

BK 1044-0177

CONTINUED

Invoice Date:

04/14/22

Sold To:

COULD HELP WITH THIS ISSUE AFTER SPEAKING WITH THEM AND WALKING THROUGH SOME OF THEIR CHECKS EVENTUALLY FOUND THE ISSUE

PARTS:

QUANTITY PART NO DESCRIPTION STK/NON-STK

UNIT PRICE

EXTENSION

1 189-3158

SUPPRESSOR TOTAL PARTS 22.50 SEG. 02

F/R LBR

SECREDIT 02 TOTAL

SEGMENT 03: TROUBLESHOOT (SJR) ENGINE

CUSTOMER COMPLAINT:

- ENGINE DERATED AND HAS ACTIVE ENGINE CODES

- INTERNAL OPEN IN VALVE

PART NUMBER:

- 463-8913 VALVE

CONTINGENT DAMAGE:

- COOLANT

- O-RINGS

CORRECTION:

- VERIFIED THE COMPLAINT

- CHECKED THE PSR FOR ACTIVE CODES

ACTIVE CODE FOR CURRENT ABOVE NORMAL FOR THE NRS

- LOOKED INTO SIS GUIDE

- CHECKED ALL ELECTRICAL CONNECTORS

- NOTICED THAT THE HARNESS ON CARLSON END OF MACHINE FROM ENGINE HARNESS TO ECM WAS NEW

CHECKED ALL THE PINS IN THE HARNESS TO MAKE SURE

ALL WERE TIGHT AND PINNED CORRECTLY

- AFTER ENSURING WIRING TESTED GOOD

- MADE A SHORT IN THE CONNECTOR TO THE NRS VALVE AND THE THE CODE CHANGED

- DETERMINED THE FAULT WAS AN INTERNAL OPEN IN THE

- ORDERED THE NEW VALVE

- REMOVED THE OLD VALVE LOST SOME OF THE COOLANT WHEN REMOVING THE VALVE

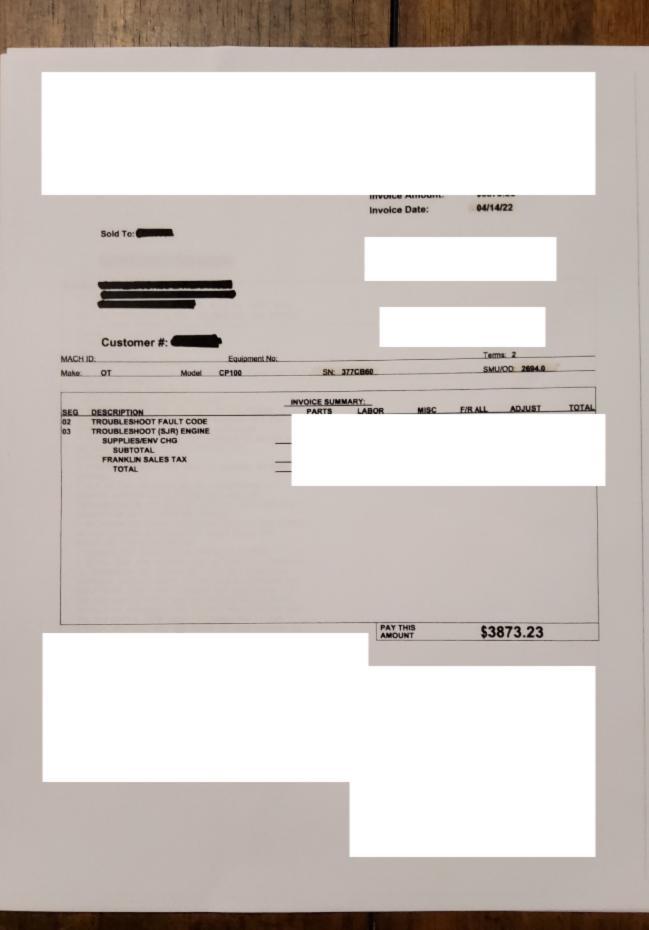
- DISCONNECTED THE EXHAUST PIPE AND HOSES

