

HYDRAULIC WALL CUTTER CHW-50A

INSTRUCTION MANUAL

- O Thank you for buying our products.
- © Read and understand this Instruction Manual carefully and completely for your own safety.
- O Save this Manual for future reference.

CONSEC CORPORATION

CONTENTS

1	. WARNINGS AND CAUTIONS	
	[1] Safety Notice For Hydraulic Machinery	· 1
	[2] Notes For Usage Of Hydraulic Wall Cutter	
2	DESCRIPTION	. 5
3	. SPECIFICATIONS	. 6
4	STANDARD ACCESSORIES	. 6
	. APPLICATIONS ·····	
6	. OPTIONS (SEPARATELY SOLD) ······	. 7
	. GENERAL DRAWING IN USE AND SPECIFICATIONS	
	[1] CHW-50A ·····	. 9
	[2] CHW-50A Standard Specification Drawing (E-1812Ax)	1 1
	[3] Max. rpm of Diamond Blade based on different hydraulic units[min-1]	1 1
	[4] Specifications for the use with CDW double line cut attachment (half cover)	1 2
	[5] Specifications for the use with Blade Retainer especially for cutting at the edge of wall	1 3
	[6] Table for the setting of discharge of Hydraulic Unit: In the 50Hz frequency area	1 4
	[7] Table for the setting of discharge of Hydraulic Unit: In the 60Hz frequency area	1 4
8	OPERATIONAL INSTRUCTIONS FOR CONTROL BOX BE-31A (SEPARATELY SOLD)	
	[1] Control Panel of Control Box BE-31A	1 5
	[2]Operational Instructions for Hydraulic Wall Cutter using Control Box BE-31A	1 5
9	. OPERATIONAL INSTRUCTIONS	
	[1] Preparation for Hydraulic Unit E-1812Ax	1 6
	[2] Anchor Fixing for the installation of Track Rail 1200LA	2 0
	[3] Installation of Hydraulic Wall Cutter	2 1
	[4] Installation of Diamond Blade	2 2
	[5] Connection of Control Box BE-31A	2 2
	[6] Connecting Track Rails	2 2
	[7] Installation of Blade Cover	2 4
	[8] Preparation of feeding water	2 4
	[9] Treatment of splashing water	2 4
	[10] Cutting Operation	2 5
	[11] Detachment of Wall Cutter	2 8
10	. SEPARATION AND ASSEMBLING OF HYDRAULIC WALL CUTTER	3 0
	.INSTALLATION AND DETACHMENT OF DIAMOND BLADE	
	[1] Installation of Diamond Blade	3 1
	[2] Detachment of Diamond Blade	3 1
12	TROUBLESHOOTING DURING OPERATION	_
	[1] TROUBLESHOOTING DURING OPERATION	3 2
	[2] An example of solving method when Diamond Blade is locked	3 3
13	. MOUNTING HYDRAULIC MOTOR	3 4
	. MAINTENANCE, INSPECTION AND REPAIR	•
•	[1] Maintenance	3 5
	[2] Inspection	3 5
	[3] Regular Inspection	3 5
	[4] Repairs	36
15	. MAINTENANCE INSTRUCTIONS	36

1. WARNINGS AND CAUTIONS

- © To avoid the risk of fire, electric shock and personal injury, follow all the instructions stated in "Safety Notice For Hydraulic Machinery" and "Notes For Usage Of Hydraulic Wall Cutter".
- Before use, read and understand this Manual, and follow all the safety instructions for your
 own safety.
- O Save the Manual for future reference.

[1] Safety Notice For Hydraulic Machinery

▲ WARNING

- 1. Do not use for other than specified purposes.
- 2. Keep bystanders and children away.
 - Never allow bystanders to contact hydraulic unit itself, other hydraulic equipment, control box or cord and hose.
- 3. Avoid dangerous environments.
 - O Do not use electric equipments such as hydraulic unit and control box in rain, damp or wet locations.
 - O Keep work area well lit.
 - O Do not use your Machine in the presence of explosive or flammable gas or liquid.
 - O Cluttered work areas invite accidents.
- 4. Wear proper apparel.
 - O Do not wear loose clothing or jewelry since these may be caught in moving parts.
 - O When working outdoors, wear rubber gloves and insulated no-skid footwear.
 - Wear a protective hair covering to contain long hair.
- 5. Wear safety glasses.
 - O When working, wear safety glasses. Use a dust mask for dusty operations.
- 6. Do not overreach and maintain control.
 - O Keep proper footing and balance at all times.
- 7. Stay alert.
 - O During operation, carefully watch the proceedings, surroundings and how the situation stands to reduce risks.
 - O Do not come close to the rotating parts. Doing so could get entangled in it or could get injured.
 - O Be careful not to jam your hands or feet between moving parts or connecting parts.
 - O Do not use your Machine when you are tired or distracted.
- 8. Guard against electric shock.
 - O Always earth hydraulic unit.
 - O Use power source equipped with earth leakage breaker.
 - When working, always wear rubber gloves and rubber shoes.

- 9. Do not abuse cord.
 - O Never carry tool by its cord or hose.
 - O Never disconnect it by yanking the cord or hose from power receptacle.
 - © Keep cord hose from heat, oil, sharp objects, cutting edges and moving parts.
- 10. Use recommended Accessories and attachment only.
 - © Using tools and devices not recommended in this Manual or Consec catalog can lead to accidents and personal injuries.
- 11. Check parts for damages.
 - © Before each use, check carefully Guards, cord, hose or other parts for damages to see that they should accomplish their designed function.
 - © Check for alignment, binding of moving parts, parts damages, mounting, and any other conditions that may affect operation.
 - O Do not use your Machine if its Switch does not turn it on or off.
 - O For repairs or replacement of Guards or parts, follow the instruction of this Manual.
 - © Unless otherwise specified in the Manual, have them repaired or replaced by Consec's sales (service) representative.
- 12. Stop Hydraulic Unit in the following cases.
 - O When connecting or disconnecting hydraulic hoses.
 - O When changes cutting tools such as blades.
 - O Before repairing it.
 - O When working, the strange noise can be heard from hydraulic unit.
 - When other hazardous situation could be anticipated.
- 13. Remove all Adjusting Keys, and Wrenches.
 - © Before switching on the power, make certain all the Adjusting Keys and Wrenches, etc. used for adjustment are removed from the Machine.
- 14. Maintain your Tool and Machine carefully.
 - © Follow the instructions in this Manual for lubrication or replacement of Accessories.
 - O Always keep Grip dry, clean and free from oil or grease.
- 15. Store idle tools securely.
 - When not in use, store tools in a dry secured place. Keep out of reach of children.
- 16. Have your Machine repaired by Consec's sales (service) representative.
 - © This Machine is manufactured in compliance with applicable safety standards. Do not modify your Machine and Tool.
 - © Repairs by unauthorized personnel may cause Machine failure, damages or personal injury.
 - Have your Machine and Tool repaired by Consec's sales (service) representative.

- 1. As for Hydraulic Unit, use "Hakken" brand hydraulic unit.
 - © Read and understand Instruction Manual of each Hydraulic Unit carefully and understand it before using it.
- 2. Pay attention to buried lines such as conduit.
 - © If core bit touched live electric wire or conduit, an operator might get an electric shock.
 - O When drilling or cutting wall or floor, please carefully check the buried items.
- 3. Always use Blade Cover
 - © To prevent the cutting water from spattering and to avoid an injury caused by breakage of rotating Diamond Blade and to avoid being caught in moving parts, always use Blade Cover.
- 4. Do not install this Hydraulic Wall Cutter downward in horizontal cutting.
 - Because this Hydraulic Wall Cutter uses the cutting water, this cutting water will be
 pooled inside of Blade Cover if it is used upside down. So this Hydraulic Wall Cutter
 could fall down and doing so is very dangerous.
- 5. Operation at high place, please obey related laws.
 - © In case of wall cutting, mounting and removing of Wall Cutter Main Body must be done at lower position.

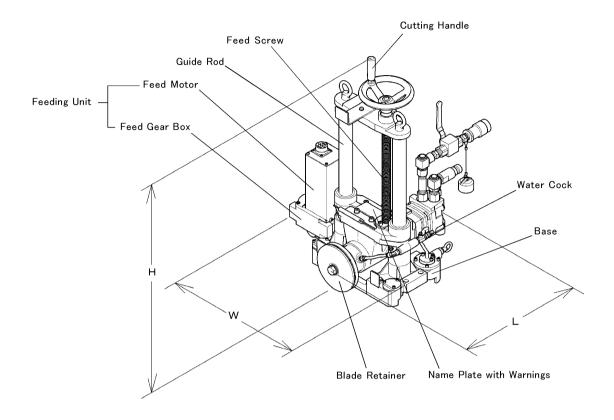
 - © For operation at a high place, set your Machine on a secured place.
 - O For operation at a high place, do not let bystanders come under the cutting area.
- 6. Anchor the Track Rail securely.
 - ② It is very important to fix the Track Rail correctly. If the Track Rail is not fixed correctly, the Diamond Blade could be damaged due to the rattling during cutting operation or the jamming of segment of Diamond Blade.
- 7. Be careful so that Hydraulic Wall Cutter do not fall down out of the Track Rail.
 - © If Swing Lever is not correctly turned to the direction of "Lock", the roller could come out of the plate of Track Rail. This is very dangerous!
- 8. Use special care when cutting through floors.
 - When cutting through floors, the side, at where Diamond Blade comes out, is very dangerous! The cutting water also spatters. Before starting operation, make arrange ment to provide for protection of all personnel and material on the opposite side.
- 9. Be careful with falling concrete block or debris where Wall Cutter is used.
 - © In the case of opening cut on the wall or floor, take necessary measures to prevent separated concrete block from falling off, such as fixing by chain hoist, before starting an operation.

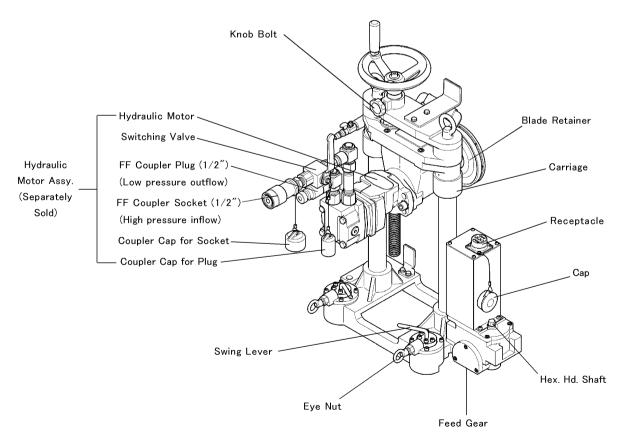
- 10. When abnormality occurs, stop the rotation of Diamond Blade.
 - ◎ If the rotation of Diamond Blade is stopped during the cutting or abnormality occurs during operation, stop the hydraulic unit by pushing 「Stop Button」 and stop the rotation of Diamond Blade.
- 11. Closing and Opening of the switching valve must be done slowly.
 - While Diamond Blade is rotating, if the switching valve is suddenly closed, this could cause the loosing of Blade Retainer. As a result, Diamond Blade could become loose. This is very dangerous!
- 12. Except during the cutting operation, stop the Hydraulic Unit.
 - When Hydraulic Wall Cutter is not being used, stop the Hydraulic Unit to avoid a sudden starting of Hydraulic Motor.

↑ CAUTION

- 1. Do not force the machine.
- 2. Be sure to use Diamond Blade.
 - © This Machine is especially designed for use with a Diamond Blade. Do not use tools other than a Diamond Blade.
- 3. Keep feeding water during entire cutting operation.
 - © Overheating of Diamond Blade reduces not only cutting performance but also its life. So be sure to keep feeding water during entire cutting operation.
 - O Use clear water only. Use of waste water recycling may lead to Machine failure.
- 4. Do not turn the switch on with Diamond Blade resting on the cutting surface.
 - This could cause a damage to Diamond Blade and Wall Cutter.
- 5. Turn Switch on and wait until Diamond Blade speed increases to the full, and then start cutting.
 - © Wait until Diamond Blade speed increases to the full, and then start cutting.
- 6. If depth of one cutting is big, this will not only force the machine too much, but slow the cutting speed. Avoid forced cutting.
- 7. Do not stop the rotation of Diamond Blade in the middle of cutting or do not lock the Diamond Blade.
 - O Doing so could cause the breakage of segment tips or the damage to Hydraulic Wall Cutter.
- 8. Cutting shall be done in the correct direction (Upper Cut) as much as possible.
 - ⑤ For the cutting in opposite direction (Down Cut), the force is applied by rotating blade in the moving direction and the movement on Track Rails may not be stable. As a result cutting performance may decrease.
- 9. Do not turn the attached Diamond Blade by hands.
 - ◎ If the Diamond Blade is turned without Hydraulic hoses 5/8" ASSY. is connected, this could cause the damage to the hydraulic motor.

2. DESCRIPTION





3. SPECIFICATIONS

Model			CHW-50A			
Type of Hydraulic Motor		2-060	HB−05	HB-08		
Displacement Volume [cc.	/rev]	64	89	127		
Nominal Speed [min ⁻¹]		850	898	746		
Max. Discharge [L/min]		54	79	95		
Rating Torque [daN-m]		19	24	34		
Rated Pressure [MPa]			21			
Applicable Diade Die	mm	782	1016	1220		
Applicable Blade Dia.	inches	30	40	48		
Blade Hole Dia. [mm]		35				
Max. Depth of Cut	782mm (30")	301				
(When new blade is used)	1016mm (40")	_	41	18		
[mm]	1220mm (48")		_	520		
Rated Feeding Speed [mm	/min]	632				
Rated Feeding Thrust [N]		1785				
Weight [kg]		28				
W [mm]		484	484	484		
L [mm]	410	434	440			
H [mm]		741	741	741		
Weight (including hydraulic	c motor) [kg]	40	41	41		

4 . STANDARD ACCESSORIES



Tool Box Y-455 ··· 1 pce



Single-ended Wrench 24mm ... 1 pce



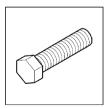
Ratchet Wrench 14 x 17mm ... 1 pce



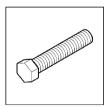
Hex. Bar Wrench 5, 6mm ... 1 pce each



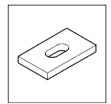
Dust Blower ... 1 pce



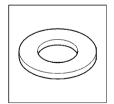
Hex. Hd. Bolt W3/8 x 38mm ... 8 pcs



Hex. Hd. Bolt
W3/8 x 50mm
... 8 pcs



Square Washer W3/8 x 50 x 30 x t6 \cdots 8 pcs



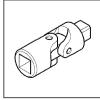
Flat Washer W3/8 ... 8 pcs



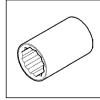
Speeder 204 ... 1 pce



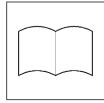
Extension Bar 307 ... 1 pce



Universal Joint 208 ... 1 pce



Socket 3D-13mm ... 1 pce

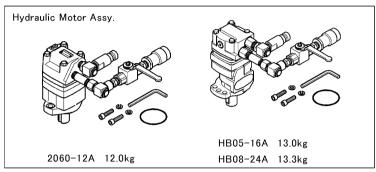


Instruction Manual ... 1 pce

5. APPLICATIONS

© Cutting on floor or (flat) wall of reinforced concrete structure (e.g. Making aperture on reinforced concrete structure)

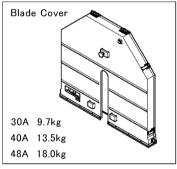
6. OPTIONS (SEPARATELY SOLD)



Based on the necessary capacity, one of four motors can be chosen.



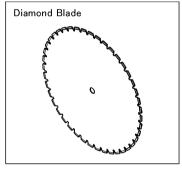
Track Rail for CHW-50A 600L, 1200L, 1800L are available.



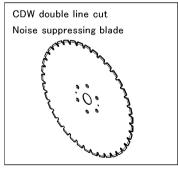
Blade Cover for CHW-50A 30" type, 40" type and 48" type are available.



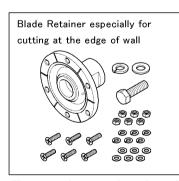
This is connected with Wall Cutter and controls it.



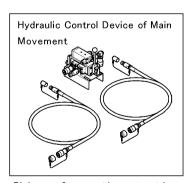
Diamond Blade especially for Wall Cutter (Segment Type) There are CW-1 type and CW-2 (thin tip and low noise) type.



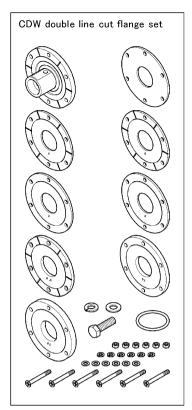
Noise suppressing blade for the use of CDW double line cut. There are the size of $18'' \sim 48''$.



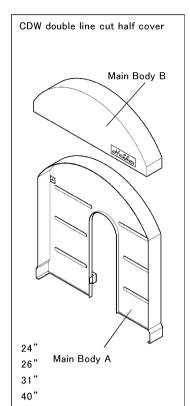
When cutting at the edge of wall, this set is used by replacing with standard Blade Retainer. As for the blade, use CDW double line cut Noise suppressing blade.



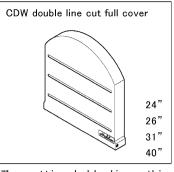
This softens the starting shock and enables to operate at intended speed. When Hydraulic Unit G-2800A is used, Exchange Adapters for male and female coupler are nec-



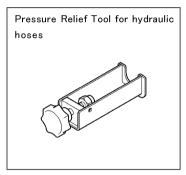
When cutting double lines or cutting at the edge of wall, this set is used by replacing with standard Blade Retainer.



