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	ailable (	<u>executions</u>									
F	xecution	Material	Cylinder		ibute 1: aft parts		ute 2: te Split				
-	No.	ID	No.	1	2	standard	Weight Levelled				
	001	PTAA117991	6	Х		X					
	002	PAAD370399	7	X		X					
	003	PTAA059869	8	X		X					
	004	PTAA003754	8		X	X					
	005	PAAD295494	9		X	X					
	006	PAAD202723	10		X	X					
	007	PAAD142162	11		X	X					
	008	PAAD279802	12		×	X					
	009	PAAD374048	12		X		X				
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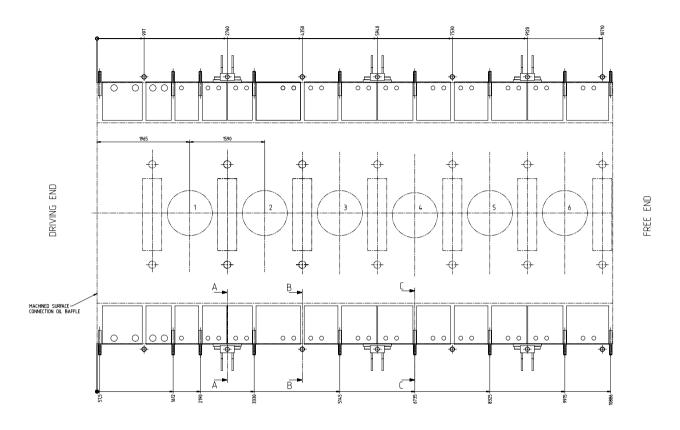
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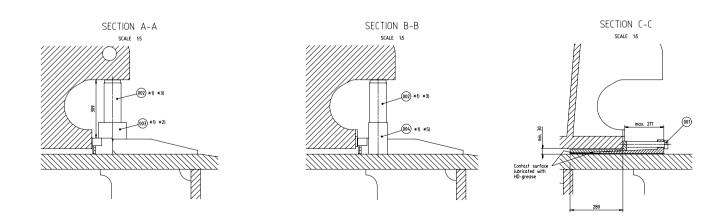
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Ε

F

001	QTY	Item ID		Item Name			Dimension	Standard-ID	Basic Material		V	Net Weight
	18	107.24	5.895.200	WEDGE								8.51
002	14	PAAD3	318478	HYDRAULIC J	JACK							
003	6	PAAD3	318479	SUPPORT PL	ATE							
004	8	PAAD3		SUPPORT BL	.OCK							
004	0	FAAD	010400									
Prod.			6 X92DI 6 X92DI		6	X92DF-M-1.0						
Prod.					6	X92DF-M-1.0						
					6	X92DF-M-1.0						
Change History Prod.	-	npa101			6 CNAA006683	X92DF-M-1.0  New MainDesig	gn introduced					
	-	npa101 Creator	6 X92DI	F-A-1.0			gn introduced		Approved	Activity Code	- E	- C
Change History	Rev.	Creator	6 X92Di	17.10.2024 Approval Date	CNAA006683 Change ID	New MainDesig		GNMEN		Activity Code		
Change History	Rev.	Creator	6 X92Di	17.10.2024	CNAA006683 Change ID	New MainDesig	NE ALI	GNMEN		Activity Code		
Change History	Rev.	Creator	mhu019 Approver	17.10.2024 Approval Date	CNAA006683 Change ID TOOL Alignment Dimension	New MainDesig Change Synopsis ENGIN	NE ALI	GNMEN		Activity Code		
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Change History	Rev.	Bill CinGD Ltd. f the docume e rights. Neight when use	mhu019 Approver  Of Materia  All rights runnent the recip ther the whole	17.10.2024 Approval Date	CNAA006683 Change ID  TOOL Alignment Dimension Units Main Design	New MainDesig Change Synopsis ENGIN with: Wedg	NE ALI es	9710-01 Q-Code PTAA1	Х Х О		E	С





Risk: Tool and/or bedplate damage

Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims livedges or shims must be inserted as deep as possible below the bedglote to ensure that the support point is as close as possible at the engine monoblock column)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine diginent by means of vedges and/or shins. Before adjusting the height of vedges and/or shins lift the engine by the hydrolic jacks, any height of adjustment hast be the engine by the hydrolic jacks, any height objective the properties of the properties of the properties of the hydrolic propers here all vedges and/or shins are successively adjusted in stages, to ensure the best possible load distribution.

#### Remarks

- \*1) To be provided by the shipyard
  \*2) Height depending on the requirement
  (chock thickness in correlation with maximum
  permissible extension of the hydraulic jack)
  \*3) Hydraulic jack proposal
  Type: Enerpac RCH-8003
  Load at 700 bar; 931 kN



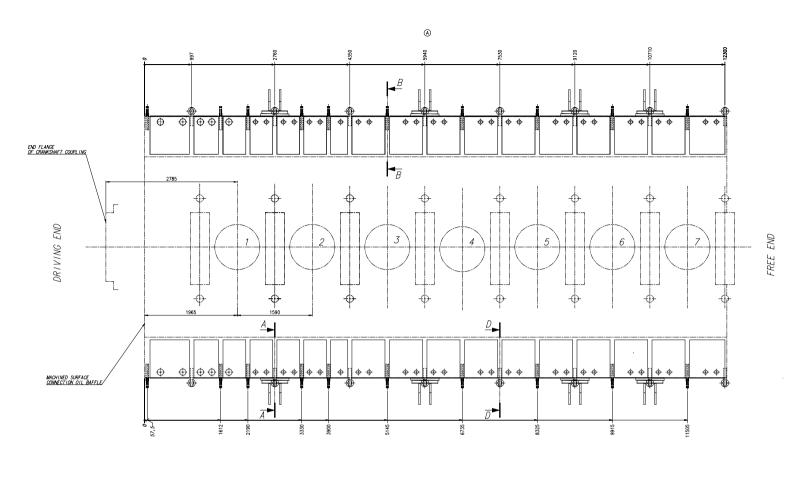
	107.245.895.200	WEDGE		8.51
003 16 F	DAAD040470	LIV/DDALILIO IA OV		0.01
	PAAD318478	HYDRAULIC JACK		
004 8 F	PAAD318479	SUPPORT PLATE		
005 8 F	PAAD318480	SUPPORT BLOCK		

Prod.			7 X92-B 7 X92DF			X92DF-2.0 X92DF-A-1.0	7 X92DF-M-1.0				
History											
Change H	Α	npa101	mhu019	13.02.2024	CNAA005217	Drawing updated				4	3
ຣ໌	1	sde101	mhu019	12.01.2021	EAAD786939	-				-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis		Approved	Activity Code	Е	С



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recognizes and honours these rights. Neither the whole nor any part of this document may be used in any way for	Main Desig
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d. nt	Units	[m] [kg]	Basic Mat	erial				Net Weight	170.2
or or	Main Design	Yes	Design G	roup	9710-01	Q-Code	XXO	Standard	WDS
or ut <b>d.</b>	Qty per	Engine	A4	Item ID	PAA	D37	0399	BOM Page/s	01/01



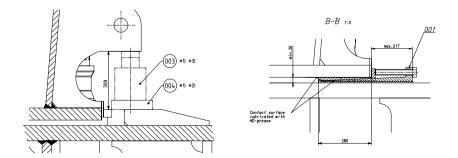
Risk: Tool and/or bedplate damage

Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

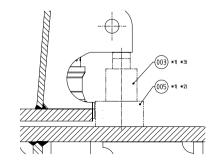
- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydroulic jacks. Any height adjustment must be the engine by the hydroulic jacks. Any height adjustment must be Changes in height larger than the maximum allowance (firm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

#### Remarks

- \*1) To be provided by the shippord
  \*2) Height depending on the requirement
  (chock thickness in correlation with maximum
  permissible extension of the hydraulic jack)
  \*3) Hydraulic jack propasa
  Type: Enerpac RCH-1003
  Lead at 700 berr 331 kM



