Magnum 235
Magnum 260
Magnum 290
Magnum 315
Magnum 340
Magnum 370

Continuously Variable Transmission (CVT)

Tractor

PIN ZCRD02588 and above

SERVICE MANUAL

https://caseihservicemanual.com

Part number 47533562
2nd edition English
October 2013

CASE IH AGRICULTURE

Contents

https://caseihservicemanual.com

https://caseihservicemanual.com

https://caseihservicemanual.com

https://caseihservicemanual.com

https://caseihservicemanual.com

INTRODUCTION

https://caseihservicemanual.com

Contents

INTRODUCTION

https://caseihservicemanual.com

Foreword - Important notice regarding equipment servicing

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] 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 CASE IH Sales and Service Networks.

https://caseihservicemanual.com

Safety rules

Magnum 235 NA, Magnum 260 NA, Magnum 290 NA, Magnum 315 NA, Magnum 340 NA, Magnum 370

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.

https://caseihservicemanual.com

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 - General maintenance safety

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] NA

⚠ General maintenance safety⚠

Keep the area used for servicing the machine clean and dry. Clean up spilled fluids.

Service the machine on a firm, level surface.

Install guards and shields after you service the machine.

Close all access doors and install all panels after servicing the machine.

Do not attempt to clean, lubricate, clear obstructions, or make adjustments to the machine while it is in motion or while the engine is running.

Always make sure that working area is clear of tools, parts, other persons and pets before you start operating the machine.

Unsupported hydraulic cylinders can lose pressure and drop the equipment, causing a crushing hazard. Do not leave equipment in a raised position while parked or during service, unless the equipment is securely supported.

Jack or lift the machine only at jack or lift points indicated in this manual.

Incorrect towing procedures can cause accidents. When you tow a disabled machine follow the procedure in this manual. Use only rigid tow bars.

Stop the engine, remove the key, and relieve pressure before you connect or disconnect fluid lines.

Stop the engine and remove the key before you connect or disconnect electrical connections.

Scalding can result from incorrect removal of coolant caps. Cooling systems operate under pressure. Hot coolant can spray out if you remove a cap while the system is hot. Allow the system to cool before you remove the cap. When you remove the cap, turn it slowly to allow pressure to escape before you completely remove the cap.

Replace damaged or worn tubes, hoses, electrical wiring, etc.

The engine, transmission, exhaust components, and hydraulic lines may become hot during operation. Take care when you service such components. Allow surfaces to cool before you handle or disconnect hot components. Wear protective equipment when appropriate.

When welding, follow the instructions in the manual. Always disconnect the battery before you weld on the machine. Always wash your hands after you handle battery components.

https://caseihservicemanual.com

Safety rules - Personal Protective Equipment (PPE)

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] NA

⚠ Personal Protective Equipment (PPE) ⚠

Wear Personal Protective Equipment (PPE) such as hard hat, eye protection, heavy gloves, hearing protection, protective clothing, etc.

https://caseihservicemanual.com

Safety rules - Do Not Operate tag

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] NA

⚠ Do Not Operate tag ⚠

Before you start servicing the machine, attach a ‘Do Not Operate’ warning tag to the machine in an area that will be visible.

https://caseihservicemanual.com

Safety rules - Ecology and the environment

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] NA

Soil, air, and water are vital factors of agriculture and life in general. When legislation does not yet rule the treatment of some of the substances required by advanced technology, sound judgment should govern the use and disposal of products of a chemical and petrochemical nature.

NOTE: *The following are recommendations that may be of assistance:*

- Become acquainted with and ensure that you understand the relative legislation applicable to your country.
- Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, antifreeze, cleaning agents, etc., with regard to their effect on man and nature and how to safely store, use, and dispose of these substances.
- Agricultural consultants will, in many cases, be able to help you as well.

