

***INSTRUCTIONS FOR THE CORRECT ASSEMBLY AND USE OF THE  
FRAME FOR SUPER 123 SHELVING***

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**FRAME FOR SUPER 123 SHELVING**

**REVISIONS**

<i>Rev</i>	<i>Revision description</i>	<i>Author</i>	<i>Date</i>

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## 1) GENERAL PRODUCT DESCRIPTION

The Super 1-2-3 frames are part of the “light gauge” industrial shelving category.

The frames are composed of uprights and spacer bars. The uprights are available in 3 versions of varying gauges while the spacer bars are available in a single gauge and can be supplied as either horizontal or diagonal elements. The uprights have a “T” shape containing two connection systems. The first, on the front face, has connectors set at a pitch of 33mm, for the assembly of beams and accessories. The second, on the side face, has connectors set at a pitch of 132mm, used for the connection of the horizontal and diagonal spacer bars.

More detailed information can be obtained by consulting the “Super 123 light gauge shelving” Technical Manual and the “Operating and Maintenance” Manual.

## 2) APPLICATION

The Super 123 industrial shelving systems are used in internal environments in both industrial and commercial applications.

## 3) RESPONSABILITY

Metalsistem **declines any responsibility** for assembly in non conformity with the specifications contained in this document.

**The use of safety clothing is mandatory:**



Gloves


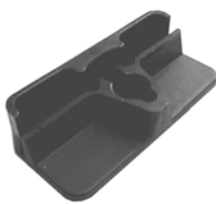






Safety boots

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**4) COMPONENTS**

PRINCIPLE COMPONENTS			
Drawing	Ref.	Code	Description
	1	68055	PVC TOP CAP
	2	67004	Plastic base plate
	3	67001	Metal base plate
	4	67006	Heavy duty metal base plate. (with bolts)
	5	S1 – 10xxx S2 – 11xxx S3 – 12xxx	Super 123 upright
	6	41xxx	Horizontal spacer bar


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	<b>7</b>	43xxx	Diagonal spacer bar
	<b>8</b>	00005	M6x20 HEX BOLT CLASS 8.8 DIN 933 Zp
	<b>9</b>	00021	M6 HEX NUT CLASS 8 DIN 934
	<b>10</b>	670xx	Anti shock spacer bar
	<b>11</b>	99230	Super 3 reinforced upright

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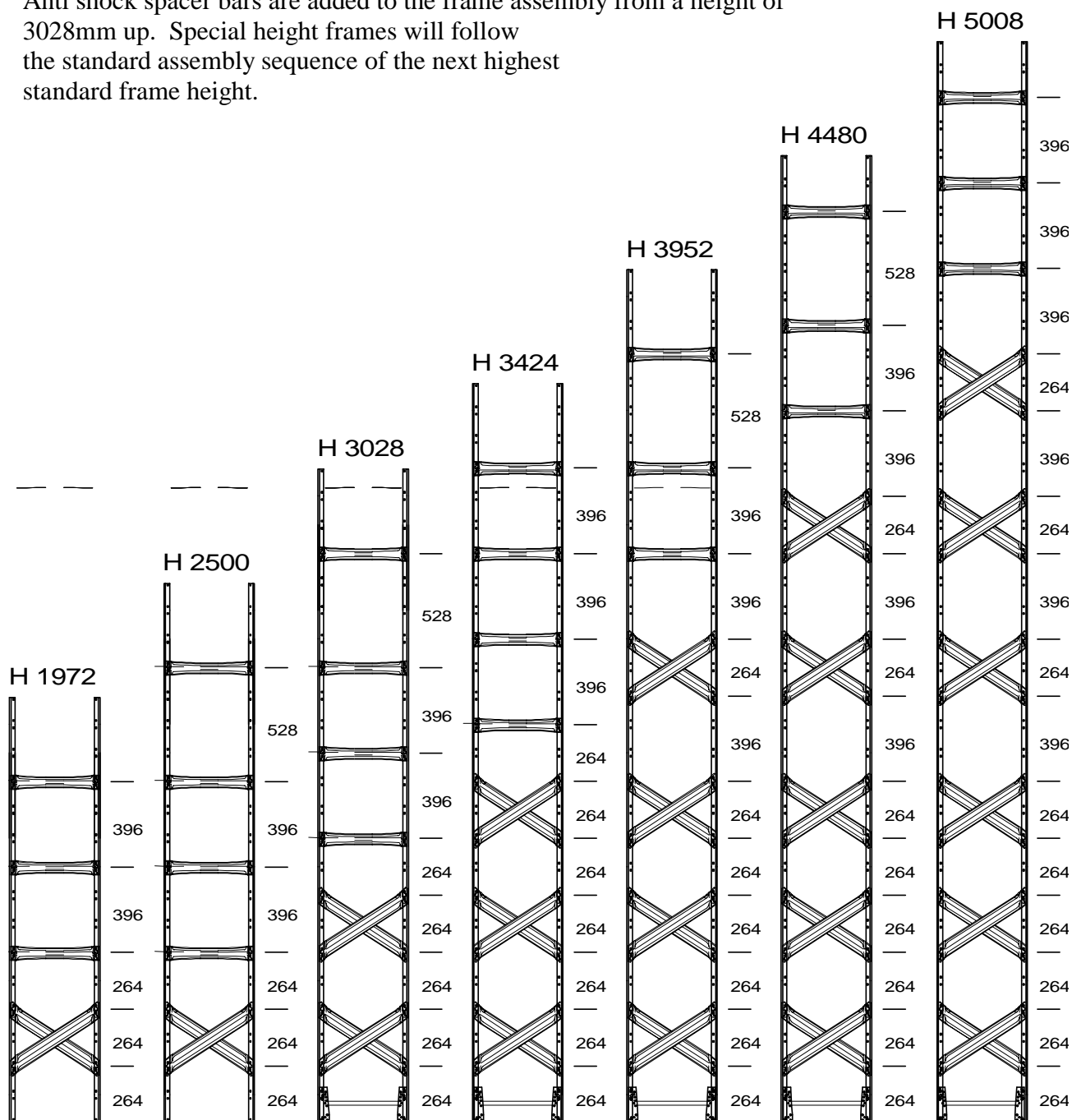
## 5) ASSEMBLY TOOLS