A: A 1:5



D:D 1:5

A sjatol mhuris (1.02.2024 (DMA000217 [ - soletil mhuris (1.02.2024 (DMA000217 [ - soletil mhuris (1.02.2024 (DMA000217 [ - soletil mhuris (DMA000217 [ - so Drawing updated TOOL ENGINE ALIGNMENT Alignment with: Wedges WNGD

9710-01 CCC00 X X 0 SIDERZED WDS
PAAD370399 COMING 1/10 SURFACE PROTECTION SEE GROUP 094.4
TOLERANCING PRINCIPLE ISSUES
GENERAL TOLERANCES ACCORDING TO ISSUE 9-14. Engine A0 lbm

SEQ NO	QTY	Item ID	Item Name Dimension	Standard-ID	Basic Material	Net Weight
001	22	107.245.895.200	WEDGE			8.51
002	20	PAAD318478	HYDRAULIC JACK			
003	12	PAAD318480	SUPPORT BLOCK			
004	8	PAAD318479	SUPPORT PLATE			
				<u> </u>		

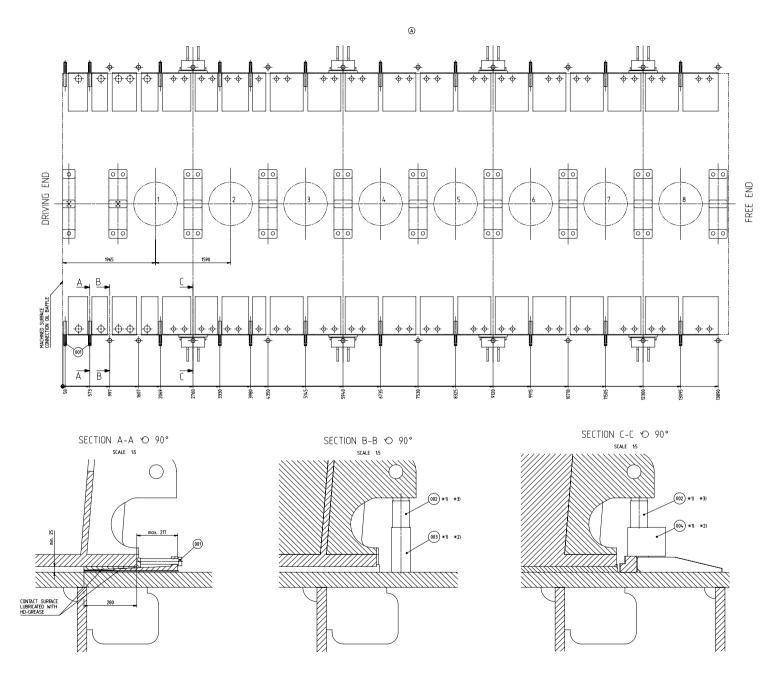
Prod.			8 X92-B 8 X92DF			8 X92DF-2.0 8 X92DF-M-1.0					
History											
Change H	Α	npa101	mhu019	22.02.2024	CNAA005327	Drawing updated				4	3
చ్	-	npa101	mhu019	19.09.2023	CNAA00448	New MainDesign				-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Арр	oroved	Activity Code	Е	С



Alignment with: Wedges + Crankshaft Parts: 1

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	Dimension								
d. nt	Units [m	n] [kg]	Basic Mate	erial				Net Weight	187
	Main Design	Yes	Design Gr	oup	9710-01	Q-Code	X X M	Standard	WDS
	Qty per E	ingine	A4	Item ID	PTA	AA0	59869	BOM Page/s	01/01



Risk: Tool and/or bedplate damage

#### Countermeasi

Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

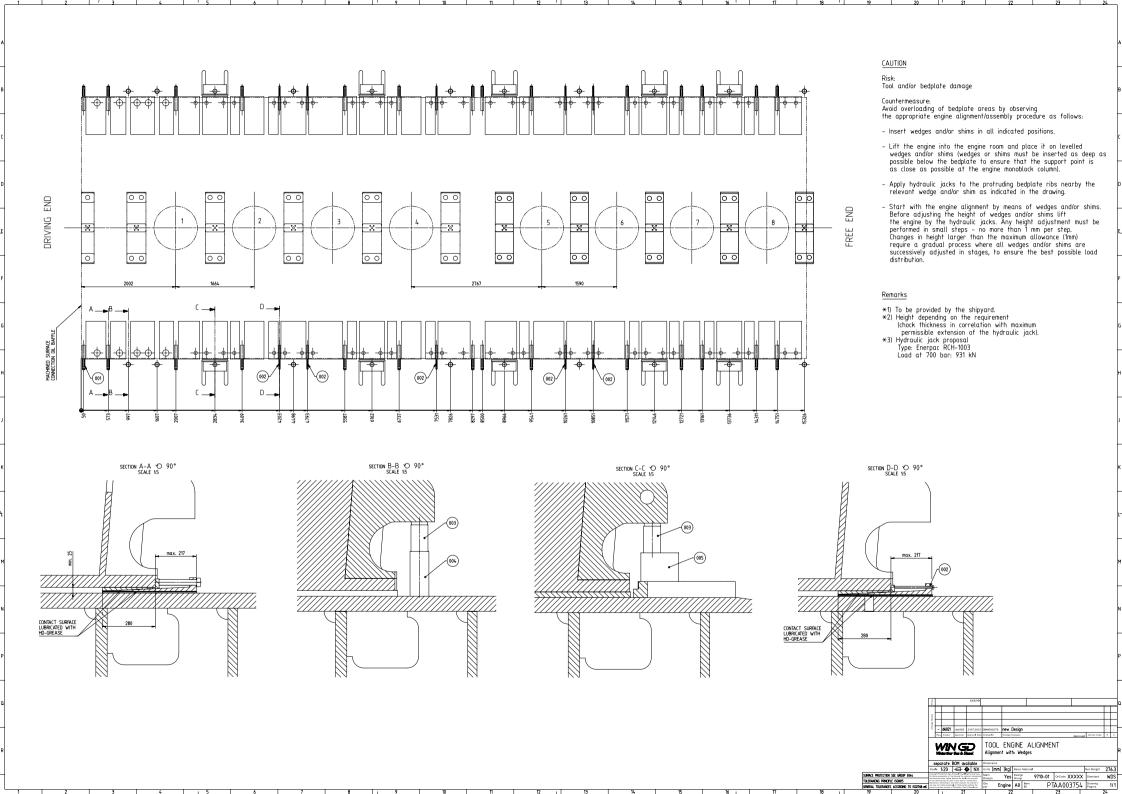
- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column).
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydraulic jacks. Any height adjustment must be performed in small steps – no more than 1 mm per step. Changes in height larger than the maximum allowance (Imm) require a gradual process where all wedges and/or shims are successively adjusted in stages, to ensure the best possible load distribution.

### Remarks

- \*1) To be provided by the shipyard.
- \*2) Height depending on the requirement (chock thickness in correlation with maximum permissible extension of the hydraulic jack).
- \*3) Hydraulic jack proposal Type: Enerpac RCH-1003 Load at 700 bar: 931 kN