Helpful hints

- Avoid filling tanks using cans or inappropriate pressurized fuel delivery systems that may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of them contain substances that may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- Avoid spillage when draining off used engine coolant mixtures, engine, gearbox and hydraulic oils, brake fluids, etc. Do not mix drained brake fluids or fuels with lubricants. Store them safely until they can be disposed of in a proper way to comply with local legislation and available resources.
- Modern coolant mixtures, i.e. antifreeze and other additives, should be replaced every two years. They should not be allowed to get into the soil, but should be collected and disposed of properly.
- Do not open the air-conditioning system yourself. It contains gases that should not be released into the atmosphere. Your CASE IH dealer or air conditioning specialist has a special extractor for this purpose and will have to recharge the system properly.
- Repair any leaks or defects in the engine cooling or hydraulic system immediately.
- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.
- Protect hoses during welding as penetrating weld splatter may burn a hole or weaken them, allowing the loss of oils, coolant, etc.

https://caseihservicemanual.com

Torque - Minimum tightening torques for normal assembly

Magnum 235, Magnum 260, Magnum 290, Magnum 315, Magnum 340, Magnum 370

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.*

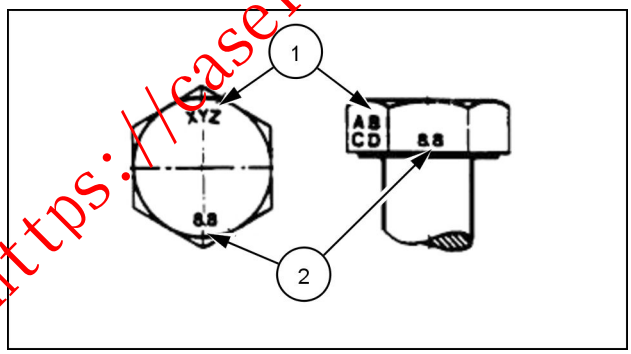
https://caseihservicemanual.com

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

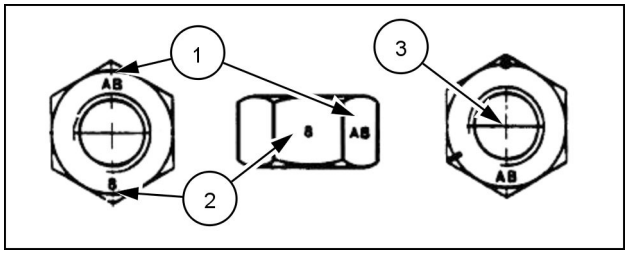
Metric Hex head and carriage bolts, classes 5.6 and up



20083680 1

1. Manufacturer's Identification
2. Property Class

Metric Hex nuts and locknuts, classes 05 and up



20083681 2

https://caseinservicemanual.com

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.*

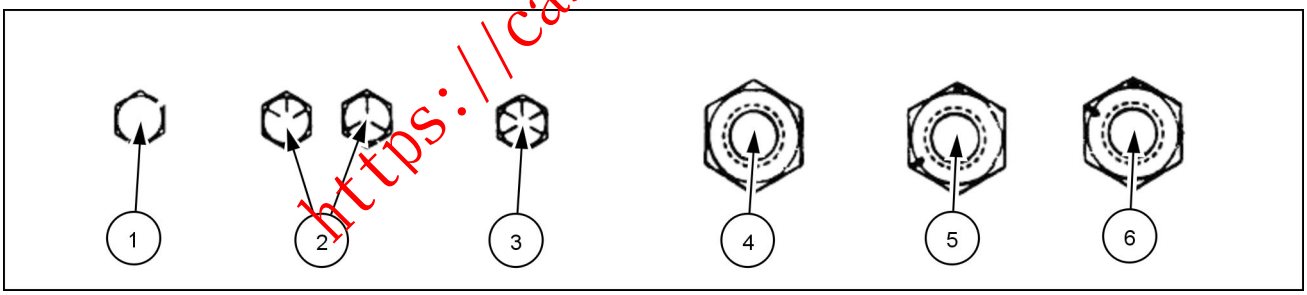
https://caseihservicemanual.com

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



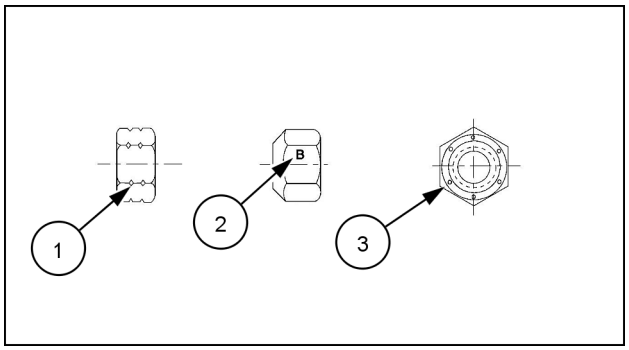
20083682 3

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

https://caseihservicemanual.com

Inch Lock Nuts, All Metal (Three optional methods)



