SWORDFISH WN-6200S

Instruction Manual for Swordfish 6200S Rubber Well Nuts

Brand: SWORDFISH | **Model:** WN-6200S

1. Introduction

The Swordfish 6200S Rubber Well Nuts are designed to provide a secure, vibration-resistant, and watertight fastening solution. These nuts are made from durable rubber with a brass insert, suitable for various applications where a blind fastener is needed or where vibration isolation is important. This manual provides essential information for the proper installation, operation, and maintenance of your Swordfish 6200S well nuts.

Key Features:

- 1/4"-20 Thread Size
- Head Diameter: 19.05mm, Overall Length: 21.1mm
- Shank Length: 16.35mm, Shank Diameter: 12.7mm
- Head Thickness: 4.75mm, Hole Size: 12.7mm
- Grip Range: 0.8-4.7mm

2. Setup and Installation

Proper installation ensures the optimal performance and longevity of the well nuts. Follow these steps carefully:

1. **Prepare the Mounting Surface:** Ensure the surface where the well nut will be installed is clean and free from debris.
2. **Drill the Hole:** Drill a hole with a diameter of **12.7mm (0.5 inches)**. The hole should be clean and smooth to allow for proper insertion of the well nut.
3. **Insert the Well Nut:** Gently push the rubber well nut into the drilled hole until the flange sits flush against the mounting surface.
4. **Secure the Component:** Align the component to be fastened over the well nut. Insert a 1/4"-20 threaded screw through the component and into the brass insert of the well nut.
5. **Tighten the Screw:** Gradually tighten the screw. As the screw is tightened, the brass insert will pull the rubber body, causing it to expand and create a secure, vibration-dampening, and watertight seal against the

mounting surface. Do not overtighten, as this can damage the rubber.



Figure 2.1: A single Swordfish 6200S Rubber Well Nut. This image shows the black rubber body with the internal brass threaded insert, ready for installation.

3. Operating Principles

The Swordfish 6200S well nut operates on a simple yet effective principle. When a screw is inserted into the brass threaded insert and tightened, it pulls the insert towards the mounting surface. This action causes the soft rubber body of the well nut to compress and expand radially behind the mounting surface, forming a bulge. This bulge creates a strong, secure grip against the material, while the flange on the front side prevents the nut from pulling through. The rubber material also provides excellent vibration isolation and a watertight seal, making it ideal for marine, automotive, and industrial applications.

4. Maintenance

Swordfish 6200S Rubber Well Nuts are designed for durability and require minimal maintenance.

- **Inspection:** Periodically inspect installed well nuts for any signs of wear, cracking, or degradation of the rubber, especially in environments exposed to extreme temperatures or chemicals.
- **Cleaning:** If necessary, clean the exterior of the well nuts with a mild soap and water solution. Avoid harsh chemicals or solvents that could damage the rubber.
- **Storage:** Store unused well nuts in a cool, dry place away from direct sunlight and extreme temperatures to preserve the integrity of the rubber material.

5. Troubleshooting

If you encounter issues during installation or use, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Well nut spins when tightening screw.	Hole drilled is too large, or rubber is not gripping.	Ensure hole size is exactly 12.7mm. If already installed, remove and replace with a new well nut in a correctly sized hole.

Problem	Possible Cause	Solution
Nut does not create a tight seal.	Insufficient tightening, incorrect grip range, or damaged rubber.	Tighten screw further (without overtightening). Verify the material thickness is within the 0.8-4.7mm grip range. Inspect the well nut for damage before installation.
Screw does not thread into the brass insert.	Incorrect screw size or damaged threads.	Ensure you are using a 1/4"-20 threaded screw. Check the screw and the brass insert for damaged threads. Replace if necessary.

6. Specifications

Model Number	WN-6200S
Thread Size	1/4"-20
Head Diameter	19.05mm
Overall Length	21.1mm
Shank Length	16.35mm
Shank Diameter	12.7mm
Head Thickness	4.75mm
Hole Size Required	12.7mm
Grip Range	0.8-4.7mm
Material	Rubber (body), Brass (insert)
Color	Black
Manufacturer	Swordfish Tools Inc

7. Warranty Information

For specific warranty details regarding the Swordfish 6200S Rubber Well Nuts, please refer to the manufacturer's official warranty policy. Generally, products purchased may be eligible for return or replacement within **30 days** of purchase, subject to the seller's return policy. Please retain your proof of purchase for any warranty claims.

8. Support

If you require further assistance or have questions not covered in this manual, please contact Swordfish Tools Inc. directly.

- **Manufacturer:** Swordfish Tools Inc
- **Online Store:** Visit the SWORDFISH Store on Amazon