BLACKSTONE ADVANCED TECHNOLOGIES LLC

Woman Owned Business*

Jamestown, New York

Sheet Metal and Light Structural Fabrications

275,000 sq. ft

Company History

1940	Marine & Office Furniture
1994	Locomotive Mufflers for General Electric
1995	GE San Francisco Bay Transit Project
	First Marine Furniture Order
	Acquire Jamestown Facility
	Employment Exceeds 50
1997	ISO Certification
1998	Employment Exceeds 75
	1st Transit HVAC Enclosure – Thermo King SEPTA
1999	NASA Console Multi Year Program
	Acquire Buffalo Facility for Larger Items
2000	Contract Direct with USPS
2002	Awarded Virginia Class Submarine Block 1 – 3 Furniture Contract
2003	Awarded New York City Transit R160 HVAC Contract
	Contracted by USN to Design/Build SCBA Lockers
	Lockheed Martin USPS APPS Multi-Year Program 2008 Employment Exceeds 200-Sales Exceed $20M
2012	Implemented Cellular Manufacturing
2014	Heather & Richard Turner purchased BBEI : BAT LLC
2015	Implemented EPICOR ERP System
2016	Awarded CUBIC Transportation Pay Fare Cabinet Contract
2017	Awarded Virginia Class Submarine Block 4 Furniture Contract

Blackstone Team

"Customer Satisfaction Specialist" is Everyone's Job Title

- Progressive Philosophy & Culture
- Encourage Innovation & Creativity
- Employee Involvement & Open Communication
- Supportive of Change & Improvement
- Dedicated & Responsive to Customer Needs & Demands
- Thriving to Learn New Technology

Blackstone Team

ISO 9000 Assessor

AWS Certified Weld Inspectors

ASQ Certified Quality Engineers

AWS Certified Welders

Military Quality Program Compliance

MIL-STD 45208A, MIL-STD 9858

Production Processes

Cutting & Punching

Forming

Welding

Finishing, Graining & Polishing

Painting & Powder-Coating

Assembly

Inspection & Test

Typical Materials Use

Stainless, Steel & Aluminum

Sheet Material Thicknesses:
.030″ to .500″+

Structural Steel

Aluminum Extrusions

Laser Cutting Systems

2000 Watt Cincinnati CL-707 Ultra High Speed Laser Systems
(3) machines with 6′ x 12′ bed - (2) machines with 5′ x 10′ bed
Positioning accuracy of +/- .002″ over the entire cutting area
Positioning speeds of up to 6,000 inches per minute

