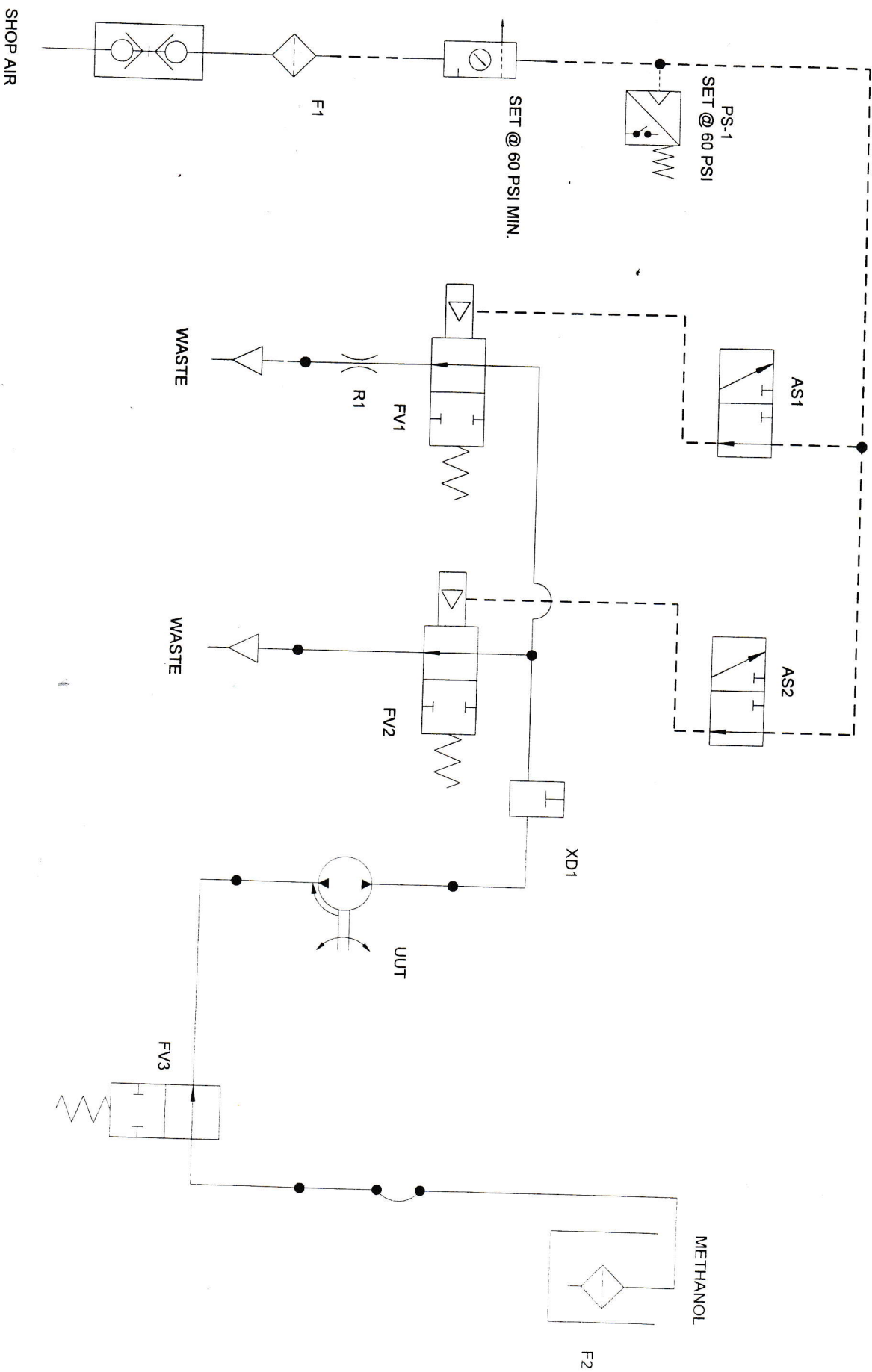


Handwritten notes on the left margin: *2-15-6* and *6-15-6*.

The schematic is divided into three main sections, each containing a 74181 ALU and a 74180 MUX. The top section (A) shows the ALU and MUX with various inputs and outputs. The middle section (B) shows the ALU and MUX with various inputs and outputs. The bottom section (C) shows the ALU and MUX with various inputs and outputs.

Key components and labels include:

- ALU (Arithmetic Logic Unit) - 74181
- MUX (Multiplexer) - 74180
- Inputs: J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J40, J41, J42, J43, J44, J45, J46, J47, J48, J49, J50, J51, J52, J53, J54, J55, J56, J57, J58, J59, J60, J61, J62, J63, J64, J65, J66, J67, J68, J69, J70, J71, J72, J73, J74, J75, J76, J77, J78, J79, J80, J81, J82, J83, J84, J85, J86, J87, J88, J89, J90, J91, J92, J93, J94, J95, J96, J97, J98, J99, J100, J101, J102, J103, J104, J105, J106, J107, J108, J109, J110, J111, J112, J113, J114, J115, J116, J117, J118, J119, J120, J121, J122, J123, J124, J125, J126, J127, J128, J129, J130, J131, J132, J133, J134, J135, J136, J137, J138, J139, J140, J141, J142, J143, J144, J145, J146, J147, J148, J149, J150, J151, J152, J153, J154, J155, J156, J157, J158, J159, J160, J161, J162, J163, J164, J165, J166, J167, J168, J169, J170, J171, J172, J173, J174, J175, J176, J177, J178, J179, J180, J181, J182, J183, J184, J185, J186, J187, J188, J189, J190, J191, J192, J193, J194, J195, J196, J197, J198, J199, J200, J201, J202, J203, J204, J205, J206, J207, J208, J209, J210, J211, J212, J213, J214, J215, J216, J217, J218, J219, J220, J221, J222, J223, J224, J225, J226, J227, J228, J229, J230, J231, J232, J233, J234, J235, J236, J237, J238, J239, J240, J241, J242, J243, J244, J245, J246, J247, J248, J249, J250, J251, J252, J253, J254, J255, J256, J257, J258, J259, J260, J261, J262, J263, J264, J265, J266, J267, J268, J269, J270, J271, J272, J273, J274, J275, J276, J277, J278, J279, J280, J281, J282, J283, J284, J285, J286, J287, J288, J289, J290, J291, J292, J293, J294, J295, J296, J297, J298, J299, J300, J301, J302, J303, J304, J305, J306, J307, J308, J309, J310, J311, J312, J313, J314, J315, J316, J317, J318, J319, J320, J321, J322, J323, J324, J325, J326, J327, J328, J329, J330, J331, J332, J333, J334, J335, J336, J337, J338, J339, J340, J341, J342, J343, J344, J345, J346, J347, J348, J349, J350, J351, J352, J353, J354, J355, J356, J357, J358, J359, J360, J361, J362, J363, J364, J365, J366, J367, J368, J369, J370, J371, J372, J373, J374, J375, J376, J377, J378, J379, J380, J381, J382, J383, J384, J385, J386, J387, J388, J389, J390, J391, J392, J393, J394, J395, J396, J397, J398, J399, J400, J401, J402, J403, J404, J405, J406, J407, J408, J409, J410, J411, J412, J413, J414, J415, J416, J417, J418, J419, J420, J421, J422, J423, J424, J425, J426, J427, J428, J429, J430, J431, J432, J433, J434, J435, J436, J437, J438, J439, J440, J441, J442, J443, J444, J445, J446, J447, J448, J449, J450, J451, J452, J453, J454, J455, J456, J457, J458, J459, J460, J461, J462, J463, J464, J465, J466, J467, J468, J469, J470, J471, J472, J473, J474, J475, J476, J477, J478, J479, J480, J481, J482, J483, J484, J485, J486, J487, J488, J489, J490, J491, J492, J493, J494, J495, J496, J497, J498, J499, J500, J501, J502, J503, J504, J505, J506, J507, J508, J509, J510, J511, J512, J513, J514, J515, J516, J517, J518, J519, J520, J521, J522, J523, J524, J525, J526, J527, J528, J529, J530, J531, J532, J533, J534, J535, J536, J537, J538, J539, J540, J541, J542, J543, J544, J545, J546, J547, J548, J549, J550, J551, J552, J553, J554, J555, J556, J557, J558, J559, J560, J561, J562, J563, J564, J565, J566, J567, J568, J569, J570, J571, J572, J573, J574, J575, J576, J577, J578, J579, J580, J581, J582, J583, J584, J585, J586, J587, J588, J589, J590, J591, J592, J593, J594, J595, J596, J597, J598, J599, J600, J601, J602, J603, J604, J605, J606, J607, J608, J609, J610, J611, J612, J613, J614, J615, J616, J617, J618, J619, J620, J621, J622, J623, J624, J625, J626, J627, J628, J629, J630, J631, J632, J633, J634, J635, J636, J637, J638, J639, J640, J641, J642, J643, J644, J645, J646, J647, J648, J649, J650, J651, J652, J653, J654, J655, J656, J657, J658, J659, J660, J661, J662, J663, J664, J665, J666, J667, J668, J669, J670, J671, J672, J673, J674, J675, J676, J677, J678, J679, J680, J681, J682, J683, J684, J685, J686, J687, J688, J689, J690, J691, J692, J693, J694, J695, J696, J697, J698, J699, J700, J701, J702, J703, J704, J705, J706, J707, J708, J709, J710, J711, J712, J713, J714, J715, J716, J717, J718, J719, J720, J721, J722, J723, J724, J725, J726, J727, J728, J729, J730, J731, J732, J733, J734, J735, J736, J737, J738, J739, J740, J741, J742, J743, J744, J745, J746, J747, J748, J749, J750, J751, J752, J753, J754, J755, J756, J757, J758, J759, J760, J761, J762, J763, J764, J765, J766, J767, J768, J769, J770, J771, J772, J773, J774, J775, J776, J777, J778, J779, J780, J781, J782, J783, J784, J785, J786, J787, J788, J789, J790, J791, J792, J793, J794, J795, J796, J797, J798, J799, J800, J801, J802, J803, J804, J80

