

SLIDE ASSEMBLY RETRACTING (11010439)

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 WORKS MANAGER
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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	11010439								QAP No: OFT/QAP/M2HB/11010439
Nomenclature	SLIDE ASSEMBLY RETRACTING , OOW50BMG. : REQD FOR HB ASSEMBLY (7265636)								
Material	AS PER MATERIAL SPECIFICATION IN THE ASSEMBLY PARTLIST.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness)	Remarks
Slide Assembly Retracting (Raw material)	General appearance	Non Critical	Visual	100%	AS PER MATERIAL SPECIFICATION IN THE ASSEMBLY PARTLIST.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 11010439 & Components		Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 11010439 & Components		Test report from NABL lab	R	
In process	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 11010439 & Components		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 11010439 & Components		Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

NAI
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RESONANCE FACTORY
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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)								Issue No : 01 Rev No: 00	
								Date of Issue / / 2021	
Drg . No.	5013681							GAP No: OFT/QAP/M2HB/5013681	
Nomenclature	BOLT, SHOULDER, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, ASTM A322 OR A331, 4140, 4340, 8640, 4142.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Bolt, Shoulder (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, ASTM A322 OR A331, 4140, 4340, 8640, 4142.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%		HEAT AT 838°C TO 860°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO ROCKWELL HARDNESS A67-71. HEAT TREATMENT METHOD IS FOR GUIDANCE EXCEPT THAT HARDNESS REQUIREMENT IS MANDATORY AND TIME AT TEMPERING TEMPERATURE SHALL NOT BE REDUCED BELOW THAT SPECIFIED.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 5013681	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%		As per Drawing 5013681	Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%		As per Drawing 5013681	Firm Inspection report	W	

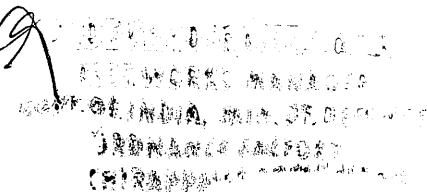
*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

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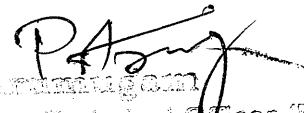
ORDNANCE FACTORY
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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	11010440								QAP No: OFT/QAP/M2HB/11010440
Nomenclature	BRACKET, RETRACTING SLIDE, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	WROUGHT STEEL ASTM A108: 1018 OR 1020. CASTING: IRON, MALLEABLE, PEARLITIC, CASTING, ASTM A220. GRADE L45006, OR IRON DUCTILE, CASTING ASTM A536, GRADE 80-55-06 OR 65-45-12.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Bracket, Retracting Slide (Raw material)	General appearance	Non Critical	Visual	100%	WROUGHT STEEL ASTM A108: 1018 OR 1020. CASTING: IRON, MALLEABLE, PEARLITIC, CASTING, ASTM A220. GRADE L45006, OR IRON DUCTILE, CASTING ASTM A536, GRADE 80-55-06 OR 65-45-12.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%		HEAT TREATMENT FOR STEEL COMPONENTS ONLY: LOCALLY CARBURIZE AND HARDEN AREA *Z*. HEAT AT 843°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO 15N 86 MIN.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 11010440	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 11010440		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 11010440		Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 -Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for <u>out sourced</u> components. JRI will be done by NAI & OFT on sampling basis. For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.</p>									


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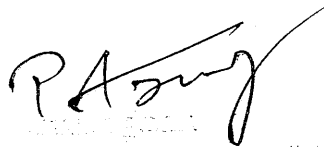
QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	6313800								GAP No: OFT/QAP/M2HB/6313800
Nomenclature	HANDLE ASSEMBLY,RETRACTING SLIDE, OOW50BMG. ✓								
Material	AS PER MATERIAL SPECIFICATION IN THE ASSEMBLY PARTLIST.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness)	Remarks
Handle Assembly, Retracting Slide (Raw material)	General appearance	Non Critical	Visual	100%	AS PER MATERIAL SPECIFICATION IN THE ASSEMBLY PARTLIST.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 6313800		Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6313800		Test report from NABL lab	R	
In process	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 6313800		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6313800		Firm Inspection report	W	
<p>*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable. (ii) In case of hard ware items, NAI, Trichy will review the reports, if required.</p>									

