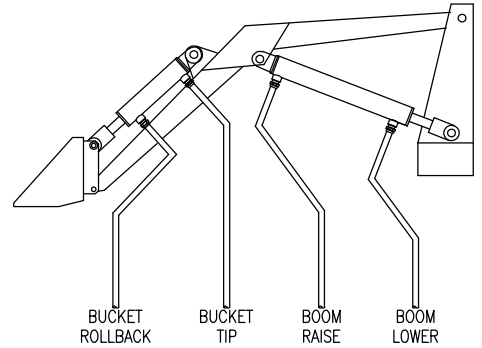
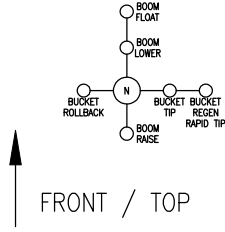


# JOYSTICK INSTALLATION OF PMC MODEL LVR AND LVS VALVES USED WITH FRONT END LOADERS

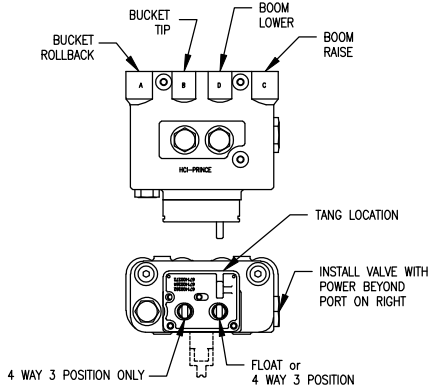
MODEL CODE	FIGURE	JOYSTICK KIT (NO LOCK)	JOYSTICK KIT (LOCKING)
<b>LVR MODELS</b>			
LVRxGRxxx3	B	660180167	660180164
LVRxGRxxx6	F	660180178	660180153
LVRxGRxxx7	B or F	660180182*	NA
LVRxRGxxx4	C	660180178	660180153
LVRxRGxxx5	E	660180167	660180164
LVRxRGxxx7	C or E	660180182*	NA
LVRxGBxxx3	B	660180167	660180164
LVRxGBxxx5	D	660180178	660180153
LVRxGBxxx6	F	660180178	660180153
LVRxGBxxx7	B,D or F	660180182*	NA
LVRxBGxxx3	A	660180178	660180153
LVRxBGxxx4	C	660180178	660180153
LVRxBGxxx5	E	660180167	660180164
LVRxBGxxx7	A,C or E	660180182*	NA
LVRxBBxxx3	B	660180167	660180164
LVRxBBxxx4	C	660180178	660180153
LVRxBBxxx5	E	660180167	660180164
LVRxBBxxx6	F	660180178	660180153
LVRxBBxxx7	B,C,E or F	660180182*	NA
<b>LVS MODELS</b>			
LVSxxxxxx1	G	660180178	660180153
LVSxxxxxx2	H	660180167	660180164
LVSxxxxxx3	G	660180178	660180153
LVSxxxxxx4	H	660180167	660180164
LVSxxxxxx7	G,H	660180182*	NA

## JOYSTICK HANDLE MOVEMENT PATTERN

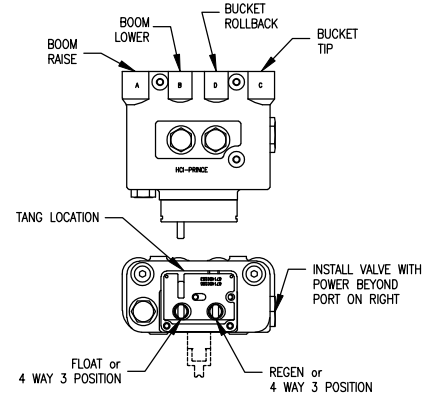


\*NOTE: HANDLE OPTION 7 KIT CONTAINS JOYSTICK COMPONENTS REQUIRED TO ASSEMBLE JOYSTICKS ON ANY OF THE VALVE MODELS SHOWN.  
 REF: KIT 660180157 ("LONG" CLEVIS) IS SIMILAR TO 660180178 ("SHORT" CLEVIS)

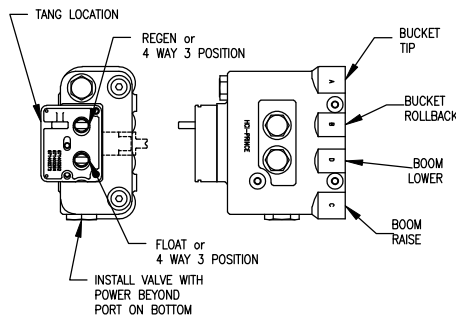
**FIGURE A. (LVR HANDLE OPTION 3)**  
 USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



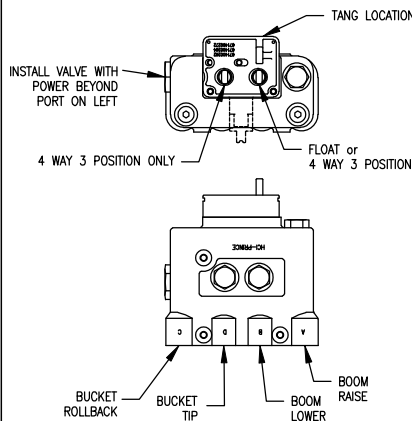
**FIGURE B. (LVR HANDLE OPTION 3)**  
 USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



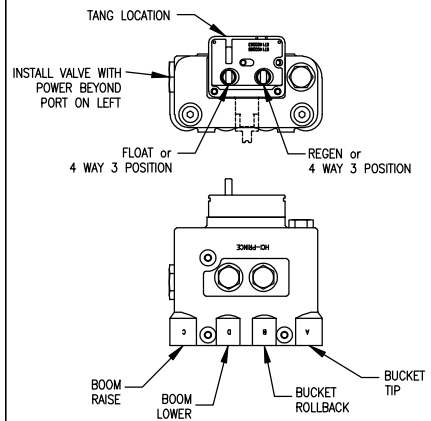
**FIGURE C. (LVR HANDLE OPTION 4)**  
 USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



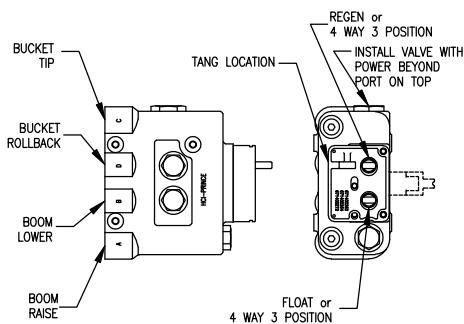
**FIGURE D. (LVR HANDLE OPTION 5)**  
 USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



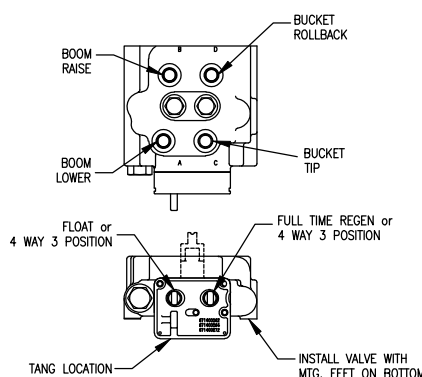
**FIGURE E. (LVR HANDLE OPTION 5)**  
 USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



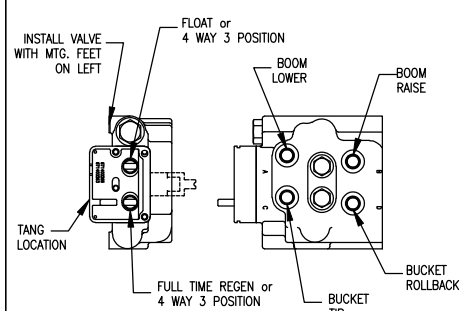
**FIGURE F. (LVR HANDLE OPTION 6)**  
 USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



**FIGURE G. (LVS HANDLE OPTION 1 OR 3)**  
 USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



**FIGURE H. (LVS HANDLE OPTION 2 OR 4)**  
 USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



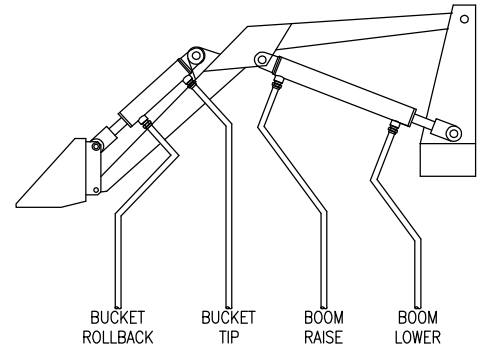
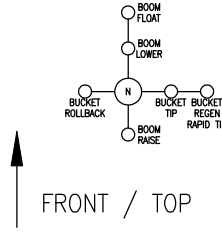
# JOYSTICK INSTALLATION OF PMC MODEL LVT VALVE USED WITH FRONT END LOADERS

MODEL CODE	FIGURE	JOYSTICK KIT (NO LOCK)	JOYSTICK KIT (LOCKING)
------------	--------	------------------------	------------------------

**LVT MODELS**

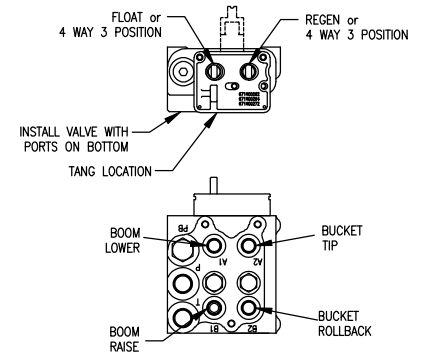
LVTxGRxxx3	A	660180178	660180153
LVTxGRxxx4	C	660180167	660180164
LVTxGRxxx7	A or C	660180182*	NA
LVTxRGxxx5	E	660180178	660180153
LVTxRGxxx6	G	660180167	660180164
LVTxRGxxx7	E or G	660180182*	NA
LVTxGBxxx3	A	660180178	660180153
LVTxGBxxx4	C	660180167	660180164
LVTxGBxxx5	F	660180167	660180164
LVTxGBxxx7	A,C,D or F	660180182*	NA
LVTxBGxxx3	B	660180167	660180164
LVTxBGxxx5	E	660180178	660180153
LVTxBGxxx6	G	660180167	660180164
LVTxBGxxx7	B,E or G	660180182*	NA
LVTxBBxxx3	A	660180178	660180153
LVTxBBxxx4	C	660180167	660180164
LVTxBBxxx5	E	660180178	660180153
LVTxBBxxx6	G	660180167	660180164
LVTxBBxxx7	A,C,E or G	660180182*	NA

## JOYSTICK HANDLE MOVEMENT PATTERN



**FIGURE A. (LVT HANDLE OPTION 3)**

USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



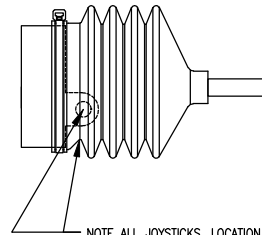
\*NOTE: HANDLE OPTION 7 KIT CONTAINS JOYSTICK COMPONENTS REQUIRED TO ASSEMBLE JOYSTICKS ON ANY OF THE VALVE MODELS SHOWN.

REF: GR & GB USE CASTING C-689 AND  
RG & BG USE CASTING C-714

KIT 660180157 ("LONG" CLEVIS) IS SIMILAR TO  
660180178 ("SHORT" CLEVIS)

**BOOT INSTALLATION:**

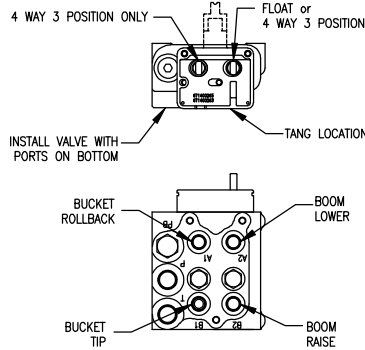
NOTE: BOOT AND CABLE TIE ARE NOT INCLUDED WITH THE JOYSTICK KITS LISTED. THEY MAY BE ORDERED IN THE BOOT & CABLE TIE KIT, PN 660180165. WHEN INSTALLING BOOT, PLEASE ASSEMBLE AS INDICATED BELOW:



NOTE ALL JOYSTICKS, LOCATION OF 'N' CONVOLUTE OF BOOT IS ON THE SIDE WITH FIXED MOUNTING TANG

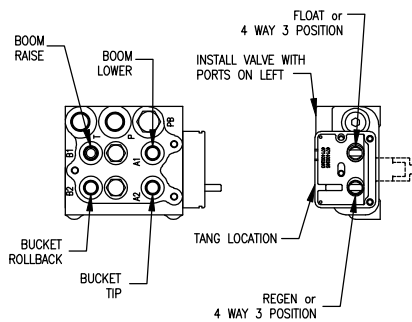
**FIGURE B. (LVT HANDLE OPTION 3)**

USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



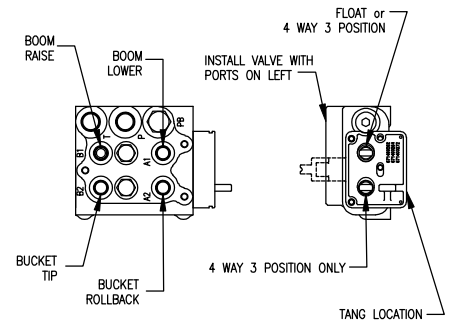
**FIGURE C. (LVT HANDLE OPTION 4)**

USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



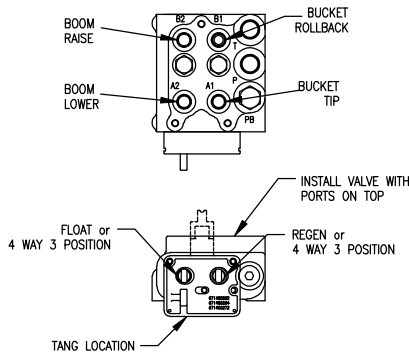
**FIGURE D. (LVT ALTERNATE HANDLE OPTION 4)**

USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



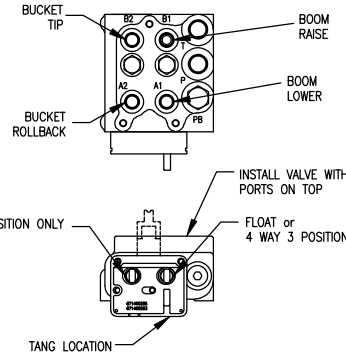
**FIGURE E. (LVT HANDLE OPTION 5)**

USE LEFT HAND CLEVIS, PN 671400272 (NO LOCK), OR 671400262 (LOCKING)



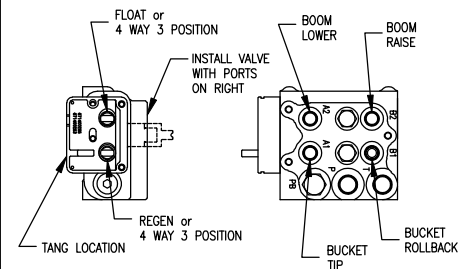
**FIGURE F. (LVT HANDLE OPTION 5)**

USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



**FIGURE G. (LVT HANDLE OPTION 6)**

USE RIGHT HAND CLEVIS, PN 671400265 (NO LOCK) OR 671400263 (LOCKING)



SYM.	REVISION
A	CHANGE JOYSTICK KIT FROM 660180178 TO 660180157; ADD 671400264 TO FIGURES; ECN 18519, 09/22/05, DMC
B	ADDED BOOT INSTALLATION NOTE AND DIAGRAM; CHANGED DRAWING DESC.; ECN 18522, 10/10/05, DMC
C	ADD FIGURE NUMBERS TO TABLES FOR MODELS WITH HANDLE OPTION 7; ROW IN TABLE WAS LVYxGxxx4, FIGURE D, 660180157, 660180153; ECN 18622, 11/14/05, DMC
D	REPLACED 660180157 WITH 660180178 IN ALL PLACES APPEARING IN PARTS LISTS; DELETE REFERENCE TO PN 671400264 FROM FIG'S A THRU H; ECN-20100, 9/12/07, WP

**JOYSTICK INSTALLATION OF PMC MODEL LVR AND LVS VALVES USED WITH FRONT END LOADERS**

PRINCE MANUFACTURING CORPORATION  
412 North Derry Lane, P.O. Box 7000  
North Derry, NH 03257-0000  
www.princevalve.com

MODEL CODE	JOYSTICK KIT FIGURE (NO LOCK)	JOYSTICK KIT FIGURE (LOCKING)
LVRxGxxx3	B	660180187
LVRxGxxx4	F	660180178
LVRxGxxx5	B = F	660180182*
LVRxGxxx6	C	660180178
LVRxGxxx7	C = E	660180187
LVRxGxxx8	B	660180187
LVRxGxxx9	D	660180178
LVRxGxxx0	F	660180178
LVRxGxxx1	B,D = F	660180182*
LVRxGxxx2	A	660180178
LVRxGxxx3	C	660180178
LVRxGxxx4	E	660180187
LVRxGxxx5	A,C = E	660180182*
LVRxGxxx6	B	660180187
LVRxGxxx7	C	660180178
LVRxGxxx8	E	660180187
LVRxGxxx9	F	660180178
LVRxGxxx0	B,C,E = F	660180153
LVSxxxx1	G	660180178
LVSxxxx2	H	660180187
LVSxxxx3	G	660180178
LVSxxxx4	H	660180187
LVSxxxx5	G,H	660180182*

**JOYSTICK HANDLE MOVEMENT PATTERN**

**FIGURE A (LVR HANDLE OPTION 3)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE B (LVR HANDLE OPTION 3)**  
USE RIGHT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE C (LVR HANDLE OPTION 4)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE D (LVR HANDLE OPTION 5)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE E (LVR HANDLE OPTION 3)**  
USE RIGHT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE F (LVR HANDLE OPTION 6)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE G (LVR HANDLE OPTION 1 OR 3)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE H (LVS HANDLE OPTION 2 OR 4)**  
USE RIGHT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

\*NOTE: HANDLE OPTION 7 KIT CONTAINS JOYSTICK COMPONENTS REQUIRED TO ASSEMBLE JOYSTICKS ON ANY OF THE VALVE MODELS SHOWN.  
REF: KIT 660180157 ("LONG" CLEVIS) IS SIMILAR TO 660180178 ("SHORT" CLEVIS)

REVISION D 9-12-07

PAGE 1 OF 2

672100032

**JOYSTICK INSTALLATION OF PMC MODEL LVT VALVE USED WITH FRONT END LOADERS**

PRINCE MANUFACTURING CORPORATION  
412 North Derry Lane, P.O. Box 7000  
North Derry, NH 03257-0000  
www.princevalve.com

MODEL CODE	JOYSTICK KIT FIGURE (NO LOCK)	JOYSTICK KIT FIGURE (LOCKING)
LVTxGxxx3	A	660180178
LVTxGxxx4	C	660180187
LVTxGxxx5	A = C	660180182*
LVTxGxxx6	E	660180178
LVTxGxxx7	E = G	660180187
LVTxGxxx8	A	660180178
LVTxGxxx9	C	660180187
LVTxGxxx0	A,C,D = F	660180182*
LVTxGxxx1	B	660180187
LVTxGxxx2	B	660180187
LVTxGxxx3	B	660180187
LVTxGxxx4	C	660180187
LVTxGxxx5	E	660180178
LVTxGxxx6	C	660180187
LVTxGxxx7	B,E = C	660180182*
LVTxGxxx8	A	660180178
LVTxGxxx9	C	660180187
LVTxGxxx0	C	660180187
LVTxGxxx1	D	660180187
LVTxGxxx2	A,C,E = G	660180182*

**JOYSTICK HANDLE MOVEMENT PATTERN**

**FIGURE A (LVT HANDLE OPTION 3)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE B (LVT HANDLE OPTION 4)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE C (LVT HANDLE OPTION 4)**  
USE RIGHT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE D (LVT ALTERNATE HANDLE OPTION 4)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE E (LVT HANDLE OPTION 5)**  
USE LEFT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE F (LVT HANDLE OPTION 5)**  
USE RIGHT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**FIGURE G (LVT HANDLE OPTION 6)**  
USE RIGHT HAND CLEVIS, IN EXTENDED (NO LOCK), OR EXTENDED (LOCKING)

**BOOT INSTALLATION:**  
NOTE: BOOT AND CLEVIS ARE NOT SUPPLIED WITH THE JOYSTICK KIT. THE BOOT IS ORDERED IN THE BOOT & CLEVIS KIT OR, IN ALTERNATE, WITH THE BOOT, PART, PLEASE REFER TO A RELEVANT BULLETIN.

\*NOTE: HANDLE OPTION 7 KIT CONTAINS JOYSTICK COMPONENTS REQUIRED TO ASSEMBLE JOYSTICKS ON ANY OF THE VALVE MODELS SHOWN.  
REF: CR & OR USE CASTING C-689 AND RG & BG USE CASTING C-714  
KIT 660180157 ("LONG" CLEVIS) IS SIMILAR TO 660180178 ("SHORT" CLEVIS)

REVISION D 9-12-07

PAGE 2 OF 2

672100032

DRAWN BY: DMC DATE: 8/19/05  
CHECKED BY: MO DATE: 8/31/05  
APPROVED BY: MO DATE: 8/31/05

PRINCE MANUFACTURING CORPORATION  
412 North Derry Lane, P.O. Box 7000  
North Derry, NH 03257-0000  
www.princevalve.com

**LVT HANDLE OPTION INSTRUCTIONS**

DEBURR & BREAK ALL EDGES  
DO NOT SCALE DRAWINGS  
DIMENSIONS ARE IN INCHES OR MILLIMETERS  
UNLESS OTHERWISE SPECIFIED

SIZE C NEXT ASSY B 672100032  
SCALE: FULL MATERIAL: NA NA SH1: 1 OF 1