**Outboard Logbook** 

MERCURY

04/2015





# IMPORTANT

- Maintenance must be completed by a Mercury Marine/Brunswick Marine *in* EMEA authorized dealer.
- At the completion of any maintenance check-up this book must be dated and signed by an authorized dealer.
- Failure to produce record of regular maintenance could invalidate your warranty.
- The maintenance suggestions provided are those services that our experience has determined to be most needed by the typical owner.
- Please ensure you have received a copy of your predelivery inspection report from your dealer.
- Your responsibilities regarding special care and preventative maintenance are outlined in your Operation & Maintenance Manual.
- In cases where operating hours are unusually high, your dealer will be able to advise you of additional services that may be necessary. We especially recommend more frequent maintenance in saltwater areas.
- Your authorized certified service centre will provide you with factory trained technicians and will provide you with genuine Quicksilver replacement parts.



# **5 YEAR WARRANTY**

# **Contractual Warranty**

The standard contractual warranty period depends upon the country in which you purchased this outboard motor.

Warranty coverage becomes available upon proper registration of the product by the Dealer.

### Extended Warranty

As of June 1, 2008, Brunswick Marine *in* EMEA extends the warranty coverage up to 5 years on its Verado, OptiMax and 4 stroke outboard engines given that the conditions for this Extended Warranty are fulfilled.

The total period of warranty are factory-backed and give the same comprehensive warranty coverage as Mercury Marine's standard manufacturer's warranty (including labor) for failures caused by defect in material or workmanship. The extended 5 year warranty will repair or replace as required, any part that is proved defective in material or workmanship under normal use during the applicable warranty period. All parts replaced under warranty will be considered as part of the original product and any warranty on those parts will expire coincidentally with the original product warranty. For full details of the warranty coverage and exclusions please refer to the factory warranty policy and conditions which are set out in your Operation and Maintenance Manual (see "Warranty Information").

Provided that the Extended Warranty conditions have been met, the additional warranty becomes effective when the standard factory limited warranty expires. The Extended Warranty will terminate upon failure to meet any of the extended warranty conditions.



Unexpired warranty coverage can be transferred to a subsequent purchaser upon proper re-registration of the product.

# **Conditions for Extended Warranty**

The Mercury Marine specified pre-delivery inspection process for the outboard must be completed and documented by your Dealer.

An Authorized Service Centre \* must perform the recommended routine servicing/maintenance requirements and repairs and log these with Mercury.

The recommended service intervals and maintenance recommendations must be adhered to 12mth, 2yr, 3yr, 4yr, 5yr **or** 100 hrs, 200 hrs, 300 hrs, 400 hrs, 500 hrs, 600 hrs...; whatever comes first.

The Extended Warranty program will not be limited in terms of hours of usage providing that the conditions are met.

ONLY Mercury Marine certified parts, oils and lubes must be used for service and repairs.

Services must be recorded in your logbook and registered online by your authorized dealer.

### Modification/Alteration

Products that have been modified or altered from their original production configuration are not eligible for Mercury 5 Year extended Warranty. The addition of, or replacement with, parts or accessories not approved by Mercury Marine, or not installed by an Authorized Service Centre, will be cause for your Mercury Marine Outboard 5 Year extended warranty to be cancelled. This may also affect your rights under the standard factory warranty.



# Eligible Products

New Mercury & Mariner Outboards (other than non-eligible products) purchased after June 1, 2008, from a dealer authorized by Mercury Marine to distribute the product in Europe, Middle-East, CIS and Africa\* which are used solely for pleasure applications.

# Non-Eligible Products and Uses

Racing and Mercury Performance Products, regardless of length of warranty period. Products used by local, State, or Federal Government or volunteer agencies. Products used in any work, boat rental, time-share/multiple ownership or employment related use, or any use of the product, which generates income, for any part of the warranty period, even if the product is only occasionally used for such purposes.

