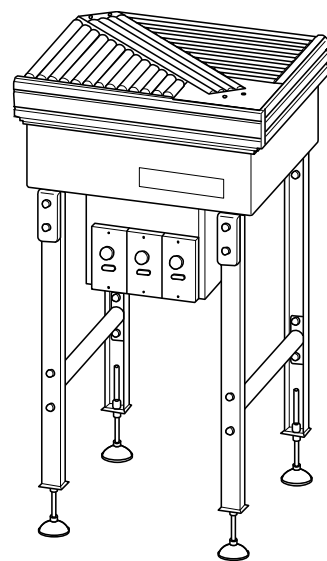
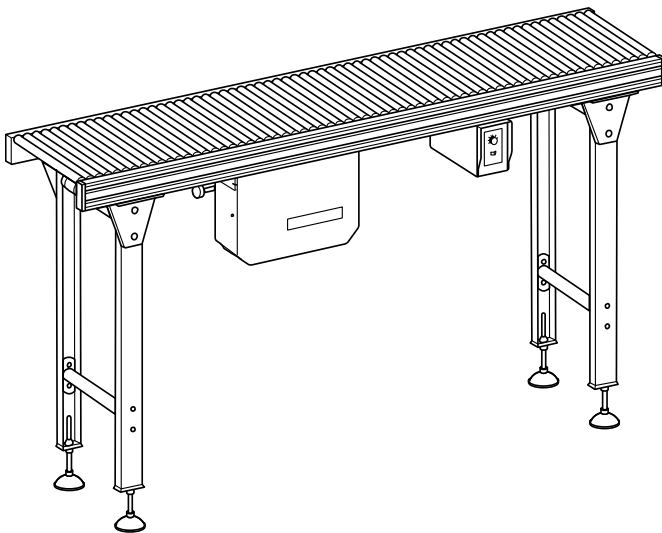


Sanki Clean Conveyor

OPERATING AND SERVICE MANUAL



Thank you very much for purchasing our **SANKI CLEAN CONVEYOR**. To use the machine properly, please read this operating and service manual carefully before use. Keep the manual where the machine is installed, so that it may be referred to when needed.



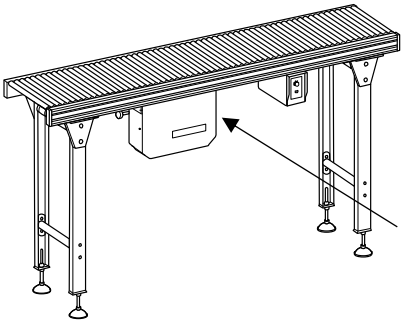
TABLE OF CONTENTS

1. Caution When Handling	4
2. Component Names	6
3. Assembly	8
4. Running the Conveyor	10
5. Taking up the Drive Belt	15
6. Drive Belt Alignment Adjustment	16
7. Drive Belt Replacement	17
8. Replacement of Urethane Drive Ring	19
9. Inspection and Maintenance	20

For the following models, refer to the separate operating and service manual:
SANKI Non-contact Magnetic Driving Conveyor MAGDRIVE
Applied models: CLAM, CLDM and CLAMC models

Upon delivery of this product, please check the package contents to ensure the product matches your order. If the delivered items do not match your order, please contact our local agent directly before use.

NOTE: To order spare parts, please include the serial number and model code found in the **serial number and model label** in your order sheet.



Serial number and model label
(affixed to side of drive cover)

[Example]

Date of production 20□□. □□
JOB NO. □□-□□□□□-□□□-□□
CLAA-400215.2 (D13-1A14.3) R-W

Manufacturer's serial number
(refer to this number when contacting us)

CLAA - 60 02 15.2 D (F02 - 3 A22) L - W

Conveyor model code

Roller width in cm (eg 60cm)

Roller pitch in cm (2 digits)
(eg 2cm)

Machine length in dm (eg 1.52m)
NOTE: For corner roller type **CLAC** model,
corner angle is shown. (eg 90 = 90°)

Drive type
(Code "D" is shown only for
double drive type machine.)

Motor type and Motor output
(eg variable-speed motor, 0.2kW)

Motor type	Motor output	Code
Constant speed	90W	C90
	0.2kW	C02
	0.4kW	C04
Brushless inverter variable speed	50W	D50
	130W	D13
Inverter variable speed	0.2kW	F02
	0.4kW	F04

Power source
(eg 200V three-phase)

Power source type	Code
100V single-phase	1
200V single-phase	2
200V three-phase	3
other	0

Roller color (eg White)

Roller color		Code
Plastic roller	White	W
	Black	B
	Carbon contained black	BE
Stainless steel roller		(none)

For **CLAA** and **CLAD** models,
Direction of drive belt
(eg. Left)

Direction of drive belt	Code
Right	R
Left	L

For corner roller type **CLAC**
model,
Direction of conveyor travel
(eg Counterclockwise)

Direction	Code
Clockwise	R
Counterclockwise	L

Power source frequency
and belt speed in m/min
(eg 50Hz, 22m/min)

Frequency	Code
50Hz	A
60Hz	B

A. Prior To Use**CAUTION :** Improper handling of the conveyor may result in physical injury or damage!**■Transport and assembly**

When transporting and assembling the conveyor, pay special attention not to drop it in order to avoid physical injury or damage. When lifting by crane, pay attention to the balance of the conveyor.

**■Earth and leakage breaker**

Ensure the conveyor is connected to earth at all times to prevent electric shock. Also ensure that an earth leakage breaker is connected to the power supply.

**■Emergency stop**

Install an emergency stop device to immediately stop the conveyor in emergency.

**■Start alarm**

If it is not possible to supervise the operation of the full length of the conveyor from the operating position, install a start alarm for increased safety.

**■Keep the conveyor dry at all times**

Use the conveyor indoors and prevent it from getting wet. Do NOT splash liquids onto the conveyor. Do NOT use or leave the conveyor outdoors. The machine is not waterproof. Do NOT touch electrical parts with wet hands.

**■Do NOT use in an explosive atmosphere**

(Avoid explosive gas, explosive dust, etc.)

□ When using in a high or inclined position:**■Lower cover and guard**

Install the optional lower cover or guard in order to prevent entry under the conveyor.

■Guide rail, top and side covers

To prevent objects from falling off the conveyor, install the optional guide rail, top and/or side covers.










■Environmental conditions

Ambient temperature : 0°C to +40°C
 Ambient humidity : RH 90% max (Avoid condensation)
 Atmosphere : Indoor (Avoid corrosive gases, dust, etc.)
 Elevation : 1,000m or less



NOTE :

- Using the conveyor in a strong electric field (eg near broadcasting devices or high- frequency welding machinery/equipment) could cause the conveyor to malfunction. In this case, install the conveyor at a sufficient distance. Alternatively shield completely to avoid any interference with the conveyor.
- Using an inverter to this machine could cause other machines to get effects of high-frequency. In this case, install the conveyor at a sufficient distance or shield completely.

B. During Operation

	WARNING : Improper handling of the conveyor could result in serious physical injury or damage!
	■Do NOT touch the conveyor when it is running There is considerable risk of being caught and injured by the conveyor.
 	■Do NOT ride on or climb on the conveyor / Do NOT go under the conveyor There is considerable risk of falling or being caught and injured by the conveyor.
	CAUTION : Improper handling of the conveyor may result in physical injury or damage!
	■Beware of entanglement When working close to the conveyor, take care not to get caught in the conveyor. There is considerable risk of being injured by the conveyor.
	■Do NOT remove safety covers There is a risk of getting caught in the rotating parts such as pulleys. Only remove in case of maintenance or inspection.
	■Do NOT start the conveyor while it is loaded The motor may become damaged due to overload. Additionally, the motors of variable-speed type machines may burn out as a result of running at excessively low speeds for long periods. Use the conveyor within the specifications, indicated in the instructions for use, and in the catalogue.
	■Do NOT apply force to ends of conveyor Do NOT press down on, or hang off the sides of the conveyor. Injury may result from a toppling conveyor. ■Toppling prevention When using the conveyor, be sure to secure it to the floor/ground with anchor bolts etc. to prevent it from toppling irrespective of indoor use or outdoor use.

C. After Use

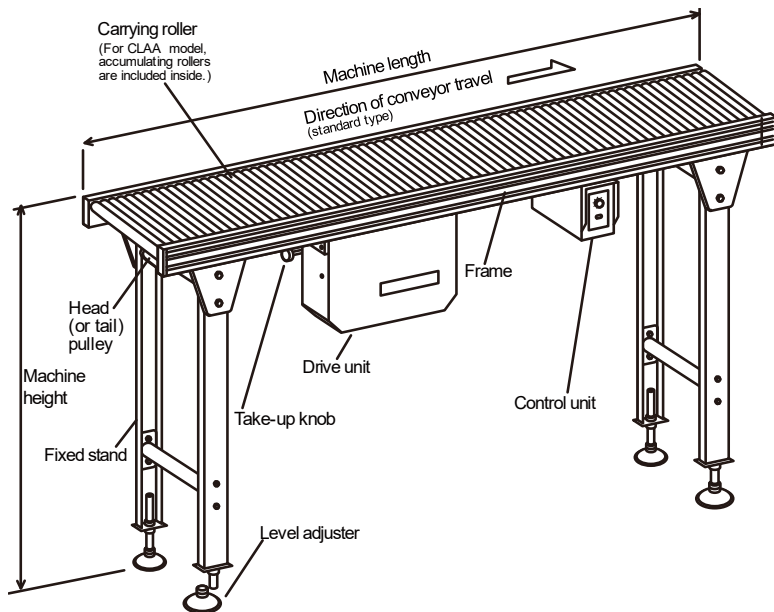
	CAUTION : Improper handling of the conveyor may result in physical injury or damage!
	■Switch off the power after use Ensure that the power is switched off when carrying out relocation, inspection, cleaning, etc. of the conveyor, otherwise there is a risk that the conveyor could start unexpectedly. When leaving the conveyor unused for a long period, take plug out of the outlet /connector to prevent electric shock or leakage.

NOTE : 1. Always use in accordance with the Occupational Safety and Health Act.
2. If the owner modifies the conveyor, any ill effects will fall outside the conditions of the guarantee.

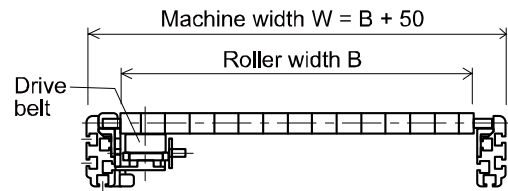
2

COMPONENT NAMES

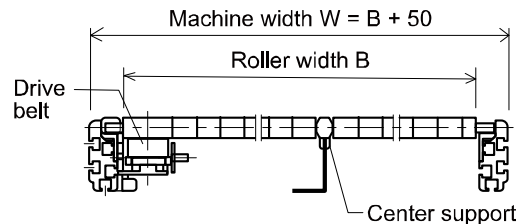
2-1. ACCUMULATING TYPE CLAA MODEL AND LIVE ROLLER TYPE CLAD MODEL



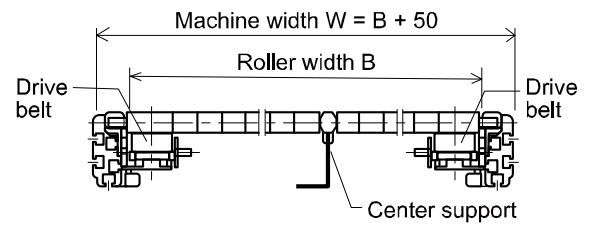
● Single drive (B=200 to 600mm)



● Single drive with center support (B=500 or 600mm)

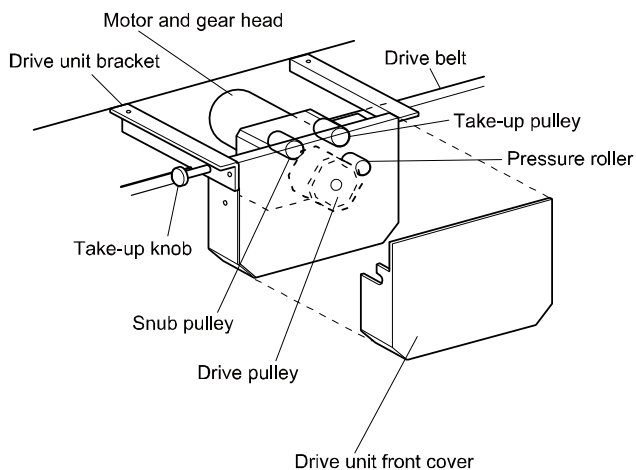


● Double drive with center support (B=700 to 1000mm)

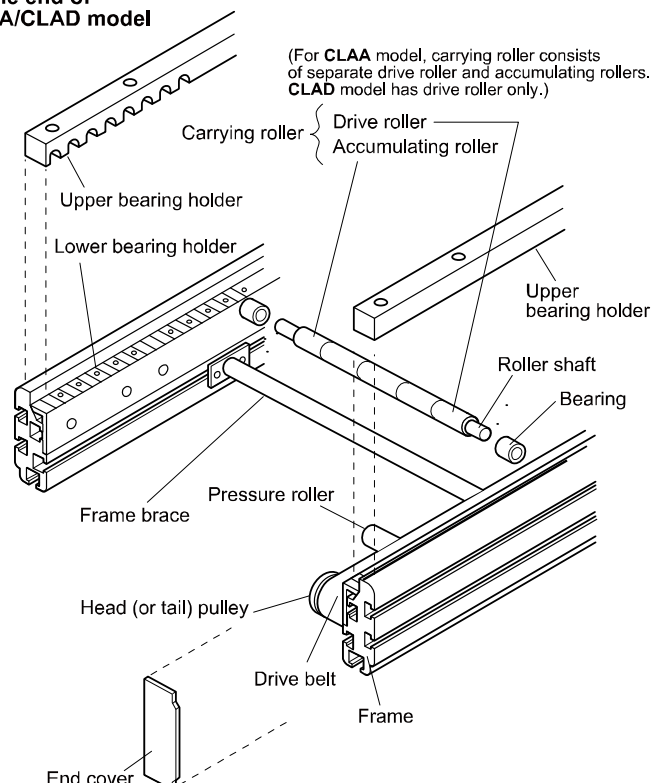


Cross section

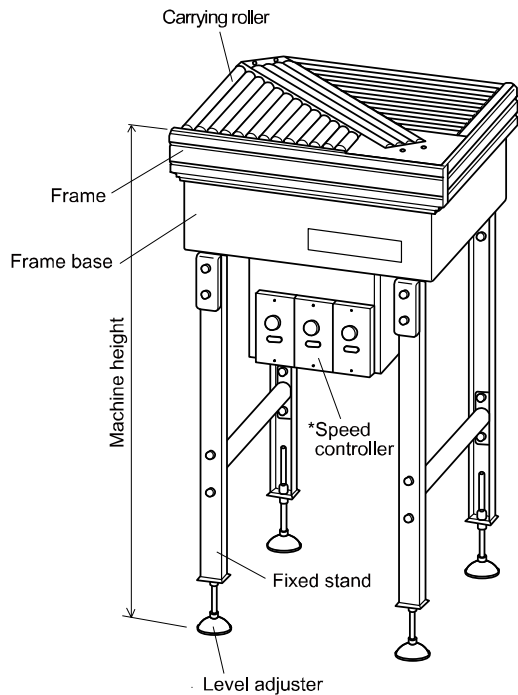
Drive Unit of CLAA/CLAD model



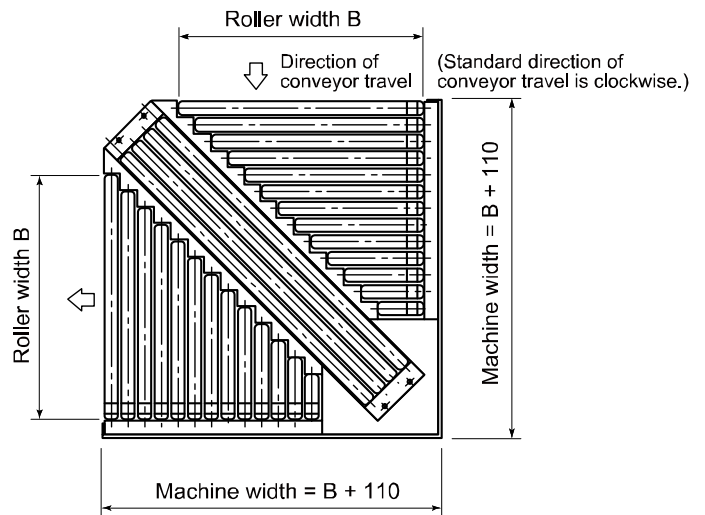
Frame end of CLAA/CLAD model



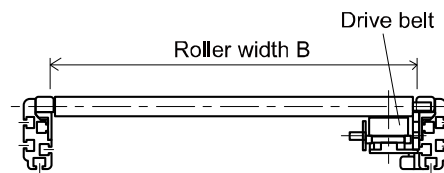
2-2. CORNER ROLLER TYPE CLAC MODEL



*NOTE: For roller width B of 20cm, speed controller is attached under frame base; for roller width B of 30cm or more, speed controller is included in frame base.

