A TEREX COMPANY

Service Manual

S-80

S-85

S-80X

from S80/85/80X13-11876
to S80/85/80X15-12263

Part No. 1259369GT
Rev C
February 2017

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Specifications

Continental TME27 Engine

Displacement	164 cu. in 2.68 liters
Number of cylinders	4
Bore and Stroke	3.58 x 4.06 inches 91 x 103.2 mm
Horsepower, continuous @ 2500 rpm	59 hp / 43.9 kW
Firing order	1 - 3 - 4 - 2
Standby idle-computer controlled Frequency	1000 rpm
Low function idle-computer controlled Frequency	1500 rpm 53.33 rpm
High function idle-computer controlled Frequency	2500 rpm 83.33 Hz
Compression ratio	8.2:1
Compression pressure pressure (psi or bar) of the lowest cylinder must be at least 75% of the highest cylinder	
Governor	electronic
Valve clearance, warm	
Intake	0.014 in 0.36 mm
Exhaust	0.018 in 0.45 mm
Lubrication system	
Oil pressure, hot	40 to 60 psi 2.8 to 4.1 bar
Oil capacity (including filter)	7 quarts 6.6 liters
Oil viscosity requirements	
-22°F to 86°F / -30°C to 30°C	5W-20
-4°F to 104°F / -20°C to 40°C	10W-40
Above 5°F / -15°C	15W-40
Unit ships with 15W-40. Extreme operating temperatures may require the use of alternative engine oils. For oil requirements, refer to the Engine Operator Manual for your engine.	

Oil Pressure switch	
Installation torque	8 - 18 ft-lbs 11 - 24 Nm
Pressure switch point	7 psi 0.55 bar
Fuel pump	
Fuel pressure	39-40 psi 2.7 bar
Fuel flow rate	0.42 gpm 1.59 L/min
Fuel requirement	
For fuel requirements, refer to the engine Operator Manual for your engine.	
Starter motor	
Current draw, normal load	150-345A
Cranking speed	200 - 250 rpm
Battery – Engine starting and control system	
Type	12V DC, Group 31
Quantity	2
Battery capacity, maximum	1000A
Reserve capacity @ 25A rate	200 Minutes
Engine coolant	
Capacity (engine only)	10.7 quarts 10.1 liters
Coolant temperature switch	
Installation torque	8 - 18 ft-lbs 11 - 24 Nm
Temperature switch point	230°F 110°C
Alternator output	65A @ 13.8V DC
Fan belt deflection	1/2 inch 12 mm

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Fault Codes



Observe and Obey:

- ☑ Troubleshooting and repair procedures shall be completed by a person trained and qualified on the repair of this machine
- ☑ Immediately tag and remove from service a damaged or malfunctioning machine.
- ☑ Repair any machine damage or malfunction before operating the machine.
- ☑ Unless otherwise specified, perform each procedure with the machine in the following configuration:
  - Machine parked on a firm, level surface
  - Key switch in the off position with the key removed
  - The red Emergency Stop button in the off position at both the ground and platform controls
  - Wheels chocked
  - All external AC power supply disconnected from the machine
  - Boom in the stowed position
  - Turntable secured with the turntable rotation lock
  - Welder disconnected from the machine (if equipped with the weld cable to platform option)

Before Troubleshooting:

- ☑ Read, understand and obey the safety rules and operating instructions in the appropriate operator's manual on your machine.
- ☑ Be sure that all necessary tools and test equipment are available and ready for use.
- ☑ Read each appropriate fault code thoroughly. Attempting short cuts may produce hazardous conditions.
- ☑ Be aware of the following hazards and follow generally accepted safe workshop practices.

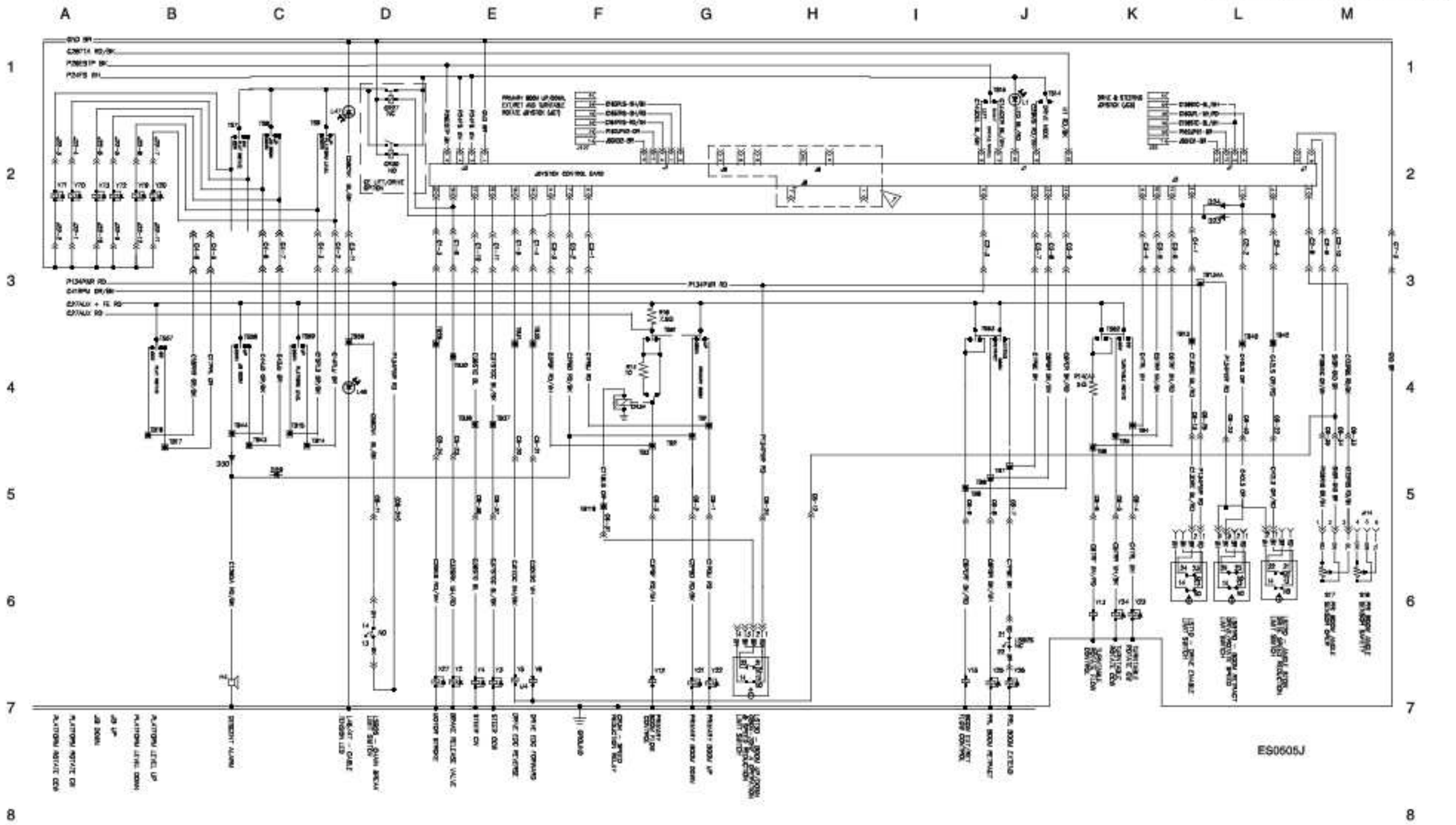
⚠WARNING Electrocution/burn hazard. Contact with electrically charged circuits could result in death or serious injury. Remove all rings, watches and other jewelry.

Note: Two persons will be required to safely perform some troubleshooting procedures.

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Electrical Schematic, S-80 • S-85

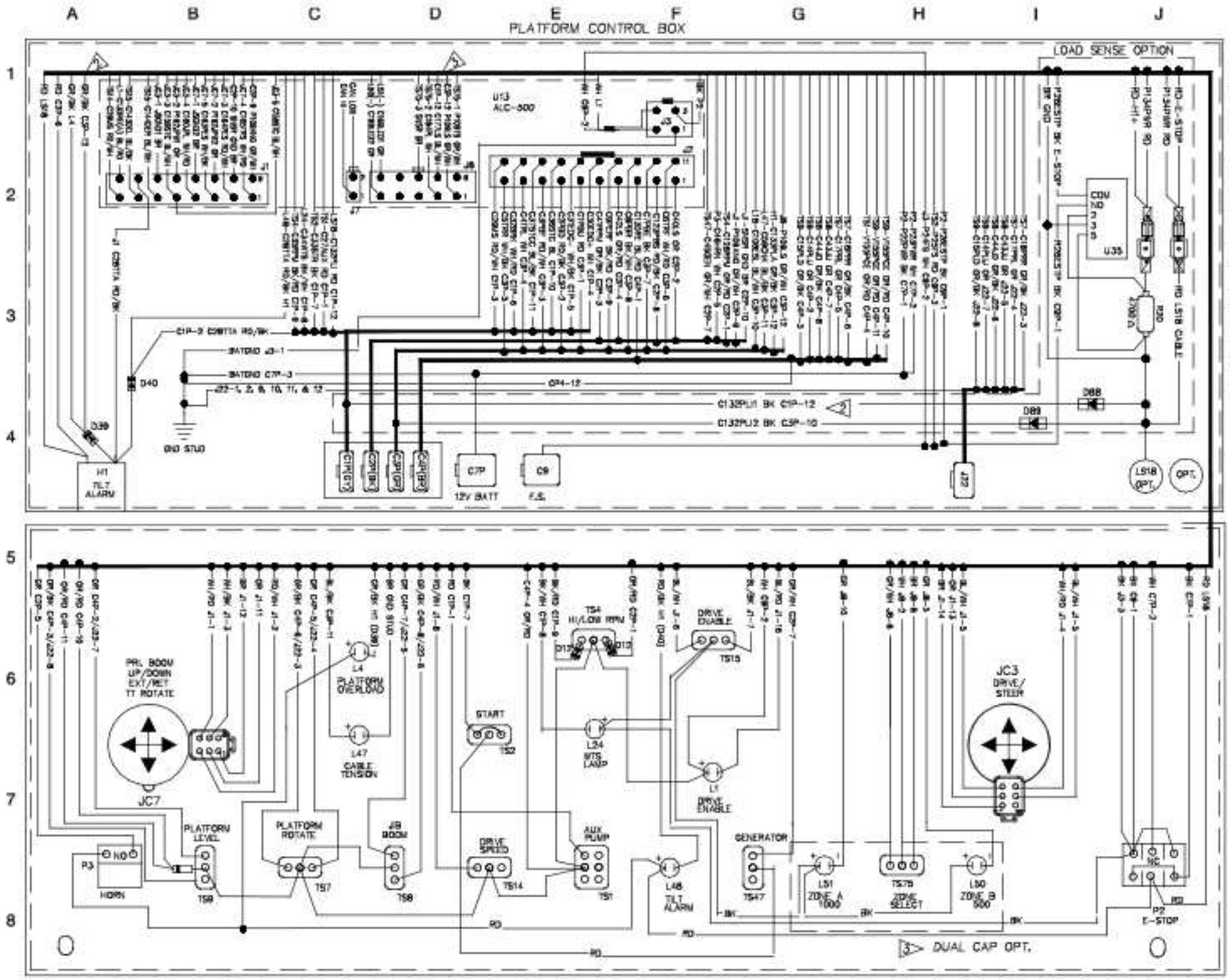
Continental TME27 Models (AS)



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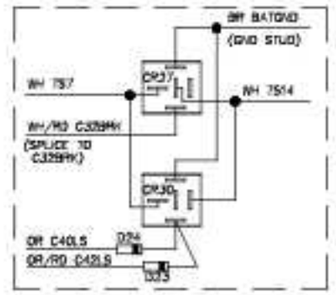
Platform Control Box, S-80 • S-85

Deutz TD2.9 L4 Models (ANSI / CSA)



COMPONENT INDEX

P2	EMERGENCY STOP BUTTON
P3	HORN SWITCH
TS1	AUXILIARY SWITCH
TS2	START ENGINE SWITCH
TS4	HI/LOW RPM SWITCH
TS6	GLOW PLUG OPTION (DIESEL ENGINE ONLY)
TS7	PLATFORM ROTATE SWITCH
TS8	JIB SWITCH (OPTION)
TS9	PLATFORM LEVEL SWITCH
TS14	DRIVE SPEED LOW/HIGH SWITCH
TS15	DRIVE ENABLE SWITCH
TS47	GENERATOR SWITCH (OPTION)
TS48	DRIVE LIGHTS (OPTION)
TS75	ZONE SELECTION
L1	DRIVE ENABLE LED
L4	PLATFORM OVERLOAD LED (CE ONLY)
L47	CABLE/CHAIN TENSION LED
L48	TILT ALARM LED (ANSI/CSA ONLY)
L50	ZONE B, 500 LB
L51	ZONE A, 1000 LB
JC3	DRIVE PROPORTIONAL JOYSTICK; PROPEL, STEER LEFT/RIGHT (DUAL AXIS OR SINGLE AXIS ROCKER--OPTIONAL)
JC7	BOOM PROPORTIONAL JOYSTICK; PRIMARY UP/DN, EXT/RET, TT ROTATE (DUAL AXIS ROCKER)
U35	LOAD SENSE TIME DELAY RELAY (30A)
H1	TILT ALARM
LS18	PLATFORM OVERLOAD LIMIT SWITCH
U13	ALC500 JOYSTICK CONTROLLER CARD



LIFT/DRIVE OPTION
REPLACE WIRE WITH THIS WIRING DIAGRAM

ES0504J

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