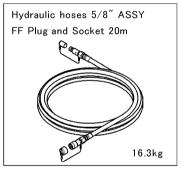
When cutting double lines or cutting at the edge of wall, this half cover is used. There are 24", 26", 31" and 40" types.



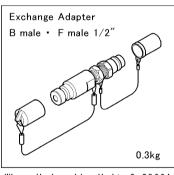
When cutting double lines, this full cover is used. There are 24", 26", 31" and 40" types.



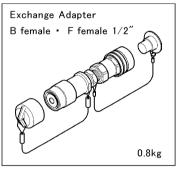
When it is difficult to connect couplers of Hydraulic hoses 5/8" ASSY FF Plug and Socket 20m, this tool can be used to release the pressure inside.



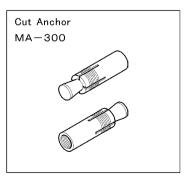
This is used when extending Hydraulic Hoses. 2 pcs are required for use. (It does not contain Hydraulic actuation oil.)



When Hydraulic Unit G-2800A is used, this is used as coupler adapter (male side) on Hydraulic Hoses.



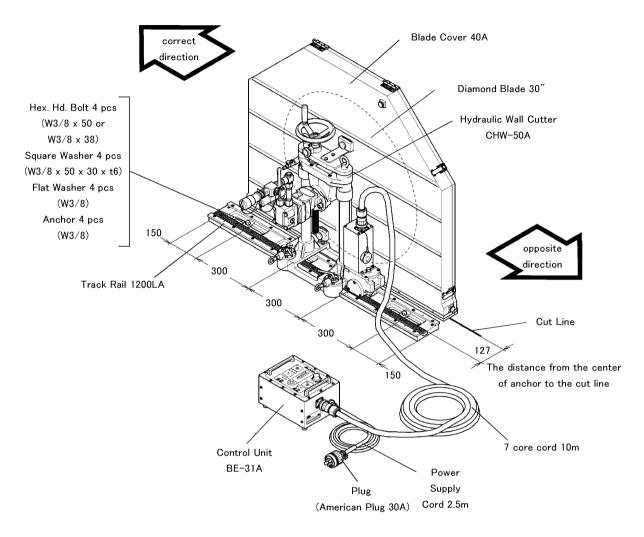
When Hydraulic Unit G-2800A is used, this is used as coupler adapter (female side) on Hydraulic Hoses.



It is fixed on the cutting surface such as concrete wall or floor to secure the Track Rail.

7. GENERAL DRAWING IN USE AND SPECIFICATIONS

[1] CHW-50A

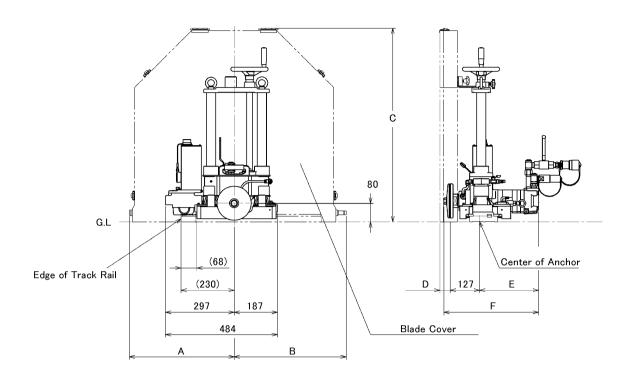


O The relationship between the diameter of Blade and Max. Depth and Width of Cut

	Blade Depth of			Relative Width of Cut to the cutting depth [mm]				Max.	Max.
Dia.	Dia. at the tip (mm) (Blade Type)	already cut groove [mm]	100mm	200mm	300mm	400mm	500mm	Width of Cut [mm]	Depth of Cut [mm]
30″	768 (CW-1)	ı	517	674	-			746	294
30	766 (CW-2)	ı	516	673	_		744	293	
40"	1016	98.5	605	808	927		-	1000	418
48″	1220	200.5	-	_	1050	1145	1200	1206	520

O The size of outer diameter of Diamond Blade differs from product to product. Therefore please calculate the depth of already cut groove and the Max. depth of cut in the following formula.

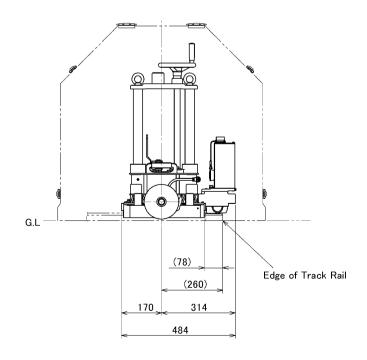
Depth of already cut groove = Dia. at the tip \times 1/2 - 409.5mm Max. depth of cut = Dia. at the tip \times 1/2 - 94mm



STANDARD SPECIFICATIONS

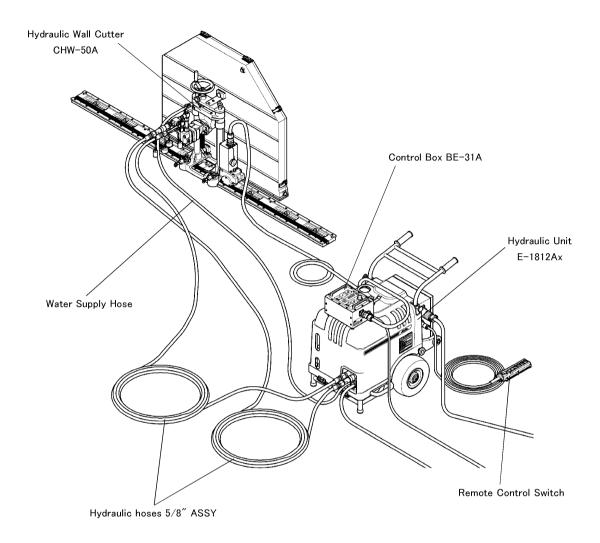
Type of Blade Cover	А	В	С	D
30A	454	484	837	45
40A	580	610	963	45
48A	671	701	1075	62

Type of Hydraulic Motor Assy.	E	F
2060-12A	256	410
HB05-16A	280	434
HB08-24A	286	440



In case the position of Feeding Unit is changed.

[2] CHW-50A Standard Specification Drawing (E-1812Ax)



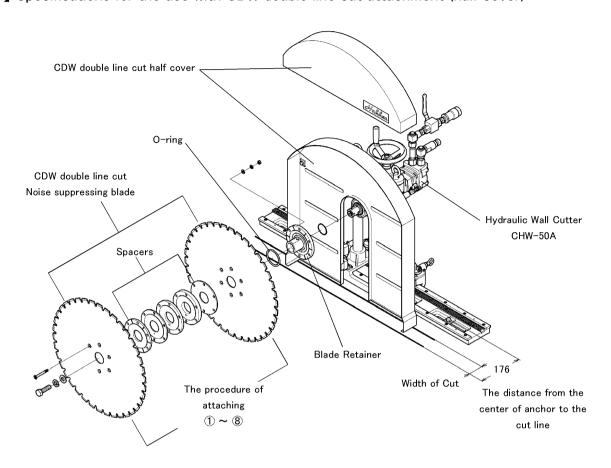
[3] Max. rpm of Diamond Blade based on different hydraulic units [min⁻¹]

Hydraulic Unit	Type of Hydraulic Motor Assy. Frequency		HB05-16A	HB08-24A
E-1812Ax	50Hz	739	531	372
E-1612Ax	60Hz	Note) 850	635	445
G-2800A	_	781	562	394
E 4400D III	50Hz	637	458	321
E-1100R Hiv	60Hz	765	551	385

Note) In case Hydraulic Unit E-1812Ax and Hydraulic Motor Assy. 2060-12A are used together in the 60Hz frequency area, the turning Discharge Adjusting Screw less than 1/2 (Discharge: 54L/min) will cause rpm becoming more than specified Max. rpm of Hydraulic Motor.

Therefore always use it with the turning Pressure Adjusting Screw more than 1/2.

