

Podium Premium Newsletter



Welcome to the Podium **Premium** Club!

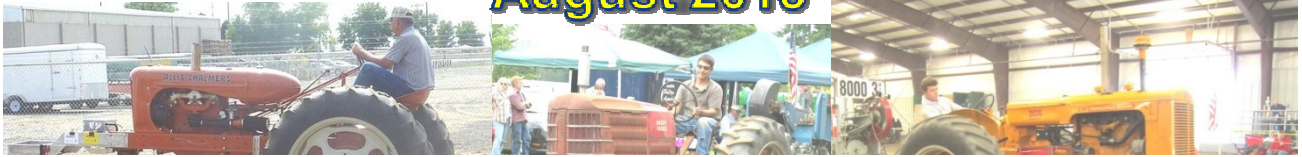
The technical information found at www.antiquetractorpullguide.com is like no other information out there. In depth explanation of the **how and why** of successful tractor pulling are designed to improve your performance at the next tractor pull, while having more fun at the same time.

Engine Run

Sometimes deals find you, even at the wrong time. In this case, I ran across a power unit engine for sale that was around 450 miles away from home and did not hesitate to buy it. Why? It was a Continental Red Seal engine that was a power unit used as a back up engine at a ski resort. The engine is similar to the B427 engine fitted into the Massey 101 Senior project tractor although this engine is....drum roll....overhead valve. It is a more rare version called a T427 that was used as a truck engine, power unit, irrigation pump unit, etc. The engine is heavier than the flathead B427 but puts out an impressive 145hp in stock form. These engines don't grow on trees, so passing one up is not an option even if it isn't a good time to buy. The even better part of the deal is that while talking on the phone, the seller mentioned he had a second engine and was wondering if I might be interested. Needless to say, I high tailed it the 450mi and it was well worth it. The second engine turned out to be another B427 flathead engine. Both are in running condition and are a good asset to build pulling tractors.



August 2015



Engine Run (cont)



The best part about power unit engines is that they are typically outfitted with updraft carburetors and manifolds. The picture above shows this arrangement on the overhead valve engine. Below shows the flathead.



August 2015



Engine Run (cont)

Below are the specifications for the T427 industrial power unit.

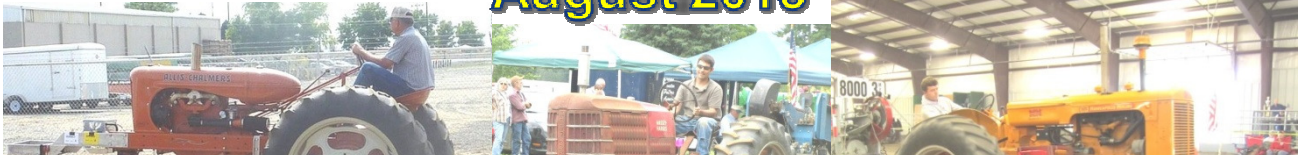
GASOLINE				INDUSTRIAL (Continued)											TORQUE		
Model	Cyl.	Bore	Str.	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	lbs. ft. —	R.P.M.	
****Z-129	4	3 1/4	3 3/8	16.0	20.4	24.3	27.7	30.8	31.3	35.0	....	....	....	....	107.0	ft	1100
G-134	4	3 1/8	4 3/8	16.0	20.5	24.5	27.9	30.2	32.4	34.2	35.0*	35.6*	....	....	106.5	ft	1100
G-157	4	3 3/8	4 3/8	18.5	23.6	28.3	32.4	35.5	38.0	40.0	41.3*	42.0*	....	....	124.0	ft	1100
****E-201	4	3 3/8	4 3/8	25.0	32.5	38.0	45.0	50.0	55.0	59.0	62.5	65.9	....	....	171.0	ft	1200
****E-208	4	3 1/16	4 3/8	26.0	33.5	40.5	46.5	52.0	56.8	61.0	64.8	67.8	....	....	177.0	ft	1200
H-227	4	3 3/8	5 1/2	29.5	37.8	44.9	49.7	53.0	54.0	55.3*	55.7*	....	....	....	198.0	ft	1000
H-243	4	3 3/8	5 1/2	31.9	40.4	47.8	53.0	56.7	57.9	59.3*	60.0*	....	....	....	213.0	ft	1000
****H-260	4	3 3/8	5 1/2	34.0	43.0	51.0	56.9	60.9	62.0	63.5*	64.0*	....	....	....	226.5	ft	1100
****H-277	4	4	5 1/2	36.2	46.0	54.0	60.3	64.5	66.1	67.8*	68.4*	....	....	....	242.0	ft	1000
K363	6	4	4 13/16	42.5	55.0	67.0	79.0	90.0	100.0	109.4	117.0	123.0	....	....	295.0	ft	1400
****J-382	4	4 1/2	6	42.8	54.0	64.7	74.2	81.0*	....	....	....	....	....	....	283.0	ft	1000
T-427	6	4 1/8	4 3/8	50.4	63.7	76.7	89.4	101.5	113.2	123.5	132.5	140.0	146.0*	151.0*	335.3	ft	1000

