



## **SO-239 Add-On Kit**

**Direct Coax Feed for the  
Hustler BTV Series Antennas**

**DXE-AOK-DCF**

DXE-AOK-DCF-INS-Rev 1d



DXE-AOK-DCF Shown installed on a Hustler BTV Series Antenna

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## Introduction

The **DXE-AOK-DCF** Direct Coax Feed assembly by **DX Engineering** for the **Hustler® BTV** series antennas allows direct connection from a coaxial cable with a PL-259 connector.

## Features

- Laser Cut Stainless Steel Bracket and Stainless Steel Hardware
- High Quality SO-239, PTFE insulation, 14 gage copper insulated wire link with weather sealed connections pre-installed
- Provides a positive coaxial connection to the antenna system, rated at 1500+ watts
- Can be positioned in three configurations
- Custom Manufactured for the Hustler® BTV series antennas
- Allows easy removal of coaxial cable for maintenance

## Parts Included

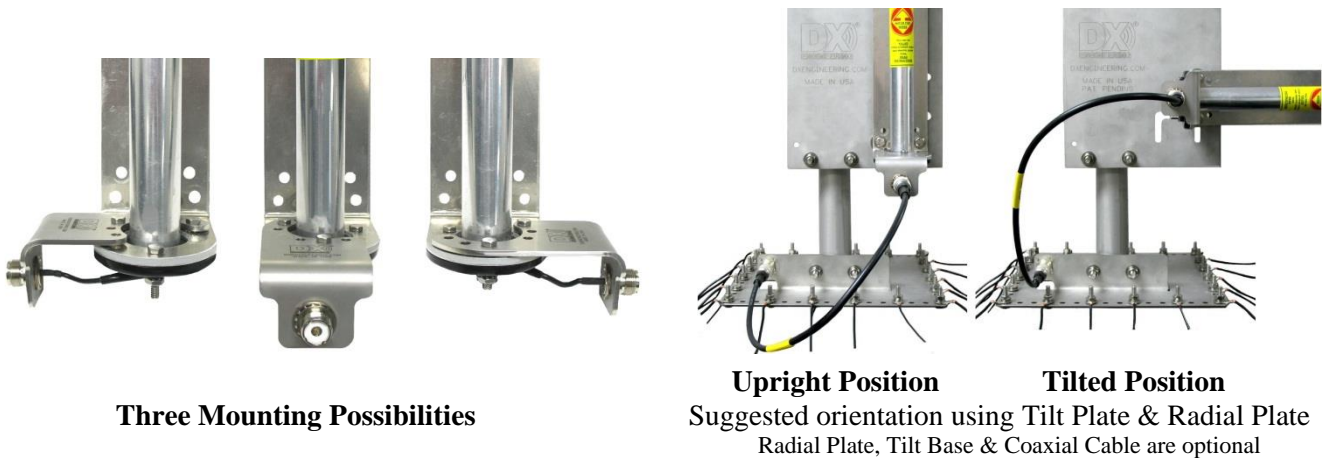
1 - SO-239 and insulated wire link with star washer, nut, and weather sealed connections installed		
1 - Laser Cut Stainless Steel Bracket	5 - #10 Star Washers	1 - 1/4" x 0.5 OD Flat Washer
3 - 10-24 x 1" Hex Head Bolts	1 - 1/4" Star Washer	1 - 1/4" Aluminum Spacer
1 - 1/4-20 X 1" Phillips Head Screw	3 - 10-24 Nuts	1 - 1/4" Split Washer

## Tools Required

3/8" and 5/16" Wrenches or Nut Drivers, 3/4" Wrench, # 3 Phillips Head Screw Driver

## Installation

Depending on your antenna configuration, you may install the **DXE-AOK-DCF** in one of three ways (**Figure 1**). The direction of the SO-239 will depend on your particular installation set up. Ensure the direction chosen allows the coaxial cable to be properly connected. When the patented **DXE-TB-3P Tilt Base** for Hustler® BTV Antennas is being used, allow clearance for the coaxial cable when tilting.



