

"DOCUMENT UNCONTROLLED IF PRINTED"

DOC #	PROCESS NAME	PAGE	REVISION	STATION	BY	DATE
AR839	Upper Shock/Track Bar Mount Replacement	1 OF 1		SER-E	C.WARD	6/19/2017

Read process before beginning. If you do not understand any part please contact: Chris Ward, VP of Parts and Warranty at 1-866-953-5555 or by E-mail @ cward@ARBOCSV.com.

Good Mechanics safety practice must be followed on any repairs.

Safety practices should include but not be limited to properly supporting the chassis, axles, blocking tires, and a work area free of clutter.

Complaint: Cracking at Upper Shock and Track Bar Mounts on Chassis Frame

Cause: Concentrated Stress Loads

Correction: Drill 1/8" Stop Holes into Frame at the end of cracks and weld provided retrofit bracket in affected areas

Vehicles Affected: All Spirit of Mobility (SOM) Units with Reyco Granning Rear Suspension

Labor Operation Code: 0116502

ARBOC Work Orders Provided for Affected Units

Labor Time Allowance: 4 hours per unit

Parts Returned: No

Tools Required

Hoist (ability to raise and support the unit)

Welder

Flame/Spark Resistant Tarp (use to protect interior harness, fuel lines, brake lines, etc.)

Parts Required

1310474 Bracket, Shock Mount Reyco Retrofit Curbside

1310475 Bracket, Shock Mount Reyco Retrofit Roadside
NAPA Rubberized Undercoating (not supplied)

Repair Instructions:

Step 1: Pull unit onto hoist, chock front tires to prevent bus from rolling forward or backwards.

Step 2: Disconnect positive (red lead) battery cable from the chassis and auxiliary battery.

Step 3: Raise unit to a comfortable working height.

Step 4: Remove Fasteners from both Upper Shocks and Track Bar (keep for future use) to swing components out of way

Step 5: Remove Upper Shock Mount (Roadside), Upper Shock Mount (Curbside), and Track Bar Mount (Curbside)

Step 6: If unit is currently experiencing cracking, drill 1/8" hole at the ends of the existing cracks (right photo below)



Step 7: Weld any existing cracks and clean surface



Step 8: Following the attached weld guidelines, weld reinforcement plates with mounts attached to roadside (1310475) and curbside (1310474)

Step 9: Using a high quality Rubberized Undercoat, paint repaired area. NAPA Rubberized Undercoating or Mac's 8400 Rubberized undercoat (not supplied).

Step 10: Re-install fasteners for Upper Shocks (Torque = 140-150 FT-LBS) and Track Bar (Torque = 400-450 FT-LBS)

Step 11: Lower unit and connect positive (red lead) battery cable to the chassis and auxilliary battery.

