| Yuma2 Expected circuit voltages |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Node \# | To | DC | AC p-p | Notes |
| 1 | U7-1, U1A-3 | OV | $\begin{aligned} & 10 \mathrm{mV} \\ & 62.5 \mathrm{KHz} \end{aligned}$ | $60 \mathrm{~K} \Omega$ source resistance |
| 2 | U1A-2 | OV | $\begin{aligned} & 10 \mathrm{mV} \\ & 62.5 \mathrm{KHz} \end{aligned}$ | Same as node 1 |
| 3 | U1A-1 | OV |  | $4168 \times \mathrm{V}$ (node1) |
| 4 | U4B-6 | OV |  | $\pm<1 \mathrm{mV}$ |
| 5 | U4B-7, U5-8 | OV |  | 0 to -150mV |
| 6 | U5-3 | OV |  | = V(HI+ OUT)/100 |
| 7 | U1B-7 | $\pm 14 \mathrm{~V}$ |  | $=-\mathrm{V}$ (CENT FORCE) |
| 8 | U9A-2 | 0V |  | $\pm<1 \mathrm{mV}$ |
| 9 | U9A-1 | $\pm 14 \mathrm{~V}$ |  | = V(CENT FORCE) |
| 10 | V(ACTUATOR) | $\pm 50 \mathrm{mV}$ |  | $=-\mathrm{V}(\mathrm{CENT}$ FORCE)/300 |
| 11 | U2A-2 | OV |  | $\pm<1 \mathrm{mV}$ |
| 12 | U2A-1 | OV |  | $\mathrm{V}(\mathrm{LO}-\mathrm{OUT})=-\mathrm{V}(\mathrm{HI}+\mathrm{OUT}) / 50$ |
| 13 | U2B-6 | OV |  | $\pm<1 \mathrm{mV}$ |
| 14 | U2B-7 | OV |  | $\mathrm{V}(\mathrm{Hi}+\mathrm{OUT})$ |
| 15 | U9B-6 | OV |  | $\pm<1 \mathrm{mV}$ |
| 16 | U9B-7 | OV |  | V (LO+ OUT) |
|  |  |  |  |  |
| Notes: |  |  |  |  |
| V(CENT FORCE) responds slowly to spring and leveling adjustments. When well balanced should be within $\pm 1 \mathrm{~V}$. |  |  |  |  |
| $\pm 15 \mathrm{~V}$ supply voltages should be within $\pm 0.4 \mathrm{~V}$ |  |  |  |  |
| $\pm 8 \mathrm{~V}$ supply voltages should be within $\pm 0.3 \mathrm{~V}$ |  |  |  |  |
| Measure node 1 with meter/scope having input resistance $\geq 10 \mathrm{M} \Omega$. |  |  |  |  |

