

FOREWORD

This service manual has been designed to furnish all dealer and service personnel with specific information concerning this machine, including disassembly and assembly procedures, inspection and analysis of worn parts, and subsequent repair or adjustment procedures.

The manual should be thoroughly read. This will provide full familiarity with the design of this machine and all correct repair procedures.

Because Yamaha engineers are constantly searching for new and more efficient engine advancements, it is possible that some of this information may be modified in the future. Any change in design, adjustments or repair procedures will be immediately forwarded to all Authorized Yamaha Dealers through Service and/or Parts News Bulletins.

YAMAHA MOTOR CO., LTD.
Engineering & Service Department

INDEX

GENERAL

1

ADJUSTMENTS

2

ENGINE SECTION

3

FUEL SYSTEM

4

CHASSIS

5

ELECTRICAL

6

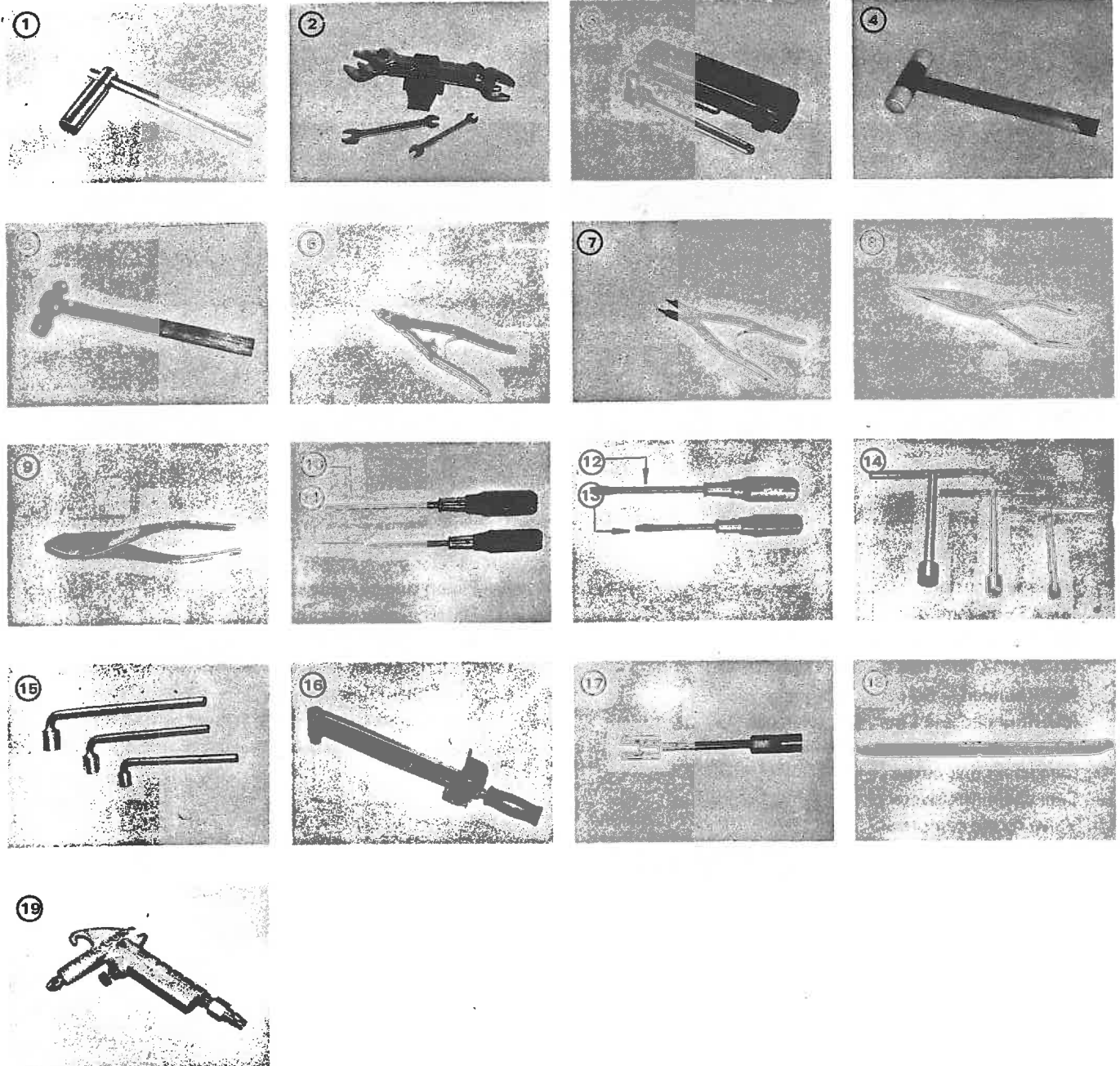
TROUBLESHOOTING

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1-4. SERVICE TOOLS

The following additional tools are required to service the YAMAHA XS650B.

A. Standard tools

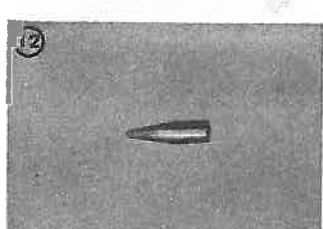
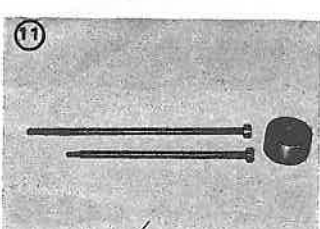
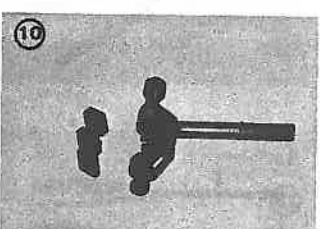
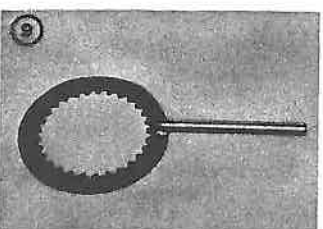
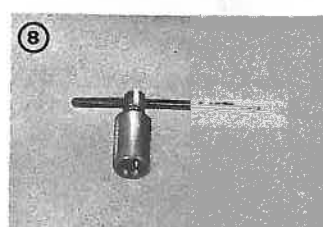
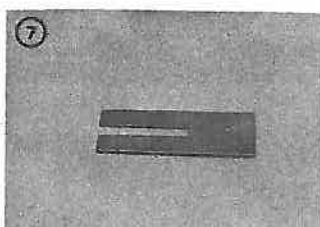
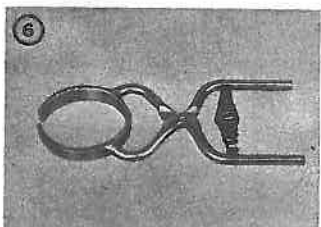
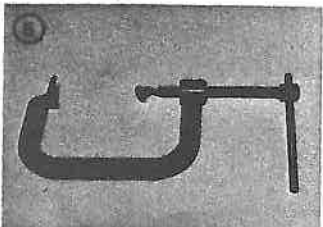
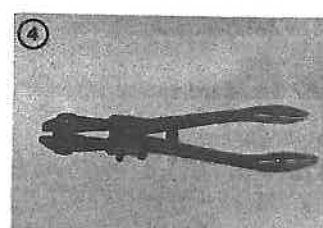
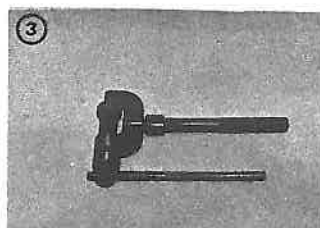
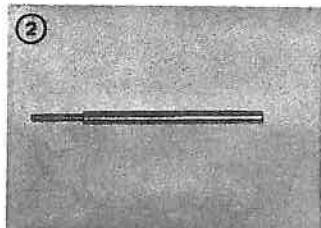
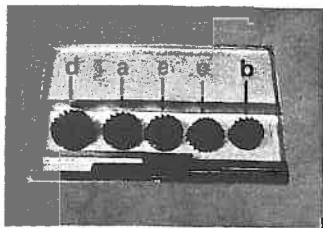


