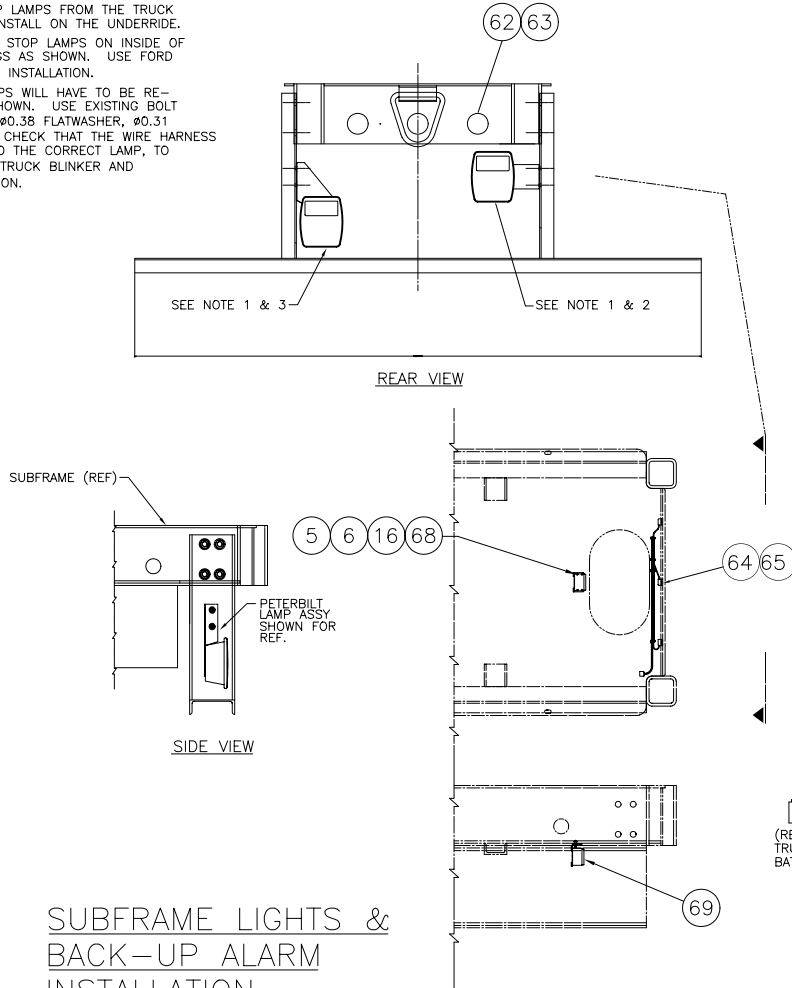
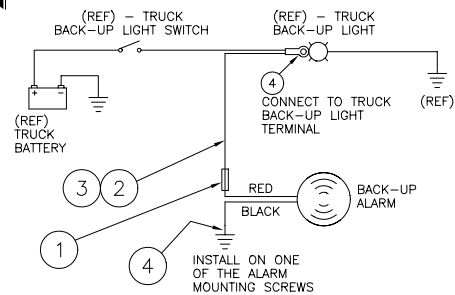


**NOTES:**

1. RELOCATE STOP LAMPS FROM THE TRUCK CHASSIS AND INSTALL ON THE UNDERRIDE.
2. POSITION FORD STOP LAMPS ON INSIDE OF UNDERRIDE LEGS AS SHOWN. USE FORD HARDWARE FOR INSTALLATION.
3. PETERBILT LAMPS WILL HAVE TO BE RE-LOCATED AS SHOWN. USE EXISTING BOLT PATTERN WITH #0.38 FLATWASHER, #0.31 BOLT & NUT. CHECK THAT THE WIRE HARNESS IS ATTACHED TO THE CORRECT LAMP, TO TEST ACTIVATE TRUCK BLINKER AND VERIFY OPERATION.



**SUBFRAME LIGHTS & BACK-UP ALARM INSTALLATION**



| BILL OF MATERIAL |             |     |                  |             |
|------------------|-------------|-----|------------------|-------------|
| ITEM NO.         | PART NUMBER | QTY | DESCRIPTION      | UNIT WEIGHT |
| 70               | 4100033     | 2   | SLEEVE 30" LG    | -           |
| 71               | SALES ORDER | 1   | BOOM ASSY        | 4050        |
| 72               | SALES ORDER | 1   | JIB & STINGER    | 800         |
| 73               | 4000152-001 | 1   | HYD FLUID DECAL  | -           |
| 74               | 2221181     | 2   | ADAPTER          | -           |
| 75               | 2221303     | 2   | ADAPTER          | -           |
| 76               | 2221295     | 1   | ADAPTER 90       | -           |
| 77               | 2221203     | 1   | ADAPTER REDUCER  | -           |
| 78               | 2221163     | 2   | ADAPTER 90       | -           |
| 79               | 2221301     | 1   | ADAPTER REDUCER  | -           |
| 80               | 2221292     | 1   | ADAPTER          | -           |
| 81               | 2221294     | 1   | ADAPTER          | -           |
| 82               | 5000357.002 | 2   | MOUNTING CHANNEL | -           |

