

nissan 28400 nds 00 Study Guide

nissan 28400 nds 00 is a crucial component in the realm of Nissan vehicle maintenance and repair, often associated with the ignition switch assembly or related electrical parts. Understanding its function, applications, and troubleshooting methods is essential for automotive technicians, Nissan vehicle owners, and enthusiasts aiming to keep their cars running smoothly. In this comprehensive guide, we delve into the details of the Nissan 28400 NDS 00, exploring its specifications, significance, installation process, and common issues.

What is Nissan 28400 NDS 00?

Overview and Definition

The Nissan 28400 NDS 00 is a specific part number associated with Nissan's electrical system components, primarily related to ignition switches, steering lock assemblies, or keyless entry systems. The designation indicates a part designed to meet Nissan's stringent quality standards, ensuring reliable operation within various Nissan models.

While the exact part may vary depending on the vehicle model and year, it generally refers to an ignition switch assembly or a related electrical module that facilitates engine start-up and vehicle security functions.

Applications in Nissan Vehicles

The Nissan 28400 NDS 00 part is typically used in:

- Model years spanning from early 2000s to recent models, depending on the vehicle line
- Vehicles equipped with keyless entry systems or traditional ignition keys
- Models such as Nissan Altima, Maxima, Sentra, and others requiring ignition switch replacements or upgrades

Understanding the application of this part is critical for proper replacement or repair, ensuring compatibility with the specific vehicle model.

Specifications and Features of Nissan 28400 NDS 00

Technical Specifications

While exact specifications may vary, typical features of the Nissan 28400 NDS 00 include:

- High durability designed to withstand repeated key insertions and turnings
- Electrical connectors compatible with Nissan's wiring harnesses
- Integrated security features to prevent theft and unauthorized vehicle start
- Precision engineering to fit seamlessly into the steering column assembly

Material and Build Quality

The part is manufactured using high-quality plastics and metals to ensure longevity and resistance to wear and tear. The internal components are designed to maintain electrical conductivity and resist corrosion.

Importance of the Nissan 28400 NDS 00 in Vehicle Operation

Role in Ignition and Security

The ignition switch assembly, indicated by the part number 28400 NDS 00, plays a pivotal role in starting the vehicle. It also interacts with the vehicle's security system, immobilizer, and steering lock mechanisms.

Key functions include:

- Activating the electrical systems necessary for engine start
- Engaging or disengaging the steering lock
- Providing security features such as immobilizer communication

Impact of Malfunction

Failure or malfunction of this component can lead to several issues:

- Difficulty or inability to start the vehicle
- Intermittent electrical system operation
- Steering lock stuck or failing to disengage
- Security system faults or false alarms

Prompt diagnosis and replacement are essential to maintain vehicle reliability and security.

Replacing or Installing Nissan 28400 NDS 00

Tools and Materials Needed

Before replacing the part, gather the necessary tools:

- Screwdrivers (Phillips and flat-head)
- Socket wrench set
- Torx drivers, if applicable
- Replacement Nissan 28400 NDS 00 part
- Electrical contact cleaner (optional)

Step-by-Step Installation Guide

While the process may vary slightly depending on the vehicle model, general steps include:

- Disconnect the vehicle's negative battery terminal to prevent electrical shorts.
- Remove the steering column covers carefully using screwdrivers.
- Locate the ignition switch assembly, typically mounted within the steering column.
- Disconnect the electrical connectors attached to the existing ignition switch.
- Unscrew or unclip the faulty ignition switch assembly.
- Install the new Nissan 28400 NDS 00 component, ensuring it aligns correctly with mounting points.
- Reconnect the electrical connectors securely.
- Reassemble the steering column covers.
- Reconnect the negative battery terminal and test the vehicle's ignition and security functions.

Always refer to the vehicle's service manual for model-specific instructions and safety precautions.

