



RAIDER OUTBOARDS, INC.
1855 SHEPARD DRIVE
TITUSVILLE, FL. 32780

RAIDER OUTBOARDS SERVICE BULLETIN NR. RO2019-003 (August 2, 2019)

1. Gear Ratio and Propeller Pitch applicability.
 - a. Engine Model: Raider 50 HP.
 - b. Item: Legacy lower units on the Raider 50 HP have a gear ratio of 1 to 1.11-13.24 and should utilize a 11.6" Diameter X11 pitch propeller (**Part# 3T5B645230**) for best performance. All other Raider 50 HP motors have a gear ratio of 1 to 1.52-13:25 and should utilize a 11.1" Diameter X13 pitch propeller (**Part# 3T5B645270**) for best performance. The use of other than recommended propeller will result in degraded performance.
 - c. Service Action. Identify serial numbers in current inventory against attached list and verify correct propeller is installed.
 - 1) Identify the serial number of your motor. The serial number is located on the right-side powerhead just behind the top cylinder. The label placard is silver in color, circular in shape and about the size of a 25¢ coin. (**see fig 1 and 2**)
 - 2) Identify the propeller pitch of the installed propeller on motor. Stenciled on the hub between the trailing edges of each blade. (**see fig 3 and 4**)
 - 3) Motors with the legacy lower unit may also be identified by the type of recoil starter.
 - a) Metal recoil starter is the Legacy Lower Unit with a gear ratio of 1 to 1.11-13.24 and should utilize a 11.6" Diameter X11 pitch propeller. (**see fig 5**)
 - b) Plastic recoil starter is the new Lower Unit with a gear ratio of 1 to 1.52-13:25 and should utilize a 11.1" Diameter X13 pitch propeller. (**see fig 6**)
 - 4) Verify recorded serial number against attached list. If you hold a motor in your inventory that is on the attached list, that motor is geared 1 to 1.52-13:25 and should utilize a 11.1" Diameter X13 pitch propeller.
 - 5) Stencil the lower unit on the gear case with the number 13 to designate the pitch for the propeller that should be installed. Motors that are returned to the shop for annual service will be stenciled as such. (**see fig 7 and 8**).
 - 6) Place the stencil on the right side of the lower unit, centerline on the gearcase.

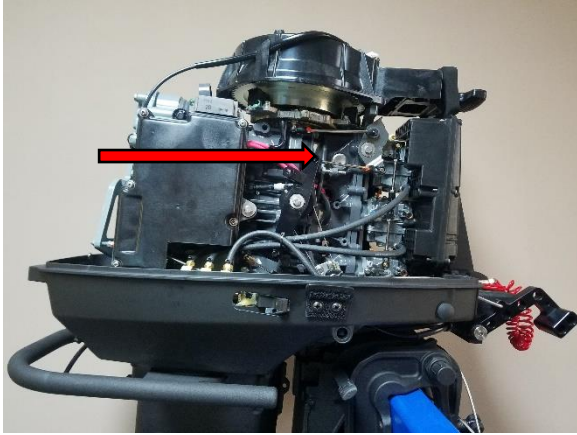


Fig 1. Motor Serial Number



Fig 2. Motor Serial Number

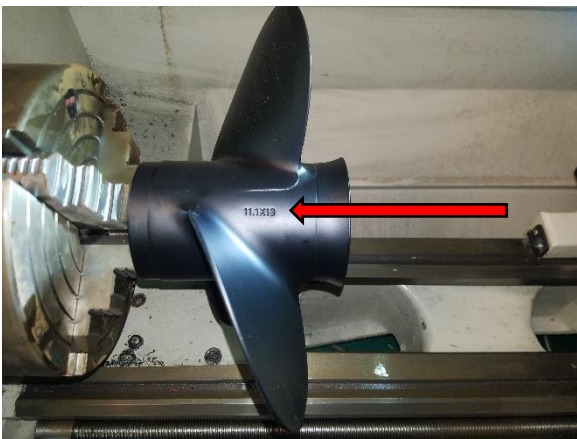


Fig 3 Propeller diameter and pitch stamp



Fig 4 Propeller diameter and pitch stamp



Fig 5 Recoil Starter on motors with Legacy Lower Units



Fig 6 Recoil Starter on motors with new Lower Units



Fig 7 Stencil on right side of gearcase.



