

SEM 1

H02-97
SEP

MAINTENANCE REQUEST FORM

UNIT# 807

HRS/KM 125012

DESCRIPTION OF REPAIRS REQUIRED

INITIAL BREAK IN OIL CHANGE

D HOOK to WELD ON FRAME

REQUESTED BY:

DATE:



SEMI (HWY TRACTOR)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

☐ 807 - Winch Truck

BHDD Shop

Tuesday, April 21st 2026, 9:36 AM (MDT -06:00)

Unit Information

Date: April 21, 2026

Select Unit Number: 807 - Winch Truck

KMs: # 759021

Hours: # 15286

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Service, exhaust manifold starting to leak #6

- changed engine oil
- changed fuel filters
- changed air filters
- changed fan belts

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop



FULL SERVICE COMPLETED? Check the box if Oil /Filters & inspection are performed.

Requested By:

Worker Requesting Repairs:



Luke Jacobsen

Request submitted to:

After signing Request Form be sure to: Request Signature or Approval Tab and select either from the Given Names below: Ron Jerome Dan Fontaine Jon Archibald

Signatures

Luke Jacobsen, *Mechanic*



April 21st 2026, 9:36 AM (MDT -06:00)



52.8512629, -110.8423614



ISEW (HWN TRACTOR)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807 - Winch Truck

BHDD Shop

Friday, April 10th 2026, 1:25 PM (MDT -06:00)

Unit Information

Date: April 10, 2026

Select Unit Number: 807 - Winch Truck

KMs: 754973

Hours: 15202

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Driver side rear wheel seal leaking

- removed wheels
- removed hub
- cleaned parts
- installed new seal
- torqued to spec
- installed hub
- replaced brakes and drum
- installed wheels and torqued

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop

FULL SERVICE COMPLETED? Check the box if Oil /Filters & inspection are performed.

Requested By:

Worker Requesting Repairs:



Luke Jacobsen

Request submitted to:

After signing Request Form be sure to: Request Signature or Approval Tab and select either from the Given Names below: Ron Jerome Dan Fontaine Jon Archibald

Signatures

Luke Jacobsen, *Mechanic*



April 10th 2026, 1:25 PM (MDT -06:00)



52.8513311, -110.8422407

Integra Tire Wainwright Ltd.
1613 - 1st Street Wainwright AB T9W 1L5

PH: 780-842-1500
FX: 780-842-1520

SOLD TO:
BRO001
BROTHERS HDD INC
2002 23 AVE

Invoice WAIR071576 (Copy)

SHIP TO
SAME

DATE: 26 Mar 15

Wainwright
T9W 0B8

AB

TEL:

FAX:

TEL: 780.214.7711

PAGE: 1

YEAR	MAKE	MODEL	ENGINE
2016	Peterbilt	367	14.9 L 912 CID L6 Cummins ISX C
PLATE NO	VIN	ODOMETER	UNIT NO.
CTV6642	1XPTP4TX4GD288888	748177	807
TIME IN	PROMISED	TERMS	P.O.
7:50 AM		NET 30	
WRITTEN BY	TAG		
HR			

QTY	ITEM/DESCRIPTION	SIZE	TAX	NET	EXT.PRICE
1	AHC AFTER HOURS CALL-OUT HR		G		147.90
4	HHS21711245	11R24.5	G	360.00	1440.00
4	MISC TAITONG HS217 ON/OFF DRIVE 16H		G	14.00	56.00
4	TTAB2		G		171.76
4	TIRE RECYCLING FEE - AB (Medium Truck, ETC)		G		
4	COMT CHANGE OVER MEDIUM TRUCK W/PURCHASE HR		G		
4	REAR AXLE		G	9.95	39.80
4	TEC545D	VALVE	G		
1	MISC O-RING VALVE		G	39.48	39.48
	SHP				
	SHOP SUPPLIES				
	GST Registration# 820001915RT0001				
**WARNING, WHEEL MANUFACTURERS RECOMMEND CHECKING THE TORQUE ON FASTENERS ON PASSENGER CARS/LIGHT TRUCKS AT 30-50 KM AND MEDIUM TRUCKS AT 80-160 KM AFTER EACH WHEEL REMOVAL AND INSTALL. THIS SERVICE IS PROVIDED FREE OF CHARGE. PLEASE SEE US TO HAVE THIS DONE. FAILURE TO DO SO MAY RESULT IN A WHEEL OFF SITUATION. AIR SET AT _____ WHEEL NUTS HAND TORQUED _____ FT. LBS					
GST EXEMPT #:		PST EXEMPT #:			

PARTS:	1479.80
LABOUR:	319.66
OTHER:	95.48
SUB-TOTAL:	1894.94
GST:	94.75
PST:	N/C
TOTAL:	1989.69



Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

SEMI (winch)

ww

Maintenance Request / Report Form

Information

807 - Winch Truck

Grand Prairie - Shop

Tuesday, March 3rd 2026, 4:04 PM (MST -07:00)

Unit Information

Date:  March 3, 2026

Select Unit Number:  807 - Winch Truck

KMs:  741854

Hours:  14902.9

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

 Replace signal lights on front of truck put new switch in for work lights

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Complete

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested By:

Worker Requesting Repairs:



Chase Atkinson

Request submitted to:

After signing Request Form be sure to: Request Signature or Approval Tab and select either from the Given Names below: Ron Jerome Dan Fontaine Jon Archibald

Signatures

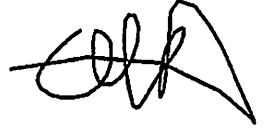
Chase Atkinson, *Laborer*



March 3rd 2026, 4:04 PM (MST -07:00)



52.8512332, -110.841983

A handwritten signature in black ink, appearing to be 'C. Atkinson', written over a horizontal line.



SEMI (WINCH)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

 807 - Winch Truck

 BHDD Shop

 Friday, February 27th 2026, 4:27 PM (MST -07:00)

Unit Information

Date:  February 27, 2026

Select Unit Number:  807 - Winch Truck

KMs: # 74065

Hours: # 14858

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

 Replaced left rear drive wheel seal

Serial/Part # if applicable:  No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

FULL SERVICE COMPLETED? Check the box if Oil /Filters & inspection are performed.

Requested By:

Worker Requesting Repairs:



Wayne Phillips

Request submitted to:

After signing Request Form be sure to: Request Signature or Approval Tab and select either from the Given Names below: Ron Jerome Dan Fontaine Jon Archibald

Signatures

Ron Jerome, *Supervisor*



February 27th 2026, 4:27 PM (MST -07:00)



52.8515073, -110.8418795

A handwritten signature in black ink, appearing to be a stylized 'R' or 'J' with a horizontal line through it.

Northern Trailer and Truck
 2210 - 19 Avenue
 Wainwright, AB T9W 1L2, CA
 service1.northern@gmail.com
 780-842-0080



Invoice: 15566

Date: 12/30/2025

Bill To
 Brothers HDD

UNIT # 807

P: (780) 214-7711

Service Order	Terms	Due Date	Authorizer	Customer PO	Service Writer	Unit #
9333	COD	12/30/2025	Ron Jerome		Cornish, Megan	807

Item	Description	Quantity	Rate	Amount
------	-------------	----------	------	--------

Complaint: Diagnose Transmission Noise? Distinct sound between 40 -80 km/hr customer believes is coming from the transmission?

Requires test drive

Cause: Unknown Type: Unscheduled repair

Labor	Correction: Powertrain - Clutch/ Transmission/ Aux / Driveline/ Differentials/ Axles / Clutch and Transmission - Service / repair / shifter / controls / Diagnose Transmission Noise? Distinct sound between 40 -80 km/hr customer believes is coming from the transmission?	4.00000	\$135.00	\$540.00
-------	---	---------	----------	----------

- Test drove unit to confirm the noise
- Made no difference with clutch disengaged, lockers in or engine rpm
- Brought in and inspected driveline found jackshaft between #3/#4 axle was out of phase and steady bearing yoke was also out of phase
- Remove Jack shaft and put back in phase
- Remove driveline at steady bearing, remove yoke and put in phase
- Ran unit with driveline off and could not hear anything
- Reinstall driveshafts and torque to spec
- Test drove unit again and same noise came back but it was at 10km/hr now
- Pulled back in shop and drive axles in the air
- Ran unit up and found the #2 Input dustshield for the yoke was loose
- With weight on/interaxle was resting on it so it looked tight but when driving it would spin
- Disconnected batteries and tack weld dustshield in place
- Test drove good

*** The interaxle does have play in them which caused the dustshield to come loose

- Plug swapped both differentials and there doesn't appear to be much for contamination would recommend inspecting at oil change intervals but should be fine to run out - Completed: 12/30/2025

Subtotal \$540.00

Complaint: Diagnose leak in diff lock as requested by driver.

Cause: Unknown Type: Unscheduled repair

(Inspection)

Labor	Correction:	1.80000	\$135.00	\$243.00
	Powertrain - Clutch/ Transmission/ Aux / Driveline/ Differentials/ Axles / Differential Components - seals / carriers / service / mounts/ housing / Diagnose leak in diff lock as requested by driver.			

- Hit the diff locks did not hear anything, checked under truck found no leaks

- Removed dash paneling and found both interaxle and forward diff lock switches leaking at fittings require replacement

1. Replace Leaking Switches

- Remove and replace

- Test. everything working as intended

2. Rear most fitting on LH tank under driver step is leaking

-remove and replace fitting - Completed: 12/30/2025

Parts	VALVE-AIR ROCK W/ELEC SW - G90-6022-001AN	1.00000	\$471.28	\$471.28
Parts	VALVE-AIR ROCK W/ELEC SW - G90-6022-014AN	1.00000	\$471.28	\$471.28
Parts	5/8" TUBE X 1/2" MPT COMPRESSION UNION - 1468-10D	1.00000	\$5.89	\$5.89
	Subtotal			\$1,191.45

Freight	1.00	\$60.00	\$60.00
---------	------	---------	---------

Unit: 807 VIN: 1XPTP4TX4GD288888
 License Plate: CTV-6642
 2016 Peterbilt 367
 Chassis: 716,851 Kilometers
 Engine: 14,316 Hours

Labor \$783.00

Parts \$948.45

Shop Supplies \$54.81

Pre-Charge Subtotal \$1,786.26

Freight \$60.00

GST \$92.31
 (5% of \$1,846.26)

Total \$1,938.57

Payments & Credits \$0.00

Balance Due \$1,938.57



SEMI (WINCH)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807 - Winch Truck

w/o # 63068355660

BHDD Shop

Monday, December 29th 2025, 10:19 AM (MST -07:00)

Unit Information

Date: December 23, 2025

Select Unit Number: 807 - Winch Truck

KMs: # 716821

Hours: # 14313

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Coolant heater not working, block heater not working, change oil to 0w40, batteries dead, middle diff leaking air when interlock engaged

- replaced batteries
- replaced corroded wires for coolant heater
- test ran coolant heater, all good
- block heater terminals melted
- moved block heater cord to passenger side
- replaced block heater element
- changed engine oil and filter

ENTERED
DEC 30 25

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop

Requested By:

Worker Requesting Repairs:



Luke Jacobsen

Signatures

Luke Jacobsen, *Mechanic*



December 29th 2025, 10:19 AM (MST -07:00)



52.8512976, -110.842179



Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7717

SEMI (WINCH
TRUCK)

Maintenance Request / Report Form

Information

807 - Winch Truck

BHDD Shop

Wednesday, December 17th 2025, 9:14 AM (MST -07:00)

Unit Information

Date: December 3, 2025

Select Unit Number: 807 - Winch Truck

<Ms: # 716750

Hours: # 14309

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Cvip, rear diff seal leaking, loud bearing noise

- replaced 3 air bags
- replaced rear axle yoke seal and drivshaft u joints
- replaced rear main drive shaft u joint
- replaced air suspension guage
- replaced brake pot
- drained transmission, took apart pto cover to inspect pto gear, looks fine, assembled and filled with oil 75w90
- replaced 2 drums and brakes on drive axle
- replaced front kingpins and bushings
- replaced all diff oils 75w90
- greased
- welder fixed cracks on rear frame and winch
- mounted mudflaps in front of fuel tanks
- replaced d sign air cylinders but still leaking air
- wheel speed sensor code, cleaned tone ring and set sensor closer to ring, verified sensors are working, cleared codes
- filled pto tank, was very low on hydraulic oil
- replaced air dryer purge valve
- replaced front wheel seals and brakes/drums
- replaced front bumper bushings and bolts
- replaced alternator
- replaced wires for bunk heater and verified working

Middle diff and rear diff were low on oil.

Bearing howl coming from rear axles.

Sent to northern truck and trailer for diagnosing diff problem.

Serial/Part # if applicable:

 No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested By:

Worker Requesting Repairs:

 Luke Jacobsen

Signatures

Luke Jacobsen, *Mechanic*

 December 17th 2025, 9:14 AM (MST -07:00)

 52.8512531, -110.8419806



Integra Tire Wainwright Ltd.
1613 - 1st Street Wainwright AB T9W 1L5

PH: 780-842-1500
FX: 780-842-1520

SOLD TO:
BRO001
BROTHERS HDD INC
2002 23 AVE

Invoice WAIR070496 (Copy)

SHIP TO
SAME

DATE: 25 Nov 25

Wainwright
T9W 0B8

AB

TEL:

FAX:

TEL: 780,214.7711

PAGE: 1

YEAR	MAKE	MODEL	ENGINE
2016	PETERBILT	367	
PLATE NO	VIN	ODOMETER	UNIT NO.
CTV6642	1XPTP4TX4GD288888	714669	807
TIME IN	PROMISED	TERMS	P.O.
4:11 PM		NET 30	
WRITTEN BY	TAG		
HR			

QTY	ITEM/DESCRIPTION	SIZE	TAX	NET	EXT.PRICE
2	44007	425/65R22.5	G	678.75	1357.50
	WESTLAKE AT557 165K 20L				
2	TTAB2		G	14.00	28.00
	TIRE RECYCLING FEE - AB (Medium Truck, ETC)				
2	COWB CHANGE OVER WIDE BASE JAR BPB		G		105.10
2	TEC545D	VALVE	G	9.95	19.90
	MISC O-RING VALVE				
1	tlgal	TIRE LIFE	G	49.95	49.95
	MISC TIRE LIFE				
1	SHP		G	12.98	12.98
	SHOP SUPPLIES				
	TOTAL DISCOUNT GIVEN---> 294.22				
	GST Registration# 820001915RT0001				
	**WARNING, WHEEL MANUFACTURERS RECOMMEND CHECKING THE TORQUE ON FASTENERS ON PASSENGER CARS/LIGHT TRUCKS AT 30-50 KM AND MEDIUM TRUCKS AT 80-160 KM AFTER EACH WHEEL REMOVAL AND INSTALL. THIS SERVICE IS PROVIDED FREE OF CHARGE. PLEASE SEE US TO HAVE THIS DONE. FAILURE TO DO SO MAY RESULT IN A WHEEL OFF SITUATION. AIR SET AT _____ WHEEL NUTS HAND TORQUED _____ FT. LBS				
	GST EXEMPT #:				
	PST EXEMPT #:				

PARTS:	1427.35
LABOUR:	105.10
OTHER:	40.98
SUB-TOTAL:	1573.43
GST:	78.69
PST:	N/C
TOTAL:	1652.12

UNIT #550

FLUID ANALYSIS

UIN 0BC9132

Diesel Engine

Unit No. 480923UEABE10

Unit:

Make Doosan

Model HP1600

Serial No. 480923UEABE10

Site

Compartment:

Name Diesel Engine

Make

Model

Serial No.

Capacity: 0.0 Ltrs

Customer:

BROTHERS HDD

2002 23Ave

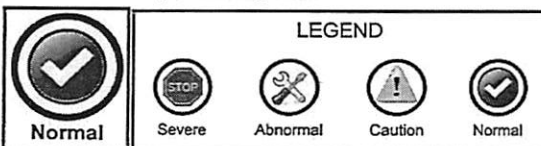
Wainwright AB T9W0B8

Canada

DIAGNOSIS

Hours on component not given. No abnormal wear detected. No recommended action at this time. Resample at normal intervals.

ANALYST: raphaella.nogueira



DATE SAMPLED	05-Nov-25
DATE RECEIVED	12-Nov-25
DATE REPORTED	13-Nov-25

LAB NO.	40210743281
SIF NO.	JDP010168015
TIME ON UNIT	17340
TIME ON OIL	560
OIL BRAND	Unidentified
OIL TYPE	Unidentified
OIL GRADE	SAE 15W40
OIL ADDED	0.0
FILTER	Not Applicable
OIL CHANGED	Not Changed
WO NUMBER	Unit # 550

Metals (ppm)

Iron (Fe)	7
Chromium (Cr)	<1
Lead (Pb)	3
Copper (Cu)	5
Tin (Sn)	<1
Aluminium (Al)	<1
Nickel (Ni)	<1
Silver (Ag)	<1
Titanium (Ti)	<1
Vanadium (V)	<1

Contaminants (ppm)

Silicon (Si)	2
Sodium (Na)	2
Potassium (K)	<1
Water (%)	<0.05
Coolant	No
Fuel (%)	<1
Soot (%) Infrared D7844	0.1

Additives (ppm)

Magnesium (Mg)	1260
Calcium (Ca)	1262
Barium (Ba)	<1
Phosphorus (P)	926
Zinc (Zn)	1403
Molybdenum (Mo)	63
Boron (B)	<5

Physical Tests

Viscosity (cSt 100C)	13.9
----------------------	------

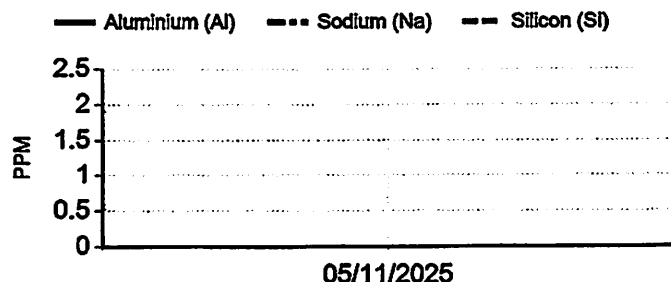
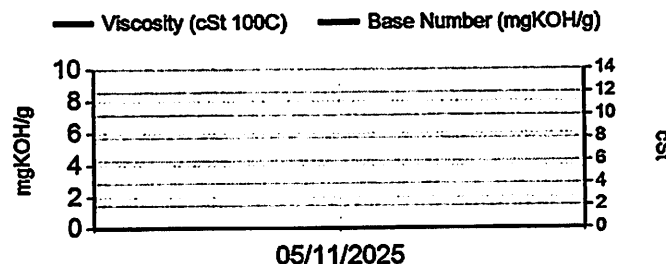
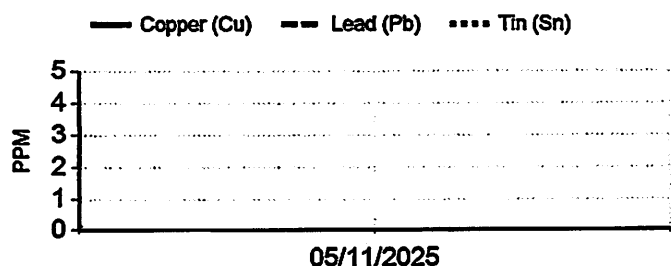
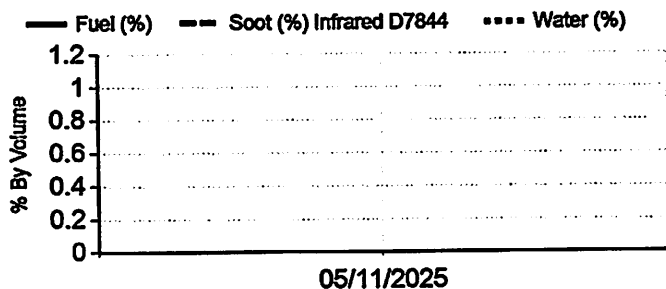
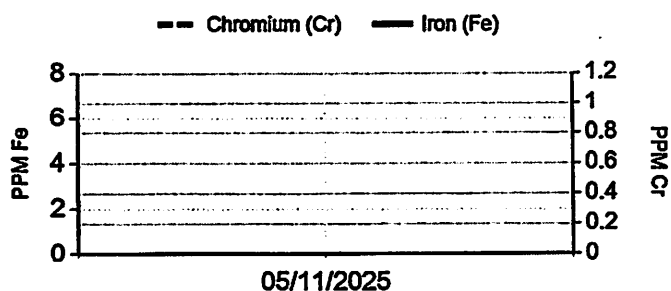
Physical / Chemical

Base number (mgKOH/g)	9.0
Oxidation (Abs/0.1mm)	13
E2412/D7414	
Nitration (Abs/0.1mm) E2412	5
Sulphation (Abs/0.1mm)	18
E2412/D7415	



FLUID ANALYSIS

UIN 0BC9132



Filter Image

Filter patch test is not performed Contact laboratory for more information

Since services are based on samples and information supplied by others, and since corrective actions, if any, are necessarily taken by others, these services are rendered without any warranty or liability of any kind beyond the actual amount paid to ALS Tribology for the services. Reported recommendations are based on interpretations of the generated test results and historical data. Certain test results appearing in this report may have been tested at other ALS laboratories within the Tribology divisional network.

