

# **BEL-20+ BEL-20N DENTAL CHAIR**

**Model : B-20+ and B-20N**

## **Parts List**

**Ver. 01.1**

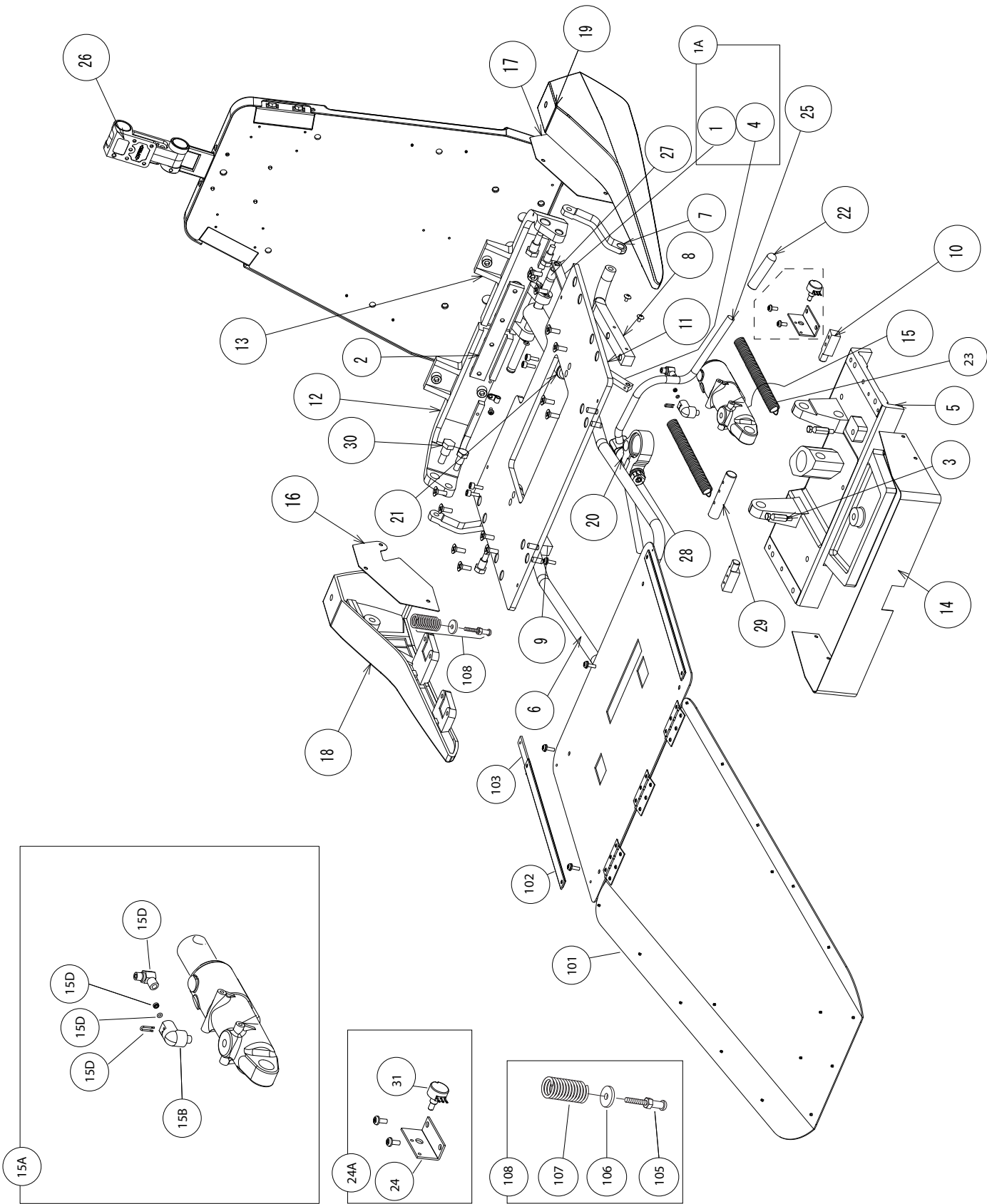
**July 3, 2012**

### **IMPORTANT**

- Not all of the parts indicated in these lists are available by itself. Some of the parts can only be supplied as an assembled unit with other parts.
- Parts design, description and parts numbers are subject to change without notice.
- Not all of the parts are available in stock of Takara Belmont USA Inc. Some of the parts need to be arranged at receipt of your firm purchase order.



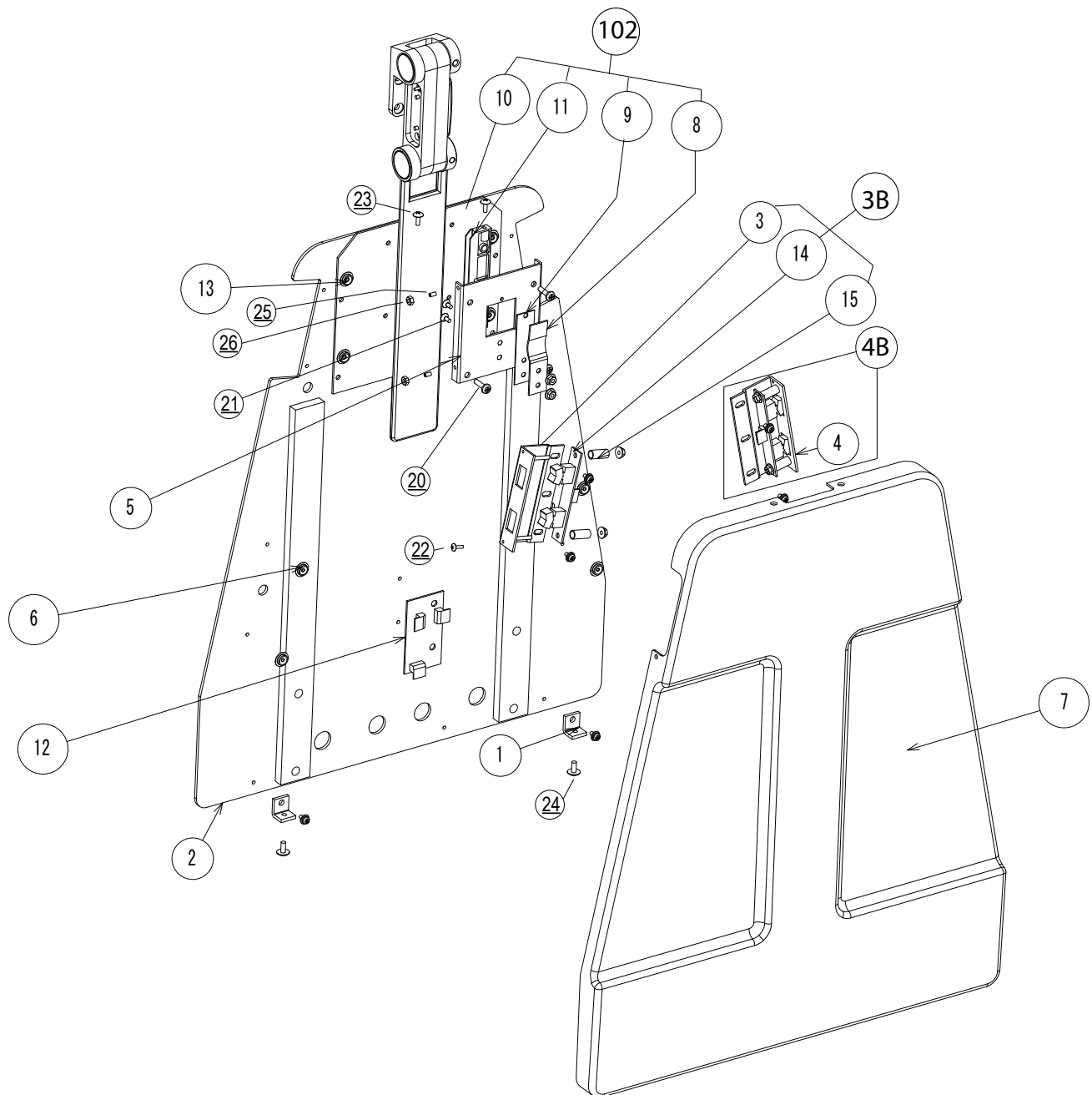
1. Chair Base (Top section) B-20+ and B-20N



