

R-390 Reflector February '04 Edited

From chacuff@cableone.net Sun Feb 1 01:06:09 2004
Subject: [R-390] Resistance Measurements and Trouble Shooting

Greetings Group,

I would look at what the predominant resistor tolerance is in the circuitry. For the Halli's 20% might be pretty standard. For a piece of Mil equipment I would expect no greater than 10%. I would use that as my reference while going through the checks. I think a circuit analysis would also be in order....you need to know what you are measuring in there and try to get under the bottom and break it down to more individual components when you find a resistance measurement that is out of whack from what the book says to expect. I have found that many of the high value resistors are effected the most by their age. Also if there are still all the old BBOD type caps in the circuit the resistance measurements will most likely be effected. (ugly red tiny chief caps in the old Halli's)

From ba.williams@charter.net Sun Feb 1 01:19:30 2004
Subject: [R-390] Looking for Ralph Sanserino

Found it: r.sanserino@worldnet.att.net Barry

From ba.williams@charter.net Sun Feb 1 01:25:08 2004
Subject: [R-390] ReCapping R-390A

Dan, Somebody posted a report by somebody a while back. I have it on another computer at the moment. The IERC shields with 'fingers' lining the inside of the shield transfer more heat from the tube than any other type of shield. The shiny ones seem to reflect heat back to the tube and actually raise tube temperatures. Chuck used to have a short list of tubes suggested for having shields. Most are best used unshielded. the other other Barry

From ba.williams@charter.net Sun Feb 1 01:48:42 2004
Subject: [R-390] Re: bad audio

Cecil, That does make a difference. Still, the audio isn't that terrible on a stock A, imho. It ain't great like the SP-660, but those are two different environments. I don't bandcruise a lot, so maybe I'm not missing a lot from the SW best stations. Speakers or headphones make a bigger difference to me than the filters. Maybe it is just impressions, but it seems to me that I get more audio 'data' from the tighter filters like station ID, what they are saying, etc than I do with wider filters and increased band noise and hets. Music is better on the SP, but is music that great on HF with any radio? Barry

From jbrannig@optonline.net Sun Feb 1 13:41:09 2004
Subject: [R-390] Resistance Measurements and Trouble Shooting

A few things to keep in mind. The charts in the manual are representative of all the radios and not unique to your particular radio....The type of meter in use will affect the voltage readings. A high impedance VTVM will give more accurate readings than a VOM and some DMM's have low

impedances. Also, bear in mind that many of the components are +/- 20% of the stated value.

Ideally, you would want to record the voltage and resistance measurements when the radio is operating properly. This would provide a unique reference against a future problem. Since many boatanchors are received in less than "pristine" condition we have to make a lot of assumptions. First, I check the power supply voltages. If the manual says that the plate supply should be 300VDC and you measure 290VDC, then expect all the plate voltages to be down 10%.

I create an Excel spreadsheet, in the same format as the voltage and resistance tables. The values (or adjusted values, as above) are entered into the appropriate cells. The measured values are entered below them. In adjacent cells I create a formula to "Test" the entered values. I use "Plus error" or "Minus error" messages as appropriate to indicate a value out of my defined parameters. This gives me a picture of the whole table and is useful for spotting trouble areas. Jim

From BRingwoo@csir.co.za Mon Feb 2 07:26:11 2004
Subject: [R-390] Re: bad audio

Oh dear, There I was thinking how nice it sounded through an EL84 amp and home-made speaker in the 16kHz position. The audio must be better than my ears - or is it that our local AM stations put out a high quality ? Bryce

From r390a@bellsouth.net Mon Feb 2 14:41:08 2004
Subject: [R-390] Re: bad audio

Yes, getting the audio out of the confines of the bandwidth limited audio deck of the 390A does help quite a bit. I have to agree the Super Pro is much much better when it comes to "listening quality", the SP-400 even more so. I foolishly sold the one I had and only have an SP-600 (actually 3 of them)

The SP-660, is that similar to the SP-666 which only picked up rap, heavy metal and 24 hour pro wrestling stations??? heehee. Tom

From wli@u.washington.edu Mon Feb 2 17:59:29 2004
Subject: [R-390] Resistance Measurements and Trouble Shooting

wrote: Subject: Re: [R-390] Resistance Measurements and Trouble Shooting >A few things to keep in mind. The charts in the manual are representative of all the radios and >not unique to your particular radio....The type of meter in use will affect the voltage readings. <snip>

Jim is quite correct in his suggestion. Our units are different, but they theoretically should be within 20% of the published voltage/resistance measurements. Measuring these values are facilitated by using 7- and 9-pin tube extenders (sometimes found at hamfests) and a good quality long VTVM probe tip. If you also enter the published values into your spreadsheet, anomalies are easy to spot. One operation that must be done (but is oft forgotten) is to set all the panel controls exactly as called out for in the manual, as they affect our measured values. This exercise may sound tedious at first glance, but the effort will pay off if and when our units act up or die on us. W. Li Mercer Island, WA

From David_Wise@Phoenix.com Mon Feb 2 21:53:07 2004

Subject: [R-390] Plastic Gears

I repaired one of the bevel gears in mine. The plastic they used shrinks over time, and eventually gets so tight on the metal core that it bursts.

I ground out the hole until when the break was squeezed shut it was a sliding fit on the core. Then I roughened the core and glued them together with JB Weld. A plastic wire tie held the break shut while the epoxy hardened. Not satisfied with this, I also reinforced the gear with a washer JB-Welded to its flat backside. (As with the main bond, I roughened the surfaces.) Being a bevel gear, the slight decrease in diameter was inconsequential. It's been trouble-free for a couple of years now.

This technique may also work on the spur gears.

One other thing. I found the detents to be ridiculously stiff on the Range and Deviation switches, and took out a couple of leaf springs from each. They're much lighter now (without being sloppy), which is very important for my unit as it doesn't have the original Range and Deviation knobs. No doubt the originals got their flanges broken off from the stiff detents! Love my 8640B, Dave Wise

From drewmaster813@hotmail.com Tue Feb 3 00:17:45 2004

Subject: [R-390] RE: ReCapping R-390A

George Kavanagh wrote: ** Just how big a project _is_ completely recapping an R-390A?

You are mostly recapping individual modules; that divides the project into a series of smaller sub-projects none of which is very large. A module can be recapped in reasonable time and the radio placed back in service; another module can be done at another time.

Removal of the BFO can in the IF module makes access to several capacitors there much easier. Make a notation of the connection points for the can's 3 leads.

Resistors can be checked and replaced as needed; quite often they drift out of tolerance (usually upward).

Wei-i Li comes to the rescue with his "Pearls of Wisdom"; a categorized collection of postings to this forum over the years. Go to r-390a.net, references, pearls of wisdom for much more information on recapping and other topics. Fascinating and Absorbing! Drew "Vicariously repairing and modifying R-390x via advice to others"

From jlkolb@cts.com Wed Feb 4 07:06:53 2004

Subject: [R-390] RE: HSR-2 vs 390a

wrote: > Those sound like some good ideas to check out...I had thought about the IF deck mod to replace the Mechanicals with some LC filtering or ceramics.

Older mechanical filters such as those used in the R-390A are 100 Kohms in/output resistance. Most ceramic filters, and the new torsion bar mechanical filters are 2 Kohms in/out. So swapping ceramic filters into the 390 would require some additional impedance transformation circuitry.

The Yeasu frDX-400 used transformers to get from the tube impedance levels down to the 2K for Kokusai or Murata filters, and another transformer to match back to the following IF amp grid.

I've got some mechanical and ceramic filter curves on my site <<http://members.cts.com/king/j/jlkolb>>
Some of the ceramics look pretty good. John

From djmerz@3-cities.com Thu Feb 5 19:02:56 2004
Subject: [R-390] Filter pins

Hi,

I'm trying to use a NIB 2 khz mechanical filter of 390a type as a substitute for the single ended type Collins filter that went into a nine pin socket in my Mackay tube radio. I have a couple of questions. Has anyone accomplished this or a similar adaption? I know the input is the upper end but I'm wondering whether the two pins on each end are "equal" with respect to ground - can I put the input connections either way on them? Similarly can I put the output connections either way on the lower end? There will probably be other problems, like getting the leads from the top to bottom to behave ok. My first inclination was to try to make it a plug-in unit with 9 pins but I'm starting to think maybe I should just pull the socket out and mount the filter in the hole, much as it's mounted in a 390a, and feed the top two leads thru added holes in the chassis. Any ideas? thanks, Dan.

From ToddRoberts2001@aol.com Thu Feb 5 21:01:50 2004
Subject: [R-390] Filter pins

Hi Dan,

I believe the Collins-type 9-pin plug-in mechanical filter as used in the Mackay tube receivers is the F455 J series, the same as is used in the 75A-4 receiver. Collins made a whole series of filters to plug in the 75A-4, the F455 J 05 (500 Hz) the F455 J31 (3.1KHz) the F455 J 60 (6.0KHz) and some in-between sizes. I think they made a F455 J08 and possibly a F455 J18 but not exactly sure. I think it would be best to keep the socket in place on the chassis and either look for F455 J series filters or make up your own plug-in replacements. That way you can always swap filters later on if needed or wanted. It is no problem to make up a 9-pin plug-in adapter for the R-390A series filter. Both terminals on each end of the filter are floating so there is really no "polarity" with them. I made up an adapter myself using a 9-pin plug and a short piece of aluminum tubing that would slip over the lower end of the R-390A filter to hold it in place. The bottom pins of the filter are directly wired to the appropriate pins on the 9-pin plug. I ran the top 2 leads down through 2 short lengths of RG-174/U miniature coax and thru a hole in the side of the aluminum tubing at the bottom to connect to the other 2 pins on the 9-pin socket. The shields of the RG-174/U are soldered together at the ground pin on the top of the filter. No impedance matching was needed and the plug-in filter adapter works great. I used an 8KHz R-390A filter for wider selectivity of the 75A-4. 73 Todd Roberts WD4NGG.

From jlkolb@cts.com Thu Feb 5 21:18:57 2004
Subject: [R-390] Filter pins

Either end of the R-390A F455N- series filters can be the input and either the output. The filters have 3 pins at each end, 1 gnd and 2 pins for the coil. Either of the two coil pins at each end can be the RF ground side. John

From K5IUO@sbcglobal.net Thu Feb 5 23:08:00 2004
Subject: [R-390] R-388 Info

I am new to this list and I am in hope that some of you can offer me some advice. I have an opportunity to obtain either a R-388 or an SP-600. Both are in very good condition. But my concern is to which one I should chose. My concern about both is really availability of parts etc for any problems that might occur in the future. I would appreciate all the help I can get and please contact me direct. Bud McClure
K5IUO Phoenix AZ

From schluensen@freenet.de Thu Feb 5 23:43:36 2004
Subject: [R-390] Tube Set 390A

My 67 EAC needs a complete tube replacement. I will look here in Germany for the tubes - but if I can't get some tubes (3TF7) - did someone know a good shop in the US for our 390A tubes? 73, Frank,
DK1LX

From ToddRoberts2001@aol.com Fri Feb 6 00:52:32 2004
Subject: [R-390] Tube Set 390A

writes: My 67 EAC needs a complete tube replacement. I will look here in Germany for the tubes -

Hi Frank,

as far as I know, Hank KN6DI has a good supply of the 3TF7 Ballast Tubes. Most of the other tubes used are fairly common 7 and 9 pin types except for the two 26Z5W rectifier tubes. If needed the 26Z5W's can be replaced with silicon diodes. Also someone on the e-place is currently selling a complete set of tubes for the R-390A minus the 3TF7. Antique Electronic Supply is a good source for tubes. 73 Todd Roberts WD4NGG.

From r390a@bellsouth.net Fri Feb 6 00:47:47 2004
Subject: [R-390] OT: 15 MHz WWV Spurs

Mildly off topic, but at least radio related to a degree. For the past couple days, NIST has been running a dirty transmitter!

Folks on various other mailing lists are reporting reception from all over the CONUS of spurs at +/- 26 KHz from WWV's 15 MHz frequency. I can hear them here at 14.974 and 15.026 at about S2 to S3, making it only down only around 40 dB from the main signal at S9. (My HP 8640B generator confirms the S meter to be sort of mostly accurate on my Icom 756 Pro, I double checked) Heck of a strong signal for such a boo boo, VOACAP calculates S2 to be around -8.16 dBuV, that calculating out to be about -115.5 dBm, or around .39 microvolts. (I was bored, sorry) Especially bad is that NIST is the one making the boo boo. Maybe I am being so hard on NIST because I work for a cal lab, dunno.

Take a listen Friday during daylight hours and see if it is still there. I it is on its 2nd or 3rd day of being there, and you'd think they would have it fixed by now. Tom KA4RKT Manchester, TN

From cfandt@netsync.net Fri Feb 6 01:53:03 2004

Subject: [R-390] Tube Set 390A

A *complete* tube replacement? Did something happen to the existing tubes?? Breakage, theft or just to replace old with new?

If just replacing all with new, you may be in for a complete alignment job. Prepare yourself for an adventure if you are not experienced :-)

But why replace all with new? Unless this unit has been run hard and absolutely to death, there will be many existing tubes who may still perform very well in their present positions. Or maybe the unit was run accidentally at 240 volt mains while set at 115 volts for a short time which caused some tubes to fail? Been there, done that myself :(

The 3TF7 could be replaced, as an emergency measure at least, with a 12BH7. It just controls the filament current to that required by the PTO tube filaments. Or even replace the PTO tubes with 12BA6's and short circuit the 3TF7 socket by plugging a thin copper wire into the two appropriate socket pins. Those fixes are very easy to reverse if you prefer to have a 3TF7 -whenever you find one. Regards, Chris

From JMILLER1706@cfl.rr.com Fri Feb 6 02:19:30 2004
Subject: [R-390] Tube Set 390A

Here is the Antique Electronic Supply Web site: <http://www.tubesandmore.com/> Also you often see complete 390a tube sets for sale on eBay. 73

From wa6knw@sbcglobal.net Fri Feb 6 02:35:33 2004
Subject: [R-390] Interesting item on eBay web site item# 3075110104: HAM RADIO RECEIVER ANTENNA COUPLER.W/HOUSE

Nice Receiver Antenna multicoupler. Price is a little stiff for me but I guess you couldn't buy the 20 each 692's for that.... RICH WA6KNW

Title of item: HAM RADIO RECEIVER ANTENNA COUPLER.W/HOUSE
Seller: dknh
Starts: Jan-29-04 18:59:00 PST
Ends: Feb-05-04 18:59:00 PST
Price: Starts at \$299.00

Item Description:
HAM RADIO RECEIVER ANTENNA COUPLER.W/HOUSE BRAND.MILITARY VERSION CU-656-U..USED TO COUPLE COLLINS 390 391 SERIES RECEIVERS AND OTHERS..21 TUBES.20-6DJ8/6922. I INTERNAL.8-EXTERNAL CONNECTORS..HAS BUILT IN TUBE TESTER THAT TEST ALL TUBES WITHOUT PULLING THEM..WAS WORKING FINE..SOLD AS IS SEE PICTURES FOR DETAILS..On Jan-30-04 at 07:49:48 PST, seller added the following information:Western Union® Auction Payments — auction payments made easy

From ToddRoberts2001@aol.com Fri Feb 6 03:33:07 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

There is currently a Museum Quality R-390 up for auction on the E-Place, auction No. 3076297101, end date Feb.11. The radio looks absolutely gorgeous and in mint condition. The seller has a gallery of 15 nice closeup pictures of the rig. It is worth visiting for the pictures alone! If you ever wanted to see what a like-new R-390 Non-A looks like this is the place! I downloaded all the pictures for posterity! 73 Todd Roberts WD4NGG.

From chacuff@cableone.net Fri Feb 6 03:44:41 2004
Subject: [R-390] R-388 Info

Greetings Bud, My choice would be the SP-600. That's a personal choice though...it's just a much nicer looking radio in my opinion. When set up correctly I can't imagine the R-388 outperforming it...But my experience with the 388 is limited. I haven't heard that they are that great a radio...

Parts for either should be about equally available...maybe more so with the Hammarlund. I see a lot of SP-600's being bought and sold....not quite as many R-388's.

From djmerz@3-cities.com Fri Feb 6 04:04:27 2004
Subject: [R-390] Filter pins

Hi, Pete, John, and Todd and thanks for the helpful comments. I wonder where I can get a male 9 pin plug. I have a vector tube extender but it's a shame to ruin that and it's not really constructed to make it's use easy for my application. I suppose I could make a socket into a plug by putting pins into it that would extend into the chassis socket. Seems like somewhere there would be some 9 pin plugs??? I do like the idea of keeping the original socket on the radio chassis, Dan.

From w5or@comcast.net Fri Feb 6 04:28:19 2004
Subject: [R-390] R-388 Info

Welcome to the R-390 list, Bud. Such a dilemma! My advice is get them both, set both up and take each for a long test drive. Then, if you can bear to part with one, do so. But keep an eye out for an R-390A, too. The R-388 has the most in common with the R-390 series receivers. Direct replies leaves out the other 600 or so subscribers who might like to listen in - that is why we are all assembled here on the list. 73 Don W5OR R-390 List Admin

From jlkolb@cts.com Fri Feb 6 05:47:40 2004
Subject: [R-390] Filter pins

wrote: > Hi, Pete, John, and Todd and thanks for the helpful comments. I wonder > where I can get a male 9 pin plug. I have a vector tube extender but

It should also be noted that R390A filters sell for around \$40-50 while 75A-4 filters sell for around \$200 - sure helps to pay for a 9 pin plug :) John

From w2ec@arrl.net Fri Feb 6 07:43:22 2004
Subject: [R-390] R-388 Info

I have both an R388/51J-3 and an SP-600. Both I consider to be aligned and running about as good as

can be. Check: "<http://www.w2ec.com/W2EC.html>"

In terms of sensitivity and selectivity I consider both radios about equal. The R388 may, I repeat "may", be a little better on the sensitivity but that is very subjective and just my opinion. They are so close as to be pretty much indistinguishable.

The R388 is of course the winner in terms of frequency accuracy. If you are into locating stations and wanting to accurately record their frequency, the R388 is your choice. Likewise, if you don't do much band hopping, the R388 is a good choice.

The SP-600 does not have the ability to accurately depict frequency like the R388 but it is far better for general band cruising. The bandspread dial is a dream to spin. Don't get me wrong, frequency accuracy is fine and you can get real close with what is provided, you just don't get the "1kc or better" accuracy you can get with the R388.

Audio wise the two are close but I prefer the SP-600.

Having both, which do I use the most? And which one would I keep if I could only have one? The choice is the SP-600. I find I use that far more than the R388.

But it is strictly personal, both are great radios, you can't go wrong with either one. Note however you will usually pay more for an R388 vs an SP-600, both being in equal electrical, mechanical and cosmetic condition. Just seems there are far more SP-600's around than the R388, so scarcity influences the price.

Parts wise, electrically, except for a few special purpose (size/shape) capacitors, and transformers of course, the remaining tubes, resistors and capacitors are pretty much standard for both radios. Mechanical and cosmetic parts are of course unique and there seem to be more SP-600's around to donate parts if needed than R388s. But if you have a good condition (mechanically/cosmetically) radio to start with and take care of it, you shouldn't need to worry about those hard to get items. So other electrical parts shouldn't be much of a concern. 73, Ray W2EC

From odyslim@comcast.net Fri Feb 6 11:43:12 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

Do you think he will get the \$4500.00 for it?

This is not a sales pitch but... Rick Mish just did my R390 and I believe it looks just as good if not better. The total cost for the radio and restoration was less than half of the sellers "Buy it now" price. Am I bragging? No. Just very satisfied :-)

I did notice the one on e ay was S/N 4724. Mine, 4720. Small World! Scott (another!) W3CV

From r390a@bellsouth.net Fri Feb 6 11:46:46 2004
Subject: [R-390] OT: 15 MHz WWV Spurs

No, they generally don't identify as "Radio Station WWV, Fort Collins Colorado" at the top of the hour. Listen today and you will hear it for yourself. The Russian time ticks are 5 KHz up or down when I can even hear them any more. Tom

From kc8opp@yahoo.com Fri Feb 6 11:56:09 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

Todd, Nice looking R-390, Museum Quality - NOT!

Tube shields, the ones installed are better but I don't believe these were shipped with the original R-390. RF deck & Power supply screw heads not painted green. No tools on the back panel and TS101 was replaced with wrong type. Covers appear to be the after market replacements and not original style. Wonder what else would be discovered with a hands on inspection.

These may be nits that are being picked, but then again this radio is supposed to be Museum Quality. No doubt this is a great looking restoration, but me thinks that Museums would want something a bit closer to the original. 73's Roger KC8OPP

From odyslim@comcast.net Fri Feb 6 12:19:46 2004
Subject: [R-390] PTO needed, R-388/51J3

Hi, I wonder if anybody has a spare PTO for the R-388/ 51J3? Mine has a bend in the shaft. Regards, Scott W3CV

From cbscott@ingr.com Fri Feb 6 14:26:57 2004
Subject: [R-390] Filter pins

Dan, I think Antique Electronic Supply sells them. www.tubesandmore.com Barry(III) - N4BUQ

From roy.morgan@nist.gov Fri Feb 6 16:16:01 2004
Subject: [R-390] R-388 Info

>I have an opportunity to obtain either a R-388 or an SP-600. Both are in >very good condition. >>But my concern is to which one I should chose.
Bud, You are asking the wrong question. You should ask: "How can I afford to buy BOTH." heheh Roy

From roy.morgan@nist.gov Fri Feb 6 16:37:23 2004
Subject: [R-390] Filter pins

wrote: >Hi, Pete, John, and Todd and thanks for the helpful comments. I wonder where I can get a male 9 pin plug.

Carefully score a 9-pin tube near the base with a glass cutter. Then warm it in hot water and dunk it down top first in ice water. The thing will cut nicely. (At least that's what I predict!)

