



The

# ***Broadcasters' Desktop Resource***

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## **TECH TIPS**

### **Adjusting a Harris 30 Amp Motor-Driven Contactor**

Here is an adjustment procedure for Harris motorized (not solenoid operated) AM RF contactors. From time to time there are reports about these operating erratically and unreliably, so the material was sent to be posted here.

This contactor in question is the Harris 30 Ampere motor-driven contactor. The part number of the contactor is: Harris Model HS-4P 994-8524-001

#### **ADJUSTMENT PROCEDURE**

1. Remove the contactor from the unit.
2. Using a table or other suitable surface, lay the contactor in an inverted position on the contacts. From this position it is possible to observe the micro-switches and the adjustable brackets that contact the micro-switches.
3. Depress the manual override, (located on the contactor, on the opposite side from the terminal board), move the center contact arm either direction, to its fullest travel.
4. Observe the clearance between the micro-switch and the adjustable bracket (it will be necessary to lightly depress the switch arm, being careful not to bend the arm). The bracket has two separate steps; the step with the least amount of clearance will be the one to check.

With the slide arm set at its fullest travel, the clearance between the bracket and the micro-switch roller should measure between 0.0 – 1/16" If the clearance is greater than this, the two screws that hold the adjustable bracket in place should be loosened and the bracket adjusted accordingly.

5. After initial adjustment, the contactor should be cycled a few times and then the clearances re-checked, this operation can be done by hand if control voltages are unavailable.
6. Once the clearance has been established, move the center contact arm to the other side and repeat steps 3 thru 5.
7. When clearances are satisfied for both sides, check switch operation by manually moving the switch and verifying opens and closures using an Ohm meter, test light or other suitable device.
8. Reinstall contactor.

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