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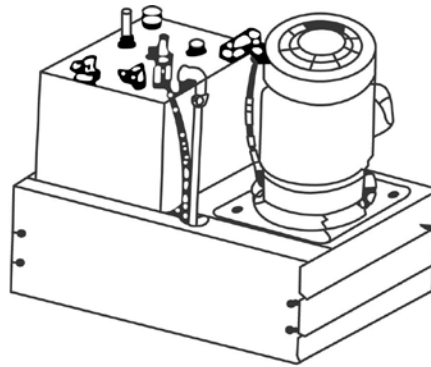
HC-2AM

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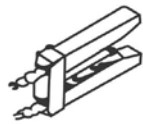


HC-2A

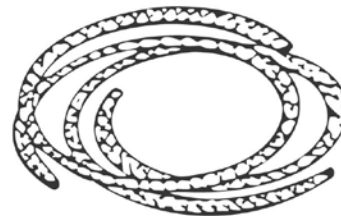
Edge Guide Controller Accessory



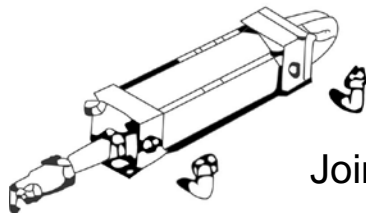
HC-2A BODY



Detection nozzle

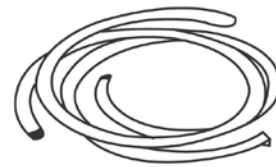


PVC Air hose



Joint

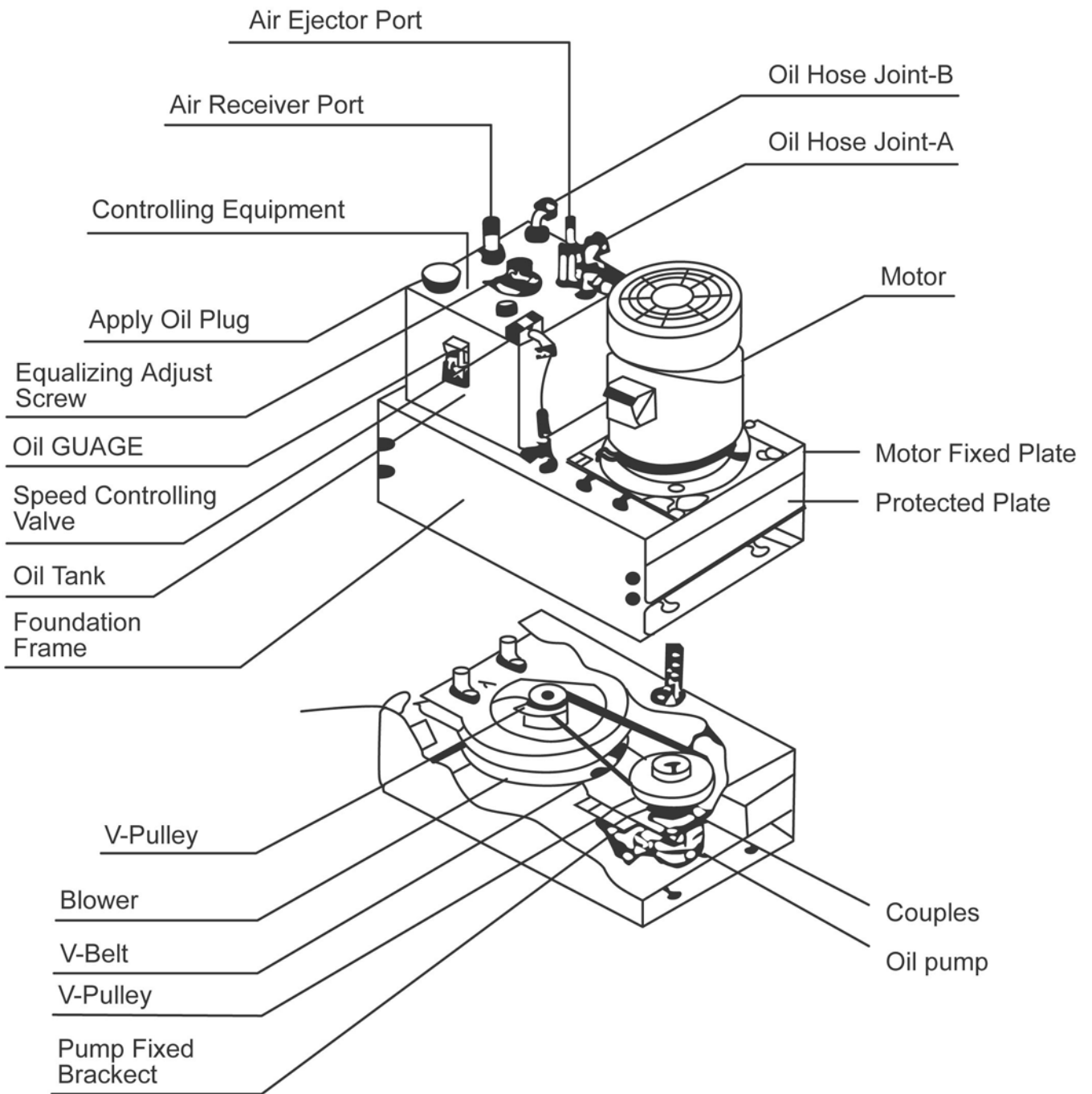
Hydraulic Cylinder



PE Oil hose



HC-2A





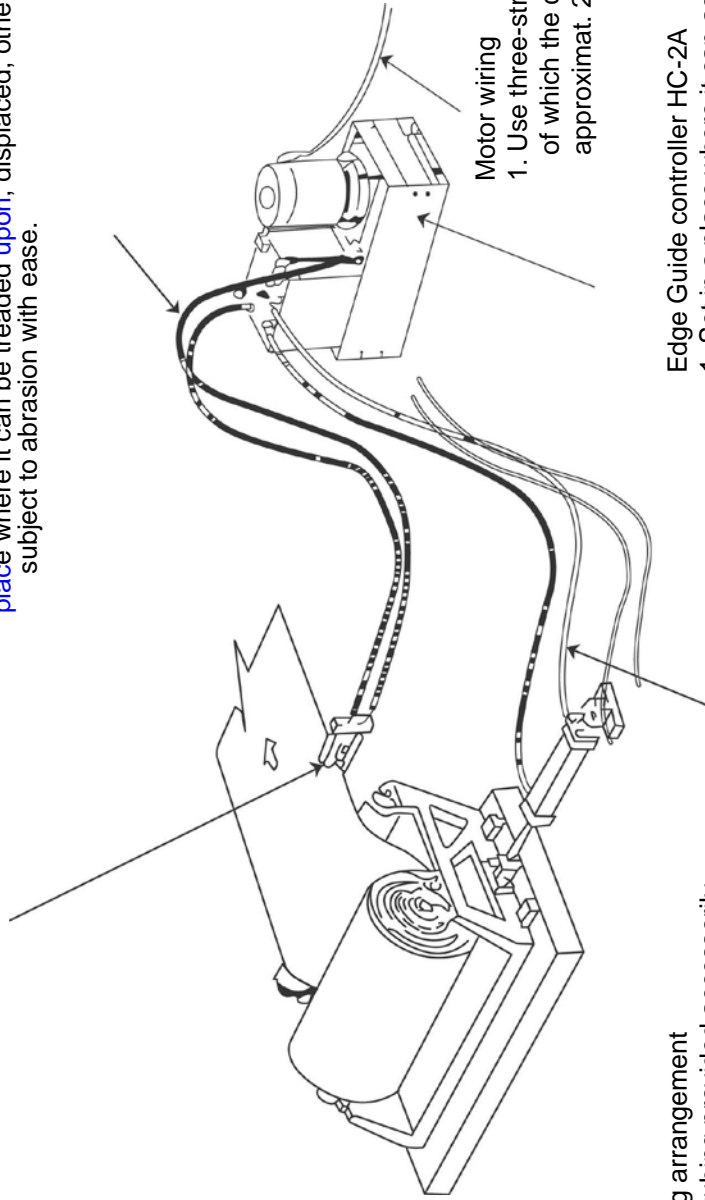
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**Assembling, tubing arrangement and wiring
Detection nozzle**

1. For installation on 25 or 30 MM fix rod.
2. The fix rod to be installed level wised with The platen.

Air tubing for detection nozzle

1. Use the two PVC retrieving tubes provided accessorialy.
2. The length of the tubing not to exceed 5m.
3. Don't bend the tubing abruptly, the minimum Dia. of the tubing to be approximate. 10mm, and avoid aetting in a place where it can be treaded upon, displaced, otherwise subject to abrasion with ease.



Hydraulic tubing arrangement

1. Use two PE tubing provided accessorialy.
2. Cylinder tubing connection differs by reason of method of control in use. However, where the position relationship between the cylinder and the detection nozzle is contrary to what is given in the illustration, please connect by exchanging the tubing accordingly.
3. If the please use 3/8 B PE tube, the tubing shall not exceed 5m in length.
4. Don't bend the tubing abruptly, the minimum Dia. to be approximate.

