HEATAWAY

BRAND-NEW
9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Containerized

EC9 MODEL AND ADDITIONAL EQUIPMENT



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"MORE COST EFFECTIVE WITH WORLD CLASS QUALITY"

This installation manual has been prepared as a guide for assembling and installing the 9th Generation Evaporative Condenser, designed for high efficiency, durability, and cost-effectiveness with premium stainless steel materials.

The manual provides detailed step-by-step instructions, from the initial assembly of individual components to the installation of additional equipment. For models with varying footprints, users can refer to the table provided in this manual for specific assembly guidelines to ensure smooth and accurate installation.

We sincerely hope that this manual will serve as a valuable resource for users and facilitate efficient installation processes.

Footprint	Model
7' X 9' (2.3 X 2.7 m)	EC9-0510-07092-5 EC9-0620-07092-5 EC9-0710-0709C-S EC9-0750-0709C-S EC9-0860-0709C-L EC9-0910-0709C-L
7' X 12' (2.3 X 3.6 m)	EC9-0960-0712C-L EC9-1000-0712C-S EC9-1120-0712C-M EC9-1200-0712C-L EC9-1270-0712C-M EC9-1320-0712C-M EC9-1370-0712C-L EC9-1410-0712C-L
7' X 18' (2.3 X 5.5 m)	EC9-1300-0718C-S EC9-1520-0718C-L EC9-1570-0718C-S EC9-1750-0718C-M EC9-1760-0718C-S EC9-1990-0718C-M EC9-2060-0718C-M EC9-2140-0718C-L EC9-2200-0718C-L
10' X 12' (3.0 X 3.6 m)	EC9-1400-1012C-S EC9-1600-1012C-M EC9-1660-1012C-L EC9-1840-1012C-M EC9-1920-1012C-L EC9-2000-1012C-M EC9-2080-1012C-L

Footprint	Model
10' X 18' (3.0 X 5.5 m)	EC9-2250-1018C-S EC9-2520-1018C-M EC9-2550-1018C-S EC9-2860-1018C-M EC9-2990-1018C-L EC9-3120-1018C-M EC9-3250-1018C-L
12' X 12' (3.6 X 3.6 m)	EC9-1650-1212C-S EC9-1890-1212C-M EC9-1980-1212C-L EC9-2150-1212C-M EC9-2350-1212C-M EC9-2460-1212C-L
12' X 18' (3.6 X 5.5 m)	EC9-2600-1218C-S EC9-2950-1218C-S EC9-3010-1218C-M EC9-3400-1218C-M EC9-3730-1218C-M EC9-3900-1218C-L

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1. Evaporative condenser Unit Layout
2. Installation outline
3. Handling and Installation Precautions (for Coating Models)
4. Installation Tool list
5. Installation Manual of EC9 Model

Footprint	Model	Page
7' X 9' (2.3 X 2.7 m)	EC9-0510-0709C-S EC9-0620-0709C-S EC9-0710-0709C-S EC9-0750-0709C-S EC9-0860-0709C-L EC9-0910-0709C-L	8
7' X 12' (2.3 X 3.6 m)	EC9-0960-0712C-L EC9-1000-0712C-S EC9-1120-0712C-M EC9-1200-0712C-L EC9-1270-0712C-M EC9-1320-0712C-M EC9-1370-0712C-L EC9-1410-0712C-L	22
7' X 18' (2.3 X 5.5 m)	EC9-1300-0718C-S EC9-1520-0718C-L EC9-1570-0718C-S EC9-1750-0718C-M EC9-1760-0718C-S EC9-1990-0718C-M EC9-2060-0718C-M EC9-2140-0718C-L EC9-2200-0718C-L	36
10' X 12' (3.0 X 3.6 m)	EC9-1400-1012C-S EC9-1600-1012C-M EC9-1660-1012C-L EC9-1840-1012C-M EC9-1920-1012C-L EC9-2000-1012C-M EC9-2080-1012C-L	50
10' X 18' (3.0 X 5.5 m)	EC9-2250-1018C-S EC9-2520-1018C-M EC9-2550-1018C-S EC9-2860-1018C-M EC9-2990-1018C-L EC9-3120-1018C-M EC9-3250-1018C-L	72
12' X 12' (3.6 X 3.6 m)	EC9-1650-1212C-S EC9-1890-1212C-M EC9-1980-1212C-L EC9-2150-1212C-M EC9-2350-1212C-M EC9-2460-1212C-L	95
12' X 18' (3.6 X 5.5 m)	EC9-2600-1218C-S EC9-2950-1218C-S EC9-3010-1218C-M EC9-3400-1218C-M EC9-3730-1218C-M EC9-3900-1218C-L	117

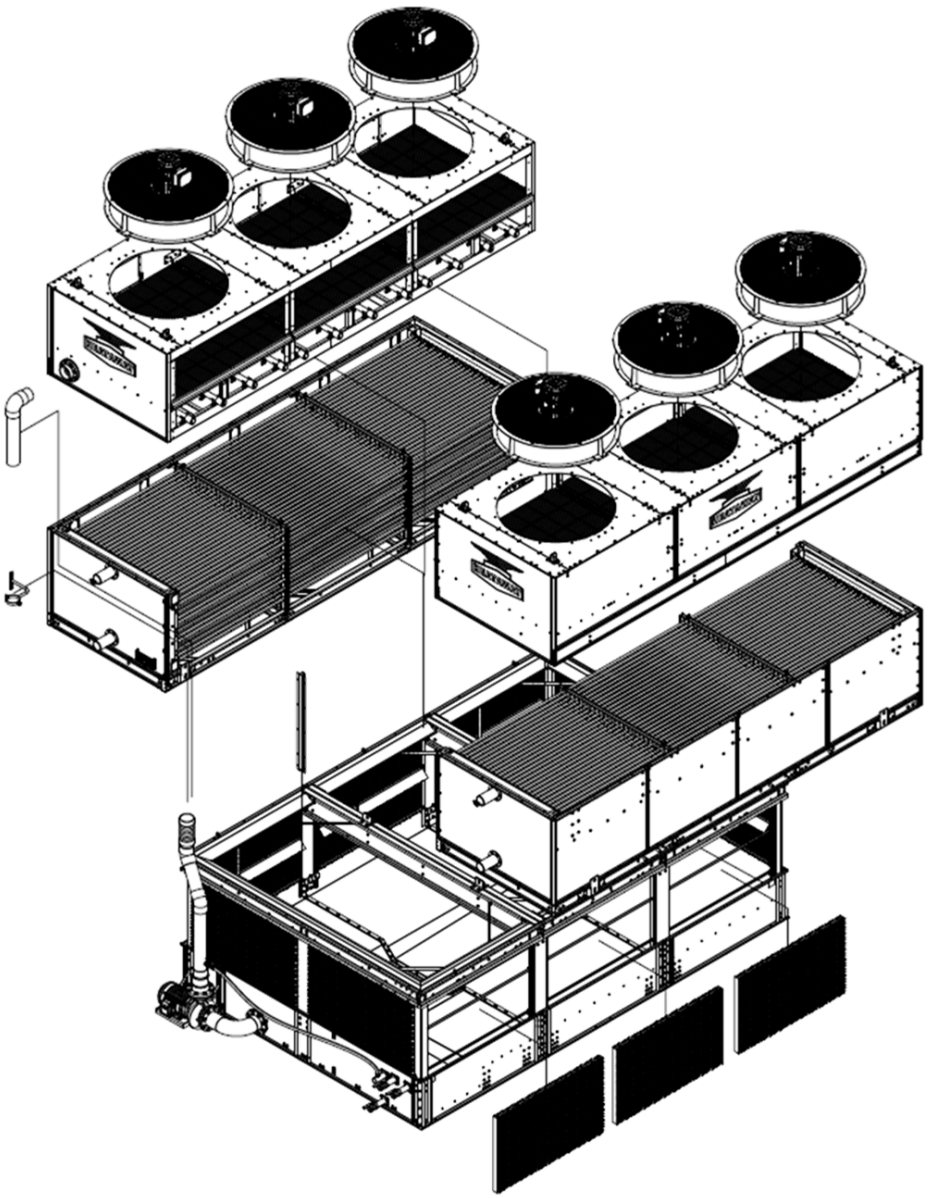
Table of Contents

3. Installation Additional Equipment of EC9

Equipment	Details	Page
Water Cooling Coil	Single layer of Water-cooling Coil Double layer of Water-Cooling Coil	143 144
Standby Water pump	Additional Standby Water pump	146
Ladder	Standard Ladder and Customize Ladder	149
Platform	Platform for footprint Length 9' Platform for footprint Length 12' Platform for footprint Length 18'	150 153 156
Top Handrail	Standard Top Handrail	161
Cage	Standard cage Addition cage	162

Installation outline

The assembly process of the Evaporative Condenser is outlined in a clear and systematic manner, starting with the basin section, followed by the coil section, and concluding with the fan section. Each step is detailed and accompanied by corresponding illustrations to ensure accuracy and ease of assembly.



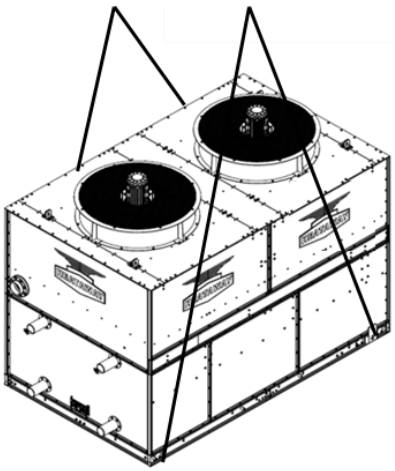
Step3
FAN Section

Step2
Coil Section

Step1
Basin Section

Handling and Installation Precautions
(for Coating Models)

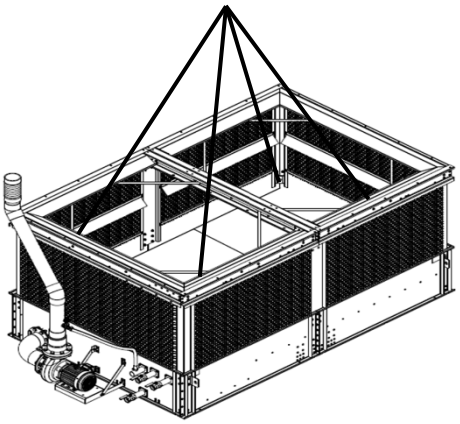
During handling or installation, care must be taken to prevent the sling from contacting or scratching the unit body, especially on coated surfaces.



1. Use soft material for supports at sling or contact points to protect the unit body during lifting or installation.

2. When working near the unit, if there is any risk of contact or scratching on the coated body, always use protective fabric to cover the surface.

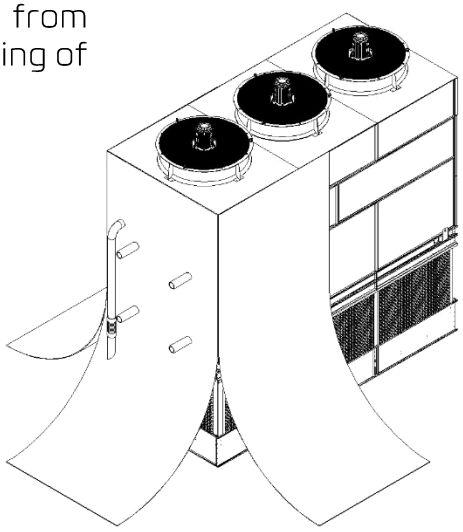
After positioning the unit,
the installer must proceed with welding and assembly of the valve set into the piping system. This includes cutting and welding the unit's hot gas pipe and liquid return pipe. The installer must perform the work with great care. In addition, the pipe welding must be carried out by a qualified welding specialist, following these steps:



1. Discharge nitrogen gas from the unit.

2. Cover the unit completely with a fire-resistant blanket in areas where grinding or welding is performed, in order to prevent sparks from contacting the unit. Sparks may cause rusting of the unit's surface.

Note: Welding should only be carried out by technicians who are experts in welding.



Installation Tool list

To assist with tooling for the assembly of an Evaporative Condenser EC9

1. Impact Wrench
2. Sockets (Size M6 M8 M10 M12 M16 M20)
3. Combination Wrenches (Size M6 M8 M10 M12 M16 M20)
4. Universal Joint
5. Silicone Sealant Gun
6. Rubber hammer



Impact Wrench



Sockets



Combination Wrenches



Universal Joint



Silicone Sealant Gun



Rubber hammer

HEATAWAY

BRAND-NEW 9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

7' X 9'

Model

EC9-0510-0709C-S

EC9-0620-0709C-S

EC9-0710-0709C-S

EC9-0750-0709C-S

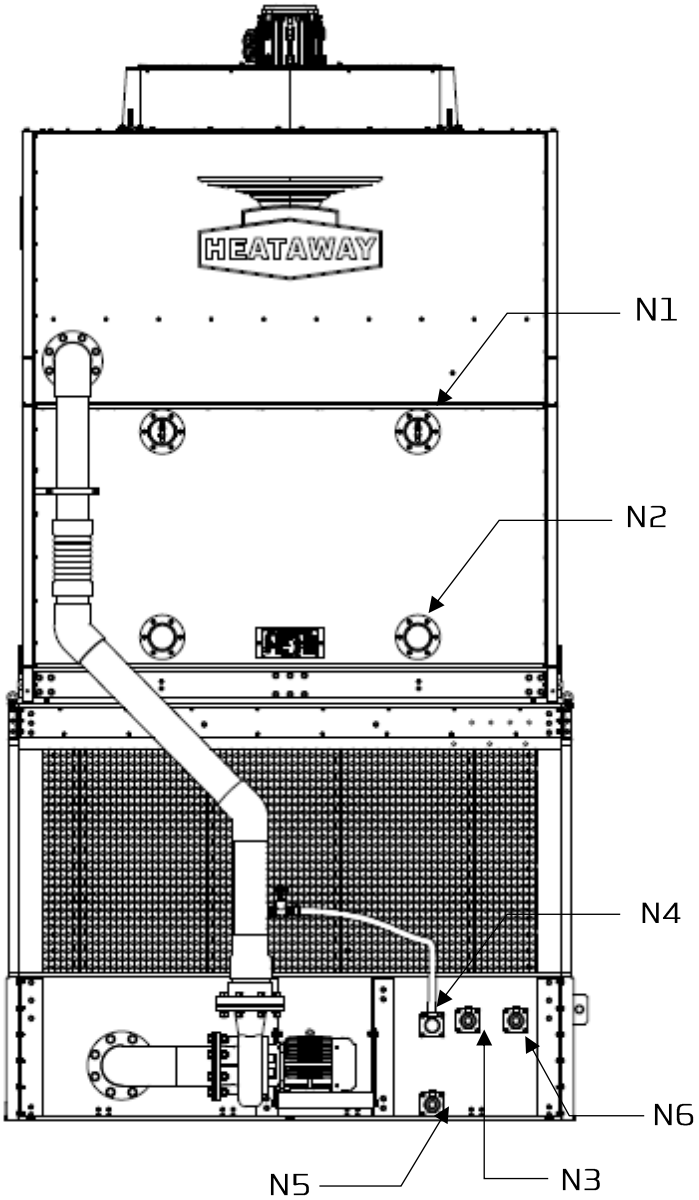
EC9-0860-0709C-L

EC9-0910-0709C-L



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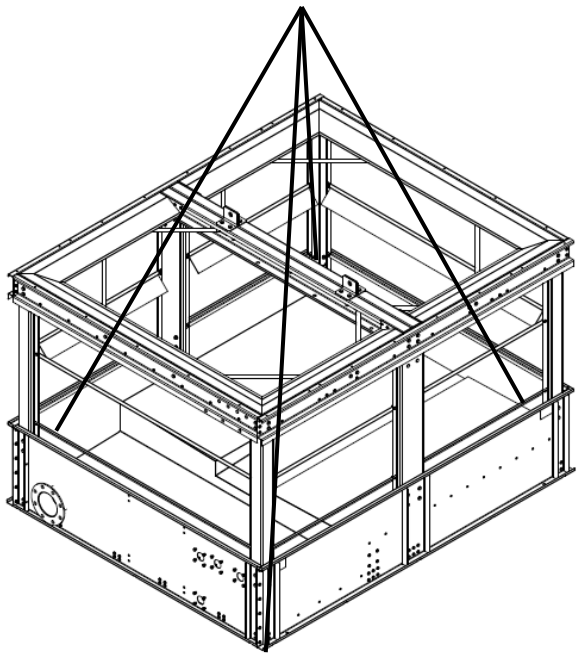
Piping Connection

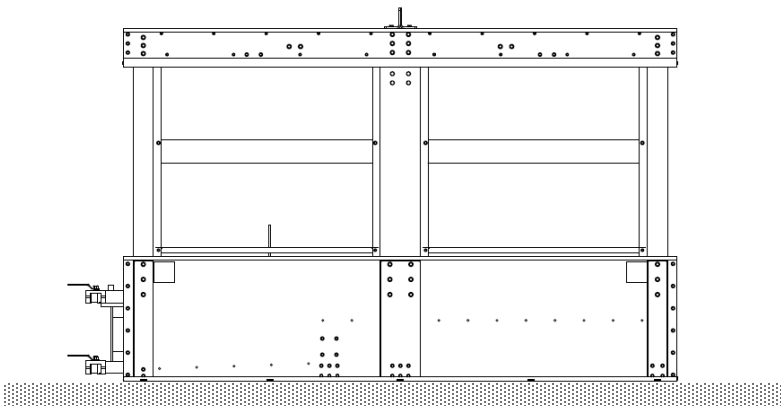


PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

Basin Section Assembly

Step 1 : Move Basin to install area for prepare to assembly pump support

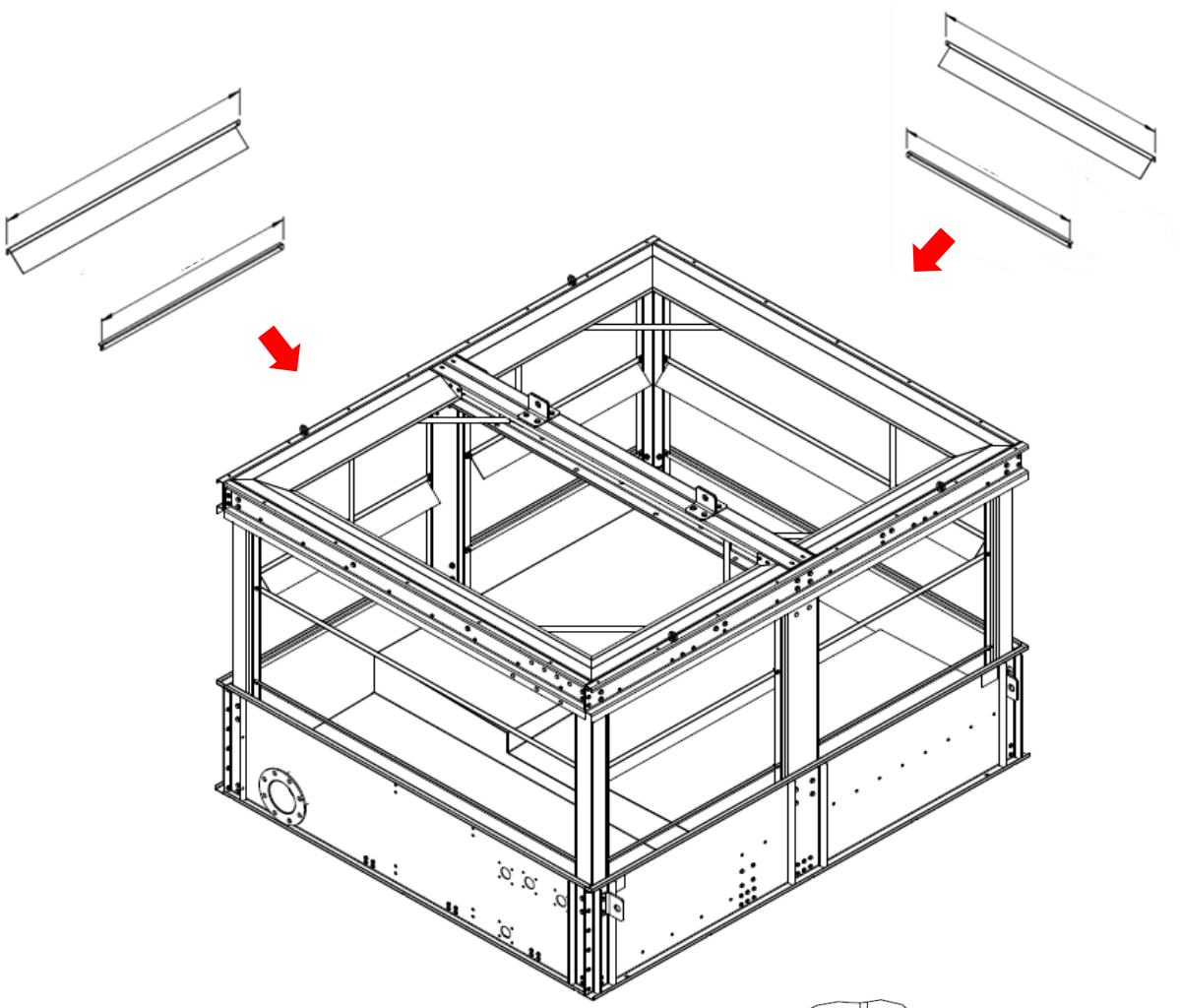


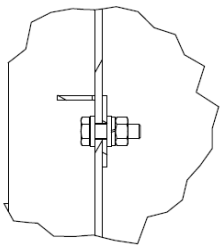


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

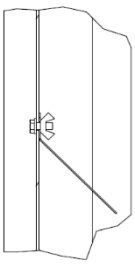
Basin Section Assembly

Step 2 : Water Deflect Assembly





HEX BOLT
M6x1.25x20L
HEX.LOCK NUT
M6x1.25
WASHER M6
SPRING WASHER
M6

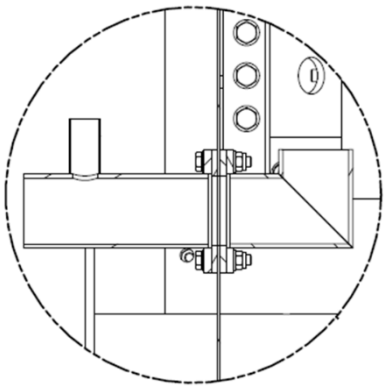


HEX BOLT
M8x1.25x20L
WING NUT M8
WASHER M8

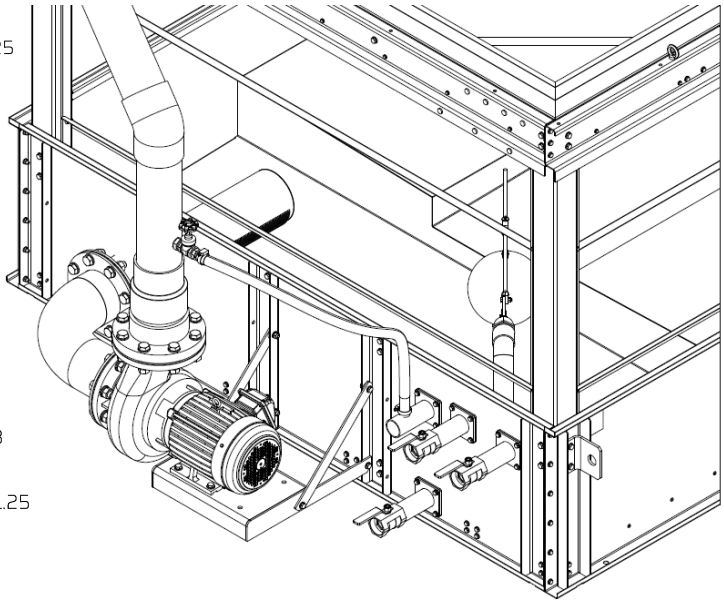
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

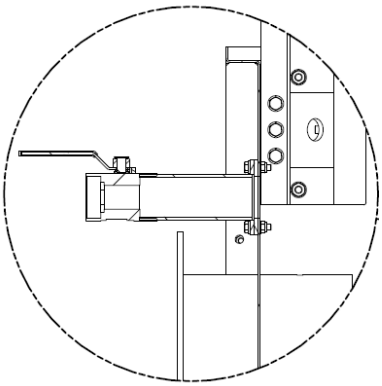
Basin Section Assembly

Step 3 : Piping and Valve Assembly

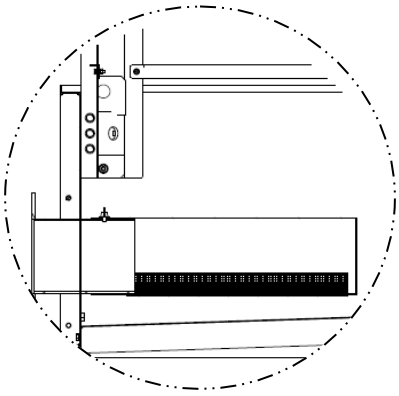


PIPE OVER FLOW
BOLT M8x1.25x40L
NR GASKET
WASHER FOR M8
HEX.LOCK NUT M8X1.25

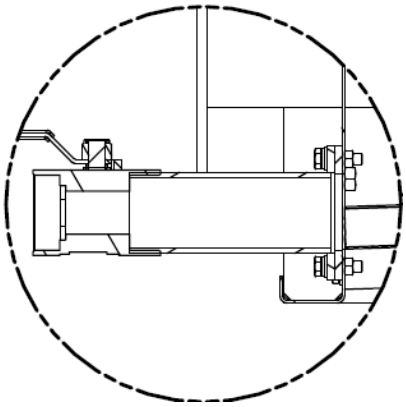




BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25



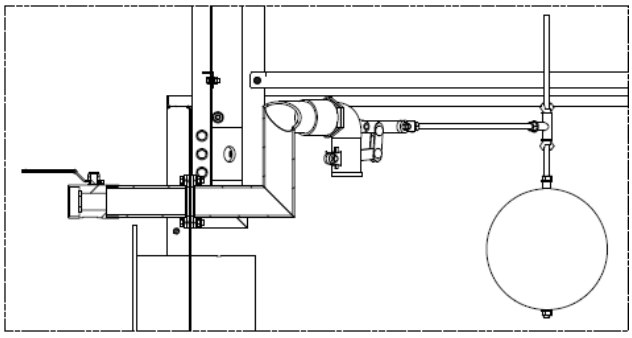
PIPE WITH STRAINER
WING SCREW - M8 x 12
WASHER



BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25

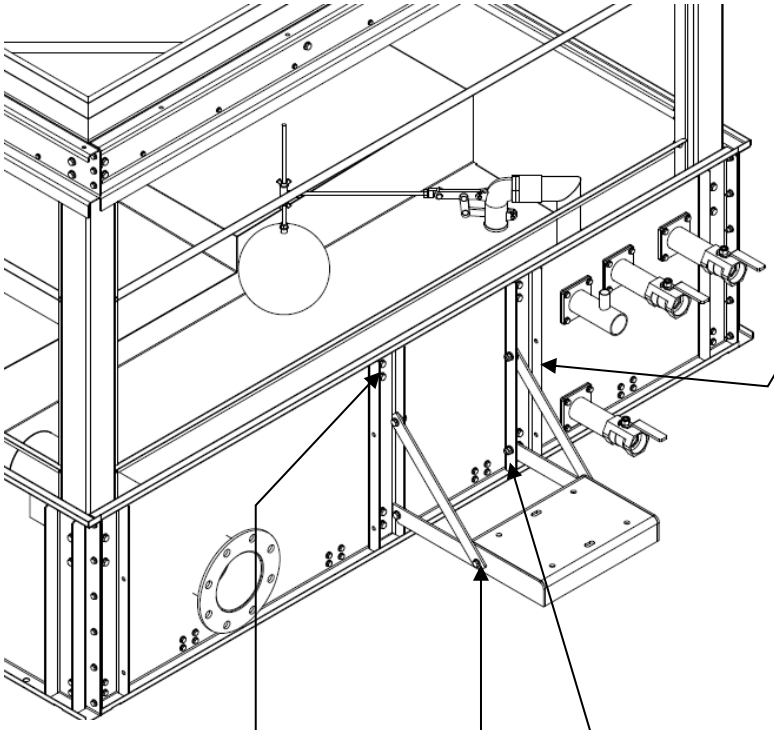
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

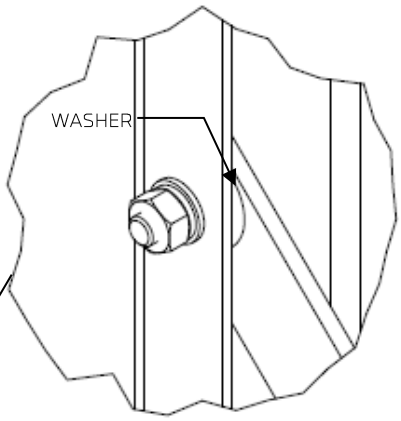
BALL VALVE
FLOAT VALVE
WASHER FOR M8
NR GASKET
PIPE MAKE UP WATER 2"
FLOAT VALVE
BOLT M8x1.25x30L
SPRING WASHER M8
HEX.LOCK NUT M8X1.25



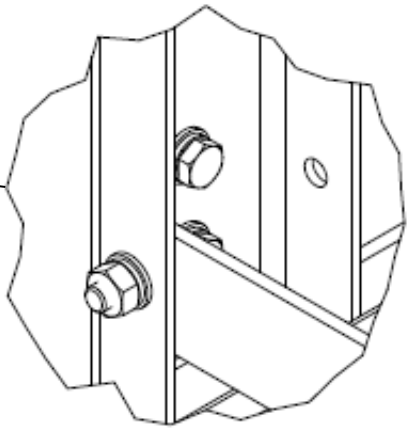
Basin Section Assembly

Step 4 : Water Pump Base Assembly

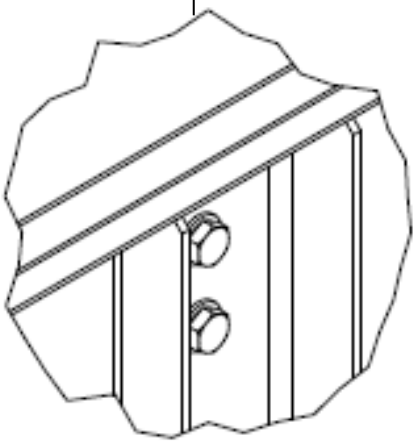




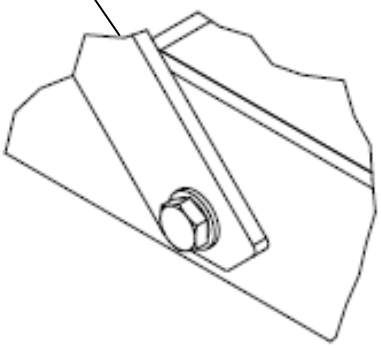
HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x30L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x25L
WASHER FOR M10
HEX.NUT LOCK M10x1.5

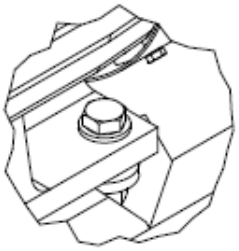


HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5

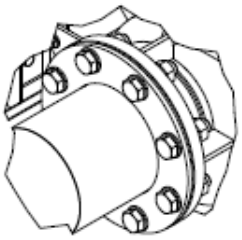
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

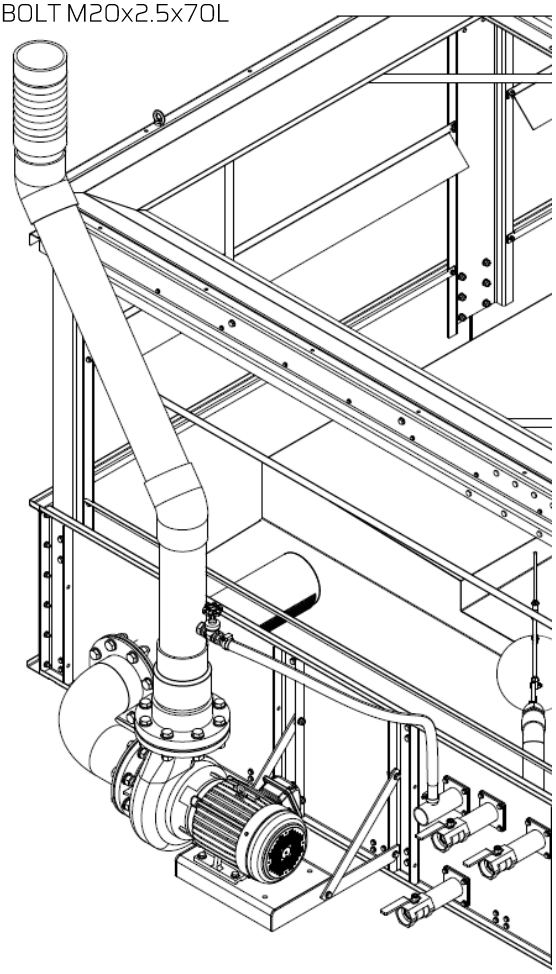
Step 5 : Water Pump pipe Assembly

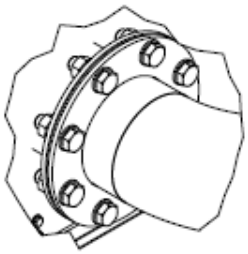


HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

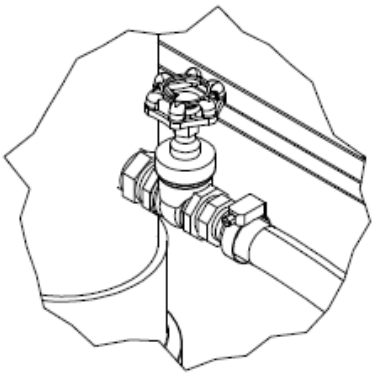


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

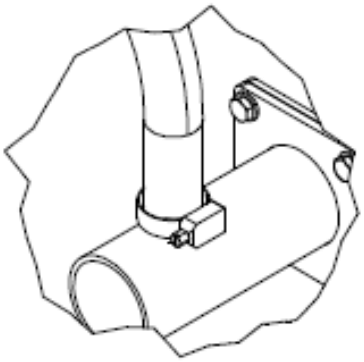




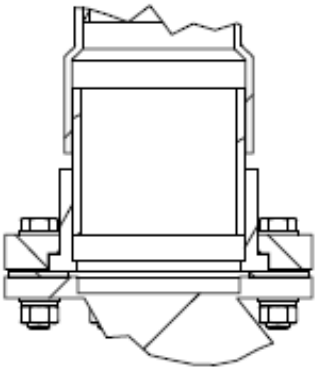
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L



HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

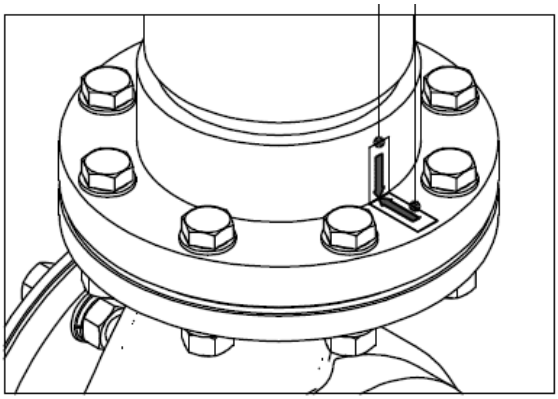


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

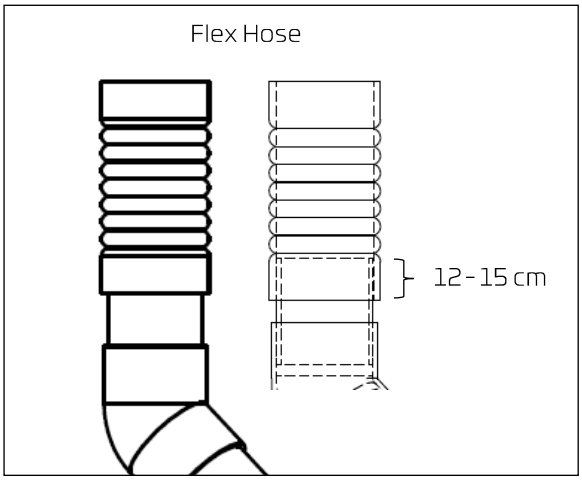
Basin Section Assembly

Step 5 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

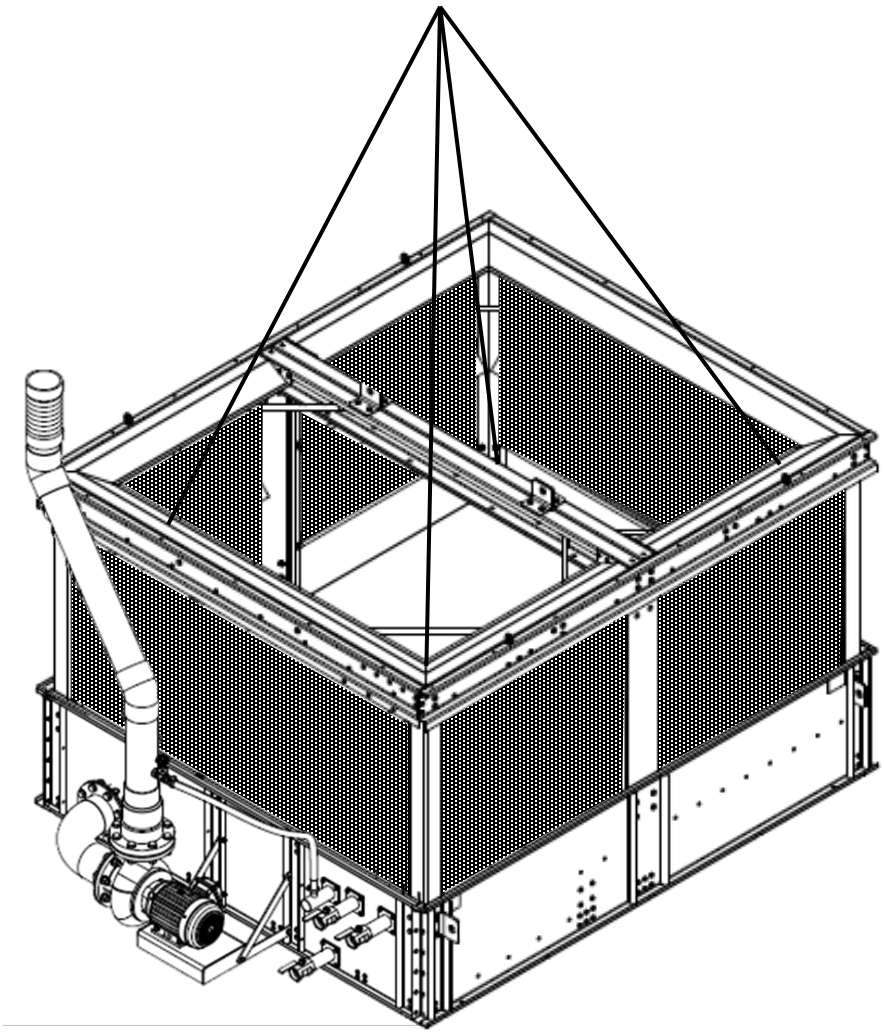
>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

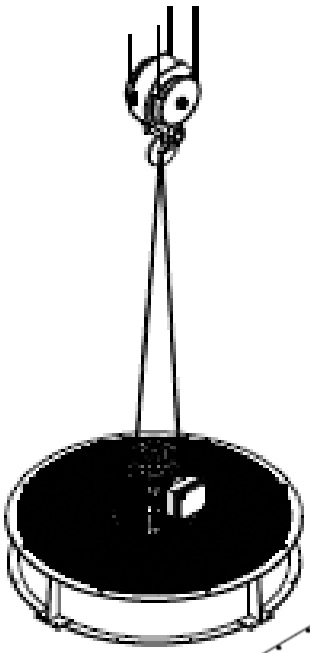
Step 6 : Move Assembled Basin to Position

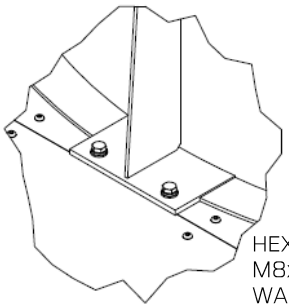


LOUVER

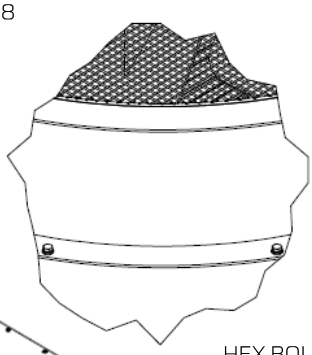
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Assembly Fan set

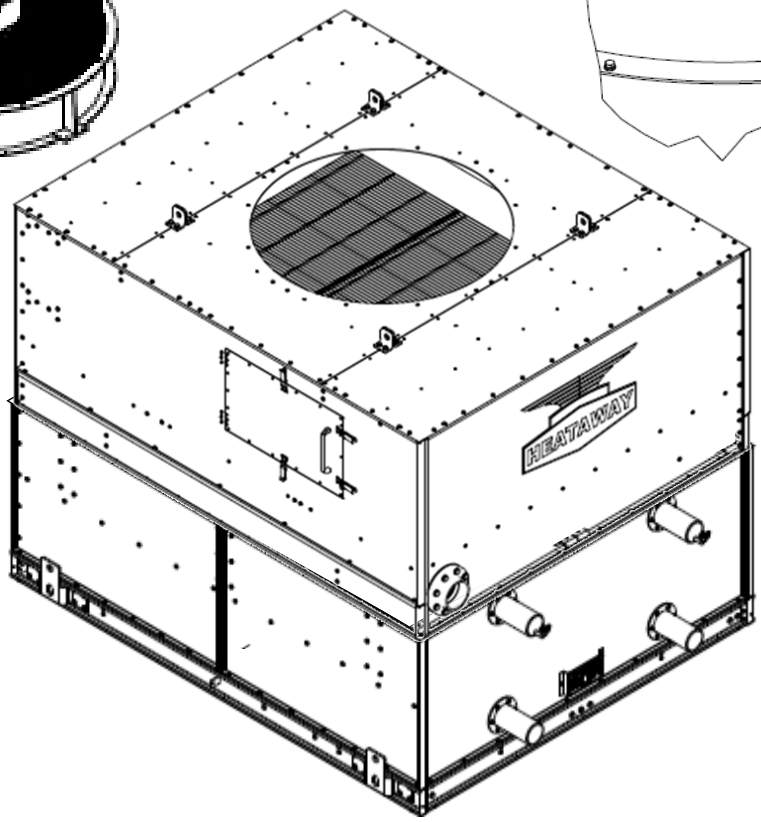




HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8

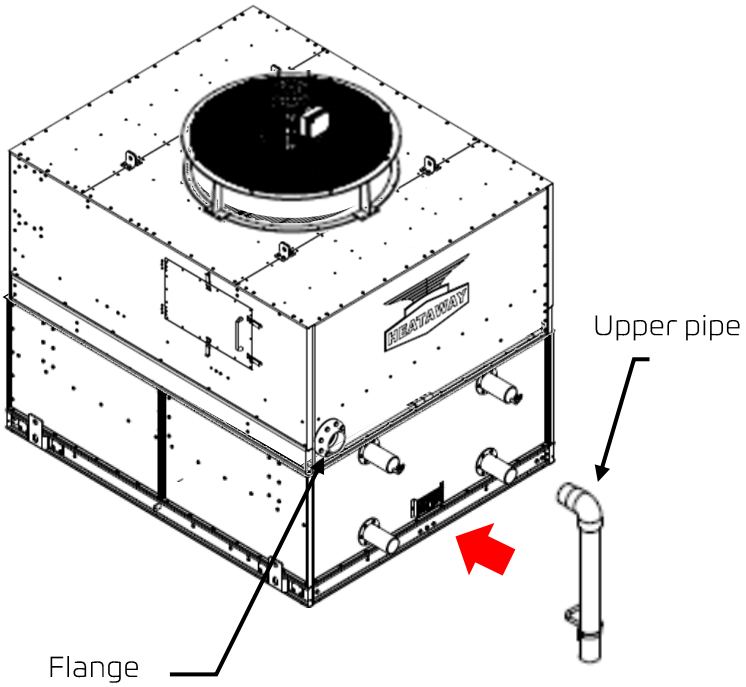


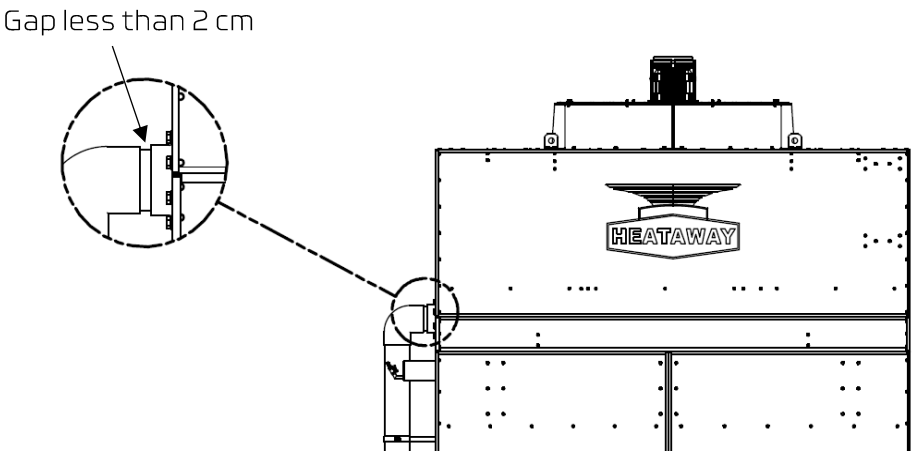
HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

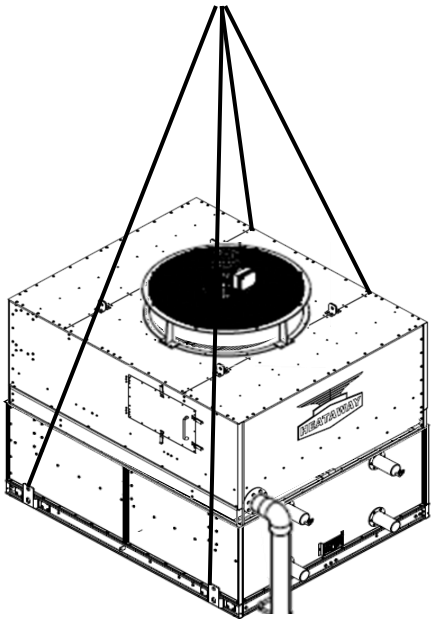
Assembly Upper water pipe



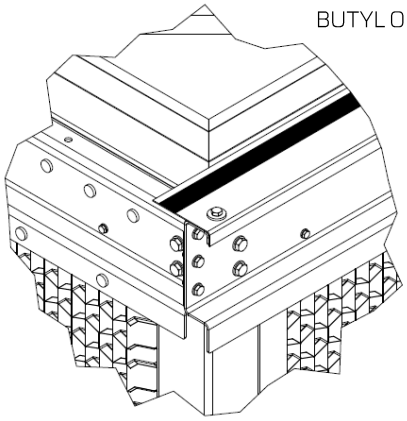


>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

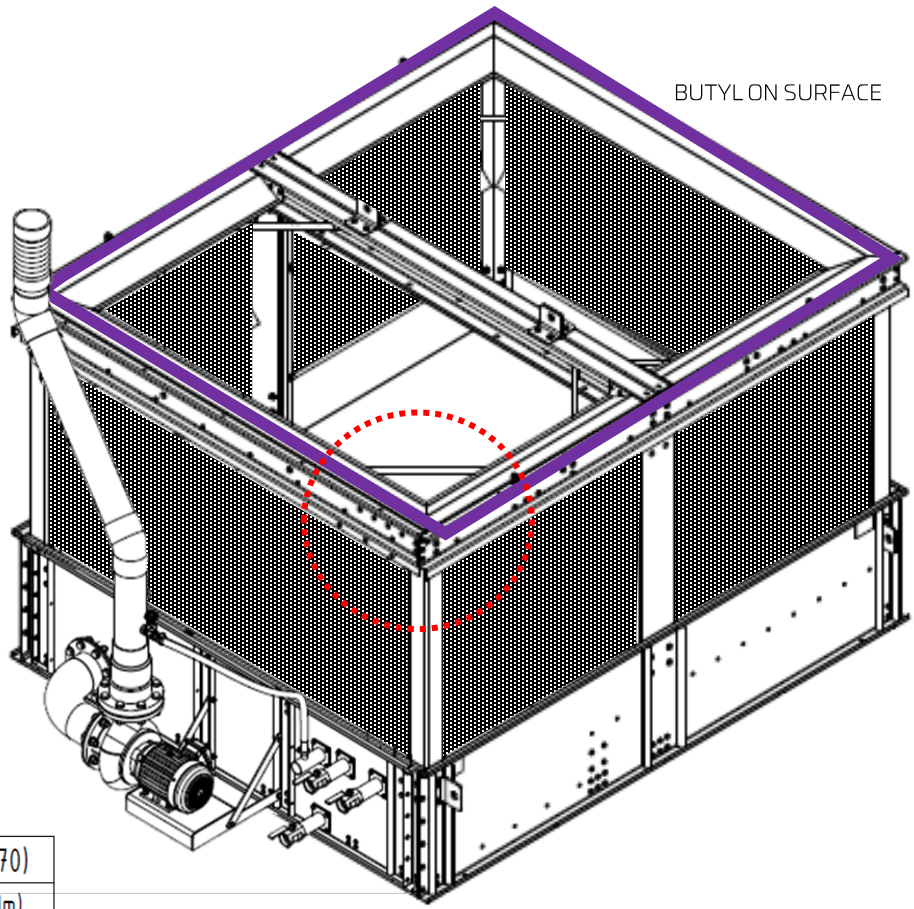
Assembly Fan Section to Basin Section



BUTYL ON SURFACE

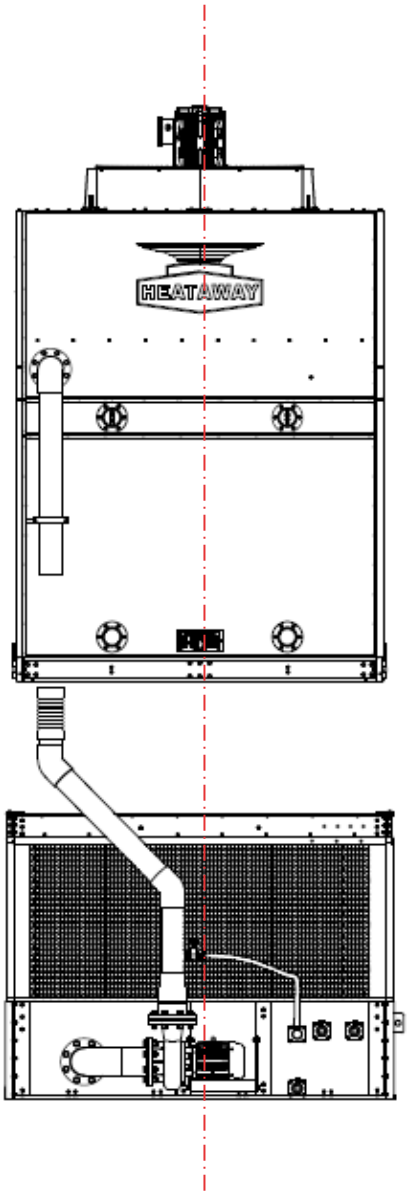


BUTYL ON SURFACE

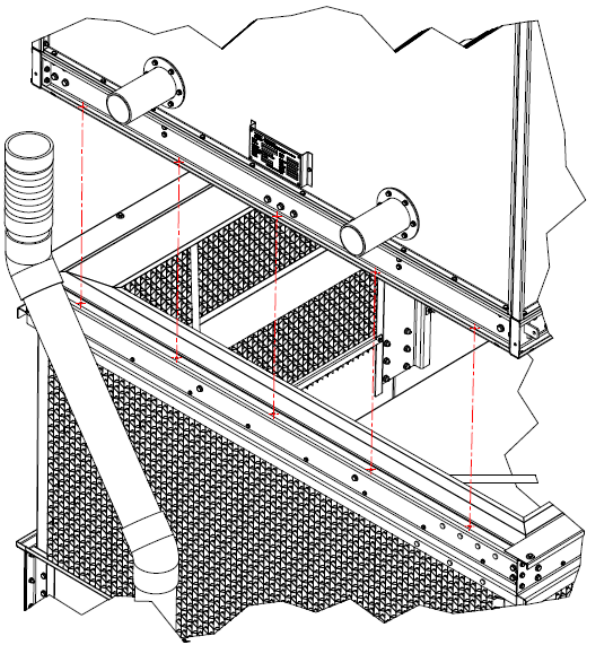


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

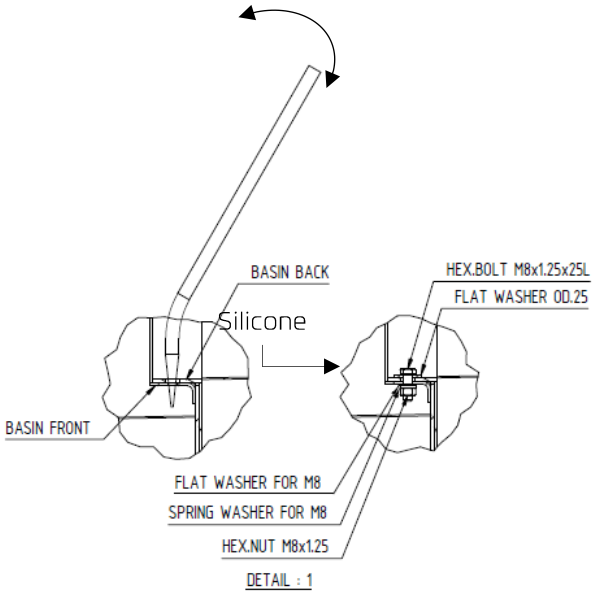
Assembly Fan Section to Basin Section



Set Upper section on BASIN Section by setting in middle of BASIN Section

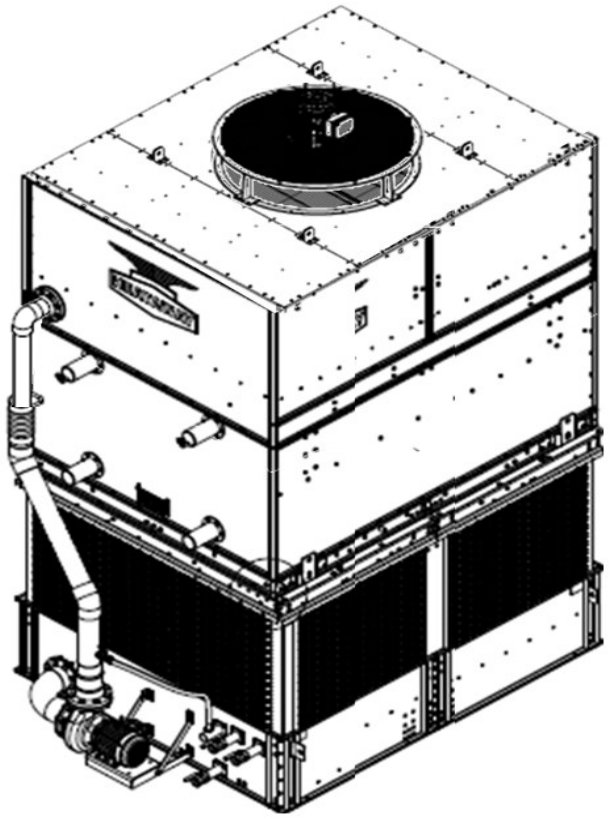


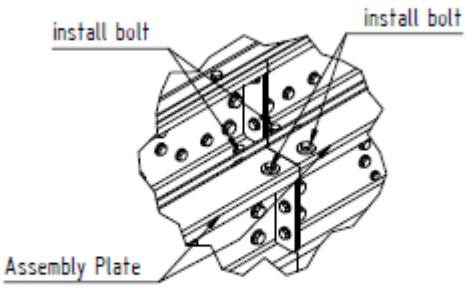
Use rod guide for guide upper section and BASIN Section and make sure front side and back side are in position before assembly



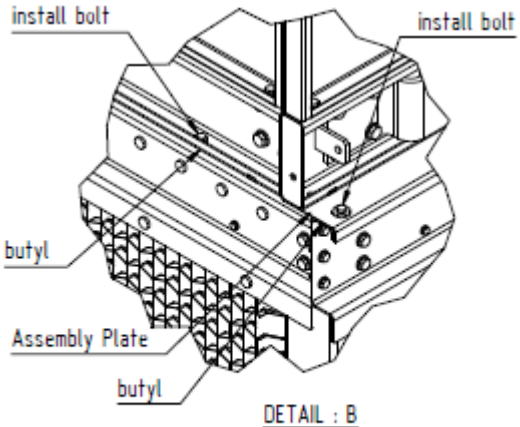
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Final Assembly

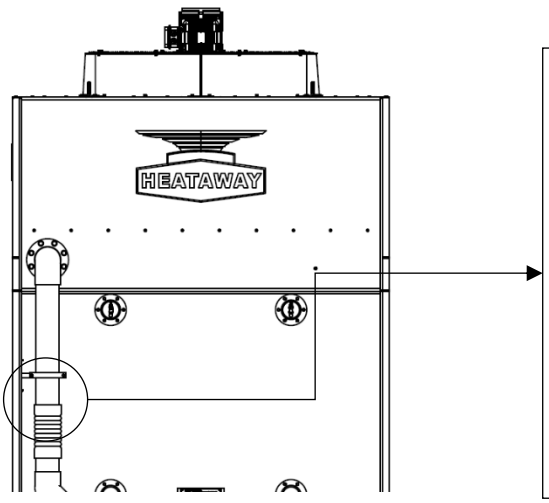


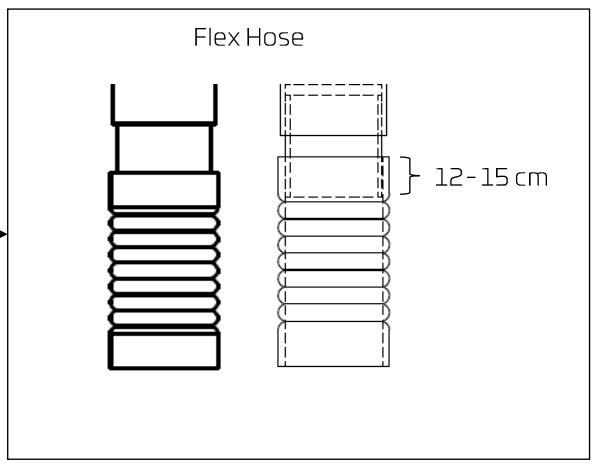


DETAIL : A



DETAIL : B





TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

HEATAWAY

BRAND-NEW
9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

7' X 12'

Model

EC9-0960-0712C-L

EC9-1000-0712C-S

EC9-1120-0712C-M

EC9-1200-0712C-L

EC9-1270-0712C-M

EC9-1320-0712C-M

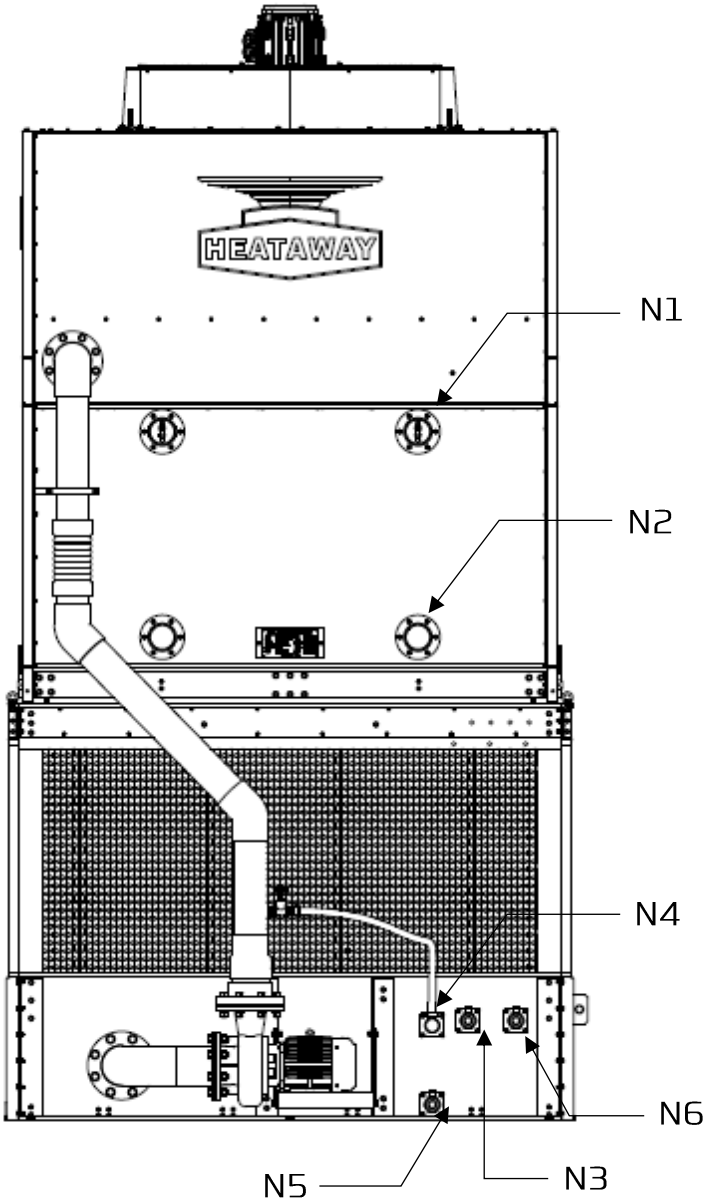
EC9-1370-0712C-L

EC9-1410-0712C-L



www.heataway.net

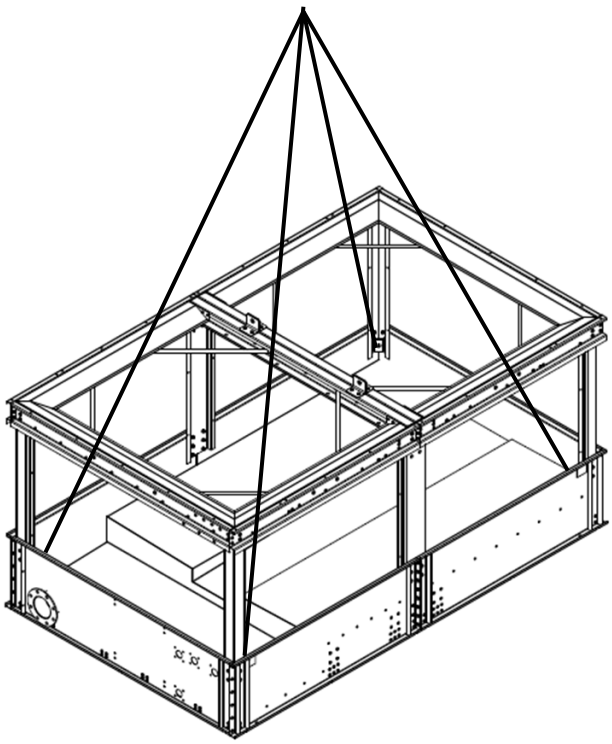
Piping Connection

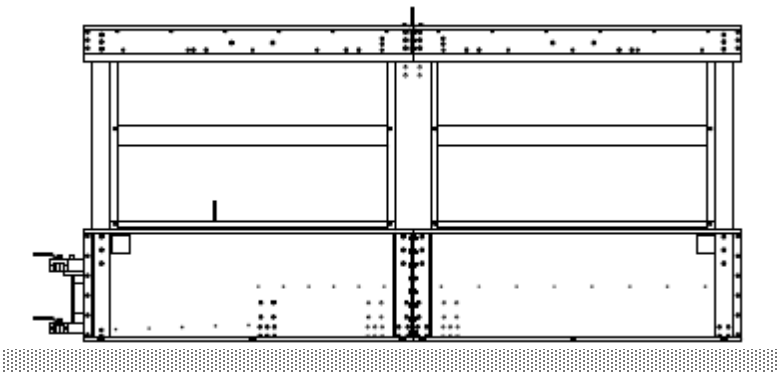


PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

Basin Section Assembly

Step 1 : Move Basin to install area for prepare to assembly pump support

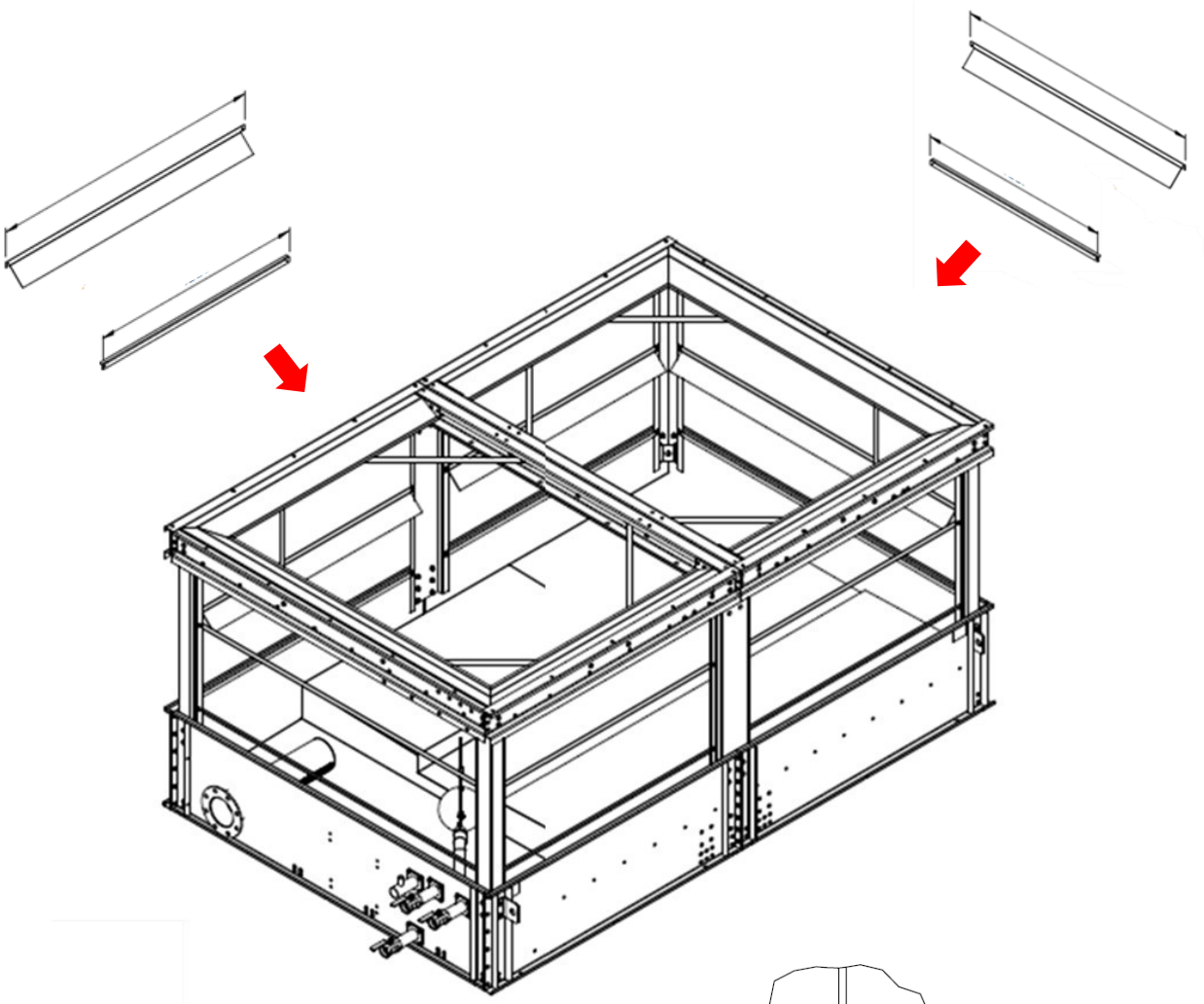


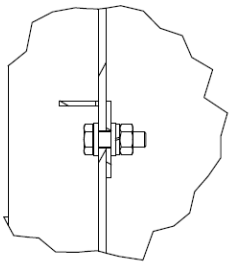


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

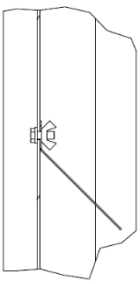
Basin Section Assembly

Step 2 : Water Deflect Assembly





HEX BOLT
M6x1.25x20L
HEX.LOCK NUT
M6x1.25
WASHER M6
SPRING WASHER M6

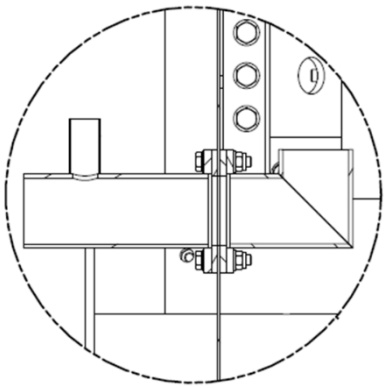


HEX BOLT
M8x1.25x20L
WING NUT M8
WASHER M8

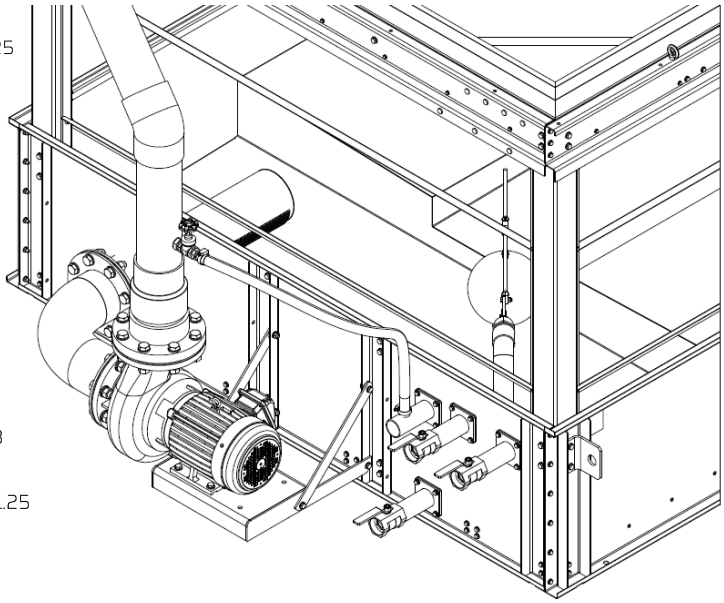
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

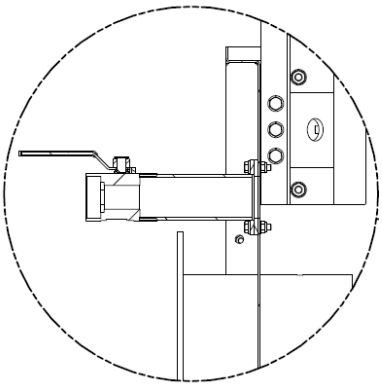
Basin Section Assembly

Step 3 : Piping and Valve Assembly

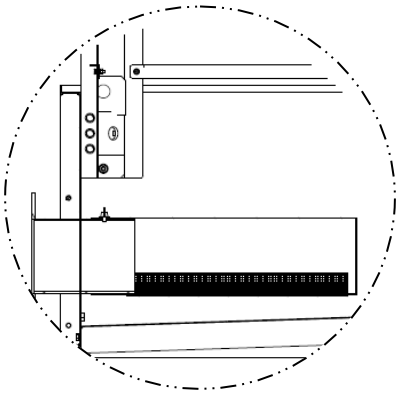


PIPE OVER FLOW
BOLT M8x1.25x40L
NR GASKET
WASHER FOR M8
HEX.LOCK NUT M8X1.25

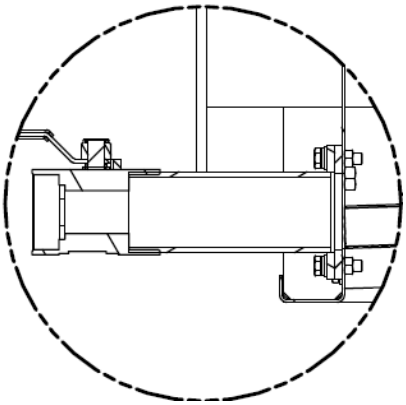




BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25



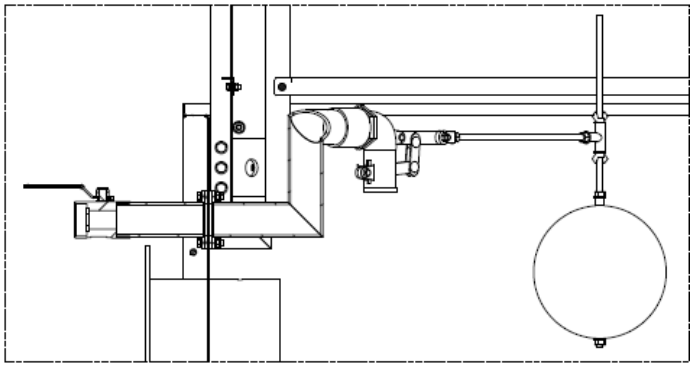
PIPE WITH STRAINER
WING SCREW - M8 x 12
WASHER



BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25

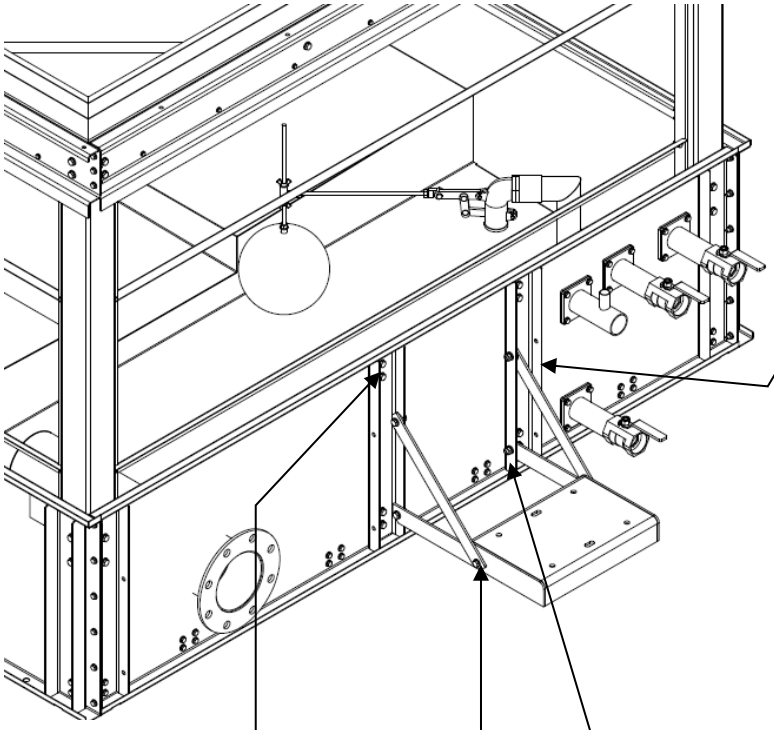
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

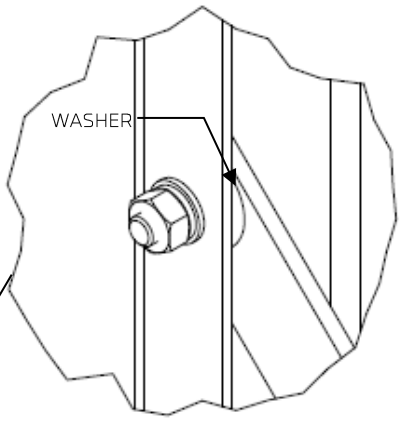
BALL VALVE
FLOAT VALVE
WASHER FOR M8
NR GASKET
PIPE MAKE UP WATER 2"
FLOAT VALVE
BOLT M8x1.25x30L
SPRING WASHER M8
HEX.LOCK NUT M8X1.25



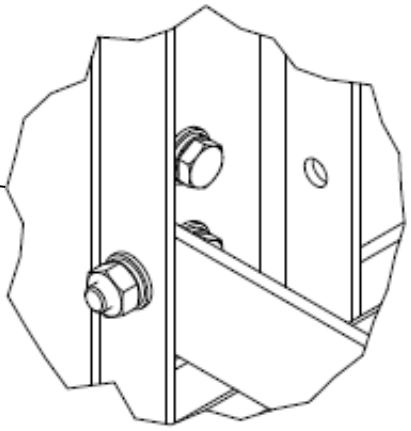
Basin Section Assembly

Step 4 : Water Pump Base Assembly

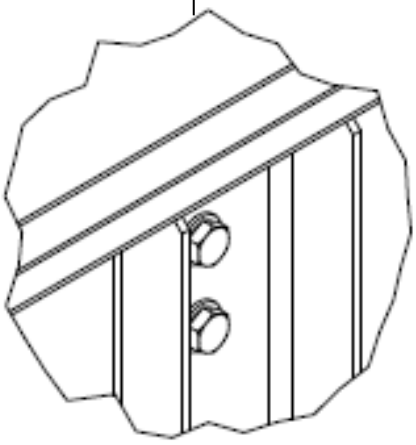




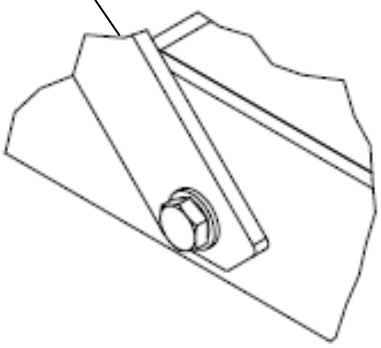
HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x30L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x25L
WASHER FOR M10
HEX.NUT LOCK M10x1.5

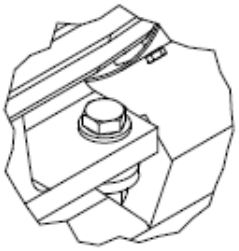


HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5

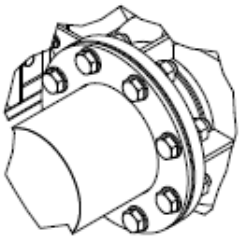
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

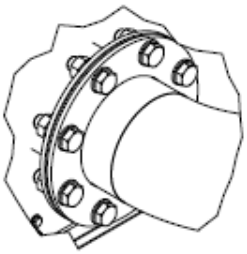
Step 5 : Water Pump pipe Assembly



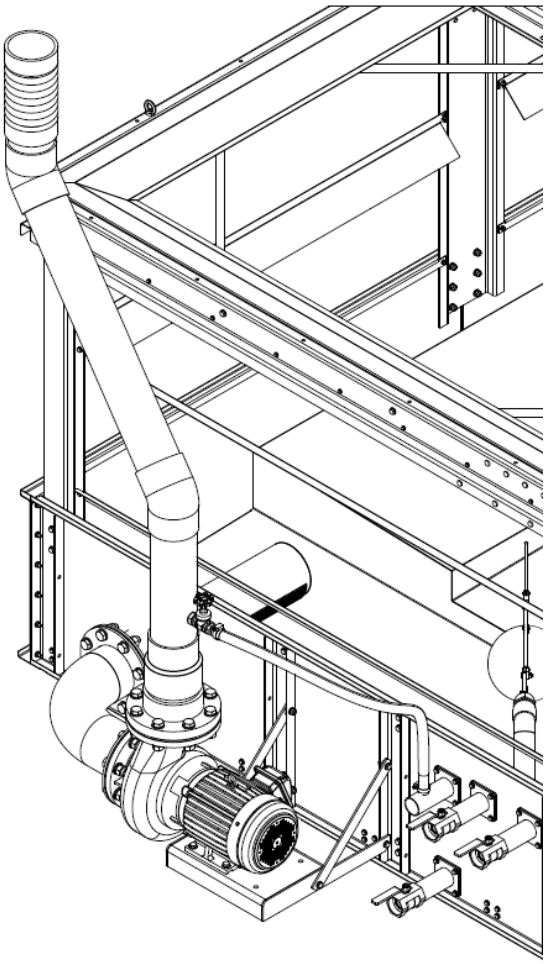
HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

