

BO9-1
BLUE-MAR

Northern Heavy Duty Repair Ltd
PO BOX 2115
Lac La Biche, AB T0A 2C0, CA
northernhdr@gmail.com
(780) 404-3830

Invoice: 13118
Date: 7/25/2024

Bill To
TRANSTECH LTD

Remit Payment To
Northern Heavy Duty Repair Ltd
PO BOX 2115
Lac La Biche, AB T0A 2C0, CA

Service Order	Terms	Due Date	Authorizer	Customer PO	Unit #
3881	Net 30	8/24/2024	MYRON		1

Item	Description	Quantity	Rate	Amount
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Complaint: BRING UNIT IN SHOP, PERFORM TEST TO SEE IF EXHAUST GAS IS GOING INTO COOLANT SYSTEM
CHECK EGR COOLER, DRY
REMOVE AIR PIPING ETC, REMOVE VALVE COVER

Cause: Customer request

Labor	Correction: A/C Cooling System / Cooling System / BRING UNIT IN SHOP, PERFORM TEST TO SEE IF EXHAUST GAS IS GOING INTO COOLANT SYSTEM CHECK EGR COOLER, DRY REMOVE AIR PIPING ETC, REMOVE VALVE COVER - Completed: 7/25/2024	1.00000	\$145.00	\$145.00
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Subtotal \$145.00

Complaint: PULL OUT ALL INJECTORS AND INSPECT FOR COOLANT, ALL GOOD HAS RING IN THE CUPS
DRAIN COOLANT, RECOVER A/C SYSTEM, 1LB
STRIP ENGINE, PULL CYLINDER HEAD OFF, START CLEANING DECK

Cause: Customer request

Labor	Correction: Engine / Overhaul / PULL OUT ALL INJECTORS AND INSPECT FOR COOLANT, ALL GOOD HAS RING IN THE CUPS DRAIN COOLANT, RECOVER A/C SYSTEM, 1LB STRIP ENGINE, PULL CYLINDER HEAD OFF, START CLEANING DECK - Completed: 7/25/2024	4.00000	\$145.00	\$580.00
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Subtotal \$580.00

Complaint: CLEAN BLOCK VERY GOOD, MEASURE PROTRUSION, #6 R/H LITTLE LOW

Cause: Customer request

Item	Description	Quantity	Rate	Amount
Labor	Engine / Overhaul / CLEAN BLOCK VERY GOOD, MEASURE PROTRUSION, #6 R/H LITTLE LOW - Completed: 7/25/2024	1.50000	\$145.00	\$217.50
Subtotal				\$217.50

Complaint: STRIP CYLINDER HEAD, PREP FOR SHIPMENT

Cause: Customer request

Labor	Engine / Overhaul / STRIP CYLINDER HEAD, PREP FOR SHIPMENT - Completed: 7/25/2024	0.50000	\$145.00	\$72.50
Subtotal				\$72.50

Complaint: DRAIN OIL, REMOVE OIL PAN

REMOVE #6 COOLING JET, PISTON AND LINER

#6 LINER SHIM TOOK DAMAGE, DAMAGED SPOT ON BLOCK COUNTERBORE

Cause: Customer request

Labor	Correction: Engine / Overhaul / DRAIN OIL, REMOVE OIL PAN REMOVE #6 COOLING JET, PISTON AND LINER #6 LINER SHIM TOOK DAMAGE, DAMAGED SPOT ON BLOCK COUNTERBORE - Completed: 7/25/2024	1.50000	\$145.00	\$217.50
Subtotal				\$217.50

Complaint: CLEAN COUNTERBORE VERY GOOD, TOOK PHOTO, CLEAN AND INSPECT PARTS,
REMOVE WATER PUMP AND INSPECT

Cause: Customer request

Labor	Engine / Overhaul / CLEAN COUNTERBORE VERY GOOD, TOOK PHOTO, CLEAN AND INSPECT PARTS, REMOVE WATER PUMP AND INSPECT - Completed: 7/25/2024	2.00000	\$145.00	\$290.00
Subtotal				\$290.00

