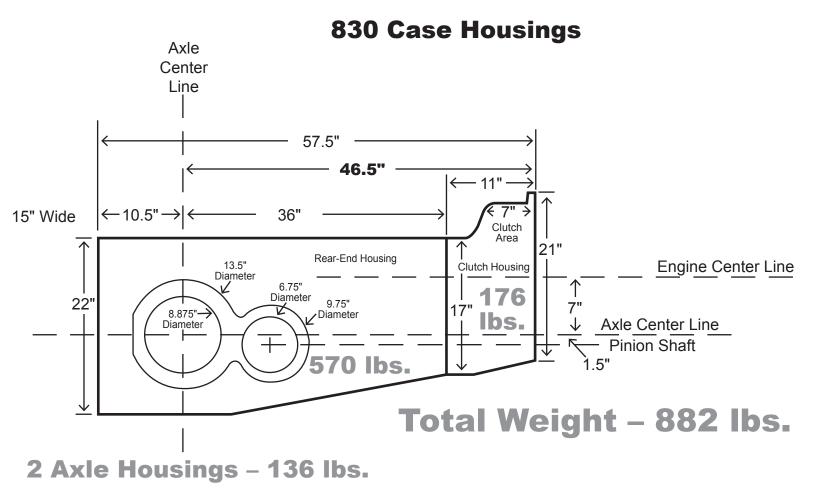


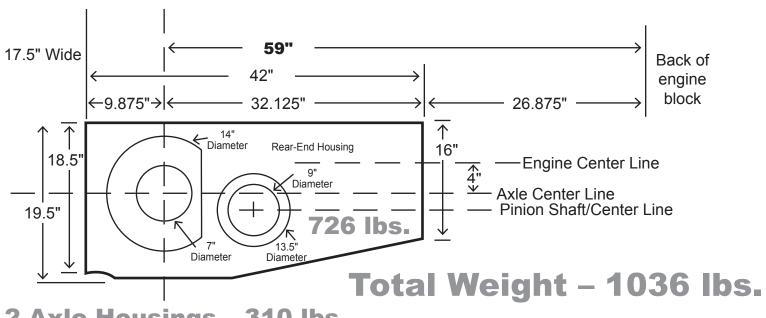
2 Axle Housings - 372 lbs.

The International has the heaviest total weight of cast housings at 1,604 lbs. thus it was the last to make weight in the 7,500 lb. cast class before components. It never made weight in the 5,500 lb. class before the component era. Last year at 6,100 lbs. on alcohol and 6,400 lbs. on diesel it can. With the engine location at 58.25 inches it has 1,188 lbs. applied to front axle. That along with roll cage location along with the easy access to remove weight from cast components it can make 3,200 lbs. on front axle. With the Engine and Center Line location the same it can also save weight over the regular transmission with either an 45 lb. aftermarket reverse box or 145 lb. transmission. It has a 340 lb. front axle advantage over a John Deere from engine and roll cage location. I recommend the weight stay at the 2017 weight of 6,000 lbs. for alcohol and 6,400 lbs. for diesel.



The Case has the lightest of all housings at 882 lbs. and also the second shortest distance of 46.5 inches from center of rear axle to back of engine block. This engine location applies 1,002 lbs. to front axle which is one of the lowest. That and the fact that there is no factory holes in either the rear end or clutch housing to remove material and really no cast to be had. Even though this is a bull gear tractor the engine and differential is not on the same line so you have to run a modified stock transmission. The rear end case is about the same weight as others, but it has the lightest of all axle housings at just 136 lbs. So there just is no lightening to be had on this tractor. With this short engine location and these other factors it more than offsets the lightest cast tractor weight. I recommend this tractor weigh 6,100 lbs. for alcohol and 6,500 lbs. for diesel for 2017.