- INSTALLED THE NEW VALVE

TORQUED ALL FASTENERS

- CONNECTED PIPES, HOSES AND HARNESS

- TOPPED OFF THE COOLANT



Invoice Date: 04/14/22 Sold To - RESET THE MRS VALVE IN THE CONFIGURATION - CLEARED THE CODES RAN THE ENGINE NO CODES RECORDED AFTER THE REPAIR COMPLICATIONS: COMPLICATIONS:

- CARLSON IS NOT A SUPORTED PRODUCT BY OUR DEALER
SO THERE IS ONLY INFORMATION FOR THE ENGINE NONE
OF THE MACHINE HARNESSES USED TO CONNECT ECM TO
ENGINE IS ALL CARLSON HAD NO INFORMATION AND HAD
TO TRACE WIRES IN ORDER TO RULE OUT THE HARNESS WHILE TROUBLESHOOTING THE PROBLEM PARTS: QUANTITY PART NO DESCRIPTION STK/NON-STK EXTENSION UNIT PRICE SEAL O NO.
CAT ELC
SEAL N
VALVE AS SWEFN
TOTAL PARTS 1 6V-3251 3 238-8648 1 386-1911 1 463-8913 EXSRV: 4638913 TOTAL MISC CMGS 1.00 SECRENT 03 TOTAL SUPPLIES/ENV CHG FRANKLIN SALES TAX

Invoice Date:

04/14/22

Sold To:

### SEGMENT 02: TROUBLESHOOT FAULT CODE

CUSTOMER COMPLAINT:

- MACHINE WILL NOT SHUT OFF, E STOPS DON'T WORK HAVE TO DISCONNECT A MIRE TO SHUT OFF THE MACHINE

#### AUSE:

- SHORT IN HARNESS
- PART NUMBER:
- CARLSON MACHINE HARNESS
- COMMON PARTIES INCOMES

#### CONTINGENT DAMAGE:

- VERIFIED THE COMPLAINT
- MADE SURE THERE WERE NO CODES
- CHECKED ALL OF THE CAT SIDE OF THE ENGINE HARNESS TO ENSURE NOTHING WAS KEEPING THE ECH POWERED UP AFTER KEY HAD BEEN SHUT DOWN
- CHECKED THE RELAYS BY THE BATTERY TO ENSURE NONE
- OF THEM WERE BACK FEEDING TO THE ECM
- CHECKED THE GROUNDS
- STARTED CHECKING THE PINS ON CARLSON MACHINE HARNESS
- HAD TO CALL CARLSON AND BE TRANSFERRED TO PRODUCT SUPPORT TO GET SOME HELF GETTING INFORMATION ON THE MACHINE AND PIN LOCATIONS AND CONNECTION OF THE MACHINE HARNESS
- WHILE ON THE PHONE PERFORMING SOME OF THE CHECKS HE WAS TELLING ME TO ON ECM POWER RELAY THE WIRES WAS CONNECTED WRONG
- ENSURED ALL PINS TO THE ECM WERE CORRECT
- FOUND THAT THE HARNESS WAS INCORRECTLY CONNECTED TO ALTERNATOR TO GROUND AND THAT HAD BLOWN THE INTERNAL HARNESS DIODE IN THE CARLSON HARNESS AND WOULD BACK FEED POWER THROUGH THE MAIN RELAY FOR THE KEY SWITCH AND POWER UP THE ECM AND MACHINE WOULD STAY RUNNING AFTER THE KEY WAS SWITCHED OFF THE KEY SWITCH MAIN RELAY IS CONNECTED TO THE E-STOPS AND THAT WAS THE CAUSE TO THAT PROBLEM AS
- MELL
   CARLSONS INLINE DIODE IS NOT AVAILABLE THROUGH
  CAT USED A CAT A/C SYSTEM DIODE AND RETROFITTED IT
  IN PLACE ON THE CARLSON HARNESS AND CONNECTED IT
  THE CORRECT LOCATION ON THE BACK OF THE ALTERNATOR
- VERIFIED THE REPAIR - MADE SURE MACHINE SHUT DOWN E-STOPS FUNCTIONED

#### COMPLICATIONS:

THIS ISSUE WAS ON THE MACHINE SIDE SO THERE WAS NO INFORMATION OR ELECTRICAL SCHEMATIC HAD TO GET A HOLD OF CARLSON AND BE DIRECTED TO SOMEONE THAT

