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› Yamaha YFM400F BIG BEAR ATV Service Manual (2000-2006)

Yamaha YFM400F

Yamaha YFM400F BIG BEAR ATV Service Manual (2000-2006)

Comprehensive Service and Maintenance Instructions

INTRODUCTION

This service manual provides detailed service information, step-by-step repair instructions, and maintenance specifications for 2000-2006 Yamaha YFM400F BIG BEAR 4WD and 2WD ATVs. It is designed to assist qualified technicians and experienced owners in performing proper maintenance and repairs.

The manual includes a base manual and several supplements, covering various models and years within the 2000-2006 range. Specifically, it covers:

- LIT-11616-BB-2K, which includes LIT-11616-13-22 (2000 Yamaha YFM400FW 4WD Big Bear ATV Base Service Manual) and LIT-11616-13-34 (2000 Yamaha YFM400N 2WD Big Bear ATV Supplement Service Manual).
- LIT-11616-15-22 (2002 Yamaha YFM400FW 4WD Big Bear ATV Supplement Service Manual).



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YFM400FWNM/NMC

Service Manual



Image: Main cover of the Yamaha YFM400F BIG BEAR ATV Service Manual. This manual provides comprehensive repair and maintenance information for the ATV models.

CHAPTER 1: GENERAL INFORMATION

Machine Identification

Locating and understanding the identification numbers for your ATV is crucial for service and parts ordering.

- **Vehicle Identification Number (VIN):** Typically located on the frame.
- **Model Label:** Provides specific model details.

Important Information for Procedures

Before beginning any removal or repair procedures, review the following guidelines:

- **Preparation for Removal Procedures:** Ensure the ATV is stable and safe. Disconnect the battery if working on electrical components.
- **Replacement Parts:** Always use genuine Yamaha replacement parts or equivalent quality parts.
- **Gaskets, Oil Seals, and O-Rings:** Replace these components whenever they are removed to prevent leaks.
- **Lock Washers/Plates and Cotter Pins:** Replace these fasteners with new ones during reassembly to ensure secure connections.
- **Bearings and Oil Seals:** Inspect for wear and replace as necessary. Lubricate new bearings and seals before installation.
- **Circlips:** Ensure circlips are correctly seated in their grooves.
- **Special Tools:** Refer to the manual for any required special tools for specific procedures.

**YFM400FWM/YFM400FWMC
SERVICE MANUAL**
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LIT-11616-13-22

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Image: Cover of the 2000 Yamaha YFM400FW 4WD Big Bear ATV Base Service Manual (LIT-11616-13-22). This is one of the core manuals included.

CHAPTER 2: SPECIFICATIONS

This section provides detailed technical specifications for the ATV's engine, chassis, and electrical systems, along

with important torque values and lubrication information.

- **General Specifications:** Overall dimensions, weight, and capacities.
- **Maintenance Specifications:** Recommended service intervals and component tolerances.
- **Engine:** Bore, stroke, compression ratio, valve clearances, and other engine-specific data.
- **Chassis:** Suspension travel, tire pressures, brake specifications.
- **Electrical:** Battery type, fuse ratings, bulb wattages.
- **How to Use the Conversion Table:** Instructions for converting units of measurement.
- **General Torque Specifications:** Standard torque values for various fasteners.
- **Lubrication Points and Lubricant Type:** Identification of all lubrication points and the recommended lubricant for each.
- **Lubrication Diagrams:** Visual guides for lubrication points.
- **Cable Routing:** Diagrams showing correct routing for control cables and wiring harnesses.



**YFM400NM
YFM400NMC**

SUPPLEMENTARY SERVICE MANUAL

LIT-11616-13-34

5GW-F8197-E0

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Image: Cover of the 2000 Yamaha YFM400N 2WD Big Bear ATV Supplement Service Manual (LIT-11616-13-34). This supplement covers the 2WD models.

CHAPTER 3: PERIODIC INSPECTIONS AND ADJUSTMENTS

Regular inspections and adjustments are vital for maintaining the performance and longevity of your Yamaha ATV.

Introduction to Periodic Maintenance

This section outlines the schedule and procedures for routine maintenance tasks.