[4] Specifications for the use with CDW double line cut attachment (half cover)



Width of Cut				The procedu	ire of attac	hing spacer	S		
Width of Cut	0-ring	1	2	3	4	5	6	7	8
50mm	without	Blade	5mm groove	5mm	10mm	15mm	ı		
45mm		5mm groove	Blade	5mm groove	10mm	15mm	1		
40mm		5mm	5mm groove	Blade	5mm groove	5mm	15mm		
35mm		10mm	5mm groove	Blade	5mm groove	15mm	ı	7.5	
30mm	with	15mm	5mm groove	Blade	5mm groove	10mm	I	7.5mm groove	Blade
25mm		5mm	15mm	5mm groove	Blade	5mm groove	5mm		
20mm		10mm	15mm	5mm groove	Blade	5mm groove	_		
Cutting with one Blade only		3mm Black	5mm	5mm	10mm	15mm	-		

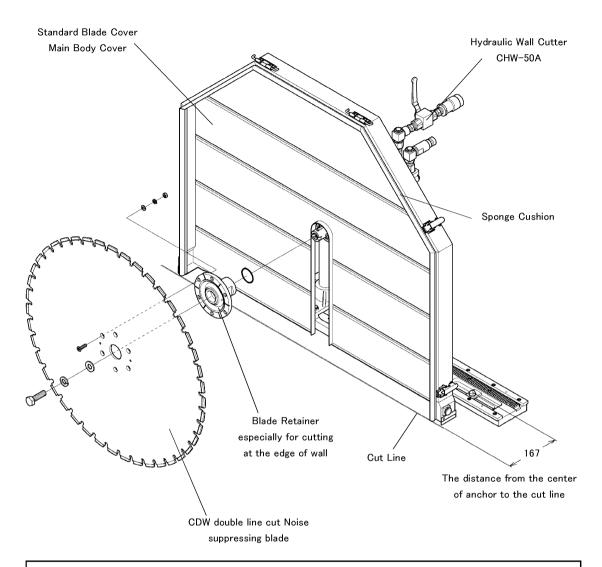
CAUTION

To feed water to the surface of cutting blade, the spacers with 5mm groove and 7.5mm groove, which come into contact with Blade, should be attached so that the groove side come into contact with Blade.

POINT

To attach Blade Retainer, Ratchet Wrench 24mm is necessary.

[5] Specifications for the use with Blade Retainer especially for cutting at the edge of wall



A WARNING

- 1. If only Main Body Cover is used for the cutting operation, it is very dangerous, because one side is wide open. Except cutting operation at the edge of wall, do not use it.
- 2. To prevent the cutting water from spattering and to avoid an injury caused by breakage of rotating Diamond Blade and to avoid being caught in moving parts, make Sponge Cushion of Main Body Cover and wall surface closely in contact and take measures such as placing safety fences to avoid possible danger.

POINT

To attach Blade Retainer especially for cutting at the edge of wall, Ratchet Wrench 24mm is necessary.

[6] Table for the setting of discharge of Hydraulic Unit: In the 50Hz frequency area.

Libratua di a I bait	Type of Hydraulic	Type of Hydraulic Diameter of Diamond Blade					
Hydraulic Unit	Motor Assy.	26"	30″	40"	48"		
	2060-12A	2 1/2	3 1/2	Max.	_		
	2000-12A	0	1 1/2	4	5 1/2		
E-1812Ax	HB05-16A	_	1	3 1/2	4 1/2		
LIGIZAX	TIBOO TOA			1 1/2	3		
	HB08-24A	_	_	_	2		
	TIDOU ZAA		_		Note 2)		
	2060-12A	4 1/2	6 1/2	10	_		
		1	3 1/2	7	9 1/2		
G-2800A	HB05-16A	-	2	6	8		
G 2000A				3 1/2	5		
	HB08-24A	_	_	11	3 1/2		
			_		0		
	2060-12A	1 1/2	3 1/2	6	7 1/2		
	2000 12A		0	4	5 1/2		
E-1100R Hiv	HB05-16A	_	_	3 1/2	4 1/2		
- 11001(1110	TIDOO TOA		_	Note 2)	2		
	HB08-24A	_	_		1/2		
	TIDOO 24A		_		Note 2)		

Note 1) The peripheral speed is calculated at 1200m/min at High Speed and 1500m/min at Low Speed.

[7] Table for the setting of discharge of Hydraulic Unit: In the 60Hz frequency area.

Libratua di a Ilinia	Type of Hydraulic	Diameter of Diamond Blade					
Hydraulic Unit	Motor Assy.	26"	30″	40"	48″		
	2060-12A	4	5	_	-		
	2000-12A	2	3 1/2	5 1/2	1		
E-1812Ax	HB05-16A	1	2 1/2	4 1/2	_		
E-101ZAX	11000 107		0	3	4 1/2		
	HB08-24A	_	_	1 1/2	3 1/2		
	TIDOU ZAA			_	1 1/2		
	2060-12A	4 1/2	6 1/2	10	_		
		1	3 1/2	7	9 1/2		
G-2800A	HB05-16A	_	2	6	8		
G 2000A	TIBOO TOA			3 1/2	5		
	HB08-24A	-	_	1	3 1/2		
	11000 247			_	0		
	2060-12A	3 1/2	5	7 1/2	8 1/2		
	2000 12A	1	2 1/2	5 1/2	7		
E-1100R Hiv	HB05-16A	<u> </u>	1 1/2	4 1/2	6 1/2		
L TIOUR HIV	HB03-10A			2	4 1/2		
	HB08-24A	<u> </u>	_	1/2	2 1/2		
	11D00-24A		-	_	Note 2)		

Note 1) The peripheral speed is calculated at 1200m/min at High Speed and 1500m/min at Low Speed.

Note 2) It will not reach the peripheral speed of 1500m/min, although it is set for Max. discharge.

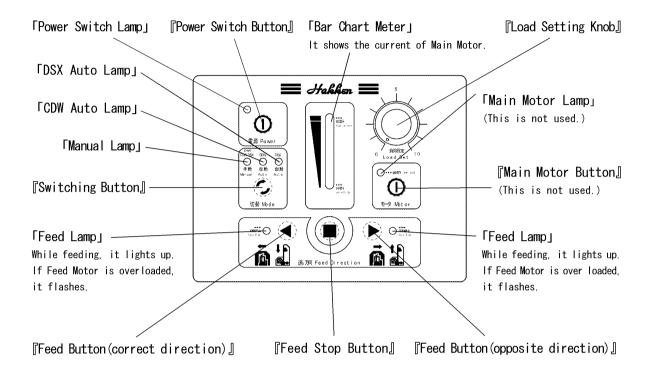
Note 3) Above table is only the rule of thumb. Actually drilled object might change the conditions. In that case please readjust the discharge of Hydraulic Unit.

Note 2) It will not reach the peripheral speed of 1500 m/min, although it is set for Max. discharge.

Note 3) Above table is only the rule of thumb. Actually drilled object might change the conditions. In that case please readjust the discharge of Hydraulic Unit.

8 . OPERATIONAL INSTRUCTIONS FOR CONTROL BOX BE-31A (SEPARATELY SOLD)

[1] Control Panel of Control Box BE-31A



[2] Operational Instructions for Hydraulic Wall Cutter using Control Box BE-31A

▲ WARNING

- 1. Control Box BE-31A must be operated by the same operator who uses Hydraulic Wall Cutter.
- 2. If Control Box BE-31A is operated at a distance from Hydraulic Wall Cutter, make sure the safety at the surrounding area of Hydraulic Wall Cutter before operation.
- 1) Press the power switch button of Control Box BE-31A. (Power Switch Lamp comes on.)
- 2) Make sure that 「Manual Lamp」 is ON. If it is not ON, press 「Switching Button」 to turn 「Manual Lamp」 "ON".
- 3) Set the cutting load at "0" with the load setting knob.
- 4) Press either Feed Button (correct direction) or Feed Button (opposite direction).
- 5) Looking at the Oil Pressure Gauge, adjust the feeding speed with the load setting knob so that the load of Hydraulic Motor is kept constant. The feeding speed is in proportion to the scale of the load setting knob. (At the position of 0, the feeding stops and at the position of 10, the feeding speed is at maximum.)
- 6) To stop the feeding only, press the Feed Stop Button.

9. OPERATIONAL INSTRUCTIONS

▲ WARNING

Before start cutting operation, take safety measures such as preventing falling off of separated concrete block or avoiding danger.

The following operational instructions are based on the use of Hydraulic Unit E-1812Ax.
 Read Instruction Manual of Hydraulic Unit E-1812Ax before you will use it.

[1] Preparation for Hydraulic Unit E-1812Ax

Items to be prepared



Water Supply Hose ... necessary quantity



Hose Band ... necessary quantity



Three-way Cock ... necessary quantity



Wheel Stopper ... at least 2 pcs

1. Connect Power Supply

© Connect Hydraulic Unit E-1812Ax with Power Supply.

▲ WARNING

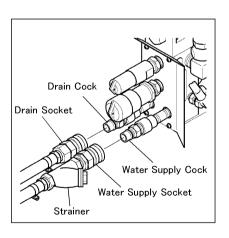
- 1. Be careful not to get Electric Shock. Use Power Source installed with Earth Leakage Breaker.
- 2. When connecting Electric Cable with Power Supply, always make sure that the breakers at the engine and distribution panel are cut off. Also connect Earth (Green) always.

2. Connection of Hydraulic Hoses and Water Supply Hoses

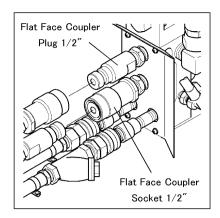
 Connect Water Supply Hose from running water to Water Supply Socket, connect this socket with Water Supply Cock. Connect Water Supply Hose for Hydraulic Wall Cutter to Drain Socket. Then connect Drain Socket with Drain Cock. Fix Water Supply Hoses with Hose Bands.

⚠ CAUTION

- 1. In this manual, we have suggested that cooling water can be used to feed cutting water. However in the actual cutting operation, if the amount of cooling water is not enough due to the extreme change of Hydraulic actuation oil, separately prepare another source of cutting water.
- Regarding amount of cooling water, it must be more than 10L/min and it must be adjusted so that the temperature of actuation oil become 20°C ~ 60°C.
- 3. Always use clean water as the cooling water.



2) Connect Hydraulic Hoses Assy. with Hydraulic hoses 5/8" ASSY.



! CAUTION

- 1. When connecting Flat Face Couplers, push them until they are completely engaged.
- 2. When Flat Face Couplers have dust or debris, wipe them out before connecting them.
- 3. In the case using new hydraulic hoses (separately sold) to extend the length of hoses, the amount of oil is reduced because there is no oil inside of new hoses. Before connecting Hydraulic equipment, first connect hydraulic hoses with Hydraulic Unit, then connect discharge end of new hose with return end of new hose like a loop. While checking oil amount indicator, refill oil tank by inching with remote controller. Extending Hydraulic Hoses Assy. They must be connected always one by one to refill oil tank. If two new hoses are connected at once, the amount of oil is reduced dramatically and this could cause the damage. (Approx. 6L of oil is necessary to refill each hose.)

POINT

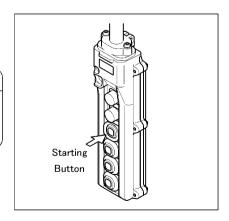
To connect with Hydraulic Unit G-2800A or E-1100R Hiv, Exchange Adapters (separately sold) are necessary.

- 3. The setting of discharge (RPM of Diamond Blade)

 - ◎ When E-1812Ax is shipped, it is set at 42/50L/min (50Hz/60Hz).
 - 1) Push 「Starting Button」 on Remote Control Switch to start Hydraulic Unit.

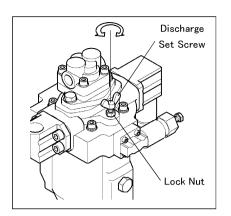
POINT

When changing discharge, always start Hydraulic Unit before changing it.



- 2) Loosen Lock Nut by Single-ended Spanner (13mm) and set the discharge by turning Discharge Set Screw.
 - ① Set discharge at 「Maximum」.

 The position of 「Maximum」 discharge is where Discharge Set Screw is loosen freely once and tighten back until Discharge Set Screw slightly contacts Lock Nut.
 - ② Referring the table for the setting of discharge of Hydraulic Unit in page 14, set the discharge as desired. When decreasing discharge, tighten Discharge Set Screw. When increasing the discharge, loosen Discharge Set Screw.



Rule of thumb for discharge

[L/min]

Number of turning Frequency	0	1	2	3	4	5	Maximum
50Hz	47.3	43.2	39.0	34.9	30.7	26.6	23.6
60Hz	56.6	51.6	46.7	41.7	36.8	31.8	28.3

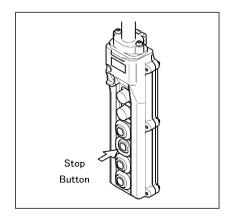
♠ CAUTION

Discharge must be within maximum stream flow of Hydraulic Motor. If discharge is set above maximum stream flow, this could lead to the damage.

POINT

It is said that the suitable peripheral speed of blade is at $1,200 \sim 1,500 \text{m/min}$ in general. However it could be different depending on the cut object or the conditions of the site. Based on the situations, re-adjust the setting of RPM.

- 3) Always tighten Lock Nut to fix the position after the setting.
- 4) Push 「Stop Button」 on Remote Control Switch to stop Hydraulic Unit.

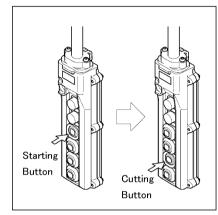


- 4. Method of Setting Pressure (Max. Load Pressure)
 - © While doing this, Hydraulic hoses 5/8" ASSY must be disconnected.

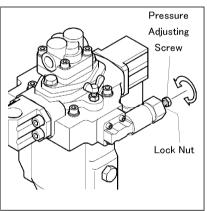
POINT

If Hydraulic hoses 5/8" ASSY is connected, the set pressure will not be shown in Oil Pressure Gauge.

- Conduct running-in operation of hydraulic actuation oil.
 When oil temperature becomes within the range of 20°C ~ 60°C, running-in operation is complete.
- 2) Press \[Starting Button \] on Remote Control Switch to start Hydraulic Unit.
- 3) 6 seconds after starting, push 「Cutting Button」 on Remote Control Switch.



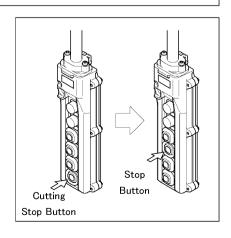
- 4) Loosen Lock Nut by Single-ended Spanner (13mm) and turn Pressure Adjusting Screw by Single-ended Spanner (13mm).
- 5) When increasing pressure, tighten Pressure Adjusting Screw. When decreasing pressure, loosen Pressure Adjusting Screw.
- 6) Looking at Oil Pressure Gauge, adjust the pressure at 21MPa and tighten Lock Nut by Single-ended Spanner (13mm) to fix it.



⚠ CAUTION

When setting the pressure, please make sure that the set pressure does not overreach Rated Pressure[MPa] specified in the name plate. If it is used at more than Rated Pressure, this could lead to the damage of hydraulic motor.

- 7) Push 「Cutting Stop Button」 on Remote Control Switch to stop Hydraulic Unit.
- 8) Push 「Stop Button」 on Remote Control Switch to stop Hydraulic Unit.



[2] Anchor Fixing for the installation of Track Rail 1200LA

Items to be prepared



Hammer Drill ···1 pce



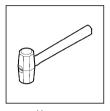
Drill Bit ϕ 14.5mm ... 1 pce



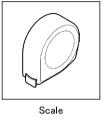
W3/8 ··· as necessary



Dust Blower ... 1 pce

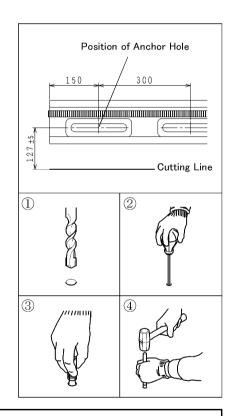


... 1 pce



... 1 pce

- ① Mark the anchoring position by the scale. Open an anchor hole (Dia. ϕ 4.5mm, Depth 55mm) at the marked position using a hammer drill.
- 2 Clean the hole by Dust Blower.
- 3 Insert Anchor (W3/8) into the hole.
- 4 Drive the Anchor (W3/8) securely by Driving Holder and hitting hard by Hammer.

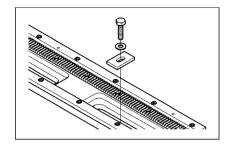


▲ WARNING

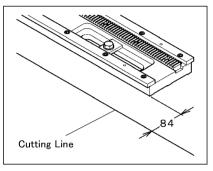
- 1. For the safety, use 4 positions of anchor fixing per 1 piece of Track Rail 1200LA. Use 2 positions of anchor fixing per 1 piece of Track Rail 600LA. Use 6 positions of anchor fixing per 1 piece of Track Rail 1800LA.
- 2. Take care so that chips are completely blown out of the hole. Otherwise anchors could come loose.
- 3. Use concrete anchors specified by CONSEC.

[3] Installation of Hydraulic Wall Cutter

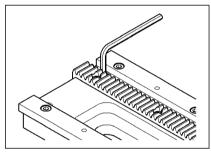
Temporarily fix Track Rails with Square Washer (W3/8 x 50 x 30 x t6) and Flat Washer (W3/8) and Hex. Hd. Bolt (W3/8 x 38mm or W3/8 x 50mm).



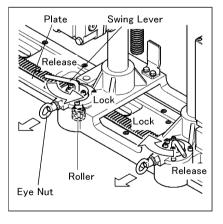
 Adjust the position of Track Rails so that the distance from the side of Track Rail to the cutting line becomes 84mm by the scale.



 Adjust the leveling of Track Rails using Hex. Bar Wrench (5mm) up and down. After adjusting it, securely fix Track Rails.



- 4) Pull Eye Nut attached on the base of Hydraulic Wall Cutter and turn Swing Lever to the direction of "Release".
- 5) Lift Hydraulic Wall Cutter. Engage the roller of the base with the plate of Track Rail at the preferred position and set Wall Cutter on the Track Rail.
- 6) Pull Eye Nut on the base of Hydraulic Wall Cutter and turn Swing Lever to the direction of "Lock".



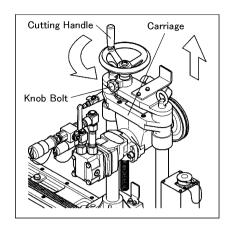
7) Make sure that 4 pcs of Roller and the plate of Track Rail are securely engaged and the pin on the tip of Eye Nut has come into the Swing Lever.

