



**PANDROL**

# LIGHTWEIGHT 1.5T 1435 GAUGE TROLLEY

## REF. 12111020

OPERATING AND MAINTENANCE MANUAL

REF. 42111035



**PANDROL**

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En cas de litige, la version française fait référence – The French version will be decisive in cases of litigation

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## I – SAFETY LABEL EXPLANATION



Warning! The machine can be dangerous  
Careless and incorrect use can result in injury to the operator



Read carefully the operating manual of use and make sure you understand it before using the machine.

## II –INSTRUCTIONS GENERALES DE SECURITE

- Never start up the trolley until you have read and understood the directions for use
- Only trained and qualified personnel is allowed to operate the trolley.
- All maintenance operations must be achieved by trained and qualified personnel
- The operator must respect the regulations, procedures and particular applicable orders of the railway operating network
- Never use the trolley when you are tired or under influence of medicines, alcohol or substances which can alter your sight, dexterity or appreciation capacity.
- The operator must ensure that no one can affect his work (people, animals, ...).
- Mandatory use of personal protection equipment (PPE) !

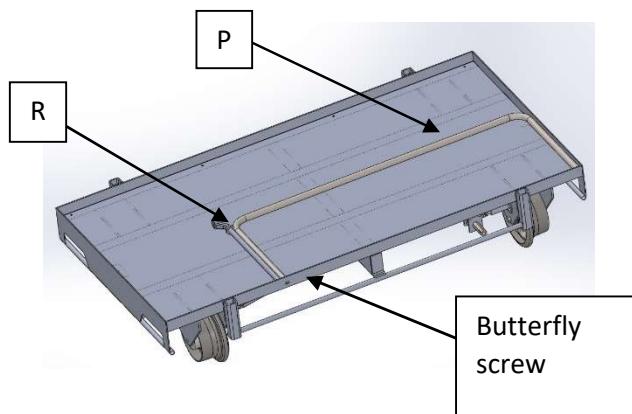


## III – INSTRUCTIONS FOR USE

### 1- STORAGE

The trolley does not require any special storage conditions.  
However, do not store loads on the trolley which exceed its capacity.

Push bar (P) and brake release lever (R) are stored on the platform.



### 2- HANDLING

The trolley is fitted with handles: two along the length and four across the width.

### 3- USE

After loading onto the railway,  
Installation of the push bar:

