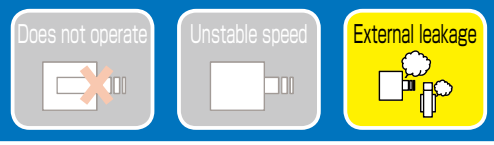
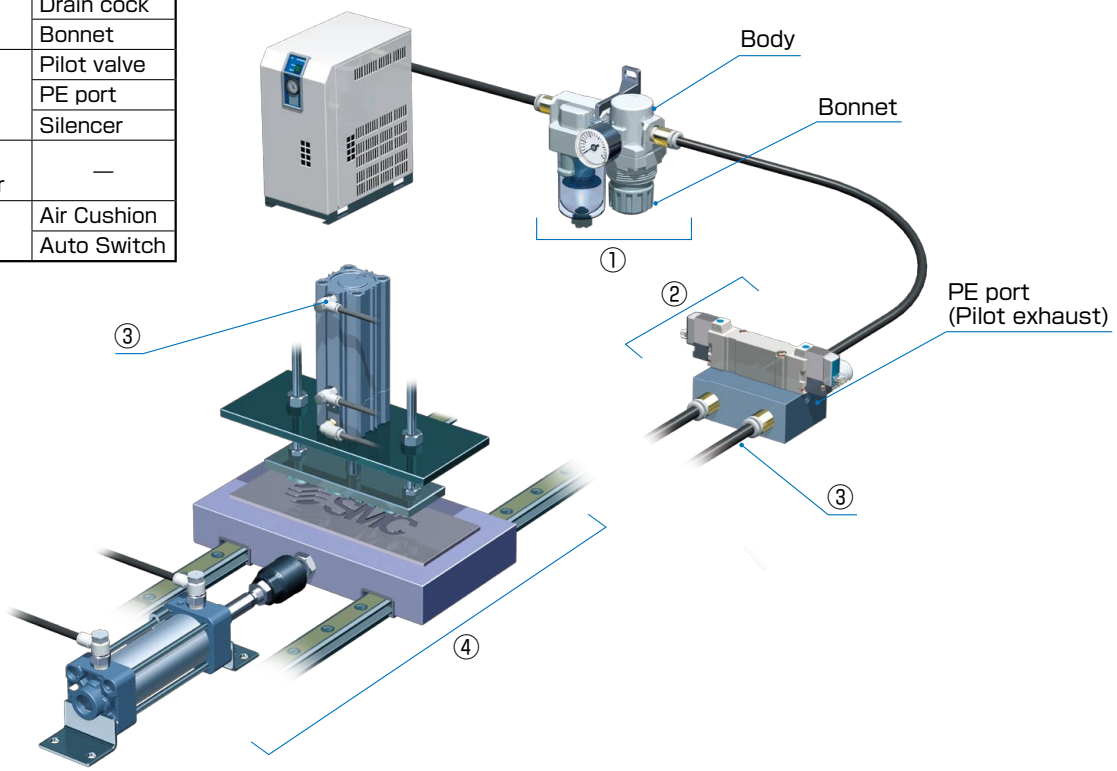
Trouble Check Sheet

Basic Pneumatic Circuit



Check location	Description	Related items
①	Filter/Regulator	Drain cock
		Bonnet
②	Solenoid valve	Pilot valve
		PE port
		Silencer
③	Fitting/Tubing/ Speed controller	—
④	Air cylinder	Air Cushion
		Auto Switch



Check location		Detailed status	[Probable cause] and Actions
① Air filter	Drain cock	☐ Leakage from discharge portion	[Foreign matter caught in drain cock valve] [Damage of drain cock] ・Blow clean the drain cock. ・Replace bowl assembly
① Regulator	Exhaust hole of bonnet	☐ IN and OUT tubing is connected in reverse.	[Connection error] ・Reconnect tubing.
		☐ Parallel circuit is being used.	[Flowing around of valve-outlet pressure] ・Review circuit. ・Attach a check valve.
	Between bonnet and body	☐ Looseness in bonnet seal	Reconnect tubing.
② Solenoid valve	Between body and manifold	☐ Gasket is sticking out.	[Connection error] ・Reconnect tubing. ・Replace gaskets
	Silencer (Sound absorbing material)	☐ There is always leakage.	[Foreign matter caught in solenoid valve] ・Operate manually. [Wear of cylinder piston seal] ・Replace cylinder piston seal
③ Fitting/Tubing/Speed controller		☐ Air leaks from tube connection portion.	[Insufficient connection, or cut section] ・Reconnect tubing.
		☐ Leakage from coiled tubing moving portion	[Rupture due to rubbing between tubing] ・Reconnect tubing. ・Consider using wear resistant tubing (Series TUZ)
④ Air Cylinder	Rod	☐ Scratches on rod surface	[Flowing of grease due to surrounding environment] [Damage of cylinder rod seal] ・Replace cylinder rod seal [Increase of sliding resistance] [Lateral load/Moment] ・Replace with a cylinder equipped with dust, water resistance, and welding spatter measures.
		☐ There is splashing or adhesion of dust, water, etc.	
		☐ Out of grease	[Wear of cylinder rod seal] ・Replace cylinder rod seal [Increase of sliding resistance] [Flowing of grease due to surrounding environment] ・Apply grease.
		☐ Floating mechanism is not installed.	[Wear of cylinder rod seal] [Increase of sliding resistance] [Lateral load/Moment] [Foreign matter adhesion] ＊Check the minimum operating pressure.
		☐ Guide and rods are off center.	