SEQ NO	QTY	' Item	ıID	Item Name				Dim	ension	Standard-ID	Basic Material		V	Net Veight
1	28	107	7.245.895.200	WEDGE										8.51
2	10	107	7.424.346.200	WEDGE				NARROW	TVPF		W-FU-235-JR			3.8
3	1	PA	AD318478	TOOL ENGIN	E ALIGNMENT			NANNOW	1111					75
4	1	PA	AD318480	TOOL ENGIN	E ALIGNMENT									75
5	1		AD318479	TOOL ENGIN	E ALIGNMENT									75
	<u>'</u>													
Prod.			8 X92-B											
Pro														
tory														
Change History														
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	Rev.	Creator	Approver	Approval Date	Change ID	Change Sy	nopsis				Approved	Activity Code	Е	С
	V	M	NO	<b>5</b> 0	TOOL	ΕN	GIN	NE A	LI	GNMEN <sup>-</sup>	Γ			
			hur Gas &		Alignment	with: \	Nedg	es						
		Bi	II <b>O</b> f <b>M</b> ateria	 al	Dimension									
Copyr Bv ta	ight <b>Wi</b> i	nterthur	Gas & Diesel Ltd	I. All rights reserved. ment the recipient	Units	[m] [kg]	Basic Mat	terial				Net Weight	27	76.3
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copied	d in any	way nor	made accessible to	ny other purpose nor third parties without ur Gas & Diesel Ltd.	Qty per	Engine	A4	Item ID		PTAA0	03754	BOM Page/s	01	1/01
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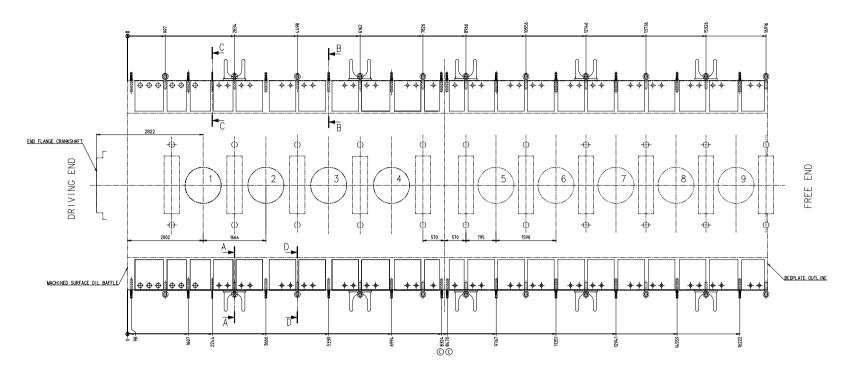
Q O	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Ne Weigl
ı	24	107.245.895.200	WEDGE				7.51
	2	107.424.346.200	WEDGE	NARROW TYPE			3.35
	22	PAAD318478	HYDRAULIC JACK				
	10	PAAD318479	SUPPORT PLATE				
	12	PAAD318480	SUPPORT BLOCK				

Prod.		9 X92 9 X92-B				X92DF X92DF-2.0	9 X92DF-A-1.0 9 X92DF-M-1.0				
	С	sde101	mhu019	10.01.2023	CNAA002424	Drawing Update	d			4	3
History	В	sde101	mhu019	17.01.2022	CNAA001401	A001401 Drawing Updated					3
Change His	Α	sde101	mhu019	02.10.2019	EAAD090713	1713 Legacy information. See corresponding ChangeNotice				4	3
Cha	-	sde101	dst009	11.06.2018		-				-	-
	Rev.	Creator	Approver	Approval Date	Change ID	ange ID Change Synopsis Approved Activity (				Е	С
1 -					1		·				_



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	Dimension								
d. nt	Units	[m] [kg]	Basic Ma	terial				Net Weight	211.8
- 1	Main Design	Yes	Design G	roup	9710-01	Q-Code	XXXXX	Standard	WDS
-	Qty per	Engine	A4	Item ID	PAA	\D29	95494	BOM Page/s	01/01



Risk: Tool and/or bedplate damage

Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

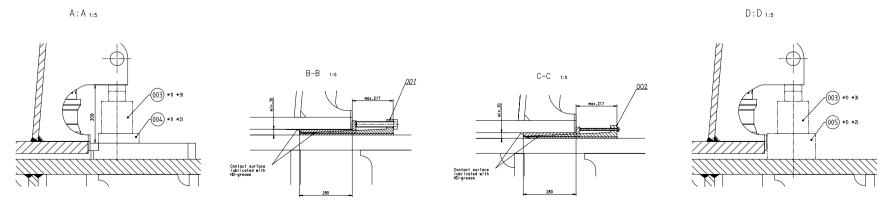
- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- relevant wedge and/or shim as indicated in the drawing.

  Stort with the engine alignment by means on wedges and/or shims.
  Before adjusting the height of wedges and/or shims lift
  the engine by the hydraulic jacks. Any height adjustment must be
  performed in small steps no more than imm per step.

  require a gradual process where all wedges and/or shims are
  successively adjusted in stages, to ensure the best possible load
  distribution.

#### Remarks

- \*1) To be provided by the shipyard
  \*2) Height depending on the requirement
  (chock thickness in correlation with maximum
  permissible extension of the hydraulic jack)
  \*3) Hydraulic jack proposal
  Type: Enerpac RCH-1003
  Load at 700 ber: 931 kN



TOOL ENGINE ALIGNMENT Alignment with: Wedges WNGD separate BOM available Dimension
Scale 1:25 NX Units [mm] [kg] Basic 

Engine A0 lbm

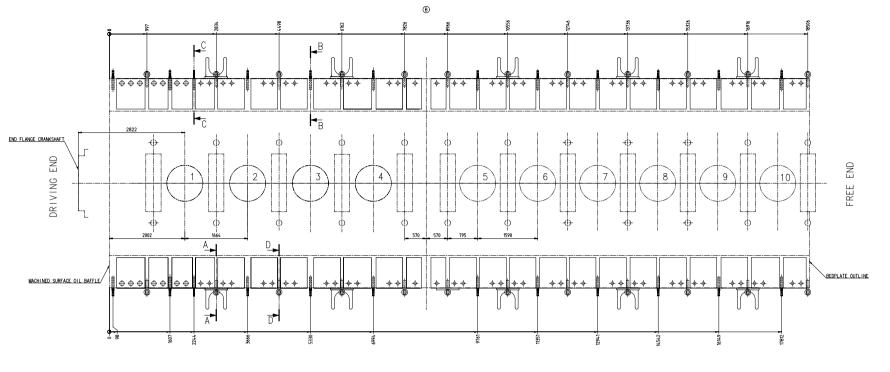
SEQ NO	QTY	Item ID	Item Name Dimension	Standard-ID	Basic Material	Net Weight
1	26	107.245.895.200	WEDGE			8.51
2	2	107.424.346.200	WEDGE NARROW TYPE		W-FU-235-JR	3.8
3	24	PAAD318478	HYDRAULIC JACK			
4	10	PAAD318479	SUPPORT PLATE			
5	14	PAAD318480	SUPPORT BLOCK			

Prod.	10 X92 10 X92-B					X92DF X92DF-2.0				
History	В	B ssh102 mhu019 17.012022		CNAA001401	Drawing Updated			4	3	
Change H	Α	sde101	mhu019	02.10.2019	EAAD090713	Legacy information. See corresponding	on. See corresponding ChangeNotice			3
5	-	dki021	bha009	11.09.2015		-			-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	Е	С



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	Dimension								
d. nt	Units	[m] [kg]	Basic Mat	erial				Net Weight	228.9
	Main Design	Yes	Design G	oup	9710-01	Q-Code	XXXXX	Standard	WDS
	Qty per	Engine	A4	Item ID	PAA	D20	02723	BOM Page/s	01/01





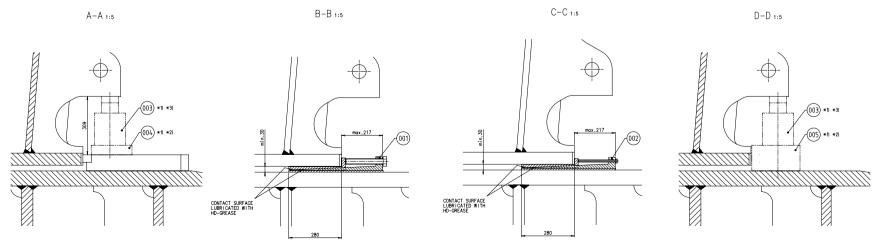
Risk: Tool and/or bedplate damage

Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedgiote to ensure that the support point is as close as possible at the engine monoblock column)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shims. Before adjusting the height of wedges and/or shims lift the engine by the hydrouli clocks. Any height adjustment must be the engine by the hydrouli clocks. Any height adjustment must be changes in height larger than the maximum allowance (Imm) changes in height larger than the maximum allowance shims are successively adjusted in stages, to ensure the best possible load distribution.

