



# PANDROL

## FRAME ALIGNER 42143024

NOTICE D'UTILISATION ET D'ENTRETIEN

11111003 CR57 RAG TYPE

11111004 CR57 BURBAACH TYPE



PANDROL

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# I - DESCRIPTION

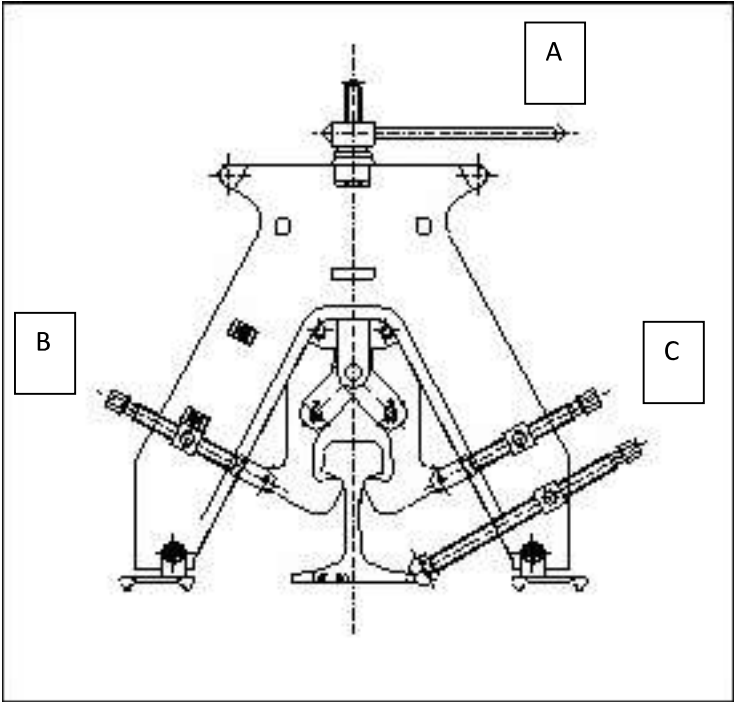
The geometrical quality of an aluminothermic weld depends mainly on the initial adjustment of the two ends of rail to be welded.

**THE ADJUSTMENT COMPRISES :**

- 2. A level point in the vertical plane ;
- 3. The perfect alignment of the inside walls of the rails heads ;
- 4. The identical cant of the two rails.

The frame aligner CR57 RAG and BURBACH version allow to answer to these three essential requirements.

The different operating screws have the following functions:



- Screw Adjustment of level  
A point
- Screw Adjustment of rail  
B head alignment
- Screw Adjustment of cant  
C

## II – GENERAL CHARACTERISTICS

- **PARTICULARITY**

With a **common heightened body** for the four versions

**It can be used on all the heights of rail**

- **P The CR57 RAG Version Ref : 11111003**

- delivered without anti-shifting screw                      must be used on track equipped with grooved rails

- **P The CR57 BURBACH Version Ref : 11111004**

- must be used on track equipped with Burbach rail A65 to A150 or MRS 51 to 125 rail

Dimensions
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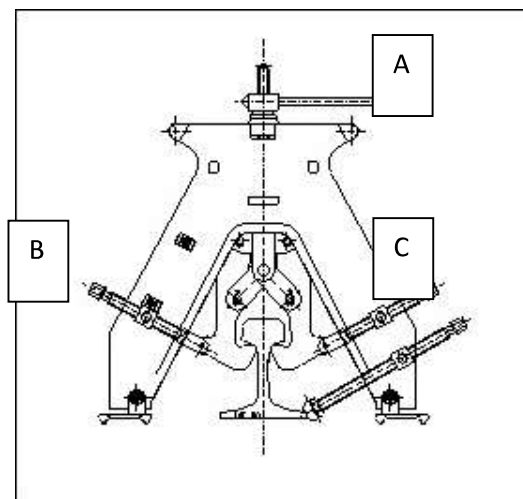
Height	: 600 mm
Width	: 180 mm
Spread	: 580 mm
Weight	: 19 Kg RAG version 21 Kg BURBACH version

### I - ADJUSTMENT PROCEDURE

- Loosen the fastenings of 4 or 5 sleepers on either side of the joint to be welded.
- Position a frame aligner on the second sleeper on either side of the joint (in exceptional cases on the third sleeper if the distance is sufficient to allow installation of certain hydraulic shearing machine).

