

Changeover Key		Inspection Key		Process Flow Diagram Worksheet										Part #		
P=Product	T=Tooling	A=Automatic	M=Manual	Product: All-Terrain Front Wheel Subassy												
S=Software	D=Dunnage	V=Visual	Q=Quality Audit	Rev Date:												
Op-seq #		Fab	Move	Store/Gat	Inspect	Rework	Scrap/Contain	Changeover	Operation Description		Class (KPC)	Significant Product Characteristics (Outputs)		Class (KCC)	Significant Process Characteristics (Inputs)	
1.2		◊	○	△	■	◊	○		Front Wheel Subassembly Station							
1.2.1									Get wheel hub from parts presentation device			Correct hub selected			Correct hub are in presentation device	
1.2.2									Orient and place wheel hub in wheel assembly fixture			Wheel hub is correctly located in wheel assy fixture			Fixture does not allow incorrect hub placement	
1.2.3									Get wheel rim from parts presentation device			Correct wheel rim selected			Correct wheel rims are in presentation device	
1.2.4									Orient and place wheel rim in wheel assembly fixture			Wheel rim is correctly located in wheel assy fixture			Fixture does not allow incorrect rim placement	
1.2.5									Get set of wheel spokes from parts presentation device			Correct spoke set selected			Correct spokes are in presentation device	
1.2.6									Orient and place wheel spokes in wheel assembly fixture			1. Correct number of wheel spokes 2. Correctly oriented spokes properly connected in wheel assy fixture			1. Correct kit of 36 wheel spokes 2. Error-proofed wheel assy fixture (orientation,correct parts)	
1.2.7									Attach and tighten spokes to wheel rim and wheel hub		KPC	Spokes correctly tightened to required specification		KCC	Spoke tightening gun correctly calibrated (torque management)	
1.2.8									Adjust spoke tightness to ensure wheel rim is round to specs		KPC	Wheel roundness meets specifications		KCC	Correct spoke adjustment procedure	
1.2.9									Get tire liner from parts presentation device			Correct tire liner selected			Correct tire liners are in presentation device	
1.2.10									Orient and install tire liner around wheel rim			Tire liner correctly located on wheel rim			Correct tire liner installation procedure	
1.2.11									Get tire from parts presentation device			Correct tire selected			Correct tire are in presentation device	
1.2.12									Orient and install tire around wheel rim and tire liner			Tire correctly located on wheel rim			Tire installation tool well suited for mounting tire on wheel rim	
1.2.13									Get tube from parts presentation device			Correct tube selected			Correct tubes are in presentation device	