Maintenance Procedures

- **Seat, Carriers, Fenders, and Fuel Tank:** Instructions for removal and installation for access to other components.
- **Engine:**
 - Valve Clearance Adjustment
 - Timing Chain Adjustment
 - Idling Speed Adjustment
 - Throttle Lever Free Play Adjustment
 - Speed Limiter Adjustment
 - Starter Lever Free Play Adjustment
 - Spark Plug Inspection
 - Ignition Timing Check
 - Compression Pressure Measurement
 - Engine Oil Level Check

CONTENTS

SPECIFICATIONS	1
GENERAL SPECIFICATIONS	1
MAINTENANCE SPECIFICATIONS	2
CHASSIS	2
CABLE ROUTING	3
 PERIODIC INSPECTIONS AND ADJUSTMENTS	5
INTRODUCTION	5
PERIODIC MAINTENANCE/LUBRICATION	5
 ENGINE OVERHAUL	7
ENGINE REMOVAL	7
SEAT, CARRIERS, FENDERS AND FUEL TANK	7
ENGINE OIL	7
CARBURETOR	7
EXHAUST PIPE AND MUFFLER	8
STARTER MOTOR	8
OIL FILTER	9
REVERSE CONTROL CABLE	9
SHIFT PEDAL AND FOOTREST	9
SPARK PLUG	10
LEADS	10
REAR SHOCK ABSORBER AND SWINGARM	11
FRONT FENDER BRACKET	12
ENGINE REMOVAL	12
MIDDLE GEAR SERVICE	13
REMOVAL	14
DISASSEMBLY	14
INSPECTION	17
MIDDLE DRIVE AND DRIVEN GEAR SHIM SELECTION	17
ASSEMBLY	20
INSTALLATION	23
GEAR LASH MEASUREMENT	23
ENGINE ASSEMBLY AND ADJUSTMENT	25
REMOUNTING THE ENGINE	25
 CHASSIS	28
FRONT AND REAR WHEELS	28
REMOVAL	29

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Image: Contents page from the 2000 Yamaha YFM400N 2WD Big Bear ATV Supplement Service Manual. This page lists sections like Specifications, Periodic Inspections, and Engine Overhaul.

ENGINE OVERHAUL

This section details the procedures for disassembling, inspecting, and reassembling engine components.

Engine Removal and Related Components

- Engine Removal
- Seat, Carriers, Fenders, and Fuel Tank (for engine access)
- Engine Oil Drainage
- Carburetor Removal
- Exhaust Pipe and Muffler Removal
- Starter Motor Removal
- Oil Filter Replacement
- Reverse Control Cable Disconnection
- Shift Pedal and Footrest Removal
- Spark Plug Removal
- Leads Disconnection
- Rear Shock Absorber and Swingarm Removal
- Front Fender Bracket Removal

Middle Gear Service

- Removal
- Disassembly
- Inspection of components
- Middle Drive and Driven Gear Shim Section adjustments
- Assembly
- Installation
- Gear Lash Measurement
- Engine Assembly and Adjustment
- Remounting the Engine



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YFM400FWNP

SUPPLEMENTARY SERVICE MANUAL

LIT-11616-15-22

5FU-F8197-E1

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Image: Cover of the 2002 Yamaha YFM400FW 4WD Big Bear ATV Supplement Service Manual (LIT-11616-15-22). This supplement provides updates for the 2002 4WD models.

CHASSIS

This section covers maintenance and repair procedures for the ATV's chassis components.

Front and Rear Wheels

- Removal procedures for front and rear wheels.
- Inspection of tires, rims, and hubs.
- Installation and torque specifications.

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the YFM400FWNP. For complete information on service procedures, it is necessary to use this Supplementary Service Manual together with the following manual.

YFM400FWNM/YFM400FWNMC SERVICE MANUAL: 5FU-F8197-E0

**YFM400FWNP
SUPPLEMENTARY
SERVICE MANUAL**

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LIT-11616-15-22

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ELECTRICAL SYSTEM

This section provides information on inspecting, testing, and troubleshooting the ATV's electrical components.

- **Checking the Switch:** Procedures for testing various electrical switches.
- **Ignition System:**
 - Circuit Diagram
 - Troubleshooting steps for ignition issues.
- **Electric Starting System:**
 - Circuit Diagram
 - Troubleshooting procedures for starting problems.
- **Lighting System:**
 - Circuit Diagram
 - Checking the Lighting System components.
- **Signal System:**
 - Circuit Diagram
 - Troubleshooting for signal components.
- **2WD/4WD Selecting System:**
 - Circuit Diagram
 - Troubleshooting for the drive selection system.
- **YFM400FWNP Wiring Diagram:** A comprehensive wiring diagram for the YFM400FWNP model.

CONTENTS

SPECIFICATIONS	1
GENERAL SPECIFICATIONS	1
MAINTENANCE SPECIFICATIONS	2
ENGINE.....	2
CHASSIS.....	3
ELECTRICAL	4
CABLE ROUTING	5
 PERIODIC CHECKS AND ADJUSTMENTS	16
INTRODUCTION	16
PERIODIC MAINTENANCE/LUBRICATION INTERVALS	16
CHASSIS	18
ADJUSTING THE FRONT BRAKE	18
ADJUSTING THE REAR BRAKE LIGHT SWITCH.....	18
 DRIVE TRAIN	19
CONSTANT VELOCITY JOINTS AND DIFFERENTIAL GEAR	19
ASSEMBLING THE DIFFERENTIAL GEAR	21
MEASURING AND ADJUSTING THE DIFFERENTIAL GEAR LASH.....	21
 ELECTRICAL	24
CHECKING THE SWITCH	24
CHECKING THE SWITCH	24
CHECKING A SWITCH SHOWN IN THE MANUAL	24
IGNITION SYSTEM	25
CIRCUIT DIAGRAM	25
TROUBLESHOOTING	26
ELECTRIC STARTING SYSTEM	31
CIRCUIT DIAGRAM	31
TROUBLESHOOTING	32
LIGHTING SYSTEM	35
CIRCUIT DIAGRAM	35
CHECKING THE LIGHTING SYSTEM	36
SIGNAL SYSTEM	37
CIRCUIT DIAGRAM	37
TROUBLESHOOTING	38
CHECKING THE SIGNAL SYSTEM	40
2WD/4WD SELECTING SYSTEM	42
CIRCUIT DIAGRAM	42
TROUBLESHOOTING	43

YFM400FWNP WIRING DIAGRAM

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Image: Contents page from the 2002 Yamaha YFM400FW 4WD Big Bear ATV Supplement Service Manual. This page details sections on Periodic Checks, Drive Train, and Electrical.

TROUBLESHOOTING

This section provides guidance for diagnosing common issues. For detailed troubleshooting, refer to the specific

system sections within the manual (e.g., Ignition System, Electric Starting System, Lighting System, Signal System, 2WD/4WD Selecting System).

Always begin troubleshooting by checking the simplest possible causes, such as loose connections, blown fuses, or low fluid levels.

MAINTENANCE SCHEDULE AND PROCEDURES

Adhering to the recommended maintenance schedule is crucial for the optimal performance and longevity of your ATV. Refer to Chapter 3: Periodic Inspections and Adjustments for detailed intervals and procedures.

Key Maintenance Areas:

- Engine oil and filter changes
- Spark plug inspection and replacement
- Valve clearance checks and adjustments
- Brake system inspection and adjustment
- Tire pressure and wear checks
- Lubrication of moving parts
- Cable and hose inspections

PRODUCT SPECIFICATIONS SUMMARY

Specification	Detail
Model Years Covered	2000-2006
ATV Models	Yamaha YFM400F BIG BEAR 4WD & 2WD
Manual Type	Service Manual (Base and Supplements)
Language	English
Publisher	by Publisher
Publication Date	January 1, 2004
Item Weight	1.06 Kilograms

SUPPORT INFORMATION

For further assistance or specific technical inquiries not covered in this manual, please refer to official Yamaha service centers or authorized dealers. This manual is intended as a comprehensive guide for service and repair, but professional assistance may be required for complex issues.

Note: Warranty information is not provided within this service manual. Please consult your ATV's original purchase documentation or an authorized Yamaha dealer for warranty details.

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question