Loosen the butterfly screws which hold the push bar in place

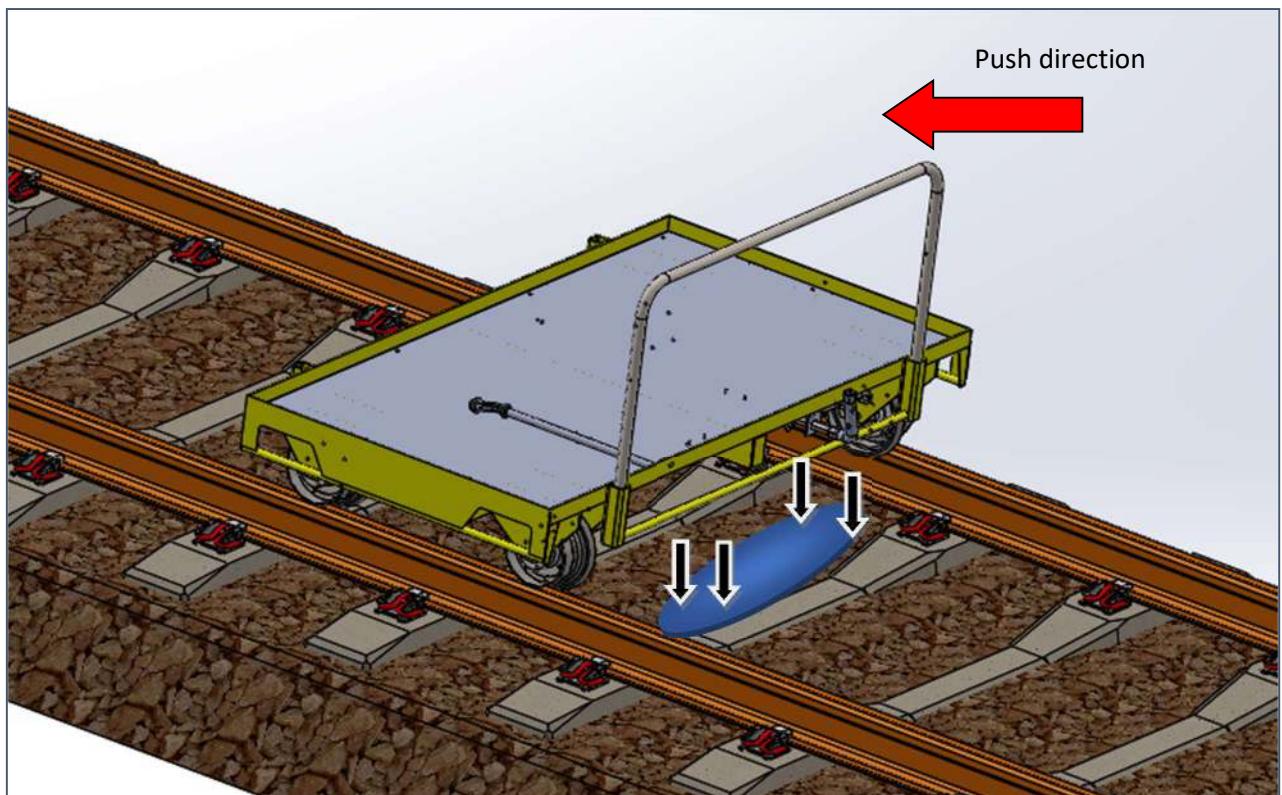
- Slide the push bar and brake release lever to the left by a few centimeters.
- Disconnect the brake release lever from the push bar.
- Slide the push bar into the square tubes on the relevant side.
- Slide the Allen key of the brake release lever onto the hex sockets of the trolley. In order to be comfortable in use, the lever must be vertical.
- Grab the push bar and operate it in the direction shown by the arrow with the forearm on the brake release lever so that it completes one rotation.

**Before loading onto the rails, systematically check that the mobilization system works properly.**

## 4 – WORK AREA

The operator must always handle the trolley inside the track (safety reminder)  
The operating position is marked in the blue area with 4 arrows.

**See below :**



## IV – MAINTENANCE FREQUENCY & CHECK

Four elements must be checked on an annual basis:

- The two immobilization stars, which are fastened to the wheel

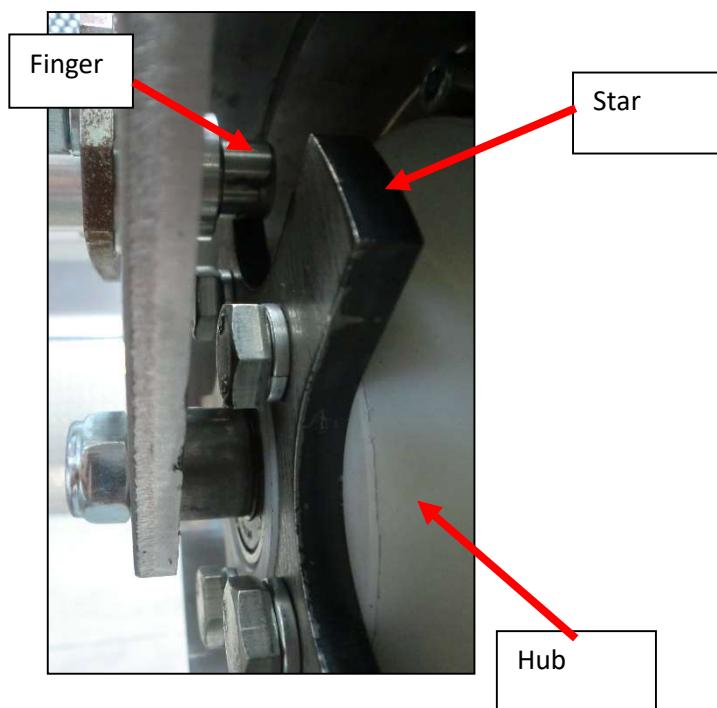
The branches of the star may be caulked, but the irregularities must not exceed 1 millimeter. The inspection is conducted off the tracks. Operate the brake release lever and turn the wheel by hand in order to rotate the five branches of the star.

