COMPANY NAME		SHOP JOB NUM	
CUSTOMER EQUIP NUM	TT91	COMP SERIAL NUM	
COMPARTMENT NAME	ENGINE	COMPARTMENT MODEL	
SERIAL NUMBER	KCB54471	COMP MANUFACTURER	
MANUFACTURER	CATERPILLAR	SAMPLE LABEL NUM	
MODEL	C13	FLUID BRAND/WEIGHT	MOBIL/10W-30
JOB SITE		FLUID TYPE	
EXT WARR NUMBER		EXT WARR EXPIRE DATE	
		FUEL CONSUMED	

FAX

PHONE

SAMPLE TYPE: OIL

SAMPLE SHIP TIME (days) 4

LAB CONTROL NUMBER	SAMPLE DATE	PROCESS DATE	EQUIPMENT METER	METER ON FLUID	FLUID CHANGED	MAKE UP FLUID	MAKE UP FLUID UNITS	FILTER CHANGED
E130-50073-1043	09-Mar-2020	13-Mar-2020	646000 MI	15000 MI	Yes			Yes
No Action Required	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.							
E130-49322-1020	08-Nov-2019	18-Nov-2019	631000 MI	15000 MI	Yes			Yes
No Action Required	WEAR PATTERN IS ACCEPTABLE AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.							
E130-49241-1063	16-Aug-2019	29-Aug-2019	616000 MI	15500 MI	Yes			Yes
No Action Required	ALUMINUM & POTASSIUM TOGETHER ARE USUALLY FROM LEACHING OFF THE AIR-TO-AIR AFTERCOOLER (IF EQUIPPED). NO ENGINE PROBLEM INDICATED. ALL OTHER DATA IS NORMAL. LABEL SAID THE OIL WAS CHG'D AT THIS TIME. RESAMPLE AT NORMAL INTERVAL.							
E130-49162-1022	03-Jun-2019	11-Jun-2019	600500 MI	15000 MI	Yes			Yes
Monitor Compartment	SODIUM AND POTASSIUM ARE INCREASING, HOWEVER, THE TEST FOR GLYCOL WAS NEGATIVE. MONITOR WATER CONSUMPTION CLOSELY. LABEL SAID THE OIL WAS CHG'D AT THIS TIME. RESAMPLE AT HALF THE NORMAL INTERVAL.							

Wear Metals (ppm)	Cu	Fe	Cr	Al	Pb	Sn	Si	Na	K	B	Mo	Ni	Ag	Ca	Mg	Zn	P
E130-50073-1043	3	12	1	0	1	0	4	3	3	36	43	0	0	1761	560	984	837
E130-49322-1020	3	17	1	4	3	1	5	0	15	26	42	0	0	1722	530	943	791
E130-49241-1063	3	22	1	7	3	1	5	9	44	18	47	0	0	1817	539	961	760
E130-49162-1022	2	15	0	2	2	1	5	15	62	15	49	0	0	1797	531	980	794

Oil Condition / Particle Count (ct/ml)	ST	OXI	NIT	SUL	W	A	F	V100
E130-50073-1043	7	22	9	23	N	N	N	11.5
E130-49322-1020	12	23	9	24	N	N	N	11.5
E130-49241-1063	19	22	9	23	N	N	N	11.8
E130-49162-1022	8	22	9	23	N	N	N	11.0

Ag = Silver, Al = Aluminum, B = Boron, Ca = Calcium, Cr = Chromium, Cu = Copper, Fe = Iron, P = Phosphorus, K = Potassium, Li = Lithium, Mg = Magnesium, Mo = Molybdenum, Na = Sodium, Ni = Nickel, Pb = Lead, Si = Silicon, Sn = Tin, S = Sulphur, V = Vanadium, Zn = Zinc, A = Antifreeze, F = Fuel, W = Water, P = Positive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PFC = Percent Fuel Content, PQI = Particle Quantifying index , NaW = Salt Water, FL Pt = Flash Point, TAN = Total Acid Number, TBN = Total Base Number, H2O = Karl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, PVI = Particle Volume Indicator

INVOICE

Invoice #	IN-103174
SO #	SO-0148706
Date	08/08/2018
Writer	
Page	1 of 1

Invt:Cust 09:09 Cust acct# Cust PO#

Sold to:

Ship to:

Contact		Payment terms	Due on the 10th	Ship via	None Specified
Contact phone		Primary phone			Prepay and Add

Work Order No.	WO - WO-0021849	999_WORKORDER
Condition	Resurface flywheel	

Part number	Description	Ord	Del	B/O	List Price	Unit price	Ext. price
029_306VV	PILOT BRG W/VITON SEAL	1	1	0			
Labor							
116_FRO16210CX-C	REMAN FULLER W/INTERNAL COOLER	1	1	0			
	WO Unit # 24-86187						
Core exchange							
Shop supplies							

Received by

See warranties on reverse side

Total merchandise	
Total cores	
Total labor	
Tax amount	
Invoice total	$3,697.43

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15	------		24	T	121	2	1

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	F/N/R	DESCRIPTION	UNIT PRICE	EXTENSION

PERFORM TA1 INSPECTION
CATEGORY 1

COMPLAINT: TA1 INSPECTION
CAUSE: PREVENTATIVE MAINTENACE
CORRECTION: SAMPLES TAKEN, INSPECTION PERFORMED
AND RESULTS ATTACHED.

F/R PTS
F/R LBR

1.00- CAT SERVICE PRGM

TOTAL MISC CHGS SEG. 00

SEGMENT 00 TOTAL

RECONDITION IN FRAME ENGINE

COMPLAINT: COOLANT IN ENGINE OIL
CAUSE: PIN HOLE IN # 4 CYLINDER LINER.
CORRECTION: REMOVE CYLINDER HEAD AND PACKS, CLEAN
ENGINE BLOCK AND TAP HEAD BOLT HOLES, ORDER A
PLATINUM REBUILD KIT AND INSTALL, INSTALL INJECTOR
TRIM FILES AND FILL WITH COOLANT AND PRE LUBE,
WASH ENGINE AND TEST DRIVE.

TT-0091
08

1	2913866		DEO 15W40 1G	S
10	3007913		DEO 15W40 BULK	S

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	2

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	*N/R	DESCRIPTION		UNIT PRICE	EXTENSION
1	BRZ/B9224-0411-FRB		CLAMP	S		
15	3S-2093		STRAP-CABLE	S		
			DISCOUNT	15.00%		
1	5P-7814		SEAL	S		
1	5P-8245		WASHER-HARD	S		
3	6V-2317		BOLT	S		
1	6V-3250		SEAL O RING	S		
1	6V-3668		BOLT	S		
2	6V-5218		BOLT	S		
13	6V-5839		WASHER-HARD	S		
1	6V-5842		BOLT	S		
1	6V-7743		LOCKNUT	S		
1	6V-8149		NUT	S		
1	6V-8225		NUT	S		
1	7C-1821		COUPLING	S		
1	7C-1822		COUPLING	S		
20	7K-1181		STRAP CABLE	S		
1	8T-0154		CLAMP	S		
4	8T-4121		WASHER-HARD	S		
1	8T-4189		BOLT	S		
4	8T-4191		BOLT	S		
1	8T-4224		WASHER	S		
2	8T-4984		CLAMP	S		
3	9M-1974		WASHER	S		
1	9X-8256		WASHER	S		
1	9X-8267		WASHER	S		
1	10R-8733		TURBO GP BAS	S		
1			CORE DEPOSIT	S		
1-	10R-8733		TURBO GP BAS	S		

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

CATINV.OVL

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	3

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	PN/R	DESCRIPTION		UNIT PRICE	EXTENSION
1-			CORE CREDIT	S		
1	10R-9922		KIT ENG OVER	S		
			DISCOUNT 10.00%			
1			CORE DEPOSIT	S		
1-			CORE CREDIT	S		
1	131-6645		HOSE	S		
4	161-6963		CLAMP	S		
1	180-1538		DOWEL	N		
1	222-2887		HOSE AS	S		
1	224-5539		HOSE	S		
1	225-6948		SEAL-O-RING	S		
1	226-3571		SEAL-O-RING	S		
4	230-2603		BOLT-FLANGE	S		
1	230-4011		PLUG AS-CONN	S		
1	232-5185		HOSE	S		
11	241-5682		CLIP	S		
9	242-3360		CM BULK HOSE	S		
1	250-4409		MANIFOLD-EXH	N		
1	256-8753		FILTER AS SE	S		
			DISCOUNT 20.00%			
1	284-2728		SENSOR GP-PR	S		
1	X007805		SEALCLAMP	S		
			DISCOUNT 10.00%			

