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# Cabling diagrams

EN\_Universal\_Cabling\_diagrams\_2\_V09-181106.docx



BOZZIO

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Hauptsponsor



Schweizer  
Paraplegiker  
Stiftung

Sponsoren



**STI**  
Stiftung für technologische Innovation  
Fondation pour l'innovation technologique  
Foundation for technological innovation



**Berner Fachhochschule**  
Technik und Informatik

**KTI/CTI**  
DE FÖRDERAGENTUR FÜR INNOVATION  
L'AGENCE POUR LA PROMOTION DE L'INNOVATION  
L'AGENZIA PER LA PROMOZIONE DELL'INNOVAZIONE  
THE INNOVATION PROMOTION AGENCY

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## 1 General

This document describes the installation of the joysteer® system and to take place by trained personnel **exclusively**, whereby all points need to be carried out as described.

## 2 Disclaimer

Bozzio AG refuses their product liability if one or more of the following facts are given:

- Driving the system by users who do not possess an appropriate driving licence  
Exception: driving accompanied by an authorized driving instructor
- Driving with accompanying driving instructor without installation of an Instructor switch
- Installation/ maintenance/ repairs by companies not trained by Bozzio AG
- Installation/ maintenance/ repairs by personnel not trained by Bozzio AG
- Installation/ maintenance/ repairs not according to the manuals
- Installation/ maintenance/ repairs of components/ modules, which are not mentioned in the part list
- Installation/ maintenance/ repairs of any MMI (Man Machine Interface), which has not been released by Bozzio AG in written form
- Usage of parameter-sets which do not correspond to the “rules” of the Servicemanager
- Any modifications to the cable harness

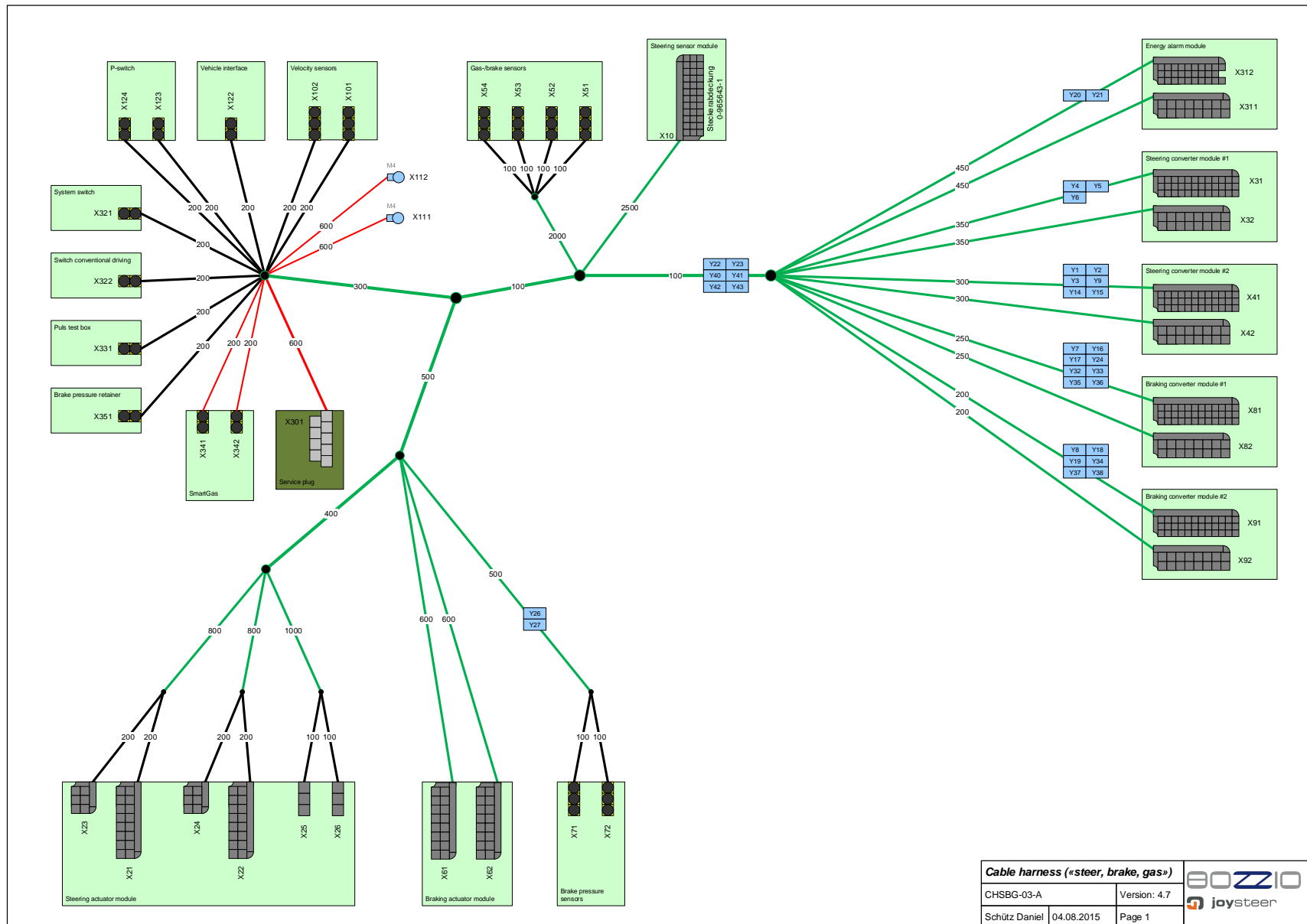
### Important:

- By opening the modules any warranty of the manufacturer is omitted  
(Exception: EnergyAlarm module).

### **3 Cabling diagrams**

The following cabling diagrams are to be used for the installation of joysteer®.

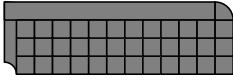




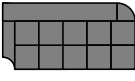










### 3.1 Cable harness "steer, brake, gas"




<b>Cable harness («steer, brake, gas»)</b>	
CHSBG-03-A	Version: 4.7
Schütz Daniel	04.08.2015 Page 1



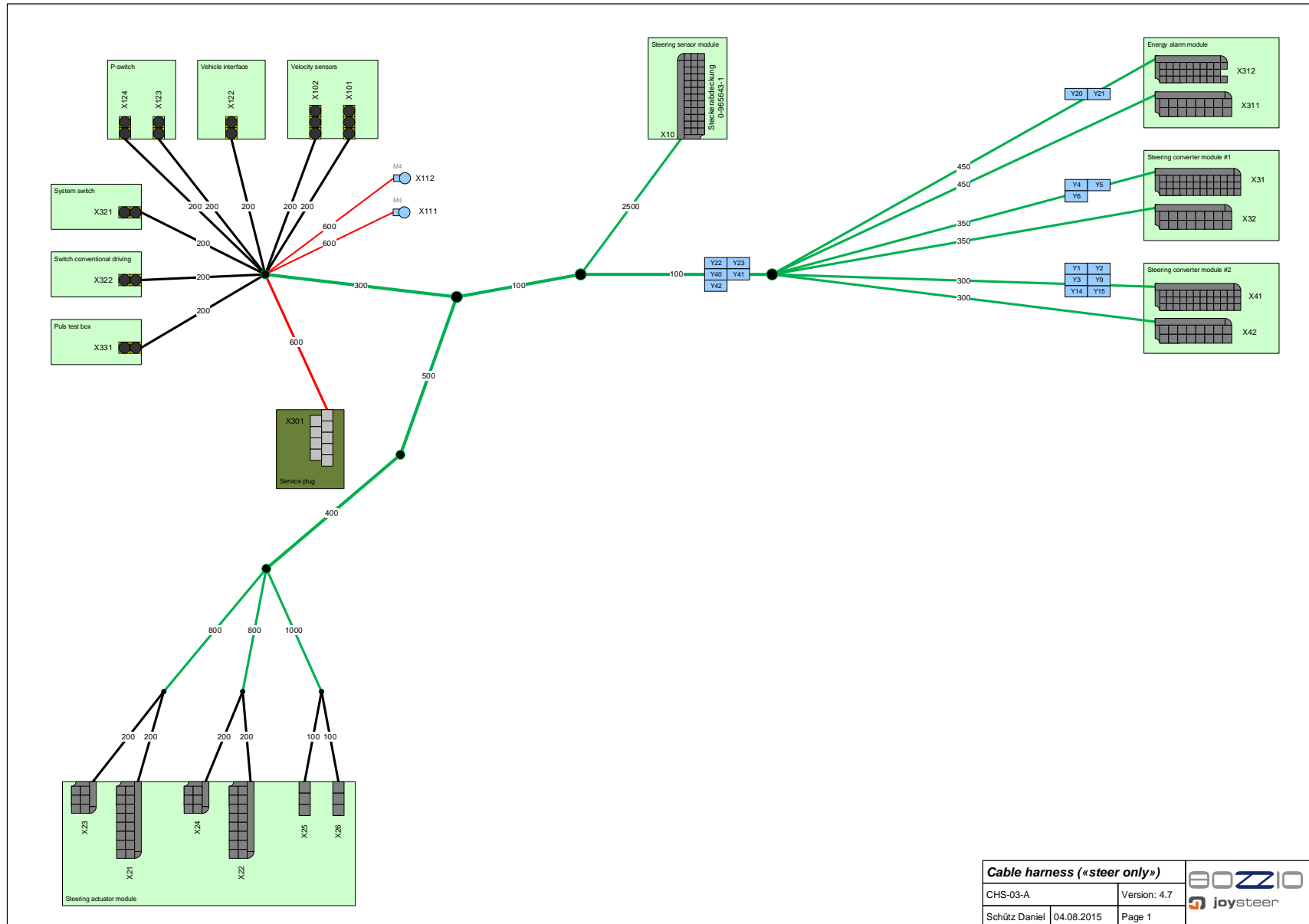
### 3.2 Cable harness "steer brake gas", plugs