- The two locking fingers fastened to the base frame

Disconnect the finger of the connecting rod. Remove the two screws which hold the bearing of the arm in place and remove the entire assembly.

The end of the arm, which protrudes from the bearing must not have any irregularities which exceed 1 mm.

Any part outside of these limits must be replaced.



- In case of damage to the reflective strips, please change them using our kit (Ref: 22111024)



### Periodicity of maintenance

OBJECT	DESCRIPTION	PÉRIODICITÉ			
		Before use	After Use	50h use	100h use
Machine complète	Machine inspection Clean the machine with a clean cloth or with compressed gun to remove the dirt	X			
Machine complète	Cleaning Adjust the clearance Replace		X	X	X
Galet				X	X
Système de tringlerie					X

NOTA : These recommendations are not restrictive. Continuous monitoring and preventive maintenance will increase the life span of the trolley.

Maintenance of the equipment is the owner's responsibility.

All maintenance operation must be achieved by qualified staff.

## V - DESCRIPTION

The trolley is designed for transporting equipment on 1435 mm gauge railways. Its load bearing capacity is 1500 kg when evenly distributed.

It is fitted with a 'fail-safe' type immobilization system. A removable stem blocks the rotation of the two rollers, one for each railway track.

Push bar and brake release control are reversible.

## VI - TECHNICAL FEATURES

Max load	1500 kg evenly distributed
Dimensions (L x W x H)	1,910 x 1,090 x 360 mm
Usable surface of the platform	1,900 x 990 mm
Platform height/wheel tread	315 mm
Weight	70 kg in working condition

## VII - MARKING

Our lorries comply with the requirement of Standard EN 13977, HSL compatible and enjoy a complete traceability indicated on the manufacturer's plate.

