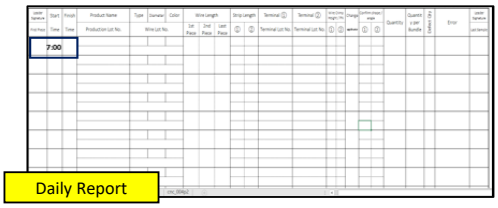
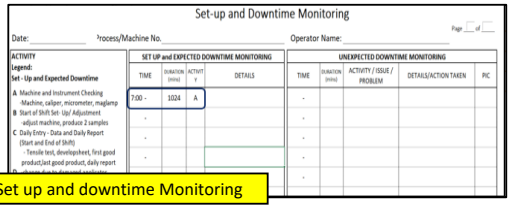
No.	Work Procedure/ Illustration	Remarks

1. Check work area. Conduct 5's. Prepare need for production such as box for crimp wire, wire tray/plastic, rubber band and paper.
2. Open Wire cutting and Crimping daily Report. Enter Start time.
   Update Set up and Downtime monitoring. Start time for legend (A) activity Check machine and instrument.
   Properly check each check items. Activity end time.

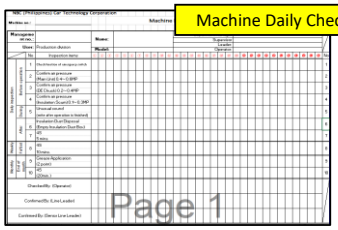
F-PRO-CNC-003
F-PRO-CNC-004

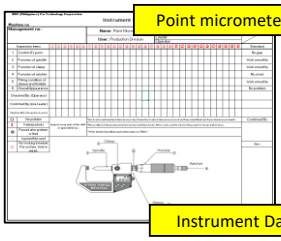

Daily Report

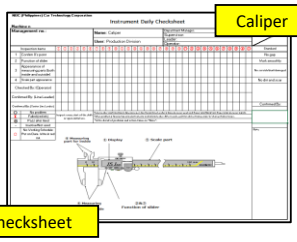


Set up and downtime Monitoring

Note:
Start/continue operation if machine is already set up during weekdays. Do the activities while machine is running.


Machine Daily Checksheet

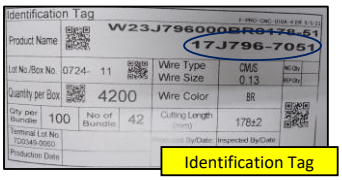

Point micrometer


Caliper

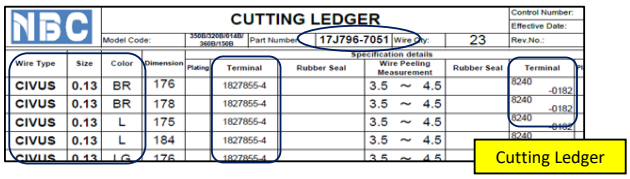
Instrument Daily Checksheet

F-PRO-CNC-002A&B
F-PRO-CNC-015

3 Check plan. Prepare materials needed. Start time Legend (B) activity.
   3.1 Get tag from the rack. Scan tag to check materials needed put ID tag in the table after scanning.



Identification Tag



Cutting Ledger

F-PRO-CNC-010A
CL-ENG-PDE

   3.2 Get wire, terminal and applicator from the rack and set up to machine. Refer to Cutting ledger.
   Wire set up. Applicator and terminal set up.


Wire


Terminal

Applicator

CL-ENG-PDE
WI-PRO-CNC-056
WI-PRO-CNC-070

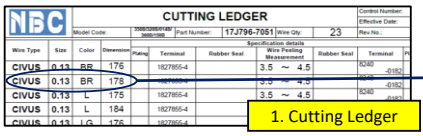
Note:
If machine already set up proceed to next step.

   3.3 Produce 2 good samples for Developsheet Crimp Data gathering.
      A. Input data in operating panel.
         1. Enter Total length refer to cutting ledger.
         2. Enter Setting pieces/Quantity needed refer to ID tag.
         3. Enter Batch Pieces refer to ID tag. Batch automatic pieces must be 1 second only.
         4. Enter Core diameter and Blade move back refer to Cut depth value record.

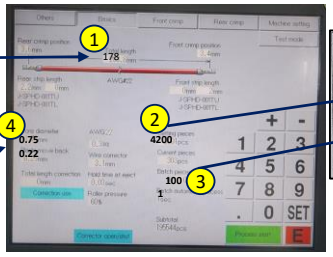
F-PRO-CNC-008

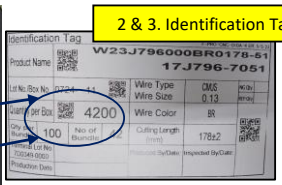
CL-ENG-PDE
F-PRO-CNC-010A

F-PRO-CNC-007

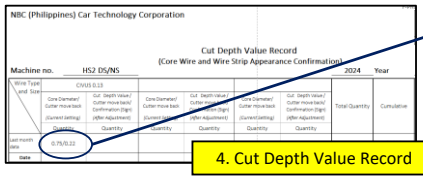


1. Cutting Ledger





2 & 3. Identification Tag



4. Cut Depth Value Record

							Prepare	Check		Approve
08/07/2024	0	Initial issue.	M. Lipaopao	W. Bergado	C. Calayan	M. Carbillon	M. Lipaopao	W. Bergado	C. Calayan	M. Carbillon
Eff./Rev. Date	Rev. No.	Details of change	Revise	Check		Approve	Est. date:	August 7, 2024		

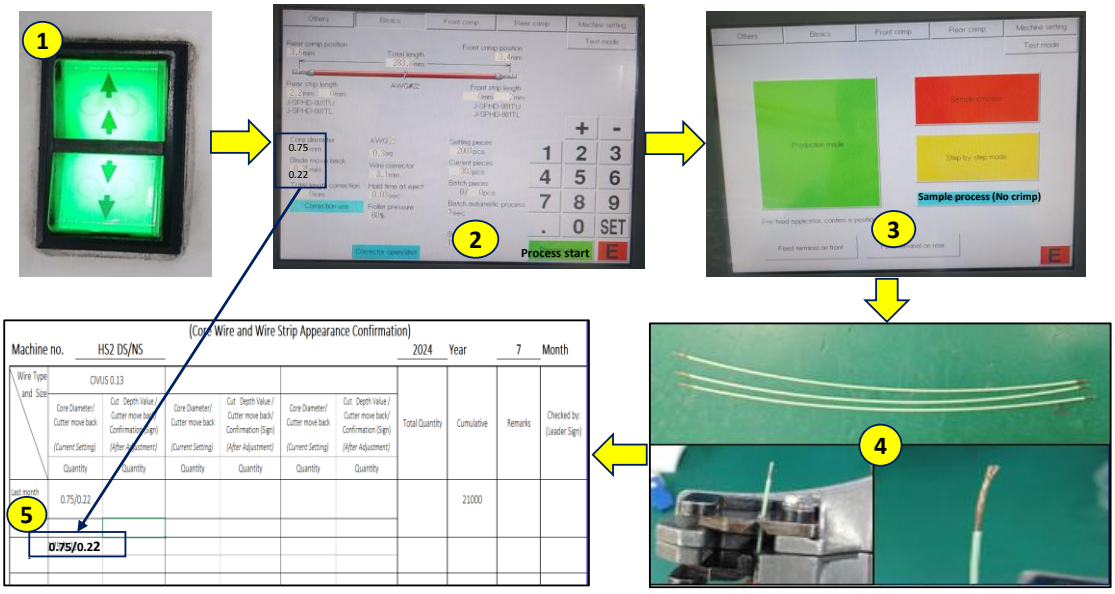
No.	Work Procedure/ Illustration	Remarks

B. Record and checking of core wire/strip condition.

1. Feed wire. Press arrow forward.
2. Press Process start.
3. Press Sample process (No crimp)
4. Measure strip length. Peel insulation from strip part to check.
5. Record the Core diameter and Blade move back in Cut depth value record.

WI-PRO-CNC-011
WI-PRO-CNC-017
WI-PRO-CNC-023
F-PRO-CNC-007

Note:
If encounter cut/scratch STOP, CALL and WAIT.

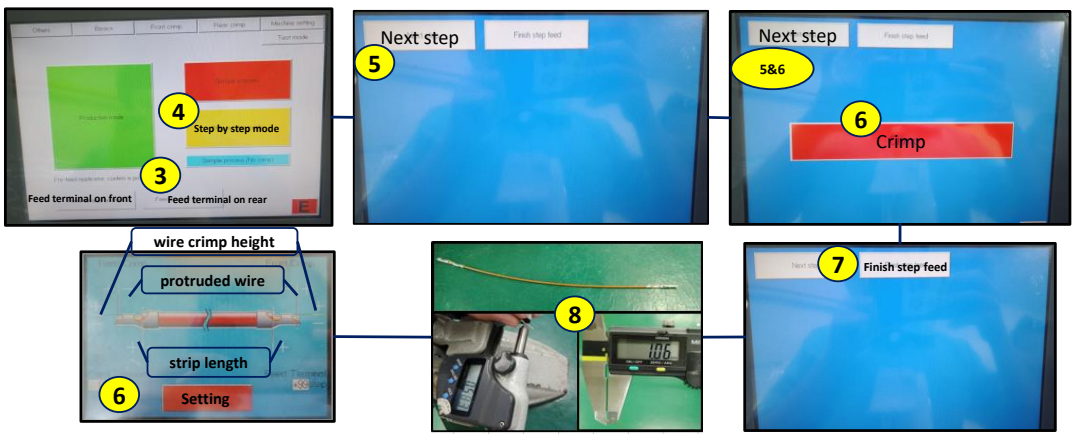


C. Setting and adjustments.

1. Feed wire. Press arrow forward.
2. Press Process start.
3. Press Feed terminal on front and Feed terminal on rear to feed terminal.
4. Press Step by step mode.
5. Press Next step, Next step.
6. Press Crimp in front and Next step in rear to Crimp.
7. Press Finish step feed after crimp in rear.
8. Check appearance, checkpoint and measure crimp height & width and insulation height & width both terminal.
   Refer to Terminal specification per part number.
9. Press Setting to set and save adjustments.
   Make adjustments if necessary (crimp height and insulation height, protruded wire)

WI-PRO-CNC-010
WI-PRO-CNC-026
WI-PRO-CNC-005
TS-ENG-PDE

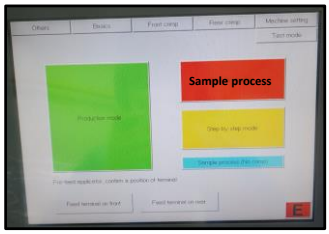
Note :
Maximum of 5 pieces samples only in adjustments, if cannot set require specs call Leader.

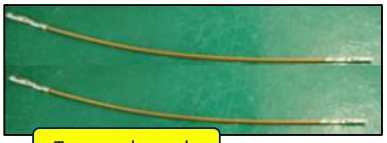


No.	Work Procedure/ Illustration	Remarks

D. Produce second sample

1. Feed wire. Press arrow forward.
2. Press Process start
3. Press Sample process. Activity B end time.





Note:
Check both crimp shape both sample.

WI-PRO-CNC-010
WI-PRO-CNC-005

4. Daily Entry start time legend (C) activity.

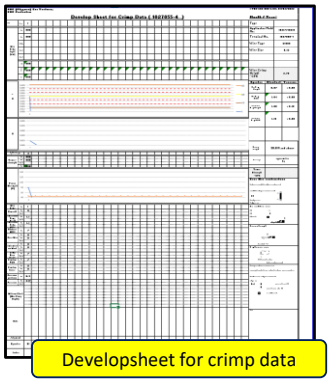
4.1 Gather data in Developsheet for Crimp data.

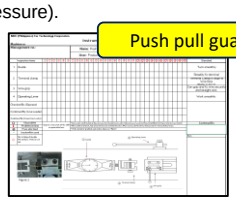
A. Measure both samples. Record require data.

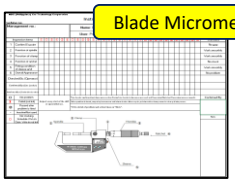
B. Check instruments. Perform checking of Tensile strength and check crimp burr if necessary.

C. Record crimp pressure (Maximum pressure).

F-PRO-CNC-008
F-PRO-CNC-002C&D
WI-PRO-CNC-007
WI-PRO-CNC-005
WI-PRO-CNC-009







Note:
Check graph appearance.

