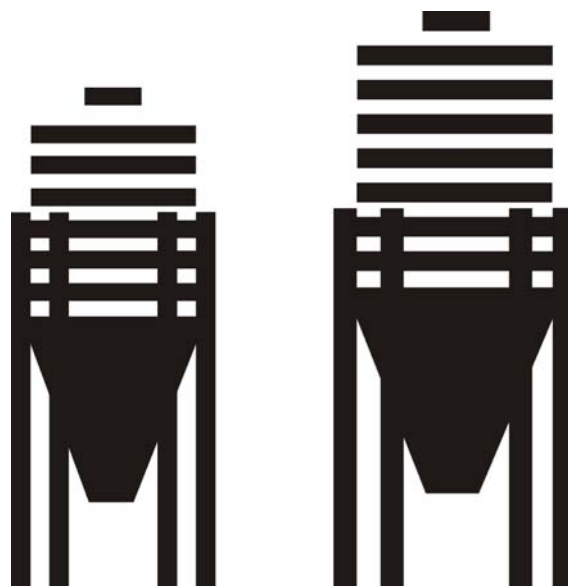




# **BULK BINS**

## **2.75M & 3.2M**

**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 Ø2.75M & Ø3.2M .....	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
HOOK PROFILE FOR HOPPER .....	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 .....	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 Ø2.75M OEM .....	III-4
BIN Ø3.2M 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 Ø 2.75M & Ø3.2M .....	III-13
TO INSTALL THE BIN ROOF .....	III-15
TO INSTALL THE COLLAR TO THE INTEGRATED HOPPER COLLAR .....	III-17
TO INSTALL THE BIN LEGS .....	III-20
TO INSTALL OF THE HOPPER BRACES .....	III-22
POSITION OF THE LEG BRACES .....	III-23
OVERVIEW BRACES 902 & 903, 904 & 905, 906 & 907 .....	III-24
Ø 2.75M - SITUATION 904 & 905 .....	III-25
Ø 2.75M - SITUATION 906 & 907 .....	III-26
OVERVIEW BRACES 1052 & 1053 & 1054, 1055 & 1056 .....	III-27
Ø 3.2M - SITUATION 1055 & 1056 .....	III-28
POSITION OF THE FASTENING BRACES .....	III-29
POSITION OF INLET/EXHAUST PIPES - BIN LEGS .....	III-30
TO INSTALL THE HOPPER VALVE (OPTION) .....	III-30
TO INSTALL THE INLET/EXHAUST PIPES .....	III-31
RESULT OF INSTALLING THE PIPES .....	III-32
TO INSTALL THE FEED VIEWER WINDOW .....	III-33
TO INSTALL THE COVER (PNEUMATIC FILLING) .....	III-34
TO INSTALL THE COVER (MECHANIC FILLING) .....	III-35
HOW TO ASSEMBLE THE LADDER .....	III-37
TP ASSEMBLE THE LADDER .....	III-38
TO INSTALL THE SAFETY CAGE .....	III-40
TO INSTALL THE ENTRY HATCH IN THE BOTTOM RING (OPTIONAL) .....	III-41
SAFETY PLATFORM .....	III-44
SECURITY DOOR .....	III-51
TO GROUND THE BIN .....	III-53
TO ASSEMBLE THE HOOK ON LADDER .....	III-54

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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!

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

## 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.

 <b>DANGER</b>	<p><b>ATTENTION!</b>  <b>BE CAREFUL!</b>  <b>YOUR SAFETY IS AT STAKE!</b></p>
--	---

## 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.

 <b>WARNING</b>	<p><b>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.</b></p>	
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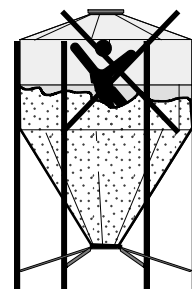
**You can suffocate under material in the bin. Never enter the bin when it contains material !**

**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.**



**WARNING**



- **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 !!!**



**DANGER**



## PRODUCT DESCRIPTION

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

- \* Roof sections 30°
- \* Body sections made out of corrugated sheets
- \* Legs and braces
- \* 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) :**

- \* Ladder and safety cage
- \* Entry hatch
- \* Shut-off plate
- \* Hopper valve
- \* Safety platform
- \* Security door
- \* 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.

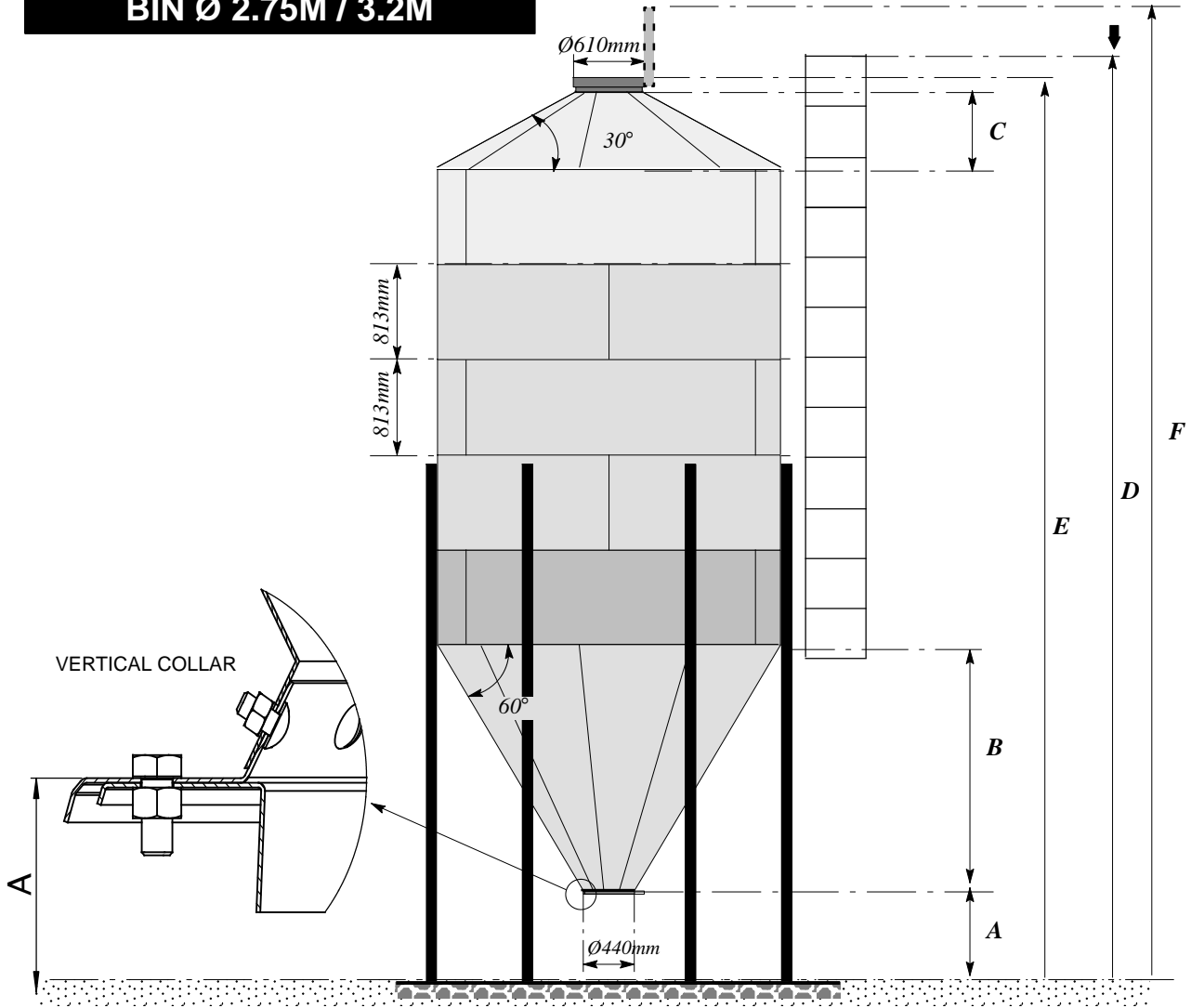
Take into account following points when determining the location of your new bin:

- 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 (m<sup>3</sup>)**

**BIN Ø 2.75M / 3.2M**

ANCHORING 3mm INCLUDED



TYPE	902	903	904	905	906	907	Ø2750mm
Weight Kg.*	633	712	778	908	1104	1247	1,5m <sup>3</sup>
A	800	800	800	800	800	800	4,8m <sup>3</sup>
B	2057	2057	2057	2057	2057	2057	4,7m <sup>3</sup>
C	638	638	638	638	638	638	
D	5313	6126	6939	7752	8565	9378	
E	5266	6079	6892	7705	8518	9331	
F	5906	6719	7532	8345	9158	9971	
Contents - m <sup>3</sup>	15,8	20,6	25	30,2	35	39,8	
Contents - M.ton	10,3	13,4	16,5	19,6	22,8	25,9	

TYPE	1052	1053	1054	1055	1056	Ø3200mm
Weight Kg.*	793	883	1043	1218	1358	2,5m <sup>3</sup>
A	800	800	800	800	800	6,6m <sup>3</sup>
B	2452	2452	2452	2452	2452	7,4m <sup>3</sup>
C	772	772	772	772	772	
D	5708	6521	7334	8147	8960	
E	5795	6608	7421	8234	9047	
Contents - m <sup>3</sup>	23,4	30	36,6	43,2	49,8	
Contents - M.ton	15,2	19,5	23,8	28,1	32,4	

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



**Inbouwverklaring betreffende niet voltooide machines** (Richtlijn 2006/42/EG, Bijlage II.1.B)  
**Declaration of incorporation of partly completed machinery** (Directive 2006/42/EC, Annex II.1.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); 2014/30/EU (Elektromagnetische Compatibiliteit)
- 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 informatievervalsing 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); 2014/30/EU (Electromagnetic Compatibility)
- 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, 20/04/2016

.....  
 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.1.A)  
**EC-declaration of conformity** (Directive 2006/42/EC, Annex II.1.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**

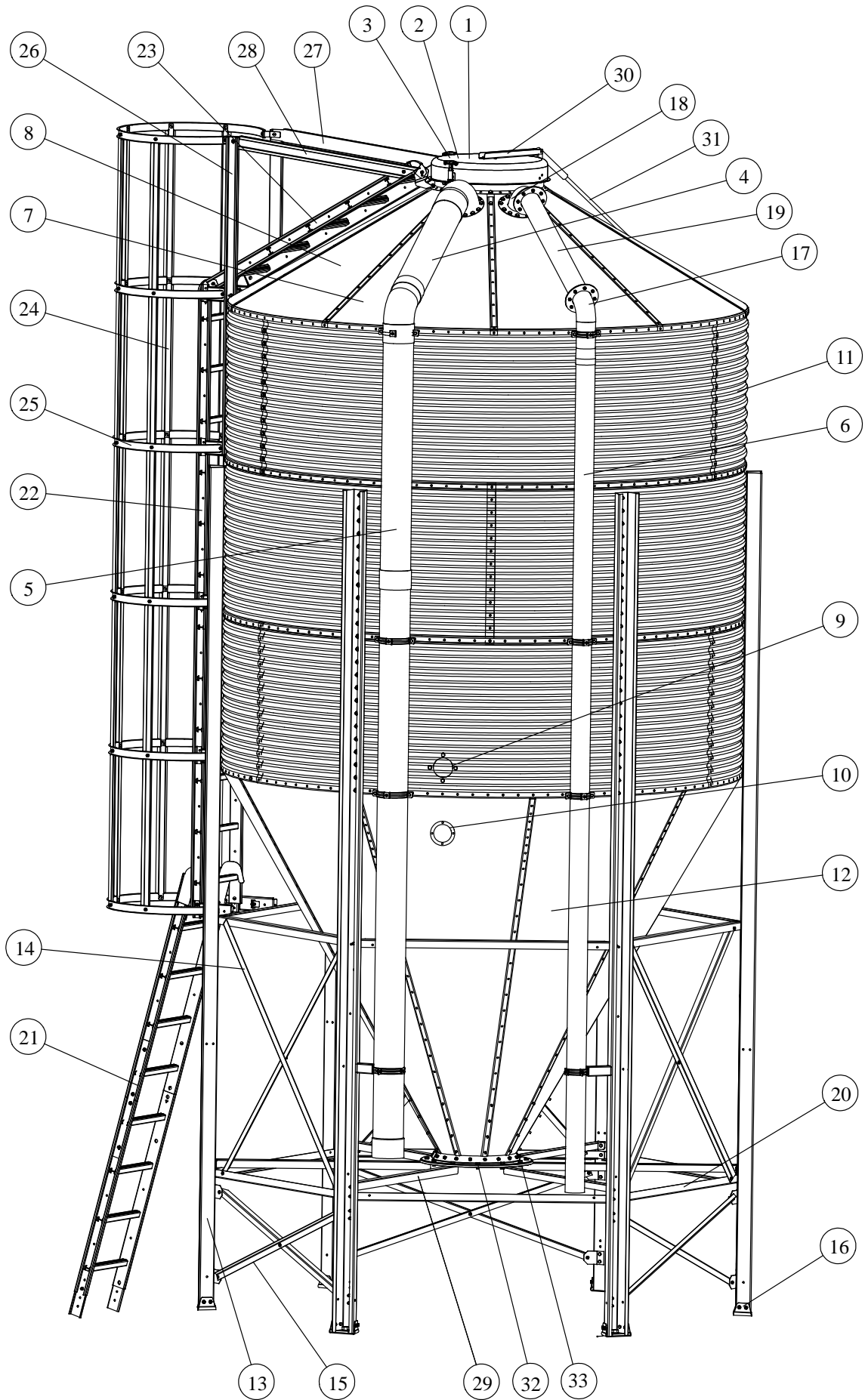
### **1. ENVIRONMENTALLY-FRIENDLY DESIGN**

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

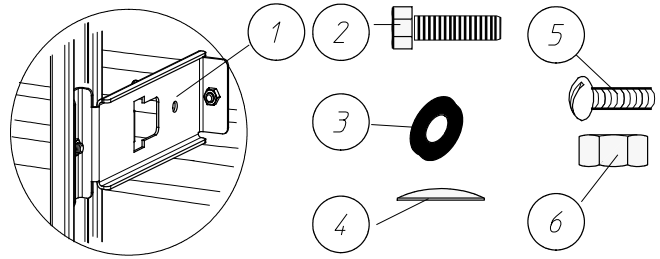
Key	Name	Number Bin	
		2.75M	3.2M
1	MECHANICAL FILL SYSTEM	5651990840	5651990840
2	PNEUMATIC FILL SYSTEM	5651991000	5651991000
3	MECHANICAL/PNEUMATIC FILL SYSTEM	5951991260	5952991260
4	EXHAUST PIPE Ø160 X 920 MM (2.75M) / Ø160 X 1171 MM (3.2M)	5951995420	5952991520
5	EXHAUST PIPE Ø160 X 1950 MM	5950992550	5950992550
6	INLET PIPE - STANDARD LENGTH 6 M	5950993130	5950993130
7	ROOF SECTION - PNEUMATIC FILL/EXHAUST	5951909540	5952995330
8	ROOF SECTION - STANDARD	5951909460	5952995250
9	FEED VIEWER WINDOW (BODY)	5948997880	5948997880
10	FEED VIEWER WINDOW (HOPPER)	5950998920	5950998920
11	TOP/MID RING SECTION 0.8 MM	5651993160	-
	TOP/MID RING SECTION 0.8 MM WITH HOLE Ø103	5651993240	-
	TOP/MID RING SECTION 1 MM	5951909130	5952991370
	TOP/MID RING SECTION 1 MM WITH HOLE Ø103	-	5952991290
	TOP/MID RING SECTION 1 MM WITH HOLES FOR BIN LEG	5951998810	5952991030
	TOP/MID RING SECTION 1.25 MM	5951998490	5952990870
	TOP/MID RING SECTION 1.25 MM WITH HOLE Ø103	5951998320	5952990790
	TOP/MID RING SECTION 1.25 MM WITH HOLES FOR BIN LEG	5951998240	5952990610
	TOP/MID RING SECTION 1.5 MM	5951998730	-
	TOP/MID RING SECTION 1.5 MM WITH HOLE Ø103	5951998650	-
	TOP/MID RING SECTION 1.5 MM WITH HOLES FOR BIN LEG	5951998570	5952991950
	BOTTOM RING SECTION 1 MM	5951997090	5952999540
	BOTTOM RING SECTION 1 MM WITH HOLE Ø103	5951997910	5952999460
	BOTTOM RING SECTION 1.25 MM	5951997400	5952999700
	BOTTOM RING SECTION 1.25 MM WITH HOLE Ø103	5951997330	5952999620
	BOTTOM RING SECTION 1.5 MM	5951997660	5952990960
	BOTTOM RING SECTION 1.5 MM WITH HOLE Ø103	5951997580	5952999880
12	HOPPERSECTION 1.25 MM	5951900960	5952991860
	HOPPERSECTION 1.5 MM	5951900040	5952992940
13	BIN LEG 3690 X 2.5 MM	5951908220	-
	BIN LEG 4443 X 2.5 MM	5951996590	-
	BIN LEG 4443 X 3.5 MM	5951996670	-
	BIN LEG 4838 X 3.5 MM	-	5952997720
14	X-BRACE	5950912850	5950912850
15	SHORT X-BRACE	5951908630	-
16	ANCHORING KIT M20	5951993440	5951993440
17	INLET ELBOW - BODY	5948999600	5948999600
18	INLET ELBOW - ROOF	5948999780	5948999780
19	CONNECTION PIPE INLET ELBOW	5951909880	5952999390
20	LEG BRACE STRAIGHT TIE	5951908550	5952995820
21	"HOOK ON" LADDER	5959995880	5950908240
22	ONE RING LADDER	5948999860	5948999860
	TWO RING LADDER	5948990940	5948990940
23	ROOF LADDER	5951900790	5948990940
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	5951909700	5951909700
28	RAIL FOR ROOF LADDER - R	5951909620	5951909620
29	HORIZONTAL HOPPERBRACE	5951908710	5952996900
30	MECHANICAL OPENING SYSTEM	5951993520	5652999000
31	OPENING TUBE - 3M	5648999490	5648999490
32	HORIZONTAL COLLAR	5051904810	5051904810
33	COLLAR DOWN	5050933880	5050933880

## COMPONENT NUMBERS (NOT SHOWN)

Name	Part Nr.	Part Nr.
	2.75	3.2
assembly kit for ladder	5948990430	5948990430
SHORT X BRACE	5951901780	-
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	5651991410	5952992510
MECH.- PNEUMAT. FILL system	5651991260	5651991260
COUPLING ASS'Y FOR BIN INLET PIPE	5950993540	5950993540
HOOK PROFILE FOR HOPPER	5951908060	5952995090
Parts Kit for bin (w/vertical collar) : see page		

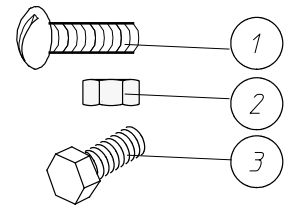
### ASSEMBLY KIT FOR LADDER - 5948990430

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



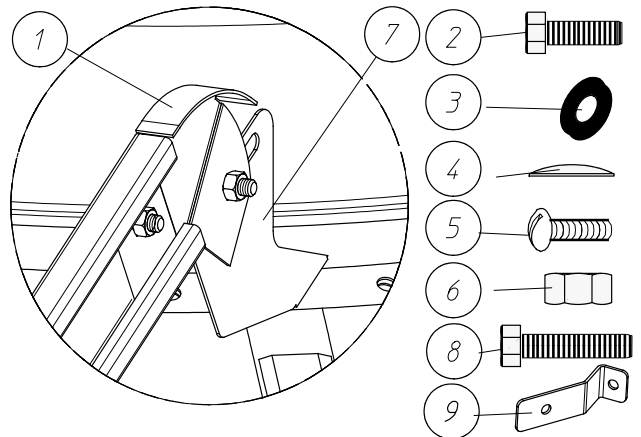
### ASSEMBLY KIT FOR SAFETY CAGE - 5948990690

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



### ASSEMBLY KIT FOR ROOF LADDER - 5948990510

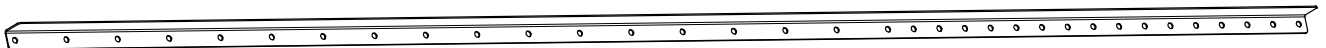
Key	Part Nr.	Qt.
1	5048998510	4
2	5191990320	6
3	5191999330	2
4	5191999250	2
5	5191990650	8
6	5191990080	18
7	5048995210	1
	5048997370	1
8	5191990730	6
9	5048997600	2



### HOOK PROFILE FOR HOPPER

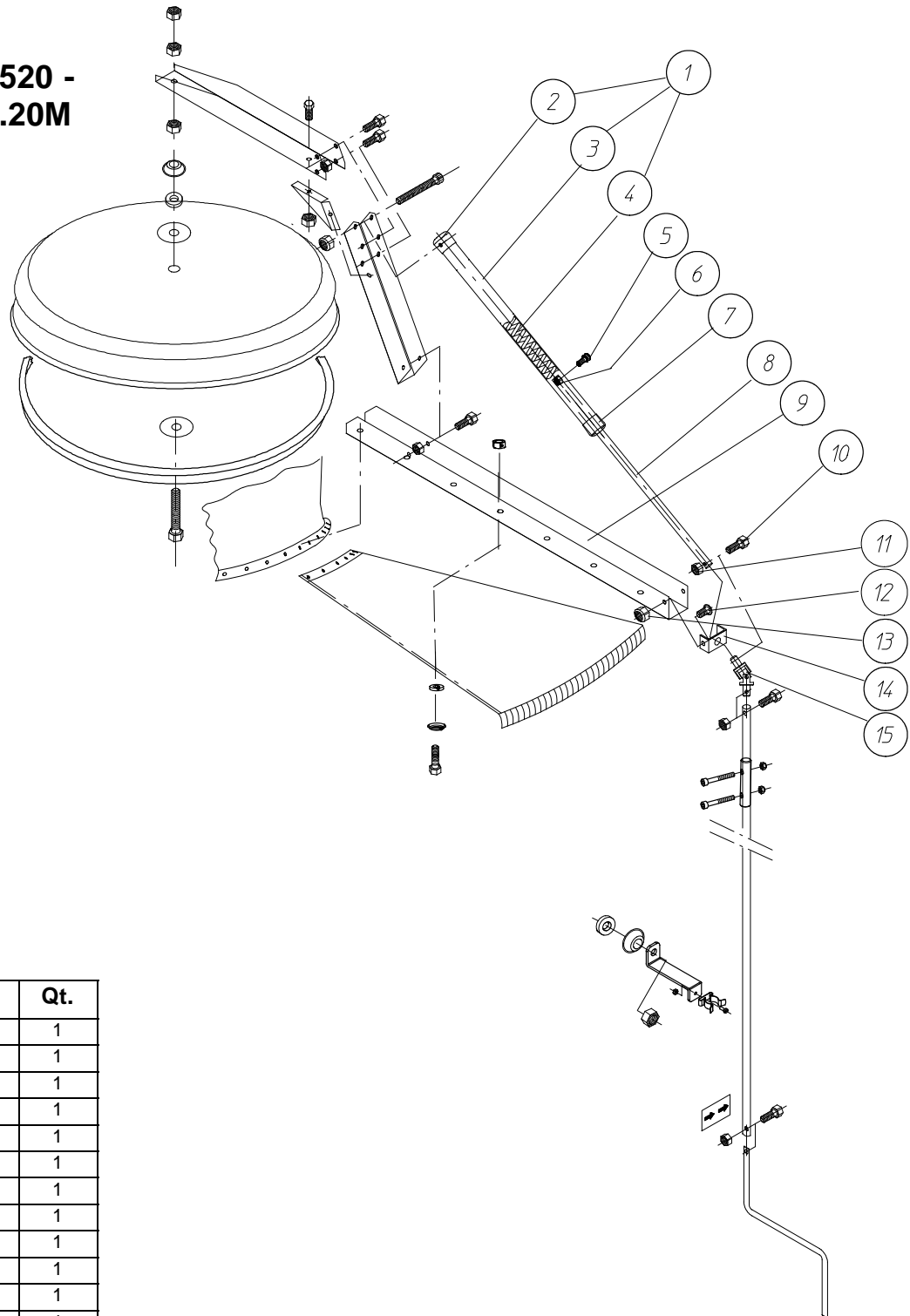
Ø 2.75M - 5951908060

Ø 3.2M - 5952995090



## MECHANICAL OPENING SYSTEM

5951993520 -  
2.75M/3.20M

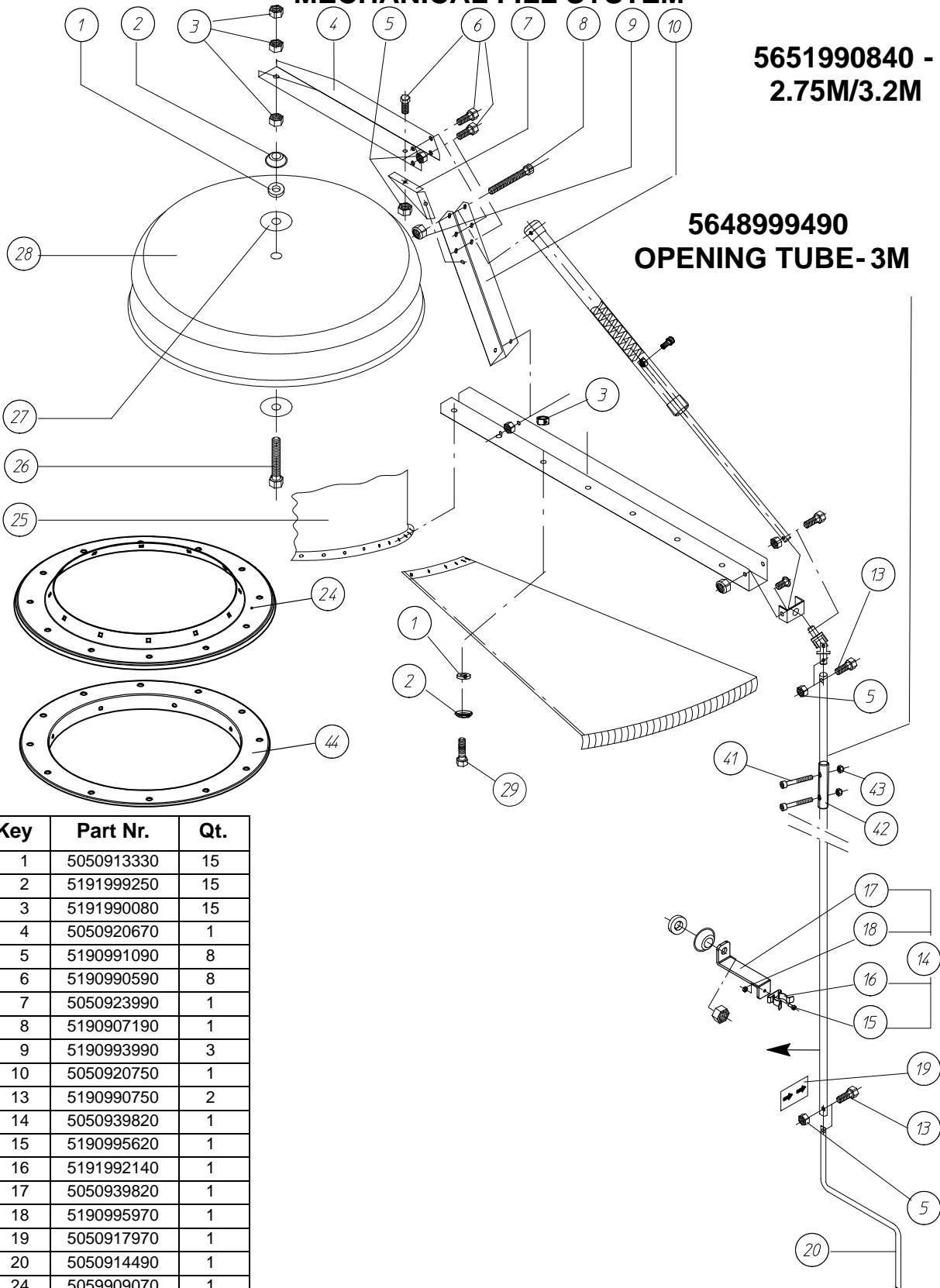


Key	Part Nr.	Qt.
1	5050930080	1
2	5020932170	1
3	5050921740	1
4	5050930160	1
5	5190920380	1
6	5190990410	1
7	5050922240	1
8	5051993760	1
8	5052990690	1
9	5051993680	1
9	5052990770	1
10	5190990750	1
11	5190991090	1
12	5190914360	2
13	5190993990	2
14	5050923480	1
15	5050916550	1

**MECHANICAL FILL SYSTEM**

**5651990840 -  
2.75M/3.2M**

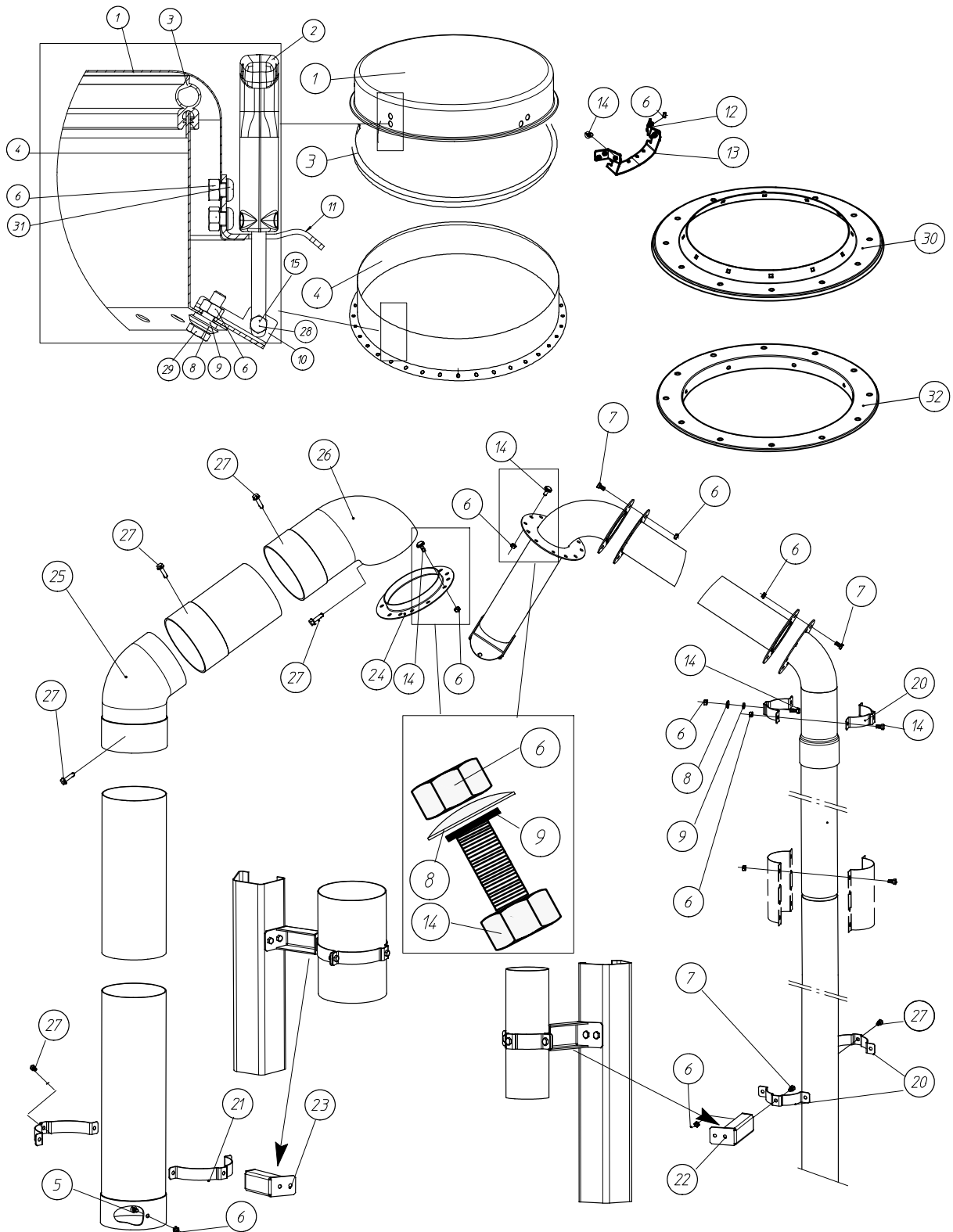
**5648999490  
OPENING TUBE-3M**



Key	Part Nr.	Qt.
1	5050913330	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

5651991000 -  
2.75M/3.2M



### 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

5951909880 - L = 902 - 2.75M

5952999390 - L = 1148 - 3.2M

#### EXHAUST PIPE

5951995420 - 2.75M

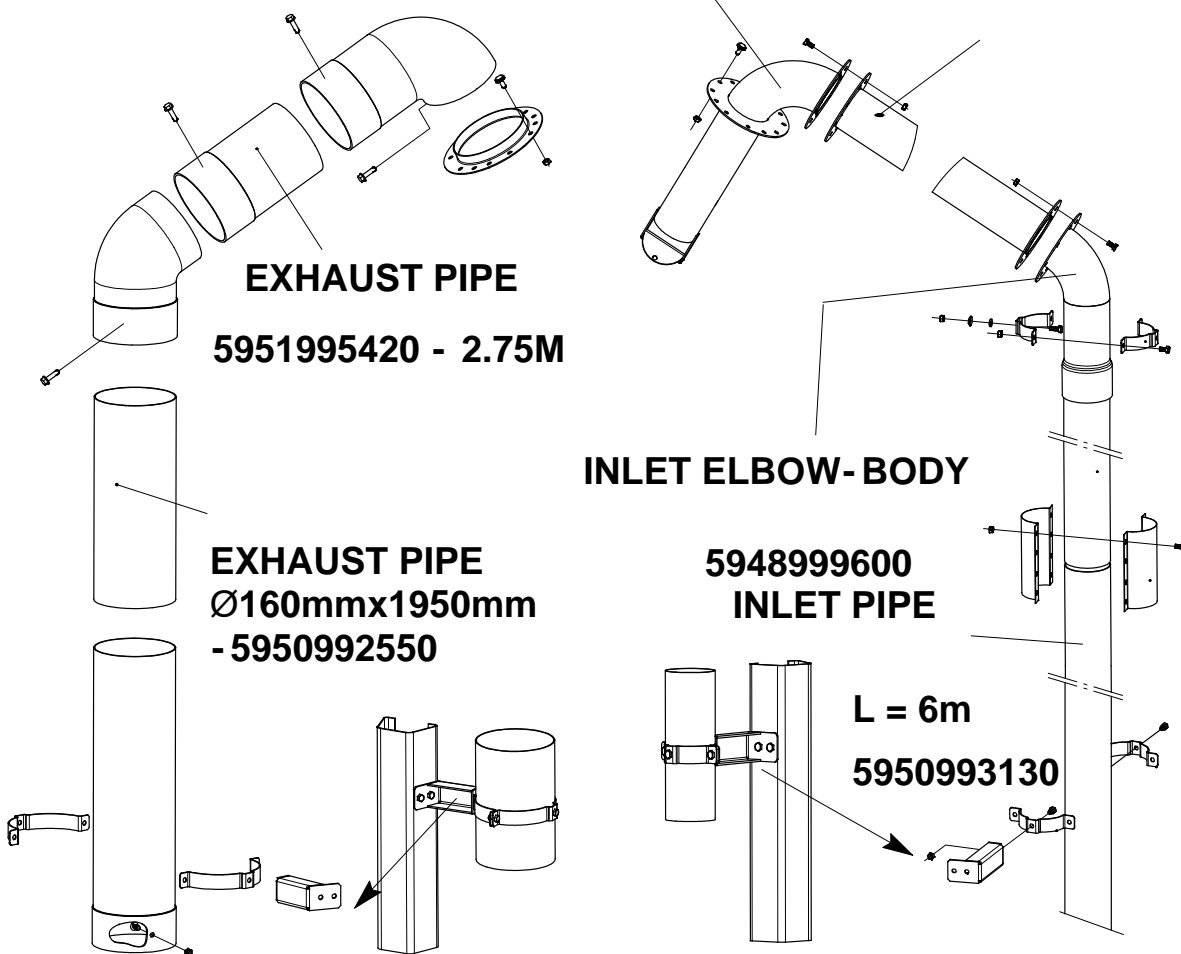
EXHAUST PIPE  
Ø160mmx1950mm  
- 5950992550

#### INLET ELBOW- BODY

5948999600  
INLET PIPE

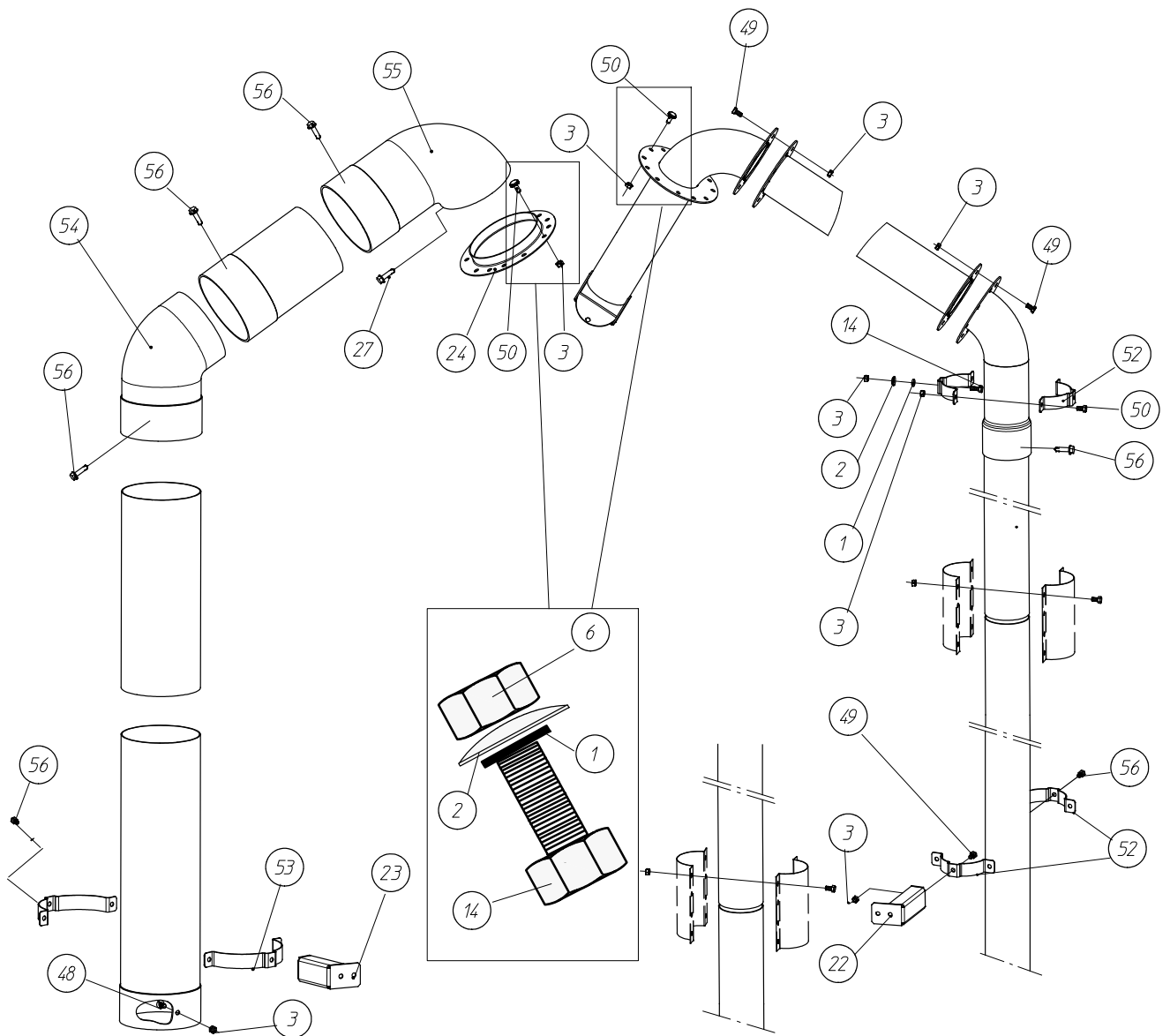
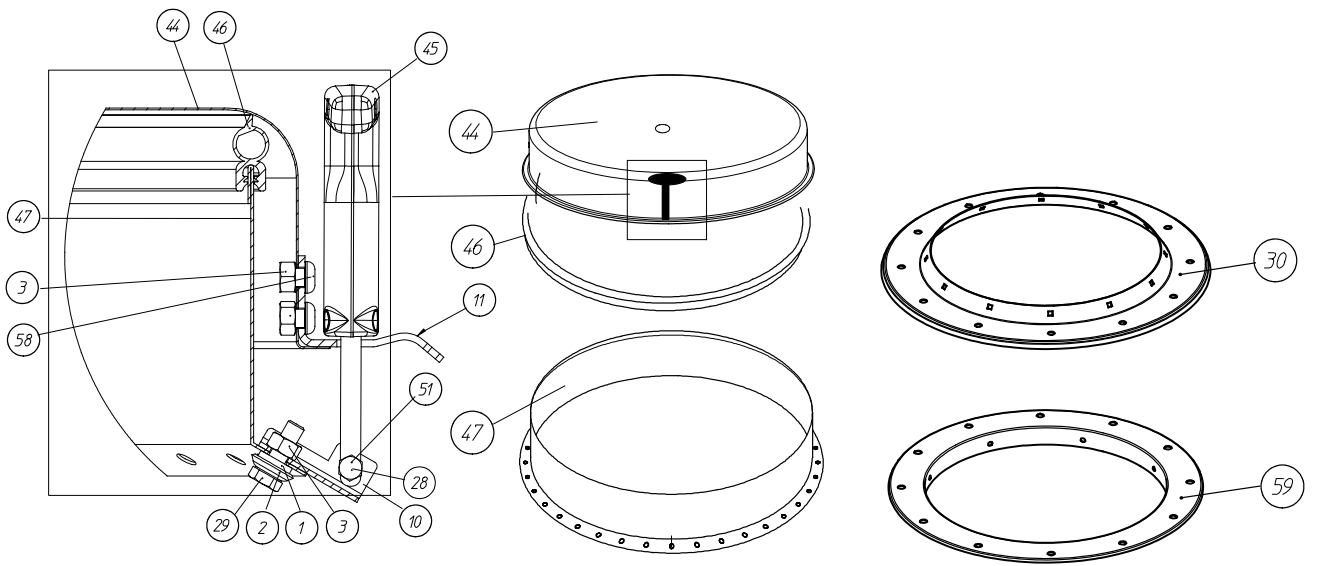
L = 6m