20090268 4

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

https://caseihservicemanual.com

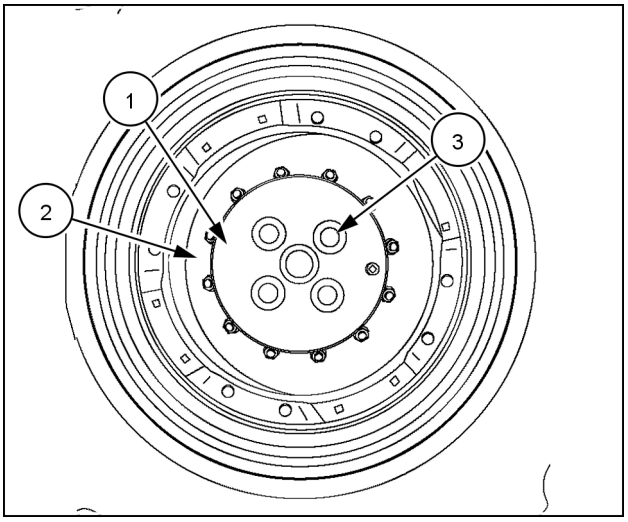
Capacities

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] NA

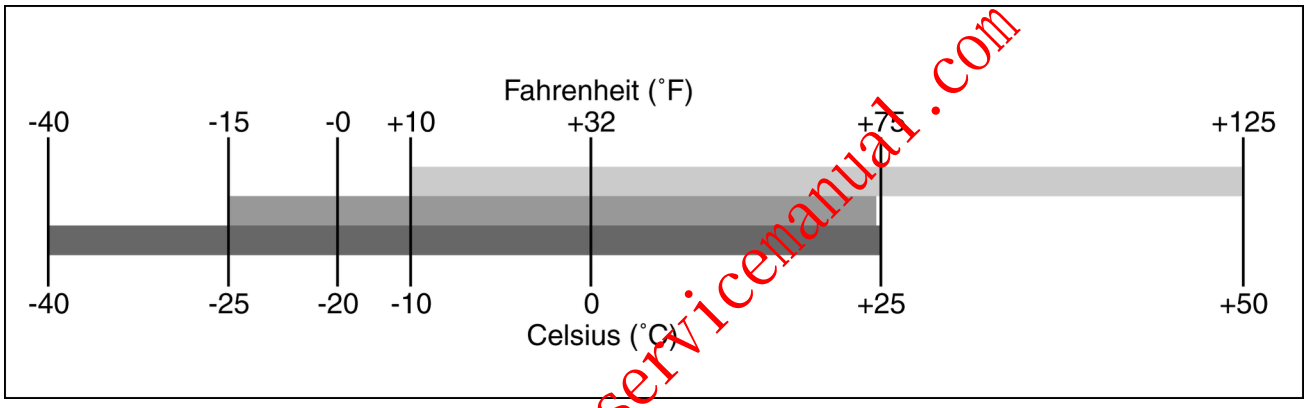
System	Metric	U.S.	Imperial
9.0 l engine **TUTELA UNITEK CJ-4 ENGINE OIL** or **CASE IH AKCELA NO. 1™ ENGINE OIL**			
Engine oil – no filter change	**25 l**	**6.6 US gal**	**5.5 UK gal**
Engine oil – with filter change	**25 l**	**6.6 US gal**	**5.5 UK gal**
Cooling system	**26.5 l**	**7 US gal**	**5.8 UK gal**
Transmission/hydraulic system – **CASE IH AKCELA HY-TRAN® ULTRACTION**			
Powershift	**172 l**	**45.5 US gal**	**38 UK gal**
Continuously Variable transmission (CVT) with standard rear axle	**187 l**	**49.5 US gal**	**41.25 UK gal**
Continuously Variable transmission (CVT) 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 US qt**	**21.6 UK pt**
Planetary (each)	**1.4 l**	**3 US pt**	**2.4 UK pt**
4 pin – **180 mm** (**7 in**) hub length heavy duty axle*			
Differential	**11.8 l**	**12.5 US qt**	**20.5 UK pt**
Planetary (each)	**3.3 l**	**7 US pt**	**5.8 UK pt**
3 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**
Case IH 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**
Case IH 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**
Case IH 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.			

https://caseihservicemanual.com

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.