	POS.	No.	DESCRIPTION
	1		Electric screw driver.
	2		Screw driver
	3		Pliers
	4		Rubber mallet UNI 7784 (Rif. 7°)
	5		Hexagonal socket 10mm UNI 2725

## 6) STANDARD FRAME ASSEMBLY GRAPH

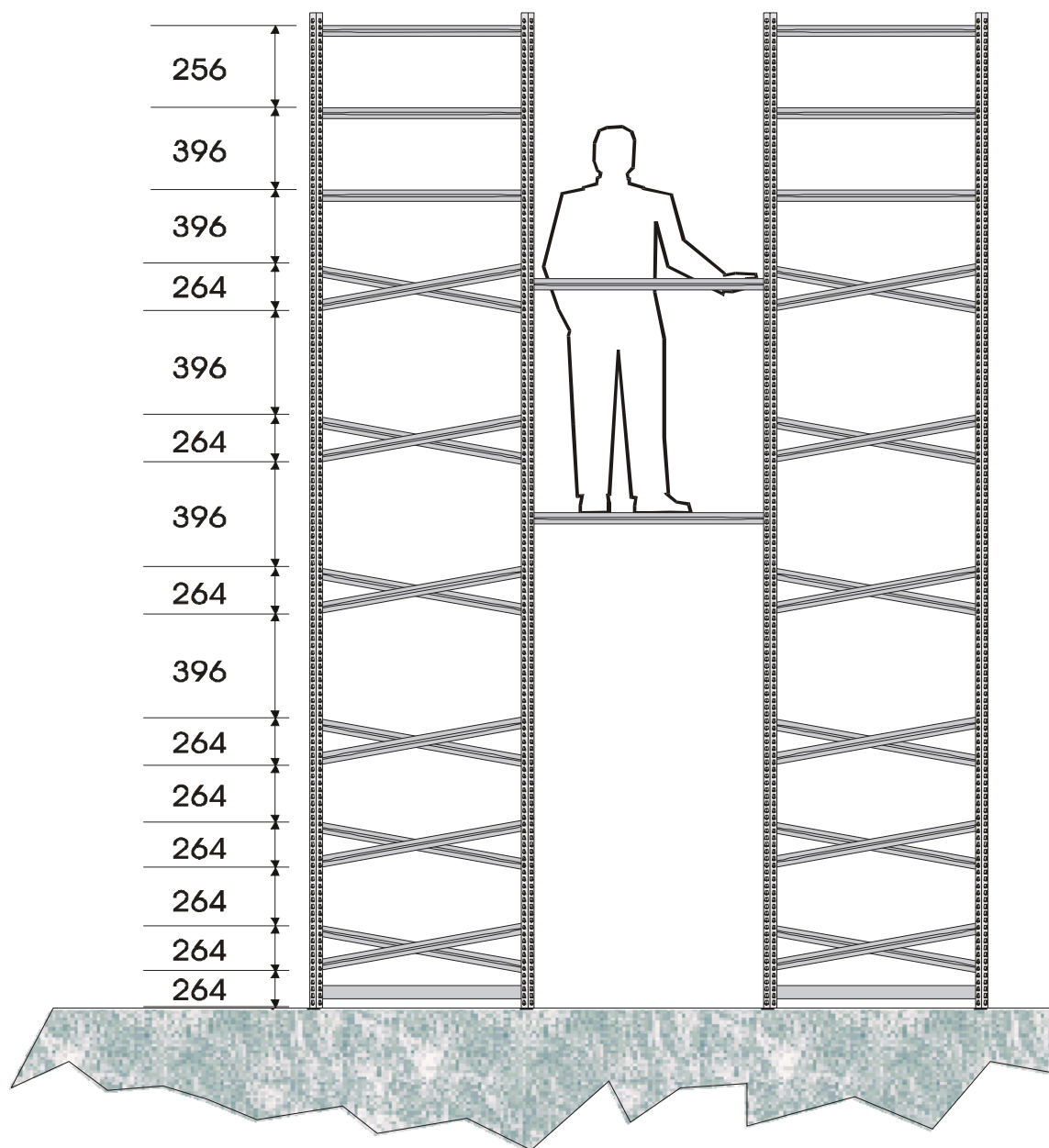
Assembly diagrams valid for 320-400-500-600-700-800 frame depths.

