

# **IMT** MATERIAL HANDLING SYSTEMS

## **PROPORTIONAL RADIO / TETHERED REMOTE CONTROL**



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MANUAL PART NUMBER 99903381

**Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation company.**

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**REVISIONS LIST**

DATE	LOCATION	DESCRIPTION OF CHANGE
20030718	Many 23	Added 7-15 tm crane radio remote parts to manual
20040204	70,71	Added Handle Asm part number to 99903279-1 drawing
20040318	76-88	ECN 9291 - Change to 991716958 Control Kit for tethered remote (winch)
20040629	97,99,101,103,105	Added 11-76 radio kit to parts manual, removed separate drawing numbers.
20041019	19	Corrected typo on valve asm part number.
20050509	18	Added spool actuator 71411169 part number on 99903318-2 drawing.
20061113	23	99903318 - Added orifice part number 71411432. ECN 10256 - update 99903279 drawing.

## INTRODUCTION

This manual has been compiled to provide the basic information on how to use your remote control system and how to proceed with maintenance. Before using this equipment, carefully read this manual.

### **WARNING**

THE USER OF THE REMOTE CONTROL MUST BE PROPERLY TRAINED ON HOW TO USE THE EQUIPMENT. FAILURE TO TRAIN OPERATORS PROPERLY MAY RESULT IN SERIOUS INJURY OR DEATH.

It is the purchaser's responsibility to operate the Remote Control in accordance with all State, Local, Safety and Health Regulation Codes and Standards.

If the Remote Control will be used in a safety critical application, the Customer must appropriately test and evaluate the control to prevent injury to the final user.

Changes or modifications not expressly approved by IMT will void the warranty

Parts and/or components may be changed without notice. If discrepancies result from the changes in respect to the contents of this manual, please contact IMT Technical Support.

### **WARNING**

FAILURE TO ADHERE TO THE INSTRUCTIONS PROVIDED BY THE VEHICLE AND CRANE MANUFACTURER CAN RESULT IN EQUIPMENT FAILURE, SERIOUS INJURY, OR DEATH.

### **WARNING**

READ AND UNDERSTAND THE IMT CRANE OPERATORS' SAFETY MANUAL AND ALL OTHER APPLICABLE INSTRUCTION MANUALS WHICH ACCOMPANIED YOUR CRANE. FAILURE TO DO SO MAY RESULT IN EQUIPMENT FAILURE, SERIOUS INJURY, OR DEATH.

## REMOTE CONTROL SPECIFICATIONS

This document provides principles of operation for IMT's material handling cranes using Radio Remote or Tethered Remoted Controls and Main Control Valves. The components of the system include:

- Main Control Valve
- Radio/Tethered Remote Valve

### MAIN CONTROL VALVE

The main control valve is considered an open center valve. When the crane is not operated, the oil flows from pressure (P) to return (T). The pressure developed in the system is simply back pressure from the oil traveling through the valve.

The main control valve can be operated using two methods: manual or hydraulic. In the manual mode, the operator moves the spool that directs oil to the crane cylinders. The operator can control the speed and direction of movement using control handles on the valve. The system is proportional, so the further the handle is moved, the faster the crane will function. (Increased spool movement results in increased hydraulic flow.)

In the hydraulic mode, the principles are the same. A port is located on each end of the spool (Hydraulic Spool Actuator Port.) During normal operation, oil is diverted to one end of the spool while the other end is diverted to tank. Pressure builds on one end, causing the spool to move. When the spool moves, the oil is sent out to the crane functions.

### RADIO / TETHERED REMOTE VALVE

The radio remote valve controls the oil direction and the pressure level to the hydraulic spool actuators on the main control valve. When the operator selects a function, a solenoid is energized. This directs oil to the main control valve. A single, proportional, pressure-reducing valve sets the pressure, based on trigger position. The maximum pressure into the proportional valve is controlled by a pressure reducing valve at the inlet to the valve. As the trigger is pulled, the oil pressure flowing into the main control valve hydraulic spool actuator port increases. During normal operation, only one function can be controlled at a time. If two crane functions are selected, the remote control valve will control both functions using one proportional pressure signal.

## VALVE DRIVER - TETHERED REMOTE-HCT 99910038 (77044826)

### POWER LED

The Power LED illuminates red while power is being applied to the valve amplifier. If the LED is not illuminated, no power is being applied to the valve amplifier.

If the power LED does not function as described, inspect input wiring and repair or replace as necessary. When input power is applied, the LED should illuminate.

### PMW% LED

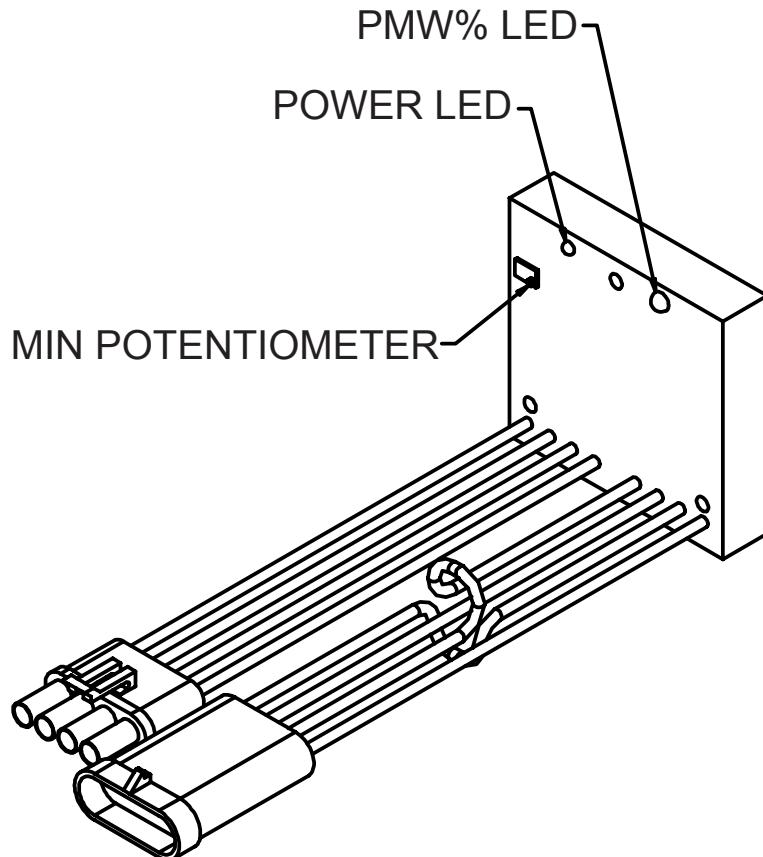
The PMW% LED indicates the condition of the output currently flowing to the proportional valve. The LED will change colors from red to yellow to green. The change of colors indicates the variance of current flowing to the proportional valve. Red indicates minimum current, and green indicates maximum current. This represents the flow condition going from low flow (red) to maximum flow (green), thus varying the speed of crane functions.

If the LED remains red as the speed control trigger is activated, a dead short is present in the circuit. This could be the result of a wiring problem, shorted out proportional coil, etc. Inspect the wiring and replace the proportional coil if required.

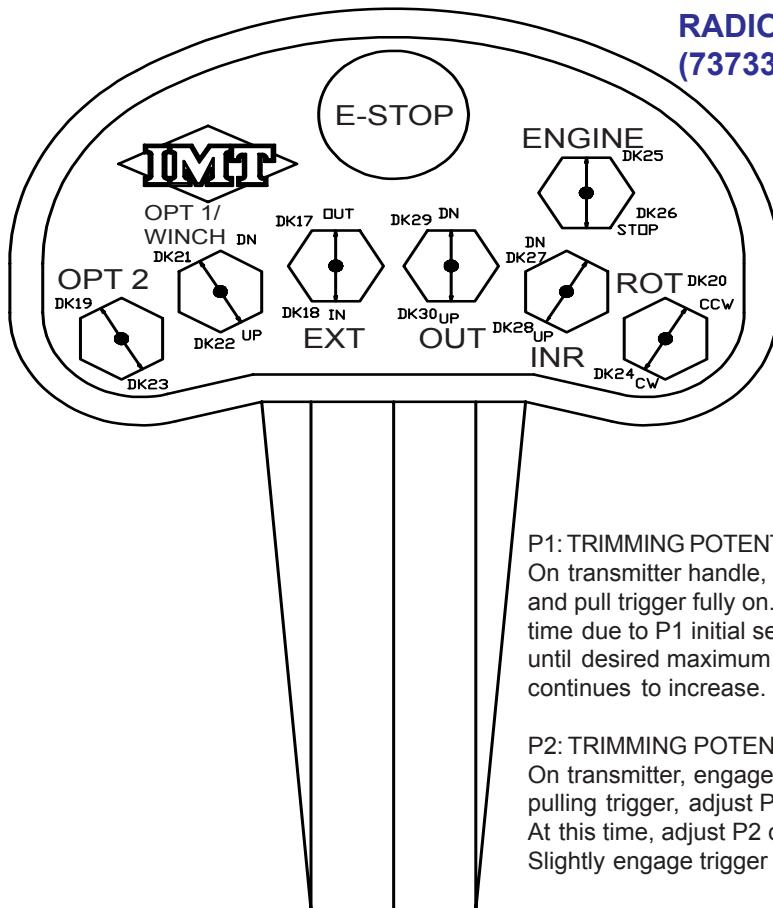
### MIN POTENTIOMETER

The minimum adjustment potentiometer is used to set the minimum amount of movement of an individual function at the valvebank when the corresponding function switch at the handset is depressed. To adjust, set engine at high speed control setting. Depress the "rotation" function switch at the handset. Adjust the minimum potentiometer at the amp driver card clockwise until the crane begins to rotate, or counterclockwise until motion begins to stop. No other electrical adjustments are required to properly operate the crane.

If the valve shifts using manual overrides, the problem is electrical. Valve coils are interchangeable and may be changed by removing the coil nut. This allows maintenance personnel to isolate individual coil failures. If the valve cannot be actuated manually or electrically, it is necessary to replace the section.



## RADIO REMOTE KIT - MAT'L HANDLING (73733600)



JUMPER CONNECTIONS INSIDE RECEIVER

J1: PULSE/DITHER FREQUENCY  
- NO JUMPER

J2: CONTROL RANGE OF OUTPUT CURRENT (ONLY CURRENT-CONTROL)  
- PIN 2/3 CONNECTED: 0-2A

### P1: TRIMMING POTENTIOMETER FOR MAXIMUM VALUES

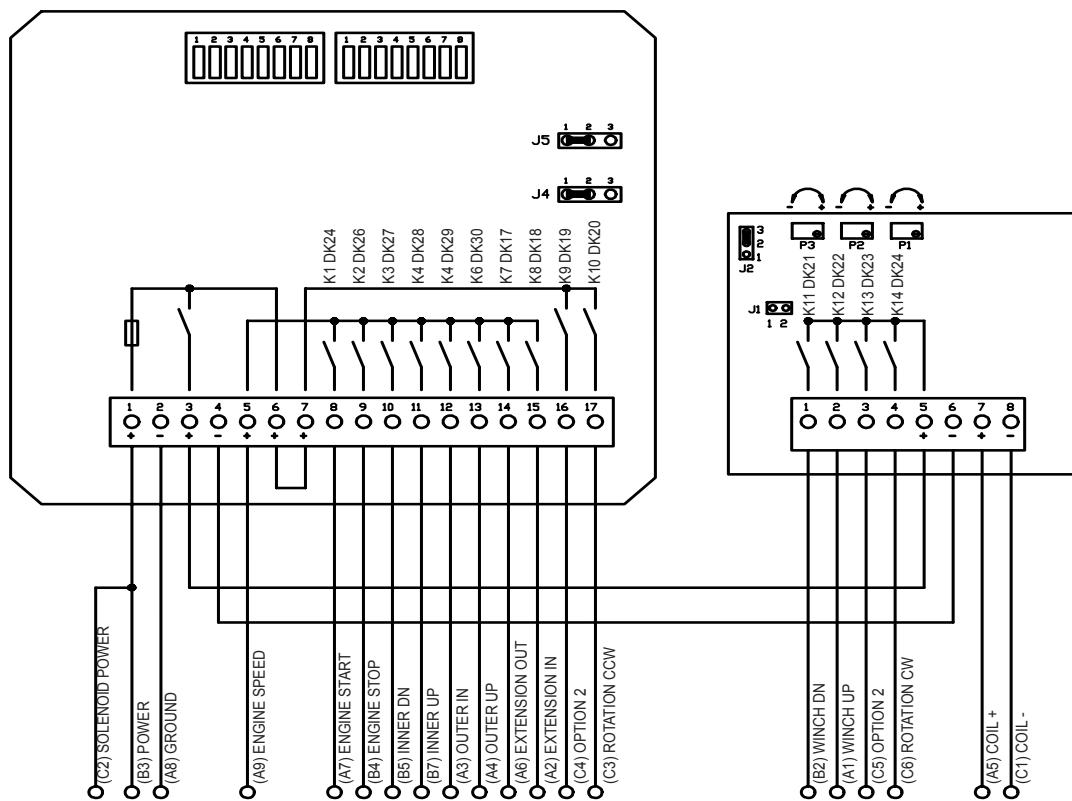
On transmitter handle, engage rotation CW or CCW function switch and pull trigger fully on. Crane MAY or MAY NOT begin to move at this time due to P1 initial setting. Turn P1 potentiometer counterclockwise until desired maximum speed is obtained, or until speed no longer continues to increase.

### P2: TRIMMING POTENTIOMETER FOR INITIAL VALUE ADJUSTMENT

On transmitter, engage rotation CW or CCW function switch. Without pulling trigger, adjust P2 counterclockwise until crane begins to move. At this time, adjust P2 clockwise until no movement is detected. Slightly engage trigger and adjust P2 to fine tune.

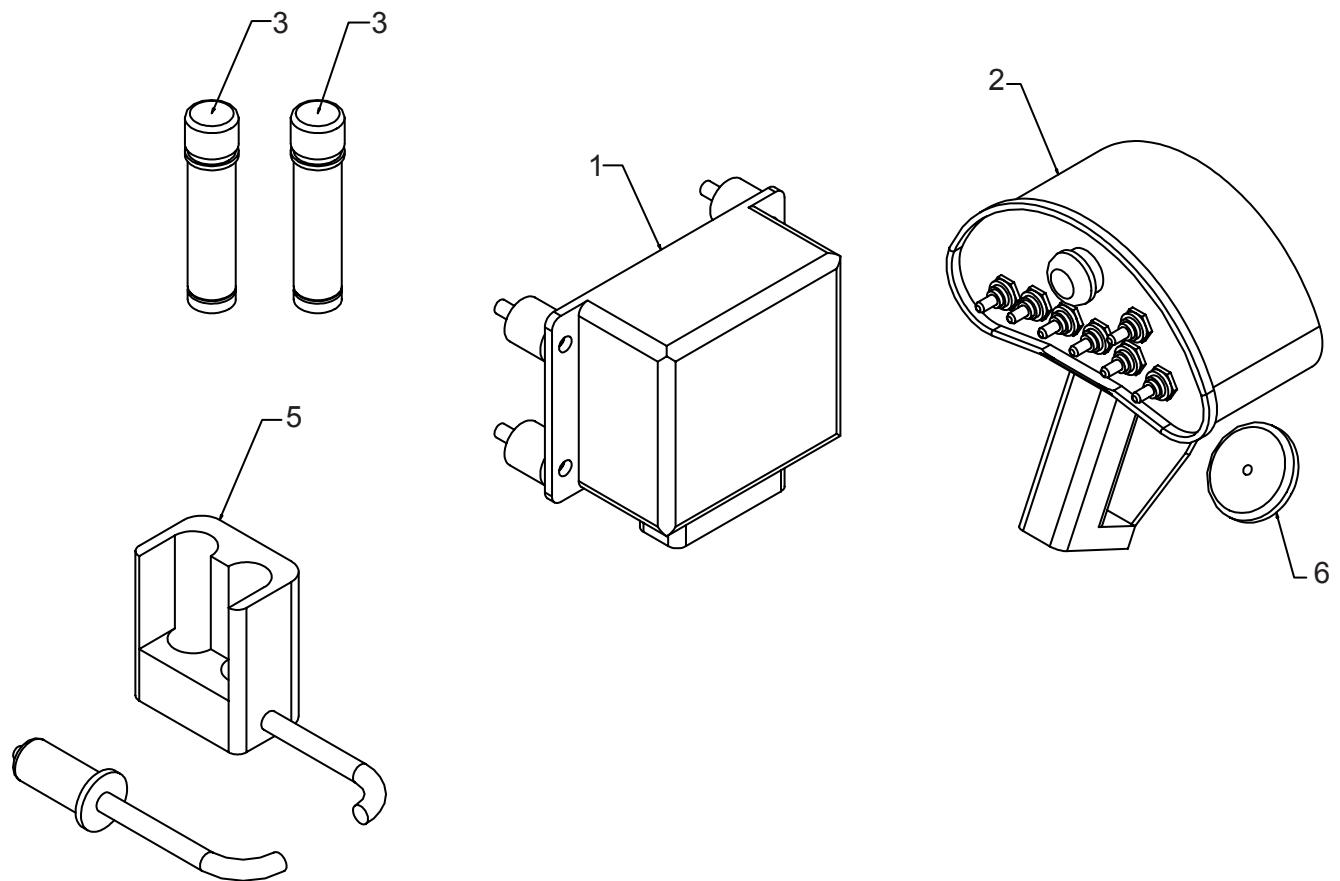
### P3: TRIMMING POTENTIOMETER TO ADJUST DITHER AMPLITUDE

Adjust clockwise or counterclockwise for smoothness of operation.



**RADIO REMOTE KIT COMPONENTS  
(73733600-1)**

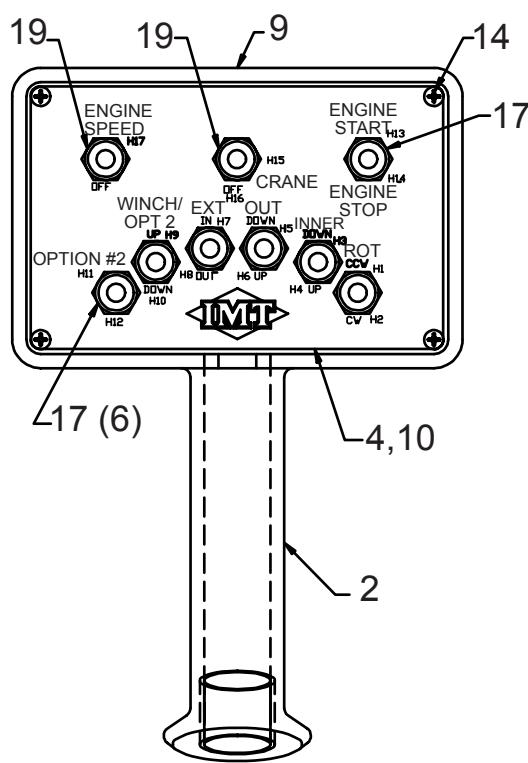
- |    |          |                            |   |
|----|----------|----------------------------|---|
| 1. | 73733588 | RADIO RMT RECEIVER         | 1 |
| 2. | 73733589 | RADIO RMT TRANSMITTER      | 1 |
| 3. | 70146100 | VERSA-PACK BATTERY (3.6 V) | 2 |
| 5. | 70146102 | BATTERY CHARGER (12V)      | 1 |
| 6. | 70146103 | MAGNET, TEL RAD RMTTRANS.  | 1 |



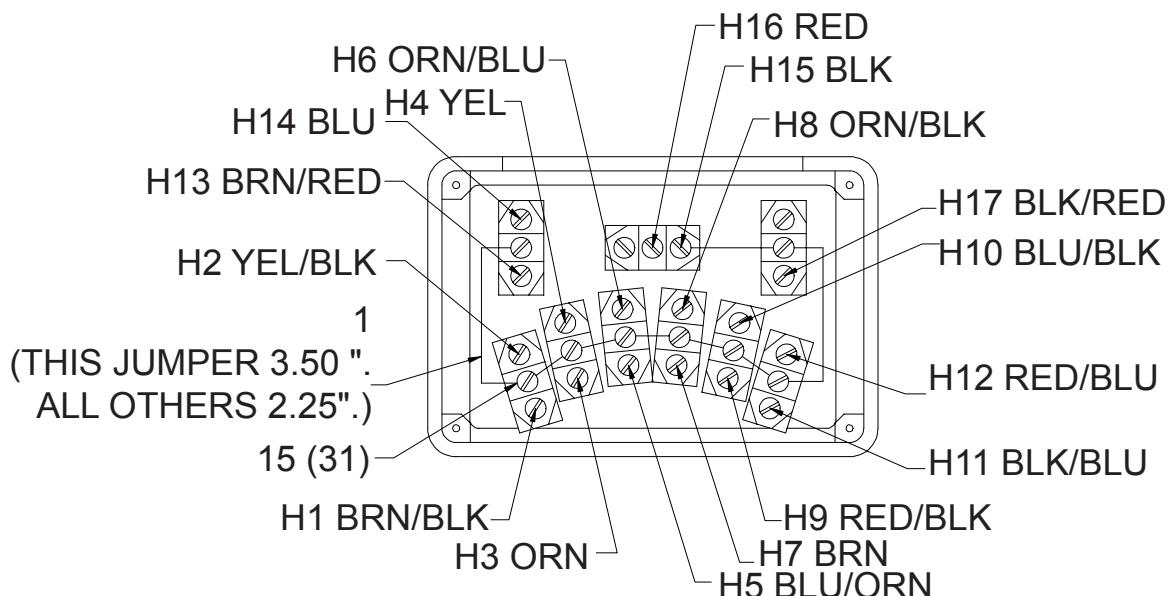
## HANDLE ASM - MAT'L HANDLING TETH- ERED REMOTE (51716758-1)

1. 89044214	WIRE - 18GA GRN STRD	1.61 FT
2. 60119335	CONTROL HANDLE-BLK	1
3. 60111141	TRIGGER MACHINING (PART OF 11)	1REF
4. 60119277	FRONT COVER-RC HANDLE	1
5. 70034306	BACK COVER-RC HANDLE	1
7. 77044196	CONNECTOR - 3/4 STR REL	1
8. 77044621	PIN	24
9. 70394447	DECAL-DANGER RC	1
10. 70396084	DECAL-TETH RMT	1

11. 70394183	TRIGGER ASM - RC HANDLE (INCL. 3)	1
14. 72061009	SCR-SHT MET #6 X 3/4 PH	8
15. 77040051	TERM-SPRSPACE I #8 STUD	26
17. 77040372	SWITCH-TOGGLE SPDT	7
19. 77040373	SWITCH-TOGGLE SPST	2
20. 77045002	CONNECTOR	1
21. 89044100	CABLE-18 GA/24 WIRE TYPE	50 FT
22. 77040147	TERMINAL	5
23. 77040047	TERMINAL	5
24. 72060602	SCR-MACH #6-32 X 3/8 RDH	4
25. 70145495	HEAT SHRINK 3/4" W/ ADH	1/2 FT

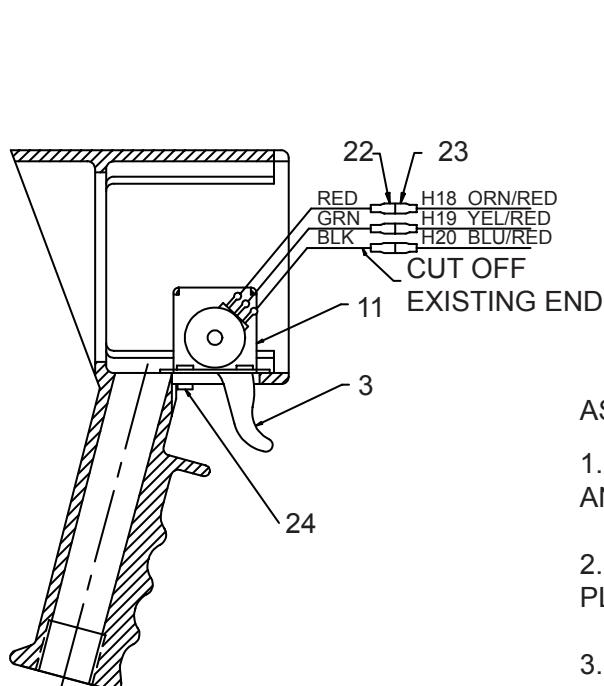


CONNECTOR PIN LOCATION	WIRE COLOR	HANDLE CONN. LOCATION	FUNCTION
1	YEL/BLK	H2	ROT CW
2	ORN/BLK	H7	EXT OUT
3	BLU/BLK	H9	WINCH DN
4	RED/BLK	H10	WINCH UP
5	ORN/RED	H18	REF
6	BRN	H8	EXT IN
7	BRN/RED	H13	ENG START
8	BLU/RED	H20	GROUND
9	BLK/RED	H17	ENG SPEED
10	BRN/BLK	H1	ROT CCW
11	RED	H16	POWER
12	BLU	H14	ENG STOP
13	ORN	H3	INNER DN
14	BLK/ORN	DRIVER (-)	COIL (-)
15	YEL	H4	INNER UP
16	BRN/BLU	DRIVER (+)	COIL (+)
17	YEL/RED	H19	VOLT
18	BLK	H15	CRANE
19	BLK/BLU	H11	OPTION 2
20	RED/BLU	H12	OPTION 2
21	BLU/ORN	H5	OUTER DN
22	ORN/BLU	H6	OUTER UP
23	YEL/BLU	COIL (+)	DRIVER (+)
24	RED/ORN	COIL (-)	DRIVER (-)



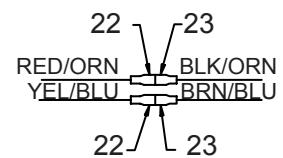
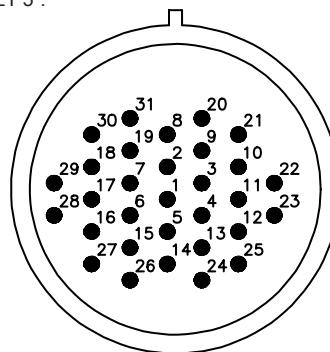
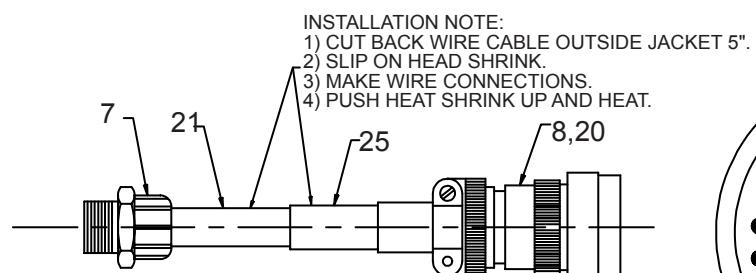
## HANDLE ASM - MAT'L HANDLING TETH- ERED REMOTE (51716758-2)

1. Position trigger assembly into handle assembly .
2. Looking from the back side of the handle, install only the two screws located on the left-hand side of the trigger assembly. (Two screws are sufficient to hold the assembly in place.)
3. Push the trigger assembly towards the front of the housing as far as the mounting screws will allow .
4. Connect ohm-meter to green and black wires to check ohm readings. Setting should range from 100 to 320 ohms. If different, contact IMT for assistance.
5. Fill the right hand screws with black or clear silicone.
6. Assemble the rest of the handle.

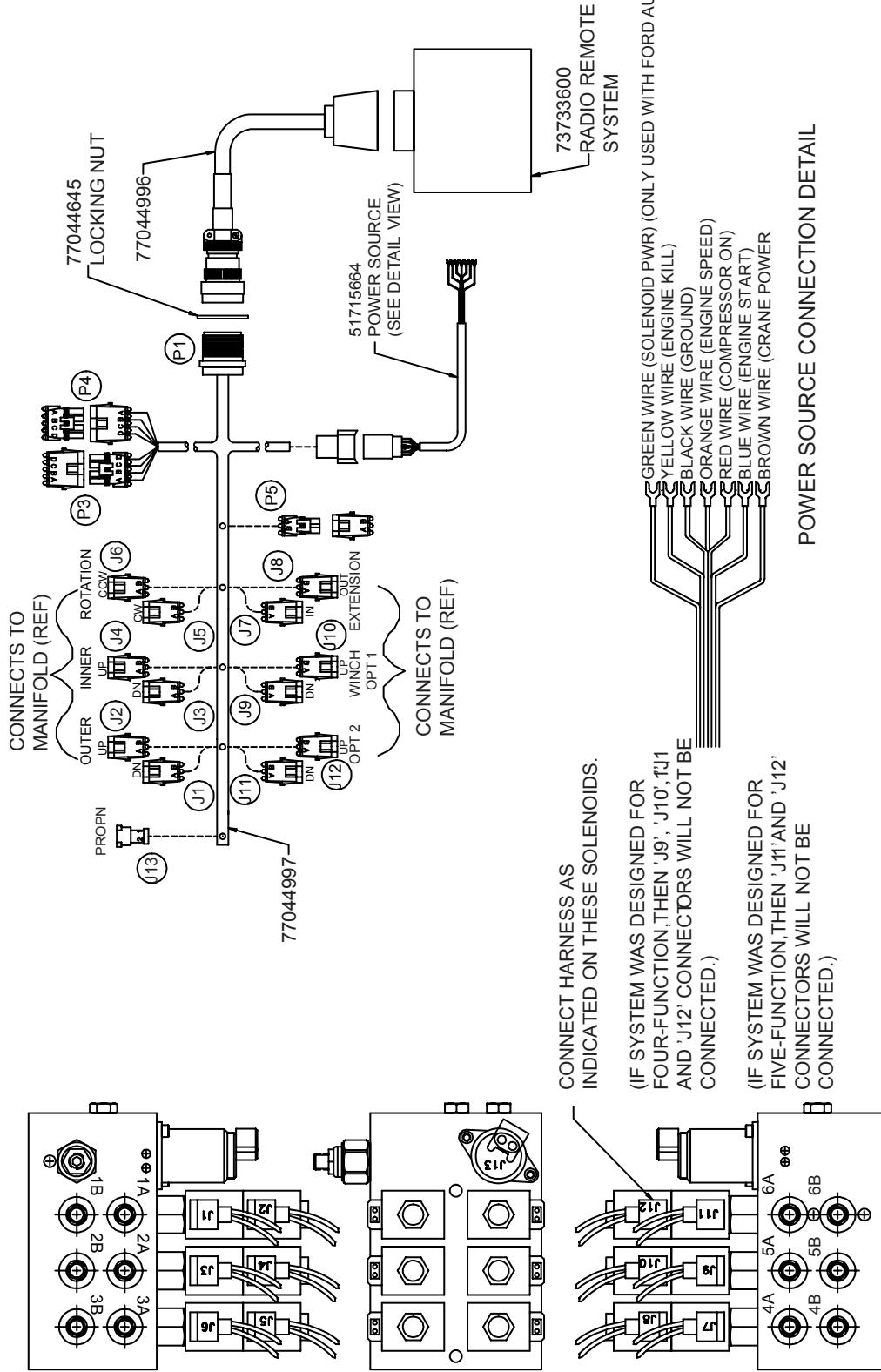


### ASSEMBLY OF SWITCHES ONTO FACE PLATE

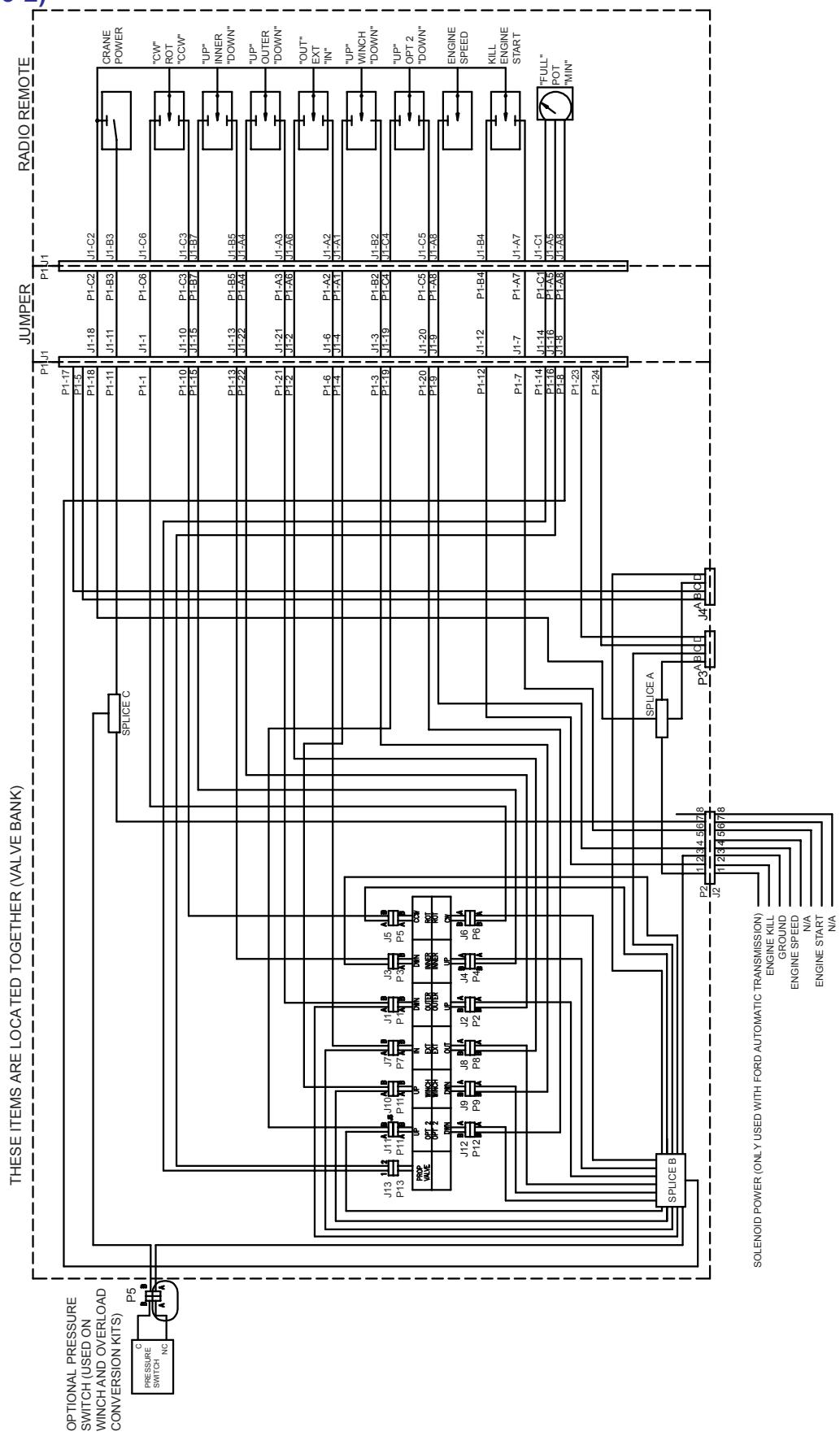
1. INSTALL 1 STAR WASHER BETWEEN SWITCH AND FACE PLATE.
2. INSTALL 1 LOCK NOT ON FRONT OF FACE PLATE TO RETAIN SWITCH.
3. DISCARD ALL OTHER MOUNTING HARDWARE.



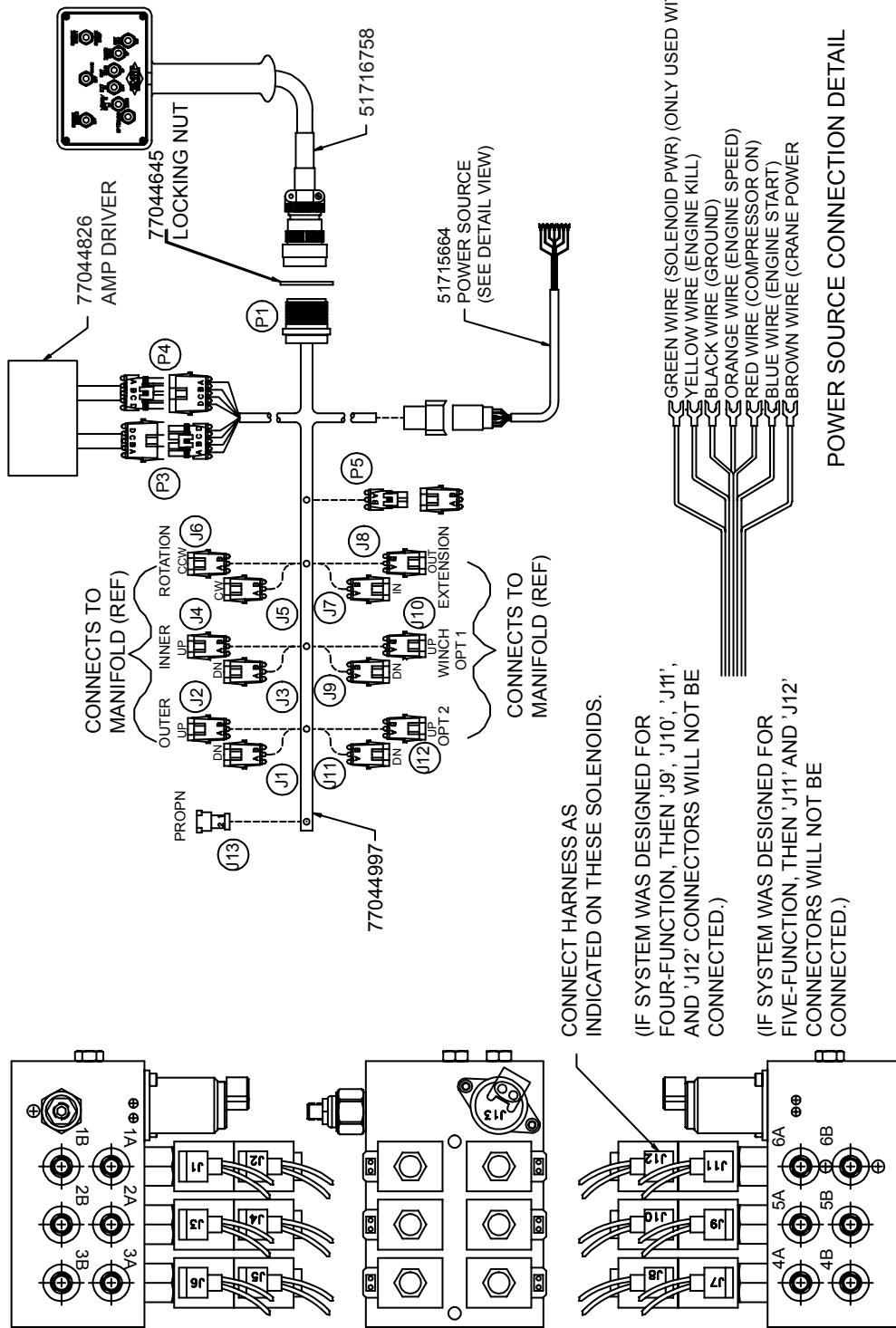
## WIRING DIAGRAM - RADIO REMOTE (99903343-1)



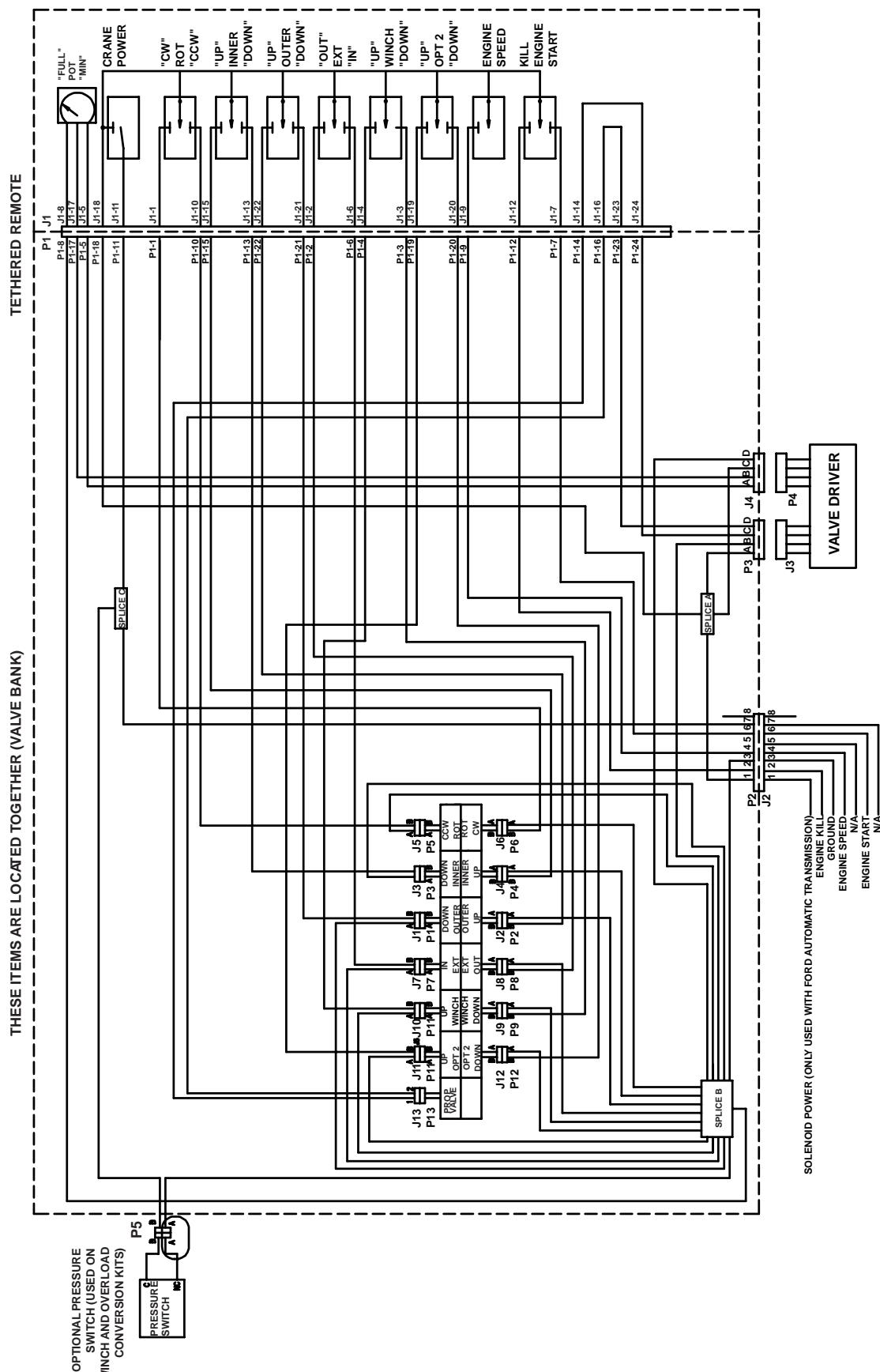
## **WIRING DIAGRAM - RADIO REMOTE (99903343-2)**



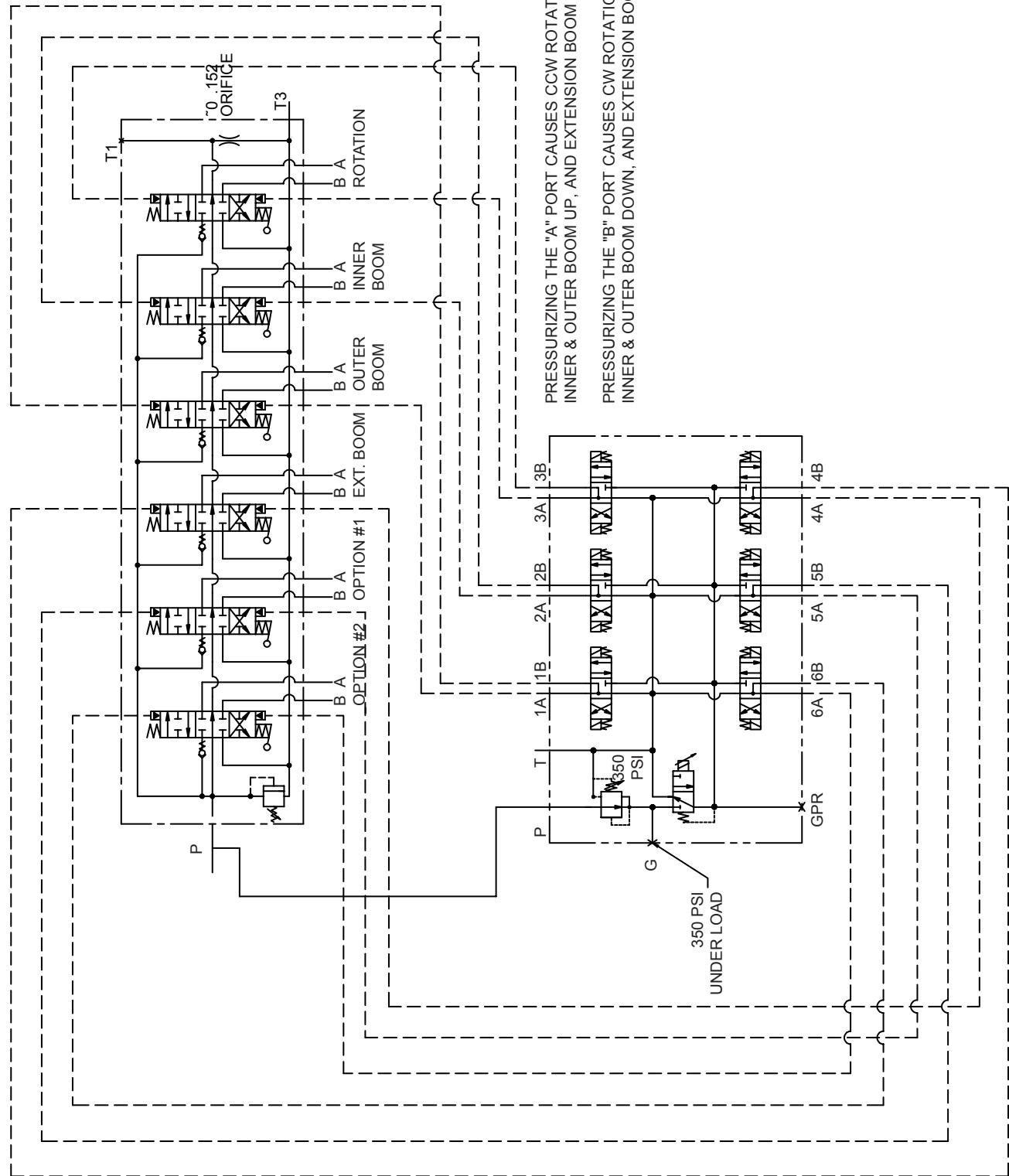
## WIRING DIAGRAM - TETHERED (99903344-1)



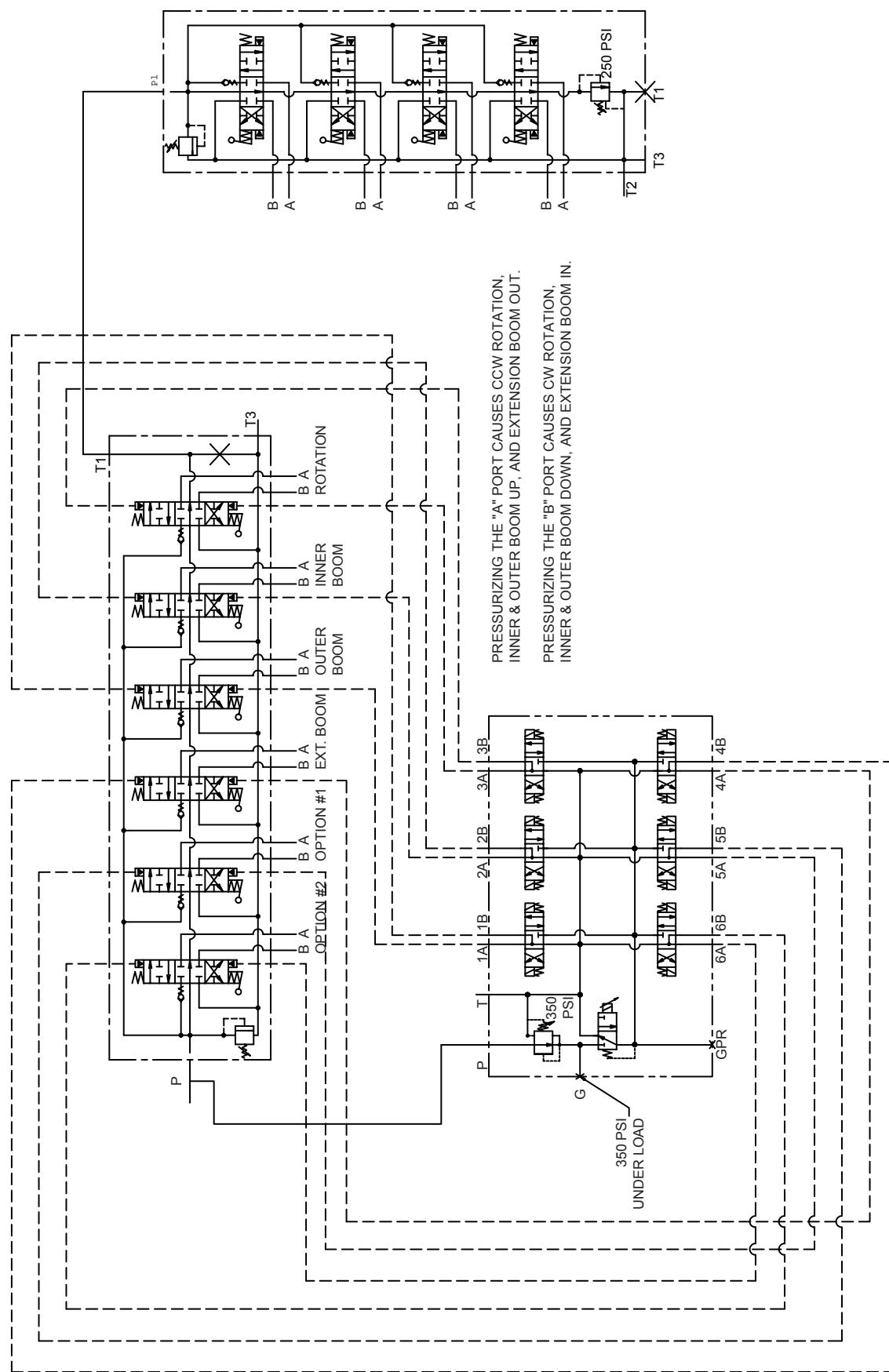
## WIRING DIAGRAM - TETHERED (99903344-2)

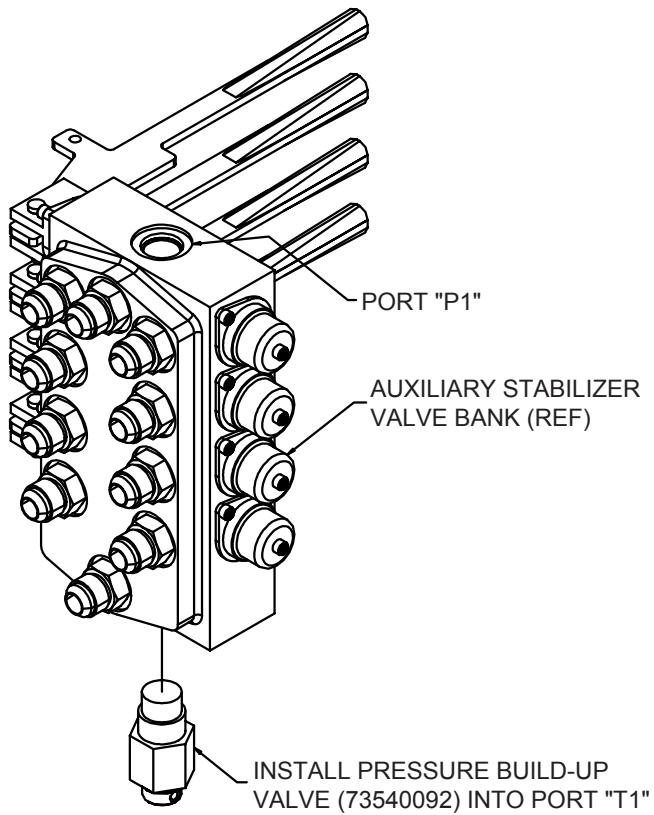


**PLUG-N-PLAY HYDRAULIC SCHEMATIC  
(99903317)**



**PLUG-N-PLAY W/EXTRA VALVE BANK -  
HYDRAULIC SCHEMATIC (99903384)**

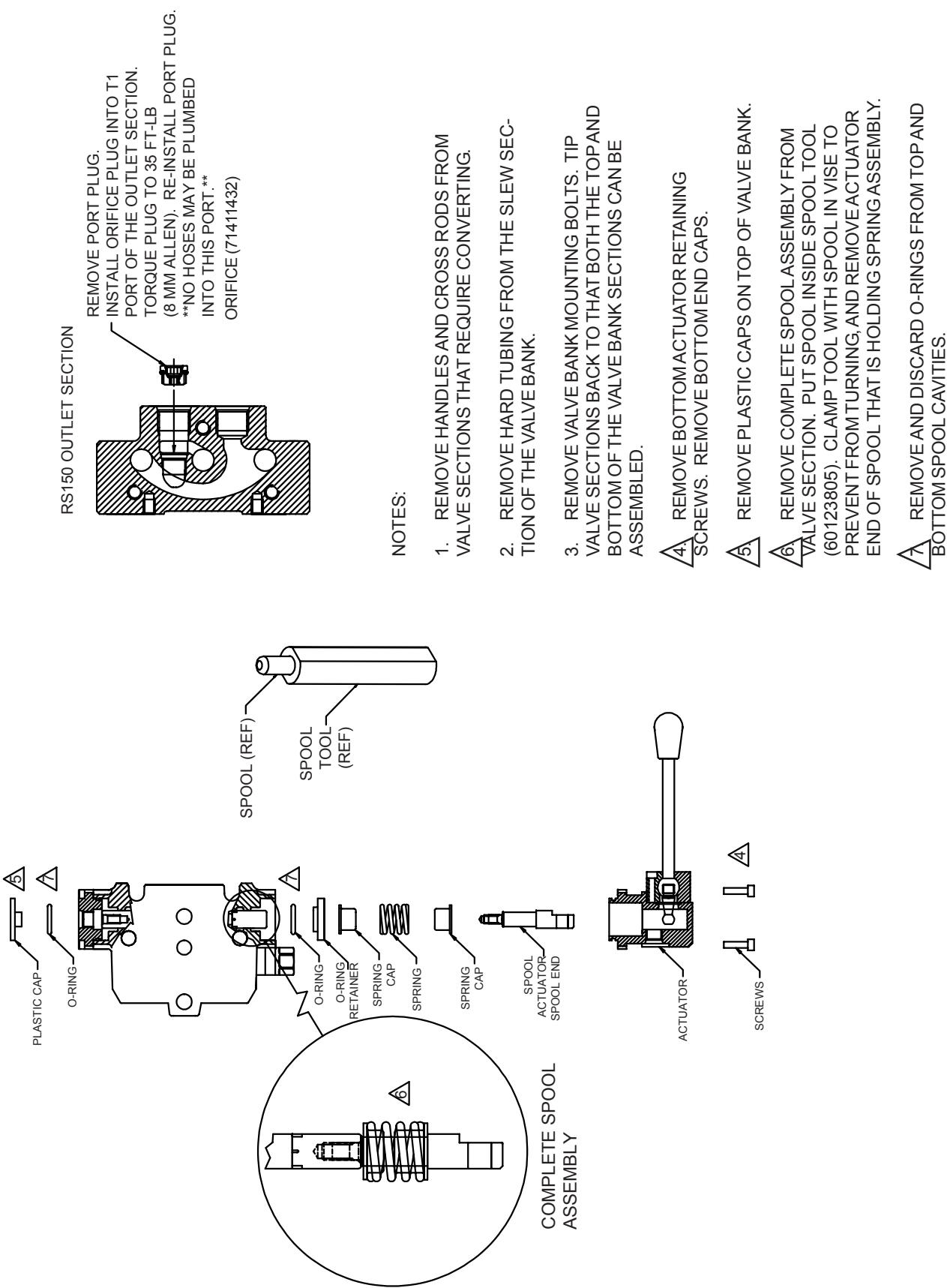


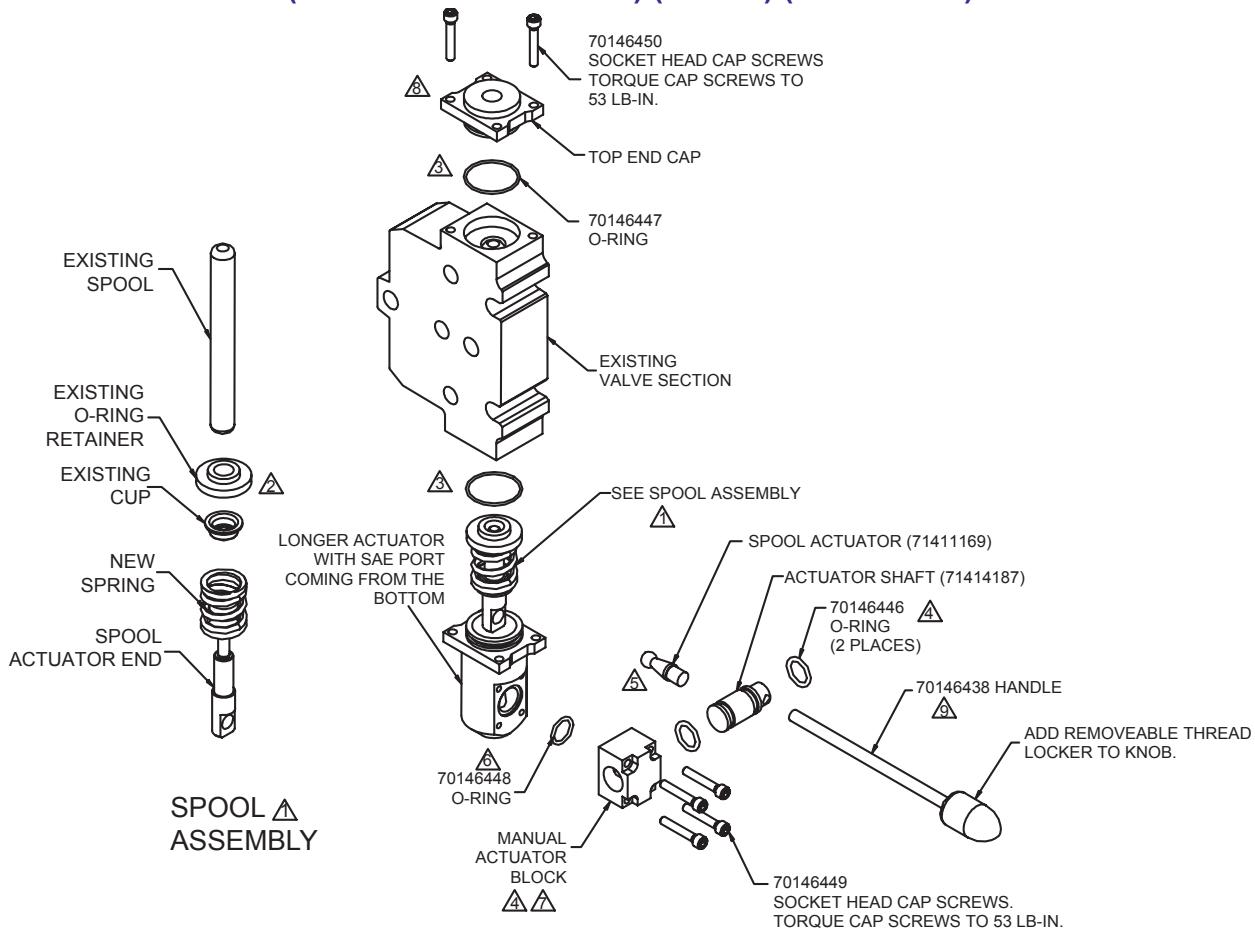
**AUXILIARY STABILIZER VALVEBANK  
(99903385)****NOTES:**

IF CRANE IS EQUIPPED WITH AN AUXILIARY STABILIZER VALVE BANK, THEN YOU MUST INSTALL THE PRESSURE BUILD-UP VALVE (73540092).

## RS150 CONVERSION (MANUAL TO REMOTE) (4-6 TM) (99903318-1)

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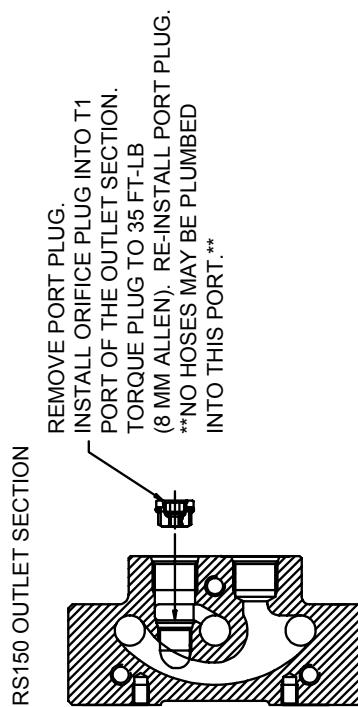


**RS150 CONVERSION (MANUAL TO REMOTE) (4-6 TM) (99903318-2)****NOTES:**

1. REASSEMBLE COMPLETE SPOOL ASSEMBLY WITH EXISTING COMPONENTS WITH THE EXCEPTION OF THE HEAVIER SPRING. FIRST INSTALL SPRING CUP ONTO THE SPOOL SECTION, THEN THE NEW HEAVIER SPRING, AND THEN THE TOP SPRING CUP. SCREW THE TWO SPOOL SECTIONS TOGETHER AND TIGHTEN UP.
2. RE-INSTALL SPOOL ASSEMBLY INTO THE EXACT VALVE SECTION THAT IT WAS TAKEN FROM. FIRST INSTALL O-RING RETAINER AND THEN THE COMPLETE SPOOL ASSEMBLY.
3. INSTALL O-RINGS INTO THE RECESS SECTION OF THE END CAPS.
4. INSTALL O-RINGS ONTO THE ACTUATOR SHAFT. THEN INSTALL ACTUATOR SHAFT INTO THE MANUAL ACTUATOR BLOCK.
5. SCREW THE SPOOL ACTUATOR ONTO THE ACTUATOR SHAFT AFTER ACTUATOR SHAFT IS INSTALLED IN ACTUATOR BLOCK.
6. INSTALL THE ACTUATOR O-RING (YOU MAY USE GREASE TO HOLD O-RING IN PLACE DURING INSTALLATION) IN THE ACTUATOR RECESSION.
7. INSTALL THE MANUAL ACTUATOR BLOCK ONTO THE ACTUATOR SECTION USING TWO SOCKET HEAD CAP SCREWS.
8. INSTALL TOP END CAP USING CAP SCREWS.
9. SCREW HANDLE INTO ACTUATOR SHAFT.
10. REMOUNT VALVE BANK ONTO CRANE.
11. RE-ATTACH ONLY STABILIZER CONTROL CROSS RODS.

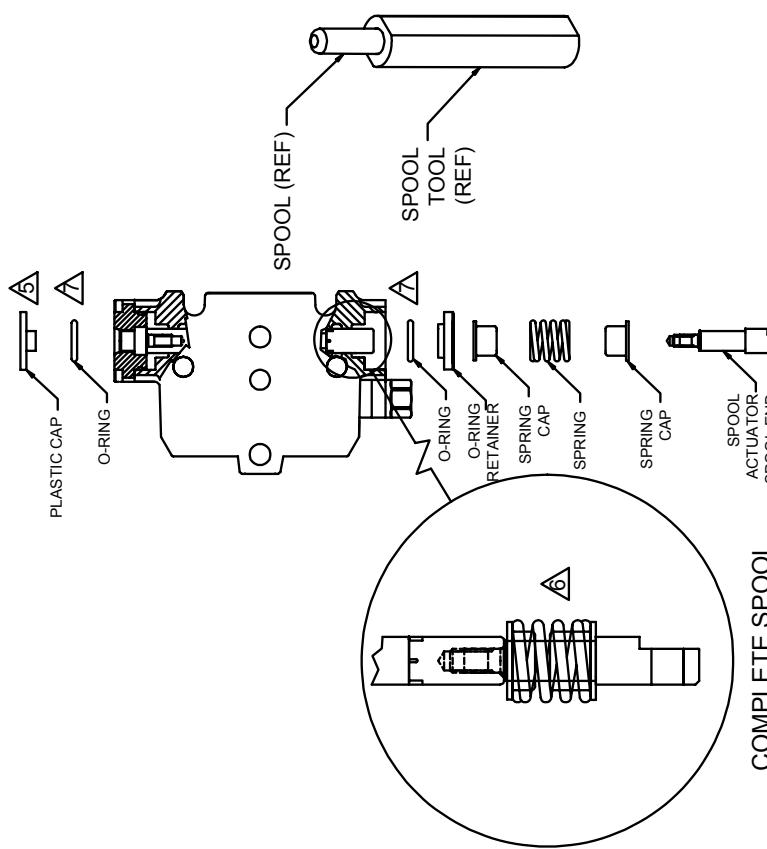
## RS150 CONVERSION (MANUAL TO REMOTE) (4 TM ONLY) (99903319-1)

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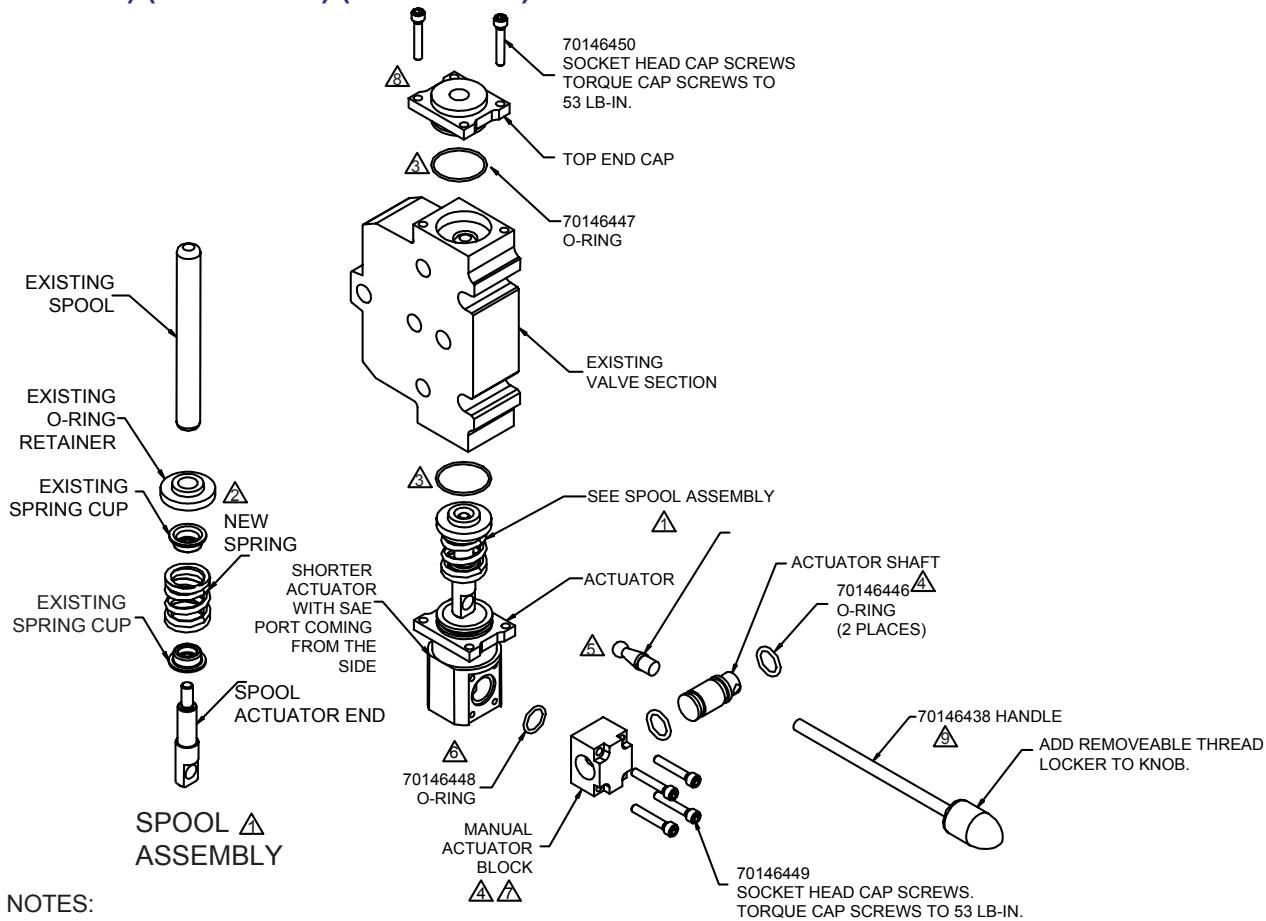


## NOTES:

1. REMOVE HANDLES AND CROSS RODS FROM VALVE SECTIONS THAT REQUIRE CONVERTING.
2. REMOVE HARD TUBING FROM THE SLEW SECTION OF THE VALVE BANK.
3. REMOVE VALVE BANK MOUNTING BOLTS. TIP VALVE SECTIONS BACK TO THAT BOTH THE TOP AND BOTTOM OF THE VALVE BANK SECTIONS CAN BE ASSEMBLED.



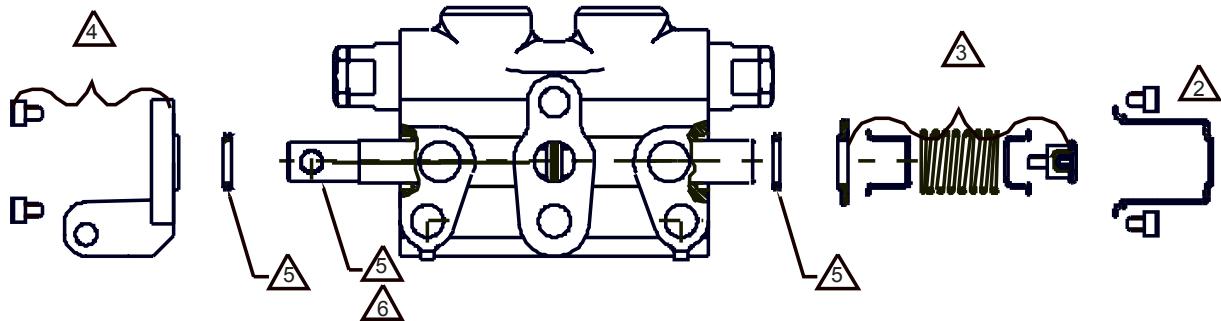
## RS150 CONVERSION (MANUAL TO REMOTE) (4 TM ONLY) (99903319-2)



### NOTES:

1. REASSEMBLE COMPLETE SPOOL ASSEMBLY WITH EXISTING COMPONENTS WITH THE EXCEPTION OF THE HEAVIER SPRING. FIRST INSTALL SPRING CUP ONTO THE SPOOL SECTION, THEN THE NEW HEAVIER SPRING, AND THEN THE TOP SPRING CUP. SCREW THE TWO SPOOL SECTIONS TOGETHER AND TIGHTEN UP.
2. RE-INSTALL SPOOL ASSEMBLY INTO THE EXACT VALVE SECTION THAT IT WAS TAKEN FROM. FIRST INSTALL O-RING RETAINER AND THEN FINALLY COMPLETE SPOOL ASSEMBLY.
3. INSTALL O-RINGS INTO THE RECESS SECTION OF THE END CAPS.
4. INSTALL O-RINGS ONTO THE ACTUATOR SHAFT. INSTALL ACTUATOR SHAFT INTO THE MANUAL ACTUATOR BLOCK.
5. SCREW THE SPOOL ACTUATOR ONTO THE ACTUATOR SHAFT AFTER ACTUATOR SHAFT IS INSTALLED IN ACTUATOR BLOCK.
6. INSTALL THE ACTUATOR O-RING (YOU MAY USE GREASE TO HOLD O-RING IN PLACE DURING INSTALLATION) IN THE ACTUATOR RECESSION.
7. INSTALL THE MANUAL ACTUATOR BLOCK ONTO THE ACTUATOR SECTION USING TWO SOCKET HEAD CAP SCREWS.
8. INSTALL TOP END CAP USING CAP SCREWS.
9. SCREW HANDLE INTO ACTUATOR SHAFT.
10. REMOUNT VALVE BANK ONTO CRANE.
11. RE-ATTACH ONLY STABILIZER CONTROL CROSS RODS.

## RS210 CONVERSION (MANUAL TO REMOTE) (99903279-1)

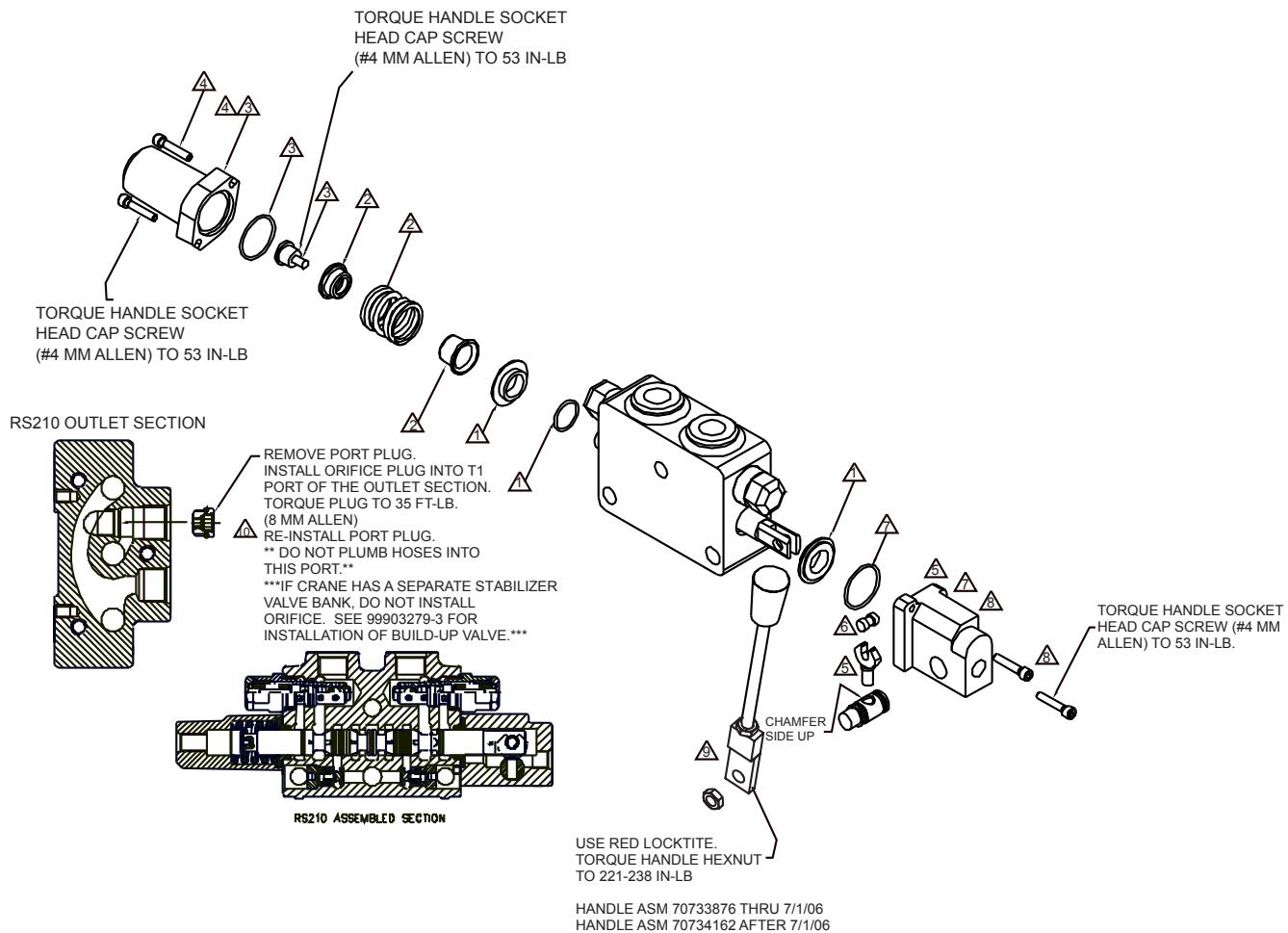


### CONVERSION STEPS:

1. REMOVE HANDLES AND CROSS RODS FROM VALVE SECTIONS TO BE CONVERTED.
2. SECTIONS TO BE CONVERTED ONLY:  
REMOVE END CAP AND SOCKET HEAD CAP SCREWS.
3. REMOVE SPRING RETAINING SCREW,  
SPRING CUPS, SPRING AND RETAINER SEAL.
4. REMOVE SOCKET HEAD CAP SCREWS AND BRACKET/SEAL RETAINER.
5. PRESS ON CLEVIS END OF THE VALVE SECTION SPOOL UNTIL SPOOL SEAL IS EXPOSED ENOUGH TO BE REMOVED.  
PRESS SPOOL IN THE OPPOSITE DIRECTION UNTIL OTHER SPOOL SEAL CAN BE REMOVED.
6. PRESS VALVE SECTION SPOOL BACK TO NORMAL POSITION.

## RS210 CONVERSION STEPS (99903279-1)

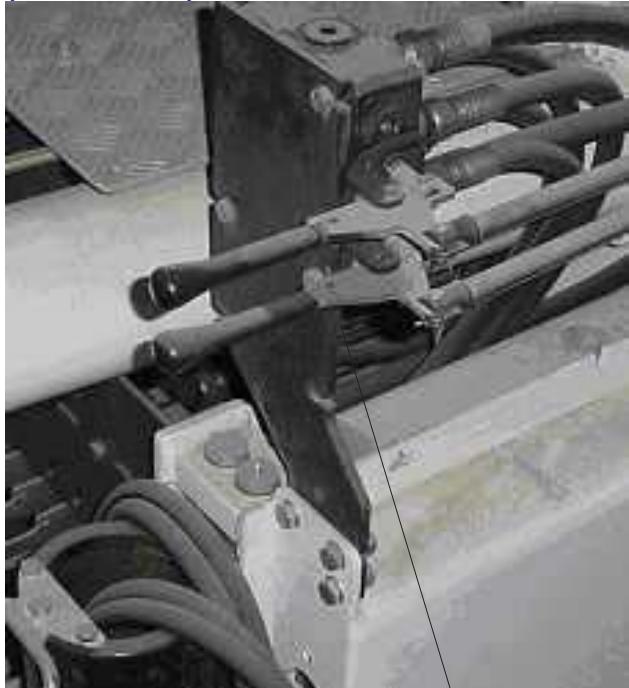
CONVERSION INSTRUCTIONS ON FOLLOWING PAGE



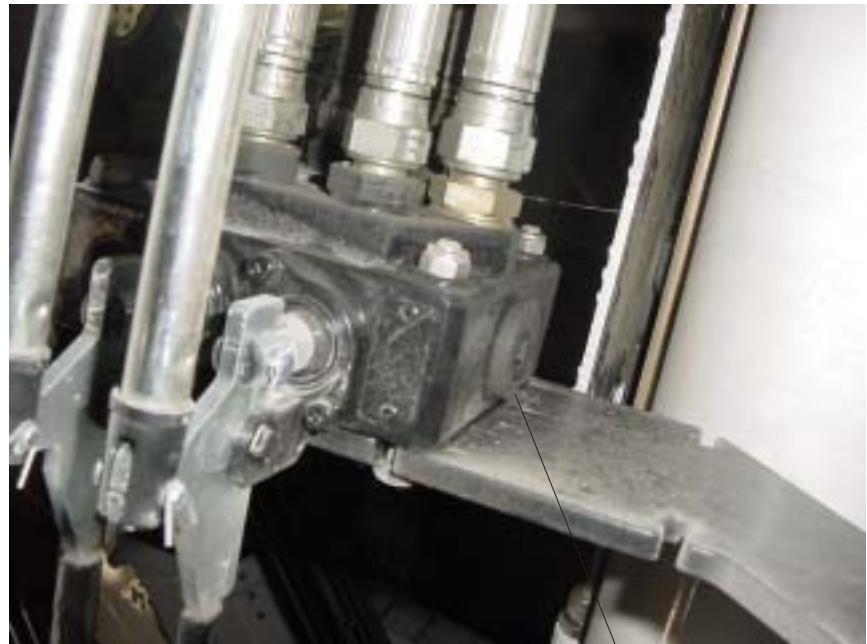
**RS210 CONVERSION STEPS (99903279-1)****CONVERSION DIAGRAM ON PREVIOUS PAGE**

Conversion Steps:

- 1** Install both seal collars over the section spool.  
(install caps at the same time.) Be sure that the smaller o-ring is in the groove inside the collar and that the collar is positioned so that the smaller o-ring is toward the valve body
- 2** Install spring cups into the springs, and install the spring and cups onto the section spool, using the retaining screw. Make sure the deeper cup is positioned toward the spool. (See drawing view for torque specifications.)
- 3** Install o-ring into the recess section of the end cap. (You may use grease to hold in place during installation.)
- 4** Now install the end cap using socket head cap screws. (See drawing view for torque specifications.)
- 5** Install fork into the hole in the actuator shaft (inside actuator cap). Be sure that the fork is pointed to open end of cap.
- 6** Install pin into clevis end of section spool. Both ends of the pin should be inside the diameter of the spool. Be sure clevis is positioned so the fork can properly engage over pin.
- 7** Install o-ring into the recess section of the actuator cap. (You may use grease to hold o-ring in place during installation.)
- 8** install actuator cap over the end of the spool with the shaft for the actuator lever on the right hand side of the cap. Be sure the fork engages into the pin.  
Install socket head cap screws. (See drawing view for torque specifications.)
- 9** Install handle on actuator shaft. (See drawing view for torque specifications.)
- 10** Install orifice plug into RS210 outlet section.

**RS210 CONVERSION PHOTOS  
(99903279-3)**

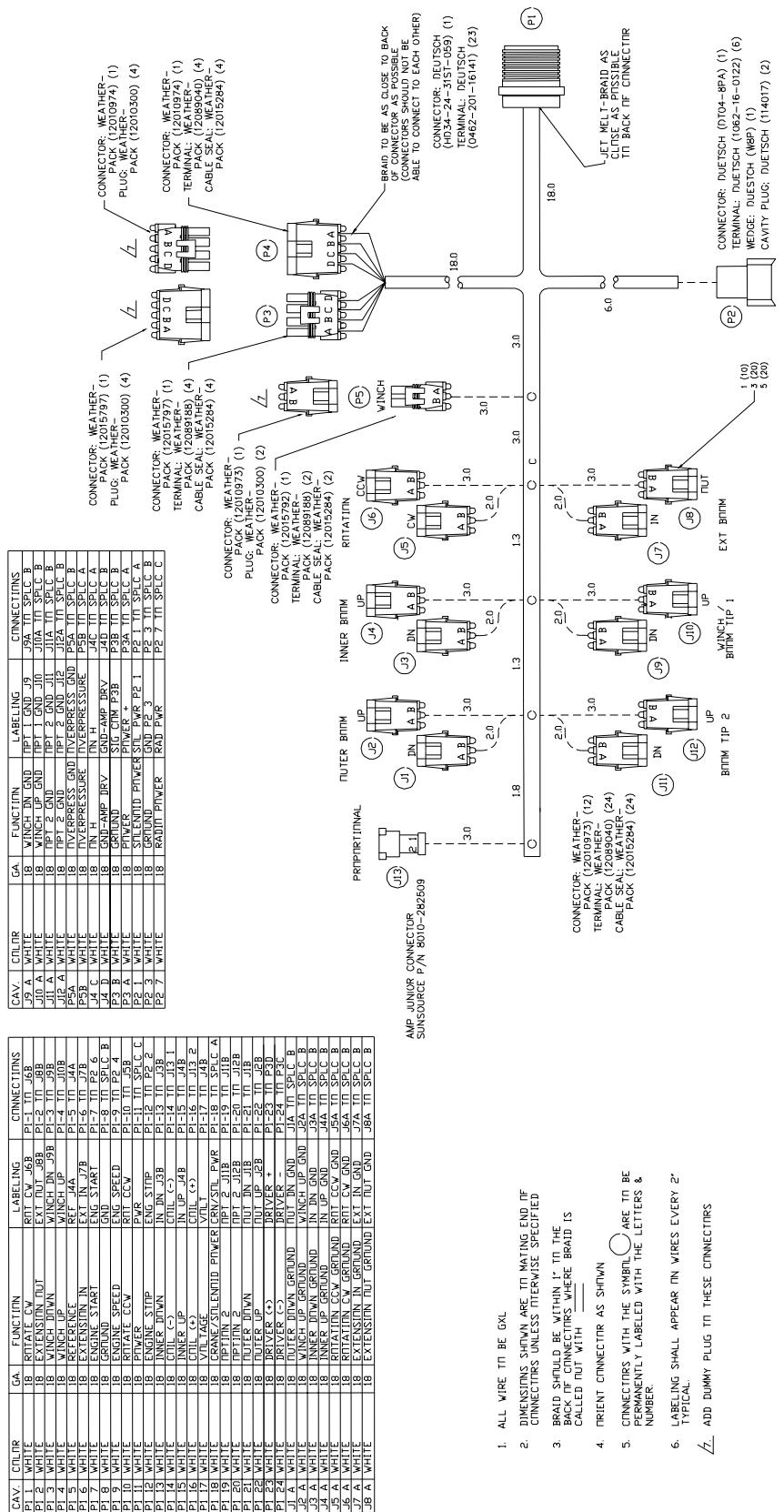
SEE BOTTOM SIDE OF AUXILIARY  
STABILIZER VALVE BANK PHOTO  
**AUXILIARY STABILIZER VALVE BANK  
(REF)**



**BOTTOM SIDE OF AUXILIARY STABILIZER VALVE BANK**  
INSTALL PRESSURE BUILD-UP  
VALVE (73540092) IN THIS PORT

## RS 210 CABLE ASM (77044997-1)

CONTINUED



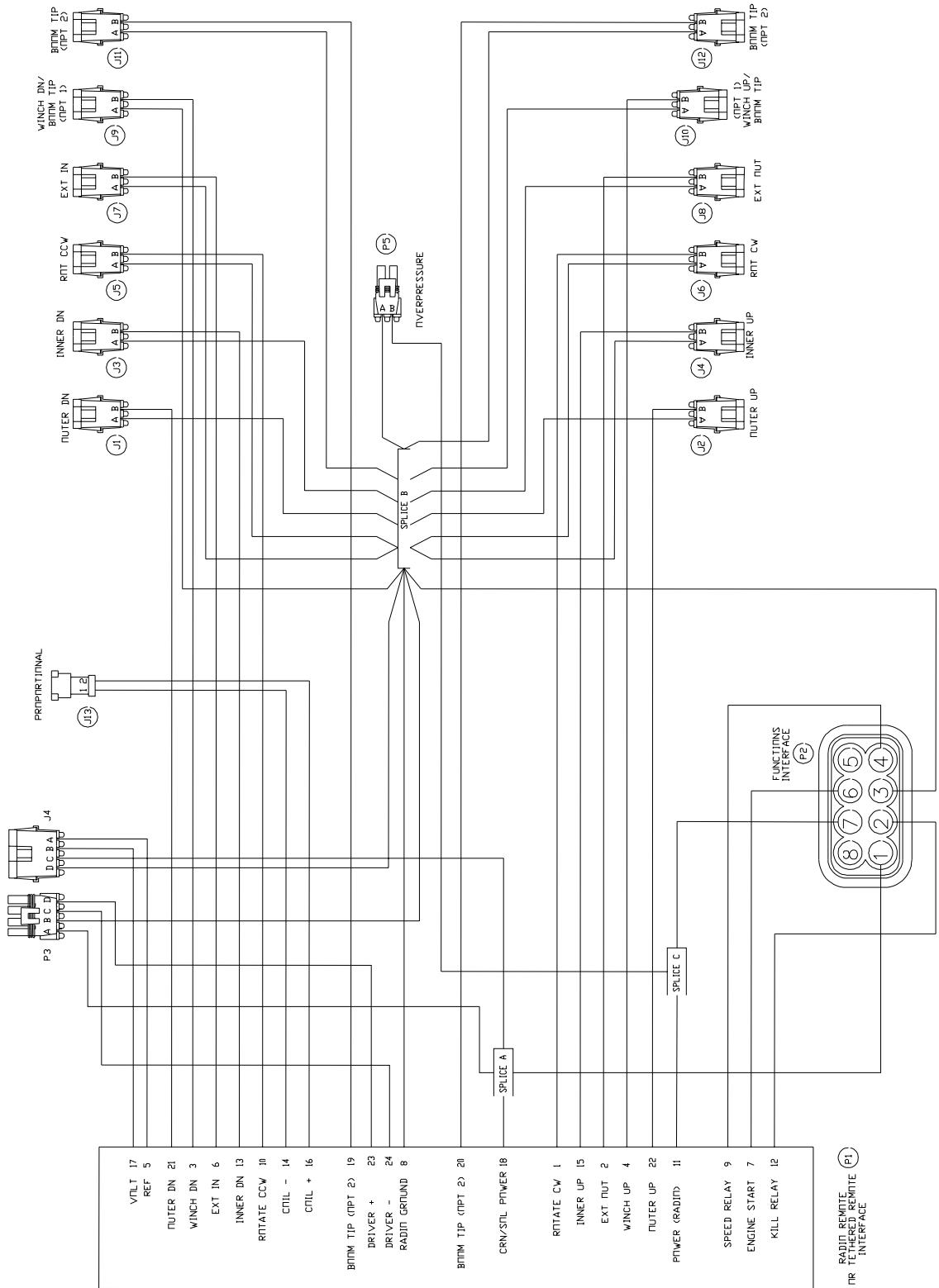
## WIRE SPECIFICATIONS

PART #	SIZE (ANG.)	# OF STRANDS	INSULATION THICKNESS
GXL18	18	16/20	.023 MILS-NOM.

CONNECTOR: WEATHER-TERMINAL DEUTSCH (2010973) (12)	TERM. DEUTSCH (H034-24-351-059) (24)	CAFB F SEAL (WEATHER-TERMINAL DEUTSCH (H034-24-351-059) (24))	CAFB F SEAL (WEATHER-TERMINAL DEUTSCH (H034-24-351-059) (24))
- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)	- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)	- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)	- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)
CONNECTOR: WEATHER-TERMINAL DEUTSCH (H034-24-351-059) (1)	TERM. DEUTSCH (H034-24-351-059) (1)	CAFB F SEAL (WEATHER-TERMINAL DEUTSCH (H034-24-351-059) (1))	CAFB F SEAL (WEATHER-TERMINAL DEUTSCH (H034-24-351-059) (1))
- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)	- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)	- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)	- MEET FURTE SPICE (ML-858) & CHRTSLR (MS-890)

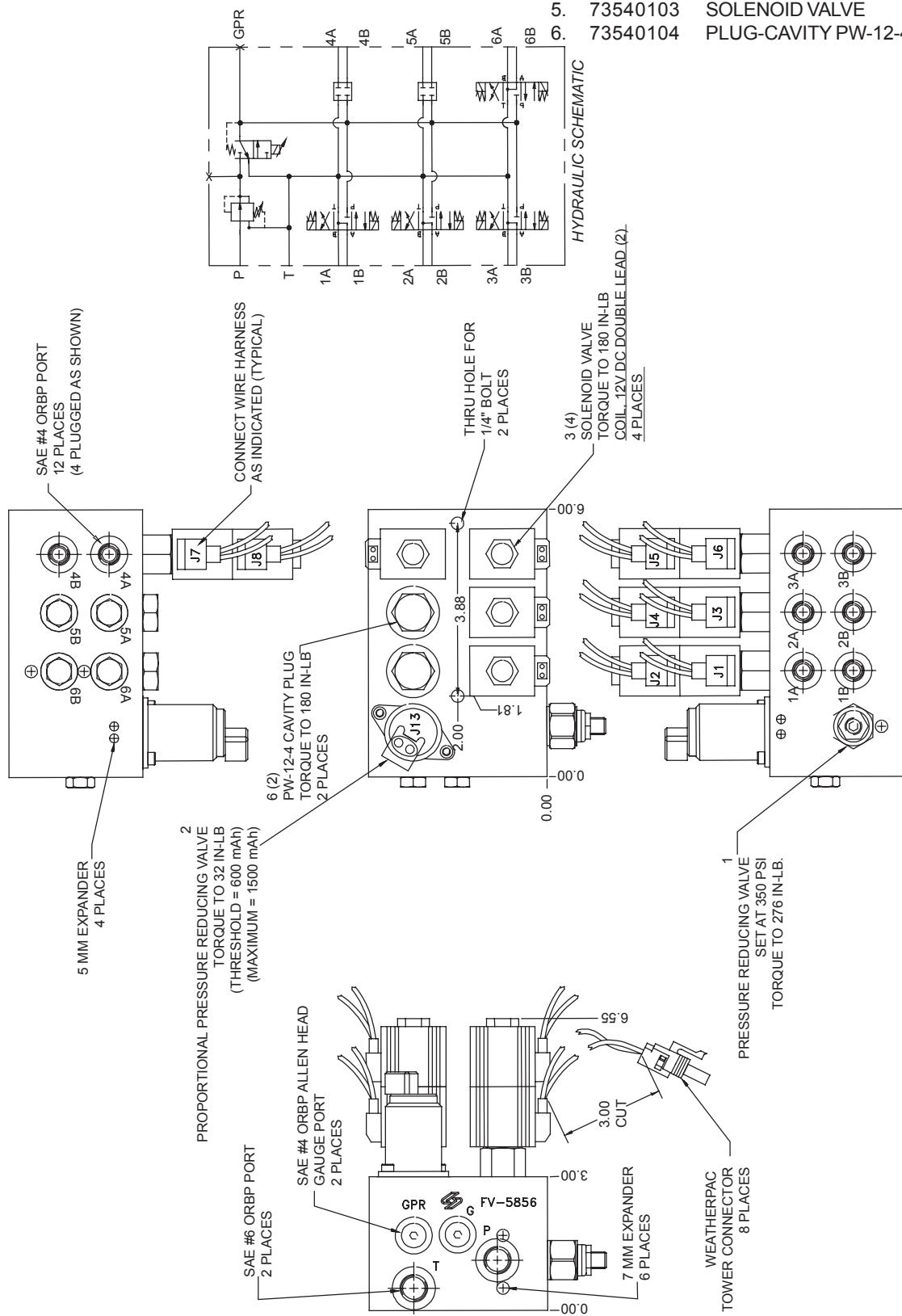
## PROTECTIVE LINING DETAIL

HIGH TEMPERATURE RESISTANT VINYL CLOTHED YARN PHYSICAL PROPERTIES:  
- FIR AND FLAME RESISTANT  
- HIGH ABRASION RESISTANT SEE SAE 2020106 J562  
- TEMPERATURE RESISTANT FROM -280° F TO +65° F  
YARN CLOTH TO BE BRAIDED WITH RED STRIPE  
YARN SHIELD D BE BRAIDED WITH WEAVE TIGHTNESS OF 12 PICKS PER INCH

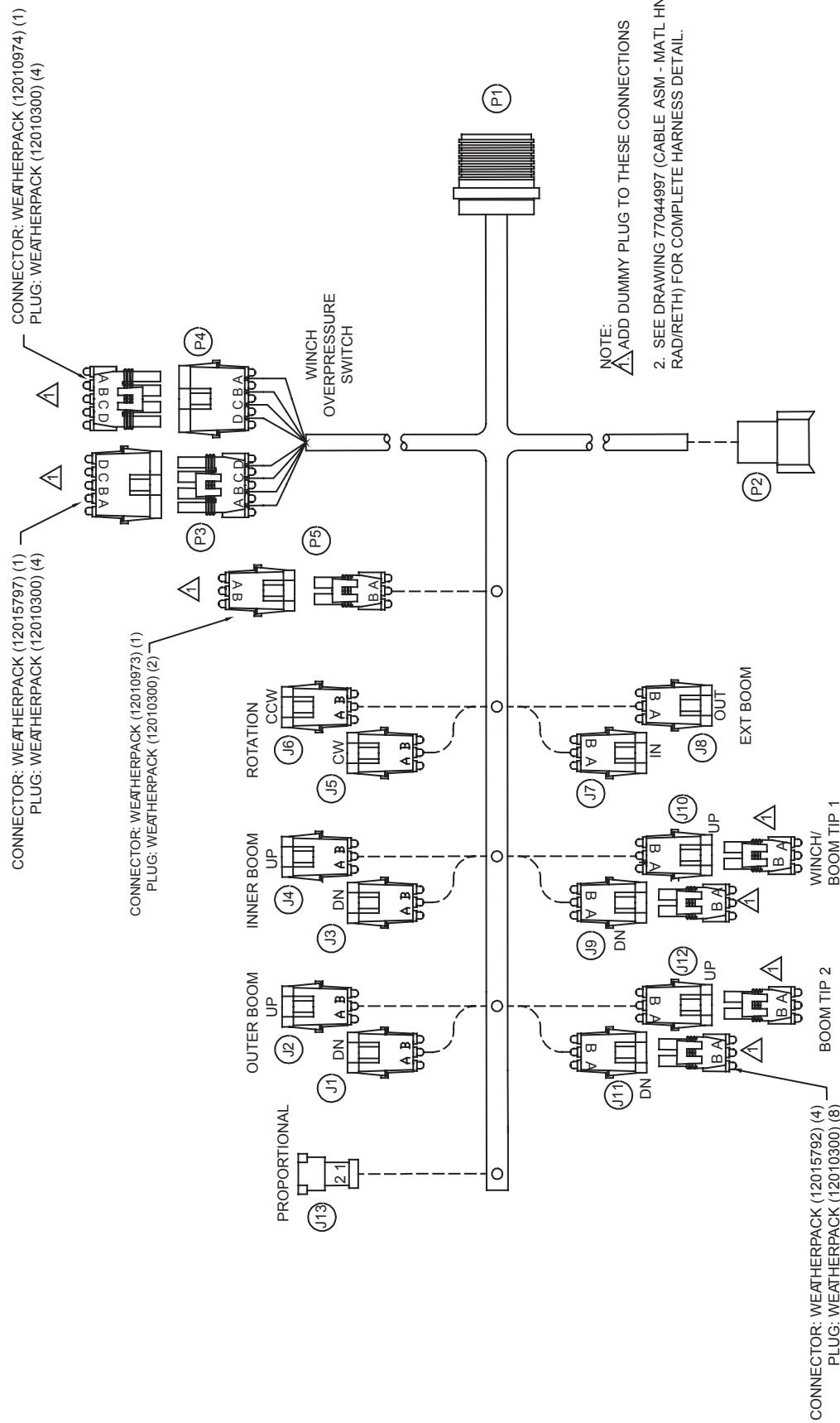
**RS210 CABLE ASM (77044997-2)**

## RS 210 VALVE ASM - 4 FUNCTION (70146349-1)

1.	73540099	PRESSURE REDUCING VALVE	1
2.	73540100	PROP PRESS RED VALVE	1
3.	73540101	SOLENOID VALVE (INCL. 4,5)	4
4.	73540102	SOLENOID VALVE COIL	2REF
5.	73540103	SOLENOID VALVE	1REF
6.	73540104	PLUG-CAVITY PW-12-4	1

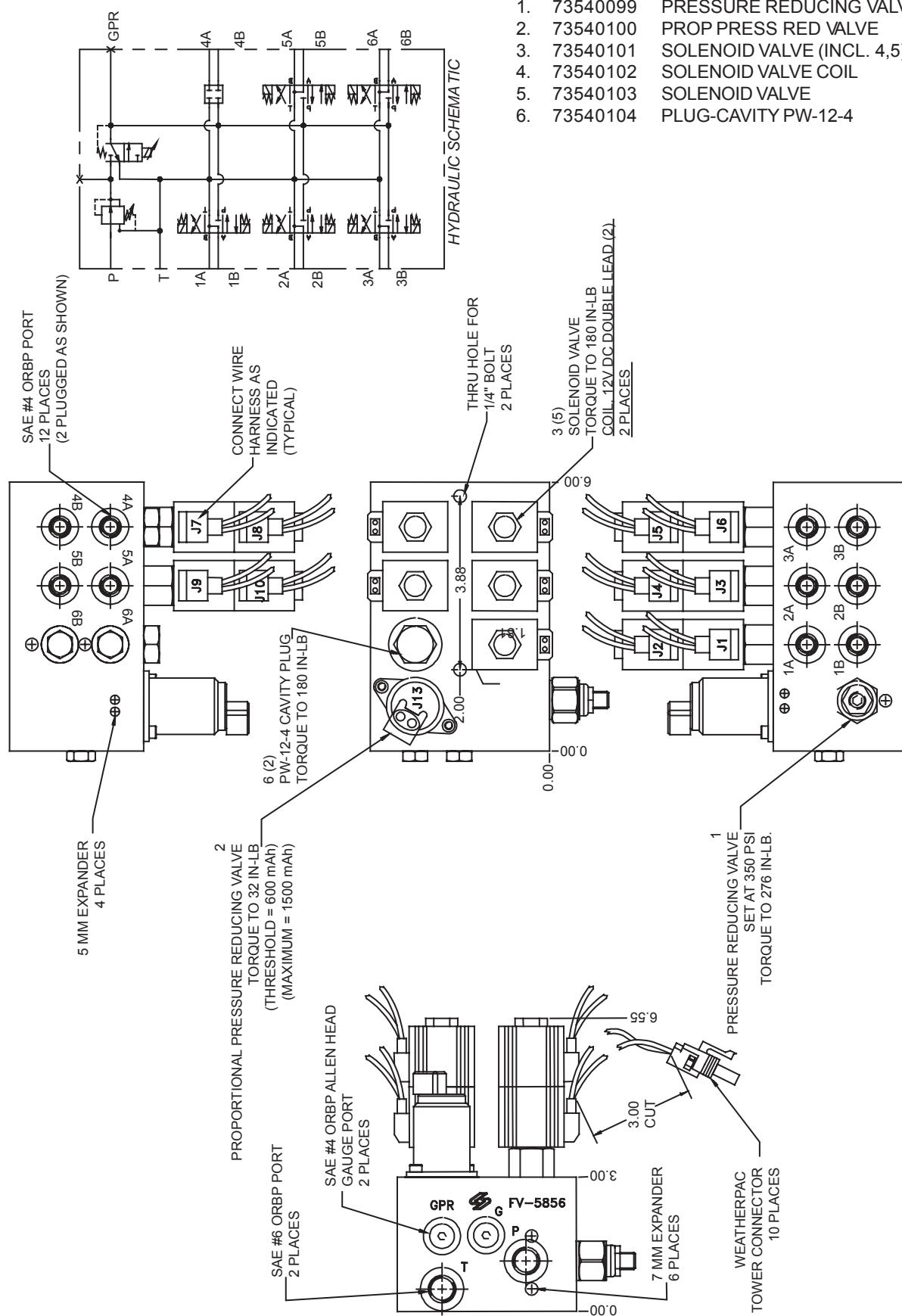


**RS 210 VALVE ASM - 4 FUNCTION  
(70146349-2)**

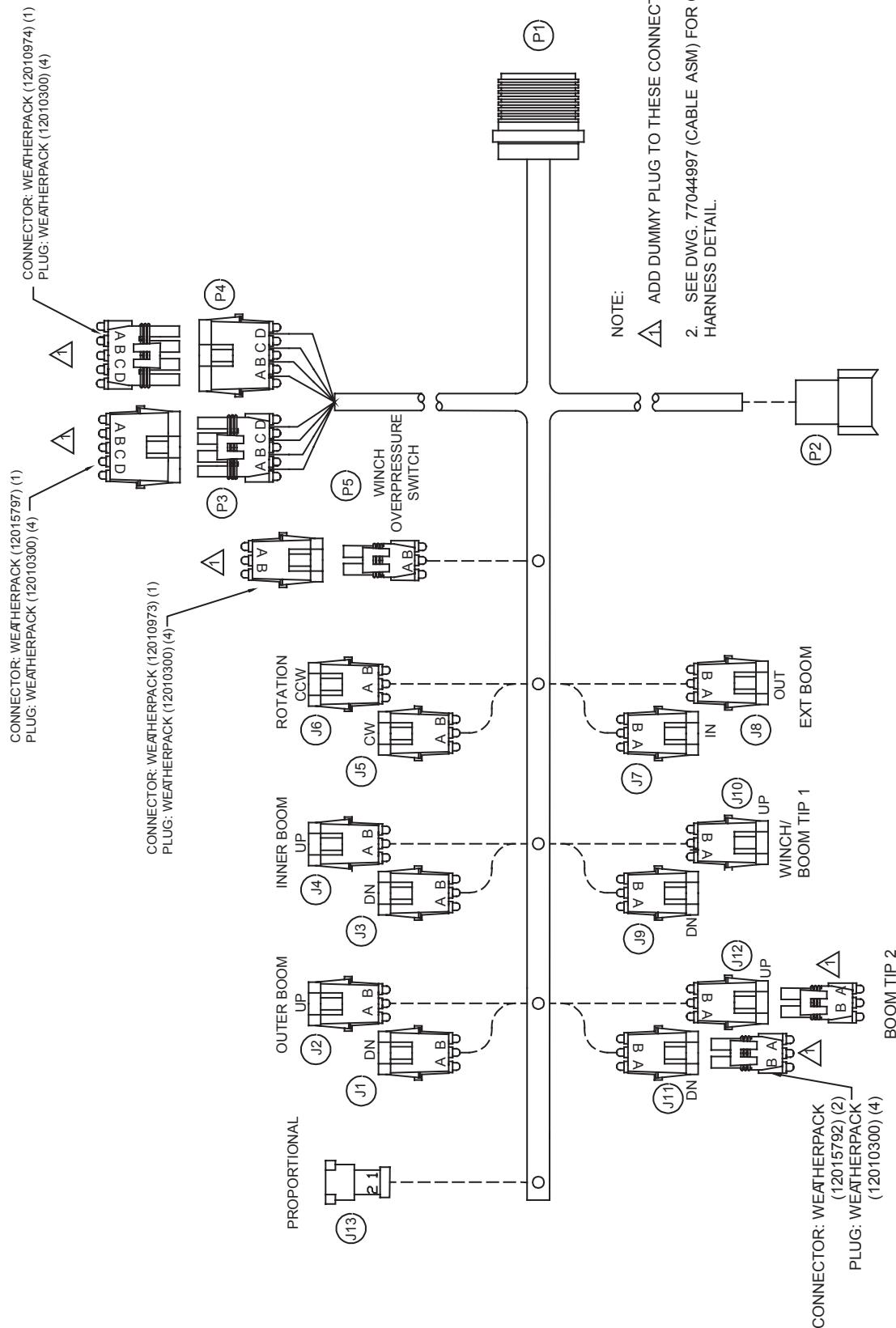


## **RS 210 VALVE ASM - 5 FUNCTION (70146350-1)**

- |    |          |                            |      |
|----|----------|----------------------------|------|
| 1. | 73540099 | PRESSURE REDUCING VALVE    | 1    |
| 2. | 73540100 | PROP PRESS RED VALVE       | 1    |
| 3. | 73540101 | SOLENOID VALVE (INCL. 4,5) | 5    |
| 4. | 73540102 | SOLENOID VALVE COIL        | 2REF |
| 5. | 73540103 | SOLENOID VALVE             | 1REF |
| 6. | 73540104 | PLUG-CAVITY PW-12-4        | 1    |

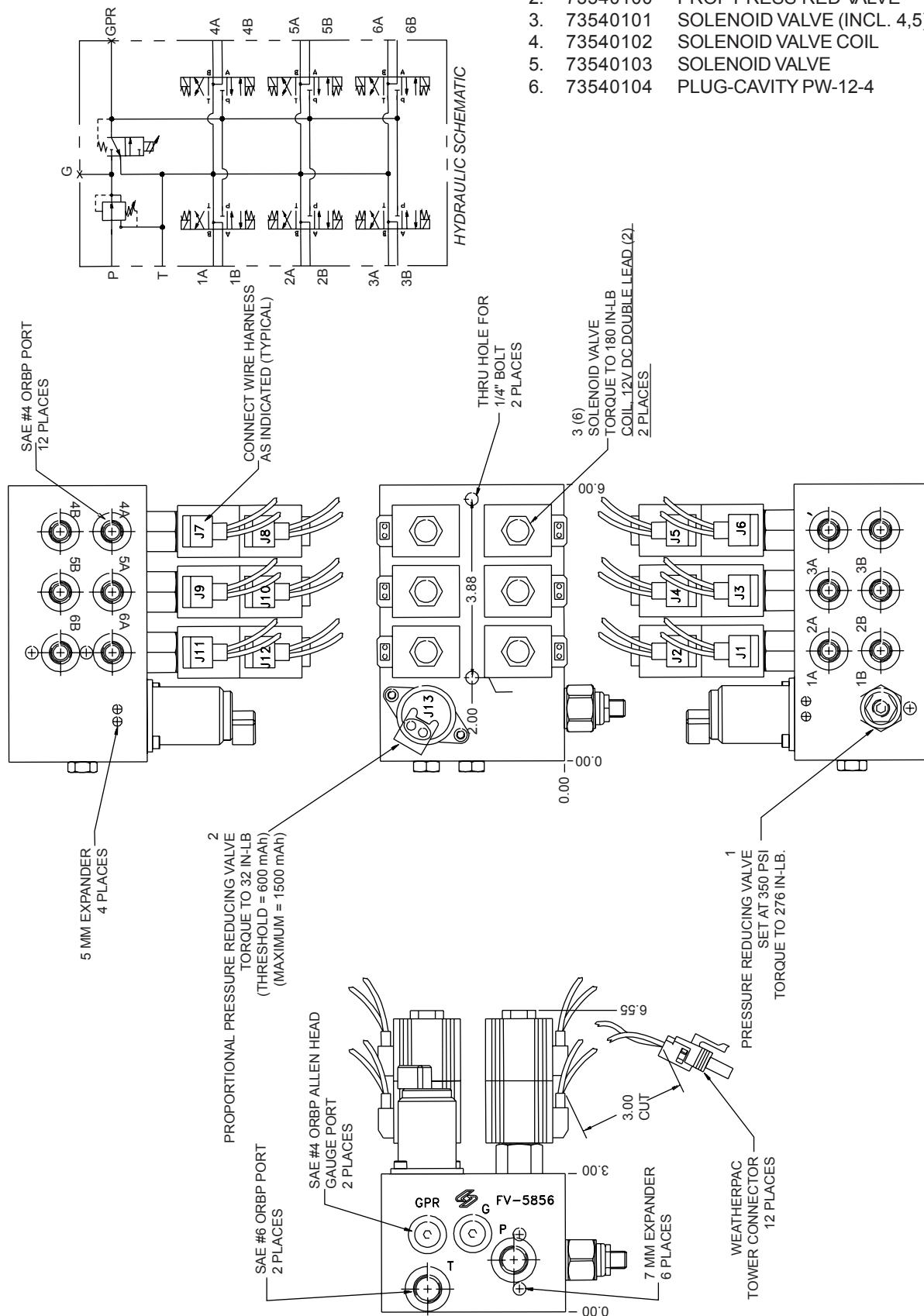


## RS 210 VALVE ASM - 5 FUNCTION (70146350-2)

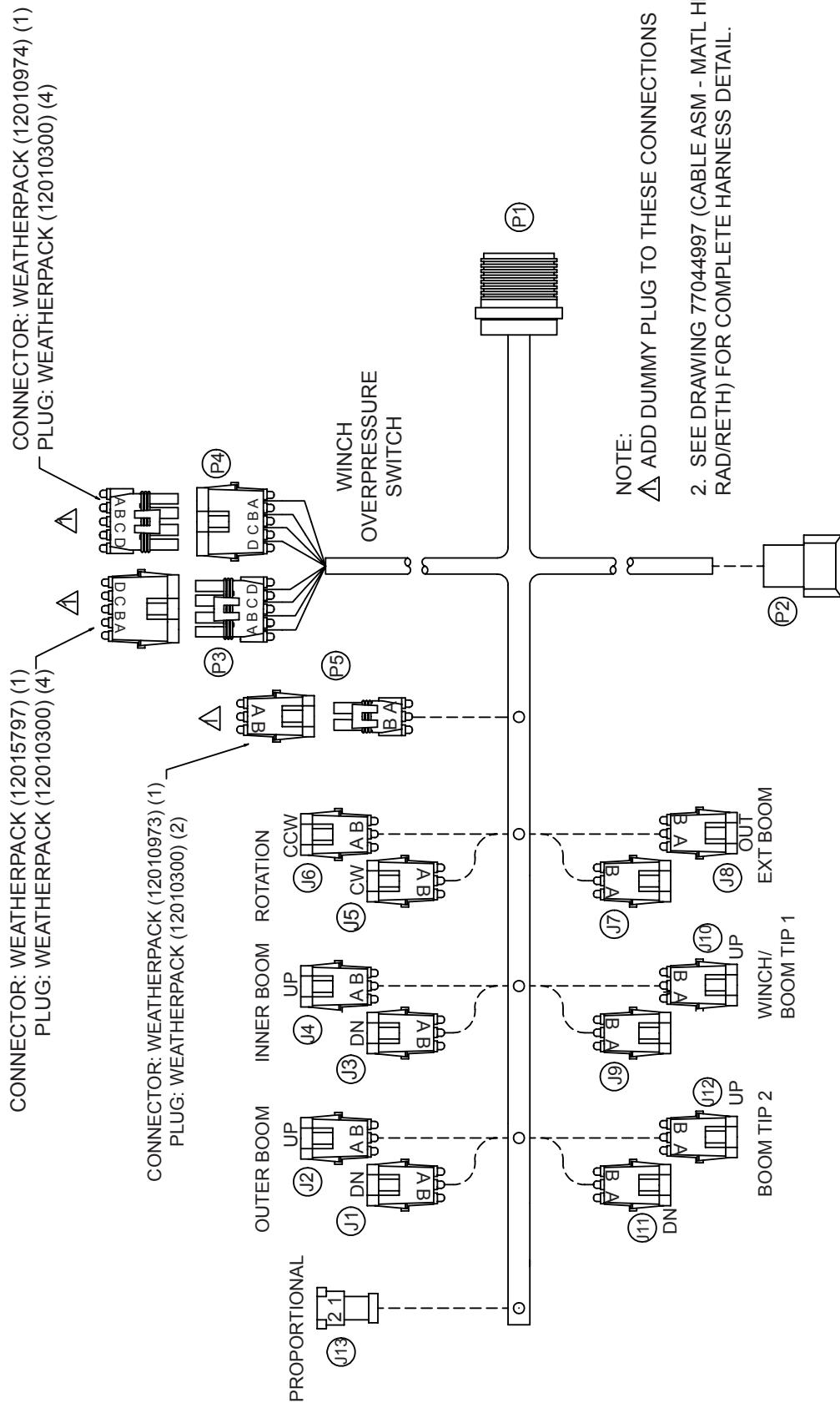


## RS 210 VALVE ASM - 6 FUNCTION (70146351-1)

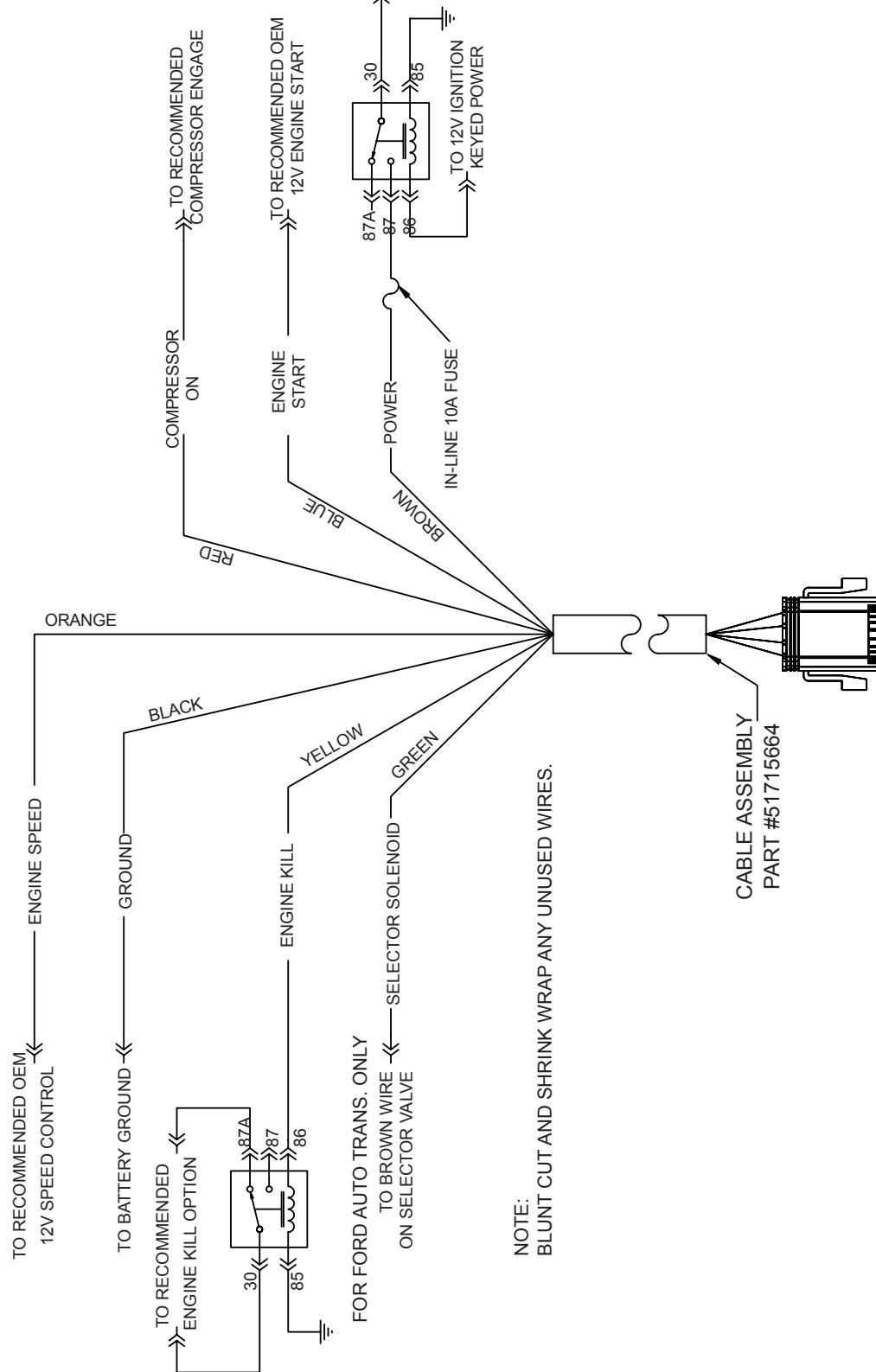
- |    |          |                            |      |
|----|----------|----------------------------|------|
| 1. | 73540099 | PRESSURE REDUCING VALVE    | 1    |
| 2. | 73540100 | PROP PRESS RED VALVE       | 1    |
| 3. | 73540101 | SOLENOID VALVE (INCL. 4,5) | 6    |
| 4. | 73540102 | SOLENOID VALVE COIL        | 2REF |
| 5. | 73540103 | SOLENOID VALVE             | 1REF |
| 6. | 73540104 | PLUG-CAVITY PW-12-4        | 1    |



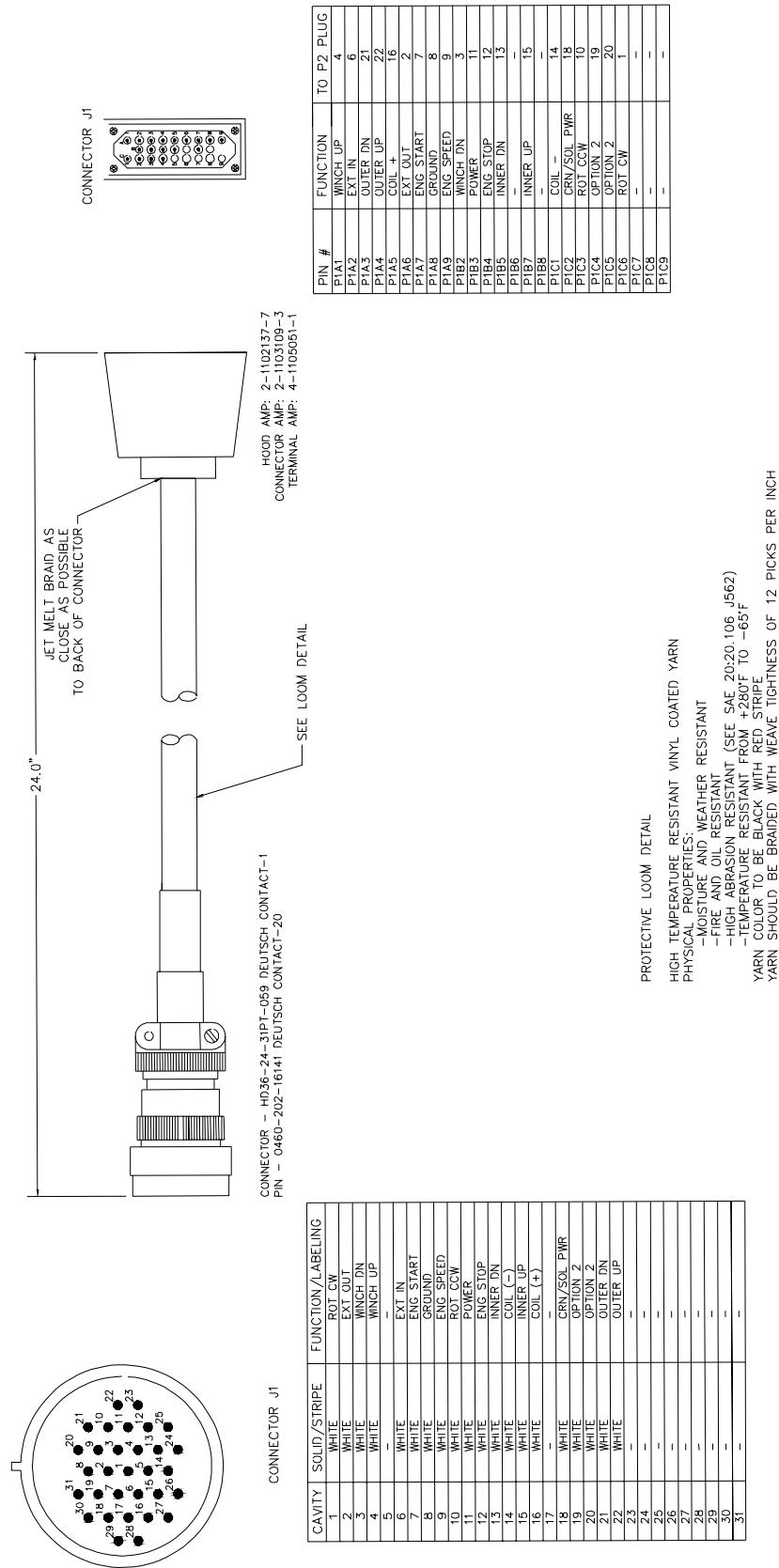
**RS 210 VALVE ASM - 6 FUNCTION  
(70146351-2)**



## CHASSIS WIRING HARNESS (99903340)



# HARNESS-MAT'L HANDLING REMOTE JUMPER (77044996)



LABELING SHALL APPEAR ON WIRE EVERY 2" (TYPICAL)

WIRE SPECIFICATIONS			
PART #	SIZE (AWG)	# OF STRANDS	INSULATION THICKNESS
GXL18	18	16/730	.023 MILS-NOM.
- HEAT RESISTANCE IN ACCORDANCE WITH SAE J-1125			
- TEMPERATURE RANGE: -51°C TO +125°C			
- MEETS FORD SPEC (MIL-S-85B) & CHRYSLER (MS-8900)			



## 4-29 RADIO/TETHERED REMOTE PARTS

CONTROL KIT-RADIO 4-FUNCT -4/29 CRANE (KIT 91716642) .....	38
CONTROL KIT - RADIO 4-FUNCT - 4/29 CRANE (KIT 91716642) .....	39
CONTROL KIT - RADIO 4-FUNCT - 4/29 CRANE (KIT 91716642) .....	40
CONTROL KIT - TETH 4-FUNCT - 4/29 CRANE (KIT 91716952) .....	41
CONTROL KIT - TETH 4-FUNCT - 4/29 CRANE (KIT 91716952) .....	42
CONTROL KIT - TETH 4-FUNCT - 4/29 CRANE (KIT 91716952) .....	43

**CONTROL KIT-RADIO 4-FUNCT -4/29  
CRANE (KIT 91716642)**

1. 73733600 RADIO RMT KIT-MATL HDNG 1  
 2. 70146334 VALVE-RMT KIT RS150 4 FCTN (INCL. 23 & 24) 1  
 3. 77044996 HARNESS 1  
 4. 60123461 MOUNTING PLATE, MANIFOLD 1  
 5. 72053758 ELBOW #4MSTR #4MJIC 90° 8  
 6. 72532351 ADPTR #4MSTR #4MJIC 6  
 7. 72532699 ELBOW #6MSTR #4MJIC 90° 1  
 8. 72053760 ELBOW #6MSTR #6MJIC 90° 1  
 9. 72533629 CONNECTOR 1  
 10. 72533726 TEE-M PIPE/F PIPE MALE RUN 1/4 1

11. 72531412	ELBOW MPT #4MJIC 90° 1/4	1
12. 51716921	HOSE KIT (INCL. 13-16,27,28)	1
13. 51396069	HOSE-FF 1/4X63.00 4-4	3REF
14. 51396070	HOSE-FF 1/4 X 55.00 4-4	3REF
15. 51396071	HOSE-FF 1/4 X 71.00 4-4	1REF
16. 51397072	HOSE-FI 1/4 X 54.00 4-4	1REF
17. 72060016	CAP SCR 1/4-20 X 4.00 HH	2
18. 72533020	ELBOW #4MSTR #4MJIC 45°	2
19. 72601778	CAP SCR-METRIC 6-1.00 X 12	4
20. 60119299	BRACKET	1
21. 72060004	CAP SCR 1/4-20 X 1.00 HH GR5	4
22. 72062000	NUT 1/4-20 HEX ZINC	8
23. 70146349	VALVE ASM	1REF
24. 77044997	HARNESS	1REF
25. 60123470	TUBE-1.00 OD X 3/4 ID X 5.35LG	1
26. 60123459	PLATE-RADIO REMOTE	1
27. 51393965	HOSE-FF 1/4 X 67.00 4-4	1REF
28. 51396073	HOSE-FF 1/4 X 66.00 6-8	1REF
29. 60114481	PIPE 1/2 SCH 40 X 1.50	2
30. 72060010	CAP SCR 1/4-20 X 2.50 HH GR5Z	2
31. 77044645	NUT-DEUTSCH 24 SHELL	1

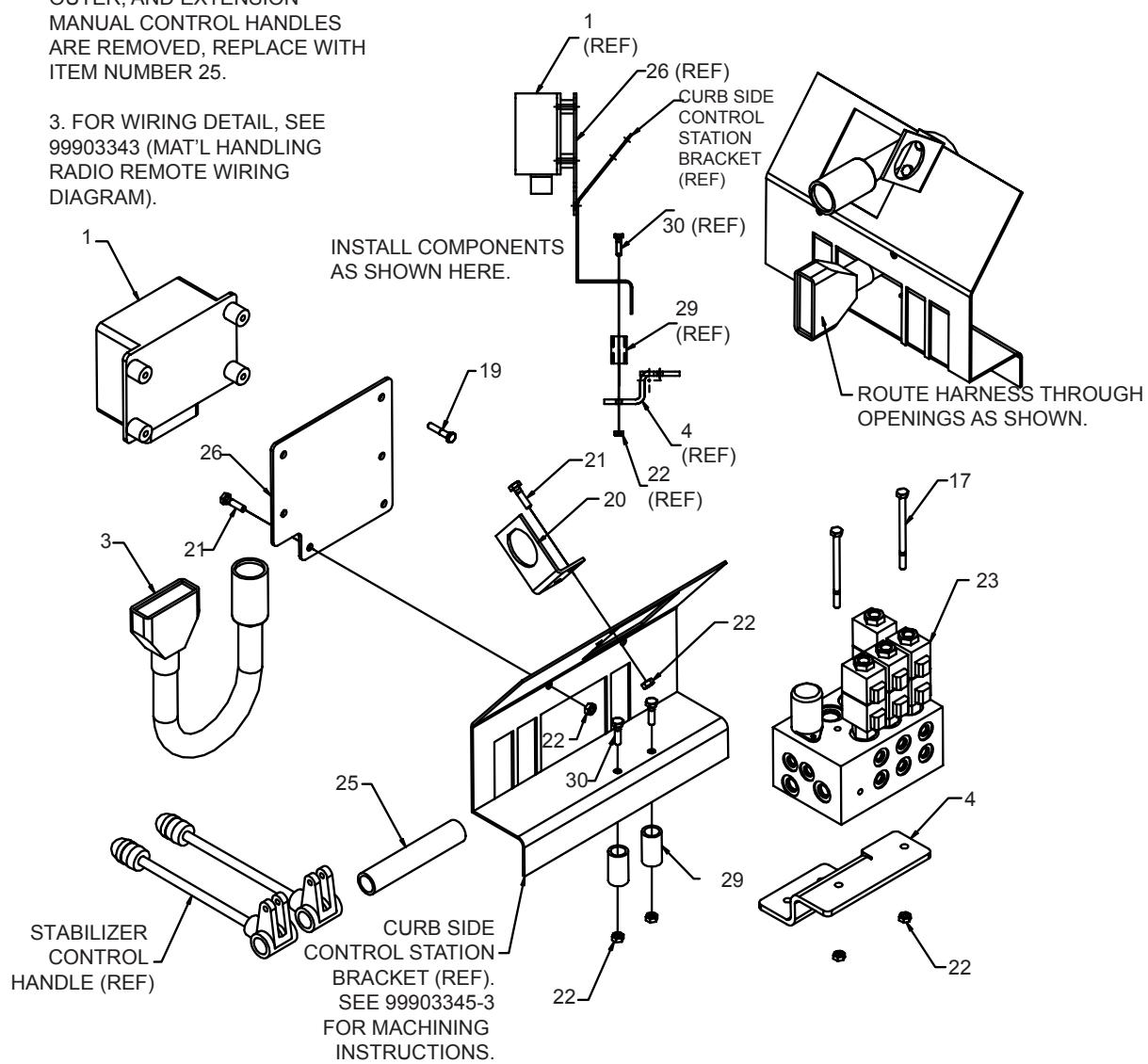
## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB-SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE STABILIZER CONTROLS.

2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROL HANDLES ARE REMOVED, REPLACE WITH ITEM NUMBER 25.

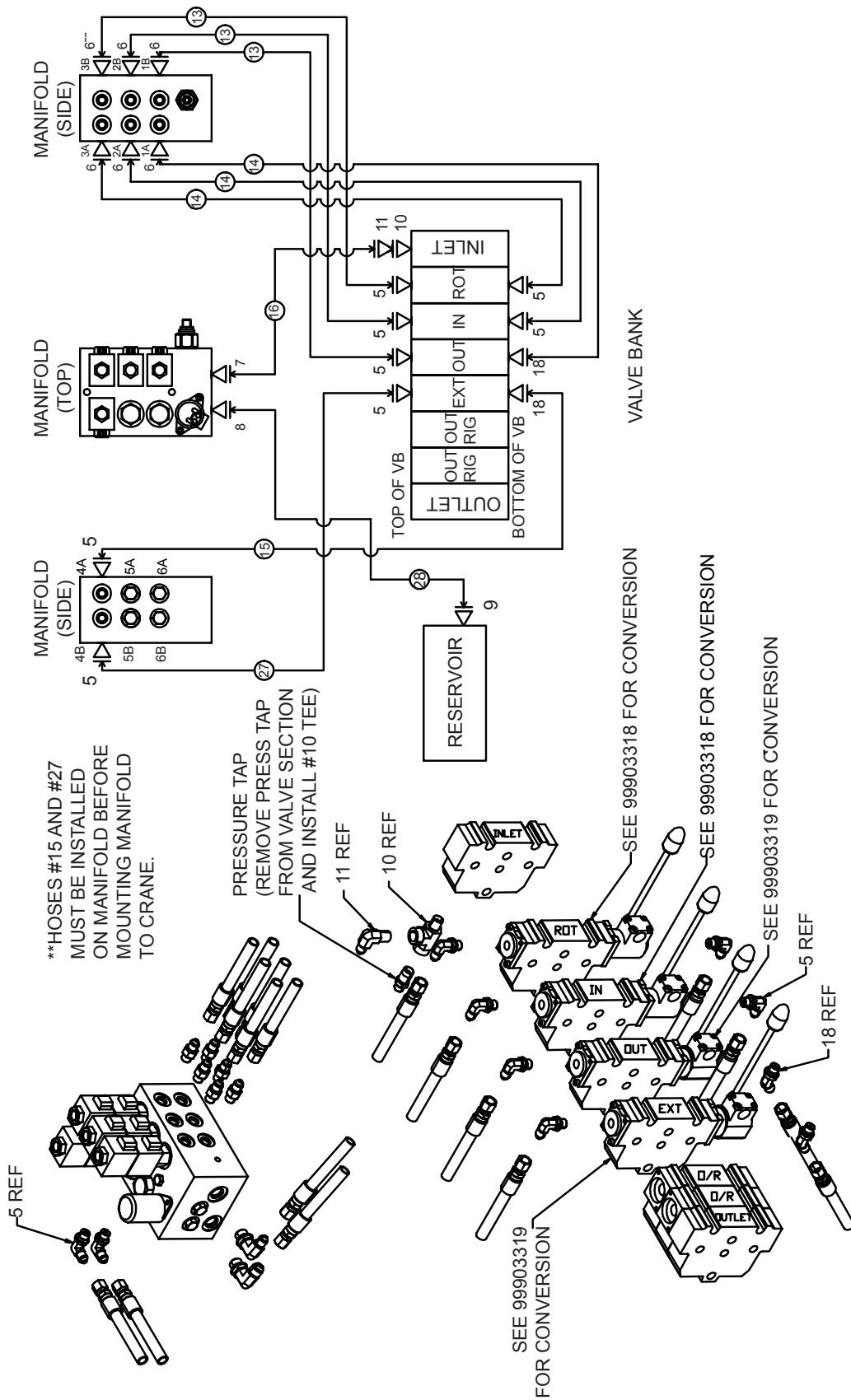
3. FOR WIRING DETAIL, SEE 99903343 (MAT'L HANDLING RADIO REMOTE WIRING DIAGRAM).

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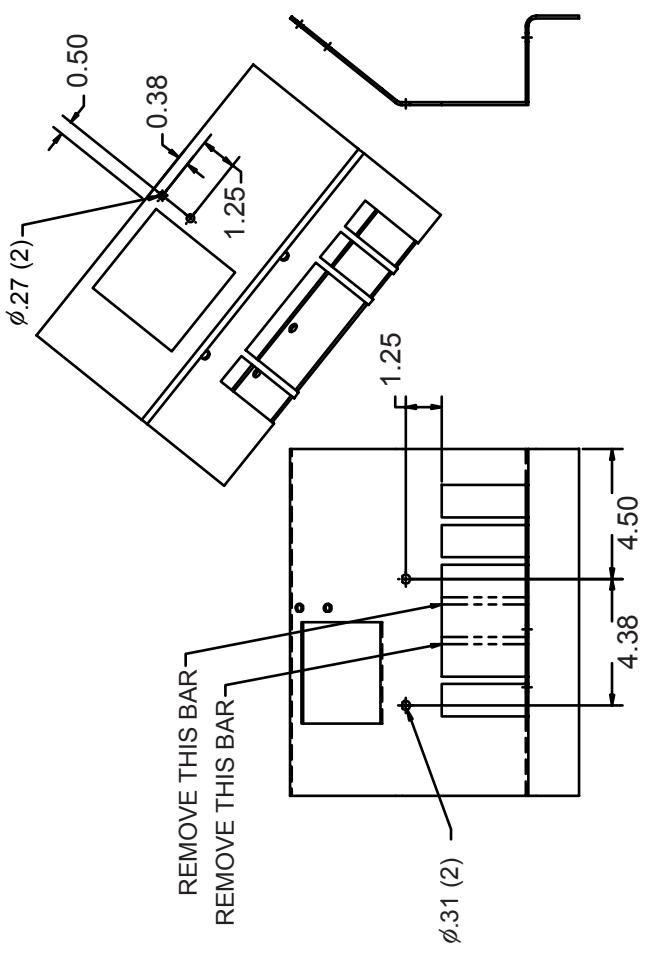
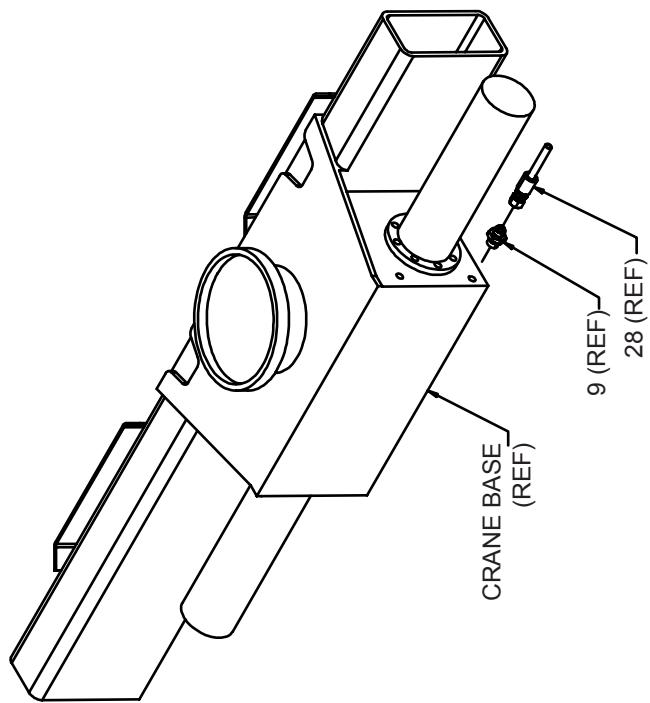


**CONTROL KIT - RADIO 4-FUNCT - 4/29  
CRANE (KIT 91716642)**

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**CONTROL KIT - RADIO 4-FUNCT - 4/29**  
**CRANE (KIT 91716642)**



**CONTROL KIT - TETH 4-FUNCT - 4/29  
CRANE (KIT 91716952)**

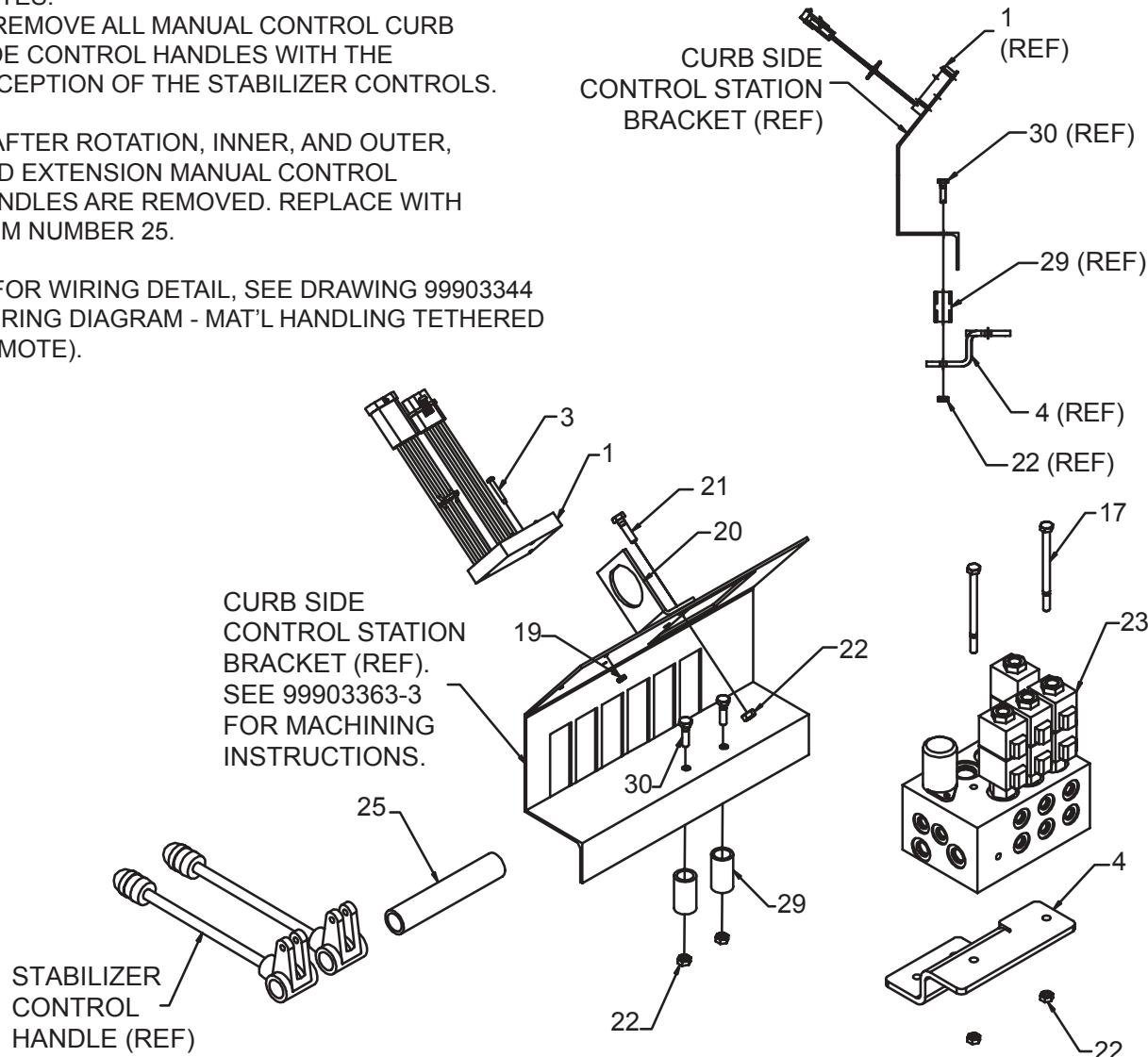
1.	77044826	VALVE DRIVER - HCT	1	13.	51396069	HOSE-FF 1/4X63.00 4-4	3REF	
2.	70146334	VALVE-RMT KIT RS150 4 FCTN (INCL. 23 & 24)	1	14.	51396070	HOSE-FF 1/4 X 55.00 4-4	3REF	
3.	72060606	SCR MACH #6-32 X 1.00 RDHZ	3	15.	51396071	HOSE-FF 1/4 X 71.00 4-4	1REF	
4.	60123461	MOUNTING PLATE, MANIFOLD	1	16.	51397072	HOSE-FI 1/4 X 54.00 4-4	1REF	
5.	72053758	ELBOW #4MSTR #4MJIC 90°	8	17.	72060016	CAP SCR 1/4-20 X 4.00 HH	2	
6.	72532351	ADPTR #4MSTR #4MJIC	6	18.	72533020	ELBOW #4MSTR #4MJIC 45°	2	
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1	19.	72601726	NUT #6-32 HEX NYLOC ZINC	3	
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1	20.	60119299	BRACKET	1	
9.	72533629	CONNECTOR	1	21.	72060004	CAP SCR 1/4-20 X 1.00 HH GR5	2	
10.	72533726	TEE-M PIPE/F PIPE MALE RUN 1/4	1	22.	72062000	NUT 1/4-20 HEX ZINC	6	
11.	72531412	ELBOW MPT #4MJIC 90° 1/4	1	23.	70146349	VALVE ASM	1REF	
12.	51716921	HOSE KIT (INCL. 13-16,27,28)	1	24.	77044997	HARNESS	1REF	
				25.	60123470	TUBE-1.00 OD X 3/4 ID X 5.35LG	1	
				27.	51393965	HOSE-FF 1/4 X 67.00 4-4	1REF	
				28.	51396073	HOSE-FF 1/4 X 66.00 6-8	1REF	
				29.	60114481	PIPE 1/2 SCH 40 X 1.50	2	
				30.	72060010	CAP SCR 1/4-20 X 2.50 HH GR5Z	2	
					31.	77044645	NUT-DEUTSCH 24 SHELL	1

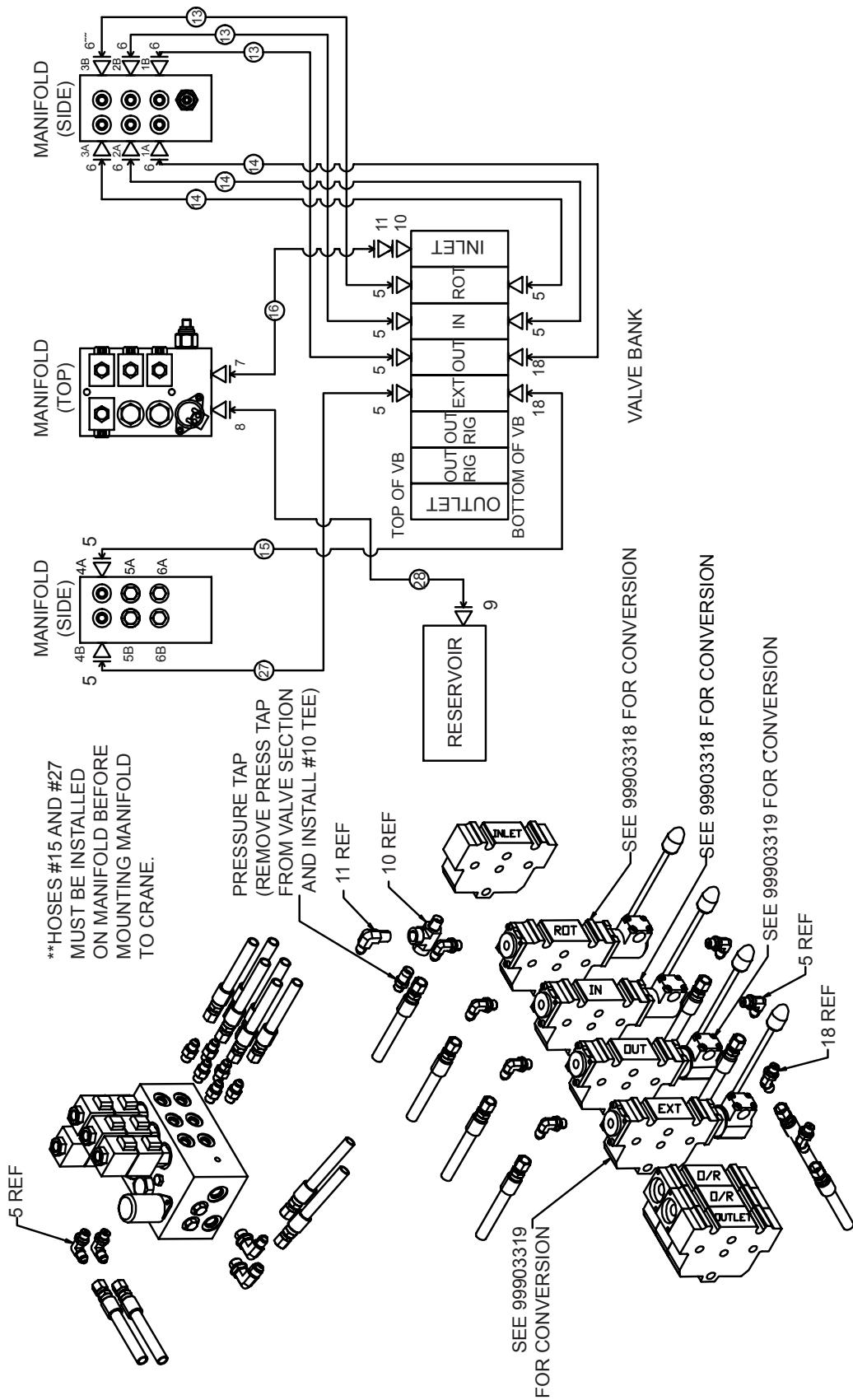
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**INSTALL COMPONENTS  
AS SHOWN HERE**

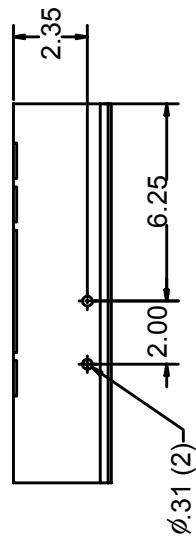
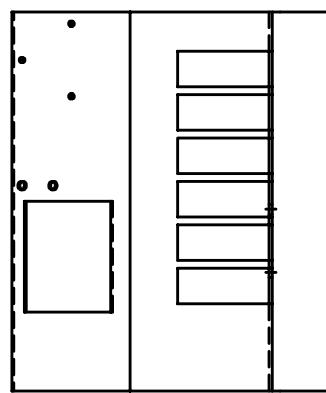
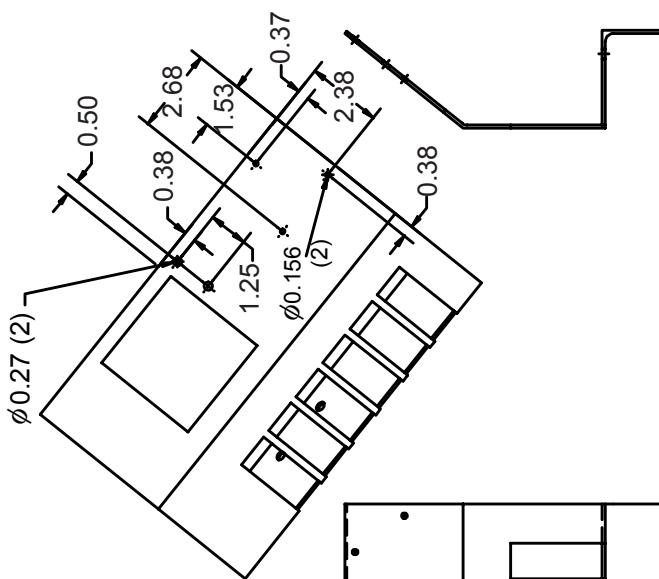
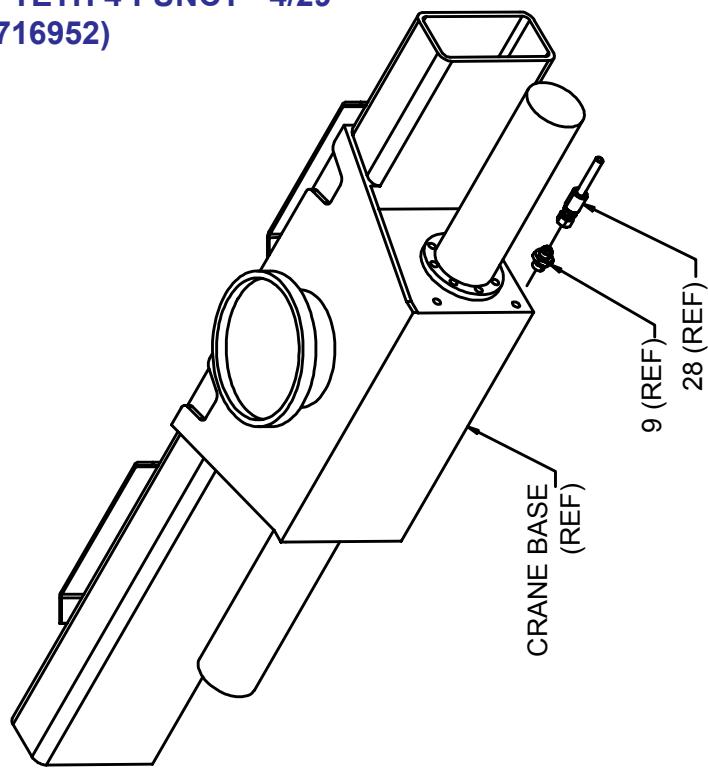
## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE STABILIZER CONTROLS.
2. AFTER ROTATION, INNER, AND OUTER, AND EXTENSION MANUAL CONTROL HANDLES ARE REMOVED. REPLACE WITH ITEM NUMBER 25.
3. FOR WIRING DETAIL, SEE DRAWING 99903344 (WIRING DIAGRAM - MAT'L HANDLING TETHERED REMOTE).





**CONTROL KIT - TETH 4-FUNCT - 4/29**  
**CRANE (KIT 91716952)**



MODIFY CURB SIDE CONTROL  
 HANDLE BRACKET AS INDICATED



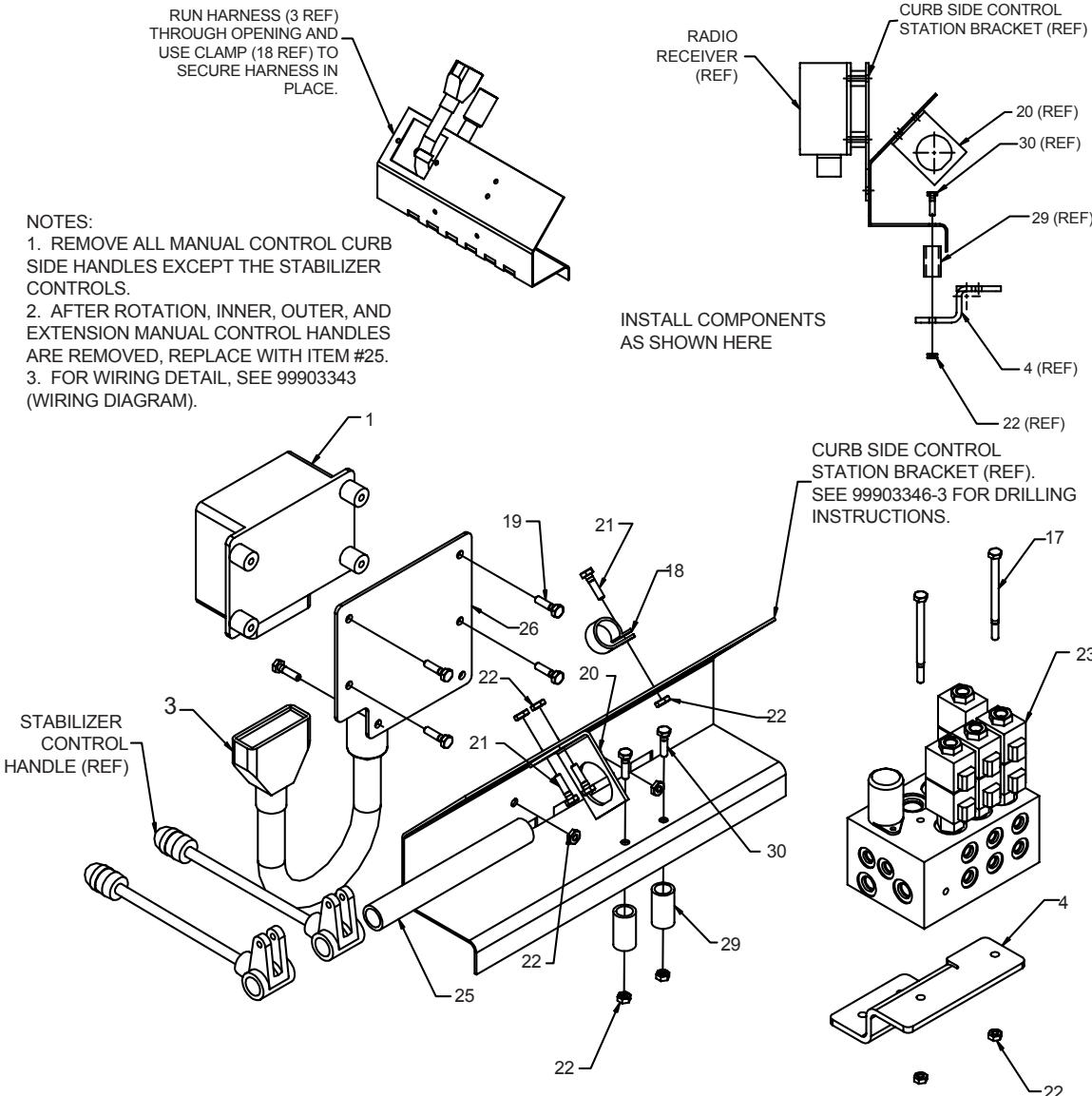
## 5-6 TM RADIO/TETHERED REMOTE CONTROL PARTS

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CONTROL KIT - RADIO 4-FUNCT - 5/35 & 6/45 CRANES (KIT 91716643) .....	47
CONTROL KIT - RADIO 4-FUNCT - 5/35 & 6/45 CRANES (KIT 91716643) .....	48
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CONTROL KIT - TETH - 5/35 & 6/45 CRANES (KIT 91716953).....	50
CONTROL KIT - TETH - 5/35 & 6/45 CRANES (KIT 91716953).....	51

**CONTROL KIT - RADIO 4-FUNCT - 5/35 &****6/45 CRANES (KIT 91716643)**

1.	73733600	RADIO REMOTE KIT	1	17.	72060016	CAP SCR 1/4-20 X 4.00 HHGR5Z	2
2.	73733575	VALVE (INCL. 23 & 24)	1	18.	72066580	CLAMP	1
3.	77044996	HARNESS	1	19.	72601778	CAP SCR METRIC 6-1.00 X 12	4
4.	60123461	PLATE	1	20.	60119299	BRACKET	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10	21.	72060004	CAP SCR 1/40-20 X 1.00 HHGR5Z	5
6.	72532351	ADPTR #4MSTR #4MJIC	6	22.	72062000	NUT 1/4-20 HEX ZINC	9
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1	23.	70146349	VALVE ASM	1REF
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1	24.	77044997	HARNESS	1REF
9.	72533629	CONNECTOR	1	25.	60123543	TUBE 1.00 OD X 3/4 IDX 7.88 LG	1
10.	72533726	TEE MPIPE/FPIPE MALE RUN 1/4	1	26.	60123459	PLATE	1
11.	72531412	ELBOW 1/4MPT #4MJIC 90°	1	27.	51393965	HOSE-FF 1/4 X 67.00 (4-4)	1REF
12.	51717214	HOSE KIT (INCL. 13-16, 27, 28)	1	28.	51396073	HOSE-FF 1/4 X 66.00 (6-8)	1REF
13.	51396069	HOSE-FF 1/4 X 63.00 (4-4)	3REF	29.	60114481	PIPE 1/2 SCH 40 X 1-1/2	2
14.	51393971	HOSE-FF 1/4 X 57.00 (4-4)	3REF	30.	72060010	CAP SCR 1/4-20 X 2.50 HH GR5Z	2
15.	51396071	HOSE-FF 1/4 X 71.00 (4-4)	1REF	31.	77044645	NUT	1
16.	51397072	HOSE-FI 1/4 X 54.00 (4-4)	1REF				

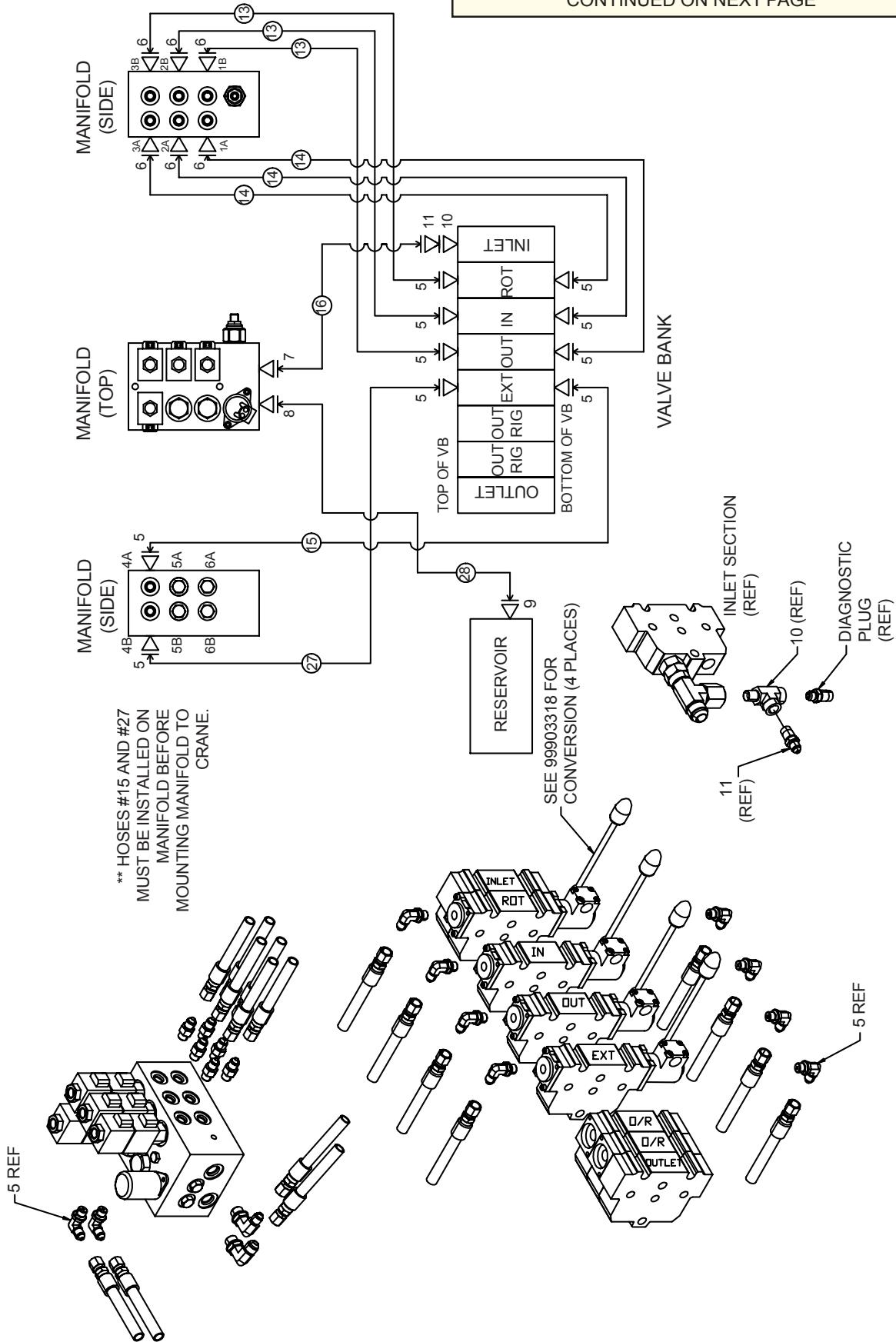
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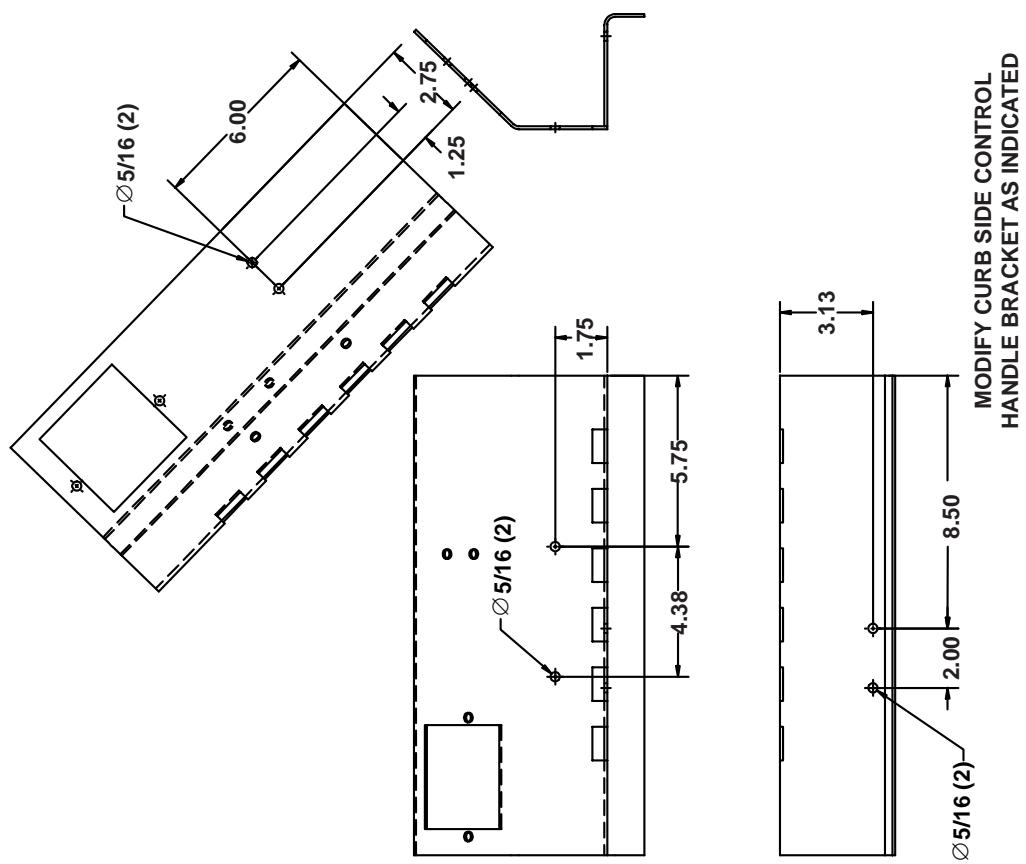
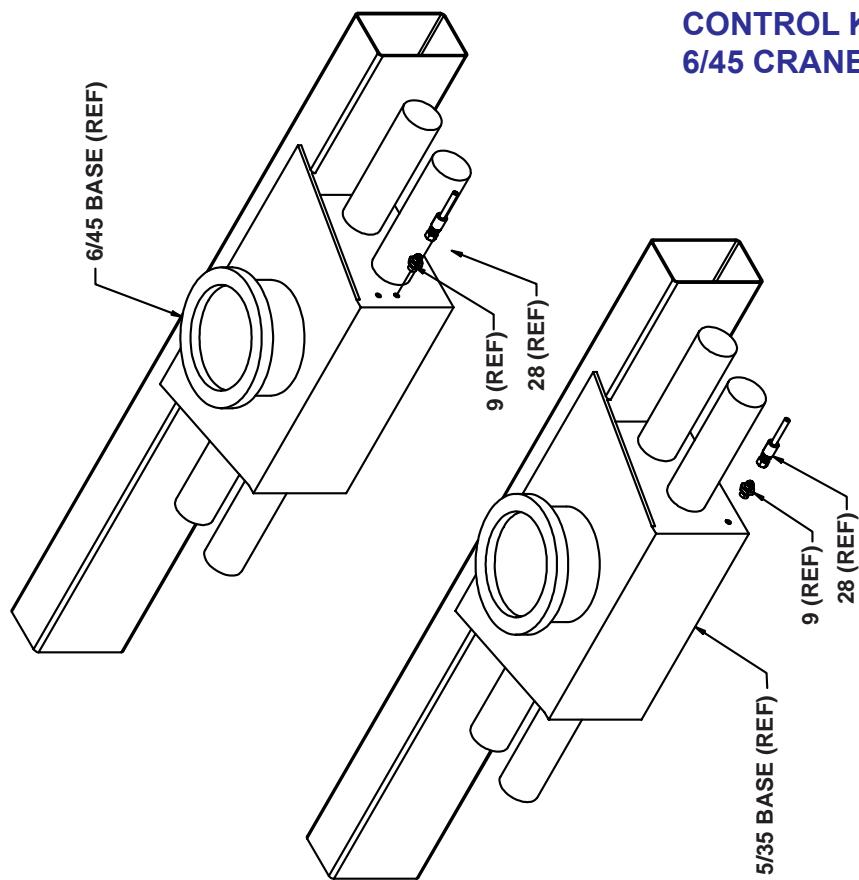
**CONTROL KIT - RADIO 4-FUNCT - 5/35 &  
6/45 CRANES (KIT 91716643)**

PARTS LIST ON PREVIOUS PAGE

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**CONTROL KIT - RADIO 4-FUNCT - 5/35 &  
6/45 CRANES (KIT 91716643)**



## CONTROL KIT - TETH - 5/35 & 6/45 CRANES (KIT 91716953)

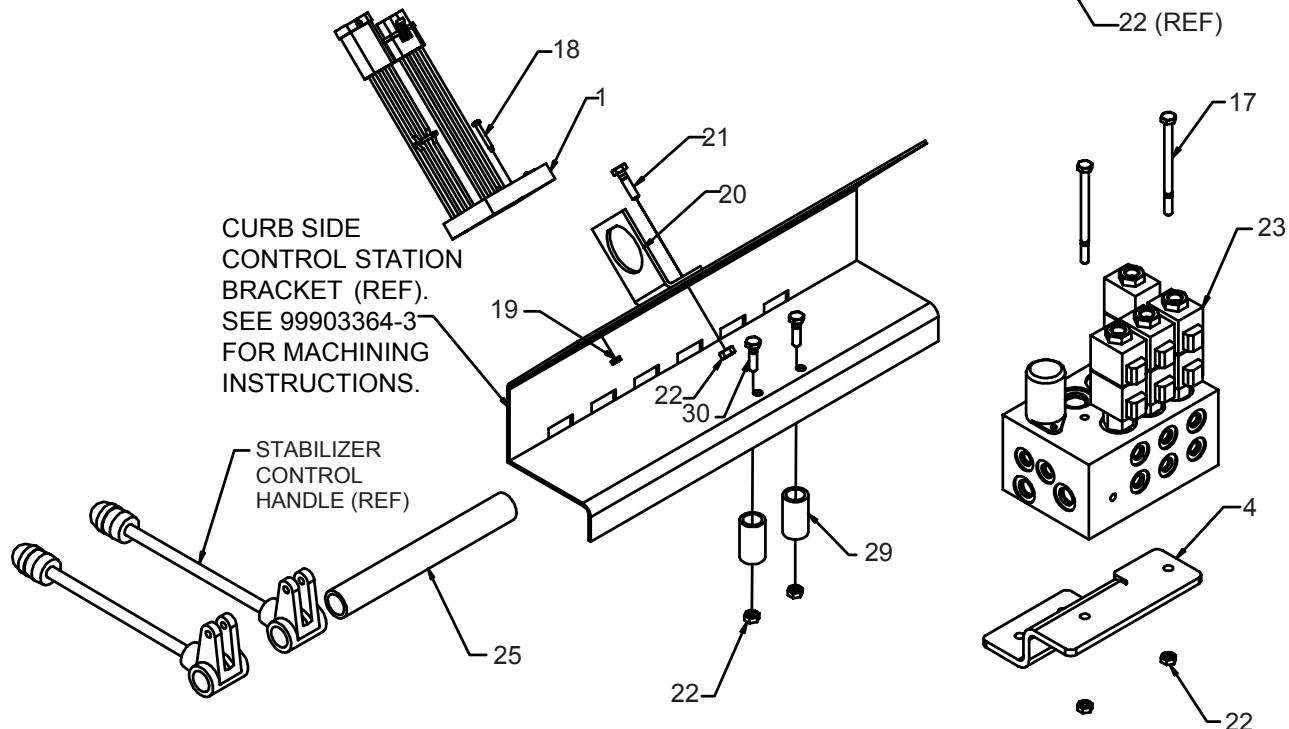
1.	77044826	VALVE DRIVER	1
2.	73733575	VALVE (INCL. 23 & 24)	1
3.	51716758	HANDLE ASM - TETHERED	1
4.	60123461	PLATE	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR	1
10.	72533726	TEE MPIPE/FPIPE MALE RUN 1/4	1
11.	72531412	ELBOW 1/4MPT #4MJIC 90°	1
12.	51717214	HOSE KIT (INCL. 13-16, 27, 28)	1
13.	51396069	HOSE-FF 1/4 X 63.00 (4-4)	3REF
14.	51393971	HOSE-FF 1/4 X 57.00 (4-4)	3REF

15.	51396071	HOSE-FF 1/4 X 71.00 (4-4)	1REF
16.	51397072	HOSE-FI 1/4 X 54.00 (4-4)	1REF
17.	72060016	CAP SCR 1/4-20 X 4.00 HHGR5Z	2
18.	72060606	SCR-MACH #6-32 X 1.00 RDH Z	3
19.	72601726	NUT #6-32 HEX NYLOC ZINC	3
20.	60119299	BRACKET	1
21.	72060004	CAP SCR 1/40-20 X 1.00 HHGR5Z	5
22.	72062000	NUT 1/4-20 HEX ZINC	9
23.	70146349	VALVE ASM	1REF
24.	77044997	HARNESS	1REF
25.	60123543	TUBE 1.00 OD X 3/4 IDX 7.88 LG	1
26.	60123459	PLATE	1
27.	51393965	HOSE-FF 1/4 X 67.00 (4-4)	1REF
28.	51396073	HOSE-FF 1/4 X 66.00 (6-8)	1REF
29.	60114481	PIPE 1/2 SCH 40 X 1-1/2	2
30.	72060010	CAP SCR 1/4-20 X 2.50 HH GR5Z	2

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## NOTES:

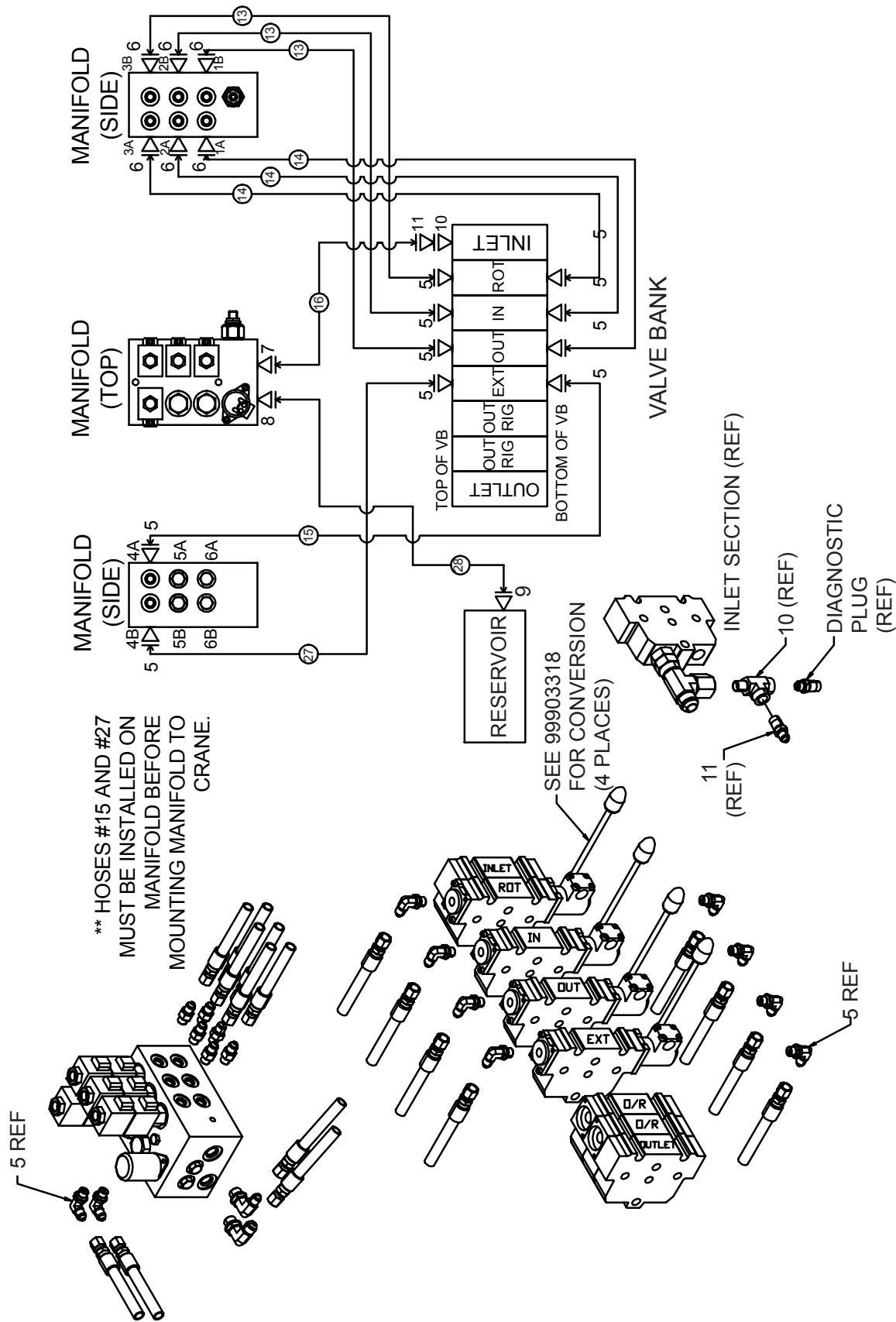
1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE STABILIZER CONTROLS.
2. AFTER ROTATION, INNER AND OUTER, AND EXTENSION MANUAL CONTROL HANDLES ARE REMOVED. REPLACE WITH ITEM NUMBER 25.
3. FOR WIRING DETAIL, SEE DRAWING 99903344 (WIRING DIAGRAM - MAT'L HANDLING TETHERED REMOTE).



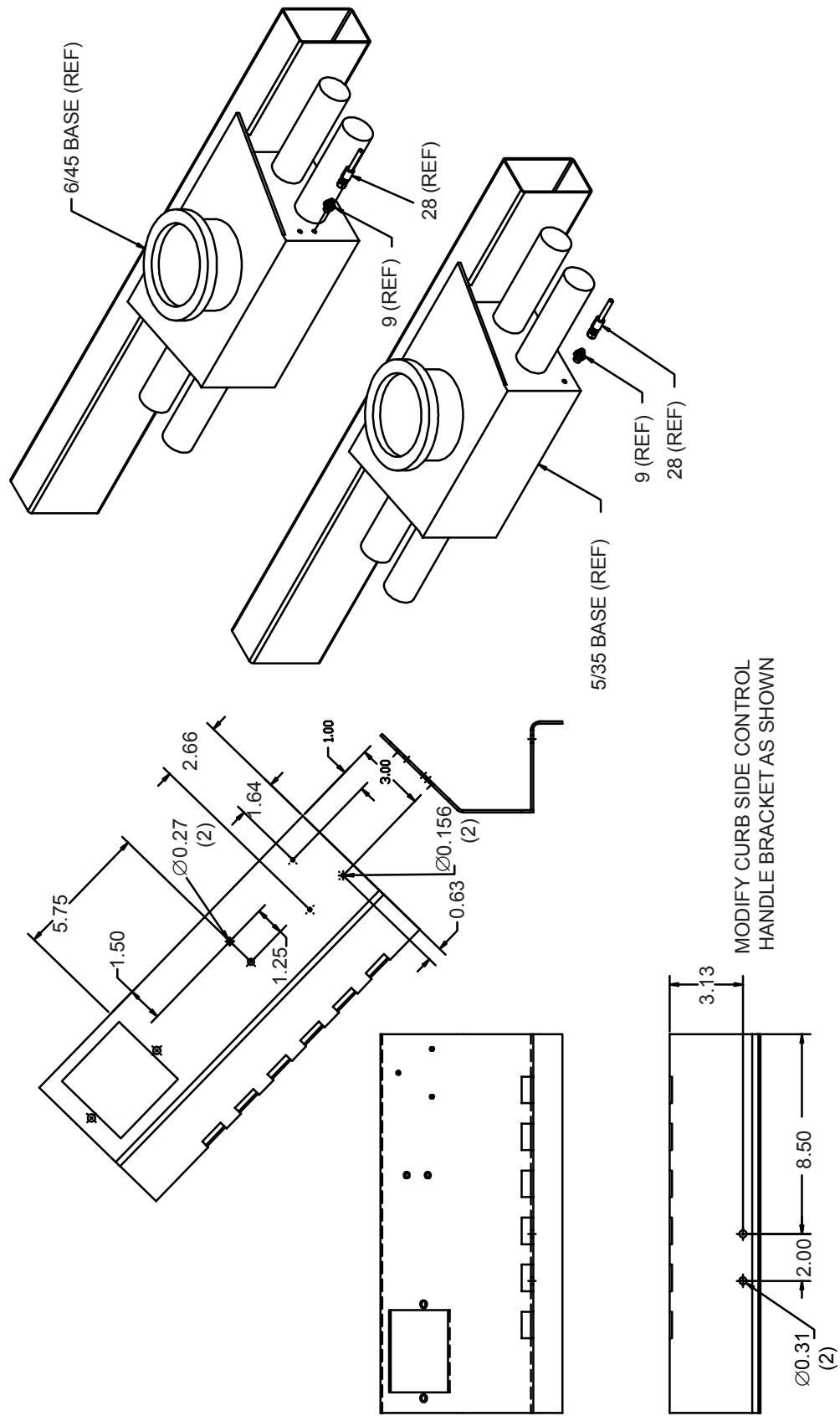
**CONTROL KIT - TETH - 5/35 & 6/45  
CRANES (KIT 91716953)**

PARTS LIST ON PREVIOUS PAGE

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**CONTROL KIT - TETH - 5/35 & 6/45  
CRANES (KIT 91716953)**



99903381:

52

## 7/51 RADIO/TETHERED REMOTE PARTS

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CONTROL KIT-TETH 4-FUNCT - 7/51 CRANE (KIT 91716955-1) .....	60
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CONTROL KIT-TETH 5-FUNCT - 7/51 CRANE (KIT 91716956-1) .....	62
CONTROL KIT-TETH 5-FUNCT - 7/51 CRANE (KIT 91716956-2) .....	63
CONTROL KIT-TETH 6-FUNCT - 7/51 CRANE (KIT 91716957-1) .....	64
CONTROL KIT-TETH - 6-FUNCT - 7/51 CRANE (KIT 91716957-2) .....	65

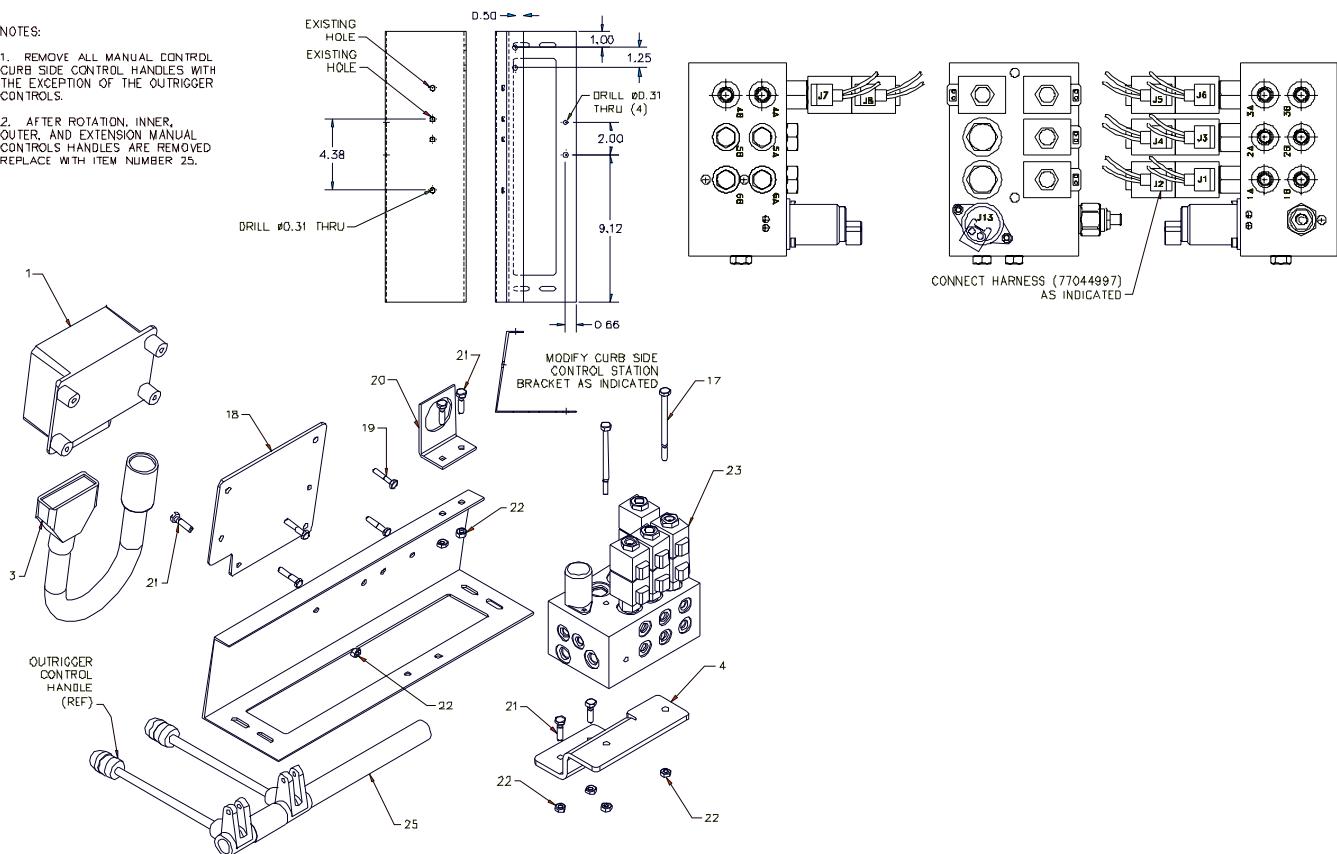
**CONTROL KIT-RADIO 4-FUNCT - 7/51  
CRANE (KIT 91716645-1)**

1.	73733600	RADIO RMT KIT	1
2.	73733576	VALVE- RMT KIT RS210 4FCTN	
1		(INCLUDES 23,24)	
3.	77044996	HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE MALE RUN .25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1
12.	51717023	HOSE KIT-7/51 4FCTN RMT (INCLUDES 13-16)	1
13.	51396070	HOSE-FF 1/4x55 OAL (4-4)	7REF

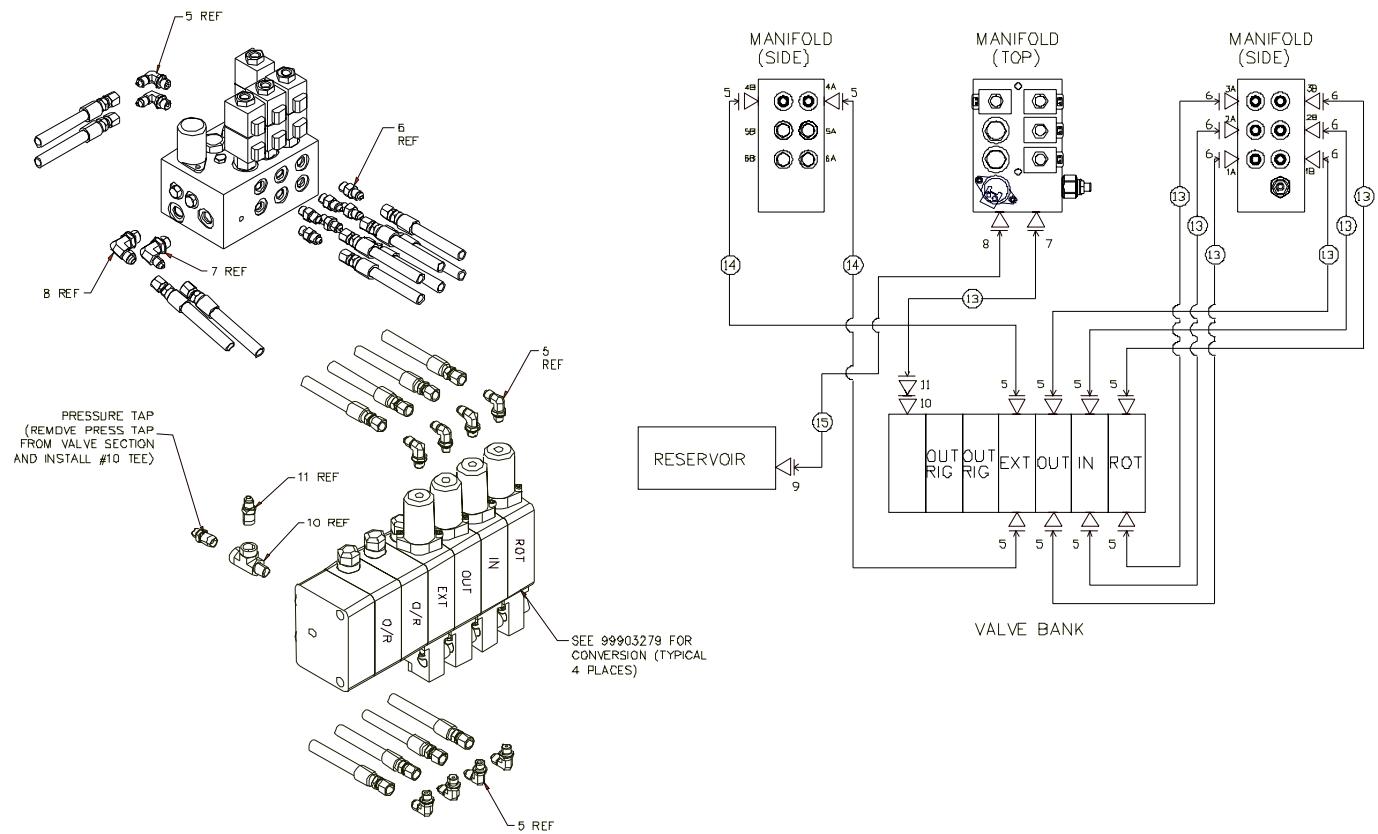
14.	51396095	HOSE-FF 1/4x65 OAL (4-4)	2REF
15.	51396087	HOSE-FJ 3/8x40 OAL (6-8)	1REF
17.	72060016	CAP SCR 1/4-20x4 HH GR5Z	2
18.	60123459	PLATE-RADIO RMT MTG	1
19.	72601448	CAP SCR METRIC 6-1.0 x10 HHZ	4
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5Z	
6			
22.	72062000	NUT 1/4-20 HEX ZINC	8
23.	70146349	VALVE ASM-4FCTN RAD/TETH	
1REF			
24.	77044997	HARNESS-MATL HNDLG RAD/TETH	1REF
25.	60123543	TUBE 1.00ODx.75IDx7.88 LG	1

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NOTES:  
 1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE OUTRIGGER CONTROLS.  
 2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.



**CONTROL KIT-RADIO 4-FUNCT - 7/51  
CRANE (KIT 91716645-2)**



**CONTROL KIT-RADIO 5-FUNCT - 7/51  
CRANE (KIT 91716646-1)**

1.	73733600	RADIO RMT KIT	1
2.	73733577	VALVE- RMT KIT RS210 5FCTN	
3.	77044996	(INCLUDES 23,24) HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	14
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE MALE RUN .25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1

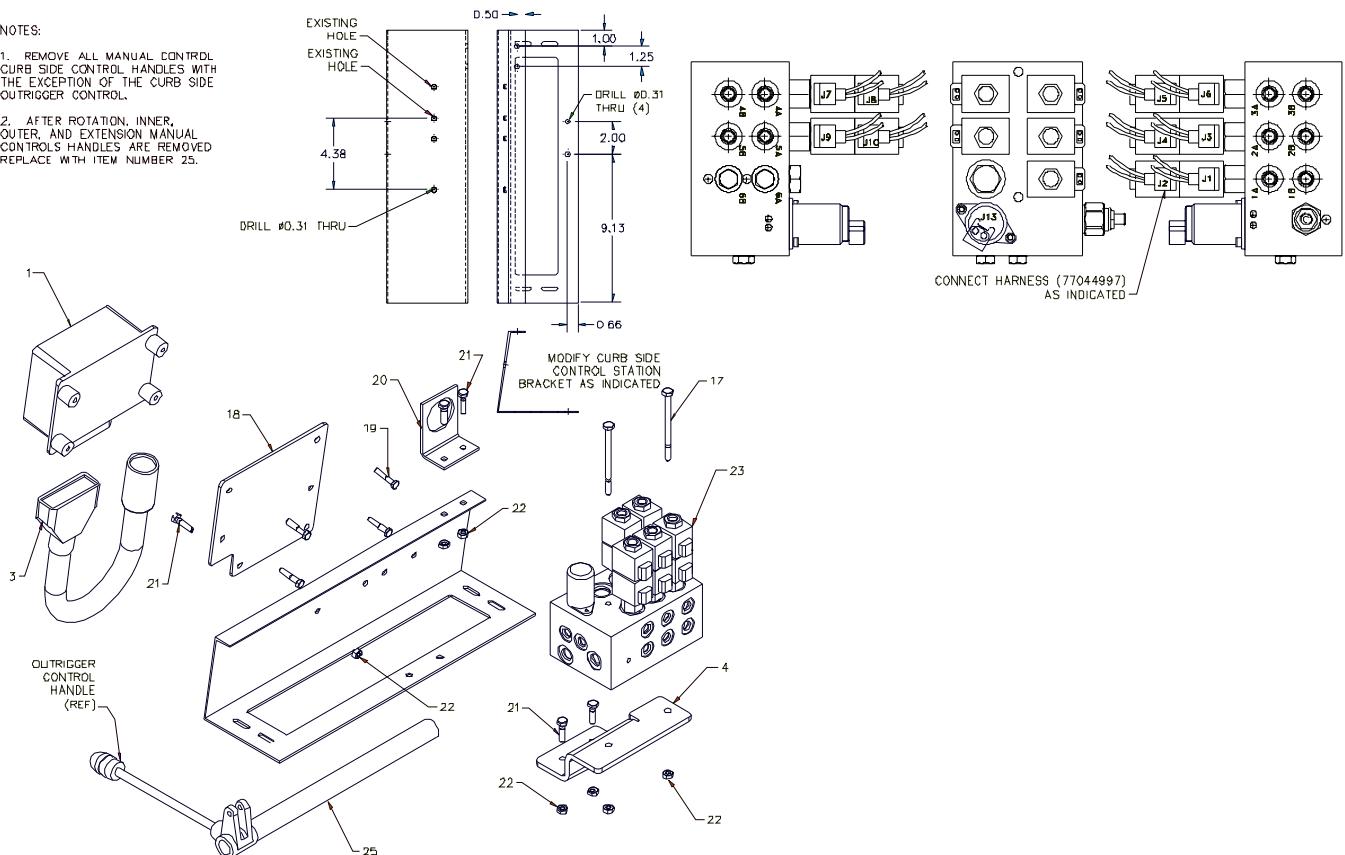
12.	51717024	HOSE KIT-7/51 5FCTN RMT (INCLUDES 13-16)	1
13.	51396070	HOSE-FF 1/4x55 OAL (4-4)	7REF
14.	51396095	HOSE-FF 1/4x65 OAL (4-4)	4REF
15.	51396087	HOSE-FJ 3/8x40 OAL (6-8)	1REF
17.	72060016	CAP SCR 1/4-20x4 HH GR5Z	2
18.	60123459	PLATE-RADIO RMT MTG	1
19.	72601448	CAP SCR METRIC 6-1.0 x10 HH	4
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5Z	
22.	72062000	NUT 1/4-20 HEX ZINC	8
23.	70146349	VALVE ASM-4FCTN RAD/TETH	
24.	77044997	HARNESS-MATL HNDLG RAD/TETH	1REF
25.	60123639	TUBE 1.00ODx.75IDx11.88 LG	1

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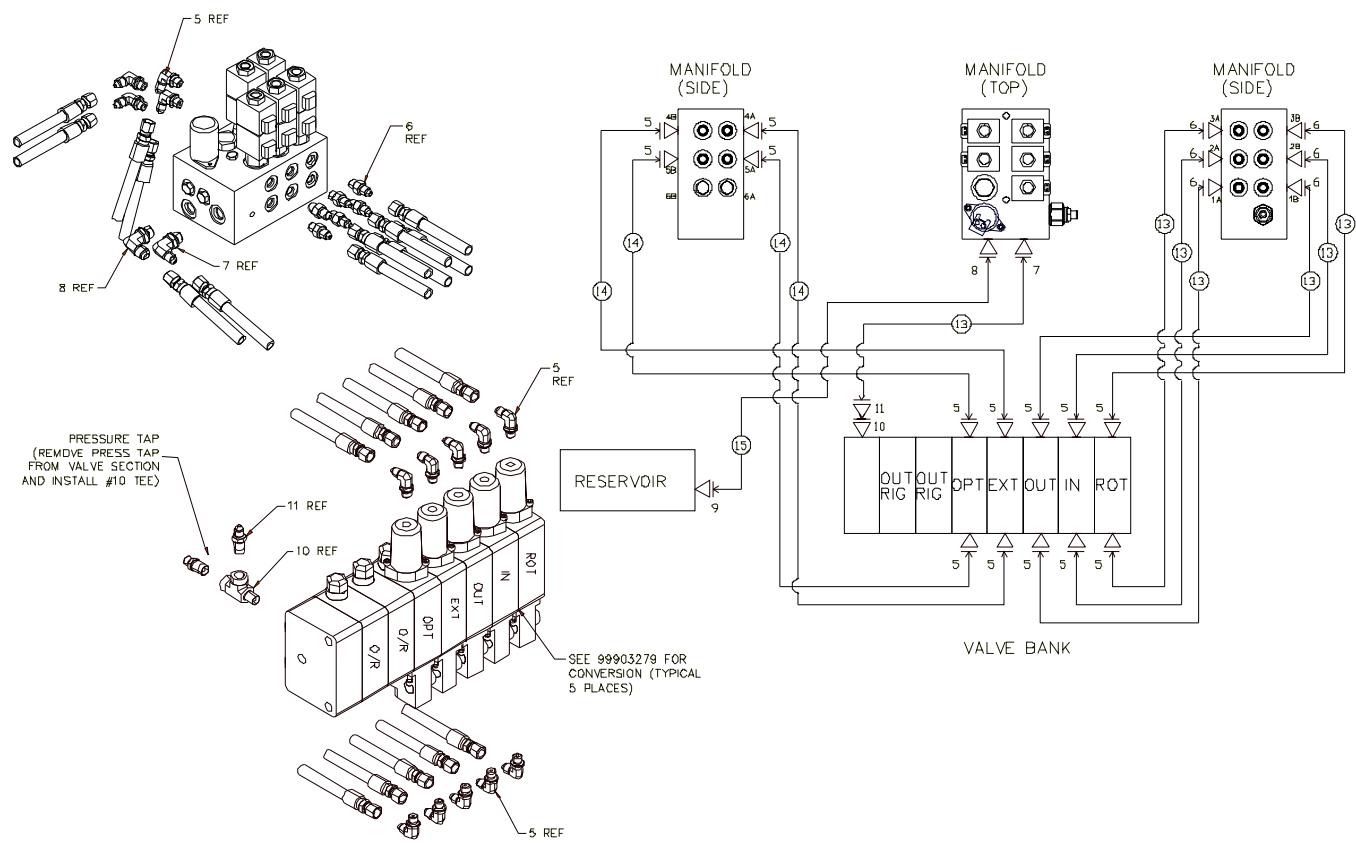
## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE CURB SIDE OUTRIGGER CONTROL.

2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.



**CONTROL KIT - RADIO 5-FUNCT - 7/51  
CRANE (KIT 91716646-2)**



**CONTROL KIT-RADIO 6-FUNCT - 7/51  
CRANE (KIT 91716647-1)**

1.	73733600	RADIO RMT KIT	1
2.	73733436	VALVE- RMT KIT RS210 6FCTN	
3.	77044996	(INCLUDES 23,24) HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	18
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE MALE RUN .25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1
12.	51717023	HOSE KIT-7/51 6FCTN RMT	1

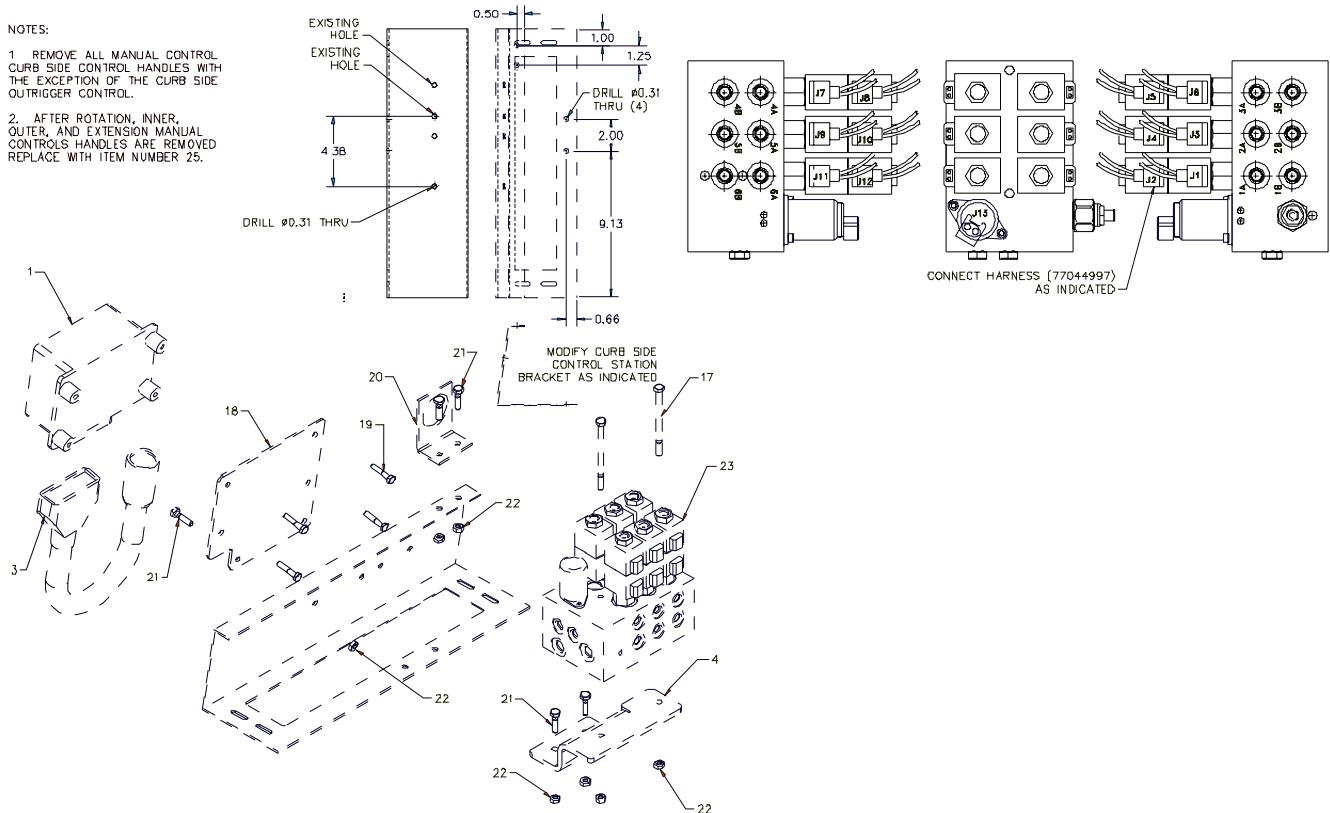
13.	51396070	(INCLUDES 13-16) HOSE-FF 1/4x55 OAL (4-4)	7REF
14.	51396095	HOSE-FF 1/4x65 OAL (4-4)	2REF
15.	51396087	HOSE-FJ 3/8x40 OAL (6-8)	1REF
17.	72060016	CAP SCR 1/4-20x4 HH GR5Z	2
18.	60123459	PLATE-RADIO RMT MTG	1
19.	72601448	CAP SCR METRIC 6-1.0 x10 HHZ	4
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5Z	
22.	72062000	NUT 1/4-20 HEX ZINC	8
23.	70146351	VALVE ASM-6FCTN RAD/TETH	1REF
24.	77044997	HARNESS-MATL HNDLG RAD/TETH	1REF

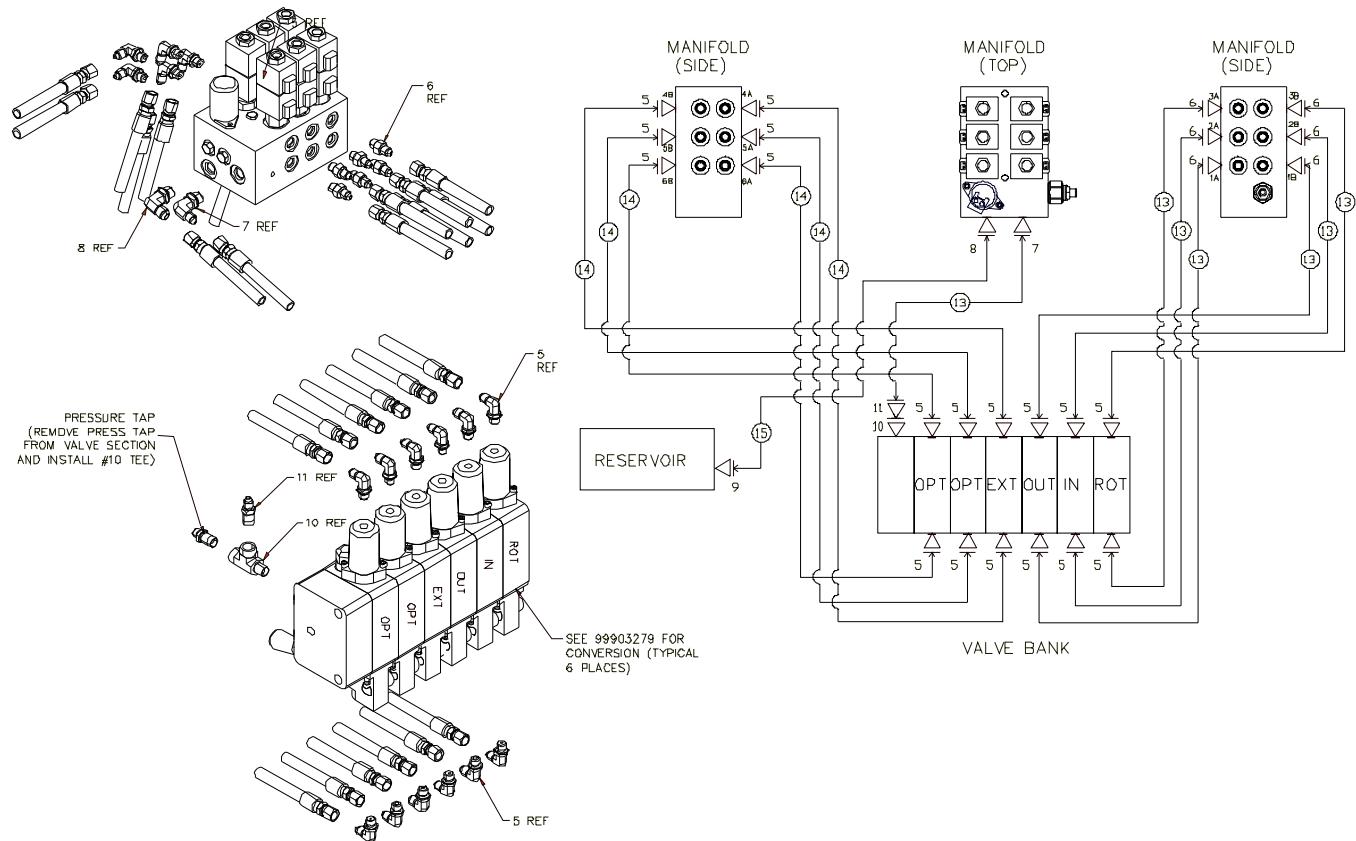
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## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE CURB SIDE OUTRIGGER CONTROL.

2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.



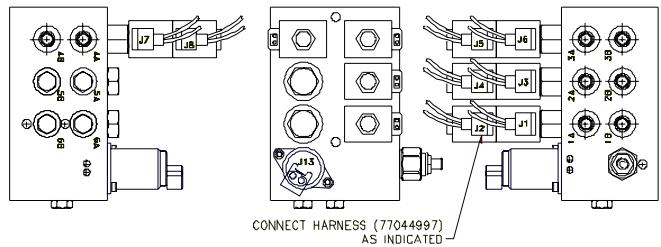
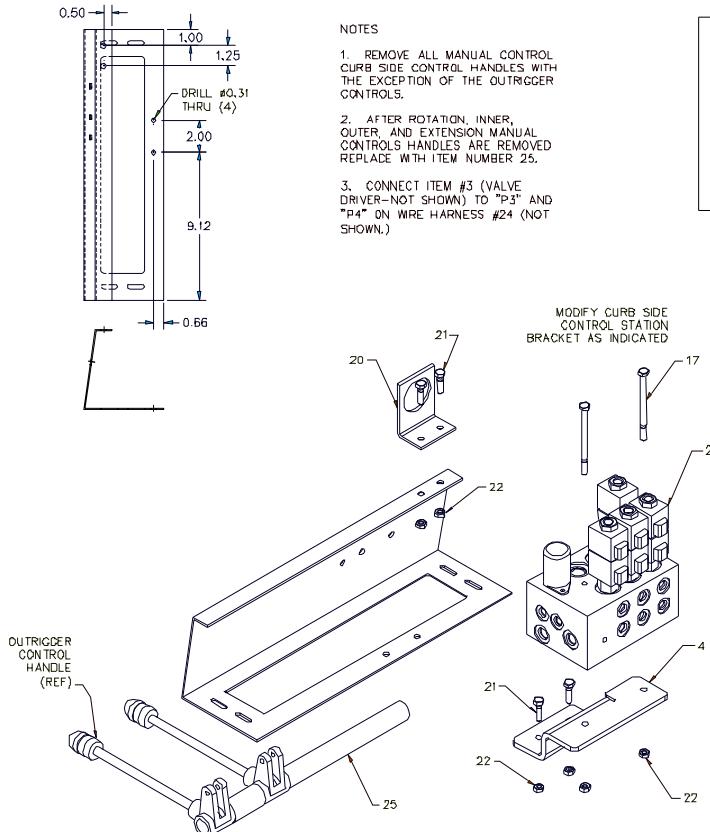
**CONTROL KIT-RADIO 6-FUNCT - 7/51 CRANE (KIT 91716647-2)**


**CONTROL KIT-TETH 4-FUNCT - 7/51  
CRANE (KIT 91716955-1)**

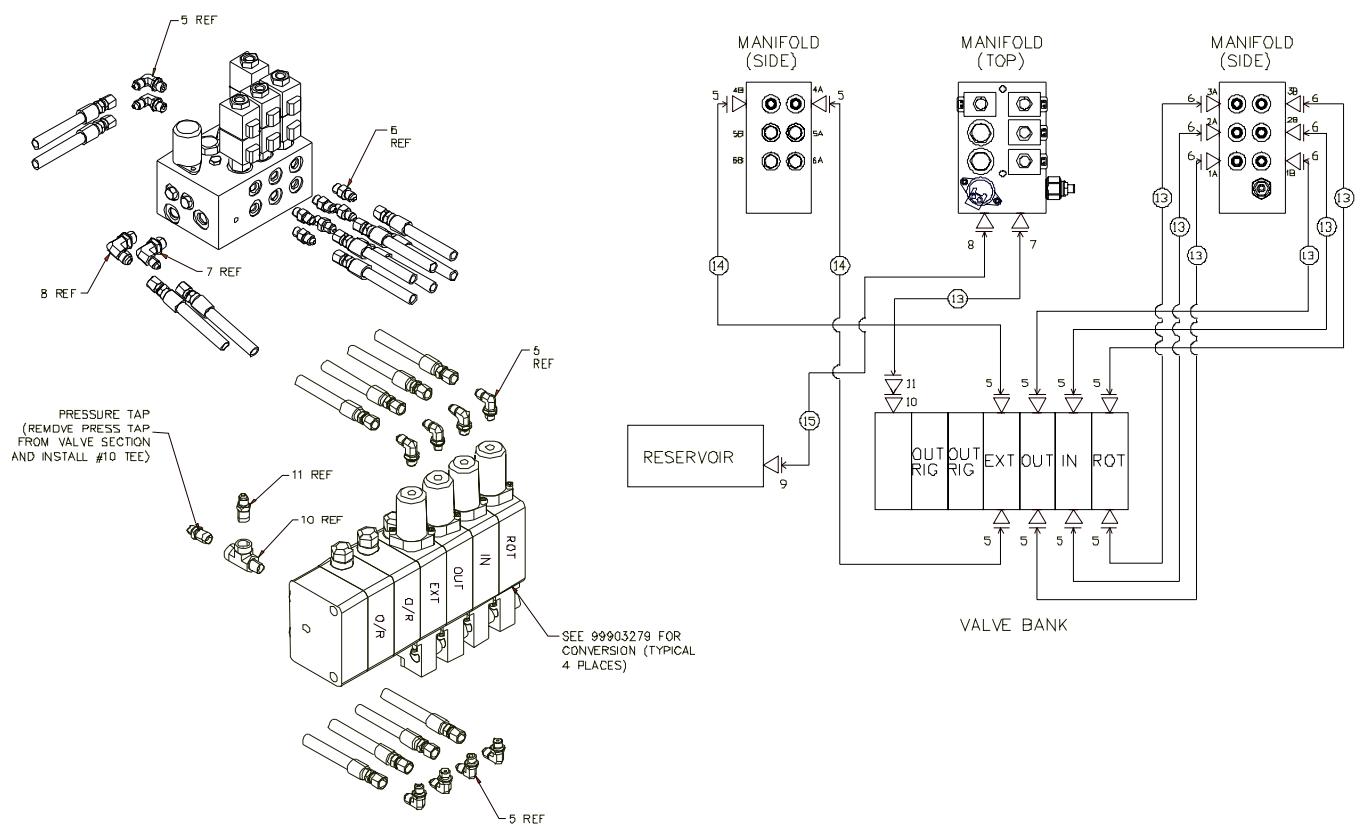
1.	51716758	HANDLE ASM-MATL HND TETH	1
2.	73733576	VALVE- RMT KIT RS210 4FCTN (INCLUDES 23,24)	1
3.	77044826	VALVE DRIVER-HCT 99910038	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE MALE RUN .25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1

12.	51717023	HOSE KIT-7/51 4FCTN RMT (INCLUDES 13-16)	1
13.	51396070	HOSE-FF 1/4x55 OAL (4-4)	7REF
14.	51396095	HOSE-FF 1/4x65 OAL (4-4)	2REF
15.	51396087	HOSE-FJ 3/8x40 OAL (6-8)	1REF
17.	72060016	CAP SCR 1/4-20x4 HH GR5Z	2
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5Z	
22.	72062000	NUT 1/4-20 HEX ZINC	8
23.	70146349	VALVE ASM-4FCTN RAD/TETH	1REF
24.	77044997	HARNESS-MATL HNDLG RAD/TETH	1REF

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**CONTROL KIT - TETH 4-FUNCT - 7/51  
CRANE (KIT 91716955-2)**

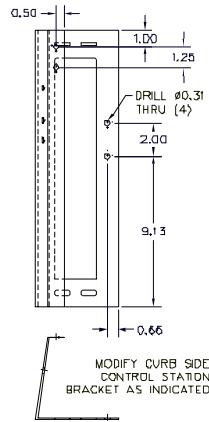


**CONTROL KIT-TETH 5-FUNCT - 7/51  
CRANE (KIT 91716956-1)**

1.	51716758	HANDLE ASM-MATL HNDLG	1
2.	73733577	VALVE-RMT KIT RS210 5 FCTN	1
(INCLUDES 23&24)			
3.	77044826	VALVE DRIVER-HCT 99910038	1
(INCLUDES 23&24)			
4.	60123461	PLATE-MTG RAD RMT MANIFOLD	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	14
6.	72532351	ADPTR-#4MSTR #4MJIC	6
7.	72532599	ELBOW #6MSTR #6MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72633629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE MALE RUN .25	1
11.	72053663	ADPTR MPT/MJIC 12-4	1
12.	51717024	HOSE KIT 7/51 5FUNC RAD RMT	1

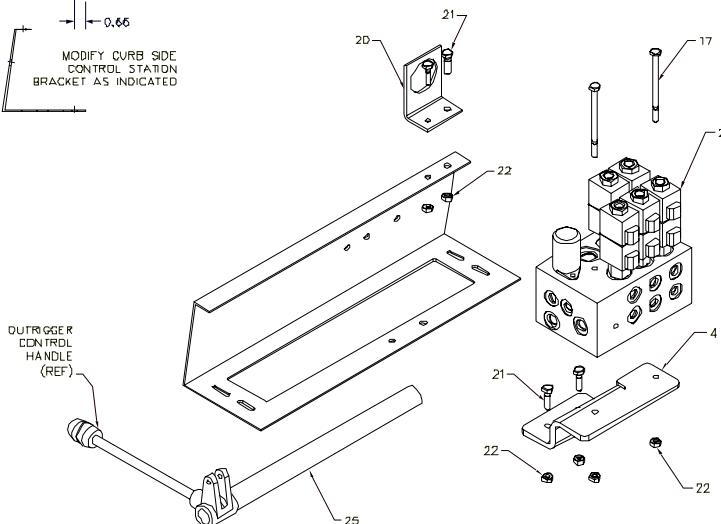
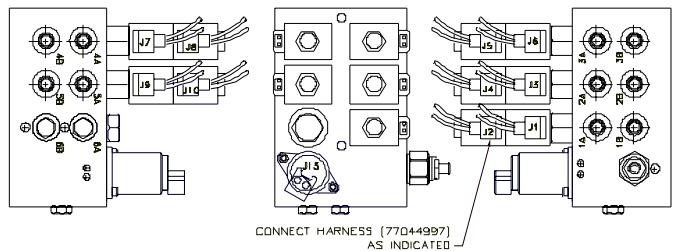
(INCLUDES 13-16)							
13. 51396070 HOSE-FF 1/4x55.00 OAL (4-4) 7REF							
14. 51396095 HOSE-FF 1/4x65.00 OAL (4-4) 4REF							
15. 51396087 HOSE-FJ 3/8x40.00 OAL (6-8) 1REF							
17. 72060016 CAP SCR 1/4-20x4.00 HH GR5 Z							
2							
20. 60119299 BRACKET-MTG DEUTSCH CONN							
21. 72060004 CAP SCR 1/4-20x1.00 HH GR5 Z							
4							
22. 72062000 NUT 1/4-20 HEX ZINC							
23. 70146350 VALVE ASM 5 FCT RAD/TETH 1REF							
24. 77044997 HARNESS-MATL HNDLG RAD/TETH 1REF							

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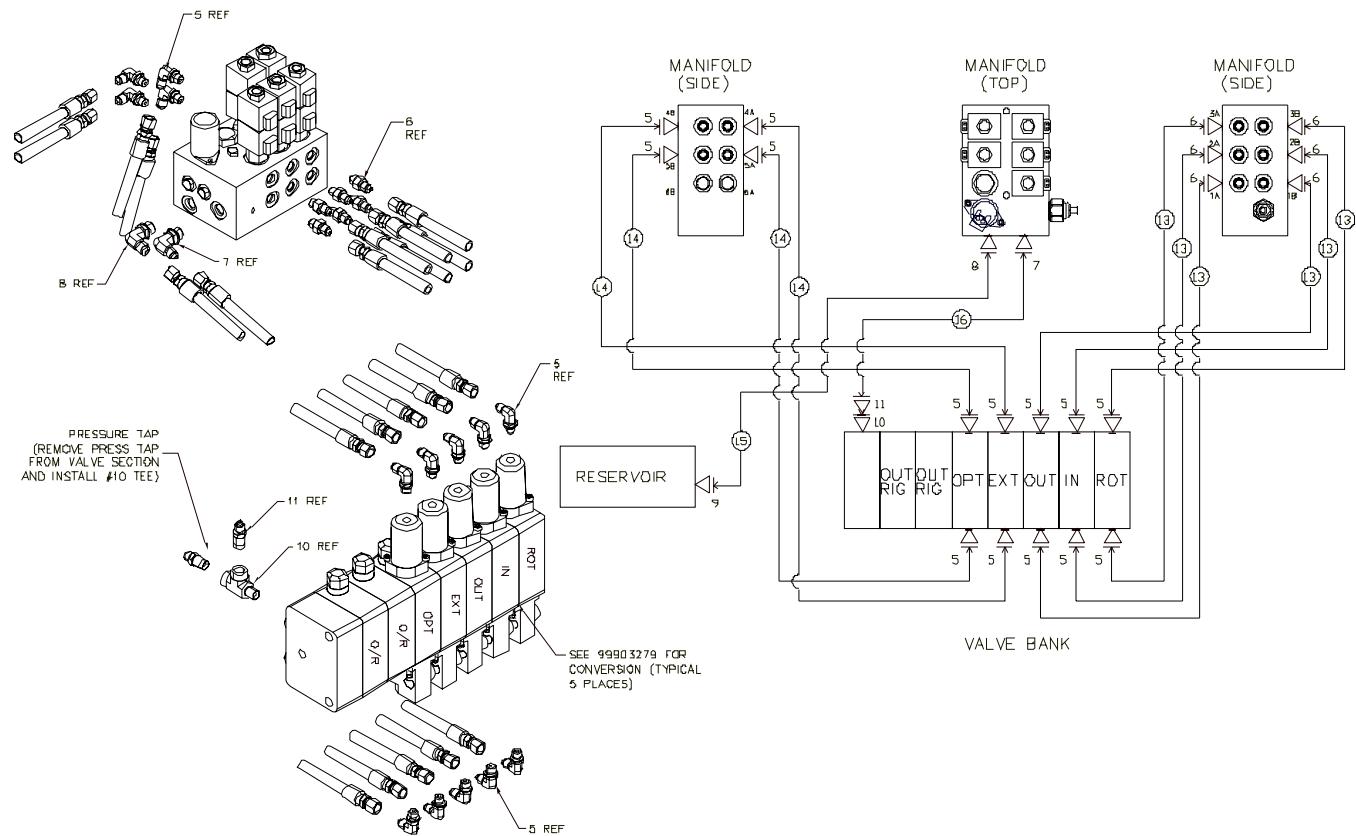


## NOTES:

1. REMOVE ALL MANUAL CONTROLD CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE OUTRIGGER CONTROLS.
2. AFTER ROTATION, INNER, OUTER, AND EXTENSION, MANUAL CONTROLS HANDLES ARE REMOVED. REPLACE WITH ITEM NUMBER 23.
3. CONNECT ITEM #3 (VALVE DRIVER-NOT SHOWN) TO "P3" AND "PA" ON WIRE HARNESS #24 (NOT SHOWN.)



**CONTROL KIT-TETH 5-FUNCT - 7/51  
CRANE (KIT 91716956-2)**

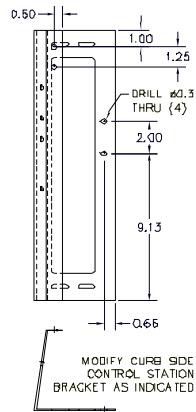


**CONTROL KIT-TETH 6-FUNCT - 7/51  
CRANE (KIT 91716957-1)**

1.	51716758	HANDLE ASM-MATL HNDLG	1
2.	73733436	VALVE-RMT KIT RS210 6 FCTN	1
(INCLUDES 23&24)			
3.	77044826	VALVE DRIVER-HCT 99910038	1
4.	60123461	PLATE-MTG RAD RMT MANIFOLD 1	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	18
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532599	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72633629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE MALE RUN .25	1
11.	72053663	ADPTR MPT/MJIC 12-4	1
12.	51717025	HOSE KIT 7/51 6FUNC RAD RMT	1

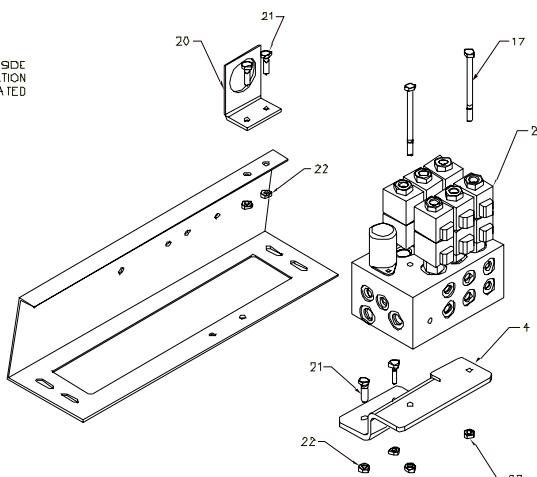
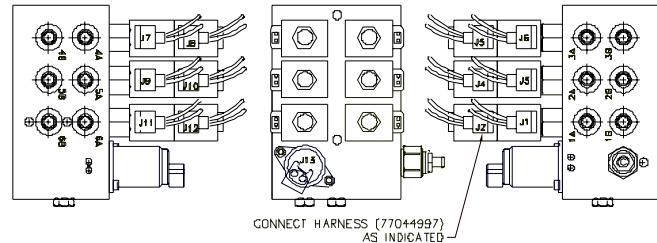
(INCLUDES 13-16)	
13.	51396070 HOSE-FF 1/4x55.00 OAL (4-4) 7REF
14.	51396095 HOSE-FF 1/4x65.00 OAL (4-4) 6REF
15.	51396087 HOSE-FJ 3/8x40.00 OAL (6-8) 1REF
17.	CAP SCR 1/4-20x4.00 HH GR5 Z
2	
20.	60119299 BRACKET-MTG DEUTSCH CONN 1
21.	72060004 CAP SCR 1/4-20x1.00 HH GR5 Z
4	
22.	72062000 NUT 1/4-20 HEX ZINC 6
23.	70146351 VALVE ASM 6 FCT RAD/TETH 1REF
24.	77044997 HARNESS-MATL HNDLG RAD/TETH 1REF

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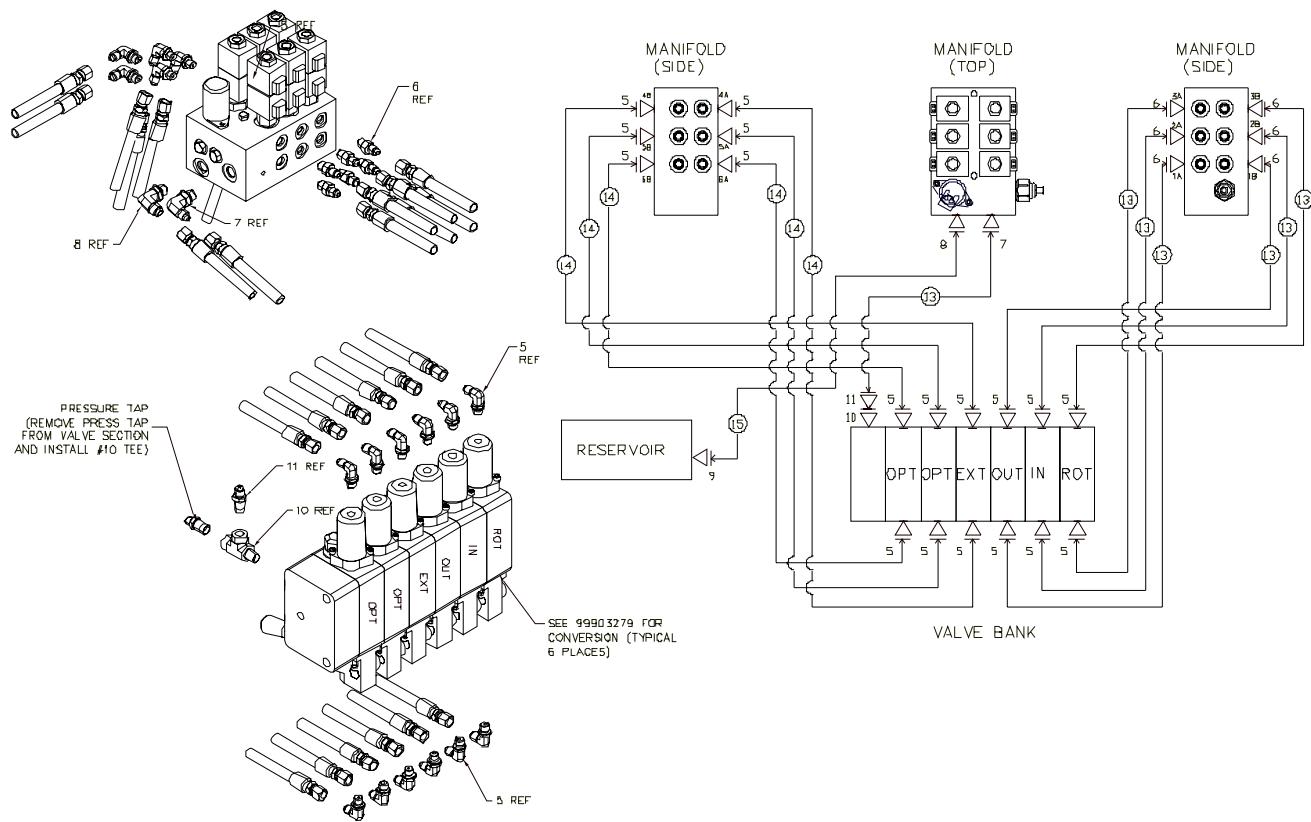


## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE DUTRIGGER CONTROLS.
2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 23.
3. CONNECT ITEM #3 (VALVE DRIVER-NOT SHOWN) TO "P3" AND "P4" ON WIRE HARNESS #24 (NOT SHOWN.)



**CONTROL KIT-TETH - 6-FUNCT - 7/51  
CRANE (KIT 91716957-2)**



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## 9/63 RADIO/TETHERED REMOTE PARTS

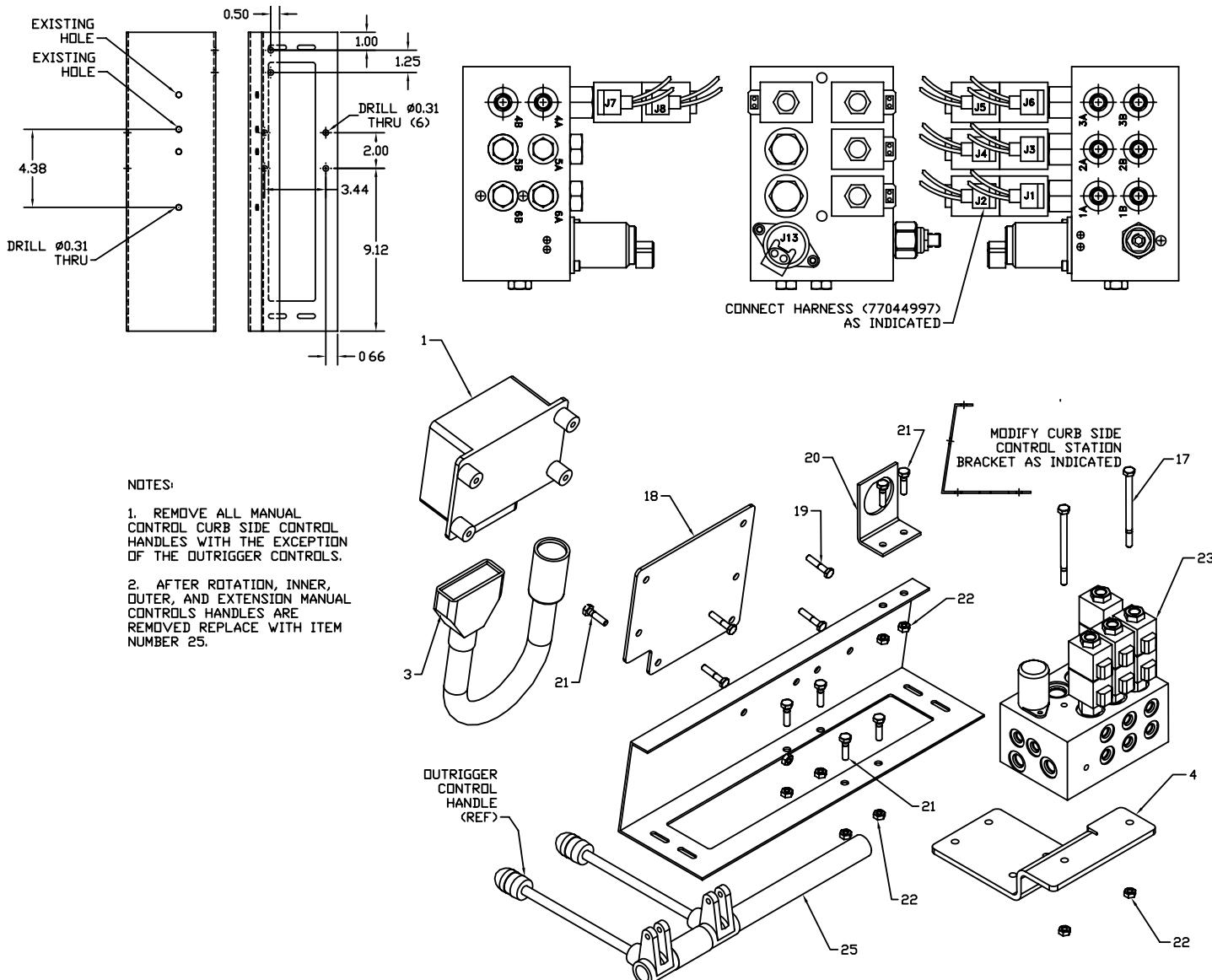
CONTROL KIT-RADIO 4-FUNCT - 9/63 CRANE (KIT 91716648-1) .....	68
CONTROL KIT-RADIO 5-FUNCT - 9/63 CRANE (KIT 91716649-1) .....	70
CONTROL KIT-RADIO 6-FUNCT - 9/63 CRANE (KIT 91716650-1) .....	72
CONTROL KIT-TETH 4-FUNCT - 9/63 CRANE (KIT 91716958-1) .....	74
CONTROL KIT-TETH 5-FUNCT - 9/63 CRANE (KIT 91716959-1) .....	76
CONTROL KIT-TETH 6-FUNCT - 9/63 CRANE (KIT 91716960-1) .....	78

**CONTROL KIT-RADIO 4-FUNCT - 9/63  
CRANE (KIT 91716648-1)**

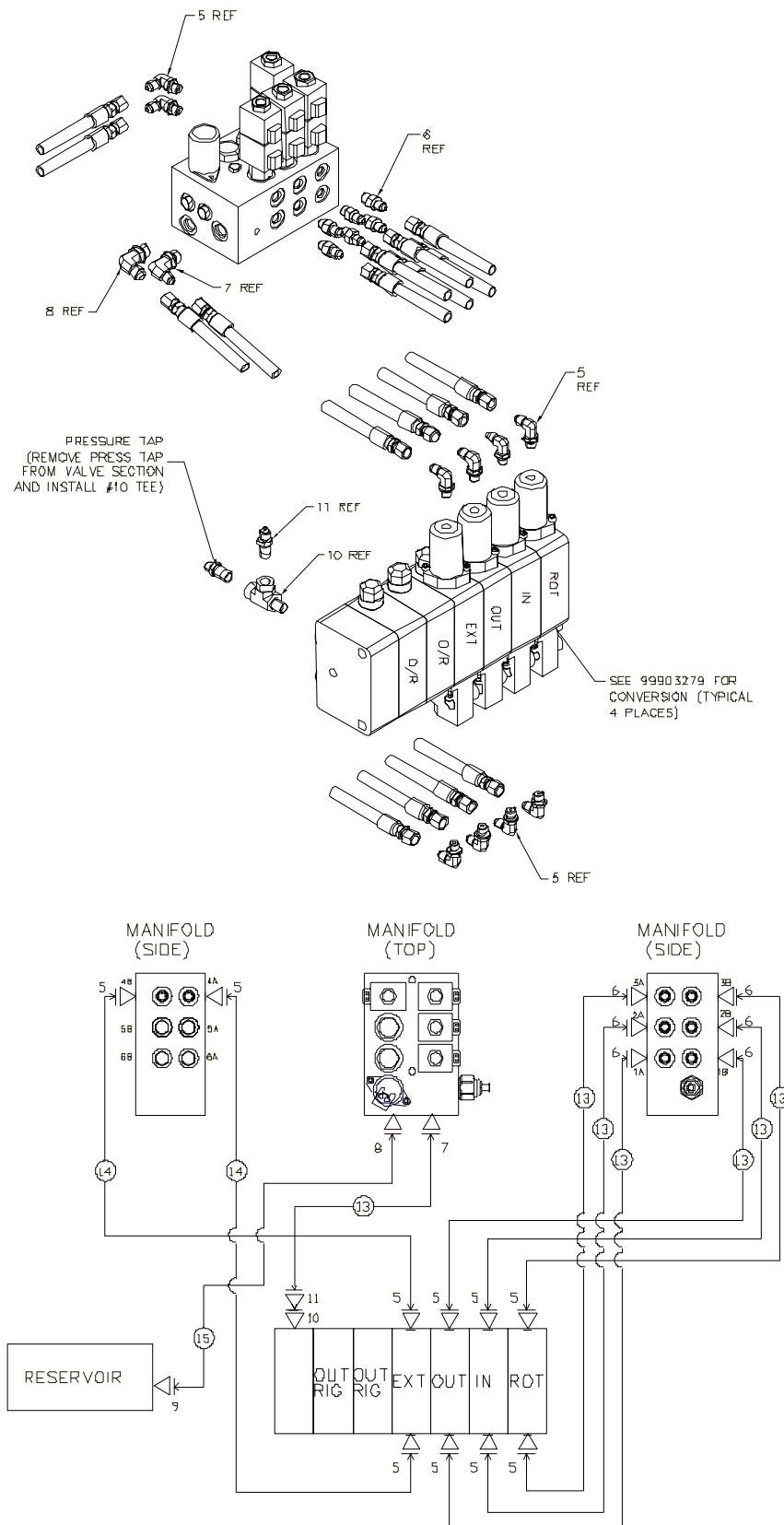
1.	73733600	RAD RMT KIT-MATL HANDLING	1
2.	73733576	VALVE-RMT KIT 4 FCTN (INCL. 23&24)	1
3.	77044996	HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR MBSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE -MALE RUN.25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1

12.	51716986	HOSE KIT 9/63 4 FUNCT. (INCLUDES 13-16)	1
13.	51396085	HOSE-FF .25X60.00 OAL (4-4)	7REF
14.	51396086	HOSE-FF .25X70.00 OAL (4-4)	2REF
15.	51396087	HOSE-FJ .38x40.00 OAL(6-8)	1REF
17.	72060016	CAP SCR 1/2-20x4.00 HH GR5 Z	2
18.	60123459	PLATE-RADIO REMOTE MTG	1
19.	72601448	CAP SCR-METRIC 6-1.00x10 HHZ	4
20.	60119299	BRACKET-MTG DEUTSCH CONNECTOR	1
21.	72060004	CAP SCR 1/4-20X1.00 HH GR5 Z (WAS 6)	8
22.	72062000	NUT 1/4-20 HEX Z (WAS 8)	10
23.	70146349	VALVE ASM-4 FCT RAD/TETH	1REF
24.	77044997	HARNESS- RAD/TETH	1REF
25.	60123543	TUBE-1.00ODx.75IDx7.88 LG	1

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**CONTROL KIT-RADIO 4-FUNCT - 9/63  
CRANE (KIT 91716648-2)**



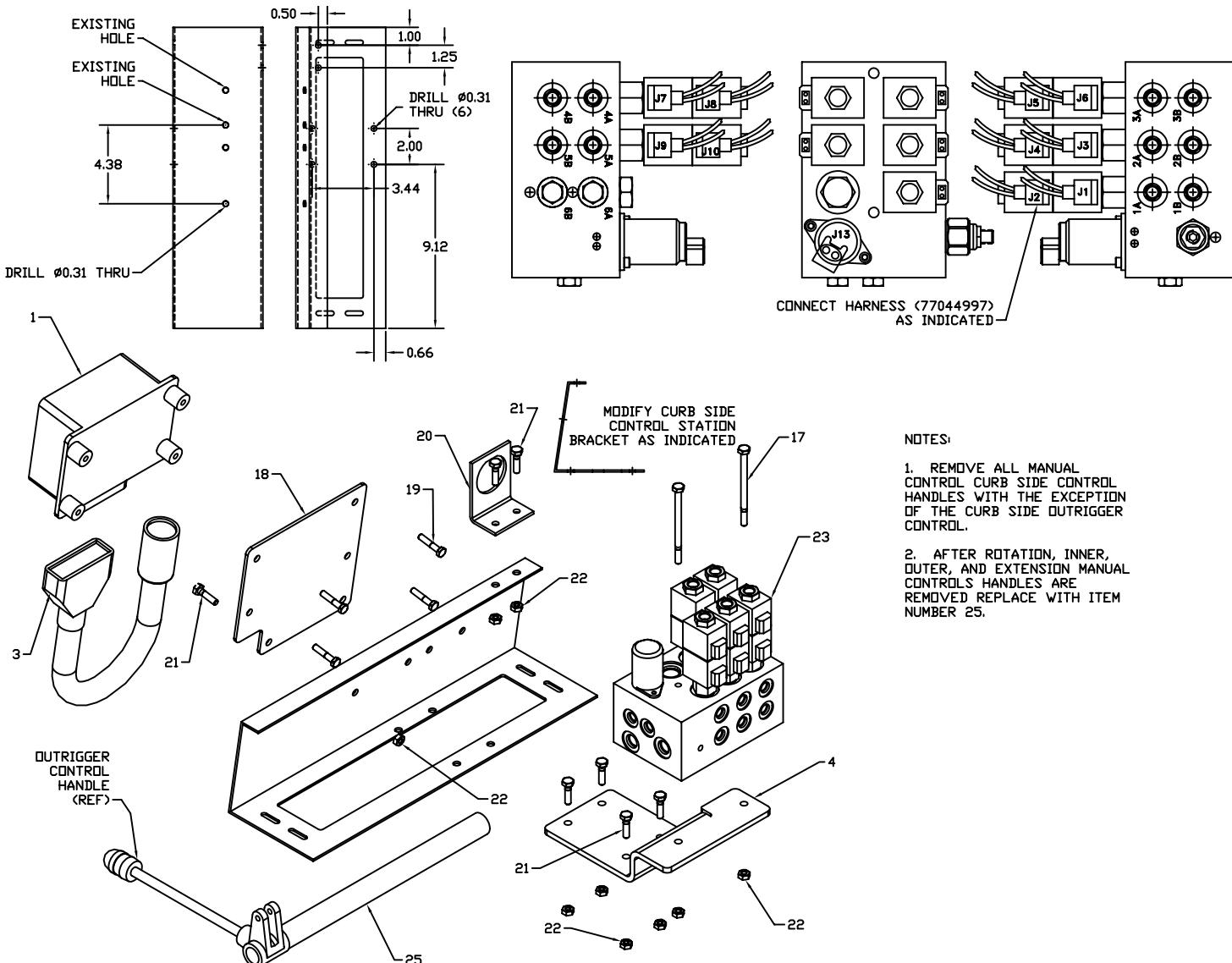
VALVE BANK

**CONTROL KIT-RADIO 5-FUNCT - 9/63  
CRANE (KIT 91716649-1)**

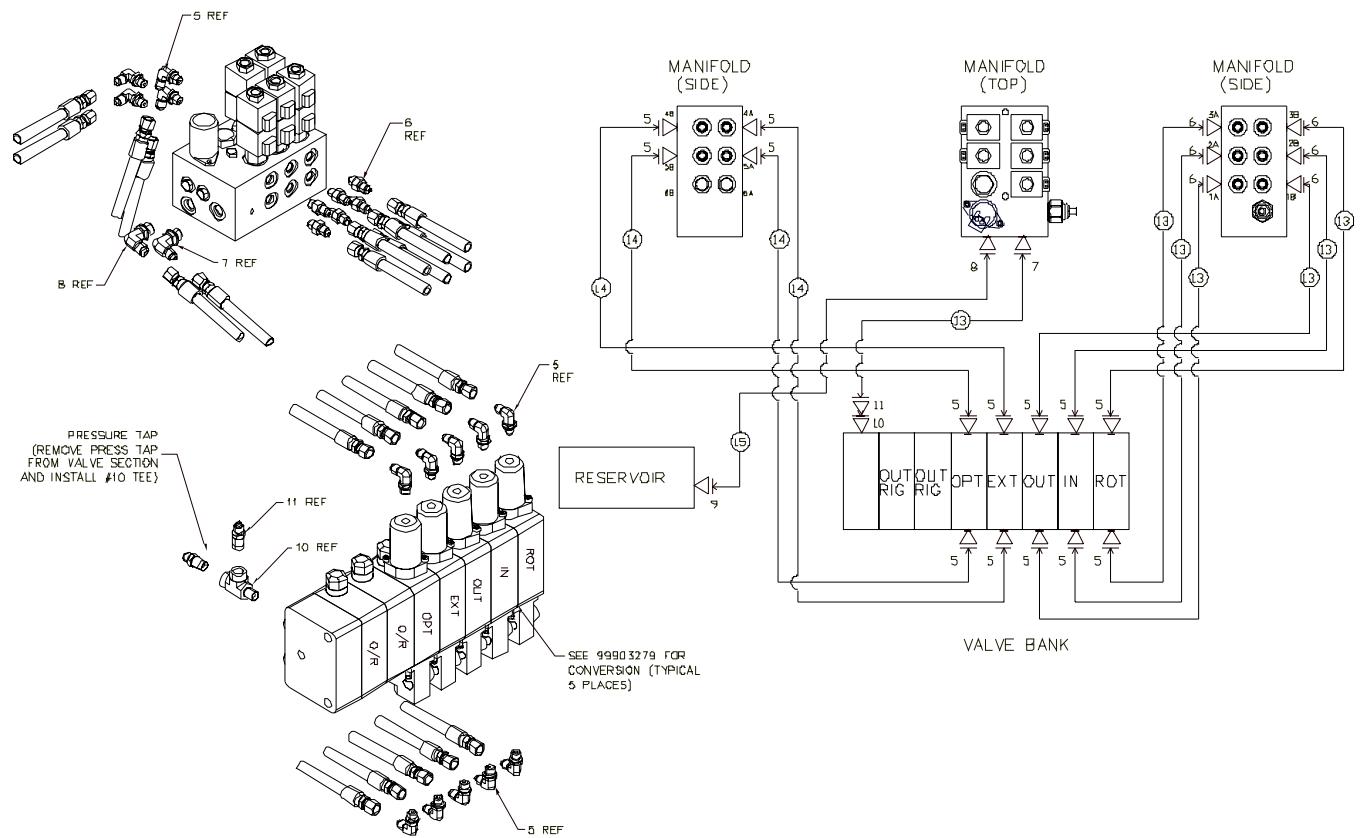
1.	73733600	RAD RMT KIT-MATL HANDLING	1
2.	73733577	VALVE-RMT KIT 5FCTN (INCL. 23&24)	1
3.	77044996	HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	14
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR MBSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE -MALE RUN.25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1
12.	51716987	HOSE KIT 9/63 5 FUNCT.	1

(INCLUDES 13-16)		
13.	51396085	HOSE-FF .25X60.00 OAL (4-4) 7REF
14.	51396086	HOSE-FF .25X70.00 OAL (4-4) 4REF
15.	51396087	HOSE-FJ .38x40.00 OAL(6-8) 1REF
17.	72060016	CAP SCR 1/2-20x4.00 HH GR5 Z 2
18.	60123459	PLATE-RADIO REMOTE MTG 1
19.	72601448	CAP SCR-METRIC 6-1.00x10 HHZ 4
20.	60119299	BRACKET-MTG DEUTSCH CONNECTOR 1
21.	72060004	CAP SCR 1/4-20X1.00 HH GR5 Z 8 (WAS 6)
22.	72062000	NUT 1/4-20 HEX Z (WAS 8) 10
23.	70146350	VALVE ASM-5 FCT RAD/TETH 1REF
24.	77044997	HARNESS- RAD/TETH 1REF
25.	60123639	TUBE-1.00ODx.75IDx11.88 LG 1

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## **CONTROL KIT-RADIO 5-FUNCT - 9/63 CRANE (KIT 91716649-2)**



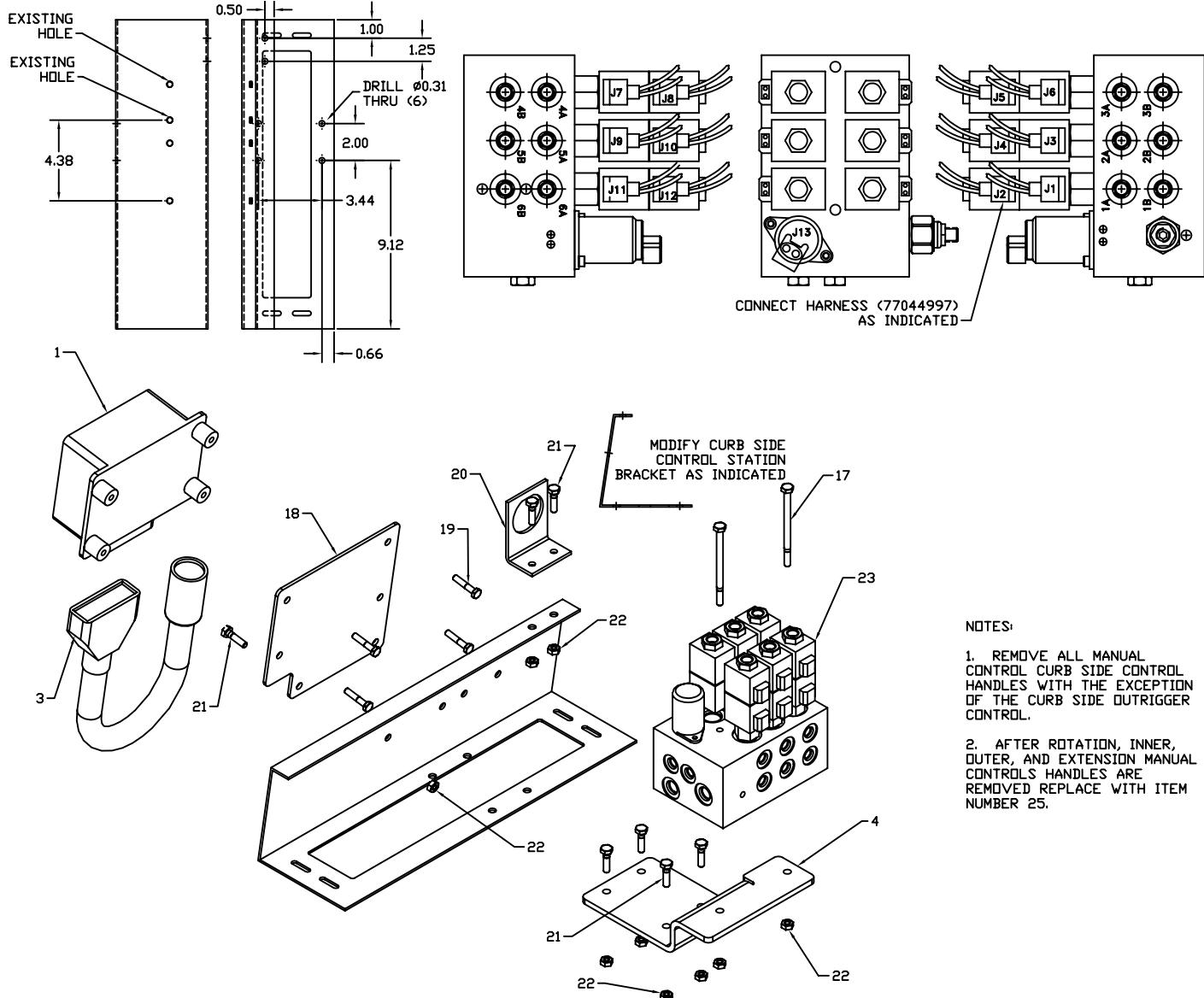
**CONTROL KIT-RADIO 6-FUNCT - 9/63  
CRANE (KIT 91716650-1)**

1.	73733600	RAD RMT KIT-MATL HANDLING	1
2.	73733436	VALVE-RMT KIT 6FCTN (INCL. 23&24)	1
3.	77044996	HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	14
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR MBSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE -MALE RUN.25	1
11.	72053663	ADPTR MPT/MJIC .12-4	1
12.	51716988	HOSE KIT 9/63 6 FUNCT.	1

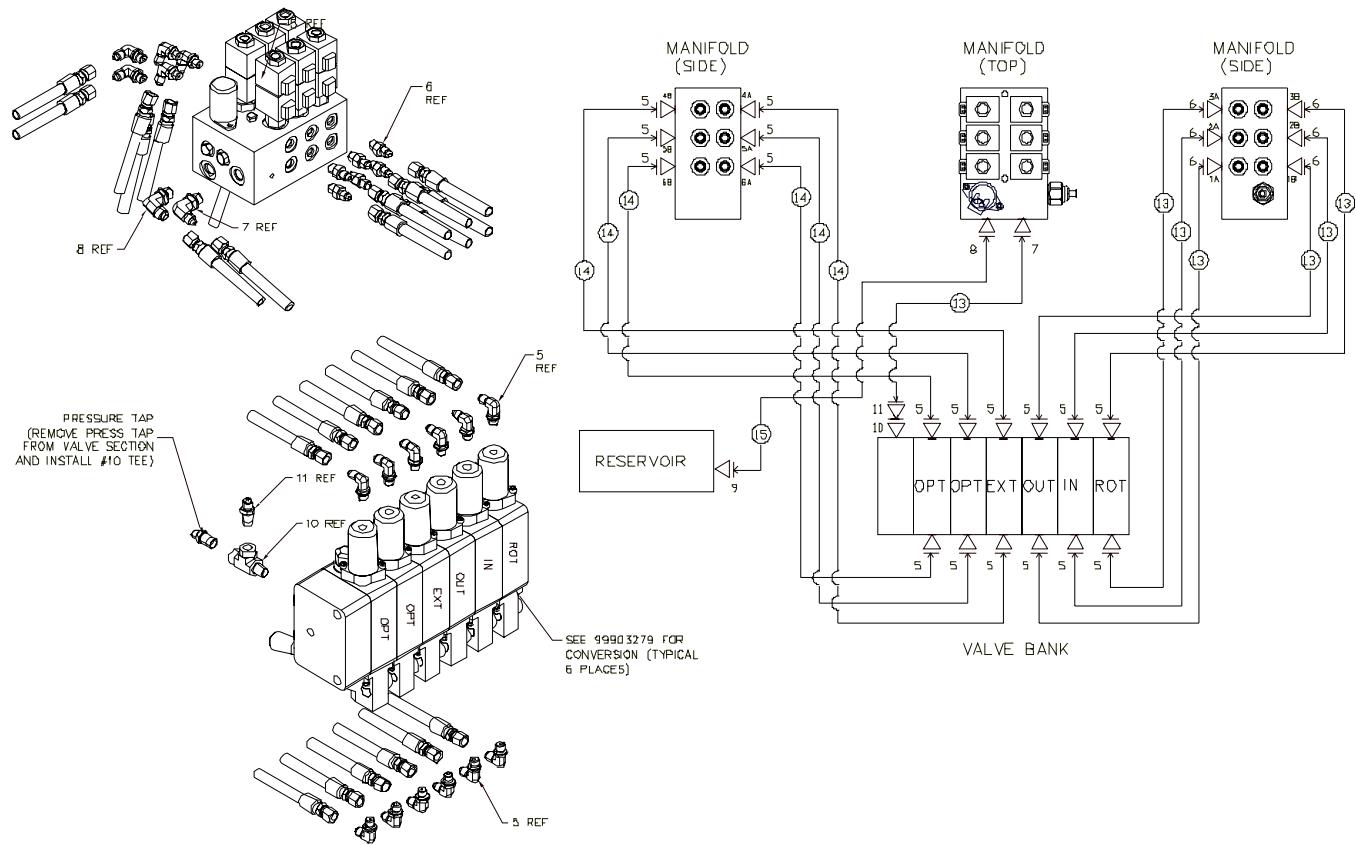
(INCLUDES 13-16)

13.	51396085	HOSE-FF .25X60.00 OAL (4-4) 7REF
14.	51396086	HOSE-FF .25X70.00 OAL (4-4) 6REF
15.	51396087	HOSE-FJ .38x40.00 OAL(6-8) 1REF
17.	72060016	CAP SCR 1/2-20x4.00 HH GR5 Z 2
18.	60123459	PLATE-RADIO REMOTE MTG 1
19.	72601448	CAP SCR-METRIC 6-1.00x10 HHZ 4
20.	60119299	BRACKET-MTG DEUTSCH CONNECTOR 1
21.	72060004	CAP SCR 1/4-20X1.00 HH GR5 Z 8 (WAS 6)
22.	72062000	NUT 1/4-20 HEX Z (WAS 8) 10
23.	70146351	VALVE ASM-6 FCT RAD/TETH 1REF
24.	77044997	HARNESS- RAD/TETH 1REF

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**CONTROL KIT-RADIO 6-FUNCT - 9/63  
CRANE (KIT 91716650-2)**

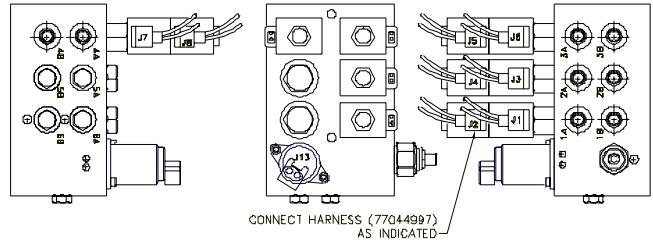
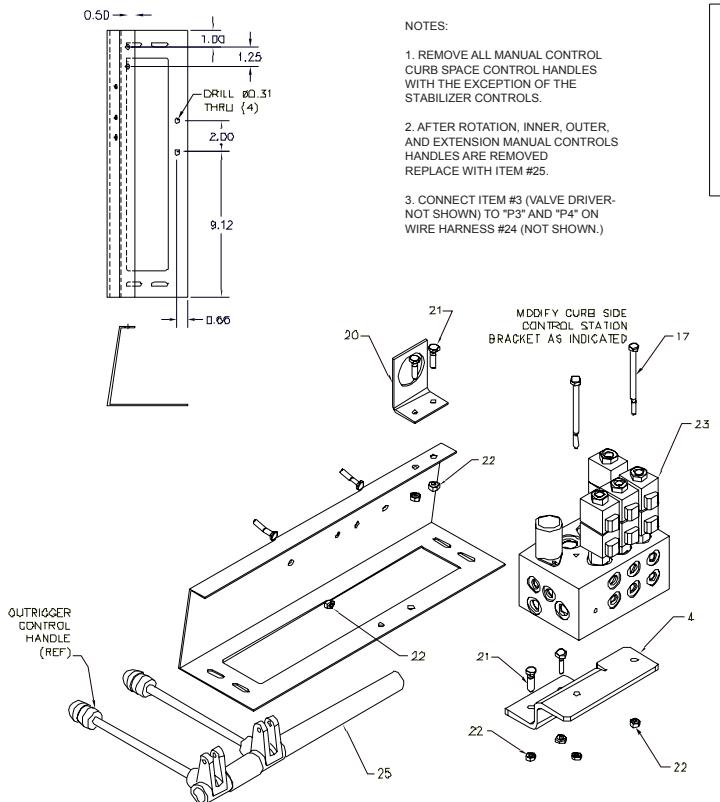


**CONTROL KIT-TETH 4-FUNCT - 9/63  
CRANE (KIT 91716958-1)**

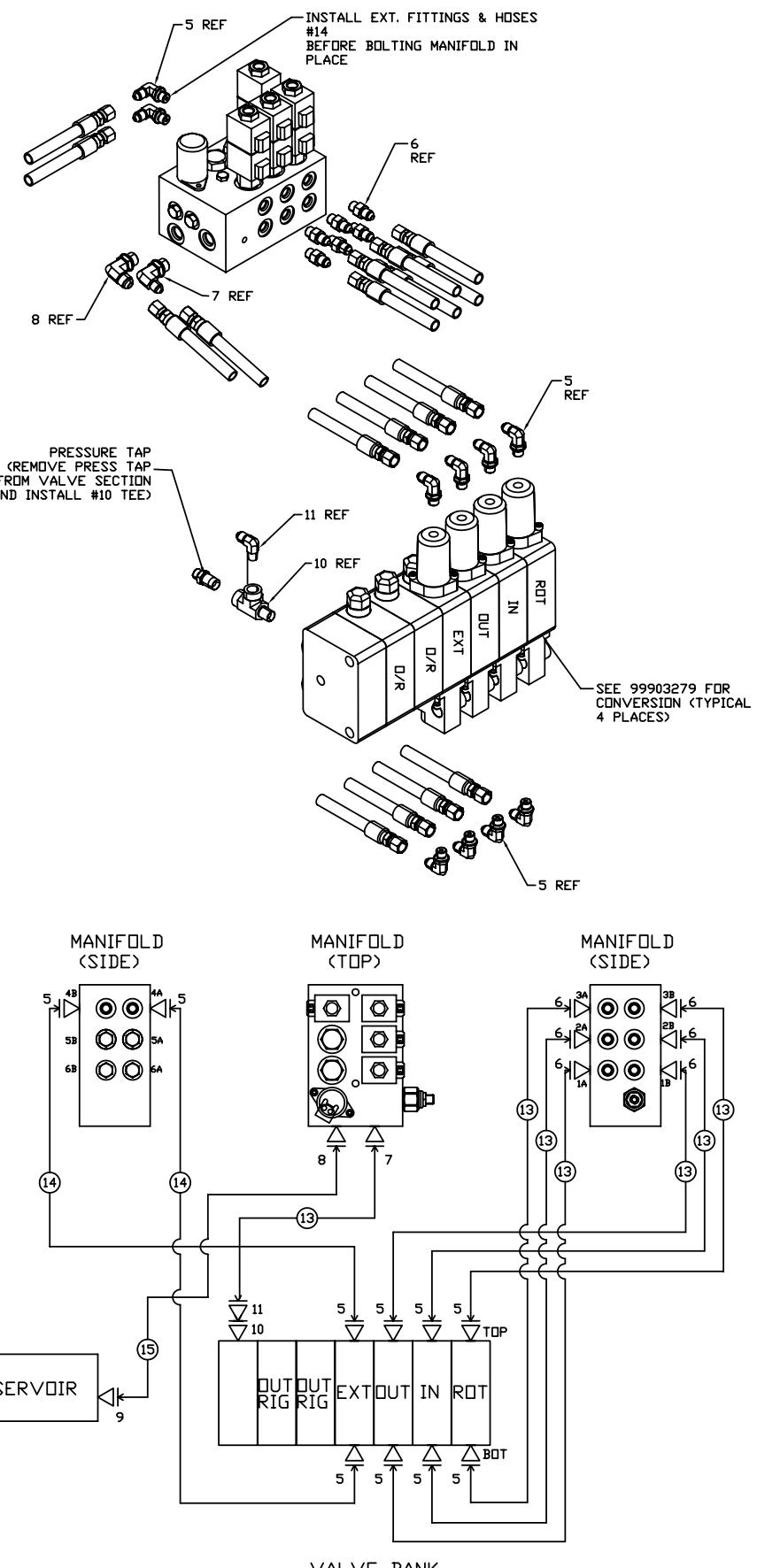
1.	51716758	HANDLE ASM-MATL HND TETH	1
2.	73733576	VALVE-RMT KIT RS210 4FCTN	1
3.	77044826	VALVE DRIVER-HCT 99910038	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR- #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1

10.	72533726	TEE-MPIPE F PIPE MALE RUN.25	1
11.	72531412	ELBOW 1/4 MPT #4MJIC 90°	1
		(WAS 72053663)	
12.	51716986	HOSE KIT 4 FUNC RAD RMT	1
		(INCLUDES 13-16)	
13.	51396085	HOSE-FF .25x60.00 OAL(4-4) 7REF	
14.	51396086	HOSE-FF .25x70.00 OAL (4-4) 2REF	
15.	51396087	HOSE-FJ .38x40.00 OAL (6-8) 1REF	
17.	72060016	CAP SCR 1/4-20x4.00 HH GR5 Z 2	
20.	60119299	BRACKET-MTG DEUTSCH CONN 1	
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5 Z 4	
22.	72062000	NUT 1/4-20 HEX ZINC 6	
23.	70146349	VALVE ASM 4FCTN RAD/TETH 1REF	
24.	77044997	HARNESS-MTL HND RAD/TETH 1REF	
25.	60123543	TUBE, 1" OD 1	

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**CONTROL KIT -TETH 4-FUNCT - 9/63  
CRANE (KIT 91716958-2)**



## CONTROL KIT-TETH 5-FUNCT - 9/63

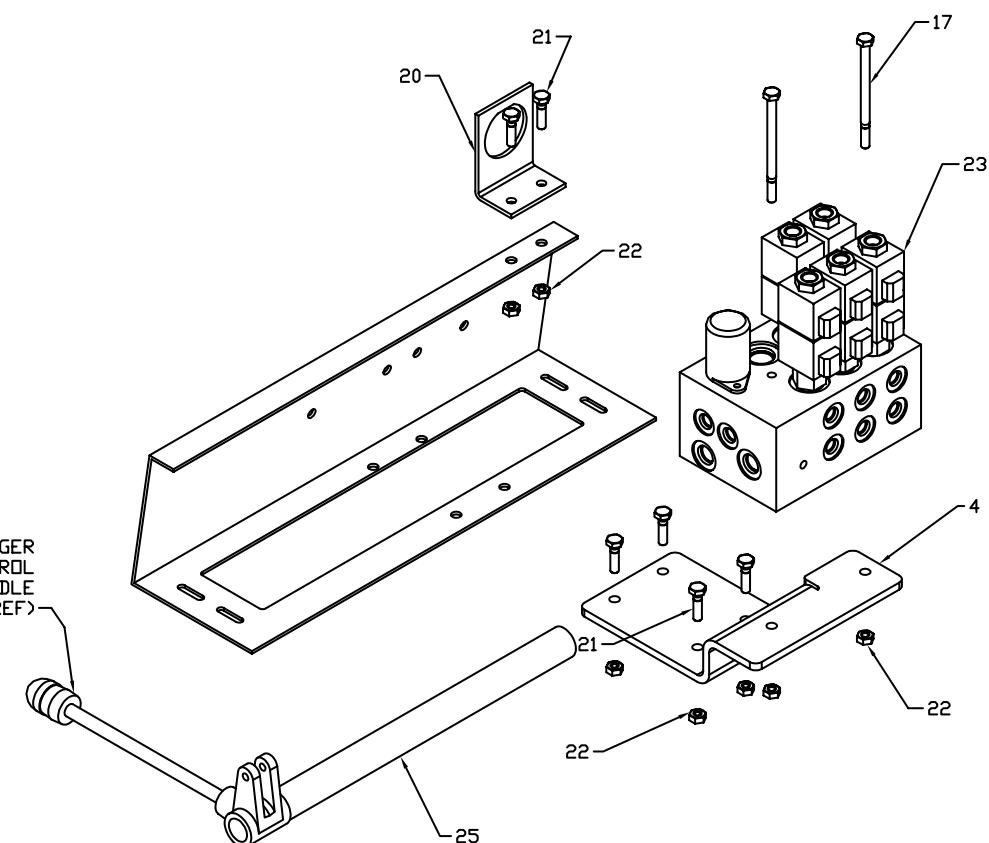
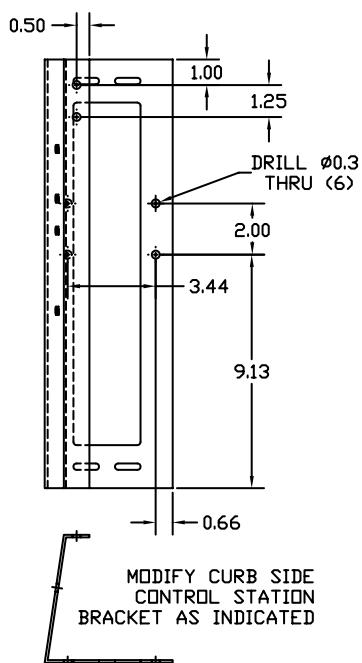
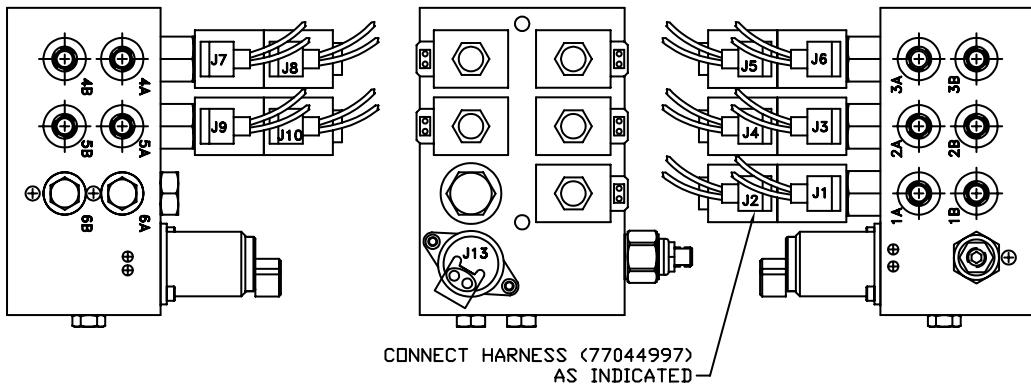
### CRANE (KIT 91716959-1)

1. 51716758	HANDLE ASM-MATL HND TETH	1	12. 51716987	HOSE KIT 5 FUNC RAD RMT (INCLUDES 13-16)	1
2. 73733577	VALVE-RMT KIT RS210 5FCTN (INCLUDES 23 & 24)	1	13. 51396085	HOSE-FF .25x60.00 OAL(4-4) 6REF	
3. 77044826	VALVE DRIVER-HCT 99910038	1	14. 51396086	HOSE-FF .25x70.00 OAL (4-4) 4REF	
4. 60123461	PLATE-MTG RAD RMT	1	15. 51396087	HOSE-FJ .38x40.00 OAL (6-8) 1REF	
5. 72053758	ELBOW #4MSTR #4MJIC 90°	14	17. 72060016	CAP SCR 1/4-20x4.00 HH GR5 Z 2	
6. 72532351	ADPTR- #4MSTR #4MJIC	6	20. 60119299	BRACKET-MTG DEUTSCH CONN 1	
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5 Z 6 (QTY. WAS 4)	
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	22. 72062000	NUT 1/4-20 HEX ZINC (WAS 6) 8	
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	23. 70146350	VALVE ASM 5FCTN RAD/TETH 1REF	
10. 72533726	TEE-MPIPE F PIPE MALE RUN.25	1	24. 77044997	HARNESS-MTL HND RAD/TETH 1REF	
11. 72053663	ADPTR-MPT/MJIC .12-4	1			

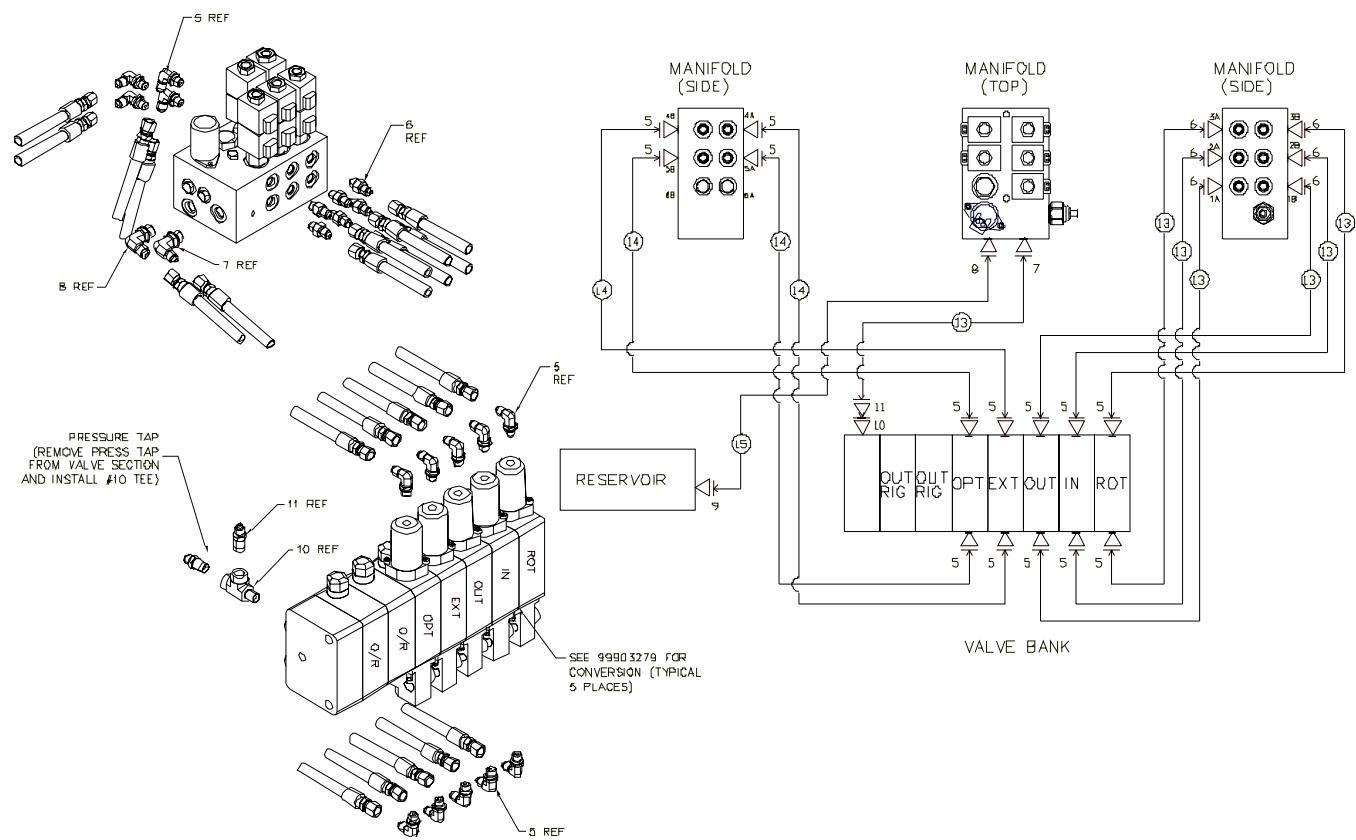
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## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE OUTRIGGER CONTROLS.
2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.
3. CONNECT ITEM #3 (VALVE DRIVER-NOT SHOWN) TO "P3" AND "P4" ON WIRE HARNESS #24 (NOT SHOWN).



**CONTROL KIT -TETH 5-FUNCT - 9/63  
CRANE (KIT 91716959-2)**



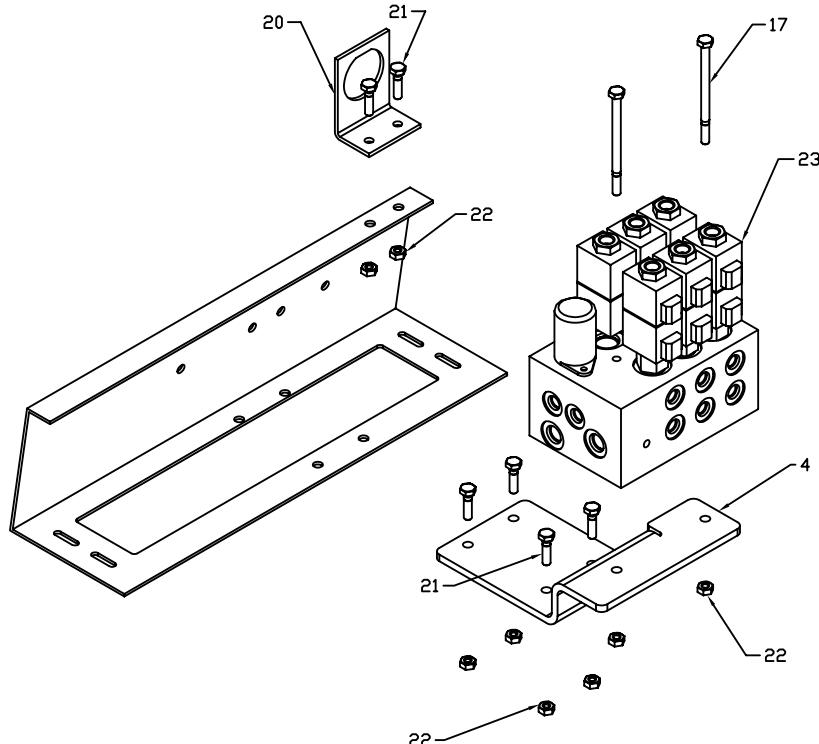
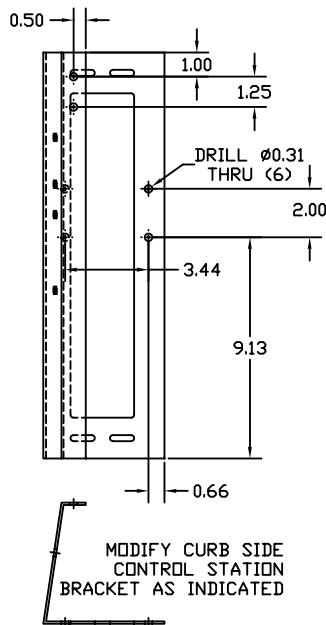
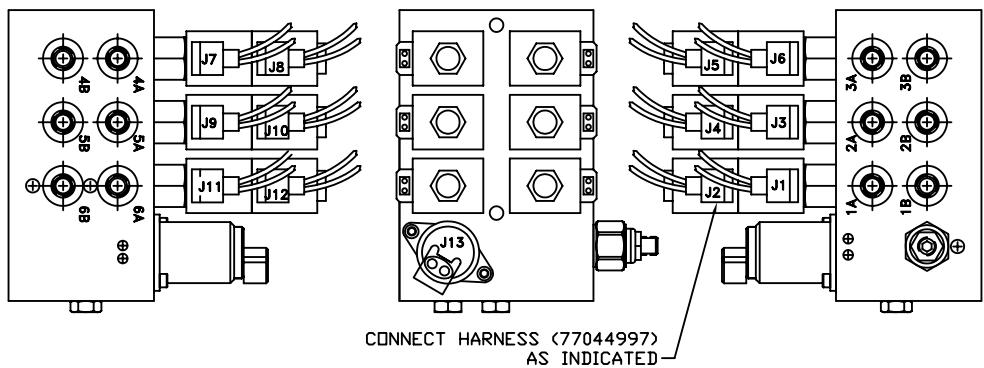
**CONTROL KIT-TETH 6-FUNCT - 9/63  
CRANE (KIT 91716960-1)**

1. 51716758	HANDLE ASM-MATL HND TETH	1	11. 72053663	ADPTR-MPT/MJIC .12-4	1
2. 73733346	VALVE-RMT KIT RS210 6FCTN (INCLUDES 23 & 24)	1	12. 51716988	HOSE KIT 6 FUNC RAD RMT (INCLUDES 13-16)	1
3. 77044826	VALVE DRIVER-HCT 99910038	1	13. 51396085	HOSE-FF .25x60.00 OAL(4-4) 6REF	
4. 60123461	PLATE-MTG RAD RMT	1	14. 51396086	HOSE-FF .25x70.00 OAL (4-4) 6REF	
5. 72053758	ELBOW #4MSTR #4MJIC 90°	18	15. 51396087	HOSE-FJ .38x40.00 OAL (6-8) 1REF	
6. 72532351	ADPTR- #4MSTR #4MJIC	6	17. 72060016	CAP SCR 1/4-20x4.00 HH GR5 Z	2
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	20. 60119299	BRACKET-MTG DEUTSCH CONN 1	
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5 Z	6
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	22. 72062000	(WAS 4) NUT 1/4-20 HEX ZINC (WAS 6)	8
10. 72533726	TEE-MPIPE F PIPE MALE RUN.25	1	23. 70146351	VALVE ASM 6FCTN RAD/TETH 1REF	
			24. 77044997	HARNESS-MTL HND RAD/TETH 1REF	

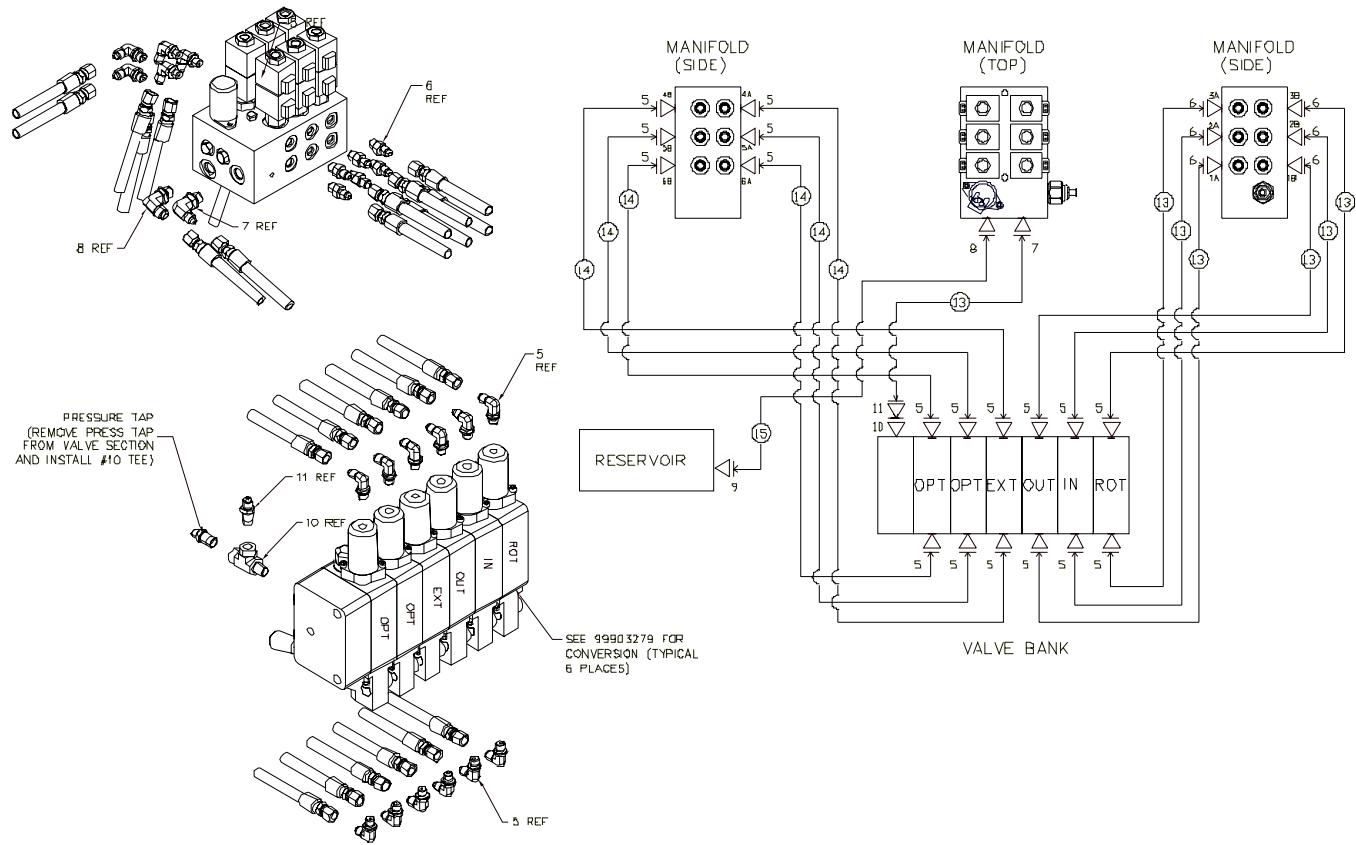
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## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE OUTRIGGER CONTROLS.
2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.
3. CONNECT ITEM #3 (VALVE DRIVER-NOT SHOWN) TO 'P3' AND 'P4' ON WIRE HARNESS #24 (NOT SHOWN.)



**CONTROL KIT-TETH 6-FUNCT - 9/63  
CRANE (KIT 91716960-2)**



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## 11/76 RADIO/TETHERED REMOTE PARTS

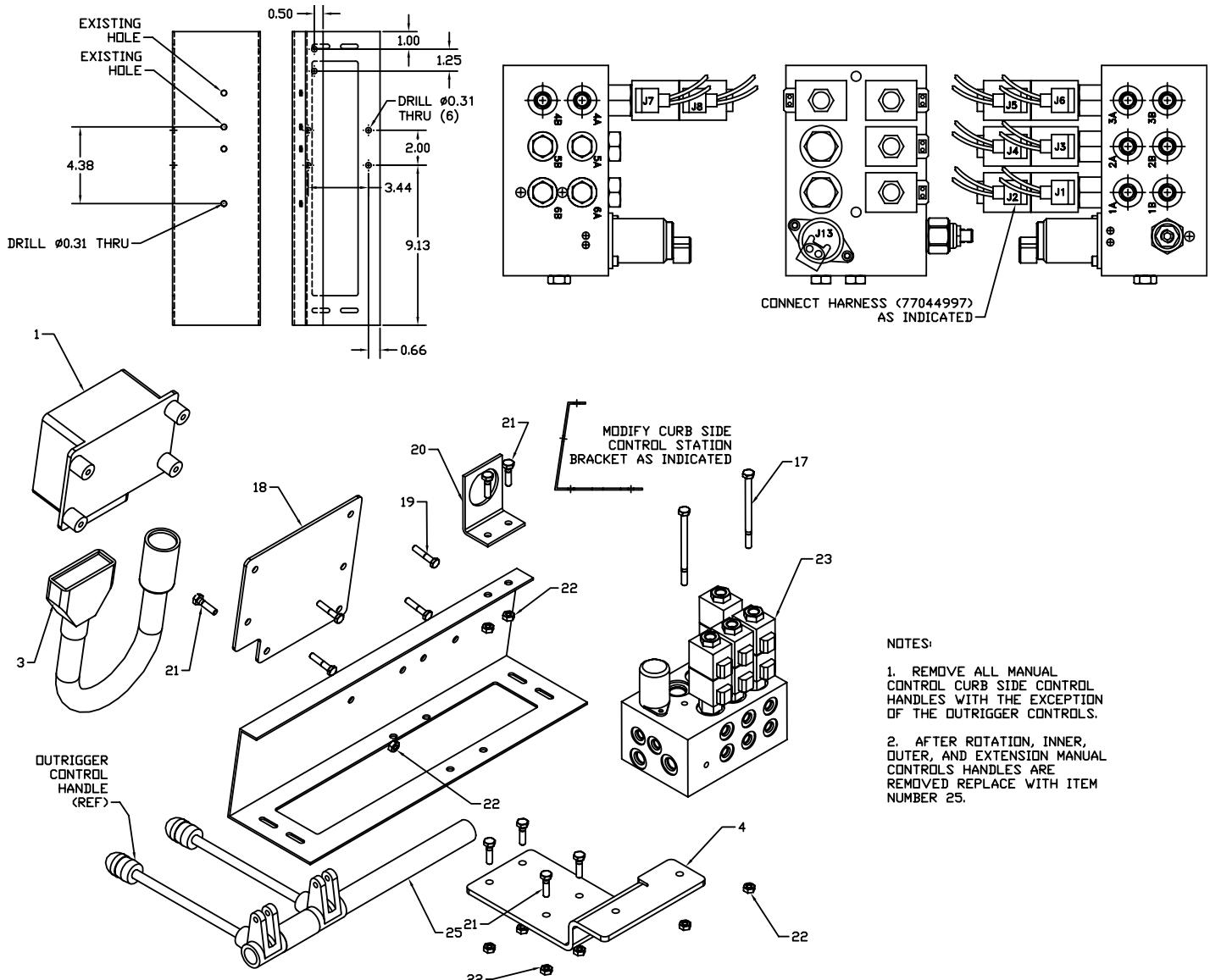
CONTROL KIT-RADIO 4-FUNCT - 11/76 CRANE (KIT 91716651-1) .....	82
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## **CONTROL KIT-RADIO 4-FUNCT - 11/76 CRANE (KIT 91716651-1)**

1.	73733600	RAD RMT KIT-MATL HANDLING	1
2.	73733576	VALVE-RMT KIT 4 FCTN (INCL. 23&24)	1
3.	77044996	HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR MBSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE -MALE RUN.25	1
11.	72053449	ADPTR MPT/M,IIC 1/4-4	1

12.	51718550	HOSE KIT 11/76 4 FUNCT. (INCLUDES 13-16)	1
13.	51396069	HOSE-FF .25X63.00 OAL (4-4)	6REF
14.	51394614	HOSE-FF .25X73.50 OAL (4-4)	2REF
15.	51396504	HOSE-FJ .38x42.00 OAL(6-8)	1REF
16.	51396085	HOSE-FF .25X60 OAL (4-4)	1REF
17.	72060016	CAP SCR 1/2-20x4.00 HH GR5 Z2	
18.	60123459	PLATE-RADIO REMOTE MTG	1
19.	72601448	CAP SCR-METRIC 6-1.00x10 HHZ 4	
20.	60119299	BRACKET-MTG DEUTSCH CONNECTOR	1
21.	72060004	CAP SCR 1/4-20X1.00 HH GR5 Z	8
22.	72062000	NUT 1/4-20 HEX Z	10
23.	70146349	VALVE ASM-4 FCT RAD/TETH	1REF
24.	77044997	HARNESS- RAD/TETH	1REF
25.	60123543	TURF-1 000Dx 75IDx7.88 LG	1

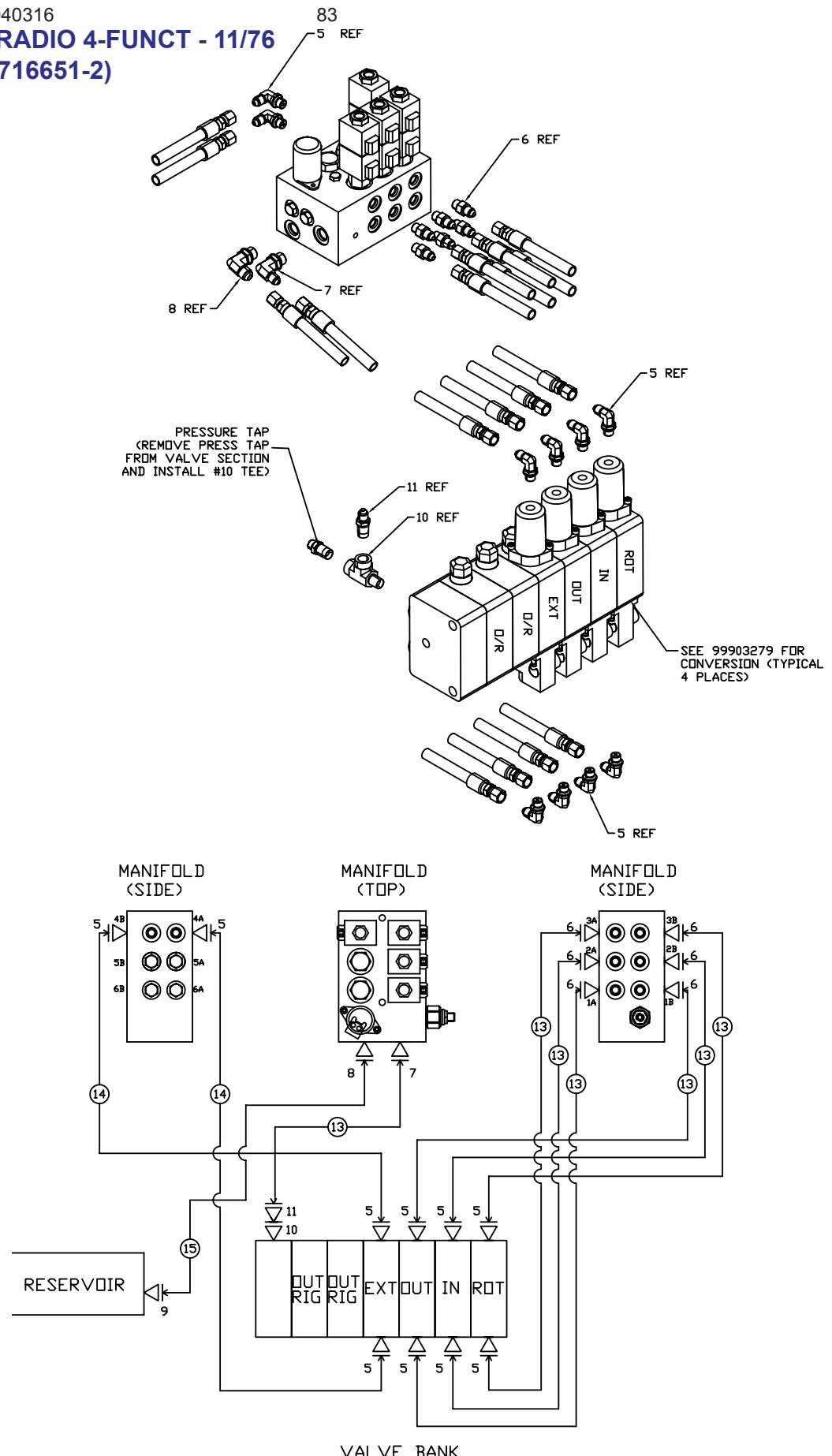
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**CONTROL KIT-RADIO 4-FUNCT - 11/76**

**CRANE (KIT 91716651-2)**



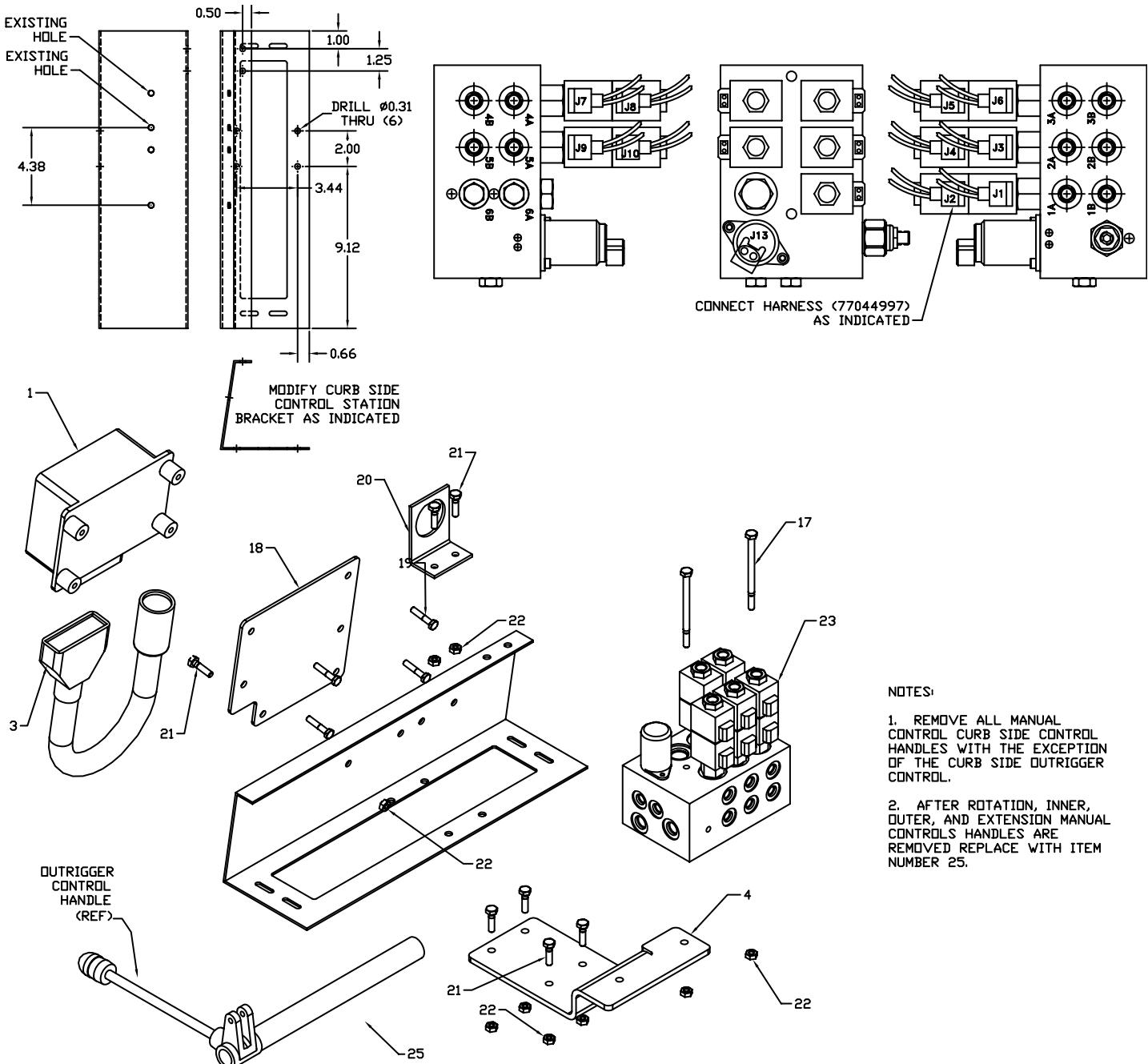
**CONTROL KIT-RADIO 5-FUNCT - 11/76  
CRANE (KIT 91716652-1)**

1. 73733600 RAD RMT KIT-MATL HANDLING 1
2. 73733577 VALVE-RMT KIT 5FCTN (INCL. 23&24) 1
3. 77044996 HARNESS-MATL HNDLG RAD RMT JUMPTER 1
4. 60123461 PLATE-MTG RAD RMT 1
5. 72053758 ELBOW #4MSTR #4MJIC 90° 14
6. 72532351 ADPTR #4MSTR #4MJIC 6
7. 72532699 ELBOW #6MSTR #4MJIC 90° 1
8. 72053760 ELBOW #6MSTR #6MJIC 90° 1
9. 72533629 CONNECTOR MBSPP 8F40MX PAR29 1
10. 72533726 TEE MPIPE FPIPE -MALE RUN.25 1
11. 72053499 ADPTR MPT/MJIC 1/4-4 1
12. 51718551 HOSE KIT 11/76 5 FUNCT. 1  
(INCLUDES 13-16)

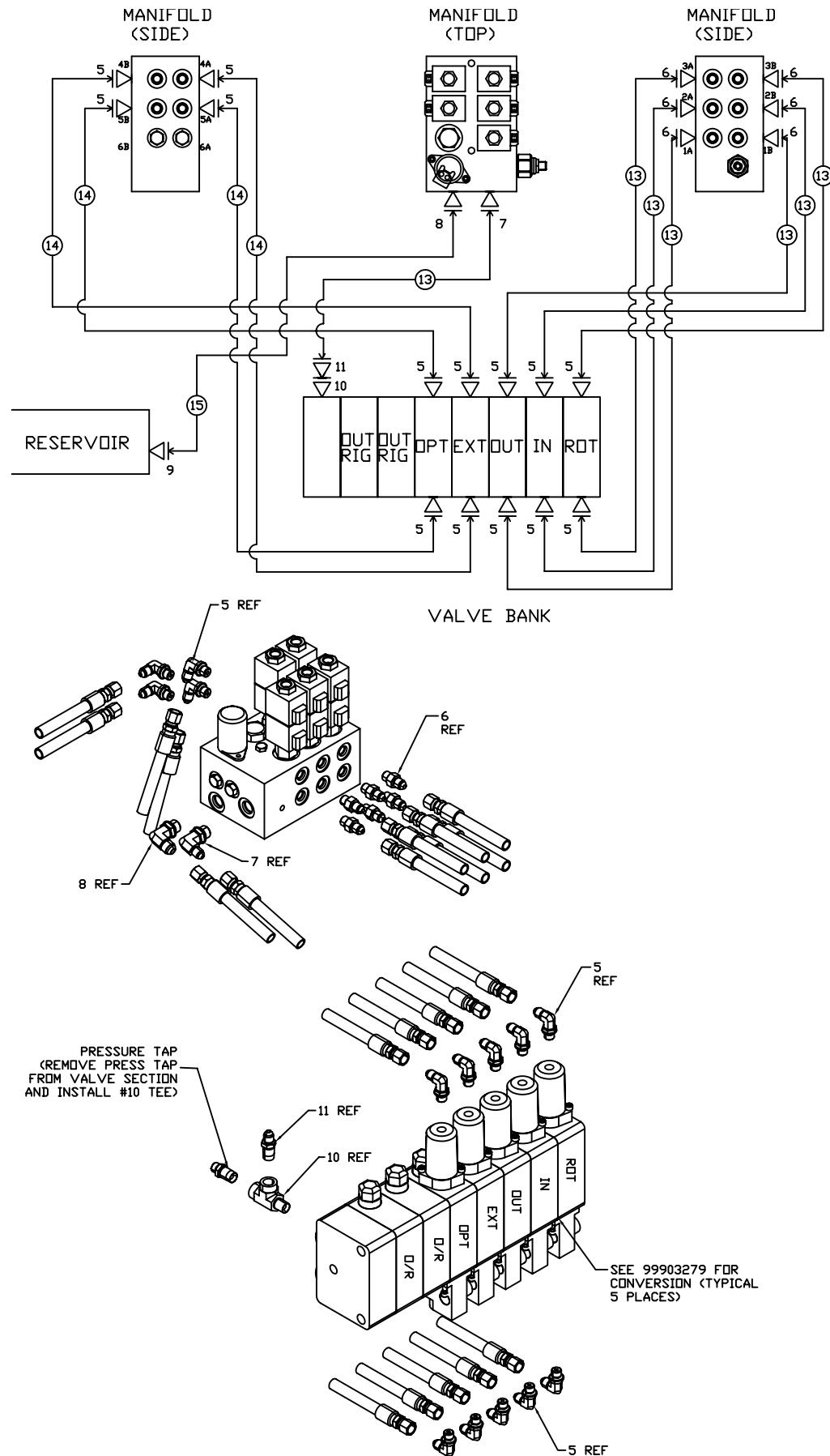
84

13. 51396069 HOSE-FF .25X63.00 OAL (4-4) 7REF
14. 51394614 HOSE-FF .25X73.50 OAL (4-4) 4REF
15. 51396504 HOSE-FJ .38x42.00 OAL(6-8) 1REF
16. 51396085 HOSE-FF .25X60 OAL (4-4) 1REF
17. 72060016 CAP SCR 1/2-20x4.00 HH GR5 Z2
18. 60123459 PLATE-RADIO REMOTE MTG 1
19. 72601448 CAP SCR-METRIC 6-1.00x10 HHZ 4
20. 60119299 BRACKET-MTG DEUTSCH CONNECTOR 1
21. 72060004 CAP SCR 1/4-20X1.00 HH GR5 Z 8
22. 72062000 NUT 1/4-20 HEX GR5Z 10
23. 70146350 VALVE ASM-5 FCT RAD/TETH 1REF
24. 77044997 HARNESS- RAD/TETH 1REF
25. 60126057 TUBE-1"ODx.75IDx9.75 LG 1

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**CONTROL KIT-RADIO 5-FUNCT - 11/76  
CRANE (KIT 91716652-2)**

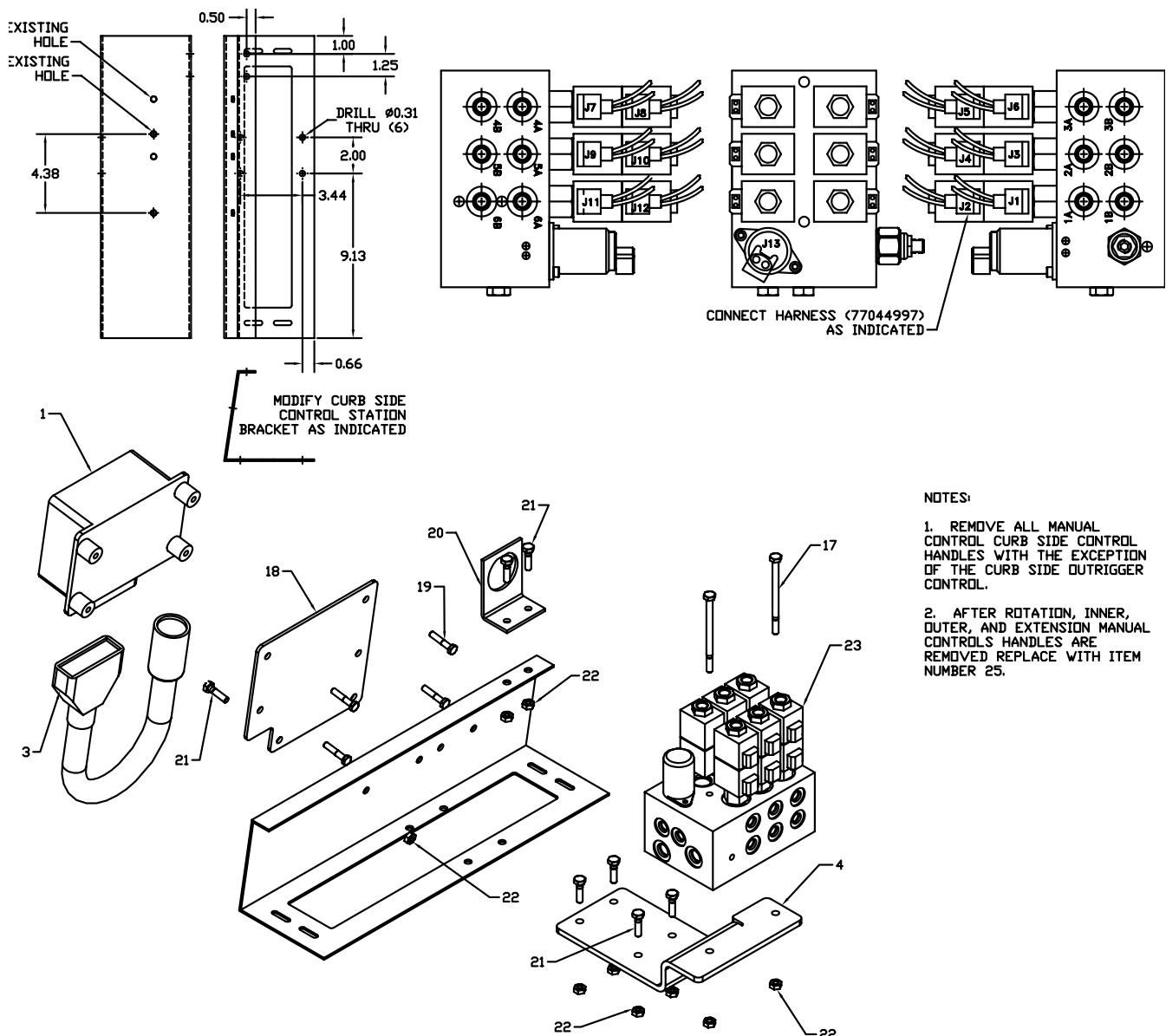


**CONTROL KIT-RADIO 6-FUNCT - 11/76  
CRANE (KIT 91716653-1)**

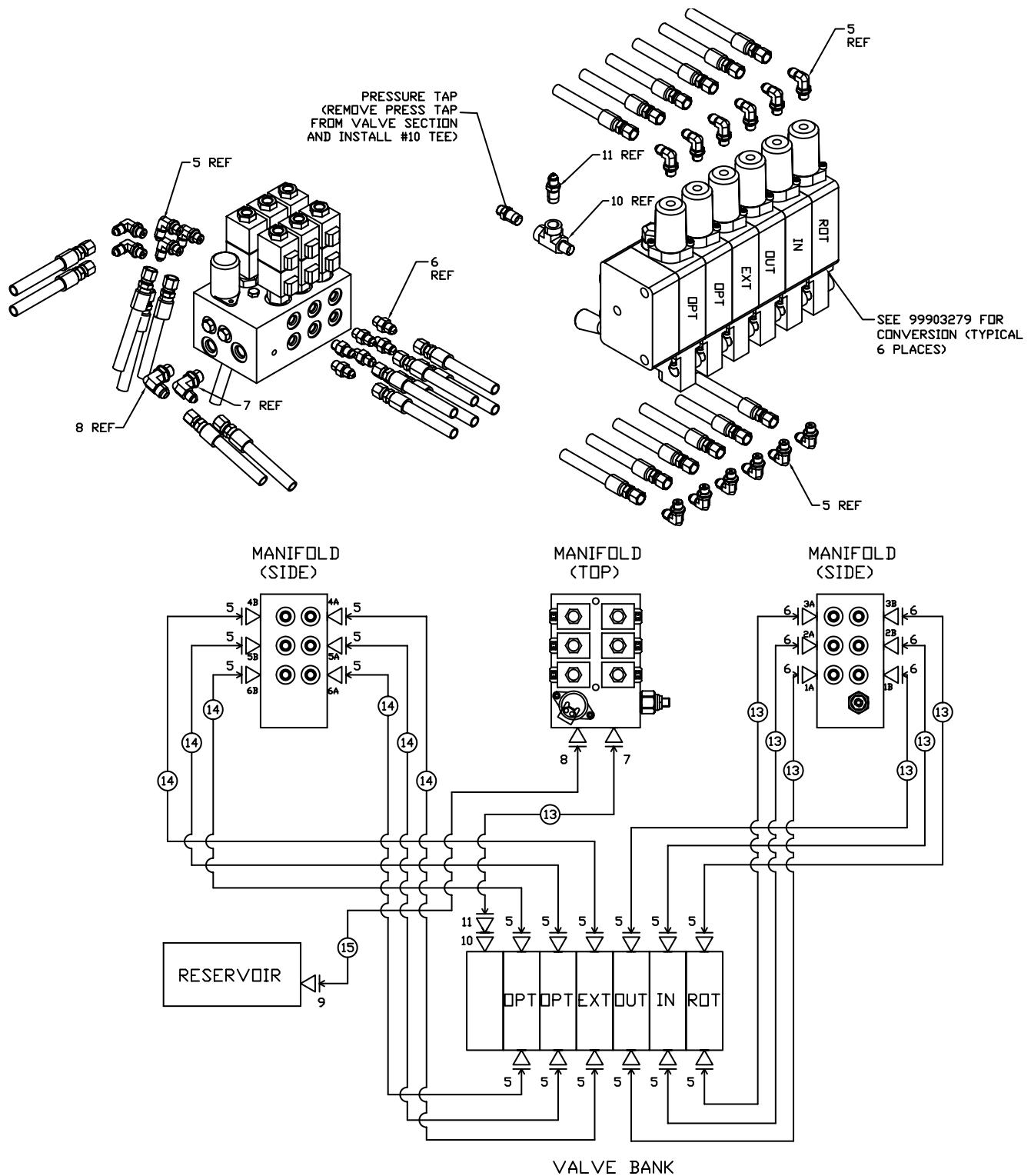
1.	73733600	RAD RMT KIT-MATL HANDLING	1
2.	73733436	VALVE-RMT KIT 6FCTN (INCL. 23&24)	1
3.	77044996	HARNESS-MATL HNDLG RAD RMT JUMPTER	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	18
6.	72532351	ADPTR #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR MBSPP 8F40MX PAR29	1
10.	72533726	TEE MPIPE FPIPE -MALE RUN.25	1
11.	72053499	ADPTR MPT/MJIC .25-4	1

12.	51718552	HOSE KIT 11/76 6 FUNCT. (INCLUDES 13-16)	1
13.	51396085	HOSE-FF .25X60.00 OAL (4-4)	6REF
14.	51394614	HOSE-FF .25X73.50 OAL (4-4)	6REF
15.	51396054	HOSE-FJ .38x42.00 OAL(6-8)	1REF
16.	51396085	HOSE-FF 1/4X60 OAL (4-4)	1REF
17.	72060016	CAP SCR 1/2-20X4.00 HH GR5 Z	2
18.	60123459	PLATE-RADIO REMOTE MTG	1
19.	72601448	CAP SCR-METRIC 6-1.00x10 HHZ 4	
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20X1.00 HH GR5 Z	8
22.	72062000	NUT 1/4-20 HEX Z	10
23.	70146351	VALVE ASM-6 FCT RAD/TETH	1REF
24.	77044997	HARNESS- RAD/TETH	1REF

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**CONTROL KIT-RADIO 6-FUNCT - 11/76  
CRANE (KIT 91716653-2)**



**CONTROL KIT-TETH 4-FUNCT - 11/76****CRANE (KIT 91716961-1)**

1.	51716758	HANDLE ASM-MATL HND TETH	1
2.	73733576	VALVE-RMT KIT RS210 4FCTN (INCLUDES 23 & 24)	1
3.	77044826	VALVE DRIVER-HCT 99910038	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	10
6.	72532351	ADPTR-#4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE-MPIPE F PIPE MALE RUN.25	1
11.	72531412	ELBOW 1/4 MPT #4MJIC 90°	1

12.	51718550	HOSE KIT 4 FUNC RAD RMT (INCLUDES 13-16)	1
13.	51396069	HOSE-FF .25x63.00 OAL(4-4)	6REF
14.	51394614	HOSE-FF .25x73.50 OAL (4-4)	2REF
15.	51396504	HOSE-FJ .38x42.00 OAL (6-8)	1REF
16.	51396085	HOSE-FF .25X60 OAL (4-4)	1REF
17.	72060016	CAP SCR 1/4-20x4.00 HH GR5 Z	2
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5 Z	4
22.	72062000	NUT 1/4-20 HEX ZINC	6
23.	70146349	VALVE ASM 4FCTN RAD/TETH	1REF
24.	77044997	HARNESS-MTL HND RAD/TETH	1REF
25.	60123543	TUBE, 1" OD	1

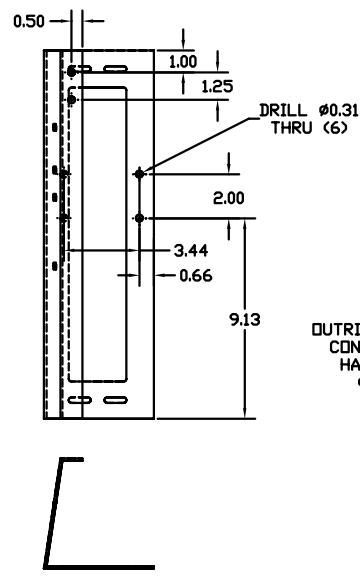
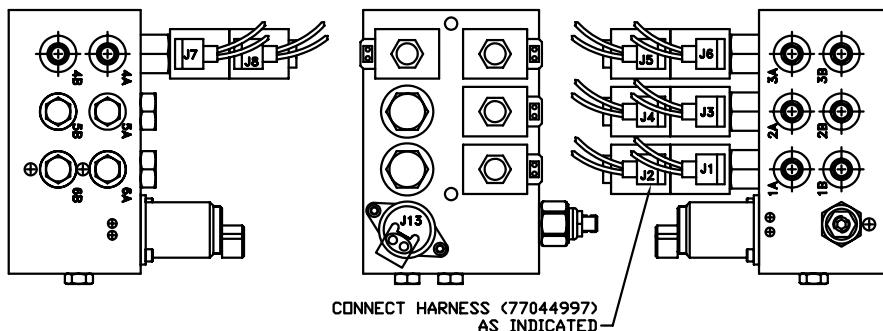
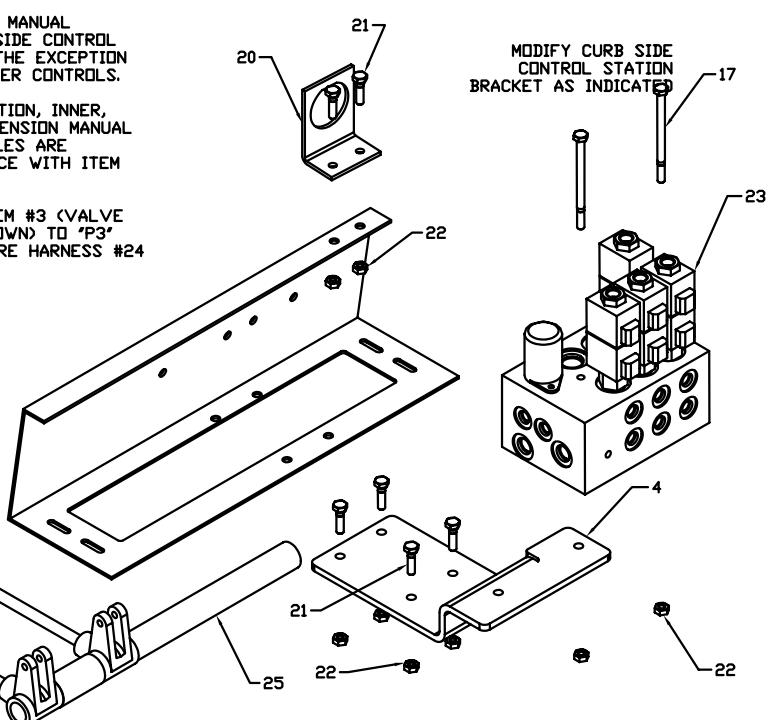
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## NOTES:

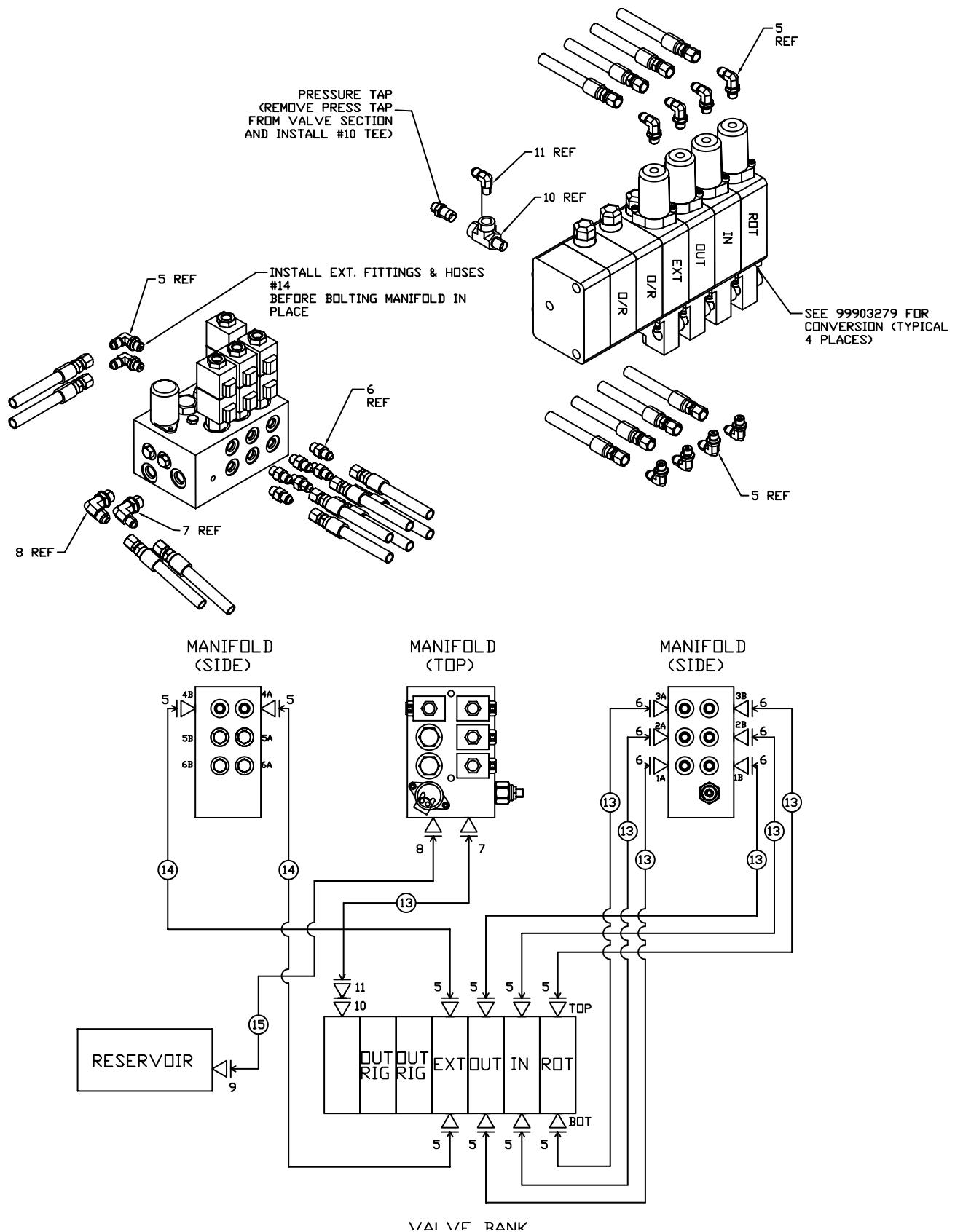
1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE OUTRIGGER CONTROLS.

2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.

3. CONNECT ITEM #3 (VALVE DRIVER-NOT SHOWN) TO 'P3' AND 'P4' ON WIRE HARNESS #24 (NOT SHOWN.)

OUTRIGGER  
CONTROL  
HANDLE  
(REF)

## **CONTROL KIT-TETH 4-FUNCT - 11/76 CRANE (KIT 91716961-2)**

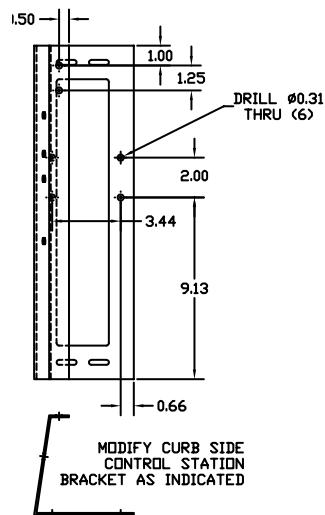
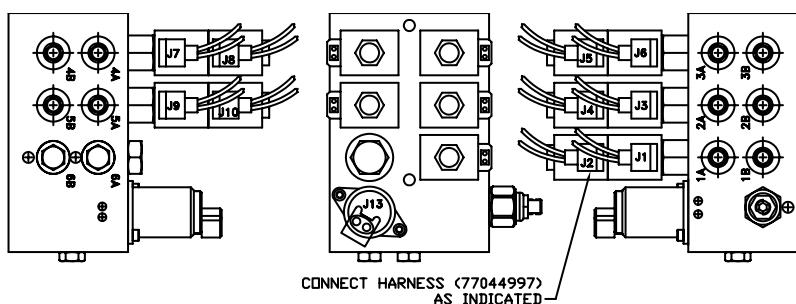


**CONTROL KIT-TETH 5-FUNCT - 11/76  
CRANE (KIT 91716962-1)**

1.	51716758	HANDLE ASM-MATL HND TETH	1
2.	73733577	VALVE-RMT KIT RS210 5FCTN (INCLUDES 23 & 24)	1
3.	77044826	VALVE DRIVER-HCT 99910038	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	14
6.	72532351	ADPTR- #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1
10.	72533726	TEE-MPIPE F PIPE MALE RUN.25	1
11.	72053499	ADPTR-MPT/MJIC .25-4	1

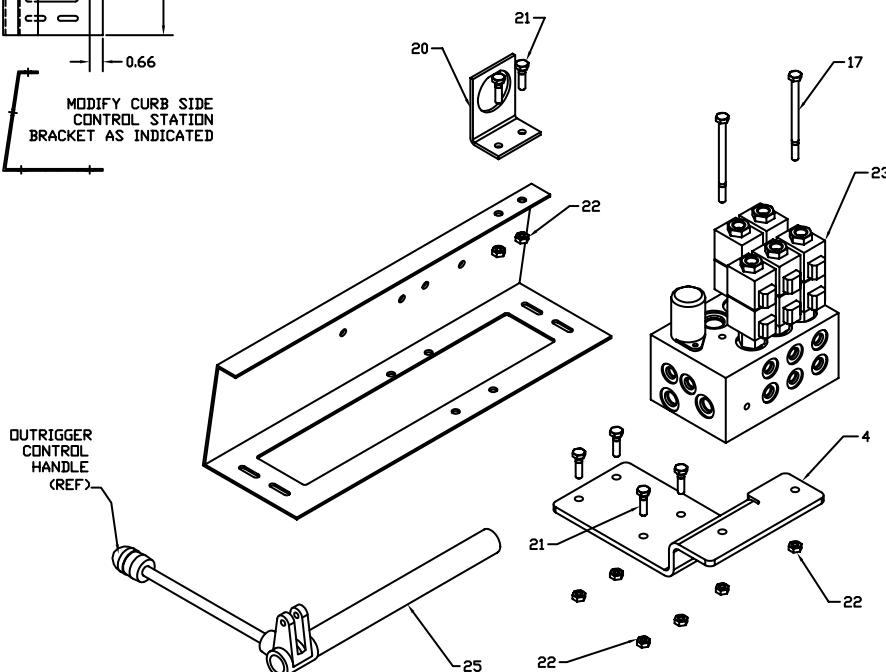
12.	51718551	HOSE KIT 5 FUNC RAD RMT	1
		(INCLUDES 13-16)	
13.	51396069	HOSE-FF .25x63.00 OAL(4-4) 6REF	
14.	51394614	HOSE-FF .25x73.50 OAL (4-4) 4REF	
15.	51396504	HOSE-FJ .38x42.00 OAL (6-8) 1REF	
16.	51396085	HOSE-FF .25X60 OAL (4-4) 1REF	
17.	72060016	CAP SCR 1/4-20x4.00 HH GR5 Z 2	
20.	60119299	BRACKET-MTG DEUTSCH CONN 1	
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5 Z 6	
22.	72062000	NUT 1/4-20 HEX ZINC 8	
23.	70146350	VALVE ASM 5FCTN RAD/TETH 1REF	
24.	77044997	HARNESS-MTL HND RAD/TETH 1REF	
25.	60126057	TUBE 3/4 ID X 1 OD X 9.75 LG 1	

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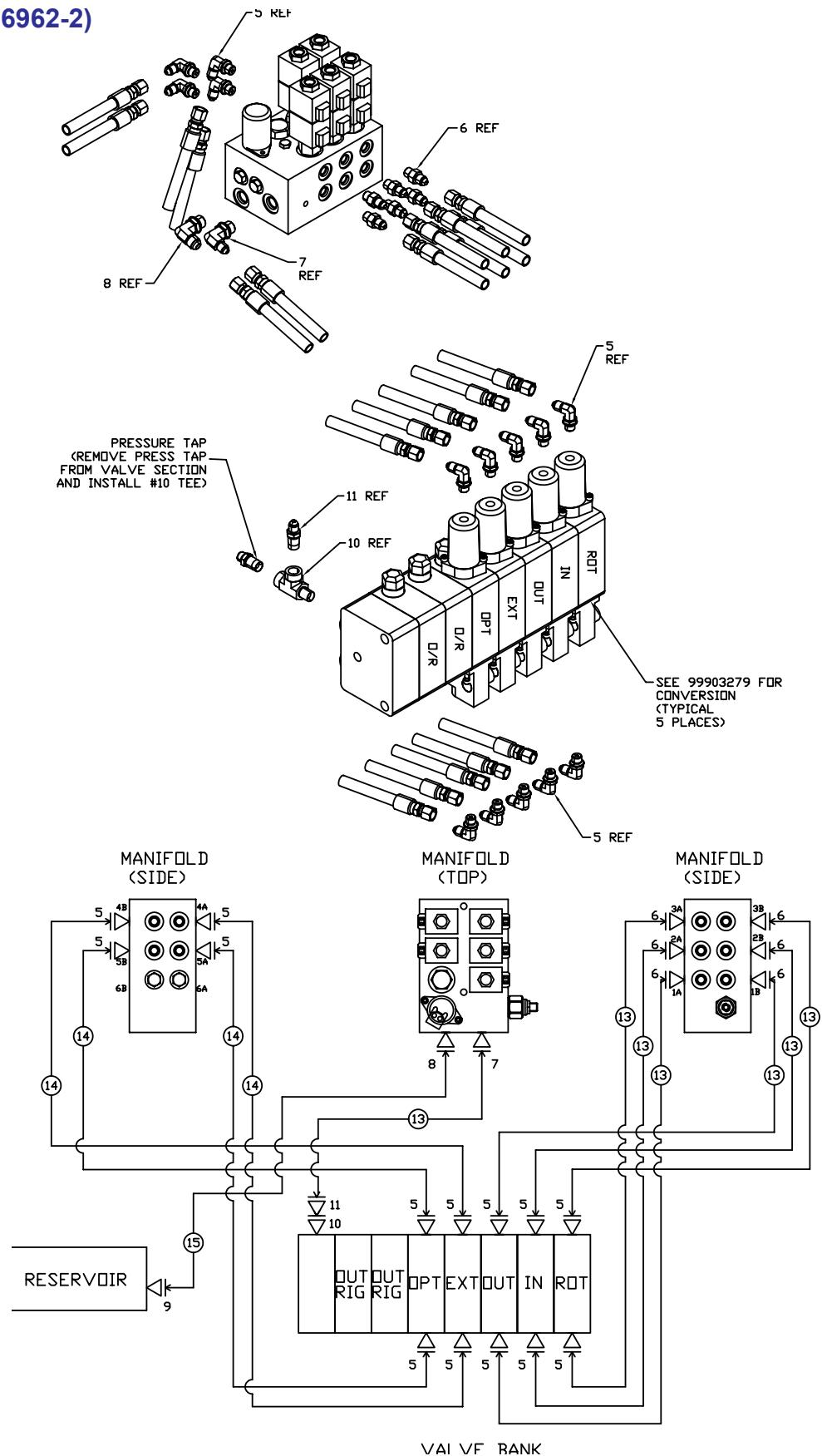


## NOTES:

1. REMOVE ALL MANUAL CONTROL CURB SIDE CONTROL HANDLES WITH THE EXCEPTION OF THE OUTRIGGER CONTROLS.
2. AFTER ROTATION, INNER, OUTER, AND EXTENSION MANUAL CONTROLS HANDLES ARE REMOVED REPLACE WITH ITEM NUMBER 25.
3. CONNECT ITEM #3 (VALVE DRIVER-NOT SHOWN) TO 'P3' AND 'P4' ON WIRE HARNESS #24 (NOT SHOWN).



