Spark Plug Application Guide (09/28/13)

Brand	Type	455	403	Gap
ACDelco	Platinum	41818	41818	.038
ACDelco	Standard	R46SZ	R46SZ	.060
ACDelco	Platinum	AC41833 (Napa)	AC41833 (Napa)	.038
Autolite	Standard	847	847	.060
Autolite	Platinum	AP847	AP847	.038
Bosch	Standard	7921(WR10FCZ)	7920(WR10FCY)	.060
Bosch	Platinum	4023(WR9FPZ)	4022(WR9FPY)	.038
Champion	Standard	66(RJ18YC6)	66(RJ18YC6)	.060
E3	Premium	E3.52	E3.52	As from Box
NGK	Standard	4536	4536	.038
NGK	Iridium	XR45IX (7293)	XR45IX (7293)	.038
NGK	Iridium	XR5IX (7355)	XR5IX (7355)	.038

Plug Gap Settings: Gap setting is gap out of the box; plug gaps out of the box vary by manufacture and application and should always be checked before installation. Dick Paterson several years ago conducted Dyno testing on several different plug gaps and found that there was little difference between the large and small gap settings for power output. My personal setup was a Paterson HEI, running original ACDelco #7 Rapidfire gapped @ .038 as per DP, yours may vary. The smaller gap reduces the load on the HEI coil. Factory specified gaps have varied over the years for the coach. The 73/74 point distributor called for a .040 gap. The 455 with the HEI distributor (75 thru 77) called for a .080 gap. The 403 with HEI distributor (77 thru 78) had 2 gaps listed. The gap for the Federal motor was .060 and the California motor was .080. It has been seen that the .080 gap was hard on the coil and module and had seen a higher failure rate. An article in GMCMHI newsletter V 4, I 3, P 3 stated that GM dealers both in California and east were recommending a .045 for the 403 HEI giving the best performance.

Now a personal comment and again yours may vary. I had run our 77 403 with the .060 gap (R46SZ) (98 thru 03) and saw that the plug gap was pounded out to better than .075 in less than 4K miles. I was changing plugs every year. I also had several modules failures during that time. I switched to the DP HEI and #7 plug in 2004 I did not had any failures. Same #7 plugs, 32K miles, Cleaned and regapped in 2008, still looked good, ACDelco listed these as a 100K-mile plug. Another personal comment, is I would run one of the platinum or Iridium plugs and close the gap down to the .036 to .040 range or the E3 plug as it comes out of he box.

NOTE: The original ACDelco #7 is no longer available in original plug tip. New ACDelco #7 is not the same construction and should be avoided. In 2010 Dick Paterson recommended the NGK XR5IX plug as a replacement. I now run the E3 Brand E3.52 plug and have about 4000 miles.

Onan Spark Plugs: Both the 4K & 6K use the same heat range spark plug. Plug gap for both is .020" Cummins Onan spark plugs are part# 167-0262-99 <\$7

The X-7525B service manual Section 24C page28 calls for the use of an AC Delco R46S spark plug. Possible spark plugs that cross for *AC DELCO R46S*:

Accel 498
Accel 198
Accel 138
Autolite 86
Autolite 87
Autolite 567
Bosch WR11F
Bosch WR10FC
Bosch stk 7519
Champion RJ18Y

Champion RJ18Y8 Champion RJ18YC6

E3 Spark Plug E3.52

Champion RJ18Y6 Champion RJ18YC Champion stk 58 Denso W9PRU Denso W9PR-U Denso stk 6007

General Motors 5613879

Mighty M4R52 Motorcraft AS52C Motorcraft AR82 Motorcraft stk 57

NGK BP4 NGK XR4

NGK stk 5858

Another spark plugs that has been used is the Champion RH12: Possible spark plugs that cross for *Champion RH12*:

AC Delco 43LS

Accel 166

Autolite 4316

Autolite MP4316DP2

Autolite 216

Champion stk 537

Denso W16LS

Evguem 500A

Motorcraft AL5

Splitfire SM021F

For Generac Primpac 45G/55G/66G RV Generators Plug Gap for all 3 units is 0.030" Generac Manual lists 3 different spark plugs and I added an E3 Cross

AC R45S Autolite 65 Champion RC12YC E3 Spark Plug E3.52

Honda Generator EV-4010 & EV-6010 Plug Gap for both units is 0.024" to 0.028"

Honda Manual lists the NGK BPR4HS, which crosses to ACDelco R43FS, Bosch WR8BC, Champion RL92YC, Honda 98076-54717 and NAPA X936