## 1. Chair Base (Top section) B-20+ and B-20N

| No. | Part No.   | Description                                                 | Qty | Remark   |
|-----|------------|-------------------------------------------------------------|-----|----------|
| 1A  | B10503906  | Reclining link ass'y                                        | 1   | APDP16A0 |
| 2   | AAEJ99B0   | Back support Plate                                          | 1   | AAEJ99B0 |
| 3   |            | Spring hook for backrest                                    | 2   | AAET37A0 |
| 5   | B10H3728   | Rotation flange                                             | 1   | DAOB19A0 |
| 6   |            | Foot rests support bar                                      | 1   | 1A0265A0 |
| 7   | B10T3964   | Recline link                                                | 2   | DAOJ15A0 |
| 8   | B10J3681   | Link anchor (left)                                          | 1   | DAOJ19A0 |
| 9   | B10J3680   | Link anchor (right)                                         | 1   | DAOJ20A0 |
| 10  | B10U3525   | Tilt pin                                                    | 2   | DAOR63A0 |
| 11  | B10H3824   | Seat Plate                                                  | 1   | DAPB07A0 |
| 12  | B10K3873   | Back Support (Right)                                        | 1   | DAPE15A0 |
| 13  | B10K3874   | Back Support (Left)                                         | 1   | DAPE15A0 |
| 14  | B10M3962   | Side cover                                                  | 1   | DAPE33A0 |
| 15A | B10503721  | Recline cylinder ass'y                                      | 1   | APDN19A0 |
| 15B | B10T1027   | Elbow for high pressure hose                                | 1   | SALA05C0 |
| 15C | B10Q3300   | Elbow for over flow hose                                    | 1   | AAES26A0 |
| 15D | B10Q6237   | U pin                                                       | 1   | ABNL93B0 |
| 15E | B10F3470   | O-ring (P3)                                                 | 1   | AEDN86A0 |
| 15F | B10Q6241   | O-ring retainer (Brass ring)                                | 1   | AANF59B0 |
| 16  | B10J3684   | Side Frame cover (Right)                                    | 1   | DAQJ45A0 |
| 17  |            | Side Frame cover (Left)                                     | 1   | DAQJ46A0 |
| 18  | B10L3607   | Side Frame (Right)                                          | 1   | DENR01AA |
| 19  | B10L3608   | Side Frame (Left)                                           | 1   | DENR02AA |
| 20  | B10E6017   | Clamping Body                                               | 1   | E-60170  |
| 22  | B10G0050   | Grip                                                        | 1   | G-00500  |
| 23  | B10T3692   | Reclining spring                                            | 2   | G-01300  |
| 24A |            | Potentiometer ass'y for reclining (before (S/N AL10J0101)   | 1   | DNCR02B0 |
|     |            | Potentiometer ass'y for reclining (S/N AL10J0101 and after) | 1   | 1A04KPA0 |
| 25  | B10Q3300   | Elbow                                                       | 1   | AAFE14A0 |
| 26  | B10350851W | Twin axis headrest mechanism                                | 1   | AXEA01A0 |
| 27  | B10T3965   | Cylinder pin (rear)                                         | 1   | T-39650  |
| 28  | B10U2102   | Left hand nut                                               | 1   | U-21020  |
| 29  | B10U3526   | Cylinder pin (front)                                        | 1   | U-35260  |
| 30  | B10U3533   | Tapered Bolt                                                | 2   | U-35330  |
| 101 | B10503907W | Seat plate ass'y                                            | 1   | AXEA08A0 |
| 102 |            | Velcro                                                      | 2   | DECR43A0 |
| 103 |            | Plate for Velcro                                            | 2   | AAEJ84A0 |
| 104 | B10R1186   | Link Pin 12 x 36                                            | 2   | R-11860  |
| 105 | B10U3919   | Armrest screw                                               | 2   | U-3919   |
| 106 | B10Q3503   | Armrest washer                                              | 2   | Q-3503   |
| 107 | B10Q3505   | Armrest spring                                              | 2   | Q-3505   |
| 108 | B20Q3506   | Armrest screw KIT                                           | 0   | APDN30A0 |

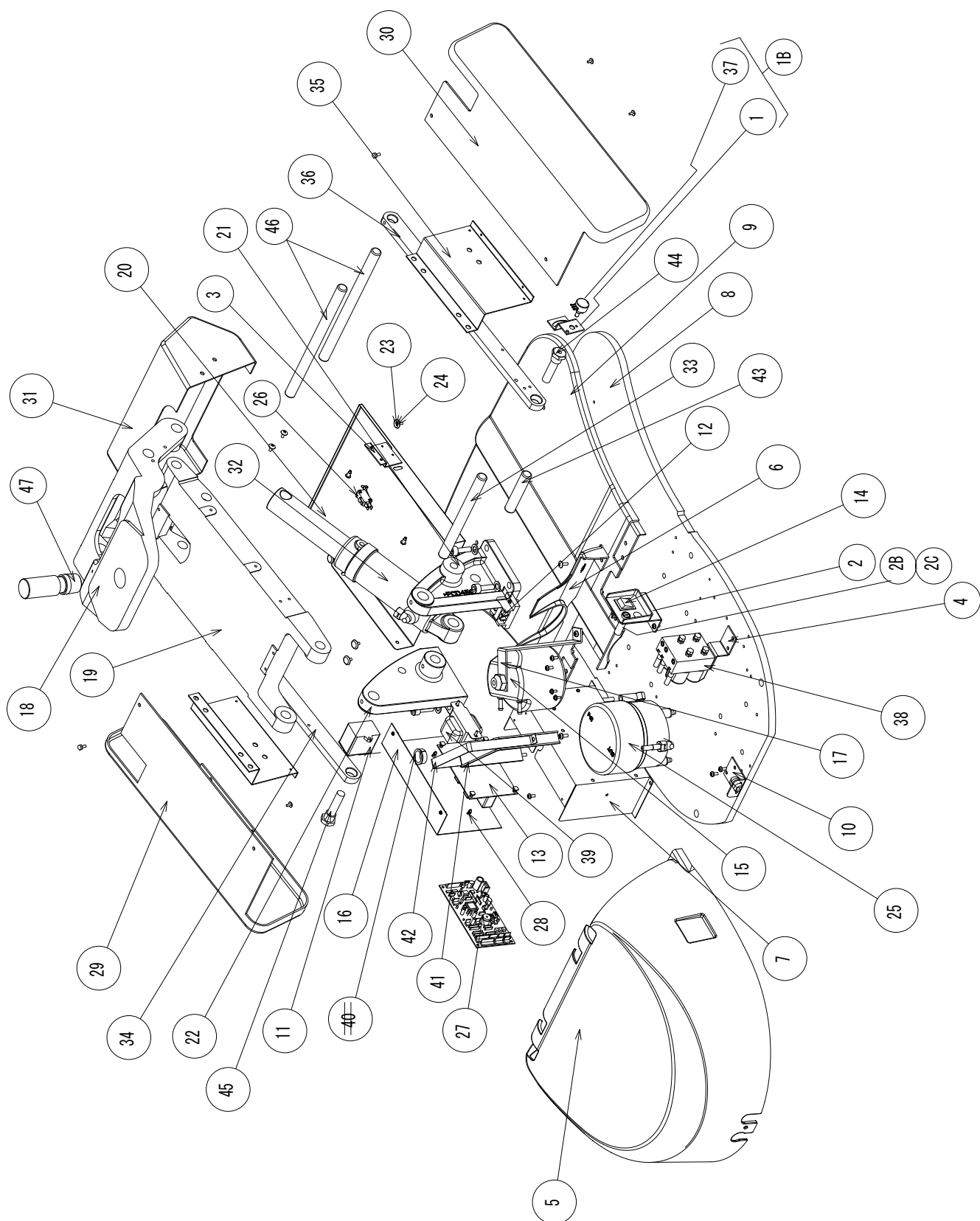
## (101)



#### 4. Chair Base (Backrest Plate Section) B-20+ and B-20N

| No. | Part No.  | Description                                                 | Qty | Remark   |
|-----|-----------|-------------------------------------------------------------|-----|----------|
| 1   |           | Fixing plate for covers                                     | 2   | AAER88A0 |
| 2   | B10L3605  | Backrest plate without rivets (not available as spare part) | 1   | DAPB31A0 |
| 3   | B10N3704  | Backrest switch guard (Left)                                | 1   | DAPJ22A0 |
| 4   | B10N3703  | Backrest switch guard (Right)                               | 1   | DAPJ21A0 |
| 3B  | B10503902 | Backrest switch assy'y (left)                               | 0   | AGER19A0 |
| 4B  | B10503901 | Backrest switch assy'y (right)                              | 0   | AGER18A0 |
| 5   | B10S3738  | Spring plate                                                | 1   | DAQJ66A0 |
| 6   |           | Not available as spare part                                 | 1   |          |
| 7   | B10A3725  | Backrest cover                                              | 1   | HAPE04A0 |
| 8   | B10S3739  | Spring bar                                                  | 1   | S-3739   |
| 9   | B10S3740  | Rubbing block                                               | 1   | S-3740   |
| 10  | B10T3974  | Headrest plate                                              | 1   | T-39740  |
| 11  | B10U3534  | Headrest guide                                              | 2   | U-3534   |
| 12  | B10X6520  | Backrest connecting PCB                                     | 1   | X-65200  |
| 14  | B10X6521  | Backrest switch board                                       | 2   | X-65210  |
| 15  | B10X6595  | Spacer                                                      | 4   | X--65950 |
| 20  |           | Pan head screw M5 x 16mm                                    | 4   |          |
| 21  |           | Flat head screw M4 x 8                                      | 2   |          |
| 22  |           | Round head screw M3 x 10mm                                  | 2   |          |
| 23  |           | Round head wood screw 4mm x 10mm                            | 2   |          |
| 24  |           | Round head screw M5 x 10mm                                  | 2   |          |
| 25  |           | Set screw M4 x 6                                            | 3   |          |
| 26  |           | Hex nut M4                                                  | 2   |          |
| 101 |           | Backrest complete assembly                                  | 0   | 1S006KB0 |
| 102 | B10503903 | Headrest bar guide ass'y                                    | 0   | APDN45A0 |