Brothers HDD
Attn: R Jerome
2002 23Ave
Wainwright AB T9W0B8
Canada

0003 v1.5

U.S. Laboratories

Atlanta, Georgia - 420
5300 Oakbrook Parkway
Building 200 Suite 245
Norcross, GA 30093
800.394.3669

Valley View, Ohio - 410
6180 Hale Dr. Suite D
Valley View, OH 44125
800.726.5400

Kansas City, Kansas - 430
835 Sunshine Road
Kansas City, KS 68115
800.332.8055

Phoenix, Arizona - 440
3319 West Earl Drive
Phoenix, AZ 85017
800.445.7830

Portland, Oregon - 401

4943 NW Front Avenue
Portland, OR 97210
800.770.4128

Canadian Laboratories

Burlington, Ontario - 450
5036 South Service Rd.
Burlington, ON L7L5Y7
905 332 9559

Edmonton, Alberta - 402
9450 17 Ave NW
Edmonton, AB T6N 1M9
+1 (780) 483-1036

Sales & Marketing

Houston, Texas
10450 Standcliff Road, Suite 210
Houston, TX 77099
877.835.8437

International Locations

Australia

Brisbane, Perth, Sydney, Muswellbrook

South America

Santiago de Chile, Belo Horizonte, Brazil

New Zealand

Wellington

Southeast Asia

Kuala Lumpur, Singapore

Europe

Prague

TEST METHODS:

Acid Number:	ASTM D974/D664 (*M)
Base Number:	ASTM D4739 (*M)
Base Number (Perchloric):	ASTM D2896B, back (*M)
Fuel Dilution by GC:	ASTM D7593
Fuel Dilution Visc/Setflash	In House
Fuel Soot ATR/IR:	ASTM D7686 (*M)
Soot by FTIR:	ASTM D7844
Glycol:	In House
Metals by ICP AES:	ASTM D5185 (*M)
Ox, NOx, SOx, FTIR:	ASTM E2412/D7418/D7414 D7415
PQ Index:	ASTM D8120 (*M)
Particle Count:	ASTM D7647 (*M) / ISO 4406
Kinematic Viscosity:	ASTM D445 (*M) / D7279 (*M)
Water KF:	D6304 / E203 (*M)
Water Crackle:	In House

*M - Modified Method

FLUID ANALYSIS

UIN 0BC5D93

Diesel Engine

Unit No. 1XPTP4TX4GD288888

Unit:

Make Peterbilt
Model .
Serial No. 1XPTP4TX4GD288888
Site Winch Truck Unit 807

Compartment:

Name Diesel Engine
Make
Model
Serial No.
Capacity: Ltrs

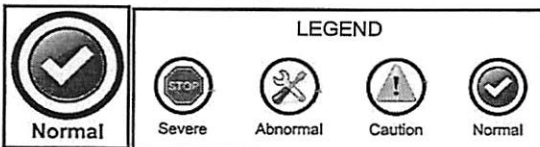
Customer:

BROTHERS HDD
2002 23Ave
Wainwright AB T9W0B8
Canada

DIAGNOSIS

Please provide all unit make, and model details. Hours on component not given. No abnormal wear detected. Sample form indicates oil changed at time of sampling. No recommended action at this time. Resample at normal intervals.

ANALYST: raphaella.nogueira

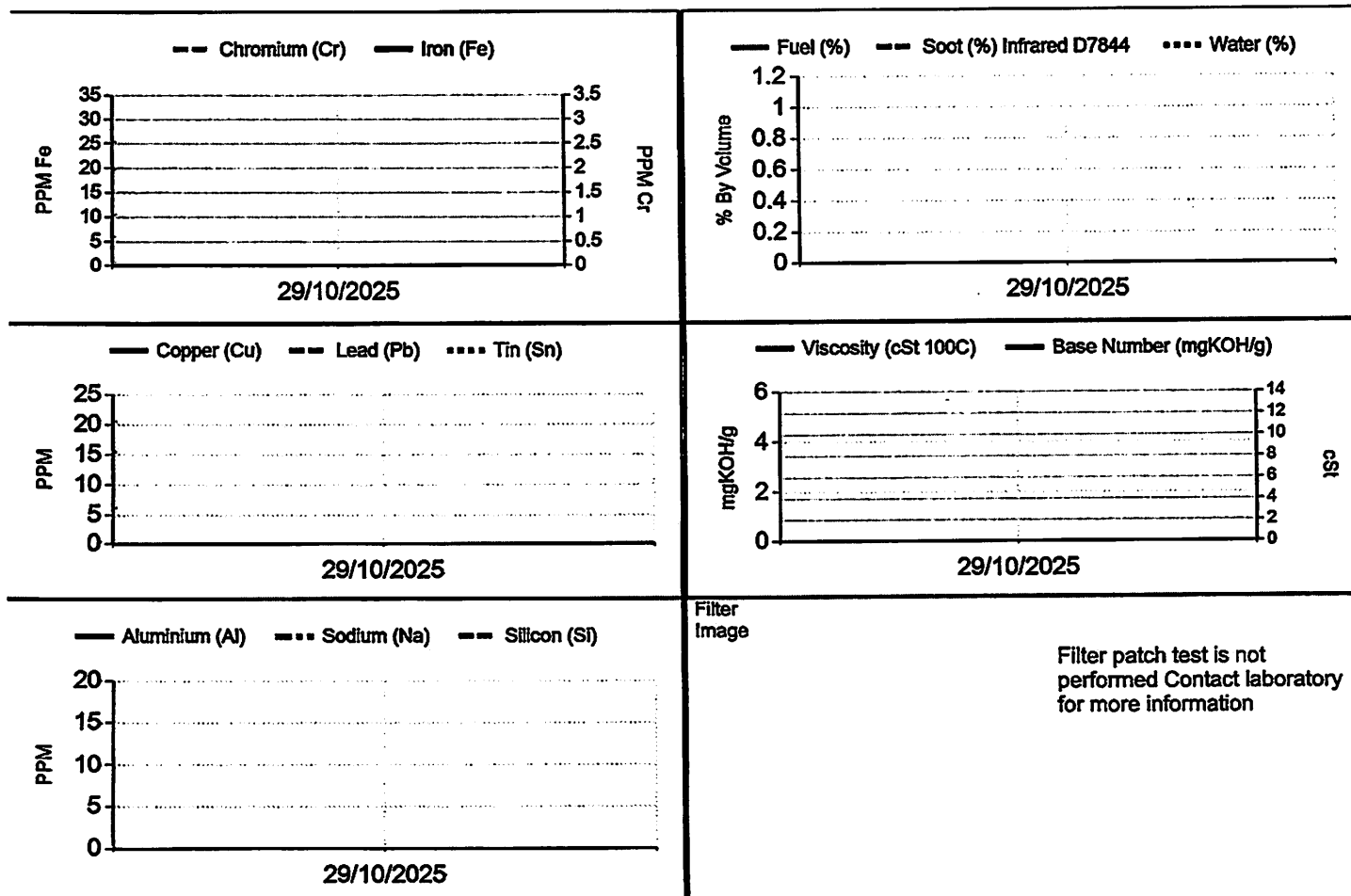


DATE SAMPLED	29-Oct-25
DATE RECEIVED	12-Nov-25
DATE REPORTED	13-Nov-25
LAB NO.	40210743282
SIF NO.	JDP010167894
TIME ON UNIT	mi 13983
TIME ON OIL	mi 599
OIL BRAND	Unidentified
OIL TYPE	Unidentified
OIL GRADE	SAE 15W40
OIL ADDED	0.0
FILTER	
OIL CHANGED	Changed
WO NUMBER	Unit # 807
Metals (ppm)	
Iron (Fe)	30
Chromium (Cr)	3
Lead (Pb)	4
Copper (Cu)	20
Tin (Sn)	3
Aluminium (Al)	19
Nickel (Ni)	1
Silver (Ag)	<1
Titanium (Ti)	<1
Vanadium (V)	<1
Contaminants (ppm)	
Silicon (Si)	11
Sodium (Na)	5
Potassium (K)	47
Water (%)	<0.05
Coolant	No
Fuel (%)	<1
Soot (%) Infrared D7844	0.4
Additives (ppm)	
Magnesium (Mg)	1136
Calcium (Ca)	1287
Barium (Ba)	<1
Phosphorus (P)	966
Zinc (Zn)	1469
Molybdenum (Mo)	71
Boron (B)	<5
Physical Tests	
Viscosity (cSt 100C)	13.1
Physical / Chemical	
Base number (mgKOH/g)	5.1
Oxidation (Abs/0.1mm) E2412/D7414	19
Nitration (Abs/0.1mm) E2412	10
Sulphation (Abs/0.1mm) E2412/D7415	23



FLUID ANALYSIS

UIN 0BC5D93



Since services are based on samples and information supplied by others, and since corrective actions, if any, are necessarily taken by others, these services are rendered without any warranty or liability of any kind beyond the actual amount paid to ALS Tribology for the services. Reported recommendations are based on interpretations of the generated test results and historical data. Certain test results appearing in this report may have been tested at other ALS laboratories within the Tribology divisional network.