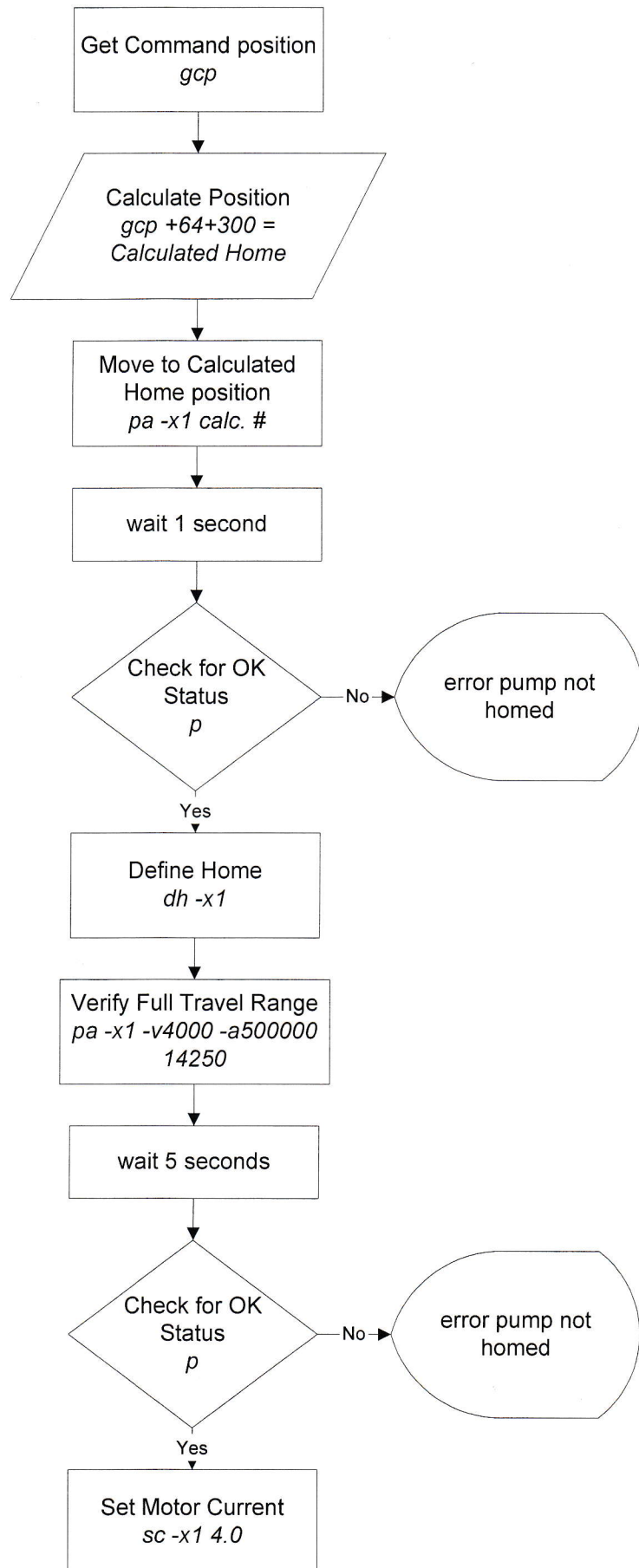


NOTES:

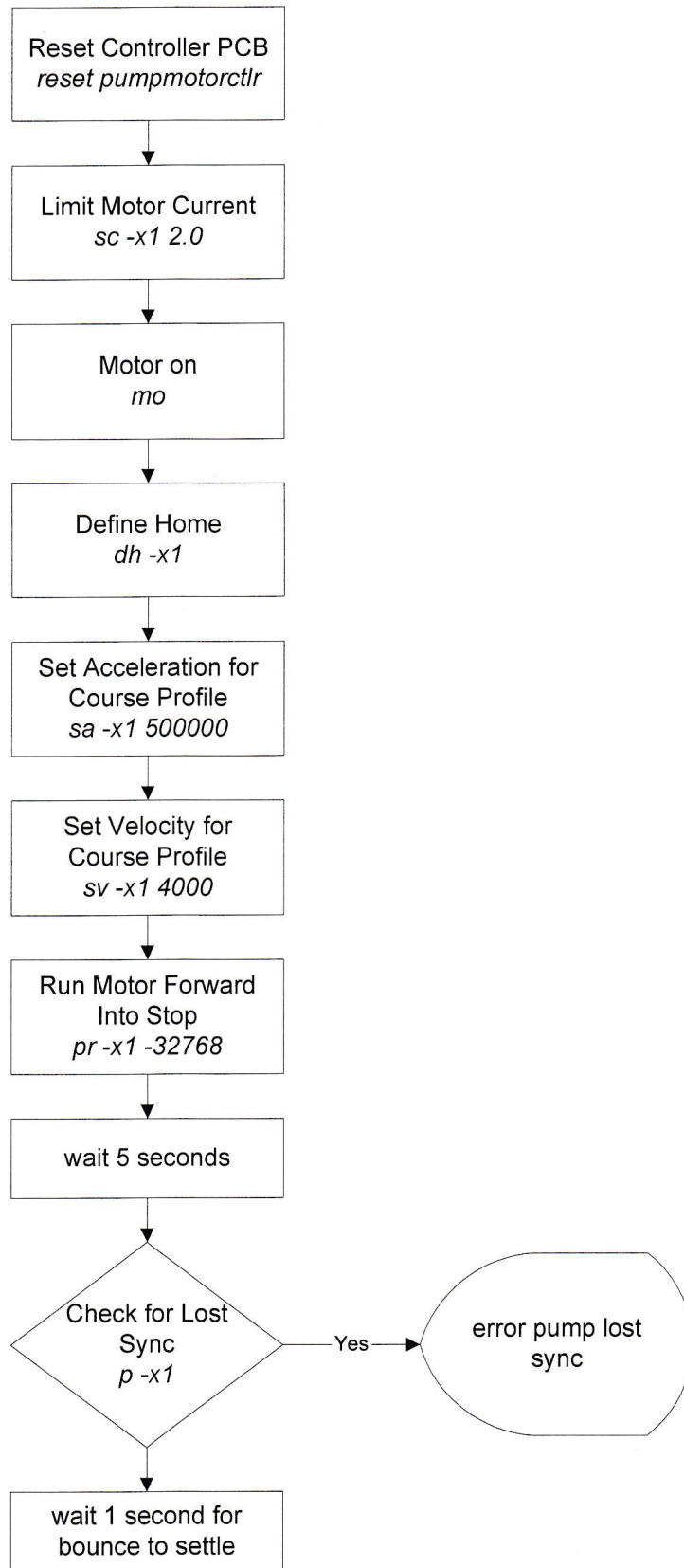
- ALL VALVES NC
- F1 - .3 μ M
- F2 - 10 μ M
- R1 - .009 X 18' SST

