

CAT

#174

Invoice Number: [REDACTED] Date: 7/15/14 Account No.: [REDACTED] Page: 3

Quantity	Item	NR	Description	Unit Price	Extended
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SEGMENT 01 TOTAL 2417.55 T

INSPECT ENGINE  
25 POINT  
CUSTOMER COMPLAINT:  
THE CUSTOMER WANTED THE TRUCK CHECKED OVER AS  
WELL.  
REPAIR PROCESS COMMENTS:  
THE CUSTOMER WANTED THE TRUCK CHECKED OVER. WENT  
THROUGH AND INSPECTED THE TRUCK. CAME UP WITH A  
LIST AND CONTACTED THE CUSTOMER. THE CUSTOMER DID  
NOT WANT TO DO THE REPAIRS AT THIS TIME THEY ARE  
GOING TO DO A MAJORITY OF THEM THEMSELVES.

K5529 Pate

TOTAL LABOR	SEG. 02	82.50 *
SEGMENT 02 TOTAL		82.50 T

SERVICE SUPPLIES AND ENVIRONMENTAL CHARGES 112.61 T

IA SALES TAX-6% 156.76 T

IA SILO POLK .00 T

DUE BY 10TH OF THE NEXT MONTH

INVOICE TOTAL 2,769.42

Invoice Number:

Date:

7/15/14

2

Quantity	Item	N/R	Description	Unit Price	Extended
<p>TEST/CHECK, ADJUST ENGINE  CHECK ENGINE OVER  CUSTOMER COMPLAINT:  CHECK ENGINE OVER, REPAIR WIRES, HARD STARTING  REPAIR PROCESS COMMENTS:  THE CUSTOMER HAD JUST BOUGHT THE TRUCK AT AN AUCTION AND WANTED THE TRUCK CHECKED OVER. THEY ALSO WANTED THE WIRES FIXED AND ALSO THE TRUCK HAD HARD STARTING PROBLEMS. THERE WAS AN ECM LAYING ON THE FLOOR OF THE CAB AS WELL. PULLED THE TRUCK INTO THE SHOP INSPECTED THE ENGINE AND MADE A LIST. HOOKED UP THE COMPUTER AND DOWNLOADED THE ECM. FOUND THE ECM ON THE ENGINE WAS NOT FOR THE ENGINE. HOOKED UP AND DOWNLOADED THE ECM THAT WAS ON THE FLOOR OF THE CAB. IT WAS THE CORRECT ECM. REMOVED THE INCORRECT ECM FROM THE ENGINE AND INSTALLED THE CORRECT ECM THAT WAS IN THE CAB. HOOKED IT UP AND THERE WAS ACTIVE FAULTS FOR THE OIL PSI SENSOR. AND THERE WERE ALSO LOGGED FAULTS FOR THE ENGINE SPEED SENSOR. BOTH THE ENGINE HARNESS AND THE OEM HARNESS AT THE ECM HAD DAMAGED CONNECTORS. AT SOME POINT IN TIME SOMEONE HAD PULLED THE GUTS OUT OF THE CONNECTORS AND HAD USED A BUNCH OF ELECTRICAL TAPE TO TRY AND SEAL THE HARNESSES BACK UP. REPLACED THE ENTIRE ENGINE HARNESS SINCE THERE WERE SO MANY LOGGED FAULTS. RAN THE ENGINE AND THE OIL PSI STILL HAD AN ACTIVE FAULT. ALSO FOUND THAT THE ENGINE COOLANT TEMP SENSOR WAS READING BUT IT WAS READING 100 DEG. F. HIGHER THAN ACTUAL TEMP. INSTALLED A NEW OIL PSI SENSOR AND COOLANT TEMP SENSOR. RAN THE ENGINE AGAIN. THE COOLANT TEMP AND OIL PSI SENSORS WERE READING CORRECTLY NOW. ORDERED UP A CONNECTOR FOR THE OEM HARNESS AT THE ECM. CUT THE OLD CONNECTOR OFF AND INSTALLED THE NEW CONNECTOR WITH NEW PINS ONE WIRE AT A TIME SO THE WIRES DID NOT GET SWAPPED AROUND. HOOKED THE OEM HARNESS BACK UP. HOOKED UP FUEL SIGHT GLASSES AND FUEL PRESSURE GAUGE. RAN THE ENGINE THE FUEL PSI WAS GOOD IT HAD 78 PSI AT IDLE AND 84 PSI AT HIGH IDLE. THERE WAS NO AIR IN THE SIGHT GLASSES. REMOVED THE FUEL PRESSURE GAUGE AND SIGHT GLASSES. DID NOTICE THAT THE ENGINE SPEED SENSOR SEEMED TO BE ACTING UP. THE ENGINE WOULD HAVE TO CRANK OVER 4 TO 5 REVOLUTIONS BEFORE THE ENGINE WOULD EVEN START READING ENGINE SPEED. REPLACED THE ENGINE SPEED SENSOR AND CRANKED THE ENGINE OVER IT WAS READING ENGINE SPEED A LOT QUICKER. LET THE ENGINE SIT OVER NIGHT AND STARTED IT IN THE MORNING. THE ENGINE STARTED UP.</p>					
1	6V-5048		SEAL-O-RING	S	
1	6V-6609		SEAL	S	3.38
1	8L-2786		O RING	S	.98
1	102-2240		CONTROL G	S	4.39
1	110-6845		PLUG A	N	113.57
1	117-2763		HARNESS AS	N	31.97
40	126-1768		SOCKET	S	199.69
1	161-9930		SENSOR GP-	S	1.90
1	214-7568		SEAL-O RING	S	138.47
1	265-9033		SENSOR GP-SP	S	3.73
					195.37
			TOTAL PARTS	SEG. 01	767.55 *
			TOTAL LABOR	SEG. 01	1650.00 *

K 5529  
Pete



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Sold To: HOY TRUCKING  
3179 BARROWS AVE  
BUSSEY IA 50044-8019

Date: 7/15/14

Account No.:

Ship To:

*K 5529  
Pete*

Invoice Information

WO Number: WX64575  
WO Date: 6/25/14  
Store: DESM MOINES TRUCK SH  
Payment Terms: CHARGE  
P/O Number:  
Ship Via:  
Invoice Type: 1H1H1H

Make: CATERPILLAR  
Model: 3176  
Serial: 09CK30505  
PIN:  
Id No:  
Cust Unit: 176  
Meter: 647907.0

Invoice Summary

Parts: 767.55  
Labor: 1,732.50  
Misc: 112.61  
Taxes: 156.76

Amount Due: \$2,769.42

Invoice Total: 2,769.42



To ensure proper credit, please detach this portion, at the perforation, and return with remittance.



HOY TRUCKING  
3179 BARROWS AVE  
BUSSEY IA 50044-8019

Account Number:  
Invoice Number:  
Invoice Date:

Please remit to:  
ZIEGLER INC.  
SDS 12-0436  
PO BOX 86  
MINNEAPOLIS, MN 55486-0436

Amount Due:

Amount Enclosed: