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Various icons and important messages are used in this manual to avoid problems that could result in hazards to personnel and damage to properties.

- The below explains what will happen if someone fails to heed a particular precaution statement.




 <b style="font-size: 1.2em;">Danger</b>	Danger statements are used to indicate hazards or unsafe practices which COULD result in severe personal injury or death.
 <b style="font-size: 1.2em;">Caution</b>	Caution statements are used to indicate hazards or unsafe practices which COULD result in minor personal injury or product or property damage.


- The following symbols are used to describe the type of Do and Don't.

	This symbol is used to indicate a practice that shall not be attempted.
	This symbol is used to indicate a practice that shall be done.



# Safety Precautions (Please observe safety precautions fully.)

## **Danger**


	<b>Don't use the speed controller in or near environment containing water, corrosive gas, flammable gas or flammable material.</b>	To prevent possibility of fire.
	<b>Don't place flammable materials near the motor (including the controller).</b>	
	<b>Don't make soldering joint on a round pin of the speed controller.</b>	
	<b>Don't damage leadwires or subject leadwires to excessive stress such as strong pressure, heavy object and clamping load.</b>	Will cause electric shock, malfunction or damage.
	<b>Don't use leadwires soaked in water or oil.</b>	
	<b>Don't use the controller in a place subject to excessive vibration or shock.</b>	Will cause electric shock, personal injury or fire.
	<b>Don't remove the speed controller setting knob.</b>	Will cause burn injury or electric shock.
	<b>Don't touch rotating member of the motor.</b>	Will cause personal injury.
	<b>Don't touch potentially hot motor casing.</b>	Will cause burn injury.
	<b>Don't attempt to carry out wiring or manual operation with wet hand.</b>	Will cause electric shock, personal injury or fire.
	<b>Wiring work should be done by a qualified electrician.</b>	Wiring work done by an inexperienced person will cause electric shock.



	<b>Use overcurrent protection device, ground-fault circuit interrupter, overtemperature protecting device, and emergency stop device.</b>	Failure to heed these requirements will result in electric shock, personal injury or fire.
	<b>After an earthquake, first verify safety.</b>	
	<b>Before transferring, wiring or checking product, disconnect the power source for safe isolation.</b>	Incomplete power disconnection will cause electric shock.
	<b>Securely install the equipment to prevent bodily injury or fire in case of earthquake.</b>	Failure to heed these requirements will result in electric shock, personal injury, fire, malfunction or damage.
	<b>Provide emergency stop circuit externally for instantaneous interruption of operation and power supply.</b>	
	<b>Install the unit to a nonflammable construction (e.g. metal).</b>	Installation on a flammable material may cause fire.
	<b>Installation area should be free from excessive dust, and from splashing water and oil.</b>	Failure to heed this precaution will result in electric shock, personal injury, fire, malfunction or damage.
	<b>Correctly run wirings to the tachogenerator.</b>	Incorrect wiring will result in short circuit, electric shock, personal injury, etc.
<b>Turn off power upon power interruption or activation of overtemperature protecting device.</b>	Unpredictable restarting will cause personal injury.	

# Safety Precautions Please observe safety precautions fully.


	<b>Install the equipment in the control board and keep the terminal block and protect it from inadvertent contact.</b>	Failure to heed this precaution will result in electric shock, personal injury, fire, malfunction or damage.
	<b>After correctly connecting leadwires, insulate the live parts with insulator.</b>	Incorrect wiring will result in short circuit, electric shock, fire or malfunction.
	<b>Ground the motor ground to the earth.</b>	Floating ground circuit will cause electric shock.


## Caution

	<b>Don't move the product by holding leadwires or motor shaft.</b>	Failure to heed these precautions will cause bodily injury.
	<b>Don't put the machine into unstable operation.</b>	
	<b>Once power failure occurs, don't come close to the machine that will unexpectedly start upon recovery of the power. Provide secure mechanism so that the restarting of the machine will not cause personal injury.</b>	
	<b>Don't apply excessive shock to the motor shaft.</b>	Excessive shock will cause failure.
	<b>Don't apply excessive shock to the product.</b>	
	<b>Don't get on the product. Don't place heavy object on the product.</b>	Failure to heed this instruction will result in electric shock, personal injury, fire, malfunction or damage.

	<b>Don't lock the motor shaft while the motor is running.</b>	Locked motor will cause fire, electric shock, or malfunction.
	<b>Don't clog or put an object into the radiating hole of the motor.</b>	Failure to heed this instruction will result in fire.
	<b>Don't turn off and on power so frequently.</b>	Failure to heed this instruction will result in fire, personal injury, malfunction or damage.
	<b>Don't pull leadwires with an excessive force.</b>	Failure to heed this instruction will cause fire, electric shock or personal injury.
	<b>Don't use the equipment in highly intensive electric field.</b>	Failure to heed these instructions will cause personal injury or fire.
	<b>Don't use the equipment under direct sunshine.</b>	
	<b>Don't use the equipment in an environment where electrostatic voltage potentials may be produced.</b>	Induced malfunction will cause malfunction or personal injury.
	<b>Don't drop or cause topple over of something during transportation or installation.</b>	Failure to heed this instruction will result in personal injury or malfunction.
	<b>Don't use a variable transformer or transformer having capacity insufficient to feed the load.</b>	Failure to heed this instruction will cause fire, electric shock or malfunction.
	<b>Don't use the equipment outside the limits described on the nameplate and user's manual.</b>	Failure to heed this instruction will result in electric shock, personal injury, fire, malfunction or damage.
	<b>Never attempt to perform modification, dismantle or repair.</b>	Failure to heed this instruction will cause fire, electric shock or personal injury.

# Safety Precautions Please observe safety precautions fully.

	<b>Perform installation by taking into consideration the mass of the body and rated output of the product.</b>	Failure to heed these instructions will result in personal injury or malfunction.
	<b>Adjust ambient environmental condition of motor and speed controller to match the motor operating temperature and humidity.</b>	
	<b>Exactly follow the installing method and direction specified.</b>	
	<b>Use the speed controller in combination with the specified motor.</b>	Failure to heed this instruction will result in fire.
	<b>Connect the motor electromagnetic brake control relay in series with a ground-fault interrupter, circuit breaker and relay so that they turn off the circuit upon emergency stop.</b>	Lack of connection will cause malfunction.
	<b>Test-run the securely fixed motor without loading to verify normal operation, and then connect it to the mechanical system.</b>	Operation using a wrong model or wrong wiring connection will result in personal injury.
	<b>Level of input voltage to the speed controller should correspond to the motor rated voltage.</b>	Operation from a voltage outside the rated voltage will cause electric shock, personal injury or fire.
	<b>Provide protection device against idling of electro-magnetic brake or gear head, or grease leakage from gear head.</b>	Lack of protection will cause personal injury, damage, pollution or fire.

	<b>Don't place any obstacle object around the motor and peripheral, which blocks air passage.</b>	Temperature rise will cause burn injury or fire.
	<b>Correctly run and arrange wiring. Maintenance must be performed by an experienced personnel.</b>	Wrong wiring will cause personal injury or electric shock.
	<b>Always keep power disconnected when the power is not necessary for a long time.</b>	Improper operation will cause personal injury.
	<b>Scraps must be treated as industrial waste.</b>	