

Diagram illustrating a wheel and axle system. A rope is attached to the wheel and pulled upwards, lifting a weight attached to the axle.

If used frequently, oil the wheelsets with a drop of non-resinous, acid-free sewing machine oil! In order to achieve the best possible running and traction properties, it is advisable to run the locomotive in for 25 minutes forwards and 25 minutes in reverse without load. Clean rails are essential for good performance.

The PIKO SmartDecoder XP Sound Next18 is a powerful multiprotocol sound decoder of the newest generation. The decoder ensures a high-level noiseless sound experience. It can be used with DCC and Motorola® digital systems and it is also operable in analogue mode on DC and AC layouts. The decoder is RailCom® and RailComPlus® capable. The innovative PIKO SmartDecoder XP Sound independently recognizes the respective operating mode and has a wide range of setting options for the additional functions. The decoder works with an auto-adaptive motor control for a silky smooth operation and is suitable for a continuous current consumption of up to 1A. The amplified function outputs can handle up to 0.5A each. Its many braking section functions include ABC braking, ABC automatic shuttle, as well as ABC slow speed. The sound part can control fixed function outputs as well as the motor output of the decoder. For example, the lighting of a diesel locomotive flickers when the engine is started.

F0	Light on / off	F9	Air compressor	F18	Conductors signal
F1	Motor noise - diesel loco	F10	Driver cab door open / close	F19	Station announcement
F2	Low Tone Horn	F11	Engine room door open / close	F20	Info for groups
F3	Motor 2	F12	Driver cab window open / close	F21	Release compressed air
F4	Train lighting: the loco pulls	F13	Side window open / close	F22	Sanding
F5	Train lighting: the loco pushes	F14	Fuel feed pump	F23	Curve squeal on / off
F6	Sludge removal	F15	Feed pump	F24	Rail Clack Sound on / off
F7	Shunting mode	F16	Preheater	F25	Volume control
F8	Handbrake apply / release	F17	Coupling	F26	Soundfader

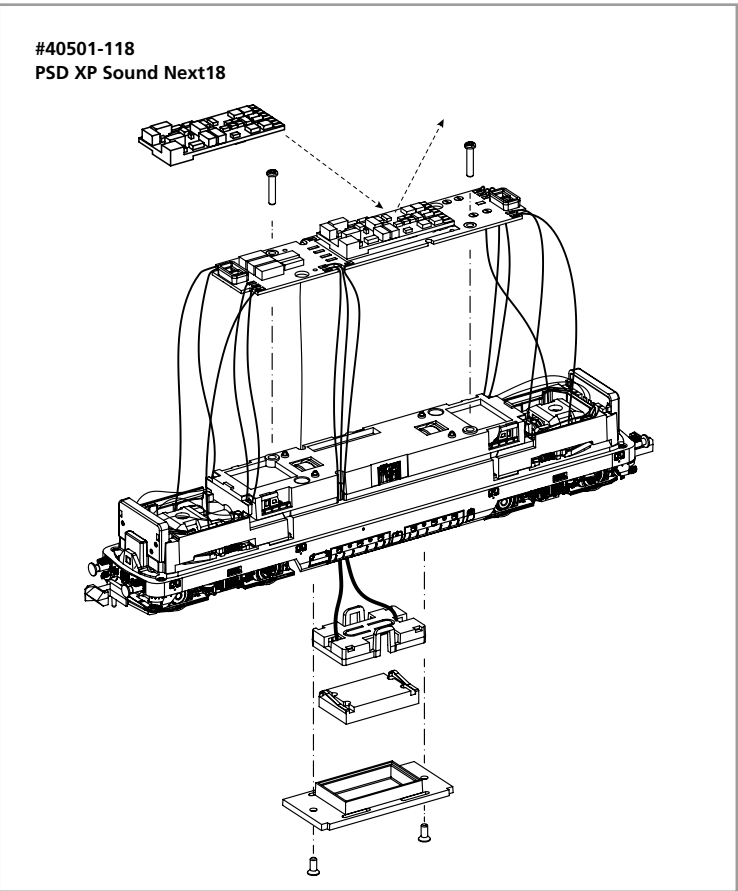
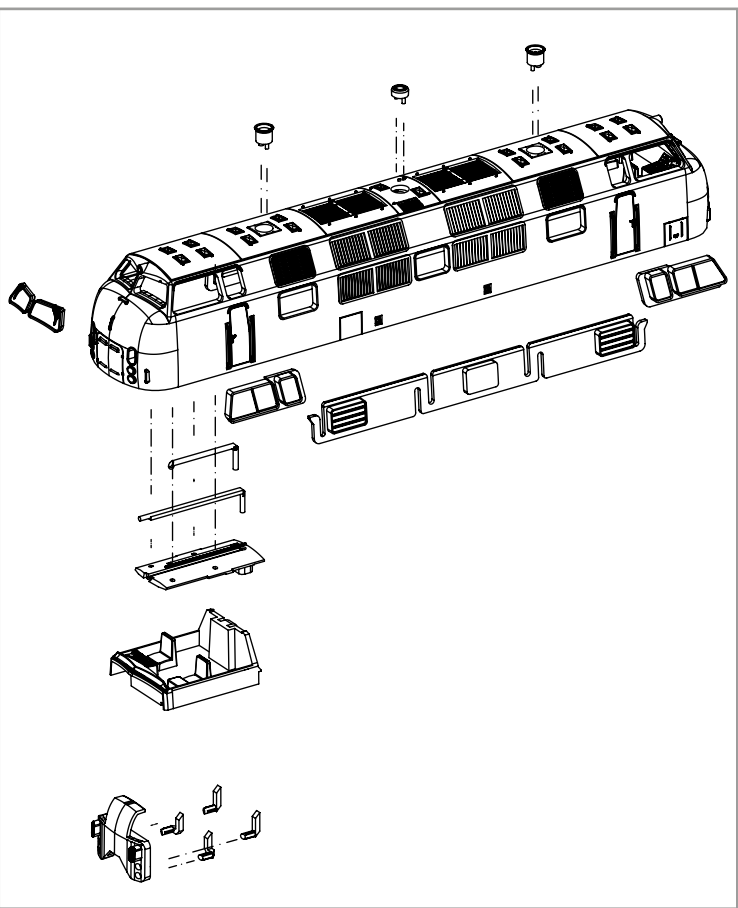
CV	Description	Area	Value*	
1	Locomotive address	DCC: 1 - 127 Mot: 1 - 80	3	
2	Minimum speed (the speed from 0 until the locomotive is running at speed step 1)	0 - 255	1	
3	Acceleration delay	0 - 255	90	
4	Braking rate	0 - 255	42	
5	Maximum speed (must be greater than CV 2)	0 - 255	200	
6	Average speed (must be greater than CV 2 and less than CV 5)	0 - 255	100	
7	Software version (The processor can be updated)	-	differenty.	
8	Manufacturer identification decoder reset, CV8 = 8	-	162	
Decoder operating mode				
12	Bit 0=1 DC (analog operation; direct current) on	Value +1	0 - 117	117
	Bit 2=1 DCC data format on	+4		
	Bit 4=1 AC (analog 3-rail operation; alternating current)	+16		
	Bit 5=1 Motorola® data format on	+32		
17 18	Long locomotive address		1 - 10239 192 - 231	1000 195
	17 = high Byte		0 - 255	232
	18 = low Byte			
Brake signal settings (automatic stop)				
27		Value 1	0 - 51	0
	Bit 0 = 1 -> ABC (Automatic Brake Control) right rail positive	2		
	Bit 1 = 1 -> ABC left rail positive	16		
	Bit 4 = 1 -> DC; opposite direction of travel	6		
	Bit 5 = 1 -> DC; same direction of travel	32		
DCC standard configuration				
29		Value +0	0 - 63	14
	Bit 0=0 Normal direction of travel	+1		
	Bit 0=1 Opposite direction of travel	0		
	Bit 1=0 14 speed steps	+2		
	Bit 1=1 28 speed steps	0		
	Bit 2=0 Digital mode only	+4		
	Bit 2=1 Automatic analog/digital recognition	0		
	Bit 3=0 RailCom® turned off	+8		
	Bit 3=1 RailCom® turned on	0		
	Bit 4=0 Speed steps over CV 2, 5, and 6	+16		
	Bit 4=1 Use the characteristic curve from CV 67 - 94	0		
30	Bit 5=0 Short address (CV1)	+32	0 - 15	0
	Bit 5=1 Long address (CV 17/18)			
Error codes for the motor, thermal overload, and function outputs:				
	1 = motor error, 2 = thermal overload error, 4 = function output error, 8 = fault sound memory			