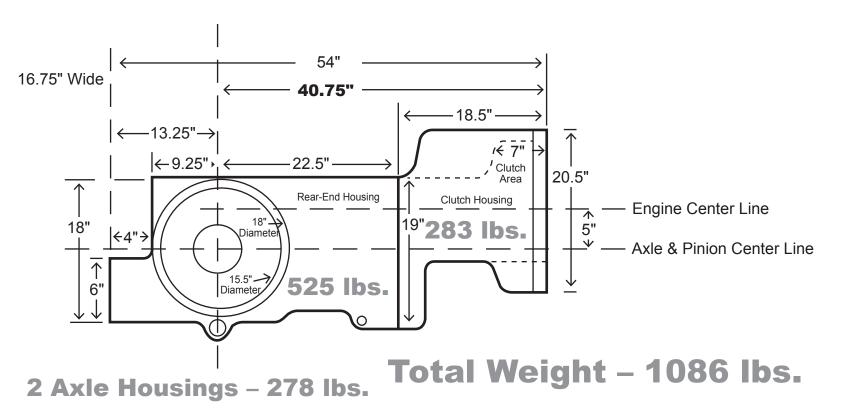
#### **1800 A Oliver Housing**



2 Axle Housings - 310 lbs.

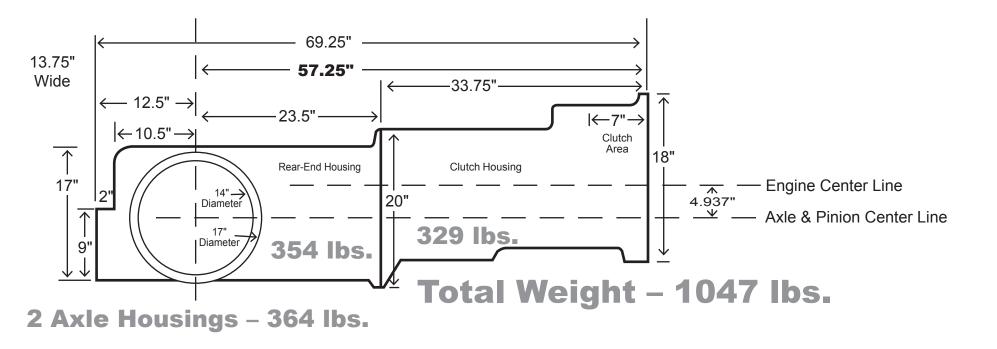
The Oliver is the only brand that has just one housing. With one housing it still has about the same weight of a John Deere, Ford and Deutz. For years it has not been required to run the cast tub frame as it is over 700 lbs. There is some weight that can be removed from both the transmission case & axle housings. Because of no clutch housings and it having the longest distance from center of rear axle to back of engine at 59 inches it has 3,200 lbs. on front axle at last year's weight of 6,100 lbs. This tractor can run either a Wakesha, Hercules, Cummins or V8 Cat engines. Not sure of the weight of these engines but at 1700 lbs. it has 1,133 lbs. from engine on front axle. I recommend it stay the same weight for 2017 as last year to stay at 3,200 lbs. on front axle at 6,100 on alcohol and 6400 lbs. as a diesel.

