PART NO. TOCEB-E-00

HITACHI

Technical Manual

Operational Principle

ZAXIS

140W-3

Wheeled Excavator

Service Manual consists of the following separate Part No;

Technical Manual (Operational Principle)	: Vol. No.TOCEB-E
Technical Manual (Troubleshooting)	: Vol. No.TTCEB-E
Workshop Manual	: Vol. No.WCEB-E

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SECTION 2
SYSTEM



CONTENTS

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(Network Provided for Machine) T2-1-2
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ECM: Engine Control Module T2-1-12
ICF: Information Controller T2-1-14
Monitor Unit T2-1-16
Option Controller T2-1-31
Steering Column Monitor T2-1-36

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Pump Control T2-2-32
Valve Control T2-2-50
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Electric and Hydraulic
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Wiper/Washer Circuit T2-5-28
Light Circuit T2-5-30

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SECTION 3
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OUTLINE

The electrical circuit is broadly divided into the main circuit, monitor circuit, control circuit and steering column monitor circuit.

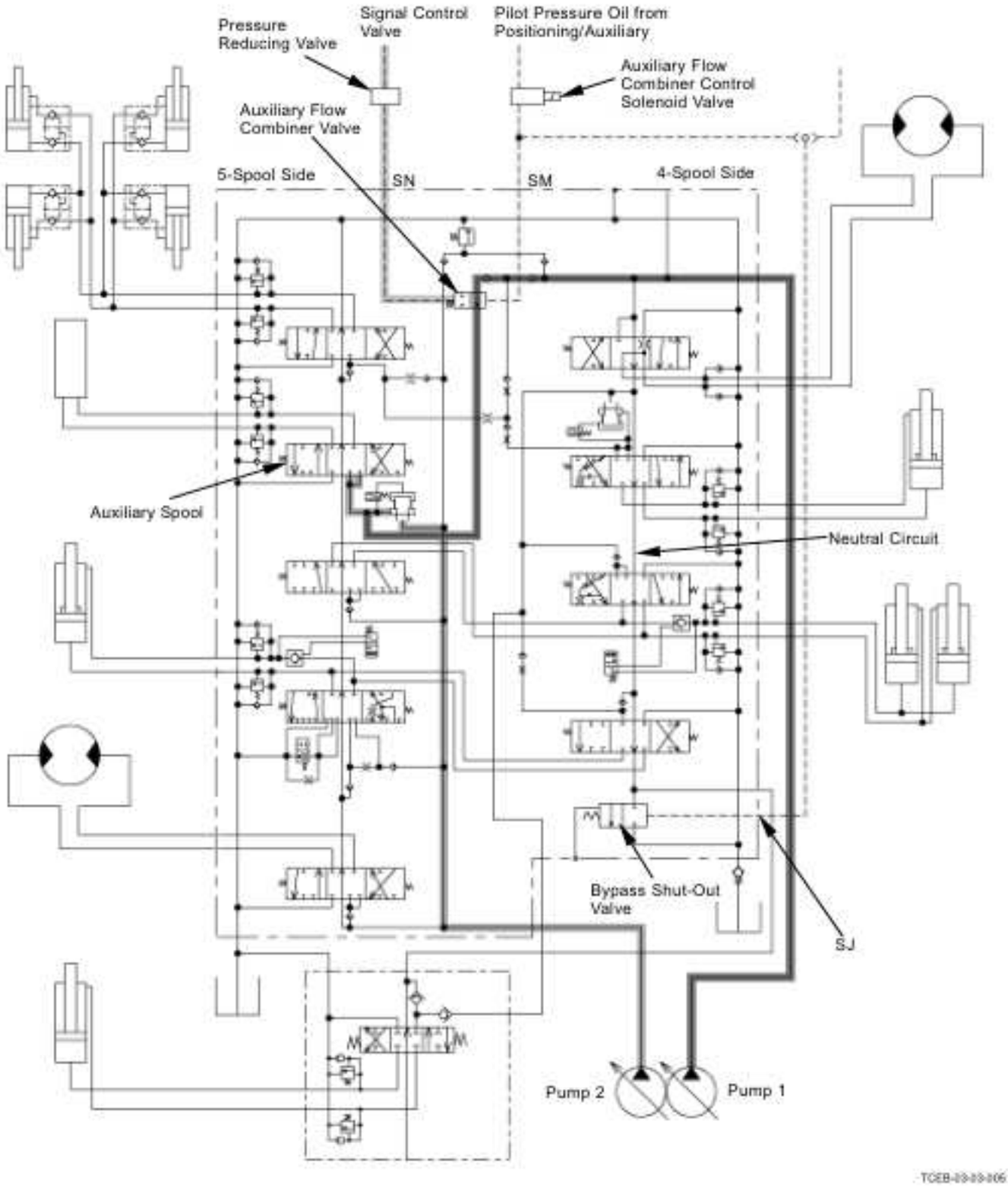
- Main Circuit
  The engine and accessory operation related circuit.

