Information sheet Maintenance work on motor/gear unit

Replacing the lubrication cartridge of the IEC adapter (with grease collector)

To ensure the service life of the IEC adapter, it is mandatory to replace the lubrication cartridge according to the specified intervals.

Target for action:

→ Lubrication cartridge of the IEC adapter has been replaced. IEC bearings are lubricated.

Scope of application:

Gear units 9062 and 9072 with IEC 160 and IEC180

Prerequisites:

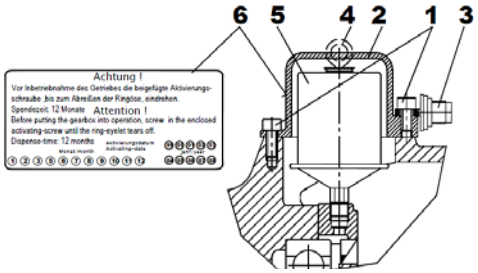
- Conveyor belt is switched off.
- Motor and gear unit has cooled down.

⚠ **WARNING:** Hot motor and gear unit oil. Risk of burns. **Before changing the engine and gear unit oil, let it cool down.**

Interval:

- Annually or after 1000 hours of operation.

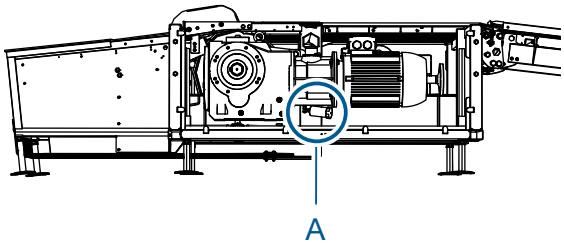
Instructions for action:

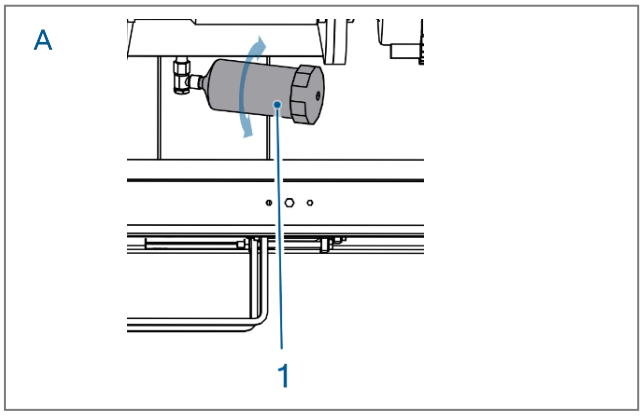


1. Unscrew the cartridge cover.
2. Unscrew the lubricator.
3. Screw on the new attachment.
4. Activate the lubricator.

a. Loosen and remove the cylindric head screws M8x16 (1).
b. Remove the cartridge cover (2).
c. Screw activation screw (3) into lubricator (5) until ring eye (4) breaks off at predetermined breaking point.
d. Replace cartridge hood (2) and fasten with cap screws (1).
e. Mark the activation time on the red adhesive label (6) with month/year.

5. Check the grease collector. **There must only be grease in the collection container! If there is also oil in the collecting container, contact the manufacturer (possible damage to the IEC adapter).**
6. Replace or empty the grease collector every second change of the lubricator.
7. Unscrew the grease collector from the drain hole of the IEC adapter.





No.	Designation
1	Grease collector

8. Press out grease with rod through internal piston.
9. Collect the grease.
10. Dispose of grease properly.

NOTE: Due to the shape of the container, a residual amount of grease remains in the container.

11. Clean the container.
12. Screw the container into the drain hole on the IEC adapter.
13. Replace the container if it is damaged.

Replacing the lubrication cartridge of the IEC adapter (without grease collector)

To ensure the service life of the IEC adapter, it is mandatory to replace the lubrication cartridge according to the specified intervals.

Target for action:

→ Lubrication cartridge of the IEC adapter has been replaced. IEC bearings are lubricated.

Scope of application:

Gear units 9062 and 9072 with IEC 160 and IEC180

Prerequisites:

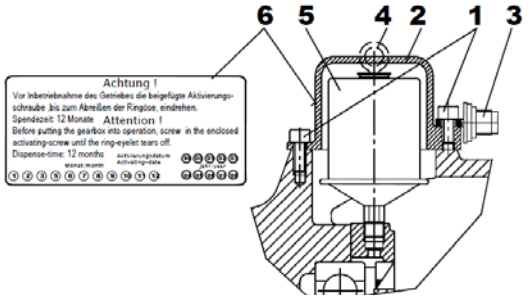
- Conveyor belt is switched off.
- Motor and gear unit has cooled down.

⚠ **WARNING:** Hot motor and gear unit oil. Risk of burns. **Before changing the engine and gear unit oil, let it cool down.**

Interval:

- Annually or after 1000 hours of operation.

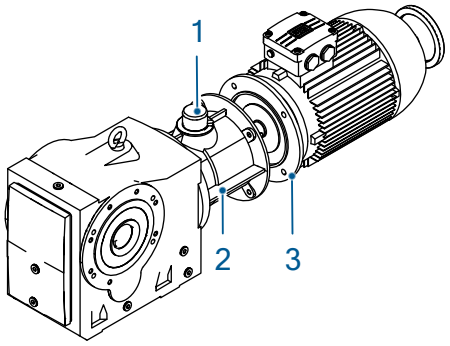
Instructions for action:



1. Unscrew the cartridge cover.
2. Unscrew the lubricator.
3. Screw on the new attachment.
4. Activate the lubricator.

a. Loosen and remove the cylindric head screws M8x16 (1).
b. Remove the cartridge cover (2).
c. Screw activation screw (3) into lubricator (5) until ring eye (4) breaks off at predetermined breaking point.
d. Replace cartridge hood (2) and fasten with cap screws (1).
e. Mark the activation time on the red adhesive label (6) with month/year.