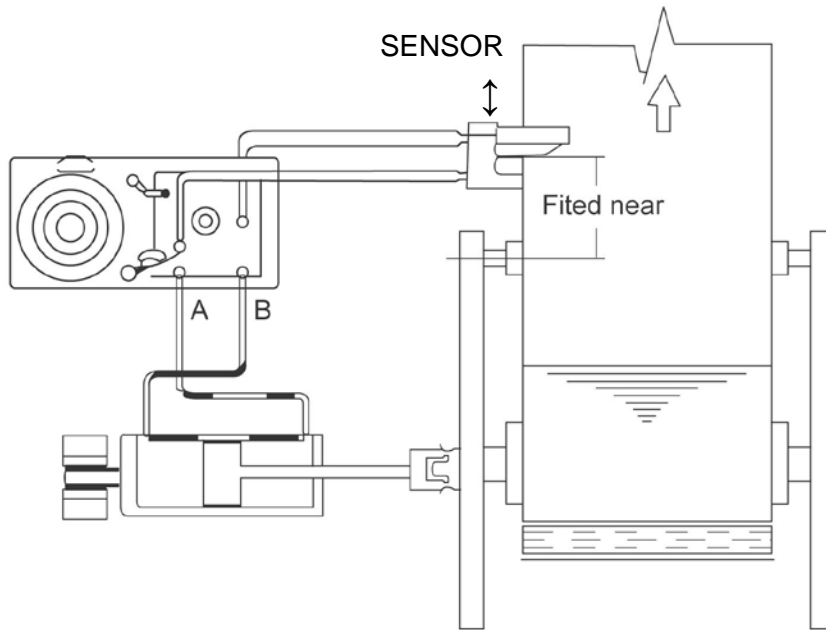
Edge Guide controller HC-2A

1. Set in a place where it can accommodate easy adjustment, inspection, replacement of oil agents, and as close as possible to the hydraulic cylinder and detection nozzle.
2. Install in a horizontal setting.
3. Fix reliably with foundation screws to safeguard incidental possibilities lied vibration of the equipments.

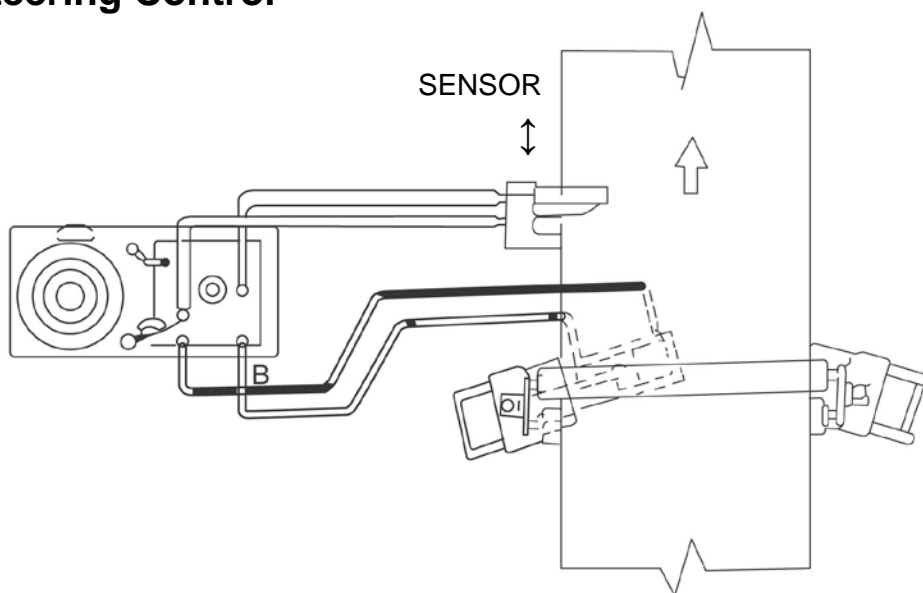


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Pay off or unwind control



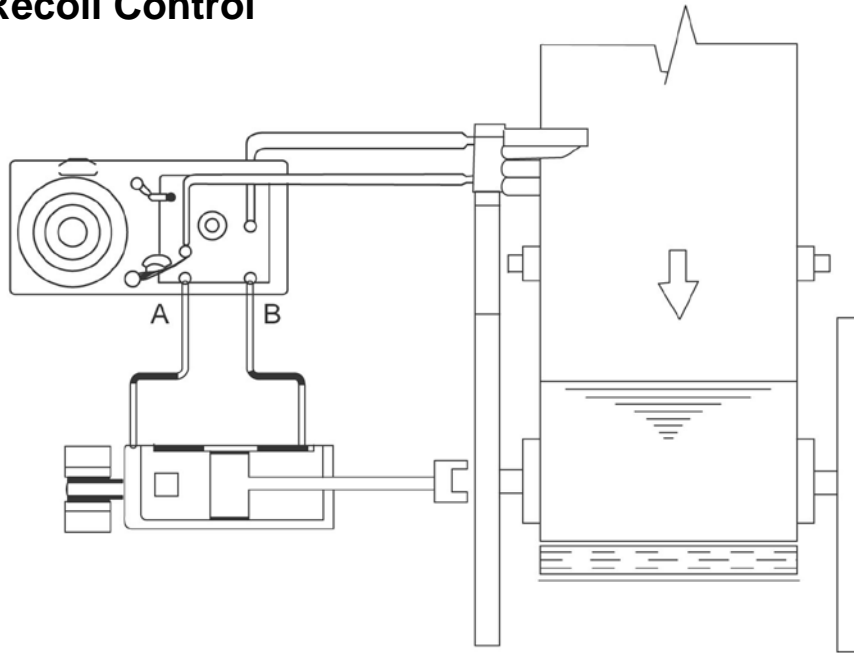
Center Pivoted Roll Guider or Steering Control



