



GREATWEST KENWORTH LTD

7202 98th STREET
CLAIRMONT, AB T8X 5B1
(780) 532-1595

Sold To: RYTY DEVELOPMENTS LTD
10447 10221 121 STREET

Ship To: RYTY DEVELOPMENTS LTD
10221 121 STREET

REPRINT CUSTOMER
INVOICE

GRANDE PRAIRIE, AB T8V 8B5
780 532-2536

GRANDE PRAIRIE, AB T8V 8B5

Work Order
SG3010584

Date: 09-21-21
Page 1 of 4

Table with 6 columns: Year, Make / Model, Serial Number, License, Mileage, Unit/Stock. Includes delivery details like Delivery Mileage, Delivery Date, Engine Model / Serial #, and Rear Ratio.

Table with 7 columns: Engine Hours, Reefer Hours, Standby Hours, P.O. Number, Open Date / Time, Complete, Service Writer.

Memo DON WELLER 780-518-1699
D.WELLER@RYTY.CA

Tax ID Date: Tax ID:

4 JAKE NOT WORKING/BAD VIBRATION WHILE JAKING
CAUSE:

UNKNOWN. CUMMINS APPROVED NEW DROP IN ENGINE AS ROOT CAUSE NEVER
DETERMINED. OLD ESN/79991651 NEW ESN/80338034

CORRECTION:

177 - TOOK UNIT FOR A SHORT AROUND THE BLOCK ROAD TEST PRIOR TO
BRINGING INTO THE SHOP , JAKES SEEMED TO BE OPERATING AS THEY SHOULD.
CALL CUSTOMER TO CONFIRM COMPLAINT . TOOK UNIT FOR A HIGHWAY ROAD TEST
AT OPERATING TEMPERATURE. FOUND A VIBRATION SLOWING DOWN BETWEEN 80
AND 90 KMH. TRIED SLOWING DOWN WITHOUT USING JAKES AND VIBRATION STILL
AT SAME SPEED OF 80 TO 90 KMH. INSPECTED DRIVE LINE AND WHEELS, FOUND
REAR DRIVE TIRES HAD MUD IN THEM, CUSTOMER TOOK UNIT & WASHED.
177 - WENT TO RYTY SHOP, TEST DRIVE W/ LOADED TRAILER. JAKES SEEMED TO
HAVE A MISS MORE THAN A VIBRATION WHEN LOADED. 236 - STARTED EDS
DSBYL7657. EXHAUSTED ALL T/SHOOTING FOR JAKE ISSUE. COULD NOT FIND
ANYTHING WRONG. 236 - CALLED 1800CUMMINS FOR FURTHER DIRECTION,
ADVISED TO INSPECT ENGINE BACK SOLENOID PEDESTALS & RECORD STAMPED
NUMBERS. FRONT & REAR BOTH STAMPED WITH E17. CUMMINS RECOMMENDED
REPLACING PEDESTALS & ROCKER SHAFTS, DATA LOGGED ROAD TEST W/ TRAILER
ONCE COMPLETE. 236 - REMOVE ROCKER SHAFT ASSEMBLIES, CHANGE OVER
ALL ROCKER LEVERS ONTO NEW SHAFTS AND INSTALL NEW ENGINE BRAKE
PEDESTALS. INSTALL ROCKER SHAFT ASSEMBLIES, TORQUE TO SPEC. CHECK
VALVE SET, OK. INSTALL VALVE COVER AND EGR CROSS OVER PIPE. CONNECT
W/ INSITE, UPDATE ECM FROM HD10188.11 TO HD10188.19. 236 - TRAVELLED
TO RYTY. ROAD TESTED W/ LOADED TRAILER, UPLOADED TO EDS. CALLED
CUMMINS, ADVISED TO PERFORM AN INJECTOR PERFORMANCE TEST & UPLOAD TO
EDS BEFORE GOING ANY FURTHER. 236 - TOOK VIDEOS OF OVERHEAD &
PEDESTALS FOR ENGINE BRAKE SOLENOIDS. SENT VIDEOS IN, ADVISED TO R/R
OIL PUMP REGULATOR SPRING. DRAIN ENGINE OIL, REMOVE REGULATOR FROM
PUMP. FOUND REGULATOR SCORED ON ONE SIDE. REMOVE PUMP, DISSAMBLER FOR
FURTHER INSPECTION. FOUND HOUSING SCORED AS WELL. CUMMINS ADVISED TO
REPLACE PUMP. 215- CLEANED BOTTOM OF BLOCK, INSTALLED OIL PUMP &
MEASURE BACKLASH, IN RANGE @ 0.012. CLEANED PAN & REINSTALLED W/ NEW
GASKET. CHANGED OIL FILTER & FILLED OIL. RAN UNIT. TAGGED PARTS FOR
WARRANTY. 236 - TRAVELLED TO RYTY. DATA LOGGED ROAD TEST W/ LOADED

