

# Overview Specifications Sheet

## ENGINE

Make ..... Ford Motor Co.  
Model ..... CSG 649  
Type ..... 6 Cylinder  
No. of Cylinders ..... 6 in Line  
Displacement ..... 4.9 liters (300 cu. in.)  
Bore ..... 4.00 in.  
Stroke ..... 3.98 in.  
Compression ..... 8.0:1  
Brake Horsepower ... 101 H.P. @ 2800 RPM  
Torque ..... 205 ft.-lb.s @ 2800 RPM  
Firing Order ..... 1-5-3-6-2-4  
Engine idle (automatic transmission —  
drive range) ..... 500 - 600 RPM  
Oil Capacity (including required oil  
for filter replacement) ..... 7 qts.  
Oil Pressure, Hot ..... 40-60 psi @ 2000 RPM

## CARBURETOR

Make ..... Holley  
Type ..... Downdraft

## ALTERNATOR

Make ..... Ford  
Voltage ..... 12  
Amp ..... 65  
Amperage draw @ normal load .... 150 amps

## STARTER

Make ..... Ford  
Voltage ..... 12  
Type ..... Permanent Magnet, Solenoid  
Amperage draw ..... 70 ±10 amps

## TRANSMISSION

Model ..... Ford C6  
Type ..... Automatic  
Speeds ..... 3 Forward, 1 Reverse  
Parking Brake ..... Drum type  
Oil Capacity ..... 12 Qts.  
Gear Ratios (Forward & Reverse)  
Low ..... 2.46:1  
2nd ..... 1.46:1  
3rd ..... 1:1  
Reverse ..... 2.18:1

## FRONT AXLE

Make ..... Dana  
Model ..... PS1300-R30-BP  
Differential Reduction Ratio ..... 6.17:1  
Wheel End  
Planetary Reduction Ratio ..... 3.650:1  
Brakes ..... (wet disc) 66120  
Tires ..... 7.50 × 15 × 12 ply  
Inflation Pressure ..... 125 psi

## REAR AXLE

Make ..... Dexter  
Part Number ..... 91634  
Brakes ..... 12.25 in Dia. × 3.375 in  
Tires ..... 7.50 × 15 × 12 ply  
Inflation Pressure ..... 80 psi

## HYDRAULIC BRAKE VALVE

Make ..... Mico  
Type ..... Hydraulic Power Brake Valve  
Part Number ..... 90731

## BRAKES (FRONT)

Make ..... Dana  
Type ..... Hydraulic (wet disc)  
Part Number ..... 66120

## BRAKE WHEEL CYLINDER (REAR)

Make ..... Dexter  
Type ..... Hydraulic  
Part Number ..... 76639 L.H. 76640 R.H.

## POWER STEERING PUMP

Make ..... Hydreco  
Type ..... Belt Driven  
Part Number ..... 90416

## STEERING VALVE

Make ..... Char-Lynn  
Part Number ..... 47223

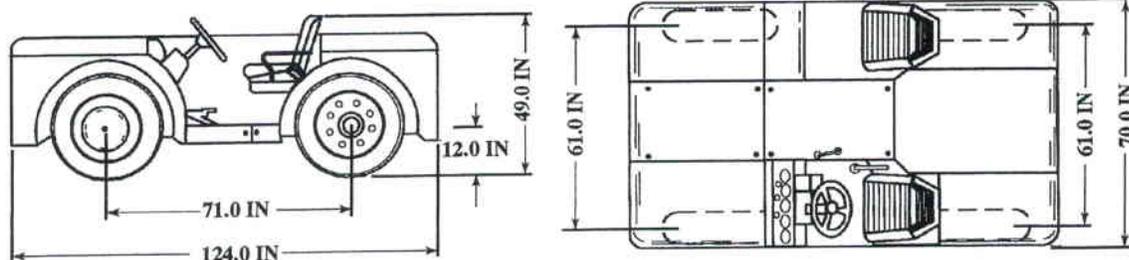
## COLUMN ASSEMBLY

Make ..... Char-Lynn  
Part Number ..... 45930

## BATTERY

Type ..... Lead-Acid  
Voltage ..... 12  
System Type ..... Negative Ground

## General Specifications



|                                 | U.S.   | Metric  |
|---------------------------------|--------|---------|
| Length                          | 124 in | 3149 mm |
| Width                           | 70 in  | 1778 mm |
| Height (over top of seat)       | 49 in  | 1245 mm |
| Steer axle tread                | 61 in  | 1549 mm |
| Forward speed (no load maximum) | 10 mph | 16 kph  |
| Turning radius (outside)        | 220 in | 5588 mm |

## General Capacities

|                                   | U.S.    | Metric |
|-----------------------------------|---------|--------|
| Cooling system                    | 22 qt   | 20.8 L |
| Engine crankcase                  | 7.0 qt  | 6.6 L  |
| Transmission (with filter change) | 12.0 qt | 11.4 L |
| Fuel tank                         | 19 gal  | 72 L   |

## Model Description

This manual is for SMLP-80, SMLP-100 and SMLP-120 models, internal combustion engine-powered, wheeled, aircraft tow tractors manufactured by **United Tractor Company**, Chesterton, Indiana.

