SERVICE MANUAL

T8.275 / T8.300 / T8.330 / T8.360 / T8.390 Powershift Transmission (PST)

Tractor

PIN ZCRC02583 and above

Part number 47533594
1st edition English
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INTRODUCTION

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Safety rules

T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

Personal safety

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual and on machine decals, you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury. The color associated with DANGER is RED.

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury. The color associated with WARNING is ORANGE.

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. The color associated with CAUTION is YELLOW.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: *Notice indicates a situation which, if not avoided, could result in machine or property damage. The color associated with Notice is BLUE.*

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: *Note indicates additional information which clarifies steps, procedures, or other information in this manual.*

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

Safety rules

T8.275, T8.300, T8.330, T8.360, T8.390

Standard safety precautions

Be informed and notify personnel of the laws in force regulating safety, and provide documentation available for consultation.

- Keep working areas as clean as possible.
- Ensure that working areas are provided with emergency boxes. They must be clearly visible and always contain adequate sanitary equipment.
- Fire extinguishers must be properly identified and always be clear of obstructions. Their efficiency must be checked on a regular basis and personnel must be trained on proper interventions and priorities.
- Keep all emergency exits free of obstructions and clearly marked.
- Smoking in working areas subject to fire danger must be strictly prohibited.

Prevention of injury

- Wear suitable work attire and safety glasses with no jewelry such as rings and chains when working close to engines and equipment in motion.
- Wear safety gloves and goggles when performing the following operations:
  - Topping off or changing lubrication oils.
  - Using compressed air or liquids at a pressure greater than **2 bar** (**29 psi**).
- Wear a safety helmet when working close to hanging loads or equipment working at head level.
- Always wear safety shoes and fitting clothes.
- Use protection cream for hands.
- Change wet clothes as soon as possible.
- In the presence of voltages exceeding **48 - 60 V**, verify the efficiency of the ground and mass electrical connections. Ensure that hands and feet are dry and use isolating foot boards. Workers should be properly trained to work with electricity.
- Do not smoke or start an open flame close to batteries and any fuel material.
- Place soiled rags with oil, diesel fuel or solvents in specially provided anti-fire containers.
- Do not use any tool or equipment for any use other than what it was originally intended for. Serious injury may occur.
- If running an engine indoors, make sure there is a sufficient exhaust fan in use to eliminate exhaust fumes.

During maintenance

- Never open the filler cap of the cooling system when the engine is hot. High temperature liquid at operating pressure could result in serious danger and risk of burn. Wait until the temperature decreases under **50 °C** (**122 °F**).
- Never add coolant to an overheated engine and use only appropriate liquids.
- Always work when the engine is turned off. Certain circumstances require maintenance on a running engine. Be aware of all the risks involved with such an operation.
- Always use adequate and safe containers for engine fluids and used oil.
- Keep engine clean of any spilled fluids such as oil, diesel fuel, and or chemical solvents.
- Use of solvents or detergents during maintenance may emit toxic vapors. Always keep working areas aerated. Wear a safety mask if necessary.
- Do not leave soiled rags that may contain any flammable substances close to the engine.
- Always use caution when starting an engine after any work has been performed. Be prepared to cut off intake air in case of engine runaway.
- Never disconnect the batteries while the engine is running.

- Disconnect the batteries prior to performing any work on the equipment.
- Disconnect the batteries to place a load on them with a load tester.
- After any work is performed, verify that the battery clamp polarity is correct and that the clamps are tight and safe from accidental short circuit and oxidation.
- Before disconnecting any pipelines (pneumatic, hydraulic, fuel pipes, etc.), verify that all pressure has been released. Take all necessary precautions bleeding and draining residual pressure. Always wear the proper safety equipment.
- Do not alter the lengths of any wires.
- Do not connect any electronic service tool to the engine electrical equipment unless specifically approved by Iveco.
- Do not modify the fuel system or hydraulic system unless approved by Iveco, Any unauthorized modification will compromise warranty assistance and may affect engine operation and life span.

For engine equipped with an electronic control unit

- Do not weld on any part of the equipment without removing the control unit.
- Remove the in case of work requiring heating over **80 °C** (**176 °F**).
- Do not paint the components and the electronic connections.
- Do not alter any data filed in the electronic control unit driving the engine. Any manipulation or alteration of electronic components will void engine warranty assistance and may affect the correct working order and life span of the engine.

Respect of the Environment

- Respect of the environment should be of primary importance. Take all necessary precautions to ensure personnel's safety and health.
- Inform the personnel of the laws regarding the dispensing of used engine fluids.
- Handle batteries with care, storing them in a well ventilated environment and within anti-acid container.

Basic instructions - Important notice regarding equipment servicing

T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

All repair and maintenance work listed in this manual must be carried out only by qualified dealership personnel, strictly complying with the instructions given, and using, whenever possible, the special tools.

Anyone who performs repair and maintenance operations without complying with the procedures provided herein shall be responsible for any subsequent damages.

The manufacturer and all the organizations of its distribution chain, including - without limitation - national, regional, or local dealers, reject any responsibility for damages caused by parts and/or components not approved by the manufacturer, including those used for the servicing or repair of the product manufactured or marketed by the manufacturer. In any case, no warranty is given or attributed on the product manufactured or marketed by the manufacturer in case of damages caused by parts and/or components not approved by the manufacturer.

The information in this manual is up-to-date at the date of the publication. It is the policy of the manufacturer for continuous improvement. Some information could not be updated due to modifications of a technical or commercial type, or changes to the laws and regulations of different countries.

In case of questions, refer to your NEW HOLLAND AGRICULTURE Sales and Service Networks.

Torque - Minimum tightening torques for normal assembly

T8.275, T8.300, T8.330, T8.360, T8.390

METRIC NON-FLANGED HARDWARE

NOM. SIZE	CLASS 8.8 BOLT and CLASS 8 NUT		CLASS 10.9 BOLT and CLASS 10 NUT		LOCKNUT CL.8 W/CL8.8 BOLT	LOCKNUT CL.10 W/CL10.9 BOLT
	UNPLATED	PLATED W/ZnCr	UNPLATED	PLATED W/ZnCr		
M4	2.2 N·m (19 lb in)	2.9 N·m (26 lb in)	3.2 N·m (28 lb in)	4.2 N·m (37 lb in)	2 N·m (18 lb in)	2.9 N·m (26 lb in)
M5	4.5 N·m (40 lb in)	5.9 N·m (52 lb in)	6.4 N·m (57 lb in)	8.5 N·m (75 lb in)	4 N·m (36 lb in)	5.8 N·m (51 lb in)
M6	7.5 N·m (66 lb in)	10 N·m (89 lb in)	11 N·m (96 lb in)	15 N·m (128 lb in)	6.8 N·m (60 lb in)	10 N·m (89 lb in)
M8	18 N·m (163 lb in)	25 N·m (217 lb in)	26 N·m (234 lb in)	35 N·m (311 lb in)	17 N·m (151 lb in)	24 N·m (212 lb in)
M10	37 N·m (27 lb ft)	49 N·m (36 lb ft)	52 N·m (38 lb ft)	70 N·m (51 lb ft)	33 N·m (25 lb ft)	48 N·m (35 lb ft)
M12	64 N·m (47 lb ft)	85 N·m (63 lb ft)	91 N·m (67 lb ft)	121 N·m (90 lb ft)	58 N·m (43 lb ft)	83 N·m (61 lb ft)
M16	158 N·m (116 lb ft)	210 N·m (155 lb ft)	225 N·m (166 lb ft)	301 N·m (222 lb ft)	143 N·m (106 lb ft)	205 N·m (151 lb ft)
M20	319 N·m (235 lb ft)	425 N·m (313 lb ft)	440 N·m (325 lb ft)	587 N·m (433 lb ft)	290 N·m (214 lb ft)	400 N·m (295 lb ft)
M24	551 N·m (410 lb ft)	735 N·m (500 lb ft)	762 N·m (560 lb ft)	1016 N·m (750 lb ft)	501 N·m (370 lb ft)	693 N·m (510 lb ft)

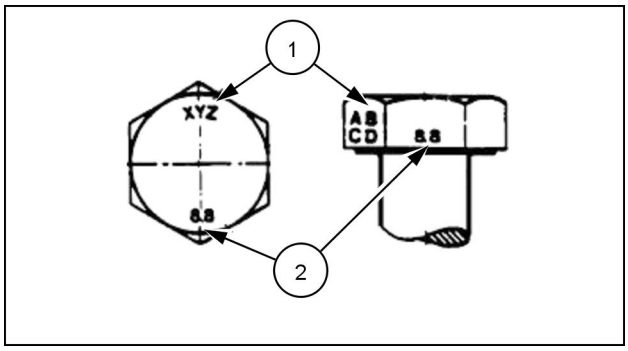
NOTE: *M4 through M8 hardware torque specifications are shown in pound-inches. M10 through M24 hardware torque specifications are shown in pound-feet.*

METRIC FLANGED HARDWARE

NOM. SIZE	CLASS 8.8 BOLT and CLASS 8 NUT		CLASS 10.9 BOLT and CLASS 10 NUT		LOCKNUT CL.8 W/CL8.8 BOLT	LOCKNUT CL.10 W/CL10.9 BOLT
	UNPLATED	PLATED W/ZnCr	UNPLATED	PLATED W/ZnCr		
M4	2.4 N·m (21 lb in)	3.2 N·m (28 lb in)	3.5 N·m (31 lb in)	4.6 N·m (41 lb in)	2.2 N·m (19 lb in)	3.1 N·m (27 lb in)
M5	4.9 N·m (43 lb in)	6.5 N·m (58 lb in)	7.0 N·m (62 lb in)	9.4 N·m (83 lb in)	4.4 N·m (39 lb in)	6.4 N·m (57 lb in)
M6	8.3 N·m (73 lb in)	11 N·m (96 lb in)	12 N·m (105 lb in)	16 N·m (141 lb in)	7.5 N·m (66 lb in)	11 N·m (96 lb in)
M8	20 N·m (179 lb in)	27 N·m (240 lb in)	29 N·m (257 lb in)	39 N·m (343 lb in)	18 N·m (163 lb in)	27 N·m (240 lb in)
M10	40 N·m (30 lb ft)	54 N·m (40 lb ft)	57 N·m (42 lb ft)	77 N·m (56 lb ft)	37 N·m (27 lb ft)	53 N·m (39 lb ft)
M12	70 N·m (52 lb ft)	93 N·m (69 lb ft)	100 N·m (74 lb ft)	134 N·m (98 lb ft)	63 N·m (47 lb ft)	91 N·m (67 lb ft)
M16	174 N·m (128 lb ft)	231 N·m (171 lb ft)	248 N·m (183 lb ft)	331 N·m (244 lb ft)	158 N·m (116 lb ft)	226 N·m (167 lb ft)
M20	350 N·m (259 lb ft)	467 N·m (345 lb ft)	484 N·m (357 lb ft)	645 N·m (476 lb ft)	318 N·m (235 lb ft)	440 N·m (325 lb ft)
M24	607 N·m (447 lb ft)	809 N·m (597 lb ft)	838 N·m (618 lb ft)	1118 N·m (824 lb ft)	552 N·m (407 lb ft)	

IDENTIFICATION

Metric Hex head and carriage bolts, classes 5.6 and up



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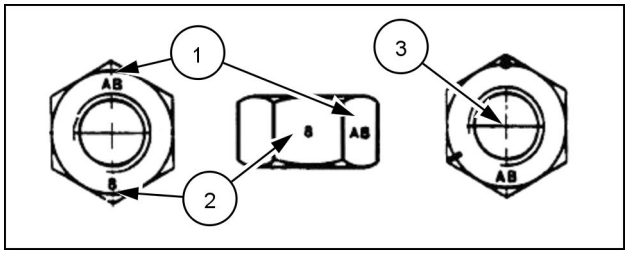
1. Manufacturer's Identification
2. Property Class

Metric Hex nuts and locknuts, classes 05 and up



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1. Manufacturer's Identification
2. Property Class
3. Clock Marking of Property Class and Manufacturer's Identification (Optional), i.e. marks **60 °** apart indicate Class 10 properties, and marks **120 °** apart indicate Class 8.

INCH NON-FLANGED HARDWARE

NOMINAL SIZE	SAE GRADE 5 BOLT and NUT		SAE GRADE 8 BOLT and NUT		LOCKNUT GrB W/ Gr5 BOLT	LOCKNUT GrC W/ Gr8 BOLT
	UN-PLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UN-PLATED or PLATED SILVER	PLATED W/ZnCr GOLD		
1/4	**8 N·m (71 lb in)**	**11 N·m (97 lb in)**	**12 N·m (106 lb in)**	**16 N·m (142 lb in)**	**8.5 N·m (75 lb in)**	**12.2 N·m (109 lb in)**
5/16	**17 N·m (150 lb in)**	**23 N·m (204 lb in)**	**24 N·m (212 lb in)**	**32 N·m (283 lb in)**	**17.5 N·m (155 lb in)**	**25 N·m (220 lb in)**
3/8	**30 N·m (22 lb ft)**	**40 N·m (30 lb ft)**	**43 N·m (31 lb ft)**	**57 N·m (42 lb ft)**	**31 N·m (23 lb ft)**	**44 N·m (33 lb ft)**
7/16	**48 N·m (36 lb ft)**	**65 N·m (48 lb ft)**	**68 N·m (50 lb ft)**	**91 N·m (67 lb ft)**	**50 N·m (37 lb ft)**	**71 N·m (53 lb ft)**
1/2	**74 N·m (54 lb ft)**	**98 N·m (73 lb ft)**	**104 N·m (77 lb ft)**	**139 N·m (103 lb ft)**	**76 N·m (56 lb ft)**	**108 N·m (80 lb ft)**
9/16	**107 N·m (79 lb ft)**	**142 N·m (105 lb ft)**	**150 N·m (111 lb ft)**	**201 N·m (148 lb ft)**	**111 N·m (82 lb ft)**	**156 N·m (115 lb ft)**
5/8	**147 N·m (108 lb ft)**	**196 N·m (145 lb ft)**	**208 N·m (153 lb ft)**	**277 N·m (204 lb ft)**	**153 N·m (113 lb ft)**	**215 N·m (159 lb ft)**
3/4	**261 N·m (193 lb ft)**	**348 N·m (257 lb ft)**	**369 N·m (272 lb ft)**	**491 N·m (362 lb ft)**	**271 N·m (200 lb ft)**	**383 N·m (282 lb ft)**
7/8	**420 N·m (310 lb ft)**	**561 N·m (413 lb ft)**	**594 N·m (438 lb ft)**	**791 N·m (584 lb ft)**	**437 N·m (323 lb ft)**	**617 N·m (455 lb ft)**
1	**630 N·m (465 lb ft)**	**841 N·m (620 lb ft)**	**890 N·m (656 lb ft)**	**1187 N·m (875 lb ft)**	**654 N·m (483 lb ft)**	**924 N·m (681 lb ft)**

