

# 2006 Snowmobile Technical Update

	PZ500C (Without Adjustable Grip Warmer)	5/600 Liquid Twin
<b>Peak Voltage Specs</b>		
<b>Pulser Coil</b>		
Wire Lead Color Codes	White/Green-White/Red	White/Green-White/Red
Resistance in Ohms (Spec)	206	(210 ±10%) 210
Peak Voltage @ Cranking Unloaded	6	5.5 ~ 6.5
Peak Voltage @ Cranking Loaded	5	5
Peak Voltage @ 1800 rpm	10	8.5
Peak Voltage @ 3000 rpm	12	12.1
<b>Charge Coil</b>		
Wire Lead Color Codes	Brown-Black	Brown-Black/Red
Resistance in Ohms (Spec)	298	(250 ±10%) 315
Peak Voltage @ Cranking Unloaded	225	220 ~ 280
Peak Voltage @ Cranking Loaded *1	210	350
Peak Voltage @ 1800 rpm	228	300
Peak Voltage @ 3000 rpm	228	300
<b>CDI Output</b>		
Wire Lead Color Codes	Orange-Black	Orange-Black
Peak Voltage @ Cranking Unloaded	225	220 ~ 280
Peak Voltage @ Cranking Loaded *1	190	180
Peak Voltage @ 1800 rpm	206	274
Peak Voltage @ 3000 rpm	208	275
<b>Battery Charging Coil</b>		
Wire Lead Color Codes	White-Black	
Resistance in Ohms (Spec)	0.4	(0.43 ±10%) 0.3
Peak Voltage @ Cranking Unloaded	10	9.5 ~ 10.5
Peak Voltage @ Cranking Loaded	6	8
Peak Voltage @ 1800 rpm	18.5	20
Peak Voltage @ 3000 rpm	28	27.9
<b>Lighting Coil</b>		
Yellow-Black	Yellow-Black	
Resistance in Ohms (Spec)	0.4	(0.3 ±10%) 0.3
Peak Voltage @ Cranking Unloaded	10	8.5 ~ 10
Peak Voltage @ Cranking Loaded	6	8
Peak Voltage @ 1800 rpm	16/13 (brake light on)	17.5/14 (brake light on)
Peak Voltage @ 3000 rpm	23/20 (brake light on)	22.8/19 (brake light on)
<b>Grip Warmer Coil</b>		
Wire Lead Color Codes	Yellow/Black-Black	Yellow/Black-Black
Resistance in Ohms (Spec)	1.6	(1.1 ±10%) 1.1
Peak Voltage @ Cranking Unloaded	14.5	9.5 ~ 10.0
Peak Voltage @ Cranking Loaded	8	11 (off) *3
Peak Voltage @ 1800 rpm	40 (off) / 15 (on) *3	18 (off) *3
Peak Voltage @ 3000 rpm	71 (off) / 18 (on) *3	20.3 (off) / 22.6 (on) *3

All specs taken with Snap-on "Fluke" type meter w/DCV scale and Repair adapter.