It is essential for the operating screws "A", "B", "C" to be loosened to facilitate positioning of the frames.

**ALL CORRECTIONS MADE MUST BE EVENLY DISTRIBUTED, HALF ON EACH RAIL**



#### ADJUSTMENT OF LEVEL POINT

This is obtained by moving screw "A" on each frame (photo 1).



Never move the screw of level point adjustment « **A** » before you have loosened the adjustment screws of rail head alignment and cant (incline) adjustment « **B** » and « **C** », because this should generate important efforts and result in frame aligner damage.

#### ADJUSTMENT OF RAIL HEAD ALIGNMENT

Move screw "B" so that the rail can be moved in the direction required and then bring the opposite screw "B" into contact with the jaw (photo 2).

**WARNING: Do not force screw "B" if the opposite screw "B" prevents the rail from moving.**

#### CANT INCLINAISON

Position screw "C" on one of the places specially provided so that the required rotation is obtained when it is tightened.

At the same time, move screw "B" on the opposite side to keep the rails heads lined up.

Check the level point: if its adjustment is not correct, before operating a correction, it's imperatively necessary to loosen the alignment adjusting screw and the cant (incline) adjusting screw.

#### **IMPORTANT RECOMMANDATIONS:**

In sharp bends, tie-rods must be used when making a visual approximation of the adjustment.

**NEVER FORCE THE ADJUSTMENT SCREWS:** if forcing is necessary, it means that the rail is not free (fastenings not loosened, opposite screw locked).

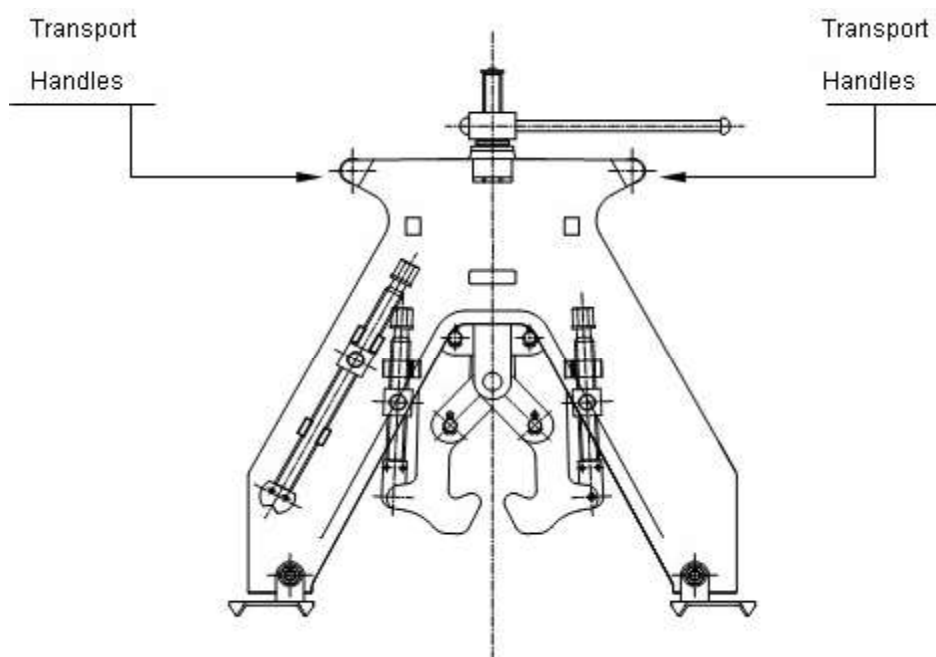
## III – TRANSPORT MAINTENANCE

### TRANSPORT

- During transport, make sure that all the adjusting screws are placed in the appropriate storage housing.
- Every time the frames are carried into the track, we recommended holding them by the "tightening nut".

### MAINTENANCE

Check the screwing-in movement of the adjusting screw is performed without forcing. If not, clean screws and nuts and lubricate the components. The use of calcium-lithium mineral grease is recommended.

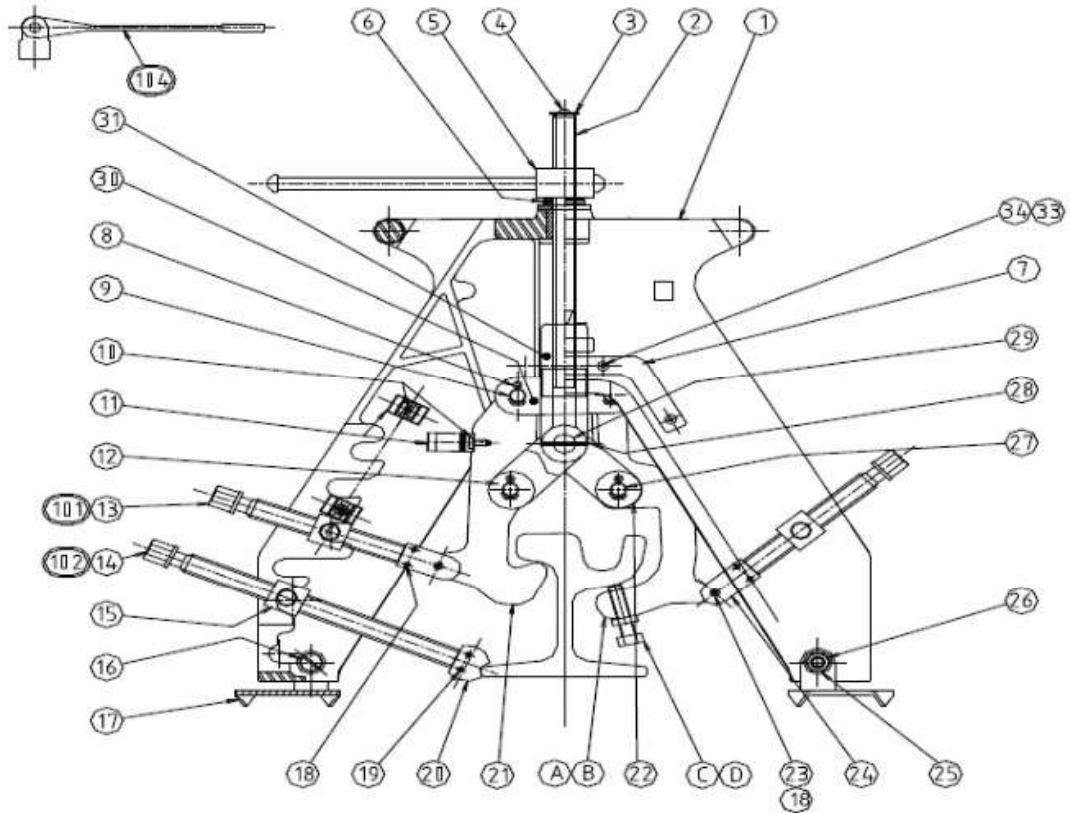




**IV – PLAN D'ENSEMBLE ET  
NOMENCLATURE  
GENERAL LAYOUT AND PARTS LIST**

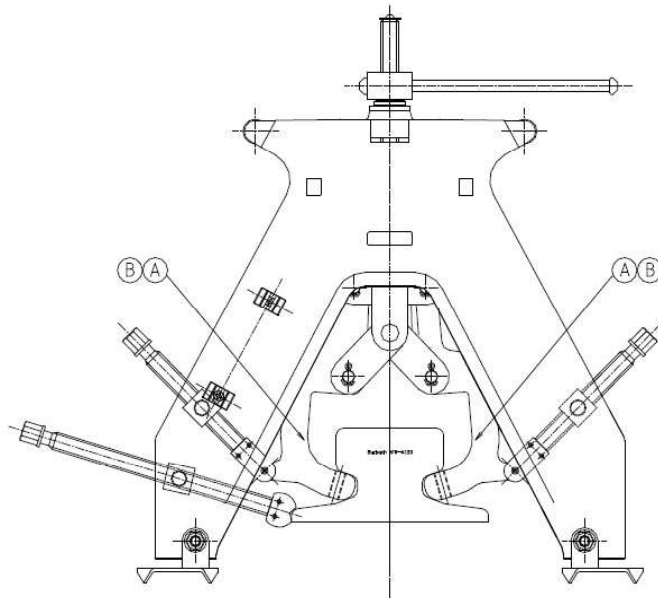
CHEVALET DE REGLAGE TYPE CR57 RAG

FRAME ALIGNER FOR GROOVED RAILS



CHEVALET DE REGLAGE TYPE CR57 RAG

FRAME ALIGNER FOR GROOVED RAILS





**NOMENCLATURE POUR CHEVALET**  
Version CR57 RAG REF. 11111003  
Version rails Burbach & MRS REF.  
11111004

**FRAME NOMANCLATURE**  
CR57 RAG Version REF. 11111003  
Burbach & MRS rail version REF.  
11111004

Rep	Qté.	Réf.	Désignation	Description
1	1	32930048	Corps de chevalet	Frame aligner body
2	1	33910004	Chape male	Male cap
3	1	41106003	Rondelle plate LL6	Washer LL6
4	1	41505001	Rivet 12 x 12.7	Rivet 12 x 12.7
5	1	21111001	Ensemble écrou de manoeuvre	Shunting nut set
6	1	44020001	Butée à aiguilles AXZ 8x20x35,4	Bearing stud AXZ 8x20x35.4
7	2	31410060	Renfort	Reinforcement
8	8	41303002	Goupille fendue V 4 x 35	V 4 x 35 pin
9	2	31110033	Axe de bielle de maintien	Maintaining connecting rod axel
10	4	41006005	Vis auto taraudeuse M6x12	"TAPTITE" Selft-cutting screw M6x12
11	4	47203002	Clip à embase n° 8	Fastening clip n° 8
12	2	31230027	Rondelle	Washer
13	2	=> rep. 101	Vis de réglage mâchoire	Jaw adjusting screw
14	1	=> rep 102	Vis de réglage inclinaison	Incline adjustment screw
15	3	=> rep. 101-102	Entretoise à 2 tenons	Spacer with 2 tenons
16	4	31110133	Axe épaulé	Shouldered axel
17	2	35910025	Semelle articulée	Articulated shoe