| BILL OF MATERIAL |             |     |                          |             | REVISIONS         |
|------------------|-------------|-----|--------------------------|-------------|-------------------|
| ITEM NO.         | PART NUMBER | QTY | DESCRIPTION              | UNIT WEIGHT |                   |
| 1                | 4460035     | 1   | BUTT SPLICE 16-14        | .01         | EN 302465         |
| 2                | 2820035     | 6   | CONVOLUTED LOOM          | .01         | JW 6-28-00        |
| 3                | 4921630     | 6   | WIRE MTW 16 RED          | .01         | NEW RELEASE       |
| 4                | 4460078     | 2   | RING TONGUE 16-14        | .01         | EN 00-0011 07     |
| 5                | 3271801     | 4   | HEX NUT #10NC            | .01         | EN 12-20-00       |
| 6                | 4761000     | 4   | LOCKWASHER #10           | .01         | EN 12 WAS 2220478 |
| 7                | 0641814     | 4   | BOLT 1.75"               | .01         | AND 74 THRU 81    |
| 8                | 4761800     | 8   | WASHER LOCK              | .01         | EN 01-0002-11     |
| 9                | 4751800     | 10  | WASHER FLAT              | .01         | 2-23-01           |
| 10               | 3311605     | 4   | ELASTIC NUT              | .01         | ADDED ITEM 82     |
| 11               | 2220475     | 1   | SPLIT FLANGE             | .30         | 75 WAS 2221171    |
| 12               | 2221297     | 1   | SPLIT FLANGE             | .70         |                   |
| 13               | 30093-00-40 | 1   | O-RING                   | .01         |                   |
| 14               | 30107-00-40 | 8   | SUCTION HOSE 2.5         | 11.40       |                   |
| 15               | 30108-00-40 | 2   | CLAMP 2.5                | .07         |                   |
| 16               | 3911012     | 4   | RD HD SCR #10NC          | .01         |                   |
| 17               | 2220965     | 1   | ADP 90"                  | 0.07        |                   |
| 18               | 30220-00-40 | 1   | BEADED HOSE              | 1.80        |                   |
| 19               | 2753449     | 1   | HOSE ASSY                |             |                   |
| 20               | 2753450     | 1   | HOSE ASSY                |             |                   |
| 21               | 2753451     | 1   | HOSE ASSY                |             |                   |
| 22               | 2820070     | 9   | TRIM, VINYL              |             |                   |
| 23               | 0641816     | 8   | 1/2" HEX-BOLT            | 0.10        |                   |
| 24               | 3311801     | 4   | 1/2" HEX-NUT             | 0.20        |                   |
| 25               | 2009-080000 | 8   | 1/2" WASHER-BEVEL        | 0.10        |                   |
| 26               | 3311805     | 8   | 1/2" LOCKNUT             | 0.07        |                   |
| 27               | 2220737     | 1   | 1.50 SPLIT FLG KIT       | 1.50        |                   |
| 28               | 30093-00-24 | 1   | O-RING                   | 0.01        |                   |
| 29               | 2221287     | 1   | ADP ORS/MNPT             | 0.07        |                   |
| 30               | 4000074-002 | 2   | TANK STRAP               | 3.50        |                   |
| 31               | SALES ORDER | 1   | HYDRAULIC TANK           | 99.00       |                   |
| 32               | 4900059-003 | 1   | FILTER, LINE             | 5.00        |                   |
| 33               | 4900059-500 | 1   | FILTER, ELEMENT          | 1.00        |                   |