Step 12: Remove from hoist

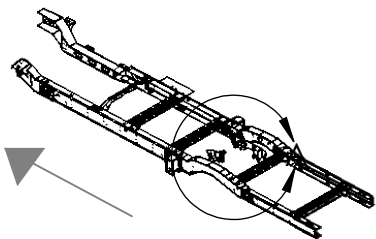
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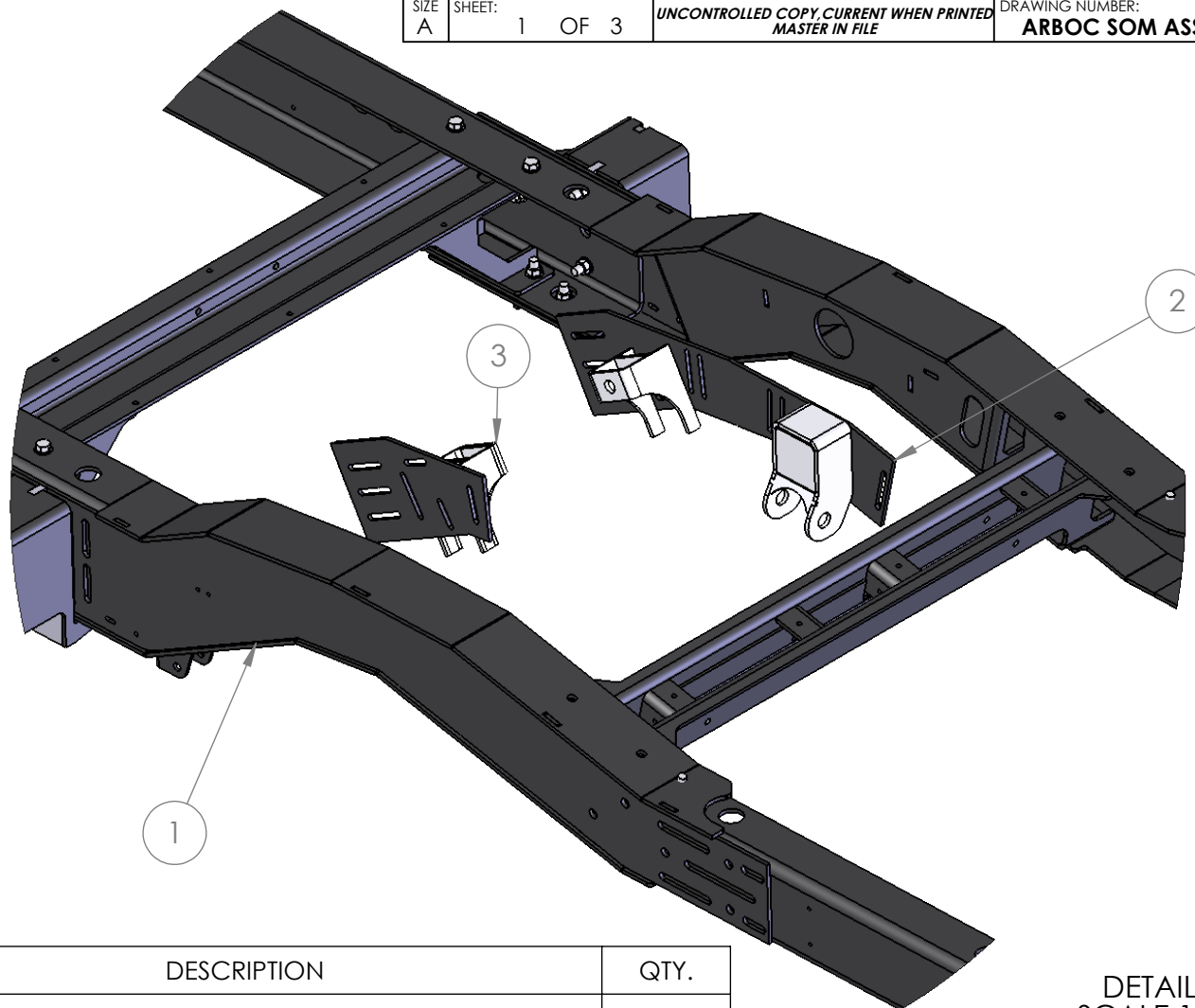
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2

1

SIZE
ASHEET:
1 OF 3UNCONTROLLED COPY, CURRENT WHEN PRINTED
MASTER IN FILEDRAWING NUMBER:
ARBOC SOM ASSYREV
-

FRONT OF BUS

DETAIL A
SCALE 1 : 10

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	ARBOC CHASSIS FRAME	ASSEMBLY, FRAME, 191 WB, SOM	1
2	1310474	SUSPENSION RETROFIT, REYCO GRANNING, SOM, CS	1
3	1310475	SUSPENSION RETROFIT, REYCO GRANNING, SOM, RS	1

MATERIAL: SEE BOM

ALLOY: SEE BOM

BLANK SIZE:

FINISH WEIGHT:

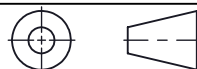
DENSITY:

FINISH:

SURFACE AREA:

ALLOCATION MATL' SIZE:

ALLOCATION MATL' WEIGHT:

TOLERANCES:FLOOR PLAN DIMS: $\pm 1/4"$
FRACTIONAL DIMS: $\pm 1/8"$
2 PLACE DECIMAL DIMS: $\pm .06$
3 PLACE DECIMAL DIMS: $\pm .015$ **THIRD ANGLE PROJECTION**

ARBOC SPECIALTY VEHICLES CLAIMS PROPRIETARY RIGHTS IN THE MATERIAL DISCLOSED HEREON. NEITHER THIS DRAWING NOR ANY REPRODUCTION THERE OF MAY BE USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION IN WRITING FROM ARBOC SPECIALTY VEHICLES TO THE USER SPECIFICALLY REFERRING TO THE DRAWINGS. INFORMATION CONTAINED HEREON MAY BE THE EXPRESS PROPERTY OF ARBOC SPECIALTY VEHICLES AND PROTECTED IN THE FORM OF A U.S. PATENT.