Brothers HDD
Attn: R Jerome
2002 23Ave
Wainwright AB T9W0B8
Canada

0003 v1.5

U.S. Laboratories

Atlanta, Georgia - 420
5300 Oakbrook Parkway
Building 200 Suite 245
Norcross, GA 30093
800.394.3669

Valley View, Ohio - 410
6180 Halia Dr. Suite D
Valley View, OH 44125
800.726.5400

Kansas City, Kansas - 430
935 Sunshine Road
Kansas City, KS 66115
800.332.8055

Phoenix, Arizona - 440
3319 West Earl Drive
Phoenix, AZ 85017
800.445.7930

Portland, Oregon - 401

4943 NW Front Avenue
Portland, OR 97210
800.770.4128

Canadian Laboratories

Burlington, Ontario - 450
5036 South Service Rd.
Burlington, ON L7L5Y7
905.332.9559

Edmonton, Alberta - 402
9450 17 Ave NW
Edmonton, AB T6N 1M9
+1 (780) 483-1036

Sales & Marketing

Houston, Texas
10450 Standcliff Road, Suite 210
Houston, TX 77099
877.635.8437

International Locations

Australia

Brisbane, Perth, Sydney, Muswellbrook

South America

Santiago de Chile, Belo Horizonte, Brazil

New Zealand

Wellington

Southeast Asia

Kuala Lumpur, Singapore

Europe

Prague

TEST METHODS:

Acid Number:	ASTM D974/D664 (*M)
Base Number:	ASTM D4739 (*M)
Base Number (Perchloric):	ASTM D2896B, back (*M)
Fuel Dilution by GC:	ASTM D7593
Fuel Dilution Visc/Setflash:	In House
Fuel Soot ATR/IR:	ASTM D7686 (*M)
Soot by FTIR:	ASTM D7844
Glycol:	In House
Metals by ICP AES:	ASTM D5185 (*M)
Ox, NOx, SOx, FTIR:	ASTM E2412/D7418/D7414 D7415
PQ Index:	ASTM D8120 (*M)
Particle Count:	ASTM D7647 (*M) / ISO 4406
Kinematic Viscosity:	ASTM D445 (*M) / D7279 (*M)
Water KF:	D6304 / E203 (*M)
Water Crackle:	In House

*M - Modified Method



~~WINCH TRUCK~~

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

 807 - Winch Truck

 BHDD Shop

 Saturday, November 8th 2025, 11:22 AM (MST -07:00)

Unit Information

Date:  November 8, 2025

Select Unit Number:  807 - Winch Truck

KMs: # 708523

Hours: # 14074

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

 Steady bearing and u joint squeaking

- removed u joint
- remvoed yoke and steady bearing
- Installed new steady bearing
- Installed new u-joint
- greased driveline

Serial/Part # if applicable:  No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Pick the location where the repairs were completed:

 Wainwright Shop

Requested By:

Worker Requesting Repairs:



Luke Jacobsen

Signatures

Luke Jacobsen, *Mechanic*



November 8th 2025, 11:22 AM (MST -07:00)



52.8512434, -110.8420945





WINCH TRUCK

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807 - Winch Truck

BHDD Shop

Tuesday, November 4th 2025, 3:25 PM [MST -07:00]

Unit Information

Date: November 4, 2025

Select Unit Number: 807 - Winch Truck

MS: 708069

Hours: 14054

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Turbo actuator

- drained coolant
- removed turbo actuator
- calibrated new actuator
- installer actuator
- filled with coolant and test ran
- cleared codes

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested By:

Worker Requesting Repairs:



Luke Jacobsen

Signatures

Luke Jacobsen, *Mechanic*

 November 4th 2025, 3:25 PM (MST -07:00)

A handwritten signature in black ink, appearing to be 'LJ' or similar, located to the right of the date and time.

 52.85127, -110.842085



WINCH TRUCK

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7717

Maintenance Request / Report Form

Information

807 - Winch Truck

REF # 60216753700

BHDD Shop

Wednesday, October 29th 2025, 3:24 PM [MDT -06:00]

Unit Information

Date: October 29, 2025

Select Unit Number: 807 - Winch Truck

KMs: # 703600

Hours: # 13983

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

- Engine service
 - a) engine oil/filter
 - b) fuel filters
 - c) air filters
 - d) grease and check over
 - e) 8 drive tires-Integra Tie

ENTERED
OCT 27 2025

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Completed

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop

Requested By:

Worker Requesting Repairs:



Wayne Phillips

Signatures

Ron Jerome, *Supervisor*



October 29th 2025, 3:24 PM (MDT -06:00)



52.8516198, -110.8420065

Integra Tire Wainwright Ltd.
1613 - 1st Street Wainwright AB T9W 1L5

PH: 780-842-1500
FX: 780-842-1520

SOLD TO:
BRO001
BROTHERS HDD INC
2002 23 AVE

Invoice WAIR069905 (Copy)

SHIP TO
SAME

DATE: 25 Oct 29

Wainwright
T9W 0B8

AB

TEL: FAX: TEL: 780.214.7711 PAGE: 1

YEAR	MAKE	MODEL	ENGINE
2016	PETERBILT	367	
PLATE NO	VIN	ODOMETER	UNIT NO.
CTV6642	1XPTP4TX4GD288888	703607	807
TIME IN	PROMISED	TERMS	P.O.
10:41 AM		NET 30	
WRITTEN BY	TAG		
HR			

QTY	ITEM/DESCRIPTION	SIZE	TAX	NET	EXT.PRICE
8	HHS21711245	11R24.5	G	360.00	2880.00
	MISC HUMSUNG HS217 ON/OFF DRIVE 16H				
8	TTAB2		G	14.00	112.00
	TIRE RECYCLING FEE - AB (Medium Truck, ETC)				
8	COMT CHANGE OVER MEDIUM TRUCK W/PURCHASE DF FM AD		G		336.80
8	TEC545D VALVE		G	9.95	79.60
	MISC O-RING VALVE				
1	SHP		G	41.59	41.59
	SHOP SUPPLIES				
	GST Registration# 820001915RT0001				
**WARNING, WHEEL MANUFACTURERS RECOMMEND CHECKING THE TORQUE ON FASTENERS ON PASSENGER CARS/LIGHT TRUCKS AT 30-50 KM AND MEDIUM TRUCKS AT 80-160 KM AFTER EACH WHEEL REMOVAL AND INSTALL. THIS SERVICE IS PROVIDED FREE OF CHARGE. PLEASE SEE US TO HAVE THIS DONE. FAILURE TO DO SO MAY RESULT IN A WHEEL OFF SITUATION. AIR SET AT _____ WHEEL NUTS HAND TORQUED _____ FT. LBS					
GST EXEMPT #:				PST EXEMPT #:	

PARTS:	2959.60
LABOUR:	336.80
OTHER:	153.59
SUB-TOTAL:	3449.99
GST:	172.50
PST:	N/C
TOTAL:	3622.49



SEM (HWY)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807 - Winch Truck

BHDD Shop

Thursday, July 17th 2025, 12:55 PM (MDT -06:00)

Unit Information

Date: July 17, 2025

Select Unit Number: 807 - Winch Truck

KMs: # 672610

Hours: # 13422

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Request - Request shop assistance in facilitating repairs.

Repairs Required

Description of Repairs Required (attach photos): BRAKES ON RECLAMER

AC needs charging / needs a electric Brake controller

WASH RAD / CONDENSER

Serial/Part # if applicable: Brake controller

Urgency of Repairs:

Select priority level of repairs:

☒ High Priority - Required within 1-2 days

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested by:

Worker Requesting Repairs:



Steven Nontell

Signatures

Steven Nontell, *Driver*



July 17th 2025, 12:55 PM (MDT -06:00)

A handwritten signature in black ink, consisting of a stylized 'S' followed by a horizontal line.



SEMI (HWY)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807 - Winch Truck

BHDD Shop

Tuesday, July 15th 2025, 12:14 PM (MDT -06:00)

Unit Information

Date: July 15, 2025

Select Unit Number: 807 - Winch Truck

Chassis #: # 671560

Hours: # 13400

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Request - Request shop assistance in facilitating repairs.

Repairs Required

Description of Repairs Required (attach photos):

Lube chassis and drive line/ suspension/ steering - unsure of last time completed Thank you **CHECK DIFF FLUIDS**

Serial/Part # If applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Low Priority - Repair at earliest convenience

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested by:

Worker Requesting Repairs:



Steven Nontell

Signatures

Steven Nontell, *Driver*

A handwritten signature in black ink, appearing to be 'SN' or similar, written over a horizontal line.