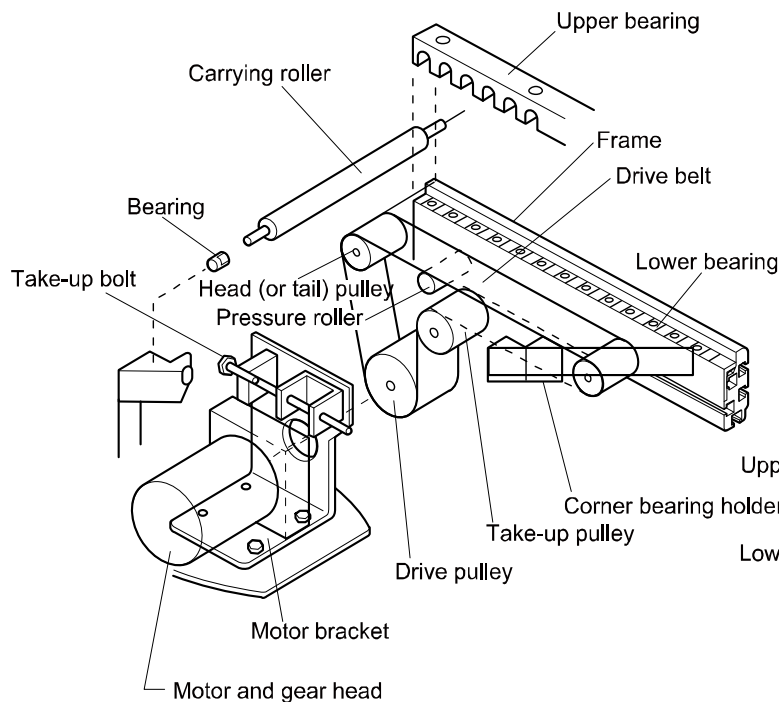


Top view

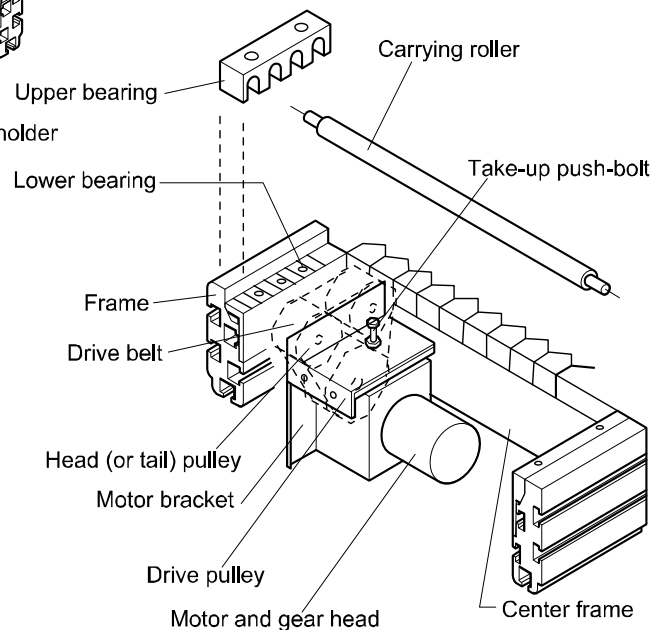


Cross section

Side section of CLAC model



Middle section of CLAC model



3

ASSEMBLY



CAUTION



■ Transport and assembly

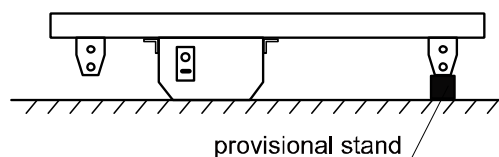
When transporting and assembling the conveyor, pay special attention not to drop it in order to avoid physical injury or damage. When lifting by crane, pay attention to the balance of the conveyor.

3-1. INSTALLING STANDS (for accumulating type CLAA and live roller type CLAD)

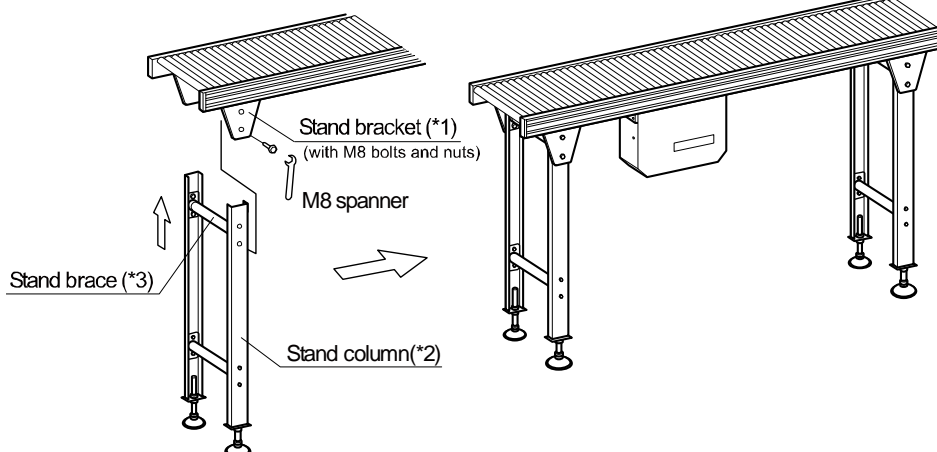
NOTE: Stands are delivered in separate packaging.

Stand brackets(*1) are fixed to conveyor frame. Attach stand columns(*2) together with stand braces(*3) to these brackets, with bolts and nuts(M8).

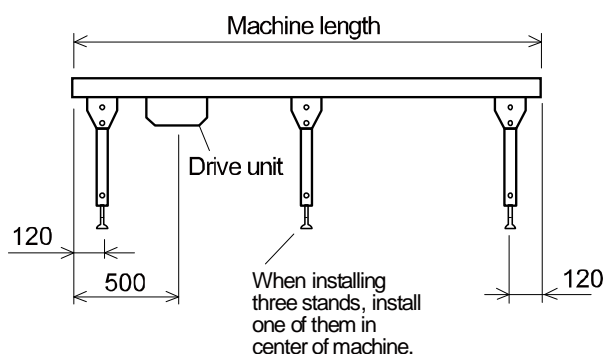
NOTE: Remove provisional stands, if any.



● Installing stands



● Standard installation positions of stands



● Quantity of stands by machine length

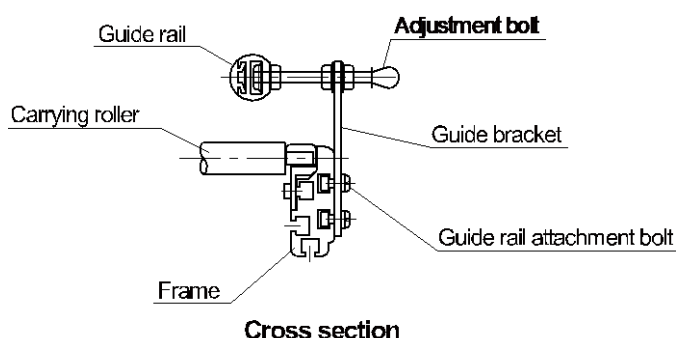
Machine length (m)	0.72-2.24	2.28-3.0
Quantity of stands	2	3

NOTE: When changing installation positions of stands, pay special attention to balance of conveyor for safety.

3-2. INSTALLING GUIDE RAILS (OPTIONAL)

Install guide rails (optional) into frame slots as shown in figure to right.

● Installing guide rails (optional) eg G-P2 type





3-3. CONTROL UNIT INSTALLATION

When power source is 100/200V single-phase and control unit (control box) is delivered in separate packaging, install control unit as follows.