Connector				
	Tyco / AMP Power Timer 42 pol (6+36) 1-967281-1		Delphi Metri-Pack 150 Sealed Female 3 pol 12110192	
	Tyco / AMP Power Timer 29 pol 1-963448-2			
	Tyco / AMP Power Timer 16 pol 1-967242-1		Molex Micro Fit 3.0 3 pol 43640-0300	
	Tyco / AMP Power Timer 10 pol 1-967240-1		DSUB Socket 9 pol	
	Tyco / AMP Power Timer 6 pol 1-967241-1		Ring terminal (M4)	
	Tyco / AMP Superseal 1.5 Series 3 pol 282087-1		Ring terminal (M6) DIN 6-25 / GS 6-26	
	Tyco / AMP Superseal 1.5 Series 2 pol 282080-1		Standard Battery terminal clamp	
	Tyco / AMP Superseal 1.5 Series <b>Tab housing</b> 3 pol 282105-1		Connector / Splice	
	Tyco / AMP Superseal 1.5 Series <b>Tab housing</b> 2 pol 282104-1			


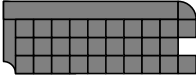


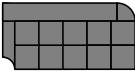









<b>Cable harness («steer, brake, gas»)</b>			
CHSBG-03-A		Version: 4.7	
Schütz Daniel	04.08.2015	Page 2	


### 3.3 Cable harness "steer only"



<b>Cable harness («steer only»)</b>		
CHS-03-A	Version: 4.7	
Schütz Daniel	04.08.2015 Page 1	

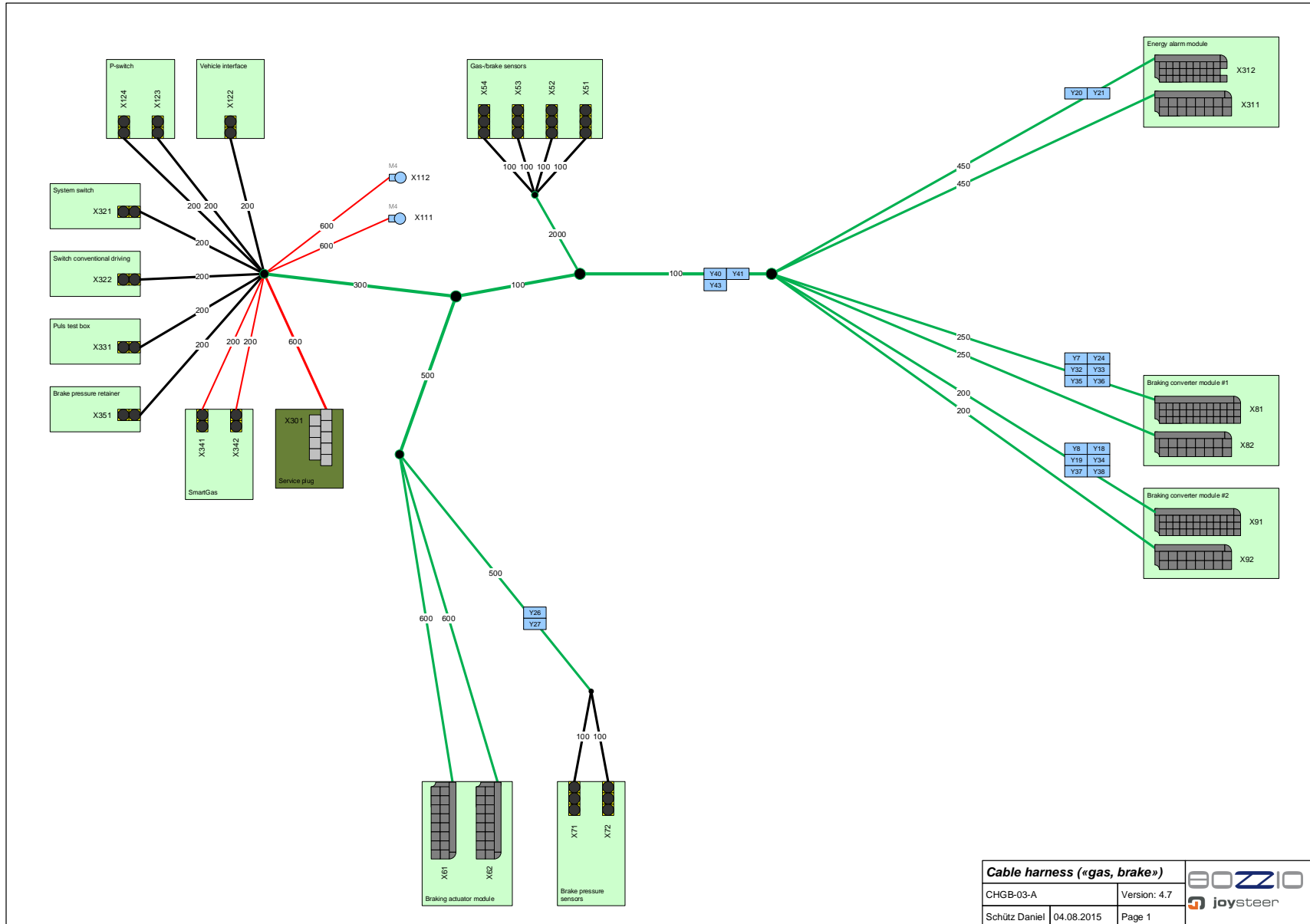
### 3.4 Cable harness "steer only", plugs

Connector			
	Tyco / AMP Power Timer 42 pol (6+36) 1-967281-1		
	Tyco / AMP Power Timer 29 pol 1-963448-2		
	Tyco / AMP Power Timer 16 pol 1-967242-1		Molex Micro Fit 3.0 3 pol 43640-0300
	Tyco / AMP Power Timer 10 pol 1-967240-1		DSUB Socket 9 pol
	Tyco / AMP Power Timer 6 pol 1-967241-1		Ring terminal (M4)
	Tyco / AMP Superseal 1.5 Series 3 pol 282087-1		Ring terminal (M6) DIN 6-25 / GS 6-26
	Tyco / AMP Superseal 1.5 Series 2 pol 282080-1		Standard Battery terminal clamp
	Tyco / AMP Superseal 1.5 Series Tab housing 2 pol 282104-1		Connector / Splice



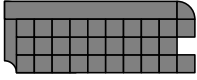
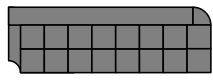

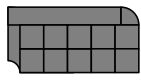
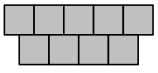









<b>Cable harness («steer only»)</b>			
CHS-03-A		Version: 4.7	
Schütz Daniel	04.08.2015	Page 2	




### 3.5 Cable harness “gas, brake”



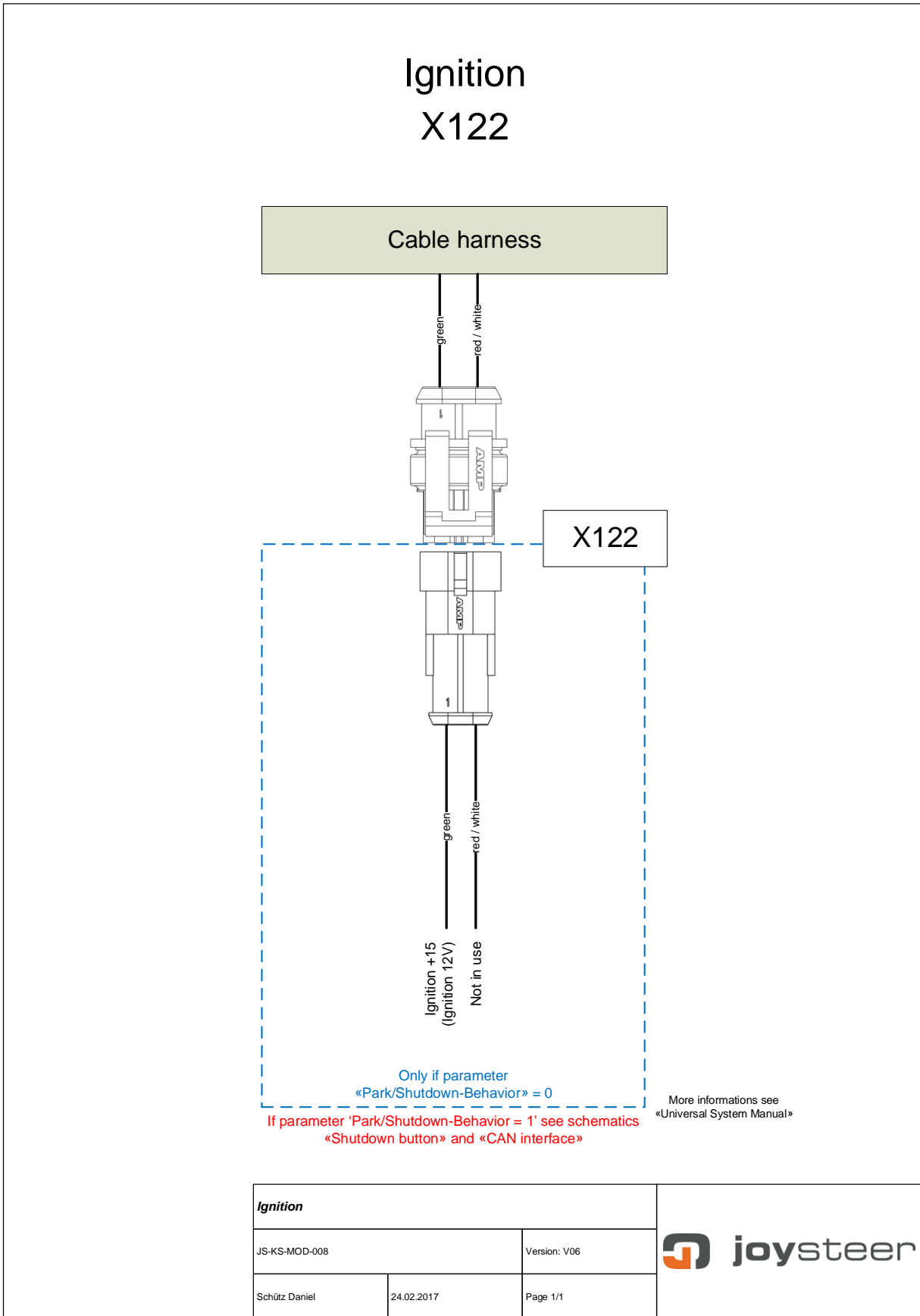
### 3.6 Cable harness „gas, brake“, plugs

Connector				
	Tyco / AMP Power Timer 42 pol (6+36) 1-967281-1		Delphi Metri-Pack 150 Sealed Female 3 pol 12110192	
	Tyco / AMP Power Timer 29 pol 1-963448-2			
	Tyco / AMP Power Timer 16 pol 1-967242-1		Molex Micro Fit 3.0 3 pol 43640-0300	
	Tyco / AMP Power Timer 10 pol 1-967240-1		DSUB Socket 9 pol	
	Tyco / AMP Power Timer 6 pol 1-967241-1		Ring terminal (M4)	
	Tyco / AMP Superseal 1.5 Series 3 pol 282087-1		Ring terminal (M6) DIN 6-25 / GS 6-26	
	Tyco / AMP Superseal 1.5 Series 2 pol 282080-1		Standard Battery terminal clamp	
	Tyco / AMP Superseal 1.5 Series <b>Tab housing</b> 3 pol 282105-1		Connector / Splice	
	Tyco / AMP Superseal 1.5 Series <b>Tab housing</b> 2 pol 282104-1			

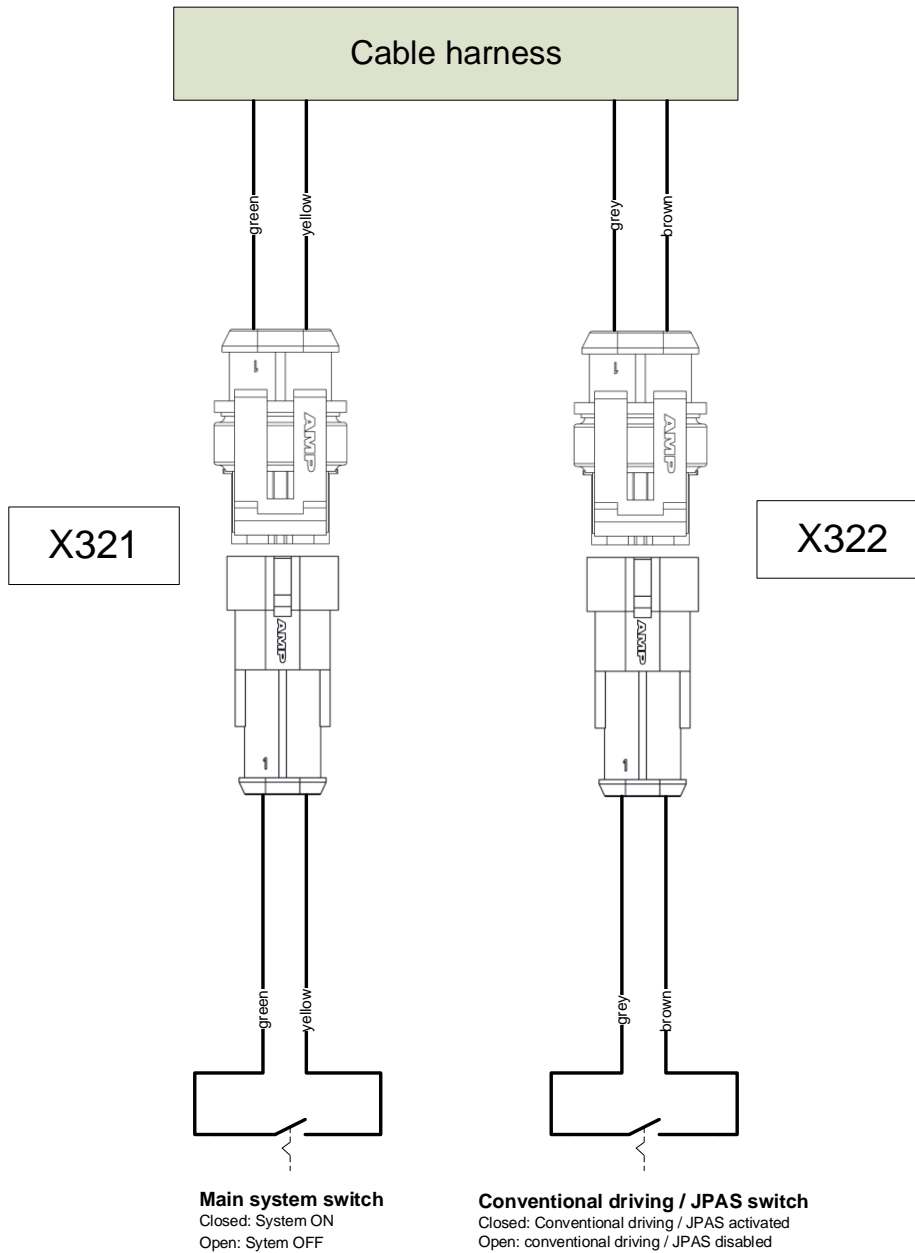
<b>Cable harness («gas, brake»)</b>			
CHGB-03-A		Version: 4.7	
Schütz Daniel	04.08.2015	Page 2	

### 3.7 Ignition




### 3.8 Main switch / Conventional driving / J-PAS

## Main switch X321 Conventional driving / JPAS switch X322

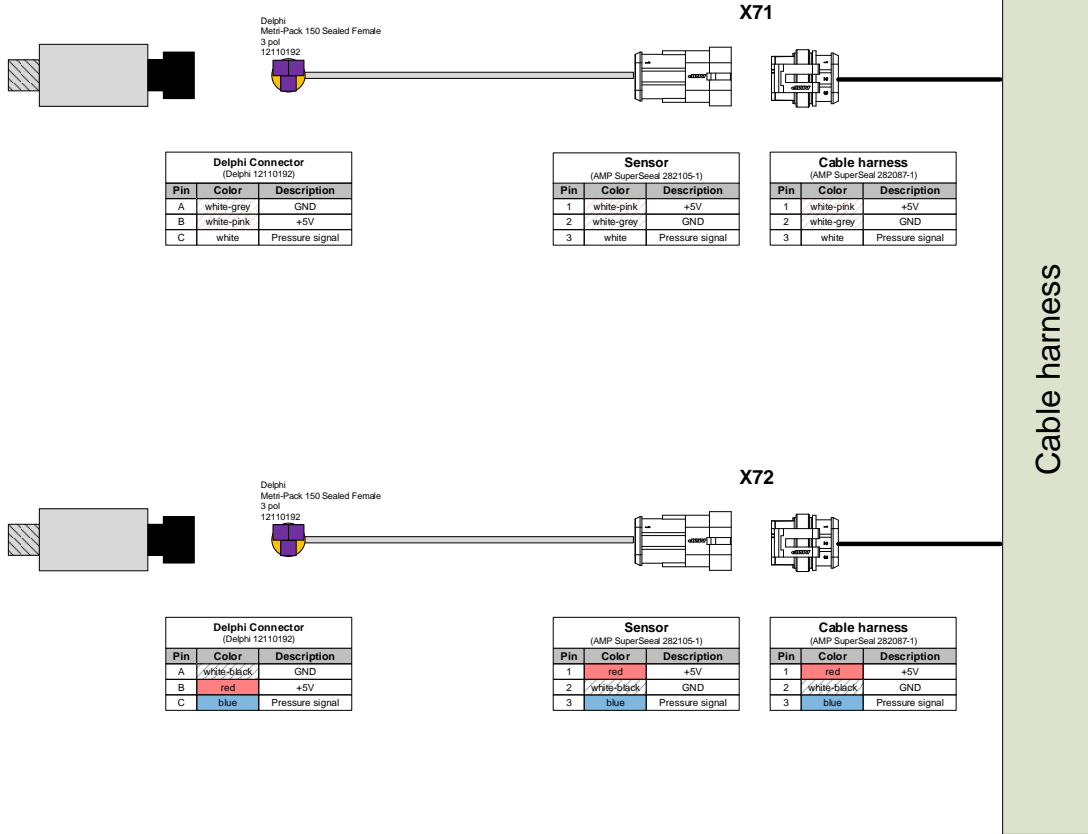


Switch not included

<b>Main switch</b>		
<b>Conventional driving / JPAS</b>		
JS-KS-MOD-003	Version: V05	
Schütz Daniel	22.10.2015	Page 1/1

### 3.9 Brake pressure sensors

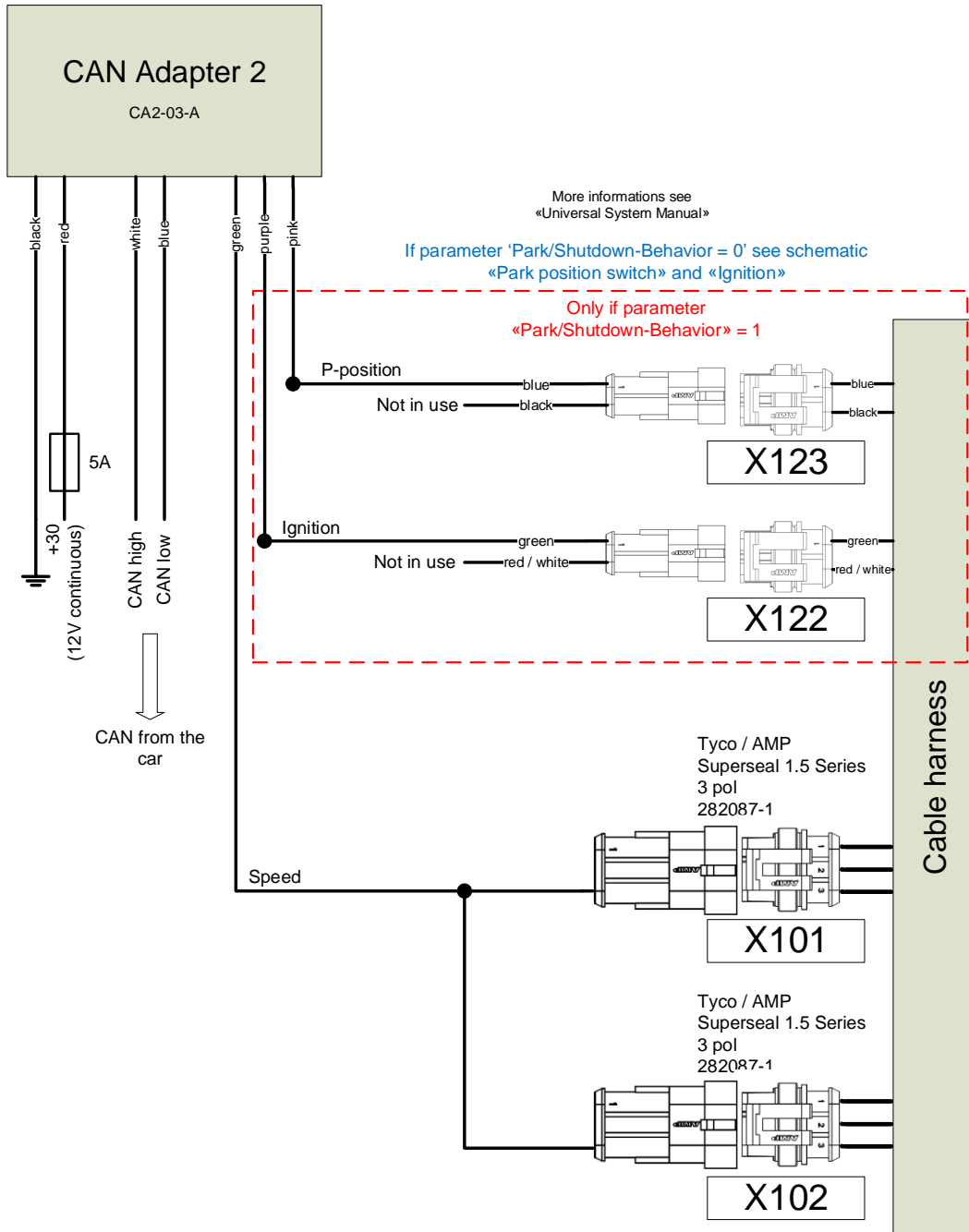
## Brake pressure sensors X71, X72



<b>Brake pressure sensors</b>		
JS-KS-MOD-002	Version: V05	
Schütz Daniel	22.10.2015	

### 3.10 CAN Adapter 2

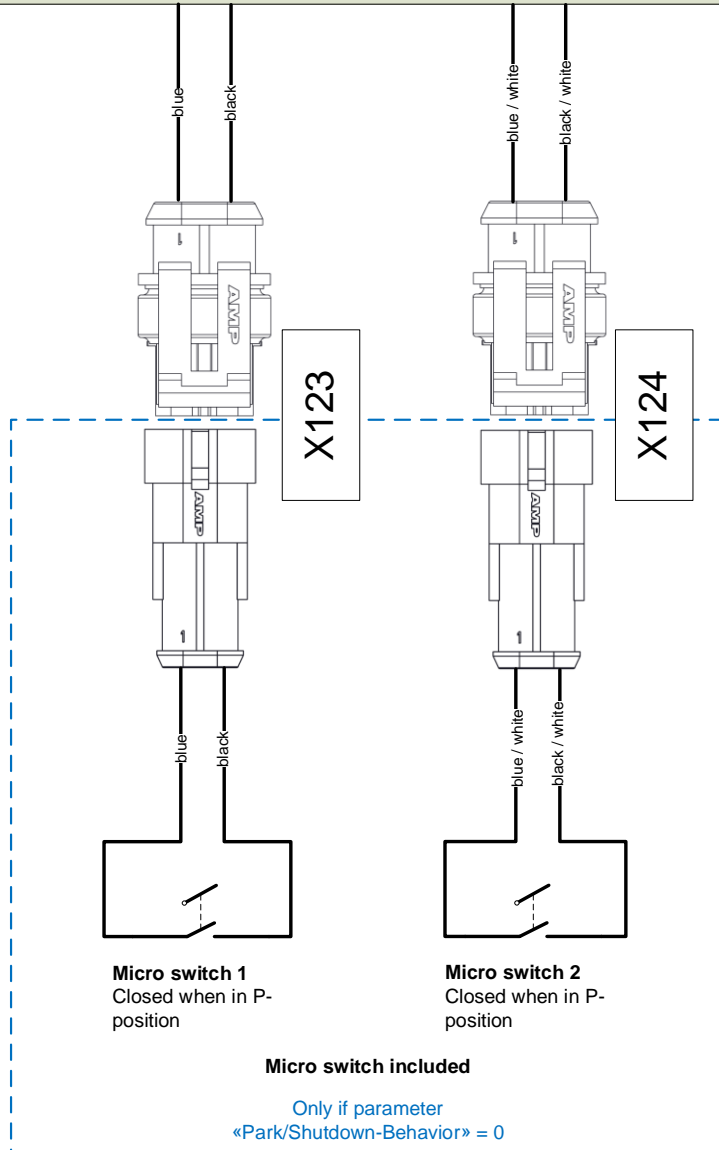
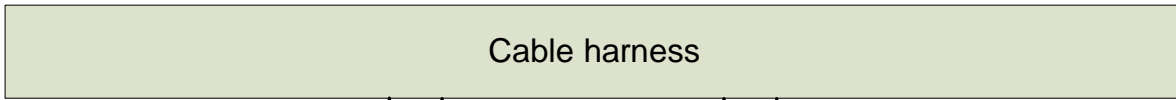
## CAN Adapter 2 X101, X102, X122, X123



<b>CAN Adapter 2</b>			
JS-KS-MOD-005		Version: V06	
Schütz Daniel	24.02.2017	Page 1/1	

### 3.11 Park position switch

## Park position switch X123, X124



**Micro switch 1**  
Closed when in P-position


**Micro switch 2**  
Closed when in P-position

**Micro switch included**

Only if parameter  
«Park/Shutdown-Behavior» = 0

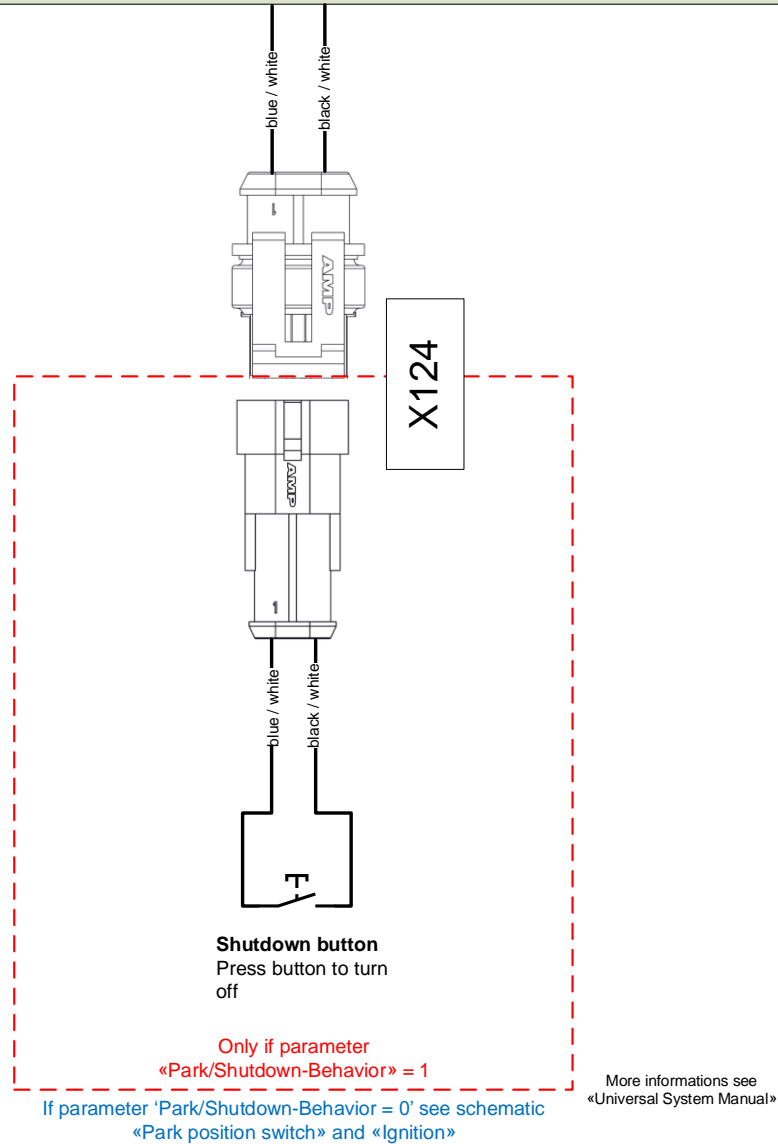
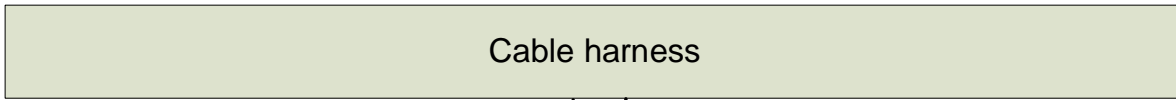
If parameter «Park/Shutdown-Behavior» = 1 see schematics  
«Shutdown button» and «CAN interface»


More informations see  
«Universal System Manual»

<b>Park position switch</b>			
JS-KS-MOD-006		Version: V05	
Schütz Daniel	22.10.2015	Seite 1/1	

