

**DENTAL CHAIR**

# **PROGRES**

**INSTALLATION  
INSTRUCTIONS**

**IMPORTANT**

**This manual provides installation instructions for BELMONT PROGRES. The instructions contained in this booklet should be thoroughly read and understood before attempting installation of chair. After the installation is completed, file this manual and refer back to it for future maintenance.**

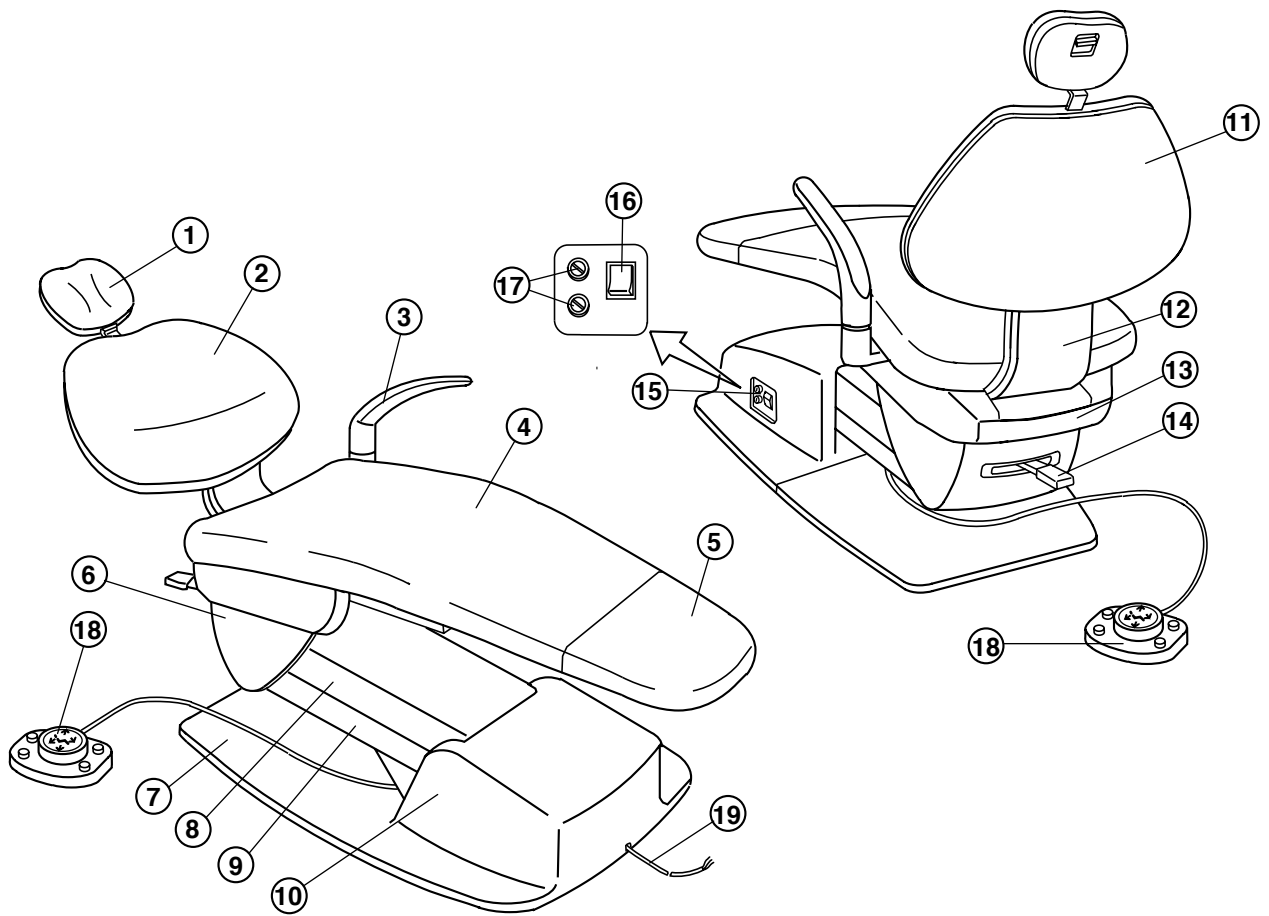
 **Belmont**



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# 1. OVERALL VIEW AND MAJOR COMPONENTS



