# Workmate 2100 2100S

# Bobcat®

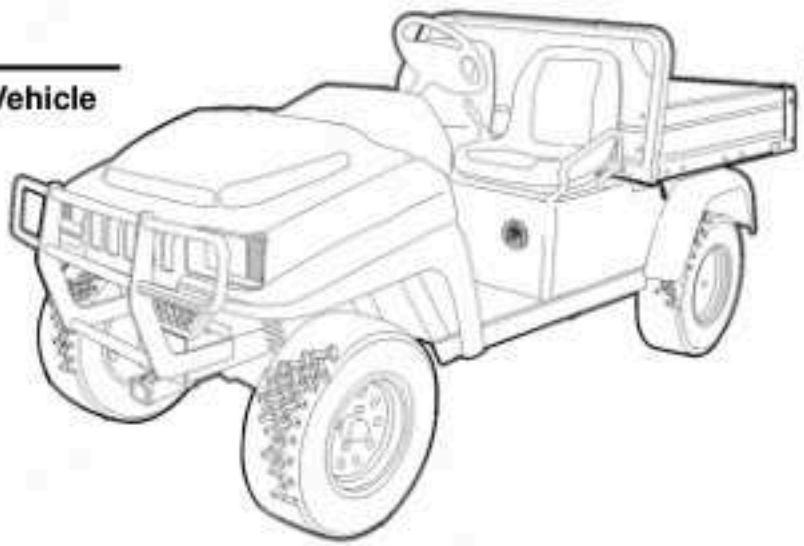
# Maintenance

# &

# Service

**S/N 522711758 & Above**
**S/N 524411001 & Above**

**Utility Vehicle**



An Ingersoll-Rand business

6902936 (2-04)

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# SECTION 2 – VEHICLE SPECIFICATIONS

| SPECIFICATIONS | BOBCAT 2100 | BOBCAT 2100 S |
|---|---|---|
| **POWER SOURCE** | | |
| **Engine:** 4-cycle OHV, 400 cc, 13 hp rated, single-cylinder, air-cooled, with pressure lubrication system | • | • |
| **Fuel system:** Side-draft carburetor with float bowl, fixed jets, fuel filters, and impulse fuel pump | • | • |
| **Governor:** Automatic ground-speed sensing, internally-geared in unitized transaxle | • | • |
| **Ignition:** Transistor electronic ignition with electronic RPM limiter | • | • |
| **Unitized transaxle, MC012C-AS00:** Fully synchronized forward and reverse with neutral (14.9:1 forward, 20.5:1 reverse) and differential lock feature | • | • |
| **Electrical system:** 12 volt, 500 cca at 0 °F (-17.8 °C), 650 at 32 °F (0 °C), 105-minute reserve capacity and 35-amp charging capacity | • | • |
| **Torque converter:** Automatic, variable-speed, dry type | • | • |
| **STEERING/SUSPENSION/BRAKES** | | |
| **Steering:** Self-adjusting rack and pinion, Ackerman | • | • |
| **Suspension:**<br>**Front:** Independent A-arms with coil-over shocks<br>**Rear:** Semi-independent suspension with multi-leaf springs and dual hydraulic shocks | • | • |
| **Brakes:** Hydraulic brake system – self-adjusting drum brakes on each wheel with separate hand-operated park brake | • | • |
| **BODY/CHASSIS** | | |
| **Frame/Chassis:** Twin I-Beam welded aluminum | • | • |
| **Side and rear body:** All aluminum with a powder-coated steel cargo bed | • | |
| **Side and rear body:** All aluminum with an aluminum cargo bed | | • |
| **Front body:** ABS/DR acrylic cap | • | • |
| **Tires:** 23 x 10.50 - 12 tubeless, 4-ply rated load range, front and rear | • | • |
| **DIMENSIONS/WEIGHT** | | |
| **Overall length** (with box bed) | 123.4 in. (313.4 cm) | 144.4 in. (366.8 cm) |
| **Overall width** | 54 in. (137 cm) | |
| **Overall height** (at steering wheel) | 51 in. (130 cm) | |
| **Overall height** (at light bar) | 75.3 in. (191 cm) | |
| **Wheelbase** | 80 in. (203 cm) | 101 in. (256 cm) |
| **Ground clearance:**<br>under differential<br>under foot platform | 6.6 in (17 cm)<br>11.4 in (29 cm) | |
| **Front wheel tread** | 43 in. (109 cm) | |
| **Rear wheel tread, MC012C-AS00 transaxle** | 44.5 in. (113 cm) | |
| **Weight** (dry):<br>with all-terrain tread<br>with turf tread | 1106 lb. (501.7 kg)<br>1066 lb. (477.2 kg) | 1200 lb. (544.2 kg)<br>1160 lb. (526.0 kg) |
| **Forward speed** | 17-19 mph (27-31 km/h) | |
| **Governed RPM** | 3850 (±30) RPM | |
| **Curb clearance circle** (diameter) | 24 ft. 1 in. (734 cm) | 31 ft. 8 in. (965 cm) |
| **Turning radius** (per SAE J 695) | 139.6 in. (355 cm) | 15 ft. 6 in. (472.4 cm) |
| **Intersecting aisle clearance** | 112.2 in. (285 cm) | 120 in. (304 cm) |