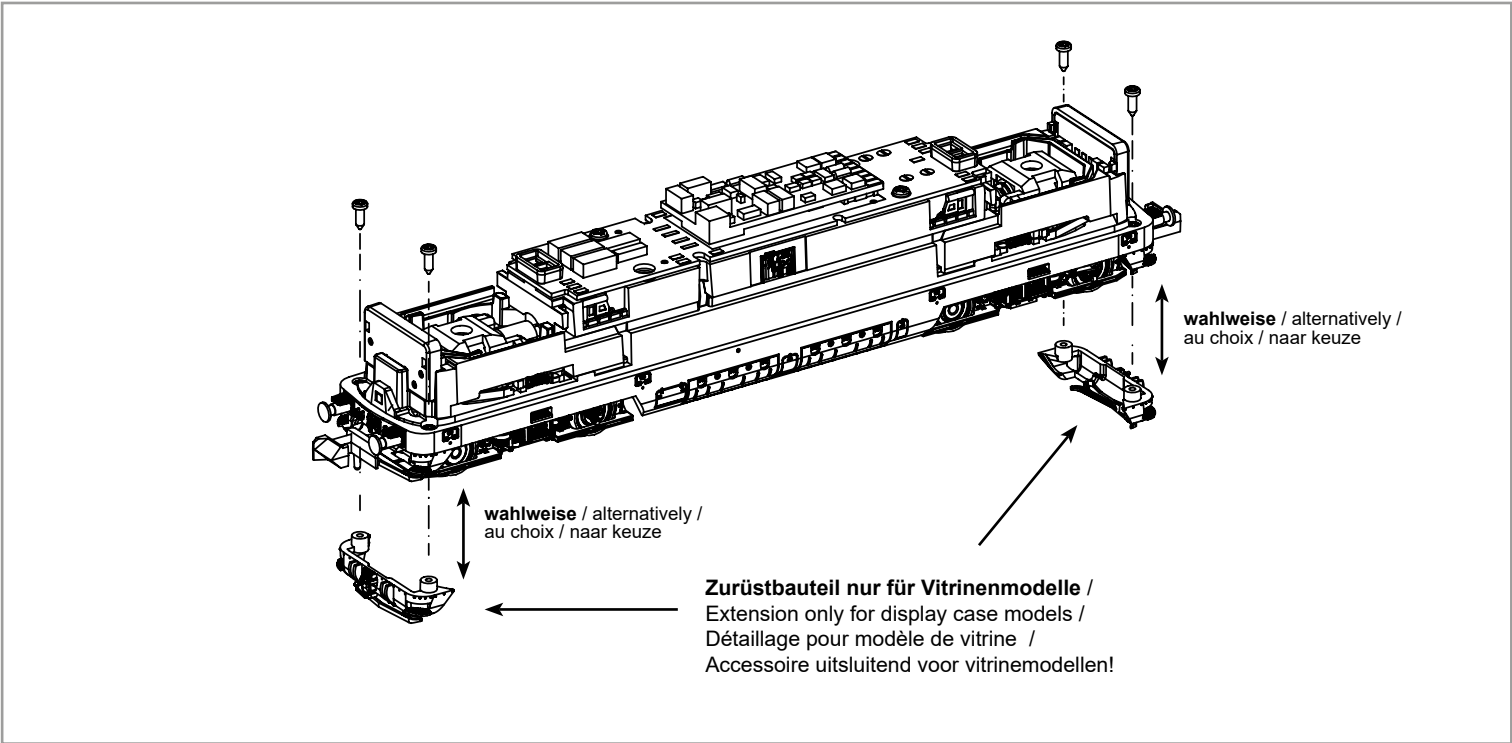
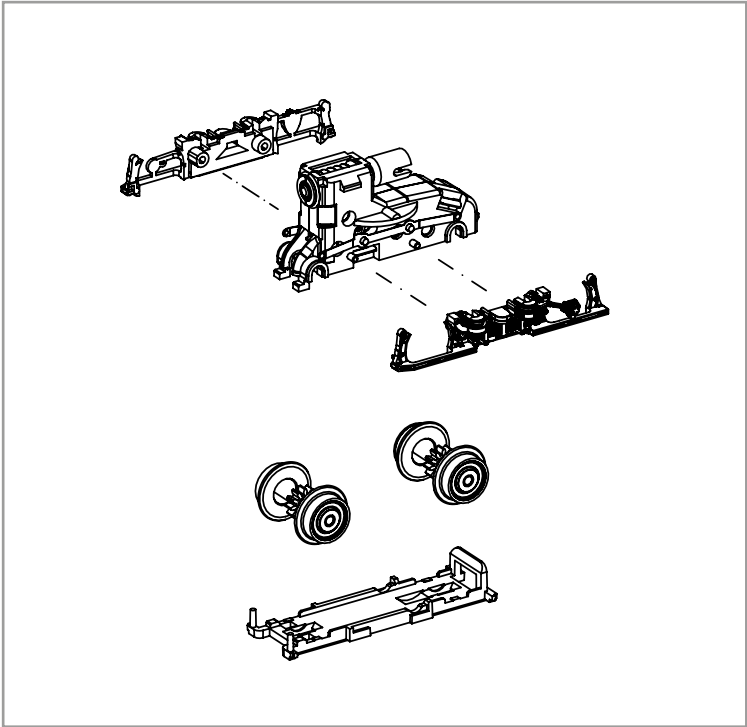
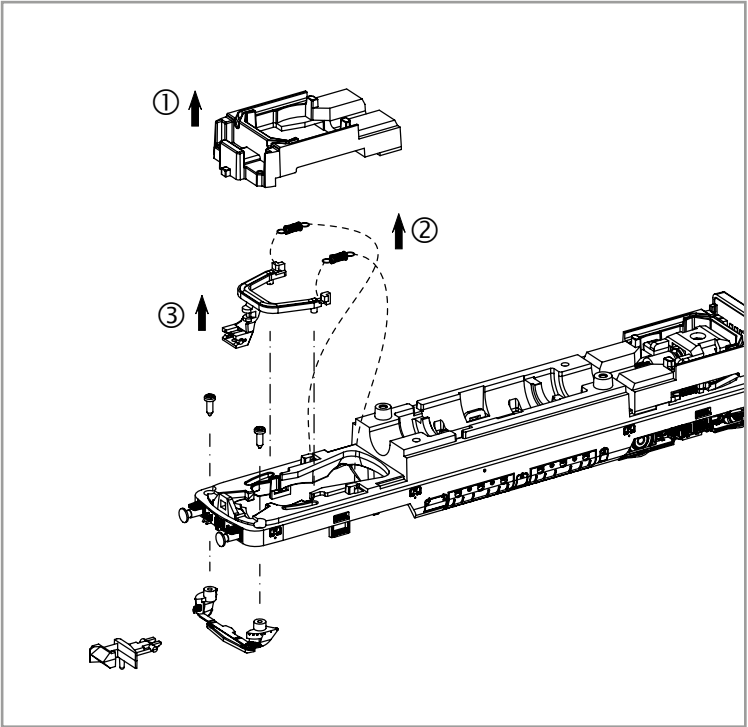
Factory setting

