

# 400FF Series (Gasoline/Propane) Tow Tractors



Note: Shown with Optional Tilt Steering.

**SERIES 400FF** 

Model 460FF

Model 460FF-LP

Model 470FF

Model 470FF-LP

# All of our Tow Tractors complies with ANSI B56.9 Standards.

|       | DRAW BAR PULL |          | WEIGHT |           |
|-------|---------------|----------|--------|-----------|
| MODEL | POUNDS        | NEWTON'S | POUNDS | KILOGRAMS |
| 460FF | 3,000         | 13,345   | 4,150  | 1,882     |
| 470FF | 4,000         | 17,793   | 4,300  | 1,950     |

Drawbar pull is the ultimate start up pull on dry, freshly swept concrete, and on a level surface. If used on ramps or inclines the drawbar pull will be affected.



# Tow Tractors built ruggedly for long service life.

All Mercury tow tractors feature a one piece welded frame designed to protect components through a long service life, with reinforcement at high stress areas.

The steering axle is built like no other in the industry. Needle bearings on the king pin and center pivot pin, together with thrust bearings, provide smooth easy steering. The tough, cast steel I-Beam axle is built to withstand long hours of service.

Leaf spring suspension, with bronze bushings is a feature unique to A & G Mercury Tow Tractors, which provides a smooth ride and reduces shock loads to steering system.

The heavy duty Drive Axle on the 400 Series are typically used on much larger units. High capacity disc brakes that provide the stopping power required for heavy loads. Bevel cut gears ensure smooth quiet operation.

Front and Rear bumpers are an integral part of the frame. The  $\frac{1}{2}$ " (12.7 mm) thick front bumper and massive 2" (51 mm) thick lower rear bumpers protect drive line components from damage.

Standard colors are Safety Yellow, and Safety Orange.



Full Instrumentation; all controls in easy reach. Shown with Optional Tilt/Telescoping Steer Column.



One Piece Welded Frame with integral bumpers.



Leaf Spring Suspension Steer Axle



Heavy duty axle with high capacity disk brakes.

# Standard Features/ Specifications

| •  | •    |   |
|----|------|---|
| Нn | gine |   |
|    |      | • |

| Make & Model Ford 2.5 L EFI         |
|-------------------------------------|
| 2015 E.P.A. & C.A.R.B. Certified    |
| Type of Fuel Gas/LP/CNG             |
| Number of Cylinders Four            |
| Compression Ratio 9.7:1             |
| Bore & Stroke 3.5" x 3.93"          |
| (89 mm x 100 mm)                    |
| Displacement 2.5 L (152.5 CID)      |
| Horsepower 80 hp (59 kw)            |
| Torque                              |
| @ 3200 rpm                          |
| Fuel Pump, Gasoline Electrical      |
| Oil Filter Replaceable spin-on      |
| Air Filter Replace dry type element |
| Cooling System Pressurized 14 psi   |
| Ignition Electronic Fuel Injected   |
| Engine                              |
| Transmission                        |

| Engine  |
|---|
| Transmission                                    |
| Type Ford Electronic 6R80                       |
| Automatic planetary gear                        |
| Speeds 6 Speed Forward,                         |
| 1 Reverse                                       |
| Ratio's 1st 4.17, 2nd 2.34, 3rd 1.52, 4th 1.14, |
| 5 <sup>th</sup> 0.87, 6 <sup>th</sup> 0.69      |
| Reverse 3.40                                    |
| Torque Converter Integral Clutch                |
| 1.73 Stall Ratio                                |
| Cooling Integral Radiator                       |
| T1 () 1   |

#### **Electrical**

| System Voltag | ge | 12 Volts |
|---------------|----|----------|
| Battery       |    |          |
| Alternator    | 95 | Amps     |

# Steering

Manual with 15" (381 mm) diameter steering wheel.

#### **Drive Axle**

| Type Rigid, full floa            |
|----------------------------------|
| Carrier-type housing             |
| Gears Hypoid, with 10.5"         |
| (267 mm) dia. ring gear          |
| Total Gear Reduction 17.09:1     |
| G.A.W. rating 6,000 lb (2727 kg) |
| Nominal                          |

### Steer Axle

Type ... One Piece cast Steel I-Beam Bearings ... Needle type at kingpins & at center pivot pin

#### **Brakes**

| Service Power Assis             |
|---------------------------------|
| Hydraulic dry dis               |
| on drive axle                   |
| Rotor 12.5" (318 mm) diameter   |
| Piston Single per calipe        |
| 2.6" (66 mm) dia. nomina        |
| Parking Mechanical disc type or |
| drive input, with over center   |
| type adjustment contro          |
| • • •                           |