A WARNING

- 1. In case Hydraulic Wall Cutter is mounted on the vertical wall, mount it by more than two persons. Be careful not to drop Hydraulic Wall Cutter.
- 2. If Swing Lever is not correctly turned to the direction of "Lock", the roller could come out of the plate of Track Rail. This is very dangerous!

[4] Installation of Diamond Blade

- 1) Turn Cutting Handle unticlockwise and move up Carriage upper most position. Fasten Knob Bolt to fix it.
- Install the Diamond Blade. Please see INSTALLA-TION AND DETACHMENT OF DIAMOND BLADE in page 31 in detail.

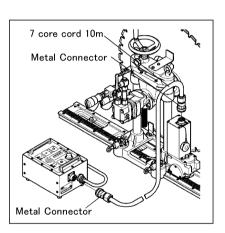


[5] Connection of Control Box BE-31A

1) Connect Hydraulic Wall Cutter and Control Box BE-31A by 7 core cord 10m.

∴ CAUTION

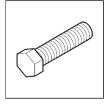
- If Receptacle or Metal Connector were wet, dry them up enough before connecting them.
- If Metal Connectors or surrounding parts were stained with dust, mud or debris, make them clean before connecting them.



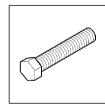
- 2) Insert the plug of Control Box BE-31A in the power socket.
 - O In case Transformer HDT-5A is used, plug in 115V socket.

[6] Connecting Track Rails

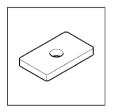
Items to be prepared



Hex. Hd. Bolt W3/8 x 38mm ... as desired



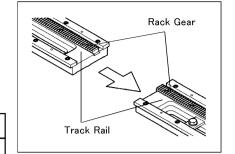
Hex. Hd. Bolt W3/8 x 50mm ... as desired



Square Washer $W3/8 \times 50 \times 30 \times t6$... as desired

1) Install concrete anchors in like manner described in [2] Anchor Fixing for the installation of Track Rail 1200LA in page 20.

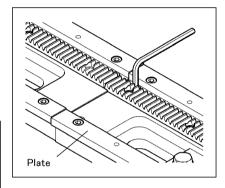
2) Engage the rack gear of Track Rail and the rack gear of next Track Rail and make the side face of each Track Rail closely in contact. Fix Track Rails with Square Washer (W3/8 x 50 x 30 x t6) and Flat Washer (W3/8) and Hex. Hd. Bolt (W3/8 x 38mm or W3/8 x 50mm).



▲ WARNING

In case Hydraulic Wall Cutter is mounted on the vertical wall and Track Rails are installed on the vertical wall, be careful not to drop Track Rails.

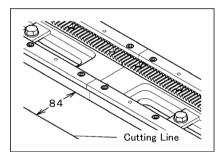
3) In case the matching of each plate of connecting Track Rails is not flat or there is still a space between Track Rails and between the surface to be cut and Track Rails, adjust the leveling of Track Rails using Hex. Bar Wrench (5mm).



CAUTION

If connected Track Rails is not flat, this could cause the damage to Hydraulic Wall Cutter.

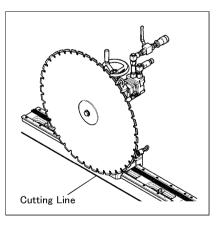
4) Adjust the position of Track Rails so that the distance from the side of Track Rail to the cutting line becomes 84mm by the scale.



⚠ CAUTION

Do not hit Track Rails by such as hammer.

5) Run Hydraulic Wall Cutter on the Track Rail without turning Diamond Blade to make sure if Diamond Blade is in alignment with cutting line or not. If not, make a small adjustment of Track Rails.



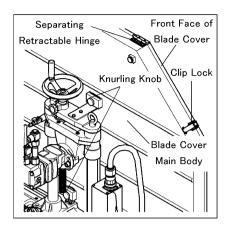
▲ WARNING

Do not rotate Diamond Blade.

6) Securely fasten all Hex. Hd. Bolt on the Track Rail by Ratchet Wrench.

[7] Installation of Blade Cover

- Match Blade Cover Main Body against the front face of Blade Cover. Fix them by separating retractable hinge and clip lock.
- Attach Blade Cover to Hydraulic Wall Cutter and fix it by fastening Knurling Knob.



3) Move the position of drain port as necessary, connect one end of drain hose with drain port and place the other end of drain hose into a bucket.

[8] Preparation of feeding water

© Close Water Cock. Connect Feed Water Coupler on it or connect Feed Water Hose by fixing by hose band on it.

∴ CAUTION

Always use clean water as cooling water. Not doing so could cause the damage to Hydraulic Wall Cutter.

[9] Treatment of splashing water

- 1. Treatment of splashing water based on the cutting site
 - O Cutting water splashes. Take measures such as surrounding the scene by sheet.

♠ CAUTION

Take measures also for the opposite side of wall, at where Diamond Blade penetrates.

- 2. Treatment of splashing water for the feeding motor
 - © Start feeding water and rotate Diamond Blade. If the cutting water splashes over the feeding motor, take measures for it. If no measure can be taken, stop operation.

♠ CAUTION

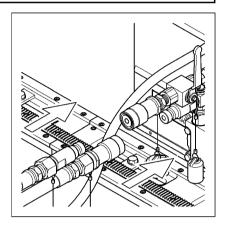
- 1. If cutting water gets inside of feeding motor or over surrounding electric wires, this could cause the damage to Hydraulic Wall Cutter.
- 2. If Hydraulic Wall Cutter is used on the wall to cut vertically up and down and the feeding motor comes to the down side of Hydraulic Wall Cutter, particularly be careful for it.

During cutting operation, if abnormality occurs, immediately push 「Stop Button」 on Remote Control Switch of Hydraulic Unit to stop the rotation of Diamond Blade and stop the operation.

1) Connect Hydraulic hoses 5/8" ASSY. with Hydraulic Wall Cutter.

A CAUTION

- 1. When connecting Flat Face Couplers, push them until they are completely engaged.
- 2. When Flat Face Couplers have dust or debris, wipe them out before connecting them.

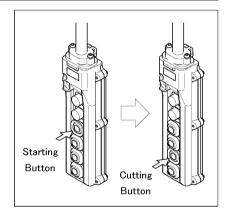


2) Open the faucet of running water and slowly open Water Supply Cock to adjust the amount of feeding water.

⚠ CAUTION

Allow water to flow at 3 liters per minute.

- 3) Push 「Starting Button」 on Remote Control Switch to start Hydraulic Unit and Push 「Cutting Button」 on Remote Control Switch to start rotating Diamond Blade.
- If Switching Valve is closed, slowly open Switching Valve and start rotating Diamond Blade.

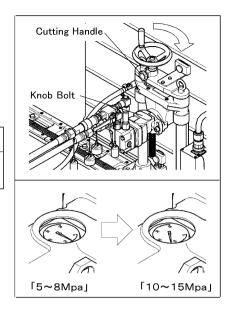


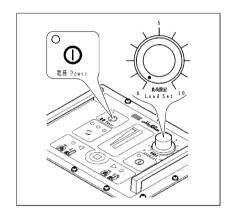
4) Loosen Knob Bolt and start cutting the object by turning Cutting Handle clockwise and fasten Knob Bolt to fix the Cutting Handle after reaching the desired depth. (By turning Cutting Handle one turn, the Diamond Blade moves 5mm.)

⚠ CAUTION

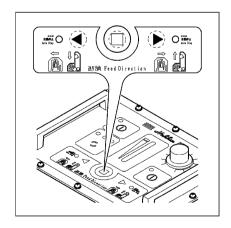
Do not force Hydraulic Wall Cutter.

- \odot Up until you reach the depth of $10\sim30$ mm, adjust the cutting speed so that the Pressure of Hydraulic Unit comes in the range of $5\sim8$ MPa.
- \odot After cutting reached the depth of $10 \sim 30$ mm, adjust the cutting speed so that the Pressure of Hydraulic Unit comes in the range of $10 \sim 15$ MPa until cutting reaches the desired depth.
- 5) Set Load Setting Knob at $\lceil 0 \rfloor$ and press the power switch button and make it "ON".





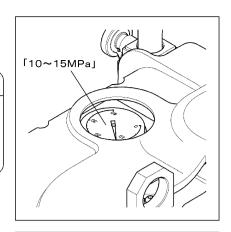
- 6) Make sure if 「Manual Lamp」 is "ON" or not. If it is not "ON", then press [Switching Button] and make 「Manual Lamp」 "ON".
- 7) Press either [Feed Button (correct direction)] or [Feed Button (opposite direction)] to feed to cut.



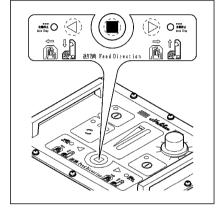
8) Adjust Load Setting Knob so that the Pressure of Hydraulic Unit comes in the range of $10 \sim 15$ MPa.