Then remove the innards, smooth the glass edge with a silicon carbide sharpening stone, or "sand paper". Solder (use flux if you need to) your connections to the remaining pins. Use epoxy creatively with a piece of aluminum tube cut in half, and you are in business. Roy

From jmiller1706@cfl.rr.com Fri Feb 6 16:39:57 2004

Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

Also the side panels have a blueish tint. Camera effects or were they treated with some form of chemical or painted? Going thru a radio and polishing everything in sight does not make it museum quality. Chances are they didn't come off the assembly line with everything polished and buffed. Could be why the green paint is missing from some screw heads. And the final question: Does it operate?

From cbsscott@ingr.com Fri Feb 6 16:47:24 2004

Subject: [R-390] R-388 Info

Bud, Will the one you don't want be available? Barry(III) - N4BUQ

From roy.morgan@nist.gov Fri Feb 6 16:48:17 2004

Subject: [R-390] R-388 Info

wrote: >I have an opportunity to obtain either a R-388 or an SP-600. Both are in very good condition.

Cecil, One point that may not have been mentioned yet: the R-388 PTO's.

The R-388 PTO's can be divided into two groups: those which do not drift and those which do, always have and always will. By "drift", I mean the "endpoint spread" increases slowly over time. That means that it takes more than 10 turns of the shaft to change the PTO frequency the one megacycle it is intended to change.

Here are significant points about this situation:

- The only way you can know which you have is to get the radio and try it out.
- Non-drifting PTO's are not rare but you don't know which you have till you have it. Do not rely on any seller to tell you the truth. They may not know what you are talking about.
- **There is no cure for a drifting PTO. You can re-align it to bring the spread back to correct, but it will continue to drift. (Some folks overcompensate about 2 to 3 years worth of drift and then count on doing it again after 4-6 years.)**
- Careful overhaul of a PTO and correction of drift is not for the novice, but is certainly doable if you are a **capable** technician and take advice well.
- This situation of a drifting PTO only bothers some people, not all.
- The receiver is still very useful, and normal operating procedure compensates for the errors. Roy

From schluensen@freenet.de Fri Feb 6 07:35:45 2004

Subject: [R-390] R-390A tubes

Thanks for the many answers to my question! Wow! My question was a little incorrect - my EAC now runs very well - but in the future I think, it's good to have spare parts ... Frank, DK1LX

From chacuff@cableone.net Fri Feb 6 17:46:07 2004

Subject: [R-390] R-388 Info

Good info Roy...I didn't know that.

I had an R-388 when I was a teenager....It had been dropped, it looked like, out of the back of a truck.

The front panel had a rounded bend in it near the bottom right corner you could place a lemon in. It also damaged the chassis and some of the assemblies behind the panel. I had hopes of straightening everything out and rehabilitating it. (had it in my blood even back then) My parents though I was crazy I think.

It would have been a nice companion to the complete and beautiful Collins KWS-1 I had picked up for \$100 from an Air Force Officer who was shipping out. I had restored the KWS-1 power supply and fired the transmitter up. It never made more than a few watts. Didn't have the test equipment nor experience/knowledge to fix the thing...(did have a full manual)..and my Mom wanted the thing out of my room. I allowed it to be stolen from me by a knowledgeable local Collins guy by trading it for a National NC-183D that did at least work. Wouldn't give me the matching speaker though. Sure wish I had that KWS-1 back. An R-390A would work well with it too....(I'm back on topic now!) Cecil...

From richy2@mindspring.com Fri Feb 6 23:15:38 2004
Subject: [R-390] Re: R-390 digest, Vol 1 #980 - 16 msgs

Buy em both, parts are available and will continue to be for a very long time.. (the SP-600 is a better radio) Joe W2DBO

From K5IUO@sbcglobal.net Fri Feb 6 23:37:07 2004
Subject: [R-390] R-388 Info Replies

First I received a very nice message from W5OR (Don List Adm.) and he suggest to have your replies sent to me here on the list.

I apologize. I like that idea a will not make the same mistake again but it was done out of habit. On some of the other list if you don't ask for replies direct you will receive hate mail like you don't believe.

Anyway I was really excited. I got 14 replies total. The responses were about equal stating that one of the main factors was what was I going to be using them for. Well that makes the decision even tougher because I was leaning toward the R-388 and most of you suggested the SP-600 was a great band cruiser.

Two suggested the SP-600 so even though I am better off than I was before I am going to have to revert to two of the suggestions "Get them Both"..... I might be able to do that because they are owned by a friend.

Thanks again. It looks like both the R-388 and the SP-600 are good choices. Bud K5IUO Phoenix AZ

From ba.williams@charter.net Sat Feb 7 03:40:52 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

wrote: >Also the side panels have a blueish tint. \$1800+ bucks and the reserve has not been met yet and 11 bids. Yikes!

From ba.williams@charter.net Sat Feb 7 03:59:01 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

I have a PH-56 Motorola that has been a champ for over 10 years now. The front panel is scratched up,

the knobs are chipped badly, and the Megacycle change knob has a peace symbol scratched in the center circle by some GI. It has an ASA sticker on the back panel. I decided to not do a thing to the appearance. It looks too real as is. I always wonder what bored soldier scratched that peace sign in the paint. On the other hand, I have a 67 EAC that I am going to repaint and clean up cosmetically. Still, I'm pretty sure which one I will feel most at home with when all is done and they sit one on top of the other. I'm sure not going to polish VFOs and black tube shields. the other other Barry

From r390a@rcn.com Sat Feb 7 07:40:18 2004

Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

>Also the side panels have a blueish tint. Camera effects or were they >treated with some form of chemical or painted?

The side panels of the R-389, R-390 and R-391 are painted grey, not anodized like the R-390A.

From brookbank@triad.rr.com Sat Feb 7 11:57:22 2004

Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

Let's no be more papist than the Pope, otherwise he would never be able to enter the Sistene Chapel on account that the ceiling does not have the original painting, nor we could enjoy the Statue of Liberty because now it has modern electrical wiring, go up the Washington Monument because the elevator is not the same.

Most Museum pieces have been restored and very often improved by the new restoration techniques that does not disqualify them from being a museum piece.

If I had a radio museum, I would be glad to display the subject radio - it looks great, probably better than new - and if some qualifying notes needed to be added to the display, so be it.

I would be willing to bet that none of the critics of the radio would believe that any of the items on the Aero Space Museum are in their original/unaltered condition and that they would perform as they did when in service. Let's be more flexible and less critical, enjoy.....life is to short Pat

From dsmamples@comcast.net Sat Feb 7 13:44:07 2004

Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

All: Very well put by Patrick, IMHO.

We are not here to worship these items, but to enjoy them. For me, I'll accept an intelligently-conceived, skillfully-carried-out modification that enhances the safety of one of these things. I added an IEC-based CORCOM filter and a 3-wire power cord to my R-390A for just that reason. Others may disapprove; that's fine.

Opinions are like socks in a drawer. There's lots of them, usually they are mismatched, and sometimes they have holes in them. Except, of course, for MY opinions, which are ALWAYS absolutely well-informed, full of wisdom for all ages, exquisitely reasoned, etc., etc., etc. (I'm running a deal on slightly-used bridges for sale, too!). Dave WB4FUR

From jlap1939@yahoo.com Sat Feb 7 16:23:18 2004
Subject: [R-390] About the "more like it..."

Hey, If the jerks are gone, I might even be willing to post again..Oh well...Maybe I was one of the jerks.... John (still reading....)

From bipi@comcast.net Sat Feb 7 16:49:00 2004
Subject: [R-390] Advice - Proper Use of Meggers

I recently picked up a megger but, honestly, I don't know much about them. They are apparently great for checking leakage through caps which is the main reason I bought it.

For the record, it is a old Navy unit made by Winslow Teletronics, Inc., Model ZM-63/PSM-35 with a Navy designation of AN/PSM-35. It measures Megohms resistance at 500V.

I notice that I can vary the output voltage by rotating the crank at a slower speed but the readings fluctuate. So I take it, that the proper use requires rotating the crank at normal speed and full-voltage output? While 500V is fine for some caps, it typically exceeds some of the smaller caps found in receiver boat anchor receivers. So, does one need a smaller unit for lower voltage caps to get reliable readings? For my ignorance on the subject, I've just never used one of these. Can someone shed some light on this subject for me or point me at a reference for their proper use. Any manuals available for this animal?

BTW, just finished tearing apart my RF deck and cleaning all the gears. I found that even a clean looking unit like mine was before I started, should be rebuilt...many gears were stuck together from hardening of the lubrication oil even though they looked quite good to the naked "eye". I'm looking forward to experiencing the "smooth" action of an R-390A. Hey thanks all... 73 de Mike K7PI Mercer Island, WA

From rbethman@comcast.net Sat Feb 7 16:56:50 2004
Subject: [R-390] Advice - Proper Use of Meggers

Mike, These are used normally to test high voltage cables, transformers,, and generator windings. I don't believe that testing capacitors is recommended. Bob - N0DGN

From r390a@bellsouth.net Sat Feb 7 18:05:59 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

>Most Museum pieces have been restored and very often improved by the >new restoration techniques that does not disqualify them from being >a museum piece.

Thinks like the IERC tube shields are "authorized" updates that *could* have been done in its lifetime.
Tom

From tetrode@comcast.net Sat Feb 7 19:53:04 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

Well said Patrick, but you've got to remember that with a list such as this one there is a huge amount of

hard won expertise. So when an R-39x Ebay ad appears with a lot of high power adjectives and an even higher price tag it's no wonder that it becomes open season on making comments. Tough crowd here! ;^)

Actually there is no requirement that a Museum piece even functions. I just got back from a Florida trip and on the way back stopped at The Mighty 8th Air Force (B-17) Museum which is right off I-95 North in Georgia. They had two BC-348 receivers on display inside; neither were powered up so who knows if they even worked?

They also have a beautifully restored B-47 SAC bomber outside but I'm sure it's in no condition to fly! But it was really cool seeing one up close, always wanted to see one since reading about the RB-47 Russian flyover missions described in Bamford's Body of Secrets book. Who knows, maybe there was even R-648 receiver inside of it. (that's the airborne version of the R-390A). John KA1XC

From jlap1939@yahoo.com Sat Feb 7 21:48:29 2004
Subject: [R-390] Anritsu

Friends, In speaking of the "best" (one more time...!)...

We know the test gear, but has anyone ever operated the early 50's, back to post war, rec., by Anritsu?

Have a family friend who still speaks English poorly, that was "the enemy" in the early 40's, (tho' he is just a few years older than me), and he insists the mil equip around '45-'52+ was as good as could be had. (He came to this country in '55, at age 22...He was a japanese el. engineer, and continued in America....)

As the modern equip. is so good, I wonder about the radios.. Regards, John

From chacuff@cableone.net Sat Feb 7 23:26:39 2004
Subject: [R-390] Advice - Proper Use of Meggers

The use of a hand cranked meggar was outlined in one of Chuck Rippel's videos on radio restoration...can't remember if it was the SP-600 video or the R-390..not important....It worked very well. Don't remember the specifics... Cecil....

