CONSTRUCTION

SEE FIGURE 1.

power supply chassis. This is the smaller chassis.

Begin building your KNIGHT VFO by mounting the parts on the

INTRODUCTION

Size: 6½" x 6½" x 1½"

power supply: 6x4 rectifier

AF Output: approx. 10 volts

Frequency Coverage: 9000 to 15000 kHz

Specifications

THE KNIGHT VFO (Variable Oscillator) is designed to give the ever-

3rd harmonic. If not printed on the part, can be found with the aid of the

circuits. Work from the actual diagram of all parts and wiring.

Study the pictorial diagram and note how the parts are mounted.

base picture, diode detector, crystal rectifier, power transformer, and a solen-
**Figure 3. Samples of Good Soldering.**

1. Coat bare metal.
2. Press flat side of a hot iron to bare metal.
3. Apply solder.
4. Hold the iron in place for 10-15 seconds.
5. Remove the iron and solder.

**Figure 2. The One-Two-Three of Good Soldering.**

1. Use a 100-watt iron.
2. Press flat side of the iron to the joint.
3. Apply solder.
4. Hold the iron in place for 10-15 seconds.
5. Remove the iron and solder.

**Heres How To Do It.**

1. Coat the tip of a hot iron with solder.
2. Press flat side of the iron to the joint.
3. Apply solder.
4. Hold the iron in place for 10-15 seconds.
5. Remove the iron and solder.

**Use Enough Heat.**

No matter how excellent the materials, work will not work if the joints are loose without good soldering. An electronic unit will not work if your connections take a longer time to heal after you have used enough heat. If you do not use enough heat, the joint will not conduct electricity.

**The Difference between Good Soldering (enough heat and proper solder) and Poor Soldering.**

If you have not used enough heat, the joint will not conduct electricity.

1. Coat the joint with solder.
2. Press the hot iron to the joint.
3. Apply solder.
4. Hold the iron in place for 10-15 seconds.
5. Remove the iron and solder.
WIRING HINTS

The soft tubing supplied is called "spaghetti". Spaghetti is used to cover the bare end leads of some of the parts. Whenever it is necessary to use some of this spaghetti, the exact length is given. The spaghetti must cover the entire lead where there is a chance it will touch another lead, a connection, or the chassis.

The coils are sensitive to heat. When you solder the connections to the coils be careful not to touch the winding with the iron and do not allow the iron to remain close to the coils any longer than necessary to make the solder connection.

Unless otherwise stated all the leads on the resistors, capacitors and transformers should be as short as possible. Figure 2 shows how a component lead should be pulled through a terminal so that the part is tightly mounted. After a lead is pulled through a terminal bend it around the terminal and cut off the excess lead length. Bare wires and bare leads not connected to the same terminal must not accidentally touch each other or the chassis.

SEE FIGURE 4.

(1) Solder one of the red leads from T-1 to pin 6 of V-4. Solder the other red lead from T-1 to pin 1 of V-4.

(2) Trim each green lead from T-1 to 2 1/4 inches. Remove the insulation from 1/2 inch of the end of each. Coat both of them with solder. Connect but do not solder one green lead to terminal 3 of TS-1. Connect but do not solder the other green lead to terminal 4 of TS-1.

(3) Trim each black lead from T-1 to 3 inches. Remove the insulation from 1/2 inch of the end and coat each end with solder. Connect but do not solder one black lead to terminal 2 to TS-1. Connect but do not solder the other black lead to terminal 1 to TS-1.

(4) Solder one of the leads from L-5 to pin 7 of V-4. Connect but do not solder the other lead to terminal 1 of TS-2.

(5) Connect but do not solder one end of an orange wire to terminal 3 of TS-1. Solder the other end to pin 4 of V-4.

(6) Connect but do not solder one end of another orange wire to terminal 4 of TS-1. Solder the other end to pin 3 of V-4.

(7) Connect but do not solder one end of a yellow wire to terminal 1 of TS-2. Connect but do not solder the other end to terminal 5 of TS-1.

SEE FIGURE 5.

(1) Mount C-13, the 40 MFD, 450 V electrolytic capacitor, and a ground lug as shown in Figure 5. The red lead must be toward TS-2. Use the same larger machine screw and nut to fasten both.

(2) Trim the red lead of C-13 to 1 1/2 inches. Remove the insulation from 1/2 inch of the end and coat the bare end with solder. Solder it to terminal 1 of TS-2. Connect but do not solder the black lead to the ground lug.

(3) Solder one end of an orange wire to pin 7 of V-3. Connect but do not solder the other end to the ground lug.

(4) Connect but do not solder the red and yellow lead from T-1 to the ground lug.

(5) Connect but do not solder one end of R-7 to pin 1 of V-3. Connect but do not solder the other end to terminal 5 of TS-1.

(6) Solder one end of a brown wire to the ground lug. Pass the other end through the grommet in the top of the chassis.

(7) Solder one end of a white-yellow wire to pin 1 of V-3. Pass the other end through the grommet in the top of the chassis.

(8) Solder one end of a white-red wire to terminal 5 of TS-1. Pass the other end through the grommet in the top of the chassis.

(9) Connect but do not solder one end of a white wire to terminal 4 of TS-1. Pass the other end through the grommet in the top of the chassis.

(10) Connect but do not solder one end of another white wire to terminal 3 of TS-1. Pass the other end through the grommet in the top of the chassis.

(11) Solder one end of a yellow wire to terminal 4 of TS-1.

(12) Solder one end of another yellow wire to terminal 3 of TS-1. Now, twist these two yellow wires together.

(13) Solder one of the twisted yellow wires to one of the terminals on the pilot lamp socket. Solder the other twisted yellow wire to the other terminal on the pilot lamp.

(14) Solder one end of a grey wire to terminal 2 of TS-1. Pass the other end through the grommet in the top of the chassis.

(15) Solder one end of another grey wire to terminal 1 to TS-1. Pass the other end through the grommet in the top of the chassis.
FIGURE 6.
HOW TO MOUNT THE PARTS ON THE OSCILLATOR CHASSIS

- TERMINAL STRIP 1
- GROMMET
- GROUND LUGS
- TERMINAL STRIP 3
- C-3AB
- POWER AND OUTPUT SWITCH S-2AB
Check all of the work against Figure 5. You have finished wiring the power supply chassis of your KNIGHT VFO. All connections must be strong mechanically and all should now be well soldered.

The ends of the long wires which pass through the top grommet will be connected when most of the wiring on the oscillator chassis is finished.

**SEE FIGURE 6.**

- Mount C-3A, B, the tuning capacitor, on top of the oscillator chassis. The two terminals on each side of C-3A, B extend through the slots in the chassis, but must not touch the sides of the slots. Use three of the larger machine screws. Tighten one into the upper left hole, one into the lower left hole, and the other into the upper right hole of C-3.

- Now mount terminal strip 3 (TS-3), the other single terminal strip which has the solder terminal to the left of the mounting tab when viewed from the rear. Use another of the larger machine screws to mount TS-3 and tighten it into the lower right hole of G-3.

- Mount the light colored socket for V-1, the 6BH6 oscillator tube, inside the chassis in the large hole nearer the center. The keyway or wide space between two of the pins must be toward the left as shown in Figure 6. Place a ground lug under each mounting nut and use two of the smaller machine screws and nuts to fasten V-1.

- Mount the last bakelite socket for V-2, the 6AK6 buffer tube, from inside the chassis. The keyway or wide space between two of the pins must be toward the back of the chassis as shown in Figure 6. Put a ground lug under the front mounting nut and use two of the smaller machine screws and nuts to fasten V-2.

- Mount terminal strip 4 (TS-4), in the right rear corner of the chassis. This is the 3-terminal strip with the center terminal and the mounting tab made in one piece. Use one of the larger machine screws and nuts to fasten it.

- Mount terminal strip 5 (TS-5), the other three terminal strip, on the back of the chassis. Use two of the larger machine screws and nuts to fasten it.

- Insert one of the grommets in the hole in the upper right corner of the chassis. Insert the other grommet in the hole in the back of the chassis.

**SEE FIGURES 6 AND 7.**

The front panel and oscillator chassis are fastened together with S-1, S-2A, B, S-3, and J-1.

Mount S-1, the band switch, in the large hole on the left front of the chassis and the panel. The three terminals must be toward the open side of the chassis. Screw a large nut over the threaded bushing several turns, place one of the large lockwashers on the shaft, and insert the shaft through the hole in the chassis and the hole in the panel. Tighten another large nut over the threaded bushing. See Figure 7.

