

# XS650SK

## 1983 SERVICE DATA

|                                                 |                                   |     |
|-------------------------------------------------|-----------------------------------|-----|
| MODEL - 1983 LD. NUMBER                         | XS650SK                           | 5V4 |
| Initial Engine Number / Frame Number            | 5V4-100101 / JYA5V400 / JDA100101 |     |
| Fuel Type/Total Fuel Tank Capacity/Reserve Cap. | Regular / 11.5 Lit. / 2.3 Lit.    |     |

|                                                |                                         |
|------------------------------------------------|-----------------------------------------|
| <b>ENGINE TYPE</b>                             | 4-Stroke, SOHC, Parallel Twin           |
| Bore/Stroke/Number Cylinders/Displacement      | 75mm / 74mm / 2 / 653cc                 |
| Compression Ratio/Compression Pressure Min~Max | 8.7:1 / 9.5 ~ 11.5 kg/cm <sup>2</sup>   |
| Piston Skirt Clearance New / Max               | 0.050 ~ 0.055mm / 0.10mm                |
| Ring End Gap Top / 2nd / 3rd                   | 0.2 ~ 0.4mm / 0.2 ~ 0.4mm / 0.3 ~ 0.9mm |
| Valve Clearance (Cold) Intake / Exhaust        | 0.06mm / 0.15mm                         |
| Oiling System                                  | Wet Sump                                |
| Capacity: Dry                                  | 2500cc                                  |
| Oil and Filter Change                          | 2000cc                                  |
| Oil Change Only                                | 2000cc                                  |
| Lubricant: Temp. Above 5°C (40°F)              | Yamalube 4" or SAE 20W40 SE or SF       |
| Temp. Below 15°C (60°F)                        | Yamalube 4" or SAE 20W40 SE or SF       |
| Cooling System / Capacity                      | Air / 0                                 |
| Coolant Type / Mixing Ratio                    | 0 / 0                                   |

|                                         |   |
|-----------------------------------------|---|
| <b>APPROX - Min Stroke / Color Code</b> | 0 |
| Minimum Output @ 200 Cycles             | 0 |
| Maximum Output @ 200 Cycles             | 0 |

|                                                      |                                         |
|------------------------------------------------------|-----------------------------------------|
| <b>CARBURETOR - Manufacturer / Type / LD. Number</b> | Mikuni / BS34 / 5V4-00                  |
| Main Jet / Pilot Jet                                 | 132.5 / 42.5                            |
| Needle Jet / Jet Needle-Clip Position                | Y-0 / SHX12 Fixed                       |
| Slide Cutaway                                        | 0                                       |
| Floot Level / Fuel Level                             | 22 ± 1.0mm / 1 ± 1mm                    |
| Idle rpm                                             | 1200 rpm                                |
| Max CO <sup>*</sup> / Max HC <sup>*</sup> / Set CO   | 5% / 500 ppm / 2% (All Settings @ Idle) |

|                                             |                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------|
| <b>SUSPENSION</b>                           |                                                                         |
| Front: Inner Tube Diameter                  | 0                                                                       |
| Oil Type / Level / Qty                      | 10 Wt. Fork Oil <sup>*</sup> / 0 / 169cc                                |
| Gas Pressure Min ~ Max / Standard           | 0                                                                       |
| Spring Length Std                           | 462mm                                                                   |
| Rear: Gas Pressure Min ~ Max / Standard     | 0                                                                       |
| Minimum Brake Lining Thickness Front / Rear | 1.0mm / 2.0mm                                                           |
| Tire Size (Nominal Pressure) Front / Rear   | 3.50S19 (1.6 kg/cm <sup>2</sup> ) / 130/90S16 (2.0 kg/cm <sup>2</sup> ) |