From ah7i@atl.org Sat Feb 7 23:32:41 2004
Subject: [R-390] Advice - Proper Use of Meggers

Have your boy crank until he develops a fine sheen of sweat. If he is dripping, he's working too hard and will be useless by days end. There is also a risk of sweat drops affecting the local conductance. If he is not sweating, either he's not cranking enough, or it's too cold to be working. If the later, go sit by the fire and break out some scotch.

You can.

Measure resistance of your ground system.

Perform geophysical surveys to find ground water or minerals.

"Coax worms from the ground" for fishing.

Extract information from children as to WHY they were not cranking the megger fast enough.

Stimulate plants "to produce SUPER tomatos"

From w7itc@hotmail.com Sun Feb 8 03:07:22 2004
Subject: [R-390] Museum Quality R-390 Non-A on the E-Place

If it has a bluish finish it was probably Kromacoated. This is a chemical protective coating used on sheet metal, ferrous and non ferrous, it gives the metal a bluish mother of pearl look. Ken de W7ITC

From r390a@bellsouth.net Sun Feb 8 03:29:47 2004
Subject: [R-390] Orange Drops, not just for radio any more

Will the price of Orange Drop caps go through the roof now that the secret is out that they are good for vintage audio gear too? Check item number 3701942877 on you know where and decide for yourself.
twitch Tom

From r390a@bellsouth.net Sun Feb 8 03:41:45 2004
Subject: [R-390] Going rate for a ZM-3A?

What is the going rate for a ZM-3A cap tester these days? I may have found one, but don't want to pay
too much for it. (I'm cheap.) Thanks Tom

From phyoung@adelphia.net Sun Feb 8 04:51:04 2004
Subject: [R-390] Meggers

Meggers are great for making sure you're WIDE AWAKE in the morning! Years ago I was working in the product test department at Norlin, which built receivers. I accidentally hi-potted myself, and my right leg kicked so hard, the heel came off my boot and flew across the room. Didn't need any more coffee that day!

I'm new to this group. I'm Pete, K3IN, and I have an old 1955 (I think) Collins-made R-390A, which is probably due for re-capping. I've really enjoyed reading this group, learned a lot, and decided to jump in! 73, Pete

From vk2abn@batemansbay.com Sun Feb 8 10:36:37 2004
Subject: [R-390] Re: R-390 digest, Vol 1 #983 - 14 msgs

MEGGARS Hi guys I have always used a meggar for testing capacitors and high value resistors ,I have been an Electrician since the 1960 s , meggars come in various shapes and sizes 500 v is the smallest in australia because it is normal to test insulation resistance at twice the applied voltage which here is 240v they also use 1000v meggars here to check Insulationt on line voltage circuits which is 415 here . In the U.S.A this is 208v ,One thing I should say is DO NOT check capacitors that have a lower working voltage than 500 marked on them as they are likley to be damaged by the meggar also it is possible to charge up capacitors with the meggar and get quiet a shock!!!! also DONT check ELECTROLYTICS as they dont like AC . I had a very noisy IF module in a 390a and when I meggar tested the bypass caps they were ALL leaky , they were the axial black ones with the coloured bands around them after replacing them it is a different radio , I once had a tektronix 500 series CRO and the timbase would not work ,I got it from the gov surplus auctions-,it had an unrepairable tag on it .I checked every component in the time base and couldnt find a problem but it refused to oscillate- then I disconnected one end off every component in the time base and trigger and holdoff circuit and meggar

tested , on testing a 500pf mica cap it read 500megohms this was the culprit ,the timebases were miller integrator timebases and they rely for feed back on the stray capacity of the tube and that 500meg resistor stopped in its tracks , I venture to surmise that not many instruments would show this fault so u can see that meggers are very handy with valves OR what u guys call TOOBES -BUT KEEP IT AWAY FROM THE SOLID STATE HI-

From r390a@rcn.com Sun Feb 8 12:10:19 2004
Subject: [R-390] Orange Drops, not just for radio any more

The vintage audio crowd is showing 'rare' wisdom since the last eight auctions all ended without bids.

From r390a@bellsouth.net Sun Feb 8 14:28:24 2004
Subject: [R-390] Orange Drops, not just for radio any more

I guess they will only pay that much for Black Beauties..... :-) Nice to know they have *some* sense at times. I remember some fellow last year asking for, and getting \$5 per for NOS BBOD's.

From jlap1939@yahoo.com Sun Feb 8 14:52:14 2004
Subject: [R-390] Radios meeting or exceeding 390 series...

Friends...In light of limited interest, just this: Osterman lists Anritsu rec. and mentions worldwide installations and mfg plants...but mentions only 5 rec., This in his text, 3rd ed.

He does mention the Japanese language PROFESSIONAL RECIEVERS by Hideo Kanemich, as covering the entire line of Anritsu, and being highly rec. as a text.

I have seen only the RG02, but have not operated any. The one I saw was at a small hamfest in P.C. where I live, many years ago..(Usual hindsight ..should have bought it...) I am sure it was the RG02, as it had the dig. knobs...and looks the same...(see Osterman)

The guy that had it told us the name, as it was not on the front of the radio...Never forgot the name, and then later, began seeing the test equipment..(inc. my friends working w/major companys, where it was sometimes preferred to Fluke...??)

Can't remembner the price he asked..(Middle 1970's but I don't remember it being other than pretty high...maybe several hundred.? High for middle '70's.) My Regards, John (JLAP)

From vibroplex@mindspring.com Sun Feb 8 17:34:45 2004
Subject: [R-390] Boonton Signal Generator from Collins

Hi Guys, I picked up a Boonton Signal Generator at a recent hamfest. The info on the top of the lid says:

"Supersonic Oscillator"
Type 210-A
115-230V 50-60 cy SER. 272
Boonton Radio Corp. Boonton, NJ USA

On the back is a tag that says: Collins Radio Co. Engineering & Research Division ...so it sounds like it was a good tool in the Collins labs...

I'd like to do a presentation on this piece of equipment at my next antique radio club meeting. I can't seem to find any info on it. I've poked around on the web and I see lots of references to a Boonton 211 but not a Boonton 210. Can any one point me toward a manual on this? Thanks for any help you guys can give me. Derek Cohn

From jlap1939@yahoo.com Sun Feb 8 19:15:07 2004
Subject: [R-390] Wrong Mod. Number

Friends, Gave RG01 as model in Osterman...was RG01A...Sorry John (JLAP)

From chacuff@cableone.net Sun Feb 8 23:28:31 2004
Subject: [R-390] Cloth wire preservation and Soviet Mil Stuff

Hey folks, I have a question that I thought I would field to the group since I know many of you not only work on R-390's but many other various makes of boatanchor receivers.

I have a rough old tube receiver that has great potential. It has cloth wiring. It looks as though the cloth is showing signs of deterioration. One of the IF cans were removed when I got the receiver because of a problem in the can...turned out both of the mica caps were leaky and one of the IF coils open. I had picked up a spare set of IF cans so I set out to replace the thing. The wiring was a mix of cloth and rubber insulated wire. Why they used different I don't know. The rubber insulated wire was crumbling. The cloth was coming apart where it had been manipulated to unsolder the connections in the chassis. I opted to replace all the wires with modern plastic insulated wire. It doesn't look original under the chassis but will function fine.

My question: is there a way to preserve the existing wiring in the chassis from further deterioration. The wiring that is original and not pulled around on much is still intact and the cloth still providing it insulating properties but I would like to do something to preserve it if it can be done. I just don't really know what one might do to minimize further deterioration.

I keep all my old radios in a humidity and temp controlled environment and that should help...

For the record it's an SX-28A...In it's original cabinet and with it's matching speaker.

The previous owner, who is now deceased, was well along in recapping the receiver. The job needs to be checked and finished. I am in the process of removing a 2nd IF can to replace it's wiring and check the internal components. The wiring has come apart because I think the previous owner had removed that can at some point as well.

I think it will make a nice addition to the R-390's and SP-600's when finished.

On another topic...does any of you fool around with old Soviet Military stuff. Do you know someone that does. I have accumulated some parts that came out of some old Soviet Comm. vans that might be of use in maintaining that type stuff. It's all NOS parts and is in my way and needs to find a new home. I also have a couple pieces of test equipment and 2 real nice Soviet mil. Morse encoding\decoding

keyboards that were installed in a couple of the vans. They work once I converted the power supplies to 120VAC.

A lot of this stuff is marked with the C.C.C.P. markings...making them interesting Cold War Relics.

Sorry for the ramblings for those of you not interested in this...just wanted to make use of the best technical resource I know of on the web....the folks on the R-390 list! Cecil....

From ba.williams@charter.net Mon Feb 9 02:37:48 2004
Subject: [R-390] Orange Drops, not just for radio any more

Dave, This pair of Spragues went for \$9.99. The frenzy is over. Barry nonHauser

From krkaplan@cox.net Mon Feb 9 05:05:24 2004
Subject: [R-390] Re: Orange Drops, not just for radio any more

Let's see - \$9.99 for a pair of Orange Drops that AES would sell for 2.06 (1.03 each). Maybe AES should start selling via that auction place. I didn't know you needed 400 volt caps in a guitar. I wonder if 600 volt caps would sound better? Anyone know how to test wire to see if it is oxygen free?

If any of you ever get a chance to attend the CES (Consumer Electronics Show) in Las Vegas, check out the high end audio exhibits at the Alexis Hotel. Amid some of the most wonderful sounding audio systems are some shameful scams. One vendor had disassembled a Leviton duplex AC outlet and plated all of its insides gold. He claimed that it would help provide a more pure power to the equipment for a sweeter sound. If want a sweeter sound, I'll stuff down a Krispy Kreme... 73 Ken kb7rgg

From jrg.dk3ng@t-online.de Mon Feb 9 10:24:58 2004
Subject: [R-390] Off topic but worth reading anyway

The contrbutions on audio freaks getting off on orange drops are intriguing. Here is a personal experience ya'll like a lot:

Looking at a line-up of top-of-the range NAD AV equipment (such as a power amplifier weighing in at 30kg!!!) in one of those high-end shops In Germany, I mentioned to the salesman that the equipment would not be suitable for my set-up because the loudspeaker terminals were positioned too close together to accommodate the special connectors I use on my nitrogen-filled coaxial loudspeaker leads.

The saleman's awestruck reaction to this told me that I had just hit new business paydirt.

I am thinking about tooling up to exploit this gem of an idea!!!! J R "Jo" Groeger G4XXW, DK3NG, EL0AA/MM, ex MP4TDT, GM5BKZ, 9H1FO, 8P6KK

From George.Kavanagh@FMR.COM Tue Feb 10 01:11:36 2004
Subject: [R-390] BBOD leakage

Although I realize that even if it is still "good", a BBOD should be replaced if one has the opportunity, before it fails; what leakage current is considered "acceptable" for a .01uF, 300v BBOD tested at 300v?

