FORCE Outboards

service bulletin

No. 95-9

New Stator - 70/90 HP

Models Affected

70 HP

1991 thru 1995

90 HP

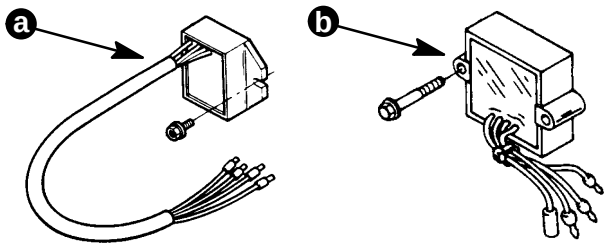
1991 “H” Model thru 1995

New stators are available which will service older Thunderbolt Ignition Systems from late 1991 thru 1995 models. These stators include design improvements for increased reliability and charging output.

Part numbers for these stators are:

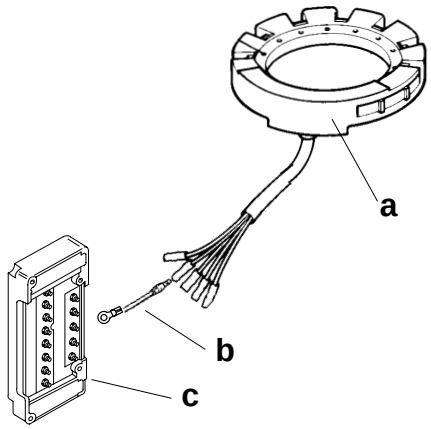
1. 398-9873A32 and 398-9873A35
    a. These stators are identified by part number 398-9873A24 printed on top of stator.
    b. Both of these stators are the same. Difference is the number of bullet to ring terminal adapters (qty. 2 vs. qty. 4). Stator, 398-9873A35, will be superseding 398-9873A32.

IMPORTANT: New stators will supersede older design. But, there are conditions when new stator will require changing voltage regulator. If voltage regulator is not changed, failure of regulator or possibly other electrical components may occur.



a - Old Regulator
b - New Regulator

Following is detailed chart on applications of new stators. This information is followed by new test specifications. New test specifications are needed because design is different for ignition and charging windings. Charging output of new stators for 70/90 HP is 15 amps. Original stators are 9 amps.

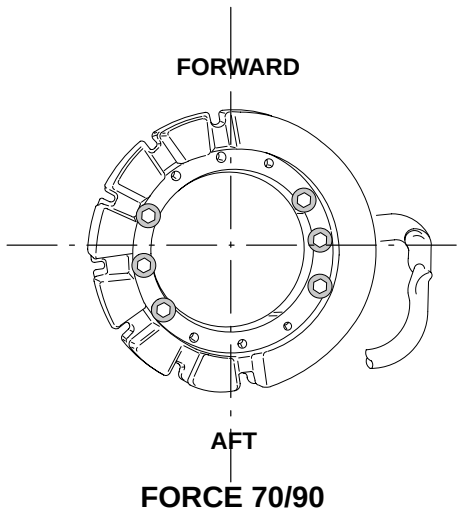


a - Stator
b - Adapter
c - Switch Box

Installation

If using bullet to ring terminal adapter, remove ring terminal boot from old stator. Install on adapter before connecting to new stator.

IMPORTANT: New stator for the 70/90 is different and must be positioned as shown below to fully charge the switch box capacitor.



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Dealer Service Stock:

Return all original part number* stators in stock for credit on a warranty claim. List part number(s) and quantities. Write “Return for Credit per Service Bulletin 95-9” on claim.

*Original Part Numbers are listed in following Chart

Warranty:

Stator failures will be covered by special warranty for three (3) years from original date of sale on 1991 thru 1995 model year 70/90 HP to assure customer satisfaction.

Midas or Paper
Complete warranty claim listing:

– 70/90 HP Serial Number
– Qty. 1 p/n _____ Stator
(and voltage regulator if required)
– One and one half (1-1/2) hour labor
– Labor Rate Code: OA18 .5 hour
OA15 one (1) hour
– Failure Code: 323-00

USA and Canada: Scrap failed stators and voltage regulators (if replaced).

International: Hold failed stators and voltage regulators (if replaced) for inspection/disposition by a Marine Power International technical representative.

70/90 HP Stator Usage Chart

HP	Model/Model Year	Original Stator	Supersedes To:	Requires:
70	1991 Models to 1994-1/2 s/n 0E065371	398-8778A10 and 398-8778A26	398–9873A35 (398-9873A24 printed on top of stator)	Needs Voltage Regulator 815279T5 (815279-4 printed on case)
	1994-1/2 s/n 0E065372 thru 1995 Models	398-8778A29	398-9873A32 or 398-9873A35	Does Not Need Voltage Regulator Change
90	1991 “H” Models to 1994-1/2 s/n 0E065504	398-8778A10 and 398-8778A26	398–9873A35 (398-9873A24 printed on top of stator)	Needs Voltage Regulator 815279T5 (815279-4 printed on case)
	1994-1/2 s/n 0E065505 thru 1995 Models	398-8778A29	398-9873A32 or 398-9873A35	Does Not Need Voltage Regulator Change

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Stator Test Specifications

398-9873A32 (398-9873A24 printed on the stator).
398-9873A35 (398-9873A24 printed on the stator).

Ohms - Low Speed - 1100 - 1600 (R x 1000) between Blue and Red

High Speed - 30 -35 (R x 1) between Red and Ground

Charging - .1 - .5 (R x 1) between Yellow Leads

Charging Output - 15 amps

DVA TEST SPECIFICATIONS

NOTE: Position selector switch at scale above the highest test value listed for each test.

Test	DVA Leads Red	DVA Leads Black	Voltage @ 300 RPM	Voltage @1000 RPM	Voltage @4000 RPM
Coil Primary	Coil (+) Terminal	Coil (–) Terminal	145 - 175	210 - 250	200 - 240
Sw. Box - Stop Circuit	Black/Yellow Sw. Box Terminal	Ground	215 - 265	280 - 340	260 - 320
Stator - Low Speed	Blue Sw. Box Terminal	Ground	215 - 265	280 - 340	260 - 320
Stator - High Speed	Red Sw. Box Terminal	Ground	10 - 15	45 - 55	205 - 255
Sw. Box - Bias	Ground	White/Black Sw. Box Terminal	2 - 10	10 - 30	10 - 30

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