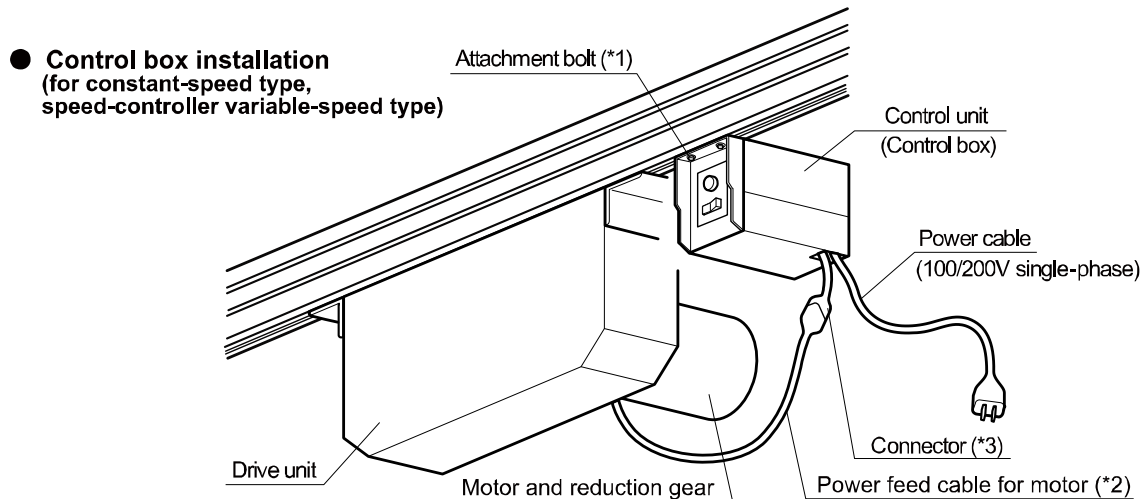
NOTE: For 200V three-phase power source, standard machine has only wires from motor.

Control devices (switch etc.) are optional.

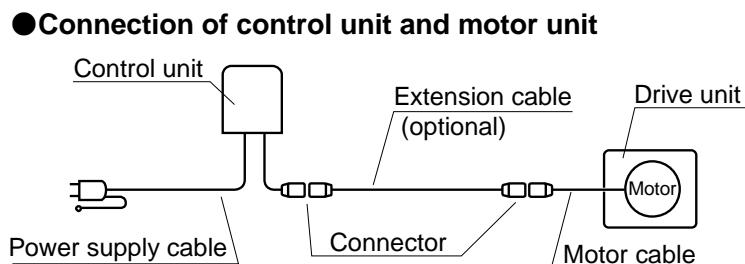
 CAUTION	 ■ BE SURE TO SWITCH OFF POWER SUPPLY Before starting procedures below, be sure to stop conveyor and switch off power supply. In addition, make sure plug is removed from outlet/connector. If connected to power supply, there is a risk that conveyor may start unexpectedly.
---	---

1. Constant-speed Type and Speed-controller Variable-speed Type

- (1) Place control unit (control box) near drive unit. Install control unit by tightening attachment bolts(*1) into underside slot of frame.
- (2) Power feed cable(*2) is coming out of drive unit. Put power feed cable connector into control unit connector(*3). (Connect tightly.)



NOTE: If it is necessary to install control unit separately from drive unit, use extension cable (optional) to make connection as shown in figure left. (If necessary, remove control unit cover to connect connectors. In this case be sure to reinstall control unit cover.)



4

RUNNING THE CONVEYOR

4-1. BEFORE OPERATION

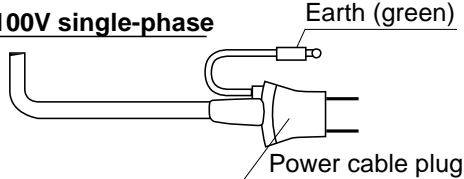
100V single-phase power source : Ground earth terminal (green) of power cable plug.

200V single-phase power source : Connect earth terminal (green) of power cable to power cable plug with an earth.

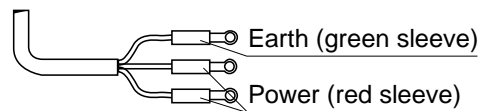
200V three-phase power source : Standard machine has only lead wire terminal, switch etc. are optional.
When wiring, properly provide an earth on motor or drive side plate.

● Power cable and terminals

AC 100V single-phase



AC 200V single-phase



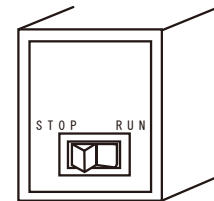
4-2. STARTING CONVEYOR

(1) Constant-speed Type

Push illuminating-start switch into "RUN" position. To stop machine, push it to "STOP" position.

NOTE: This switch is not for turning power on and off. When leaving conveyor unused for a long period, make sure that it is unplugged or mains is off.

Constant speed



Illuminating-start

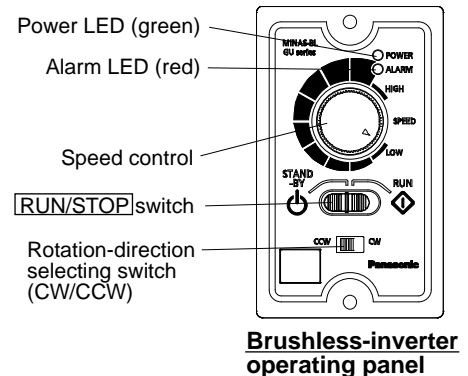
(2) Brushless-inverter Variable-speed Type

For brushless-inverter (inverter for brushless-motor variable-speed control) variable-speed type, operate machine as follows:

NOTE: 1. Be sure to combine brushless inverter with specified brushless motor.

2. Be sure to ground before use.

1. Make sure RUN/STOP switch on brushless inverter operating panel is in "STOP" position. Turn on power supply and ensure that power LED (power-on indicator) is illuminated in green.
2. Set RUN/STOP switch to "RUN" position. Motor will start rotating and conveyor will run.
3. To increase speed, turn speed control clockwise; to decrease speed, turn it counterclockwise. Set appropriate speed for intended use. (→See "Variable-speed Range of Brushless-inverter", p.11.)
4. To stop conveyor, set RUN/STOP switch to "STOP" position.



■ Speed Adjustment of Corner Roller Type CLAC Model

Middle and side sections of CLAC model are individually equipped with a speed controller, i.e. machine has a total of 3 speed controllers. Set them at appropriate speeds for intended use. (→See p.7.) By setting each controller at a different speed, it is possible to make right-angle carrying or to carry materials without changing directions of their faces. However, keep in mind that machine operation is not entirely sure in this case.

- NOTE: 1. Be sure to confirm that the power source voltage is within the rated voltage range, before turning ON the power source.
2. Be sure to start and stop the conveyor with RUN/STOP switch. When starting and stopping the machine by external signals, use control circuit terminals on rear of inverter. (→See “Starting and Stopping the Conveyor by External Signals” , p.12.)
3. When leaving the conveyor unused for a long period, make sure that the power supply is off. (The RUN/STOP switch is not for turning the power on and off.)
4. Before turning off the power supply, be sure to set RUN/STOP switch to “STOP” position, otherwise there is a risk that the motor will restart rotating unexpectedly when powered. Moreover make sure that RUN/STOP switch is in “STOP” position before turning on the power supply.

Brushless-inverter standard specification		
Applied motor		Brushless motor 50W, 130W
Power source	Voltage	Single-phase AC100-120V Single-phase/three-phase AC200-240V
	Permissible voltage range	±10%
	Frequency	50/60Hz
Variable-speed range		General change gear ratio 1:76 (Maximum change gear ratio 1:100)
Environmental conditions	Ambient temperature	−10°C to +40°C (Avoid freezing.)
	Ambient humidity	Relative humidity 85% max. (Avoid condensation.)
	Atmosphere	Indoor (Avoid splash of liquids, corrosive/flammable gases, dust, etc.)
	Elevation	1000m or less

■ Variable-speed Range of Brushless-inverter

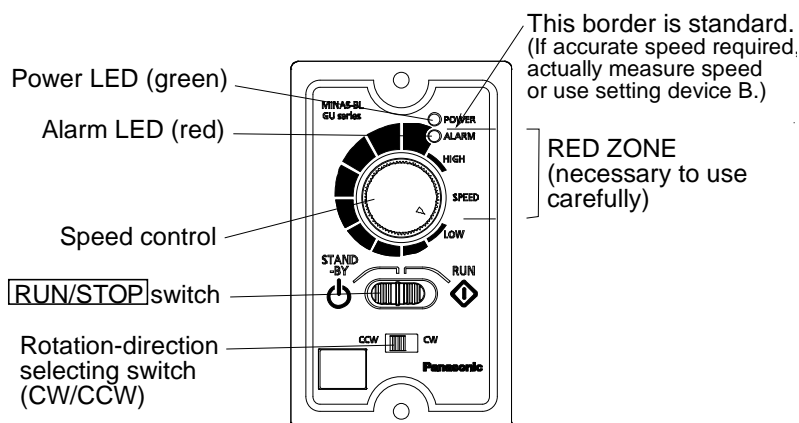
(Torque at high speed can be used at low speed as well.)

Nominal speed (motor rotation: 2300 r/min) is determined as the lower limit of RED ZONE. Variable-speed range up to the lower limit of RED ZONE is 1:76 (motor rotation: 30-2300 r/min).

By using RED ZONE up to the upper limit, it is possible to vary speed up to 1.3 times of nominal speed (variable-speed range: 1:100, motor rotation: 30-3000r/min).

NOTE: Since motor rotation increases as the speed gets closer to the upper limit of RED ZONE, this will increase noise and shorten service life of gear head. Use the machine at appropriate speed to avoid these troubles.

● Brushless-inverter operating panel

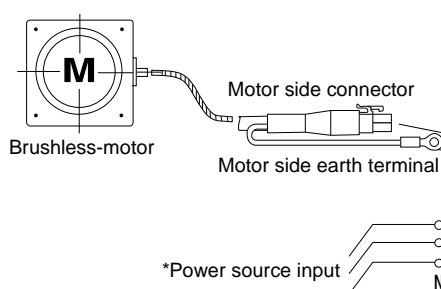


■ Starting and Stopping the Conveyor by External Signals

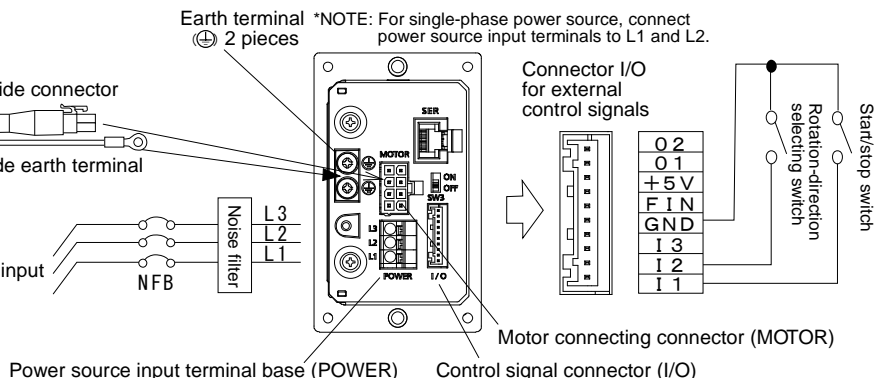
When starting and stopping the conveyor frequently in a short period (tact operation etc.), it is impossible to start and stop the machine by turning on/off the power supply. (The controller may get damaged and trip.) In this case be sure to start and stop the machine by external signals. For start and stop circuit by external signals, make connection to external control circuit terminals on rear of brushless inverter.

NOTE: Do not start and stop the conveyor excessively frequently. It may cause machine failure or shorten its service life.

● Standard connection diagram of brushless-motor and power source (eg 200V three-phase)



● Standard connection diagram for starting/stopping conveyor by external signals (eg Reversible operation)



Rear of brushless-inverter

When using connector I/O for external control signals, purchase "Cable for control signals (cable with I/O connector) Item number: DV0PM20076" sold separately.

NOTE:

1. Be sure to ground earth. (D-type grounding, 100Ω or less, ϕ 1.6mm or more)
 2. Noise filter, NFB, etc. should be set up by user.
 3. When making connection to external control terminals, use special cable for external control (optional).
 4. For reversible operation by external signals, set rotation-direction selecting switch to CCW.
- For details, refer to "Brushless-inverter instruction manual", appendix.

■ Caution When Using brushless inverter



CAUTION

1. Be sure to confirm that the power source voltage is within the rated voltage range, before switching ON the power source.
(Voltage exceeding the rated voltage could cause fuming, abnormal noise, etc.)
2. Be sure to start and stop the conveyor with RUN/STOP switch. If installing a separate RUN/STOP switch and operating the machine by external control, be sure to use the control circuit terminal on the rear of controller unit. (For reversible operation, set the reverse switch to CCW.)
3. The RUN/STOP switch of control unit is not for turning the power on and off. When leaving the conveyor unused for a long period, make sure that the mains is off.
4. Do not run the conveyor at excessively low speed for a long period, or start and stop the conveyor excessively frequently. These may cause machine failure or shorten its service life.
5. Do not touch the inverter radiator of side of control unit, and do not allow any material to touch it, because of its high temperature.
6. Use the control unit within the permissible range of ambient temperature (from -10°C to +40°C). Avoid freezing.
7. Pay special attention not to allow any foreign matter (dust, iron powder, etc.) to get into the control unit.
8. Operating the motor using the inverter could cause noises from the inverter I/O cables, motor, etc. Keep in mind that these could interfere with the correct operation of other electronic devices. (In this case, noises and their effects can be suppressed to some extent by providing the inverter I/O with a filter or otherwise shielding the power cable.)

■ Circuit Protector

(1) Constant-speed Type

To prevent motor from burning out due to overload etc., it is recommended to provide the machine with a circuit protector(optional). When protector is activated and conveyor stops, reset button pops out. In this case always switch off power and set RUN/STOP switch to “STOP”. Reset button may be pressed in to restore circuit, and machine can be restarted by setting RUN/STOP switch to “RUN”.

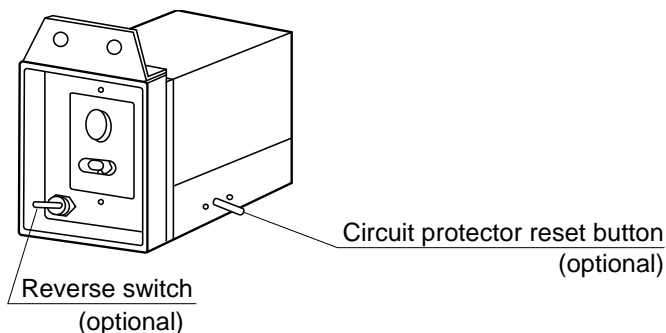
NOTE: Before restarting machine, carefully check for cause of stoppage and ensure it is removed.

(2) Brushless inverter Variable speed Type

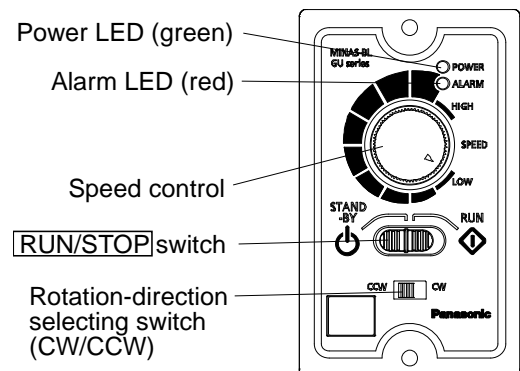
Brushless inverter has built-in protective function against overload, overcurrent, overheat, etc. In emergency, brushless-inverter trips and alarm LED is illuminated in red.

NOTE: 1. When brushless-inverter trips, immediately set RUN/STOP switch to “STOP” position and turn off power supply. Before restarting machine, carefully check for cause of trip and ensure it is removed.
2. When voltage is insufficient, alarm LED is illuminated in red. However, brushless inverter does not trip in standard circuit.
3. For increased safety, separately install overcurrent protective device on power source side.

● Constant-speed Type



● Brushless inverter Variable speed Type



4-3. CHANGING DIRECTION OF CONVEYOR TRAVEL

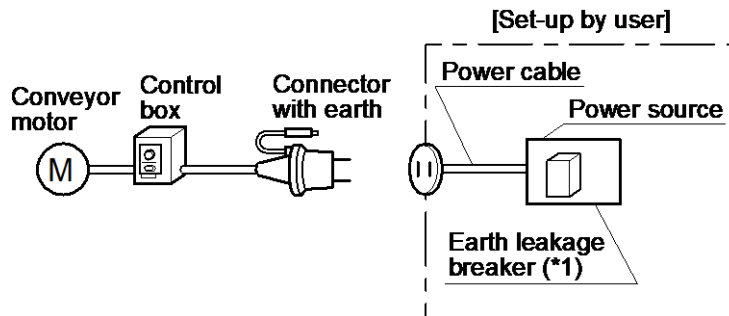
It is impossible to change direction of conveyor travel on account of machine structure. Use machine in the direction arrow mark sticker shows.







NOTE: Occasionally machine has a reverse switch. Since this switch is only for factory adjustment, do not tamper with it.

4-4. OTHER NOTES

■ Earth leakage breaker

To prevent electric leakage, be sure to provide an earth leakage breaker(*1) on power source side.



 CAUTION	 <p>□When using in a high or inclined position: ■Lower cover and guard, guide rail, top and side covers Install the optional lower cover and guard, guide rail, top and side covers in order to prevent entry under the conveyor.</p>
	 <p>■Keep the conveyor dry at all times Use the conveyor indoors and prevent it from getting wet. Keep the ambient temperature within the permissible range, from 0°C to +40°C. Do NOT leave the conveyor outdoors.</p>
	 <p>■Do NOT use in an explosive atmosphere (Avoid explosive gas, explosive dust, etc)</p>
	 <p>■Be sure to switch off power supply Ensure that the power is switched off when carrying out relocation, inspection, cleaning, etc. of the conveyor, otherwise there is a risk that the conveyor could start unexpectedly. When leaving the conveyor unused for a long period, take plug out of the outlet/connector to prevent electric shock or leakage.</p>
	 <p>■Cleaning Rollers After use, remove any dirt from roller surfaces and keep them clean at all times. Dirt may cause rollers to slip and disturb smooth driving of machine.</p>

TAKING UP THE DRIVE BELT

This machine is designed to carry light-weight materials. If overloaded, carrying rollers slip and cannot carry materials. However, if they stop with no load or cannot carry light-weight materials, it is possible that drive belt is slackened off. In this case take up drive belt as follows.

5-1. ACCUMULATING TYPE CLAA MODEL AND LIVE ROLLER TYPE CLAD MODEL

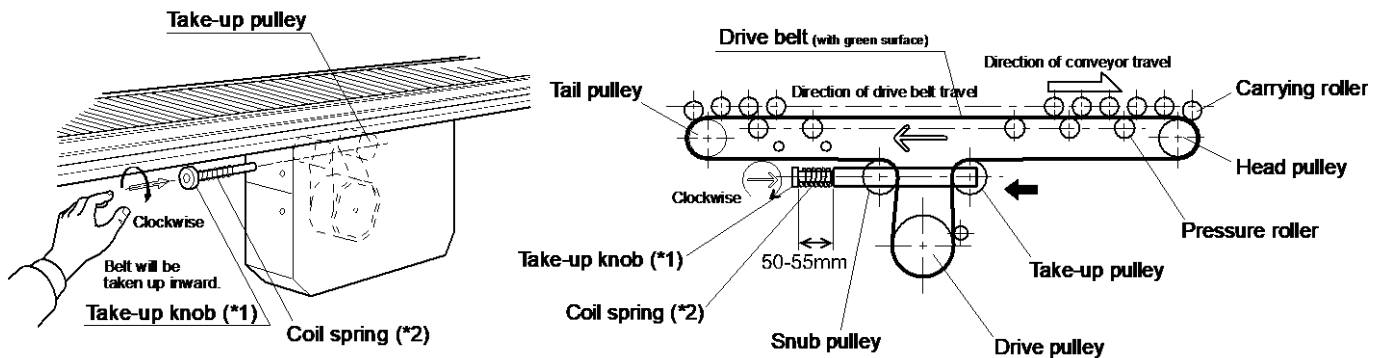
Turn take-up knob(*1) of drive unit clockwise little by little. Drive belt will then be taken up. Coil spring(*2) is set on take-up screw rod. When turning take-up knob(*1), keep coil spring length 50 to 55mm.

(→See figure below.)

■ Drive Belt Tension

Do not take up belt too much, but only to extent that belt does not slip on drive pulley, i.e. enough to drive belt. Excessive belt take-up may overload motor or shorten service lives of belt, pulley, etc.

Take-up pulley of CLAA/CLAD model



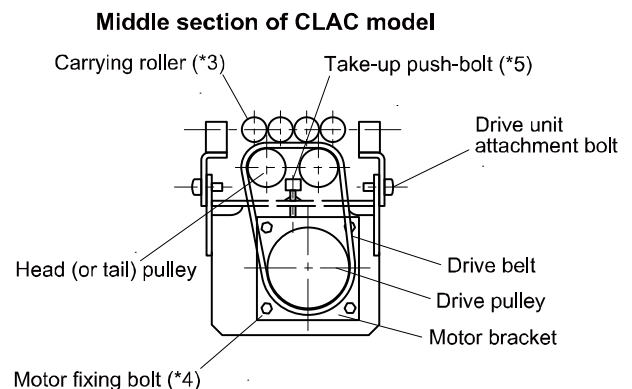
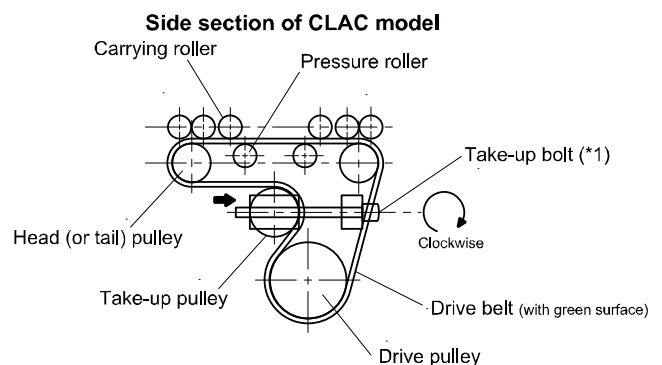
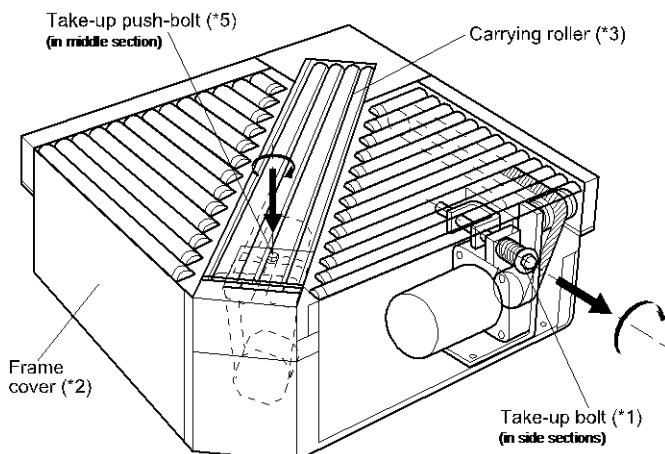
5-2. CORNER ROLLER TYPE CLAC MODEL

1. Side section of CLAC model

Turn take up bolt(*1) clockwise. Take-up pulley will then move outward and drive belt will be taken up.

2. Middle section of CLAC model

Remove frame cover(*2) and carrying rollers(*3). Loosen motor fixing bolts(*4) and turn take-up push-bolt(*5) clockwise. Drive unit will then move downward and drive belt will be taken up. Once adjustment is completed, retighten motor fixing bolts(*4) and reinstall frame cover(*2) and carrying rollers(*3).





DRIVE BELT ALIGNMENT

6-1. ADJUSTMENT USING HEAD OR TAIL PULLEY

(For Accumulating Type CLAA Model and Live Roller Type CLAD Model)

When drive belt is not correctly aligned, make adjustments so that it will run in center of head (or tail) pulley, as follows. Keep running conveyor slowly during adjustments.

1. To move drive belt in direction of arrow , move head (or tail) pulley shaft end(*2) outward by turning push-bolt(*3) with a spanner. To move drive belt in opposite direction of arrow , similarly move shaft end(*2) inward.

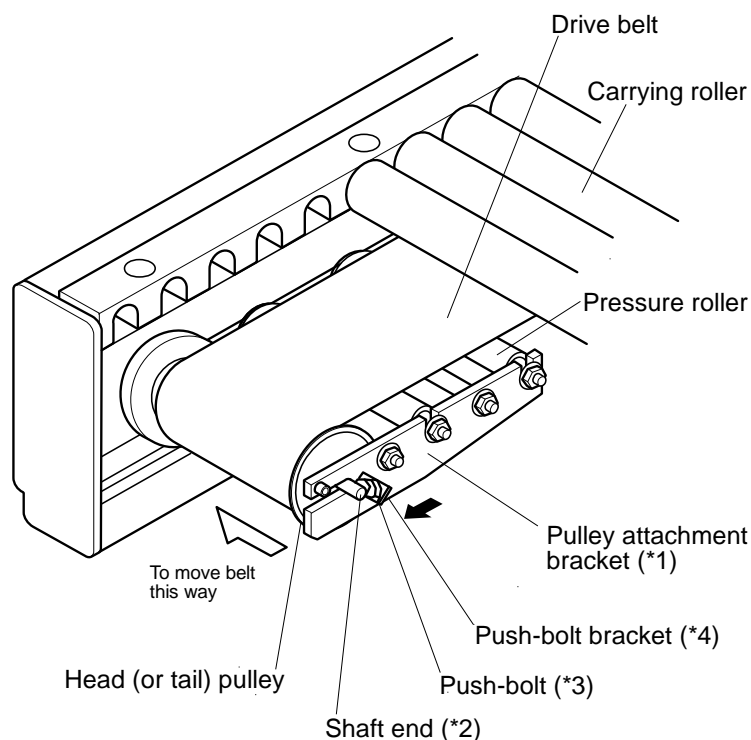
NOTE: Do not adjust both head and tail pulleys at the same time. First adjust one of them and wait until belt running stabilizes. Then adjust the other if necessary.

2. Once adjustment is completed, fix push-bolt(*3) by retightening nut to push-bolt bracket(*4).

NOTE: 1. Since this adjustment is carried out while conveyor is running, beware of entanglement.

2. Excessive belt take-up may overload motor or shorten It is necessary to wait until belt running stabilizes after each adjustment step and to adjust belt alignment little by little. Belt running will not change immediately.

Head (or tail) pulley of CLAA/CLAD model



7-1. TYPE AND LENGTH OF DRIVE BELT

Conveyor model code	Accumulating type CLAA model Live roller type CLAD model	Corner roller type CLAC model	
Quantity of endless belt	1 belt per machine Machine length (mm) × 2 + 350 (mm)	Side section: 2 belts per machine (1 belt per section) Roller width of 20cm: 583mm 30cm: 783mm 40cm: 983mm 50cm: 1188mm 60cm: 1388mm	Middle section: 1 belt per machine (Peripheral length of belt: 340mm)
Belt width	28mm	20mm	
Type	Manufacturer: Forbo Siegling Japan Ltd. Model code: GG15E-18G		

7-2. DRIVE BELT REPLACEMENT

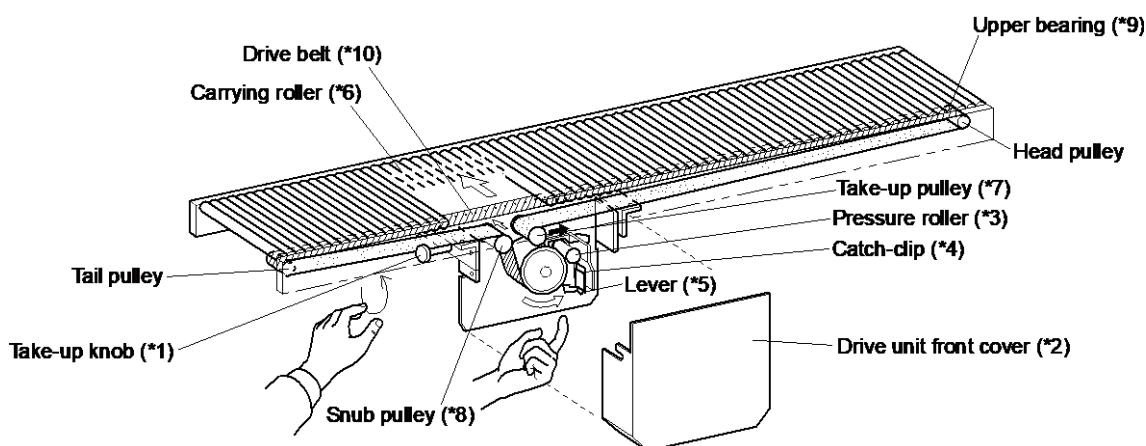
NOTE: BE SURE TO SWITCH OFF POWER SUPPLY

Before starting procedures below, be sure to stop conveyor and switch off power supply.

In addition, make sure plug is removed from outlet/connector. If connected to power supply, there is a risk that conveyor may start unexpectedly.

1. Accumulating Type CLAA Model and Live Roller Type CLAD Model

- (1) Fully loosen drive belt by turning take-up knob(*1).
- (2) Remove drive unit front cover(*2). Release pressure roller(*3) by unfastening catch-clip(*4) lever(*5) with your finger. Remove drive belt(*10) sideways from drive pulley.
- (3) Remove carrying rollers(*6) attached above drive unit. Pull out a part of drive belt upwards from space between take-up pulley(*7) and snub pulley(*8).
- (4) To make a space between drive belt(*10) and carrying rollers, on drive belt side of conveyor, loosen all the attachment bolts on top of upper bearing(*9).
- (5) Remove drive belt(*10) from head and tail pulleys, and gently pull it out of conveyor.
- (6) Insert replacement drive belt into conveyor in reverse order, and correctly set it to each pulley. Reinstall carrying rollers(*6), upper bearing(*9) and drive unit front cover(*2). Firmly tighten each bolt.
- (7) Take up drive belt by turning take-up knob(*1). Run the conveyor and adjust belt alignment.



2. Corner Roller Type CLAC model

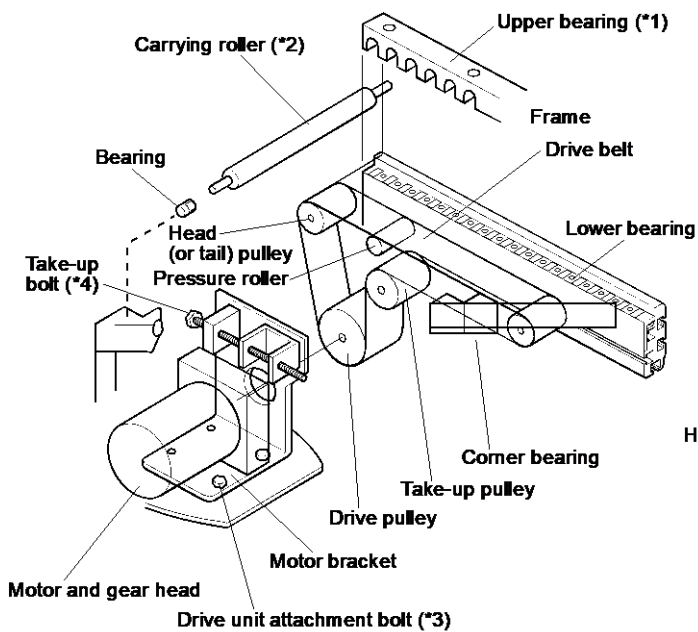
(1) Side Section

- 1) Remove upper bearing(*1) and carrying rollers(*2). Loosen drive belt by turning take-up bolt(*4).
- 2) Remove drive unit attachment bolts(*3). Remove drive belt while moving drive unit outward.
- 3) Return drive unit to initial position while inserting replacement drive belt. Retighten attachment bolts(*3).
- 4) Correctly set drive belt to each pulley and pressure roller. Take it up with take-up bolt(*4).
- 5) Reinstall upper bearing(*1) and carrying rollers(*2).

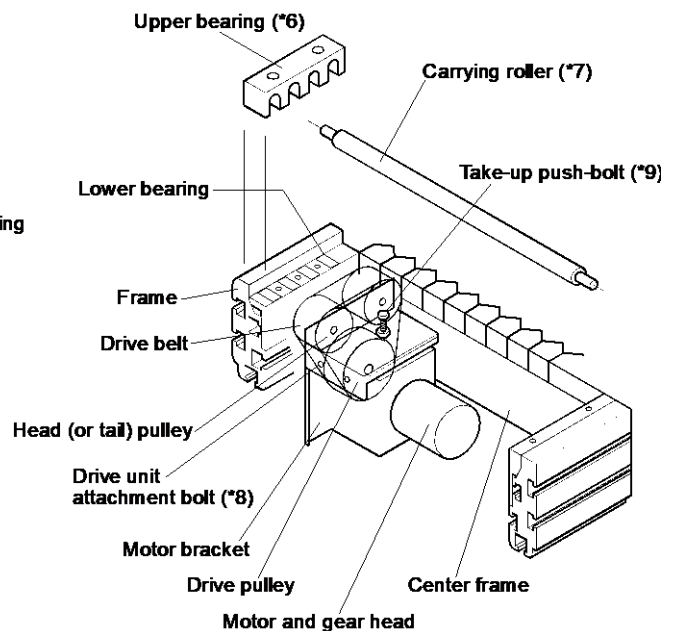
(2) Middle section

- 1) Remove upper bearing(*6) and carrying rollers(*7). Remove drive unit by loosening attachment bolts(*8).
- 2) Loosen take-up push-bolt(*9) and motor attachment bolts. Then replace drive belt.
- 3) Take up drive belt by turning take-up push-bolt(*9). Reinstall drive unit, carrying rollers(*7) and upper bearing(*6).

Side section of CLAC model



Middle section of CLAC model



REPLACEMENT OF URETHANE DRIVE

NOTE: BE SURE TO SWITCH OFF POWER SUPPLY

Before starting procedures below, be sure to stop conveyor and switch off power supply.
In addition, make sure plug is removed from outlet/connector. If connected to power supply, there is a risk that conveyor may start unexpectedly.

For Accumulating Type CLAA Model and Live Roller Type CLAD Model

Carrying rollers on both ends of conveyor are driven by urethane rings(*8) attached to head and tail pulleys. If any of them does not rotate, it is possible that urethane ring has become worn and is not correctly touching carrying roller. Check condition of urethane ring and replace it as follows if necessary.

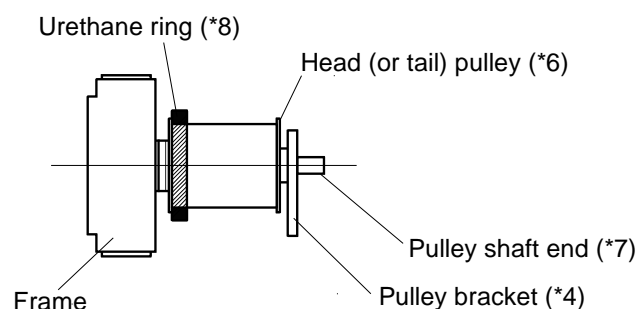
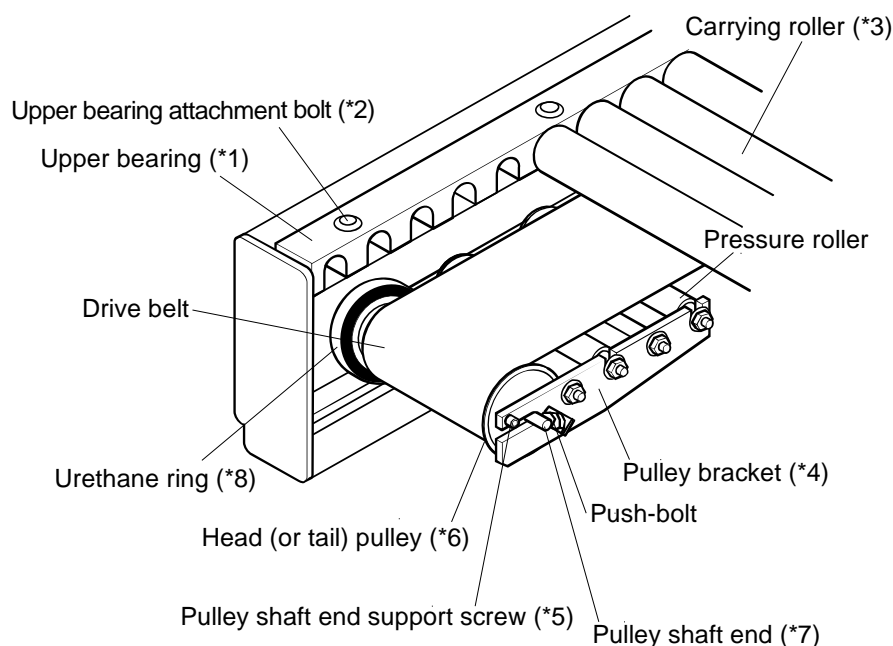
Type of urethane drive ring

Shape of cross section: 3mm×3mm square

Inside diameter: 29mm

Outside diameter: 35mm

1. Loosen drive belt by turning take-up knob. On side of defective urethane ring, remove upper bearing(*1) by loosening attachment bolts(*2). Then remove carrying rollers(*3) attached above head (or tail) pulley(*6) as shown in figure to right.
2. Remove pulley shaft end support screw(*5) tightened on pulley bearing(*4), with a hexagonal wrench. Move shaft end(*7) outward and remove head (or tail) pulley(*6).
3. Remove urethane ring(*8) from groove of pulley(*6). Correctly install replacement urethane ring without twisting it.
4. Reinstall parts in reverse order.
5. After reassembly, check if urethane ring is correctly touching carrying roller and drive belt is correctly aligned.



9-1. PROBLEMS AND REMEDIES

PROBLEM	CAUSE	REMEDY
1. Conveyor does not run when switched on.	(1) Power plug is not properly connected to mains. (2) Power switch is not turned on. (3) Inappropriate power source (Power source type: 100V single-phase, 200V single-phase, 200V three-phase)	(1) Inspection, correction (2) Inspection, correction (3) Check power source. → See p.10. -For 200V single-phase source, green on power cable is an earth. -200V single-phase power cable may not be used for 220V power source. (it may be used for 200V three-phase power source, however)
2. Conveyor is turned on, but motor will not run.	(1) Disconnection or breakage in wiring (2) Conveyor speed is set too slow. (3) Circuit protector or emergency stop switch has been activated. (4) Failure of motor or speed controller	(1) Inspection, repair (2) Reset to appropriate speed. → See p.11. (3) Restore protection circuit or emergency stop switch. (4) Replacement (motor, condenser and speed controller)
3. Motor runs, but drive belt does not move.	(1) Drive belt is slacked off. (2) Drive belt has something sticky on undersurface. (3) Drive belt is trapped after misalignment.	(1) Take up belt. → See p.15. (2) Remove any foreign matter and clean belt undersurface. (3) Adjust drive belt alignment. → See p.16. If drive belt is damaged, replace it. → See p.17.
4. Drive belt moves, but carrying rollers do not rotate.	(1) Level of carrying rollers is too high. (i.e. carrying rollers are not set correctly.) (2) Foreign substances on carrying rollers (3) Guide rails or covers are attached too tight to carrying rollers.	(1) Inspection, correction (2) Remove any foreign matter. (3) Inspection, correction
5. Drive belt runs, but speed cannot be changed. (in case of variable speed type)	(1) Disconnection or breakage in wiring of motor and speed controller (2) Failure of speed changing device inside motor (3) Failure of speed controller	(1) Inspection, repair (2) Replace motor and speed controller. (3) Replace motor and speed controller.
6. Electric shock is received from conveyor.	(1) Static electricity has been charged in frames. (2) Electric leakage	(1) Properly ground the machine. → See p.10. (2) Inspection, investigation

9-2. ITEMS FOR REGULAR INSPECTION

CHECKING PERIOD	PART TO CHECK	THINGS TO CHECK FOR	CHECKING METHOD	REMEDY
Daily	Drive belt	Slip (tension), alignment	Visual inspection	Adjustment → See p.15 and p.16.
	Carrying roller (accumulating roller)	Foreign substances	Visual inspection	Remove foreign substances.
Monthly	Drive belt	Tension, alignment Wear, damage	Visual inspection	Adjustment → See p.15 and p.16. Replacement → See p.17 and p.18.
	Carrying roller (accumulating roller)	Rotation malfunction	Visual inspection	Inspection, adjustment, cleaning
Three monthly	Attachments	Loose bolts	Visual inspection and manual check	Tighten loose bolts.
	Motor, reduction gear (gear head)	Loose attachment bolts Overheat of motor and bearings	Tapping, checking vibration Manual check, measurement	Tighten loose bolts. Disassembly and inspection, replacement
		Abnormal noise	Listening	Disassembly and inspection, replacement
Six monthly	Drive pulley,	Rotation malfunction	Visual inspection	Replacement
	Head pulley, tail pulley	Wear of surface	Visual inspection	Replacement
	Bearing	Overheat, abnormal noise	Manual check, listening	Replacement

MEMO

MEMO

Customer Center

TEL +81-46-273-8989 FAX +81-46-273-8990

URL <https://www.hansou.jp>

E-mail kikaiinfo@eng.sanki.co.jp



[hansou.jp](https://www.hansou.jp)



Contact us

- Particular attention is given to the manufacture and transportation of SANKI conveyors. However, if you need any information about the use or failure of the machine or any other matters, please contact our customer service. Also do not hesitate to ask us for information about conveyors in general.
- The specification given in this manual are subject to change without notice.