A .1uF, 300v? Yes, it depends on the circuit in which it is used, but can someone quote how a new one would have tested 40 years ago? Thanks! George Kavanagh; KB1HFT

From ba.williams@charter.net Tue Feb 10 02:18:56 2004
Subject: [R-390] Cloth wire preservation and Soviet Mil Stuff

Cecil, Interesting stuff, so don't worry about the topic police. Glad to hear about projects like this as I have a few of them going on around here too.

You can buy the cloth type of wire covering in different colors. I've used it a lot in some places. It looks pretty new, but if you desoldered the wiring and replaced it with this covering it would all look pretty good. The SX-28 is worth it if you care to put in the time. The transformer wires could be done by unsoldering one end, slipping the cloth sleeves over the wire, and resoldering....if doing it all was the goal. New cloth sleeves would preserve the original wiring.

Sounds like a good project, the other other Barry

From mahlonhaunschild@cox.net Tue Feb 10 20:27:11 2004
Subject: [R-390] How deep is an R-390A?

Guys, need an assist here.

I'm on a business trip this week & have hit my usual electronic surplus haunts while on it. I may have found a very nice cabinet for an R-390A, but I need to determine that it is deep enough for the receiver before I buy it.

Could one of you please measure the distance from the front of the R-390A front panel to the edge of the rear panel/side panel? Please reply direct, as I don't want to wait for tonight's digest for the info. Thanks a lot! regards, Mahlon - K4OQ

From mahlonhaunschild@cox.net Tue Feb 10 20:43:22 2004
Subject: [R-390] Got my answer, thanks guys!

THanks for the help. regards, Mahlon - K4OQ

From lal@gwi.net Wed Feb 11 17:32:37 2004
Subject: [R-390] R-390A W/Cabinet for sale

R-390A For Sale This is a real nice R-390A with a CY-979/URR Cabinet and manual. The radio has been gone through, it works perfectly. The cosmetic condition is great. It is in use with it92s companion transmitter, a Collins 32V-3 which is also for sale. Price of the R-390A w/ cabinet is \$ 750 I am unable to ship. Thanks for reading. Merle

From cbsscott@ingr.com Wed Feb 11 17:44:58 2004
Subject: [R-390] R-390A W/Cabinet for sale

Merle, How much for the 32V-3? Where are you located? Thanks, Barry(III) - N4BUQ

From Commtekman@aol.com Wed Feb 11 17:54:54 2004
Subject: [R-390] R-390A

Merle- Interested in the R-390A, where do you live ? Thanks Bob K6OSM

From jbrannig@optonline.net Wed Feb 11 22:18:16 2004
Subject: [R-390] Hum

I have a '67 EAC R-390A with a low level hum that is making me crazy.

The hum is controlled by the AF gain control and therefore before it. It is influenced by the 800cps bandpass filter and disappears when V601 (1st AF amp) is removed.

The plug in Capacitors have been replaced with new electrolytics. C609 in the cathode circuit has been replaced and the Rippel audio mod installed. The tube has been swapped for another and the hum still persists.

Short of replacing every component in the 1st AF amp, I'm stumped!! Any suggestions? Thanks in advance, Jim

From tetrode@comcast.net Thu Feb 12 02:53:44 2004
Subject: [R-390] Hum

Hi Jim, the hum might not be in the audio deck. Here's some tips.....

Does it go away when you click ON the noise limiter? If so bypass cap C536 in the IF deck could be open. You could also have filament to cathode leakage in one of the detector or noise limiter tubes. To further isolate the trouble, disconnect the Diode Load jumper (TB103 terminals 14&15) which will break the connection from the detector and see what happens. John

From ghayward@uoguelph.ca Thu Feb 12 13:10:52 2004
Subject: [R-390] Hum

I had a similar problem and as John mentioned, it was a filament to cathode leak in the noise limiter. The impedances in that stage are high so the leak was small enough not to show up on my tube tester, but big enough to give lots of hum. Replacing the tube fixed the problem, but I only found it by substitution. Cheers de Gord, VE3EOS

From ai2q@adelphia.net Thu Feb 12 20:43:22 2004
Subject: [R-390] Hum

Jim: Tighten down all under-chassis hardware, such as terminal strip grounding points. That cured a nasty 60-cycle audio hum problem here in a recent 51J-4 overhaul on my bench. GL es 73, AI2Q, Alex

From vk2abn@batemansbay.com Fri Feb 13 01:24:02 2004
Subject: [R-390] 390a hum

I had hum in my 390a and after some searching I found that it was caused by heater cathode leakage in the 6BA6 in the VFO replacing the tube fixed the problem But I initially looked in the audio and IF module

From David Hallam <dhallam@rapidsys.com> Fri Feb 13 01:26:28 2004
Subject: [R-390] Oxygen Free Wire

I have been meaning to reply to Ken Kaplan's "tongue in cheek" request on how to identify oxygen free wire and his comments about the scams in the audio industry for "better sound".

I am by training a metallurgical engineer and by experience am engineer involved in the manufacture of electrical wire and cable. I have 35+ years experience in the field and currently have my own consulting business for manufacturing processes in the area of superconducting wire.

Oxygen free copper has a place in the business. That place is where there is a need for copper to be used in a high temperature-reducing atmosphere such as hydrogen brazing of components. For that read, the manufacturing of vacuum tubes, vacuum capacitors, light bulbs and the like. Under those circumstances, oxygen in the copper will react with hydrogen and form water. At the elevated temperatures involved, the water formed is in the vapor phase and creates tremendous internal pressure that fractures the gain boundaries rendering the wire or copper form brittle and useless.

In ordinary transmission of energy, oxygen does nothing detrimental to the process, unless, of course, it is present in excessive amounts. If it were, you would not be able to make wire out of it. The oxygen present in ordinary copper wire, where the copper is referred to as electrolytic tough pitch, is on the order of 250 ppm. Believe me, the electrons traveling through wire carrying the sound from your amplifier to your speakers don't give a damn whether there is 250 ppm or 0 ppm of oxygen in the wire. The end result is the same.

The marketing of oxygen free copper speaker wire or other forms of wire in the amplifier is a ploy designed to separate you from excessive amounts of your money, all pseudo scientific claims notwithstanding. THERE AIN'T NO BASIS FOR IT. You all will have to forgive my rant, but this is one of my pet peeves.

From David Hallam <dhallam@rapidsys.com> Fri Feb 13 01:31:46 2004
Subject: [R-390] Oxygen Free Wire

I think I forgot to sign my name to my little piece about oxygen free wire. David C. Hallam KC2JD

From sid@leben.com Fri Feb 13 01:36:08 2004
Subject: [R-390] R390 on the air

Well I hope all of you can see my grin, which runs from my left/audio gain hand to the right Rf gain !!!

I have spent about a week listening to my restored R390. Many thanks to Rick Mish/Miltronix, for all the care he has taken to get this old lady back to perfection!

I am blown away by the performance. Much more than I had anticipated from a radio of this age. I have it connected to an active magnetic Loop antenna primarily for MW, but I find myself reading the mail on SSB !!

Rick, thank you for your expertise and guidance in the care & use of this heirloom radio. Gee, is there a 32V lurking out there for me to op on AM ???? :) Sid KC2EE

From odyslim@comcast.net Fri Feb 13 01:58:21 2004
Subject: [R-390] R390 on the air/ Mish is the Man!

Hi Sid and gang,

I agree with you 100%. Rick Mish did my 390 and 2, 390-A's. I have just sent him another 390-A to restore. Last summer I drove out to his place from Baltimore and he did some work for me while I hung around. It was a pleasure to meet Rick in person and I also got to see his fine radio room and work bench. He then took me out for ribs. What a guy! Scott W3CV

From mikea@mikea.ath.cx Fri Feb 13 02:00:42 2004
Subject: [R-390] Oxygen Free Wire

wrote: [snip qualifications and experience] > The marketing of oxygen free copper speaker wire or other forms of wire in > the amplifier is a ploy

You may be amused, then, by the "explanation for one of my favorite UseNet newsgroups:

: [munged] Fresh-harvested neural tissue for your speaker cables.

The subject of the various ingenious ways whereby the modern versions of snake-oil salesmen separate the audiophools from their cash is a constant and always-amusing topic. Mike Andrews

From roy.morgan@nist.gov Fri Feb 13 17:20:11 2004
Subject: [R-390] Oxygen Free Wire

wrote: >I have been meaning to reply to Ken Kaplan's "tongue in cheek" request on >how to identify oxygen free wire ... THERE AIN'T NO >BASIS FOR IT.

David, I'm afraid I did not receive the full text of your message, but thanks for sending it.

I was using my R-390A as part of the network connection and unfortunately I have not yet re-soldered all the RF signal connections with silver solder. This caused garbled and unreadable signals.

Soon, I will have silver solder in there, and also mount my computer up on carefully made cones of exotic hardwood to improve the data transfer. Then I'll be able to get your message from the archives and see what it said.

POINK! (that was the sound of me removing my tongue from my cheek.)

Roy Who has a spare R-390A RF deck and intends to find out for himself one day.

From JMILLER1706@cfl.rr.com Fri Feb 13 19:16:30 2004
Subject: [R-390] Interchangeability of RF Deck Mechanicals

I have a Collins made 390a that is "almost" all Collins except for the IF which is Motorola. It receives exceptionally well. However a previous owner apparently took a Drimmel grinder or a file to one of the vertical slots on the front face of the RF deck (the slots where the RF slug racks ride up and down in). And it was not just a little filing, there is some significant amount of metal whittled out of one of the slots. The slug rack rides up and down OK with no apparent problem, but some day I want to replace the slug rack front plate. I would like to find a junker RF deck to cannabilize for this. Question: Should the mechanics (hole locations, machining, etc.) of RF deck metal stock be identical between manufacturers? In other words, if I find an old EAC RF deck, take the front slug rack plate off and put it on the Collins RF deck, should things still line up mechanically and physically?

From courir26@yahoo.com Fri Feb 13 19:40:27 2004
Subject: [R-390] Interchangeability of RF Deck Mechanicals

The parts "should" all line up exactly as they were made from the same drawings and gauges. You should not have any problems getting it to fit up.

The only noticeable differences I know of are the late EAC RF and IF mainframes which are made differently from the other makes. EAC got permission to do this and it is reflected in their drawings. I know of no differences in the slug guide plates. 73 Tom N5OFF

From courir26@yahoo.com Fri Feb 13 22:59:31 2004
Subject: [R-390] Interchangeability of RF Deck Mechanicals

Compare the corners of the IF deck of the EAC to the Collins. You'll see that they were constructed differently. This is to facilitate wiring of the EAC decks prior to the sides being crimped up.

