

### DRIVER/VEHICLE EXAMINATION REPORT

Aspen 3.0.0, 1

End: 1:32:21 PM ET

Public Utilities Commission of Ohio

180 East Broad Street

Transportation Department Columbus, OH 43215

Phone: (614)466-0429 Fax: (614)752-9274

Report Number: OH3203300600 Inspection Date: 01/27/2020

Start: 12:10 PM ET

Inspection Level: I - Full HM Inspection Type: None

BAKER EQUIPMENT AND MATERIALS LTD

**PO BOX 526** MONROE, OH 45050

MC/MX#: 181811

USDOT#: 00649901

Phone#: (513)422-0680

Fax#:

Driver: LITTLEJOHN, JAMES A

License#: RT163583

Date of Birth: 10/30/1976

CoDriver:

License#: Date of Birth:

State:

State: OH

State#:

Location: CAMBRIDGE SCALES

Highway: IR70

County: GUERNSEY, OH

MilePost: 173

Shipper:

Origin: CAMBRIDGE, OH

Destination: MONROE, OH

Bill of Lading: 0000

Cargo: EMPTY

VEHICLE IDENTIFICATION

Unit Type Make Year State TT PTRB 2009 OH 2 ST FONA 2008 ME

Plate # PVZ3448 2836852

Equipment ID 0 - 382459

VIN 1XPXDB0X79N776796 13N14820581546203

<u>GVWR</u> 52,000 68,000

CVSA # CVSA Issued # OOS Sticker

3203300600

**BRAKE ADJUSTMENTS** 

Axle # 1 2 4 5 Right 3/16 1 3/4 2 1/4 1 1/4 2 1/4 Left 1 1/2 1/2 1 1/4 1 1/4 1 1/2 Chamber C-20 C-30 C-30 C-30 C-30

Section

VIOLATIC	NS
----------	----

Vio Code

			-		ORGIOTI II	V CITTY	Ciasi
	393.75A3	393.75(a)(3)	1	Y		U	N
	393.47E	393.47(e)	1	N		N	N
-	393.53B	393.53(b)	1	Ν		N	N
-	393.47E	393.47(e)	2	N		N	N
-	393.53B	393.53(b)	2	Ν		N	N
-	396.3A1BOS	396.3(a)(1)	1	Υ -		U	N
-							

Unit OOS Citation # Verify Crash Violations Discovered Tire-flat and/or audible air leak: Axle 2 right inside measured at 40%, verified by driver. Clamp or Roto type brake out-of-adjustment: Axle 2 right side. CMV manufactured after 10/19/94 has an automatic airbrake

adjustment system that fails to compensate for wear Clamp or Roto type brake out-of-adjustment: Axle 5 right side.

CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear BRAKES OUT OF SERVICE: The number of defective brakes

is equal to or greater than 20 percent of the service brakes on the vehicle or combination: oos when in combination. Placard: No Cargo Tank:

HazMat: No HM Transported.

Special Checks: No Data for Special Checks.

State Information:

FMCSA Credentials Verified-Y/N: Y; CDL Verified (Y/N): Y; FMCSA OOS Order Issued(Y/N): Y; For-Hire Carrier: Y; Reason Code: USSP; Fatalities (Y/N): N; Driver Address Verified (Y/N): Y; Driver Address: 1415 BERNICE ST; Driver City: MIDDLETOWN; Driver State: OH; Driver Zip: 45044; Photos Taken (Y/N): Y;

Report Prepared By ARON LOCKHARI

Badge #: 3203

Copy Received By: JAMES LITTLEJOHN Page 1 of 2



# DRIVER/VEHICLE EXAMINATION REPORT

Aspen 3.0.0.17

State: OH

State:

ic Utilities Commission of Ohio

**East Broad Street** ansportation Department olumbus, OH 43215

Phone: (614)466-0429 Fax: (614)752-9274

Report Number: OH3203300600 Inspection Date: 01/27/2020

Start: 12:10 PM ET End: 1:32:21 PM ET

Inspection Level: I - Full HM Inspection Type: None

BAKER EQUIPMENT AND MATERIALS LTD

PO BOX 526

Highway: IR70

State#

MONROE, OH 45050

USDOT#: 00649901

Phone#: (513)422-0680

MC/MX#: 181811

Location: CAMBRIDGE SCALES

County: GUERNSEY, OH

Fax#:

Driver: LITTLEJOHN, JAMES A

License#: RT163583

Date of Birth: 10/30/1976

CoDriver:

License#:

Date of Birth:

MilePost: 173 Shipper:

Origin: CAMBRIDGE, OH Destination: MONROE, OH

Bill of Lading: 0000 Cargo: EMPTY

\* Pursuant to authority contained in Title 49, Code of Federal Regulations, Section 396.9, I hereby declare vehicles with defects followed by an "Y" in the "Out of Service" column in the violations discovered section of this report OUT OF SERVICE. No person shall remove the out of service stickers applied to these vehicles, or operate such vehicles until the out of service defects have been repaired and the vehicles have been restored to safe operating condition.

ATTENTION DRIVER This report must be sent to the motor camer whose name appears at the top of this inspection report within 24 hours. If the inspection report cannot be delivered within 24 hours the driver must mail or fax the inspection report to the motor carrier

POSSIBLE CDL DISQUALIFICATION \*\*\*\*\*\*

If this roadside inspection identified an alleged violation of one or more of the below noted regulations, your CDL may be disqualified. If the PUCO finds you committed a violation of any of these regulations, the violation will be treated as a conviction for the purposes of federal and state law and notice of such conviction will be forwarded to the Ohio Bureau of Motor Vehicles (BMV). The BMV may disqualify you from operating a commercial motor vehicle for a minimum of 60 days. Any BMV sanction is in addition to sanctions imposed by the Public Utilities Commission of Ohio (PUCO)

177.804(b)(1), 177.804(b)(2), 177.804(b)(3), 177.804(c), 4901:2-5-07D, 383.23(a)(2), 383.51(a), 383.51A-NSIN, 383.51A-NSOUT, 383.51A-SIN, 383.51A-SOUT, 383.91(a), 383.93(b)(1) 383.93(b)(2), 383.93(b)(4), 383.93(b)(4), 383.93(b)(5), 391.15(a), 391.15A-NSIN, 391.15A-NSOUT, 391.15A-SOUT, 392.10(a)(1), 392.10(a)(2), 392.10(a)(3), 392.10(a)(4), 392.10(a)(2), 392.5(c)(2), 392.5(c)(2), 392.80(a), 392.82(a)(1), 395.13(d), 396.9(c)(2).

MOTOR CARRIER CERTIFICATION OF COMPLETED REPAIRS. The undersigned certifies that all violations noted on this report have been corrected and action taken to assure compliance with the Federal Motor Carrier Safety & Hazardous Materials Regulations insofar as they are applicable to motor carriers and drivers. A false certification of repairs is required

Signature Of Repairer X:

Facility Taken Carried as having brake adjustment violations. 49CFR Section 393.53 requires that a self-adjusting brake system be +March 1-27-20 Advisory: This vehicle has been identified as having brake adjustment violations. 49CFR Section 393.53 requires that a self-adjusting brake system be equipped on this vehicle. A qualified service technician needs to determine why the defective brake has excessive stroke and make the appropriate repairs Simply re-adjusting a self-adjusting brake adjustor, or replacing it, does not guarantee that the problem is corrected. The problem may exist in the foundation brake system. By certifying this inspection report you have indicated that this vehicle now has a properly functioning self-adjusting brake adjustment system.

All violations of the FHMR and FMCSR or Title 49 of the Ohio Revised Code will be reviewed by the PUCO's Transportation Department to determine whether civil forfeitures should be assessed against any responsible parties in accordance with the penalty provisions of Title 49 of the Ohio Revised Code. If civil forfeitures are assessed, you will receive a separate notice by mail. These penalties may be assessed to motor carriers, shippers, and/or drivers.

ATTENTION MOTOR CARRIER: The motor carrier must examine this report and repair all the vehicle defects/violations noted above -AND- The motor carrier must sign the Certification of Repairs below and return the signed form to: Public Utilities Commission of Ohio, TASD - 4th floor, 180 E Broad St, Columbus, OH 43215-3793 - OR- Fax (614) 752-9274 within 15 days of the inspection. If "No Violations Were Discovered" then you do not need to return this report. Failure to return this report with the required certification can result in penalties up to \$1,000 per day for each day the violation continues, up to a total of \$10,000. If you have any questions, please contact (614) 466-0429.

Barox Equipment Materials THE Mans Cooplinger Signature Of Motor Carrier X: in Il locar

Report Prepared By: AARON LOCKHART

Badge #: 3203 Copy Received By: JAMES LITTLEJOHN Page 2 of 2



Doran Manufacturing, LLC 2851 Massachusetts Ave Cincinnati, Ohio 45225 USA (513)-681-5424

BILL TO:

Baker Concrete 990 N Main St Monroe, OH 45050

US

### ORDER ACKNOWLEDGEMENT

Please notify us of any compliance requirements you may have.

PAGE NO	CURRENT DATE	ORDER NO
1	4/28/2020	93708

CUSTOMER PURCHASE ORDER .

SHIP TO:

Baker Concrete 990 N Main St Monroe, OH 45050

US

#### Dear Customer,

This document acknowledges receipt of your order. Please review the information presented here and advise us of any errors you notice or disagreements you have at your earliest convenience. Please refer to our Order Number and your P.O. Number in all correspondence. This order is governed by Doran Mfg, LLC's Terms and Conditions.

CUSTOMER PAYMENT TERMS PPD/COL SHIPPING
SHIP VIA INSTRUCTIONS

000099349396 TRIAL PREPAID

**GROUND** 

GROUND					
ITEM NO DESCRIPTION	QUANTITY	SHIP DATE	иом и	NIT PRICE	EXTENDED PRICE
#3666OC-35 SMARTLINK TRANSCEIVER w/ 35' EXT. ANT. & ONE CLICK	2	4/29/2020	EA	209.9900	419.98
#3653K METAL MOUNTING BRACKET KIT (2)	2	4/29/2020	EA	7.4900	14.98
#3650 FLOW THRU EXTENSION - BENT W/ 190mm BRAIDED AIR LINE	16	4/29/2020	EA	14.9900	239.84
#3649 FLOW THRU EXTENSION - W/ 11 INCH BRAIDED AIR LINE	16	4/29/2020	EA	14.9900	239.84
#3629-S TIRE PRESSURE SENSOR LOCKING JAM NUTS (PACK OF 10)	4	4/29/2020	EA	2.9900	11.96
#3623 REMOTE ANTENNA KIT - 35' W/TNC & SMA RA Cable	2	4/29/2020	EA	37.4900	74.98
#360SL10 SMARTLINK 10-WHEEL TRUCK	2	4/29/2020	EA	524.9900	1,049.98
#3602 TIRE PRESSURE SENSOR	18	4/29/2020	EA	37.4900	674.82



Doran Manufacturing, LLC 2851 Massachusetts Ave Cincinnati, Ohio 45225 USA (513)-681-5424

BILL TO:

Baker Concrete 990 N Main St Monroe, OH 45050

US

### ORDER ACKNOWLEDGEMENT

Please notify us of any compliance requirements you may have.

PAGE NO	CURRENT DATE	ORDER NO	
2	4/28/2020	93708	

CUSTOMER PURCHASE ORDER
.

SHIP TO

Baker Concrete 990 N Main St Monroe, OH 45050

US

Dear Customer,

This document acknowledges receipt of your order. Please review the information presented here and advise us of any errors you notice or disagreements you have at your earliest convenience. Please refer to our Order Number and your P.O. Number in all correspondence. This order is governed by Doran Mfg, LLC's Terms and Conditions.

CUSTOMER	PAYMENT TERMS	PPD/COL		SHIPPING		The state of the s	
Charles 188	SHIP VIA			INSTRUCTIONS			
000099349396	TRIAL	PREPAID					
	GROUND						
ITEM NO	QU	JANTITY	SHIP DATE	UOM	UNIT PRICE	A Charles of the Control of the Cont	EXTENDED
DESCRIPTION						1	PRICE

TOTAL

2,726.38

Any applicable Freight and Taxes will be added to your order upon invoicing.

PAGE: 1



PO NUMBER

71983/

DATE 2/26/20

THE ABOVE PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES, SHIPPING, PAPERS, AND CORRESPONDENCE.

VENDOR:

5214

AMERICAN EXPRESS

ATTN: PAYMENT PROCESSING

PO BOX 650448

DALLAS, TX 752650448

SHIP TO:

MONROE BRANCH 990 N MAIN ST

MONROE, OH 45050

DATE	REQUIRED		F.O.B. POINT		PAYMENT	TERMS		TAXABLE
					1 DAY PAY			YES
		SHIP VI	A	BUY	YERS NAME	ORI	DERED FR	ОМ
BEST	WAY		, and a second s	SCHAMER RIC	<u> </u>			
						Unit		
	Qty	B/O	Item number/Des	scription		Cost	Ex	tended
			360SL10 TPMS 10-WHEEL S	SMART LINK	TPMS KIT (TRACT	524.990 COR)		
			3623 TPMS REMOTE AND	ΓΈΝΝΑ ΚΙΤ,	35' (TRACTOR)	37.490		
			3649 TPMS FLOW THROU	UGH EXTENS	ION, INSIDE TIRE	14.990		
			3650 TPMS FLOW THROU	UGH EXTENSI	ION, OUTSIDE TIF	14.990 EE		
			3629-S TPMS 10 PACK T		RE SENSOR LOCKIN	2.990 IG JAM NUT		
2 2 2			36600C-35 TPMS SMARTLINK	and a second and a	LER TRANSCEIVER	209.990 W/ 35' AN	ITENNA	
			3602 TPMS WIRELESS T	TIRE PRESSU	JRE SENSOR	37.490		
			3649 TPMS FLOW THROU	UGH EXTENS	ION, INSIDE TIRE	14.990		
							CONTI	NUED

PAGE: 2



PO NUMBER

71983/

DATE 2/26/20

THE ABOVE PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES, SHIPPING, PAPERS, AND CORRESPONDENCE.

VENDOR:

5214

AMERICAN EXPRESS

ATTN: PAYMENT PROCESSING

PO BOX 650448

DALLAS, TX 752650448

SHIP TO:

MONROE BRANCH 990 N MAIN ST

MONROE, OH 45050

DATE REQUIR	ED	F.O.B. POINT			PAYMENT	TERMS		TAXABLE
				1 DAY I	PAY			YES
	SHIP	VIA	BU	YERS NAME		ORDE	RED FR	ОМ
BEST WAY			SCHAMER RI	<u> </u>				
						Unit		
Qty	у в/о	Item number/De	escription			Cost	E	xtended
		3650 TPMS FLOW THRO	OUGH EXTENS:	ION, OUTS	DE TIR	14.990 RE		
		3653K TPMS MONITOR N	MOUNTING BRA	ACKET KIT	(TRACT	7.490 COR)		
		360SLT TPMS SMARTLINI	K TABLET PRO	OGRAMMING	TOOL	499.990		
		RCHASE FROM DURA v # 108845	MA					

P.O. Total:

.00



PO NUMBER

73433/

PAGE: 1

DATE 5/27/20

THE ABOVE PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES, SHIPPING, PAPERS, AND CORRESPONDENCE.

**VENDOR:** 

5214

AMERICAN EXPRESS

ATTN: PAYMENT PROCESSING

PO BOX 650448

DALLAS, TX 752650448

SHIP TO:

MONROE BRANCH

990 N MAIN ST

MONROE, OH 45050

DATERE	QUIRED		F.O.B. POINT		PA	YMENT TERMS	TAXABLE
					1 DAY PA	Y	YES
		SHIP VI	Α		ERS NAME	ORDE	RED FROM
BEST W	IAY ————————————————————————————————————			SCHAMER RIC	7	BILLY	
						Unit	
	Qty	B/O	Item number/De	escription		Cost	Extended
			36600C-35			209.990	
			TPMS SMARTLINE	K TPMS TRAII	LER TRANSCE	IVER W/ 35' ANT	TENNA
			3653K			7.490	
			TPMS MONITOR N	MOUNTING BRA	ACKET KIT (	TRACTOR)	
			3650			14.990	
			TPMS FLOW THRO	DUGH EXTENS	ON, OUTSID	E TIRE	
			3649			14.990	
			TPMS FLOW THRO	DUGH EXTENS	ON, INSIDE	TIRE	
			3629-S			2.990	
			TPMS 10 PACK 7	TIRE PRESSUI	RE SENSOR LO	OCKING JAM NUT	
			3623			37.490	
			TPMS REMOTE AN	TENNA KIT,	35' (TRACTO	OR)	
			360SL10			524.990	
			TPMS 10-WHEEL	SMART LINK	TPMS KIT (	TRACTOR)	
			3602			37.490	
			MDMG LITDET DGG	TIDE DDECCE	IDE CENCOD		
			TPMS WIRELESS	TIRE PRESSU	NE SENSOR		



**PO NUMBER** 73433/

**DATE** 5/27/20

THE ABOVE PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES, SHIPPING, PAPERS, AND CORRESPONDENCE.

PAGE: 2

**VENDOR:** 

5214

AMERICAN EXPRESS

ATTN: PAYMENT PROCESSING

PO BOX 650448

DALLAS, TX 752650448

SHIP TO:

MONROE BRANCH 990 N MAIN ST

MONROE, OH 45050

DATE BEOLUBED	Т	F O P POINT					
DATE REQUIRED		F.O.B. POINT		PAYMENT	TERMS	S	TAXABLE
				1 DAY PAY			YES
	SHIP VI	A	BUY	ERS NAME		ORDERED F	ROM
BEST WAY			SCHAMER RIC		BIL	LY	
Qty	в/о	Item number/De	escription			Unit Cost E	xtended
		3639 T-FITTING, FLO	OW-THROUGH A	ADAPTOR - DORAN		7.490 S	

PURCHASE FROM DORAN

ORDER # 93708

ORDER # 93461 INV # 108927

P.O. Total:

.00



Ne

Job Site: OUR SHOP **WORK ORDER INVOICE** 

Invoice#....

418836-0001

Date..... 3/16/20

Customer #..

Job Loc.... OUR SHOP

Job No.... P.O. #..... Authorized..

Serial #

1FUJGLDV2ELFK31560

Received on. 3/16/20 Finished on. 3/16/20 Last con/cus 403093/50

Bill To:

Equip #

T - 370

MONROE BRANCH 990 N MAIN ST MONROE, OH 45050

Make

WORK PERFORMED:

AT 385,239MI. INSTALL TIRE PRESSURE SYSTEM WITH DORAN TECHNICIAN.

FREIGHTLIN CASCADIA

Model

LABOR:

Mechanic JEFF BURTON EIRIK FURGINSON Hours Work 4.00 MECHANIC-IN SHOP 2.00 MECHANIC-IN SHOP

Total Labor

Total Amount

Description

60.00

SEMI TRACTOR - ROAD

Rate Extended 60.00 240.00

360.00

120.00

360.00

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR **OVERTIME RATES MAY APPLY**  CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

X

**CUSTOMER SIGNATURE** 

DATE

NAME PRINTED

DELIVERED BY



Ne

Job Site: OUR SHOP WORK ORDER INVOICE

Invoice#....

418838-0001

Date..... 3/16/20

Customer #..

Job Loc.... OUR SHOP

Job No..... P.O. #..... Authorized.

Received on. 3/16/20 Finished on. 3/16/20 Last con/cus 282892/50

Bill To:

Equip #

HT289

MONROE BRANCH 990 N MAIN ST MONROE, OH 45050

Make

RAVENS

WORK PERFORMED:

INSTALL TIRE PRESSURE SYSTEM WITH DORAN TECHNICIAN.

Model

#NA

HAD TO MODIFY ALL BRACKETS FOR WHEEL SENSORS. INSTALL MISSING JAM NUTS ON WHEEL SENSORS.

Serial #

1R1F04429EE840459

LABOR:

Mechanic JEFF BURTON Hours Work 8.00 MECHANIC-IN SHOP

Rate 60.00

Description

FLAT SEMI TRAILER -

Extended 480.00

Total Labor

480.00

Total Amount

480.00

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

X

CUSTOMER SIGNATURE

DATE

NAME PRINTED

DELIVERED BY



Ne

Job Site: OUR SHOP WORK ORDER INVOICE

5/18/20

Description

Invoice#.... 424409-0001

Date..... Customer #..

Job Loc.... OUR SHOP

Job No..... P.O. #..... Authorized..

Received on. 5/11/20 Finished on. 5/18/20 Last con/cus 303969/50

Bill To: MONROE

Equip #

MONROE BRANCH 990 N MAIN ST MONROE, OH 45050

Make

O-382 PETERBILT 389 1XPXDB0X79N776796 SEMI TRACTOR - ROAD	-		 					
		0-382	307	1XPXDB0X79N776796	SEMI	TRACTOR	-	ROAD

Serial #

WORK PERFORMED:

495,964MI / 3696HRS. INSTALL NEW TIRE PRESSURE SYSTEM.

Model

Steps Performed:

TIRES

PARTS:

Qty	Part Number	Description	U/M	Price	Extended
1	360SL10	TPMS 10-WHEEL SMART	EA	524.990	524.99
4	3649	TPMS FLOW THROUGH EX	EA	14.990	59.96
4	3650	TPMS FLOW THROUGH EX	EA	14.990	59.96
1	3629-S	TPMS 10 PACK TIRE PR	EA	2.990	2.99
1	3623	TPMS REMOTE ANTENNA	EA	37.490	37.49
5	3602	TPMS WIRELESS TIRE P	EA	37.490	187.45
1	3653K	TPMS MONITOR MOUNTIN	EA	7.490	7.49

LABOR:

MechanicHours WorkRateExtendedJEFF BURTON18.00 MECHANIC-IN SHOP60.001,080.00

Total Parts & Materials 880.33
Total Labor 1,080.00

CONTINUED...

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

Χ

CUSTOMER SIGNATURE DATE NAME PRINTED DELIVERED BY DATE



MONROE BRANCH

990 N MAIN ST

MONROE, OH 45050

Remit To:
990 N MAIN ST
PO BOX 526
MONROE, OH 45050

Ne

Job Site: OUR SHOP

Bill To:

# WORK ORDER INVOICE

Invoice#....

424409-0001

Date..... 5/18/20

Customer #..

Job Loc.... OUR SHOP

Job No..... P.O. #..... Authorized..

Received on. 5/11/20 Finished on. 5/18/20 Last con/cus 303969/50

Equip #	Make	Model	Serial #	Description
0-382	PETERBILT	389	1XPXDB0X79N776796	SEMI TRACTOR - ROAD
		Total	l Amount	1,960.33



IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY

CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

DATE

X

CUSTOMER SIGNATURE

NAME PRINTED

DELIVERED BY



Ne

Job Site: OUR SHOP WORK ORDER INVOICE

Bill To:

MONROE BRANCH 990 N MAIN ST MONROE, OH 45050 Invoice#.... 424381-0001

Date..... 6/09/20 Customer #..

Job Loc.... OUR SHOP

Job No..... P.O. #..... Authorized..

Received on. 5/09/20 Finished on. 6/09/20 Last con/cus 266935/50

Equip #	Make	Model	Serial #	Description
F-200	MACK	CXN613	1M1AK07Y25N005432	SEMI TRACTOR - ROAD

WORK PERFORMED:

844,367MI / 32,729HRS. INSTALL DORAN TIRE PRESSURE SYSTEM. REPLACED BOTH AIR BAGS FOR CAB LEVELING. ADJUST ALL BRAKES.

Steps Performed:

TIRES

BRAKE WORK

PARTS:

Qty	Part Number
2	21128983
2	782-2226
4	3649
4	3650
1	3629-S
1	3623
1	360SL10
10	3602
1	3653K
2	12173

Degenintion	TT / N#	To 2"	77 - 1
Description	U/M	Price	Extended
AIR BAG, CAB LEVELIN	EA	73.140	146.28
FUSE W/ PIGGYBACK CI	EA	10.090	20.18
TPMS FLOW THROUGH EX	EA	14.990	59.96
TPMS FLOW THROUGH EX	EA	14.990	59.96
TPMS 10 PACK TIRE PR	EA	2.990	2.99
TPMS REMOTE ANTENNA	EA	37.490	37.49
TPMS 10-WHEEL SMART	EA	524.990	524.99
TPMS WIRELESS TIRE P	EA	37.490	374.90
TPMS MONITOR MOUNTIN	EA	7.490	7.49
8" ROUND MIRROR	EA	13.087	26.17
		CONTINUED	

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY

CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

X

CUSTOMER SIGNATURE DATE

NAME PRINTED

DELIVERED BY



Ne

Job Site: OUR SHOP

# **WORK ORDER INVOICE**

Invoice#....

424381-0001

Date..... 6/09/20

Customer #..

Job Loc.... OUR SHOP

Job No..... P.O. #..... Authorized..

Received on. 5/09/20 Finished on. 6/09/20 Last con/cus 266935/50

Bill To:
MONROE BRANCH
990 N MAIN ST
MONROE, OH 45050

Equip # Make Model Serial # Description F-200 MACK CXN613 1M1AK07Y25N005432 SEMI TRACTOR - ROAD LABOR: Mechanic Hours Work Rate Extended JEFF BURTON 23.00 MECHANIC-IN SHOP 60.00 1,380.00 Total Parts & Materials 1,260.41 Total Labor 1,380.00 2,640.41

Total Amount

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY

CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

Χ

CUSTOMER SIGNATURE DATE

NAME PRINTED

DELIVERED BY



Ne

Job Site: OUR SHOP WORK ORDER INVOICE

Bill To:

MONROE BRANCH 990 N MAIN ST MONROE, OH 45050 Invoice#.... 424484-0001

Date..... 6/09/20

Customer #..

Job Loc.... OUR SHOP

Job No..... P.O. #..... Authorized..

Received on. 5/11/20 Finished on. 6/09/20 Last con/cus 395546/50

Equip #	Make	Mod	el	Serial #		Description	on
S-990	TRAIL	KING TK7	0HT-482	1TKA048248M0	92759	FLAT SEMI	TILT TRAI
WORK PERI	FORMED: DORAN TIR	E PRESSUR	E SYSTEM				
PARTS:							
Qty	Part Numl	per	Desci	ription	U/M	Price	Extended
ĺ	36600C-3	5	TPMS	SMARTLINK TPMS	EA	209.990	209.99
4	3650		TPMS	FLOW THROUGH EX	EA	14.990	59.96
4	3649		TPMS	FLOW THROUGH EX	EA	14.990	59.96
1	3629-S		TPMS	10 PACK TIRE PR	EA	2.990	2.99
8	3602		TPMS	WIRELESS TIRE P	EA	37.490	299.92
LABOR:							
Mechanic		Hours	Work			Rate	Extended
JEFF BUR	ION	14.00	MECHANIO	C-IN SHOP		60.00	840.00

Total Parts & Materials

Total Labor

Total Amount

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY

CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES OR REPAIRS

See Attachment for Terms and Conditions.

X

CUSTOMER SIGNATURE DATE

NAME PRINTED

DELIVERED BY

DATE

632.82

840.00

1,472.82



# **Inspection Bulletin**

### North American Standard Inspection Program

# 2014-02 – Identification of Long Stroke Brake Chambers or Brake Adjustment Limit Markings

Created: April 10, 2014 Revised: April 27, 2017

#### **Summary**

This Inspection Bulletin provides guidance to correctly identify a long stroke brake chamber on an air-braked vehicle during inspection. This information gives clarity to some of the inquiries and issues encountered during roadside inspections. Correct identification of the brake chambers is necessary to ensure proper reference to the appropriate brake adjustment charts in the North American Standard Out-of-Service Criteria (OOSC). This Inspection Bulletin pertains only to clamp-type brake chambers on drum brake and exposed-pushrod-style disc brake systems.

An accompanying training video is available at www.cvsa.org/videos, through the CVSA member portal at www.cvsa.org/memberportal and via the CVSA Out-of-Service Criteria app.

#### **Background**

Long stroke brake chambers manufactured for use in North America generally comply with a recommended practice (RP) published by the Society of Automotive Engineers (SAE J1817). SAE RP J1817 compliant long stroke brake chambers use at least two of three different identification methods. Some brake chambers are in use that do not comply with J1817 identification methods, but may have alternative markings to identify them as being a long stroke design.

### **Chamber Type and Size**

The type of brake chamber, in terms of its <u>size</u>, for all brake chambers is determined by using a caliper or a tool (chambermate) to measure the outside diameter.

The type of brake chamber, in terms of its **stroke**, is determined by looking for visual identifiers that indicate it is a long stroke chamber. The absence of a recognizable long stroke marking requires the inspector to deem the brake chamber to be a standard type and not a long stroke type.

### Stroke Markings are Rated Stroke not Adjustment Limit

All stroke markings placed on a brake chamber by the manufacturer refer to the rated stroke of the chamber. Rated stroke is a design feature and is generally one-half inch (13 mm) greater than the brake adjustment limit of a chamber. Inspectors must be careful to differentiate between these two values. Rated strokes are included in the clamp-type brake chamber data reference tables in the OOSC for type 20 and 24 long stroke chambers to help identify the brake chamber type.

© 2017 Commercial Vehicle Safety Alliance All rights reserved.



#### **Identifying Long Stroke Brake Chambers**

SAE RP J1817 includes three different methods for identifying long stroke brake chambers. These methods are:

- 1. Service instructions embossed or stamped onto the chamber.
- 2. Tags showing the rated stroke of the chamber. These tags are trapezoid-shaped (trapezoidal) with information embossed on the surface.
- 3. Square-shaped air ports or a square-shaped embossment around the air port.

Many chambers will use all three of these identification methods, but only two of the three are required. It is also possible that one or more of these identification methods has become obscured, and in the case of the trapezoidal tags, detached from the chamber.

*Inspectors need to be prepared to locate, recognize and accept one, two or three of these identifiers.* In some cases, inspectors may also need to recognize and accept an alternative identification method to those listed in SAE RP J1817, as described below.

#### 1. Trapezoidal Stroke Tags

Many manufacturers of long stroke chambers identify them by installing a tag in the shape of a trapezoid that shows the rated stroke for the chamber. These tags can be any color and any suitable material, and are usually installed near the air fitting or a clamp bolt. Information on the tag may also be repeated on the chamber itself. The design of the tag from SAE RP J1817 is shown in figure 1, and figures 2 and 3 show examples of the tags. **One of these tags is an** *acceptable identifier* of a long stroke chamber.





Figure 1

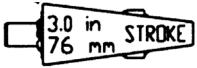


Figure 2

Figure 3



#### 2. Square-Shaped Ports or Embossment

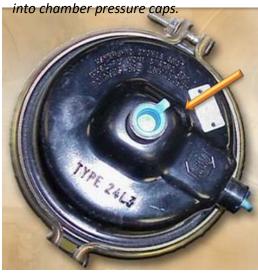
Most long stroke brake chamber manufacturers identify the chamber by using square-shaped ports where the air fittings connect or emboss the pressure cap section of the chamber housing with a square shape. In many cases, the square shape has rounded corners. **Any indication of the square shape is an acceptable identifier of a long stroke chamber.** 



Square-shaped air fitting ports









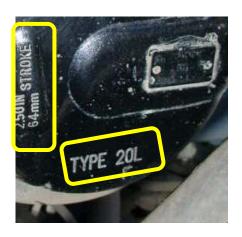


#### 3. Identification and Service Data

Many long stroke brake chambers have identification and service data stamped, cast or embossed onto the metal parts of a brake chamber. Others are provided with an adhesive data label. The data provided often identifies the type of brake chamber and may also include the rated stroke. For example, the letter "L" and "LS" following the size (12 through 30) are often (but not always) used to identify long stroke chambers. Other alpha-numeric codes are also used to identify chamber type.

<u>Special note for type 20 and 24 long stroke chambers</u>: There are two sizes of these two long stroke chambers. As shown in the long stroke clamp-type brake chamber data reference in the OOSC, the rated stroke of these chambers could be 2.5 inches or 3 inches. Confirm the chamber is correctly identified. Whenever the square embossment is 0.5 inch high, it indicates a long stroke chamber with a rated stroke of 3 inches, having a brake adjustment limit of 2.5 inches.

Identification and service data provided by the chamber manufacturer that shows a rated stroke consistent with the long stroke data reference table in the OOSC is an <u>acceptable identifier</u> of a long stroke chamber.



Examples of identification data and marking.







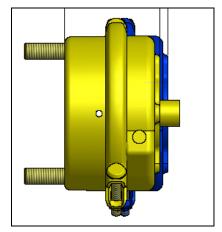




#### 4. Unacceptable Means of Identifying Long Stroke Chambers

To avoid confusion, inspectors must also be aware of other means that may be claimed as being suitable for identifying long stroke chambers. These methods are not accepted as identifiers of long stroke brake chambers for inspector's purposes.

The measurement of the thickness of the chamber cannot be used to identify a long stroke chamber. The interior design of the chamber differs among manufacturers. Exterior brake chamber dimensions do not reliably identify the rated stroke. Rated strokes can even differ among chambers with similar exterior dimensions from the same manufacturer.



 A square hole where the pushrod enters the brake chamber is not an indicator of a long stroke brake chamber. The hole is sometimes square in order to allow the pushrod yoke to pass through the housing.



• The color of the trapezoidal tag does not indicate a particular rated stroke.





#### Brake Adjustment Limit for Air Brake Chambers – New Option

In December 2013, SAE J2899 was developed and a new recommended practice was approved to provide an alternative way of determining the size and allowable stroke of a brake chamber. By putting a standardized rated stroke marking on the air brake chamber in a known location, the only conversion required is between the rated stroke marking to the brake adjustment limit. This method would reduce the likelihood of an inspector passing a vehicle that should be out of service or putting a vehicle out of service that is within acceptable operating conditions.

Rated stroke markings are to be located on the spring brake housing base for spring brakes or on the pressure housing base for service chamber brakes as shown in Figure 1 and marked per column "Rated Stroke Marking" as shown in Figure 2.

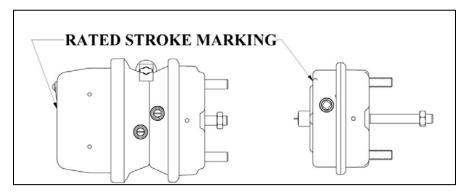


Figure 1

				rigare 1		
Rated Stroke	Rated Stroke on Brake Chamber			Brake Adjustment Limit		
Marking						
А	1.50"	1 1/2"	38 mm	1.25"	1 1/4"	32 mm
В	1.75"	1 3/4"	44 mm	1.38"	1 3/8"	35 mm
С	2.00"	2"	51 mm	1.50"	1 1/2"	38 mm
D	2.25"	2 1/4"	57 mm	1.75"	1 3/4"	44 mm
E	2.50"	2 1/2"	64 mm	2.00"	2"	51 mm
F	3.00"	3"	76 mm	2.50"	2 1/2"	64 mm
G	3.25"	3 1/4"	83 mm	2.62"	2 5/8"	67 mm
Н	3.50"	3 1/2"	89 mm	2.75"	2 3/4"	70 mm
x.xx	Other					

Figure 2

#### **Rated Stroke**

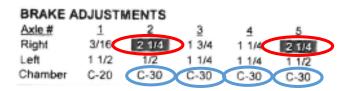
The rated stroke marking (A,B,C,D, etc.) is to be permanently stamped or embossed on the housing or on a corrosion-resistant tag permanently affixed or bonded to the housing. The font height of the stroke marking is to be at least 3/8 inches (10 mm) tall and at least 3 times the size of any other characters located on the same tag or within a 1/2 inch (12 mm) from the stroke marking if located directly on the housing.

Reminder: This is a recommended practice only and not a regulatory requirement to have brake chambers marked as per SAE Standards.



#### Code 393.47E (2 citations) - "Clamp or Roto type brake out-of-adjustment"

The measurements that triggered the apparent violations were each measured at 2 ½". We agree with the brake adjustment measurements taken at the Cambridge scale. Scale measurements are shown below (red circled values) from the "DRIVER/VEHICLE EXAMINATION REPORT" dated 1/27/20:



As shown above, the chambers on the vehicle were identified by the Cambridge scales as "C-30" brake chambers (blue circled values).

The chambers installed on the vehicle, however, were not identified properly on the "DRIVER/VEHICLE EXAMINATION REPORT" dated 1/27/20. The report states that C-30 brake chambers were measured. C-30 standard stroke brake chambers would indeed have a readjustment limit of 2" (orange circled value), based on the table shown in section 393.47(e) on page 537 of the November 2019 edition of the Federal Motor Carrier Safety Regulations handbook shown at right:

(e) Clamp, Bendix DD-3, bolt-type, and rotochamber brake actuator readjustment limits.

(1) The pushrod stroke must not be greater than the values specified in the following tables:

### Clamp-type brake chambers

Туре	Outside diameter	Brake readjust- ment limit: stan- dard stroke chamber	Brake readjust- ment limit: long stroke chamber
6	4 ½ in. (114 mm)	1 ¼ in. (31.8 mm).	
9	AND REAL PROPERTY AND REAL PRO	1 % in. (34.9 mm).	
12	with a swall mount	1 % in. (34,9 mm) .	1 % in. (44.5 mm).
16	6 % in. (162 mm)	1 % in. (44.5 mm)	2 in. (50.8 mm).
	6 = 1/12 in. (172 mm)	1 34 in. (44.5 mm)	2 in. (50.8 mm). 2 ½ in. (63.5 mm).
24	7 1/2 in. (184 mm)	1 1/4 in. (44.5 mm)	2 in. (50.8 mm). 2 ¼ in. (63.5 mm). <sup>2</sup>
30	8 % in. (206 mm)	2 in. (50.8 mm).	2 ½ in. (63.5 mm).
36	9 in. (229 mm)	. 2 % in. (or ≥ mm).	

<sup>1</sup> For type 20 chambers with a 3-inch (76 mm) rated stroke.

In actuality, the chambers on our vehicle are long stroke (3") brake chambers. These units should have been identified by the inspector as "C-30L" on the report. When properly identified as C-30L chambers, the readjustment limit for these chambers is 2 ½" (green circled value above).

The following page will show details of the presence of long stroke brake chambers.

<sup>&</sup>lt;sup>2</sup> For type 24 chambers with a 3-inch (76 mm) rated stroke.

#### Code 393.47E (2 citations) – "Clamp or Roto type brake out-of-adjustment".

The following shows the detail of the long strong brake chambers installed on the combination from case OH3203300600. Reference link to Commercial Vehicle Safety Alliance document detailing identification of long stroke brake chambers:

https://www.cvsa.org/wp-content/uploads/Inspection-Bulletin-2014-02-ID-Long-Stroke-Brake-Chambers.pdf

#### Photo of chamber in installed view:



Presence of square air line inlet bosses confirm "long stroke" chamber type. As per the CVSA file attached, the presence of square air line inlet bosses confirm "long stroke" chamber type.

Acknowledging that photos of the markings are difficult to see in the installed state, we removed the air chamber on the combination in question and took photos that clearly show it to be a long stroke chamber:



This photo shows embossed in the chamber casting: "USE ONLY 3 INCH LONG STROKE DIAPHRAGM".



This photo shows the embossed characters obscured in the installed photo above: "TYPE 30LP3" indicating long stroke.

Based on the table shown above and the type of chamber on our vehicle, the readjustment limit for this application should have been  $2 \frac{1}{2}$ " (circled in red on table). With the  $2 \frac{1}{2}$ " adjustment limit, the measurements taken at the Cambridge scales of  $2 \frac{1}{2}$ " would confirm our compliance and no violation.

Code 393.53B (2 citations) – "CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear".

The units involved with this apparent violation do indeed have an airbrake adjustment system that compensates for wear. As the 2 ¼" measurements taken by the official at the Cambridge scales indicate the adjustment to be within compliance, the airbrake adjustment system was functioning properly.

To ensure the apparent violation was corrected, we proceeded to remove and replace the slack adjusters and found them to be fully functional.

The photos below show the operation of the removed slack adjuster:

The paint marks on the slack adjuster below serve as a baseline of the positions of each surface:

This photo was taken after 6 cranks of the adjustment lever. Notice the difference in the position of the paint dots:





Based on the understanding that the brake adjustment was within the stated allowance and that each slack adjuster shows to be functioning properly, it clearly shows the CMV to have a functioning airbrake adjustment system that compensates for wear.

Code 396.3(a)(1)BOS – "BRAKES OUT OF SERVICE. The number of defective brakes is equal to or greater than 20 percent of the service brakes on the vehicle or combination: oos when in combination".

Based on the documentation provided for previously mentioned violation codes 393.47(3) and 393.53(b), we believe that this combination had no defective brakes. With this understanding, certainly less than 20 percent of the service brakes were defective.

This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

7/14/2021 10:11:21 AM

in

Case No(s). 20-0805-TR-CVF

Summary: Exhibit Exhibits 1-7 electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Grubaugh, Valerie