2690 PUMP HEAD
TESTER
TE 82519
M MADYDA 12/96

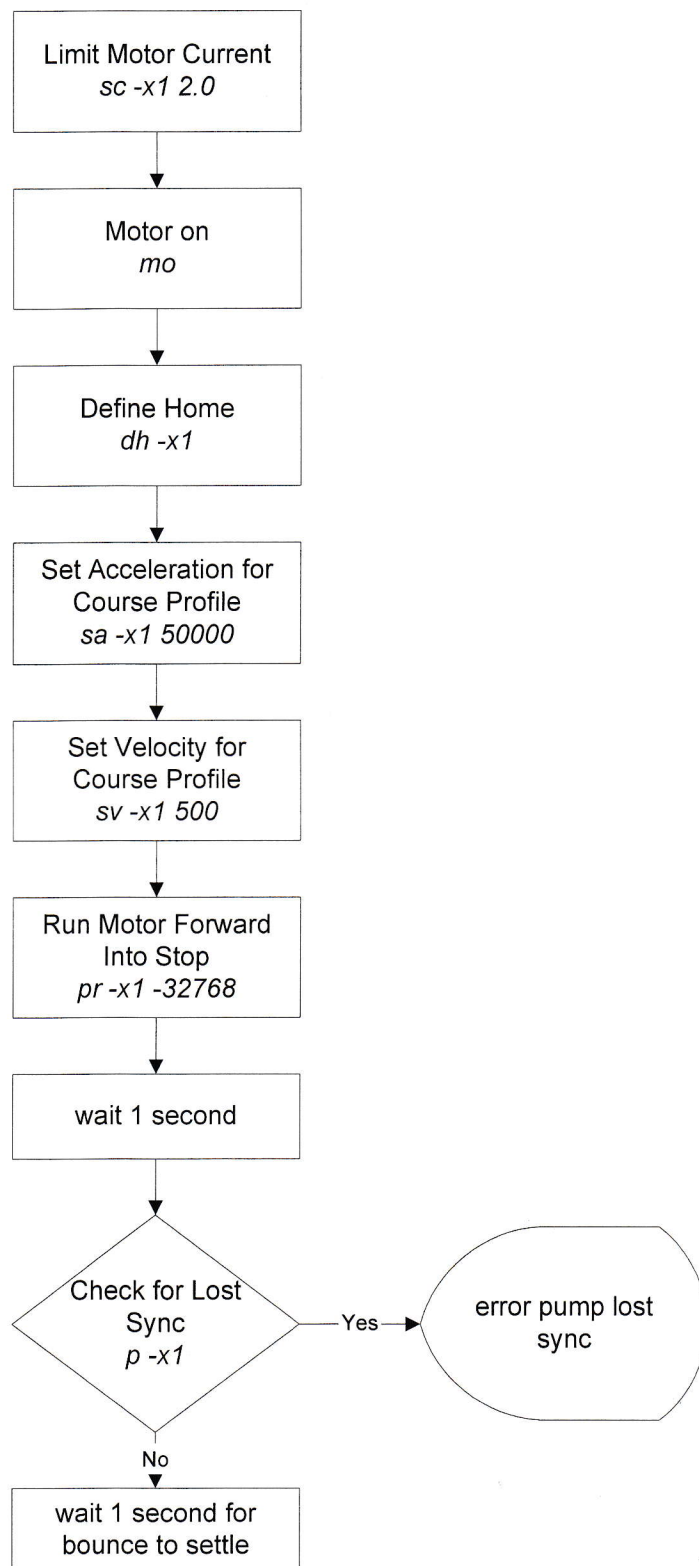
Position Pump Home
Calculate & Move to
Home