Complaint: REMOVE FRONT ENGINE SEAL

REMOVE OIL PUMP AND STIFNEER PLATE

REMOVE PISTON COOLING JETS, PISTONS AND LINERS

CLEAN COUNTERBORES

Cause: Customer request

Labor	Correction: Engine / Overhaul / REMOVE FRONT ENGINE SEAL REMOVE OIL PUMP AND STIFNEER PLATE REMOVE PISTON COOLING JETS, PISTONS AND LINERS CLEAN COUNTERBORES - Completed: 7/25/2024	2.00000	\$145.00	\$290.00
Subtotal				\$290.00

Item	Description	Quantity	Rate	Amount
Complaint: CLEAN PISTONS AND PAILS, SET UP TO SOAK CLEAN LINERS AND INSPECT, CLEAN CONNECTNG ROD CAPS Cause: Customer request				
Labor	Correction: Engine / Overhaul / CLEAN PISTONS AND PAILS, SET UP TO SOAK CLEAN LINERS AND INSPECT, CLEAN CONNECTNG ROD CAPS - Completed: 7/25/2024	1.00000	\$145.00	\$145.00
Subtotal				\$145.00
Complaint: INSTALL FRONT SEAL, CLEAN DECK BETTER RUN A TAP HEADBOLT HOLES INSTALL WATERPUMP, WASH AND INSPECT OIL PUMP, CLEAN BOTTOM OF ENGINE OIL PAN AREA CLEAN LINERS AND INSPECT Cause: Customer request				
Labor	Correction: Engine / Overhaul / INSTALL FRONT SEAL, CLEAN DECK BETTER RUN A TAP HEADBOLT HOLES INSTALL WATERPUMP, WASH AND INSPECT OIL PUMP, CLEAN BOTTOM OF ENGINE OIL PAN AREA CLEAN LINERS AND INSPECT - Completed: 7/25/2024	2.00000	\$145.00	\$290.00
Parts	PAI CUMMINS ISX CM2250, CM2350 FRONT CRANK SHAFT SEAL - P136139	1.00000	\$104.00	\$104.00
Subtotal				\$394.00
Complaint: TRY WASHING PISTONS THAT WERE SOAKING OVERNIGHT, NO SUCCESS WASH SUCTION TUBE, WASH STIFFNER PLATE Cause: Customer request				
Labor	Correction: Engine / Overhaul / TRY WASHING PISTONS THAT WERE SOAKING OVERNIGHT, NO SUCCESS WASH SUCTION TUBE, WASH STIFFNER PLATE - Completed: 7/25/2024	0.50000	\$145.00	\$72.50
Subtotal				\$72.50
Complaint: WASH CRANKCASE FILTER, REMOVE/REPLACE CRANKCASE FILTER Cause: Customer request				
Labor	Engine / Overhaul / WASH CRANKCASE FILTER, REMOVE/REPLACE CRANKCASE FILTER - Completed: 7/25/2024	1.50000	\$145.00	\$217.50
Parts	CRANKCASE FILTER - CV15000	1.00000	\$80.461	\$80.46
Subtotal				\$297.96

