



### MTL U/C Facts

- Belts account for 35 – 40% of operating cost
- Cat life: 1500 hours Others: 800 hours
- Superior construction
- Less susceptible to cuts and tears
- Differentiated product

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### Operation + Maintenance =70 percent of O&O

Application Operation Maintenance Underfoot

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### Why Tracks vs. Wheels?

TRACKED MACHINE	WHEELED MACHINE
<ul style="list-style-type: none"> <li>• More contact points</li> <li>• Wider ground contact area</li> <li>• Lower ground pressure</li> </ul>	<ul style="list-style-type: none"> <li>• 4 contact points</li> <li>• Weight concentrated</li> <li>• Higher ground pressure</li> </ul>

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### MTL Considerations

- Can I charge more per hour or per job? **YES.**
- How much money do I lose due to muddy conditions? **A MTL can work in any wet underfoot conditions.**
- Will this save me a lot of rework from the lessened ground damage and/or from filling my tire prints? **YES.**
- How much will increased traction/stability increase production? **30-60%**
- Will this save me from hauling/buying other equipment? **YES. Work tool wisely.**
- Will I be able to take on more jobs and expand business? **YES.**

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### Suspended Rubber Track: Cross-Section

- Embedded high-tensile cords
- Rubber lugs
- Track is flexible and comparatively light
- Performs best in high-speed operation

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### Rigid Steel Track: Cross-Section

- Band of steel cords on inside of track
- Steel lugs surrounded by rubber
- Track is heavy and inflexible
- Best at low speeds

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### Track Review: Steel vs. No Steel

Rubber coated steel	CAT all rubber belted undercarriage
<ul style="list-style-type: none"> <li>• Salt, ammonium sulfate, potassium sulfate, and lime can corrode tracks</li> <li>• Cannot use above 131 degrees or below -14 degrees</li> <li>• Rock operation not recommended</li> </ul>	<ul style="list-style-type: none"> <li>• Chemicals have no effect on performance</li> <li>• No temperature restrictions</li> <li>• Rock operation not recommended</li> </ul>

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### Five Machines—Three Types of Undercarriage

247B/257B 267/277B 287B

MTL Rubber Belt Undercarriage Caterpillar. The difference counts.

### The Value of Suspension


What does suspension mean for you?

- Better load retention
- Smoother ride
- More stability
- Protects machine from shock loads
- Ability to work at faster speeds
  - ... more work gets done in less time
  - ... the operator is more productive
  - ... more jobs can be completed

**= More profit for you**

MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Cat MTL Undercarriage Review




	247B/257B	267B/277B	287B
Track on Ground	4.9 ft. (1.5 m)	6.7 ft. (2.04 m)	6.9 ft. (1.84 m)
Ground Pressure	3.8 psi (25.5 kPa)	3.1 psi (21.4 kPa)	3.8 psi (26.2 kPa)
Track Width	15" (381 mm)	18" (457 mm)	18" (457 mm)
Contact Points	24	48	42


MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Component Comparison: Sprocket

Others



CAT



- Engages steel bars between lugs
- 2-3 teeth engage track at any time
- Sprocket and track wear at same rate

- Lugs engaged by sleeves on sprocket
- 4-5 sleeves engage track at any time
- Sleeves can be replaced without replacing sprocket

MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Daily Inspection

**Make daily machine walk around inspections looking for:**

- Track or wheel damage
- Excessive wear to track, wheels or sprocket components
- Sprocket sleeves – free-turning
- Loose hardware

End of shift is preferred time to inspect and perform daily maintenance

MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Daily Inspection: Checklist


1. Remove dirt and debris
2. Inspect track for damage
3. Check for proper track tension
4. Inspect sprocket rings and sleeves
5. Inspect rollers and idlers
6. Inspect bearings and axles
7. Check for loose hardware

MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Undercarriage Cleanout

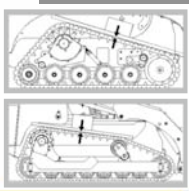
**Remove dirt and debris**

- Dirt, rocks and debris within the undercarriage causes track and component wear
- Clean undercarriage as needed
- In certain conditions, cleaning should be more frequent
- End of day cleaning is easier than the morning after



MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Proper Track Tension: Test



**For 247, 257 and 287:**  
Place 100 lbs (45 kg) on belt between drive sprocket and idlers

**• Proper track sag is 1/2" to 1"**

**For 267 and 277:**  
Place 100 lbs (45 kg) on belt between the drive sprocket and track tensioner

MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**


### Inspect Sprocket Rings and Sleeves

- Roller sleeves wear, need periodic replacement when less than .12 inch (3 mm) thickness
- Sprocket rings also wear, replace when thickness is below .19 inch (4.75 mm)
- If replacing outer sleeves, rotate inner sleeves 180 degrees




MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

### Roller/Idler Wear



Would you replace?  
**NO**

Acceptable: Minor damage (nicks, cuts, small missing pieces)




Would you replace?  
**YES**

Unacceptable: Wear that impacts machine performance


MTL Rubber Belt Undercarriage **Caterpillar. The difference counts.**

**Inspect Bearings and Axles**



247/257

- Lubricate periodically
- Apply to grease fittings for rear and front axle bearings

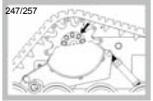


257

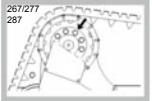
MTL Rubber Ball Undercarriage **Caterpillar. The difference counts.**

**Check for Loose Hardware**

- Sprocket nuts
- Bogie/Idler hardware



247/257



267/277  
287

MTL Rubber Ball Undercarriage **Caterpillar. The difference counts.**