RCPH11CCH074AAB 1



RCIL08CCH001EAA 2

Axle oil viscosity/temperature usage recommendation

CASE IH AKCELA GEAR 135 H EP 85W-140

CASE IH AKCELA GEAR 135 H EP 80W-90

CASE IH AKCELA GEAR LUBE SSL 75W90

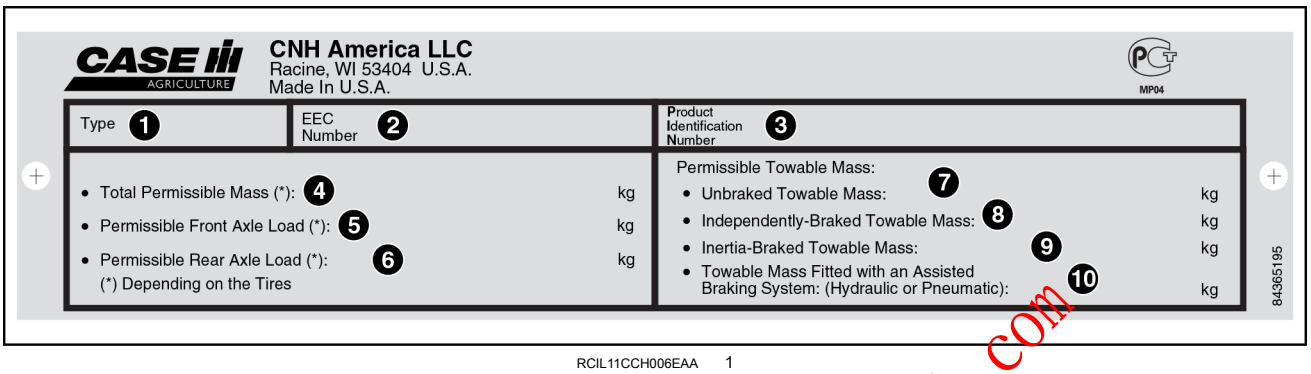
https://caseihservicemanual.com

Product identification

Magnum 235 [ZCRD02588 -] NA, Magnum 260 [ZCRD02588 -] NA, Magnum 290 [ZCRD02588 -] NA, Magnum 315 [ZCRD02588 -] NA, Magnum 340 [ZCRD02588 -] NA, Magnum 370 [ZCRD02588 -] NA

Tractor model and product identification number

Write your model number, product identification number (PIN) or serial number of major components on the lines provided. If needed, give these numbers to your dealer when you need parts or information for your machine.



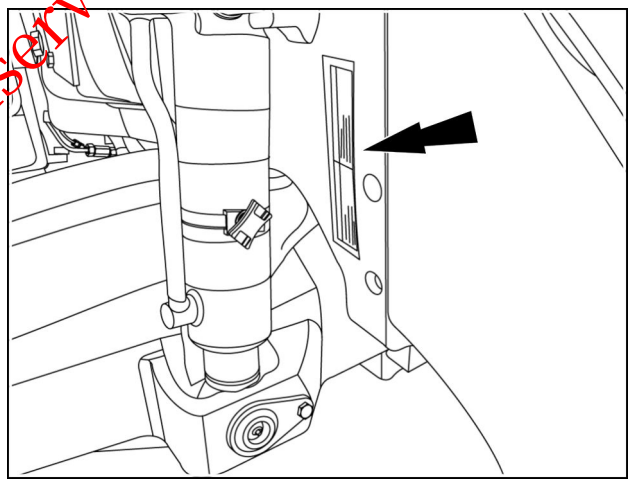
RCIL11CCH006EAA 1

1. Type	Permissible towable mass:
2. EEC number	• 7. Unbraked towable mass
3. Product identification number	• 8. Independently brakes towable mass
4. Total permissible mass	• 9. Inertia braked towable mass
5. Permissible front axle load	• 10. Towable mass fitted with an assisted braking system (hydraulic or pneumatic)
6. Permissible rear axle load	

Model :

PIN:

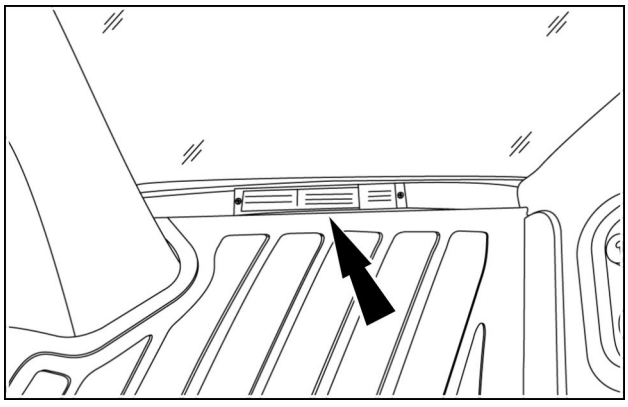
NOTE: *Located on right hand front casting. Pin plate may be mounted vertically or horizontally.*



RCPH11CCH013BAB 2

Roll Over Protective System (ROPS) serial number

NOTE: *Located on the right hand cab floor.*

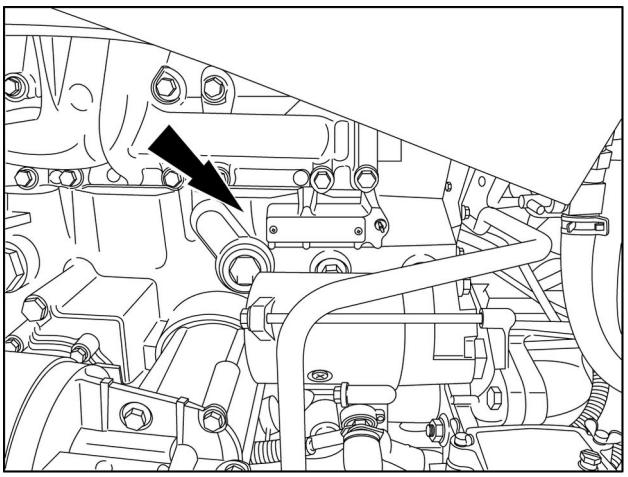


RCPH11CCH014AAB 3

https://caseihservicemanual.com

Engine serial number

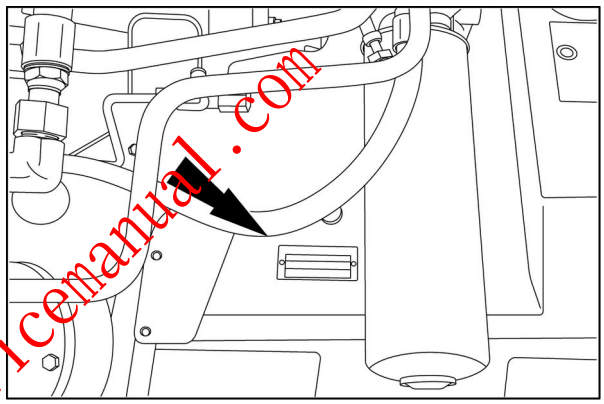
NOTE: *Located on the valve cover. The serial number is also etched into the left hand side of the engine block, just below the oil cooler.*



RAIL12TR02140AA 4

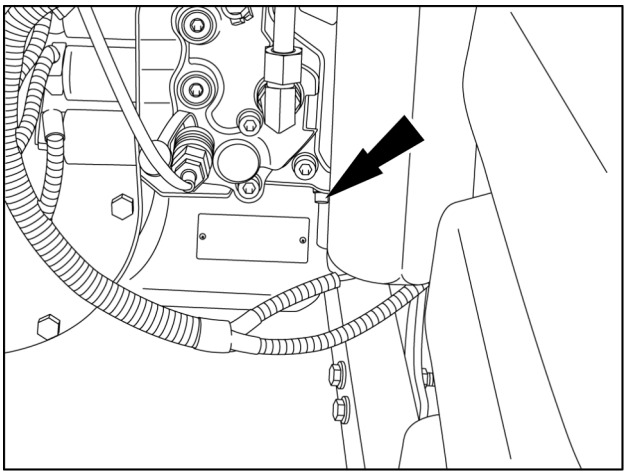
Transmission serial number

NOTE: *Located on the right hand side of the transmission to the left of the main hydraulic filter.*