| 34               | 4900238-001 | 1   | BREATHER                 | 0.85        |                   |
| 35               | 4240033     | 6   | CABLE TIES               | -           |                   |
| 36               | 30109-01-40 | 1   | NIPPLE, KING             | 1.80        |                   |
| 37               | 2200221     | 1   | PLUG, 1/8" NPT           | 0.01        |                   |
| 38               | 4900023-140 | 1   | BALL VALVE               | -           |                   |
| 39               | 2220862     | 1   | NIPPLE PIPE 2-1/2"       | -           |                   |
| 40               | 4000323-001 | 1   | DECAL, "CAUTION"         | -           |                   |
| 41               | 2753452     | 2   | HOSE ASSY                | -           |                   |
| 42               | 3312005     | 2   | LOCKNUT                  | -           |                   |
| 43               | 0257736     | 1   | PLATFROM                 | -           |                   |
| 44               | 3311501     | 4   | NUT HEX 5/16             | -           |                   |
| 45               | 4761500     | 4   | WASHER LOCK              | -           |                   |
| 46               | 0641510     | 4   | BOLT 1.25                | -           |                   |
| 47               | 4751500     | 4   | WASHER FLAT              | -           |                   |
| 48               | 0641616     | 4   | BOLT 2"                  | -           |                   |
| 49               | 3311601     | 8   | NUT HEX 3/8              | -           |                   |
| 50               | 4761600     | 8   | WASHER LOCK              | -           |                   |
| 51               | 0641608     | 4   | BOLT 1/8"                | -           |                   |
| 52               | 2221184     | 1   | ADAPTER, STRAIGHT        | .10         |                   |
| 53               | 4892000     | 4   | FLATWASHER #0.625        | 0.03        |                   |
| 54               | 0642010     | 1   | BOLT #0.62NC X 1.25      | 0.17        |                   |
| 55               | 2753443     | 1   | HOSE ASSY.               | -           |                   |
| 56               | 2221167     | 1   | ADAPTER                  | -           |                   |
| 57               | SALES ORDER | 1   | HYD CYLINDER             | -           |                   |
| 58               | 2221298     | 1   | ADAPTER                  | -           |                   |
| 59               | 30217-08-08 | 2   | ADAPTER, SWIVEL          | .70         |                   |
| 60               | 2221226     | 1   | ADP, 90 ORS-NPT          | -           |                   |
| 61               | 30289-04-04 | 1   | ADP, TEE                 | -           |                   |
| 62               | 4800095-003 | 3   | SEALED LAMP (RED)        | 0.50        |                   |
| 63               | 4800094-500 | 3   | GROMMET                  | 0.10        |                   |
| 64               | 4800689-001 | 1   | TAILLIGHT WIRING HARNESS | 1.00        |                   |
| 65               | 4800689-002 | 1   | POWER WIRING HARNE       | 0.25        |                   |
| 66               | SALES ORDER | 1   | BOOM REST                | -           |                   |
| 67               | 4845771     | 2   | ANGLE WELDMENT           | -           |                   |
| 68               | 4751000     | 4   | FLATWASHER               | -           |                   |
| 69               | 4000149-001 | 1   | WARNING HORN             | .40         |                   |

DOCUMENT CONTROL STATUS:  
ELECTRONIC FILE = CONTROLLED  
HARDCOPY = UNCONTROLLED

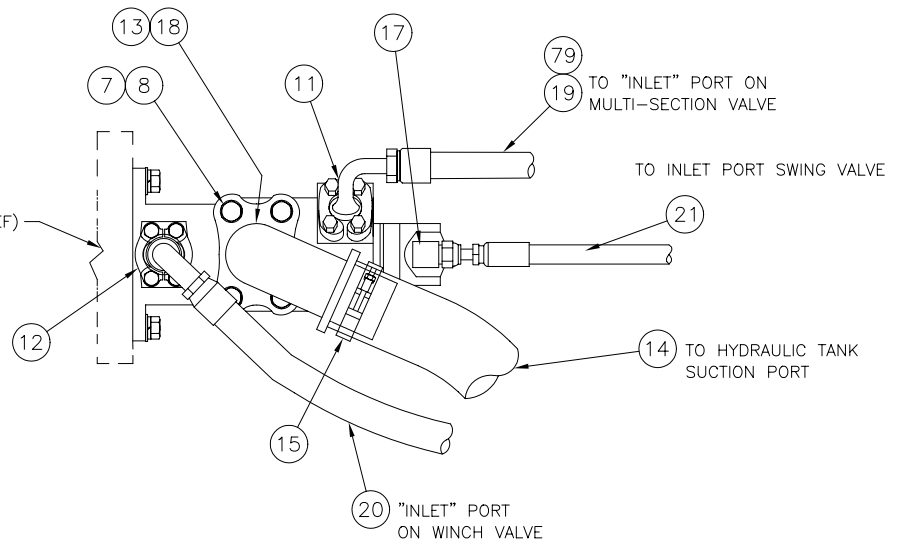
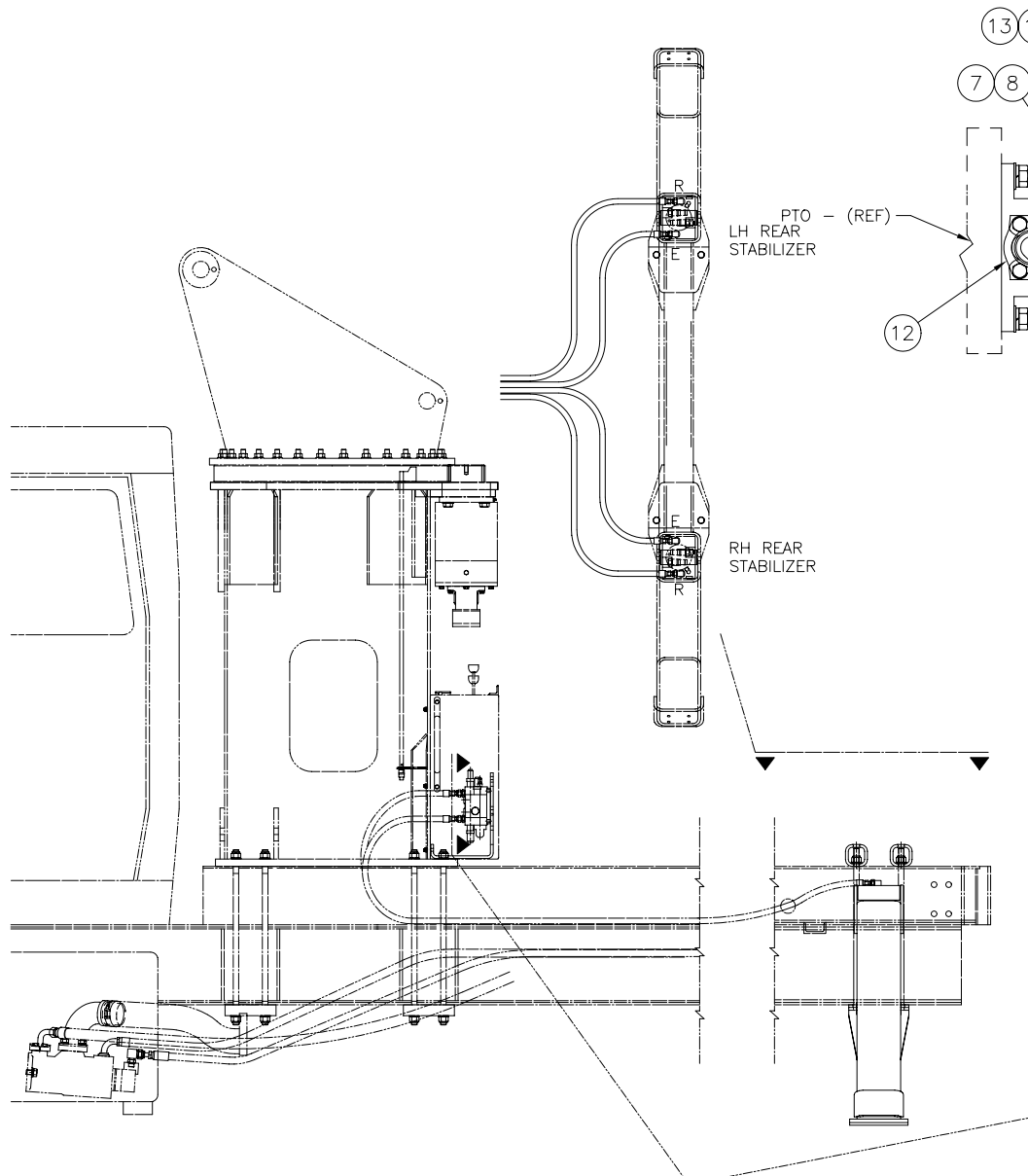
**Manitowoc Boom Trucks, Inc.**  
A Manitowoc Company

SCALE: 1/8" DRAWN: J.WOOD CHECKED: APPVD./DATE:

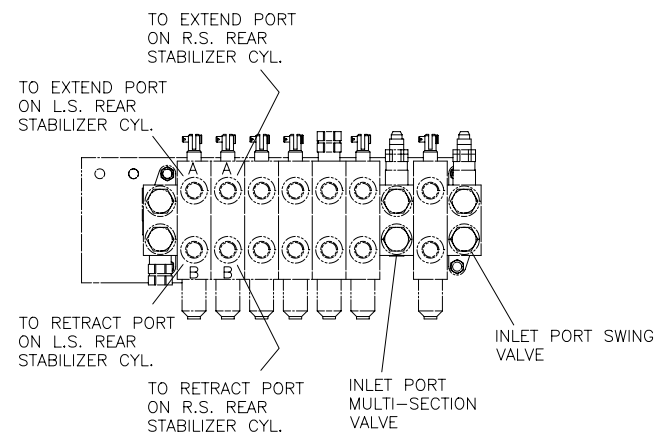
TRUCK MOUNT

TOLERANCES (UNLESS SPECIFIED): 0257732

SHEET 1 OF 8



**PUMP PLUMBING**



**STABILIZER PLUMBING**

REVISIONS

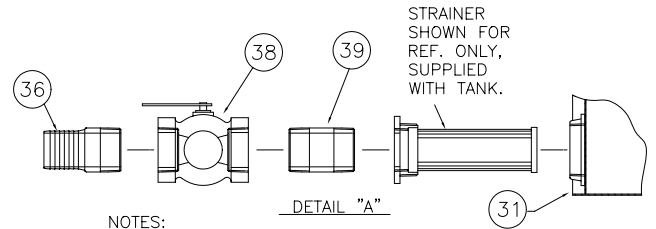
|                  |
|------------------|
| EN 302465        |
| JW 6-28-00       |
| NEW RELEASE      |
| EN 00-0011 07    |
| 12-20-00         |
| 12 WAS 2220478   |
| ADDED 55, 56, 58 |
| AND 74 THRU 81   |
| EN 01-0002-11    |
| 2-23-01          |
| ADDED ITEM 82    |

DOCUMENT CONTROL STATUS:  
ELECTRONIC FILE = CONTROLLED  
HARDCOPY = UNCONTROLLED

|                                    |                 |         |             |
|------------------------------------|-----------------|---------|-------------|
| <b>Manitowoc Boom Trucks, Inc.</b> |                 |         |             |
| SCALE<br>1/8"                      | DRAWN<br>J.WOOD | CHECKED | APP'D./DATE |
| <b>TRUCK MOUNT</b>                 |                 |         |             |
| TOLERANCES<br>(UNLESS SPECIFIED)   |                 | 0257732 |             |
| SHEET 2                            |                 | OF 8    |             |

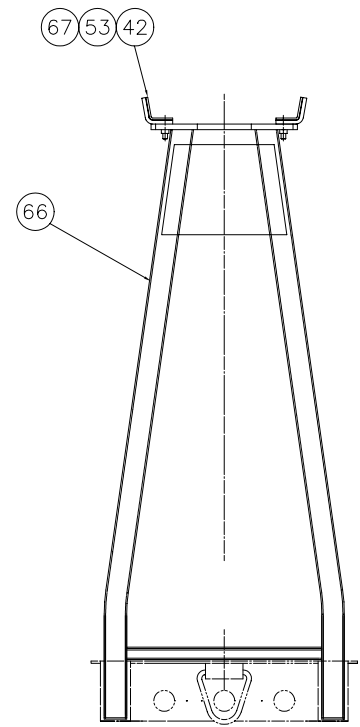
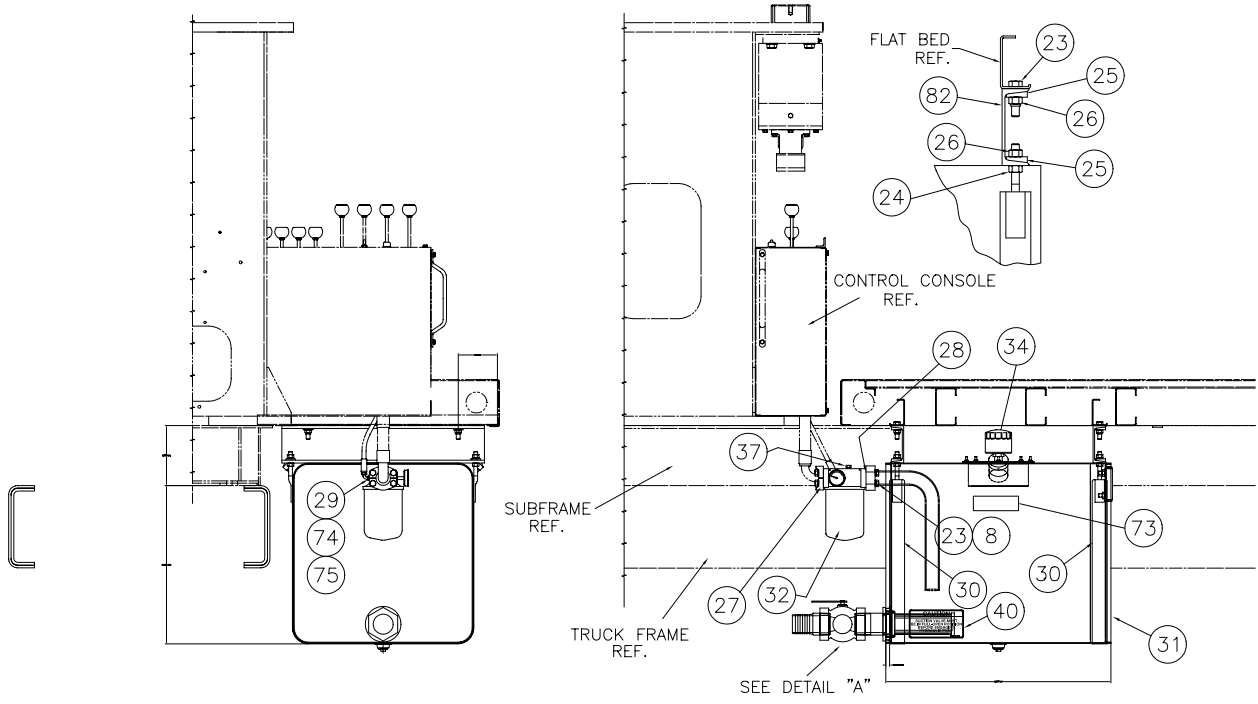
REVISIONS