**CONTROL KIT-TETH 5-FUNCT - 11/76  
CRANE (KIT 91716962-2)**



VAI VF RANK

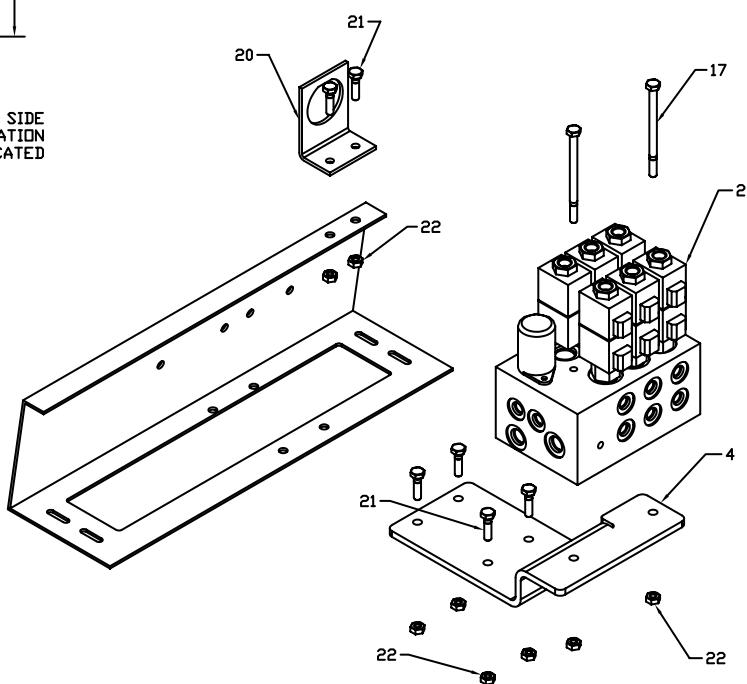
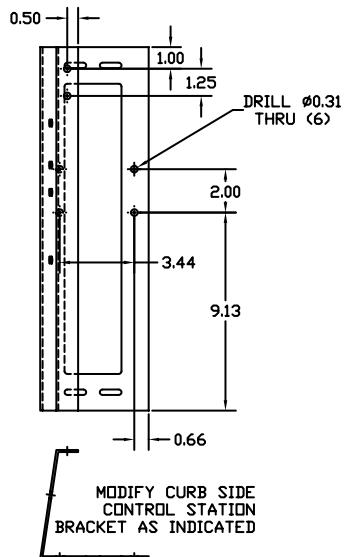
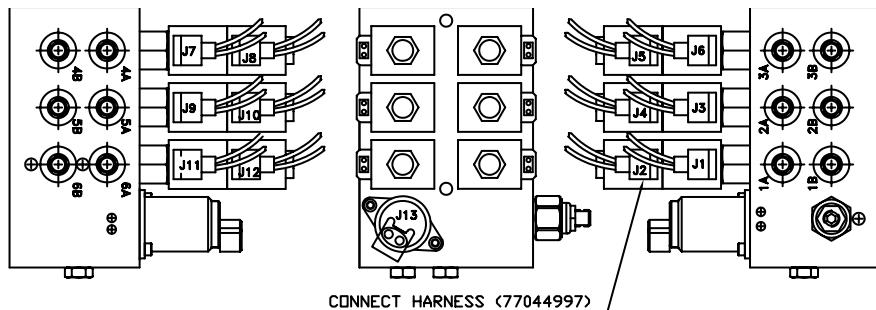
**CONTROL KIT-TETH 6-FUNCT - 11/76  
CRANE (KIT 91716963-1)**

1.	51716758	HANDLE ASM-MATL HND TETH	1
2.	73733346	VALVE-RMT KIT RS210 6FCTN (INCLUDES 23 & 24)	1
3.	77044826	VALVE DRIVER-HCT 99910038	1
4.	60123461	PLATE-MTG RAD RMT	1
5.	72053758	ELBOW #4MSTR #4MJIC 90°	18
6.	72532351	ADPTR- #4MSTR #4MJIC	6
7.	72532699	ELBOW #6MSTR #4MJIC 90°	1
8.	72053760	ELBOW #6MSTR #6MJIC 90°	1
9.	72533629	CONNECTOR M BSPP 8F40MX PAR29	1

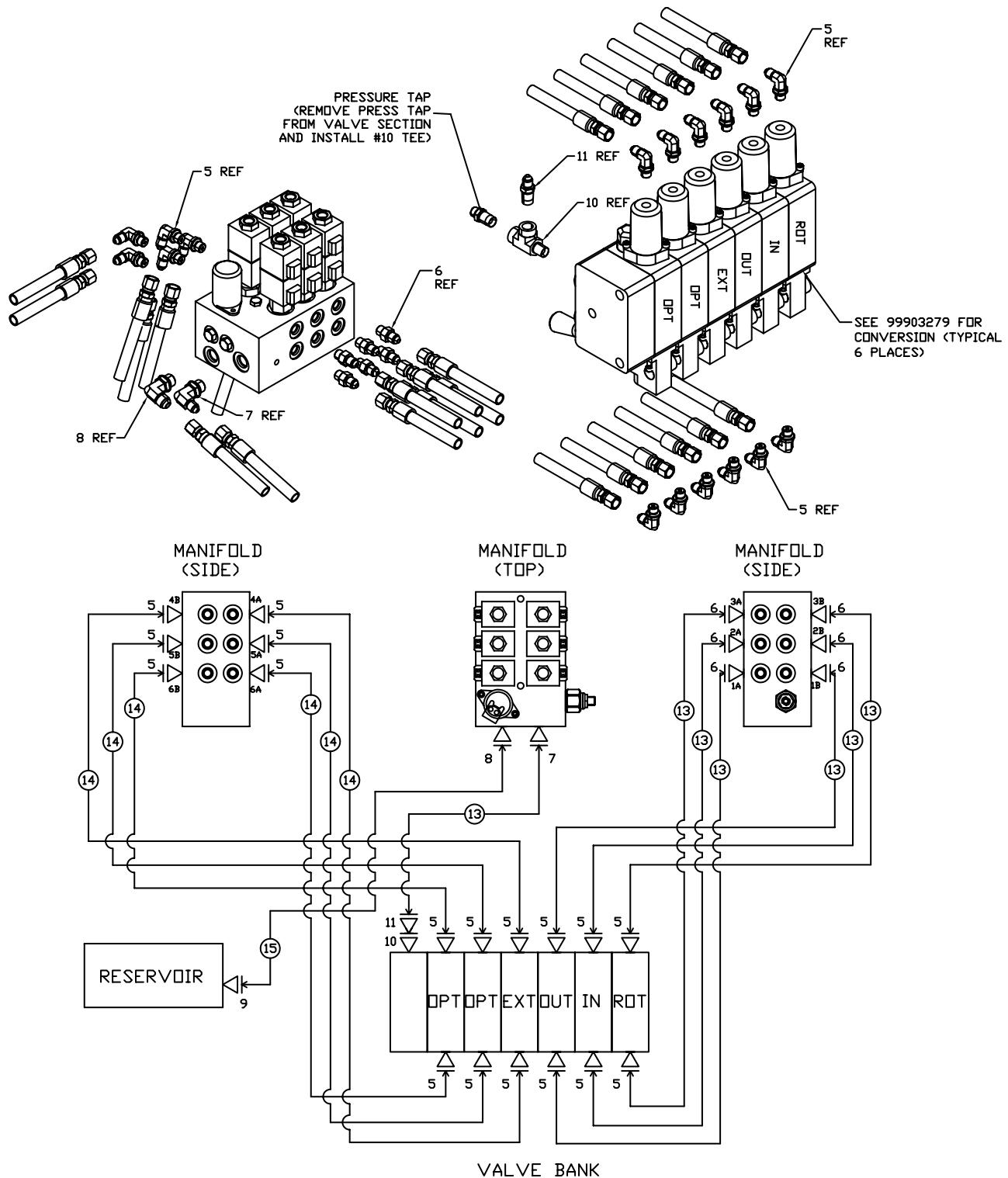
92

10.	72533726	TEE-MPIPE F PIPE MALE RUN.25	1
11.	72053499	ADPTR-MPT/MJIC .25-4	1
12.	51718552	HOSE KIT 6 FUNC RAD RMT (INCLUDES 13-16)	1
13.	51396069	HOSE-FF .25x63.00 OAL(4-4)	6REF
14.	51394614	HOSE-FF .25x73.50 OAL (4-4)	6REF
15.	51396504	HOSE-FJ .38x42.00 OAL (6-8)	1REF
16.	51396085	HOSE-FF .38X42 OAL (6-8)	1REF
17.	72060016	CAP SCR 1/4-20x4.00 HH GR5 Z	2
20.	60119299	BRACKET-MTG DEUTSCH CONN	1
21.	72060004	CAP SCR 1/4-20x1.00 HH GR5 Z	6
22.	72062000	NUT 1/4-20 HEX ZINC	8
23.	70146351	VALVE ASM 6FCTN RAD/TETH 1REF	
24.	77044997	HARNESS-MTL HND RAD/TETH 1REF	

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**CONTROL KIT-TETH 6-FUNCT - 11/76  
CRANE (KIT 91716963-2)**





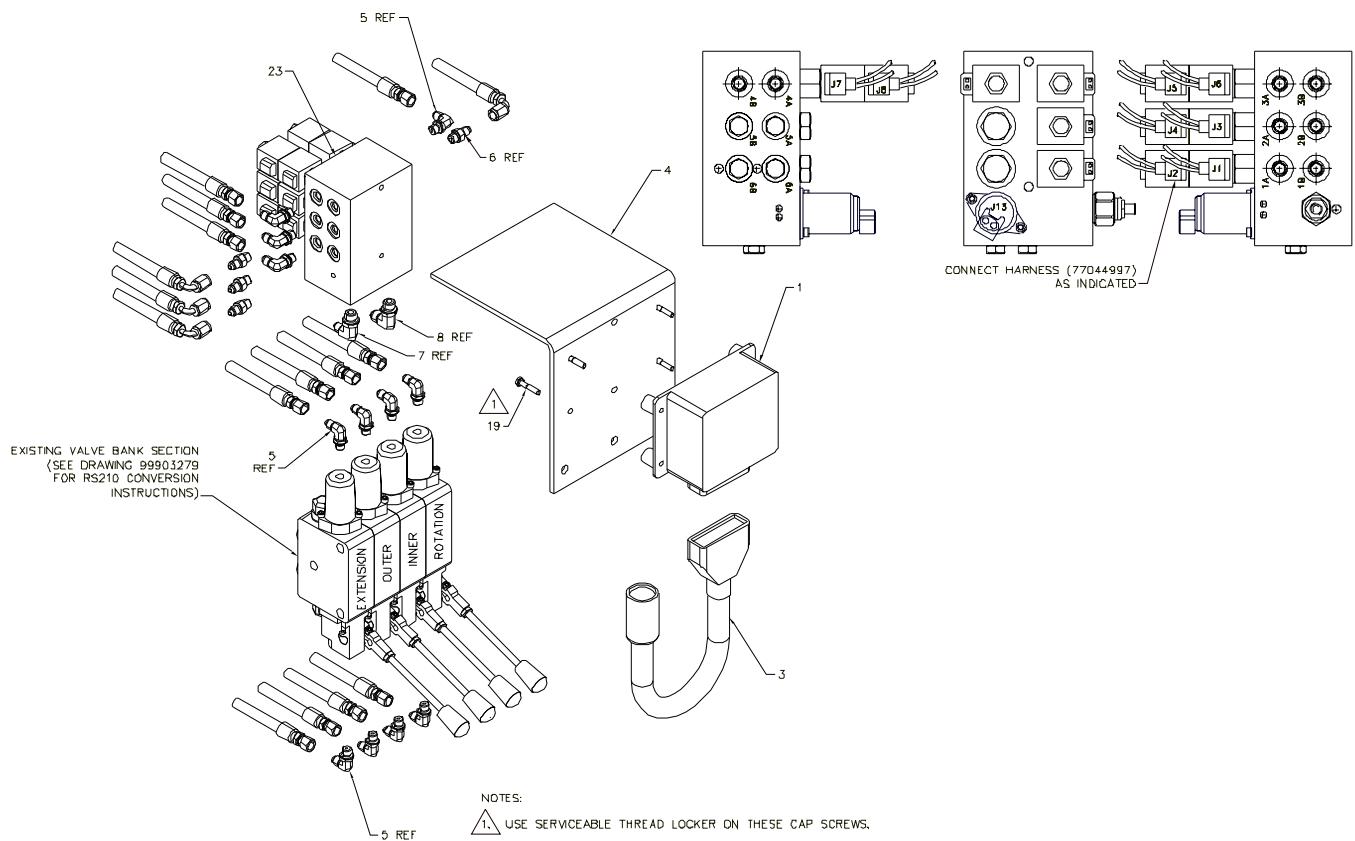
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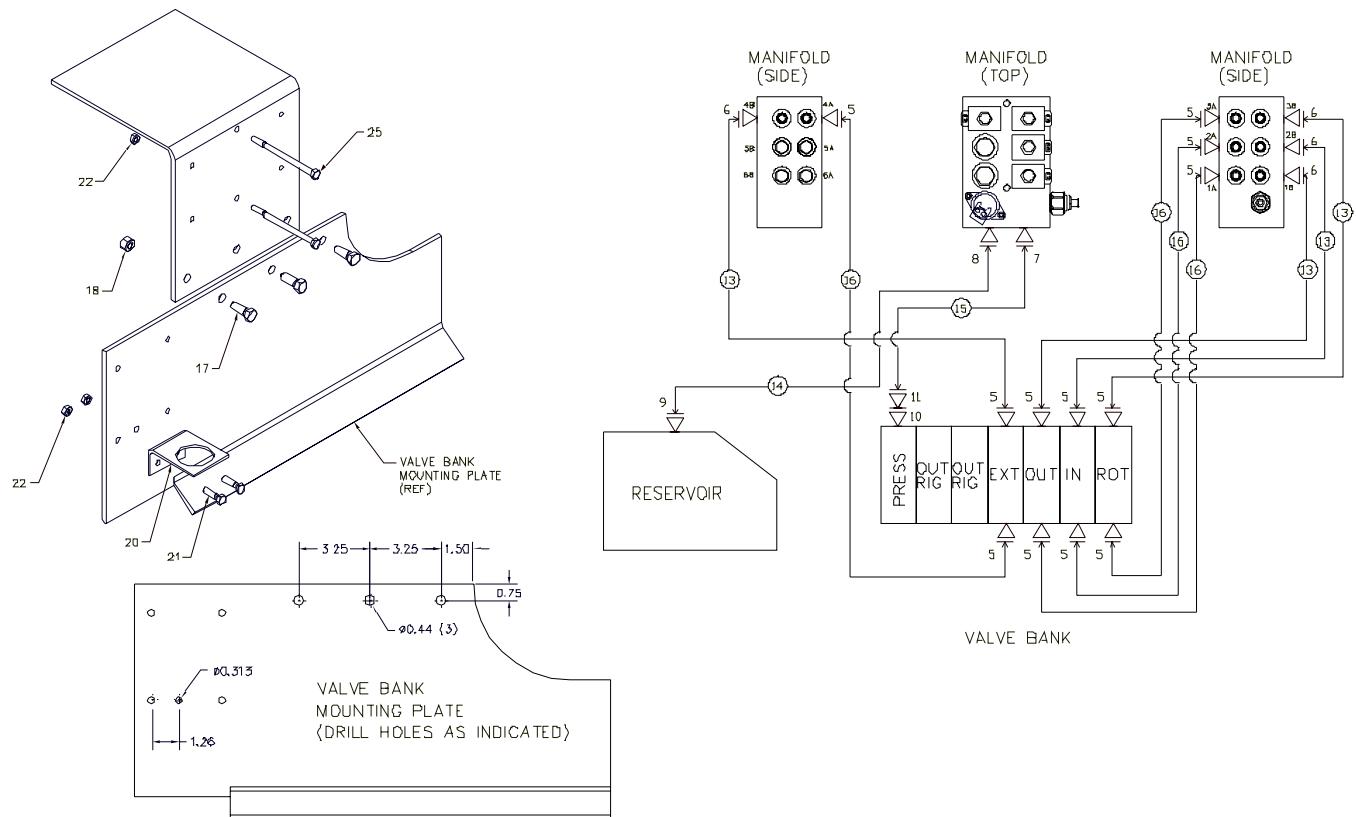


**CONTROL KIT-RADIO 4-FUNCT - 12/89 CRANE  
(KIT 91716654-1)**

1. 73733600	RAD RMT KIT - MATL HNDLG	1	12. 51716801	HOSE KIT 4 SECT RAD RMT (INCLUDES 13-16)	1
2. 73733576	VALVE-RMT KIT RS210 4FCTN (INCLUDES 23, 24)	1	13. 51396055	HOSE-FJ 1/4X24.00 OAL(4-4) 4REF	
3. 77044996	HARNESS-RAD RMT JUMPER	1	14. 51396056	HOSE-FJ 3/8x108.00 OAL(6-8) 1REF	
4. 60123351	BRACKET - RAD RMT	1	15. 51396057	HOSE-FF 1/4x22.00 OAL (4-4) 1REF	
5. 72053758	ELBOW #4MSTR #4MJIC 90°	12	16. 51396576	HOSE-FF 1/4X30.00 OAL (4-4) 4REF	
6. 72532351	ADPTR #4MSTR #4MJIC	4	17. 72060046	CAP SCR 3/8-16X1.00 HH GR5 Z 3	
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	18. 72062103	NUT 3/8-16 HEX NYLOC ZINC 3	
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	19. 72061448	CAP SCR-METRIC 6-1.00x10 HHZ 4	
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN 1	
10. 72533726	TEE MPIPE FPIPE MALE RUN .25	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5Z 2	
11. 72053499	ADPTR MPT/MJIC 1/4-4	1	22. 72062000	NUT 1/4-20 HEX ZINC 4	
			23. 70146349	VALVE ASM 4FCTN RAD/TETH 1REF	
			24. 77044997	HARNESS-RAD/TETH 1REF	
			25. 72060016	CAP SCR 1/4-20X4.00 HH GR5Z 2	

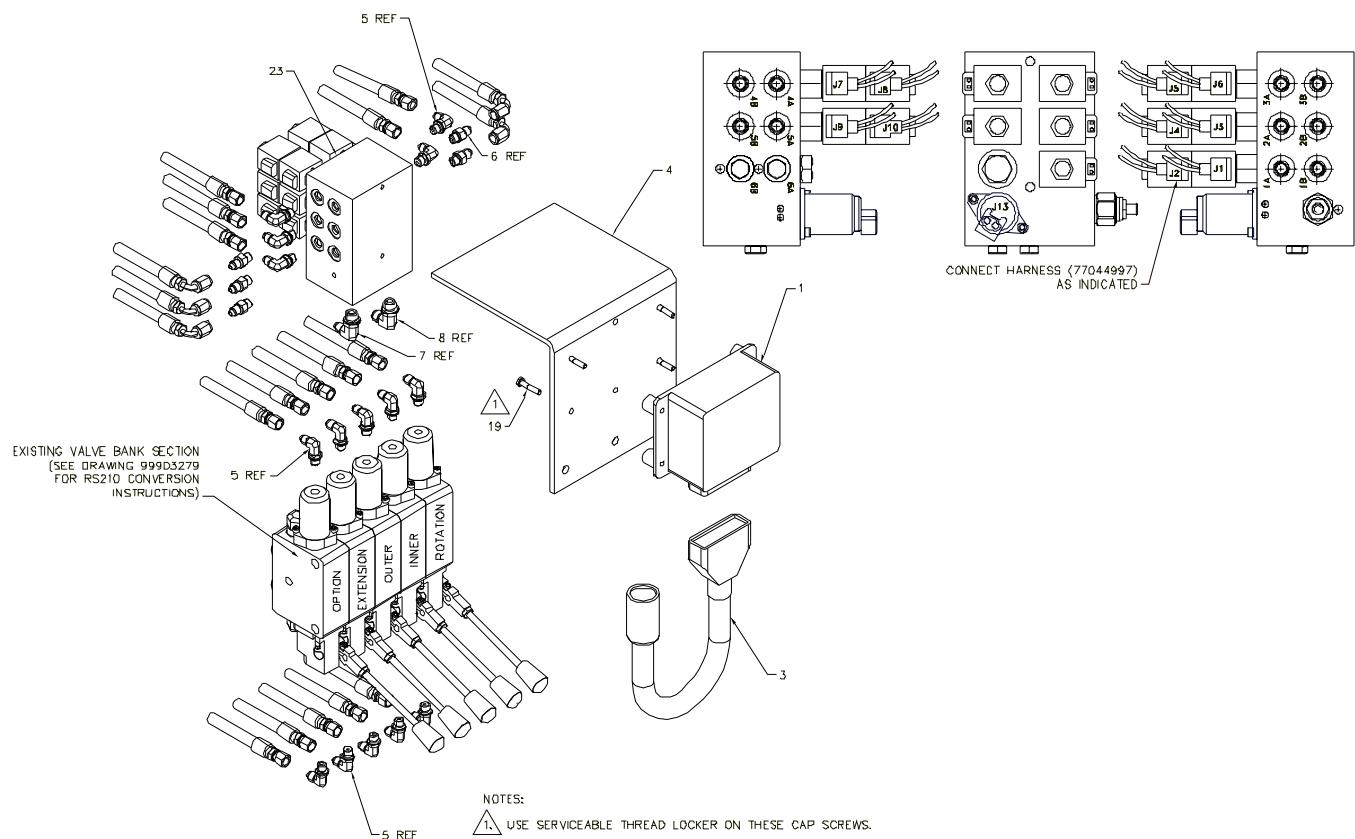


**CONTROL KIT - RADIO 4-FUNCT - 12/89**  
**CRANE (KIT 91716654-2)**

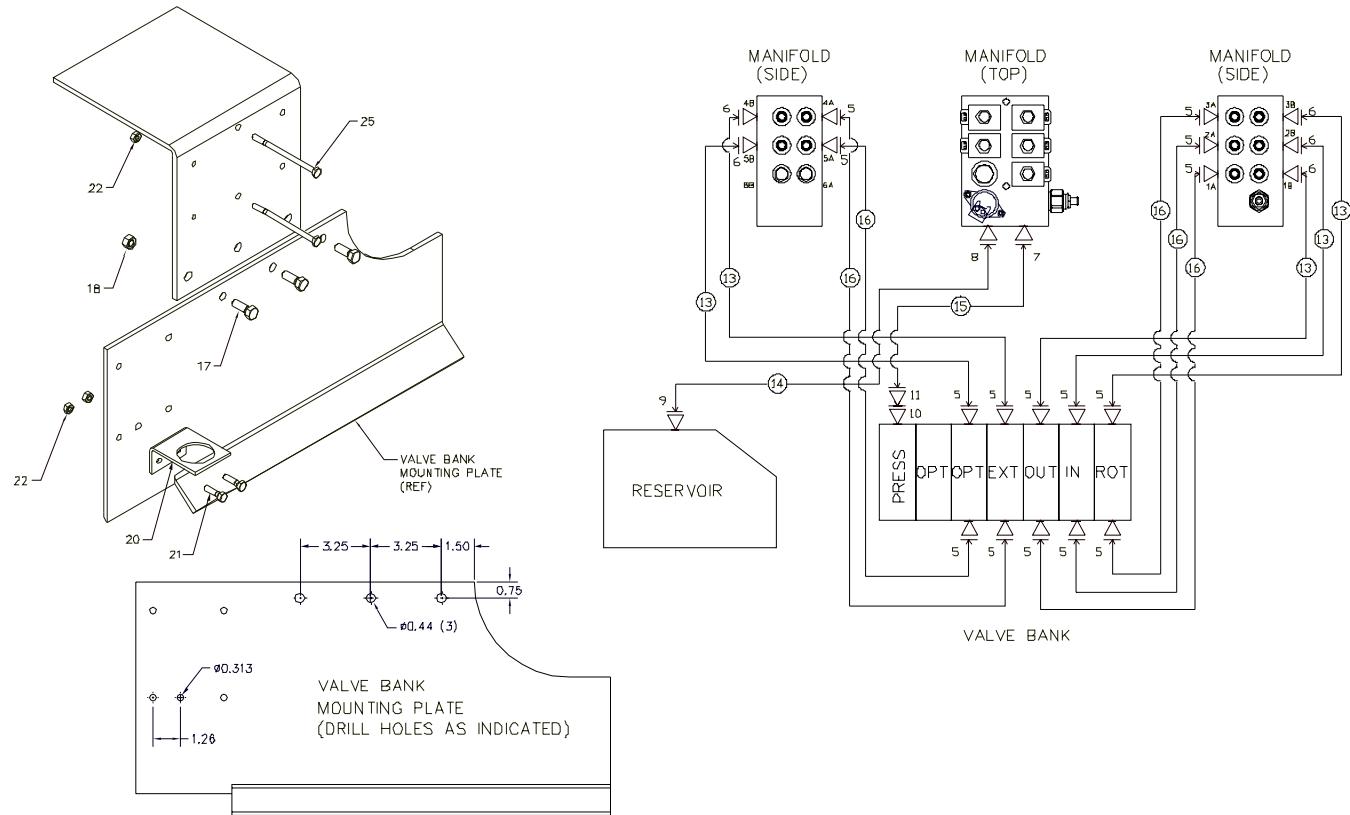


**CONTROL KIT-RADIO 5-FUNCT - 12/89 CRANE  
(KIT 91716655-1)**

1. 73733600	RAD RMT KIT - MATL HNDLG	1	12. 51716998	HOSE KIT 5 SECT RAD RMT (INCLUDES 13-16)	1
2. 73733577	VALVE-RMT KIT RS210 5FCTN (INCLUDES 23, 24)	1	13. 51396055	HOSE-FJ 1/4X24.00 OAL(4-4)	5REF
3. 77044996	HARNESS-RAD RMT JUMPER	1	14. 51396056	HOSE-FJ 3/8x108.00 OAL(6-8)	1REF
4. 60123351	BRACKET - RAD RMT	1	15. 51396057	HOSE-FF 1/4x22.00 OAL (4-4)	1REF
5. 72053758	ELBOW #4MSTR #4MJIC 90°	15	16. 51396576	HOSE-FF 1/4X30.00 OAL (4-4)	5REF
6. 72532351	ADPTR #4MSTR #4MJIC	5	17. 72060046	CAP SCR 3/8-16X1.00 HH GR5 Z	3
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	18. 72062103	NUT 3/8-16 HEX NYLOC ZINC	3
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	19. 72061448	CAP SCR-METRIC 6-1.00x10 HHZ	4
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN	1
10. 72533726	TEE MPIPE FPIPE MALE RUN .25	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5Z	2
11. 72053499	ADPTR MPT/MJIC 1/4-4	1	22. 72062000	NUT 1/4-20 HEX ZINC	4
			23. 70146350	VALVE ASM 5FCTN RAD/TETH	1REF
			24. 77044997	HARNESS-RAD/TETH	1REF
			25. 72060016	CAP SCR 1/4-20X4.00 HH GR5Z	2

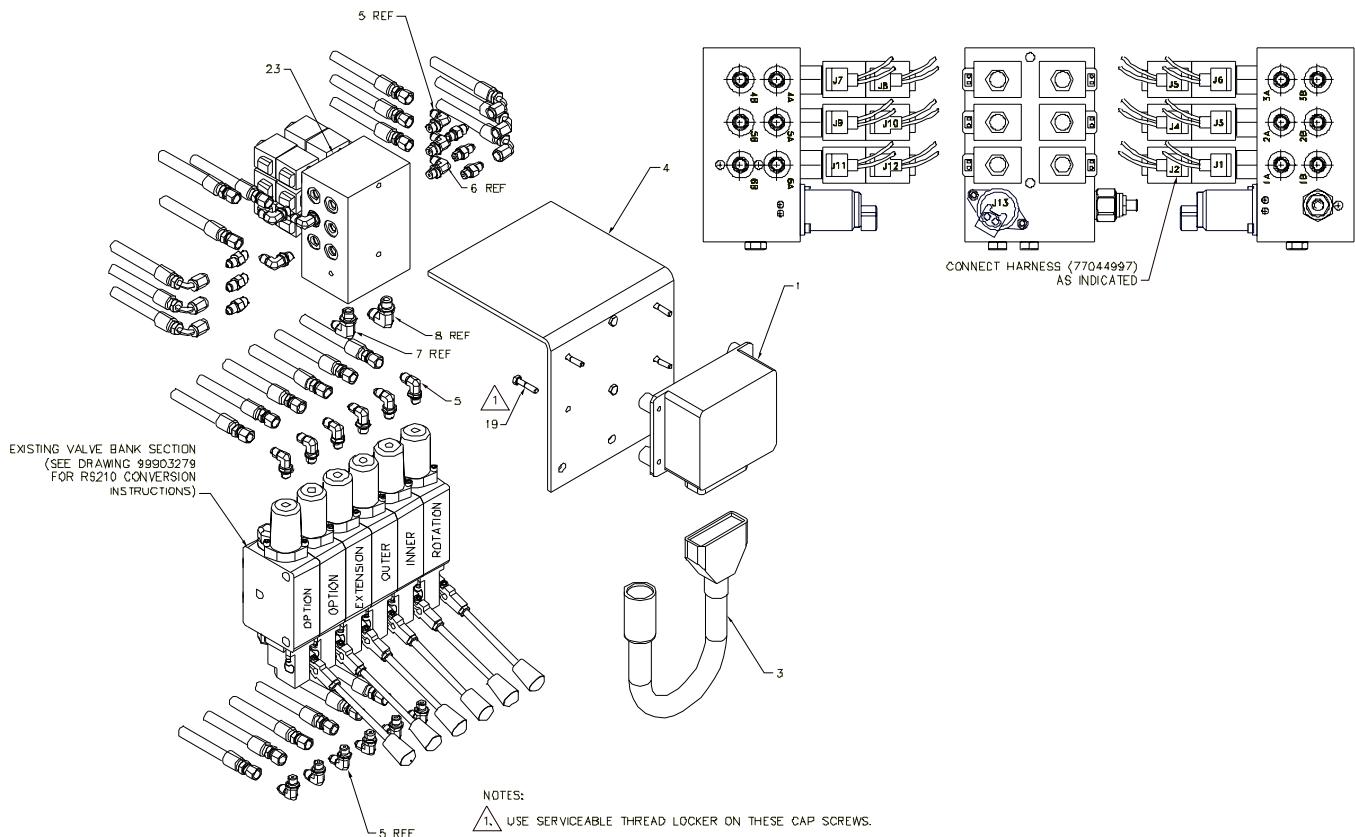


**CONTROL KIT-RADIO 5-FUNCT - 12/89 CRANE  
(KIT 91716655-2)**

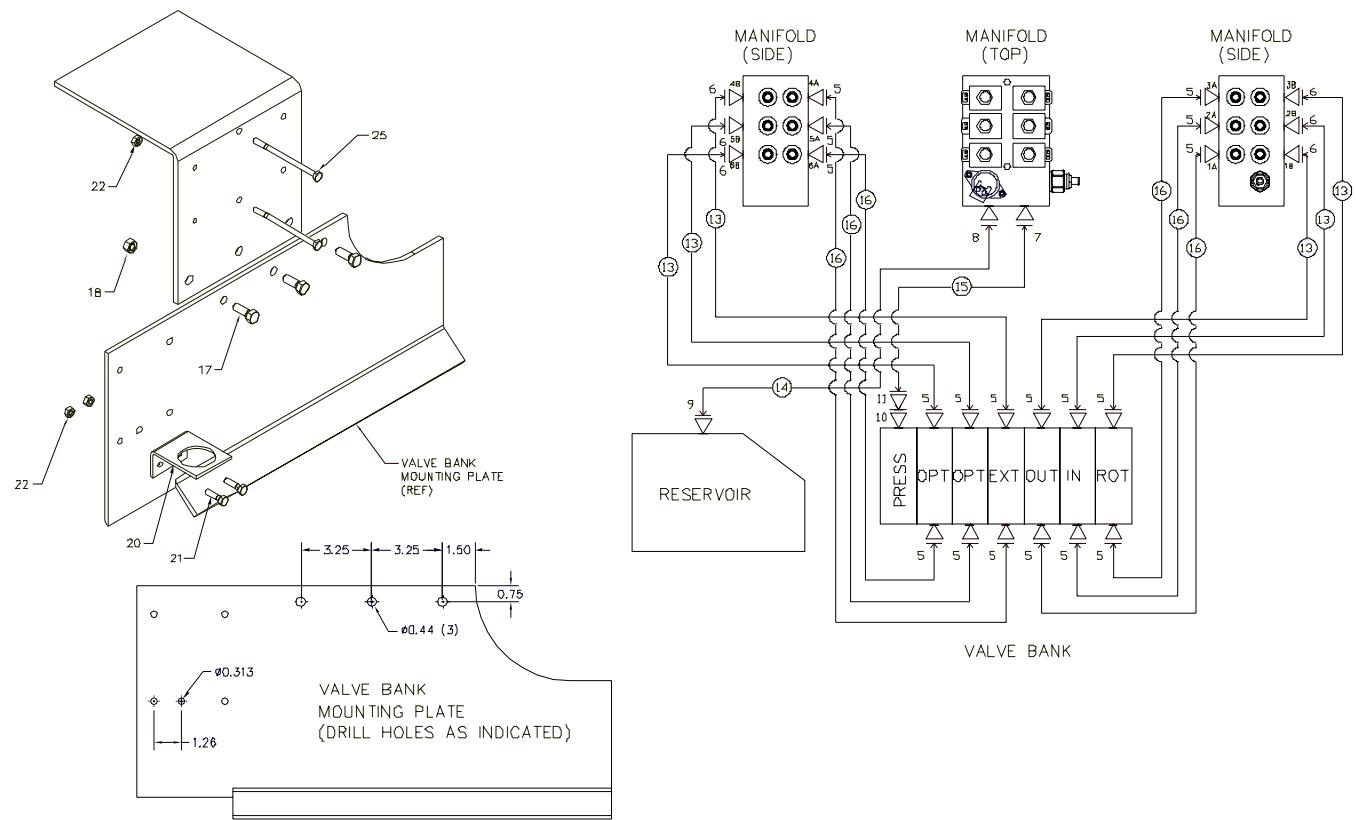


**CONTROL KIT-RADIO 6-FUNCT - 12/89 CRANE  
(KIT 91716656-1)**

1. 73733600	RAD RMT KIT - MATL HNDLG	1	12. 51716999	HOSE KIT 6 SECT RAD RMT (INCLUDES 13-16)	1
2. 73733436	VALVE-RMT KIT RS210 6FCTN (INCLUDES 23, 24)	1	13. 51396055	HOSE-FJ 1/4X24.00 OAL(4-4) 6REF	
3. 77044996	HARNESS-RAD RMT JUMPER	1	14. 51396056	HOSE-FJ 3/8x108.00 OAL(6-8) 1REF	
4. 60123351	BRACKET - RAD RMT	1	15. 51396057	HOSE-FF 1/4x22.00 OAL (4-4) 1REF	
5. 72053758	ELBOW #4MSTR #4MJIC 90°	18	16. 51396576	HOSE-FF 1/4X30.00 OAL (4-4) 6REF	
6. 72532351	ADPTR #4MSTR #4MJIC	6	17. 72060046	CAP SCR 3/8-16X1.00 HH GR5 Z 3	
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	18. 72062103	NUT 3/8-16 HEX NYLOC ZINC 3	
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	19. 72061448	CAP SCR-METRIC 6-1.00x10 HHZ 4	
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN 1	
10. 72533726	TEE MPIPE FPIPE MALE RUN .25	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5Z 2	
11. 72053499	ADPTR MPT/MJIC 1/4-4	1	22. 72062000	NUT 1/4-20 HEX ZINC 4	
			23. 70146351	VALVE ASM 6FCTN RAD/TETH 1REF	
			24. 77044997	HARNESS-RAD/TETH 1REF	
			25. 72060016	CAP SCR 1/4-20X4.00 HH GR5Z 2	

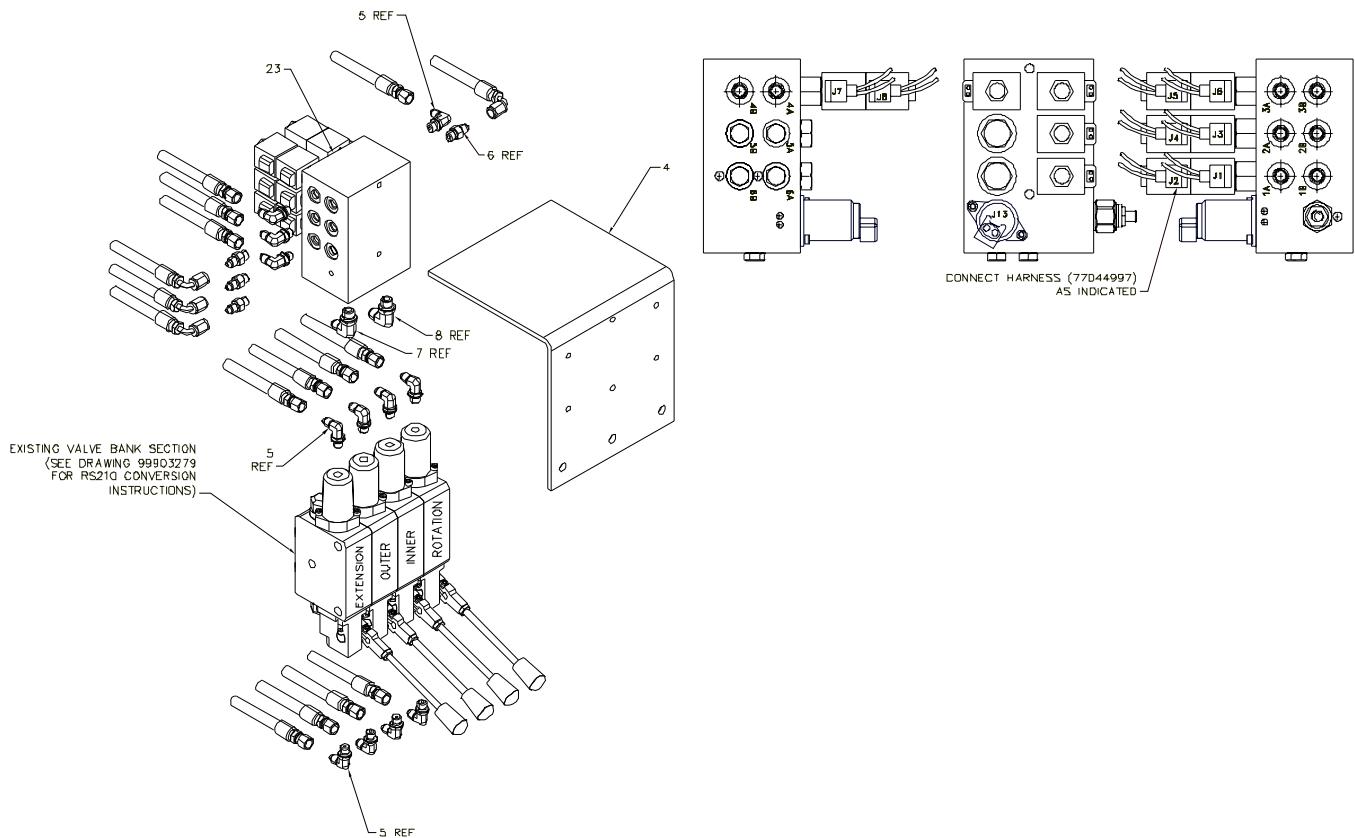


**CONTROL KIT-RADIO 6-FUNCT - 12/89 CRANE**  
**(KIT 91716656-2)**

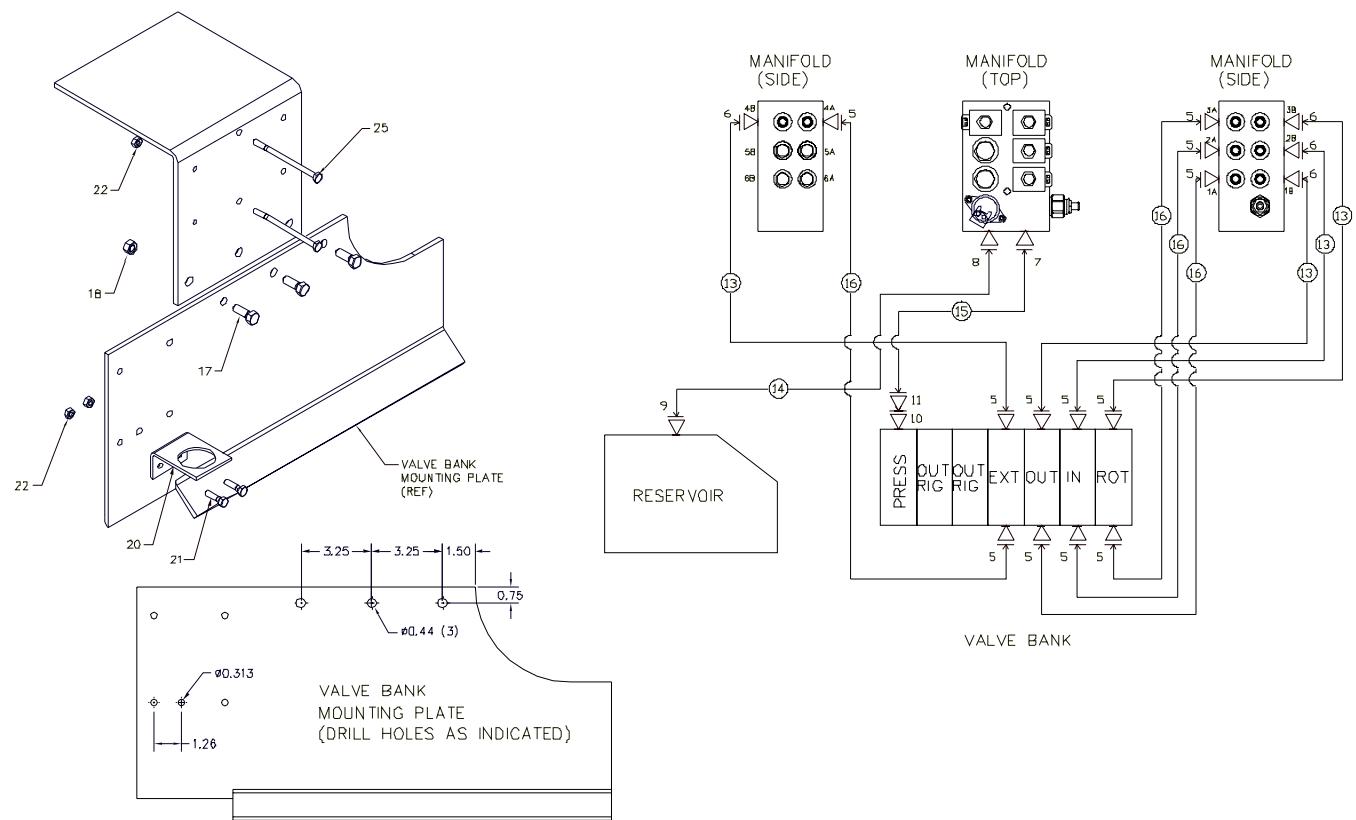


**CONTROL KIT-TETH 4-FUNCT - 12/89 CRANE  
(KIT 91716964-1)**

1. 51716758	HANDLE ASM - TETH RMT	1	12. 51716801	HOSE KIT 4 SECT RAD RMT (INCLUDES 13-16)	1
2. 73733576	VALVE-RMT KIT RS210 4FCTN (INCLUDES 23, 24)	1	13. 51396055	HOSE-FJ 1/4X24.00 OAL(4-4)	4REF
4. 60123351	BRACKET - RAD RMT	1	14. 51396056	HOSE-FJ 3/8x108.00 OAL(6-8)	1REF
5. 72053758	ELBOW #4MSTR #4MJIC 90°	12	15. 51396057	HOSE-FF 1/4x22.00 OAL (4-4)	1REF
6. 72532351	ADPTR #4MSTR #4MJIC	4	16. 51396576	HOSE-FF 1/4X30.00 OAL (4-4)	4REF
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	17. 72060046	CAP SCR 3/8-16X1.00 HH GR5 Z	3
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	18. 72062103	NUT 3/8-16 HEX NYLOC ZINC	3
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN	1
10. 72533726	TEE MPIPE FPIPE MALE RUN .25	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5Z	2
11. 72053499	ADPTR MPT/MJIC 1/4-4	1	22. 72062000	NUT 1/4-20 HEX ZINC	4
			23. 70146349	VALVE ASM 4FCTN RAD/TETH	1REF
			24. 77044997	HARNESS-RAD/TETH	1REF
			25. 72060016	CAP SCR 1/4-20X4.00 HH GR5Z	2

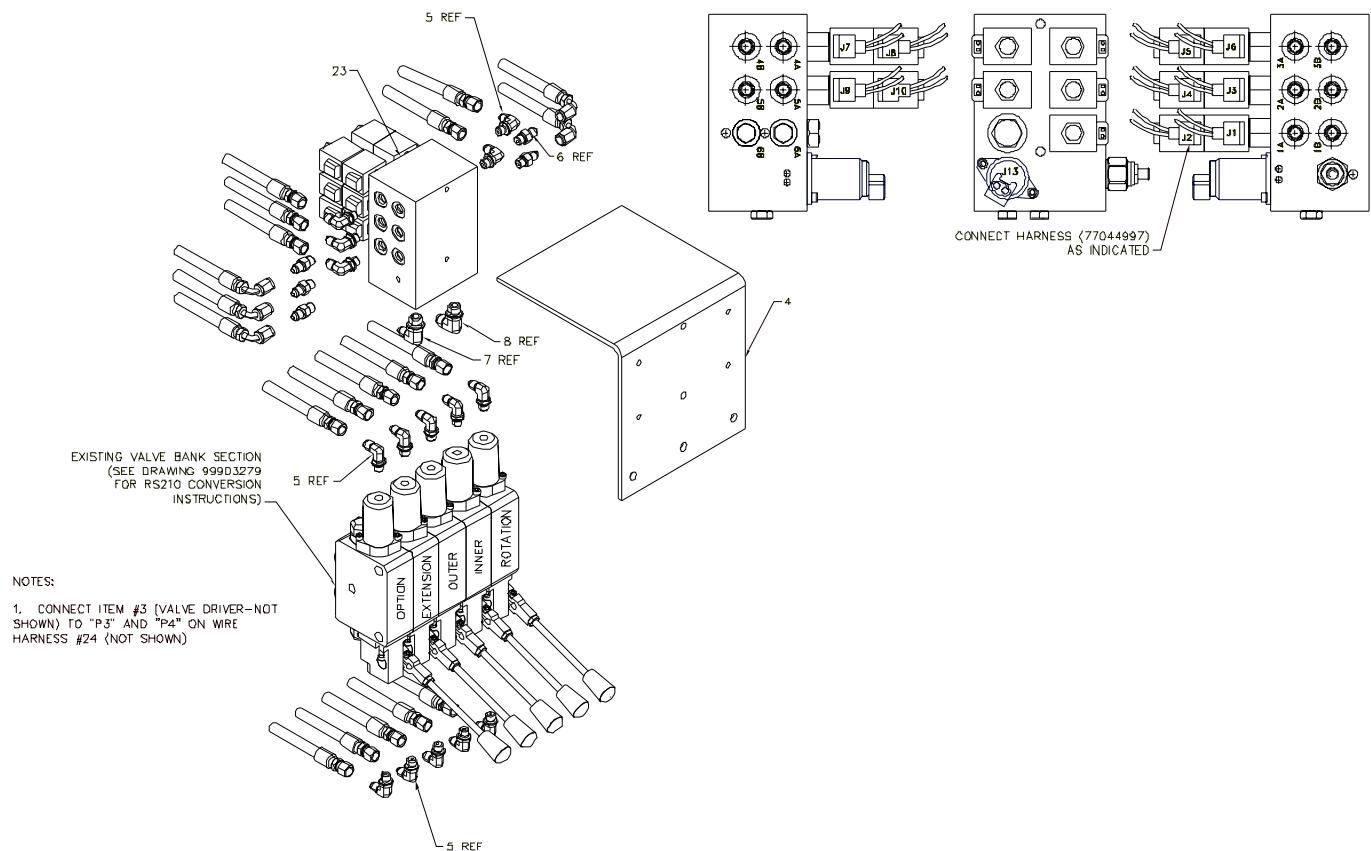


**CONTROL KIT-TETH 4-FUNCT - 12/89 CRANE**  
**(KIT 91716964-2)**

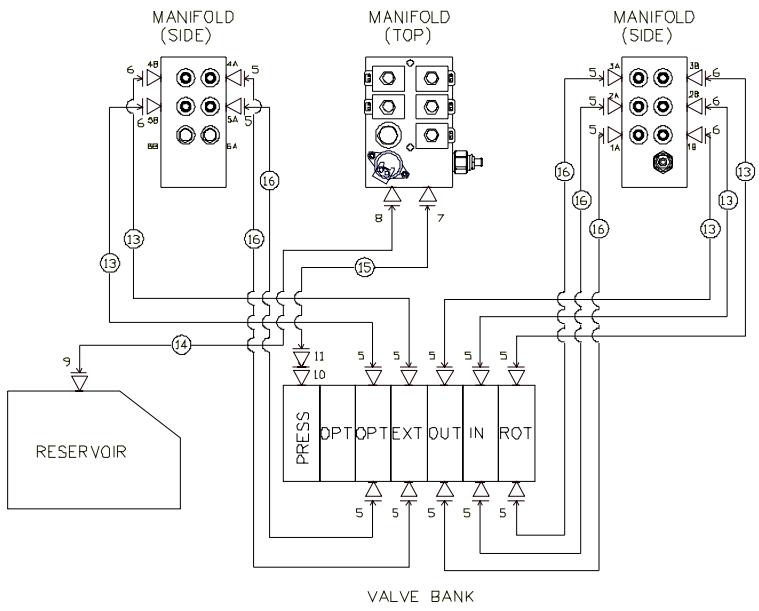
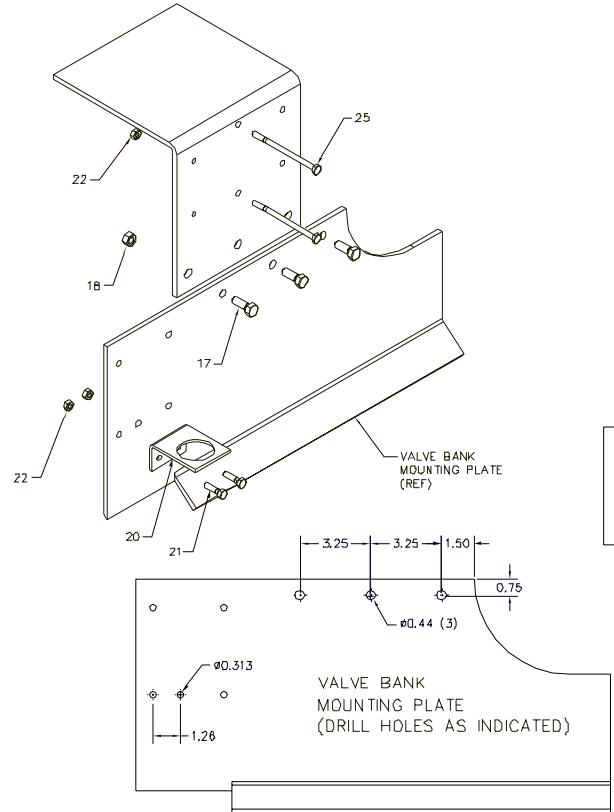


**CONTROL KIT-TETH 5-FUNCT - 12/89 CRANE  
(KIT 91716965-1)**

1. 51716758	HANDLE ASM - TETH RMT	1	11. 72053499	ADPTR MPT/MJIC 1/4-4	1
2. 73733577	VALVE-RMT KIT RS210 5FCTN (INCLUDES 23, 24)	1	12. 51716998	HOSE KIT 5 SECT RAD RMT	1
3. 77044826	VALVE DRIVER HCT 99910038	1	13. 51396055	(INCLUDES 13-16)	
4. 60123351	BRACKET - RAD RMT	1	14. 51396056	HOSE-FJ 1/4X24.00 OAL(4-4)	5REF
5. 72053758	ELBOW #4MSTR #4MJIC 90°	15	15. 51396057	HOSE-FJ 3/8x108.00 OAL(6-8)	1REF
6. 72532351	ADPTR #4MSTR #4MJIC	5	16. 51396576	HOSE-FF 1/4x22.00 OAL (4-4)	1REF
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	17. 72060046	HOSE-FF 1/4X30.00 OAL (4-4)	5REF
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	18. 72062103	CAP SCR 3/8-16X1.00 HH GR5 Z	3
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	NUT 3/8-16 HEX NYLOC ZINC	3
10. 72533726	TEE MPIPE FPIPE MALE RUN .25	1	21. 72060004	BRACKET-MTG DEUTSCH CONN	1
			22. 72062000	CAP SCR 1/4-20x1.00 HH GR5Z	2
			23. 70146350	NUT 1/4-20 HEX ZINC	4
			24. 77044997	VALVE ASM 5FCTN RAD/TETH	1REF
			25. 72060016	HARNESS-RAD/TETH	1REF
				CAP SCR 1/4-20X4.00 HH GR5Z	2

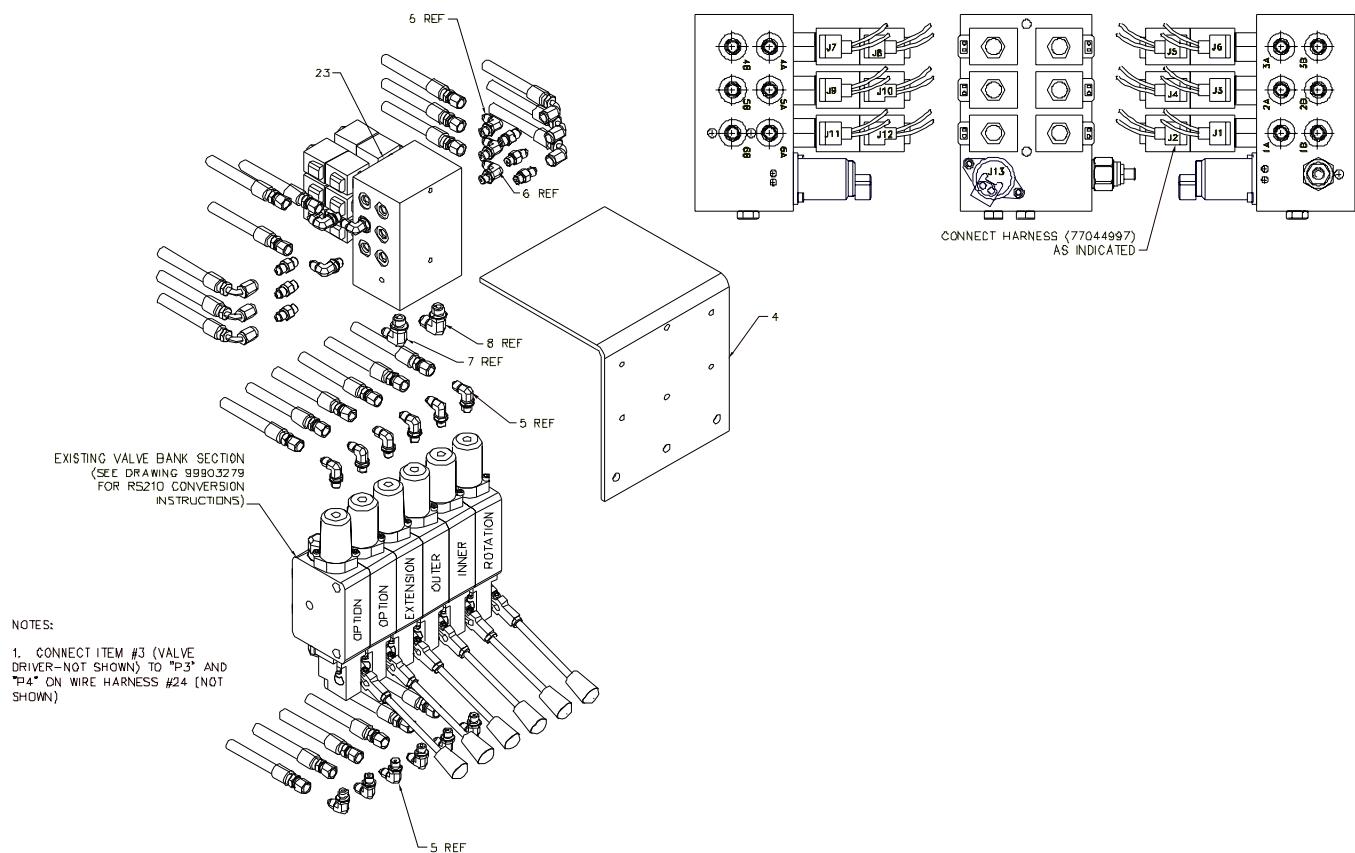


## **CONTROL KIT-TETH 5-FUNCT - 12/89 CRANE (KIT 91716965-2)**

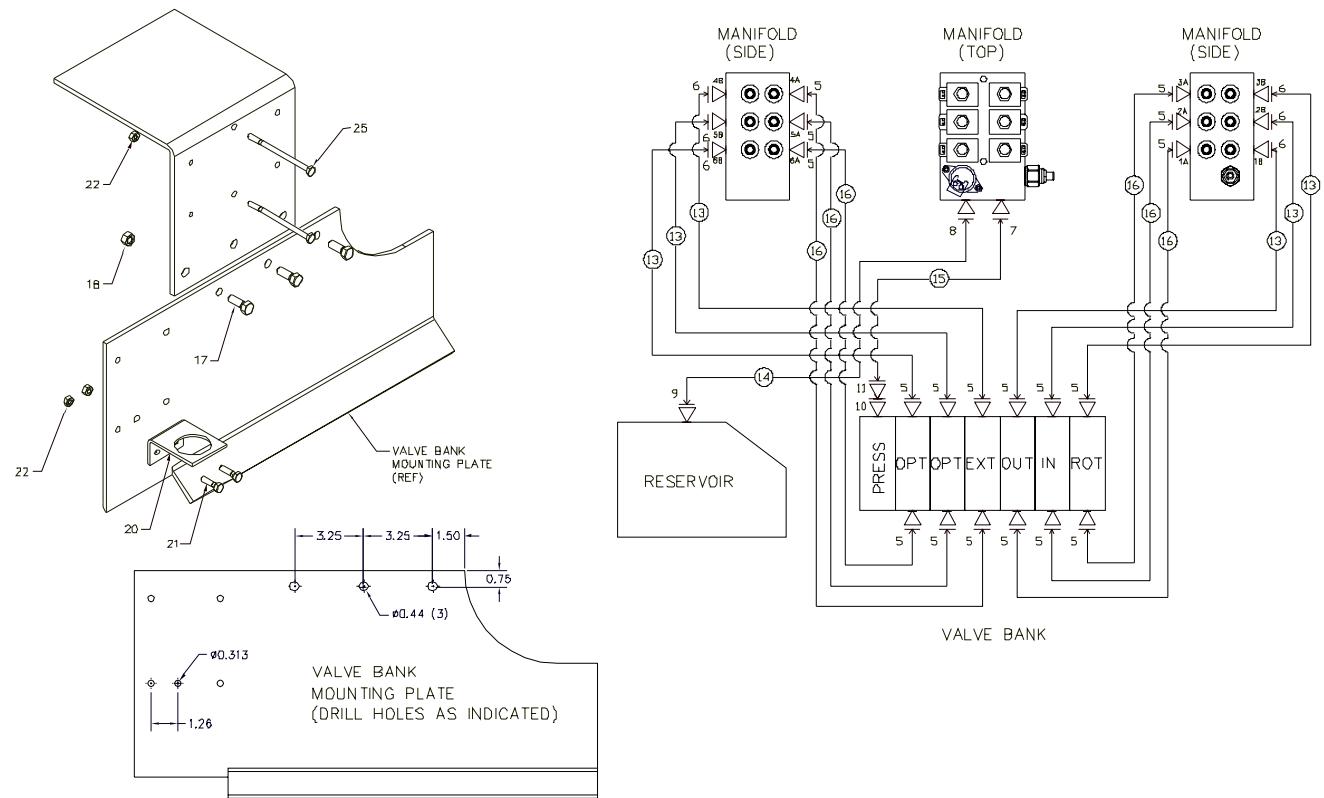


**CONTROL KIT-TETH 6-FUNCT - 12/89 CRANE  
(KIT 91716966-1)**

1. 51716758	HANDLE ASM - TETH RMT	1	11. 72053499	ADPTR MPT/MJIC 1/4-4	1
2. 73733436	VALVE-RMT KIT RS210 6FCTN (INCLUDES 23, 24)	1	12. 51716999	HOSE KIT 6 SECT RAD RMT (INCLUDES 13-16)	1
3. 77044826	VALVE DRIVER HCT 99910038	1	13. 51396055	HOSE-FJ 1/4X24.00 OAL(4-4)	6REF
4. 60123351	BRACKET - RAD RMT	1	14. 51396056	HOSE-FJ 3/8x108.00 OAL(6-8)	1REF
5. 72053758	ELBOW #4MSTR #4MJIC 90°	18	15. 51396057	HOSE-FF 1/4x22.00 OAL (4-4)	1REF
6. 72532351	ADPTR #4MSTR #4MJIC	6	16. 51396576	HOSE-FF 1/4X30.00 OAL (4-4)	6REF
7. 72532699	ELBOW #6MSTR #4MJIC 90°	1	17. 72060046	CAP SCR 3/8-16X1.00 HH GR5 Z	3
8. 72053760	ELBOW #6MSTR #6MJIC 90°	1	18. 72062103	NUT 3/8-16 HEX NYLOC ZINC	3
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN 1	
10. 72533726	TEE MPIPE FPIPE MALE RUN .25	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5Z	2
			22. 72062000	NUT 1/4-20 HEX ZINC	2
			23. 71046350	VALVE ASM 5FCTN RAD/TETH 1REF	
			24. 77044997	HARNESS-RAD/TETH 1REF	
			25. 72060016	CAP SCR 1/4-20X4.00 HH GR5Z	2