**FIGURE 7. HOW TO MOUNT THE PANEL WITH A CONTROL OR SWITCH**

Mount S-2A, B, the ON-OFF and Output switch, in the same manner in the large hole on the right front of the chassis and panel. The three terminals which are close together must be on the left toward the closed side of the chassis.
These...
( ) Solder one end of a 2½ inch bare wire to pin 1 of V-1. The other end will be connected later.

( ) Solder one end of R-4, 22,000 ohm resistor (red, red, orange), to pin 1 of V-2. Connect but do not solder the other end to the ground lug under the right mounting nut of V-1.

( ) Solder one end of R-5, 470 ohm resistor (yellow, violet, brown) to the ground lug under the right mounting nut of V-1. Pass the other end through pin 2 and connect it to pin 7 of V-2. Do not solder pin 2. Solder pin 7.

( ) Solder one end of C-9, .002 MFD disc capacitor, to pin 2 of V-2. Connect but do not solder the other end to the ground lug under the front mounting nut of V-2.

( ) Connect but do not solder one end of C-12, 400 MMFD mica capacitor, to pin 5 of V-2. Connect but do not solder the other end to terminal 3 of TS-4.

( ) Insert one end lead of C-10, .002 MFD disc capacitor, through a 1 inch length of spaghetti. Connect but do not solder it to pin 6 of V-2. Connect but do not solder the other end to the ground lug under the front mounting nut of V-2.

( ) Solder one end of R-6, 27,000 ohm resistor (red, violet, orange) to pin 6 of V-2. The other end will be connected later.

( ) Connect but do not solder one end of C-7, .002 MFD disc capacitor, to terminal 1 of TS-4. Connect but do not solder the other end to terminal 2 of TS-4.

( ) Connect but do not solder one end of C-11, .002 MFD disc capacitor, to terminal 2 of TS-4. The other end will be connected later.

( ) Connect but do not solder one end lead of L-6, the 2.5 mH choke, to pin 2 of V-1. Connect but do not solder the other end to terminal 1 of TS-3.

( ) Solder one end lead of C-4, 780 MMFD mica capacitor, to pin 2 of V-1. The other end will be connected later.

( ) Solder one end of a yellow wire to terminal 1 of TS-3. The other end will be connected later.

( ) Check all of the work against Figure 9.

SEE FIGURE 10.

Pass all of the wires coming from the power supply chassis through the grommet in the upper right corner of the oscillator chassis.

( ) Solder the white-yellow wire from the power supply chassis to terminal 1 of TS-4.

( ) Solder the brown wire from the power supply chassis to the ground lug under the front mounting nut of V-2.

( ) Solder one of the white wires from the power supply chassis to pin 3 of V-2.

( ) Solder the other white wire from the power supply chassis to pin 4 of V-2.

( ) Solder one of the grey wires from the power supply chassis to terminal 2 of S-23.

( ) Connect but do not solder the other grey wire from the power supply chassis to terminal 1 of S-2A.

All of the wires coming from the power supply chassis are now connected, except the white-red wire. It will be connected when the slug-tuned coils, L-3 and L-4, are mounted.

( ) Mount S-3, the lever switch. Position this switch so that the terminals are in a line up and down. Use one of the large nuts to fasten it.

( ) Mount J-1, the jack, so the three terminals are toward the open side of the chassis. Use one of the large nuts to fasten it.

( ) Solder one end of a yellow wire to terminal 3 of J-1. Solder the other end to terminal 5 of S-3.

( ) Solder the loose end of the yellow wire from terminal 1 of TS-3 to terminal 6 of S-3.

( ) Pass one end of a yellow wire through terminal 1 and connect it to terminal 2 of J-1. Solder both of these connections. Solder the other end to terminal 3 of S-3.

( ) Solder one end of a white-orange wire to terminal 3 of TS-5. Bring it over to the edge of the open side of the chassis, along the side of the chassis to the front, and across to S-3, as shown in Figure 10. Solder the other end to terminal 4 of S-3.

( ) Solder one end of a white-yellow wire to terminal 2 of TS-5. Position it the same as the wire in the step above. Solder the other end to terminal 1 of S-3.

( ) Solder one end of a white-green wire to terminal 1 of TS-5. Posi-
Mount a spade bolt on each side of L-1, the oscillator tank coil wound on the large form. The nuts must be inside L-1 as shown in Figure 12.