- EN 302465
- JW 6-28-00
- NEW RELEASE
- Ⓜ
- EN 00-0011 07
- 12-20-00
- 12 WAS 2220478
- ADDED 55, 56, 58
- AND 74 THRU 81
- Ⓜ
- EN 01-0002-11
- 2-23-01
- ADDED ITEM 82



NOTES:

- 1 - USE MANITEX PART NUMBER 30093-00-24 REPLACEMENT O-RING FOR 30092-00-24 SPLIT FLANGE KIT.
- 2 - TANK SHOWN MOUNTED ON DRIVER SIDE.
- 3 - SHIP REPLACEMENT FILTER ELEMENT ITEM 12 WITH CRANE.



HYDRAULIC TANK  
INSTALLATION

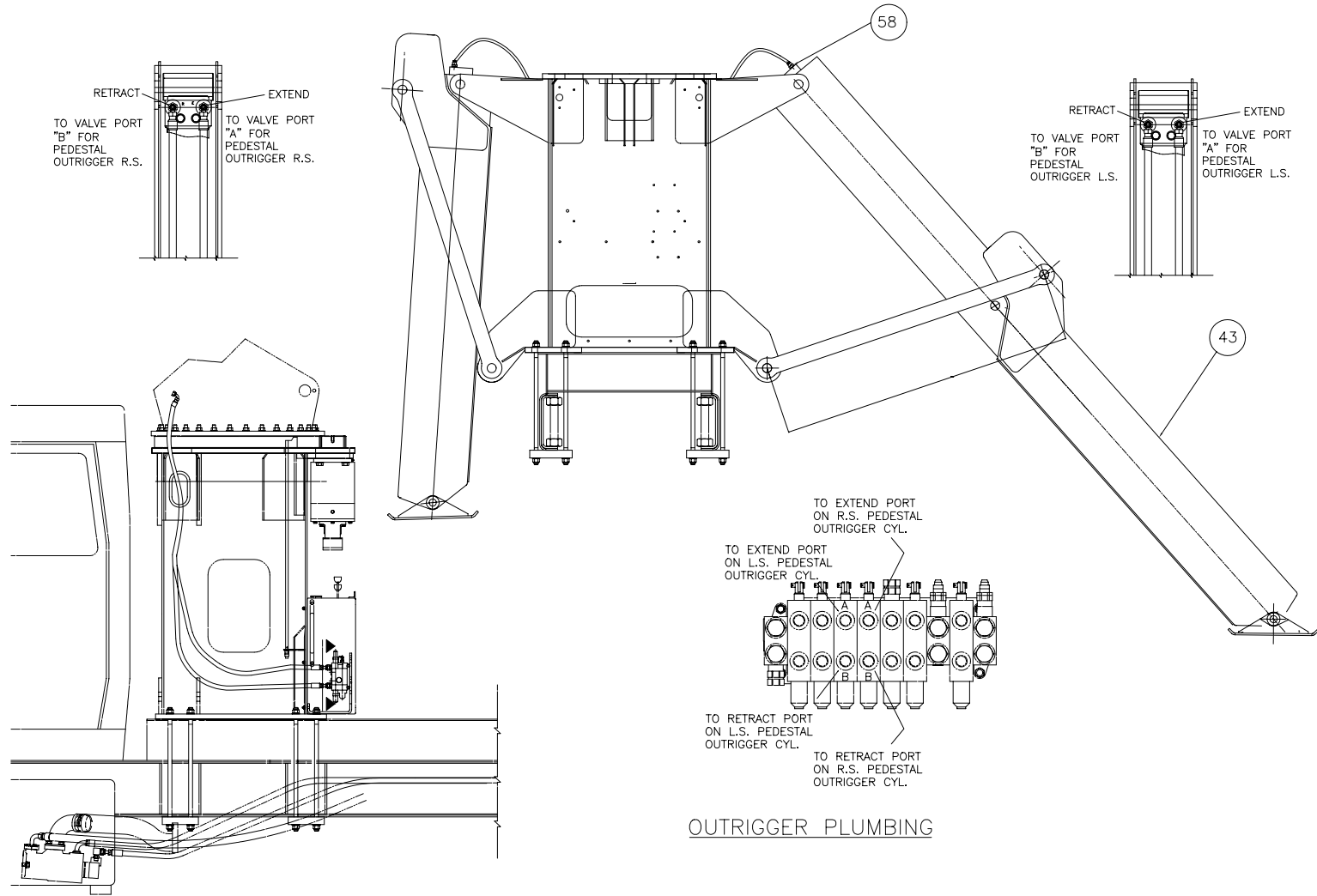
DOCUMENT CONTROL STATUS:  
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HARDCOPY = UNCONTROLLED

