Invoice:

Date: 4/2/2021

Bill To

Remit Payment To

Service Order	Terms	Due Date	Authorizer	Customer PO	Service Writer	Unit #
SO-1196	COD	4/2/2021				131

Item	Description	Quantity	Rate	Amount
Drive to unit				
Labor	Drive to unit (Service Call) 2020 Dollar Rd, Spokane Valley, WA			

Subtotal $0.00

Complaint: Replace engine
Cause: Engine oil drain hose lost all engine oil and caused engine failure.

INVOICE NO
REMIT TO: Lockbox 100224 POB 396321

SOLD TO

SHIP TO

*** ON ACCOUNT CHARGE ***

CONTACT

DATE	CUSTOMER ORDER NO.	DATE IN SERVICE	ENGINE MODEL	PUMP NO.	EQUIPMENT MAKE
14-JAN-2021					
CUSTOMER NO.	SHIP VIA	FAIL DATE	ENGINE SERIAL NO.	CPL NO.	EQUIPMENT MODEL
			45035723		
REF. NO.	SALESPERSON	PARTS DISP.	MILEAGE-HOURS	PUMP CODE	UNIT NO.
XENG-100-312634	IL079				

QUANTITY ORDERED	BACK ORDERED	QUANTITY SHIPPED	PART NUMBER	DESCRIPTION	PRODUCT CODE	UNIT PRICE	AMOUNT
1		1	DR101RX	ENG 4BT 3.9 C 100-2500 VE	DRC		
			S/N: 60136687				
1		1	DR101D	ENG 4BT 3.9 C	CLEAN		

AS A RESULT OF THE OUTBREAK OF THE DISEASE COVID-19 ARISING FROM THE NOVEL CORONAVIRUS, TEMPORARY DELAYS IN DELIVERY, LABOUR OR SERVICES FROM CUMMINS AND ITS SUB-SUPPLIERS OR SUBCONTRACTORS MAY OCCUR. AMONG OTHER FACTORS, CUMMINS DELIVERY OBLIGATIONS ARE SUBJECT TO CORRECT AND PUNCTUAL SUPPLY FROM OUR SUB-SUPPLIERS OR SUBCONTRACTORS, AND CUMMINS RESERVES THE RIGHT TO MAKE PARTIAL DELIVERIES OR MODIFY ITS LABOUR OR SERVICE. WHILE CUMMINS SHALL MAKE EVERY COMMERCIALLY REASONABLE EFFORT TO MEET THE DELIVERY, SERVICE OR COMPLETION OBLIGATIONS SET FORTH HEREIN, SUCH DATES ARE SUBJECT TO CHANGE.

TRACKING#

SUB TOTAL: 10,375.11

Billing Inquiries? Ca

TOTAL AMOUNT; US $ 10,375.11

RECEIVED BY (print name)_____ SIGNATURE_____ DATE

Item	Description	Quantity	Rate	Amount
Labor	**Correction:** Engine / Overhaul / Assisted Amos with moving machine into the shop. Positioned machine to be worked on. Removed all access doors on machine. Marked and disconnected all electrical connectors to the main control panel. Marked and disconnected all individual wires to function solenoids by hydraulic tank. Marked and lowered all of the control valves in the center console. All bolts were loose on the control valves. Removed muffler and took out of machine. Removed air filter inlet hose to turbo. Found that hose was rotted from all of the oil on the rubber and will need to be replaced. Removed remaining bolts on engine hood, most of the bolts were missing and the others were loose. Lifted engine portion of hood off of machine. Drilled the rivets out for the steering sensor connectors and removed from the sheet metal. Removed guarding and supports from the cooling package. Disconnected the hydraulic oil cooler lines and capped them. Removed the radiator hoses that were deteriorating due to engine oil. Lifted the cooling package out of machine and took out to the wash pad. Removed the hydraulic oil cooler from the radiator and pressure washed the radiator and the cooler. Reinstalled the hydraulic oil cooler onto the radiator and moved back in the shop. Marked all of the hydraulic lines that were going to be in the way of engine removal and removed them. Marked and removed all of the lines and wires going to the gauge panels. Rigged crane to the rear section and control panels and removed from the machine. Made a bracket to mount to the hydraulic tank so a support fixture could be installed to support he weight of the pump drive when the engine was removed. Installed support fixture and chain come along and rigged to the pump drive. Removed all of the bell housing bolts and then the rear engine mounts. Marked and disconnected all engine wiring harness. This harness was nothing but individual wires laying hap hazzardly on and around the engine and multiple wires were way to long. Disconnected the fuel lines and pinched hoses so no fuel would be lost. Rigged engine to the crane and removed from the machine. Had Curtis clean the platform at Ricks request before the new engine was installed. Looked over engine and machine and to install the engine and made a parts list. Looked up the parts in the manual and called in the order to Pac West. Included in that order was new radiator hoses, a new hydraulic temp gauge, new turbo to air filter inlet hose, and engine mounts. Went to Pac West and picked up the parts and when I picked them up the engine mounts were the wrong ones. Called Gomaco and figured out that there warehouse had pulled and shipped the wrong ones. I left the mounts at Pac West and drove to the shop. Removed the pump coupler from the flywheel that was seized in the flywheel. Removed the flywheel and starter. Removed the bell housing. Cleaned all parts that were removed. Used a wire wheel to clean all of the rust off of the fly wheel. Installed the bell housing and torqued all bolts to spec. Installed the fly wheel and torqued all of the bolts to spec. Applied anti seize to bores on flywheel where the coupler mounts. Installed the coupler. Cleaned the starter as best as possible and installed on new engine. Removed oil pan and found that the bottom of the pan was melted and should be replaced. Broke every bolt removing the old exhaust manifold and found that the manifold mounting surfaces were warped. Called Rick and asked him what he wanted to do and he told me to make the call. Called Cummins and ordered a new exhaust manifold and a new oil pan. Went to Cummins and picked up parts that were ordered. Drove back to the shop and glued the new oil pan gasket to the new oil pan. Installed the old pick up tube after cleaning. Cleaned bottom of block, applied silicone to the joints and then installed the oil pan. Torqued all oil pan bolts to 19ftlbs. Installed new exhaust manifold using new bolts and new gaskets. Installed the turbo using new nuts and studs. Removed the # 1 and # 2 injector lines to remove the intake manifold cover. Cleaned off gasket and reinstalled on engine so it would orientated correctly to hook up the discharge line from the turbo. Cleaned discharge tube and installed on the engine using new clamps and hoses. Reinstalled the 2 injector lines that were removed. Installed new fan hub and belt tensioner on the engine. Installed new belt. Installed the fan after cleaning and replaced the bolts. Installed the alternator and brackets on the new engine. Rigged engine and lifted with the crane. Looked over engine compartment before installing the engine and found that the positive cable to the starter had been rubbed through and that was what caused the melting of the oil pan. Made new battery cables for machine and routed into place. Installed the engine back into the machine. Lined up pump drive and installed all new bell housing bolts with loctite on them.			

Item	Description	Quantity	Rate	Amount
			Subtotal	$6,200.00
Return from unit				
Labor	Return from unit	0.00000		$0.00
			Subtotal	$0.00

Unit: 131 **VIN:** 902920-020
Gomaco GT3600
Chassis: 3,747 Miles

Labor	
Shop Supplies	
Pre Tax Total	
Total	
Payments & Credits	
Balance Due	$7,055.63