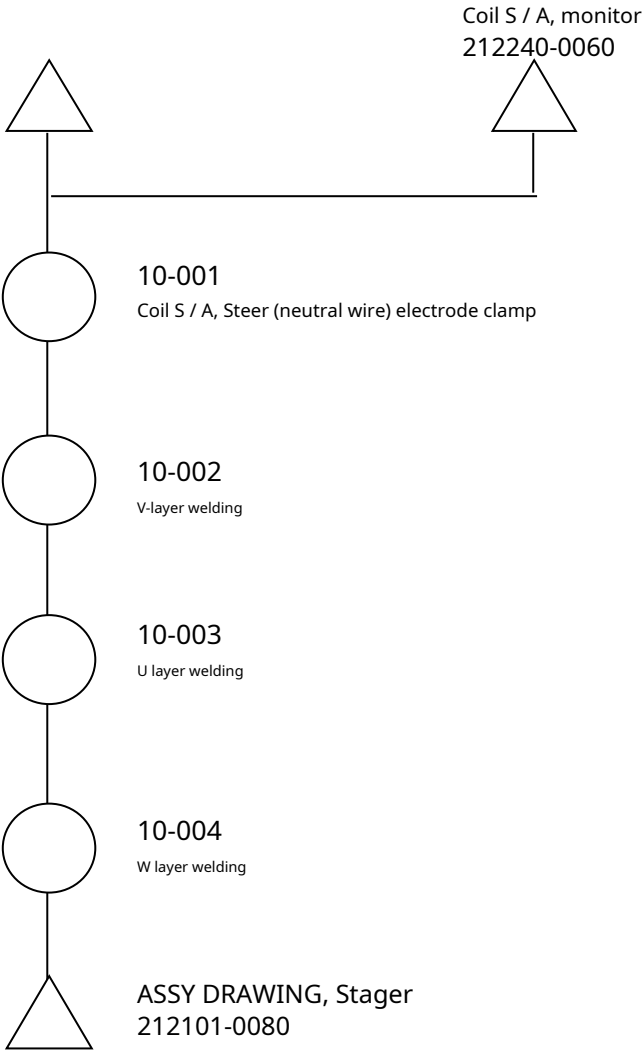


Structure system diagram	Issuing section	Electric manufacturing department 2 production engineering room 4	Approval	吉田	小坂	山地			Distribution					
	date of creation		2/8/2016	16/02/08	16/02/08	16/02/08			cloth					
Line name			Assembly part number, part name				name							
690A MG Stereoline			212100-0080				For initial flow							
690A MG Stereoline			Stater S / A, Mo Tar				Priority management designation							
System No. <1/1>			Model Product Name				Delivery destination, reserved vehicle type							
Ten			212101-0080				Toyota							
Terminal welding (neutral wire)			ASSY DRAWING, statuser				690A							