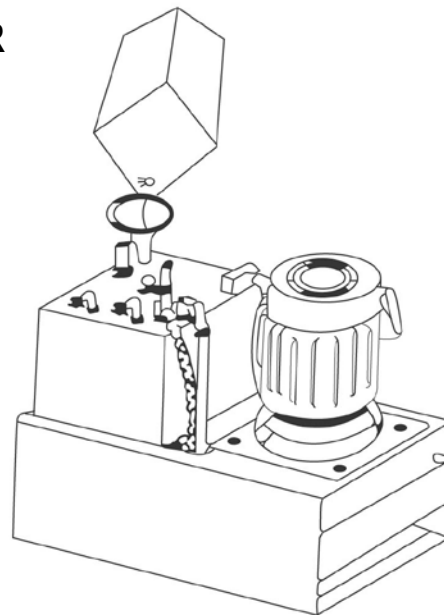


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Windup or Recoil Control



Fitting oil hose and Apply oil of motion (About 8 Liter CPC RL68 OR SHF 32 to oil Gauge)





HC-2A

Operation procedures:

A. Prior to actuation:

1. Verify that hydraulic cylinder and the detection nozzle are installed all right.
2. Ensure that enough transmission oils have been filled.
3. Ensure that the startup motor has been wire-bound correctly.

B. Startup trial running:

1. Start running the startup motor intermittently to verify that the motor runs in the clockwise as directions indicated. In the negative case just exchange any two of the wires as connected in order also verify that the solenoid switch in use can withstand the max. loading burden of the motor.
2. Verify the performance of the hydraulic cylinder by holding a piece of card or name card across the detection nozzle the air flow shielded or let through the paper card be shifted sideways as a start step.
3. Adjusting the hydraulic cylinder speed: shift the hydraulic cylinder in the manner as stated in step 2. as there will be a differential of the speed by about 15% on both sides owing to the difference of the area on both of the hydraulic ends of the piston lever. Adjusting screw will bring speeds on both sides equal to each other.
4. Adjusting the location of the detection device make the platen's edge passing through the detection nozzle and effect adjustments to see that the centre point of the air stream outgoing from the detection nozzle coincides with the edge of the platen.



HC-2A

5. Let the platen start flowing in a manner so that it builds up its speed gradually. If should fail to achieve the results anticipated, please perform verifications as identified in step D herein.

C. Regular operation procedures:

1. Start up the motor.
2. Adjust the setting position of the detection device.

D.

1. If the platen vibrates too fast owing to the hydraulic cylinder driving speed being too fast, just adjust the speed adjustment valve to the speed appropriate.
2. Verify if the hydraulic cylinder linkage yields too large a clearance gap.
3. Verify if the tension of the platen is unstable as to affect precision requirements.
4. The presence of wrinkle or cutting edge on the border of the material and of the platen.



HC-2A

Installation

The improper mounting of the detector and improper arrangement of the rolls will result in unsatisfactory control performance, or will cause wrinkles to the web. When planning and aligning the process line, the following described items must keep in mind.

A. Unwinding (pay off reel system)

B. If the material wound is irregular, this system guide the edge position and let it regularly into the subsequent process.

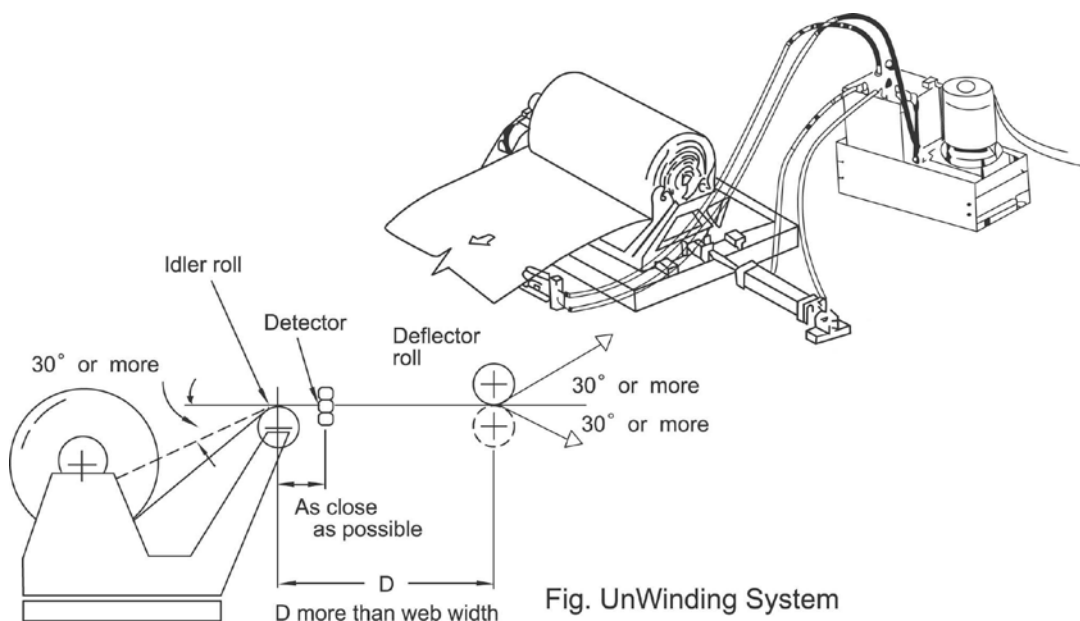
The idler roll moves with the unwinding reel stand.