### 3. Chair Base (Base section) B-20+ only



**3. Chair Base (Base section) B-20+ only**

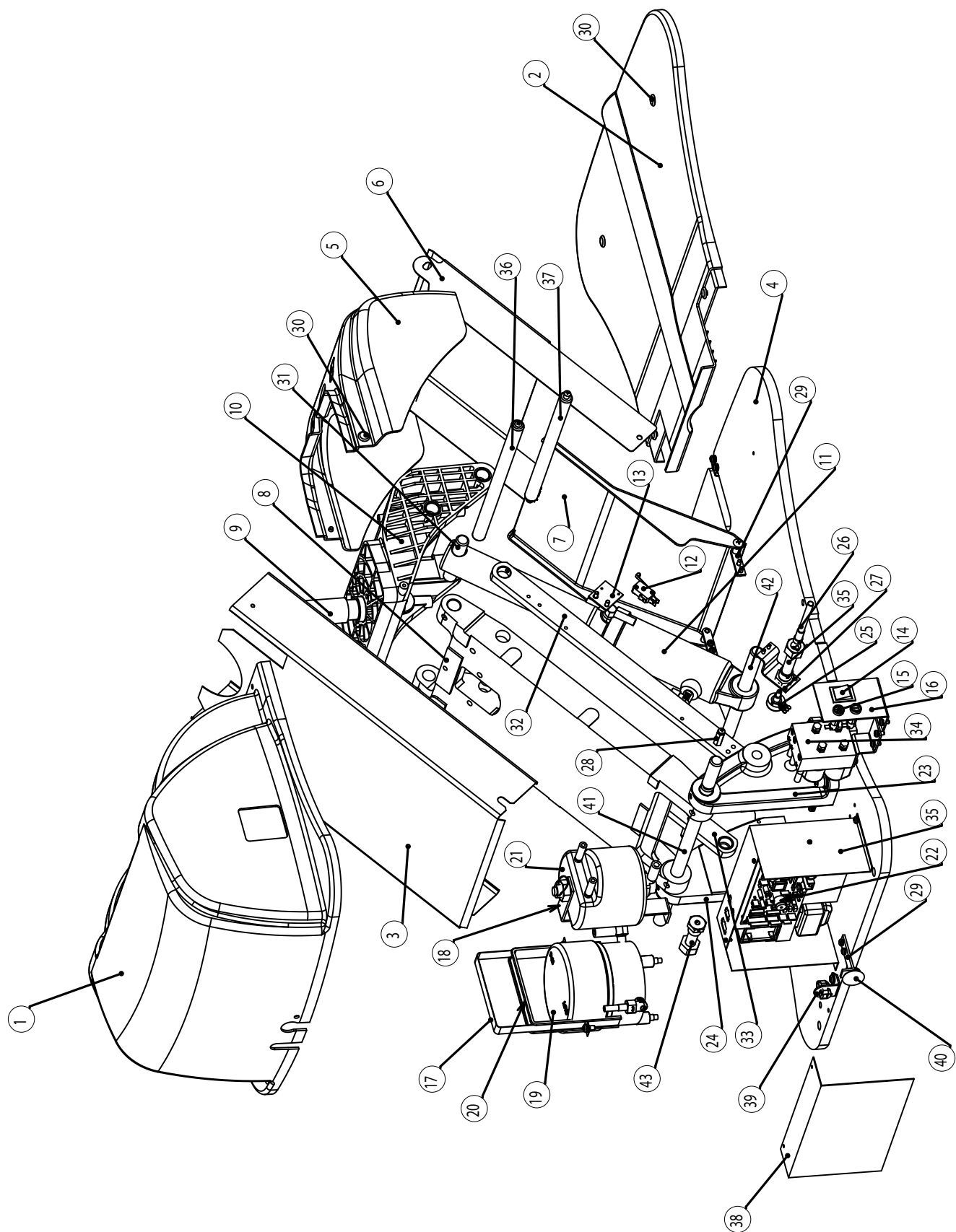
| No. | Part No.    | Description                                            | Qty | Remark   |
|-----|-------------|--------------------------------------------------------|-----|----------|
| 1   |             | Plate for base potentiometer                           | 1   | AAET12A0 |
| 1B  |             | Potentiometer ass'y for base (Before S/N AL10J0101)    | 1   | 1A00HLA0 |
|     |             | Potentiometer ass'y for base (S/N AL10J0101 and after) | 1   | 1A069KA0 |
| 2   |             | Plate for power, fuse and main switch                  | 1   | 1A00GYA0 |
| 2B  |             | Fuse 10A 314010MXP                                     | 2   | AEFS11A0 |
| 2C  |             | Fuse holder MF-530                                     | 2   | AEFR92A0 |
| 3   |             | Plate for safety cut-out switch                        | 1   | AAEJ97A0 |
| 4   |             | Plate for solenoid valve block                         | 1   | AAER82A0 |
| 5   |             | Pump cover (Front)                                     | 1   | AAFC46A0 |
| 6   |             | Pump cover (Rear)                                      | 1   | AAFC47A0 |
| 7   |             | Box for PCB                                            | 1   | AAFF67A0 |
| 8   |             | Base plate                                             | 1   | AAFF69A0 |
| 9   |             | Base cover                                             | 1   | AAFF74A0 |
| 10  |             | Fixing plate for pump cover                            | 1   | AAFL80A0 |
| 11  |             | Capacitor                                              | 1   | AATP26A0 |
| 12  |             | Main terminal block                                    | 1   | AEFU22A0 |
| 13  |             | Relay PCB                                              | 1   | AGER31A0 |
| 14  |             | Main switch A8A-213-1G                                 | 1   | AEIA06B0 |
| 15  | B10C3244    | Oil reservoir                                          | 1   | AAFE57A0 |
| 16  |             | Cover for PCB                                          | 1   | DACE02B0 |
| 17  |             | Fixing plate for oil reservoir                         | 1   | AAER85A0 |
| 18  | B10B3846    | Flange                                                 | 1   | DAOB22A0 |
| 19  | B10B3452    | Main link                                              | 1   | DAOB23A0 |
| 20  | B10503908W  | Safety plate                                           | 1   | DAPE31A0 |
| 21  | B10K3182    | Link bracket (Left)                                    | 1   | DATE61A0 |
| 22  | B10K3181    | Link bracket (Right)                                   | 1   | DATE62A0 |
| 23  | B50DEAS14A0 | Cap washer (White)                                     | 6   | DEAS14A0 |
| 24  | B50DEAS15A0 | Lid for Cap washer (White)                             | 6   | DEAS15A0 |
| 25  |             | Motor ass'y                                            | 1   | 1S006DA0 |
| 26  | B10X6313    | Micro switch                                           | 1   | DNBR78A0 |
| 27  |             | Control PC board                                       | 1   | DNCJ06A0 |
| 28  |             | Spacer                                                 | 1   | DELR09AA |
| 29  | B10H3077    | Link cover right                                       | 1   | HAPE06A0 |
| 30  | B10H3078    | Link cover left                                        | 1   | HAPE07A0 |
| 31  | B10L3606    | Flange coverr                                          | 1   | HAPE09A0 |
| 32  | B10503720   | Base cylinder ass'y                                    | 1   | ASBA03A0 |
| 33  | B10P3440    | Link pin (Lower)                                       | 1   | P-34400  |
| 34  | B10P3443    | Sublink                                                | 1   | P-34432  |
| 35  | B10T3426    | Safety support frame                                   | 2   | T-34260  |

### 3. Chair Base (Base section) B-20+ Only

|     |          |                                          |     |          |
|-----|----------|------------------------------------------|-----|----------|
| 36  | B10T3429 | Sublink                                  | 1   | T-34292  |
| 37  |          | Included in 1B                           | 1   |          |
| No. | Part No. | Description                              | Qty | Remark   |
| 38  |          | Solenoid valve block with AAER82A0 plate | 1   | 1S0033A0 |
| 39  |          | Transformer                              | 1   | 1G004VA0 |
| 41  |          | Motor band                               | 1   | S-30200  |
| 42  |          | Motor band retainer                      | 1   | AABN13A0 |
| 43  | B10R3195 | Cylinder pin                             | 1   | R-31950  |
| 44  | B10U3331 | Sub link shaft                           | 1   | U-33310  |
| 45  | B10R3196 | Sub link shaft                           | 1   | R-31960  |
| 46  | B10P3441 | Link shaft                               | 2   | P-34410  |
| 47  | B10U3521 | Rotation shaft                           | 1   | U-35210  |