# **4010 John Deere Housings**



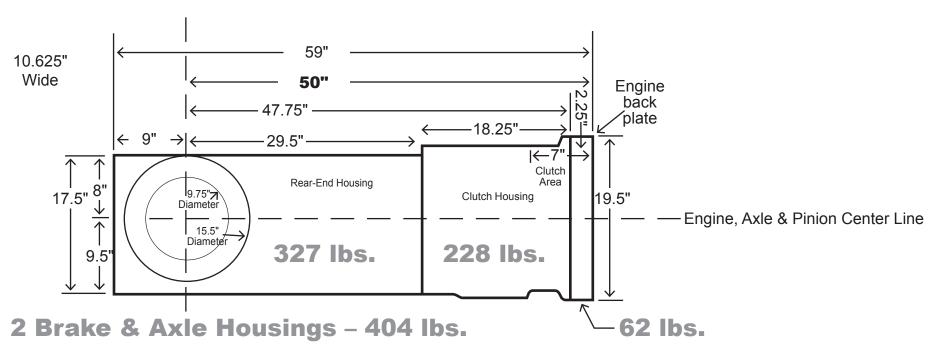
The John Deere is the one brand that has the biggest disadvantage in a cast tractor class. It has one of the overall lightest weight of OEM cast and because of this was the only large frame tractors to make the 5,500 lb. class before components. Yet in 17 years it never won a championship because of lack of front end weight. Its shortest length of 40.25 inches from center of rear axle to back of engine makes it have the least engine weigh applied to front axle of 911 lbs. This is 285 lbs. less than that of an International. Add another 55 lbs. for roll cage location and it is a 340 lb. disadvantage. The rear end housing only has a 5 inch filter hole and 3 x 4 inch triangle area to lose weight compared to 7 places from 6 to 16 inches on an International. With the Engine center line and Pinion Center line being different you cannot run a lighter 45 lb. reverser or aftermarket transmission. I weighed some diesel tractors that ran last year at 6,400 lbs. and the heaviest one was 2,900 lbs. We have lost 3 John Deere tractors from this class in the last 2 years and are about to lose 2 more if they do not get some front axle weight. I recommend for 2017 the weight of 6,250 lbs. for alcohol and 6,650 lbs. for diesel.

# **5000 Ford Housings**



The Ford is the third longest from rear axle to back of engine at 57.25 inches which is just 1.75 less than the longest of the Oliver/White and 1 inch less than International. Yet it is one of the lightest at 1047 lbs. It also can lose a substantial amount of weight from the axle housings which is weight moved 13 feet forward. This being an intermediate frame tractor its light weight and long length with a good engine made it a good fit for the LSS class. It won two NTPA Grand National Championships and numerous Regional Championship before the component era. Most were as a diesel and now it is alcohol were it does the best. Its engine location equals 1,099 lbs. on front axle. It can make weight at 3,200 lbs. on front axle so I recommended staying with the 2017 weight of 6,000 lbs. for alcohol and 6,400 lbs. for diesel.