4.2 Record data in Daily Report

A. Scan ID tag for Product Name and Production Lot Number.

B. Input/scan wire details (type,diameter,color and lot number).

C. Record strip length 1 and 2.

D. Input Terminal 1, Terminal 2 and lot number.

E. Record Quantity and quantity per bundle.

WI-PRO-CNC-038

Leader Signature	Start	Finish	Product Name	Type	Diameter	Color	Wire Length			Strip Length		Terminal ①	Terminal ②	Wire Crimp Height / PN		Change	Confirm shape / angle		Quantity	Quantity per Bundle	Defect Qty	Error	Leader Signature
First Piece	Time	Time	Production Lot No.	B	Wire Lot No.		1st Piece	2nd Piece	Last Piece	①	②	Terminal Lot No.	D Terminal Lot No.	①	②	applicator	①	②	E				Last Sample
	7:00	A	17J796-7051	CIVUS	0.13	BR			C	3.5	4.5	1827855-4	8240-0182						4,200	100			
			0724-11	c24022204367-15								24151	24.04.18(14)										

4.3 Produce 2 good length and Hatsumono checking.

A. Feed wire. Press arrow forward.

B. Press Process start

C. Press Production mode to produce 1piece and immediately press Stop.

Measure wire length refer to cutting ledger.

Measure wire crimp height per part number and check shape/angle 1 and 2.

D. Record in Daily Report the actual length in 1st piece column.

Record data for wire crimp height per part number and confirmation of shape/angle 1 and 2.

E. Repeat the process to produce the 2nd piece and check wire length. Fill out ID tag information requirements.

F. Press andon to Call Leader's attention for Hatsumono/2nd piece checking.

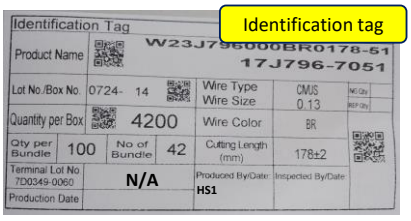
Leader will check and record the Hatsumono in Daily Report and may start the operation. Put ID tag in box holder.

Enter Process Name Machine No. and Operator Name save the Daily report. Activity C end time.

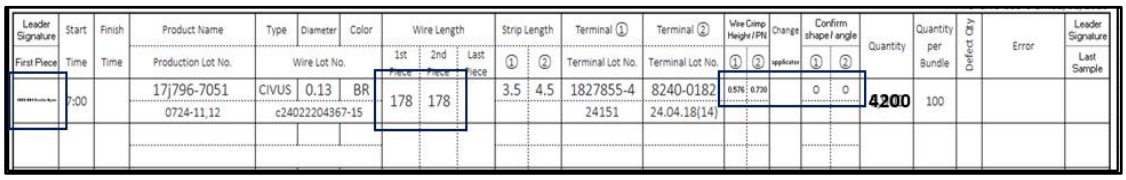
WI-PRO-CNC-013
WI-PRO-CNC-011
F-PRO-CNC-003
F-PRO-CNC-010A

Note:
If machine produce more than 1piece check/confirm all wire produce.
Attach first piece tag for checking of leader.

Operation may start even first piece is for verification of leader or on going check of leader.



No.	Work Procedure/ Illustration	Remarks



Leader Signature	Start	Finish	Product Name	Type	Diameter	Color	Wire Length			Strip Length		Terminal ①	Terminal ②	Wire Crimp Height / PN		Change	Confirm shape / angle		Quantity	Quantity per Bundle	Defect Qty	Error	Leader Signature
First Piece	Time	Time	Production Lot No.	Wire Lot No.			1st Piece	2nd Piece	Last Piece	①	②	Terminal Lot No.	Terminal Lot No.	①	②	applicator	①	②					Last Sample
	7:00		17j796-7051	CIVUS	0.13	BR	178	178		3.5	4.5	1827855-4	8240-0182	0.576	0.730		0	0	4200	100			
			0724-11,12	c24022204367-15								24151	24.04.18(14)										