3B. Chair Base (Base section) B-20N Only

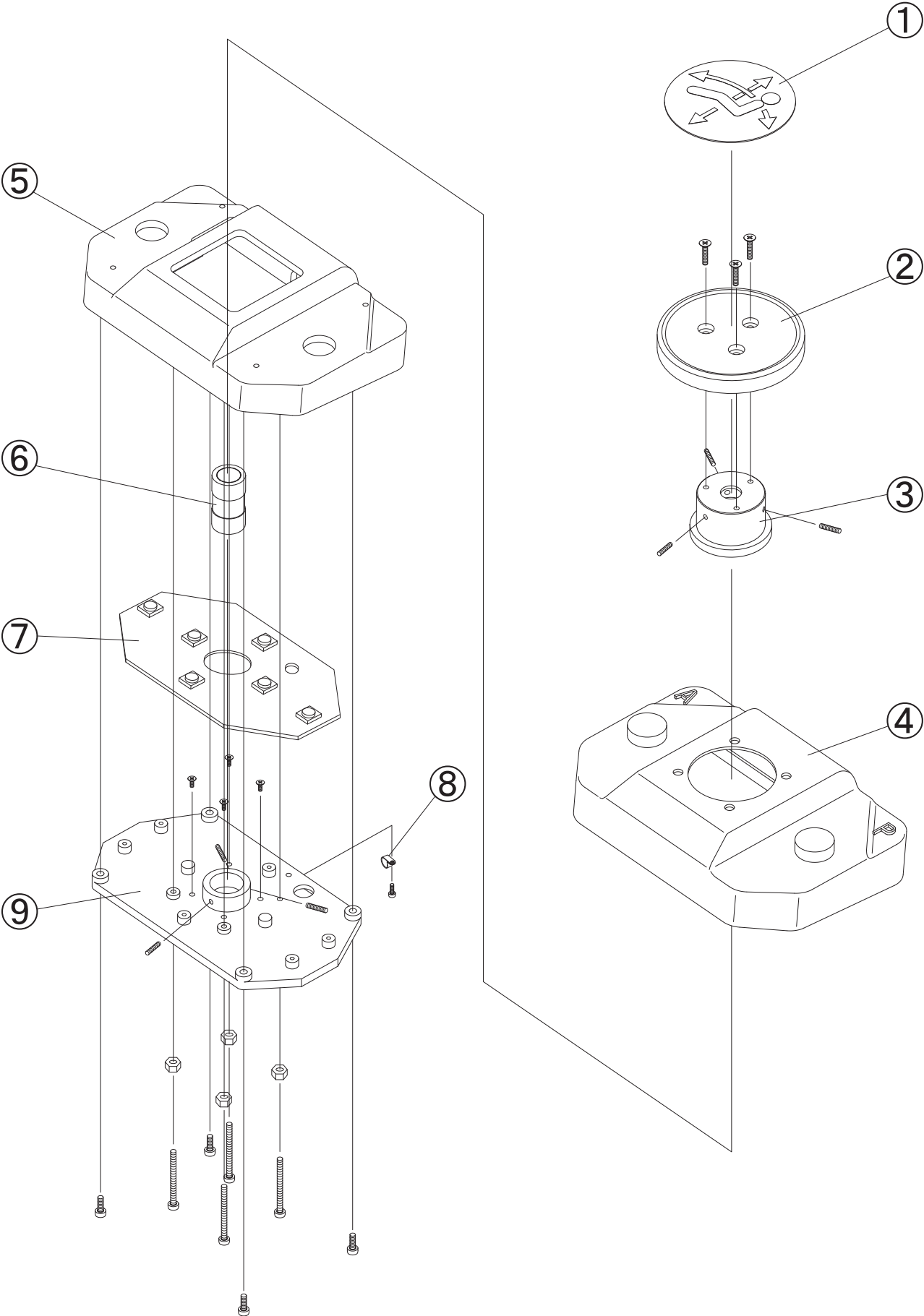


**3B. Chair Base (Base section) B-20N Only**

| No. | Part No.      | Description                   | Qty | Remark   |
|-----|---------------|-------------------------------|-----|----------|
|     | B50HBCE63A0   | Pump cover                    | 1   | HBCE63B0 |
| 2   | B50HBCE64A0   | Base cover                    | 1   | HBCE64B0 |
| 3   | C07DAQB02A0   | Main Link Cover               | 1   | DAQB02A0 |
| 4   |               | Base plate                    | 1   | DACA12B0 |
| 5   |               | Flange cover                  | 1   | 1G02JVA0 |
| 6   |               | Sub link cover                | 1   | DAQE03A0 |
| 7   | C07HARE07A0   | Sub link cover (lower)        | 1   | HBBE06B0 |
| 8   |               | Main Link                     | 1   | DARE41A0 |
| 9   | B50DACR82A0   | Rotating Shaft                | 1   | DACR82A0 |
| 10  | B50DACA16A0   | Flange                        | 1   | DACA16B0 |
| 11  |               | Base Cylinder Ass'y           | 1   | AXBA15A0 |
| 12  | B10X6313      | Micro Switch                  | 1   | DNBR78A0 |
| 13  |               | Switch Plate                  | 1   | G-00870  |
| 14  | C07DDELRL10AA | Switch                        | 1   | BELA20A0 |
| 15  |               | Fuse 10A (314010)             | 2   | AEFS11A0 |
| 15  |               | Fuse holder (MF-530)          | 2   | AEFR92A0 |
| 16  |               | Switch bracket                | 1   | DAQJ07A0 |
| 17  |               | Motor Clamp                   | 1   | AABN13A0 |
| 18  |               | Oil reservoir bracket         | 1   | DACJ52A0 |
| 19  | B10D6065      | Motor pump ass'y              | 1   | 1G01L8A0 |
| 20  |               | Motor clamp belt (rubber)     | 1   | S-30200  |
| 21  | B10C3244      | Motor reservoir               | 1   | AAFE57A0 |
| 22  |               | Main PC Board M2PlatformT4    | 1   | 1G01GYA0 |
| 23  |               | Link bracket (right)          | 1   | AXBA18A0 |
| 24  |               | Link bracket (left)           | 1   | AXBA17A0 |
| 25  |               | Base potentiometer ass'y      | 1   | 1A04KNA0 |
| 26  |               | Potentiometer adjustment knob | 1   | DAQR04B0 |
| 27  |               | Bracket for potentiometer     | 1   | DAQR05A0 |
| 28  |               | spacer                        | 2   | DAQR06B0 |
| 29  |               | Bracket for sublink cover     | 2   | DAQR02A0 |
| 30  | B50DEAS14A0   | Washer (White)                | 8   | DEAS14A0 |
| 30  | B50DEAS15A0   | Cap for screw (White)         | 8   | DEAS15A0 |
| 31  |               | Cylinder pin (Upper)          |     | R-31950  |
| 32  |               | Sub link (Right)              | 1   | AXBA76A0 |
| 33  |               | Sub link (Left)               | 1   | AXBA19A0 |
| 34  |               | Solenoid valve ass'y          | 1   | 1X00JNA0 |
| 35  |               | Sub link pin                  | 1   | DAQR03A0 |

|    |  |                        |   |          |
|----|--|------------------------|---|----------|
| 36 |  | Link pin for Main link | 1 | DAQJ05A0 |
| 37 |  | Link pin for Sub link  | 1 | DAQJ04A0 |
| 38 |  | Cover for PCB          | 1 | M-30030  |
| 39 |  | Wire bracket           | 1 | AAFR16A0 |
| 40 |  | Hole plug              | 1 | AFER24A0 |
| 41 |  | Carrige bar            | 1 | DARJ59B0 |
| 42 |  | Link Pin A             | 1 | P-34400  |
| 43 |  | Sub link Pin           | 1 | G-01230  |