Item	Description	Quantity	Rate	Amount
Complaint: CLEAN AND PRIME, OIL PAN, VALVE COVER, INTAKE MANIFOLD, VIBRATION DAMPNER, CRANKCASE FILTER HOUSING, EGR VALVE AND HOUSING DISASSEMBLE PISTONS FROM CONNECTING RODS CLEAN UP FRONT COVER PAINT PRIMED PARTS Cause: Customer request				
Labor	Correction: Engine / Overhaul / CLEAN AND PRIME, OIL PAN, VALVE COVER, INTAKE MANIFOLD, VIBRATION DAMPNER, CRANKCASE FILTER HOUSING, EGR VALVE AND HOUSING DISASSEMBLE PISTONS FROM CONNECTING RODS CLEAN UP FRONT COVER PAINT PRIMED PARTS - Completed: 7/25/2024	3.00000	\$145.00	\$435.00
			Subtotal	\$435.00
Complaint: REMOVE/REPLACE THERMOSTAT, SEAL, GASKET REMOVE #4 MAIN CAP, BEARING IS DAMAGED HAS UNDERSIZED BEARINGS PRIME THERMOSTAT HOUSING Cause: Customer request				
Labor	Correction: Engine / Overhaul / REMOVE/REPLACE THERMOSTAT, SEAL, GASKET REMOVE #4 MAIN CAP, BEARING IS DAMAGED HAS UNDERSIZED BEARINGS PRIME THERMOSTAT HOUSING - Completed: 7/25/2024	1.00000	\$145.00	\$145.00
			Subtotal	\$145.00
Complaint: PULL OFF ALL MAIN BEARING CAPS TO SEE BEARING NUMBERS, ALL THE SAME, CONNECTING ROD BEARINGS UNDERSIZED AS WELL, CRANK WAS GROUNDED DOWN Cause: Customer request				
Labor	Engine / Overhaul / PULL OFF ALL MAIN BEARING CAPS TO SEE BEARING NUMBERS, ALL THE SAME, CONNECTING ROD BEARINGS UNDERSIZED AS WELL, CRANK WAS GROUNDED DOWN - Completed: 7/25/2024	1.00000	\$145.00	\$145.00
			Subtotal	\$145.00
Complaint: REMOVE STEERING SHAFT, WASH REMOVE/REPLACE STEERING SHAFT U-JOINTS AND REINSTALL Cause: Customer request				
Labor	Correction: Engine / Overhaul / REMOVE STEERING SHAFT, WASH REMOVE/REPLACE STEERING SHAFT U-JOINTS AND REINSTALL - Completed: 7/25/2024	1.50000	\$145.00	\$217.50

Item	Description	Quantity	Rate	Amount
Parts	STEERING U-JOINT - 1-0475	2.00000	\$42.237	\$84.47
			Subtotal	\$301.97

Complaint: RECEIVE ENGINE PARTS, PULL LINERS OUT, PULL PISTONS OUT, AND ASSEMBLE ONTO CONNECTING RODS
RECEIVE CYLINDER HEAD, WASH OUT GOOD

Cause: Customer request

Labor	Correction: Engine / Overhaul / RECEIVE ENGINE PARTS, PULL LINERS OUT, PULL PISTONS OUT, AND ASSEMBLE ONTO CONNECTING RODS RECEIVE CYLINDER HEAD, WASH OUT GOOD - Completed: 7/25/2024	2.00000	\$145.00	\$290.00
Parts	CUMMINS INFRAMME KIT CLASSIC OVERHAUL - 5693737CUM	1.00000	\$11,208.184	\$11,208.18
			Subtotal	\$11,498.18

Complaint: OVERDRIVE CAME TO CUT BLOCK 0.012 (0.020)
PRIME CYLINDER HEAD
PULL ALL LINES, INSTALL O-RING, REINSTALL AND MEASURE PROTRUSION, ALL 0.012-0.013
PAINT CYLINDER HEAD

Cause: Customer request

Labor	Correction: Engine / Overhaul / OVERDRIVE CAME TO CUT BLOCK 0.012 (0.020) PRIME CYLINDER HEAD PULL ALL LINES, INSTALL O-RING, REINSTALL AND MEASURE PROTRUSION, ALL 0.012-0.013 PAINT CYLINDER HEAD - Completed: 7/25/2024	1.50000	\$145.00	\$217.50
			Subtotal	\$217.50

Complaint: ROLL BEARING #1-#5

Cause: Customer request

Labor	Engine / Overhaul / ROLL BEARING #1-#5 - Completed: 7/25/2024	1.50000	\$145.00	\$217.50
Parts	KIT MAIN BEARING - 5406112CUM	1.00000	\$1,804.0576	\$1,804.06
			Subtotal	\$2,021.56

Complaint: ROLL IN BEARINGS #6-#7

Cause: Customer request

Labor	Engine / Overhaul / ROLL IN BEARINGS #6-#7 - Completed: 7/25/2024	1.50000	\$145.00	\$217.50
			Subtotal	\$217.50