**Specifications continued on next page...**



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## TROUBLESHOOTING GUIDE

| SYMPTOM | POSSIBLE CAUSES | REFER TO |
|---|---|---|
| **Starter/Generator does not charge battery, continued.** | Starter/generator belt is loose or slipping | **See Starter/Generator, Section 12, Page 12-1.** |
| | Voltage regulator failed | Section 11 – Troubleshooting and Electrical System: FE400 Engine Test Procedure 12 |
| | Battery failed | Section 11 – Troubleshooting and Electrical System: FE400 Engine Test Procedure 1 |
| **Transmission does not engage or disengage smoothly.** | Transmission shifter linkage is binding or is out of adjustment | **See Forward/Reverse Shifter Cable Adjustment, Section 16, Page 16-25.** |
| | Idle RPM setting is set too high | Section 14 – Fuel System |
| | Insufficient (low) level of lubricant or wrong type of lubricant in transmission | **See Unitized Transaxle Service, Section 16, Page 16-3.** |
| | Internal gears are damaged or worn | See Engines and Transaxles Manual |
| | Synchronizer rings are worn, damaged or jammed | See Engines and Transaxles Manual |
| **Excessive vehicle vibration.** | Engine mounting nuts or bolts are loose | Section 13 – FE400 Engine |
| | Snubber on frame is worn or damaged | Section 13 – FE400 Engine |
| | Misaligned muffler mounting clamp | Section 15 – Exhaust System |
| | Damaged drive belt or starter belt | Section 17 – Torque Converter |
| | Damaged drive clutch | Section 17 – Torque Converter |
| | Damaged driven clutch | Section 17 – Torque Converter |
| | Damaged starter/generator pulley | **See Starter/Generator Removal, Section 12, Page 12-1.** |
| | RPM setting is incorrect | **See Engine RPM Adjustment, Section 14, Page 14-10.** |
| **Torque converter does not shift smoothly.** | Drive belt is worn, cracked, glazed, or frayed | **See Drive Belt, Section 17, Page 17-3.** |
| | Drive clutch malfunction | **See Drive Clutch Cleaning and Inspection, Section 17, Page 17-5.** |
| | Driven clutch malfunction | **See Drive Clutch Cleaning and Inspection, Section 17, Page 17-5.** |
| | Governor is sticking | See Engines and Transaxles Manual |
| **Engine won't stop running.** | Kill circuit wire is disconnected from the ignition coil | Section 11 – Troubleshooting and Electrical System: FE400 Engine Test Procedure 13 |
| | Key switch failure | Section 11 – Troubleshooting and Electrical System: FE400 Engine Test Procedures 4 and 17 |
| | Carburetor is too lean; check main and pilot jet sizes | Section 14 – Fuel System |
| | Carburetor throttle stop screw out of adjustment | Section 14 – Fuel System |



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## ⚠ WARNING

- **If wires are removed or replaced, make sure wiring and/or wiring harness is properly routed and secured to vehicle frame. Failure to properly route and secure wiring could result in vehicle malfunction, property damage or personal injury.**

