

Nikolas Wachlarowicz

From: V.Seropian [v.seropian@powergenenterprises.com]
Sent: Wednesday, October 15, 2014 7:18 PM
To: Nikolas Wachlarowicz; Joe Galindo
Subject: Fwd: Waukesha Gen #1. More photos

See attached

Regards,

Victor Seropian
Power Generation Enterprises, Inc.
office +1.818.484.8550 x 302 | fax+1.818.660.2283
mobile +1.818.968.8388

<http://www.powergenenterprises.com>
V.Seropian@powergenenterprises.com

Begin forwarded message:

From: Dave Camacho <dave@apexpowerinc.com>
Date: October 15, 2014 at 3:37:45 PM PDT
To: "V.Seropian" <v.seropian@powergenenterprises.com>
Subject: Waukesha Gen #1

Waukesha Gen #1

Dave Camacho | President
APEX Power, Inc.
P: 562-201-9684
F: 909-614-7358
Dave@ApexPowerInc.com

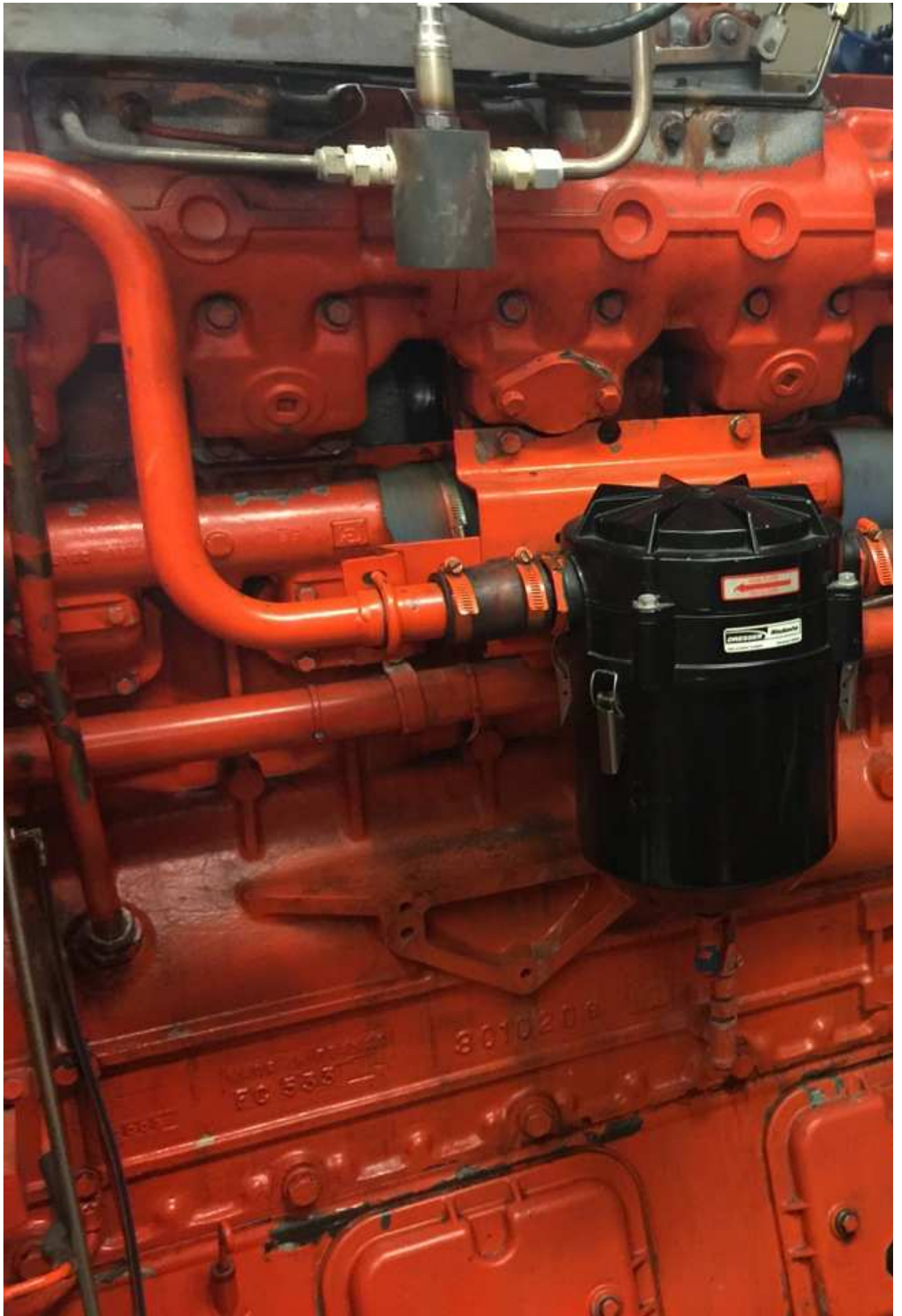








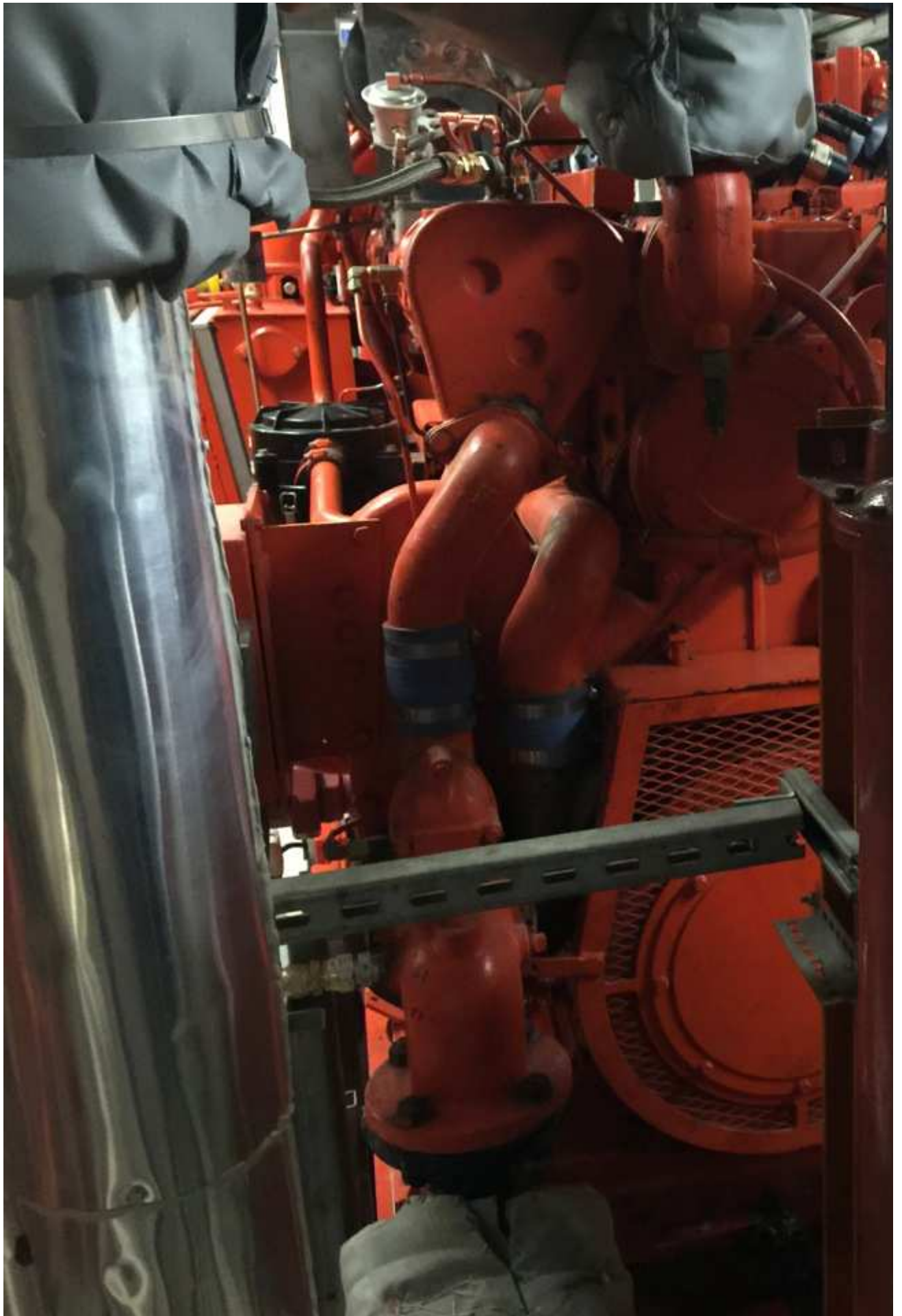


