



ASK ALBERT!

Albert Roberts, Pine Stump Farms, Omak

Clutch Information on Your Tractors

Dear Albert,

We are in the process of looking at purchasing a tractor and found a '71 Ford 3000, 40 HP, diesel, 3 point PTO, 1900 hours. It sounds and looks good but the clutch seemed high to release. They're asking \$6,700.

We're wondering if this is a good deal and if it will work for our operation. We are row cropping (squash, beans, beets, lettuce) eight acres that has been in cover crop.

- About to Take the Plunge

Dear About To Plunge,

That model and year of tractor has live PTOs (power take-off), so has a dual disc clutch. The upper part is for the transmission, and the bottom is for the PTO. Releasing, engaging, or disengaging at the upper point of the pedal movement is not abnormal.

There is some adjustment, the most important being the free-play. There will be about one inch of movement before the throw-out bearing hits the clutch fingers. This is to ensure that the throw-out bearing doesn't spin constantly. There needs to be no contact between the throw-out bearing and clutch fingers in normal operation.

Sometimes a high pedal means the clutch is wearing out. A good test for this is to secure the tractor to an immovable object, then

put the tractor in low range and 4th gear. Release the clutch normally (without jerking but not so much that the clutch slips and burns). If this motion kills the motor, then the clutch is fine. If the tractor sits and spins when letting out the clutch, then you have a clutch problem.

Dual disc clutches start at \$400 and go up from there. That's just the parts. In addition, you'll have to split the tractor to get to it - lots of labor.

Considerations

What you want to consider is where do you envision your operation in 5 years? What are the levels of mechanization and efficiency you'd like to have? If you are row cropping, what are the dimensions of your beds and will the tractor be wide & tall enough to maneuver the rows without excess lost space?

You can also explore renting or leasing. If you're talking with a dealer, see if you can negotiate the terms and have the money spent apply to purchase.

Network with your neighbors and local agencies like Conservation Districts, Ag Centers, WSU Extension offices, or Cultivating Success course facilitators.

My tractors range from a 1939 to my newest tractor, which is a 1967. A good tractor holds its utility if it is maintained.

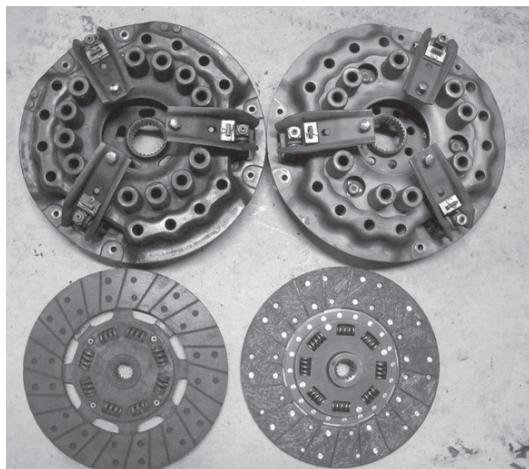
Thinning the forest and taking out the pine mistletoe,

Albert (the logger man)

Albert Roberts was raised on a fourth-generation grain and cattle operation in North Dakota. Albert has ranched in the Okanogan for twenty-eight years with his partner Carey Hunter. albert_roberts@hotmail.com

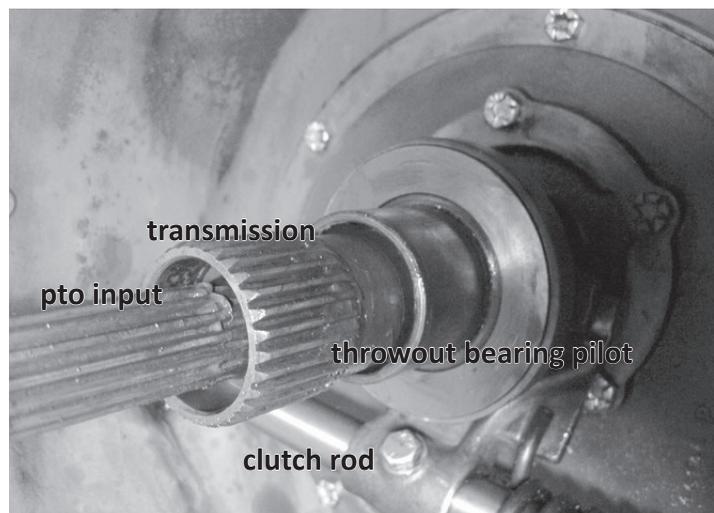
A NEW ALBERT?

Albert invites you to take a turn at answering this column! Surely there are many out there with lots of experience and expertise. Thanks for the faithful and interested readership. Email editor@tilthproducers.org to put your name in the Ask Albert Q&A hat.



Upper discs: pressure plate with transmission disc inserted.

Lower discs: PTO (power take-off) disc.



Small shaft with splines on far left is PTO input. Larger shaft with splines is transmission input shaft. Smooth shaft is throwout bearing pilot with throw-out bearing. The clutch rod is below.

Photo credits: yesterdaytractor.com