PART NO. TOLAC50-EN-00

HITACHI

Reliable solutions

Technical Manual

Operational Principle

ZX

145W-6

Wheeled Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOLAC50-EN
Technical Manual (Troubleshooting)	: Vol. No.TTLAC50-EN
Workshop Manual	: Vol. No.WLAC50-EN
Engine Manual	: Vol. No.ETLAB50-EN, EWLAB50-EN

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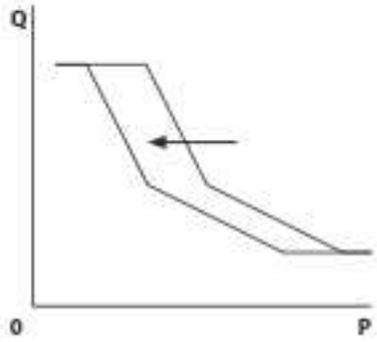
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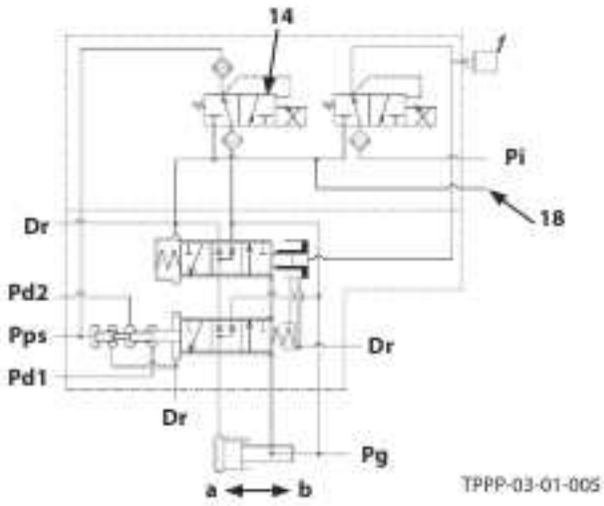
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- Control by Pilot Pressure from Torque Control Solenoid Valve (14)
  MC1 (main controller 1) sends the signals to the torque control solenoid valve (14) according to the engine speed and the signals from sensors.
  Torque control solenoid valve (14) delivers the torque control pilot pressure Pps to the regulator in response to the signals from MC1. When receiving the torque control pilot pressure Pps, the regulator reduces the pump delivery flow rate.
  (Refer to SYSTEM/Control System.)



