



GREATWEST KENWORTH LTD

5909 6TH STREET S.E.
CALGARY, AB T2H 1L8
(403) 253-7555

CUSTOMER INVOICE

Work Order

SC1043381

Date: 09-03-26

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Year	Make / Model	Serial Number	License	Mileage	Unit/Stock
2020	Kenworth / T680	1XKYD40X1LJ956151		1057739K	260-2068
Delivery Mileage	Delivery Date	Engine Model / Serial #	Transmission Model/Serial #		
	03-26-19	ISX / 80147244	Fuller FO18E318B-MXP UltraShift Plus / K1327052		
CPL/ARRG	Rear Ratio	Rear Axle Model / Serial #	Rear Axle Model / Serial # 2		

Engine Hours	Reefer Hours	Standby Hours	P.O. Number	Open Date / Time	Complete	Service Writer
15207.0	0.0	0.0	CASH	08-31-26 / 07:18AM	09-03-26	TBE*DAR
Memo						

Tax ID Date:

Tax ID:

1 CHECK ENGINE LIGHTON - INJECTOR CODES

CAUSE:

FAILED INJECTORS

CORRECTION:

790 - PULLED INTO SHOP. HOOKED UP AND CHECKED FAULTS. FOUND ACTIVE 559 INJECTOR METERING RAIL 1 PRESSURE - DATA VALID BUT BELOW NORMAL OPERATING RANGE - MODERATELY SEVERE LEVEL. CONFIRMED NO HIGHER PRIORITY FAULT CODES. REVIEWED TSBS AND FOUND NONE RELEVANT. CONFIRMED ENGINE STARTS AND RUNS NORMALLY. VISUALLY INSPECTED FOR LEAKS, KINKS, AND DAMAGE TO FUEL SYSTEM COMPONENTS: OK. CONFIRMED ADEQUATE FUEL PRESENT IN TANKS. RIGGED UP FOR INLET RESTRICTION MEASUREMENT. CHECKED INLET RESTRICTION: 4 IN.HG. @ HIGH IDLE WITH ORIFICE LINE OPEN. NOTED NO SIGNS OF AIR IN FUEL. REMOVED INLET RESTRICTION TEST LINE. RIGGED UP FOR PRESSURE SIDE FILTER DIFFERENTIAL PRESSURE TEST. UPSTREAM PRESSURE: 186 PSI. DOWNSTREAM PRESSURE 185 PSI. MEASURED AT HIGH IDLE. REMOVED TEST EQUIPMENT. RIGGED UP FOR AND PERFORMED INJECTOR RETURN FLOW TEST. INJECTOR RETURN FLOW WAS OVER 500 ML IN 60 SECONDS. SPEC IS UNDER 200 ML. RECOMMENDED REPLACING ALL 6 INJECTORS. 8852 - STEAM CLEANED ENGINE BAY, WAS COVERED WITH DIRT ALL OVER. DE-PRESSURIZE FUEL SYSTEM. REMOVED AIRBOX ASSEMBLY, EGR CROSSOVER PIPE AND ROCKER COVER. REMOVED ALL HIGH PRESSURE FUEL LINES, DISCONNECTED ELECTRICAL FROM INJECTORS AND JAKE BRAKES. REMOVED RETAINING NUTS AND ALL QUILL TUBES, HAD TO SPEND SOME TIME PULLING QUILL TUBES OUT AS THEY WERE SEIZED IN THE BORES. REMOVED ALL 6 INJECTORS. CLEANED OUT ALL INJECTOR BORES AND INJECTOR MOUNTING STUD HOLES. INSTALLED 6 NEW INJECTORS AND NEW WUILL TUBES AS PER QUICKSERVE. USED ENW INJECTOR HOLD DOWN BOLTS AND TORQUED TO SPEC. CLEANED HIGH PRESSURE FUEL LINES AND INSTALLED IN SEQUENCE AND TORQUED TO SPEC. CONNECTED ALL ELECTRICAL. INSTALLED ROCKER COVER WITH NEW GASKET AND TORQUED TO SPEC. INSTALLED EGR CROSSOVER TUBE AND AIRBOX ASSEMBLY BACK. PUT SECURITY CHECK PAINT ON AIR INTAKE CONNECTIONS. CONNECTED WITH INSITE AND PERFORMED INJECTOR RESET PROCEDURE. PRIMED FUEL SYSTEM AND CHECKED FOR ANY LEAKS, NO LEAKS PRESENT. STEAM CLEANED ENGINE BAY AND TAKE UNIT FOR SMALL ROADTEST TO GET TO OPERATING TEMPERATURE. VERIFIED NO FUEL LEAKS PRESENT. PERFORMED INJECTOR PERFORMANCE TEST, ALL INJECTORS PASSED. TAKE UNIT FOR ANOTHER ROADTEST, DROVE GOOD WITH NO FURTHER ISSUES. VERIFIED NO

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FUEL LEAKS PRESENT. PACKED UP OLD INJECTORS AND GAVE TO BACK COUNTER.

TOTAL LABOR	1,889.91
TOTAL PARTS	6,483.60
TOTAL FREIGHT	100.00

B/O RELEASE CPE40918 CONFIRM # 61732

Qty	Part Number	Description	Unit	Extended
6	5579421HHP-HAW	ISX INJECTOR - W/LINE ADF	1,048.65	6,291.90
6	4984152CUM	SEAL,O RING	5.50	33.00
6	3679102CUM	SCREW,TWELVE POINT CAP	8.56	51.36
1	3104392CUM	GASKET,VALVE COVER	107.34	107.34
1	FREIGHT	AIR FRT	100.00	100.00

2 CHECK FRIDGE NOT WORKING

CAUSE:

FAILED SPLICE

CORRECTION:

790 - TESTED AND CONFIRMED FRIDGE TEMPERATURE MATCHES AMBIENT AFTER 30 MINUTES. CHECKED FUSE: OK. TESTED RELAY: OK. PULLED WIRING DIAGRAM. REMOVED SLEEPER SWITCH PANEL. INSPECTED AND NOTED FRIDGE WIRING HAS BEEN REPAIRED WITH SHRINKABLE BUTT CONNECTORS, WHICH HAD NOT BEEN HEATED AND SEALED. CHECKED FOR POWER AT SWITCH: OK. REMOVED FRIDGE TRIM. NOTED PRE-EXISTING CRACK AT BOTTOM LEFT CORNER OF TRIM. REMOVED FRIDGE. NOTED COMPRESSOR BEGAN TO RUN WHILE FRIDGE WAS COMING OUT. INSPECTED AND NOTED TWO MORE WIRING REPAIRS SIMILAR TO THE ONE IN THE SWITCH PANEL. PULL TESTED SPLICES AND FOUND ONE SPLICE IN THE FRIDGE CAVITY NOT CRIMPED TIGHTLY. TEMPORARILY CLAMPED WIRING BACK TOGETHER. LET FRIDGE RUN FOR 30 MINUTES. CHECKED FREEZER TEMPERATURE: -12 C. REPLACED BOTH SPLICES WHERE OLD SPLICE PULLED OUT WITH UNINSULATED BUTT CONNECTORS AND HEAT SHRINK. SHRANK INSULATION AROUND OTHER 4 PRE-EXISTING SHRINKABLE BUTT CONNECTORS. REINSTALLED FRIDGE AND ALL PANELS.

TOTAL LABOR	524.98
TOTAL PARTS	0.84

Qty	Part Number	Description	Unit	Extended
2	775-0316	SHRINK	0.42	0.84

3 ROAD TEST UNIT PULLS TO THE LEFT ON A BRAKE APPLICATION - SHOES AND DRUMS REPLACED 5 DAYS AGO

CAUSE:

CORRECTION:

8852- CHECKED BRAKE ADJUSTMENT ON STEER AXLE, OK. INSPECTED BRAKES, NOTICED BRAKES AND DRUMS ARE NEW NUT BRAKES ARE PROTUDING OUTSIDE OF THE BRAKE DRUM, NEEDS FURTHER INSPECTION. CUSTOMER DECLINED.

TOTAL LABOR	199.00
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4 CENTRE STEERING WHEEL

CAUSE:

AS PER CUSTOMER REQUEST.

CORRECTION:

8852- REMOVED STEERING WHEEL USING THE PULLER. TURN THE STEERING WHEEL COUNTER CLOCKWISE 2 NOTCHES. RE-INSTALLED WHEEL BACK AND TORQUED TO

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SPEC, USED RED LOCTITE. DROVE AROUND BLOCK AND VERIFIED STEERING WHEEL
IS STRAIGHT

TOTAL LABOR 139.30

SHOP SUPPLIES 275.32
TECHNOLOGY FEE 50.00

- - - - -
G.S.T. - REG. NO. R139766661 5.00 % OF 9,662.95 = 483.15

CUST MECH LAB-CAL 2,753.19
PARTS CUSTOMER R/O-CAL 6,484.44
SHOP SUPPLIES-SHOP A 325.32
FREIGHT EXPENSE PARTS- 100.00
G.S.T. R139766661 483.15
15822 CASH SALE 10,146.10

THANK YOU! WE APPRECIATE YOUR BUSINESS!
MONDAY - FRIDAY 7:00AM - 7:00PM SATURDAY 7:00AM - 5:30PM
AFTERHOURS PARTS/SERVICE CALLOUT AVAILABLE
PARTS EMAIL: CALGARYPARTS@GREATWESTKENWORTH.COM

I ACKNOWLEDGE THAT I WILL BE RESPONSIBLE FOR ALL COST INCURRED TO DIAGNOSE, ROAD TEST, DISMANTLE AND REASSEMBLE MY UNIT IF NO FAULT CAN BE FOUND.

THE MANUFACTURER WARRANTY CONSTITUTES ALL OF THE WARRANTIES WITH RESPECT TO THE SALE OF THIS ITEM/ITEMS. THE SELLER HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING AND IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SELLER NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THIS ITEM/ITEMS.

GREATWEST KENWORTH LTD. MAKES THE LIMITED WARRANTY COVERING ANY DEFECT IN WORKMANSHIP OR MATERIAL FURNISHED IN CONNECTION WITH THIS REPAIR ORDER FOR A PERIOD OF THIRTY (30) DAYS FROM THE DATE OF DELIVERY OF SAID MOTOR VEHICLE TO THE CUSTOMER/OWNER, OR 16,000 KILOMETERS WHICHEVER OCCURS FIRST.

IT IS UNDERSTOOD THAT A LIEN MAY BE PLACED THEREON FOR THE AMOUNT DUE IN CASE THE VEHICLE REPAIRS ARE NOT PAID IN FULL.

Customer: X _____ Date: _____

BALZAC -- CALGARY -- CLAIRMONT -- FOX CREEK -- LETHBRIDGE -- MEDICINE HAT -- RED DEER