5950993130

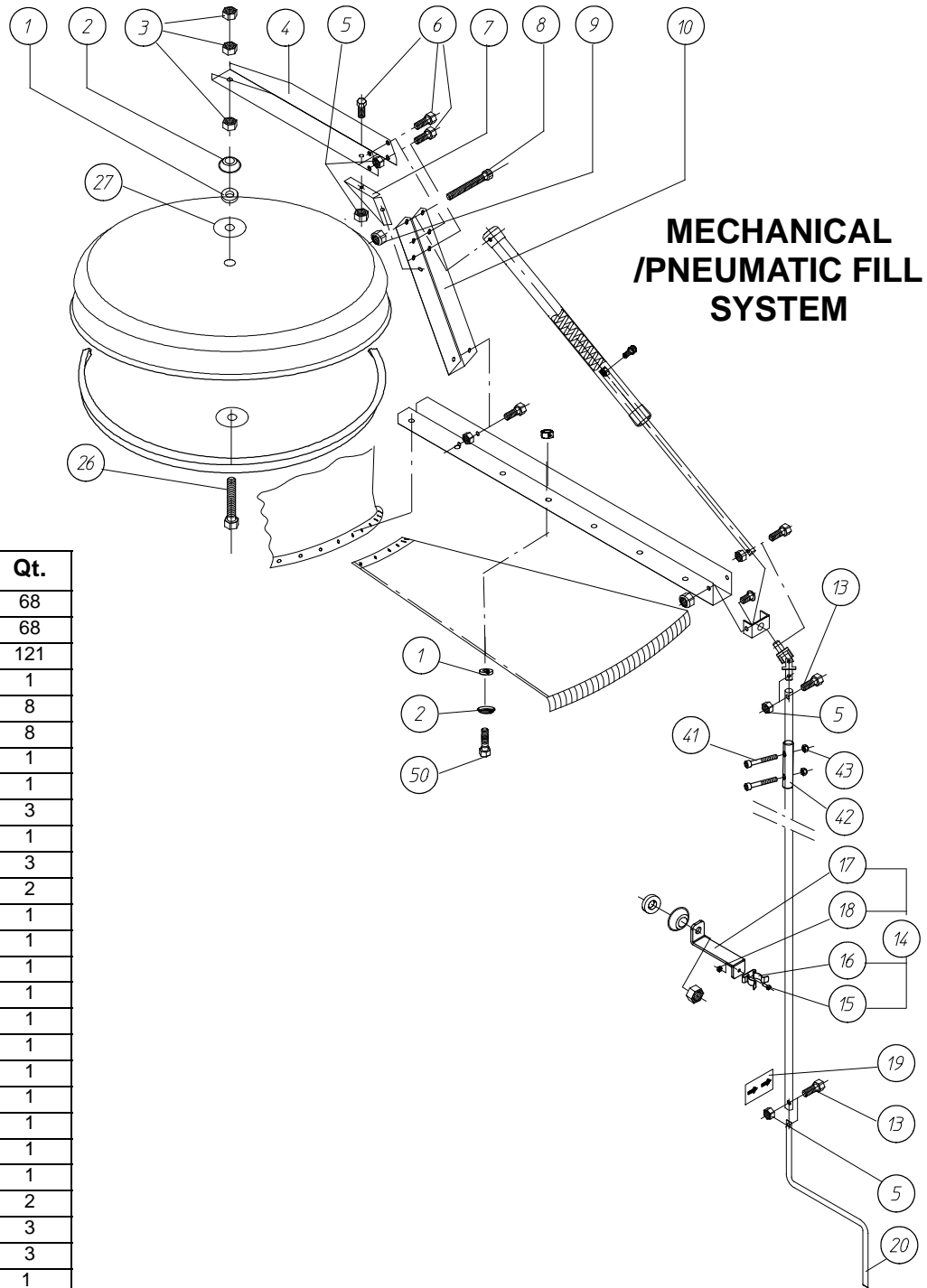


# MECHANIC/PNEUMATIC FILL SYSTEM

## 5651991260 - 2.75M/3.2M



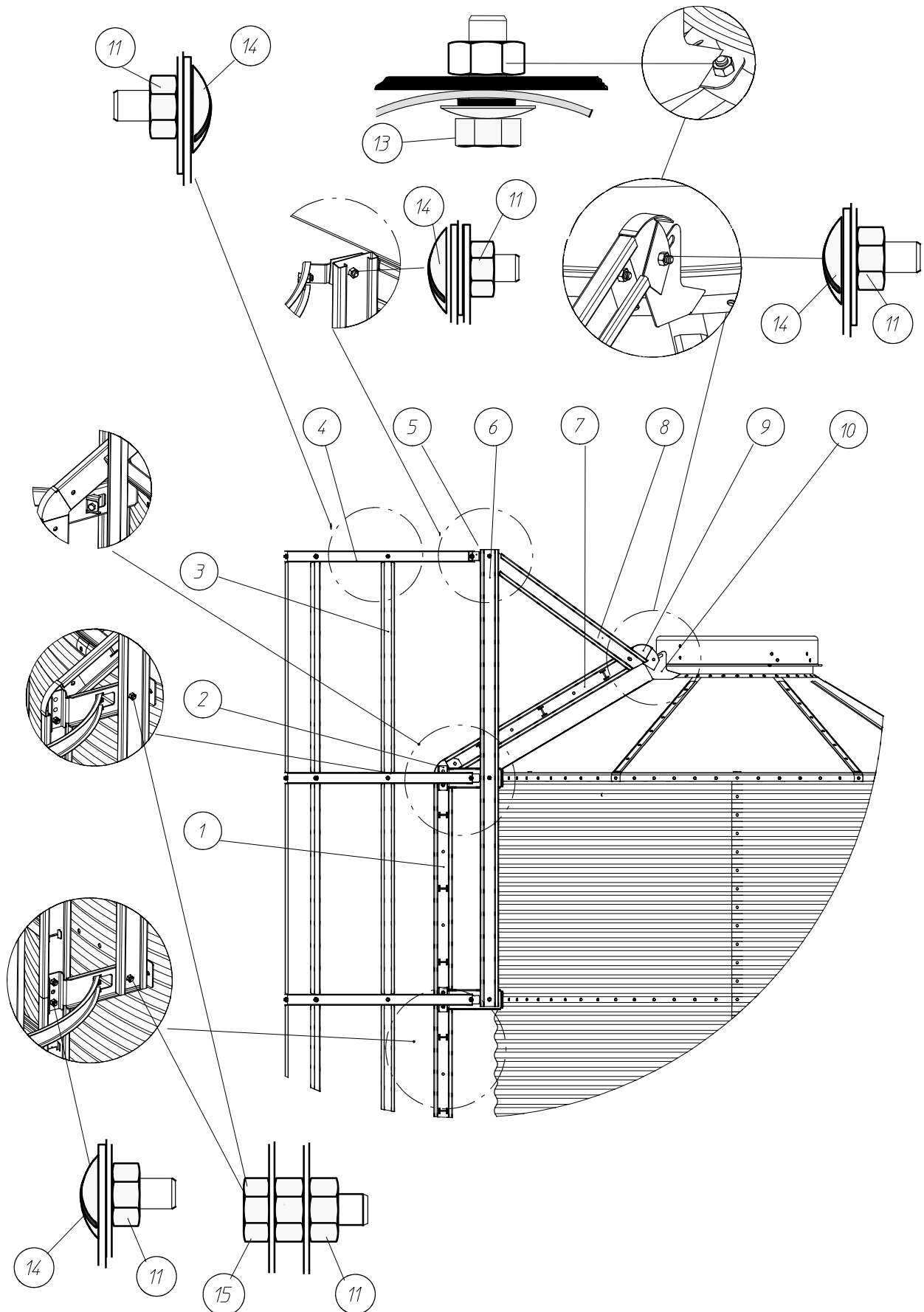




Key	Part Nr.	Qt.
1	5191999330	68
2	5191999250	68
3	5191990080	121
4	5050920670	1
5	5190991090	8
6	5190990590	8
7	5050923990	1
8	5190907190	1
9	5190993990	3
10	5050920750	1
11	5048913290	3
13	5190990750	2
14	5050939820	1
15	5190995620	1
16	5191992140	1
17	5050939820	1
18	5190995970	1
19	5050917970	1
20	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

2.75M/3.2M

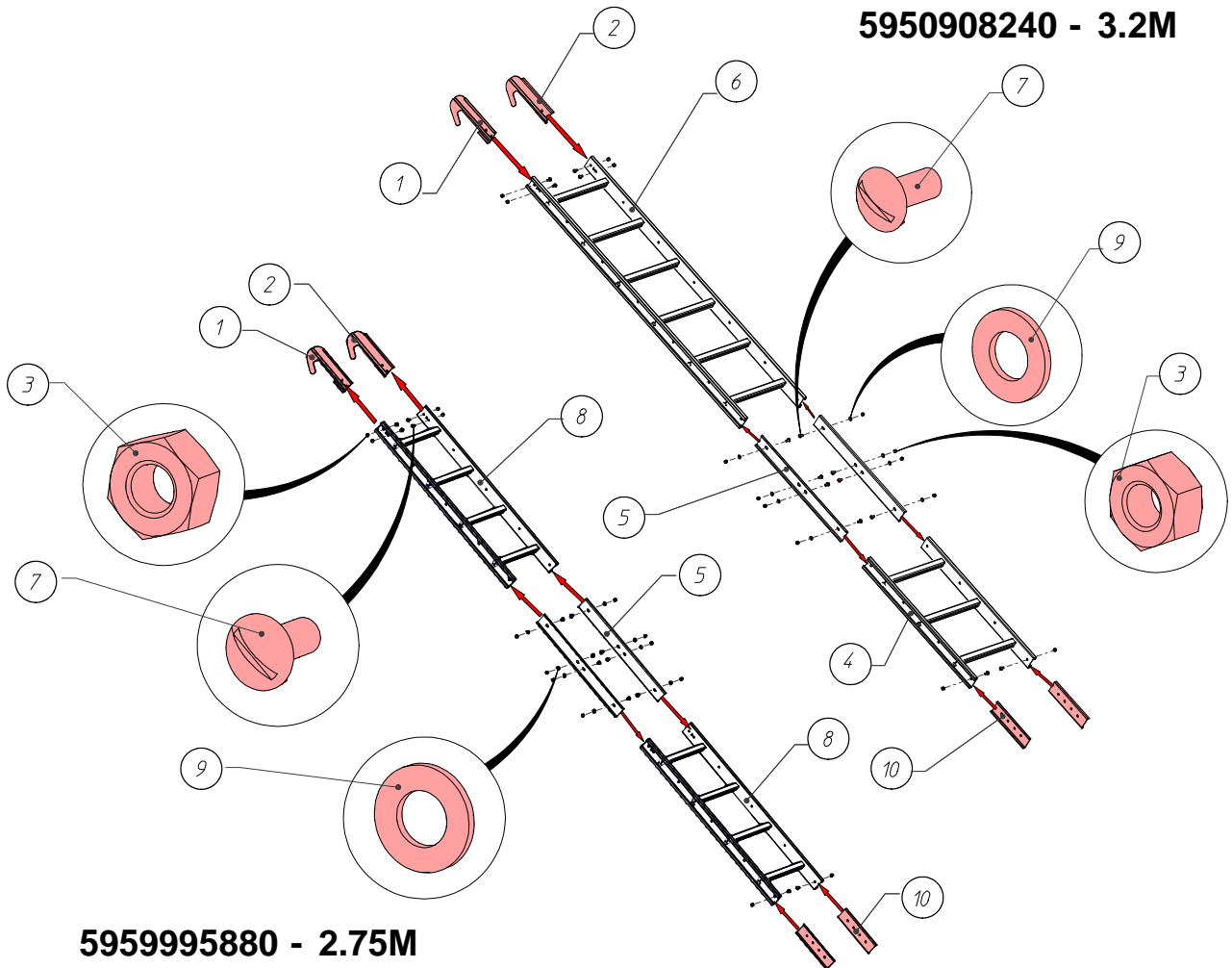


### LADDER - SAFETY CAGE

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

Key	Name	Part Nr.	Qt.
*8	SAFETY RAIL FOR ROOF LADDER LH 9&10.5'	5951909700	1
	SAFETY RAIL FOR ROOF LADDER RH 9&10.5'	5951909620	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



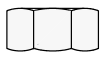


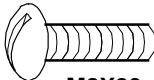
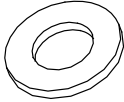


### “HOOK ON” LADDER



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	5048990160	2

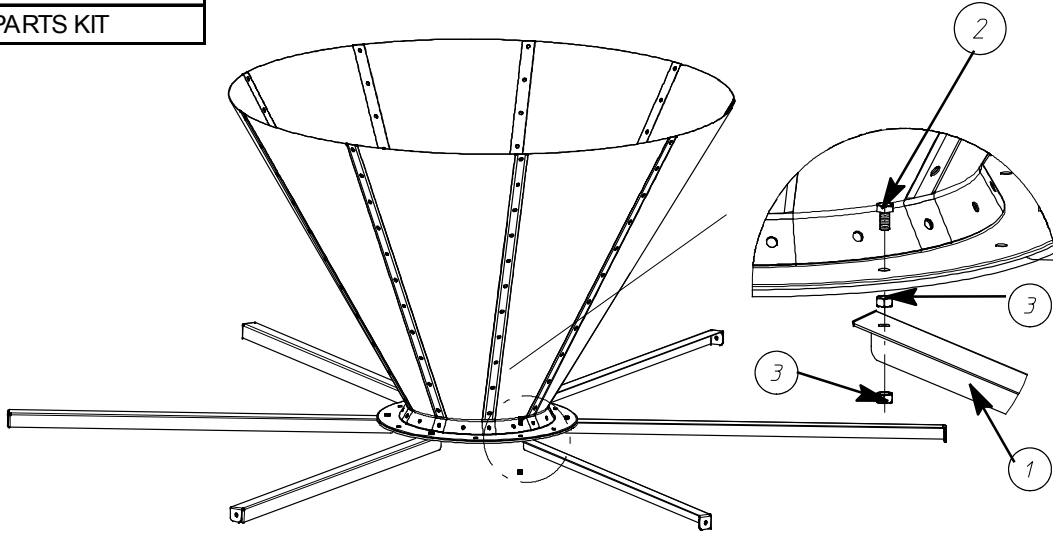
Key	Name	Part Nr.	Qt.
6	TWO RING LADDER	5948990940	1
*7	TRUSS HEAD BOLT M8X20 - SP	5191990650	14
8	4 RUNG LADDER	5959905440	2
*9	WASHER D.9xD.16x1.6-DIN126	5190993560	8
10	LADDER FOOT	5048990080	2
*	ASSEMBLING KIT HOOK-IN LADDER	5048990320	1

**BOLTS & NUTS (PARTS KITS)**

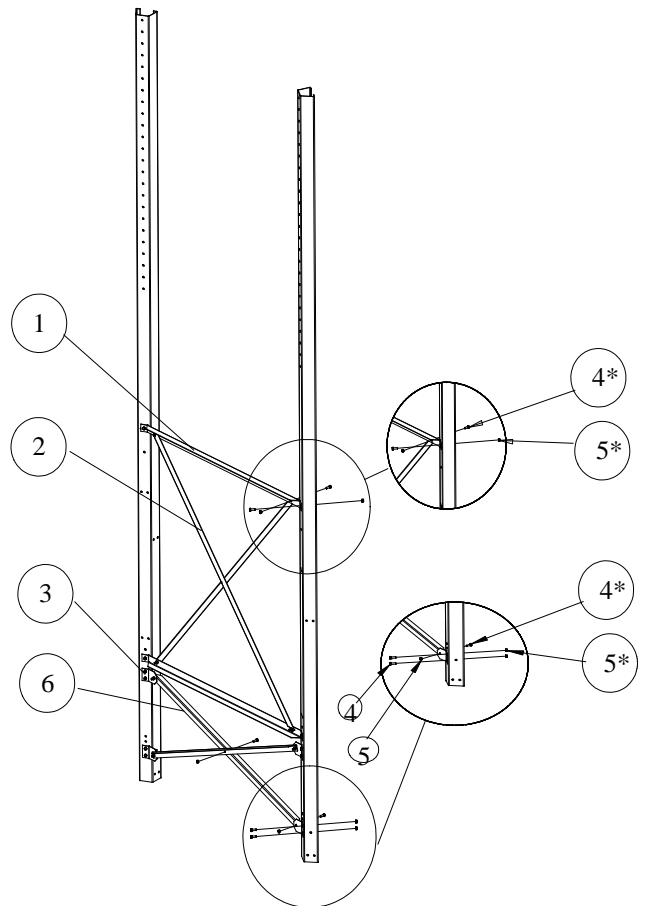
		Part Nr.	2.75m			3.2m		
			Type	Parts Kit nr.	Qt.	Type	Parts Kit nr.	Qt.
13	 <b>M8X25</b>	5191990320	902	5651992580	653	1052	5652999340	806
			903	5651992660	753	1053	5652999410	902
			904	5651992740	904	1054	5652999590	998
			905	5651992820	1010	1055	5652999670	1110
			906	5651993900	1129	1056	5652999750	1169
			907	5651993080	1218			
5	 <b>M8 EV</b>	5191999170	902	5651992580	508	1052	5652999340	574
			903	5651992660	597	1053	5652999410	670
			904	5651992740	686	1054	5652999590	766
			905	5651992820	776	1055	5652999670	861
			906	5651993900	865	1056	5652999750	921
			907	5651993080	954			
6	 <b>M8 SP</b>	5191990080	902	5651992580	441	1052	5652999340	622
			903	5651992660	441	1053	5651992660	622
			904	5651992740	514	1054	5652999590	622
			905	5651992820	530	1055	5652999670	638
			906	5651993900	560	1056	5652999750	638
			907	5651993080	560			
8		5191999250	902	5651992580	861	1052	5652999340	1080
			903	5651992660	950	1053	5652999410	1176
			904	5651992740	1112	1054	5652999590	1291
			905	5651992820	1201	1055	5652999670	1387
			906	5651993900	1290	1056	5652999750	1447
			907	5651993080	1379			
10		5191999330	902	5651992580	861	1052	5652999340	1080
			903	5651992660	950	1053	5652999410	1176
			904	5651992740	1112	1054	5652999590	1291
			905	5651992820	1201	1055	5652999670	1387
			906	5651993900	1290	1056	5652999750	1447
			907	5651993080	1379			
2	 <b>M8X20</b>	5191990650	902	5651992580	296	1052	5652999340	345
			903	5651992660	296	1053	5652999410	345
			904	5651992740	296	1054	5652999590	345
			905	5651992820	296	1055	5652999670	345
			906	5651993900	296	1056	5652999750	345
			907	5651993080	296			
		5190993560	902	5651992580	29	1052	5652999340	29
			903	5651992660	29	1053	5652999410	29
			904	5651992740	33	1054	5652999590	33
			905	5651992820	33	1055	5652999670	33
			906	5651993900	33	1056	5652999750	33
			907	5651993080	33			
13	 <b>M12X25 SP</b>	5191990570	902	5651992580	13	1052	5652999340	13
			903	5651992660	13	1053	5652999410	13
			904	5651992740	13	1054	5652999590	13
			905	5651992820	13	1055	5652999670	13
			906	5651993900	13	1056	5652999750	13
			907	5651993080	13			
5	 <b>M12 SP</b>	5191990240	902	5651992580	19	1052	5652999340	17
			903	5651992660	19	1053	5652999410	17
			904	5651992740	19	1054	5652999590	17
			905	5651992820	19	1055	5652999670	17
			906	5651993900	19	1056	5652999750	17
			907	5651993080	18			
<b>STICKER</b>			<b>15902109</b>					

### HORIZONTAL BRACES

Key	Part Nr.
1	5951908710
	5952996900
*2	5191990570
*3	5191990240
*5	5191990080
*6	5191990320
*	PARTS KIT

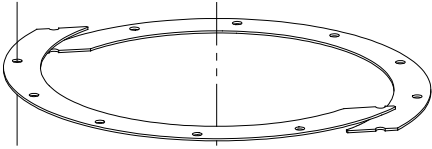


### X-BRACES / HORIZONTAL BRACES

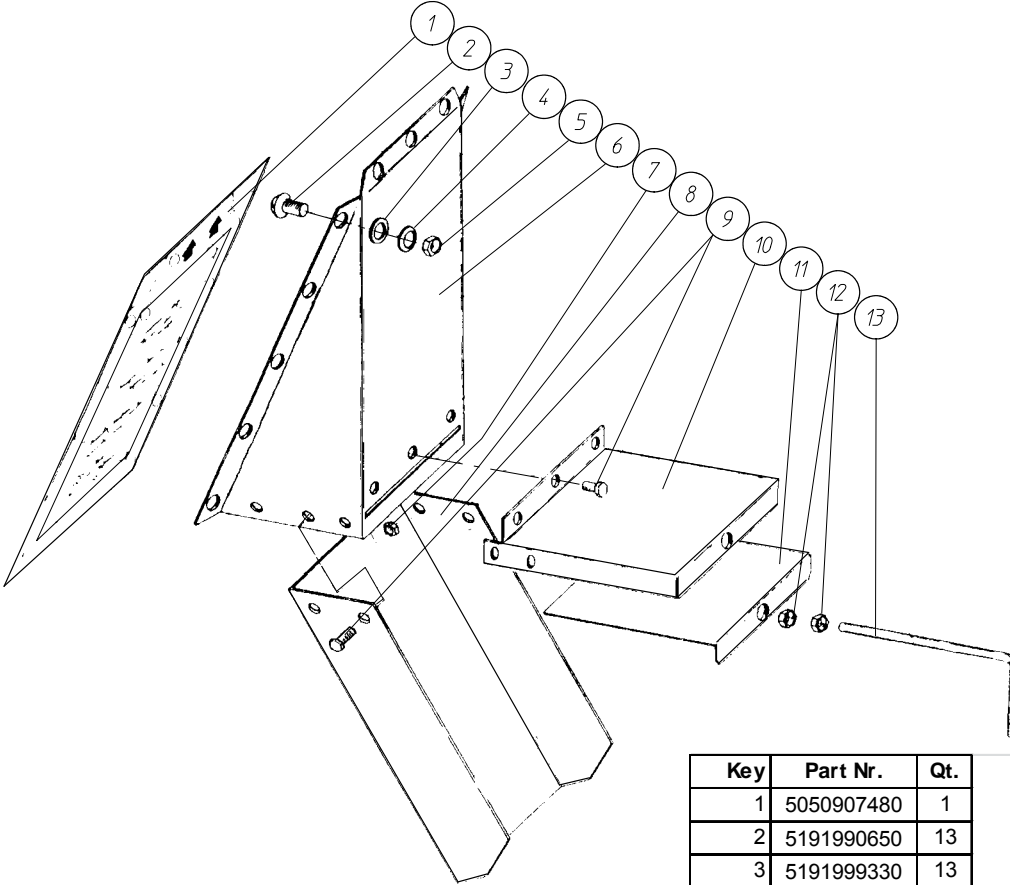


Key	Part Nr.
1	5951908550
	5952995820
2	5950912850
3	5051992280
*4	5191990320
*5	5191990080
*6	5951908630
*	PARTS KIT

**HALF RING FOR HORIZONTAL COLLAR FOR 3.2M- 5952996080**



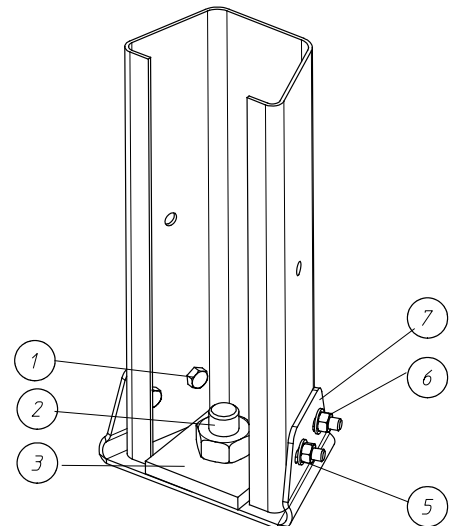
**HOPPER VALVE - 5950998750**



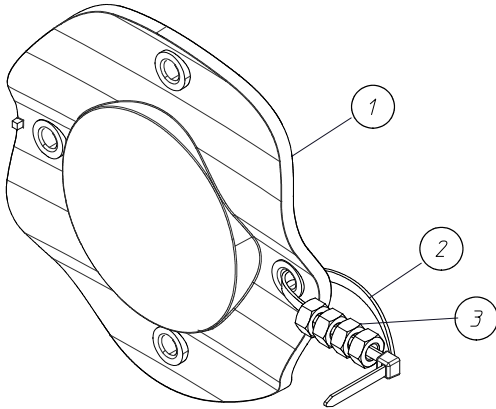
Key	Part Nr.	Qt.	Key	Part Nr.	Qt.
1	5050907480	1	8	5050907230	1
2	5191990650	13	9	5190990590	9
3	5191999330	13	10	5050907070	1
4	5191999250	13	11	5050907150	1
5	5191990080	13	12	5191990080	2
6	5050907310	4	13	5050907990	1
7	5190991090	9			

**ANCHORING KIT M20  
- 5951993440 (DIA. 2.75M & 3.2M)**

Key	Part Nr.	Qt.
Key	Part Nr.	2.75/3.2
*1	5191991480	24
2	5191991150	4
*3	5050991620	4
*5	5190993560	24
*6	5191990080	24
*7	5048994630	4
* INCLUDED IN PARTS KIT		

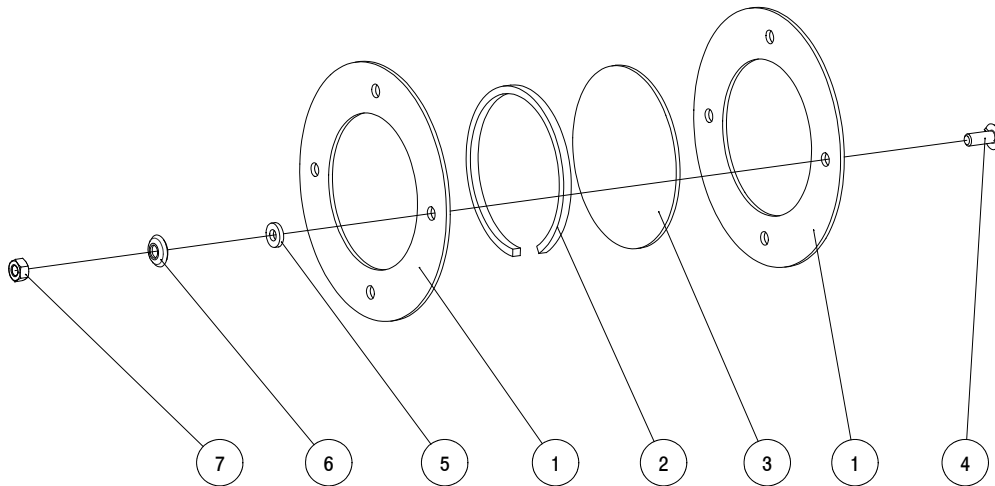


## FEED VIEWER WINDOW (BODY) - 5948997880



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

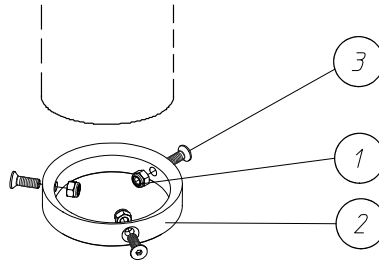
## FEED VIEWER WINDOW (HOPPER) - 5950998920



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

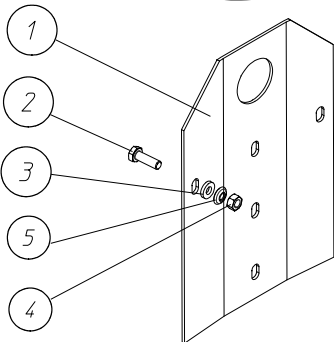
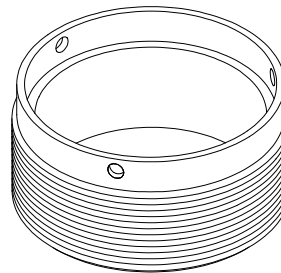
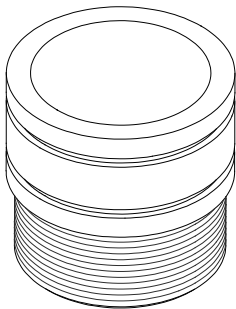
**RING ACCESSORY KIT - 5950992630**

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**

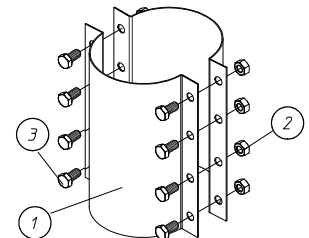
**5651991590 - 2.75M & 3.2M**

Key	Part Nr.	Qt.
1	5050998160	2
2	5191990320	15

3	5191999330	15
4	5191999170	15
5	5191999250	15

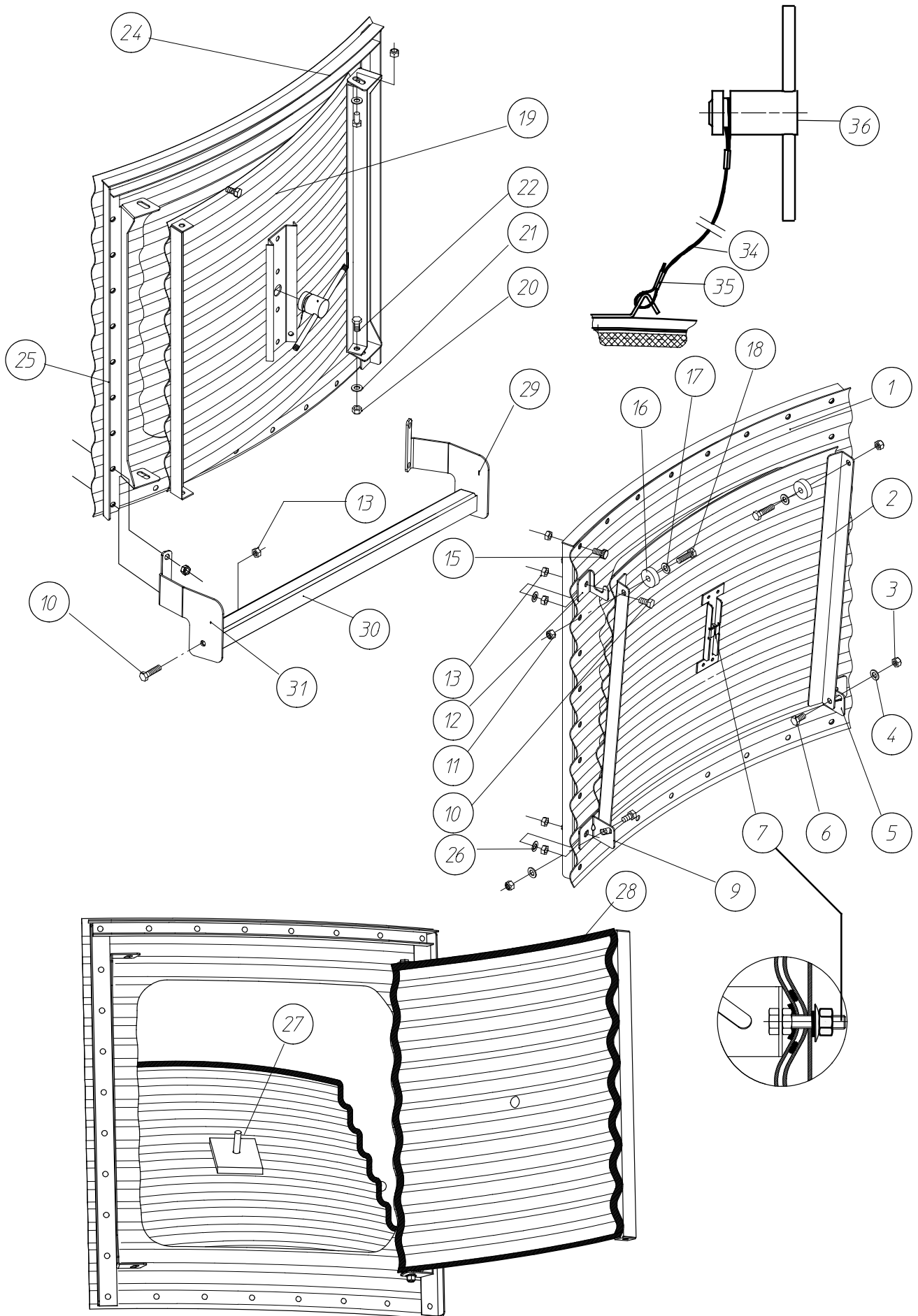
**COUPLING ASS'Y FOR BIN INLET PIPE- 5950993540**

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





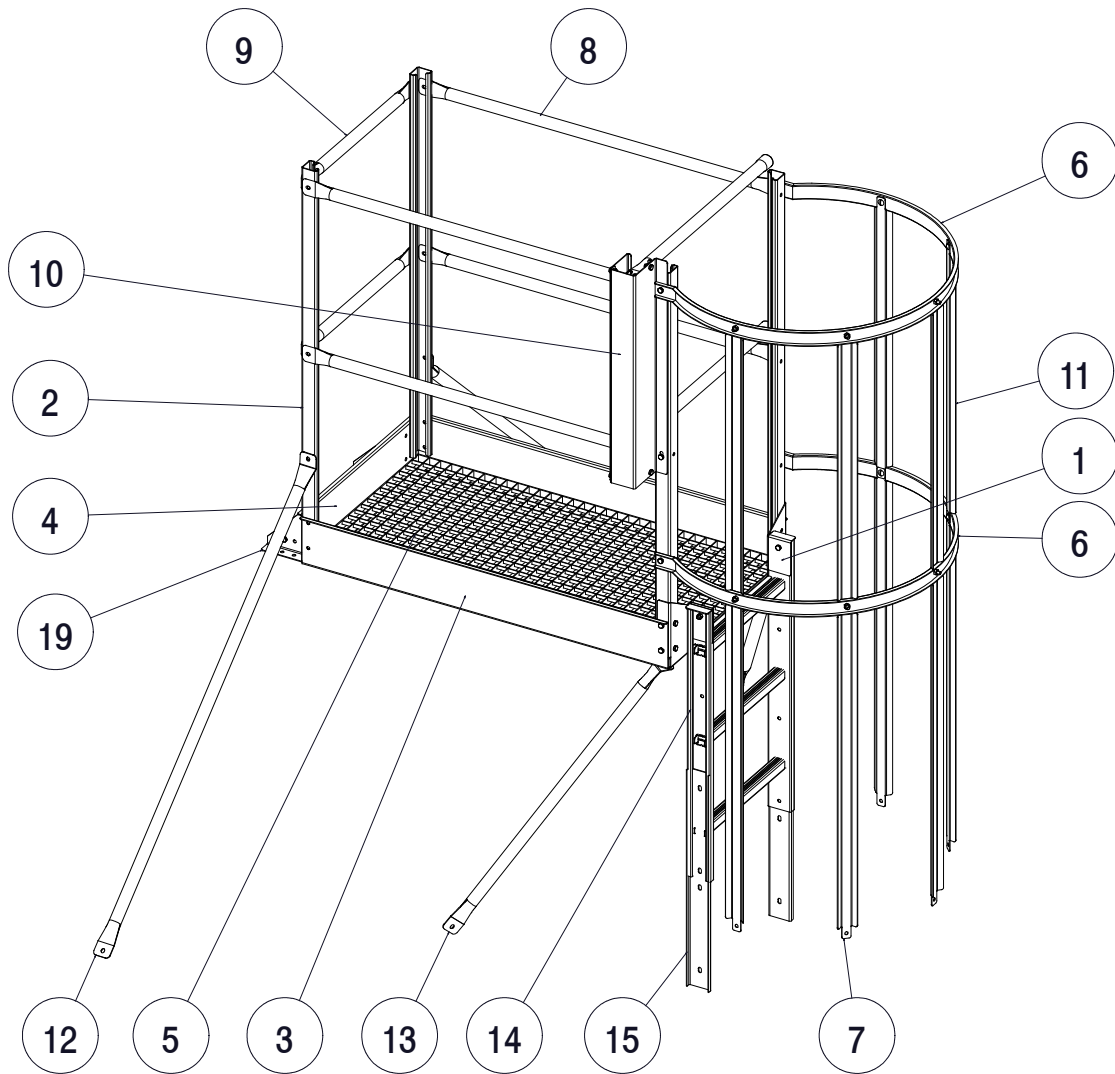
### ENTRY HATCH (OPTION)



**ENTRY HATCH (OPTION) -****5951996340 - 2.75 M****5952992510 - 3.20 M**

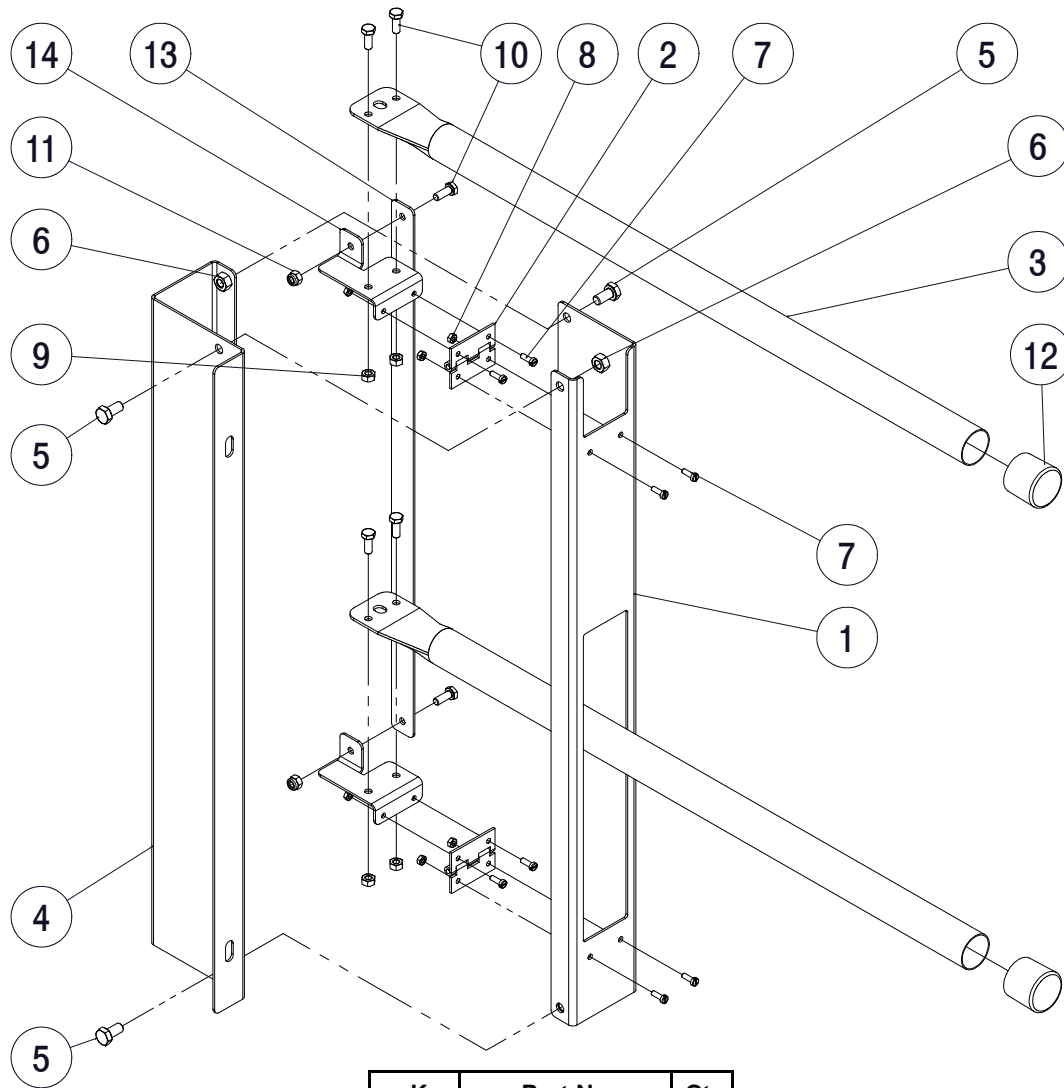
Key	Part Nr.	Qt.
1	5048993990	1
	5048909400	1
2	5048991820	2
	5048909250	2
*3	5190917740	2
*4	5190917580	2
*5	5048991910	2
*6	5088980640	2
7	5048990920	1
*9	5048991090	1
*10	5190991330	5
11	5191999170	2
*12	5048991170	1
*13	5191990080	37
*15	5191990320	29
16	5048990000	2
17	5190993560	2
18	5190991400	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 2.75M & 3.2M



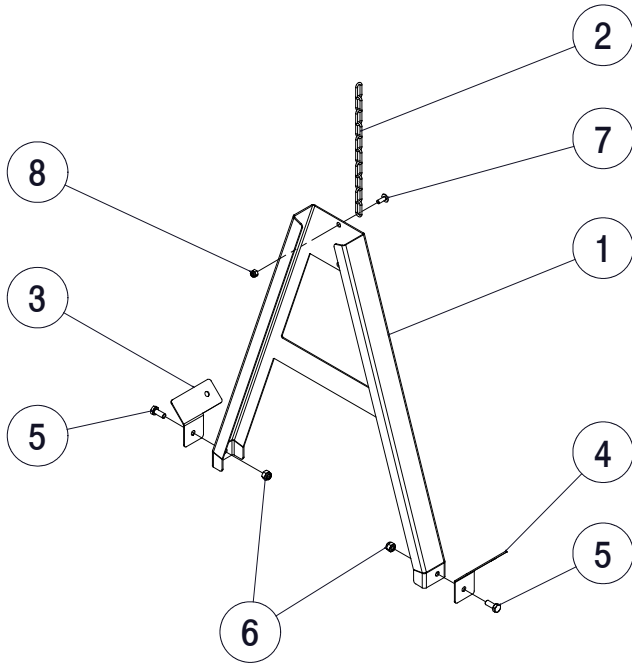
Key	Part Nr.	Part Nr.	Qt.
	2.75M	3.2M	
1	5948900340	5948900340	1
2	5948900260	5948900260	4
3	5951911580	5952998550	2
4	5948900410	5948900410	1
5	5951911500	5952998620	1
6	5948900480	5948900480	2
7	5951911740	5952998700	5
8	5951911660	5952998780	4
9	5948900560	5948900560	2
10	5948900640	5948900640	1
11	5948999370	5948999370	5
12	5951911820	5952998860	2
13	5951912900	5952909940	2
14	5948999860	5959905440	1
15	5048900160	5048900160	2
*16	5191990650	5191990650	10
*17	5191990080	5191990080	52
*18	5191991480	5191991480	42
19	5948900800	5952909020	2
*	NOT SHOWN	NOT SHOWN	

