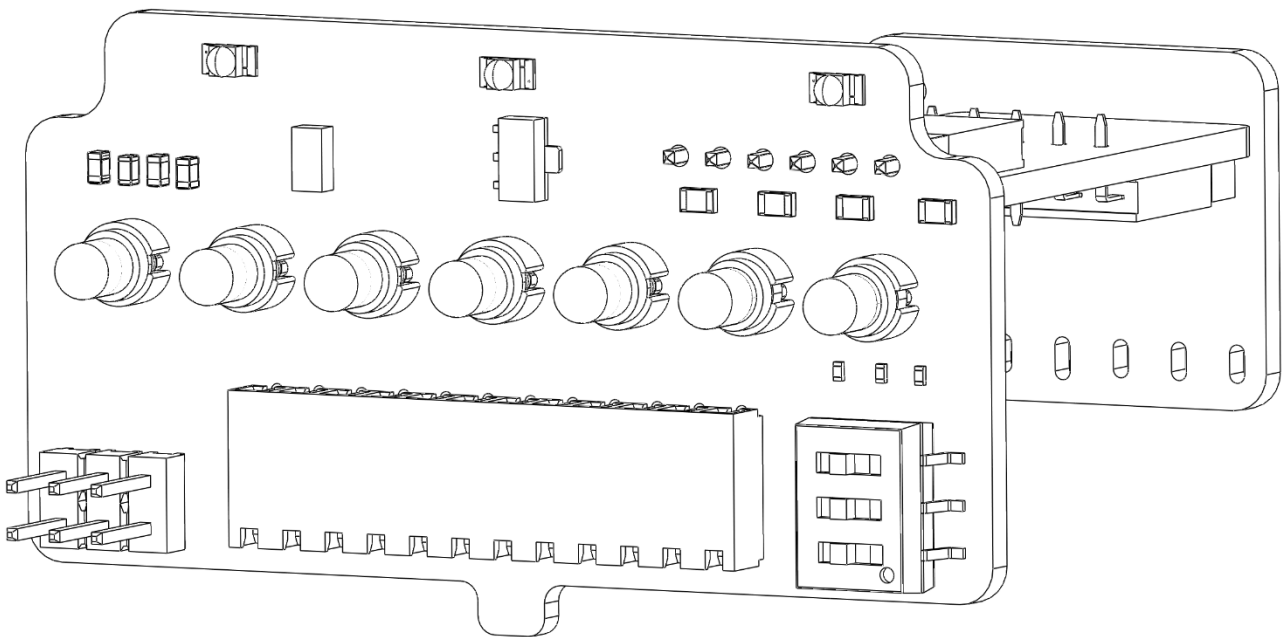


# DALECRAFT

# INSTRUCTION MANUAL



## SHIFT LIGHT V2

## E30 FACELIFT MODELS (1987-1991)

# Instruction Manual: Installing the Shift Light V2 into E30 Instrument Cluster

## INTRODUCTION

Thank you for purchasing the Shift Light v2 PCB Board for the BMW E30 (1987–1991). This replacement restores the Service Indicator (SI) lights and adds a modern shift light feature to improve your driving experience.

This guide provides instructions for safely removing the old SI PCB and installing the new one. Read all steps carefully before starting.

For support visit [www.dalecraft.com](http://www.dalecraft.com).

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## SAFETY INFORMATION

**WARNING:** Incorrect installation may damage your instrument cluster or electrical system. Follow these precautions:

- Disconnect the battery before starting.
  - Work in a clean, well-lit, static-free environment.
  - Handle the PCB by its edges to prevent electrostatic damage.
  - Do not force components—check alignment if resistance occurs.
  - Use proper, well-maintained tools.
  - If unsure, consult a qualified professional.
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## TOOLS AND MATERIALS REQUIRED

- Phillips screwdriver (small and medium sizes)
  - 10mm socket wrench (for battery disconnection)
  - Clean, lint-free cloth
  - SI Light PCB Board with Shift Light (included)
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## PACKAGE CONTENTS