119.0	123.0*	126.0*	286.0
140.0	146.0*	151.0*	335.3
140.0	146.0*	151.0*	335.3



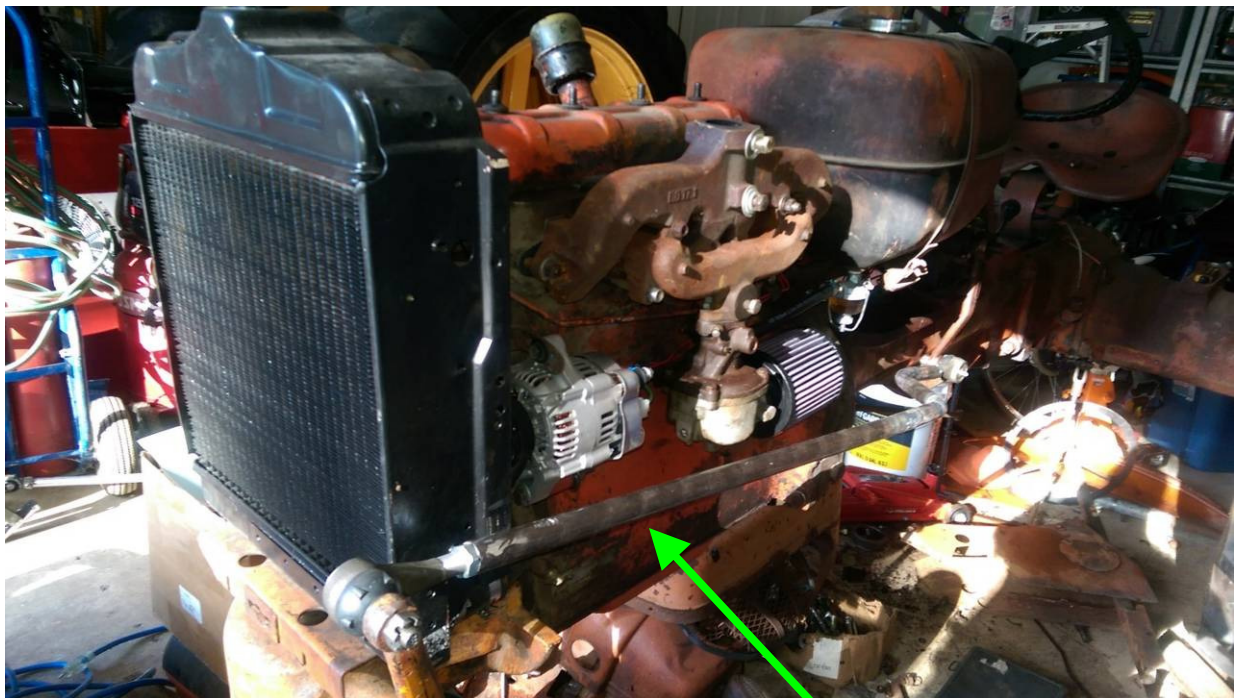
Another find for the retrieval trip from the same area, Cub Cadet 108 for the kids.