July 15th 2025, 12:14 PM (MDT -06:00)

Northern Trailer and Truck
 2210 - 19 Avenue
 Wainwright, AB T9W 1L2, CA
 service1.northern@gmail.com
 780-842-0080



Invoice: 13325

Date: 3/7/2025

Bill To
 Brothers HDD
 2002 23 Avenue
 Wainwright, AB T9W 0B8, CA
 P: (780) 214-7711

Ship To
 Brothers HDD
 2002 23 Avenue
 Wainwright, AB T9W 0B8, CA

Service Order	Terms	Due Date	Authorizer	Customer PO	Service Writer	Unit #
8007	COD	3/7/2025	Ryan		Shop, Service Counter	807

Item	Description	Quantity	Rate	Amount
------	-------------	----------	------	--------

Complaint: Diagnose - Check Engine Light On with Scan Fee
 # 5 Injector Mechanical Fault - Will remove and Replace all other 5 Reman Injectors with New ones
 Labor covered under Warranty - Customer to pay difference on Injectors

Cause: Customer request Type: Unscheduled repair

Labor	Correction: Engine / Engine Electrical Sensors and Wiring / Engine Light On -scan unit found # 5 Injector Mechanical Fault - Completed: 3/5/2025	0.30000	\$0.00	\$0.00
-------	--	---------	--------	--------

Parts	SCANNER FEE - Scanner Fee	1.00000	\$0.00	\$0.00
-------	---------------------------	---------	--------	--------

Labor	Correction: Engine / Engine Fuel System / Fuel Injector R&R - In Chassis With Tractor Truck - Long Conventional With Common Rail Injection One Includes: The removal of component and all necessary components for access. Does not include: System diagnosis, testing, or a vehicle road test. (044-003) -Due to this being the second injector within a week all injectors are going to be swapped with OEM -Remove EGR crossover, Valve cover, clean surfaces -Remove all injectors except #4 (already replaced), evacuate cylinders, clean bores and install new injectors following OEM procedure -Reinstall all removed components, hook up laptop and reset injectors -Test drove unit had no issues, pulled unit into shop and let idle for ten minutes and had fault for low rail pressure - add new task to diagnose Low Fuel Rail Pressure - Completed: 3/5/2025	3.00000	\$0.00	\$0.00
-------	--	---------	--------	--------

Parts	INJECTOR KIT - 5579419PXCUM	5.00000	\$2,379.98	\$11,899.90
-------	-----------------------------	---------	------------	-------------

Parts	Inherent Core for INJECTOR KIT - 287216100 D	5.00000	\$405.90	\$2,029.50
-------	--	---------	----------	------------

Parts	Dirty Core for INJECTOR KIT - 287216100 D	-5.00000	\$405.90	-\$2,029.50
-------	---	----------	----------	-------------

Subtotal \$11,899.90

Complaint: Diagnose - Low Rail Pressure
 After completing Injector swap and Test Driving Unit - Engine Light Came on

Cause: Relief Valve Type: Preventive maintenance
 (Inspection)

UNIT # 807

Item	Description	Quantity	Rate	Amount
Labor	Correction: Engine / Engine Fuel System / Scanned for codes - Low Fuel Rail Pressure after replacing All Injectors	4.00000	\$135.00	\$540.00
	1. Tested relief valve and it was dumping out at 10000psi - requires replacement Remove High pressure relief valve - clean and inspect seat for damage - showing some wear and should be replaced - reinstall relief valve and torque to spec to diagnose Fuel Pump Pressures/ Leakage 2. Tested fuel pump for internal leakage spec is between 185cc and 525cc had 510cc - disassemble and inspect Cleaned top of Fuel Pump, removed head to inspect for wear **Fuel Pump is getting worn, but not failing at this time - reinstalled head with new gasket and torqued bolts to spec - ran engine up to temp and checked for leaks OK FUEL PUMP IS AT MAXIMUM ALLOWABLE LEAKAGE DUE TO WEAR - WOULD RECOMMEND REPLACING FUEL PUMP WITHIN NEXT 6 MONTHS No engine lights - driver called to take and try Next day - Unit came back after running in the yard -hook up and tested all mechanical components to verify all very much in spec (brand new measurement good) -cracked fuel line and checked was reading 400 psi with no fuel in the rail - Faulty Fuel Pressure Sensor requires replacement -replaced sensor and perform leakage test rail held 30000psi for 5 minutes good - idle unit over lunch no fault codes came back Driver took to retry - Completed: 3/13/2025			
Parts	FUEL PUMP GASKET - 2872513	1.00000	\$39.85	\$39.85
Parts	SEALING WASHER (FUEL LINE) - 3983988	2.00000	\$8.31	\$16.62
Parts	VALVE PRESSURE RELIEF - 4307226CUM	1.00000	\$289.98	\$289.98
Parts	SEAL-PRESURE RELIEF PX8 - 4984382CUM	1.00000	\$18.95	\$18.95
Parts	SEALING WASHER (FUEL LINE) - 3983990	6.00000	\$6.98	\$41.88
Parts	FUEL PRESSURE SENSOR - 2897581CUM	1.00000	\$364.95	\$364.95
Parts	SCANNER FEE - Scanner Fee	1.00000	\$125.00	\$125.00
			Subtotal	\$1,437.23
	Reman Injector Credit	5.00	-\$1,485.00	-\$7,425.00
Unit: 807 VIN: 1XPTP4TX4GD288888			Labor	\$540.00
License Plate: CTV-6642			Parts	\$12,797.13
2016 Peterbilt 367			Shop Supplies	\$37.80
Chassis: 643,191 Kilometers			Pre-Charge Subtotal	\$13,374.93
Engine: 12,790 Hours			Reman Injector Credit	-\$7,425.00
			GST	\$297.50
			(5% of \$5,949.93)	
			Total	\$6,247.43
			Payments & Credits	\$0.00
			Balance Due	\$6,247.43

WE ACCEPT DEBIT AND CREDIT CARD PAYMENT

I hereby authorize the above repair work to be done along with the necessary material and hereby grant you and/or your employees permission to operate the vehicle described for testing and/or inspection.

Express mechanic's lien is hereby acknowledged on above vehicle to secure the amount of the repairs there to.

All parts removed will be discarded unless instructed otherwise: save all parts ____.

NORTHERN TRAILER AND TRUCK SALES LTD. IS NOT RESPONSIBLE FOR LOSS OF OR DAMAGE TO VEHICLES OR ARTICLES LEFT IN VEHICLES IN THE CASE OF FIRE, THEFT, OR ANY OTHER CAUSE.

NORTHERN TRAILER AND TRUCK SALES ASSUMES THE RIGHT TO CHARGE 2% ON ANY INVOICE OUTSTANDING OVER 30 DAYS.



SEMI (STEVE)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Field Requisition Form for Tools, Parts, & Consumables

Information

Parts # 807

BHDD Shop

Friday, June 20th 2025, 7:38 AM (MDT -06:00)

General Information

Date: June 20, 2025

Location: BHDD

Job # 1

Site Supervisor: Steven Nontell

Item Details - List all items clearly

Tool/Part/Consumable Description Winch strap winder , magnets for flags

1 x 10091 / 10094

Quantity: Number of Items Needed 1 winder / 10 small magnets for flags

8 x NAO11200N

Serial/Part Number if applicable: N/A

Special Instructions (ie. Specific brand, model or usage details)

N/A

4 x JET LUBE 1234

Urgency of Request:

Standard Priority - Required within 3-5 days

Comments or Delivery Instructions:

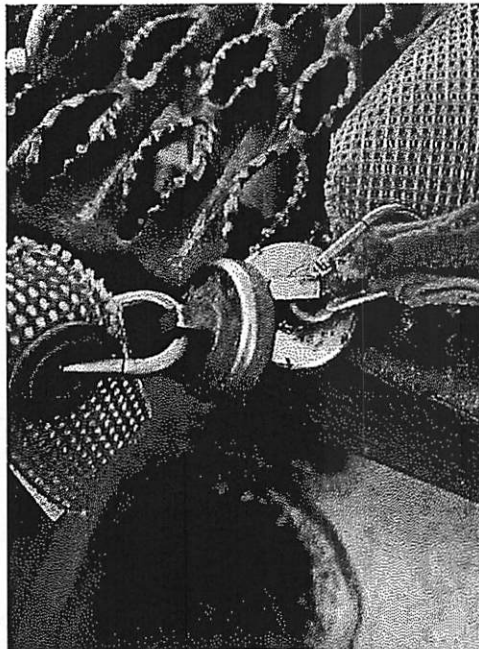
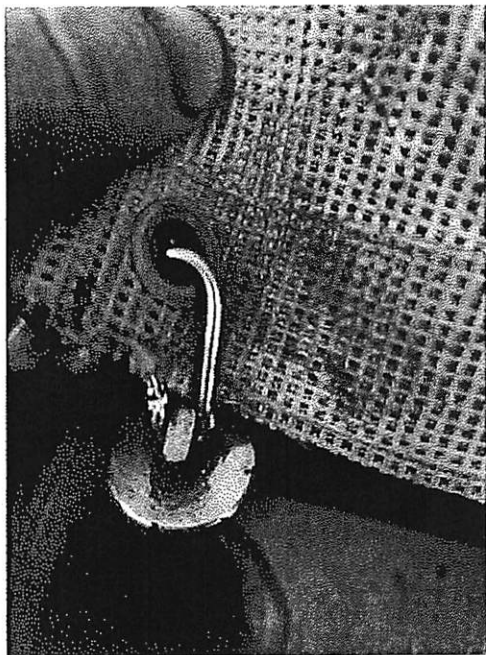
No Response

Signatures

Worker Submitting the Request

Steven Nontell

Additional Photos



Signatures

Steven Nontell, *Driver*



June 20th 2025, 7:38 AM [MDT -06:00]

A handwritten signature in black ink, appearing to read "Steven Nontell".



SEMI (WINCH TRUCK)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807 - Winch Truck

w/o #000155

BHDD Shop

Friday, May 23rd 2025, 3:15 PM (MDT -06:00)

ENTERED
May 24/25

Unit Information

Date: May 23, 2025

Select Unit Number: 807 - Winch Truck

KMs: # 66140

Hours: # 13184

Please choose from list to identify if this is a request for Maintenance? Or If you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Service, replace seat
-changed engine oil and filter
-changed fuel filters
-replaced seat

#5,6 injector lines leaking fuel at injector

Filled with 15w40 conventional for break in oil. First 3 oil change with conventional.

