Manual No. : KM-CBBE
Vol. No. : WCBBE-00

Workshop Manual

ZAXIS 160W Wheeled Excavator

Service Manual (Manual No. KM-CBBE) consists of the following three separate volumes;

Technical Manual (Operational Principle)	: Vol. No. TOCBBE
Technical Manual (Troubleshooting)	: Vol. No. TTCBBE
Workshop Manual	: Vol. No. WCBBE

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GENERAL



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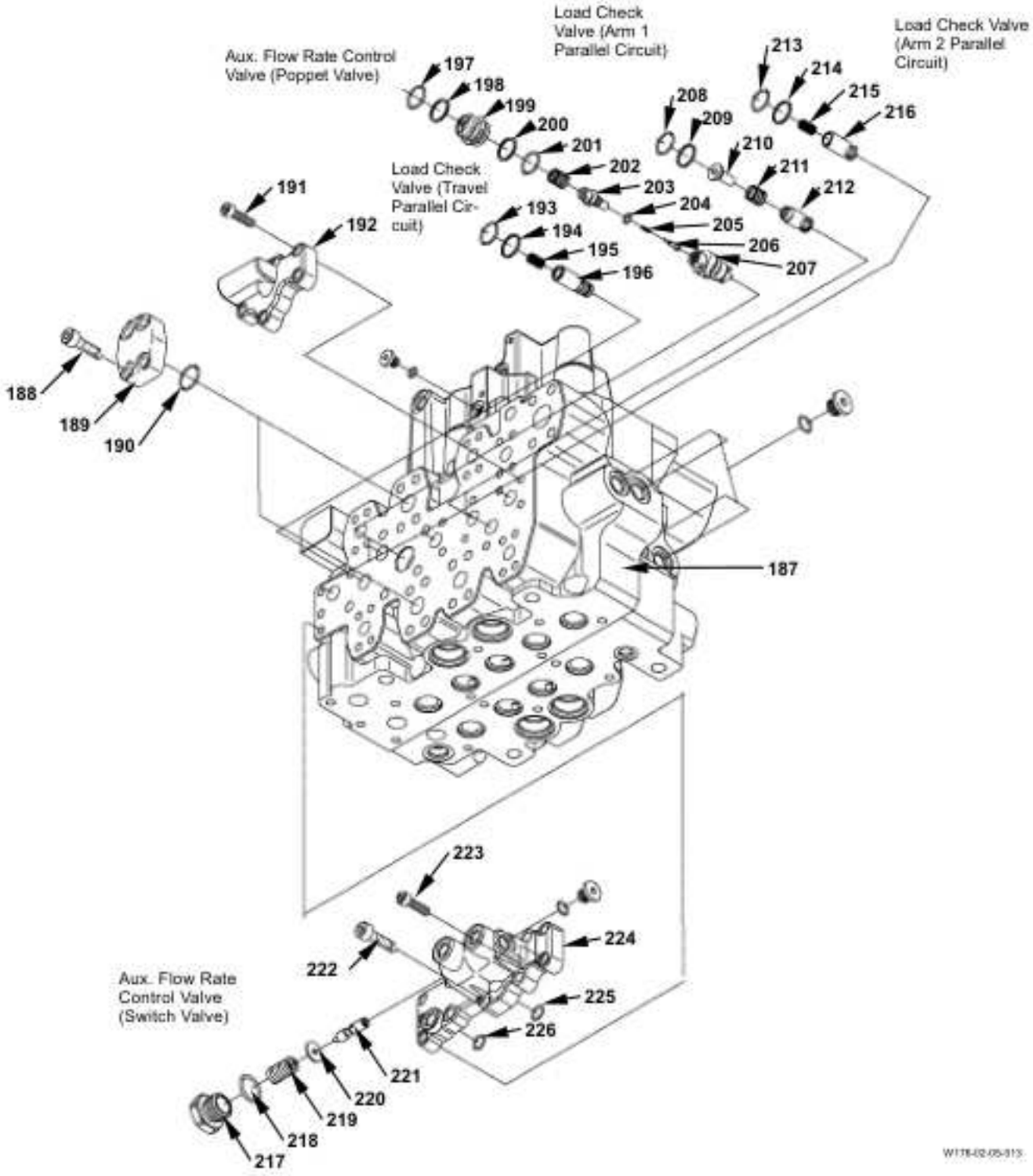
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Disassemble Swing Motor

- Be sure to read "Precautions for Disassembly and Assembly" thoroughly on page W1-1-1 before starting the disassembly work.