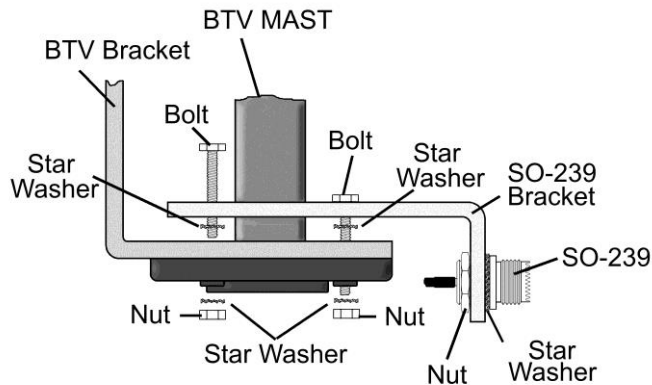
**Figure 1**

If your BTV is already installed, you may want to remove the antenna from the base to allow easy access to the bottom of the antenna bracket where the feedline is connected. Remove and discard the existing coaxial connection and the original slotted head screw at the feedpoint of the BTV antenna.

Remove the existing three bolts and hardware at the bottom of the BTV mounting bracket. New replacement stainless steel hardware is included in this kit (**Figure 2**).

Install the SO-239 into the bracket using the 5/8" star washer and 5/8" nut as shown in **Figure 2**. When installing stainless steel hardware, it is suggested that **JTL-12555 Jet-Lube SS-30 Anti-Seize** be used to allow easier future maintenance.

Position the bracket so the SO-239 is facing the direction you have chosen. Install the three new 10-24 x 1" stainless steel bolts, five - #10 stainless steel star washers, and three 10-24 stainless steel nuts. **On each of two bolts that go through the bracket, place a star washer between the SO-239 bracket and the BTV mounting bracket (Figure 2). The other three star washers are used between the nuts and the black BTV base. Do not over tighten to avoid damage to the black plastic BTV base.**

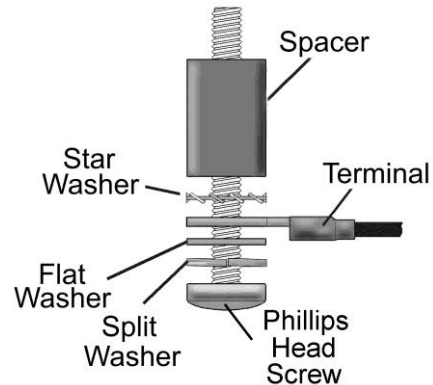


**Figure 2**

Install the insulated and weather sealed wire link terminal to the BTV antenna feedpoint using the new spacer, star washer, terminal from the SO-239, flat washer, split washer, and Phillips head screw (**Fig. 3**).



**Figure 3**



Remount the antenna if you removed it earlier. When using a **DXE-RADP-1P Radial Plate**, connect the optional coaxial cable jumper from the SO-239 bracket to the radial plate bulkhead connector.

## Weatherproofing

After firmly attaching your existing coaxial cable PL-259 to the SO-239, the PL-259 and SO-239 should be weatherproofed using **TES-2155** rubber splicing tape which is a conformable self-fusing rubber electrical insulating tape. For outdoor use, the rubber splicing tape should be protected from UV deterioration with an overwrap of **TES-06132** for all weather applications.

Peel back the protective covering. Tightly wrap the **TES-2155**. When wrapping, stretch the rubber splicing tape up to twice its normal length. Wrap tightly around the coaxial cable and connectors. Overlap each wind of the tape by about 50%. Use the **TES-06132** as an overwrap to give the assembly UV protection. Cover the **TES-2155** splicing tape completely.



## Optional Items

**TES-2155** - 3M Temflex™ 2155 Rubber Splicing Tape. Conformable self-fusing rubber electrical insulating tape. It is designed for low voltage electrical insulating and moisture sealing applications. For outdoor use, it should be protected from UV deterioration with an overwrap of **TES-06132**



**TES-06132** - Scotch® Super 33+. Highly conformable super stretchy tape for all weather applications. This tape provides flexibility and easy handling for all around performance. It also combines PVC backing with excellent electrical insulating properties to provide primary electrical insulation for splices up to 600V and protective jacketing. Both tape products are available from DX Engineering.



