

**Subject:** Installation of an electric fuel tank gauge system for the 60 liters fuel tank

**Serial number applicability:** ASK 16 / ASK 16 B, Data Sheet No. L-758, all production series

**Compliance:** None; optional retrofit.

**Reason:** Because of a discoloration of the fuel tank which was made of the resin system L 20 / H 91, the mechanical tank gauge is hardly or no longer at all readable. Therefore, this TN offers the possibility to retrofit an electric fuel tank gauge system with dip pipe sending unit.

**Action:** The fuel tank must be completely emptied and removed.  
Use a circular cutting tool Ø 59mm to cut into the tank top surface a hole which takes up the Dip-Pipe Sending Unit (see drawing L 758.62-S4 Sheet 1 & 2).  
Remove carefully any cuttings out of the fuel tank.  
Install the Dip-Pipe Sending Unit (see Fig. 1 and VDO Installation Instructions No. 5 301 018).  
Install the indicator unit (Fig.2) into the instrument panel in good visibility of the pilot according to VDO Installation Instructions.  
Fit a new grounding for the Dip-Pipe Sending Unit at the steel tube fuselage above the fuel tank.  
Make the electric wiring according to diagram (Fig.3). Lay the cable at the right inner fuselage wall in the upper cable loom, and separately off the fuel line. Fuse 2A.  
Match the gauge to the Dip-Pipe Sending Unit (see VDO Installation Instructions) with the tank empty (approx.. 60 Ohm).  
Re-install the fuel tank and connect the electrics.  
Measure the fuel tank volumetrically in 1 liter steps and compare the contents and indication in flight attitude and with the tail down (see point Notes).

Insert into the Maintenance Manual the Page „Electric Wiring Diagram“ with revision entry „TN 11 Date 10.07.97 Juw“ and enter this change into the manual on p.2 "Additions to the Manual".

**Important Note for changes to the manuals:**

In case that any manual page referred to herein, has already been changed in your manual by a previously issued revision (as eg: a Technical Note); then the previous manual page revision remains valid; and the page under this TN must be inserted *in addition!*

**Material & Drawings:** VDO Dip-Pipe Sending Unit P/N-No. 224.082.005/098, length 433.5 mm,  
VDO indicator unit P/N No. 301 010 007,  
Cable as per LN 9251,  
Drawing L 758.62-S4, Sheet 1 & 2 and VDO Installation Instructions „Fuel Tank Gauge for Use with Dip-Pipe Sending Unit“ No. 5 301 018 Sheet 1 & 2 .

**Notes:** Because of the position of the fuel connecting line it is possible to use up the fuel entirely. So there is no „unusable fuel“.  
Flight attitude for measuring volumetrically is adjusted as per Maintenance Manual (wedge 1000 : 90 on fuselage top and water level). Flight and tail attitude provide the same indication.

Measuring by liters resulted in:

Indication	Tank Contents	5,0 liters
0		
1/8		12,5
1/4		20,0
3/8		27,5
1/2		35,0
5/8		42,5
3/4		50,0
7/8		57,5
1/1		65,0

The installation can be done by a competent person. The manual page may be exchanged by the owner / operator himself. The accomplishment of all actions must be examined and certified by a licensed aviation inspector in the glider logbook, Flight & Maintenance Manual, and in the glider inspection certificates.

Fig. 1

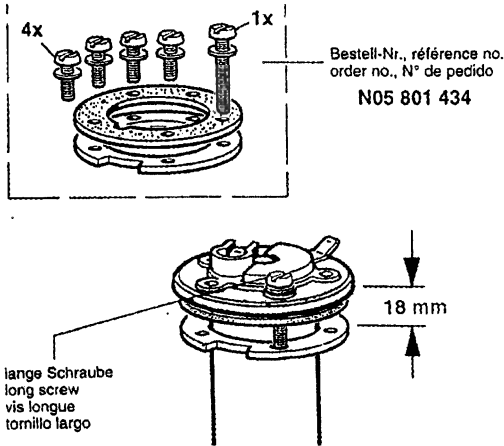
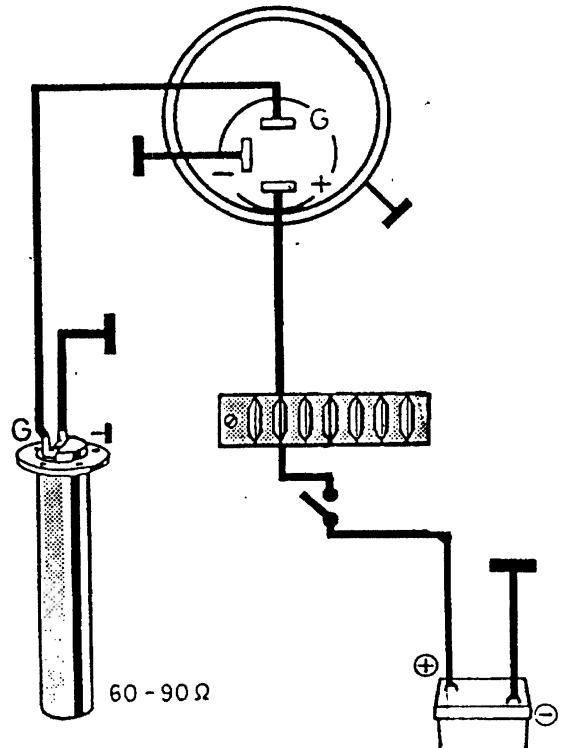