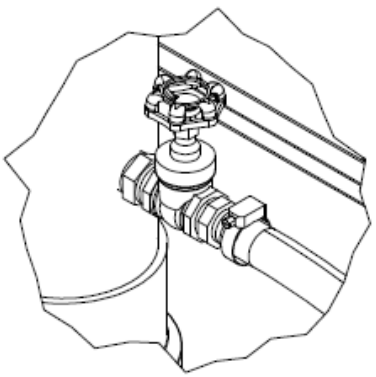


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

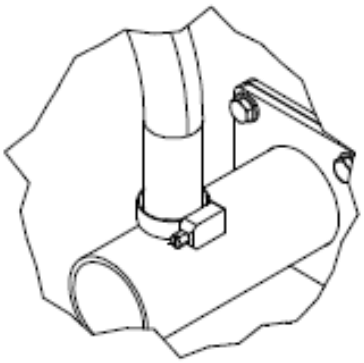


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L

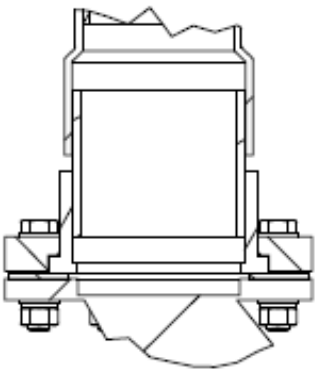




HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

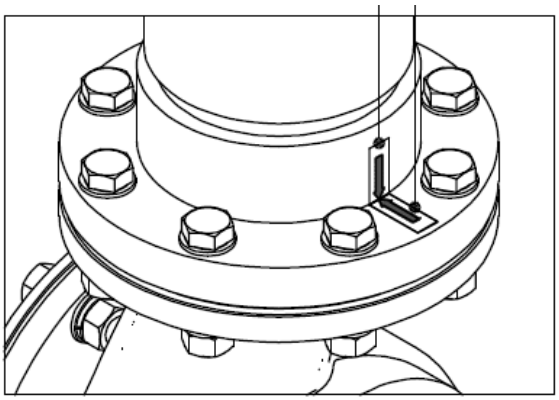


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

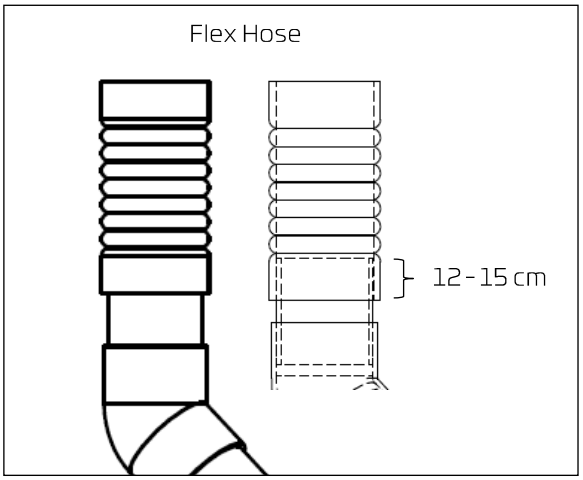
Step 5 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

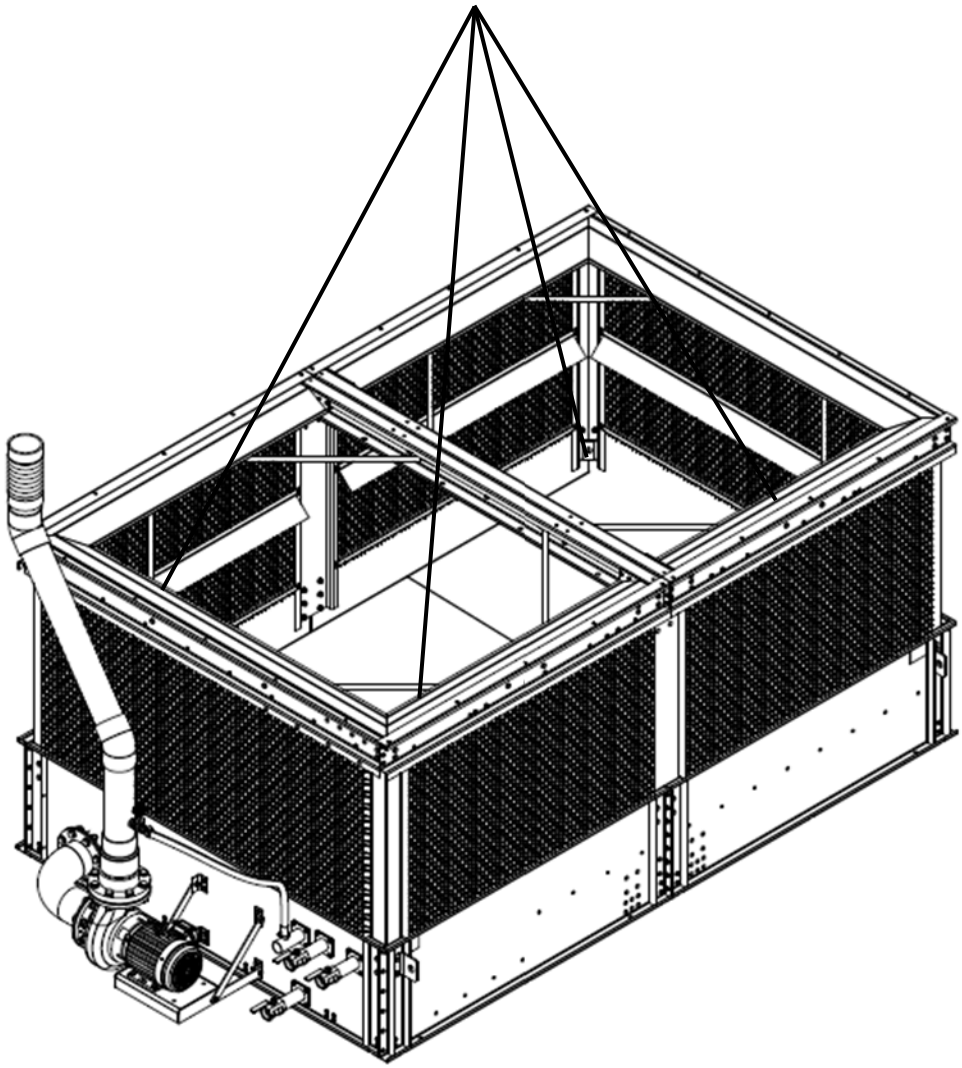
** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

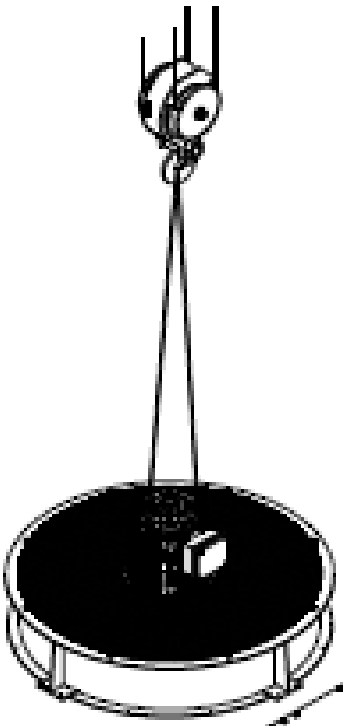
Basin Section Assembly

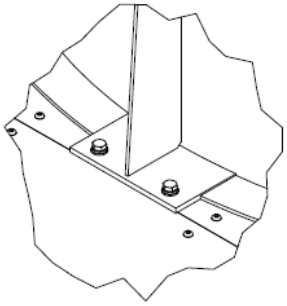
Step 6 : Move Assembled Basin to Position

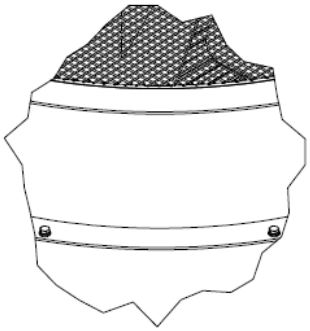


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

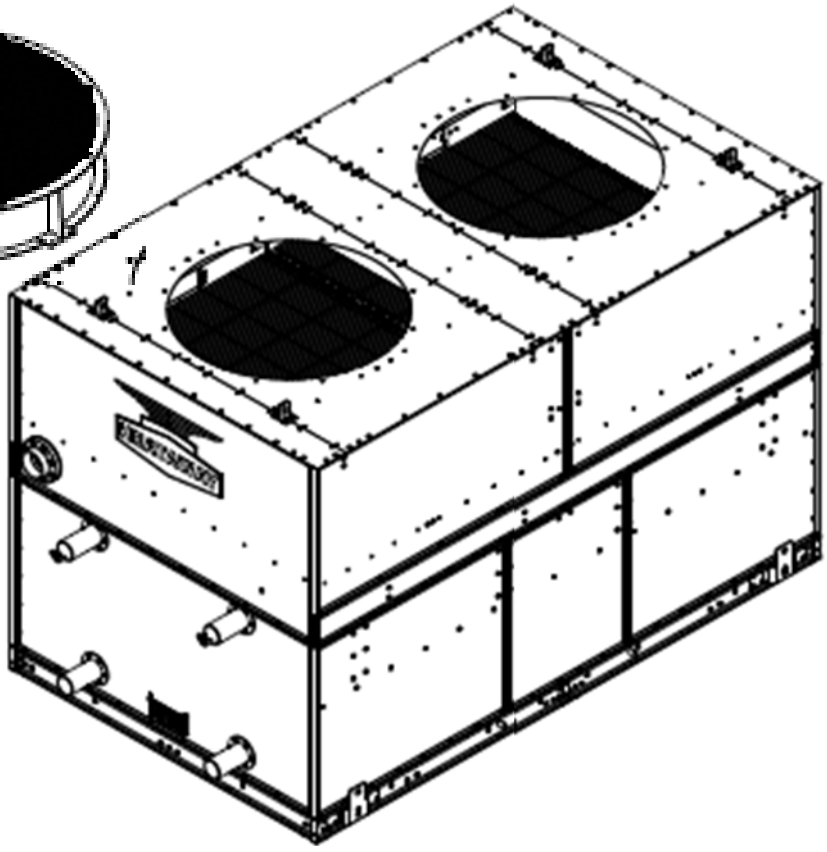
Assembly Fan set





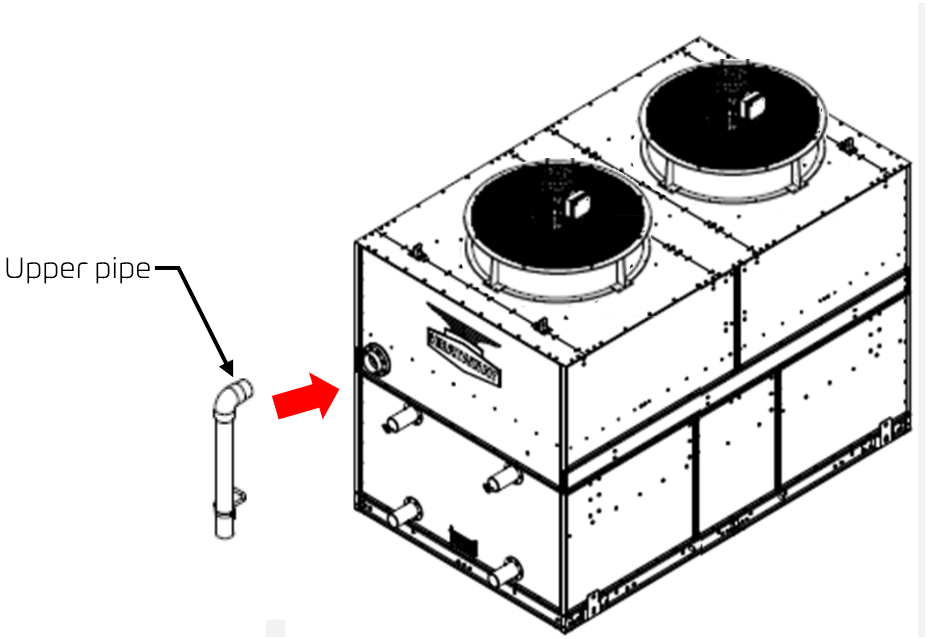


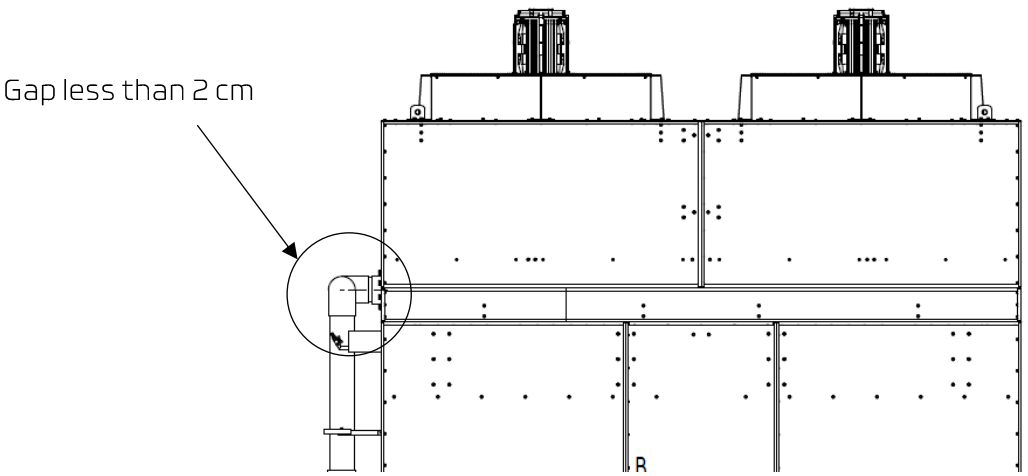
HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

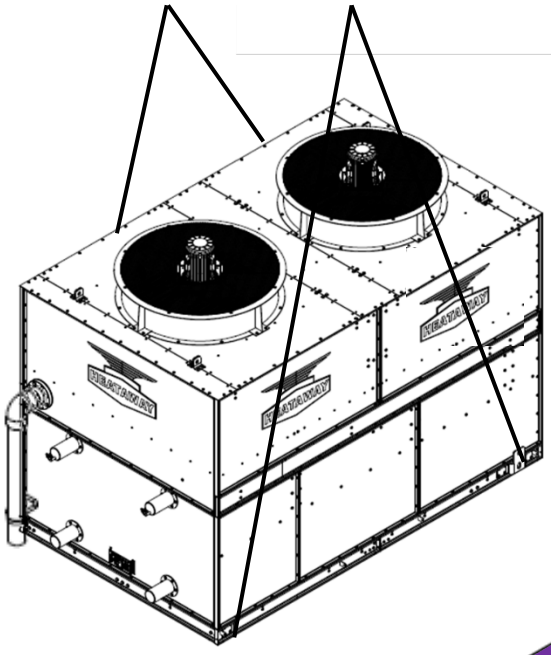
Assembly Upper water pipe

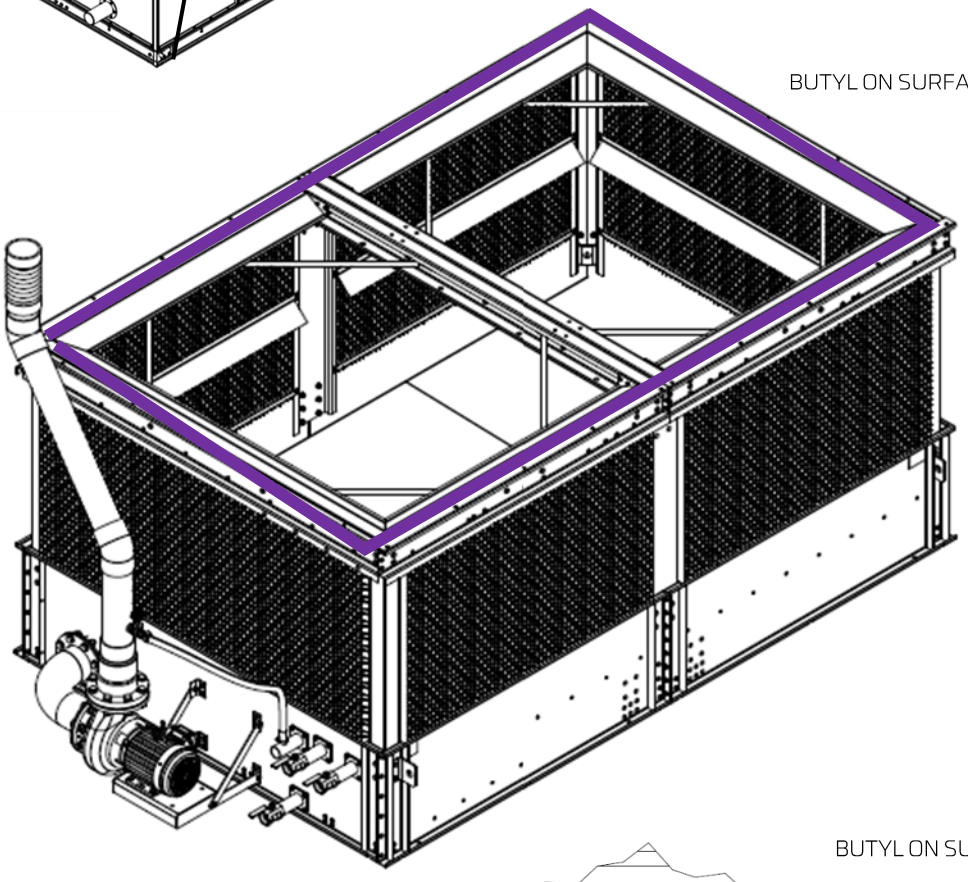


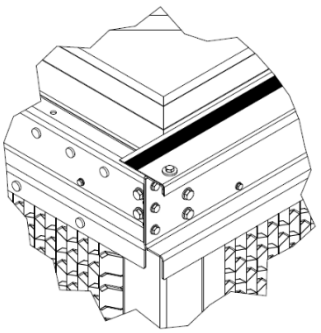


>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

Assembly Fan Section to Basin Section

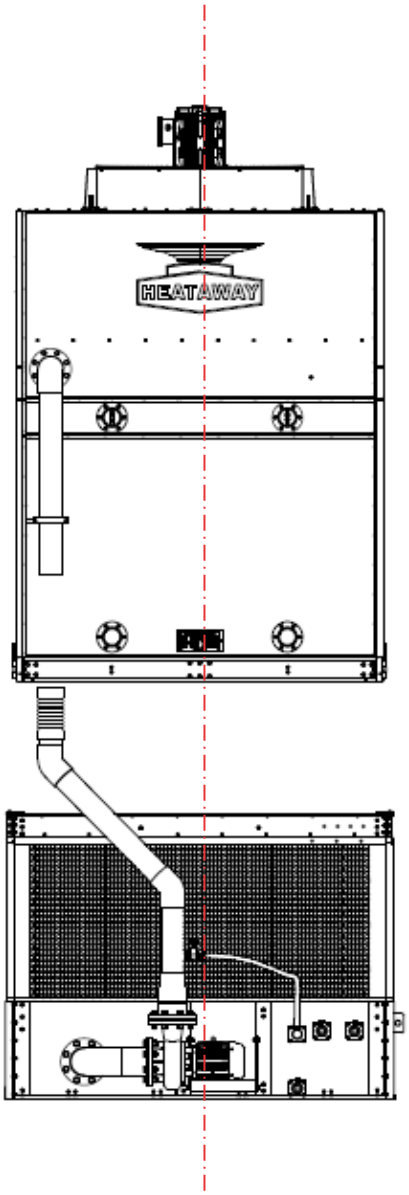




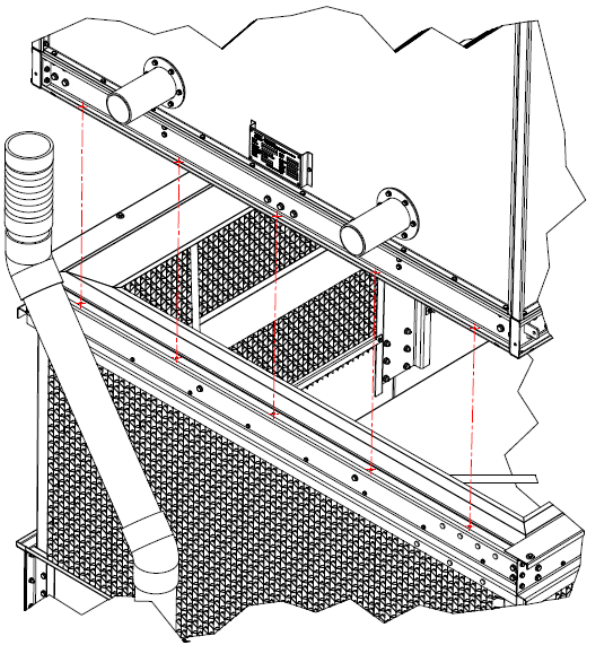


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

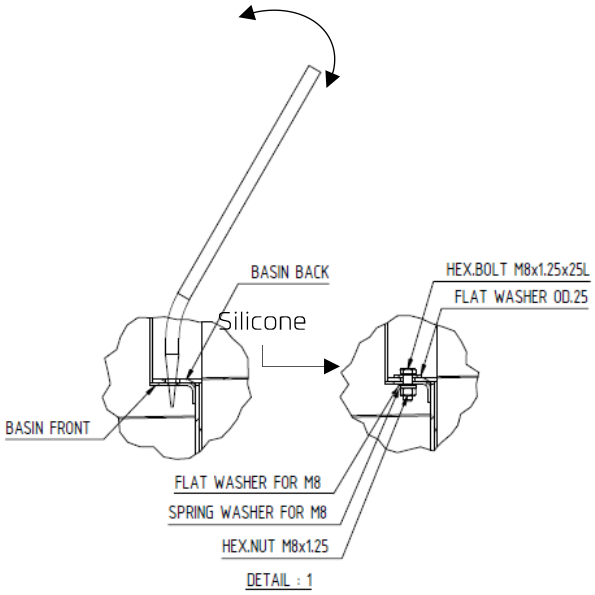
Assembly Fan Section to Basin Section



Set Upper section on BASIN Section by setting in middle of BASIN Section

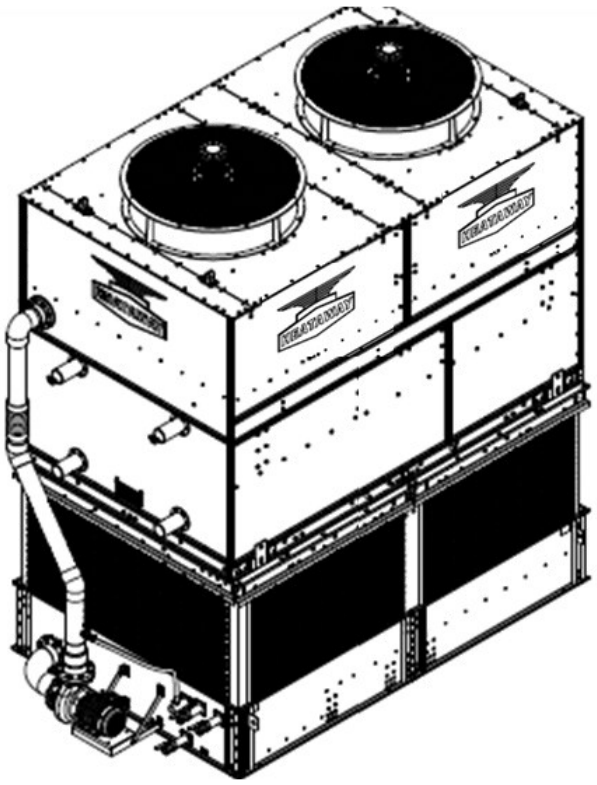


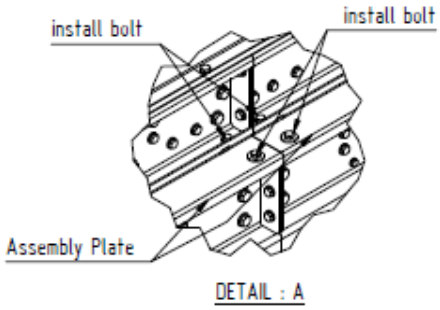
Use rod guide for guide upper section and BASIN Section and make sure front side and back side are in position before assembly

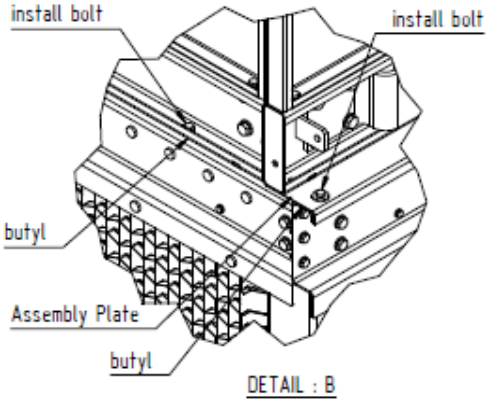


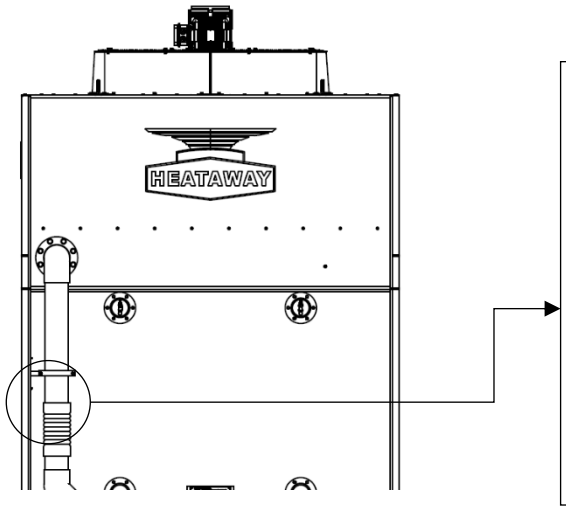
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

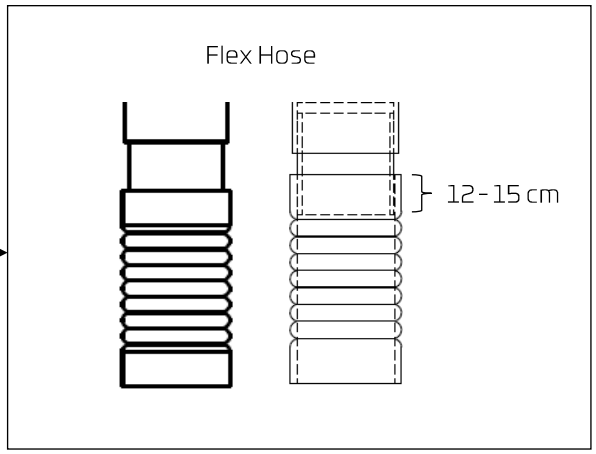
Final Assembly











TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

HEATAWAY

BRAND-NEW 9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

7' X 18'

Model

EC9-1300-0718C-S

EC9-1520-0718C-L

EC9-1570-0718C-S

EC9-1750-0718C-M

EC9-1760-0718C-S

EC9-1990-0718C-M

EC9-2060-0718C-M

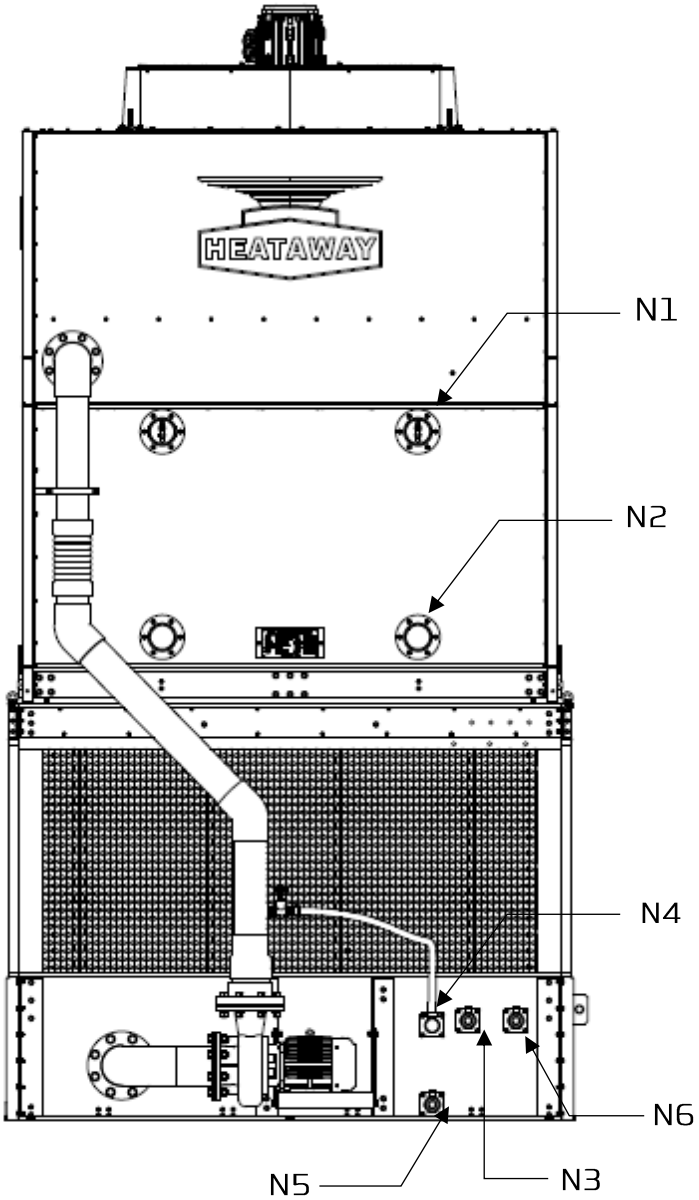
EC9-2140-0718C-L

EC9-2200-0718C-L



www.heataway.net

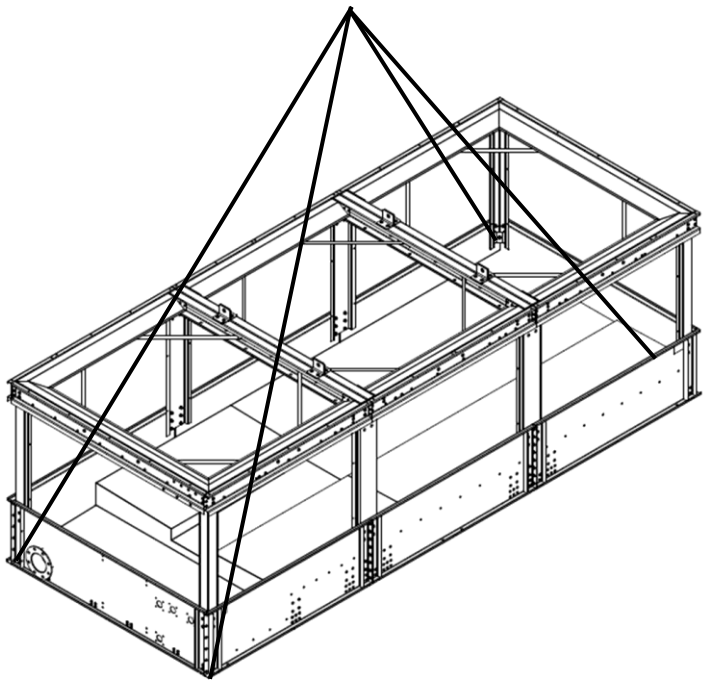
Piping Connection

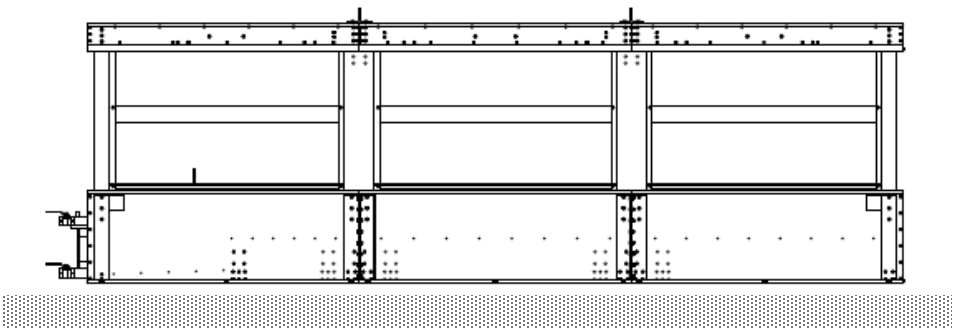


PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

Basin Section Assembly

Step 1 : Move Basin to install area for prepare to assembly pump support

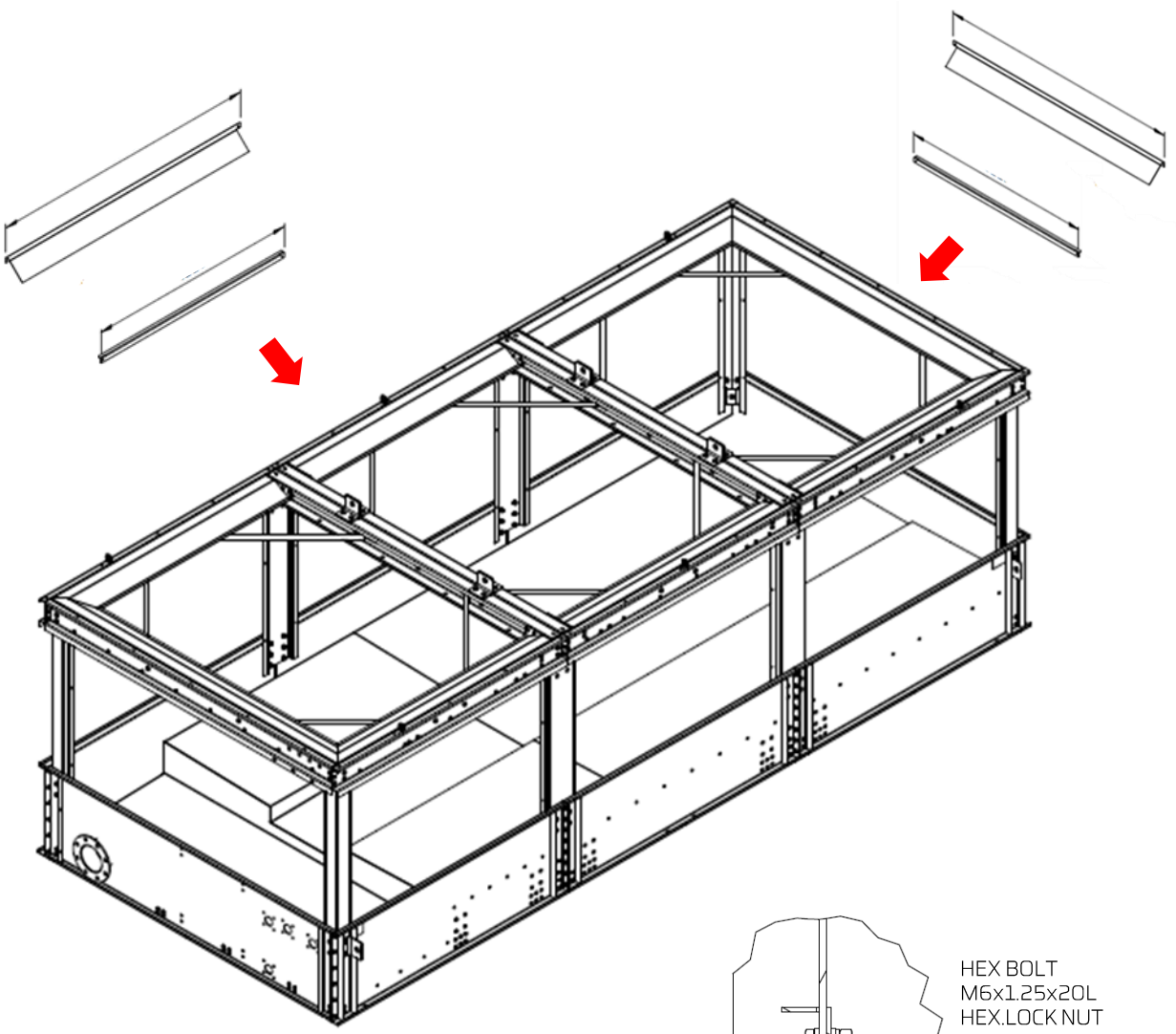


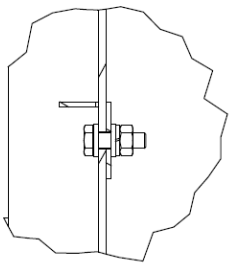


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

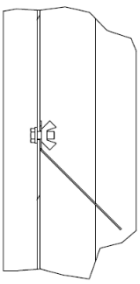
Basin Section Assembly

Step 2 : Water Deflect Assembly





HEX BOLT
M6x1.25x20L
HEX.LOCK NUT
M6x1.25
WASHER M6
SPRING WASHER M6

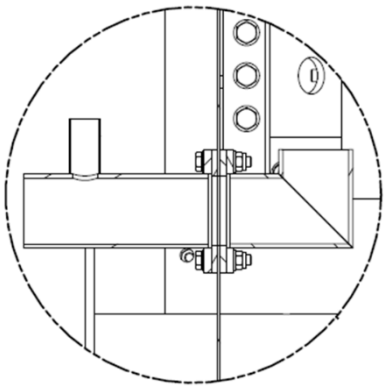


HEX BOLT
M8x1.25x20L
WING NUT M8
WASHER M8

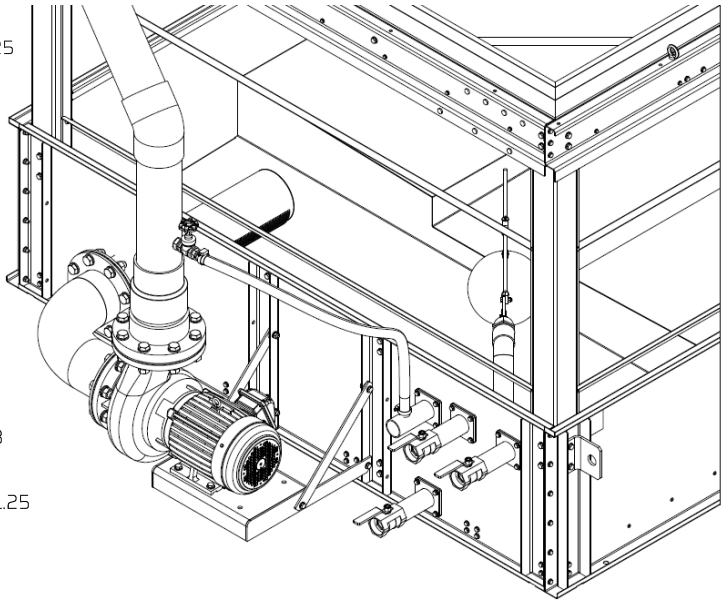
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

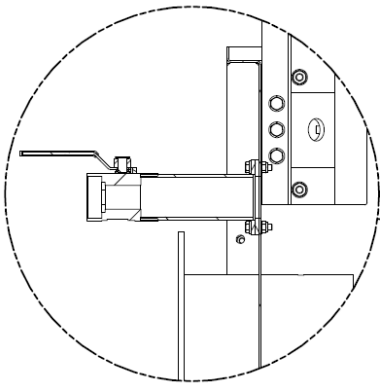
Basin Section Assembly

Step 3 : Piping and Valve Assembly

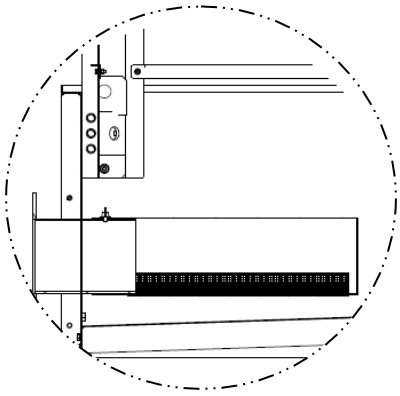


PIPE OVER FLOW
BOLT M8x1.25x40L
NR GASKET
WASHER FOR M8
HEX.LOCK NUT M8X1.25

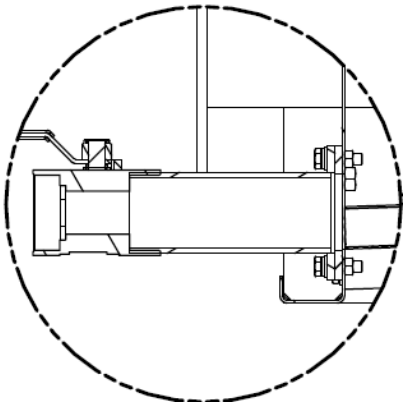




BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25



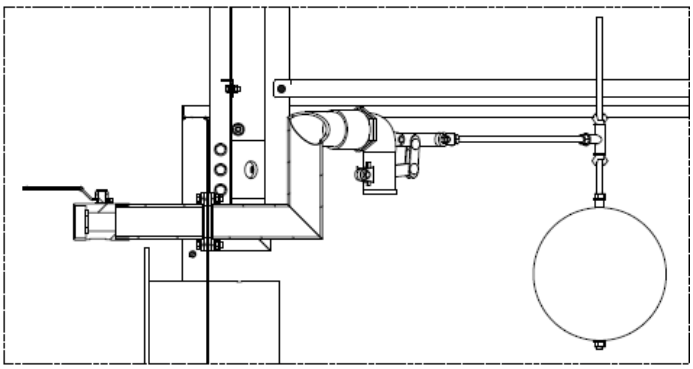
PIPE WITH STRAINER
WING SCREW - M8 x 12
WASHER



BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25

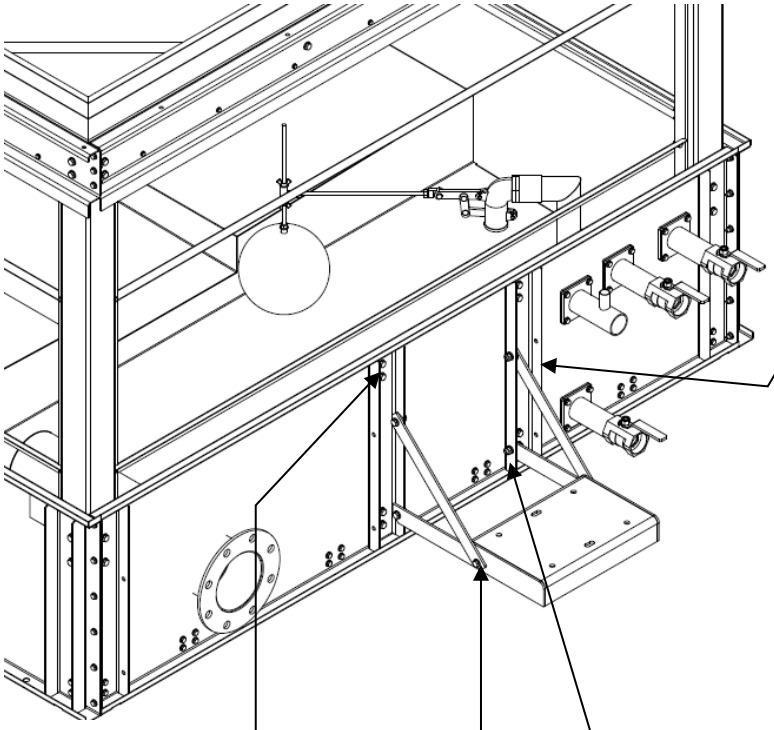
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

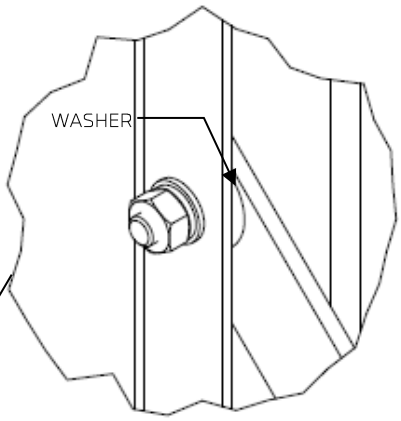
BALL VALVE
FLOAT VALVE
WASHER FOR M8
NR GASKET
PIPE MAKE UP WATER 2"
FLOAT VALVE
BOLT M8x1.25x30L
SPRING WASHER M8
HEX.LOCK NUT M8X1.25



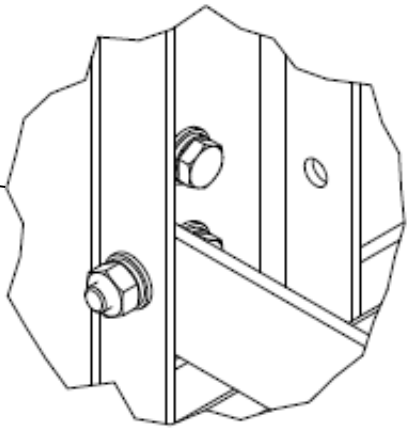
Basin Section Assembly

Step 4 : Water Pump Base Assembly

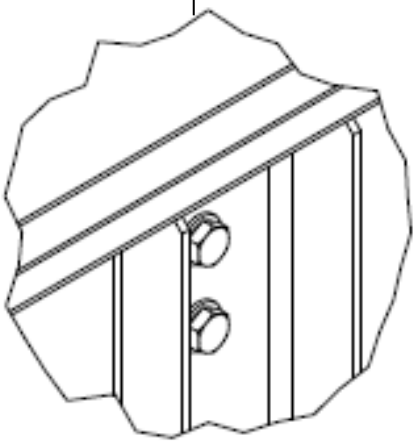




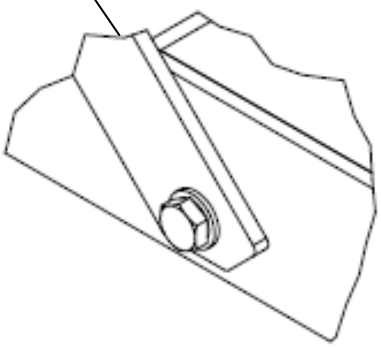
HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x30L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x25L
WASHER FOR M10
HEX.NUT LOCK M10x1.5

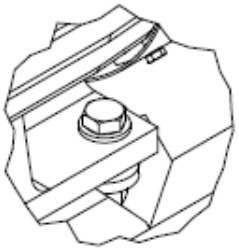


HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5

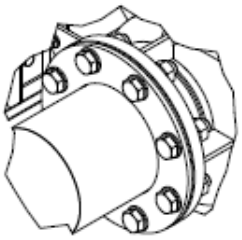
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

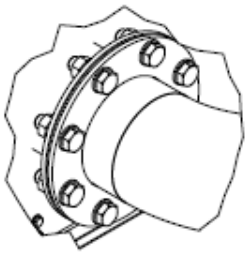
Step 5 : Water Pump pipe Assembly



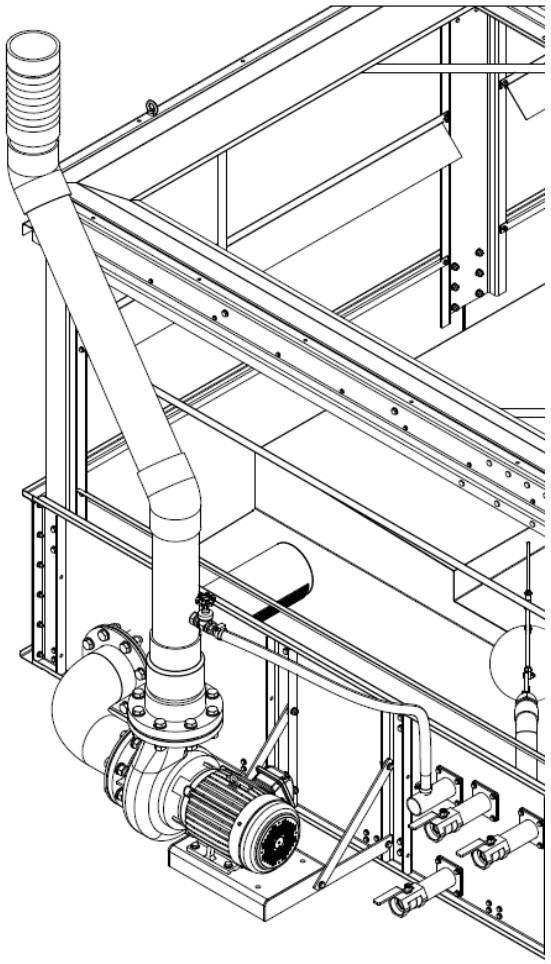
HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

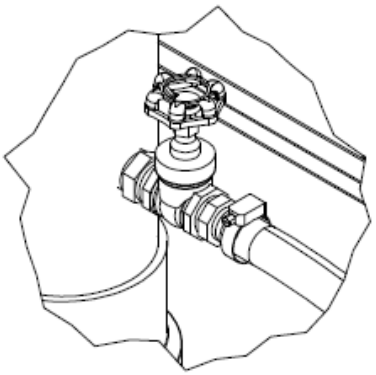


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

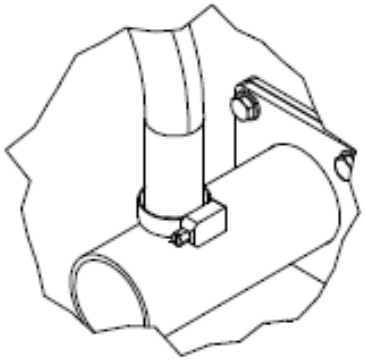


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L

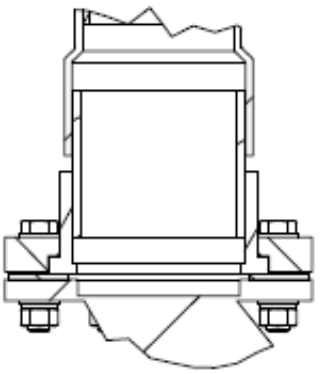




HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

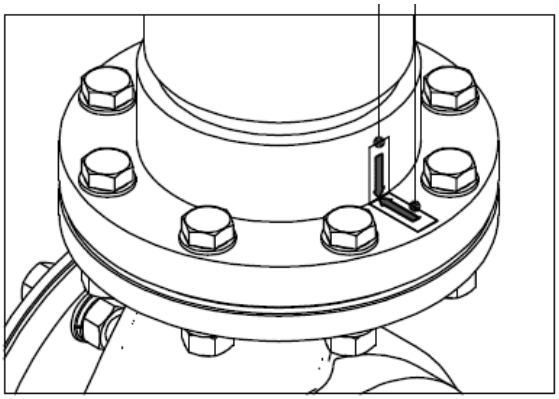


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

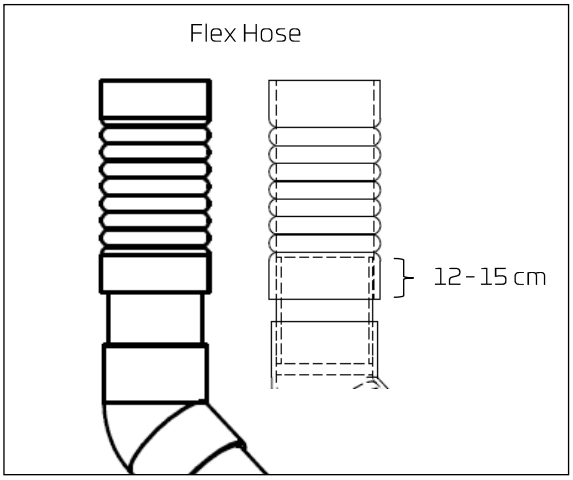
Step 5 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

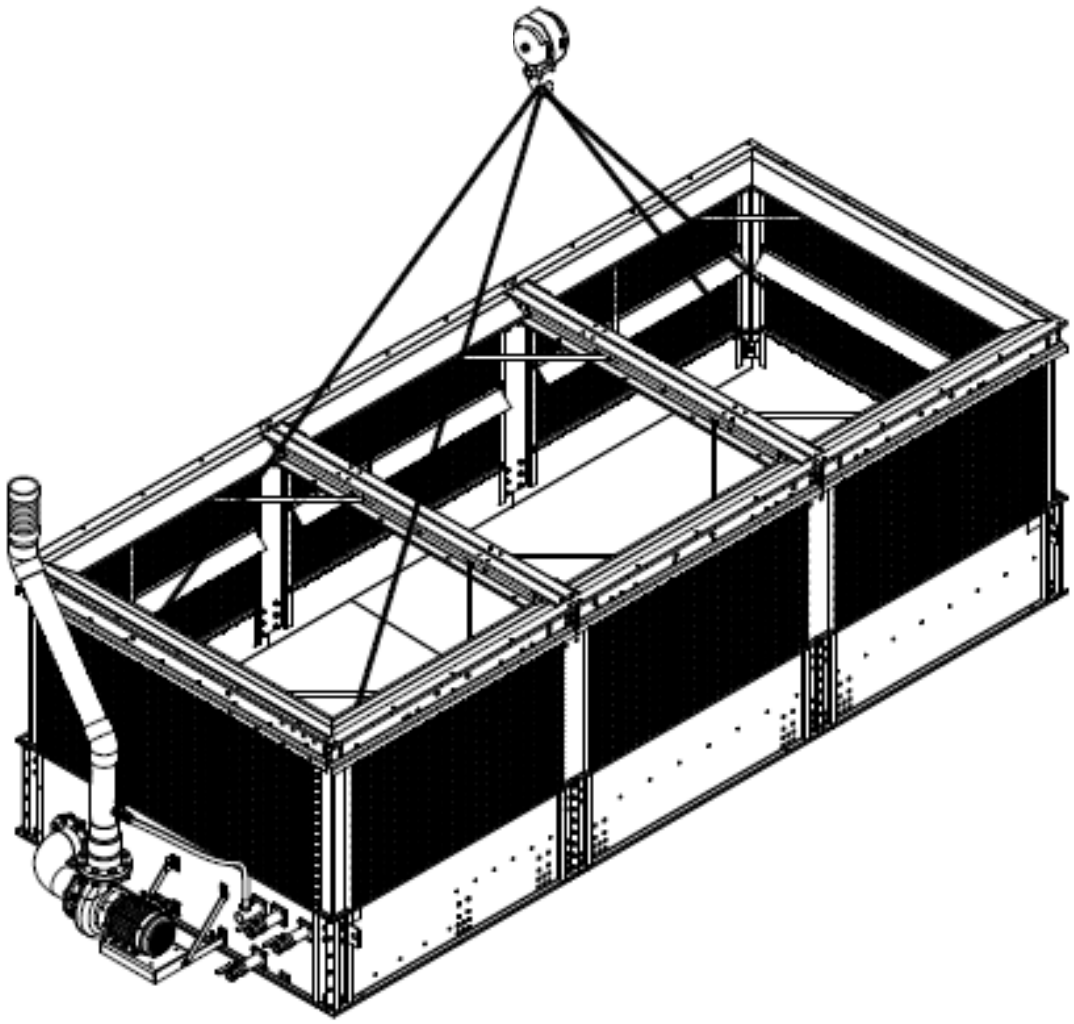
** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

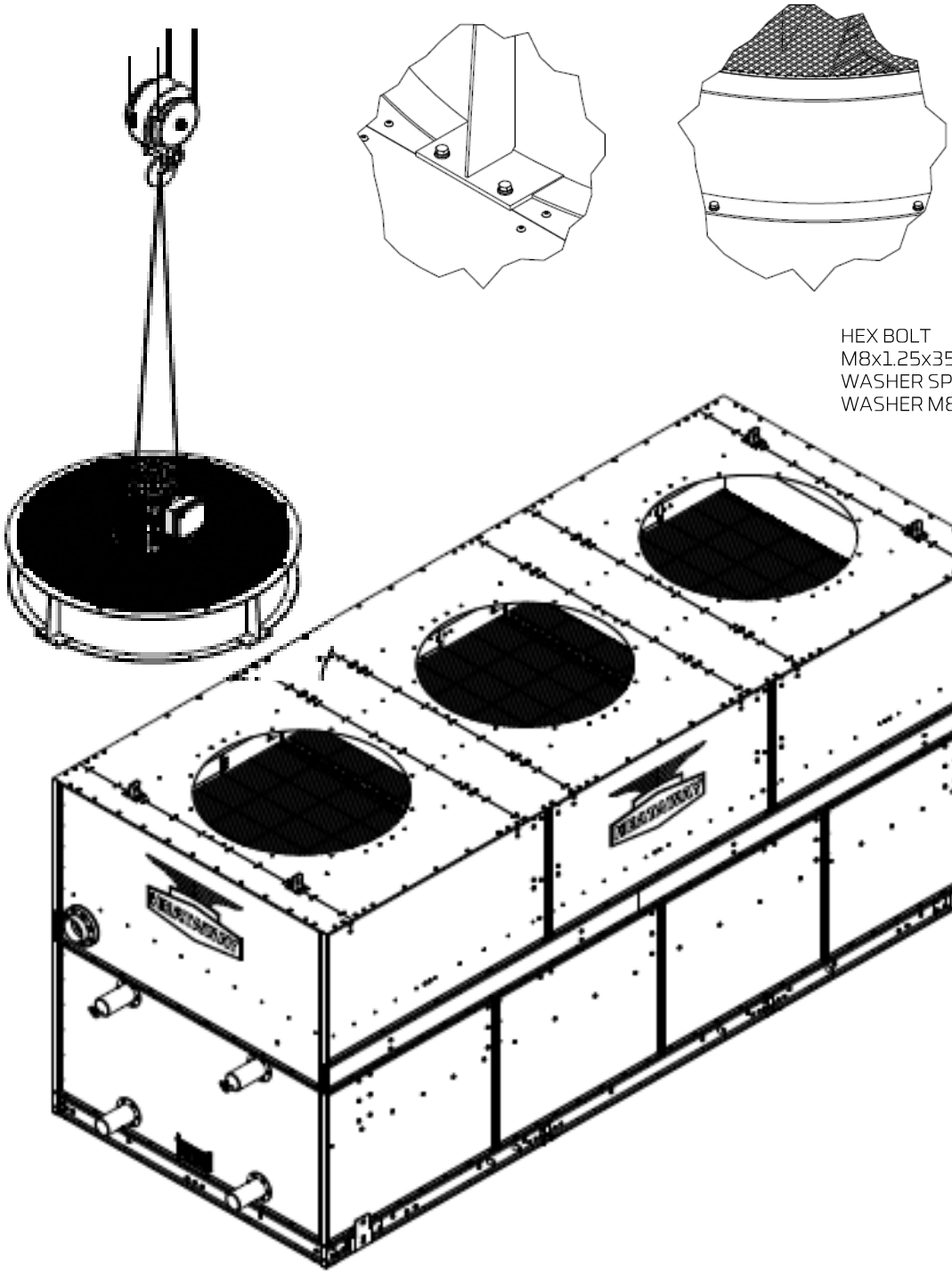
Step 6 : Move Assembled Basin to Position



LOUVER

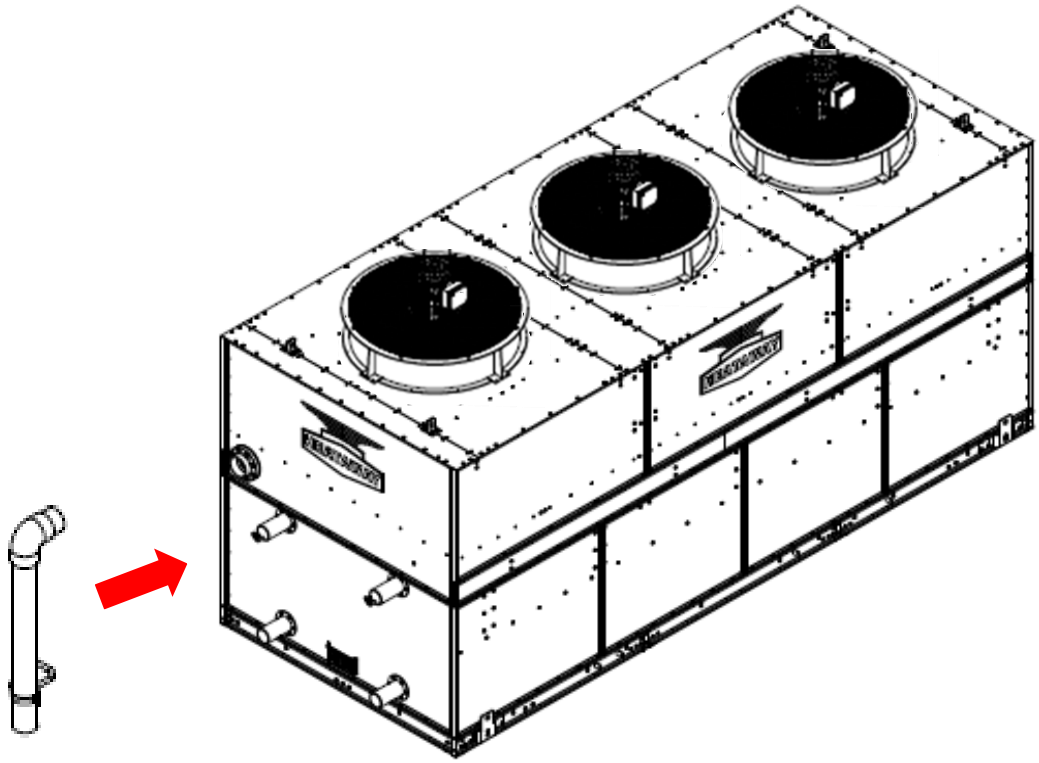
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

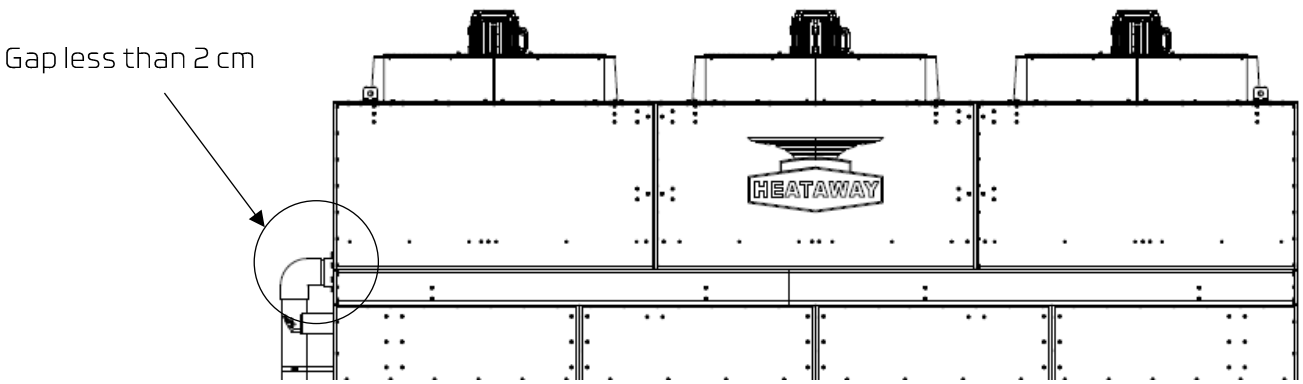
Assembly Fan set



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Upper pipe Assembly

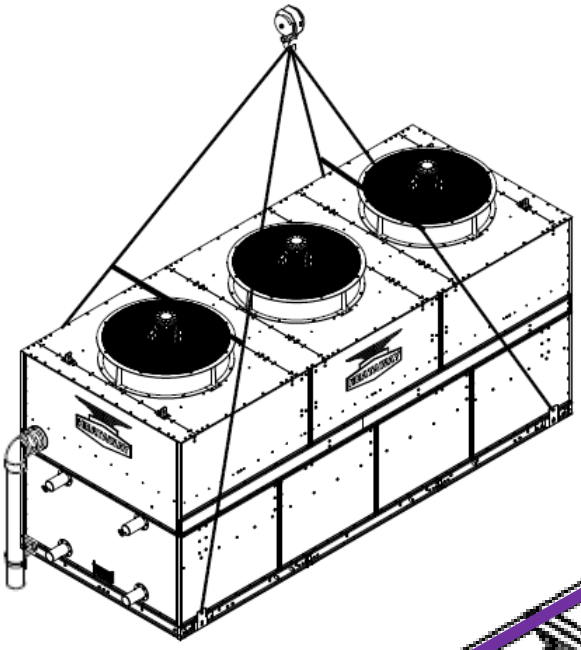


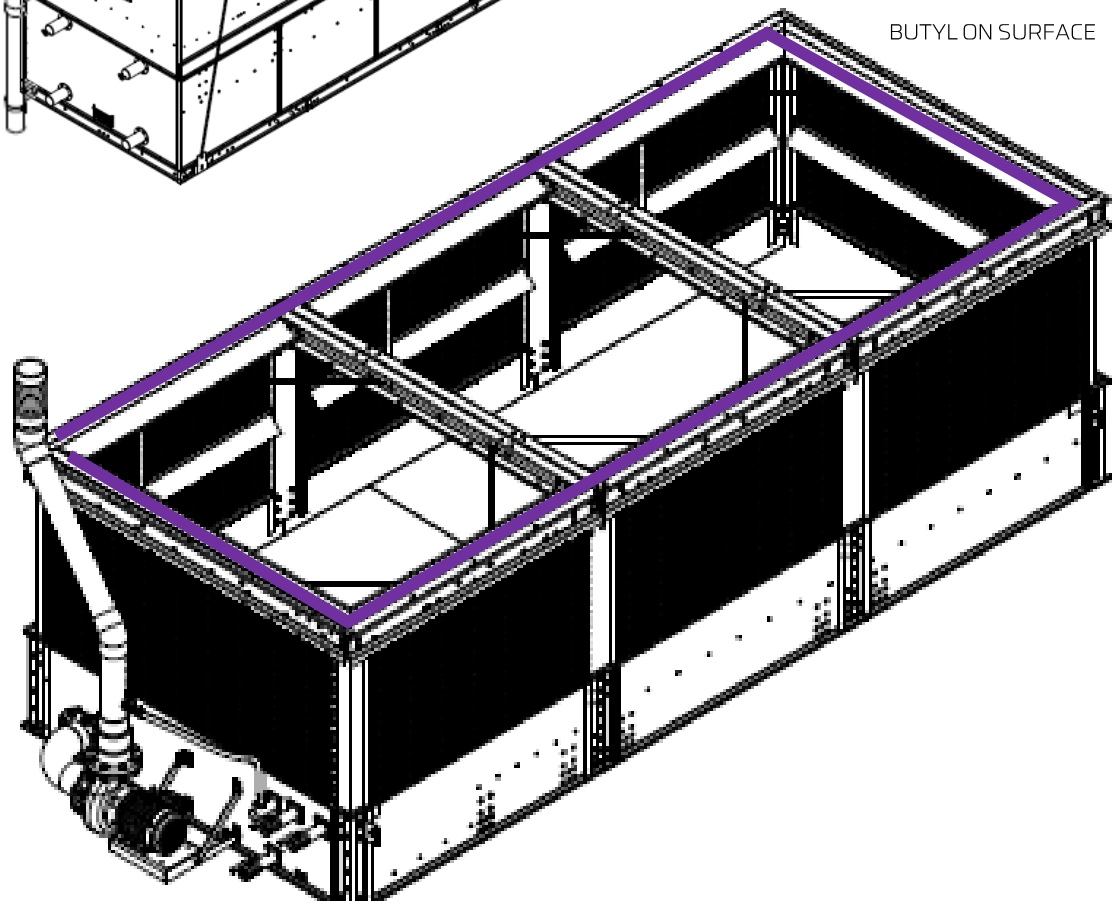


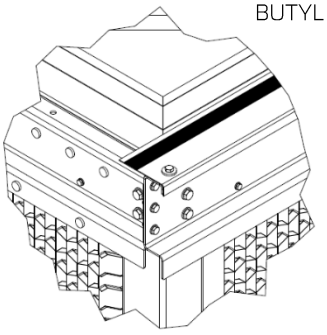
>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Assembly Fan Section to Basin Section

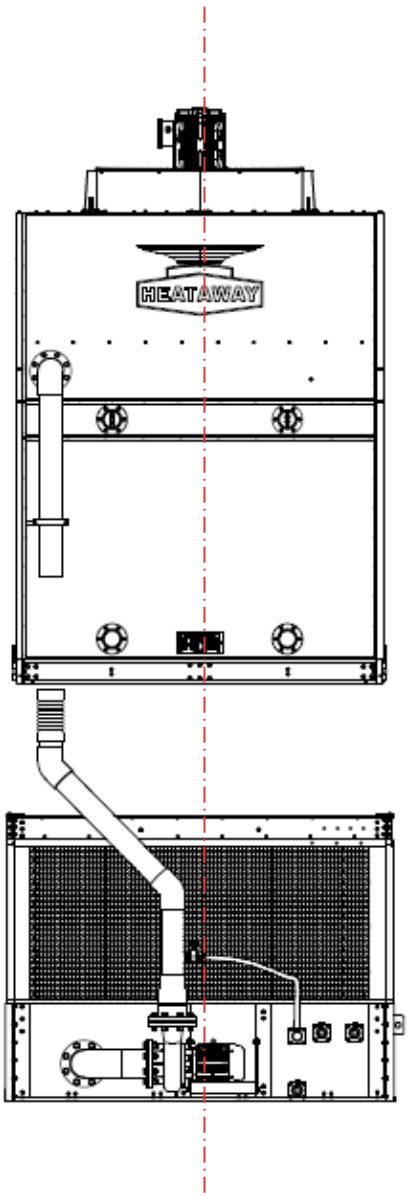




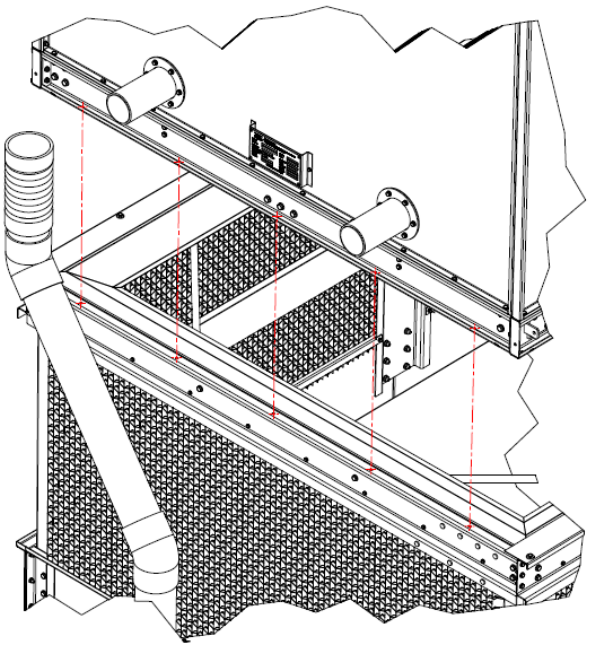


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

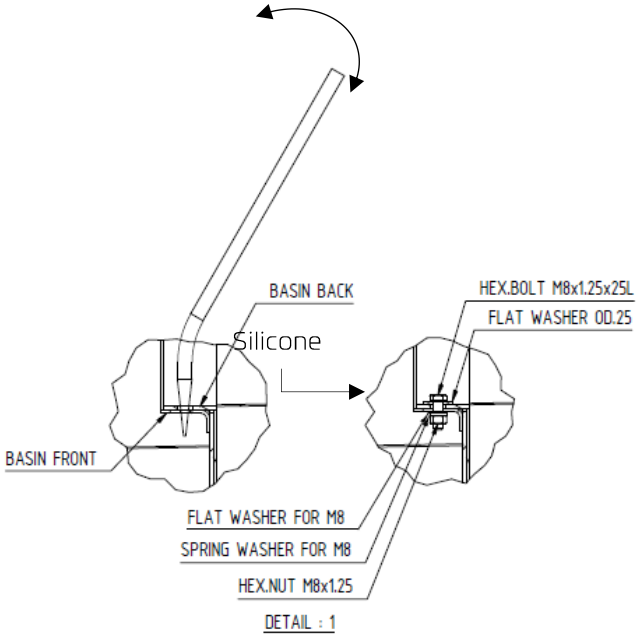
Assembly Fan Section to Basin Section



Set Upper section on BASIN Section by setting in middle of BASIN Section

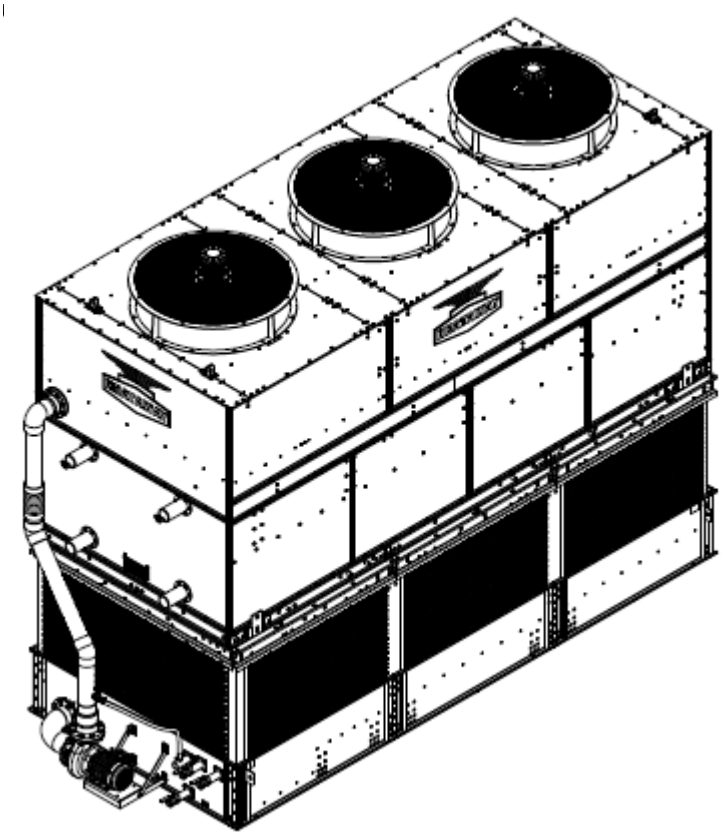


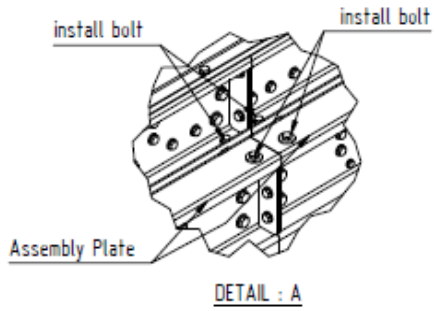
Use rod guide for guide upper section and BASIN Section and make sure front side and back side are in position before assembly



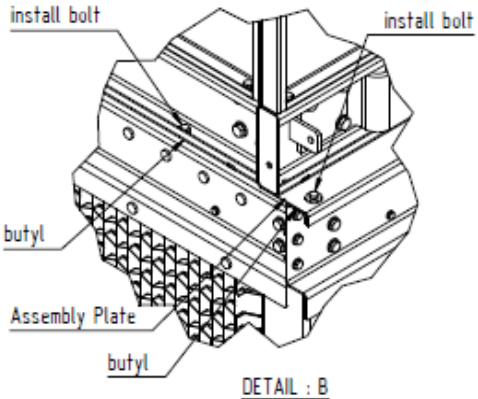
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Final Assembly

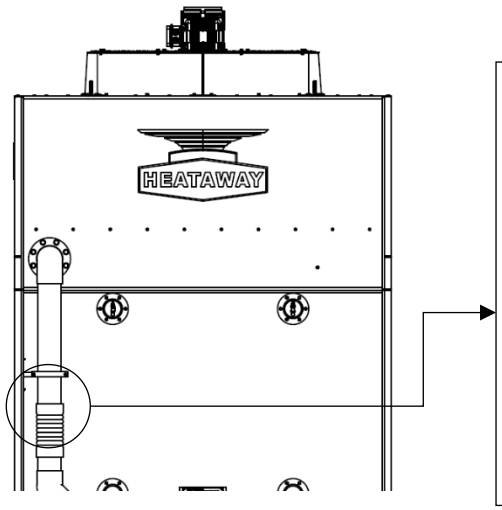


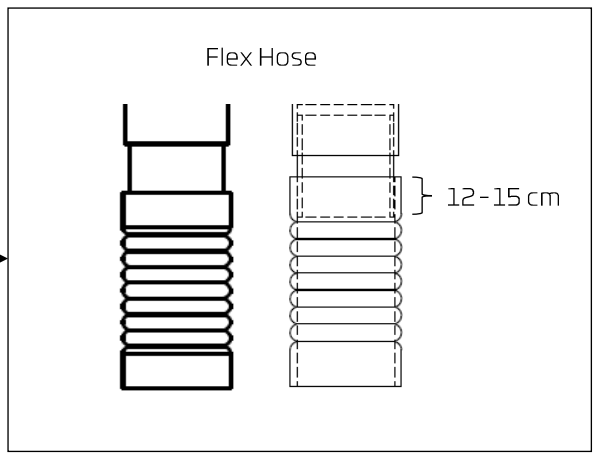


DETAIL : A



DETAIL : B





TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

HEATAWAY

BRAND-NEW 9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

10' X 12'

Model

EC9-1400-1012C-S

EC9-1600-1012C-M

EC9-1660-1012C-L

EC9-1840-1012C-M

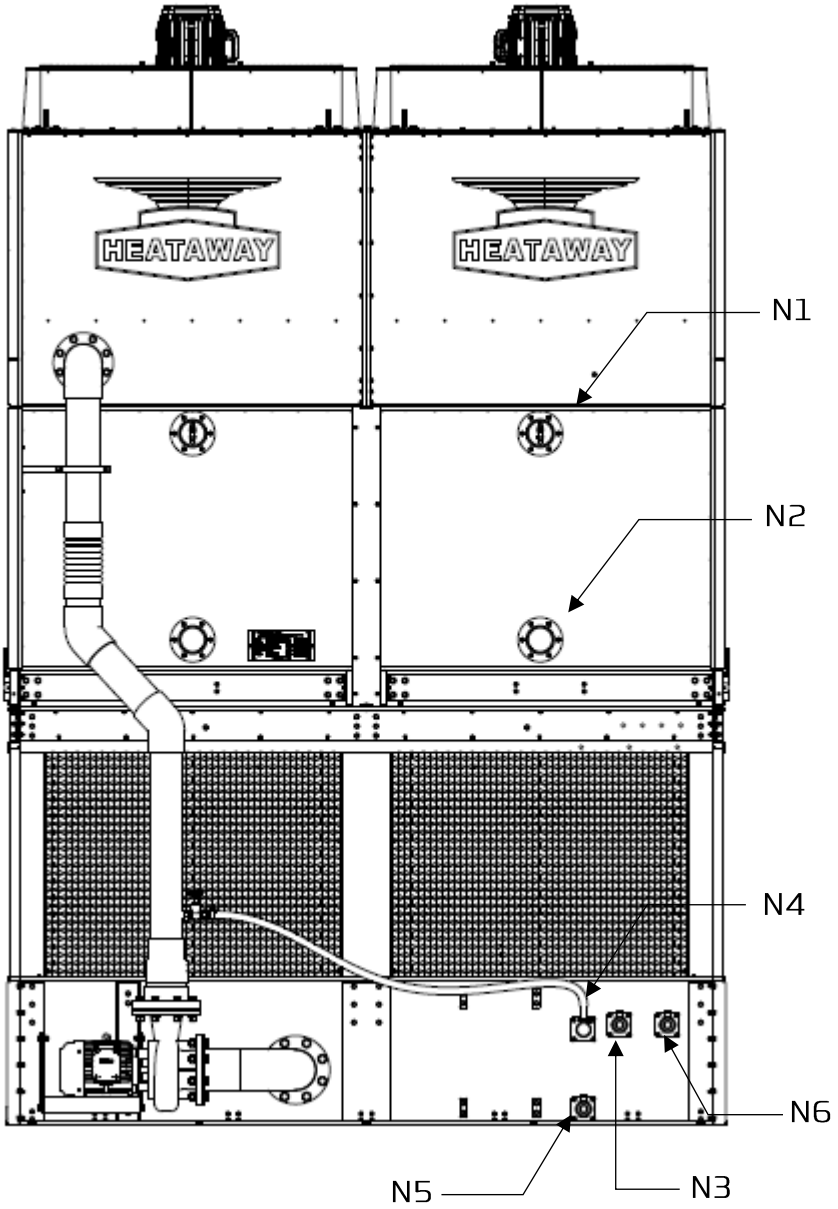
EC9-1920-1012C-L

EC9-2000-1012C-M

EC9-2080-1012C-L



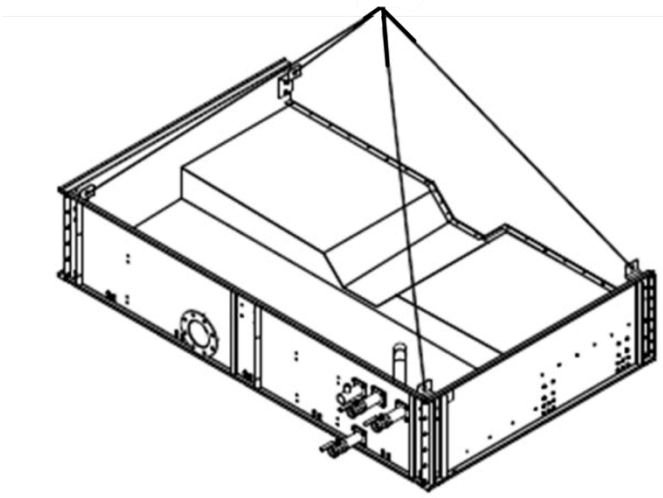
Piping Connection

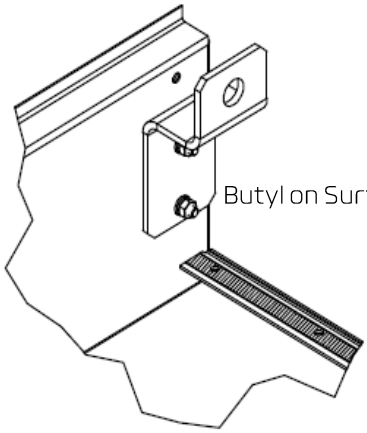


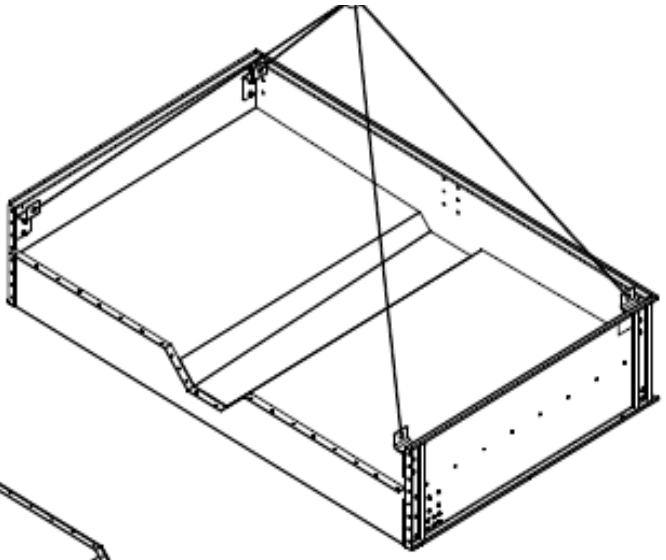
PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