Mount L-1 from the inside of the chassis to the left of V-1. Use two of the larger nuts to fasten it.

Solder the bare wire from terminal 3 of S-1 to terminal 1 of L-1.

Connect but do not solder the bare wire from pin 1 of V-1 to terminal 2 of L-1.

Solder the loose end of C-4 to terminal 2 of L-1.

Prepare both ends of the output cable as shown in Figure 13. Remove 3/4 of an inch of the outer insulation from each end of the cable. Unravel the shielding back to the cut off insulation. Twist the unraveled shielding tightly. Coat it with solder. Remove 1/4 inch of the insulation from the inner conductor on one end. On the other end remove 1/2 inch of the insulation from the inner conductor. Twist the inner conductor at each end tightly and coat it with solder.
( ) Insert the solder coated shielding and the 1/2 inch long inner conductor into the two prongs of J-2. J-2 is the plug which fits into the crystal socket of your transmitter. Tighten the screw of each prong so that the wires are held firmly.

SEE FIGURE 11.

( ) Pass the other end of the cable through the grommet right behind TS-4. Solder the inner conductor to terminal 3 of TS-4. Solder the shielding to terminal 2 of TS-4.

( ) Pass the line cord through the same grommet. Knot it 8 inches from the bare ends on the inside of the chassis. Split the line cord back about 2 inches. Solder one section of the cord to terminal 1 of S-2B. Solder the other section to terminal 1 of S-2A.

CAUTION: Never touch any part of the under chassis wiring while the line cord plug is connected to the power outlet. NEVER use or test the unit on or near a GROUNDED METAL bench, radiator, or other grounded metal objects.

SEE FIGURES 14 AND 15.

L-3 and L-4 are the same. It makes no difference which one is mounted first.

( ) Mount L-3 from the inside in the large hole nearer the open side of the chassis. Put the metal cap through the hole, line up the small locating pin with the small hole beside the larger hole, and push firmly on the end of the coil until the locking springs snap into position.

( ) Mount L-4 in the same way.

( ) Pass the loose end lead of C-11 through terminal 2 of L-4 and connect it to terminal 1 of L-3. Do not solder the connection to L-3. Solder terminal 2 of L-4.

( ) Connect but do not solder the loose end of R-6 to terminal 1 of L-3.

( ) Solder the end of the white-red wire from the power supply chassis to terminal 1 of L-3.

( ) Solder one end of a green wire to terminal 2 of S-2A. Solder the other end to terminal 1 of L-1.

( ) Solder one end of another green wire to terminal 3 of S-2A. Solder the other end to terminal 2 of L-3.

( ) Solder one end of a yellow wire to terminal 4 of S-2A. Solder the other end to pin 5 of V-2.

( ) Check all of the work. Every connection must be strong mechanically, and all should now be well soldered. A single loose or unsoldered connection will make the unit intermittent, or it may not work at all.

The wiring of your KNIGHT VFO is completed.

SEE FIGURE 17.

( ) Insert the threaded shaft of the pilot light jewel through the large hole near the top center of the panel. Place the pilot light bracket over the threaded shaft. Position the bracket so that it is over the terminal strip. Tighten the nut over the threaded shaft. Insert the pilot lamp in the socket.

( ) Now, mount the power supply chassis to the front panel. Use four of the larger machine screws, lockwashers, and nuts to fasten the power supply chassis to the panel.
FIGURE 17. HOW TO MOUNT THE POWER SUPPLY CHASSIS TO THE PANEL

There are two tubes on each chassis.

Install V-1, 6BH6, and V-2, 6AK6, on the oscillator chassis. Install the OA2 voltage regulator tube, V-3, in the socket on the corner of the power supply chassis. Install the 6X4 rectifier tube, V-4, in the other socket on the power supply chassis.

Close the plates of the tuning condenser, C-3, entirely. Place the dial pointer on the shaft of the tuning condenser. Line up the black line on the pointer with the horizontal line along the bottom of the scales on the left side. Tighten the set screw against the shaft of C-3. Push the large knob on the shaft and tighten the set screw. See Figure 18.

Put the two small knobs on the other two shafts. Tighten the set screws against the flat portion of the shaft.

CAUTION: NEVER touch any part of the under-chassis wiring while the line cord plug is connected to the power outlet. NEVER use or test the unit on or near a grounded metal bench, radiator, or other grounded metal objects.

It is best not to use the VFO with your transmitter or radiate a signal into an antenna until you have calibrated it and it is operating within the limits of the various amateur bands.

HOW TO TEST AND OPERATE YOUR KNIGHT VFO

The rotary switch, S-1, marked "BANDS", is a two position switch. The 80 meter band is covered by one position of the switch which places section "A" of the tuning capacitor and C-1, the air padder capacitor, in the frequency determining circuit. The 40, 20, 15, and 10 meter bands are covered by the other position of the Band Switch, which puts C-3B and C-2 in the frequency determining circuit.

The rotary switch, S-2A, II, marked "OUTPUT", is a three position switch. The AC power is removed when the switch is in the first position, the 80 meter band is covered by the second position which puts L-3 into the output circuit. The third position of the switch puts L-4 into the output circuit for the 40, 20, 15, and 10 meter bands.

The lever switch, S-3, is marked "CALIBRATE - STANDBY - TRANSMIT". This switch has an extra set of terminals so that auxiliary equipment may be controlled from the VFO position. The Standby position of this switch enables you to leave the VFO continuously in operating condition without waiting for it to warm up for each transmission.

Your key plugs directly into the KEY jack on the front panel of the KNIGHT VFO.

To check the operation of the KNIGHT VFO, plug the line cord into the power source. Put the lever switch in the Standby position. Turn the Band Switch to either position. Turn the Output Switch to the position corresponding to the Band Switch. The pilot light should light. The tubes should also light, and the OA2 should have a violet glow.

If the pilot light and the tubes light, you are ready to install the KNIGHT VFO in the cabinet.

Remove the line cord plug from the power source. Push the line cord plug and the output cable plug through the large hole in the back of the cabinet.

Slide the VFO into the cabinet. Use the ten small sheet metal screws supplied in the holes in the front panel and tighten them into the holes in the cabinet. Tighten the two larger sheet metal screws into the holes in the back of the oscillator chassis.

You are now ready to calibrate your KNIGHT VFO.

HOW TO CALIBRATE YOUR KNIGHT VFO

Do not use your KNIGHT VFO with your transmitter until you have
HOW TO ASSEMBLE THE DIAL POINTER AND KNOB

FIGURE 18.
calibrated it, because it may be operating outside of the bands.

Before you begin calibration of the KNIGHT VFO turn the slug on L-3, which is the coil nearer the edge of the back of the cabinet, almost all of the way into the coil form. Turn the slug on L-4 almost all of the way out of the coil form. This approximate adjustment will assure more than enough output for calibration purposes.

If you have a 1750 KC crystal, install it in your transmitter. If not, use any crystal whose frequency is within the 80 meter band, preferably near the low end of the band.

Place the oscillator of your transmitter in operation, but do not apply plate voltage to the final amplifier. Turn on your receiver and the VFO. Set S-3 on the VFO in the Calibrate position. Allow about one-half hour for all of the equipment to warm up.

In the meantime, clip a piece of wire about 10 inches long to the inner conductor prong of J-2. Lay this piece of wire close to the antenna connection of your receiver.

Set the VFO Band Switch to the position marked "80". Set the Output switch to the position marked "80". Set the dial pointer of the VFO to 3.5 megacycles if you are using a 1750 KC crystal. If not, set the dial of the VFO according to the frequency of the crystal. Tune the receiver to pick up the signal from the transmitter. Close the plates of C-1, which is the air padder near the top of the cabinet, by turning the screw.

When the equipment is warmed up, adjust C-1 until the VFO zero beats with the crystal as heard in the receiver.

This adjustment completes the calibration of the 80 meter band.

To calibrate the other bands, turn the Band Switch to the position marked "40, 20, 15, and 10", and the Output Switch to the position marked "40, 20, 15, and 10". If you have a 3500 KC crystal, use it in your transmitter, or you can use the 1750 KC crystal, to calibrate the other bands. Set the dial of the VFO to 7.0 megacycles, if you are using either a 3500 or 1750 KC crystal. If not, use any crystal whose frequency falls within either the 40, 20, 15, or 10 meter band, and set the dial of the VFO accordingly. Tune the receiver to pick up the signal from the transmitter. Adjust C-2 to zero beat with the crystal as heard in your receiver.