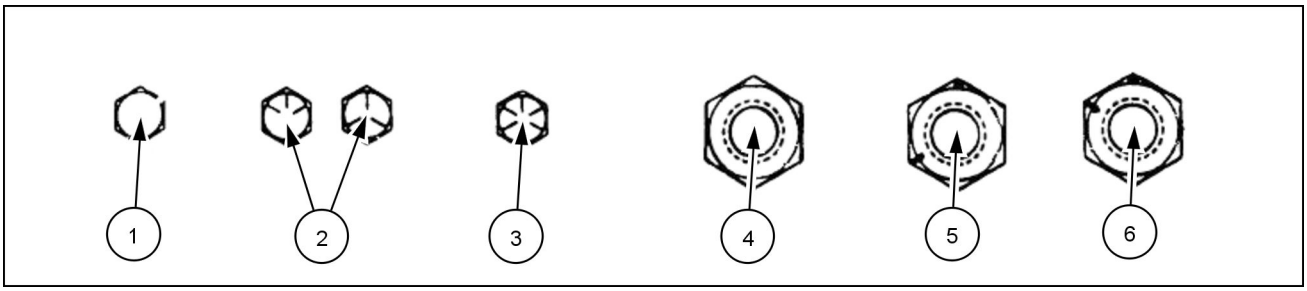
NOTE: *For Imperial Units,* ***1/4 in*** *and* ***5/16 in*** *hardware torque specifications are shown in pound-inches.* ***3/8 in*** *through* ***1 in*** *hardware torque specifications are shown in pound-feet.*

INCH FLANGED HARDWARE

NOM-INAL SIZE	SAE GRADE 5 BOLT and NUT		SAE GRADE 8 BOLT and NUT		LOCKNUT GrF W/ Gr5 BOLT	LOCKNUT GrG W/ Gr8 BOLT
	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD	UNPLATED or PLATED SILVER	PLATED W/ZnCr GOLD		
1/4	**9 N·m (80 lb in)**	**12 N·m (106 lb in)**	**13 N·m (115 lb in)**	**17 N·m (150 lb in)**	**8 N·m (71 lb in)**	**12 N·m (106 lb in)**
5/16	**19 N·m (168 lb in)**	**25 N·m (221 lb in)**	**26 N·m (230 lb in)**	**35 N·m (310 lb in)**	**17 N·m (150 lb in)**	**24 N·m (212 lb in)**
3/8	**33 N·m (25 lb ft)**	**44 N·m (33 lb ft)**	**47 N·m (35 lb ft)**	**63 N·m (46 lb ft)**	**30 N·m (22 lb ft)**	**43 N·m (32 lb ft)**
7/16	**53 N·m (39 lb ft)**	**71 N·m (52 lb ft)**	**75 N·m (55 lb ft)**	**100 N·m (74 lb ft)**	**48 N·m (35 lb ft)**	**68 N·m (50 lb ft)**
1/2	**81 N·m (60 lb ft)**	**108 N·m (80 lb ft)**	**115 N·m (85 lb ft)**	**153 N·m (113 lb ft)**	**74 N·m (55 lb ft)**	**104 N·m (77 lb ft)**
9/16	**117 N·m (86 lb ft)**	**156 N·m (115 lb ft)**	**165 N·m (122 lb ft)**	**221 N·m (163 lb ft)**	**106 N·m (78 lb ft)**	**157 N·m (116 lb ft)**
5/8	**162 N·m (119 lb ft)**	**216 N·m (159 lb ft)**	**228 N·m (168 lb ft)**	**304 N·m (225 lb ft)**	**147 N·m (108 lb ft)**	**207 N·m (153 lb ft)**
3/4	**287 N·m (212 lb ft)**	**383 N·m (282 lb ft)**	**405 N·m (299 lb ft)**	**541 N·m (399 lb ft)**	**261 N·m (193 lb ft)**	**369 N·m (272 lb ft)**
7/8	**462 N·m (341 lb ft)**	**617 N·m (455 lb ft)**	**653 N·m (482 lb ft)**	**871 N·m (642 lb ft)**	**421 N·m (311 lb ft)**	**594 N·m (438 lb ft)**
1	**693 N·m (512 lb ft)**	**925 N·m (682 lb ft)**	**979 N·m (722 lb ft)**	**1305 N·m (963 lb ft)**	**631 N·m (465 lb ft)**	**890 N·m (656 lb ft)**

IDENTIFICATION

Inch Bolts and free-spinning nuts



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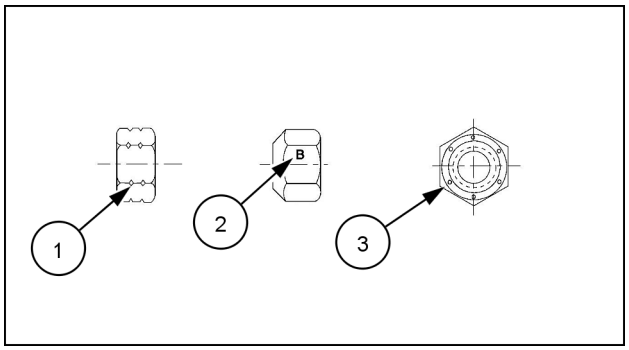
Grade Marking Examples

SAE Grade Identification			
1	Grade 2 - No Marks	4	Grade 2 Nut - No Marks
2	Grade 5 - Three Marks	5	Grade 5 Nut - Marks **120 °** Apart
3	Grade 8 - Five Marks	6	Grade 8 Nut - Marks **60 °** Apart

Inch Lock Nuts, All Metal (Three optional methods)



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Grade Identification

Grade	Corner Marking Method (1)	Flats Marking Method (2)	Clock Marking Method (3)
Grade A	No Notches	No Mark	No Marks
Grade B	One Circumferential Notch	Letter B	Three Marks
Grade C	Two Circumferential Notches	Letter C	Six Marks

Capacities

T8.275, T8.300, T8.330, T8.360, T8.390

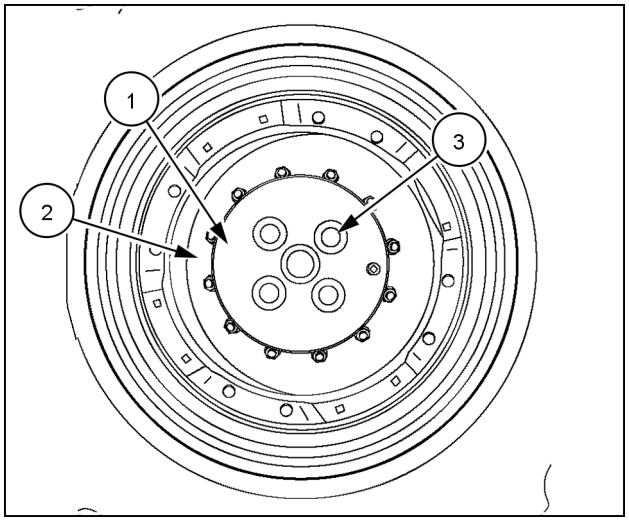
System	Metric	U.S.	Imperial
9.0 l engine			
Engine oil – no filter change	**25 l**	**6.6 US gal**	**5.5 UK gal**
Engine oil– with filter change	**25 l**	**6.6 US gal**	**5.5 UK gal**
Cooling system	**26.5 l**	**7 US gal**	**5.8 UK gal**
Transmission/hydraulic system	**172 l**	**45.5 US gal**	**38 UK gal**
Mechanical front drive			
4 Pin – **100 mm** (**4 in**) hub length standard axle*			
Differential	**11.8 l**	**12.5 US qt** (A)	**21.6 UK pt**
Planetary (each)	**1.4 l**	**3 US pt**	**2.5 UK pt**
4 Pin – **180 mm** (**7 in**) hub length heavy duty axle*			
Differential	**11.8 l**	**12.5 US qt**	**20.8 UK pt**
Planetary (each)	**3.3 l**	**7 US pt**	**5.8 UK pt**
4 pin – **250 mm** (**10 in**) hub length heavy duty class 5 axle			
Differential	**15 l**	**15.8 US qt**	**26.4 UK pt**
Planetary (each)	**6 l**	**12.7 US pt**	**10.5 UK pt**
Front PTO	**3.05 l**	**3.2 US qt**	--
DEF/ADBLUE® Tank	**87 l**	**23 US gal**	**23.8 UK gal**
Fuel tank	**636 l**	**168 US gal**	**140 UK gal**
* Pin quantity is determined by observing the wheel ends.			

Capacities

T8.275 [ZCRC02583 -] NA, T8.300 [ZCRC02583 -] NA, T8.330 [ZCRC02583 -] NA, T8.360 [ZCRC02583 -] NA, T8.390 [ZCRC02583 -] NA

System	Metric	U.S.	Imperial
9.0 l engine **TUTELA UNITEK CJ-4 ENGINE OIL** or **NEW HOLLAND AMBRA MASTERGOLD™ HSP ENGINE OIL**			
Engine oil – no filter change	**25 l**	**6.6 US gal**	**5.5 UK gal**
Engine oil– with filter change	**25 l**	**6.6 US gal**	**5.5 UK gal**
Cooling system	**26.5 l**	**7 US gal**	**5.8 UK gal**
Transmission/hydraulic system – **NEW HOLLAND AMBRA MASTERTRAN® ULTRACTION**			
Powershift	**172 l**	**45.5 US gal**	**38 UK gal**
Auto Command transmission with standard rear axle	**187 l**	**49.5 US gal**	**41.25 UK gal**
Auto Command transmission with heavy duty rear axle	**206 l**	**54.5 US gal**	**45.4 UK gal**
Mechanical Front Drive (MFD) axles			
4 Pin – **100 mm** (**4 in**) hub length standard axle*			
Differential	**11.8 l**	**12.5 US qt** (A)	**21.6 UK pt**
Planetary (each)	**1.4 l**	**3 US pt**	**2.5 UK pt**
4 Pin – **180 mm** (**7 in**) hub length heavy duty axle*			
Differential	**11.8 l**	**12.5 US qt**	**20.8 UK pt**
Planetary (each)	**3.3 l**	**7 US pt**	**5.8 UK pt**
4 pin – **250 mm** (**10 in**) hub length heavy duty class 5 axle			
Differential	**15 l**	**15.8 US qt**	**26.4 UK pt**
Planetary (each)	**6 l**	**12.7 US pt**	**10.5 UK pt**
New Holland 4.5 fixed front axle			
Differential	**11 l**	**11.6 US qt**	**194 UK pt**
Planetary (each)	**2.3 l**	**4.9 US pt**	**4 UK pt**
New Holland 4.75 fixed and saddle suspended front axle			
Differential	**17.5 l**	**18.5 US qt**	**30.8 UK pt**
Planetary (each)	**4.3 l**	**9.1 US pt**	**7.6 UK pt**
New Holland 5.0 fixed and saddle suspended front axle			
Differential	**17.5 l**	**18.5 US qt**	**30.8 UK pt**
Planetary (each)	**4.5 l**	**9.5 US pt**	**8 UK pt**
Front PTO	**4.2 l**	**4.4 US qt**	--
DEF/ADBLUE® Tank	**87 l**	**23 US gal**	**23.8 UK gal**
Fuel tank	**636 l**	**168 US gal**	**140 UK gal**
* Pin quantity is determined by observing the wheel ends.			

Measure the distance from the outer face of the hub **(1)** and bolting surface of the wheel **(2)**, and count the number of pins **(3)** on the wheel end to determine axle type for your tractor.



