



TECHNICAL / INSTRUCTION / 29.2100.20.1143

INSTALLATION INSTRUCTIONS FOR FUEL KIT 29.2180.01.0565

These instructions provide details for the following installations:

- Ford Transit / Custom OEM Fuel Tank Auxiliary Take-Off (pages 2 & 3)
- Ford Transit / Custom OEM Fuel Sender Unit Take-Off (pages 4 & 5)
- Mercedes Sprinter 2018 OEM Fuel Sender Unit Take-Off (pages 6 & 7)

FORD TRANSIT / CUSTOM OEM FUEL TANK AUXILIARY TAKE-OFF

Please read these instructions from start to finish before commencing with the installation process.

If in doubt, contact Eberspächer UK Technical Support for assistance.

The kit is supplied with 6 metres of fuel line, which is assembled as per Sheet 1 of document 29.2100.20.114.2. The fuel line and protective conduit (also supplied) will need to be cut to length according to the heater installation, as follows:

Airtronic S2 (D2):	5 metres (maximum)
Airtronic M2 (D4):	2 metres (maximum)
Hydronic HSS:	2 metres (maximum)

1. Lower the fuel tank to access the auxiliary fuel port (figure 2).
2. Cut the tip off the fuel port (see figure 3) and deburr. This will open the fuel port accordingly.
3. The take-off kit requires assembly with the correct length of fuel line protruding from the in-line connector (as detailed in figure 4). This length is determined by the make and model of the vehicle for which the kit was designed. If you are using the kit for anything other than a Ford Transit/Connect, please ensure that you check for the correct length based on the vehicle manufacturer guidelines. Length can be adjusted by loosening the clip (see figure 4) however care must be taken to ensure that the fuel line does not touch the bottom of the tank and the clip must be re-tightened to 1.0Nm (-0/+0.2) once the correct length is established. If in doubt, contact Eberspächer UK Technical Support for assistance.



Figure 1

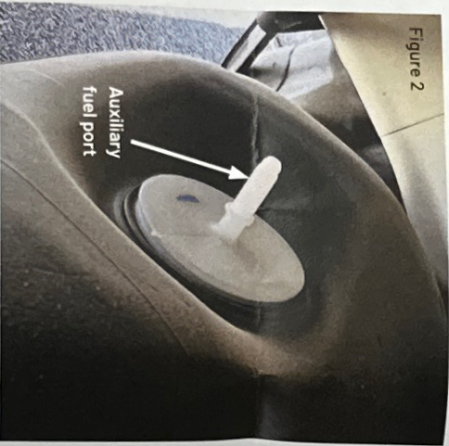


Figure 2

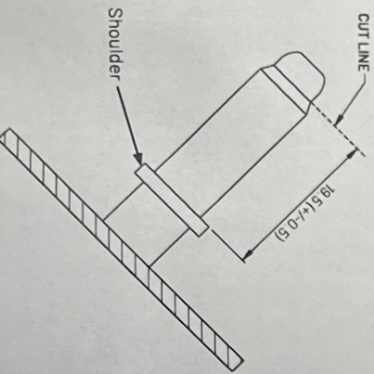
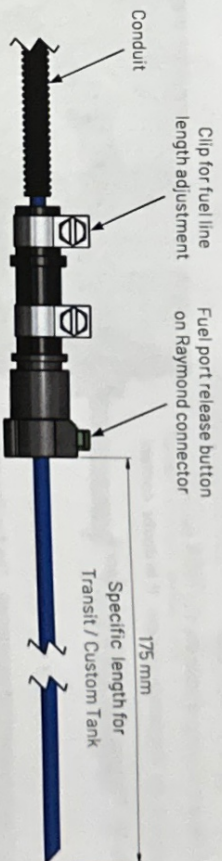