4. Foot Switch (1 Preset switch)

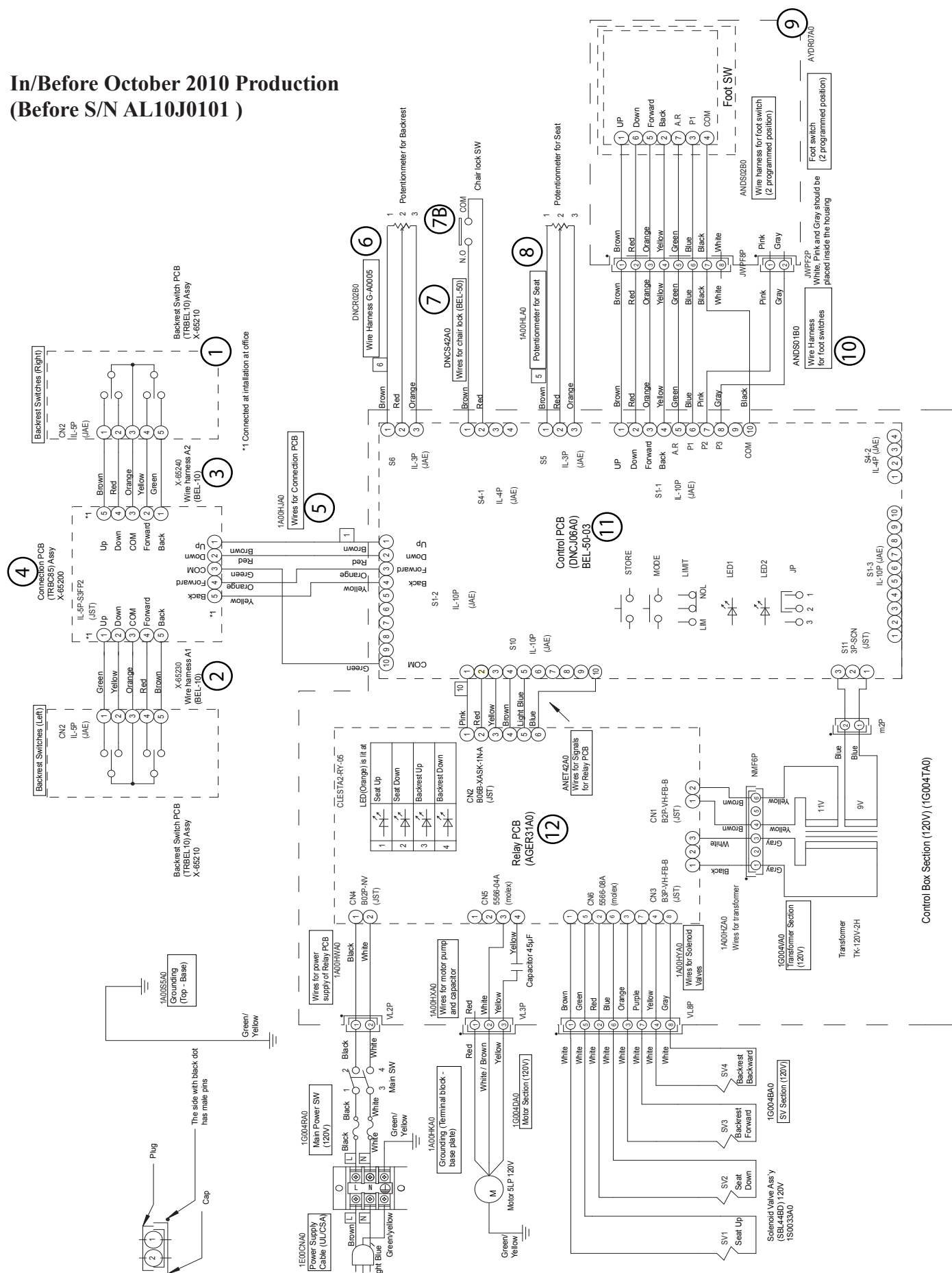


#### 4. Foot Switch (1 Preset switch)

| No. | Part No.    | Description                    | Qty | Remark       |
|-----|-------------|--------------------------------|-----|--------------|
| 1   | B10X7322    | Label                          | 1   | R-32460      |
| 2   | B10T3271G   | Disk                           | 1   | DAOJ76A0     |
| 3   | B10U3135    | Cap                            | 1   | U-31350      |
| 4   | B10K3276G   | Rubber Cover                   | 1   | DAPE62A0     |
| 5   | B10K3275    | Foot control body              | 1   | K-32750      |
| 6   | B10U3180    | Rubber shaft                   | 1   | AAFU87A0     |
| 7   | B10X7898    | Foot switch PC board           | 1   | AGFR45A0     |
| 8   |             | Clamp                          | 1   | XX-387240010 |
| 9   | B10K3191    | Switch plate                   | 1   | K-31910      |
| 101 | B50AYDR07A0 | Foot switch ass'y (One preset) | 1   | AYDR07A0     |