Position Pump Home COURSE PROFILE



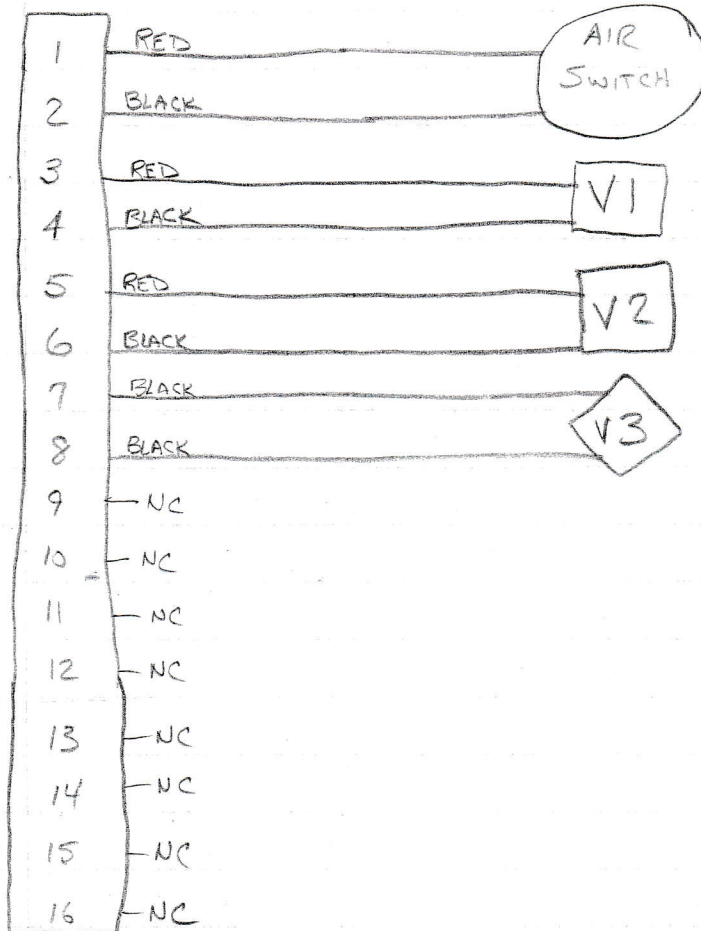
Position Pump Home FINE PROFILE



15 MAR 96

PUMP HEAD TESTER - " VALVE / AIRSW. WIRING "

16 PIN
BULKHEAD
CONN.



W

PUMP HEAD TESTER WIRING

25 MAR 96

CPU

- ✓ J23 PRIMARY — 10 PIN (ON FRONT PANEL)
- ✓ J20 PRIMARY — PT1 (INNER PANEL)
- ✓ J26 (SERIAL) — PUMP DRIVER (}
- ✓ J8 (CONSOLE PORT) — 9 PIN 'D' ON REAR PANEL
- ✓ PWR

PUMP DRIVER

- ✓ FAN — FAN ON REAR PANEL
- ✓ MOTORS — 4 PIN G.I.D.E ON FRONT PANEL

BD		FRONT PANEL (4 PIN G.I.D.E. CONN.)	
(BRN)	1 - MTR WIND A	1	YELLOW
(RED)	2 - " B	2	WHT
(ORG)	5 - " B	3	RED
(YEL)	6 - " A	4	ORG