5. Operation.

5.1 Feed wire. Press arrow forward. Press Process start — GL-PRO-CNC-018

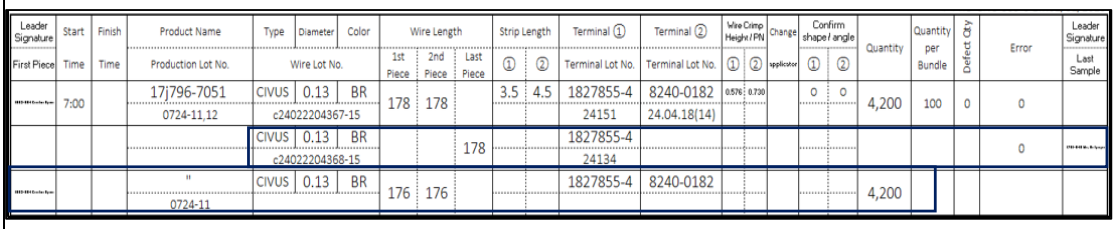
5.2 Press Production mode — WI-PRO-CNC-010

5.3 Conduct checking each crimp wire during machine running.

After inspection put wire in wire tray if reach 1 bundle put inside the box.
First 300 pieces per color/model/box must check 100%.

Note:
If wire tray is not available, use rubber band to tie wire per bundle and put inside the plastic per 300 pieces.

During operation, other activity refer to Set up and Downtime monitoring.
Set up and Expected Downtime Legend E-J.
Repeat previous steps and enter start time of each activity and end time.
For owarimono per model/color, measure wire length then record,
measures crimp height, insulation height and record for change model or set up only then Call leader to check.



Leader Signature	Start	Finish	Product Name	Type	Diameter	Color	Wire Length			Strip Length		Terminal ①	Terminal ②	Wire Crimp Height / PN		Change	Confirm shape / angle		Quantity	Quantity per Bundle	Defect Qty	Error	Leader Signature
First Piece	Time	Time	Production Lot No.	Wire Lot No.			1st Piece	2nd Piece	Last Piece	①	②	Terminal Lot No.	Terminal Lot No.	①	②	applicator	①	②					Last Sample
	7:00		17j796-7051	CIVUS	0.13	BR	178	178		3.5	4.5	1827855-4	8240-0182	0.576	0.730		0	0	4,200	100	0	0	
			0724-11,12	c24022204367-15								24151	24.04.18(14)										
				CIVUS	0.13	BR			178			1827855-4										0	
				c24022204368-15								24134											
			"	CIVUS	0.13	BR	176	176				1827855-4	8240-0182						4,200				
			0724-11																				

Note:
Attach Last piece for Owarimono.

Place paper tape for every product with product name, production date, machine no., (1) for first piece and (2) for last piece, put in owarimono or hatsumono box.

If encounter machine error, unexpected Downtime (D for unexpected change of applicator) and machine error K-U.
Enter start time and problem encounter. Declare defect detected in Daily report enter in Defect details. — WI-PRO-CNC-036
Refer to action items legend per error or indicate specific problem encounter in machine.
Check affected item in machine conveyor.
May conduct trouble shooting for minor error refer unexpected downtime to troubleshoot and action items. — WI-PRO-CNC-067
Call Leader for verification/hatsumono after problem. — WI-PRO-CNC-013
Conduct inspection for 1st 300 pieces after problem encounter/trouble shoot of machine. Enter end time of downtime.
Other error/problem **Stop** the machine, **Call** Leader and **Wait** for instructions. — GL-PRO-CNC-017

Machine Downtime/trouble (unexpected)

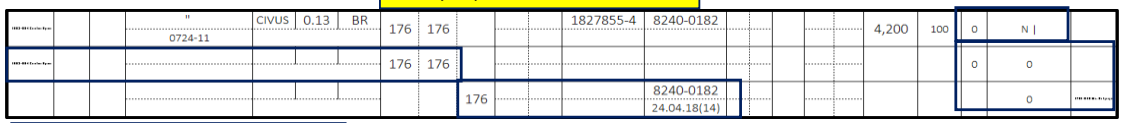
UNEXPECTED DOWNTIME MONITORING

TIME	DURATION (mins)	ACTIVITY / ISSUE / PROBLEM	DETAILS/ACTION TAKEN	PIC
14:20 - 14:22	2	LOOSE CHUCK	WAITING MAINTENANCE	REANN
16:22 - 16:28	6	TWIST 8240-0182	adjust terminal feed	niña