### MANUFACTURER'S PLATE



### EN 13977 LABEL



### HSL COMPATIBLE LABEL

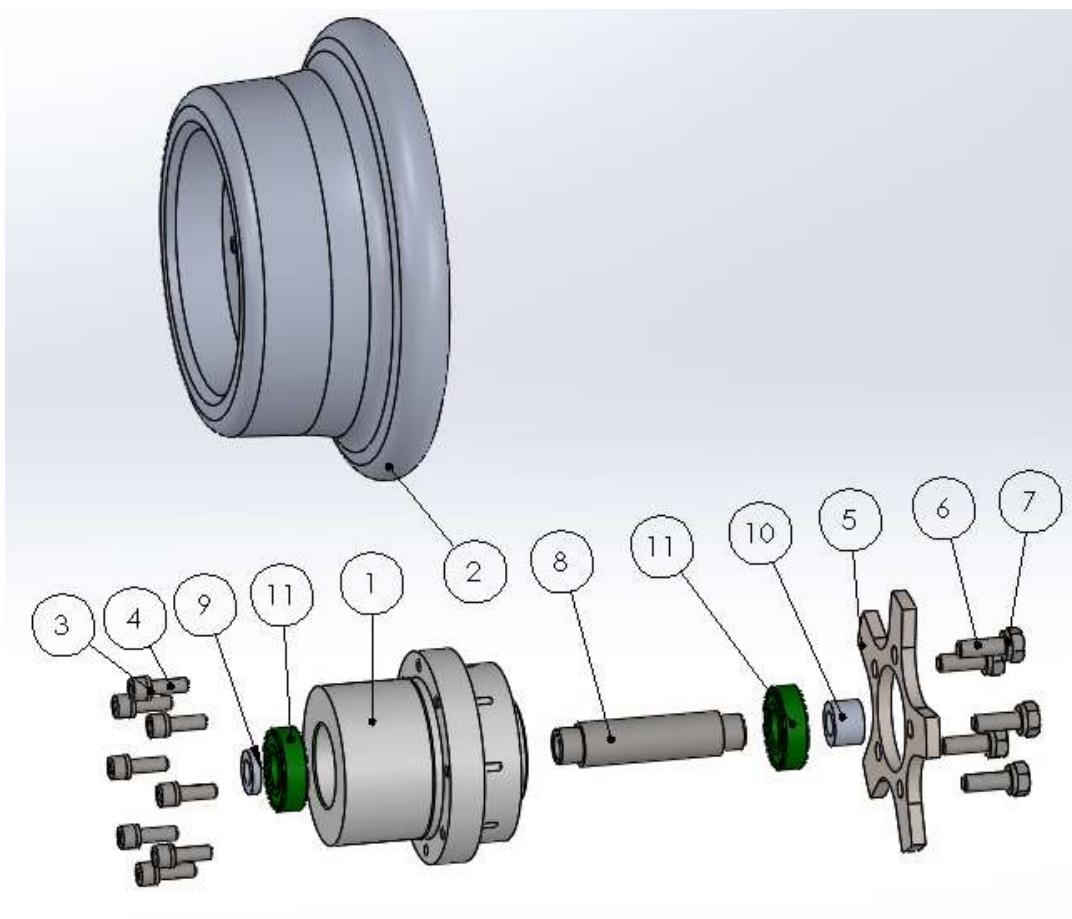




## VIII - PIÈCES DÉTACHÉES SPARE PARTS

Ensemble galet freiné isolé -  
2 ensembles par Lorry -

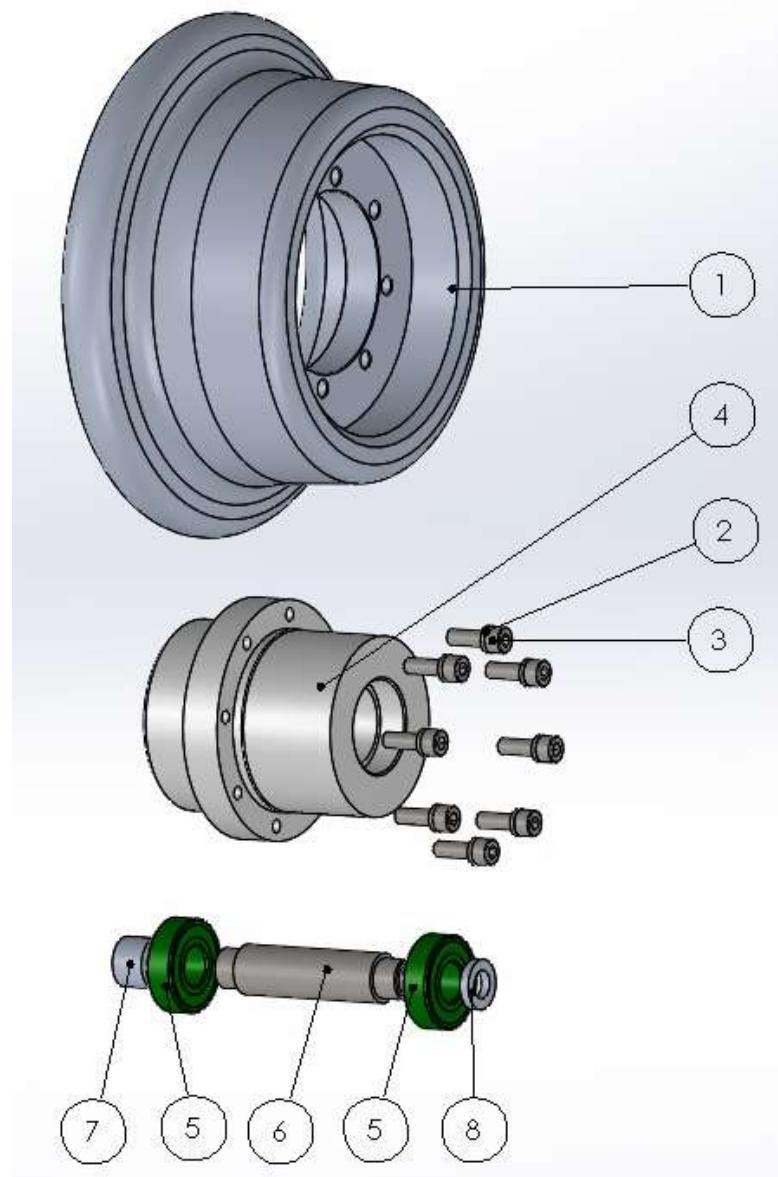
*Restrained roller isolated assembly  
2 assemblies per Trolley*