RAIL12TR01410AA 5

Powershift transmission



RAIL12TR02191AA 6

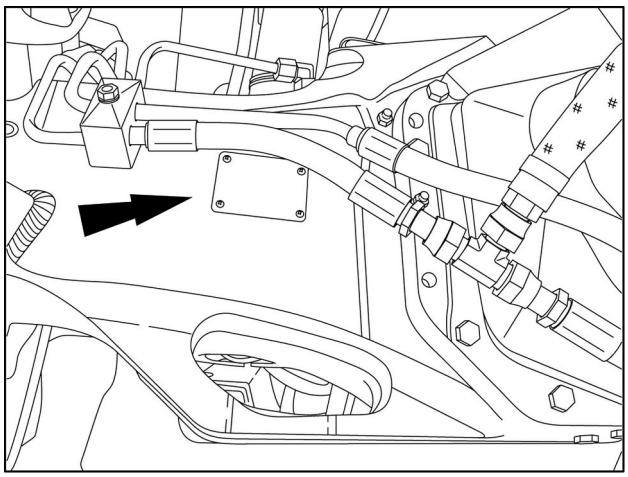
Continuously Variable Transmission (CVT)

https://caseihservicemanual.com

Axle serial number

Located on the rear left hand side of the CASE IH4.5 fixed, 4.75 fixed, 4.75 saddle suspended, 5.0 fixed and 5.0 saddle suspended front axle housings. (example shown)

Located on the rear right hand side of the Dana heavy duty fixed, 5.0 fixed and 5.0 fixed saddle suspended axles.

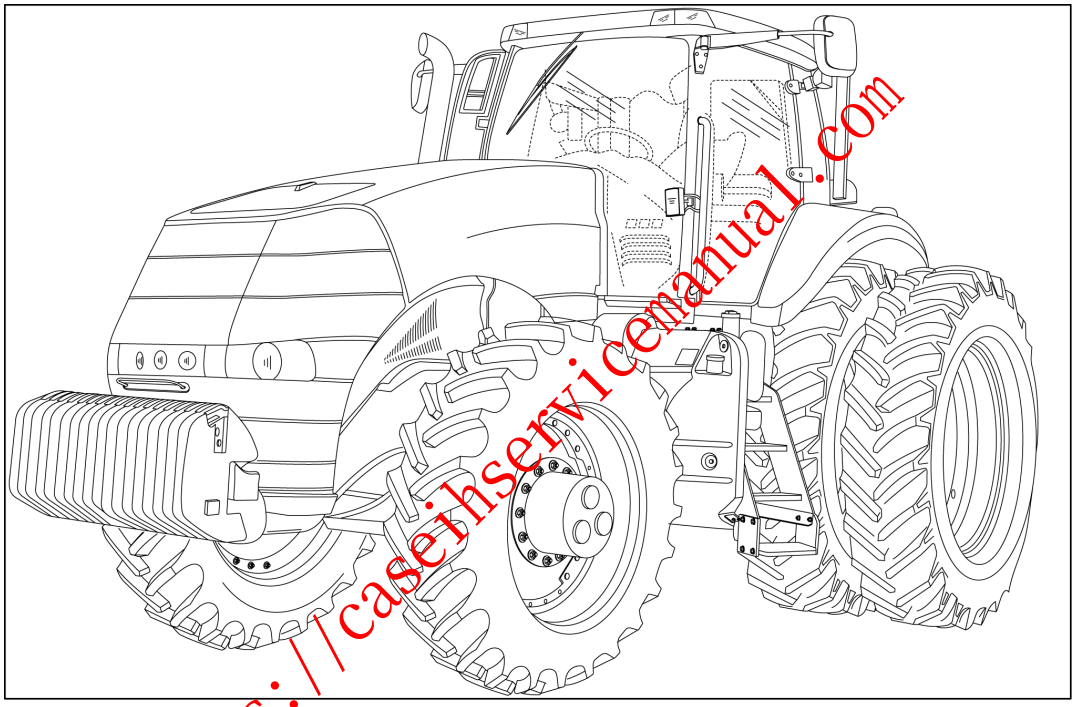


RAIL12TR02142AA 7

https://caseihservicemanual.com

SERVICE MANUAL

Engine



https://caseihservicemanual.com

Magnum 235 [ZCRD02588 -] , Magnum 260 [ZCRD02588 -] , Magnum 290 [ZCRD02588 -] , Magnum 315 [ZCRD02588 -] , Magnum 340 [ZCRD02588 -] , Magnum 370 [ZCRD02588 -]

