

# Aircraft Support Equipment



Model shown above includes additional options.

## Aircraft Tow Tractor Model GT-50

The S&S TUG Gator Tractor Model GT-50/GT-50H provides our customers with dependable pushback service for all mid-sized aircraft. This popular model has helped make our tractor product line synonymous with quality and performance.

The GT-50 features optional gross vehicle weight packages for the various applications and airport conditions. Customers can choose the 60,000-lb (GT-50H) tractor for difficult towing requirements such as heavier aircraft, inclement weather conditions and tight maneuvering, or they may choose the 50,000-lb tractor for less stringent applications.

A clean environment is important to S&S TUG. For this reason, the GT-50 is offered with optional power sources that meet or exceed current emission-level requirements. Customers have the option of either Caterpillar or Deutz power.

For over a decade, S&S TUG has provided parts and service for the GT-50 to customers located all over the world. Our dedication to quality and customer satisfaction makes the GT-50 the best choice for your operation.

### Standard features include:

- Glow plugs for cold-weather starting (Deutz)
- Spark-arresting muffler
- Sealed-beam headlights
- Backup lights
- Turn signals/emergency flashing lights
- Front, rear & side reflectors
- Dual-rearview mirrors
- Electric horn
- Single-color polyurethane paint
- Anti-skid matting on top of tractor surface

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# TUG

## Specifications

## Model GT-50

### General

Gross Vehicle Weight (gvw) .....	Maximum Drawbar Pull*
At gvw 50,000 lb (22,680 kg) (GT-50) .....	40,000 lb (18,143 kg)
At gvw 60,000 lb (27,216 kg) (GT-50H) .....	48,000 lb (21,773 kg)

\*At 0.8 traction coefficient.  $\pm 3\%$  variation on published drawbar pull and weight, owing to manufacturing tolerances.

### Speed\*

Forward	1st .....	2.5 mph	(4.0 km/h)
	2nd .....	3.8 mph	(6.2 km/h)
	3rd .....	4.6 mph	(7.4 km/h)
	4th .....	6.7 mph	(10.8 km/h)
	5th .....	9.5 mph	(15.3 km/h)
	6th .....	15 mph	(24.0 km/h)
Reverse	1st .....	2.5 mph	(4.0 km/h)
	2nd .....	3.8 mph	(6.2 km/h)
	3rd .....	9.5 mph	(15.3 km/h)

### Overall Dimensions

Length (w/o Hitches) .....	194"	(4,923 mm)
Width .....	102"	(2,600 mm)
Height (w/o Cab) .....	64"	(1,626 mm)
(w/Cab) .....	78"	(2,005 mm)
Wheel Base .....	90"	(2,286 mm)
Ground Clearance .....	7"	(178 mm)

### Turning Radius (Outside)

Standard Front-Wheel Steer .....	21'	(6,400 mm)
Optional Four-Wheel Steer .....	14'	(4,267 mm)

### Ramp Angles

Approach Angle .....	8.0°
Breakover Angle .....	17.0°
Departure Angle .....	14.0°

### Engine - Standard, 1996 EPA-Certified

Manufacturer .....	Deutz Model BF6M1013
Type .....	Watercooled, diesel, four-cycle (turbocharged)
Number of Cylinders and Arrangement .....	Six (6)-cylinder; in-line
Bore .....	4.25" (108 mm)
Stroke .....	5.12" (130 mm)
Displacement .....	436 C.I.D. (7.14 L)
Horsepower @-Flywheel .....	190 hp (141 kW) @ 2500 rpm

### Engine - Alternate, 1996 EPA-Certified

Manufacturer .....	Caterpillar Model 3208DIT
Type .....	Water-cooled, diesel, four-cycle (turbocharged)
Number of Cylinders and Arrangement .....	Eight (8); VEE
Bore .....	4.5" (114 mm)
Stroke .....	5.0" (127 mm)
Displacement .....	636 C.I.D. (10.4 L)
Horsepower (gross) .....	210 hp (157 kW) @ 2600 rpm

### Transmission

Manufacturer .....	Funk Mfg. Co.
Type .....	Torque converter/power shift
Speeds .....	Six (6) forward; three (3) reverse
Controls .....	Electrical

### Axles - Front

Manufacturer .....	Rockwell SVI Model 5
Type .....	Planetary-drive/steer
Steering System - Cylinders .....	Hydrostatic - Twin double-acting
Tires .....	365/80R20 radial, tubeless
Suspension .....	Cradle mount

### Axles - Rear

Manufacturer .....	Rockwell SVI Model 5
Type .....	Planetary-drive/rigid
Tires .....	365/80R20 radial, tubeless
Optional Rear Steering Axle Available .....	
Suspension .....	Rigid mount

### Inter-Axle Differential

Integral with transmission .....	
Type .....	No spin

### Brakes

Service, Front and Rear .....	Four-wheel drum brakes, 400x120-mm hydraulically actuated.
	Split braking is provided by a dual-chamber master cylinder.
	Power assist provided by an engine-driven hydraulic pump.
	Automatic backup to power assist, in event of engine shutdown provided by a battery-powered motor pump.
Parking .....	Mechanical actuated on caliper on driveline.

### Steering Hydraulic System

Type .....	Two (2)-wheel hydraulic
Optional .....	Four (4)-wheel hydraulic
Pump .....	Direct-driven, gear-type
Steering Cylinders .....	Twin, double-acting
Controls, Four-Wheel .....	Electric pre-selection with push-pull
Steer Option .....	Cable feedback control

### Hydraulic Oil Tank

Type .....	Removable
Capacity .....	17 U.S. gallons (64.4 L)

### Electrical System

Starting System .....	12V
Charging System .....	70A (high output @ idle speed)

### Fuel System

Capacity .....	40 U.S.-gallons (151 L)
Fuel .....	No. 2 Diesel (Jet-A-approved)

### Hitch (Front and Rear)

Type .....	Pin coupler, camlocked
Height from Ground .....	16" (406.4 mm)
Pin Diameter .....	2.5" (63.5 mm)

### Standard Operator Compartment

Operator instrument panel • engine tachometer • engine oil pressure gauge • engine coolant temperature gauge • voltmeter • hourmeter • fuel level indicator • keyless anti-restart-type ignition/shutdown switch • light switches • red parking brake "ON" warning light • symbolic decals &-labels for all instruments & controls • glow plug indicator light (Deutz engine) • warning lights for engine coolant high temp/low level, low engine oil pressure, alternator failure, brake booster and pump on • parking brake actuator with transmission out of neutral shift warning horn • starter interlock (engine speed sensitive) • driver's seat (adjustable position) • passenger seat

### Optional Equipment

Two-man cab • windshield wipers • dome light • ventilating fan • sound insulation • electrical switches for above • roof windows • rear window wiper • tire chains • spare tire and wheel • revolving or flashing beacon (red/amber) • cold weather starting accessories • coolant heater • battery warmer • oil pan heater • fuel heater • ether aid start for CAT-engine • dry-chemical fire extinguisher(s) • front and/or rear hitch lights • special paint schemes, strips, logos, etc. • front & rear communication jacks • Racor-style fuel filter/separator • low engine oil pressure, high engine coolant temperature, automatic engine shutdown w/override switch • two- or three-mode steering • heater/windshield defroster (front &-rear) • transmission oil temperature gauge • 12-VDC emergency steering system • backup alarm • elevating cab option - 28" lift • GPU platform with/without GPU • GPU power cable(s) • hitch extension • jack adapters • hitch mirror • tilt steering • windshield washer • wipers, roof • other options available

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