

MT A 117

Outboard Engines-Inline

Overview:

Introduces troubleshooting, maintaining, and repairing four-stroke Inline (90-200 HP) outboard marine engines. Provides entry-level marine technicians with the knowledge to maintain the Yamaha F/LF150B engine platform according to a maintenance schedule.

Student Learning Outcomes:

- use F150 LF150 Service Manual and related resources/tools
- use the maintenance charts in F150 LF150 Service Manual - LIT-18616-03-35
- inspect and replace marine batteries
- grease points / cowling and tilt operation
- inspect and replace spark plugs/spark plug wire/ignition coil
- Vapor Separator Tank/fuel system
- inspect and replace thermostat and PCV
- timing belt inspection/replacement
- inspect and adjust valve clearance
- inspect and adjust throttle/shift cables/cable joint to specs using digital caliper
- inspect and replace propellers
- create and submit a parts pick list in YMBS
- replace oil by draining and replace oil by using an extraction pump
- inspect and replace water pumps
- conduct pressure tests
- use YDIS for basic maintenance-related tasks
- spot issues while performing regular maintenance tasks
- recommend and use the correct oil and lubricants
- properly drain and refill lower gear lubricant
- remove and reinstall lower units
- check PT&T operation
- inspect and replace anodes
- inspect and replace fuel filters and fuel pump
- conduct a compression test
- test fuel components on and off the engine
- remove and check fuel pump assembly
- inspect and replace timing belt