A TEREX COMPANY

# Service and Repair Manual

## S®-80
## S®-85
## S®-80X

Serial Number Range

from S8016H-13643 to S8016H-13999

from S8516H-13643 to S8516H-13999

from S80X16H-13643 to S80X16H-13999

from S80H-14000
from S85H-14000
from S80XH-14000

except S8516H-13685
except S8516H-13711

This manual includes:
Repair procedures
Fault Codes
Electrical and
Hydraulic Schematics

For detailed maintenance procedures, refer to the appropriate Maintenance Manual for your machine.

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# Specifications

## Hydraulic Hose and Fitting Torque Specifications

Your machine is equipped with Parker Seal-Lok™ ORFS or 37° JIC fittings and hose ends. Genie specifications require that fittings and hose ends be torqued to specification when they are removed and installed or when new hoses or fittings are installed.

### Seal-Lok™ Fittings

(hose end - ORFS)

| SAE Dash Size | Torque |
|---|---|
| -4 | 10 ft-lbs / 13.6 Nm |
| -6 | 30 ft-lbs / 40.7 Nm |
| -8 | 40 ft-lbs / 54.2 Nm |
| -10 | 60 ft-lbs / 81.3 Nm |
| -12 | 85 ft-lbs / 115 Nm |
| -16 | 110 ft-lbs / 150 Nm |
| -20 | 140 ft-lbs / 190 Nm |
| -24 | 180 ft-lbs / 245 Nm |

### JIC 37° Fittings

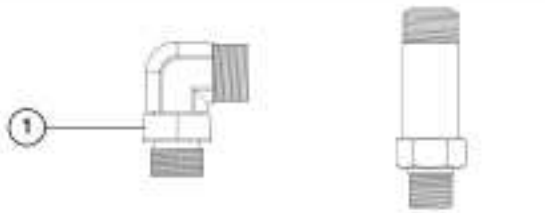
(swivel nut or hose connection)

| SAE Dash Size | Thread Size | Flats |
|---|---|---|
| -4 | 7/16-20 | 2 |
| -6 | 9/16-18 | 1 ¼ |
| -8 | 3/4-16 | 1 |
| -10 | 7/8-14 | 1 |
| -12 | 1 1/16-12 | 1 |
| -16 | 1 5/16-12 | 1 |
| -20 | 1 5/8-12 | 1 |
| -24 | 1 7/8-12 | 1 |

### SAE O-ring Boss Port

(tube fitting - installed into Aluminum)
(all types)

| SAE Dash Size | Torque |
|---|---|
| -4 | 14 ft-lbs / 19 Nm |
| -6 | 23 ft-lbs / 31.2 Nm |
| -8 | 36 ft-lbs / 54.2 Nm |
| -10 | 62 ft-lbs / 84 Nm |
| -12 | 84 ft-lbs / 114 Nm |
| -16 | 125 ft-lbs / 169.5 Nm |
| -20 | 151 ft-lbs / 204.7 Nm |
| -24 | 184 ft-lbs / 249.5 Nm |




Adjustable Fitting

1 jam nut

Non-adjustable fitting

### SAE O-ring Boss Port

(tube fitting - installed into Steel)

| SAE Dash Size | | Torque |
|---|---|---|
| -4 | ORFS / 37° (Adj) | 15 ft-lbs / 20.3 Nm |
| | ORFS (Non-adj) | 26 ft-lbs / 35.3 Nm |
| | 37° (Non-adj) | 22 ft-lbs / 30 Nm |
| -6 | ORFS (Adj / Non-adj) | 35 ft-lbs / 47.5 Nm |
| | 37° (Adj / Non-adj) | 29 ft-lbs / 39.3 Nm |
| -8 | ORFS (Adj / Non-adj) | 60 ft-lbs / 81.3 Nm |
| | 37° (Adj / Non-adj) | 52 ft-lbs / 70.5 Nm |
| -10 | ORFS (Adj / Non-adj) | 100 ft-lbs / 135.6 Nm |
| | 37° (Adj / Non-adj) | 85 ft-lbs / 115.3 Nm |
| -12 | (All types) | 135 ft-lbs / 183 Nm |
| -16 | (All types) | 200 ft-lbs / 271.2 Nm |
| -20 | (All types) | 250 ft-lbs / 339 Nm |
| -24 | (All types) | 305 ft-lbs / 413.5 Nm |



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# Schematics



## Observe and Obey:

- R Troubleshooting and repair procedures shall be completed by a person trained and qualified on the repair of this machine
- R Immediately tag and remove from service a damaged or malfunctioning machine.
- R Repair any machine damage or malfunction before operating the machine.

## Before Troubleshooting:

- R Read, understand and obey the safety rules and operating instructions in the appropriate operator's manual on your machine.
- R Be sure that all necessary tools and test equipment are available and ready for use.

## About This Section

There are two groups of schematics in this section.

### Electrical Schematics

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

### Hydraulic Schematics

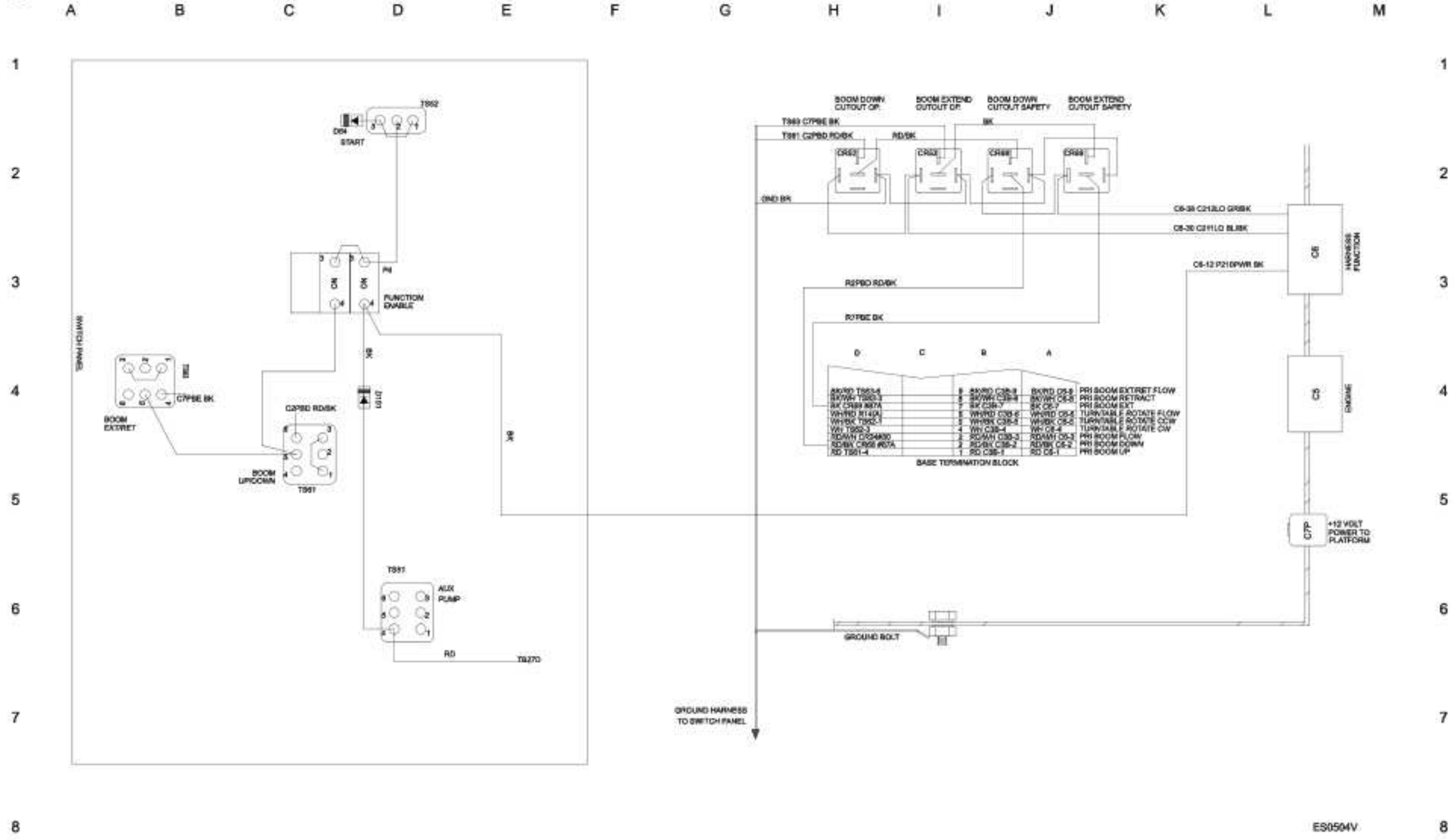
**⚠WARNING** Bodily injury hazard. Spraying hydraulic oil can penetrate and burn skin. Loosen hydraulic connections very slowly to allow the oil pressure to dissipate gradually. Do not allow oil to squirt or spray.



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# S-80X Ground Control Box Wiring Diagram

**Use this wiring diagram with each S-80X Ground Control Box Schematic**

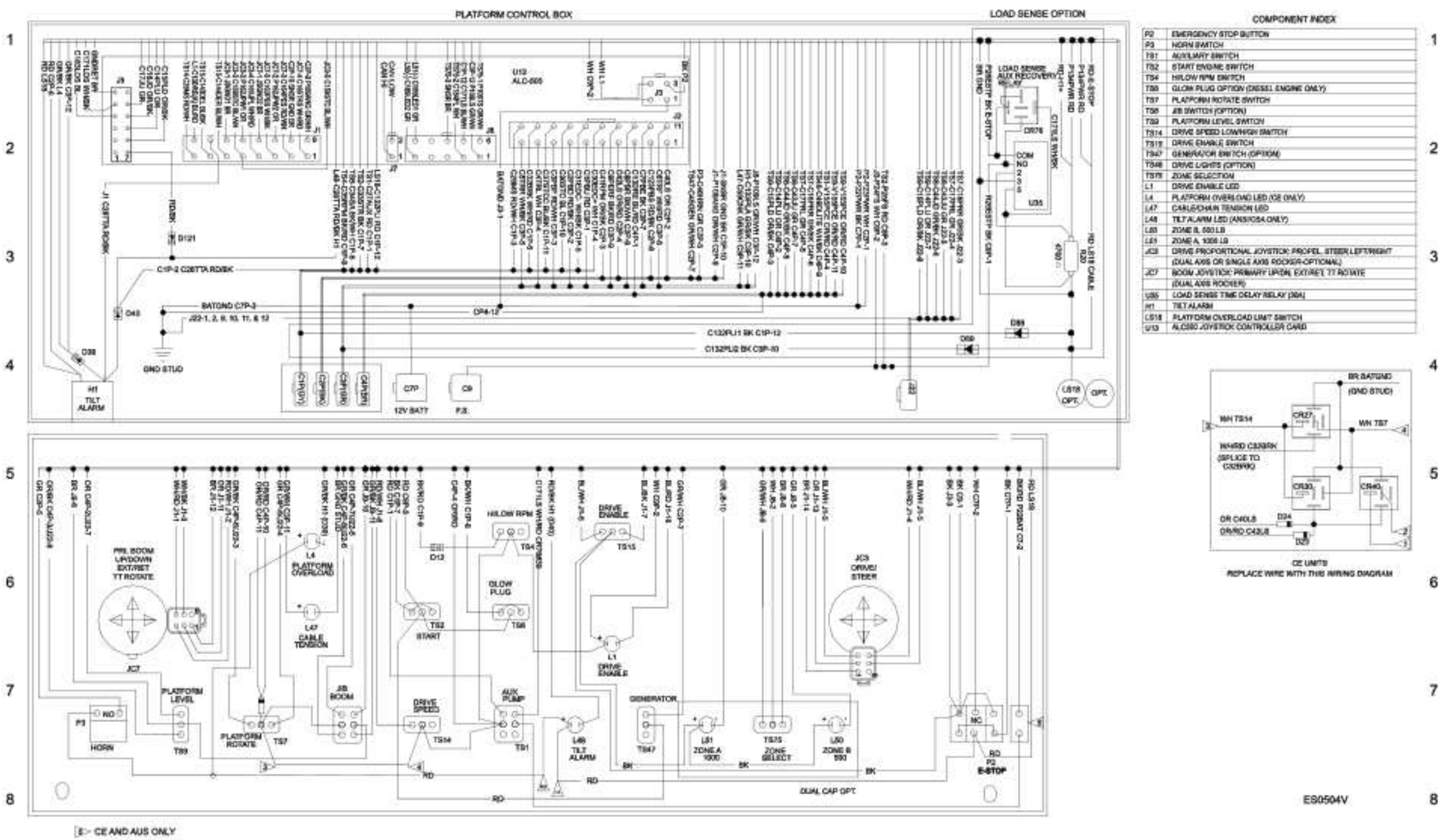





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# Platform Control Box, S-80 • S-85

## Deutz TD2011L04i Models (ANSI / CSA)




COMPONENT INDEX

| | |
|---|---|
| P2 | EMERGENCY STOP BUTTON |
| P3 | HORN SWITCH |
| TS1 | AUX/SMART 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) |
| LS0 | ZONE B, 500 LB |
| LS1 | ZONE A, 1000 LB |
| JC3 | DRIVE PROPORTIONAL JOYSTICK: PROPEL, STEER LEFT/RIGHT (DUAL AXIS OR SINGLE AXIS ROCKER-OPTIONAL) |
| JC7 | BOOM JOYSTICK: PRIMARY UP/DN, EXT/RET, YT ROTATE (DUAL AXIS ROCKER) |
| U35 | LOAD SENSE TIME DELAY RELAY (30A) |
| H1 | TILT ALARM |
| LS18 | PLATFORM OVERLOAD LIMIT SWITCH |
| U13 | ALC500 JOYSTICK CONTROLLER CARD |



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