

PASD MG 2006 – PV38 Field Checklist Vacuum Interrupter Maintenance Table

kV/kA (K factor 1)	38kV/40kA 1200 amp	38kV/40kA 2000 amp
VI Part # VI Assembly#	C-H WL35616BP* 43649G02	C-H WL35616BP* 43650G03
Continuous Current	1200A	2000A
Push Rod Spring Color	40704p01 green	40704p01 green
Flexible shunt #	40723p01, 1 per phase	43667p01 2 per phase
Primary Stab #	1200A – 2.25" diameter 43315p01	2000A – 3.00" diameter 43316p01/43317p01
Contact Stroke	.710" - .750"	
Push Rod over travel (nut gap)	.120" - .188"	
Contact Resistance (maximum allowable)	1200 - 55 μ OHM	2000 - 40 μ OHM
Opening Speed	\geq 53"/sec	
Opening Time	< 30 ms - 3 cycle breakers, < 50 ms – 5 cycle (PowlVac mech only)	
Closing Speed	\geq 30"/sec.	
Closing Time	\leq 80ms	

Contact Stroke	Breaker "contact travel" in inches, determined by measuring the difference between the closed and open position of the lower contact block. Stroke will vary depending upon operational conditions.
Nut gap (Contact Spring Loading Force)	Dimensional measurement of the gap between the push rod bias regulator and the 1/8" thick flat washer on the end of the push rod stud.
Contact Resistance	Maximum conductor path resistance, measured in micro ohms, from the upper to lower primary stabs.
Closing time	Time measurement in milliseconds, initiated at application of closing voltage and stopped at contact touch.
Closing speed	Determined by 0.25 S (S = breaker stroke measured in inches) divided by Tc (Tc = Elapsed time in milliseconds for the breaker contacts to travel the last 25% of the breaker closing stroke)
Opening time	Time measurement in milliseconds, initiated at application of opening voltage, and stopped at contact part.
Opening speed	Determined by 0.75 S (S = breaker stroke measured in inches) divided by Tt (Tt = Elapsed time in milliseconds for the breaker contacts to travel the first 75% of the breaker opening stroke)

*The WL35616P vacuum interrupter was originally furnished in this breaker. It mounted with metric M12 - 40mm bolts. The WL35616BP vacuum interrupter mounts with 1/2" -13 SAE bolts. New hardware must be provided when replacing a WL35616P VI with a new WL35616BP VI. The threads and the VI will be damaged if the improper hardware is used.