This is why there are some slices in the wires on EAC's, normally a NO-NO in military construction. Tom

From schluensen@freenet.de Fri Feb 13 23:14:04 2004
Subject: [R-390] Tubes R-390A

Did someone know K5SVC ??? He sells tubes for the 390A (some tubes I can't get here in Germany). Is he o.k. ??? 73, Frank, DK1LX

From James Smith" <n1xas@comcast.net Sat Feb 14 00:06:58 2004
Subject: [R-390] Filters

I am looking for collins mechanical filters 6KHz and 12KHz to use in a EAC R 390A receiver. Are they available? Who might have them? Thanks in advance Jim Smith N1XAS

From ToddRoberts2001@aol.com Sat Feb 14 00:47:33 2004

Subject: [R-390] Filters

n1xas@comcast. I am looking for collins mechanical filters 6KHz and 12KHz to use in a

Hi Jim,

Dave Curry Longwave Products makes a 6KHz replacement mechanical filter assembly for the R-390A receiver. It comes in an identical-size cylinder with mounting flange just like the original filter and wires in as a direct replacement with no modifications. The price is high though at \$199 plus \$4.50 S&H. They are available from Electric Radio Magazine store. You can see them online at www.ermag.com. Rockwell Collins also has a line of inexpensive torsional mechanical filters in a wide range of bandwidths. You could check their website. I am not sure about their prices or minimum order size? Their filters are pretty small and one could fit inside of a tube assembly to fit the R-390A if you wanted to make up your own. 73 Todd Roberts WD4NGG.

From jlkolb@cts.com Sat Feb 14 05:35:01 2004
Subject: [R-390] Filters

wrote: > I am looking for collins mechanical filters 6KHz and 12KHz to use in a

Collins didn't make any 6 or 12 kHz filters that would fit the R-390A directly - what they call the "K (special)" case in their catalogs. They made the F455K-60 and F455K-120 with the standard "K" case, which has the mounting flange in the center of the filter rather than towards one end. Those or the smaller Y case filters, F455Y060 and F455Y-120 could be used with some work to fabricate a mounting flange. Dallas Lankford had an article recently on such a filter and has posted it to the files section of this group.

As mentioned in another reply Dave Curry makes some modern filters in 390A style cases. The modern filters available directly from Collins generally have a 2 Kohm in and out impedance so would require some matching to replace the 100 Kohm 390A filters. John <<http://members.cts.com/king/j/jlkolb>> - filters

From jrg.dk3ng@t-online.de Sat Feb 14 10:56:17 2004
Subject: [R-390] Tubes for R-390

Did someone know K5SVC ??? He sells tubes for the 390A

Frank, don't know K5SVC. But you can get suitable tubes from Wilson Valves in England. He sells new ones and N.O.S. US tubes. J R Groeger, G4XXW, DK3NG, EL0AA/MM

From wewilson@knology.net Sat Feb 14 14:22:12 2004
Subject: [R-390] Tubes for R-390

Yes, he is a very good source for tubes. I've ordered from him several times, always get top quality tubes, and I've met him a few times at Dayton. Walter

From krkaplan@cox.net Sat Feb 14 17:33:07 2004
Subject: [R-390] Re: Oxygen Free Wire

Hi David,

Thanks for your very informative reply on this topic. In my gut, I strongly suspected that the wire claims were bogus but I had no facts to back up my feeling. With your response, I now have a much better understanding of the issue. I can't wait for next years CES show (wink). One of the "scams" I've seen is high quality power cables. I'm talking about the cable that you plug into the wall to power the audio equipment (typically the power amp). Some of these power cables cost well over \$100 and are supposed to provide a reduction in RF and EMI noise. They don't address the copper from the wall outlet back to the transformer in the street. If they start sending the Internet over power lines, I suspect that will drive a whole new specialized cable product line. I wouldn't want some hacker getting into my stereo <g>. Two of the most annoying words these days are scam and spam. Interesting that you just have to change one letter. I wonder how Hormel feels about the use of their product name? 73 Ken kb7rgg

From James Smith" <n1xas@comcast.net Sat Feb 14 17:48:24 2004
Subject: [R-390] R-390A Filters

Thank you to all that replied about the R-390A filters Jim Smith N1XAS

From pucroc@inwind.it Sat Feb 14 20:50:31 2004
Subject: [R-390] Lubricate my 390A/URR

In the Y2K-R2 manual I read I have to use MIL-L-7970 and MIL-G-7421 for lubricate my 390A/URR. Were can I buy this type of oils ? 73 de IK0JJZ Max Sorry for my English.

From Barry Hauser" <barry@hausernet.com Sun Feb 15 00:40:27 2004
Subject: [R-390] Lubricate my 390A/URR

Hi Max: I don't know where you would find those MIL lubricants, but they are probably no longer the best choice anyway.

R-390A owners use a number of different favorites. One is synthetic motor oil, such as "Mobil One" here in the US 10W-30 or similar. Some use synthetic gear oil which is 70-90 weight. One quart or liter is enough for at least a thousand radios. Avoid hypoidal gear lubricant which contains sulfur. Some say the fumes cause oxidation of silver plated contacts, but I just do not like the aroma.

The main reason for favoring the synthetics is that they should never harden up or become sticky. However, someone pointed out that quality regular oils and grease should be good for many years and it would be OK to have to clean and re-lubricate every 5 to 10 years or so. (In other words, synthetic lube might be over-doing things but we are R-390 owners with 75 lb. radios, so perhaps over-doing is something we like to do ;-)) (Like making sure that who ever owns the radio 50 years from now is happy with our work.)

You are likely to already have some oil that will do the job. The main thing is to clean the gear train completely and use very little. A single drop on the end of a wire or paper clip is enough for a bearing or bushing. Just coat the gear teeth with a small amount using a brush. Make certain that the rollers on the slug racks (cam followers) spin freely. (Keep oil away from the antenna trimmer shaft.)

I sometimes apply a molybdenum paste lubricant to sliding surfaces, such as the inside surfaces of the RF deck frame, ends of the slug racks, etc. You apply the paste as if you were polishing a car rub it in and buff. It fills the pores in the metal and leaves a slick, dry surface.

Do you have the R2 version of the Y2K manual? I may be wrong, but I thought some notes were added about lubrication. If not, you can find more in the "Pearls of Wisdom" on Al Tirevold's site. Barry

From bipi@comcast.net Sun Feb 15 23:44:25 2004
Subject: [R-390] Thanks for Megger Info + A Question

Hi All, I want to, first, thank all those who responded to my question regarding proper megger operation and I was glad to get that confirmed for future reference. Folks on this list are a big help for sure!

I have completely disassembled the RF deck on my R-390A and want to get it back together before I completely forget what I did :-). However, in the process of cleaning all the parts, I have found 2 broken clamps and a couple more that have serious stress fractures and will fail in the not too distant future. Anyone know of a supply of either NOS or re-manufactured clamps in both the larger and smaller sizes needed on the RF deck? I think I would like to replace all of them while I'm at it and possibly save some grief downstream. Any leads would be appreciated.

BTW, just for the record, my RF deck gear train appeared to be about as clean as you could find before I started. When I began this adventure, I was just planning on fixing a broken clamp on the megacycle gear shaft. What I found was the lubricant between all of the split gears had hardened due to age and those gears no longer functioned properly. So, I guess the old "if it ain't broke, don't fix it" may not completely apply to the R390 because you might not know that it "ain't working" properly. Anyway, thanks again for the megger help and any clamp leads would be appreciated. 73 de Mike

From w7itc@hotmail.com Mon Feb 16 07:32:38 2004
Subject: [R-390] Oxygen Free Wire

There is an easy way to tell oxygen free wire. Just listen to the person explain why he paid 50 dollars a foot for cables. I when into a high end stereo shop because they carried a particular brand of this fancy cable. I purchased three feet of cable. The clerk seemed peeved when I told him I could care less about the oxygen free copper wire, all I cared about was the pretty colors the braded cable has, and I was purchasing it to use as cable for my Straight keys, and a Bug. Ken

From alexx@techunix.technion.ac.il Mon Feb 16 11:21:56 2004
Subject: [R-390] SP8675

hello, nothing to do with R390, but, if someone have any data about the SP8675 transistor, please let me know, and I don't mean the SOUTHERN PACIFIC train !! as found on Google !!! thanks alex

From alexx@techunix.technion.ac.il Mon Feb 16 12:34:13 2004
Subject: [R-390] SP8675

Thanks, this transistors are mounted on the SR-209 receiver made by ASTRO COMMUNUCATION. Idont think they are from Japan. this receiver with all plugs covers from 30-2000 MHz. AM,FM. thanks

alex

From alexx@techunix.technion.ac.il Mon Feb 16 13:18:56 2004
Subject: [R-390] SP8675

Hello Bryce, yes, I know it is NPN and made in the 60's. the man from that radio museum in Austarlia was very kind and already sent me more schematics, but he knew nothing about that transistor. The receiver works very good but I just collect more info about it. thanks again, alex

From BRingwoo@csir.co.za Mon Feb 16 13:44:19 2004
Subject: [R-390] SP8675

.. but they're great with toobs.

From pucroc@inwind.it Mon Feb 16 15:24:24 2004
Subject: [R-390] Lubricate my 390A/URR

Thanks. 73 de Max IK0JJZ

From r390a@bellsouth.net Tue Feb 17 01:58:28 2004
Subject: [R-390] ZM-3 photo needed

While I am waiting to download the manuals for my ZM-3A/U cap bridge, does anyone have an actual photo of one of these critters? Reason being, I just bought one, but the knobs that came with it are a willy-nilly assortment and I wanna see what the thing is *supposed* to look like.

Got a pretty good deal on it, though it needs an alignment and the dial "tags" don't track - the dial string has jumped the pulley, so that will need fixing too. Works well otherwise, just the cap values are more than a bit off.

I calibrate more complex things at work every day, so don't think the alignment itself should be much of a problem, especially since I am aligning it to "hobby use" tolerances. :-)

Any special gotchas I need to be aware of on this thing? thanks Tom

From frolik@gulftel.com Tue Feb 17 12:27:25 2004
Subject: [R-390] ZM-3 photo needed

Howdy Tom,
ZM-3 is a pretty slick piece of gear to have on the bench. I sure have got a lot of use out of mine. Colors are cool too Hi. Have not had mine apart in quite some time since it was Gov NOS but I don't seem to remember the drum being driven with a dial cord. Hmmmmmm I guess I always though it was a gear or direct drive system of some sort. I always whiz the thing from one end to the other slamming it into the stops. Hehehe if it's a cord system maybe I need to take it a bit more easy on the "ol gal". Sure works good and with a bit of creative operation makes a great electrolytic reformer. Anyway just thought I'd throw my 2 cents in cause you may have a bit more work to do than just re-string a dial cord.

Still worth it for sure. Have a good one and enjoy the new toy. Skip WB4GMQ

From sparks@codepoets.com Tue Feb 17 14:38:08 2004
Subject: [R-390] EAC R-390A parts needed

I have a nice EAC R-390A mechanical marvel that is missing all tube shields and the slug rack cover. Does anyone have any or know of a source to obtain these? Thanks es keep em glowin... Tom K4NCG

From roy.morgan@nist.gov Tue Feb 17 15:16:58 2004
Subject: [R-390] Oxygen Free Wire

wrote: > . I went into a high end stereo shop .. for ... three feet of cable. .. all I cared about was the pretty colors the braded cable has, and I was purchasing it to use as cable for my Straight keys, and a Bug.
Ken,

You may have missed an opportunity for some good leg pulling.

You could have assumed a very surreptitious manner and whispered to the fellow that you are experimenting with some advanced digital modes. Mention that you need his confidence and not to tell any one, but you think that Class D operation with modest signal levels in the 7 megacycles range is just right at a baud rate of about 12. Explain that you think his wonderful cable is going to improve the image delivered by the interconnects. You could hint about experiments with furniture grade wood disks grown in a temperate climate used to manage the mechanical vibrations affecting the tones in the lower midrange.

He will never know that what you are *really* telling him is:

- You are running 50 watts on 40 meters CW
- Your average code speed is 12 WPM
- You just dig the colors in his cable
- Your straight key has a finger knob made of local grown cherry wood.
- You copy CW with a note at about 800 cycles.
- You are gonna laugh all the way home.

Roy Whose paddle has finger pieces of Uhmurrikan Walnut and a cord of fancy red microphone cable.

From chacuff@cableone.net Tue Feb 17 18:05:38 2004
Subject: [R-390] EAC R-390A parts needed

Hey Tom,

The slug rack cover is commonly also called the Utah cover. I guess because of it's shape. Fair radio sales www.fairradio.com had those a while back. They also can sell you a set of tube shields...I would imagine only the silver ones. If you are looking for the IERC shields, which are recommended, you may be able to pick up a set from Walter Wilson. I don't know if he sells that stuff separately or not! Hope that helps... Cecil...

From hankarn@pacbell.net Tue Feb 17 18:52:15 2004

Subject: [R-390] EAC R-390A parts needed

Hi All, I make all of the covers and have them for sale and furnish the R390A covers to Fair. I also have some silver tube shields and tons of R-390A parts that I am sorting through at present. No I do not have list together yet. just about any part. Hank KN6DI

From r390a@bellsouth.net Tue Feb 17 23:10:54 2004

Subject: [R-390] WWV Spurs followup from NIST

From the wording of the email, it almost sounds like they didn't know they were even having transmitter problems. Hmmmmm. (Also from the lack of "thanks to all the reports we received" it almost sounds like mine was the only email they received.) Oh well, they fixed it last week it seems, as Monday 2/9 was the last I had heard the spur here. 73 Tom

From jbrannig@optonline.net Tue Feb 17 23:22:59 2004

Subject: [R-390] WWV Spurs followup from NIST

Good catch Tom. I have to admit that when I saw your first post my thought was "Nah, not WWV, this guy got it wrong" I guess the FCC doesn't monitor WWV for spectral compliance..... Jim

From ba.williams@charter.net Wed Feb 18 02:49:30 2004

Subject: [R-390] EAC R-390A parts needed

Tom,

I think that I have a complete set of the real IERC tube shields between my 2 radios. I have one Utah cover plate and one set of top and bottom covers. All came pretty much free with the radios. I only use a couple of the tube shields for the one working R-390A, and those are only the suggested shields listed by Chuck Rippel. I keep one top cover loose on top of the radio in the rack for dust protection. I take it off most of the time when the radio is on to prevent heat buildup. I keep the Utah plate stored away. All of this is nice to look at from time to time, but most of it could allow too much heat.

Just keep your eye open for reasonably priced IERC shields. Sometimes, you find them for a buck or two. A whole lot of old timers have them rolling around in junk boxes or stuffed in plastic AM/FM radios. You only need something like 5 or 6 for shielding in a working radio....if you decide you need them. Barry non Hauser

From hankarn@pacbell.net Wed Feb 18 05:35:19 2004

Subject: [R-390] EAC R-390A parts needed

I find it extremely interesting that after Collins designed these GREAT radios and they were built to work 24/7/365 with covers, shields, adverse operating conditions, voltages all over the scale, vibration and i could go on forever.

Then the radios became available to to public domain, then all of a sudden a whole new bunch of WANNABEE redesign engineers come up with all of these far out theories and solutions to further their case or mostly their pocket books to sell the SS replacements for a perfectly working ballast tube or to

enhance the audio, which is fine. It was not designed to be concert hall performer. It was designed to listen some of the worst signal reception signals in the world for the state of the art at the time.

Covers and shields were there for a reason. The Spec's say how and where the radio was DESIGNED to OPERATE. The enhancements help to some extent.

We all remember our lost somewhere in the Louisiana swamps Nolan Lee and his radio that ran over 7 years 24/7 with out a 3TF7 failure and with voltage fluctuations up and down with covers on and all shields in place with it meeting the same spec's (period) Recap yes. align yes, then plug and play and pass it on to first your born still running. IF IT WORKS WHY FIX IT???? My .0002 worth. Hank KN6DI

From r390a@rcn.com Wed Feb 18 13:06:12 2004
Subject: [R-390] ZM-3 photo needed

Tom, Here's a pcture of mine: <http://users.rcn.com/r390a/hobby/ZM-3A.jpg> All of the knobs are black I believe. 73, /dave N9ZC

From dathegene@hotmail.com Wed Feb 18 14:17:34 2004
Subject: [R-390] IERC shields

Hi gang-- Looking to buy some IERC sheilds; I need 1 of the 6025-B's and 7 of the 5020-B's. I want only the "finger" style, not the 3 piece... Thanks in advance! 73, Gene NAØG

From r390a@rcn.com Wed Feb 18 17:48:14 2004
Subject: [R-390] EAC R-390A parts needed

I think the evidence is pretty good that IERC tube shields reduce internal tube temperatures and prolong tube life. Collins did employ them on later tube gear. Can't fault earlier engineers for using components that were accepted practice, but when something clearly better appears, why not use it?

BTW, was Nolan's radio from an early Collins contract? IIRC, it was a '67 EAC with IERC shields. /dave N9ZC

From rbethman@comcast.net Wed Feb 18 19:11:08 2004
Subject: [R-390] EAC R-390A parts needed

All, The first thing we ALL need to keep in mind - It is the OWNER'S prerogative to do what THEY wish with THEIR radio. Whether WE agree or not. It is indeed THEIRS.

I have both a '52 Collins R-390A/URR and a '67 EAC.

I'm NOT about to modify them. Repair as needed, replace the notorious BBODs, and maintain them - YES!

I've even built a wood cabinet without ventilation ability. Still works GREAT. If anyone wants to change things? Go for it! It is YOURS! Bob - N0DGN

From tetrode@comcast.net Wed Feb 18 21:09:57 2004
Subject: [R-390] EAC R-390A parts needed

> IF IT WORKS WHY FIX IT????

Ahhh, the classics, gotta love 'em... :^) Here's some more....

"If God had meant for man to <blah> then He would have <blah blah>."

"According to the <insert name of religious tome here>....."

"Keep It Simple Sailor"

"Change is Bad..."

"Don't rock the boat!"

and finally

"If it ain't broke don't fix it...."

So everyone join in and sing now, lyrics are below and the tune in Real Audio format can be heard at this link: <http://www.geocities.com/~johnapoe/iftaint.html> at least until the fellow's bandwidth is exceeded!

IF IT AIN'T BROKE

©1995, John A. Poe, Jr.

.
1

I love my old car, it's a classic, you know, But lately when I drive around, it feels kind of slow,
So I went to a mechanic that I know downtown; He checked it over carefully, then said with a frown,
Boy,
(chorus)

If it still works, better leave it alone,
You won't make it better with your tinkering and nagging
And improving and revising and complaining and nitpicking,
So, if it ain't broke, don't fix it.

.
2

I'm good at my job, but hard to satisfy, So I went to the boss with some ideas we ought to try,
Said, Let's overhaul the system and reschedule the crew; He just looked real disgusted, said, I'll tell you
what you do, Bud,

.
(chorus)

If it still works, better leave it alone,
You won't make it better with your tinkering and nagging
And improving and revising and complaining and nitpicking,
So, if it ain't broke, don't fix it.

.
3

I've got the sweetest gal there could possibly be, But I get home so tired, I just sit and watch TV, So I
went to see a counselor, and asked him what to do, He listened to me patiently, and said, If I were you,
Son,

(chorus)

If it still works, better leave it alone,
You won't make it better with your tinkering and nagging
And improving and revising and complaining and nitpicking,

So, if it ain't broke, don't fix it.

.
4

I always go to church, and I love the Lord, But I noticed some teenagers looking terribly bored,
So I went to see the pastor, said we ought to change the way That we do our worship service to attract
the kids today;

.
(bridge)

So it's one for the sermon, two for the prayer, Three for the music, now don't stand there,
We gotta rock around the church today, We gotta jump and shout, sing and pray, Gotta put on a show,
and fill those pews that way...

.
5

Well... the preacher looked amused, had a twinkle in his eye, He said, I'd rather wait for that big show in
the sky;
Let's live by His word, and then some day we'll be Together with our Lord throughout eternity... so...

.
(chorus)

If it still works, better leave it alone,
You won't make it better with your tinkering and nagging
And improving and revising and complaining and nitpicking,
So, if it ain't broke, don't fix it

.....

All in good fun, John (who has no relation to the above songwriter, and has at least one R-390 running
with all shiny shields)

From ezeran@concentric.net Wed Feb 18 23:09:03 2004
Subject: [R-390] ZM-3 photo needed

I used one in the Navy back in 1964. It is a good piece of gear. It seems that once folks get one they
don't let go. EdZ

From cfandt@netsync.net Thu Feb 19 01:00:43 2004
Subject: [R-390] ZM-3 photo needed

said something like: >I used one in the Navy back in 1964. It is a good piece of gear. It seems >that once
folks get one they don't let go.

Yer durn tootin' Ed! This thing is great. Nobody's gettin' mine til I'm in the grave.

Of the several decent quality cap testers I've had over the years this is by far the most stable and
accurate. Note that I'm not including in this discussion the simpler hobbyist cap checkers like the EICOs
and Heaths, etc which use a tuning eye. -Chris F. P.S.: Did that image I shot of mine work out for you?

From odyslim@comcast.net Thu Feb 19 01:46:04 2004
Subject: [R-390] parts needed

Hi, I really need some (3) couplers for my R388. They are for the VFO Pitch, Calibrate and Antenna trim. They look like little clutch discs. That is all that is keeping me from a good working radio. I will pay a good price for them. Thanks, Scott W3CV

From phyoung@adelphia.net Thu Feb 19 04:03:27 2004
Subject: [R-390] SP8675

Thanks, this transistors are mounted on the SR-209 receiver made by ASTRO COMMUNUCATION. dont think they are from Japan. this receiver with all plugs covers from 30-2000 MHz. AM,FM.

-snip- Back when I was a young RF technician in my misspent youth I worked for a little shop in Gaithersburg, MD called Norlin Communications. We manufactured mostly surveillance receivers for the US Govt. If I remember correctly, Norlin was owned by Astro Communication Labs, aka ACL. I think both companies were owned by Ayden Corporation, though I'm not positive.

I remember seeing old SR-209's coming into the test department where I worked for repairs. I fished one out of a dumpster out back one day with one plug-in RF unit and worked on it at home but it never did work well, probably due to my lack of decent test equipment at home. Norlin turned out some interesting, if not spectacular performing receivers, before going out of business sometime in the 1980's. I think documentation, including schematics, might be still available at Ayden Corporation, located in northern Virginia, in the DC area. I'll have to rummage through my old files if anyone expresses an interest. Pete, K3IN "keep 'em glowing!" 1955 Collins R390-A

From ba.williams@charter.net Fri Feb 20 02:22:29 2004
Subject: [R-390] EAC R-390A parts needed

Hank,

Good to hear from you again. It isn't a big thing on the tube shields and dust covers, but the -20 manual does state that the dust covers should be removed if not used in extremely dusty conditions. I think the same paragraph in chapter 2 is where Chuck got his suggested group of tubes to be shielded. These are: V201-V206, V505, and V701 if used in a fixed installation.

The only point that I would quibble on is the type of shields. I posted a resend of the study of no shields, shiny, black, and IERC shields last year. The measured temps was convincing data for tested tube life. I'll dig around and see if I can find it again. The shiny shields were the worst of the lot, and worse than tubes with no shields at all. They always increased tube temps. Barry nonHauser

From hankarn@pacbell.net Sat Feb 21 01:07:00 2004
Subject: [R-390] RE: Post in ref to CV/591 covers

Did any one see my post about making covers for the CV/591? If so would you please forward it to me as it got lost. TIA Hank KN6DI

From Barry Hauser <barry@hausernet.com> Sat Feb 21 04:06:30 2004
Subject: [R-390] Sighting Boatanchors on the History Channel

Hiya Gang

Just saw lot's of BA's on the History Channel's "Secrets of the Y Service" about the British radio intelligence organization which started around the end or shortly after WWI. Lots of AR77's, AR88's, HRO's, WS-19's, SX-28's.

Funny though, they always have to mess up at least one detail. The script goes something like " .. they used Hallicrafters radios to listen in on enemy high frequency transmissions" as the scene shifts to a woman in a fairly recent interview, wearing headphones and tuning a radio an old AR88 (RCA). (I don't think it had the optional meter ;-). There were plenty of SX-28's and I think there was an SX-32 the VHF version of the SX-28 but Hallicrafters, of course, was not the only brand.

Still though, the show has a very high BA/HR rating. If you read this in time (and get The History Channel), I think it repeats at 12 midnight EST. Worth a peek. A lot I've heard of before, but some stories were either new or in somewhat more detail than in previous programs.

No there were no R-390's. Most of the coverage was WWII and a bit beyond. I didn't even spot an R-388. However, at one point there were a whole mess of SP-200's couldn't read the tags so can't say which BC-####'s they were. B

From hankarn@pacbell.net Sat Feb 21 13:57:27 2004
Subject: [R-390] [Fwd: Re: CV-591 covers]

Reflector members,

> I am doing a cost study now for replacement covers for the CV/591 and similar units. It appears that they will look more like the R390 covers. I have 3 no bids on the perforated panels. One bid for for \$20,000 for \$100.00 each of top and bottom plus forming and I have to furnish the Dzus and tooling to insert, plus alodine. Then the marketing, packing, waiting for money and shipping so that means close to \$300.00 per set. NO WAY It looks like I can do louvres on the top and holes on the bottom, Dzus and tooling, alodine. for about \$90.00 per set if I can get 100 FIRM orders and not maybes. I would really tend to having prepaid orders, as I do not feel that I would like to have to play nursemaid to a bunch of unsold cover sets or get burned like on my .engraved panel job. I would estimate \$12.50 for packing and UPS in Lower 48, others TBD. Delivery about 45 days after ordering. Would have to set a deadline date of like March 15 for orders with money, checks or Paypal and hold funds until shipped. Thanks for reading, Hank KN6DI

From dougaudio@earthlink.net Sun Feb 22 00:06:33 2004
Subject: [R-390] r-391 off freq.

Hi!, new to the group. I have a R-391 that I acquired in 1976 still in the crate. Still in mint cond.. Ever since "new", it has been 8-10kc off freq. It zero beats perfectly on all WWV freqs. with bfo on "0". But if you change bands it's off freq. I have moved vfo coupler to adjust but that throws it off on WWV by 8kc to high.

I swapped a r-390 vfo with same result. Change the RF deck, same thing. Change crystal osc., again same problem. 180v b+ is fine. All tubes are good. I know these radios pretty well but this has always stumped me and several others. This my main receiver but I also have 2 R-390 non A's. Any ideas????
Thanx, Doug Ka4swt

From DJED1@aol.com Sun Feb 22 00:08:30 2004
Subject: [R-390] r-391 off freq.

Not sure I understand the problem... You can adjust the calibration so that it reads OK on the 10 Mhz band, for example, but then it's off when you change to another band? Can't you recalibrate on that band? Is the calibration good across a band once it is calibrated? It seems strange that you could change out most of the oscillators and still have a problem. Please describe in more detail.

From courir26@yahoo.com Mon Feb 23 01:22:03 2004
Subject: [R-390] "New" R-390A Capehart Contract

Gentlemen? My moles to the east have uncovered a new contract. See below. I'll update the web link later. It's Mardi Gras now and I can barely (emphasis on bare) type. 73 Tom

From minmar@2z.net Mon Feb 23 04:04:09 2004
Subject: [R-390] WTB Cosmos PTO & 390

Hello all, I am new this list and couldnt find any rules for the list. So if I am out of line with a WTB post please let me know.

I am looking for a Cosmos PTO for a Teledyne R-390 with all Amelco replacement modules. I think Fair Radio has PTO's but they wont let you specify which make. I would also be interested in buying a 1967 EAC for restoration if anyone has an extra or know where I can find one. Thank you, Orrin Bentz In far Northern Minnesota.

From w5or@comcast.net Mon Feb 23 05:50:49 2004
Subject: [R-390] WTB Cosmos PTO & 390

Hello Orrin,
Welcome Aboard, And look no further than the bottom of every post here for info and rules.

And, your post is certainly not out of line. Hope you find your R-390A parts, or even a late model EAC for a project. You are better off asking here for specific PTO's and parts than hoping Fair would send what you prefer. Nothing against Fair, they are indeed fair (pun intended) but can't devote the time to sorting parts by vendor. I've seen their PTO bins, what a pile! w5or@comcast.net

From courir26@yahoo.com Mon Feb 23 13:24:09 2004
Subject: [R-390] Updated Collins Receiver and R-390A List

Gentlemen? I've updated the Collins receiver contract list that I maintain to include the new 390A contract for Capehart, and an update on the R-388.

It is at: <http://www.geocities.com/courir26/CollinsRec.htm>

Please note that there are numerous other lists floating around that are either not maintained by me or are erroneous. The link above is the only one that I maintain. Feel free to link to it if you like. 73 and Happy

Mardi Gras N5OFF

From davidmed82@yahoo.com Mon Feb 23 20:03:33 2004
Subject: [R-390] WTB Cosmos PTO & 390

Hi Orrin, You need to be accurate when posting this kind of ad. What you are looking for is a PTO for an R-390A NOT an R-390. All R-390 PTOs were made by Collins so far as I know and will not work in an R-390A.. Please confirm that your radio is an R-390A. I may have a Cosmos PTO here. Also I think you are looking to buy an R-390A not an R-390. David

From courir26@yahoo.com Mon Feb 23 21:28:37 2004
Subject: [R-390] False Alarm:Was New 390A Contact

Sorry gents . . the new contract did not sustain the double check process, so I removed it from the list. The list is at the same link: <http://www.geocities.com/courir26/CollinsRec.htm> Sorry for the confusion . . . Tom

From hankarn@pacbell.net Tue Feb 24 01:05:50 2004
Subject: [R-390] [Fwd: FS: R-389]

I am going to sell my R-389 S/N 576 that is very clean, fully functional, no mods, original in all aspects with original manual, tool holders are in place and tools are missing. It is at present rack mounted and is sold "AS-IS" but not DOA. The selling price is \$5,000.00 in certified funds plus professional packing and shipping. Prefer Wire transfer or pick up and pay cash in Northridge,CA. No loooky lous or knob twisters, after 2 minutes of tuning and twisting it goes to \$20.00 a twist cash. (includes john). Thanks, Hank KN6DI

From bipi@comcast.net Tue Feb 24 04:28:06 2004
Subject: [R-390] Anti-Backlash Gear Tension?

Question for the experts...what is the rule of thumb for tensioning the anti-backlash gear sets on the RF deck of the R-390A, i.e., 1, 2, or 3 gear teeth after tensioning begins on the springs. Thanks 73 de Mike K7PI

From R390rcvr@aol.com Tue Feb 24 23:23:09 2004
Subject: [R-390] 8640B, SG 1112

Gentlemen: At the risk of rehashing old ground, I would appreciate some input on several questions related to the above units.

- 1) Is there any significant difference between the commercial and military version of the 8640B?
- 2) Were there any major improvements over the life of the 8640B, and if so, what, and at what serial number were they instituted? Thanks for your input! Randy Stout

From ku4yp@verizon.net Wed Feb 25 19:22:41 2004

Subject: [R-390] test and hello

hello all, i am new to this list and wanted to say hello. do not have an r-390 as of yet, however it is top of my wish list. 73 de KU4YP

From mikea@mikea.ath.cx Wed Feb 25 19:27:51 2004

Subject: [R-390] test and hello

wrote: > hello all, > i am new to this list and wanted to say hello. do not have an r-390 as > of yet, however it is top of my wish list.

Welcome. I'm sure someone here will be able to find you an R-390 or R-390A, in whatever shape you want, from serious fixer-upper to pristine Rippel/Mish-reconditioned. They're fun rigs, and I've got to get my 390 working again. One of these days I'll also get the 4 390A rigs working, too, but they're serious fixer-uppers. Mike Andrews

From tetrode@comcast.net Thu Feb 26 01:10:15 2004

Subject: [R-390] test and hello

Welcome aboard Michael, if you haven't already browsed the excellent R-390A FAQ page check it out at <http://www.r-390a.net> It's not really in Q and A format but is more of an information site. You might want to start by downloading some manuals, there are lots listed in the reference section, and another good site for all kinds of boatanchor gear is at <http://www.kg7bz.com/Manuals.html> 73, John

From k8fg@comcast.net Thu Feb 26 02:35:53 2004

Subject: [R-390] ? BRISTOL WRENCHES

Hello to the group, Does anyone know what size Bristol wrenches are needed to disassemble a R-390A ? I need to remove the front panel, shaft clamps and gear train. Thanks, Ron/K8FG...

From r390a@rcn.com Thu Feb 26 11:22:32 2004

Subject: [R-390] ? BRISTOL WRENCHES

You really only need the six-flute 0.096" size. The long-arm variety is helpful when removing/replacing the Mc/Kc knobs.

McMaster-Carr is one source (no minimum order): <http://www.mcmaster.com/> search for 'Spline Key Wrenches'

From k8fg@comcast.net Thu Feb 26 23:58:25 2004

Subject: [R-390] ? BRISTOL WRENCHES

Thanks to the Group fo the info, it's like www.mcmaster.com it is. 73 Ron/K8FG...