Contents

Engine - 10

https://caseihservicemanual.com

Engine - 10

Engine and crankcase - 001

https://caseihservicemanual.com

Magnum 235 [ZCRD02588 -] , Magnum 260 [ZCRD02588 -] , Magnum 290 [ZCRD02588 -] , Magnum 315 [ZCRD02588 -] , Magnum 340 [ZCRD02588 -] , Magnum 370 [ZCRD02588 -]

Contents

Engine - 10

Engine and crankcase - 001

SERVICE

https://caseihservicemanual.com

Engine - Remove

Magnum 235, Magnum 260, Magnum 290, Magnum 315, Magnum 340, Magnum 370 [ZCRD02588 -]

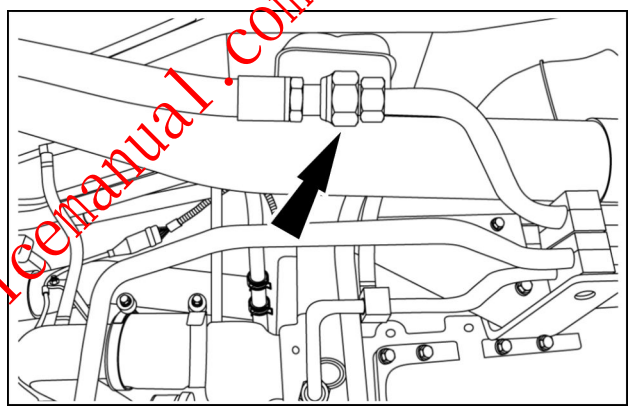
Prior operation:
Battery - Disconnect (55.302)
Prior operation:
Side shield - Remove (90.102)
Prior operation:
Hood - Remove (90.100)
Prior operation:
Engine cooling system - Emptying (10.400)
Prior operation:
Air conditioning - Recover (50.200)

NOTE: *During the disassembly of components with O-ring seals, the seals should be discarded and new seal installed during assembly.*

NOTE: *Cap all fittings and plug all lines/hoses as they are disconnected.*

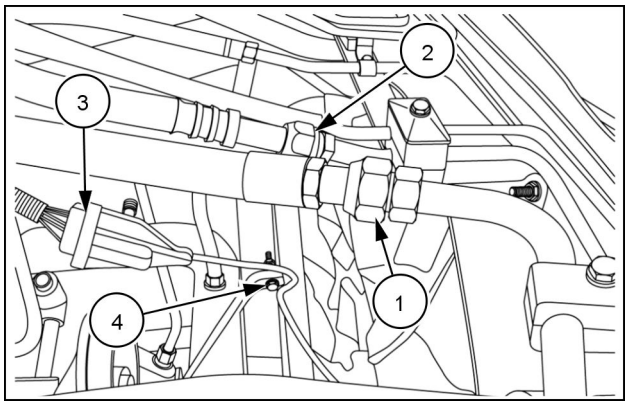
1. Disconnect the hydraulic cooling line connection on the right side (from oil cooler).

NOTE: *Be prepared to collect some hydraulic oil by placing a pan under the fitting.*



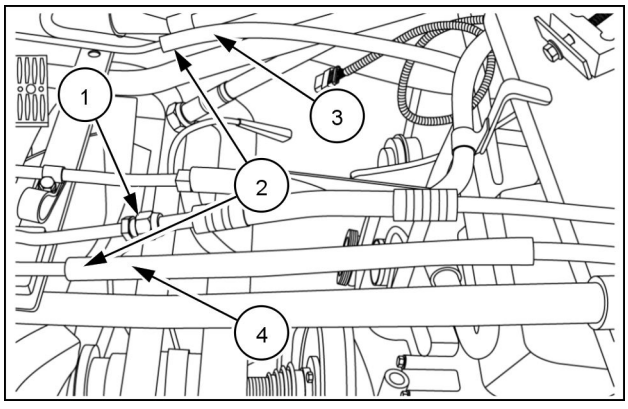
RCPH10CCH771AAB 1

2. Disconnect the hydraulic line **(1)** on the left side (to oil cooler). Disconnect the engine cooling fan drive harness connector **(3)**
3. Disconnect the air conditioning low pressure hose to line fitting (return from condenser) **(2)**.
4. Remove the bolt securing the harness P-clamp **(4)**.