**CONTROL KIT-TETH 6-FUNCT - 12/89 CRANE**  
**(KIT 91716966-2)**



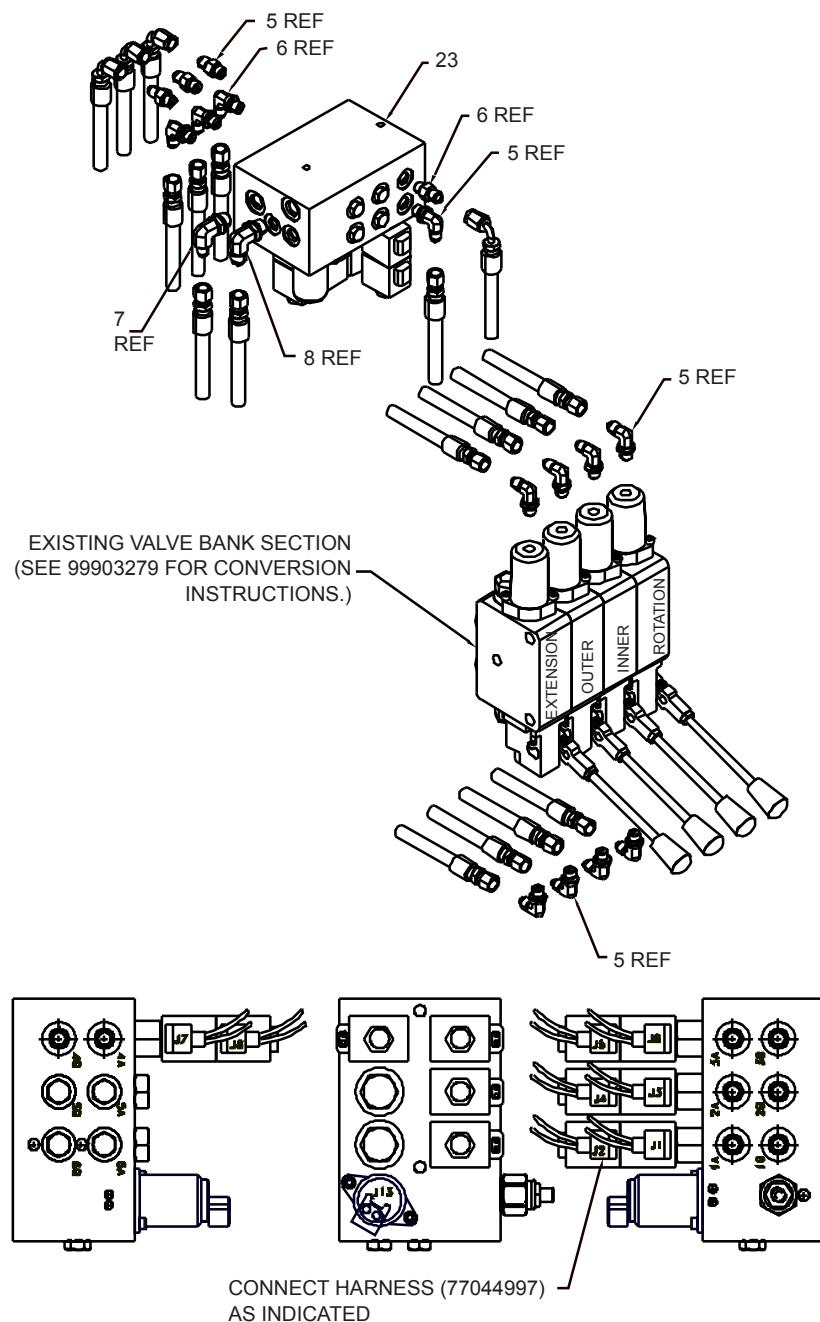
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**CONTROL KIT-RADIO 4-FUNCT - 15/113  
CRANE (KIT 91716657-1)**

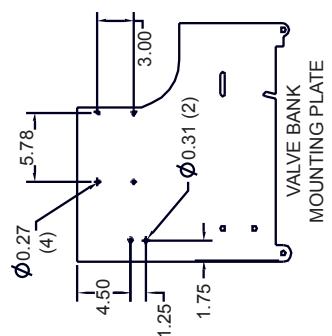
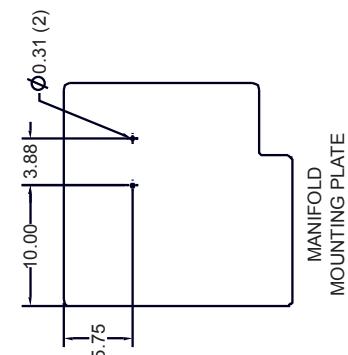
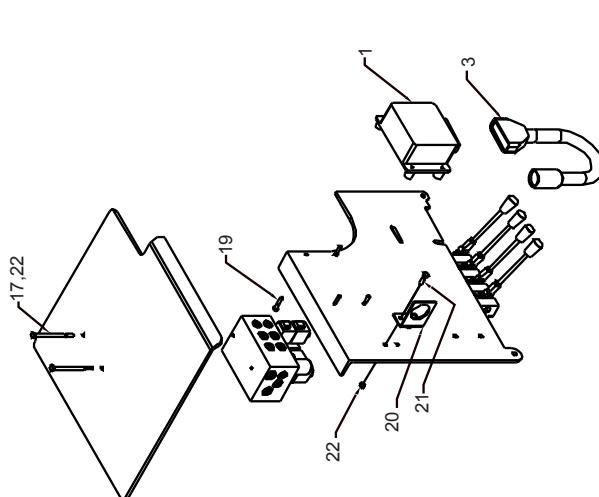
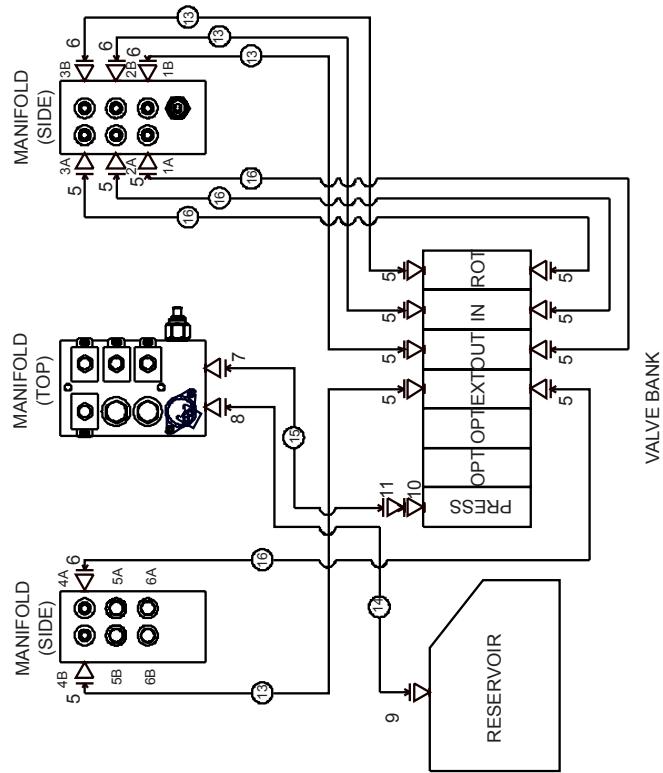
1. 73733600	RADIO REMOTE KIT	1	13. 51395865	HOSE-FJ1 /4 x 18.00 OAL	4REF
2. 73733576	VALVE - RS210 4 FCTN (INCLUDES 23 & 24)	1	14. 51396075	HOSE-FJ 3/8 x 78 OAL	1REF
3. 77044996	HARNESS - RAD RMT JUMPER	1	15. 51396076	HOSE-FM 1/4 x 14 OAL	1REF
5. 72053758	ELBOW #4 MSTR/#4 MJIC 90°	12	16. 51393983	HOSE-FF 1/4 x 27.00 OAL	4 REF
6. 72532351	ADPTR #4 MSTR/#4 MJIC	4	17. 72060016	CAP SCR 1/4-20x4 HH GR5 Z	2
7. 72532699	ELBOW #6 MSTR/#4 MJIC 90°	1	19. 72601448	CAP SCREW-METRIC 6-1.00x12 HHZ	4
8. 72053760	ELBOW #6 MSTR/#6 MJIC 90°	1	20. 60119299	BRACKET-MTG DEUTSCH CONN.	1
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	21. 72060004	CAP SCREW 1/4-20x1.00 HH GR5 Z	2
10. 72533726	TEE M PIPE F PIPE	1	22. 72062000	NUT 1/4-X0 HEX Z	4
11. 72053499	ADPTR - MPT/MJIC 1/4-4	1	23. 70146349	VALVE ASM 4 FCTN RAD/TETH	1REF
12. 51716938	HOSE KIT 15/113 4 FUNC (INCLUDES 13-16)	1	24. 77044997	HARNESS-RMT/TETH	1REF

CONTINUED ON FOLLOWING PAGE



**CONTROL KIT-RADIO 4-FUNCT - 15/113  
CRANE (KIT 91716657-2)**

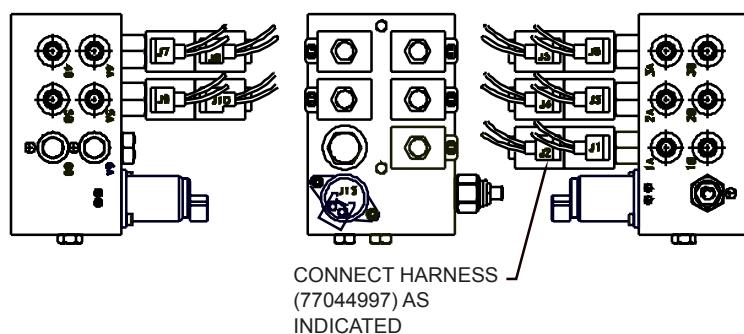
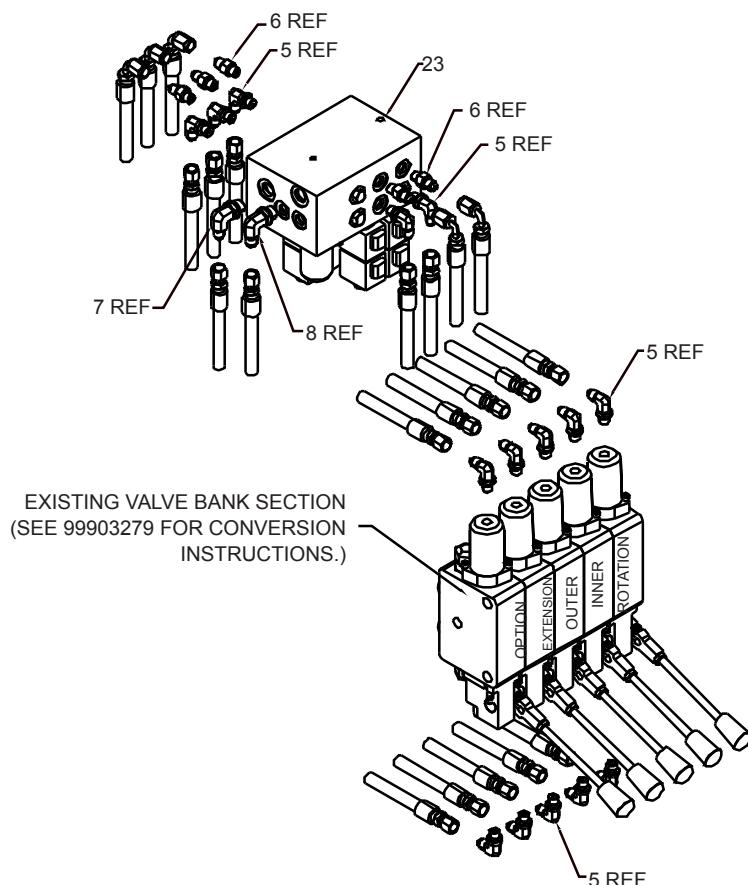
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**CONTROL KIT-RADIO 5-FUNCT - 15/113  
CRANE (KIT 91716658-1)**

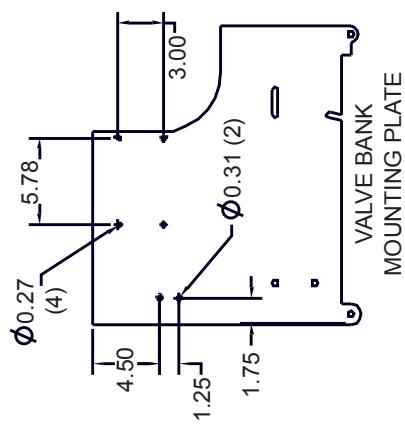
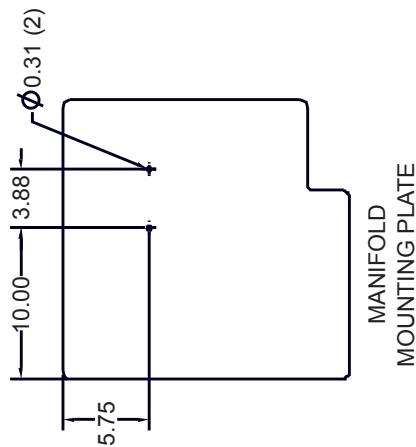
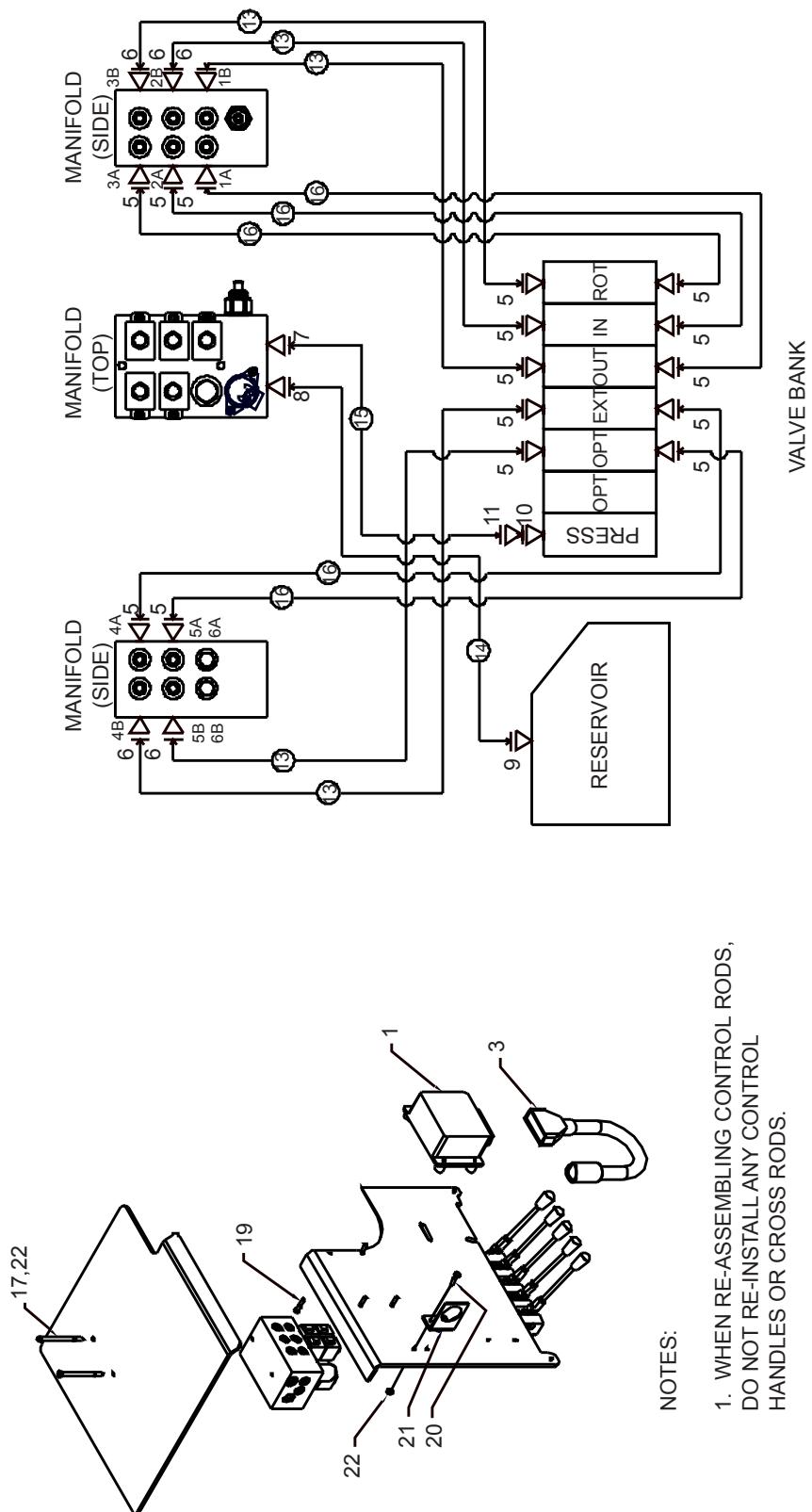
1. 73733600	RADIO REMOTE KIT	1	12. 51716981	HOSE KIT 15/113 5 FUNC (INCLUDES 13-16)	1
2. 73733577	VALVE - RS210 5 FCTN (INCLUDES 23 & 24)	1	13. 51395865	HOSE-FJ 1/4x18.00 OAL	4REF
3. 77044996	HARNESS - RAD RMT JUMPER	1	14. 51396075	HOSE-FJ 3/8x 78.00 OAL	1REF
5. 72053758	ELBOW #4 MSTR/#4 MJIC 90°	15	15. 51396076	HOSE-FM 1/4 x 14.00 OAL	1REF
6. 72532351	ADPTR #4 MSTR/#4 MJIC	5	16. 51393983	HOSE-FF 1/4 x 27.00 OAL	4 REF
7. 72532699	ELBOW #6 MSTR/#4 MJIC 90°	1	17. 72060016	CAP SCR 1/4-20x4 HH GR5 Z	2
8. 72053760	ELBOW #6 MSTR/#6 MJIC 90°	1	19. 72601448	CAP SCR-METRIC 6-1x12 HHZ	4
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN. 1	
10. 72533726	TEE M PIPE F PIPE	1	21. 72060004	CAP SCR 1/4-20x1HH GR5 Z	2
11. 72053499	ADPTR - MPT/MJIC .25-4	1	22. 72062000	NUT 1/4-X0 HEX Z	4
			23. 70146349	VALVE ASM 4 FCTN RAD/TECH 1REF	
			24. 77044997	HARNESS-RMT/TETH	1REF

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**CONTROL KIT-RADIO 5-FUNCT - 15/113  
CRANE (KIT 91716658-2)**

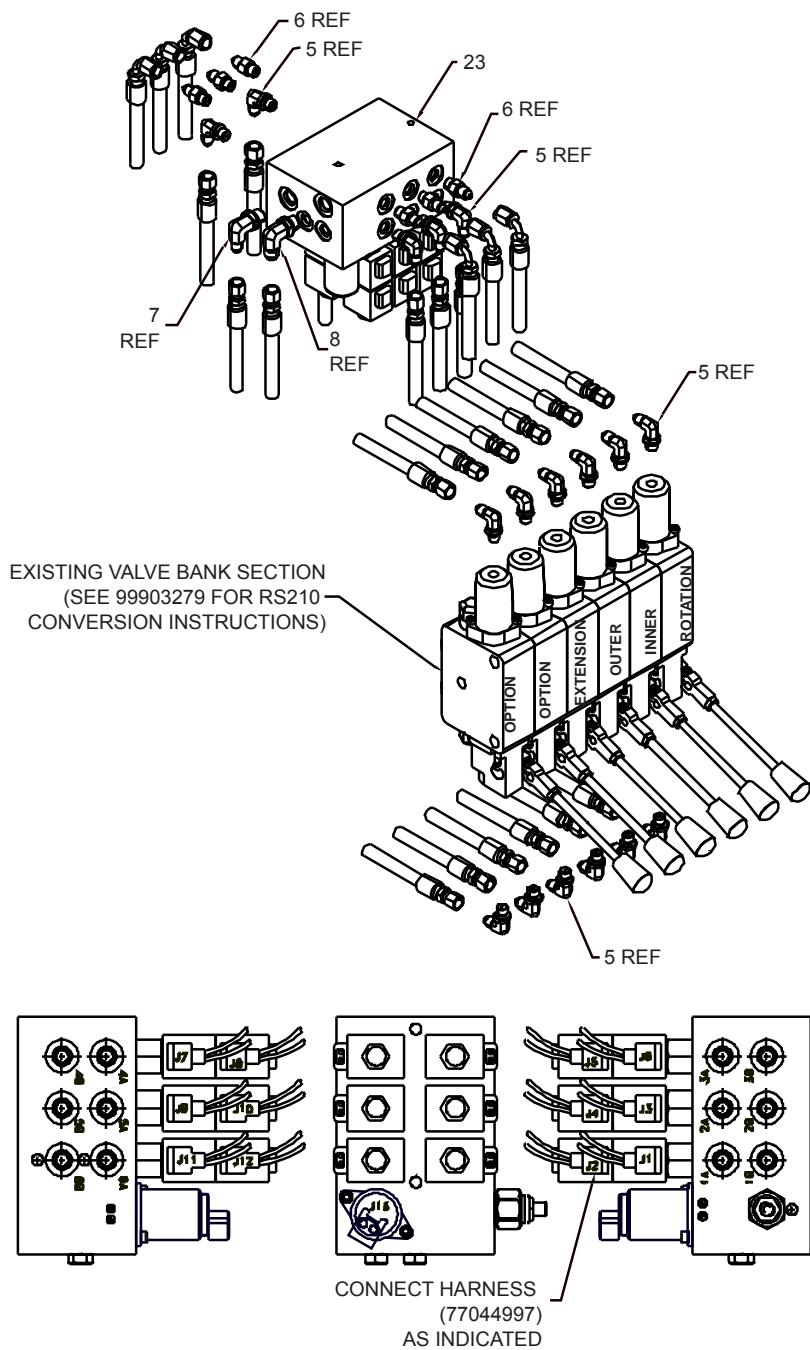
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**CONTROL KIT-RADIO 6-FUNCT - 15/113  
CRANE (KIT 91716659-1)**

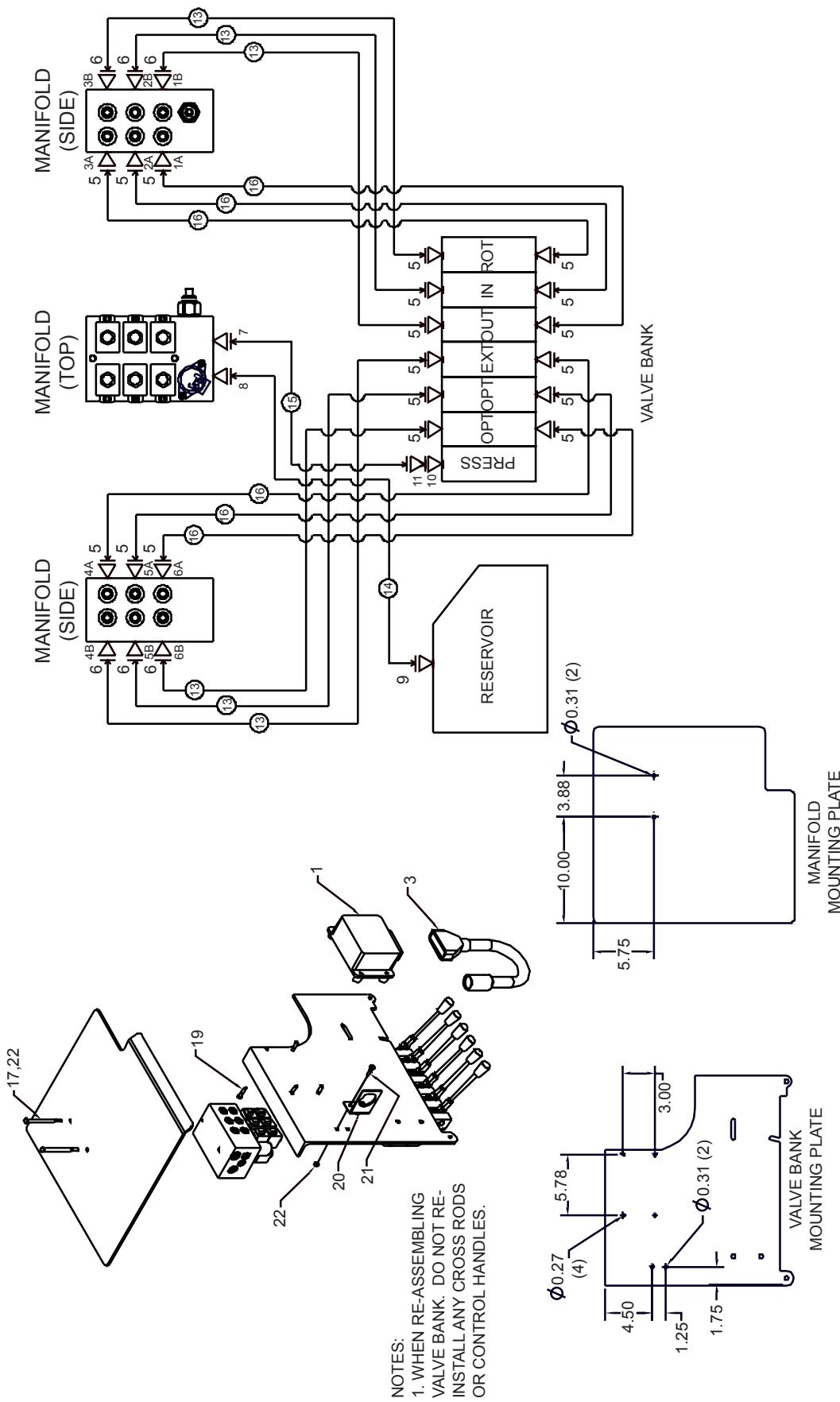
1. 73733600	RADIO RMT 4-15TM	1	12. 51716982	HOSE KIT 15/113 6 FUNC (INCLUDES 13-16)	1
2. 73733436	VALVE-RS210 6 FUNC. (INCLUDES 23&24)	1	13. 51395865	HOSE-FJ 1/4 x 18.00 OAL	6REF
3. 77044996	HARNESS - RAD RMT JUMPER	1	14. 51396075	HOSE-FJ 3/8 x 78 OAL	1REF
5. 72053758	ELBOW #4 MSTR/#4 MJIC 90°	16	15. 51396076	HOSE-FM 1/4 x 14 OAL	1REF
6. 72532351	ADPTR #4 MSTR/#4 MJIC	6	16. 51393983	HOSE-FF 1/4 x 27.00 OAL	6 REF
7. 72532699	ELBOW #6 MSTR/#4 MJIC 90°	1	17. 72060016	CAP SCR 1/4-20x4HH GR5 Z	2
8. 72053760	ELBOW #6 MSTR/#6 MJIC 90°	1	19. 72601448	CAP SCR-METRIC 6-1x12 HHZ	4
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	20. 60119299	BRACKET-MTG DEUTSCH CONN.	1
10. 72533726	TEE M PIPE F PIPE	1	21. 72060004	CAP SCR 1/4-20x1.00 HH GR5 Z	2
11. 72053499	ADPTR - MPT/MJIC .25-4	1	22. 72062000	NUT 1/4-20 HEX Z	4
			23. 70146349	VALVE ASM 4 FCTN RAD/TETH	1REF
			24. 77044997	HARNESS-RMT/TETH	1REF

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**CONTROL KIT-RADIO 6-FUNCT - 15/113  
CRANE (KIT 91716659-2)**

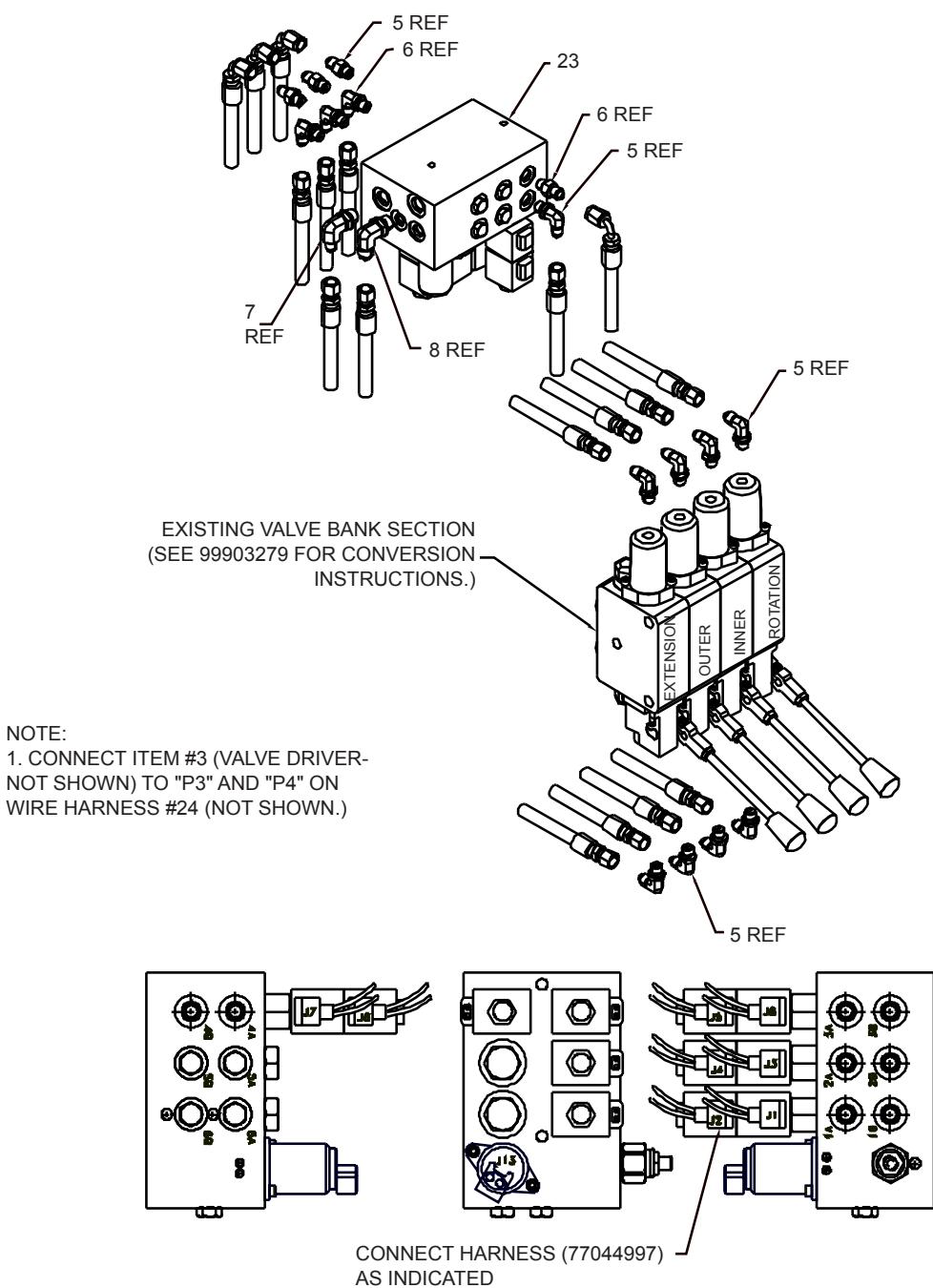
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**CONTROL KIT-TETH 4-FUNCT - 15/113  
CRANE (KIT 91716967-1)**

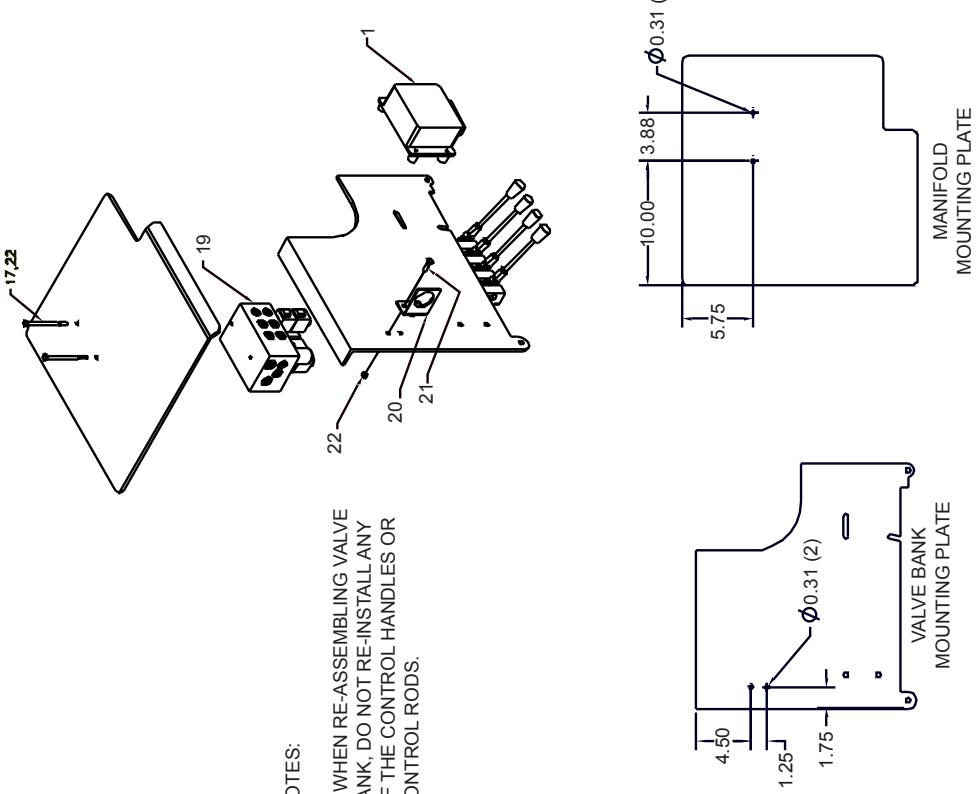
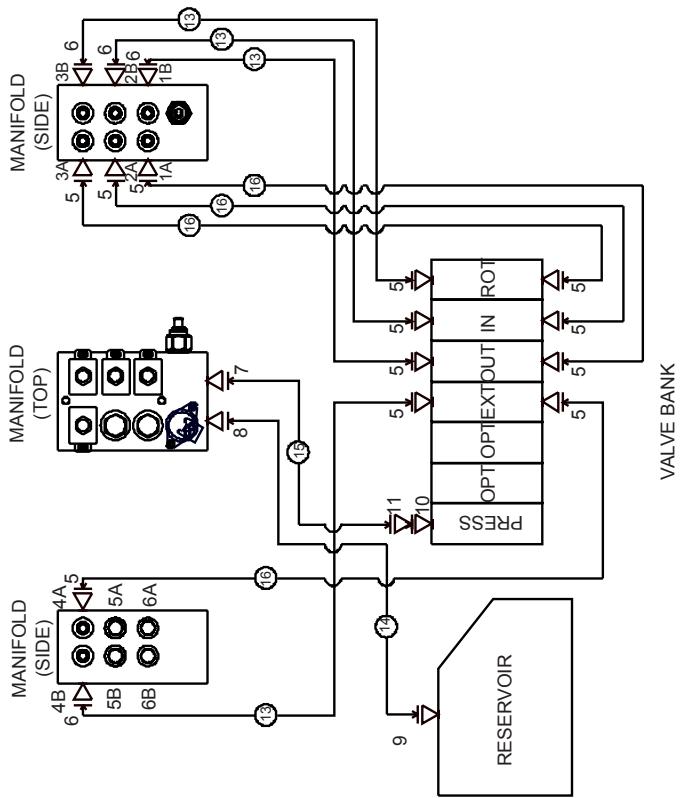
1. 51716758	HANDLE ASM-TETH REMOTE	1	12. 51716938	HOSE KIT 15/113 4 FUNC (INCLUDES 13-16)	1
2. 73733576	VALVE-RMT KIT RS210 4 FCTN (INCLUDES 23&24)	1	13. 51395865	HOSE-FJ 1/4 x 18.00 OAL	4REF
3. 77044826	VALVE DRIVER HCT 99910038	1	14. 51396075	HOSE-FJ 3/8 x 78 OAL	1REF
5. 72053758	ELBOW #4 MSTR/#4 MJIC 90°	12	15. 51396076	HOSE-FM 1/4 x 14 OAL	1REF
6. 72532351	ADPTR #4 MSTR/#4 MJIC	4	16. 51393983	HOSE-FF 1/4 x 27.00 OAL	4 REF
7. 72532699	ELBOW #6 MSTR/#4 MJIC 90°	1	17. 72060016	CAP SCR 1/4-20x4HH GR5 Z	2
8. 72053760	ELBOW #6 MSTR/#6 MJIC 90°	1	20. 60119299	BRACKET-MTG DEUTSCH CONN.	1
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	21. 72060004	CAP SCR 1/4-20x1 HH GR5 Z	2
10. 72533726	TEE M PIPE F PIPE	1	22. 72062000	NUT 1/4-20 HEX Z	4
11. 72053499	ADPTR - MPT/MJIC .25-4	1	23. 70146349	VALVE ASM 4 FCTN RAD/TETH 1REF	
			24. 77044997	HARNESS-RMT/TETH	1REF

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**CONTROL KIT-TETH 4-FUNCT - 15/113  
CRANE (KIT 91716967-2)**

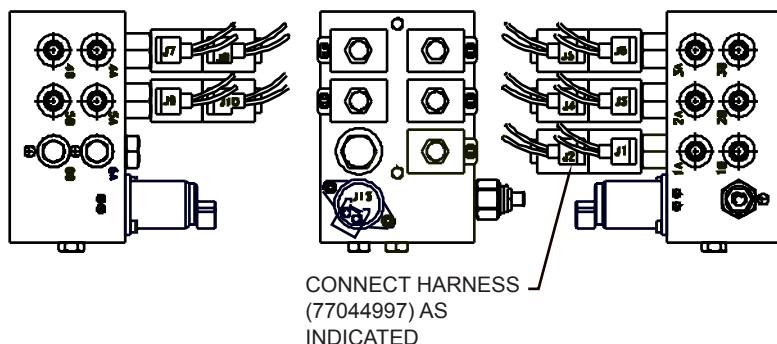
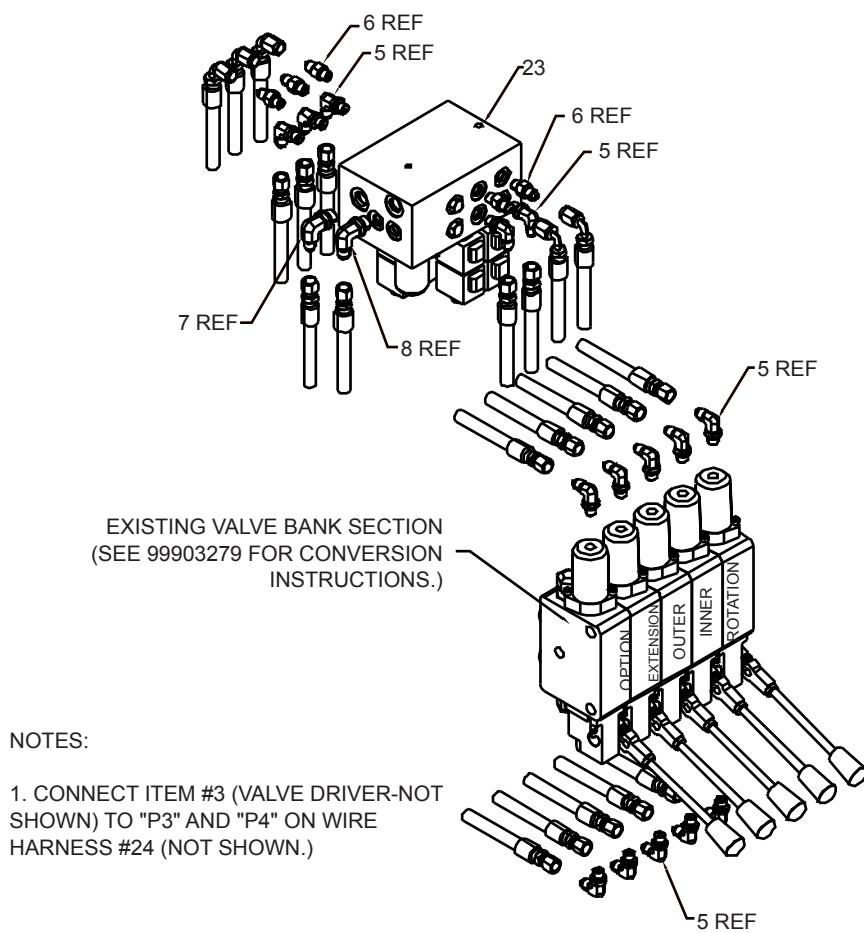
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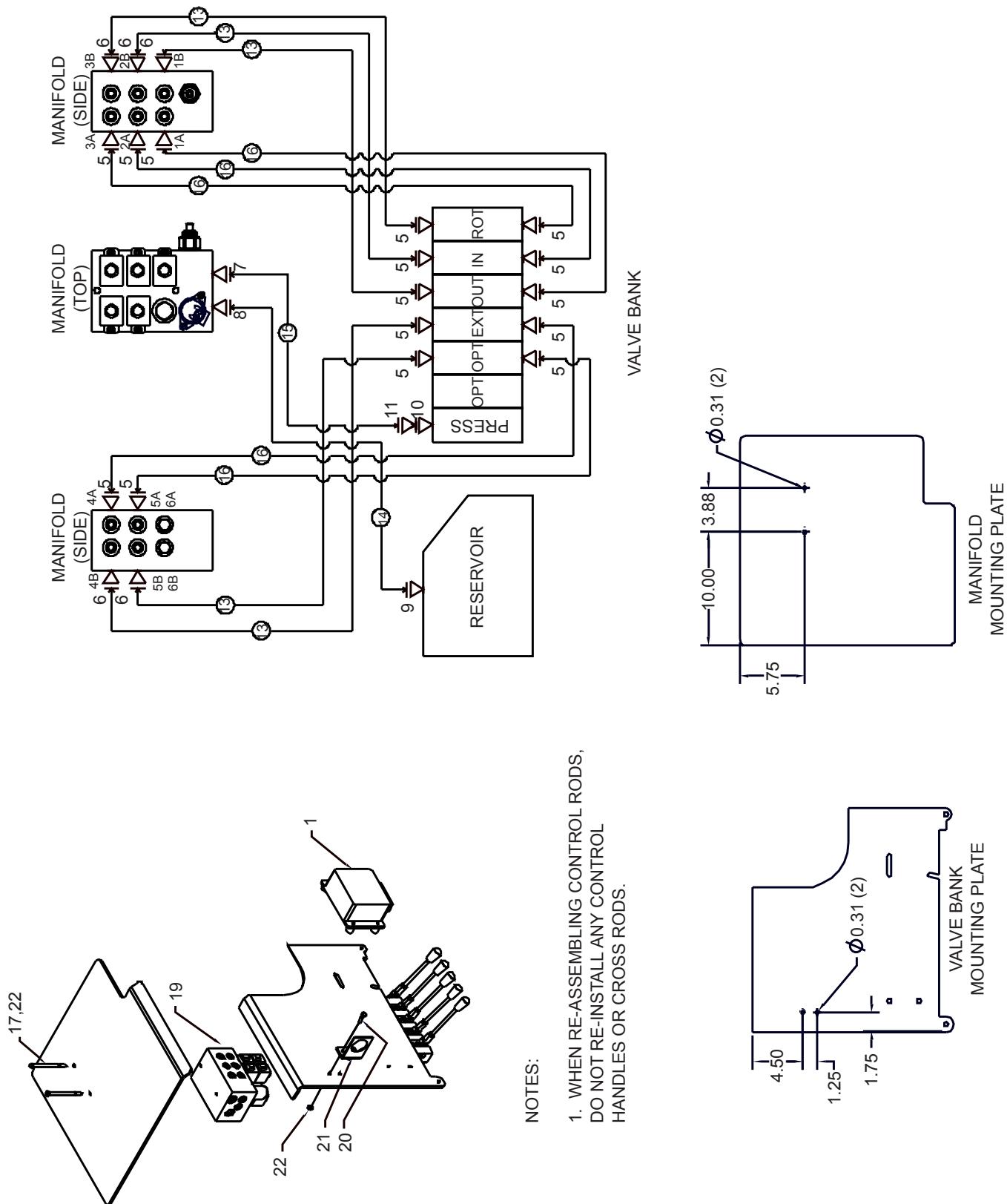
**CONTROL KIT-TETH 5-FUNCT - 15/113  
CRANE (KIT 91716968-1)**

1. 51716758	HANDLE ASM-TETHERED RMT	1	12. 51716981	HOSE KIT 15/113 5 FUNC (INCLUDES 13-16)	1
2. 73733577	VALVE-RMT KIT RS210 5 FCTN (INCLUDES 23&24)	1	13. 51395865	HOSE-FJ 1/4 x 18.00 OAL	5REF
3. 77044826	VALVE DRIVER HCT 99910038	1	14. 51396075	HOSE-FJ 3/8 x 78 OAL	1REF
5. 72053758	ELBOW #4 MSTR/#4 MJIC 90°	15	15. 51396076	HOSE-FM 1/4 x 14 OAL	1REF
6. 72532351	ADPTR #4 MSTR/#4 MJIC	5	16. 51393983	HOSE-FF 1/4 x 27.00 OAL	5 REF
7. 72532699	ELBOW #6 MSTR/#4 MJIC 90°	1	17. 72060016	CAP SCR 1/4-20x4 HH GR5 Z	2
8. 72053760	ELBOW #6 MSTR/#6 MJIC 90°	1	20. 60119299	BRACKET-MTG DEUTSCH CONN.	1
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	21. 72060004	CAP SCR 1/4-20x1 HH GR5 Z	2
10. 72533726	TEE M PIPE F PIPE	1	22. 72062000	NUT 1/4-20 HEX Z	4
11. 72053499	ADPTR - MPT/MJIC .25-4	1	23. 70146349	VALVE ASM 4 FCTN RAD/TECH	1REF
			24. 77044997	HARNESS-RMT/TETH	1REF

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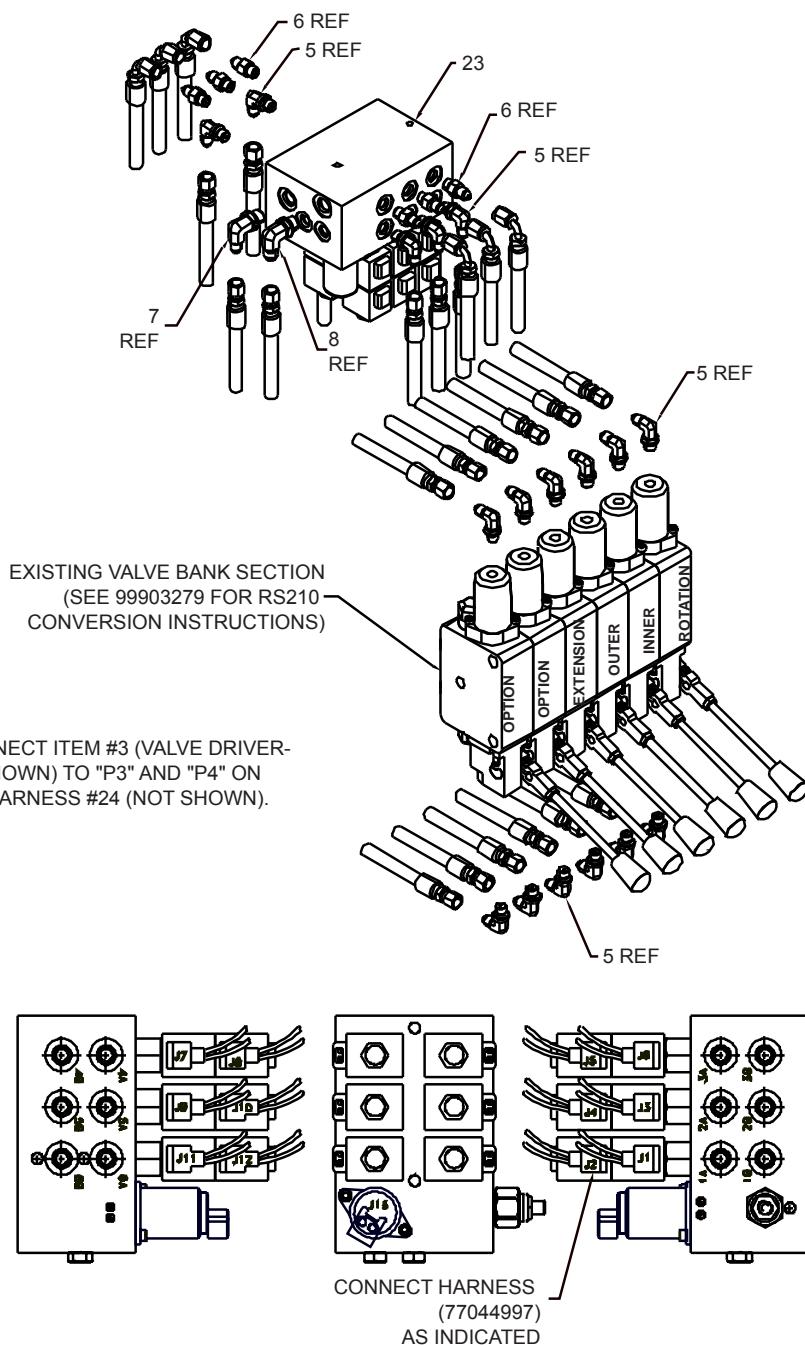
**CONTROL KIT-TETH 5-FUNCT - 15/113**  
**CRANE (KIT 91816968-2)**



**CONTROL KIT-TETH 6-FUNCT - 15/113  
CRANE (KIT 91716969-1)**

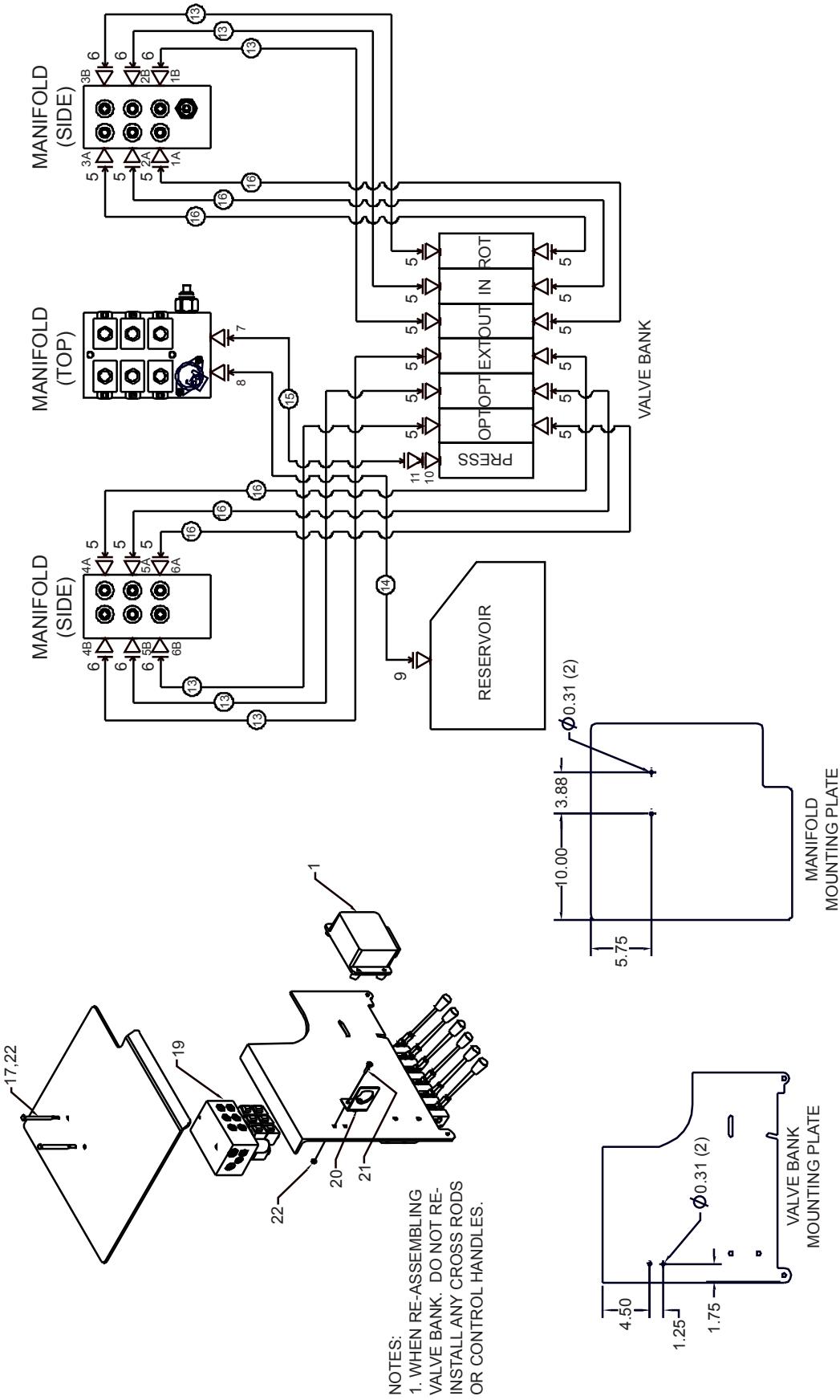
1. 51716758	HANDLE ASM-TETH RMT	1	12. 51716982	HOSE KIT 15/113 6 FUNC (INCLUDES 13-16)	1
2. 73733436	VALVE-RMT KIT RS210 6 FCTN (INCLUDES 23&24)	1	13. 51395865	HOSE-FJ 1/4 x 18.00 OAL	6REF
3. 77044826	VALVE DRIVER HCT 99910038	1	14. 51396075	HOSE-FJ 3/8 x 78 OAL	1REF
5. 72053758	ELBOW #4 MSTR/#4 MJIC 90°	16	15. 51396076	HOSE-FM 1/4 x 14 OAL	1REF
6. 72532351	ADPTR #4 MSTR/#4 MJIC	6	16. 51393983	HOSE-FF 1/4 x 27.00 OAL	6 REF
7. 72532699	ELBOW #6 MSTR/#4 MJIC 90°	1	17. 72060016	CAP SCR 1/4-20x4 HH GR5 Z	2
8. 72053760	ELBOW #6 MSTR/#6 MJIC 90°	1	20. 60119299	BRACKET-MTG DEUTSCH CONN.	1
9. 72533629	CONNECTOR M BSPP 8F40MX PAR29	1	21. 72060004	CAP SCR 1/4-20x1 HH GR5 Z	2
10. 72533726	TEE M PIPE F PIPE	1	22. 72062000	NUT 1/4-X0 HEX Z	4
11. 72053499	ADPTR - MPT/MJIC .25-4	1	23. 70146349	VALVE ASM 4 FCTN RAD/TECH	1REF
			24. 77044997	HARNESS-RMT/TETH	1REF

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**CONTROL KIT-TETH 6-FUNCT - 15/113  
CRANE (KIT 91716969-2)**

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