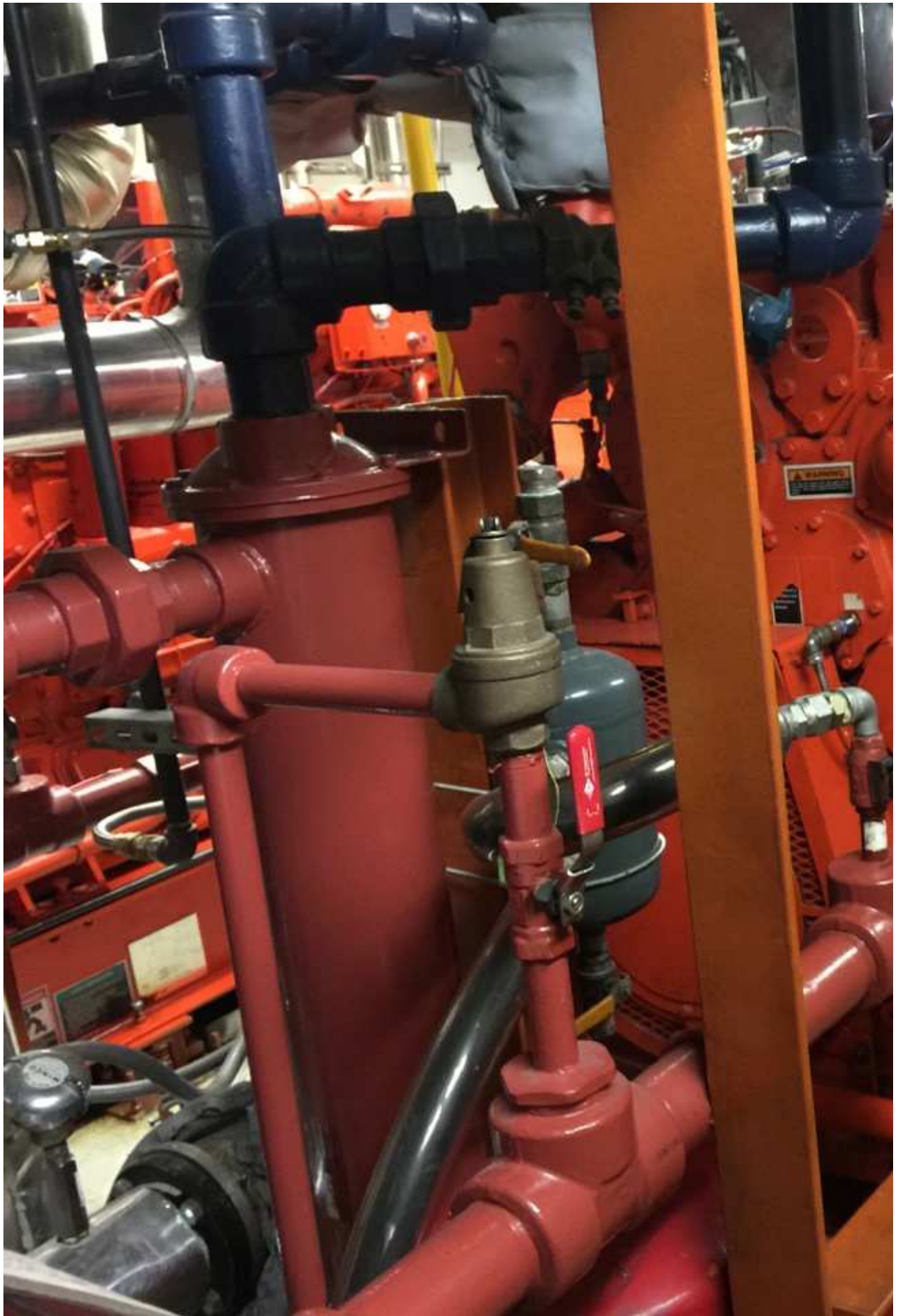


WAUKESHA









MODEL

H24GSID

Waukesha

SERIAL NUMBER

C-94644/2

WAUKESHA ENGINE
DRESSER INC.

COMP. RATIO

8.6/1

THIS ENGINE IS FACTORY EQUIPPED AS LISTED. HP/KW ARE ISO 3046/1. CONSULT A W.E.D. AUTHORIZED DISTRIBUTOR FOR APPLICATION ENGINEERING FOR ADDITIONAL INFORMATION

PRIMARY

SECONDARY

FUEL

NAT. GAS

MIN. WKI™

91

IGN. TIMING °BTDC

23

CARB ADJ.