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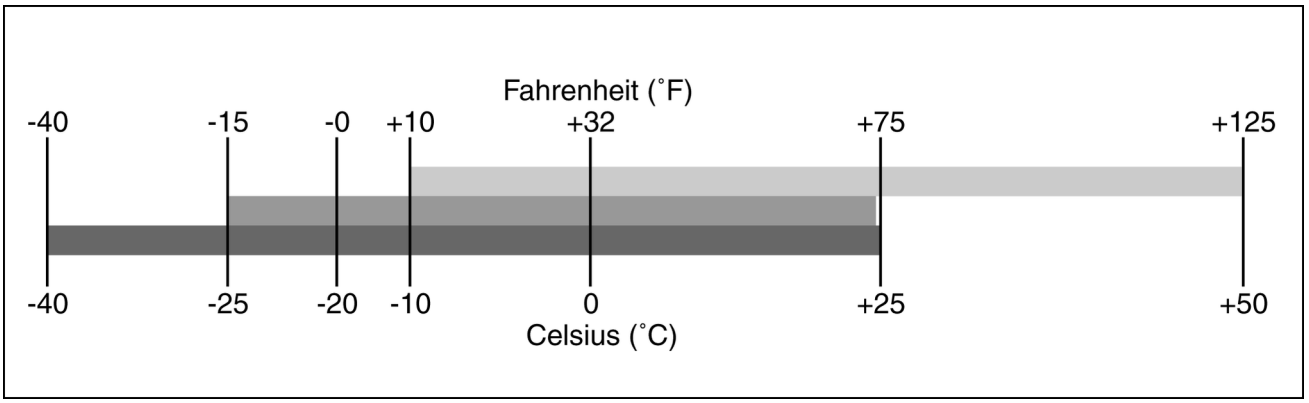

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Axle oil viscosity/temperature usage recommendation

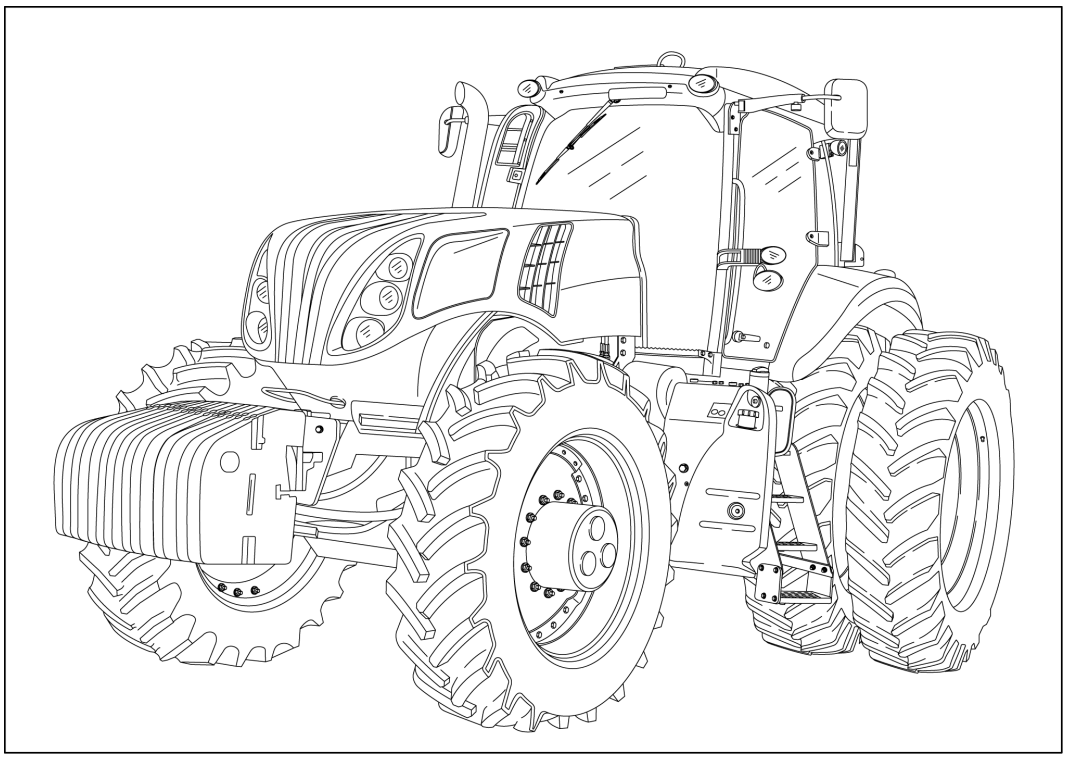
NEW HOLLAND AMBRA HYPOIDE 140

NEW HOLLAND AMBRA HYPOIDE 90

NEW HOLLAND AMBRA HYPOIDE SSL GEAR OIL

SERVICE MANUAL

Engine



T8.275 NA
T8.300 NA
T8.330 NA
T8.360 NA
T8.390 NA

Contents

Engine - 10

[10.001] Engine and crankcase 10.1
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.101] Cylinder heads 10.2
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.114] Pump drives 10.3
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.202] Air cleaners and lines 10.4
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.216] Fuel tanks 10.5
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.310] Aftercooler 10.6
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.400] Engine cooling system 10.7
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.414] Fan and drive 10.8
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

[10.500] Selective Catalytic Reduction (SCR) exhaust treatment 10.9
T8.275 NA, T8.300 NA, T8.330 NA, T8.360 NA, T8.390 NA

Engine - 10

Engine and crankcase - 001

T8.275 NA
T8.300 NA
T8.330 NA
T8.360 NA
T8.390 NA

Contents

Engine - 10

Engine and crankcase - 001

SERVICE

Engine

Remove 3
T8.275, T8.300, T8.330, T8.360, T8.390

Install 24
T8.275, T8.300, T8.330, T8.360, T8.390

Engine - Remove

T8.275, T8.300, T8.330, T8.360, T8.390

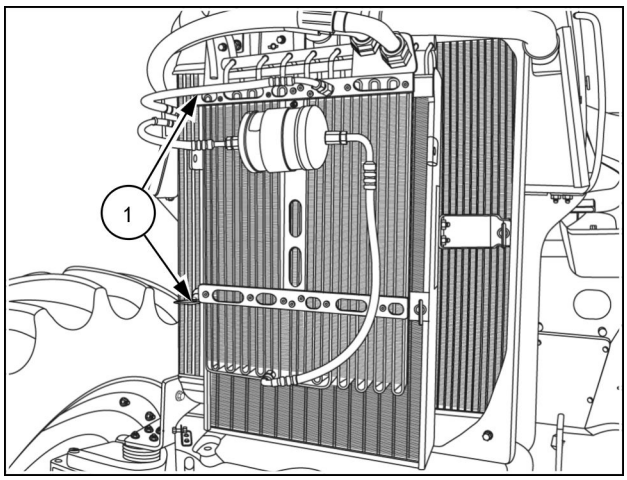
Prior operation:
Disconnect the batteries — **Battery - Disconnect (55.302)**
Prior operation:
Remove the hood — **Hood - Remove (90.100)**
Prior operation:
Recover the refrigerant — **Air conditioning - Recover (50.200)**
Prior operation:
Drain the coolant — **Engine cooling system - Emptying (10.400)**

ATTENTION: *For tractors equipped with front PTO/hitch, refer to steps **81**– **96** for additional disassembly instructions.*

NOTE: *Clean all fittings before disconnecting.*

NOTE: *Cap or plug all lines and ports when disconnecting hydraulic components.*

1. Remove the nuts **(1)** securing the condenser/fuel cooler.



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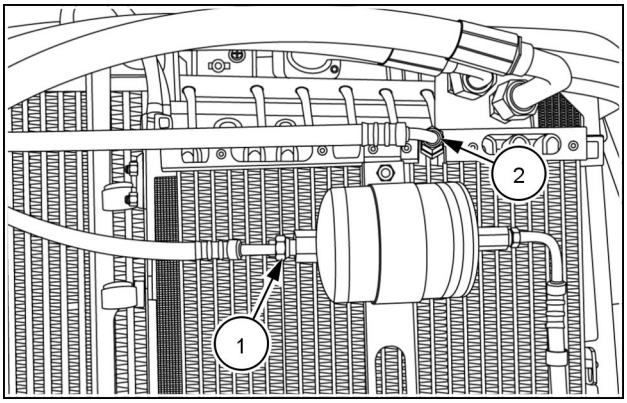
2. Disconnect the refrigerant hose from the receiver/ dryer **(1)** and the condenser outlet hose **(2)**.