Mount the detector fixed and as close to the idler roll as possible.

The leaving web formed a angle at the deflector roll should more than 30°

The important, do not allow the web slip on this roll.

The distance between two rolls should be more than the maximum width of the web.

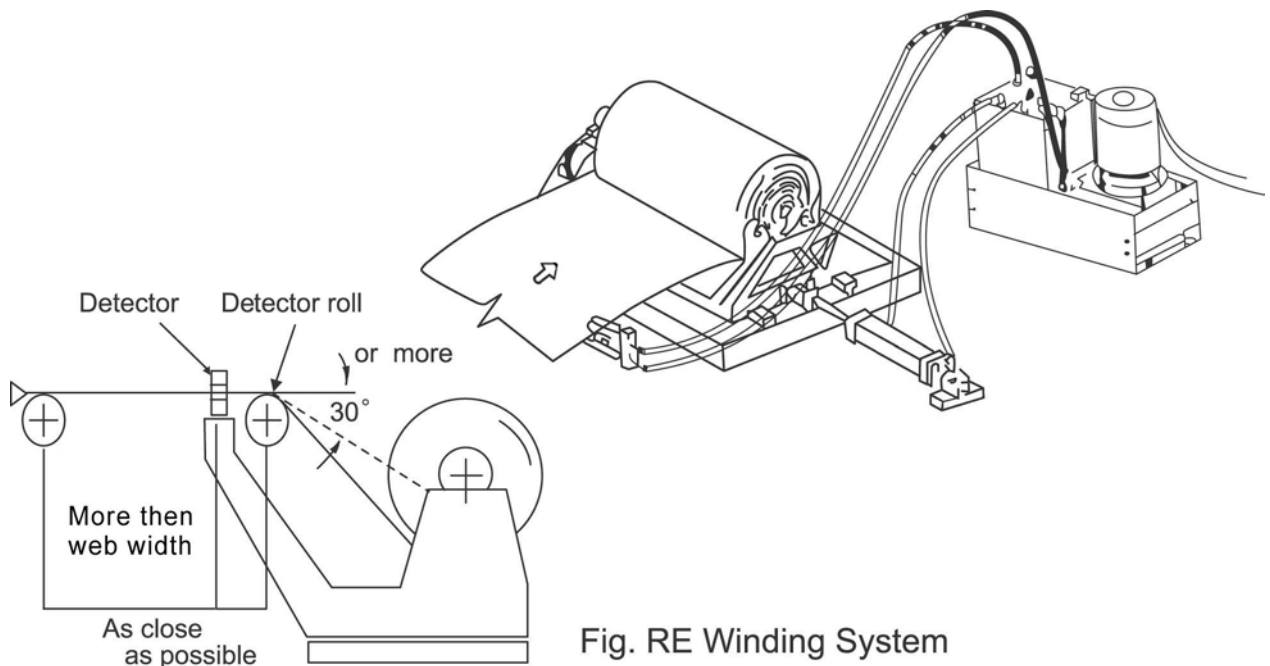




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B. Rewinding (wind-up reel system)

This reel system to uniform the web of winding up coil with edge **alignment**. Mount **the** deflector roll rigidly and independent from the reel stand. Mount the **The** detector on the reel stand-extending arm, so moves together with the wound coil. The detector located on the entry side of the detector roll as close as possible. The angle formed by the incoming web on the detector roll is no less then 30° Larger diameter and higher friction are preferable to **avoid** slippage over this roll. The distanced between the wind-up reel and the detector roll should be more than the maximum with of the web. If distance is too short, winkles will happened on thins or soft web.





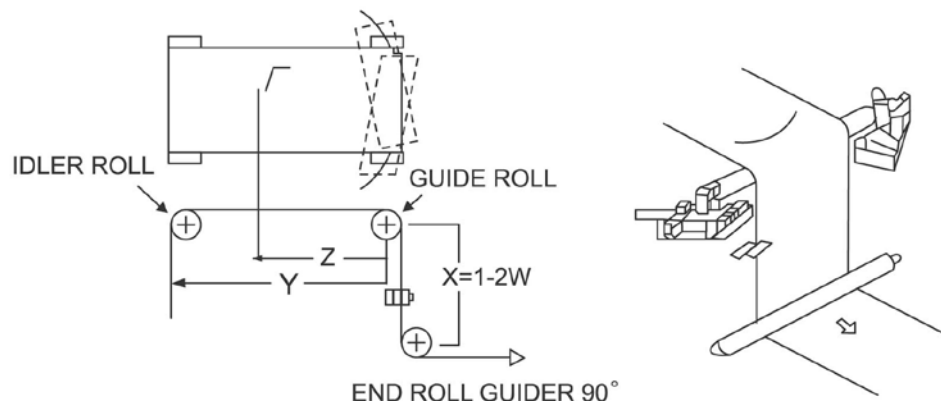
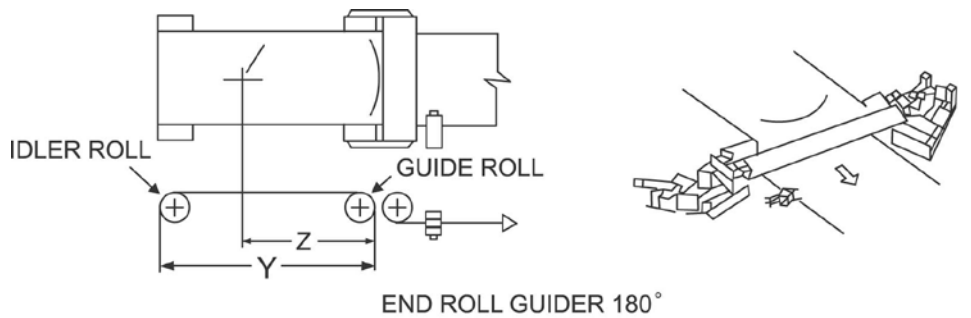
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Intermediate guiding system