Item	Description	Quantity	Rate	Amount
Complaint: RECEIVE CONNECTING ROD BEARINGS INSTALL PISTON RINGS ON ALL PISTONS INSTALL BEARING SHELLS ONTO CONNECTING RODS INSTALL PISTONS INSTALL PISTON COOLING JETS INSTALL ANTI POLISHING RINGS, CLEAN DECK AND PISTONS INSTALL CYLINDER HEAD, TORQUE DOWN BOLTS Cause: Customer request				
Labor	Correction: Engine / Overhaul / RECEIVE CONNECTING ROD BEARINGS INSTALL PISTON RINGS ON ALL PISTONS INSTALL BEARING SHELLS ONTO CONNECTING RODS INSTALL PISTONS INSTALL PISTON COOLING JETS INSTALL ANTI POLISHING RINGS, CLEAN DECK AND PISTONS INSTALL CYLINDER HEAD, TORQUE DOWN BOLTS - Completed: 7/25/2024	4.00000	\$145.00	\$580.00
Parts	KIT OVERSIZED ROD BEARING - 4376361CUM	6.00000	\$270.059	\$1,620.35
			Subtotal	\$2,200.35

Complaint: PIN ENGINE #1-#6 TDC
 CLEAN CAMSHAFT, INSTALL CAMSHAFT
 CLEAN GEARS, INSTALL WEDGE AND TIME ENGINE, INSTALL FRONT STRUCTURE BRACKETS TO HEAD L/H AND R/H
 INSTALL FRONT COVER, REMOVE/REPLACE O-RING ON CAM SENSOR AND INSTALL
 PAINT ENGINE, INSTALL STIFFNER PLATE

Cause: Customer request

Labor	Correction: Engine / Overhaul / PIN ENGINE #1-#6 TDC CLEAN CAMSHAFT, INSTALL CAMSHAFT CLEAN GEARS, INSTALL WEDGE AND TIME ENGINE, INSTALL FRONT STRUCTURE BRACKETS TO HEAD L/H AND R/H INSTALL FRONT COVER, REMOVE/REPLACE O-RING ON CAM SENSOR AND INSTALL PAINT ENGINE, INSTALL STIFFNER PLATE - Completed: 7/25/2024	3.00000	\$145.00	\$435.00
Parts	SEAL O-RING - 4928599CUM	1.00000	\$18.0621	\$18.06
			Subtotal	\$453.06

Item	Description	Quantity	Rate	Amount
Complaint: INSTALL VIBRATION DAMPNER, INSTALL ROCKER SHAFTS AND VALVE BRIDGES, SET RUNNNG CLEARANCE, ADJUST ALL VALVES AND JAKES REMOVE/REPLACE CARBON TIPS AND O-RINGS ON INJECTORS REMOVE/REPLACE O-RINGS ON JUMPER TUBES AND INSTALL INJECTORS INSTALL INJECTOR HARNESS INSTALL OIL PAN WITH NEW GASKET FILL OIL REMOVE/REPLACE VALVE COVER GASKET, INSTALL REMOVE/REPLACE FRONT COVER PLUG PAINT INSTALL FUEL RAIL Cause: Customer request				
Labor	Correction: Engine / Overhaul / INSTALL VIBRATION DAMPNER, INSTALL ROCKER SHAFTS AND VALVE BRIDGES, SET RUNNNG CLEARANCE, ADJUST ALL VALVES AND JAKES REMOVE/REPLACE CARBON TIPS AND O-RINGS ON INJECTORS REMOVE/REPLACE O-RINGS ON JUMPER TUBES AND INSTALL INJECTORS INSTALL INJECTOR HARNESS INSTALL OIL PAN WITH NEW GASKET FILL OIL REMOVE/REPLACE VALVE COVER GASKET, INSTALL REMOVE/REPLACE FRONT COVER PLUG PAINT INSTALL FUEL RAIL - Completed: 7/25/2024	5.00000	\$145.00	\$725.00
Parts	PLUG GEAR CVER ENGINE CUMMINS - 3688113	1.00000	\$31.0059	\$31.01
			Subtotal	\$756.01
Complaint: CLEAN FUEL LINES AND INSTALL, TORQUE INSTALL INTAKE MANIFOLD WITH NEW GASKET CLEAN EXHAUST MANIFOLD AND INSTALL, INSTALL PRESSURE SENSING TUBE INSTALL EGR BRACKET, EGR AND EGR CROSSOVER INSTALL CRANKCASE FILTER BOLT (WAS MISSING) WASH RAD Cause: Customer request				
Labor	Correction: Engine / Overhaul / CLEAN FUEL LINES AND INSTALL, TORQUE INSTALL INTAKE MANIFOLD WITH NEW GASKET CLEAN EXHAUST MANIFOLD AND INSTALL, INSTALL PRESSURE SENSING TUBE INSTALL EGR BRACKET, EGR AND EGR CROSSOVER INSTALL CRANKCASE FILTER BOLT (WAS MISSING) WASH RAD - Completed: 7/25/2024	3.50000	\$145.00	\$507.50
Parts	CRANKCASE SCREW - 3683919CUM	1.00000	\$90.006	\$90.01
			Subtotal	\$597.51

Item	Description	Quantity	Rate	Amount
Complaint: CLEAN UP TURBO, REMOVE/REPLACE O-RINGS AND SEALING WASHERS INSTALL TURBO AND ACCESSORIES INSTALL FAN HUB INSTALL TOWER, INSTALL 2 BOLT ON BOTTOM (WAS MISSING) CONTINUE DRESSING ENGINE REMOVE/REPLACE OIL FILTER REMOVE/REPLACE COOLANT FILTER REMOVE/REPLACE BOTH FUEL FILTERS REMOVE/REPLACE AIR FILTERS WASH AIR PIPING AND INSTALL Cause: Customer request				
Labor	Correction: Engine / Overhaul / CLEAN UP TURBO, REMOVE/REPLACE O-RINGS AND SEALING WASHERS INSTALL TURBO AND ACCESSORIES INSTALL FAN HUB INSTALL TOWER, INSTALL 2 BOLT ON BOTTOM (WAS MISSING) CONTINUE DRESSING ENGINE REMOVE/REPLACE OIL FILTER REMOVE/REPLACE COOLANT FILTER REMOVE/REPLACE BOTH FUEL FILTERS REMOVE/REPLACE AIR FILTERS WASH AIR PIPING AND INSTALL - Completed: 7/25/2024	5.50000	\$145.00	\$797.50
Parts	CK-4 15W40 OIL - 31311-20L	2.50000	\$136.773	\$341.93
Parts	SCREW HEX FLANGE HEAD - 3914407CUM	2.00000	\$27.4668	\$54.93
Parts	COOLANT FILTER - B5087	1.00000	\$42.146	\$42.15
Parts	FREON R-134A - R134A	32.00000	\$3.75	\$120.00
Parts	FUEL FILTER - PF46081	1.00000	\$53.833	\$53.83
Parts	AIR FILTER - RS5288XP	2.00000	\$111.118	\$222.24
Parts	ATF - 30141-1L	2.00000	\$8.5728	\$17.15
Subtotal				\$1,649.73
Complaint: INSTALL RAD, CONTINUE DRESSING ENGINE START ENGINE, RECHECK FLUIDS, RUN UP TO TEMP TEST DRIVE UNIT INSTALL NEXT SERVICE DUE STICKER Cause: Customer request				
Labor	Correction: Engine / Overhaul / INSTALL RAD, CONTINUE DRESSING ENGINE START ENGINE, RECHECK FLUIDS, RUN UP TO TEMP TEST DRIVE UNIT INSTALL NEXT SERVICE DUE STICKER - Completed: 7/25/2024	4.00000	\$145.00	\$580.00
Parts	RAD HOSE 2-1/2" BLUE 2.5 COOLANT - 57240	6.00000	\$4.704	\$28.22

Item	Description	Quantity	Rate	Amount
Parts	HOSE-SILICONE 2.5" EPA-Y - F50-1548	1.00000	\$58.435	\$58.44
Parts	Pre Mixed Coolant Bulk - Coolant	1.50000	\$13.4536	\$20.18
Parts	RED CUMMINS PAINT - 3163075	4.00000	\$50.708	\$202.83
			Subtotal	\$889.67

Complaint: OVERDRIVE SERVICE ORDER:

TRAVEL TO CUSTOMER IN LLB

RECORD MEASUREMENTS

CUT ALL COUNTERBORES AND INSTALLED 0.020" SHIMS (PART#5298564CUM QTY 6)