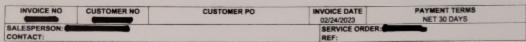
PAYMENT TERMS INVOICE DATE CUSTOMER NO CUSTOMER PO INVOICE NO NET 30 DAYS 02/24/2023 SERVICE ORDER: SALESPERSONS CONTACT:
CARLSON MODEL: CP100 S/N: 377CB6Q CUST UNIT: UNIT: EQ0300282 SEGMENT: 10 MAJOR REPAIR CAB / BODY / CHASSIS CUSTOMER - SHOP SEGMENT TYPE: Chargosible
CARLSON MODEL: CP100 S/N: 377CB6Q CUST UNIT: UNIT: EQ0300282
CARLSON MODEL: CP100 S/N: 377CB6Q CUST UNIT: UNIT: EQ0300282
WORK SITE: ALTA CONSTRUCTION EQUIPMENT OH LLC 181 OAK LEAF OVAL BEDFORD OH 44146-6156
LOCATION: \*\*SENT MACHINE OUT FOR COMPLETE EVAL PRIOR TO SEASON\*\* EVAL NOTES WORK DESCRIPTION: Decided against paint job Quote along the way any parts needed for return of very reliable machine to oustomer. (Been a few months since we inspected and gave findings) Rt. track crossover control cable is bad. I recommend replacing at Rt. track crossover control cable is add. Trackment replaced in least both left and right crossover cables.

Missing 1 track pad on rt. track. Mejority of track pad boits and nuts are loose, should replace all pad boits and nuts. Hydraulic cooler is leaking and causing the cooler to plug externally. Auger drive chains are to tight and need lubricated badly. Auger drive hydraulic motors shaft seals are seeping, possibly because of chain tension. because of chain tension. Suspect left auger control seal blown because left auger moves while running other functions over reliaf.

Left auger end bearing has noticeable movement. Rt. conveyor drive chain to tight. Left and rt. drive chains and sprockets showing wear. Hydrautic leak on rt. side control valve block at a plug.
Rt. extension cylinder is leaking.
Rt. side control panel, left hand extension toggle switch is bad.
Rt. side outer to middle extension slide tube mount is broken. Left side outer to middle extension side tube mount is loose. Back up alarm and hom do not function. Rt. side door latch is missing arm from latch to hold door shut. Multiple lights not working. Rt. auger, L&Rt truck hitch, ? of the rear screed light.

1/23-Added LH Extension Cylinder and Bushings

1/25-Added complete undercarriage, turbo,LH remote, RH ext. cyl rod, toggle switch Also quoted 2000 HR PM will install Conveyor Drive Sprockets and Chains in Field due to lead time on parts separate bill) CORRECTION: - REPAIRS &/OR CORRECTIONS MADE BASED ON EVAL NOTES



- REPLACED THE CROSS OVER CABLES. ADJUSTED THE CABLES
- 1/13/23 ANTONIO
- REPLACED ALL LIGHTS THAT WERE BURNED OUT AND THAT WERE HALF BURNED OUT
- REPLACED HORN
- REPLACED BROKEN LEFT HAND EXTENSION TOGGLE SWITCH
- 1-17 MARK
- HELPED ANTONIO REMOVE RIGHT SIDE EXTENSION SLIDE PLATE
- 1/17/23 ANTONIO

   CHECKED FOR MOVEMENT ON THE SCREED EXTENSIONS TO SEE IF PLATE ON LEFT SIDE WAS LOOSE
  - NO MOVEMENT WAS FOUND.
- REMOVED THE COVERS ON THE SCREED TO ACCESS THE EXTENSION SLIDE PLATE MARK HELPED WITH THE DISASSEMBLY AND REMOVAL OF PLATE
- SWAPPED EVERYTHING OVER TO THE NEW PLATE HAD LIZ ORDER NEW BUSHINGS FOR THE SLIDE TUBES
- STARTED REMOVING ASPHALT FROM AUGER END BEARING ON THE LEFT SIDE REMOVED BOLTS HOLDING END AUGER ON
- USED TORCH TO HEAT UP TUBE OVER SHAFT TO GET THE TAR HOT ENOUGH TO SLIDE THE TUBE OFF - REMOVED BEARING HOLDER FROM UNIT
- HEATED BEARING UP AND USED A PULLER FROM THE TOOL ROOM TO PULL THE BEARING OFF
- CLEANED TAR OFF NUT TO REMOVE BEARING FROM MOUNT ROD BROKE NUT FREE AND REMOVED MOUNT

- REMOVED GREASE FITTING TUBE LET THE AUGER BLADE AND TUBE MOUNT SIT IN A BUCKET OF BRAKE CLEAN TO EAT AWAY THE TAR OVER NIGHT 1/18/23 ANTONIO
- REMOVED BLADE AND TUBE AND CLEANED AFTER SOAKING
- INSTALLED THE GREASE FITTING TUBE TO BEARING AND THE BEARING TO THE
- CLEANED THE AUGER SHAFT AND SLID BEARING OVER IT INSTALLED THE TUBE BEARING AND TUB MOUNT TO UNIT
- GREASED BEARING
- INSTALLED THE AUGER SHAFT TUBE AND THE AUGER END BLADE AND INSTALLED
- THE BOLTS WITH NEW NUTS TIGHTENED THEM DOWN TO SPEC
- DISCONNECTED THE BATTERY AND STARTED DRAINING THE RADIATOR AND HYD
- REMOVED TUBES AND HOSES TOOK FRONT COVER OFF UNIT TO GET TO OTHER SIDE OF RADIATOR
- REMOVED FAN GUARD AND SHROUD
- REMOVE BRACKETS HOLDING RADIATOR TO SHROUD REMOVED FAN FROM ENGINE
- UNBOLTED BOTTOM OF RADIATOR FROM THE FRAME AND PULLED IT OUT BROUGHT RADIATOR TO WASH BAY AND WASHED IT OFF REMOVED ALL FITTINGS AND BROKE RADIATOR DOWN INTO SECTIONS
- FOUND AIR COOLER WAS GETTING RUBBED BY THE HOOD HAD HYD COOLER AND CHARGE AIR COOLER SENT OUT FOR TESTING
- DURING REMOVAL FOR AIR COOLER TUBES AN EXCESSIVE AMOUNT OF OIL WAS
- FOUND IN THE COOLER TUBE AND TURBO
   TURBO SEAL IS LEAKING AND NEEDS TO BE REPLACED

INVOICE NO CUSTOMER NO	CUSTOMER PO	02/24/2023	PAYMENT TERMS NET 30 DAYS	
SALESPERSON CONTACT:		SERVICE ORDER		

- GAVE LIZ NUMBERS OFF THE TURBO
- 1/19/23 ANTONIO
- LOOKED INTO WHY LEFT SIDE TOW POINT CYLINDER WAS NOT GOING DOWN
- SWAPPED THE UP PLUG ON THE SOLENOID TO THE DOWN SIDE AND SOLENOID ACTIVATED
- USED VOLT METER TO CHECKED FOR POWER
- NO POWER WAS BEING SENT TO THE PLUG FROM THE REMOTE SWITCH
- SWAPPED REMOTES AND SOLENOID WORKED AS IT SHOULD
- REMOTE SWITCH IS BAD AND NEEDS REPLACED
- REMOVED BOTTOM ROLLER GUARDS AND FOUND 1 ROLLER THAT THERE WERE NO BOLTS IN AND ROLLER WAS JUST SITTING ON THE TRACK CHAINS ON LEFT HAND
- REMOVED RIGHT SIDE ROLLER GUARDS AND FOUND BOLTS THAT WERE LOOSE ON THE BOTTOM ROLLERS
- JACKED RIGHT SIDE OF UNIT OFF THE GROUND TO START REMOVING THE TRACKS
- TO CLEAN THEM AND REMOVE OLD BOLTS
- MASTER PIN WOULD NOT COME OUT
- STARTED DIGGING OUT ASPHALT FROM THE PAD HOLES
   REMOVED BOLTS AND PADS FROM HALF THE RIGHT SIDE TRACK.
- 1/20/23 ANTONIO - PUT THE COOLER BACK TOGETHER
- INSTALLED COOLER BACK INTO MACHINE LOOSENED ALTERNATOR TO GET FAN HUB TO SPIN TO ALIGN BOLTS
- INSTALLED FAN AND ADJUSTED ALTERNATOR TO TIGHTEN BELT
- 1/23/23
- INSTALLED SIDE FAN TO RADIATOR
- INSTALLED MID PLATE EXTENSION SLIDE BUSHINGS FOR THE EXTENSION TUBES INSTALLED MID PLATE TO UNIT
- 1/24/23
- TIGHTENED DOWN BOLTS
- DUG OUT HARDENED ASPHALT FROM EXTENSION PANEL AND MAIN SCREED WHERE **EXTENSION RIDES**
- INSTALLED EXTENSION PANEL TO THE MID PLATE AND INSTALLED SLIDE TUBES
- CONNECTED SIDE PLATE TO EXTENSION PANEL
- 1/25/23
- INSTALLED MID PLATE ADJUSTMENT SPROCKETS AND SHAFT WITH CHAIN
- REMOVED OLD CYLINDER
- INSTALLED NEW CYLINDER DRAINED HYD OIL FROM TANK
- ADDED 25 GALLONS OF NEW HYD FLUID AND WILL RECHECK LEVEL WHEN ENGINE
- CLEANED HARDENED OIL OUT OF CHARGED AIR COOLER TUB
- STARTED REMOVING TURBOCHARGER.
- 2/6/23 ANTONIO
- INSTALLED NEW TURBO CHARGER
- CONNECTED HOSES TO TURBO
- CONNECTED AIR FILTER HOSE AND AIR COOLER HOSE
- LIFTED UNIT RIGHT SIDE OFF GROUND
- CUT TRACK LINKS REMOVE SPROCKET BOLTS
- USED FORKLIFT TO DRAG TRACKS OUT FROM UNDER MACHINE
- REMOVED ALL ROLLERS
- CLEANED UNDERCARRIAGE FRAME

#### REPAIRS &/OR CORRECTIONS MADE BASED ON EVAL NOTES

INVOICE NO	CUSTOMER NO	CUSTOMER PO	INVOICE DATE 02/24/2023	PAYMENT TERMS NET 30 DAYS
SALESPERSON CONTACT:		SERVICE ORDER		

- REMOVED ALL POINT ON NEW ROLLER MOUNTING SURFACES

- REMOVED ALL POINT ON NEW ROLLER MOUNTING SURFACES
   INSTALLED ROLLERS
   REMOVED FRONT IDLER
   INSTALLED NEW IDLER
   REMOVED SPROCKET AND INSTALLED NEW SPROCKET
   UNROLLED NEW TRACKS AND INSTALLED
   INSTALLED PADS AND CONNECTED TRACK TENSIONER HYD HOSE
- 2/7/23
   REMOVED BLOCKS OF WOOD FOR RIGHT SIDE OF UNIT
   LIFTED LEFT SIDE OF UNIT UP
   REMOVED TRACK PADS
   USED TORCHES AND CUT LEFT SIDE TRACK LINKS

- REMOVED TRACKS
- REMOVED IDLERS, ROLLERS AND SPROCKETS
   INSTALLED NEW IDLERS, SPROCKETS AND ROLLERS
- INSTALLED NEW TRACKS

## 2/8/23

- INSTALLED PADS THAT WERE TAKEN OFF TO CONNECT TRACKS
  INSTALLED TENSIONER HYD HOSE
  REMOVED BLOCKING HOLDING UNIT UP
  STARTED UNIT AND TOOK OUTSIDE
  BROUGHT UNIT BACK IN
  REPLACED ALIGER SWITCH ON RIGHT SIDE PANEL
  FOUND THAT LEFT SIDE HAND HELD SWITCH THAT OPERATES AUGER PITCH
  CYLINDER WAS BAD
  2/9/23
  JACKED UNIT UP INTO AIR TO GET TO FINAL DRIVES
  USED TORCH AND BLEW OFF ALL ASPHALT ON FINAL DRIVES TO FIND
  DRAIN AND FILL PUGS
  DRAINED FINAL DRIVE OIL
  FILLED WITH NEW OIL

# REPAIRS &/OR CORRECTIONS MADE BASED ON EVAL NOTES

INVOICE NO	CUSTOMER NO	CUSTOMER PO	02/24/2023	, PAYMENT TERMS NET 30 DAYS
SALESPERSON (MINISTRALE)		SERVICE ORDER:		
CONTACT:		REF:		

- INSTALLED NEW ROD SEALS AND PUT CYLINDER BACK TOGETHER
- INSTALLED CYLINDER BACK INTO SCREED CONNECTED HYD HOSES
- BACKED PAVER UP TO SCREED AND CONNECTED SCREED TO PAVER - BACKED PAVER UP TO SCREED AND CONNECTED SCREED TO PAVER 2/20/23
  - INSTALLED COTTER PINS TO SCREED PINS
  - INSTALLED NEW HAND HELD REMOTE FOR LEFT SIDE
  - CONNECTED HYD HOSES FROM SCREED TO PAVER
  - INSTALLED SCREED PLATES TO SCREED EXTENSIONS
  - INSTALLED SCREED STEP PANELS
  - GREASED SCREED AND PAVER
  - LIFTED SCREED AND PAVER
  - LIFTED SCREED OFF GROUND CYCLED EXTENSIONS
  - CHECKED HYD FLUID AND TOPPED OFF
  - BROUGHT UNIT OUTSIDE AND CALIBRATED/ PROGRAMED AUGERS ACCORDING
  TO DOOR INSTRUCTION STICKER

- TO DOOR INSTRUCTION STICKER

   TOOK TO WASH BAY AND WASHED UNIT OFF
   TIGHTENED UP COVERS, BRACKETS AND UNDERCARRIAGE GUARDS
   CLEANED WORK SPACE AND DUD WRITE UPS

TEM / Lot ID	DESCRIPTION	QTY	PRICE	CORE	TOTAL
	CROSSOVER CABLE	2	_		
	BOLT	288			
	NUT	288			
	TRACK - POLY PAD	1			
	AUGER HANGER AS.	1			
	PLATE - PAWL SIDE DO	1			
		2			
	WASHER	2			
	SWITCH - TOGGLE	1			
	HORN - 2 TONE 12V	1			
	LIGHT	3			
	ASSEMBLY - LIGHT LED	1			
	SEAL KIT	1			
	SECONDARY INNER TUBE	1			
	CYLINDER - EXTENSION	1			
	BUSHING	4			
	Turbo Replaces 53039	1			
	REMOTE AS LH TOWE	1			
	Extension Cyl Rod	1			
	USE 133635-01-C11	1			
	TRACK CHAIN ASSY.	2			
	SPROCKET	2			
	"Bolt Hex 5/8"-11 X	16			
	TRACK WHEEL	2			
	TRACK WHEEL	12			
	IDLER AS.	2			
	"1/2" SPRING STEEL	72			
	BOLT - HEX	56			
	FILTER ELEMENT - HYD	2			
	FILTER, AIR PRIMARY	1			
	FILTER-SECONDARY	1			

INVOICE		CUSTOMER PO	02/24/2023	4 ' NE	MENT TERMS T 30 DAYS
SALESPERSON SERVICE OF REF:				DER:	
ITEM / Lot ID	DESCRIPTION	QTY	PRICE	CORE	TOTAL
	FILTER,OIL	1	_		
	FILTER, FUEL PRIMARY	1			
	FUEL WATER SEPARATOR	1			
	BUZZER,BACK	1			
	DOOSAN MOLY 3% EP GR	20			
MISC	SUBLET LABOR	1.00			
MISC	COOLER REPAIR	1.00			
MISC	MISC - SHIPPING AND	1.00			
MISC	MISC - SERVICE SUPP	1.00			
MISC	FUEL SURCHARGE	1.00			
MISC	MISC - SHIPPING AND	1.00			
MISC	MISC - SHIPPING AND	1.00			
MSC	MISC - SHIPPING AND	1.00			
MISC	MISC - SHIPPING AND	1.00			
ABOR SEGMENT 10					

Note:

TOTAL IF PAID AFTER DUE DATE:

52,855.92

PARTS
LABOR
MISC.
SALES TAX
TOTAL INVOICE 52,074.80

View Invoices and Statementa Online at: altaequipment billtrust com

Enrollment Password:

Page 6 of 6