\*1 Ignition switch on, stop switch on, plug wires grounded

\*2 Indicates passenger grip warmer switch position

\*3 Indicates position of drivers grip warmer switch

\*4 Three tests, each pair of the three white wires

	600 Twin (Smart Carb Equipped)
<b>Peak Voltage Specs</b>	
<b>Pulser Coil</b>	
Wire Lead Color Codes	White/Green-White/Red
Resistance in Ohms (Spec)	(210 ±10%) 212
Peak Voltage @ Cranking Unloaded	6.3
Peak Voltage @ Cranking Loaded	3.8
Peak Voltage @ 1800 rpm	7.8
Peak Voltage @ 3000 rpm	11.4
<b>Charge Coil</b>	
Wire Lead Color Codes	Brown-Black/Red
Resistance in Ohms (Spec)	(250 ±10%) 315
Peak Voltage @ Cranking Unloaded	205
Peak Voltage @ Cranking Loaded *1	283
Peak Voltage @ 1800 rpm	314
Peak Voltage @ 3000 rpm	316
<b>ECU Smart Carb Coil</b>	
Wire Lead Color Codes	White/Yellow-White Black
Resistance in Ohms (Spec)	(1.86 ±10%) 1.9
Peak Voltage @ Cranking Unloaded	22.6
Peak Voltage @ Cranking Loaded	14
Peak Voltage @ 1800 rpm	16.2
Peak Voltage @ 3000 rpm	16.4
<b>CDI Output</b>	
Wire Lead Color Codes	Orange-Black
Resistance in Ohms (Spec)	Not Applicable
Peak Voltage @ Cranking Unloaded	230
Peak Voltage @ Cranking Loaded *1	256
Peak Voltage @ 1800 rpm	287
Peak Voltage @ 3000 rpm	277
<b>Battery Charging Coil</b>	
Wire Lead Color Codes	White-Black
Resistance in Ohms (Spec)	(0.43 ±10%) 0.3
Peak Voltage @ Cranking Unloaded	9.8
Peak Voltage @ Cranking Loaded	2.8
Peak Voltage @ 1800 rpm	17
Peak Voltage @ 3000 rpm	22.6
<b>Lighting Coil</b>	
Wire Lead Color Codes	Yellow-Black
Resistance in Ohms (Spec)	(0.3 ±10%) 0.3
Peak Voltage @ Cranking Unloaded	8.6
Peak Voltage @ Cranking Loaded	6.3 (off) / 5.9 (on) *2
Peak Voltage @ 1800 rpm	15 (off) / 13.8 (on) *2
Peak Voltage @ 3000 rpm	19.6 (off) / 16.3 (on) *2
<b>Grip Warmer Coil</b>	
Wire Lead Color Codes	Yellow/Black-Black
Resistance in Ohms (Spec)	(1.1 ±10%) 1.1
Peak Voltage @ Cranking Unloaded	7.3
Peak Voltage @ Cranking Loaded	7.1 (on or off) *3
Peak Voltage @ 1800 rpm	13.8 (off) / 17.2 (on) *3
Peak Voltage @ 3000 rpm	16.23 (off) / 18.6 (on) *3

