SERVICE MANUAL

T8.295 / T8.325 / T8.355 / T8.385 TIER 3

Tractor

Part number 47681318

English

May 2017

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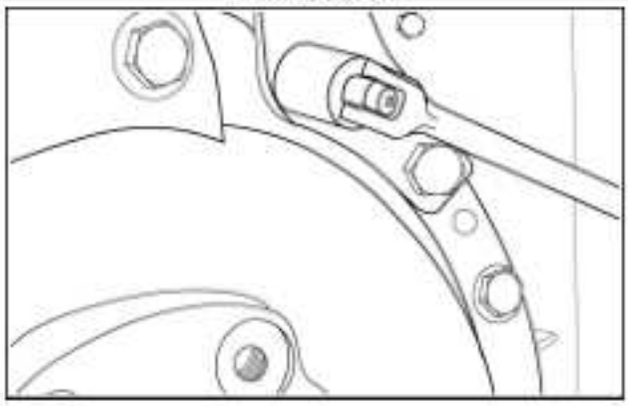
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Rear axle - Torque

T8.295	LA
T8.325	LA
T8.355	LA
T8.385	LA

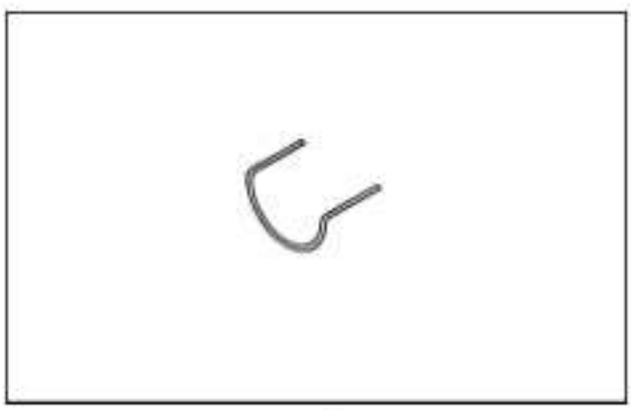
Component	N·m	Identification	lb-ft
Rear axle mounting bolts	220 – 250 Nm	 RCPH07COHB55AAA 1	171 – 193 lb ft

Rear axle - Special tools

T8.295	LA
T8.325	LA
T8.355	LA
T8.385	LA

Service brake disc alignment – 89-581-5

This tool is used to align the service brake discs in the rear axle for sun gear shaft installation.



1

Alignment guide pins – CAS2601

These tools are used to install and remove the rear axle housing assembly.



2

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Wiring harnesses - Electrical schematic sheet 44 SH44 - PRIMARY CAN BUS

Type	Component	Connector / Link	Description
ENGINE CONTROL UNIT (ECU)	**A-009**	**X-174**	CAN TRACTOR DIAGNOSTICS
ENGINE CONTROL UNIT (ECU)	**A-010**	**X-407**	AUTOGUIDANCE CONTROLLER
ENGINE CONTROL UNIT (ECU)	**A-012**	**X-282**	TRACTOR ENGINE CONTROL UNIT (ECU)
ENGINE CONTROL UNIT (ECU)	**A-014**		ICU CN3
ENGINE CONTROL UNIT (ECU)	**A-043**		TCU COMMON
ENGINE CONTROL UNIT (ECU)	**A-047**		ATC MODULE
ENGINE CONTROL UNIT (ECU)	**A-056**	**X-137**	ARMREST
Connector	X-010	**X-010**	TO CAB HARNESS
Connector	X-137	**X-137**	ARMREST
Connector	X-174	**X-174**	CAN TRACTOR DIAGNOSTICS
Connector	X-280	**X-280**	TO ARMREST CONSOLE
Connector	X-282	**X-282**	TECU
Connector	X-292	**X-292**	TO OUTSIDE CAB HARNESS
Connector	X-351	**X-351**	CN1B
Connector	X-381	**X-381**	HEATING, VENTILATION AND AIR CONDITIONING CONTROLLER
Connector	X-409A	**X-409A**	AUTOGUIDANCE CONTROLLER
Connector	X-426	**X-426**	ICU CN3