DOC. # AME-008A
LAST REVISED: 10-18-2016

SIGNATURES/DATES

DRAWN: DH 6/8/2017

CHECKED:

ARBOC Specialty Vehicles

DESCRIPTION:

ASSEMBLY, FRAME, 191 WB, SOM SUSP REINF

DRAWING
SIZE: ADRAWING
NUMBER: ARBOC SOM ASSYPART REV
-

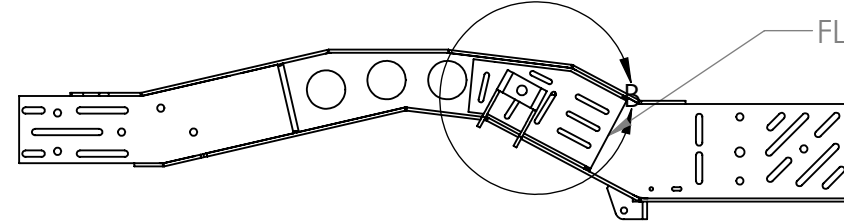
SCALE: 1:100

NEXT ASSY: -

SHEET: 1 OF 3

RS RETROFIT INSTALLATION

• 1310475



FLUSH WITH EXISTING PLATE

WELD PATTERN TO REDUCE HEAT BUILD-UP

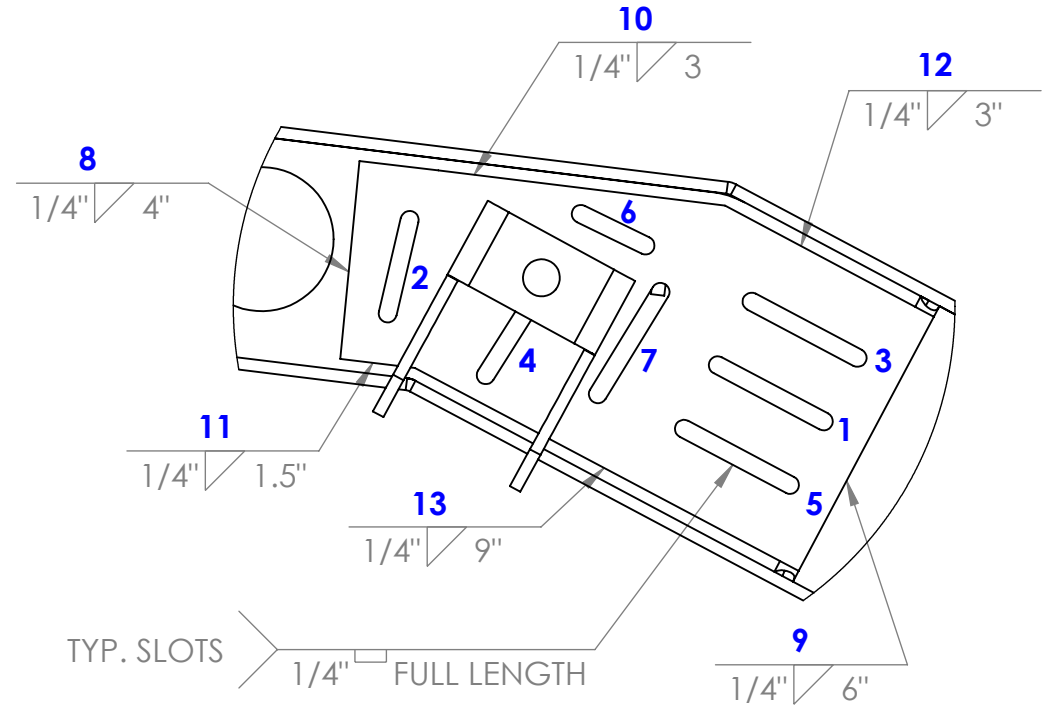


FIGURE 1: WELD PATTERN

INSTALLATION PROCEDURE

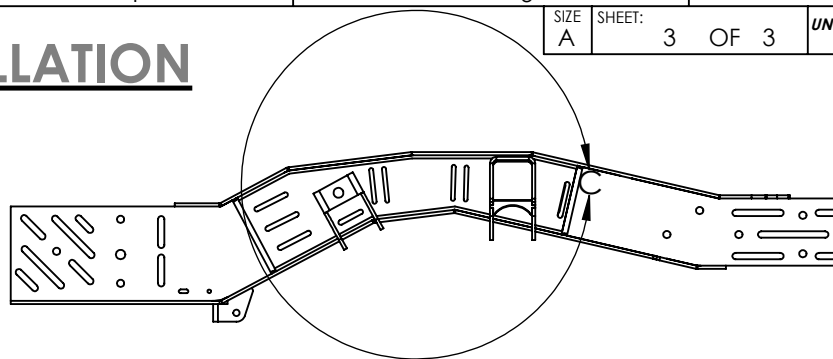
- REMOVE ALL EXISTING BRACKETS
- DRILL STOP ANY FRAME CRACKS AND FILL WITH WELD. GRIND SURFACE SMOOTH
- PLACE RS RETROFIT BRACKET, AS SHOWN. THERE SHOULD BE A 1/4" SPACE ABOVE AND BELOW FOR CLEARANCE AROUND EXISTING WELD BEADS
- WITH BRACKET FLAT AGAINST FRAME, CLAMP AND WELD AS SHOWN IN FIGURE 1.

MATERIAL: SEE BOM	TOLERANCES: FLOOR PLAN DIMS: ±1/8" FRACTIONAL DIMS: ±1/16" 2 PLACE DECIMAL DIMS: ±.01 3 PLACE DECIMAL DIMS: ±.005	ARBOC SPECIALTY VEHICLES CLAIMS PROPRIETARY RIGHTS IN THE MATERIAL DISCLOSED HEREON. NEITHER THIS DRAWING NOR ANY REPRODUCTION THEREOF MAY BE USED TO MANUFACTURE ANYTHING SHOWN HEREON WITHOUT PERMISSION IN WRITING FROM ARBOC SPECIALTY VEHICLES TO THE USER SPECIFICALLY REFERRING TO THE DRAWINGS. INFORMATION CONTAINED HEREON MAY BE THE EXPRESS PROPERTY OF ARBOC SPECIALTY VEHICLES AND PROTECTED IN THE FORM OF A U.S. PATENT. DOC. # AME-008A REV2 : 6-26-14	ARBOC  <i>Specialty Vehicles</i>			
ALLOY: SEE BOM			DESCRIPTION: ASSEMBLY, FRAME, 191 WB, SOM SUSP REINF			
BLANK SIZE:						
FINISH WEIGHT:						
DENSITY:						
FINISH:	THIRD ANGLE PROJECTION					
SURFACE AREA:		SIGNATURES/DATES		DRAWING SIZE: A	DRAWING NUMBER: ARBOC SOM ASSY	PART REV -
ALLOCATION MATL' SIZE:		DRAWN: DH 6/8/2017				
ALLOCATION MATL' WEIGHT:			CHECKED:		SCALE: 1:20	NEXT ASSY: -

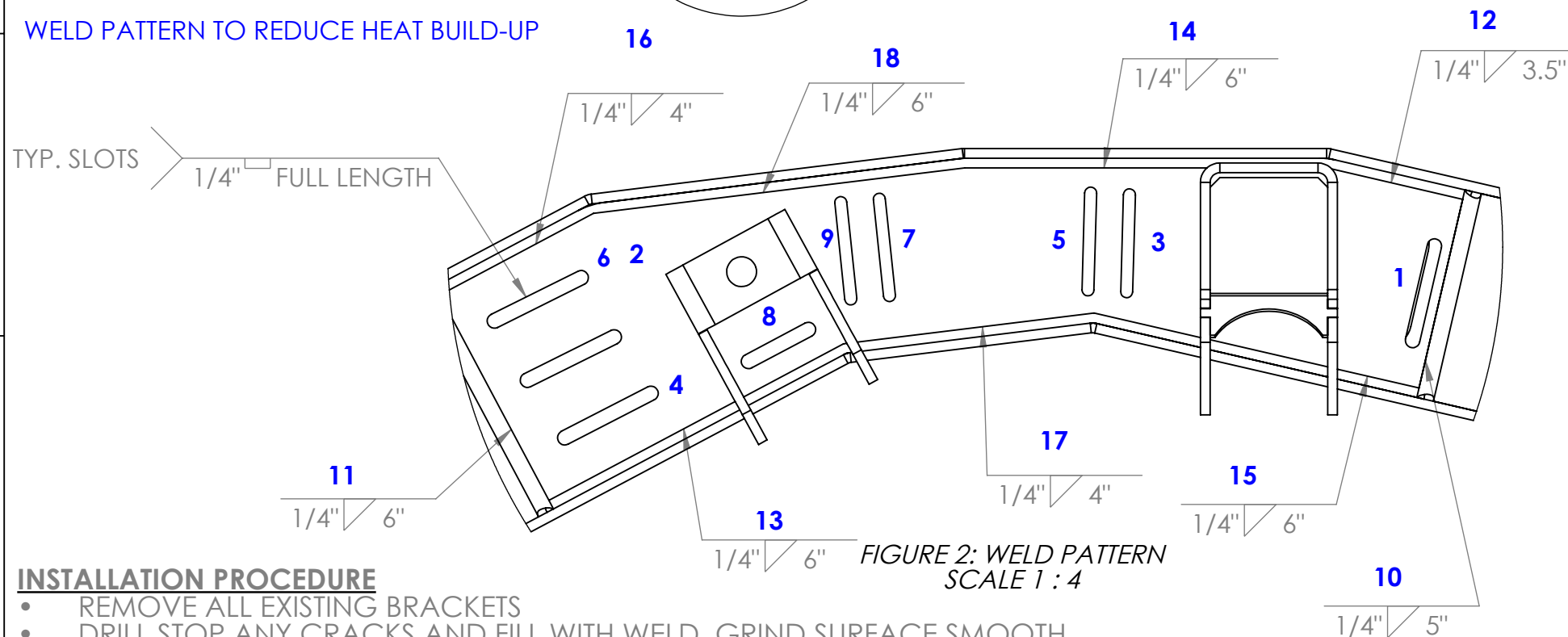
CS RETROFIT INSTALLATION

• 1310474

SIZE A SHEET: 3 OF 3 UNCONTROLLED COPY, CURRENT WHEN PRINTED MASTER IN FILE DRAWING NUMBER: ARBOC SOM ASSY REV -



WELD PATTERN TO REDUCE HEAT BUILD-UP



INSTALLATION PROCEDURE

- REMOVE ALL EXISTING BRACKETS
- DRILL STOP ANY CRACKS AND FILL WITH WELD. GRIND SURFACE SMOOTH
- PLACE CS RETROFIT BRACKET, AS SHOWN. THERE SHOULD BE A 1/4" SPACE ABOVE AND BELOW FOR CLEARANCE AROUND EXISTING WELD BEADS
- WITH BRACKET FLAT AGAINST FRAME, CLAMP AND WELD AS SHOWN IN FIGURE 2.

MATERIAL: SEE BOM

ALLOY: SEE BOM

BLANK SIZE:

FINISH WEIGHT:

DENSITY:

FINISH:

SURFACE AREA:

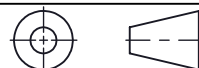
ALLOCATION MATL' SIZE:

ALLOCATION MATL' WEIGHT:

TOLERANCES:

FLOOR PLAN DIMS: $\pm 1/8"$
FRACTIONAL DIMS: $\pm 1/16"$
2 PLACE DECIMAL DIMS: $\pm .01$
3 PLACE DECIMAL DIMS: $\pm .005$

THIRD ANGLE PROJECTION



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ARBOC Specialty Vehicles

DESCRIPTION:

ASSEMBLY, FRAME, 191 WB, SOM SUSP REINF

SIGNATURES/DATES

DRAWN: DH 6/8/2017

CHECKED:

DRAWING SIZE:

A

SCALE: 1:24

DRAWING NUMBER:

ARBOC SOM ASSY

NEXT ASSY: -

PART REV

-

SHEET: 3 OF 3