

# Aircraft Support Equipment



## Baggage Tow Tractor Model MA

The MA is a time-tested, field proven tow tractor with 3,000 to 6,000 pounds (1,362 to 2,722 kg) drawbar pull to handle all of your cargo and baggage towing requirements and to provide pushback for private and regional aircraft with a MTOW up to 60,000 pounds (27,220 kg). All models are equipped with gasoline-, diesel-, LPG- or CNG-fueled engines. An enclosed cabin and other options are available.

Other features include solid-state ignition, engine emission control, automatic transmission and disc brakes on the rear wheels operated via a dual hydraulic system. Simple, rugged and easy access to all components assure long life on even the most demanding ramps.

### Standard features include:

- Recessed headlights
- Combination tail and stop lights
- Power boosted disc brake system
- Automatic transmission
- Seat belts
- Non slip surface on floor boards
- Non slip surface on brake pedal
- Engine speed governor
- Adjustable over center park brake lever
- Split braking systems
- Front, rear & side reflectors

### Stewart & Stevenson TUG – Kennesaw

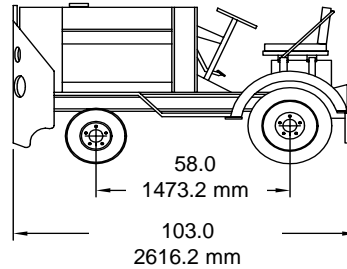
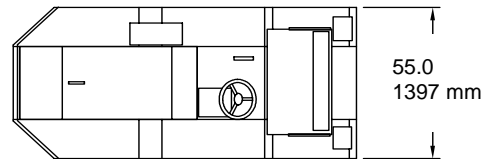
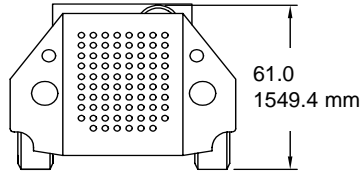
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## Specifications

## Model MA

### Dimensions

Length excluding coupler . . . . . 103" (2616.2 mm)  
 Width . . . . . 57.5" (1460.5 mm)  
 Height less cab . . . . . 60" (1524.0 mm)  
 Height with cab . . . . . 82.5" (2095.5 mm)  
 Wheelbase . . . . . 59" (1498.6 mm)  
 Minimum ground clearance. . . . . 6.5" (165.1 mm)  
 Steer axle underclearance . . . . . 7.8" (198.12 mm)  
 Frame underclearance . . . . . 10" (254.0 mm)  
 Turning radius . . . . . 115" (2921.0 mm)  
 Maximum governed speed . . . 15 mph (24.14 kph)

### Drawbar Pull by Model

Model	Drawbar Pull	GVW
MA 30	3000 lb (1362 kg)	3750 lb
MA 40	4000 lb (1816 kg)	5000 lb
MA 50	5000 lb (2270 kg)	6250 lb
MA 60	6000 lb (2722 kg)	7500 lb

### Engine Options

#### Ford 300 Gasoline

Type . . . . . In-line, 6 cylinder  
 Fuel . . . . . No-lead regular, 87 octane  
 Bore & stroke . . . . . 4 x 3.96" (101.6 x 100.6 mm)  
 Displacement . . . . . 300 CID (4.9 L)  
 Governed rpm with full load . . . . . 2500  
 Net brake hp at governed rpm . . . . . 95  
 Torque at 2000 rpm . . . . . 240 lb ft (325 Nm)  
 Compression ratio . . . . . 7.9:1  
 Oil capacity Dry . . . . . 7 qt (6.62 L)  
   Refill . . . . . 6 qt (5.68 L)  
 Idle speed rpm . . . . . 500 - 550

#### Perkins 1004 Diesel

Type . . . . . In-line, 4 cylinder  
 Fuel . . . . . Diesel or Jet A  
 Displacement . . . . . 243 CID - 4 Liter  
 Governed rpm . . . . . 2500  
 Net brake hp at governed rpm . . . . . 86  
 Torque at 1600 rpm . . . . . 206 lb ft (279 Nm)  
 Compression ratio . . . . . 16.5:1  
 Idle speed rpm . . . . . 850

#### Cummins B 3.9

Type . . . . . Water-cooled, direct injected  
   4-cyl., in-line diesel engine  
 Fuel . . . . . Diesel or Jet A  
 Bore & stroke . . . . . 4.02 x 4.72" (102 x 120 mm)

Displacement . . . . . 3.9 L  
 Governed rpm with full load . . . . . 2500  
 Net brake hp at governed rpm . . . . . 80  
 Torque at 2000 rpm . . . . . 189 lb ft (256 Nm)  
 Compression ratio . . . . . 18.5:1  
 Idle speed rpm . . . . . 750

### Transmission

#### Gasoline

Type . . . . . Ford industrial 2-speed automatic transmission w/torque converter

#### Diesel

Type . . . . . Ford industrial 3-speed automatic transmission w/torque converter

### Drive Axle

Type . . . . . Heavy-duty 6,000 lb capacity axle with drop box

### Drive Shaft

Type . . . . . Double universal, sliding spline coupling

### Electrical System

Type . . . . . 12 V, negative ground  
 Alternator . . . . . 60 A

### Cooling System

Engine . . . . . 15 qt (14.2 L)  
   Heavy-duty radiator and fan  
 Transmission . . . . . Radiator cooled

### Fuel System

Fuel Cell Capacity . . . . . 15.5 U.S. gal (58.67 L)  
 Fuel options . . . . . Gasoline, diesel, LP or CNG

### Brakes System

Service . . . . . Dual split system, vacuum boosted with four calipers on the rear axle and 13-inch cast iron rotors  
 Parking . . . . . Lever operated, drum type

### Steering System

Type . . . . . Ball and screw gearbox, heavy-duty front steer axle with inclined king pins, bushings and bearings

### Suspension

Front . . . . . Leaf springs  
 Rear . . . . . Rubber mount

### Tires

Front . . . . . 20.5 x 8 x 10,6-ply rating  
 Rear . . . . . 8 x 16.5, 8-ply rating

### Hitch

Standard "E" hitch . . . . . Other options available

### Instruments

Water temperature  
 Oil pressure  
 Ammeter  
 Hour meter

### Options

Cab  
 Overhead guard  
 Backup alarm  
 Snow plow  
 Additional hitches to fit customer specifications  
 Others available upon request

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