# Exclusions

The warranty does not extend to the following:

- Cosmetics, corrosion and abuse.
- Servicing items e.g. filters, anodes etc.
- Gaskets, seals, hoses and other non metallic parts.
- Accidental damage, no missing metal, neither water in the fuel system nor engine.
- Conditions caused by lack of routine maintenance (as outlined in the owners manual).
- Conditions caused by the use of propeller(s) that do not allow the outboard engine to run in its recommended full throttle rpm range.
- Operation inconsistent with the recommended operation/duty cycle (as outlined in the owners manual).
- Parts affected or damaged by an accident, submersion and/or collision.
- Normal wear and tear.
- Fuel contamination and water entering the engine through the fuel intake, air intake, or exhaust system.



Operation with fuels, oils, additives and lubricants which are not suitable for use in the product.

- Use in an application for which the outboard engine was not designed, such as racing or competitive use or any other misuse or neglect.
- Incorporation of unsuitable attachments or parts.
- The unauthorized alternation, improper installation and/ or rigging, or any causes other than defects in material or workmanship.
- Corrosion to steering system or electrical components, corrosion due to electrolysis, water born foreign chemicals, improper service or corrosion caused by damage or abuse. NB. Corrosion caused by damage or abuse.
- Reimbursement for towing charges, in and out of water charges, or technical travel time.
- Growth of marine organisms on motor surfaces, external or internal

# Additional Warranty Information and Conditions

Additional information regarding your outboard's factory warranty policy and conditions can be found in your Operation and Maintenance Manual (see "Warranty Information").

\* This warranty applies only to Mercury and Mariner outboards registered through an authorized Mercury or Mariner Distributor or Dealer.– Please check the Brunswick Marine in EMEA website (<u>www.brunswick-marine.com</u>) for more details on our authorized dealer network.

# MERCURY

90-889158R04

This logbook has been provided for your convenience. Please take the time to fill out your Engine/Boat details, that you may need these for future reference. It is important that your details are kept up to date.

Engine Serial Number
Model Number
Date of Purchase
Propeller Number
Pitch
Ignition Key Number
Boat Model
Boat Make
Boat Length
Hull Number
Owner's Manual Reference
Owner's Name
Address
Postcode City
Country
Change of Owner/Address
Date

Owner's Name .....

Address .....

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Postcode	City .	 	 	 
Country		 	 	 
E-mail address:		 	 	 

### Change of Owner/Address

Date
Owner's Name
Address
Postcode City
Country
E-mail address:

Transfer of Ownership: If you have purchased this product from the original owner, you will need to provide your details to your local distributor/branch, to ensure you receive the balance of the product warranty. See in the Operation & Maintenance manual for further details.



# Check before running (Please check the boxes or leave blank if not applicable)

- Service Bulletin updates or repairs completed
- Check engine oil level (FourStroke)
- Lower unit lubricant
- □ Tilt tube and swivel pin lubrication
- Engine tight on transom, height correct, and centered
- Mounting hole number
- Distance cavitation plate to bottom of the hull
- Distance from transom to jack plate
- Proper amount of mounting bolts as per installation manual requirements
- Fuel line and fuel tank installation
- Gasoline-oil mixture for break-in (2-stroke engines only, NOT DFI)
- Co-pilot adjustment
- Steering operation through complete range
- Remote control operation
- Electrical harness installation
- Battery proper rating, fully charged and properly secured, brand & type, Amps/he, cold cranking Amps
- Battery cable connections tight and protective cover (s) in place
- Instrument connections
- □ Manual tilt operation
- □ Manual tilt valve operation
- Check for tight steering link and fasteners
- □ Fill oil injection reservoir(s)
- Adjust trim limit switch
- Purge air from oil injection system (OptiMax only) using CDS or RC
- Check operation of low oil and overheat warning horns using CDS or G3—attached inspection form to the invoice
- □ Shift cables adjustment
- Select correct propeller, install and torque
- Before fitting propeller grease propeller shaft
- Inform about pitch and diameter, provide P/N
- Check oil level and operation of power trim system and power trim gauge



- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum and having the same functionality and Amps rating as a standard Mercury ignition switch
- Ensure Electronic Remote Control connections are completed following ERC
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the lanyard stop switch is connected to the DTS command module harness
- □ Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that no wings nuts are used for battery installation
- Verify that all engine battery cables are connected to the correct terminals. Specify section and length
- Verify that the DTS power harness is directly connected to the starting battery without battery switch secured with locknut and that is not spliced
- Ensure that 5 Amp (10 Amps for extended power harnesses) fuse for the DTS power harness is accessible
- Ground wire circuit continuity, check for loose connections

#### Check while running

- □ Rewind starter/ neutral interlock operation
- Electrical starter/ neutral safety switch
- Manual choke
- Electric choke
- Tell-tale water stream
- □ Instrument (s) operation

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- Set idle RPM
- Idle RPM .....
- □ Throttle and shift, ease of operation
- □ Steering operation throughout range
- Reverse operation and reverse lock hooks
- Shallow water drive
- Power trim operation
- Trim tab adjustment
- Tilt angle adjustment
- Maximum RPM
- □ Stop switch and lanyard stop switch

#### OptiMax and EFI

- Use CDS laptop to check engine operation
   Attached CDS or G3 run files

#### Check after running

- Oil, Gasoline, or water leakage
- Propeller nut torque
- Power trim and oil injection level
- □ 4-cycle engine oil level
- Apply Quicksilver Corrosion Guard to the engine package

#### I certify that above checks and inspections have been completed

Technician Name: .....

Technician Passport No.: .....

Date: ..... .....

Dealer Stamp:

Dealer Number: .....



# Customer Delivery Inspection

#### (Please check the boxes or leave blank if not applicable)

- Complete and process warranty registration Provide customer with copy
- Operation and Maintenance Manual Provide and review content with customer. Emphasize importance of "Safety Warnings" and Mercury engine testing procedure
- Operation of Equipment Explain / demonstrate
- Lanyard stop switch
- Steering torque or pull, cause and effect, firm steering wheel grip, boat spin out, trim for neutral steering.
- U.S Coast guard capacity plate/CE capacity plate
- Proper seating
- □ Importance of life vest and throw cushion
- Outboard features and warning systems of the package
- SmartCraft gauge(s) functions
- Off season storage and maintenance schedule
- Engine
- 🛛 Boăt
- □ Trailer (if applicable)
- External appearance of the outboard is acceptable (Paint, cowl, decals, etc)
- Warranty Provide and explain the limited warranty to the customer. Explain dealer services
- Explain how to flush the engine

# I certify that the above information has been provided and explained to the customer.

Sales person name: .....

Dealer Number:	
Dealar Number	

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# First 3 Months OR 20 Hours Service Checkup (Recommended only)

# Check Before Running (Please check the boxes or leave blank if not applicable)

- Inspect outboard motor and accessories for visible damages
- Drain gear housing and refill with gear lube
- Lubricate all grease fittings, transom clamps screws, throttle/shift linkage (pivot points) and propeller shaft splines
- Lubricate steering cable. Clean and lubricate cable end at engine
- Service battery and terminals
- Remove and inspect spark plugs. Check compression (engine must be warm)
- Inspect fuel tank fuel lines and connections
- Replace fuel filters and oil injection filter
- Check throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and gauge
- gauge Gheck propeller blades for damages
- Check for oil/water/fuel leaks
- □ Check for corrosion

#### EFI & DFI

Check TPS settings

#### 4 Stroke Only

Change engine oil and replace filter

#### Check While Running

- Water pressure .....
- Operation of water pump and cooling system
- Throttle, gearshift and reverse lock operation
- Carburettor mixture and idle speed ......
- Maximum RPM/timing ......
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

#### OptiMax & EFI

- Use DDT/CDS laptop
- Check diagnostic codes

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r pressure
n Quicksilver Corrosion Guard to pro- ections and exposed metal surfaces trol anodes and system
Passport No
Dealer Number:

Remarks	 	



# Annual OR 100 Hours Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable))

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Remove and inspect propeller. Grease propeller shaft spline
- **I** Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check accessory drive belt (change if necessary)
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap



- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible

### EFI & DFI

□ Check TPS settings

#### OptiMax

Change compressor oil filter

#### 4 Stroke Only

- Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

#### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Throttle, gearshift and reverse lock operation
- □ Alternator is charging
- Carburettor mixture and idle speed .....