### Remarks

- \*1) To be provided by the shippard
  \*2) Height depending on the requirement
  (chock thickness in correlation with maximum
  permissible extension of the hydraulic jack)
  \*3) Type: Energoe CRH-103
  Lood at 700 bar: 931 kN



TOOL ENGINE ALIGNMENT Alignment with: Wedges WNGD

separate BOM available Dimension
Scale 1:25 + NX Units [mm] [kg] Basic

9710-01 CCGG XXXXX STREET WDS

97 ADD 20723 CGG XXXXX THE CONTROL TO THE CONTROL SUBSICE PROTECTION SEE GROUP 0944
TOLERANCING PRINCIPLE ISSUES
GENERAL TOLERANCES ACCORDING TO ISSUESS-INK Yes Design Group Engine A0 lin

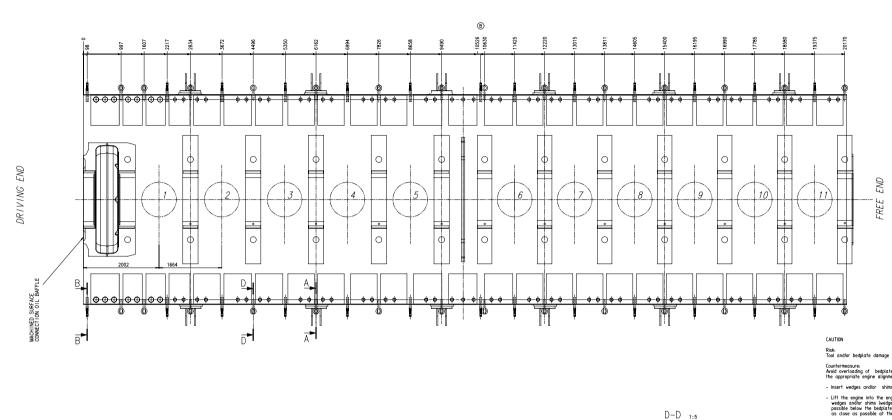
SEQ NO	QTY	Item ID	Item Name Dimension	Standard-I D	Basic Material	Net Weight
001	26	107.245.895.200	WEDGE			8.51
003	28	PAAD318478	HYDRAULIC JACK			
004	12	PAAD318479	SUPPORT PLATE			
005	16	PAAD318480	SUPPORT BLOCK			

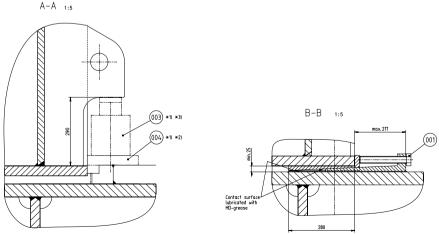
Prod.		11 X92 11 X92-B			11 11	X92DF X92DF-2.0	11 X92DF-A-1.0				
History	В	sjo101	mhu019	13.02.2024	CNAA005217	NAA005217 Drawing Updated				4	3
Change Histo	Α	sde101	mhu019	02.10.2019	EAAD090713	Legacy information. See corresponding ChangeNotice				4	3
Š	-	grpadm	bha009	11.09.2015	EAAD778960	-				-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis		Approved	Activity Code	Е	С

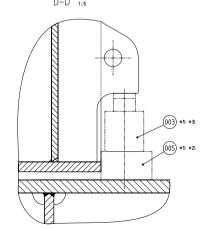


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construction, fabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the provious written consent of Winterthur, Cas & Diesel Ltd.	Qty per	

	Units	[m] [kg]	Basic Mat	erial		Net Weight	221.3		
r	Main Design	Yes			9710-01	Q-Code	ХХО	Standard	WDS
r t	Qty per	Engine	A4	Item ID	PAA	D14	12162	BOM Page/s	01/01







Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shins (wedges or shins must be inserted as deep as possible below the bedplate to ensure that the support point is as close as possible at the engine monoblock column)
- Start with the engine disjonent by means of vedges and/or shims. Before adjusting the height of vedges and/or shims lift the engine by the hydrouiz jocks. Any height adjustment just be the start of the start of

#### Remarks

- \*1) To be provided by the shipyard
  \*2) Height depending on the requirement
  (chock thickness in correlation with maximum
  permissible extension of the hydraulic jack)
  \*3) Hydraulic jack proposal
  Type: Enerpac RCI+1003
  Load at 700 bar; 931 kM

į	11X92 11X92-5					11X92DF 11X92DF-A-1,0 11X92DF-2,0	
Г	Т						
į	В	sjo101	mhu019	13.02.2024	ONA4005217	Drawing Updated	4
I i	Α	sde101	mhu019	02.10.2019	EAAD090713	Legacy information. See corresponding ChangeNotice	4
å	-	WinGD	bhall09	11.09.2015	EAAD778960	-	-
1	Rev.	Chestor	Approver	Approval Data	Change 10	Change Synopsis Appropriate Ap	ē
Г							

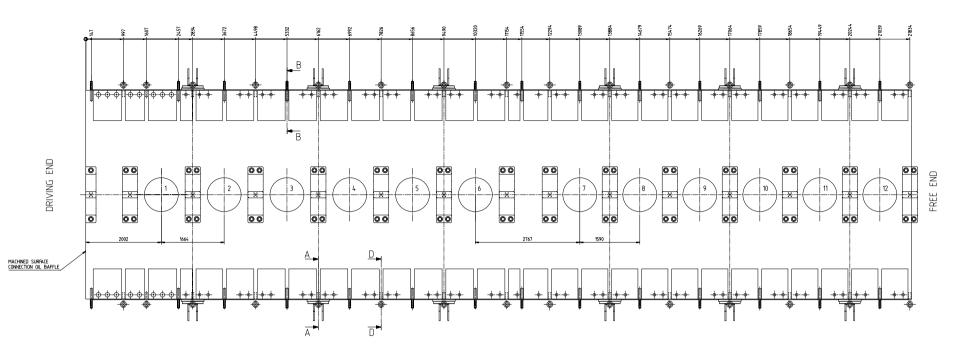
separate BOM available Direction
Scale 1:25 NX Units [mm] [kg] Basic Ma

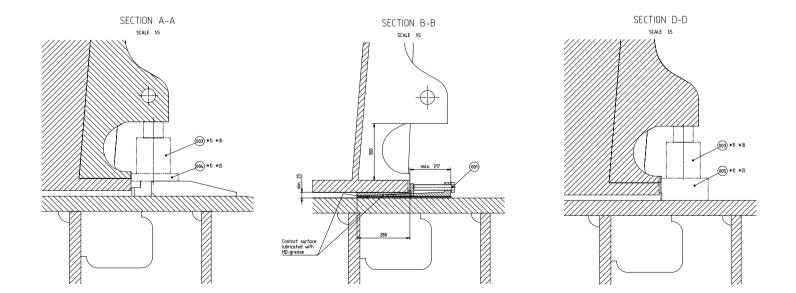
TOOL ENGINE ALIGNMENT Alignment with: Wedges