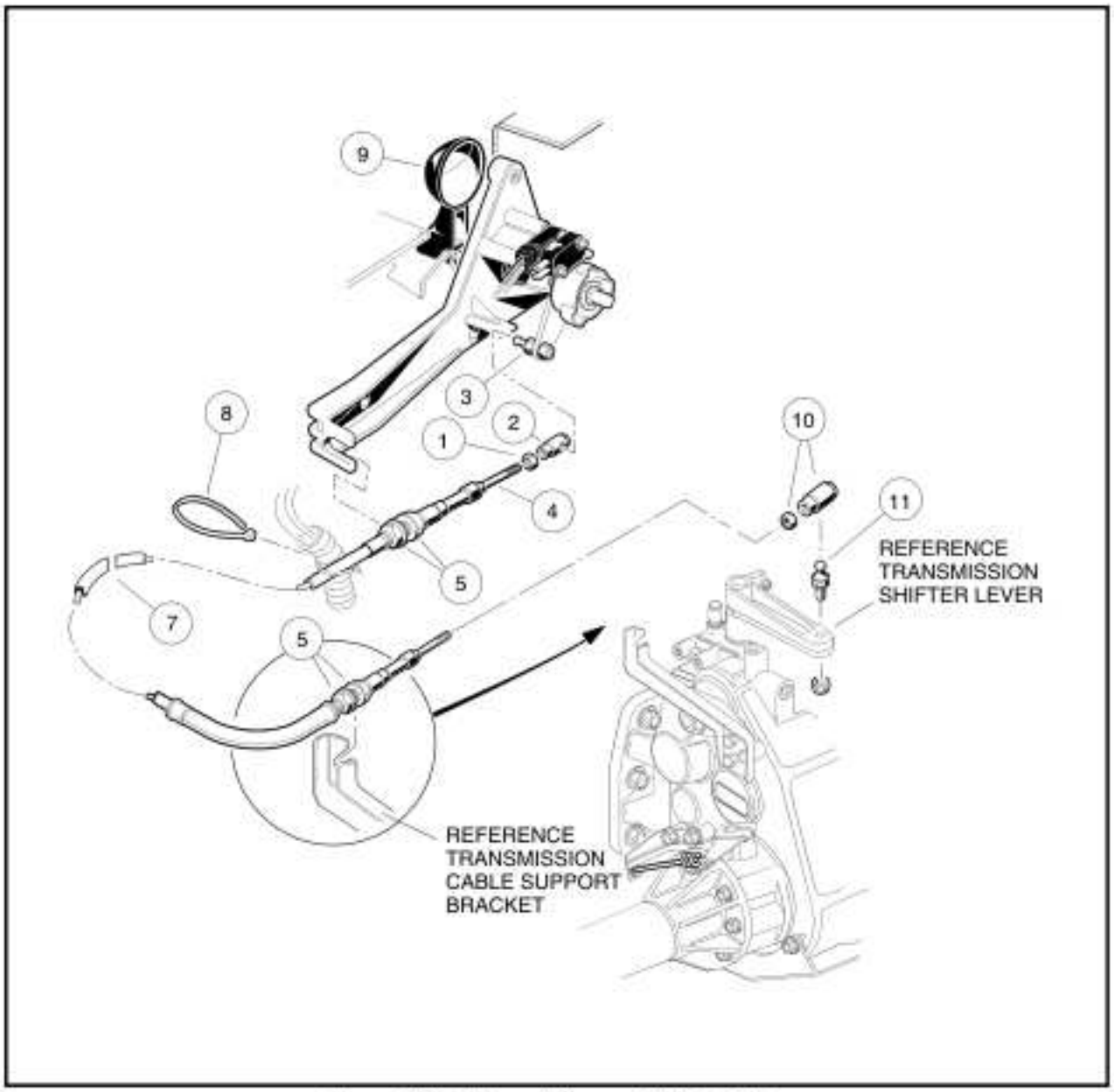



**Figure 16-62 Forward/Reverse Shifter Cable**

## FORWARD/REVERSE SHIFTER CABLE ADJUSTMENT

Place the shift lever in the NEUTRAL position (straight up) **(Figure 16-62, Page 16-25)**. For minor adjustments, the nut (1) may be loosened and the ball joint socket (2) rotated to get the proper adjustment **(Figure 16-62, Page 16-25). See following CAUTION.**



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