DECK MACHINERY SERVICE NEWS	DATE: 20 July 2020 No.: N0-20-002

SUBLECT: Brake Lining replacement procedure (bolt-and-nut type)

Brake linings of the bolt-and-nut type are replaceable as individual components.
The allowable wear of the brake lining is as indicated by “S” in Table 1,
and the brake lining must be replaced before it comes into contact with the bolts.
If the brake lining is used beyond this wear limit, the bolts may contact the brake drum,
resulting in insufficient braking force and become a serious safety hazard.

WARNING: If this condition occurs, immediately replace the brake lining.

Measure the brake lining thickness after loosening the brake band support (Fig. 1),
with the brake released.
Measure the brake lining thickness regularly and replace the brake linings
in a planned manner.

Brake Lining Replacement Procedure

1) Confirm that the brake can be released without any issues.
2) Loosen the brake band support.
3) Release the brake.
4) Remove the pin from the brake mechanism and remove the brake band.
5) Remove the bolts and nuts securing the brake lining.
6) Remove the brake lining from the brake band.
8) Install the new brake lining onto the brake band.
   - Machine the bolt holes of the brake lining to ensure the remaining thickness “T” of the brake lining(Fig.2).
   - Never perform machining that results in “t = 0”(Fig.3).
   - Doing so will cause the brake lining to fracture.
   - If the inner surface of the brake band is to be painted, apply only rust-preventive coating.
9) Assemble the brake mechanism and adjust the brake band support.
10) Apply grease to all pin sections and drive components of the brake mechanism.
    WARNING: At this time, never apply oil or grease to the lining surface.

See next page.

Kawasaki Heavy Industries, Ltd.
Precision Machinery Business Division
Customer Service Department

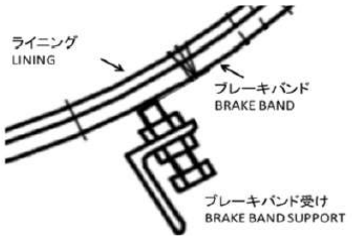

Fig.1 Brake Band Support

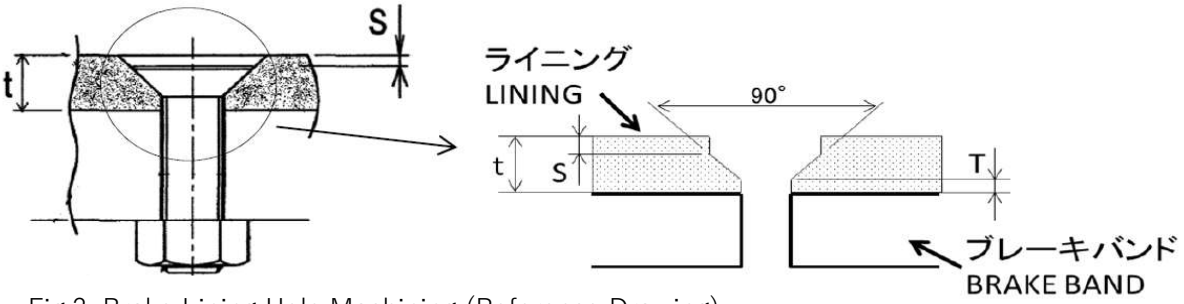

Fig.2 Brake Lining Hole Machining (Reference Drawing)

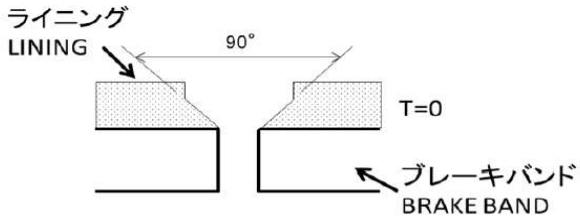

Fig.3 Incorrect Machining Examples of Brake Lining Holes

Table 1 Brake Lining Wear Allowance and Reference Dimensions

	BRAKE DRUM DIA Φd (mm)	ORIGINAL BRAKE LINING THICKNESS t (mm)	ALLOWABLE WEAR S (mm)	LINING THICKNESS FOR EXCHANGE t (mm)	WHEN PROCESSING THE BOLT HOLE T (mm)		
					M6	M8	M10
HD	φ800	6	1	5	1.6–2.1	0.6–1.0	–
	φ1000, φ1200	8	2	6	3.1–3.6	2.1–2.6	1.0–1.5
	φ1300, φ1400	10	3.5	6.5	3–3.5	2.6–3.6	1.5–2.5
	φ1500, φ1700	12.5	5	7.5	4.1	3.1	2.0
	φ1800–φ2450	16	6	10	6.6	5.6	4.5
HD	φ800	6	1	5	1.6–2.1	0.6–1.0	–
	φ1000–φ1400	8	2	6	3.1–3.6	2.1–2.6	1.0–1.5
	φ1600	10	3.5	6.5	3.1–3.6	2.6–3.6	1.5–2.5
RW	φ375	6	1	5	1.6–2.1	0.6–1.0	–
	φ505	6	1	5	1.6–2.1	0.6–1.0	–

Over

Kawasaki Heavy Industries, Ltd.
Precision Machinery Business Division
Customer Service Department