9710-01 C-Code X X 0 Standard WDS

PAAD142162 Creating 1/1 Engine A0 lbm

	QTY	/ Item ID	)	Item Name				Dimension	Standard-ID	Basic Material		١	Net Weight
1	28	107.2	45.895.200	WEDGE									8.51
3	30	PAAD	)318478	HYDRAULIO	C JACK								
4	40			SUPPORT F	JPPORT PLATE								
4	12	PAAL	)318479	SUPPORT E	DI OCK							+	
5	18	PAAD	)318480	SUFFURIE	BLOCK								
po			12 X92			X92DF			12 X92DF-A-1.0				
Prod.			12 X92 12 X92-B			X92DF X92DF-2.0			12 X92DF-A-1.0 12 X92DF-M-1.0				
	В	sde101	12 X92-B	01.02.2023		X92DF-2.0	sign/Draw	ving Introduce	12 X92DF-M-1.0			4	3
	B	sde101 sde101	12 X92-B mhu019	01.02.2023	12	X92DF-2.0  Main Des		-	12 X92DF-M-1.0	ice		4 4	3 3
			12 X92-B mhu019 mhu019		12 CNAA003170	X92DF-2.0  Main Des		-	12 X92DF-M-1.0	ice		-	
	A -	sde101	12 X92-B mhu019 mhu019	02.10.2019	CNAA003170  EAAD090713	X92DF-2.0  Main Des	nformatio	-	12 X92DF-M-1.0	ice Approved	Activity Code	4	3
	A - Rev.	sde101 dki021 Creator	mhu019 mhu019 Approver	02.10.2019 17.11.2017 Approval Date	CNAA003170  EAAD090713  EAAD782032  Change ID	Main Des Legacy in - Change Syr	nformatio	n. See corres	12 X92DF-M-1.0	Approved	Activity Code	4	3
	A - Rev.	sde101 dki021 Creator	mhu019 mhu019 mhu019	02.10.2019 17.11.2017 Approval Date	CNAA003170  EAAD090713  EAAD782032  Change ID	Main Des Legacy ii - Change Syr	nformatio	n. See corres	d Donding ChangeNot	Approved	Activity Code	4	3
Change History Prod.	A - Rev.	sde101 dki021 Creator	mhu019 mhu019 Approver	02.10.2019 17.11.2017 Approval Date Diesel	CNAA003170 EAAD090713 EAAD782032 Change ID TOOL	Main Des Legacy ii - Change Syr	nformatio	n. See corres	d Donding ChangeNot	Approved	Activity Code	4	3
Change History	Rev.	sde101 dki021 Creator  Therefore Bill interthur G possession	mhu019 mhu019 Approver  Of Materia as & Diesel Ltd of the docu	02.10.2019 17.11.2017 Approval Date  Diesel  I. All rights reservement the recipie	CNAA003170 EAAD090713 EAAD782032 Change ID  TOOL Alignment Dimension Ed. Units	Main Des Legacy ii - Change Syr  With W	nformatio	E ALI	d Donding ChangeNot	Approved	Net Weight	4 - E	3
Change History Stock of the sto	Rev.	sde101 dki021 Creator  Bill interthur G possession and honours this docum	mhu019 mhu019 mhu019 Approver  Of Materia as & Diesel Ltd of the docul these rights. N hent may be us	02.10.2019 17.11.2017 Approval Date  Diesel  All rights reserve	CNAA003170 EAAD090713 EAAD782032 Change ID  TOOL Alignment Dimension Units Off Main Design	Main Des Legacy in Change Syr  With W	nformationnopsis GIN /edges	E ALI	d Donding ChangeNot	Approved	Net Weight	4 - E	3 - c





Risk: Tool and/or bedplate damage

Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplare to ensure that the support point is as close as possible at the engine monoblock column)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shins. Before adjusting the height of wedges and/or shins lift the engine by the hydroulic jacks, any height adjustment houst be the engine by the hydroulic jacks, any height adjustment to the control of the control

- \*1) To be provided by the shipyard
  \*2) Height depending on the requirement
  (chock thickness in correlation with maximum
  permissible extension of the hydraulic jack)
  \*3) Hydraulic jack proposal
  Type: Energiac RCH-803
  Load at 700 bars, 531 kN

| B | 9689 | one | 0000000 | Notice | N

WNGD

TOOL ENGINE ALIGNMENT

separate BOM available Dimension
Scale 1:25 NX Units [mm] [kg] Basic Mosenia 

SEQ NO	QTY	Item ID	Item Name Dimension	Standard-I D	Basic Material	Net Weight
1	30	107.245.895.200	WEDGE			7.511
3	30	PAAD318478	HYDRAULIC JACK			
4	12	PAAD318479	SUPPORT PLATE			
5	18	PAAD318480	SUPPORT BLOCK			
					,	

Prod.		12 X92-B 12 X92DF		12	12 X92DF-2.0				
History									
Change F	Α	sjo101	mhu019	13.02.2024	4 CNAA005217	Drawing Updated		4	3
చ్	-	sde101	mhu019	16.02.2021	EAAD787057	-		-	-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis Approved Activ	ity Code	Е	С



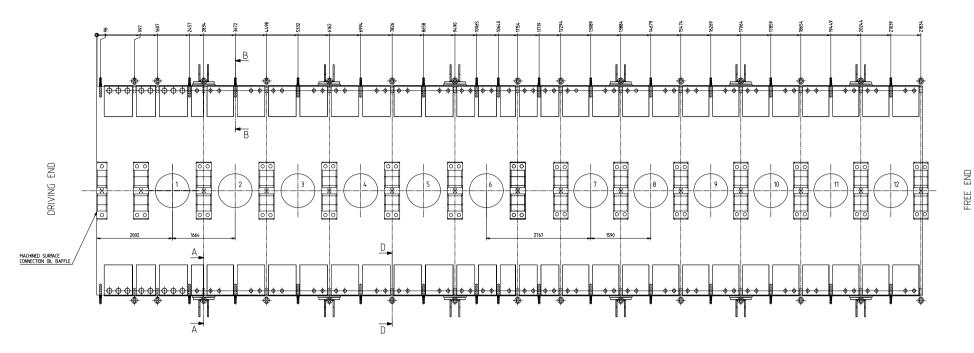
Alignment with: Wedges + STD bedplate split

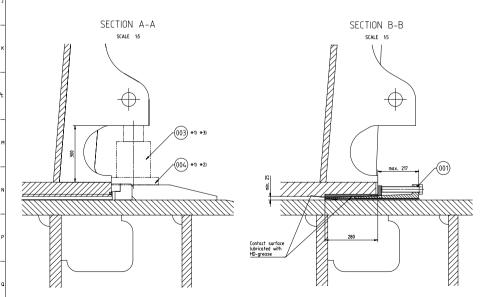
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Dimension

. t	Units	[m] [kg]	Basic Mat	Basic Material				Net Weight	225.3
10	Main Design	Yes	Design Group		9710-01	Q-Code	XXO	Standard	WDS
'' or ut d.	Qty per	Engine	A4	Item ID	PAA	D37	4048	BOM Page/s	01/01







SECTION D-D

Risk: Tool and/or bedplate damage

Countermeasure: Avoid overloading of bedplate areas by observing the appropriate engine alignment/assembly procedure as follows:

- Insert wedges and/or shims in all indicated positions.
- Lift the engine into the engine room and place it on levelled wedges and/or shims (wedges or shims must be inserted as deep as possible below the bedplare to ensure that the support point is as close as possible at the engine monoblock column)
- Apply hydraulic jacks to the protruding bedplate ribs nearby the relevant wedge and/or shim as indicated in the drawing.
- Start with the engine alignment by means of wedges and/or shins. Before adjusting the height of wedges and/or shins lift the engine by the hydroulic jacks, any height adjustment houst be the engine by the hydroulic jacks, any height adjustment to the control of the control

(003) \*11 \*3)

(005) \*1) \*2)

- \*1) To be provided by the shipyard
  \*2) Height depending on the requirement (chock thickness in correlation with maximum permissible extension of the hydraulic jack)
  \*3) Hydraulic jack proposal
  Type: Energon RCH-803
  Load at 700 bars 731 kN