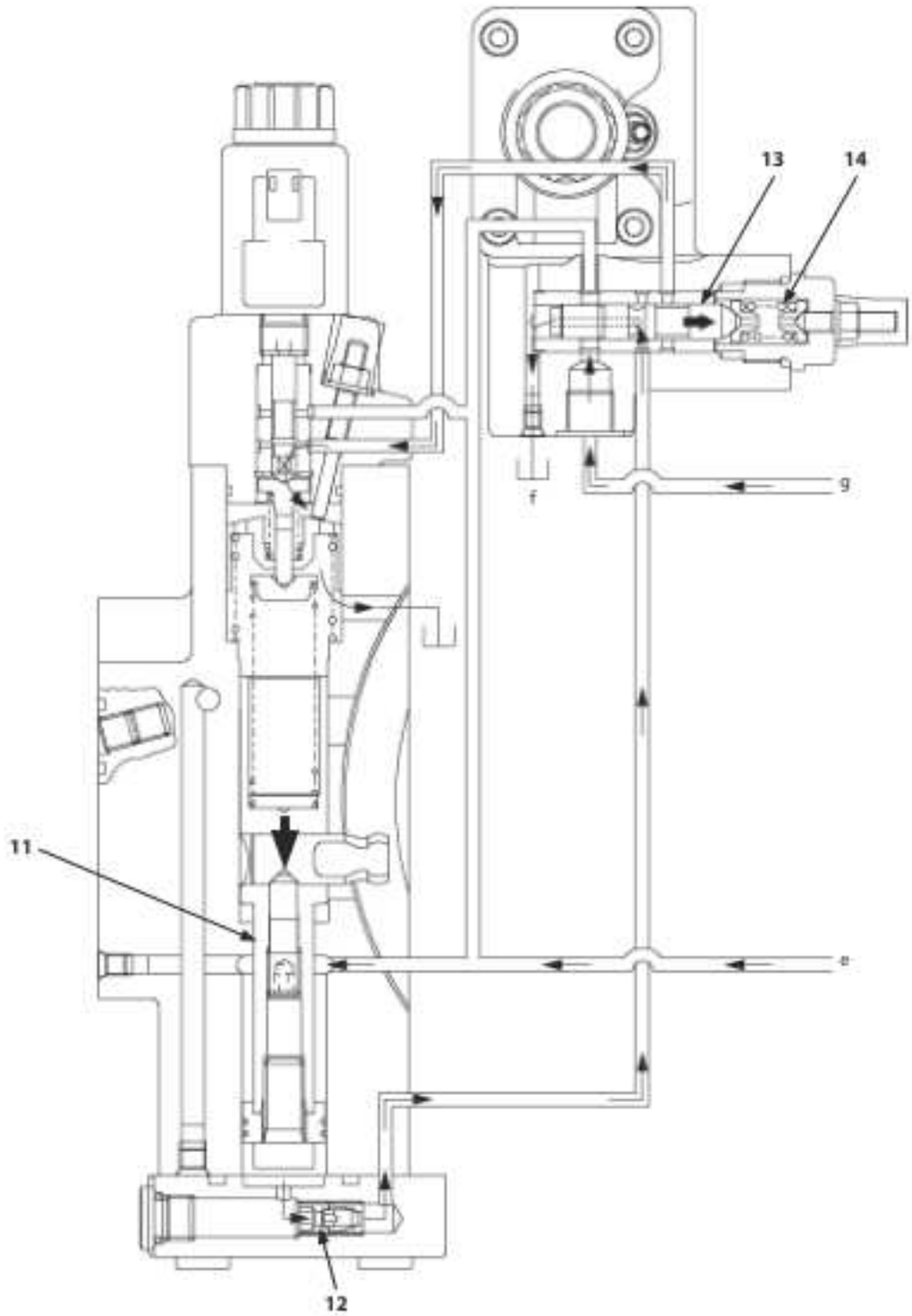
Q- Flow Rate P- Pressure

Pump 2 Regulator



Pd1- Pump 1 Delivery Pressure
Pd2- Pump 2 Delivery Pressure
Dr- Returning to Hydraulic Oil Tank
Pi- Pump Control Pressure
Pps- Torque Control Pressure
14- Torque Control Solenoid Valve
Pg- Primary Pilot Pressure (From Pilot Pump)
a- Displacement Angle Increase
b- Displacement Angle Decrease
18- Air Bleed

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TCJB-03-07-014

e- Motor Circuit Pressure
f- Hydraulic Oil Tank
g- Motor Driving Oil Pressure
11- Servo Piston
12- Orifice
13- Pilot Piston
14- Spring

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CAB HARNESS

Applicable Machine

Attach to vol. No.	Model
TTLAB50-EN-00	ZX140W-6
TTLAC50-EN-00	ZX145W-6

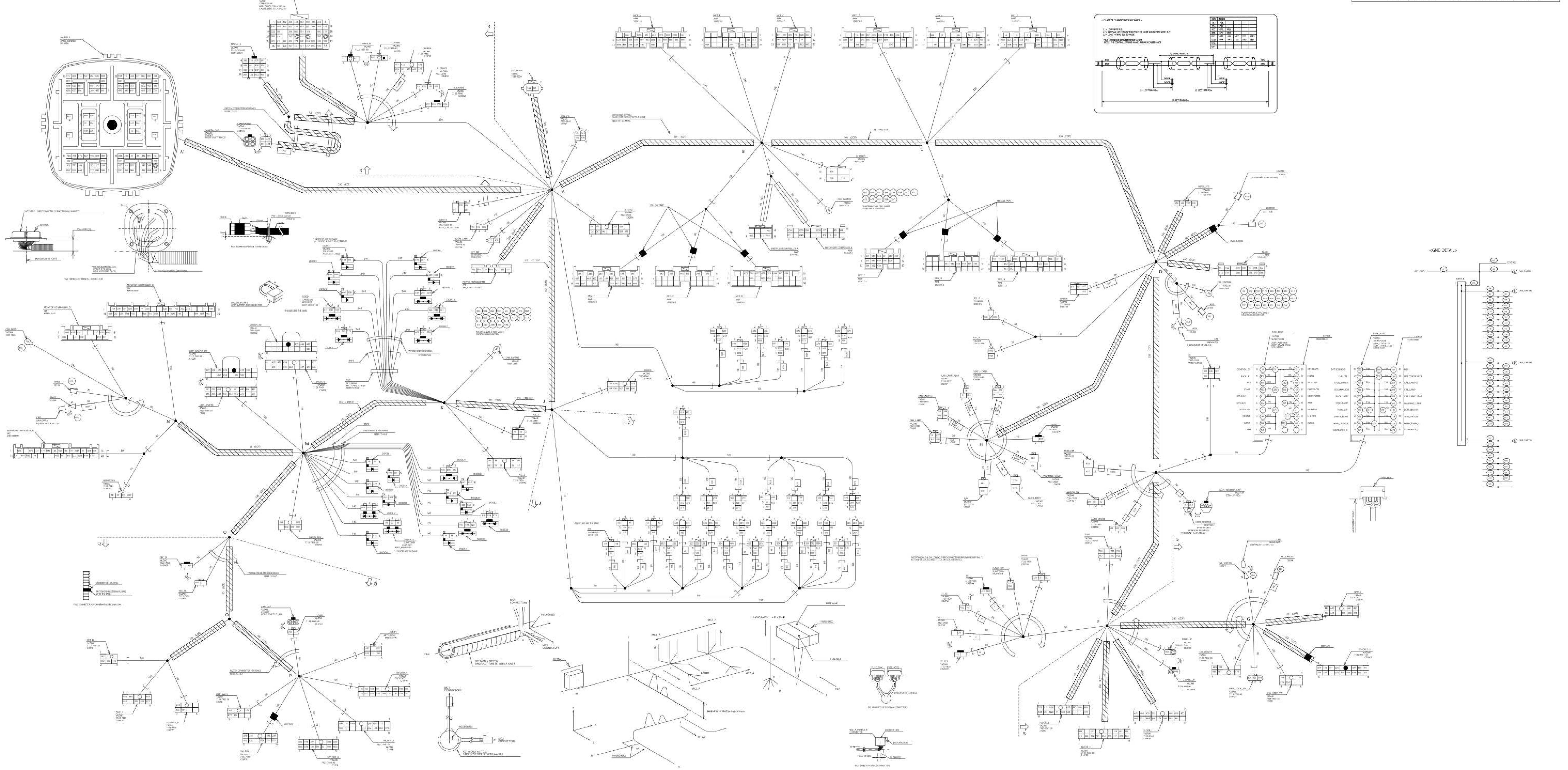
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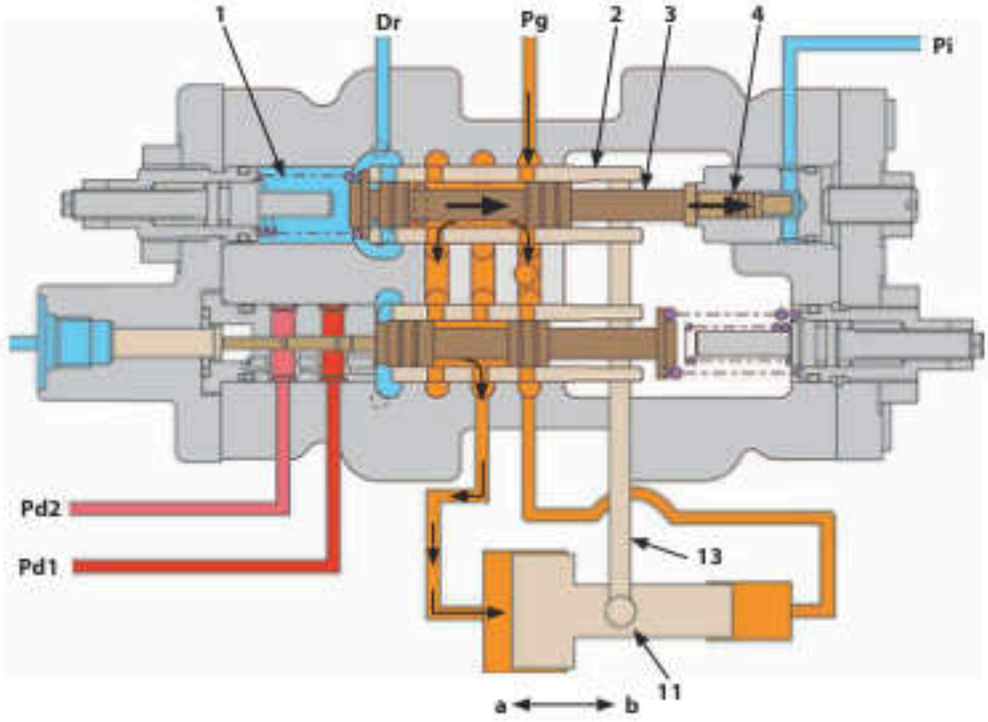
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To order parts on the drawing, be sure to consult the Parts Catalog.



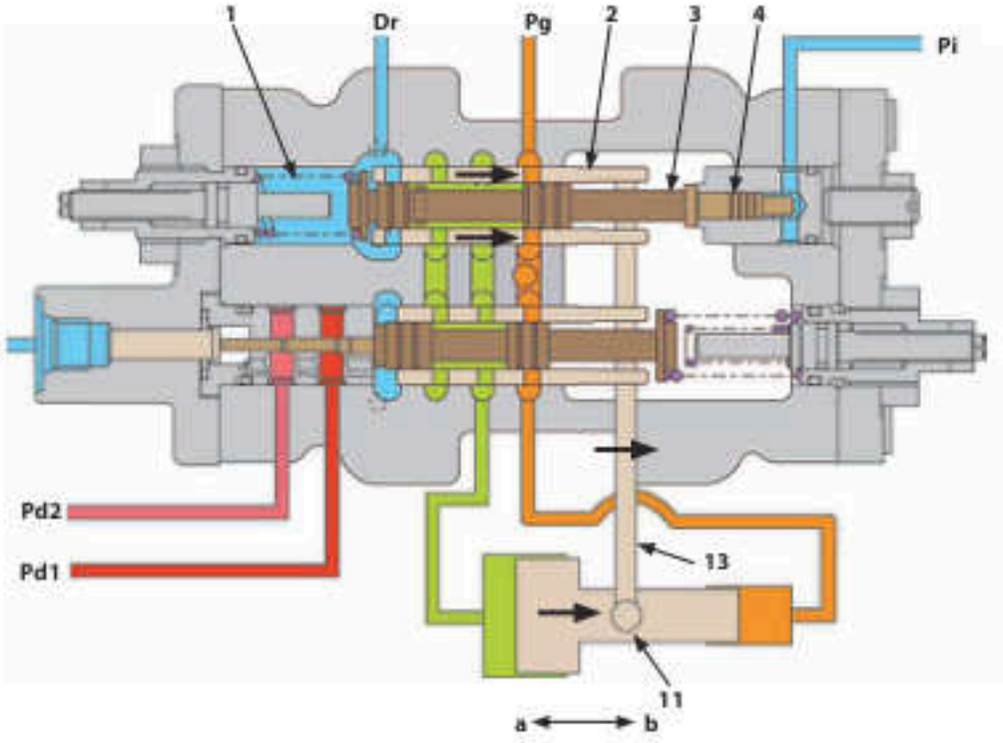
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NOTE: The figure shows the pump 2 regulator.



TPPP-03-01-018



TPPP-03-01-019

Pd1- Pump 1 Delivery Pressure
Pd2- Pump 2 Delivery Pressure

Dr- Returning to Hydraulic Oil Tank
Pi- Pump Control Pressure

Pps- Torque Control Pressure
Pg- Primary Pilot Pressure (From Pilot Pump)

a- Displacement Angle Increase
b- Displacement Angle Decrease

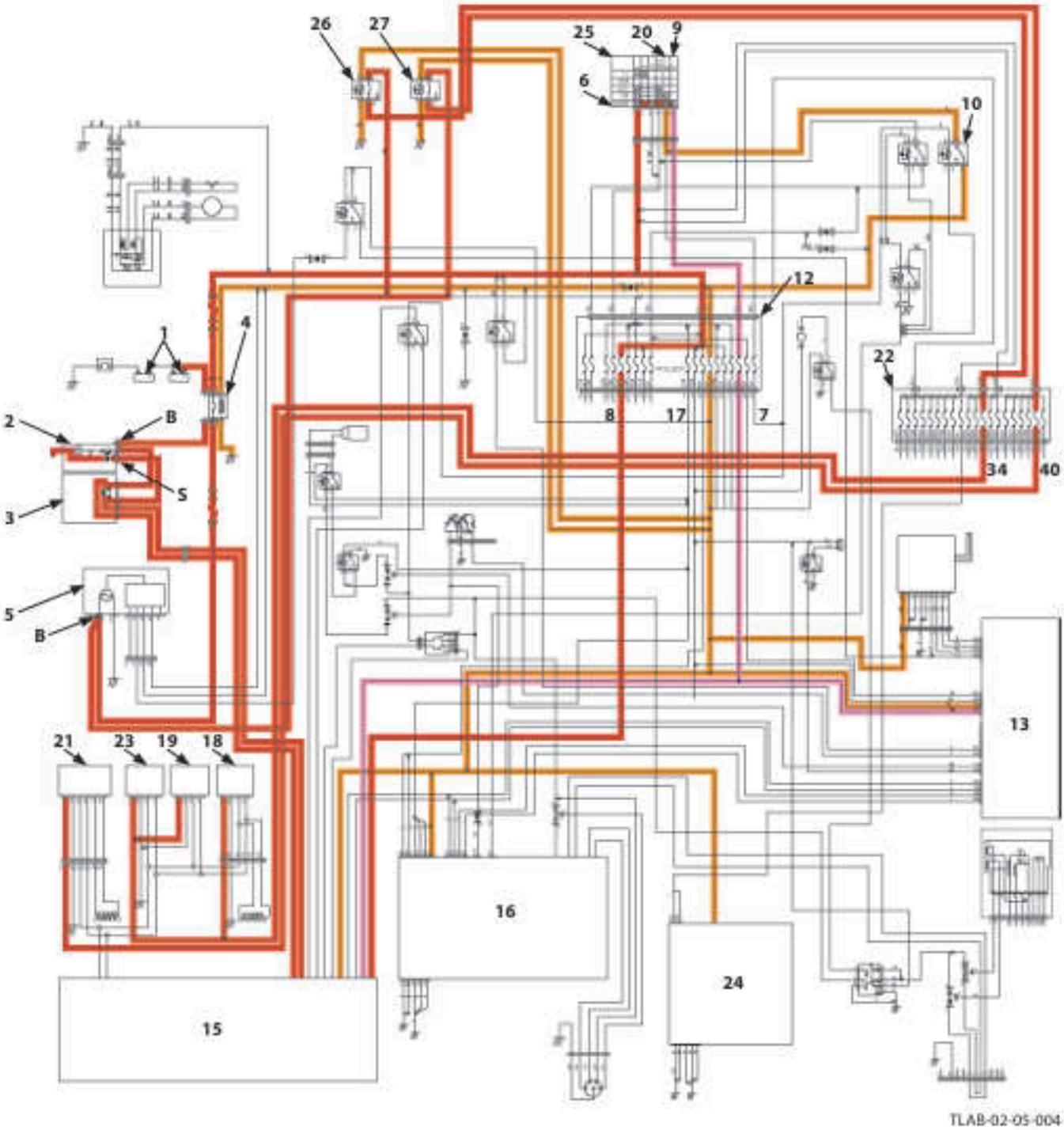
1- Spring
2- Sleeve A

3- Spool A
4- Piston

11- Servo Piston

13- Link

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TLAB-02-05-004

1- Battery
2- Starter
3- Starter Relay 1
4- Battery Relay
5- Alternator
6- START Position
9- Terminal ST
10- Key Switch ON Cut Relay
12- Fuse Box 1
13- Monitor Controller
15- ECM
16- MC1
18- DEF Sensor Unit
19- Upstream NOx Sensor
20- Terminal M
21- EGR Controller
22- Fuse Box 2
23- Downstream NOx sensor
24- MC2
25- Key Switch
26- EGR Key Switch ON Relay
27- SCR Key Switch ON Relay

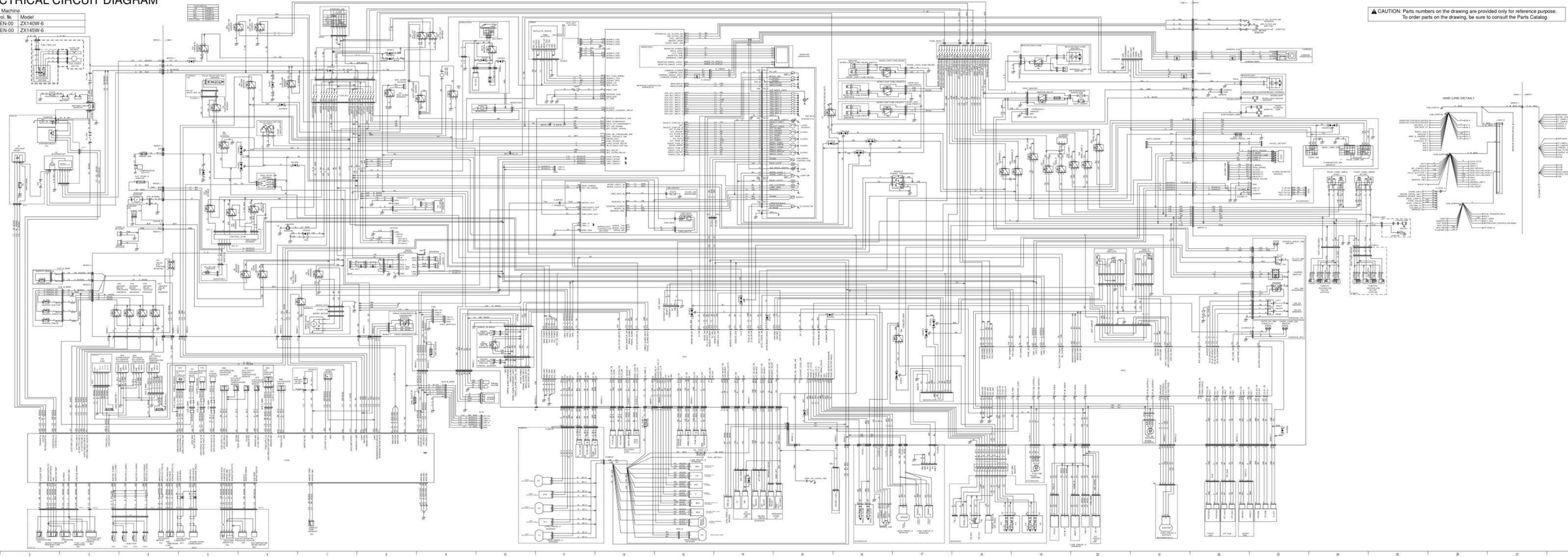
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ELECTRICAL CIRCUIT DIAGRAM

Applicable Machine

Attach to vol. No.	Model
TTLAB50-EN-00	ZX140W-6
TTLAC50-EN-00	ZX145W-6

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