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| <b>TRANSMISSION - Oil Type / Oil Change / Oil Qty</b> | See ENGINE Above              |
| Secondary Drive Type / Teeth / Chain                  | Chain / 34-17 / DID530HDS104L |
| Middle Gear Case Capacity                             | 0                             |
| Final Gear Case Capacity                              | 0                             |
| Gear Case Lubricant                                   | 0                             |

|                                                 |                                  |
|-------------------------------------------------|----------------------------------|
| <b>AC Generator / 3-Phase / Full Wave</b>       | YB14L-A2 (12V14AH) / 1.28 / 1.4A |
| Battery: Model / Specific Gravity / Charge Rate | 14V16A @ 5000 rpm                |
| Maximum Output                                  | Grn ~ Brn / 5.30 ± 10%           |
| Field Coil Color Code / 0                       | Whl ~ Whl / 0.460 ± 17%          |
| Stator Coil Color Code / 0                      | 0                                |
| Charge Coil Color Code / 0                      | 0                                |

|                                                  |                                                                |
|--------------------------------------------------|----------------------------------------------------------------|
| <b>Ignition Timing</b>                           | Transistor Controlled, 15° @ 1200 rpm Full Adv: 41° @ 3200 rpm |
| Spark Plug Type                                  | NGK BP7ES                                                      |
| Spark Plug Gap / Torque / Cap 0                  | 0.7 ~ 0.8mm / 2.0 m·kg / 5K0                                   |
| Point Gap / Condenser Capacitance                | 0                                                              |
| Ignition Coil Test Gap / Primary 0 / Secondary 0 | 6mm / 2.50 ± 10% / 11K0 ± 20%                                  |
| Pulser Coil or Pickup Coil Color Code / 0        | Org ~ Blk, Gry ~ Blk / 7000 ± 20%                              |
| Source Coil Color Code / 0                       | 0                                                              |

|                                              |                               |
|----------------------------------------------|-------------------------------|
| <b>Headlight / Taillight / Signal Rating</b> | 12V50-40W / 12V27-5W / 12V27W |
| Lighting Coil Color Code / 0                 | 0                             |

|                                     |                                          |
|-------------------------------------|------------------------------------------|
| <b>Front Axle Nut</b>               | M14: 10.8 m·kg                           |
| <b>Front Axle Holder Nut</b>        | M8: 1.4 m·kg                             |
| <b>Rear Axle Nut</b>                | M16: 15.0 m·kg                           |
| <b>Rear Axle Pinch Bolt</b>         | 0                                        |
| <b>Clutch Nut</b>                   | M18: 8.0 m·kg                            |
| <b>Drain Plug</b>                   | M30: 4.2 m·kg                            |
| <b>Flywheel Nut</b>                 | 0                                        |
| <b>Cylinder Head Cover</b>          | M8: 2.1 m·kg                             |
| <b>Cylinder Head:</b>               | M10: 3.7 m·kg                            |
|                                     | M6: 0.9 m·kg                             |
| <b>Engine Mounting Bolts: Front</b> | M10: 4.6 m·kg                            |
|                                     | Engine, Lower M10: 9.0 m·kg              |
|                                     | Rear M10: 4.1 m·kg                       |
|                                     | Rear, Lower M10: 4.6 m·kg                |
|                                     | Engine, Upper M8: 1.8 m·kg M10: 3.0 m·kg |

0 = Does Not Apply To This Model  
NA = Information Not Available

\*Available From Yamaha Parts Distributors In  
\*For Diagnostic Use Only

### SERVICE LITERATURE

| PUBLICATION          | PART NUMBER     | REMARKS                                                    |
|----------------------|-----------------|------------------------------------------------------------|
| Owner's Manual       | LIT-11626-03-94 |                                                            |
| Service Manual       | LIT-11616-02-90 |                                                            |
| Assembly Manual      | LIT-11666-03-94 | Same as XS650SJ                                            |
| Consumer Information | LIT-11656-03-94 | Supp. to XS / XJ / XV / XZ / RD Basic Assem Manual (03-85) |