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	5013684								QAP No: OFT/QAP/M2HB/5013684
Nomenclature	GRIP,RETRACTING SLIDE OOW50MBG: REQD FOR HANDLE ASSEMBLY, (6313800) OOW50MBG.								
Material	PLASTIC,MOULDING, THERMOSETTING,ASTM D5948 TYPE CFI-20; SEMI-DULL BLACK AS DERIVED FROM MOULDING THE PART IN A CAVITY HAVING A SAND BLASTED SURFACE RESULTANT SURFACE GLOSS SHALL NOT EXCEED THAT OF LUSTERLESS OR SEMI-GLOSS COLOR CHIPS 37038 OR 27038 OF FED -STD-595 AS DETERMINED BY VISUL COMPARISON								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Grip,Retacting Slide (Raw material)	General appearance	Non Critical	Visual	100%	PLASTIC,MOULDING, THERMOSETTING,ASTM D5948 TYPE CFI-20; SEMI-DULL BLACK AS DERIVED FROM MOULDING THE PART IN A CAVITY HAVING A SAND BLASTED SURFACE RESULTANT SURFACE GLOSS SHALL NOT EXCEED THAT OF LUSTERLESS OR SEMI-GLOSS COLOR CHIPS 37038 OR 27038 OF FED -STD-595 AS DETERMINED BY VISUL COMPARISON		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
In process	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%		As per Drawing 5013684	Firm Inspection report	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%		As per Drawing 5013684	Test report from NABL lab	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%		As per Drawing 5013684	Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for <u>out sourced</u> components. JRI will be done by NAI & OFT on sampling basis. For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.</p>									

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2021/09/21

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drng . No.	5377961								QAP No: OFT/QAP/M2HB/5377961
Nomenclature	WASHER, RETRACTING SLIDE HANDLE OOW50MBG: REQD FOR HANDLE ASSEMBLY, (6313800) OOW50BMG.								
Material	STEEL, CARBON :1117,1118: ASTM A108 OR STEEL,CARBON: ASTM A 109.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Washer,Retacting Slide Handle (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, CARBON :1117,1118: ASTM A108 OR STEEL,CARBON: ASTM A 109.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
In process	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5377961		Firm Inspection report	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 OR 5.3.2.2	Test report from NABL lab	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5377961		Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	6313799								QAP No: OFT/QAP/M2HB/6313799
Nomenclature	BOLT,RETRACTING SLIDE HANDLE OOW50MBG: REQD FOR HANDLE ASSEMBLY, (6313800) OOW50BMG.								
Material	STEEL, ASTM A108: 1050,1137 THRU1151								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Bolt,Retacting Slide Handle (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, ASTM A108: 1050,1137 THRU1151		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
In process	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 6313799		Firm Inspection report	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 6313799		Test report from NABL lab	R	
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 OR 5.3.2.2	Test report from NABL lab	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6313799		Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	6147085								QAP No: OFT/QAP/M2HB/6147085
Nomenclature	LEVER, RETRACTING SLIDE, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	WROUGHT STEEL, ASTM A331 OR A322; 4140, 8640. CASTING: STEEL SPEC MIL-S-22141: IC 4140, IC 8640, SAE AMS 2175, CLASS 2, GRADE B AND C (AS SHOWN) SHALL APPLY.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Lever, Retracting Slide (Raw material)	General appearance	Non Critical	Visual	100%	WROUGHT STEEL, ASTM A331 OR A322; 4140, 8640. CASTING: STEEL SPEC MIL-S-22141: IC 4140, IC 8640, SAE AMS 2175, CLASS 2, GRADE B AND C (AS SHOWN) SHALL APPLY.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 6147085	HEAT AT 838°C TO 860°C. OIL QUENCH. TEMPER AT HEAT FOR ONE HOUR MINIMUM TO ROCKWELL HARDNESS C 46-52.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 6147085	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 6147085		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6147085		Firm Inspection report	W	

(* Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT.

Sub clause (ii) is applicable for out sourced components. JRI will be done by NAI & OFT on sampling basis.

For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	5013686								QAP No: OFT/QAP/M2HB/5013686
Nomenclature	NUT, SLOTTED, HEXAGON, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, CARBON; 1117, 1118; ASTM A108.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Nut, Slotted, Hexagon (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, CARBON; 1117, 1118; ASTM A108.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
In process -As per Drawing 5013686	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5013686		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5013686		Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	5013694								QAP No: OFT/QAP/M2HB/5013694
Nomenclature	PIN,SHOULDER,HEADLESS, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, ASTM A322 OR A331; 4140								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Pin, Shoulder, Headless (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, ASTM A322 OR A331; 4140		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 5013694	HEAT AT 838°C TO 860°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO ROCKWELL HARDNESS C 38-46.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 5013694	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5013694		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5013694		Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

P. Arunagiri
NAI Arunagiri
 Civilian Technical Officer (Mech)
 for Principal Inspector Of Naval Armament
 Trichirappalli.

G. Devendiran
G. DEVENDIRANE, I.O.F.S.
 ASST WORKS MANAGER
 INDIA, MIN. OF DEFENCE
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 TRICHIRAPPALLI

QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)								Issue No : 01 Rev No: 00	
								Date of Issue / / 2021	
Drg . No.	5013687							QAP No: OFT/QAP/M2HB/5013687	
Nomenclature	PIN, STRAIGHT, HEADLESS , OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, CARBON; 1117, 1118; ASTM A108.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Pin, Straight, Headless (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, CARBON; 1117, 1118; ASTM A108.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
In process -As per Drawing 5013687	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5013687		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5013687		Firm Inspection report	W	
<p>*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable. (ii) In case of hard ware items, NAI, Trichy will review the reports, if required.</p>									

NAI
P. Arundhan
 P. Arundhan
 Civilian Technical Officer (Mech)
 for Principal Inspector of Naval Armaments
 Tirunelveli.

OFT
G. Devedirane
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GRONANCE FACTORY
TIRUPATI

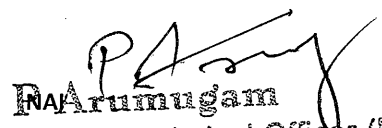
QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drng . No.	6008990								QAP No: OFT/QAP/M2HB/6008990
Nomenclature	PLUNGER, RETRACTING SLIDE, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, ASTM A576: 1095, 1075 OR STEEL, ASTM A686: CLASS W 1-8 THRU 10, GRADE 'C'.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Plunger, Retracting, Slide (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, ASTM A576: 1095, 1075 OR STEEL, ASTM A686: CLASS W 1-8 THRU 10, GRADE 'C'.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 6008990	HEAT AT 774°C TO 802°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO ROCKWELL HARDNESS A 70.5-73.5.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 6008990	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 6008990		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6008990		Firm Inspection report	W	


*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

NAI
P. Arumugam
 Chief Technical Officer (Quality)
 or Principal Inspector of Naval Armaments
 Chennai


OF
G. DEVENDIRANE, I.O.F.S.
 WORKS MANAGER
 MIN. OF. DEFENCE
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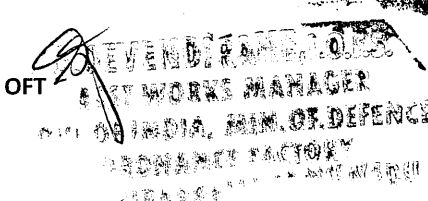
QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drq . No.	6147893								QAP No: OFT/QAP/M2HB/6147893
Nomenclature	SLIDE, RETRACTING ,OOW50BMG. : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	WROUGHT STEEL, ASTM A108: 1018, 1118. CASTING: IRON, MALLEABLE, PERALITIC, ASTM A220, GRADE 45006 OR IRON, DUCTILE CASTING, ASTM A536, GRADE 80-55-06 OR ASTM A536, GRADE 65-45-12.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Slide, Retracting (Raw material)	General appearance	Non Critical	Visual	100%	WROUGHT STEEL, ASTM A108: 1018, 1118. CASTING: IRON, MALLEABLE, PERALITIC, ASTM A220, GRADE 45006 OR IRON, DUCTILE CASTING, ASTM A536, GRADE 80-55-06 OR ASTM A536, GRADE 65-45-12.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 6147893		Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 6147893	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 6147893		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6147893		Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for <u>out sourced</u> components. JRI will be done by NAI & OFT on sampling basis. For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.</p>									


N. Arumugam
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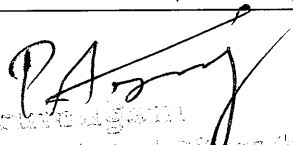

G. DEVEDIRANE, I.O.F.S.
 ASST. WORKS MANAGER
 GOVT. OF INDIA, MIN. OF DEFENCE
 ORDNANCE FACTORY
 TIRUCHIRAPPALLI-TAMILNADU


QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	5013693								QAP No: OFT/QAP/M2HB/5013693
Nomenclature	SPRING, HELICAL COMPRESSION, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	WIRE, MUSIC, STEEL ASTM A228 EXCEPT THAT MAXIMUM TENSILE STRENGTH SHALL NOT APPLY.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Spring, Helical Compression. (Raw material)	General appearance	Non Critical	Visual	100%	WIRE, MUSIC, STEEL ASTM A228 EXCEPT THAT MAXIMUM TENSILE STRENGTH SHALL NOT APPLY.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	STRESS RELIEVE AT 224°C ± 5°C .FOR 30 Min After Coiling.		Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 or 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 5013693	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5013693		Firm Inspection report	R	
Load Test	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	LOAD TEST SHALL APPLY AFTER SPRING HAS BEEN COMPRESSED SOLID FIVE(5) TIMES.		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5013693		Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for <u>out sourced</u> components. JRI will be done by NAI & OFT on sampling basis. For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.</p>									


NAI Arumugam
 Civilian Technical Officer (Mech)
 for Principal Inspector Of Naval Armament
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 OFT
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 INDIA, MIN. OF DEFENCE
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 TIRUCHIRAPPALLI

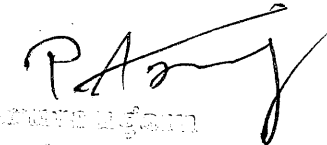
QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	5013691								QAP No: OFT/QAP/M2HB/5013691
Nomenclature	SPRING, HELICAL TORSION, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	WIRE, MUSIC, STEEL, ASTM A228								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Spring, Helical Torsion (Raw material)	General appearance	Non Critical	Visual	100%	WIRE, MUSIC, STEEL, ASTM A228		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 5013691	AFTER COILING, STRESS RELIEVE AT 224°C ± 5°C FOR 30 MINUTES.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 1.1.2.2 Except supplementary chromate color to be olive drab.	Test report from NABL lab	R	
In process -As per Drawing 5013691	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5013691		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5013691		Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for <u>out sourced</u> components. JRI will be done by NAI & OFT on sampling basis. For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.</p>									


 NAI
 Civilian Technical Officer (Head)
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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	6008993								QAP No: OFT/QAP/M2HB/6008993
Nomenclature	STUD, RETRACTING SLIDE, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, ASTM A322 OR A331; 4140, 4142, 8640 OR 8740.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Stud, Retracting Slide (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, ASTM A322 OR A331; 4140, 4142, 8640 OR 8740.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%		HEAT AT 838°C TO 860°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO ROCKWELL HARDNESS C38-46. HEAT TREATMENT METHOD IS FOR GUIDANCE EXCEPT THAT HARDNESS REQUIREMENT IS MANDATORY AND TIME AT TEMPERING TEMPERATURE SHALL NOT BE REDUCED BELOW THAT SPECIFIED.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 6008993	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%		As per Drawing 6008993	Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%		As per Drawing 6008993	Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

NAI

 Chief Technical Officer (Tech)
 Ordnance Factory, Changanassery,
 Thiruvananthapuram.

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 CHANGANASSERY
 THIRUVANANTHAPURAM

QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	6313822								QAP No: OFT/QAP/M2HB/6313822
Nomenclature	STUD, SHOULDERED AND STEPPED, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, ASTM A322 OR A331: 4140.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Stud, Shouldered and Stepped (Raw material)	General appearance	Non Critical	Visual	100%	STEEL, ASTM A322 OR A331: 4140.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 6313822	HEAT AT 838°C TO 860°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO ROCKWELL HARDNESS C 28-35.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 6313822	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 6313822		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 6313822		Firm Inspection report	W	
<p>*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable. (ii) In case of hard ware items, NAI, Trichy will review the reports, if required.</p>									

NAI

Chief Engineer, QA
Ordnance Factory, Trichy

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"UCHIRAPPALLI" TAMILNADU

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QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)								Issue No : 01 Rev No: 00	
								Date of Issue / / 2021	
Drg . No.	5013697							QAP No: OFT/QAP/M2HB/5013697	
Nomenclature	WASHER, THRUST, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL, CARBON; 1117, 1118; ASTM A108 OR STEEL, CARBON; ASTM A109.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Washer, Thrust (Raw material)	General appearance	Non Critical	Visual	100%		STEEL, CARBON; 1117, 1118; ASTM A108 OR STEEL, CARBON; ASTM A109.	Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 5013697	CARBURIZE AT 871°C TO CASE DEPTH 0.076 TO 0.152. OIL QUENCH. TEMPER AT 177°C MINIMUM FOR ONE HOUR MINIMUM TO FILE HARDNESS. HEAT TREATMENT METHOD IS FOR GUIDANCE EXCEPT THAT CASE DEPTH AND HARDNESS REQUIREMENTS ARE MANDATORY AND TIME AT TEMPERING TEMPERATURE SHALL NOT BE REDUCED BELOW THAT SPECIFIED. THE USE OF STRAIGHT CYANIDE BATH OR CARBON-NITRIDING PROCESS SHALL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE CONTRACTING OFFICER.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 5013697	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%		As per Drawing 5013697	Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%		As per Drawing 5013697	Firm Inspection report	W	

*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable.
(ii) In case of hard ware items, NAI, Trichy will review the reports, if required.

R. Arumugam
R. Arumugam
 Civilian Technical Officer (Mech)
 Principal Inspec
 Thirapp

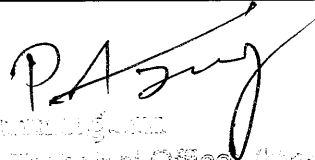
G. DEVENDIRAMELLO.S.
 ASST. WORKS MANAGER
 GOVT. INDIA, MIN. OF DEFENCE
 DEFENCE FACTORY
 THIRAPP

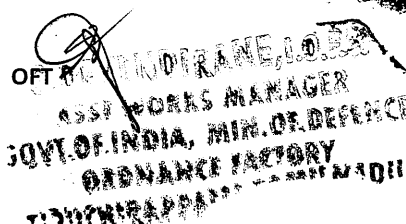
QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)								Issue No : 01 Rev No: 00	
								Date of Issue / / 2021	
Drg . No.	MS24665-816							QAP No: OFT/QAP/M2HB/MS24665-816	
Nomenclature	PIN,COTTER, 1/16" X 1", OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	STEEL								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by GM/OFT (Review/Witness) (*)	Remarks
Pin Cotter, 1/16" x 1" (Raw material)	General appearance	Non Critical	Visual	100%	STEEL		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	IS 2500 Level II AQL 2.5%	As per Drawing MS24665-816		Firm Inspection report	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
In process -As per Drawing MS24665-816	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	IS 2500 Level II AQL 2.5%	As per Drawing MS24665-816		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	IS 2500 Level II AQL 2.5%	As per Drawing MS24665-816		Firm Inspection report	W	
<p>*Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause 3(c) sub clause (i) NAI, Trichy may do Surveillance audit of the reports, if applicable. (ii) In case of hard ware items, NAI, Trichy will review the reports, if required.</p>									

NAI
P Arunigam
Civilian Technical Officer (Mech)
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ARMOURY FACTORY
TRICHY

QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00
									Date of Issue / / 2021
Drg . No.	5013692								QAP No: OFT/QAP/M2HB/5013692
Nomenclature	SPRING, HELICAL TORSION, OOW50BMG : REQD.FOR SLIDE ASSEMBLY RETRACTING (11010439)								
Material	WIRE, MUSIC, STEEL, ASTM A228								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Spring, Helical Torsion (Raw material)	General appearance	Non Critical	Visual	100%	WIRE, MUSIC, STEEL, ASTM A228		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%	As per Drawing 5013692	AFTER COILING, STRESS RELIEVE AT 224°C ± 5°C FOR 30 MINUTES.	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 1.1.2.2 Except supplementary chromate color to be olive drab.	Test report from NABL lab	R	
In process -As per Drawing 5013692	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5013692		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5013692		Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for out sourced components. JRI will be done by NAI & OFT on sampling basis. For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.</p>									


 NAI
 (Civilian Technical Officer (Tech))
 for Principal Inspector Of Naval Armament
 Trichirappalli.


 OFT / SRCG / M2HBGun, I.O.E.
 WORKS MANAGER
 GOVT. OF INDIA, MIN. OF DEFENCE
 ORDNANCE FACTORY
 TRICHIRAPPALLI