TOTAL PARTS SEG. 01

F/R LBR

1.00 4 YR WARR

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

CATINV.OVL

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	4

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	N/R	DESCRIPTION	UNIT PRICE	EXTENSION

TOTAL MISC CHGS SEG. 01

SEGMENT 01 TOTAL

REMOVE & INSTALL PRECOOLER

COMPLAINT: NONE
CAUSE: PRE COOLER LEAKING COOLANT INTO AIR SYSTEM
CORRECTION: R AND I PRE COOLER.

QUANTITY	ITEM	DESCRIPTION	N/R
1	RF75330268	AC COMPRESSOR	N
1	41800651	DRIER	N
1	3J-7354	SEAL O RING	S
2	161-6963	CLAMP	S
1	239-8140	HOSE-WTR INL	S
1	239-8144	HOSE-WTR OUT	S
26	242-3360	CM BULK HOSE	S
1	245-9004	ELBOW	N
1	247-6405	CORE AS	S
4	284-3502	CLAMP-BAND	S

TOTAL PARTS SEG. 02

SHOP LABOR

TOTAL LABOR SEG. 02

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	5

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	N/R	DESCRIPTION	UNIT PRICE	EXTENSION

SEGMENT 02 TOTAL

REMOVE & INSTALL CAMSHAFT
EXCLUDES SOME R AND I

COMPLAINT: NONE
CAUSE: CAMSHAFT LOBE ON # 1 INTAKE PITTED.
CORRECTION: R AND I CAMSHAFT AND ONE CAM FOLLOWER
DAMAGED.

2	32570	FENDER WASHER	S
1	5P-4889	SEAL	S
7	6V-5843	BOLT	S
1	6V-8225	NUT	S
4	8T-0338	BOLT	S
1	10R-2131	CAMSHAFT	S
1		CORE DEPOSIT	S
1-		CORE CREDIT	S
1	220-3373	RING	S
1	223-7852	SEAL-INTEGRA	S
1	226-4755	SEAL GP	S
1	251-1005	LIFTER AS-VA	S

TOTAL PARTS SEG. 03

SHOP LABOR

TOTAL LABOR SEG. 03

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

CATINV.OVL

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15	[illegible]		24	T	121	2	6

PSWWO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	*N/R	DESCRIPTION	UNIT PRICE	EXTENSION

SEGMENT 03 TOTAL

REMOVE & INSTALL CYLINDER BLOCK
PLUG(S)

COMPLAINT: NONE
CAUSE: REPAIR DURING ENGINE SERVICE
CORRECTION: R AND I BLOCK PLUGS
3 209-7309 PLUG S

TOTAL PARTS SEG. 04

SHOP LABOR

TOTAL LABOR SEG. 04

SEGMENT 04 TOTAL

REMOVE & INSTALL AIR COMPRESSOR
CLUTCH

COMPLAINT: NONE

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	7

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	PN/R	DESCRIPTION	UNIT PRICE	EXTENSION

CAUSE: AC COMPRESSOR CLUTCH VERY STIFF.
CORRECTION: R AND I AC COMPRESSOR AND RECEIVER
DRYER AND CHARGE SYSTEM.

1	0015-4360	O-RING #10 FORD	S	
1	4813-4360	O-RING #8	S	
2	9X-7380	SEAL O RING	S	
		TOTAL PARTS		SEG. 05
		SHOP LABOR		
		TOTAL LABOR		SEG. 05
3.50		R134A REFRIG		
		TOTAL MISC CHGS		SEG. 05
		SEGMENT 05 TOTAL		

TEST AFTERCOOLER

AND WASH

COMPLAINT: NONE
CAUSE: TEST DURING ENGINE REPAIR
CORRECTION: PRESSURE TEST AIR CORE AND FOUND OK.

