



# Thrust Bearing Bypass Ground Kit

DXE-BBGK-SERIES-INS Rev. 0b

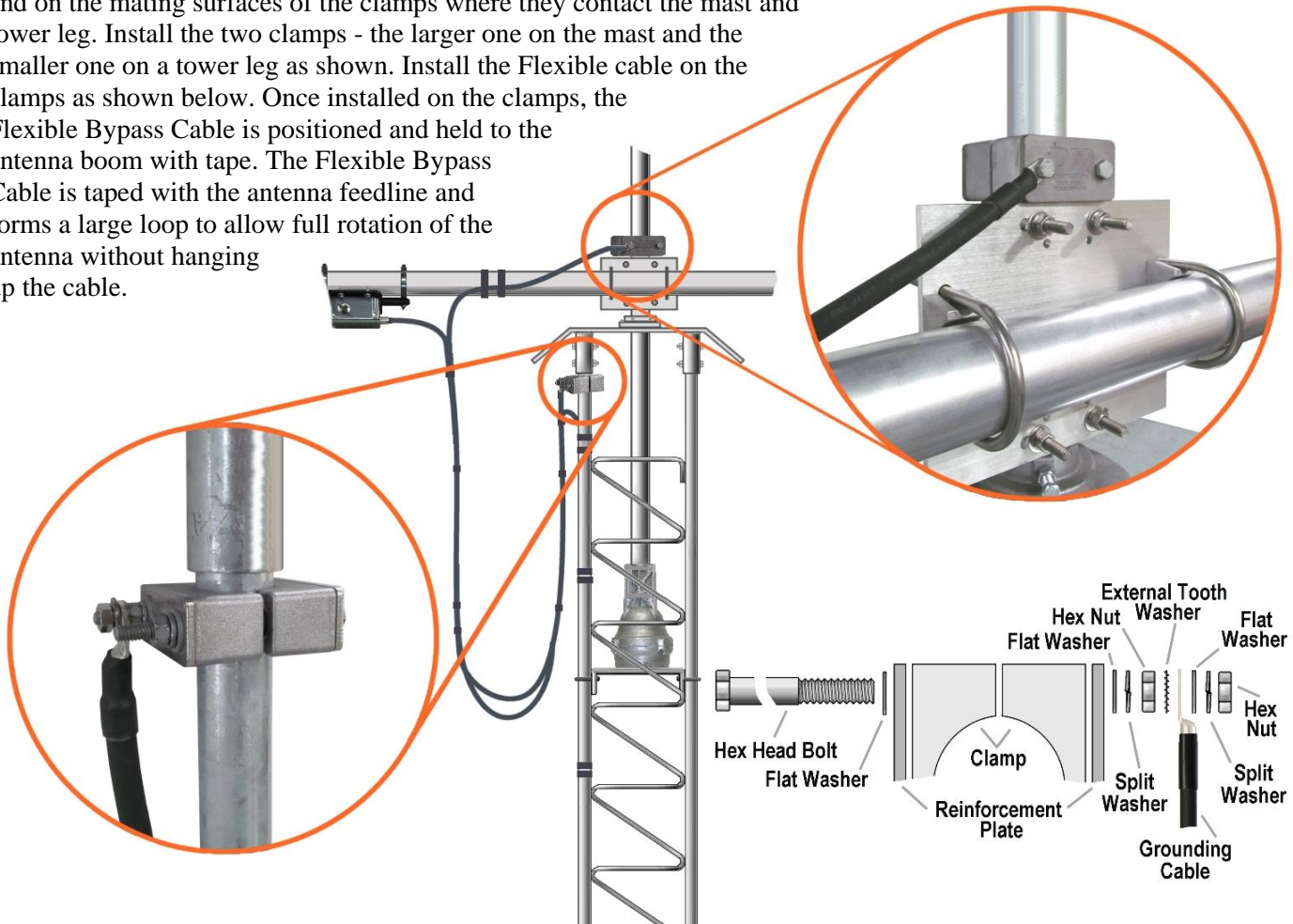
The DX Engineering Thrust Bearing Bypass Ground Kits are used as an added lightning protection scheme allowing energy an easy path from the tower mast to a leg on the tower. This alternate path helps to avoid energy that would normally flow through the thrust bearing which could freeze up or otherwise ruin the bearing. The kits are available for two inch and three inch diameter mast sizes and the round tower legs found on Rohn 25G, 45G and 55G tower sections. The Flexible Bypass Cable is 10 feet long and made of 1 AWG (780 strands of 0.010") copper wire with a flexible UV resistant EPR insulation. The ends of the Flexible Bypass Cable are terminated with ring terminals (1/4" at one end, 3/8" at the other end) and sealed.

There are four Bearing Bypass Ground Kits available:

Part Number	Description
<b>DXE-BBGK-2-25-P</b>	Bearing Bypass Ground Kit for 2" Mast for Rohn 25G/45G
<b>DXE-BBGK-2-55-P</b>	Bearing Bypass Ground Kit for 2" Mast for Rohn 55G
<b>DXE-BBGK-3-25-P</b>	Bearing Bypass Ground Kit for 3" Mast for Rohn 25G/45G
<b>DXE-BBGK-3-55-P</b>	Bearing Bypass Ground Kit for 3" Mast for Rohn 55G

Each kit contains: One Flexible Bypass Cable, one DX Engineering Super Duty Clamp, one DX Engineering Heavy Duty Clamp, Backing Plates and hardware for mounting the clamps and the flexible bypass cable. Parts needed but not supplied are: **JTL-12555** Jet-Lube™ SS-30 Anti-Seize and **TES-06132** Scotch 33 Electrical Tape.

Installation is straight forward and is shown in the drawings below. Use the Jet-Lube SS-30 on all of the hardware and on the mating surfaces of the clamps where they contact the mast and tower leg. Install the two clamps - the larger one on the mast and the smaller one on a tower leg as shown. Install the Flexible cable on the clamps as shown below. Once installed on the clamps, the Flexible Bypass Cable is positioned and held to the antenna boom with tape. The Flexible Bypass Cable is taped with the antenna feedline and forms a large loop to allow full rotation of the antenna without hanging up the cable.



Examining the Flexible Bypass Cable should be part of your annual tower inspection and it should be replaced if the cable shows signs of wear or cracking insulation or other signs of damage.

## Optional Accessory Items

### 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. An environmentally preferred thread lubricant and conductive termination compound, Jet-Lube™ SS-30 helps keep your equipment in serviceable condition. 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



### 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.



## 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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