SERVICE MANUAL

E215C EVO
E245C EVO

Hydraulic Excavator

Part Number
48024961
1st Edition
English 11/2016

NEW HOLLAND CONSTRUCTION

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6. Assemble the poppet **(32)** and spring **(33)** in the arm 1 parallel-tandem section (D-D cross section).

   Screw in and tighten the plug assembly **(72)** with O-ring mounted.

   Tightening torque: **73 – 79 N·m** (**53.84 – 58.27 lb ft**)

7. Assemble the poppet **(32)**, spring **(33)**, and spacer **(57)** in the arm 2 parallel-tandem section (D-D cross section).

   Screw in and tighten the plug assembly **(72)** with O-ring mounted.

   Tightening torque: **73 – 79 N·m** (**53.84 – 58.27 lb ft**)

Anti-drift valve assembly

1. Mount the O-rings **(36)** and **(41)** on the anti-drift valve installation surfaces in the arm 1 section (E-E cross section) and boom 1 section (F-F cross section).
2. Assemble the poppet **(38)** and spring **(39)**.
3. Install the 2 anti-drift valve assemblies **(67)** and tighten with the hexagon socket head bolts **(74)**.

   Tightening torque: **39 – 44 N·m** (**28.76 – 32.45 lb ft**)

4. Install the 2 caps **(88)** with O-rings **(89)** mounted and tighten with the hexagon socket head bolts **(75)**.

   Tightening torque: **58 – 64 N·m** (**42.78 – 47.20 lb ft**)

5. Screw in and tighten the 2 plug assemblies **(93)** with O-rings and backup rings mounted.

   Tightening torque: **78 – 88 N·m** (**57.53 – 64.91 lb ft**)

Arm regeneration release valve assembly

1. Mount the O-ring **(30)** and 2 backup rings **(31)** in the sleeve (27–2).
2. Assemble the piston (27–3), spool (27–1) in the sleeve and insert into the valve housing.
3. Put the spring **(26)** into the plug **(24)** with O-ring **(25)** mounted, then screw into the valve housing and tighten.

   Tightening torque: **103 – 113 N·m** (**75.97 – 83.34 lb ft**)

Arm 1 parallel-tandem spool assembly

1. Assemble the spool **(19)** in the sub-assembly state into the valve housing.

   ⚠ CAUTION:

   - After inserting the spool, slide it to check for any sticky or rough feeling.

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Wiring harnesses - Electrical schematic sheet 36 - Camera

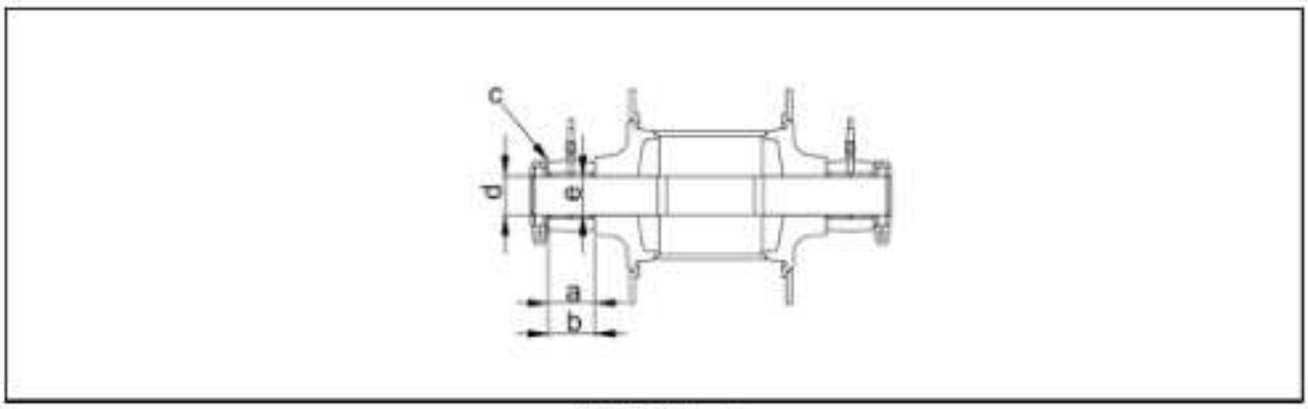
E215C EVO CRAWLER EXCAVATOR - STANDARD MODEL - TIER3	LA
E245C EVO CRAWLER EXCAVATOR - MASS EXCAVATOR MODEL - TIER3	LA

Type	Components	Connectors/link	Description
Camera	H10		Camera 1 (rear)
Camera	H11		Camera 2 (right side)
Connector	CN.C18	**CN.C18**	
Connector	CN.C19	**CN.C19**	
Connector	CN.C20	**CN.C20**	To Camera 3 (blue tape)
Connector	CN.C26	**CN.C26**	
Connector	CN.C27	**CN.C27**	Camera 1 (rear)
Connector	CN.C28	**CN.C28**	Camera 2 (right side)

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3. Boom and boom cylinder installation section



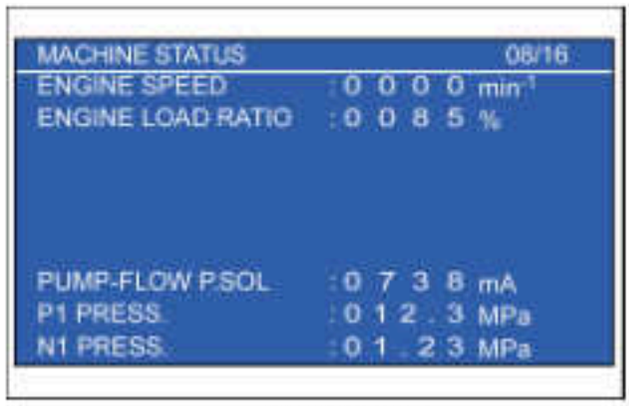
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Part name	Code	Standard value	Usage limits	Judgment	Solution
Boom cylinder (top section)	a	**108 mm (4.25 in)**	**106 mm (4.17 in)**	Acceptable/ Unacceptable	Replacement
Boom	b	**108 mm (4.25 in)**	**106 mm (4.17 in)**	Acceptable/ Unacceptable	Replacement
Clearance	c	**1.0 – 2.5 mm (0.04 – 0.10 in)**	Shim adjustment	Acceptable/ Unacceptable	Adjustment with shims
Pin	d	**Ø90 mm (3.54 in)**	**Ø89 mm (3.50 in)**	Acceptable/ Unacceptable	Replacement
Bushing (boom cylinder)	e	**Ø90 mm (3.54 in)**	**Ø91.5 mm (3.60 in)**	Acceptable/ Unacceptable	Replacement

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8. Engine

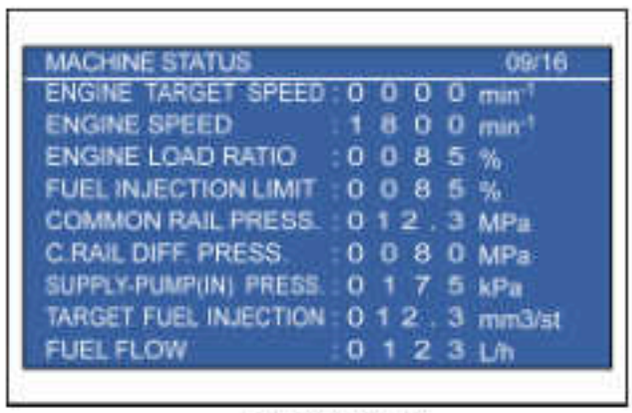
ENGINE SPEED	min^{-1} (rpm)	Engine speed
ENGINE LOAD RATIO	%	Engine load ratio
PUMP-FLOW P.SOL.	mA	Actual milli-amp for flow proportional valve
P1 PRESS.	MPa (psi)	P1 pressure
N1 PRESS.	MPa (psi)	N1 pressure



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9. Engine

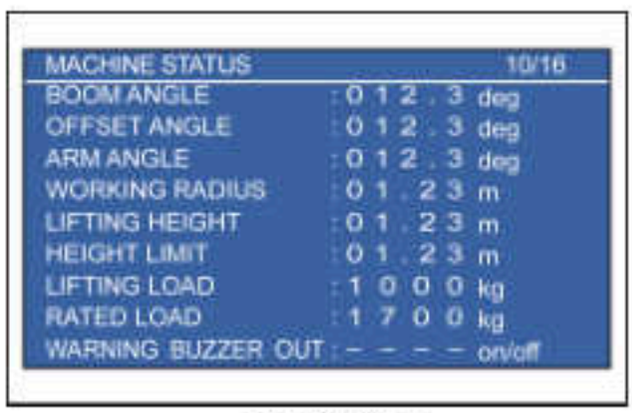
ENGINE TARGET SPEED	min^{-1} (rpm)	Engine target speed
ENGINE SPEED	min^{-1} (rpm)	Engine speed
ENGINE LOAD RATIO	%	Engine load ratio
FUEL INJECTION LIMIT	%	Fuel injection quantity limit level
COMMON RAIL PRESS.	MPa (psi)	Common rail pressure
C. RAIL DIFF. PRESS.	MPa (psi)	Common rail differential pressure
SUPPLY-PUMP (IN) PRESS.	kPa (psi)	Supply pump inlet pressure
TARGET FUEL INJECTION	mm^3 /st	Target fuel injection quantity
FUEL FLOW	L/h	Fuel flow



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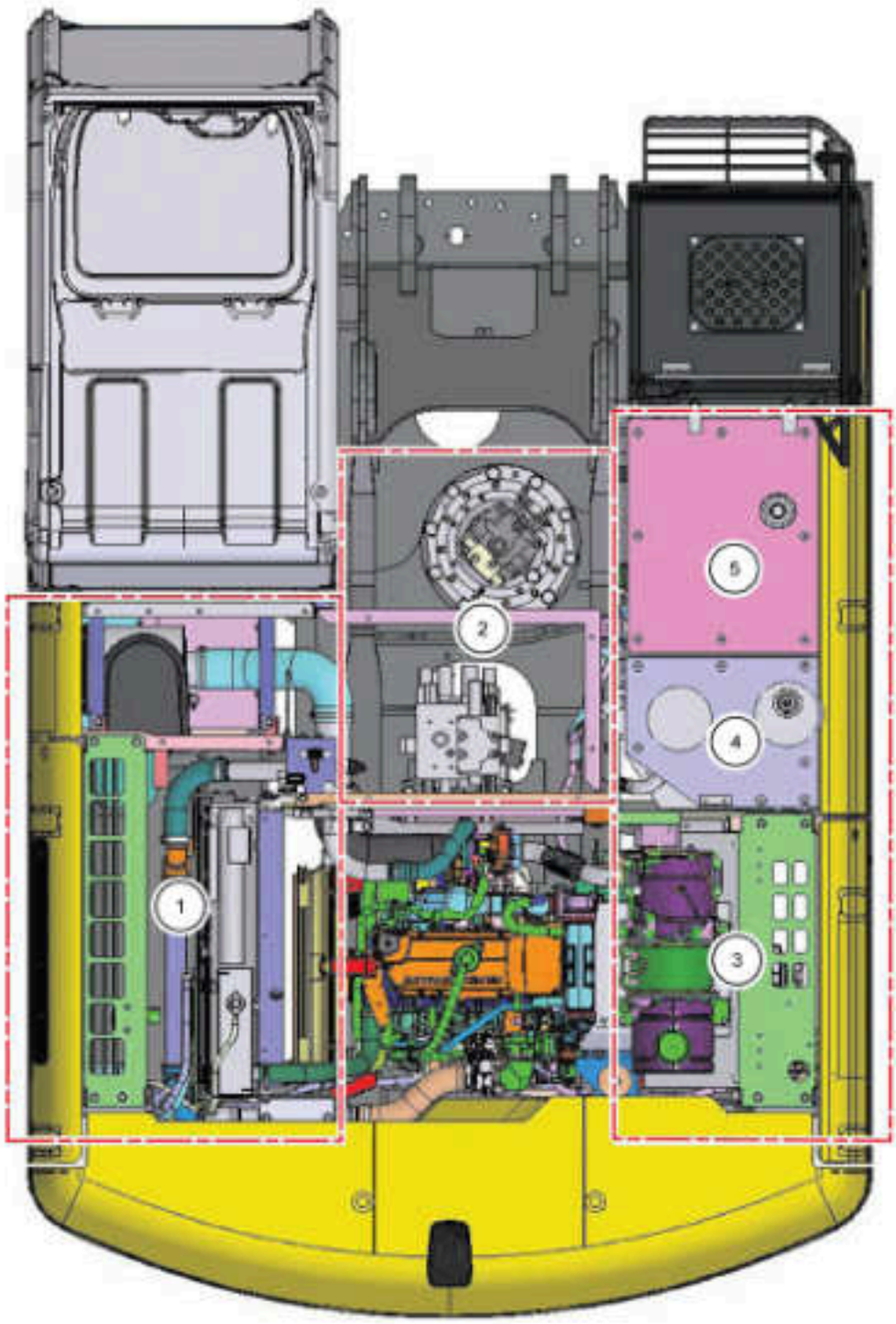
10. Work radius and height

BOOM ANGLE	deg	Boom angle
OFFSET ANGLE	deg	Offset angle
ARM ANGLE	deg	Arm angle
WORKING RADIUS	m (ft.)	Work radius
LIFTING HEIGHT	m (ft.)	Hanging work height
HEIGHT LIMIT	m (ft.)	Hanging height limit
LIFTING LOAD	kg (lb)	Actual load
RATED LOAD	kg (lb)	Rated load
WARNING BUZZER OUT	on/off	Warning buzzer output



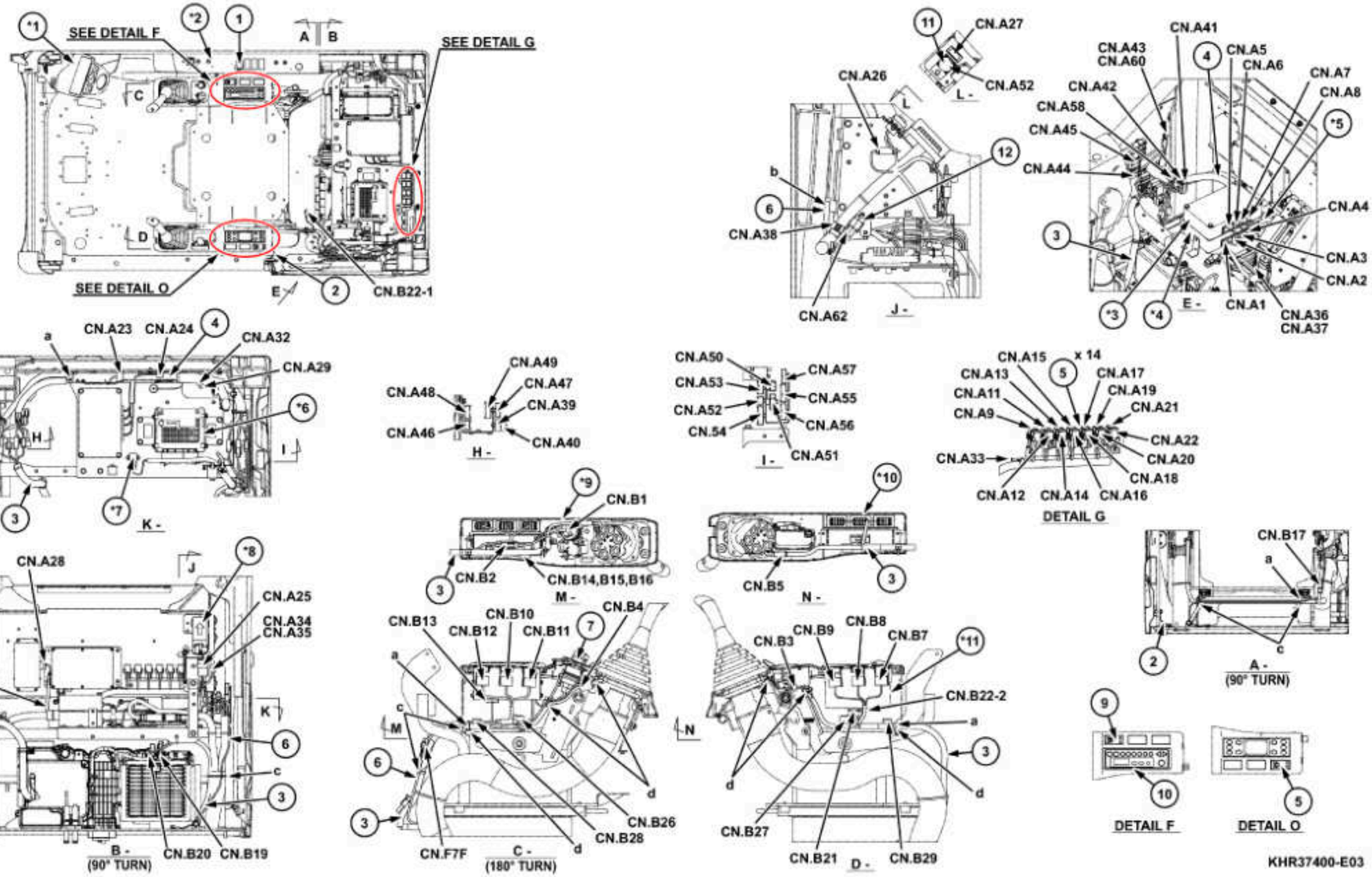
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1. Housing left side
2. Swing body center section
3. Pump chamber
4. Hydraulic oil tank
5. Fuel tank

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