

Richarz Repair

1694 Hwy 9
Larchwood, IA 51241
712-477-2700

THANK YOU FOR YOUR BUSINESS!!

Repair Order #8617

Page:1

Steffes Group Inc.

1688 HWY 9
Larchwood, IA 51241

Phone: 1-712-477-2144

Vehicle : -1 JCB 541-70

VIN : JCB5AD3HEH2572262

Fleet #/Driver :

Created : 12/16/2021 2:32:38 PM CST

Service Writer : lr

Tag/State : /IA

Odometer In : 5109

Odometer Out : 5109

Labor/Notes

Technician	Description	Price
bk	Equipment Labor	\$4,838.00
	Machine came in for fuel issues and not running. Put new fuel filters on and tried to start it. Had to check all fuses and electrical as it had fault codes coming up and found that it was an injector shorted. Drained the coolant and removed coolant tank and removed the air to air hoses. Had to remove the EGR to get the valve cover off so we could get to the injectors. Removed the fuel lines and injector hold down bolts and removed injectors. Sent injectors in and got new ones. Installed new injectors and torqued the hold down bolts. Installed new fuel lines. Put the valve cover back on and installed the EGR with new gaskets. Installed the coolant tank and hooked air to air back up. Went to start the machine and it fired then died. Removed the hood and engine cover from the machine. Removed the engine from the machine and removed the fuel injection pump. Installed a new pump and installed the engine back in the machine. Bled fuel system and started machine and it died right away and would not fire again. Took out the injectors and installed a new set. Had electric fuel pump on all the time and turned engine over by hand to get fuel into the rail. Buzz tested the injectors while doing this also. Cranked the machine and it fired and ran. Installed all the parts back on the engine and installed the cover and hood. Ran machine again and had def codes. Drained the def tank and put in new def. Codes went away and machine was good.	
cb	Equipment Labor	\$345.00
	Pulled valve cover off and swapped out injectors for a set we thought were good. Put valve cover back on and tried to get unit running. Had no luck getting unit running. Checked to make sure all air was bleed out of system and that fuel was getting to injectors and it was. Ordered new set of injectors for unit.	

Parts

Code	Description	Condition	Unit Price	Price
	Fuel Filter		\$19.53	\$19.53
	ABI HP Pipes		\$187.20	\$187.20
	Injector		\$903.34	\$3,613.36
	Injector Seal		\$7.10	\$28.40
	FREIGHT -		\$55.63	\$55.63
	Gasket-EGR to Manifold		\$25.83	\$51.66
	Pipe Clip - 8mm		\$3.04	\$12.16
	FREIGHT		\$20.76	\$20.76
	Filter		\$37.72	\$37.72
	Filter		\$81.00	\$81.00
	FREIGHT -		\$475.09	\$475.09
	Injector Leak Back Assy		\$401.53	\$401.53
	FREIGHT -		\$22.83	\$22.83
	Injector		\$957.52	\$3,830.08
	Filter		\$37.72	\$37.72
	Filter		\$81.00	\$81.00
	#8 Clamp		\$2.11	\$2.11
	JCB Injector		\$449.95	\$1,799.80
	JCB Injector Core		\$227.82	\$911.28
	FREIGHT -		\$79.17	\$79.17
	Battery, Post		\$140.84	\$281.68
	Battery Core		\$36.73	\$0.00

Richarz Repair

1694 Hwy 9
Larchwood, IA 51241
712-477-2700

THANK YOU FOR YOUR BUSINESS!!

Repair Order #8617

Page:2

Steffes Group Inc.

Vehicle: -1 JCB 541-70

<u>Code</u>	<u>Description</u>	<u>Condition</u>	<u>Unit Price</u>	<u>Price</u>
	Pump		\$1,756.41	\$1,756.41
	FREIGHT -		\$123.71	\$123.71
	5/16 X 15-1/4" Black Nylon Cable Tie		\$1.23	\$12.30
	3/16 X 15-1/2" Black Nylon Cable Tie		\$0.94	\$13.16
	Tank Line		\$91.70	\$91.70
	FREIGHT -		\$25.70	\$25.70
	Injector		\$1,014.34	\$4,057.36
	Injector Seal		\$9.43	\$37.72
	FREIGHT		\$43.83	\$43.83
	1/2" Black Heater Hose Per Ft		\$3.23	\$3.23
	6mm Flat Washer		\$0.78	\$3.12
	6x1.0x20 Metric Hex Cap Screw		\$1.14	\$4.56
	DEF		\$14.56	\$14.56
	Metric M12x1.75x30 Hex Head Cap Screw		\$2.79	\$5.58

Labor	\$10,366.00	less discount:	\$5,183.00	\$5,183.00
Parts	\$20,442.26	less discount:	\$3,066.33	\$17,375.93
Shop Supplies				\$175.00
Charges				\$846.72

Repair Total	\$23,580.65
PAYMENT	\$0.00
BALANCE DUE	\$23,580.65

Due Upon Receipt.

Finance Charges Added to Invoices Over 30 Days, Annual Interest Rate 18.0%

1 Hour Minimum Charge on All Invoices.

Please include the invoice number with your payment.

Richarz Repair

1694 Hwy 9
Larchwood, IA 51241
712-477-2700

Invoice #16521

Page:1

Steffes Group Inc.

1688 HWY 9
Larchwood, IA 51241

Phone: 1-712-477-2144

Fold Here

Vehicle : -1 JCB 541-70

VIN : JCB5AD3HEH2572262

Fleet #/Driver :

Created : 10/6/2023 1:06:59 PM CDT

Invoiced : 10/13/2023 3:49:05 PM CDT

Service Writer : MGR

Tag/State : /IA

Odometer In : 5104

Odometer Out : 5104

Labor/NotesTechnician

bk

Description

Equipment Labor

Price

\$621.00

Machine had codes coming up for the DEF system. Hooked computer to machine and checked the codes. The machine was stuck in an inducement and derate. Cleared codes and they came back right away. Found the issue was in the DEF head, ordered a new one. Removed the cab floor and removed the access plate to the DEF head. Removed the lines from the head and removed the head from the tank. Installed the new head and hooked up the lines. Hooked computer to machine and codes cleared out. Ran machine to check for leaks on the head and it was good. Installed the floor pan and floor mat back in the machine and ran the machine again with the computer hooked to it to watch the DEF system and everything was good.

PartsCodeDescriptionConditionUnit PricePrice

DEF Head

\$1,142.03

\$1,142.03

Scan Tool Charge

\$75.00

\$75.00

Labor

\$621.00

Parts

\$1,142.03

Shop Supplies

\$29.50

Charges

\$75.00

Total \$1,867.53**PAYMENT \$0.00****BALANCE DUE \$1,867.53**

Due Upon Receipt.

Finance Charges Added to Invoices Over 30 Days, Annual Interest Rate 18.0%

1 Hour Minimum Charge on All Invoices.

Please include the invoice number with your payment.