Truck needs mudflap brackets and rear mudflaps

Front bumper bolts worn

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ High Priority - Required within 1-2 days

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested By:

Worker Requesting Repairs:

 Luke Jacobsen

Signatures

Luke Jacobsen, *Mechanic*

 May 23rd 2025, 3:15 PM (MDT -06:00)

 52.8514183, -110.8420905





SEMI (HWY TRACTOR)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

 807 - Winch Truck

 BHDD Shop

 Wednesday, May 7th 2025, 2:13 PM [MDT -06:00]

Unit Information

Date:  May 7, 2025

Select Unit Number:  807 - Winch Truck

KMs:  658052

Hours:  13117

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

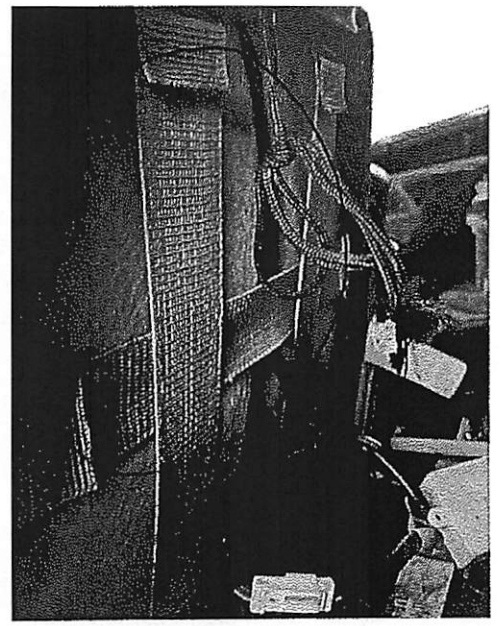
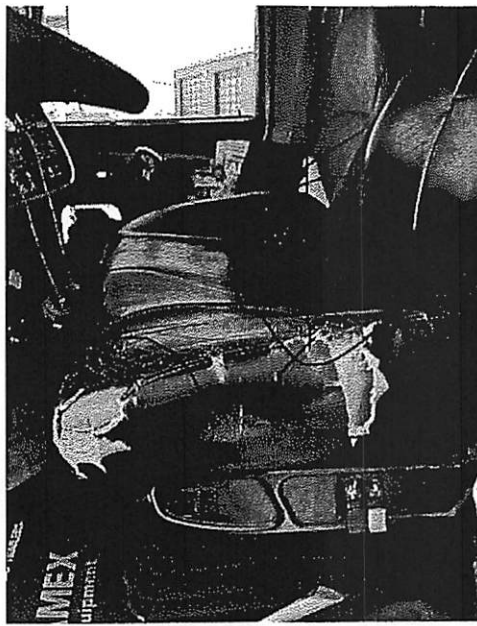
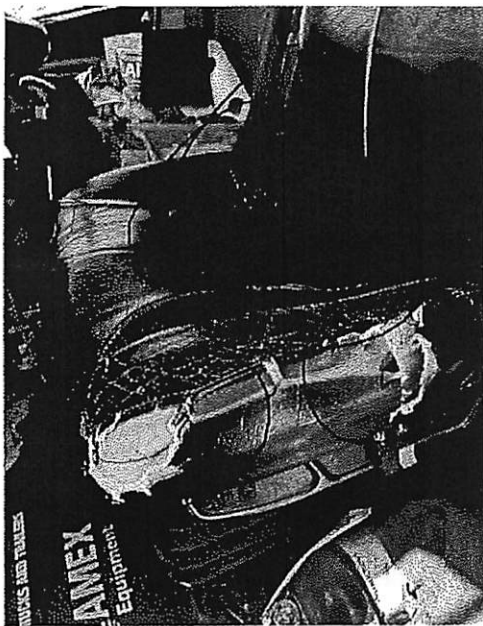
☒ Maintenance Request - Request shop assistance in facilitating repairs.

Repairs Required

Description of Repairs Required (attach photos):

 Seat pad worn out no support left

SEAT



Serial/Part # If applicable:

 Xxxxxx

Urgency of Repairs:

Select priority level of repairs:



High Priority - Required within 1-2 days

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop

Requested By:

Worker Requesting Repairs:



Steven Nontell

Additional Photos

Manufactured by / Fabricado Por:
Grandt Tractor Ltd.
20 - 2 BL., Nilesa, All TME CWA
780-955-2770

A.M. / N.I.V.
1XPTPATX4GD288888
TYPE:
TT/CT:
DATE:
November 2018
GVWR / PNEU:
38102kg / 84000lbs
FR GVWR / AV PNEU:
8184kg / 18000lbs
TIRE / PNEU FR / AV:
385/85R22.5(J)
TIRE / PNEU FR / AV:
2.5x12.25
A.C.O.L.D.: PSI / LPG:

Signatures

Steven Nontell, *Driver*



May 7th 2025, 2:13 PM (MDT -06:00)



Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

SEMI (Hwy TRACTOR)

Maintenance Request / Report Form

Information

807

BHDD Shop

Monday, May 5th 2025, 10:06 AM (MDT -06:00)

Unit Information

Date: May 5, 2025

Select Unit Number: 807
 Unit 807. Please add winch trucks to list on Site Docs

Units: 657010

Hours: 13097

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Retorqued front right steer tire

Repairs Required

Description of Repairs Required (attach photos):

FRSteer tire

Serial/Part # if applicable: Retorqued

Urgency of Repairs:

Select priority level of repairs:

☒ Done

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop

Requested By:

Worker Requesting Repairs:



Steven Nontell

Signatures

Steven Nontell, *Driver*



May 5th 2025, 10:06 AM (MDT -06:00)



SEMI (HWY TRACTOR)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B6
780-214-7711

Maintenance Request / Report Form

Information

807

BHDD Shop

Saturday, March 29th 2025, 9:25 AM (MDT -06:00)

Unit Information

Date: March 29, 2025

Select Unit Number: 807

KMs: 650093

Hours: 12968

Please choose from list to identify if this is a request for Maintenance? Or if you are Reporting on maintenance completed.

☒ Maintenance Report - Field completion of maintenance.

Repairs Required

Description of Repairs Required (attach photos):

Replaced cab air bags.

Serial/Part # if applicable: No Response

Urgency of Repairs:

Select priority level of repairs:

☒ Critical - Immediate attention needed

Location of repairs being completed:

Pick the location where the repairs were completed:

☒ Wainwright Shop

Requested By:

Worker Requesting Repairs: Luke Jacobsen

Signatures

Luke Jacobsen, Mechanic

March 29th 2025, 9:25 AM (MDT -06:00)

52.8514084, -110.8421067



SEMI (TRACTOR)

Brothers HDD Inc
2002 23 Avenue
Wainwright, Alberta
T9W 0B8
780-214-7711

Maintenance Request / Report Form

Information

807

BHDD Shop

Saturday, March 22nd 2025, 5:11 PM (MDT -06:00)

Unit Information

Date: March 22, 2025

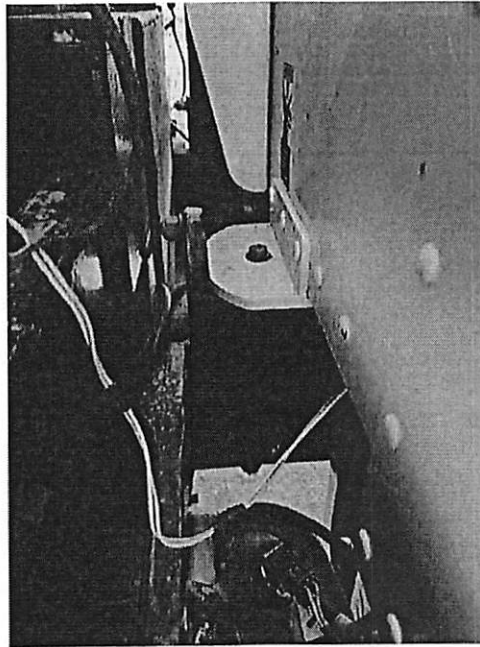
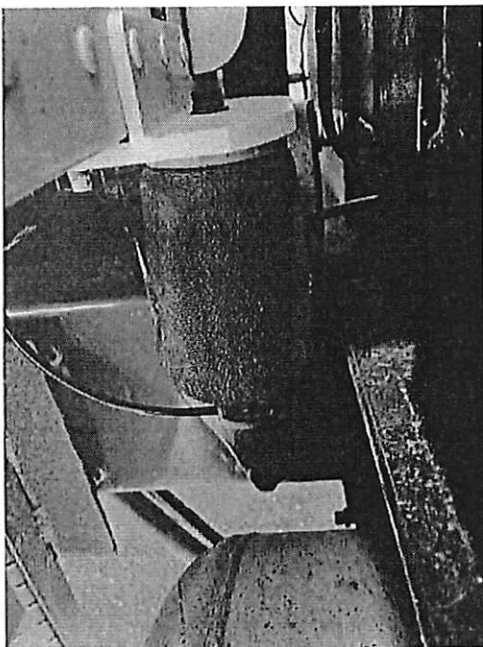
Select Unit Number: 807

KMs: # 649000

Hours: # 0

Please choose from list to Identify if this is a request for Maintenance? Or If you are Reporting on maintenance completed.

☒ Maintenance Request - Request shop assistance in facilitating repairs.