MAINTENACE DOWNTIME HISTORY

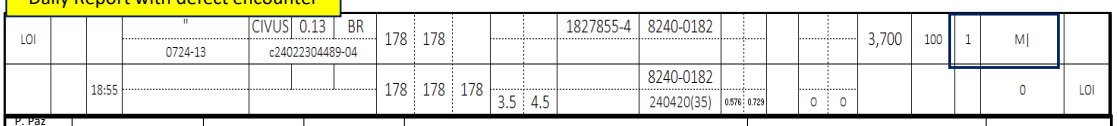
Repair Start Time	Repair End Time	DURATION (mins)	ISSUE	ROOT CAUSE	DETAILS/ACTION TAKEN	PIC
12:38	12:57	19	STUCKED WIRE ON SHUTTER PLATE	LOOSE E CHUCK	ASSEMBLE AND ALIGNMENT OF E CHUCK	ED
14:22	14:45	23	STUCKED WIRE ON SHUTTER PLATE	LOOSE E CHUCK	ASSEMBLE AND ALIGNMENT OF E CHUCK	FJ

Daily Report with machine error



			"	CIVUS	0.13	BR	176	176				1827855-4	8240-0182						4,200	100	0	N	
			0724-11																				
							176	176													0	0	
									176				8240-0182									0	
													24.04.18(14)										

Daily Report with defect encounter



LOI			"	CIVUS	0.13	BR	178	178				1827855-4	8240-0182						3,700	100	1	M	
			0724-13	c24022304489-04																			
		18:55					178	178	178	3.5	4.5		8240-0182									0	LOI
													240420(35)	0.576	0.729		0	0					

P. Paz

Quantity	Defect Name	Product Name	Lot Number	Cause/Analysis	Corrective Action	Repaired by
1	rolling	17J796-7051	0724-6	LACK OF TERMINAL FEED	adjust applicator feed finger	P. Pascual

Measure 1 piece every 4,000 pieces each terminal set up fill out Developsheet for crimp data. — WI-PRO-CNC-005
At the middle of operation, get 1 piece for checking of all specs for the middle data in developsheet. — WI-PRO-CNC-009

No.	Work Procedure/ Illustration	Remarks

6. End of the Shift.

6.1 Enter start time for end of shift data entry in Set up and Downtime Monitoring.

6.2 Fill out data in Developsheet for crimp data, Summary of Defect, Cut depth value record and Daily report

A. Get 2 samples for data gathering in developsheet for crimp data. Repeat previous steps to produce good sample. — F-PRO-CNC-004

B. Enter quantity of defect item per catergory and fill out remarks for the defect details. — WI-PRO-CNC-005

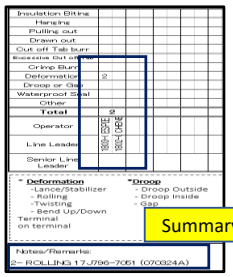
Total defect will appear and enter name. Record total output per wire type&size in Cut Depth Value record and total. — WI-PRO-CNC-009

C. Measure last piece wire length, crimp height and insulation height and record. — F-PRO-CNC-014A

Input strip length, confirm shape/angle, defect, error and record then call leader for Owarimono checking. — F-PRO-CNC-007

Enter end time for end of shift data entry and Finish time in Daily report. — WI-PRO-CNC-013

D. Conduct **5's**.



Summary Of Defect

Machine no.	HS1 DS/NS	
Wire Type and Size	CIVUS 0.13	
	Core Diameter/ Cutter move back *(Current Setting)*	Cut Depth Value / Cutter move back/ Confirmation (Sign) *(After Adjustment)*
	Quantity	Quantity
Last month data	0.34/0.14	
Date		
1	0.5/0.18 58800	

Cut Depth Value Record

Machine no.	HS1 DS/NS							2024 Year	
Wire Type and Size	CIVUS 0.13								
	Core Diameter/ Cutter move back *(Current Setting)*	Cut Depth Value / Cutter move back/ Confirmation (Sign) *(After Adjustment)*	Core Diameter/ Cutter move back *(Current Setting)*	Cut Depth Value / Cutter move back/ Confirmation (Sign) *(After Adjustment)*	Core Diameter/ Cutter move back *(Current Setting)*	Cut Depth Value / Cutter move back/ Confirmation (Sign) *(After Adjustment)*	Total Quantity	Cumulative
	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity		
Last month data	0.34/0.14							933,500
Date								
1	0.5/0.18 58800 38000						105000	105000