

Top Speed — Is It Normal?

Grove MZ66B — Top Speed: Is “Extremely Slow” Normal?

Short answer: **the factory top speed for this exact model is only 3.0 mph (4.8 kph) even under best-case conditions**, and there are several built-in safety interlocks that cut that down further and are very easy to trigger accidentally. So “extremely slow” is very likely **normal**, not a fault — but there are a couple of specific, checkable failure modes that would make it slower than even that low bar.

Two factory documents give different numbers for this, and it matters which one you trust:

- The **Grove MZ48B/MZ66B factory [sales brochure](#)** (Form No. SBMZ48B/MZ66B) — its spec table is headed literally “MZ48B” / “**MZ66B**” and states **Maximum Drive Speed: 3.0 mph (4.8 kph), Gradeability (Theoretical): 25%**.
- The **Grove [Operators Safety and Maintenance Handbook](#)**, which covers the “T60/T60XT/MZ66/MZ66XT” family, states **6.4 kph (4 mph)** and **30% gradeability** for “T60 (MZ66).”

Since a data plate reading **MZ66B** matches the brochure — the only document titled for that exact suffix — **3.0 mph / 25% is treated as authoritative** here. The handbook’s higher figures most likely describe the plain “T60/MZ66” (no B) variant, a related but not identical machine. Two pieces of evidence support this rather than it being a simple print-run discrepancy:

- Forum discussion (see [Research](#) §2.5) notes the B-suffix machines differ from the base model in counterweight and tire size, which would plausibly affect both speed and gradeability.

- **The handbook’s own lubrication chart only ever mentions a Ford or Deutz engine option** (“Ford Engine 4.7 L,” “Deutz Engine 7.76 L,” with their own separate oil-change intervals) — it **never mentions the Nissan A15** anywhere, while this machine’s engine is confirmed Nissan A15. That means the handbook likely documents a genuinely different engine package, not just a different trim level of the same driveline.

Both documents are genuine Grove factory material — see [Manuals](#) for provenance on both.

1. The official number

Spec	Value	Source
Maximum drive speed (boom fully stowed, HIGH range selected)	4.8 kph (3.0 mph)	MZ48B/MZ66B sales brochure (model-exact)
Gradeability (theoretical)	25%	MZ48B/MZ66B sales brochure (model-exact)
<i>(for comparison, T60/MZ66 handbook states)</i>	<i>6.4 kph (4 mph), 30% grade</i>	Operators handbook (family-wide, not B-specific)
Emergency tow speed limit	4.8 kph (3 mph), “extremely short distances” only	Operators handbook

3 mph is a slow walking pace — slower than most people’s stroll. **This is the top speed of the machine when everything is working correctly and configured for maximum speed** — it is not a symptom of anything wrong. Large telescoping-boom aerial platforms like this are hydrostatically driven through the same hydraulic system that runs the boom, not through a road-going transmission, and they’re intentionally geared for control and stability rather than speed.

2. Why it can be even slower than that — three built-in interlocks

The handbook documents several conditions that automatically restrict the machine to an even slower “LOW” drive mode. **All of the following override the drive speed regardless of what any switch is set to:**

1. **Boom not fully retracted.** “The boom retracted limit switch is installed at the rear of the boom base section... When the boom is extended, the boom retracted limit switch closes and only low drive is attainable.”
2. **Boom not fully lowered / platform not stowed.** “The boom lowered limit switch is installed on the rear of the turntable beneath the boom base section... When the boom is raised 30.4 cm (12 inches) from the bottom rest, the boom lowered limit switch opens and only low will be attainable,” and separately: “When the boom is extended or the platform is elevated above +2°, the high speed drive is cutout and only the low speed mode is attainable.”
3. **FUNCTION SPEED switch not set to HIGH.** This is a driver-operated 3-position toggle:
 - **LOW** — drive motors low speed, function speed low range
 - **HIGH** — drive motors high speed, function speed high range (this is the only position that unlocks the 3 mph figure)
 - **TORQUE** (center) — drive motors *low* speed, but function speed high range (a torque-biased mode, not a speed mode — easy to mistake for “high” since it’s not “low”)

So: **before treating this as a fault, confirm the boom is fully retracted and fully lowered, and that the FUNCTION SPEED switch is in HIGH (not the center TORQUE position).** If all three are true and it still crawls, that’s worth chasing — see §3.

3. If it's still too slow even with the boom stowed and switch on HIGH

In rough order of likelihood, given what's already known about this specific machine (see [Research](#)):

1. **Boom-position limit switches themselves are damaged or misadjusted.** Rodent damage to limit switch wiring elsewhere on this machine has already been found (My Story). If either the boom-retracted or boom-lowered limit switch has damaged wiring, a stuck contact, or is simply out of adjustment, the controller can permanently “believe” the boom is extended or raised even when it's fully stowed — locking the machine into low-speed creep no matter what the FUNCTION SPEED switch is set to. **This is the single most likely explanation for chronically slow drive on a machine with known rodent wiring damage**, and it's cheap to check: visually confirm both switches close/open properly as the boom reaches its stowed position.
2. **Engine not reaching operating RPM.** Drive speed on a hydrostatic machine like this scales with engine RPM (pump output). A machine that can't reach or hold correct RPM in general (vacuum leak, carb issue, ignition issue) will be sluggish across the board once it is running.
3. **Hydraulic system wear or low fluid.** Forum research turned up other MZ66B owners reporting “engine lugging” and sluggish drive/boom-lower traced to low or contaminated hydraulic fluid, or a worn pump/control valve. Check fluid level and condition first — it's the cheapest thing to rule out.
4. **Torque hub tow-disconnect not fully re-engaged.** The handbook's towing procedure requires setting a disconnect cap on each torque hub to a “stowing” position (dimples in) before normal driving; if this machine was ever towed and the caps weren't reset, that could produce abnormal drive behavior.
5. **Dragging park brake.** A standard check on any hydrostatic drive machine that “moves but slowly” — rule out mechanically before assuming an electrical/hydraulic cause.

Bottom line

Don't chase a “fix” for the 3 mph top speed itself — that's the real spec for this exact model, confirmed from the model-specific factory brochure. Do check, in order: (1) boom fully stowed + switch on HIGH, (2) the two boom-position limit switches for

damage given the known rodent issue, (3) hydraulic fluid level/condition, before assuming anything is broken.

🔊 System

Powered by Hextra ○ (<https://github.com/imfing/hextra>)