August 2015



The D12 Emerges

Last year the D12 project kicked off with a major weight reduction program. The target build for this little tractor was to replace the stock 138 engine with a 149 engine out of a D14 tractor. The finished product is worth about 45hp in a tractor that easily makes a 2500# class. This particular tractor was a bit rough in the sheet metal (most of these tractors are) but is otherwise mechanically sound. The biggest part to the little AC's is they love to pop out of gear. Many times the transmission shift collars wear so bad that 3rd gear is unusable because the tractor simply won't stay in gear. With a sound drive train, the attention turned to a motor, front end and wheel swap. The biggest issue was the steering since a narrow front was never offered on the D12 tractor. A narrow front end from a C tractor bolted easily to the engine and then a custom steering shaft was built out of a piece of pipe with brand new steering joints. After rewiring the tractor and a new set of gauges, it was ready for its debut.



New steering shaft

August 2015



The D12 Emerges (cont)

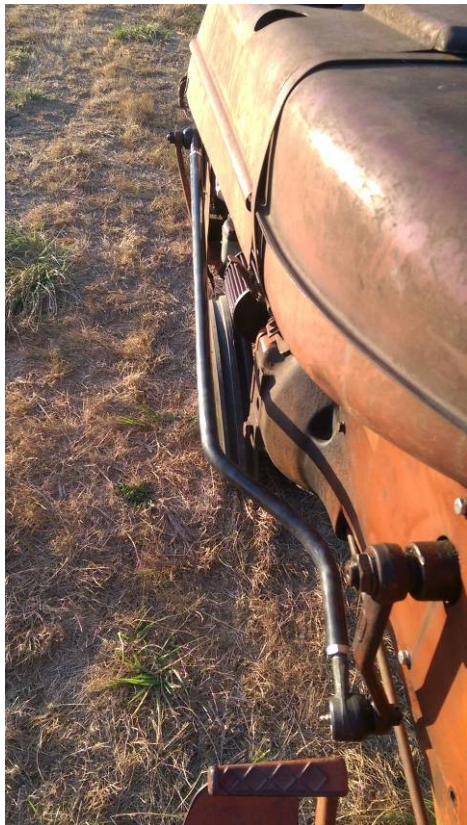
This is what the tractor looks like now vs. when it was purchased. It now weighs only an astonishing 2150# with no driver. The 12.4-28s for now will have to work until other options are considered.



Original 2800# beast



Lean and more powerful 2150#



Steering shaft
viewed from the seat



Farmall 706
Carburetor and K&N
filter



Rear view shows the hydraulic
unit yet to be removed.

August 2015



The D12 Emerges (cont)



Allis Chalmers D12

Year: 1959

Engine: Allis Chalmers

Bore & Stroke: 3.50" x 3.875"

Displacement: 149 cubic inches

Horsepower: 45hp @ 2500 rpm

Weight: 2250# without driver (projected with hitch, wt brkts, wheelie bars)

Rear tires: 12.4-28 Firestone Field & Road 151

Front tires: 4.00-12

Transmission Speeds: 4

Other

Carburetor: Farmall 706

Ignition: points

Spark plug wires: MSD Heli-core 8.5mm

Spark plugs: Autolite 303

Air Filter: K&N RU-0640

August 2015



The Massey 101 update

The biggest news is that the Massey 101 now has the room around it to do to the finish work. With the D12 moved out of the way, there was plenty of room to shim the engine in the frame. It's now off to the races in the coming weeks to finish the build before the end of the season.



With the coupling bolted together, shims were used under the bell housing mounting to find the correct alignment.



Engine mounted and bolted down.

August 2015



Tire Tread – 45 vs 23 degree

Ever wonder why the tire companies went away from 45 degree tread patterns? Below is some Firestone literature from a 1972 catalog explaining the benefits of the 23 degree Field & Road that is the most beloved tire of tractor pulling. The most interesting statement is about the testing that went in to finding the optimal angle to maximize traction.

Firestone DEEP TREAD Tractor Tire



Tough, long-wearing premium quality rear tractor tire ... **built** for high-horsepower tractors.

23° angle traction bars... deep, wide, full ground contact tread.

Will help you do more work in less time ... Save fuel costs and get extra seasons of dependable traction with less wear.

Our 23° Angle Bars



Conventional 45° Angle bar
Firestone 23° Angle bar

45°
23°

THE POWER ANGLE

Careful testing of every possible tread bar angle proves the superiority of the 23° angle design. It's the best possible angle for maximum traction and power ...