18	6	41301006	Goupille Mécanindus 5 x 40	Mecanindus 5 x 40
19	2	=> rep 102	Goupille Mécanindus 5 x 25	Mecanindus 5 x 25
20	1	=> rep 102	Cale pour inclinaison	Incline wedge
			<b>CR57 RAG</b>	<b>CR57 RAG Version</b>
21	1	32930001	Mâchoire de chevalet	Clamping jaw
A	1	31910068	Mâchoire rails type SEI,	Clamping jaw for Grooved rails
B	4	41114001	Rondelle M14N	Washer M 14N
C	1	41012006	Vis HM 12x60	Screw HM 12x60
D	1	40912002	Ecrou HM 12	Nut HM 12
			<b>CR57 rails Burbach, MRS</b>	<b>CR57 rail Burbach, MRS Version</b>
A	2	31910068	Mâchoire rails type SEI,	Clamping jaw for Grooved rails
B	8	41114001	Rondelle M14N	Washer M 14N
22	4	31930003	Bielle de manoeuvre	Shunting connecting rod
23	2	41301024	Goupille Mécanindus 8 x 40	Mecanindus pin 8 x 40
24	2	=> rep. 101	Chape pour machoire	Clamping jaw cap
25	4	41112002	Rondelle ressort dia. 12,2	Single coil spring lock washer dia. 12.2
26	4	40912001	Ecrou Nylstop M12	Nylstop nut M12
27	2	31110032	Axe de bielle de manoeuvre	Shunting connecting rod axel
28	2	41301004	Goupille m"canindus 3 x 40	Mecanindus pin . 3 x 40
29	1	31110031	Axe central de bielle	Connecting rod central axel
30	2	31930002	Bielle de maintien	Maintaining connecting rod
31	2	35910026	Guide de descente	Descent guide
101	2	<b>21111003</b>	<b>Vis de réglage latéral composé</b>	<b>Adjusting screw set composed</b>
		<b>Ensemble</b>	<b>des repères 13-15-18-24</b>	<b>of rep. 13-15-18-24</b>
102	1	<b>21111004</b>	<b>Vis de réglage du dévers com-</b>	<b>Inclining screw set composed</b>
		<b>Ensemble</b>	<b>posé des repères 14-15-19-20</b>	<b>of rep. 14-15-19-20</b>
104	1	48401001	Clé à douille articulée	Flex head soket wrench

