Liebherr R 9800 Excavator 42100 Basic Version Lighting Kit

Package contents:

- 6 x 15cm Warm White Dot Lights
- 10 x 30cm Warm White Dot Lights
- 4 x Warm White Strip Lights
- 2 x Red Strip Lights
- 3 x 5cm Connecting Cables
- 3 x 15cm Connecting Cables
- 3 x 30cm Connecting Cables
- 1 x 6-port Expansion Board
- 1 x 8-port Expansion Board
- 1 x 12-port Expansion Board
- 1 x Multi Effects Board
- 1 x Battery Pack

Extra pieces

Important things to note:

When installing dot lights
Make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

Place wires on the surface or under the building blocks.
The wire can be placed between the building blocks or under the block, but they should be placed between the studs correctly.
Be careful when inserting the micro connector to the micro expansion board. With connecting cable side facing down, connect the connector to the board as per below. In case of damaging the pieces, do not force to connect the pieces.

Insert the connectors to the ports.
Be careful when you are operating, there’s only one correct way to insert, make sure the expansion board is upward, find the soldered “=” sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the “=” sign and if you feel hard to insert, please stop, and don’t force it, for that may result in bent pins inside the port or overheating of the expansion board.

At this point, use the tweezers to straighten the bent pins.
Connecting cable connectors to Strip Lights
Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won’t fit easily into a port connector, don’t force it. Doing so will damage the plug and the connector.

Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.
Note for connecting cable to the remote control board:

Connect the cables of the lights to the A, B, C, D ports which are corresponded to the buttons on the remote control board.
With connecting cable side facing down, connect the cable to the bigger port on the remote control board as per below.

Connect the other end of the connecting cable to the sensor.

Connect the USB cable to the port as per below.
Instructions for installing this kit:

OK, Let’s Begin!
Start from installing lights for the railings outside the cockpit.

Remove the following piece, and disassemble it.

Take a warm white 15cm dot light, place the light between the 2 studs as per below.
Reconnect the trans piece to secure the light, thread the cable through the following space.

Reconnect the piece we removed.

Thread the cable through the following space to the back as per below.
Wind excess cable around the following piece.

Take a warm white strip light, connect the connecting cable to it.
Stick the strip light to the following place.
Remove the following piece.

Take a 15cm connecting cable, connect it to the other end of the strip light.

Take a 12-port expansion board, connect the connecting cable to it.
Stick the expansion board to the following place, remove the following piece.

Move onto installing lights for the cockpit.

Remove the following wall.
Start from the following trans pieces.

Remove the 2 pieces, and disassemble them.

Take 2 warm white 15cm connecting cables, 2 trans round 1x1 plates.
Thread the cable through the pin till the light is placed inside.

Secure the light with the trans 1x1 round plate as per below.

Lift the gray piece a lit (to help the cable thread through), thread the cable through the hole.
Reconnect the pin, pull the cable backward as per below.

Remove the seat, thread the cable through the space underneath.

Place the cable underneath the light gray piece as per below.
Connect the cable to the expansion board as per below.

Repeat the steps above to install the other light, thread the cable through the space next to the wall, and connect the cable to the expansion board.
Take a warm white strip light, a 15cm connecting cable, connect the connecting cable to the strip light.

Stick the strip light to the roof of the control cabin. Pull the cable backward.

Thread the cable through the following space, and connect it to the expansion board.
Continue to install light for the trans orange piece over the control cabin. Remove it.

Disassemble it.

Take a warm white 15cm dot light, a trans orange 1x1 round plate, thread the cable through the following piece, pull the cable out till the light is placed inside.
Secure the light with the trans orange round plate.

Thread the cable through the following gray piece, reconnect the pin.
Thread the cable through the following space to the bottom.

Reconnect the wall.

Take a Multi Effects Board, a 15cm connecting cable, connect the connecting cable to the power port on the Multi Effects Board.
Connect the cable from the orange piece to the following port on the Multi Effects Board.

Connect the cable to the expansion board as per below.

Stick the Multi Effects Board to the following place with adhesive squares.
Continue to install light for the following dark gray box, remove and disassemble it as per below.

Take a warm white 15c dot light, a trans orange 1x1 round plate, place the light on the yellow round 1x1 plate, secure the light with trans orange round plate.
Reconnect the light back to the box, thread the cable through the following space underneath the box.

Reconnect the box.
Turn the car over to its side, connect the cable of the light to the expansion board as per below.

Continue to install light for the following trans piece, remove the piece and disassemble it.
Take a warm white 30cm dot light, place it between the 2 studs, secure the light with the trans piece.

Thread the cable through the following space, reconnect the box.
Thread the cable to the inner side, pull it downward, in case of interfering the excavator, do not thread the cable through any holes.

Connect the cable to the expansion board.
Take a 30cm connecting cable, connect it to the expansion board.

Pull the connecting cable to the back of the excavator.