RCPH10CCH772AAB 2

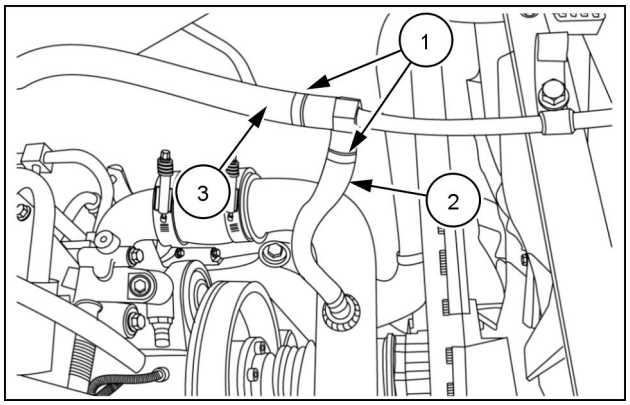
5. Disconnect the air conditioning high pressure hose to tube fitting **(1)**.
6. Disengage the hose clamps **(2)**, and disconnect the cooler hoses **(3)** **(4)**.



RCPH10CCH773AAB 3

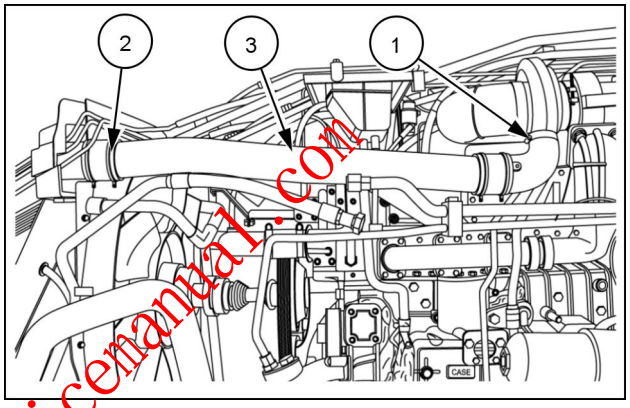
https://caseihservicemanual.com

7. Disengage the hose clamps **(1)** and disconnect the air vent hose **(2)** and the hose **(3)** from the deaeration tank to the recovery bottle.



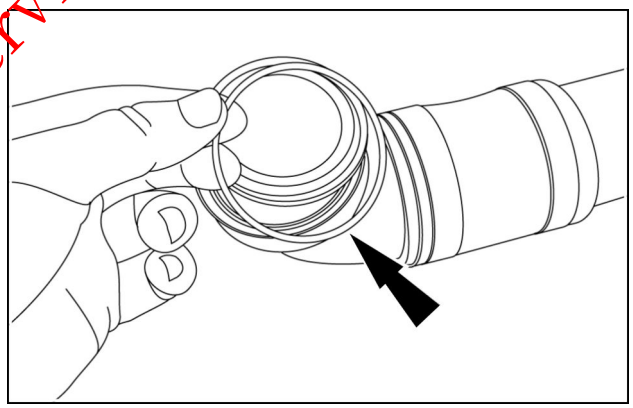
RCPH10CCH774AAB 4

8. Loosen the turbocharger clamp **(1)**.
9. Loosen the air cooler inlet hose clamp **(2)**.
10. Remove the pipe **(3)** and set aside.
11. Repeat for the right side air to air tube from the cooler to the intake manifold (not shown).



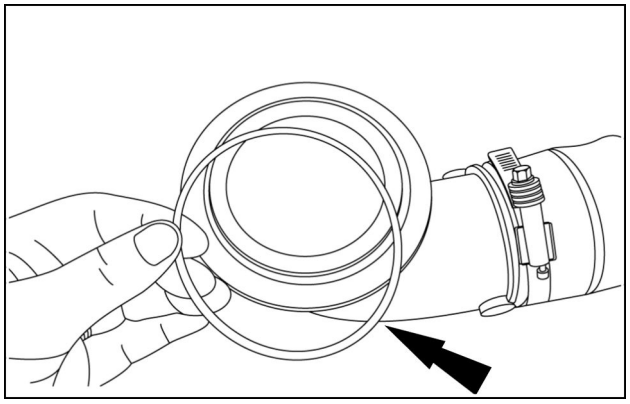
RCPH10CCH775AAB 5

12. Remove and discard the O-ring seal from the elbow.



RCPH10CCH778AAB 6

13. Remove and discard the O-ring seal from the elbow.



RCPH10CCH777AAB 7

https://caseihservicemanual.com