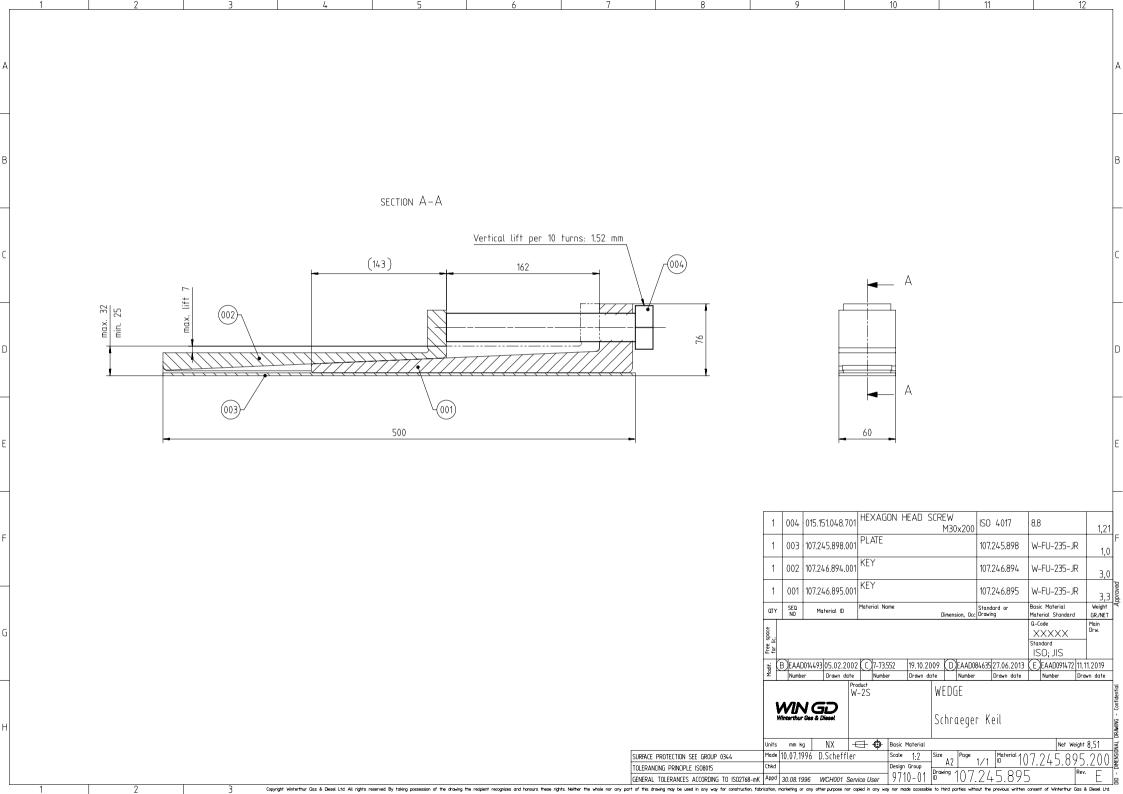
A sjat01 mhu0-10 10.02.2024 03446662-17 [C - side101 mhu019 16.02.2021 EAAD191057 - Re. Constor Approximation Company C - side101 mhu019 Approximation Company C - side101 mhu019 Approximation C - si Drawing Updated

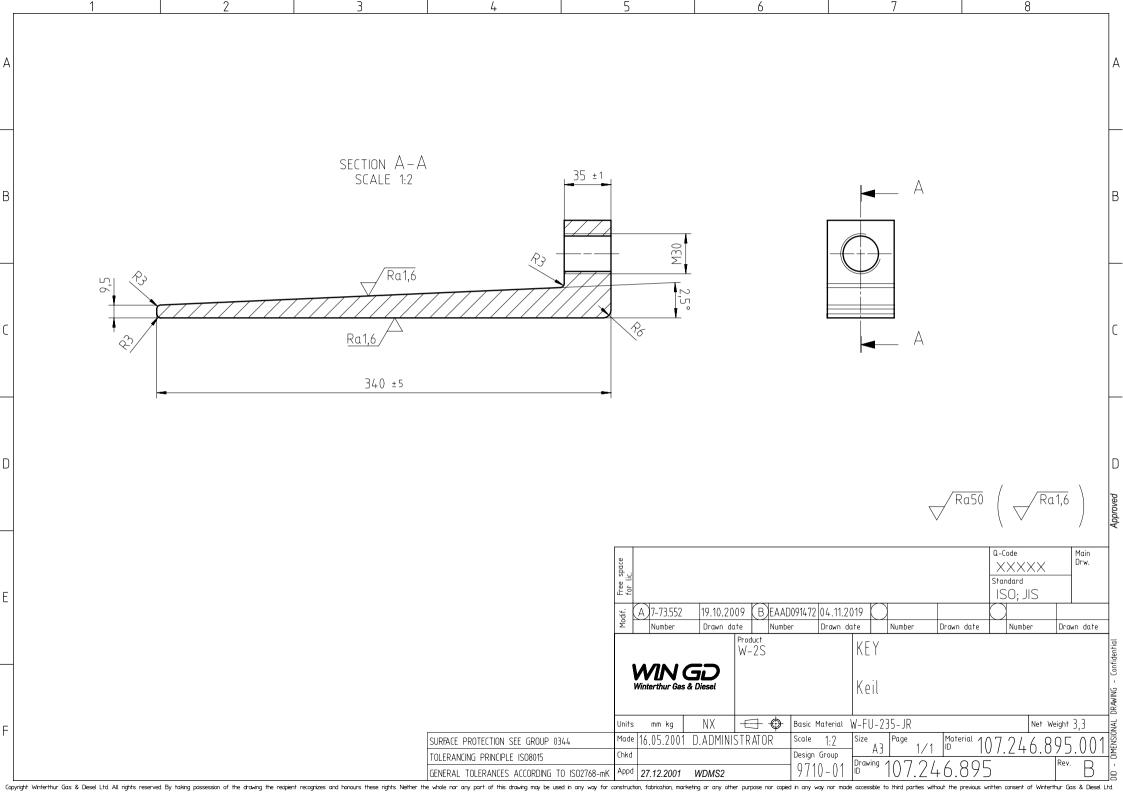
TOOL ENGINE ALIGNMENT Alignment with: Wedges + STD bedplate split

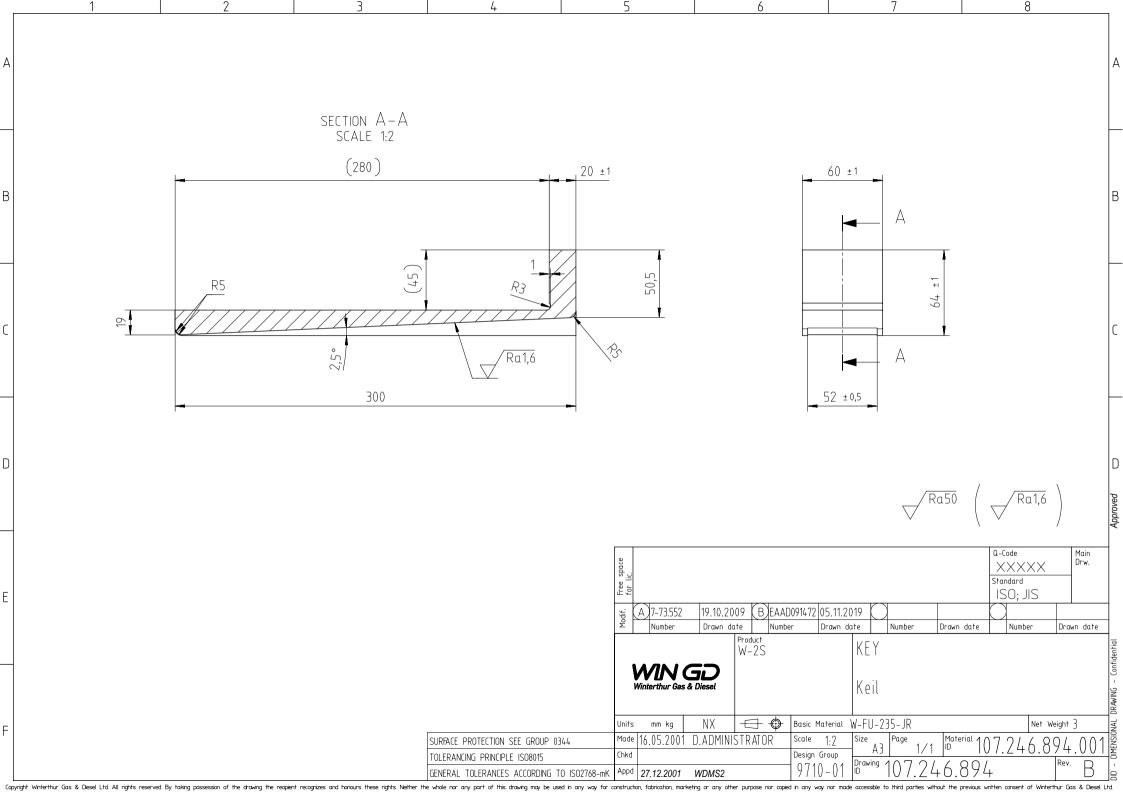
separate BOM available Units [mm] [kg] Basic