**Manitowoc Boom Trucks, Inc.**  
A Manitowoc Company

|              |                 |         |             |
|--------------|-----------------|---------|-------------|
| SCALE<br>1/8 | DRAWN<br>J.WOOD | CHECKED | APP'D./DATE |
|--------------|-----------------|---------|-------------|

TRUCK MOUNT

|                                  |         |
|----------------------------------|---------|
| TOLERANCES<br>(UNLESS SPECIFIED) | 0257732 |
| SHEET 3                          | OF 8    |



OUTRIGGER PLUMBING

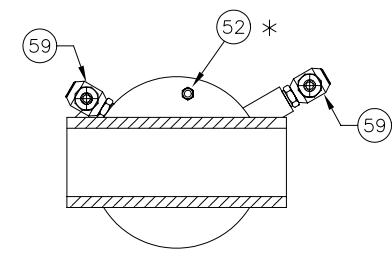
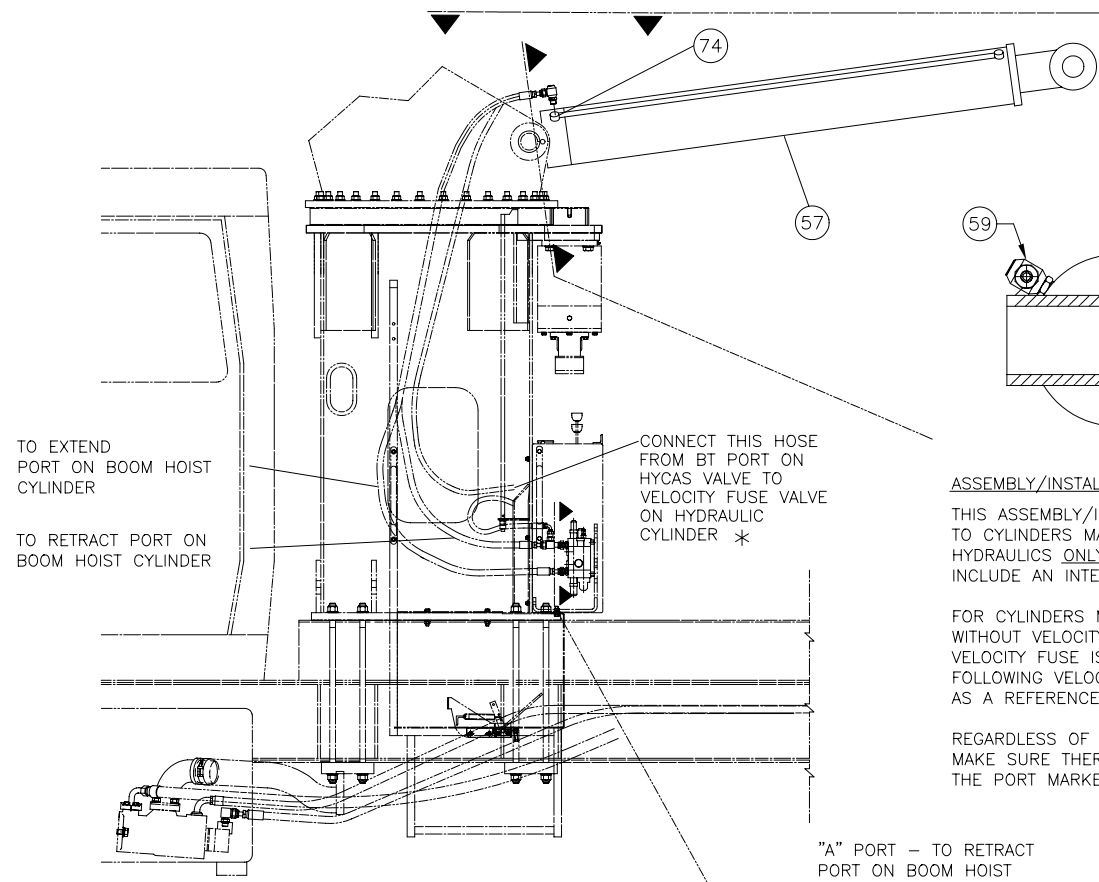
REVISIONS