Thread the cable through the following spaces.
Continue to place the cable as per below, pull the cable to the back of the battery pack.

Take an 8-port expansion board, connect the connecting cable to it.

Stick the expansion board to the following place with adhesive squares.
Take a warm white strip light, a 15cm connecting cable, connect the connecting cable to the strip light.

Stick the strip light to the following place next to the stairs.

Place the connecting cable from the strip light as per below, pull it toward the 12-port expansion board.
Connect the connecting cable to the expansion board.

Reconnect the pieces we removed before.

Move onto installing lights for the following trans orange piece, remove the piece.
Disassemble the piece.

Take a warm white 30cm dot light, a trans orange 1x1 round plate.

Thread the cable through the pin, pull the cable out till the light is placed inside, secure the light with the trans orange plate.
Thread the cable through the following spaces, reconnect the pieces we removed before.

Turn the excavator to its side, thread the cable through the orange piece, and continue to thread it through the following spaces.
Tuck excess cable before connect it to the expansion board.

Continue to install lights at the back of the excavator, remove the following piece.
Remove the following piece and disassemble it.

Take a warm white 30cm dot light, a trans orange 1x1 round plate.

Thread the cable through the pin, pull the cable till the light is placed inside, secure the light with trans orange plate.
Thread the able through the following black piece, reconnect the piece we removed before.

Remove the following piece, disassemble it.
Take a warm white 30cm dot light, a trans 1x1 round plate.

Thread the cable through the pin, pull the cable out till the light is placed inside, secure the light with trans piece.
Continue to thread the cable through the following gray piece, reconnect the piece we removed before.

Group the 2 lights together, thread them through the following space.

Reconnect the piece we removed before, turn the excavator to its side, pull the cables out from the bottom.
Wind excess cable around the following piece before connect it to the 8-port expansion board.

Take 2 warm white 30cm dot lights, a trans orange 1x1 round plate, a trans 1x1 round plate, repeat the steps above to install the other light.
Continue to install light for the following piece over the ‘9800’ sticker. Remove the piece and disassemble it.
Take a warm white 15cm dot light, a trans 1x1 round plate.

Thread the cable through the pin, pull the cable out till the light is placed inside, secure the light with the trans round plate.
Thread the cable through the following black piece, reconnect the trans piece.

Continue to thread the cable through the following piece, reconnect the piece we removed before.

Turn the excavator to its side, pull the cable out.
Take a warm white strip light, a 5cm connecting cable, connect the connecting cable to the strip light.

Connect the cable of the light to the strip light, stick the strip light to the following place.

Connect the connecting cable from the strip light to the expansion board as per below.
Take a 30cm connecting cable, connect it to the strip light.

Thread the cable of the light through the following space, turn the excavator to its side, pull the cable out.

Pull the cable out from the following hole (you can pull it out from any hole).
Take a 6-port expansion board, connect the connecting cable to the expansion board.

Stick the expansion board to the following place.

Move onto install lights for the side door. Remove the light as disassemble it as per below.
Take a warm white 30cm strip light, a trans 1x1 round plate.

Thread the cable through the pin, pull the cable out till the light is placed inside.
Secure the light with trans round plate, continue to thread the cable through the following black piece, reconnect the pin.

Reconnect the piece we removed before, open the door underneath.
Thread the cable through the space near the doorframe to the bottom.

Close the door.

Turn the excavator to its side, thread the cable through the following space.
Tuck excess cable before connect it to the 8-port expansion board.

Remove the following railings and roof.

Continue to install light for the following trans piece, remove the piece and disassemble it.
Take a warm white 30cm dot light, place the light between the 2 studs, secure the light with trans piece.
Thread the cable through the following space. Reconnect the piece we removed before.

Pull the cable downward from the inner side, in case of interfering the excavator, do not thread the cable through any holes.

Take 2 red strip light, a 5cm connecting cable, assemble them as per below.
Connect the cable from the light to the strip light, stick the strip light to the following place.

Take a 30cm connecting cable, connect it to the other strip light.

Stick the strip light to the following place.
Thread the cable through the following space, pull the cable out from the bottom.

Tuck excess cable before connect it to the expansion board.

Reconnect the railings and the roof.
Move onto installing the following 2 lights, remove one of them, disassemble it as per below.

Take a warm white 30cm dot light, place the light between the 2 studs, secure the light with the trans piece.
Thread the cable through the following space, reconnect the piece we removed before.

Pull the cable out from the bottom, place it alongside the car to the back.
Thread the cable through the holes before connect it to the expansion board.

Take a warm white 30cm dot light, repeat the previous steps to install the light.

Pull the cable downward.
Connect it to the expansion board.

Take the battery pack.

Open the following roof, stick the battery pack to the following place. Note: do not block the original switch.
Pull the cable out, connect it to the expansion board.

There’s enough space inside the excavator, you can place the cable as you wish. This completes installation of this LED Lighting Kit. ENJOY!