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- Maximum RPM/timing .....
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

#### OptiMax & EFI

- Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- Check DFI fuel and air pressure

#### Check After Running

- Spray powerhead with Quicksilver Corrosion Guard to protect electrical connections and exposed metal surfaces from corrosion
- Inspect corrosion control anodes and system. Replace trim tab if required

Date:					
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Hours of Operation: .....

Dealer Stamp:

Passport No. .....

Dealer Number: .....

Remarks

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Owner should follow recommendations in Operation & Maintenance Manual until next scheduled service.

We recommend using original Mercury Precision or Quicksilver replacement parts and genuine lubricants;

#### Storage

The major consideration in preparing your outboard for storage is to protect it from rust, corrosion and damage caused by freezing of trapped water.

Refer to the procedures given in your "Outboard Operation, Maintenance & Warranty" manual to prepare your outboard for out of season storage or prolonged storage (two months or longer).



# Annual OR 200 Hours Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable))

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Remove and inspect propeller. Grease propeller shaft spline
- **I** Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check accessory drive belt (change if necessary)
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap



- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible

### EFI & DFI

□ Check TPS settings

#### OptiMax

Change compressor oil filter

#### 4 Stroke Only

- Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

#### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Throttle, gearshift and reverse lock operation
- □ Alternator is charging
- Carburettor mixture and idle speed .....

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- Maximum RPM/timing .....
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

#### OptiMax & EFI

- Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- Check DFI fuel and air pressure

#### **Check After Running**

- Spray powerhead with Quicksilver Corrosion Guard to protect electrical connections and exposed metal surfaces from corrosion
- Inspect corrosion control anodes and system. Replace trim tab if required

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Hours of Operation: .....

Dealer Stamp:

Passport No. .....

Dealer Number: .....

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# Annual OR 300 Hours of Use Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable)

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Replace water pump impeller
- Remove and inspect propeller. Grease propeller shaft spline
- Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- □ Inspect fuel tank, fuel lines and connectors
- □ Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check power trim fluid
- □ Replace accessory drive belt
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)



- Verify all unused receptacles are covered with a weather cap
- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible
- Check lower unit backlash with dial indicator gauge on the propeller shaft

#### EFI & DFI

□ Check TPS settings

#### **OptiMax**

🖬 Change compressor oil filter

#### 4 Stroke Only

- Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

#### Check While Running

Water pressure .....

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- Alternator is charging
- Carburettor mixture and idle speed .....
- Maximum RPM/timing .....
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

### **OptiMax & EFI**

- Use DDT/CDS laptop
- Check diagnostic codes
- □ ECM and sensor operation
- Check for fault codes
- □ Check DFI fuel and air pressure

- Check After Running
   Spray powerhead with Quicksilver Corrosion Guard to protect électrical connections and exposed metal surfaces from corrosion
- □ Inspect corrosion control anodes and system. Replace trim tab if required
- Date:

Hours of Operation: .....

Dealer Stamp:

Passport No. .....

Dealer Number:

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# Annual OR 400 Hours Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable))

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Remove and inspect propeller. Grease propeller shaft spline
- □ Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check accessory drive belt (change if necessary)
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap



- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- □ Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible

### EFI & DFI

Check TPS settings

#### OptiMax

**D** Change compressor oil filter

#### 4 Stroke Only

- □ Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Throttle, gearshift and reverse lock operation
- □ Alternator is charging
- Carburettor mixture and idle speed .....
- Maximum RPM/timing .....