## 5. Wire harness and electric parts

**In/Before October 2010 Production  
(Before S/N AL10J0101 )**

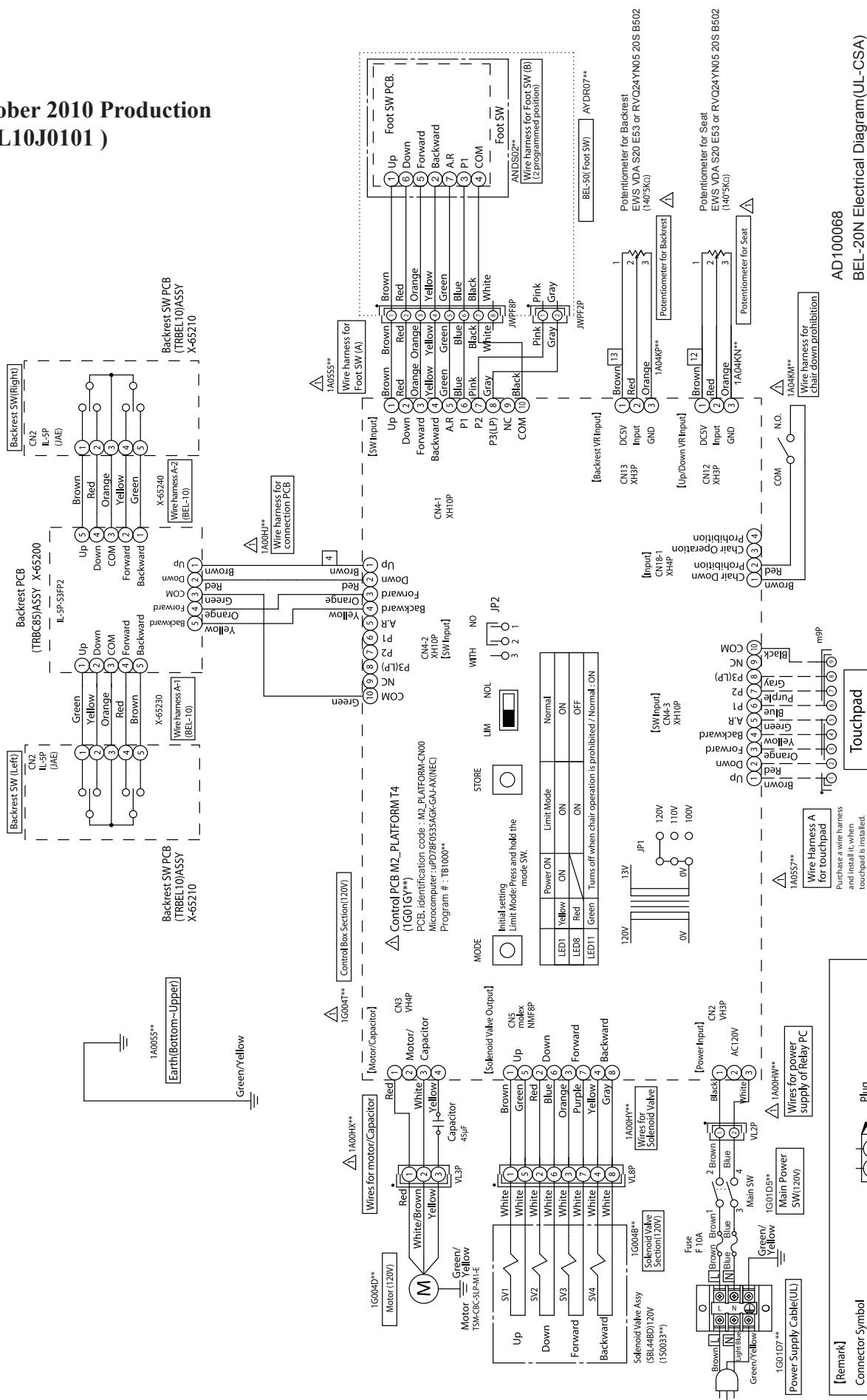


## 5. Wire harness and electric parts

**In/Before October 2010 Production**  
**(Before S/N AL10J0101 )**

| No. | Part No. | Description                                  | Qty | Remark   |
|-----|----------|----------------------------------------------|-----|----------|
| 1   | B10X6521 | Backrest switch PCB                          | 1   | X-65210  |
| 2   |          | Backrest Wire harness A1                     | 1   | X-65230  |
| 3   | B10X6524 | Backrest Wire harness A2                     | 1   | X-65240  |
| 4   | B10X6520 | Backrest connection PCB                      | 1   | X-65200  |
| 5   |          | Wire harness for connection PCB              | 1   | 1A00HJA0 |
| 6   |          | Potentiometer ass'y for reclining with plate | 1   | 1S006FA0 |
| 7   |          | Wire harness for micro switch (chair lock)   | 1   | DNCS42A0 |
| 7B  | B10X6313 | Micro switch V-5515EK (chair lock)           | 1   | DNBR78A0 |
| 8   |          | Potentiometer ass'y for base                 | 1   | 1A00HLA0 |
| 9   |          | Foot switch ass'y (1 preset)                 | 1   | AYDR07A0 |
| 10  |          | Wire harness for foot switch                 | 1   | ANDS01B0 |
| 11  |          | Control PCB for B-50 / B-20+                 | 1   | DNCJ06A0 |
| 12  |          | Relay PCB                                    | 1   | AGER31A0 |

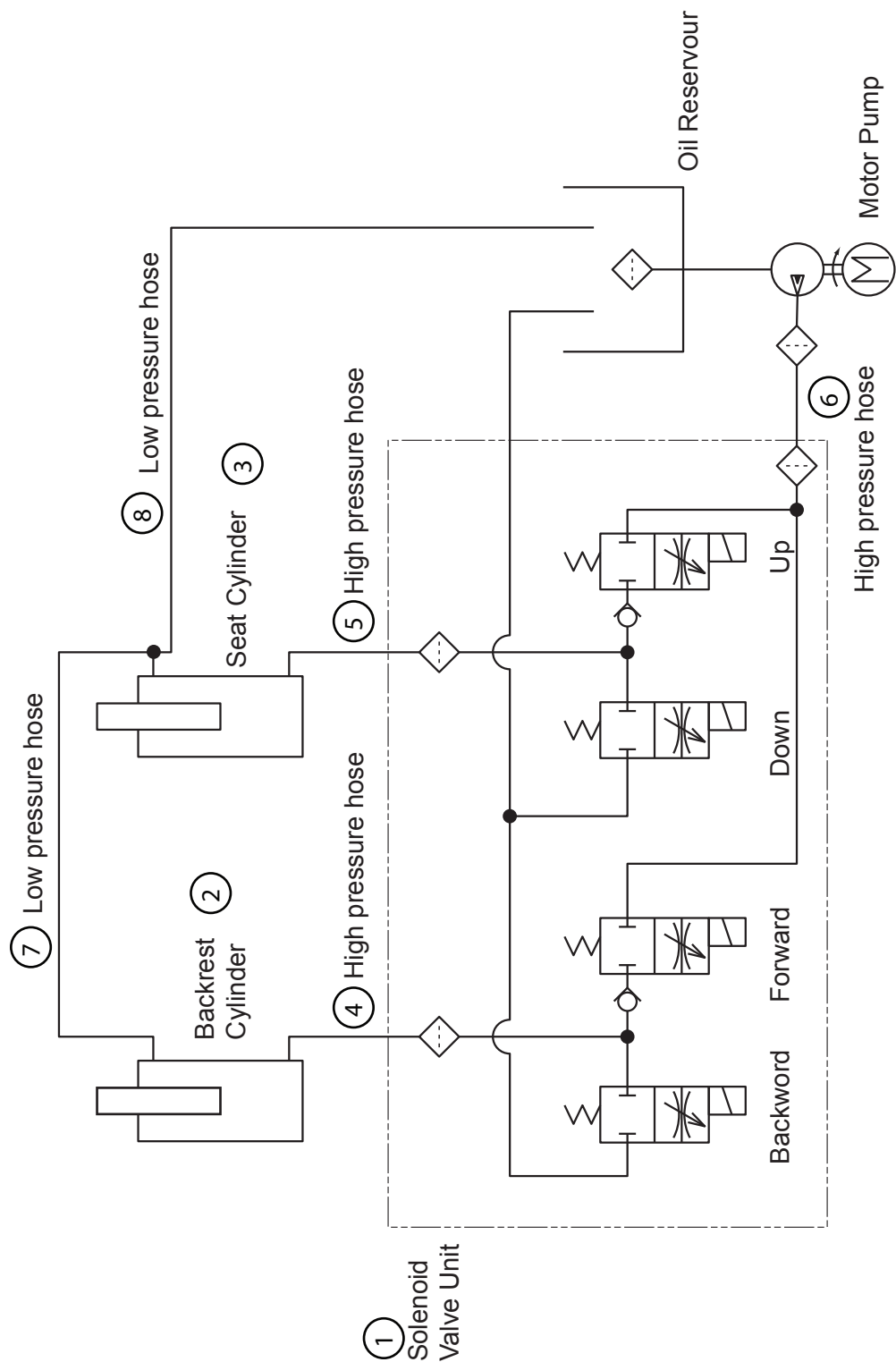
**In/After October 2010 Production  
(After S/N AL10J0101 )**



AD100068  
BEL-20N Electrical Diagram(UL-CSA)  
(Foot SW 2 Auto Spec.)  
Created : 20111006



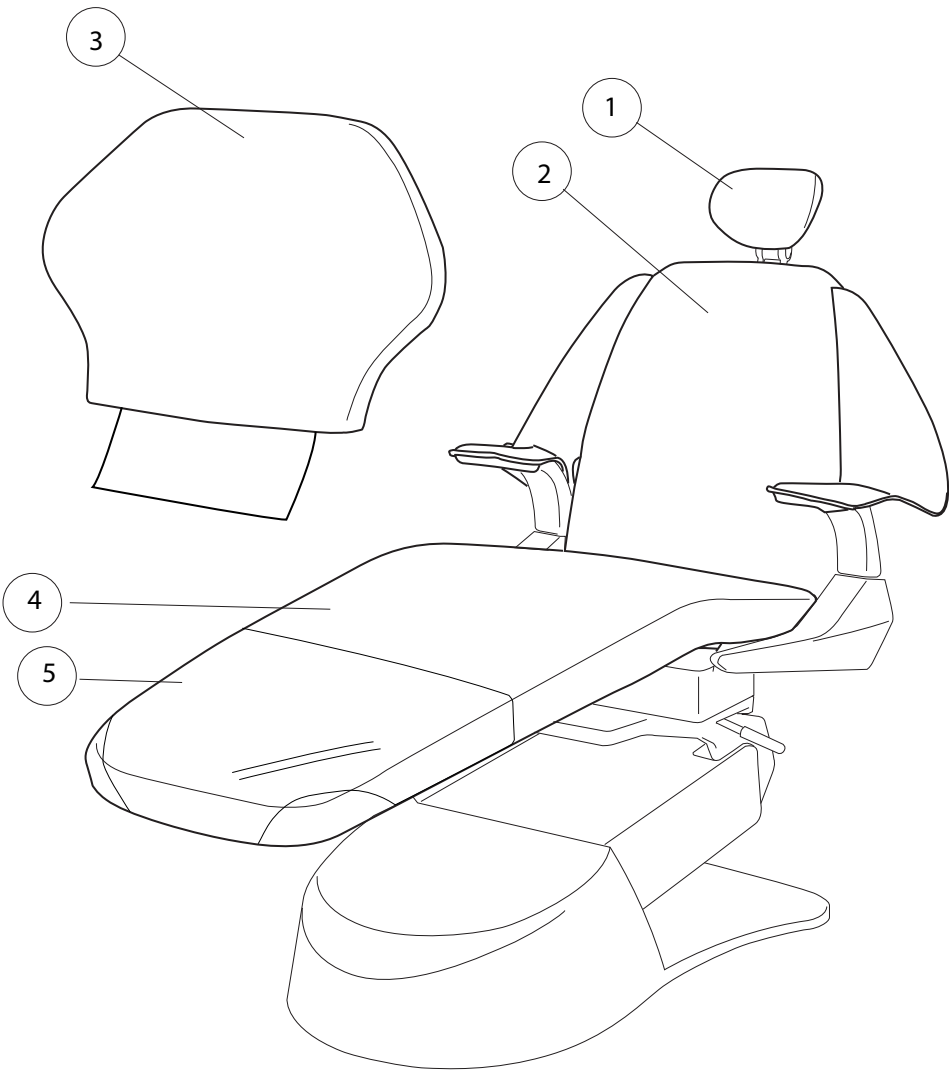
6. Hydraulic hoses and components



## 6. Hydraulic hoses and components (B-20+ Only)

| No. | Part No.  | Description                                                              | Qty      | Remark   |
|-----|-----------|--------------------------------------------------------------------------|----------|----------|
| 1   |           | Solenoid valve block with AAER82A0 plate                                 | 1        | 1S0033A0 |
| 2   | B10503721 | Recline cylinder ass'y                                                   | 1        | APDN19A0 |
| 3   | B10503720 | Base cylinder ass'y                                                      | 1        | ASBA03A0 |
| 4   |           | High pressure hose (1700mm), between solenoid valve and recline cylinder | 1        | AEFR99A0 |
| 5   |           | High pressure hose (680mm), between solenoid valve and base cylinder     | 1        | AENL77B0 |
| 6   |           | High pressure hose (250mm), between motor and solenoid valve block       | 1        | AENL66B0 |
| 7   | B10X5513  | Low pressure hose between                                                | 1.4<br>m | X-55130  |
| 8   | B10X5557  | Low pressure hose, between base cylinder and oil reservoir               | 0.8<br>m | AENL14A0 |

7. Upholsteries



## 7. Upholsteries

| No. | Part No.              | Description                                                                        | Qty |
|-----|-----------------------|------------------------------------------------------------------------------------|-----|
| 1   | B20HR (+ Color code)  | Headrest upholstery for replacement                                                | 1   |
| 2   | SLBK (+ Color code)   | Back rest (Narrow, with slings) upholstery for replacement with Duration vinyl     | 1   |
| 2   | ULSLBK (+ Color code) | Back rest (Narrow, with slings)upholstery for replacement with Ultraleather        | 1   |
| 3   | NUBK (+ Color Code)   | Back rest (Wide, without sling) upholstery for replacement with Duration vinyl     | 1   |
| 3   | ULNUBK (+ Color code) | Back rest (Wide, without sling)upholstery for replacement with Ultraleather        | 1   |
| 4   | SLST (+ Color code)   | Seat upholstery for replacement with Duration vinyl                                | 1   |
| 4   | ULSLST (+ Color code) | Seat upholstery for replacement with Ultra-leather vinyl                           | 1   |
| 4   | NUST (+ Color code)   | Seat upholstery for replacement with Duration vinyl                                | 1   |
| 4   | ULNUST (+ Color code) | Seat upholstery for replacement with Ultra-leather vinyl                           | 1   |
| 5   | B10B3645              | Legrest protector for replacement                                                  | 1   |
|     | SL (+ Color code)     | Complete upholstery set containing narrow backrest with slings with Duration Vinyl |     |
|     | ULSL (+ Color code)   | Complete upholstery set containing narrow backrest with slings with Ultraleather   |     |
|     | NU (+ Color code)     | Complete upholstery set containing wide backrest without sling with Duration Vinyl |     |
|     | ULNU (+ Color code)   | Complete upholstery set containing wide backrest without sling with Ultraleather   |     |

SLST and NUST is identical. ULLSST and ULLNUST is identical too. When you order a seat upholstery that are cobined with a backrest with slings, please use SLST orULSLST as a part number for seat upholstery.

# NOTE

BELMONT EQUIPMENT, Division of Takara Belmont USA, Inc.  
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