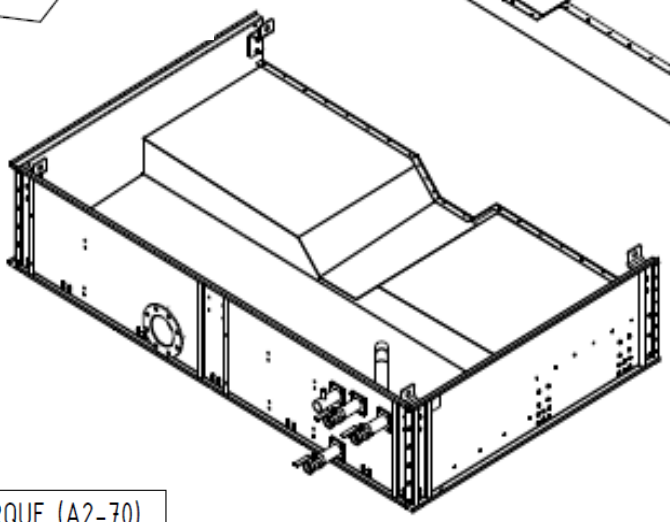
Basin Section Assembly

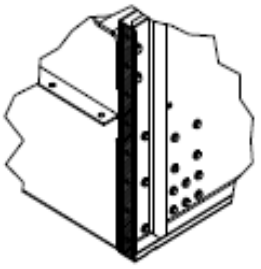
Step 1 : Basin Assembly









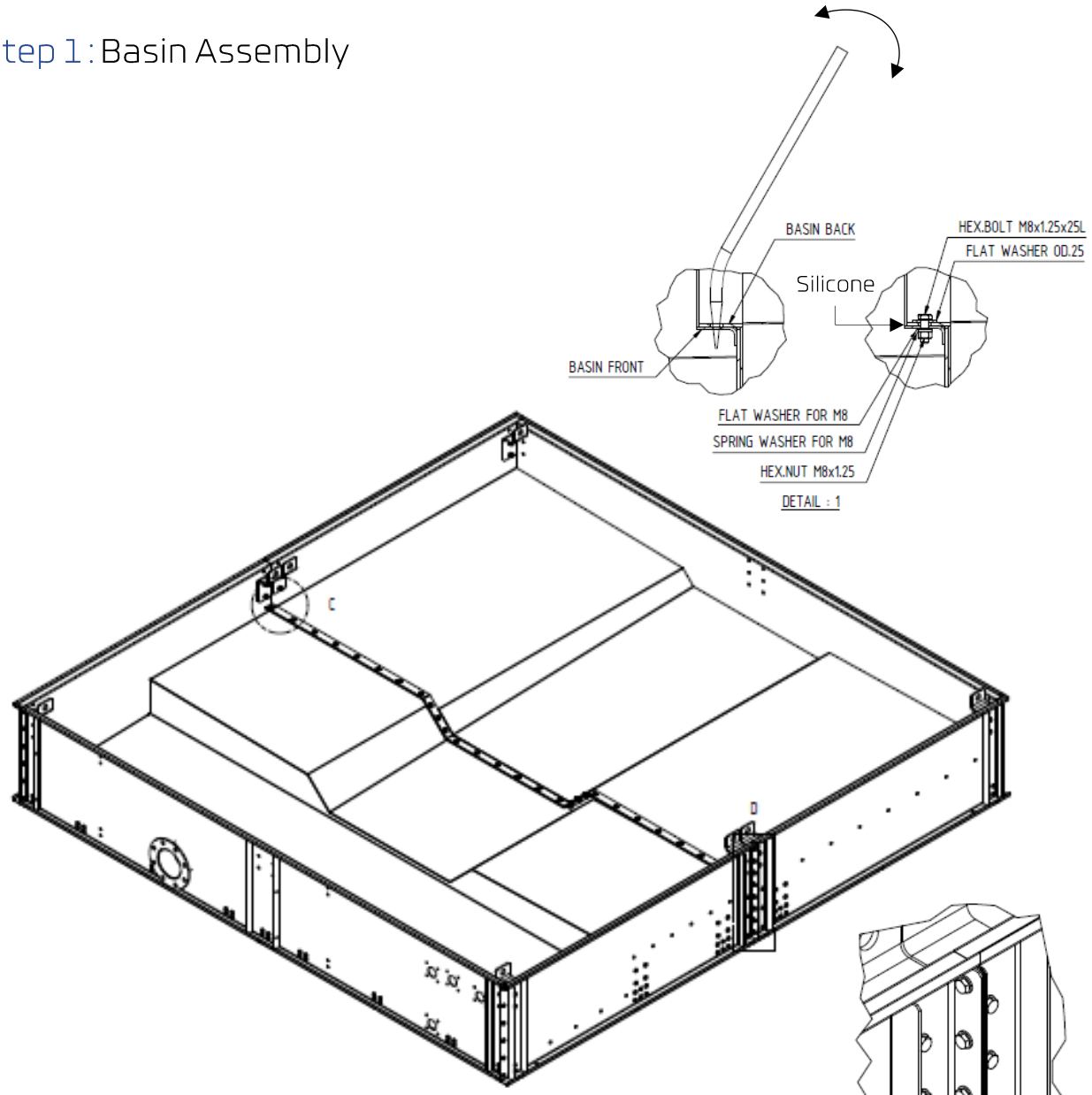


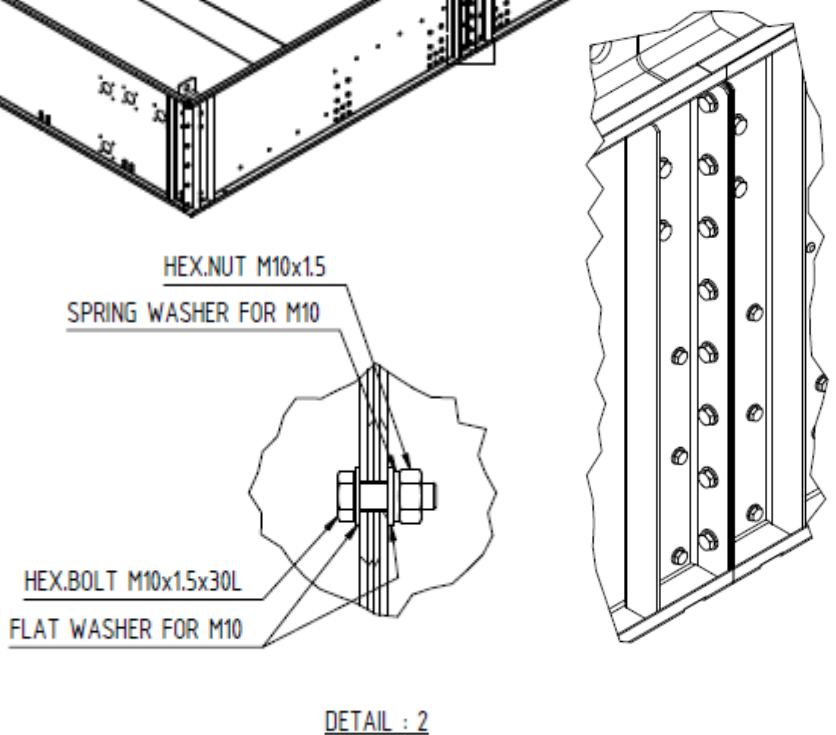
Butyl on Surface

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

Step 1 : Basin Assembly

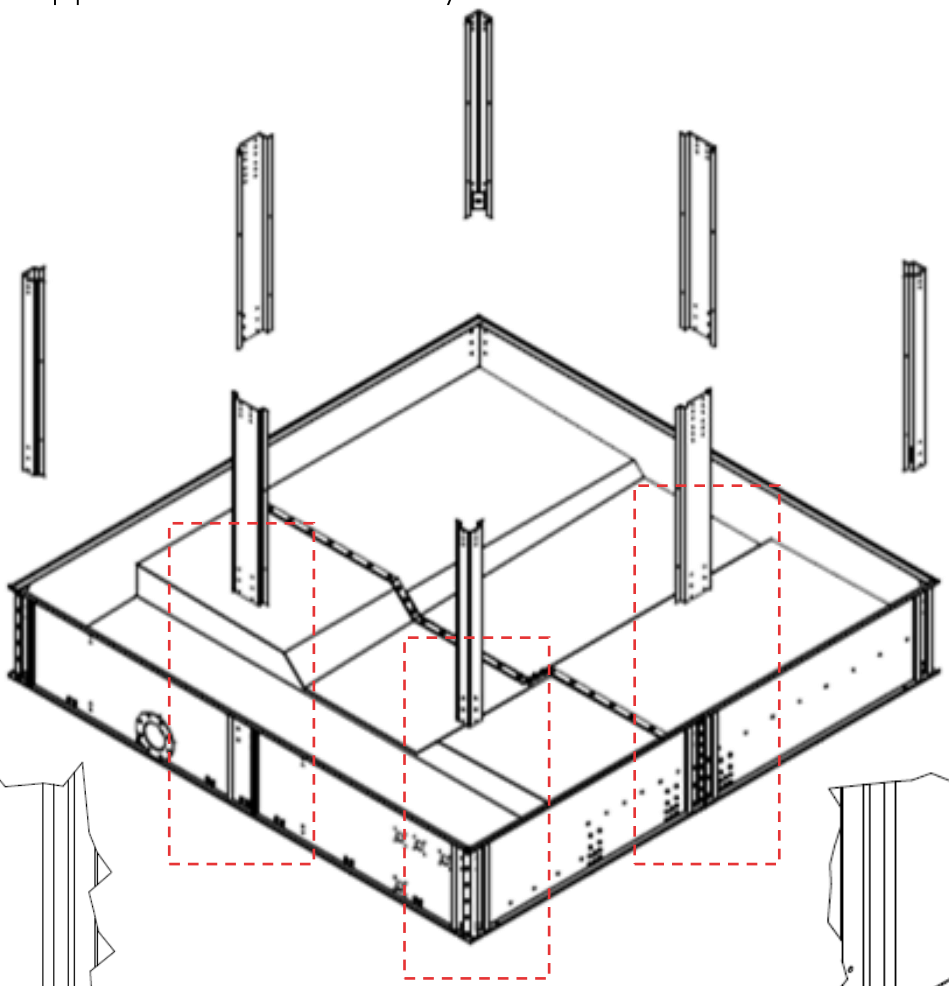


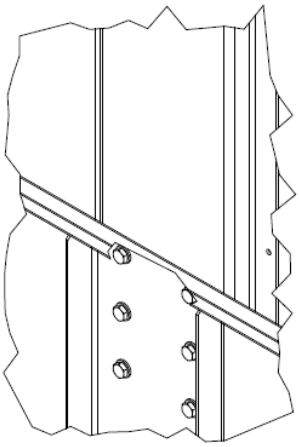


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

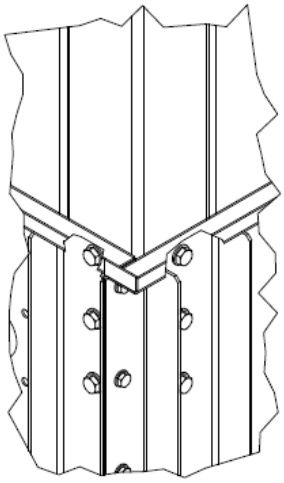
Step 2 : Support Frame Assembly





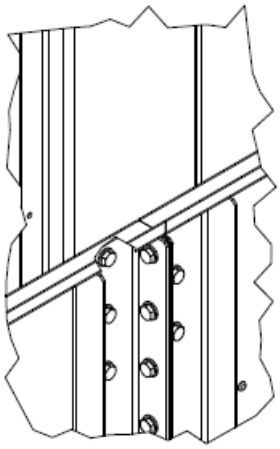
Butyl on Surface

HEX BOLT M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER M10



Butyl on Surface

HEX BOLT M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER M10



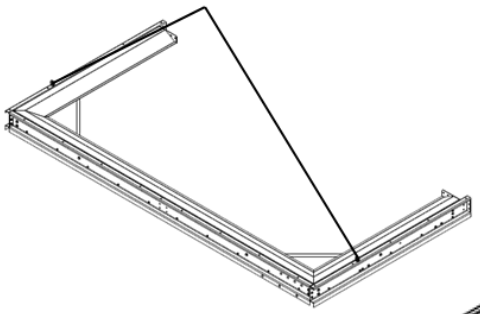
Butyl on Surface

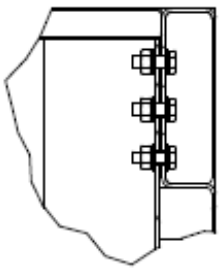
HEX BOLT M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER M10

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

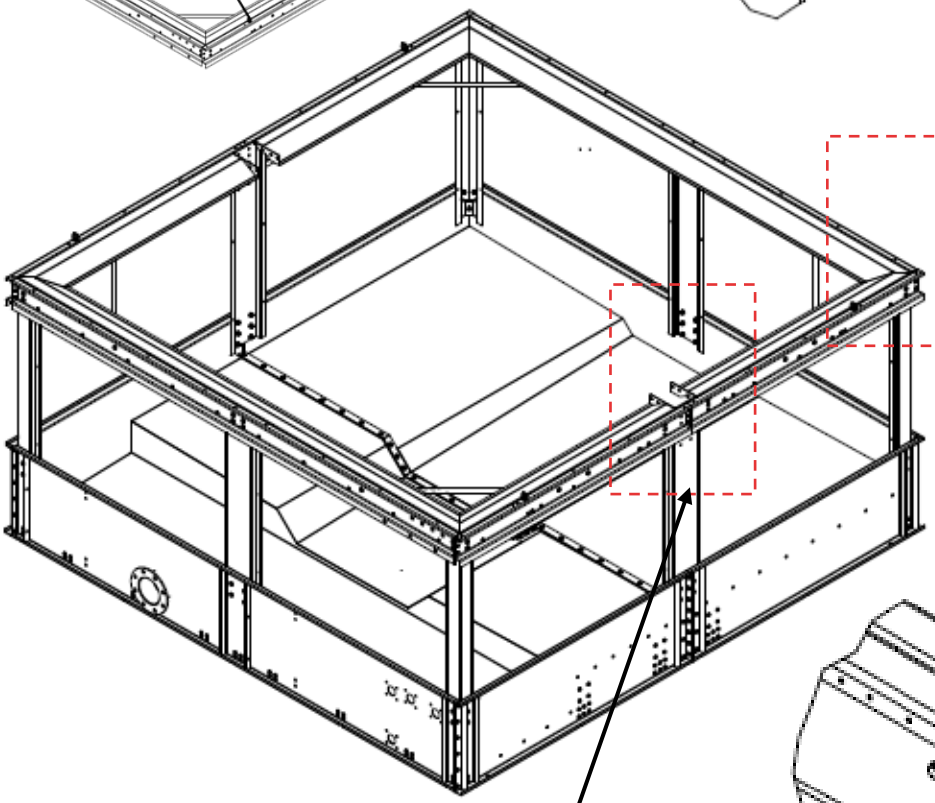
Basin Section Assembly

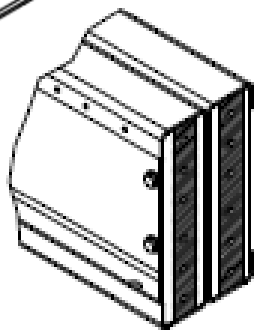
Step 3 : Frame Assembly



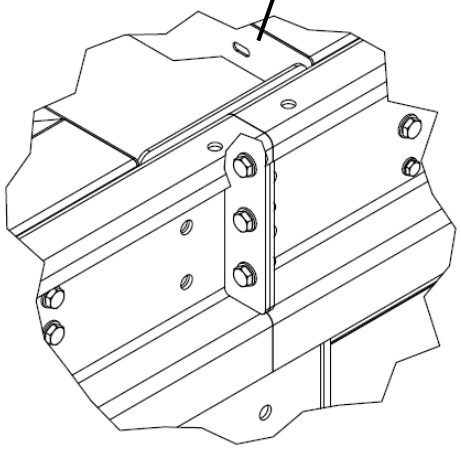


HEX BOLT
M8x1.25x25L
HEX.LOCK NUT
M8x1.25
WASHER M8





Butyl on Surface



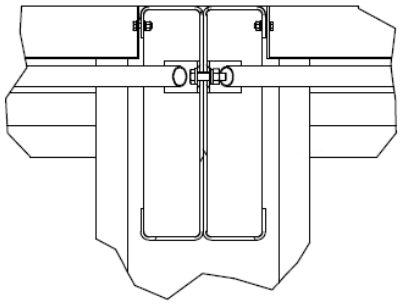
HEX BOLT
M8x1.25x25L
HEX.LOCK NUT
M8x1.25
WASHER M8

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

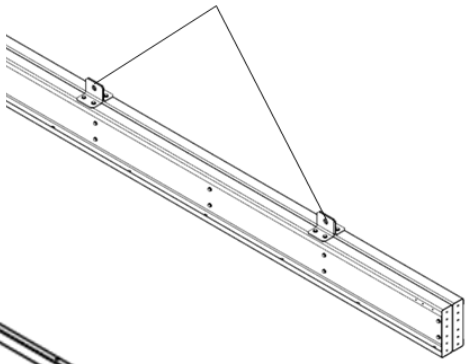
Basin Section Assembly

Step 4 : Frame Beam and Support Assembly

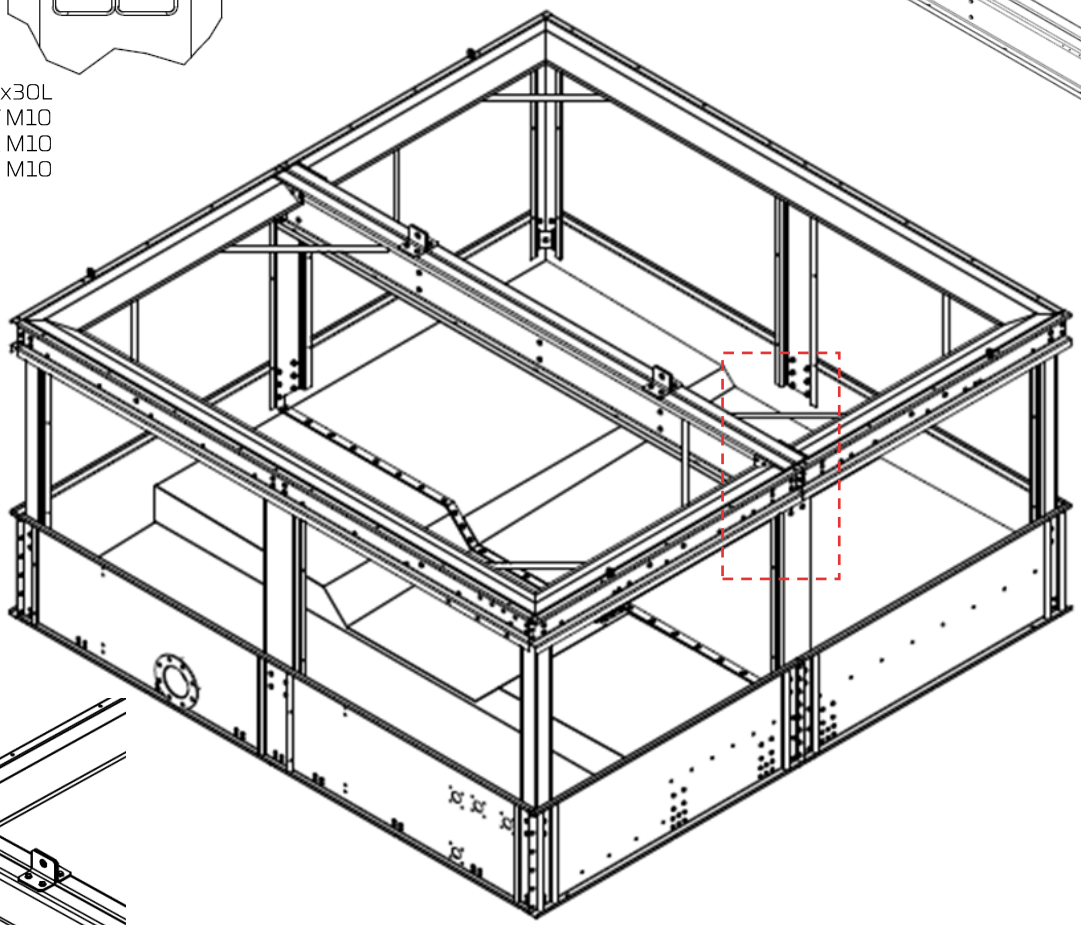


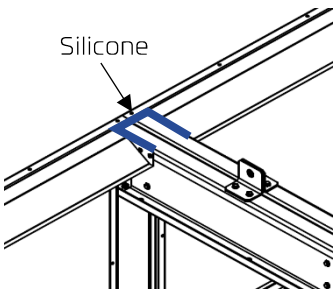


HEX BOLT M10x1.5x40L
HEX NUT M10
WASHER M10
SPRING WASHER M10

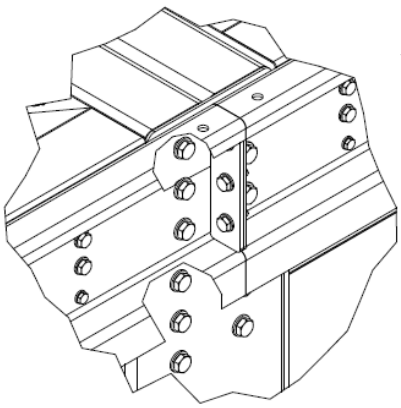


HEX BOLT M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER M10





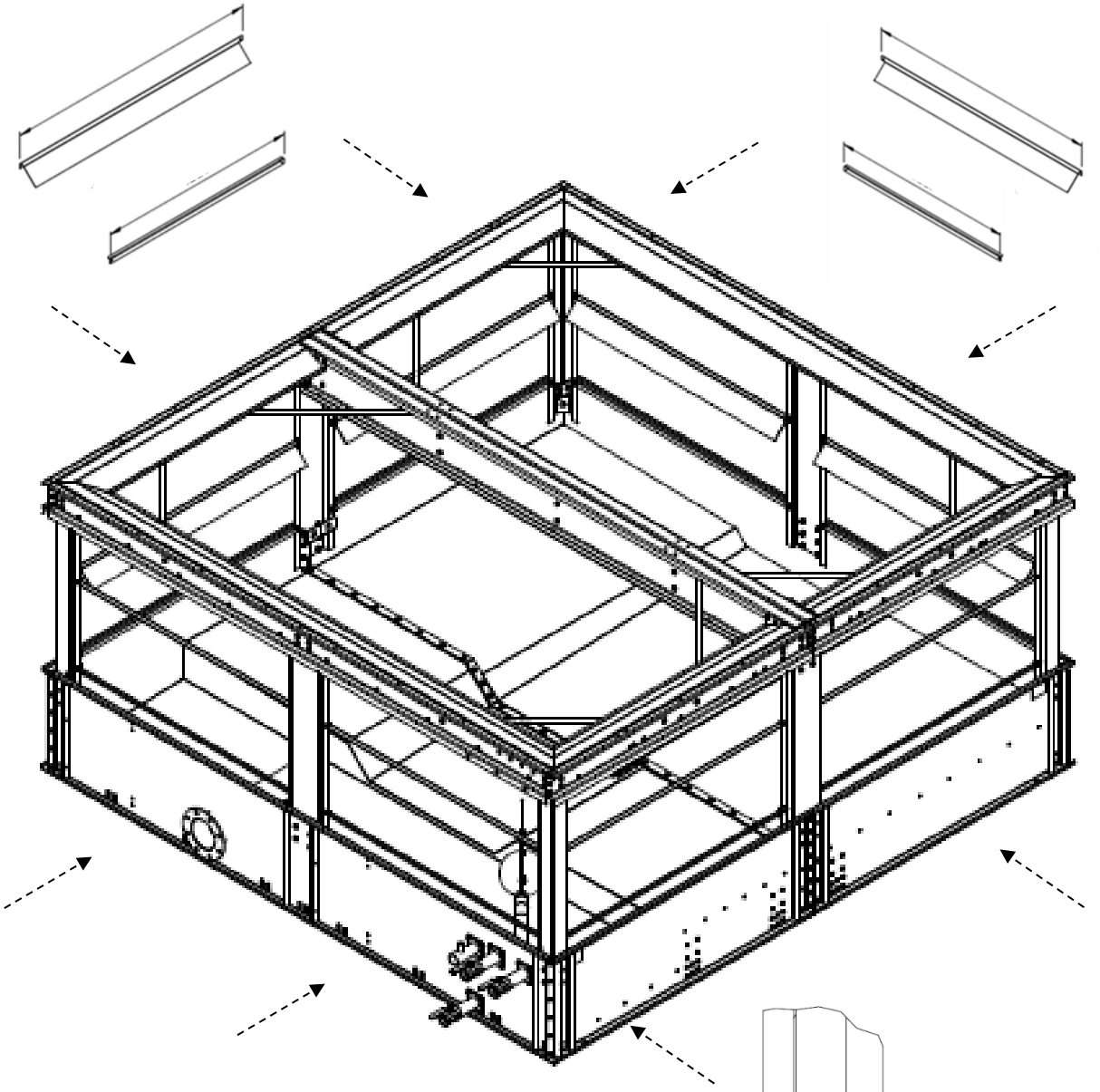
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

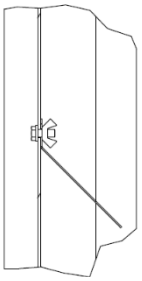


HEX BOLT M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER M10

Basin Section Assembly

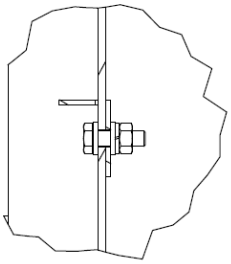
Step 5 : Water Deflect Assembly





HEX BOLT
M8x1.25x20L
WING NUT M8
WASHER M8

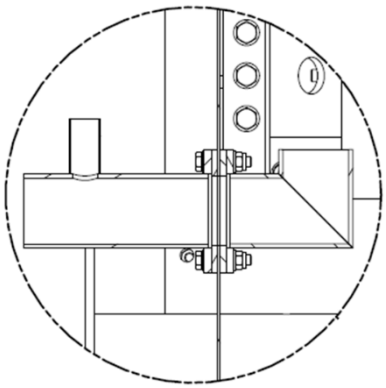
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0



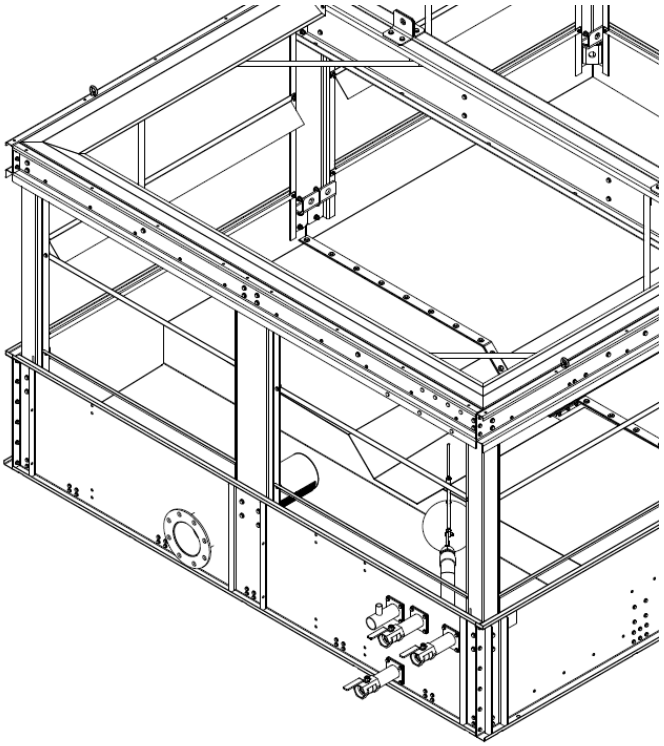
HEX BOLT
M6x1.25x20L
HEX.LOCK NUT
M6x1.25
WASHER M6
SPRING WASHER M6

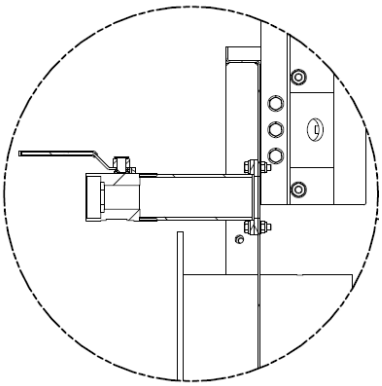
Basin Section Assembly

Step 6 : Piping and Valve Assembly

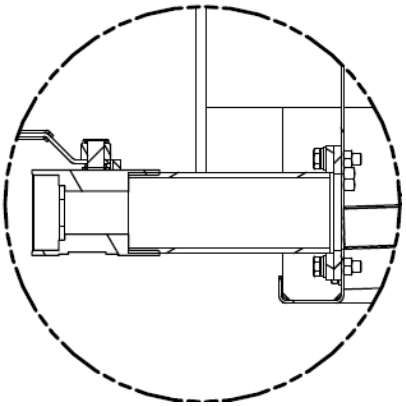


PIPE OVER FLOW
BOLT M8x1.25x40L
NR GASKET
WASHER FOR M8
HEX.LOCK NUT M8X1.25

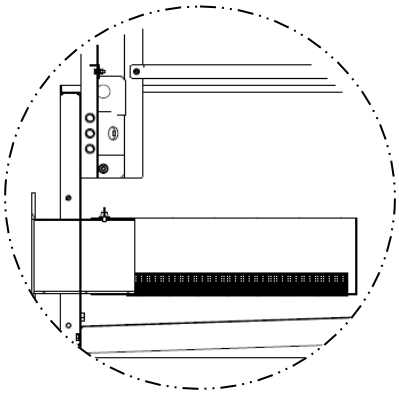




BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25



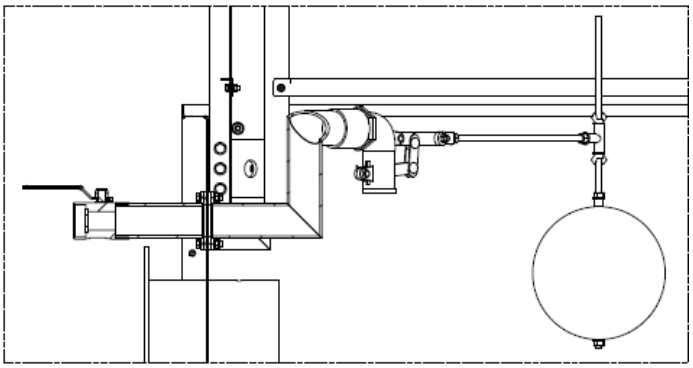
BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25



PIPE WITH STRAINER
WING SCREW - M8 x 12
WASHER

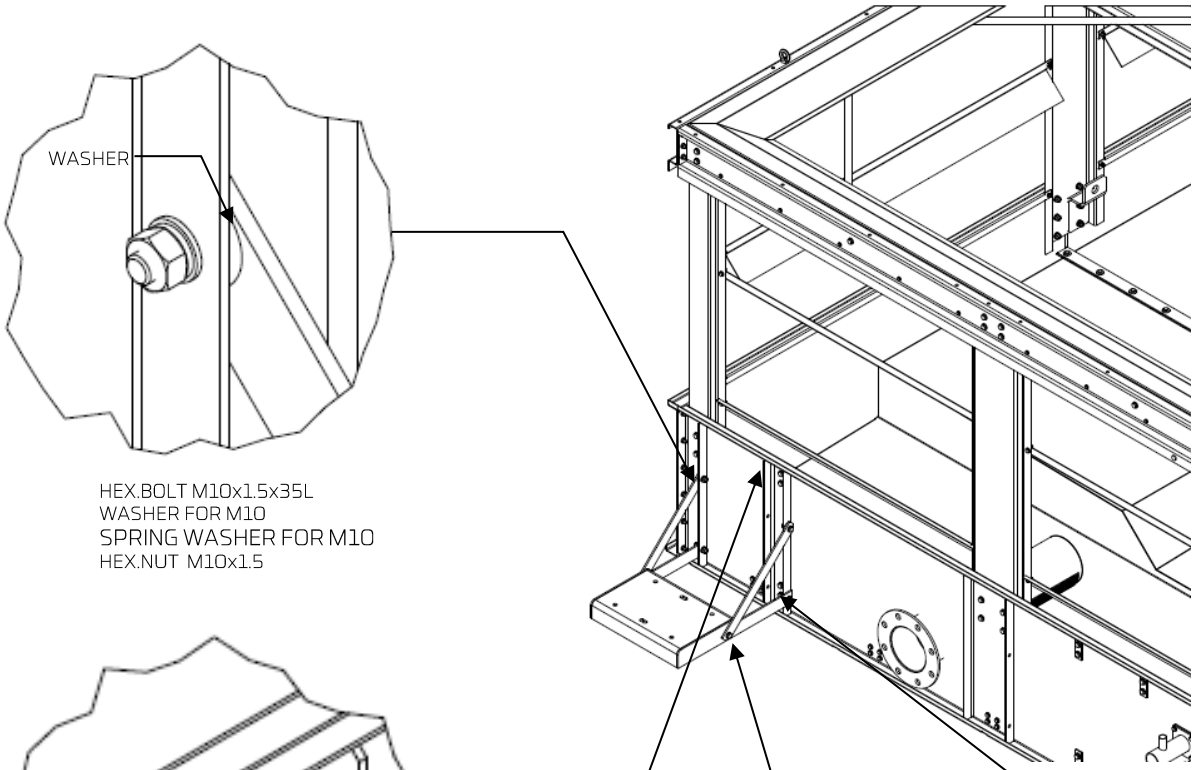
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

BALL VALVE
FLOAT VALVE
WASHER FOR M8
NR GASKET
PIPE MAKE UP WATER 2"
FLOAT VALVE
BOLT M8x1.25x30L
SPRING WASHER M8
HEX.LOCK NUT M8X1.25

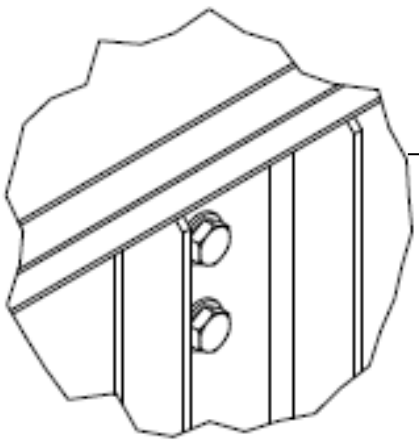


Basin Section Assembly

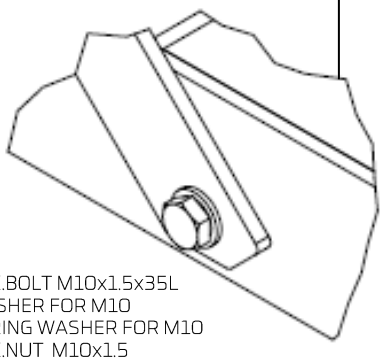
Step 7 : Water Pump Base Assembly



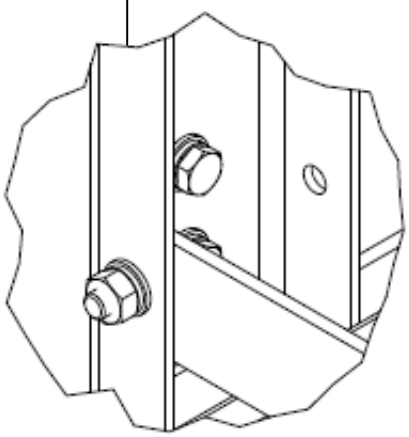
HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5



HEX.BOLT M10x1.5x25L
WASHER FOR M10
HEX.NUT LOCK M10x1.5



HEX.BOLT M10x1.5x35L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5

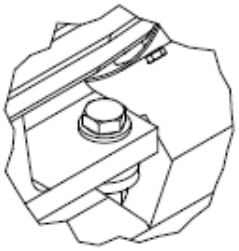


HEX.BOLT M10x1.5x30L
WASHER FOR M10
SPRING WASHER FOR M10
HEX.NUT M10x1.5

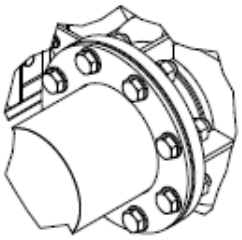
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

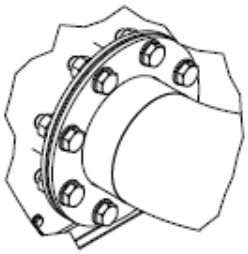
Step 8 : Water Pump pipe Assembly



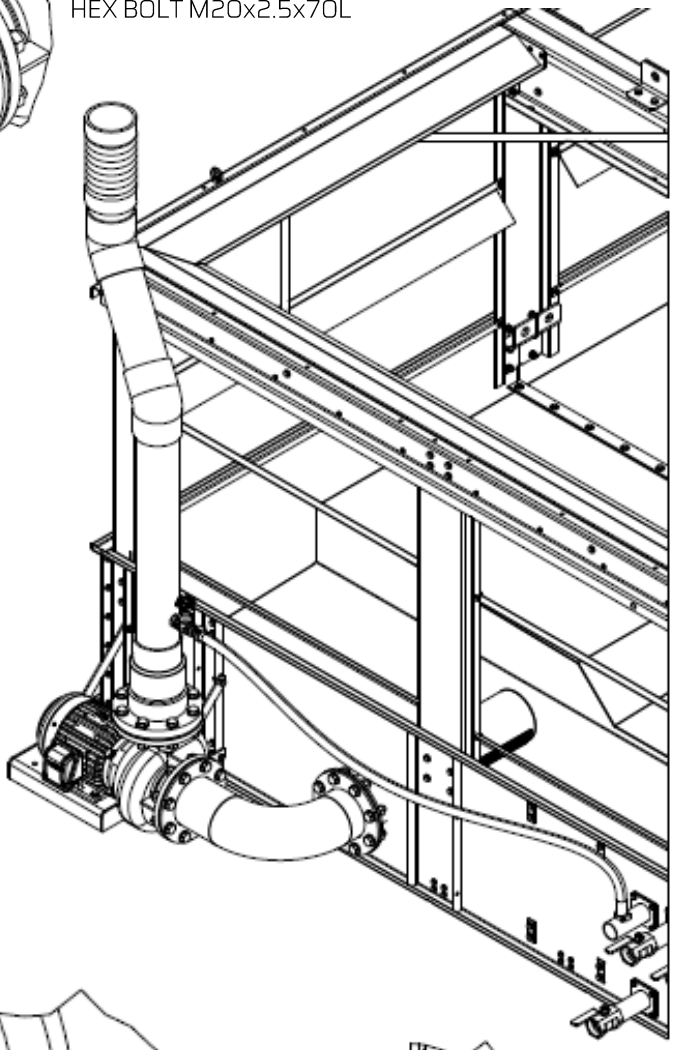
HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

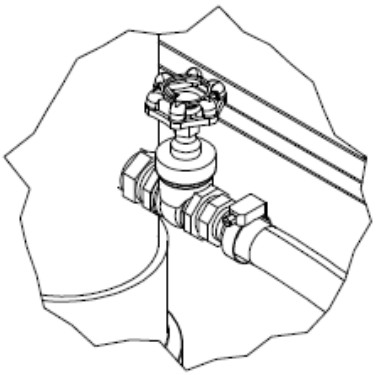


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

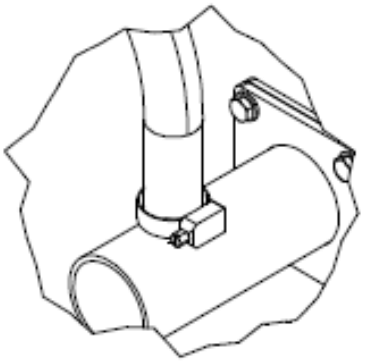


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L

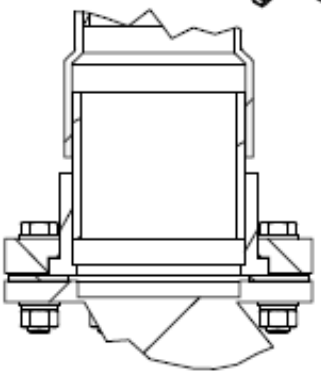




HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

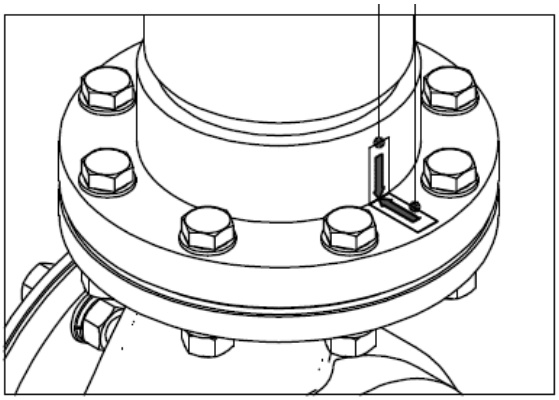


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

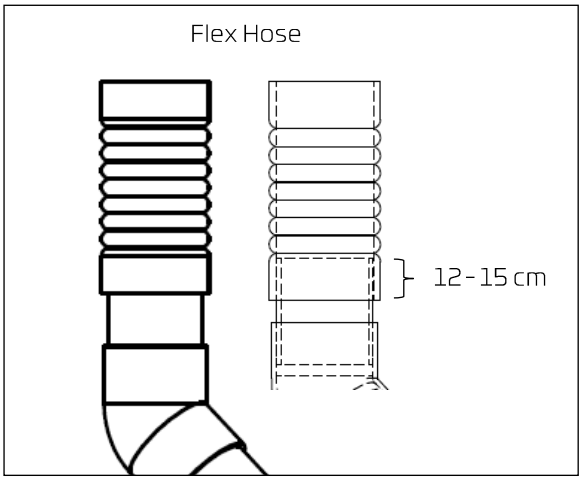
Step 8 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

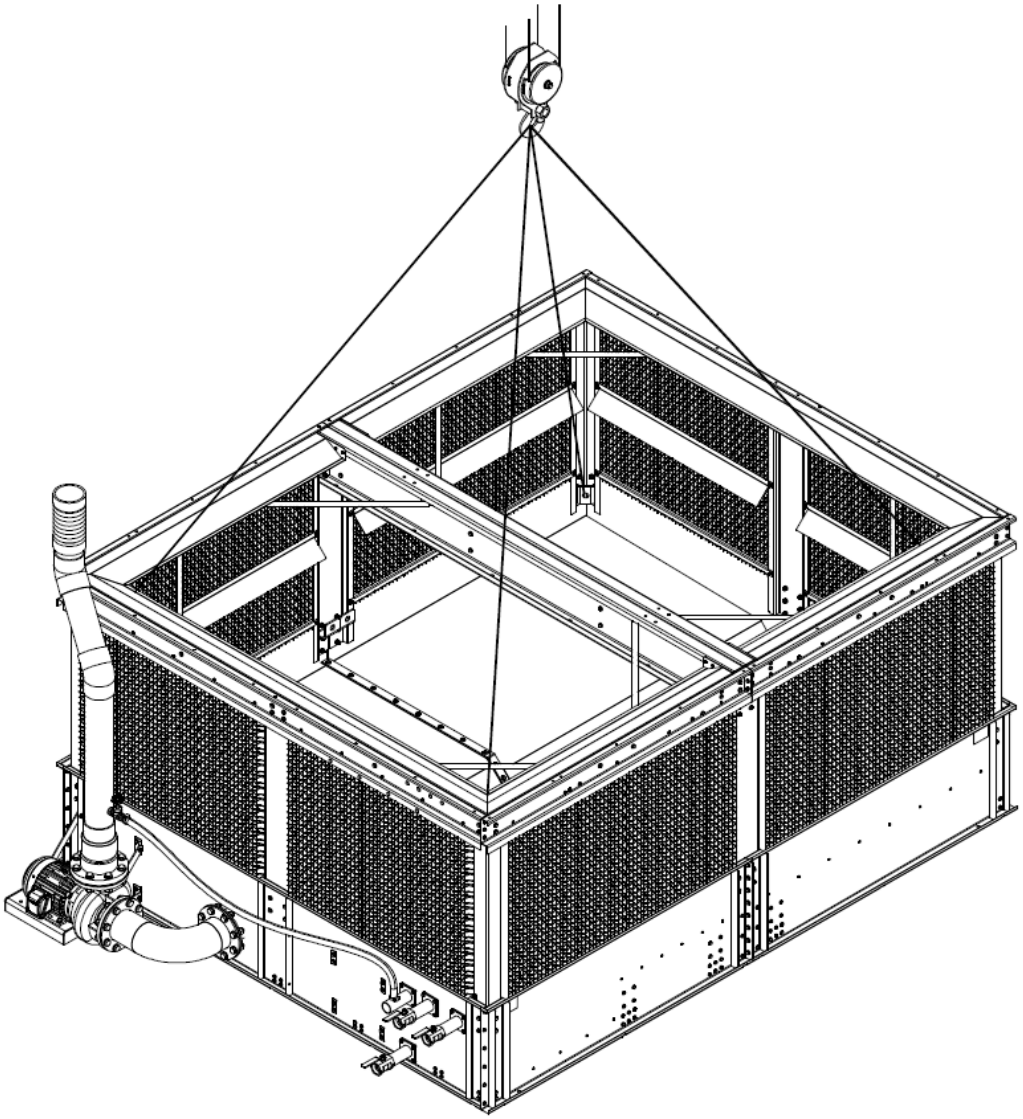
** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

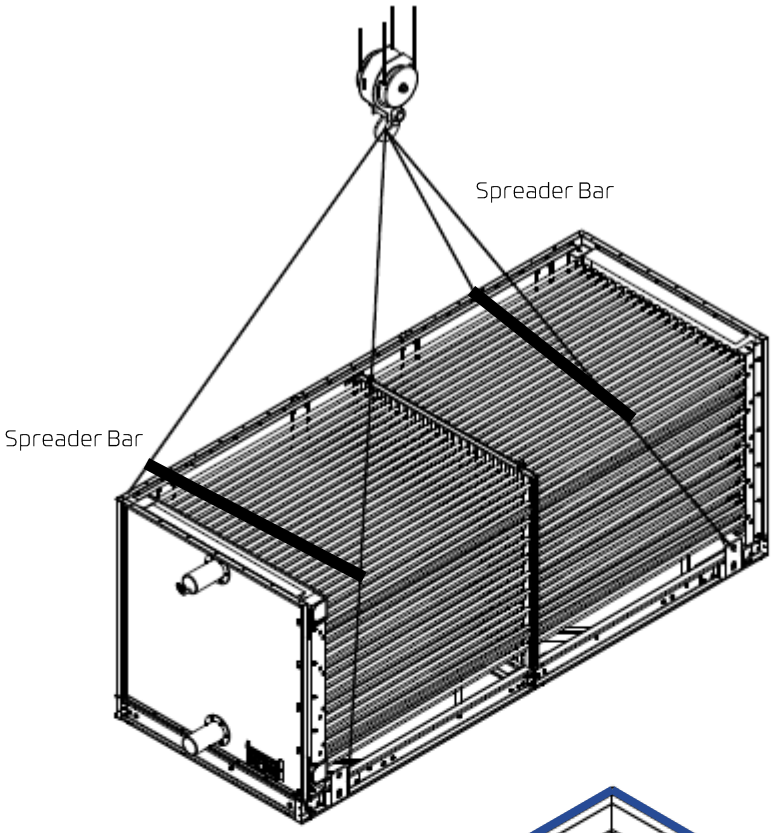
Step 9 : Move Assembled Basin to Position

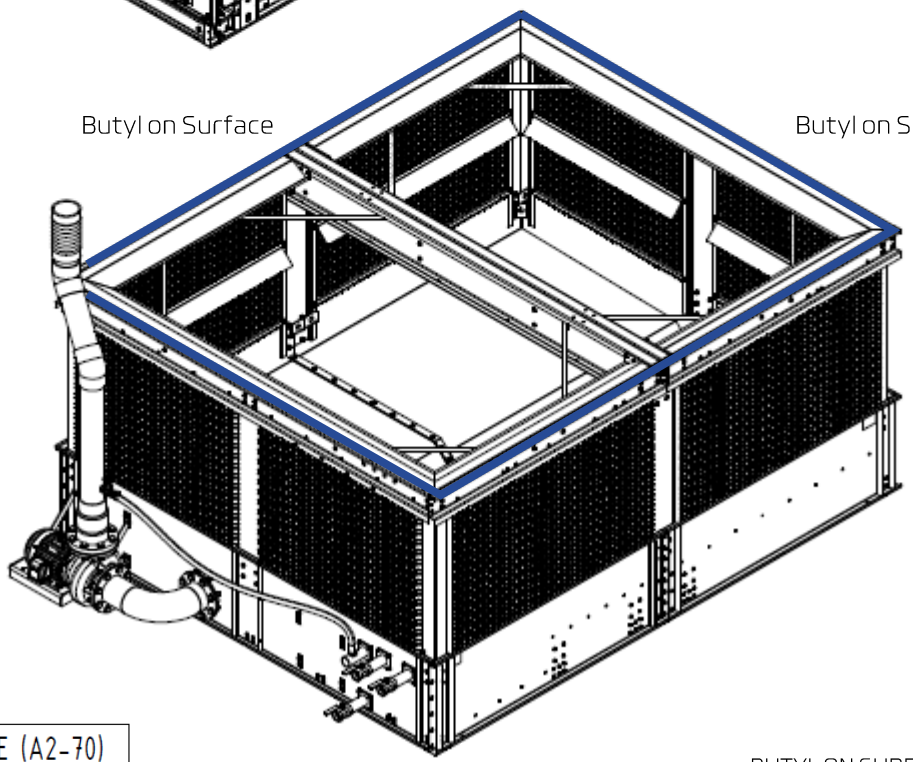


LOUVER

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

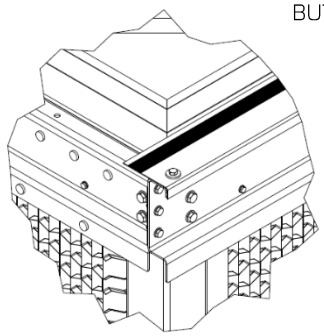
Coil Section Assembly



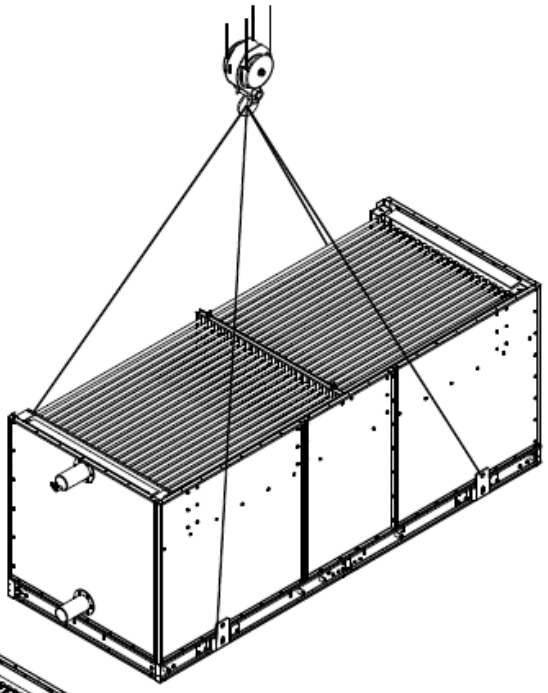


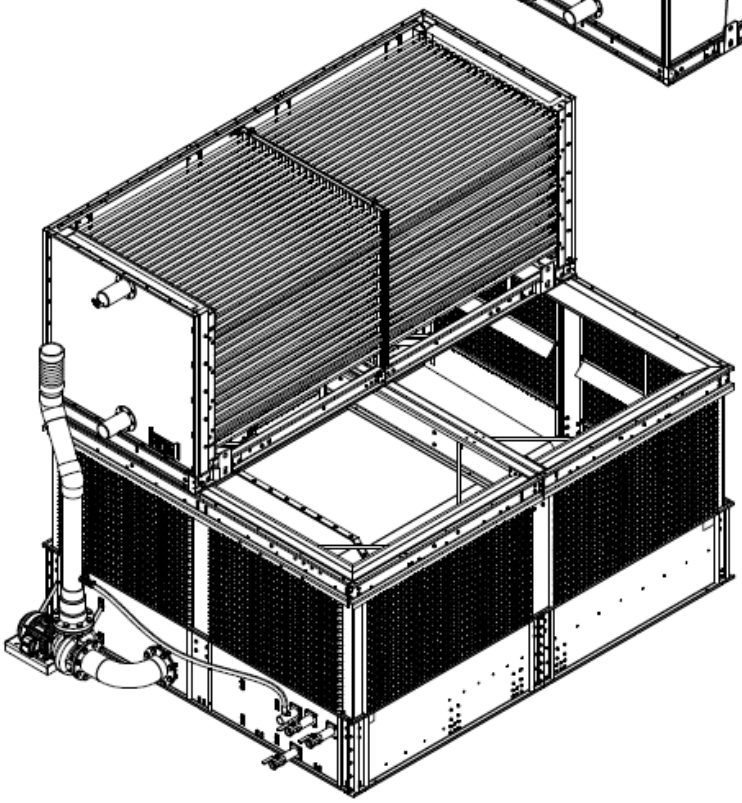
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

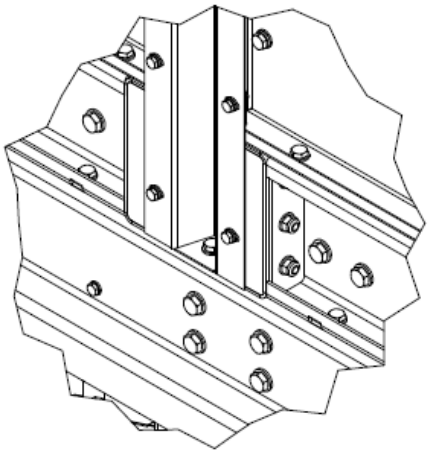
BUTYL ON SURFACE



Coil Section Assembly



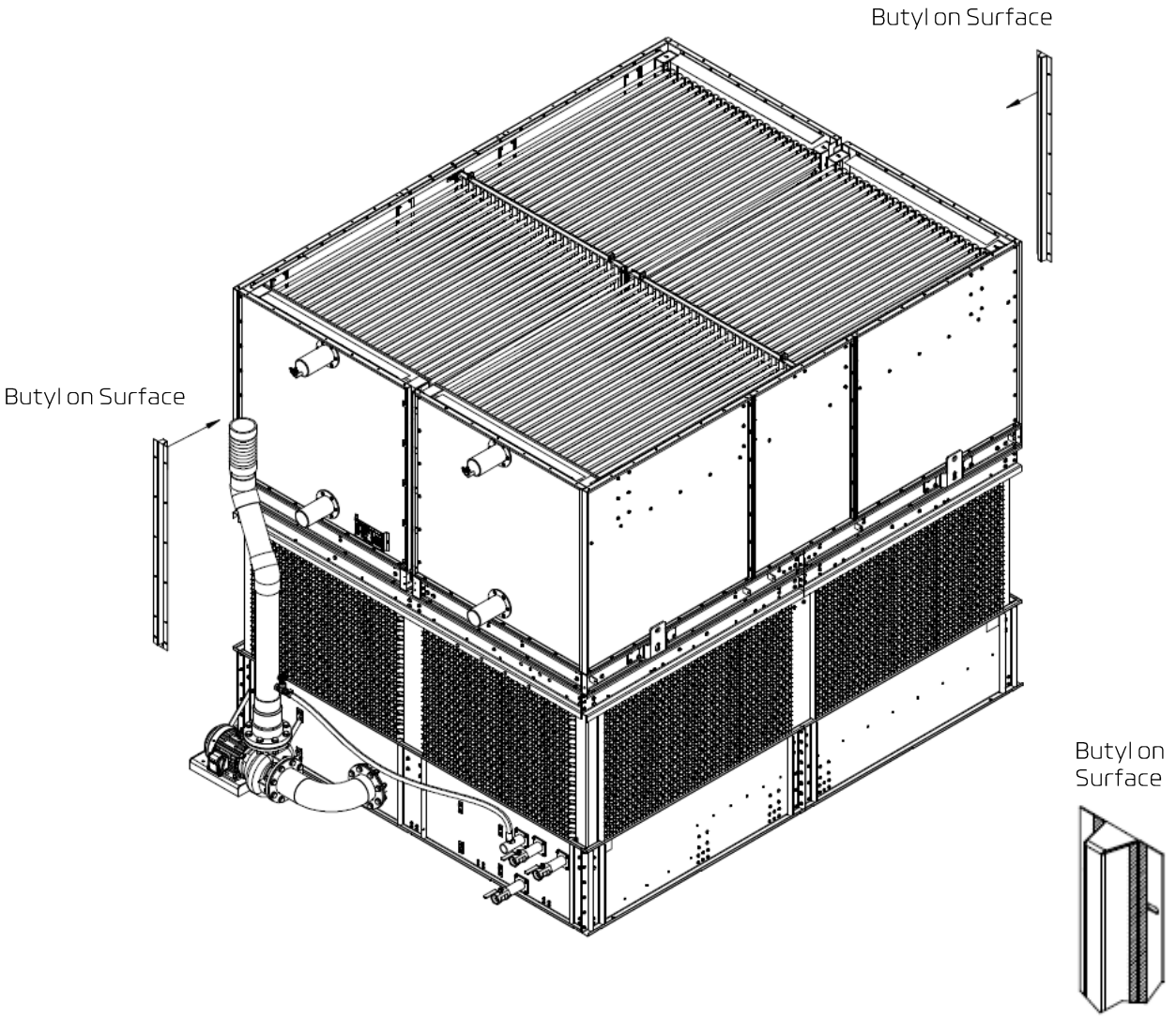


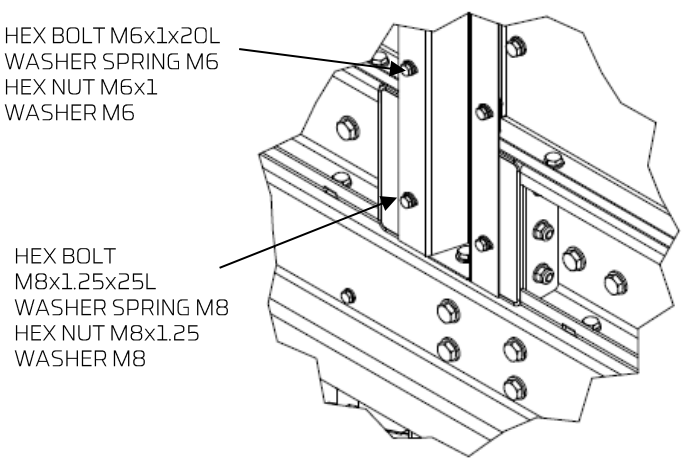


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

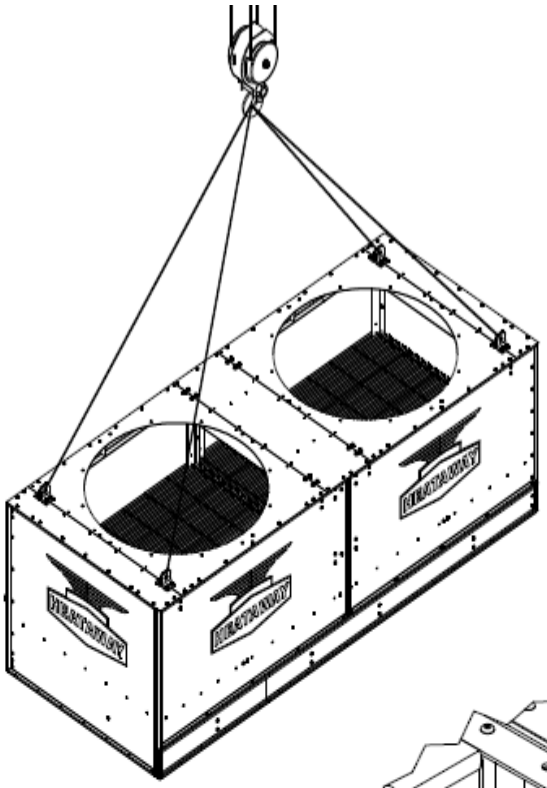
Coil Section Assembly

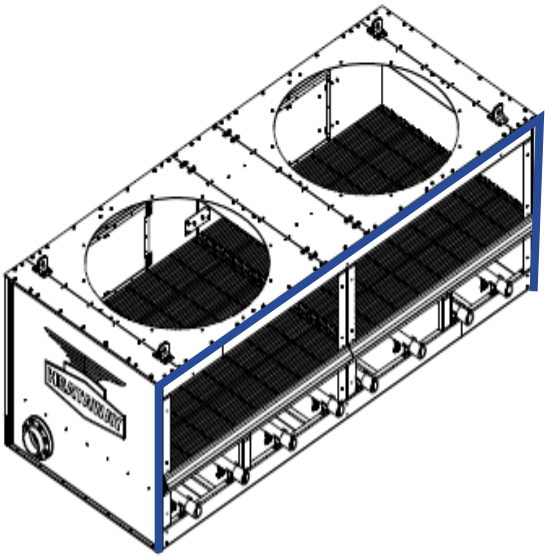




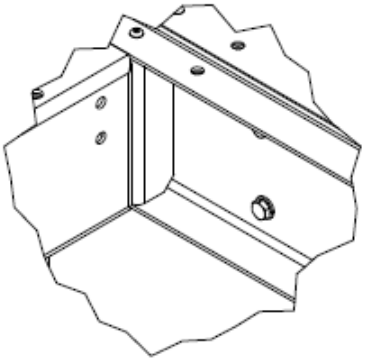
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

FAN Section Assembly

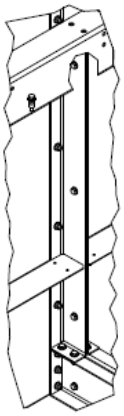




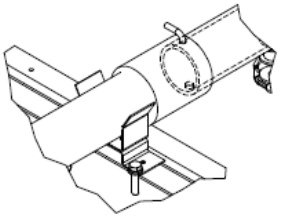
Butyl on Surface



HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

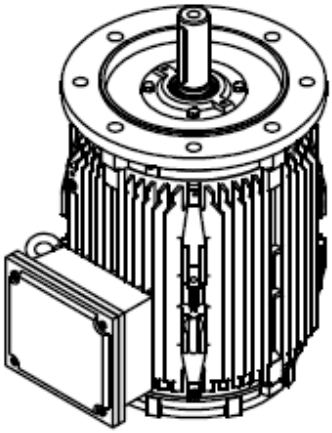


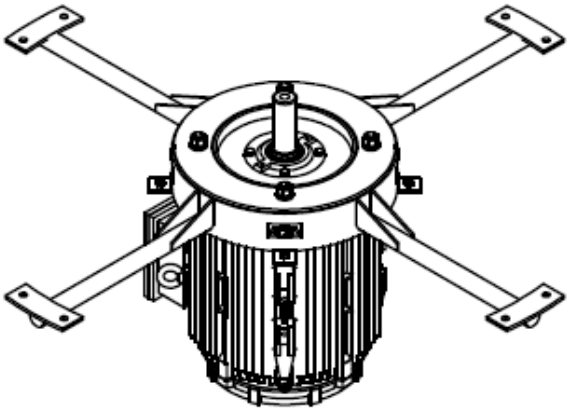
HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8



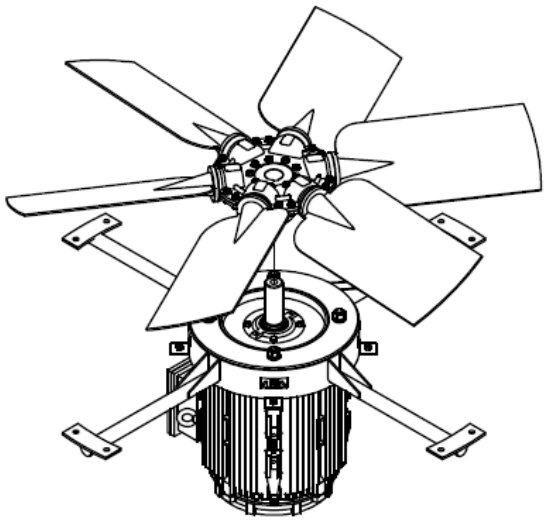
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

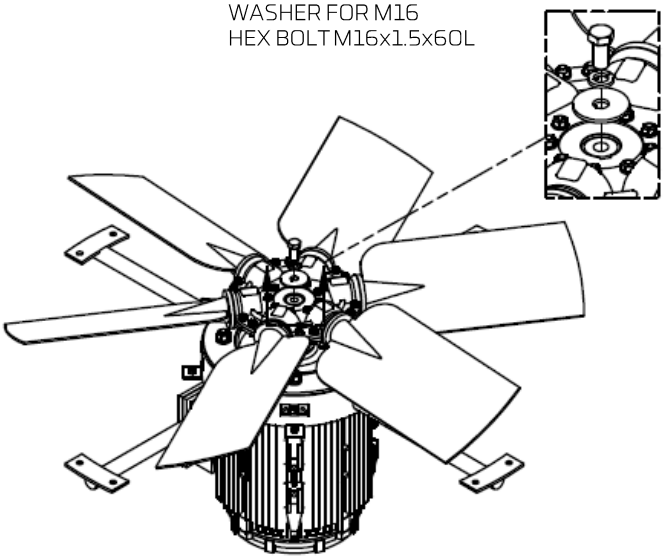
Fan Motor Assembly



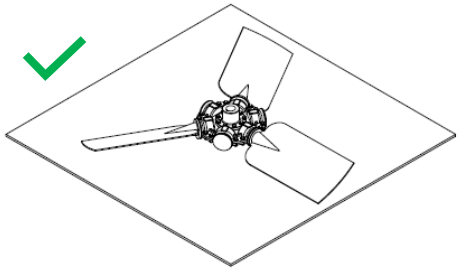


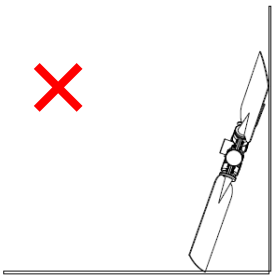
HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L





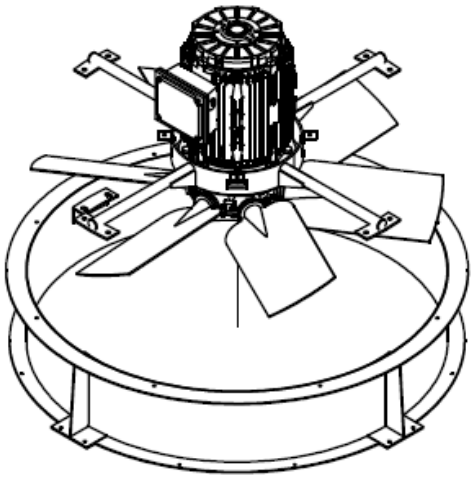
For prevents of FAN Blade warping or deformation please store by keep retaining plate side on the floor.



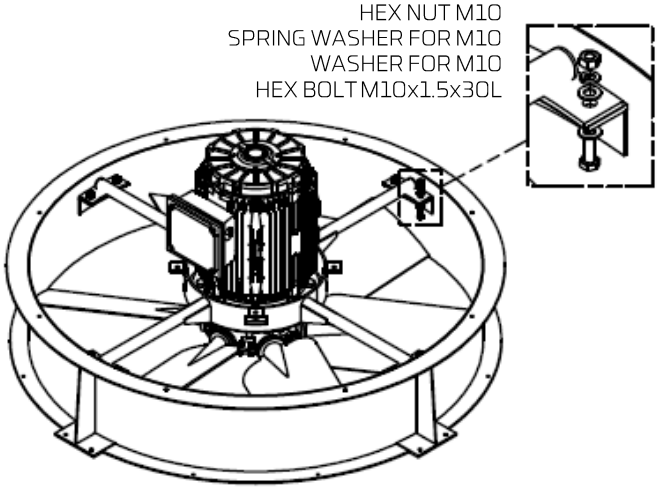


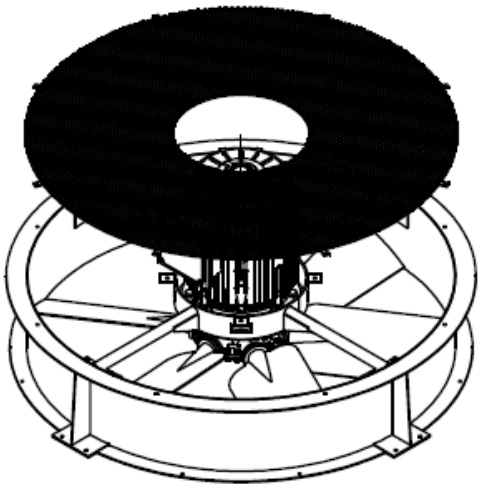
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Fan Motor Assembly

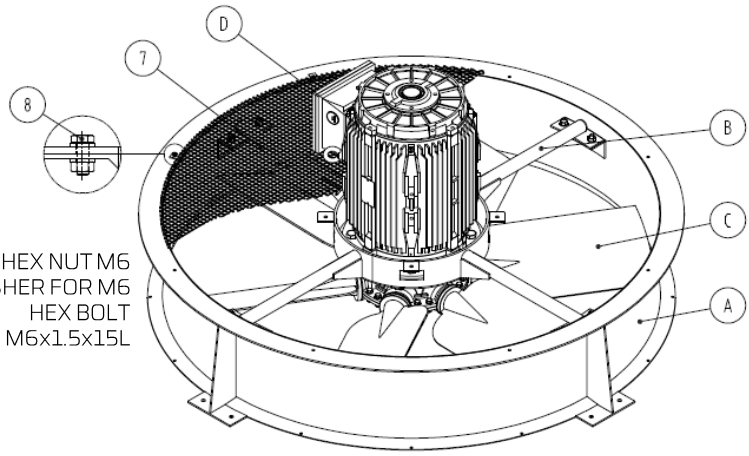


HEX NUT M10
SPRING WASHER FOR M10
WASHER FOR M10
HEX BOLT M10x1.5x30L





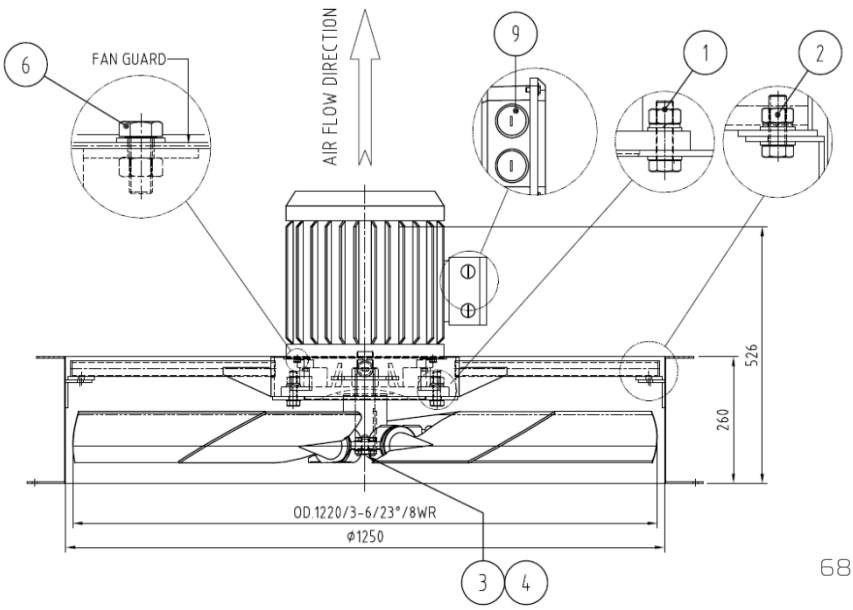
HEX NUT M6
WASHER FOR M6
HEX BOLT
M6x1.5x15L



HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L

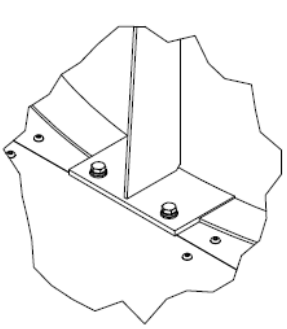
HEX NUT M10
SPRING WASHER FOR M10
WASHER FOR M10
HEX BOLT M10x1.5x30L

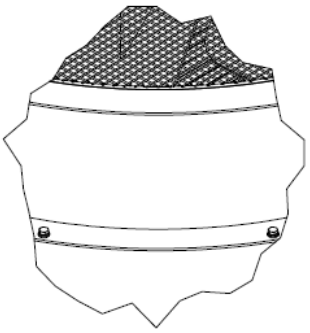
HEX NUT M8
WASHER FOR M8
HEX BOLT
M8x1.5x15L



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

FAN Motor Assembly

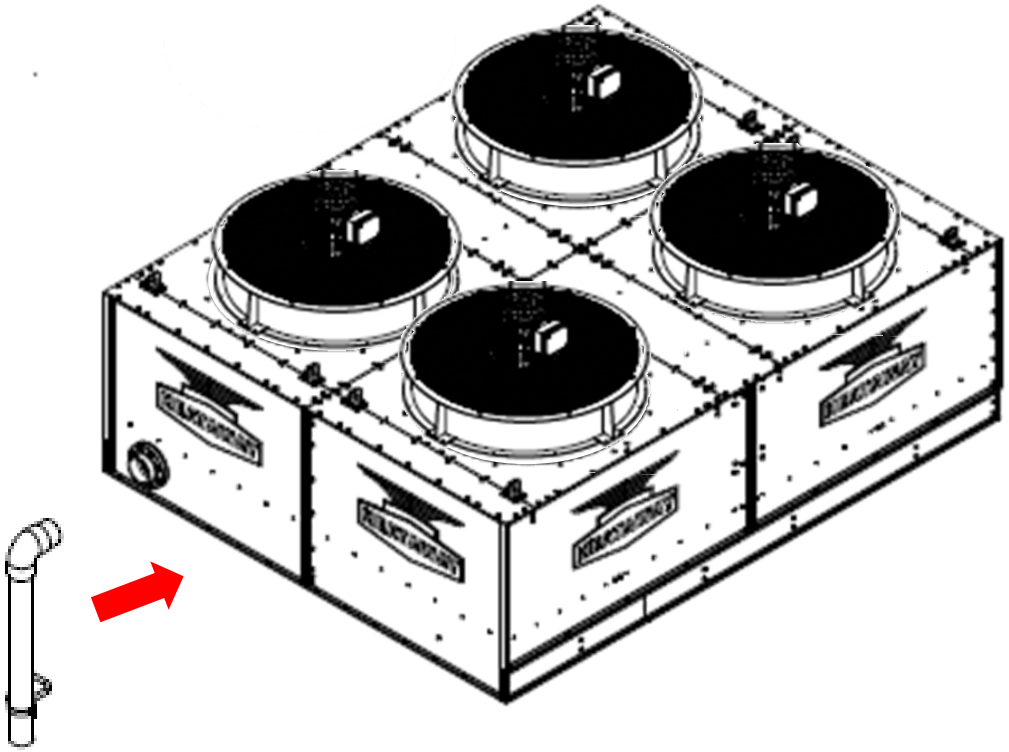


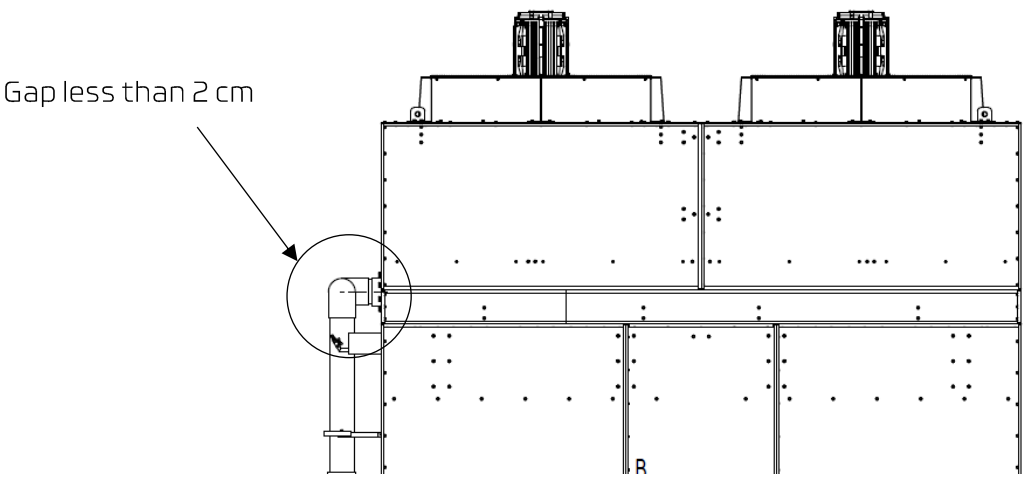


HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Assembly Upper water pipe

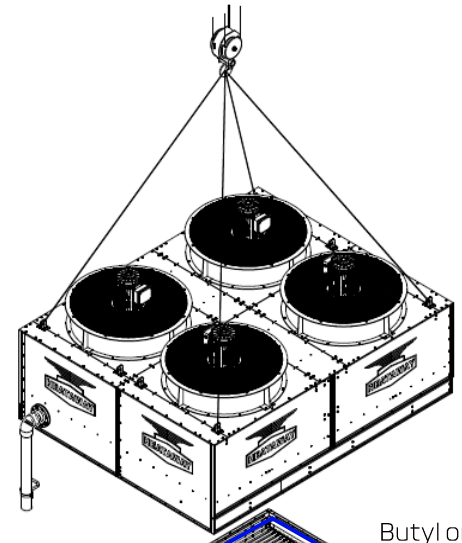


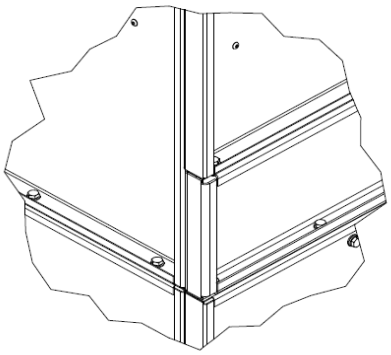


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

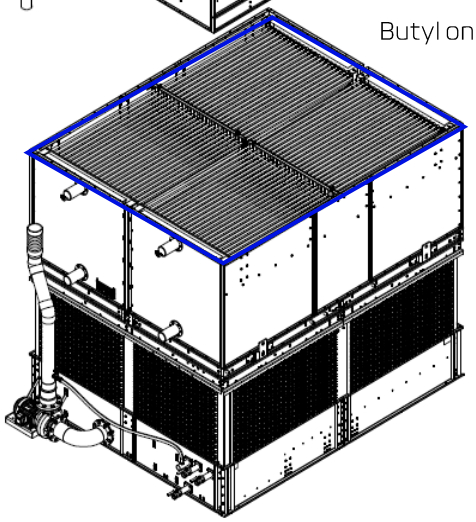
Final Assembly

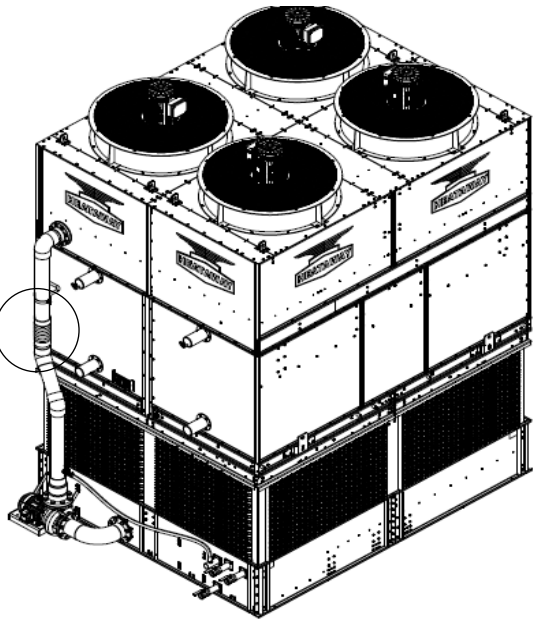


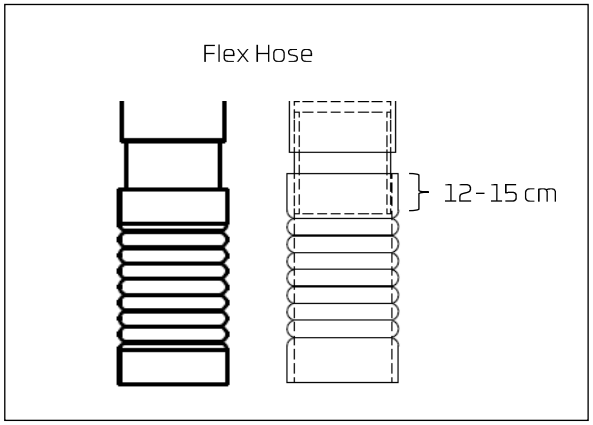


HEX BOLT
M8x1.25x20L
WASHER SPRING M8
WASHER M8
HEX NUT M8 1.25

Butyl on Surface







TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

HEATAWAY

BRAND-NEW
9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

10' X 18'

Model

EC9-2250-1018C-S

EC9-2520-1018C-M

EC9-2550-1018C-S

EC9-2860-1018C-M

EC9-2990-1018C-L

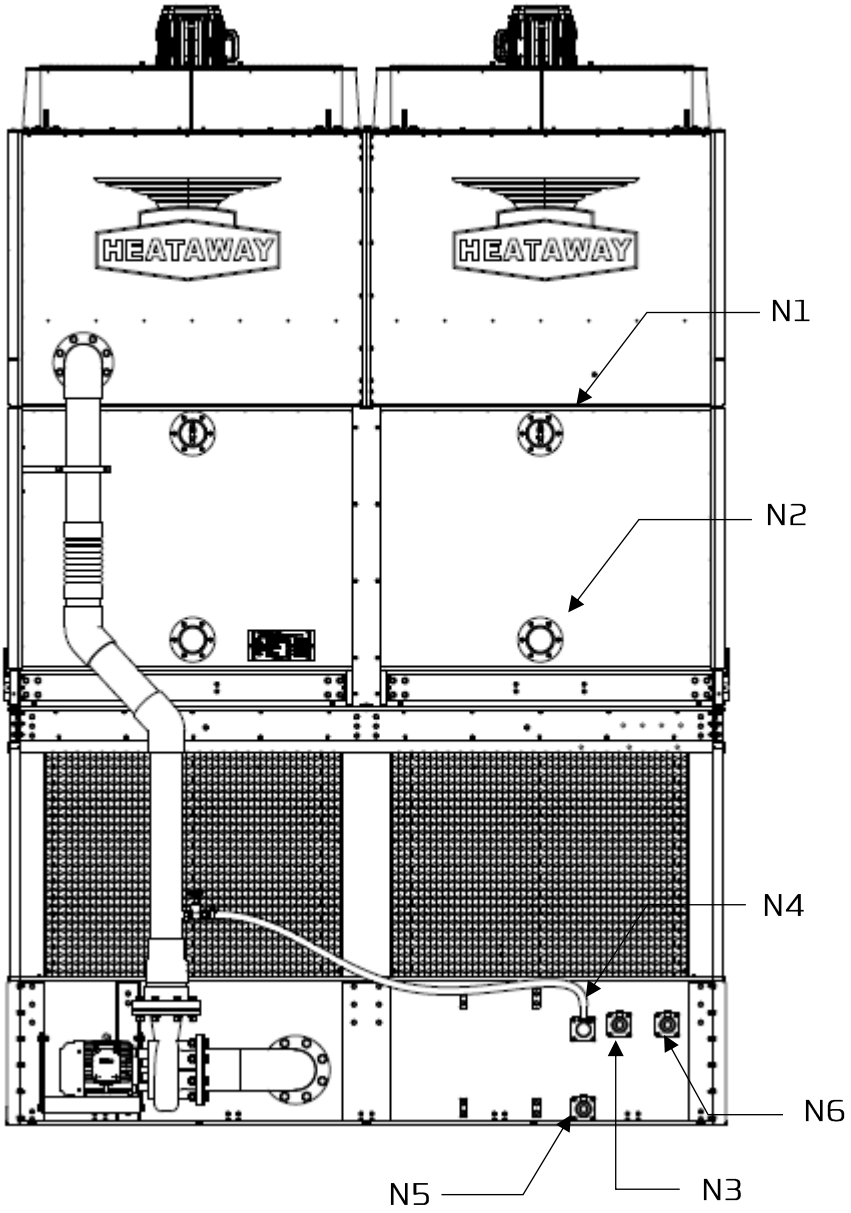
EC9-3120-1018C-M

EC9-3250-1018C-L



www.heataway.net

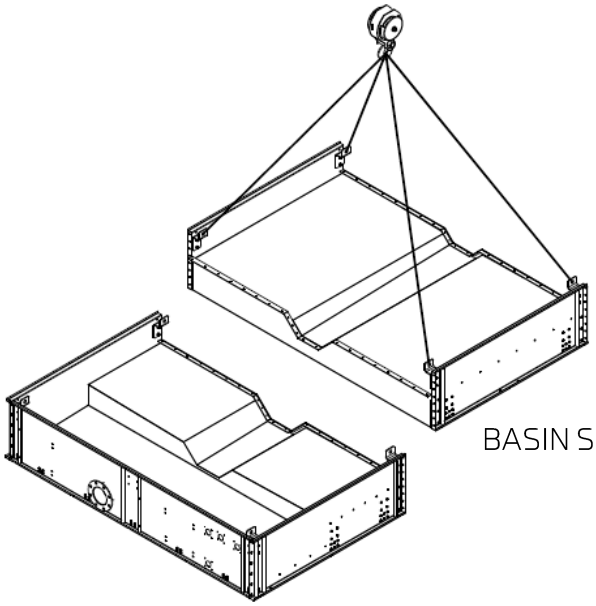
Piping Connection



PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

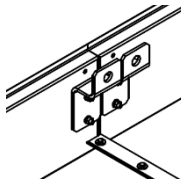
Basin Section Assembly

➤ Step 1 : Start Assembly from item " BASIN SECTION-F " And " BASIN SECTION-M "

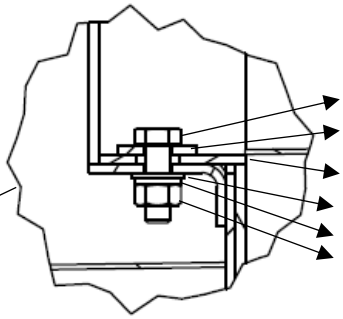


BASIN SECTION-M

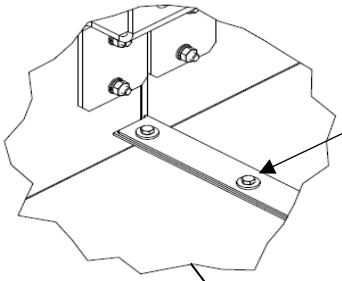
BASIN SECTION-F

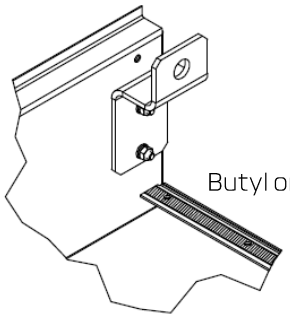


Caution : **Remove Lifting lug** after assembly basin section finished.

