The OSJ146/440 does **NOT** require a ground plane.

Ideal for mounting:
- In an attic
- On a roof vent pipe
- On a wooden (or Metal) pole
- On Fiberglass or Plastic Vehicles (Motorhomes, Trucks, Boats)

Mount it just about anywhere.

Single feed for both 2m & 70cm (SO239)

Covers 143-149 MHz & 430-450 MHz with a VSWR of less than 1.5:1.

Omni-Directional

The OSJ146/440 is a Heavy Duty Antenna. The elements are made from 3/8” solid aluminum with a heavy duty angle mounting bracket.

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**Guarantee**

No hassle refund

If you are not completely satisfied with any ARROW ANTENNA Product it can be returned for a FULL refund less shipping and handling within 90 DAYS of purchase date.

**SIMPLY THE BEST**

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**Model**

**OSJ 146/440**

Open Stub J-Pole

We don’t invent antennas.

We simply build them better.
<table>
<thead>
<tr>
<th>Part #</th>
<th>Price</th>
<th>Model OSJ 146/440 Packing List</th>
</tr>
</thead>
<tbody>
<tr>
<td>J14611</td>
<td>$10.</td>
<td>3/8&quot; X 19 3/4&quot; Element with Coupling Nut</td>
</tr>
<tr>
<td>J44012</td>
<td>$6.</td>
<td>3/8&quot; X 5 7/8&quot; Element with 2 Stainless Jam Nuts.</td>
</tr>
<tr>
<td>J14613</td>
<td>$15.</td>
<td>3/8&quot; X 57 1/2&quot; Element with 2 Stainless Jam Nuts.</td>
</tr>
<tr>
<td>J14623</td>
<td>$23.</td>
<td>Custom 3/8&quot; X 57 1/2&quot; TWO Piece Element</td>
</tr>
<tr>
<td>J14614</td>
<td>$20.</td>
<td>3/16&quot; X 1 1/2&quot; X 1 1/2&quot; X 5 1/2&quot; Assembly Bracket</td>
</tr>
<tr>
<td>52S206</td>
<td>$4.</td>
<td>Saddle Clamp for mounting to Mast up to 1 1/2&quot; - (2 for $4.)</td>
</tr>
<tr>
<td>J14605</td>
<td>$4.</td>
<td>SO-239 - 3/8-24 Antenna Mount</td>
</tr>
<tr>
<td>J14606</td>
<td>$1.</td>
<td>Nylon Shoulder Washer for Antenna Mount above - (2 for $1.)</td>
</tr>
<tr>
<td>25C275</td>
<td>$1.</td>
<td>2 3/4&quot; Bolt, Nut &amp; Lock Washer (all Stainless)</td>
</tr>
</tbody>
</table>

(Please add $8.00 S & H per order. Thank you.)

Assembly Instructions

1. Attach the 19 3/4” element to the Assembly / Mounting Bracket as shown in the picture on the left. Place nylon shoulder washer on top of bracket as shown with shoulder down.
2. Tighten with 5/8” wrenches.

Caution: Do NOT over tighten. About 30 ft./lb. Max.

3. Remove one nut from the 57 1/2” element.
4. Screw 57 1/2” element into Assembly / Mounting Bracket in threaded 3/8” hole nearest end of Bracket.
5. Replace second nut and tighten with 9/16” wrench.
6. Repeat steps 1 to 3 for 5 7/8” element. Put element in the other 3/8” threaded hole.

Put a small amount of grease on threads before assembly.
SWR

SWR is basically a way of testing the impedance of your Antenna System. The Antenna System has two parts.

1. Coax and connectors.
2. Antenna.

Before you can test or tune the Antenna, you have to test the other half of the system first, the Coax & Connectors.

**Brand New Coax can be Defective or Damaged.**

To test the Coax you will need a 50 ohm Dummy Load and an SWR Meter or Antenna Analyzer.

Note: Some of the MFJ 269 Analyzers don’t work right. - - (eHam reviews on the MFJ269) - - The MJF 259B works Great.

Connect the Dummy Load to the end of the coax instead of the Antenna. Connect SWR Meter or Antenna Analyzer to the other end of the coax.

Check the SWR on all frequencies. SWR should be 1.0:1 on all frequencies. If the SWR is not 1.0:1 or if the SWR varies with frequency, then the Coax is Not up to the task.

**Important:** Some Coax can test fine on VHF but not at UHF.

Also a known problem with some remote Antenna Switches.

Example from eHam Reviews

I have had my MFJ269 for about 5 years. It works ok. On VHF and HF it is dead on. But on UHF I do not trust it. I also have a Bird and I compared several antennas tuned with the MFJ269 and the Bird and the MFJ269 was wrong everytime on the UHF side. I killed one UHF final when I relied on the MFJ269 for tuning. This antenna was checked with the Bird after the finals died and was found to have an SWR of 5:1+. Yet when checked with the MFJ269 it showed fine. I now use the Bird for everything but HF tuning. The MFJ269 still seems to work ok in this range and is nice for tuning my Buddy Pole for portable ops. It will never see VHF or UHF antennas again.
More Mounting Tips

The OSJ 146/440 is not tolerant of metal above the assembly bracket. Make sure your mast does not extend above the assembly bracket. Also do not mount it near metal (above the assembly bracket). Keep it at least 10 feet from metal or other conductors.

The OSJ 146/440 gives better performance on the 70cm band when it is installed with 4 to 6 loops in the coax directly below the antenna. Loops should be 4 to 6” in diameter. This acts as a balun. See the picture below.

Lastly, grounding the antenna is not necessary for performance. But, it can be grounded for lightning protection by grounding the assembly bracket. This will not affect performance.
CHECKLIST FOR OUR SHIPPING DEPARTMENT

Circle Antenna Being Built:

OSJ 146/440       OSJ 146/440 ELC
(Two Piece Element)

___ 3/8" x 57 1/2" Element with 2 Stainless Jam Nuts.
___ 3/16" x 1 1/2" x 1 1/2" x 5 1/2" Assembly Bracket

OR

___ 3/8" x 57 1/2" **TWO Piece** Element with 2 Stainless Jam Nuts
___ 3/16" x 1 1/2" x 1 1/2" x 5 1/2" Assembly Bracket with extra hole for split element.

___ 3/8" x 19 3/4" Element with Coupling Nut
___ 3/8" x 6 7/8" Element with 2 Stainless Jam Nuts.

___ Saddle Clamp
___ SO-239 Stud & Nylon Shoulder Washer
___ 2 @ 2 3/4" Bolts, Nuts & Lock Washers for saddle