Anti shock spacer bars are added to the frame assembly from a height of 3028mm up. Special height frames will follow the standard assembly sequence of the next highest standard frame height.



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**Case “A” Super 3 suspended walkway**



Suspended walkway installations use exclusively Super 3 frames. The assembly of the frames follow the standard configuration, however, the diagonal spacer bars must always rise to the height of the suspended walkway.

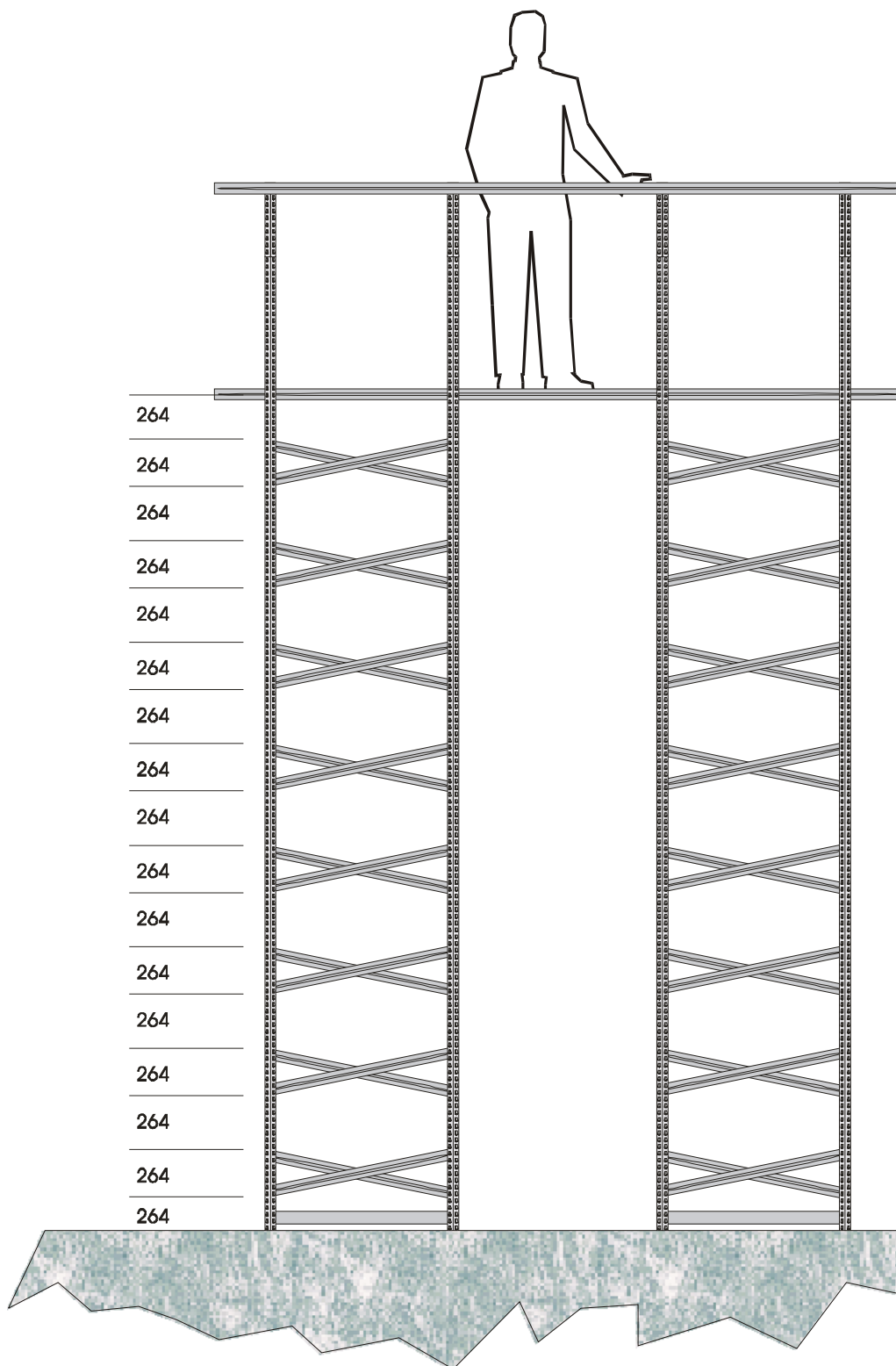
All frames must be assembled complete with anti shock spacer bars.

Stairs created from Super 3 components must always use Super 3 uprights with a reinforcing ‘C’ channel welded to the front of the profile. The location of the spacer bars for the special frames used in this area will be decided by the client/designer who will follow the indications of the Technical Manual “MTxx Accessories for light gauge shelving”.

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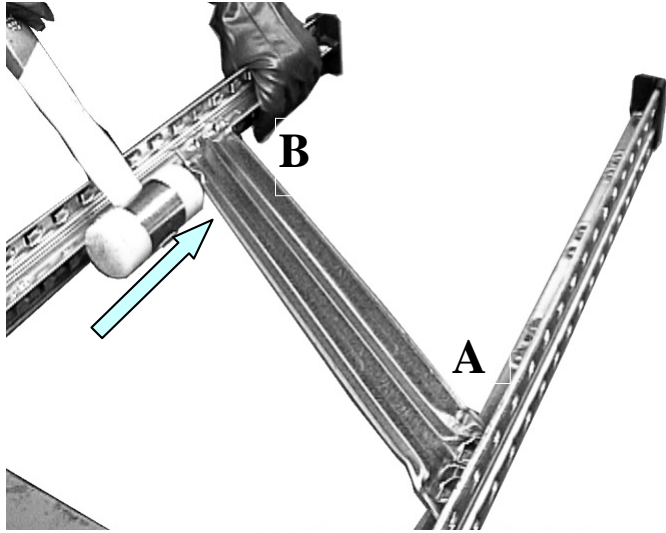

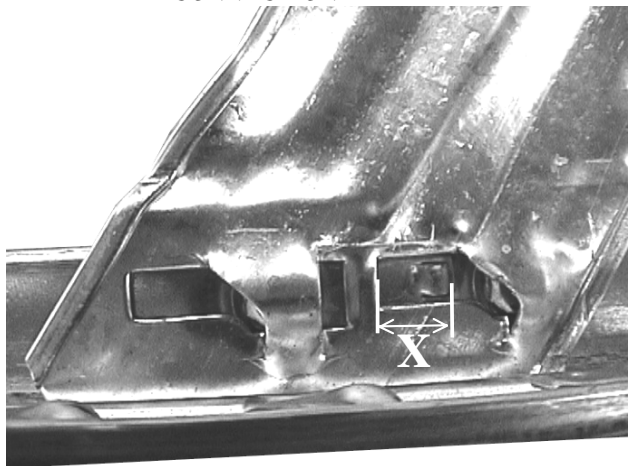
### Case "B" Super 3 with decking

Frames used for Super3 shelving with decking must use diagonal spacer bars only. These frames will be assembled complete with anti shock spacer bars.



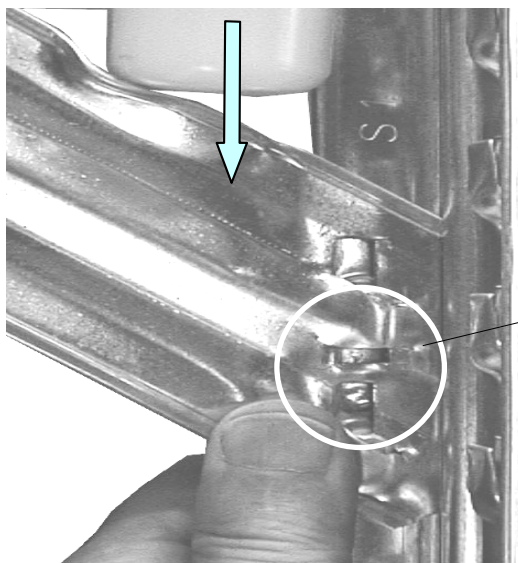
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## 7) FRAME ASSEMBLY

N°	DESCRIPTION
<p>1</p> 	<p>PLACE THE FIRST DIAGONAL AT THE DESIGN HEIGHT SHOWN IN THE SUPER 123 CATALOGUE (OR PARAGRAPH 6). KNOCK THE COMPONENT INTO POSITION, STARTING AT B AND ALTERNATING FROM POSITION B TO A UNTIL THE SECURITY PIN SYSTEM HAS BEEN ACTIVATED.</p>
<p>2</p> <p><i>CONNECTION DETAIL B</i></p> 	<p>THE PRECEDING METHOD IS FUNDAMENTAL FOR A QUICK AND EASY FRAME ASSEMBLY. AS CAN BE SEEN IN PHOTOS 2 AND 3, THE CONNECTION POINTS ON THE DIAGONAL ARE OFFSET BY THE DISTANCE X. THIS AVOIDS PROBLEMS RELATED TO THE COMPONENT FALLING OUT OF ALIGNMENT WHILE THE DIAGONAL IS DRIVEN INTO ITS SEAT.</p>
<p>3</p> <p><i>CONNECTION DETAIL A</i></p> 	

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4

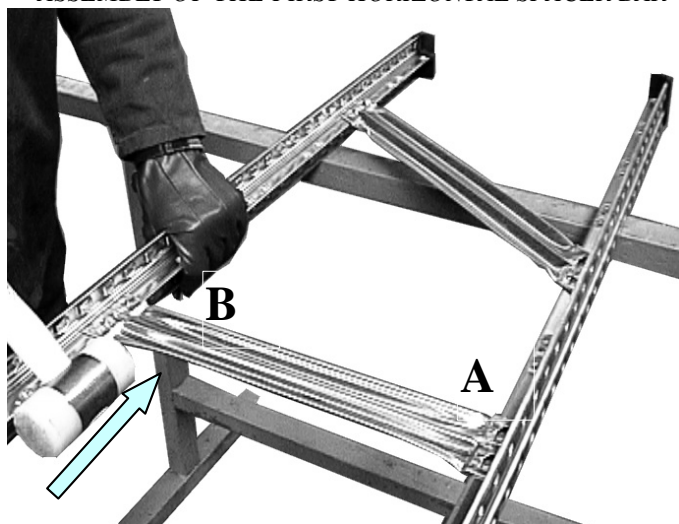


THE DIAGONAL AND HORIZONTAL SPACER BARS HAVE BEEN ASSEMBLED CORRECTLY IF THE SAFETY CLIP MECHANISM HAS BEEN ACTIVATED;

THE SAFETY CLIP MECHANISM HAS BEEN CORRECTLY ACTIVATED WHEN THE PROTRUSION ON THE UPRIGHT IS COMPLETELY WITHIN THE WINDOW OF THE SPACER BAR.

5

*ASSEMBLY OF THE FIRST HORIZONTAL SPACER BAR*



PROCEED WITH THE ASSEMBLY OF THE FIRST HORIZONTAL SPACER BAR, OR IN THE CASE OF HIGHER FRAMES, WITH THE OTHER DIAGONAL SPACER BARS.

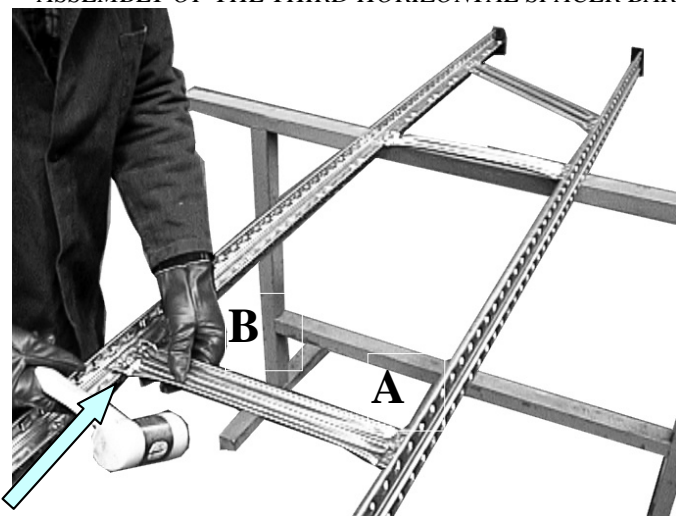
THE HORIZONTAL SPACER BARS ARE ASSEMBLED ALTERNATING ON EITHER SIDE OF THE UPRIGHT, AS THEY RISE TO STOP THE UPRIGHTS FROM TWISTING.

THEREFORE ON THE FIRST WORKING FACE THE 1<sup>ST</sup>, 3<sup>RD</sup>, (AND SO ON), HORIZONTAL SPACER BARS ARE ASSEMBLED.

EVEN IN THIS CASE USED THE RUBBER MALLET TO KNOCK THE HORIZONTAL SPACER BAR IN POSITION ALTERNATING FROM LOCATION B TO A UNTIL THE SAFETY CLIP MECHANISM HAS BEEN ACTIVATED.

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**6 ASSEMBLY OF THE THIRD HORIZONTAL SPACER BAR**



REPEAT THE ASSEMBLY PROCEDURE SHOWN IN SECTION 5

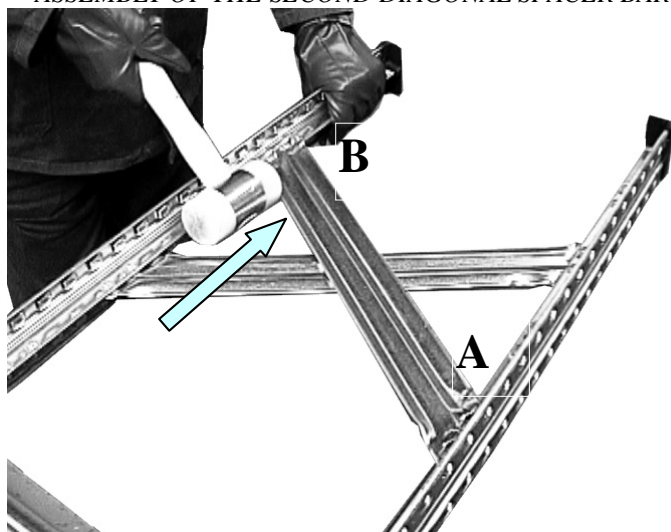
**7 TURN THE FRAME**



THE PHOTOS SHOW THE ASSEMBLY OF A 2500MM HIGH FRAME. THEREFORE, IN THIS CASE THE ASSEMBLY OF THE FIRST FACE IS COMPLETE.

TURN THE FRAME AND CONTINUE AS SHOWN IN THE FOLLOWING PHOTOS.

**8 ASSEMBLY OF THE SECOND DIAGONAL SPACER BAR**

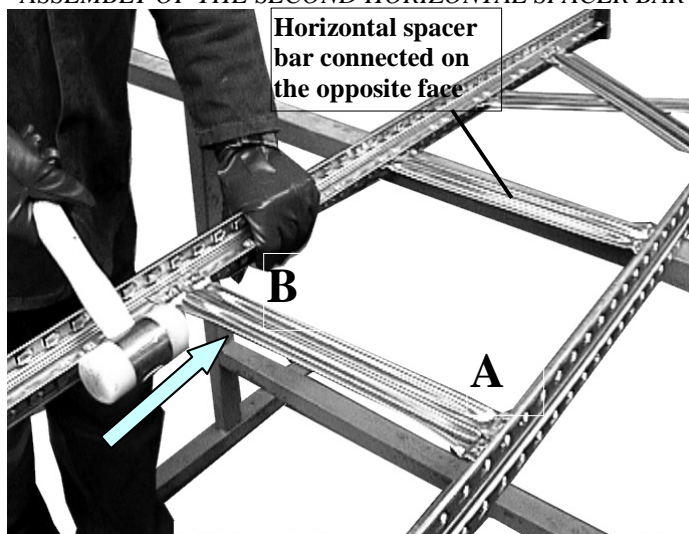


REPEAT THE ASSEMBLY PROCEDURE SHOWN IN POINT 1.

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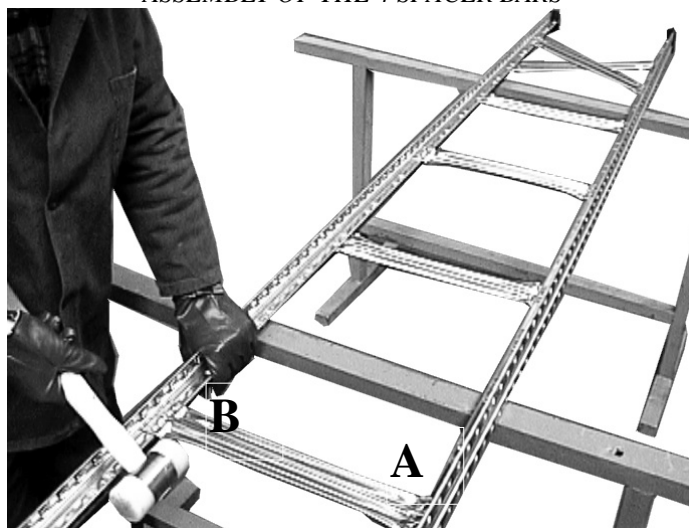
**9** *ASSEMBLY OF THE SECOND HORIZONTAL SPACER BAR*



REPEAT THE ASSEMBLY SEQUENCE SHOWN IN POINT 5.

NOTE THAT THE HORIZONTAL SPACER BARS HAVE BEEN ASSEMBLED ON BOTH FACES OF THE UPRIGHT.

**10** *ASSEMBLY OF THE 4 SPACER BARS*

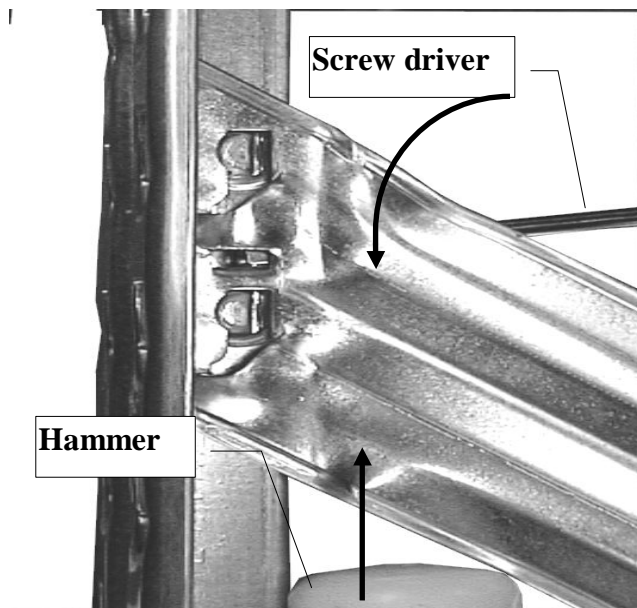


REPEAT THE ASSEMBLY SEQUENCE AS SHOWN IN POINT 5.

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**11**






FOLLOW THESE INSTRUCTIONS SHOULD IT BE NECESSARY TO DISCONNECT THE SPACER BAR FROM THE UPRIGHT.

INSERT THE SCREW DRIVER BETWEEN THE UPRIGHT AND THE SPACER BAR. USE A HAMMER TO KNOCK THE SPACER BAR OUT OF ITS SEAT.

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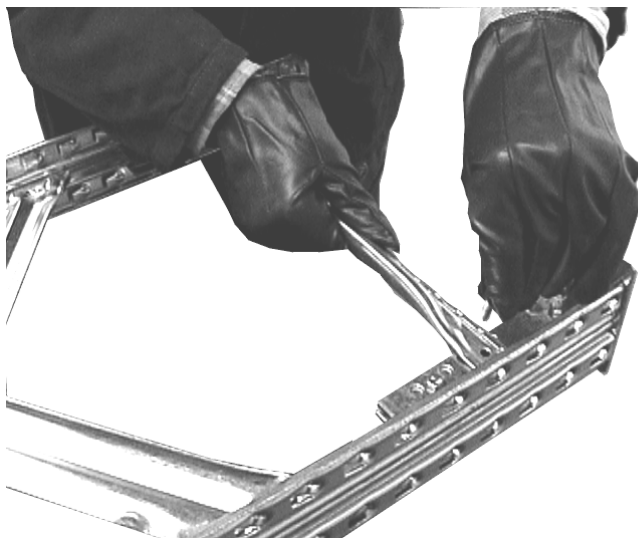
## 8) ASSEMBLY OF ACCESSORIES

### 8.1) Assembly of the heavy duty metal base plate.

<p><b>12</b></p> 	<p>PREPARE THE HEAVY DUTY METAL BASE PLATE AS SHOWN HEREIN.</p> <p>INSERT THE M6X20 BOLTS INTO THE UPPER AND LOWER HOLES AND START THE NUTS ONTO THE BOLTS.</p> <p>DO NOT USE THE CENTRE HOLE AS THIS WILL BE USED TO FASTEN THE ANTI SHOCK SPACER BAR.</p> <p>COMPLETE TWO SETS OF PRE ASSEMBLIES, ONE WITH THE BOLTS FACING LEFT AND THE OTHER WITH THE BOLTS FACING RIGHT.</p>
<p><b>13</b></p> 	<p>COMPONENTS PRE ASSEMBLED IN THIS WAY WILL (ONCE ASSEMBLED TO THE FRAME) HAVE THE BOLTS ALL FACING IN THE SAME DIRECTION.</p>
<p><b>14</b></p> 	<p>TIGHTEN THE M6X20 BOLTS ONTO THE UPRIGHTS AS SHOWN.</p>

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**15**



ASSEMBLE THE ANTI SHOCK BAR TO THE FRAME USING THE CENTRE HOLE OF THE REINFORCED METAL BASE PLATE.

FASTEN THIS COMPONENT USING THE M6x20 BOLTS.

8.2) Assembly of the plastic base plate.

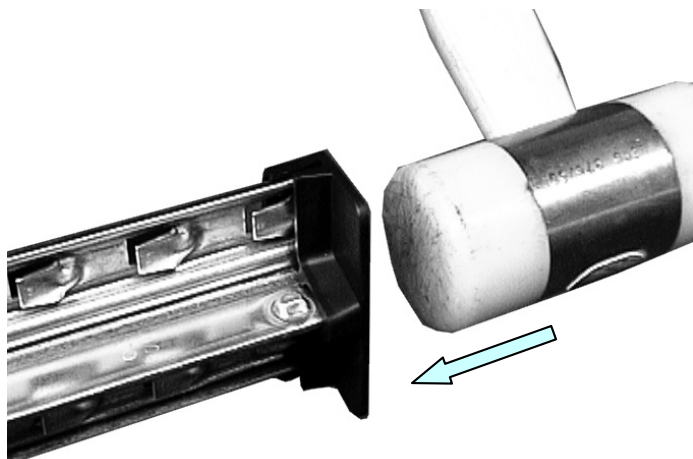
**16**



PLACE THE PLASTIC BASE PLATE AGAINST THE SUPER 123 UPRIGHT CUPPING FIRST THE CENTRE RIB FOLLOWED BY THE CONNECTION FACE.

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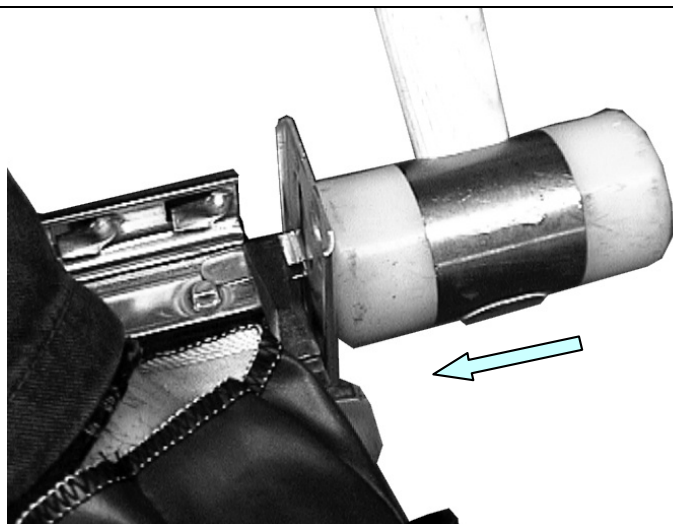
**17**



COMPLETE THE ASSEMBLY BY GENTLY KNOCKING THE BASE PLATE UNTIL IT HAS BEEN INSERTED ONTO THE UPRIGHT.

8.3) Assembly of the metal base plate.


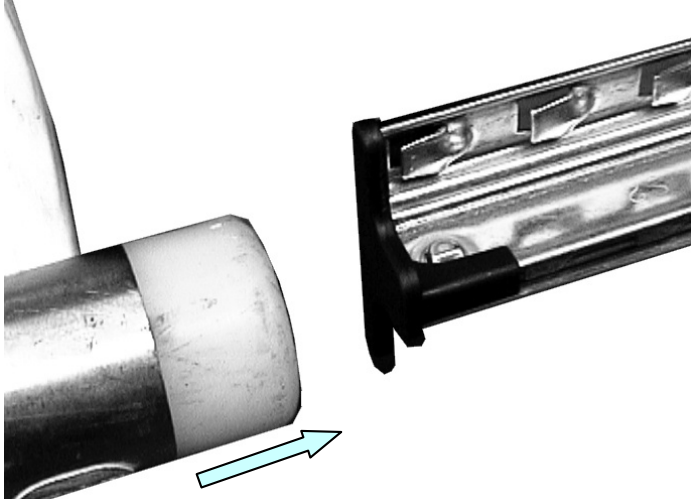
**18**



PRESS THE WINGS OF THE METAL BASE PLATE AGAINST THE SUPER 123 UPRIGHT WITH A PAIR OF PLIERS. GENTLY KNOCK THE METAL BASE PLATE INTO POSITION WITH A HAMMER.

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8.4) Assembly of the PVC top cap.

19		<p>PLACE THE PVC TOP CAP AGAINST THE SUPER 123 UPRIGHT CUPPING FIRST THE CENTRE RIB FOLLOWED BY THE CONNECTION FACE.</p>
20		<p>COMPLETE THE ASSEMBLY BY GENTLY KNOCKING THE TOP CAP FULLY INTO POSITION.</p>