### 3.12 Shutdown button

## Shutdown button X124

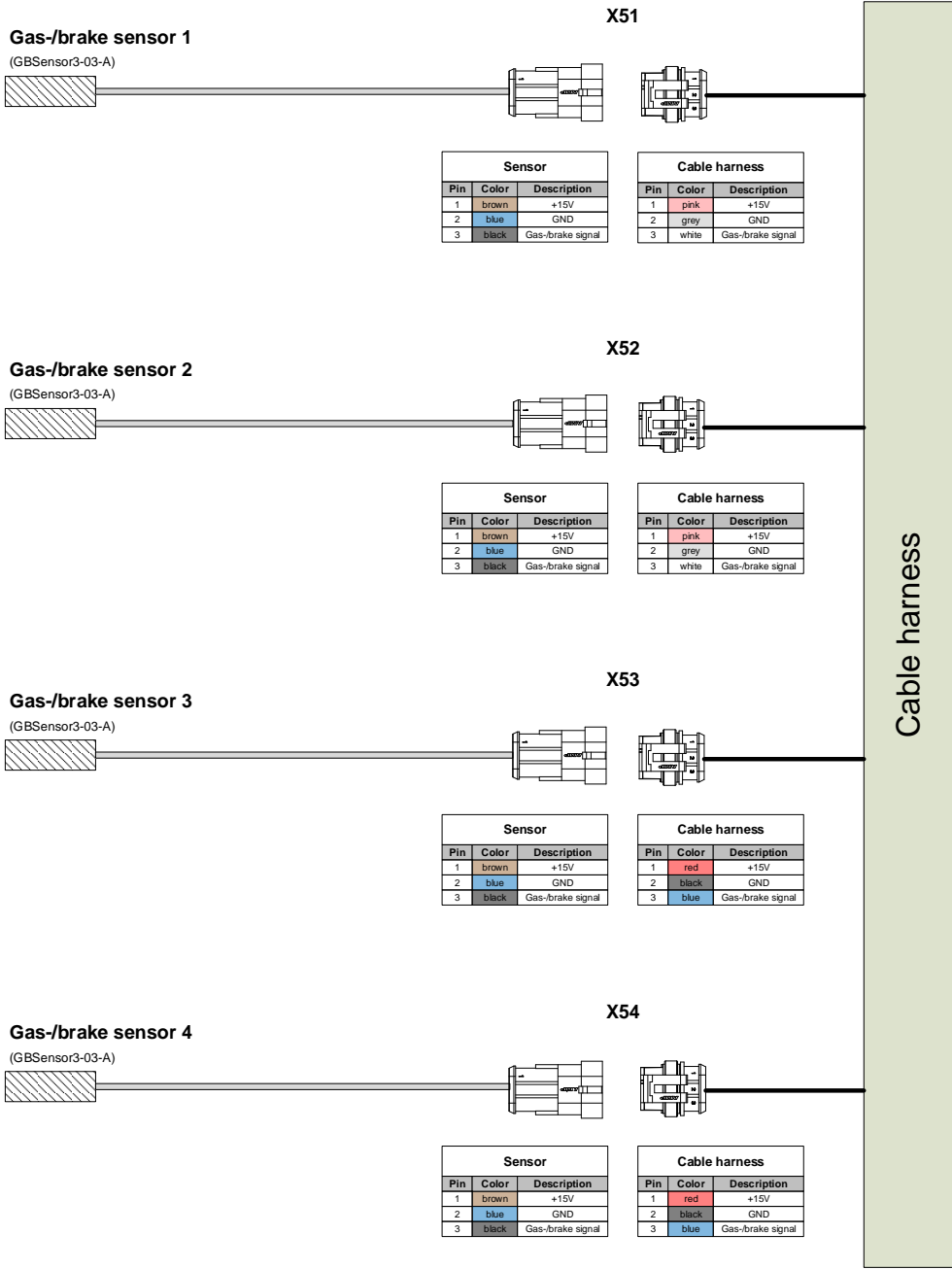


<b>Shutdown button</b>			
JS-KS-MOD-006		Version: V06	
Schütz Daniel	25.04.2016	Seite 1/1	



### 3.13 Gas-/ brake sensors

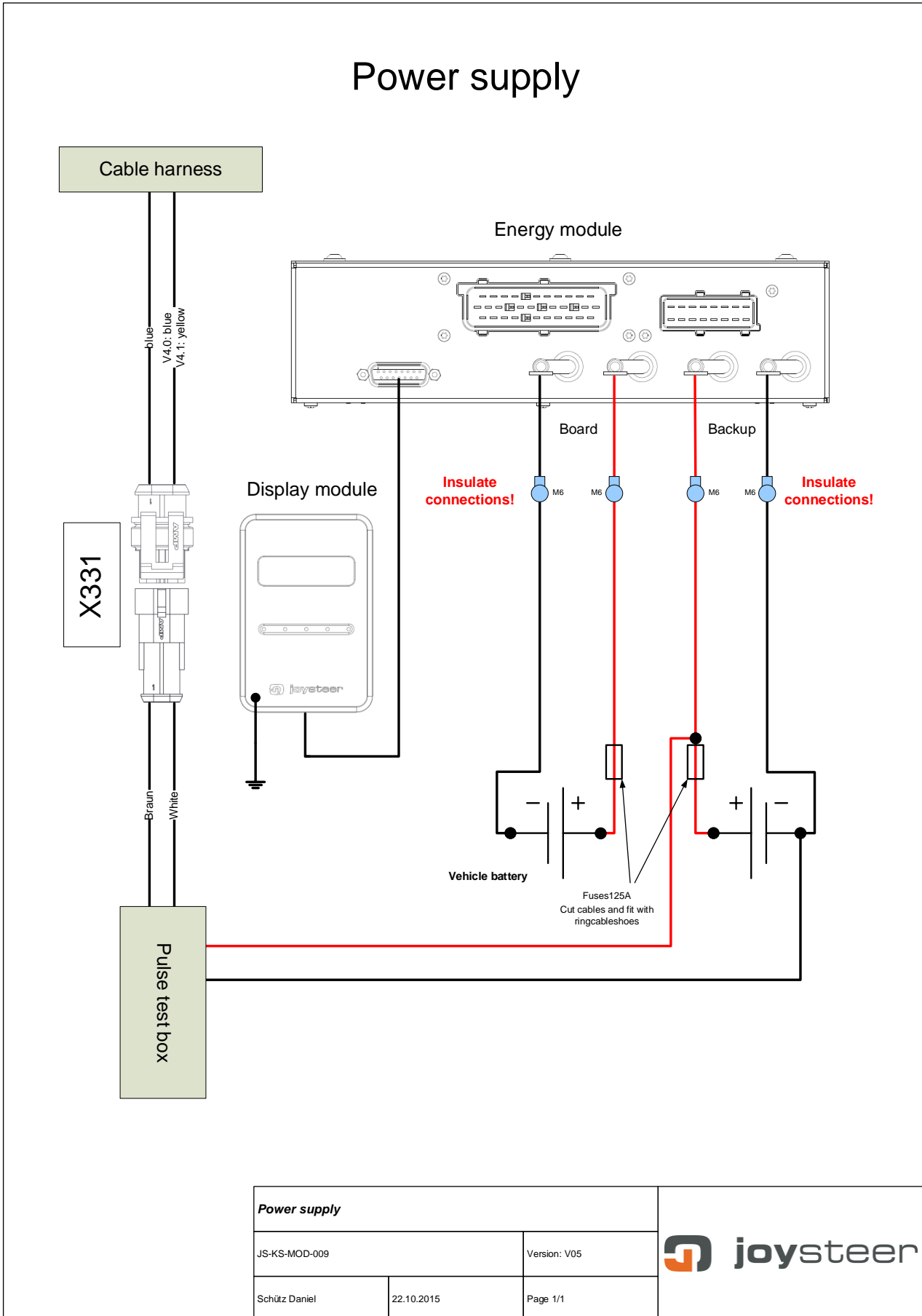
## Gas-/brake sensors X51, X52, X53, X54