- 1 x Custom SI Light PCB Board with Integrated Shift Light
- 1 x Middle Board
- 1 x Connector Board
- 1 x Installation Guide (this manual)

**Note:** Verify all contents are present before proceeding. Contact customer service if any items are missing.

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## PREPARATION

1. **Park the Vehicle:** Ensure the vehicle is parked on a flat surface with the parking brake engaged.
  2. **Disconnect the Battery:** Using a 10mm socket wrench, disconnect the negative (-) terminal of the battery to prevent electrical hazards.
  3. **Set Up Workspace:** Clear the driver's area of any loose items and ensure good lighting.
  4. **Gather Tools:** Have all required tools and materials ready to streamline the installation process.
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## INSTALLATION INSTRUCTIONS

Follow these steps to remove the old SI PCB and install the new board with shift light functionality. The process includes removing the instrument cluster, accessing the SI board, and installing the new PCB.

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### STEP 1: REMOVE THE INSTRUMENT CLUSTER

#### 1. Remove the Knee Bolster Panel

- Locate the panel under the steering column.
- Remove the screws with a Phillips screwdriver.
- Gently pull the panel off and set it aside.

#### 2. Remove the Cluster Trim Surround

- Unscrew the two aluminum thumb screws behind the lower trim panel.
- Carefully pry off the trim using a small flathead screwdriver.
- Remove the Phillips screws at the top and bottom of the trim surround.
- Set the trim aside safely.

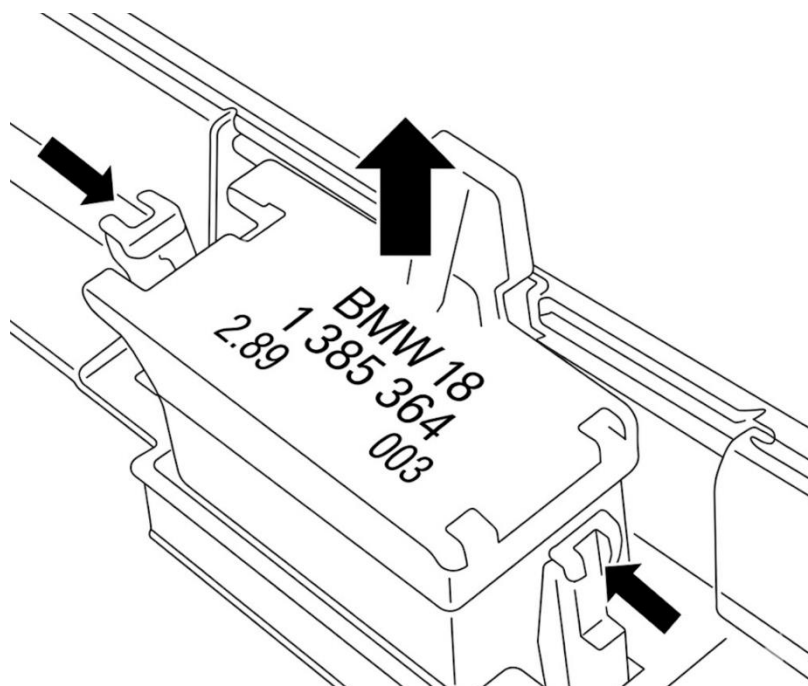
#### 3. Extract the Instrument Cluster

- Remove the four Phillips screws securing the cluster.
  - Tilt the cluster forward to access the rear.
  - Disconnect the blue and white harness connectors by releasing their clips.
  - Disconnect any additional small wires on the left side.
  - Carefully remove the cluster and place it on a clean surface.
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## STEP 2: ACCESS AND REMOVE THE SI PCB BOARD

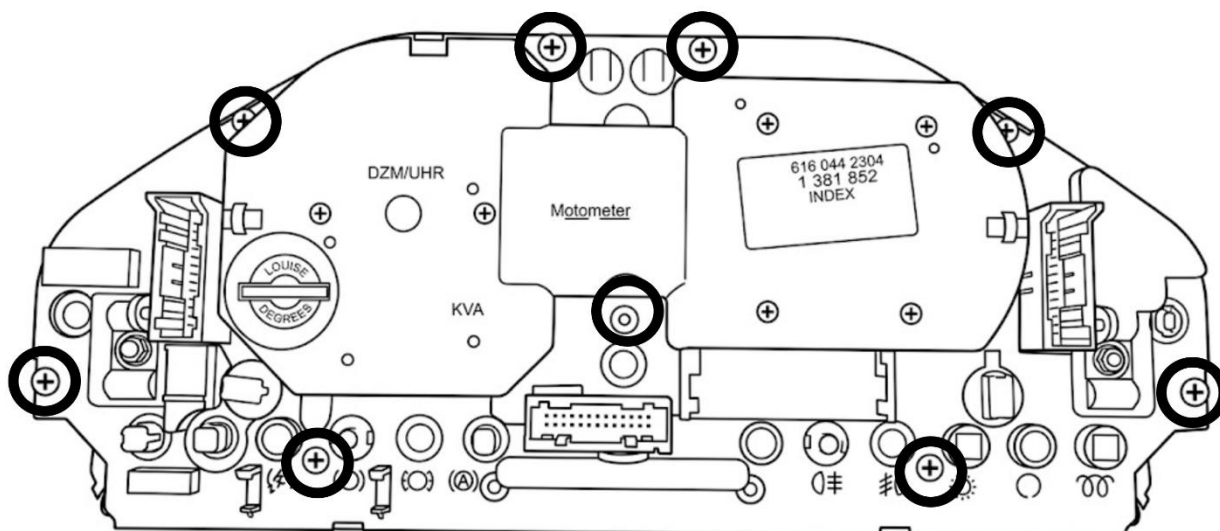
### Pull the Coding Plug

- Locate the coding plug on the front of the cluster (lower right corner)
- Remove the coding plug by pressing the two snapfits while pulling it towards yourself.



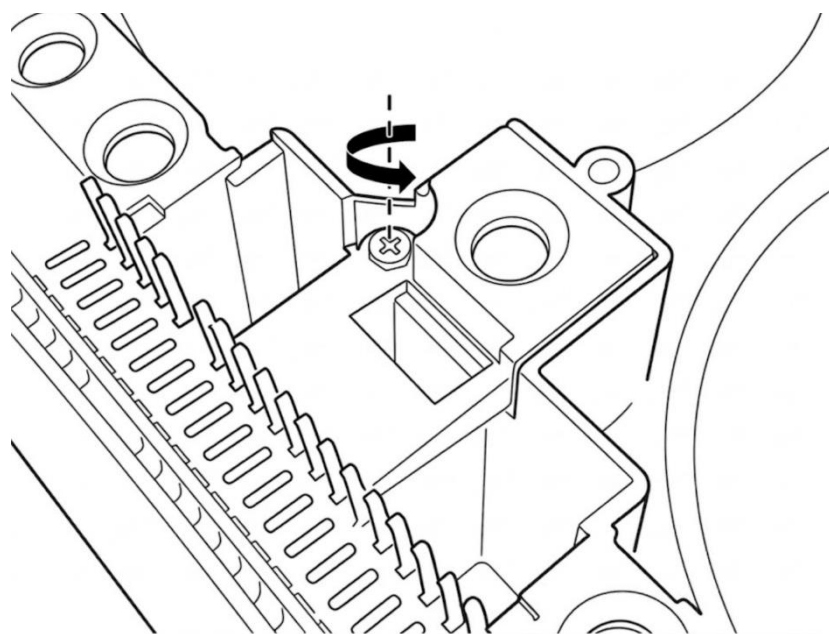
### Remove the rear cover

- Locate 8-9 screws on the backside of the instrument cluster (highlighted with circles)
- Use a phillips screwdriver to remove the screws
- Gently remove the backcover and place it on a clean surface



## Remove the fixation plug

- On the front side of the cluster there is a fixation plug holding the SI board in place.
- There is a screw in the middle. Remove it.
- Take off the fixation plug.
- The SI board should now slide out freely.

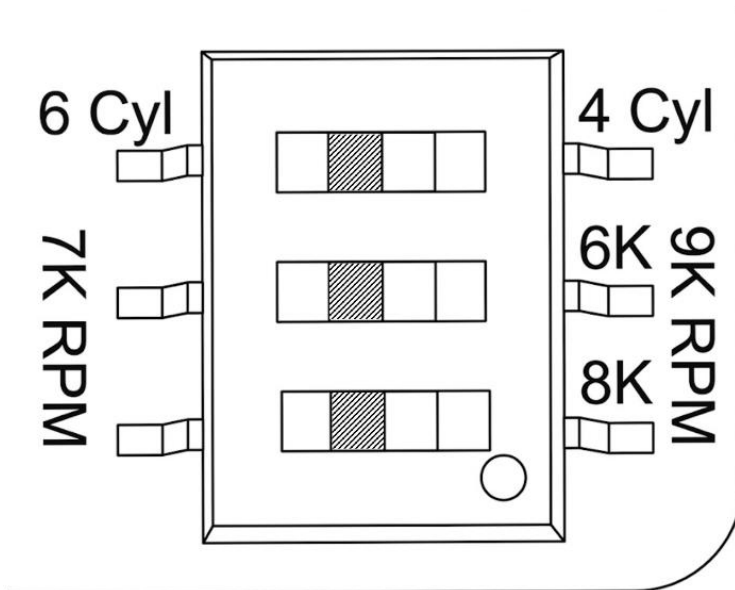


## STEP 3: PREPARE THE SHIFT LIGHT ACCORDING TO YOUR VEHICLE SETUP

### Configure the board

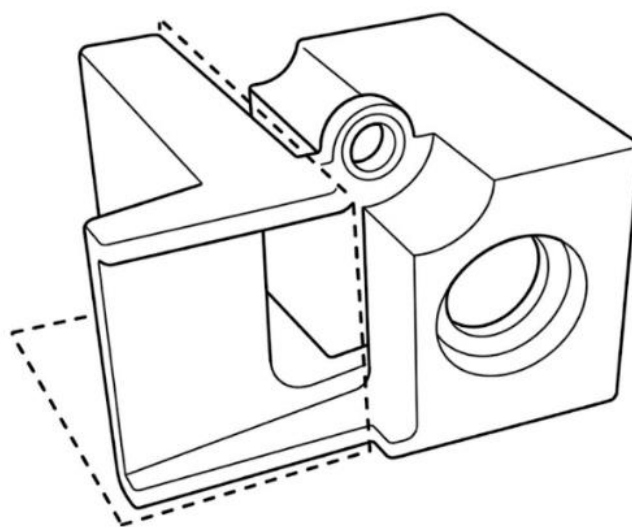
On the shiftlight locate the configuration DIP switch (lower right corner)

- First switch: Select 6 cyl or 4 cyl for the amount of cylinders the engine has.
- Second switch: Check the maximum RPM of your cluster. Switch to right for 6K max RPM
- Third switch: For 8000 max RPM move the switch to 8K RPM.
- Second and Third switch combined: for 7K keep both switches left, for 9K keep both switches to the right.



### Modify the fixation plug

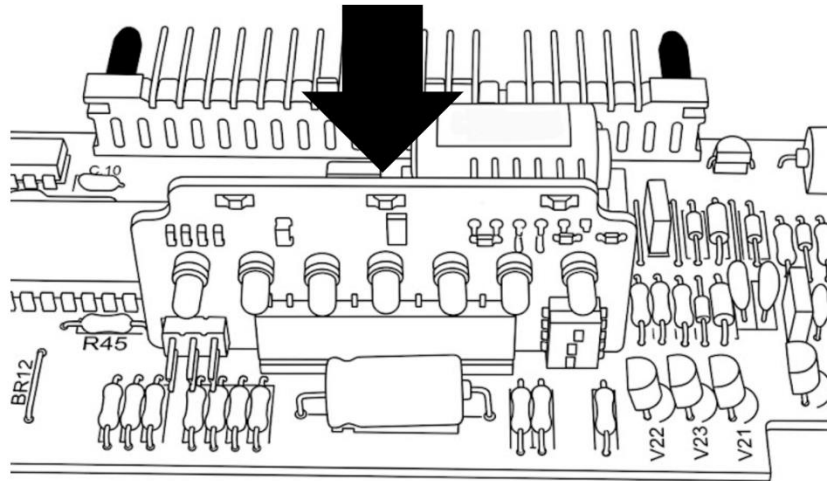
- On the fixation plug that was taken out before removing the SI board, cut away half of the bottom area (marked with dashed lines in the picture).



## STEP 4: INSTALL THE SHIFT LIGHT PCB BOARD ON SI BOARD

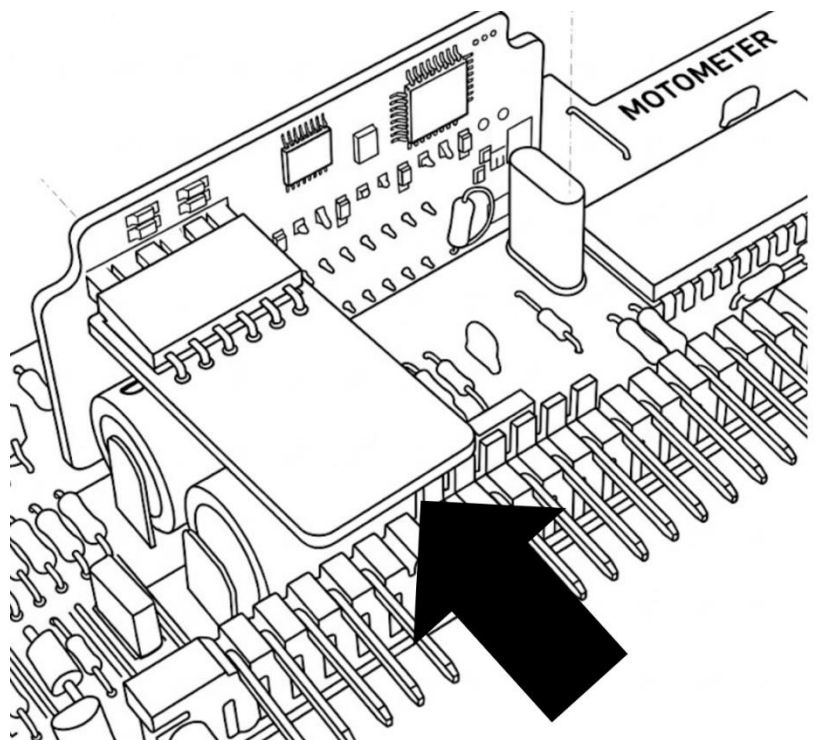
### 1. Mount the shiftlight:

- Connect the Shiftlight board to the SI board using the 12 pin connector



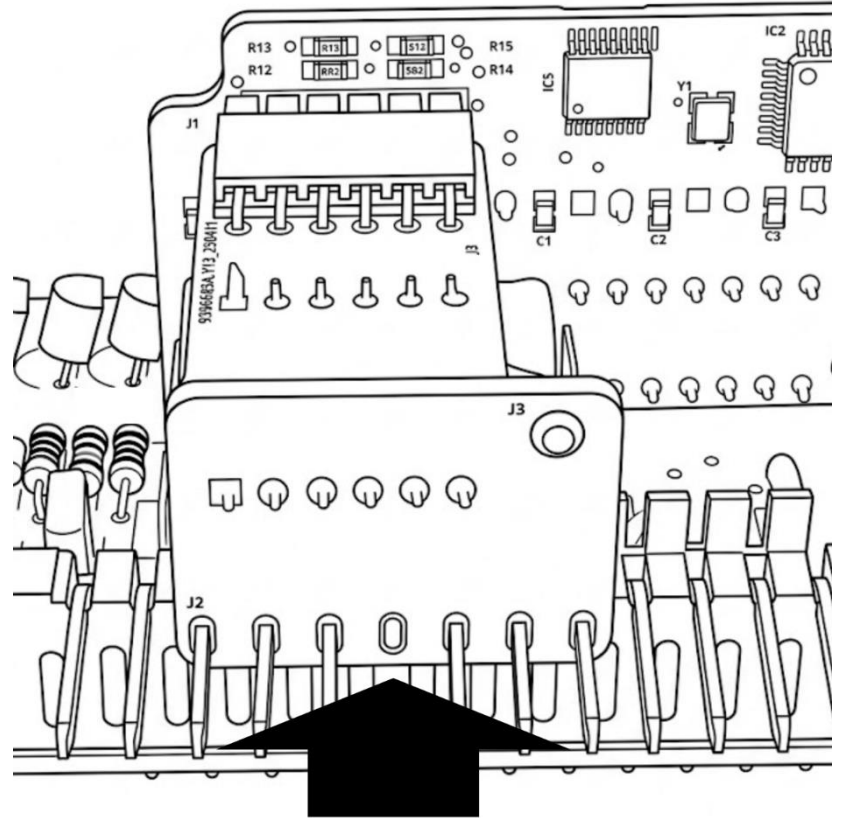
### 2. Mount the Middle board:

- Mount the Middle PCB board to the Shiftlight board.
- Make sure the connector is on the top side



### 3. Install connector board

- Slide the connector board on the large connector starting from the 3rd pin from the left side.
- Make sure the 6 pin connector on the other side is aligned with all the sockets.
- Move the Connector board to the end until it seats firmly.



### 4. Verify Connections:

- Double-check that the PCB board is securely connected and properly aligned.

## **STEP 4: REASSEMBLE THE INSTRUMENT CLUSTER**

1. Reassemble the Cluster
  - Slide the SI board back into place and secure the fixation plug.
  - Reattach the rear cover and tighten all screws.
2. Reconnect and Reinstall
  - Reconnect the blue and white harness plugs and any additional wires.
  - Carefully slide the cluster back into the dashboard.
  - Secure it with the four Phillips screws.
  - Reinstall the trim surround (top and bottom screws) and lower trim panel (thumb screws).
3. Reinstall Knee Bolster Panel
  - Position the panel and secure it with its screws.

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## **STEP 5: TEST THE INSTALLATION**

1. Reconnect Battery
  - Reconnect the negative (-) terminal.
2. Test Functionality
  - Turn ignition to “ON”.
  - Verify SI lights (green, yellow, red) illuminate correctly.
  - Test the shift light per the Configuration Card (rev engine safely).
3. Final Checks
  - Confirm all gauges work properly.
  - Check for warning lights or errors.
  - Clean up tools and workspace.

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## TROUBLESHOOTING

Issue	Possible Cause	Solution
Shift lights do not illuminate	Day lights are not on	Turn on the day lights to light up the shift light and rotate the knob to max brightness.
Shift lights do not illuminate	Light control module faulty	Verify if all other interior lightning is working.
Shift lights illumination offset	Instrument cluster illumination bulbs faulty	Verify if the state of the two illumination bulbs in instrument cluster and replace if required.
Regular SI Lights do not work	SI Light battery dead	Replace the SI light battery

For additional assistance, contact [support@dalecraft.com](mailto:support@dalecraft.com).

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# CONFIGURATION

Maximum RPM	4 cylinder engine	6 cylinder engine
6000 RPM		
7000 RPM		
8000 RPM		
9000 RPM		