

24000 CLUTCH/BRAKE

1.1.1 PROCEDURE

1. Identify the hoist model and size from the hoist rating plate and identify the values for the clutch setting. (Setting in t and SWL in t I/I reeving).
2. Select the proper friction force sensor and connect it to the display unit.
3. Review the steps shown in the operating instructions **(206 974 44)**
4. Note the temperature of the hoist. If it is cold, the readings will be different than if it is hot and has been in operation or if it has been close to a radiant heater or other source of heat.
5. Note the values shown for main lifting and main/creep lifting. These values are for single or dual speed hoists.
 - A) Main lifting is for a single speed hoist. Use this value if the hoist is single speed lift.
 - B) Main/creep lifting is for a two-speed hoist. Use this value if the hoist is two speed lift. **DO NOT USE THE HIGH SPEED WHEN CHECKING THE CLUTCH.**
6. The clutch slipping values are for protecting the hoist from damage in operation. **THIS IS NOT A SAFETY LIMIT FOR THE RATED LOAD OF THE HOIST.**

1. Place the friction force sensor onto the chain. Ensure the chain is not twisted. Turn the adapter as shown in FIG. 2.
2. Bump the hoist to bring the adapter into contact with the hoist base.
CAUTION: Be careful not to place your hands in a pinch point.
3. Depress the pendant “up” button for 1 second and observe the reading on the display unit.
NOTE THIS READING.
 - a Does it hold steady?
 - b Does it rise in value?
 - c Does it decline in value?

This information must be noted while the hoist in operation (while the “up” button is depressed)

DO NOT REPEAT MORE THAN THREE TIMES.

You must allow the hoist to cool for 30 minutes after the third attempt. Does the reading meet the value specified? (This is the “Setting in t” value)

4. Release the pendant “up” button and observe the reading on the display unit.

NOTE THIS READING.

- a Does it hold steady?
- b Does it drop a small amount and hold steady?
- c Does it drop a large amount and hold steady?
- d Does it decline in value over time?
- e Does the final (steady) reading meet the value specified?
(This is the SWL in t l/l reeving value)
This is the brake holding function of the hoist.

5. **For DK Hoists**

- a If the display unit reading in step 3 is within tolerance for the value for the clutch setting, proceed to step 6.
- b If the display unit reading in step 3 is below the value for the clutch setting, adjust following the steps in FIG 3. Repeat steps 3 and 4.
- c If the display unit reading in step 3 is above the value for the clutch setting, adjust following the steps in FIG 3. Repeat steps 3 and 4.

For PK Hoists

- a If the display unit reading in step 3 is within tolerance for the value for the clutch setting, proceed to step 6.
- b If the display unit reading in step 3 increases or differs from the value for the clutch setting check the clutch lock washer. Place 2 allen wrenches (6mm) between the hoist case and the clutch plate to prevent the clutch from falling out of place. Remove the locknut and lockwasher. Check the lock washer inner tab. If it is damaged, replace the lockwasher. Reinstall the locknut and tighten to remove the Allen wrenches. Adjust following the steps for PK hoists. Repeat steps 3 and 4.

- 6.

- a If the clutch slipping reading is correct (step 3) and the brake hold reading is correct (step 4), press the pendant “down” button and remove the friction force sensor from the chain.
- b If the brake hold reading (step 4) drops below the value (SWL in t l/l reeving for the hoist and holds steady, the brake air gap is excessive. Adjust the brake clearance following the maintenance manual procedures and repeat steps 3 and 4.
- c If the brake hold reading (step 4) drops below the value (SWL in t l/l reeving) for the hoist and continues to decline, the brake is faulty and must be repaired or replaced. Check the brake components, repair or replace as required following the maintenance manual procedures, and repeat steps 3 and 4.