Bezpečnostní pokyny v jiných jazycích
naleznete na adrese: **www.piko-shop.de**



Bitte bewahren Sie diese auf.

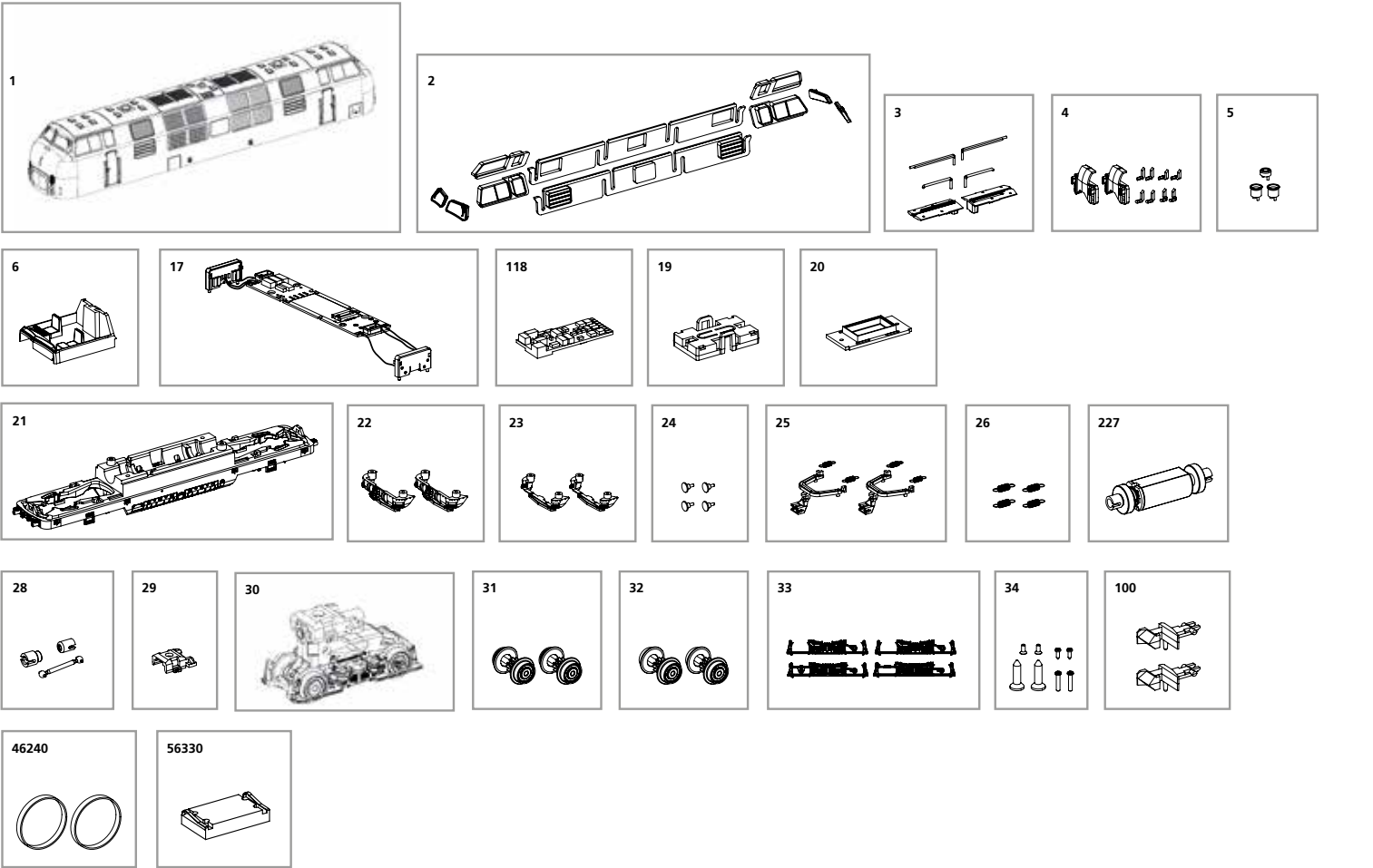
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ERSATZTEILE DIESELLOKOMOTIVE V 200.1 / BR 221 N