CAUTION: Swing motor assembly weight: 47 kg (105 lb)

IMPORTANT: Do not disassemble relief valve (32).

1. Remove relief valves (32) (2 used) from valve casing (28).
   : 41 mm
2. Remove plugs (24) (2 used) from valve casing (28).
   : 14 mm
3. Remove springs (26) (2 used) and poppets (27) (2 used) from valve casing (28).
4. Make mating marks at the joint surface between valve casing (28) and casing (1). Then loosen socket bolts (29) (4 used). At this moment, there is a clearance between valve casing (28) and casing (1). Take this clearance down.
   : 17 mm
5. Remove valve casing (28) from casing (1).

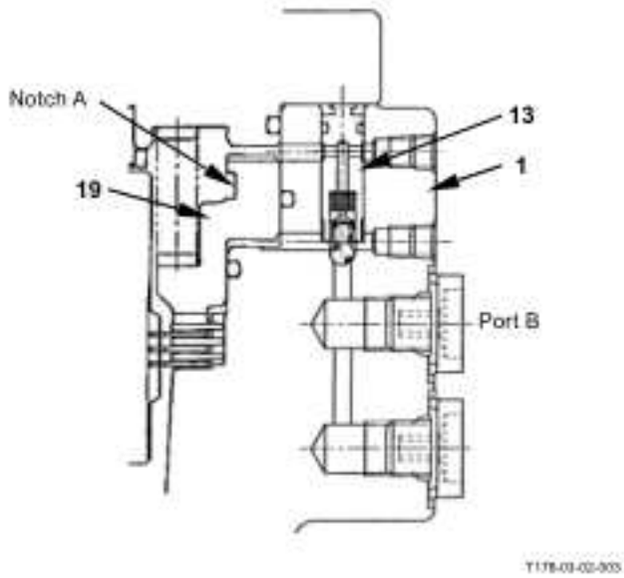
NOTE: At this moment, valve casing (28) may be with valve plate (21) attached. Take care do not drop valve plate (21).

IMPORTANT: Be sure not to damage the mating surface when separating valve plate (21) from valve casing (28) or rotor (9) with a screwdriver. (Be sure not to mismatch the surfaces of the valve plate when installing.)

6. If valve plate (21) is still on rotor (9) in step 5, remove the valve plate from the rotor. Remove springs (20) (24 used).

CAUTION: Another method is to float fload brake piston (19) by blowing air from port B. However, piston (13) may fly out when blowing air. Do not use this method.

7. Install tool (ST 1468) into notch A of brake piston (19), then pull brake piston (19) out from casing (1).



8. Remove O-rings (17, 18) from casing (1).

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Installation of Rear Axle

CAUTION: Rear axle (7) weight: 440 kg (970 lb)

1. Lift rear axle (7), then install rear axle (7) to frame (3) with bolts (8) (8 used) and nuts (6) (8 used).
   : 30 mm
   : 560 N·m (57.0 kgf·m, 410 lbf·ft)

2. Connect brake pipe (5).
   : 19 mm
   : 29.5 N·m (3.0 kgf·m, 21.5 lbf·ft)

CAUTION: Propeller shaft (10) weight: 30 kg (66 lb)