The **SMLP-80** model tow tractor weighs 17,600 pounds (7,983.3 kg). With a 12-inch (304.8 mm) coupler height on dry concrete, the SMLP-80 tow tractor has a rated drawbar pull of 8,000 pounds (3,628.8 kg).

The **SMLP-100** model tow tractor weighs 18,100 pounds (8,210.2 kg). With a 12-inch (304.8 mm) coupler height on dry concrete, the SMLP-100 tow tractor has a rated drawbar pull of 10,000 pounds (4,536.0 kg).

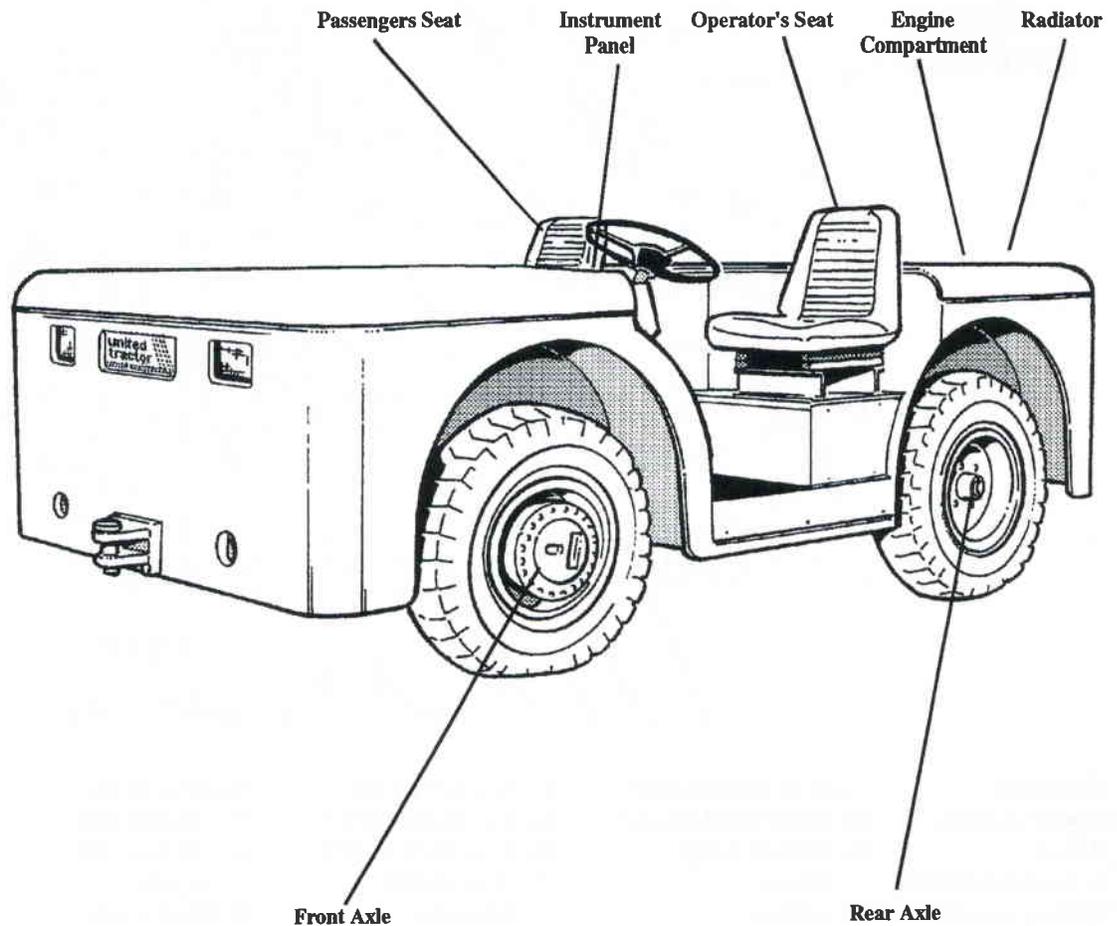
\* The **SMLP-120** model tow tractor weighs 19,200 pounds (8,709.1 kg). With a 12-inch (304.8 mm) coupler height on dry concrete, the SMLP-120 tow tractor has a rated drawbar pull of 12,000 pounds (5,443.2 kg).

Each vehicle meets all applicable requirements mandated in ANSI B56.9, Safety Standard for operator-controlled industrial tow tractors.

In addition, your vehicle may conform to Underwriter Laboratory requirements. (See the vehicle's capacity plate for Type Designation.)

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## Major Systems



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### Frame

The vehicle frame is of welded construction and provides mounting facilities for the engine, transmission, front axle, rear axle, and bolt-on components. The frame is constructed of heavy steel of sufficient weight and strength to support all anticipated stresses of the power train and towed loads.

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### Operator's Compartment

The operator's compartment contains a cushioned, adjustable seat. All controls and instruments are arranged directly in front of the operator. The vehicle also provides seating for a passenger. This seat is also cushioned and adjustable with a handhold to the passenger's left, mounted on the center console.