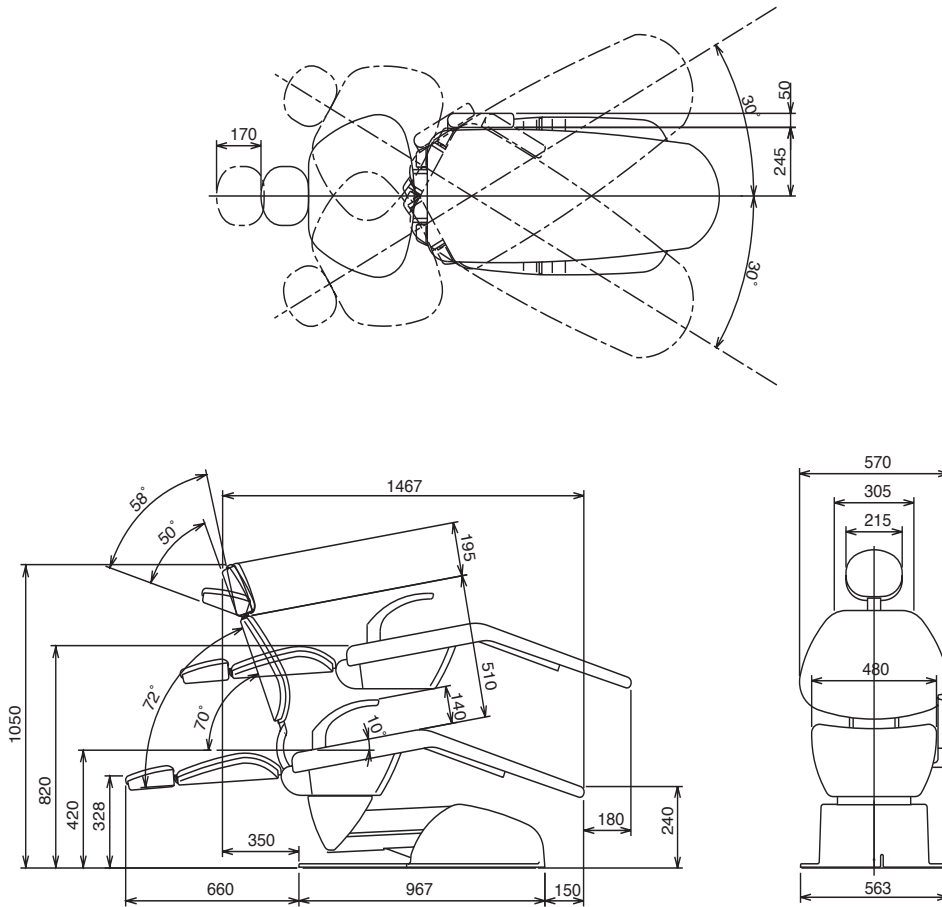
**Fig.1-1** Overall View

- |                     |                         |
|---------------------|-------------------------|
| 1. Headrest         | 11. Backrest Cover      |
| 2. Backrest         | 12. Back Support        |
| 3. Armrest (Left)   | 13. Rear Flange Cover   |
| 4. Seat             | 14. Rotation Lock Lever |
| 5. Seat Cover       | 15. Main Switch Panel   |
| 6. Flange Cover     | 16. Main Switch         |
| 7. Base             | 17. Fuse Holder         |
| 8. Upper Link Cover | 18. Foot Switch         |
| 9. Lower Link Cover | 19. Power Supply Cable  |
| 10. Pump Cover      |                         |

## 2. DIMENSIONS AND SPECIFICATIONS

### 2-1. DIMENSIONS

-mm-



**Fig.2-1** Dimensions

### 2-2. SPECIFICATIONS

Seat Initial Height-----	420mm
Seat Lifting Stroke-----	400mm
Backrest Movement -----	-2° ~ 70° above Horizontal
Auto Movements-----	2 Preset, 1 Last Position Memory and 1 Auto Return
Control Voltage-----	DC12V
Power Consumption-----	115V, 50/60Hz, 5.1A/3.5A 220V, 50/60Hz, 1.8A/1.8A 230V, 50Hz, 2.0A 240V, 50Hz, 2.3A
Net Weight-----	160 kg

### 3. INSTALLATION INSTRUCTIONS

#### 3-1. UNPACKING

The chair is delivered in 2 cartons (base section and top section cartons).  
Open the top section carton and check the contents with following check list.

#### CAUTION

**Do not use sharp instrument, it may damage upholstery.**

#### Check List

1. Headrest Assembly ----- 1 set
2. Backrest Assembly----- 1 set  
(Backrest Cushion, Backrest Cover, Back Support Cover)
3. Seat with Seat Cover Assembly ----- 1 set
4. Armrest (Standard Type; Left Side only) ----- 1 set
5. Screw Kit  
M8x20 Socket Head Cap Screw with Spring washer for Backrest ----- 4 pcs.  
M5x12 Truss Head Screw for Back Support Cover and Pump Cover---- 5 pcs.  
M6x35 Pan Head Screw and Flat Washer for Seat ----- 2 sets  
M6x25 Pan Head Screw, Flat Washer and Collar for Armrest ----- 1 set  
M12x10 Hex Socket Set Screw for Base ----- 4 sets  
M6x40 Bolt and Flat Washer for Base ----- 2 sets

#### 3-2. INSTALLATIONS

#### CAUTION

**Do not plug the power supply line before removing Red tagged bolt.**

- (1) Remove all the staples fixing the carton to pallet, or cut the carton just above the stapled line, and remove the carton. (Fig.3-1)

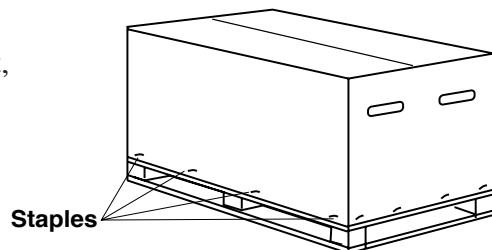


Fig.3-1 Base Section Carton

- (2) Place the base section with pallet behind the planned location for chair.

- (3) Remove the pump cover and remove 2 x wood screws from the base.  
Remove the base section from the pallet by holding the carriage bars and place it at planned location. (Fig.3-2)

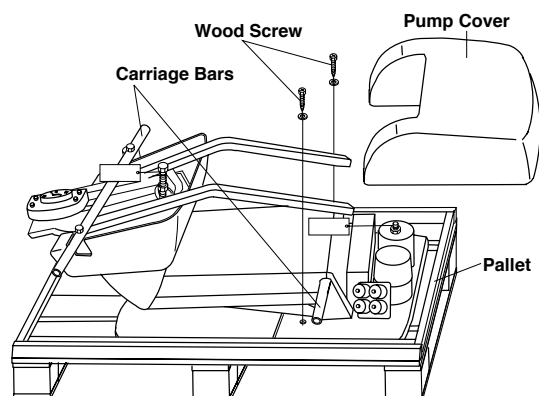
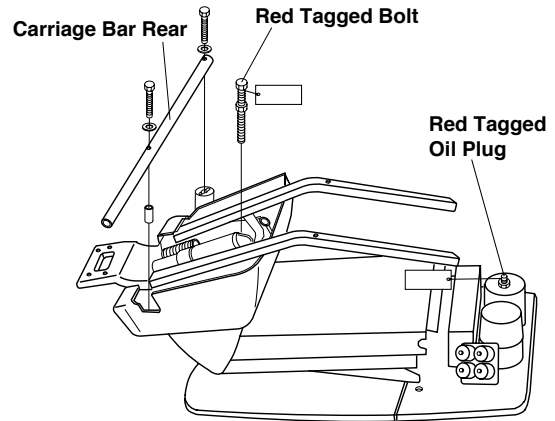


Fig.3-2 Removing Base Section from Pallet

## CAUTION

**Do not lift the chair by upper structure after removing the red tagged bolt.**

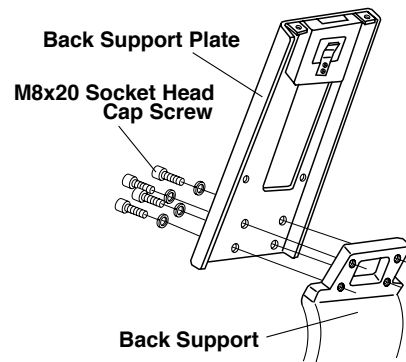
- (4) Remove the carriage bar Rear. (**Fig.3-3**)
- (5) Remove the red tagged bolt (carriage bolt) from centre of chair flange. (**Fig.3-3**)
- (6) Remove the red tagged oil plug from the oil reservoir. (**Fig.3-3**)



**Fig.3-3** Removing Carriage Bar Rear, Red Tagged Bolt and Oil Plug

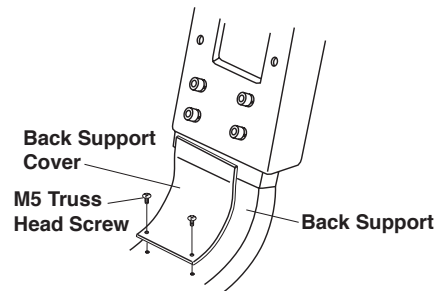
- (7) Plug the power supply cable into suitable power supply outlet.  
Raise the upper structure by the foot switch to the highest position.  
Raise the backrest by the foot switch to the upright position.

**Note :** Refer to the operating manual for chair operation.



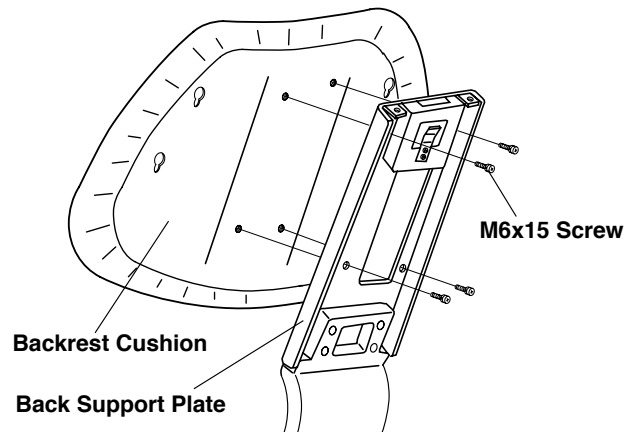
**Fig.3-4** Fixing Back Support Plate

- (8) Remove the back support plate from the backrest cushion by removing four M6 x 15 screws.  
Fix the back support plate to the back support with four M8 x 20 socket head cap screws and spring washers. (**Fig.3-4**)



**Fig.3-5** Fixing Backr Support Cover

- (9) Attach the back support cover to the back support with two M5 truss head screws. (**Fig.3-5**)
- (10) Fix the backrest cushion to the back support plate with four M6 x 15 screws. (**Fig.3-6**)



**Fig.3-6** Fixing Backrest Cushion

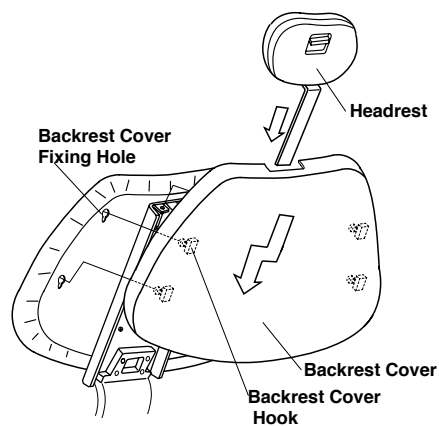
(11) Attach the backrest cover to the backrest cushion.

**(Fig.3-7)**

Insert upper two hooks of backrest cover into upper fixing holes of backrest.

Keep pressing the backrest against backrest, slide down the backrest cover so that lower two hooks catch the lower fixing holes.

(12) Attach the headrest. **(Fig.3-7)**

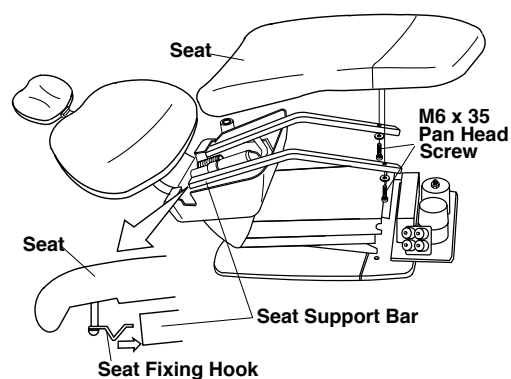


**Fig.3-7** Fixing Backrest Cover and Headrest

(13) Fix the seat to the base section.

Hook 2 x fixing hooks into the seat support bars and fix the seat to the seat support bars with two M6 x 35 pan head screws and flat washers.

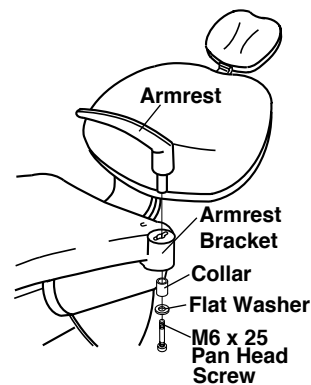
**(Fig.3-8)**



**Fig.3-8** Fixing Seat

(14) Fix the armrest to the armrest bracket with M6 x 25 pan head screw, flat washer and collar.

**(Fig.3-9)**



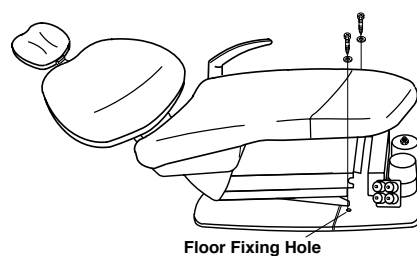
**Fig.3-9** Fixing Armrest

(15) Fix the chair base to the floor with two wood screws, or by other appropriate means.

**(Fig.3-10)**

**⚠ CAUTION**

Chair must be fixed to the floor with bolts to prevent from falling down.  
When fixing chair to the floor, be careful not to damage pipings under the floor.



**Fig.3-10** Fixing Base to Floor



- (16) Fix the pump cover to the base with three M5 x 12 truss head screws.

(Fig.3-11)

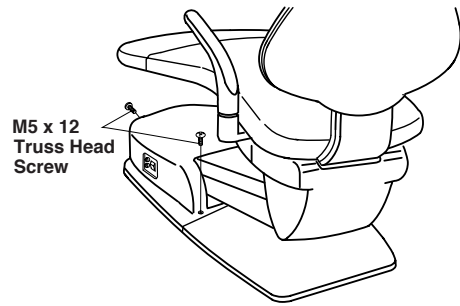


Fig.3-11 Fixing Pump Cover

**Note :** After installation is completed, check all movements following the operating manual.

#### 4. SPEED ADJUSTMENT (Fig.4-1 and Fig.4-2)

Seat lowering speed and backrest reclining speed can be adjusted by the speed control knob on the solenoid valve block.

Solenoid valve numbers and functions are shown in Fig.4-1.

- A. Remove the pump cover. (Refer to 3-2(17))

Solenoid valve block is located on the right side of base.

Each speed control knob is located on the rear side solenoid valve block.

- B. Loosen the lock nut for the speed control knob.

- C. Turning the speed control knob clockwise decreases speed and turning counterclockwise increases speed.

- D. After adjustment, tighten the lock nut and reattach the pump cover.