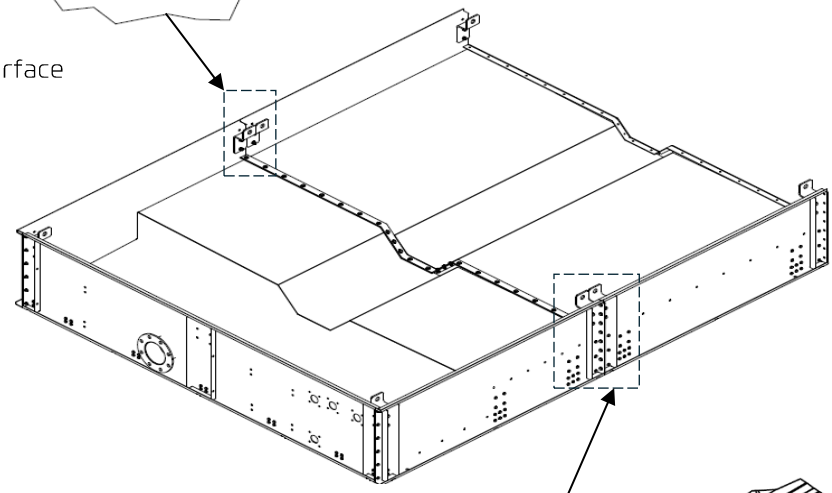


HEX BOLT M8x1.25x25L
WASHER
SILICONE
WASHER M8
SPRING WASHER M8
HEX NUT M8x1.25

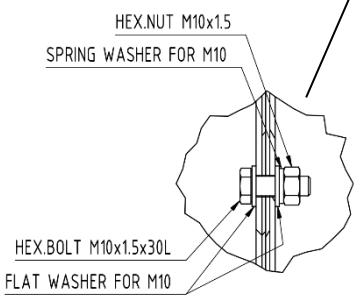




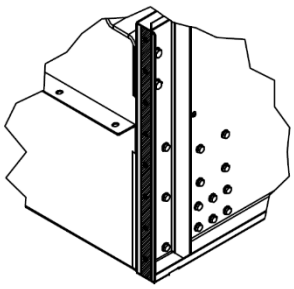
Butyl on Surface



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0



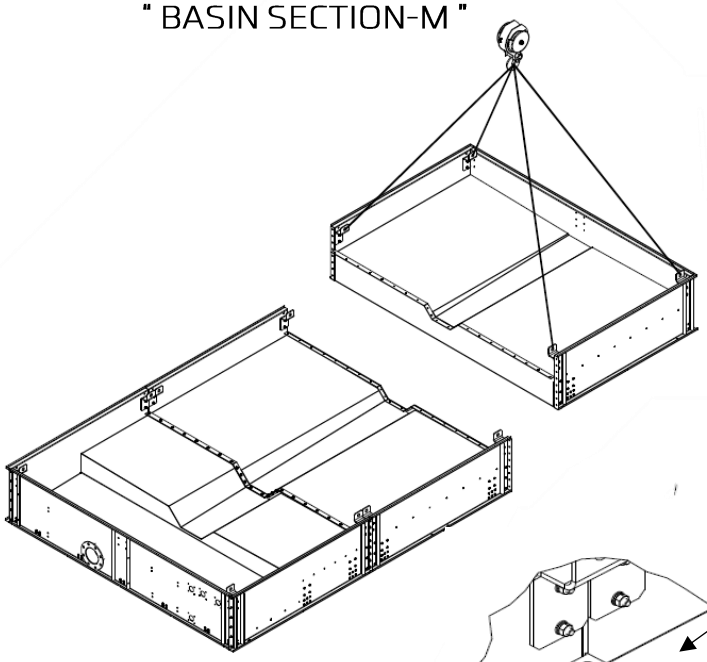
HEX.NUT M10x1.5
SPRING WASHER FOR M10
HEX.BOLT M10x1.5x30L
FLAT WASHER FOR M10

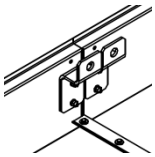


Butyl on Surface

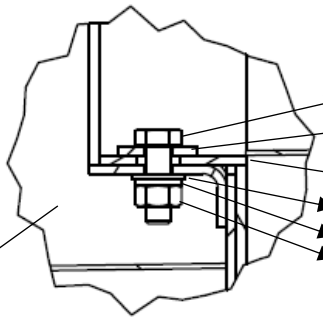
Basin Section Assembly

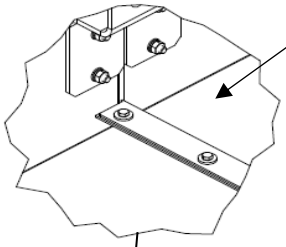
➤ Step 2 : Assembly " BASIN SECTION-B " with " BASIN SECTION-F " And " BASIN SECTION-M "

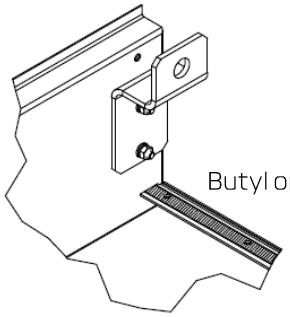


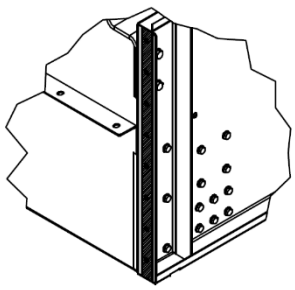


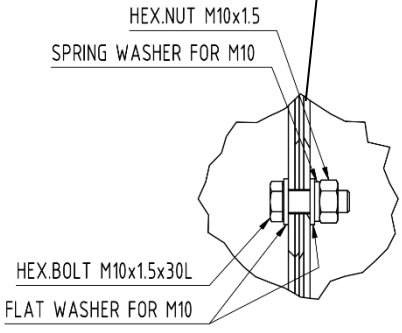
Caution : **Remove Lifting lug** after assembly basin section finished.







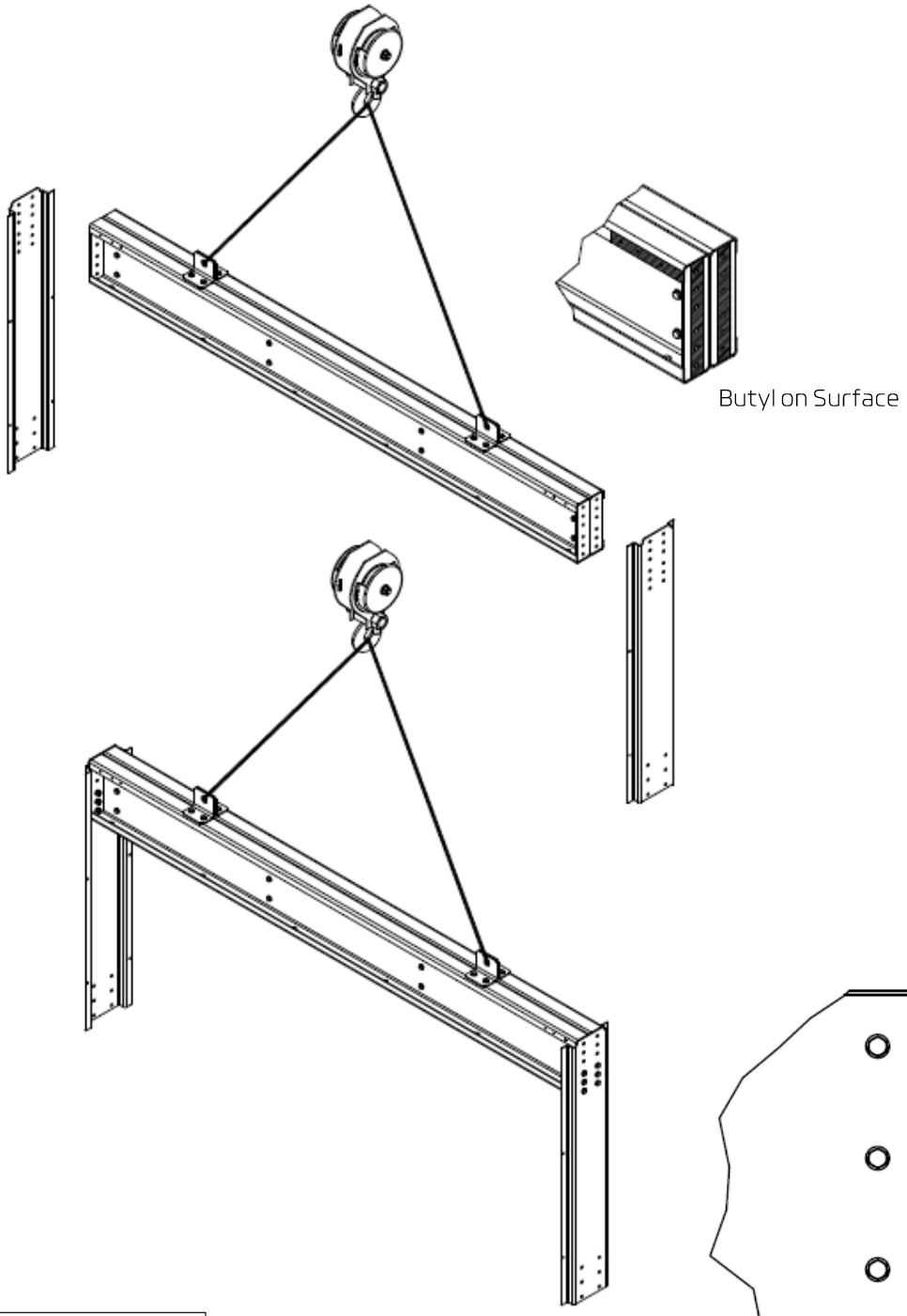




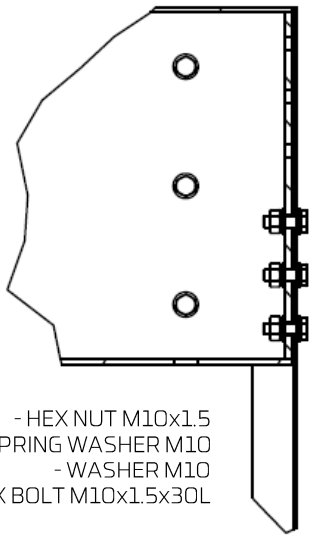
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

Step 3 : Assembly Support Frame



Butyl on Surface

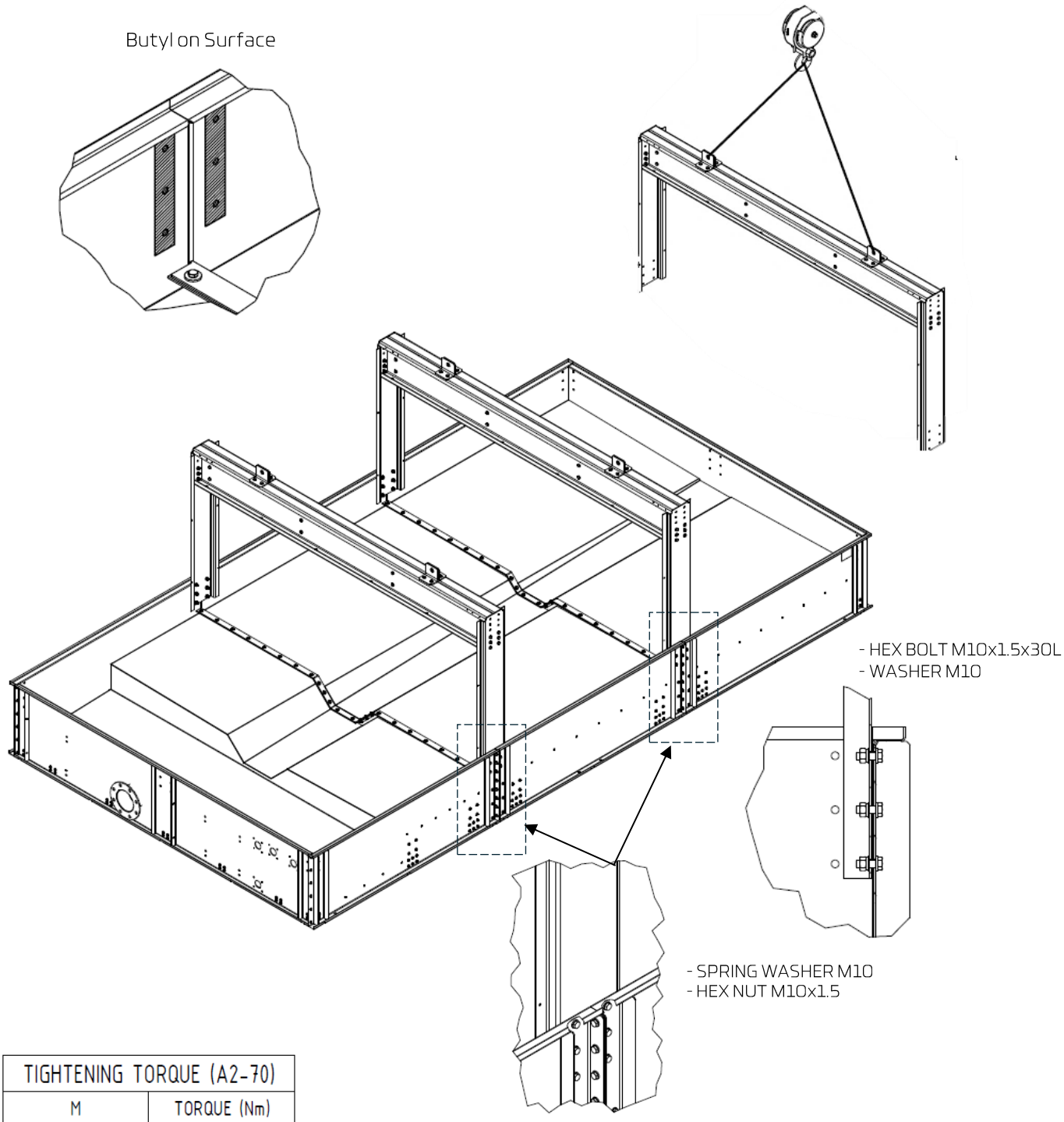


- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x30L

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

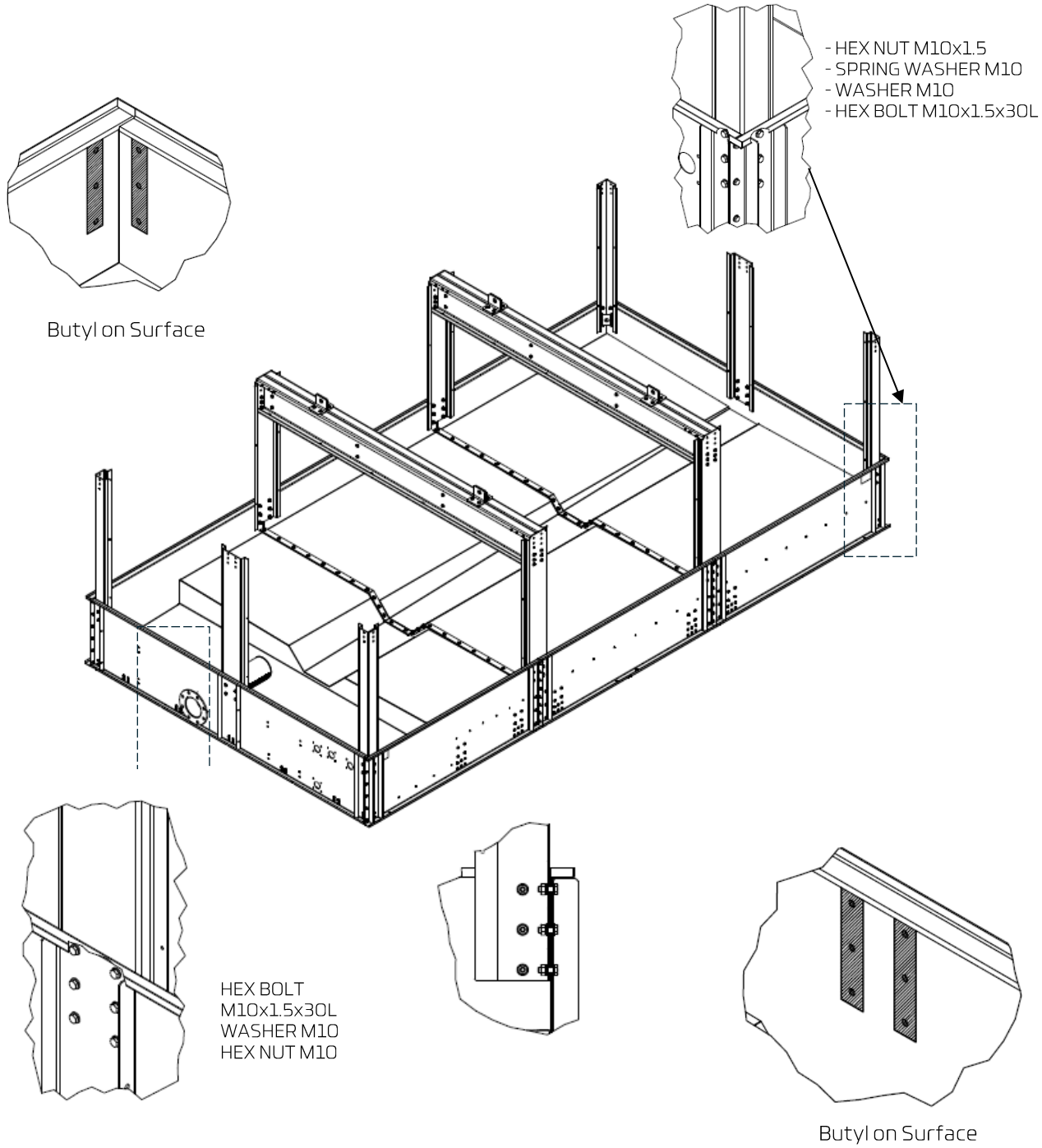
➤ Step 4 : Assembly Frame Support with BASIN Set Assembly



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

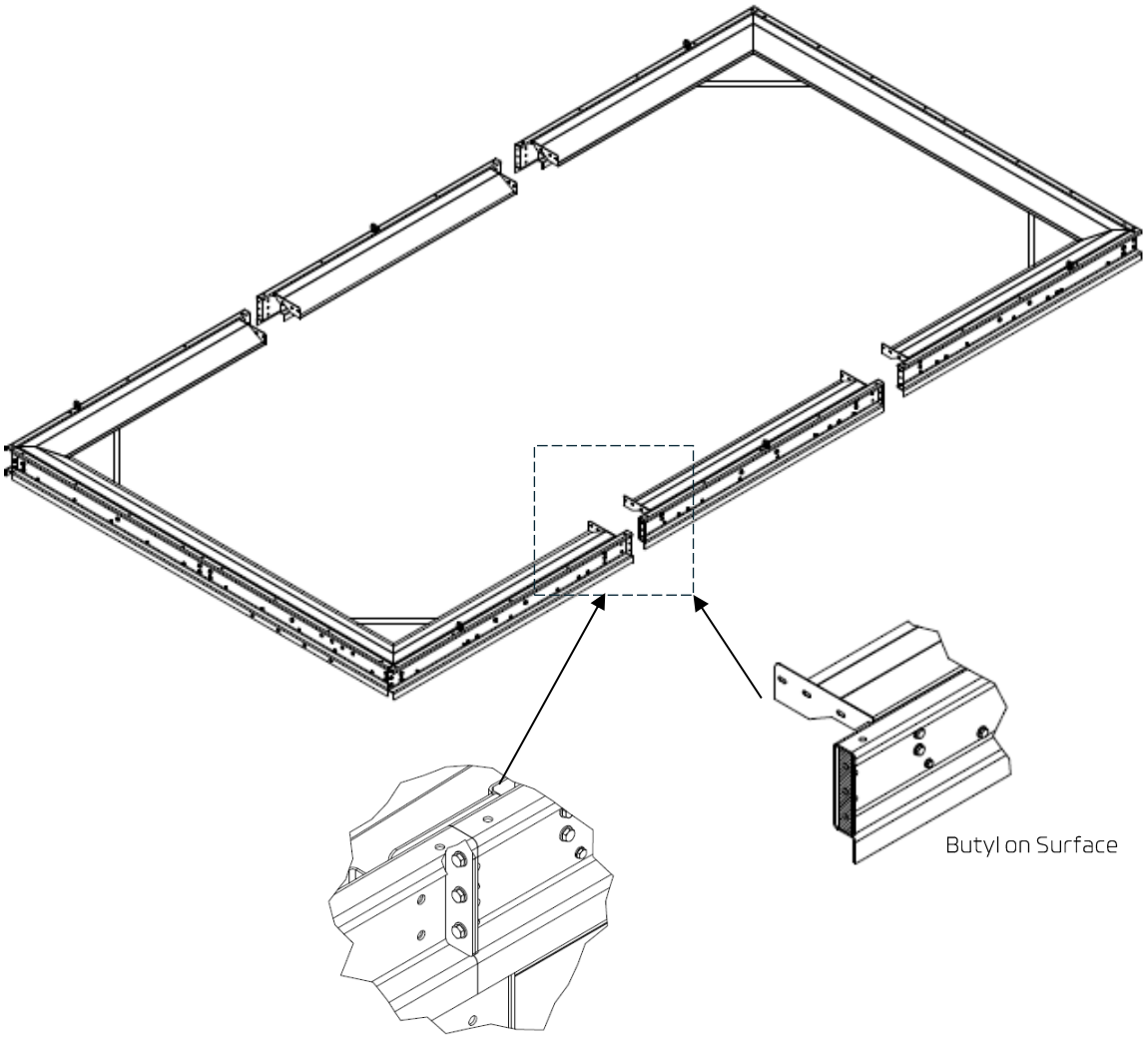
Step 5 : Assembly Frame Support with BASIN Set Assembly

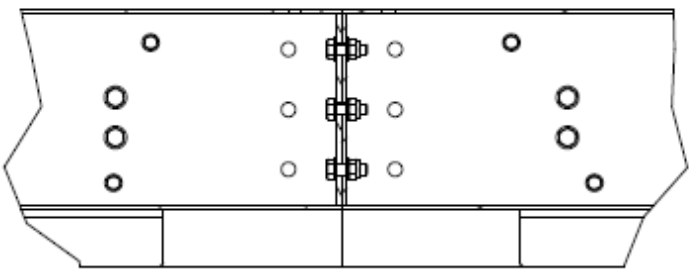


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

➤ Step 6 : Assembly Top Frame of BASIN SECTION



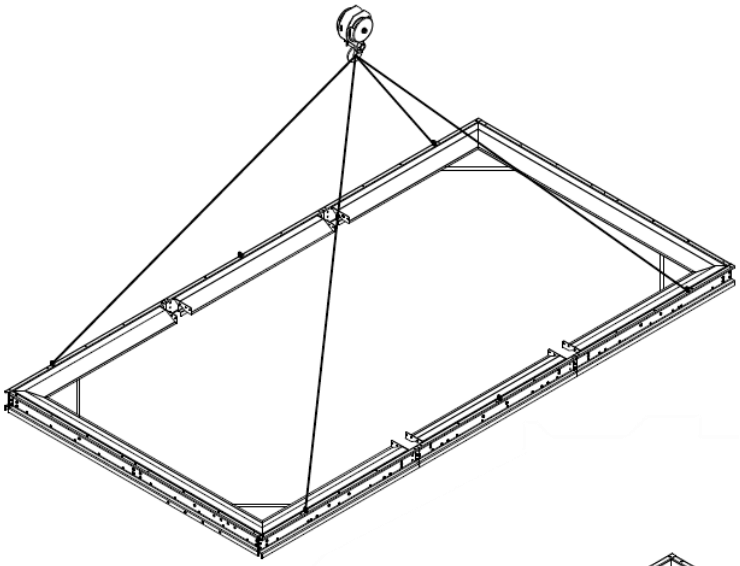


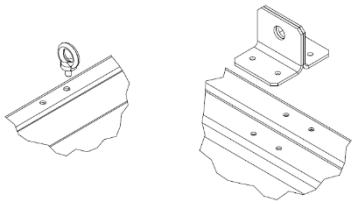
HEX BOLT
M8x1.25x25L
WASHER M8
HEX.LOCK NUT
M8x1.25

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

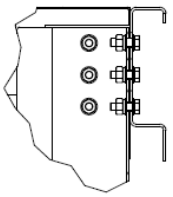
➤ Step 7 : Install Top Frame to BASIN SECTION and assembly MID FRAME

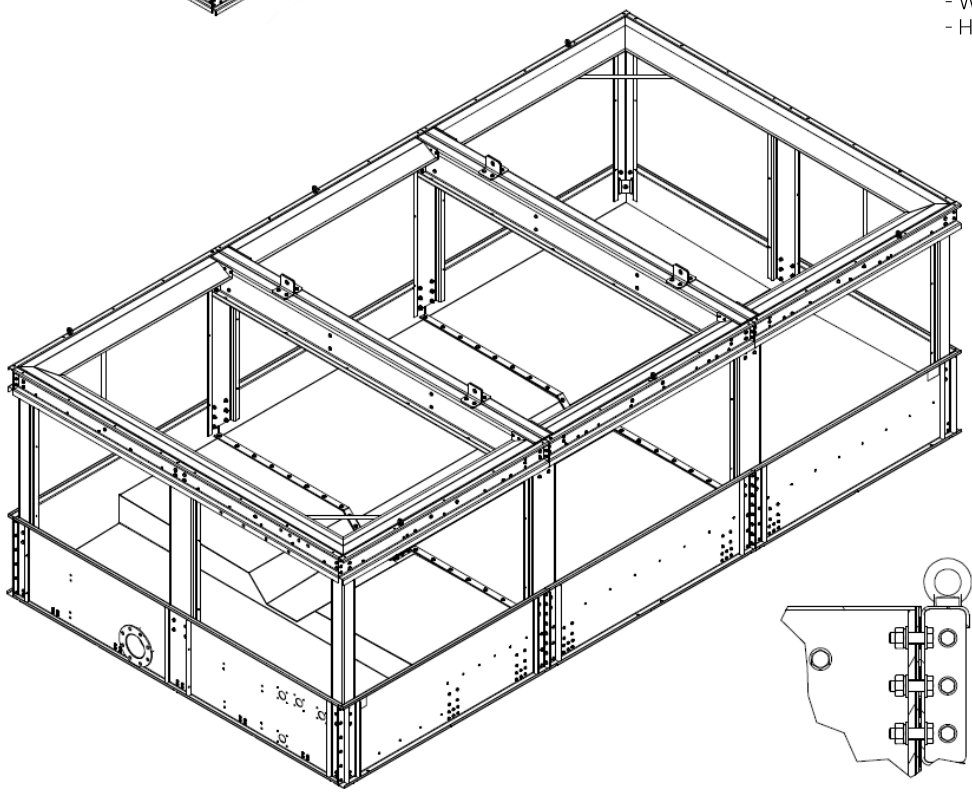




Caution : **Remove Lifting lug and eye bolt** after assembly basin section finished.

- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x35L





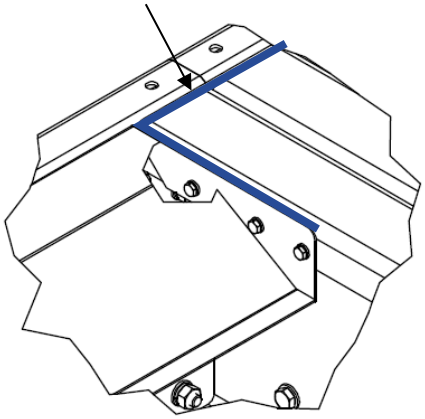
- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x35L

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

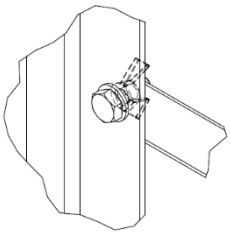
Basin Section Assembly

Step 8 : Assembly support frame and Deflector

SILICONE ON SURFACE

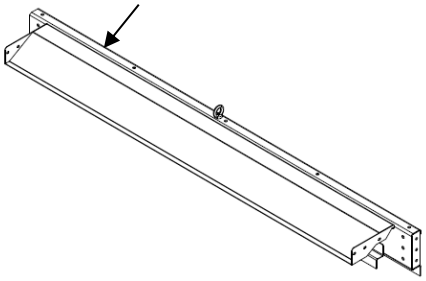


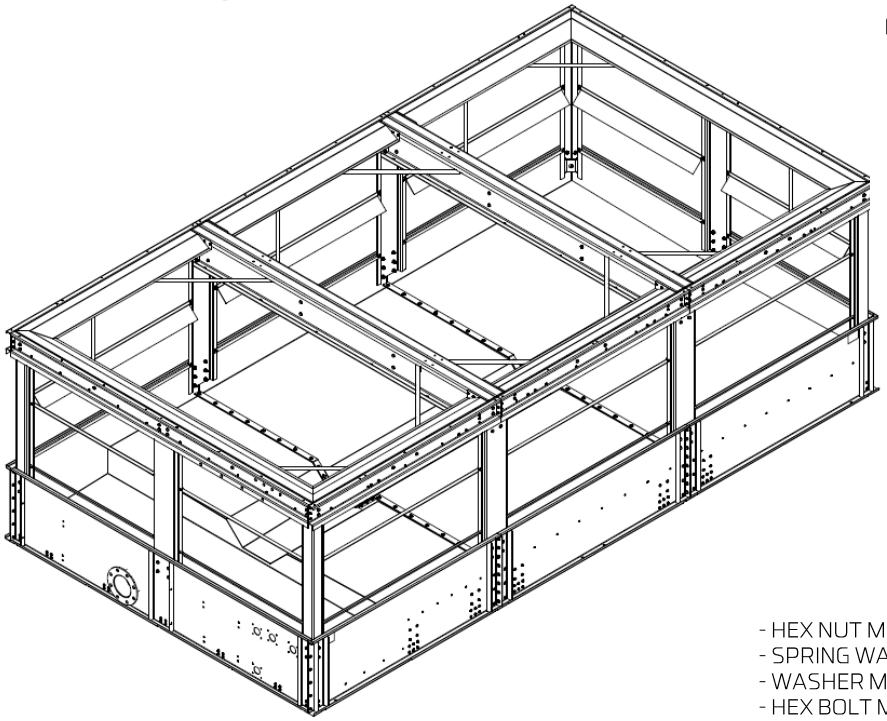
- HEX NUT M6x1
- SPRING WASHER M6
- WASHER M6
- HEX BOLT M6x1x20L



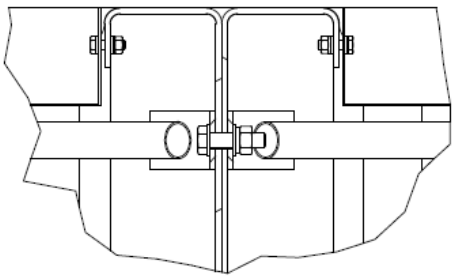
LIIFTING EYE BOLT
M10x1.5x17L
WASHER FOR M10
HEX NUT M10x1.5

SILICONE AND BUTYL ON SURFACE





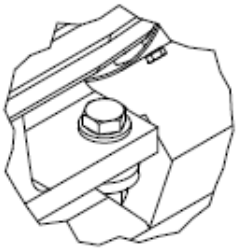
- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x30L

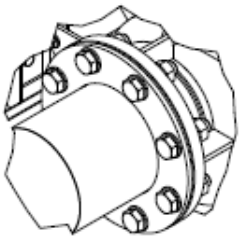


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

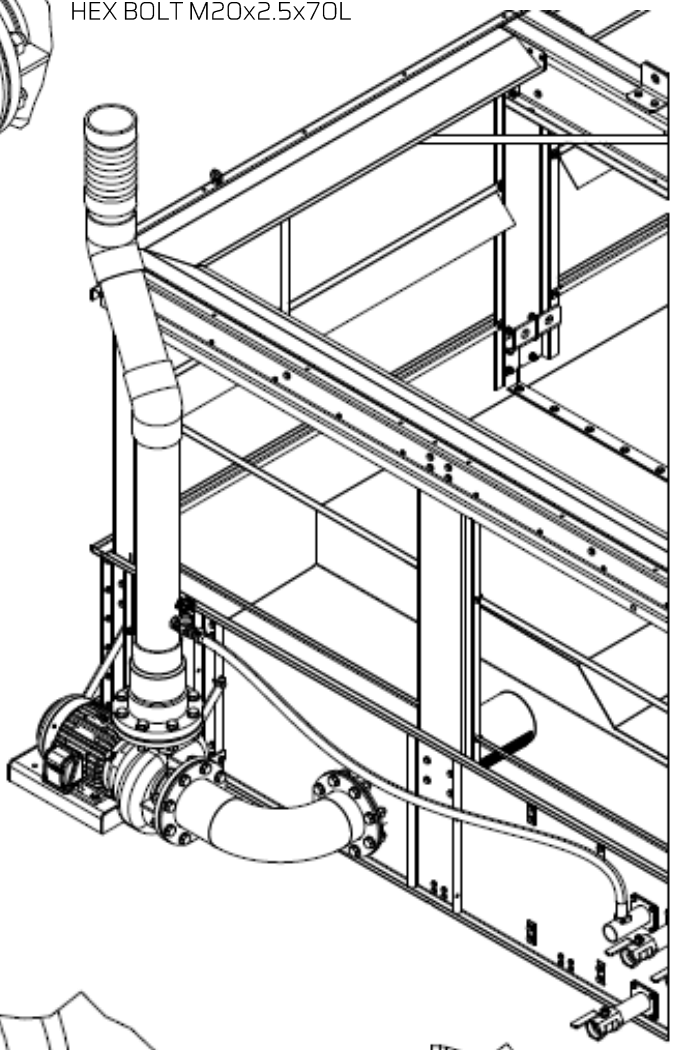
➤ Step 9 : Install water pipe and Ball Float Valve to BASIN SECTION

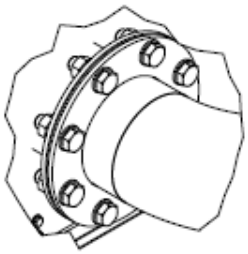




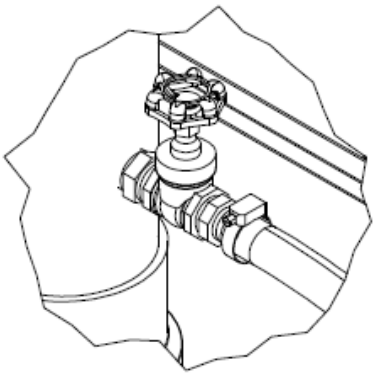
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x50L

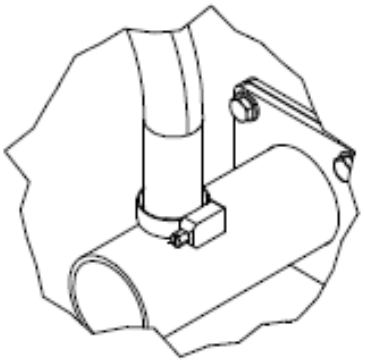




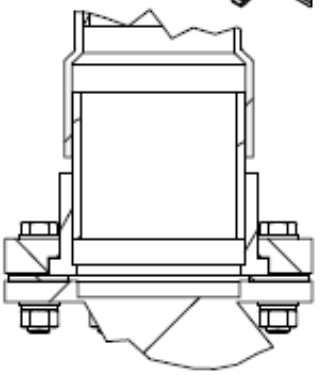
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L



HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

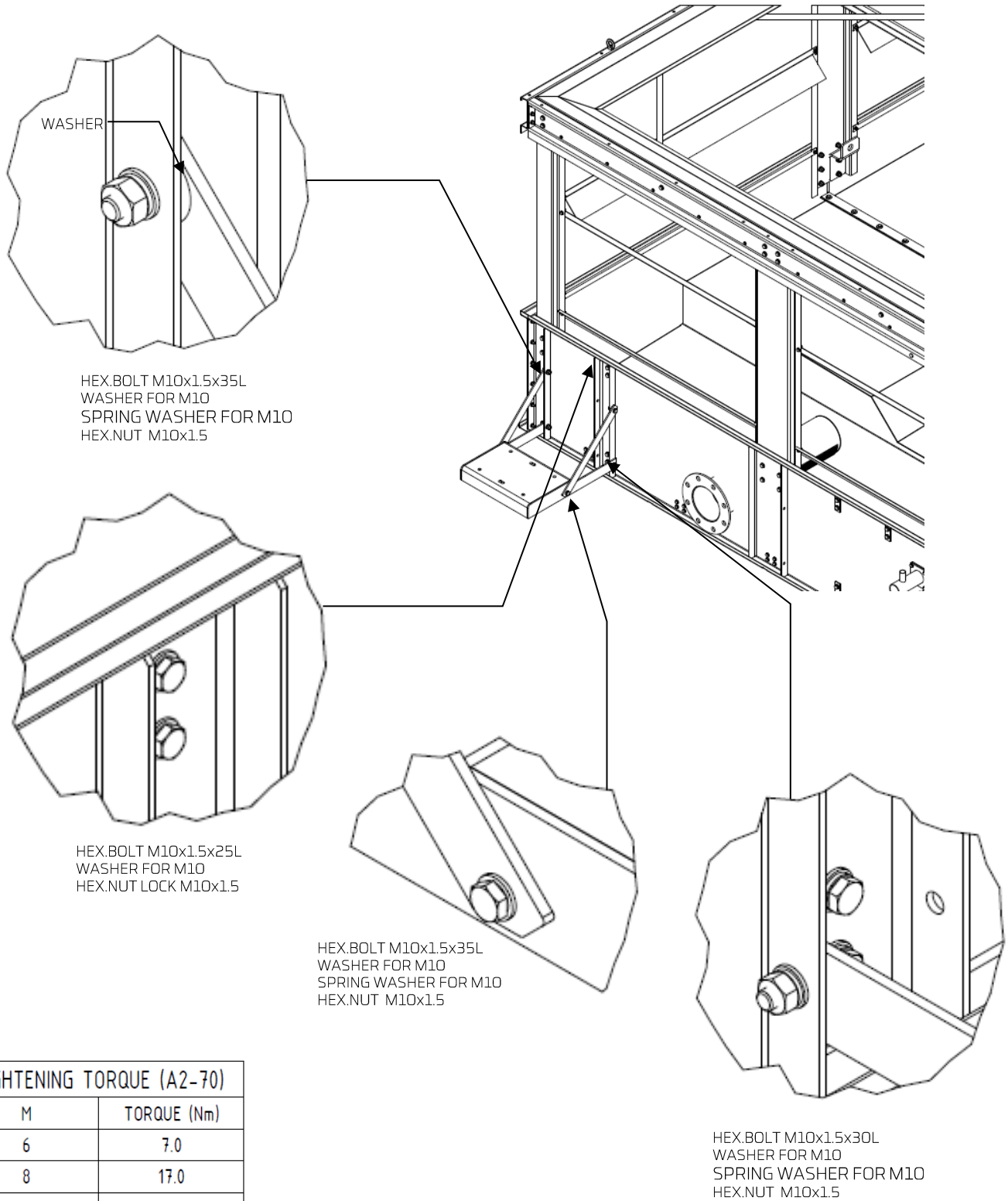


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

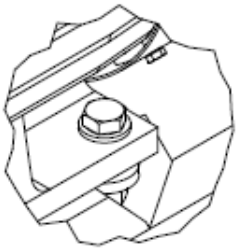
➤ Step 10 : Pump set assembly and install to BASIN SECTION

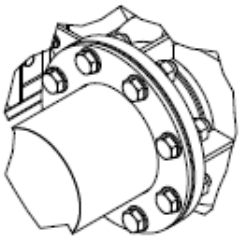


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

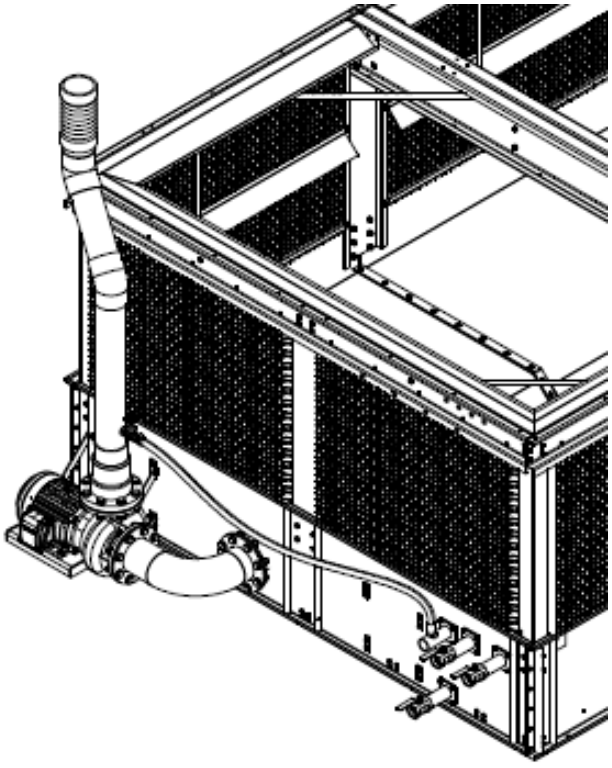
➤ Step 10 : Pump set assembly and install to BASIN SECTION

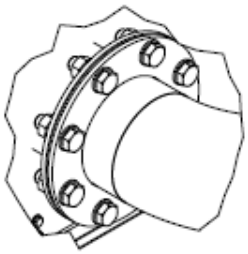




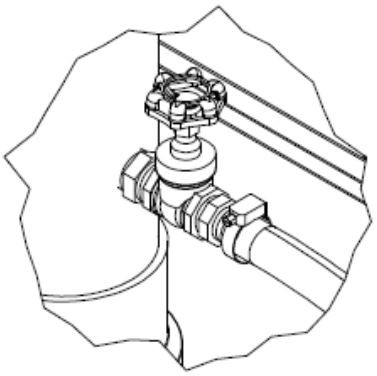
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

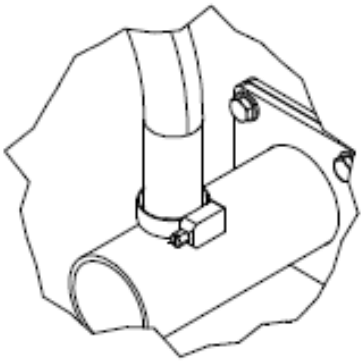




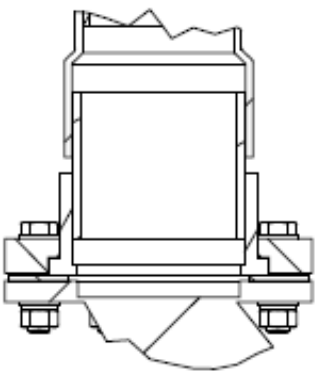
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L



HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

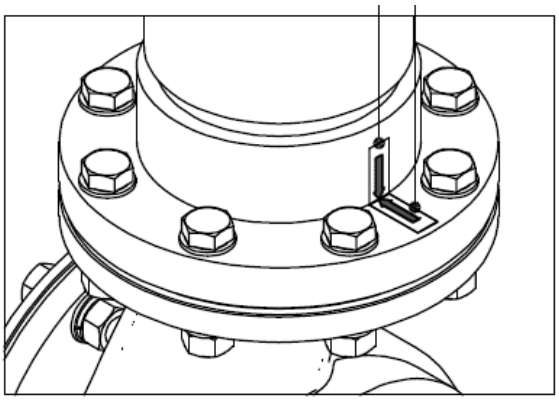


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

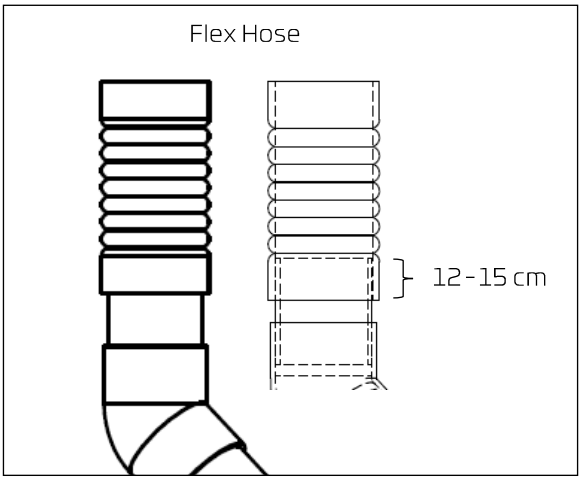
Step 10 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage then tighten securely with a hose clamp.

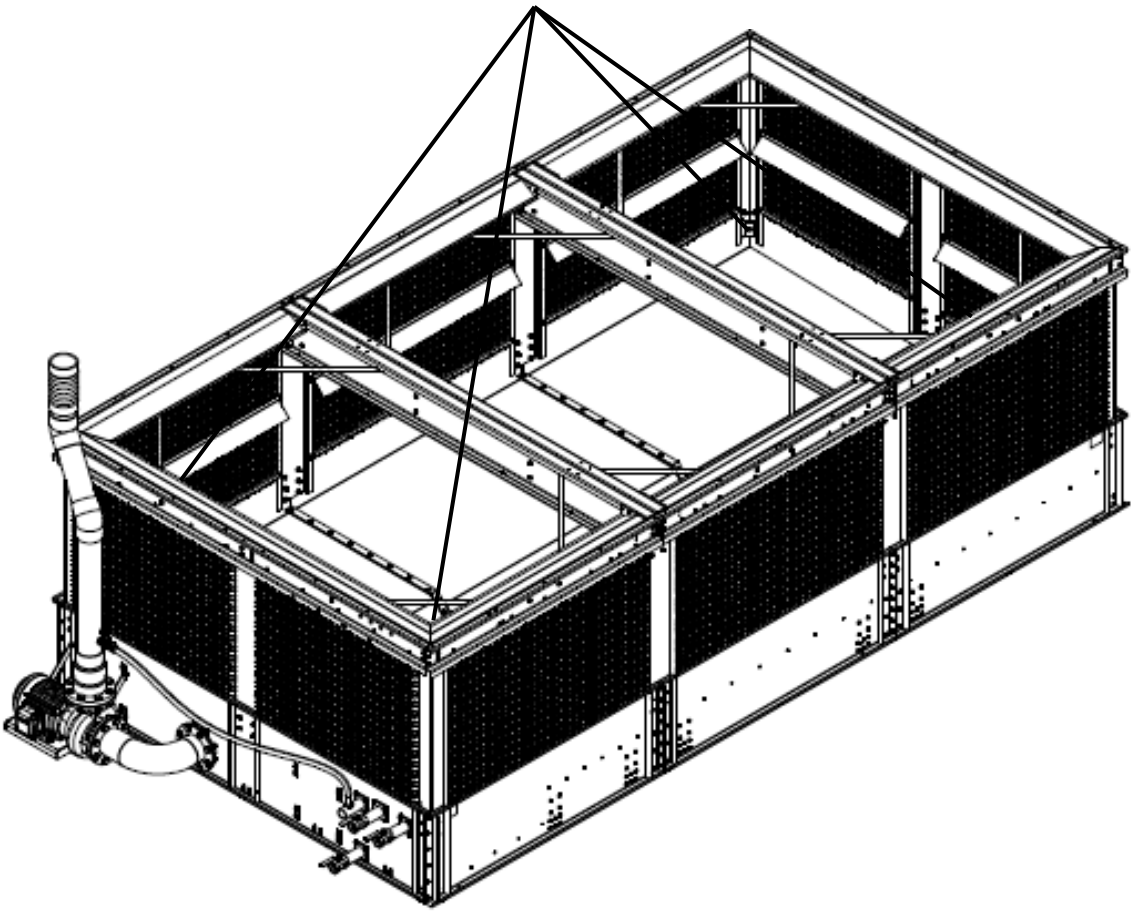
** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

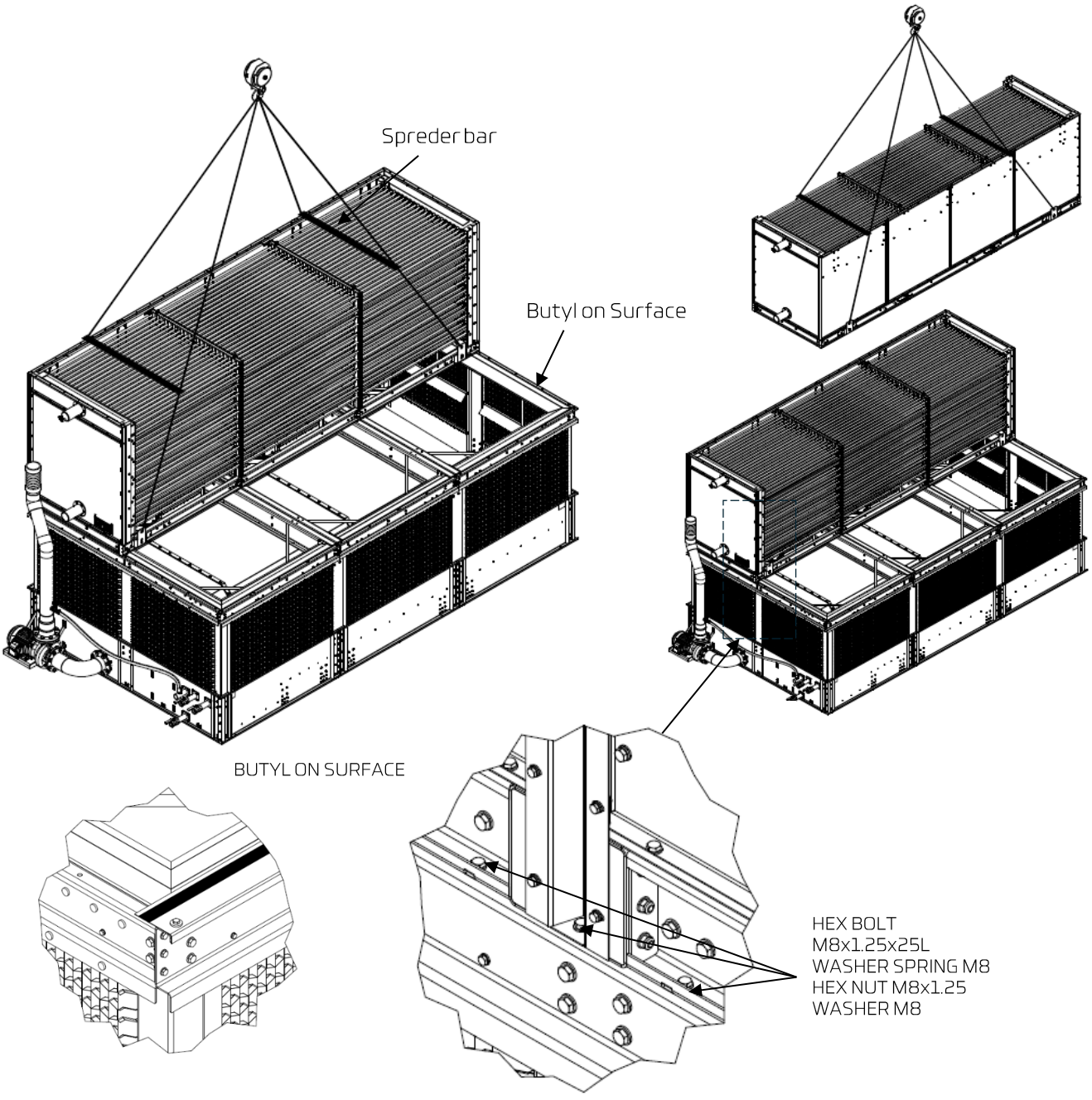
Move BASIN SECTION to position



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

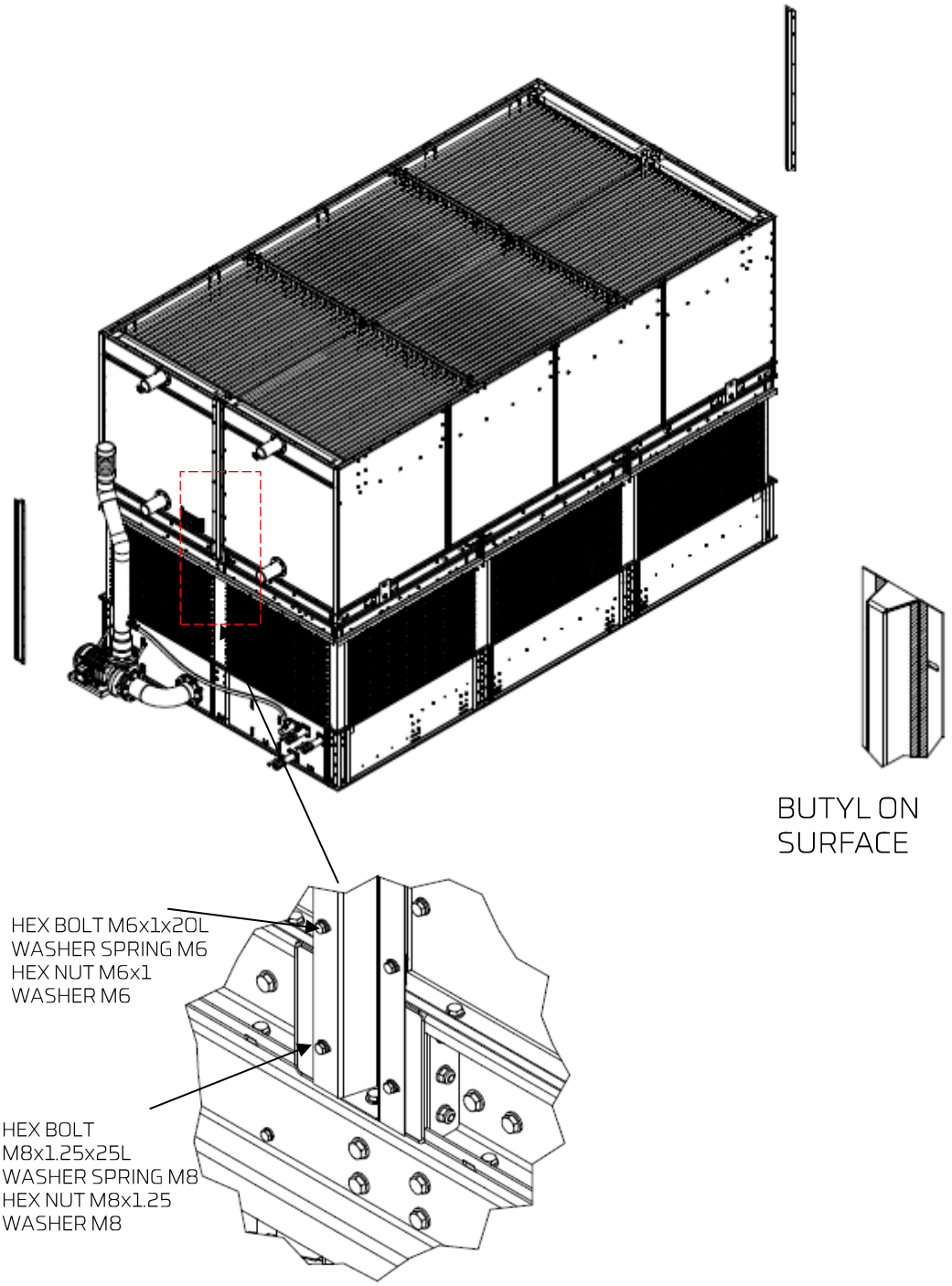
Coil Section Assembly

>> Assembly Coil Section L and R on Basin



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

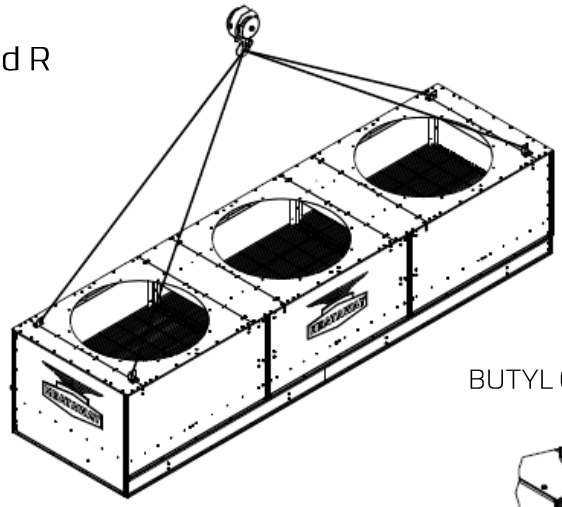
Coil Section Assembly



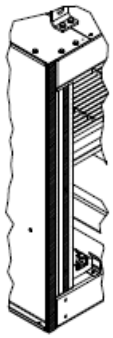
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

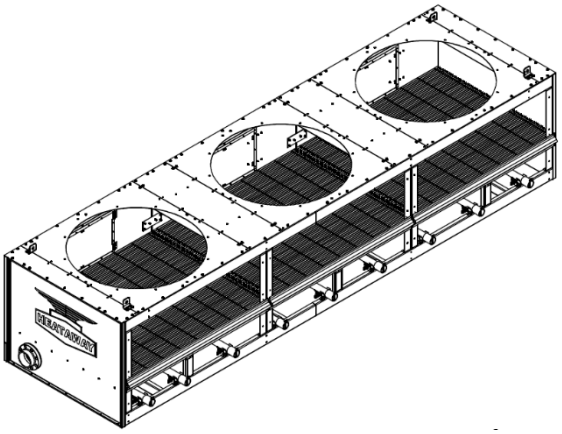
Fan Section Assembly

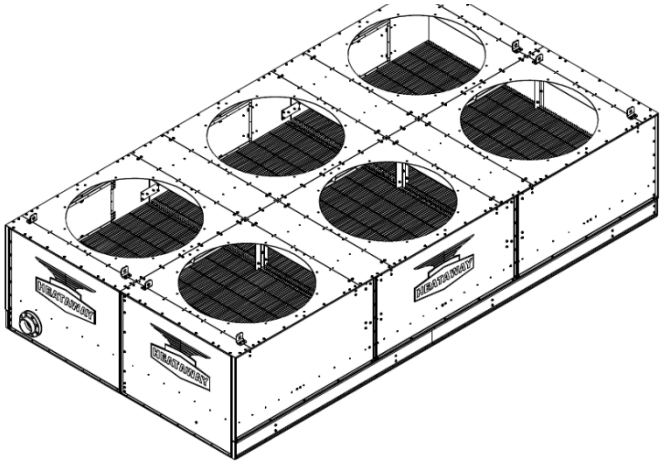
>> Assembly FAN Section L and R



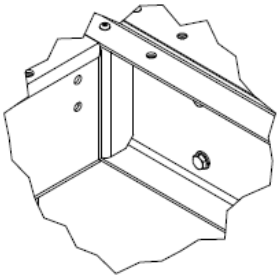
BUTYL ON SURFACE



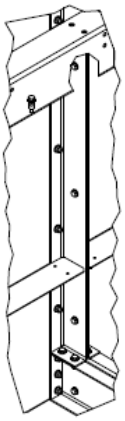


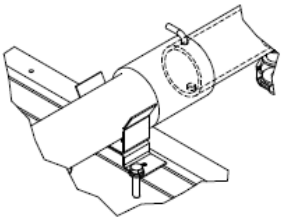


HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8



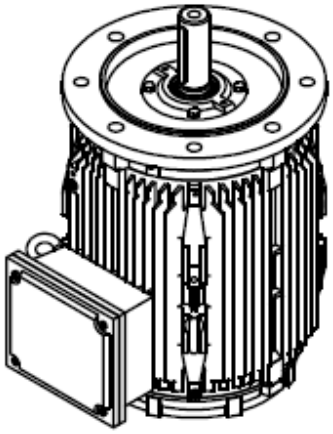
HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

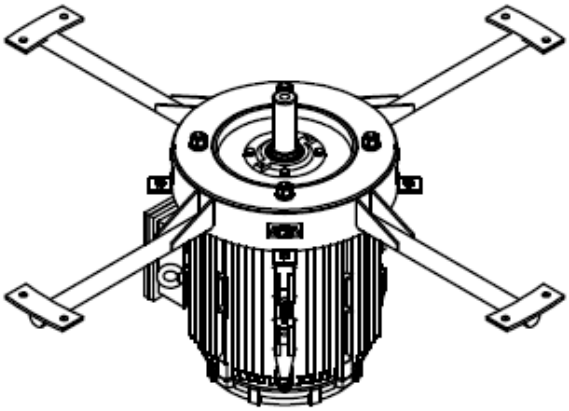


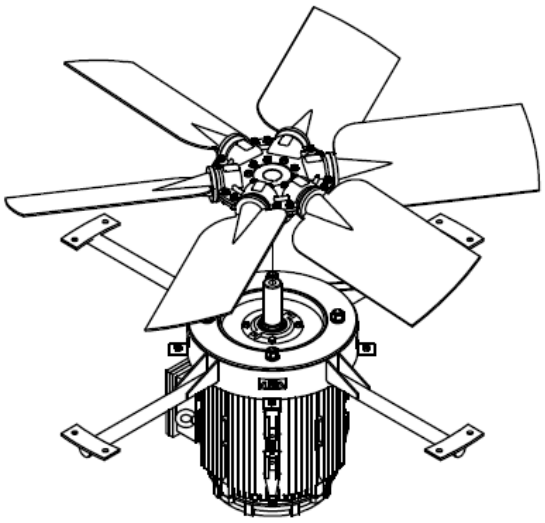


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

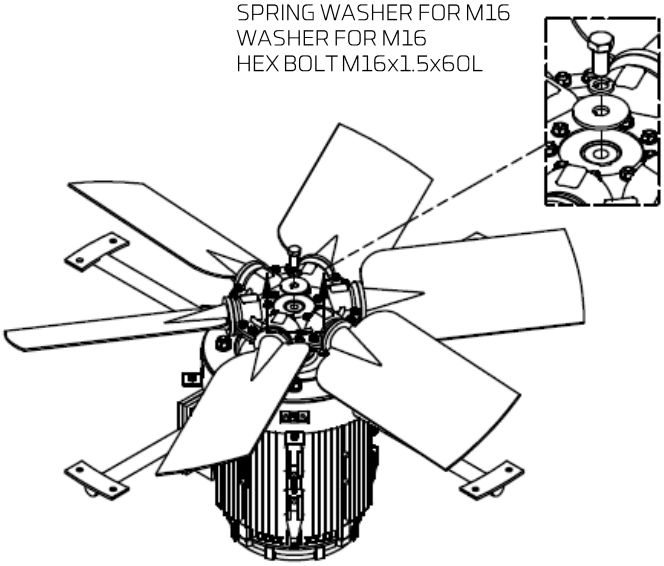
Fan Motor Assembly



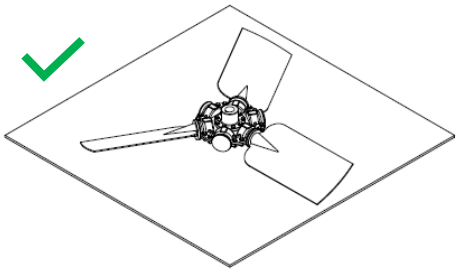


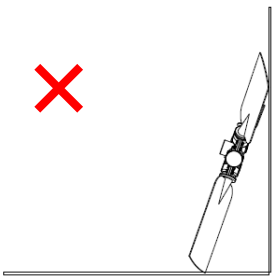


HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L



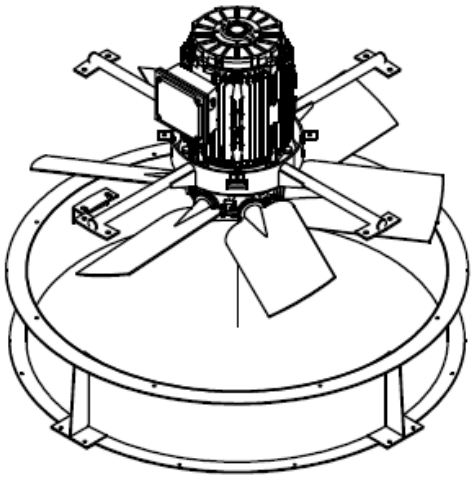
For prevents of FAN Blade warping or deformation please store by keep retaining plate side on the floor.



