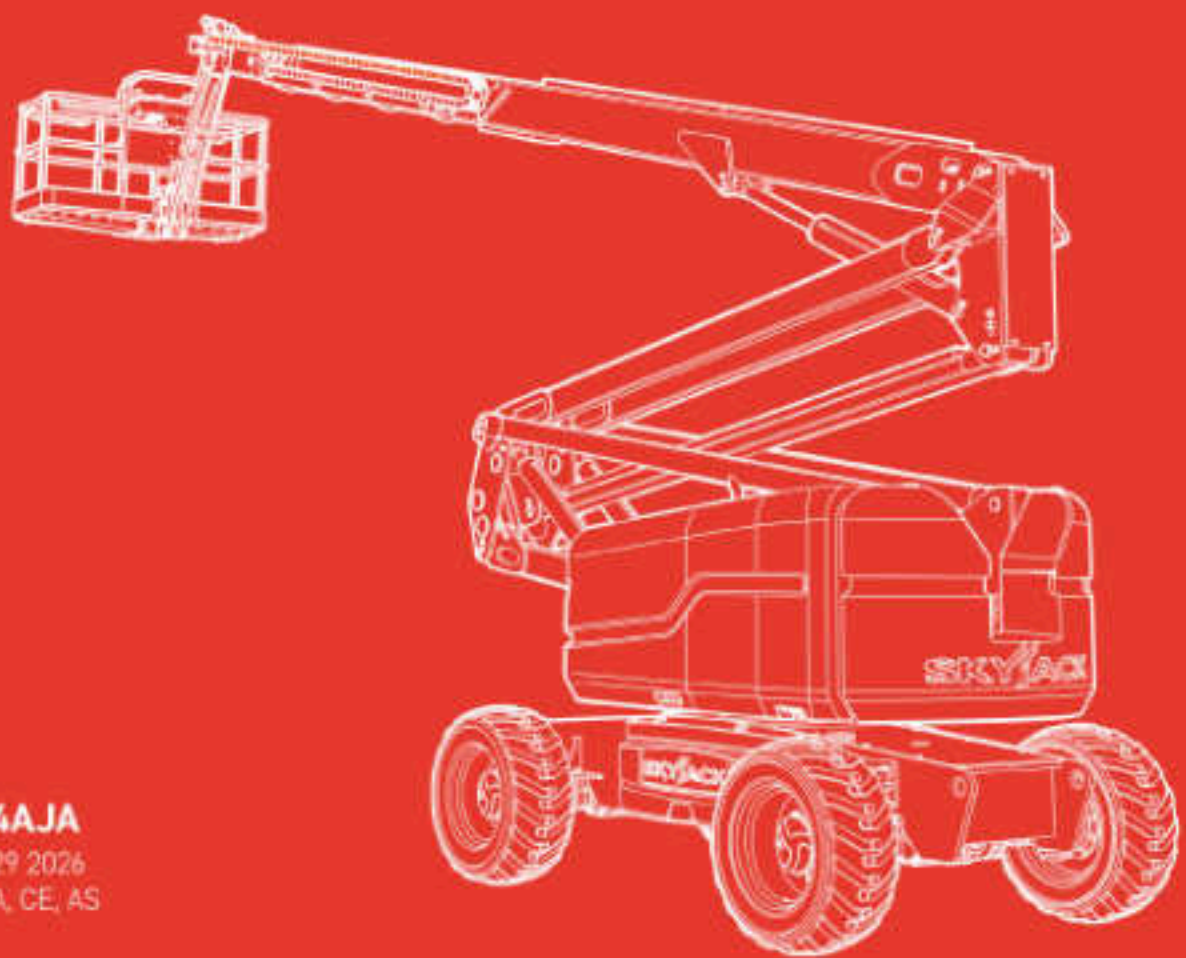
SKYJACK

SERVICE MANUAL

SJ85 AJ

ARTICULATING BOOM



229044AJA

January 29 2026

ANSI/CSA, CE, AS

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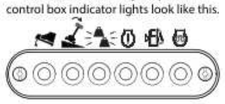
Table 2.10 Hydraulic Specifications

Description		US	Metric
Pumps			
Drive Pump	Displacement	2.48 in^3/r 28.7 gal/min @ 2675 rpm	40.6 cm^3/r 108.6 L/min @ 2675 rpm
	Drive Pump Pressure	3000 psi	207 bar
	Charge Pump Displacement	0.84 in^3/r	13.8 cm^3/r
	Charge Pump Pressure	300 - 320 psi	20.68 - 22.41 bar
System Pump	Displacement - Static	3.00 in^3/r 34.74 gal/min @ 2675 rpm	49.2 cm^3/r 131.5 L/min @ 2675 rpm
	System Pump Pressure	3050 psi	210 bar
Filters			
High Pressure Filter	Max. Operating Pressure	4000 psi	276 bar
Hydraulic Return Filter	Max. Operating Pressure	120 psi	8 bar
Motors			
Drive Motor	Displacement - Low	0.90 in^3/r	14.7 cm^3/r
	Displacement - High	2.48 in^3/r	40.6 cm^3/r
Swing Motor	Motor Displacement	6.1 in^3/r	100 cm^3/r
	Maximum Operating Pressure	3000 psi	207 bar
Cylinders			
Extension Cylinder	Bore	3.93 in	10 cm
	Rod Diameter	2.95 in	7.5 cm
	Stroke	255 in	647.7 cm
	Maximum Boom Pressure	3000 psi	207 bar
Lift Cylinder	Bore	5.71 in	14.5 cm
	Rod Diameter	2.95 in	7.5 cm
	Stroke	46.83 in	119 cm
	Maximum Lift Pressure	4000 psi	276 bar
Steering Cylinder	Bore	3.06 in	7.8 cm
	Stroke	4.31 in	11 cm

For other component specifications, refer to the hydraulic schematic. *1281AB*

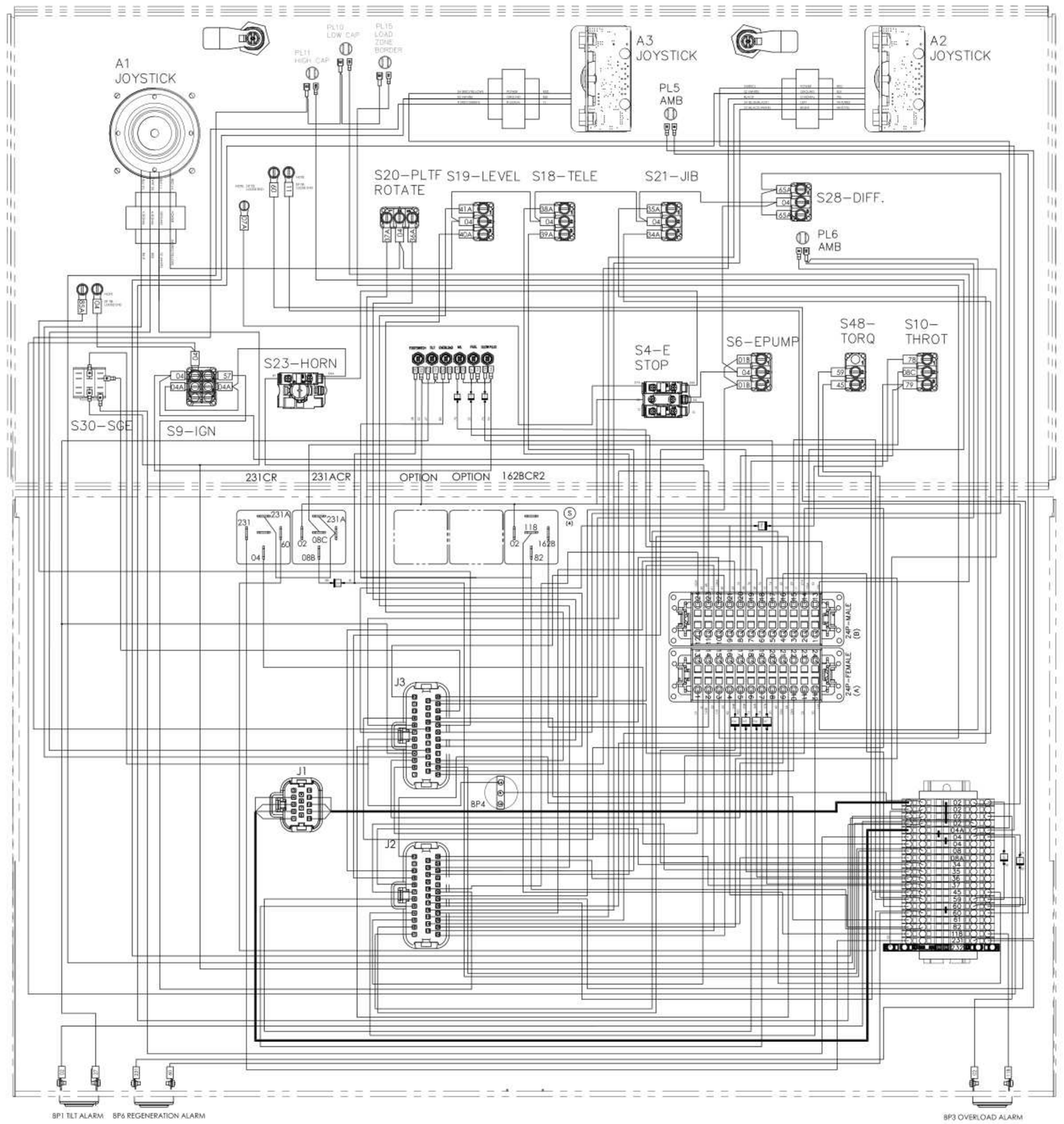
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Use this schematic if your platform control box indicator lights look like this.



Wire Numbers and Colour Codes

Relay diagram



M22460AE

3.55 Platform Controls Wiring - Deutz TCD2.2 with individual indicator LEDs

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5.8-7 Deutz TD2.9L Fault Codes (EMR5) - serial number A401 000 520 and above

DTC #	FTB	SPN	FMI	Fault description
P244B	F1	3521	0	DPF differential pressure: data is above the normal operational range (most severe level)
P2454	11	3251	4	DPF differential pressure: voltage is below the normal range or is shorted to a low source
P2455	12	3251	3	DPF differential pressure: voltage is above the normal range or is shorted to a high source
P2456	64	3251	2	DPF differential pressure: data erratic, intermittent or incorrect
P245F	21	520300	18	Pressure after DPF - data is below the normal operational range (moderately severe level)
P245F	22	520300	16	Pressure after DPF - data is above the normal operational range (moderately severe level)
P2463	F0	4781	16	DEF soot load: data is above the normal operational range (moderately severe level)
P2463	F1	4781	0	DEF soot load: data is above the normal operational range (most severe level)
P24E1	01	4377	2	NH3 sensor: data erratic, intermittent or incorrect
P24E9	01	4382	2	NH3 sensor heater: data erratic, intermittent or incorrect
P250A	00,2F	98	2	Oil level: data erratic, intermittent or incorrect
P250A, P250B	1C	98	31	Oil level: condition exists
P250E	13	98	14	Oil level: special instructions
P2541	11	94	4	Fuel low pressure sensor: voltage is below the normal range or is shorted to a low source
P2542	12	94	3	Fuel low pressure sensor: voltage is above the normal range or is shorted to a high source
P2560	7B	111	1	Coolant level sensor: data is below the normal operational range (most severe level)
P2604	02	729	12	Preheating relay: bad intelligent device or component
P2604	13	729	5	Preheating relay: current is below the normal range or open circuit
P2604	4B	729	12	Preheating relay: bad intelligent device or component
P260E	11	3697	4	Particle filler lamp: voltage is below the normal or shorted to a low source
P260E	12	3697	3	Particle filler lamp: voltage is above the normal or shorted to a high source
P268A	54	651	13	Injector 1: out of calibration
P26DF	01	3512	14	ECU sensor supply voltage 4: special instructions
P26DF	4B	3512	11	ECU sensor supply voltage 4: the root cause is not known
P26E0	11	3512	6	ECU sensor supply voltage 4: current is above the normal range or grounded circuit
P26E0	16	3512	1	ECU sensor supply voltage 4: data is below the normal operational range (most severe level)
P26E1	17	3512	0	ECU sensor supply voltage 4: data is above the normal operational range (most severe level)
P2ABD	F0	1188	11	TC wastegate: the root cause is not known
P2D87	4B	1071	11	Fan drive output: the root cause is not known
U0010	88	1231	14	CAN: special instructions
U0028	88	639	14	CAN: special instructions

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Standstill Regeneration Stages

Standstill Lamps ❸ ❹	Engine Lamp ❺	Audible Alarm ❻	Engine Torque	Action Required
Flashes slowly	Off	Pulsates slowly	100%	Perform the standstill operation at the next available opportunity, within 3 to 4 hours.
Flashes slowly	On	Pulsates slowly	75%	The standstill operation must be performed immediately.
Flashes quickly	Flashes	Pulsates quickly	40%	a. The standstill operation is no longer possible with on-machine controls. Contact an authorized repair facility.
				b. Failure to perform the standstill has resulted in the diesel particulate filter failure, and regeneration is no longer possible. Contact an authorized repair facility to replace the filter.

Do the Standstill Regeneration

1. Move the MEWP to an open, well-ventilated area, away from any flammable material. Park it on a firm level surface, and fully stow the MEWP.
2. With the engine running, turn the off/base/platform switch ❼ on the base controls to the base position.
3. Activate the standstill regeneration by moving the standstill switch ❽ on the base controls to the right. Base functions become inoperative when the standstill switch is turned on.
4. On the engine display module ❷ press and hold the middle button ❾ (below the regeneration symbol) for 7 seconds.

⚠ WARNING

Do not touch hot engine components. Touching hot surfaces may cause serious injury.

5. The engine display module changes to the Regeneration Ongoing symbol ❿, the standstill lamps turn solid, and the engine speed may change.
6. Standstill regeneration takes approximately 45 minutes. During this time, the MEWP must not be used.