Repairs Required

CAB AIR BAGS

Serial/Part # if applicable:

 No Response

Urgency of Repairs:

Select priority level of repairs:



High Priority - Required within 1-2 days

Location of repairs being completed:

Pick the location where the repairs were completed:



Wainwright Shop

Requested By:

Worker Requesting Repairs:



Steven Nontell

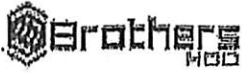
Signatures

Steven Nontell, *Driver*



March 22nd 2025, 5:11 PM (MDT -06:00)





SEM

MAINTENANCE REQUEST FORM

UNIT# 807 HRS/KM

DESCRIPTION OF REPAIRS REQUIRED

① SLIP WINCH LINE STRAND BROKEN :

②

REQUESTED BY: STEVE

DATE: MAR 12/2025

5.1 HDD

UNIT #: 807
ENGINE HOURS: 12743
MILEAGE: 640860
WORK LOCATION: Wanawana
WORK REQUESTED: _____

W.O. TYPE (Circle): PM CVIP Reactive

TECH COMMENTS: _____

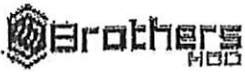
LABOUR DESCRIPTION:	HOURS
Removed 5th wheel top plate, removed hitch rail support brackets, removed slide forks and air cylinder	3
Installed new 5th wheel mount assembly, Torqued bolts to 195 Ft/Lb, Installed top plate, Verified function	
LABOUR TOTAL	3

[illegible]

PARTS & MATERIALS TOTAL _____

WORK AUTHORIZED BY: Ron WORK COMPLETED BY: Mike Jackson
UNIT RETURNED TO SERVICE: Feb 26 2025 OVERALL CONDITION OF UNIT: Good
ADDITIONAL COMMENTS: _____

SEMI



MAINTENANCE REQUEST FORM

UNIT# 807

HRS/KM

DESCRIPTION OF REPAIRS REQUIRED

- REPLACE SLIDING 5th WHEEL ASSEMBLY

REQUESTED BY:

DATE:



MAINTENANCE WORK ORDER

Nº 3374

ENTERED
FEB 11 2025

UNIT #: 807

ENGINE HOURS: 12512

MILEAGE: 633909

WORK LOCATION: Wainwright

WORK REQUESTED:

ORDER DATE: Feb 6 2025

COMPLETED DATE: Feb 7 2025

JOB #:

W.O. TYPE (Circle): PM CVIP Reactive

REPAIRS REQUIRED: Service, Replace driver door latch

TECH COMMENTS:

BREAK IN SERVICE

LABOUR DESCRIPTION:	HOURS
Charged oil & filter	2
Took apart door and removed inner door latch	3
Replaced door latch	

LABOUR TOTAL 5

PARTS & MATERIALS	P.O. #	QUANTITY	PRICE	AMOUNT

PARTS & MATERIALS TOTAL

WORK AUTHORIZED BY: Ron

WORK COMPLETED BY: Wlee Jackson

UNIT RETURNED TO SERVICE: Feb 7 2025

OVERALL CONDITION OF UNIT: Good

ADDITIONAL COMMENTS:



MAINTENANCE WORK ORDER
Nº 3368

UNIT #: 807
ENGINE HOURS: 12376
MILEAGE: 629978
WORK LOCATION: Wainwright
WORK REQUESTED: _____

ORDER DATE: Jan 30 2025
COMPLETED DATE: Jan 30 2025
JOB #: _____

W.O. TYPE (Circle): PM CVIP Reactive

REPAIRS REQUIRED: Check clutch function. Driver says its sticking.
Change fuel filters, fill up low tires
D-514 air cylinders leaking air

TECH COMMENTS: Front right steer tire worn on outer edge, may need
an alignment

LABOUR DESCRIPTION:	HOURS
<u>Inspected clutch, greased clutch bearing & linkages</u>	<u>2</u>
<u>Changed fuel filters, filled up tires, tightened loose</u>	
<u>drumhead & joint bolts,</u>	
<u>Repaired broken wire on Rear light</u>	

LABOUR TOTAL 2

PARTS & MATERIALS	P.O. #	QUANTITY	PRICE	AMOUNT

PARTS & MATERIALS TOTAL _____

WORK AUTHORIZED BY: Ron WORK COMPLETED BY: Mike Jackson

UNIT RETURNED TO SERVICE: Jan 30 2025 OVERALL CONDITION OF UNIT: Good

ADDITIONAL COMMENTS: _____

Northern Trailer and Truck
 2210 - 19 Avenue
 Wainwright, AB T9W 1L2, CA
 service1.northern@gmail.com
 780-842-0080



Invoice: **13048**
 Date: **1/28/2025**

Bill To
 Brothers HDD
 2002 23 Avenue
 Wainwright, AB T9W 0B8, CA
 P: (780) 214-7711

Service Order	Terms	Due Date	Authorizer	Customer PO	Service Writer	Unit #
7735	COD	1/28/2025	Ryan		Oake, Tony	807

Item	Description	Quantity	Rate	Amount
------	-------------	----------	------	--------

Complaint: Diagnose Engine Cooling System Pressuring Up and Overheating - Possible Head Gasket?

Cause: Leaking. **Type:** Preventive maintenance

Labor	Correction:	2.00000	\$135.00	\$270.00
-------	--------------------	---------	----------	----------

Engine / Engine Block Mechanical/Overhaul / Pressure up cooling system and found reservoir cap isn't popping at 15psi (holding over 20psi).
 - Swapped with known good cap made no difference.
 - Talked to customer, to see what was exactly going on.
 - Did put the combustion leak tester on it and it did turn green (indicating combustion gases).
 - Drain coolant, swapped reservoir and pressure up system relief popped at 15psi good.

Unit does have combustion gas entering cooling system, cylinder head requires removal to inspect further.

- Old coolant reservoirs bad and is likely what was causing the radiator hoses to burst. -
 Completed: 1/24/2025

Parts	COOLANT RESERVOIR (PETERBILT/ KENWORTH) - 575.1023	1.00000	\$249.98	\$249.98
-------	--	---------	----------	----------

Labor	Correction:	68.00000	\$135.00	\$9,180.00
-------	--------------------	----------	----------	------------

Engine / Engine Block Mechanical/Overhaul / Cylinder Head Removal For Inspection.
 - Drain coolant, recover AC, Disconnect wiring to grill and hood.
 - Hook up scanner and pulled all inactive codes.
 - Remove all lines, front grill, and all components, remove bumper, hood, and radiator assembly.
 - Pressure test Air to Air Found multiple leaks at 5psi requires replacement.
 - Disconnect wiring harnesses, remove all exterior components to remove cylinder head, ie. exhaust, intake, fuel and cooling system.
 - Remove Accessory mounting bracket, bottom two bolts were seized and threads were damaged.
 - Remove front cover, time engine, remove all rocker arms, injectors, remove cam/ Idler gears, camshaft.
 - Found Camshaft #5/#6 Intake lobes galling at the point of the lobes require replacement.
 - Remove cylinder head, clean block and measure liner protrusion attached picture has liner measurements all out of spec requires removing and machining.
 - Talk to customer and get go ahead for rebuild.

Item	Description	Quantity	Rate	Amount
	- Drain oil, remove oil pan, suction tube, and oil pump. - Remove piston cooling nozzles, pistons and liners. - Finish cleaning deck and cylinder bores for machining. - Go thru parts and clean/inspect. - Install Cylinder Liners, remove and replace main bearings, disassemble and clean connecting rod assemblies. - Install new pistons, install connecting rods with new bearings torqued to OEM spec, install piston cooling nozzles. - Swap components to new cylinder head. - Install cylinder head and torque to OEM spec, install camshaft, set engine base timing and install idler/camshaft gears following OEM procedure. - Clean and install front timing cover, install vibration dampener assembly. -Clean, oil and install rocker arm shafts, torque to spec, perform overhead set -Install all Intake, fuel, exhaust, cooling system, all torqued to oem spec -install radiator assembly, tested coolant found it was below spec failed all three sections of test strip (likely from combustion gases) -Vacuum fill cooling system and let sit held 15psi for over a hour -swap air, oil and secondary fuel filters, prime oil system while barring engine over -run unit up to operating temp, confirm temp sensors in range, no leaks found -install hood, grill, hook up wiring and test -test drive unit Extra Repairs. 1. Clean/Repair threads for accessory mounting bracket. - clean threads with tap and die 2. Rocker arms had surface rusting took more time to clean. - There is minor frosting wear on rocker arms but still well within reuse condition for Cummins. 3. Replace Air Filters. 4. Intake Air Restriction gauge broken. -replaced 5. Camshaft plates both were worn into by rocks requires replacing idler as wear is inside sealing area but camshaft plate should be reusable. 6. Turbo speed sensor leaking thru harness and externally requires replacement. -replaced 7 Fix fins on powersteering cooler were all folded over in the front 8 Front Grill had to modified due to being bent and obsolete air to air cooler had to change brackets to install Notes. Main Bearing Measurements. .002". Connecting rod measurements. .002". Final Protrusion .013". Crankshaft Endplay .008". Oil Pump .011". - Fuel lines did have minor wear but believe they are fine for reuse if they leak will need to replace lines in future. - Completed: 1/24/2025			
Parts	OVERHAUL KIT - CUM5693737	1.00000	\$13,495.00	\$13,495.00
Parts	INJECTOR - 337-43-5579419PX	6.00000	\$1,485.00	\$8,910.00
Parts	Inherent Core for INJECTOR - INJECTOR CORE	6.00000	\$369.00	\$2,214.00

