DAT	TE ARRIVED	DATE INVOICE	SALES TYPE	ADVISOR		TERMS	CUSTOMER RE	FERENCE
10/19/2014	4 10:51:18AM	10/30/2014	SWDD					
YEAR	MAKE	MODEL	VIN	CUSTOMER UNIT #	ENGINE HOURS	IN SERVICE Com	ponent Serial #	ODOMETER
2007	FREIGHTLINER	CONVENTIONAL	1FUJA6CK47DZ18976		0	12/13/2007 06R0	960832	636358

## **Sold Operations**

JOB #1 01 ENGINE

CLAIM NUMBER# WA14526817

COMPLAINT

ENGINE

PRESSURE TEST CYLINDER HEAD. ENGINE IS BUILDING AN EXTREME AMOUNT OF PRESSURE AND CAUSING

COOLANT LEAKS.

CAUSE CORRECTION

ENGINE OVERHAULED AT FLOYDS SCOTTSBLUFF 9/18/14 AT 633,357 MILES ON INVOICE NUMBER 242610060. BUILDING PRESSURE IN COOLING SYSTEM.

CHECKED PRESSURES FOUND PRESSURES WOULD BUILD TO AROUND 18 TO 20 PSI TOOK OUT COOLANT HOSE TO AIR COMPRESSOR AT FIRST REPAIRED THAT HOSE. THEN CAME BACK NEXT DAY WITH WATER PUMP LEAKING INSTALLED NEW WATER PUMP. NEXT DAY CAME BACK WITH RADIATOR LEAKING INSTALLED NEW RADIATOR. CHECKED PRESSURE IN COOLING SYSTEM FOUND WHEN FIRST FIRED UP WOULD BUILD TO 18 TO 20 PSI GOING DOWN ROAD WITH A LOAD. STOP AND RELIES PRESSURE WILL THEN ONLY BUILD TO 5.5 TO 6. ELIMINATED AIR COMPRESSOR DID NOT CHANGE ANY THING COULD NOT RUN DOWN ROAD TO VERIFY WITH COMPRESSOR DISABLED BUT STATIONARY TEST WAS THE SAME. CHECKED EGR COOLER THERE IS NO LEAKS IN COOLER. CALLED DETROIT TECH SUPPORT THEY SAID HAS TO BE HEAD OR HEAD GASKET FAILURE. DRAINED COOLANT REMOVED RADIATOR SUPPORT RODS OFF LEFT SIDE REMOVED INTAKE MANIFOLD REMOVED TURBO AND EXHAUST MANIFOLD INSPECTED TO SEE IF SEE ANY SIGNS OF COOLANT IN EITHER NO COOLANT SEEN. REMOVED VALVE COVERS REMOVED JAKES AND ROCKERS REMOVED INJECTORS REMOVED CAM SHAFT. REMOVED HEAD BOLTS AND REMOVED CYLINDER HEAD. CLEANED OFF CYLINDER HEAD INSTALLED HEAD PRESSURE TEST TOOL PUT HEAD IN HOT WATER PERFORMED TEST AS PER DETROIT. NO LEAKS FOUND. CHECKED HEAD FOR STRAIGHTNESS IT IS IN SPEC. CLEANED DECK SURFACE OF BLOCK INSTALLED HEAD GASKET INSTALLED CYLINDER HEAD INSTALLED FUEL LINES, WIRING HARNESS CLEANED AND INSTALLED CAM SHAFT CLEANED AND INSTALLED INJECTORS WITH NEW SEALS. CLEANED AND INSTALLED ROCKERS AND JAKES. INSTALLED VALVE COVERS WITH NEW LOWER VALVE COVER GASKET. INSTALLED INTAKE MANIFOLD AND ALL INTAKE TUBING. INSTALLED SUPPORT RODS. INSTALLED EXHAUST MANIFOLD AND TURBO. INSTALLED TUBING TO CAC. INSTALLED AIR FILTER ASSEMBLY INSTALLED COOLANT HOSES. AND T STAT HOUSING. FILLED COOLING SYSTEM WITH ANTI FREEZE THAT WAS TAKEN OUT AND ADDED 2 GALLONS NEW. PRESSURED UP FUEL SYSTEM. FIRED UP ENGINE TEST RAN DID NOT BUILD EXCESSIVE PRESSURE NO LEAKS FOUND. RECHECKED ALL HOSE CLAMPS AND CHECKED OVER ENGINE. PRESSURE WASHED OFF ENGINE. TURNED PARTS IN FOR WARRANTY.