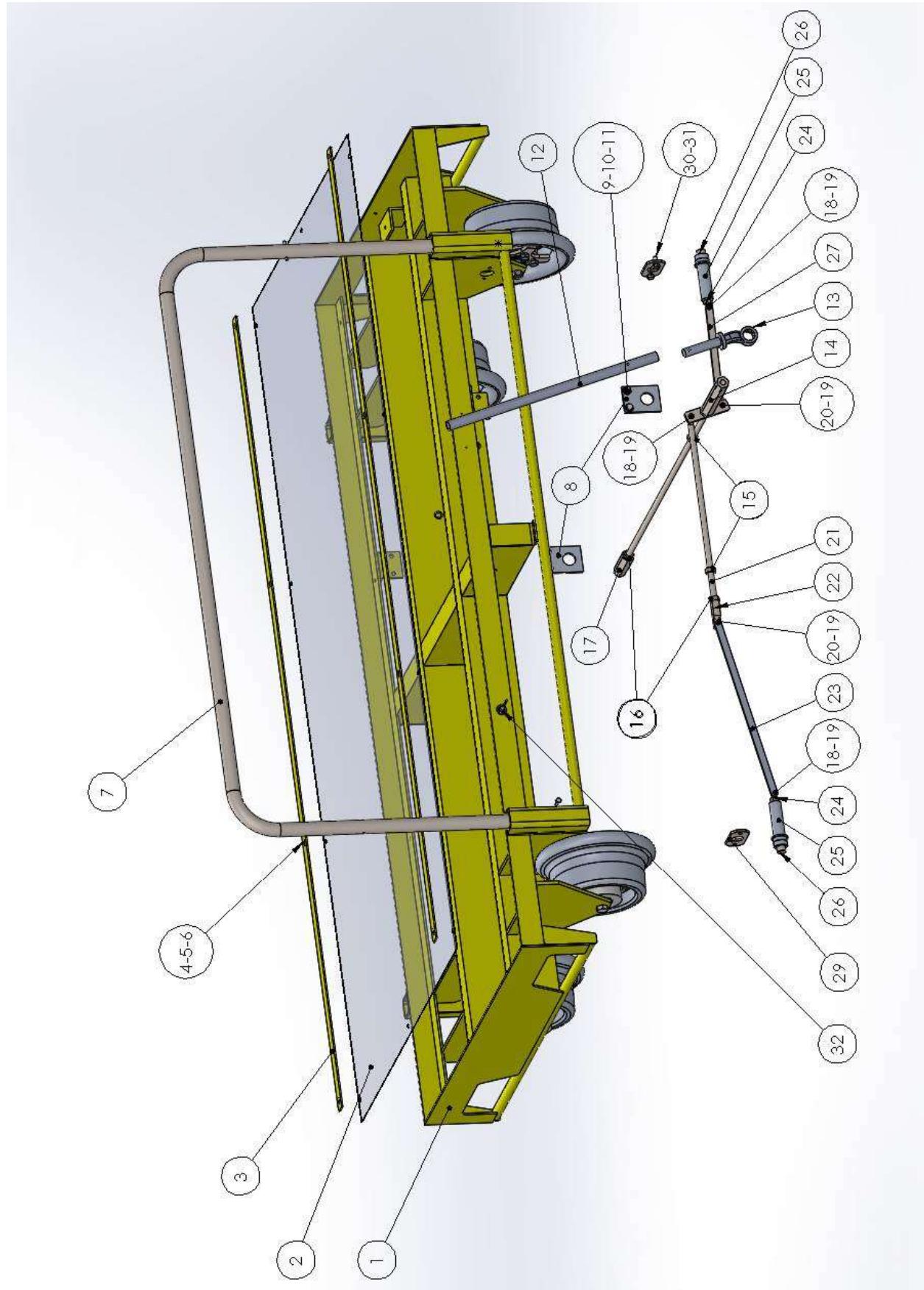
Rep	Référence	Qté	Désignation	Label
1	31270034	1	Moyeu côté frein	Brake side hub
2	31230102	1	Galet usiné Ø260	Roller Ø 260
3	41108004	8	Rondelle W8	W8 washer
4	41008017	8	Vis CHc M8 x 40	M8 x 40 HSHC screws
5	31210476	1	Etoile d'immobilisation	Immobilisation star
6	41010006	5	Vis H M10 x 30	H M10 x 30 screw
7	41110002	5	Rondelle W10	W10 washer
8	31210473	1	Entretoise de galet	Roller spacer
9	31210474	1	Entretoise extérieur voie	Outside track spacer
10	31210475	1	Entretoise intérieur voie	Inside track spacer
11	44010033	2	Roulement 6204 2RS	6204-2RS bearing