- Monitor Circuit
  The electrical circuit group consists of the monitors, sensors and switches, and displays the machine operation status.

- Control Circuit (Refer to the SYSTEM / Control System group.)
  The control circuit is categorized into the engine, pump and valve control circuits. Each circuit consists of the actuators such as solenoid valves, MC (main controller), ECM (engine control module), switch panels, sensors and pressure switches.

- Steering Column Monitor Circuit
  This circuit is used when the machine travels and consists of head light, turn signal light, stop light and steering column monitor.

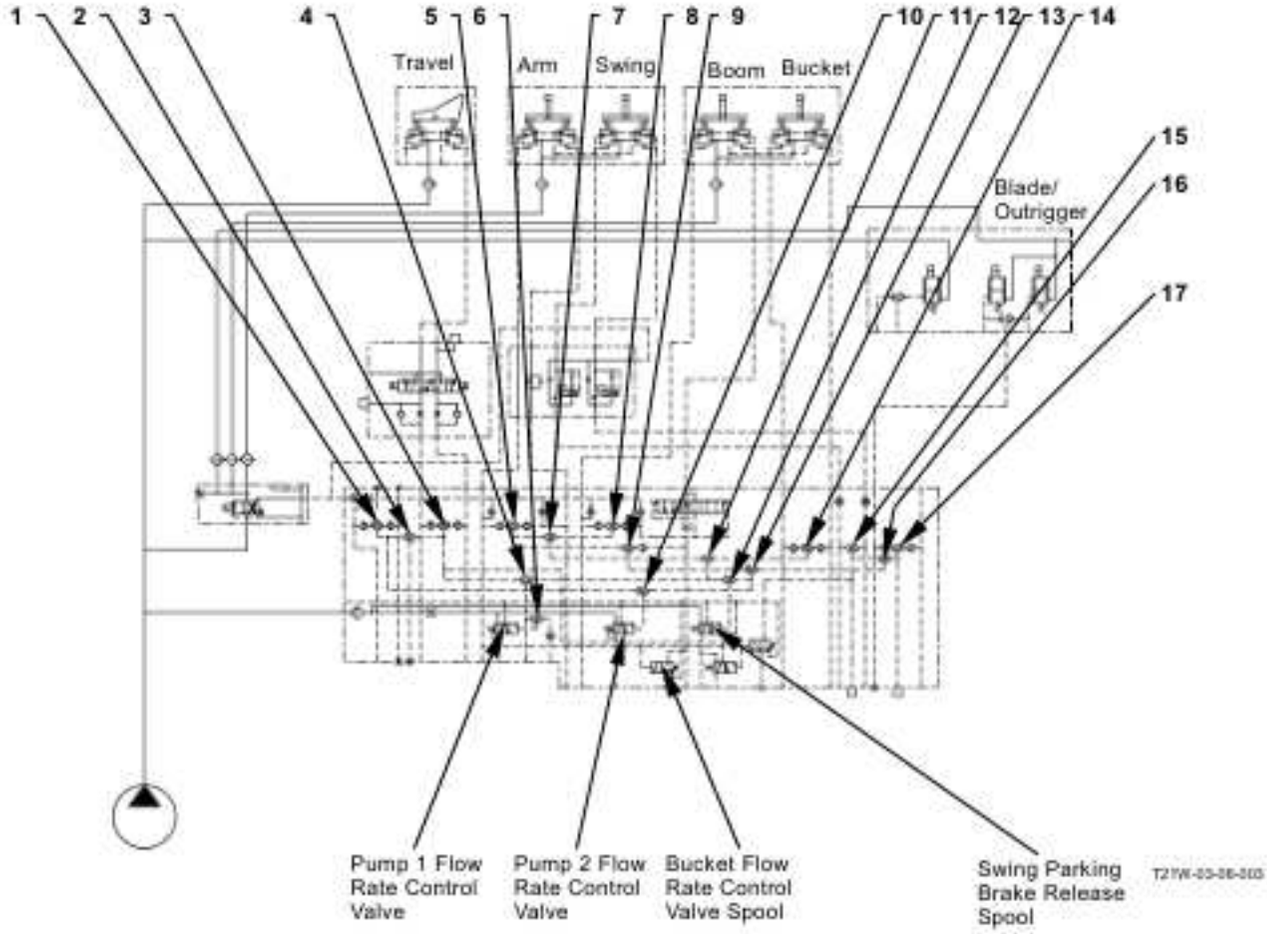
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NOTE: The pressure reducing valve and the auxiliary flow combiner control solenoid valve are installed only on the machines equipped with the optional parts.

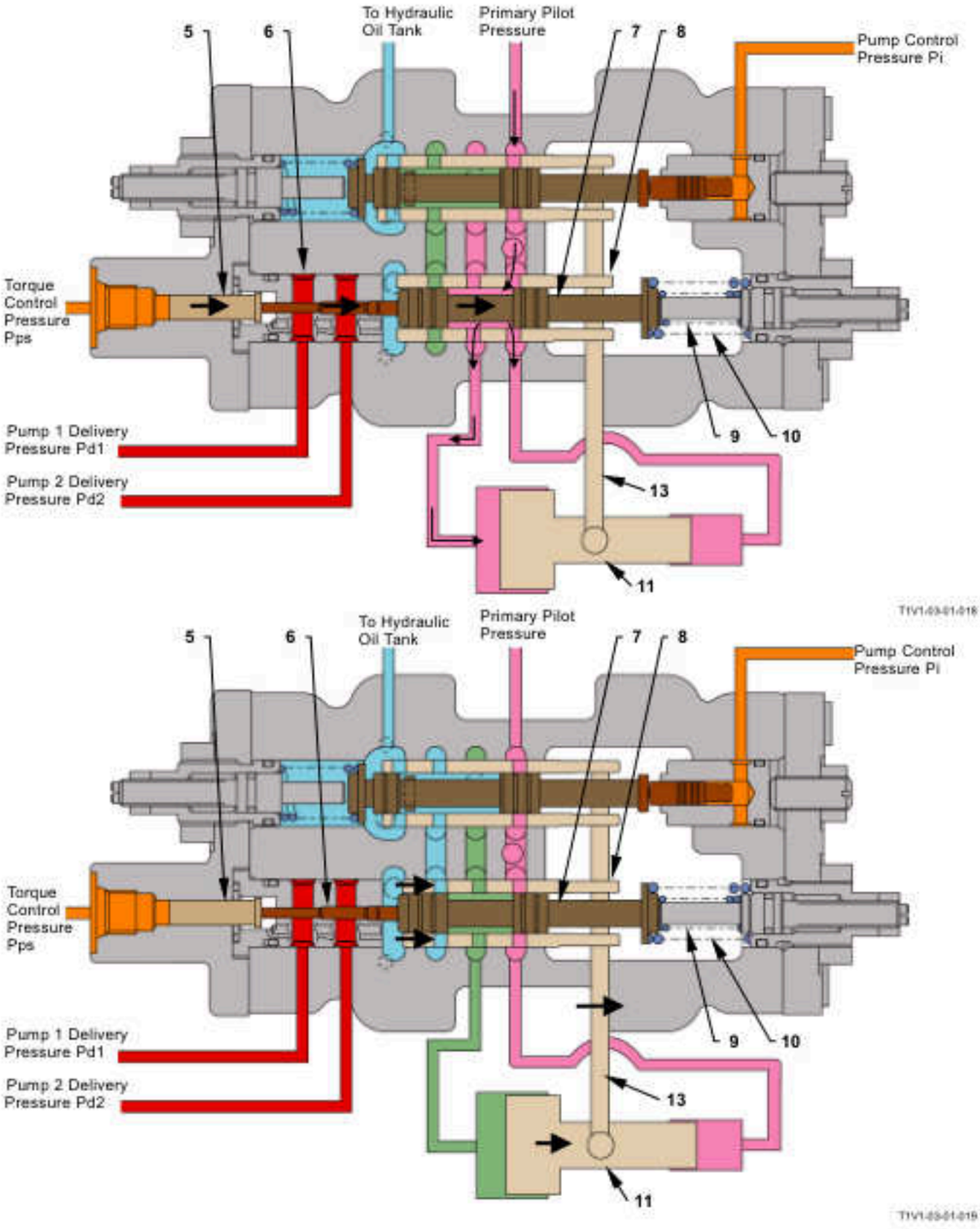
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Monoblock Boom / STD Specification



1 - Unused
2 - Travel
3 - Travel
4 - Boom / Arm / Bucket / Travel
5 - Arm
6 - Boom / Arm / Bucket / Travel / Auxiliary / Positioning
7 - Boom / Arm
8 - Boom
9 - Arm / Boom Raise
10 - Boom Raise / Arm / Travel / Swing / Blade / Outrigger / Auxiliary
11 - Boom / Arm / Bucket
12 - Boom / Arm / Bucket / Swing / Auxiliary
13 - Arm / Boom Raise / Swing / Blade / Outrigger / Auxiliary
14 - Bucket
15 - Swing
16 - Swing / Blade / Outrigger / Auxiliary
17 - Blade / Outrigger / Auxiliary

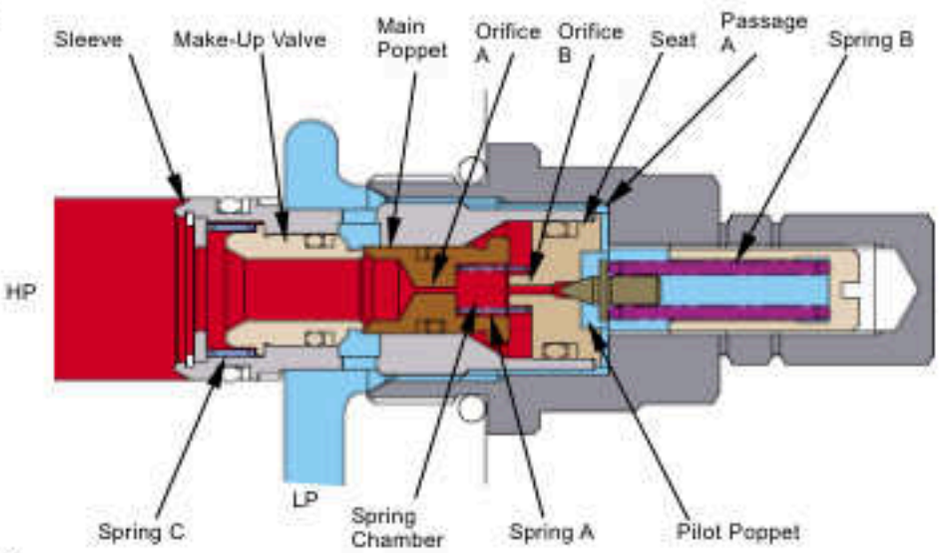
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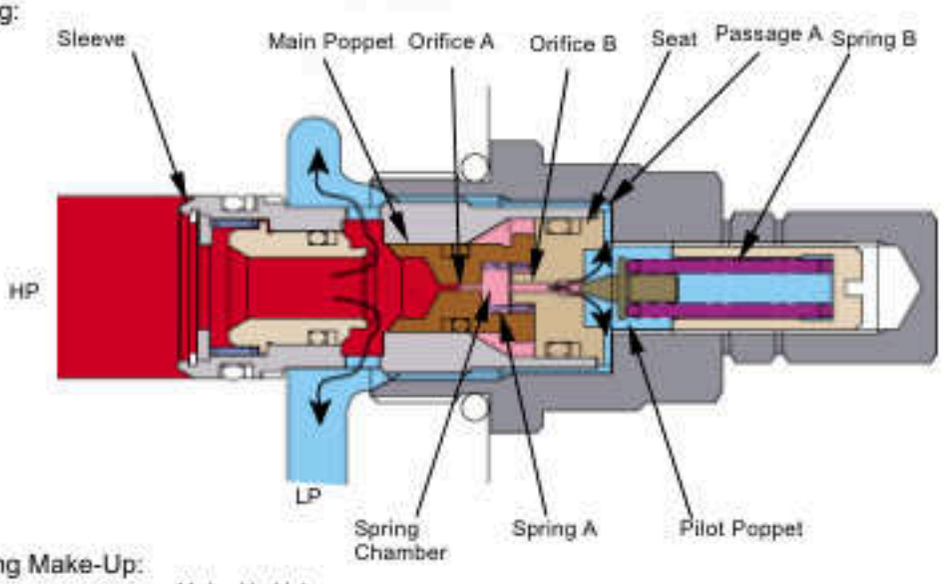
5 - Load Piston 1
6 - Load Piston 2
7 - Spool B
8 - Sleeve B
9 - Inner Spring
10 - Outer Spring
11 - Servo Piston
13 - Link

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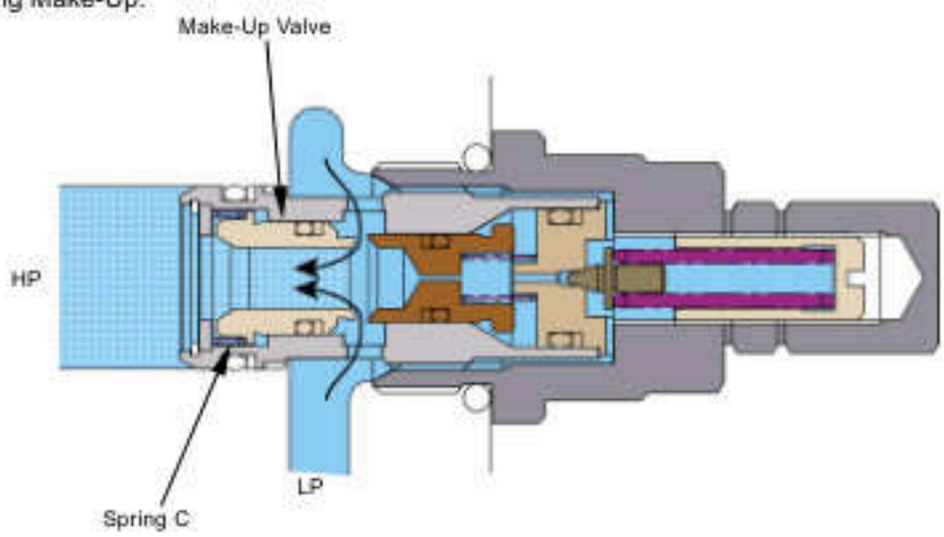
When Normal:



When Relieving:



When Operating Make-Up:

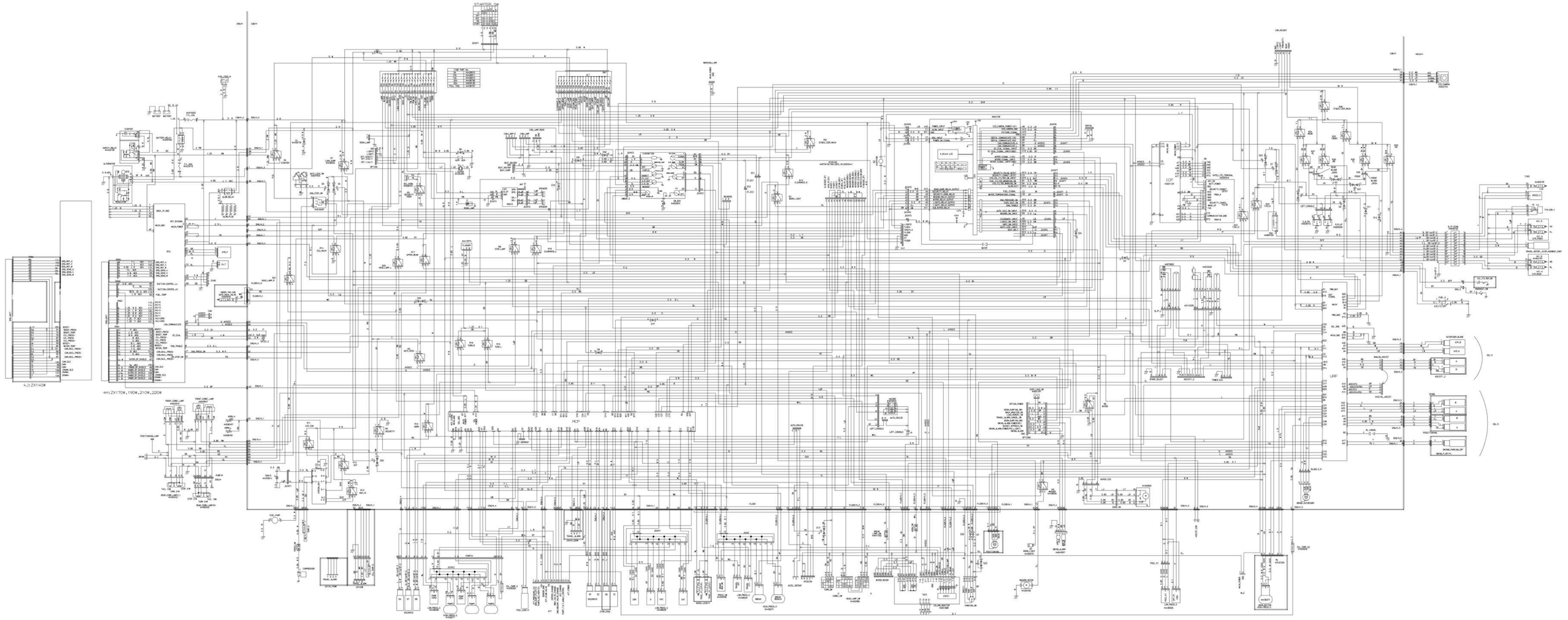


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Attach to Vol. No.: TTCEB-E-00, TTCGB-E-00, TTCJB-E-00

ZAXIS140W-3/170W-3/190W-3/210W-3/220W-3 ELECTRICAL CIRCUIT DIAGRAM (STANDARD)

⚠CAUTION: Parts numbers on the drawing are provided only for reference purpose.
To order parts on the drawing,be sure to consult the Parts Catalog.



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