Fig. 2



Fig. 3



Poppenhausen, July 10, 1997

For **Alexander Schleicher**  
GmbH & Co.

*Lutz-W. Juntow*  
(Lutz-W. Juntow)

The German original of this Technical Note has been approved by the LBA under the date of July 15, 1997 (signature: Walter). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.

# VDO

## EINBAU- ANLEITUNG

## INSTALLATION INSTRUCTIONS

## INSTRUCTIONS DE MONTAGE

## INSTRUCCIONES DE MONTAJE

5 301 018

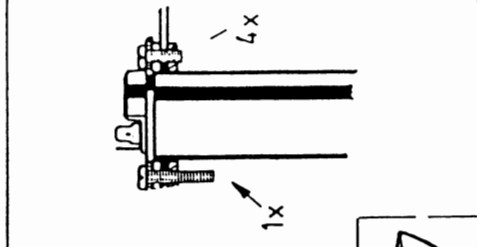
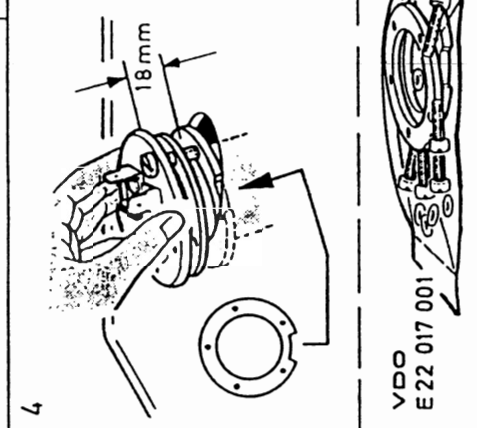