Figure 3

Figure 4

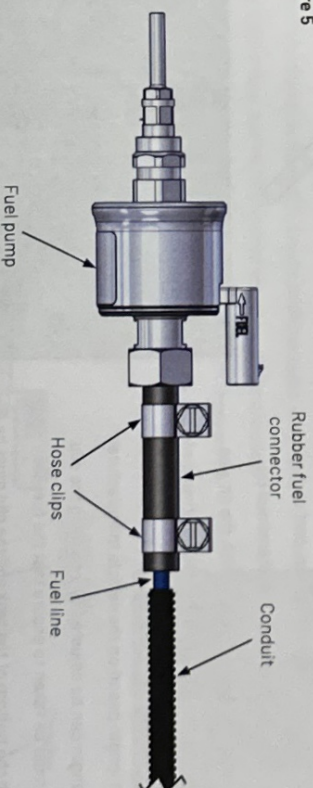


4. Insert the fuel line into the open auxiliary fuel port. Ensure that the fuel line is straight when fitting, or that any curvature is angled downwards, towards the bottom of the tank. Push the in-line connector fully onto the fuel port until it engages (clicks) with the shoulder near the base of the port (shown in figure 3). When fitted correctly, the in-line connector can only be released by pressing and holding the green button at the base of the connector (see figure 4).

5. Cut the fuel line and conduit to the desired length (according to heater installation). Ensure there are no kinks in the fuel line and that the conduit fully protects the fuel line from potential damage / fretting.

6. Attach the fuel line to the fuel metering pump using the rubber fuel connector provided (see figure 5). Ensure both the pump spigot and the fuel line are fully inserted and butted together. Recommended torque setting for hose clips is 1.0Nm (-0/+0.2). Ensure there are no kinks in the fuel line and that the conduit fully protects the fuel line from potential damage / fretting.

Figure 5



If in doubt, contact Eberspächer UK Technical Support for assistance.

FORD TRANSIT / CUSTOM OEM FUEL SENDER UNIT TAKE-OFF

Please read these instructions from start to finish before commencing with the installation process. **If in doubt, contact Eberspächer UK Technical Support for assistance.**

The kit is supplied with 6 metres of fuel line, which is assembled as per Sheet 2 of document 29 2100 20 1142. The fuel line and protective conduit (also supplied) will need to be cut to length according to the heater installation, as follows:

Airtronic S2 (D2):	5 metres (maximum)
Airtronic M2 (D4):	2 metres (maximum)
Hydronic HS3:	2 metres (maximum)

1. Lower the fuel tank to access the sender unit fuel port (figure 7 & 8). Remove the sender unit from the tank in order to complete the following process.

2. Cut the tip off the fuel port (see figure 7) and deburr. This will open the fuel port accordingly.

3. The take-off kit requires assembly, with the correct length of fuel line protruding from the rubber fuel port connector (as detailed in figure 9). This length is determined by the make and model of the vehicle for which the kit was designed. If you are using the kit for anything other than a Ford Transit/Connect, please ensure that you check for the correct length based on the vehicle manufacturer guidelines. Length can be adjusted by loosening the clip, however care must be taken to ensure that the fuel line does not touch the bottom of the tank and the clip must be re-tightened to 1.0Nm (-0/+0.2) once the correct length is established. **If in doubt, contact Eberspächer UK Technical Support for assistance.**

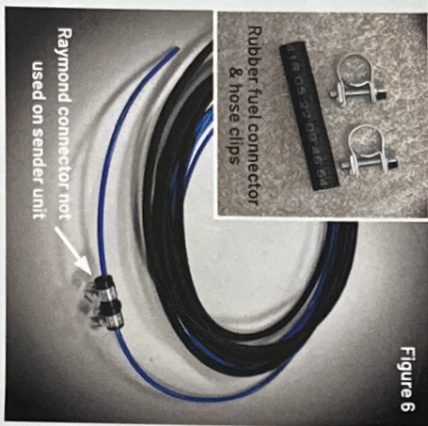


Figure 6

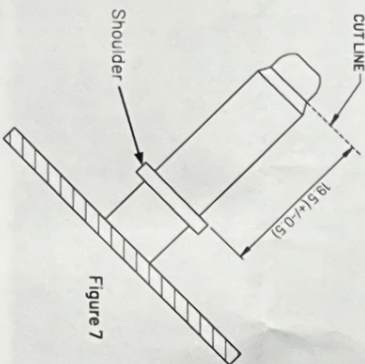


Figure 7

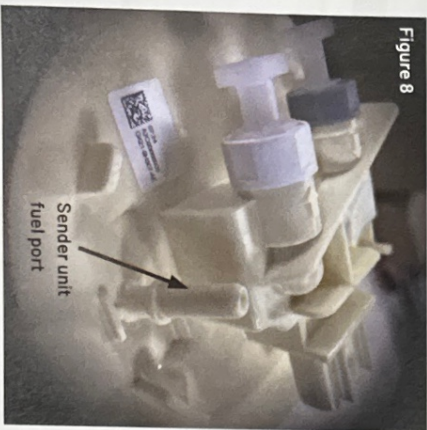
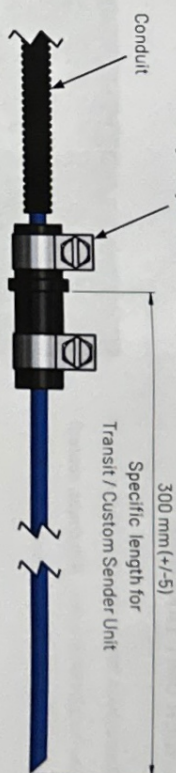


Figure 8

Figure 9
Clip for fuel line length adjustment



4. Insert the fuel line into the open sender unit fuel port (figure 10). Ensure that the fuel line is straight when fitting, or that any curvature is angled downwards, on the outside of the sender unit, away from the float gauge. Push the rubber connector fully onto the fuel port until it touches the shoulder near the base of the port (figure 11). Position the clip 5mm (+/-1mm) from the shoulder. When fitted correctly, the rubber connector should not easily slide off the fuel port. Tighten the clip to 1.0Nm (-0/+0.2) to prevent this from happening. Check by pulling firmly on the rubber connector and tighten further if necessary.

5. At the pump connection end, cut the fuel line and conduit to the desired length (according to heater installation). Ensure there are no kinks in the fuel line and that the conduit fully protects the fuel line from potential damage / fretting.

6. Attach the fuel line to the fuel metering pump using the rubber fuel connector provided (see figure 12). Ensure both the pump spigot and the fuel line are fully inserted and butted together. Recommended torque setting for hose clips is 1.0Nm (-0/+0.2). Ensure there are no kinks in the fuel line and that the conduit fully protects the fuel line from potential damage / fretting.



Figure 10

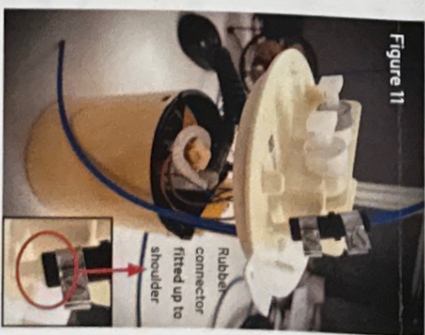


Figure 11

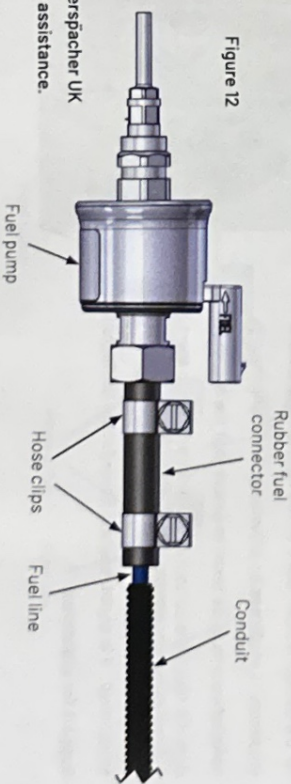


Figure 12

If in doubt, contact Eberspächer UK Technical Support for assistance.

**MERCEDES SPRINTER 2018
OEM FUEL SENDER UNIT TAKE-OFF**

Please read these instructions from start to finish before commencing with the installation process. **If in doubt, contact Eberspächer UK Technical Support for assistance.**

The kit is supplied with 6 metres of fuel line, which is assembled as per Sheet 2 of document 29.2100.20.1142. The fuel line and protective conduit (also supplied) will need to be cut to length according to the heater installation, as follows:

Airtronic S2 (D2):	5 metres (maximum)
Airtronic M2 (D4):	2 metres (maximum)
Hydronic HS3:	2 metres (maximum)

1. Lower the fuel tank to access the sender unit fuel port (figure 14 & 15). Remove the sender unit from the tank in order to complete the following process.

2. Cut the tip off the fuel port (see figure 14) and deburr. This will open the fuel port accordingly.

3. The take-off kit requires assembly, with the correct length of fuel line protruding from the rubber fuel port connector (as detailed in figure 16). This length is determined by the make and model of the vehicle for which the kit was designed. If you are using the kit for anything other than a Mercedes Sprinter 2018, please ensure that you check for the correct length based on the vehicle manufacturer guidelines. Length can be adjusted by loosening the clip, however care must be taken to ensure that the fuel line does not touch the bottom of the tank and the clip must be re-tightened to 1.0Nm (-0/+0.2) once the correct length is established. **If in doubt, contact Eberspächer UK Technical Support for assistance.**



Figure 13

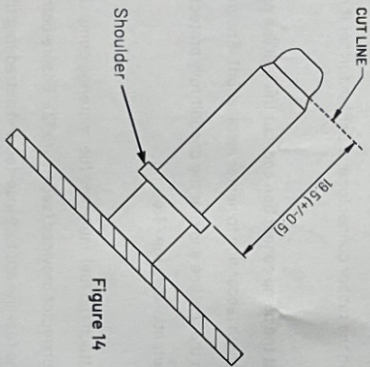
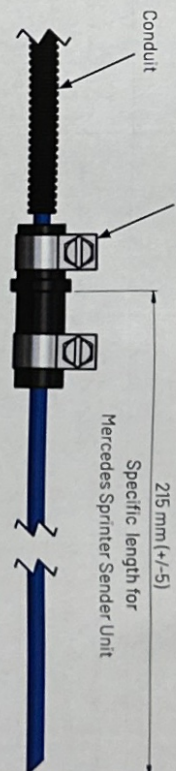


Figure 14



Figure 15

Figure 16



4. Insert the fuel line into the open sender unit fuel port (figure 17**). Ensure that the fuel line is straight when fitting, or that any curvature is angled downwards, on the outside of the sender unit, away from the float gauge. Push the rubber connector fully onto the fuel port until it touches the shoulder near the base of the port (figure 18**). Position the clip 5mm (+/-1mm) from the shoulder. When fitted correctly, the rubber connector should not easily slide off the fuel port. Tighten the clip to 1.0Nm (-0/+0.2) to prevent this from happening. Check by pulling firmly on the rubber connector and tighten further if necessary. **Figure 17 & 18 are for representation only and do not accurately depict the actual sender unit for which this assembly process applies.

5. At the pump connection end, cut the fuel line and conduit to the desired length (according to heater installation). Ensure there are no kinks in the fuel line and that the conduit fully protects the fuel line from potential damage / fretting.

6. Attach the fuel line to the fuel metering pump using the rubber fuel connector provided (see figure 19). Ensure both the pump spigot and the fuel line are fully inserted and butted together. Recommended torque setting for hose clips is 1.0Nm (-0/+0.2). Ensure there are no kinks in the fuel line and that the conduit fully protects the fuel line from potential damage / fretting.



Figure 17

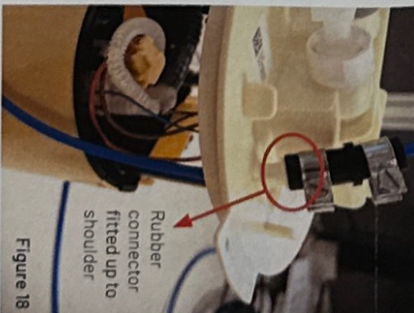


Figure 18

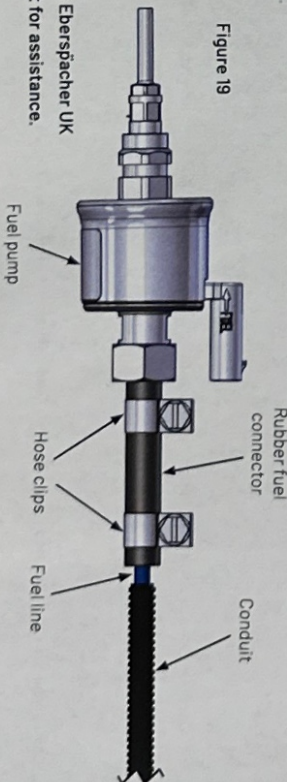


Figure 19

If in doubt, contact Eberspächer UK Technical Support for assistance.