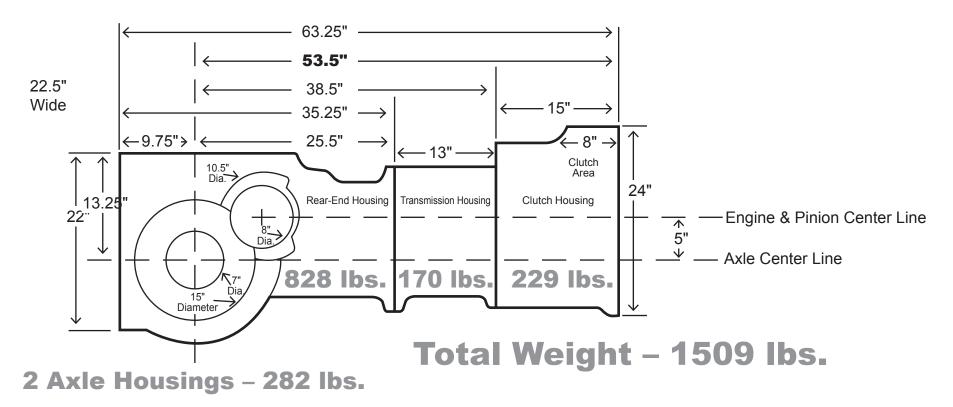
# **8006 Deutz Housings**



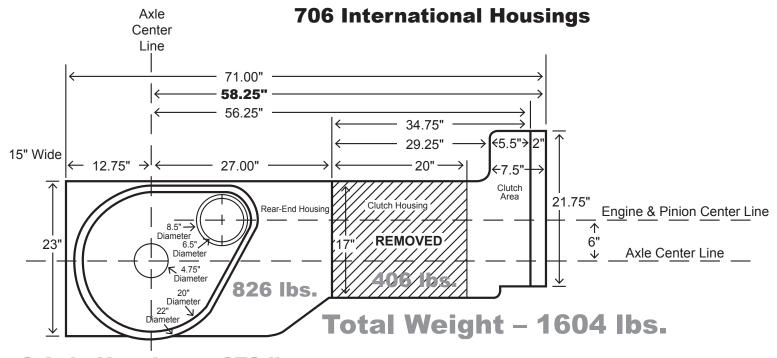
**Total Weight – 1021 lbs.** 

The Deutz is in the intermediate frame category. It has the lightest rear end and clutch housings at just 555 lbs. total. It does have the heaviest two piece brake and axle housings at 404 lbs. You can remove some weight from both. It does have a shorter length of 50 inches from center of rear axle to back of engine. This engine location gives it 991 lbs. on front axle. I weighed it in my shop and it has 3,100 on front axle the way it ran in 2016. It gained 100 lbs. in overall weight when we took out 45 lb. reverser box and added 145 lb. 3 speed Pro Fab transmission two years ago. It has potential with 2 bar roll cage, different fenders and some lighting in rear-end to have 3,200 lbs. front axle weight at the new 2017 weight. I recommend for 2017 the weight of 6,000 for alcohol and 6,400 for diesel.

# **D21 Allis Chalmers Housings**

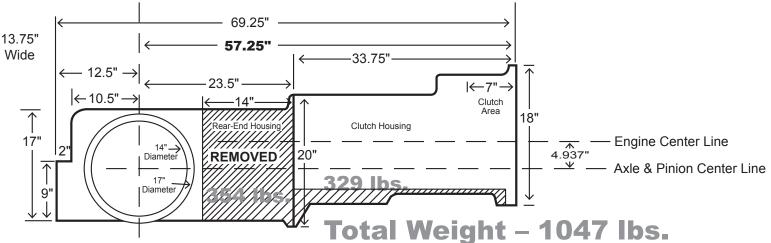


The Allis Chalmers is the second heaviest at 1,509 lbs. of OEM cast. This made it one of the last tractors to make weight in the 7,500 lb. cast class and also the 5,500 lb. class. At 53.5 inches from center of rear axle to back of engine it gets 1,113 lbs. on front axle. I have talked to some back east that run these in light classes and they sent some pictures, along with gear ratios, etc. They couldn't run legal drawbar when in Super Stock class and couldn't make 3,200 lbs. on front axle. I weighed the only AC we have and at 6,400 lbs. last year it weighed 2,790 on front axle. There were places they could get some more weight. I recommend this tractor stay at the 2016 weight of 6,100 lb. on alcohol and raise 150 lbs. to 6,550 lbs. if diesel.



#### 2 Axle Housings – 372 lbs.

#### **5000 Ford Housings**



#### 2 Axle Housings – 364 lbs.

In the LSS class front end weight is everything. Not so much the overall weight of the class, but how much you can get on the front axle to run a legal drawbar and utilize your power, keeping it under control. This drawing is the cast removed from the two Internationals and the one Ford last year. I do not have a good weight on the Internationals in this class except one. The tractor of Josh Harrington came from Steve Cowger. He bought it from Jay Fugua and at that time the front axle weighed 3,220 lbs. It just had a reverser and no transmission. The Ford came from Bryan Bowles and after the transmission broke twice he sent the rear end off to have a drop box installed without a transmission. It then had 3150 lbs. on the front axle. Last year with almost 2/3 of the 406 lb. clutch housing removed from the Internationals they had to be over 3,400 lbs. on the front axle. With the Ford having over 1/3 of the 354 lb. transmission case removed which is weight further back plus the bottom of clutch housing removed it had 200 lbs. more weight on front taking it over 3,400 on front axle. With some of the best running tractors in the class having that front axle weight advantage it was "GAME OVER". They won the first 27 hooks, with sometimes finishing 1st, 2nd and 3rd at the same event. The only place they didn't win was at Missouri State Fair where only two showed up and on wrong end of draw. After that they finished out the last 3 hooks taking the top 3 places at each event. Then I canceled the class. This is the same front end weight of the lower side of USS class with most having about 3,600 to 3,700 lbs. on front axle.