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15	------		24	T	121	2	6

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	*N/R	DESCRIPTION	UNIT PRICE	EXTENSION

SHOP LABOR

TOTAL LABOR SEG. 06

SEGMENT 06 TOTAL

HELICOIL
BOLT HOLE

COMPLAINT: NONE
CAUSE: STRIPPED THREADS
CORRECTION: HELICOIL BOLT HOLE IN VALVE RISER
BASE.

SHOP LABOR

TOTAL LABOR SEG. 07

SEGMENT 07 TOTAL

WASH RADIATOR

COMPLAINT: NONE
CAUSE: CLEAN DURING ENGINE SERVICE

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

CATINV.OVL

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	9

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	PN/R	DESCRIPTION	UNIT PRICE	EXTENSION

CORRECTION: WASH OUT RADIATOR AND AIR CORE AND
REINSTALL

SHOP LABOR

TOTAL LABOR SEG. 08

SEGMENT 08 TOTAL

REMOVE & INSTALL HOSES & LINES
RADIATOR MOUNTED

COMPLAINT: NONE
CAUSE: REPAIR DURING ENGINE SERVICE
CORRECTION: R AND I UPPER AND LOWER RADIATOR HOSES
AND ONE INCH HOSE TO RADIATOR.

2	B92260325-620	T-BOLT CLAMP MIN 3S	
1	LM412100-125	3/4" X 100' POLYETS	
18	70250-601	HOSE, STRT SILICONS	
6	70300-601	HOSE, STRT SILICONS	
20	80038-601	HOSE, 3/8" SILICONS	
38	80100-601	HOSE, 1" SILICONE	S
2	BRZ/CT-9416	CLAMP 13/16-1 1/2	S
6	B9226-0275CMP	CLAMP	S
2	CM3142	CLAMP 3/8 SIL.	S

TOTAL PARTS SEG. 09

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

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INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV.	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	10

PSW/WO NO.	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	FNR	DESCRIPTION	UNIT PRICE	EXTENSION

SHOP LABOR

TOTAL LABOR SEG. 09

SEGMENT 09 TOTAL

REMOVE & INSTALL HOSES & LINES.

COMPLAINT: NONE
CAUSE: REPAIR DURING ENGINE SERVICE
CORRECTION: R AND I FUEL LINES TO AND FROM
CYLINDER HEAD.

2 103-4669 HOSE AS N

TOTAL PARTS SEG. 10

SHOP LABOR

TOTAL LABOR SEG. 10

SEGMENT 10 TOTAL

INVOICE

PAY THIS AMOUNT ⇨	CONT'D
AMOUNT CREDIT ⇨	

CATINV.OVL

INVOICE NUMBER	INVOICE DATE	CUSTOMER NO.	CUSTOMER PURCHASE ORDER	STORE	DIV	SALESMAN	TERMS	PAGE
SS240006677	12-23-15			24	T	121	2	11

PSW/WO NO	DOC. DATE	PC	LC	MC	SHIP VIA	INVOICE SEQ. NO.
2412102	12-07-15	1C	1C	1C		9369782

MAKE	MODEL	SERIAL NUMBER	EQUIPMENT NUMBER	METER READING	MACH. ID NO.
AA	C13	0KCB54471	TT0091	440681.0	

QUANTITY	ITEM	*N/R	DESCRIPTION	UNIT PRICE	EXTENSION

DRAIN & REFILL ENGINE COOLING SYSTEM

COMPLAINT: NONE
CAUSE: OIL IN COOLING SYSTEM FROM PREVIOUS OIL COOLER REPLACEMENT
CORRECTION: FLUSH COOLING SYSTEM ONCE WITH RESTORE CLEANER AND REFILL WITH EXTENDED LIFE COOLANT.

1	CC2610-150	RESTORE CLEANER -	S
2	238-8648	COOLANT-ELC	S
2	238-8649	COOLANT-ELC	S

TOTAL PARTS SEG. 11

SHOP LABOR

TOTAL LABOR SEG. 11

SEGMENT 11 TOTAL

TOTAL PARTS DISCOUNT
KANSAS SALES TAX
SHAWNEE CO KS
TOPEKA KS

THANK YOU FOR YOUR BUSINESS

PAY THIS AMOUNT ⇨	25515.10
AMOUNT CREDIT ⇨	