IMPORTANT

The standstill regeneration must be completed fully. If the process is interrupted, the standstill request continues.

7. When the standstill regeneration is complete, the Regeneration Ongoing symbol changes to Regeneration Complete ⓫, the standstill lamps ❸❹ turn off, and the engine speed returns to normal.
8. Move the standstill switch to the left. The MEWP may now be used normally.

IMPORTANT

The derate override switch ⓬ on the front of the platform control box should only be used when absolutely necessary to move the MEWP to park it in a safe location when the derated engine torque/rpm prevents adequate torque to drive the MEWP.

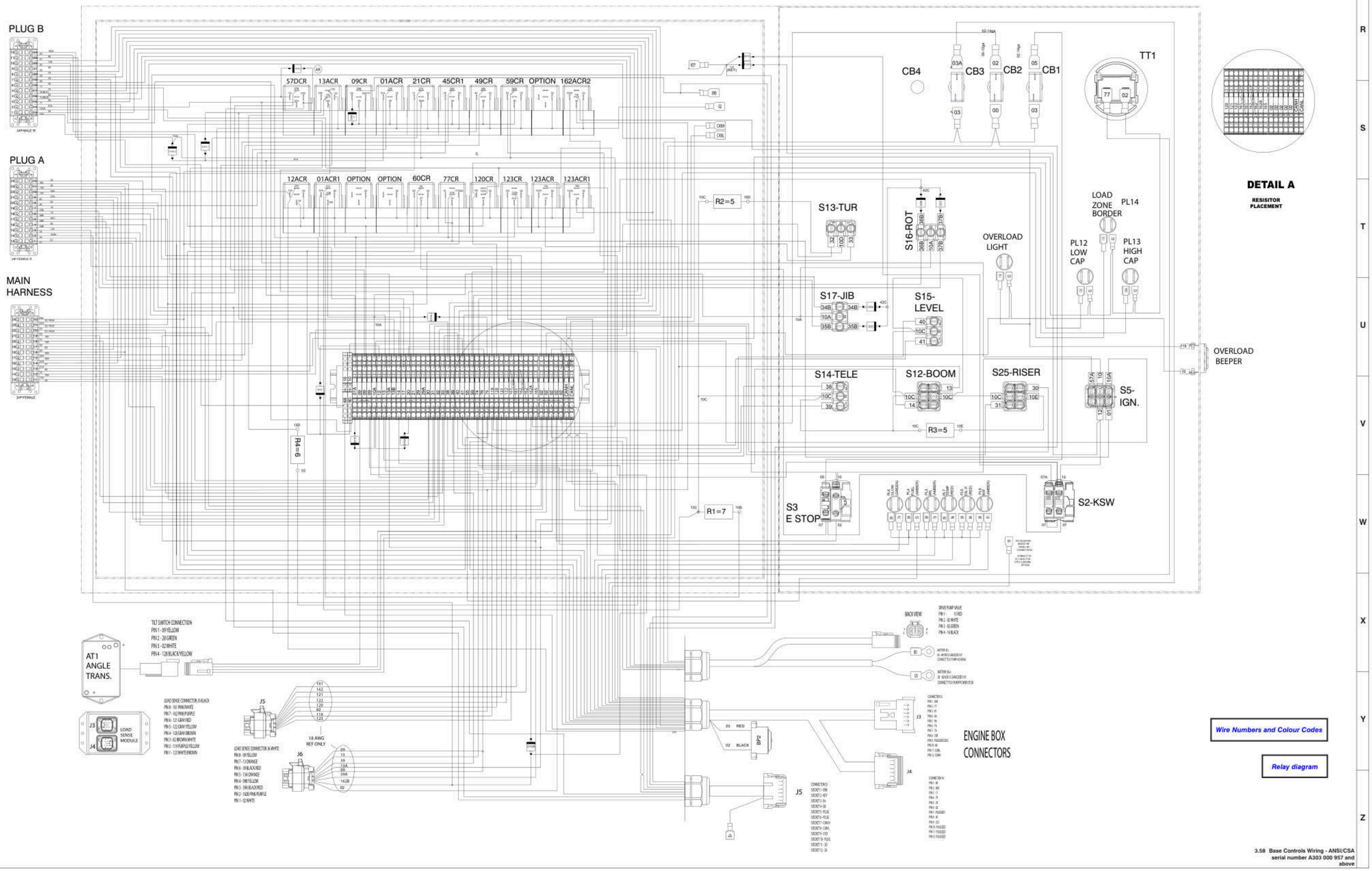
It will temporarily (for approximately 30 minutes) restore full engine power and speed.

Be aware that use of the derate override switch may result in diesel particulate filter failure.

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M2500770AA

3.58 Base Controls Wiring - ANSI/CSA serial number A303 000 957 and above

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