**FICHE DE CONTROLE**  
CLIENT

**CONTROL CARD'S COPY**  
CUSTOMER'S COPY

CHEVALET DE REGLAGE CR57 RAG	FRAME ALIGNER CR57 RAG type	11111003	
CHEVALET CR57 RAIL BURBACH	FRAME ALIGNER CR57 <u>Burbach rail</u>	11111004	

N°	Désignation des contrôles <i>Description of controls</i>	Contrôle <i>Checked by</i>
1	Serrage des vis de fixation des semelles <i>Tightening of the flanges fastening screws</i>	
2	Essai mise en place en voie <i>Trial installation on track</i>	
3	<u>VIS</u> - <u>Screws</u> - Montée - <i>Level point</i> - Réglage latéral - <i>Rail head alignment</i> - Dévers - <i>Cant</i> - Anti-ripage - <i>Anti-shifting</i>	
4	Lubrification des vis <i>Screws lubrication</i>	
5	Aspect général <i>General aspect</i>	
6	Outillage <i>Tools</i>	
7	Notice d'utilisation REF. 42143024 <i>User's manual</i>	

Date de fabrication      *Date of manufacturing* : .....

Fait à Raismes le      *Drawn up in Raismes, the* : .....

Nom      *Name* : .....

Signature      *Signature* :

**Références à rappeler en cas de réclamation**

*In case of complaint, please quote these references*

N° de fabrication

Manufacturing nbr.



**FICHE DE CONTROLE**  
CLIENT

**CONTROL CARD'S COPY**  
CUSTOMER'S COPY

CHEVALET DE REGLAGE CR57 RAG	FRAME ALIGNER CR57 RAG type	11111003	
CHEVALET CR57 RAIL BURBACH	FRAME ALIGNER CR57 <u>Burbach rail</u>	11111004	

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3	<u>VIS - Screws</u> - Montée - <i>Level point</i> - Réglage latéral - <i>Rail head alignment</i> - Dévers - <i>Cant</i> - <u>Anti-ripage</u> - <i>Anti-shifting</i>	
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N° de fabrication

*Manufacturing nbr.*



**SAV / Commercial**

**Contactez votre représentant commercial / Contact your local representative**

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# VII - 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)

**LES CHEVALETS DE REGLAGE**

**FRAME ALIGNERS**

TYPE CR57 RAG	REF 11111003	CR57 RAG type	N° de série
TYPE CR57 BURBACH	REF 11111004	CR57 BURBACH	N° de série

**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

Find out more at

[pandrol.com](https://pandrol.com)

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