Fig 8 Stencil on right side of gearcase.

d. Technical Support. Direct all technical support issues or questions or comments related to the following service bulletin please contact Raider Outboards Technical Support TechSupport@raideroutboards.com or by phone 321-567-2306. Please include the following information is your request for support.

- 1) Name
- 2) Command
- 3) Contact Information
- 4) Engine Model (if possible, provide engine serial number)
- 5) Brief description of issue or support action required

2. Thanks, from Raider Outboards for all your outstanding support defending our freedoms, we truly appreciate at that you do for our country.

Respectfully,

A handwritten signature in black ink that reads "Chris Woodruff". The signature is stylized and cursive.

Chris Woodruff

Director of Engineering

Raider Outboards Inc.

Chris@raideroutboards.com

321-567-2309

Serial Number	Where
021069AG	SPRMM118CYA10 New Cumberland
021043AG	Boat Barn
021077AG	Harris Marine
050695AG	Harris Marine
050706AG	Harris Marine
012604AG	Harris Marine
021061AG	Harris Marine
030963AH	NAVSPECWARCEN San Diego CA
030964AH	NAVSPECWARCEN San Diego CA
030965AH	NAVSPECWARCEN San Diego CA
030966AH	NAVSPECWARCEN San Diego CA
030967AH	NAVSPECWARCEN San Diego CA
030968AH	NAVSPECWARCEN San Diego CA
030969AH	NAVSPECWARCEN San Diego CA
041598AH	NAVSPECWARCEN San Diego CA
041599AH	NAVSPECWARCEN San Diego CA
041600AH	NAVSPECWARCEN San Diego CA
041601AH	NAVSPECWARCEN San Diego CA
041602AH	NAVSPECWARCEN San Diego CA
041603AH	NAVSPECWARCEN San Diego CA
041604AH	NAVSPECWARCEN San Diego CA
041605AH	NAVSPECWARCEN San Diego CA
041606AH	NAVSPECWARCEN San Diego CA
041607AH	NAVSPECWARCEN San Diego CA
046896AH	NAVSPECWARCEN San Diego CA
046902AH	NAVSPECWARCEN San Diego CA
046903AH	NAVSPECWARCEN San Diego CA
046904AH	NAVSPECWARCEN San Diego CA
046905AH	NAVSPECWARCEN San Diego CA
046906AH	NAVSPECWARCEN San Diego CA
046908AH	NAVSPECWARCEN San Diego CA
046909AH	NAVSPECWARCEN San Diego CA
046910AH	NAVSPECWARCEN San Diego CA

046911AH	NAVSPECWARCEN San Diego CA
046913AH	NAVSPECWARCEN San Diego CA
046914AH	NAVSPECWARCEN San Diego CA
046915AH	NAVSPECWARCEN San Diego CA
046916AH	NAVSPECWARCEN San Diego CA
030972AH	NAVSPECWARGRU TWO Virginia Beach VA
030973AH	NAVSPECWARGRU TWO Virginia Beach VA
030974AH	NAVSPECWARGRU TWO Virginia Beach VA
030975AH	NAVSPECWARGRU TWO Virginia Beach VA
030977AH	NAVSPECWARGRU TWO Virginia Beach VA
030978AH	NAVSPECWARGRU TWO Virginia Beach VA
030979AH	NAVSPECWARGRU TWO Virginia Beach VA
030980AH	NAVSPECWARGRU TWO Virginia Beach VA
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050690AG	No info available
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012600AG	NSW BTC Boat Support
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003729AH	NSW LOGSU-1 San Diego
012463AH	NSW LOGSU-1 San Diego

012464AH	NSW LOGSU-1 San Diego
012468AH	NSW LOGSU-1 San Diego
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046894AH	NSW LOGSU-1 San Diego
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046901AH	NSW LOGSU-1 San Diego
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050702AG	NSW LOGSU-1 San Diego
050707AG	NSW LOGSU-1 San Diego
050711AG	NSW LOGSU-1 San Diego
050718AG	NSW LOGSU-1 San Diego
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