After you have calibrated the VFO and it is operating within the limits of each band, set the dial of the VFO to the middle of the 80 meter band. Tune the circuits of your transmitter for resonance and then adjust the slug-tuned coil L-3, the coil nearest the side of the cabinet, for maximum reading on the first metered circuit of your transmitter.

Set the Band Switch and the Output Switch to the other band position. Set the dial of the VFO to 14 megacycles. Tune the circuits of your transmitter for resonance and then adjust the slug-tuned coil L-4 for maximum reading on the first metered circuit of the transmitter. By making this adjustment at 14 megacycles all of the other bands will also be operating with good output.

**SERVICE HINTS**

If you have followed all of the previous instructions carefully your KNIGHT VFO should operate properly. If it does not, here are some helpful hints:

If there is no power supplied to the other tubes, and the 6X4 rectifier tube lights, check L-5 and R-7. Also check the other tubes.

If there is operation with the Band Switch and Output Switch in the 40 meter band position, check the circuit components controlled by the 80 meter position of these two switches. Repeat this procedure for the other band components.

If your KNIGHT VFO still does not operate properly, have one of your friends, preferably another IAm, check your wiring.

**ALLIED’S SERVICE FACILITIES**

In the event that the kit still does not operate properly, we recommend the following:

Please write our Kit Department with full details, and include the stock number and the date of purchase of the kit. We may be able to determine any wiring error or replace a component which may be at fault.

This wired KNIGHT kit may be returned for inspection within 1 year after purchase. The kit will be placed in proper operating condition for $5.00. Faulty parts will be replaced without charge unless damage was caused in construction or because of a wiring error.

**PLEASE NOTE**: KITS WIRED WITH ACID CORE SOLDER OR ACID FLUX ARE NOT ELIGIBLE FOR REPAIR OR SERVICE AND WOULD HAVE TO BE RETURNED NOT REPAIRED AT YOUR EXPENSE.

Allied's facilities primarily provide an inspection and trouble-shooting service. Kits not completed, which require extensive work, will be returned collect with a letter of explanation.
of the turntable. The frequency setting of a VFO — measured in hertz — and the time constant of the VFO can change the frequency output of the VFO. There are two primary types of VFOs: parallel and series. Parallel VFOs are used in most high-frequency equipment, while series VFOs are used in low-frequency equipment. The choice of VFO depends on the type of equipment being used.

**How the Knight VFO Works**

The Knight VFO is a parallel type, which is composed of two transformers: one to amplify the input signal, and another to provide the necessary frequency. The transformers are connected in parallel, allowing the input signal to be divided between them. The output of the transformers is then combined to produce the final output signal.

**Technical Specifications**

- **Input Power**: 12V DC
- **Output Power**: 12V DC
- **Output Frequency**: 1 to 30 MHz
- **Size**: 4 x 6 x 1.5 inches

**Applications**

The Knight VFO is ideal for use in amateur radio, shortwave radio, and ham radio equipment. It can also be used in commercial and industrial applications where a stable frequency source is required.

**Maintenance**

- Keep the Knight VFO dry and away from humidity.
- Avoid using the Knight VFO in extreme temperatures.
- Regularly check the input and output connections for signs of wear.

**Warranty**

Allied Radio guarantees the Knight VFO for one year from the date of purchase.

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**Ordering Information**

To order the Knight VFO, please contact your local Allied Radio representative. The Knight VFO is available online at www.alliedradio.com.

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*Note: This manual is for informational purposes only. Always refer to the manufacturer's instructions for detailed installation and operation.*
FIGURE 19. SCHEMATIC DIAGRAM, KNIGHT VFO
### Parts List

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### Resistance Chart

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### Voltage Chart

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<td>V2</td>
<td>4.5</td>
<td>6.3V</td>
<td>6.3V</td>
<td>6.3V</td>
<td>6.3V</td>
</tr>
<tr>
<td>V3</td>
<td>4.5</td>
<td>6.3V</td>
<td>6.3V</td>
<td>6.3V</td>
<td>6.3V</td>
</tr>
<tr>
<td>V4</td>
<td>4.5</td>
<td>6.3V</td>
<td>6.3V</td>
<td>6.3V</td>
<td>6.3V</td>
</tr>
</tbody>
</table>

### Notes
- NC: No Connection
- If pin 3 shows 6.3V, pin 4 should show 0.
- If pin 3 shows 0, pin 4 should show 6.3V.
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