When needed to correct web position in the middle of the process line, Niika recommend you most economic item End pivot roll guider.

This method particularly good for flexible web. It is available, when location in long distance between entry idler roll and exit idler roll. The assumed pivot of the guide roll rotation be arranged to be ling, so turning angle of the guider rolls and the tension variation are lesser, will reducing the wrapping of the web. There have 90° wrap for single roll and 180° wrap for double rolls shown as below.

Mount the detector closer to the guide roll and secure do not allow web to contact the detector even when the pass line inclines for maximum correction. The length of Y to be no less then 1 time of maximum web width, and Z to be about 2/3 of the Y. The distance X must arrange about 1 to 2 times of the maximum web width.





H C - 2 A

Maintenance checks

A. Daily inspections

1. Verify that the nozzle is free from clogging disturbances. The nozzle being made of aluminum through precision process. Don't wash off with solvents or clear by means of hardware in the presence of clogging agents. But you should clear them with name card or hardcore Kraft cards instead.
2. Oil leakage Verify if there is oil leakage in the tube works Interconnection the hydraulic cylinder with the body of the machinery and correct them accordingly if there is any oil sufficiency
3. Inspect the oil level gauge to see if the level has dropped below the borderline and fill up to required amount in the affirmative case noting not to use mixture of oils differing in kinds.
4. Belt fastness
Depress the belt manually to verify its tension for a length of 3cm.
5. Abnormal noises
If abnormal noises are detected in the course of transmission shut down the machine and find out the problem forthwith.



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B. Periodical inspection and servicing:

1. Clearing of the suction intake filter: clearing to be performed at the end of 60 to 200 hours to operation. Lest the air stream should fail to ascend like it should. Clear by removing the snap ring removing the filter net blow in air or clear with detergent till it dries up reassemble.
2. Clearing clogging agents in the air path an air tap L is provided on the upper side of the oil tank a throttle hole is provided on the end to which air stream flows through the direction film, screw up the tap to verify if there is any clogging and clear it in the affirmative case.
3. replacement of transmission oil
Screw the oil bleeder plug open at the end of 3000 hours of operation clean the oil tank fill in transmission oil anew.



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For the elimination of disorders

Causes		Status					
		Hydraulic cylinder inoperative	Hydraulic cylinder slow 1 operative	Hydraulic cylinder operates out or balance laterally	Hydraulic cylinder operating unstably	Hydraulic cylinder operating irreversibly or intermittently	Hydraulic cylinder
Pneumatic system	Clogging of air filter	●	●	●		●	
	Clogging of throttle hole	●	●	●		●	
	Rupture of diaphragm	●				●	
	Windmill deadlocked		●		●		
	Belt sliding or ruptured						
	Linkage shaft ruptured	●					
Hydraulic system	Pump oil intake sucking Air in or hydraulic pump		●			●	
	Servo valve clogged	●				●	
	Tubing misconnected						●
	Overloading	●	●				
	Servo valve misadjusted			●		●	
	Detection device Miss-positioned or not Reliably installed				●		
	Wrinkle or cutting edge Present on the rim of the platen				●		



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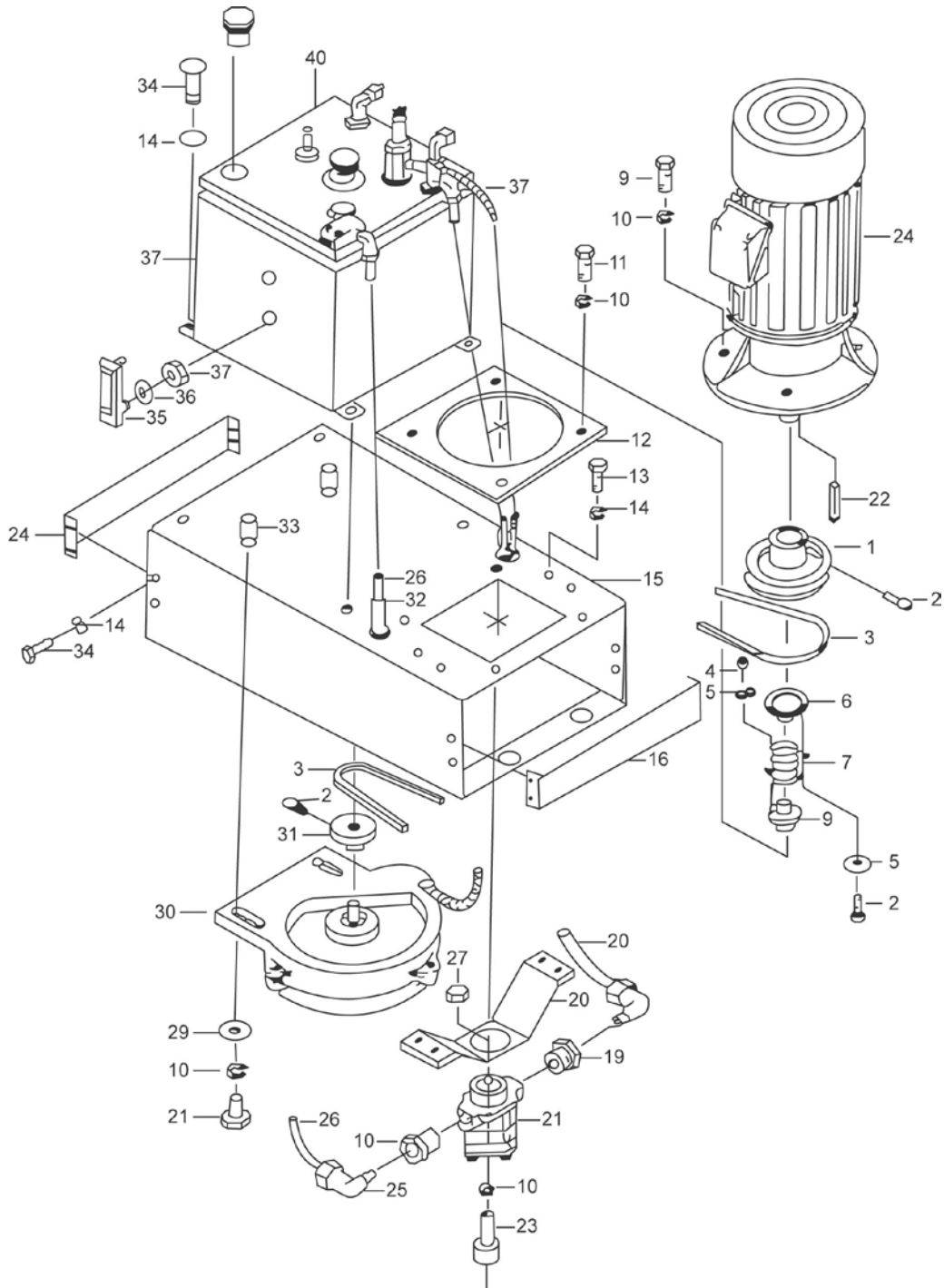
For the elimination of disorder

Checking procedures	Correction
Remove the filter net for inspection	Clearing
Screw up the 1 tap for visual inspection	Clearing
Stuff two air tap holes which are associated with the inspection device and inspect the interior pressure of the diaphragm	Replacement
Loosen out the belt and rotate the shaft core of the windmill	Disassemble the windmill for inspection
Depress the belt manually	Adjust or replace the belt
Rotate the motor manually and inspect the linkage shaft	Replace springs
Loosen out the tap tubing on the discharge side of the pump. And the startup motor as well. Inspect the hydraulic discharge or the pump	Replacement
Remove the cover of the adjusting screw. And inspect by depressing the tubing inside the cylinder manually	Disassemble the serve valve for clearing
Verify if there is any error in the tubing	Replacement
Verify the axial thrust due to the cylinder	Use a larger hydraulic cylinder instead
	Adjustment or replacement
	Correct to order or install to a stable condition



