Step	Description	Details/Actions	PTR	AS	PTD	V1	V2	V3	V4	V5	V6	S1	S2	S3	S4	S5	S6	P1	X	Y	Z	A
RS1	Advance X Vial Chain	If S2 = ON Advance X to XINC Goto RS2 Else ERROR Hold				OFF	OFF	OFF	OFF	OFF	OFF	On/Off	ON	OFF	OFF	OFF	OFF	>10	>>	Up	Up	OK
RS2	Check for Vial	If S1 = ON Goto RS3 Else No Vial Run Ended Goto SB1				OFF	OFF	OFF	OFF	OFF	OFF	On/Off	ON	OFF	OFF	OFF	OFF	>10	OK	Up	Up	OK
RS3	Wait for P&T Ready	If P&T Pin = Ready Goto RS4 Else Waiting for P&T Ready Hold	RDY			OFF	OFF	OFF	OFF	OFF	OFF	On/Off	ON	OFF	OFF	OFF	OFF	>10	OK	Up	Up	OK
RS4	Move Needle Down	Move Z>Down				OFF	OFF	OFF	OFF	OFF	OFF	On	OFF	OFF	OFF	OFF	OFF	>10	OK	Up	DN	OK
RS5	Fill Sample Syringe	V6 Needle Flush Move Y>SV+ @Sp=W				OFF	OFF	OFF	OFF	OFF	ON	On	OFF	OFF	OFF	OFF	OFF	>10	OK	SV+	DN	OK
RS6	Check If No Std Ring Skip Std	If S3 = On Goto RS9 Else Goto RS8				OFF	OFF	OFF	OFF	OFF	OFF	On	OFF	On/Off	OFF	OFF	OFF	>10	OK	SV+	DN	OK
RS7	Fill Std. Loop	V3 Standard Valve Move A>A+AINC				OFF	OFF	On	OFF	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	SV+	DN	INC
RS8	Start P&T	Send P&T Start		ST		OFF	OFF	On	OFF	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	SV+	DN	INC
RS9	Rinse to Vial	V4 Waste Move Y<SV @Sp=W				OFF	OFF	OFF	On	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	SV	DN	OK
RS10	Sample Transfer	V4 Waste V1 Syringe Move Y<0V @Sp=W				On	OFF	OFF	On	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	>0	DN	OK

Step	Description	Details/Actions	PTR	AS	PTD	V1	V2	V3	V4	V5	V6	S1	S2	S3	S4	S5	S6	P1	X	Y	Z	A
RS11	Sampler Rinse Gas Fill	V4 Waste V5 Gas Flush Move Y>5mL @Sp=G				OFF	OFF	OFF	On	On	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	>5	DN	OK
RS12	Sampler Gas Rinse 1	V4 Waste V1 Syringe Move Y<0mL @Sp=G				ON	OFF	OFF	On	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	>0	DN	OK
RS13	Needle Rinse Gas Fill	V5 Gas Flush Move Y>5mL @Sp=G				OFF	OFF	OFF	OFF	On	OFF	On	OFF	OFF	OFF	OFF	OFF	>10	OK	>5	DN	OK
RS14	Needle Gas Rinse 1	Move Y<0mL @Sp=G				OFF	OFF	OFF	OFF	OFF	OFF	On	OFF	OFF	OFF	OFF	OFF	>10	OK	>0	DN	OK
RS15	Move Needle For Rinse	Move Z>R Rinse Pos.				On	On	OFF	OFF	OFF	OFF	On	OFF	OFF	OFF	OFF	OFF	>10	OK	>0	>R	OK
RS16	Needle Rinse H2O Fill	V2 Rinse H2O V1 Syringe Move Y>5mL @Sp=W				OFF	OFF	OFF	OFF	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	>5	>R	OK
RS17	Needle H2O Rinse	Move Y<0mL @Sp=W				OFF	OFF	OFF	OFF	OFF	OFF	On	OFF	Off	OFF	OFF	OFF	>10	OK	>0	>R	OK
RS18	Needle Rinse 2 Gas Fill	V5 Gas Flush Move Y>5mL @Sp=G				OFF	OFF	OFF	OFF	On	OFF	On	OFF	OFF	OFF	OFF	OFF	>10	OK	>5	>R	OK
RS19	Needle Gas Rinse 2	V6 Needle Flush Move Y<0mL @Sp=G				OFF	OFF	OFF	OFF	OFF	On	On	OFF	Off	OFF	OFF	OFF	>10	OK	>0	>R	OK
RS20	Raise Needle Up	Move Z>U Up Pos.				OFF	OFF	OFF	OFF	OFF	OFF	On	ON/OFF	Off	OFF	OFF	OFF	>10	OK	>0	UP	OK
RS21	Check Needle Position	If S2 = ON Goto RS22 Else ERROR Hold				OFF	OFF	OFF	OFF	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>0	UP	OK
RS22	Wait for P&T Desorb	If P&T Pin = Desorb Goto RS23 Else Waiting for P&T DESORB Hold			DS	OFF	OFF	OFF	OFF	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>0	UP	OK

Step	Description	Details/Actions	PTR	AS	PTD	V1	V2	V3	V4	V5	V6	S1	S2	S3	S4	S5	S6	P1	X	Y	Z	A
RS23	Sampler Rinse H2O Fill	V2 Rinse H2O V1 Syringe Move Y>5mL @Sp=W				ON	ON	OFF	OFF	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>5	>R	OK
RS24	Sampler H2O Rinse	V4 Waste V1 Syringe Move Y>5mL @Sp=W				ON	OFF	OFF	ON	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>0	>R	OK
RS25	Sampler Rinse Gas Fill 2	V4 Waste V5 Gas Flush Move Y>5mL @Sp=G				OFF	OFF	OFF	On	On	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>5	DN	OK
RS26	Sampler Gas Rinse 2	V4 Waste V1 Syringe Move Y<0mL @Sp=G				ON	OFF	OFF	On	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>0	DN	OK
RS27	System H2O Rinse Fill	V2 Rinse H2O V1 Syringe Move Y>5mL @Sp=W				ON	ON	OFF	OFF	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>5	>R	OK
RS28	System H2O Rinse	V1 Syringe Move Y>0mL @Sp=W				ON	OFF	OFF	OFF	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>0	>R	OK
RS29	System Gas Rinse Fill	V5 Gas Flush Move Y>5mL @Sp=G				OFF	OFF	OFF	OFF	ON	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>5	>R	OK
RS30	System Gas Rinse	V1 Syringe Move Y<0mL @Sp=G				ON	OFF	OFF	OFF	OFF	OFF	On	ON	Off	OFF	OFF	OFF	>10	OK	>0	DN	OK
RS31	Finish Sample	SAMPLE FINISHED GOTO RS1																				