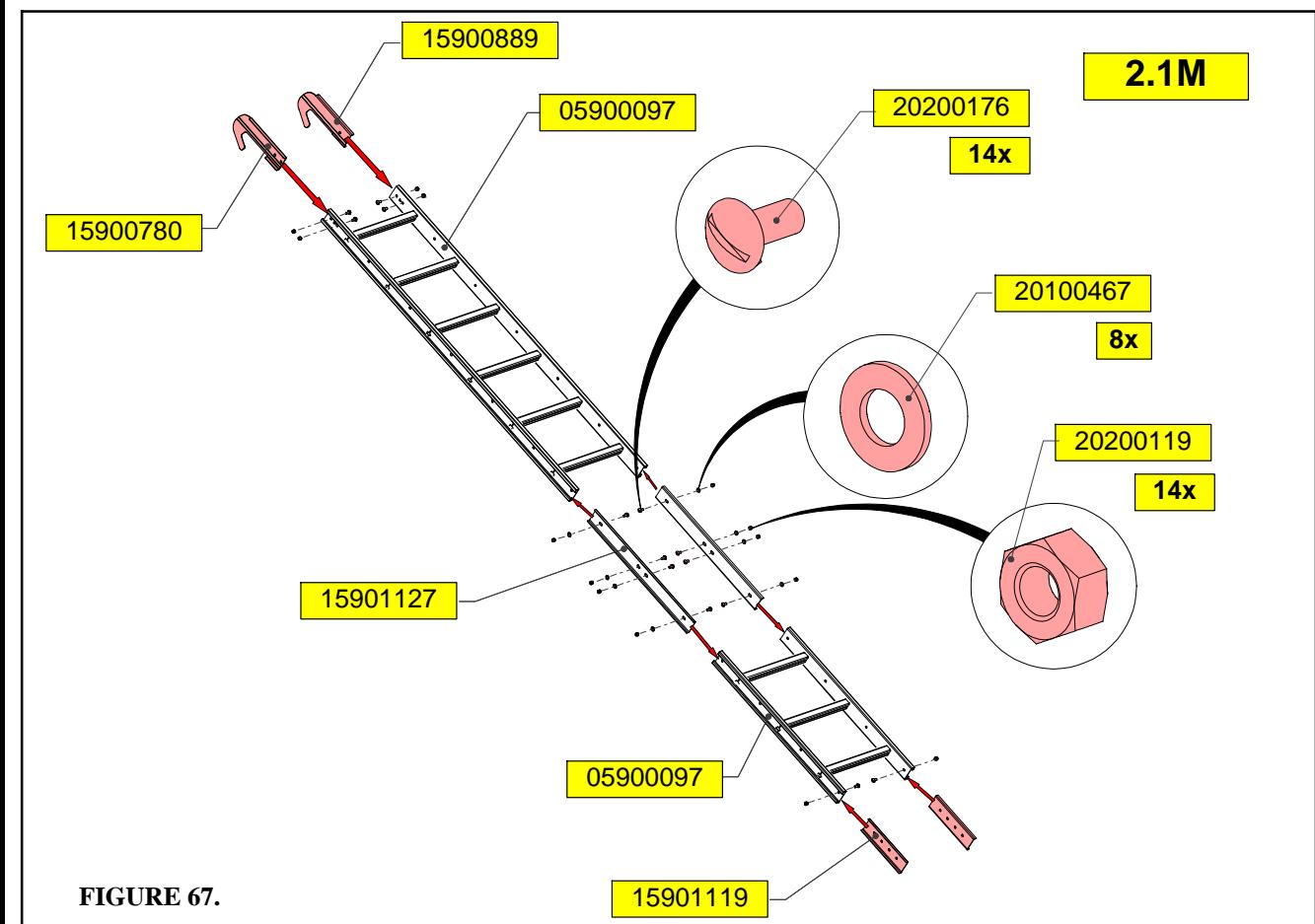


FIGURE 65.

TO ASSEMBLE THE "HOOK ON" LADDER

**FIGURE 66.****FIGURE 67.**

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