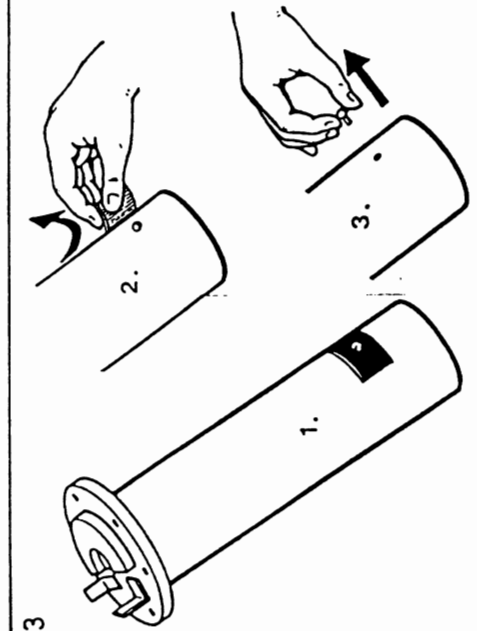
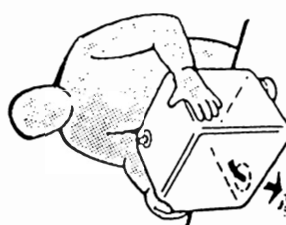
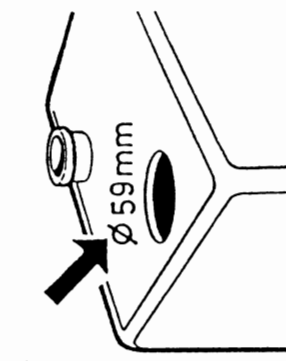
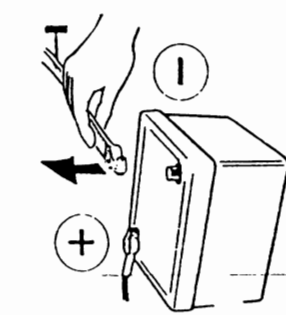
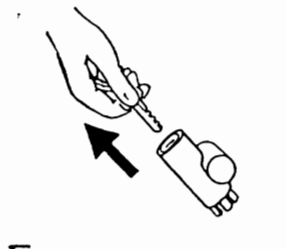
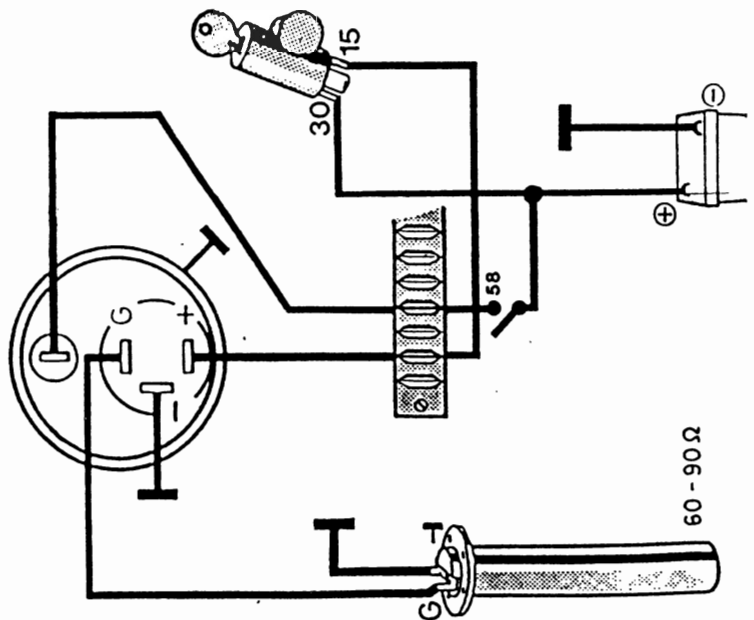
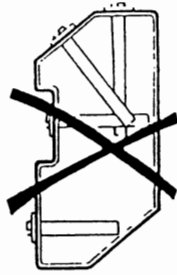
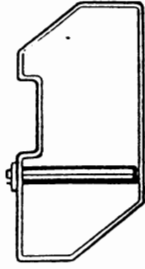
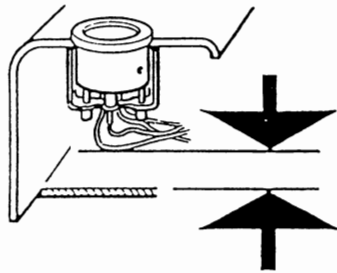
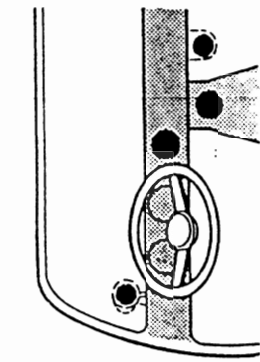
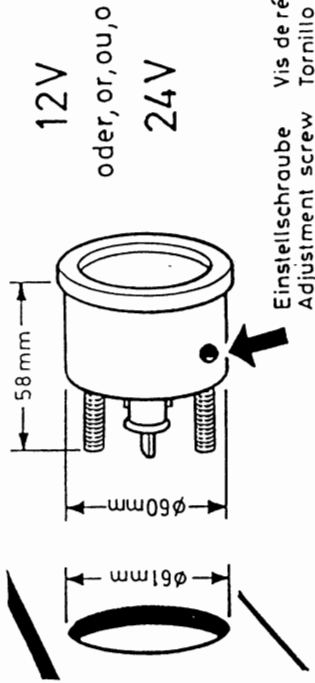
301.272/054/001 (12V)  
301.472/013/001 (24V)