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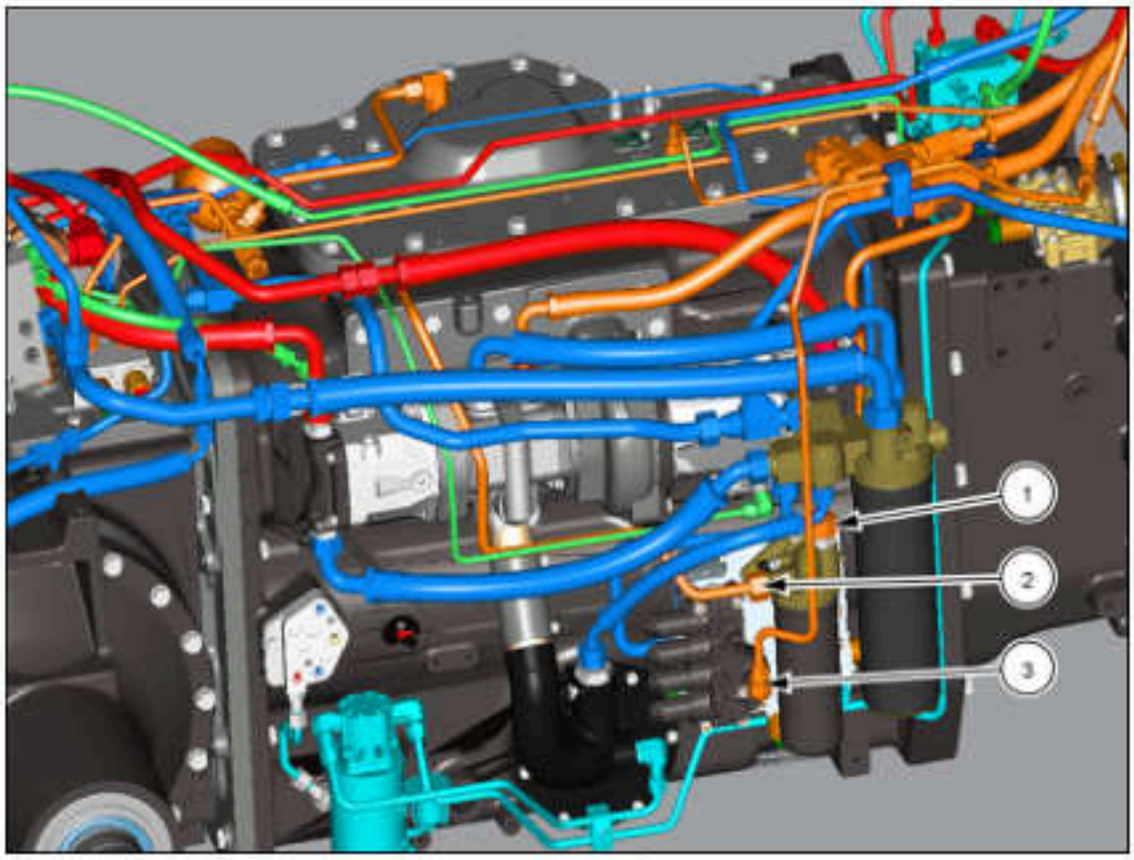
3634 - Fuel in oil delayed refill

Context:
This error occurs because of a delay in correcting another error code.

Solution:

1. Check if the error code is still active.
   A. Error code is still active. Continue to Step **2**..
   B. Error code no longer active. Return the unit to field operation
2. Check that the oil level is high from fuel contamination.
   A. Oil level is high.Locate the source of the contamination and correct.
   B. Oil level is correct. Return unit to field operation and monitor for recurring errors.

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RAIL13TR00886FA 2

Regulated circuit flow

1. Cooler return to regulated circuit filter assembly
2. Regulated supply outlet
3. Regulated supply outlet to transmission forward/reverse control valve

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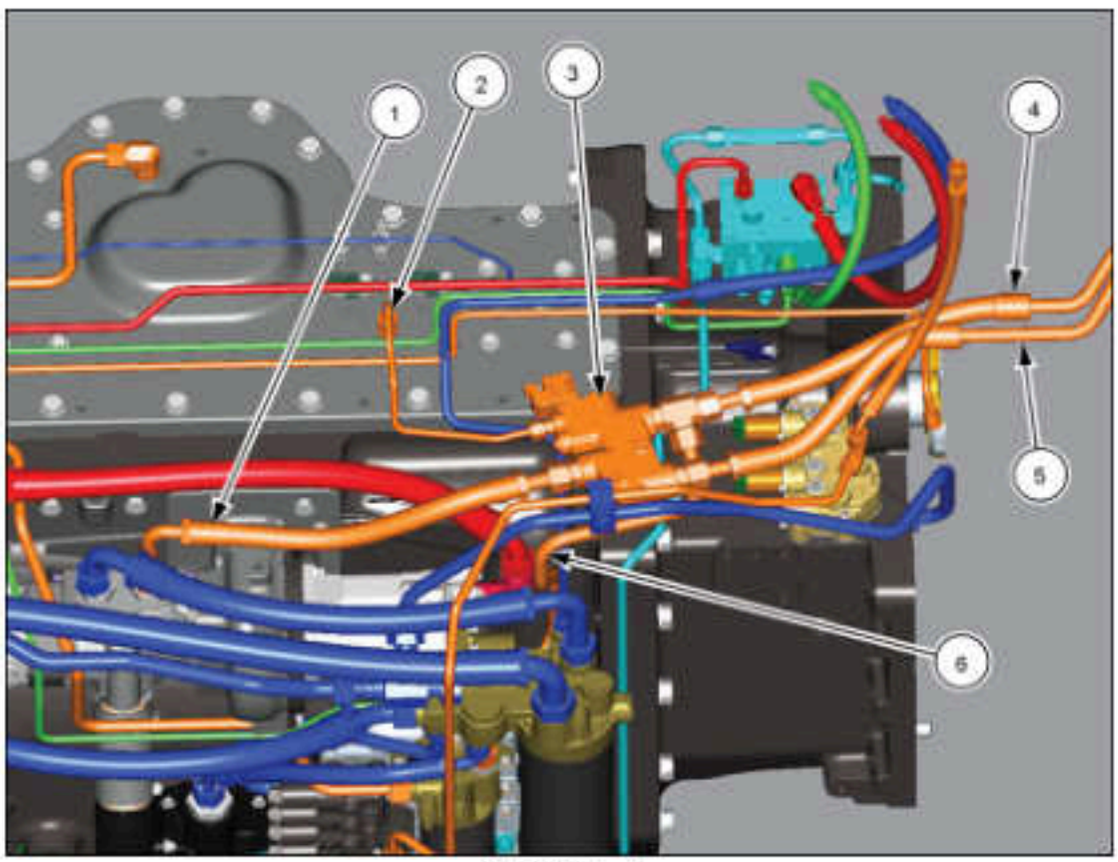
Oil cooler/Heat exchanger Bypass valve - Dynamic description

T8.295	LA
T8.325	LA
T8.355	LA
T8.385	LA

The cooler bypass valve is located on the top of the transmission housing, above the main filter assembly.

All regulated circuit pump flow is directed to the cooler bypass valve inlet. The tractor control unit (TCU) controls the cooler bypass valve function based on transmission oil temperature.

When the transmission oil temperature is below a preset limit, the cooler bypass solenoid valve will be energized. When energized most of the supply flow will bypass the cooler. When the oil temperature exceeds the preset limit, the cooler bypass solenoid will be de-energized by the tractor control unit (TCU), now all of the flow entering the bypass valve to be directed through the oil cooler.



RAIL13TR80076FA 1

1. Regulated supply to cooler bypass valve	4. Cooler return line
2. Cooler bypass drain	5. Cooler supply line
3. Cooler bypass valve	6. Cooler bypass to regulated filter assembly

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Hydraulic schematic 47513532 — Sheet 2— Power shift Transmission.

	PFC PISTON PUMP
	REGULATED CIRCUIT PUMP
	CHARGE /LUBE PUMP FLOW
	RETURN TO TANK/SUMP
	OIL COOLER / FILTRATION AUX. CHARGE PUMP FLOW
	TWIN FLOW PUMP MEGA FLOW PUMP
1. REMOTE SECTION	32. PARK CLUTCH
2. LOAD SENSE DIAGNOSTIC	33. INLET BRAKE VALVE
3. PILOT / HITCH DRAIN	34. PRIORITY REGULATOR VALVE
4. PILOT SUPPLY	35. THERMAL BYPASS VALVE
5. RETURN	36. OIL COOLER
6. SUPPLY	37. LUBE REGULATOR
7. HITCH VALVE	38. PRESSURE AND FLOW COMPENSATED (PFC) PISTON PUMP
8. NOT USED	39. FILTER
9. HITCH CYLINDERS	40. PTO CLUTCH LUBE
10. RETURN	41. ODD / EVEN LUBE
11. SUPPLY	42. DROP BOX LUBE
12. SIGNAL	43. CREEP DRIVE LUBE
13. CASE DRAIN	44. MASTER CLUTCH LUBE
14. POWER BEYOND MANIFOLD (OPTIONAL)	45. RIGHT BRAKE / DIFFERENTIAL LUBE
15. PTO / DIFFERENTIAL LOCK VALVE	46. MFD / RANGE LUBE
16. PTO CLUTCH / BRAKE	47. LEFT BRAKE / DIFFERENTIAL LUBE
17. DIFFERENTIAL LOCK CLUTCH	48. TO PARK BRAKE VALVE SOLENOID
18. BEVEL PINION LUBE	49. SERVICE BRAKE
19. LUBE SUPPLY	50. MASTER CLUTCH
20. MFD CLUTCH	51. IN
21. LOW CLUTCH	52. MASTER CLUTCH INCHING VALVE
22. MEDIUM CLUTCH	53. PARK / EMERGENCY BRAKE
23. HIGH CLUTCH	54. BRAKE RELEASE PUMP
24. REVERSE CLUTCH	55. STEERING HAND PUMP
25. FIFTH CLUTCH	56. STEERING CYLINDERS
26. THIRD CLUTCH	57. BYPASS VALVE
27. FIRST CLUTCH	58. BRAKE VALVE
28. EVEN CLUTCH	59. NOTE: SWITCH IS OPENED WHEN PEDAL REACHES FULL STROKE WHEN HYDRAULIC POWER IS LOST
29. ODD CLUTCH	60. ACCUMULATOR
30. CREEP CLUTCH HI	61. TWIN FLOW PUMP MEGA FLOW PUMP
31. TRANSMISSION CONTROL VALVES	62. TWIN FLOW MANIFOLD PLUGS MEGA FLOW MANIFOLD PLUGS

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