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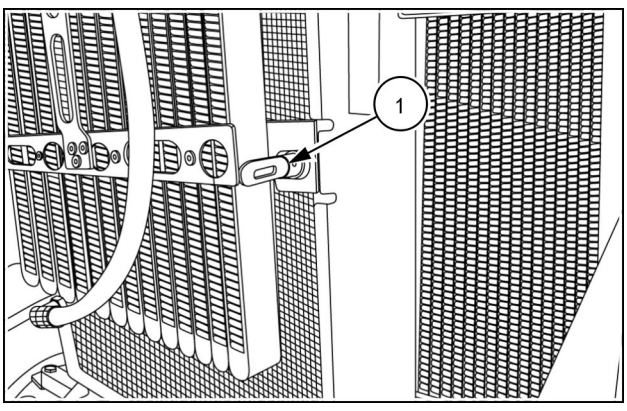
3. Open the latch **(1)**, and carefully remove the cooler from it's mounting and set aside.



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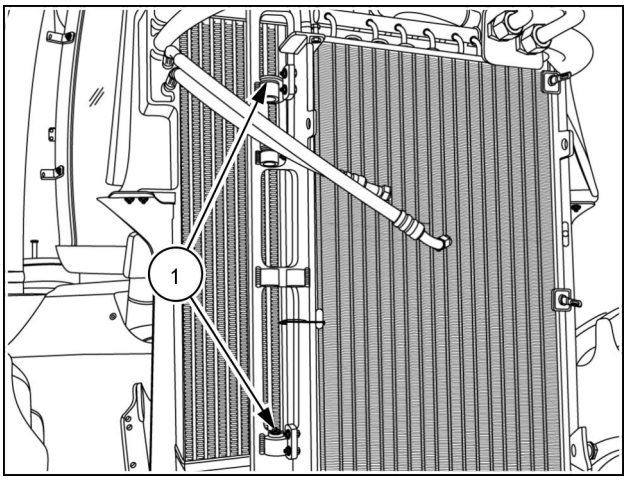
4. Remove the nuts **(1)** securing the oil cooler to it's support bracket.



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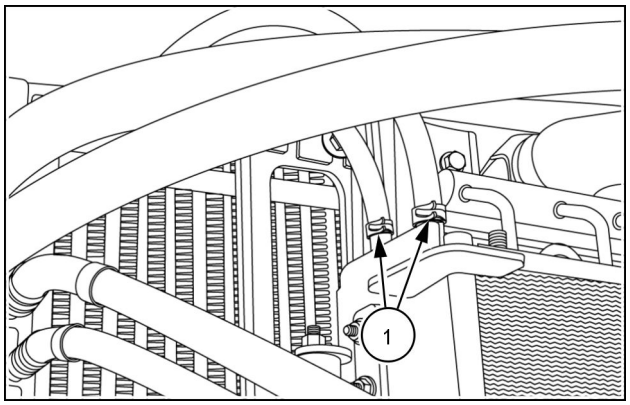
5. Disengage the hose clamps **(1)**, tag and remove the fuel hoses at the cooler.



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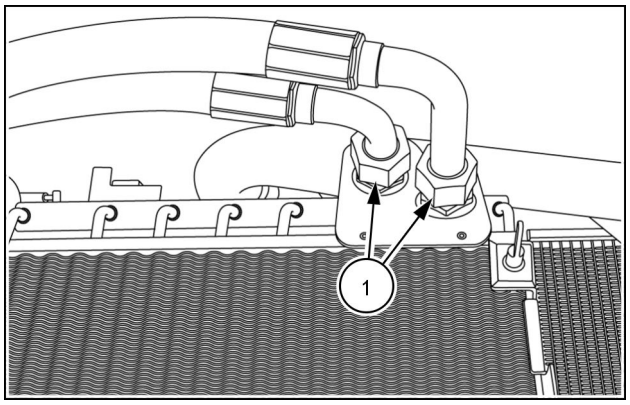
6. Loosen the hydraulic hose fittings **(1)** at the oil cooler. Remove the hoses. Carefully remove the cooler and set aside.

NOTE: *Be prepared to collect some hydraulic fluid.*



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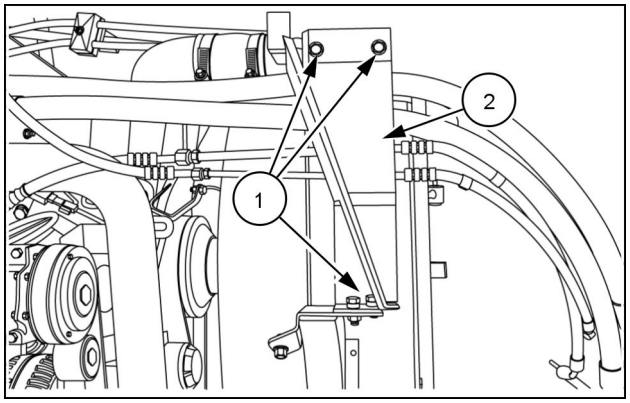
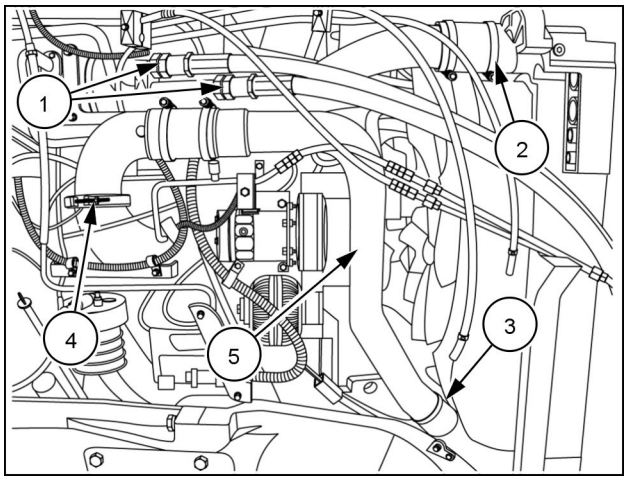
7. Remove the bolts **(1)** securing the right hose bracket **(2)**.



