Technical Information

YS SERIES

YS Series Preventive Maintenance

TI 1B4Y04-01E

Sale of the YS80 Series began in January of 1981, with over 1,200,000 units have been shipped since. Some units have been in operation for a long period of time, and we have been having customers perform replacement with the YS80 Style E or YS100 Series for those that have been in use for many years.
Also, sale of the YS100 Series began in January of 1991, so it has been over twelve years since the first items were shipped, and it is now nearing the time in which preventive maintenance is required.

Various directions can be considered for these instruments that are in operation, according to the situation of the customer: replacement with the latest version of or successor models, shift to system instrumentation, or continued use in the current state. But whatever the situation, it is necessary to maintain high reliability while they are in operation.
Examples of the wear-out failure mode which is known as the bathtub curve include parts with a lifetime, such as aluminum electrolytic capacitors, as well as parts such as switches with electrical contacts. At the design stage, the YS Series utilizes parts that have high reliability and a long lifetime, but there are some parts for which long-term deterioration due to the frequency of use cannot be avoided, as well as parts which deteriorate due to the operating environment, etc. Leaving such deteriorated parts as they are may lead to serious problems due to instrument malfunction. Problems believed to be due to the neglect of preventive maintenance also occur.
In light of such precedents, it is recommended that preventive maintenance required to maintain reliability be performed at regular intervals for parts which have a lifetime.

Please contact our Service Department regarding preventive maintenance.

Preventive Maintenance for Parts with a Lifetime
It is recommended that the parts given in the following table be replaced at regular intervals.

Item	Major Applicable Models	Recommended Replacement Intervals	Notes
Fuse	All YS80 models	3 years	Prevents wire breakage caused by element deterioration.
Aluminum Electrolytic Capacitor	SDND	Replece every 8 years without fail.	Prevents fluid leaks and capacity drop.
	All YS models	5-10 years	
Backup Capacitor	All YS100 models(*)	10 years	
Fan	SDND*A	3-5 years	Vendor-site replacement.
Battery	SLPC, etc.	5 years in energized state	1 year, in non-energized state
Fluorescent Display Tube	SLPC, etc.	3-5 years	According to the degree of deterioration in brightness.
Replay	SKYD, SALD etc.	600,000 operations	Equivalent to 10 years at a frequency of 1 operation every 10 minutes.
Servo Motor	SRVD, SRHD	3-10 years	Accoding to input vibration, etc. (Bearing wear)
Fluorescent Tube	All YS100 models(*)	2 years	Accoding to the degree of deterioration in brightness.
Liquid Crystal Display	All YS100 models(*)	7 years	Accoding to the degree of contrast decrease.
Slide Switch, Micro Switch	All YS80 models (except Style R)	5-10 years	Differs according to the environment and frequency of use.

∗ : Except YS110

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YS Series Preventive Maintenance Parts

Instrument Model	Name	Capacitors	Fuse	Battery (*2)	Fluorescent Display Tube	Relay	Fan	Servo motor (*3)	Fluorescent Tube	Liquid Crystal Display (*4)	Switches
SRVD	Recorder	✓	✓	×	×	×	×	✓	×	×	✓
SRHD	Intelligent Recorder	✓	✓	✓	×	×	×	✓	×	×	✓
SIHM	Indicator	Cond.	Cond.	×	×	×	×	×	×	×	×
SIHK	Indicator with Alarm	✓	✓	×	×	✓	×	×	×	×	×
SLCD	Indicating Controller	✓	✓	✓	Cond.	×	×	×	×	×	✓
SLPC	Programmable Indicating Controller	✓	✓	✓	Cond.	×	×	×	×	×	✓
SMLD	Manual Station	✓	✓	×	×	×	×	×	×	×	×
SPBD	Standby Manual Station	✓	✓	×	×	×	×	×	×	×	×
SMST	Auto / Manual Station	✓	✓	×	×	×	×	×	×	×	✓
SMRT	Ratio Set Station	✓	✓	✓	×	×	×	×	×	×	✓
SCMS	Programmable Computing Station	✓	✓	✓	×	×	×	×	×	×	✓
SIHF	Bar Graph Indicator with Alam	✓	✓	×	✓	×	×	×	×	×	✓
SLMC	Programmable Indicating Controller with Pulse Width Output	✓	✓	✓	Cond.	×	×	×	×	×	✓
SBSD	Batch Set Station	✓	✓	✓	×	×	×	×	×	×	✓
SLCC	Blending Controller	✓	✓	✓	×	×	×	×	×	×	✓
SLBC	Batch Controller	✓	✓	✓	×	×	×	×	×	×	✓
STLD	Totalizer	✓	✓	✓	×	×	×	×	×	×	✓
ULDU	Loop Display Unit	✓	✓	✓	Cond.	×	×	×	×	×	✓
STED	mV, Temperature and Potentiometer Converter	✓	✓	×	×	×	×	×	×	×	✓
SKYD	Alarm Unit	✓	✓	×	×	✓	×	×	×	×	✓
SALD	mV and Temperature Alam Unit	✓	✓	×	×	✓	×	×	×	×	✓
SDAU	Digital Alam Unit	✓	✓	×	×	(✓)	×	×	×	×	✓
SPLR	Programmable Computing Unit	✓	✓	×	×	×	×	×	×	×	✓
SCIU	Communication Interface Unit	✓	✓	×	×	×	×	×	×	×	✓
SISD	Isolator	✓	✓	×	×	×	×	×	×	×	×
SIND	Integrator	✓	✓	×	×	×	×	×	×	×	×
SDBU	Distributor	✓	✓	×	×	×	×	×	×	×	✓
SDND	Power supply Unit	✓	×	×	×	(✓)	✓	×	×	×	×
SDBT	Distributor	✓	✓	×	×	×	×	×	×	×	×
SDBS	Distributor	✓	✓	×	×	×	×	×	×	×	✓
SPCM	Pulse Computing Unit	✓	✓	×	×	×	×	×	×	×	✓
PTED	EMF-and RTD-to-Pneumatic Converter	✓	✓	×	×	×	×	×	×	×	✓
SPRG	Programmer	✓	✓	×	×	×	×	×	×	×	×
YS170	Single-Loop Controller	✓	×	×	×	×	×	×	✓	✓	×
YS150	Single-Loop Controller	✓	×	×	×	×	×	×	✓	✓	×
YS131	Indicator with Alam	✓	×	×	×	×	×	×	✓	✓	×
YS135	Auto / Manual Station for SV Setting	✓	×	×	×	×	×	×	✓	✓	×
YS136	Auto / Manual Station for MV Setting	✓	×	×	×	×	×	×	✓	✓	×
YS110	Standby Manual Station	✓	×	✓	×	×	×	×	×	×	×

(*1) ✓ indicates items to which preventive maintenance replacement applies.
Cond. indicates items to which preventive maintenance replacement applies according to instrument model or custom specifications and style.
× indicates items to which preventive maintenance replacement does not apply.
() indicates items for which the part model name differs from others.

(*2) The part name “battery” indicates the backup lithium battery of the RAM (memory).

(*3) If the slippage of the SRHD intelligent recorder pen carriage shaft becomes bad and a servo error, etc., is displayed, clean the shaft with alcohol. The use of lubricant may result in debris adhering, and become the cause of reoccurrence of problems.

(*4) Adjust the contrast after replacing the YS100 Series liquid crystal.