

Balaman Inspection Items

|         |          |
|---------|----------|
| User    |          |
| Machine | BMF, BMC |

Serial No.: \_\_\_\_\_  
 Location of installation: \_\_\_\_\_

Date of Inspection: \_\_\_\_\_ Date: \_\_\_\_\_  
 Person inspecting: \_\_\_\_\_

| No.                    | Check sheet  | Method of inspection:   | Date of inspectio                  | Condition       | Description of work done: | Remarks: |
|------------------------|--|---|------------------------------------|-----------------|---------------------------|----------|
| Main body and mounting | 1  | Check air set drain level   | Drain piping                       | A               | Good · Not good           |          |
|                        | 2  | Clean air set element   | Disassemble and clean              | B               | Good · Not good           |          |
|                        | 3  | Replace air set element   | Disassemble and replace            | C               | Good · Not good           |          |
|                        | 4  | Check air piping hoses, joints, etc. for damage and leaks                                 | Visually inspect and feel          | A               | Good · Not good           |          |
|                        | 5  | Check to make sure nuts and bolts are tight. Tighten if necessary.                        | Visually inspect and tighten       |                 | Good · Not good           |          |
|                        |  | (1) Mounting  |                                    | B               | Good · Not good           |          |
|                        |  | (2) Main body, arm  |                                    | B               | Good · Not good           |          |
|                        |  | (3) End effector and end effector mounts  |                                    | A               | Good · Not good           |          |
|                        |  | (4) Other   | B                                  | Good · Not good |                           |          |
|                        | 6  | Check for abnormalities such as missing or damaged bearings, snap rings, split pins, etc. | Visually inspect                   | A               | Good · Not good           |          |
|                        | 7  | Check for unusual noise and vibration during operation                                    | Confirm operation                  | A               | Good · Not good           |          |
|                        | 8  | Confirm switches, limit switches, etc. operate normally                                   | Confirm operation                  | B               | Good · Not good           |          |
|                        | 9  | Check for abnormal wear or damage to guide rail sections, etc.                            | Visually inspect                   | C               | Good · Not good           |          |
| 10                     | Check for abnormalities and cracks in welds, etc.                                      | Visually inspect  | C                                  | Good · Not good |                           |          |
| 11                     | Inspect or replace hooks on the chain and mounting bolts                               | Disassemble and visually inspect  | C                                  | Good · Not good |                           |          |
| 12                     | Check for abnormal movement in horizontal operation                                    | Confirm operation   | C                                  | Good · Not good |                           |          |
| 13                     | Check the jump prevention unit   | Confirm operation<br>Visually inspect and tighten   |                                    | Good · Not good |                           |          |
|                        | (1) Check operation<br>(confirm that the arm moves up and down, and the jump locks in) |   | A                                  | Good · Not good |                           |          |
|                        | (2) Check oil leaks  |   | A                                  | Good · Not good |                           |          |
|                        | (3) Check for loose screws   | A   | Good · Not good                    |                 |                           |          |
| End Effector           | 14   | Check vacuum pads for wear, damage, etc.  | Visually inspect, feel and replace | B               | Good · Not good           |          |
|                        | 15   | Check for wear and damage to claws, etc.  | Visually inspect                   | B               | Good · Not good           |          |
|                        | 16   | Check air cylinder for air leaks and proper operation                                     | Confirm operation                  | C               | Good · Not good           |          |
|                        | 17   | Other   |                                    | C               | Good · Not good           |          |
|                        |  |   |                                    |                 | Good · Not good           |          |
|                        |  |   |                                    | Good · Not good |                           |          |

Inspection interval...A: Daily; B: One-month (all items including daily inspection); C: Six-month (all items including daily and one-month inspections)

Action [V: Inspect; C: Clean; OV: Disassemble; △: Repair; ▲: Replace; A: Adjust; O: Tighten; □: Lubricate]