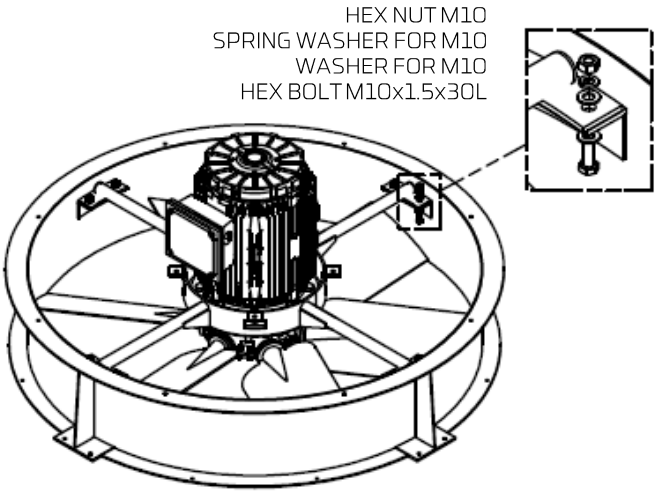


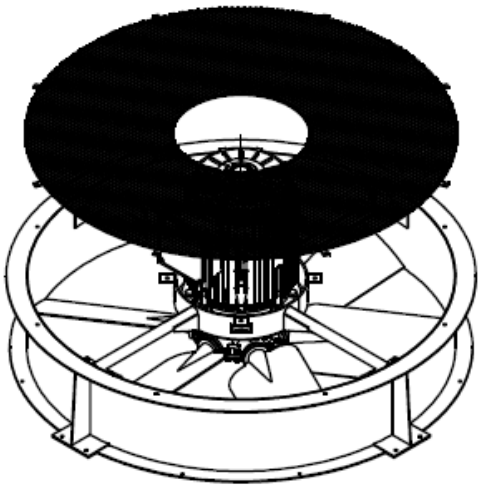
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Fan Motor Assembly

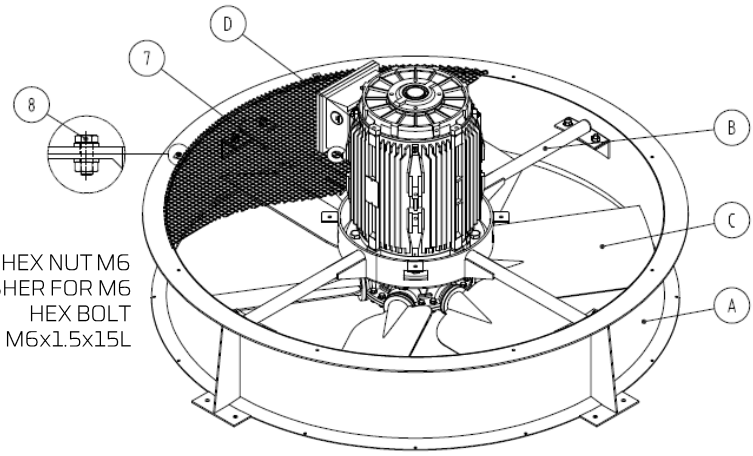


HEX NUT M10
SPRING WASHER FOR M10
WASHER FOR M10
HEX BOLT M10x1.5x30L





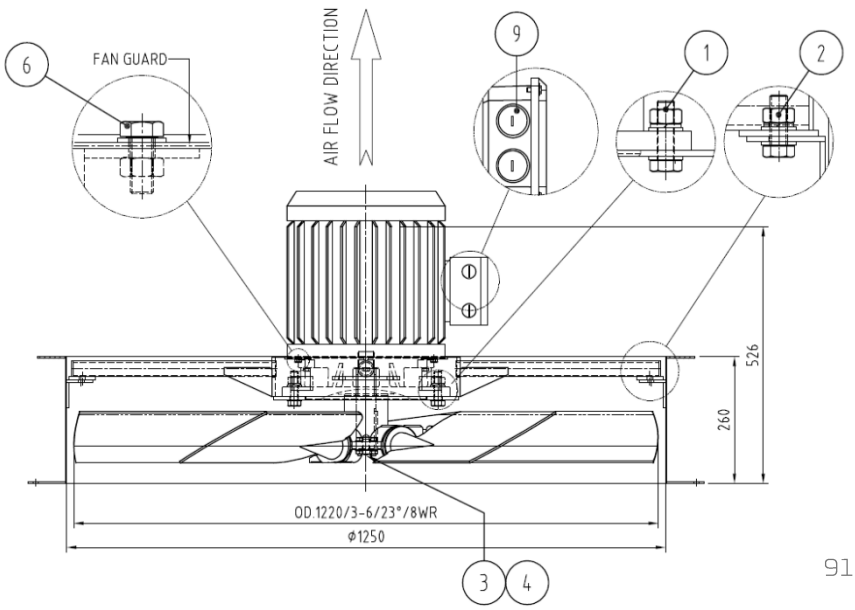
HEX NUT M6
WASHER FOR M6
HEX BOLT
M6x1.5x15L



HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L

HEX NUT M10
SPRING WASHER FOR M10
WASHER FOR M10
HEX BOLT M10x1.5x30L

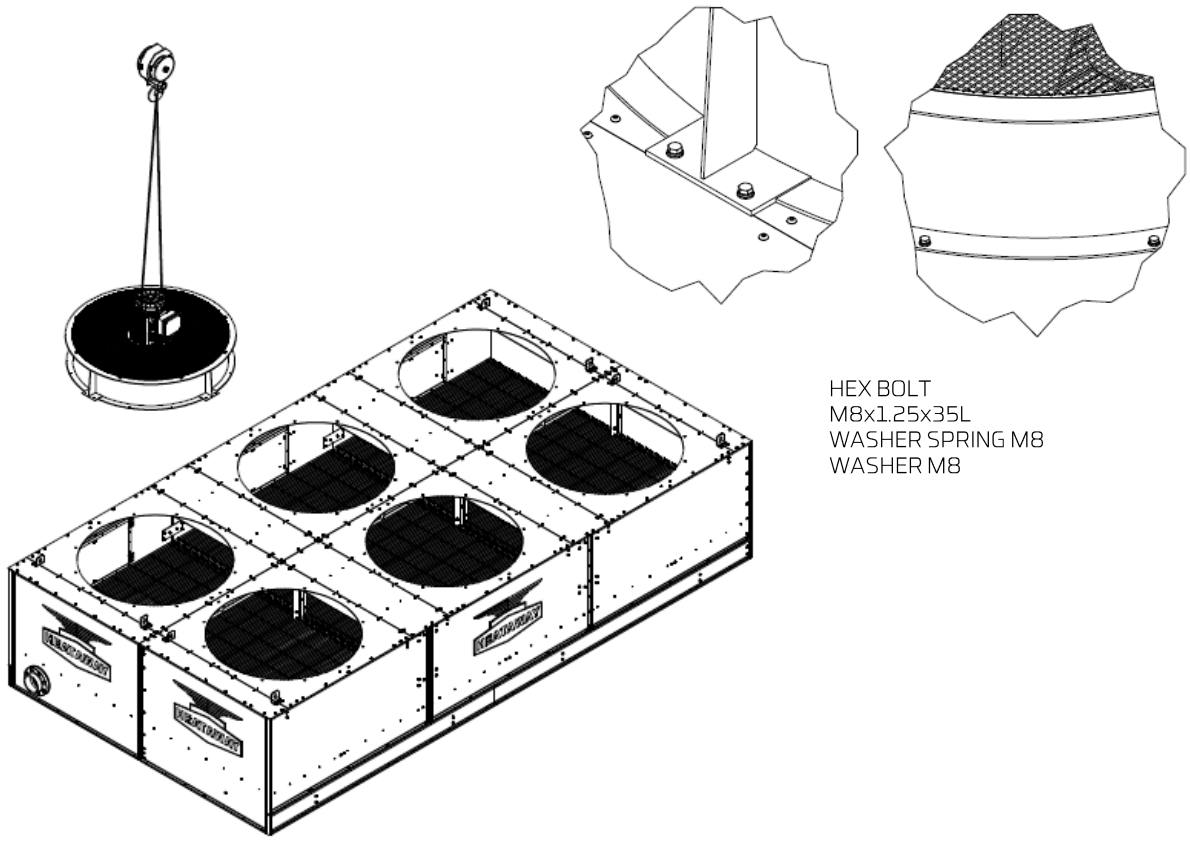
HEX NUT M8
WASHER FOR M8
HEX BOLT
M8x1.5x15L



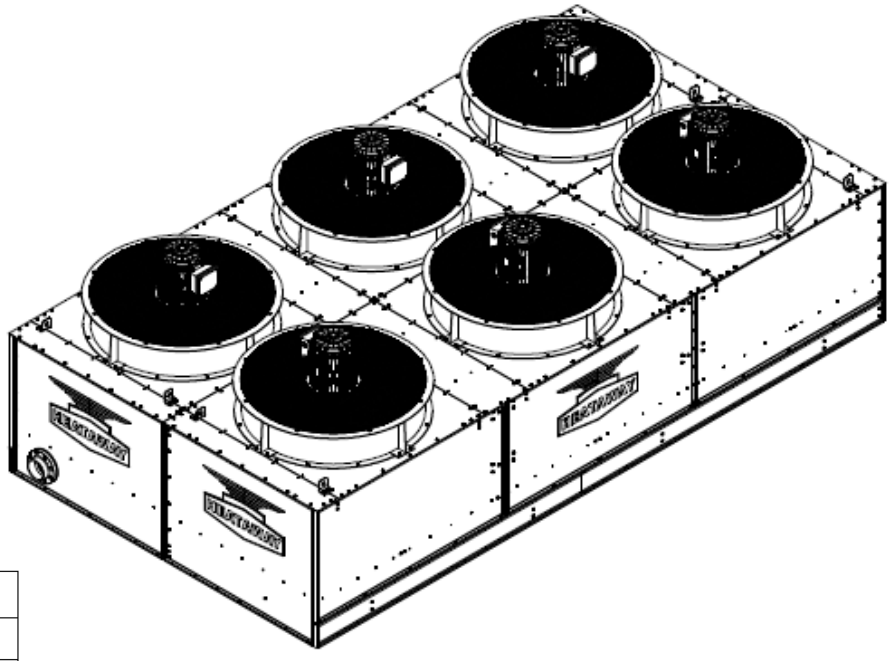
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Fan Section Assembly

>> Install FAN set With Motor to FAN Section

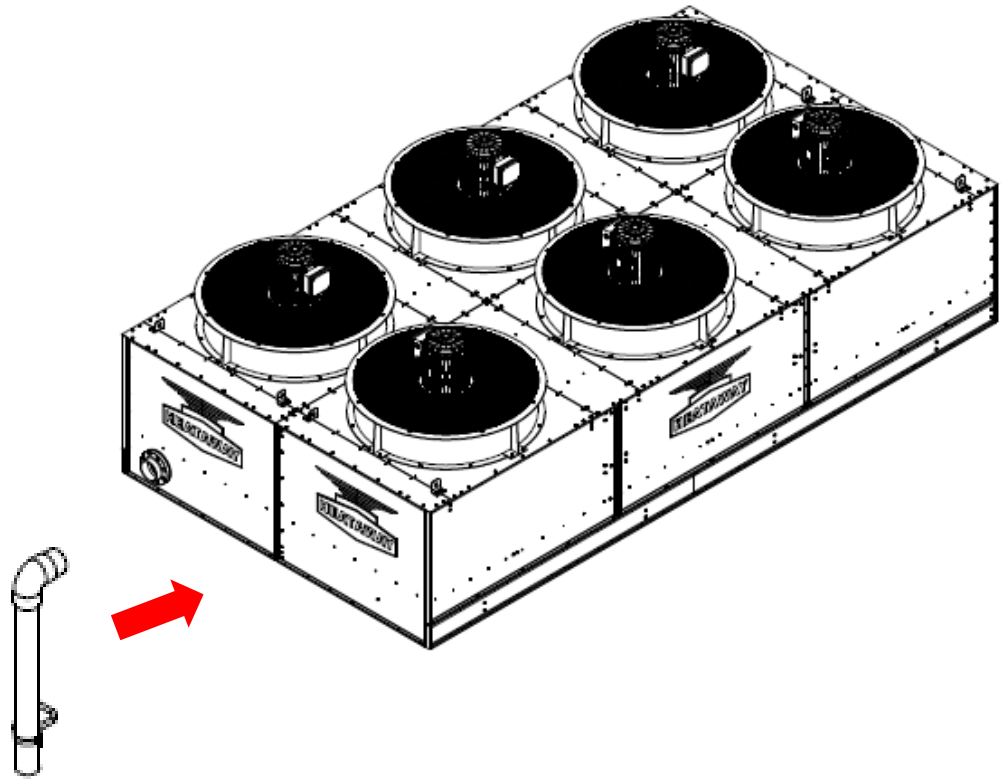


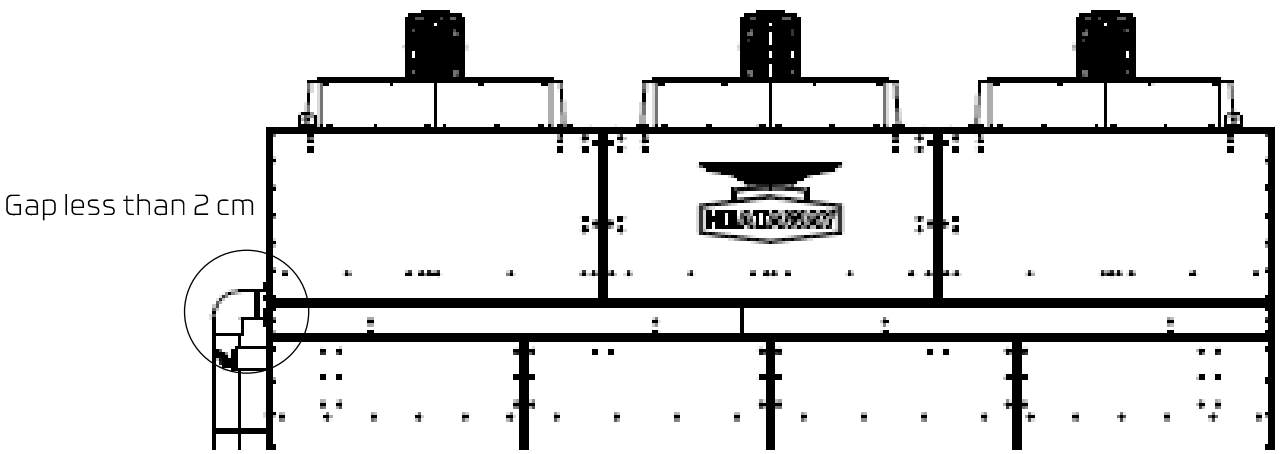
HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Upper pipe Assembly



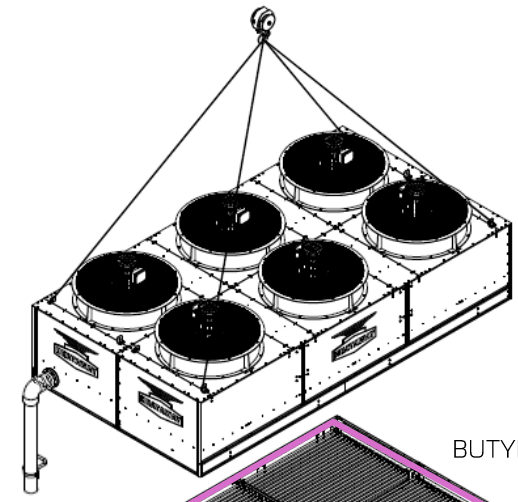


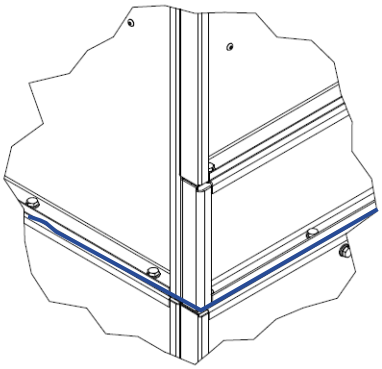
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

Fan Section Install

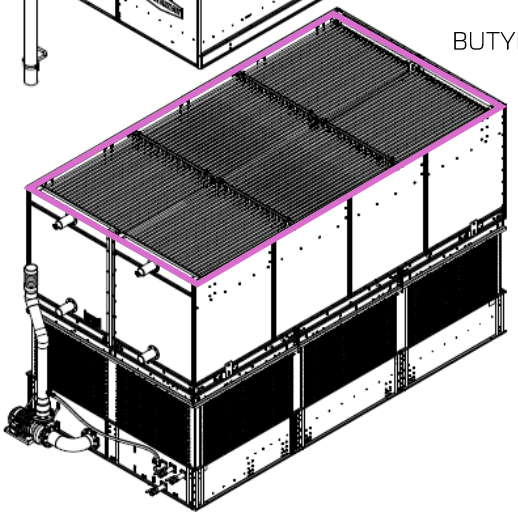
>> Install FAN Section

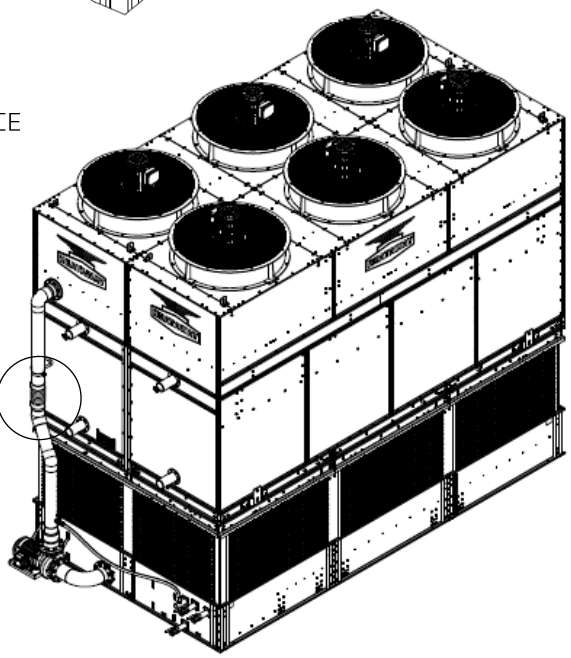


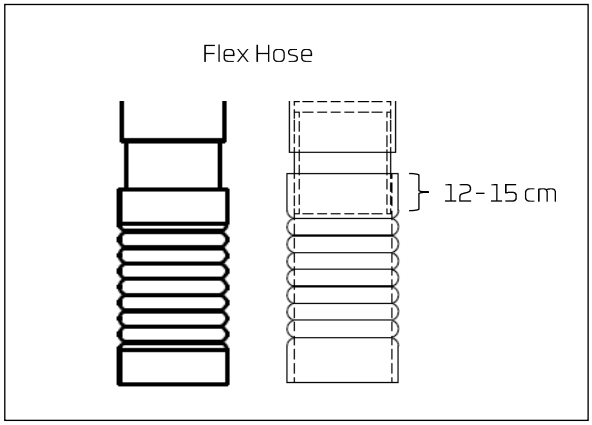


HEX BOLT
M8x1.25x20L
WASHER SPRING M8
WASHER M8
HEX NUT M8 1.25

BUTYL ON SURFACE







TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12-15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

HEATAWAY

BRAND-NEW 9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

12' X 12'

Model

EC9-1650-1212C-S

EC9-1890-1212C-M

EC9-1980-1212C-L

EC9-2150-1212C-M

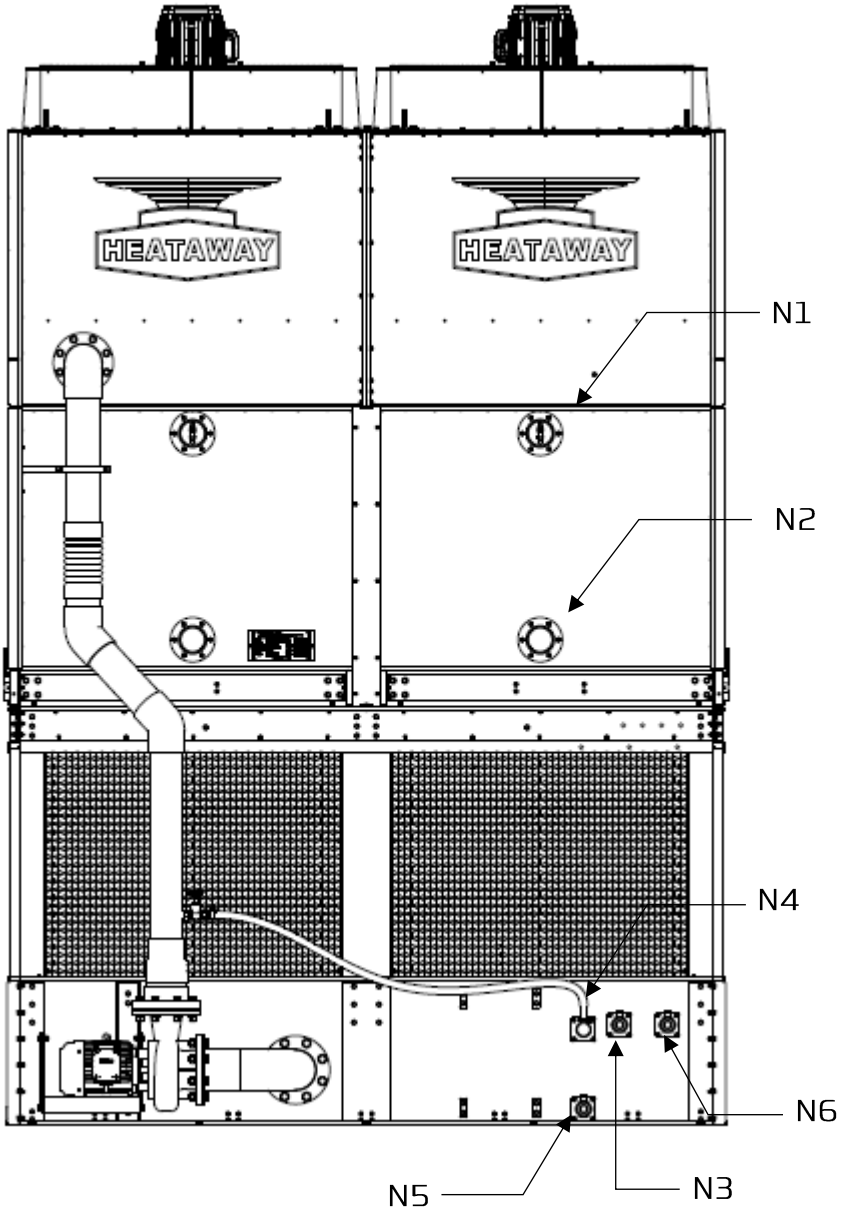
EC9-2350-1212C-M

EC9-2460-1212C-L



www.heataway.net

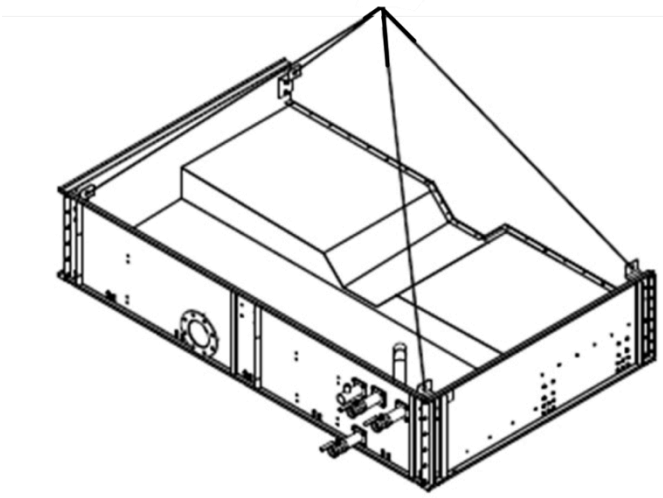
Piping Connection

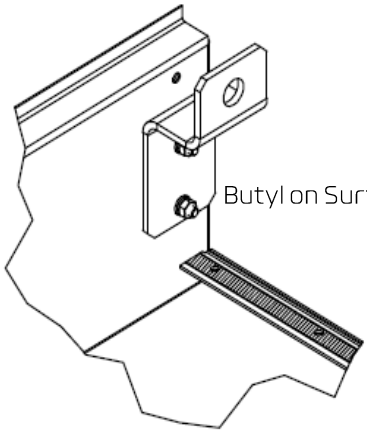


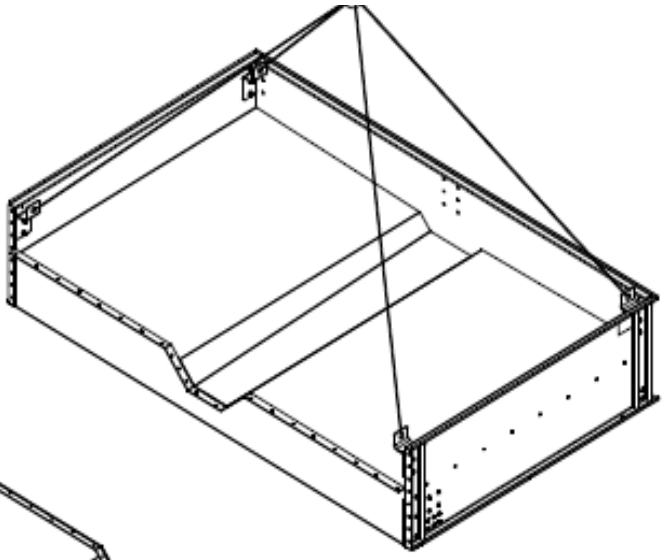
PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

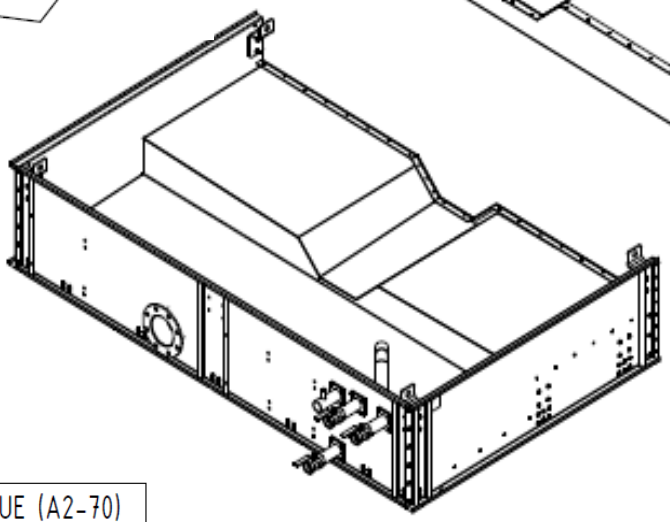
Basin Section Assembly

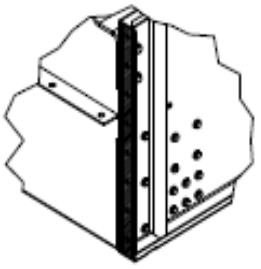
Step 1 : Basin Assembly









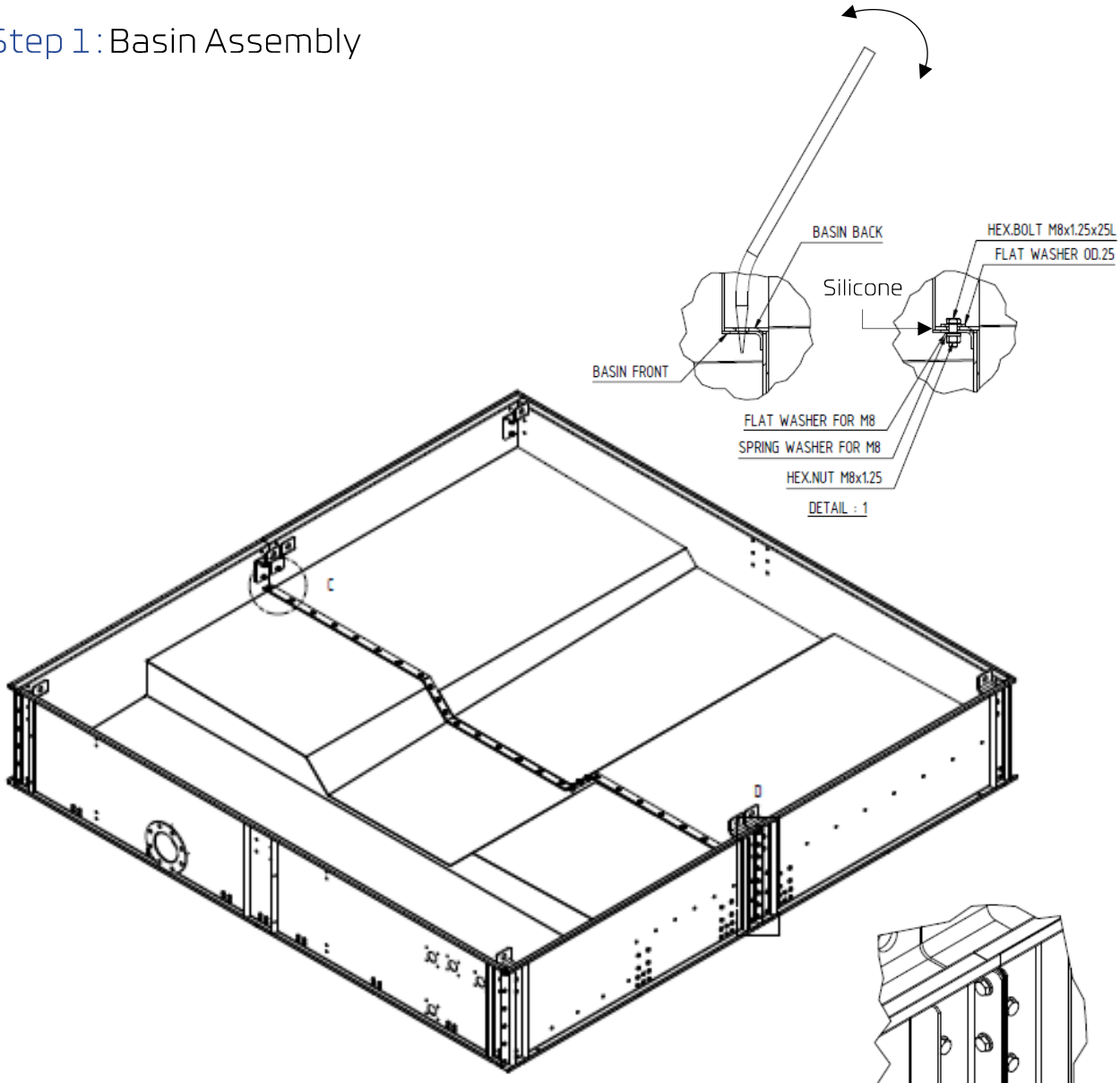


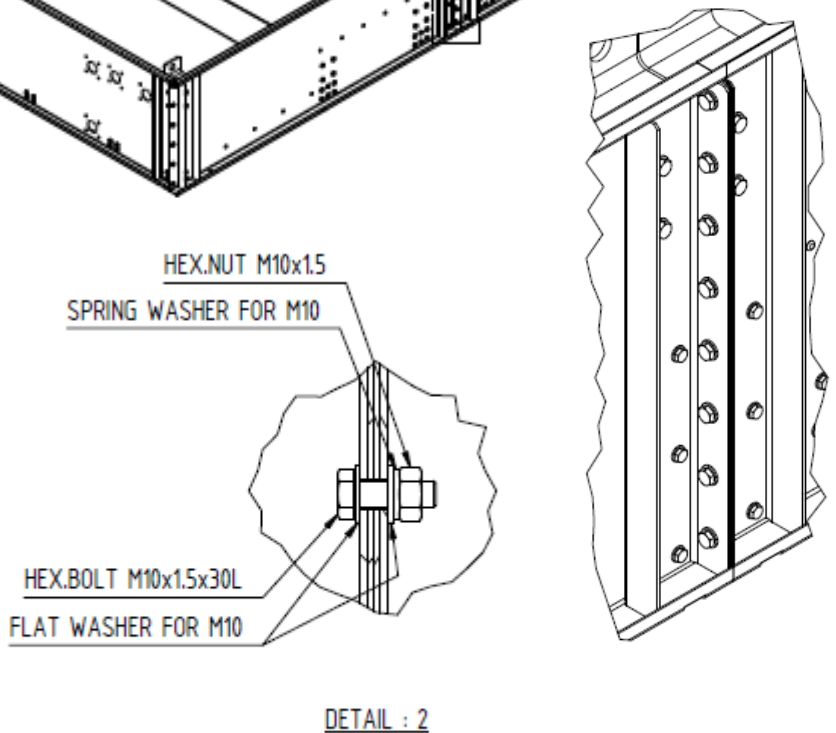
Butyl on Surface

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

Step 1 : Basin Assembly

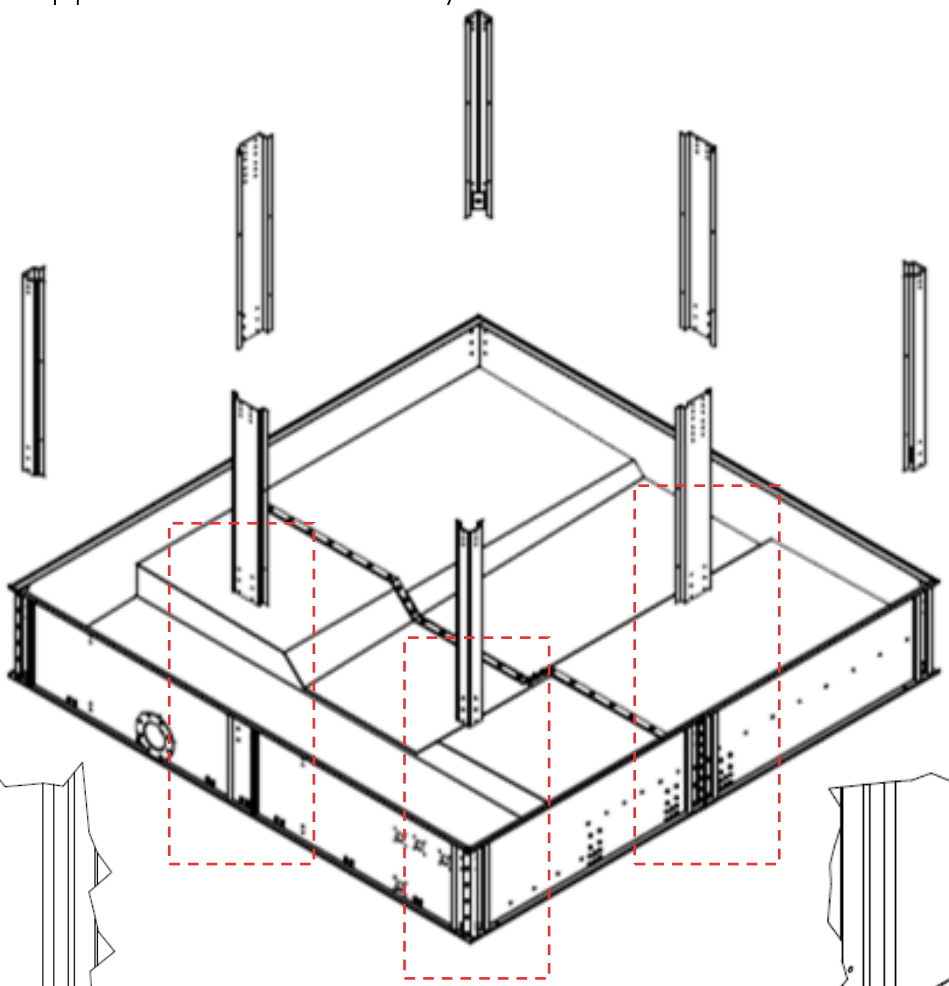


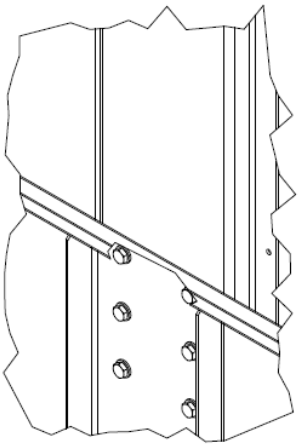


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

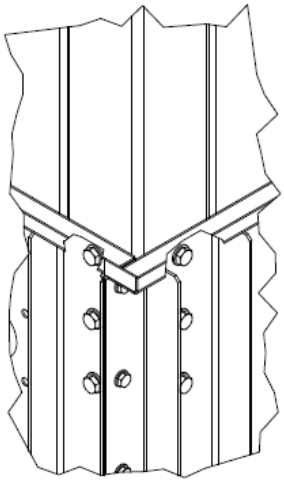
Step 2 : Support Frame Assembly





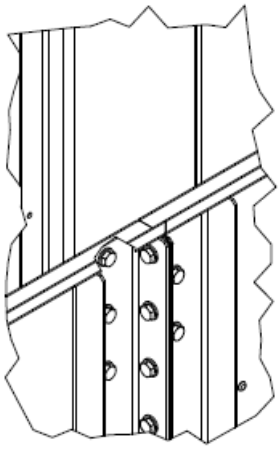
Butyl on Surface

HEX BOLT
M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER
M10



Butyl on Surface

HEX BOLT
M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER
M10



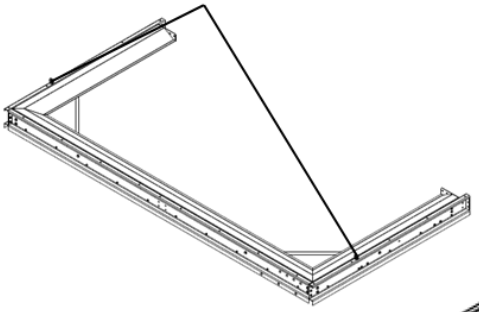
Butyl on Surface

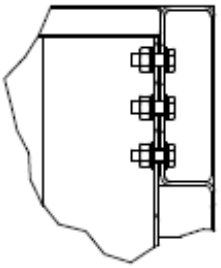
HEX BOLT
M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER
M10

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

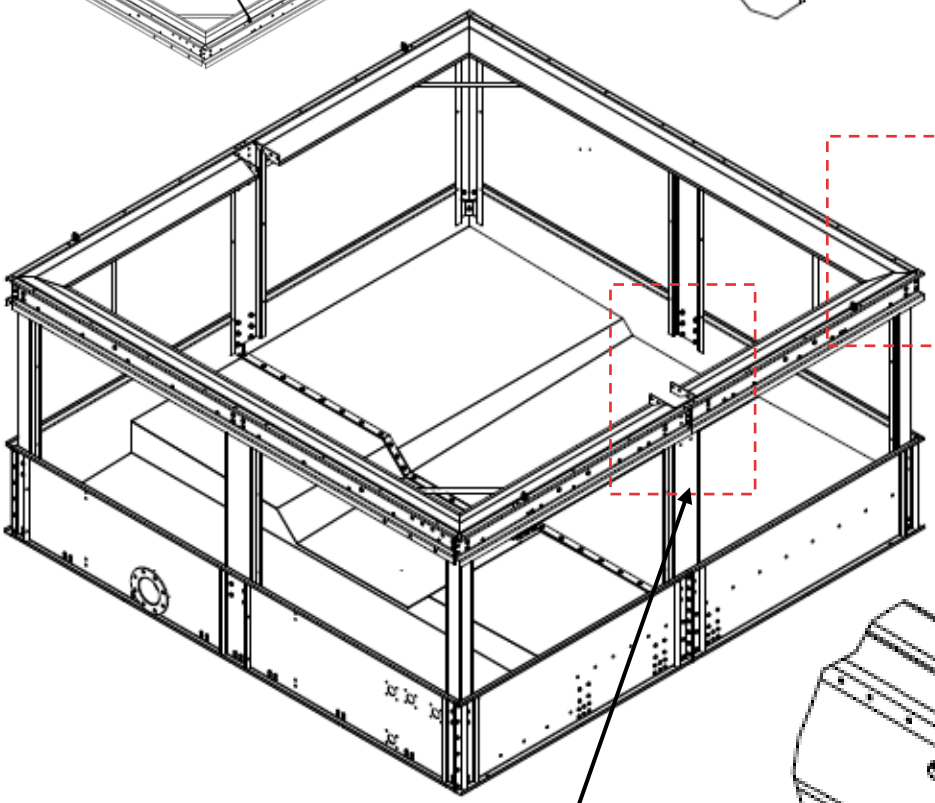
Basin Section Assembly

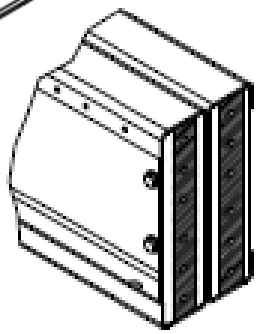
Step 3 : Frame Assembly



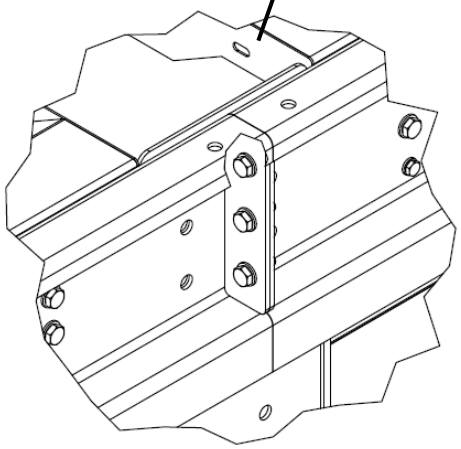


HEX BOLT
M8x1.25x25L
HEX.LOCK NUT
M8x1.25
WASHER M8





Butyl on Surface



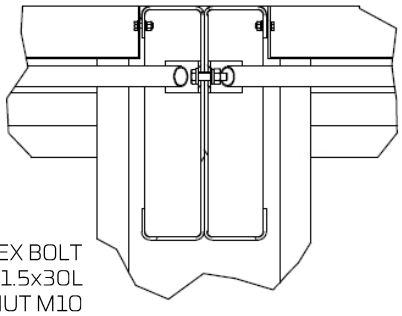
HEX BOLT
M8x1.25x25L
HEX.LOCK NUT
M8x1.25
WASHER M8

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

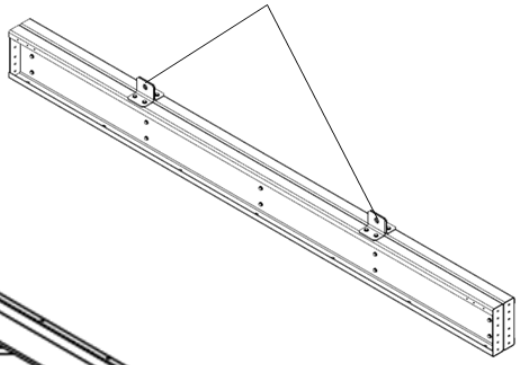
Basin Section Assembly

Step 4 : Frame Beam and Support Assembly

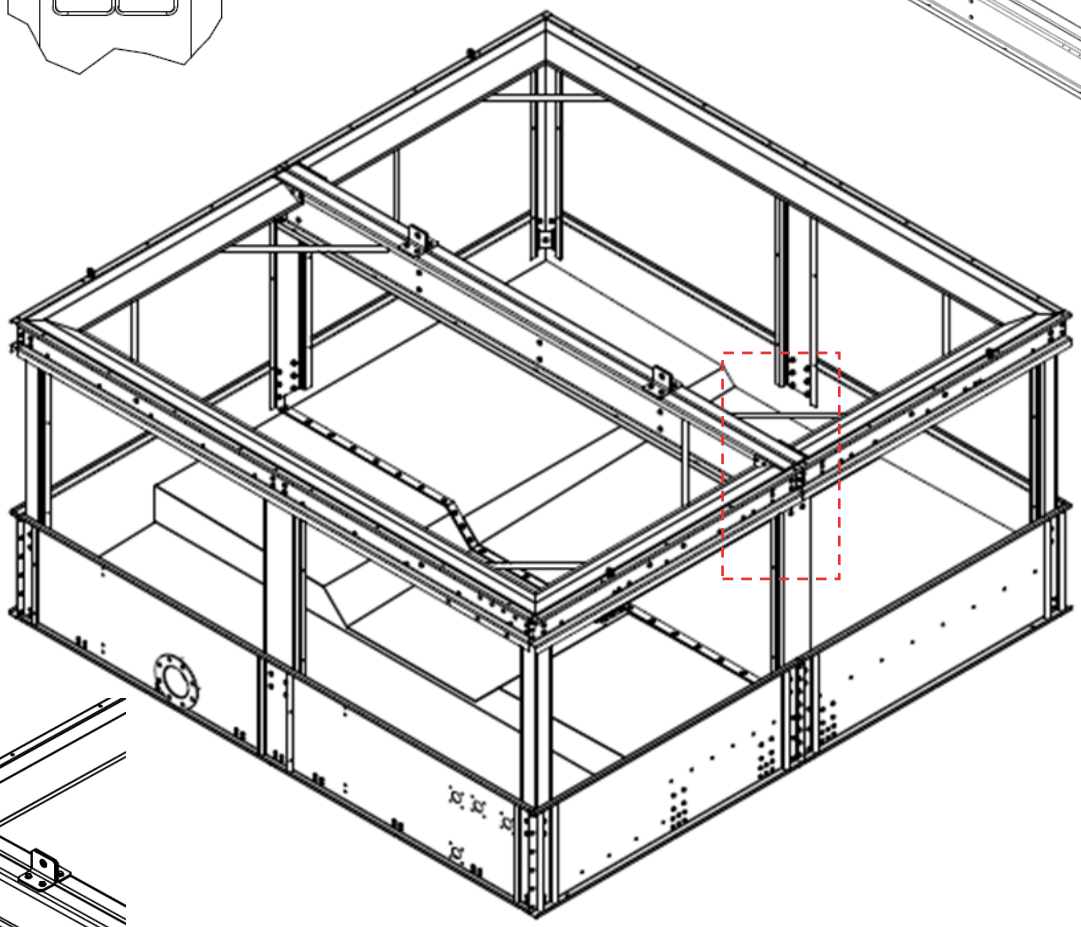


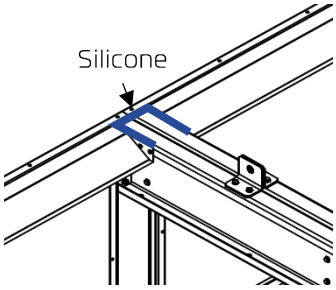


HEX BOLT
M10x1.5x40L
HEX NUT M10
WASHER M10
SPRING WASHER
M10

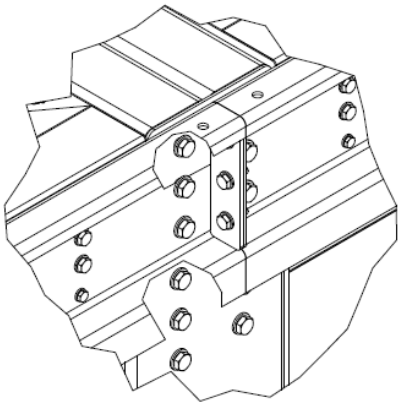


HEX BOLT
M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER
M10





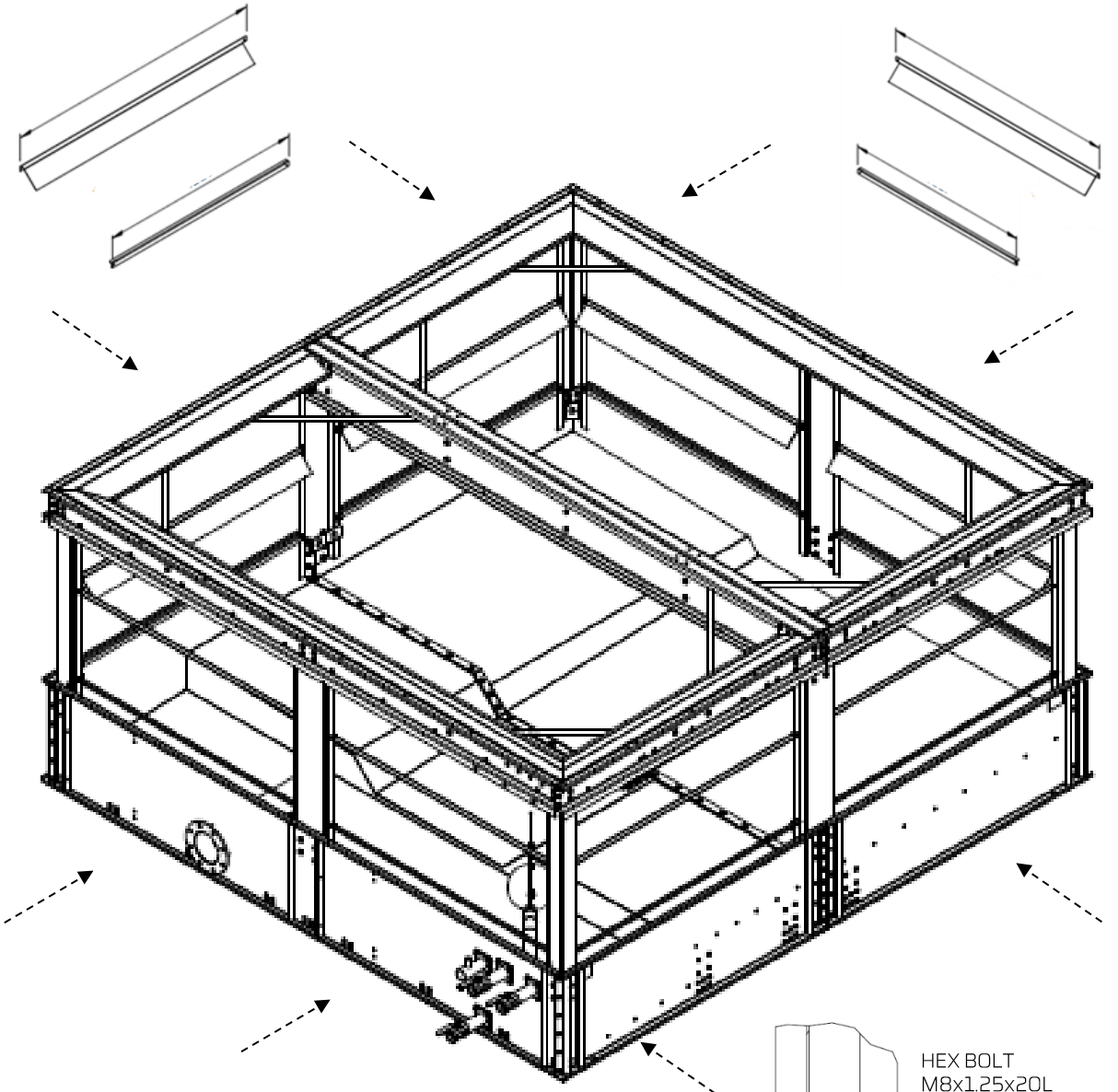
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

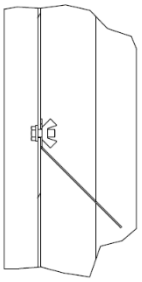


HEX BOLT
M10x1.5x30L
HEX NUT M10
WASHER M10
SPRING WASHER
M10

Basin Section Assembly

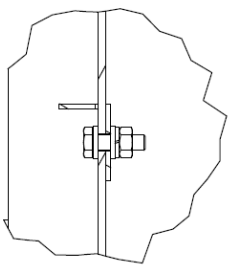
Step 5 : Water Deflect Assembly





HEX BOLT
M8x1.25x20L
WING NUT M8
WASHER M8

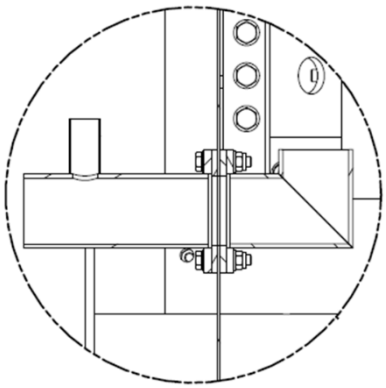
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0



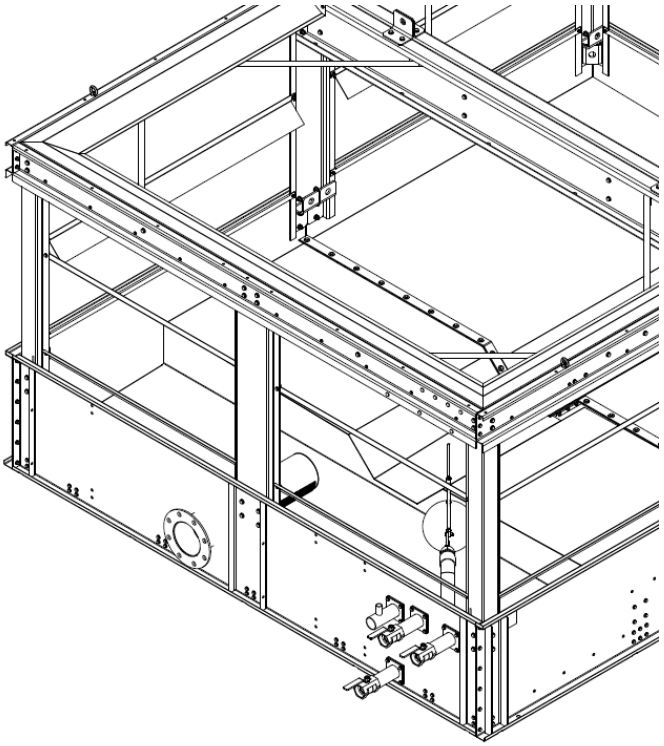
HEX BOLT
M6x1.25x20L
HEX.LOCK NUT
M6x1.25
WASHER M6
SPRING WASHER M6

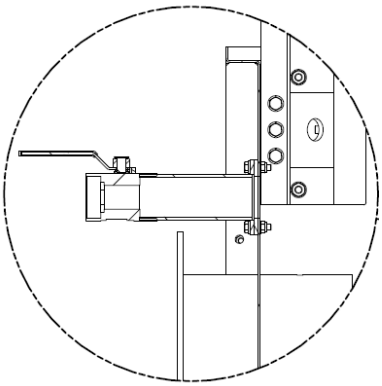
Basin Section Assembly

Step 6 : Piping and Valve Assembly

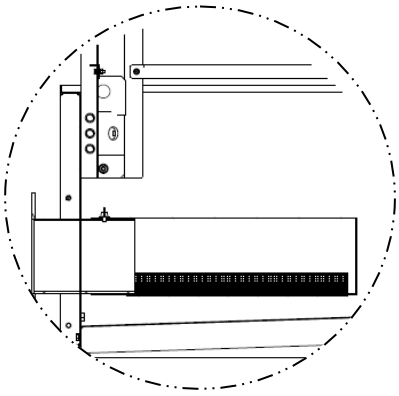


PIPE OVER FLOW
BOLT M8x1.25x40L
NR GASKET
WASHER FOR M8
HEX.LOCK NUT M8X1.25

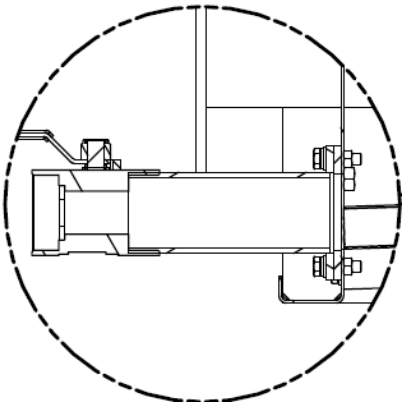




BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25



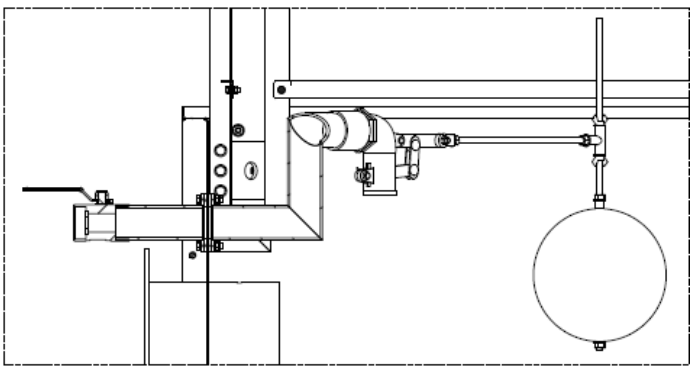
PIPE WITH STRAINER
WING SCREW - M8 x 12
WASHER



BALL VALVE
DRAIN WATER PIPE
BOLT M8x1.25x30L
SPRING WASHER M8
WASHER FOR M8
NR GASKET
HEX.LOCK NUT M8X1.25

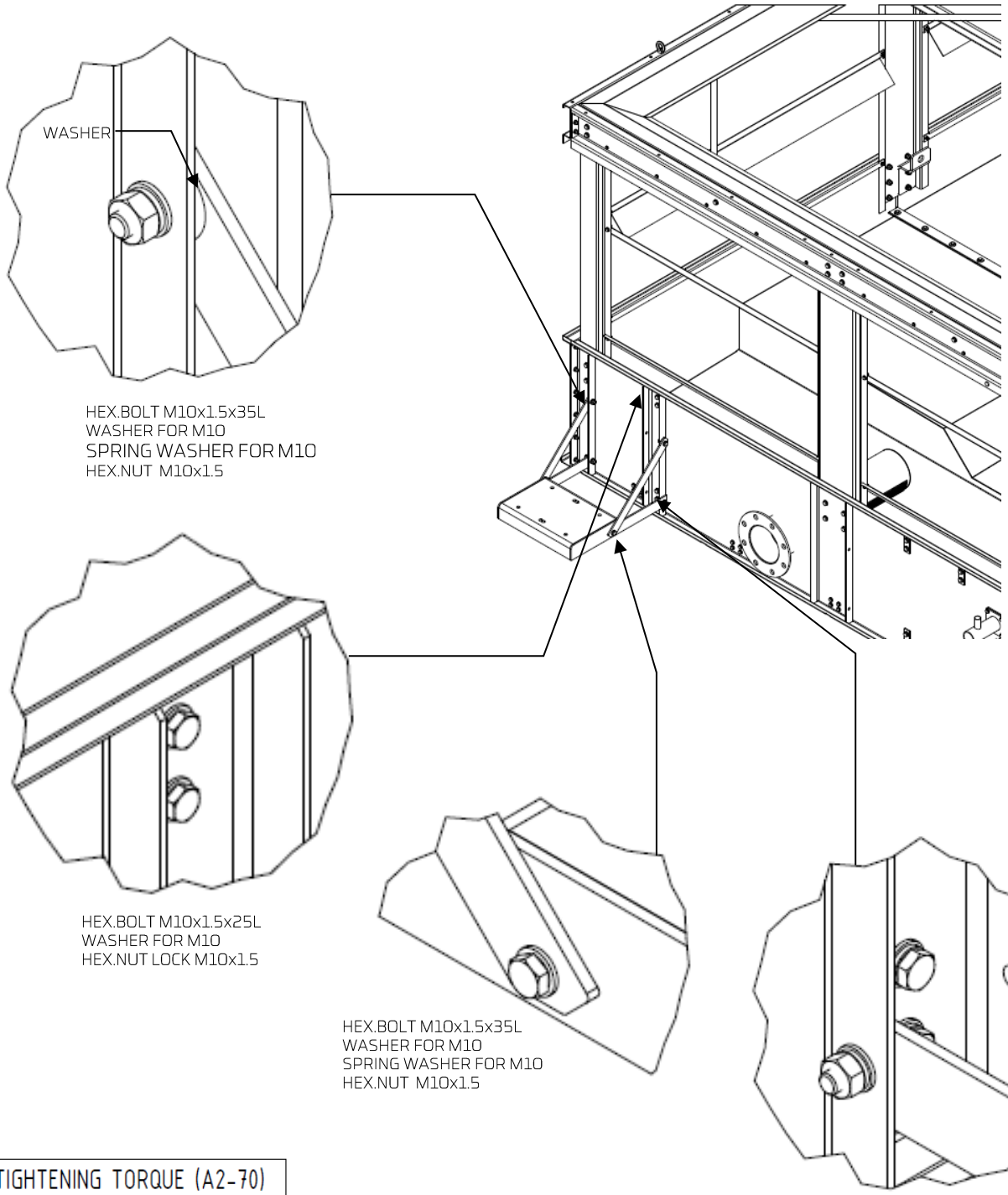
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

BALL VALVE
FLOAT VALVE
WASHER FOR M8
NR GASKET
PIPE MAKE UP WATER 2"
FLOAT VALVE
BOLT M8x1.25x30L
SPRING WASHER M8
HEX.LOCK NUT M8X1.25



Basin Section Assembly

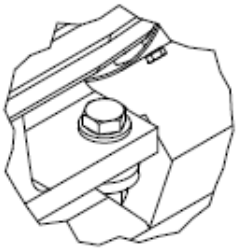
Step 7 : Water Pump Base Assembly



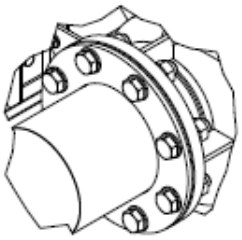
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

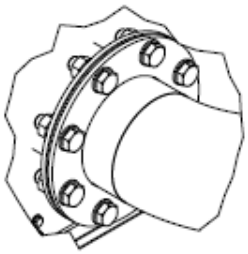
Step 8 : Water Pump pipe Assembly



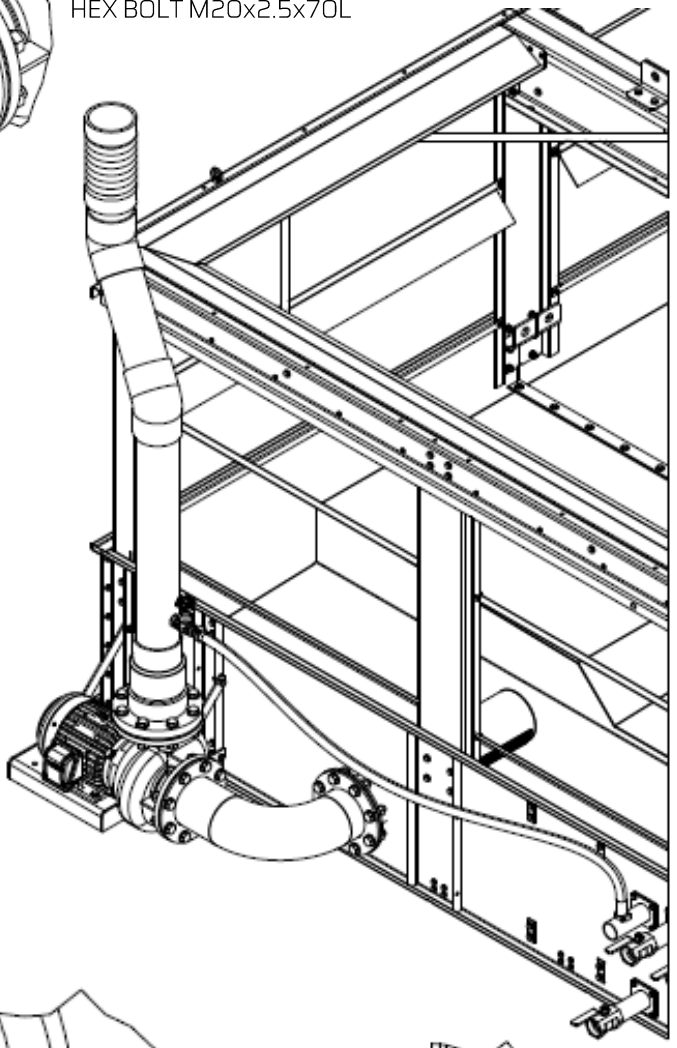
HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

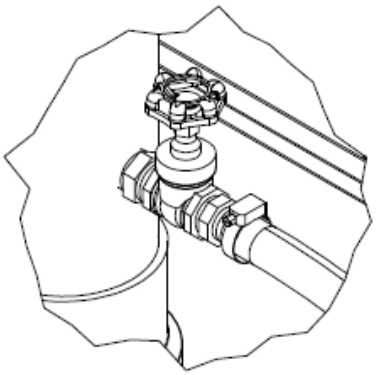


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

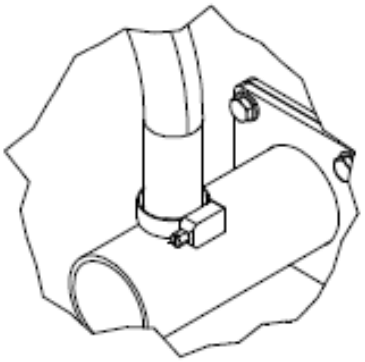


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L

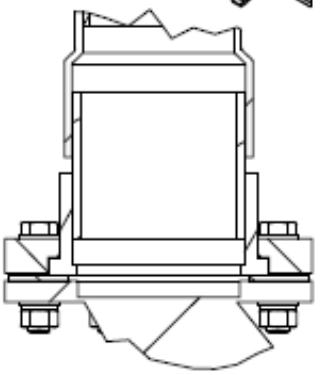




HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

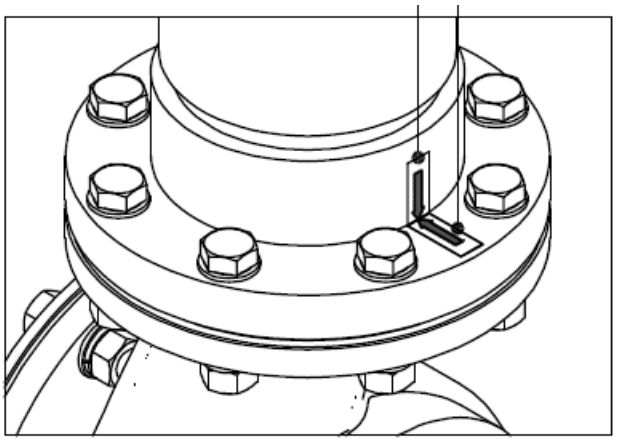


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

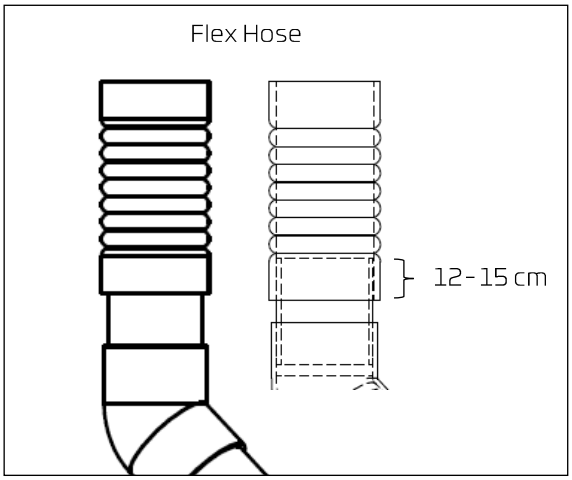
Step 10 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

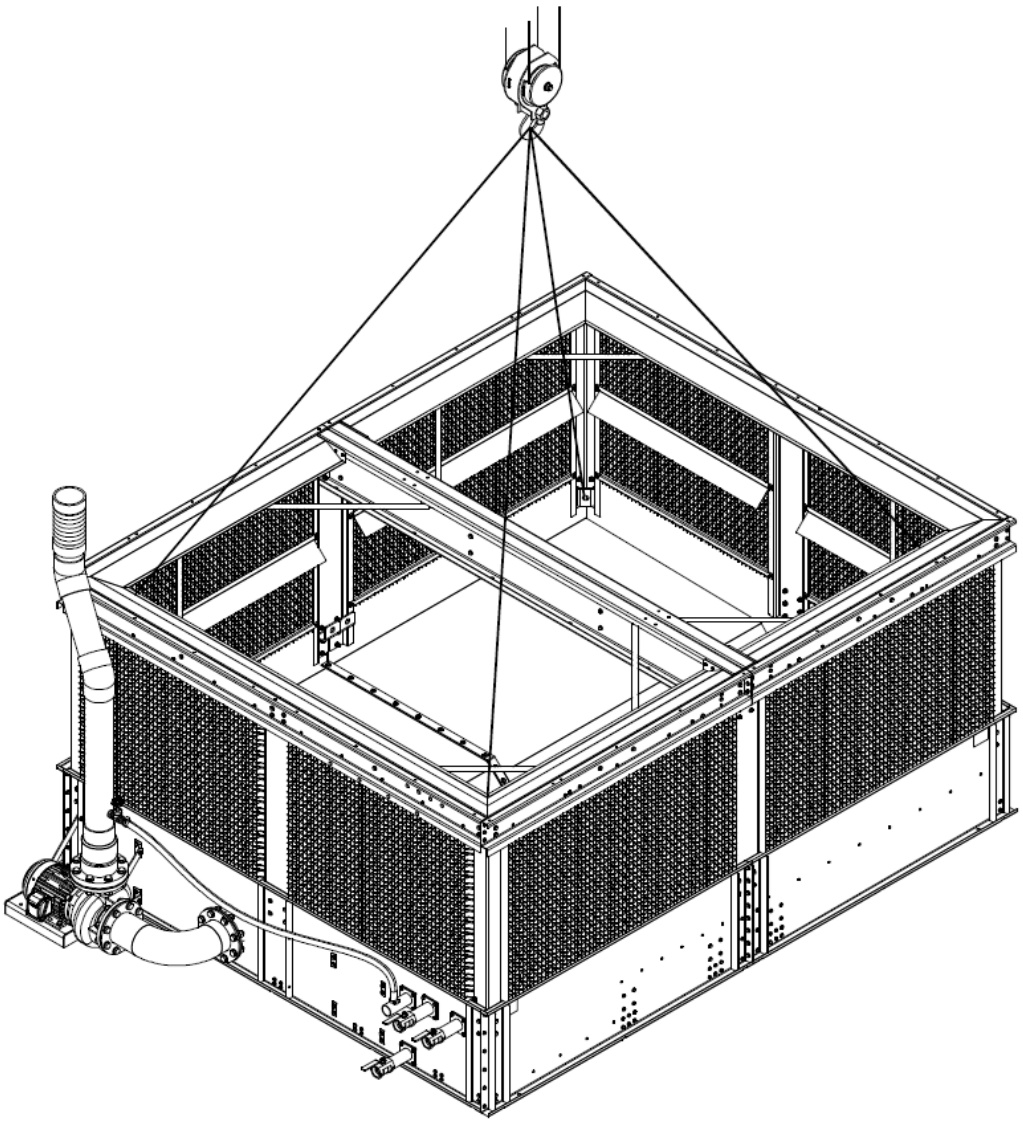
** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

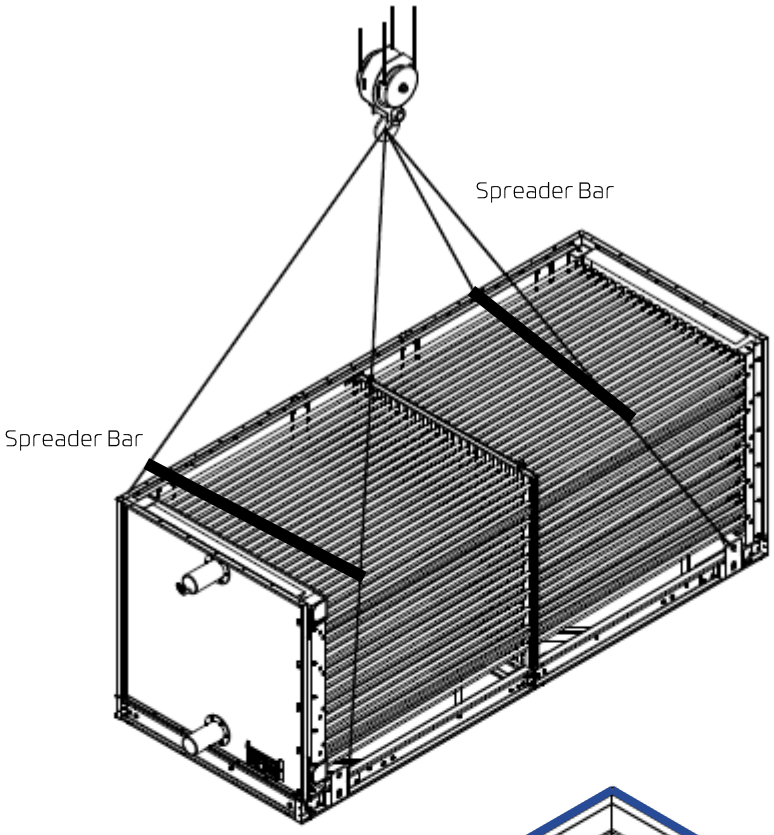
Basin Section Assembly

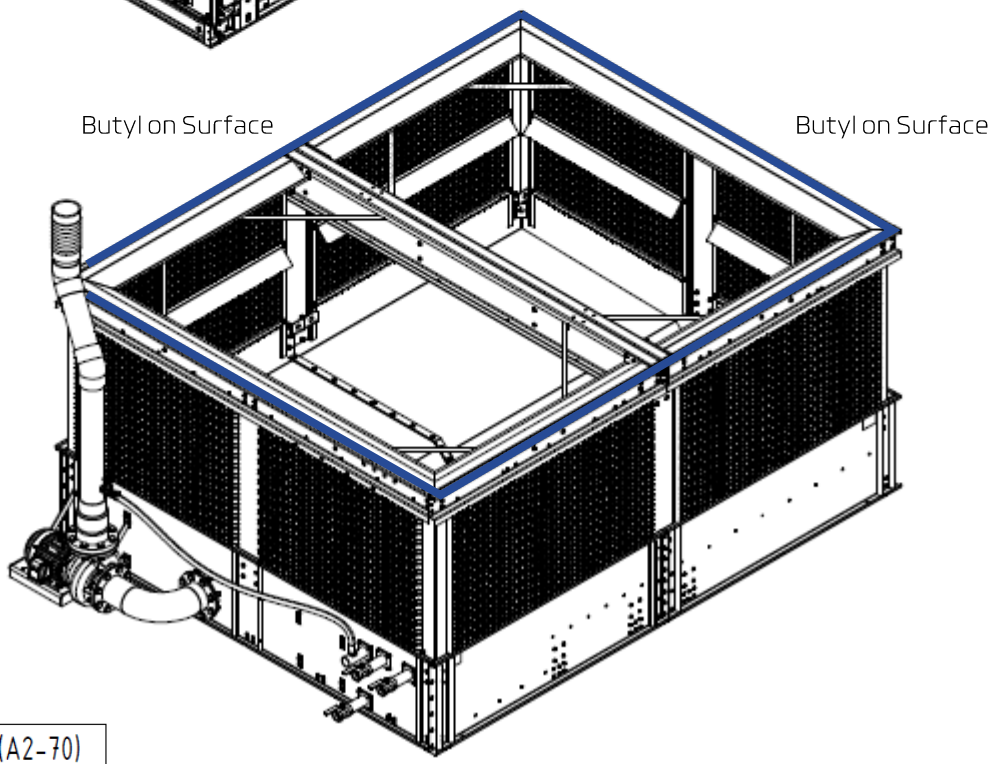
Step 9 : Move Assembled Basin to Position



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

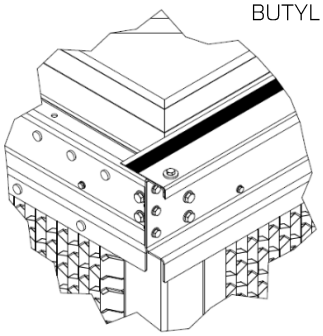
Coil Section Assembly



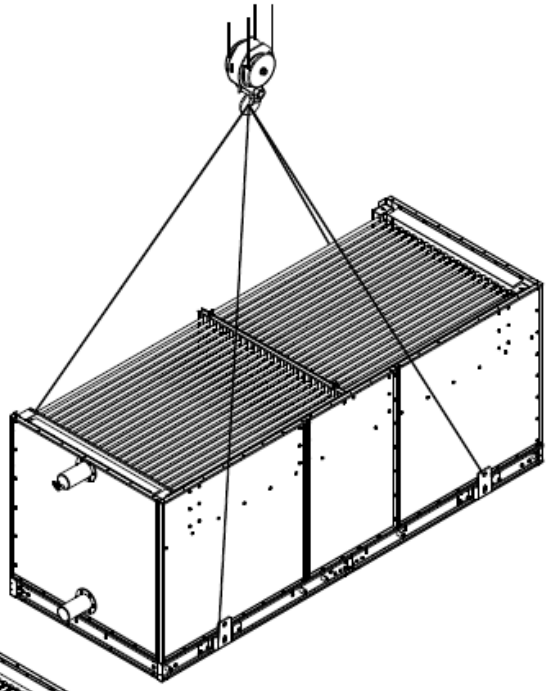


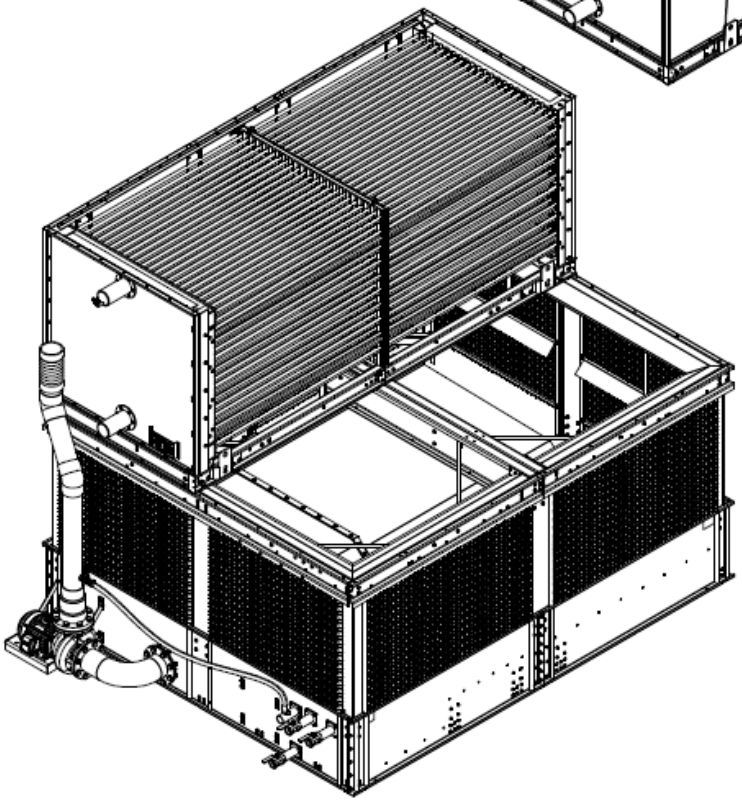
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

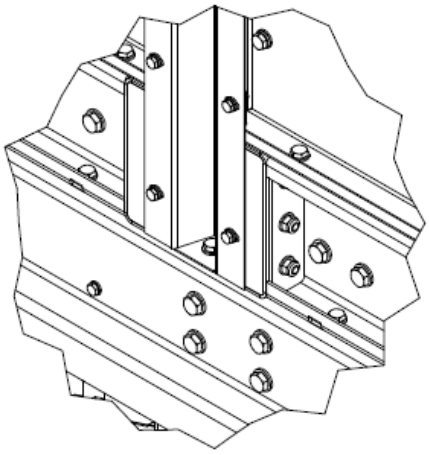
Coil Section Assembly



BUTYL ON SURFACE



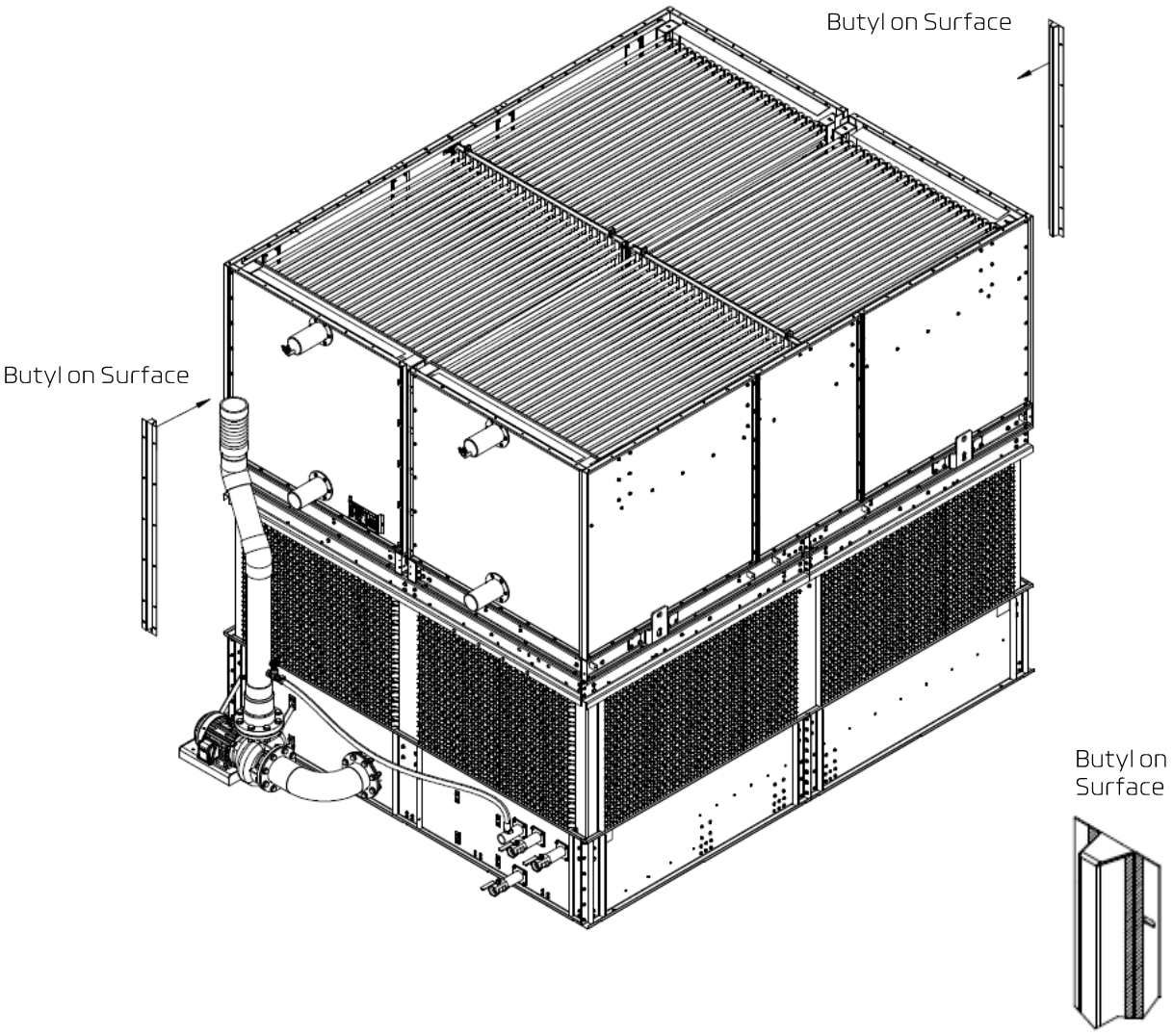


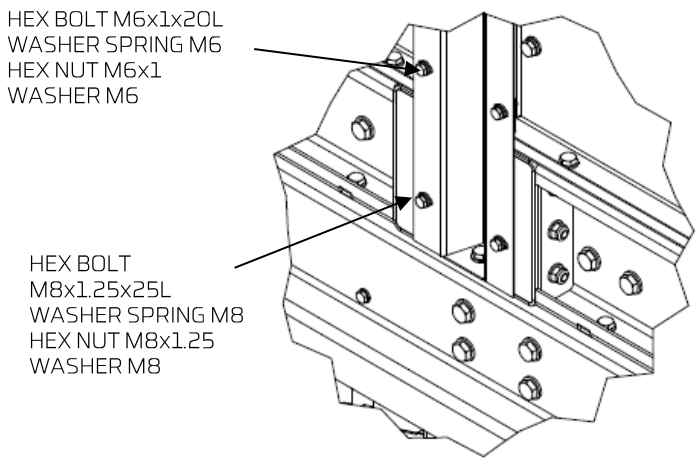


HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

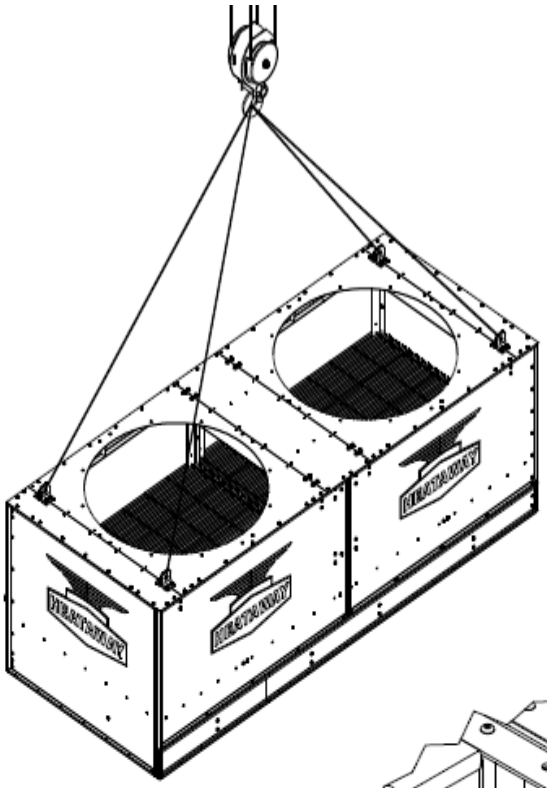
Coil Section Assembly

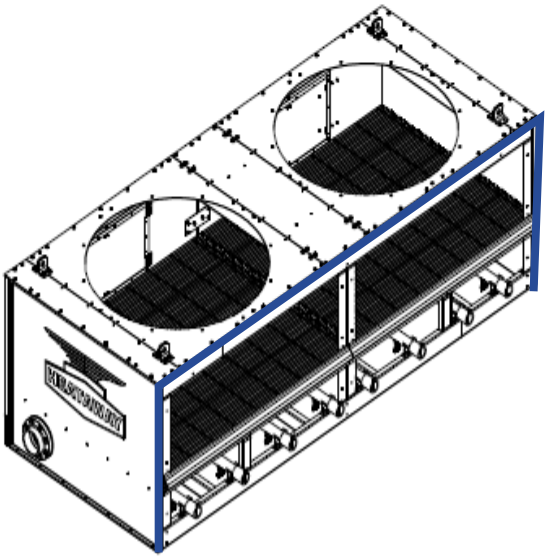




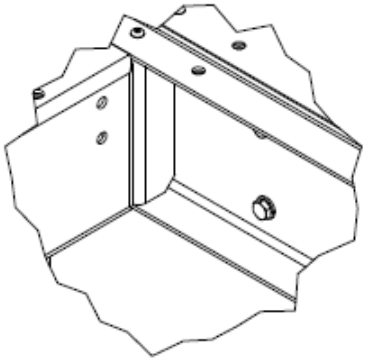
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

FAN Section Assembly

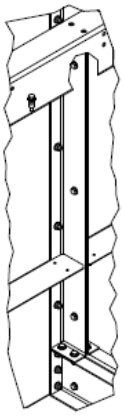




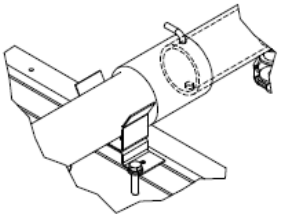
Butyl on Surface



HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

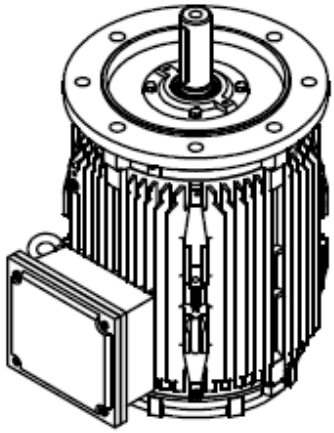


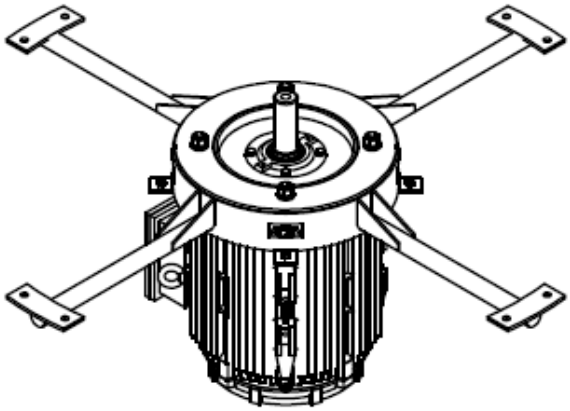
HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

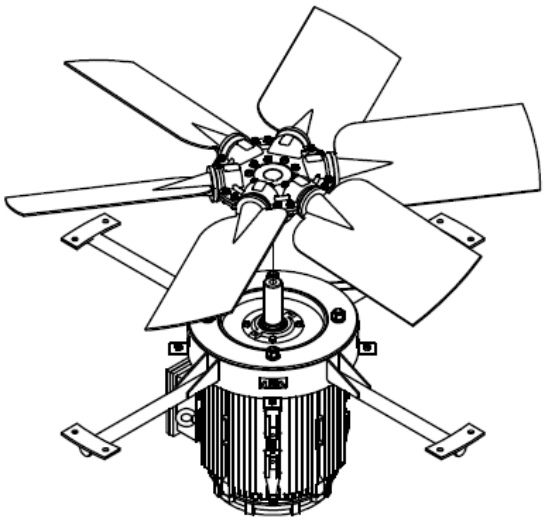


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

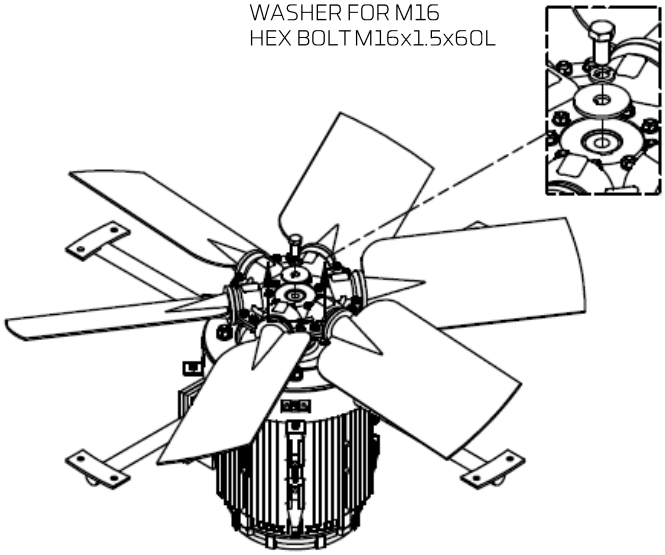
Fan Motor Assembly



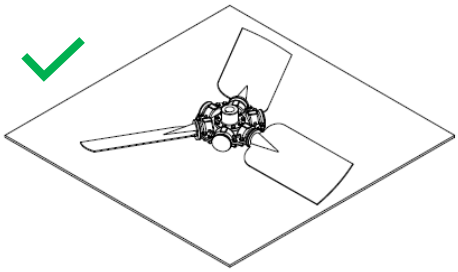


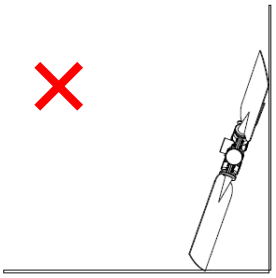


HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L



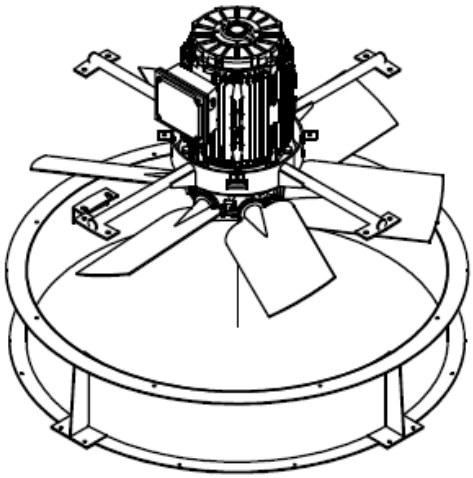
For prevents of FAN Blade warping or deformation please store by keep retaining plate side on the floor.