Forming and Bending

Welding Certifications

AWS D1.1– Structural Welding

AWS D9.1– Sheet Metal Welding

AWS D1.2– Aluminum Welding

AWS B2.1– Spec for WPR & PQR's

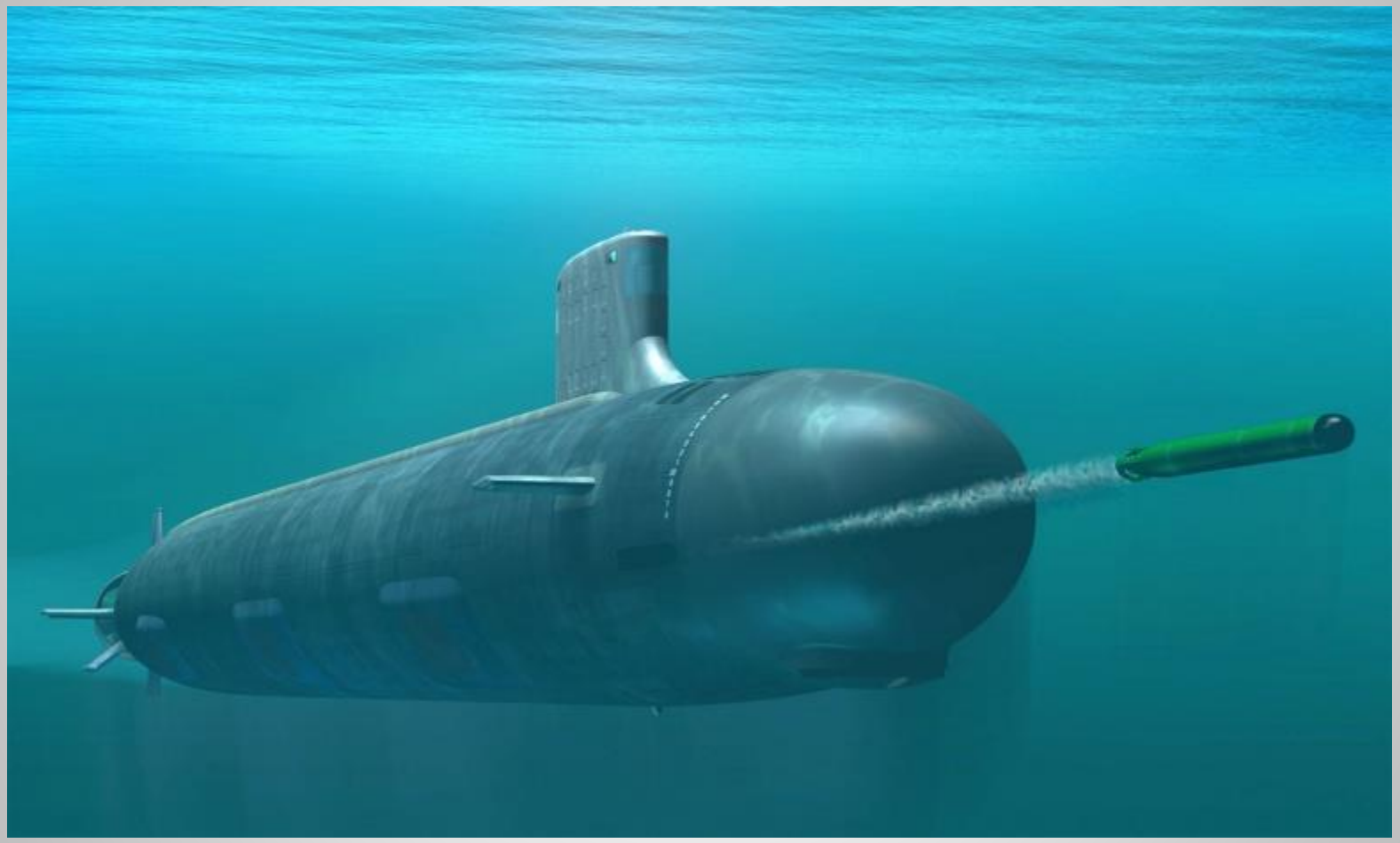
Customer Specific Weld Processes

Experience and Reputation

General Electric
Alstom
WABTEC
Nippon Sharyu
Mitsubishi
Lockheed Martin

Bombardier
NAVSEA
Westinghouse
Kawasaki
Knorr Brake
CAF

Virginia Class Attack Submarine



Outfit entire ship with all Marine furniture and SCBA lockers.
Total number of ships built: 18 (Block 1 – 4)

