

PTO CHEAT SHEET

PTO Horsepower, Sized Right

Use PTO HP (not engine HP). Add 15% margin for tall, wet, or matted material.

ENGINE HP vs PTO HP

PTO HP = engine HP minus drivetrain loss. Typical compact tractor: PTO HP is 80% to 87% of engine HP. Spec sheets always list both. Implement requirements are quoted in PTO HP. Match implement to PTO HP, never engine HP.

540, 540E, and 1000 rpm

Mode	When it is used	Common implements
540	Standard speed.	Rotary cutters, tillers, augers, post-hole diggers, generators.
540E	Economy 540.	Light loads: finish mowers, sprayers, hay rakes. Saves fuel.
1000	High-speed PTO.	Large balers, forage harvesters. Uncommon under 60 HP.

Minimum PTO HP by implement

Implement	PTO HP needed
Rotary cutter 4 ft	15 - 20
Rotary cutter 5 ft	20 - 25
Rotary cutter 6 ft	25 - 35
Rotary cutter 7 ft	35 - 45
Finish mower 60"	18 - 25
Finish mower 72"	22 - 30
Flail mower 60"	20 - 28
Tiller 48"	18 - 25
Tiller 60"	25 - 35
Tiller 72"	35 - 45
Post-hole digger 9"	15 - 25
Post-hole digger 12"	20 - 30
Snow blower 60"	20 - 30
Snow blower 72"	28 - 40
Wood chipper 4" capacity	18 - 25
Wood chipper 6" capacity	25 - 35
Generator 10 kW PTO	20
Generator 25 kW PTO	50