0.35 CO

SERVICE HP/ kW

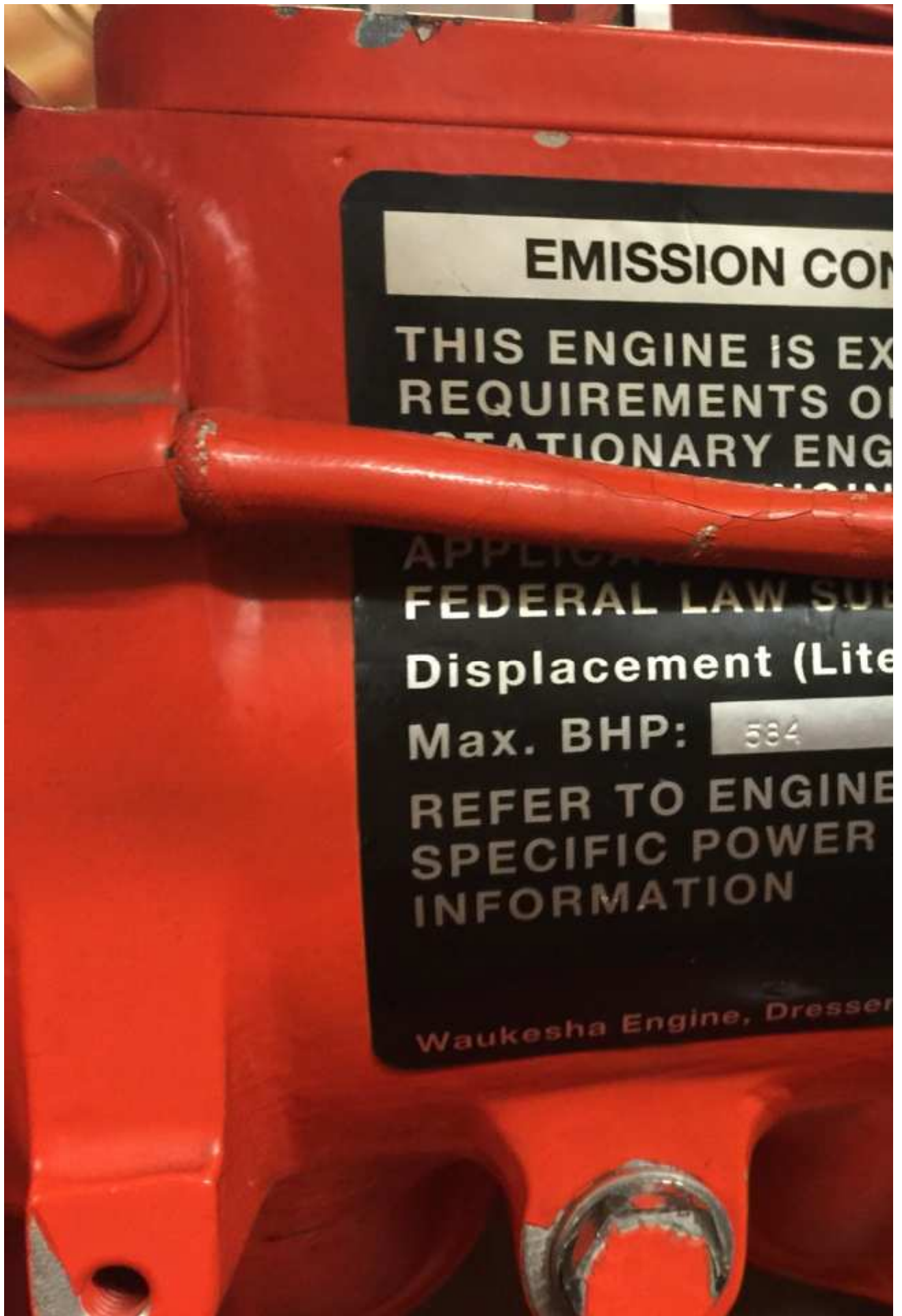
531/398

OVERLOAD HP/ kW

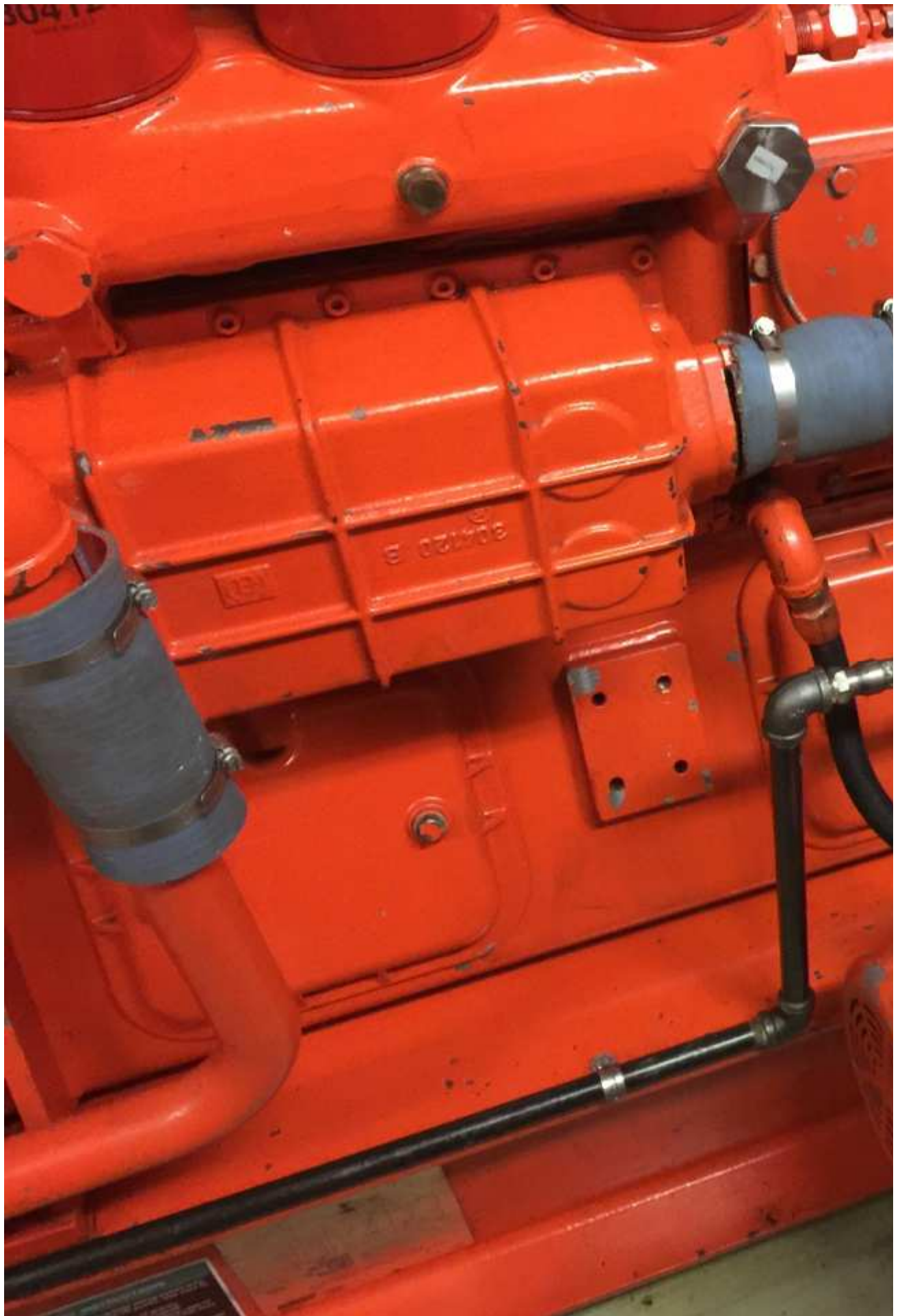
584/435

FIRING ORDER

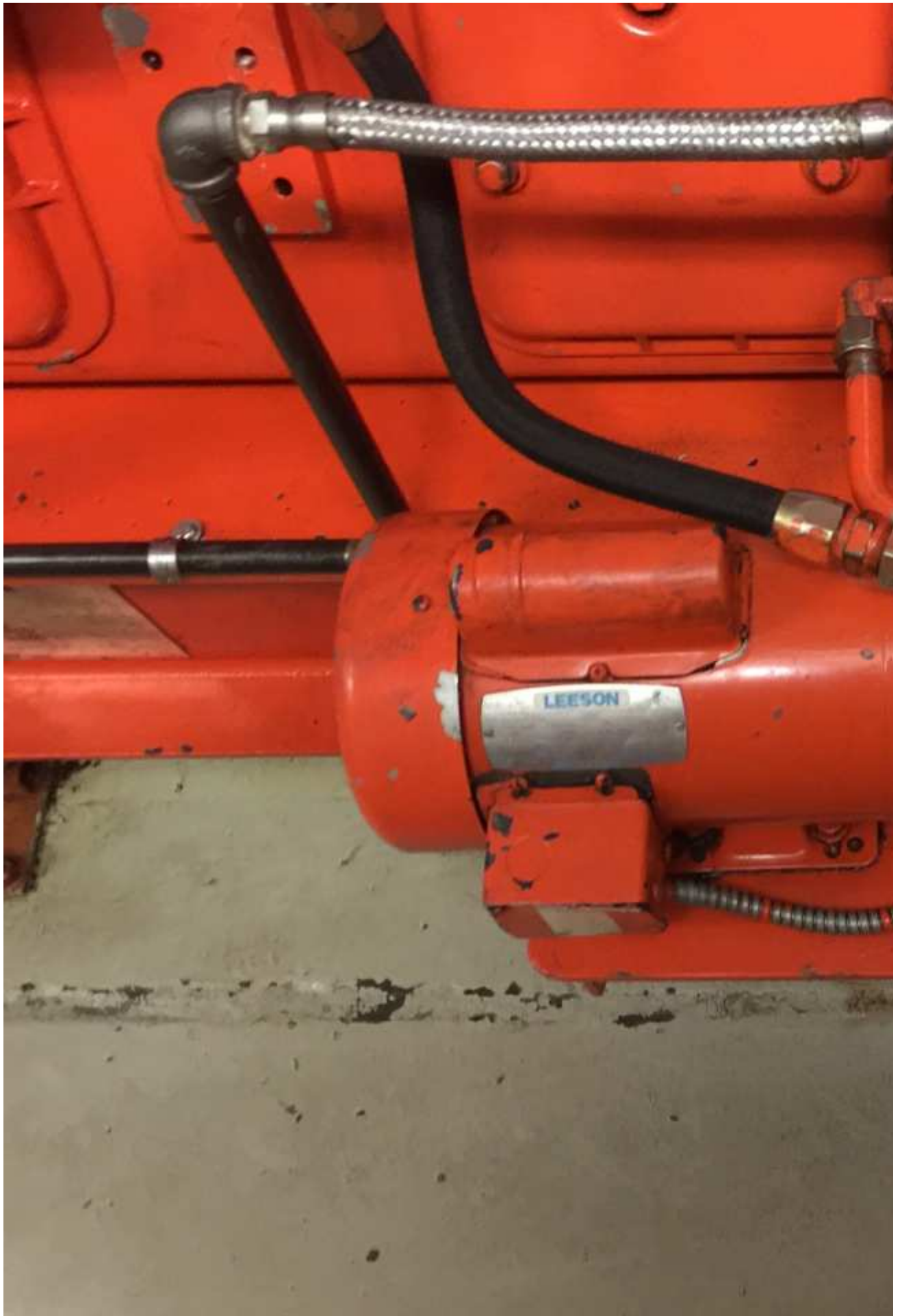
1-4-2-6-8-5-7-3

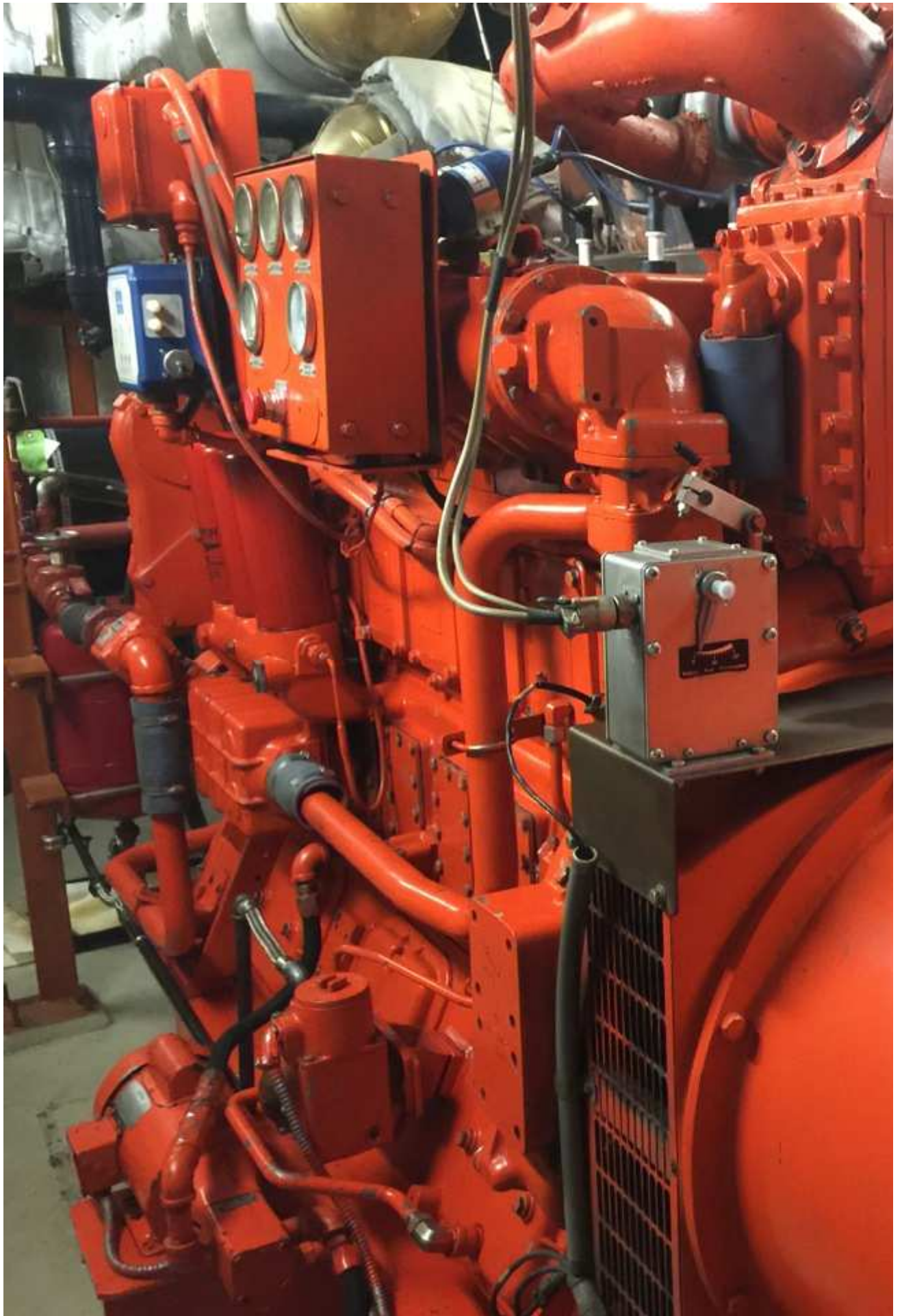














GENERATING

MODEL NO. VGF24GSTD
SERIAL NO. 3-94614-900/2
DATE AUG04
WEIGHT 12000 LBS
R.P.M. 3600 PHASE 3
VOLTS 480
HZ 60 P.F. 0.8
DUTY CONTINUOUS KW 1200
KVA 1500 AMPS 1500
DUTY CONTINUOUS KW 1200
KVA 1500 AMPS 1500
MAXIMUM SITE ALTITUDE 15000
MAXIMUM AMBIENT TEMP. 100

GENERATING

MODEL NO. VGF24GSTD

SERIAL NO. C-94644-900/2

DATE AUG04

WEIGHT 12000 LBS

R.P.M. 1800 PHASE 3

VOLTS 480/277

HZ 60 P.F. 0.8

DUTY CONTINUOUS KW 1500

KVA 1800 AMPS 2000

DUTY CONTINUOUS KW 1500

KVA 1800 AMPS 2000

MAXIMUM SITE ALTITUDE 15000

MAXIMUM AMBIENT TEMP. 100

PERFORMANCE CLASS 1





COMBINED SERVICE





GP1

GENERATOR PARALLELING
BREAKER
OUTGOING(TOP) = RISER #1

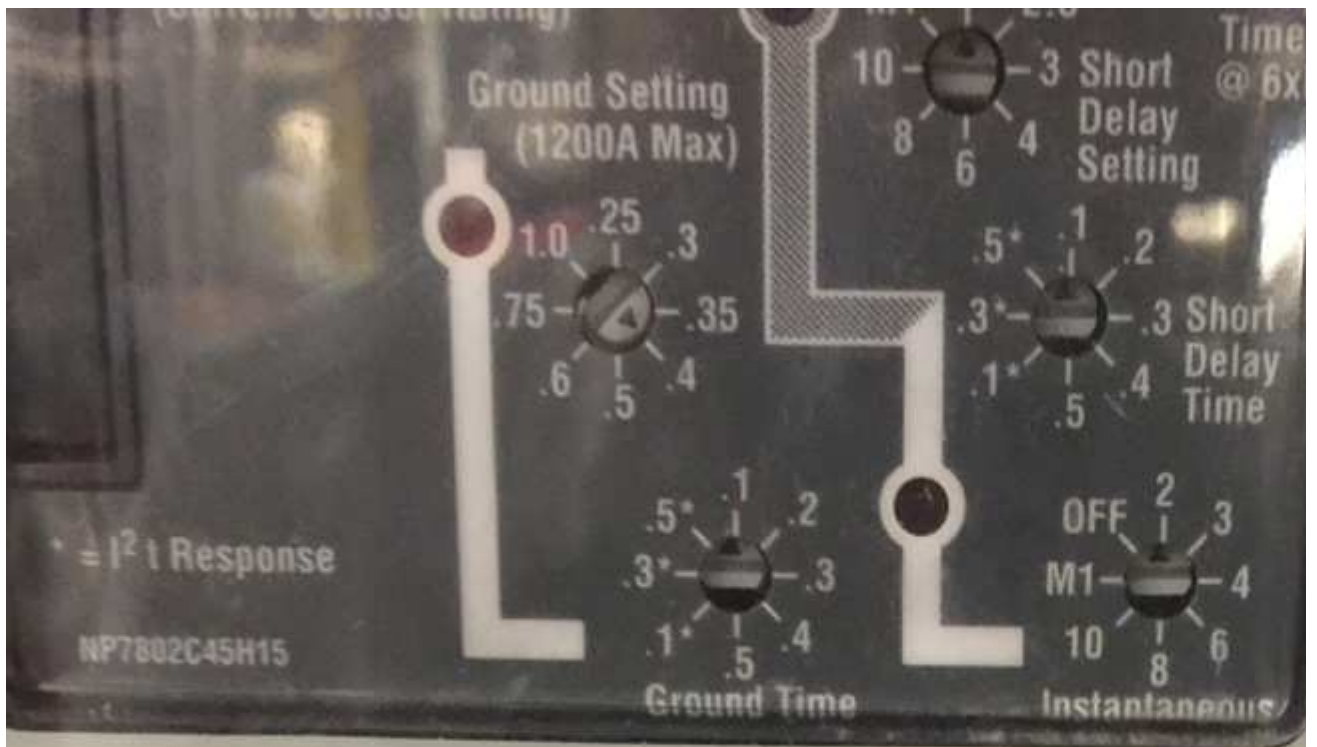
GENERATOR #1
PARALLELING BREAKER

480 VOLTS

NATURAL GAS
GENERATOR
POWER
UNIT#1
ON POSITION
ON

GENERATOR PARALLELING BREAKER





Magnum DS

MDN408

Low Voltage AC Power Circuit Breaker

800 Amp Frame

3 Pole

50/60 Hz

Interruption Ratings in Amps

Max Volts	Inst Trip	Short Delay
635	42,000A	42,000A
508	42,000A	42,000A
254	42,000A	42,000A

Accessories

Motor Operator 24 VDC

Oil-Bath Alarm



COGEN #1 STATUS HMI

PCD 7 D231 saie-burgess



F1 F2 F3 F4 F5
F6 F7 F8 F9 F10

Shift Quit I Enter

GENERATOR #1 PROTECTION RELAY

COM 1

**M-3410A
INTERTIE / GENERATOR
PROTECTION**

Integrated Protection Systems®

BECKWITH D-CO. INC.
ELECTRIC
Made in U.S.A.

PHASE UV 27	50-58 PHASE OV
GROUND UV 27G	58G GROUND OV
DIRECTIONAL PWR 32	60FL FUSE LOSS
LOSS OF FIELD 40	61 O/U FREQUENCY
CUR UNBALANCE 46	62C TRIPPER
VOLT UNBALANCE 47	DIAGNOSTIC
OVERCURRENT 58-59V	RELAY OK
OUTPUT 1	OUTPUT 2

FEEDER #1 INTERTIE PROTECTION RELAY

COM 1

RELAY OK SPKR
OK CLOSED TARGET PS 2 TARGET
TIME SYNC GAG END PS 1 RESET



**M-3520
INTERTIE PROTECTION**

Integrated Protection Systems®

BECKWITH D-CO. INC.
ELECTRIC
Made in U.S.A.

EXIT ENTER

COGEN #1 STATUS HMI

PCD 7 D231 sala-burgess



F1 F2 F3 F4 F5
F6 F7 F8 F9 F10

Shift Quit I Enter

GENERATOR #1 PROTECTION RELAY

COM 1

M-3410A
INTERTIE / GENERATOR
PROTECTION
*Integrated Protection Systems**

ROCKWELL
ELECTRIC
D
P.O. BOX 100
MADISON, WI 53701
MADE IN U.S.A.

PHASE UV 27	50/50 PHASE OV
GROUND UV 27G	50G GROUND OV
DIRECTIONAL PWR 32	60FL FUSE LOSS
LOSS OF FIELD 40	81 O/U FREQUENCY
OUR UNBALANCE 46	OSC TRIGGER
VOLT. UNBALANCE 47	DIAGNOSTIC
OVERCURRENT 50/50V	RELAY OK
OUTPUT 1	OUTPUT 2

FEEDER #1 INTERTIE PROTECTION RELAY

COM 1

RELAY OK
TMR SYNC

SPKR
CLOSED TARGET
OSC TRG

PS 2
PS 1

TARGET
RESET

22-Dec-2011 12:34:00.000

GENERATOR #1 PRO

Generator Feeder
Protection Settings
11/10/10 and for
11/10/10
11/10/10
11/10/10
11/10/10
11/10/10
11/10/10

COM 1

M-3410A
INTERTIE / GENERATOR
PROTECTION

Integrated Protection Systems®

BECKWITH
ELECTRIC  CO., INC.
Made in U.S.A.

FEEDER #1 INTERTIE PF

COM 1

RELAY OK (green) BRKR CLOSED (red) TARGET (red) PS 2 (green) TARGET RESET (red)

TIME SYNC (green) OSC TRIG (red) DMG (red) PS 1 (green)

M-3520
INTERTIE PROTECTION

Integrated Protection Systems®

BECKWITH
ELECTRIC  CO., INC.
Made in U.S.A.

TARGET 06 05 04

↑
← →
↓
EXIT

GENERATOR
CONTROL