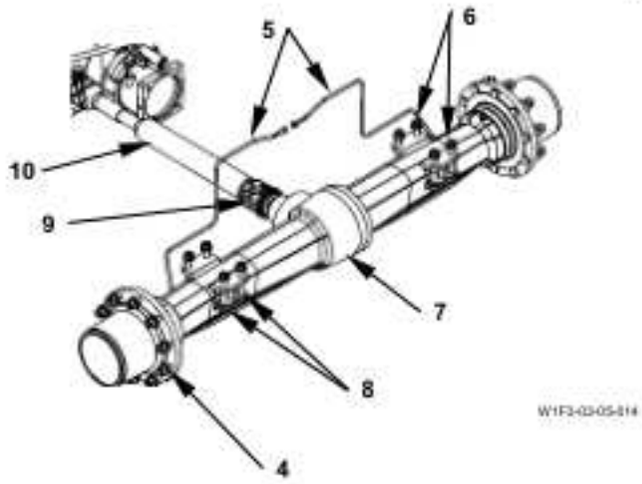
3. Install propeller shaft (10) to rear axle (7) with nuts (9) (8 used).
   : 14 mm
   : 108 N·m (11gf·m, 80 lbf·ft)

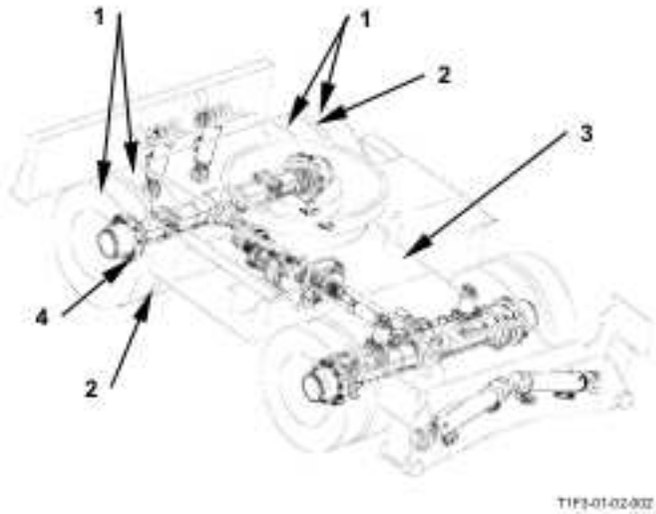
CAUTION: Tire (3) weight: 98 kg (220 lb) Tire ring (2) weight: 17 kg (38 lb)

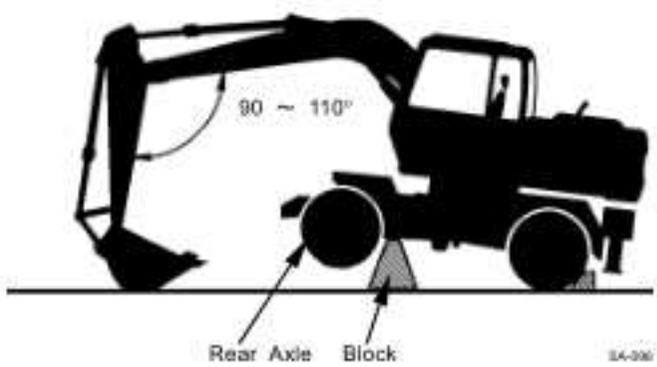
4. Install tire (1), tire ring (2) and tire (1) into rear axle (7) in order then temporarily tighten them with nuts (4) (10 used). The installing order for both sides are the same.
   : 30 mm

5. Remove the block from frame (3).

6. Tighten tires (1) (4 used) and tire rings (2) (2 used) with nuts (4) (20 used)
   : 30 mm
   : 600 N·m (61 kgf·m, 440 lbf·ft)