5. Place the collecting vessel under the motor unit.



No.	Designation
1	Cartridge cover IEC-lubrication cartridge
2	IEC adapter
3	Motor unit

6. Secure motor.
7. Loosen 4 screws of motor unit.
8. Loosen motor unit slightly **- no oil should leak out - otherwise contact manufacturer (possible damage to IEC adapter).**
9. Tighten the loosened screws again.

Change gear oil

Target for action:

→ Gear oil is replaced.

Prerequisites:

- Conveyor belt is switched off.
- Motor and gear unit has cooled down.

⚠ **WARNING:** Hot motor and gear unit oil. Risk of burns. **Before changing the engine and gear unit oil, let it cool down.**

Interval:

- 5-yearly or after 5000 operating hours

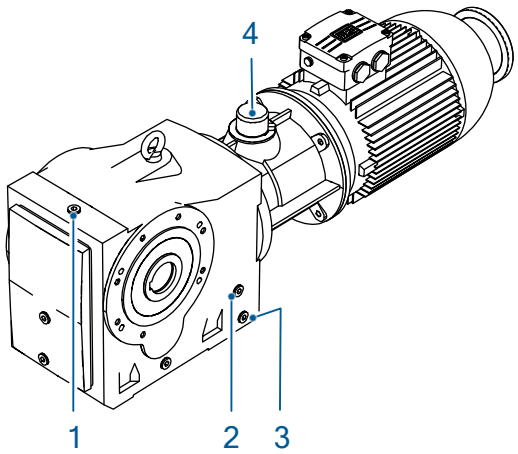
Instructions for action:

NOTE

Used gear oil pollutes the environment.

Used gear oil is hazardous waste.

→ Used gear oil must be disposed of in accordance with the regulations.



No.	Designation
1	Bleeder screw - remove wick before start-up
2	Oil level plug
3	Drain plug
4	Cartridge cover IEC-lubrication cartridge

Instructions for action - Change oil:

1. Place the collecting vessel under the drain plug.
2. Unscrew the oil level plug and drain plug completely.
3. Drain the gear oil completely.
4. Check the sealing rings of the oil level plug and drain plug. Replace screw if sealing ring is damaged.
5. Screw drain plug into bore.
6. Fill gear unit with new gear unit oil through oil level hole until oil comes out from oil level hole. The correct oil level is at the lower edge of the oil level bore.

Requirements for the gear unit oil:

- Viscosity: ISO VG 220
- Suitability for temperatures from - 25°C to + 80°C (observe local conditions)

Oils with lubricant type ISO VG 220 (- 25 to + 80°C):

Manufacturer	Designation
Aral	Degol GS 220
BP	Enersyn SG-XP 220
Castrol	Alphasyn PG 220
Esso	Glycolube 220
Mobil	Glygoyle HE 220
Shell	Tivela WB | Tivela S 220

Refer to the following table for the oil fill quantity. The values are approximate values. The actual filling quantity must be checked via the oil level (see point 6 + 7).

System type	Designation	Oil filling quantity
5,5 - 7,5 kW	Nord Bevel gear SK9032	2,1 Liter
11 kW Standard	Nord Bevel gear SK9042	4,5 Liter
11 kW Jumbo	Nord Bevel gear SK9052	7,5 Liter
15 - 22 kW	Nord Bevel gear SK9072	12 Liter
30 – 44 kW	Nord Bevel gear (2x) SK9072	12 Liter (per gear)
60 kW (30 kW 1-motory)	Nord Bevel gear SK9082	21 Liter (per gear)

NOTE: Do not exceed the oil filling quantity!

7. Check the oil level after at least 15 minutes.
8. Screw in oil level screw and all previously loosened screws correctly.

Instructions for action - Cleaning the gearbox:

Cleaning requirements:

- Removal of snow
- Removal of ice
- Removal of dirt
- Removal of oil

NOTE: If the outside of the gearbox is oily, check regularly for new oil leakage after cleaning and reseal the gearbox if necessary.

Requirements for cleaning agents:

- Use only grease-dissolving cleaning agents.
- Do not use abrasive, strongly alkaline cleaning agents, solvents, leaded gasoline, or carbon tetrachloride.

Instructions for action - Check bleed screw:

There are 2 different types of bleed screws.

- pressureless bleed screw
- pressure bleeding

When starting up the gear unit, the sealing cord must be removed.

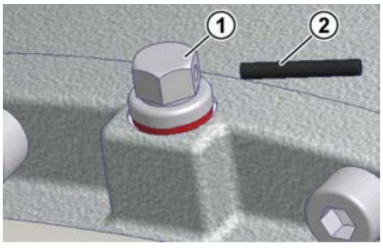


Fig. 1: pressureless bleed screw

No.	Designation
1	Pressureless bleed screw
2	Sealing cord

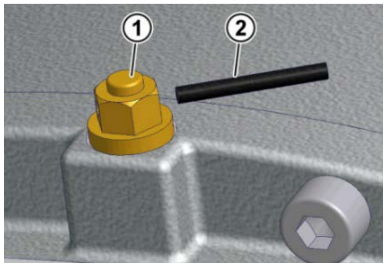


Fig. 2: pressure bleeding

Nr.	Bezeichnung
1	Pressure bleeding
2	Sealing cord

NOTE: Pressure bleeding screws should preferably be replaced by pressureless bleeding screws.

1. Unscrew the vent screw.
2. Clean the bleeder screw thoroughly (e.g. with compressed air).
3. Check the bleeder screw and the sealing ring. If the sealing ring is damaged, use a new bleeder screw.
4. Screw the bleeder screw back in.