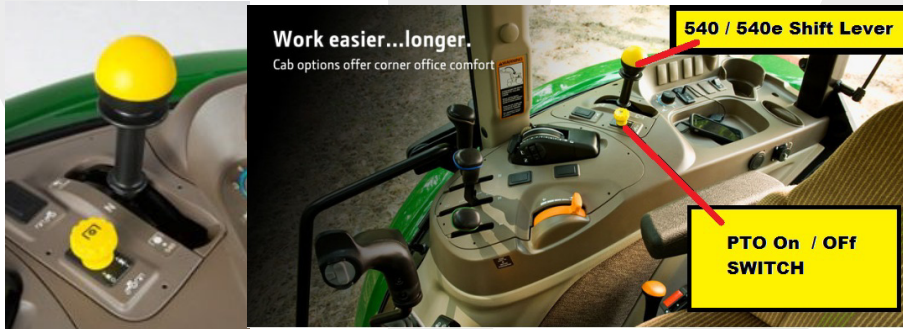


FAWCETT

TRACTOR SUPPLY LTD.



HOW TO: KNOW IF YOU HAVE SHIFTABLE OR ECONOMY PTO

What is economy PTO?

Economy PTO is a feature that allows the operator to run the PTO at 540 rpm, but at a lower engine rpm than the standard PTO rated speed. Depending on the transmission, the 540 economy PTO setting could be as low as 1600 rpm. Economy PTO allows the tractor to operate at the required 540 rpm at the PTO but with lower engine rpm, which saves fuel, reduces vibration, and reduces noise.

Some manufacturers have advertised economy PTO settings that simply reduce the engine rpm only and do not actually change the speed of the PTO shaft. This not only reduces the engine rpm but also reduces the PTO rpm, causing implements to run at slower speeds. Operating a 540 implement at lower than 540 rpm at the PTO reduces its effectiveness.

How does it work?

On John Deere Tractors, the shiftable 540/540E mode operates somewhat like shifting gears on the transmission. By engaging 540E mode, the operator changes the gear reduction ratio keeping the PTO spinning at 540 rpm but lessening the engine rpm. When the operator shifts the PTO into the standard 540 mode, a different gear reduction ratio is used to operate the PTO at 540 rpm at the standard PTO rated speed of the engine.

To operate in economy mode, the shiftable 540/540E must be in 540E mode. Then the throttle can be increased to the appropriate rpm. When in 540E, the tractor has a throttle limiter that keeps the operator from increasing engine rpm over the 540E setting. The limiter is used to prevent accidental over-speeding of PTO implements and protection against binding the PTO shaft.

When to use 540 economy mode?

540 economy is ideal for many applications including mowing, baling, or tilling. The 540 economy setting cannot be used with full advertised PTO horsepower (hp). If full PTO hp is required, the tractor should be run in standard 540 mode.

Nebraska Tractor Test has information regarding 540 economy PTO fuel consumption values for tractors where this option is available.

Details on the engine rpm for standard 540 and 540 economy mode can be found in the tractor's operator's manual.