Common Issues and Troubleshooting

Signs of a Faulty Nissan 28400 NDS 00

Recognizing symptoms early can save time and prevent breakdowns:

- Key gets stuck in the ignition or cannot turn smoothly
- The vehicle does not start despite turning the key
- Intermittent electrical failures or warning lights

- Steering lock remains engaged or does not disengage

Troubleshooting Tips

To diagnose problems:

- Inspect the ignition switch for visible damage or corrosion
- Check electrical connections for looseness or corrosion
- Use a multimeter to test for continuity and voltage supply
- Consult the vehicle's error codes for security or ignition-related faults

When to Replace

If troubleshooting confirms that the ignition switch assembly (Nissan 28400 NDS 00) is faulty, replacement is often the most effective solution. Regular maintenance and prompt repairs can prevent further electrical issues.

Where to Buy Nissan 28400 NDS 00

Authorized Nissan Parts Dealers

Purchasing from authorized dealers ensures genuine parts with warranty coverage. You can find these through Nissan's official website or authorized service centers.

Online Retailers and Auto Parts Stores

Many reputable online stores and auto parts suppliers offer Nissan 28400 NDS 00. When buying online:

- Verify the part number and compatibility with your vehicle model
- Read customer reviews for authenticity and quality
- Check return policies and warranty options

Conclusion

The Nissan 28400 NDS 00 is an integral component that ensures reliable ignition functionality and vehicle security. Whether you are performing routine maintenance or addressing specific electrical issues, understanding this part's role, installation procedures, and troubleshooting methods is vital for maintaining your Nissan vehicle's performance. Always prioritize genuine parts and professional

repair services to ensure safety, durability, and optimal vehicle operation.

By staying informed about components like the Nissan 28400 NDS 00, vehicle owners and technicians can enhance their troubleshooting skills, prolong vehicle lifespan, and enjoy peace of mind on the road.

Nissan 28400 NDS 00: An In-Depth Analysis of Its Features, Applications, and Maintenance

When it comes to automotive components, especially those that play a critical role in vehicle performance and safety, understanding the specifics can make all the difference. One such component that has garnered attention among enthusiasts and professionals alike is the Nissan 28400 NDS 00. Whether you're a mechanic, a Nissan owner, or a car enthusiast aiming to deepen your knowledge, this comprehensive guide will walk you through everything you need to know about this part, from its function and specifications to installation tips and maintenance.

What Is the Nissan 28400 NDS 00?

The Nissan 28400 NDS 00 is a specialized automotive part designed specifically for certain Nissan vehicle models. While the exact nomenclature might seem cryptic at first glance, it follows a common Nissan part numbering convention that indicates its purpose and compatibility.

Key Points:

- Part Type: Typically, this part is associated with the vehicle's engine management or emissions control system.
- Application: Commonly used in specific Nissan models, especially those manufactured in the early 2000s.
- Functionality: Serves as a sensor, connector, or actuator that plays a vital role in maintaining optimal engine performance and emissions compliance.

Understanding the Role of Nissan 28400 NDS 00 in Vehicles

Engine Management System

The Nissan 28400 NDS 00 often functions as a sensor or a control module within the engine management system (EMS). Its primary role is to monitor certain parameters or facilitate communication between different engine components.

Emissions Control

In many Nissan models, parts with similar designations are integral to the vehicle's emissions system, ensuring compliance with environmental regulations by monitoring exhaust gases or controlling related systems.

Compatibility and Models

This part is typically compatible with models such as:

- Nissan Maxima
- Nissan Altima
- Nissan Sentra
- Nissan Frontier
- Other models from the early 2000s

However, it's essential to verify compatibility with your specific vehicle model and year before purchasing or replacing.

Technical Specifications of Nissan 28400 NDS 00

Understanding the technical aspects helps in identifying, replacing, or troubleshooting the part effectively.

General Specifications:

- Part Number: 28400 NDS 00
- Type: Sensor/Controller (depending on exact application)
- Material: Usually high-grade plastic and electronic components designed to withstand engine heat and vibrations
- Electrical Connection: Multi-pin connector for secure and reliable electrical contact
- Operating Voltage: Typically around 12V DC, compatible with vehicle electrical systems
- Temperature Range: Designed to operate within the engine's temperature spectrum, often from -40°C to 125°C

Physical Dimensions:

- Precise dimensions vary based on the specific application but generally compact to fit into tight engine compartments.
- Mounting points are designed for easy installation and secure attachment.

Installation and Replacement Guide

Proper installation of the Nissan 28400 NDS 00 is vital for optimal vehicle performance. Here's a step-by-step guide:

Tools Needed:

- Screwdrivers (Phillips and flat-head)
- Ratchet and socket set
- Replacement part (ensure compatibility)
- Gloves and safety glasses

Installation Steps:

- Safety First: Disconnect the negative terminal of the battery to prevent electrical shorts.
- Locate the Part: Use your vehicle's service manual to find the exact location of the Nissan 28400 NDS 00. It's often situated near the engine control unit (ECU) or along the intake manifold.
- Remove the Old Part: Carefully disconnect the electrical connector. Unscrew or unclip the part from its mounting point.
- Inspect the Area: Check for any corrosion, damage, or debris that might interfere with installation.
- Install the New Part: Position the new component, secure it with screws or clips, and reconnect the electrical connector firmly.
- Reconnect Battery: Reattach the negative terminal.
- Test Functionality: Start the engine and verify proper operation through diagnostic tools or vehicle indicators.

Maintenance Tips for Longevity

Like all vehicle components, proper maintenance ensures the Nissan 28400 NDS 00 functions reliably over time.

Regular Inspection

- Check connections for corrosion or wear during routine maintenance.
- Look for signs of physical damage or contamination.

Diagnostic Scans

- Use OBD-II scanners to monitor sensor data and identify potential issues early.
- Clear error codes after replacing the part to reset the vehicle's computer.

Keep the Surrounding Area Clean

- Minimize exposure to dirt, oil, and debris that can affect sensor performance.

Replace When Necessary

- If the sensor or module malfunctions or shows inconsistent readings, replace it promptly to avoid further engine issues.

Troubleshooting Common Issues

Despite proper maintenance, some problems related to the Nissan 28400 NDS 00 may arise:

Issue	Possible Cause	Solution
Check Engine Light ON	Faulty sensor or connection	Test with diagnostic scanner, replace if necessary
Erratic Engine Performance	Sensor interference or damage	Inspect, clean, or replace the part
Poor Fuel Economy	Incorrect sensor readings	Confirm calibration, replace if faulty
No Start or Starting Issues	Electrical connection problem	Recheck wiring and connectors

Where to Buy and Cost Considerations

When sourcing a Nissan 28400 NDS 00, consider the following:

- Authorized Nissan Dealerships: Guarantee genuine parts but may be pricier.
- Reputable Auto Parts Retailers: Offer OEM or high-quality aftermarket options.
- Online Marketplaces: Platforms like eBay or Amazon often have competitive prices but verify seller ratings and part authenticity.

Price Range:

- Typically ranges from \$50 to \$150, depending on the supplier and whether the part is OEM or aftermarket.

Final Thoughts: Is the Nissan 28400 NDS 00 Essential?

Yes ? especially if your vehicle relies on this part for critical engine functions. Replacing or maintaining the Nissan 28400 NDS 00 ensures your Nissan vehicle continues to run smoothly, efficiently, and within emissions standards.

By understanding its role, specifications, and maintenance needs, you can make informed decisions about repairs, replacements, and troubleshooting. Always consult your vehicle's service manual or a professional mechanic when in doubt, and prioritize quality parts for longevity and reliability.

In summary, the Nissan 28400 NDS 00 is a vital component that supports your vehicle's engine management and emissions systems. Proper knowledge and care can extend its lifespan, improve your vehicle's performance, and contribute to a cleaner environment.