Self Contained Breathing Apparatus Lockers

SCBA (Self Contained Breathing Apparatus) Lockers for the Department of Defense

Lockers hold air tanks of various sizes and weights

Finished with high-gloss red powder

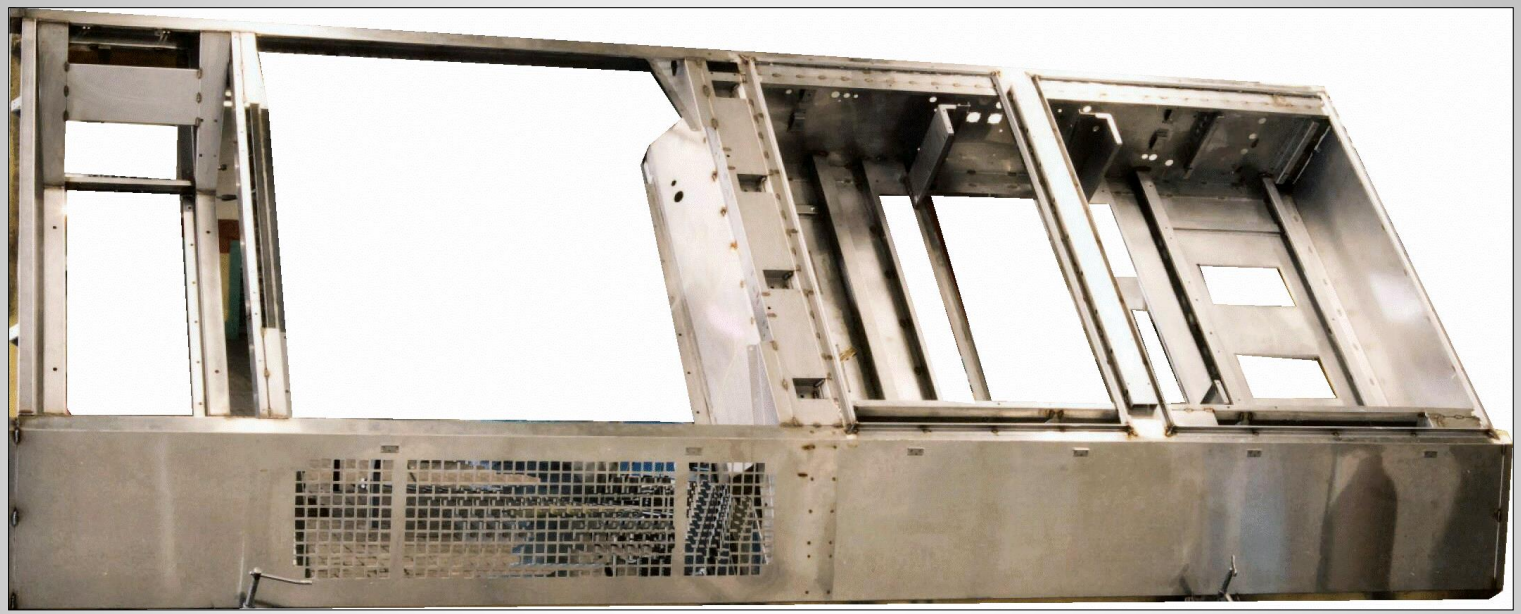
Marine Furniture

Scientific Tables

Transit Systems

WABCO “DART” Transit Car HVAC Housing

Transit Systems



ThermoKing “SEPTA” Transit Car HVAC Housing

This was an HVAC united produced for Thermo King for SEPTA Philadelphia

Material: 18 GA Stainless Steel & fnished with a brush satin finish

Size: 14’ L 8” W x 16” H

Transit Systems

Westcode “SEPTA” Transit Car HVAC Housing

Transit Car HVAC Enclosure Weldments

Customer: Westcode

Car Builders: Alstom & Kawasaki

Transit Systems

NYC "R160" Transit Car HVAC Housing

Transit System

Material
.040″ to .125″
Stainless Steel

Size
12′ L x 7′ W x 2′ H

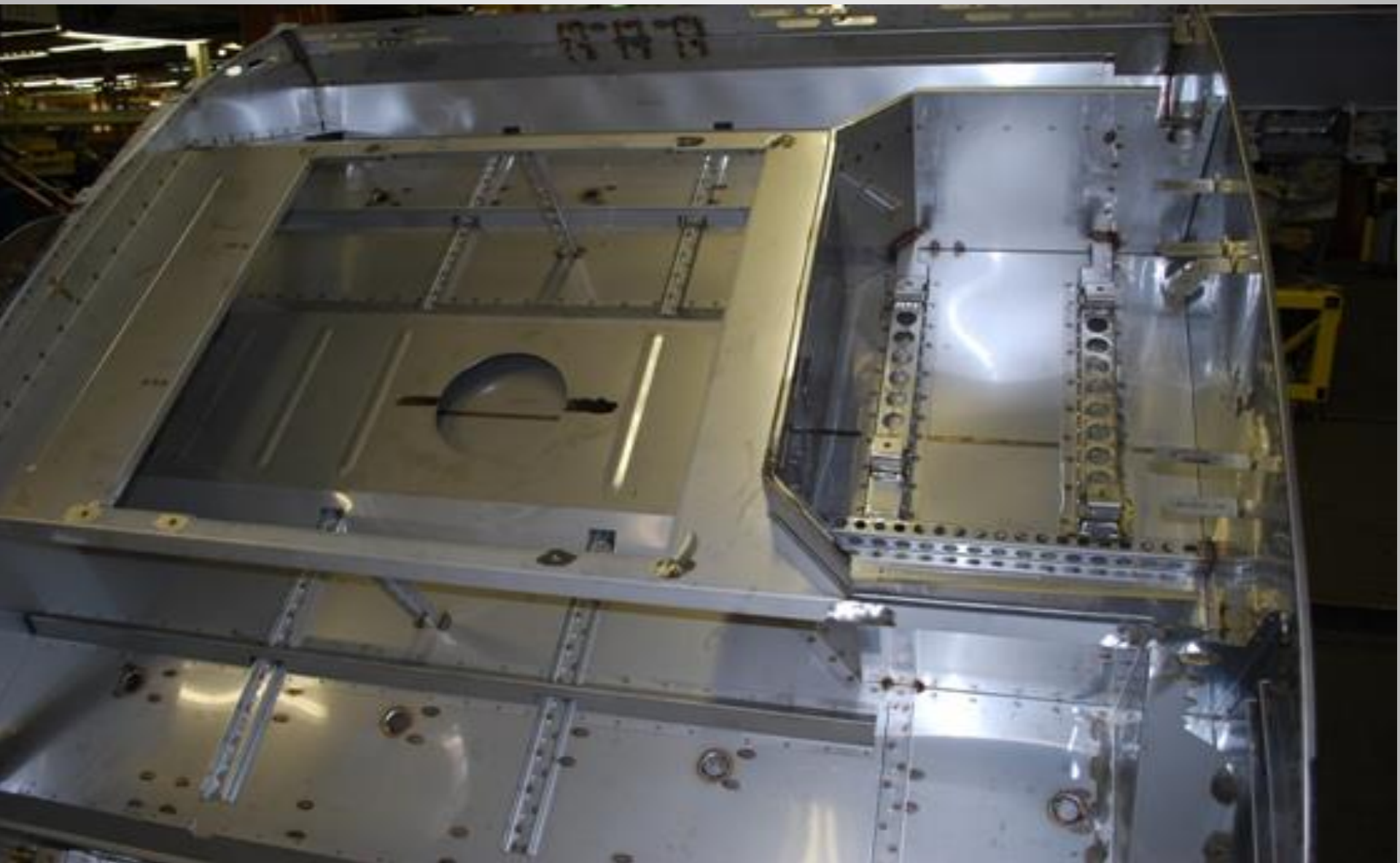
Finished Weight
750 lbs.

# of Components
659

700 Inches of Weld

2200 Spotwelds

Production Volume/Rate
3000+ Units provided to date
26-28 units per week



Transit Systems

“Bi-Level” Transit Car HVAC Housing
Bombardier – Seattle, Montreal

Transit Systems

CUBIC Pay Fare Cabinet

This unit was manufactured for CUBIC Transportation Systems – end customer is the New York City Transit Authority
Construction is stainless steel with a high cosmetic exterior

Transit Systems

Adtranz “R142” AC/DC Inverter Frame

This unit was manufactured for Adtranz-Daimler-Bombardier, NYC
Construction is of steel. The interior is powder-coated and the exterior is wet spray paint.
Size: 12” L x 7” W x 2” H
Weight: 750 LBS
Components: 300 Plus

Off Highway Equipment

Dynamic Brake Box/Silencer Package for a Mine Hauler

Locomotive & Rail Maintenance Equipment

Size - 7′ H x 10′ W x 3.5′ D

Weight - 1000+ lbs.