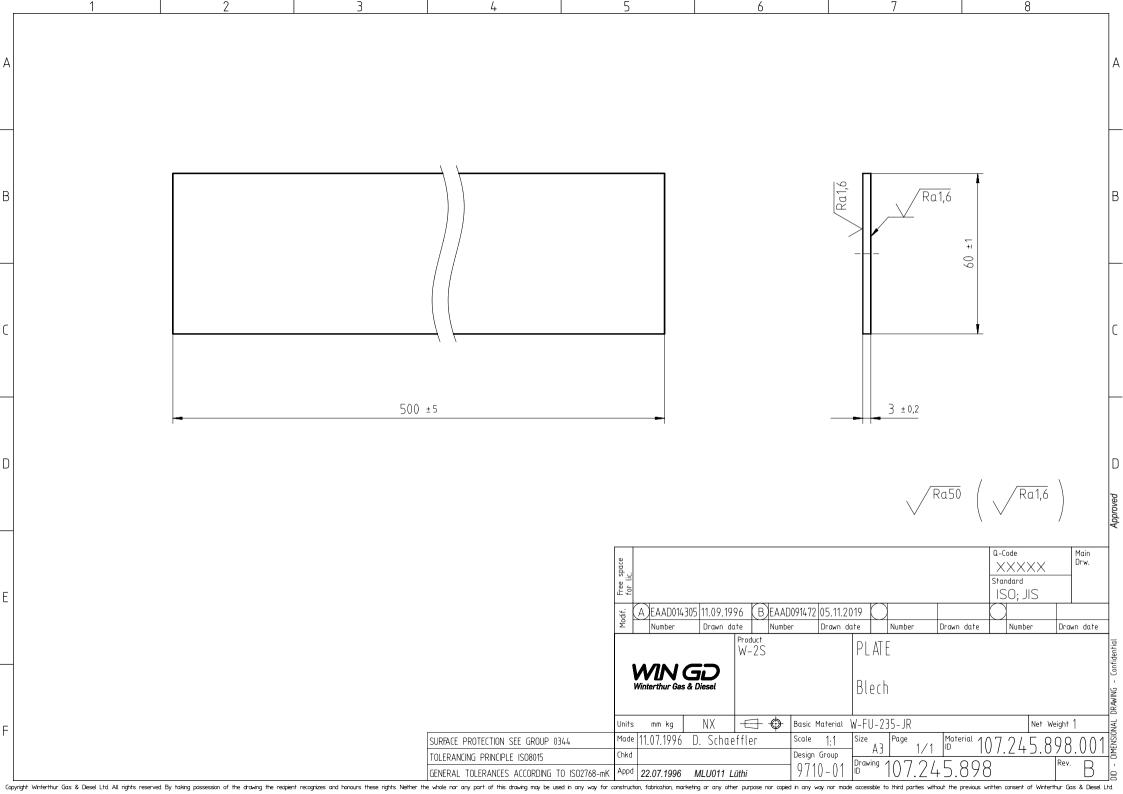
9710-01 C-Code X X 0 Standard WDS

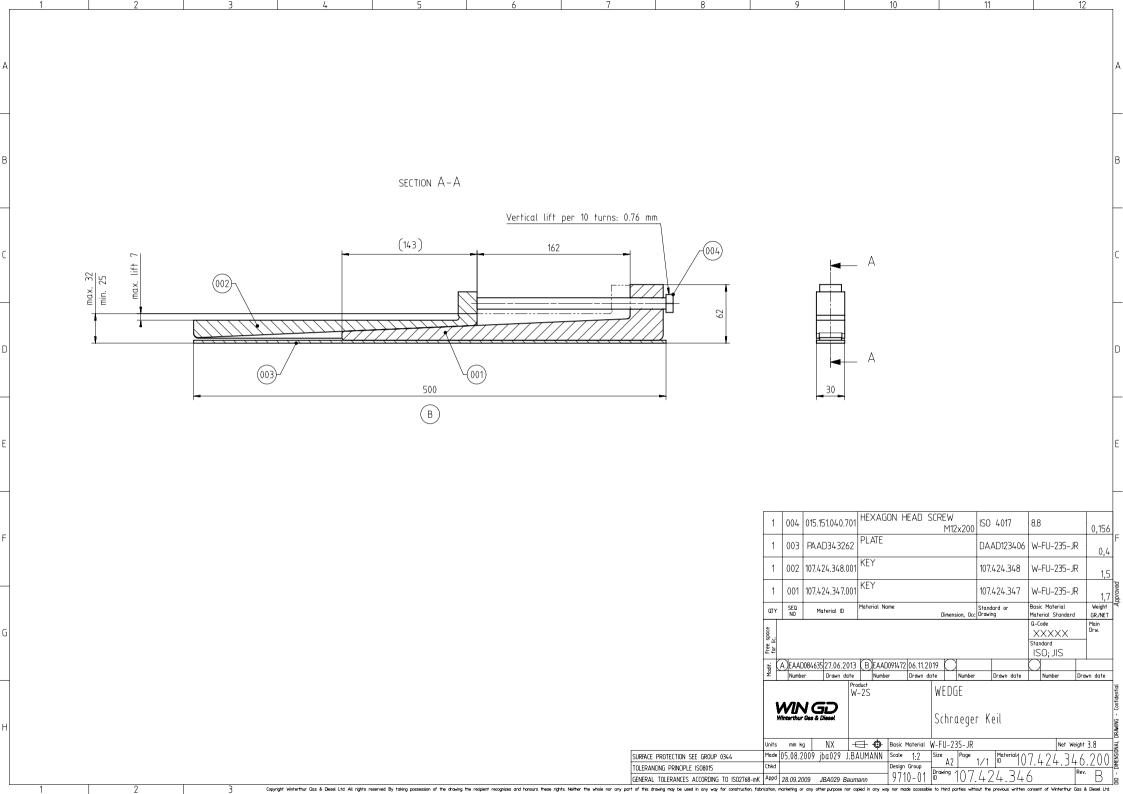
PAAD374048 Cognits 1/1 Engine A0 lbm

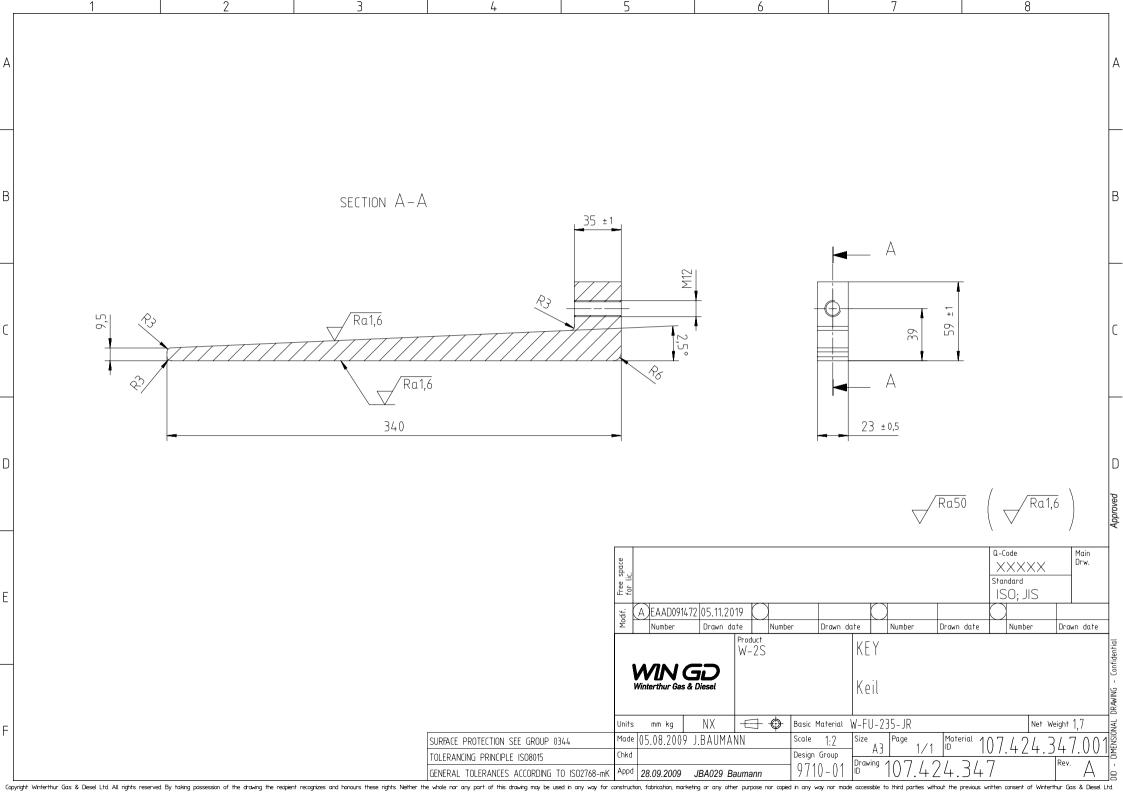


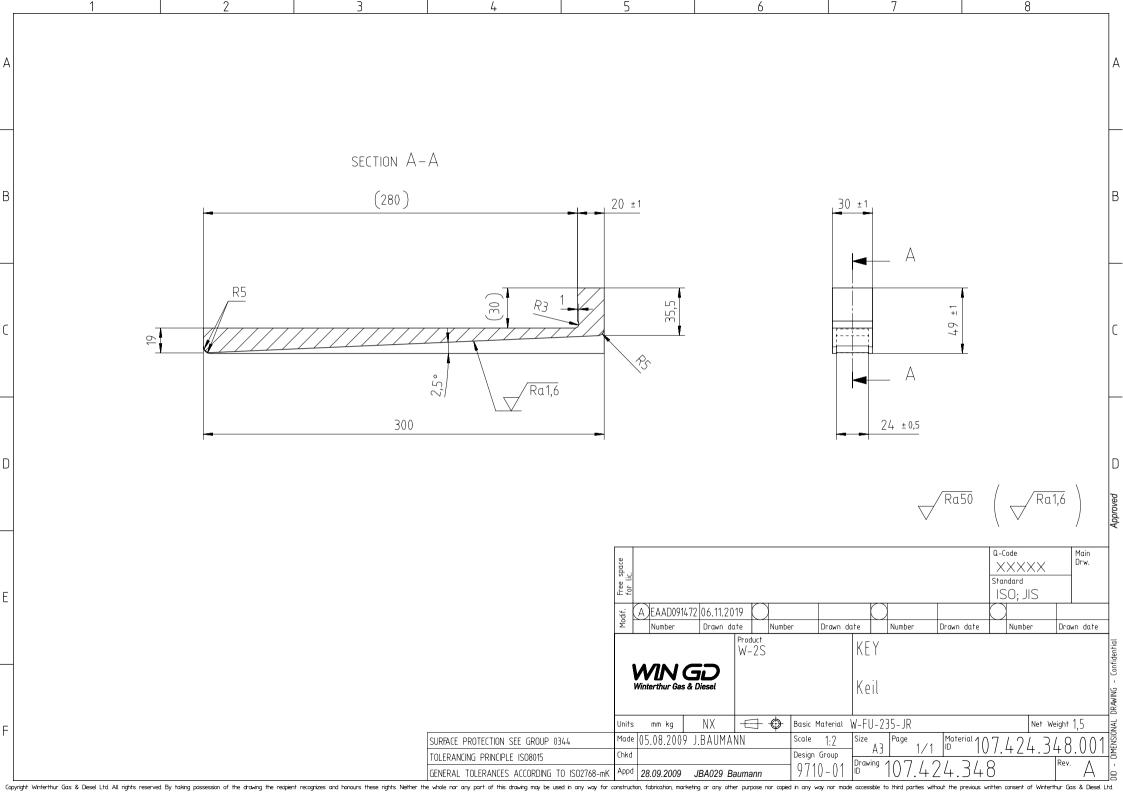


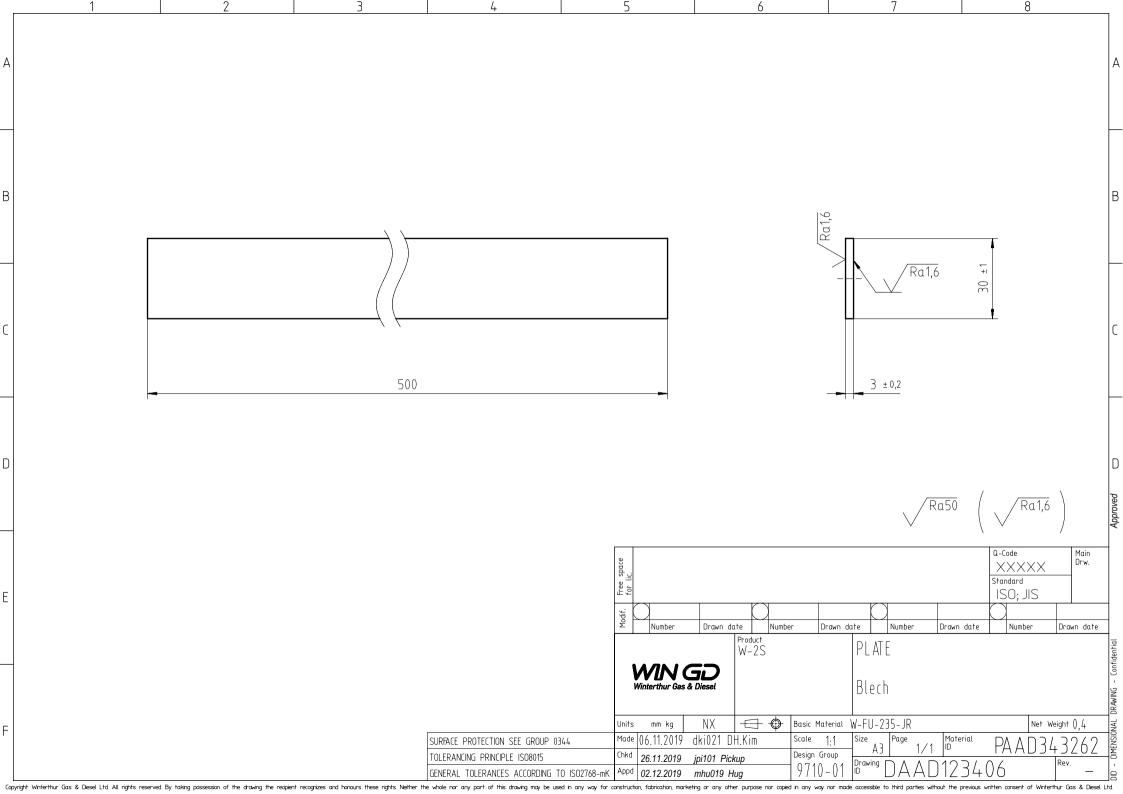














## MIDS - Tool Engine Alignment (DG9710-01)

WinGD X92-B/DF/DF-2.0

### TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2017-01-13	DRAWING SET	First web upload
2017-11-17	DAAD094562	Tool Arrangement, 12cyl drg - new added
2018-06-13	DAAD100823	Tool Arrangement, 9cyl drg - new added
2019-10-03	DAAD044462 DAAD044255 DAAD094562 DAAD070098 DAAD100823	Tool Arrangement drgs - new revision
2020-09-29	DAAD044462 107.245.895 107.246.895 107.246.894 107.245.898 107.424.346 107.424.347 107.424.348	System and wedge assembly drgs – new revision
2021-01-13	DAAD137841	Drawing set for 7 cyl. engine variant - added
2021-02-17	DAAD139723	Drawing set for 12 cyl. with weight levelled split design - added
2021-07-21	PTAA003754	8X92-B, 2-part CS, mid drive – new drawing
2022-01-20	PAAD202723 PAAD295494	Main drgs – new revisions
2022-01-20	PAAD295494	Main drg – new revision
2023-01-12	PAAD295494	Main drg – new revision

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2023-02-01	PAAD279802-B	Main drg – new revision
2023-11-20	PAAD279802-B	New MIDS-master revision
2024-02-15	PAAD374048-A PAAD142162-B PAAD370399-A	New revision
2024-02-22	PTAA059869-A	New revision
2024-10-18	PTAA117991_	New execution for 6 Cyl.

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