## SELF CL. GATE-SAFETY PLATFORM - 5948900640



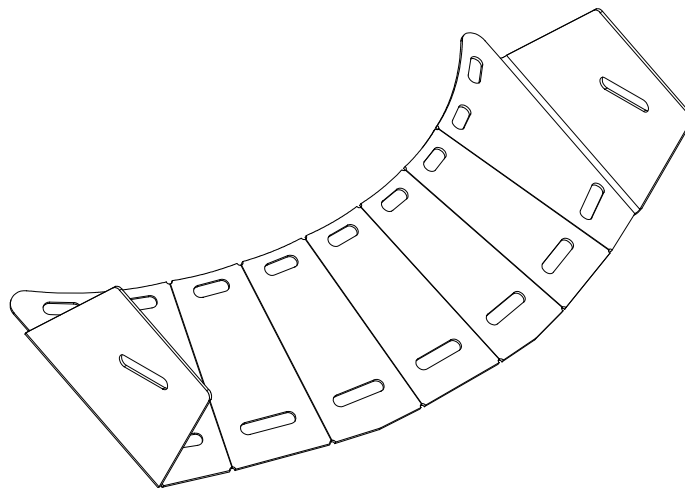
Key	Part Nr.	Qt.
1	5048915820	1
2	5907902040	2
3	5048916900	2
4	5048918140	1
5	5191991480	4
6	5191990080	4
7	5190981000	8
8	5190915350	8
9	5190911460	4
10	5190912120	6
11	5190908590	2
12	5020932170	2
13	5048918060	1
14	5048916980	2

**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**

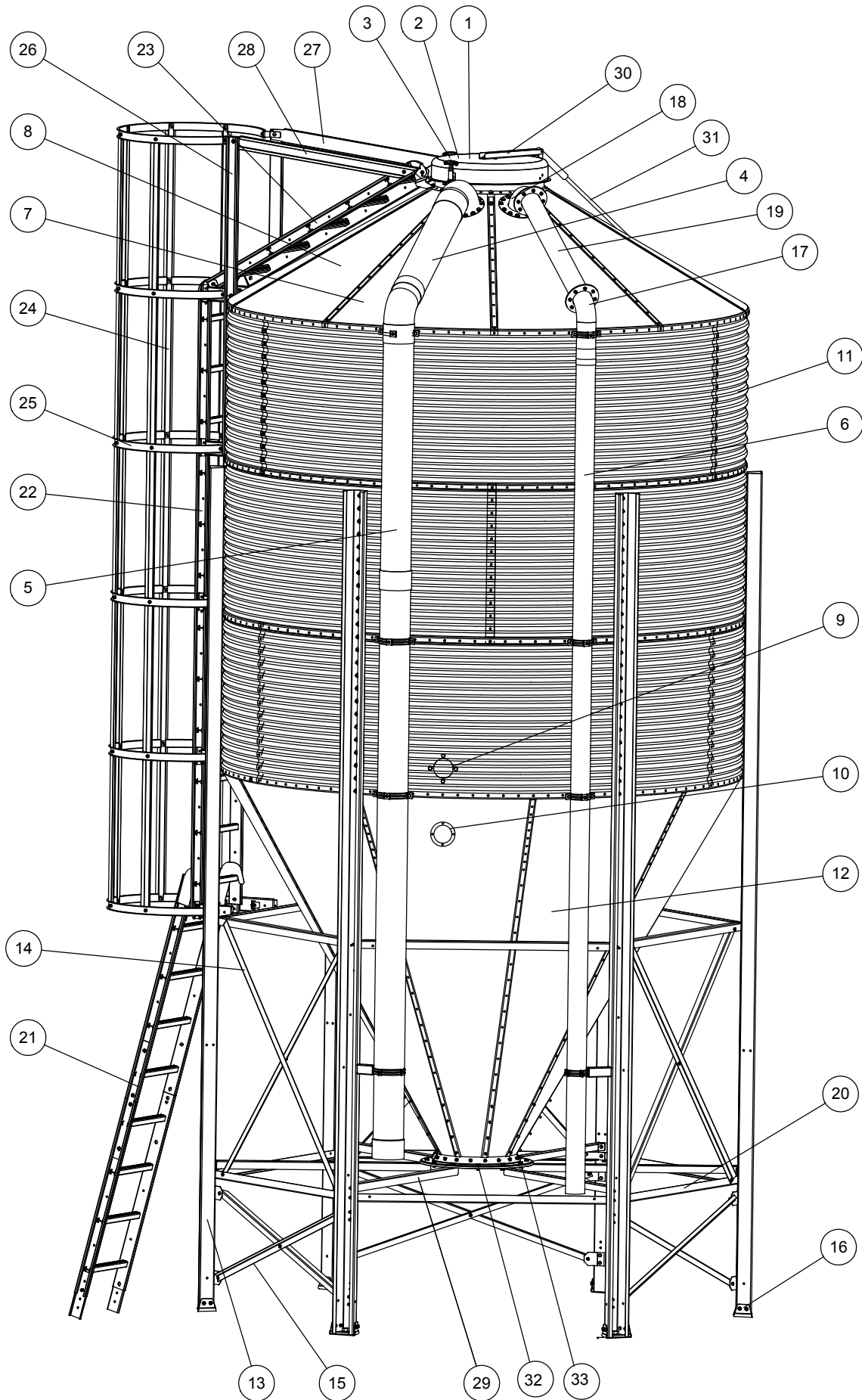
Key	Part Nr.	Qt.
1	5191990650	14
2	5191990080	74
3	5191991480	44
4	5191990320	20
5	5191999330	16
6	5191999250	16



## **PART III**

# **INSTALLATION INSTRUCTIONS**

### GENERAL VIEW BINS





## COMPONENT NUMBERS

Key	Name	Number Bin	
		2.75M	3.2M
1	MECHANICAL FILL SYSTEM	5651990840	5651990840
2	PNEUMATIC FILL SYSTEM	5651991000	5651991000
3	MECHANICAL/PNEUMATIC FILL SYSTEM	5951991260	5952991260
4	EXHAUST PIPE Ø160 X 920 MM (2.75M) / Ø160 X 1171 MM (3.2M)	5951995420	5952991520
5	EXHAUST PIPE Ø160 X 1950 MM	5950992550	5950992550
6	INLET PIPE - STANDARD LENGTH 6 M	5950993130	5950993130
7	ROOF SECTION - PNEUMATIC FILL/EXHAUST	5951909540	5952995330
8	ROOF SECTION - STANDARD	5951909460	5952995250
9	FEED VIEWER WINDOW (BODY)	5948997880	5948997880
10	FEED VIEWER WINDOW (HOPPER)	5950998920	5950998920
11	TOP/MID RING SECTION 0.8 MM	5651993160	-
	TOP/MID RING SECTION 0.8 MM WITH HOLE Ø103	5651993240	-
	TOP/MID RING SECTION 1 MM	5951909130	5952991370
	TOP/MID RING SECTION 1 MM WITH HOLE Ø103	-	5952991290
	TOP/MID RING SECTION 1 MM WITH HOLES FOR BIN LEG	5951998810	5952991030
	TOP/MID RING SECTION 1.25 MM	5951998490	5952990870
	TOP/MID RING SECTION 1.25 MM WITH HOLE Ø103	5951998320	5952990790
	TOP/MID RING SECTION 1.25 MM WITH HOLES FOR BIN LEG	5951998240	5952990610
	TOP/MID RING SECTION 1.5 MM	5951998730	-
	TOP/MID RING SECTION 1.5 MM WITH HOLE Ø103	5951998650	-
	TOP/MID RING SECTION 1.5 MM WITH HOLES FOR BIN LEG	5951998570	5952991950
	BOTTOM RING SECTION 1 MM	5951997090	5952999540
	BOTTOM RING SECTION 1 MM WITH HOLE Ø103	5951997910	5952999460
	BOTTOM RING SECTION 1.25 MM	5951997400	5952999700
	BOTTOM RING SECTION 1.25 MM WITH HOLE Ø103	5951997330	5952999620
	BOTTOM RING SECTION 1.5 MM	5951997660	5952990960
	BOTTOM RING SECTION 1.5 MM WITH HOLE Ø103	5951997580	5952999880
12	HOPPERSECTION 1.25 MM	5951900960	5952991860
	HOPPERSECTION 1.5 MM	5951900040	5952992940
13	BIN LEG 3690 X 2.5 MM	5951908220	-
	BIN LEG 4443 X 2.5 MM	5951996590	-
	BIN LEG 4443 X 3.5 MM	5951996670	-
	BIN LEG 4838 X 3.5 MM	-	5952997720
14	X-BRACE	5950912850	5950912850
15	SHORT X-BRACE	5951908630	-
16	ANCHORING KIT M20	5951993440	5951993440
17	INLET ELBOW - BODY	5948999600	5948999600
18	INLET ELBOW - ROOF	5948999780	5948999780
19	CONNECTION PIPE INLET ELBOW	5951909880	5952999390
20	LEG BRACE STRAIGHT TIE	5951908550	5952995820
21	"HOOK ON"LADDER	5959995880	5950908240
22	ONE RING LADDER	5948999860	5948999860
	TWO RING LADDER	5948990940	5948990940
23	ROOF LADDER	5951900790	5948990940
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	5951909700	5951909700
28	RAIL FOR ROOF LADDER - R	5951909620	5951909620
29	HORIZONTAL HOPPERBRACE	5951908710	5952996900
30	MECHANICAL OPENING SYSTEM	5951993520	5652999000
31	OPENINGTUBE - 3M	5648999490	5648999490
32	HORIZONTAL COLLAR	5051904810	5051904810
33	COLLAR DOWN	5050933880	5050933880

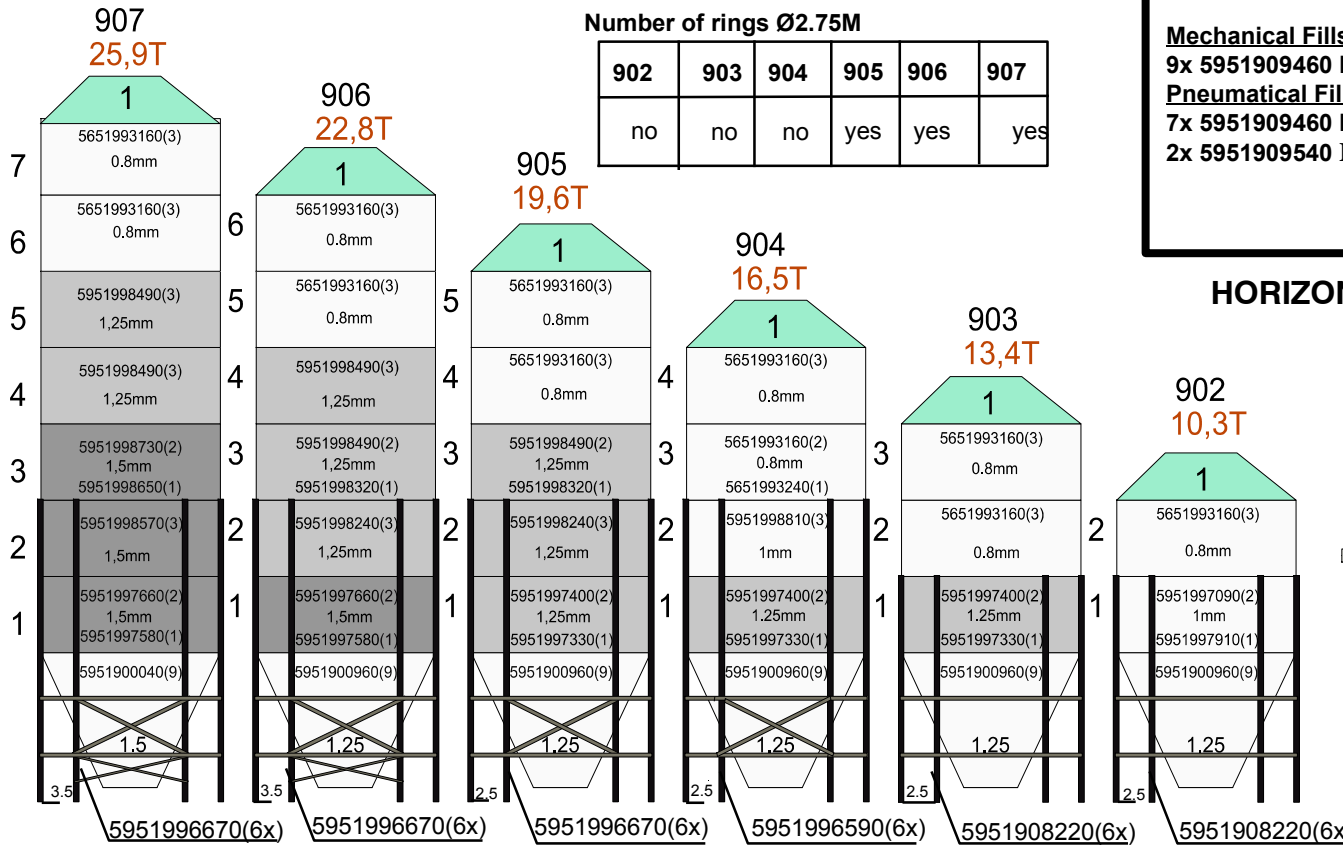
USAGE OF L-PROFILE

5951908060

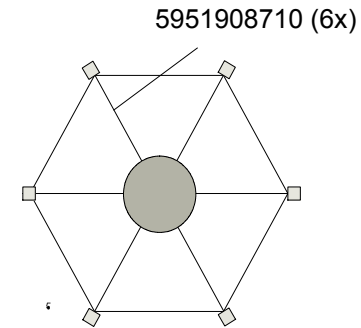
Number of rings Ø2.75M

902	903	904	905	906	907
no	no	no	yes	yes	yes

**Mechanical Fillsystem**  
 9x 5951909460 Roof Section Standard  
**Pneumatical Fillsystem**  
 7x 5951909460 Roof Section Standard  
 2x 5951909540 Roof Section Fill/Exhaust



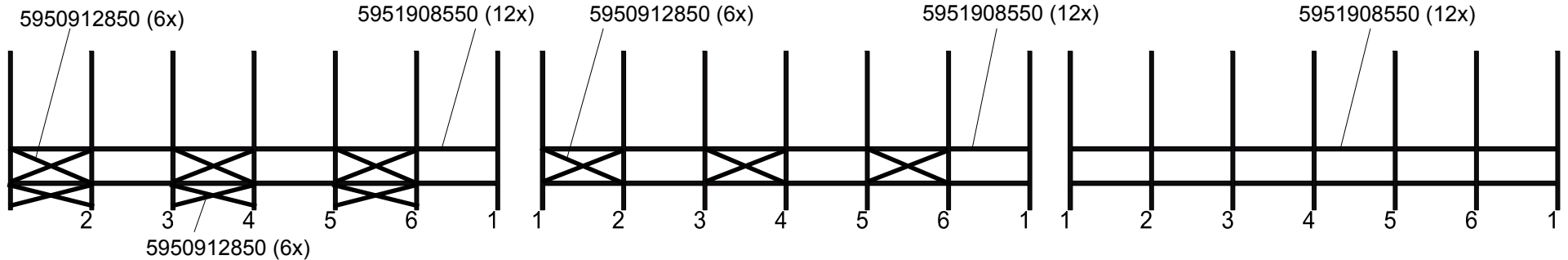
HORIZONTAL HOPPER BRACES - BOTTOM VIEW



BRACES OEM FOR 907 - 906

BRACES OEM FOR 905 - 904

BRACES OEM FOR 903 - 902



BIN Ø 2.75M OEM

**USAGE OF L-PROFILE**

5952995090

Number of rings Ø3.2M

1052	1053	1054	1055	1056
yes	yes	yes	yes	yes

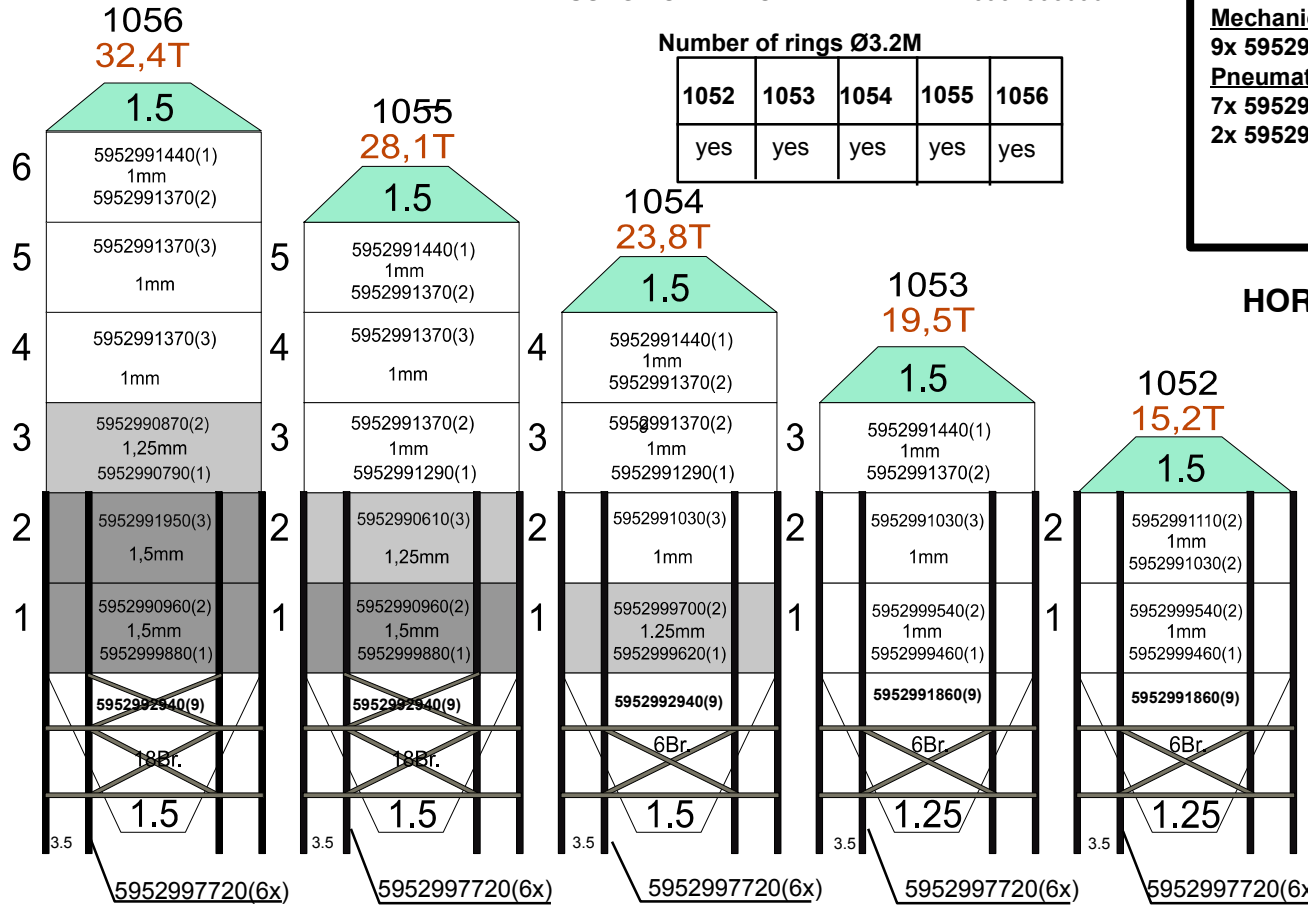
**Mechanical Fillsystem**

9x 5952995250 Roof Section Standard

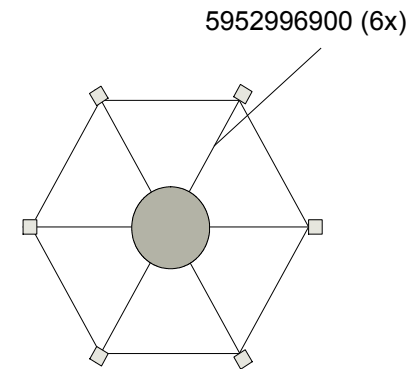
**Pneumatical Fillsystem**

7x 5952995250 Roof Section Standard

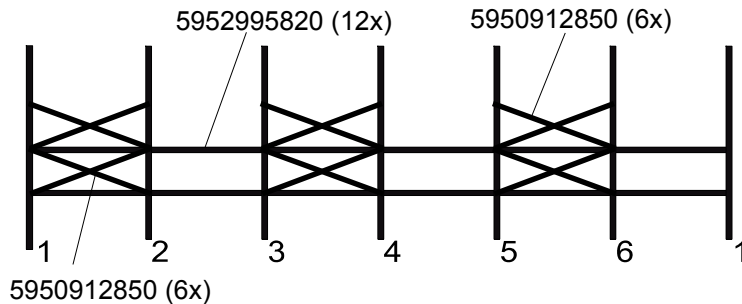
2x 5952995330 Roof Section Fill/Exhaust



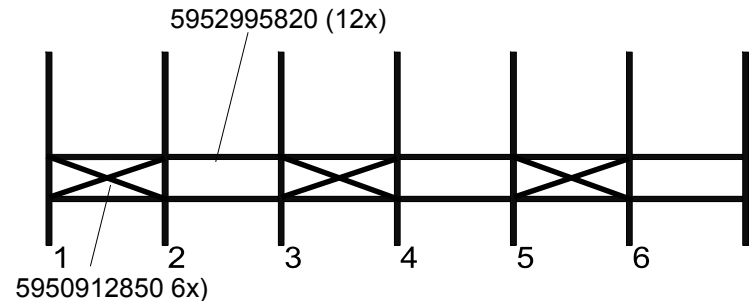
**HORIZONTAL HOPPER BRACES - BOTTOM VIEW**



**BRACES OEM FOR 1056 - 1055**



**BRACES OEM FOR 1054 - 1053 - 1052**



**BIN Ø 3.2M OEM**

2.75M & 3.2M

2416

## 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 26 Nm**.

## POSITION OF BOLTS, NUTS AND WASHERS

Plaats van de bouten, moeren en rondsels

Position des boulons, écrous et rondelles

Position der Bolzen, Muttern und Unterlegscheiben

РАСПОЛОЖЕНИЕ БОЛТОВ, ГАЕК И ШАЙБ

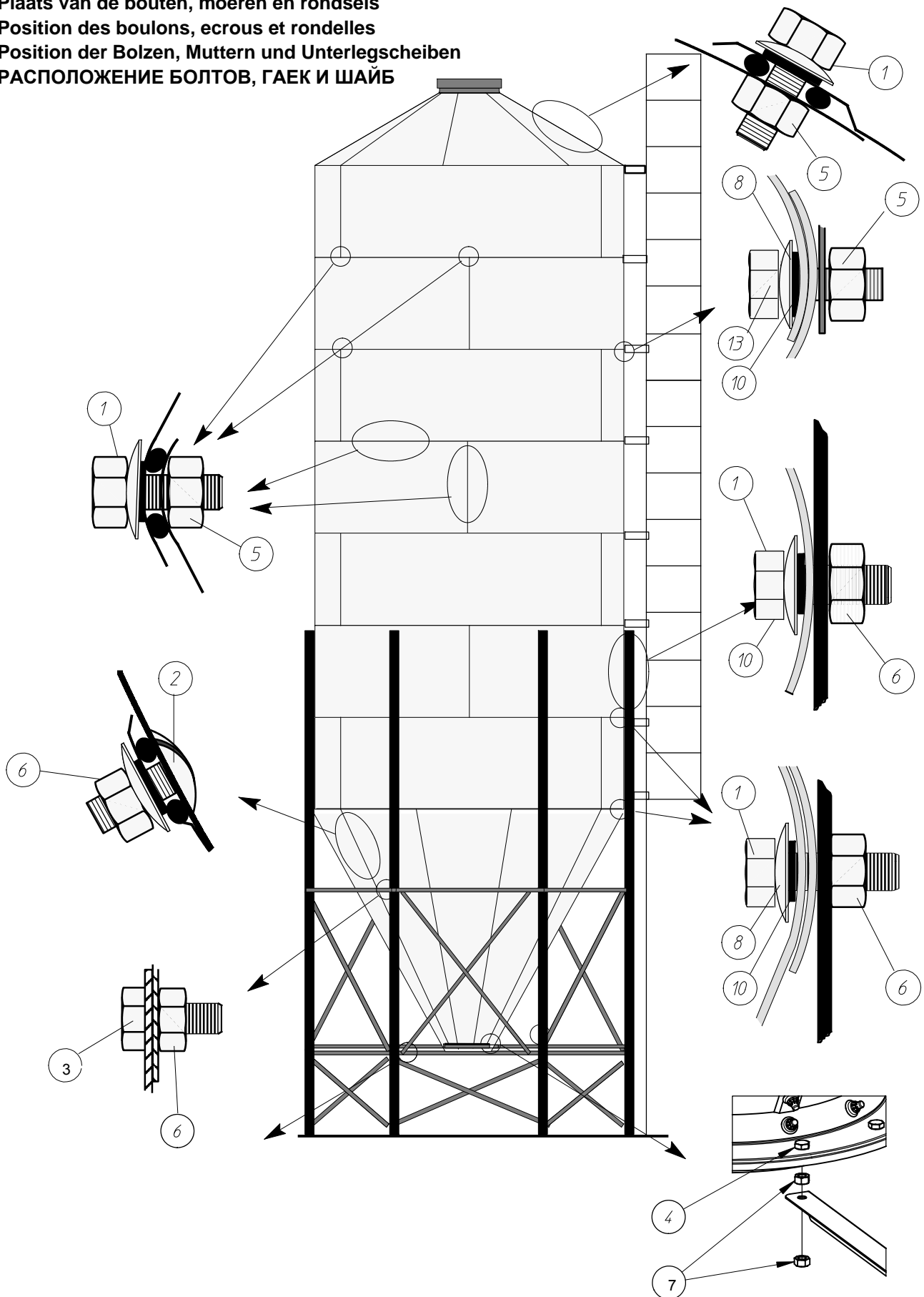


FIGURE 1.

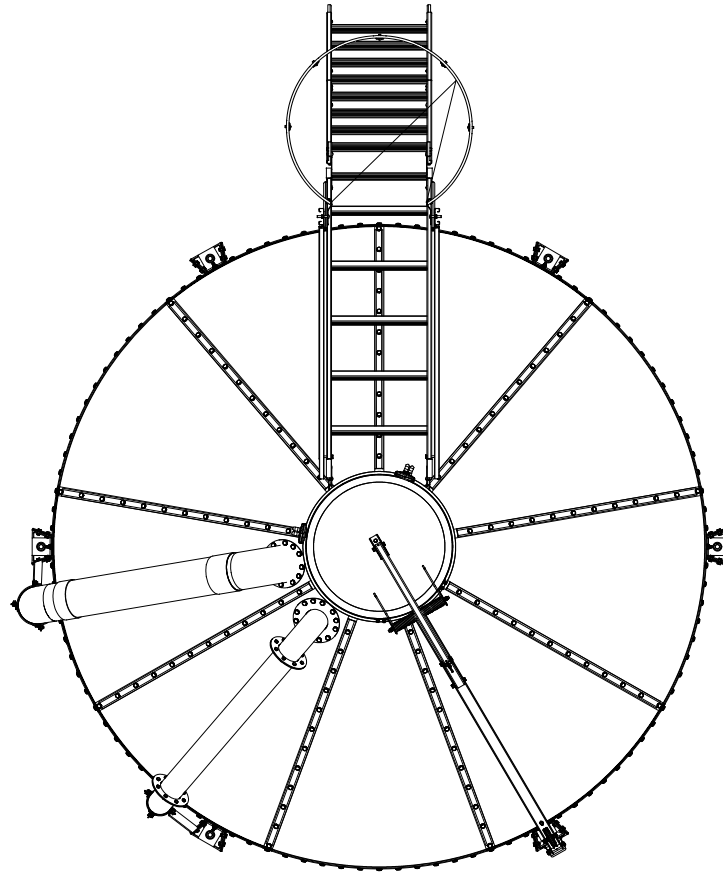
Key	Name	Number
1	BOLT M8X25 - SP	5190991250
2	TRUSS HEAD BOLT M8X20 - SPECIAL PLATED	5191990650
3	BOLT M8X16 - DULL GREY - HOT DIP GALVANIZED	5191991480
4	BOLT M12X25 - DULL GREY - HOT DIP GALVANIZED	5191990570
5	NUT M8 - YELLOW OR WHITE - ZINC PLATED	5191999170
6	NUT M8 - DULL GREY - HOT DIP GALVANIZED	5191990080
7	NUT M12 - DULL GREY - HOT DIP GALVANIZED	5191999240
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

## 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

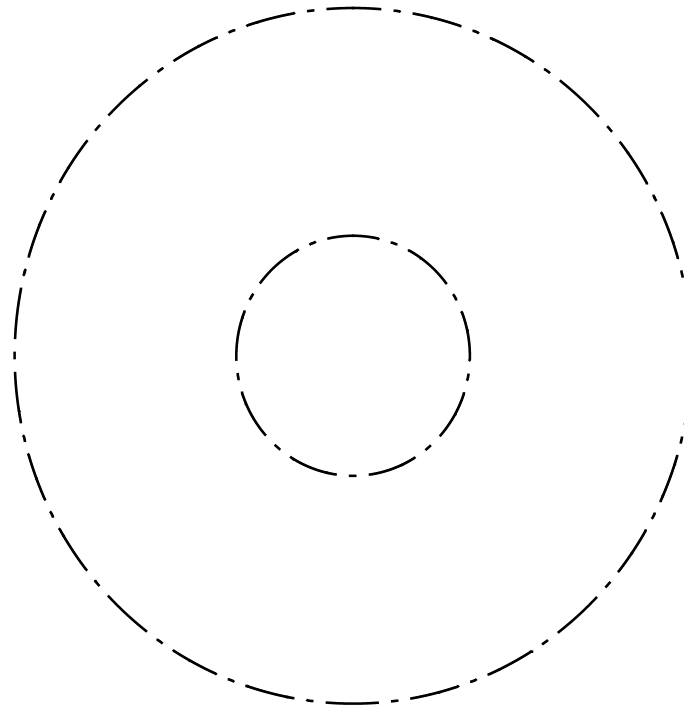
**DETERMINATION SITUATION**

**EXAMPLE**



**FIGURE 2.**

**YOUR SITUATION**



**FIGURE 3.**

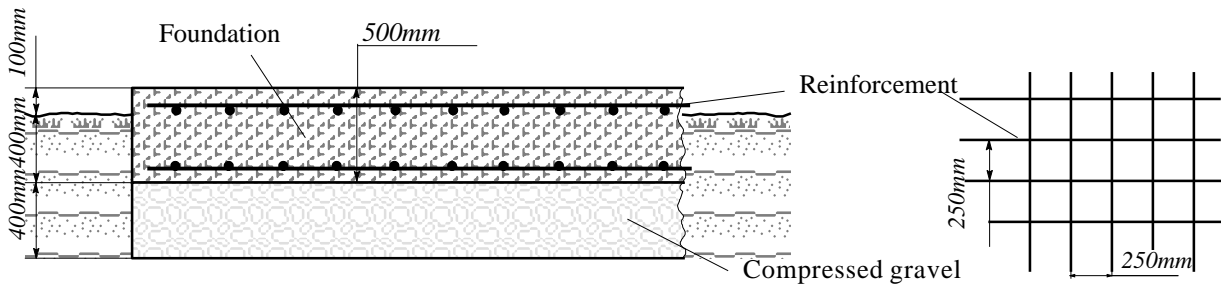
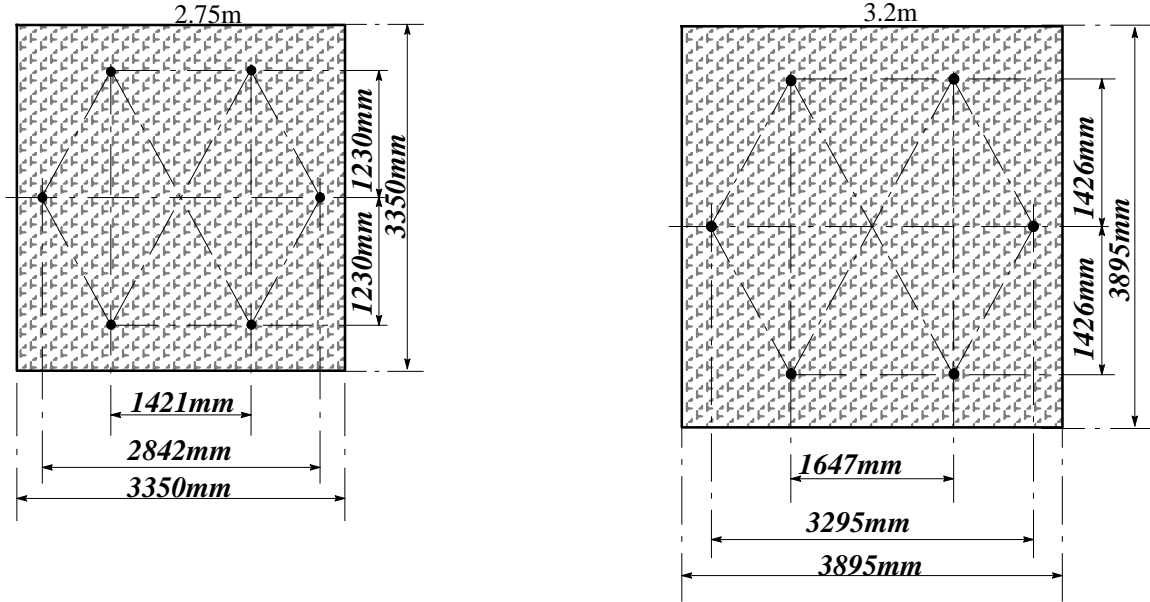
# CASTING THE FOUNDATION

**Important:**

Subsoil must withstand a pressure of at least 0,05MN/m<sup>2</sup>  
 Make foundation frostproof.

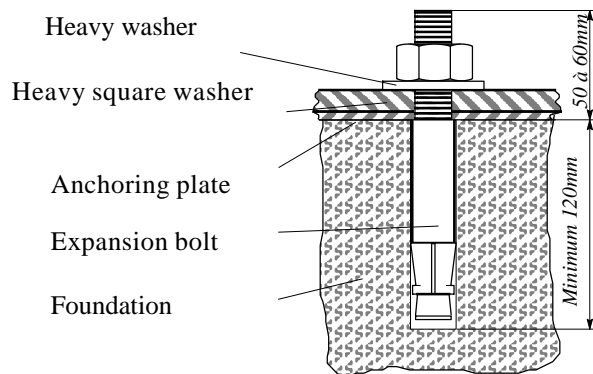
Concrete strength : 250 kgs cement per m3 concrete - broken stone dia. 0-32 ( mm - reinforcement netting Q131 (wire dia. 4-5 mm).

**2.75 M & 3.2 M**



**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

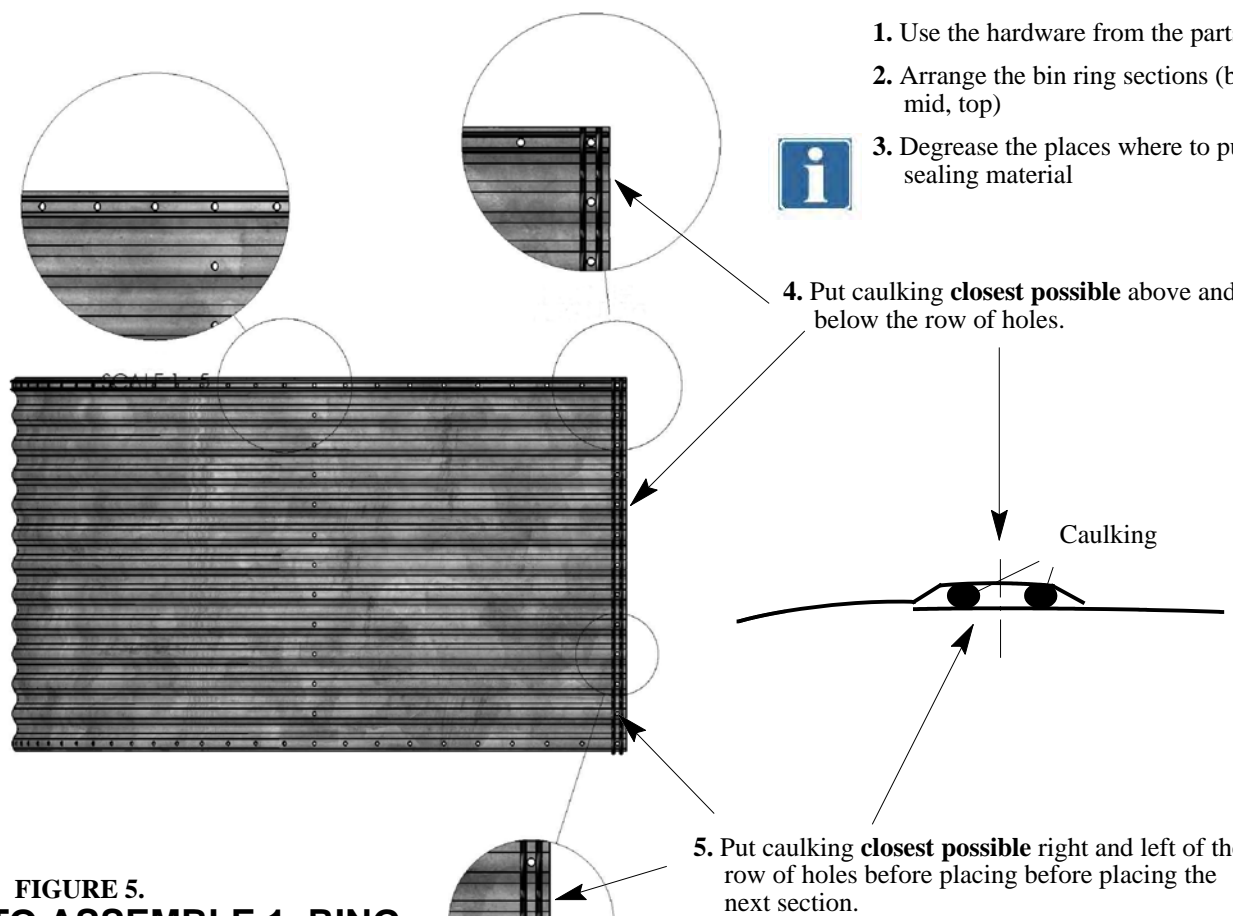


FIGURE 5.  
TO ASSEMBLE 1. RING

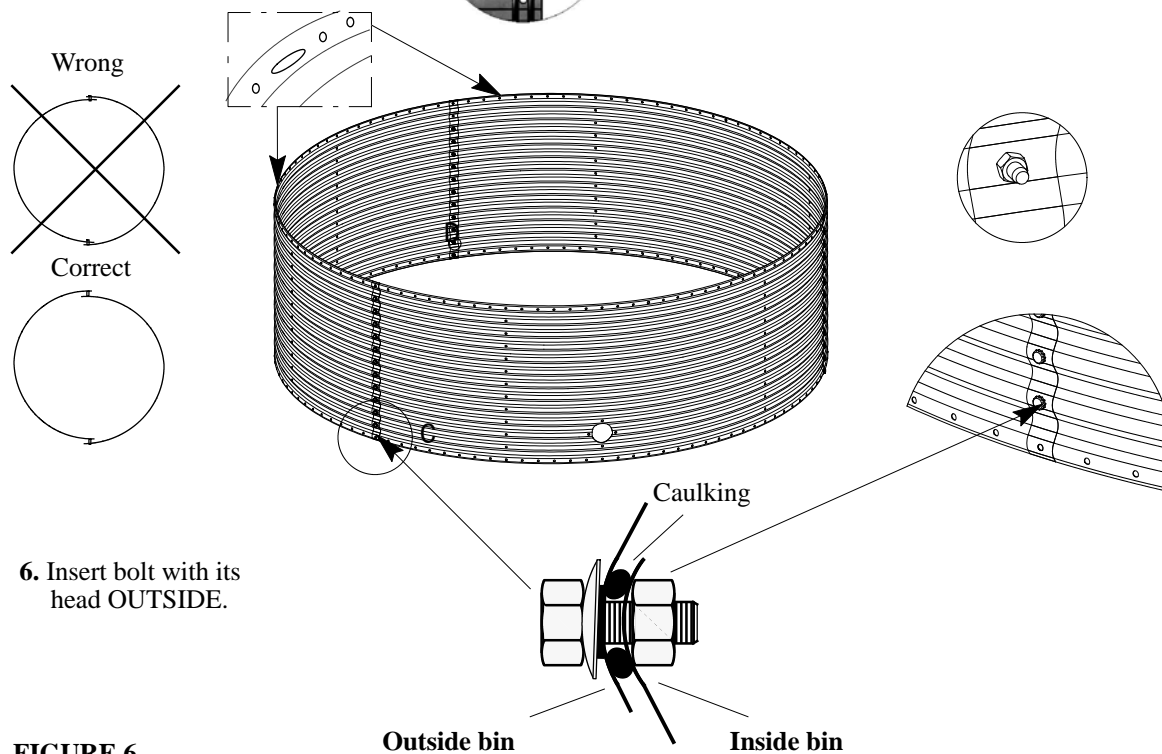


FIGURE 6.

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

### TO ASSEMBLE 2. RING

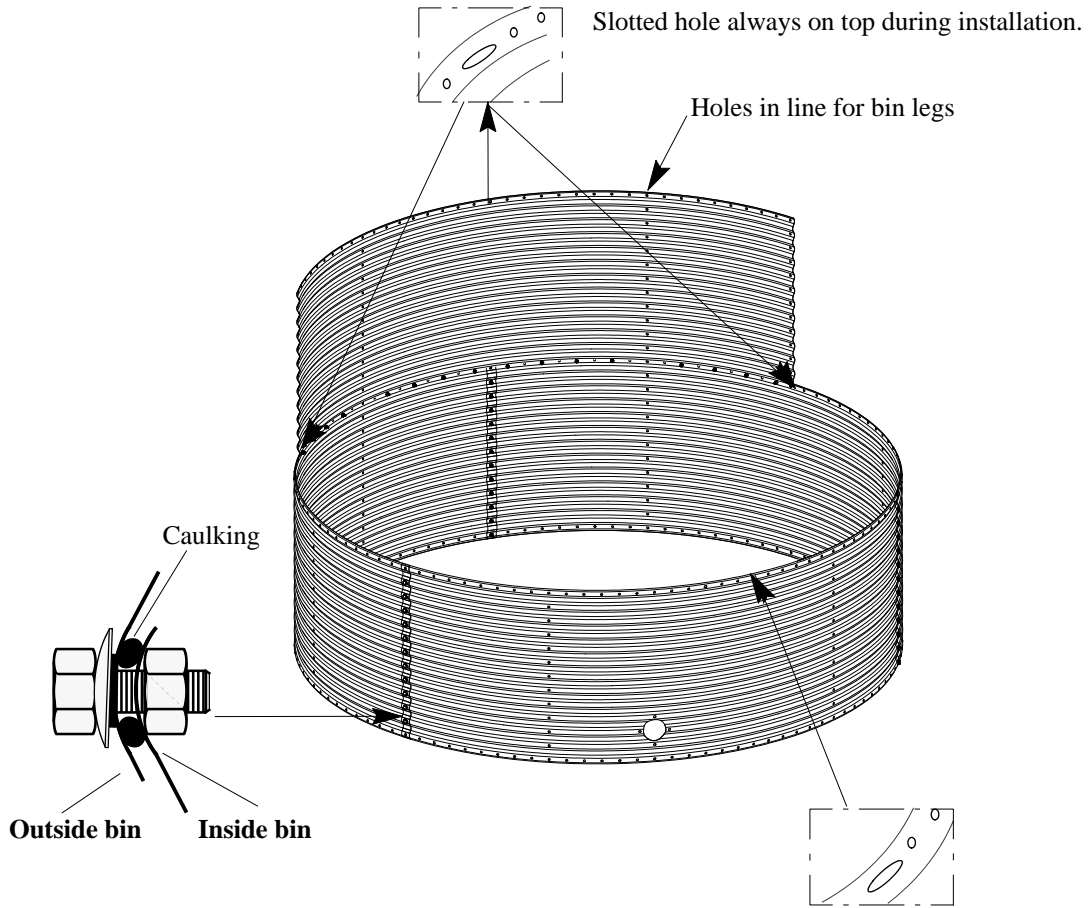


FIGURE 7.