Spare parts for electric locomotive V 200.1 / BR 221 N

Bei Ersatzteilanforderung bitte immer die vollständige Ersatzteil-Nr. angeben • Please order the wanted spare part with the complete spare part item number.



Bezeichnung / Description	ET-Nr. / spare part N°	PG*
Gehäuse, komplett / Body, complete	40512-01	15
Fenster / Windows	40500-02	9
Leuchstab Spitzenlicht-Führerhaus / Light bar front top, driver's cab	40500-03	7
Leuchstäbe Front / Light bars front	40504-04	8
Auspuff (3-tlg.) / Exhaust (set of 3)	40504-05	7
Führerstand / Driver's cab	40500-06	6
Hauptplatine mit Beleuchtungsplatinen und Kabel / Main board with lightboards and wires	40500-17	15
PIKO SmartDecoder XP Sound Next18 / PIKO SmartDecoder XP Sound Next18	40501-118	22
Lautsprechergehäuse mit Kontakten / Body loudspeaker with contacts	40501-19	7
Lautsprecherabdeckung / Cover loudspeaker	40504-20	5
Rahmen / Chassis	40512-21	12
Frontschürze geschlossen (2 Stck.) / Front spoiler (2 pcs.)	40504-22	8
Frontschürze offen (2 Stck.) / Front spoiler (2 pcs.)	40504-23	8
Puffer (4 Stck.) / Buffer (4 pcs.)	40504-24	6
Kupplungsschacht mit Federn / Coupler w spring	40504-25	7

Bezeichnung / Description	ET-Nr. / spare part N°	PG*
Kupplungsfedern (4 Stck.) / Springs (4 pcs.)	40500-26	6
Motor komplett / Motor complete	40500-227	14
Kardanwelle + Buchsen / Cardan shaft + bushes	40500-28	7
Getriebeklammer / Gear box clamp	40500-29	5
Getriebe / Gearbox	40504-30	13
Radsatz mit Zahnrad und Haftreifen (2 Stck.) / Wheelset w gear and traction tires (2 pcs.)	40500-31	9
Radsatz mit Zahnrad (2 Stck.) / Wheelset w gear (2 pcs.)	40500-32	9
Drehgestellblenden (4-tlg.) / Truck frames (set of 4)	40504-33	8
Schrauben / Screws	40500-34	7
Kupplung (2 Stck.) / Coupling (2 pcs.)	40350-100	6
ET aus unserem Standard-Programm / Spare parts standard range		
Haftreifen (10 Stck.) / Traction tires (set of 10)	46240	
Ersatzlautsprecher / Replacement loudspeaker	56330	

*Preisgruppe *price category

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<https://www.piko.de/konform>

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