

TOROMONT

REMAN

Core Acceptance Criteria



TOROMONT REMAN

Toromont Reman helps you maximize your investment in equipment. Industry leader in parts availability and warranty coverage

The following pages contain core criteria specific to TOROMONT REMAN components. Please use these instructions when reviewing cores for credit. Any other components not covered specifically in these pages need to conform to the Cat Reman core criteria.

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Alternator

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Not cracked or damaged.

Partial Credit:

- Housing or shaft cracked or damaged.
- Non operational damage such as excessive rust, corrosion, or pitting.

No Core Refund

- Unacceptable part number.
- Disassembled.
- Fire damage.
- Unsuccessful attempt to salvage.

Axle Groups

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. Ask the service dept or customer for the reason why the component was replaced.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Case, housings, and trunnion support arms (oscillating axle only) not visibly cracked, broken, or welded.

Partial Credit:

- Case, housings, or trunnion support arms (oscillating axle only) visibly cracked, broken, or welded.
- Failed, non-running core.
- Non-operational damage (such as mishandling, excessive rust, corrosion, pitting, or torch marks).

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Differential

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. Must pass rotation check. Rotate pinion shaft twice clockwise and twice counter clockwise. **Ask the service dept or customer for the reason why the component was replaced.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Differential, spider gears, or housing not visibly cracked or broken.
***Ring and pinion gear wear and damage is acceptable as Level 1.

Partial Credit:

- Failed non-running core.
- Differential, spider gears, or housing visibly cracked or broken.
- Non operational damage such as excessive rust, corrosion, mishandling, or torch marks)

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Engines

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core.
Inspection Tip : Ask customer or service dept for reason of replacement.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Cylinder block is not visibly cracked, broken, or welded
- The crankshaft must rotate through 360 degrees twice in one direction and once in the opposite direction. **This must be performed after the engine has been removed from the machine.

Partial Credit:

- Crankshaft will not rotate through 360 degrees twice in one direction and once in the opposite direction.
- Known internal damage (i.e. dropped valves or spun bearings).
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting)
- Failed, non-running core.

Block Add-bill:

- Cylinder block visibly cracked or broken. This is a separate charge on core return. ***See "Misc Item Charge" in core credit screen.

Engines Continued...

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Inspection tips:

- **Fully assembled and complete:** Engines which appear to have salvageable parts removed from them and had non-salvageable parts substituted in their place will be subject to a detailed inspection. If a returned core is found to have been scavenged or assembled from scrap material, the core will be rejected and the customer will be assessed a \$250.00 inspection fee.
- **Preparing For Shipment:** Please ensure that all oil and fluids are drained prior to shipment and the engine is securely fastened to its metal shipping stand. Failure to do so could result in fines from the Ministry of Transport or result in Health and Safety concerns.
- **Crankshaft Rotation:** After the engine has been removed from the machine, rotate the crankshaft through 360 degrees twice in one direction and once in the opposite direction using approximately a 2 ft. Johnson bar. Listen for internal damage while performing the inspection. If you hear internal damage or know there is internal damage from moving the machine prior to removal, the core will be considered for PARTIAL CREDIT and an add bill must be charged to the customer.

If the cylinder block is equipped with sound suppression panels, the panels should be examined for signs of a broken block, such as dents on the outside of the panels or oil leaks from behind the panels.

Engines which have been disassembled (i.e. loosened main or rod caps or bearings removed) to ensure the crankshaft rotates freely will be subject to PARTIAL CREDIT add bill.

Engines 3500 Series

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core.
Inspection Tip : Ask customer or service dept for reason of replacement.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Cylinder block is not visibly cracked, broken, or welded.

Partial Credit:

- **ADDBILLS OR ADDCHARGES TO BE DETERMINED BY REMAN ON AN INDIVIDUAL BASIS AFTER DISASSEMBLY/EVALUATION.**
- Crankshaft will not rotate through 360 degrees twice in one direction and once in the opposite direction.
- Known internal damage (i.e. dropped valves or spun bearings).
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting)
- Failed, non-running core.

Block Add-bill:

- Cylinder block visibly cracked or broken. This is a separate charge on core return. ***See "Misc Item Charge" in core credit screen.

Engines 3500 Series Continued....

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Inspection Tips:

- **Fully assembled and complete:** Engines which appear to have salvageable parts removed from them and had non-salvageable parts substituted in their place will be subject to a detailed inspection. If a returned core is found to have been scavenged or assembled from scrap material, the core will be rejected and the customer will be assessed a \$500.00 inspection fee.
- **Preparing For Shipment:** Please ensure that all oil and fluids are drained prior to shipment and the engine is securely fastened to its metal shipping stand. Failure to do so could result in fines from the Ministry of Transport or result in Health and Safety concerns.
- **Crankshaft Rotation:** After the engine has been removed from the machine, rotate the crankshaft through 360 degrees twice in one direction and once in the opposite direction using the 9S9082 crankshaft turning tool. Listen for internal damage while performing the inspection. If you hear internal damage or know there is internal damage from moving the machine prior to removal, the core will be considered for PARTIAL CREDIT and an add bill must be charged to the customer.
- If the cylinder block is equipped with sound suppression panels, the panels should be examined for signs of a broken block, such as dents on the outside of the panels or oil leaks from behind the panels.

**Engines which have been disassembled (i.e. loosened main or rod caps or bearings removed) to ensure the crankshaft rotates freely will be subject to PARTIAL CREDIT add bill.

Final Drives

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced. Perform rotation test on component. Must rotate twice clockwise, and twice counter clockwise.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Wheel hub, carrier or spindle not visibly cracked or broken.
- Gears not visibly broken or rusted (with cover plate removed).
- 785 rear final drive must have cast wheel, not wrapper band wheel.

Partial Credit:

- Failed non-running core.
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting)
- Wheel hub, carrier, gears, or spindle is cracked, broken, welded.
- 785 rear final drive that is wrapper band version.

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Inspection Tips:

- **Full vs. Damaged Core Refund:** To receive a Full Core Refund, the final drive or swing drive must be a non-failed “running core”. The major components including the wheel hub, carrier, spindle, or pinion gear must not be damaged or broken.
The customer must be informed at the time of sale that a partial core credit will apply for damage or broken major components. ***OUT BOARD COVER MUST BE REMOVED AND REPLACED FOR INSPECTION OF INTERNAL GEARS.
- **Shipping Stand:** All final drive cores must be returned securely fastened to the metal stand that the part was shipped on. Cores not returned on this stand are subject to a \$1,500.00 add charge.
- **Drain Oil:** Drain all oil from cores. Seal all openings with plugs and covers prior to shipping.

Hydraulic Pumps & Motors

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core.
Inspection Tip : Rotate shaft twice in one direction and once in other direction.Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Not previously disassembled
- Housing not visibly cracked, broken, or welded.
- External shaft not cracked, broken, chipped, or bent.

Partial Credit:

- Housing visibly cracked, broken, or welded.
- External shaft cracked, broken, chipped, or bent.
- Failed non-running core.
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting)

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Inspection Tips:

- **Non-Operational Damage:** If rust can be removed with an emery cloth, the core will be accepted for full credit. Excessive rust, corrosion, or pitting is most likely caused by improper storage and will result in no core credit.
- **Fully assembled and complete:** No credit will be issued for cores that are returned disassembled. External parts that are missing or damaged will be subject to additional billing at the replacement cost of the component. If the core has been disassembled and reassembled, add charges will apply.

Hydraulic Cylinder Group

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Tube not visibly damaged on the outside.
- Both eyes and trunnion are not visibly cracked or broken.
- Rod is not visibly bent.
- *****NOTE** : External oil leakage from seals or cylinder drift is not considered “failed” and is considered a level 1 core. Leakage and drift is considered wear.

Partial Credit:

- Ruptured tube/barrel.
- Non-operational damage (mishandling, excessive rust, corrosion, torch marks, or pitting)
- Rod eye OR barrel eye cracked or broken.
- Rod cracked, broken or visibly bent.
- Failed, non-running core.

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.
- Rod eye AND barrel are cracked or broken.

Inspection Tips:

- **Rod Straightness Inspection:** the full length of the rod must be able to slide into the barrel.
- **Preparing For Shipment:** Please ensure that all oil and fluids are drained prior to shipment and the barrel is securely fastened to a proper skid. Failure to do so could result in fines from the Ministry of Transport or result in Health and Safety concerns.
- *****NOTE :** External oil leakage from seals or cylinder drift is not considered “failed” and is considered a level 1 core. Leakage and drift is considered wear.

Hydraulic Rod Packs

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Rod not visibly cracked, broken or visibly bent.
- Head or piston not damaged or missing.
- Rod eye not visibly cracked or broken.

Partial Credit:

- Rod visibly cracked, damaged, broken or visibly bent.
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting).
- Failed, non-running core.

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Starters

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- No cracked or damaged housings.

Partial Credit:

- Housing cracked or damaged.
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting).

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Torque Converter & Transmissions

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core.
****SEE INSPECTION TIPS FOR ROTATION TEST. ASK SERVICE DEPT OR CUSTOMER FOR REASON WHY COMPONENT WAS REPLACED.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.
- Case, housing, splines, shafts and yoke not visibly cracked, broken or welded.
- No damage to mounting surfaces.

Partial Credit:

- Failed, non-running core. Evidence of bearing, gear or other internal failure. (Use Spin Test).
- Performance problems may indicate a failed unit resulting in a partial core credit. (Ask customer or service dept for reason why the component was replaced)
- Case, housing, splines, shafts and yoke visibly cracked, broken or welded.
- Non-operational damage (mishandling, excessive rust, corrosion, or pitting).

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

*Torque Converter's & Transmissions Continued...***Inspection Tips:**

- **Rotation Requirements**

Using a strap wrench or other suitable rotation tool, perform a rotation test to assess that the core is a non-failed, running core (see Figure 7). Listen primarily for noises that would indicate internal failures.

Torque Converters: The following inspection may be performed while core is fastened to the metal stand. This will be followed by "Step 1".

Step 1 - Rotate output shaft (yoke) two full revolutions in one direction. Unit must rotate freely without noise, rubbing, vibration, or looseness of parts.

Step 2 - Repeat Step 1 for input end(flywheel pilot).

- **Partial Credit - Failed Unit:** Cores found to be in non-running condition will be subject to a partial core credit. Evidence of failed bearing, gear, or other internal parts may be seen in the filter or screen in the form of metallic material. A SOS sample may also provide evidence of a failed unit. A failed unit will not drive or shift properly in all forward and reverse gears.
- **Add Charges:** Broken or previously welded cases will be subject to additional billing.
- **Fully Assembled and Complete:** Torque Converters which appear to have salvageable parts removed from them and had non-salvageable parts substituted in their place will be subject to a detailed inspection.
- **Preparing For Shipment:** Please ensure that all oil and fluids are drained prior to shipment and the torque converter is securely fastened to its metal shipping stand. Failure to do so could result in fines from the Ministry of Transport or result in Health and Safety concerns

Turbocharger

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core.
****INSPECTION TIP – SHAFT MUST SPIN FREELY & NO DAMAGE TO TURBINE OR COMPRESSOR FINS.** Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided if applicable.

Partial Credit:

- Housing or turbine wheels damaged from operational failure.
- Non-operational damage (mishandling, excessive rust, corrosion, torch marks or pitting).
- Failed, non-running core.
- BAND CLAMPS ARE LOOSE OR MISSING
- Nozzle ring damaged (Part # 2848281)

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.
- Coked or damaged turbine shaft (Part # 2848281)

Inspection Tips:

- **Fully assembled and complete:** Band clamps must be tightened prior to shipment to prevent damage to the cartridge. Turbocharger cores disassembled or with loose or missing band clamps will receive PARTIAL CREDIT, provided they meet all other core criteria.
- **Housing Damage:** Extensive damage to either housing caused by a severe failure of the wheel and shaft which makes the housing non-repairable will be given only a PARTIAL CREDIT. Guidelines to use include severe scoring of the internal housing surface particularly on the compressor side.

Cylinder Head

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided if applicable.
- Casting is not visibly cracked, broken, or have severe damage (minor damage such as small dents, light scratches, pitting, and minor gouges are acceptable).
- Casting is not welded by source other than Caterpillar.

Partial Credit:

- Casting is visibly cracked, has severe damage or metal stamp marks in machined surfaces.
- Casting is welded by source other than Caterpillar.
- Failed, non-running core.
- Non-operational damage (mishandling, excessive rust, corrosion, torch marks or pitting).

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Radiators

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned on stand that was provided.

Partial Credit:

- Non-operational damage (mishandling, excessive rust, corrosion, torch marks or pitting).
- Failed, non-running core.

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.

Air Compressors

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned in the packaging that was provided.
- Component not visibly cracked, broken or welded.
- Drive gear mounting nut or bolt must easily thread on.

Partial Credit:

- Non-operational damage (mishandling, excessive rust, corrosion, torch marks or pitting).
- One or two major parts damaged. See list of major parts below.

No Core Refund:

- Unacceptable part number.
- Contains non CAT part #'s.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.
- Three major parts damaged. See list of major parts below.

Major Parts – *crankshaft, crankshaft threads, cooling fins, governor mounting pad, missing or broken connecting rod and cap, mounting flange, block housing, missing end cover, cylinder head.*

Water Pumps

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete.
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned in the packaging that was provided.
- Housing, pulley, or gear not cracked, broken, or welded.

Partial Credit:

- Non-operational damage (mishandling, excessive rust, corrosion, torch marks or pitting).

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.
- Housing, pulley, or gear is cracked, broken, or welded.

Fuel Systems & Fuel Pumps

Toromont Core Acceptance Criteria

You will receive...

Full Credit:

- Acceptable part number.
- Fully assembled and complete. Non failed, running core. ****Ask the service dept or customer for the reason why the component was replaced.**
- No non operational damage such as excessive rust, corrosion, mishandling, torch marks, or fire damage.
- Must be returned in the packaging that was provided.
- Housing, pulley, or gear not cracked, broken, or welded.

Partial Credit:

- Non-operational damage (mishandling, excessive rust, corrosion, torch marks or pitting).
- Failed Core.

No Core Refund:

- Unacceptable part number.
- Fire damage.
- Disassembled or not complete.
- Unsuccessful attempt to salvage.
- Housing, pulley, or gear is cracked, broken, or welded.

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HEAD OFFICE - 416-667-5900

REMAN PRODUCTS - 416-667-5918

ENGINES - 416-667-5902

FLUID POWER TRAIN - 416-667-5903

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ENGINE MACHINING - 416-667-5926

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