DAT	E ARRIVED	DATE INVOICE	SALES TYPE	ADVISOR		TERMS	CUSTOMER RE	EFERENCE
10/17/2017	2:47:42PM	10/20/2017						
YEAR	MAKE	MODEL	VIN	CUSTOMER UNIT #	ENGINE HOURS	IN SERVICE	Component Serial №	ODOMETER
2007	FREIGHTLINER	CONVENTIONAL	1FUJA6CK47DZ18976	01	0	12/13/2007	06R0960832	782172

## **Sold Operations**

JOB #1 02 EXPRESS ASSESSMENT:

COMPLAINT

LOSES POWER, HAVE BEEN CHANGING FUEL FILTER, THEN GOES, NOW IT ONLY WENT 50 MILES ON THIS FILTER

CAUSE

HOOKED UP DDDL, PRINTED OUT INACTIVE DIAG. CODE LIST, CODE 39 147/2 VNT VANES NOT

RESPONDING-BOOST POWER WAS LOGGED WITH 62 COUNTS FROM 10/9 THREW 1017/17, LOOKED AT DELTA PRESSURE ZERO, DELTA-P COUNTS AT 105, OK, COMPARED BARO PRESSURE AT 12.6 VS. AIR INLET PRESSURE AT 12.8, OK. PRESSURIZED THE AIR INTAKE SYSTEM, FOUND A SLIGHT LEAK AT THE EGR MOUNTING GASKET, UNHOOKED THE AIR LINE OF THE TURBO ACTUATOR, HOOKED UP A GAGE, ACTIVATED THE V-POD TO 50% HAD 45 PSI, ACTIVATED TO 90% AND HAD 72 PSI, OK, REMOVED THE FUEL TEMP SENSOR AND CHECKED FUEL PRESSURE HAD 20 PSI AT IDLE AND 32 PSI AT HIGHER RPM'S, OK. HOOKED UP A SIGHT GLASS IN RETURN FUEL, RAN ENGINE AND CHECKED FOR AIR IN THE FUEL, NO AIR, OK.

QTY	ITEM	DESCRIPTION	UNIT PRICE	EXTD PRICE
	LABOR 02-10	CHECK & ADVISE - EXPRESS ASSESSMENT		
1	ELECT	101716504 ELECTRONIC HOOKUP FEE		
	The same of the sa			0505.00

\$525.20

JOB #2 01 ENGINE

COMPLAINT

REPLACE TURBO

CAUSE

INSTALLED NEW TURBO, ADJUSTED THE ACTUATOR .PROGRAMMING BACK TO ORIGINAL ENGINE SERIAL.

QTY	ITEM	DESCRIPTION	
	LABOR 01-10	CHECK & ADVISE - ENGINE	
1	101D/DDE R23534361	TURBO ASM	
1	101D/DDE R23534361-CORE	TURBO ASM	
-1	101D/DDE R23534361-CORE	TURBO ASM	
1	101D/DDE 08929529	GASKET	
1	101D/DDE 08929285	GASKET	
2	101D/DDE 23532326	M-O-RING	
		NUT P	
	101D/BRZ B9224 0411FRU	CLAMP-HD SPRING T BOLT,HOSE *D	\$2.60 Sublat \$0 \$2.6

	Sold Operations (Cont.)	
STY	THEM	DESCRIPTION
	LABOR III-III	CHECK & ADVISE - ENGINE
6	OUTDITUDE TOSSTITO	O-RING KIT
2	CHIPTHE 18929690	CAMSBRG SET
1	UNDERE ZEDA 10	GASKET
	DEDTRE LIEUAC	HD GSKET KIT
4	DITO ACA IBRID	HP BRAKE CLEAN
2	CHILDRE DESCOS	M-O-RING

TOTAL

\$1,671.85