1. Plug wrench
2. Open-end wrenches
3. Socket wrenches
4. Soft-faced hammer
5. Steel hammer
6. Clip pliers (ST type)
7. Clip pliers (RT type)

8. Needle nose pliers
9. Combination pliers
10. Phillips-head screwdriver (Large)
11. Phillips-head screwdriver (Medium)
12. Slot-head screwdriver (Large)
13. Slot-head screwdriver (Medium)
14. T-type socket wrenches

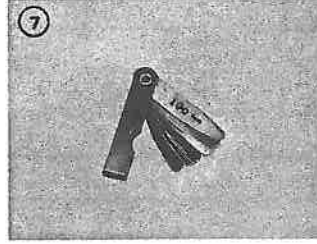
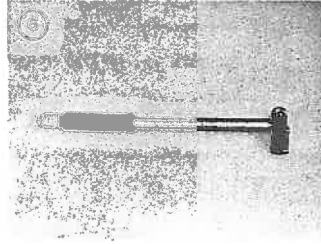
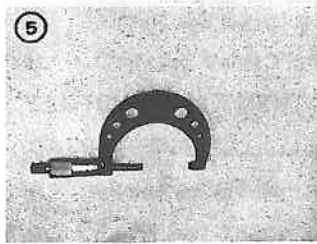
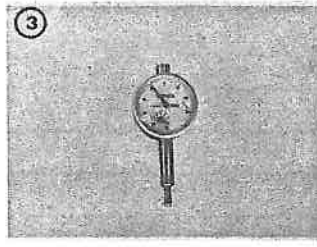
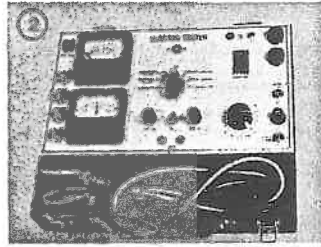
15. L-type socket wrenches
16. Torque wrench
17. Nipple wrench
18. Iron levers
19. Air gun

D. Special tools



1. Valve seat cutters
 - (a) 45 - 40 mm. dia. (intake)
 - (b) 45 - 34 mm. dia. (exhaust)
 - (c) 65 - 42 mm. dia. (intake/exhaust)
 - (d) Rounded - 50 mm. dia. (intake)
 - (e) Rounded - 44 mm. dia. (exhaust)
2. Valve guide installation/removal guide
3. Cam chain link cutter
4. Cam chain link riveter
5. Valve spring compressor
6. Piston ring compressors
7. Piston support plates
8. Rotor puller
9. Clutch holding tool
10. Drive chain link cutter
11. Rocker arm/Balancer shaft puller
12. Master cylinder seal installing tool

B. Measuring instruments



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|-------------------------|-------------------|
| 1. Pocket tester | 5. Micro Meter |
| 2. YAMAHA electrotester | 6. Cylinder gauge |
| 3. Dial gauge | 7. Feeler gauge |
| 4. Vernier Caliper | |

C. Miscellaneous tools



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|----------------------------------------------|----------------------|
| 1. YAMAHA 4-stroke oil (or Motor oil 10W/30) | 8. Overhauling stand |
| 2. Oil jug | 9. Bearing grease |
| 3. YAMAHA bond (No. 1) | 10. Rags |
| 4. Oiler | 11. Cotter pin |
| 5. YAMAHA bond (No. 4) | 12. Vinyl tube (4mm) |
| 6. Parts tray | 13. Spring balance |
| 7. Brake fluid | |