POWER BAR SPACING

To provide greater soil penetration, bigger bite and maximum traction. The tread bars are spaced at precisely the right distance. This gives complete shoulder to shoulder bar contact.

Firestone ALL TRACTION FIELD & ROAD Tractor Tire



Top-performing original equipment tractor tire.

The All Traction Field & Road tractor tire looks different because it is different. It is engineered and built for the modern tractor and today's tire requirements in the field and on the road.

give these features



Extra rubber at base of 23° angle bar
45° Angle bar
Extra bar width

POWER BAR TRACTION

Tread bars are extra thick at the base to prevent bar-bending, wiping and cupping out. Bars overlap at tread center for full width traction, long even wear and smooth ride.

RUGGED TIRE BEADS

The deflector sidewall design prevents dirt and trash from collecting at the rim (see right). Ordinary sidewalls (left) pick up trash and dirt that chafes the bead and can cause tire failure.



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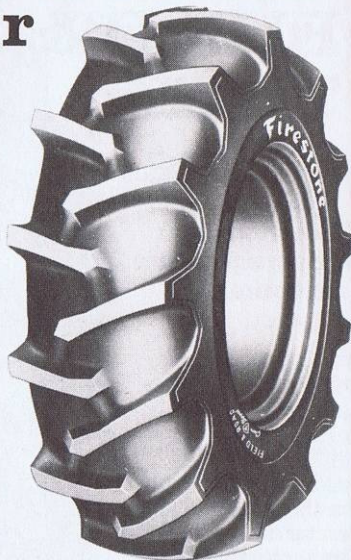
Tire Tread – 45 vs 23 degree (cont)

Note the statement in the lower left hand corner about 45 degree tires tending to hold up the shoulders. Consider this next time you look for tires!

Firestone FIELD & ROAD Tractor Tire

Economy priced
23° angle bar tire
... out-pulls all
old style 45°
bar tires in
field use.

Strong
SHOCK-
FORTIFIED
cord body
insures maximum
resistance to
impact breaks and
other tire abuses.



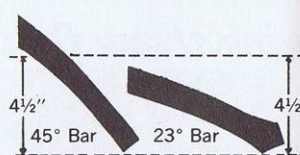
SHOULDER TO SHOULDER CONTACT



Partial Tread Contact Shoulder to Shoulder Contact

Old fashioned tractor tires with 45° bars have tendency to hold shoulders away from surface. 23° bars of Field & Road work with the tires for full shoulder to shoulder contact. More bar contact – more traction.

LESS ROLLING DISTANCE FOR FULL BAR TRACTION

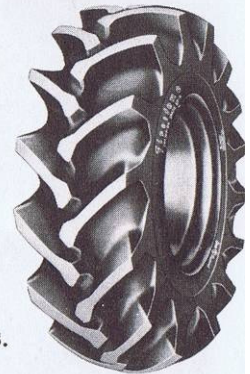


Field & Road 23° bar goes into the complete traction zone in half the distance required for 45° bars. The 23° bar design takes positive position for full traction forward. 45° bar has tendency to plow soil away from itself and spin out – lose traction.

NEW Firestone CHAMPION SPADE GRIP Tractor Tire

For the Big Pull in Rice
and Cane Farming

The Champion Spade Grip
tires bite deep, run clean for
the big pull. Tread stays
clean no matter how wet the
soil and sticky the going gets.



Firestone FARM TIRE Nylon Cord

The Economical Flotation Tire ... the
extra wide wagon or front tractor
tire for excellent flotation.

Made with Firestone
Sup-R-Tuf® rubber compounds
designed to give long tread
wear and provide greater
resistance to damaging effects
of acid. Shock-Fortified nylon
cord body gives greater
resistance to impact and
moisture damage.



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Coming up...

I want to hear from you! If you have feedback, requests or information you would like featured, please send an email to:
zack@antiquetractorpullguide.com.

- Massey 101 Thunder
- The lift kit
- Track Report
- And more...

September Newsletter available 9/30/15



John Deere 60 low seat standard in the traditional tractor pull at the Steam Up. Brooks, Oregon 8/2/15