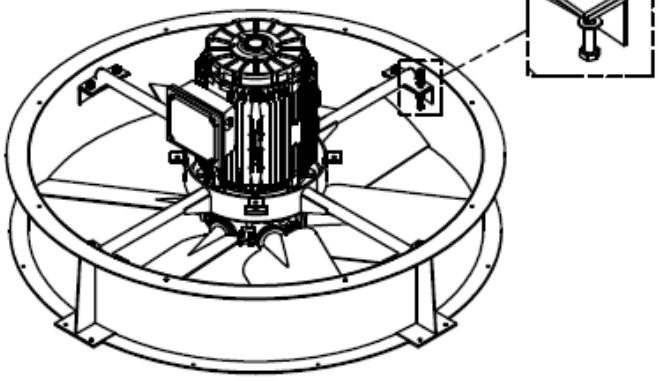


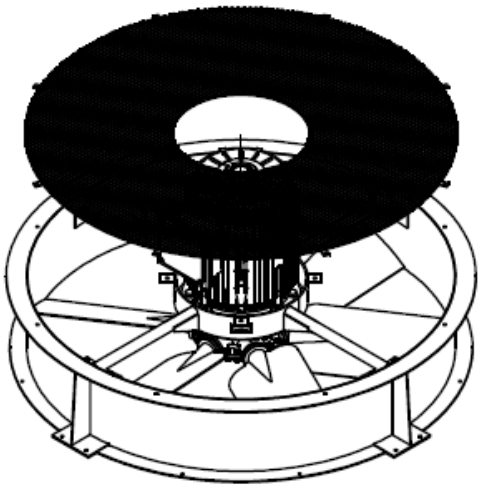
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

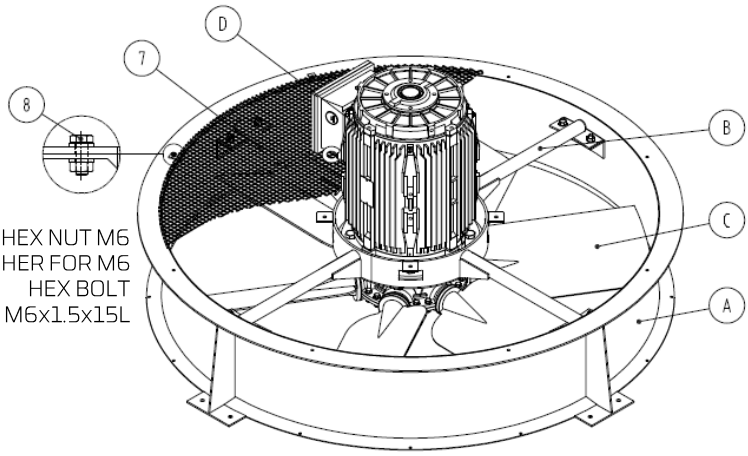
Fan Motor Assembly



HEX NUT M10
SPRING WASHER FOR M10
WASHER FOR M10
HEX BOLT M10x1.5x30L





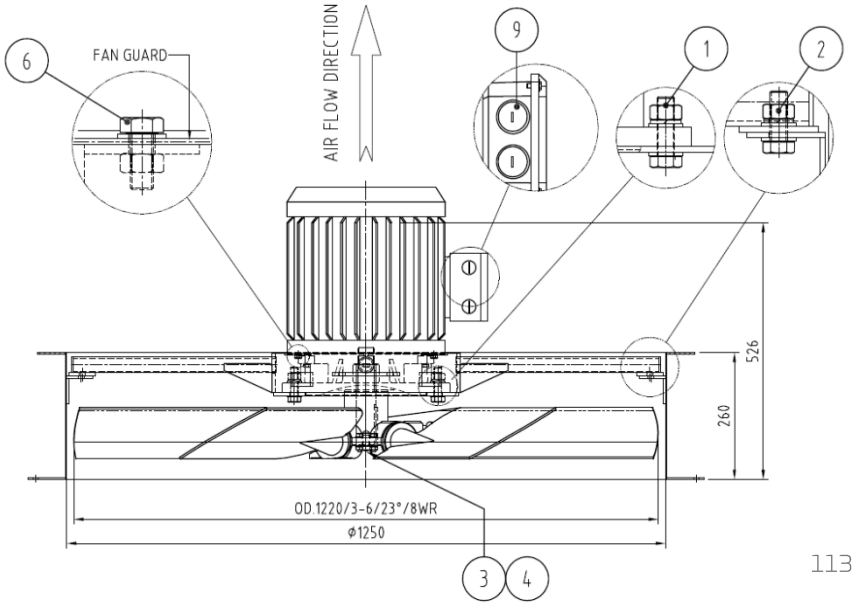


HEX NUT M6
WASHER FOR M6
HEX BOLT
M6x1.5x15L

HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L

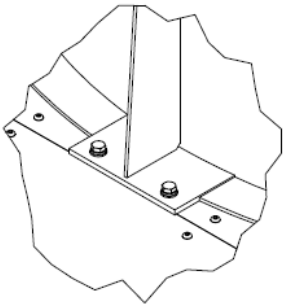
HEX NUT M10
SPRING WASHER FOR M10
WASHER FOR M10
HEX BOLT M10x1.5x30L

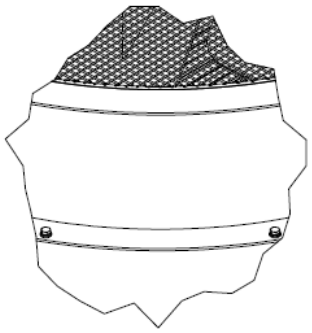
HEX NUT M8
WASHER FOR M8
HEX BOLT
M8x1.5x15L



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

FAN Motor Assembly

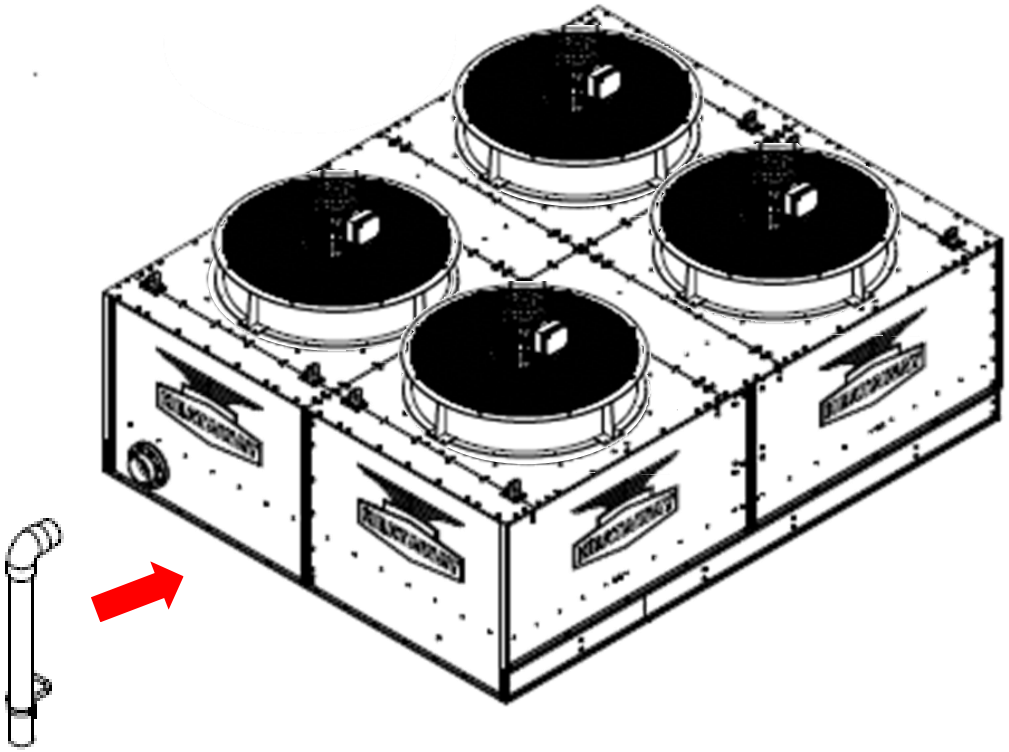


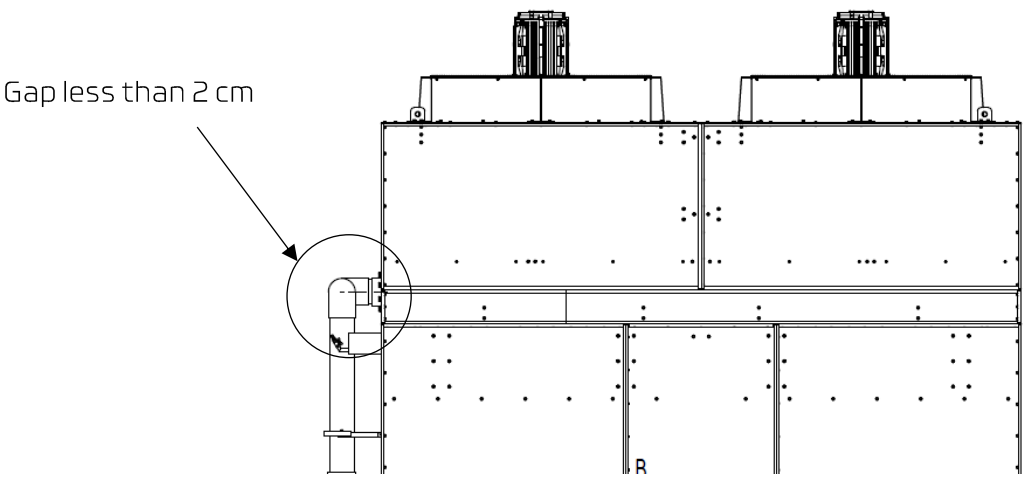


HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Assembly Upper water pipe

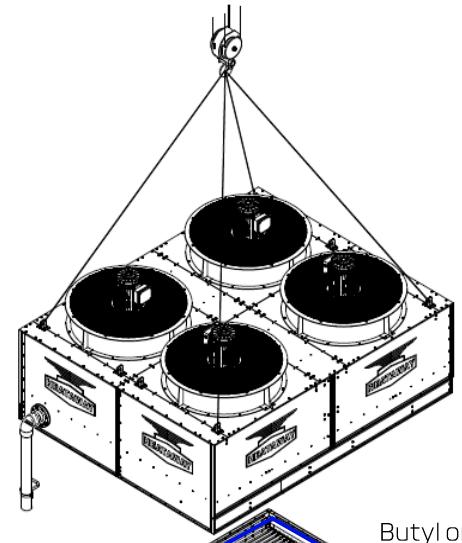


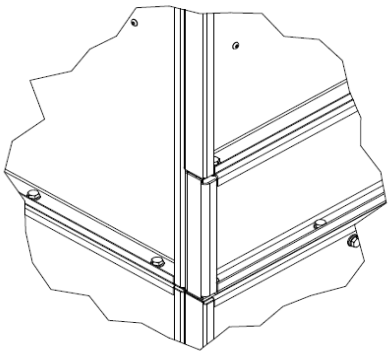


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

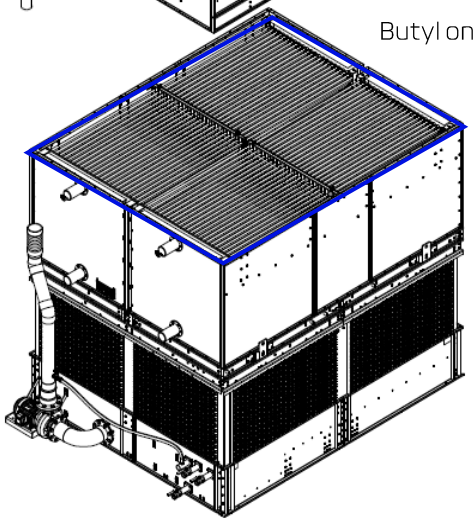
Final Assembly

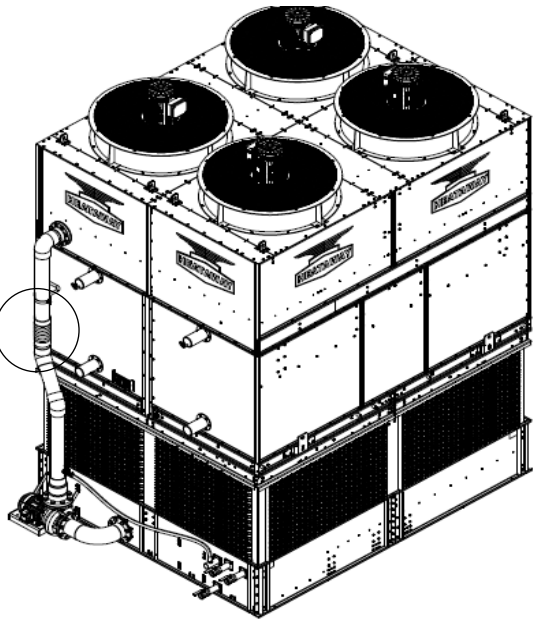


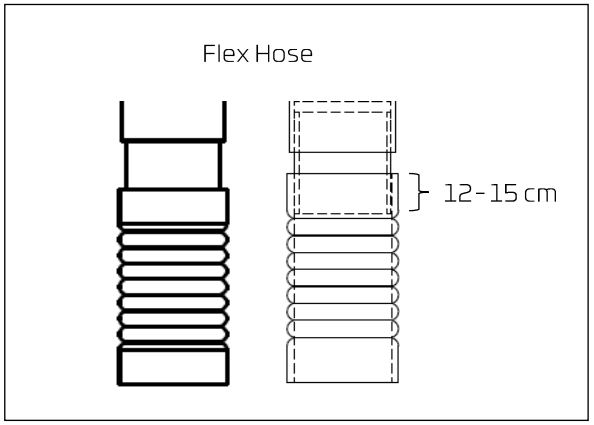


HEX BOLT
M8x1.25x20L
WASHER SPRING
M8
WASHER M8
HEX NUT M8 1.25

Butyl on Surface







TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

HEATAWAY

BRAND-NEW 9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

Footprint

12' X 18'

Model

EC9-2600-1218C-S

EC9-2950-1218C-S

EC9-3010-1218C-M

EC9-3400-1218C-M

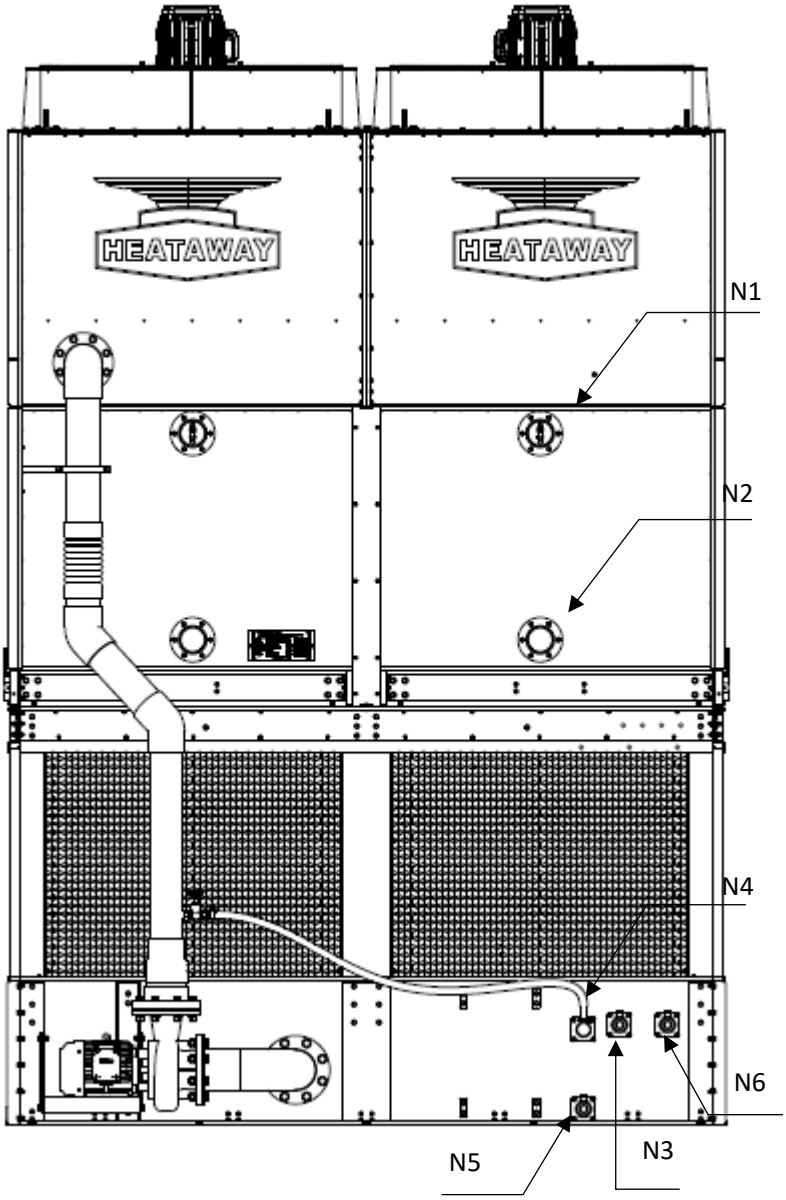
EC9-3730-1218C-M

EC9-3900-1218C-L



www.heataway.net

Piping Connection

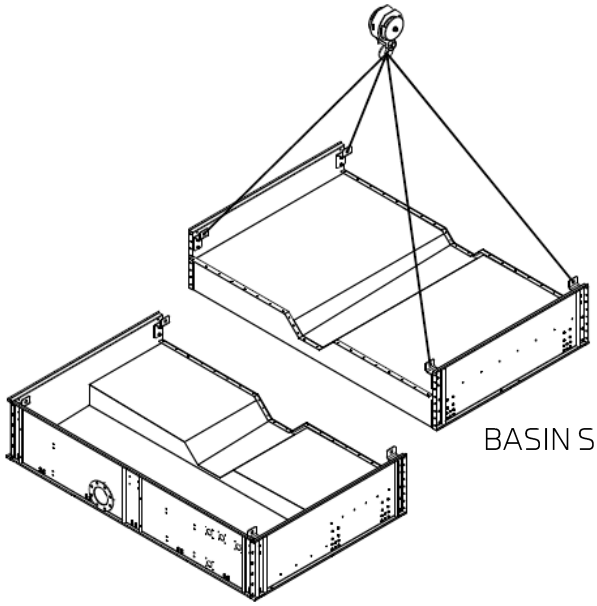


PIPING CONNECTION					
MARK	DESCRIPTION	Q'TY	SIZE	THREAD	VALVE
N1	REFRIGERANT INLET	2	4"	-	-
N2	REFRIGERANT OUTLET	2	4"	-	-
N3	MAKE UP WATER	1	2"	BSPT(F)	BALL VALVE
N4	OVER FLOW	1	2"	BSPT(M)	-
N5	DRAIN	1	2"	BSPT(F)	BALL VALVE
N6	QUICK REFILL	1	2"	BSPT(F)	BALL VALVE

EC9 RIGGING & ASSEMBLY INSTRUCTION

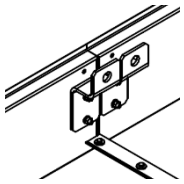
Basin Section Assembly

➤ Step 1 : Start Assembly from item " BASIN SECTION-F " And " BASIN SECTION-M "

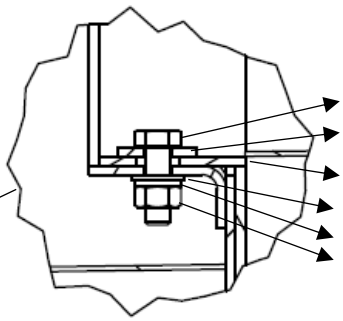


BASIN SECTION-M

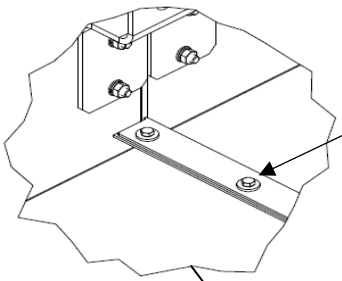
BASIN SECTION-F

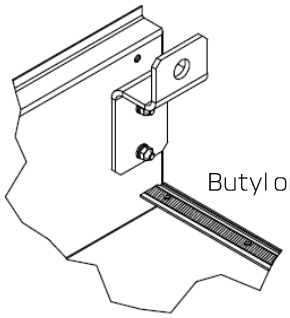


Caution : **Remove Lifting lug** after assembly basin section finished.

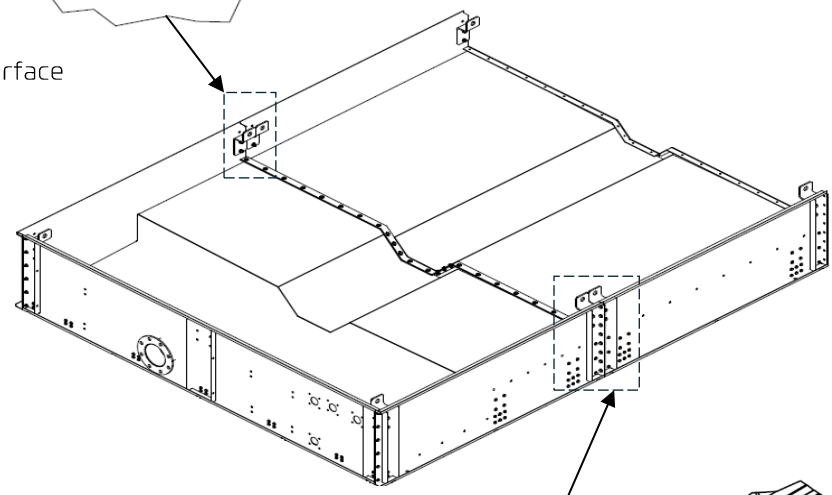


HEX BOLT M8x1.25x25L
WASHER
SILICONE
WASHER M8
SPRING WASHER M8
HEX NUT M8x1.25

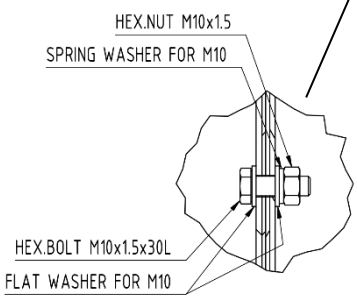


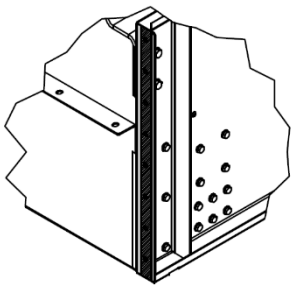


Butyl on Surface



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

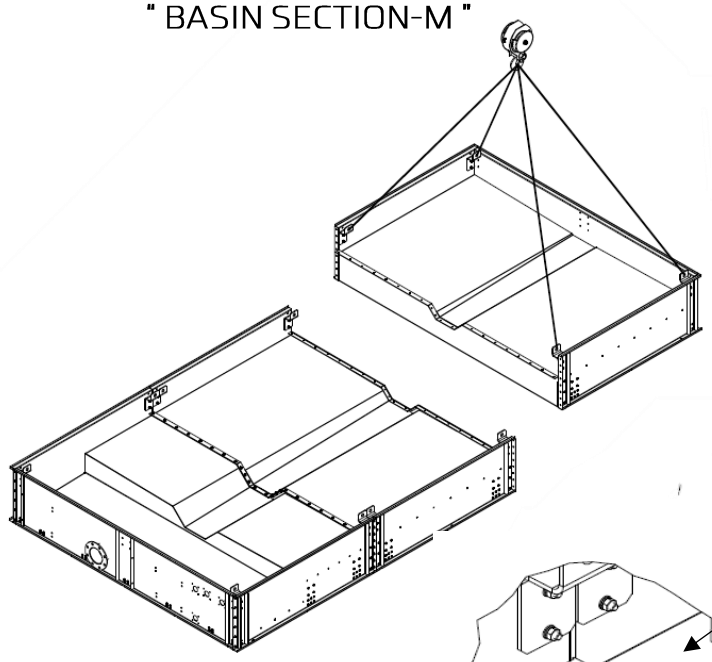


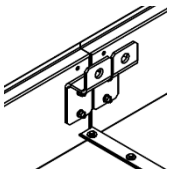


Butyl on Surface

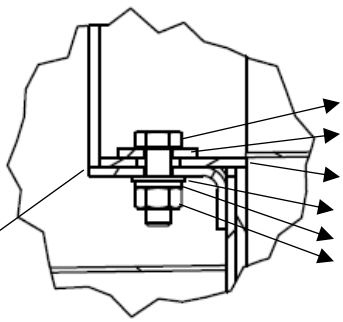
Basin Section Assembly

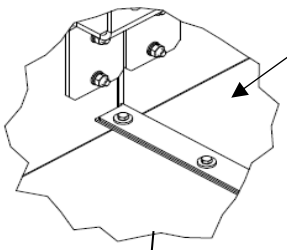
➤ Step 2 : Assembly " BASIN SECTION-B " with " BASIN SECTION-F " And " BASIN SECTION-M "

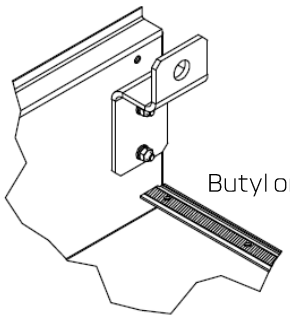


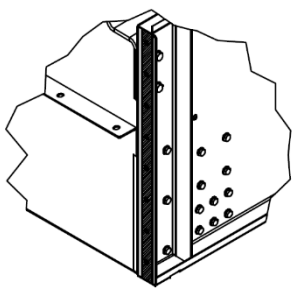


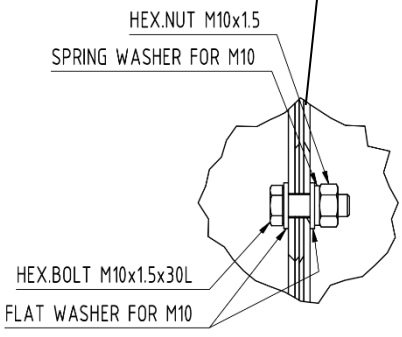
Caution : **Remove Lifting lug** after assembly basin section finished.







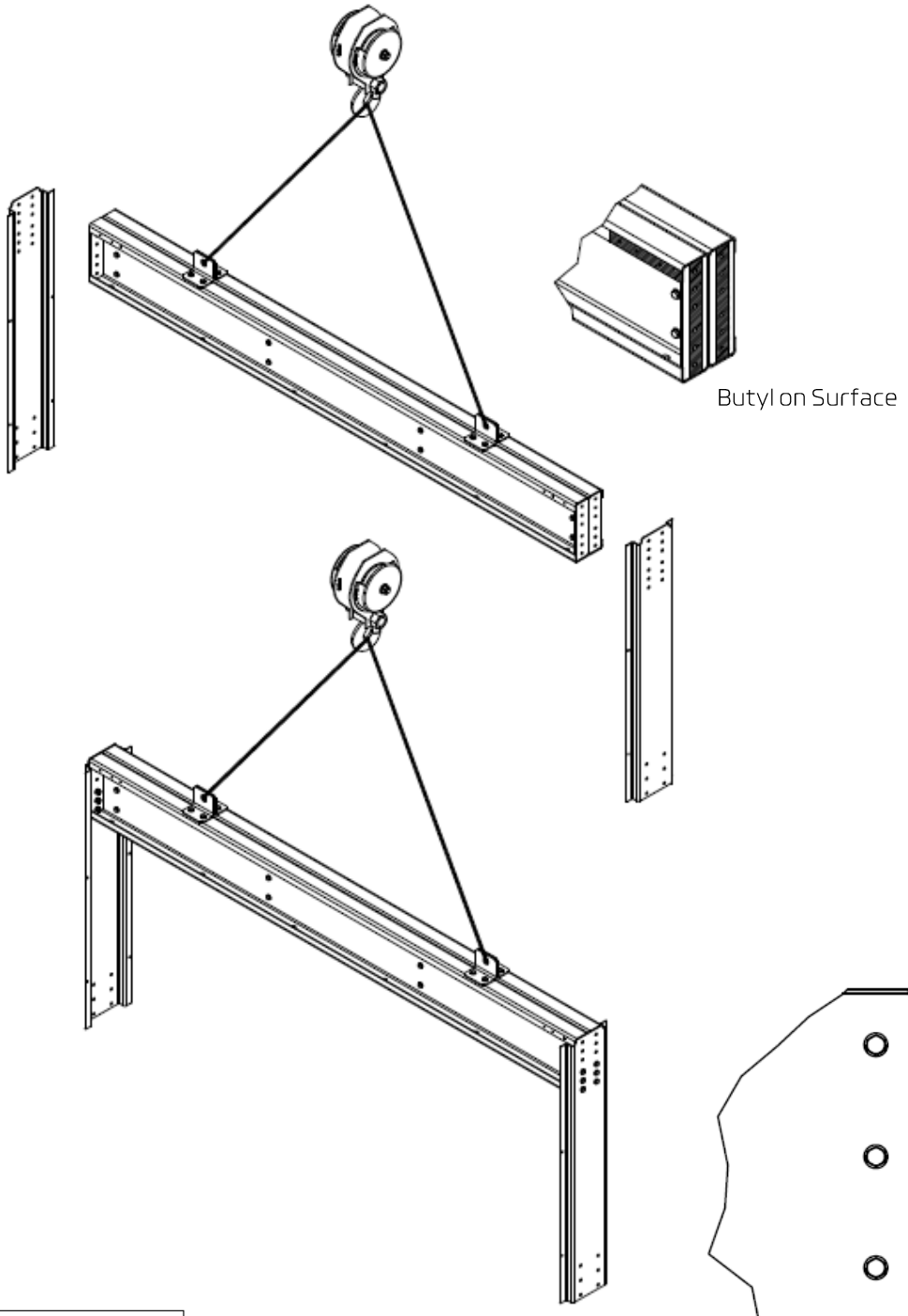


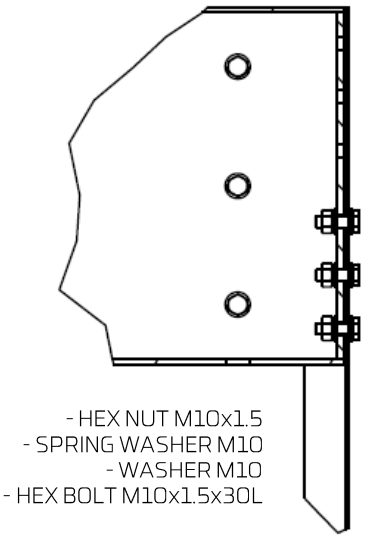


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

Step 3 : Assembly Frame Support

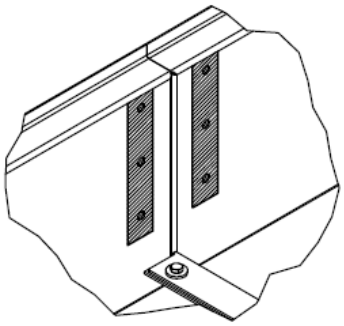


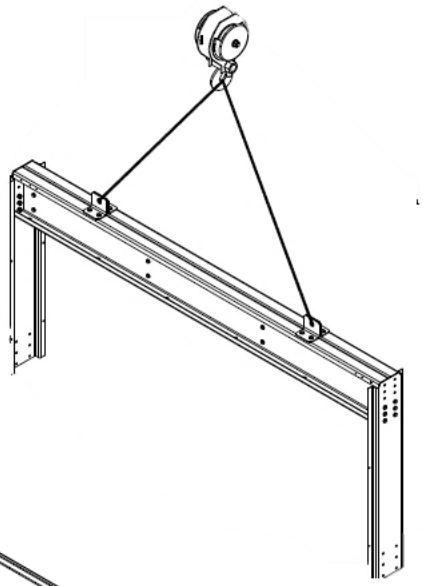


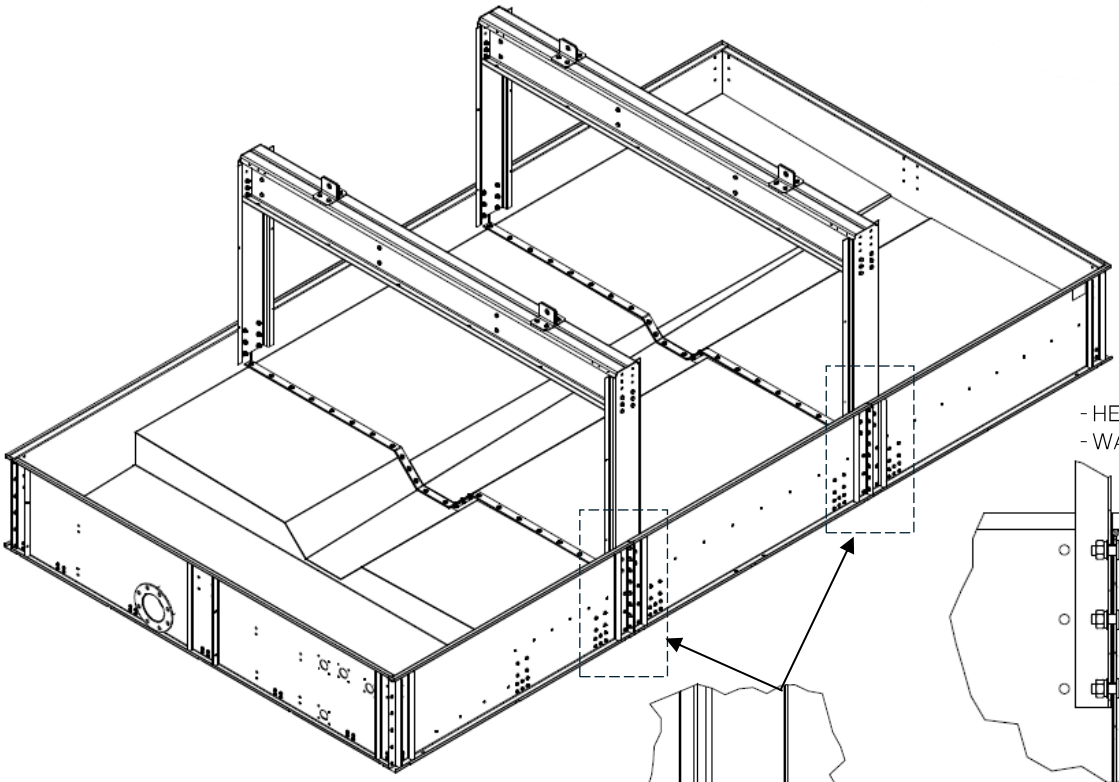
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

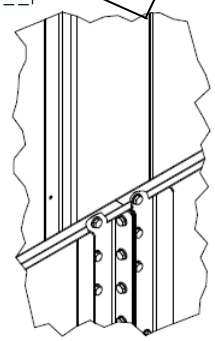
Basin Section Assembly

➤ Step 4 : Assembly Frame Support with BASIN Set Assembly





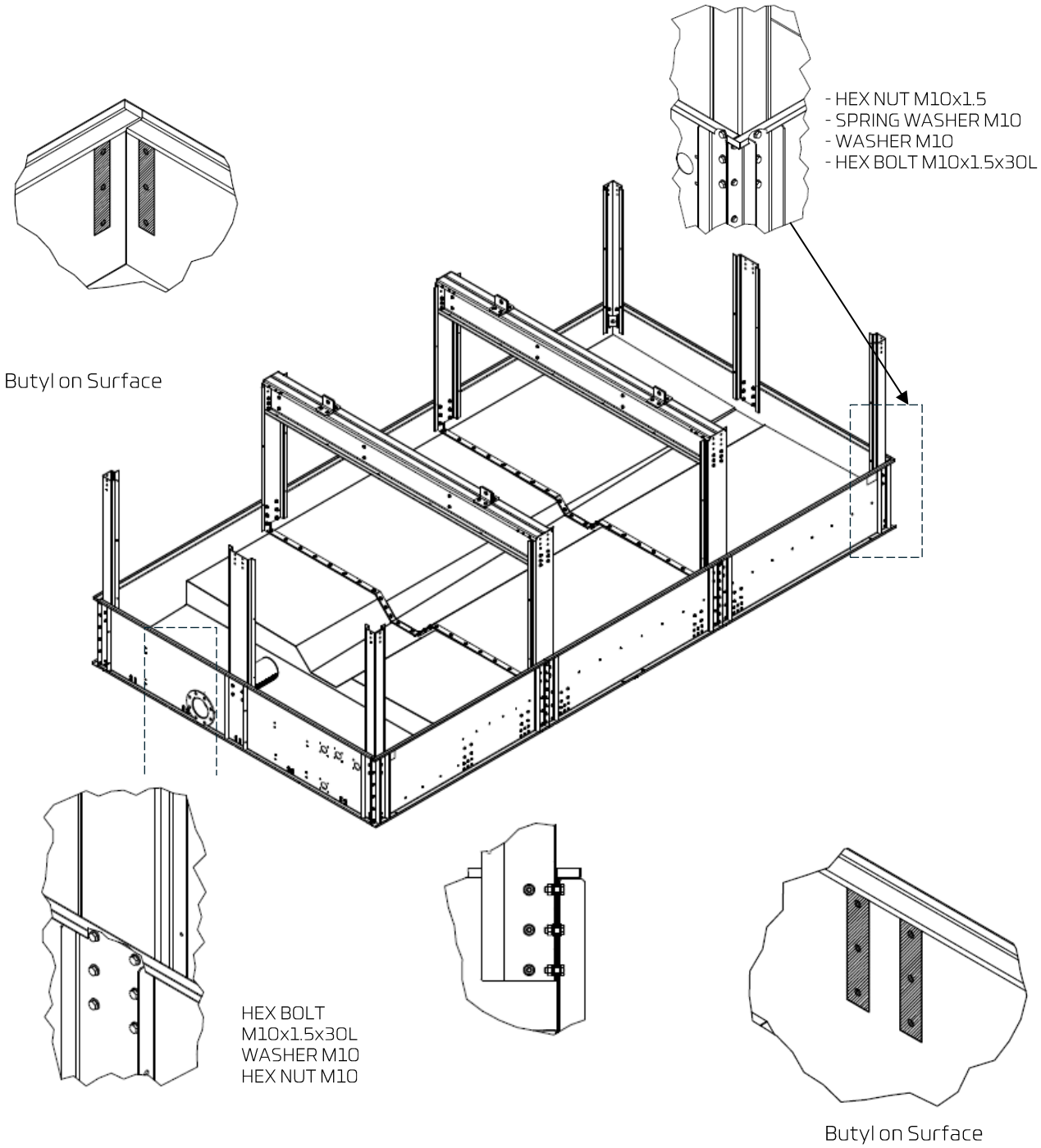




TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

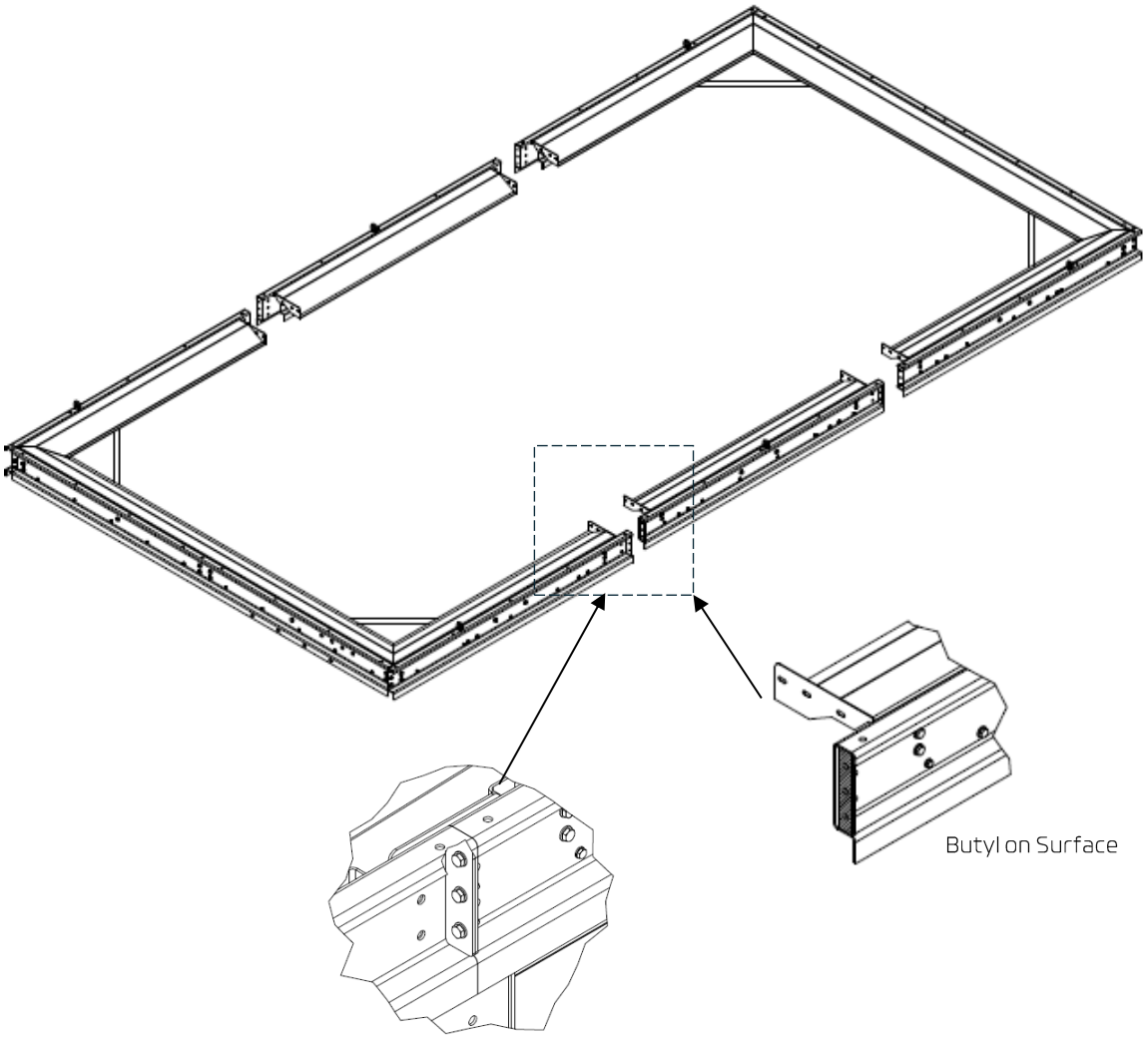
Step 5 : Assembly Frame Support with BASIN Set Assembly



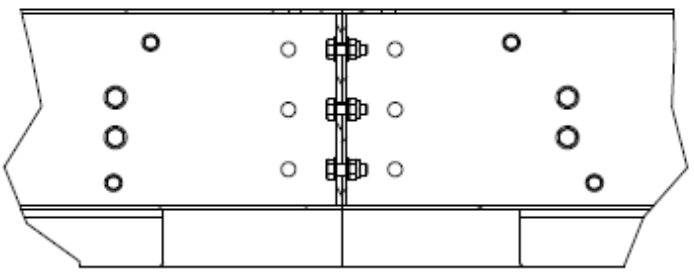
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

➤ Step 6 : Assembly Top Frame of BASIN SECTION



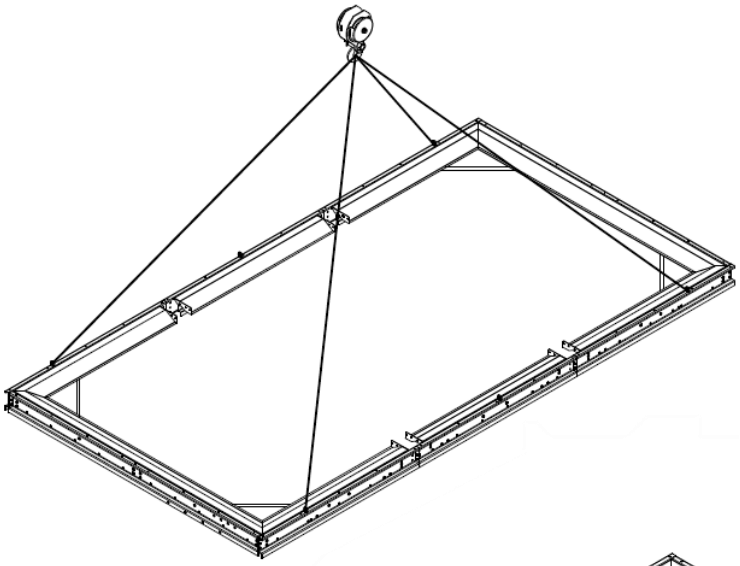
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

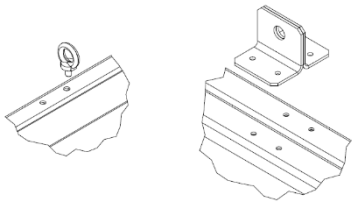


HEX BOLT
M8x1.25x25L
WASHER M8
HEX.LOCK NUT
M8x1.25

Basin Section Assembly

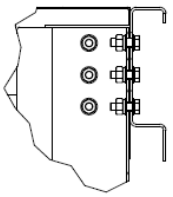
➤ Step 7 : Install Top Frame to BASIN SECTION and assembly MID FRAME

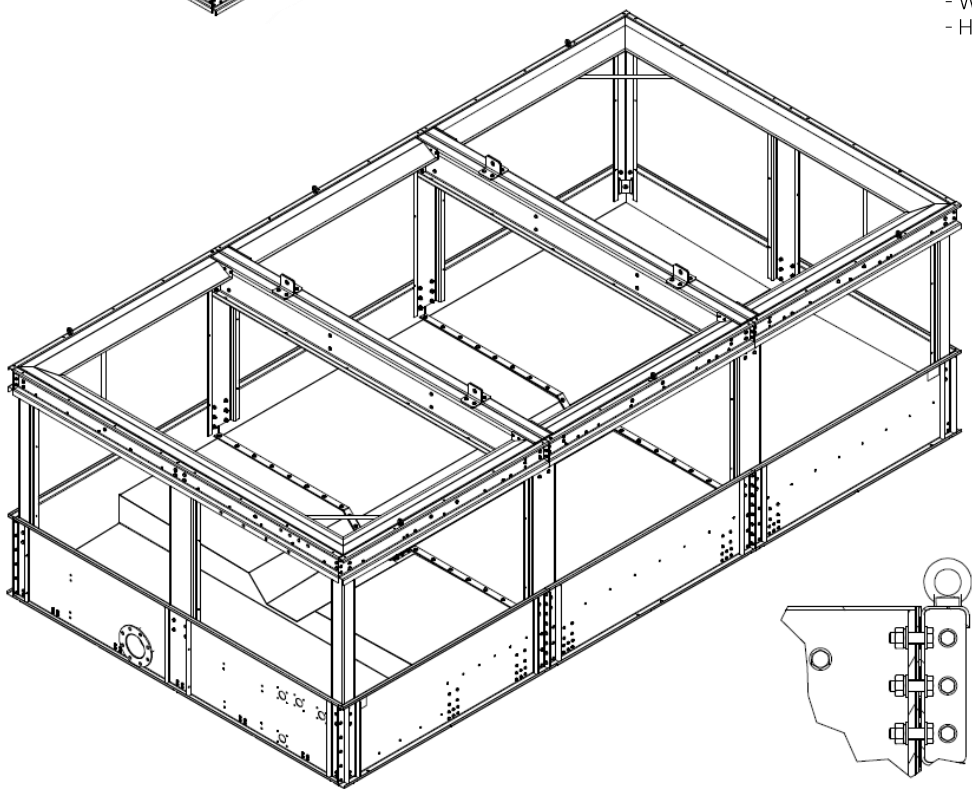




Caution : **Remove Lifting lug and eye bolt** after assembly basin section finished.

- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x35L





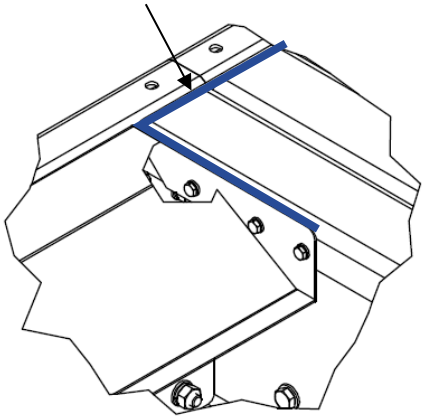
- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x35L

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

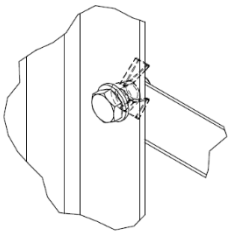
Basin Section Assembly

Step 8 : Assembly support frame and Deflector

SILICONE ON SURFACE

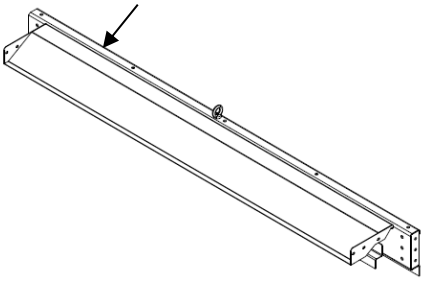


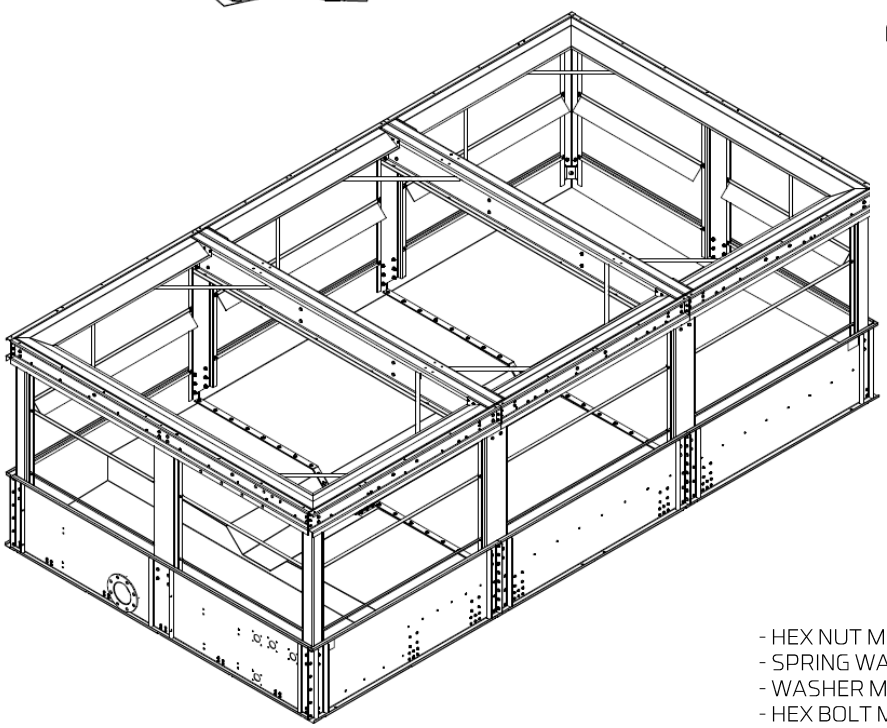
- HEX NUT M6x1
- SPRING WASHER M6
- WASHER M6
- HEX BOLT M6x1x20L



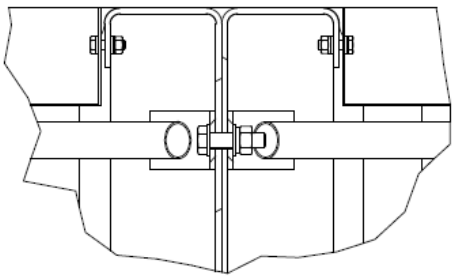
LIIFTING EYE BOLT
M10x1.5x17L
WASHER FOR M10
HEX NUT M10x1.5

SILICONE AND BUTYL ON SURFACE





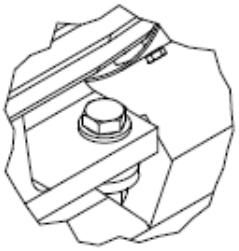
- HEX NUT M10x1.5
- SPRING WASHER M10
- WASHER M10
- HEX BOLT M10x1.5x30L



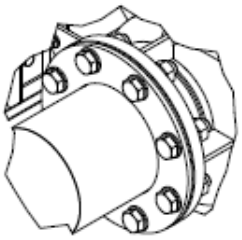
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

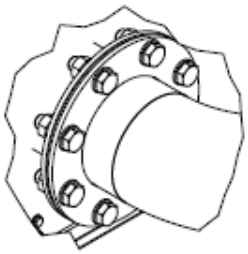
➤ Step 9 : Install water pipe and Ball Float Valve to BASIN SECTION



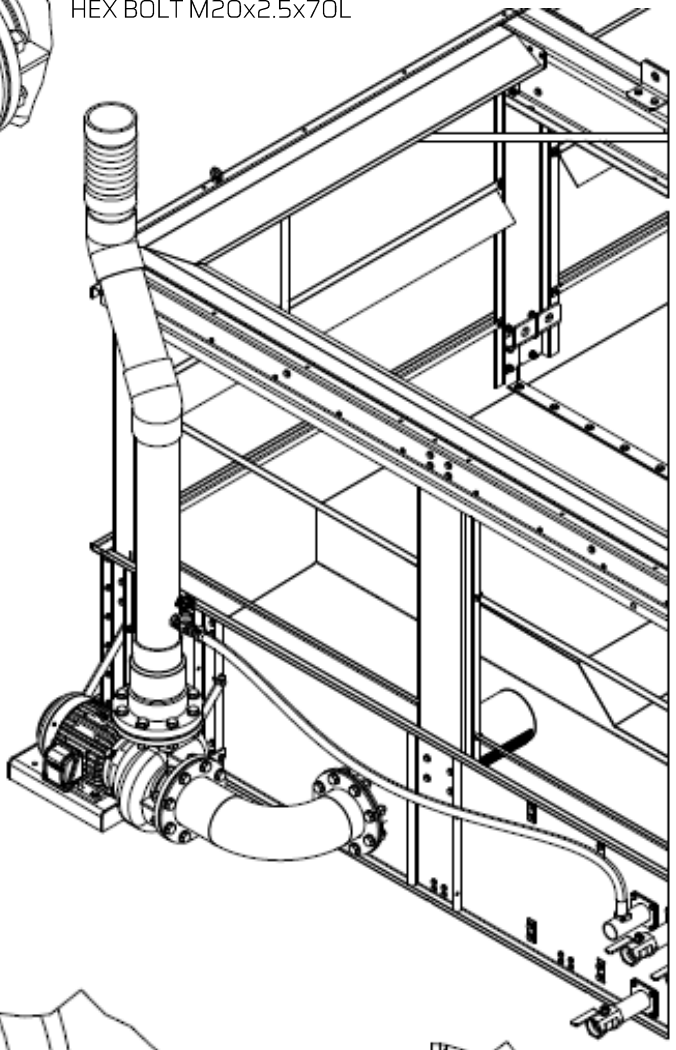
HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x50L

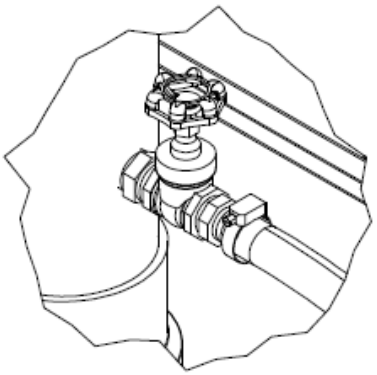


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

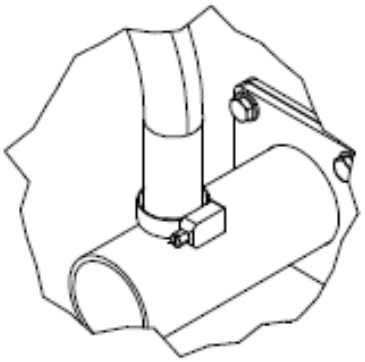


HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L

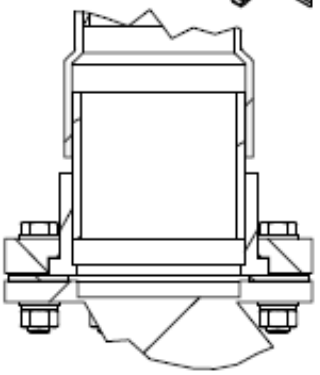




HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

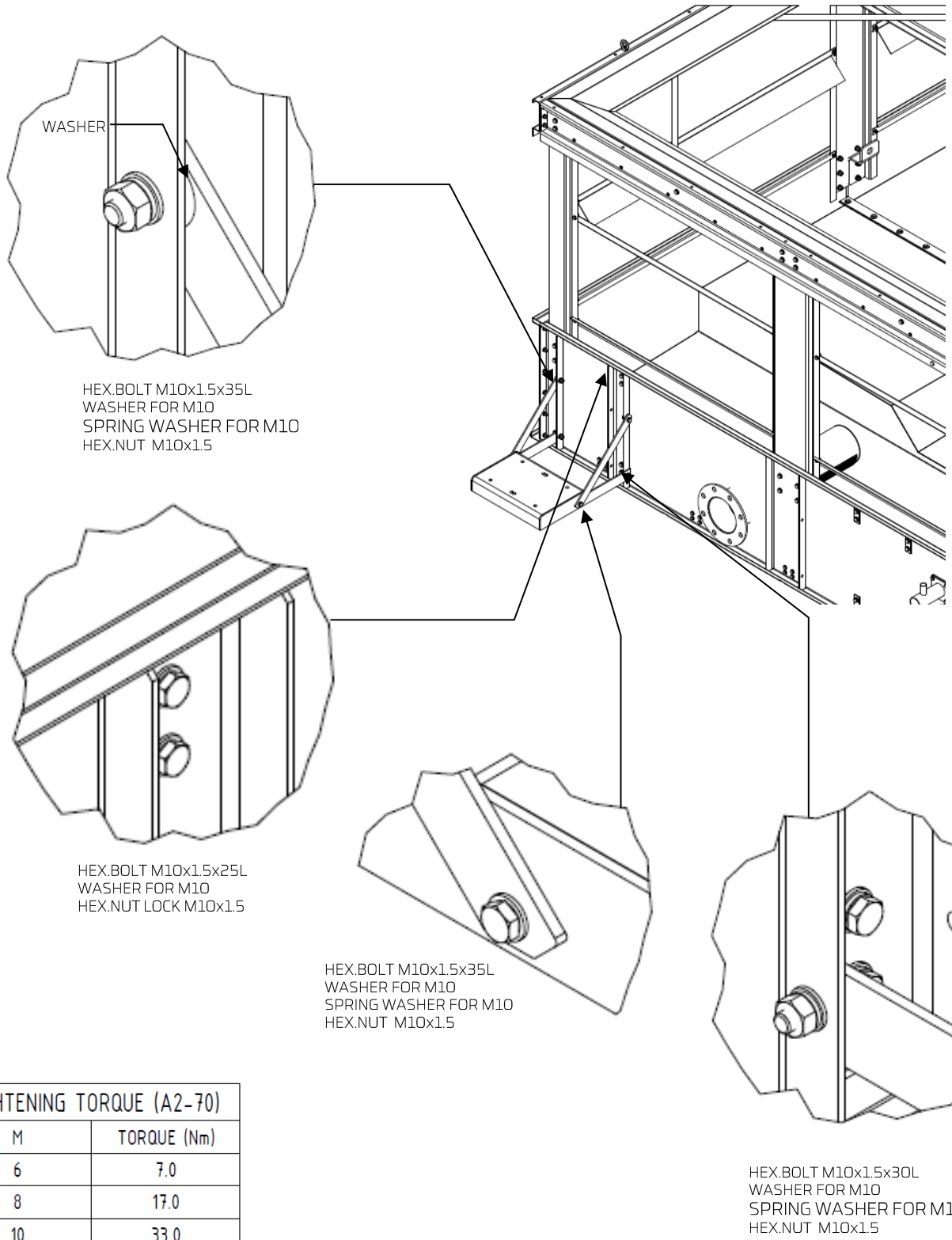


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

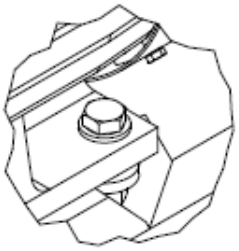
➤ Step 10 : Pump set assembly and install to BASIN SECTION

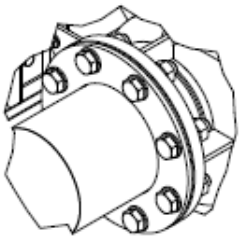


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

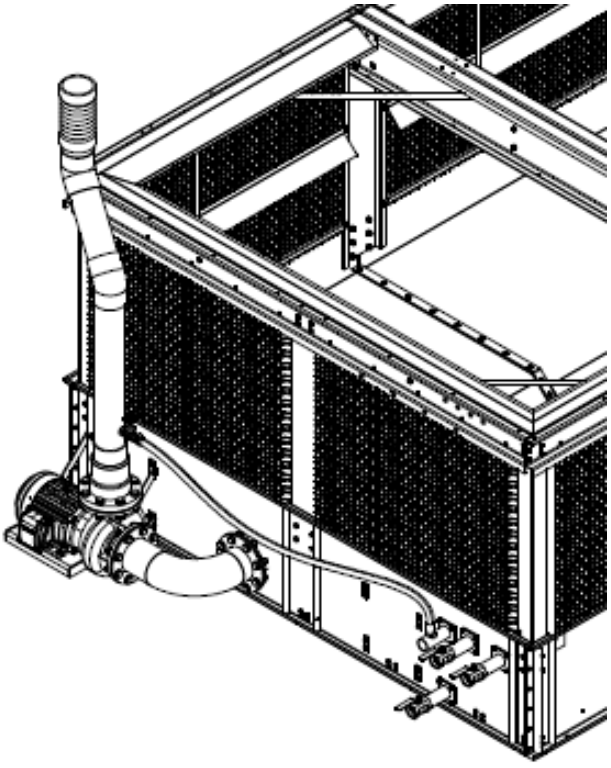
➤ Step 10 : Pump set assembly and install to BASIN SECTION

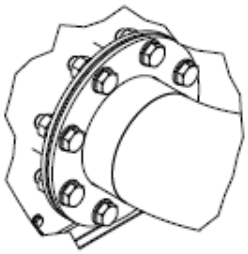




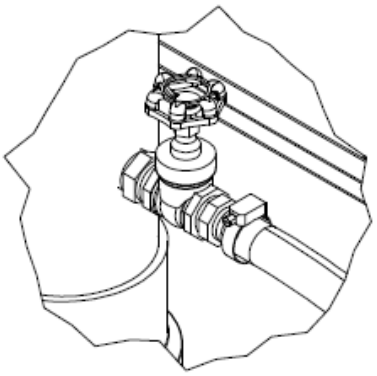
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x70L

HEX NUT M12x1.75
SPRING WASHER FOR M12
WASHER FOR M12
HEX BOLT M12x1.75x45L

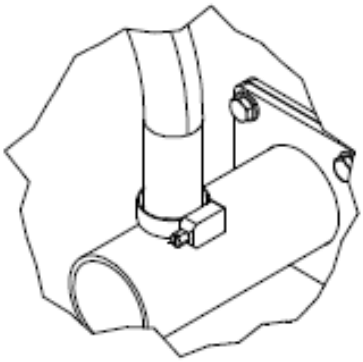




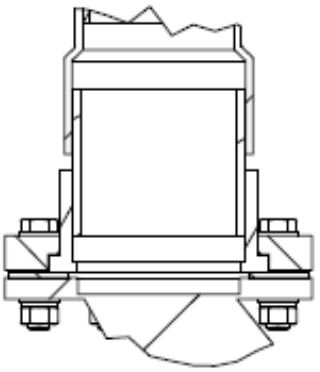
HEX NUT M20x2.5
SPRING WASHER FOR M20
WASHER FOR M20
HEX BOLT M20x2.5x60L



HOSE CLAMP 1"
TEXTILE HOSE 1"



HOSE CLAMP 1"
TEXTILE HOSE 1"

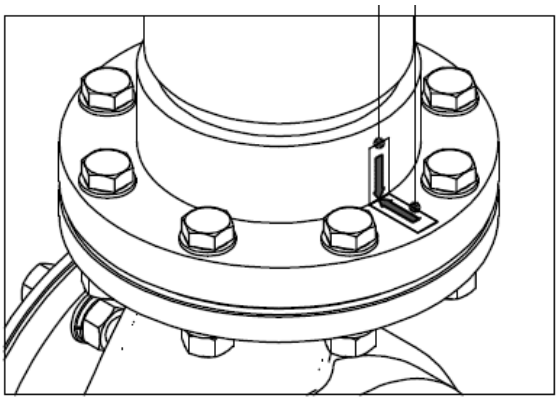


HEX BOLT M20 x90L
HEX LOCK NUT M20
WASHER FOR M20
SPRING WASHER FOR M20

TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

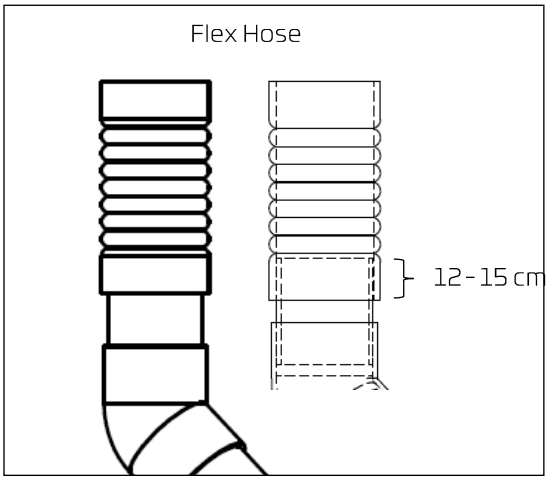
Step 10 : Water Pump pipe Assembly



>> Water pipe assembly process, pipe position must be checked using marking stickers on the base pipe. Markings must indirection to ensure proper pipe alignment and prevent misalignment and leakage.

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

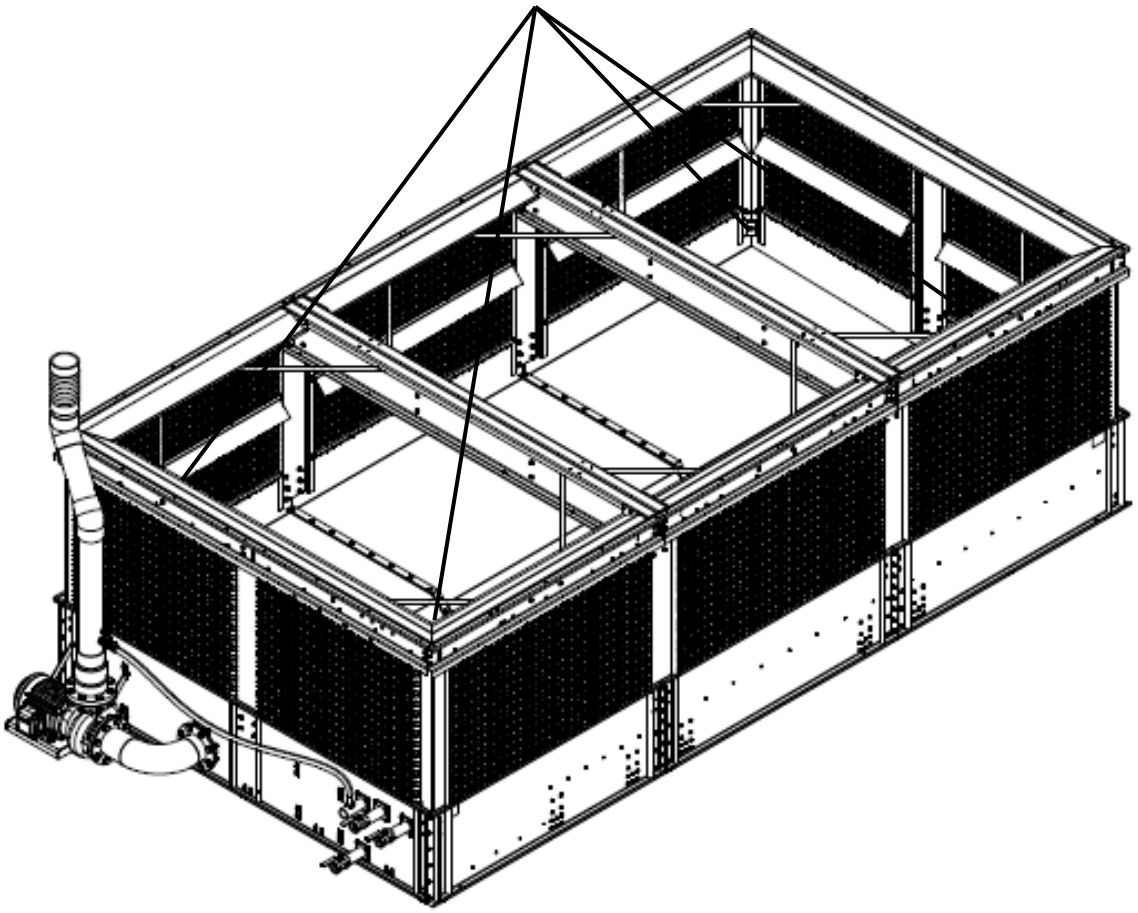
** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Basin Section Assembly

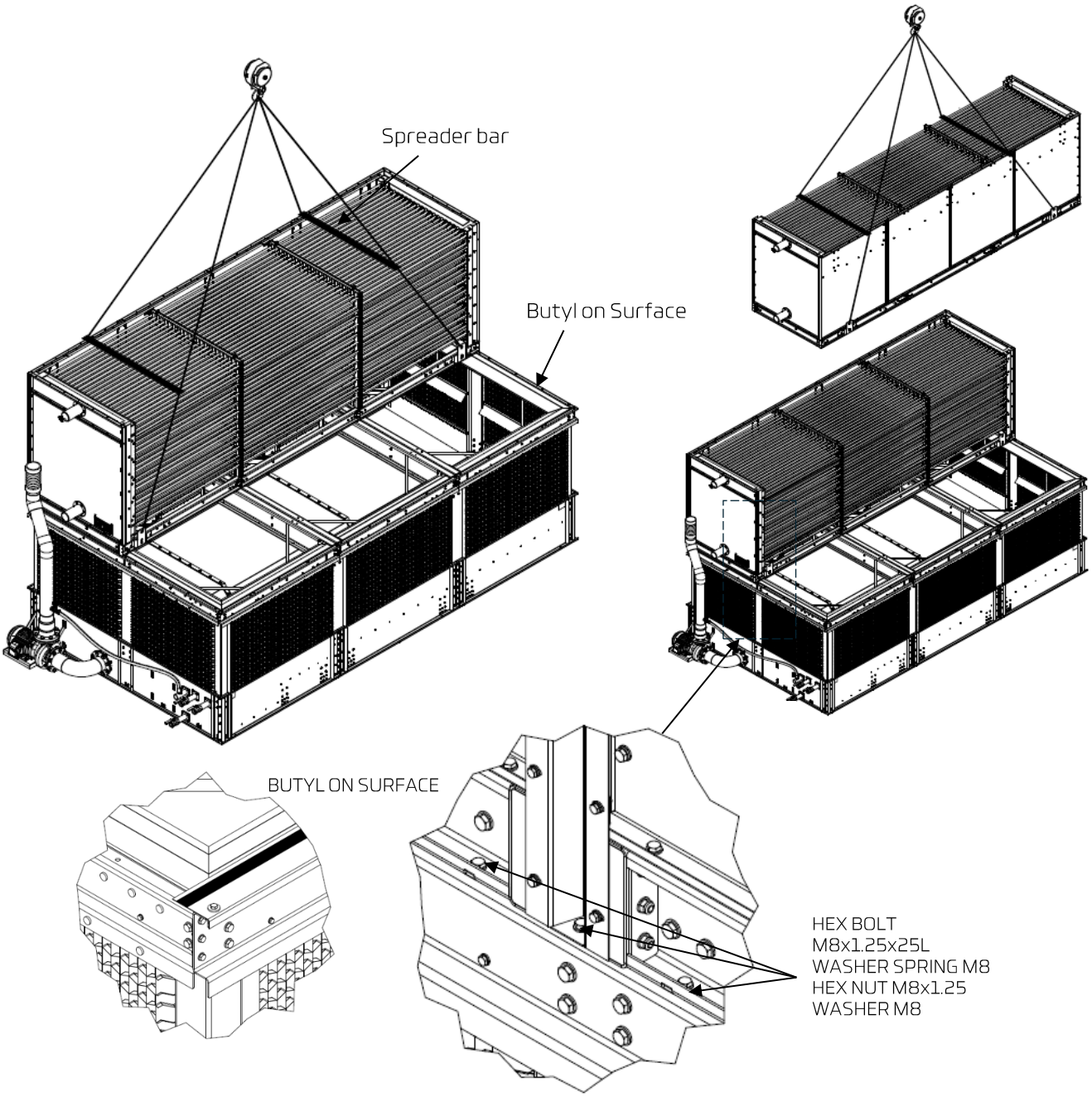
Move BASIN SECTION to position



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

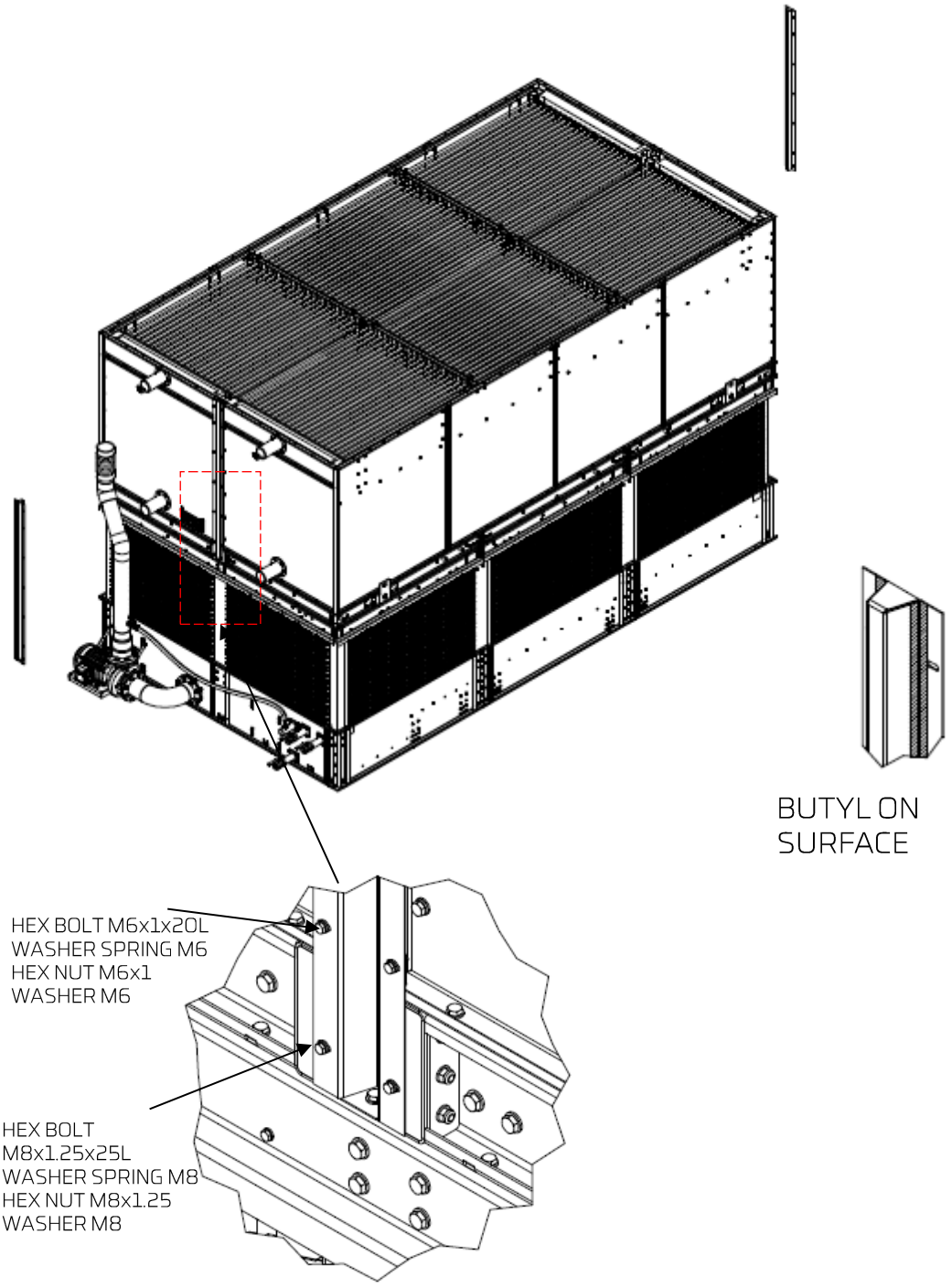
Coil Section Assembly

>> Assembly Coil Section L and R on Basin



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

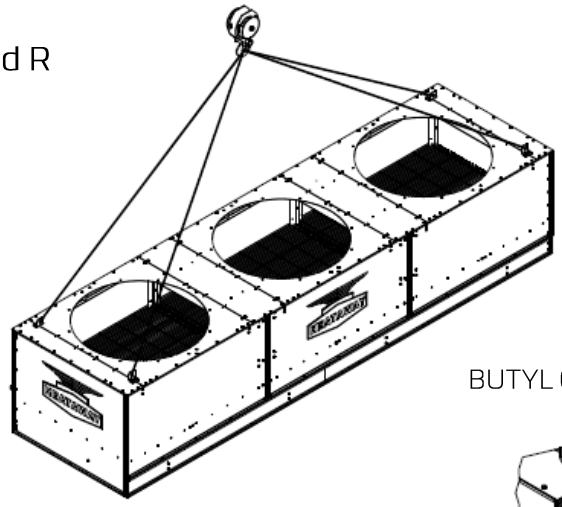
Coil Section Assembly



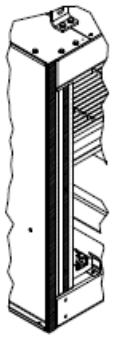
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

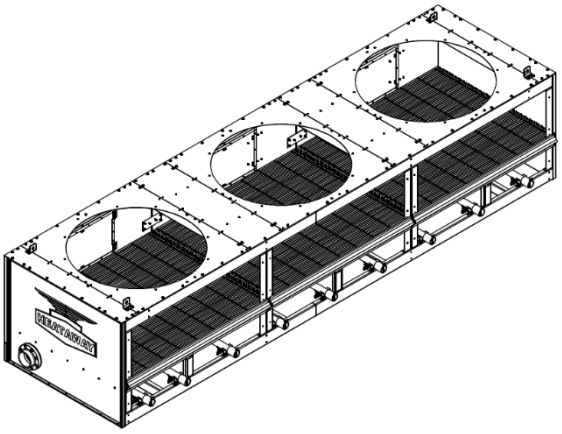
Fan Section Assembly

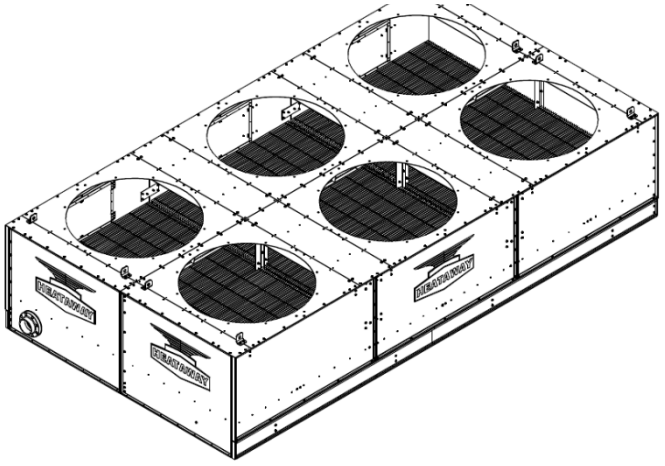
>> Assembly FAN Section L and R



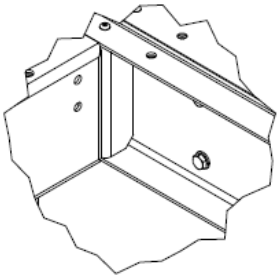
BUTYL ON SURFACE



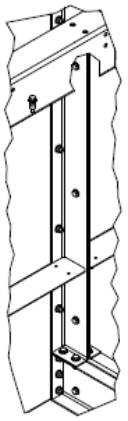


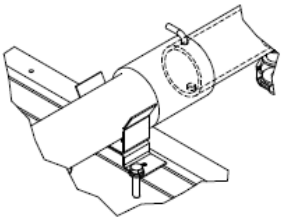


HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8



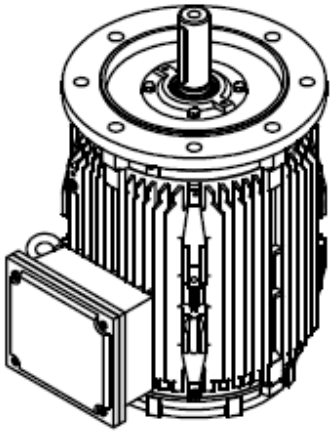
HEX BOLT
M8x1.25x25L
WASHER SPRING M8
HEX NUT M8x1.25
WASHER M8

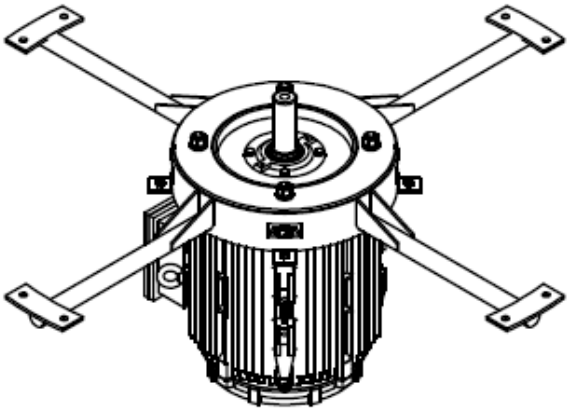


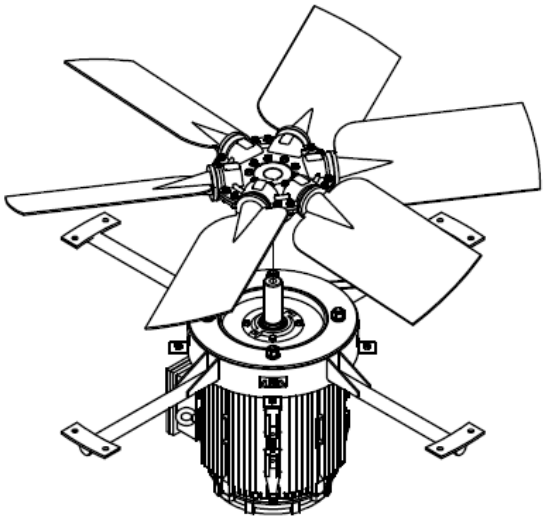


TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

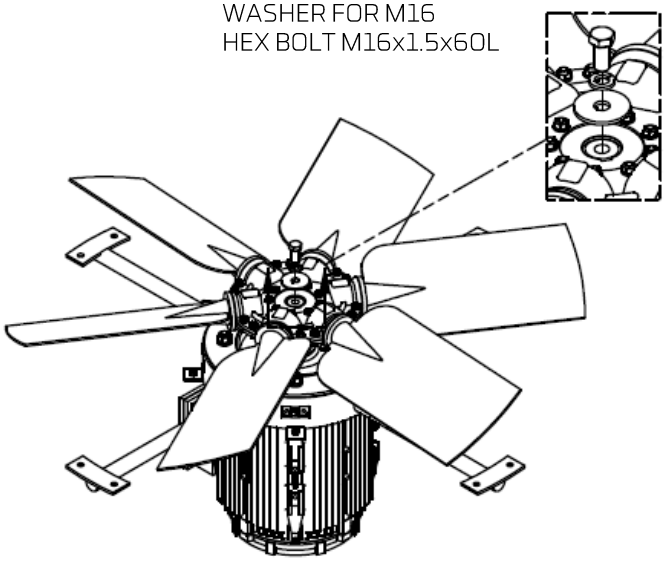
Fan Motor Assembly





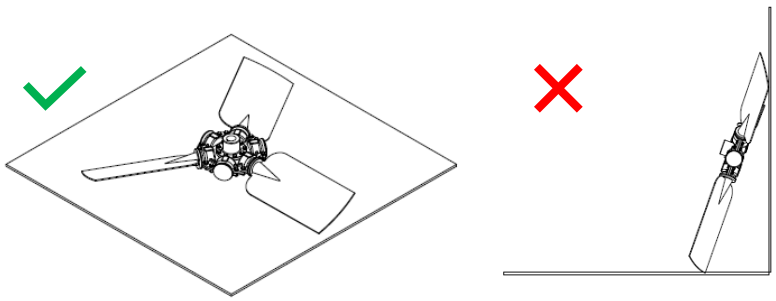


HEX NUT M16
SPRING WASHER FOR M16
WASHER FOR M16
HEX BOLT M16x1.5x60L

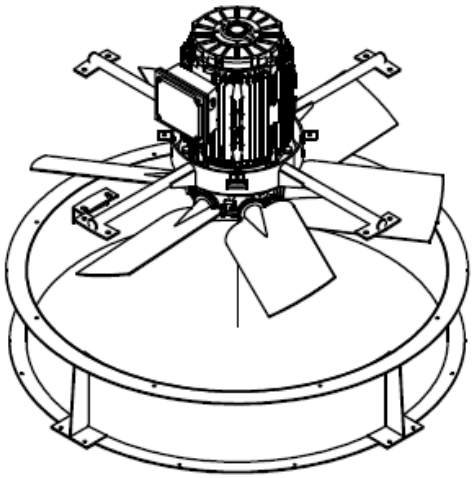


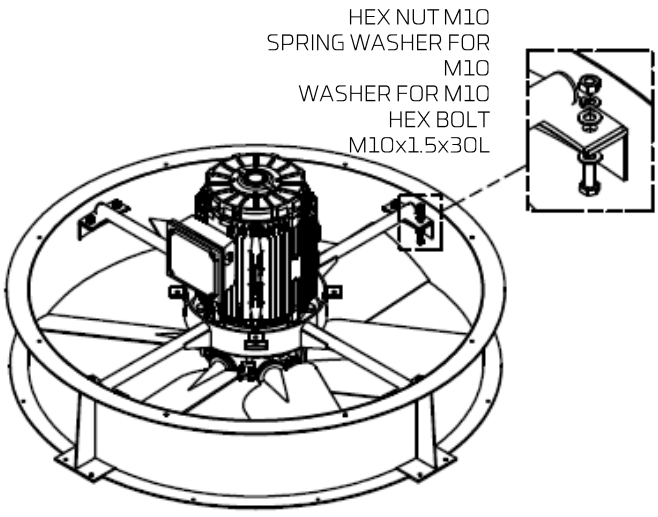
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

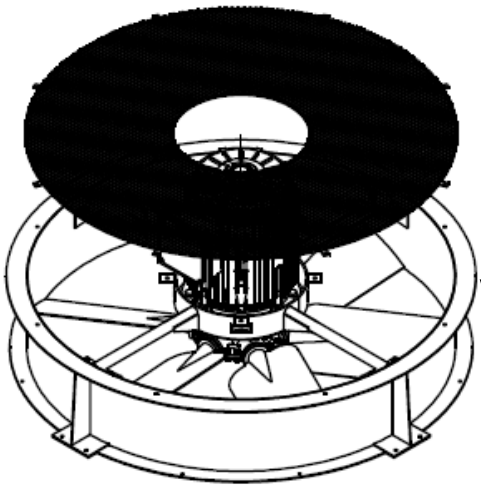
For prevents of FAN Blade warping or deformation please store by keep retaining plate side on the floor.

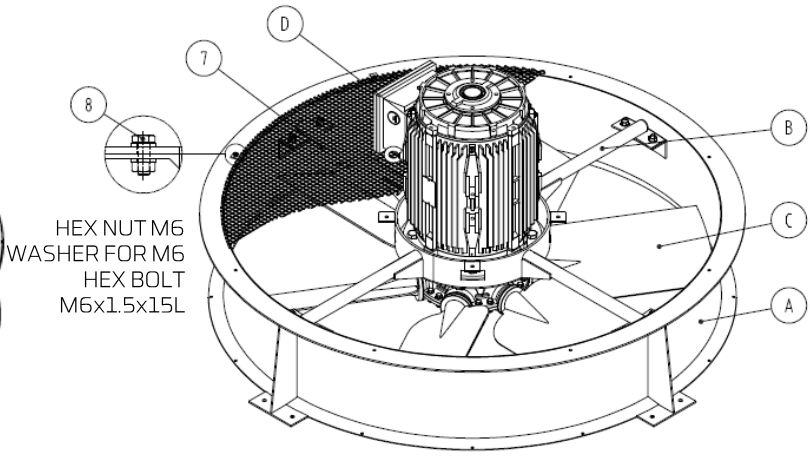


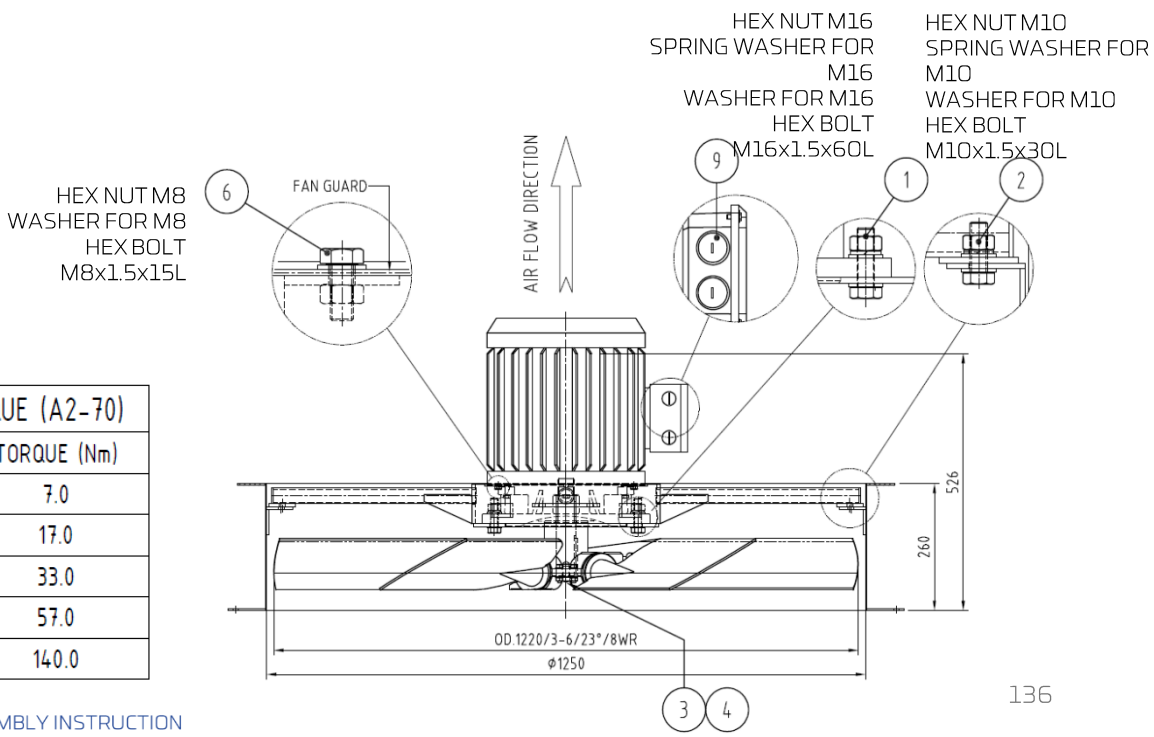
Fan Motor Assembly







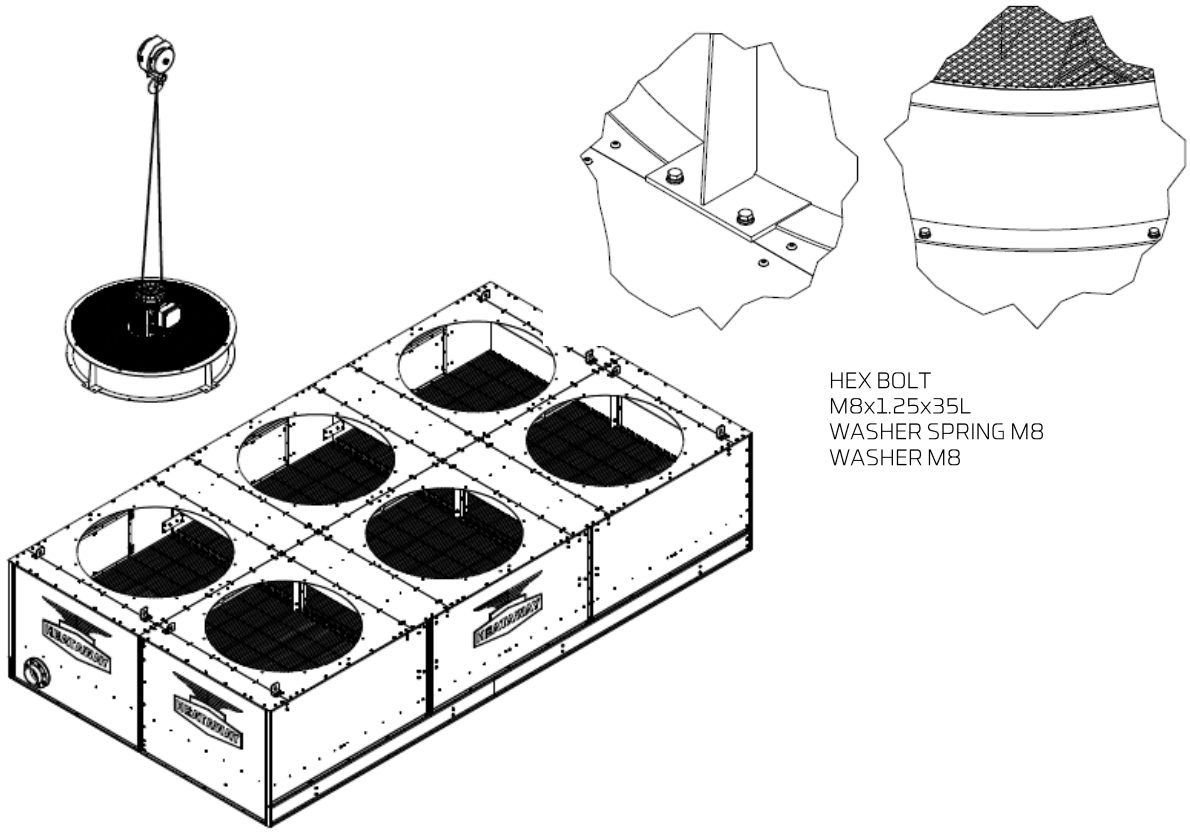




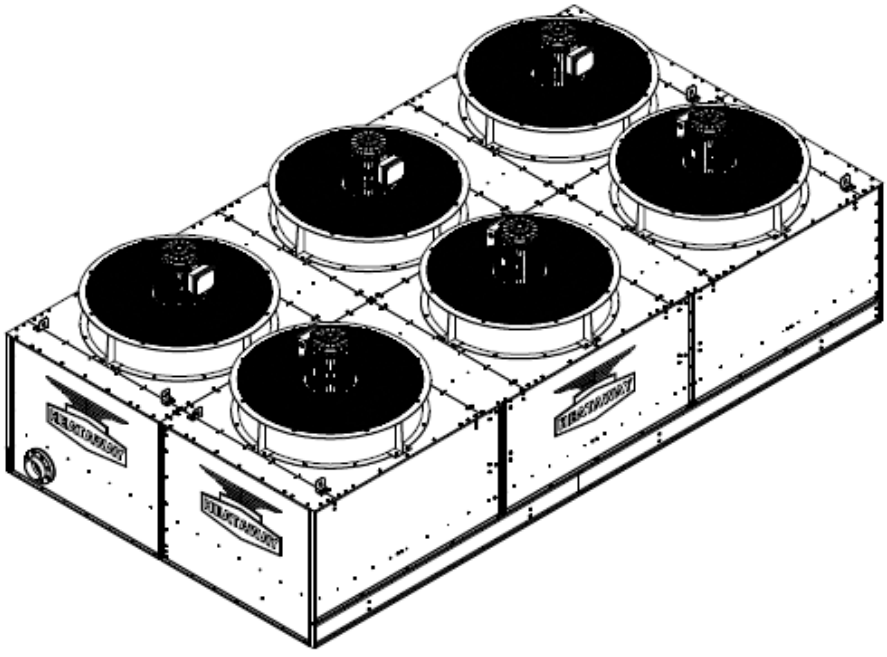
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Fan Section Assembly

>> Install FAN set With Motor to FAN Section

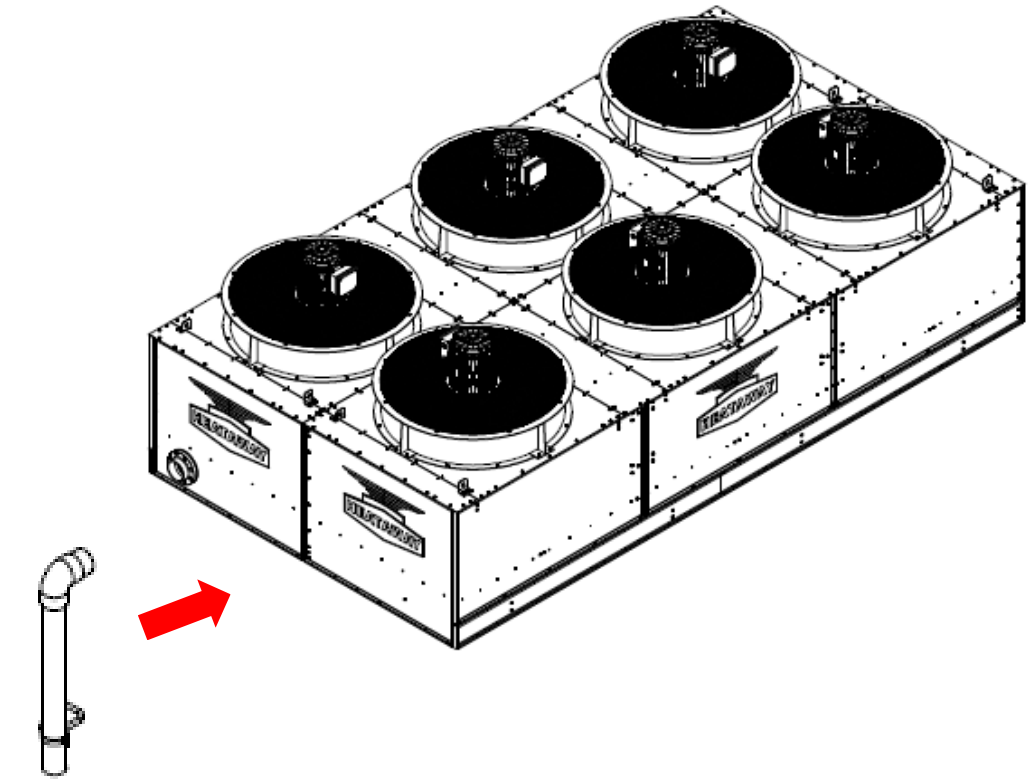


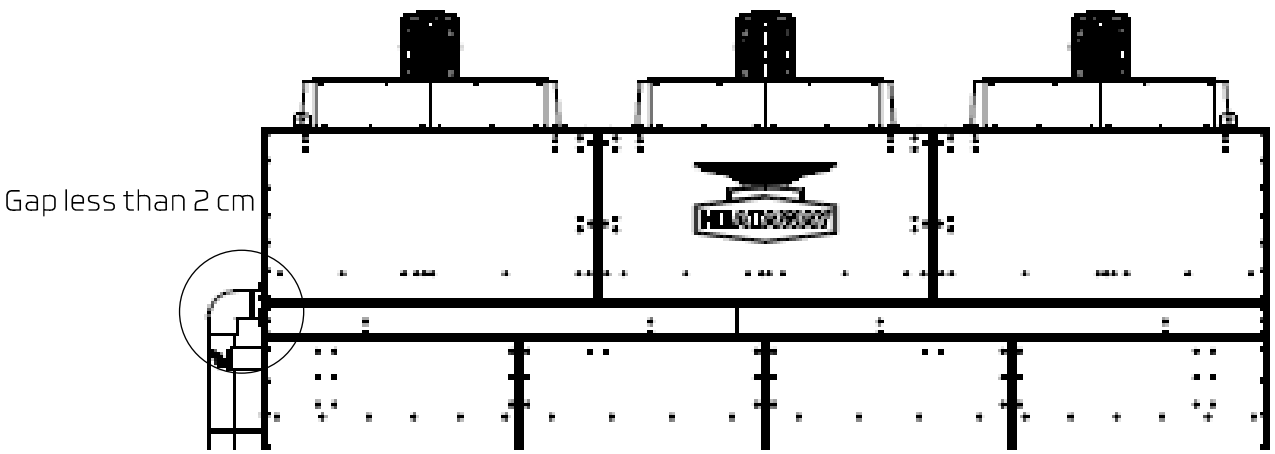
HEX BOLT
M8x1.25x35L
WASHER SPRING M8
WASHER M8



TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

Fan Section Assembly



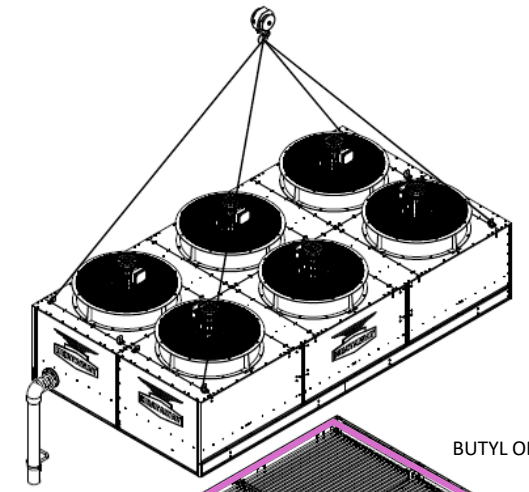


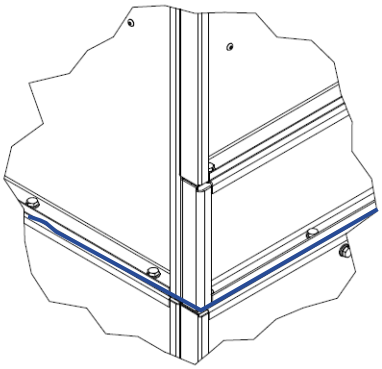
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

Fan Section Install

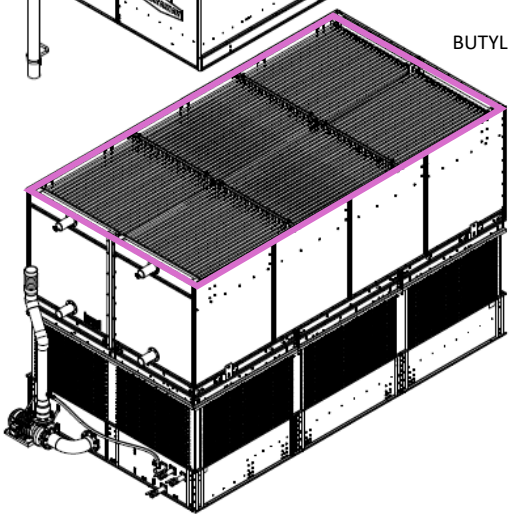
>> Install FAN Section

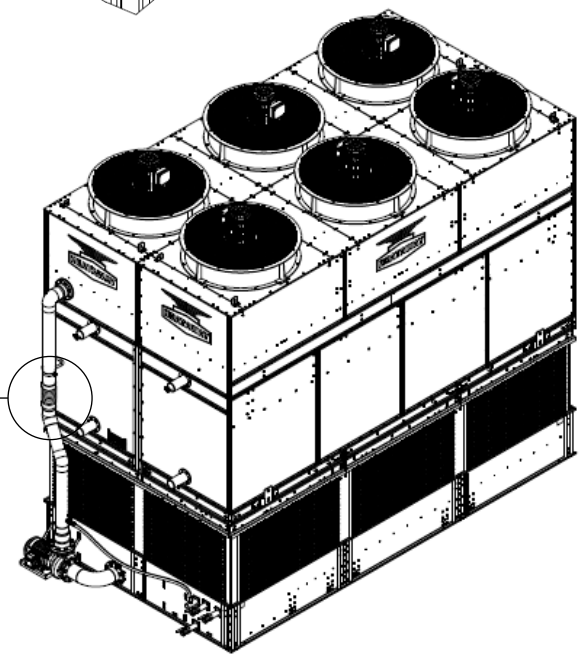


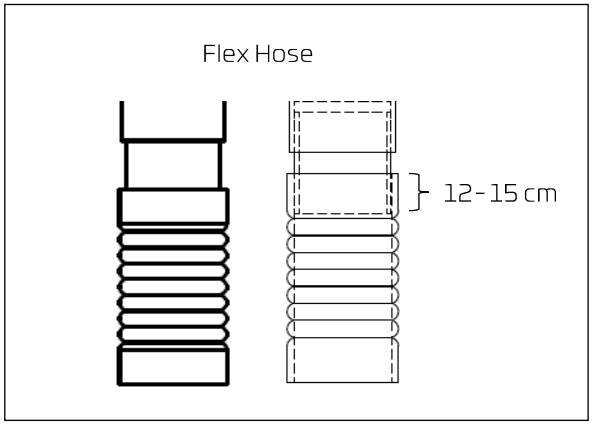


HEX BOLT M8x1.25x20L
WASHER SPRING M8
WASHER M8
HEX NUT M8 1.25

BUTYL ON SURFACE





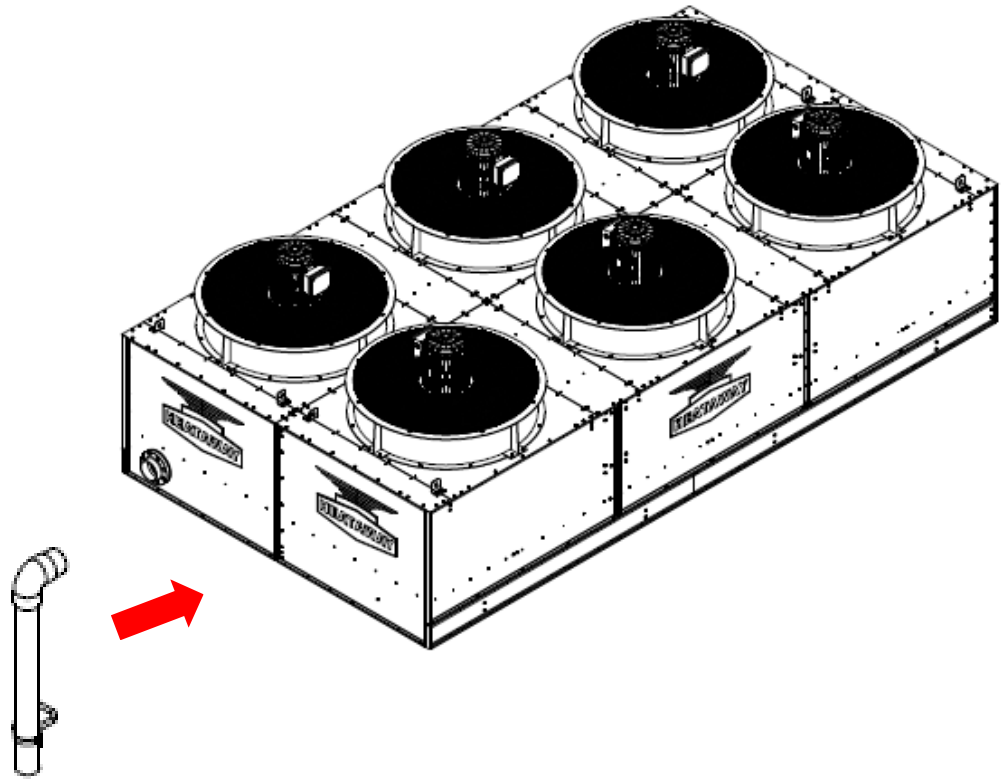


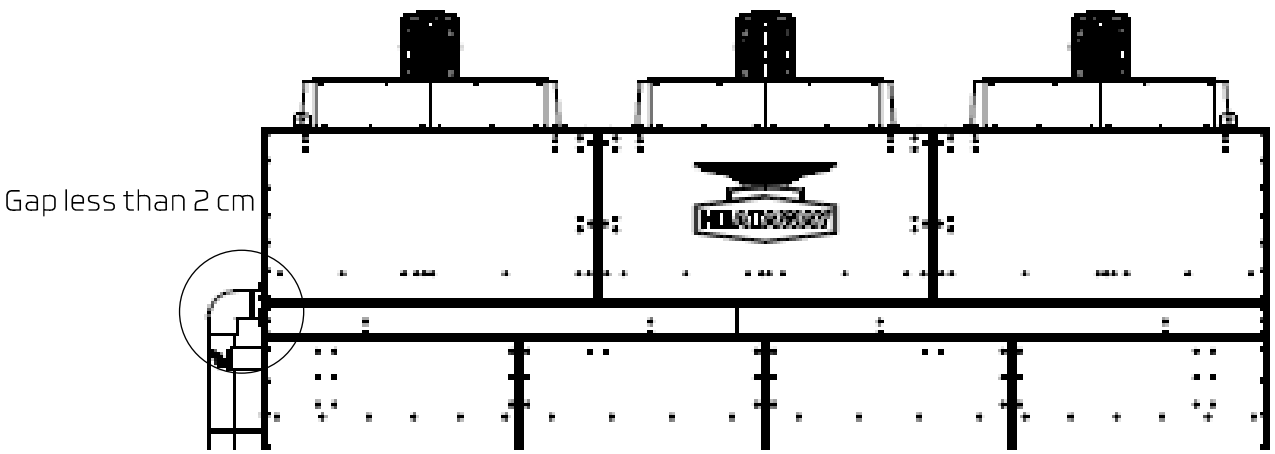
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

Fan Section Assembly



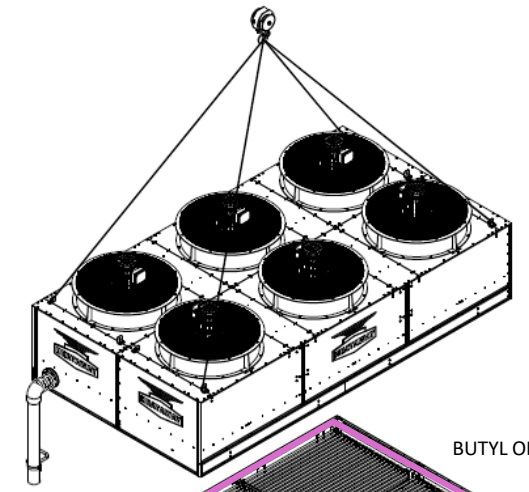


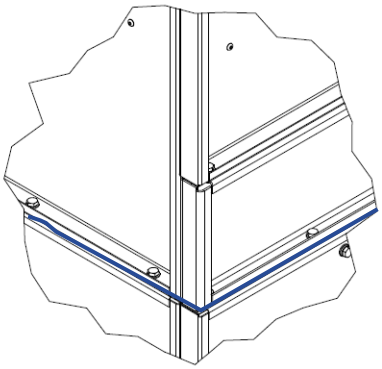
TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Upper pipe assembly process: Insert the upper pipe into the flange, ensuring proper fit and that the pipe gap less than 2 cm, and markings. Then attach by using PVC glue and use a rubber hammer to tighten and ensure a leak connection.

Fan Section Install

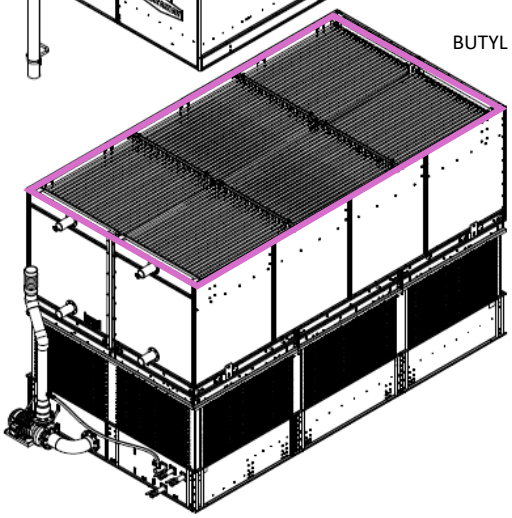
>> Install FAN Section

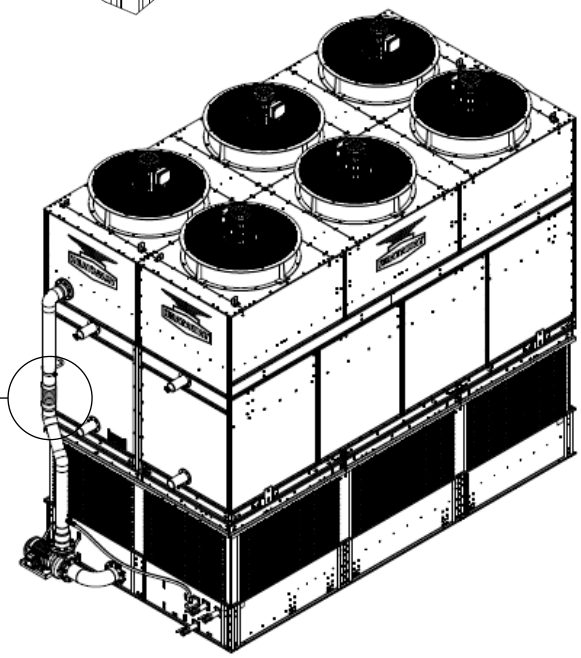


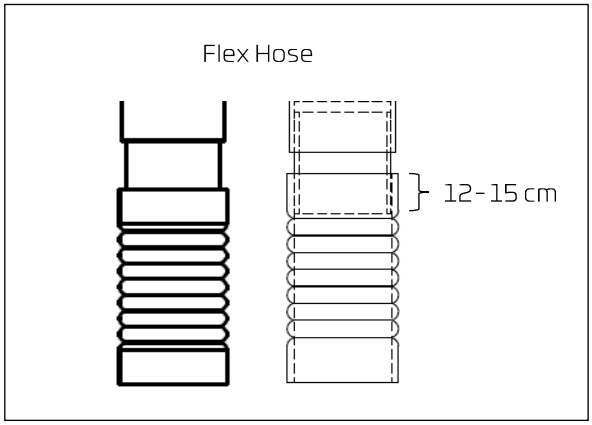


HEX BOLT M8x1.25x20L
WASHER SPRING M8
WASHER M8
HEX NUT M8 1.25

BUTYL ON SURFACE







TIGHTENING TORQUE (A2-70)	
M	TORQUE (Nm)
6	7.0
8	17.0
10	33.0
12	57.0
16	140.0

>> Flex hose assembly: Insert the flex hose into the UPVC pipe with an inner depth of 12 - 15 cm to prevent leakage, then tighten securely with a hose clamp.

** Apply a lubricant such as soap to the UPVC surface to make inserting the flex hose easier.

HEATAWAY

BRAND-NEW
9th GENERATION

RIGGING & ASSEMBLY INSTRUCTION

ADDITIONAL EQUIPMENT





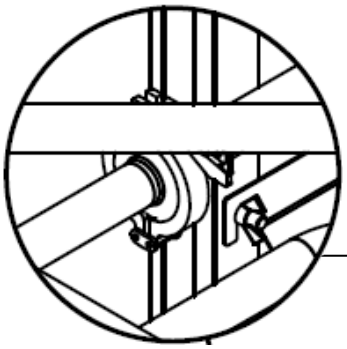




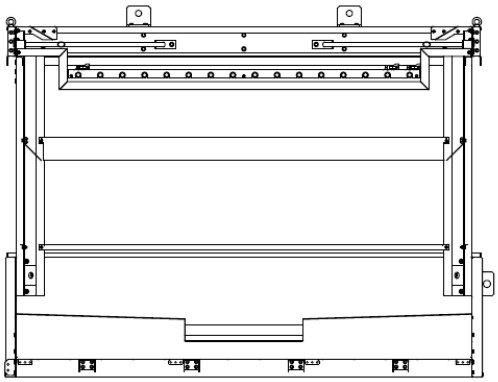
www.heataway.net

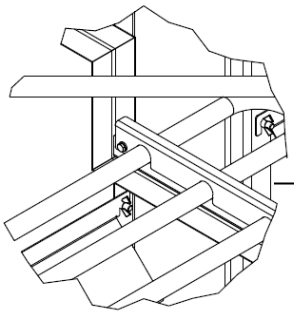
Water Cooling Coil Install

➤ Water Cooling Coil (1 Layer Type)

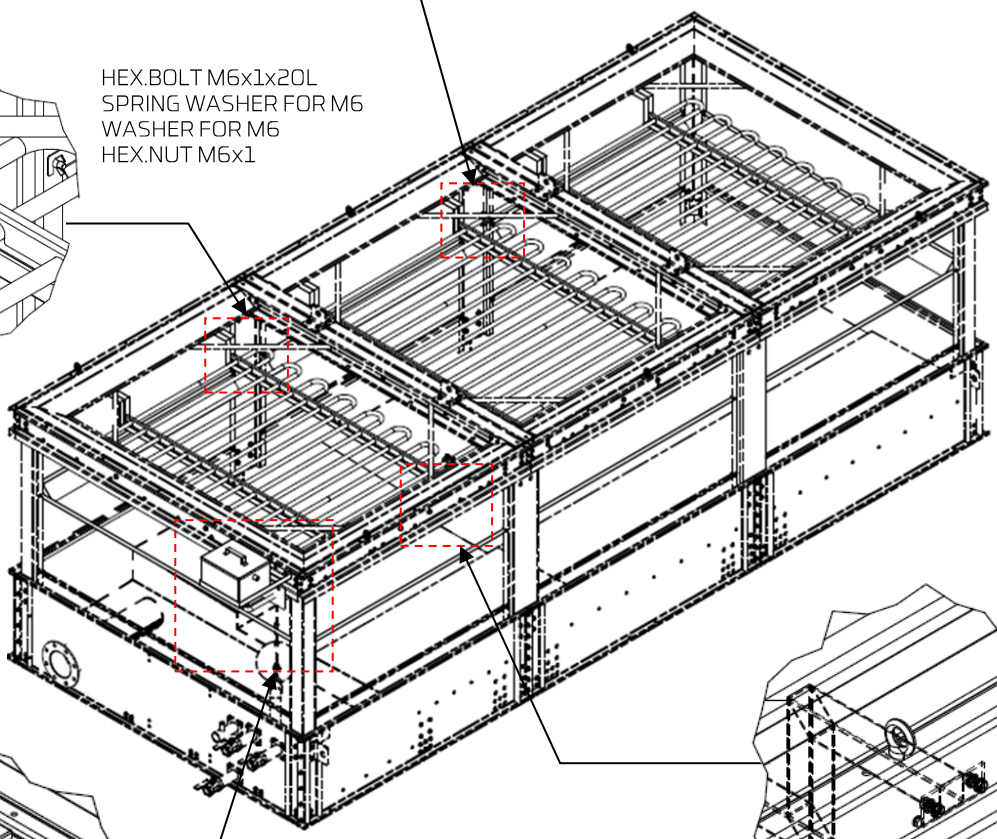


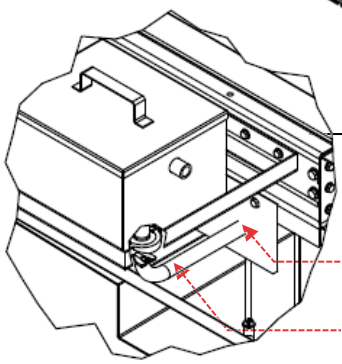
FERRULE GASKET 25.4 mm.
FERRULE CLAMP 25.4 mm.





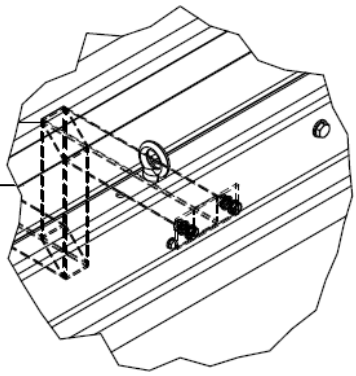
HEX.BOLT M6x1x20L
SPRING WASHER FOR M6
WASHER FOR M6
HEX.NUT M6x1





HEX.BOLT M8x1.5x20L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M5x1.5

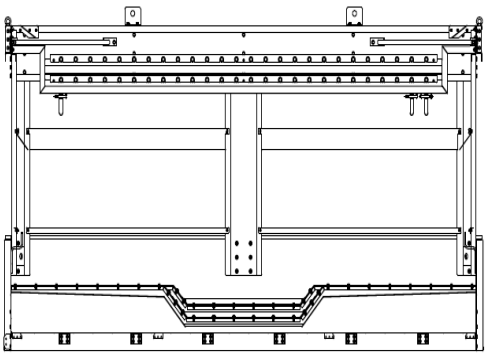
FERRULE GASKET 25.4 mm.
FERRULE CLAMP 25.4 mm.

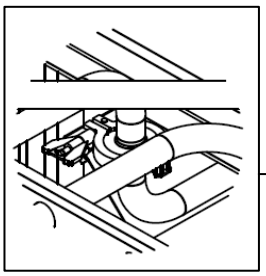


HEX.BOLT M8x1.5x21L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M5x1.5

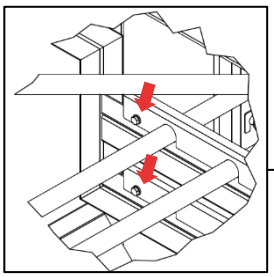
Water Cooling Coil Install

➤ Water Cooling Coil (2 Layer Type)

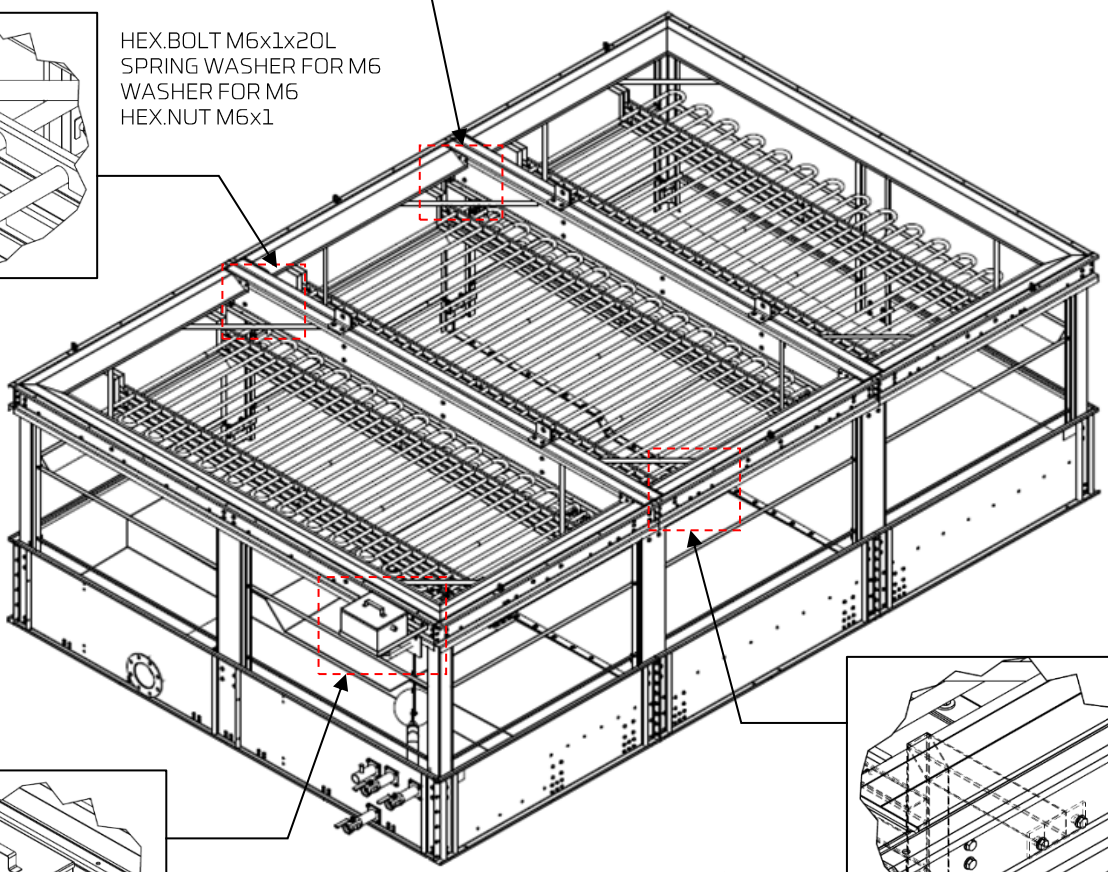


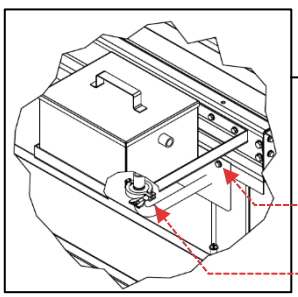


FERRULE GASKET 25.4 mm.
FERRULE CLAMP 25.4 mm.



HEX.BOLT M6x1x20L
SPRING WASHER FOR M6
WASHER FOR M6
HEX.NUT M6x1





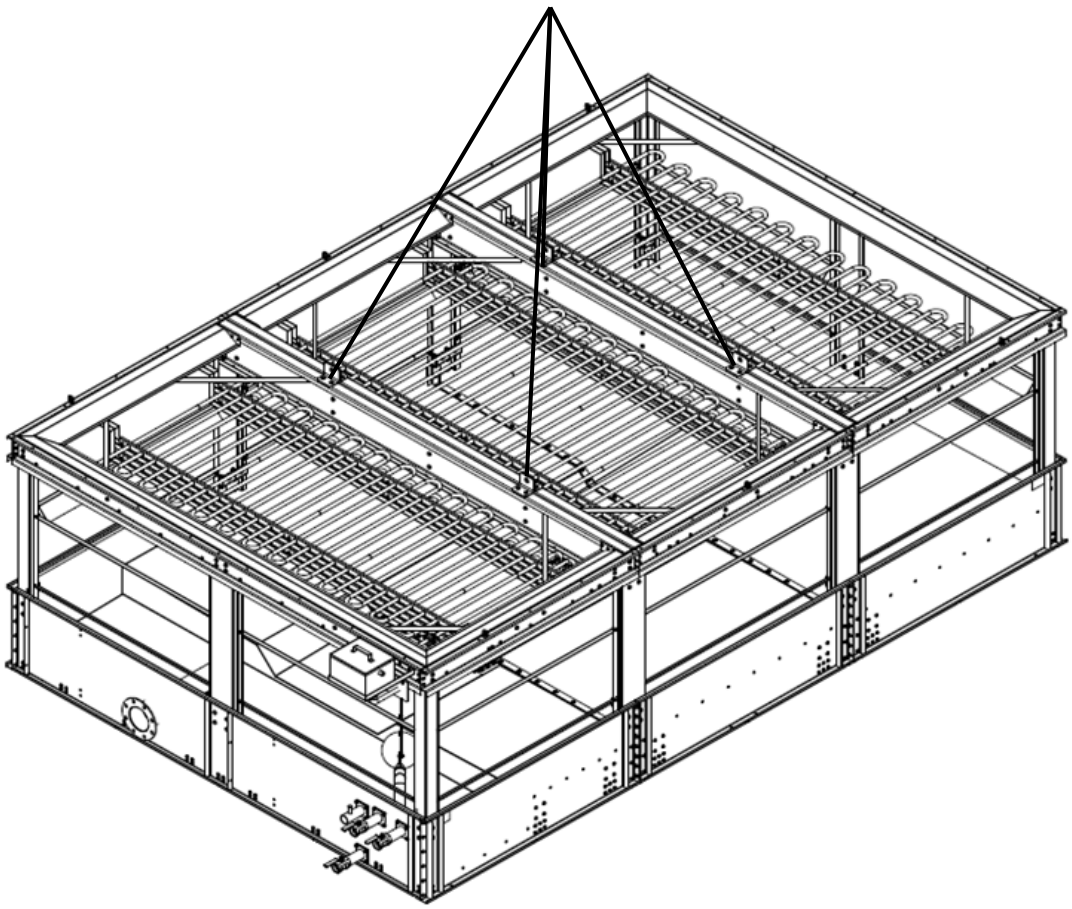
HEX.BOLT M8x1.5x20L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M5x1.5

FERRULE GASKET 25.4 mm.
FERRULE CLAMP 25.4 mm.

HEX.BOLT M8x1.5x21L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M5x1.5

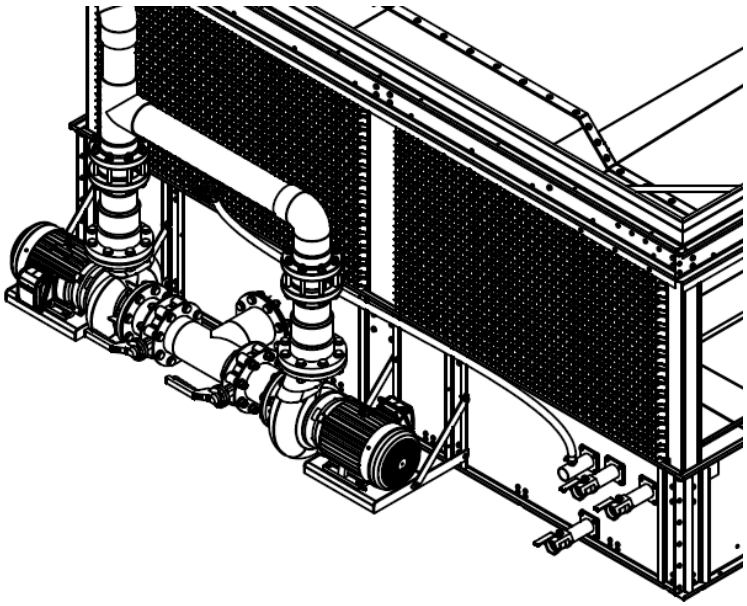
Water Cooling Coil Install

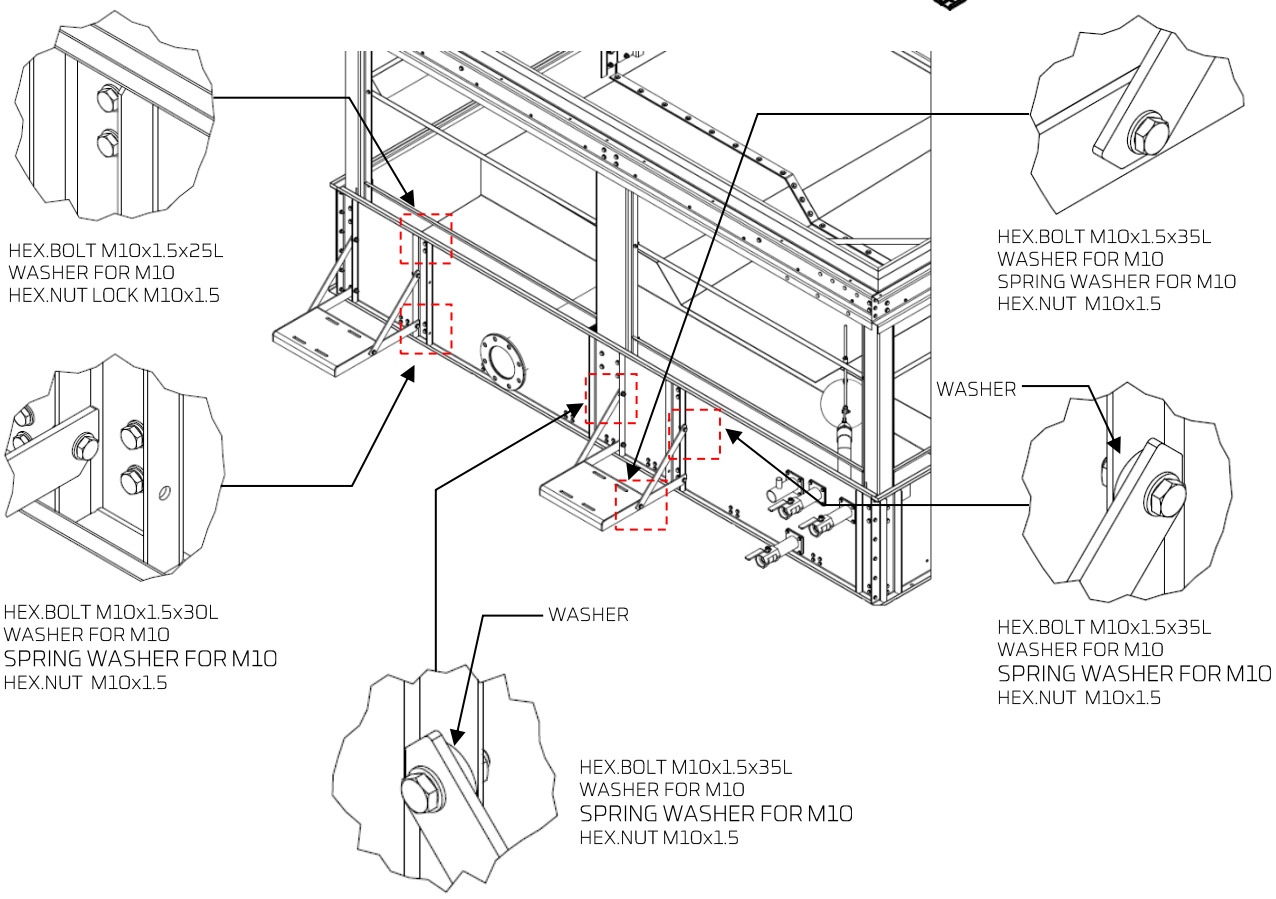
>> Process of BASIN SECTION with Water cooling coil move to position



Standby water pump assembly

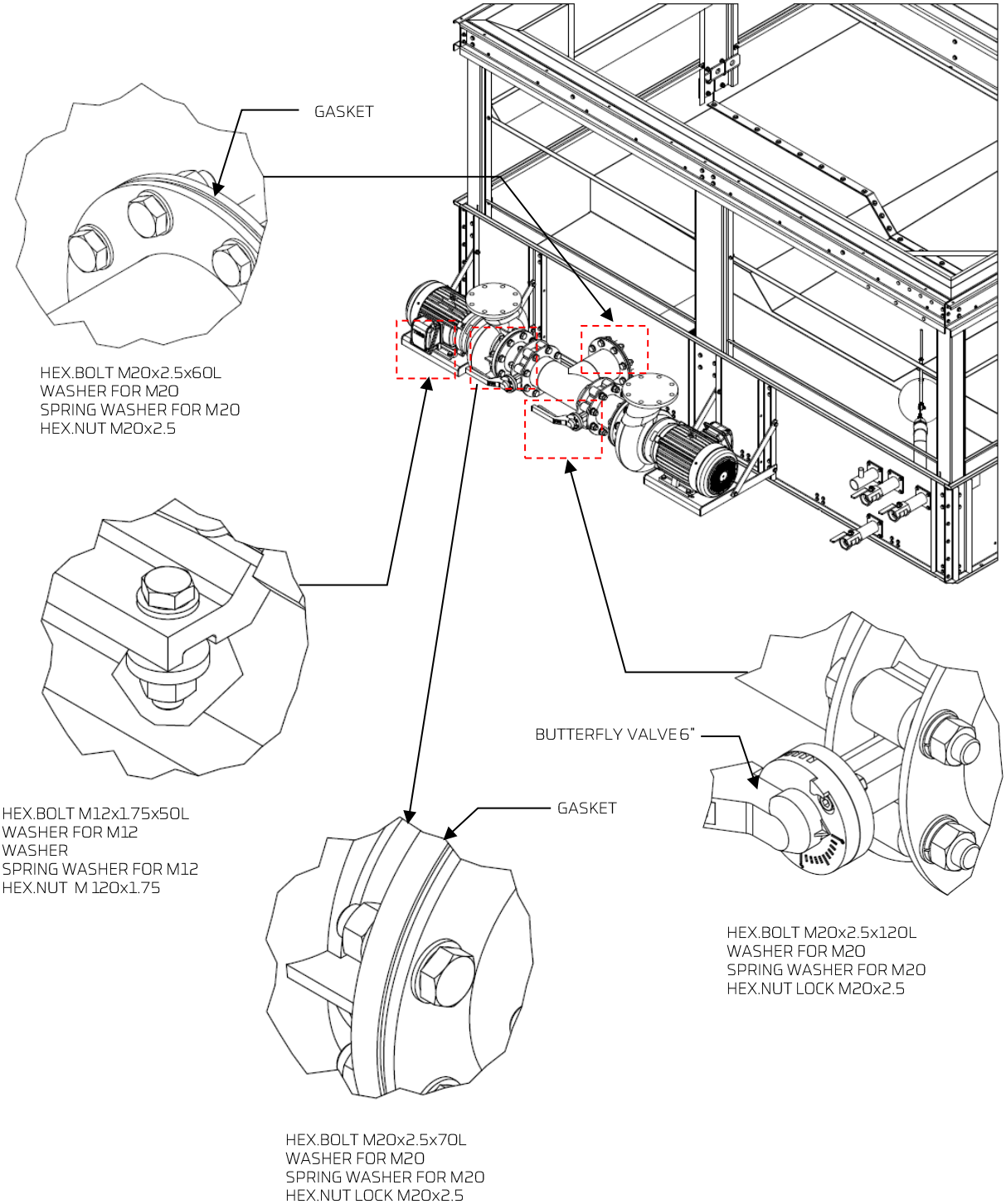
➤ Step 1 : Start Assembly water pump base





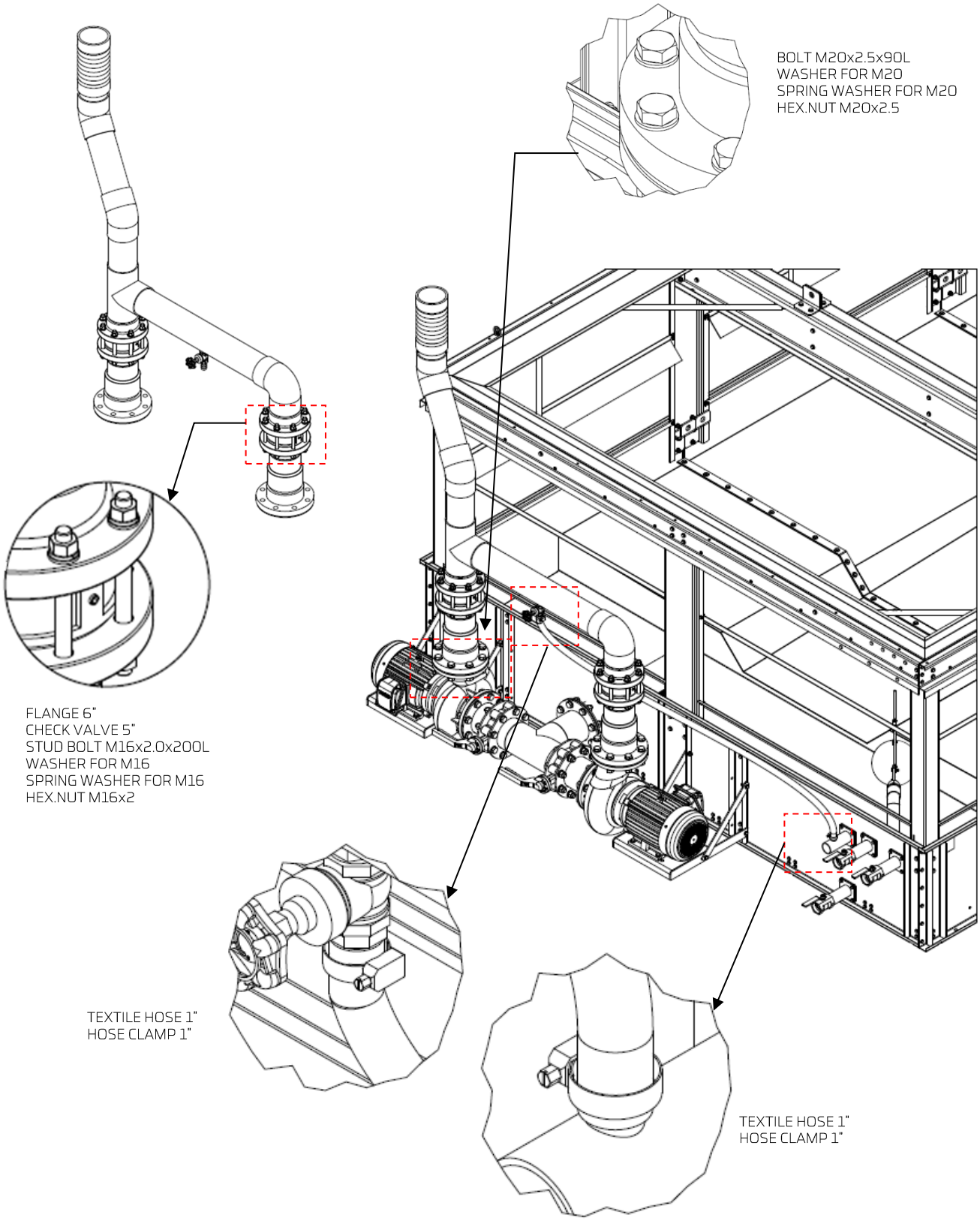
Standby water pump assembly

➤ Step 2 : Assembly water pump and Suction Pump pipe

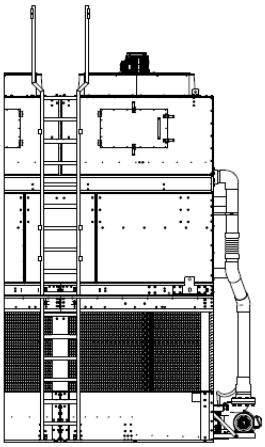


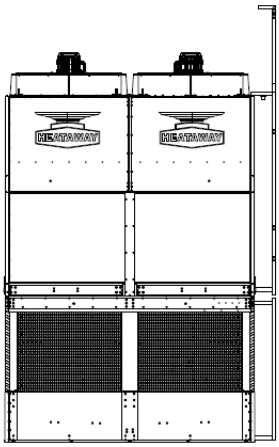
Standby water pump assembly

➤ Step 3 : Assembly Lower pump pipe

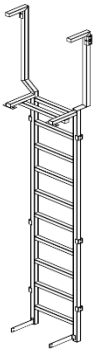


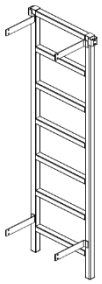
Ladder assembly





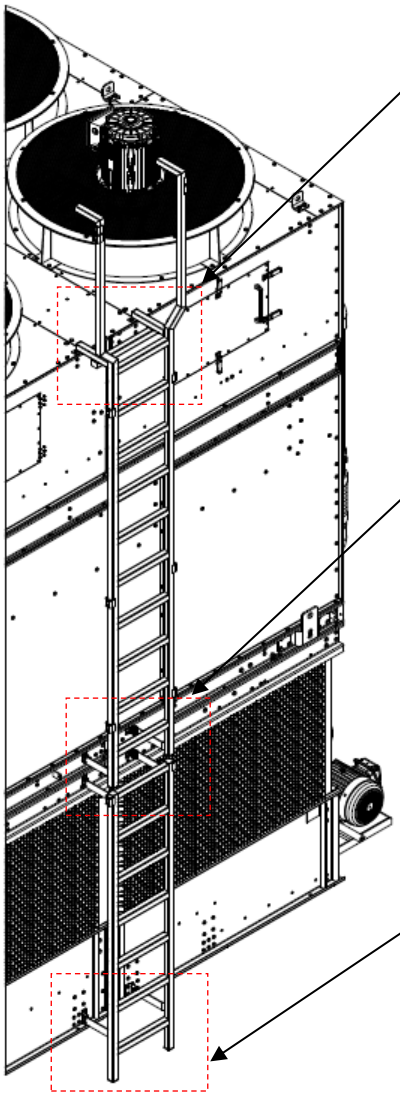
1. Lower Ladder 1 Unit
2. Upper Ladder 1 Unit



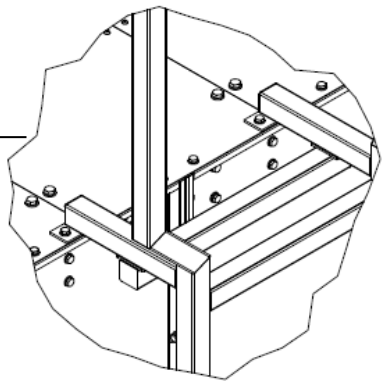


Upper Ladder Lower Ladder

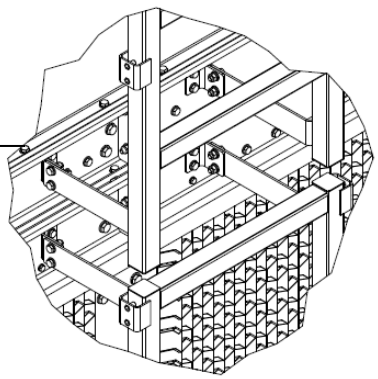
➤ Step 1 : Start Assembly from Lower Ladder



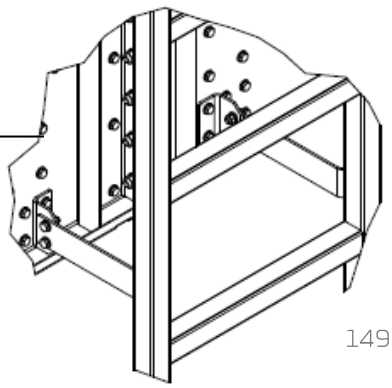
HEX.BOLT M8x1.25x25L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M8x1.25



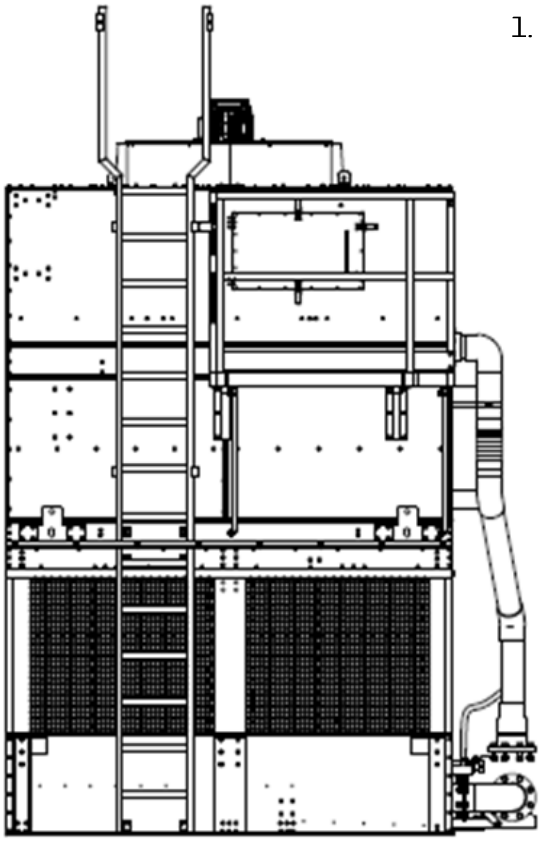
HEX.BOLT M8x1.25x25L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M8x1.25



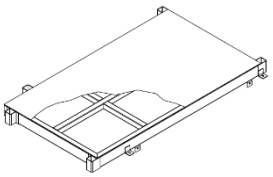
HEX.BOLT M8x1.25x25L
SPRING WASHER FOR M8
WASHER FOR M8
HEX.NUT M8x1.25



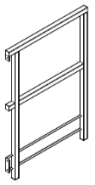
Platform assembly for footprint 9'



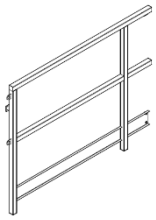
1. Platform A — 1 Set
   - Platform Floor A — 1 Unit
   - Handrail A-1 — 1 Unit
   - Handrail A-2 — 1 Unit
   - Handrail A-3 — 1 Unit
   - Beam support Platform — 2 Units



Platform Floor A



Handrail A-1



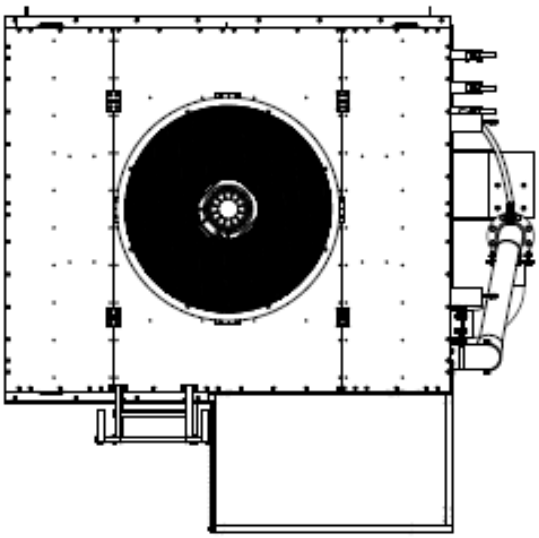
Handrail A-2

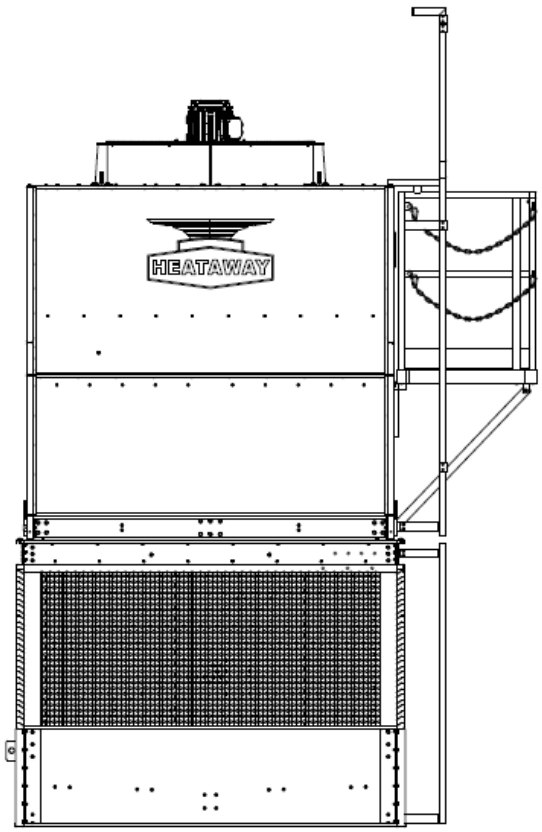


Handrail A-3



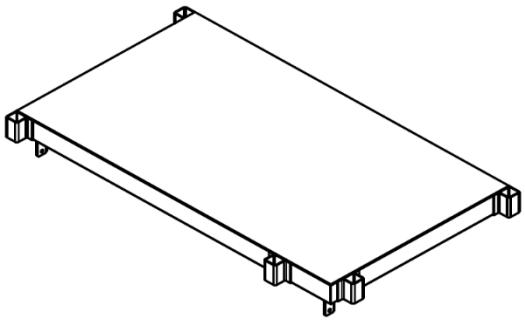
Beam support Platform

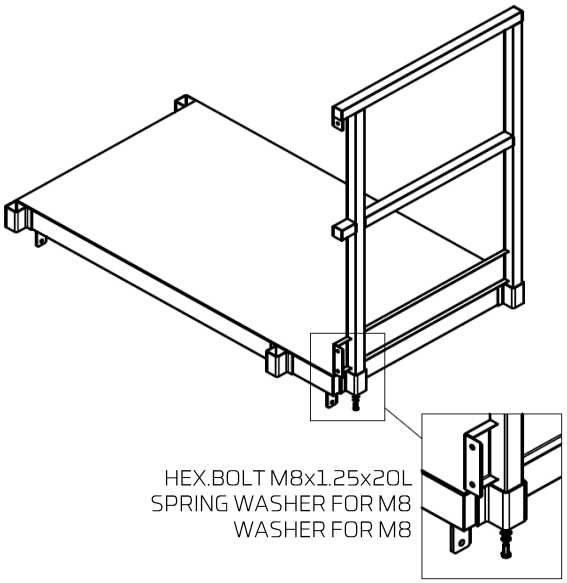


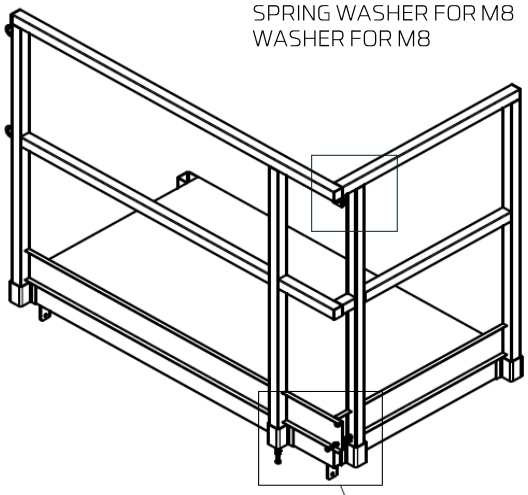


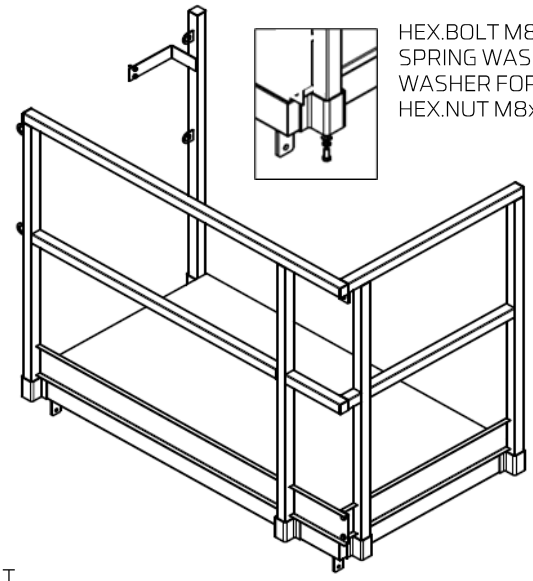
Platform assembly for footprint 9'

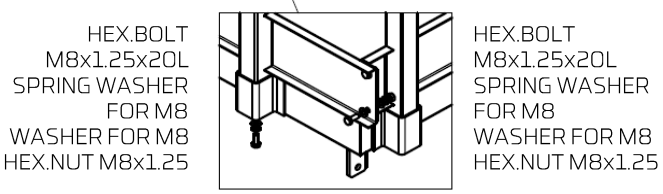
Step 1: Start Assembly from Platform A





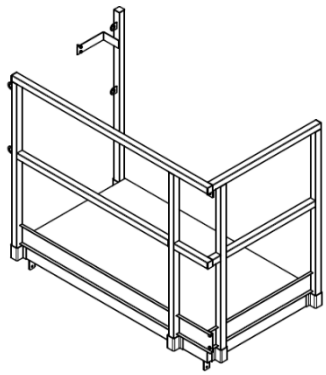


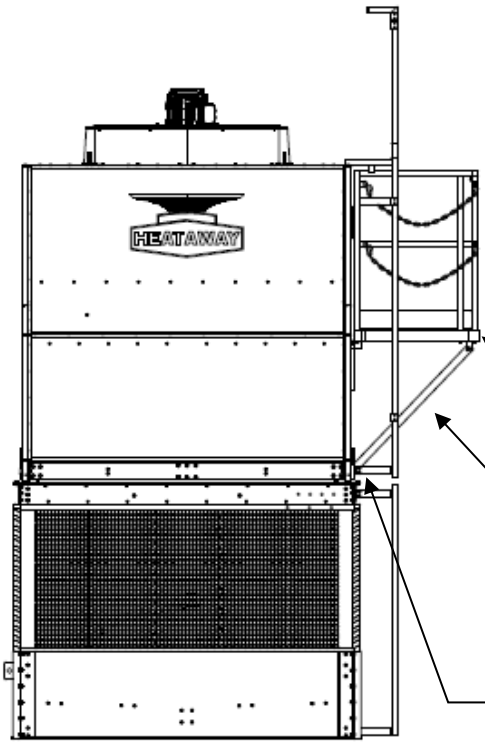




Platform assembly for footprint 9'

➤ Step 2 : Install Platform A

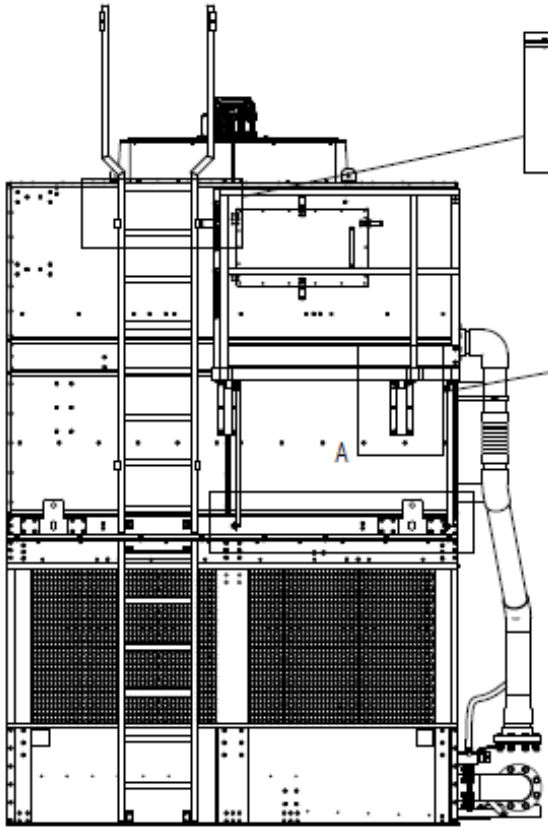


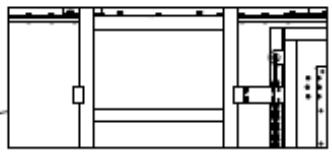


HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

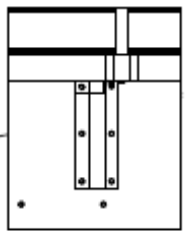
Beam support Platform

HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

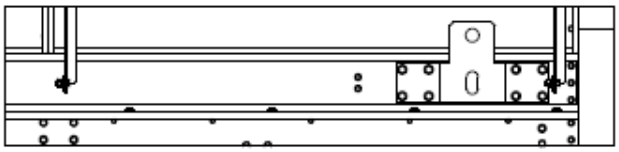




HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



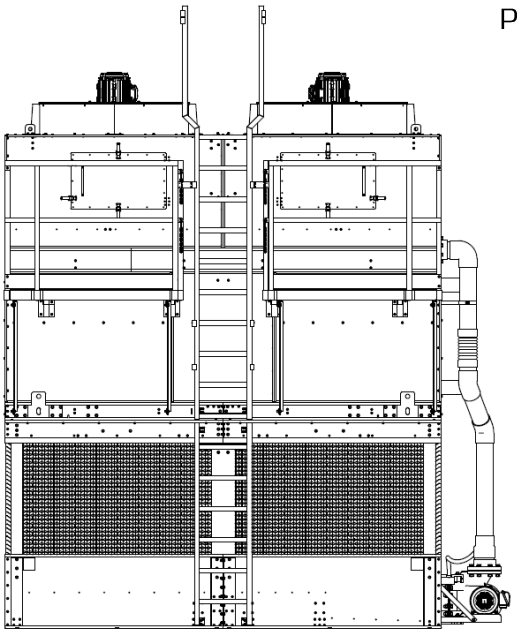
HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



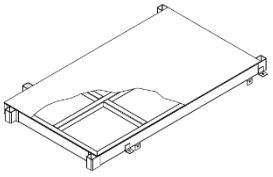
HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

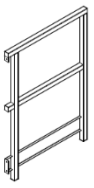
Platform assembly for footprint 12'



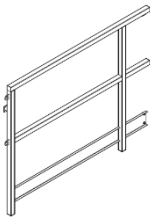
Platform A	1 Set
- Platform Floor A	1 Unit
- Handrail A-1	1 Unit
- Handrail A-2	1 Unit
- Handrail A-3	1 Unit
- Beam support Platform	2 Units



