The Spring JSWAG/JAvFOWG Technical Interchange Meeting is scheduled for April 6-9, 2020 in Phoenix, Arizona. For more information, please email jswag@navy.mil.

**Announcements**

- The Wiring Awareness (806881), Fiber Optic Awareness (806707) and Joint Service Wiring Manual Maintenance Techniques (806994) DVDs can be ordered by calling 888-743-4662 or by submitting a ticket at [http://www.dimoc.mil/customer/contact.html](http://www.dimoc.mil/customer/contact.html)
- Need help locating information on connectors, contacts or accessories? If so, email us at jswag@navy.mil.

**Resources**

- [Tool-less Shield Termination](http://www.navair.navy.mil/jswag)

Data analysis shows that the most common area for wiring damage is within twelve inches of the connector. Wiring repairs on shielded harnesses are very common repairs. To affect these repairs, the shield has to be removed by cutting off the existing shield termination band (M85049/128™) and sliding the shield back to access the wiring behind the connector (Figure 1). The NAVAIR Wiring Systems Team worked with industry partners using a Cooperative Research and Development Agreement, to develop and test a new tool-less shield termination band for the most typical shield termination connector backshells. As a result of these efforts, the Mil-Dtl-32628 and the Mil-Dtl-32628/01 specifications were published. They define a spring band which is reusable, installed and removed without special tools and meets the performance requirements of the SAE AS85049/128™ one-time use shield termination band. The M32628/01 spring band incorporates a tri-dent feature which facilitates installation and removal (Figure 2).

![Figure 1. Typical/Legacy EMI/RFI Shield Termination Configuration](image1.png)

![Figure 2. M32628/01 Shield Termination Spring Band](image2.png)

Unlike the legacy one-time use band the new M32628/01 has a part number etched on for easy identification (Figure 3). The four size bands (M32628/01-10 thru -13) cover all shell sizes of common circular connector backshells in SAE 85049/82™ thru /90™. These EMI/RFI backshells employ the standard .25 inch wide banding platform for shield termination (Figure 4).

![Figure 3. M32628/01 Spring Band Marking](image3.png)

![Figure 4. M32628/01 Installed Shield Termination Spring Band](image4.png)
In addition to the minimum mechanical and electrical performance requirements, the new M32628/01 spring band was also vibration tested as installed on and meeting requirements defined in AS50151™, Mil-Dtl-38999 connectors and SAE AS85049™ circular connector accessories. These tests subjected various connector shell sizes two eight hours of vibration in two axis each. The spring bands retained the shield, were not damaged and had the same or better electrical performance then before the vibration tests.

The installation and inspection procedures have been developed verified, and recently published in the joint service maintenance manual (NA 01-1A-505-1, in WP 011 01). Before the M32628/01 spring is installed, it is first uncoiled (Figure 5).

To ensure a good form-fit and necessary performance, the M32628/01 is installed after the metallic over-braid shield is compressed/formed on top the connector accessory banding platform. Then the spring band is coiled onto the backshell and excess braid is trimmed off (Figure 6).

* Some images courtesy of Isodyne Inc.