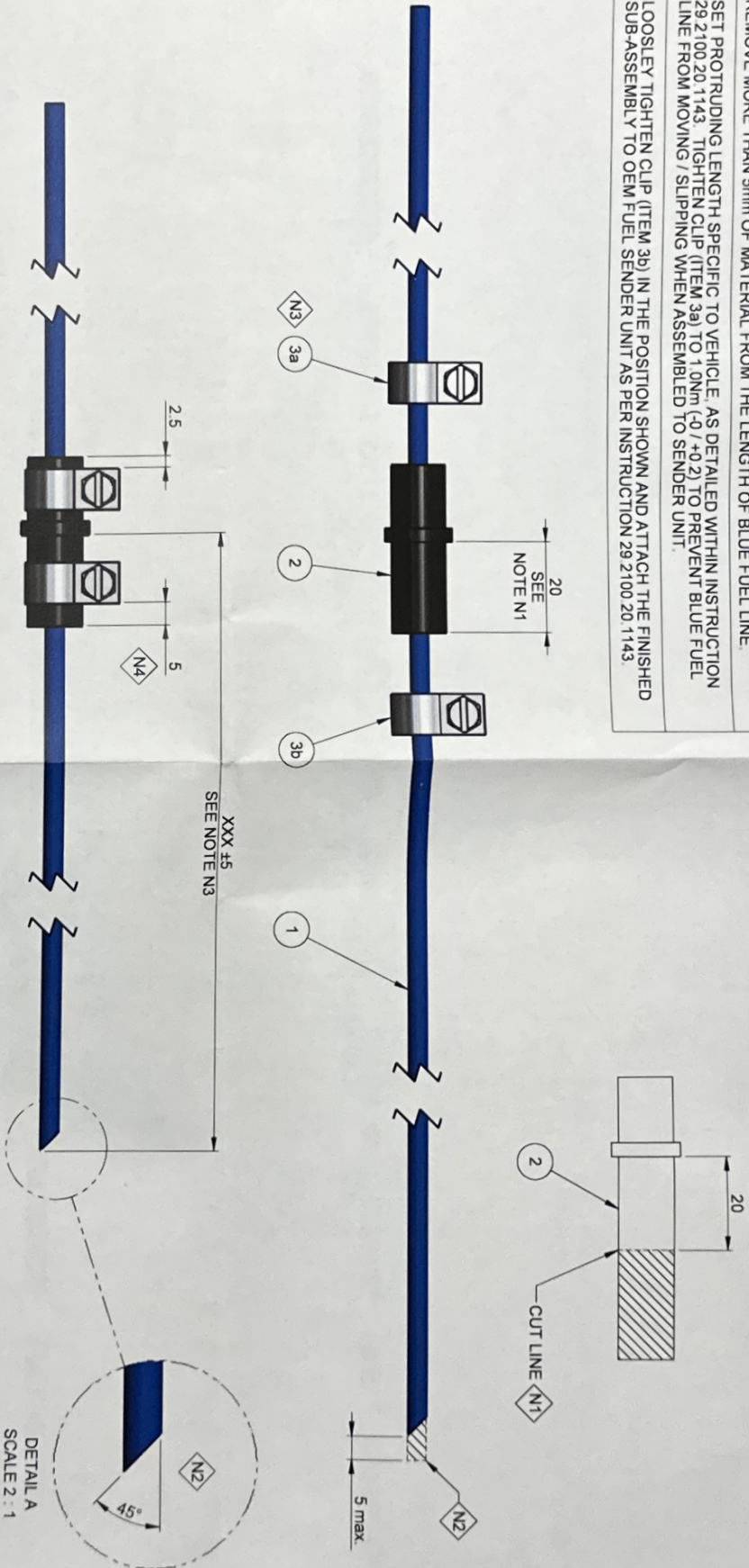
Revision	Description of updates	Checked by	Approved by	Date
A	First Issue	-	-	-
B	Instruction updated to include 3 different installation variants.	<i>Shaun Amor</i>	<i>Keith Phelps-Burry</i>	06/01/23



This publication was correct at the time of going to print, however Eberspächer UK) Ltd have a policy of continuous improvement and reserve the right to amend any specifications without prior notice.