Item	Description	Quantity	Rate	Amount
Parts	Dirty Core for INJECTOR - INJECTOR CORE	-6.00000	\$369.00	-\$2,214.00
Parts	CYLINDER HEAD - 286-4298237/4356434-476	1.00000	\$7,385.00	\$7,385.00
Parts	Inherent Core for CYLINDER HEAD - Core	1.00000	\$307.50	\$307.50
Parts	Dirty Core for CYLINDER HEAD - Core	-1.00000	\$307.50	-\$307.50
Parts	LUBRICATION OIL PUMP - 462-4309500NX	1.00000	\$1,250.00	\$1,250.00
Parts	HEX FLANGE HEAD SCREW (CAM GEAR BOLT) - CUM3678882	1.00000	\$18.63	\$18.63
Parts	CAMSHAFT, ISX 15 - 462-4298629	1.00000	\$1,895.75	\$1,895.75
Parts	SPACER, MOUNTING, IDLER GEAR - CUM5719798	1.00000	\$236.68	\$236.68
Parts	AIR RESTRICTION INDICATOR - X002252	1.00000	\$44.92	\$44.92
Parts	AIR FILTER - RS5288	2.00000	\$99.26	\$198.52
Parts	CAC HOSE HOT SIDE CHARGE AIR 4" ID X 6" L - 7715-0002	1.00000	\$47.95	\$47.95
Parts	POLYESTER REINFORCED 45 DEG - 561.17250	1.00000	\$81.65	\$81.65
Parts	PETERBILT COOLANT HOSE - 561.75638	1.00000	\$33.57	\$33.57
Parts	KIT, TURBO SPEED SENSOR - CUM4034201	1.00000	\$667.43	\$667.43
Parts	CHEVRON DELO 400 15W40 CK-4 BULK OIL - 22229055B	50.00000	\$6.40	\$320.00
Parts	APEX RED SPRAY PAINT - 3163075	2.00000	\$54.59	\$109.18
Parts	HEAD BOLT, SHORT, ISX/QSX - CUM3678506	3.00000	\$51.04	\$153.12
Parts	52/64" - 1-48/64" HOSE CLAMP - HS-20	2.00000	\$1.23	\$2.46
Parts	FLAT FACE O-RING -06 - ORFF08	3.00000	\$0.97	\$2.91
Parts	1" HOSE BARB X 3/4" MPT COUPLER - 125-16E	1.00000	\$5.23	\$5.23
Parts	3/4" FPT X 1/2" MPT REDUCING ADAPTER - 120-ED	1.00000	\$3.85	\$3.85
Parts	1/2" X 2" FENDER WASHER - FENDR122	1.00000	\$0.36	\$0.36
Parts	1/2" RUBBER P-CLAMP - 84-8002	1.00000	\$1.02	\$1.02
Parts	H.D. EXT LIFE RED PREMIXED 50/50 COOLANT - 16-834	14.00000	\$11.49	\$160.86
Parts	2-1/2" SILICONE HEATER HOSE - 5515-250	12.00000	\$3.04	\$36.48
Parts	4.06"-4.37" TORQUE SEAL CLAMP - HC19-425	2.00000	\$14.06	\$28.12
Parts	R134A REFRIGERANT FREON - R134A	2.00000	\$21.50	\$43.00
Parts	1/2" X 2-1/2" NC GR8. BOLT - GR8NC12212	2.00000	\$1.50	\$3.00
Parts	1/2" GR8. FLAT WASHER - GR8FW12	4.00000	\$0.21	\$0.84
Parts	1/2" NC GR8. NYLOC NUT - NYLOCKNC12	2.00000	\$0.26	\$0.52
Parts	EXHAUST BELLOW KENWORTH PETERBILT - 820B42320P	1.00000	\$519.75	\$519.75
Parts	12" BLACK CABLE TIES - 83-6021	30.00000	\$0.08	\$2.40
Parts	14.5" BLACK CABLE TIE - CTB14120-100	35.00000	\$0.18	\$6.30
			Subtotal	\$45,364.48

Complaint: Charge Air Cooler Leaking requires replacement.

Cause: Customer request. **Type:** Preventive maintenance

(Inspection)

Labor **Correction:**
 Engine / Air Intake/ Exhaust/ Aftertreatment Systems / Charge Air Cooler Leaking requires replacement.
 - Once radiator is in place, remove condenser, swap CAC and reinstall AC condenser. -
 Completed: 1/24/2025

1.00000 \$135.00 \$135.00

Item	Description	Quantity	Rate	Amount
Parts	CHARGE AIR COOLER - DUR-US-PEDAC-20K	1.00000	\$1,834.95	\$1,834.95
Parts	RADIATOR/ CHARGE AIR COOLER MOUNTING KIT - N4751001	1.00000	\$249.98	\$249.98
Subtotal				\$2,219.93

Complaint: Found Exhaust Bellow Split after test drive

Cause: Customer request. Type: Preventive maintenance

(Inspection)

Labor	Correction:	0.50000	\$135.00	\$67.50
Engine / Engine Fuel System / remove and replace cracked bellows - Completed: 1/24/2025				
Subtotal				\$67.50

Complaint: Cylinder Bore Machining Sublet.

Cause: Customer request Type: Unscheduled repair

(Inspection)

Labor	Correction:	0.00000		\$0.00
Engine / Engine Block Mechanical/Overhaul / - Completed: 1/22/2025				
Labor	COUNTERBORE MACHINING	1.00000	\$4,495.00	\$4,495.00
Subtotal				\$4,495.00

Complaint: Dyno

Cause: Test Type: Other

(Inspection)

Labor	Correction:	0.00000		\$0.00
Engine / Engine Block Mechanical/Overhaul / - Completed: 1/28/2025				
Labor	Engine Dyno for Break In	1.00000	\$1,795.00	\$1,795.00
Subtotal				\$1,795.00

Freight (DDR)	1.00	\$500.00	\$500.00
---------------	------	----------	----------

Unit: 807 VIN: 1XPTP4TX4GD288888

License Plate: CTV-6642

2016 Peterbilt 367

Chassis: 628,032 Kilometers

Engine: 12,346 Hours

100 HRS

Labor \$15,942.50

Parts \$37,999.41

Shop Supplies \$675.68

Freight (DDR) \$500.00

Pre-Charge Subtotal \$54,617.59

GST
(5% of \$55,117.59) \$2,755.88

Total \$57,873.47

Payments & Credits \$0.00

Balance Due \$57,873.47

500 HRS

WE ACCEPT DEBIT AND CREDIT CARD PAYMENT

I hereby authorize the above repair work to be done along with the necessary material and hereby grant you and/or your employees permission to operate the vehicle described for testing and/or inspection.

Express mechanic's lien is hereby acknowledged on above vehicle to secure the amount of the repairs there to.

All parts removed will be discarded unless instructed otherwise: save all parts _____

2/3/25, 10:39 AM

Invoices

NORTHERN TRAILER AND TRUCK SALES LTD. IS NOT RESPONSIBLE FOR LOSS OF OR DAMAGE TO VEHICLES OR ARTICLES LEFT IN VEHICLES IN THE CASE OF FIRE, THEFT, OR ANY OTHER CAUSE.

NORTHERN TRAILER AND TRUCK SALES ASSUMES THE RIGHT TO CHARGE 2% ON ANY INVOICE OUTSTANDING OVER 30 DAYS.



MAINTENANCE WORK ORDER

Nº 3240

UNIT #: 807

ENGINE HOURS: 12339.8

MILEAGE: 628016

WORK LOCATION:

WORK REQUESTED:

ORDER DATE: Dec/27/24

COMPLETED DATE: Dec/27/24

JOB #:

W.O. TYPE (Circle): PM CVIP Reactive

REPAIRS REQUIRED: replace thermostat

TECH COMMENTS:

LABOUR DESCRIPTION: replaced ~~thermostat~~ thermostat

HOURS

LABOUR TOTAL

PARTS & MATERIALS

P.O. # QUANTITY PRICE AMOUNT

thermostat

PARTS & MATERIALS TOTAL

WORK AUTHORIZED BY: Ron

WORK COMPLETED BY: Chase

UNIT RETURNED TO SERVICE: yes

OVERALL CONDITION OF UNIT: good

ADDITIONAL COMMENTS:



SEM1

* CNIP DEAL

MAINTENANCE REQUEST FORM

UNIT# 807 HRS/KM

* D HOOK FOR WINCH CABLE

DESCRIPTION OF REPAIRS REQUIRED

① RIGHT REAR HEADACHE
LAMP NOT WORKING

* LIGHT INSIDE DOOR
BULB

② HARD MOUNT / WHITE GPS

BRANDT PETERBILT 306 825-3553 KAYLA

a) DRIVERS DOOR LATCH (INNER) \$420 OEM

WRONG PART REORDER \$217 AFTERMARKET
EXCHANGEb) ~~HEATER CONTROL VALVE~~ 2 1/2" COOLANT HOSE, CLAMPS
AND A/F RESNOIR CAP

c) THERMOSTAT / GASSETS

d) FUEL FILTERS?

NORTHERN TRUCK &

TRAILER.

REQUESTED BY: STEVE

DATE: DEC. 11/2024

REPLACE TRAILER PLUG to PLUG HARNESS

PRESSURE UP ?? KENHUCK of tw #403



MAINTENANCE REQUEST FORM

UNIT# 807 HRS/KM 622063

DESCRIPTION OF REPAIRS REQUIRED

① DRIVERS DOOR POP OPEN

② LIGHT BAR NOT WORKING

③ LICENSE PLATE AND MOOSE BUMPER TO BE MOUNTED ON FRONT

④ COULD NOT GET ENGINE HEATER TO FIRE UP. BUNK WORKS.
HEATER

⑤ DRIVERS SEAT TOO CLOSE TO DASH.
WONDERING IF IT CAN BE ADJUSTED
BACK. THANKS NO GO

⑥ RIGHT STEP NEEDS ATTENTION

REQUESTED BY: STEVE

DATE: DEC. 04/2024



MAINTENANCE WORK ORDER

№ 3227

UNIT #: 807
ENGINE HOURS: 12106.7
MILEAGE: 614835
WORK LOCATION: W. 1st St + 8th St
WORK REQUESTED:

ORDER DATE: 11/29/24
COMPLETED DATE: 11/29/24
JOB #:

W.O. TYPE (Circle): PM CVIP Reactive

REPAIRS REQUIRED: put light bar on

TECH COMMENTS:

LABOUR DESCRIPTION:

HOURS

put light bar on

2

LABOUR TOTAL

PARTS & MATERIALS

P.O. # QUANTITY PRICE AMOUNT

light bar

PARTS & MATERIALS TOTAL

WORK AUTHORIZED BY: Shane

WORK COMPLETED BY: Chase

UNIT RETURNED TO SERVICE: VLS

OVERALL CONDITION OF UNIT: good

ADDITIONAL COMMENTS:



MAINTENANCE WORK ORDER

Nº 3222

UNIT #: 807
ENGINE HOURS: 12084.1
MILEAGE: 619063
WORK LOCATION: Wainwright Shop
WORK REQUESTED: CVIP
REPAIRS REQUIRED: CVIP

ORDER DATE: NOV/21/24
COMPLETED DATE: NOV/26/24
JOB #:

W.O. TYPE (Circle): PM CVIP Reactive

TECH COMMENTS:

LABOUR DESCRIPTION:	HOURS
<u>took tires drums off greased checked</u>	
<u>tire psi and fluids checked air filters</u>	
<u>checked lights painted frame</u>	

LABOUR TOTAL

PARTS & MATERIALS	P.O. #	QUANTITY	PRICE	AMOUNT
<u>Wheel indicators</u>		<u>80</u>		

PARTS & MATERIALS TOTAL

WORK AUTHORIZED BY: Ron/Share WORK COMPLETED BY: Chase
UNIT RETURNED TO SERVICE: YES OVERALL CONDITION OF UNIT: YES GOOD
ADDITIONAL COMMENTS: