

LOOSE PARTS WEEKLY DZ1 MEETING

Tuesday, October 1st 2024

9:00 ~ 10:00 am

CR 219



Status Tracking Sheet



Teaching Schedule



SUBARU



SUBARU of INDIANA AUTOMOTIVE, INC.

HOUSEKEEPING

Out this weekend:

- Leo

Weekend of Oct. 12th: B Line Facility Try

Landon Out

OBJECTIVES 目標

A-Line

- Project Updates
- Weekend Work

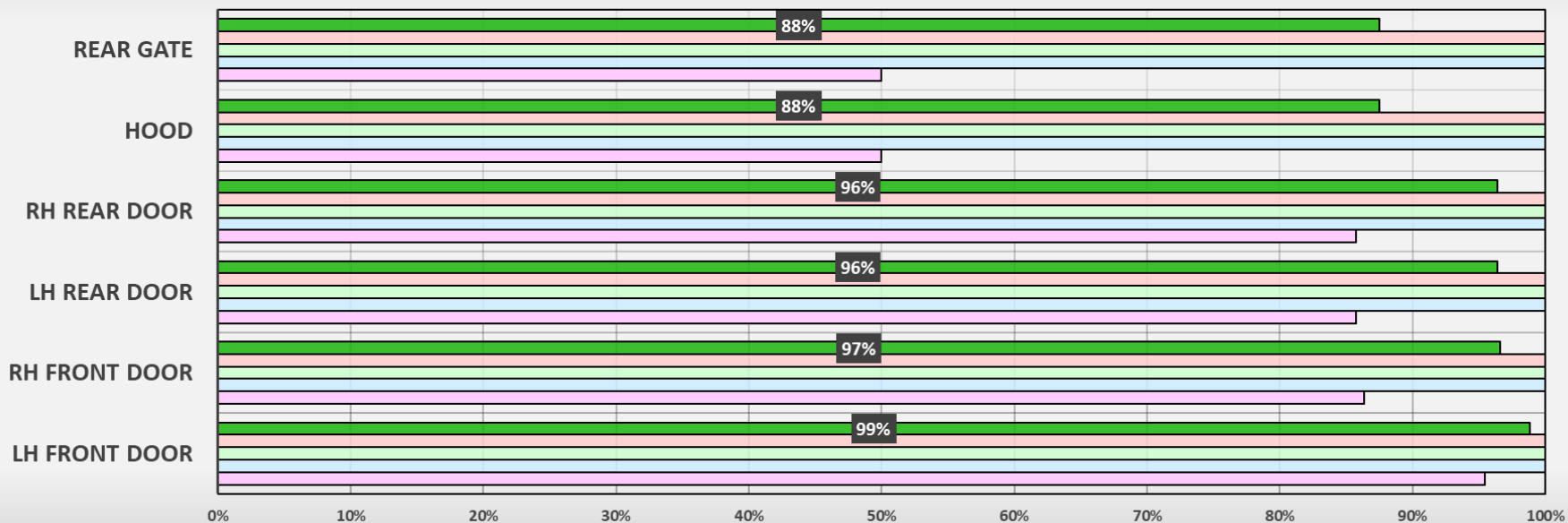
B-Line

- Status Update
- Next Steps

A LINE

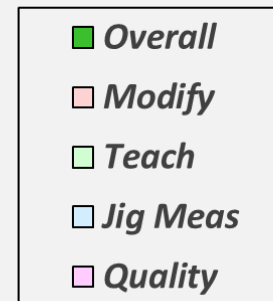
PROGRESS UPDATE

Percentage Completed by Area



Overall Items Closed

85 % (9/24) → 87 %



Percentage Complete per Area (9/24)

Area	Modify	Teach	Jig Meas	Quality	Overall
LH FRONT DOOR	100%	100%	100%	50%	88%
RH FRONT DOOR	100%	100%	100%	50%	88%
LH REAR DOOR	100%	100%	100%	50%	88%
RH REAR DOOR	100%	100%	100%	50%	88%
HOOD	100%	100%	100%	50%	88%
REAR GATE	100%	100%	100%	50%	88%

Percentage Complete per Area

Area	Modify	Teach	Jig Meas	Quality	Overall
LH FRONT DOOR	100%	100%	100%	95%	99%
RH FRONT DOOR	100%	100%	100%	86%	97%
LH REAR DOOR	100%	100%	100%	86%	96%
RH REAR DOOR	100%	100%	100%	86%	96%
HOOD	100%	100%	100%	50%	88%
REAR GATE	100%	100%	100%	50%	88%

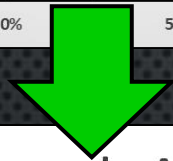
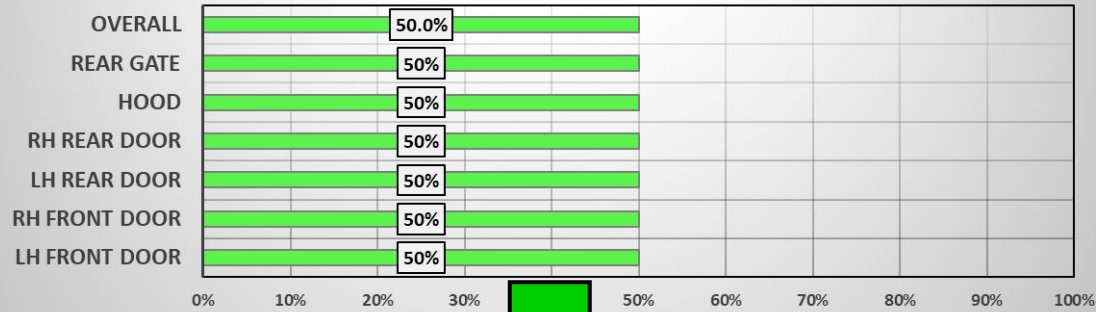


PROGRESS UPDATE

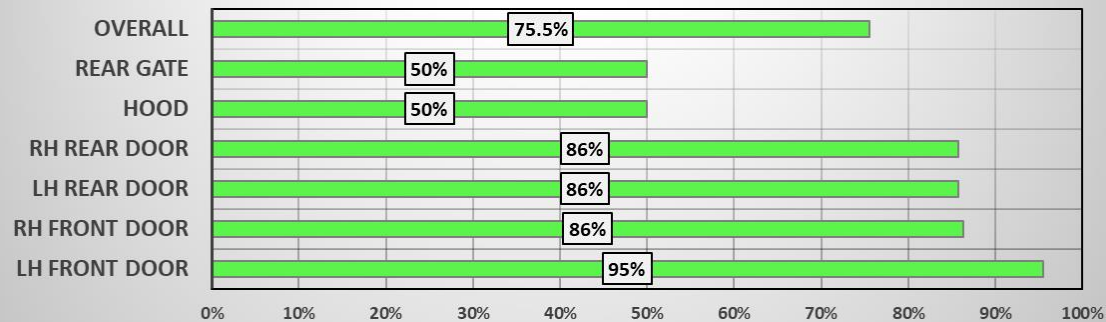


9/24

Quality Progress by Area (Hem, N&P, Destructs)



Quality Progress by Area (Hem, N&P, Destructs)



Weld Condition:

RRD: 10 of 14 Good

LRD: 10 of 14 Good

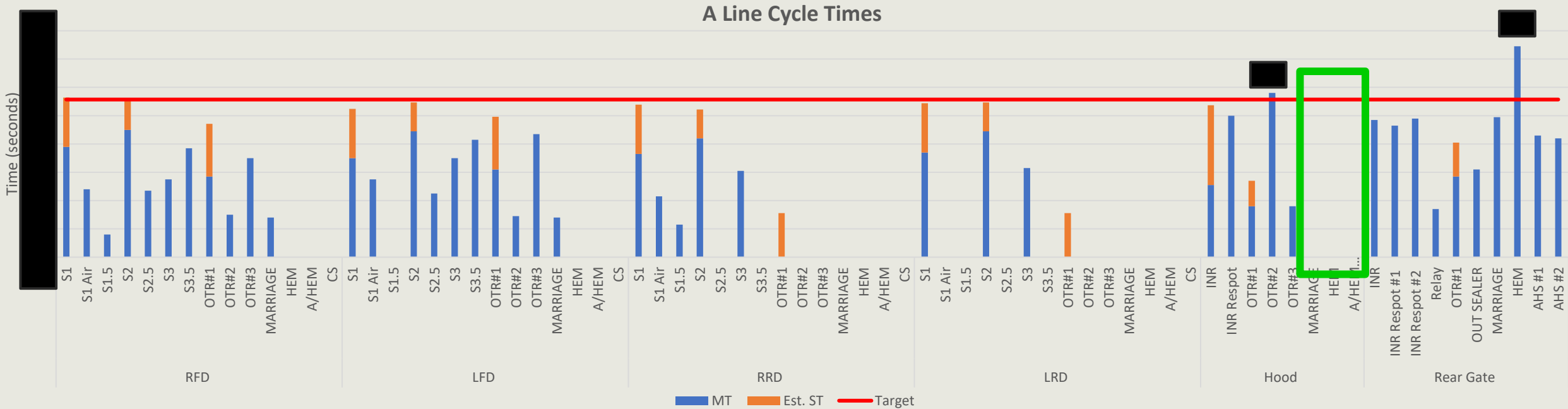
RFD: 8 of 11 Good

LFD: 10 of 11 Good

Based on thickness and diameter of weld nugget



PROGRESS UPDATE



Stages Over Limit	
Time	Stage
~1.5	Rear Gate HEM
~1.5	Hood OTR#2
~1.5	RFD S1

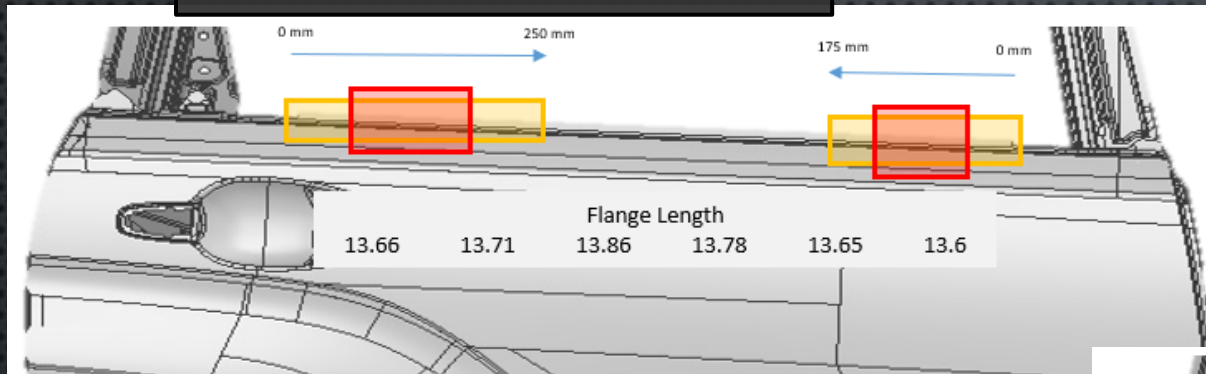
No. Over Takt Time: 3
No Measurement: 29

- Need Remeasures for:
- RFD S1
 - RG Hem

PROGRESS UPDATE

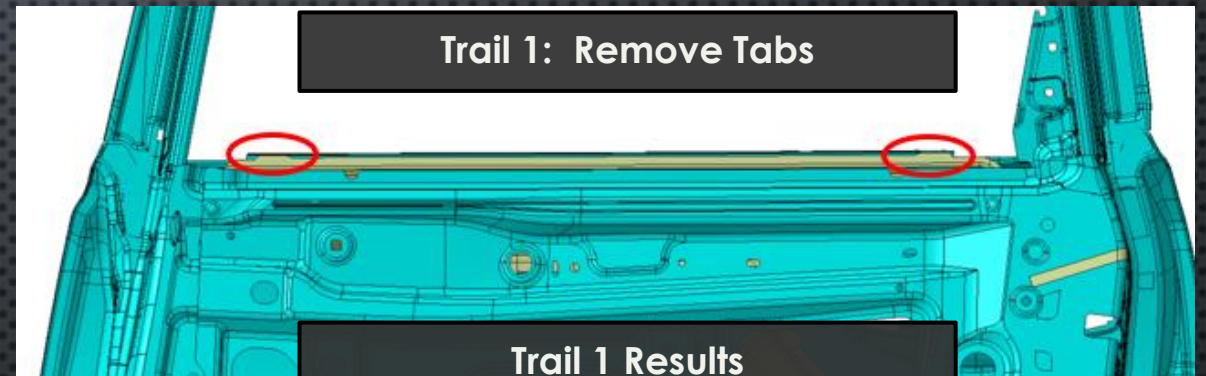
RRD Roller Hem

Before this week's adjustments

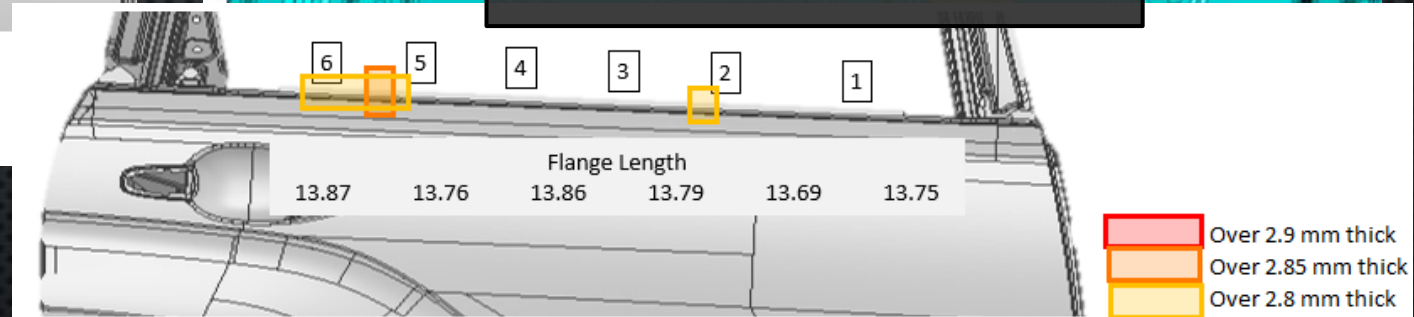


Over 2.9 mm thick
Over 2.8 mm thick

Trail 1: Remove Tabs



Trail 1 Results



Over 2.9 mm thick
Over 2.85 mm thick
Over 2.8 mm thick

Trial 1 saw improvement of flange length near the hand work areas, reduction in hem thickness out of spec

Flange Length Comparison:

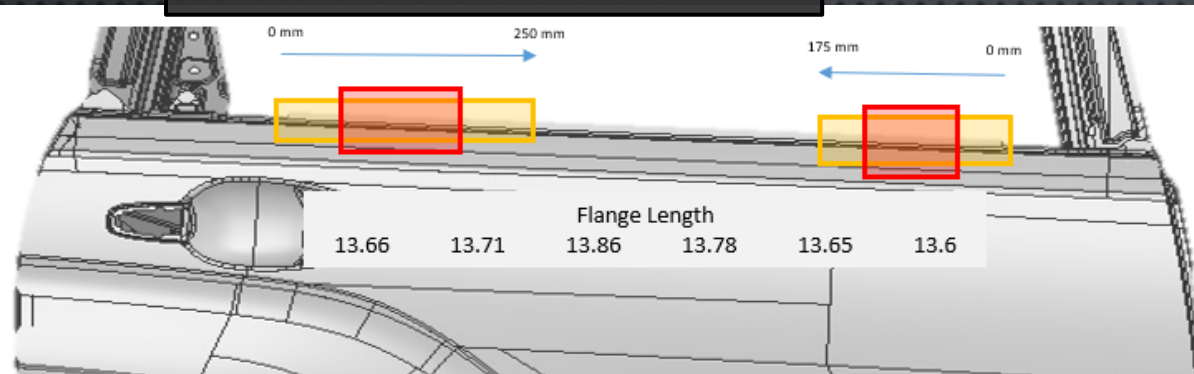
	Rear	22.21X	21.14X	20.0X	18.99X	17.92X	16.85X	Front
Base		13.66	13.71	13.86	13.78	13.65	13.6	
Trial 1		13.87	13.76	13.86	13.79	13.69	13.75	
Difference		0.21	0.05	0	0.01	0.04	0.15	

PROGRESS UPDATE

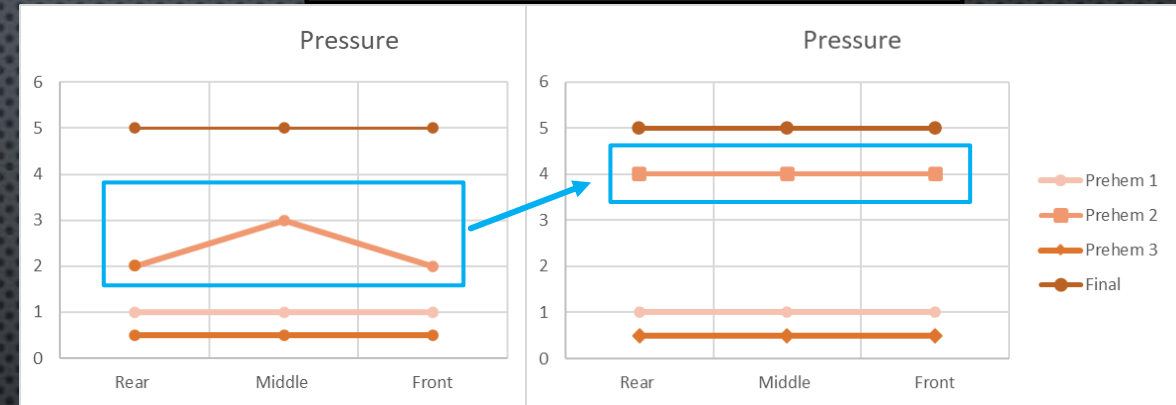
RRD Roller Hem

Trail 2: Prehem 2 Press to 4

Before this week's adjustments

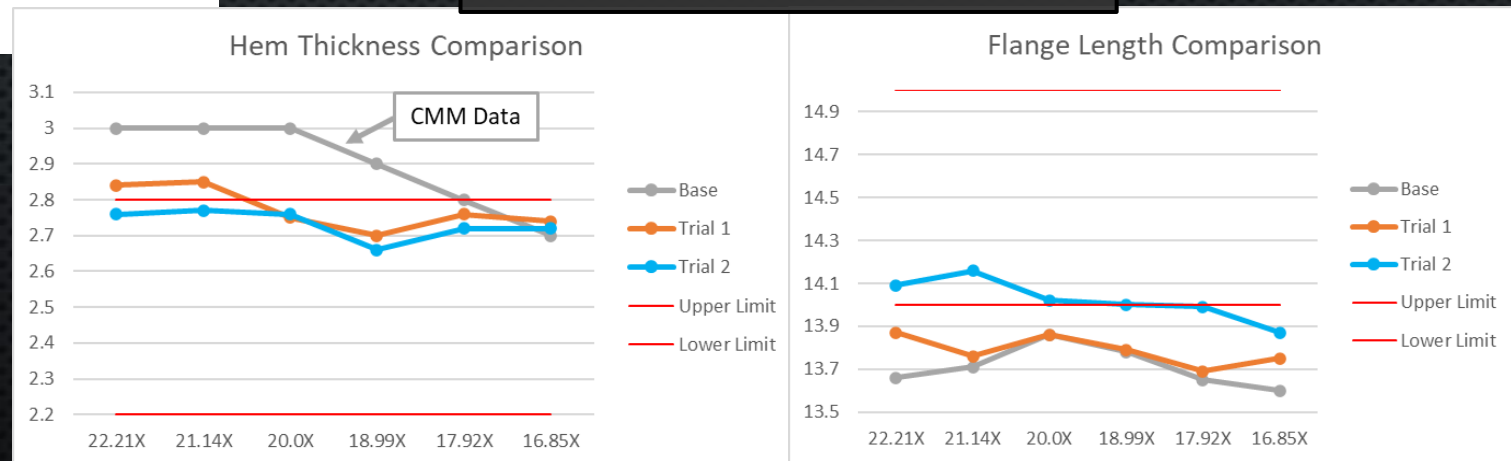


- Over 2.9 mm thick
- Over 2.8 mm thick



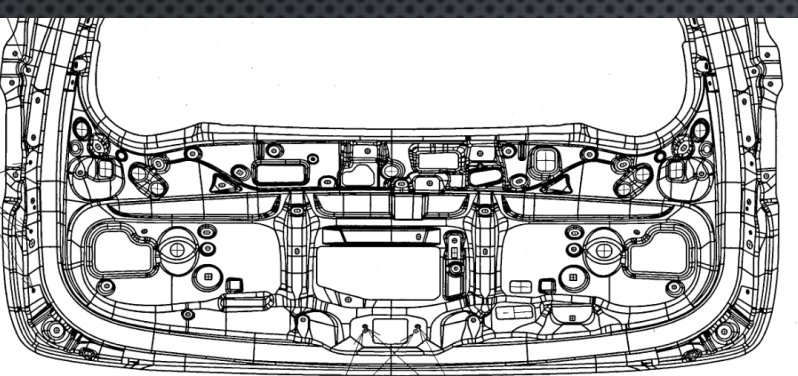
Trail 1 & 2 Results

- Trial 2 has best hem thickness condition
- Trial 2 has best flange length condition



PROGRESS UPDATE

Weekend Work Notes



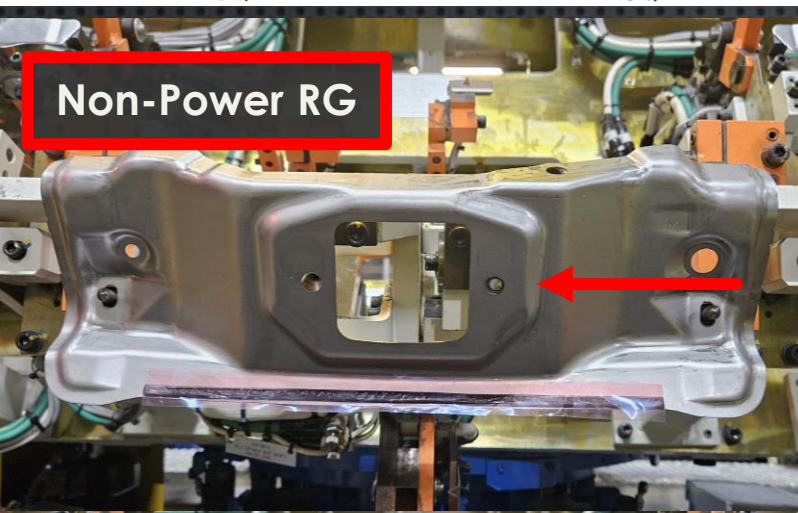
③ NOMAL LATCH取付穴

③Instl. hole for NOMAL LATCH
60830SL10Aのみ
only

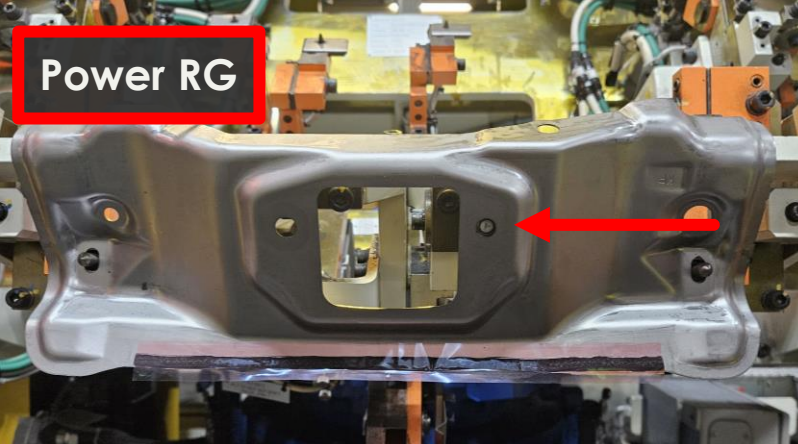
④ POWER RG LATCH取付穴

④Instl. hole for POWER RG LATCH
60830SL11Aのみ
only

Non-Power RG



Power RG

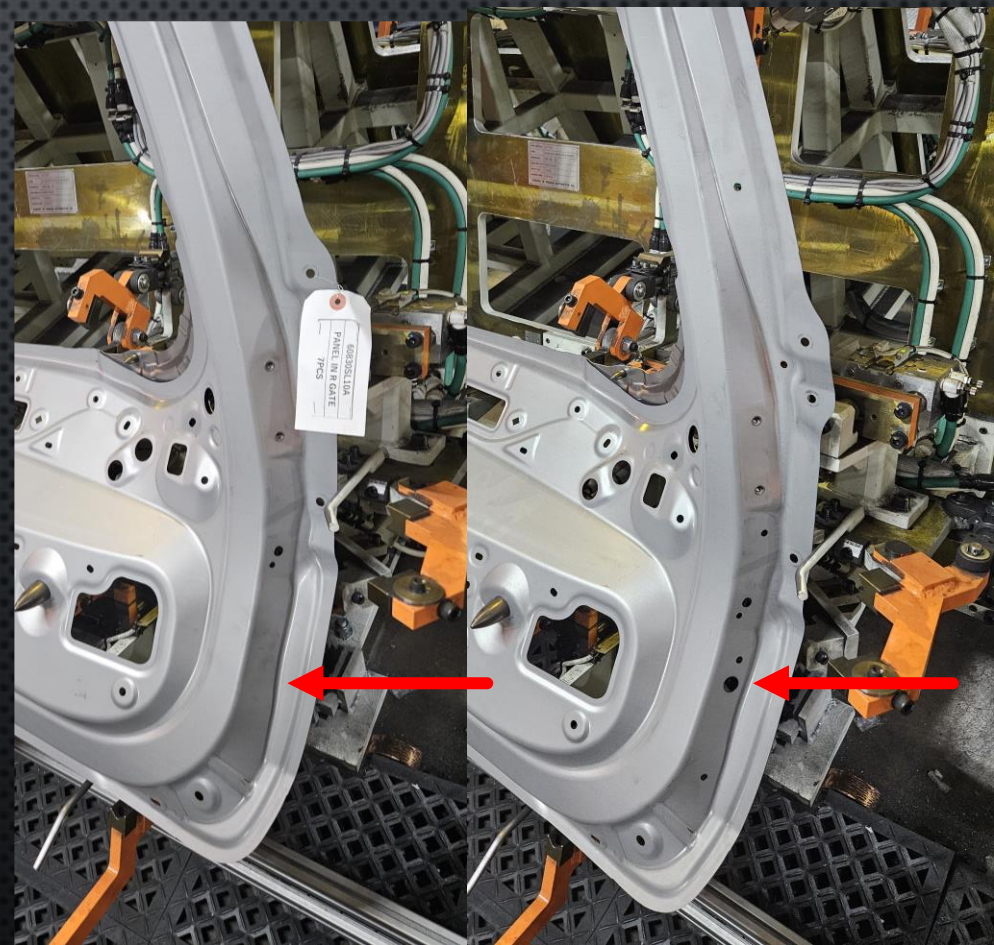


SBR Yokoten - RG built with mismatching power/non-power RG Latch

Problem: 2 prox sensors detect power/non-power RG inner & latch. Sensing distance is limited, so the inner can be set without being detected properly. (After RG is clamped, misset is detected, but sensor is at range limit)

Countermeasure: Additional sensor for RG inner panel detection (right side picture)

Progress: Brackets installed (4), sensors wired (4), PLC ready (4), 3D printed mounts (1 of 4).



PROGRESS UPDATE

Punchlist

- ~~4. Marriage (Front Doors) & Hood Outer Set – Need DZ1 resin pads~~
- ~~10. FD Takeout – Needs new sash clamp blocks~~
- ~~13. Rear Doors – Adjust sash support~~
- ~~14. **Doors** – Cassettes and handlers~~
- ~~19. RG – sealer camera, create bracket, change to color camera~~
- ~~20. **Doors** – mastic samples~~
- ~~22. **FD** – Stage 3.5 interlocks/interference relay table w/ weld station~~
- ~~28. Add ID Welds – Doors, Hood, RG~~
- ~~30. Take out write arounds for DZ1 Wilderness Pokes~~
- ~~32. RFD – Stage 3 clamps out of order switching from DZ1 to GC7~~
- ~~34. LRD - Wilderness Poke not working~~
- ~~35. RFD Outer Set – GC7 to DZ1 guide shift gets stuck – different [video](#)~~
- ~~36. RG – Whisker switch, sticking to prehem, over time~~
- ~~37. Yokoten – Handler moving into outer 4 with clamp closed~~
- ~~38. Hood – Check address labeling, A & B Line~~
- ~~39. Poke Testing Result Investigation~~
- ~~40. RFD – Vacuum Failing to build~~



PUNCHLIST



38. Hood Hem Press –
Labeling needs fixed

9/24: A Line Hood Air Pack
shown on left corrected.

Need to check others



NEXT STEPS

Weekend Work

Units to build this weekend:

- 6 DZ1 Units Scheduled
 - 1 is Black Body

Quality activity (Saturday only)

Maintenance Project:

- Maintenance will be rebuilding 2 AHSW gun stands (likely to be LFD & RFD)

Other Projects

- FD Export Jig Clamps
- RG Hem Press Pitch Up – Mark
- RG Sealer Camera – Mark
- Finish RG Power Inner Poke
- Hem Press labeling (A & B Line) – Mile

I will post the number of parts needed on each line at Stage 1 of each Line