MANUFACTURING NOTES

N1	CUT ITEM 2 AS DETAILED. USE APPROPRIATE HOSE CUTTING TOOL TO ENSURE CUT IS NEAT AND PERPENDICULAR. ASSEMBLE ITEM 2 ONTO ITEM 1, AS SHOWN.
N2	CUT ITEM 1 AT 45° ANGLE AS SHOWN. PRIOR TO TIGHTENING CLIPS (ITEM 3). DO NOT REMOVE MORE THAN 5mm OF MATERIAL FROM THE LENGTH OF BLUE FUEL LINE.
N3	SET PROTRUDING LENGTH SPECIFIC TO VEHICLE. AS DETAILED WITHIN INSTRUCTION 29 2100 20 1143. TIGHTEN CLIP (ITEM 3a) TO 1.0Nm (-0 / +0.2) TO PREVENT BLUE FUEL LINE FROM MOVING / SLIPPING WHEN ASSEMBLED TO SENDER UNIT.
N4	LOOSELY TIGHTEN CLIP (ITEM 3b) IN THE POSITION SHOWN AND ATTACH THE FINISHED SUB-ASSEMBLY TO OEM FUEL SENDER UNIT AS PER INSTRUCTION 29 2100 20 1143.



IMPORTANT NOTE:
USE THIS ASSEMBLY INSTRUCTION FOR ATTACHMENT TO THE OEM FUEL SENDER UNIT.

REV	ZONE	DCN	DESCRIPTION	CHANGED BY	CHECKED	APPROVED	DATE
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REVISIONS

ITEM NO.	PART NUMBER	DESCRIPTION	NOTES	QTY.
3	10.2063.01.1098	CLIP - 11mm FUEL 48011	SEE NOTE N3 & N4	2
2	22.1000.20.3000	ADAPTOR FUEL 7.5mm to 3.5mm	SEE NOTE N1	1
1	29.2100.17.1130	FUEL LINE 2mm ID 4mm OD BLUE 6 METRE	SEE NOTE N2	1

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UNLESS OTHERWISE STATED

DO NOT SCALE DRAWING

ALL DIMENSIONS IN mm

TOLERANCES

UNLESS OTHERWISE STATED

0	±0.0mm
0.0	±0.05mm
0.00	±0.25mm
0.000	±0.1mm
Angular	±0.5°

Cables & Hoses -0%, +10%
(To a maximum of 150mm)

Additional Information

Project No	Weight (kg)
Originator	K PHELPS-BURRY
Drawn By	C CROCKER
Checked By	Shawn Aimer
Approved By	Kate Mulvey
Date	20 DEC 2022
Date	06 JAN 2023
Date	09 01 2023