Ensemble galet Fou isolé -  
2 ensembles par Lorry -

Idler wheel isolated assembly  
2 assemblies per Trolley



Rep	Référence	Qté	Désignation	Label
1	31230102	1	Galet usiné Ø260	Roller Ø 260
2	41108004	8	Rondelle W8	W8 washer
3	41008017	8	Vis CHc M8x40	M8x40 CHc screws
4	31270035	1	Moyeu de galet fou	Idler wheel hub
5	44010033	2	Roulement 6204 2RS	6204-2RS bearing
6	31210473	1	Entretoise de galet	Roller spacer
7	31210474	1	Entretoise extérieur voie	Outside track spacer
8	31210475	1	Entretoise intérieur voie	Inside track spacer



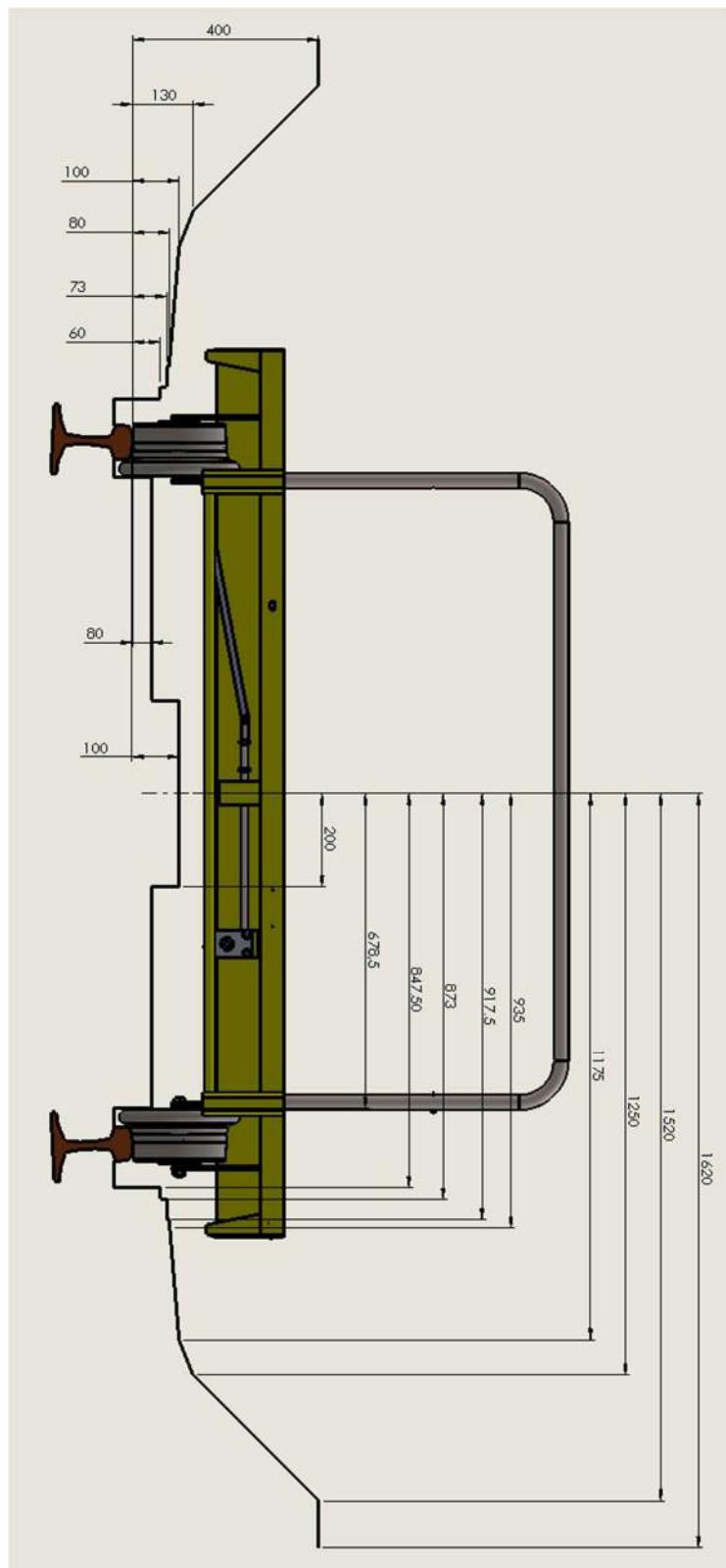
Rep	Référence	Qté	Désignation	Label
1	35930009	1	Chassis	Chassis
2	31910076	1	Tôle de couverture	Covering Sheet
3	34930004	2	Plat de fixation de la tôle de couverture	Fastening plate for the sheet
4	41006015	10	Vis H, M6 x 20	H M6 x 20 Screw
5	41106004	10	Rondelle M6N	M6N Washer
6	40906006	10	Ecrou Nylstop M6	M6 Nylstop nut
7	34910137	1	Barre de pousée	Push bar
8	31930044	2	Plat de protection	Protection plate
9	41008020	8	Vis H, M8 x 20	H M8 x 20 screw
10	41108001	12	Rondelle M8N	M8N Washer
11	40908001	4	Ecrou Nylstop M8	M8 Nylstop nut
