

Structural Concepts 73660

Structural Concepts 73660 Embraco Compressor NEK6210GK Instruction Manual

Genuine OEM Replacement Part

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Structural Concepts 73660 Embraco Compressor NEK6210GK. This compressor is a genuine OEM replacement part designed for use in Structural Concepts temperature-controlled display cases. Please read this manual thoroughly before attempting any installation or service to ensure safe and efficient operation.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always disconnect power before servicing the unit.
- Installation and service should only be performed by qualified personnel.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves.
- Ensure proper ventilation when working with refrigerants.
- Handle refrigerants responsibly and in accordance with local regulations.
- This compressor operates with R-404A refrigerant. Ensure compatibility with your system.

3. PRODUCT OVERVIEW

The Structural Concepts 73660 Embraco Compressor NEK6210GK is a high-quality, genuine OEM replacement part manufactured by Embraco for Structural Concepts display cases. It is designed to maintain optimal temperatures in commercial refrigeration units, ensuring the freshness and safety of stored products.



Figure 1: Structural Concepts 73660 Embraco Compressor NEK6210GK. This image shows the black, cylindrical compressor unit with copper tubing connections and electrical components.

Key Features:

- Genuine OEM replacement part, ensuring compatibility and performance.
- Designed for Structural Concepts temperature-controlled display cases.
- Manufactured by Embraco, a reputable compressor producer.
- Utilizes R-404A refrigerant.

4. SETUP AND INSTALLATION

Installation of the Embraco Compressor NEK6210GK should only be performed by a certified refrigeration technician. Incorrect installation can lead to system failure, refrigerant leaks, and potential safety hazards.

Installation Steps (Summary for Qualified Technicians):

1. **Preparation:** Disconnect power to the display case. Recover existing refrigerant according to environmental regulations.
2. **Removal:** Carefully disconnect electrical wiring and refrigerant lines from the old compressor. Remove mounting bolts and extract the old unit.
3. **Placement:** Position the new 73660 Embraco Compressor in the designated location, ensuring proper alignment with mounting points.
4. **Mounting:** Secure the compressor using appropriate bolts and vibration dampeners.
5. **Connections:** Braze or connect refrigerant lines to the compressor's suction and discharge ports. Ensure all

connections are leak-free.

- 6. **Electrical Wiring:** Connect electrical wiring (start relay, overload protector, capacitor if applicable) according to the display case's wiring diagram. Verify all connections are secure and correctly polarized.
- 7. **Evacuation and Charging:** Evacuate the refrigeration system to a deep vacuum. Charge the system with the correct type and amount of R-404A refrigerant as specified by the display case manufacturer.
- 8. **Leak Check:** Perform a thorough leak check on all connections.
- 9. **Testing:** Restore power and test the system for proper operation, including temperature pull-down and pressure readings.

5. OPERATING INSTRUCTIONS

The 73660 Embraco Compressor operates as an integral component of a larger refrigeration system within a Structural Concepts display case. Its operation is typically automatic, controlled by the display case's thermostat and control system.

- Once installed and the display case is powered on, the compressor will cycle on and off as needed to maintain the set temperature.
- Ensure the display case's ventilation is not obstructed to allow for proper heat dissipation from the compressor.
- Monitor the display case's temperature to confirm the compressor is functioning correctly.

6. MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your refrigeration system. While the compressor itself requires minimal direct user maintenance, the overall system it is part of does.

Recommended Maintenance Practices:

- **Condenser Coil Cleaning:** Regularly clean the condenser coils of the display case to ensure proper heat exchange. Dirty coils can overwork the compressor.
- **System Checks:** Periodically have a qualified technician inspect the entire refrigeration system, including refrigerant levels, electrical connections, and fan operation.
- **Environmental Conditions:** Ensure the display case operates within recommended ambient temperature and humidity ranges.
- **Vibration Inspection:** Check for excessive vibration or unusual noises from the compressor, which could indicate a problem.

7. TROUBLESHOOTING

Most issues related to the compressor are symptoms of problems within the broader refrigeration system. For complex issues, always consult a qualified refrigeration technician.

| Problem | Possible Cause | Solution |
|------------------------------|---|--|
| Compressor not starting | No power, faulty thermostat, faulty start relay/capacitor, motor overload. | Check power supply. Consult technician to diagnose electrical components or motor. |
| Compressor runs continuously | Low refrigerant charge, dirty condenser coils, faulty thermostat, oversized load. | Clean condenser coils. Consult technician for refrigerant charge or thermostat issues. |
| Display case not cooling | Compressor failure, refrigerant leak, evaporator fan issue, dirty coils. | Consult technician for system diagnosis and repair. |

| Problem | Possible Cause | Solution |
|--------------------------------|--|---|
| Unusual noises from compressor | Loose mounting, internal mechanical issue, refrigerant slugging. | Check mounting. Immediately consult technician for internal issues. |

8. SPECIFICATIONS

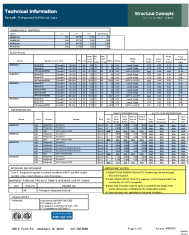
| Attribute | Detail |
|----------------------|---|
| Model Number | 73660 (Embraco NEK6210GK) |
| Brand | Structural Concepts (OEM Part) |
| Manufacturer | Structural Concepts |
| Refrigerant Type | R-404A |
| Package Dimensions | 16 x 16 x 8 inches |
| Item Weight | Approximately 0.01 ounces (Note: This weight may refer to packaging or a specific component, actual compressor weight will be significantly higher) |
| Date First Available | February 1, 2019 |
| Country of Origin | United States |

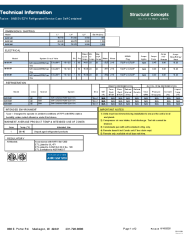
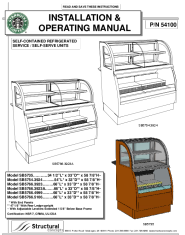

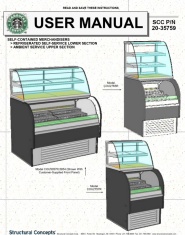
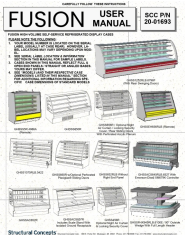
9. WARRANTY AND SUPPORT

As a genuine OEM replacement part from Structural Concepts, this compressor is subject to the warranty terms provided by Structural Concepts for their original equipment. Please refer to your display case's original documentation or contact Structural Concepts directly for specific warranty information and technical support.

For further assistance or to locate authorized service providers, please visit the [Structural Concepts official website](#) or contact their customer service department.

Related Documents - 73660

| | |
|---|--|
|  | <p>Structural Concepts Reveal Refrigerated Self-Service Case Technical Specifications</p> <p>Detailed technical information, dimensions, electrical specifications, and refrigeration data for Structural Concepts Reveal® refrigerated self-service cases, including models NR3655RSSV, NR4855RSSV, NR6055RSSV, and NR7255RSSV.</p> |
|---|--|

| | |
|---|--|
|  | <p>Structural Concepts Fusion GMDSV Series 52\"H Refrigerated Service Case Technical Information</p> <p>Detailed technical specifications, dimensions, electrical, and refrigeration data for the Structural Concepts Fusion GMDSV Series 52\"H Refrigerated Service Case. Includes installation notes and regulatory compliance.</p> |
|  | <p>Structural Concepts Refrigerated Merchandiser Installation and Operating Manual</p> <p>This manual provides comprehensive instructions for the installation, operation, maintenance, and troubleshooting of Structural Concepts refrigerated merchandisers, including models SB5735, SB5754.3924, and SB5766 series. It covers essential procedures, safety precautions, and technical specifications for optimal performance and longevity of the equipment.</p> |
|  | <p>Structural Concepts Fusion Refrigerated Cases User Manual</p> <p>Comprehensive user manual for Structural Concepts Fusion refrigerated display cases, covering installation, operation, product placement, cleaning, maintenance, and technical support.</p> |
|  | <p>Structural Concepts Merchandiser User Manual for Starbucks</p> <p>Comprehensive user manual for Structural Concepts self-contained merchandisers used by Starbucks, covering models COU2757R, COU2765R, and COU5057R.5854. Includes installation, operation, maintenance, troubleshooting, and technical specifications.</p> |
|  | <p>Fusion High-Volume Self-Service Refrigerated Display Cases User Manual</p> <p>Comprehensive user manual for Structural Concepts Fusion high-volume self-service refrigerated display cases, covering installation, maintenance, troubleshooting, and safety guidelines.</p> |