

# X-TOWER

## Manuel de montage et d'utilisation Échafaudage roulant X-TOWER

Ce manuel doit impérativement être remis aux utilisateurs



Notice vidéo en ligne

# X-TOWER

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## Chapitre 1 : Les spécifications de l'échafaudage

### 1-1 : Description du produit

L'échafaudage X-Tower est conçu pour être utilisé et manipulé par une seule personne.

Sa conception rend son montage rapide et sécurisé, les différents éléments de l'échafaudage étant solidaire, aucun risque d'oubli ou de perte de l'un d'entre eux.

Un kit de chargement est disponible en option pour faciliter le rangement dans un véhicule.

### 1-2 : Conformité

#### **X-Tower 2m :**

Echafaudage répondant aux exigences du décret 2004-924

#### **X-Tower 3m :**

Echafaudage classe 3 selon la norme EN1004 de mai 2005

### 1-3 : Caractéristiques dimensionnelles

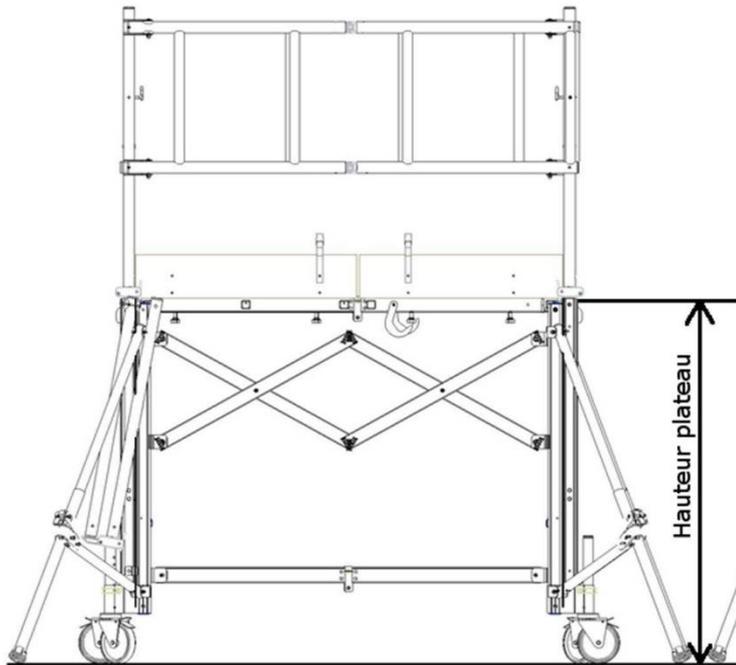
Dimension générale	X-TOWER 2m	X-TOWER 3m
Encombrement déployé		
Longueur hors tout (m)	2,4	2,3
Largeur hors tout (m)	2,1	2,1
Hauteur hors tout (m)	3,09	3,84
Encombrement replié		
Longueur hors tout (m)	0,98	0,98
Largeur hors tout (m)	0,82	0,92
Hauteur hors tout (m)	1,34	1,41
Poids (Kg)	65	75

Dim plateau	X-TOWER 2m	X-TOWER 3m
Longueur (m)	1,54	1,54
Largeur (m)	0,6	0,6
Charge ponctuelle (Kg)	150	150
Charge répartie admissible (Kg)	185	185
Hauteur minium (m)	0,8	0,8
Hauteur maximum (m)	2,05	2,8

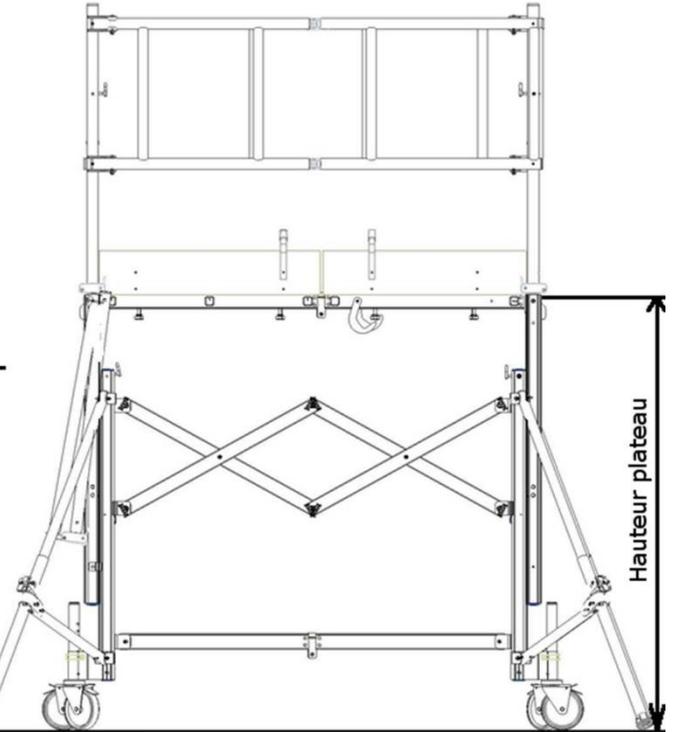
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1-4 : Vues de l'échafaudage X-TOWER 2m à ses différentes hauteurs de plateau

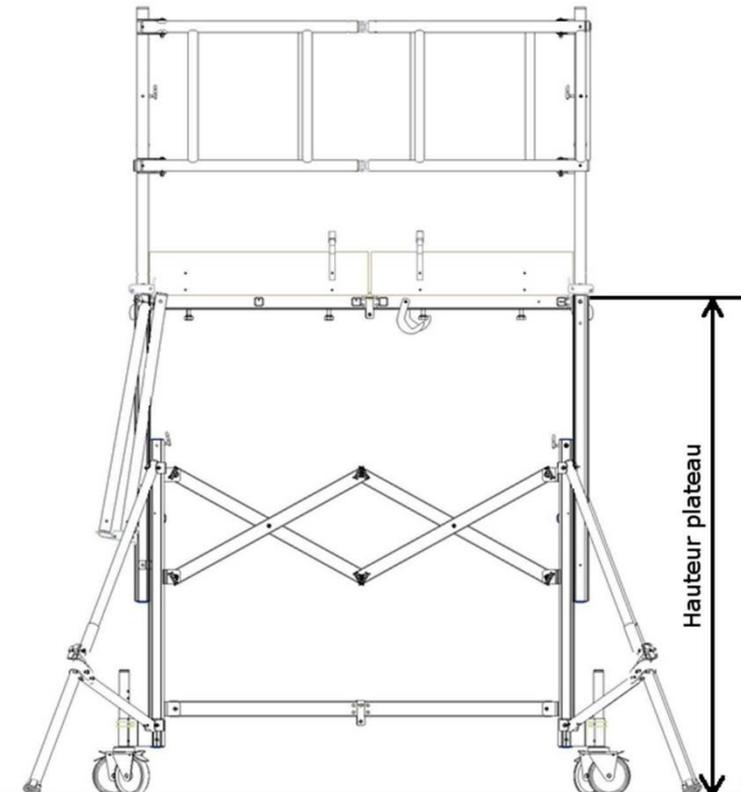
Hauteur plateau : 1,3 m



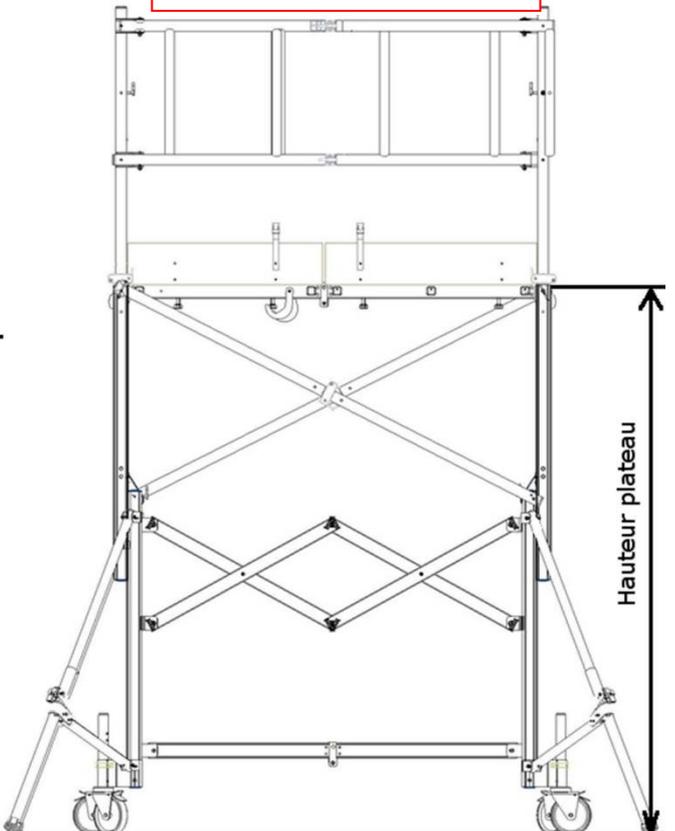
Hauteur plateau : 1,55 m



Hauteur plateau : 1,8 m



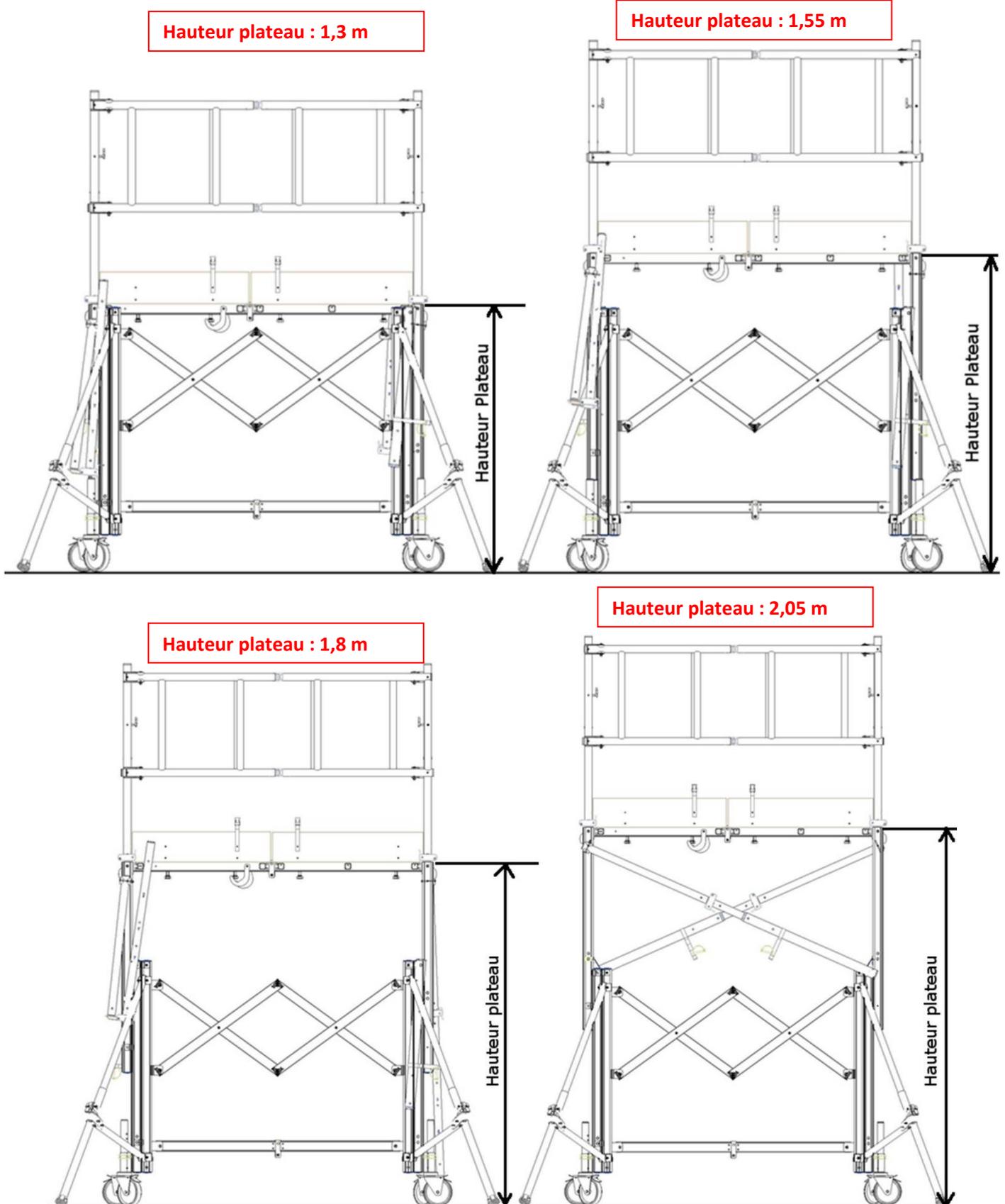
Hauteur plateau : 2,05 m



Mise en place obligatoire des diagonales

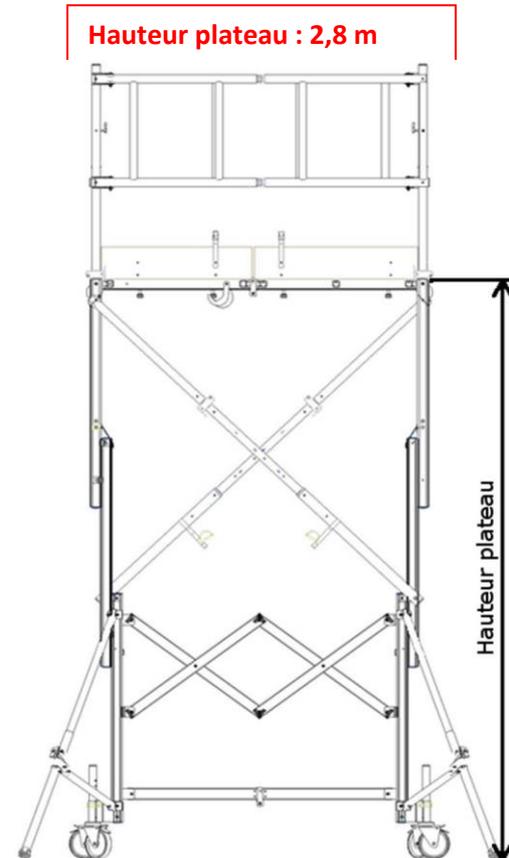
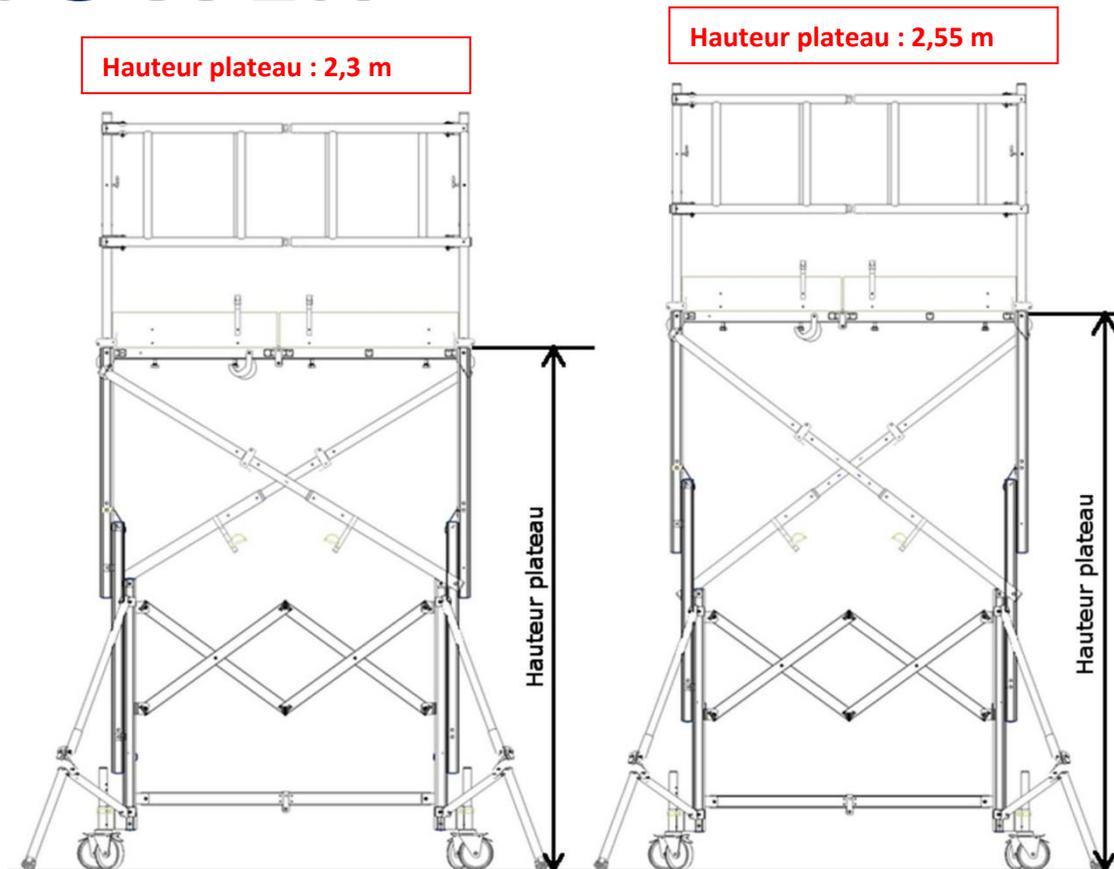
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1-5 : Vues de l'échafaudage X-TOWER 3m à ses différentes hauteurs de plateau



Mise en place obligatoire des diagonales

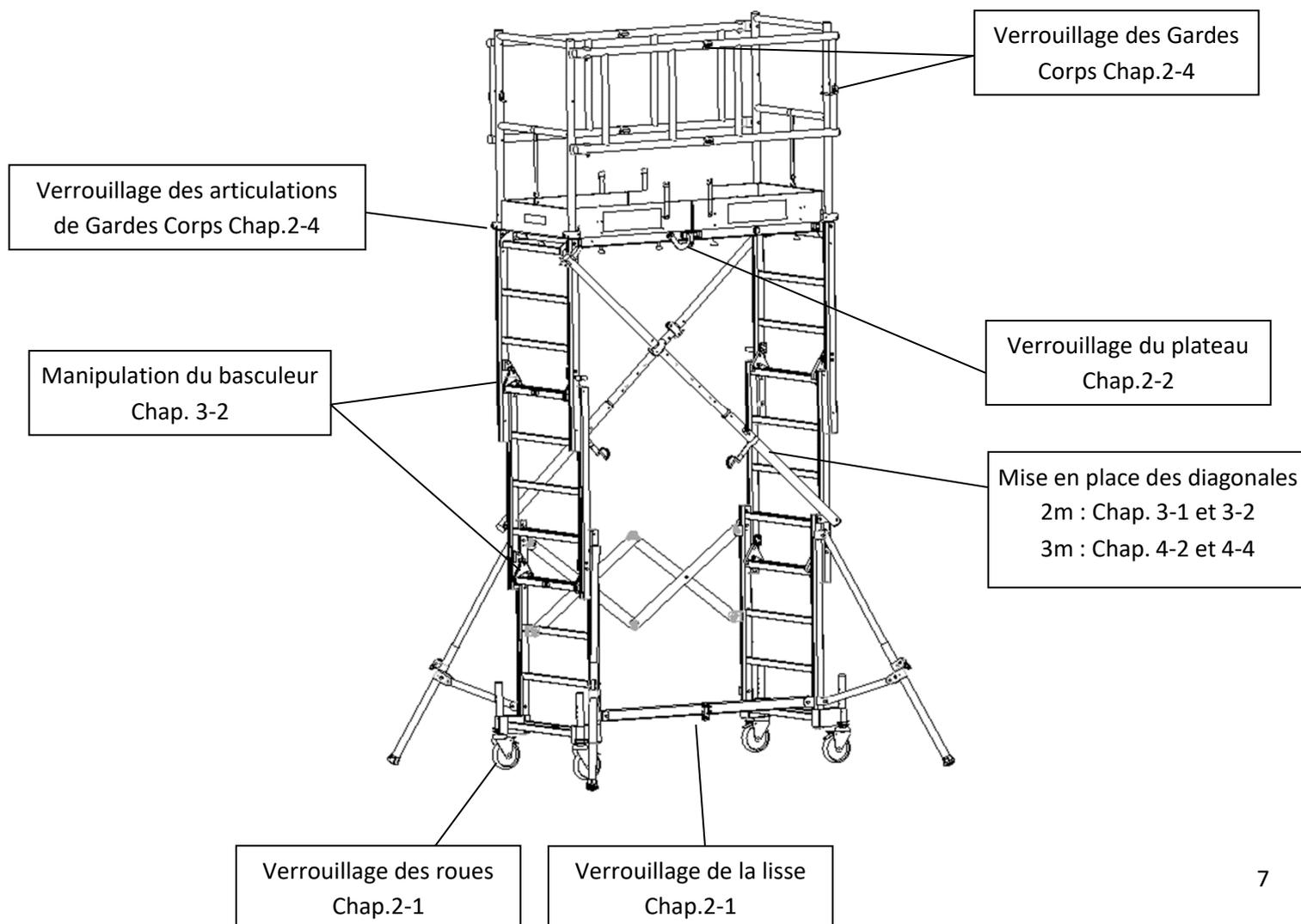
# X-TOWER



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## 1-6 : Précautions de montage

- Monter et utiliser l'échafaudage suivant ce manuel (à lire en entier avant la première utilisation).
- Le X-Tower doit être monté et démonté uniquement par un personnel formé aux instructions de montage et d'utilisation.
- Les éléments endommagés ou de marques différentes ne doivent pas être utilisés.
- Les équipements de protection individuels sont obligatoires pour le montage et le démontage de l'échafaudage.
- Respecter l'ordre de montage et de démontage de la notice.
- Avant la première utilisation, retirez les colliers plastiques situés au niveau des diagonales et des verrous de gardes corps.
- Une attention particulière doit être portée sur les points ci-dessous :



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## Chapitre 2 : Le montage, hauteur plateau 1.3m

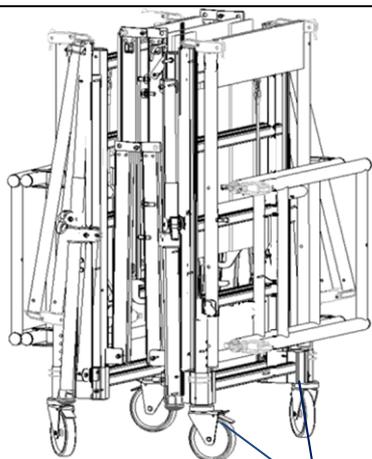
Cette partie est commune aux modèles 2 et 3 mètres

### 2-1 : Ouverture de l'échafaudage

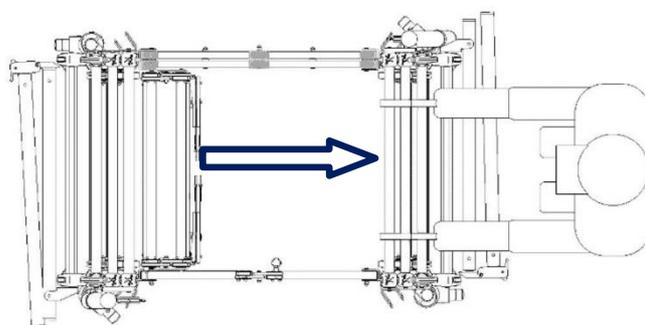
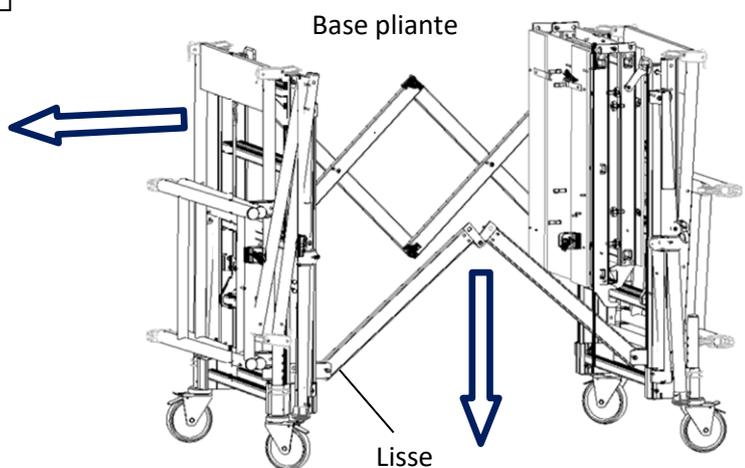
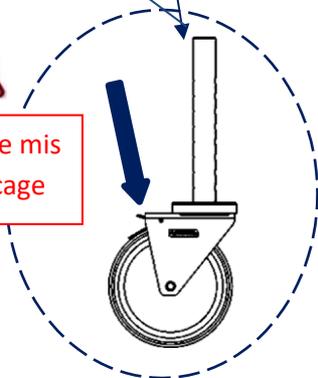
Si le produit est équipé d'un kit chargement, l'enlever (voir le chapitre 9). Sinon, retirer uniquement la sangle qui entoure le produit.

Avec le pied, bloquer les freins des 2 roues de l'échelle où le plateau est accroché.

Tirer l'échelle qui ne supporte pas le plateau, en se mettant derrière celle-ci, jusqu'à ce que la lisse soit horizontale. Veillez à garder les échelles le plus parallèle possible.



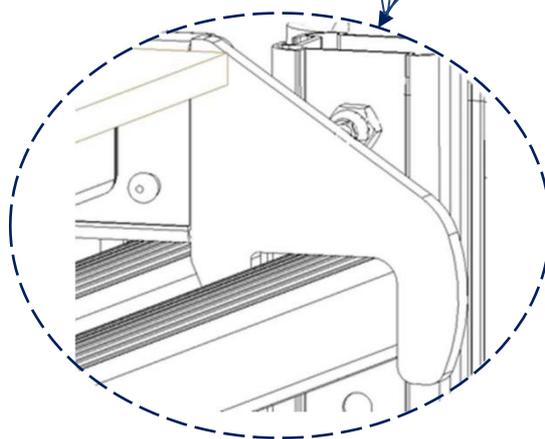
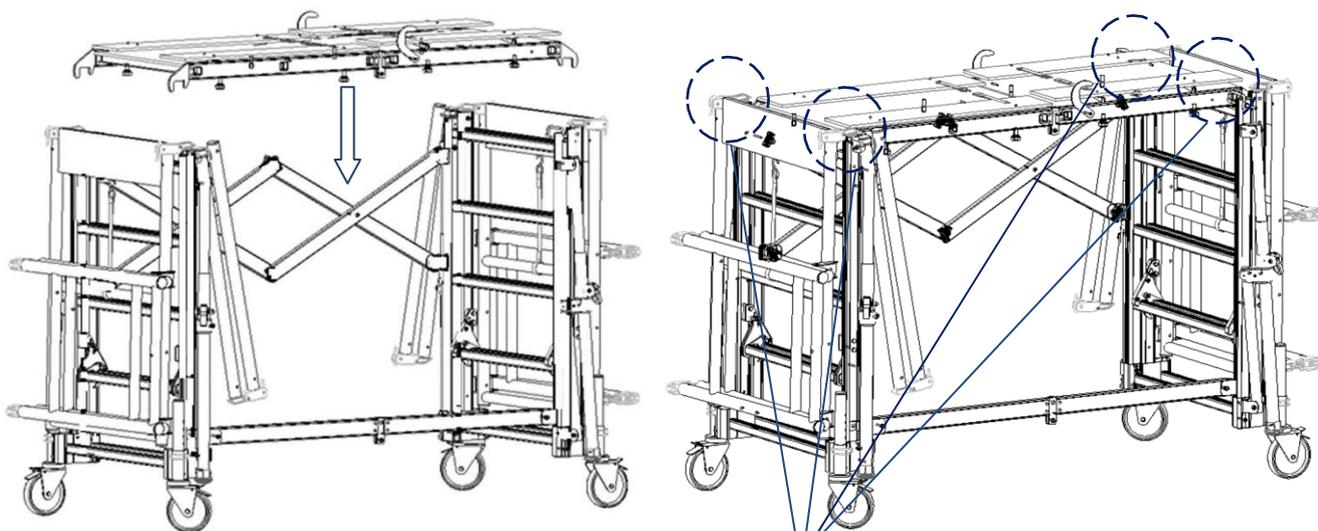
Le frein doit être mis en position blocage





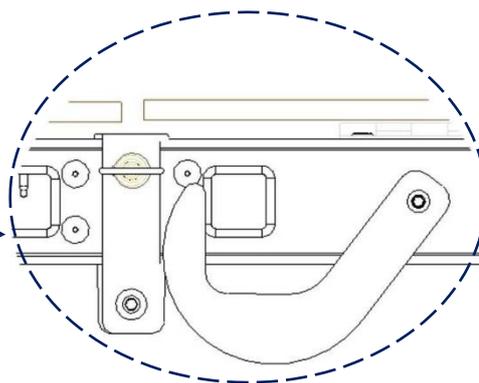
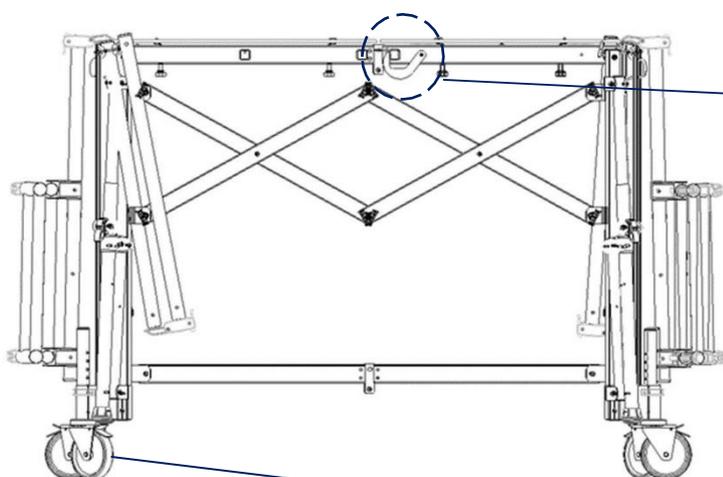
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Poser le plateau de manière à ce que les crochets soient en appui sur les échelles les plus à l'extérieur.

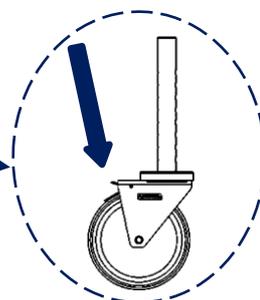


Vérifier le bon positionnement des 4 crochets de plateau sur les échelons.

Rabattre les 2 crochets de support vers le bas



Bloquer les deux autres roues de l'échafaudage.



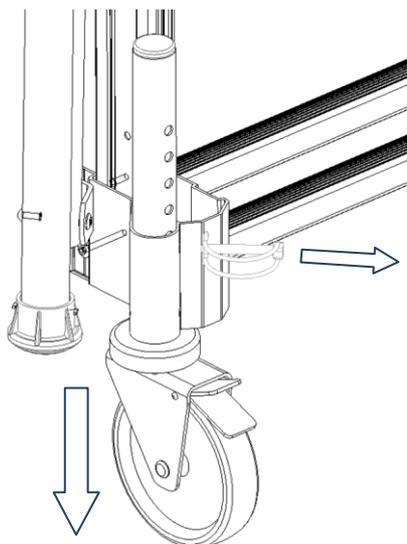
Le frein doit être mis en position blocage

# X-TOWER

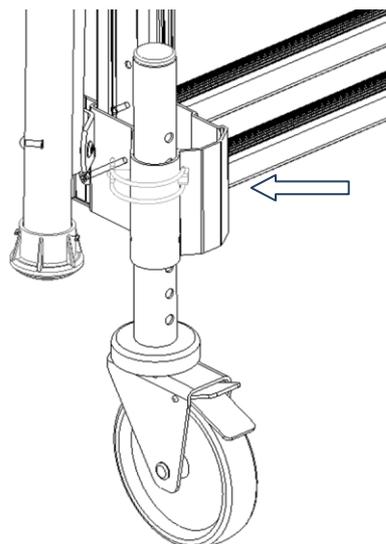
## 2-3 : Réglage des roues

Vérifier le niveau du plancher par rapport au sol dans le sens longitudinale et transversale. Si l'échafaudage se trouve sur un sol non plan, il est possible de régler les roues afin de le mettre de niveau.

Retirer la goupille qui maintient la roue, et ajuster la hauteur de la roue



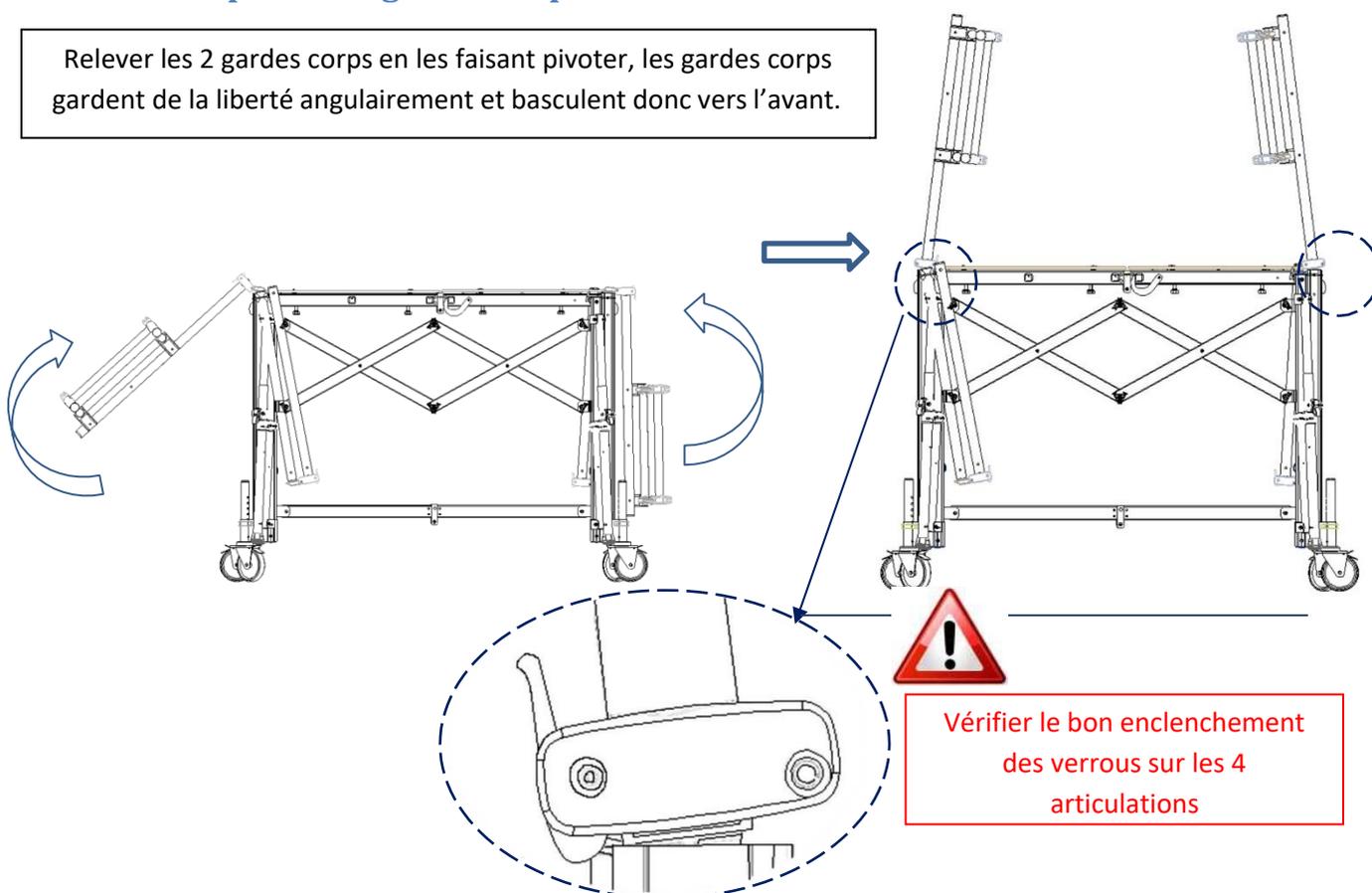
Aligner le trou de la roue le plus proche à celui du support et réintroduisez la goupille



Appliquez cette opération sur le nombre de roue nécessaire pour que l'échafaudage soit de niveau. Contrôler le niveau de l'échafaudage avant de poursuivre l'élévation.

## 2-4 : Mise en place des gardes corps :

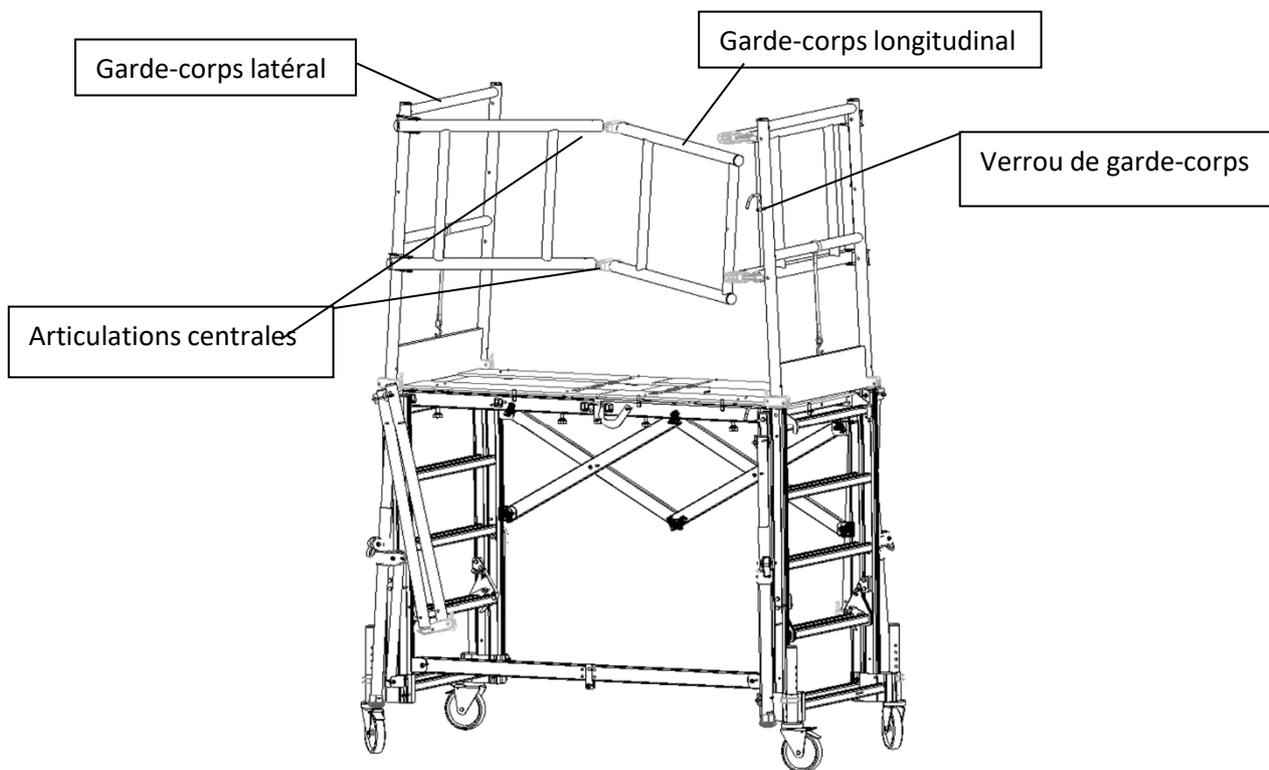
Relever les 2 gardes corps en les faisant pivoter, les gardes corps gardent de la liberté angulaire et basculent donc vers l'avant.



Vérifier le bon enclenchement  
des verrous sur les 4  
articulations

# X-TOWER

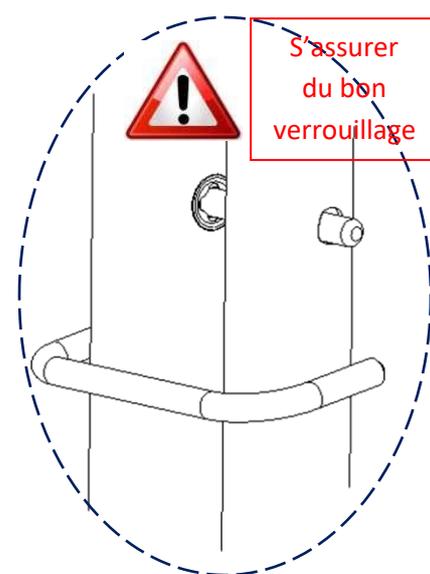
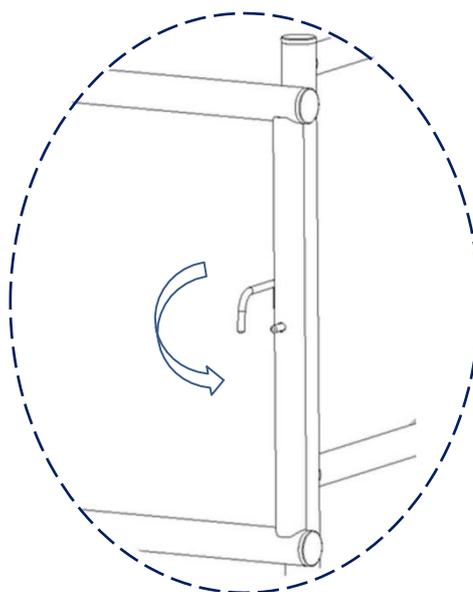
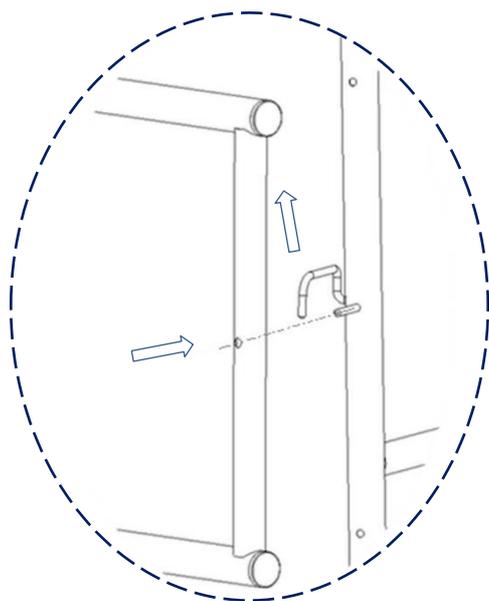
Défaire la sangle d'un des gardes corps et déplier la partie longitudinale pour l'amener jusqu'au verrou du garde-corps opposé sans enclencher l'articulation centrale



## Verrouiller le garde-corps

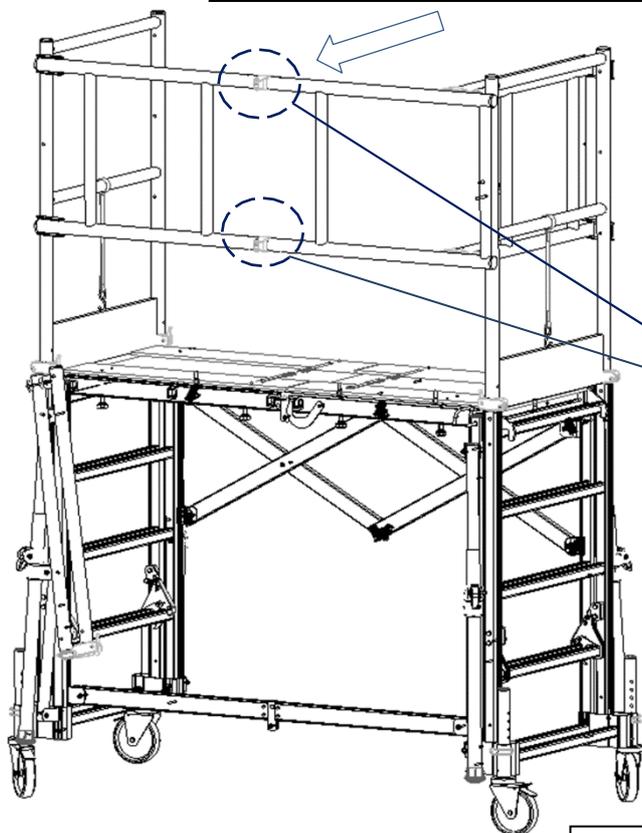
Soulever le verrou et insérer le dans le trou du garde-corps

Abaisser le verrou pour bloquer le garde-corps

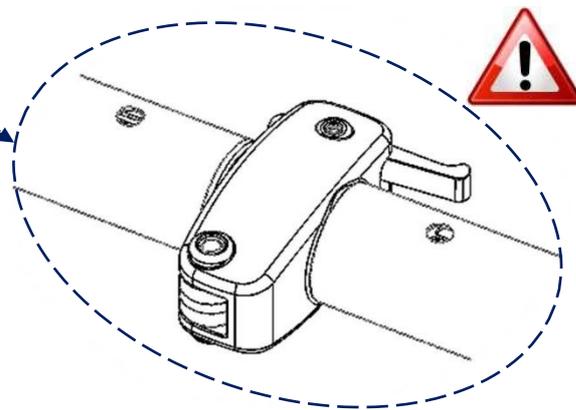


# X-TOWER

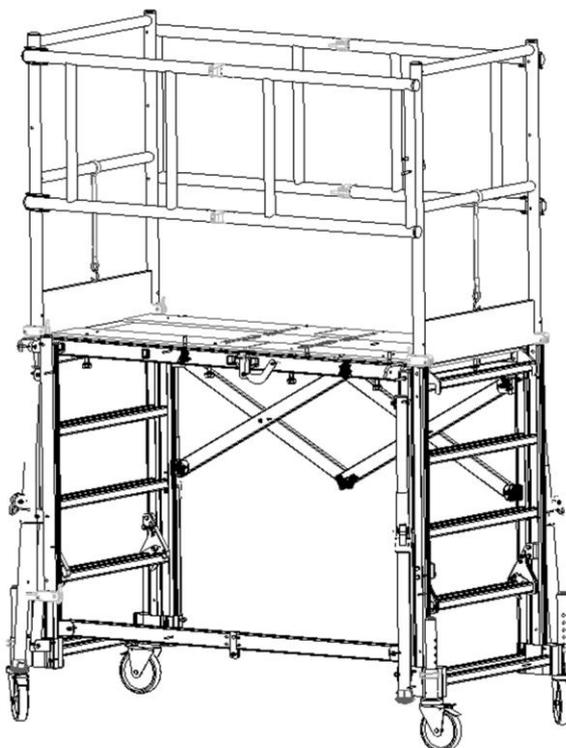
Tirer sur le garde-corps pour  
verrouiller l'articulation centrale



Vérifier le bon enclenchement  
des verrous sur les 2  
articulations



Répéter l'opération sur le second  
garde-corps

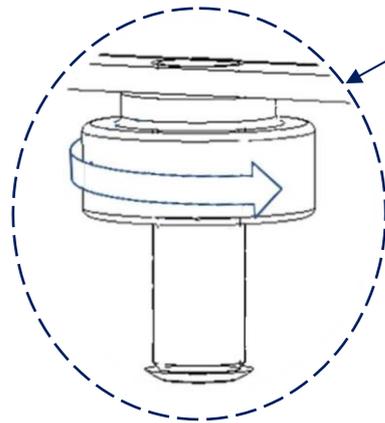
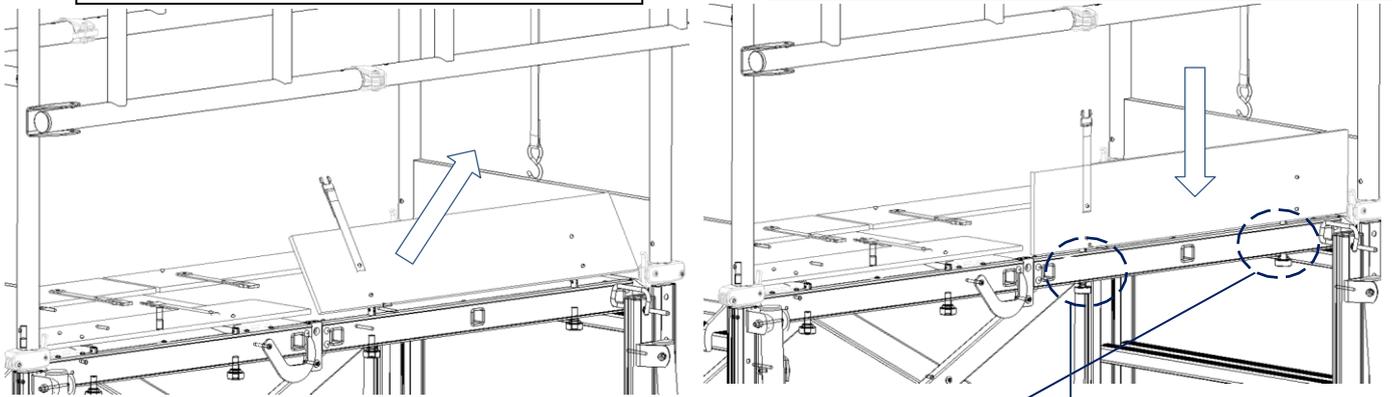


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## 2-5 : Mise en place des plinthes :

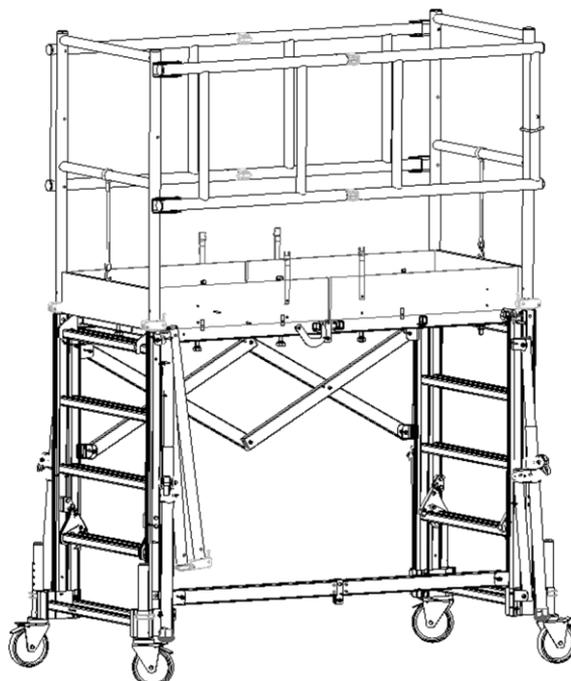
Détacher les sangles qui relient les plinthes, puis relever une première plinthe.

Abaisser la plinthe verticalement, puis verrouiller la avec les molettes sous le montant.



Serrer les 2 molettes pour que la plinthe soit correctement positionnée et ne bouge plus.

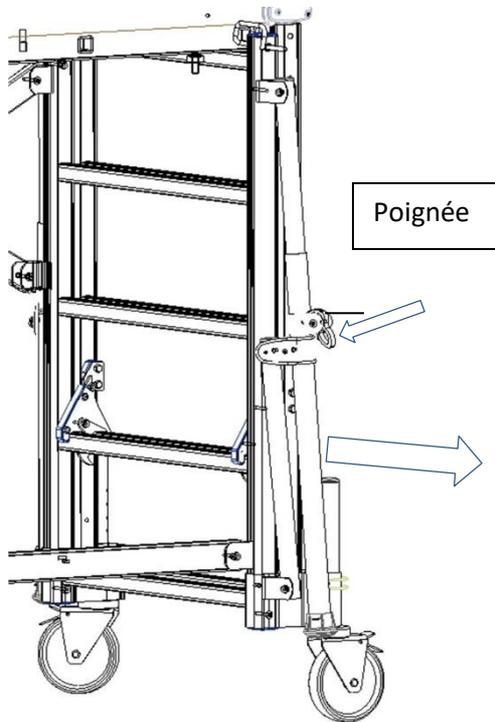
Procéder de même pour les 3 autres plinthes



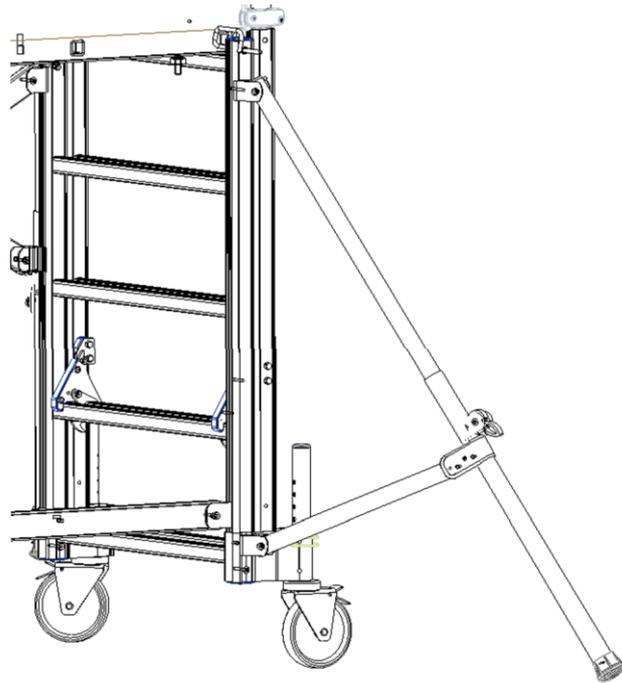
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## 2-6 : Mise en place des stabilisateurs:

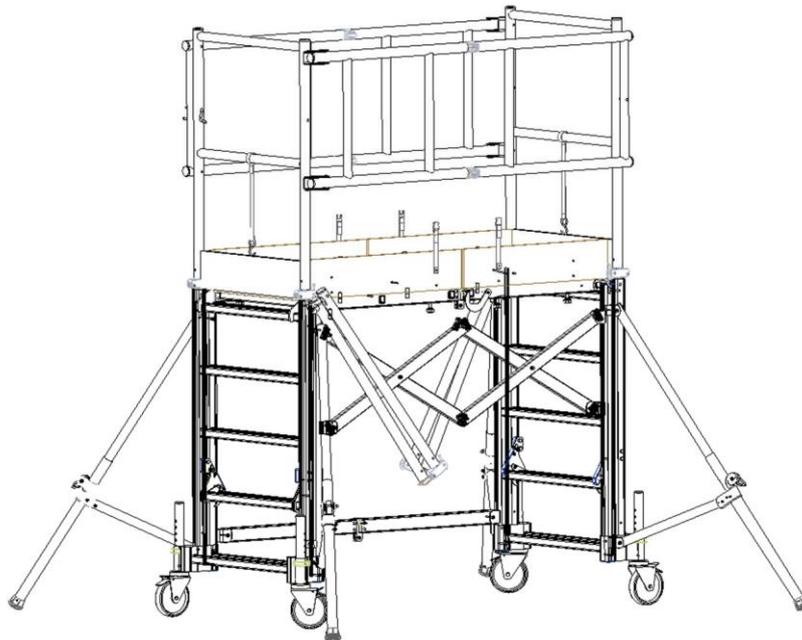
Tout en appuyant sur la poignée, tirer le stabilisateurs vers l'arrière.



Déployer le stabilisateur jusqu'à ce qu'il soit complètement en appui sur le sol et relâcher le verrou.



Répéter l'opération sur les 3 autres stabilisateurs



L'échafaudage est alors prêt à être utilisé à une hauteur de plateau de 1.3m.

Pour l'élévation de l'échafaudage 2 mètres, voir le chapitre 3, pour l'élévation du 3 mètres, voir le chapitre 4.

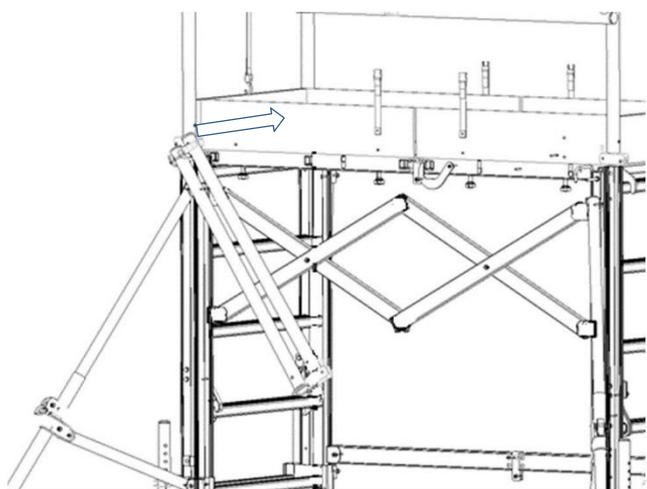
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## Chapitre 3: Elévation du modèle 2 mètres

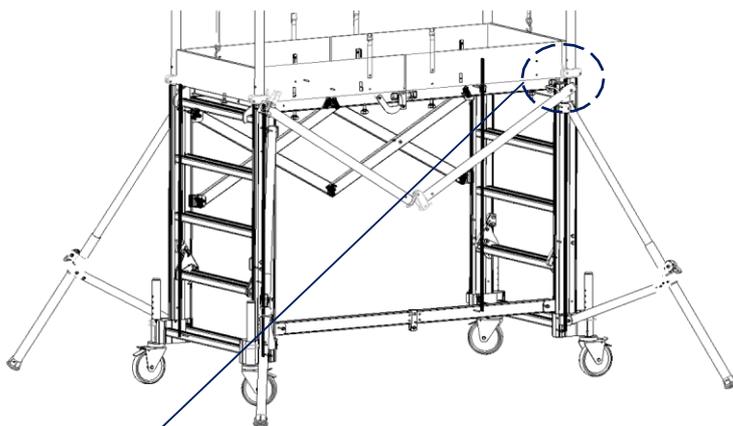
### 3-1 : Mise en place des diagonales

La diagonale doit être installée uniquement lorsque le produit est élevé à sa hauteur maximale.

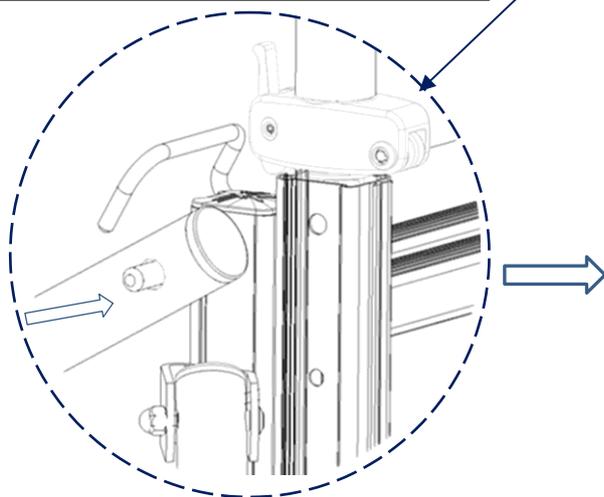
Déclipser la diagonale pour la déplier



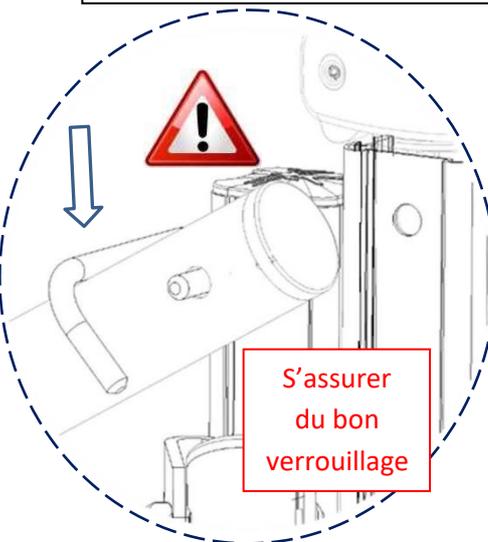
Accrocher la diagonale sur le verrou de l'échelle opposée



Passer le verrou au travers du trou de diagonale.



Abaisser le verrou vers la diagonale

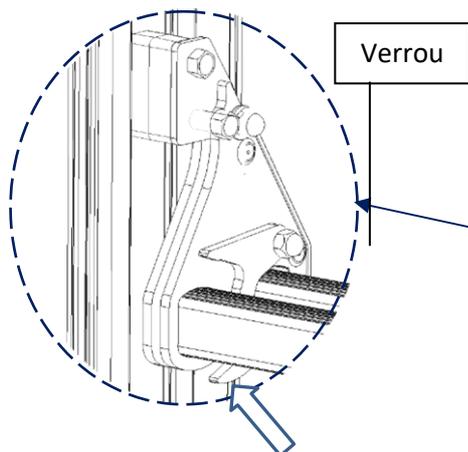


Répéter cette opération sur la seconde diagonale.

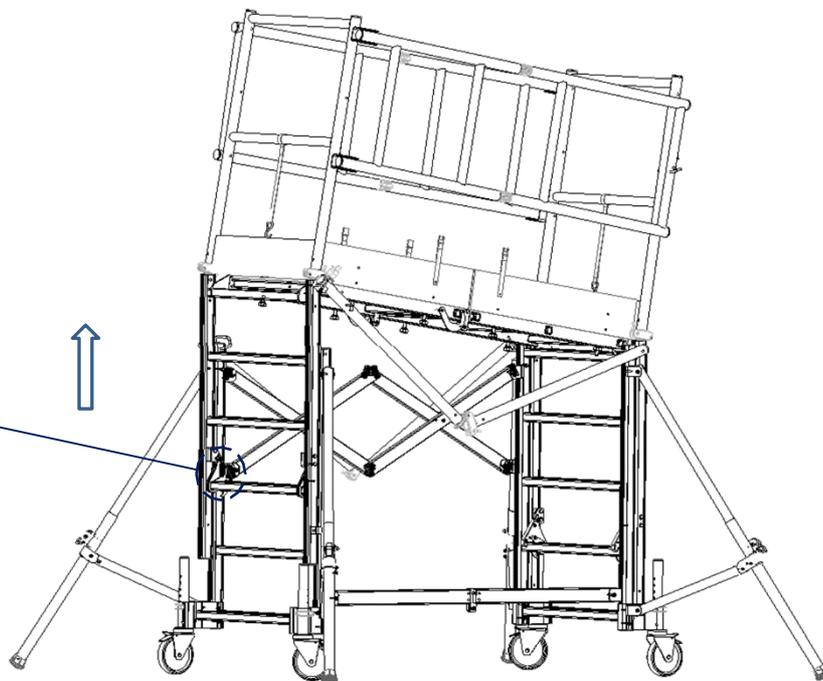
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## 3-2 : Elévation du produit

Désengager les 2 verrous du basculeur en appuyant dessus sous l'échelon

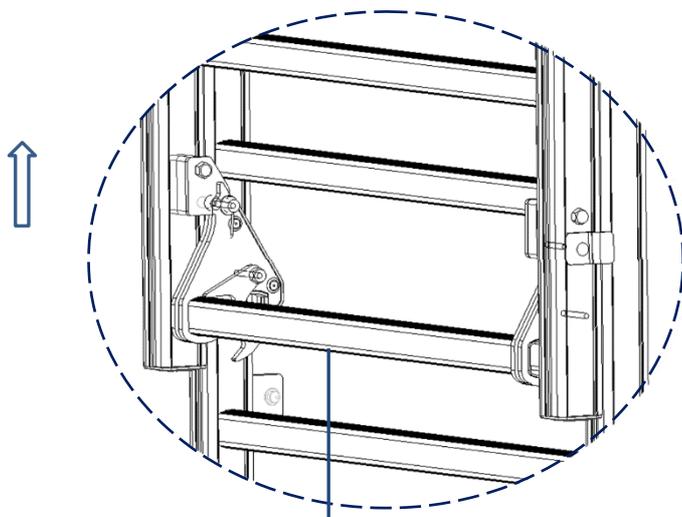


Lever l'échelle vers le haut d'un échelon selon les schémas ci-dessous



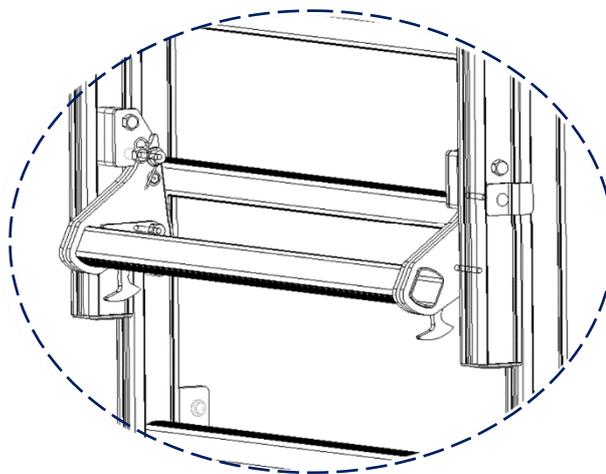
Ne pas mettre ses doigts entre les deux échelles, tenir l'échelon par le dessous

Lever l'échelle **sans tenir le basculeur**, celui-ci s'escamote automatiquement.



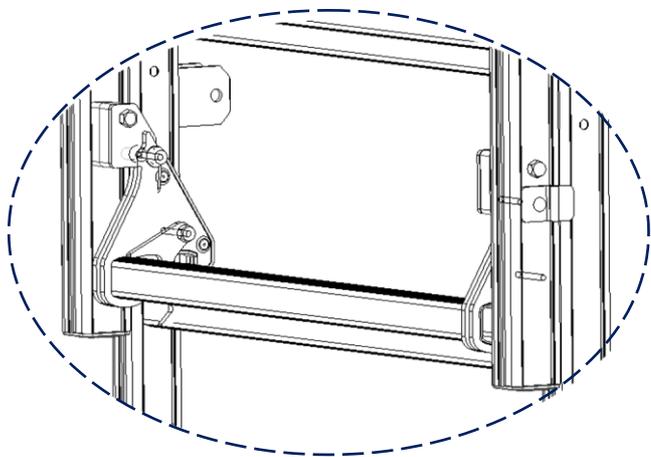
Basculéur

Le basculeur s'escamote quand il atteint l'échelon juste au-dessus.

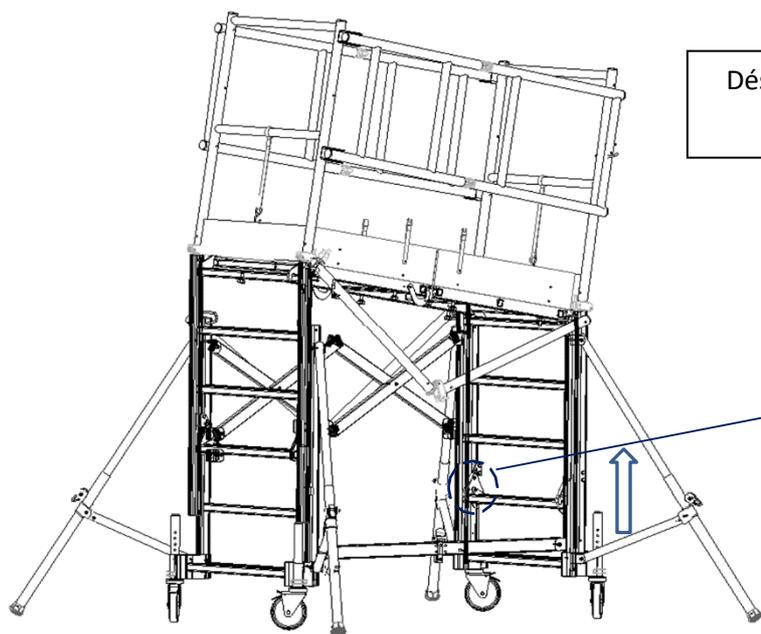
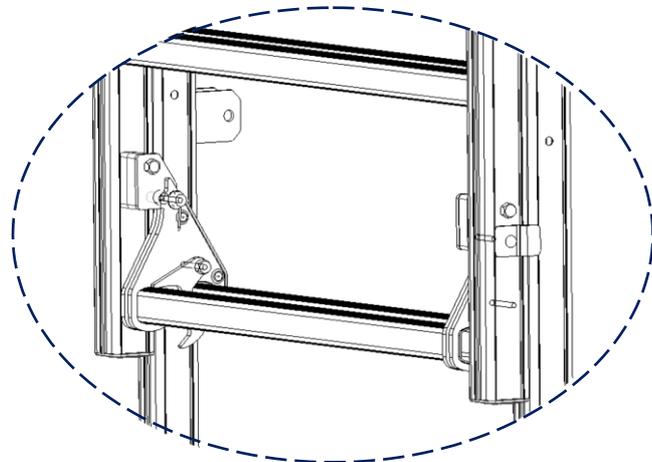


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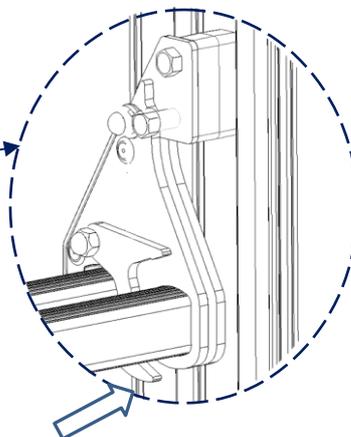
Le basculeur revient à sa position une fois l'échelon dépassé



Descendre l'échelle jusqu'à ce que le basculeur appui sur l'échelon



Désengager les 2 verrous sur le basculeur de l'échelle opposée, puis lever l'échelle.



Pour une hauteur de plateau de 1.55m, poser le basculeur sur l'échelon juste au-dessus et réenclencher les verrous de basculeur.

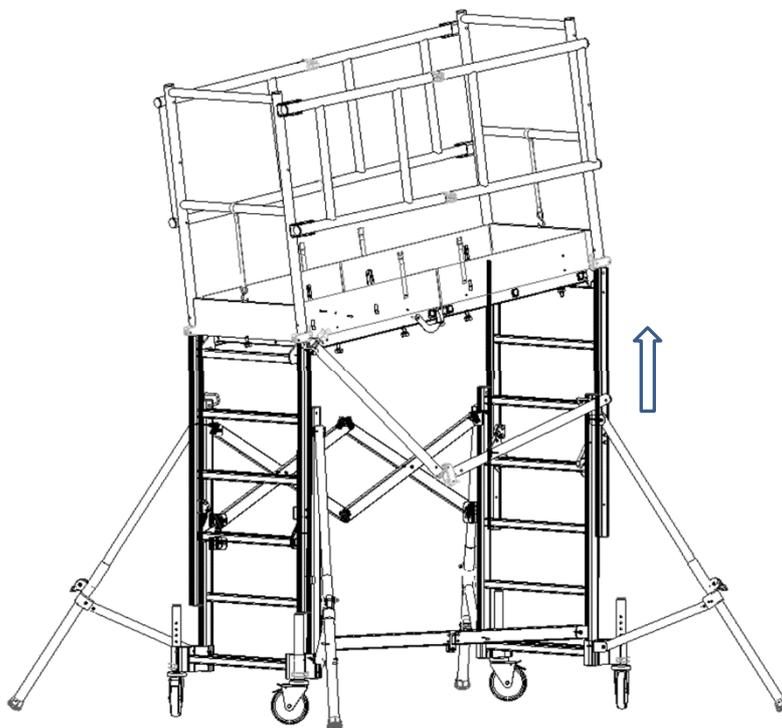
Pour une hauteur de plateau supérieure, poser le basculeur deux échelons plus haut.

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Lever de nouveau la première échelle.

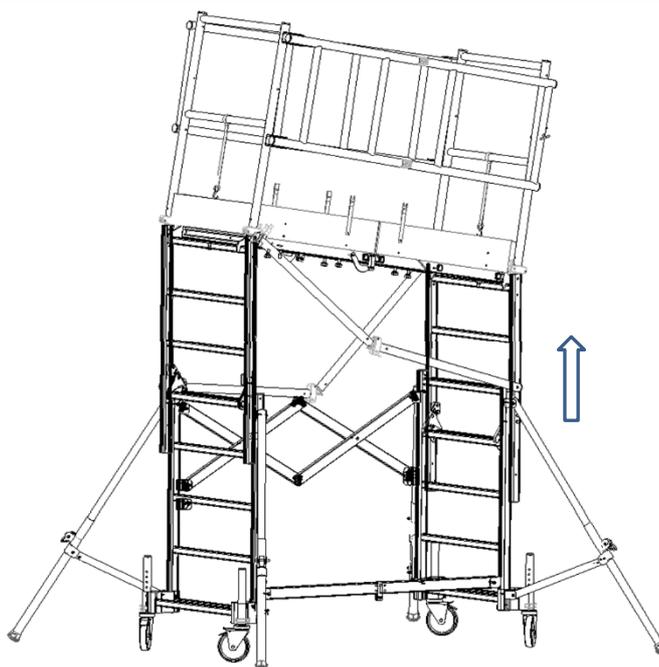
Pour une hauteur de plateau de 1.8m, poser le basculeur sur l'échelon juste au-dessus et réenclencher les verrous de basculeur.

Pour une hauteur de plateau supérieure, poser le basculeur deux échelons plus haut.

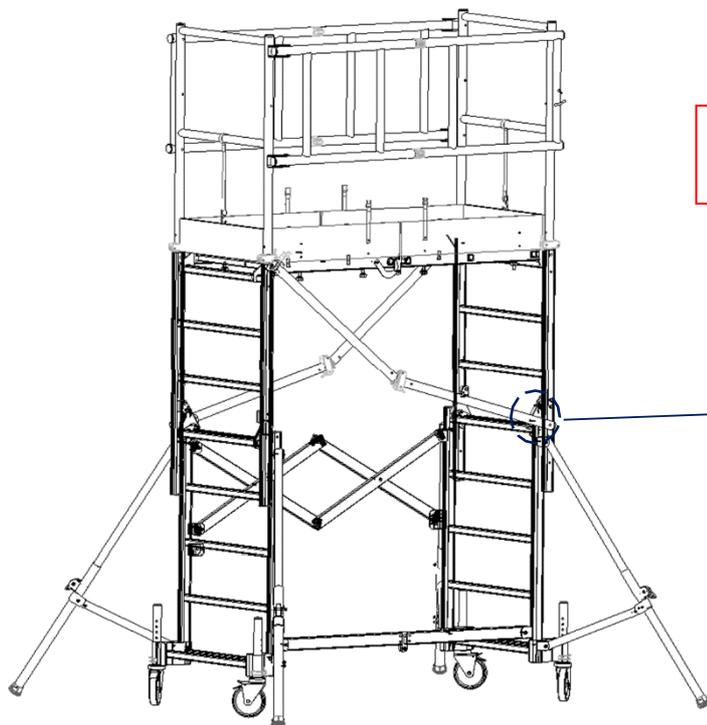


Lever la seconde échelle d'un échelon et ainsi obtenir la hauteur de travail maximale de 2.05m.

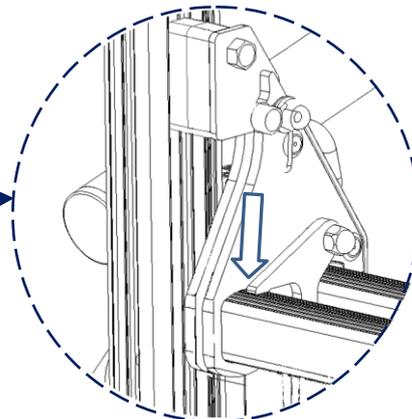
Les étiquettes stop du basculeur et de l'échelle sont alors alignées.



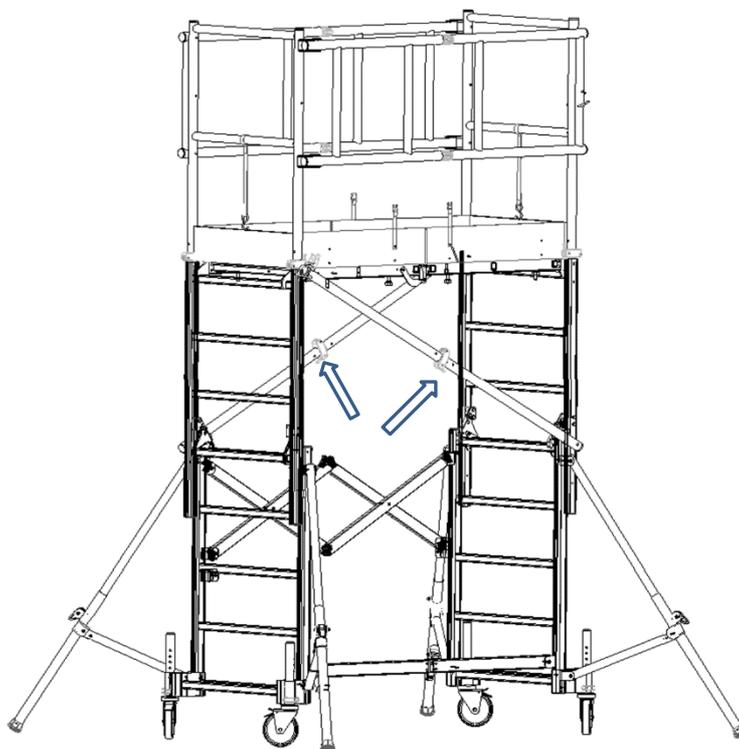
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Enclencher les 4 verrous sur les basculeurs en appuyant dessus.



Pousser sur les articulations de diagonales pour les verrouiller. (Uniquement si le plateau est à 2.05m)



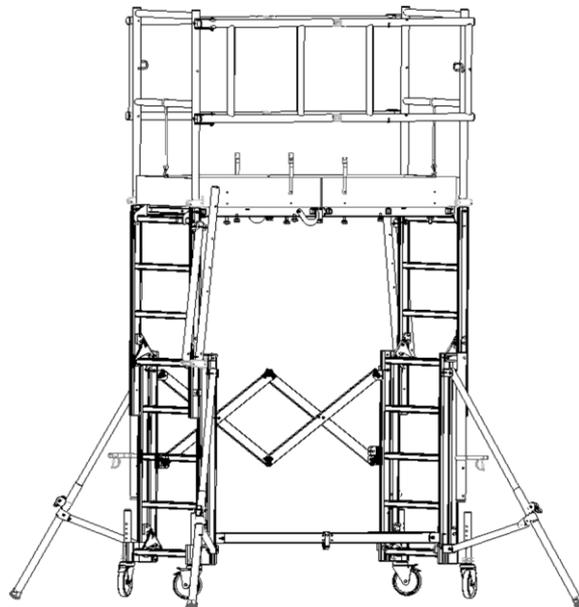
L'échafaudage est alors prêt à être utilisé à une hauteur de plateau de 2.05m.

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## Chapitre 4 : Elévation du modèle 3 mètre

### 4-1 : Elévation des échelles extérieures

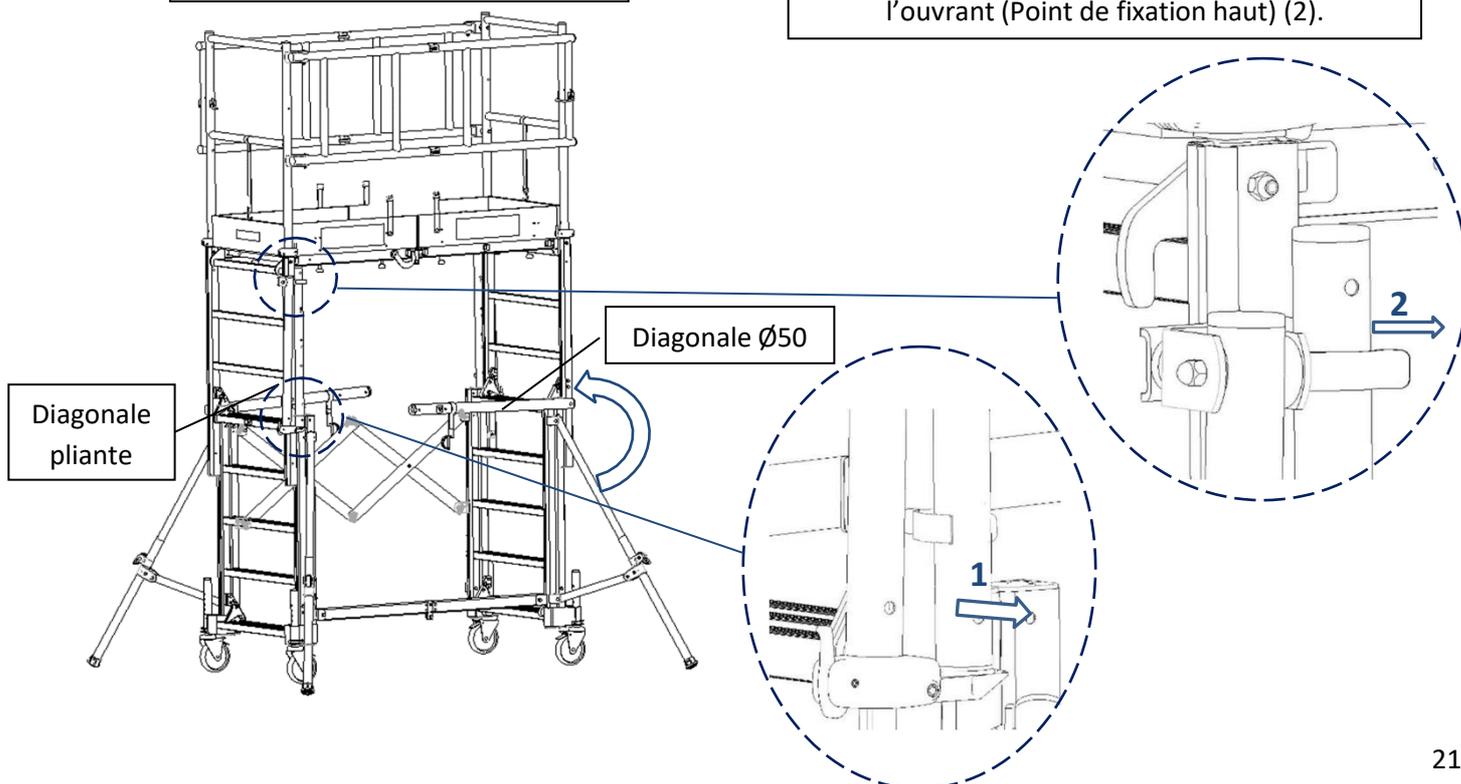
Pour les échelles extérieures, procéder comme pour le 2 mètres mais sans mettre les diagonales (voir chapitre 3-2).



### 4-2 : Mise en place des diagonales

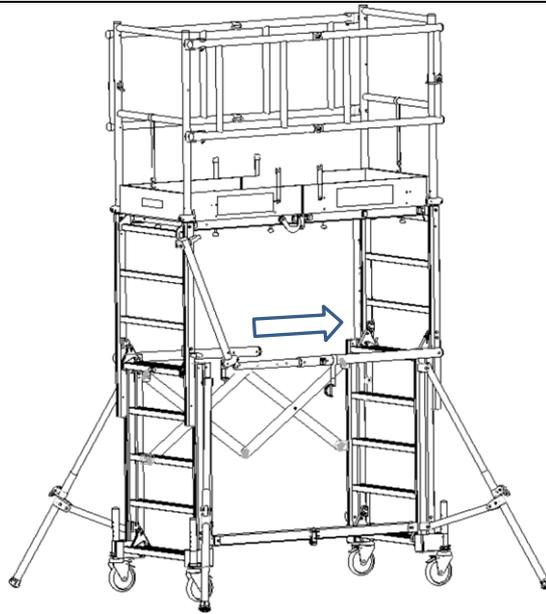
Faire pivoter la partie Ø50 de la diagonale vers l'intérieur.

Déplier la diagonale pliante, en la détachant d'abord de l'échelle (point de fixation bas) en la tenant juste au-dessous du clip (1) et ensuite en l'ouvrant (Point de fixation haut) (2).



# X-TOWER

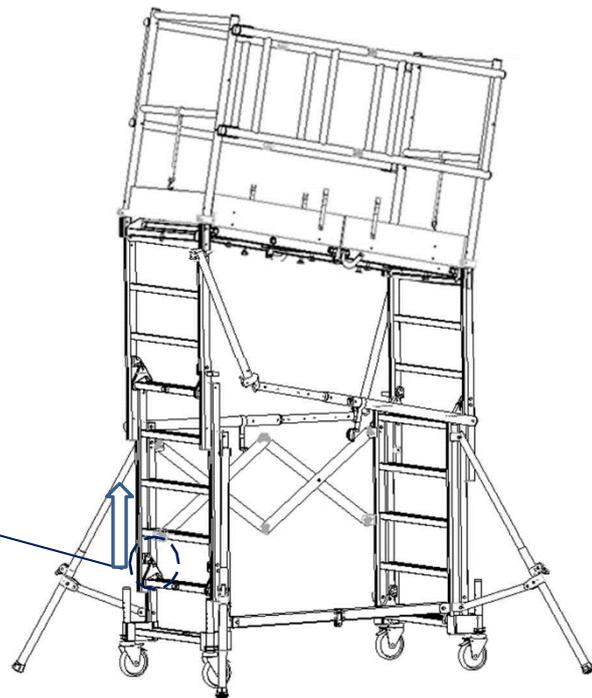
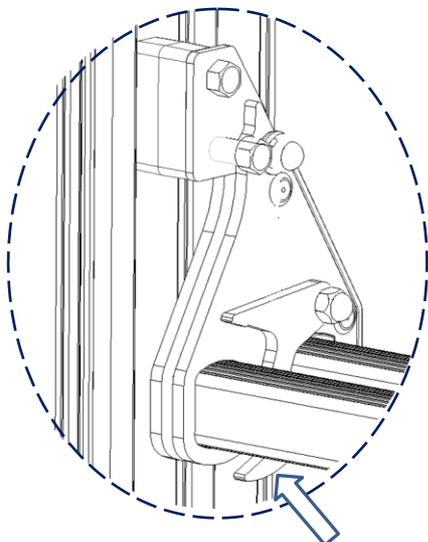
Insérer la diagonale pliante dans la partie  $\varnothing 50$ , sans mettre la goupille et sans verrouiller la diagonale si vous souhaitez élever l'échafaudage plus haut. Si l'échafaudage est à la hauteur souhaitée, aller au chapitre 4-4.



## 4-3 : Elévation des échelles intermédiaires

Lever l'échelle vers le haut jusqu'à ce que le basculeur vienne en appui sur l'échelon juste au-dessus.

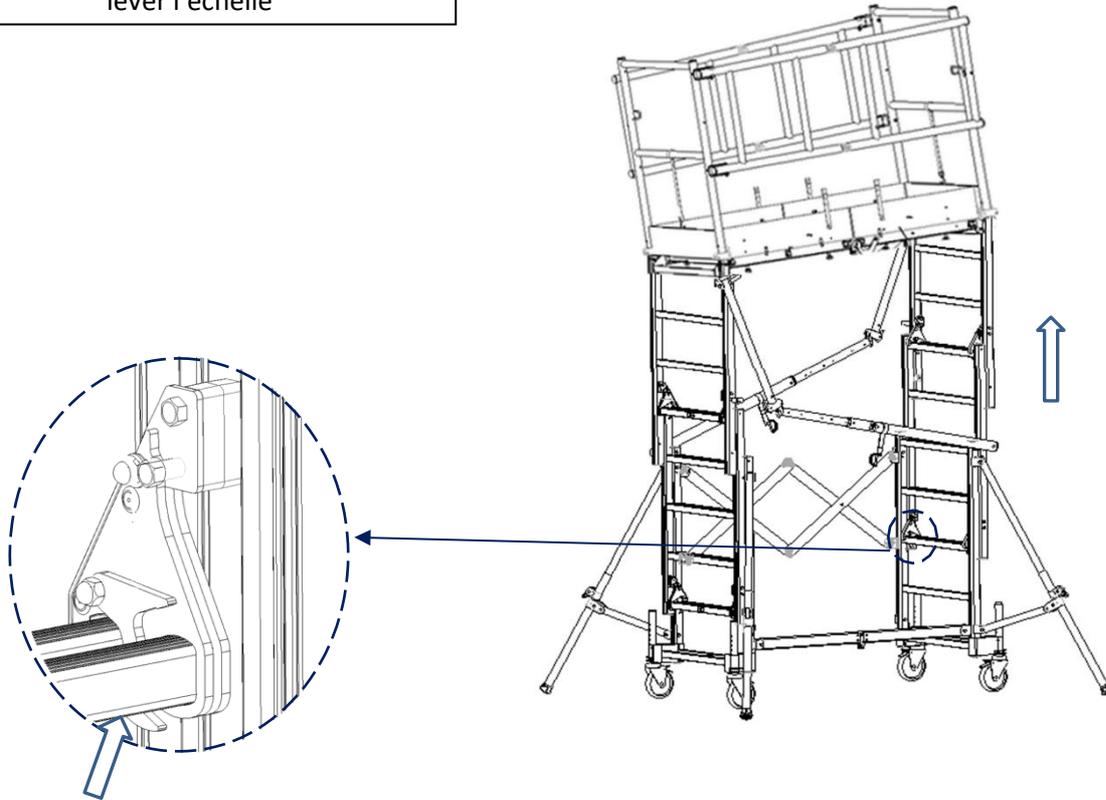
Désengager les 2 verrous de basculeur sur une des deux échelles intermédiaires.



# X-TOWER

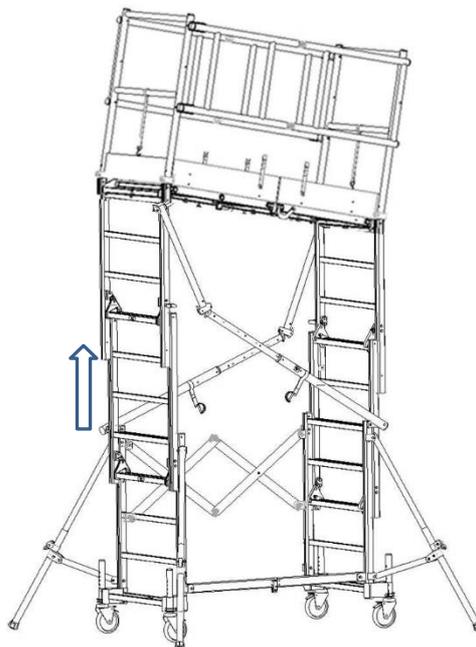
Désengager les 2 verrous sur le basculeur de l'échelle opposée, puis lever l'échelle

Pour une hauteur de plateau de 2.3m, poser le basculeur sur l'échelon juste au-dessus et réenclencher les verrous de basculeur. Pour une hauteur de plateau supérieure, poser le basculeur deux échelons plus haut.



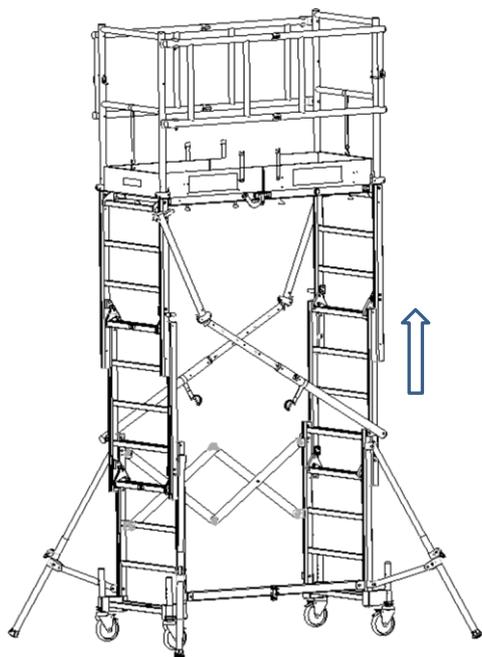
Lever de nouveau la première échelle.

Pour une hauteur de plateau de 2.55m, poser le basculeur sur l'échelon juste au-dessus et réenclencher les verrous de basculeur. Pour une hauteur de plateau supérieure, poser le basculeur deux échelons plus haut.

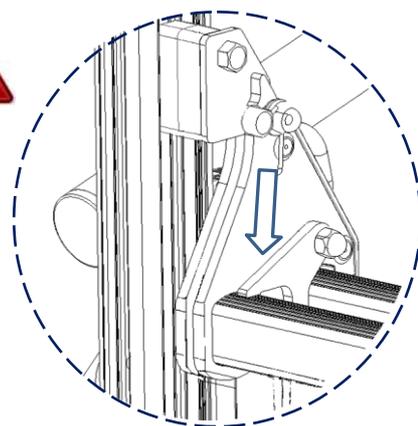


# X-TOWER

Lever la seconde échelle d'un échelon et ainsi obtenir la hauteur de travail maximale de 2,8m.



Enclencher les 4 verrous sur les basculeurs en appuyant dessus.

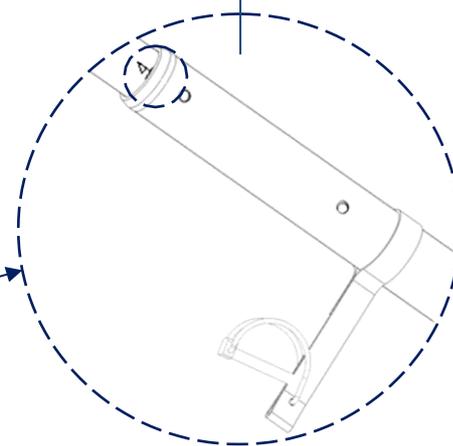
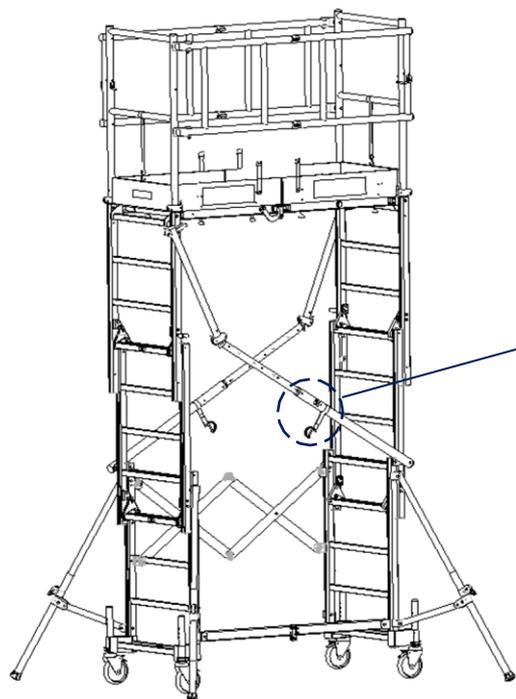


## 4-4 Verrouillage de la diagonale

Manœuvre à effectuer quand le plateau est à la hauteur désirée.

Ajuster la partie pliante dans la partie Ø50 jusqu'à voir le chiffre correspond à la hauteur du plateau (voir tableau).

Numéro de position de la diagonale, à aligner avec la diagonale Ø50.



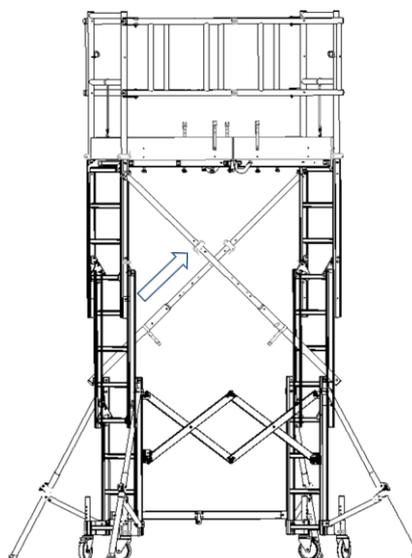
Hauteur plateau	Position diagonale
2.05m	1
2.3m	2
2.55m	3
2.8m	4

# X-TOWER

Insérer la goupille pour relier les deux parties de diagonales.



Pousser sur l'articulation pour la verrouiller, puis procéder de la même manière avec la seconde diagonale.



**L'échafaudage est prêt à être utilisé.**

## Chapitre 5: L'après montage et l'avant utilisation

La conformité du montage doit être vérifiée par le responsable chargé par le chef d'entreprise de la sécurité sur le chantier.

Les vérifications porteront sur:

- Les appuis au sol des stabilisateurs.
- Le montage correct des différents éléments.
- L'environnement.
- Le bon enclenchement des freins de roues.
- La bonne mise à niveau de l'échafaudage.
- Le verrouillage de chaque verrou de basculeur.
- Le verrouillage des diagonales au niveau des verrous et des articulations.
- Le verrouillage des garde-corps au niveau des verrous et des articulations.



**Respecter IMPERATIVEMENT les consignes de la notice collée sous le plancher.**

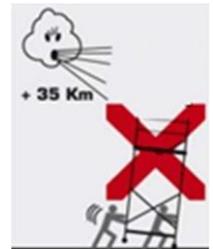
# X-TOWER

## Chapitre 6: Les consignes

### 6-1 : Les consignes d'utilisations

Cette notice ne remplace pas la réglementation en vigueur à laquelle il convient de se référer.

- Respecter les charges admissibles sur le plancher et la structure.
- Les forces horizontales ne doivent pas dépasser 30Kg.
- Vent limite avec stabilisateurs = 35Km/H
- Vent supérieur à 35Km/H: amarrer l'échafaudage



### Zone de Travail:

- Ne pas s'approcher de conducteurs nus sous tension.
- Dans les zones accessibles au public, interdire l'accès de l'appareil à celui-ci.
- Baliser la zone d'implantation en cas de passage d'engins, de véhicules...
- Vérifier que dans la zone de déplacement il n'y ait pas d'obstacles aériens.
- Sur terrain meuble, prévoir un chemin de roulement.



### Il est interdit:

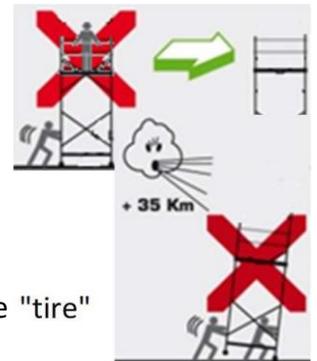
- D'utiliser une potence, même manuelle, placée sur l'extérieur de l'échafaudage.
- De bâcher un échafaudage roulant, même partiellement.
- D'augmenter la hauteur au-delà de celle autorisée.
- D'utiliser des composants autres que ceux fournis par le fabricant.
- D'utiliser un échafaudage qui n'a pas été monté verticalement (tolérance: 1%).
- D'utiliser un échafaudage qui n'a pas été monté suivant les instructions de ce manuel.
- D'établir un pont entre l'échafaudage et un bâtiment ou entre deux échafaudages.
- D'appuyer une échelle d'accès sur l'échafaudage.
- De sauter sur les planchers.
- D'utiliser des planches comme plancher.
- D'accéder par l'extérieur au plancher de travail.
- De régler les roues pour augmenter la hauteur de plateau. (Au moins une des roues doit être rentré au maximum).



# X-TOWER

## 6-2 Les consignes de déplacement

- Les échafaudages roulants ne doivent être déplacés que manuellement et sur un sol solide, de niveau, et sans obstacle au sol ou aérien. La vitesse normale de marche d'un homme ne doit pas être dépassée pendant le déplacement.
- Déplacer l'échafaudage roulant sur un sol de pente maxi 3%.
- Ne jamais tracter un échafaudage roulant avec un véhicule à moteur.
- Ne pas déplacer un échafaudage roulant avec un vent supérieur à 35 Km/H.
- Le sol sur lequel l'échafaudage roulant se déplace doit être capable de supporter les descentes de charges.
- Pour les terrains meubles, prévoir un chemin de roulement.
- Il est interdit de déplacer l'échafaudage roulant lorsque du personnel ou du matériel se trouve sur celui-ci.
- Ne pas soulever l'échafaudage à la grue ou avec un pont roulant.
- Le X-Tower se déplace à une personne, on "pousse" l'échafaudage, on ne le "tire" pas.



## Chapitre 7: La vérification, l'entretien et la maintenance

### Inspecter les pièces avant chaque montage et particulièrement:

- les bandages et les freins des roues.
- Les dispositifs de sécurité.
- Les crochets des planchers de travail et leurs fixations.
- Les contreplaqués des planchers de travail et des plinthes.

### Toutes pièces ayant subi:

- Une déformation permanente.
- Des perçages.
- Des entailles (par meulage par exemple...)
- Une forte oxydation

### ... est à rebuter!

### En cas de doute, échanger le composant.

Lors de l'échange de composant, il est impératif de bien remettre une pièce similaire à celle d'origine.

Maintenir les pièces propres et les dispositifs de sécurité en bon état de fonctionnement.

Remplacer ou nettoyer toutes les plaques ou autocollants donnant les consignes d'utilisation et de sécurité.

# X-TOWER

## Vérification :

Les vérifications réglementaires (prévues dans l'arrêté du 21 Décembre 2004) sont déclinées de la façon suivante :

### **Une vérification avant mise en service sur chaque site d'installation :**

- lors de la première utilisation,
- en cas de démontage suivi d'un remontage de l'échafaudage,
- à la suite de la modification des conditions d'utilisation, des conditions atmosphériques ou d'environnement susceptibles d'affecter la sécurité d'utilisation de l'échafaudage,
- à la suite d'une interruption d'utilisation d'au moins un mois.

Elle comporte un examen d'adéquation, un examen de montage et d'installation ainsi qu'un examen de l'état de conservation. La traçabilité de cette vérification sera formalisée sur le registre de sécurité de l'établissement.

### **Une vérification journalière**

Elle comporte un examen de l'état de conservation.

La traçabilité de cette vérification est formalisée par une feuille disposée sur la trappe d'accès.

### **Une vérification trimestrielle**

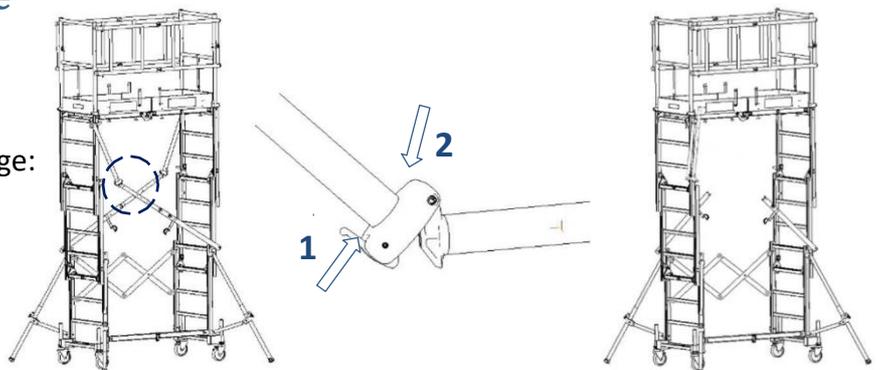
La portée de cette vérification dans le cas d'un échafaudage roulant étant comparable à la vérification journalière, on formalise sur le registre de sécurité de l'établissement la vérification réalisée a minima une fois tous les 3 mois.

**Nota bene :** Ces vérifications ne peuvent être conduites que par du personnel titulaire d'une attestation de compétence délivrée par le chef d'établissement portant la mention « Vérificateur et Utilisateur ».

Pour plus de renseignement et de détails au niveau des grilles de vérification, voir la RECO R.457, annexe 3, 3bis, 4, 5, 6.

## **Chapitre 8: Le Démontage**

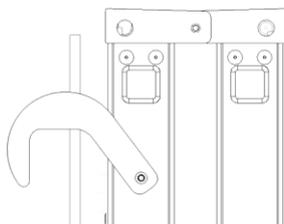
- Avant le démontage:
  - S'assurer de la stabilité de l'échafaudage:
    - roues à frein bloquées
    - Stabilisateurs bien positionnés



- Pendant le démontage:
  - Utiliser la procédure de montage en ordre rigoureusement inverse **en commençant par replier et attacher les diagonales**, enlever la goupille et déverrouiller la partie pliante, et clipser la diagonale le long de l'échelle. Réenclencher les verrous de basculeur quand les échelles sont en position basse (L'autocollant stop au bas des échelles doit être aligné avec celui du basculeur).

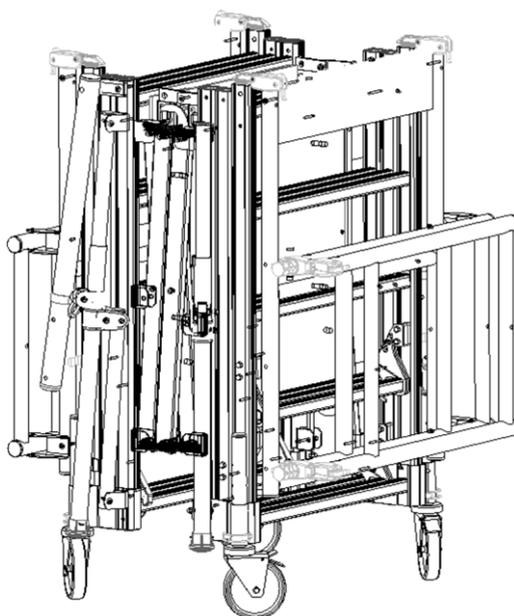
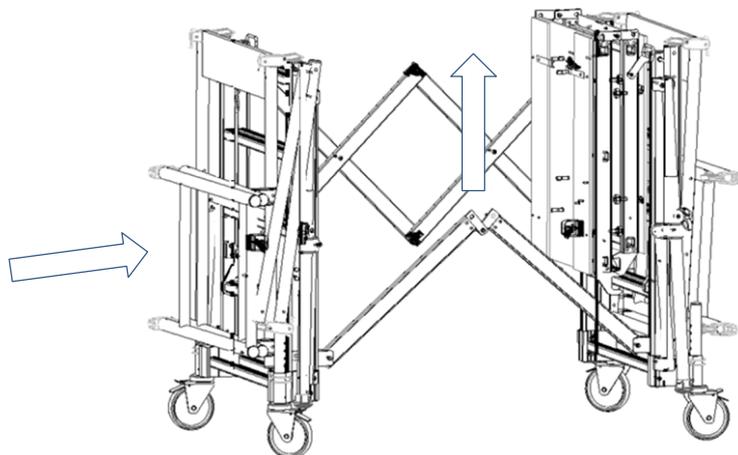
# X-TOWER

- Faire attention lors du repliement des garde-corps, se mettre sur le côté avant de les basculer pour éviter les risques de blessures à la tête.
- Pour replier le plateau, tirer sur l'anneau au niveau du verrou pour le désenclencher. Quand le plateau est refermé, remettre en position les crochets de support de manière à ce qu'il soit parallèle au plateau.



*Vue du crochet de plateau en position rangement*

- Pour refermer le produit, tirez sur l'anneau du verrou de la lisse, une fois le verrou désenclencher, tirer l'anneau vers le haut pour replier la lisse. Poussez ensuite sur le côté pour rapprocher les échelles.



*Vue du produit replié.*

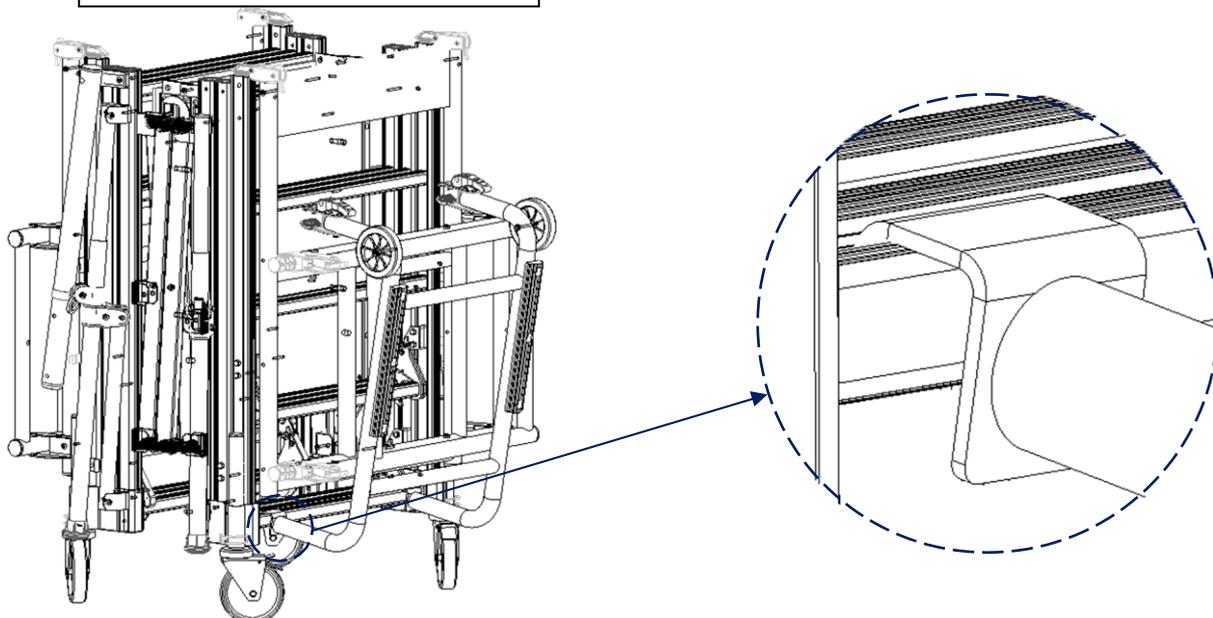
# X-TOWER

## Chapitre 9: Le déplacement et le chargement dans un véhicule

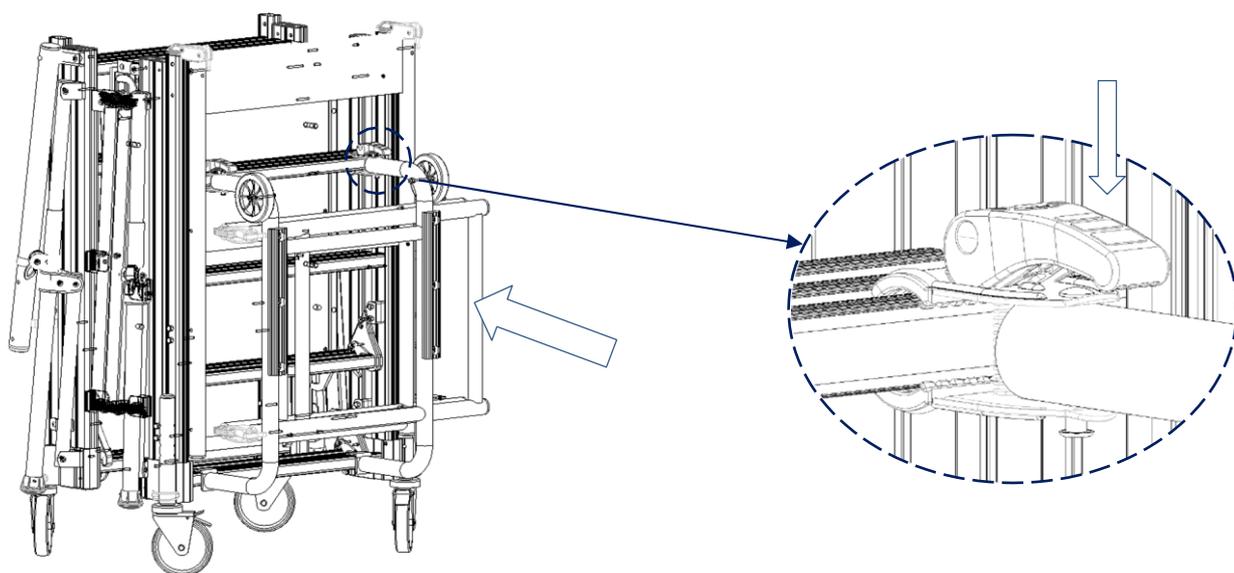
### 9-1 Mise en place du kit chargement (option)

Le kit de chargement peut s'installer d'un côté ou de l'autre de l'échafaudage en position repliée.

Poser les pattes d'accrochage sur l'échelon du support de roues.



Relever le kit de chargement jusqu'à ce que les pinces bleues soient au niveau de l'échelon de l'échelle, puis verrouiller les en appuyant sur la came.

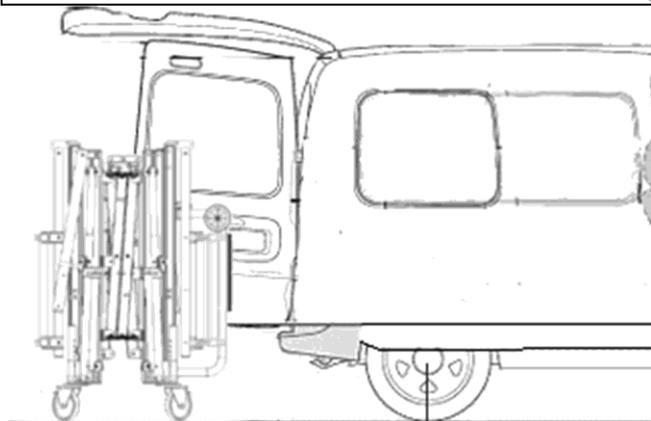


Procéder de manière strictement inverse pour enlever le kit de chargement. Le démontage doit se faire avant d'ouvrir l'échafaudage.

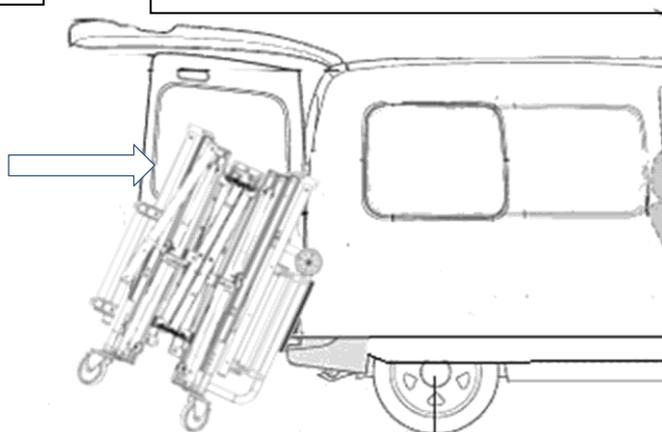
# X-TOWER

## 9-2 Chargement de l'échafaudage dans un véhicule

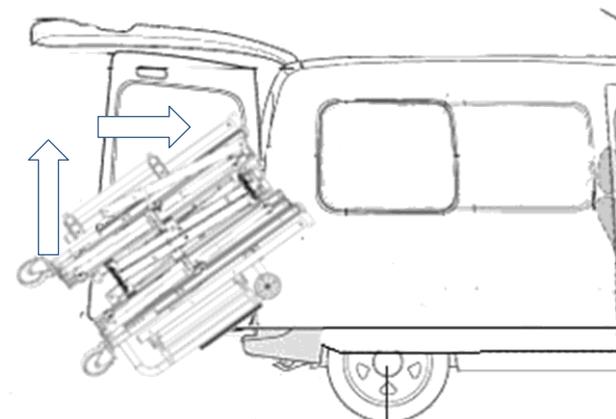
Amener l'échafaudage jusqu'à l'arrière du véhicule sans coller au parechoc et enclencher les freins sur les 4 roues.



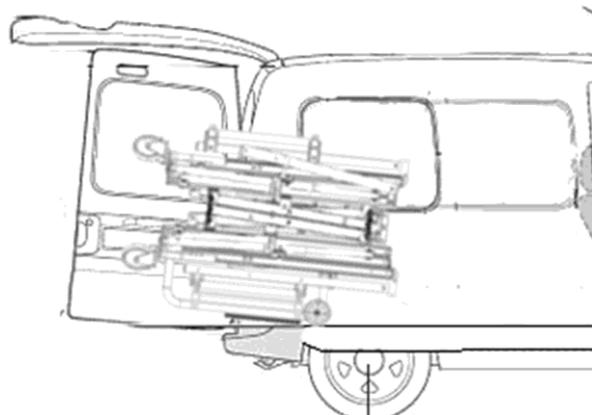
Basculer le produit vers l'avant jusqu'à ce que la patin appui sur le véhicule.



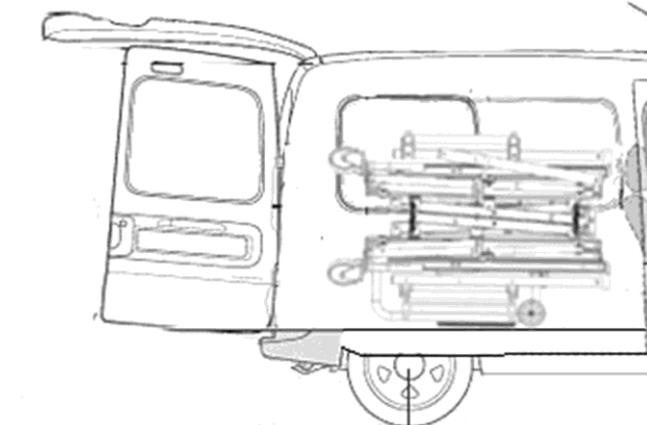
Lever l'échafaudage par le support de roue tout en le poussant sur le haut.



Une fois chargé, lever légèrement l'échafaudage pour le faire rouler jusqu'à sa position finale.



Relâcher l'échafaudage, il se pose sur ses patins d'appui.



Pour décharger l'échafaudage, procéder de manière strictement inverse.

# X-TOWER

## Chapitre 10: La garantie

Les échafaudages X-Tower sont garantis 2 ans, pièces et main d'œuvre.

Cette garantie prend effet à partir de la date de la facturation.

Notre garantie est soumise à l'accomplissement de ses obligations contractuelles par l'acheteur et notamment de paiement.

La garantie est limitée au remplacement dans notre usine ou à la réparation des pièces d'origine reconnues défectueuses après notre expertise.

Tout autre droit est exclu. Notamment l'application de la garantie ne peut en aucun cas donner lieu à des dommages et intérêts.

Cette garantie s'applique exclusivement aux produits mis en œuvre et utilisés selon les instructions contenues dans les notices techniques de montage et d'utilisation

**IMPORTANT:** conserver précieusement votre preuve d'achat (facture ou bon de livraison) car elle vous sera réclamée pour l'application de la garantie.

Pour tout renseignement supplémentaire connectez-vous sur le site internet :

***[www.tubesca-comabi.com](http://www.tubesca-comabi.com)***



*Notice vidéo en ligne*

# X-TOWER

## Assembly & operating manual for X-TOWER mobile scaffolding:

This manual must ALWAYS be made available to users



Video instructions on-line

# X-TOWER

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# X-TOWER

## Chapter 1: Scaffolding specifications

### 1-1 : Unit description

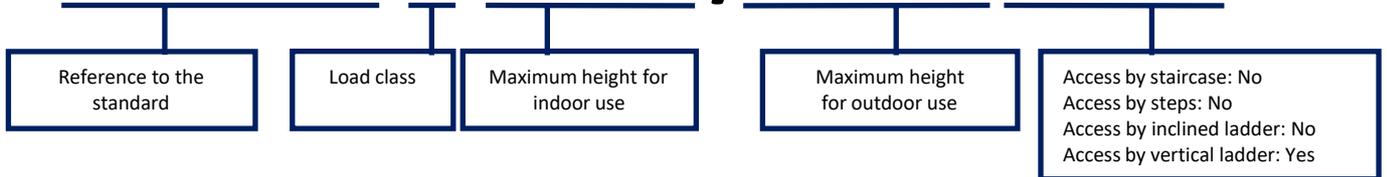
X-Tower scaffolding is designed for being used and handled by a single person.

It has been designed for rapid, safe assembly. As the different scaffolding elements are connected together, there is no risk of forgetting or losing any item.

A transport kit is available on option for easy stowing in vehicles.

### 1-2 : Marking

# EN 1004 3 2.8M / 2.8m XXXD



### 1-3 : Dimensions

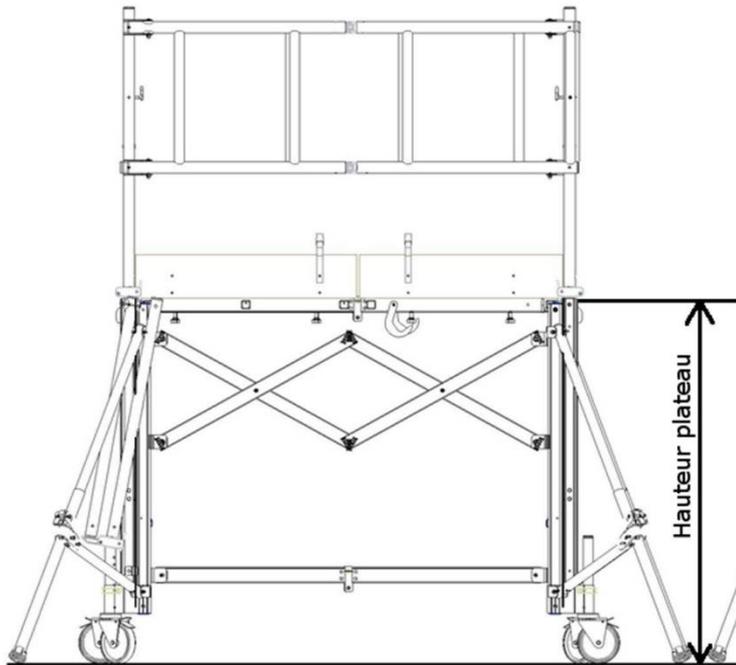
Overall size	X-TOWER 2m	X-TOWER 3m
Size when deployed		
Overall length (m)	2.4	2.3
Overall width (m)	2.1	2.1
Overall height (m)	3.09	3.84
Size when folded		
Overall length (m)	0.98	0.98
Overall width (m)	0.82	0.92
Overall height (m)	1.34	1.41
Weight (kg)	65	75

Work surface size	X-TOWER 2m	X-TOWER 3m
Length (m)	1,54	1,54
Width (m)	0,6	0,6
Temporary load (kg)	150	150
Max permissible distributed load (kg)	185	185
Minimum height (m)	0.8	0.8
Maximum height (m)	2.05	2.8

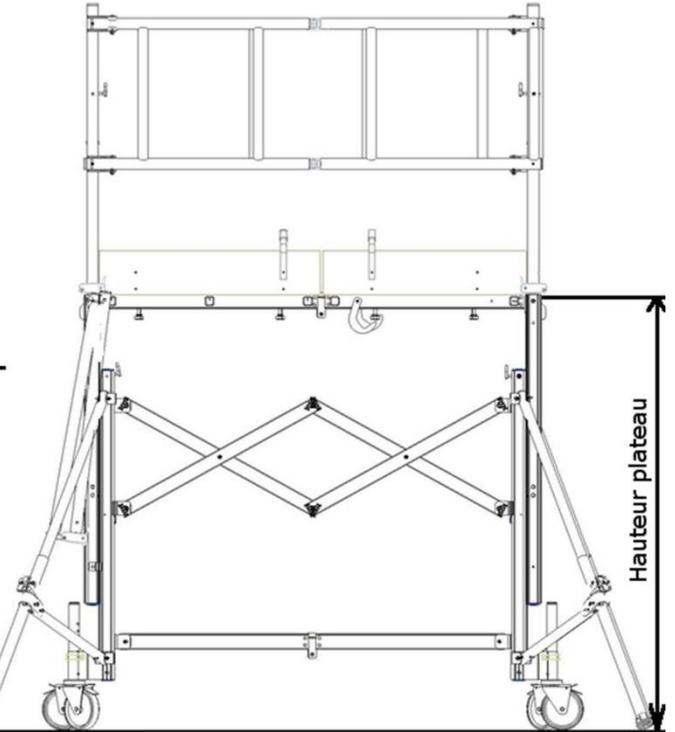
# X-TOWER

1-4: Views of the 2m X-TOWER scaffolding at its different platform heights

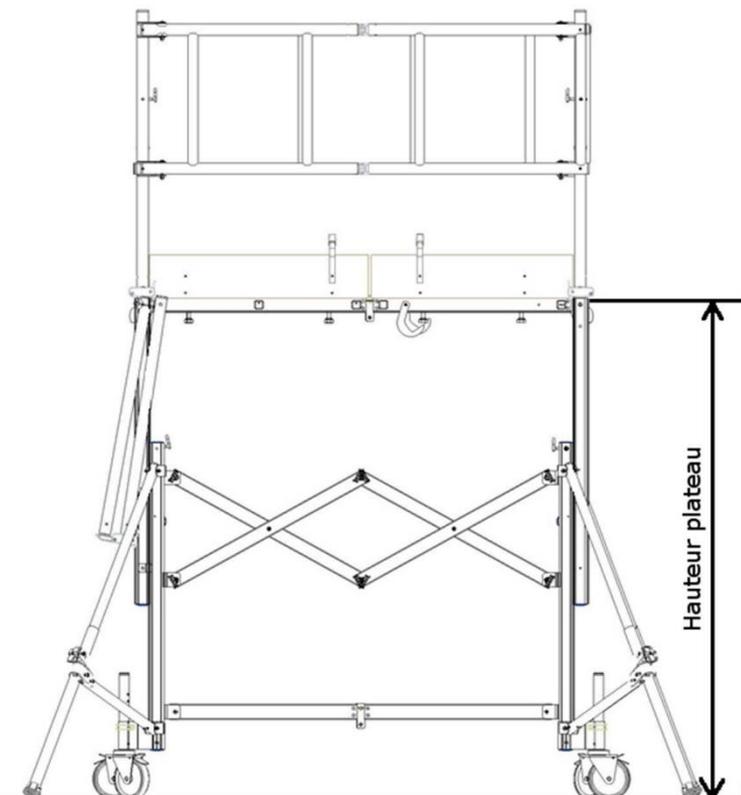
Platform height: 1.3 m



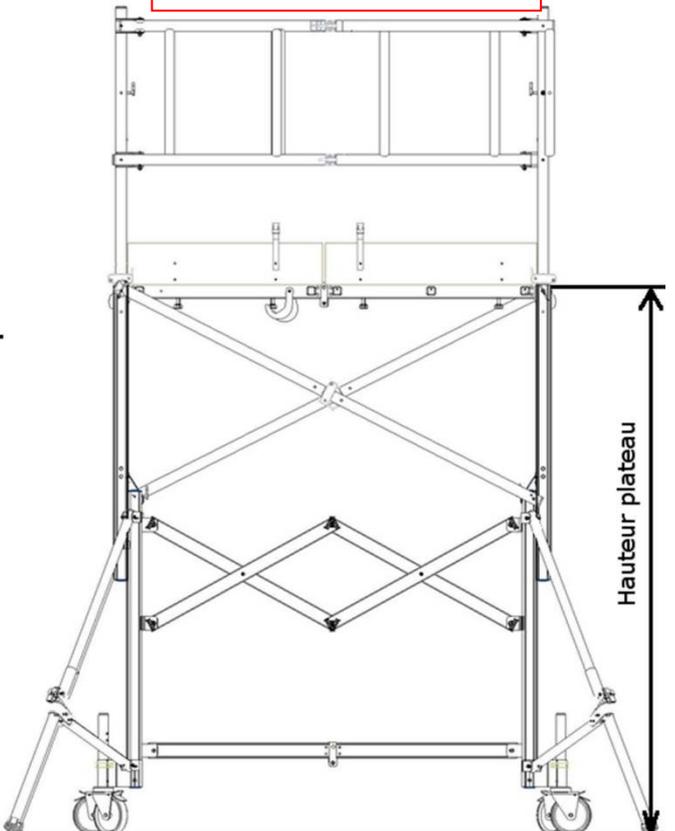
Platform height: 1.55 m



Platform height: 1.8 m



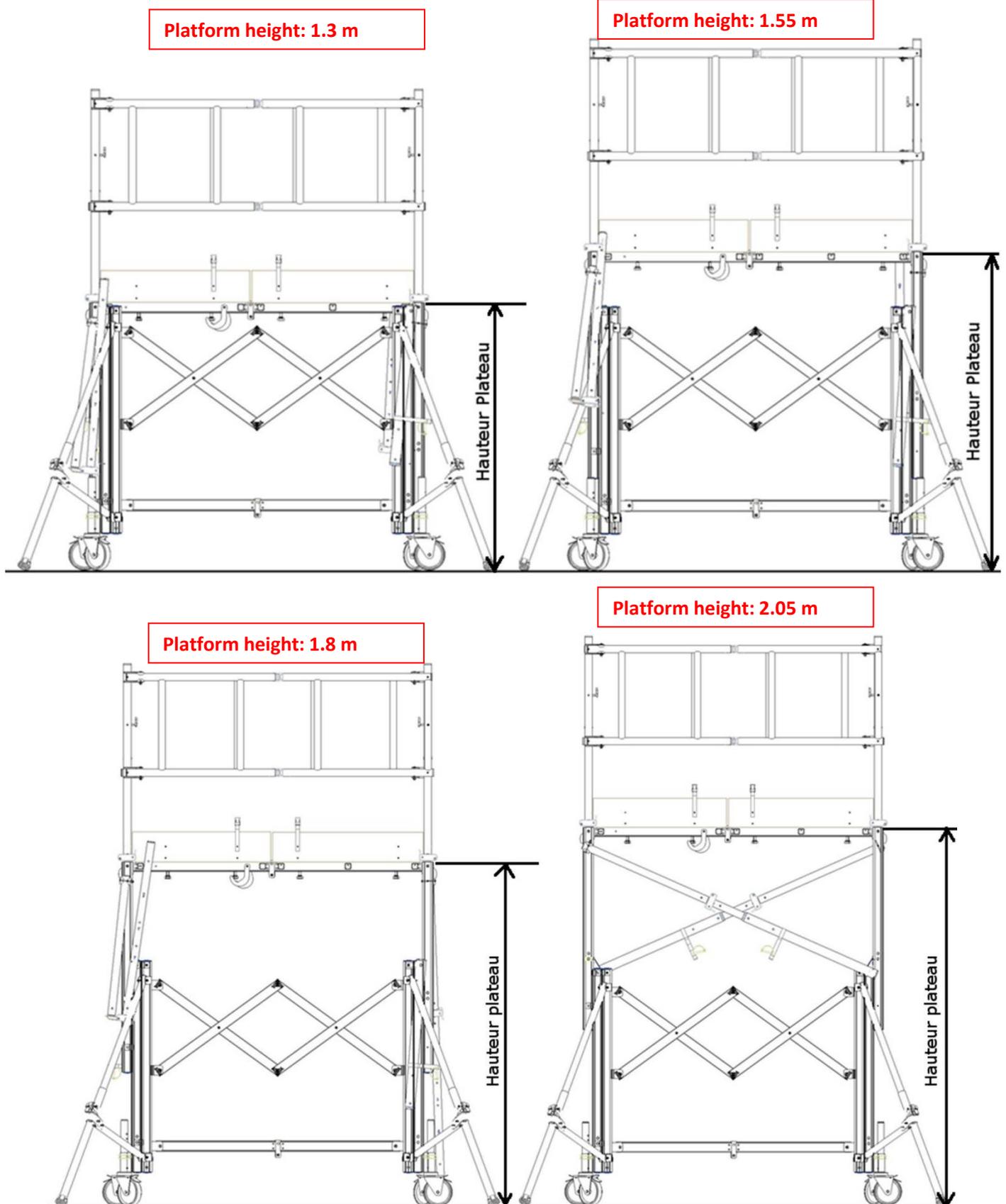
Platform height: 2.05 m



Diagonals are compulsory in this configuration

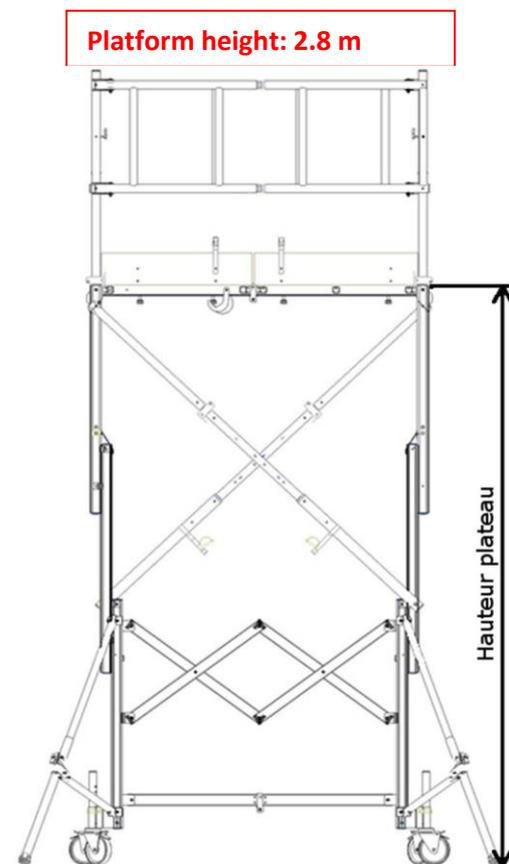
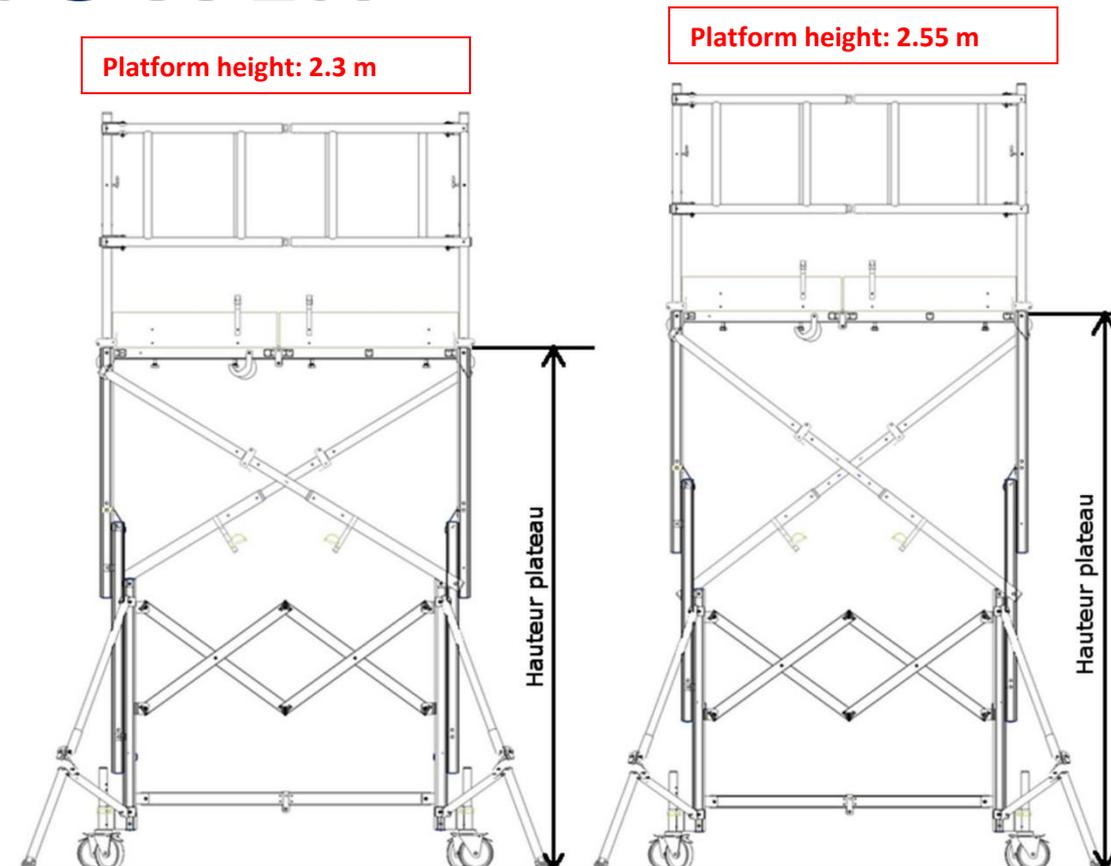
# X-TOWER

1-5 : Views of the 3m X-TOWER scaffolding at its different platform heights



Diagonals are compulsory in this configuration 5

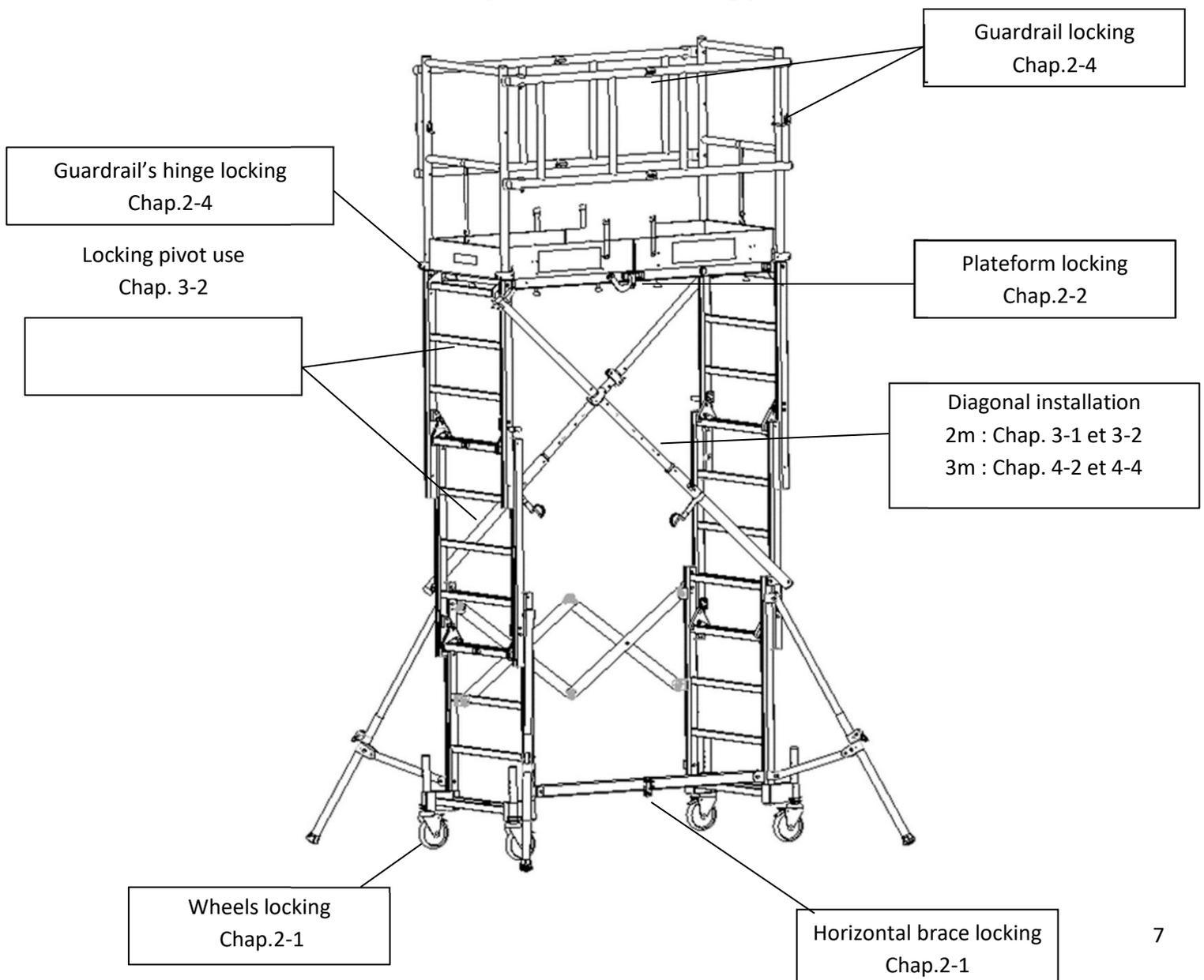
# X-TOWER



# X-TOWER

## 1-6 : Assembly precautions

- Assemble and use the scaffolding as per the instructions contained in this manual (Read the manual in totality before the first use).
- The X-Tower must only be assembled and dismantled by personnel trained for its assembly and use.
- Damaged elements or non-OEM elements must not be used.
- Wearing personal protective equipment is compulsory for assembling and dismantling the scaffolding.
- Comply with the order for assembling and dismantling as given in the instructions.
- Before initial use, remove the plastic collars located on the diagonals and guard-rail catches.
- Particular attention must be paid to the following points:



# X-TOWER

## Chapter 2: Assembly, platform height 1.3 m

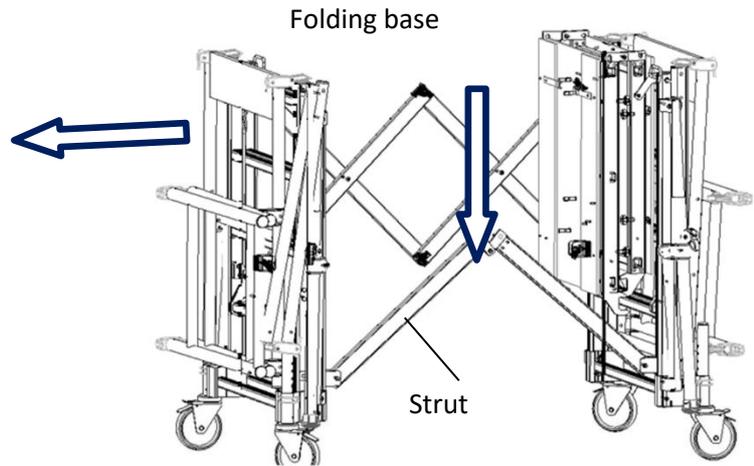
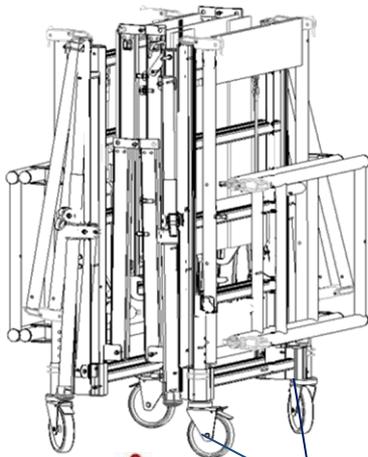
This part is identical for 2 and 3 metre models

### 2-1: Opening the scaffolding

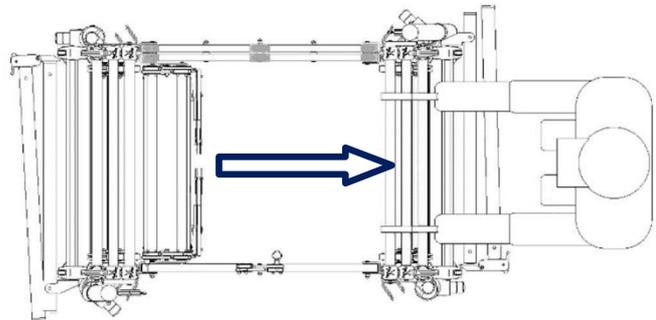
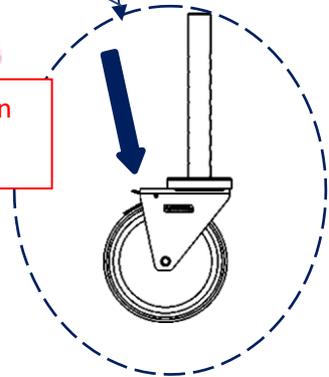
If the unit is equipped with a transport kit, remove the kit (see Chapter 9). Otherwise, only remove the strap holding the unit together.

Use your foot for locking the brakes on the two wheels of the ladder that are not bearing the weight of the platform.

Stand behind the ladder that is not bearing the weight of the platform and pull on it until the strut is horizontal. Make sure that the 2 ladders are as parallel as possible.



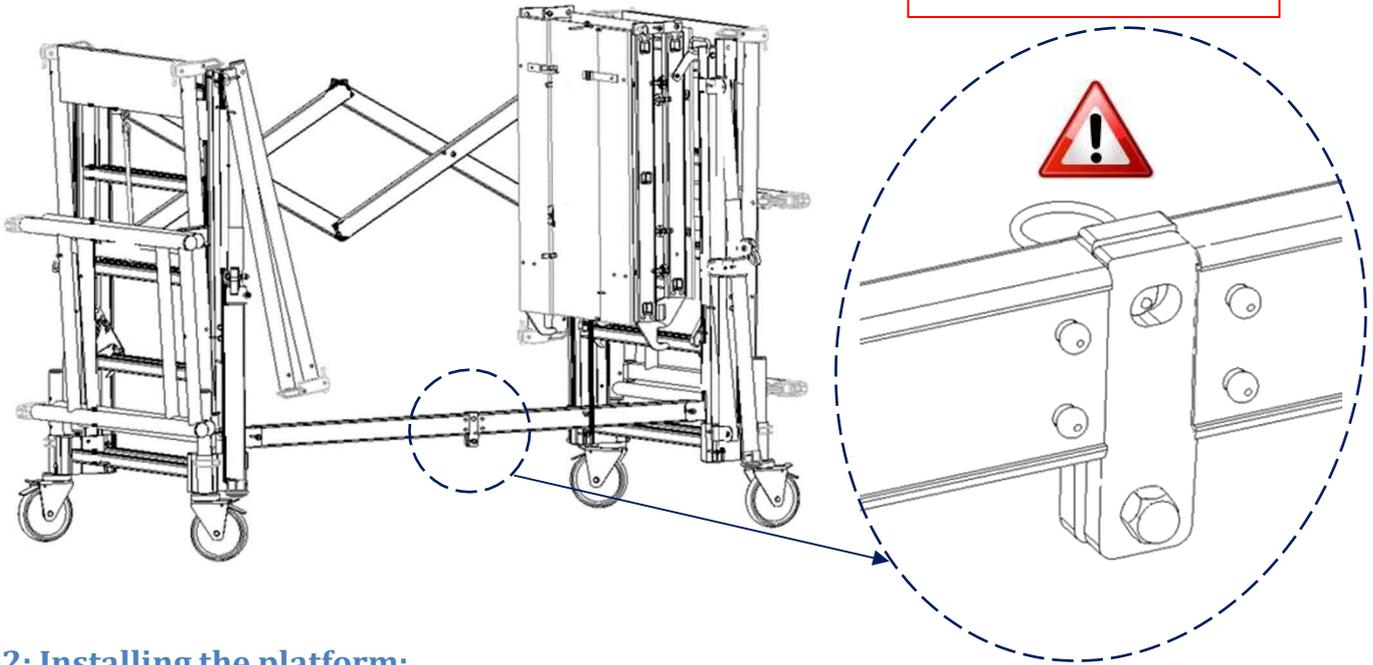
The brake must be in the "ON" position



# X-TOWER

Lock the strut in position by pushing on it

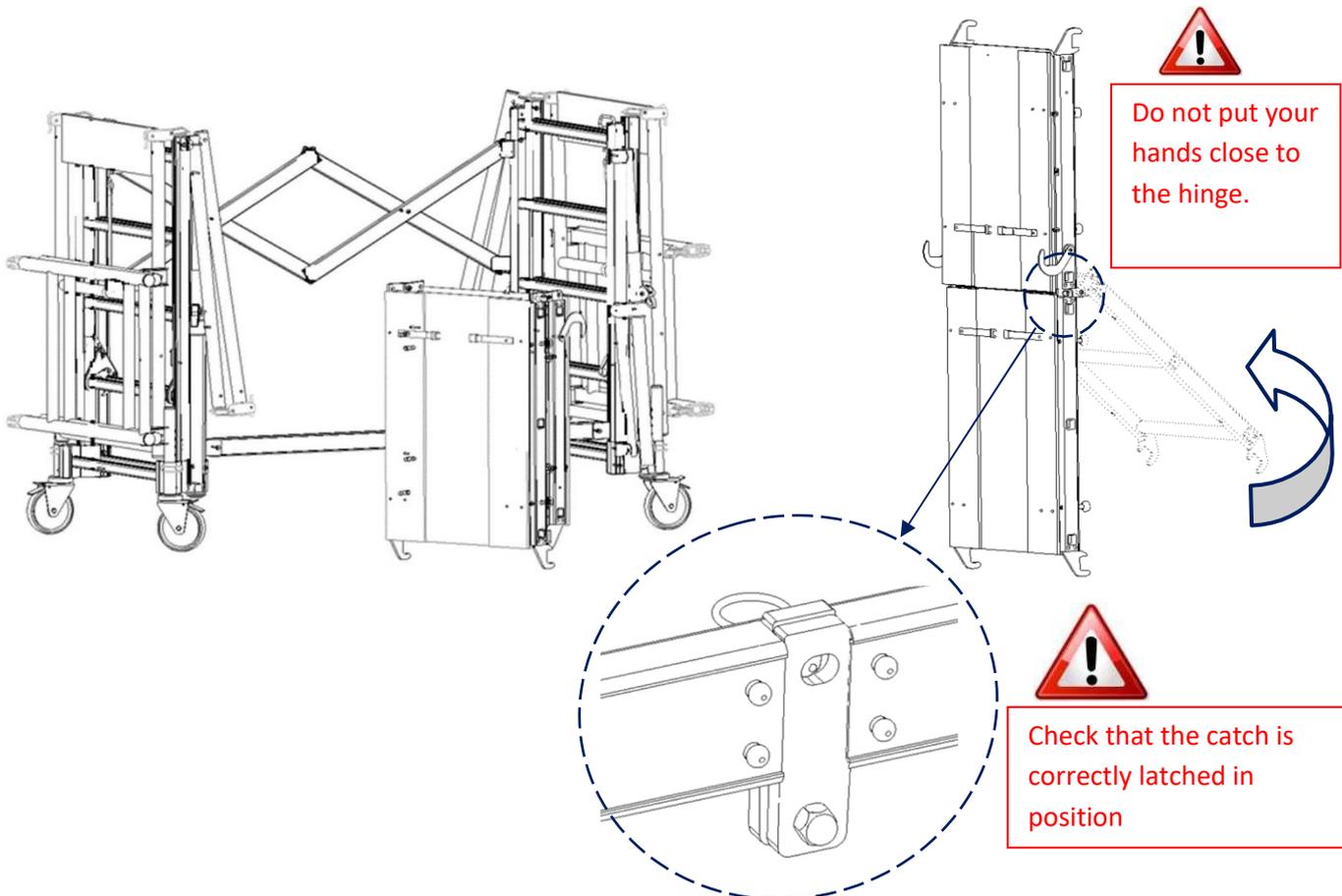
Check that the catch has latched correctly into place



## 2-2: Installing the platform:

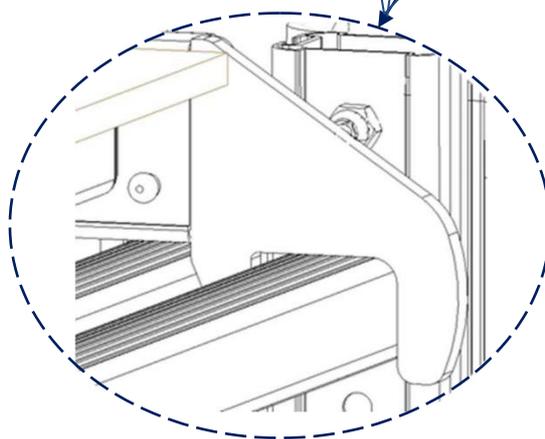
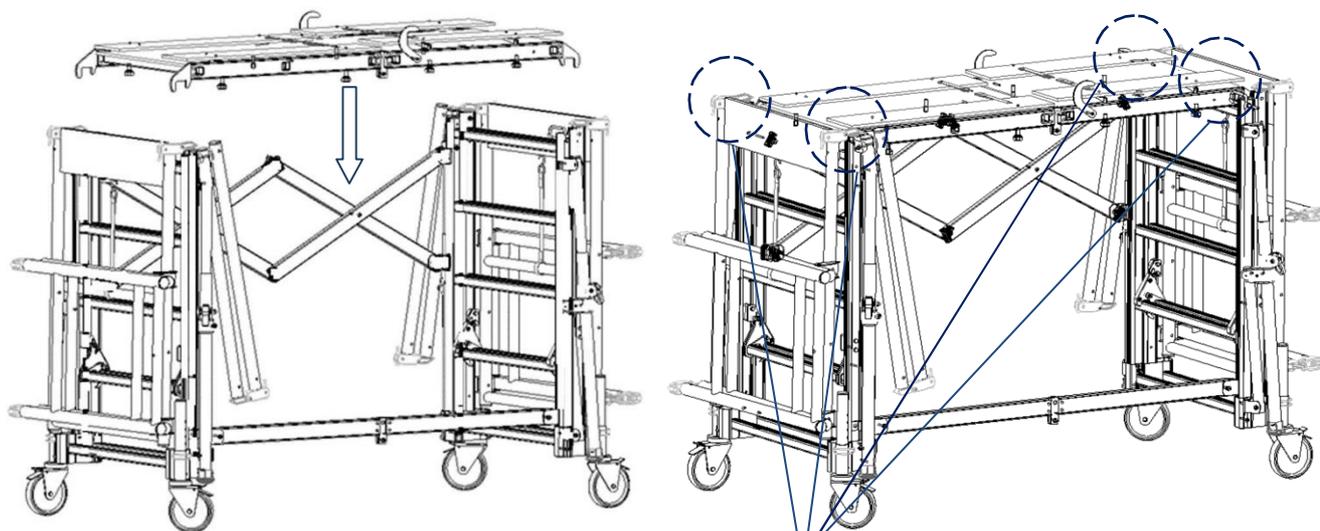
Pull the platform out of the unit and position it vertically on the floor

Raise the trap section upwards for opening the platform completely



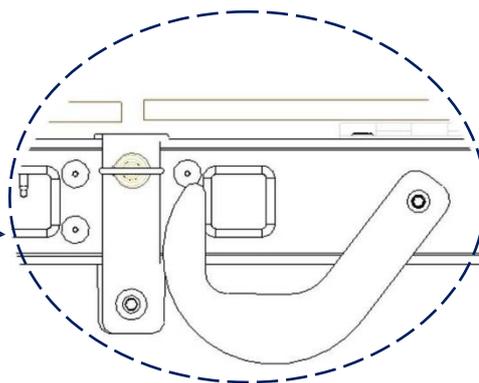
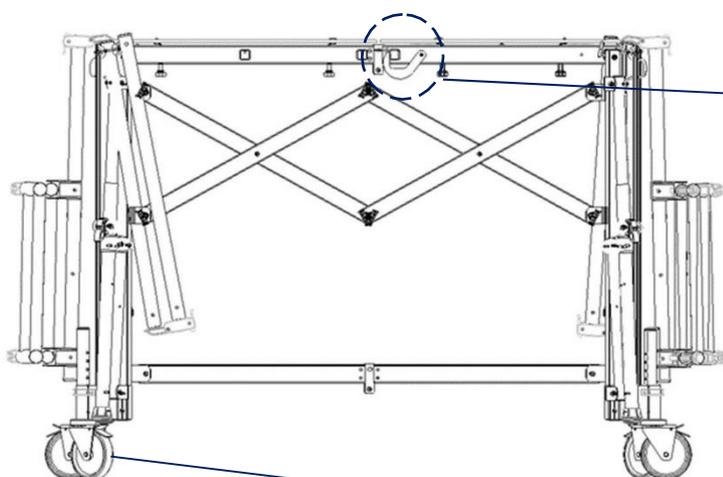
# X-TOWER

Place the platform in position so that the hooks bear on the outermost ladders.

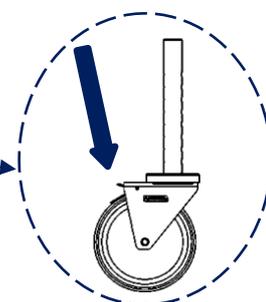


Check that the 4 platform hooks are correctly in position on the rungs.

Push the 2 support hooks downwards



Lock the other two scaffolding wheels in position.



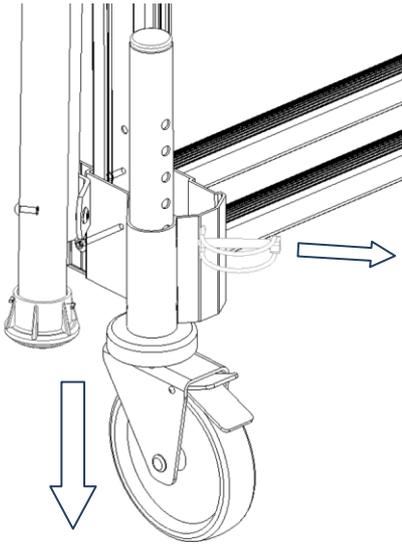
The brakes must be "ON"

# X-TOWER

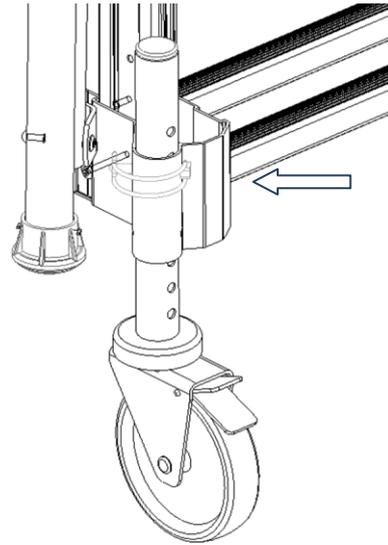
## 2-3 : Adjusting the wheels

Check that the floor is horizontal both lengthwise and crosswise. If the scaffolding is placed on a non-flat floor, the wheels can be adjusted for putting the unit level.

Remove the pin that holds the wheel, and adjust wheel height



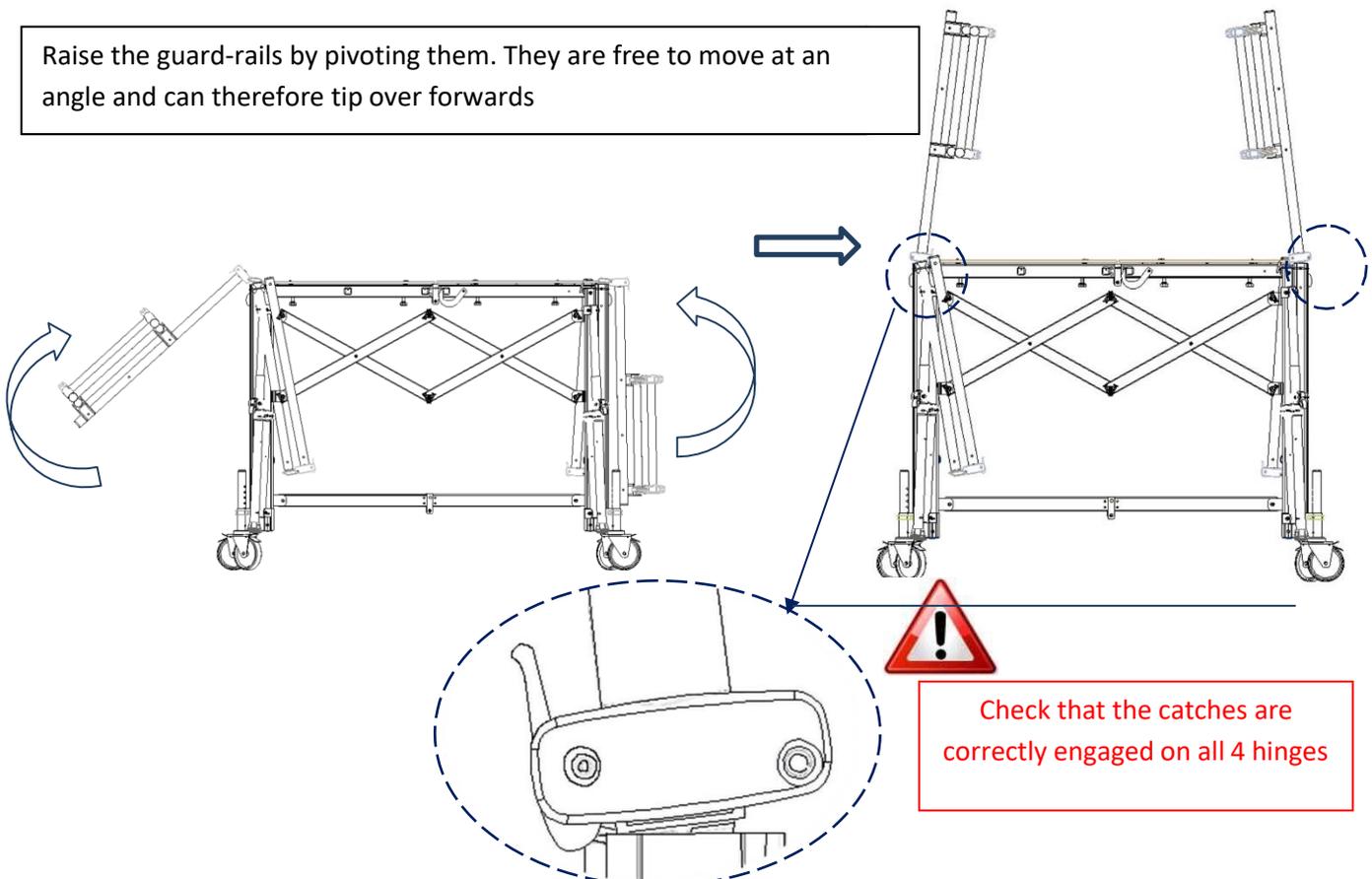
Align the hole on the wheel closest to the hole on the wheel-holder and re-insert the pin



Carry out this operation on all the wheels that need to be adjusted for the scaffolding to be level. Make sure that the scaffolding is level before continuing to erect it.

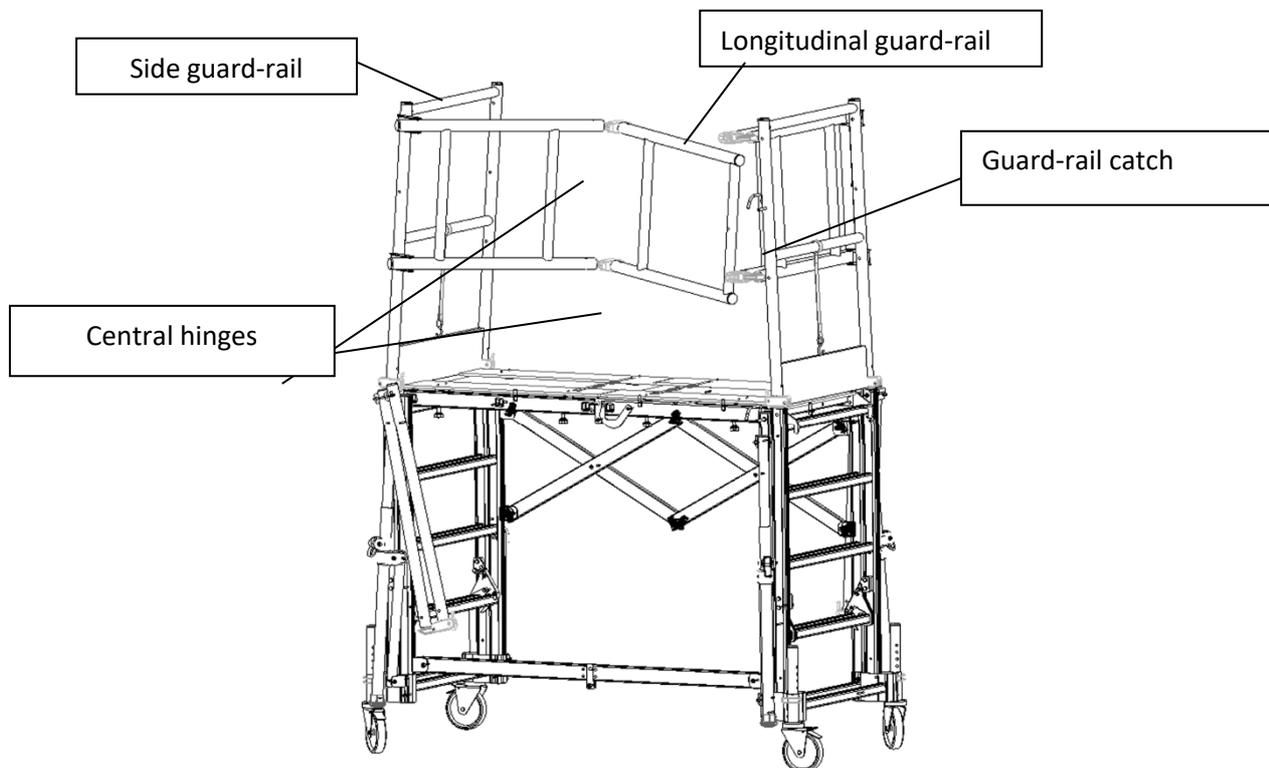
## 2-4 : Installing guardrails:

Raise the guard-rails by pivoting them. They are free to move at an angle and can therefore tip over forwards



# X-TOWER

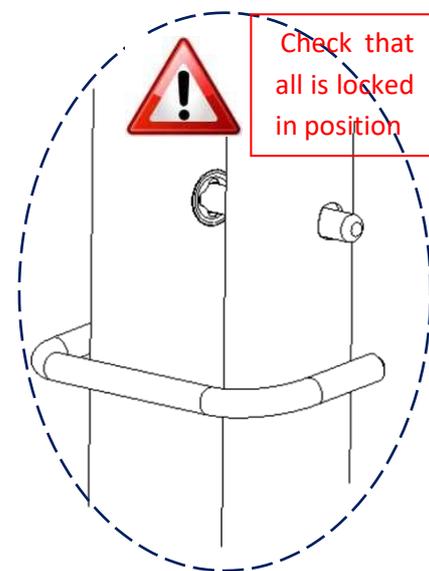
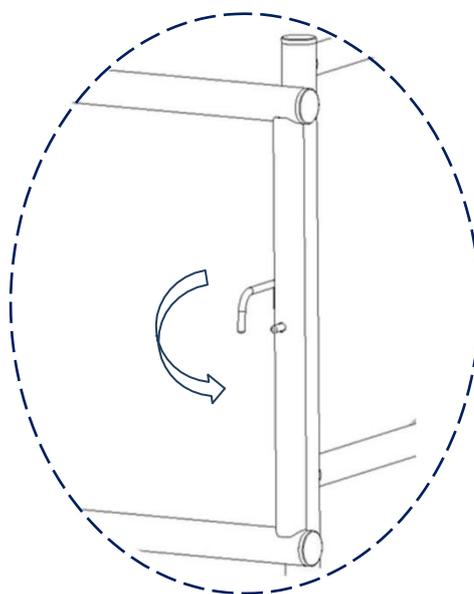
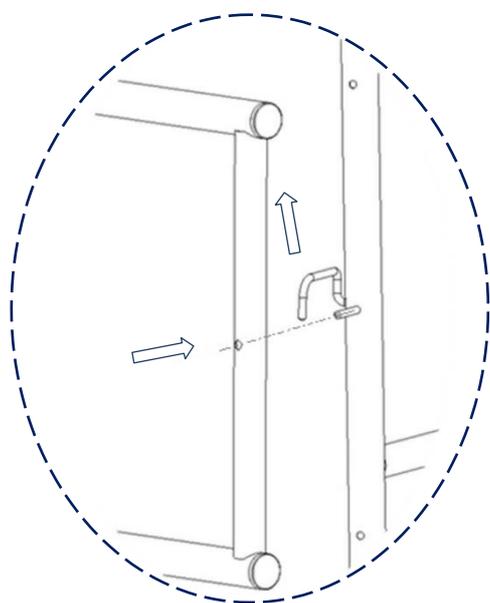
Undo the strap on one of the guard-rails and unfold the longitudinal part until it contacts the catch on the opposite guard-rail. Do not engage the central hinge catch



Lock the guard-rail in place

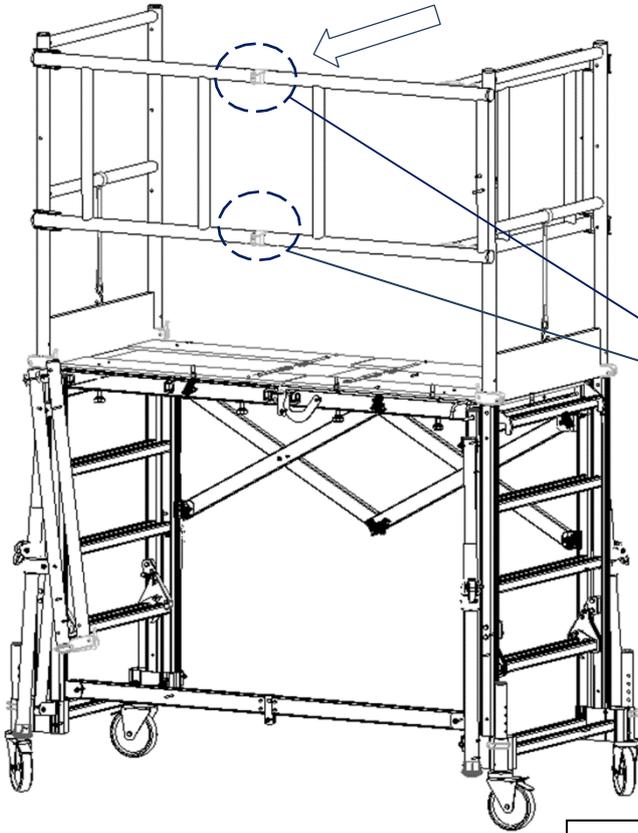
Lift up the catch and insert it into the hole on the guard-rail

Push the catch down for locking the guard-rail

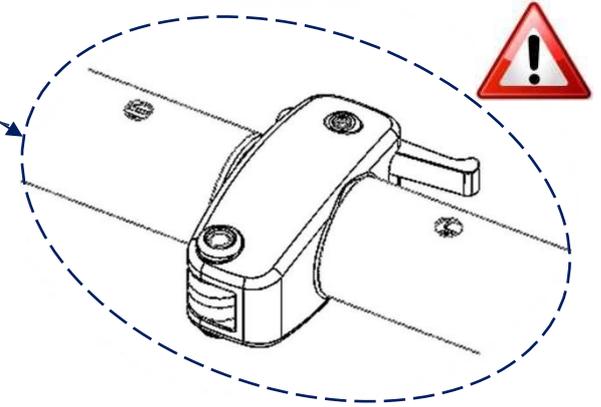


# X-TOWER

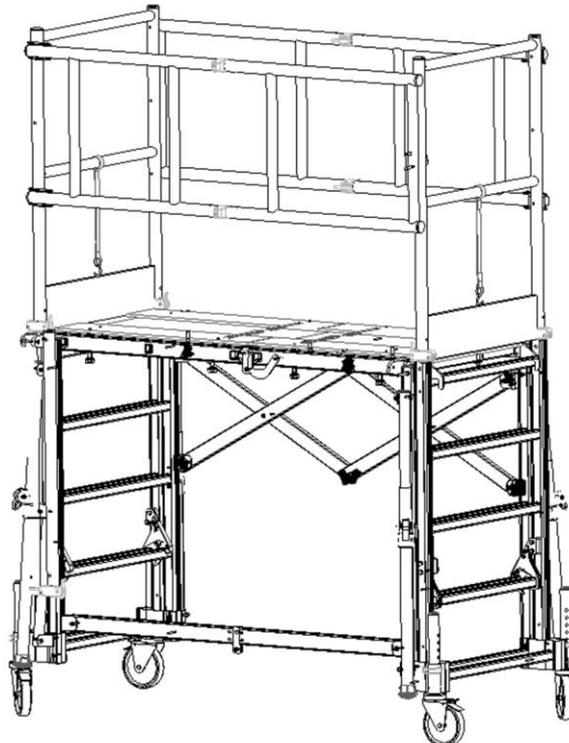
Pull on the guard-rail for locking  
the central hinge in position



Check that the catches are  
correctly engaged on the 2  
hinges



Repeat the operation for the  
second guard-rail

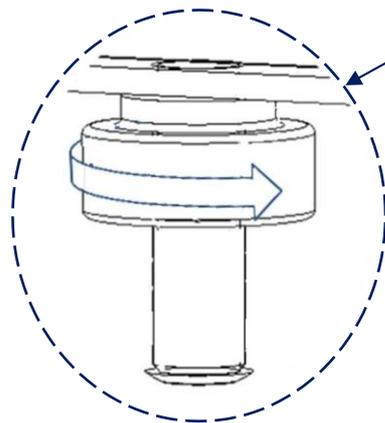
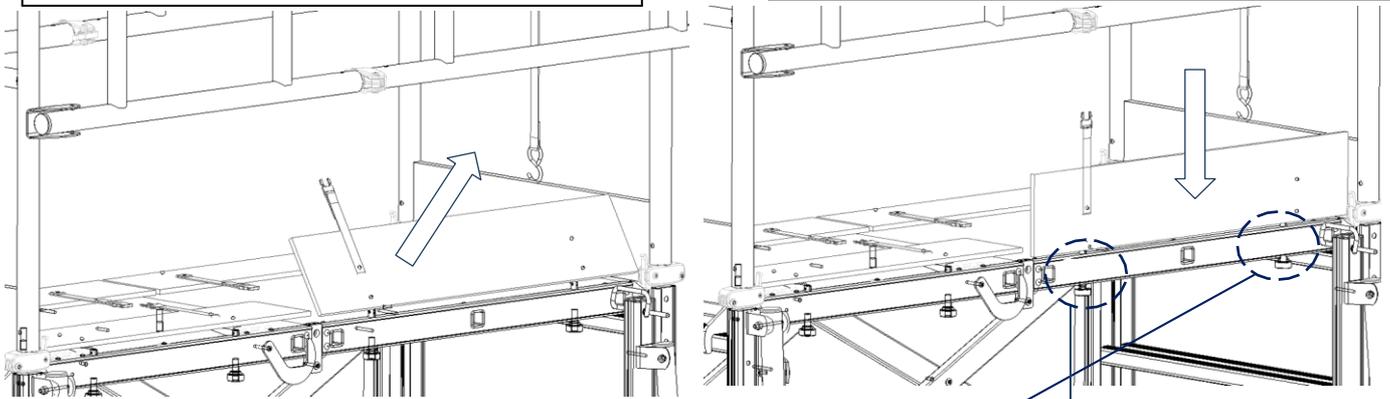


# X-TOWER

## 2-5 : Installing skirting boards:

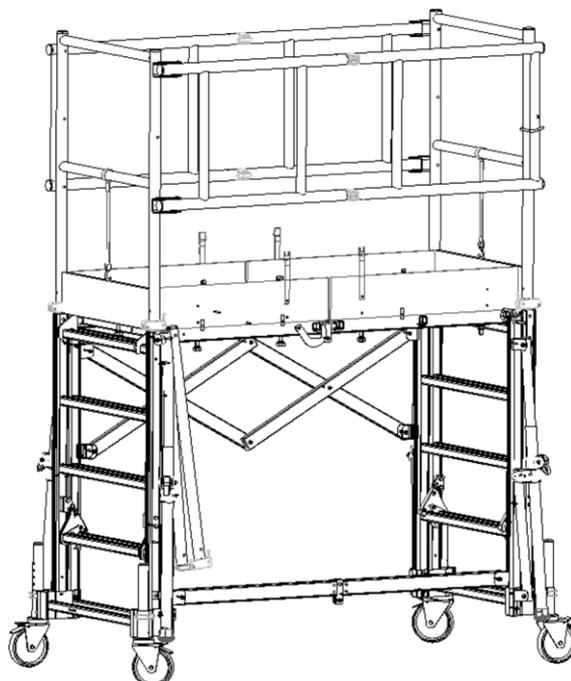
Remove the straps holding the skirting boards together and then lift up the first skirting board

Lower the skirting board vertically and then lock it in place with the knurled wheels under the upright



Tighten the 2 wheels so that the board is correctly in place and cannot move.

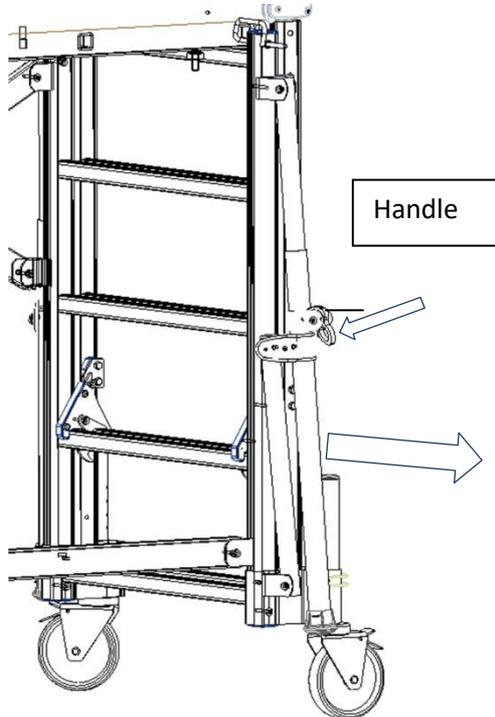
Carry out the same operation for the 3 other boards



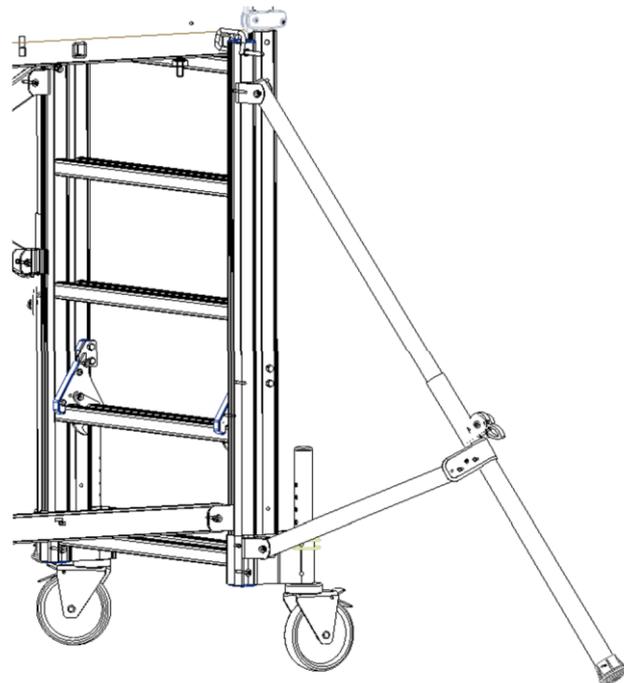
# X-TOWER

## 2-6 : Installing stabilizers:

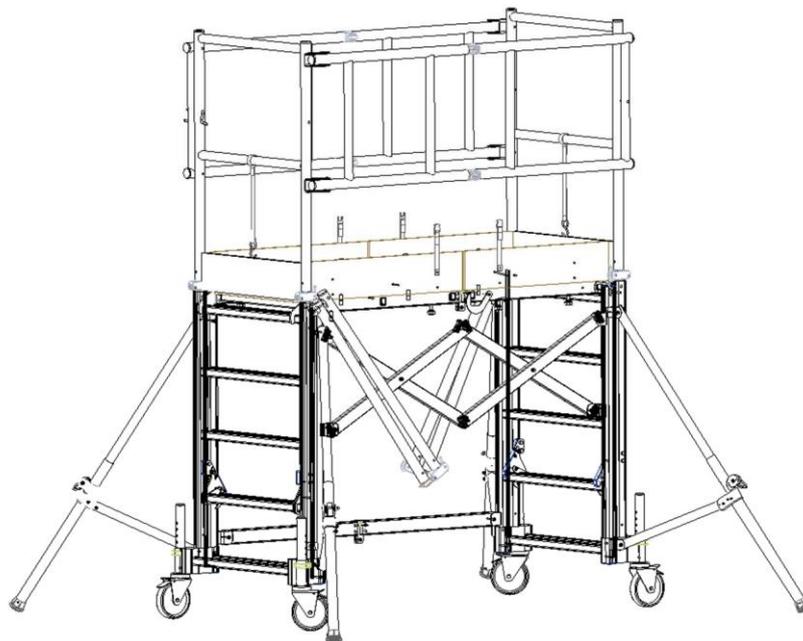
Hold the handle down and pull the stabilizers backwards.



Extend the stabilizer until it is firmly in contact with the ground and release the catch.



Carry out the same operation on the other 3 stabilizers



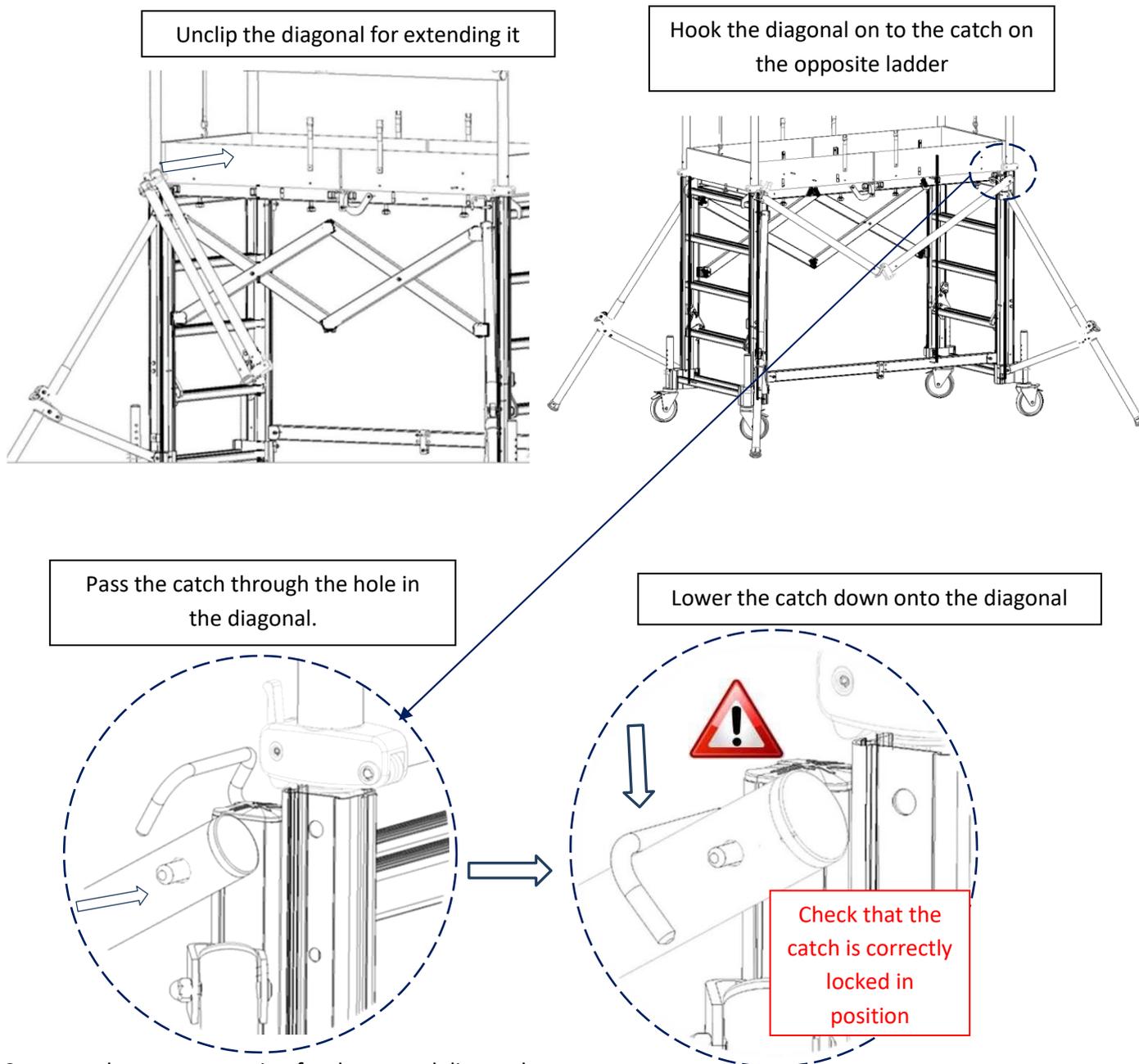
The scaffolding is now ready for use with a platform 1.3m high.  
See Chapter 3 for erecting the scaffolding at 2 metres and Chapter 4 when a height of 3 metres is required.

# X-TOWER

## Chapter 3: Erecting the 2-metre model

### 3-1: Installing diagonals

Diagonals must only be fitted when the unit has been erected at its maximum height.



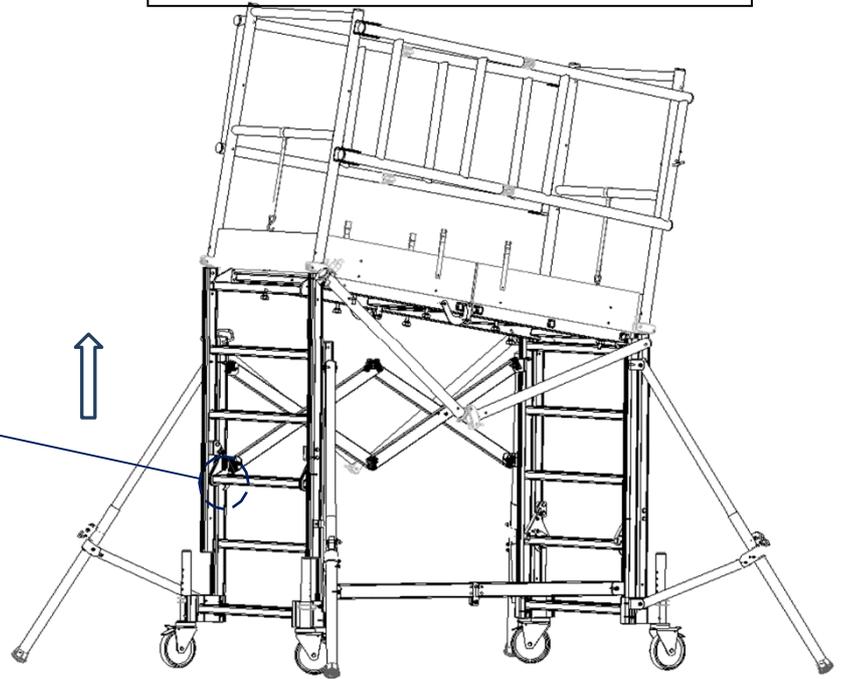
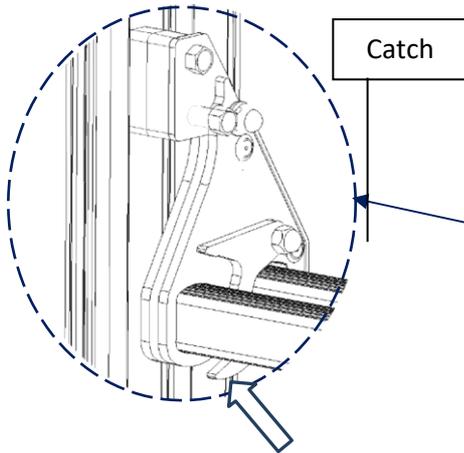
Carry out the same operation for the second diagonal.

# X-TOWER

## 3-2 : Erecting the unit

Release the 2 catches on the locking pivot by pushing on them from under the rung

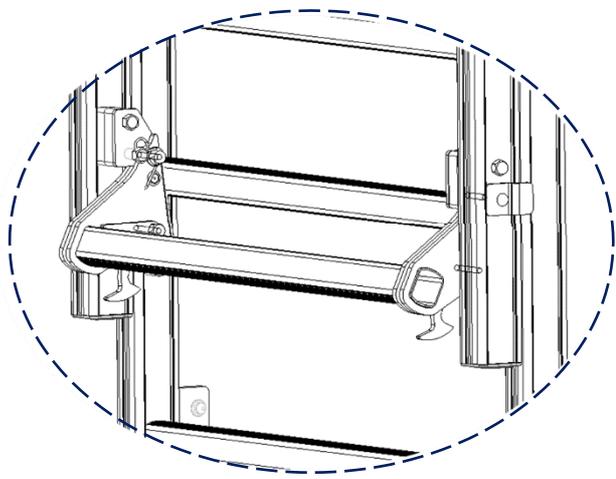
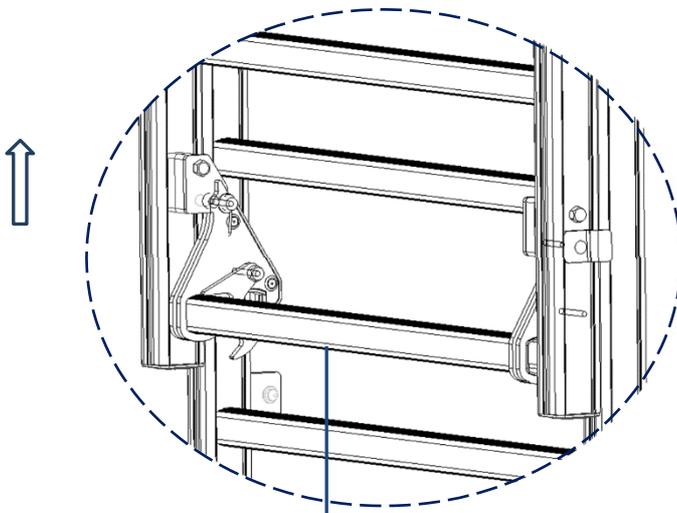
Raise the ladder to the top of a rung as shown below



Do not put your fingers between the two ladders. Hold the rung from underneath.

Raise the ladder **without holding the locking pivot**. It will move away automatically.

The locking pivot moves away when it reaches the next rung.

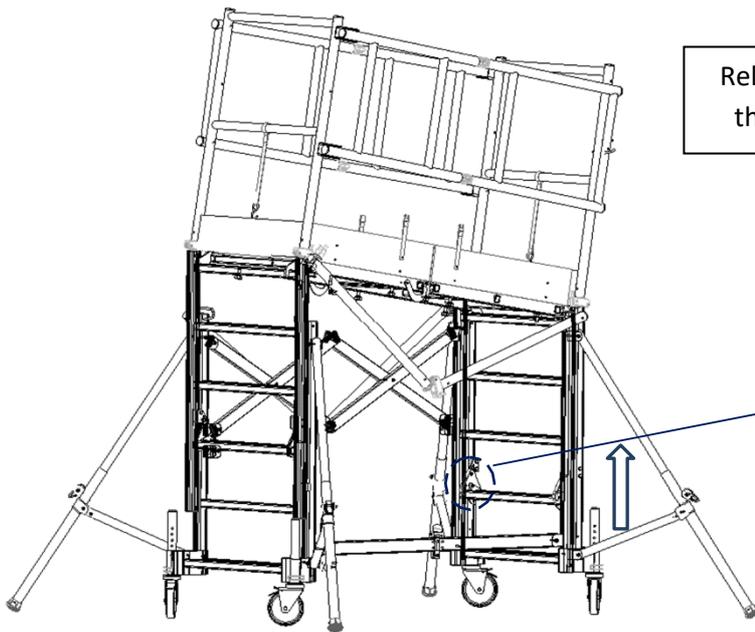
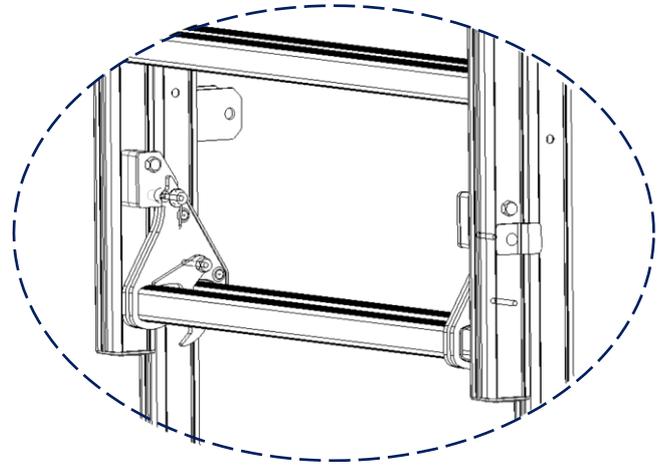
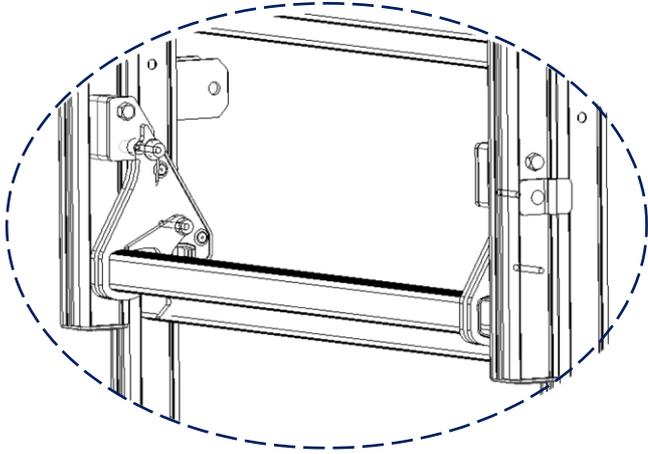


Locking pivot

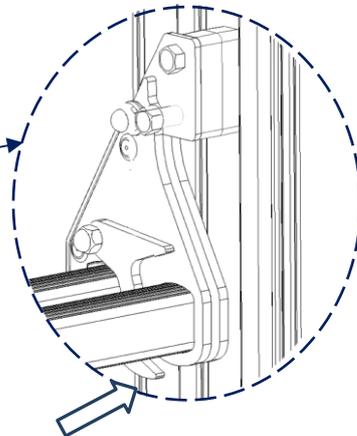
# X-TOWER

The locking pivot will come back into position once it is above the rung

Lower the ladder until the locking pivot bears on the rung



Release the 2 catches on the locking pivot on the opposite ladder. Then raise the ladder.



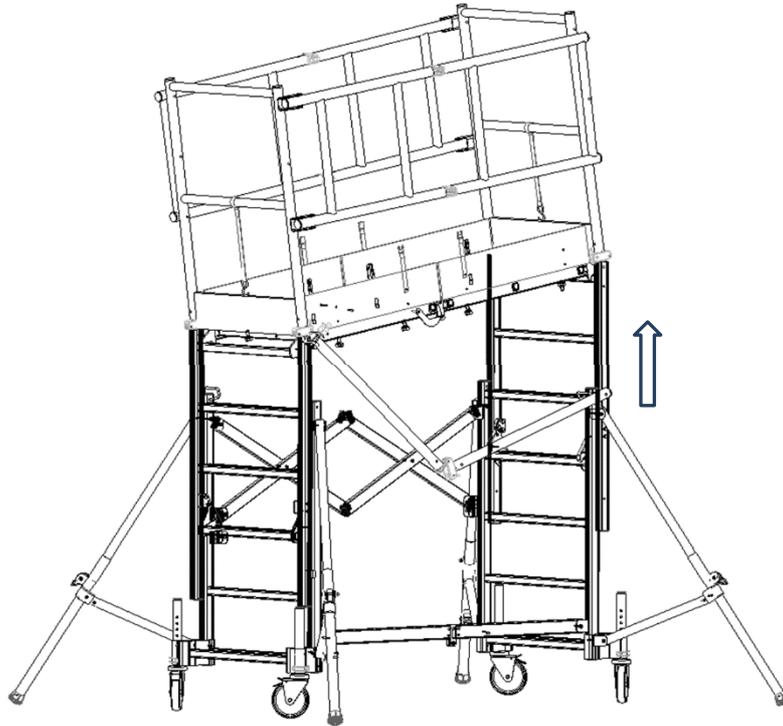
To put the platform at a height of 1.55m, place the locking pivot on the rung directly above it and re-engage the catches on the locking pivot.  
For positioning the platform higher, place the locking pivot two rungs higher.

# X-TOWER

Raise the first ladder once again.

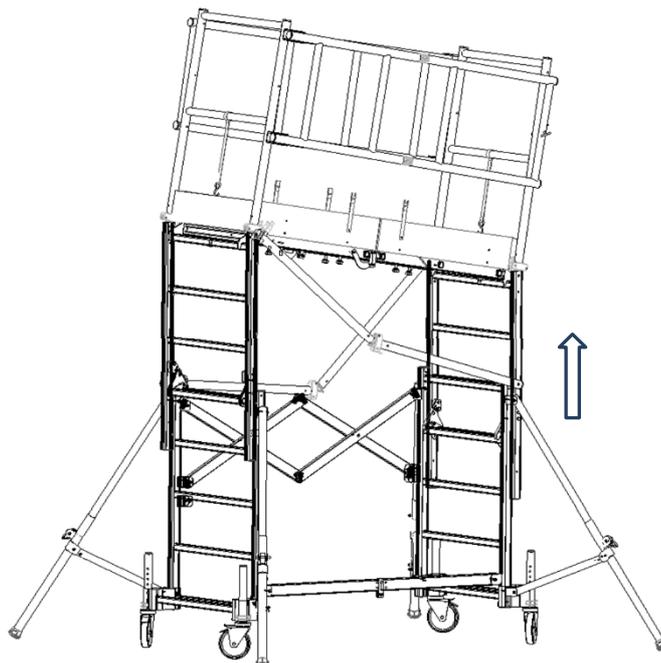
To put the platform at a height of 1.8m, place the locking pivot on the rung directly above it and re-engage the catches on the locking pivot.

For positioning the platform higher, place the locking pivot two rungs higher.

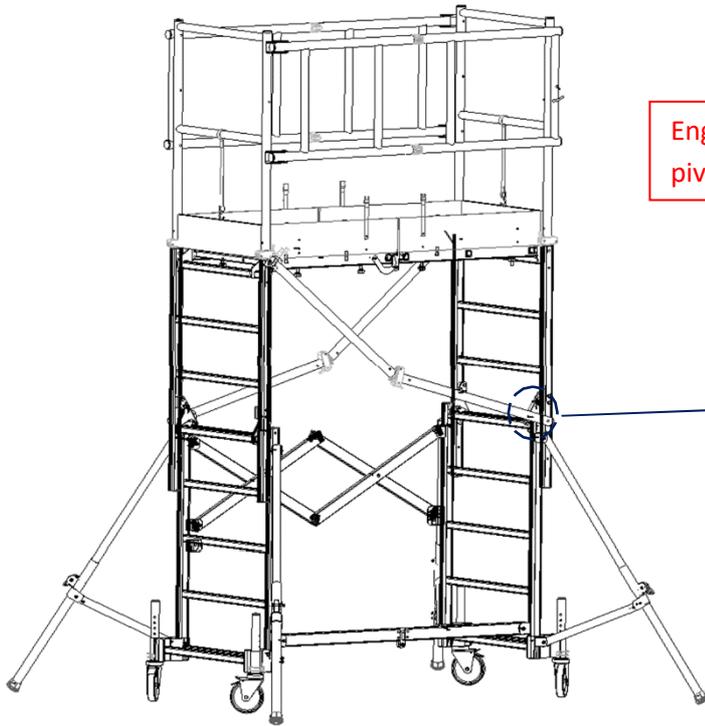


Raise the second ladder by a rung until you reach the maximum working height of 2.05m.

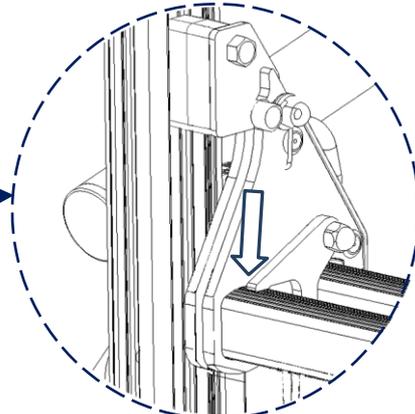
The "STOP" labels on the locking pivot and the ladder will then be in line.



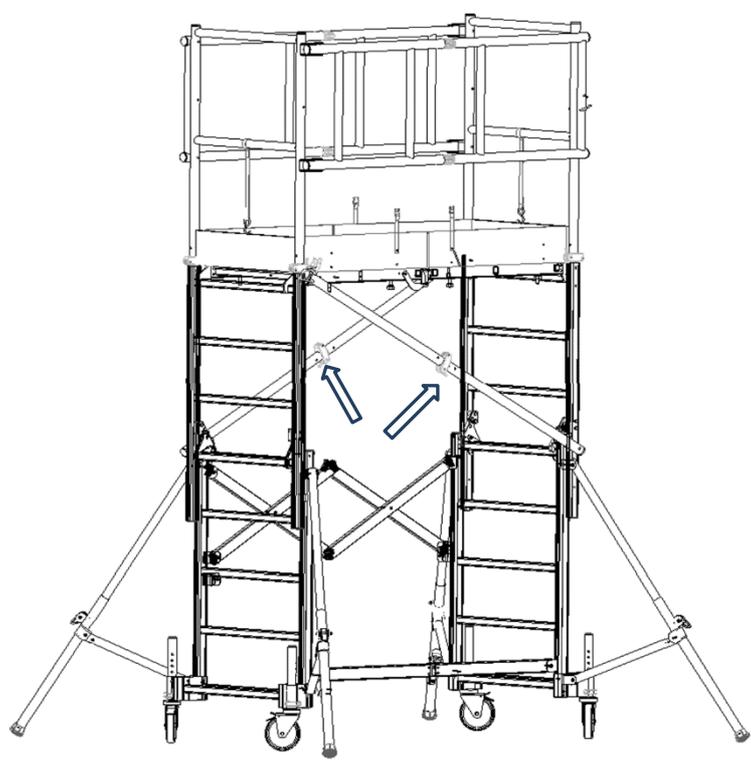
# X-TOWER



Engage the 4 catches on the locking pivots by pushing on them.



Push on the hinges on the diagonals for locking them in position. (Only when the platform is 2.05m high)



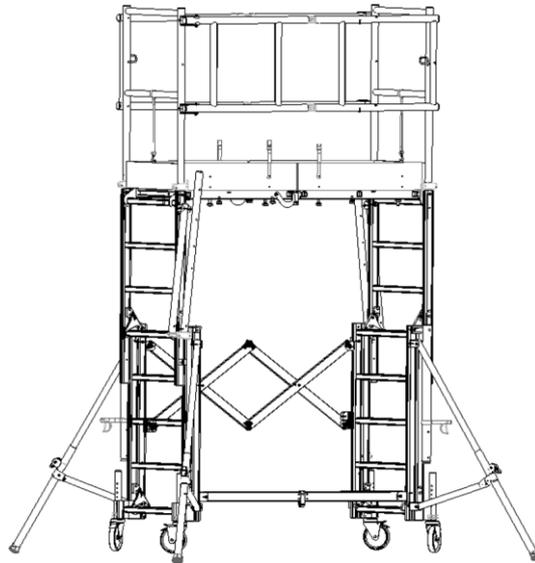
The scaffolding is now ready for use with a platform 2.05m high.

# X-TOWER

## Chapter 4: Erecting the 3-metre model

### 4-1 : Erecting external ladders

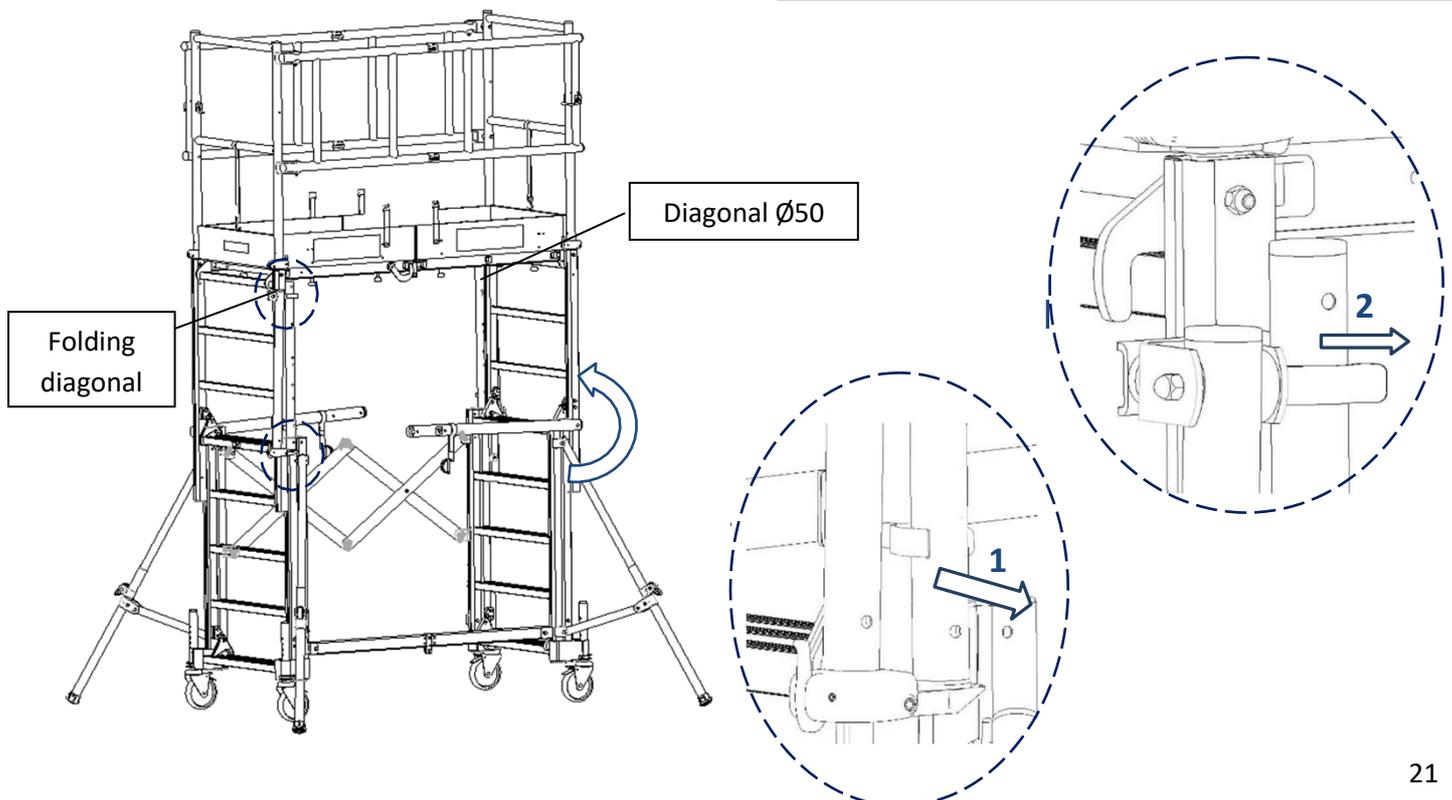
Proceed in the same way as for the 2-metre model for mounting external ladders but without fitting the diagonals (see chap 3-2).



### 4-2 : Installing diagonals

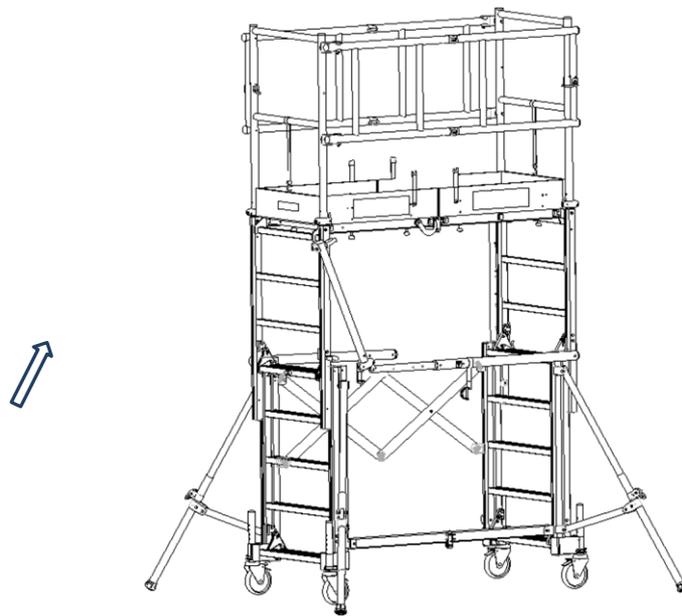
Pivot the  $\varnothing 50$  part of the diagonal

Unfold the folding diagonal by unclips first from the ladder (down fixation point) (1), then opening it (up fixation point) (2)



# X-TOWER

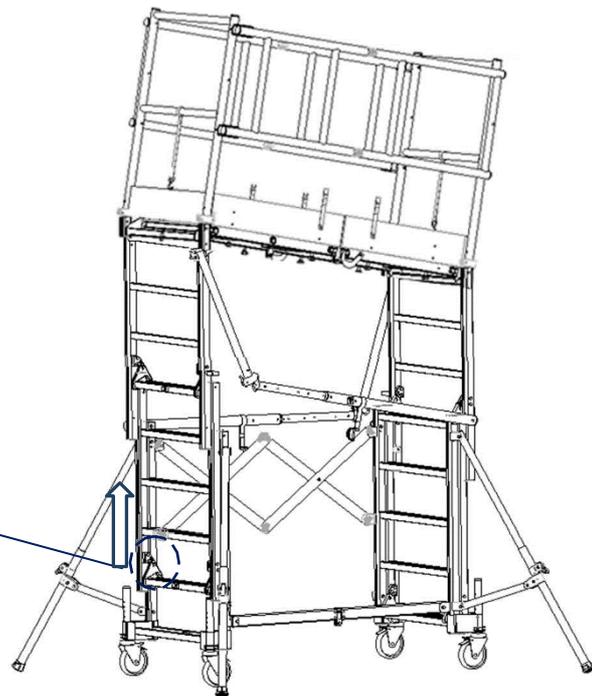
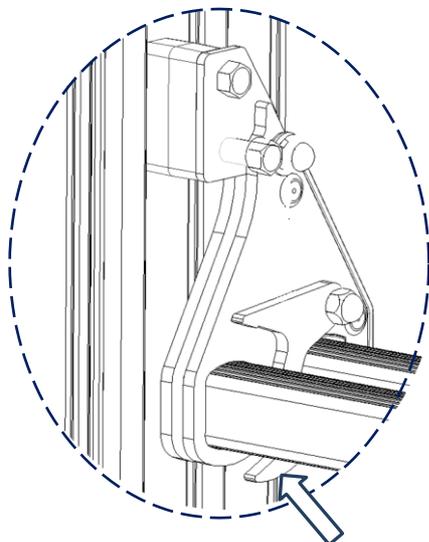
Insert the folding diagonal in the diagonal  $\varnothing 50$ , without put the pin and without locking diagonal hinge if you want up the scaffolding higher.  
If the scaffolding is at the desired height, go to chapter 4-4.



## 4-3 : Erecting intermediate ladders

Lift the ladder upwards until the locking pivot bears on the next rung.

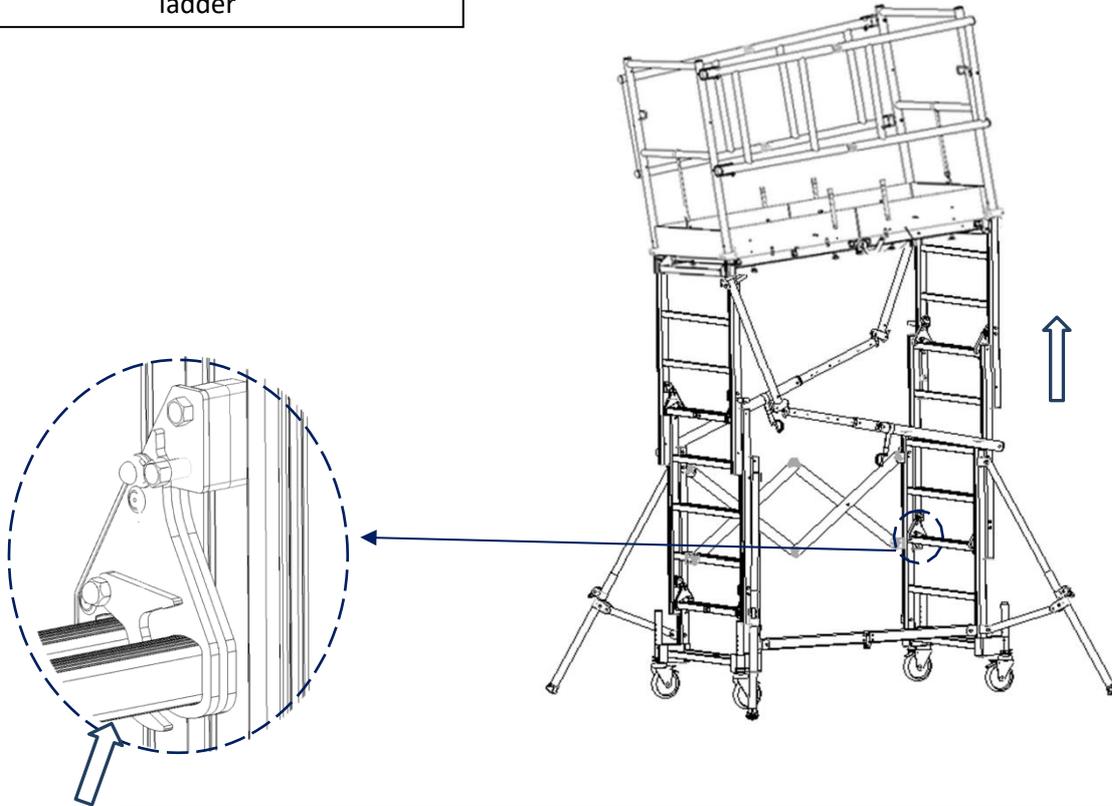
Disengage the two locking pivot catches on one of the two intermediate ladders.



# X-TOWER

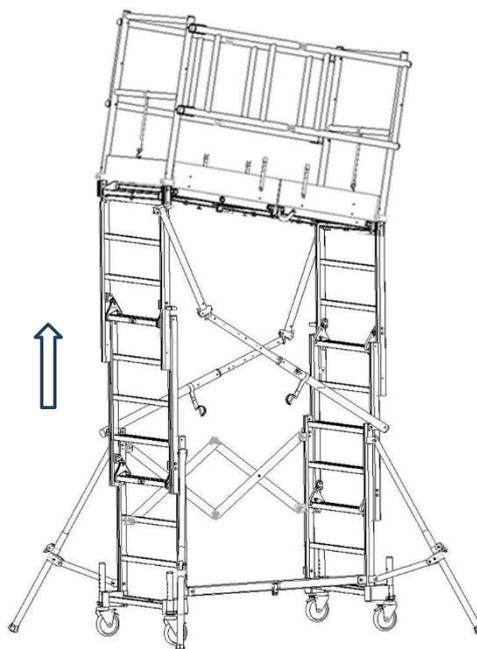
Disengage the 2 catches on the locking pivot on the other ladder. Then raise the ladder

To have a platform height of 2.3m, put the locking pivot on the rung directly above and re-engage the locking pivot catches. For positioning the platform higher, place the locking pivot two rungs higher.



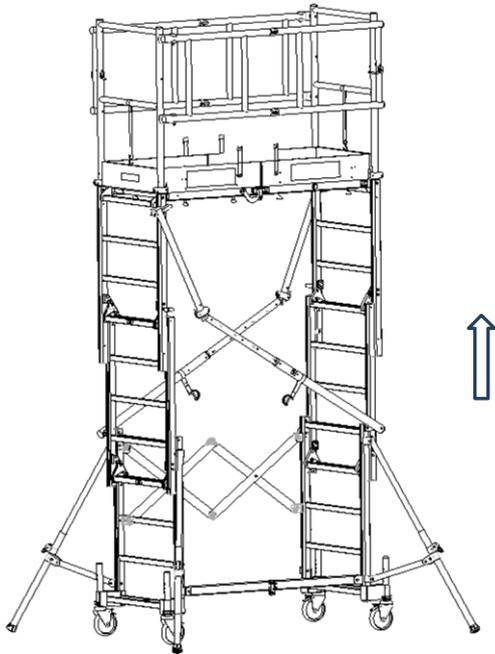
Raise the first ladder once again.

To have a platform height of 2.55m, put the locking pivot on the rung directly above and re-engage the locking pivot catches. For positioning the platform higher, place the locking pivot two rungs higher.

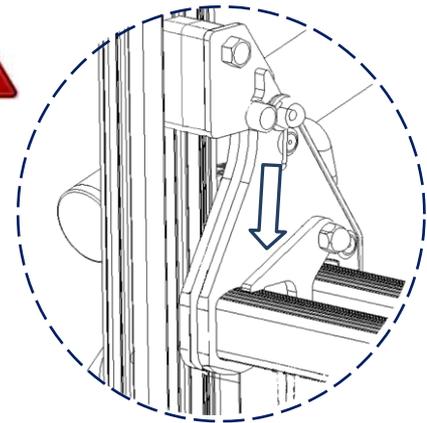


# X-TOWER

Raise the second ladder by one rung for attaining the maximum working height of 2.8m.



Engage the 4 catches on the locking pivots by pushing on them.

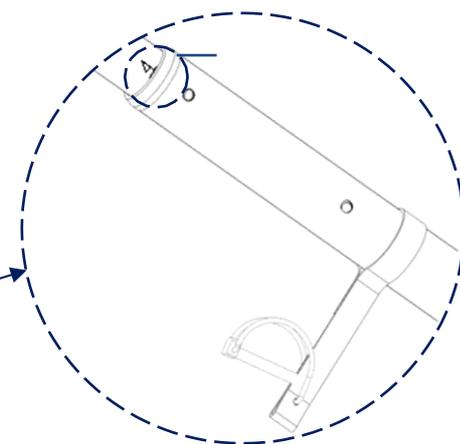
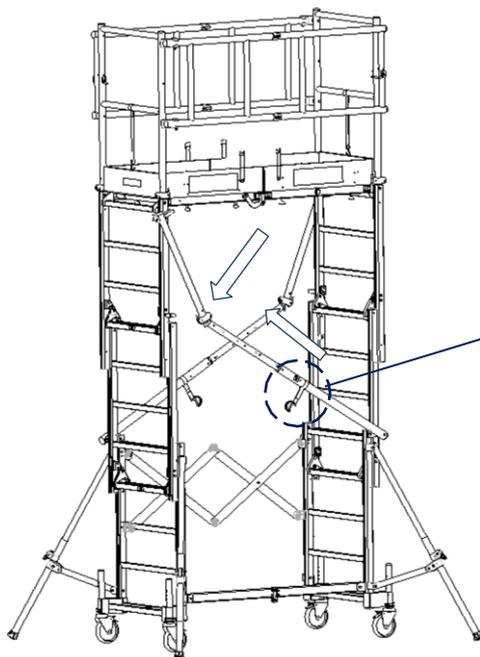


## 4-4 Locking the diagonals in position

Operation to be carried out when the platform is at the required height.

Adjust the folding diagonal in the diagonal  $\varnothing 50$  to see the number corresponding to the platform height. (See table)

Position number on the folding diagonal to align with the diagonal  $\varnothing 50$ .

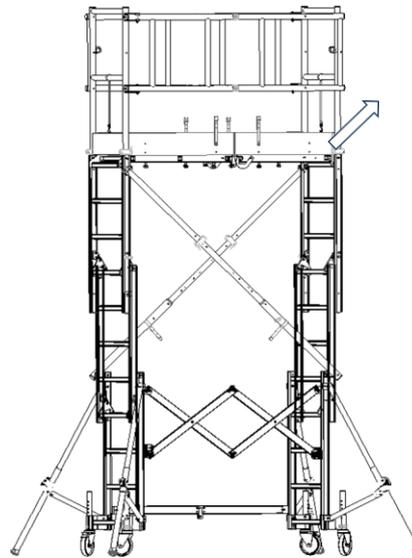


Platform height	Position of diagonal
2.05m	1
2.3m	2
2.55m	3
2.8m	4

# X-TOWER

Insert the pin for connecting the two diagonal sections together.

Push on the hinge to lock it in position and then carry out the same operation on the second diagonal.



**The scaffolding is now ready for use.**

## Chapter 5: Post-assembly and pre-use operations

The person appointed by the company manager as being in charge of safety on the site must check that assembly-work on the scaffolding is in order and compliant.

These checks concern:

- Stabilizer ground support.
- Correct assembly of the different elements.
- Environment.
- Correctly latching wheel brakes
- Scaffolding level check
- Correct locking on each locking pivot.
- Correct locking of diagonals at locking points and hinges.
- Correct locking of guardrails at locking points and hinges.



**The instructions contained on the label glued under the flooring **MUST BE FOLLOWED.****

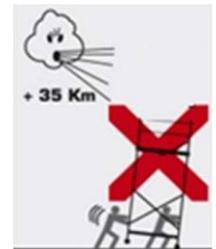
# X-TOWER

## Chapter 6: Instructions

### 6-1 : Instructions for use

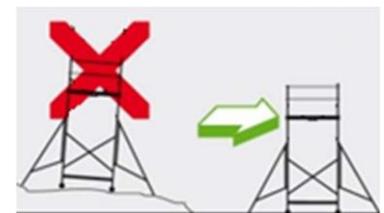
These instructions do not replace regulations in force, which must also be followed.

- Comply with permissible loads on the flooring and the structure.
- Horizontal forces must not be over 30Kg.
- Maximum wind allowed with stabilizers = 35Km/H
- Anchor the scaffolding where winds are over 35 Km/h



### Work area:

- Do not install the unit close to any bare conductors under power.
- Prohibit all access to scaffolding in zones accessible to the public.
- Mark out the area of use if machinery or vehicles are liable to pass close by...
- Check that there are no overhead obstacles in the area of movement
- Provide for tracks when on soft ground.



### The following is not allowed:

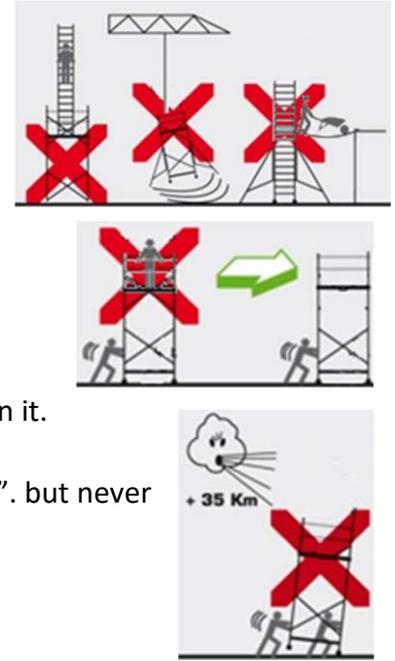
- Using a jib, even a manual jib, placed on the outside of the scaffolding.
- Covering mobile scaffolding, even partially.
- Increasing heights more than allowed.
- Using components other than those supplied by the manufacturer.
- Using scaffolding that has not been assembled vertically (tolerance: 1%).
- Using scaffolding that has not been assembled as per the instructions contained in this manual.
- Making a bridge between the scaffolding and a building or between two scaffolding units.
- Leaning an access ladder against the scaffolding.
- Jumping on floors.
- Using planks for flooring.
- Accessing the work floor from outside.
- Adjusting wheels for increasing platform height. (At least one wheel must be fully withdrawn.)



# X-TOWER

## 6-2 Instructions for moving the scaffolding

- Mobile scaffolding can only be moved manually on solid level ground where there are no obstacles either on the ground or overhead. Normal walking speed should be considered the maximum speed for moving scaffolding.
- Only move the scaffolding over ground with a maximum slope of 3%.
- Never tow mobile scaffolding with a motor vehicle.
- Never move scaffolding when the wind is higher than 35Km/H.
- The ground on which the mobile scaffolding is to be moved must be capable of bearing load paths.  
Provide for tracks when on soft ground.
- Scaffolding **MUST NEVER BE MOVED** with any persons or equipment on it.
- Do not lift up scaffolding with a crane or a gantry.
- The X-Tower can be moved by one person. It must always be “pushed”. but never “pulled”.



## Chapter 7: Inspection, servicing and maintenance

### Systematically inspect parts before assembly, especially:

- Wheel treads and brakes.
- Safety devices.
- Hooks for work floors and their fixtures.
- Work-floor and skirting board plywood.

### Any part that has been:

- Permanently distorted
- Drilled.
- Notched (by grinding for example...)
- Subject to serious rusting

**... must be discarded!**

**Replace the component whenever you are in doubt.**

**When replacing a component, it **MUST** be replaced by a part that is similar to the original.**

Keep parts clean and safety devices in good running order.

# X-TOWER

Replace or clean any plates or stickers that provide information on how to use the unit or on safety.

## Check:

Statutory checks (stipulated in the order of December 21, 2004) are as follows:

### **A check must be made on every worksite before the unit is put into use:**

- For the first time,
- After the scaffolding has been dismantled and re-assembled.
- After any modifications in the scaffolding's conditions of use, or in weather or environmental conditions that are liable to affect its safety when used.
- Whenever the scaffolding has not been used for at least one month.

This check must include appropriateness testing, an assembly and installation check and a working condition check. Traceability of this check will be confirmed formally on the establishment's safety register.

### **Daily checks**

This includes a check on good running order.

Traceability of this check is formalized by a sheet attached to the access hatch.

### **Quarterly checks**

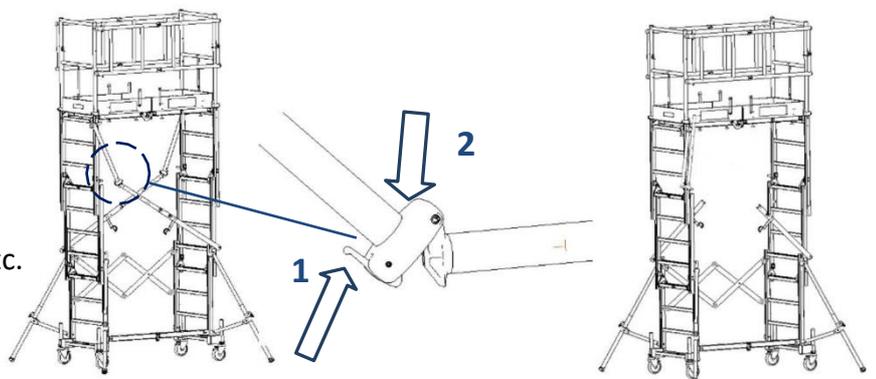
In the case of mobile scaffolding, this check covers the same points as the daily check. The check is to be made at least once every three months and must be confirmed formally on the establishment's safety register.

**N.B.:** These checks may only be carried out by personnel holding a qualification certificate issued by the head of the establishment bearing the words "Controller and user".

For more information and details concerning control checklists, see RECO R.457, appendix 3, 3bis, 4, 5 and 6.

## **Chapter 8: Dismantling**

- Before dismantling:
  - Make sure that the scaffolding is stable:
    - With wheel brakes on
    - Stabilizers correctly positioned. etc.

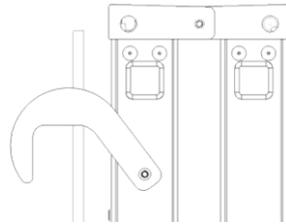


- During dismantling:
  - Use the same procedure as for assembly but in the reverse order, **beginning to fold and attach the diagonal**, take off the pin, unlock the hinge and clips the diagonal on the ladder. Re-engage the locking pivots in position when the ladders are in the "down" position (the "STOP" sticker at the bottom of the ladders must be in line with the sticker on the locking pivot). Take care when folding

# X-TOWER

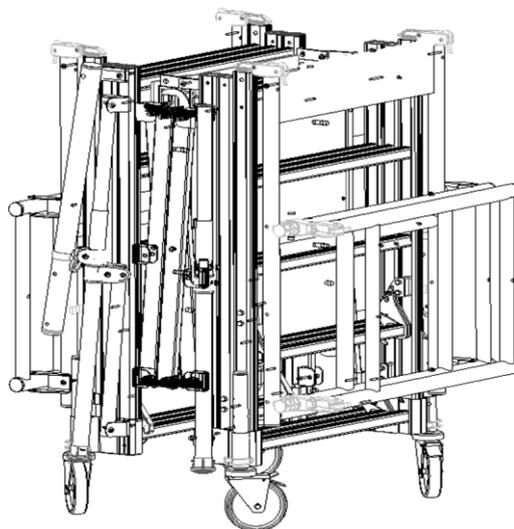
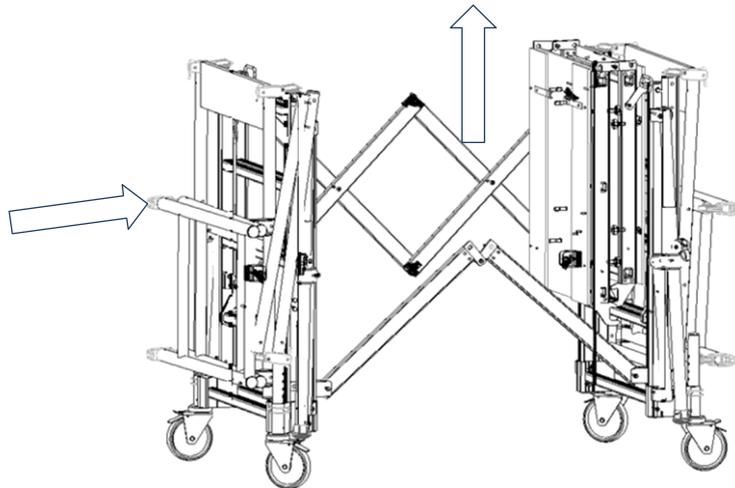
guard-rails. Move to one side before tipping them over for preventing them from hitting you on the head.

- For folding the platform, pull on the ring on the lock for releasing it. When the platform has been reclosed, put the support hooks in position so that they are parallel to the platform.



*View of the platform hook when in storage position*

- For reclosing the unit, pull on the strut locking ring. Once the catch has been released, pull the ring upwards for folding the strut. Then push it sideways for bringing the ladders together.



*View of unit when folded up.*

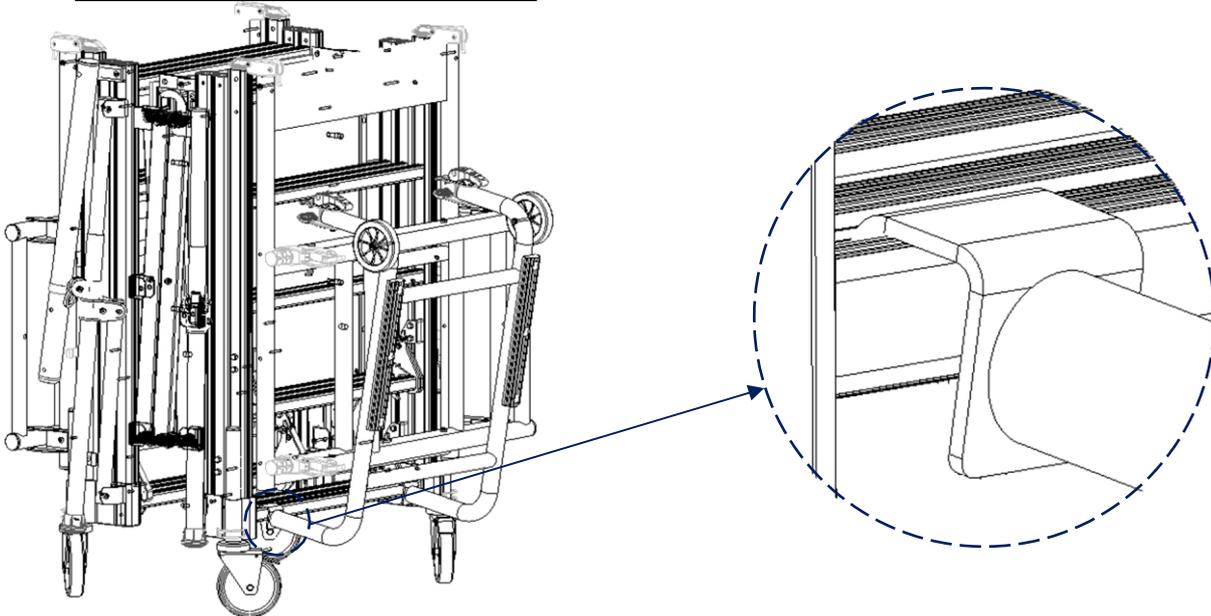
# X-TOWER

## Chapter 9: Moving and loading the unit onto a vehicle

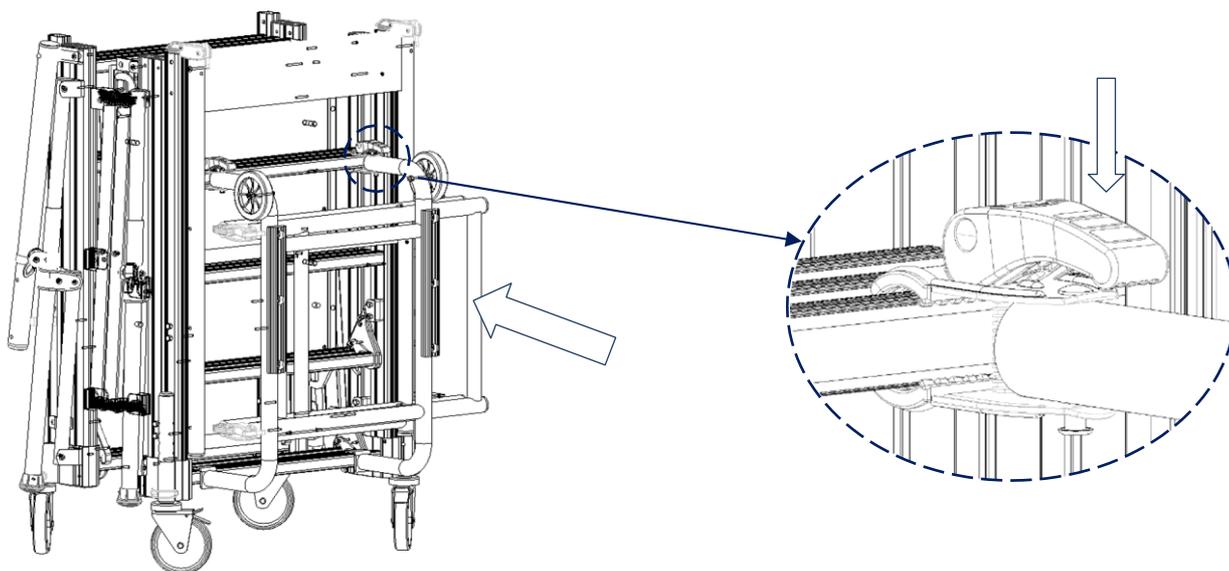
### 9-1 Fitting the transport kit (optional)

The transport kit can be installed on either side of the scaffolding after it has been folded up.

Place the hooks on the rung on the wheel holder.



Lift up the transport kit until the blue clips are at the level of the ladder rung. Then lock them in place by pushing on the cam.

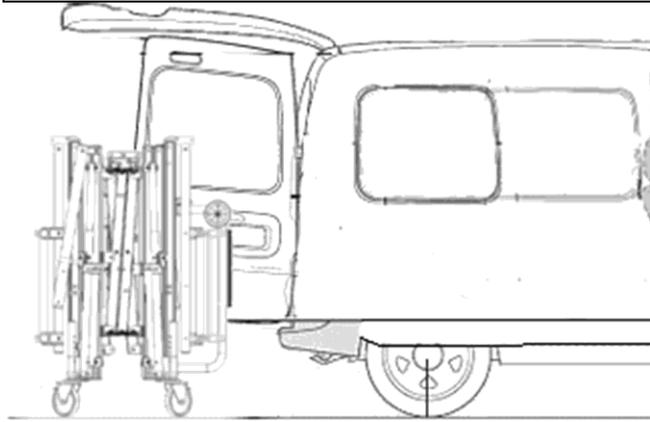


Proceed exactly in reverse order for removing the transport kit. The kit must be removed before unfolding the scaffolding.

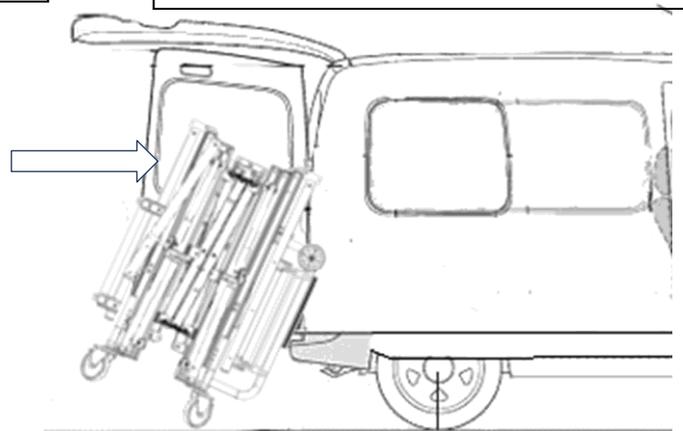
# X-TOWER

## 9-2 Loading the scaffolding onto a vehicle

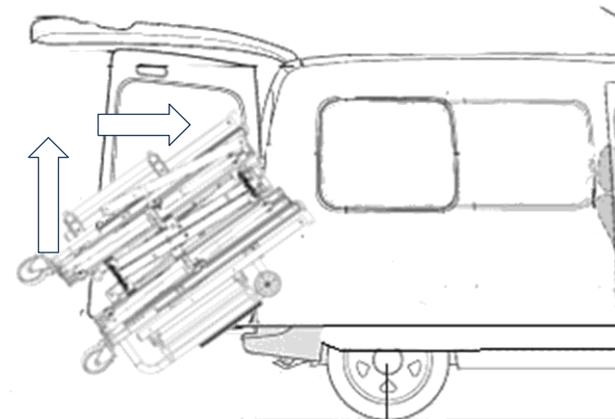
Push the scaffolding to the back of the vehicle leaving a gap behind the rear bumper. Put the 4 wheel-brakes on.



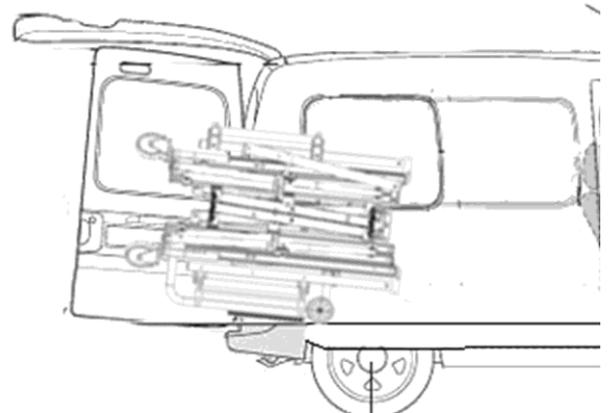
Tilt the unit forward onto the pad bears on the vehicle.



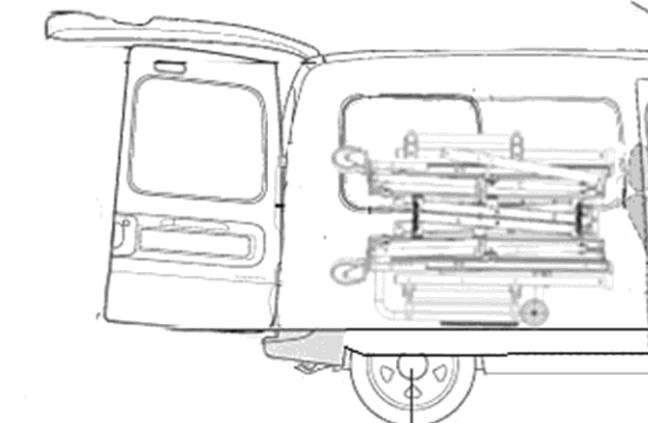
Lift the scaffolding unit using the wheel support and push it upwards.



Once it has been loaded, raise the unit a little for rolling it to its final transporting point.



Release the scaffolding. It will stand on its support pads



Proceed in exactly the reverse order for unloading the scaffolding.

# X-TOWER

## Chapter 10: Guarantee

X-Tower scaffolding unit are guaranteed for 2 years against defects in parts and workmanship.

The guarantee comes into force as of the date of invoice.

Our guarantee will only be valid on condition that the purchaser fulfils his contractual obligations, especially concerning payment for the equipment.

The guarantee is limited to replacement or repair in our works of the original parts recognized as being faulty after inspection by our services.

All other rights are excluded. More particularly, any application of the guarantee shall not give rise to payment of damages under any circumstances whatsoever.

This guarantee applies exclusively to units installed and used as per the instructions contained in technical assembly and utilisation documents.

**IMPORTANT:** Keep your proof of purchase (invoice or delivery slip) as it will be requested from you should the guarantee need to be applied.

For any further details, please connect to our internet site:

***[www.tubesca-comabi.com](http://www.tubesca-comabi.com)***



*Video instructions on-line*

# X-TOWER

## Manuale di montaggio e utilizzo Trabattello con ruote X-TOWER

Manuale da consegnare imperativamente agli utilizzatori



Istruzioni video online

# X-TOWER

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# X-TOWER

## Capitolo 1 / Caratteristiche del trabattello

### 1-1 Descrizione del prodotto

Il trabattello X-Tower è stato pensato per essere usato e maneggiato da una sola persona.

La sua concezione ne rende il montaggio rapido e sicuro; inoltre, visto che i vari elementi del trabattello sono uniti tra loro, non si correrà il rischio di dimenticarne o perderne uno.

Un kit di carico è disponibile in opzione per semplificarne il trasporto in un veicolo.

### 1-2 Conformità

#### **X-Tower 2 m:**

Trabattello conforme alle esigenze del decreto 2004-924

#### **X-Tower 3 m:**

Trabattello di classe 3 ai sensi della norma EN1004 del maggio 2005

### 1-3 Caratteristiche dimensionali

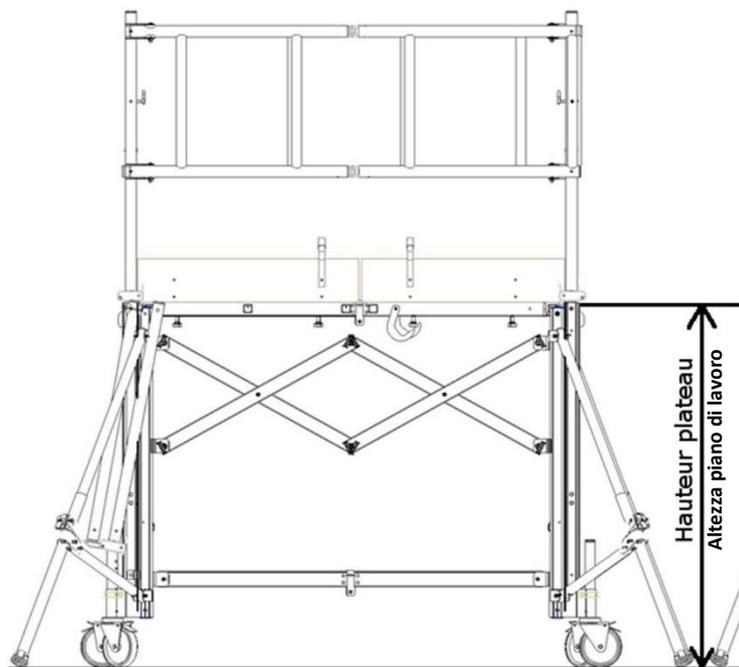
Dimensioni generali	X-TOWER 2 m	X-TOWER 3 m
Ingombro quando aperto		
Lunghezza fuori tutto (in metri)	<b>2,40</b>	<b>2,30</b>
Larghezza fuori tutto (in metri)	<b>2,10</b>	<b>2,10</b>
Altezza fuori tutto (in metri)	<b>3,09</b>	<b>3,84</b>
Ingombro quando chiuso		
Lunghezza fuori tutto (in metri)	<b>0,98</b>	<b>0,98</b>
Larghezza fuori tutto (in metri)	<b>0,82</b>	<b>0,92</b>
Altezza fuori tutto (in metri)	<b>1,34</b>	<b>1,41</b>
Peso (in kg)	<b>65</b>	<b>75</b>

Dimensioni piano di lavoro	X-TOWER 2 m	X-TOWER 3 m
Lunghezza (in metri)	<b>1,54</b>	<b>1,54</b>
Larghezza (in metri)	<b>0,60</b>	<b>0,60</b>
Carico accidentale (in kg)	<b>150</b>	<b>150</b>
Carico distribuito ammissibile (kg)	<b>185</b>	<b>185</b>
Altezza minima (in metri)	<b>0,80</b>	<b>0,80</b>
Altezza massima (in metri)	<b>2,05</b>	<b>2,80</b>

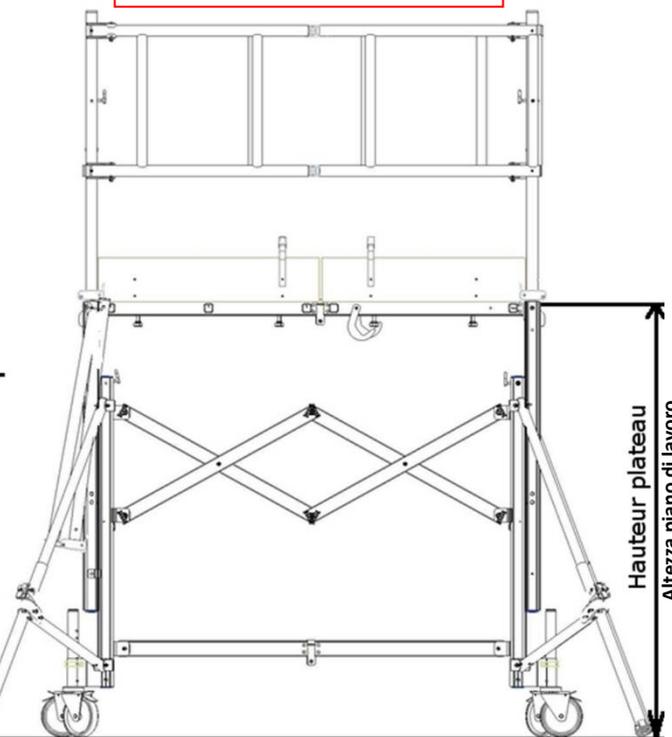
# X-TOWER

## 1-4 Schemi del trabattello X-TOWER 2 m con le varie altezze possibili del piano di lavoro

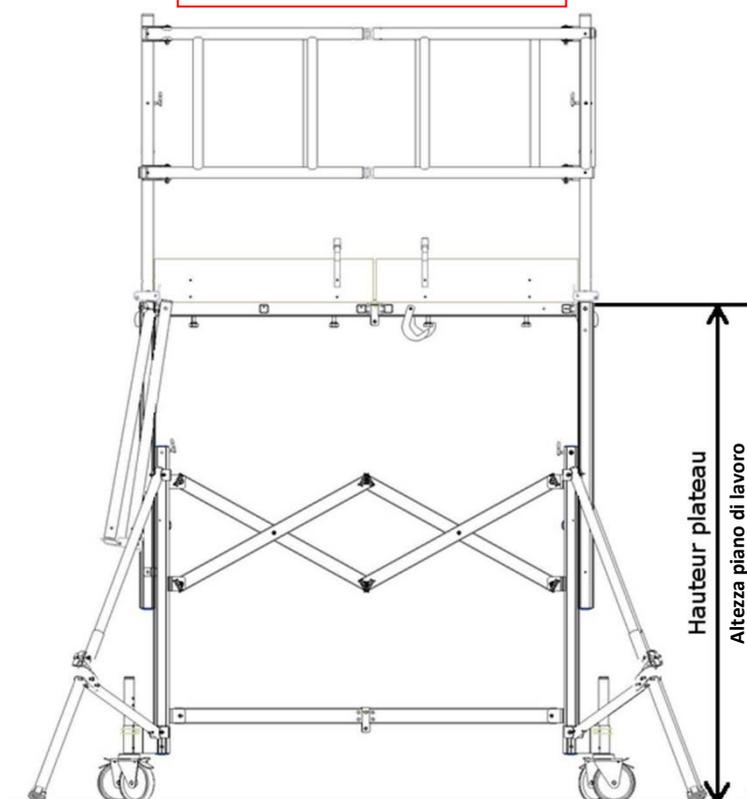
Altezza piano di lavoro: 1,30 m



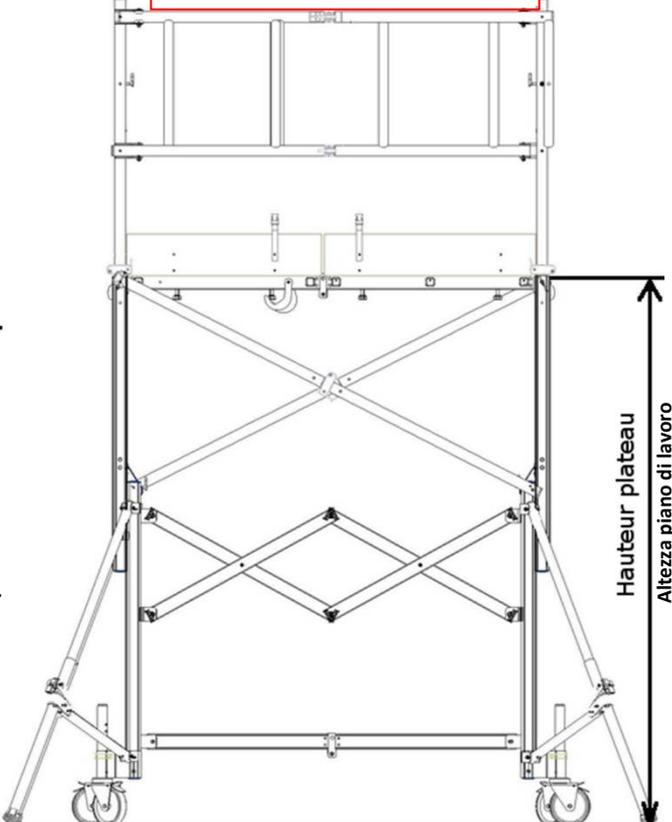
Altezza piano di lavoro: 1,55 m



Altezza piano di lavoro: 1,80 m



Altezza piano di lavoro: 2,05 m

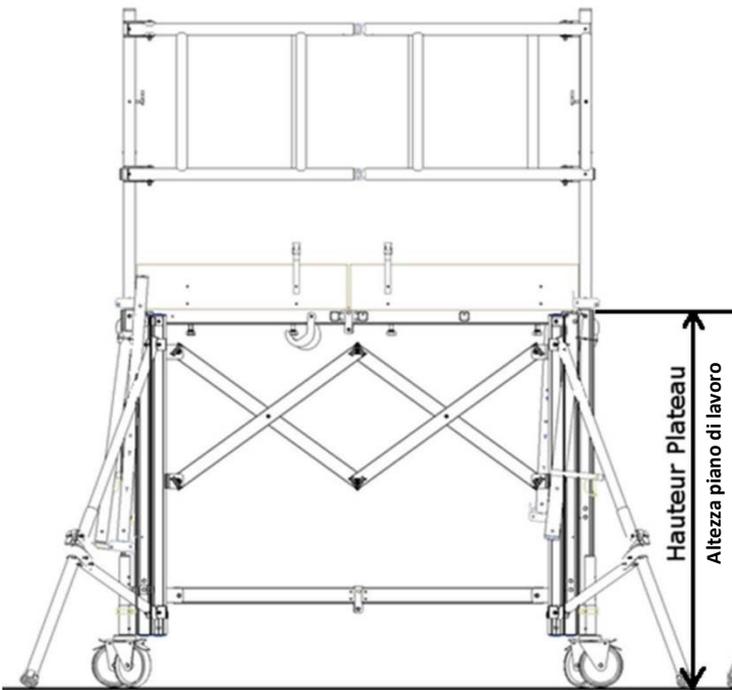


Installazione obbligatoria dei supporti diagonali

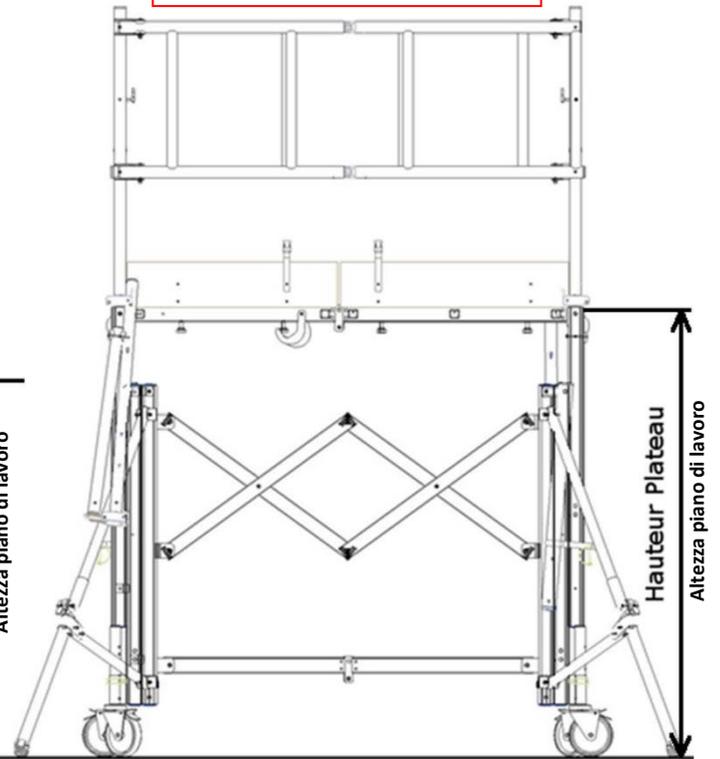
# X-TOWER

## 1-5 Schemi del trabattello X-TOWER 3 m con le varie altezze possibili del piano di lavoro

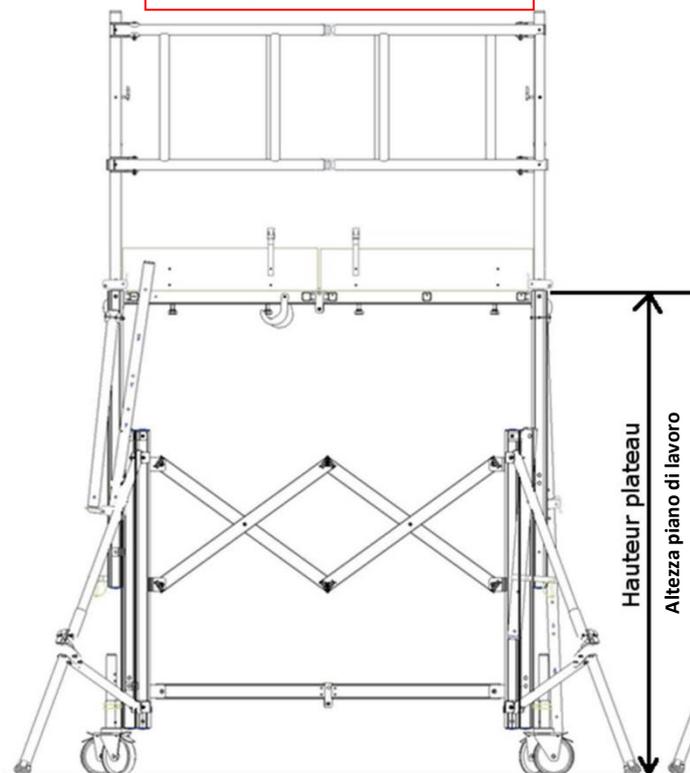
Altezza piano di lavoro: 1,30 m



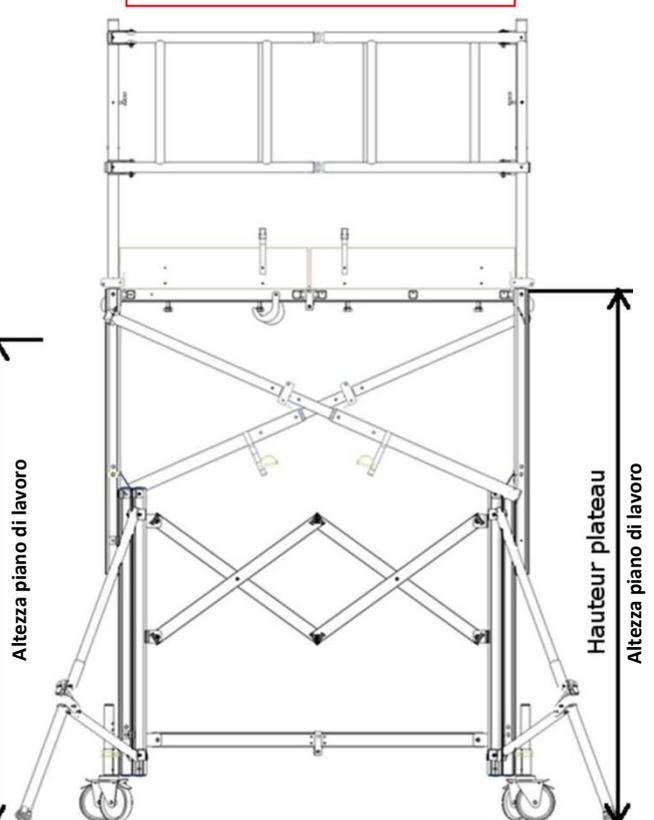
Altezza piano di lavoro: 1,55 m



Altezza piano di lavoro: 1,80 m



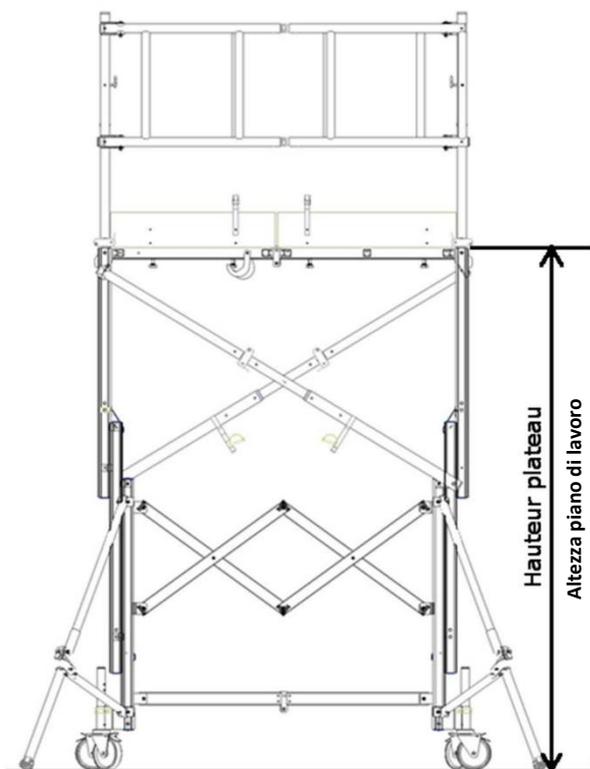
Altezza piano di lavoro: 2,05 m



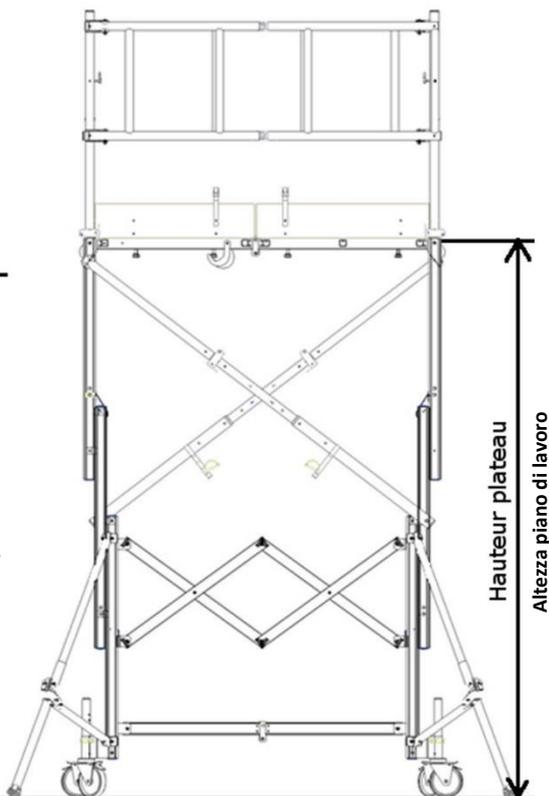
Installazione obbligatoria dei supporti diagonali

# X-TOWER

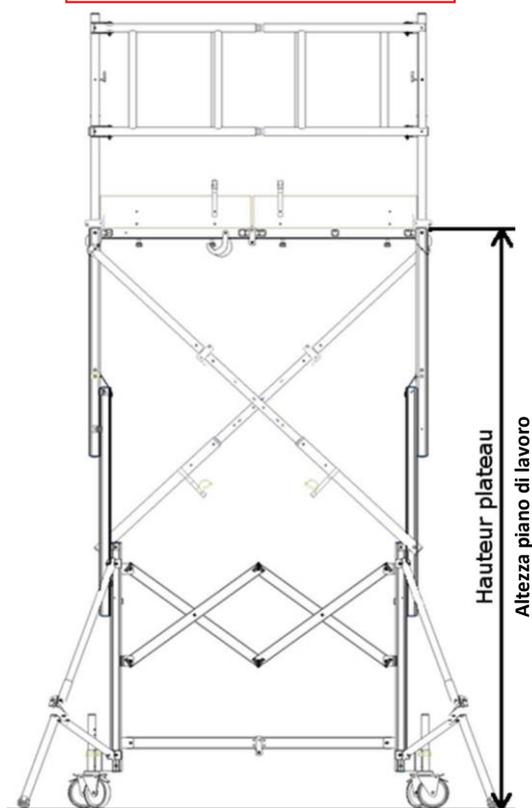
Altezza piano di lavoro: 2,30 m



Altezza piano di lavoro: 2,55 m



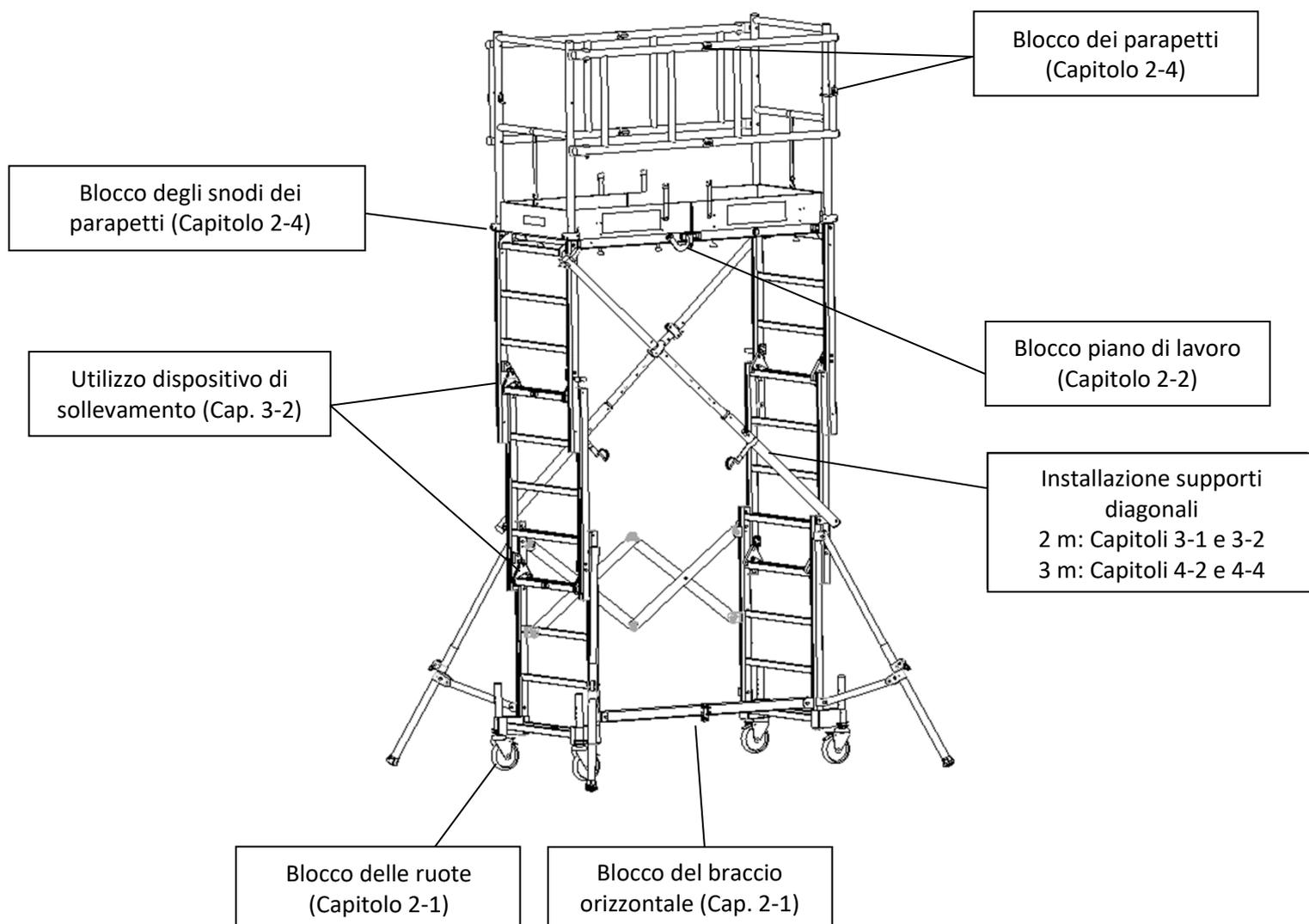
Altezza piano di lavoro: 2,80 m



# X-TOWER

## 1-6 Precauzioni di montaggio

- Montare e utilizzare il trabattello seguendo le istruzioni di questo manuale (da leggere per intero prima del primo utilizzo).
- Lo X-Tower deve essere montato e smontato solamente da personale formato alle istruzioni di montaggio e utilizzo.
- Gli elementi danneggiati o di marchi diversi non devono essere utilizzati.
- È obbligatorio indossare dispositivi di protezione individuale (DPI) durante il montaggio e lo smontaggio del trabattello.
- Rispettare l'ordine di montaggio e smontaggio previsto nel manuale.
- Prima del primo utilizzo, rimuovere le fascette di plastica collocate all'altezza dei supporti diagonali e dei dispositivi di blocco dei parapetti.
- Un'attenzione particolare dovrà essere accordata ai seguenti punti:



# X-TOWER

## Capitolo 2

## Montaggio, altezza piano di lavoro 1,30 m

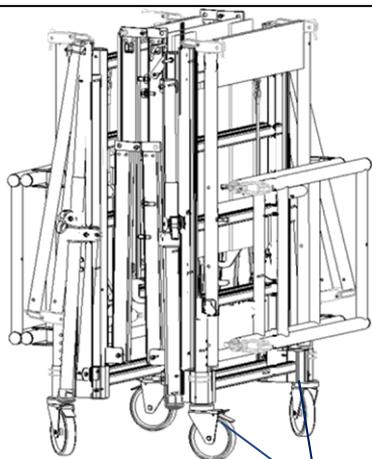
Questa sezione è comune a entrambi i modelli (2 e 3 metri).

### 2-1 Apertura del trabattello

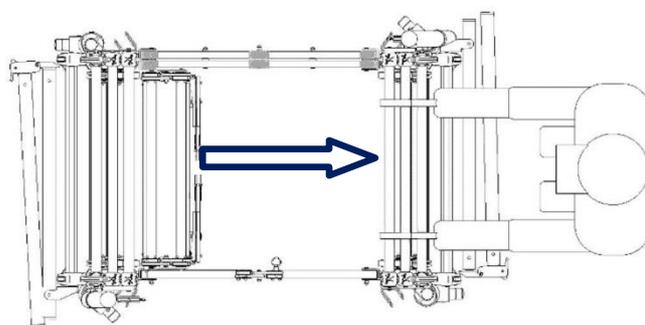
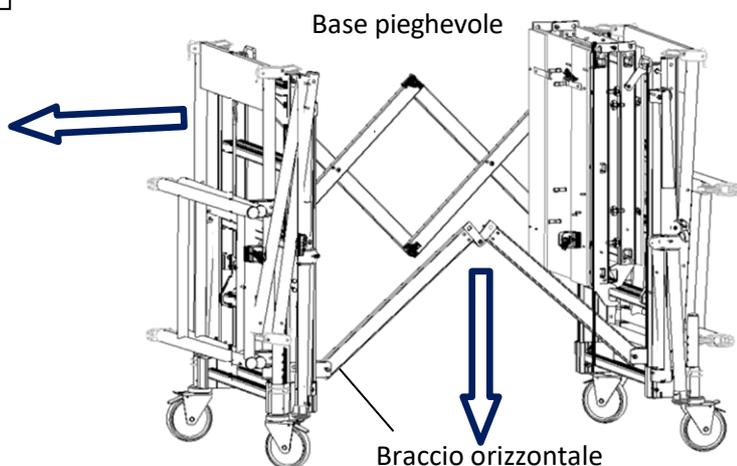
Se il prodotto è munito di un kit di carico, rimuoverlo (si veda il Capitolo 9). Altrimenti, rimuovere solamente la cinghia che avvolge il prodotto.

Con il piede, bloccare i freni delle 2 ruote della scala alla quale è agganciato il piano di lavoro

Tirare la scala che non sostiene il piano di lavoro, mettendosi dietro di essa, fino a quando il braccio inferiore non sarà all'orizzontale, tenendo le scale più parallele possibili



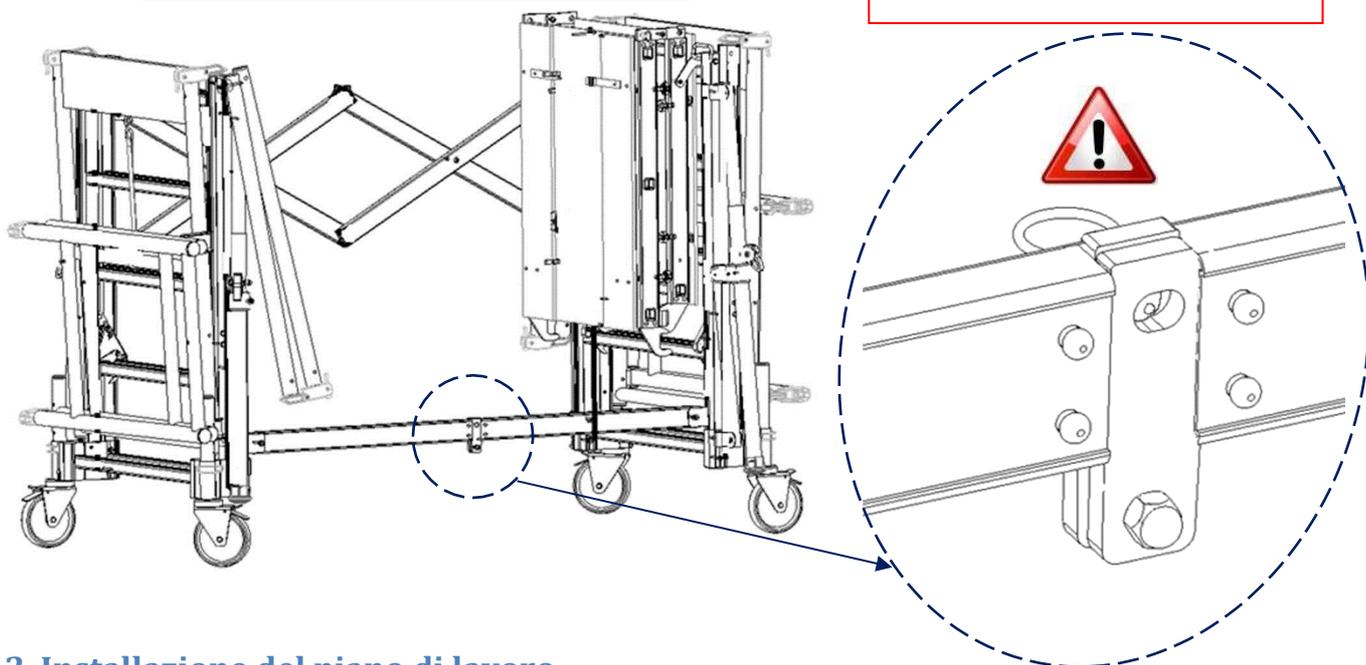
Il freno deve essere messo in posizione di blocco



# X-TOWER

Esercitare una pressione sul braccio orizzontale per bloccarlo

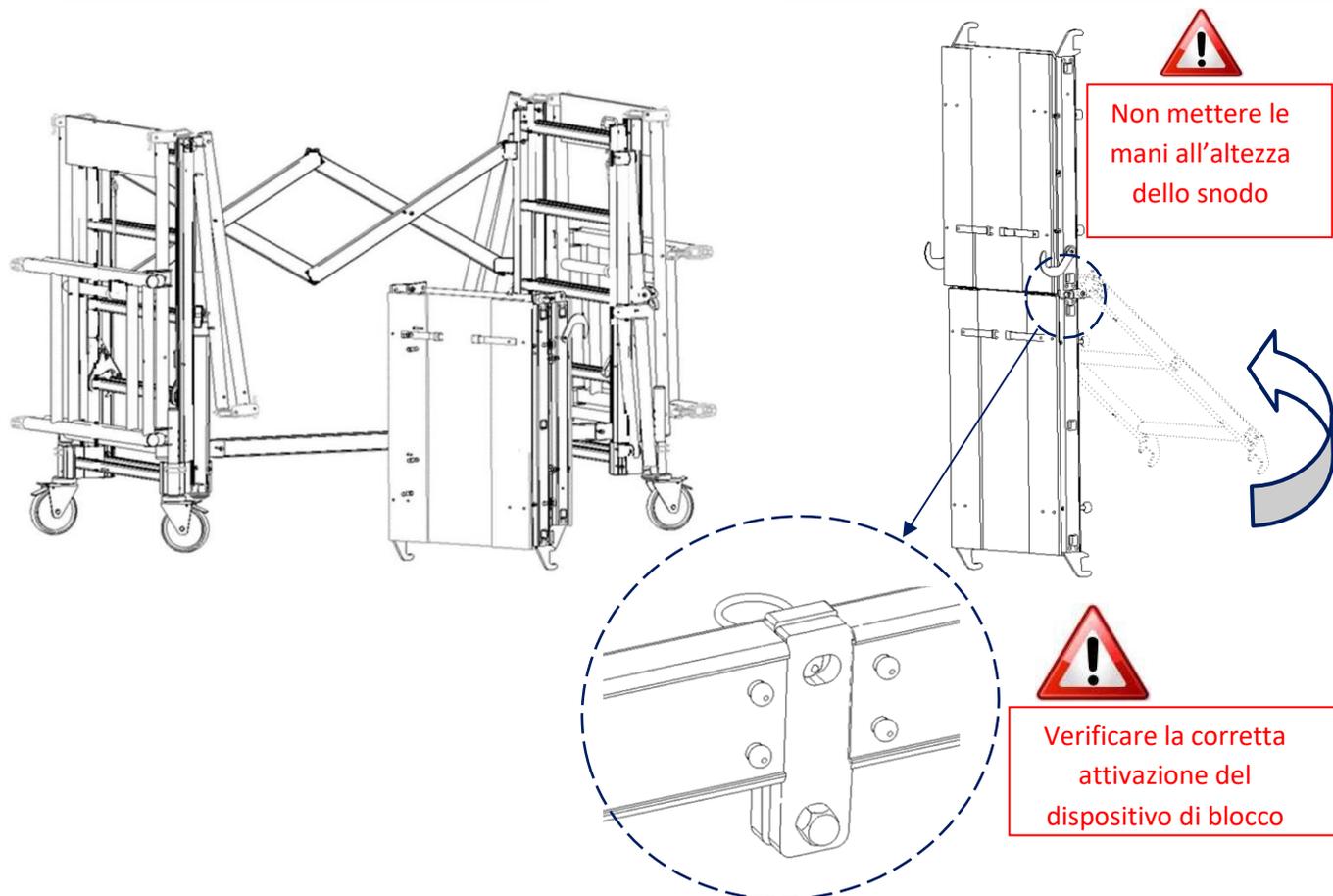
Verificare la corretta attivazione del dispositivo di blocco



## 2-2 Installazione del piano di lavoro

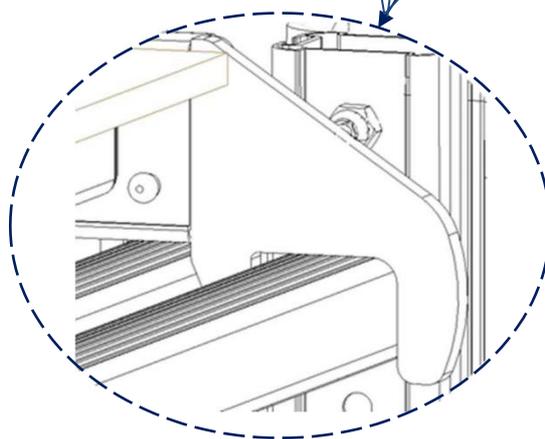
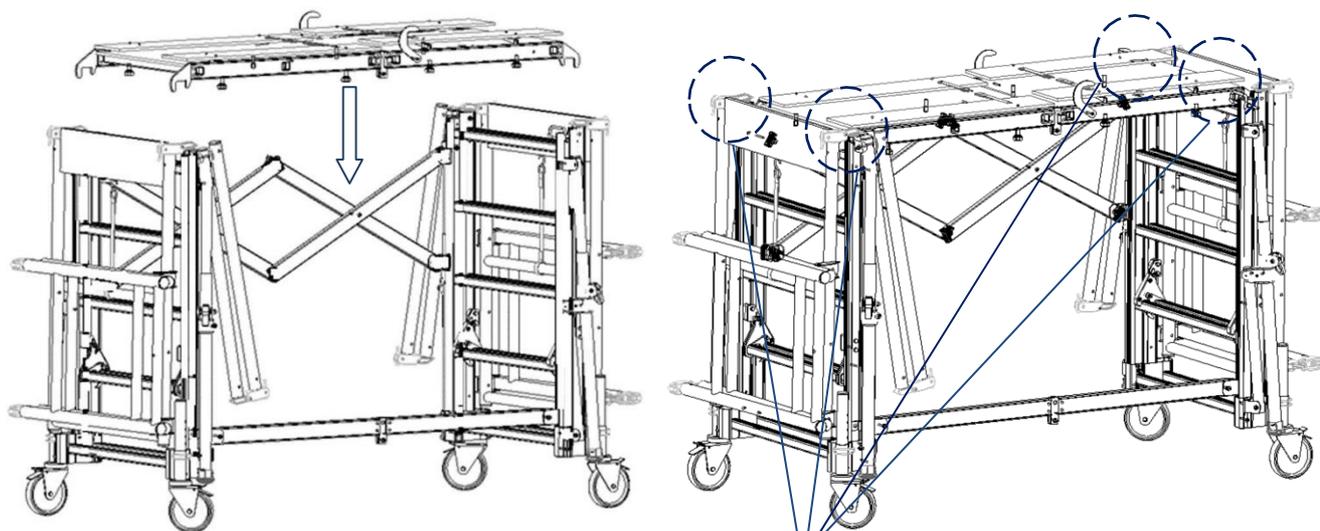
Estrarre il piano di lavoro e poggiarlo a terra in posizione verticale

Solleverla la parte con la botola per aprire completamente il piano di lavoro



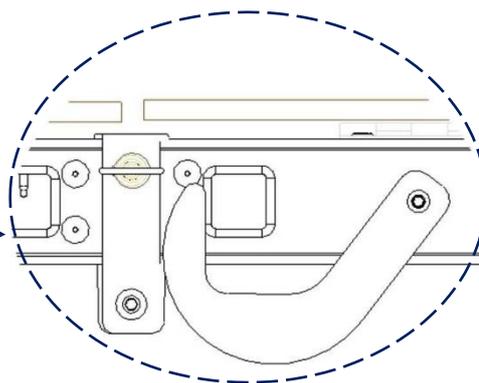
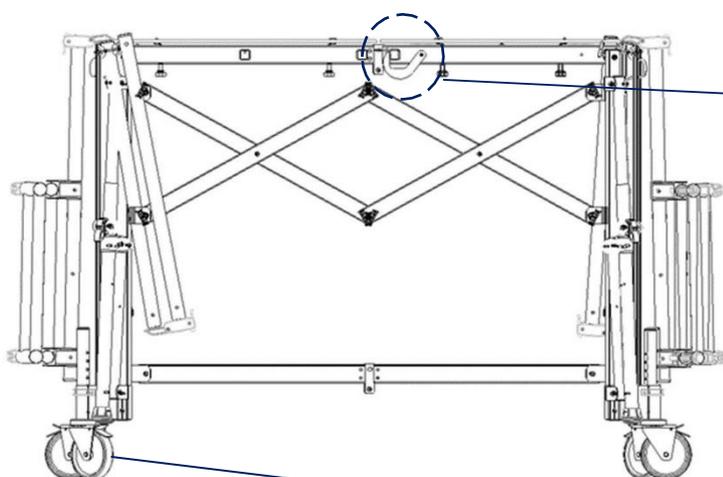
# X-TOWER

Collocare il piano di lavoro in modo che i ganci poggino sulle scale ubicate più all'esterno

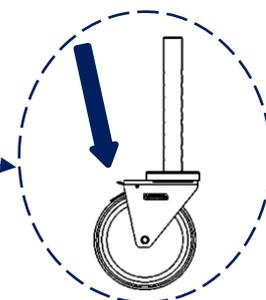


Verificare il corretto posizionamento dei 4 ganci del piano di lavoro sui pioli

Bloccare i 2 ganci di supporto



Bloccare le altre due ruote del trabattello



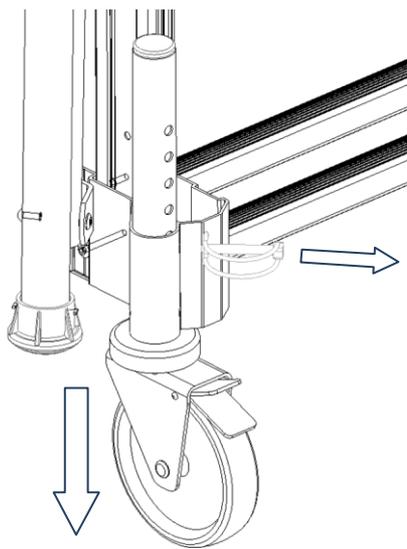
Il freno deve essere messo in posizione di blocco

# X-TOWER

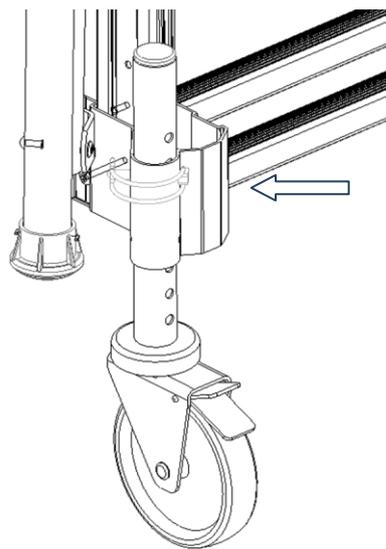
## 2-3 Regolazione delle ruote

Verificare l'allineamento del piano di lavoro rispetto al pavimento in senso longitudinale e trasversale. Nel caso in cui il trabattello poggi su un terreno non piatto, è possibile regolarne le ruote per allineare il piano di lavoro.

Rimuovere la coppia di fissaggio e regolare l'altezza della ruota



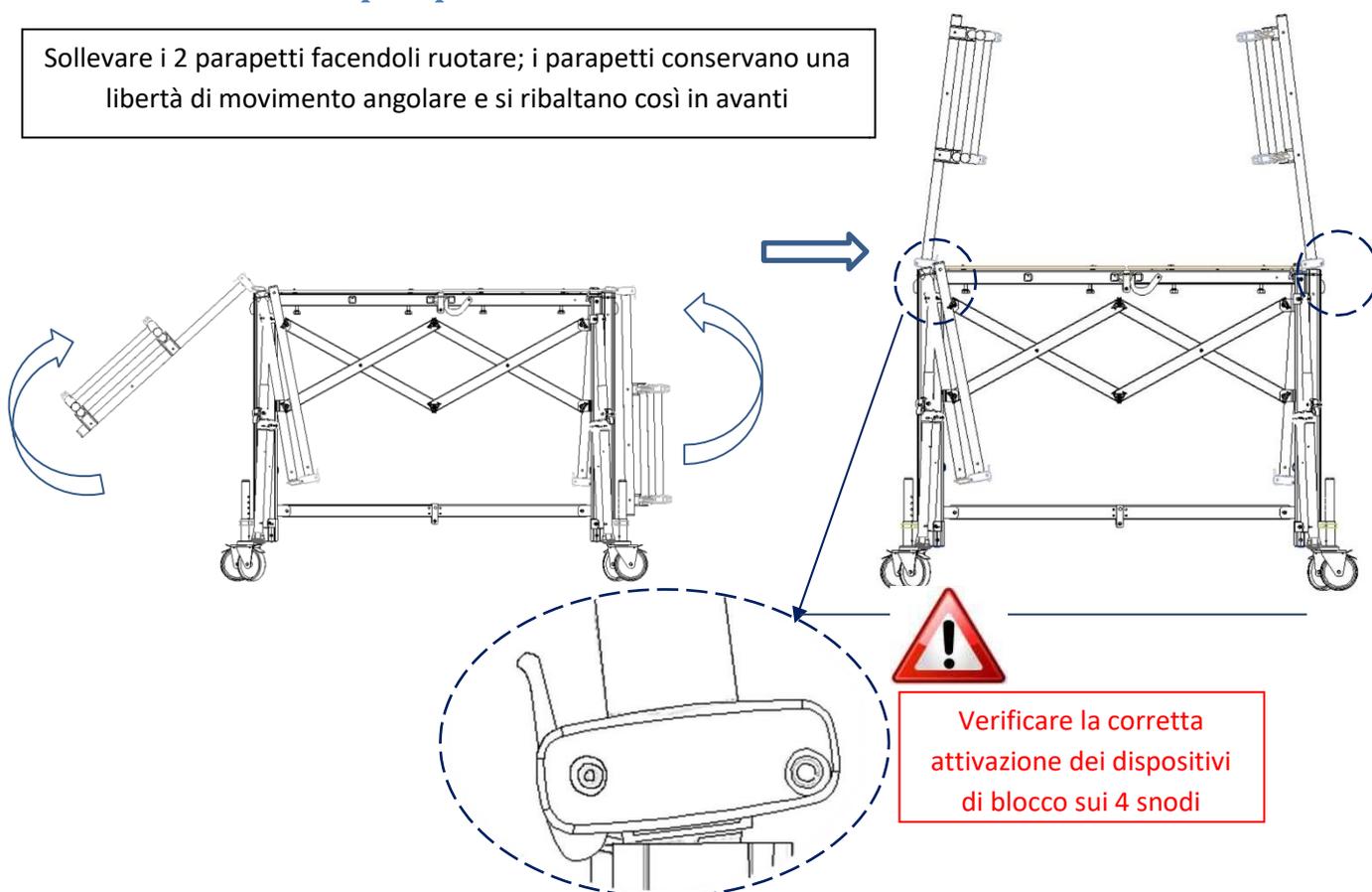
Allineare il foro della ruota più vicino a quello del supporto e reinserire la coppia



Effettuare questa operazione per tutte le ruote necessarie a un corretto allineamento del piano di lavoro rispetto al pavimento. Controllare l'allineamento del piano di lavoro prima di procedere al suo sollevamento.

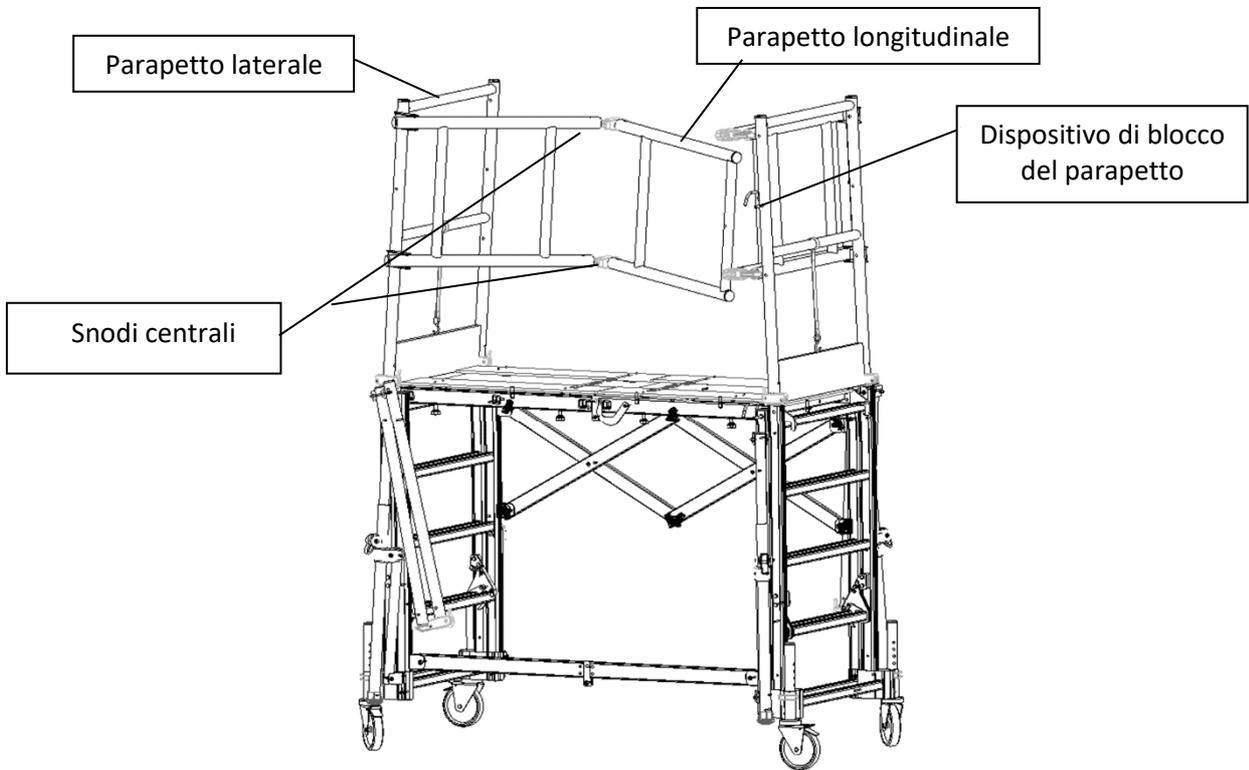
## 2-4 Installazione dei parapetti

Sollevare i 2 parapetti facendoli ruotare; i parapetti conservano una libertà di movimento angolare e si ribaltano così in avanti



# X-TOWER

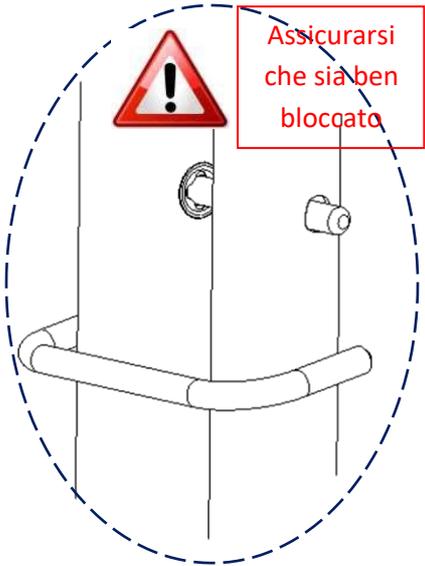
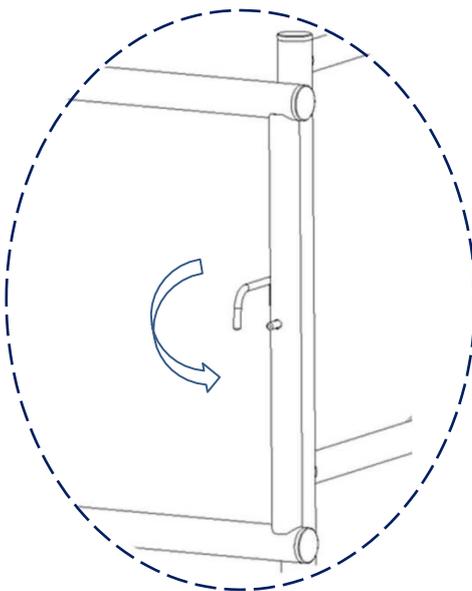
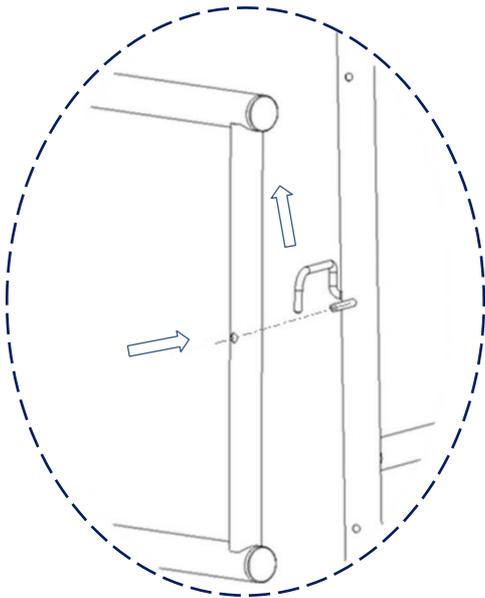
Slegare la cinghia di uno dei parapetti e aprirne la parte longitudinale per portarla fino al dispositivo di blocco del parapetto opposto, senza far scattare lo snodo centrale



## Bloccare i parapetti

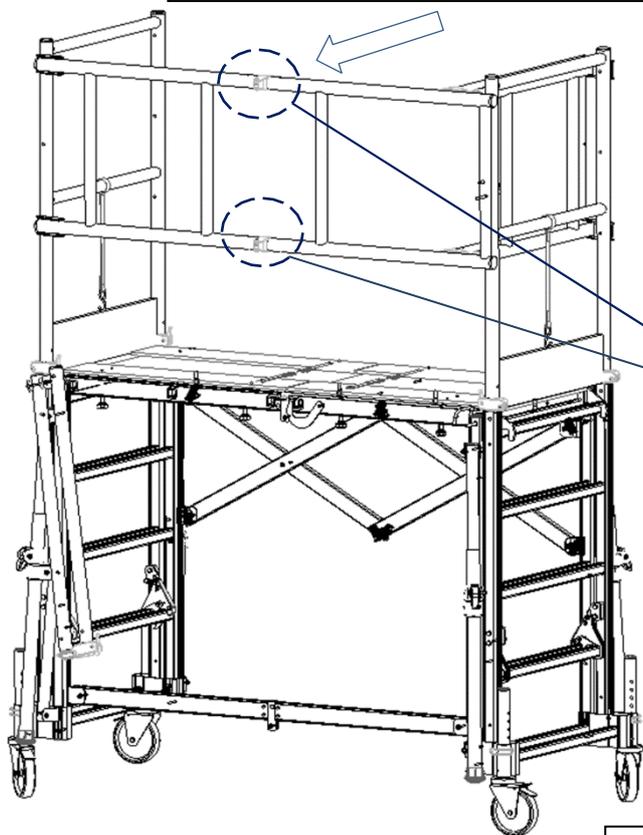
Solleverre il dispositivo di blocco e inserirlo nel foro del parapetto

Abbassare il dispositivo per bloccare il parapetto

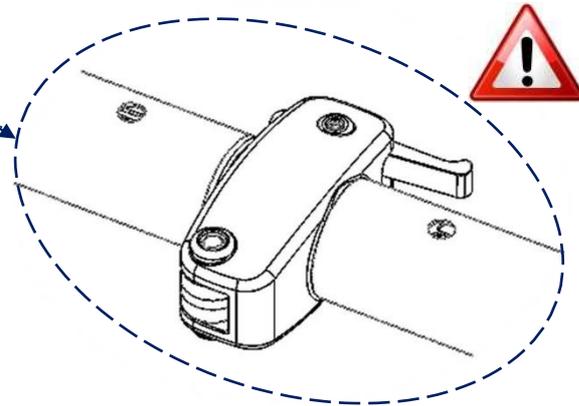


# X-TOWER

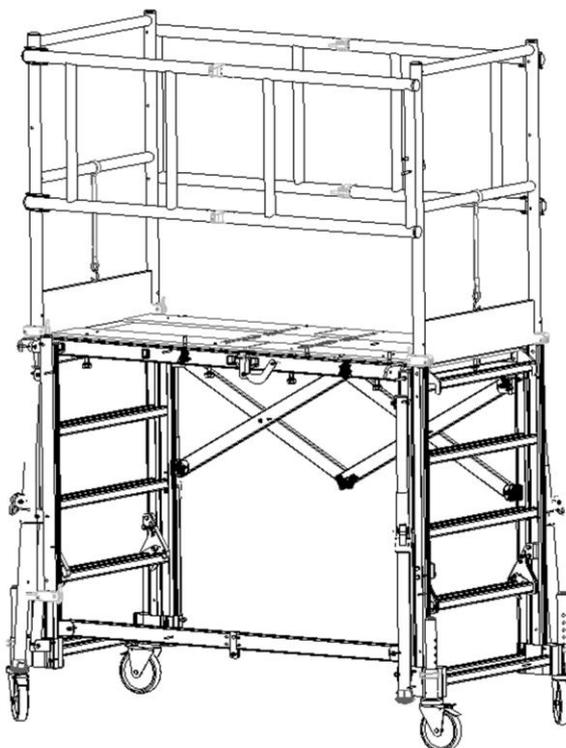
Esercitare una trazione sul parapetto  
per bloccare lo snodo centrale



Verificare la corretta  
attivazione dei dispositivi di  
blocco su ambo gli snodi



Ripetere l'operazione sul  
secondo parapetto

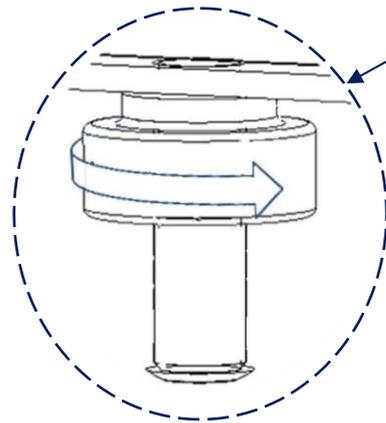
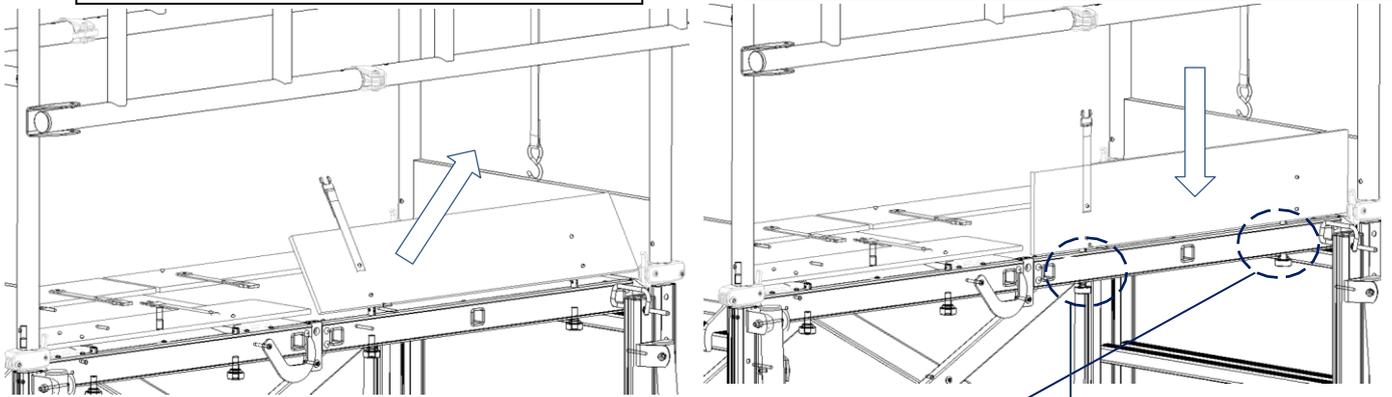


# X-TOWER

## 2-5 Installazione dei fermapiedi

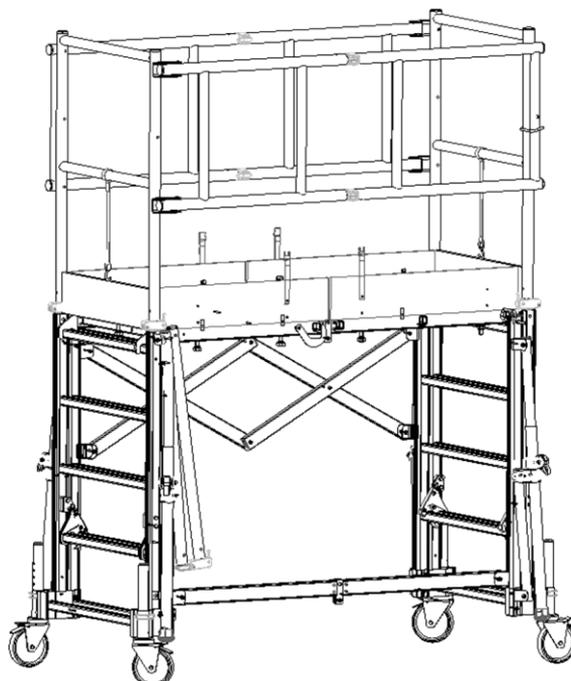
Slegare le cinghie che collegano i fermapiedi e sollevare il primo fermapiedi

Abbassare verticalmente il fermapiedi e bloccarlo per mezzo delle ghiere situate sotto il supporto



Stringere entrambe le ghiere per collocare correttamente il fermapiedi e immobilizzarlo

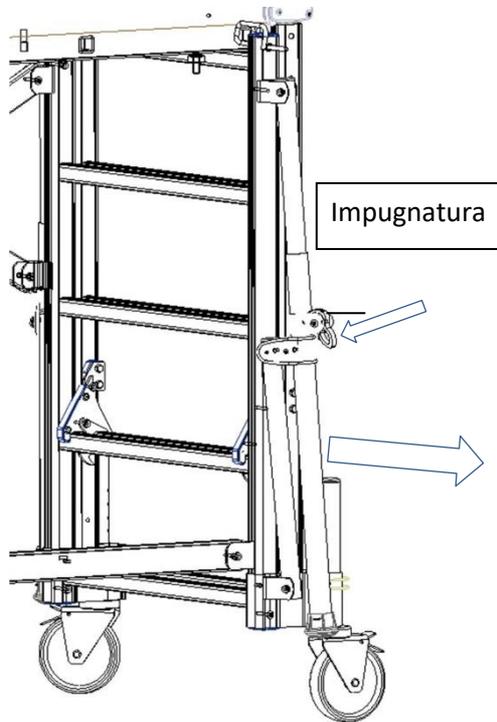
Fare lo stesso con gli altri tre fermapiedi



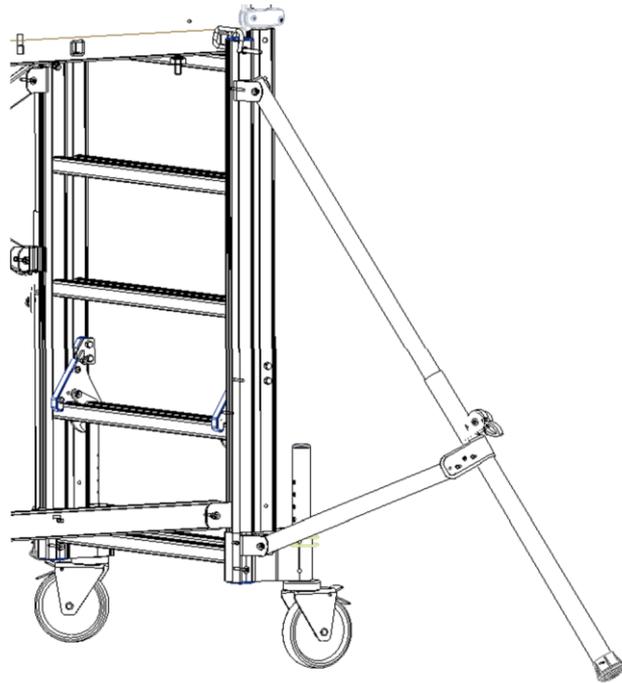
# X-TOWER

## 2-6 Installazione degli stabilizzatori

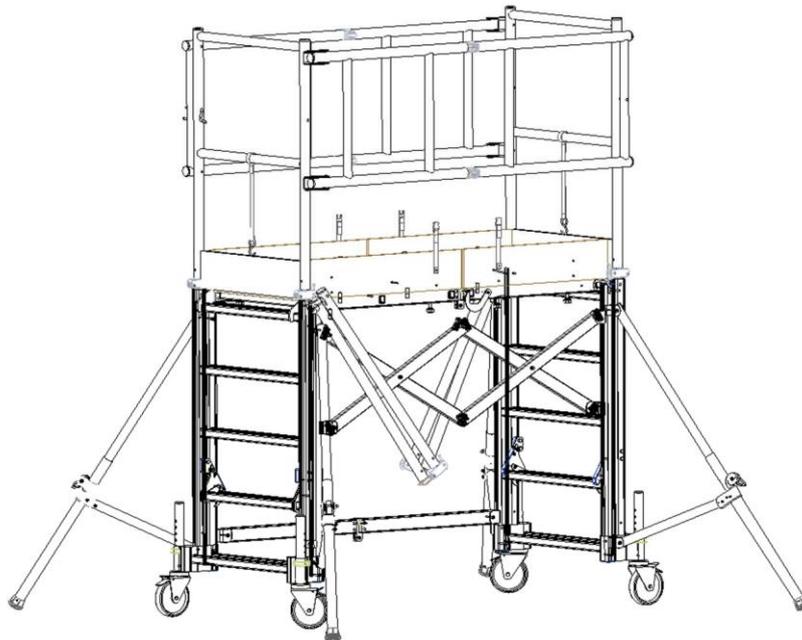
Premendo sull'impugnatura,  
tirare all'indietro gli stabilizzatori



Aprire lo stabilizzatore fino a quando non poggerà  
completamente a terra e rilasciare l'impugnatura



Ripetere l'operazione sugli altri 3 stabilizzatori



Il trabattello è adesso pronto per essere usato con un'altezza del piano di lavoro a 1,30 metri.  
Per il sollevamento del trabattello a 2 metri, vedi Capitolo 3; per un sollevamento a 3 metri, vedi Capitolo 4.

# X-TOWER

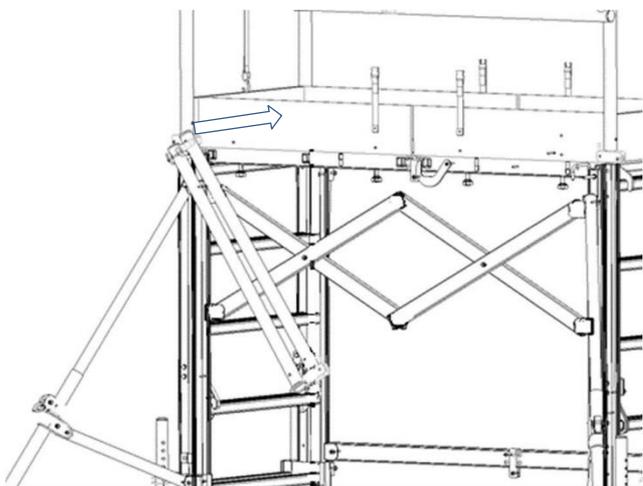
## Capitolo 3

## Sollevamento del modello 2 metri

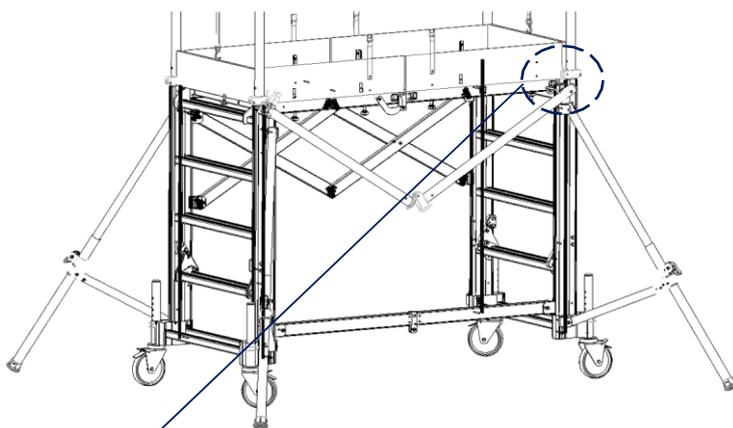
### 3-1 Installazione del supporto diagonale

Il supporto diagonale deve essere installato solamente quando il prodotto è sollevato alla sua massima altezza.

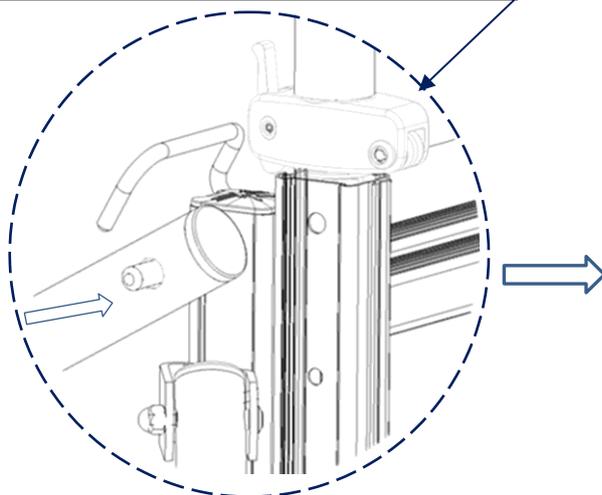
Sbloccare il supporto diagonale per aprirlo



Agganciare il supporto diagonale al dispositivo di blocco della scala opposta



Far passare il dispositivo di blocco attraverso il foro del supporto diagonale



Abbassare il dispositivo di blocco verso il supporto diagonale

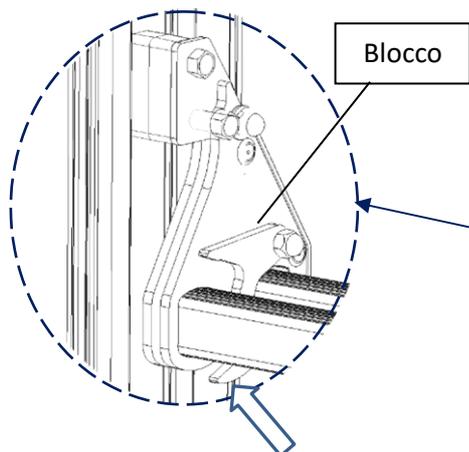


Ripetere questa operazione sul secondo supporto diagonale.

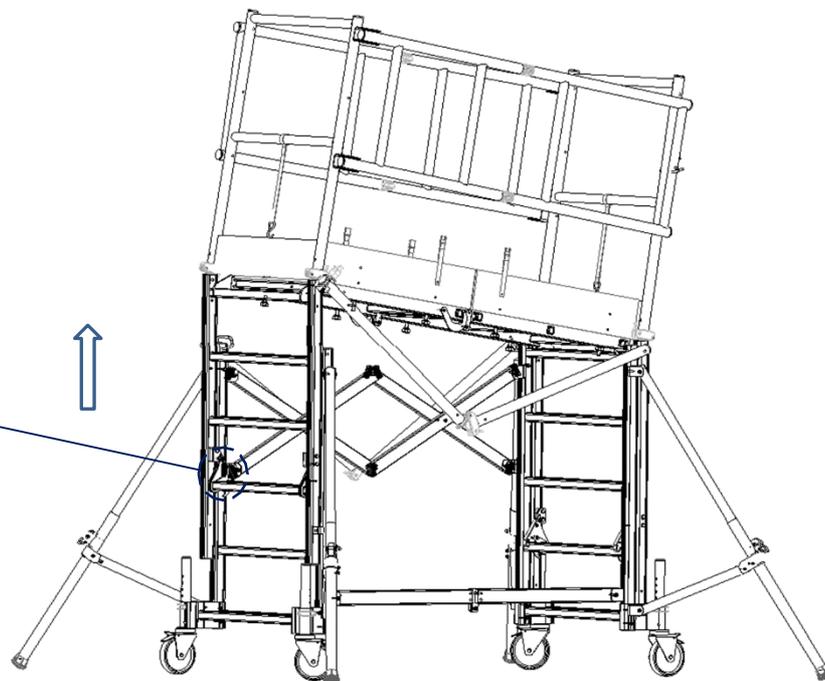
# X-TOWER

## 3-2 Sollevamento del prodotto

Liberare i 2 blocchi del dispositivo di sollevamento esercitando una pressione sotto al piolo



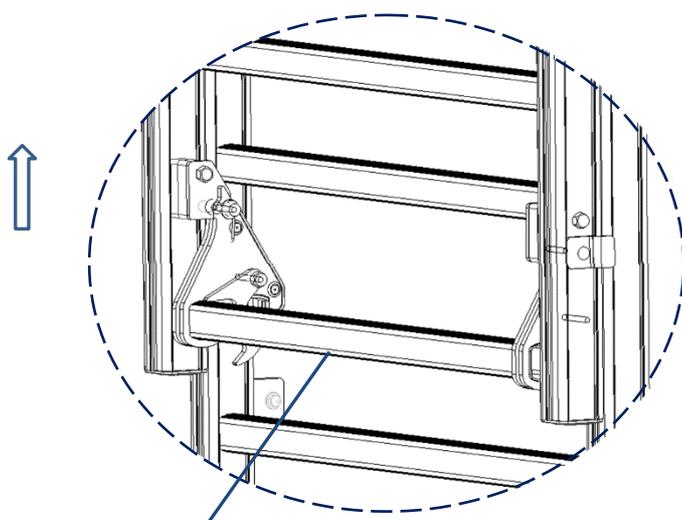
Sollevare la scala di un piolo, come indicato nello schema sottostante



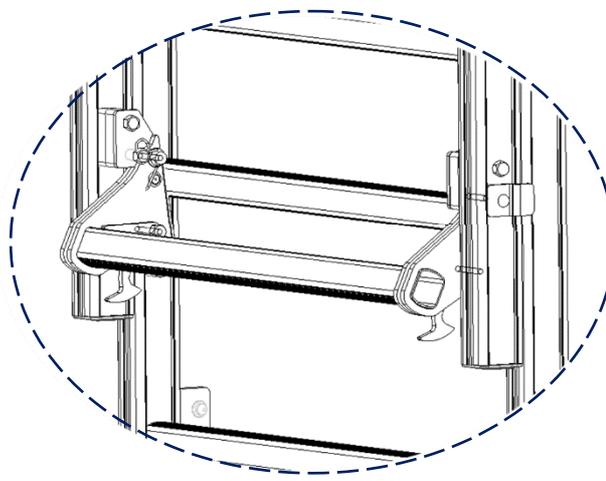
Non mettere le dita tra le due scale, ma impugnare il piolo da sotto

Sollevare la scala **senza tenere il dispositivo di sollevamento**, che si sposta autonomamente

Il dispositivo di sollevamento si sposta quando raggiunge il piolo subito sotto



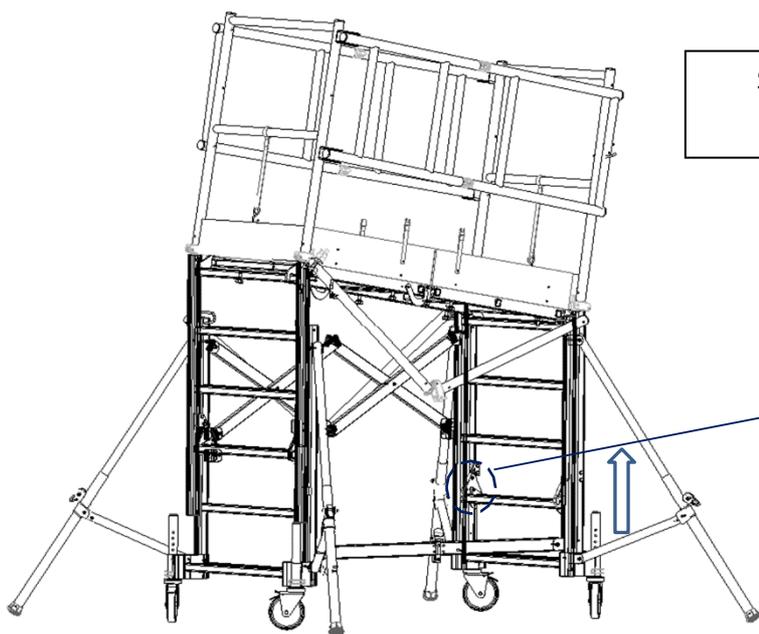
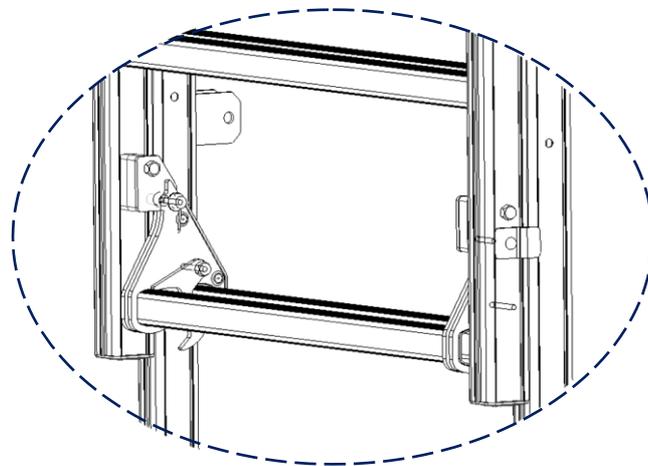
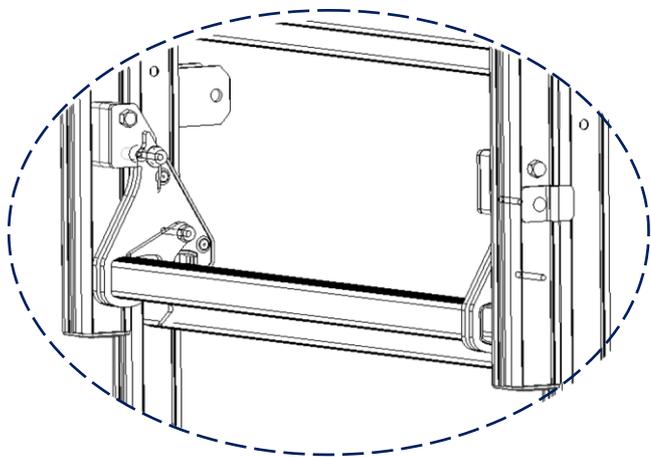
Dispositivo di sollevamento



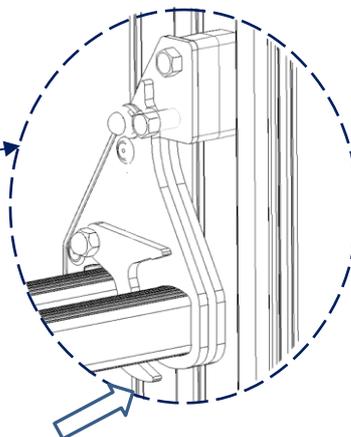
# X-TOWER

Il dispositivo di sollevamento torna in posizione dopo aver oltrepassato il piolo

Far scendere la scala fino a quando il dispositivo di sollevamento non poggerà sul piolo



Sbloccare i 2 blocchi situati sulla scala opposta e sollevare la scala



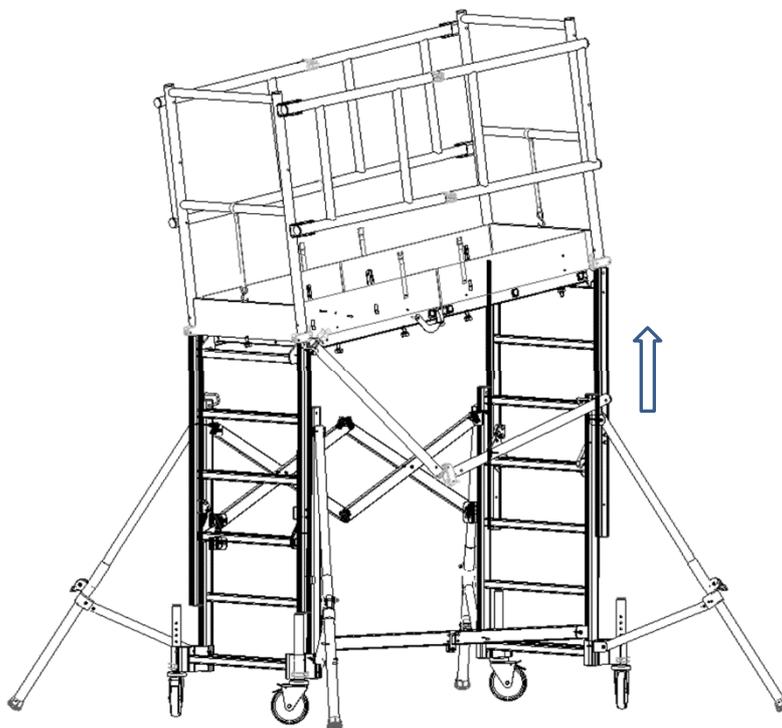
Per un'altezza del piano di lavoro a 1,55 metri, poggiare il dispositivo di sollevamento sul piolo subito sopra e riagganciare i blocchi del dispositivo di sollevamento.  
Per un'altezza superiore, poggiare il dispositivo di sollevamento due pioli più in alto.

# X-TOWER

Sollevarre di nuovo la prima scala.

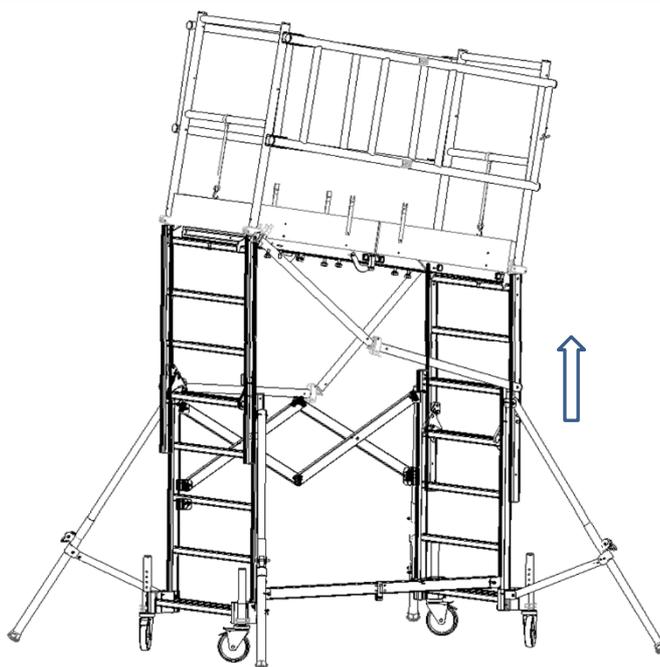
Per un'altezza del piano di lavoro a 1,80 metri, poggiare il dispositivo di sollevamento sul piolo subito sopra e riagganciare i blocchi del dispositivo di sollevamento.

Per un'altezza superiore, poggiare il dispositivo di sollevamento due pioli più in alto.

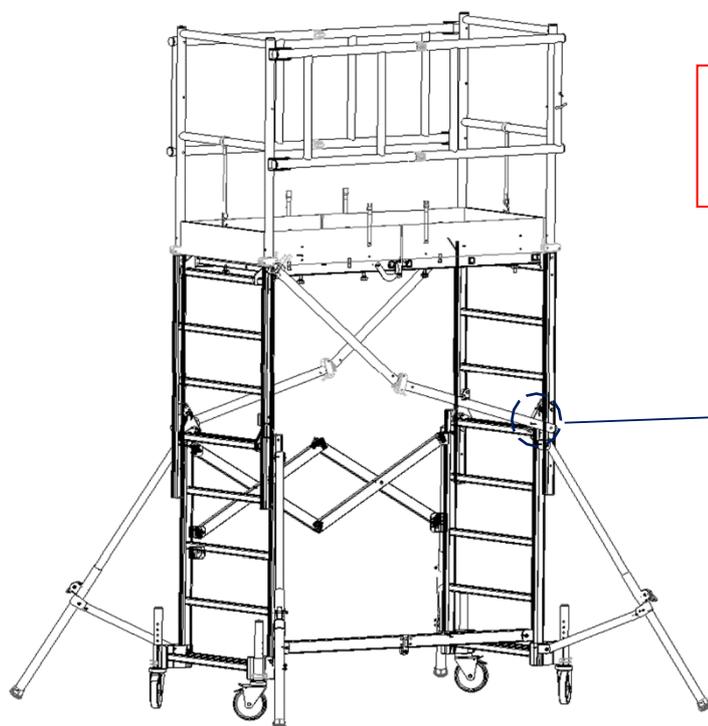


Sollevarre la seconda scala di un piolo per ottenere l'altezza di lavoro massima di 2,05 metri.

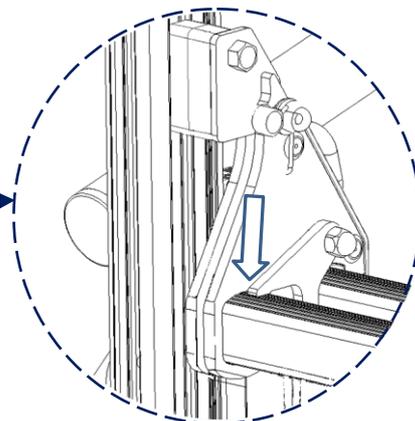
Le etichette "Stop" del dispositivo di sollevamento sono allora allineate.



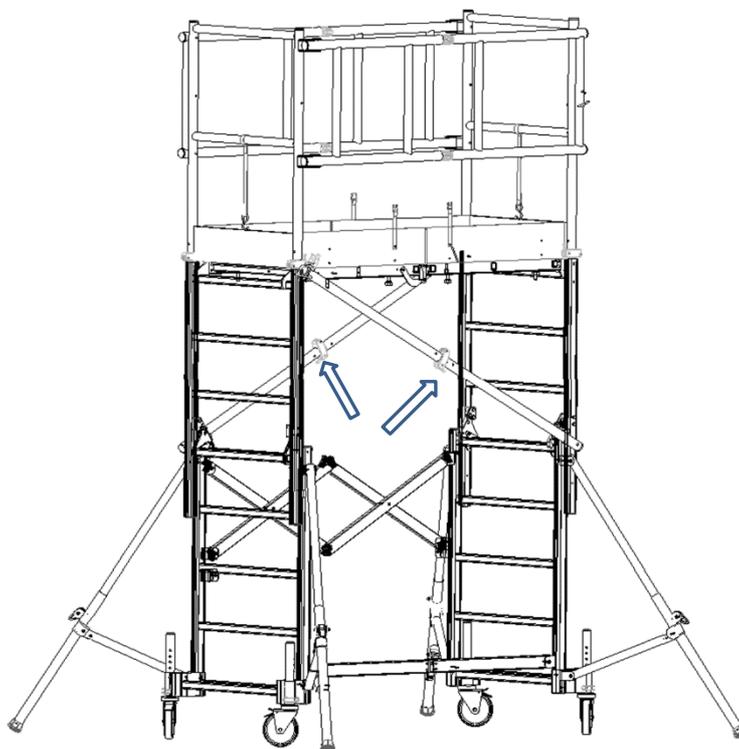
# X-TOWER



Per agganciare i 4 blocchi dei dispositivi di sollevamento basta esercitare una pressione



Esercitare una pressione sugli snodi dei supporti diagonali per bloccarli (solamente se il piano di lavoro è a 2,05 metri di altezza)



Il trabattello è adesso pronto per essere usato con un'altezza del piano di lavoro a 2,05 metri.

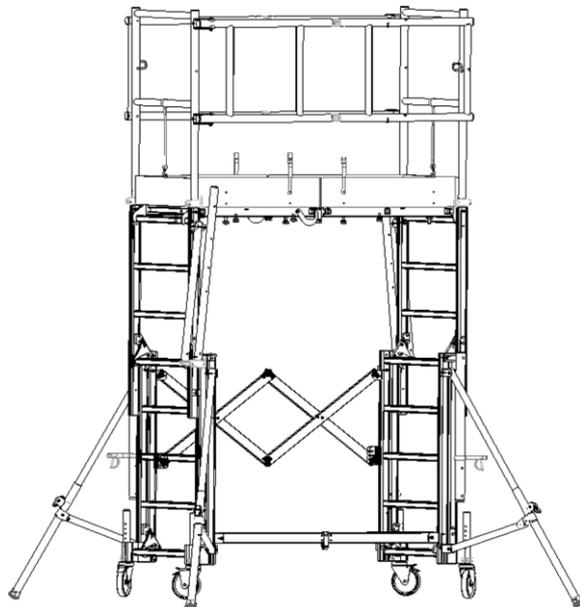
# X-TOWER

## Capitolo 4

## Sollevamento del modello 3 metri

### 4-1 Sollevamento delle scale esterne

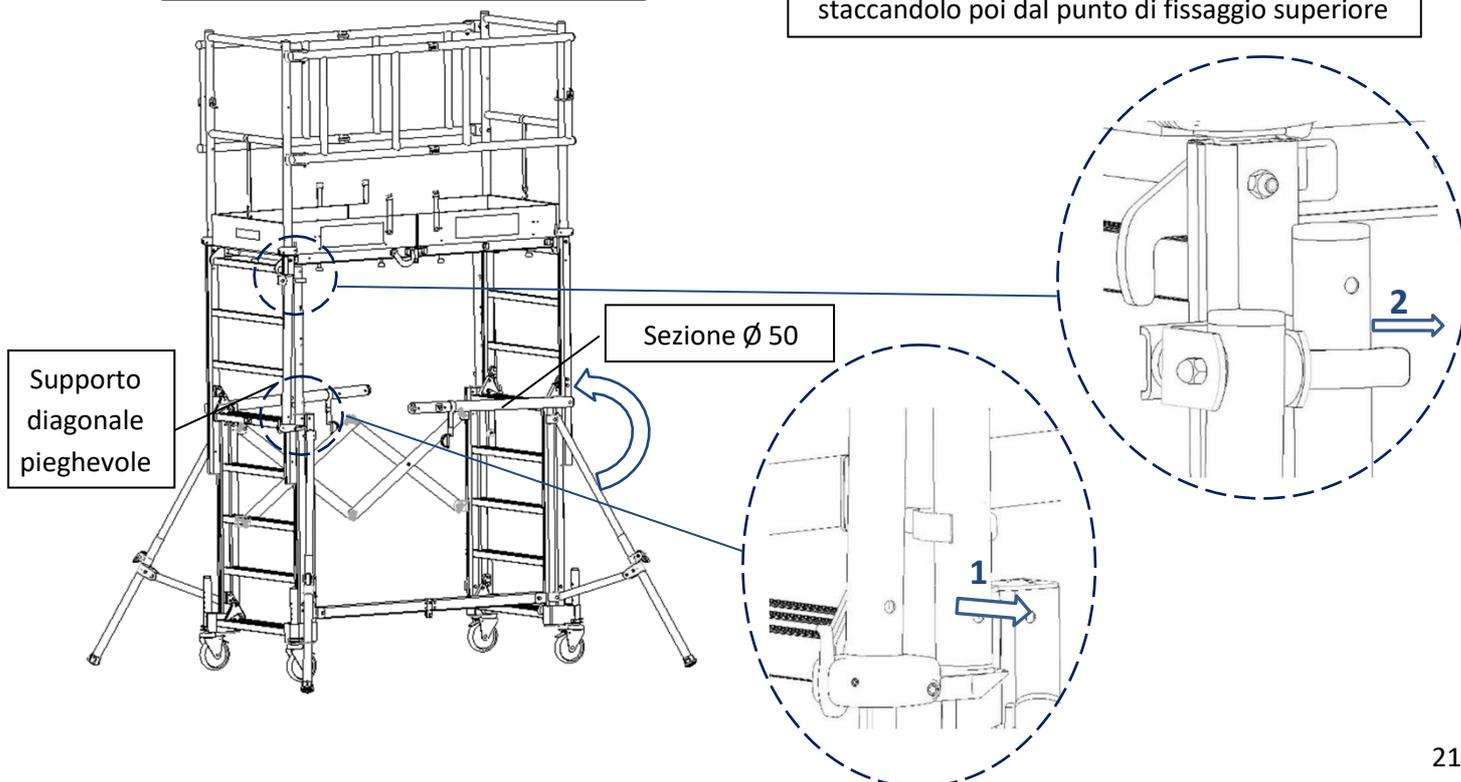
Per le scale esterne, procedere come per il modello 2 metri, ma senza installare i supporti diagonali (vedi Capitolo 3-2).



### 4-2 Installazione dei supporti diagonali

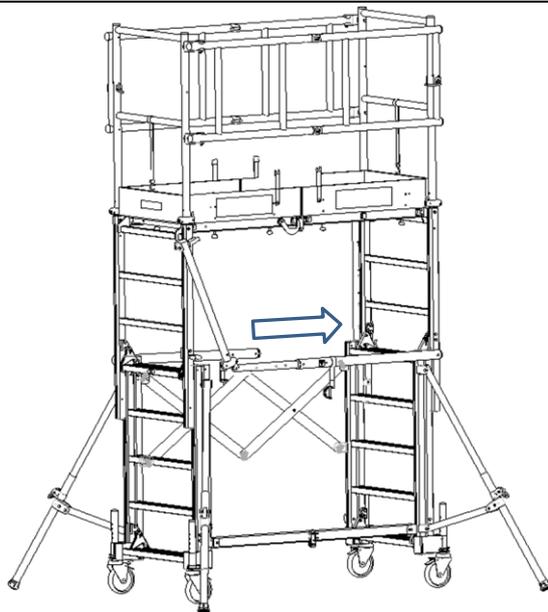
Far ruotare la sezione  $\varnothing 50$  del supporto diagonale verso l'interno

Aprire il supporto diagonale pieghevole staccandolo dalla scala nel punto di fissaggio inferiore, impugnandolo subito sotto la clip (1) e staccandolo poi dal punto di fissaggio superiore



# X-TOWER

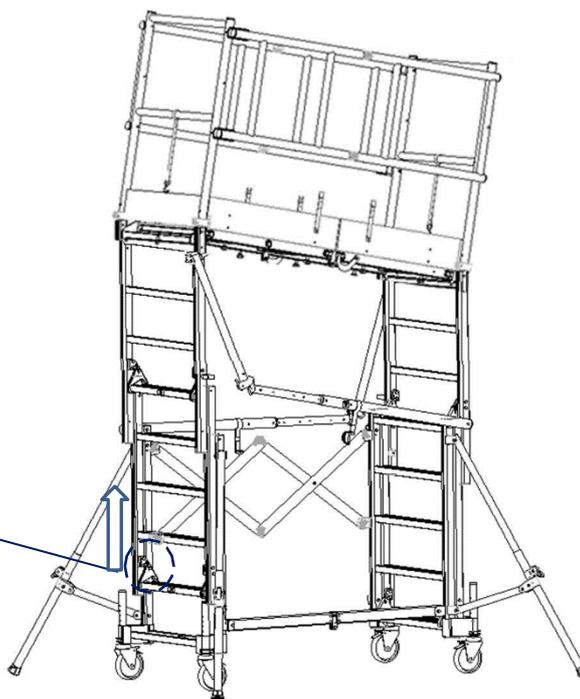
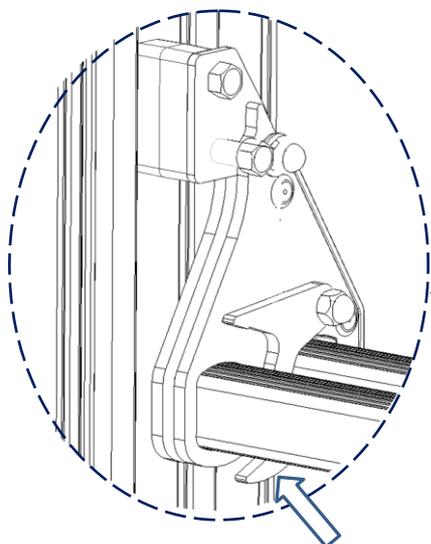
Introdurre il supporto diagonale pieghevole nella sezione  $\varnothing 50$ , senza inserire la coppiglia né bloccare il supporto diagonale nel caso in cui si desideri sollevare il trabattello più in alto. Se il trabattello è all'altezza desiderata, passare al Capitolo 4-4.



## 4-3 Sollevamento delle scale intermedie

Sollevare la scala fino a quando il dispositivo di sollevamento non poggerà sul piolo subito sopra

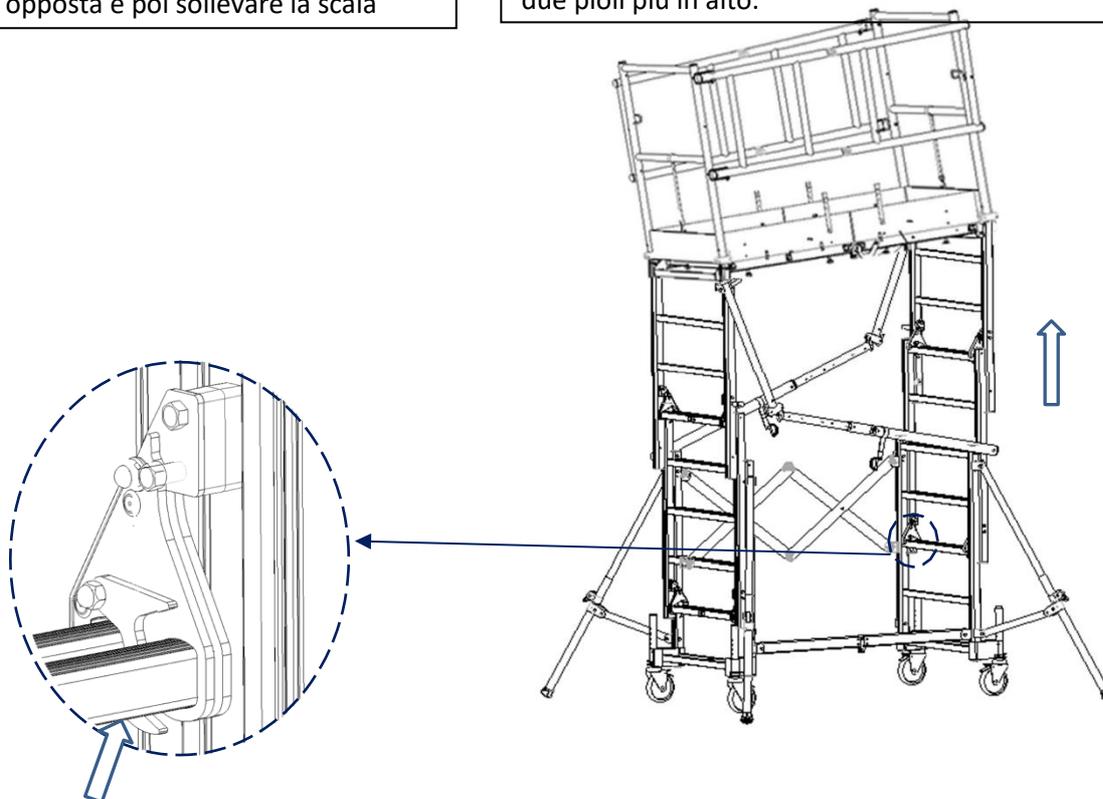
Sbloccare entrambi i blocchi del dispositivo di sollevamento su una delle due scale intermedie



# X-TOWER

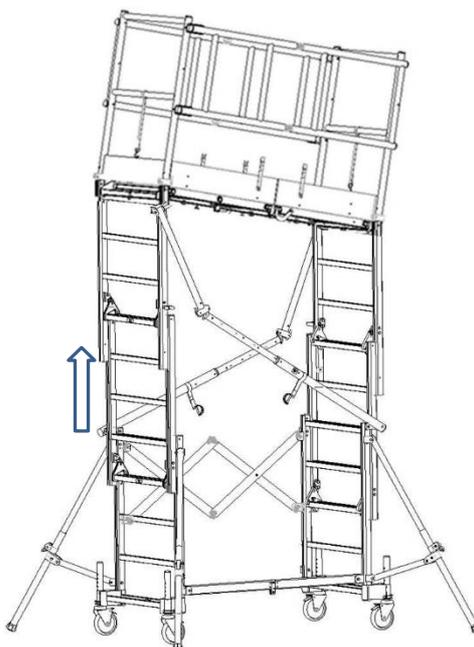
Sbloccare entrambi i blocchi del dispositivo di sollevamento della scala opposta e poi sollevare la scala

Per un'altezza del piano di lavoro a 2,30 metri, poggiare il dispositivo di sollevamento sul piolo subito sopra e riagganciare i blocchi del dispositivo di sollevamento.  
Per un'altezza superiore, poggiare il dispositivo di sollevamento due pioli più in alto.



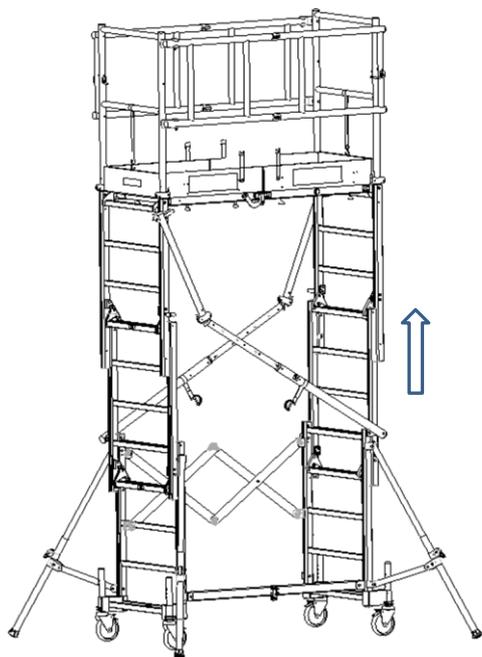
Sollevare di nuovo la prima scala.

Per un'altezza del piano di lavoro a 2,55 metri, poggiare il dispositivo di sollevamento sul piolo subito sopra e riagganciare i blocchi del dispositivo di sollevamento.  
Per un'altezza superiore, poggiare il dispositivo di sollevamento due pioli più in alto.

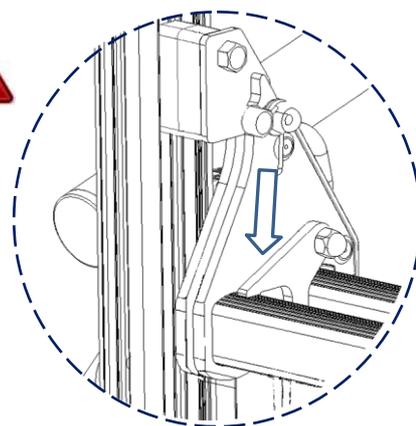


# X-TOWER

Solleverre la seconda scala di un piolo per ottenere l'altezza di lavoro massima di 2,80 m.



Per agganciare i 4 blocchi dei dispositivi di sollevamento basta esercitare una pressione

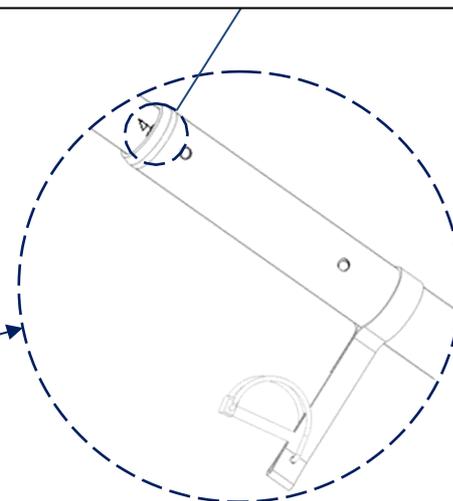
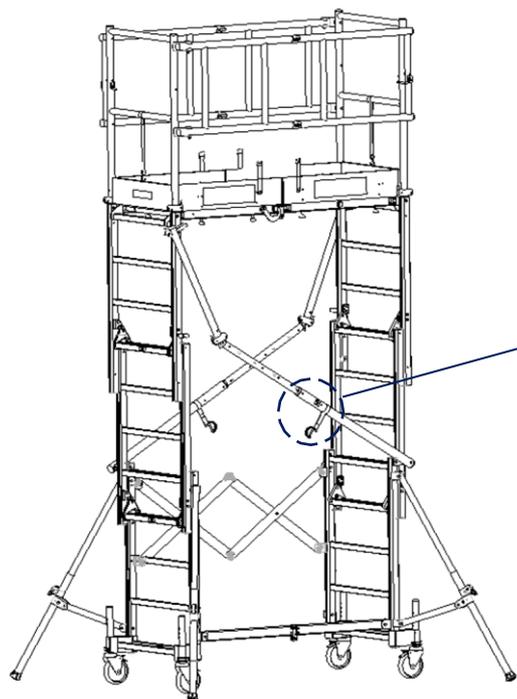


## 4-4 Blocco del supporto diagonale

Manovra da eseguire quando il piano di lavoro si trova all'altezza desiderata.

Regolare la parte pieghevole all'interno della sezione  $\varnothing 50$  fino a quando la cifra non corrisponderà all'altezza del piano di lavoro (vedi tabella)

Numero di posizione del supporto diagonale da allineare con la sezione  $\varnothing 50$



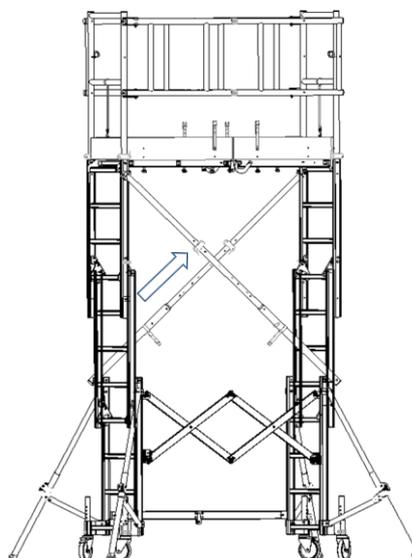
Altezza piano di lavoro	Posizione supporto diagonale
2,05 m	1
2,30 m	2
2,55 m	3
2,80 m	4

# X-TOWER

Inserire la coppiglia per collegare le due sezioni del supporto diagonale



Esercitare una pressione sullo snodo per bloccarlo, poi fare lo stesso con il secondo supporto diagonale



**Il trabattello è ora pronto per essere utilizzato.**

## Capitolo 5

### Dopo il montaggio e prima dell'utilizzo

La conformità del montaggio deve essere verificata dal responsabile della sicurezza sul cantiere incaricato dal titolare dell'impresa.

Le verifiche verteranno su:

- L'appoggio a terra degli stabilizzatori;
- Il corretto montaggio dei vari elementi;
- L'ambiente circostante;
- La corretta attivazione dei freni delle ruote;
- La buona orizzontalità del trabattello;
- L'aggancio di ogni blocco del dispositivo di sollevamento;
- Il blocco dei supporti diagonali all'altezza dei blocchi e degli snodi;
- Il blocco dei parapetti all'altezza dei blocchi e degli snodi.



**Rispettare IMPERATIVAMENTE le istruzioni del libretto incollato sotto al piano di lavoro.**

# X-TOWER

## Capitolo 6

## Istruzioni

### 6-1 Istruzioni di utilizzo

Questo libretto non può mai sostituirsi alle normative in vigore, alle quali è opportuno riferirsi.

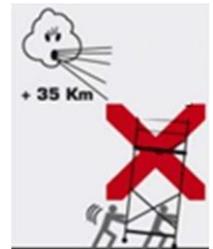
- Rispettare i carichi ammissibili sul piano di lavoro e la struttura.
- Le forze orizzontali non devono oltrepassare 30 kg.
- Vento limite con stabilizzatori = 35 km/h.
- Vento superiore a 35 km/h: ancorare il trabattello.

### Zona di lavoro:

- Non avvicinarsi ai conduttori nudi in tensione.
- Nelle zone accessibili al pubblico, vietare l'accesso al trabattello ai non addetti.
- Segnalare la zona di installazione in caso di passaggio di veicoli, mezzi da cantiere...
- Verificare l'assenza di ostacoli aerei nella zona di spostamento.
- Su un terreno soffice, prevedere l'installazione di una via di corsa.

### È vietato:

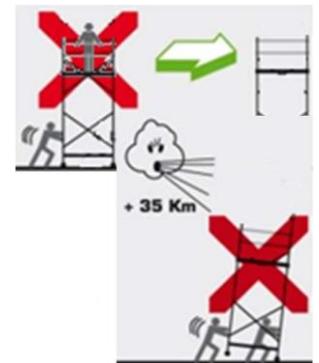
- Usare un palo di supporto, anche manuale, ubicato all'esterno del trabattello.
- Proteggere con un telone un trabattello su ruote, anche solo parzialmente.
- Aumentare l'altezza oltre quella autorizzata.
- Usare componenti diversi da quelli forniti dal fabbricante.
- Usare un trabattello non montato alla verticale (tolleranza: 1%).
- Usare un trabattello montato senza seguire le istruzioni di questo manuale.
- Stabilire un ponte tra il trabattello e un edificio o tra due trabattelli.
- Appoggiare una scala di accesso al trabattello.
- Saltare sul piano di lavoro.
- Usare assi come piano di lavoro.
- Accedere dall'esterno al piano di lavoro.
- Regolare le ruote per aumentare l'altezza del piano di lavoro (almeno una delle ruote deve essere rientrata al massimo).



# X-TOWER

## 6-2 Istruzioni di spostamento

- I trabattelli su ruote devono essere spostati solamente in modo manuale e su superfici solide e piate, senza ostacoli a terra né aerei. Durante lo spostamento, non si dovrà mai oltrepassare una velocità di camminata normale.
- Spostare il trabattello su ruote su terreni con una pendenza massima del 3%.
- Non trainare mai un trabattello su ruote per mezzo di un veicolo a motore.
- Non spostare mai un trabattello su ruote con vento superiore a 35 km/h.
- Il terreno sul quale si sposta il trabattello su ruote deve essere capace di supportare la distribuzione dei carichi.
- Su terreni soffici, prevedere l'installazione di una via di corsa.
- È vietato spostare il trabattello su ruote quando personale e/o materiali si trovano sullo stesso.
- Non sollevare il trabattello per mezzo di gru o carroponti.
- Lo X-Tower può essere spostato da una sola persona: il trabattello dovrà essere spinto e non tirato.



## Capitolo 7 Verifica e manutenzione

**Verificare i pezzi prima di ogni montaggio, facendo particolarmente attenzione a:**

- I rivestimenti e i freni delle ruote;
- I dispositivi di sicurezza;
- I ganci del piano di lavoro e i relativi sistemi di fissaggio;
- I compensati del piano di lavoro e dei fermapièdi.

**Ogni pezzo che abbia subito:**

- Una deformazione permanente;
- Delle perforazioni;
- Dei tagli (per esempio, a causa di una molatura);
- Una forte ossidazione...

**... deve essere scartato!**

**In caso di dubbio, sostituire il pezzo.**

**In occasione della sostituzione del pezzo, è imperativo utilizzare un pezzo simile a quello originale.**

Tenere i pezzi sempre puliti e i dispositivi di sicurezza in buono stato di funzionamento.

Sostituire o pulire tutte le targhette o gli autoadesivi che indicano le istruzioni di utilizzo e sicurezza.

# X-TOWER

## Verifica:

Le verifiche previste dalle normative vigenti (dettagliate, in Francia, dall'ordinanza del 21 dicembre 2004), sono le seguenti:

### Una verifica prima della messa in servizio su ogni sito di installazione:

- in occasione del primo utilizzo;
- in caso di smontaggio seguito da un rimontaggio del trabattello;
- in seguito a una modifica delle condizioni di utilizzo, delle condizioni atmosferiche o ambientali tale da influire sulla sicurezza di utilizzo del trabattello;
- in seguito a un'interruzione di utilizzo di almeno un mese.

La suddetta verifica comporta un controllo di adeguatezza, un controllo del montaggio e dell'installazione e un controllo dello stato di conservazione. La tracciabilità della verifica in oggetto dovrà essere formalizzata sul registro di sicurezza dell'impresa.

### Una verifica giornaliera

Comporta un controllo dello stato di conservazione.

La tracciabilità di questa verifica è formalizzata da un foglio ubicato sulla botola di accesso.

### Una verifica trimestrale

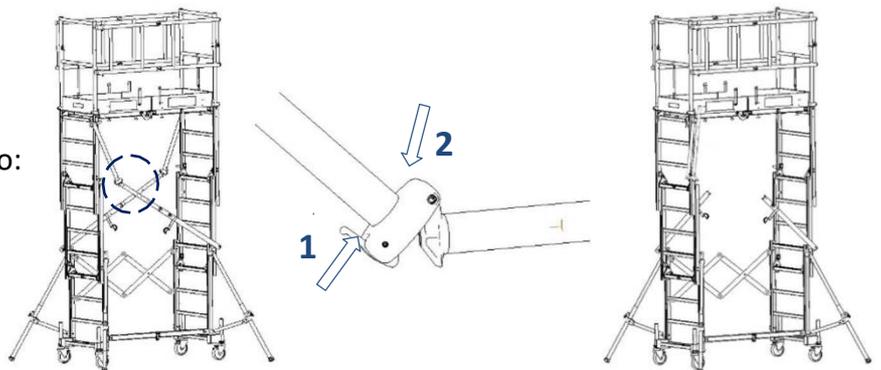
Per un trabattello su ruote, questa verifica verte sugli stessi elementi di quella giornaliera; i risultati dei controlli saranno formalizzati, almeno una volta ogni tre mesi, sul registro di sicurezza dell'impresa.

**Nota bene:** queste verifiche possono essere realizzate solamente da persone titolari di un attestato di competenza rilasciato dal responsabile dell'impresa e comportante la menzione "Verificatore e Utilizzatore".

Per maggiori informazioni e dettagli sulle verifiche, si veda la RECO R. 457, allegato 3, 3 bis, 4, 5, 6.

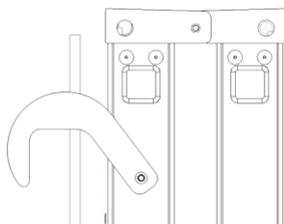
## Capitolo 8 Smontaggio

- Prima dello smontaggio:
  - Assicurarsi della stabilità del trabattello:
    - ruote a freno bloccate;
    - stabilizzatori ben posizionati.
- Durante lo smontaggio:
  - Seguire la procedura di montaggio in ordine rigorosamente inverso, **iniziando col piegare e fissare i supporti diagonali**, togliendo poi la coppiglia, sbloccando la parte pieghevole e fissando il supporto diagonale lungo la scala per mezzo della clip. Riagganciare i blocchi del dispositivo di sollevamento quando le scale sono in posizione bassa (l'autoadesivo "Stop" nella parte bassa delle scale deve essere allineato a quello del dispositivo di sollevamento).



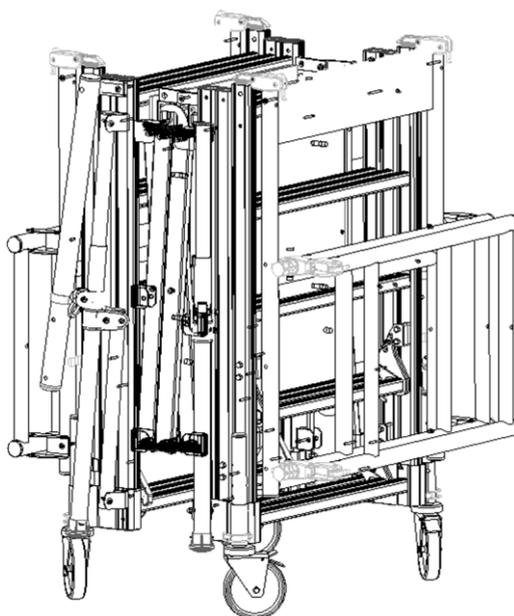
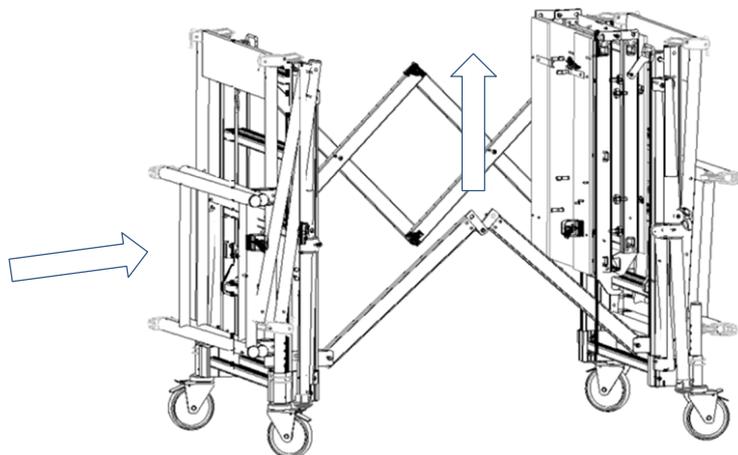
# X-TOWER

- Durante il ripiegamento dei parapetti, fare attenzione a mettersi sul lato prima di ripiegarli, al fine di evitare i rischi di lesioni alla testa.
- Per ripiegare il piano di lavoro, tirare l'anello all'altezza del dispositivo di blocco per sbloccarlo. Quando il piano di lavoro è chiuso, rimettere in posizione i ganci del supporto, in modo che siano paralleli al piano di lavoro.



*Schema del gancio del piano di lavoro in posizione di smontaggio*

- Per chiudere il prodotto, esercitare una trazione sull'anello del dispositivo di blocco del braccio orizzontale; dopo aver sbloccato il dispositivo di blocco, tirare l'anello verso l'alto per ripiegare il braccio orizzontale. Spingere poi sul lato per riavvicinare le scale.



*Schema del prodotto ripiegato.*

# X-TOWER

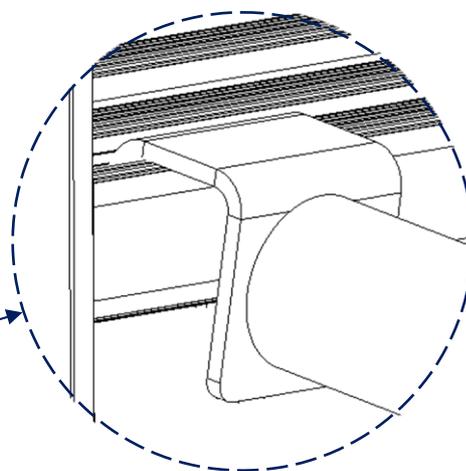
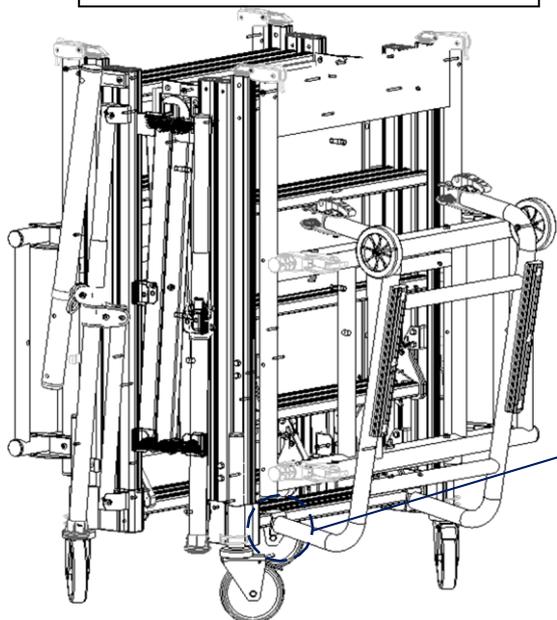
## Capitolo 9

## Spostamento e carico in un veicolo

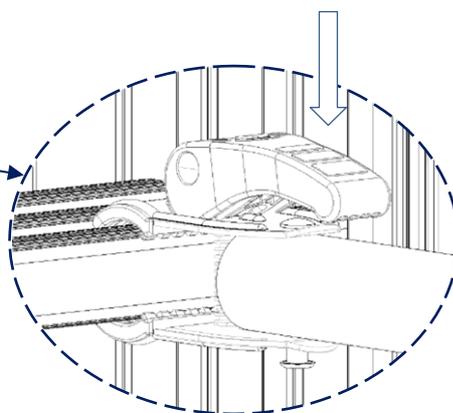
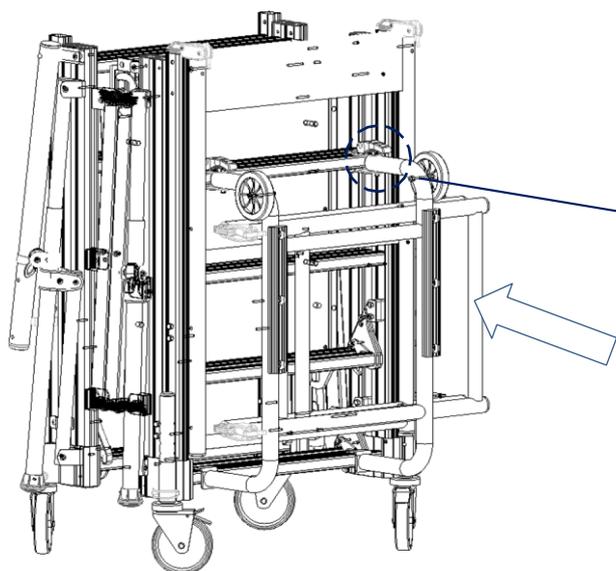
### 9-1 Installazione del kit di carico (opzionale)

Il kit di carico può essere installato su un lato o l'altro del trabattello in posizione piegata.

Poggiare le forcelle di aggancio sul piolo del supporto delle ruote



Sollevere il kit di carico fino a quando le pinze blu non saranno all'altezza del piolo della scala, poi bloccarle facendo pressione sulla camma

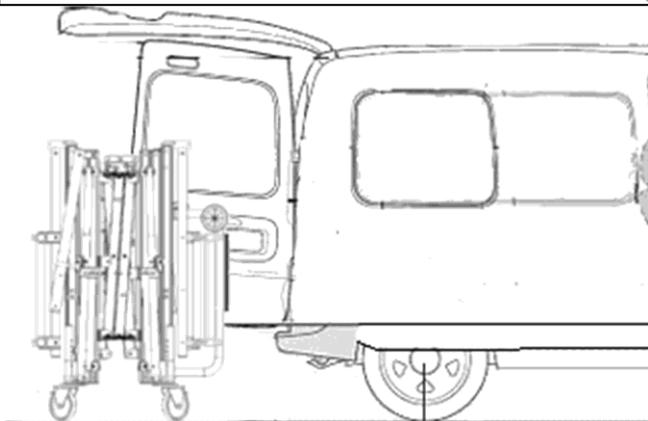


Procedere in modo rigorosamente inverso per togliere il kit di carico. Lo smontaggio deve essere realizzato prima di aprire il trabattello.

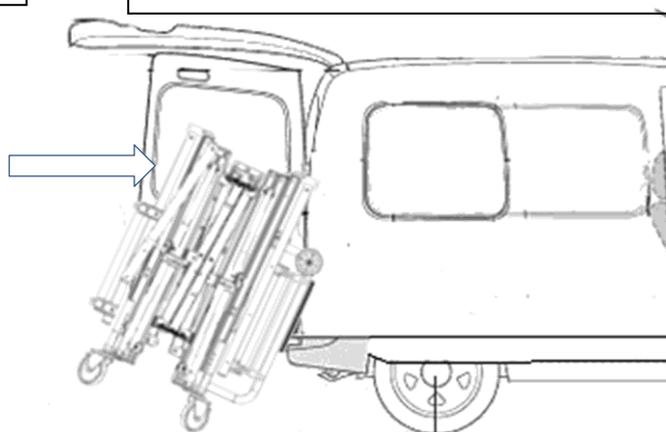
# X-TOWER

## 9-2 Carico del trabattello in un veicolo

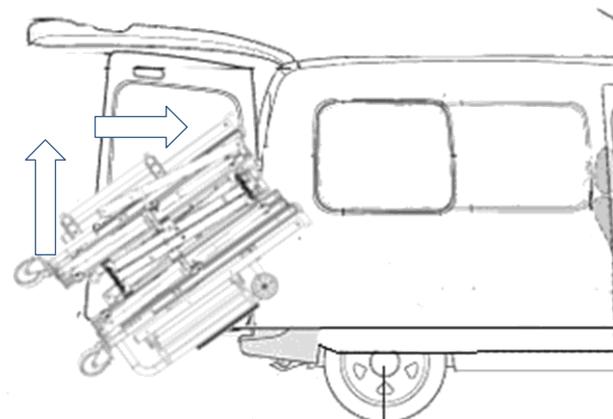
Portare il trabattello fino al retro del veicolo senza toccare il paraurti e attivare i freni sulle 4 ruote



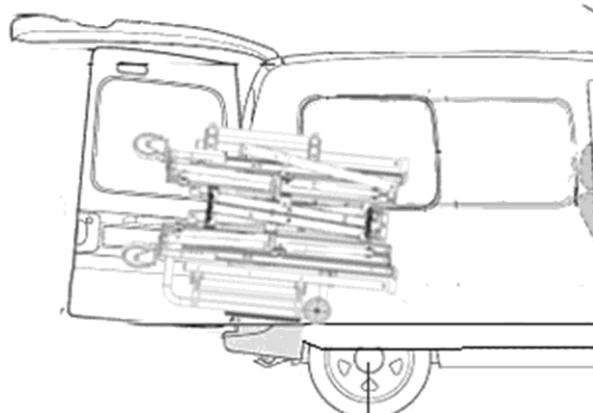
Piegare il prodotto in avanti fino a quando il kit di carico non poggerà sul veicolo



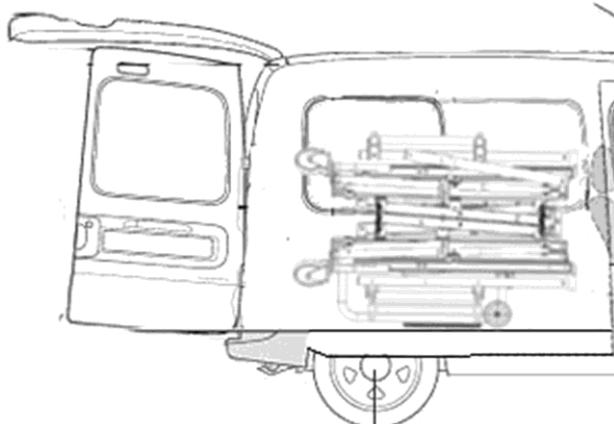
Sollevarlo impugnandolo dal supporto della ruota e spingerlo un po' in avanti



Una volta all'interno del veicolo, sollevare leggermente il trabattello per farlo scorrere fino alla sua posizione finale



Lasciare il trabattello, che poggerà allora sui supporti del kit di carico



Per scaricare il trabattello dal veicolo, procedere in modo rigorosamente inverso.

# X-TOWER

I trabattelli X-Tower sono garantiti 2 anni, pezzi di ricambio e manodopera.

Il periodo di copertura della garanzia inizia alla data di fatturazione.

La nostra garanzia è subordinata all'espletazione degli obblighi contrattuali da parte dell'acquirente, in particolare per quanto concerne il pagamento.

La garanzia è limitata alla sostituzione nel nostro stabilimento o alla riparazione dei pezzi originali riconosciuti come difettosi dopo la nostra perizia.

Ogni altro diritto è escluso. In particolar modo, l'applicazione della garanzia non può in alcun caso dar luogo al pagamento di un risarcimento danni.

Questa garanzia si applica esclusivamente ai prodotti installati e utilizzati secondo le istruzioni contenute nei manuali tecnici di montaggio e utilizzo.

**IMPORTANTE:** conservare accuratamente la prova di acquisto (fattura o buono di consegna), giacché la stessa sarà richiesta per l'applicazione della garanzia.

Per ogni informazione complementare, connettersi al sito Internet:

***[www.tubesca-comabi.com](http://www.tubesca-comabi.com)***



*Istruzioni video online*