

# Proper Tractor Set-Up Steps



## STEP ONE

### Identify horsepower of the tractor.

*EXAMPLE: MFWD Case IH Magnum 180 Tractor with 165 PTO HP*

## STEP TWO

### Calculate the weight needed for proper tractor set-up based on tractor type. [SELECT ONE]

- **2WD** ..... 145 LBS  $\times$  PTO HP
- **MFWD** ..... 130 LBS  $\times$  PTO HP
- **4WD** ..... 110 LBS  $\times$  Engine HP

*EXAMPLE: Tractor Type Weight (LBS)  $\times$  PTO HP = Desired Tractor Weight (LBS)*  
*MFWD tractor 130 LBS  $\times$  165 PTO HP = 21,450 LBS Desired Tractor Weight*

## STEP THREE

### Calculate the recommended front and rear axle weight splits based on the tractor type [SELECT ONE]

- **2WD** ..... FRONT 25% ..... REAR 75%
- **MFWD** [Draw Bar] ..... FRONT 35% ..... REAR 65%
- **MFWD** [3-point Hitch] ..... FRONT 40% ..... REAR 60%
- **4WD** ..... FRONT 51 - 55% ..... REAR 45 - 49%

#### *EXAMPLE:*

*Front (or Rear) Axle %  $\times$  Total Desired Tractor Weight = Desired Axle Weight (LBS)*  
*MFWD tractor is used to pull a disk and planter.*

*Front: 35%  $\times$  21,450 LBS = 7,507 LBS*

*Rear: 65%  $\times$  21,450 LBS = 13,942 LBS*

## STEP FOUR

### Weigh the tractor to determine actual weight.

*EXAMPLE: Weighed MFWD Case IH Magnum 180 Tractor with 165 PTO HP*

- *Front: 8,850 LBS*
- *Rear: 13,650 LBS*

## STEP FIVE

### Add or remove weight to the required axle for the optimum tractor set-up.

#### EXAMPLE:

Front Target 7,507 LBS - Front Actual 8,850 LBS = Remove Front -1,343 LBS

Rear Target 13,942 LBS - Rear Actual 13,650 LBS = Add +292 LBS

## STEP SIX

### Set inflation pressure using the Tire Inflation Calculator.

#### PROPER TIRE INFLATION

- 1) Utilize the Firestone Tire Inflation Calculator  
<http://inflacalc.firestoneag.com/>
- 2) Select Tire Size Marking: Metric or Standard
- 3) Enter Tire Size
- 4) Select Axle: Front or Rear
- 5) Enter the Axle Load
- 6) Select Tire Configuration: Singles, Duals, or Triple
- 7) Select Calculate

#### TRACTOR EXAMPLE:

##### Case IH Magnum 180

• Front Tire 380/85R34 Singles – Front Axle Weight 8,050 LBS \*\*

• Rear Tires 480/80R46 Duals – Rear Axle Weight 13,650 LBS

##### Determine the inflation pressure using the Firestone Inflation Calculator:

• Front Tire 380/85R34 Singles 17 PSI

• Rear Tire 480/80R46 Duals 9 PSI

\*\*Front axle weight 8,050 LBS after all suitcase weights removed.