### **JTL-12555 Jet-Lube™ SS-30 Pure Copper Anti-Seize 12555**

Jet-Lube™ SS-30 Pure Copper Anti-Seize is the top choice of engineers and technicians in government, industry and leading Amateur Radio contest stations, for protecting mechanical assemblies of aluminum tubing, general hardware and copper grounding systems. On bonded metal surfaces Jet-Lube™ SS-30 assures electrical and RF conductivity while preventing oxidation and corrosion. Surpassing the capabilities of other aluminum anti-oxidants, the wide temperature range of Jet-Lube™ SS-30 prevents long-term drying and caking, and allows easy disassembly and effortless cleaning of parts. It contains a high concentration of copper flakes, a requirement for heavy loads or compression; controlled frictional characteristics allow the surfaces of nuts and bolts to be tightened to their design torque specifications. This anti-seize product assures full hydraulic efficiency by allowing the metal surfaces to slide over each other without damaging metal-to-metal contact. Jet-Lube™ SS-30 is also designed to work as a similar and dissimilar component between two metal surfaces to prevent seizing and galvanic action. The SS-30 compound formula improves conductivity and ground continuity - and will not melt in high temperatures. Jet-Lube™ SS-30 Pure Copper Anti-Seize Features include: Meets MIL-PRF-907E spec, K-factor: 0.13, Service rating: -65 degrees F (-54 degrees C) to 1800 degrees F (820 degrees C), SS-30 Resistivity (ohm-CM x 108) 5



### **DXE-8UDX002 24 Inch RG-8 Foam, Coax Cable Assembly**

This DX Engineering cable assembly uses high quality RG-8 coaxial cable and includes Silver/Teflon® PL-259 (UHF) connectors installed at each end. The coaxial cable features a flexible 11 gauge stranded copper center, foam polyethylene dielectric, 97% coverage bare copper shield and a PVC jacket. Connectors are soldered rather than crimped and an adhesive lined shrink tubing provides weather protection.



### **DXE-8XDX002 24 Inch RG-8X Foam, Coax Cable Assembly**

This DX Engineering cable assembly uses high quality RG-8X coaxial cable and includes Silver/Teflon® PL-259 (UHF) connectors installed at each end. The coaxial cable features a flexible 16 gauge stranded copper center, foam polyethylene dielectric, 95% coverage bare copper shield and a PVC jacket. Connectors are soldered rather than crimped and an adhesive lined shrink tubing provides weather protection.



## Technical Support

If you have questions about this product, or if you experience difficulties during the installation, contact DX Engineering at (330) 572-3200. You can also e-mail us at: [DXEngineering@DXEngineering.COM](mailto:DXEngineering@DXEngineering.COM)

For best service, please take a few minutes to review this manual before you call.

## Warranty

All products manufactured by DX Engineering are warranted to be free from defects in material and workmanship for a period of one (1) year from date of shipment. DX Engineering's sole obligation under these warranties shall be to issue credit, repair or replace any item or part thereof which is proved to be other than as warranted; no allowance shall be made for any labor charges of Buyer for replacement of parts, adjustment or repairs, or any other work, unless such charges are authorized in advance by DX Engineering. If DX Engineering's products are claimed to be defective in material or workmanship, DX Engineering shall, upon prompt notice thereof, issue shipping instructions for return to DX Engineering (transportation-charges prepaid by Buyer). Every such claim for breach of these warranties shall be deemed to be waived by Buyer unless made in writing. The above warranties shall not extend to any products or parts thereof which have been subjected to any misuse or neglect, damaged by accident, rendered defective by reason of improper installation, damaged from severe weather including floods, or abnormal environmental conditions such as prolonged exposure to corrosives or power surges, or by the performance of repairs or alterations outside of our plant, and shall not apply to any goods or parts thereof furnished by Buyer or acquired from others at Buyer's specifications. In addition, DX Engineering's warranties do not extend to other equipment and parts manufactured by others except to the extent of the original manufacturer's warranty to DX Engineering. The obligations under the foregoing warranties are limited to the precise terms thereof. These warranties provide exclusive remedies, expressly in lieu of all other remedies including claims for special or consequential damages. SELLER NEITHER MAKES NOR ASSUMES ANY OTHER WARRANTY WHATSOEVER, WHETHER EXPRESS, STATUTORY, OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS, AND NO PERSON IS AUTHORIZED TO ASSUME FOR DX ENGINEERING ANY OBLIGATION OR LIABILITY NOT STRICTLY IN ACCORDANCE WITH THE FOREGOING.

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