

- 8] For the RMS range of current set the RMS pot. (R44) for the desired level of RMS Limiting. Fully CCW is minimum RMS current limiting. Fully CW is maximum RMS current limiting. See specification sheet for your particular amplifier.
- 9] Now set the peak current limit pot R31 for the desired peak current.

R 31 TYPICAL 20 TURN POT. SETTINGS

3 Turns CW = 30% peak current
6 Turns CW = 60% peak current
10 Turns CW = 85% peak current
14 Turns CW = 95% peak current

- 10] Turn the CMP (compensation) pot R30 CW until the motor shaft starts to oscillate at a high frequency rate, then turn the CMP pot CCW until the oscillation stops -- then turn $1\frac{1}{2}$ turns CCW for some additional safety margin.

Note 1. Sometimes a system may not break into a high frequency oscillation when the CMP pot is fully clockwise, this is normal since the particular system the amplifier is connected to may have a very high mechanical resonance and the maximum range of the bandwidth of the amplifier is such that the resonance is not reached.

Note 2. Sometimes a system may continue to oscillate at a high frequency even if the CMP pot is fully CCW see notes in "System Compensation Using An Oscilloscope".

- 11] Now apply a small step signal to the amplifiers signal input and watch the motor shaft.

Does the motor shaft overshoot (under damped) when commanded to stop?

Does the motor shaft stop slowly (over damped) when commanded to stop?

Note: The observation of the motor shaft or machine for the way it starts or stops is done at the time just before the motor shaft or machine stops -- not while the motor is accelerating or decelerating the machine.

- 12] Turn the tach pot. CCW for getting rid of over shoots.

Turn the tach pot. CW for making the system settle quicker.

Note: As a general rule it is advisable not to turn the tach. pot. beyond mid-position.

- 13] After the proper closed loop response is obtained then do not adjust the tach pot any more.

- 14] Run the system at high speed and listen to it.

Does it run rough? If so turn "CMP" pot. a little CCW.