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Operation of oil injection and low oil warning system
 Operation of steering system, remote controls and gauges

#### OptiMax & EFI

- Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- □ Check DFI fuel and air pressure

#### **Check After Running**

- Spray powerhead with Quicksilver Corrosion Guard to protect electrical connections and exposed metal surfaces from corrosion
- Inspect corrosion control anodes and system. Replace trim tab if required

Date: .....

Hours of Operation:
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Dealer Stamp:

Passport No. .....

Dealer Number: .....

Remarks

90-889158R04



# Annual OR 500 Hours Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable))

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Remove and inspect propeller. Grease propeller shaft spline
- □ Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- □ Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- □ Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check accessory drive belt (change if necessary)
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap



- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible

#### EFI & DFI

□ Check TPS settings

#### **OptiMax**

Change compressor oil filter

#### 4 Stroke Only

- Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

#### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Throttle, gearshift and reverse lock operation
- Alternator is charging
- Carburettor mixture and idle speed .....
- Maximum RPM/timing .....

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- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

# OptiMax & EFI

- Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- Check DFI fuel and air pressure

# Check After Running

- Spray powerhead with Quicksilver Corrosion Guard to protect electrical connections and exposed metal surfaces from corrosion
- Inspect corrosion control anodes and system. Replace trim tab if required

Date: .....

Hours of Operation: .....

Dealer Stamp:

Passport No. .....

Dealer Number: .....

 Remarks

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# Annual OR 600 Hours of Use Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable)

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Replace water pump impeller
- Remove and inspect propeller. Grease propeller shaft spline
- Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- □ Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check power trim fluid
- Replace accessory drive belt
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap

MERCURY

- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible
- Check lower unit backlash with dial indicator gauge on the propeller shaft

# EFI & DFI

Check TPS settings

### OptiMax

□ Change compressor oil filter

#### 4 Stroke Only

- □ Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Throttle, gearshift and reverse lock operation

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- Alternator is charging
- Carburettor mixture and idle speed ......
- Maximum RPM/timing .....
   Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

#### **OptiMax & EFI**

- Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- □ Check DFI fuel and air pressure

#### Check After Running

- Spray powerhead with Quicksilver Corrosion Guard to protect électrical connections and exposed metal surfaces from corrosion
- □ Inspect corrosion control anodes and system. Replace trim tab if required

Date:

Hours of Operation: .....

Dealer Stamp:

Passport No. .....

Dealer Number: .....

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# Annual OR 700 Hours Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable))

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Remove and inspect propeller. Grease propeller shaft spline
- □ Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- □ Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check accessory drive belt (change if necessary)
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap



- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible

#### EFI & DFI

□ Check TPS settings

#### **OptiMax**

Change compressor oil filter

#### 4 Stroke Only

- Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

#### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges
- Check DFI fuel and air pressure
- Maximum RPM/timing ......

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Operation of oil injection and low oil warning system
 Operation of steering system, remote controls and gauges

#### **OptiMax & EFI**

- □ Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- Check DFI fuel and air pressure

#### **Check After Running**

- Spray powerhead with Quicksilver Corrosion Guard to protect electrical connections and exposed metal surfaces from corrosion
- Inspect corrosion control anodes and system. Replace trim tab if required

Date: .....

Hours of Operation:	
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Dealer Stamp:

Passport No. .....

Dealer Number: .....

Remarks

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### Annual OR 800 Hours Service Checkup

## Check Before Running (Please check the boxes or leave blank if not applicable))

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Remove and inspect propeller. Grease propeller shaft spline
- **I** Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- Inspect fuel tank, fuel lines and connectors
- Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check accessory drive belt (change if necessary)
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap



- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- □ Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible

### EFI & DFI

Check TPS settings

### OptiMax

**D** Change compressor oil filter

### 4 Stroke Only

- □ Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges
- Check DFI fuel and air pressure
- Maximum RPM/timing ......

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Operation of oil injection and low oil warning system
 Operation of steering system, remote controls and gauges

### OptiMax & EFI

- Use DDT/CDS laptop
- Check diagnostic codes
- ECM and sensor operation
- Check for fault codes
- Check DFI fuel and air pressure

#### **Check After Running**

- Spray powerhead with Quicksilver Corrosion Guard to protect electrical connections and exposed metal surfaces from corrosion
- Inspect corrosion control anodes and system. Replace trim tab if required

Date: .....

Hours of Operation: .....

Dealer Stamp:

Passport No. .....

Dealer Number: .....

Remarks

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### Annual OR 900 Hours of Use Service Checkup

# Check Before Running (Please check the boxes or leave blank if not applicable)

- Inspect outboard motor and accessories for visible damage
- Remove and inspect spark plugs protectors and leads. Check compression (engine must be warm)
- Check all electrical connections. Clean and reseal if required
- Drain gear housing and refill with Gear Lube
- Lubricate all grease fittings, transom clamp screws, throttle/shift linkage (pivot points)
- Lubricate steering cable. Clean and lubricate cable end at engine
- □ Service water pump
- Replace water pump impeller
- Remove and inspect propeller. Grease propeller shaft spline
- □ Torque propeller shaft nut to specification
- Service battery and terminals
- Remove engine deposits with Quicksilver Power Tune Engine Cleaner
- Inspect fuel tank, fuel lines and connectors
- □ Replace fuel filters and oil injection filter
- Replace fuel pump diaphragm and check carburettor float levels
- Check carburettor throttle butterfly synchronization
- Check primary and secondary throttle pick ups and full throttle stop
- Check oil level and operation of power trim system and power trim gauge
- Check power trim fluid
- □ Replace accessory drive belt
- Verify the data harness is not routed near sharp edges, hot surfaces, moving parts
- Verify data harness is not routed near ignition components (coils, spark plug leads, and spark plugs, high power VHF coax or radios
- Ensure the harness connections are fastened within 25.4cm (10 in.)
- Verify all unused receptacles are covered with a weather cap

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- If non-Mercury Marine ignition key is used, verify that it passes the ingress protection testing per IEC IP66 specs minimum
- Ensure Electronic Remote Control connections are completed following ERC instructions
- Verify that all connectors are properly inserted and locked in their receptacle
- Verify that while moving the remote control handle (full) the harness has unobstructed movement
- Verify that the lanyard stop switch is wired into the system correctly
- Verify that the switch is connected to the DTS command module harness
- Verify that the harness is fastened along the routing path
- Verify that all unused connectors have weather caps to prevent corrosion
- Verify that wings nuts have been replaced with hex nuts
- Verify that all engine battery cables are connected to the correct terminals
- Verify that the DTS power harness leads are connected to the starting battery and secured with locknuts
- Ensure that 5 Amp fuse for the DTS power harness is accessible
- Check lower unit backlash with dial indicator gauge on the propeller shaft

### EFI & DFI

Check TPS settings

### OptiMax

**Change compressor oil filter** 

### 4 Stroke Only

- Change engine oil and replace oil filter
- Check and adjust valve clearance, if necessary inspect timing belt

### Check While Running

- Water pressure .....
- Operation of water pump, cooling system and thermostat
- Throttle, gearshift and reverse lock operation

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- Alternator is charging
- Carburettor mixture and idle speed .....
- Maximum RPM/timing .....
- Operation of oil injection and low oil warning system
- Operation of steering system, remote controls and gauges

### **OptiMax & EFI**

- Use DDT/CDS laptop
- Check diagnostic codes
- □ ECM and sensor operation
- Check for fault codes
- □ Check DFI fuel and air pressure

- Check After Running
   Spray powerhead with Quicksilver Corrosion Guard to protect électrical connections and exposed metal surfaces from corrosion
- □ Inspect corrosion control anodes and system. Replace trim tab if required

Date:

Hours of Operation: .....

Dealer Stamp:

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### Engine Logs

Date	Trip Details	Hours	Fuel	Weather/ Comments

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Date	Trip Details	Hours	Fuel	Weather/ Comments

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Date	Trip Details	Hours	Fuel	Weather/ Comments

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Date	Trip Details	Hours	Fuel	Weather/ Comments

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