No.	Revision Date	Revision item	Reason for revision	Revised person

品質と安全のデンソー

Process control statement		Issuing section Electric manufacturing department 2 production engineering room 4		Approval 吉田 6/02/08	examination 小坂 6/02/08	examination 山地 6/02/08			Distribution cloth Ahead									
System No. -System diagram number Line name 690A MG Stereoline				Assembly part number, part name 212100-0080 Stater S / A, Mo Tar				name For initial flow										
Process No. Process name Station name <2/2> Ten				Model Product Name 212100-0080 Stater S / A, Mo Tar				Priority management designation S2CC13 1 2 13.12										
Terminal welding (neutral wire)								Delivery destination, reserved vehicle type Toyota 690A										
<Quality>																		
At the time of measurement		Heavy	No.	Characteristic Measuring instrument		Management method			Process capability σ, X, Cp, Cpk		remarks		Quality ID Relationship criteria					
						Management interval	Management method	Administrator										
			1	Main air pressure 0.4 ± 0.05MPa Pressure gauge (0.001)		1 / Direct (at the time of work)	Condition management Check sheet	worker										
			2	Ar gas flow rate 10 ± 5 L / min Flowmeter (0.1)		1 / Direct (at the time of work)	Condition management Check sheet	worker										
			3	Welding strength 64.2N or more Push pull gage (0.01N)		1 / direct	x-Rs control chart	Team leader			A total of 4 locations with 6, 10 and 14 slots * 3 10 slots on the main line are measured alternately and managed by layer.							
			Four	Weld cross-sectional area 2.9mm or more X-ray (0.01mm)		1 / W	Proposal x-Rs control chart	Partial inspection Team leader			A total of 4 locations with 6, 10 and 14 slots * 3 10 slots on the main line are measured alternately and managed by layer.							
			* 2 Five	Twist side height after welding 96.15 mm or less Dedicated measuring instrument (0.01)		4 / Nao	xR control chart	Team leader			A total of 3 locations with 6, 10 and 14 slots * 3 stratified management							
			6	Distance between in-phase conductors 1.05 mm or more Visual device * Between 2-3T		4 / Nao	xR control chart	worker			A total of 3 locations with 6, 10 and 14 slots * 3 stratified management							
			7	Distance between phase conductors 4 mm or more Caliper (0.01) * 1-2T		4 / Nao	xR control chart	worker			6 places in total on the left and right of 6, 10 and 14 slots * 6 stratified management							
			8	No film burning Visual check		4 / Nao	Check sheet	Team leader			* See limit sample							
			9	Welded mating surface is melted Visual check		4 / Nao	Check	worker			* See limit sample							
			Ten	No blow hole (≦7% provisional) X-ray		1W, when adjusting welding conditions	Proposal	Team leader										
			11 11	Welded ball quality (no ball separation, etc.) Visual check (see limit sample)		2 / Straight, welding condition adjustment	Check	worker			* See limit sample							
			12	Welding conditions (first neutral wire) Current value 210A ± 20A Welding monitor		4 / Nao 100%	xR control chart Equipment automatic check	Team leader worker										
			13	Welding conditions (first neutral wire) Welding time 0.2s ± 0.05s Welding monitor		4 / Nao 100%	xR control chart Equipment automatic check	Team leader worker										
			14	Welding conditions (second neutral wire) Current value 200A ± 20A Welding monitor		4 / Nao 100%	xR control chart Equipment automatic check	Team leader worker										
			15	Welding conditions (second neutral wire) Welding time 0.3s ± 0.05s Welding monitor		4 / Nao 100%	xR control chart Equipment automatic check	Team leader worker										
			16 16	Welding conditions (crossover) Current value 175A ± 15A Welding monitor		4 / Nao 100%	xR control chart Equipment automatic check	Team leader worker										
			17 17	Welding conditions (crossover) Welding time 0.25s ± 0.05s Welding monitor		4 / Nao 100%	xR control chart Equipment automatic check	Team leader worker										

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No.

Revision Date

Revision item

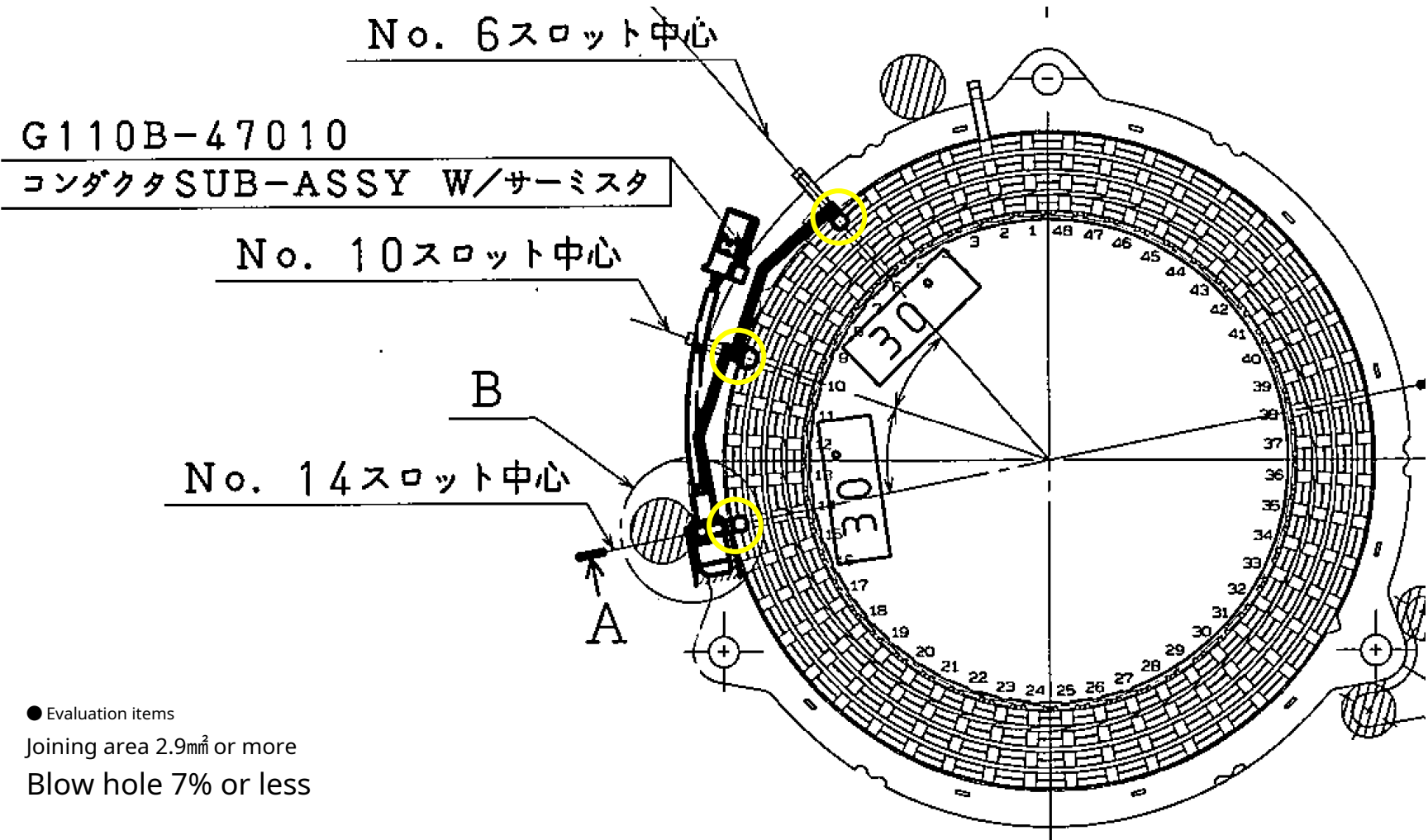
Reason for revision

Revised person

Structure system diagram		Issuing section	Approval	Examination	Examination	Distribution	cloth	Ahead						
		Electric manufacturing department 2 production engineering room 4	6/02/08	6/02/08	6/02/08									
		date of creation	2/8/2016											
Line name		Assembly part number, part name				name								
690A MG Stereoline		212100-0080				For initial flow								
		Stater S / A, Mo Tar				Priority management designation								
System No.		Model Product Name				Delivery destination, reserved vehicle type								
Ten		212101-0080				Toyota								
Terminal welding (neutral wire)		ASSY DRAWING, statuser				690A								

● Joint area & blow hole scrutiny department Place and frequency

Measurement site	interval	Rotation number
6 slots 1-2T	1 / W	①, ②
14 slots 1-2T	1 / W	①, ②
0 slot 1-2T outside (A)	1 / W	①
0 slot Within 1-2T (B)	1 / W	②



● Evaluation items

Joining area 2.9mm² or more

Blow hole 7% or less

溶接断面積の測定手順

- 図7-4に示す溶接部をA-A、B-Bでカットする。
 - 図7-5に示すA-A、B-B断面図のハッチング部の面積を測定する。
 - 母材との境界面の溶接断面積を測定する場合は、図7-5に示すA-A、B-B断面図のC-Cでカットし、C-C断面図のハッチング部の面積を測定する。
- なお、母材上面の溶け残りが無い場合は、溶接断面積が確保されているため、カット不要とする。

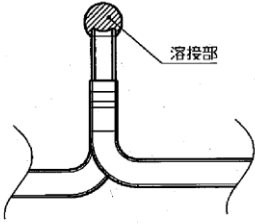
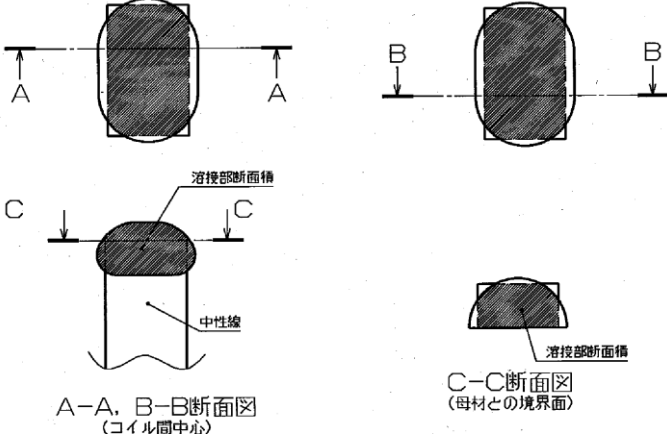


図7-4 溶接断面基準



No.	Revision Date	Revision item	Reason for revision	Revised person