Work Order

SG3010584

Date: 09-21-21

Page 2 of 4

TRAILER, PER CUMMINS. VIBRATION/SHAKE STILL PRESENT.236 - R/I PEDESTALS & CLEANED SEALING SURFACES. INSTALL W/ PRUSSION BLUE TO SEE HOW THE SEALING CONTACT IS. TOOK PICTURES OF CONTACTS & ALL JAKE ROCKER LEVERS W/ SERIAL NUMBERS. R/I REAR CAM PLATE & RECORDED PART NUMBER OFF OF CAMSHAFT. R/I FUEL LINES, PINNED CRANK & WEDGED CAMSHAFT W/ NO ISSUES. BASE ENGINE TIMING, GOOD.236 - INSTALL PEDESTALS W/ ANEROBIC SEALANT & TORQUE TO SPEC AS PER CUMMINS TECHNICAL SUPPORT. REMOVE PIN & WEDGE, CONNECT FUEL LINES, INSTALL REAR CAM PLATE W/ NEW ORING, INSTALL VALVE COVER & EGR CROSS OVER TUBE, TORQUED TO SPEC. 177 - APR 21/21 - DATA LOG ROAD TEST. 177 - JUNE 02/21 - ROAD TEST W/ ONLINE DATA LOG W/ KELSEY & TECH SUPPORT GUY FROM VANCOUVER, OVER WIFI. 223 - DRAINED FLUIDS OUT OF ENGINE & RECOVERED A/C SYSTEM. 3.8LBS RECOVERED. REMOVED DRIVELINE, PUMP OFF PTO, EXHAUST DOWN PIPING, CLUTCH LINKAGE, UNHOOKED BATTERIES, UNBOLT CLUTCH FROM FLYWHEEL & UNHOOK SHIFT TOWER. REMOVED REAR TRANSMISSION STRAP & RAD ASSEMBLY. UNHOOK ALL COOLANT LINES AT REAR MANIFOLD ON P/SIDE. REMOVED OEM ENGINE HARNESS & BATTERY CABLES OFF STARTER. R/I FUEL LINES, POWER STEERING PUMP & RESERVOIR. SET OVERHEAD CRANE OVER ENGINE, HOOKED UP ENGINE. R/I REAR & FRONT ENGINE MOUNTS. LIFT ENGINE & TRANSMISSION OUT OF FRAME RAILS, SET ASSEMBLY ON STANDS. REMOVED TRANSMISSION FROM ENGINE. CLEANED OIL. LIFTED NEW ENGINE.  
CNLT#3609119  
SRT 50.8HRS

>> WARRANTY PENDING <<

Qty	Part Number	Description
1	2882571CUM	SHAFT,ROCKER LEVER
2	3686307CUM	VALVE,ENG BRAKE CONTROL
1	2882570CUM	SHAFT,ROCKER LEVER
1	3010146	SPRING,CO
1	4026684CUM	GASKET,OIL PAN
1	LF14000NNFLG	FILTER
1	LF14000NNFLG&	ENV CHG
1	5599284RXCUM	PUMP,LUBRICATING OIL
1	4985660CUM	SEAL,RECTANGULAR RING
1	72130	CONTACT/C
1	3886396	6.2 CALIBRATION FLT REG.
1	72130	CONTACT/C
1	V46-1001-050-0250	SHIELD-HEAT 250MM
1	4376196CUM	KIT,OIL COOLER REPAIR
1	LF14000NNFLG	FILTER
1	LF14000NNFLG&	ENV CHG
1	5264570CUM	GASKET,OIL DRAIN
1	76-2843PK	TIE/SS
1	4393172CUM	SEAL,O RING
44	257000-990C	CHV DELO400XLE SYNBLN10W3
44	257000-990C&	ENV CHG
5	4393087CUM	LEVER,ENGINE BRAKE
1	4393087CUM	LEVER,ENGINE BRAKE
1	3104392CUM	GASKET,VALVE COVER
4	3104388CUM	ISOLATOR,VIBRATION
2	90-0012	CLAMP-V BAND 4"
2	2866636CUM	GASKET, AFM DEVICE
1	3695041CUM	GASKET,TURBOCHARGER
1	4966441CUM	GASKET,EXH OUT CONNECTION
4	5486657CUM	GASKET,EXHAUST MANIFOLD
2	3963991CUM	WASHER,SEALING
2	3682826CUM	SEAL,GROMMET
2	3922794CUM	SEAL,O RING

Work Order

SG3010584

Date: 09-21-21

Page 3 of 4

- 4 4298975CUM NUT, LOCK
- 4 4298242CUM STUD
- 12 4965698CUM SCREW, HEX FLANGE HEAD CAP
- 2 3692406CUM SEAL, O RING
- 1 5264570CUM GASKET, OIL DRAIN
- 2 3683144CUM CLAMP, V BAND
- 1 3683940CUM SEAL, EXHAUST MANIFOLD
- 1 3104230CUM GASKET, EXH GAS RCN VALVE
- 1 5579020CUM KIT, EXHAUST OUTLET
- 1 3682940CUM GASKET, EXHAUST MANIFOLD
- 1 3685999CUM MANIFOLD-EXHAUST
- 1 DR7690NX ENG X15 1
- 1 4925884CUM SCREW, SOCKET HEAD CAP
- 1 3689465CUM PULLEY, IDLER
- 1 D84-1000-6122180 BELT-POLY 12 RIBS X 2180
- 8 W34-1158 BOLT-FLANGE HEAD, M16 X 2
- 1 4988280CUM GASKET, HYDRAULIC PUMP
- 2 250-70-18X KIT-BEARING RETAINER
- 2 074.12.2 1/2X2NC
- 2 373.012 1/2NCNL
- 4 CT4513D TIE-CABLE DUAL CLAMP BLK
- 44 257000-990C CHV DELO400XLE SYNBLN10W3
- 44 257000-990C& ENV CHG
- 4 GDR134A R134A REFRIGERANT
- 2 890-82932 ESTEROIL
- 15 EC7501 COOLANT-TRP ELC 50/50 JUG
- 1 3886396 6.2 CALIBRATION FLT REG.
- 2 AF4195FLG AIR FILTER-PRIMARY
- 1 5599284RXCUM# CORE
- 1 DR7690NX# CORE
- 1 SUBLET WARRANTY

VIBRATION ANALYSTS

5 FUEL LEAK AT #4 AND #5 HIGH PRESSURE FUEL LINES

CAUSE:

LEAKING FUEL LINES

CORRECTION:

236 - PERFORM FUEL SYSTEM LEAK TEST, FOUND #4 AND #5 INJECTOR FUEL LINES TO BE LEAKING. REMOVE BOTH LINES AND RETORQUE CONNECTOR TUBE. INSTALL NEW FUEL LINES AND TORQUE TO SPEC. PAINT FUEL LINES

CNTL#15188580

SRT 2.5HRS

>> WARRANTY PENDING <<

Qty	Part Number	Description
2	3685809CUM	TUBE, INJECTOR FUEL SUPPLY

6 REPLACE FRONT ENGINE SEAL

CAUSE:

LEAKING SEAL

CORRECTION:

236 - RECOVER A/C AND DRAIN COOLANT. REMOVE RADIATOR, FAN BLADE, SHROUD, CRANK PULLEY AND DAMPER. REMOVE CRANK SEAL. CLEAN ALL SEALING SURFACES AND INSTALL NEW SEAL. REMOVE UPPER GEAR COVER AND REPLACE SEAL. INSTALL GEAR COVER AND TORQUE TO SPEC. INSTALL DAMPER, CRANK PULLEY, FAN BLADE, SHROUD. RADIATOR WAS INSTALLED AFTER CORE WAS REPLACED.

CNTL#15228974

SRT 3.1HRS

Work Order

**SG3010584**

Date: 09-21-21

Page 4 of 4

>> WARRANTY PENDING <<

Qty	Part Number	Description
1	3685173CUM	SEAL,OIL
1	3687007CUM	SEAL,RECTANGULAR STRIP

PLEASE PAY THIS TOTAL 0.00

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