#### ⚠ CAUTION

**The solenoid valve will be locked if the speed is reduced excessively.  
Oil may leak from the speed control knob if the speed is increased excessively.**

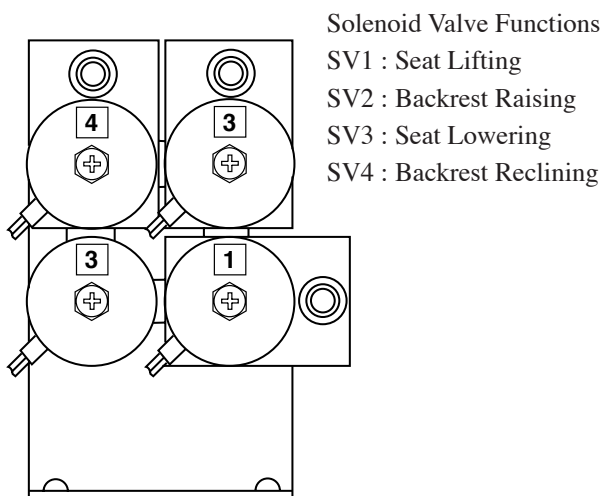


Fig.4-1 Solenoid Valve Numbers and Functions

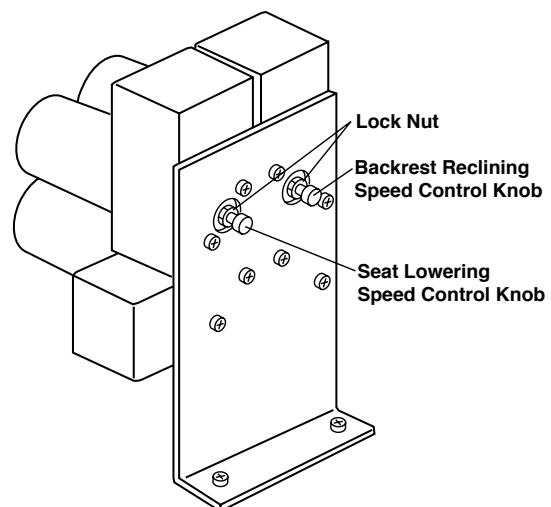
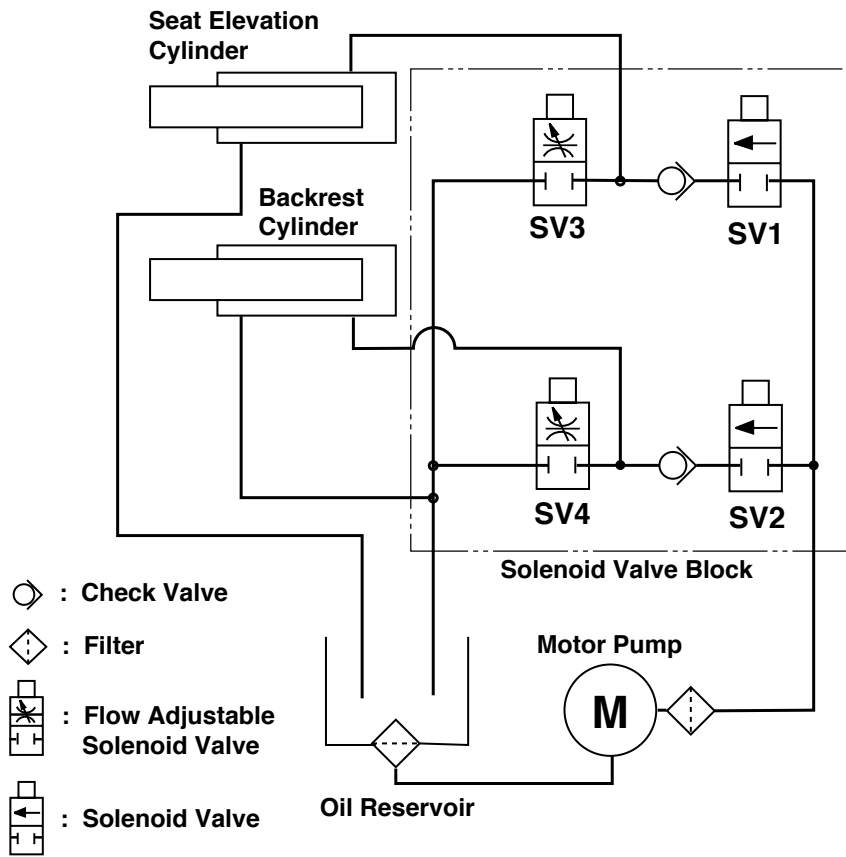
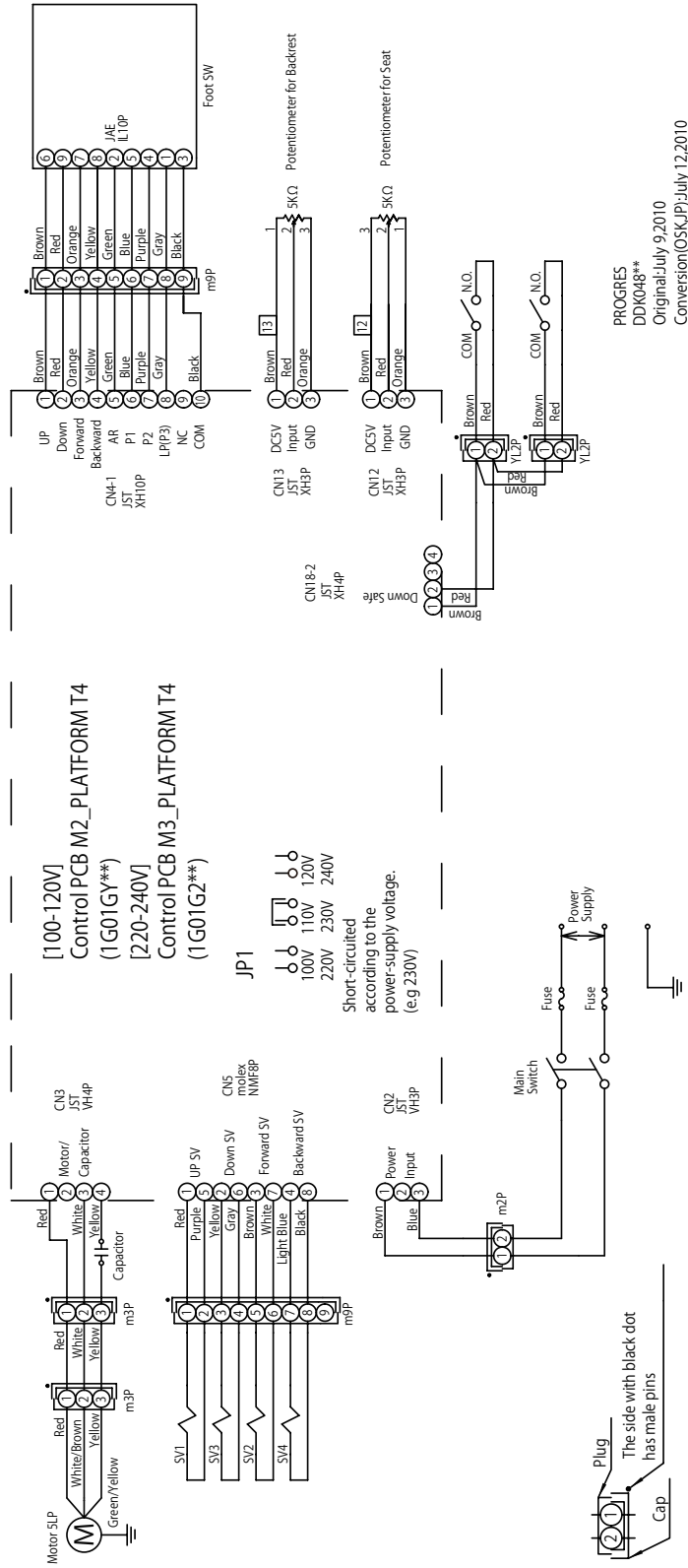


Fig.4-2 Speed Control Knobs on Solenoid Valve Block

## 5. HYDRAULIC DIAGRAM



# 6. ELECTRICAL DIAGRAM



PROGRES  
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**NOTE**



**TAKARA BELMONT CORPORATION**  
2-1-1, Higashishinsaibashi, Chuo-ku, Osaka, Japan  
TEL : + 81 6 6213-5945      FAX : + 81 6 6212-3680

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