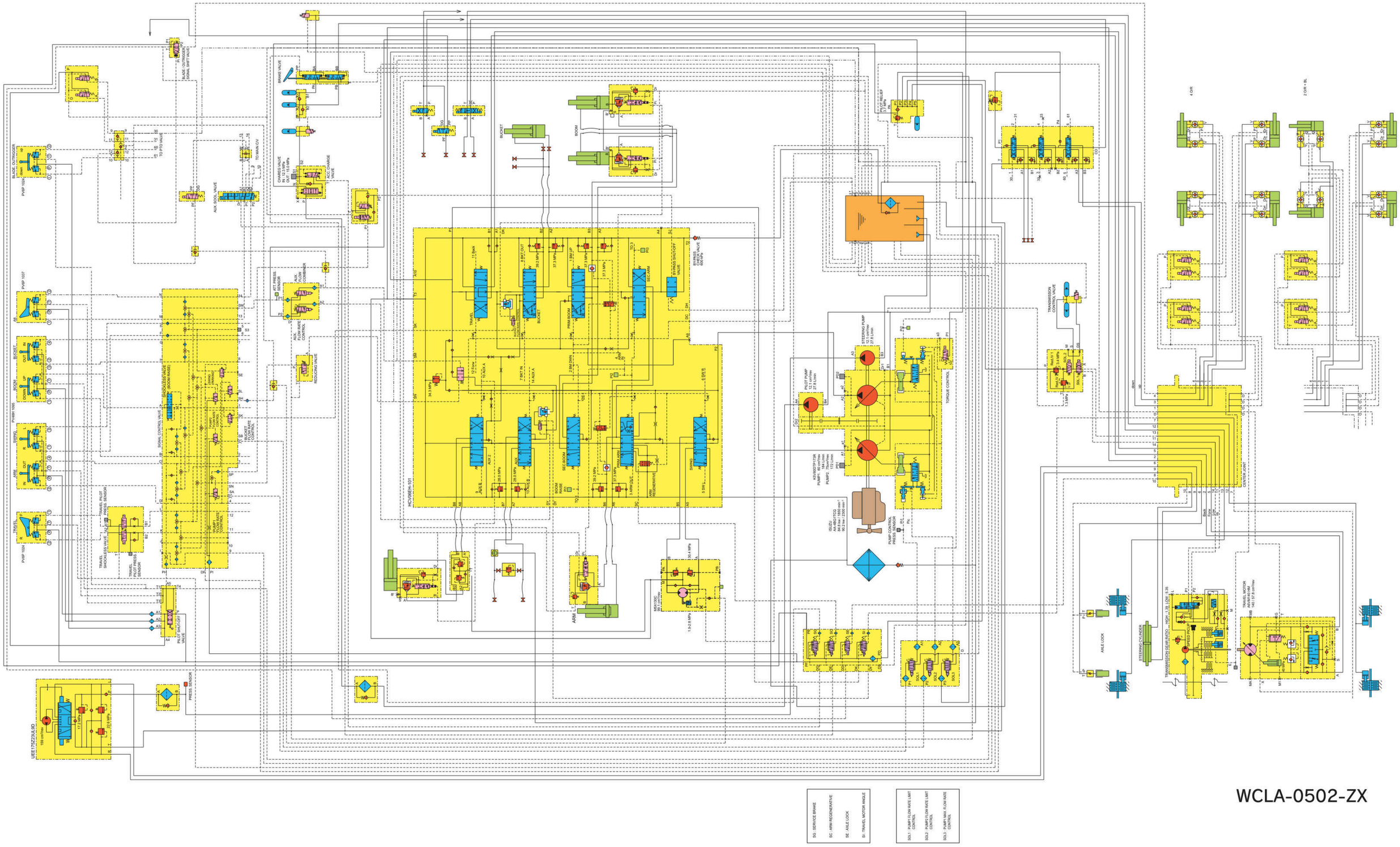




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ZAXIS 160W HYDRAULIC CIRCUIT DIAGRAM (FULL OPTION)



5G : SERVICE BRAKE
5C : ARM REGENERATIVE
5E : AXLE LOCK
5I : TRAVEL MOTOR ANGLE

SOL.1 : PUMP1 FLOW RATE LIMIT CONTROL
SOL.2 : PUMP2 FLOW RATE LIMIT CONTROL
SOL.3 : PUMP1 MAX. FLOW RATE CONTROL

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