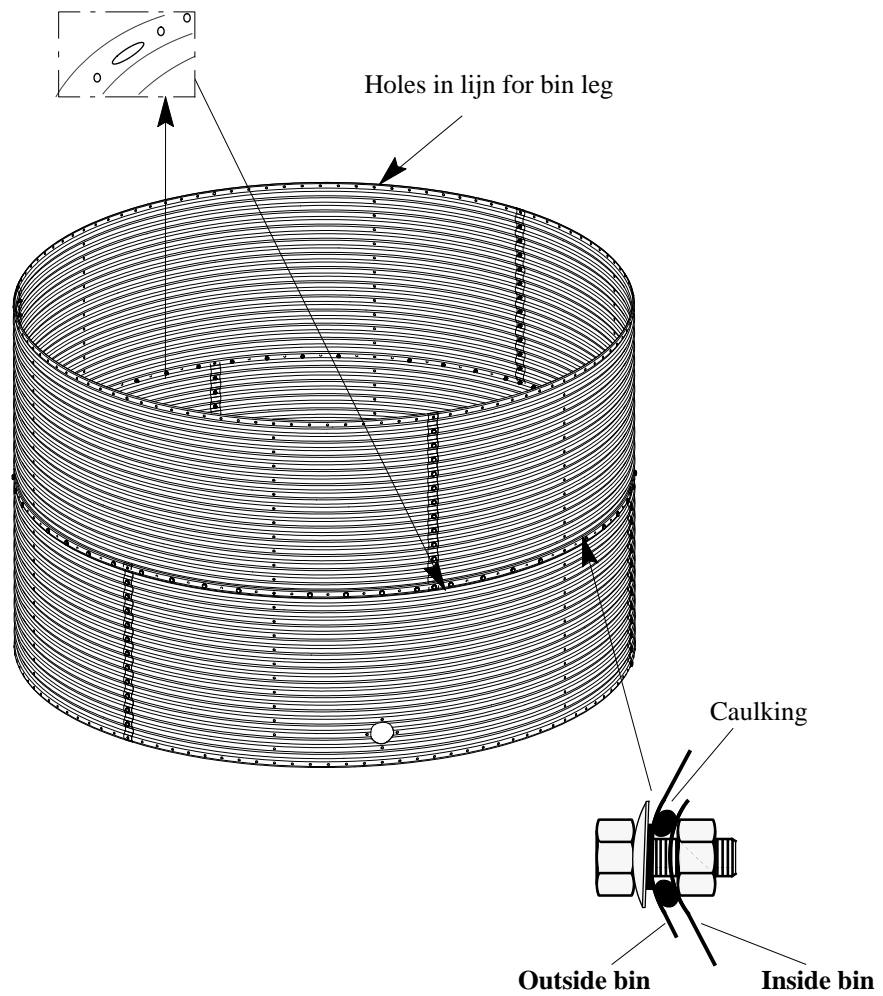


FIGURE 8.

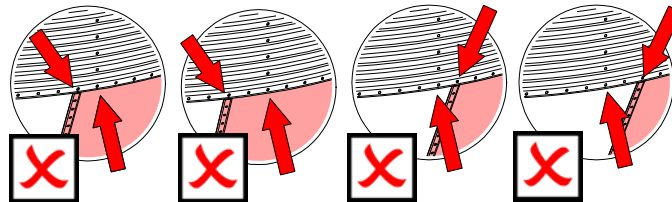
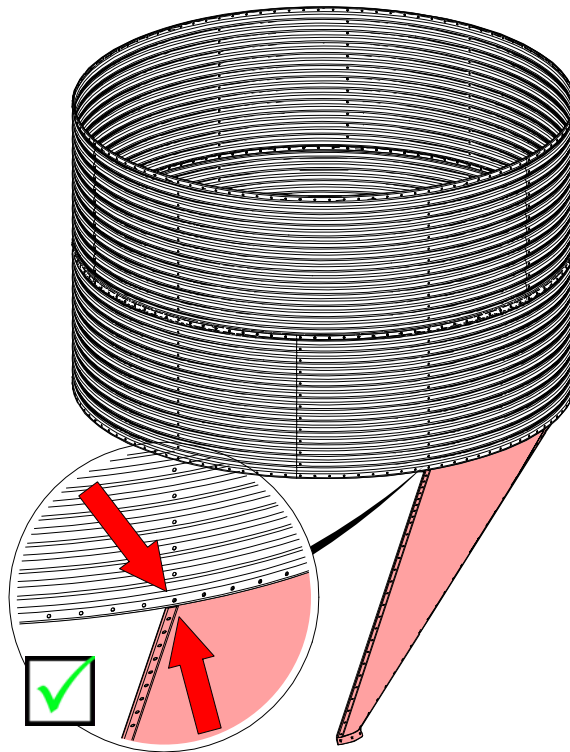
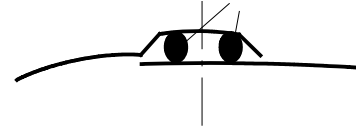


## EXAMPLE FOR BINS Ø2.75M & 3.2M

Start with hopper section 1!

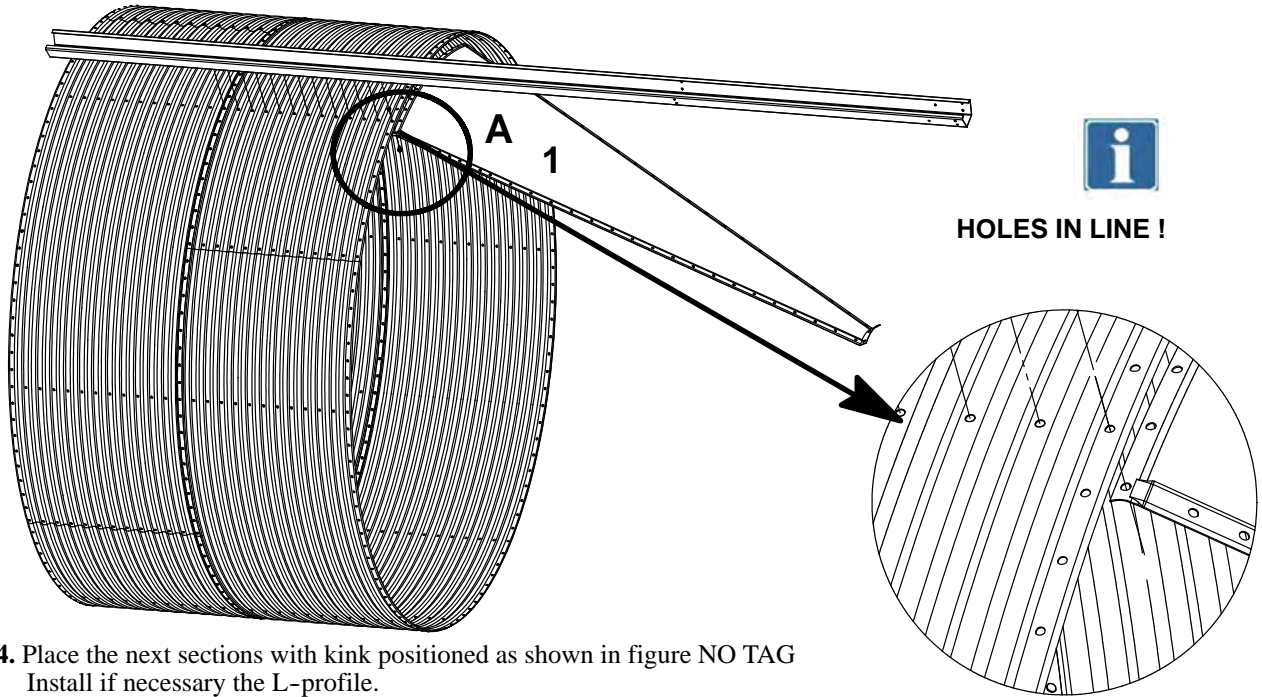
1. Degrease the hopper sections where to put sealing material
2. Put caulking right and left of each row of holes.

Caulking



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

FIGURE 9.



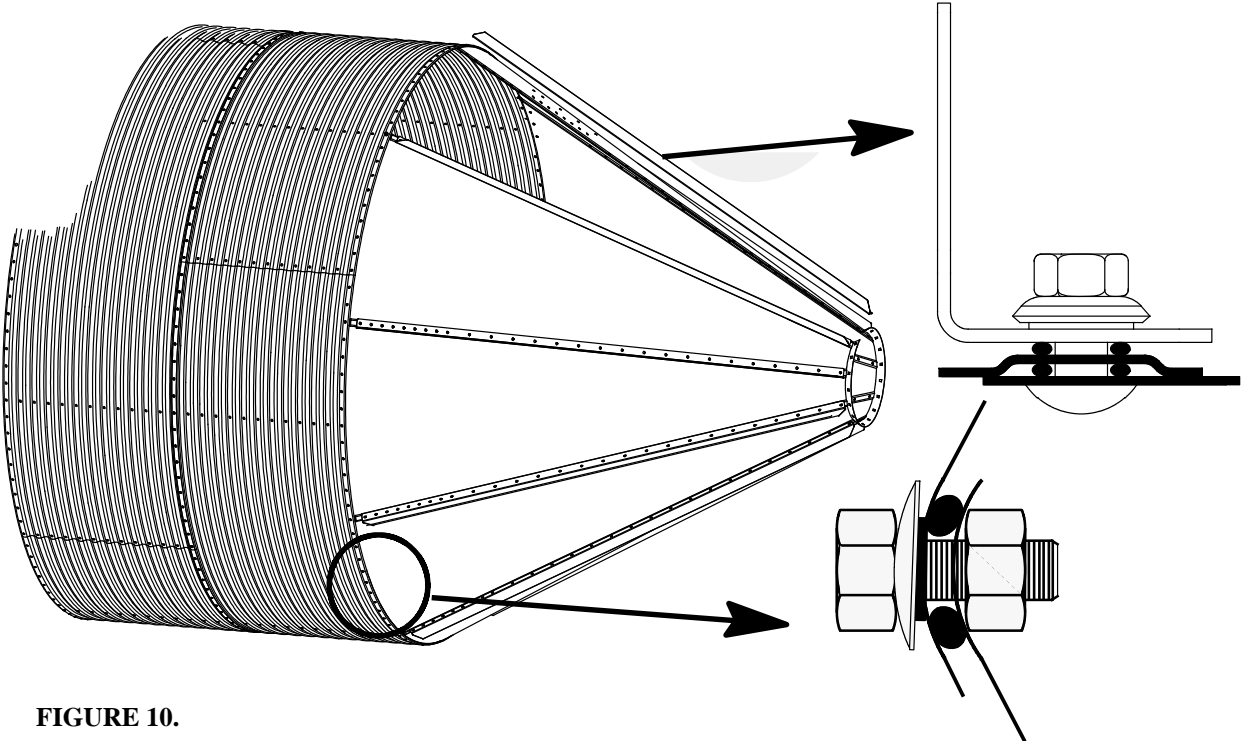
4. Place the next sections with kink positioned as shown in figure NO TAG  
Install if necessary the L-profile.
5. Place all overlappings in the same direction.
6. Connect sections with truss head bolt heads at the inside of the hopper.

**USAGE OF L-PROFILE**

Number of rings Ø2.75M					
902	903	904	905	906	907
no	no	no	yes	yes	yes

**USAGE OF L-PROFILE**

Number of rings Ø3.2M				
1052	1053	1054	1055	1056
yes	yes	yes	yes	yes



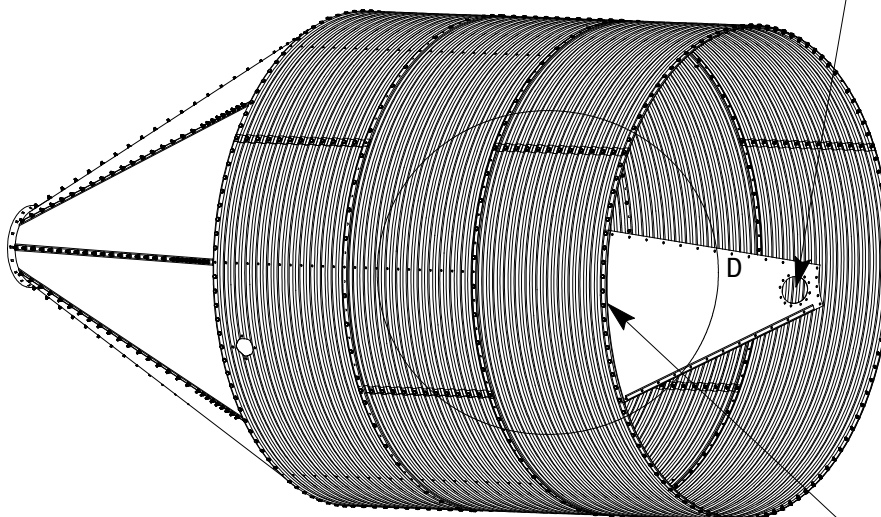
**FIGURE 10.**

# TO INSTALL THE BIN ROOF

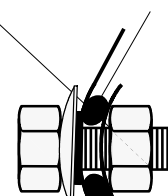


1. Degrease the roof sections where to put sealing material

Pneumatic fill hole.



Caulking

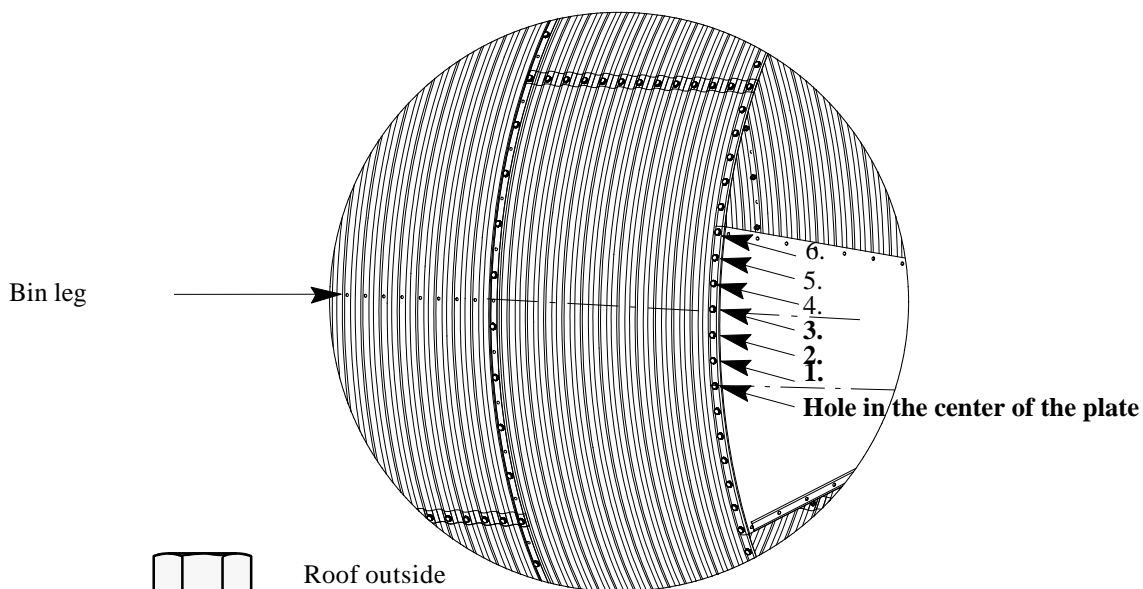


Outside bin

Inside bin

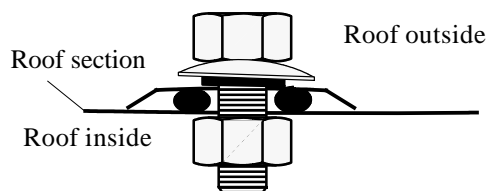
FIGURE 11.

2. 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.



Bin leg

Hole in the center of the plate



Use caulking between seams.

Caulking

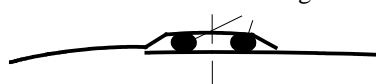


FIGURE 12.

### TO INSTALL THE BIN ROOF

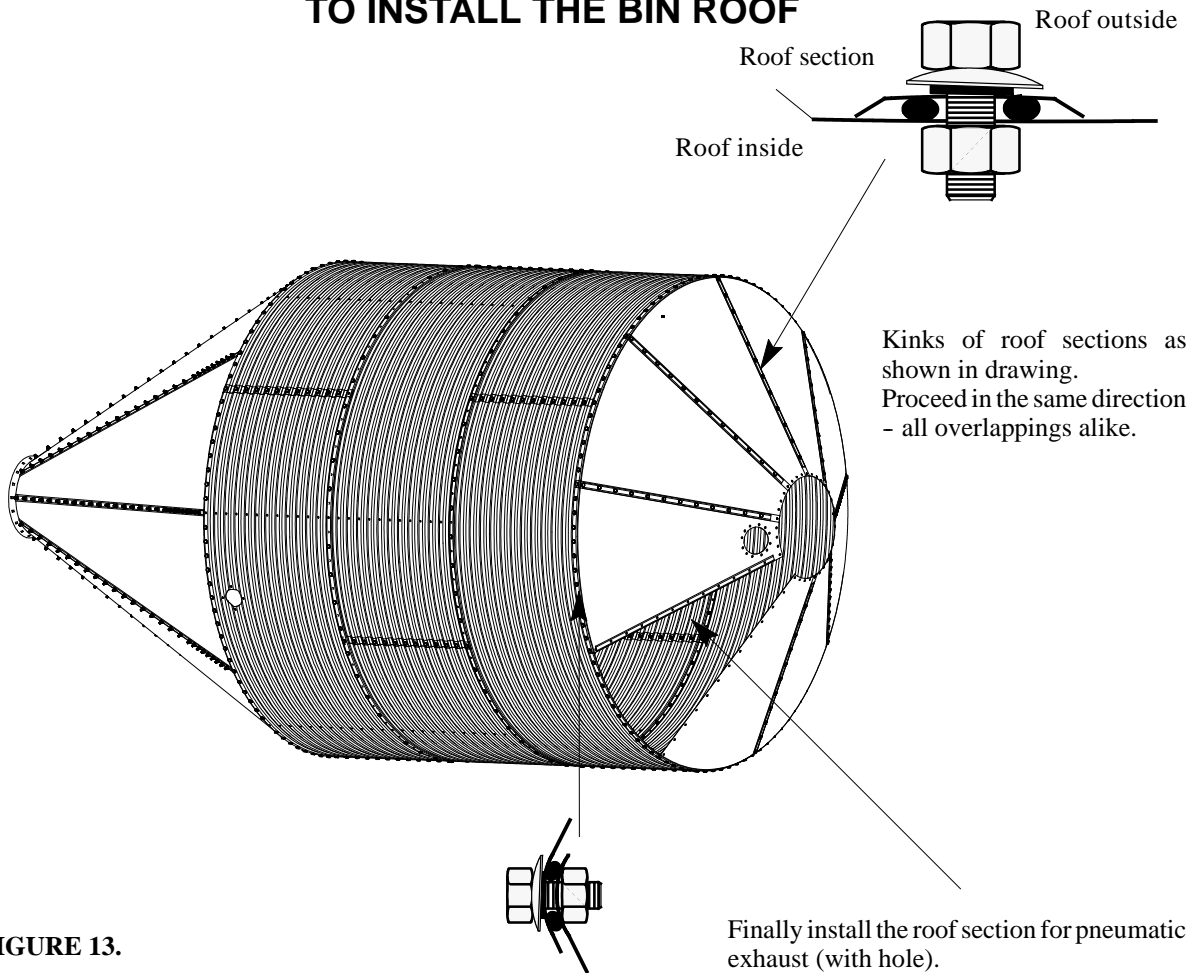
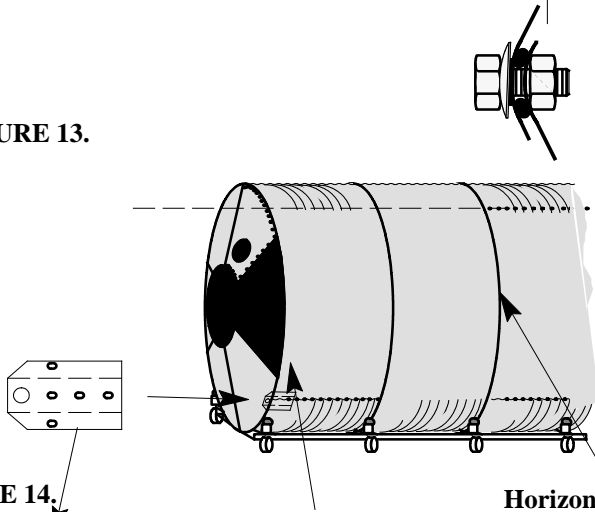


FIGURE 13.



Finally install the roof section for pneumatic exhaust (with hole).  
Install the roof section for pneumatic fill **preferably close** to the roof section for pneumatic exhaust. So you limit the dust build-up to the absolute minimum.

FIGURE 14.



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

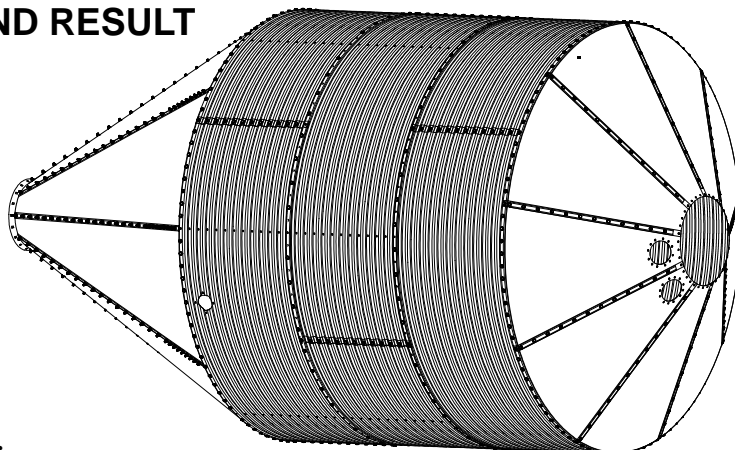


FIGURE 15.

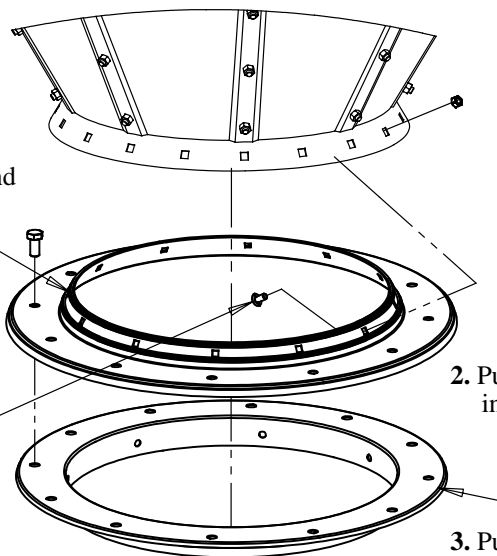
# TO INSTALL THE COLLAR TO THE INTEGRATED HOPPER COLLAR

## FOR Ø2.75M:



1. Put caulking closest possible above and below the row of holes.

Use truss head bolt M8X16 SP.



2. Put the horizontal collar inside the hopper.

3. Put the collar down under the horizontal collar.

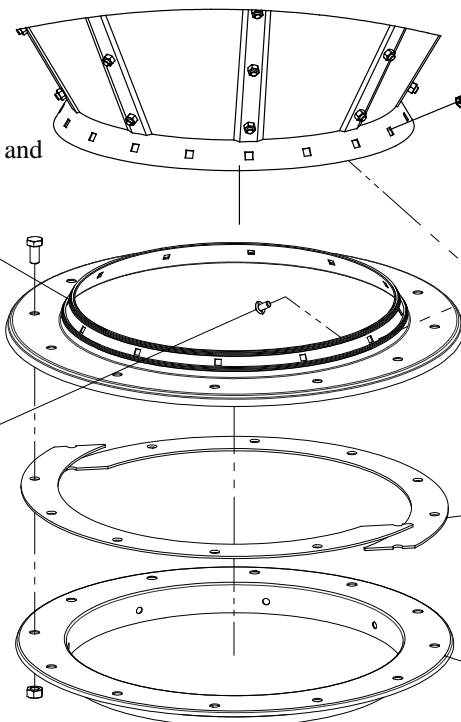
FIGURE 16.

## FOR Ø3.2M:



1. Put caulking closest possible above and below the row of holes.

Use truss head bolt M8X16 SP.



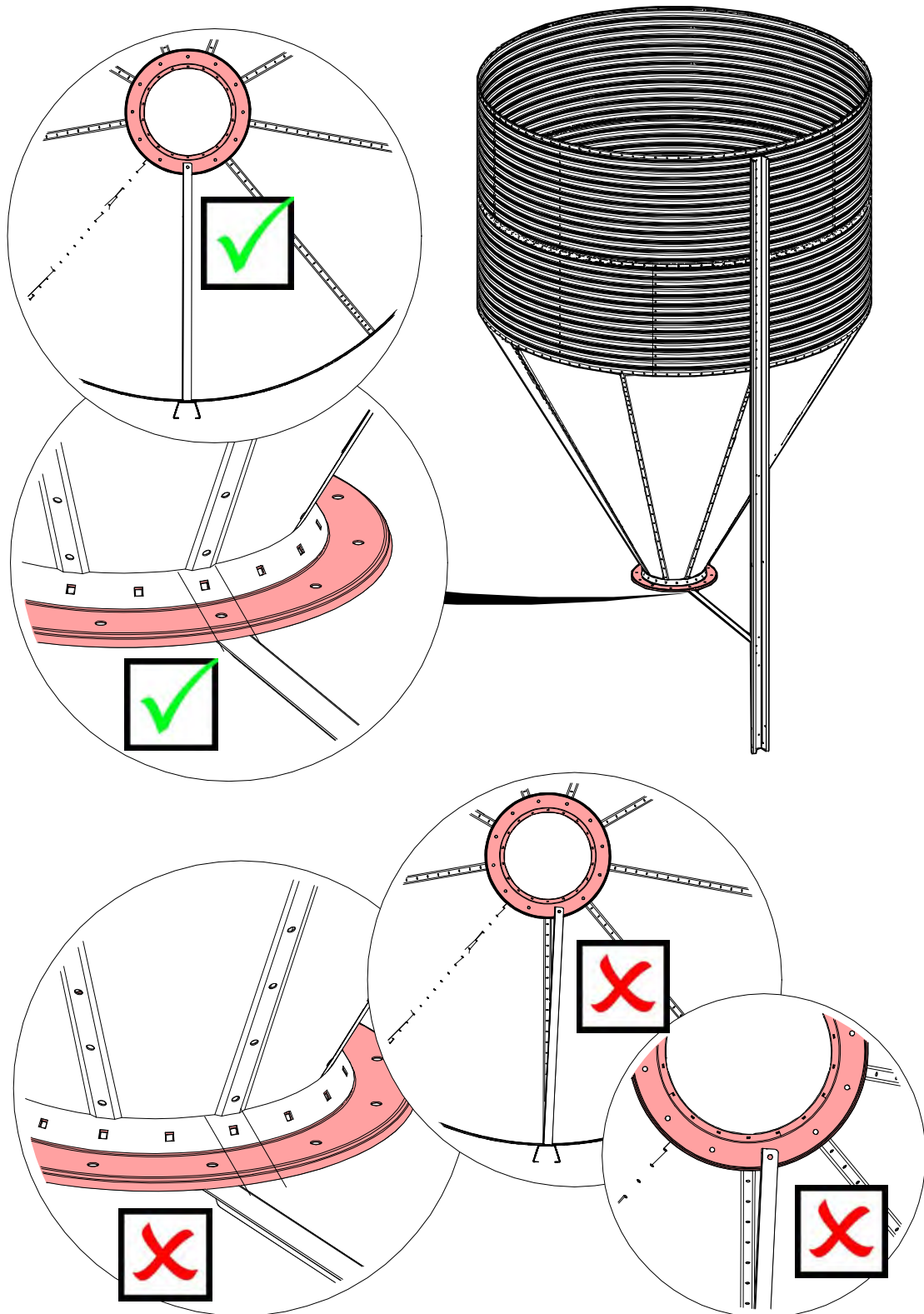
2. Put the horizontal collar inside the hopper.

3. Put two halves of reinforcement rings between the collars in case of feed bins Ø 3.2.

4. Put the collar down under the horizontal collar.

FIGURE 17.

**TO INSTALL THE COLLAR TO THE INTEGRATED HOPPER COLLAR  
FOR Ø2.75M, Ø3.2M:**



**FIGURE 18.**  
Connections of bolts for the collar



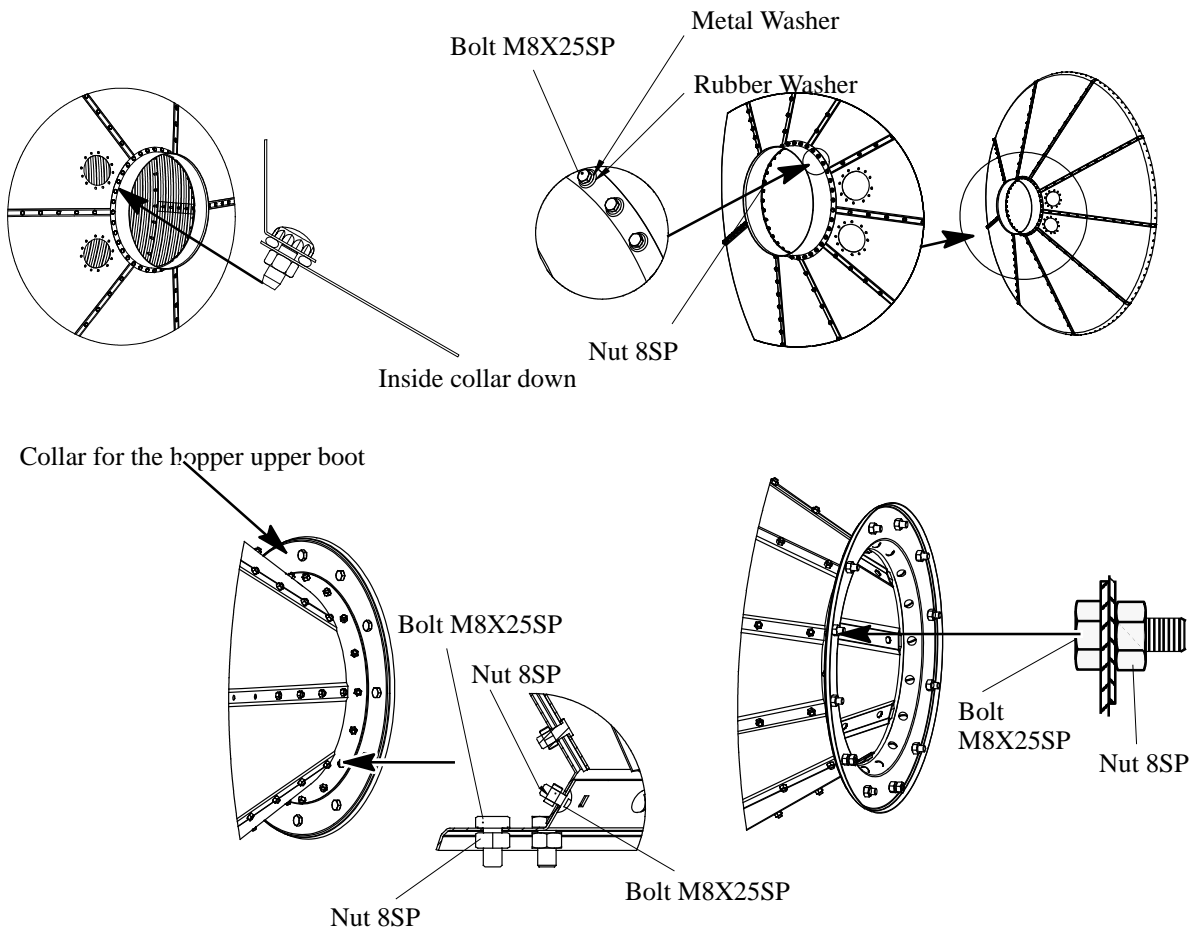
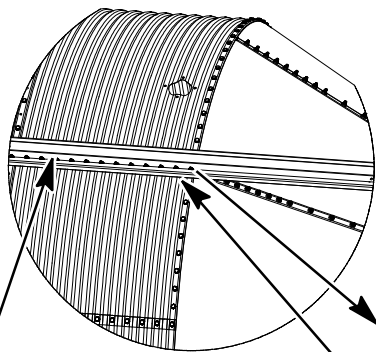
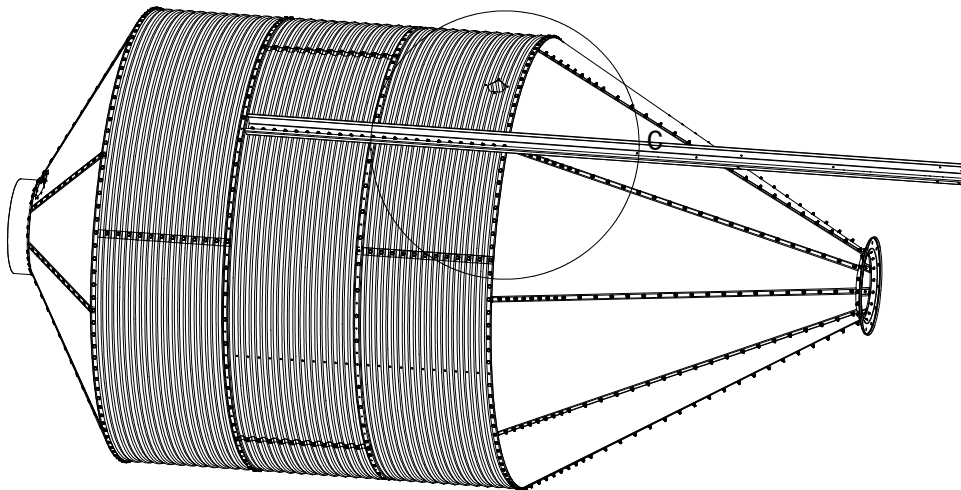


FIGURE 19.

### TO INSTALL THE BIN LEGS



Use truss head bolt M8X16 SP.

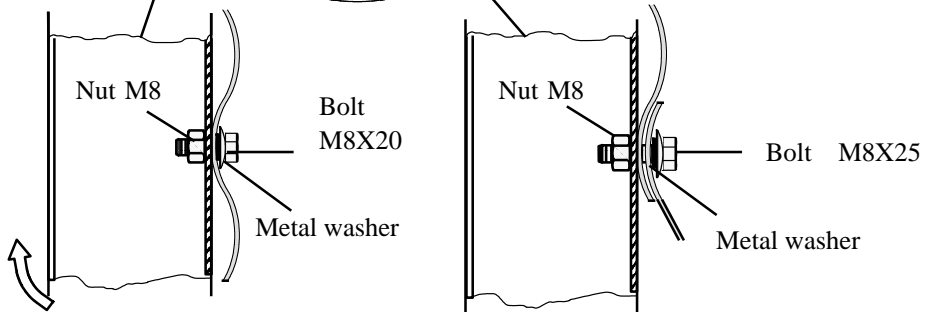


FIGURE 20. TO INSTALL THE BIN LEGS

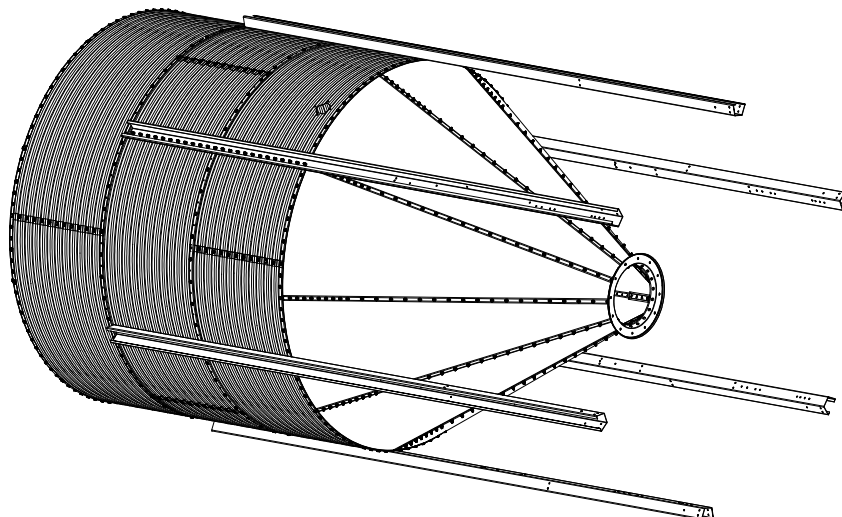


FIGURE 21.

# TO INSTALL THE BIN LEGS

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

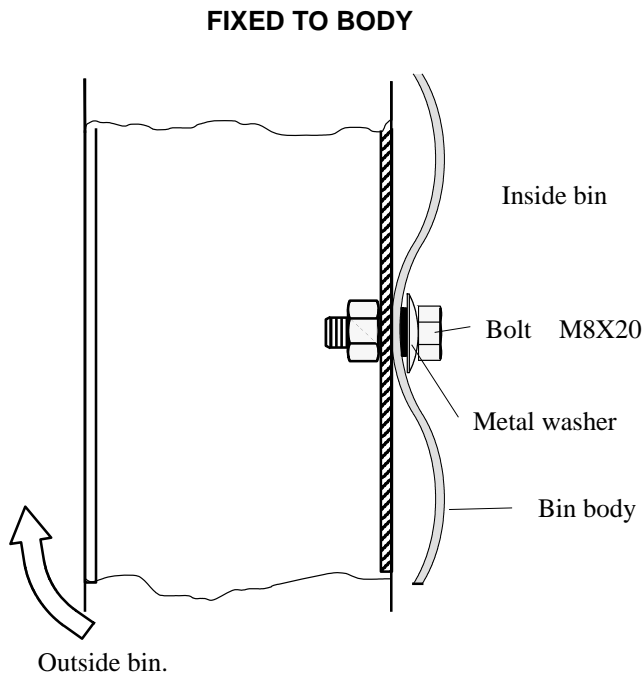


FIGURE 22.

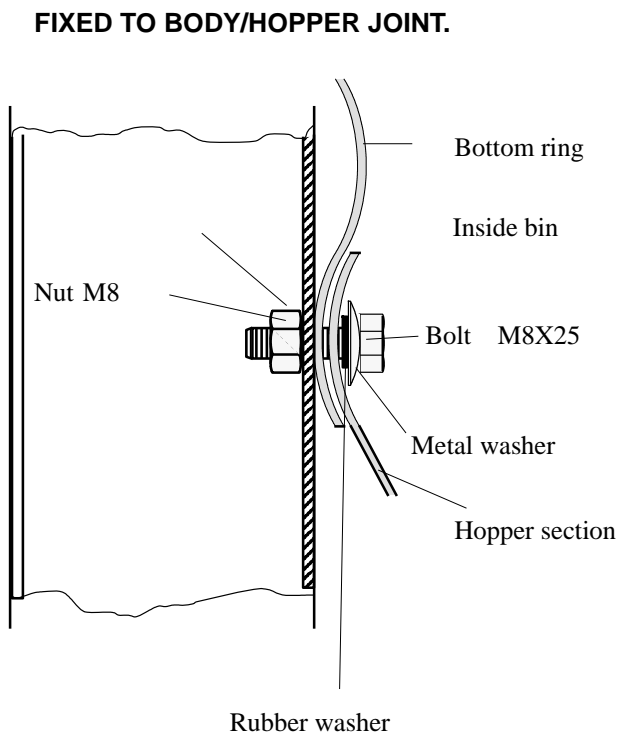


FIGURE 23.

### TO INSTALL THE HOPPER BRACES

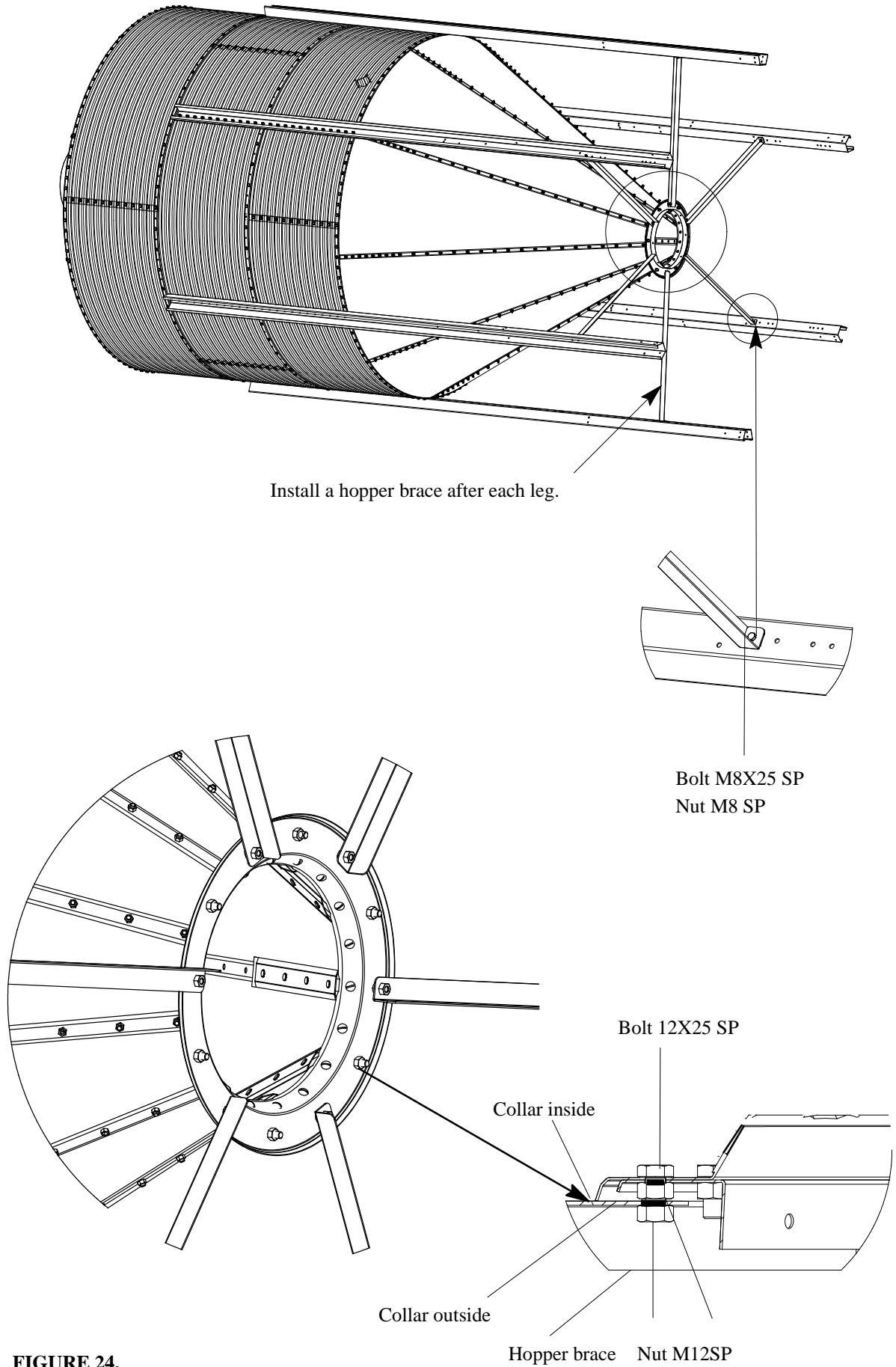


FIGURE 24.

### POSITION OF THE LEG BRACES

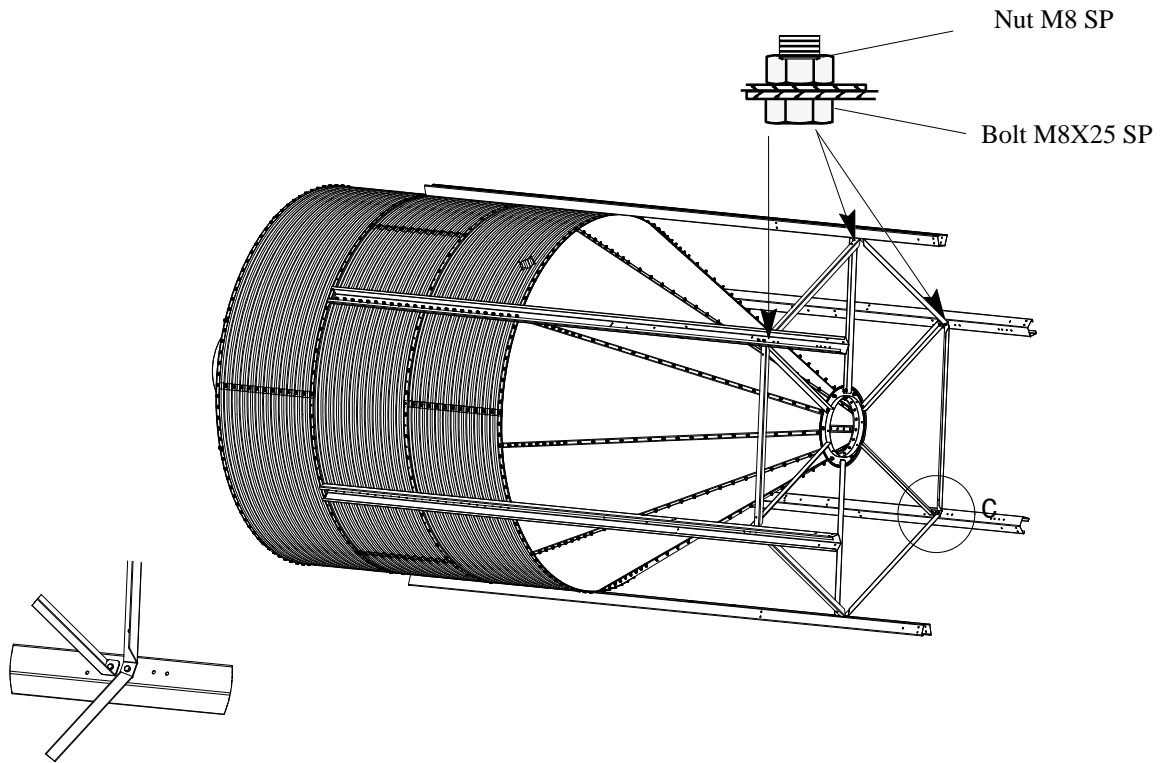


FIGURE 25.

### POSITION OF THE LEG BRACES ABOVE

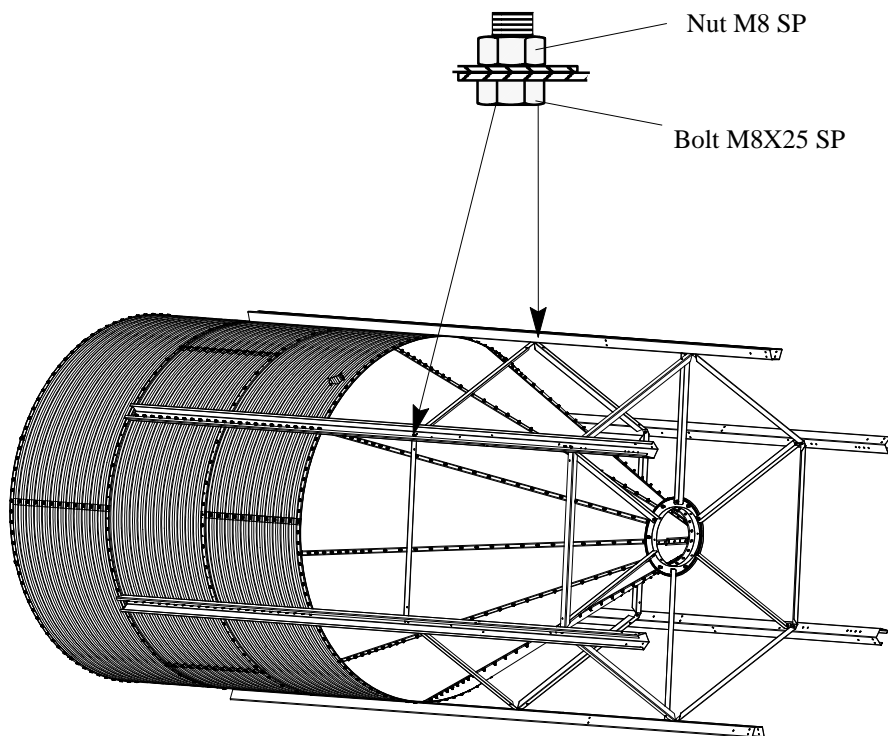
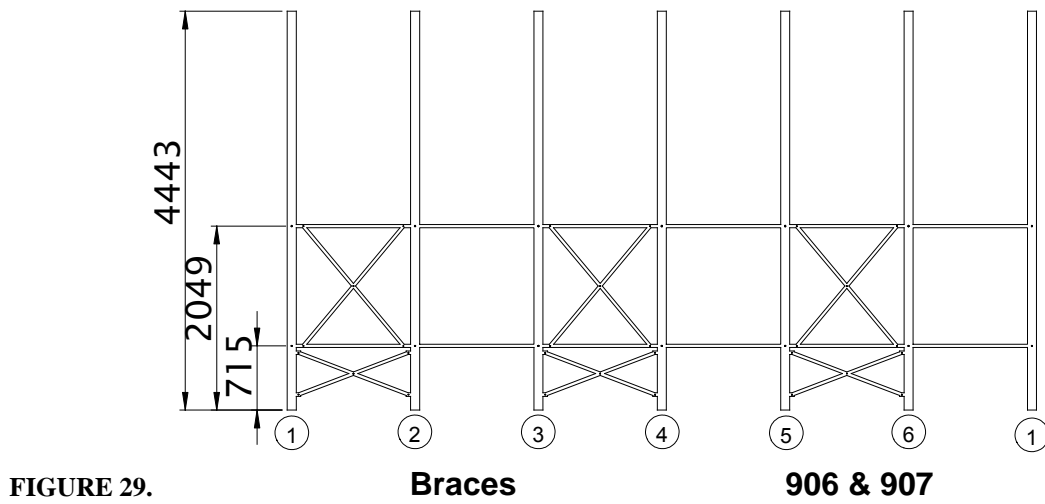
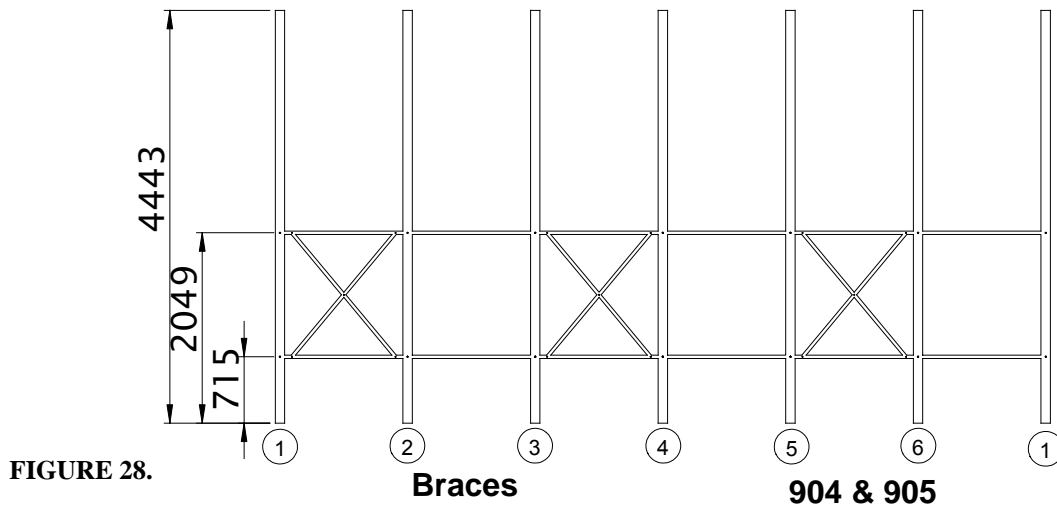
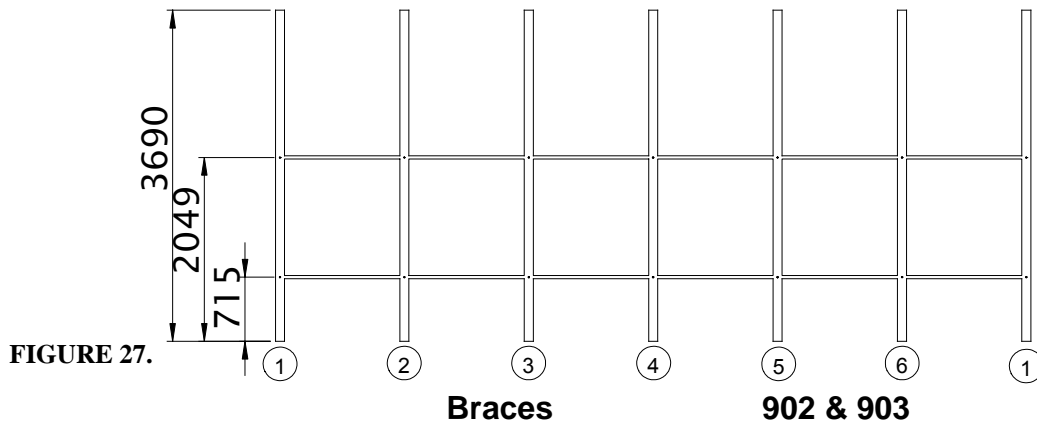


FIGURE 26.

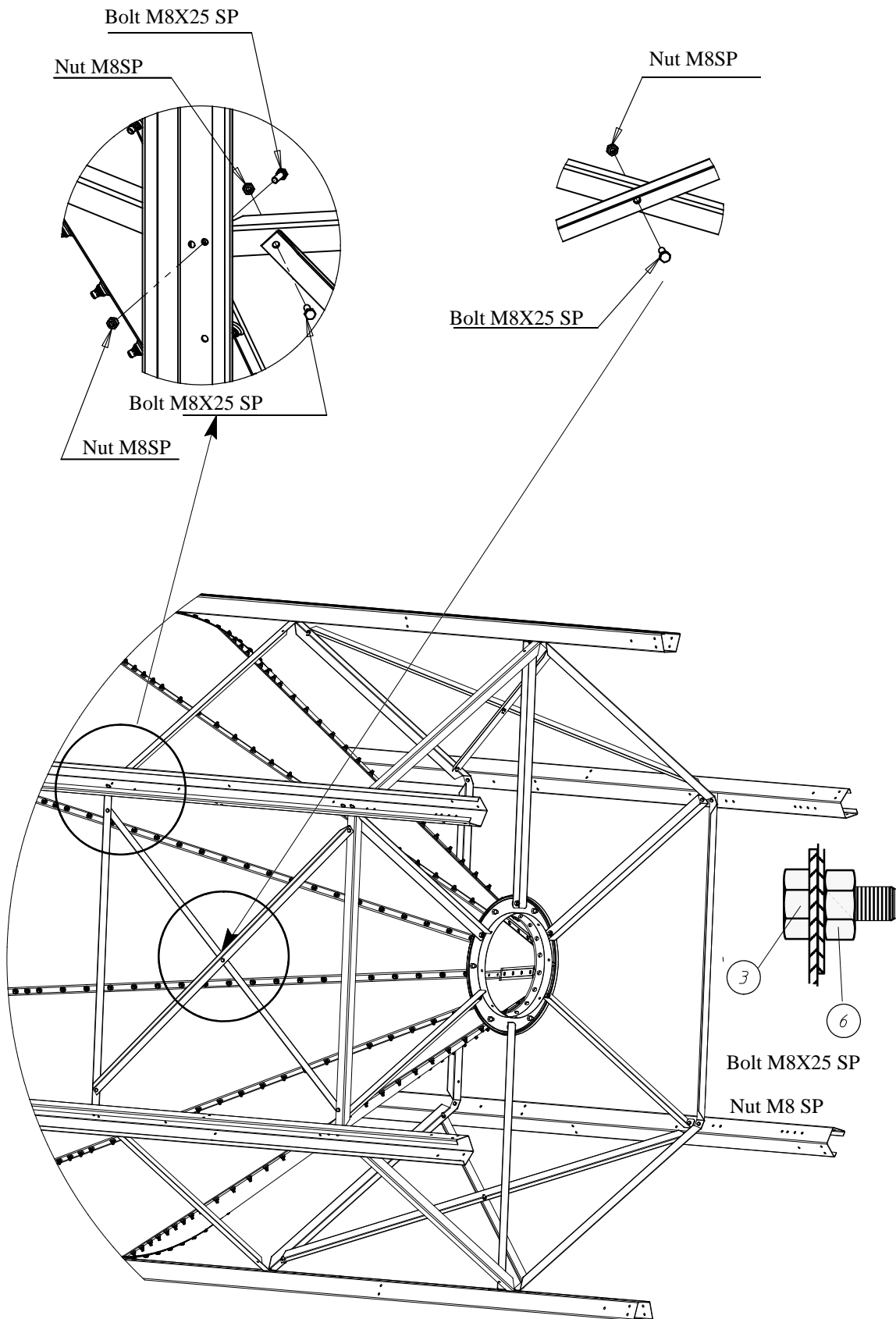


look figure 27., on page III-24  
**Overview Support braces 902 & 903**

# OVERVIEW BRACES



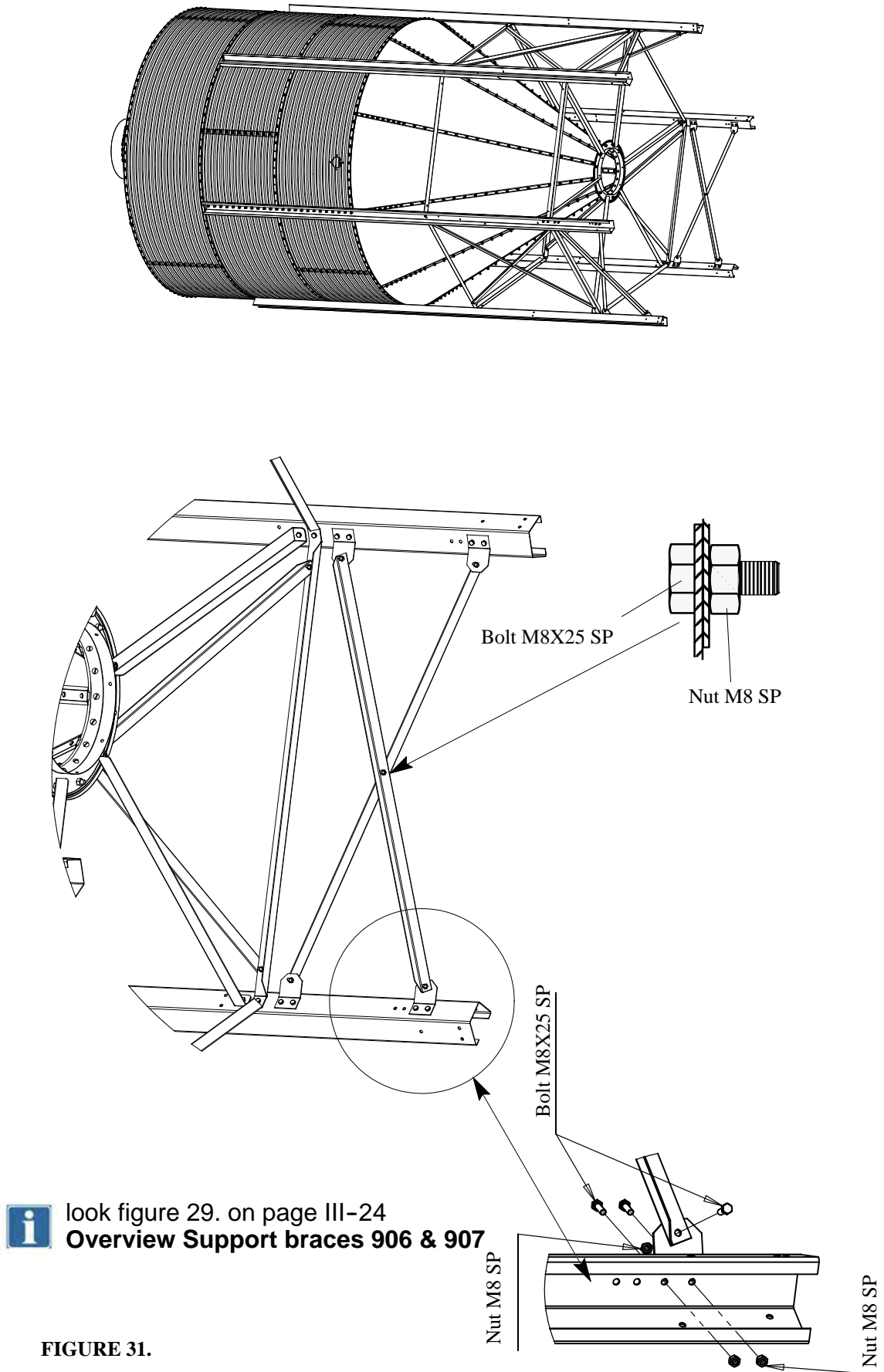
Ø 2.75M - Situation 904 & 905



 look figure 28. on page III-24  
**Overview Support braces 904 & 905**

**FIGURE 30.**

Ø 2.75M - Situation 906 & 907



**i** look figure 29. on page III-24  
**Overview Support braces 906 & 907**

FIGURE 31.



### OVERVIEW BRACES

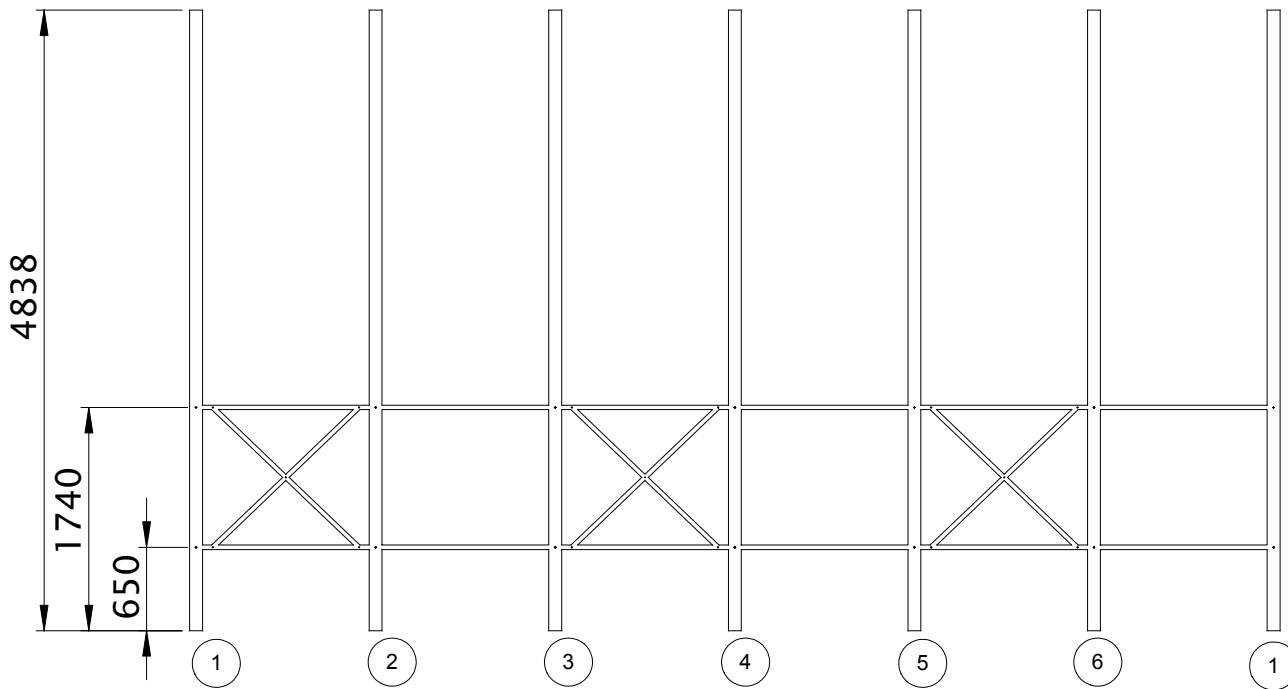


FIGURE 32. Braces 1052 & 1053 & 1054

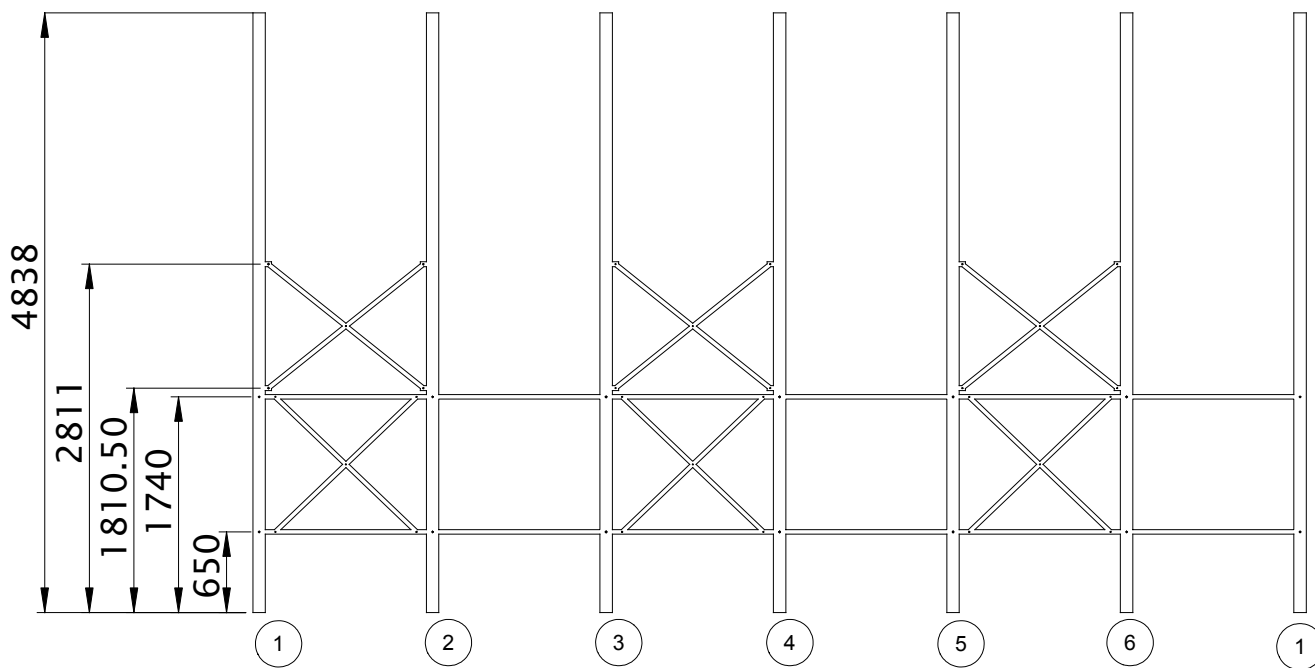


FIGURE 33. Braces 1055 & 1056

Ø 3.2M - Situation 1055 & 1056

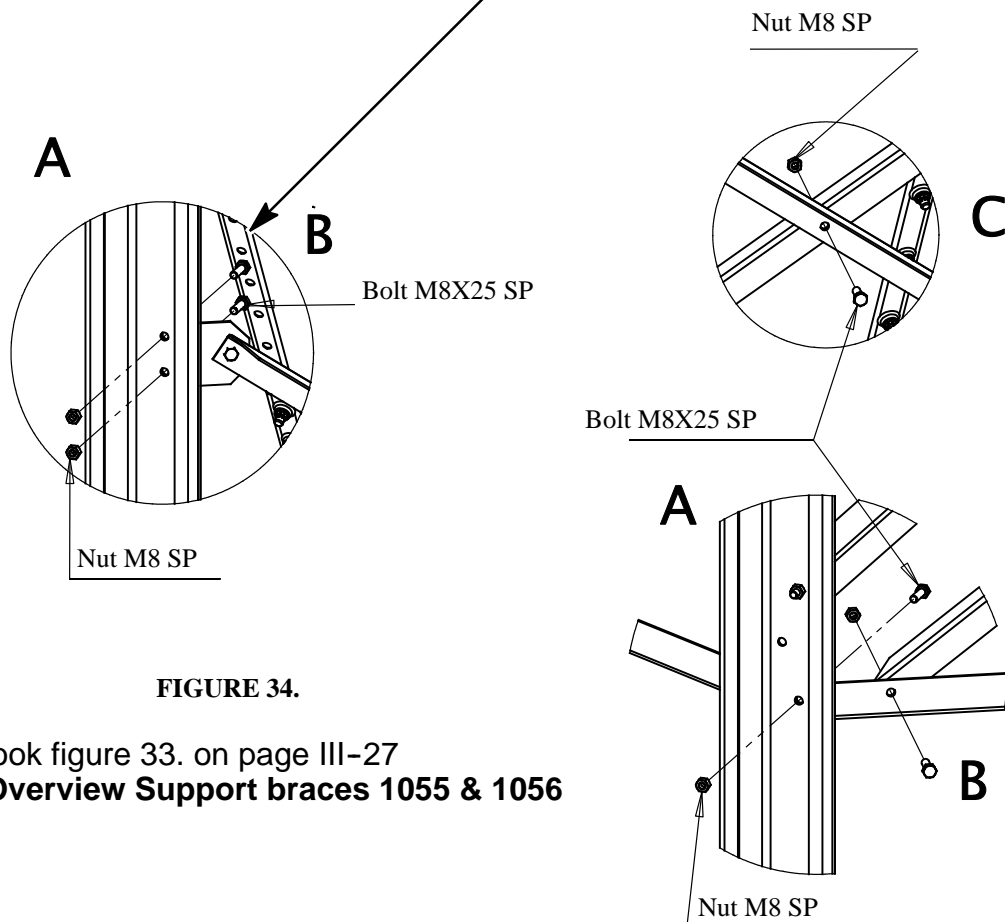
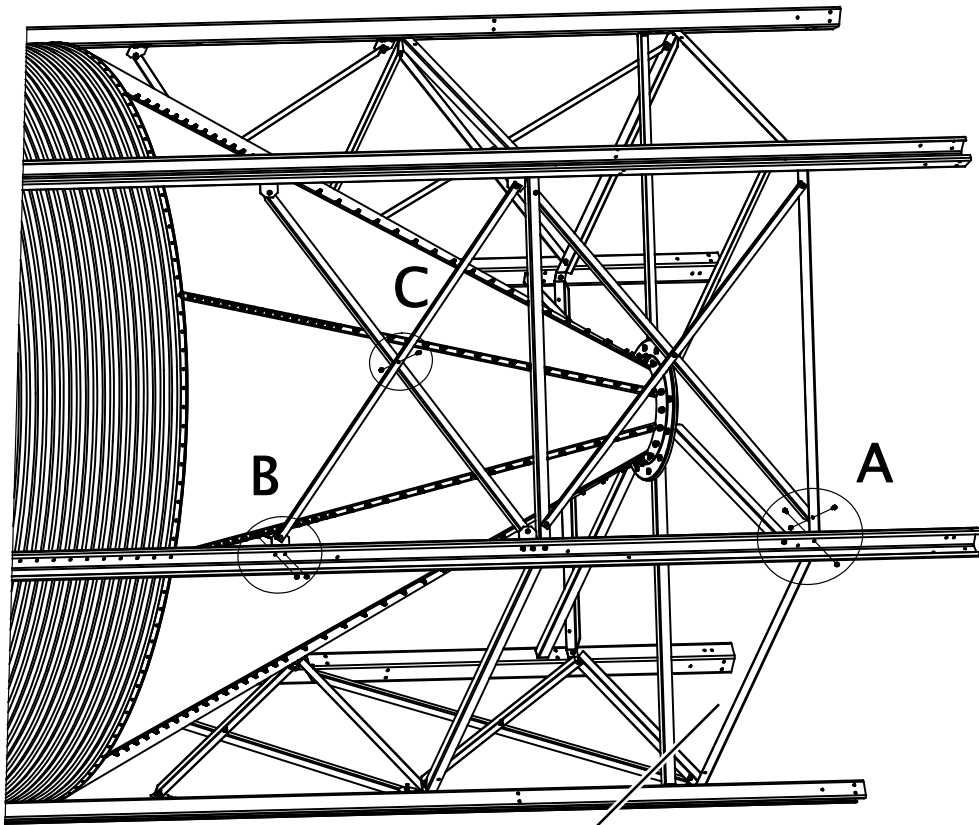


FIGURE 34.



look figure 33. on page III-27  
**Overview Support braces 1055 & 1056**

## POSITION OF THE FASTENING BRACES

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

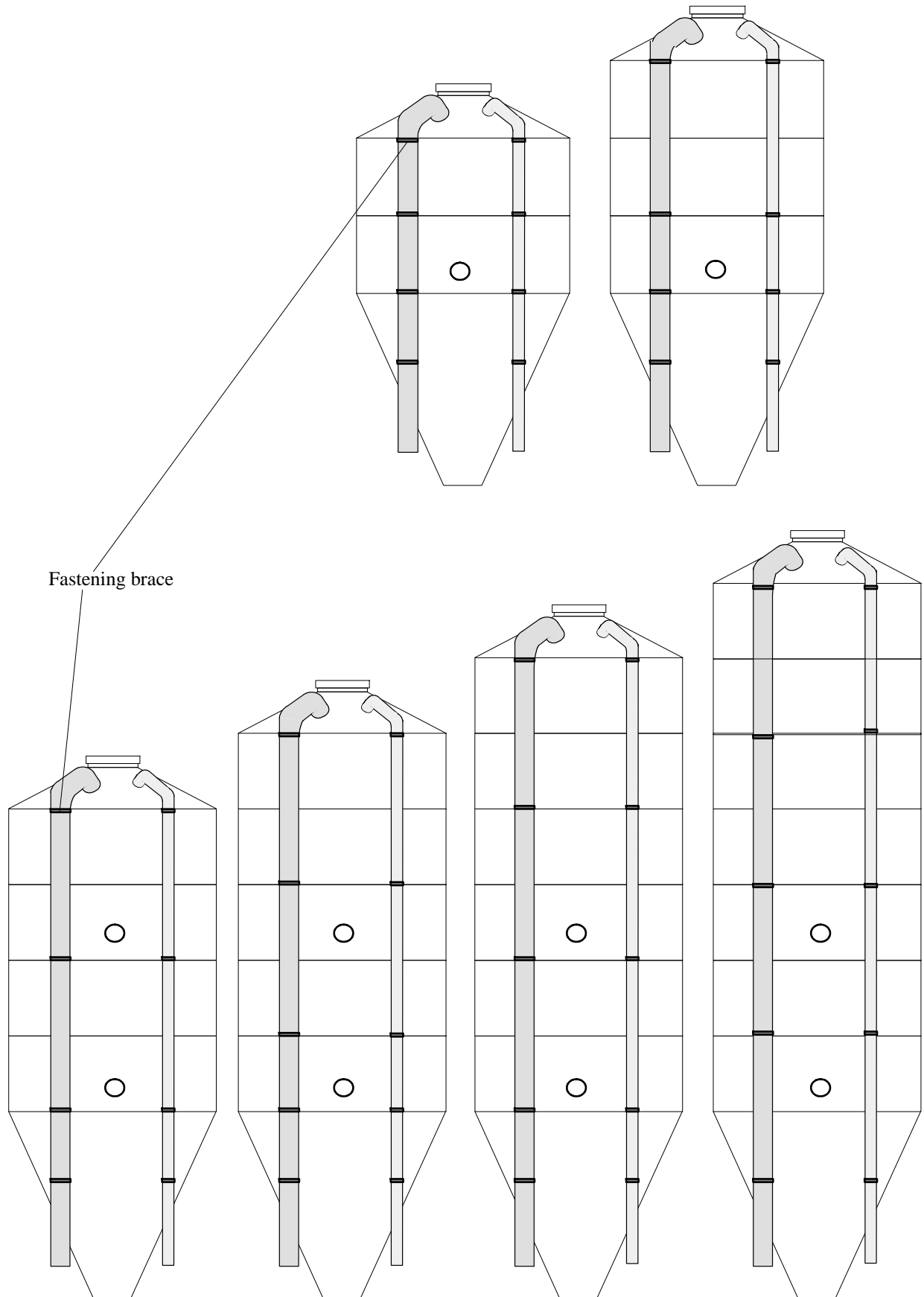


FIGURE 35.

## POSITION OF INLET/EXHAUST PIPES - BIN LEGS

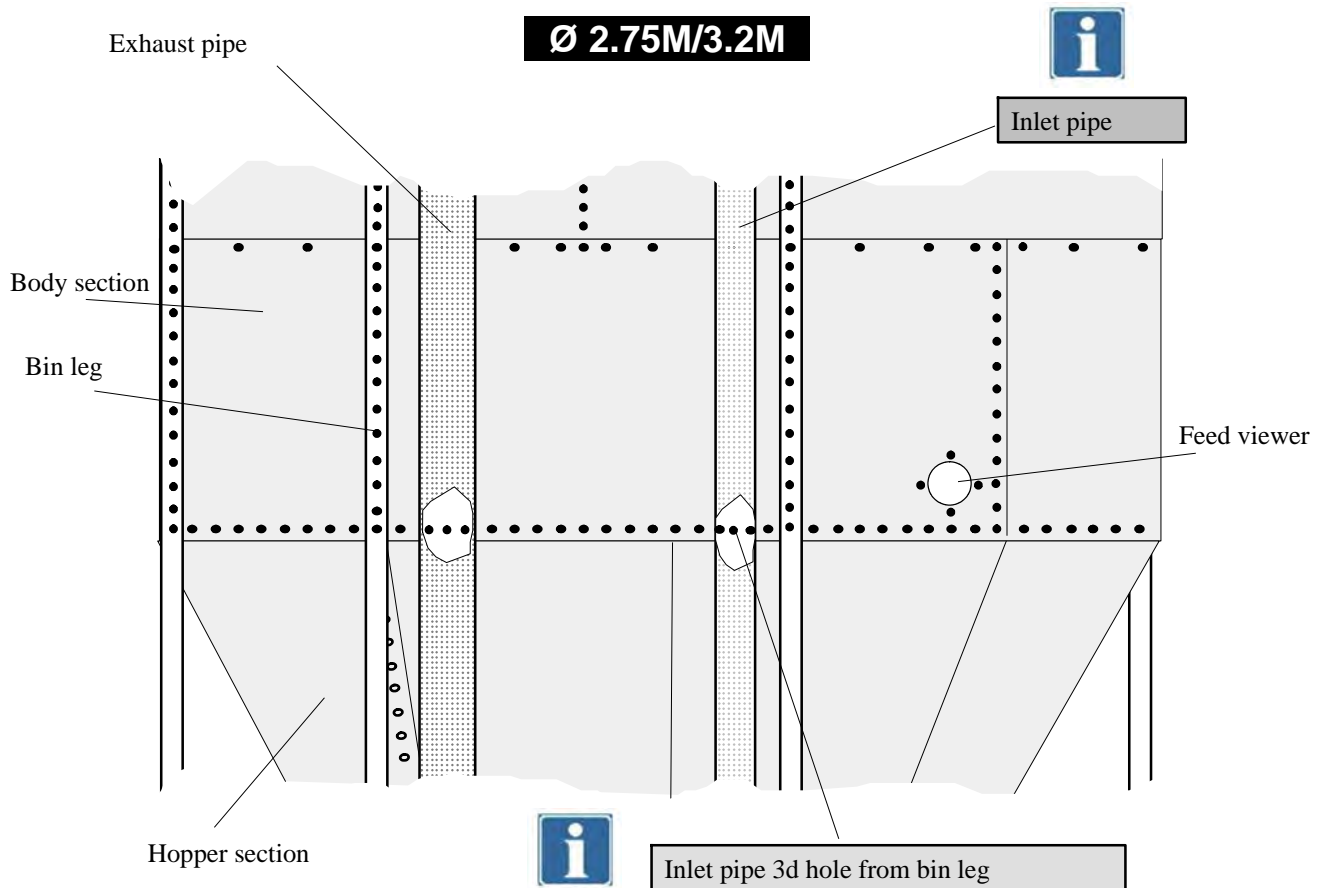


FIGURE 36.

### 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.
5. Round heads inside the hopper.  
Firmly tighten the hopper valve.

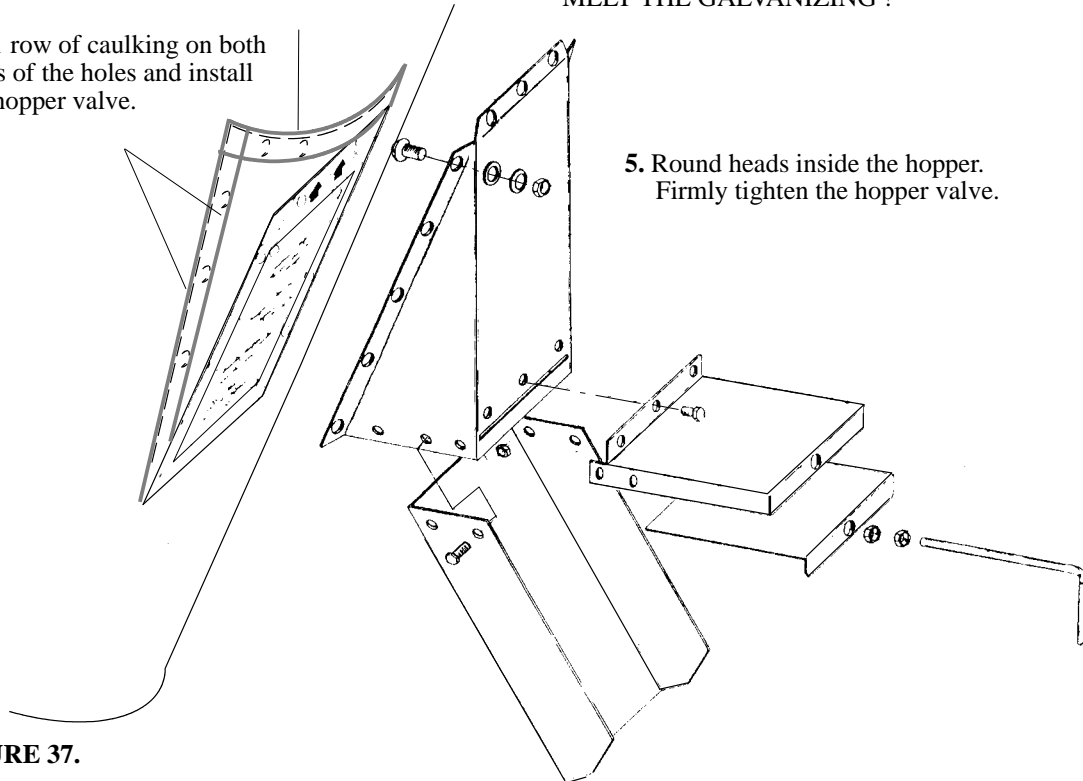
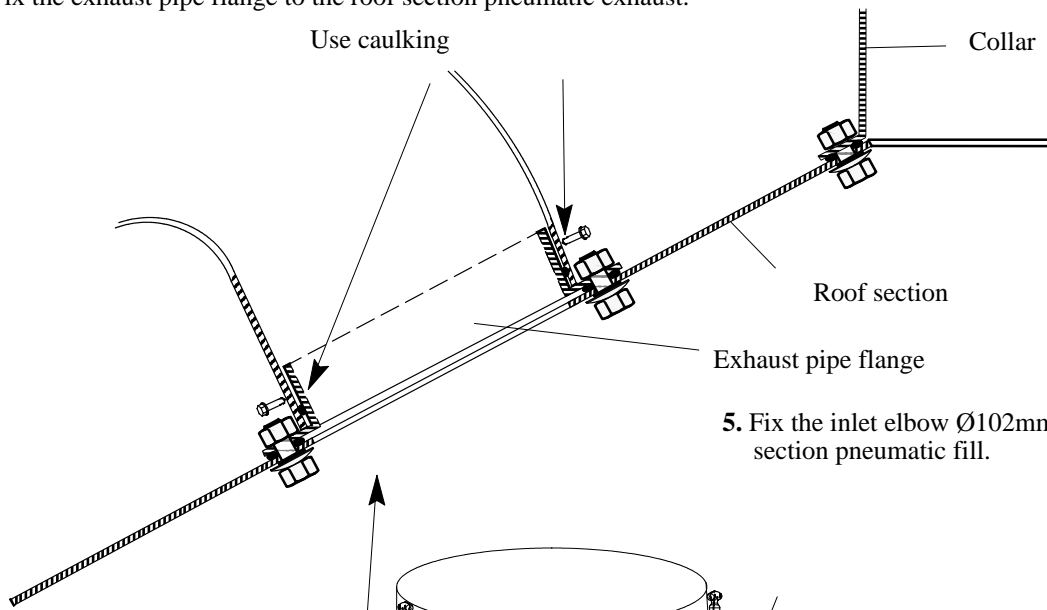


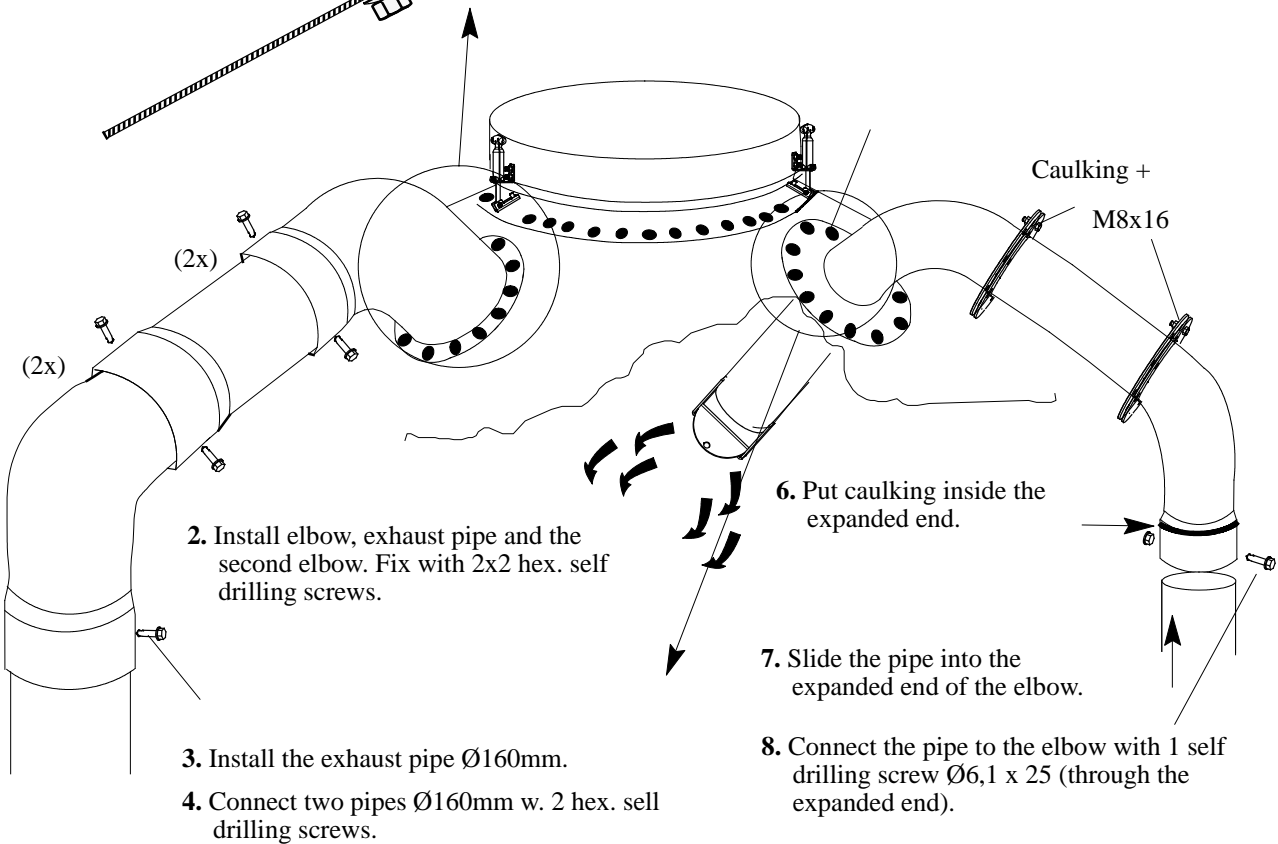
FIGURE 37.

## TO INSTALL THE INLET/EXHAUST PIPES

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



5. Fix the inlet elbow Ø102mm to the roof section pneumatic fill.



2. Install elbow, exhaust pipe and the second elbow. Fix with 2x2 hex. self drilling screws.

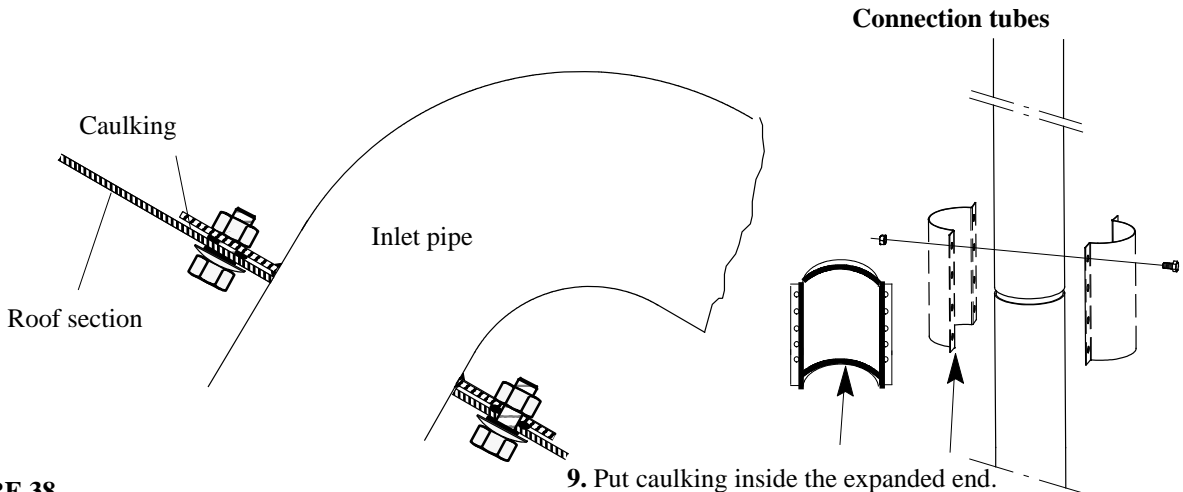
3. Install the exhaust pipe Ø160mm.

4. Connect two pipes Ø160mm w. 2 hex. self drilling screws.

6. Put caulking inside the expanded end.

7. Slide the pipe into the expanded end of the elbow.

8. Connect the pipe to the elbow with 1 self drilling screw Ø6,1 x 25 (through the expanded end).



9. Put caulking inside the expanded end.

FIGURE 38.

### RESULT OF INSTALLING THE PIPES

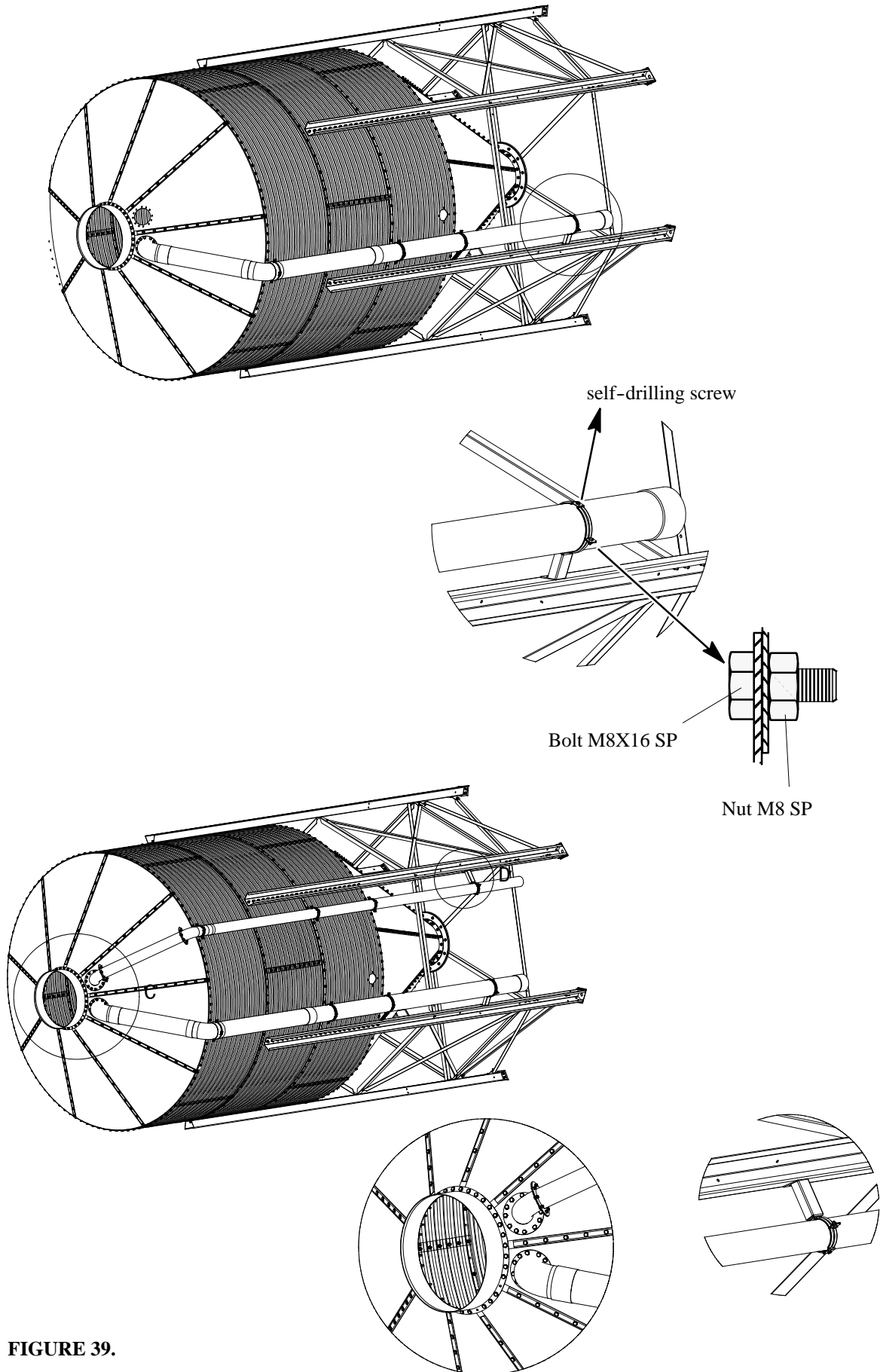


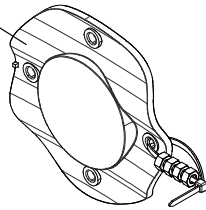
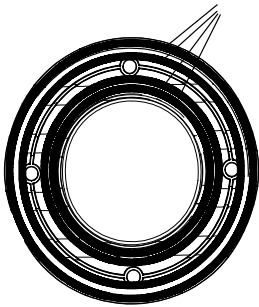
FIGURE 39.

# TO INSTALL THE FEED VIEWER WINDOW

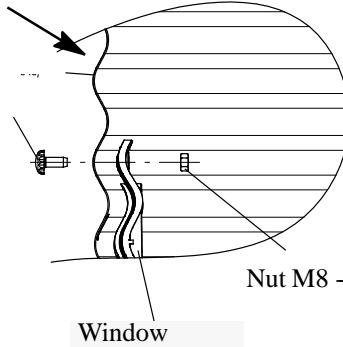
## IN BODY

Put 2 x 2 layers of caulking

at this side.



Body section

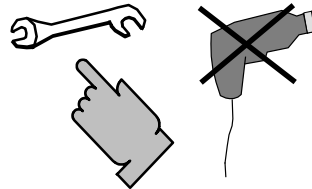


Nut M8 - PA6 - Black

Window

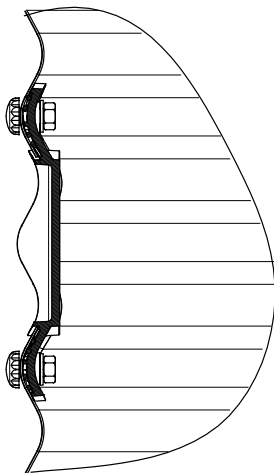


**Stretching manually**

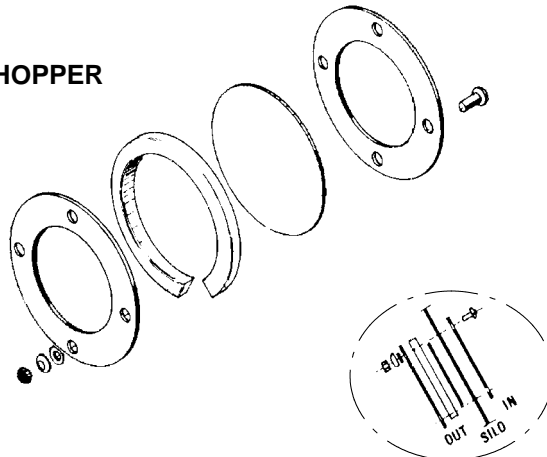


Outside bin

Inside bin



## IN HOPPER



**Stretching manually**

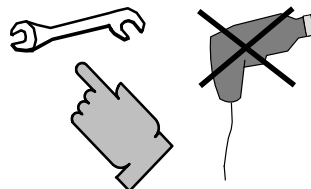


FIGURE 40.

## 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.

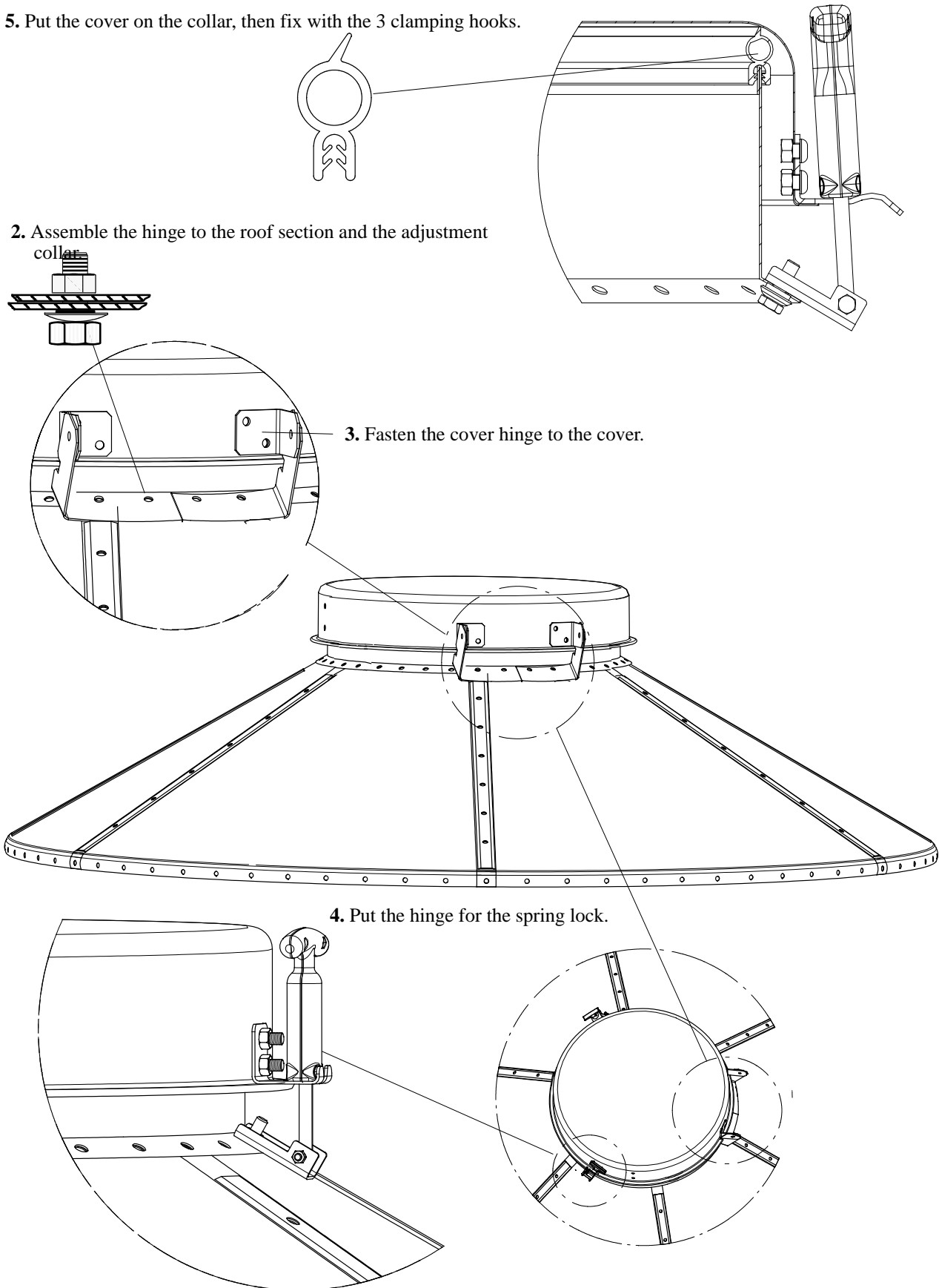


FIGURE 41.



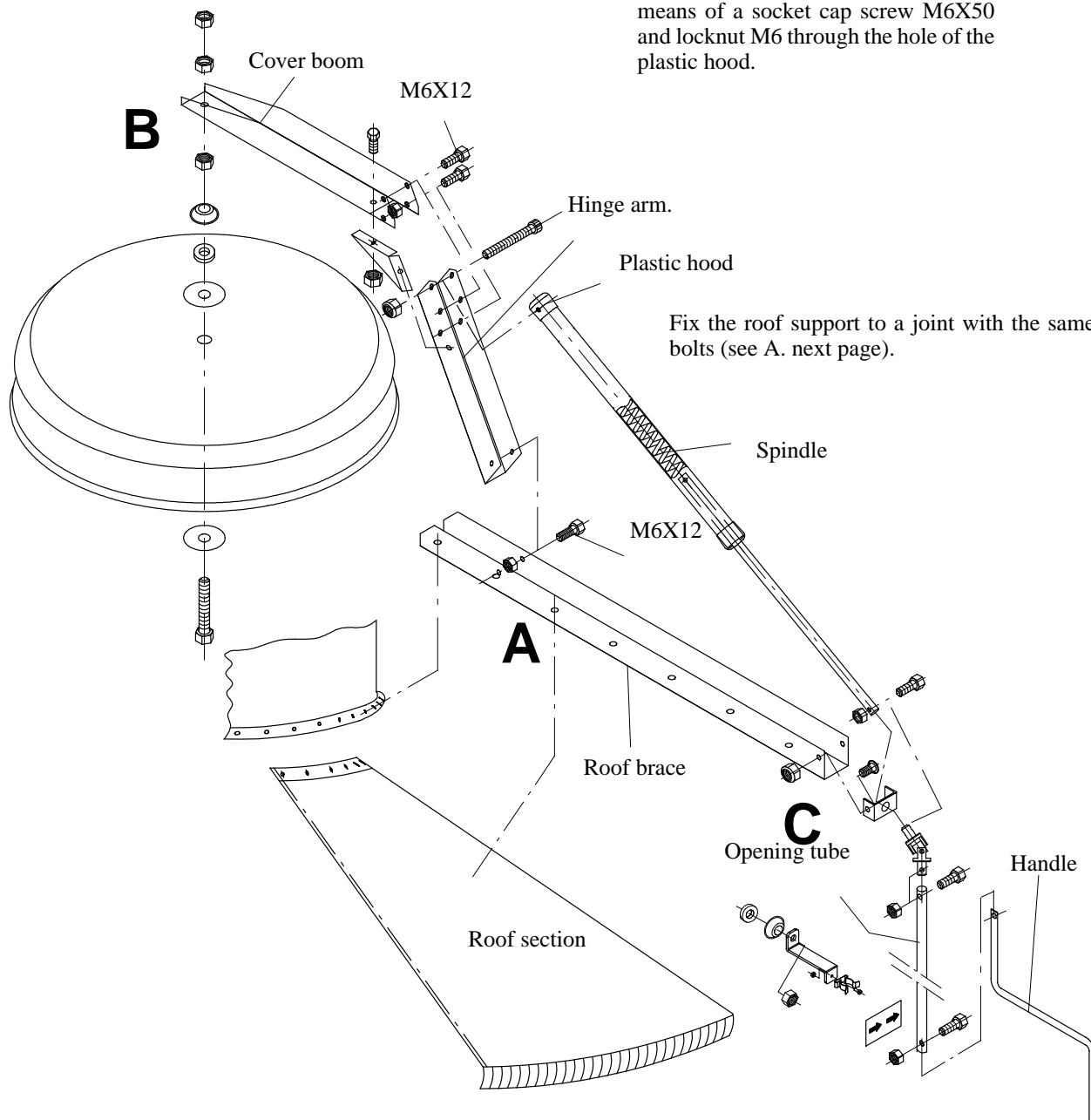
## TO INSTALL THE COVER (MECHANIC FILLING)

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.

Fix the roof support to a joint with the same bolts (see A. next page).

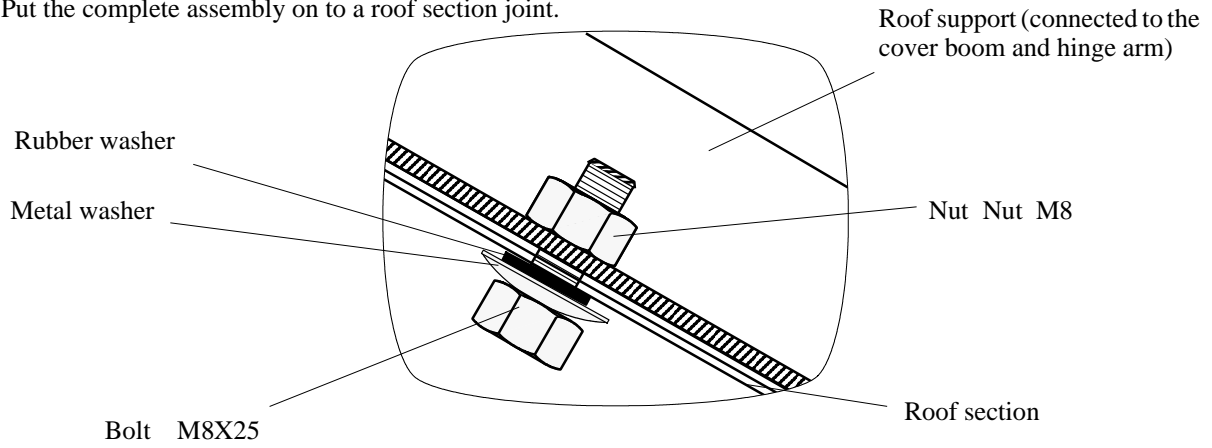


Adapt the length of the opening tube. Connect the handle by means of bolt M6X20 and nut.

FIGURE 42.

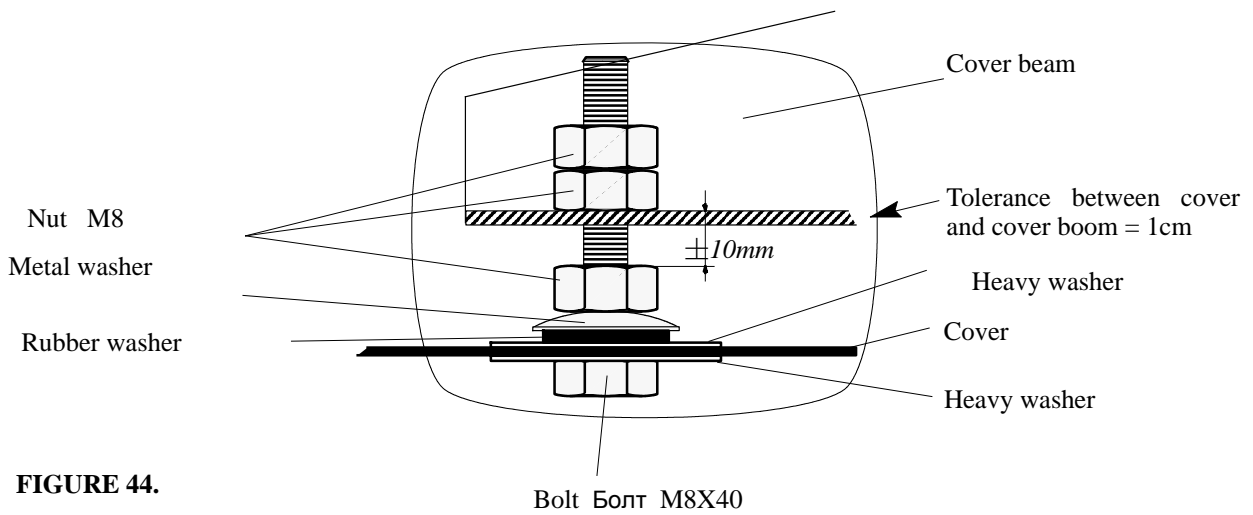
**A. FIXING THE ROOF SUPPORT TO THE ROOF SECTION**

Put the complete assembly on to a roof section joint.



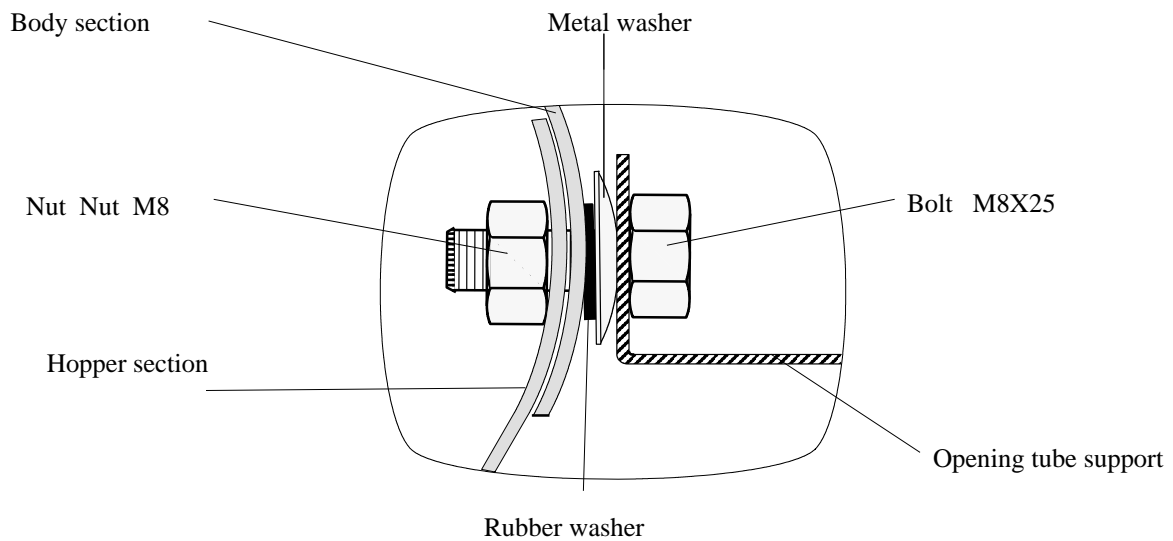
**FIGURE 43.**

**B. FIXING THE COVER TO THE COVER BEAM**



**FIGURE 44.**

**C. FIXING THE OPENING TUBE SUPPORT (BODY/HOPPER JOINT)**



**FIGURE 45. CHECK WHETHER THE SYSTEM OPERATES SATISFACTORY !!!**

### HOW TO ASSEMBLE THE LADDER

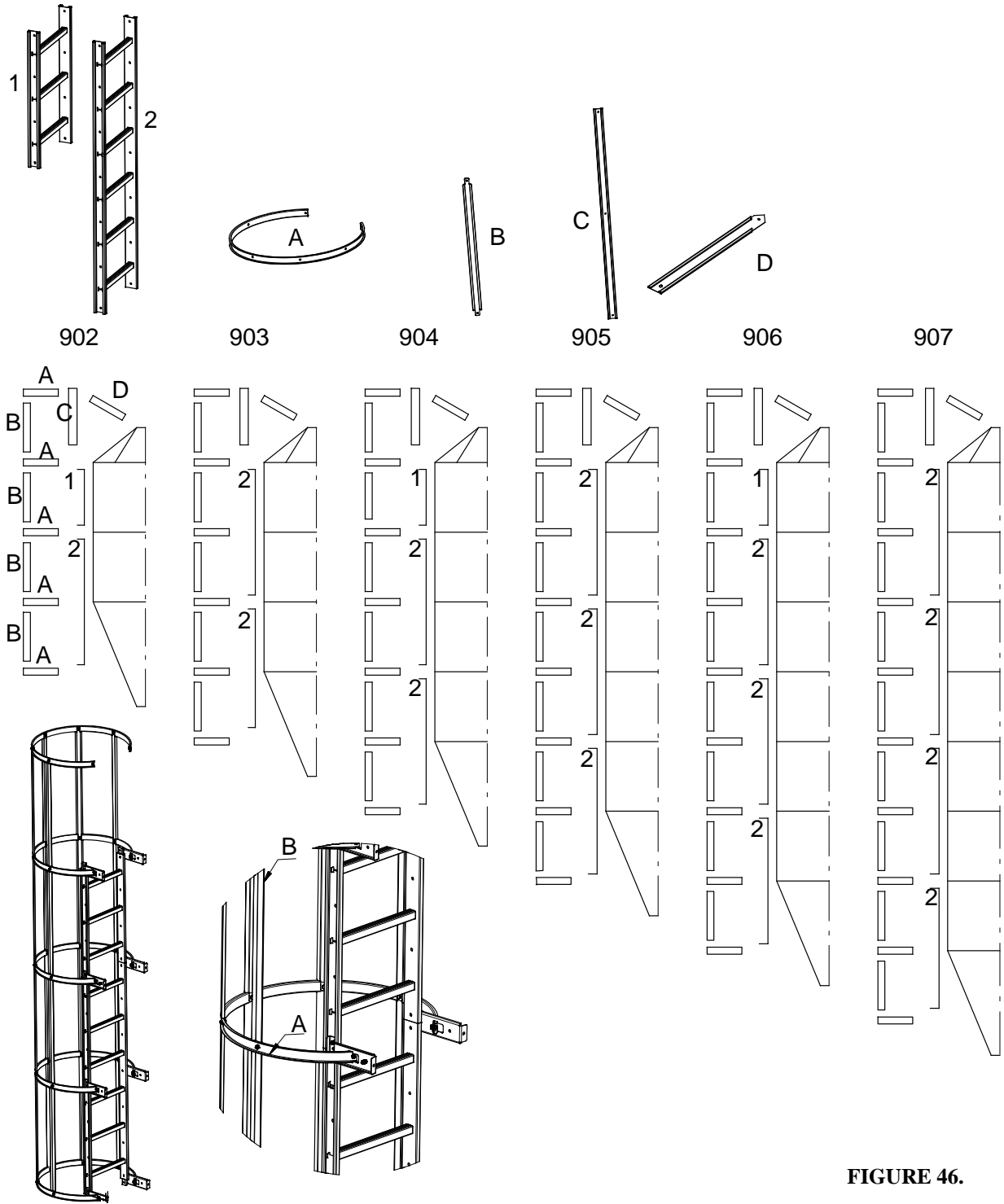
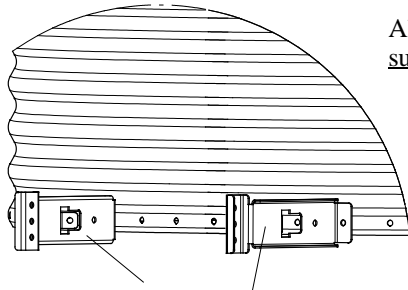


FIGURE 46.

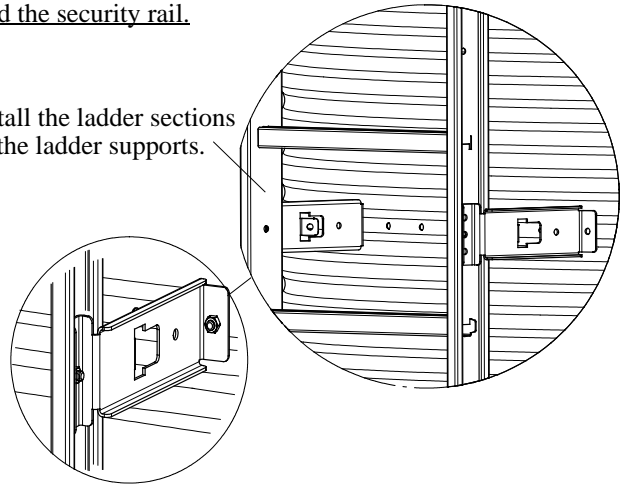
## TO ASSEMBLE THE LADDER



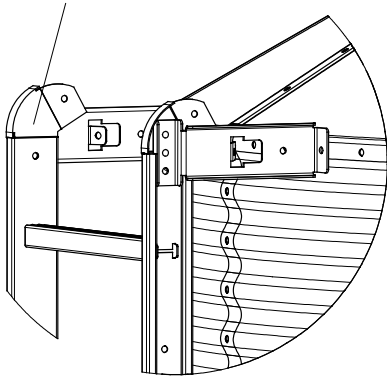
1. Install the ladder supports on the bin body (5 holes in between).

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

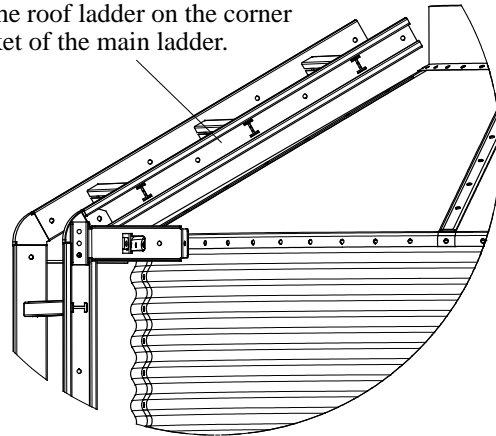
2. Install the ladder sections in the ladder supports.



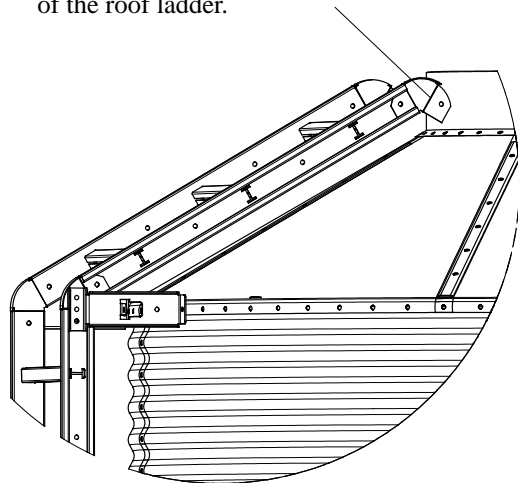
3. Install the corner bracket on top of the ladder.



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.

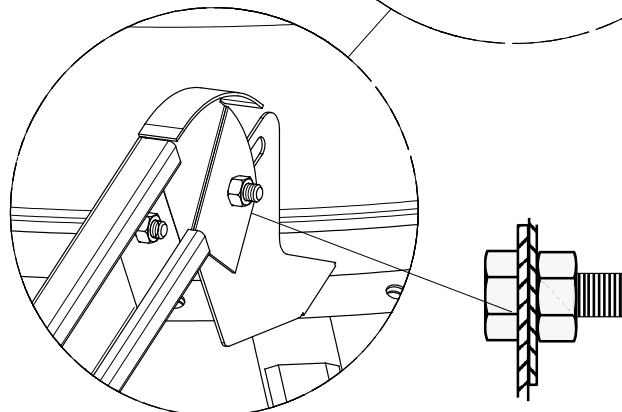
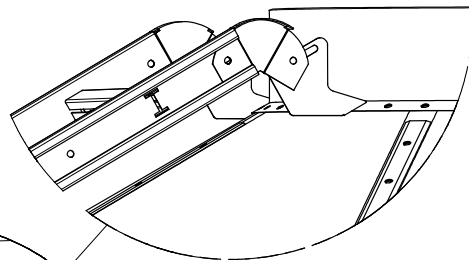


FIGURE 47.

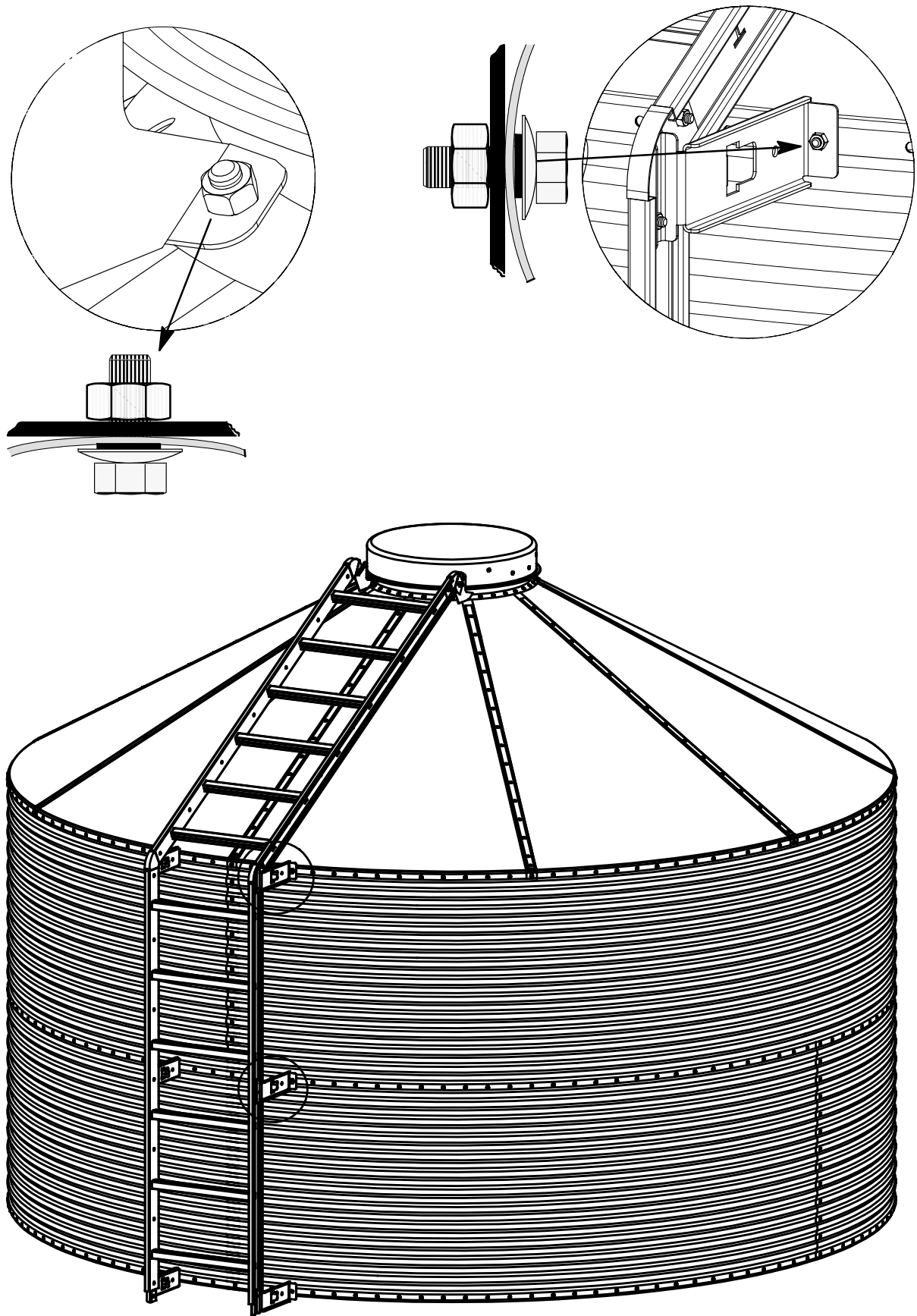
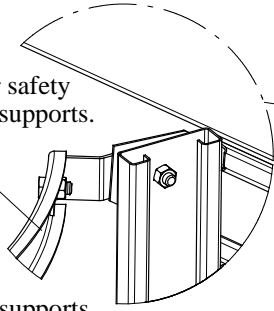
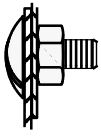


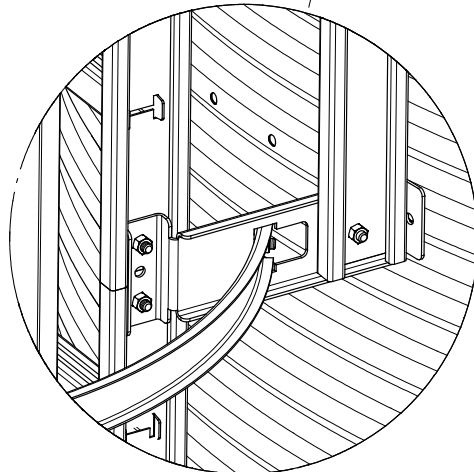
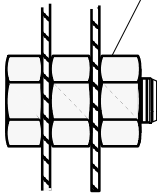
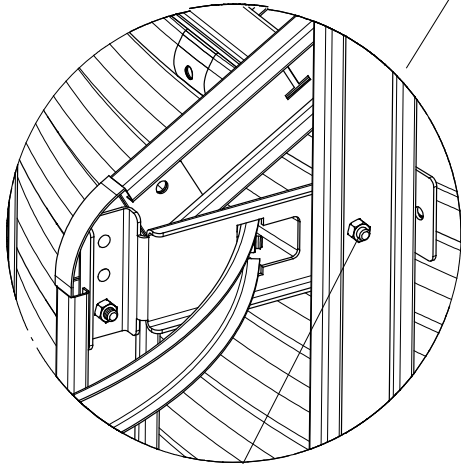
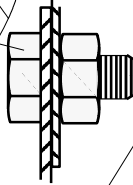
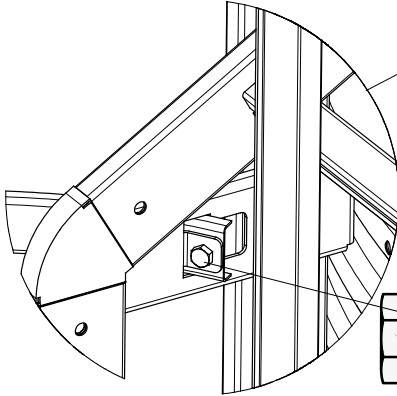
FIGURE 48.

## 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.

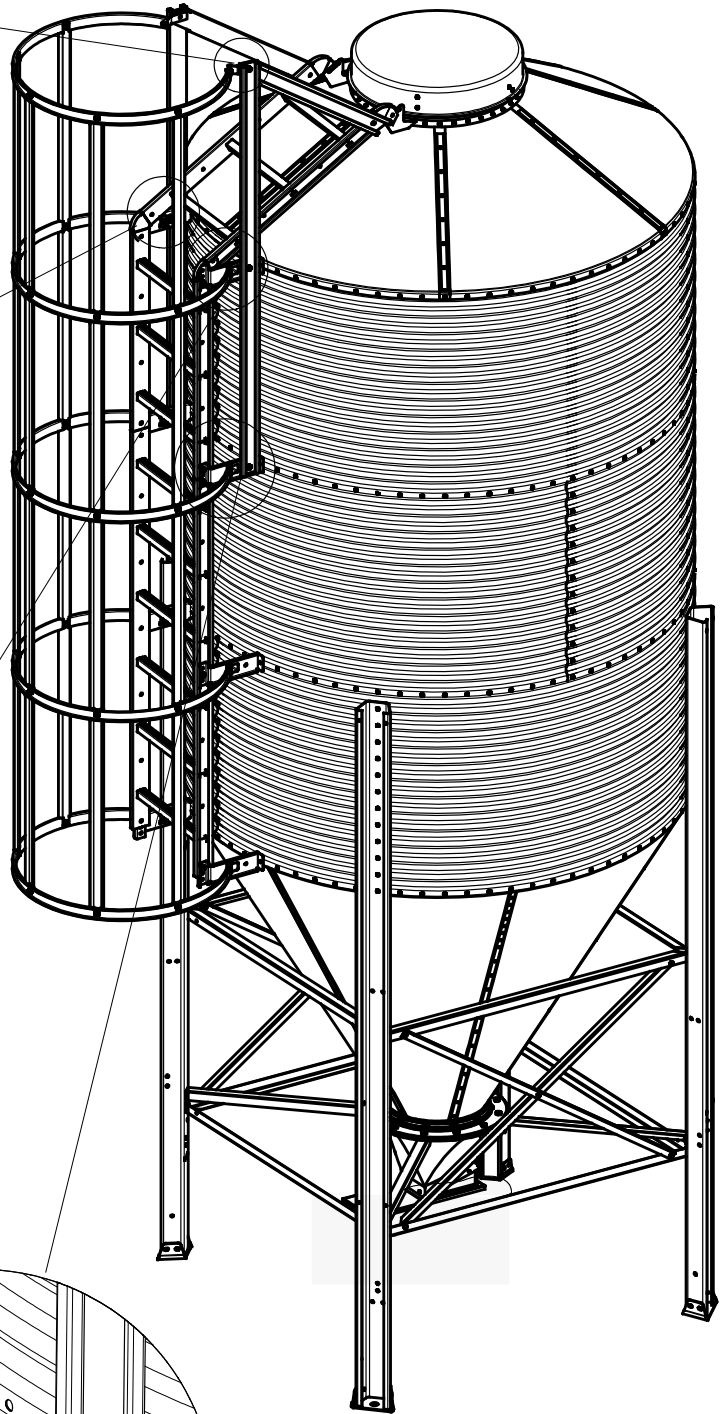


FIGURE 49.

**WARNING :** for bins 2.75M & 3.2M the main ladder is lower than the bottom ring.

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

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

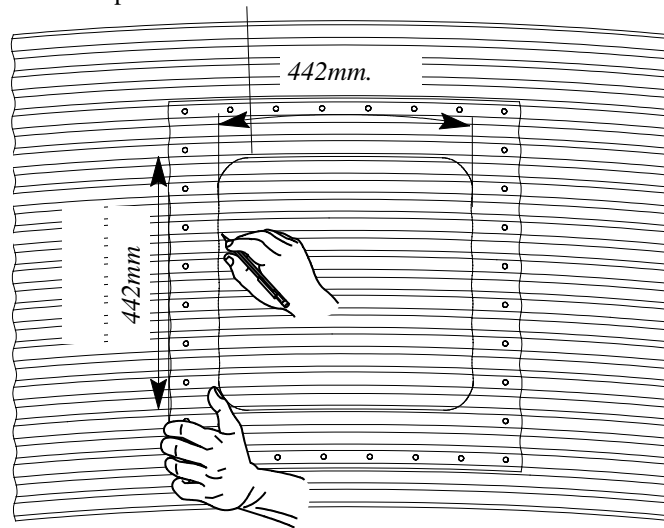


FIGURE 50.

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

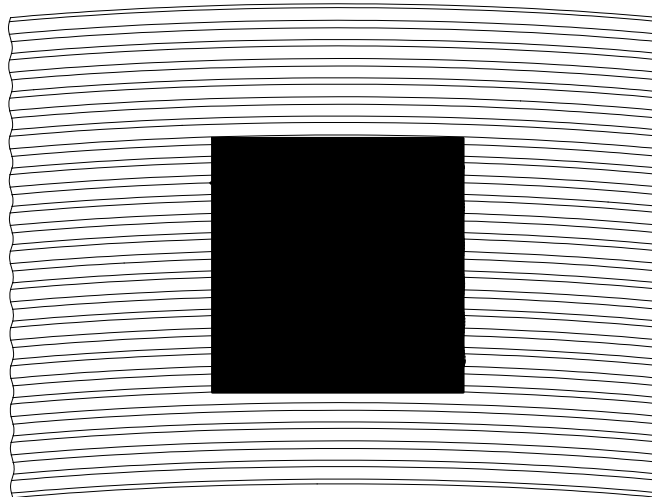


FIGURE 51.

Carefully remove the burrs !

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

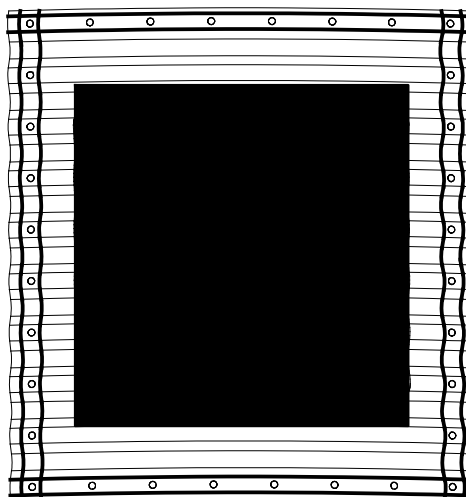


FIGURE 52.

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

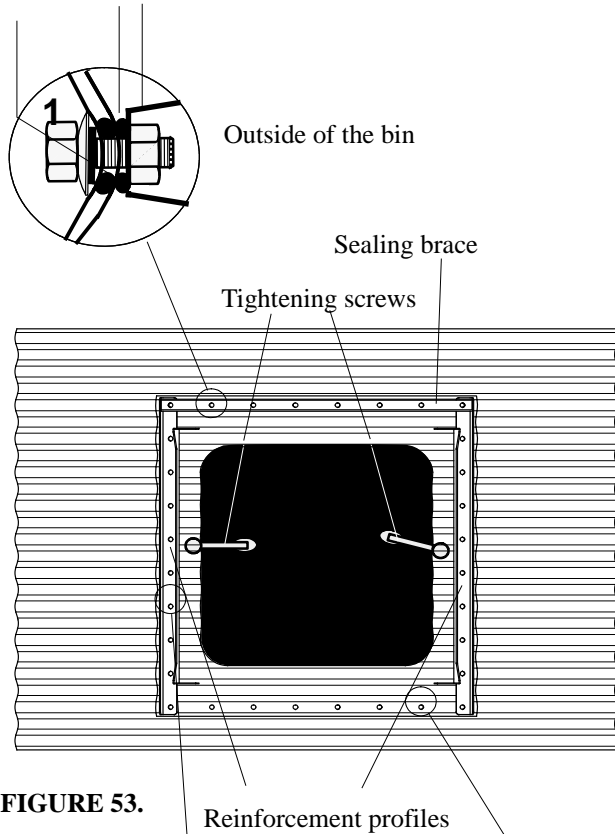


FIGURE 53.

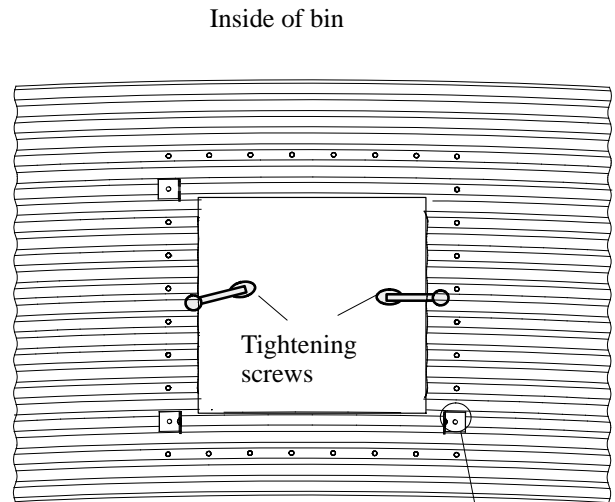
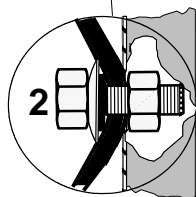
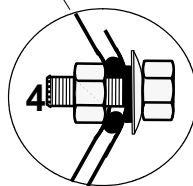


FIGURE 54.

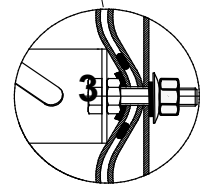


Outside of bin



Outside of bin

Inside of bin



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).

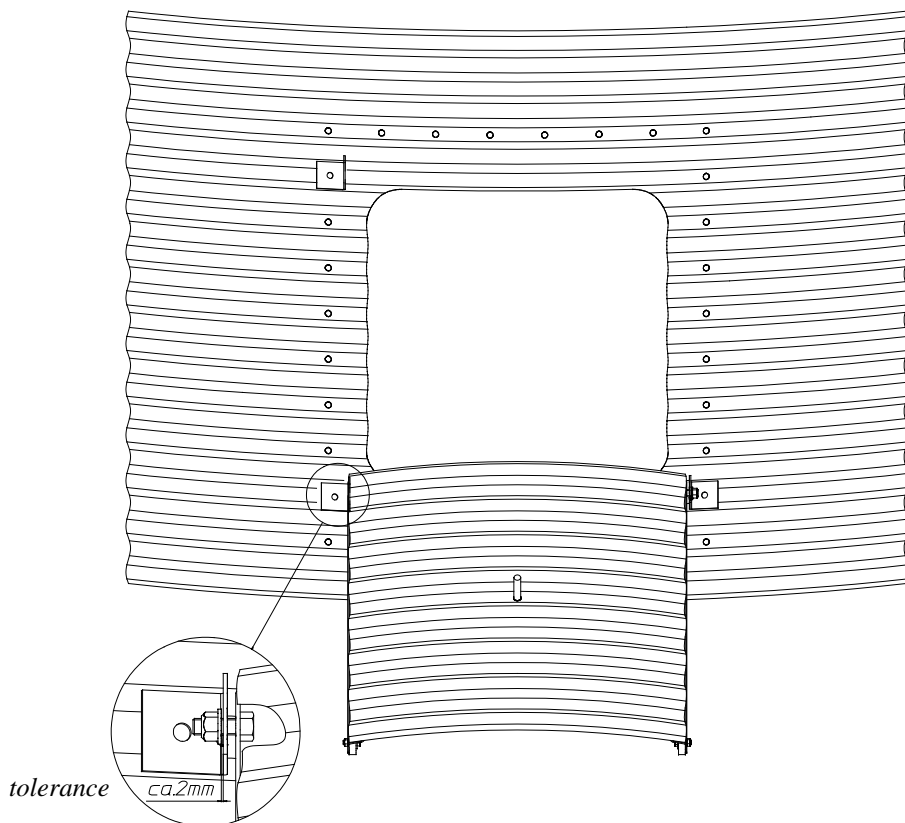
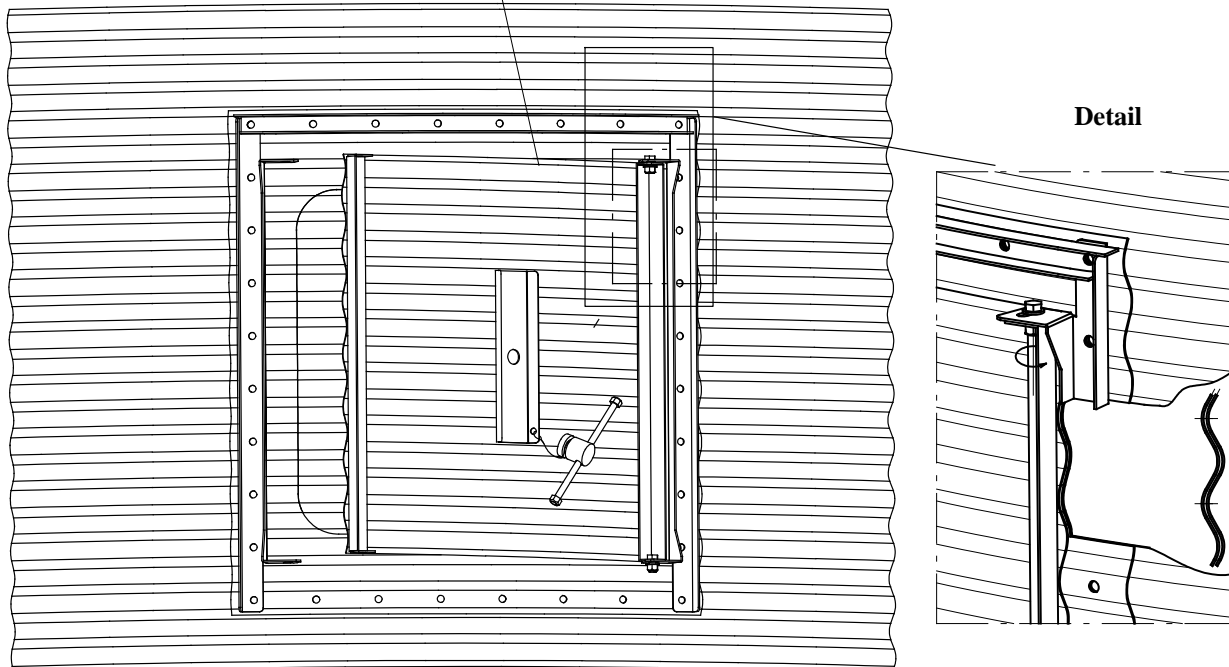


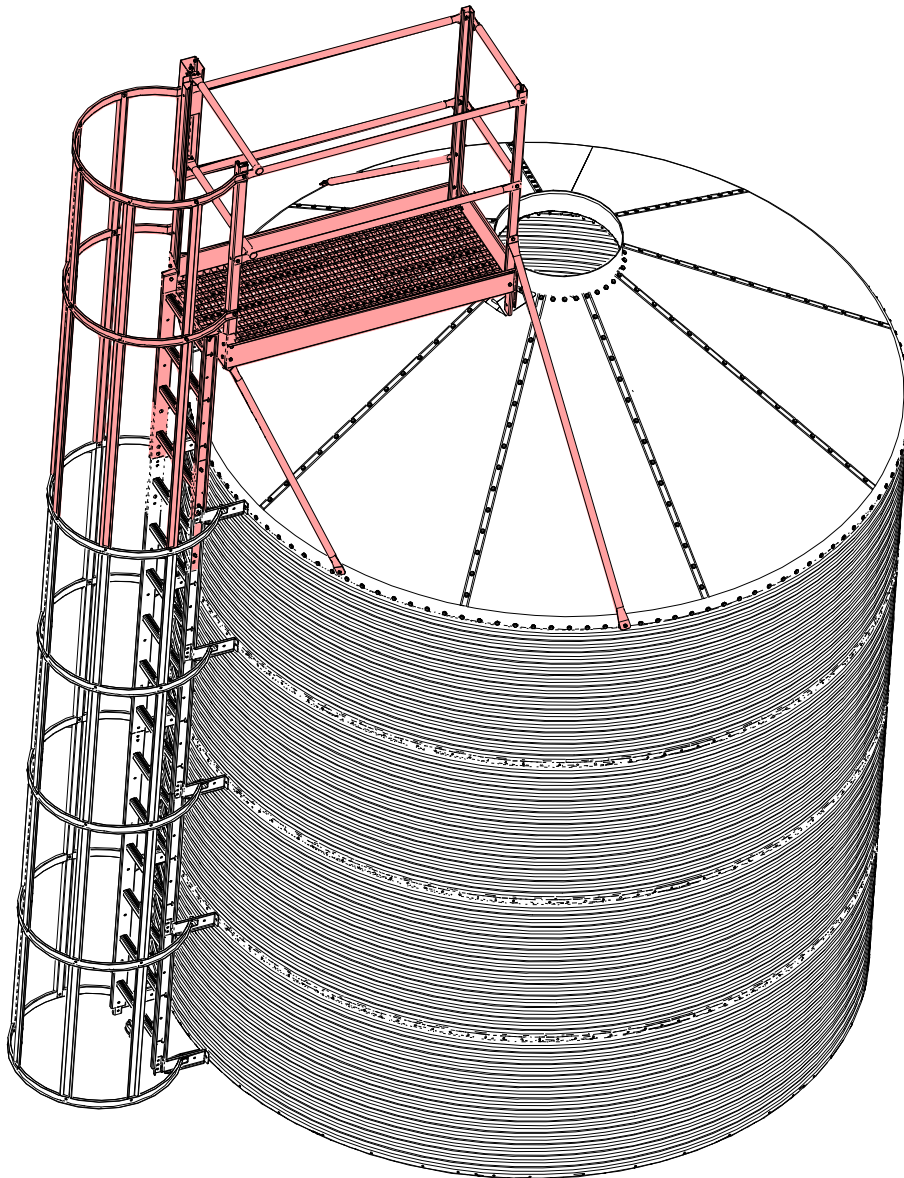
FIGURE 55.

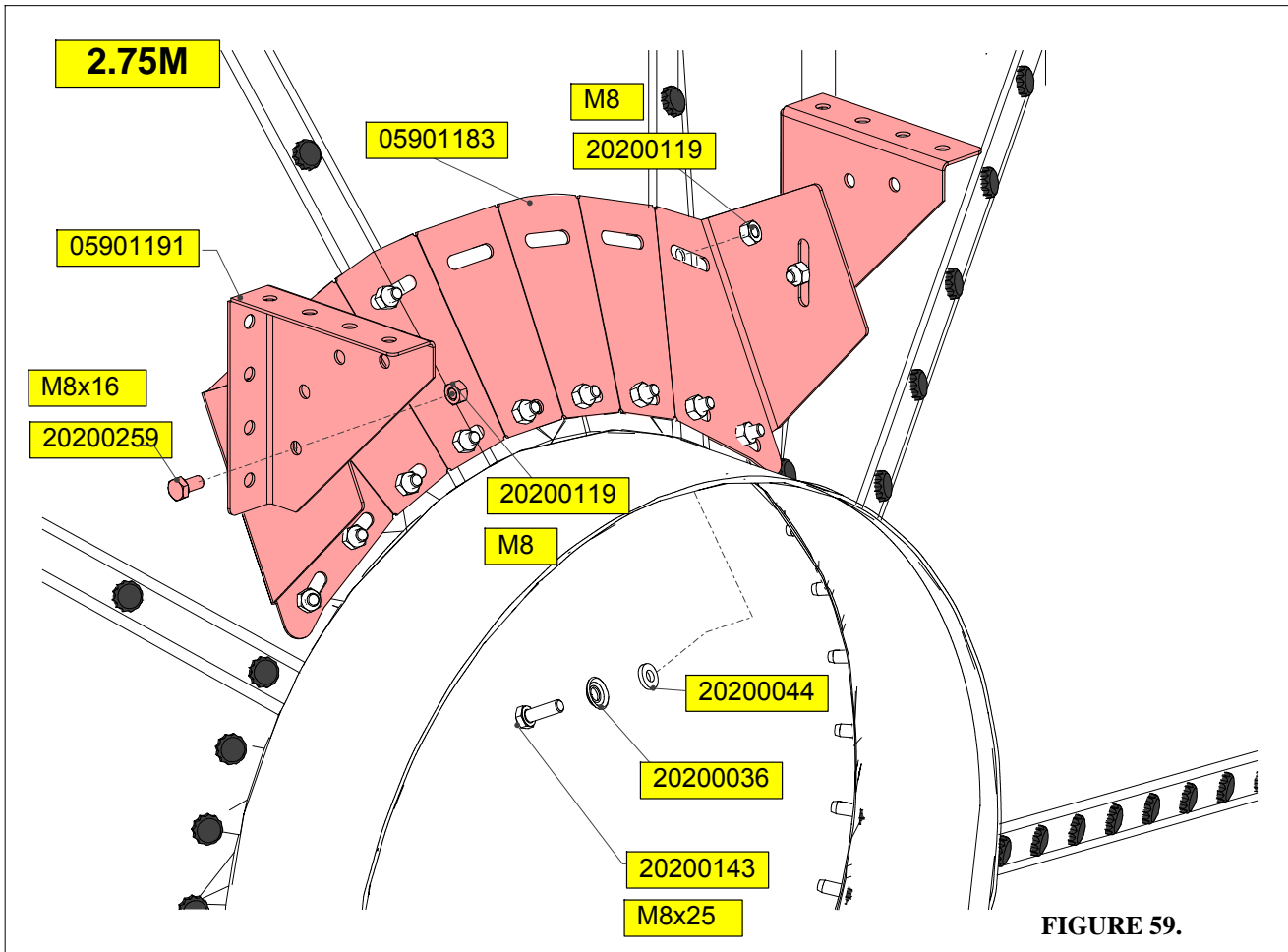
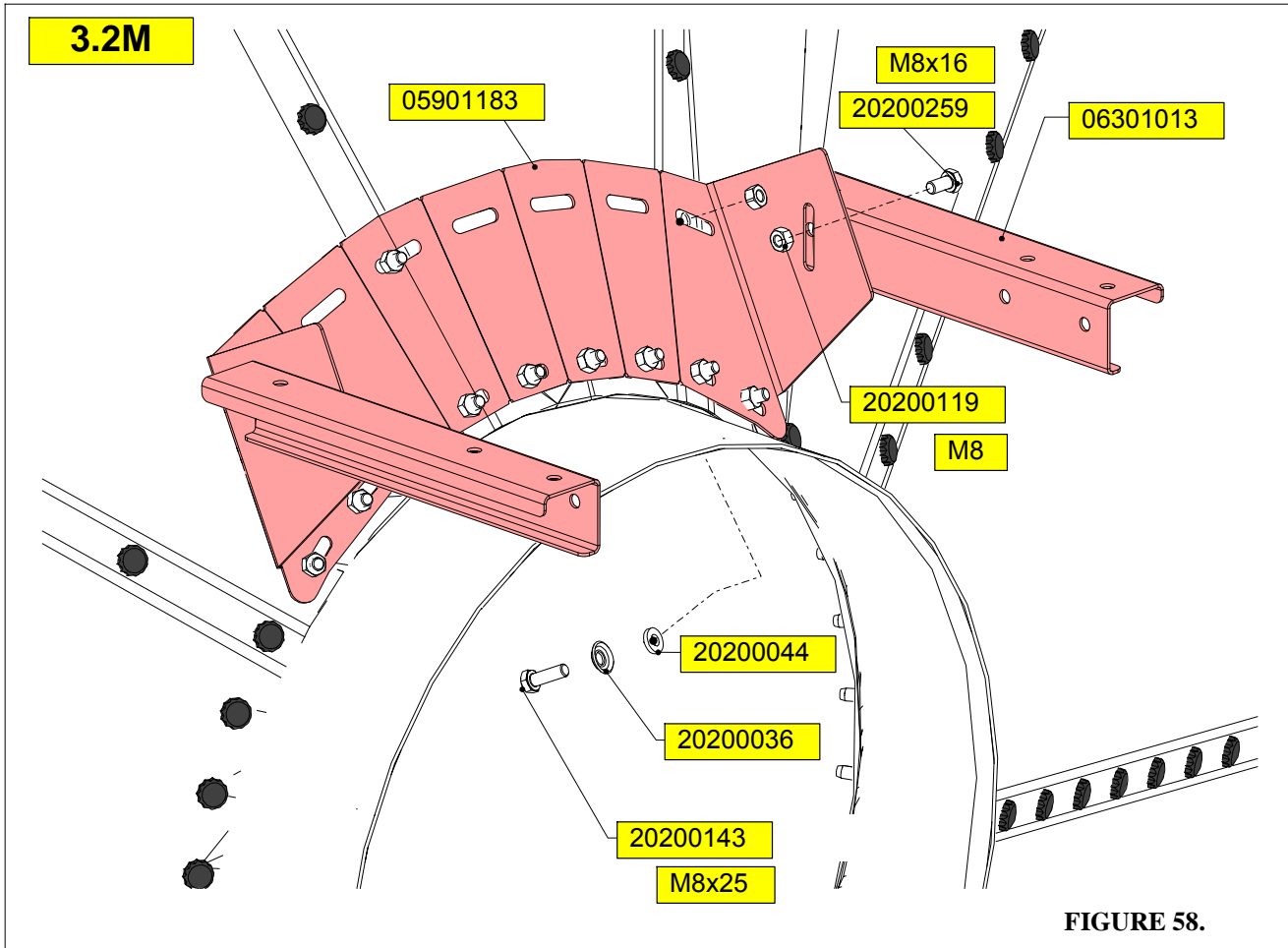
K. Install the outer door (turning to the left or the right). Adjust the hinge points so that the corrugations of the outside door fit into the corrugations of the frame (see detail).



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

FIGURE 56.

**SAFETY PLATFORM 2.75M & 3.2M****FIGURE 57.**



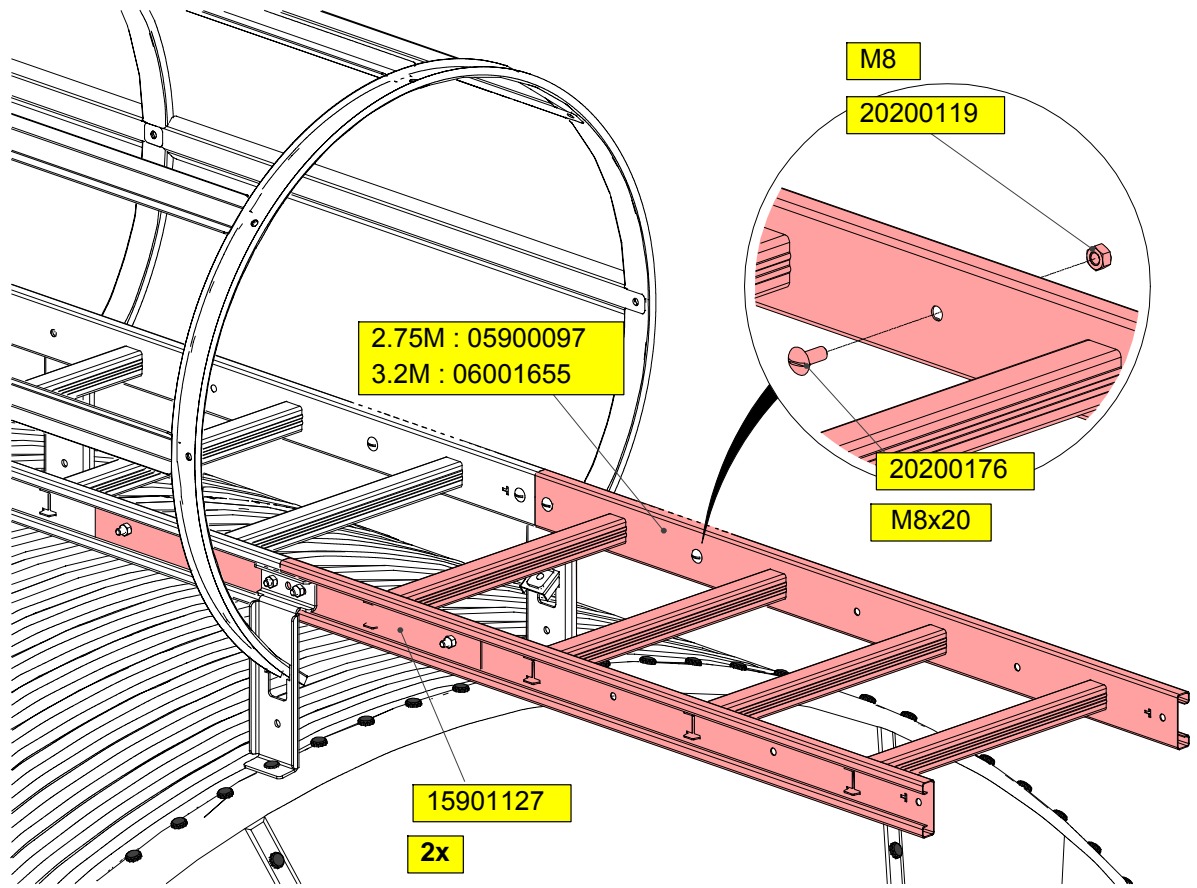


FIGURE 60.

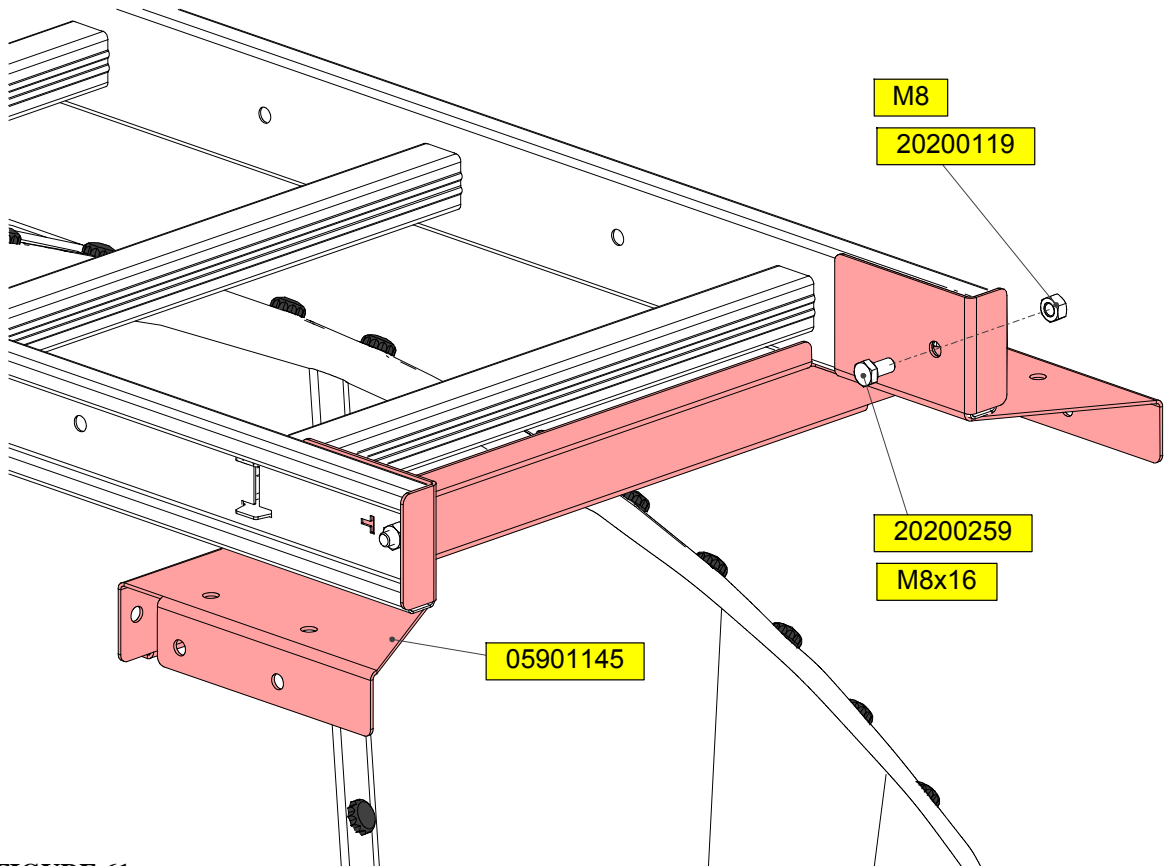


FIGURE 61.

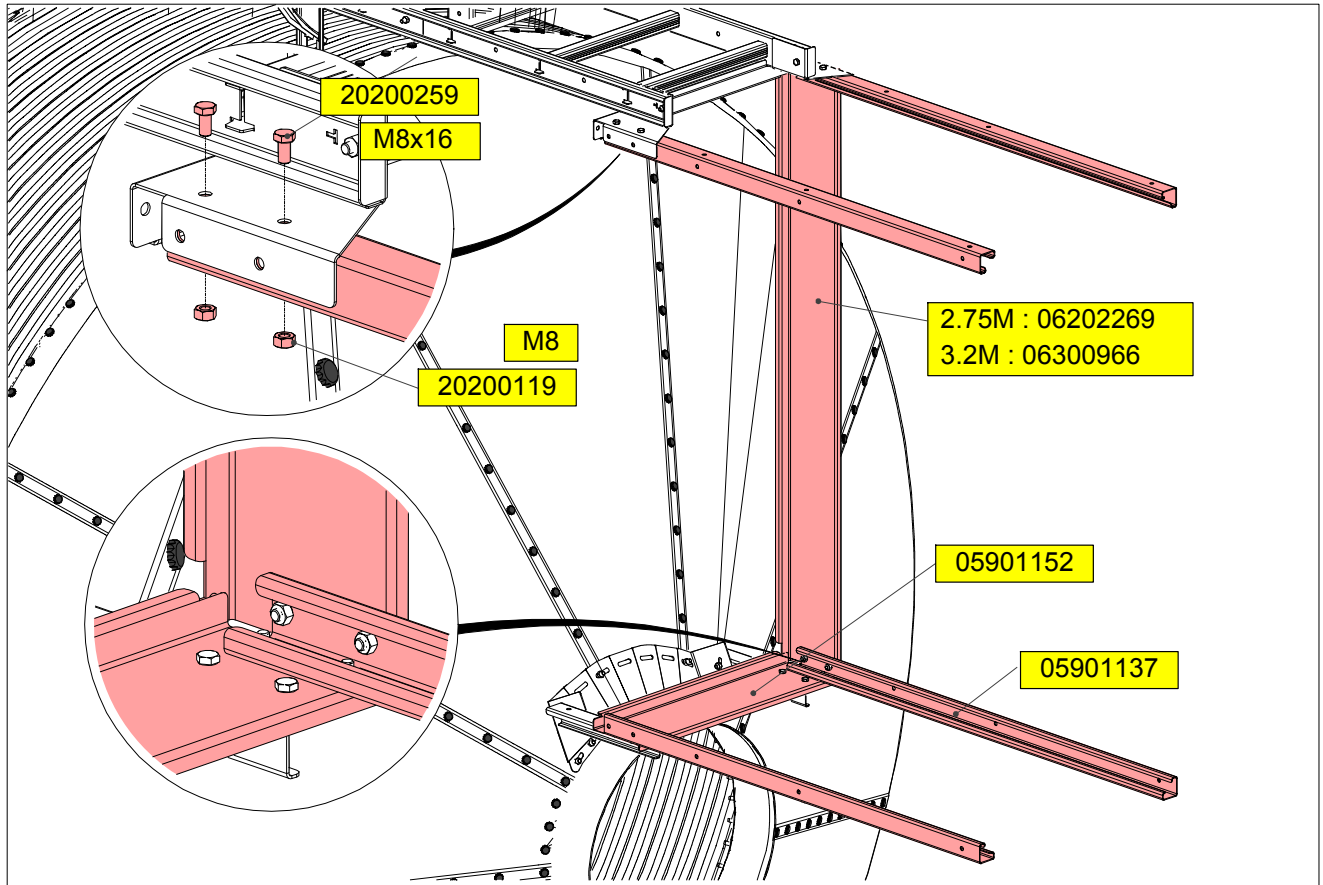


FIGURE 62.

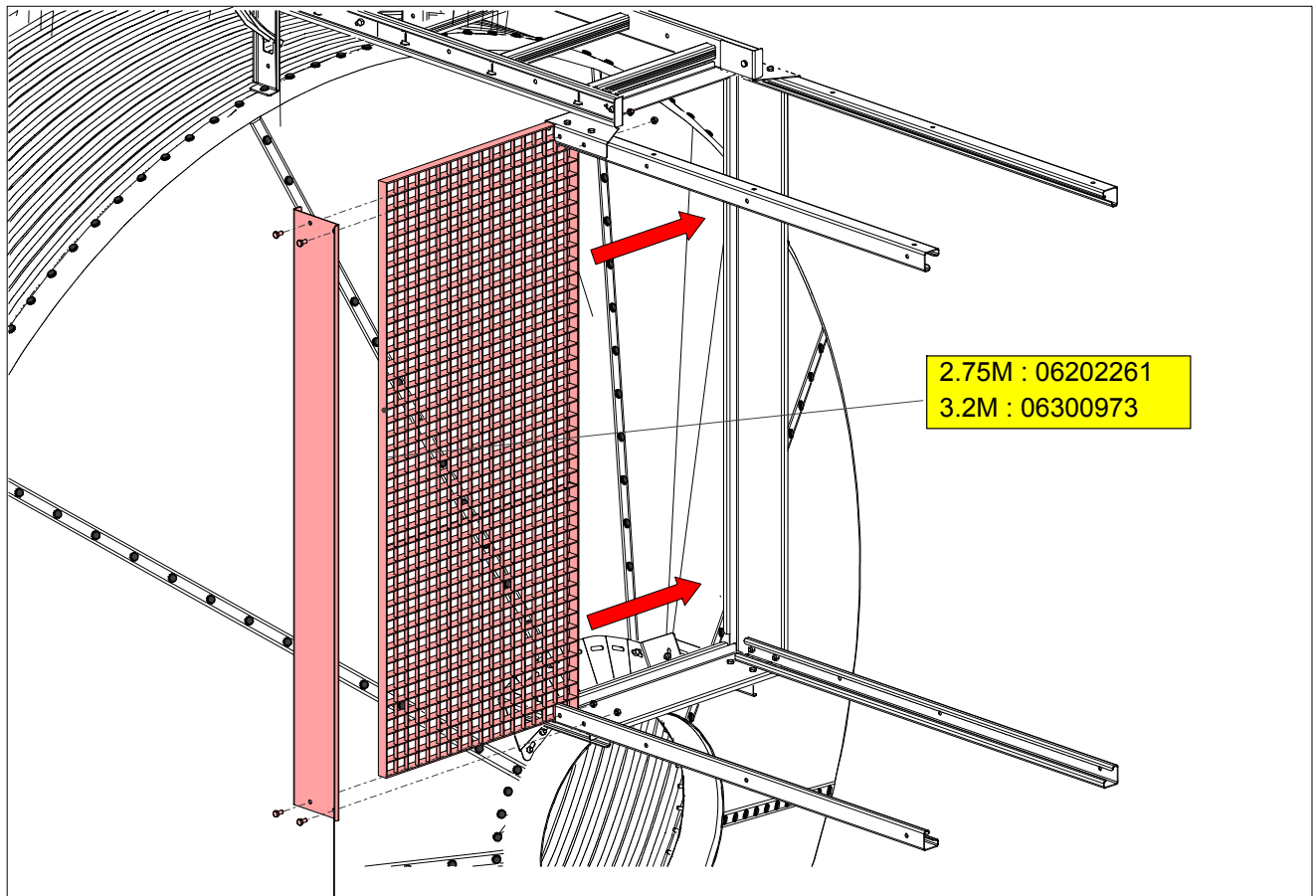
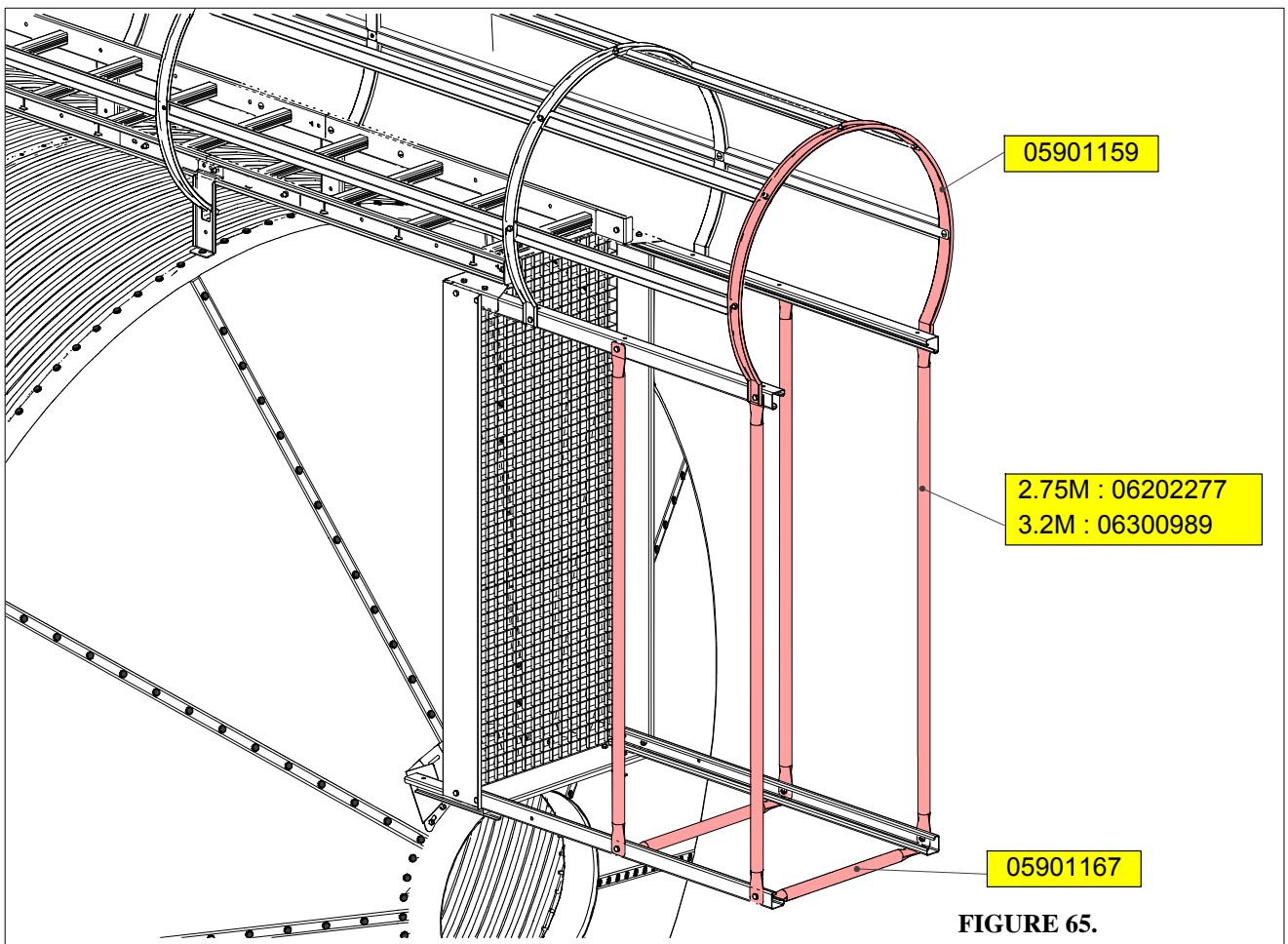
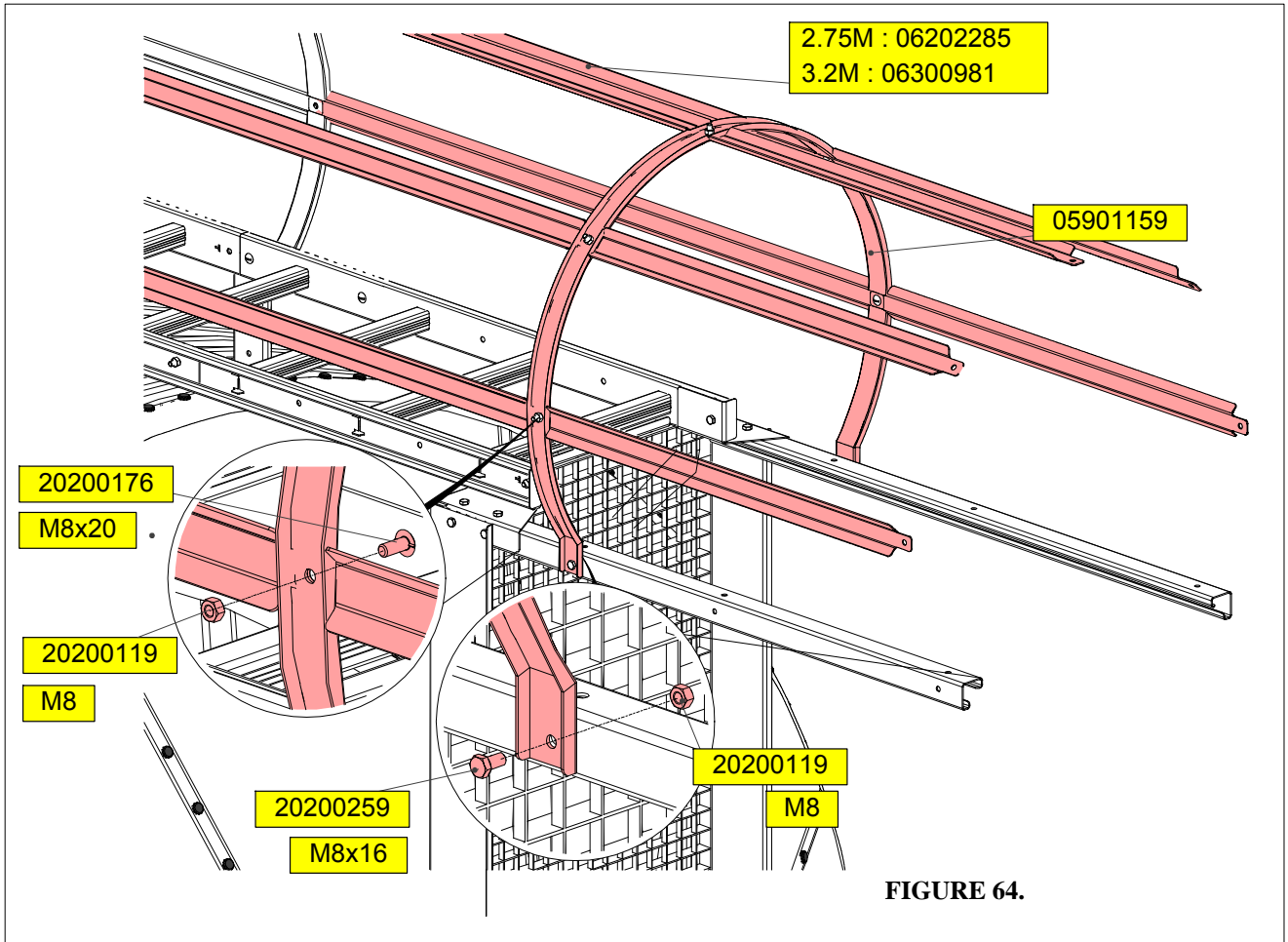


FIGURE 63.