## Suspension

| Type       | Semi-elliptical leaf |
|------------|----------------------|
|            | on both axles        |
| Pivot Pins | Lubricated with      |
|            | bronze bushings      |

## Travel Speed (No Load)

Engine at 2450 rpm 22" (559 mm) x 6" (152 mm) drive tire and 17.09:1 drive axle ratio.

|      | 2 <sup>nd</sup> | 3rd  | 4th  | Rev. |
|------|-----------------|------|------|------|
| MPH  | 4.00            | 6.17 | 8.20 | 2.76 |
| KMPH | 6.43            | 9.93 | 13.2 | 4.44 |

# **Service Capacities**

Cooling system ....... 11 qt. (10.4 L) Engine Oil w/ filter . 7 qt. (6.62 L) Transmission ......12.1 qt. (11.45 L)

## **Standard Equipment**

Instrument panel with, hour meter, engine oil pressure, volt, coolant temperature gauges, light switch, anti-restart ignition switch, and horn. Two headlights, one stop/tail light, standard vinyl cushion seat, mechanical parking brake, air cleaner, standard P-R-N-D-L pattern shifter. Automated low Oil Pressure, and High Temperature Shutdown. Gasoline models will have 8 gallon (30.28 L) fuel tank, Fuel Gauge, Electric fuel pump, fuel filter, Protect-O-Seal gas cap.

LP models will have electrical operated fuel shut-off valve, inlet relief valve. (Tank not included)

#### **Tires**

Solid Cushion (Standard) Front 16.25" (412.8 mm) x 4" (101.6 mm); Rear 22" (558.8 mm) x 6" (152.4 mm)

## Weights

Standard units without options, fuel, or operator.

| 460FF | 4,150 lb ( | (1,882 kg) |
|-------|------------|------------|
| 470FF | 4,300 lb ( | 1,950 kg)  |

# Optional Equipment

Equip your 400 series tow tractor with A & G Mercury deluxe cab which includes heater, defroster vents, wiper, with removable doors, sliding windows for doors, and rear, and insulation.

- Deluxe Cab
- > Economy Cab
- Overhead Guard
- Backup Alarm
- Hitch Release Inside
   Operators Compartment
- > Tie Down and Lift Brackets
- Strobe Light, Amber or Blue
- Seat Belt
- Grammer Suspension Seat Vinyl or Cloth
- Side View Mirrors
- LPG Fuel (Tank Not Included)
- Passenger Seat
- > Turn Signals
- Tilt/Telescoping Steering Column
- Reflectors
- Special Paint (Standard Colors are Safety Yellow & Safety Orange)

#### **Tires**

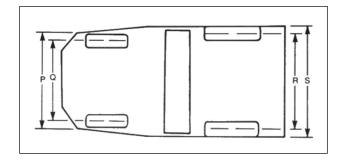
- Solid Cushion is Standard
- Foam Filled
- Pneumatic
- Solid Pneumatic
- Non Marking Solid Cushion
- Non Marking Solid Pneumatic

## Hitches

- > 25/16" (58.74 mm) Ball Hitch
- ➤ A & G Mercury H.D. Jaw Hitch
- E-Hitch's
- > ZB98
- Eve
- Pintle

| DIMENSIONS, MODEL 400FF |        |       |  |
|-------------------------|--------|-------|--|
| CODE                    | INCHES | MM    |  |
| A                       | 89.50  | 2,273 |  |
| В                       | 49.50  | 1,257 |  |
| С                       | 57.50  | 1,461 |  |
| D                       | 44.50  | 1,130 |  |
| Е                       | 8.75   | 222   |  |
| F                       | 20.75  | 527   |  |
| G                       | 19.25  | 489   |  |
| Н                       | 18.00  | 457   |  |
| J                       | 8.50   | 216   |  |
| K                       | 26.25  | 667   |  |
| L                       | 39.00  | 990   |  |
| M                       | 50.50  | 1,283 |  |
| N                       | 53.50  | 1,359 |  |
| P                       | 35.25  | 895   |  |
| Q                       | 30.50  | 775   |  |
| R                       | 36.00  | 914   |  |
| S                       | 42.50  | 1,080 |  |

C D B A B A



Outside Turning Radius: 88" (2,235 mm)
Intersecting Aisle: 73" (1,854 mm)
Standard Hitch Height: 12" (305 mm)
Specifications subject to change without notice.



Under the hood accessibility for maximum convenience an important feature which is engineered into all A & G Mercury Tow Tractors.





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