

# Spark Plug Application Guide

(11/21/10)

| Brand    | Type     | 455            | 403            | Gap         |
|----------|----------|----------------|----------------|-------------|
| ACDelco  | Platinum | 41-818         | 41-818         | .060        |
| ACDelco  | Standard | R46SZ          | R46SZ          | .060        |
| ACDelco  | Platinum | AC41833 (Napa) | AC41833 (Napa) | .038        |
| 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        |
| NGK      | Standard | XR5            | XR5            | .038        |
| NGK      | Premium  | XR51X(7355)    | XR51X(7355)    | .038        |
| NGK      | Iridium  | 7293(XR45IX)   | 7293(XR45IX)   | .038        |
| E3       | Premium  | E3.52          | E3.52          | As from Box |

**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 Patterson 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 is a Patterson 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 GMC MHI 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 yours may vary again. 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. Since switching to the DP HEI and #7 plug in 2004 I have not had any failures. Same #7 plugs, 32K miles, Cleaned and regapped 2 years ago, still looked good these are listed as a 100K-mile plug by ACDelco.

**NOTE: ACDelco #7 is no longer available in original plug tip. New #7 is not the same. Dick Patterson now recommends the NGK XR5 or the XR51X plug as a replacement.**

**Onan Spark Plugs:**

**6K**