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Peak Voltage Specs	6/700 Triple 3-1 175W System	SRX6/700B, C	600/700 Triple 300W System
<b>Pulser Coil</b>			
Wire Lead Color Codes	White/Green-White/Red	White/Green-White/Red	White/Green-White/Red
Resistance in Ohms (Spec)	(210 ±10%) 203	(210 ±10%) 218	210
Peak Voltage @ Cranking Unloaded	5.5 ~ 8.0	4.5 ~ 6.5	5.0 ~ 6.0
Peak Voltage @ Cranking Loaded	3.8	3.5	4.0 ~ 5.0
Peak Voltage @ 1800 rpm	9.6	8.5	12
Peak Voltage @ 3000 rpm	13	12.2	16
<b>Charge Coil</b>			
Wire Lead Color Codes	Brown-Black/Red	Brown-Black/Red	White-White-White
Resistance in Ohms (Spec)	(435 ±10%) 421	(435 ±10%) 463	(.36 ~ .80)
Peak Voltage @ Cranking Unloaded	175 ~ 200	245	12.0 ~ 14.0
Peak Voltage @ Cranking Loaded *1	206	225	10.0 ~ 12.0
Peak Voltage @ 1800 rpm	314	285	18.0 ~ 17.0
Peak Voltage @ 3000 rpm	322	286	17.0 ~ 18.0
<b>Charge Coil - 2</b>			
Wire Lead Color Codes	Brown/Red-Black	Brown/Red-Black	Not Applicable
Resistance in Ohms (Spec)	(103 ±10%) 97.2	(86 ±10%) 91	Not Applicable
Peak Voltage @ Cranking Unloaded	55 ~ 90	60 ~ 70	Not Applicable
Peak Voltage @ Cranking Loaded *1	73	65	Not Applicable
Peak Voltage @ 1800 rpm	240	195	Not Applicable
Peak Voltage @ 3000 rpm	281	237	Not Applicable
<b>CDI Output</b>			
Wire Lead Color Codes	Orange-Black	Orange-Black	Org-Blk/Gry-Blk/Wht-Blk
Resistance in Ohms (Spec)	N/A	N/A	Not Applicable
Peak Voltage @ Cranking Unloaded	165 ~ 200	125 ~ 165	200 ~ 210
Peak Voltage @ Cranking Loaded *1	200	210	190 ~ 195
Peak Voltage @ 1800 rpm	295	275	203
Peak Voltage @ 3000 rpm	308	275	203
<b>Battery Charging Coil</b>			
Wire Lead Color Codes	White-Black	White-White/Yellow	
Resistance in Ohms (Spec)	(0.34 ±10%) 0.3	(0.36 ±10%) 1.7	
Peak Voltage @ Cranking Unloaded	8.5 ~ 13.0	20	
Peak Voltage @ Cranking Loaded	6.4	15	
Peak Voltage @ 1800 rpm	22	15.9	
Peak Voltage @ 3000 rpm	29.7	16.4	
<b>Lighting Coil</b>			
Wire Lead Color Codes	Yellow-Black	Yellow-Black	Not Applicable
Resistance in Ohms (Spec)	(0.23 ±10%) 0.3	(0.25 ±10%) 0.2	Not Applicable
Peak Voltage @ Cranking Unloaded	7.5 ~ 9.5	6.5 ~ 8.0	Not Applicable
Peak Voltage @ Cranking Loaded	5.6	4	Not Applicable
Peak Voltage @ 1800 rpm	19/16 (brake light on)	15/12 (brake light on)	Not Applicable
Peak Voltage @ 3000 rpm	26.7/23 (brake light on)	21/17 (brake light on)	Not Applicable
<b>Grip Warmer Coil</b>			
Wire Lead Color Codes	Yellow/Black-Black	Yellow/Black-Black	Not Applicable
Resistance in Ohms (Spec)	(1.7 ±10%) 1.5	(0.84 ±10%) 0.8	Not Applicable
Peak Voltage @ Cranking Unloaded	14.5 ~ 16.5	5.5 ~ 9.5	Not Applicable
Peak Voltage @ Cranking Loaded	9 (on)	8	Not Applicable
Peak Voltage @ 1800 rpm	18.0 (off) / 23.0 (on)*3	17.8 (off) / 18.9 (on)*3	Not Applicable
Peak Voltage @ 3000 rpm	19.5 (off) / 26.4 (on)*3	20.3 (off) / 23.0 (on)*3	Not Applicable

All specs taken with Snap-on "Fluke" type meter w/DCV scale and Rapair adapter.

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Peak Voltage Specs	All RX Models	All RS & VK Models
<b>Pulser Coil</b>		
Wire Lead Color Codes	White/Green-White/Red	White/Green-White/Red
Resistance in Ohms (Spec)	189 ~ 231	189 ~ 231
Peak Voltage @ Cranking Unloaded	5.0 ~ 6.0	5.0 ~ 6.0
Peak Voltage @ Cranking Loaded	4.0 ~ 5.0	4.0 ~ 5.0
Peak Voltage @ 1800 rpm	20	20
Peak Voltage @ 3000 rpm	34	34
<b>Charge Coil</b>		
Wire Lead Color Codes	White-White-White	White-White-White
Resistance in Ohms (Spec)	(.19 ~ .24)	(.19 ~ .24)
Peak Voltage @ Cranking Unloaded	9v	12v
Peak Voltage @ Cranking Loaded *1	8v	10v
Peak Voltage @ 1800 rpm	11v	13v
Peak Voltage @ 3000 rpm	12v	13v
<b>CDI Output</b>		
Wire Lead Color Codes	Org-Blk/Rd, Gy-Blk/Rd, Wh-Blk/Rd, Yl-Blk/Rd	Org-Blk/Rd, Gy-Blk/Rd, Wh-Blk/Rd, Yl-Blk/Rd
Peak Voltage @ Cranking Loaded *1	160v min.	130v min.
Peak Voltage @ 5500 rpm	180v	150v

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