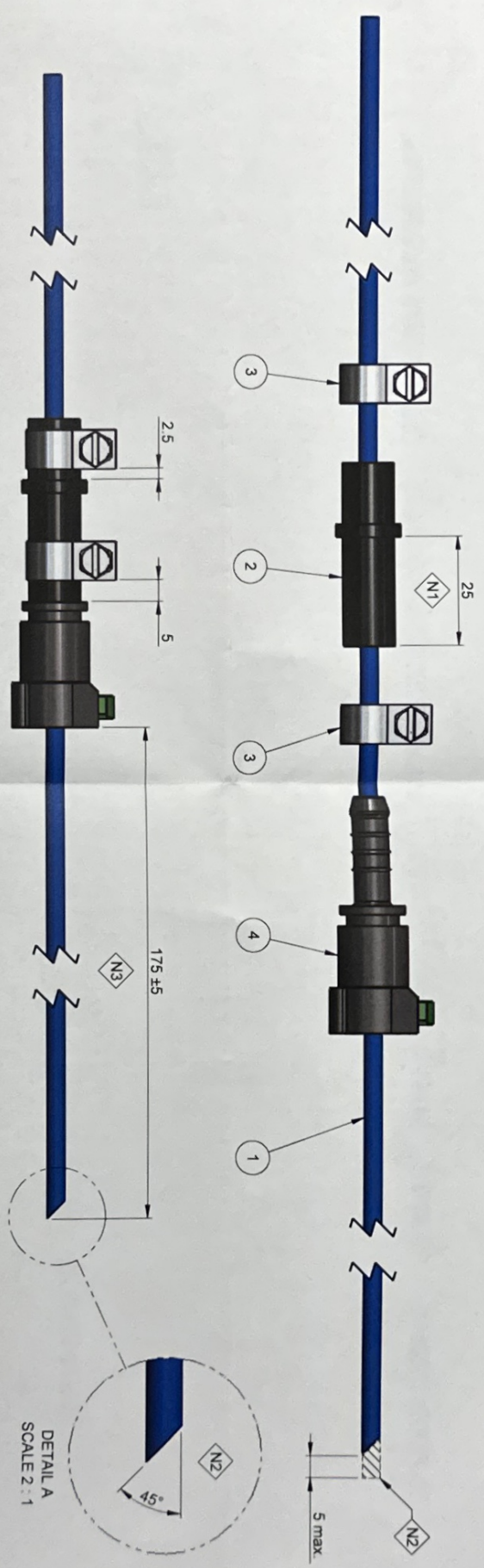
FINISH

Description	ASSEMBLY DETAILS FOR 29 2180 01 0565
SAP Part No	29.2100.20.1142
Sheet	2 of 2
Rev.	A

ITEM NO	PART NUMBER	DESCRIPTION	QTY.	NOTES
4	29 2100 17 1163	CONNECTOR FUEL INLINE RAYMOND	1	
3	10 2063 01 1098	CLIP - 11mm FUEL 46011	2	
2	22 1000 20 3000	ADAPTOR FUEL 7.5mm to 3.5mm	1	SEE NOTE N1
1	29 2100 17 1130	FUEL LINE 2mm ID 4mm OD BLUE 6 METRE	1	SEE NOTE N2

REV	ZONE	DCN	DESCRIPTION	CHANGED BY	CHECKED	APPROVED	DATE
REVISIONS							

IMPORTANT NOTE:
USE THIS ASSEMBLY INSTRUCTION FOR ATTACHMENT TO AUXILIARY FUEL SPIGOT ON THE OEM FUEL TANK.



MANUFACTURING NOTES

- N1 CUT ITEM 2 AS DETAILED. USE APPROPRIATE HOSE CUTTING TOOL TO ENSURE CUT IS NEAT AND PERPENDICULAR. FULLY INSERT ITEM 2 ONTO ITEM 4, AS SHOWN
- N2 CUT ITEM 1 AT 45° ANGLE AS SHOWN. PRIOR TO TIGHTENING CLIPS (ITEM 3). DO NOT REMOVE MORE THAN 5mm OF MATERIAL FROM THE LENGTH OF BLUE FUEL LINE
- N3 SET PROTRUDING LENGTH OF 175mm AND TIGHTEN BOTH CLIPS (ITEM 3) TO 1.0Nm (-0.7 +0.2).
- N4 ATTACH FINISHED SUB-ASSEMBLY TO OEM AUXILIARY FUEL SPIGOT AS PER INSTRUCTION 29 2100 20 1143

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DO NOT SCALE DRAWING

ALL DIMENSIONS IN mm

TOLERANCES
UNLESS OTHERWISE STATED

0	= +1.0mm
0.0	= ±0.5mm
0.00	= ±0.25mm
0.000	= ±0.1mm
Angular	= ±0.5°

Cables & Hoses: -0% +10%
(To a maximum of 150mm)

Additional Information

Project No	Weight (kg)	Date
Originator	K PHELPS-BURRY	20 DEC 2022
Drawn By	C CROCKER	06 JAN 2023
Checked By	Shaun Ryan	09 01 2023
Approved By	Kate Phipps-Burry	