Components - 100+

Powder-coated interior

Wet sprayed exterior

Some hardware was included

Locomotive Electrical Enclosure

Blackstone manufactured 100 enclosures for Union Pacific

Locomotive & Rail Maintenance Equipment

Locomotive Wiring Raceway

Fabricated from 2” X 3” X ¼” Structural Angle and 1” X 2” x 3/16” structural channel
Finished with a prime paint

Locomotive & Rail Maintenance Equipment

Locomotive Wiring Raceway

Fabricated from 2” X 3” X ¼” Structural Angle and 1” X 2” x 3/16” structural channel
Finished with a prime paint

Locomotive

Parcel & Postal Equipment

USPS APPS Program

Blackstone has delivered to the following locations:

Tampa Bay (2) Los Angeles (2) Santa Clarita
Kansas City

Sacramento
Milwaukee
Chicago
Kearney, NJ

Anaheim
Phoenix
Orlando
Brooklyn

San Jose
Dulles, VA
Nashua, NH
Omaha

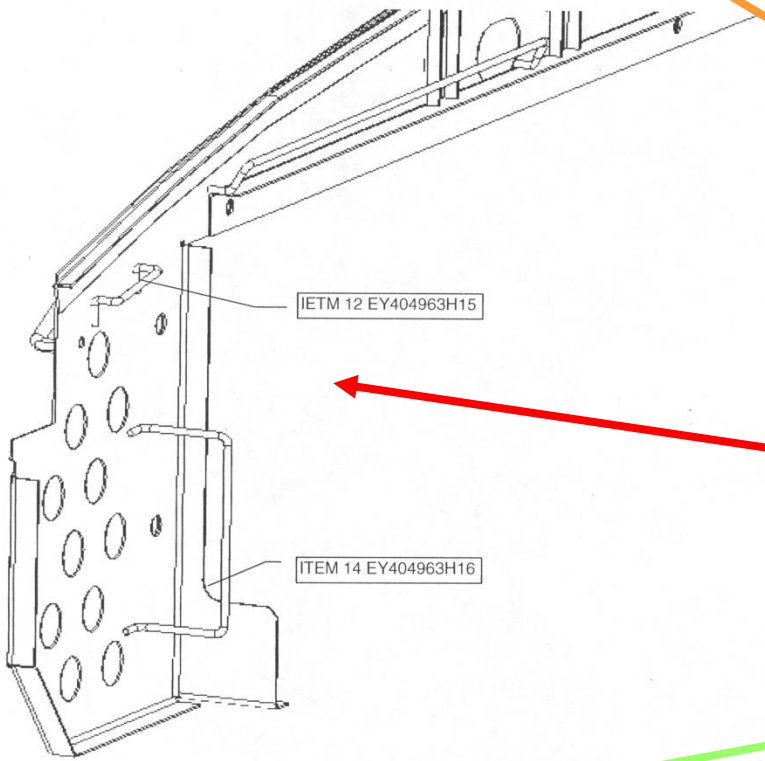
Charlotte
Houston(2)
Scarborough
Baltimore

Breakdown of the Work Instruction

BLACKSTONE SPECIFICATION
R160 FABRICATION CELL

SP000085-913

OP		INITIAL
33	STEP 1- Reference drawing EY101900 zone G3 to H3 and photos STEP 2- Obtain EY101913 weldment from step 32. STEP 3- Obtain 1 item 12 (EY404963H15) Wire Support. STEP 4- Obtain 1 item 14 (EY404963H16) Wire Support. STEP 5- Using fixture #____ locate items 12 and 14 to EY101913 weldment and tack weld into position. STEP 6- Mig weld 3/16 inch long on both sides of each leg on items 12 and 14 to EY101913 weldment	0.25



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Engineering Work Instruction ID

Production Sign-off

Description of Tasks

Program Identification

Pictorial or drawing Element

Controlled Document Status

Sample Documentation Pages

BLACKSTONE SPECIFICATION
R160 FABRICATION CELL

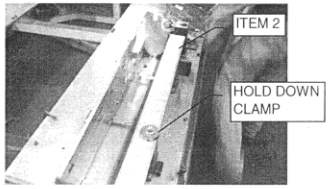
2896

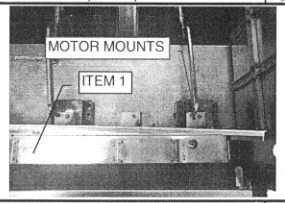
SP000085-210

WORK CENTER 3 MAIN WELDMENT (EY104210 FRAME ASSEMBLY) SERIAL #

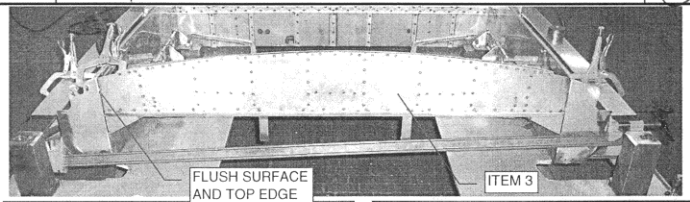
SPOT WELD PER RYOUSAYO0047004-D AND WELD PER SPW000038 & ANSI B2.1.009