12	31210478	1	Manche pour clé	Handle for ring spanner
13	48401210	1	Clé de 24 polygonale FACOM	Ring spanner 21/flat FACOM
14	35910475	1	Levier de défreinage	Brake reease lever
15	45501005	3	Bague d'arrêt inox	Stop ring
16	40912002	2	Ecrou HM12	HM12 nut
17	31210777	1	Six pans de commande	Six screw control
18	41006048	3	Vis H, M6 x 25	H M6 x 25 screw
19	40906006	5	Ecrou Nylstop M6	M6 Nylstop nut
20	41006815	2	Vis H, M6 x 20	H M6 x 20 Screw
21	31110429	1	Tringle de renvoie	Return connecting rod
22	31910075	1	Chape tige de renvoie	Return connecting rod joint
23	31910073	1	Bielette de deuxième blocage	Second locking connecting rod
24	31210481	2	Ecrou du doigt	Brake nut
25	31230096	2	Palier du doigt anti-dérive	Bearing of the anti-slipage finger
26	31110428	2	Doigt anti-dérive	Anti-slipage finger
27	31910074	1	Bielette du premier doigt	First locking connecting rod
28	31910072	2	Contre bride du guide	Flange
29	41108004	4	Rondelle W8	W8 washer
30	41014010	4	Vis H, M14 x 160	H M14 x160 screw
31	40914001	4	Ecrou Nylstop M14	M14 Nylstop nut
32	22111015	1	Ensemble vis à oreille	wing screw assembly

## IX– PLAN DE CONTRÔLE DU MONTAGE DES GALETS

## ASSEMBLY PLAN OF THE ROLLERS

La représentation ci-dessous montre les dimensions de la machine par rapport à la jauge de dégagement suivant EN 15273 (avec une largeur de voie de 1435mm).

The following picture presents the trolley dimensions in relation to the clearance gauge according to EN 15273 (with a track width of 1435 mm).



**FICHE DE CONTROLE  
COPIE CLIENT**

**CONTROL CARD  
CUSTOMER'S COPY**

LORRY 1,5T

REF 12111020

1.5T TROLLEY

No.	Désignation des opérations <i>Description of operation</i>	Contrôle <i>Checked by</i>
1	Vérification de la libre rotation des galets <i>Check that the rollers rotate freely</i>	
2	Vérification des mouvements de la tringlerie et doigts de blocage <i>Check the movement of the connecting rods and the locking fingers</i>	
4	Vérification écartement voie et alignement des galets <i>Check the track gauge and the alignment of the rollers</i>	
5	Aspect général <i>General aspect</i>	
6	Notice d'utilisation / <i>User's manual</i>	REF 42111035
<p>Date de fabrication      <i>Date of manufacturing</i> .....</p> <p>Fait à Raismes le      <i>Drawn up in Raismes, the</i> .....</p> <p>Nom      <i>Name</i> : .....</p> <p>Signature      <i>Signature</i> :</p>		

**Références à rappeler en cas de réclamation**

***In case of complaint, please quote these references***

N° de machine	Machine nbr.....
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**FICHE DE CONTROLE**  
COPIE CLIENT

**CONTROL CARD**  
CUSTOMER'S COPY

LORRY 1,5T

REF 12111020

1.5T TROLLEY

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Date de fabrication	<i>Date of manufacturing</i> .....
Fait à Raismes le	<i>Drawn up in Raismes, the</i> .....
Nom	<i>Name :</i> .....
Signature	<i>Signature :</i> .....

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*In case of complaint, please quote these references*

N° de machine	<i>Machine nbr.</i> .....
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## XI - ATTESTATION DE CONFORMITE

### CERTIFICATE OF CONFORMITY

Le constructeur soussigné (the undersigned manufacturer)

**PANDROL (DIVISION MATERIEL)**

**Z.I DU BAS PRE**

**59590 RAISMES**



Certifie que le matériel neuf désigné ci-après

(certify that the under described products)

**LORRY 1.5T**

**1.5 TONNE TROLLEY**

**ALLEGÉ VOIE 1435**

**1435 gauge track – HSL COMPATIBILE**

**Référence 12111020**

**Référence 12111020**

**N° de machine (machine number) :**

Est conforme (comply with)

- **A LA CONFORME EUROPEENE NF EN 13977**  
*(THE EUROPEENE NORM NF EN 13977)*
- **AUX DISPOSITIONS REGLEMENTAIRES DEFINIES PAR LA DIRECTIVE 2006/42/CE**  
*(THE INFORMATIONS STATED IN THE LEGAL DOCUMENTATION OF THE DIRECTIVE 2006/42/CE)*
- **Aux prescriptions de l'article R4313-20 (*procedure d'auto certification*)**  
*(the regulations of R4313-20 article – self certification procedure)*
- **M. LISINSKI Aurélien est le détenteur du dossier technique**

Raismes, 05/2019  
Bruno JOIRIS  
Directeur Industriel

Aurélien LISINSKI  
Responsable division matériel et équipement

# PANDROL

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