Vorratsanzeiger für  
Kraftstoff (einstellbar)  
mit Tauchrohrgeber

Fuel Tank Gauge  
(adjustable) for Use  
with Dip-Pipe Sending Unit

Jauge carburant  
(ajustable) avec  
sonde tubulaire

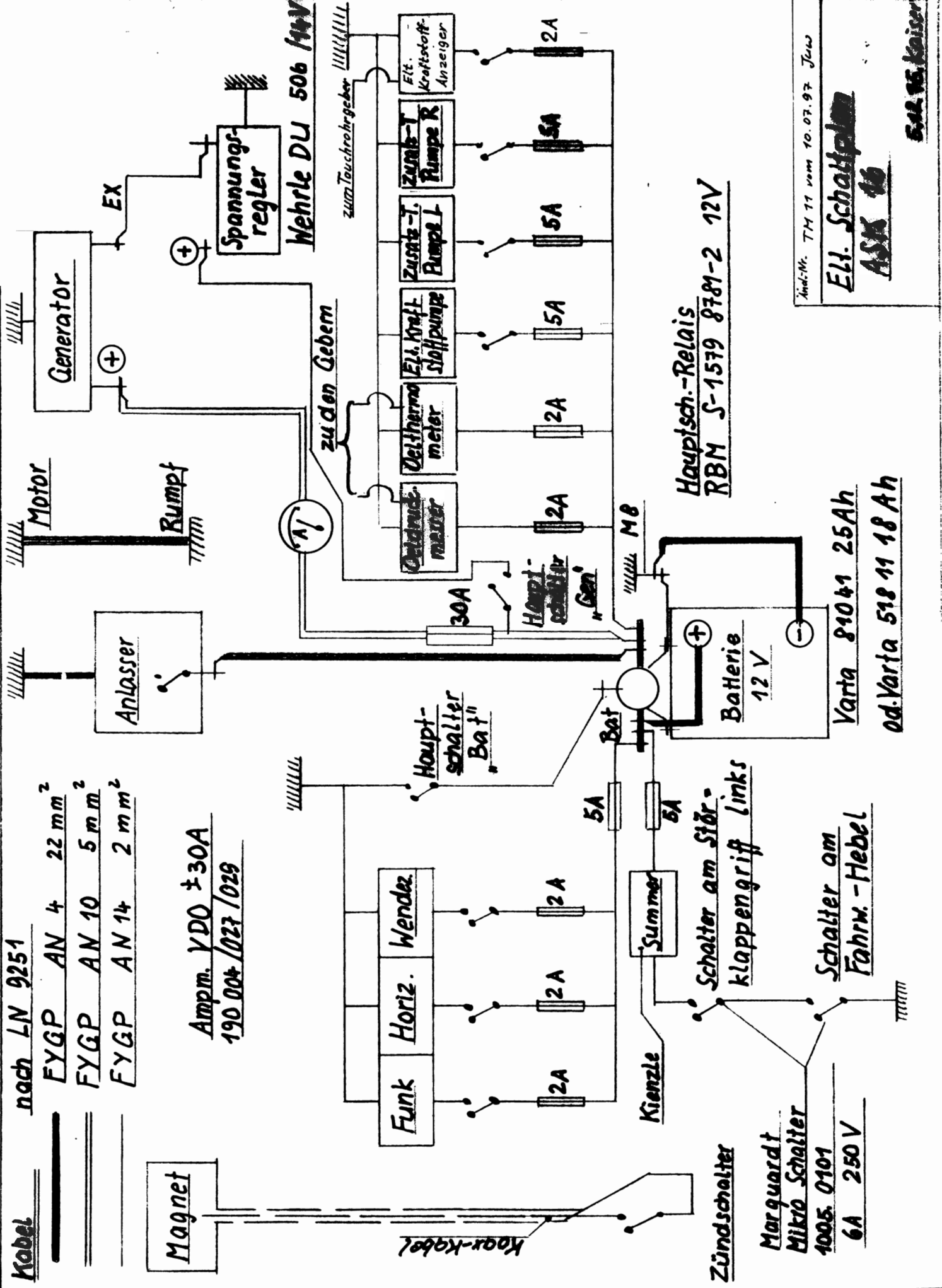
Indicador de combustible  
(regulable) con emisor  
de tubo de inmersión



60 - 90 Ω

VDO  
E22 017 001





Kabel nach LN 9251

- FGP AN 4 22 mm<sup>2</sup>
- FGP AN 10 5 mm<sup>2</sup>
- FGP AN 14 2 mm<sup>2</sup>