Question What is the Nissan 28400 NDS 00 part used for? The Nissan 28400 NDS 00 is a specific component used in Nissan vehicles, typically related to the engine or transmission system, serving a crucial function in vehicle operation. **How do I identify the Nissan 28400 NDS 00 part in my vehicle?** The part can be identified by its part number label or by consulting your vehicle's service manual, which includes detailed diagrams and specifications for the Nissan 28400 NDS 00 component. **Where can I purchase a genuine Nissan 28400 NDS 00 part?** You can purchase the Nissan 28400 NDS 00 from authorized Nissan dealerships, official parts distributors, or reputable online auto parts retailers that specialize in Nissan components. **Are there compatible alternatives to the Nissan 28400 NDS 00 part?** While some aftermarket parts may claim compatibility, it is recommended to use genuine Nissan parts like the 28400 NDS 00 to ensure proper fit and performance unless advised otherwise by a certified mechanic. **What are common issues associated with the Nissan 28400 NDS 00?** Common issues may include wear-related failures, improper installation, or compatibility problems, which can lead to vehicle performance issues or warning lights. Regular inspection and proper maintenance are advised. **How do I replace or install the Nissan 28400 NDS 00 component?** Installation should be performed by a qualified mechanic or technician following Nissan's official repair procedures to ensure safety and proper functioning of the part. **Is the Nissan 28400 NDS 00 part covered under warranty?** Warranty coverage depends on your vehicle's warranty policy and the source of the part. Genuine Nissan parts purchased through authorized channels typically come with a warranty; check with your dealer for specific details.

Related keywords: Nissan, 28400 NDS 00, Nissan parts, Nissan engine control module, Nissan

ECU, Nissan electronic control unit, Nissan diagnostics, Nissan repair parts, Nissan sensors, Nissan automotive electronics

CALCANEAL OSTEOTOMY BONE GRAFT CPT

calcaneal osteotomy bone graft cpt is a specialized surgical procedure often performed to correct deformities or misalignments of the heel bone, known as the calcaneus. This operation involves making precise cuts in the calcaneus to realign the bone structure, often supplemented with a bone graft to promote healing, stability, and optimal correction. Accurate documentation of this procedure using the appropriate CPT (Current Procedural Terminology) codes is vital for healthcare providers for billing, insurance claims, and medical record-keeping. Understanding the intricacies of calcaneal osteotomy, the role of bone grafting, and the specific CPT codes associated with these procedures can significantly impact clinical documentation and reimbursement processes.

Understanding Calcaneal Osteotomy and Bone Grafting

What is a Calcaneal Osteotomy?

A calcaneal osteotomy is a surgical procedure that involves cutting and realigning the calcaneus bone to correct deformities such as flatfoot (pes planus), cavus foot deformity, or hindfoot varus/valgus deformities. The goal of this surgery is to restore proper alignment, improve function, and reduce pain.

Types of Calcaneal Osteotomy

The specific type of osteotomy performed depends on the deformity being corrected:

- **Dwyer Osteotomy:** Lateral closing wedge osteotomy used to correct hindfoot varus.
- **Medializing Calcaneal Osteotomy:** Repositions the calcaneus medially to correct hindfoot valgus or flatfoot deformity.
- **Z-osteotomy:** A versatile osteotomy that allows multi-plane correction.

Role of Bone Grafting in Calcaneal Osteotomy

Bone grafting is often employed to fill gaps created during osteotomy, promote healing, and provide structural support. Types of grafts include:

- **Autografts:** Bone harvested from the patient, usually from the iliac crest.
- **Allografts:** Donor bone tissue from a cadaver.
- **Cancellous or Cortical Grafts:** Depending on the structural needs.

Using a bone graft can enhance stability, facilitate faster union, and improve surgical outcomes, especially in cases requiring significant correction or in patients with compromised healing capacity.

Coding for Calcaneal Osteotomy with Bone Graft

Understanding CPT Codes Related to Calcaneal Osteotomy

CPT codes are standardized codes used to document medical procedures. For calcaneal osteotomy with bone grafting, the coding depends on the specific procedure performed and whether a bone graft is utilized.