RCPH10CCH899AAB 7

8. Tag and remove the hydraulic hoses **(1)**.
9. Loosen the clamp **(2)** on the air cooler tube.
10. Loosen the clamp **(3)** at the air cooler outlet tube.
11. Remove the clamp **(4)** at the elbow to the intake manifold.
12. Remove the tube assembly **(5)** and set aside.



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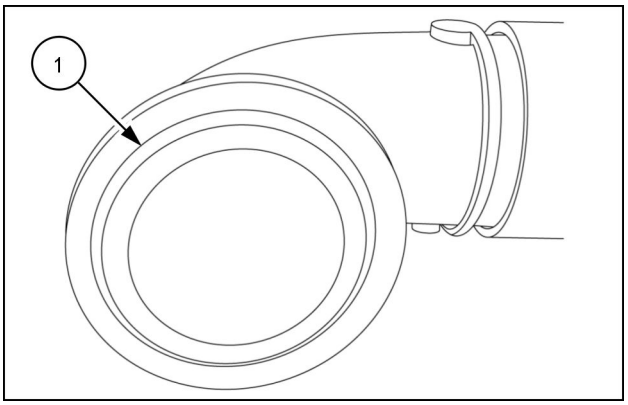
13. Remove and discard the intake elbow O-ring seal **(1)**.



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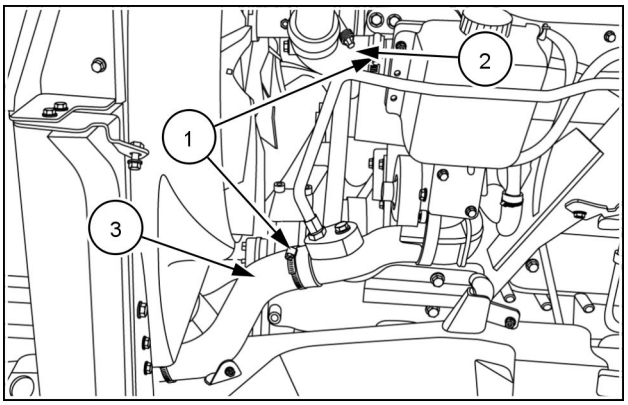
14. Loosen the clamps **(1)** and disconnect the engine coolant outlet **(2)** and inlet hoses **(3)**.



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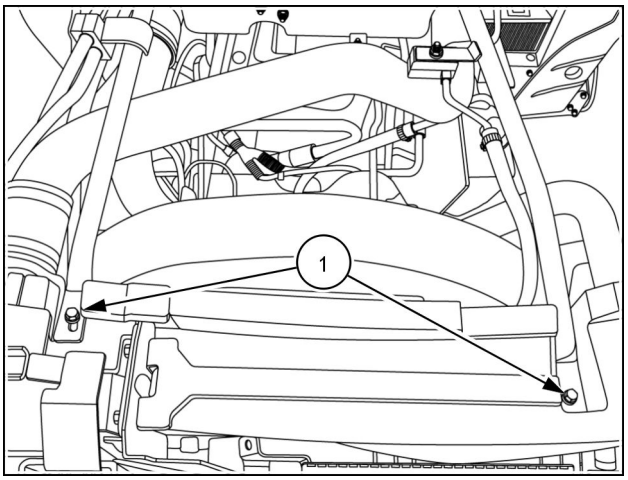
15. Remove the bolts **(1)** securing the line/harness bracket to the cooler assembly.



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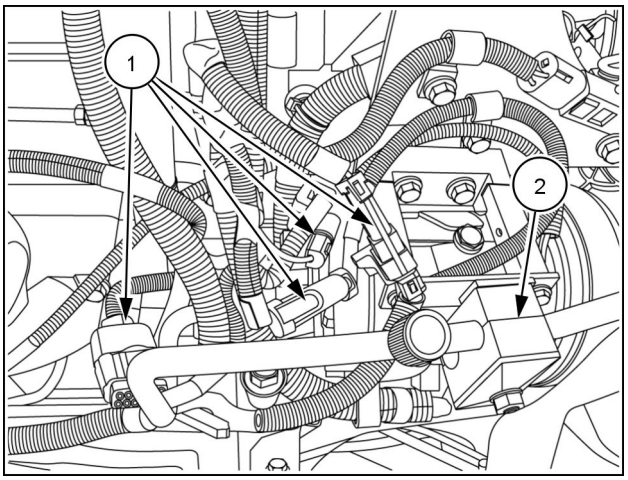
16. On the right hand side at the A/C compressor, disconnect the four harness connectors **(1)**. Remove the A/C line clamp **(2)**.



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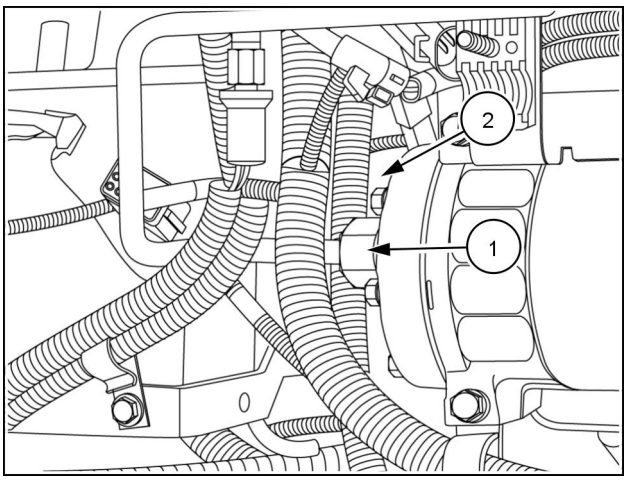
17. Disconnect the high pressure **(1)** and suction **(2)** A/C lines from the compressor.



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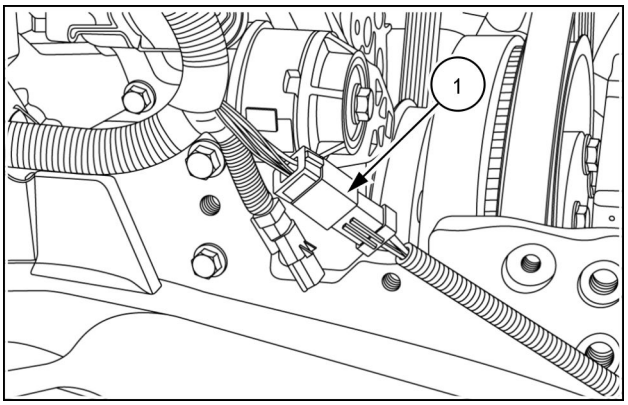
18. If equipped, disconnect the harness connector **(1)** for the suspended axle.



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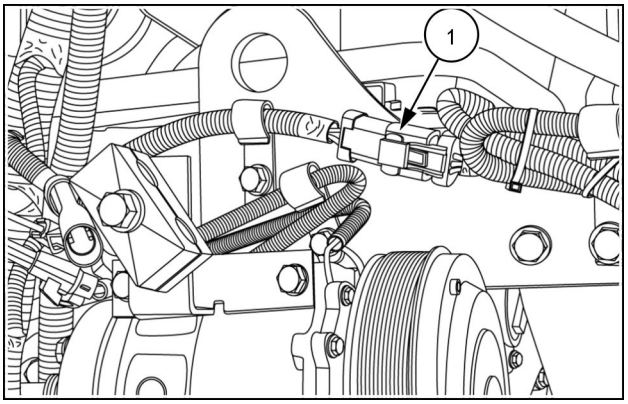
19. Disconnect the harness connector **(1)** for the fan drive.



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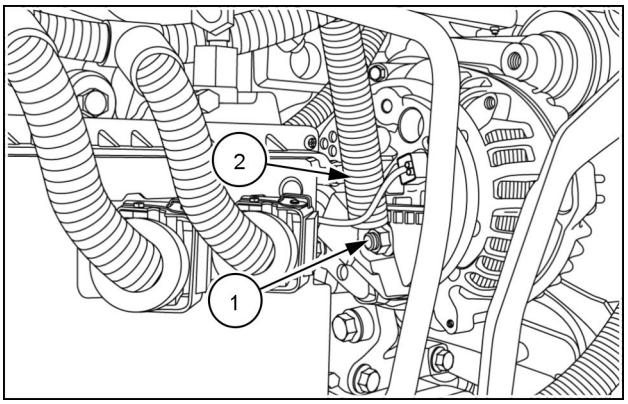
20. Remove the nut **(1)** and disengage the alternator output cable **(2)**.



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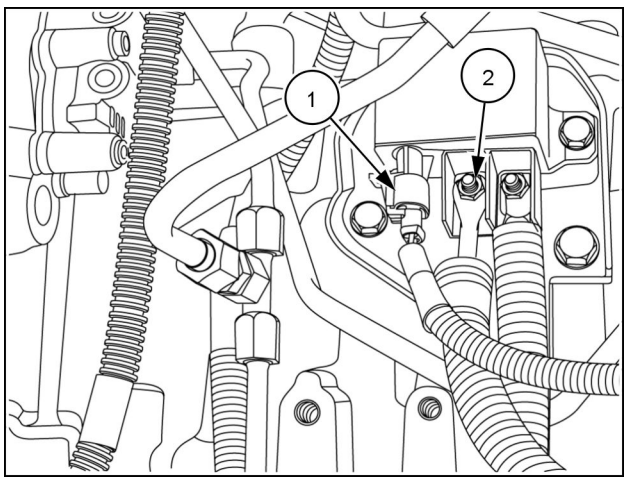
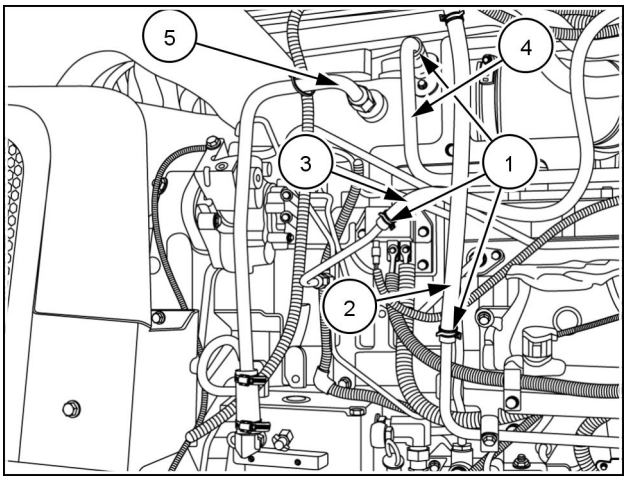
21. Disconnect the harness connector **(1)** for the engine grid heater and the power supply cable **(2)**.



RCPH10CCH062BAB 17

22. Disengage the hose clamps **(1)** and disconnect the fuel supply **(2)** and return **(3)** hoses.
23. Disconnect the engine blowby recirculation line **(4)**.
24. If equipped, disconnect the air compressor inlet line **(5)**.



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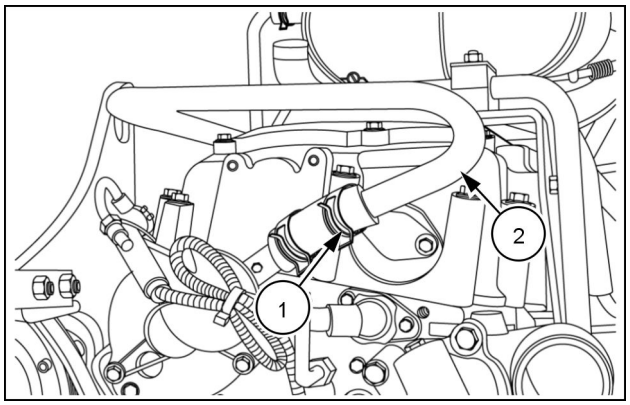
25. At the front of the engine, disengage the clamp **(1)**, and remove the blowby recirculation tube **(2)** and set aside.



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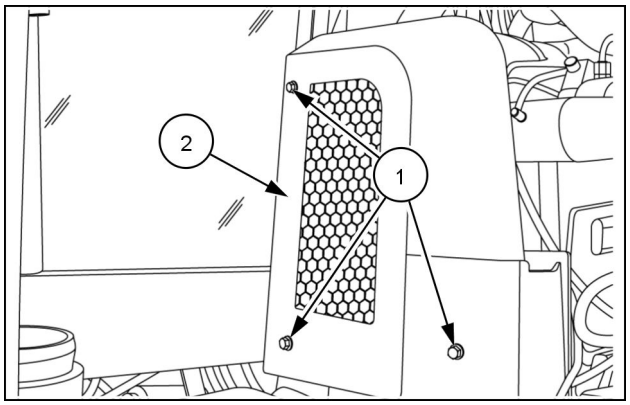
26. Remove the attaching bolts **(1)**, and remove the exhaust shield **(2)** and set aside.



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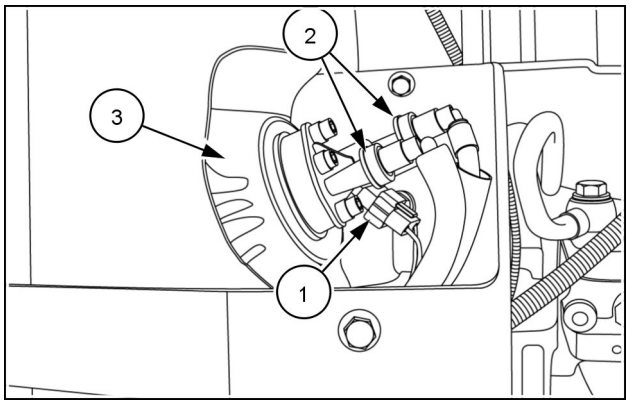
27. Disconnect the harness **(1)** and supply and return hose connections **(2)** at the SCR dosing valve **(3)**.



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