

Stryker SR-440HP Alignment Procedure

Synthesizer Alignment:

10.240 MHz PLL REFERENCE: RX Mode, AM, Freq. to 26.965MHz Band D	Connect Frequency counter to IC5 Pin 5.		Check for 5.1200MHz ± 75 Hz. If tolerance is beyond this, replace X1 (10.240MHz).
VCO BUFFER: RX Mode, AM, Freq. to 26.965MHz Band D	Connect scope to TP3 (top bare lead of R74)	L18	Adjust for max. RF (0.80V p-p typical).
	Connect scope to IC5 pin 13	L22	Adjust for max. RF (70 mv p-p typical)
VCO: RX Mode, AM, Freq. to 26.965MHz Band D Fine and coarse clarifier control to center detent.	Connect DC voltmeter to TP2 (top bare lead of R933)	L17	Adjust for 3.20 VDC ± 0.1 Vdc.
PLL OFFSET OSCILLATOR: RX Mode, AM, Freq. to 26.965MHz Band D	Connect Frequency Counter to TP3 (top bare lead of R74).	L20	AM: Adjust for 16.2700MHz ± 20 Hz.

Transmitter Alignment:

SETTINGS	CONNECTION	ADJUST	ADJUST FOR
CARRIER OSCILLATOR OFFSET, AM TX ADJUST: TX Mode Freq. to 26.965MHz Band D	Connect Frequency Counter to right lead of R232.	L26	AM/TX mode: Adjust for 10.6950MHz ± 20 Hz.
RF AMP CHAIN: Set mode to AM. Set RF power MAX .Inject 600hz tone @ 30mv input to mic audio input. Set to channel 20, band D.	Connect wattmeter to ANT output.	L43, L44, L42, L40, L52,L51	Key TX & adjust (in order) for maximum RF output. Recheck power at lowest & highest channels; readjust if necessary for balance across entire bandwidth.
AM CARRIER POWER HIGH: Set mode to AM, MIKE GAIN at minimum. RF Power to	Connect wattmeter to ANT output.	VR13	Key transmitter with NO A.F injected, set carrier level on AM to 12 watts.

MAX.			
AM CARRIER POWER LOW: RF Power to LO .	Connect wattmeter to ANT output.	VR21	Key TX & adjust for 2 watt output
AMC Mode to AM. MIKE GAIN to maximum. Inject audio signal of 600hz 30mV (-18 dBm) at MIC jack.	Connect modulation meter to ANT output.	VR14	Adjust for 100% modulation depth to where lobes just meet.
FM DEVIATION: Mode to FM MIKE GAIN to maximum. Inject 1 KHz, 30 mV audio signal at mike jack.	Connect deviation meter to ANT output.	VR5	Adjust for total deviation of 4.3 KHz.

Receiver Alignment:

SETTINGS	CONNECTION	ADJUST	ADJUST FOR
AM/FM RF & IF SENSITIVITY: Frequency to 27.205 MHz Mode AM RF GAIN fully clockwise. SQUELCH fully counter clockwise NB/ANL to OFF VOLUME to comfortable level. RF Generator output to 27.205 MHz at 100uV modulated 30% with 1 KHz audio tone.	Connect AF VTVM or scope across speaker terminals. RF Generator to ANT Jack	(in order) L6, L7 L8, L10 L11, L12 L3, L4	Adjust for max. output reading on "S" meter.
Same as above	Same as above	L6	Adjust for minimum noise with signal.
FM DETECTOR: Mode FM. Set FM RF Generator to 26.965 MHz 0.5uV deviated 3 KHz with 1KHz audio tone. Reduce VOLUME as required.	Connect AF VTVM or scope to IC2 Pin 7. RF Generator to ANT Jack	L5	Adjust for maximum audio output.
AM/FM S-METER: Set mode to AM. RF Generator output to 50uV unmodulated. Set Squelch fully counterclockwise.	Same as above	VR1	Adjust for "S-9" meter reading.
AM/FM SQUELCH RANGE: Increase RF Generator output to 10mV. Set Squelch Control fully clockwise.	Same as above	VR4	Adjust to the squelch just closes.

NOISE BLANKER: Set radio to 26.975MHz Set mode to AM Set RF generator output to 26.965MHz at 1000uV unmodulated. Set NOISE BLANKER switch to "ON".	Connect DC Voltmeter to TP1 (Cathode of D2).	L1, L2	Adjust for maximum DC voltage.
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