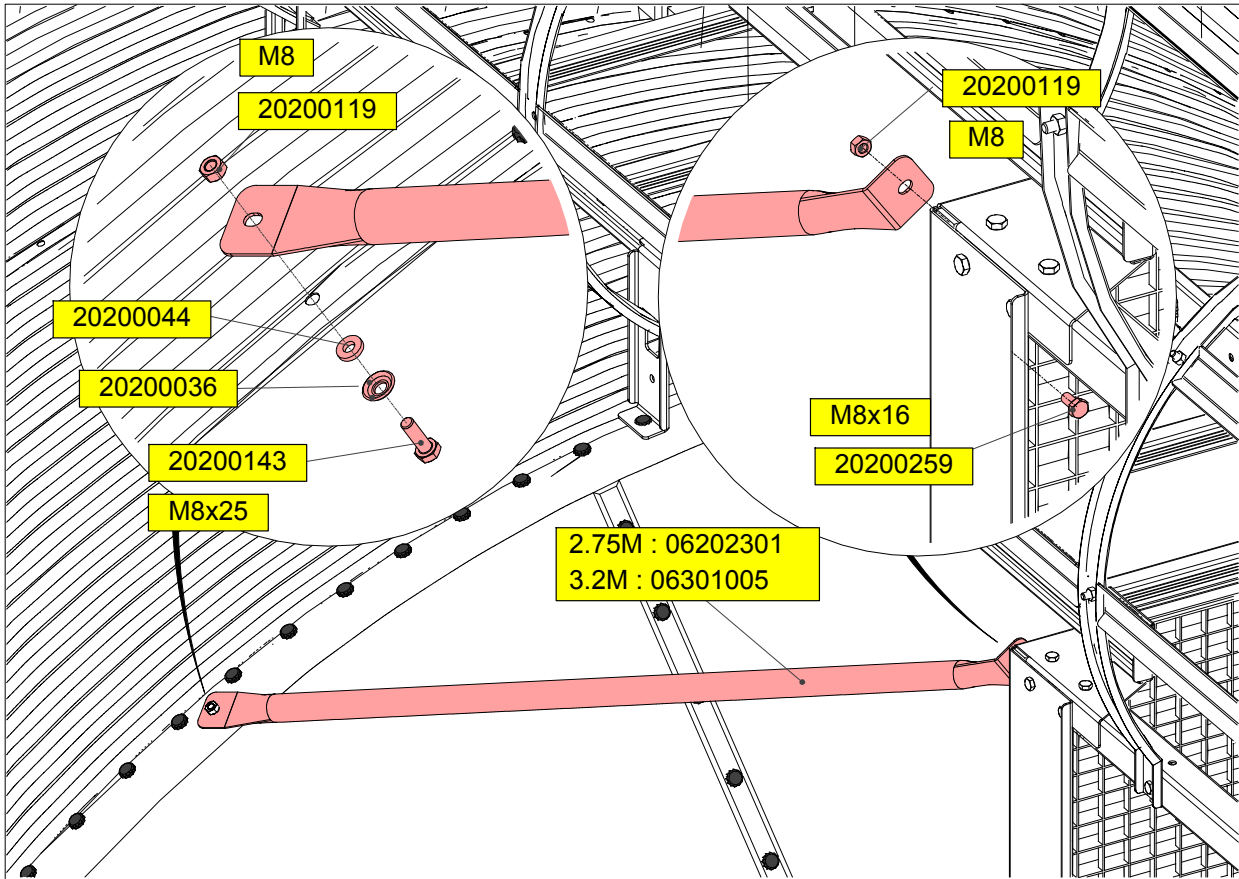


FIGURE 66.

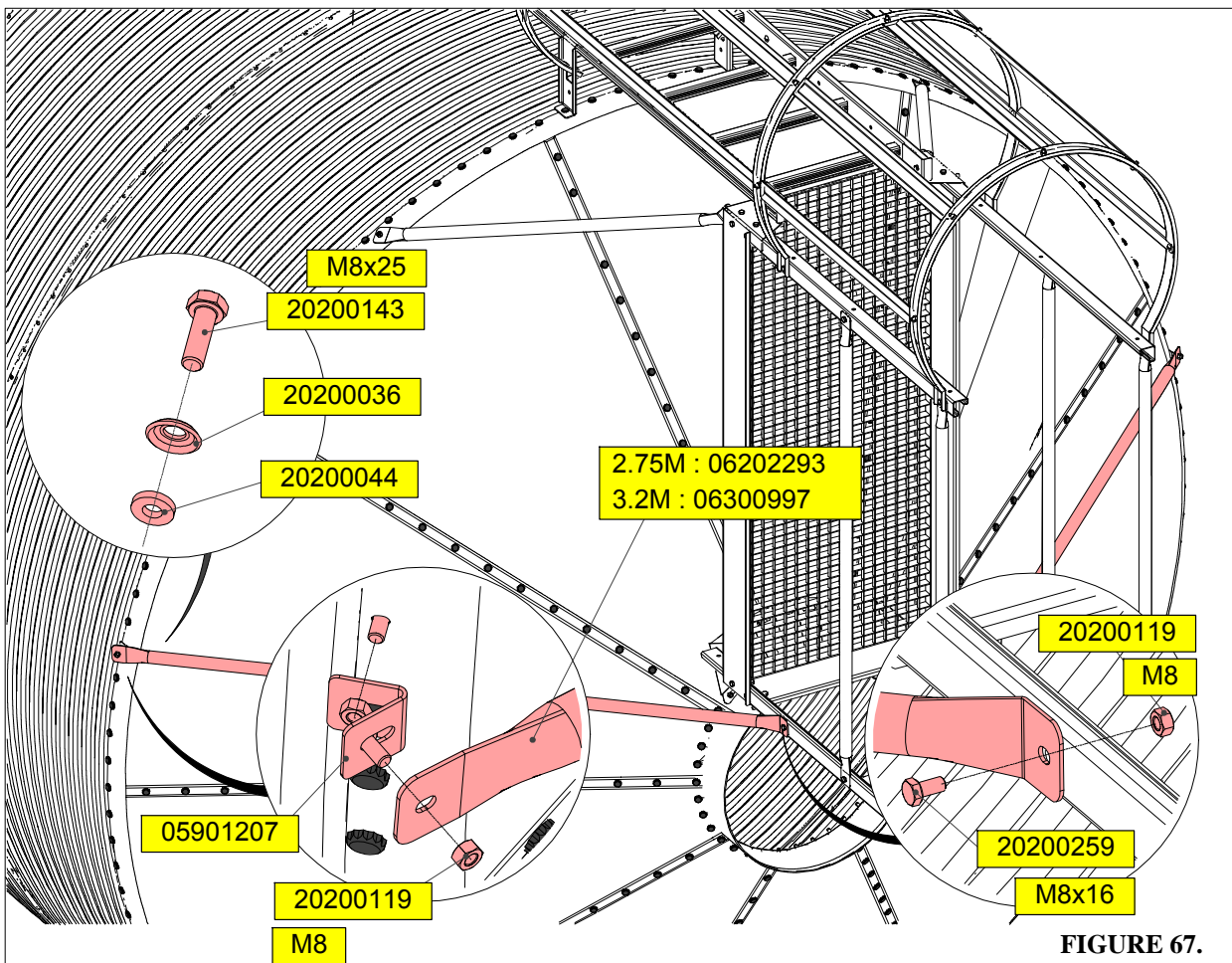


FIGURE 67.

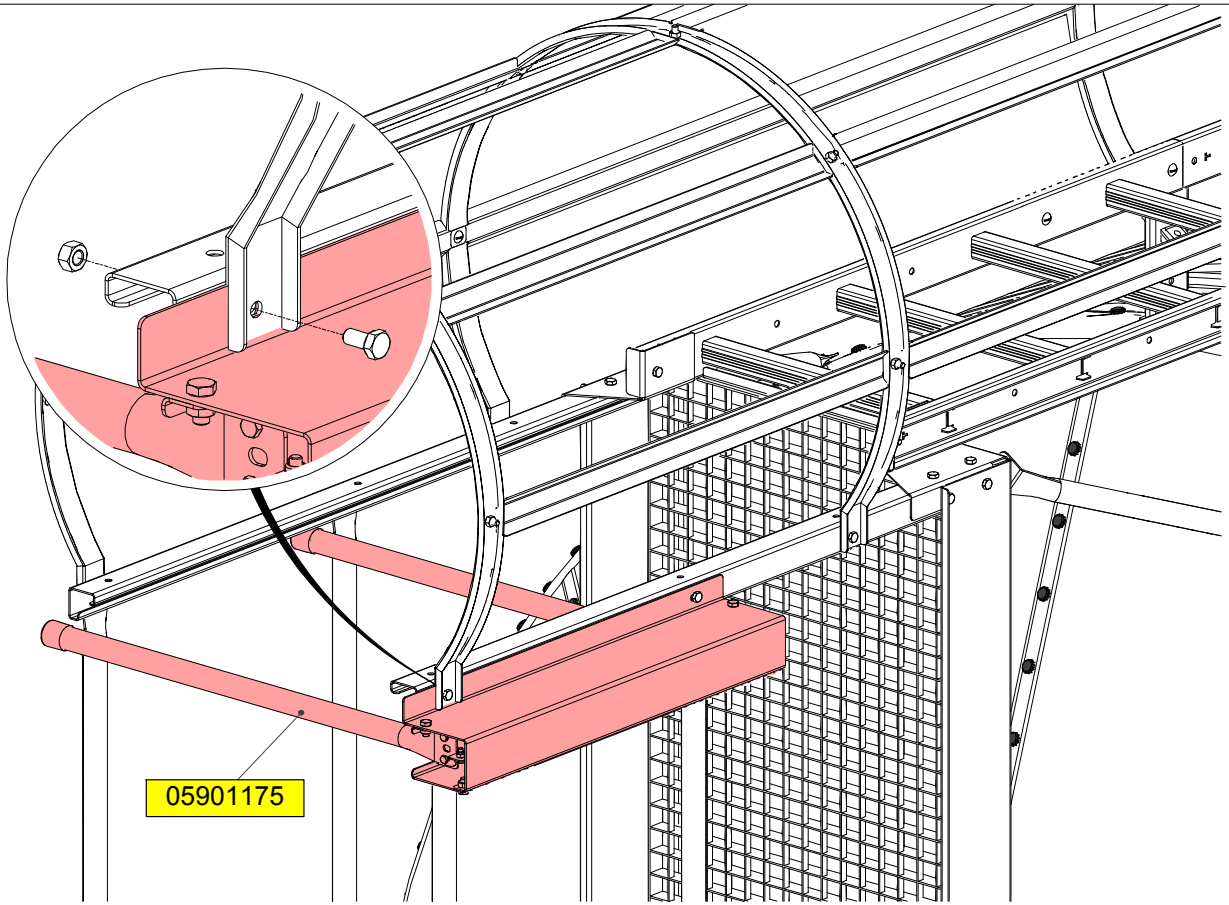


FIGURE 68.

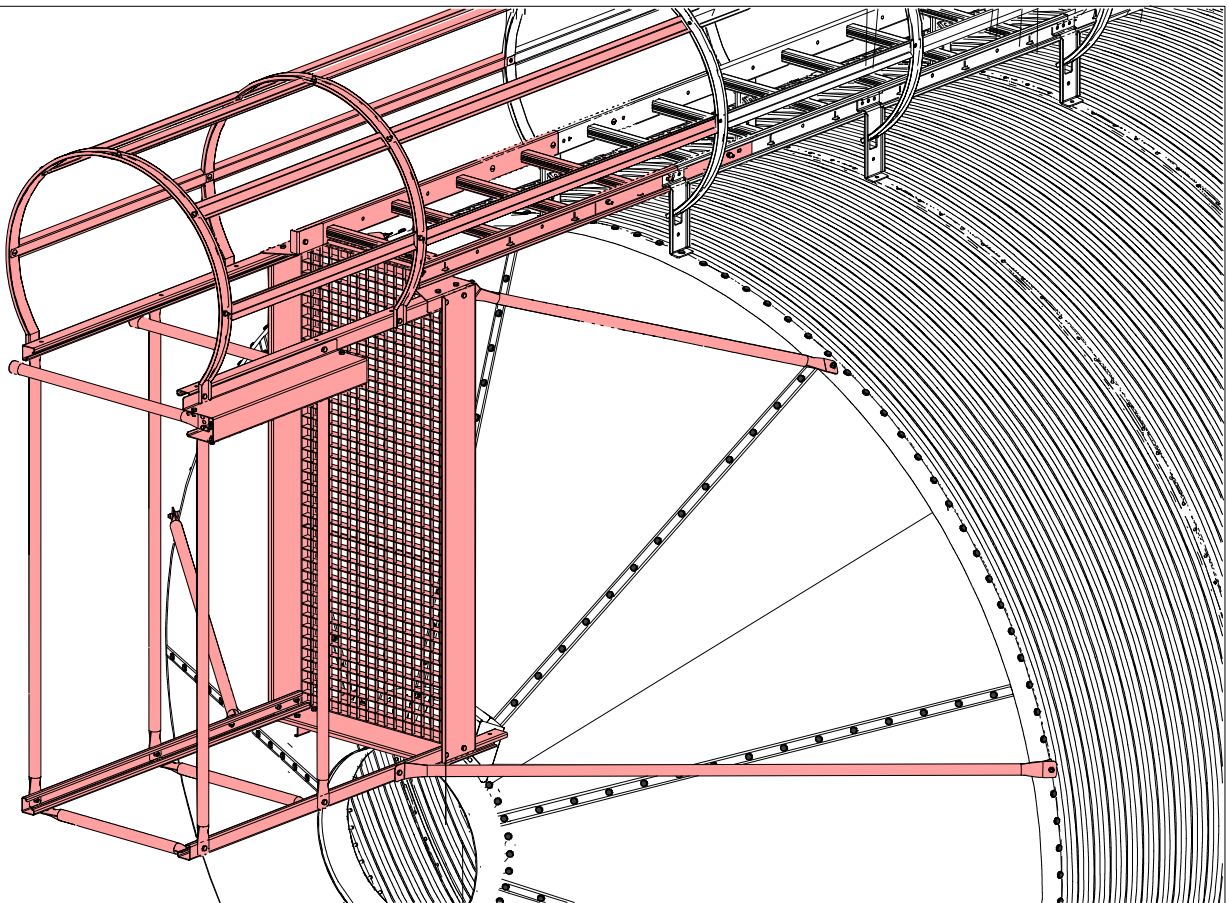
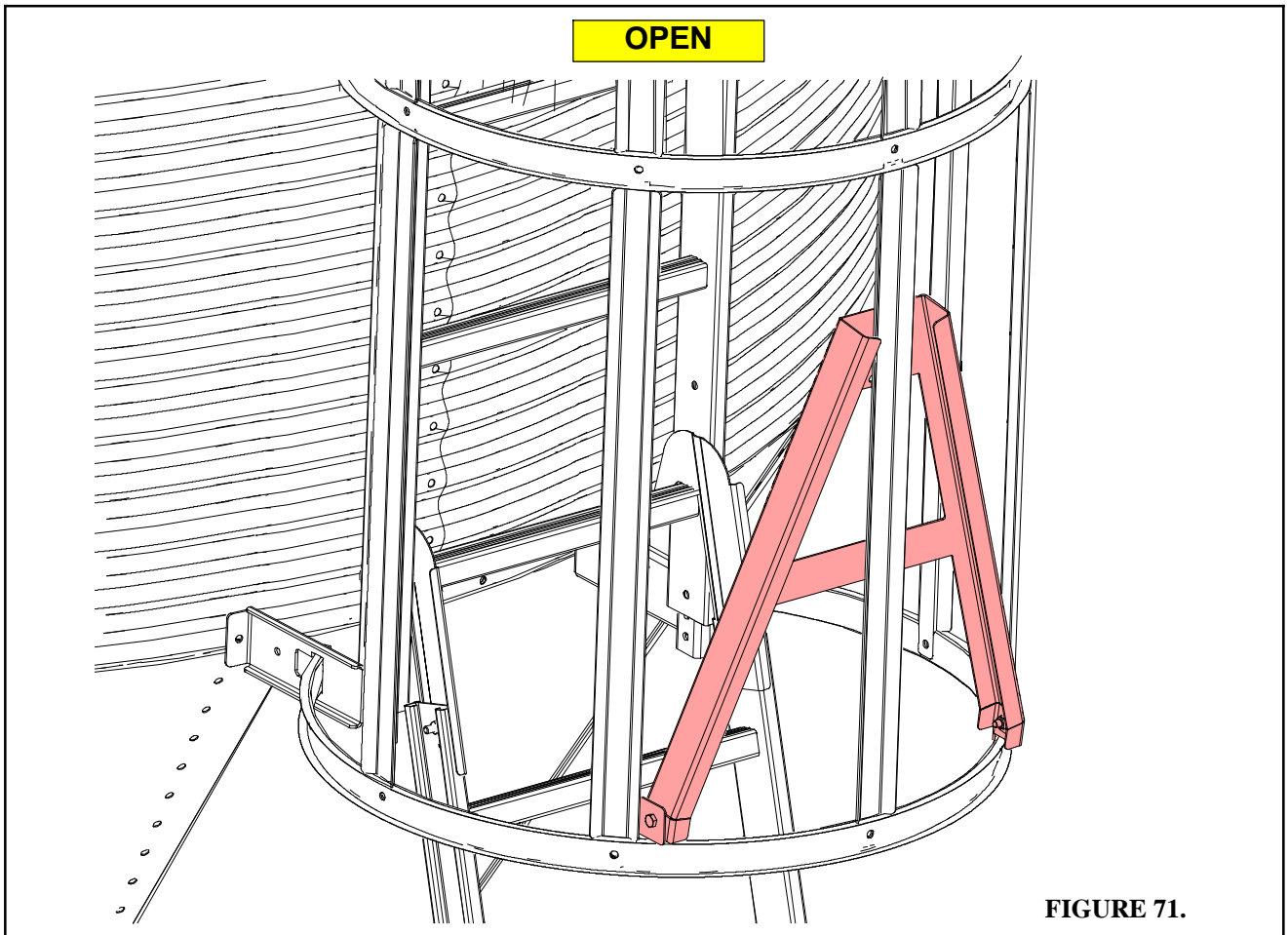
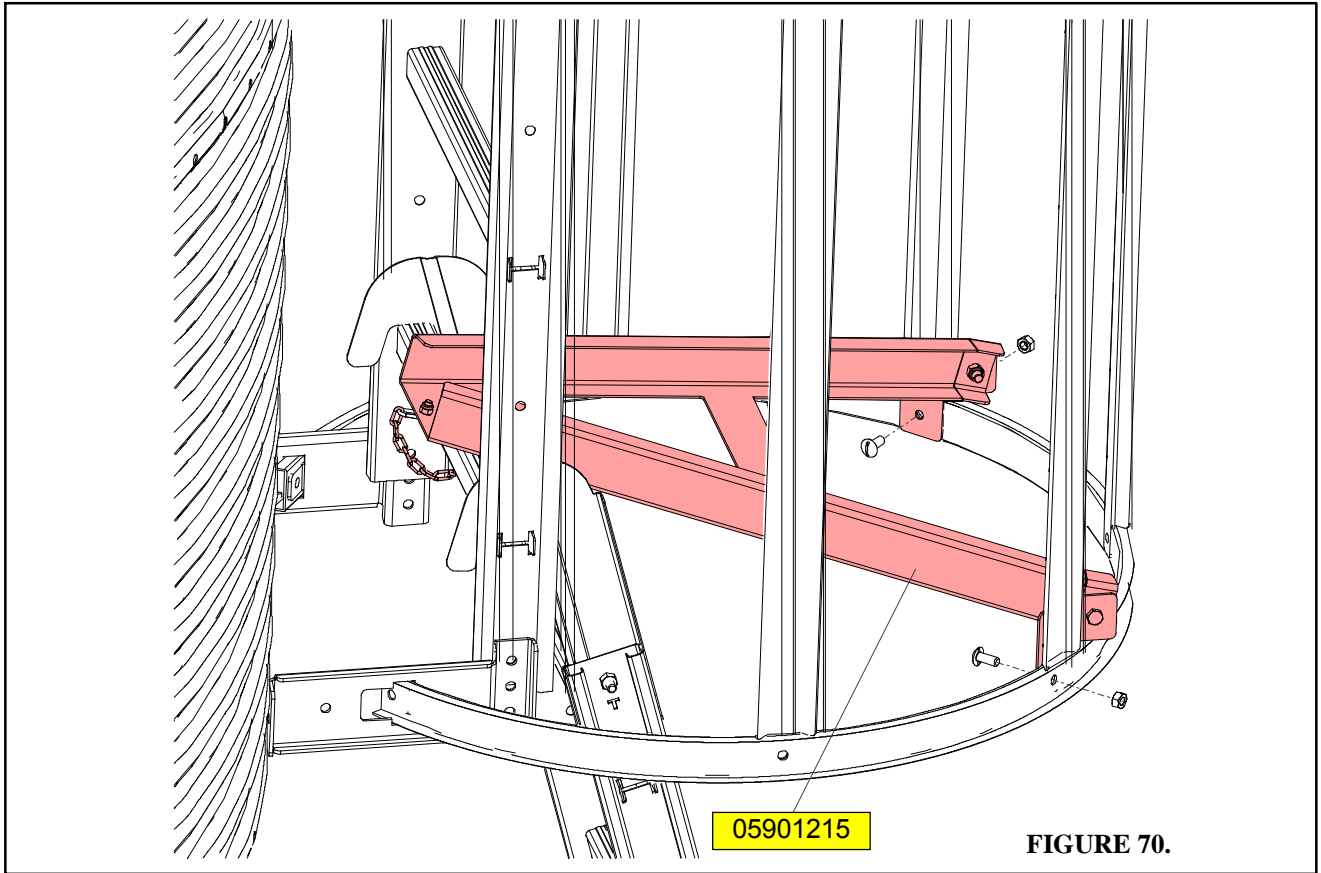
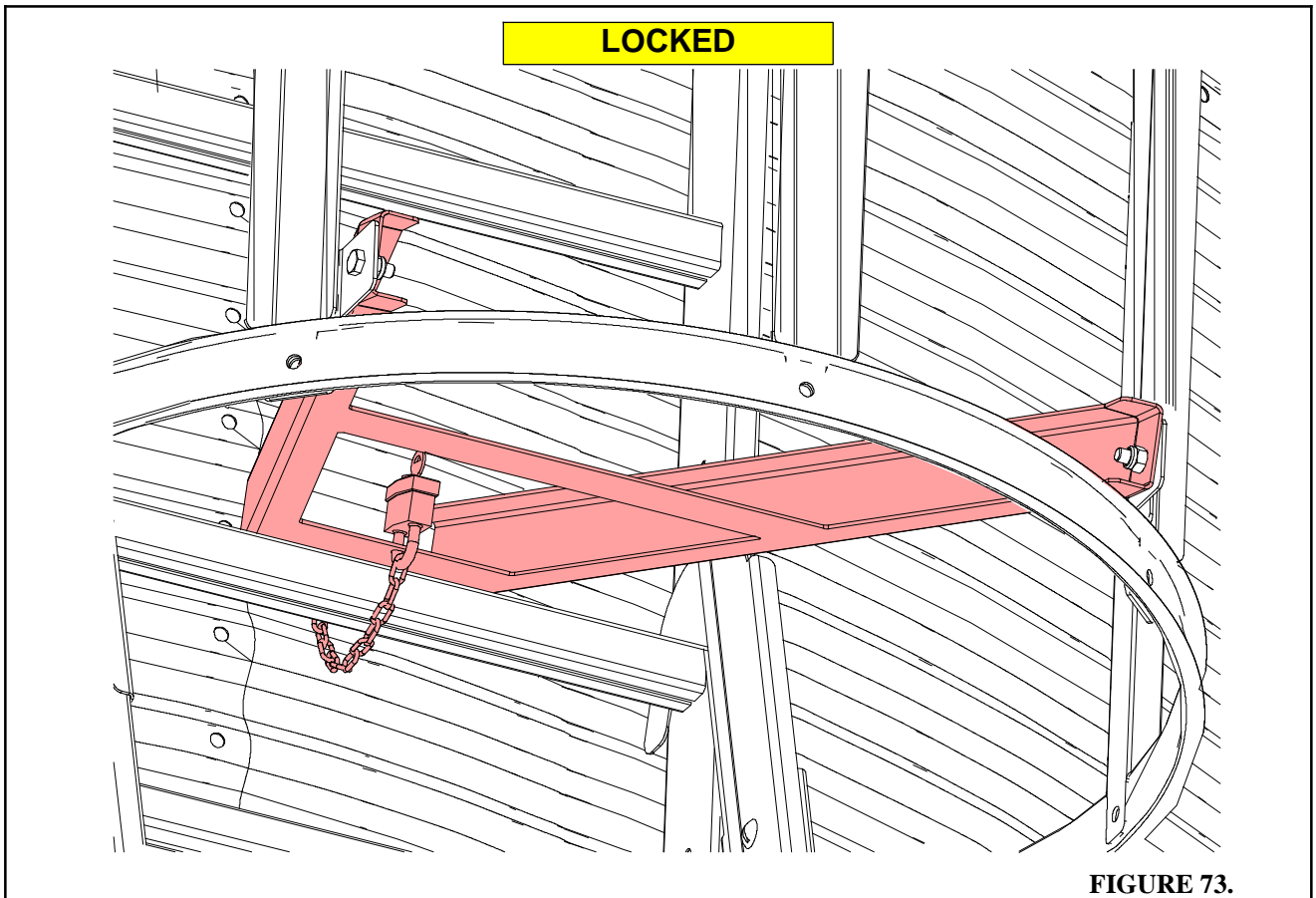
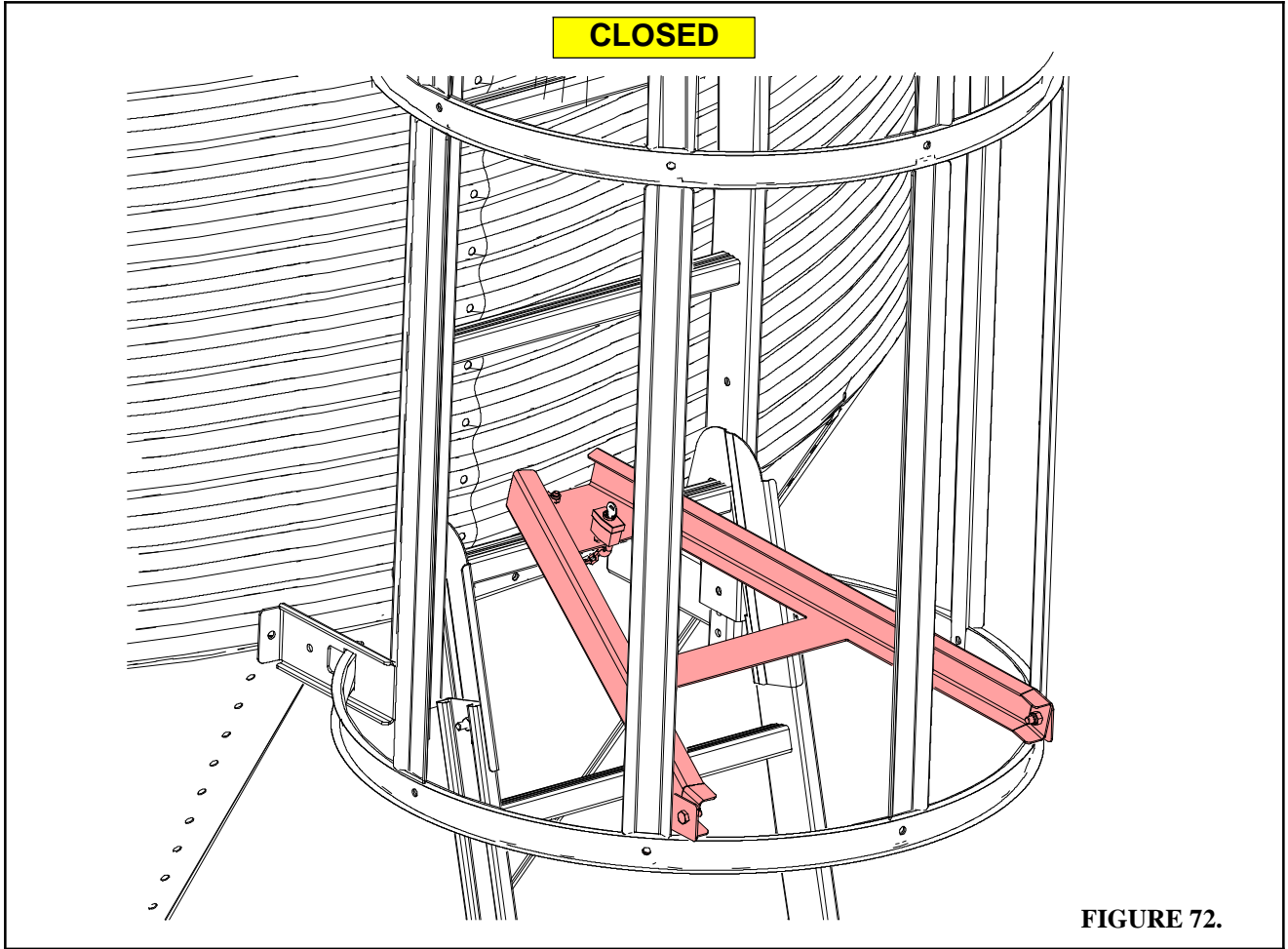


FIGURE 69.



### SECURITY DOOR





## TO GROUND THE BIN

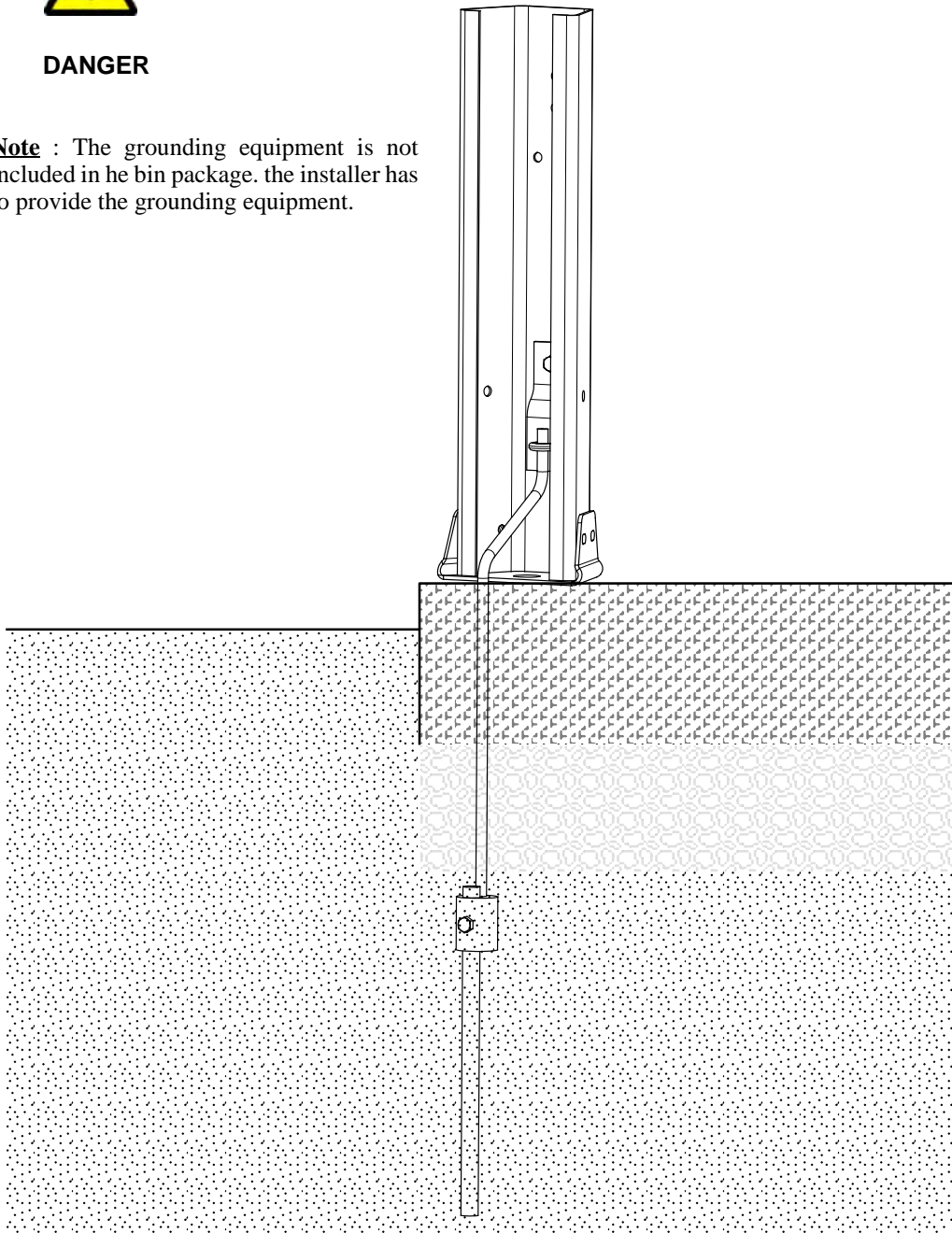
Each bin should have two groundings, equally spread around the bin.



**DANGER**

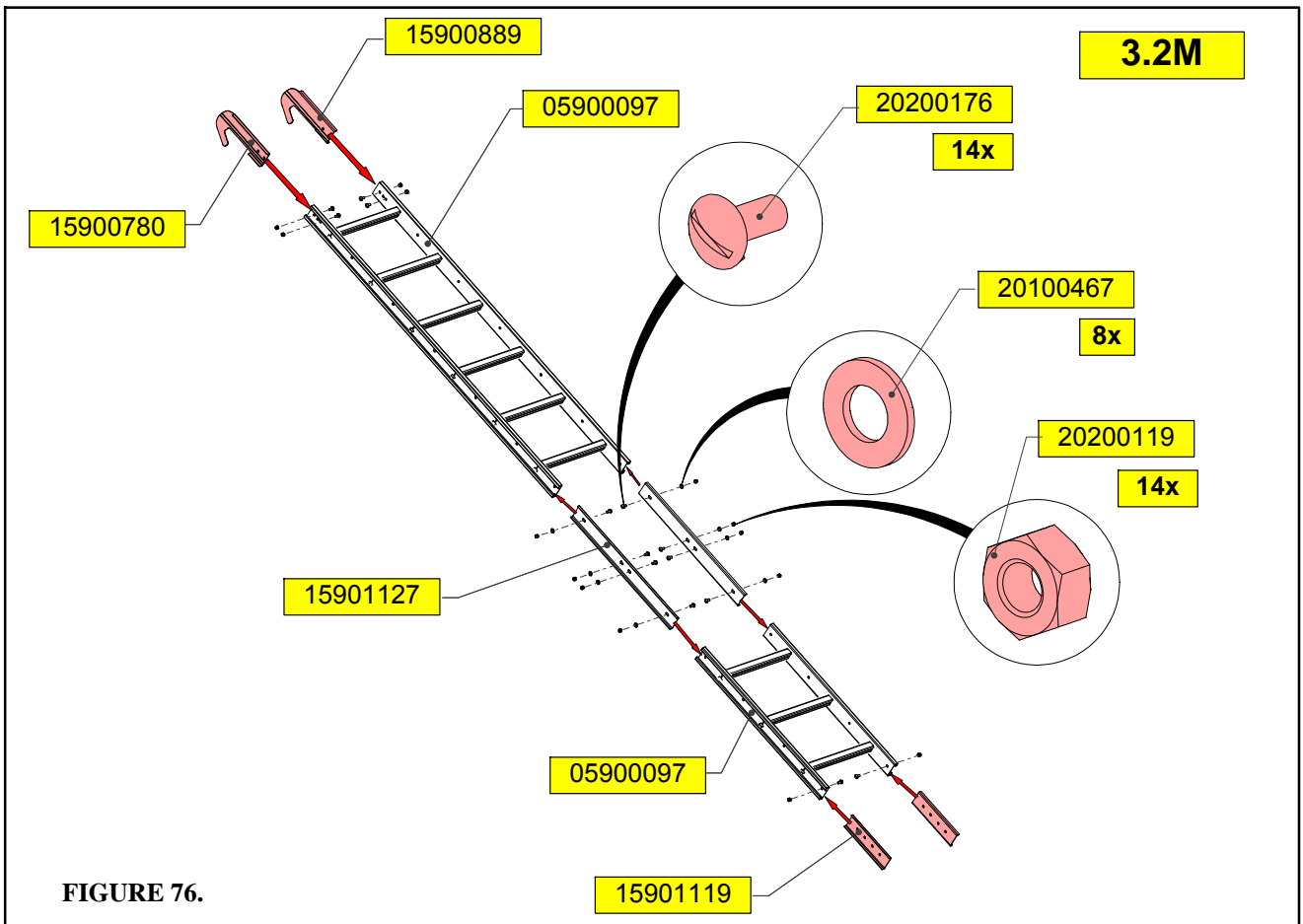
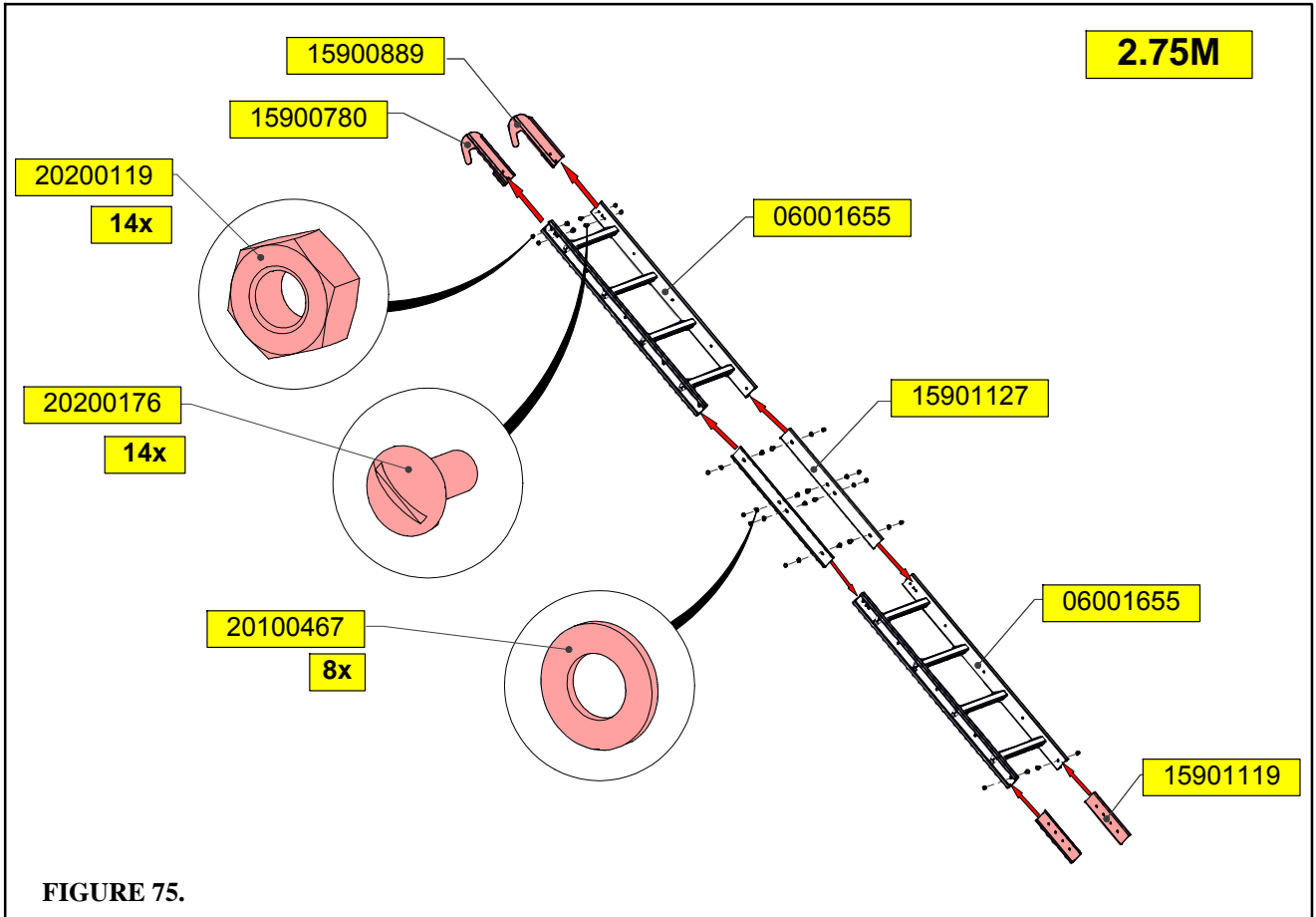
**Make sure that all electrical equipment is properly installed and grounded by a qualified electrician according to the National and local Electrical Code.**

**Note :** The grounding equipment is not included in the bin package. the installer has to provide the grounding equipment.



**FIGURE 74.**

### TO ASSEMBLE THE "HOOK ON" LADDER





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