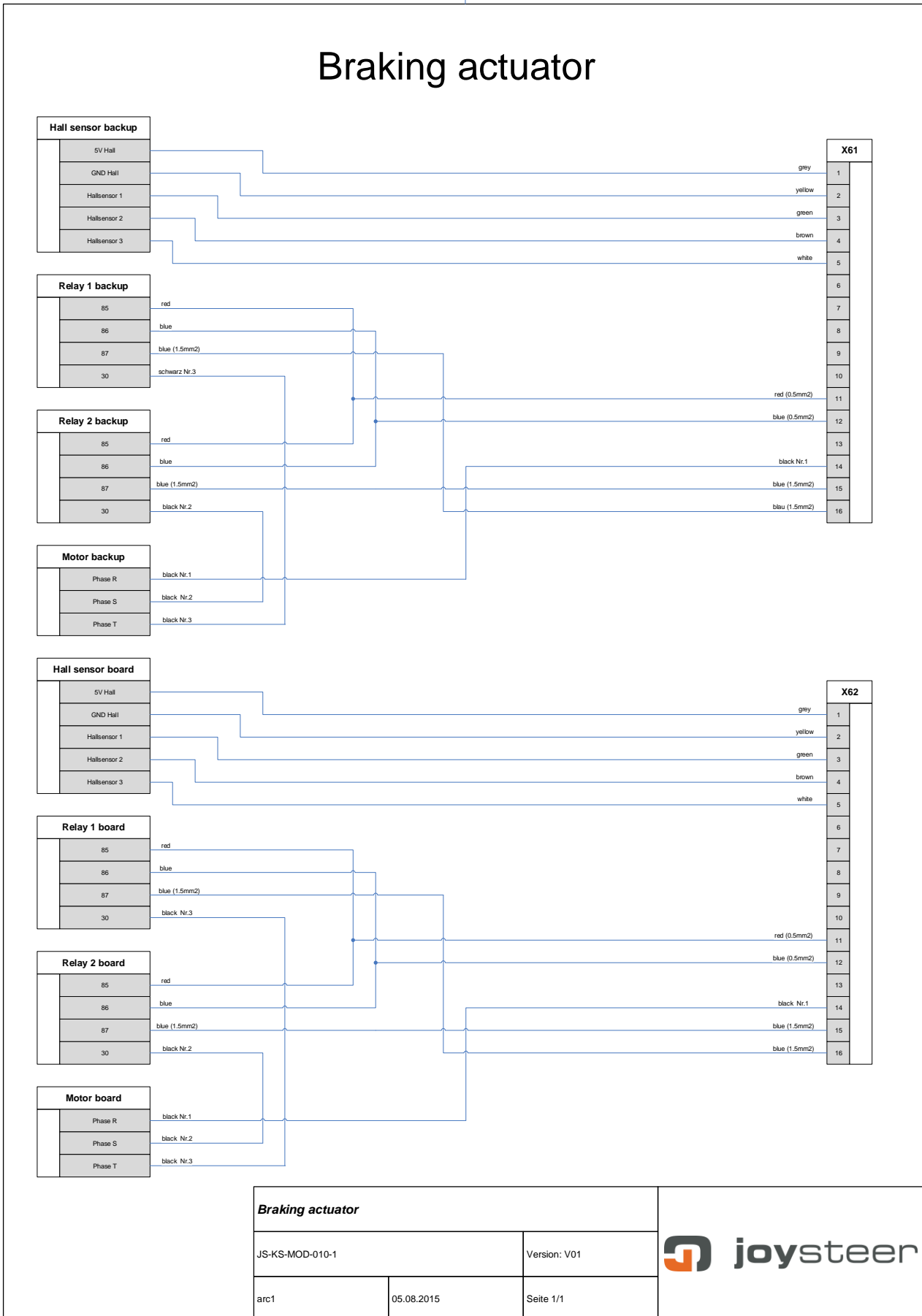
<b>Gas-/brake sensors</b>		
JS-KS-MOD-002	Version: V06	
Schütz Daniel	26.04.2016	

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### 3.14 Power supply

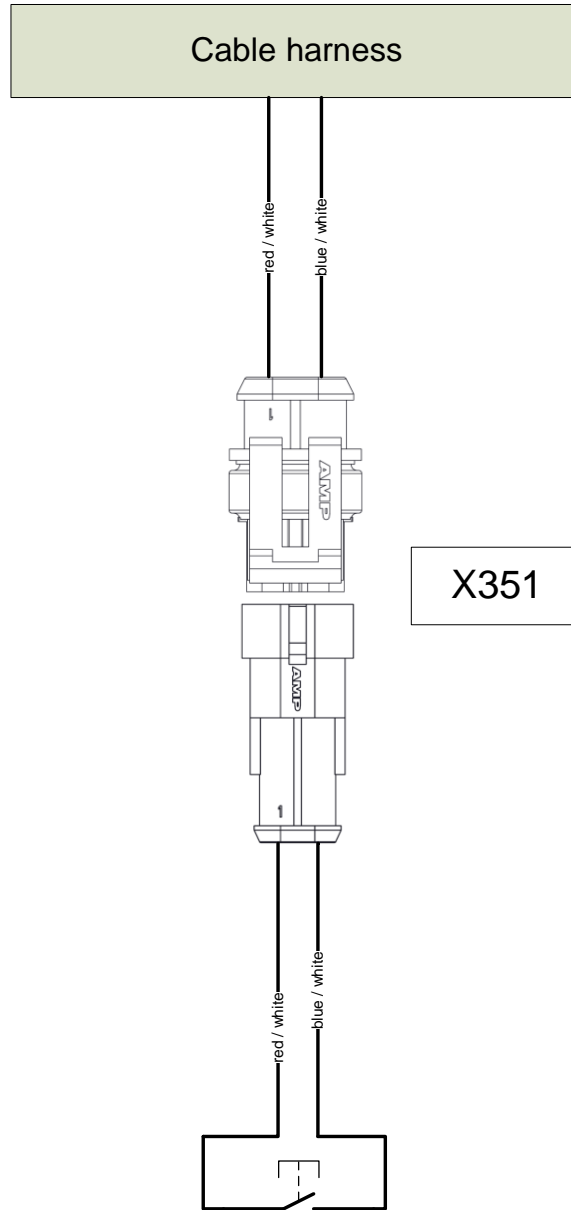


### 3.15 Braking actuator




### 3.16 Brake pressure retainer

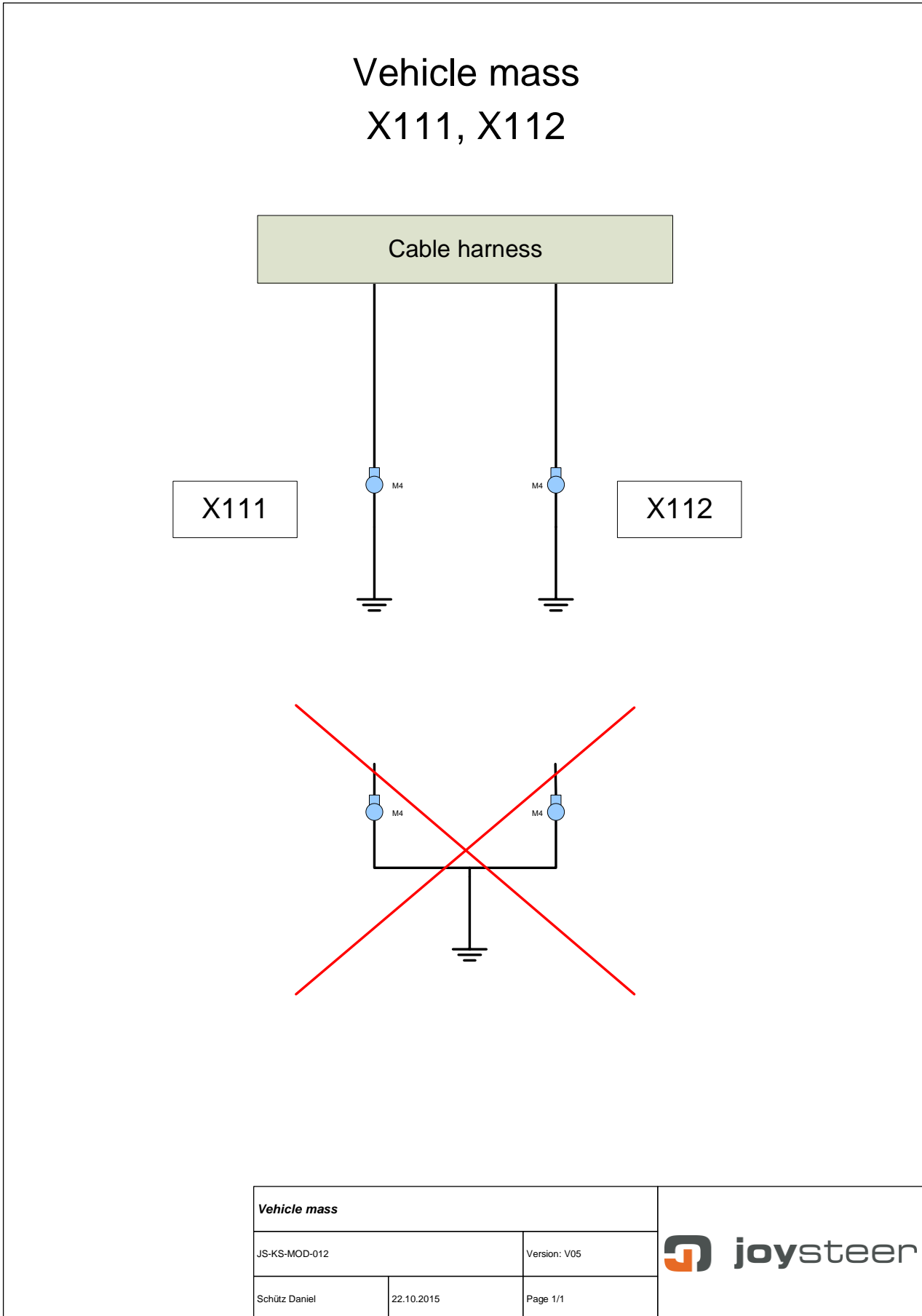
## Braking pressure retainer X351



Push button switch not included

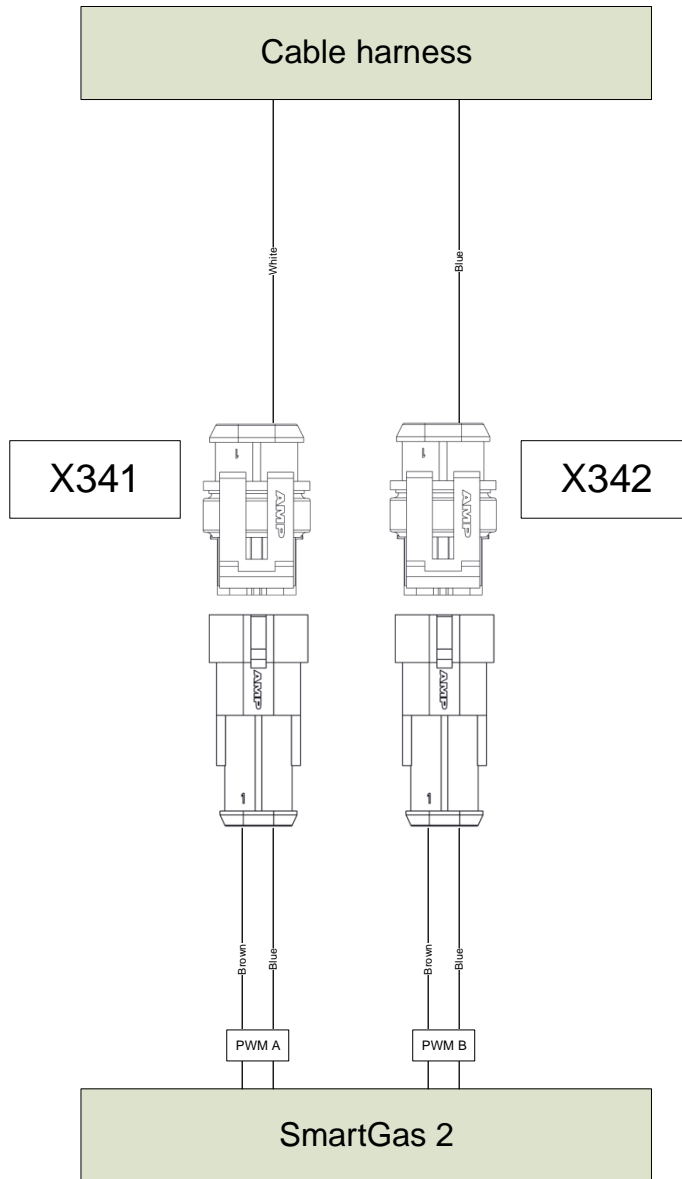
<b>Braking pressure retainer</b>			
JS-KS-MOD-011		Version: V05	
Schütz Daniel	22.10.2015	Page 1/1	


### 3.17 Vehicle mass



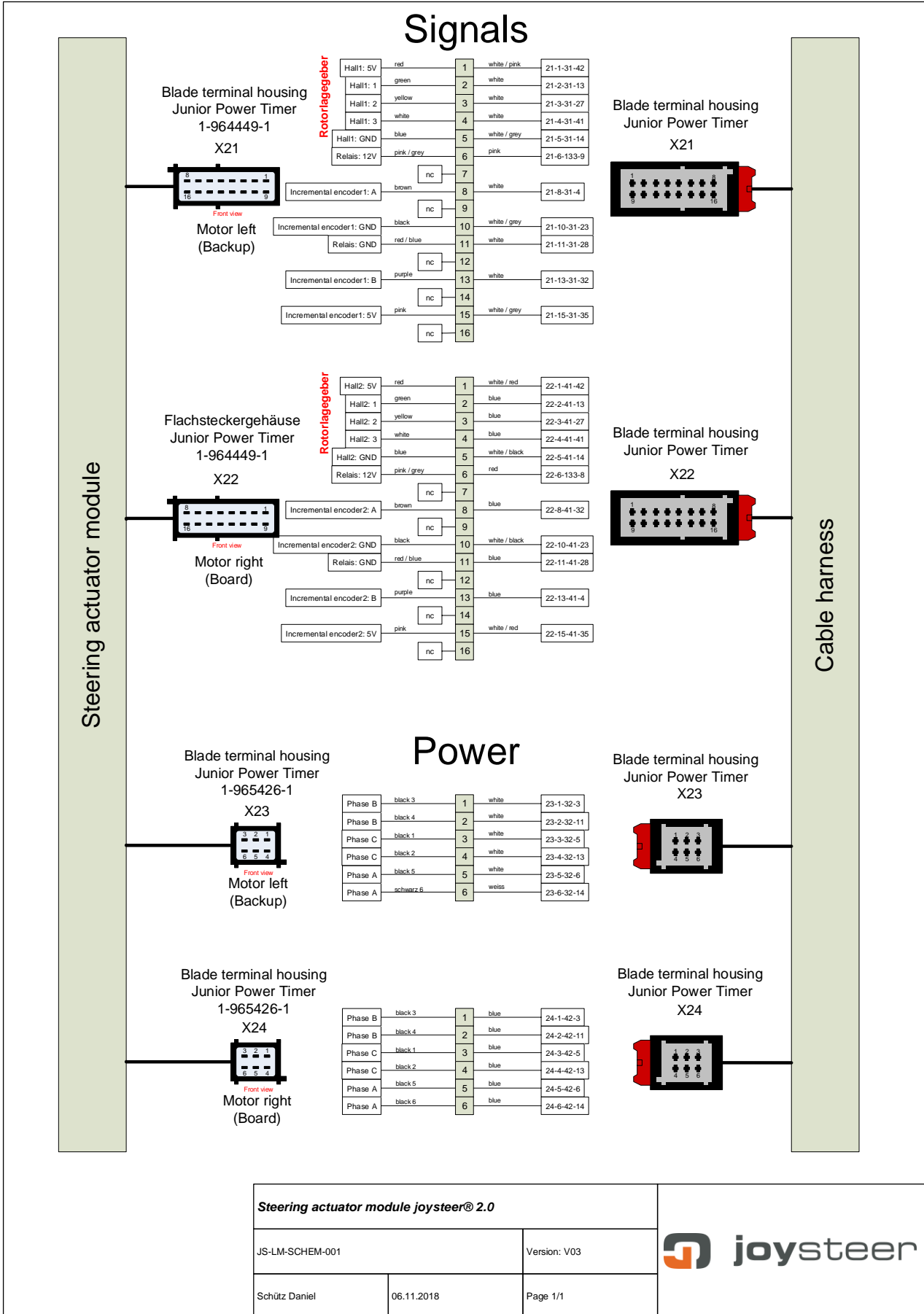
### 3.18 SmartGas 2

## SmartGas 2 X341, X342



<b>SmartGas 2</b>		
JS-KS-MOD-013	Version: V05	
Schütz Daniel	22.10.2015	

### 3.19 Steering actuator module



<b>Steering actuator module joysteer® 2.0</b>			
JS-LM-SCHEM-001		Version: V03	
Schütz Daniel	06.11.2018	Page 1/1	

### 3.20 Steering module position sensors