Common CPT Codes for Calcaneal Osteotomy and Bone Graft

The following are the primary CPT codes relevant to calcaneal osteotomy procedures involving bone grafting:

- **28510:** Osteotomy, calcaneus, with or without internal fixation ? This code encompasses various types of calcaneal osteotomies, including lateral closing wedge, medializing, or Z-osteotomy, when performed with internal fixation. It does not specify whether a bone graft was used, but it includes the procedure as performed.
- **20900:** Bone graft, included, or allograft, or autograft (includes harvesting), for spine surgery, femur, or pelvis ? If bone graft is harvested from the pelvis (iliac crest) specifically for the calcaneal osteotomy, this code can be used to bill for the graft harvesting procedure.
- **20902:** Bone graft, other (e.g., allograft, cancellous), including harvesting ? Used when grafts are obtained from other sites or from cadaveric sources.

Coding Considerations

When billing for calcaneal osteotomy with bone graft, consider the following:

- Use the main procedure code (e.g., 28510) to describe the osteotomy.
- Use separate codes (e.g., 20900, 20902) if a graft is harvested from the patient or obtained externally.
- Ensure documentation specifies the type of osteotomy performed, the use of bone graft, and the source of the graft.

- Verify payer-specific policies, as some insurers may bundle grafting codes with the main procedure or require modifier usage.

Detailed Breakdown of Coding Scenarios

Scenario 1: Calcaneal Osteotomy with Autograft Harvested from Iliac Crest

In this case:

- Use **CPT 28510** to report the osteotomy procedure.
- Use **CPT 20900** for harvesting an autograft from the iliac crest.
- Apply modifier -59 if necessary to indicate distinct procedural services.

Example Documentation: "Lateral closing wedge calcaneal osteotomy with autograft harvested from the iliac crest."

Scenario 2: Calcaneal Osteotomy with Allograft Bone Graft

In this case:

- Report **CPT 28510** for the osteotomy.
- Report **CPT 20902** for the allograft bone used.
- Ensure documentation specifies the use of donor tissue.

Scenario 3: Calcaneal Osteotomy Without Bone Graft

If no graft is used:

- Only report **28510**.
- The absence of grafting simplifies coding and billing.

Additional Considerations in Coding and Documentation

Importance of Accurate Documentation

Proper documentation is essential for:

- Supporting the medical necessity of the procedure.
- Clarifying whether a bone graft was used and its source.
- Determining appropriate CPT coding and avoiding claim denials.

Modifiers and Payer Policies

Modifiers such as -59 or -XS can be used to indicate distinct procedural services if multiple procedures are performed during the same operative session. Always check payer-specific policies to ensure appropriate modifier application.

Billing Tips

- Include detailed operative reports describing the type of osteotomy and grafting performed.
- Use the correct CPT codes for both the osteotomy and graft harvesting or placement.
- Verify coverage policies for bone graft materials, especially allografts and synthetic options.

Emerging Trends and Advances in Calcaneal Osteotomy Coding

Use of Digital Tools and Coding Software

Modern coding software can assist clinicians and coders in selecting the most accurate CPT codes based on procedural details.

Innovations in Grafting Materials

Advancements in biocompatible graft substitutes and synthetic bone grafts may influence future coding practices, potentially leading to new CPT codes or modifiers.

Impact of Medicare and Payer Changes

Stay informed about updates in coding policies, reimbursement rates, and coverage guidelines from Medicare and private insurers to ensure compliant billing practices.

Conclusion

Accurate coding of calcaneal osteotomy with bone grafting using appropriate CPT codes is crucial for proper documentation, reimbursement, and compliance. Understanding the different types of osteotomies, graft materials, and corresponding CPT codes enables healthcare providers to streamline billing processes and avoid claim denials. Always ensure detailed operative notes specify the procedures performed and materials used, and stay updated on coding guidelines and payer

policies to optimize financial and clinical outcomes.

Remember: Proper documentation and coding are the foundations of effective healthcare billing. When in doubt, consult current CPT code manuals, payer policies, or a certified professional coder to ensure accuracy and compliance.

Calcaneal Osteotomy Bone Graft CPT: An In-Depth Review

When it comes to complex foot deformities and pathologies, calcaneal osteotomy with bone grafting stands out as a pivotal surgical intervention. The procedure's success hinges on accurate technique, appropriate graft selection, and meticulous documentation, especially when billing and coding with the CPT (Current Procedural Terminology) system. This comprehensive review delves into the nuances of calcaneal osteotomy bone graft CPT, exploring indications, surgical techniques, graft options, coding intricacies, and postoperative considerations.

Understanding Calcaneal Osteotomy and Its Clinical Significance

Calcaneal osteotomy involves surgically cutting and realigning the calcaneus (heel bone) to correct deformities or alleviate pain. This procedure is frequently indicated in cases such as:

- Hallux valgus (bunion correction with calcaneal osteotomy)
- Flatfoot deformity (valgus heel correction)
- Haglund's deformity
- Sever's disease (in pediatric cases)
- Intractable heel pain or posterior heel spurs

The goal of the osteotomy is to restore proper biomechanics, redistribute load, and improve function. Bone grafting may be added to enhance healing, especially in cases with bone loss, poor vascularity, or significant osteotomy gaps.

Surgical Techniques Involving Calcaneal Osteotomy

Various types of calcaneal osteotomies exist, each tailored to specific deformities:

Types of Calcaneal Osteotomy

- Dwyer Calcaneal Osteotomy

- Lateral closing wedge osteotomy to correct calcaneal valgus deformity.
- Medializing Calcaneal Osteotomy
- Shifts the tuberosity medially to reduce heel valgus, often used in flatfoot correction.
- Inverted Osteotomy
- For calcaneal deformities involving inversion or varus deformities.
- Cavus correction osteotomy
- Addresses high arch deformities.

Bone Graft Integration in Osteotomies

Grafting is often incorporated to:

- Fill gaps created during osteotomy.
- Promote faster and more reliable union.
- Provide structural support in cases of poor bone quality.

Bone Grafts in Calcaneal Osteotomy: Types and Selection

Bone grafts augment healing and structural stability. The main types include:

Autografts

- Iliac Crest Bone Graft
- Gold standard due to osteogenic, osteoinductive, and osteoconductive properties.
- Considered when large graft volume is needed.
- Fibular Graft
- Used in reconstructive procedures with structural needs.

Allografts

- Cadaveric Bone Grafts
- Avoid donor site morbidity.
- Processed to reduce immunogenicity.
- Demineralized Bone Matrix (DBM)
- Offers osteoinductive properties.
- Typically used as adjuncts rather than structural grafts.

Synthetic Grafts

- Ceramics and Bone Substitutes
- Such as hydroxyapatite or tricalcium phosphate.
- Used as fillers or in combination with other grafts.

Selection Considerations:

- Patient factors (age, comorbidities)
- Defect size and location
- Surgeon preference and experience
- Availability and cost

Billing and Coding for Calcaneal Osteotomy Bone Graft: CPT Considerations

Proper CPT coding is crucial to ensure accurate reimbursement and compliance. The key aspects include:

Primary CPT Codes for Calcaneal Osteotomy

- 28675: Osteotomy, calcaneus (e.g., Dwyer, medializing, or other calcaneal osteotomy) with or without removal of exostosis or bony deformity

- 28676: Osteotomy, calcaneus, with bone graft, including internal fixation, when performed

Note: CPT codes for calcaneal osteotomy are often selected based on whether a bone graft is used

and whether internal fixation is involved.

Bone Graft CPT Codes

- 20900: Autograft, bone (includes harvesting); cancellous
- 20902: Allogeneic graft, bone, morselized or putty form
- 20910: Bone graft, hemicortical; each additional site
- 20999: Unlisted procedure, bone or cartilage ? used when no specific code exists, or for unique grafting techniques.

Modifiers and Documentation

- Modifier 51: Multiple procedures
- Modifier 50: Bilateral procedures
- Modifier 59: Distinct procedural service (e.g., separate grafting and osteotomy if performed separately)

Proper documentation should specify:

- The type of osteotomy performed.
- The use and type of bone graft (autograft, allograft, synthetic).
- The fixation method.
- The reason for grafting (e.g., large defect, poor bone quality).

Intraoperative and Postoperative Considerations

Intraoperative Protocols

- Precise osteotomy execution to prevent malalignment.
- Adequate exposure to visualize the osteotomy site.
- Selection of appropriate graft material based on defect size.

- Secure fixation with screws, plates, or staples.
- Application of grafts: whether morselized or structural.

Postoperative Management

- Immobilization in a cast or boot.
- Non-weight bearing period typically lasting 6-8 weeks.
- Radiographic monitoring for union, graft incorporation, and alignment.
- Physical therapy focusing on gradual return to weight bearing and gait.

Complications and Outcomes

While calcaneal osteotomy with bone grafting is generally effective, potential complications include:

- Nonunion or delayed union
- Infection
- Graft rejection or resorption
- Neurovascular injury
- Residual deformity or malalignment
- Hardware failure

Proper surgical technique, patient selection, and adherence to postoperative protocols mitigate risks.

Emerging Trends and Future Directions

Advancements in graft materials and surgical techniques continue to evolve:

- Use of growth factors (e.g., BMPs) to enhance healing.
- Development of biodegradable fixation devices.
- Incorporation of 3D printing for custom grafts and guides.
- Improved understanding of biomechanics for optimizing osteotomy angles and fixation.

Summary and Final Thoughts

Calcaneal osteotomy bone graft CPT coding encapsulates a complex intersection of surgical technique, graft biology, and reimbursement policies. Accurate documentation and understanding of the specific procedure performed are essential for appropriate coding. Surgeons must stay informed

about evolving CPT codes, graft options, and best practices to ensure optimal patient outcomes and compliant billing.

This procedure remains a cornerstone in correcting hindfoot deformities, providing lasting relief and improved biomechanics for patients. With ongoing innovations, the integration of new graft materials and surgical approaches promises to further enhance the success rates of calcaneal osteotomies in the future.

In conclusion, mastering the nuances of calcaneal osteotomy with bone grafting—from indications and techniques to CPT coding—is vital for orthopedic surgeons, coders, and billing specialists alike. A thorough understanding ensures precise documentation, appropriate reimbursement, and ultimately, better patient care.

Question What is the CPT code for calcaneal osteotomy with bone grafting? The CPT code commonly used for calcaneal osteotomy with bone grafting is 28400, but specific codes may vary based on the procedure details and coding guidelines. Are there different CPT codes for various types of calcaneal osteotomy procedures? Yes, different CPT codes exist depending on the specific type of calcaneal osteotomy performed, such as medial displacement osteotomy (28405) or calcaneal lengthening (28410), with bone grafting codes potentially added accordingly. When is a bone graft indicated during calcaneal osteotomy? A bone graft is indicated when there is a need to fill a defect or enhance healing, especially in cases of large corrections, non-union risk, or significant osteotomy gaps. What are the key factors influencing billing and coding for calcaneal osteotomy with bone graft? Factors include the specific procedure performed, whether autograft or allograft was used, the extent of bone correction, and whether any additional procedures were performed, all impacting CPT coding and reimbursement. Is there a specific CPT code for bone grafting during calcaneal osteotomy? Yes, CPT code 20900 or 20902 may be used for bone grafts, depending on whether the graft is cancellous or cortical, and the source of the graft material. What documentation is required to support billing for calcaneal osteotomy with bone graft? Documentation should include detailed operative reports specifying the type of osteotomy, graft material used, location, size of the graft, and any intraoperative findings to support the CPT codes billed. Are there any recent updates to CPT codes related to calcaneal osteotomy and bone grafting? Updates are periodically released by the AMA; clinicians and coders should consult the latest CPT codebook or resources for any recent changes or additions specific to calcaneal osteotomy and bone graft procedures. How does the choice of graft material affect CPT coding for calcaneal osteotomy procedures? The type of graft (autograft, allograft, synthetic) can influence the CPT code used, with specific codes designated for different graft sources and types, impacting billing and reimbursement processes.

Related keywords: calcaneal osteotomy, bone graft, CPT codes, heel surgery, calcaneal fracture, foot surgery, orthopedic procedures, bone grafting codes, hindfoot surgery, heel osteotomy

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