POINT

Depending on the object to be cut, the pressure of Hydraulic Unit continuously changes. Therefore continuously adjust the cutting speed during cutting operation.



 After cutting the necessary distance, press Feed Stop Button to stop feeding.

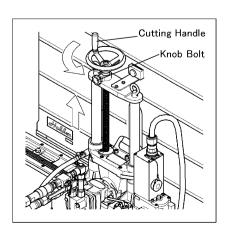


- 10) Repeat the procedure step $4)\sim 9$) to continue the cutting work to reach the desired depth.
- 11) In case Step-Cut is used. (Diamond Blade of more than 30" is used.)

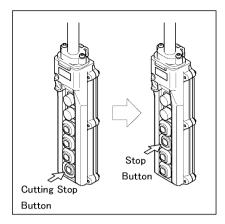
A WARNING

Before replacing Diamond Blade, make sure that Hydraulic Unit is completely stopped to avoid an unexpected accident.

- (I) Remove Blade Cover and Diamond Blade.
- 2 Insert Diamond Blade of more than 30" into the already cut groove.
- ③ As the Diamond Blade being placed in the groove, Diamond Blade shall be installed on Wall Cutter. Please see INSTALLATION AND DETACHMENT OF DIAMOND BLADE in page 31 in detail.
- 4 Use the Blade Cover which fits the size of Diamond Blade.
- 12) After cutting is finished, loosen Knob Bolt and turn Cutting Handle unticlockwise to pull up Diamond Blade until Diamond Blade comes out of cut object. After doing this, tighten Knob Bolt to fix the position.



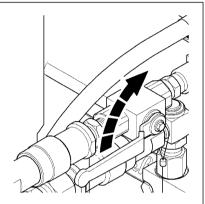
13) Push 「Stop Button」 on Remote Control Switch to stop Hydraulic Wall Cutter and Hydraulic Unit.



O In case you stop rotating Diamond Blade by Switching Valve, slowly close Switching Valve.

A WARNING

If Switching Valve is closed too quickly, Diamond Blade could come loose, because the rotation of hydraulic motor stops suddenly and it induces reaction. Pay enough attention to this.



14) Stop feeding water.

[11] Detachment of Wall Cutter

A WARNING

Before doing this, make sure that Hydraulic Unit is completely stopped to avoid an unexpected accident.

1) Remove Hydraulic hoses 5/8" ASSY. and Water Supply Hoses.

⚠ CAUTION

After disconnecting Hydraulic hoses 5/8'' ASSY., use coupler caps so that hydraulic couplers are free from dust or debris.

POINT

- 1. When disconnecting Hydraulic hoses 5/8" ASSY., if the debris, the dust etc. are attached to the couplers, the couplers can not close perfectly. While the couplers are in this condition, if Hydraulic Wall Cutter is placed at higher level than at where Hydraulic Unit is placed and Hydraulic hoses 5/8" ASSY. are disconnected from Hydraulic Wall Cutter, the air will go into the Hydraulic hoses 5/8" ASSY. As a result, Hydraulic actuation oil could overflow out of Oil Tank. Therefore when disconnecting Hydraulic hoses 5/8" ASSY., first disconnect the side of Hydraulic Unit.
- 2. Please make sure water feeding has stopped before disconnecting Water Supply Hoses.

2) Loosen Knurling Knob and remove the Blade Cover.

↑ CAUTION

Be careful that the cutting water and sludge remained inside do not come out of Blade Cover.

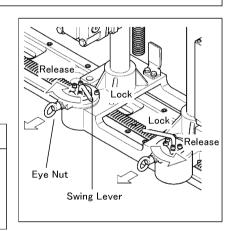
- 3) Detach the Diamond Blade. Please see INSTALLATION AND DETACHMENT OF DIA-MOND BLADE in page 31 in detail.
- 4) Plug off Control Box BE-31A from the power socket.
- 5) Disconnect 7 core cord 10m from Hydraulic Wall Cutter.

! CAUTION

- 1. Before disconnecting 7 core cord 10m, wipe the water off on and around the Metal Connector and Receptacle.
- 2. Do not disconnect 7 core cord 10m by yanking the cord.
- 3. After disconnecting 7 core cord 10m, always use the Cap on the Receptacle of Hydrau-lic Wall Cutter.
- 6) Pull Eye Nut attached on the base of Hydraulic Wall Cutter and turn Swing Lever to the direction of "Release".
- 7) Lift Wall Cutter and remove it from Track Rail.

A WARNING

In case Hydraulic Wall Cutter was mounted on the wall, remove it by more than two persons. Be careful not to drop Hydraulic Wall Cutter.



8) Remove the Track Rail.

A WARNING

In case Hydraulic Wall Cutter was mounted and Track Rails were installed on the wall, be careful not to drop Track Rails.

9) Clean the cutting areas.

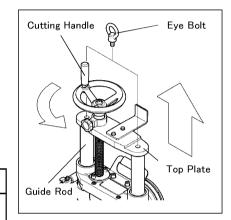
10. SEPARATION AND ASSEMBLING OF HYDRAULIC WALL CUTTER

A WARNING

When separating or assembling Hydraulic Wall Cutter, make sure that Hydraulic Unit is completely stopped to avoid an unexpected accident.

[1] Separation of Hydraulic Wall Cutter

- 1) Using bar such as Ratchet Wrench, turn the Eye Bolt and remove it.
- 2) Turn Cutting Handle to move up Carriage to the upper most position. Turn Cutting Handle further and remove Cutting Handle and Top Plate.
- 3) Remove Carriage from Guide Rod.



▲ WARNING

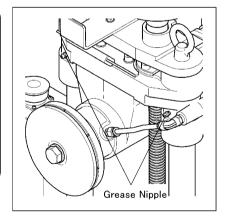
When separating Hydraulic Wall Cutter, unless the Base is fixed, a person could get injured when removing Carriage from Guide Rod.

[2] Assembling of Hydraulic Wall Cutter

② As for assembling of Hydraulic Wall Cutter, follow above procedures in the reversed order.

POINT

- Make sure that the grease is applied to the inside of Guide Rod entry of Carriage. If the amount of grease is not enough, add more grease to it.
- Do not leave Hydraulic Wall Cutter as being separated piece by piece for a long time to avoid the dust or debris adhering to the sliding part.



11. INSTALLATION AND DETACHMENT OF DIAMOND BLADE

A WARNING

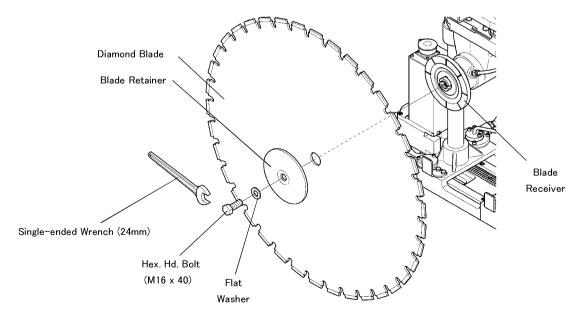
When installing or detaching Diamond Blade, make sure that Hydraulic Unit is completely stopped to avoid an unexpected accident.

[1] Installation of Diamond Blade

- 1) Detach Hex. Hd. Bolt, Flat Washer, Blade Retainer by Single-ended Wrench (24mm).
- 2) Set the Diamond Blade.
- 3) Then set the Blade Retainer, Flat Washer and Hex. Hd. Bolt back and tighten the bolt with the Single-ended Wrench (24mm) securely.

⚠ CAUTION

- 1. When handling Diamond Blade, use protection method such as wearing gloves to avoid an injury.
- 2. When installing or detaching Diamond Blade, do not hold the lower end of Diamond Blade.
- Before securing Diamond Blade by tightening the Hex. Hd. Bolt, it could come out of main shaft of Hydraulic Wall Cutter. Therefore keep holding Diamond Blade until the Hex. Hd. Bolt is tightly fastened.
- 4. Installation and detachment of Diamond Blade shall be done while Hydraulic Hoses 5/8" ASSY. is connected with Hydraulic Wall Cutter and Switching Valve is opened. If the Blade Receiver or Diamond Blade is turned without Hydraulic hoses 5/8" ASSY. is connected, this could cause the damage to the hydraulic motor.



[2] Detachment of Diamond Blade

@ As for Detachment of Diamond Blade, follow above procedures in the reversed order.

12. TROUBLESHOOTING DURING OPERATION

[1] TROUBLESHOOTING DURING OPERATION

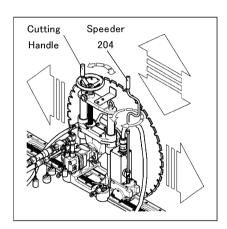
If a problem becomes apparent during operation, immediately stop the Hydraulic Unit and Hydraulic Wall Cutter. Under the safe circumstances, investigate the cause using the following table.

Problem	Cause	Solution
The top portion of the bar chart meter (orange color) of Control Box BE-31A flashes.	The power supply voltage is too high. (above 140V)	Connect with the correct power supply source.
The bottom portion of the bar chart meter (green color) of Control Box BE-31 A flashes.	The power supply voltage is too low. (below 78V)	Connect with the correct power supply source. If the abnormal power supply voltage is only temporary, wait until it returns to normal range. Reset the unit by pressing the Power Switch Button.
Feed Lamp of Control Box BE-31A flashes.	Feed Motor is overloaded. Overload protection is working.	Press Feed Stop Button or Power Switch Button to release the flashing. Solve the cause of overloading.
	Hydraulic Wall Outter and Blade Cover are hitting the object.	Remove the object.
Hydraulic Wall Cutter stopped.	Long stud bolt is used to fix Track Rail and the Base of Wall Outter is hitting the long stud bolt.	Replace it with specified Hex. Hd. Bolt or fix it again so that the Base of Wall Outter will not hit it.
	The dust or debris are accumulated on the roller or rack gear.	Clean it up or Repair it.
	The rack gear is damaged.	Repair it.
	The sliding part of Track Rail is deformed.	Repair it.
	Feed Gear Box is damaged.	Repair it.
Although Feed Button of Control Box BE- 31A is pressed, Wall Cutter does not run.	Feed Motor is broken.	Repair it.
31A is pressed, Wall Cutter does not run.	The wire inside of 7 core cord 10m is broken.	Repair it.
Diamond Blade does not rotate.	Hydraulic Unit has a problem.	Refer to the Instruction Manual of Hydraulic Unit.
Diamorio biade does not rotate.	Connection of Hydraulic hoses 5/8" ASSY. is not good.	Connect FF couplers correctly again.
	Knob Bolt is fastened.	
Cutting Handle can not be turned.	The dust or debris is adhered to the sliding part of Feed Screw.	Clean Feed Screw up. Apply the grease to it.
	Diamond Blade is cutting the steel bar.	Keep cutting trying not to force it too much.
	Segment tips of Diamond Blade are worn out.	Replace it with new one.
	Cutting performance is not good.	Consult with sales dealer.
Outting speed is slow.	Oil temperature of Hydraulic Unit is high.	Refer to TROUBLESHOOTING DURING OPERATION in Instruction Manual of Hydraulic Unit.
	Power of Hydraulic Motor is weak.	Refer to TROUBLESHOOTING DURING OPERATION in Instruction Manual of Hydraulic Unit.
	Installation of Track Rails is not correct.	Install Track Rails again.
Vibration of Wall Cutter is too much.	Diamond Blade is deformed.	Repair it.
	Main Shaft is bended. It is out of alignment.	Repair it.
Diamond Blade is locked.	Chip of steel bar or debris of mixed stone in the concrete is jammed between Diamond Blade and the surface of cut groove.	Refer to ΓAn example of solving method when Diamond Blade is locked Jin this manual.
DIGITAL DIAGE IS TOURED.	Both sides of Segment tips of Diamond Blade are worn out and Segment tips and Blade Base are flat.	Replace it with new one.

▲ WARNING

Before doing this, make sure that Hydraulic Unit is completely stopped to avoid an unexpected accident.

- 1) Press the feed stop button to stop the running and press the power switch button to make Power Switch Lamp "OFF". Plug off Control Box BE-31A from the power socket.
- 2) Push 「Stop Button」 on Remote Control Switch of Hydraulic Unit to stop Hydraulic Wall Cutter and Hydraulic Unit.
- 3) Remove the Blade Cover.
- 4) Conduct from ① to ③ below and find the easier position to pull up Diamond Blade out of cut groove.
 - ① Turn Cutting Handle to move Diamond Blade up and down
 - ② Turn Hex. Hd. Shaft by Speeder 204 tec. to move Wall Cutter back and forth in the feeding direction.
 - ③ Apply the Single-ended Wrench (46mm) to both sides of Blade Receiver and turn it in the direction easier to move Diamond Blade.



! CAUTION

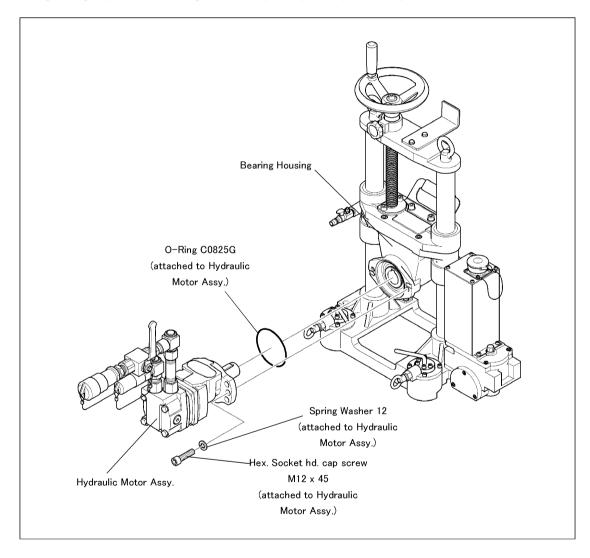
- When moving Diamond Blade up and down or moving Wall Cutter back and forth in the feeding direction, do not force it too much. If it is forced too much, the segment tips of Diamond Blade could drop out.
- 2. When turning Blade Receiver, Hydraulic Hoses 5/8" ASSY, must be connected with Hydraulic Wall Cutter and Switching Valve must be opened. If the Blade Receiver or Diamond Blade is turned without Hydraulic hoses 5/8" ASSY, is connected, this could cause the damage to the hydraulic motor.
- 4) Gradually pull up Diamond Blade out of cut groove by turning Cutting Handle.
- 5) Remove the cause of locking (Chip of steel bar or debris of mixed stones).

13. MOUNTING HYDRAULIC MOTOR

! CAUTION

Be careful so that there is no caused space between the matching surfaces of Bearing Housing and Hydraulic Motor Assy. Also be careful so that the matching surface is perfectly fitted.

O Fix Hydraulic Motor Assy. and Bearing Housing with Hex. Socket hd. cap screw M12x45 (2 pcs), Spring Washer 12 (2 pcs), O-Ring by tightening and using Hex. Bar Wrench 10mm.



14. MAINTENANCE, INSPECTION AND REPAIR

[1] Maintenance

O Clean and Maintain after the operation.

⚠ CAUTION

- 1. When cleaning, always attach the Cap to the Receptacle of feeding portion.
- 2. Do not splash water over the feeding portion. Doing so could cause the damage.
- 1) Clean and maintain your Machine after each use. Aluminium and Steel are used for the frame of Hydraulic Wall Cutter. Use dry cloth for cleaning the surface of your Machine.
- 2) Do not splash FF Hydraulic Couplers with water and wipe them with a dry cloth.
- 3) Clean Guide Rod in particular.
- 4) Clean Roller.
- 5) Apply grease to Feed Screw.
- 6) Apply oil to Level Bolts of Track Rail.
- 7) Clean Blade Cover after removing Front Face of Blade Cover. Clean up the clogging up of drain port if necessary.

[2] Inspection

◎ Inspect whether Hydraulic Wall Cutter, Blade Cover, Track Rail and Diamond Blade have cracks or fractures. Inspect whether the sliding portion of Hydraulic Wall Cutter and Track Rail have looseness or not. Inspect Hydraulic Motor, Switching Valve and FF Hydraulic Couplers for oil leakage. Also inspect whether the coating part of Power Supply Cord has cracks or fractures. If any abnormality is found, contact your nearest dealer or Consec's distributor.

[3] Regular Inspection

O Check periodically every attaching screws for loosening. If found loose, tighten it.

⚠ CAUTION

If you keep using Hydraulic Wall Cutter although some of attaching screws are loose, this could induce an accident. This is very dangerous!

[4] Repairs

- ◎ This product is manufactured to precise dimensions. If it does not operate properly, contact your nearest dealer or Consec's distributor. Do not repair it yourself.
- O not hesitate to contact your nearest dealer or Consec's distributor if you have any questions regarding use or handling of this product.

15. MAINTENANCE INSTRUCTIONS

Storing the Product and Accessories

When the Product and accessories are not in use, ensure that they are stored safely in a dry location and at where the place can be locked up, and under the following conditions.

- ♦ Store the unit out of reach of children.
- \diamondsuit Store away from rain and humidity.
- \diamondsuit Do not store in locations subject to rapid changes in temperature.
- ♦ Store the unit out of direct sunlight.
- ♦ Do not store in locations where inflammable, explosive substances are present.

Specifications of the Product described in this manual are subject to change without prior notice.

MEMO



Main office : 4-6-8 Shoko Center Nishi-ku Hiroshima 733-0833 Japan International Department : 4-6-8 Shoko Center Nishi-ku Hiroshima 733-0833 Japan

Phone: 81-82-276-3231 Fax: 81-82-276-3239

E0940-0 /CHW-50A