HC-2A

Product Part Drawing





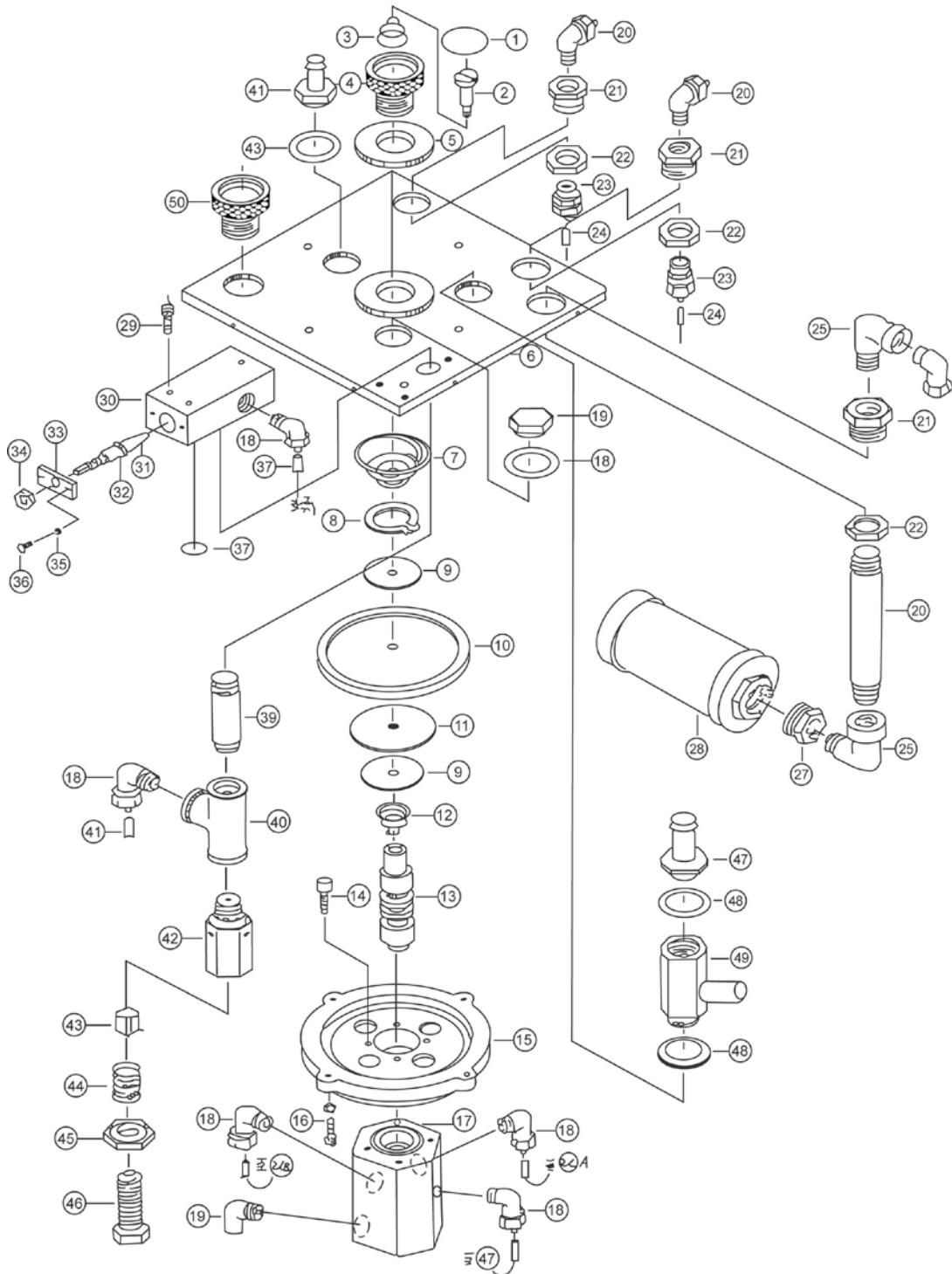
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Product part list

No	Name	Q	No	Name	Q
1	Larger v-pulley	1	21	Pump	1
2	Hexagon socket head cap screw	5	22	Square key	1
3	V-Belt	1	23	Hexagon socket head cap screw	2
4	Hexagon socket head cap screw	1	24	Motor	1
5	Spring washer	2	25	L-Joint	1
6	Connection spring upper seat	1	26	PE oil hose	1
7	Connection spring	1	27	Hexagon nut	2
8	Connection spring base	1	28	Hexagon bolt	2
9	Hexagon bolt	4	29	Spring washer	2
10	Spring washer	12	30	Blower	1
11	Hexagon bolt	4	31	Small v-pulley	1
12	Fixed plate	1	32	Rubber hose	1
13	Hexagon bolt	4	33	Blower fixed seat	2
14	Spring washer	16	34	Hexagon bolt	12
15	Foundation frame	1	35	Oil gauge	1
16	Protected plate	2	36	Rubber packing	2
17	PE oil –hose	1	37	Hexagon nut	2
18	L-Joint	1	38	Oil tank	1
19	I-Joint	2	39	Air hose	1
20	Pump fixed bracket	1	40	Controlling equipment	



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Controlling equipment part List

No	Name	Q	No	Name	Q
1	Anti-leakage plate	1	26	Iron pipe	1
2	Bolt	1	27	I-Boxing	1
3	Equalizing spring	1	28	Filter	1
4	Adjusting screw	1	29	Hexagon socket head	3
5	Fixed ring nut	1	30	Speed controlling valve body	1
6	Basic plate	1	31	Controlling needle valve	1
7	Anti-running spring	1	32	O-ring	1
8	Snap ring	1	33	Plate nut	1
9	Strengthen plate	2	34	Hexagon nut	1
10	Diaphragm	1	35	Spring washer	2
11	Anti-leakage plate	1	36	+round screw	2
12	Anti-running spring	1	37	PE-Oil hose	1
13	Spool	1	38	O-Ring	1
14	Hexagon socket head cap screw	4	39	Iron pipe	1
15	Valve fixed seat	1	40	T-Joint	1
16	Hexagon socket head cap screw	4	41	PE –Oil hose	1
17	Valve sleeve	1	42	Relief valve	1
18	L-Joint	4	43	Needle	1
19	L-Joint	2	44	Pressure set spring	1
20	L-Joint	3	45	Hexagon nut	1
21	L-Boxing	3	46	Adjusting blot	1
22		3	47	Air hose spigot	2
23	I-Joint	2	48	Packing	4
24	PE-oil hose	2	49	Hexagon plug	1
25	L-Joint	2	50	Apply oil plug	1