Platform Floor A



Handrail A-1



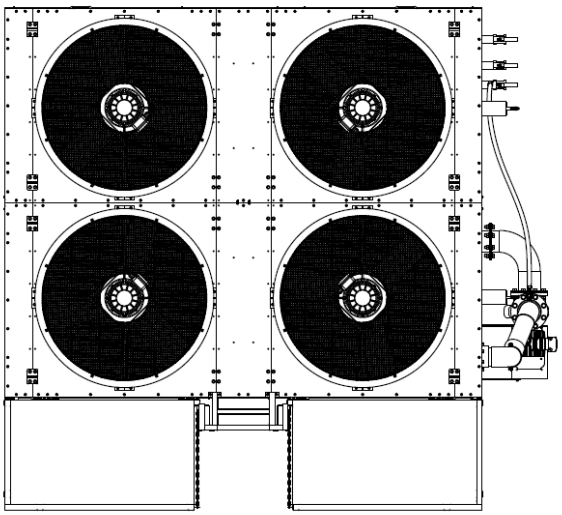
Handrail A-2

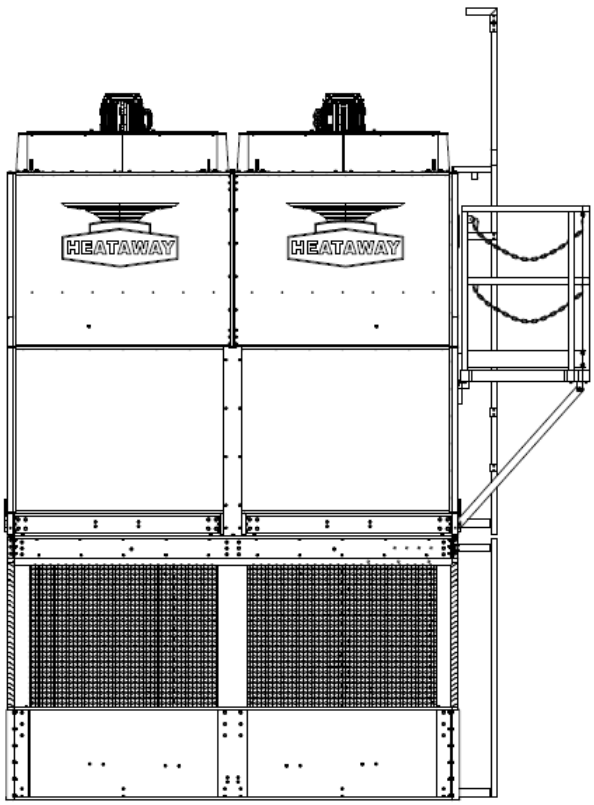


Handrail A-3



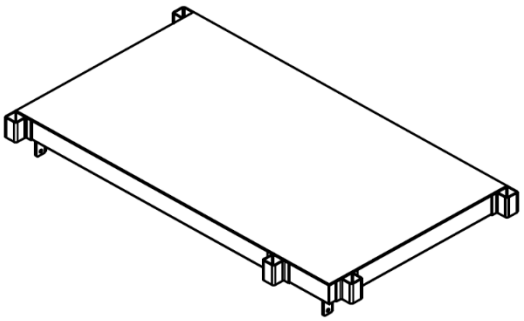
Beam support Platform

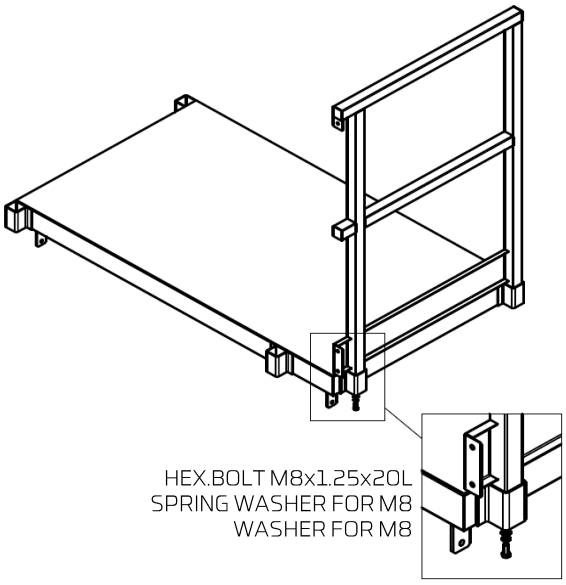


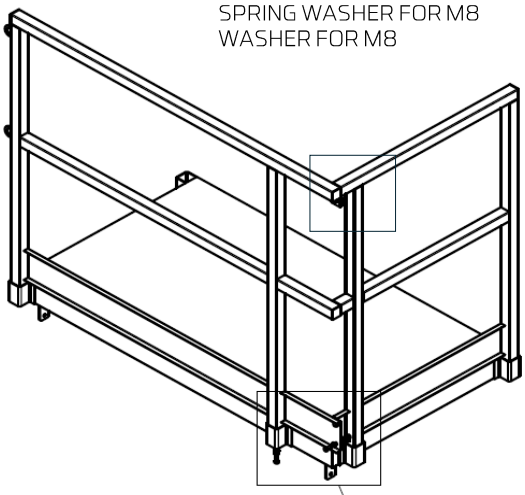


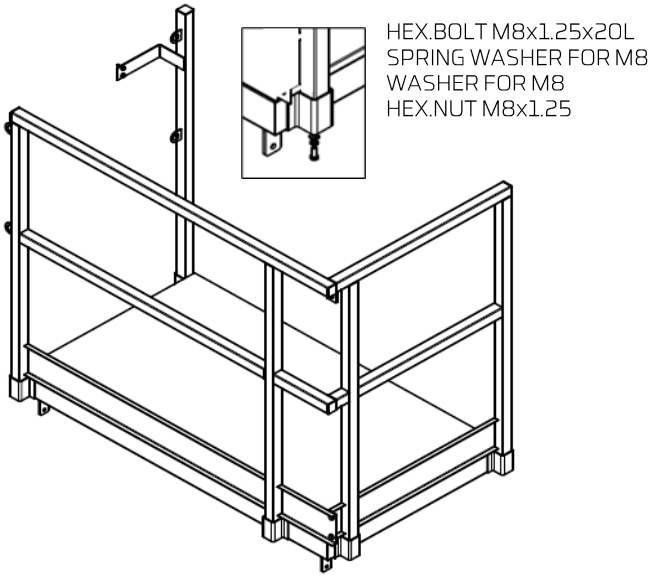
Platform assembly for footprint 12'

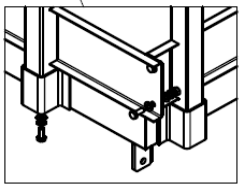
➤ Step 1 : Start Assembly from Platform A





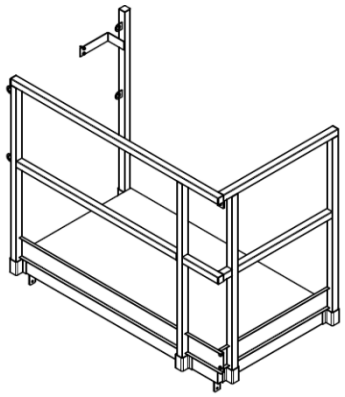


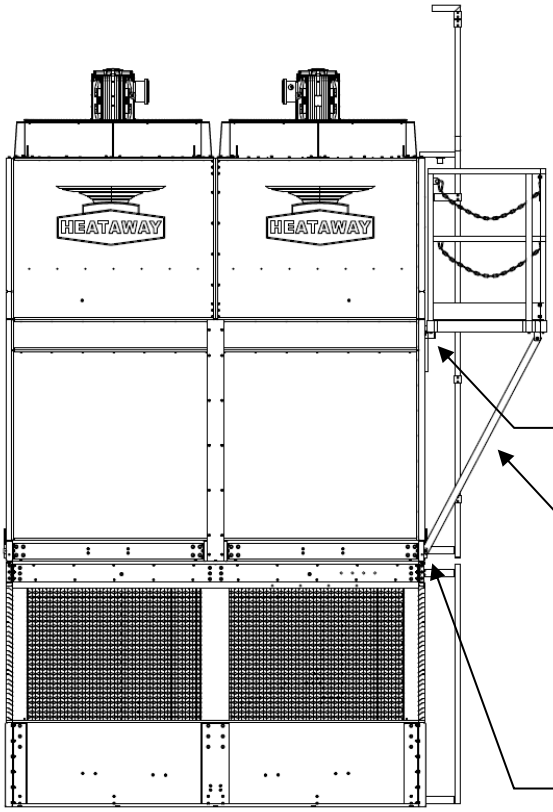




Platform assembly for footprint 12'

➤ Step 1 : Start Assembly from Platform A

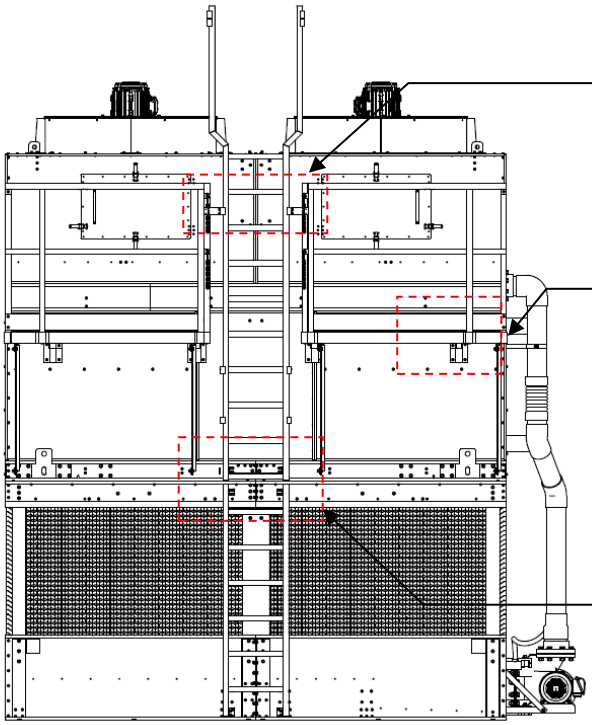


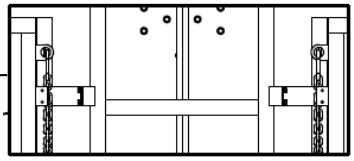


HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

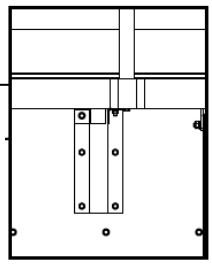
Beam support Platform

HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

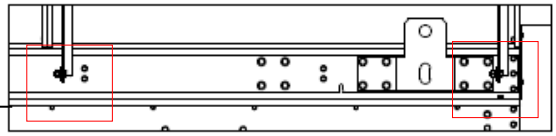




HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



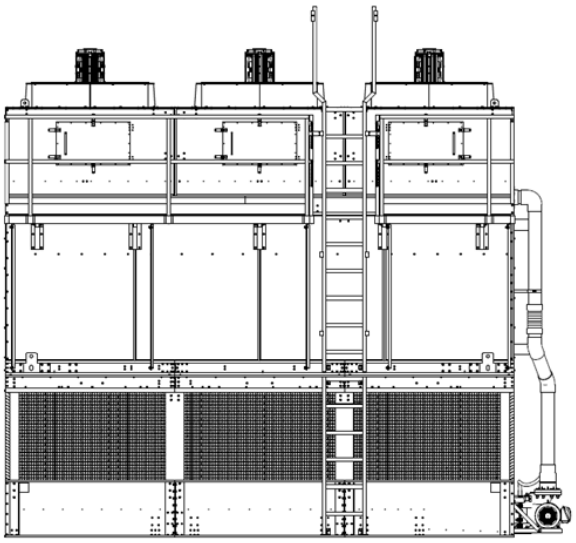
HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



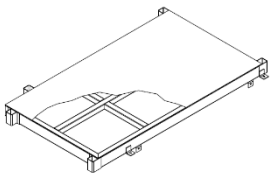
HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

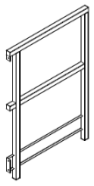
Platform assembly for footprint 18'



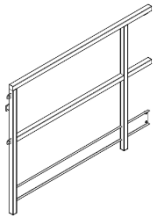
1. Platform A — 1 Set
   - Platform Floor A — 1 Unit
   - Handrail A-1 — 1 Unit
   - Handrail A-2 — 1 Unit
   - Handrail A-3 — 1 Unit
   - Beam support Platform — 2 Units



Platform Floor A



Handrail A-1



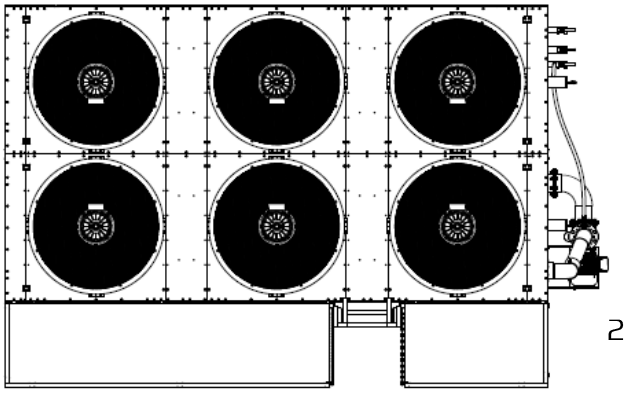
Handrail A-2



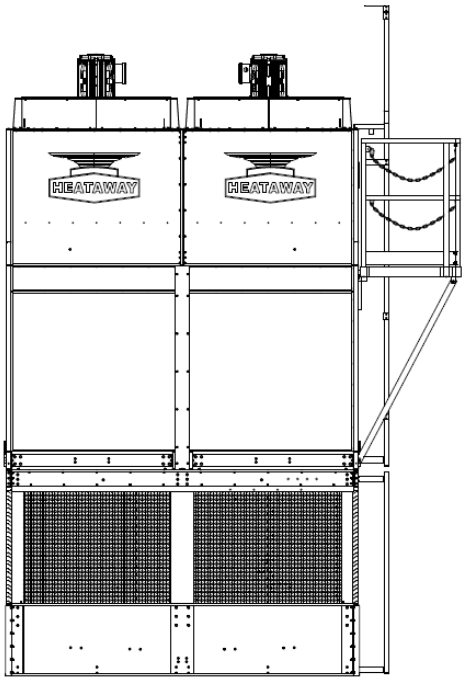
Handrail A-3

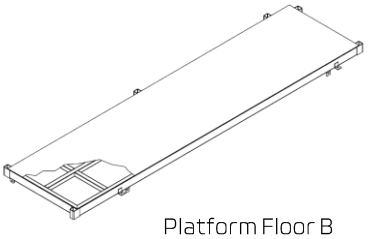


Beam support Platform

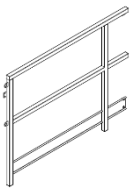


2. Platform B — 1 Set
   - Platform Floor B — 1 Unit
   - Handrail B-1 — 1 Unit
   - Handrail B-2 — 1 Unit
   - Handrail B-3 — 1 Unit
   - Beam support Platform — 3 Unit

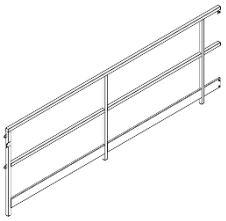




Platform Floor B



Handrail B-1



Handrail B-2



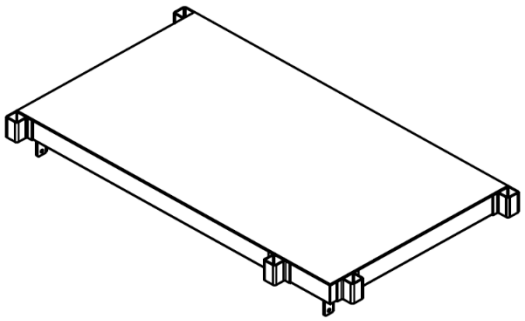
Handrail B-3

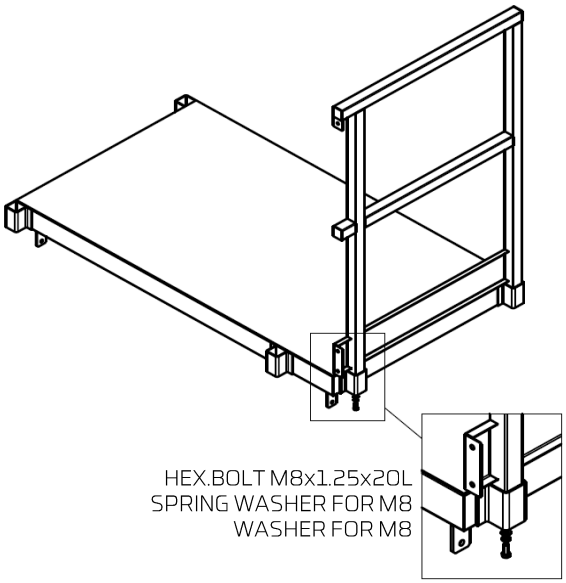


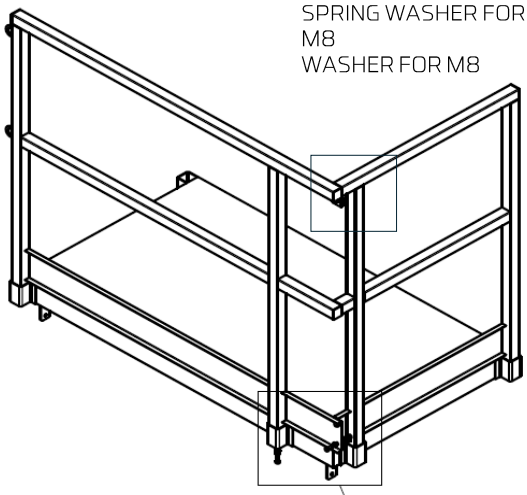
Beam support Platform

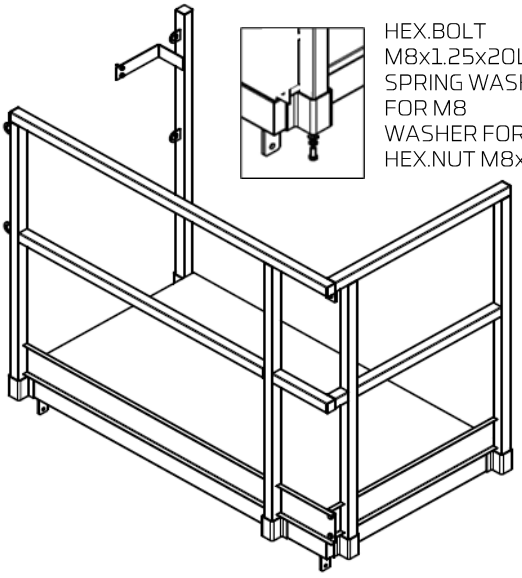
Platform assembly for footprint 18'

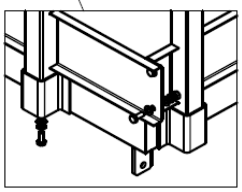
➤ Step 1 : Start Assembly from Platform A





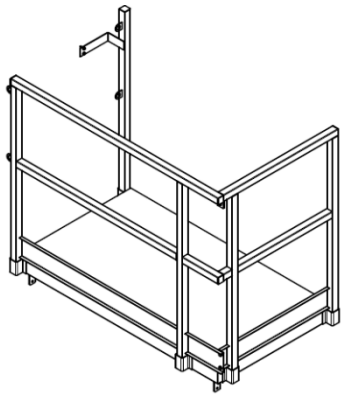


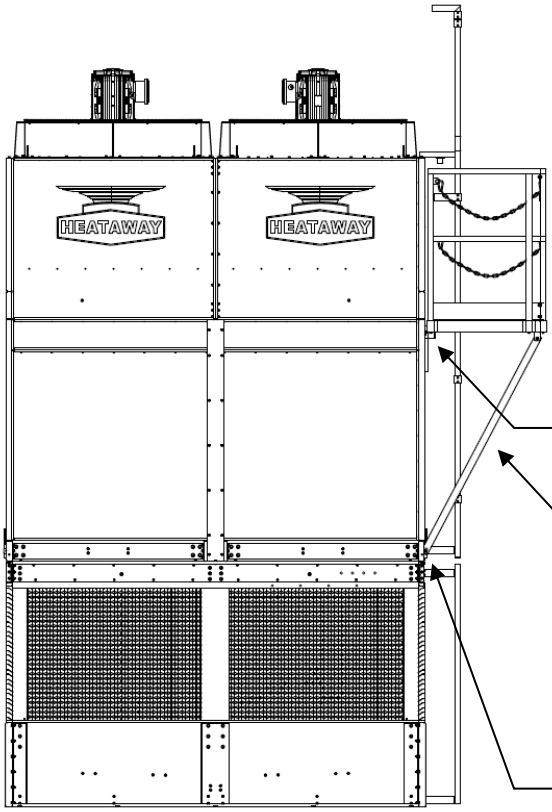




Platform assembly for footprint 18'

➤ Step 1 : Start Assembly from Platform A

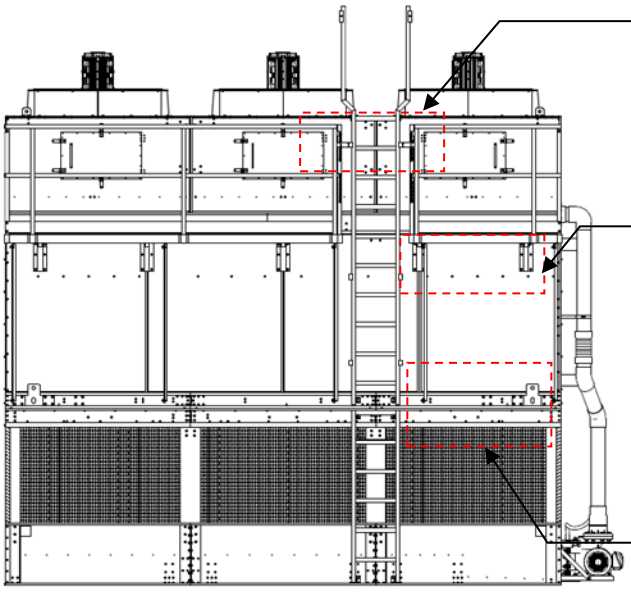


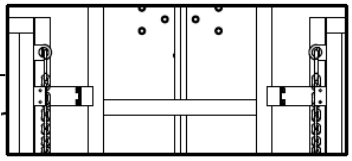


HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

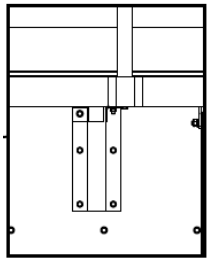
Beam support Platform

HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

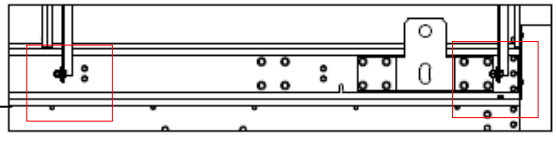




HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

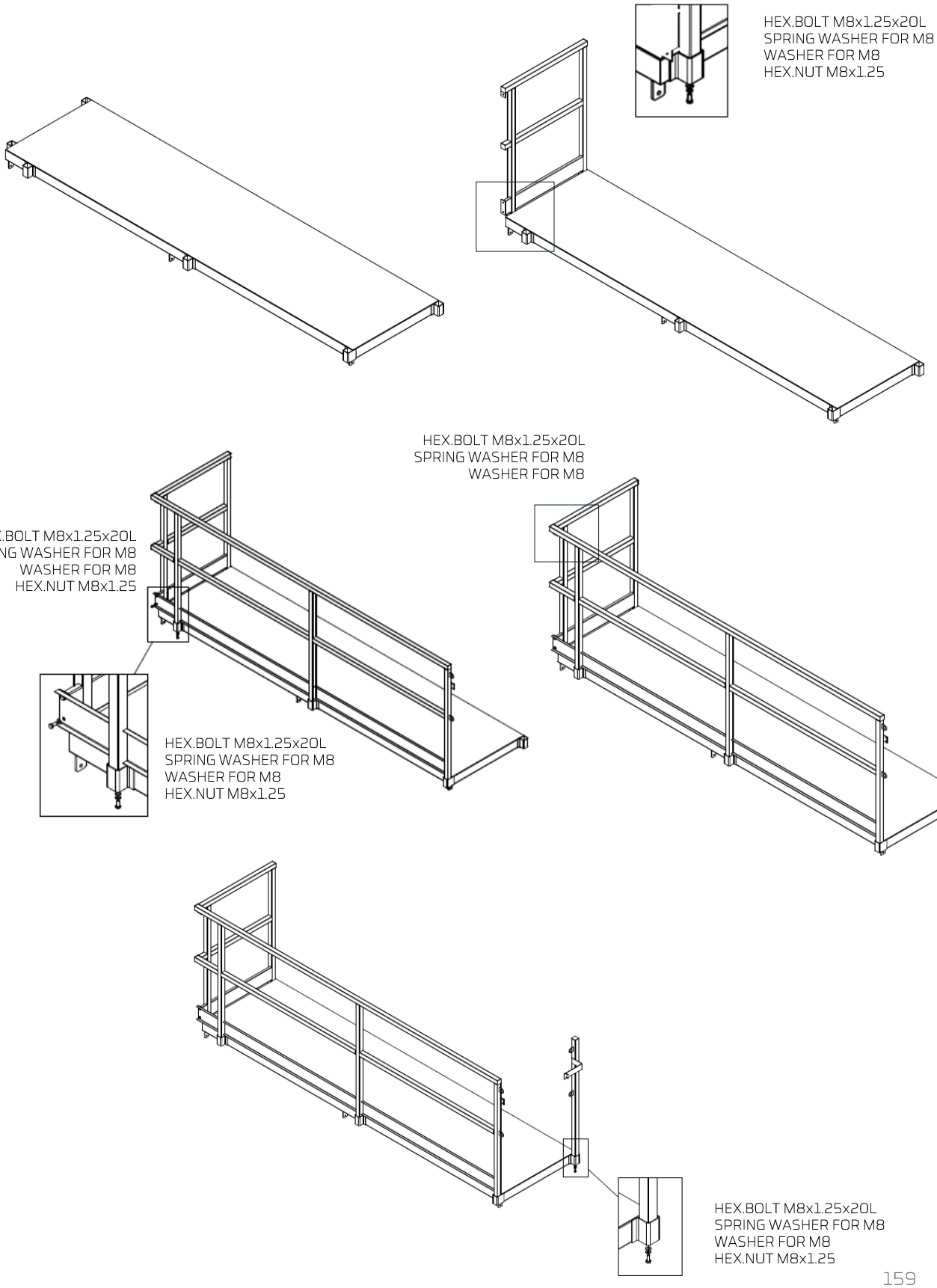


HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

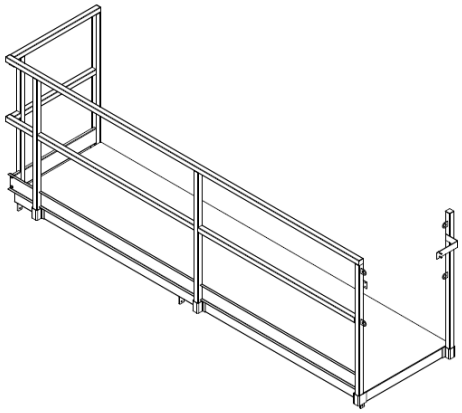
Platform assembly for footprint 18'

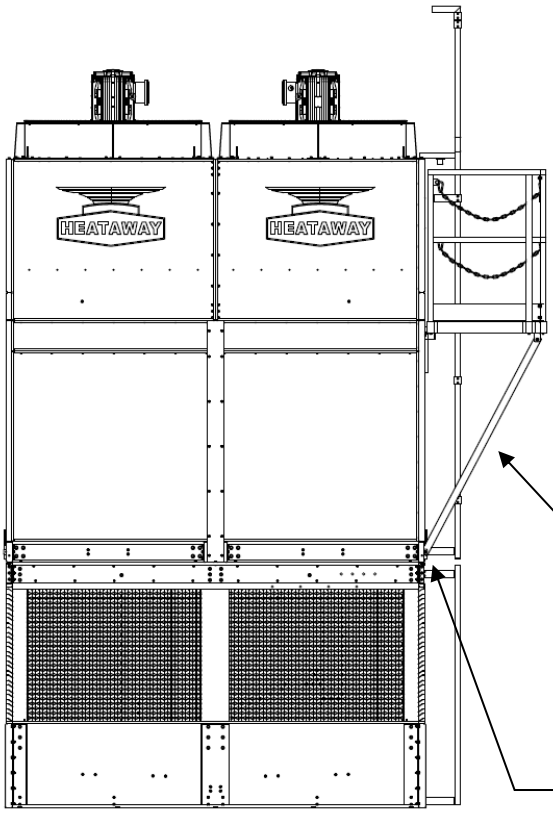
➤ Step 2 : Start Assembly from Platform B



Platform assembly for footprint 18'

➤ Step 1 : Start Assembly from Platform A



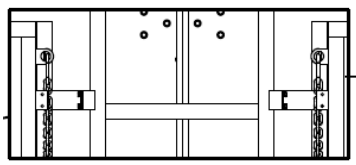


HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

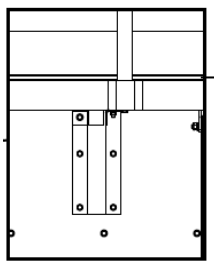
Beam support Platform

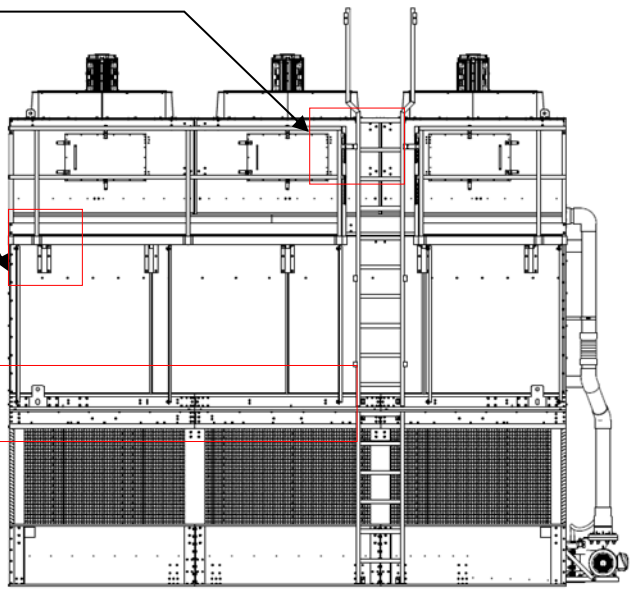
HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25

HEX.BOLT
M10x1.25x30L
SPRING WASHER
FOR M10
WASHER FOR M10
HEX.NUT M10x1.25
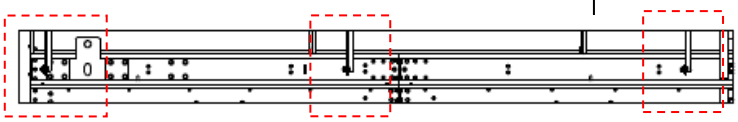


HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



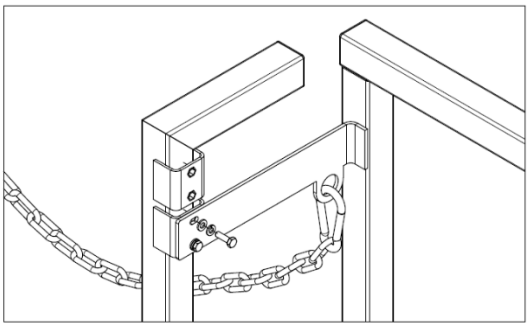


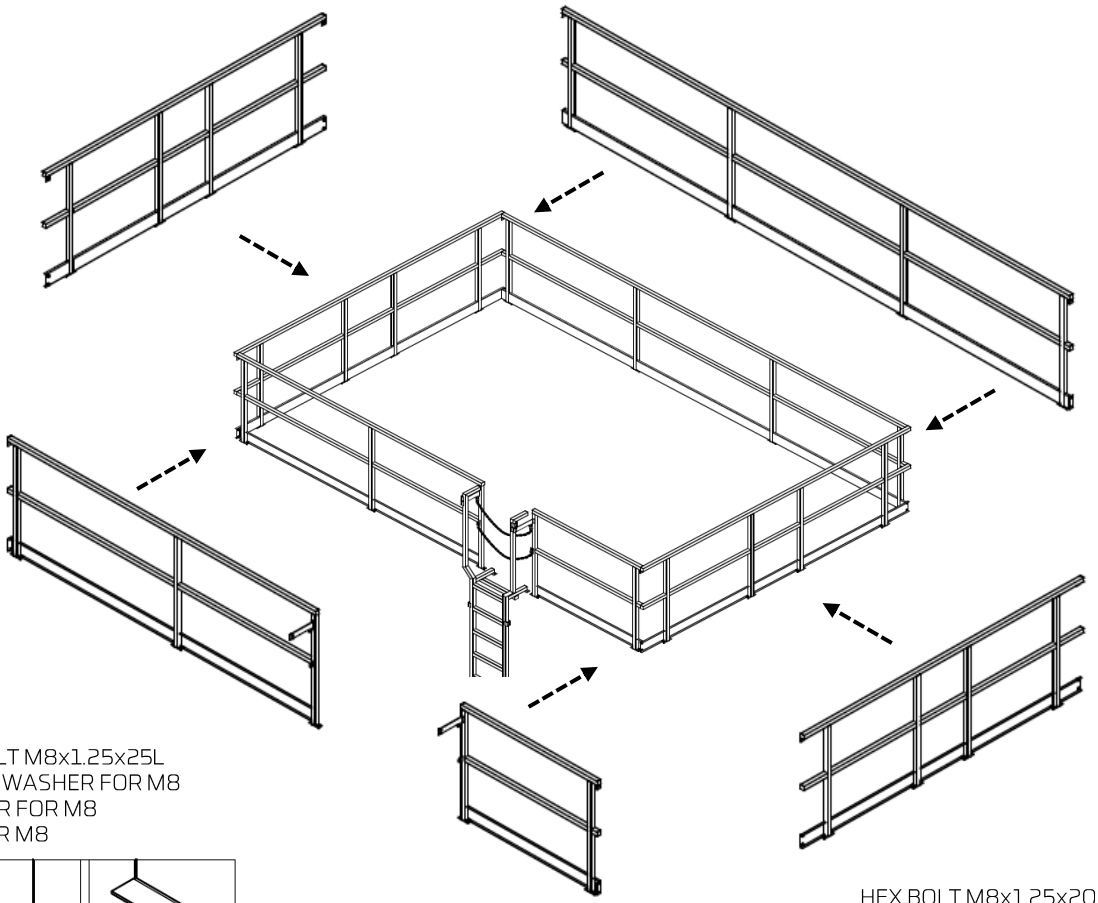
HEX.BOLT M10x1.25x30L
SPRING WASHER FOR M10
WASHER FOR M10
HEX.NUT M10x1.25



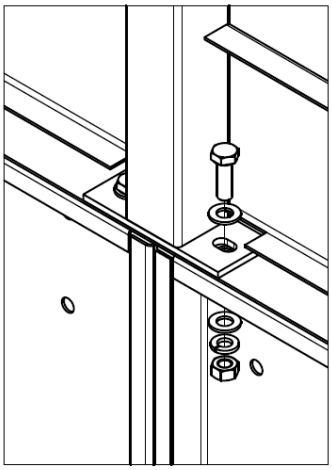
Top Handrail assembly

HEX.BOLT M6x1.25x20L
SPRING WASHER FOR M6
WASHER FOR M6
NUT FOR M6

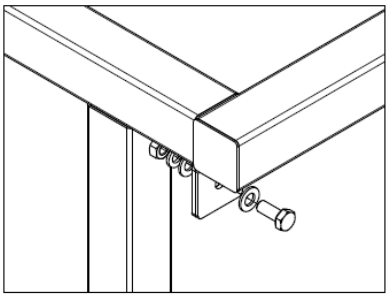




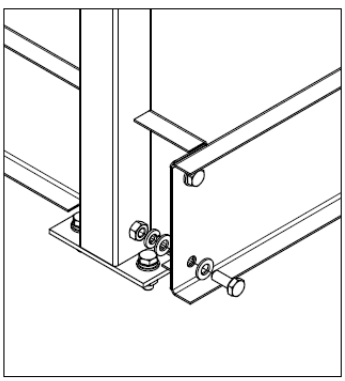
HEX.BOLT M8x1.25x25L
SPRING WASHER FOR M8
WASHER FOR M8
NUT FOR M8



HEX.BOLT M8x1.25x20L
SPRING WASHER FOR M8
WASHER FOR M8
NUT FOR M8

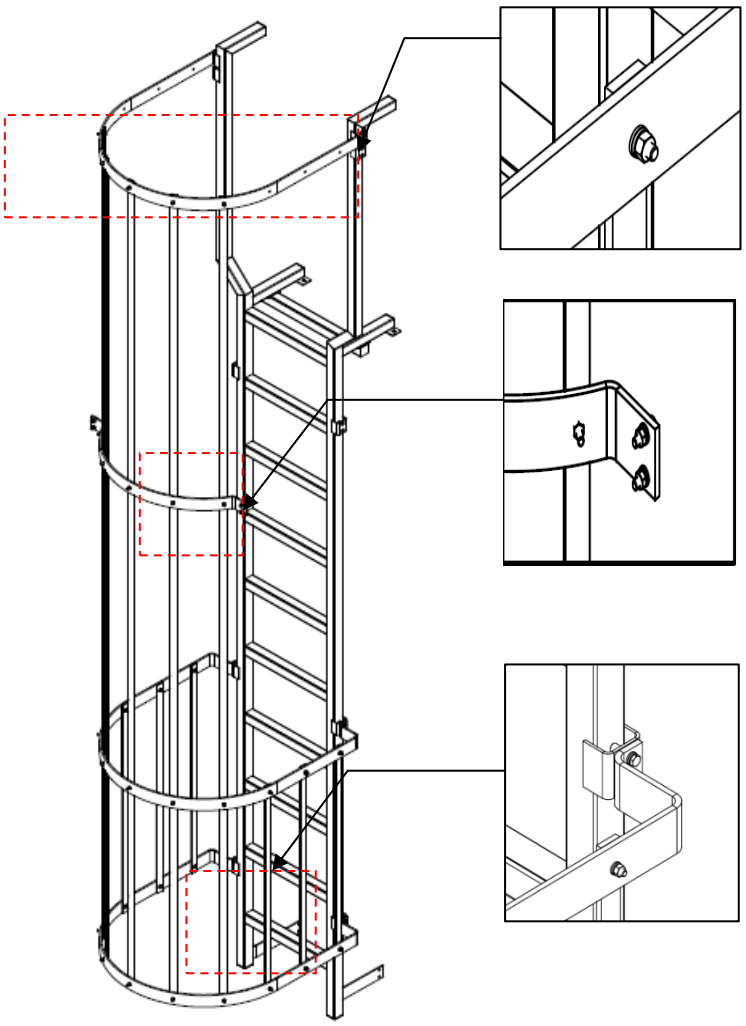


HEX.BOLT M8x1.25x20L
SPRING WASHER FOR M8
WASHER FOR M8
NUT FOR M8



Standard Cage assembly and Addition cage

➤ Standard Cage

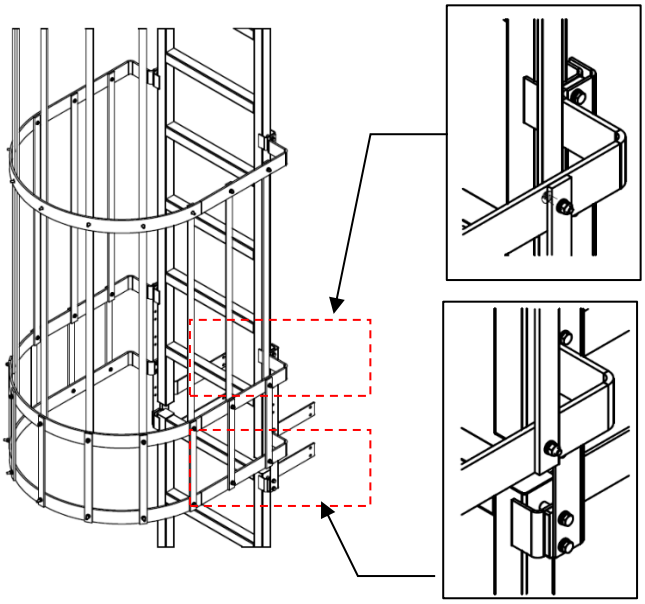


HEX.BOLT M6x1.25x25L (PAN HEAD)
SPRING WASHER FOR M6
WASHER FOR M6
NUT FOR M6

HEX.BOLT M6x1.25x25L (PAN HEAD)
SPRING WASHER FOR M6
WASHER FOR M6
NUT FOR M6

HEX.BOLT M6x1.25x25L
SPRING WASHER FOR M6
WASHER FOR M6

➤ Addition cage



HEX.BOLT M6x1.25x30L (PAN HEAD)
SPRING WASHER FOR M6
WASHER FOR M6
NUT FOR M6

HEX.BOLT M6x1.25x25L
SPRING WASHER FOR M6
WASHER FOR M6
NUT FOR M6

HEATAWAY

9th GENERATION STAINLESS STEEL EVAPORATIVE CONDENSERS

OPERATION AND MAINTENANCE

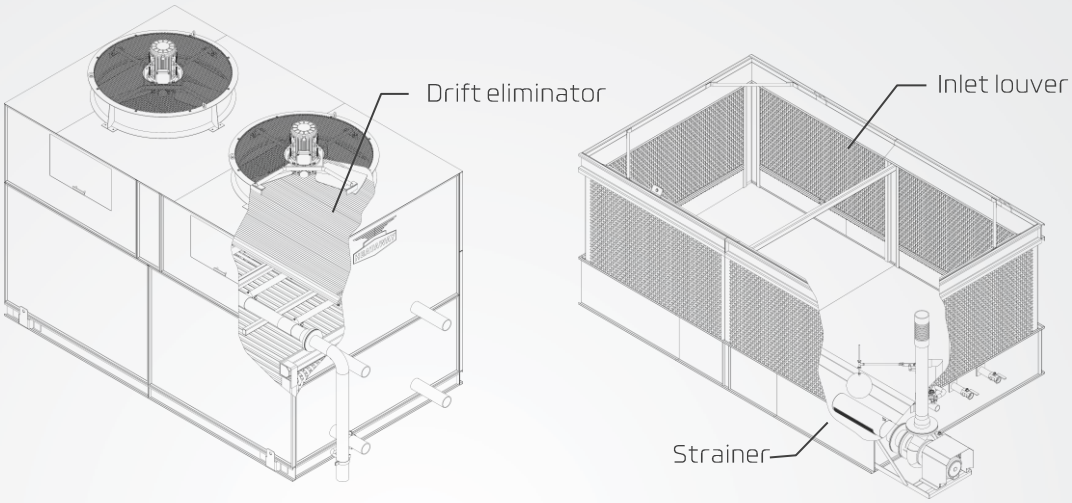
- MAINTENANCE INSTRUCTION
- INITIAL AND SEASONAL START-UP CHECKLIST
- ROUTINE MAINTENANCE CHECKLIST
- SEASONAL SHUTDOWN CHECKLIST



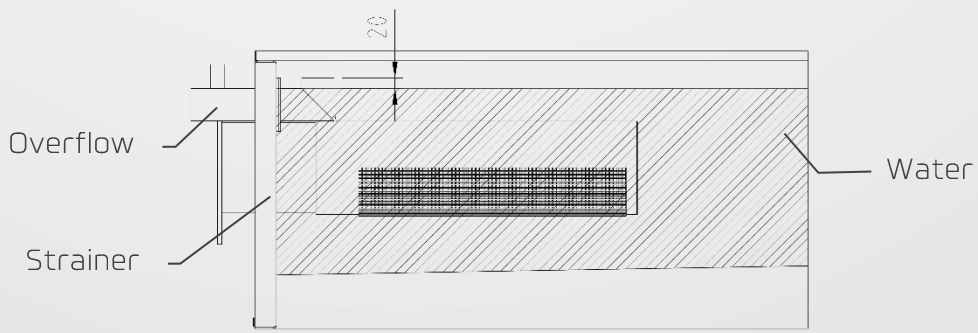
INITIAL AND SEASONAL START-UP CHECKLIST

Before START-UP

Precaution : Ensure that the machine is turned off and that no electrical power is supplied to it. The machine must be properly locked out and tagged to prevent others from turning it on during maintenance or servicing.



- ❑ Check that the drift eliminator is securely installed and fully covers the designated area.
- ❑ Ensure that the fan blades are firmly mounted to the fan hub, and the fan hub is securely attached to the fan motor.
- ❑ Manually rotate the fan to confirm that there are no obstructions preventing free movement.
- ❑ Verify that the fan guard and fan motor are firmly secured to the fan support and fan stack.
- ❑ Clean and remove debris from the inlet louver.
- ❑ Flush the basin to remove dirt and debris. Do not remove the pump strainer during this process.
- ❑ Remove the pump strainer, clean it thoroughly, and reinstall it properly.
- ❑ Manually rotate the pump to ensure there are no obstructions.
- ❑ Check that the make-up water float valve operates normally and is not obstructed.
- ❑ Fill the water basin until the water level is 20 mm below the overflow pipe and adjust the float valve to shut off completely at this water level.



Note: If you encounter any problems or have any questions, please contact the machine supplier or Heat Away Co., Ltd.

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To maintain the performance efficiency of the unit, the most important factors to consider are the quality of air and water entering the system.

Air:

Harmful air conditions for an evaporative condenser include air containing industrial smoke, chemicals, salt, or dust mixed with heavy metals. When contaminated air enters the system, these pollutants combine with the circulating water inside the unit and may form corrosive substances that can attack stainless steel, which is the primary structural material of the equipment.

Water:

Water is another key factor affecting the unit. Make-up water entering the system may contain dissolved substances such as alkaline compounds or acids. If present in high concentrations, these substances can cause scale buildup on the heat-exchange coil surface, reducing heat-transfer efficiency. They may also lead to corrosion of the unit structure and coils, potentially resulting in damage.

When the level of contaminants or impurities in air and water is high, maintenance frequency will increase. Therefore, to reduce maintenance requirements, water treatment within the system is recommended. This can be achieved by continuously draining a portion of the circulating water to control the concentration of dissolved solids and to suppress microbial growth.

Re-circulating water properties

properties	Specified values
pH	6.5 - 8.5
Hardness as $CaCO_3$	Less than 600 ppm
Alkalinity as $CaCO_3$	Less than 300 ppm
Chlorides as Cl	Less than 500 ppm
Total dissolved solids	Less than 1800 ppm
Sulfates	Less than 250 ppm
Silica	Less than 150 ppm

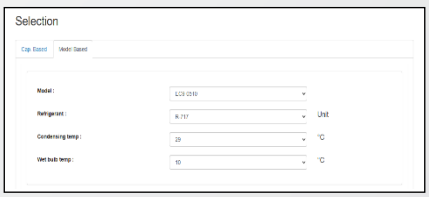
Note:
Water samples for testing must be collected before cleaning the unit or replacing the water. This ensures that the test results reflect the actual quality of the circulating water during operation. Samples must be taken only from the water in the basin. If the tested water quality exceeds the specified limits in the table above, please contact your distributor or Heat Away Co., Ltd. immediately. The company reserves the right to void the warranty if the quality of the circulating water does not meet the specified standards.

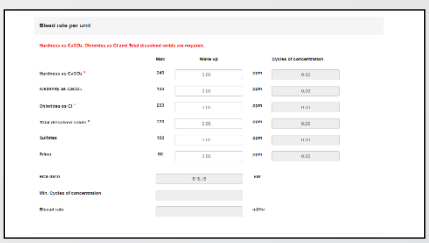
Monitoring of Make-up Water Quality and Bleed off

The quality of make-up water directly affects the volume of bleed-off. If the concentration of dissolved substances in the make-up water is high, the appropriate bleed-off volume must also increase accordingly, in order to maintain the concentration of dissolved substances in the circulating water within specified limits.

Since the appropriate bleed-off volume depends on the size of each unit and the operating conditions, it can be calculated using the following link: https://www.heataway.net/EvapCapacility/Selection.php

In the "Model Based" tab, the bleed-off rate per unit can be calculated at the bottom of the page.





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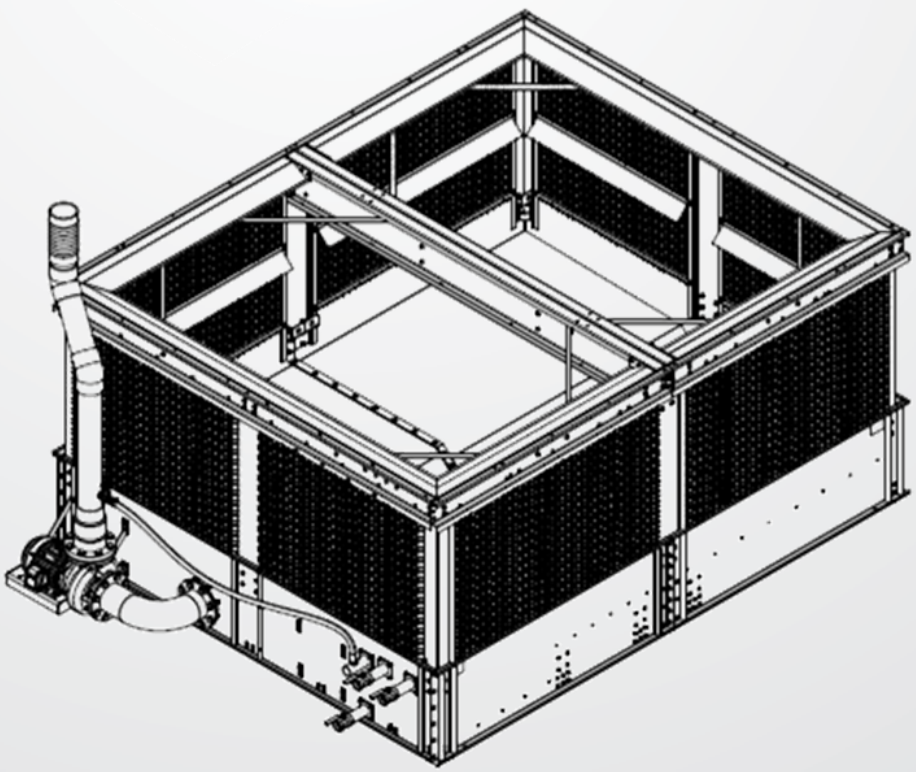
Water Basin Maintenance

The water basin should be inspected regularly. If any debris, particles, or accumulated contaminants are found settled in the basin, they should be removed immediately. At least once a month, the basin water should be drained and the basin cleaned to remove sediment, dirt, and contaminants that accumulate during system operation. After cleaning, refill the basin with clean water to help maintain the concentration of dissolved substances within an appropriate range.

If sediment or contaminants are allowed to accumulate in the basin for a long period, these impurities may transform into corrosive substances and eventually cause damage to the unit's components.

Cleaning Precautions

During basin cleaning, the debris strainer should not be removed, as debris may flow into the system and cause internal blockages, potentially damaging the water pump. After cleaning the basin, the strainer should be cleaned before refilling the basin with clean water.



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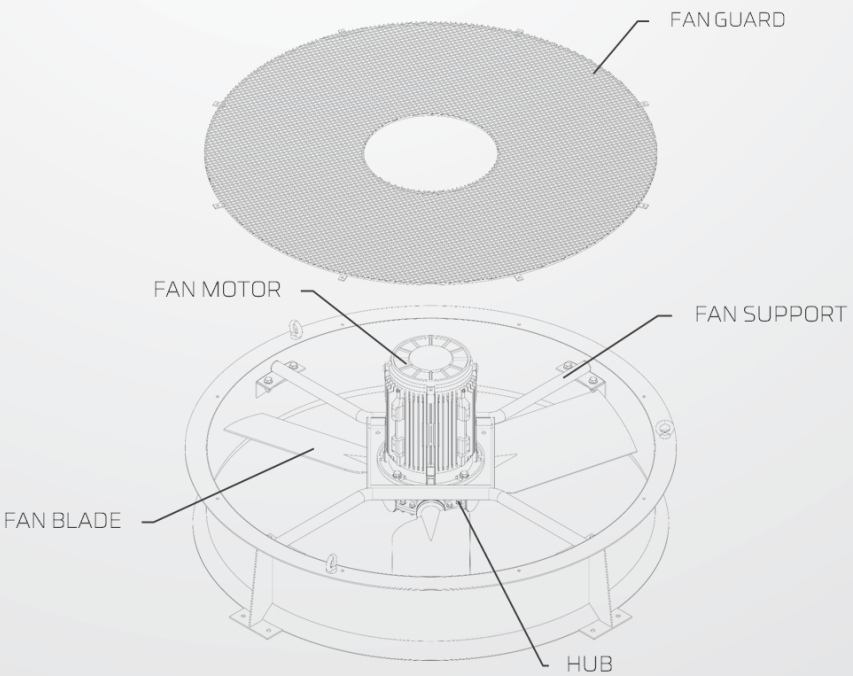
Fan Assembly Inspection

The fan assembly is a critical component for heat dissipation. If it becomes damaged, the unit and the cooling system may not be able to operate. Therefore, it must be inspected regularly, and certain parts should be replaced before the fan assembly deteriorates to the point of failure. If any of the following symptoms or abnormalities are observed, contact the distributor or Heat Away Co., Ltd. immediately:

- Abnormal vibration of the fan assembly
- Unusual noise from the fan motor
- Cracks or fractures on the fan blades or hub
- Cracks or fractures on the fan supports or fan guard

These conditions may pose safety risks to life and property. Any damaged components must be repaired or replaced as soon as possible. When operating the fans of an evaporative condenser, all fans must be turned on simultaneously to prevent reverse rotation, which can cause damage. Any damage to fan blades or fan motors resulting from operating the unit with incomplete fan operation will not be covered under the company's warranty.

Details of the components can be seen in the illustration below.

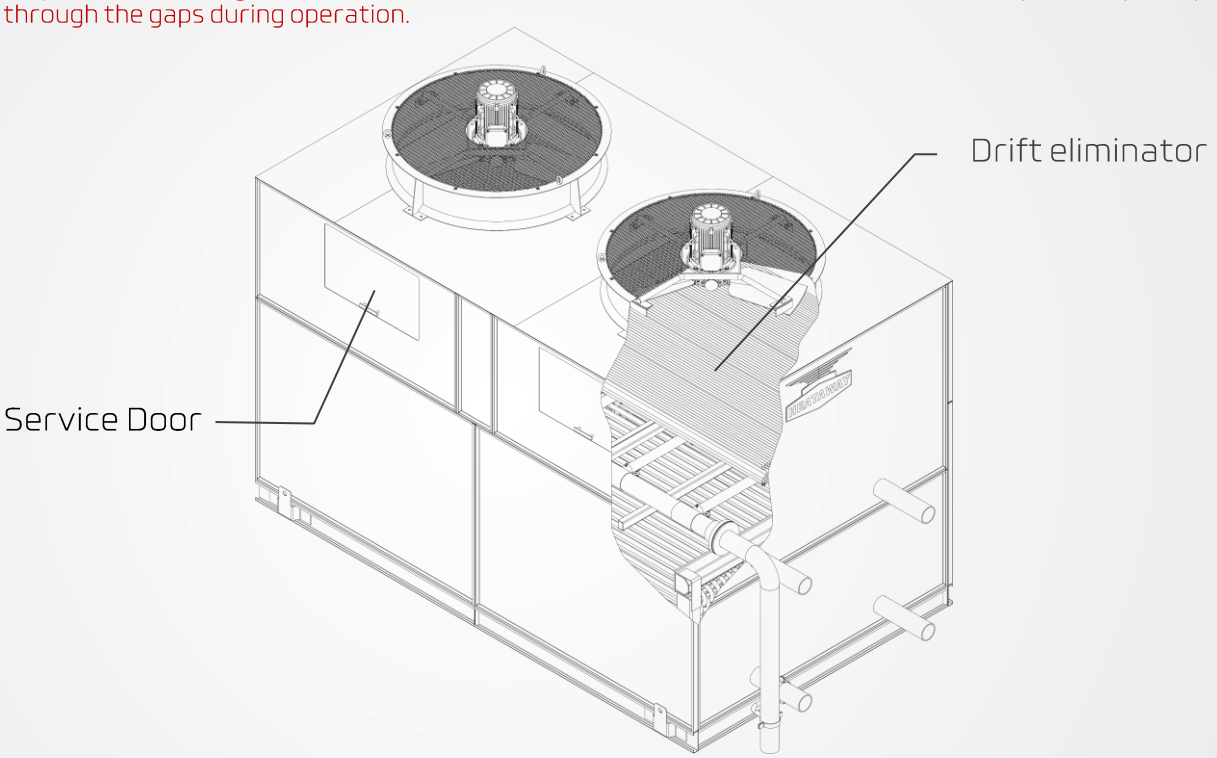


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CLEANING THE DRIFT ELIMINATOR

The drift eliminator serves to prevent water droplets from being carried out of the unit by the fan's suction force. After prolonged use, the drift eliminator may become clogged with debris and dirt, restricting airflow and directly reducing the cooling efficiency of the system. Therefore, it must be cleaned regularly. The drift eliminator can be removed through the access door and cleaned externally as shown in the image below.

Note: After cleaning the drift eliminator, reinstall it in its original position. Ensure that the drift eliminator fully covers the designated area as before. If it does not cover the entire area, water droplets may escape through the gaps during operation.

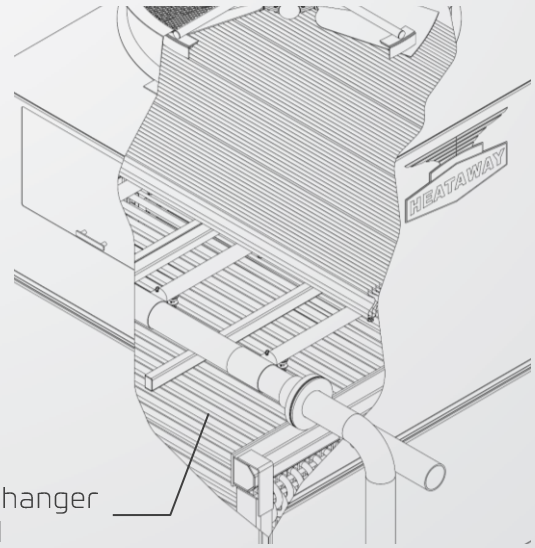


Inspection of Heat Exchanger Condition

The heat exchanger contains refrigerant and operates under high pressure; therefore, it must be inspected regularly. Damage to the heat exchanger can pose serious risks to both life and property.

A common issue is the accumulation of scale on the surface of the tubes, which directly reduces cooling efficiency. You can contact Heat Away Co., Ltd. or a specialist for scale removal. In case any leaks are detected on the heat exchanger, please contact your distributor or Heat Away Co., Ltd. immediately.

Note: When using chemicals to prevent or remove scale, please ensure that the chemicals do not damage the stainless steel. The company reserves the right to void the warranty in such cases of damage.

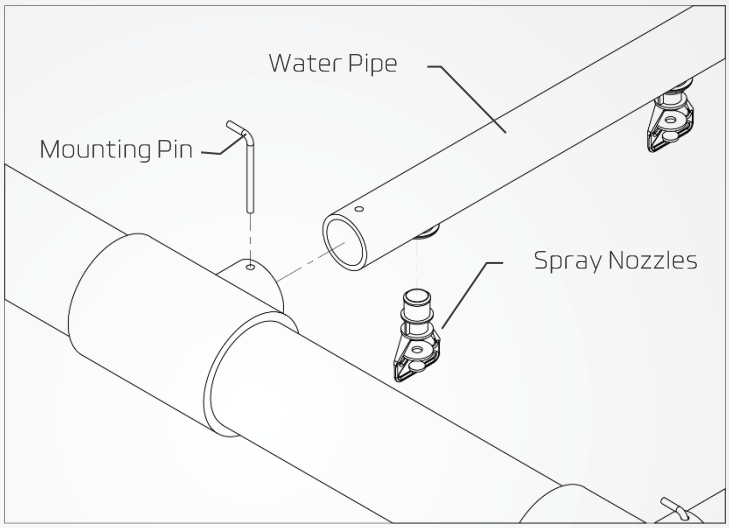


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CLEANING OF WATER PIPES AND SPRAY NOZZLES

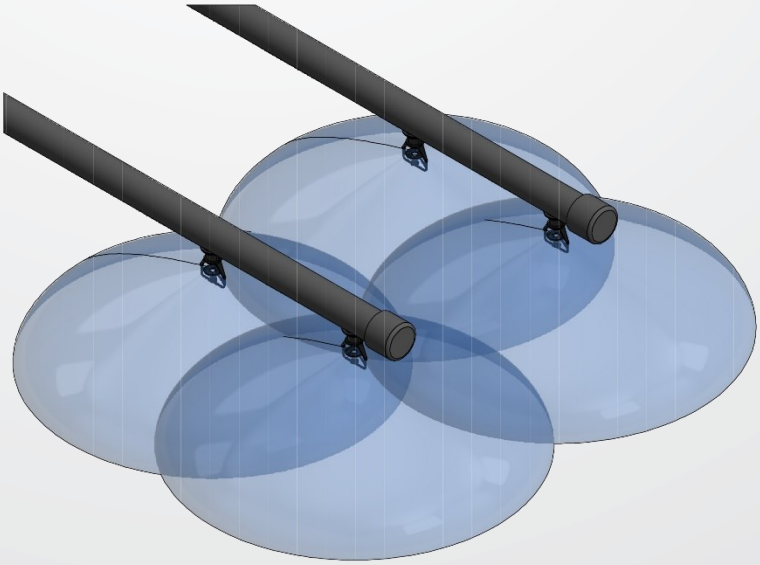
Water pipes and spray nozzles are important components for the operation of the unit. If they become clogged, the cooling efficiency will decrease. Detailed instructions for disassembling and assembling the water pipes and spray nozzles can be found in the image below.

Note: Clogged nozzles can cause damage to the heat exchanger coils, potentially leading to leaks. Therefore, regular inspection of the nozzles is essential. The company reserves the right to void the warranty in cases of nozzle blockage.



Spray pattern

The water sprayed from the nozzle must follow the spray pattern shown in the image below. If the spray does not match the specified pattern, it may indicate that the nozzle is damaged and needs to be replaced.

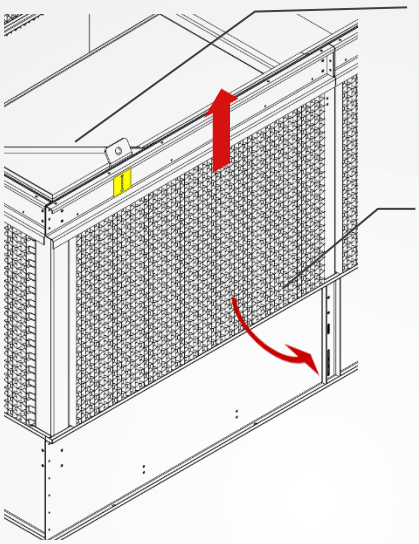


Spray pattern

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CLEANING OF INLET LOUVER

Inspect and clean the inlet louver to remove paper debris or other contaminants that may obstruct airflow, which can reduce the unit's efficiency. Such debris may also enter the unit and increase the risk of nozzle clogging. To clean the louver, lift it upward and pull out the lower section, as shown in the illustration below.

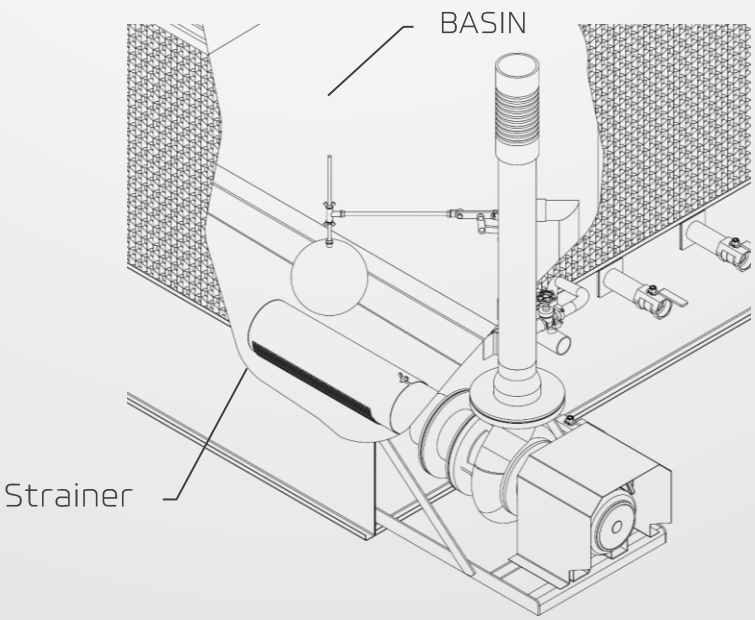


1. Lift the louver upward.

2. Pull out the lower section

CLEANING THE WATER BASIN AND PUMP STRAINER

Inspect and clean the water basin to prevent dirt or scale debris from entering the nozzles, which could lead to clogging. During cleaning, do not remove the pump strainer under any circumstances, as it helps prevent large debris from entering the spray system. Allowing such debris to enter could damage the unit or specific components.



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Float Valve Adjustment and Water Level Setting

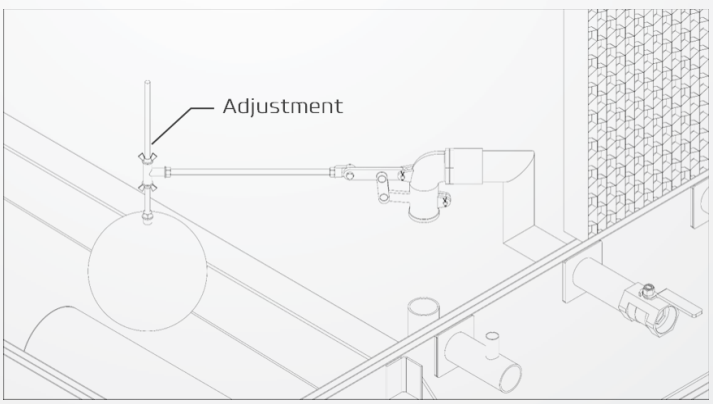
The float valve is a mechanical device that uses the buoyancy principle of a ball or float to control valve opening and closing. It is a standard component for all evaporative condenser models and can be easily inspected by removing the side inlet louver panel of the unit.

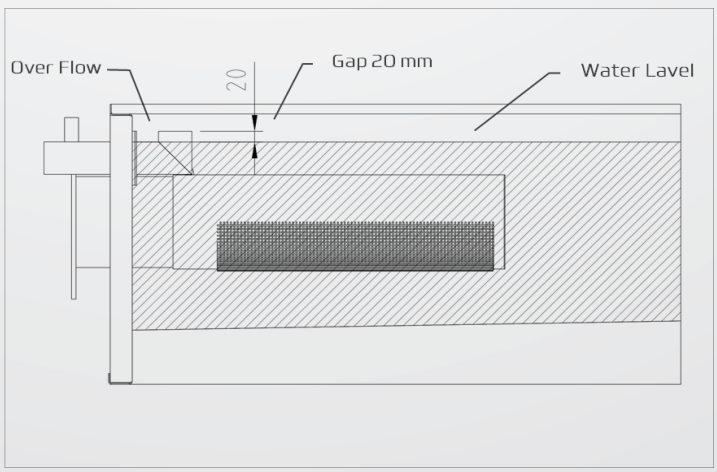
The make-up water float valve consists of a brass valve body connected to a float arm and controlled by a large stainless-steel ball. The ball is attached to the end of the float arm and is designed with a threaded connection, allowing the float to remain in the correct position without frequent adjustment.

The float valve should be inspected monthly, and leakage from the valve body should be checked at least once a year. The make-up water pressure entering the basin should be maintained between **1 - 3.5 bar** for proper operation and performance of the valve.

The basin water level can be adjusted by turning the adjustment screw so that the float valve closes completely when the water level is **13 mm below the overflow valve**. The water level should be closely monitored and adjusted as necessary during the first 24 hours of operation.

The float can be adjusted at two points—**fine adjustment** and **coarse adjustment**—as shown in the illustration below. The make-up water valve must close completely when the water level reaches the specified range, with the normal water level approximately **20 mm below the overflow pipe opening**, as illustrated.



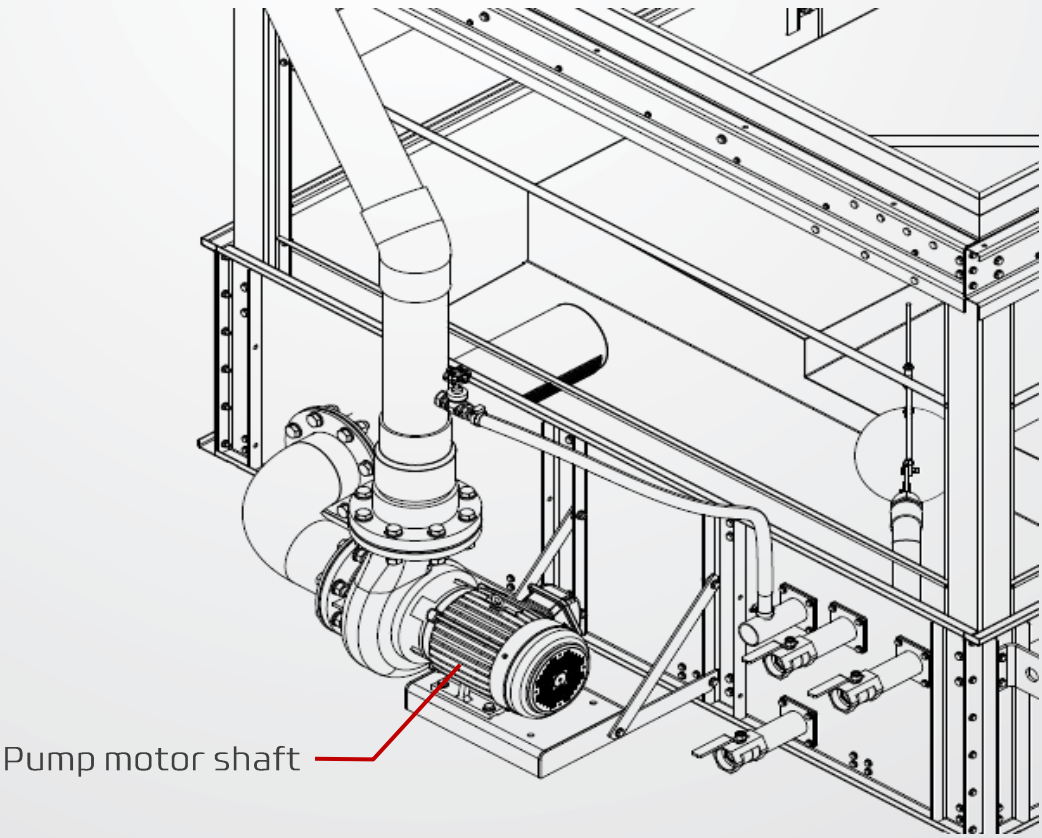


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WATER PUMP INSPECTION

Water pump inspection must be performed while the pump is running. Before starting the pump, ensure that no one is inside the unit and that all components have been properly reassembled. Also, verify that the water level in the basin is within the specified range to prevent dry running, which could damage the pump seals. If any of the following symptoms or abnormalities are observed during inspection, please contact your distributor or Heataway Co., Ltd. immediately.

- Abnormal vibration of the water pump
- Unusual noise from the water pump
- Water leakage around the pump motor shaft seal



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ROUTINE MAINTENANCE CHECKLIST

	PROCEDURE	DETAIL IN PAGE	FREQUENCY	MONTH												REMARK
				1	2	3	4	5	6	7	8	9	10	11	12	
While the unit is operating																
1	Check the quality of recirculated water.	Page 1	Monthly													
2	Check the quality of make-up water.	Page 1	Monthly													
3	Check the bleed rate.	Page 1	Monthly													
While the unit is turned off		BE CERTAIN THAT THE POWER IS TURNED OFF AND THE UNIT IS PROPERLY LOCKED AND TAGGED OUT!														
4	Check the fan blades for cracks, missing balancing weights.	Page 2	Monthly													
5	Clean drift eliminator.	Page 3	Quarterly													
6	Clean spray branches and nozzles.	Page 4	Monthly													
7	Inspect heat exchanged coil.	Page 5	Monthly													
8	Clean inlet louvers	Page 5	Quarterly													
9	Clean and flush the basin (Do not remove the strainer)	Page 5	Monthly													
10	Clean the strainer.	Page 5	Monthly													
11	Make up the water and check the float valve is operative.	Page 6	Monthly													
12	Check and adjust the water level	Page 6	Monthly													
TURNING WATER PUMP ON		BE CERTAIN THAT ALL PARTS ARE PUT BACK AND THE WATER IS AT THE PROPER LEVEL BEFORE TURNING WATER PUMP ON.														
13	Inspect the nozzles operate properly.	Page 4	Monthly													
14	Check the unusual sound or vibration of water pump.	Page 7	Monthly													
15	Check the leakage of water pump.	Page 7	Monthly													
TURNING WATER PUMP AND FAN ON		BE CERTAIN THAT NO ONE IS WORKING INSIDE THE UNIT AND ALL PARTS ARE PUT BACK BEFORE TURNING FAN ON.														
16	Check the unusual sound or vibration of fan.	Page 2	Monthly													

REMARK : If there are any problems or inquiries, please contact our sales representative or HEATAWAY Co., LTD..

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SEASONAL SHUTDOWN CHECKLIST

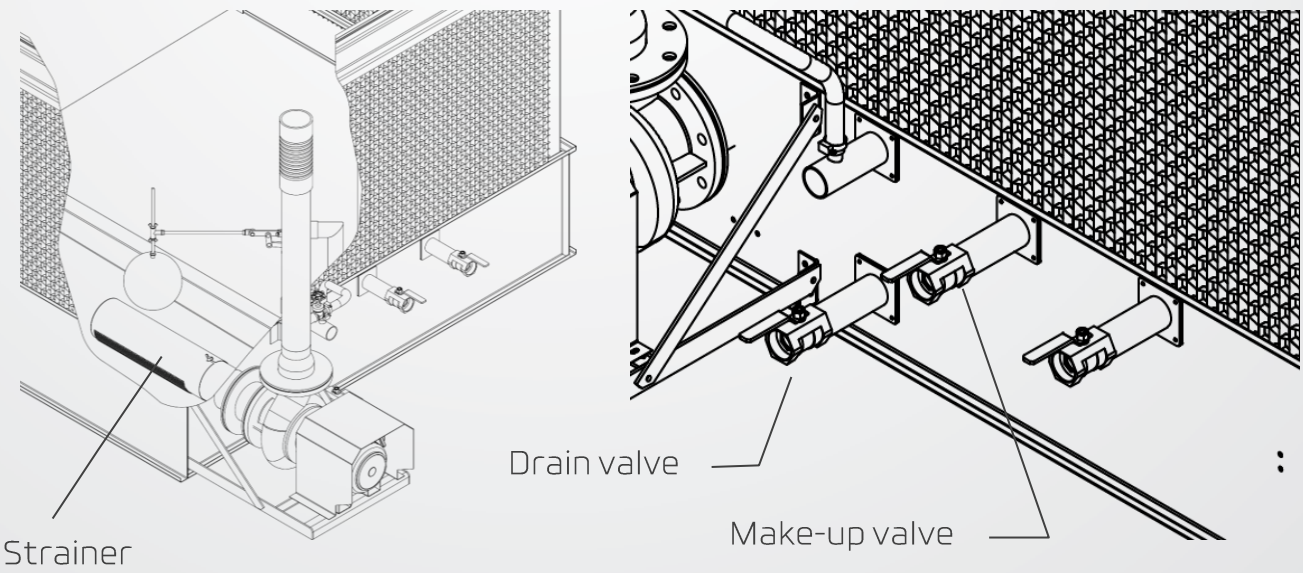
Turn off the machine for more than 3 days

CAUTION : Make sure that the machine is off, no electricity running to the machine, and the machine must be locked out, together with a sign to prevent others from turning it on during the process.

- ❑ 1. Clean the outside and inside of the machine of fouling, dust, or leaves.
- ❑ 2. Drain water out of the basin.
- ❑ 3. Clean the basin of fouling and other debris without removing the strainer.
- ❑ 4. Remove and clean the strainer before reinstalling it.
- ❑ 5. Open the drain valve to prevent water in the basin.
- ❑ 6. Close the make-up valve to stop the float from working.

IN CASE THE MACHINE HAS BEEN TURNED OFF FOR MORE THAN A MONTH

- ❑ 7. Turn the water pump by hand for at least 10 rounds per time for 1 time a month to prevent the motor from being locked up with fouling.
- ❑ 8. Turn on the fan once a month for 2 hours each time to dehumidify the motor and prevent the motor from being locked up with fouling.



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Warranty terms and conditions

Stainless steel evaporative condenser model: EC7 / EC9

HEATAWAY Co., LTD (hereinafter referred to as the "HEATAWAY") will warrant the products of the Company by providing maintenance check, repair, parts replacement services with terms and conditions as follows:

1. Warranty period

HEATAWAY guarantees the quality of materials produced during the manufacturing process for the following periods.

Detail	Model	Warranty period Products installed in Thailand	Warranty period Products installed outside Thailand
Frame & Structure	EC7 /EC9	18 months	18 months
Water Pump Mechanical Seal			
Fan Motor			
Other Accessories			
Pack Coil * • EC7-___-TS1-____-_ • EC9-___-___L -_-_-_-AB1-__-___-_ • Other	EC7 /EC9 /Other	10 years 10 years 18 months	18 months 18 months 18 months

*Pack Coil for TS1 (EC7) and AB1 (EC9) models installed in Thailand.

HEATAWAY guarantees against leaks caused by material and manufacturing defects only. For a period of 10 years from the date of invoice issuance under the following conditions:

Years 1-5, Heataway will cover the cost of repairs or replacement of the coil assembly, not exceeding the coil's present value.

Years 6-10, Heataway will cover the cost of repairs or replacement of the coil assembly, up to a maximum of 50% of the current coil value.

For model TS1 (EC7) and model AB1 (EC9) installed outside Thailand, as well as other coil pack models, the warranty period is 18 months.

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2. This warranty is subject to the following conditions:

The product must be installed and operated properly in accordance with the manual and HEATAWAY's instructions, including the use of water that meets the quality and standard values specified by HEATAWAY.

3. This warranty does not cover any damage or issues arising from the following cases:

3.1 Leakage of the coil or any damage resulting from modification of the product.

3.2 Leakage or evaporation of refrigerant.

3.3 Damage to property, life, body, or other belongings caused by the leakage or evaporation of refrigerants such as ammonia or Freon.

3.4 Damage to other products or customer-owned equipment used in conjunction with HEATAWAY products.

3.5 Damage resulting from improper use, use outside technical standards, incorrect maintenance procedures, or negligent and careless operation.

3.6 Transportation costs, crane rental, labor, and installation or dismantling expenses incurred for repair or replacement of parts.

3.7 Inspection or repair not performed by HEATAWAY's authorized technicians.

3.8 Damage caused by force majeure, accidents, natural disasters, or fluctuations in electrical systems or equipment.

4. Notification of product or equipment defects

Must be submitted through HEATAWAY's sales representative or via email at sales@heataway.net within 7 working days of discovering the issue for inspection.

Once HEATAWAY has completed the inspection, the cause and proposed solution will be communicated to you.

HEATAWAY reserves the right to determine repair or replacement of equipment in accordance with the warranty terms and company policy. Any damaged parts or equipment replaced under this warranty shall become the property of HEATAWAY, who may retain, dispose of, or use them as deemed appropriate.

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5. The warranty shall be immediately terminated upon the occurrence of any of the following:

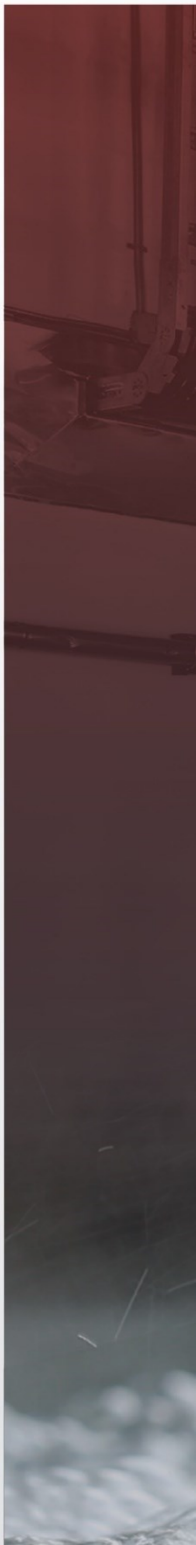
5.1 Customer fails to comply with agreements and/or sale and purchase contract,

5.2 Change the place of use of the product, modify the product or allow another person to repair the product during the warranty period without receiving permission from HEATAWAY.

6. HEATAWAY shall not be responsible for any damage arising from the use of the products by the purchaser, installer, or end user, including but not limited to liability for products made by the purchaser, installer, or end user from the seller's products, as well as any claims for damages from third parties or customers of the purchaser, installer, or end user.

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WORLD CLASS QUALITY

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