

## RAIDER OUTBOARDS SERVICE BULLETIN NR. R2019-001 Revision A (August 7, 2019)

1. Some legacy motors may have the factory plug boots installed vise the NGK plug boot that is now standard on all Raider Outboards. Prior to installation of the 2" Plug Boot Cover, the factory plug boot must be removed. The ignition coil and plug wire may remain in place during the replacement. Figure (1) shows the ignition coil, wire and factory plug boot. Figure (2) shows the NGK Plug Boot installed. Notice the NGK engraving on the boot. That should help you identify what boots are installed on the motor. Should you require the NGK Plug Boot, the replacement parts will be provided at no cost from the factory. Contact Tech Support with quantity required, number below.



Fig (1) Stock Ignition coil, wire, and factory plug boot.



Fig (2) NGK Plug Boot installed.

- 2. Follow the outlined procedure to swap the factory plug boot for the NGK Plug Boot and 2" Plug Boot Cover.
  - a) Identify and set out replacement parts and materials needed. (See Figure 3)
    - 1) NGK Plug Boot Kit.
      - Plug Boot.
      - Base Cover.
      - Boot Cover. (Discard)
    - 2) 2" Plug Boot Cover.
    - 3) Dielectric Grease. MIL-S-8660C, MILITARY SPECIFICATION: SILICONE COMPOUND, NATO CODE NUMBER S-736 (22 SEP 1983) [S/S BY SAE-AS8660]
    - 4) Clean Shop Towel.



Fig (3) Replacement Parts, item with red X included in kit but is not required and may be discarded.

 Remove the plug boot from the spark plug. With a firm grasp on wire and boot pull the boot off of the wire exposing the coil. Then remove coil from wire end and discard. (See Figures 4, 5, and 6)



**Fig (4)** Firmly grasp wire and boot and pull in opposite directions, removing boot.

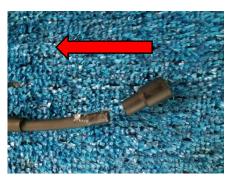


**Fig (5)** Boot separated from wire exposing coil.



Fig (6) Remove coil from wire and dispose.

c) Lightly coat the plug wire end with dielectric grease. From the NGK kit take the Base Cover and slide it over the wire. (See Figures 7, 8, and 9)



**Fig (7)** Add grease and run Base Cover over end, arrow indicates direction.



Fig (8) Run Base Cover over end, arrow indicates direction.



**Fig (9)** Base Cover over end, arrow indicates direction.

d) Take Plug Boot and place it over the end of the wire. Holding the wire firmly, twist the plug boot clockwise until it stops. Lightly coat the Plug Boot base with dielectric grease. Then slide the Base Cover into place over the Plug Boot base. (See Figures 10, 11, and 12)



**Fig (10)** Place over wire and twist clockwise to tighten. Arrow indicates direction.



**Fig (11)** Plug Boot firmly seated on wire. Slide Base Cover over Plug Boot base. Arrow indicates direction.



**Fig (12)** Base Cover in place over Plug Boot base.

e) Lightly coat the outside of the Boot Plug with dielectric grease. Firmly grasp the Boot Plug and slide the 2" Boot Plug Boot Cover over the boot until it touches the 90° bend. (See figures 13, 14, and 15)







Fig (14) Place Plug Cover over boot. Arrow indicates direction.



Fig (15) Cover should marry against 90° bend.

- Technical Support. Direct all technical support issues or questions or comments related to the following service bulletin please contact Raider Outboards Technical Support <u>TechSupport@raideroutbaords.com</u> or by phone 321-567-2306. Please include the following information is your request for support.
  - a) Name
  - b) Command
  - c) Contact Information
  - d) Engine Model (if possible, provide engine serial number)
  - e) Brief description of issue or support action required
- 4. Thanks, from Raider Outboards for all your outstanding support defending our freedoms, we truly appreciate at that you do for our country.

Respectfully,

**Chris Woodruff** 

**Director of Engineering** 

Raider Outboards Inc.

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