Ampm. VDO ±30A  
190 004/027/029

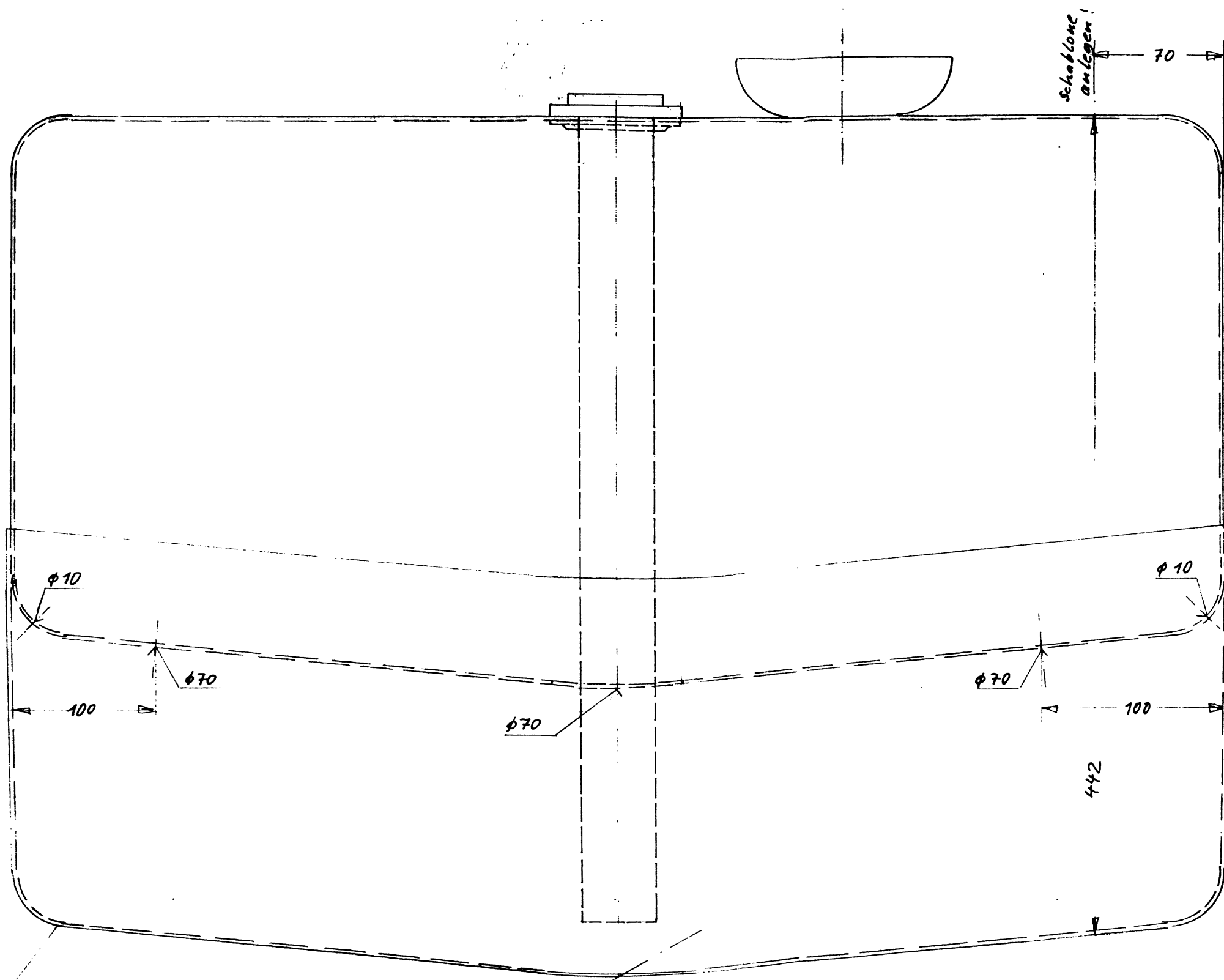
Hauptsch.-Relais  
RBM S-1579 8781-2 12V

Varta 81041 25Ah  
od. Varta 518 11 18 Ah

Anz.Nr. TM 11 vom 10.07.97 Jula

Eli. Schaltplan  
ASX 16

5.4.15. Kaiser



Schablone  
anlegen!

70

$\phi 10$

100

$\phi 70$

$\phi 70$

442

$\phi 70$

100

$\phi 10$

aus 2 Hälften bauen  
und zusammensetzen

Alle anderen Angaben, Maße,  
usw. siehe Zchg. L 758.62-52  
Blatt 1 !

St.	Benennung	L.N. Nr.	Werkstoff	Reihe Tit. oder DIN-Nr.	Bemerkung
		Datum	Stanz	Typ	Benennung
		22.06.82	16		Kraftstofftank
		16			Tauchrohrgeber
					Position

ASK 16  
A. Schleicher GmbH & Co.  
Sopotlungsarbeiten  
425 Pappstücken  
Zeichnungsnummer  
L 758.62-54

Blatt  
1  
2/2

Änderung Datum No. Ugr. L 758.62-52 Bl. 2 Ers. 1 Ers. 1