#6 HAD A NICK IN COUNTERBORE AND WAS ABLE TO CUT IT OUT AT AROUND 0.009" DEPTH

MEASURED PROTRUSIONS AFTERWARDS AND FOUND THEM TO BE 0.0115-0.0120" IN HEIGHT

FILLED OUT PROTRUSION SHEET FOR CUSTOMER AND SERVICE

TRAVEL BACK TO BASE

Cause: Customer request

(Inspection)

Labor	Correction: Engine / Overhaul / OVERDRIVE SERVICE ORDER: TRAVEL TO CUSTOMER IN LLB RECORD MEASUREMENTS CUT ALL COUNTERBORES AND INSTALLED 0.020" SHIMS (PART#5298564CUM QTY 6) #6 HAD A NICK IN COUNTERBORE AND WAS ABLE TO CUT IT OUT AT AROUND 0.009" DEPTH MEASURED PROTRUSIONS AFTERWARDS AND FOUND THEM TO BE 0.0115-0.0120" IN HEIGHT FILLED OUT PROTRUSION SHEET FOR CUSTOMER AND SERVICE TRAVEL BACK TO BASE - Completed: 7/25/2024	0.00000		\$0.00
Parts	COUNTERBORE CUT OVERDRIVE - COUNTERBORECUT	1.00000	\$2,710.2304	\$2,710.23
			Subtotal	\$2,710.23

Complaint: PRIME ENGINE REMANUFACTURING SERVICE ORDER:

RECEIVE HEAD FROM CUSTOMER

WASH, PRESSURE TEST AND MAG CHECK CUMMINS CYL HEAD

CUMMINS ISX HEAD RESURFACING

REMOVE AND INSTALL NEW INJECTOR CUPS PART #CUM-MCB7243-MCB (QTY 6) AND CUP

ORING (QTY 6)

SEND HEAD BACK TO CUSTOMER

Cause: Customer request

(Inspection)

Labor	Correction: Engine / Overhaul / PRIME ENGINE REMANUFACTURING SERVICE ORDER: RECEIVE HEAD FROM CUSTOMER WASH, PRESSURE TEST AND MAG CHECK CUMMINS CYL HEAD CUMMINS ISX HEAD RESURFACING REMOVE AND INSTALL NEW INJECTOR CUPS PART #CUM-MCB7243- MCB (QTY 6) AND CUP ORING (QTY 6) SEND HEAD BACK TO CUSTOMER - Completed: 7/25/2024	0.00000		\$0.00
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Item	Description	Quantity	Rate	Amount
Parts	HEAD RESURFACING/PRIME ENGINE - TRANSTECHHEADREPAIR	1.00000	\$1,947.4112	\$1,947.41
			Subtotal	\$1,947.41
Unit: 1 VIN: 1XKDP4EX6GR983755				Labor \$8,047.50
2016 Kenworth T8 Series				Parts \$20,860.14
Chassis: 741,750 Kilometers				Shop Supplies \$804.75
Engine: 16,933 Hours				Pre-Charge Subtotal \$29,712.39
				GST \$1,485.62
				(5% of \$29,712.39)
				Total \$31,198.01
				Payments & Credits \$0.00
				Balance Due \$31,198.01

Any warranties on the parts and accessories sold hereby are made by the manufacturer. You understand and agree that we make no warranties of any kind unless expressed in writing. You hereby authorize us to perform the repair work herein set forth and to purchase the necessary material and parts to perform such repair work. You agree that we are not responsible for loss or damage to your vehicle or articles left in your vehicle in case of fire, theft, or any other cause beyond our control or for any delays caused by unavailability of parts or delays in part shipments by the supplier or transporter. In addition, you agree that we are not responsible for damages to your vehicle from freezing due to lack of antifreeze. You hereby grant our employees permission to operate your vehicle on streets, highways, or elsewhere for the purpose of testing and/or inspection. You acknowledge and agree that an express mechanic's lien on your vehicle is granted to secure payment of this invoice for the repair work detailed in this invoice.

GST# :782506521

Customer Signature: _____

Printed Name: _____ Date: _____