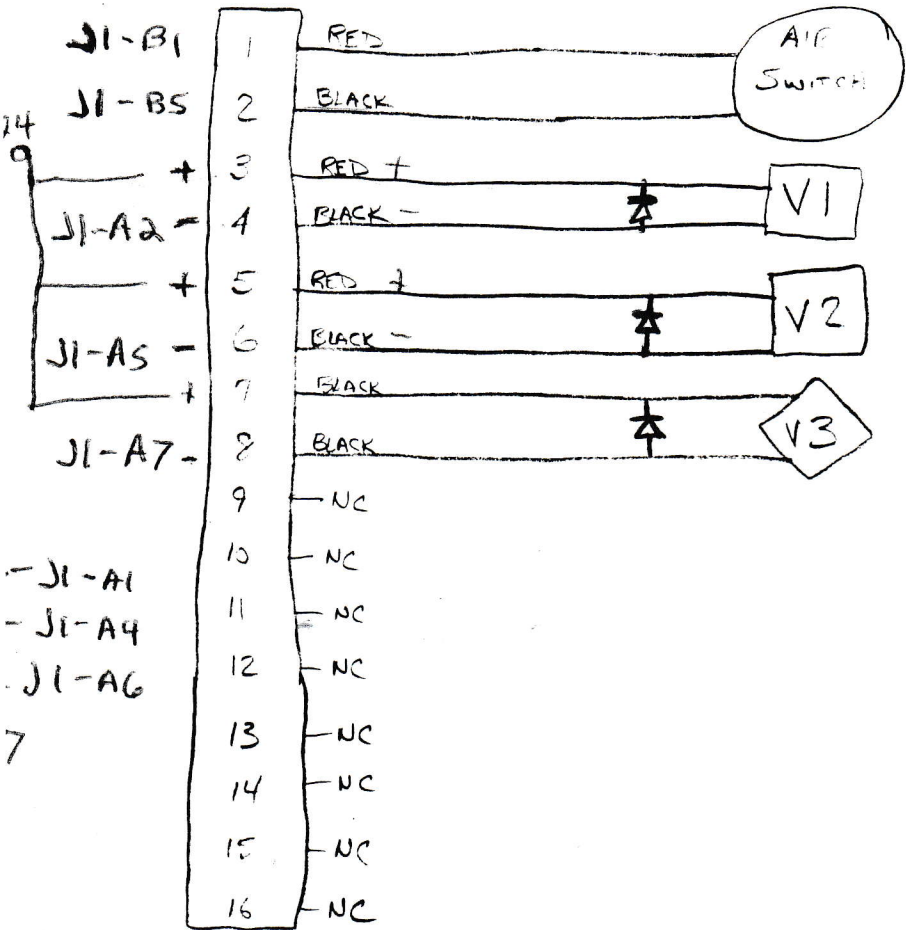
✓ POWER

CONSOLE PORT J8:

PIN		9 PIN "D" CONN.	
1	(WHT) NC	—	
2	(BRN) T1 OUT (TXD)	—	2 (RX)
3	(RED) GND	—	
4	(ORG) GND	—	5 (GND)
5	(BLK) R1 IN (RXD)	—	3 (TX)
6	(BLU) NC	—	

PUMP HEAD TESTER - " VALVE / AIRSW. WIRING "

16 PIN
BULKHEAD
CONN.



1
2 BLK
3 yellow
4
5 RED

1
yellow 2
BLACK 3
4 T
Rep 5

123456



1 - 7

tx 2 - 3

3 - 5

END 4 - 5

Rx 5 - 2

6-8

Table 10-1. Serial interface port signals and connector pinouts.

Signal	name	DB9 pin	DB25 pin
DCD	Data Carrier Detect	1	8
RX	Receive Data	2	3
TX	Transmit Data	3	2
DTR	Data Terminal Ready	4	20
GND	Signal Ground	5	7
DSR	Data Set Ready	6	6
RTS	Request to Send	7	4
CTS	Clear to Send	8	5
RI	Ring Indicator	9	22

There are two types of serial devices: DTE (Data Terminal Equipment) and DCE (Data Communications Equipment). In theory, when two serial devices are connected together, one is a DTE, and the other is a DCE. This is always true when connecting a modem (DCE) to a computer (DTE). In this case the pins in the cable can be connected straight through, as shown in Figure 10-2.

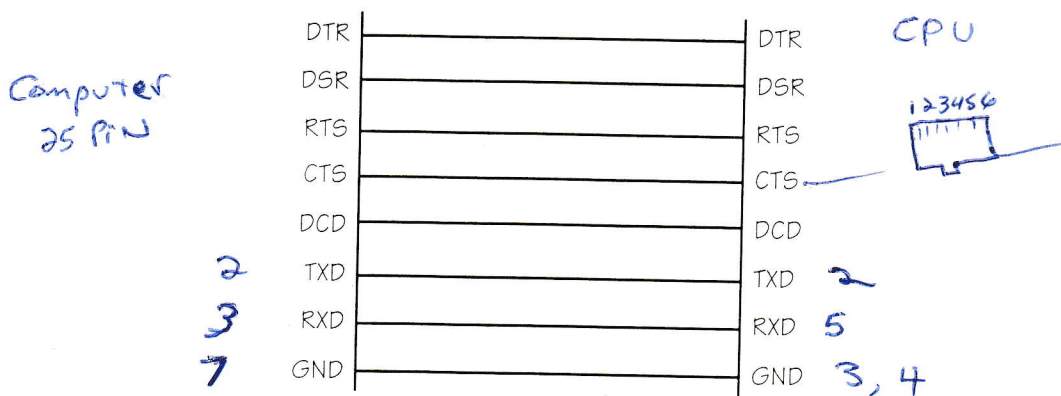


Figure 10-2. Normal serial cable wiring.