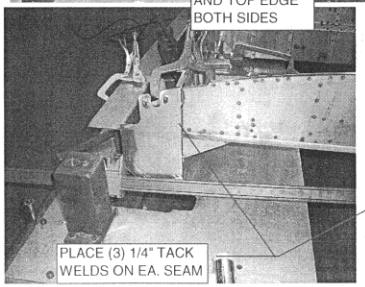
OPERATION DESCRIPTION		HRS= 8.00
OP		INITIAL
1	STEP 1- Reference drawing EY104210, EY101911 and photos. STEP 2- Obtain (1) Item 1 (EY101903G01) Bottom Plate Middle and (1) Item 2 (EY101903G02) Bottom Plate Middle. STEP 3- Locate items 1 & 2 on fixture # 4423 and clamp into position.	0.25

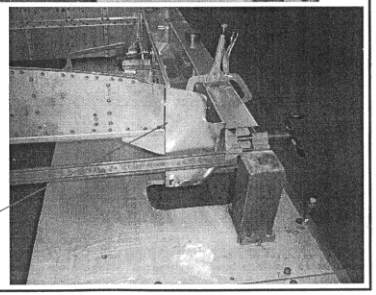




OP		INITIAL
2	STEP 1- Reference drawing EY101911 and photos. STEP 2- Obtain 1 Item 3 (EY101904) Filter Frame End. STEP 3- Locate item 3 between items 1 & 2 Bottom Plate Middle's. Flush the edges of all parts - make sure spot weld flanges are tight. Clamp and tack weld into position.	0.20







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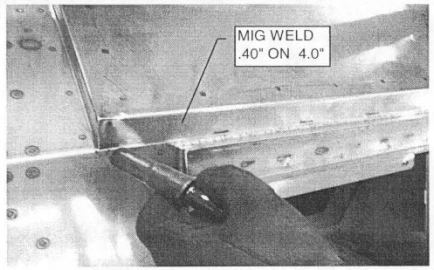
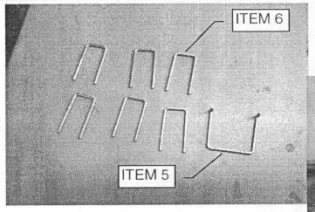
BLACKSTONE SPECIFICATION
R160 FABRICATION CELL

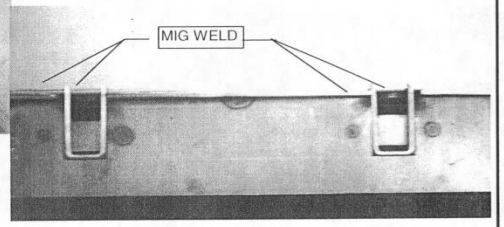
SP000085-913

30	STEP 1- Reference drawing EY101913 zone J12 (weld correction copy) and photos STEP 2- Mig weld seam .40" on 4.0" centers per print.	INITIAL 0.10



OP		INITIAL
31	STEP 1- Reference drawing EY202802 zone D2-D10 and photos STEP 2- Obtain 1 item 5 (EY404963H14) wire support STEP 3- Obtain 6 item 6 (EY404964H06) wire supports STEP 4- Using fixture 4475 locate items 5 and 6. STEP 5- Tack weld into position and remove the fixture STEP 6- Mig weld .38" long on both sides complete per print. STEP 7- Clean and dress the welds.	0.25





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The R160 HVAC Program is an excellent example of Blackstone's level of process control. Above are 2 sample pages of the 135 page Engineering Work Instruction utilized in the fabrication of every unit.

Thank you