EN 302465  
 JW 6-28-00  
 NEW RELEASE  
 (2)  
 EN 00-0011 07  
 12-20-00  
 12 WAS 2220478  
 ADDED 55, 56, 58  
 AND 74 THRU 81  
 (3)  
 EN 01-0002-11  
 2-23-01  
 ADDED ITEM 82

DOCUMENT CONTROL STATUS:  
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 HARDCOPY = UNCONTROLLED

|  |                 |         |             |
|--|-----------------|---------|-------------|
| <b>Manitowoc Boom Trucks, Inc.</b><br><small>A Manitowoc Company</small> |                 |         |             |
| SCALE<br>1/8   | DRAWN<br>J.WOOD | CHECKED | APP'D./DATE |
| TRUCK MOUNT  |                 |         |             |
| TOLERANCES<br>(UNLESS SPECIFIED)   |                 | 0257732 |             |
| SHEET  |                 | 4 OF 8  |             |

| REVISIONS |                  |
|-----------|------------------|
| EN        | 302465           |
| JW        | 6-28-00          |
|           | NEW RELEASE      |
| A         | EN 00-0011 07    |
|           | 12-20-00         |
|           | 12 WAS 2220478   |
|           | ADDED 55, 56, 58 |
|           | AND 74 THRU 81   |
| B         | EN 01-0002-11    |
|           | 2-23-01          |
|           | ADDED ITEM 82    |

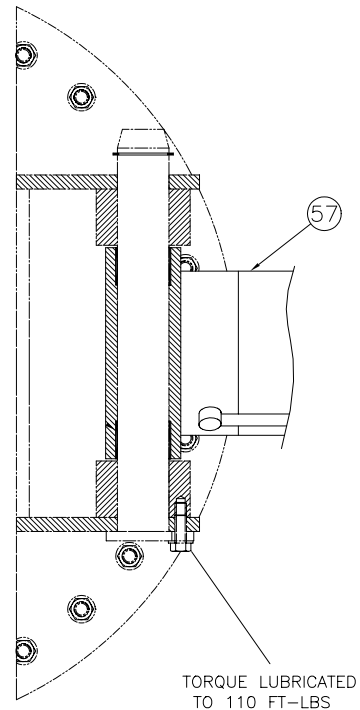


**ASSEMBLY/INSTALLATION NOTE:**

THIS ASSEMBLY/INSTALLATION APPLIES TO CYLINDERS MANUFACTURED BY TEXAS HYDRAULICS ONLY. THESE CYLINDERS INCLUDE AN INTERNAL VELOCITY FUSE.

FOR CYLINDERS MANUFACTURED BY OTHERS WITHOUT VELOCITY FUSES MAKE SURE A VELOCITY FUSE IS INSTALLED. USE THE FOLLOWING VELOCITY FUSE PART NUMBERS AS A REFERENCE: 4900155-001, -002.

REGARDLESS OF CYLINDER MANUFACTURER MAKE SURE THERE IS A VELOCITY FUSE IN THE PORT MARKED WITH AN "\*".

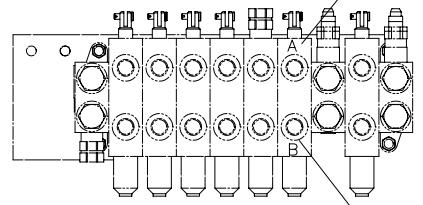


TO EXTEND  
PORT ON BOOM HOIST  
CYLINDER

TO RETRACT PORT ON  
BOOM HOIST CYLINDER

CONNECT THIS HOSE FROM BT PORT ON HYPAS VALVE TO VELOCITY FUSE VALVE ON HYDRAULIC CYLINDER \*

"A" PORT - TO RETRACT  
PORT ON BOOM HOIST  
CYLINDER



"B" PORT - TO EXTEND  
PORT ON BOOM HOIST  
CYLINDER

**BOOM HOIST CYLINDER  
INSTALLATION**

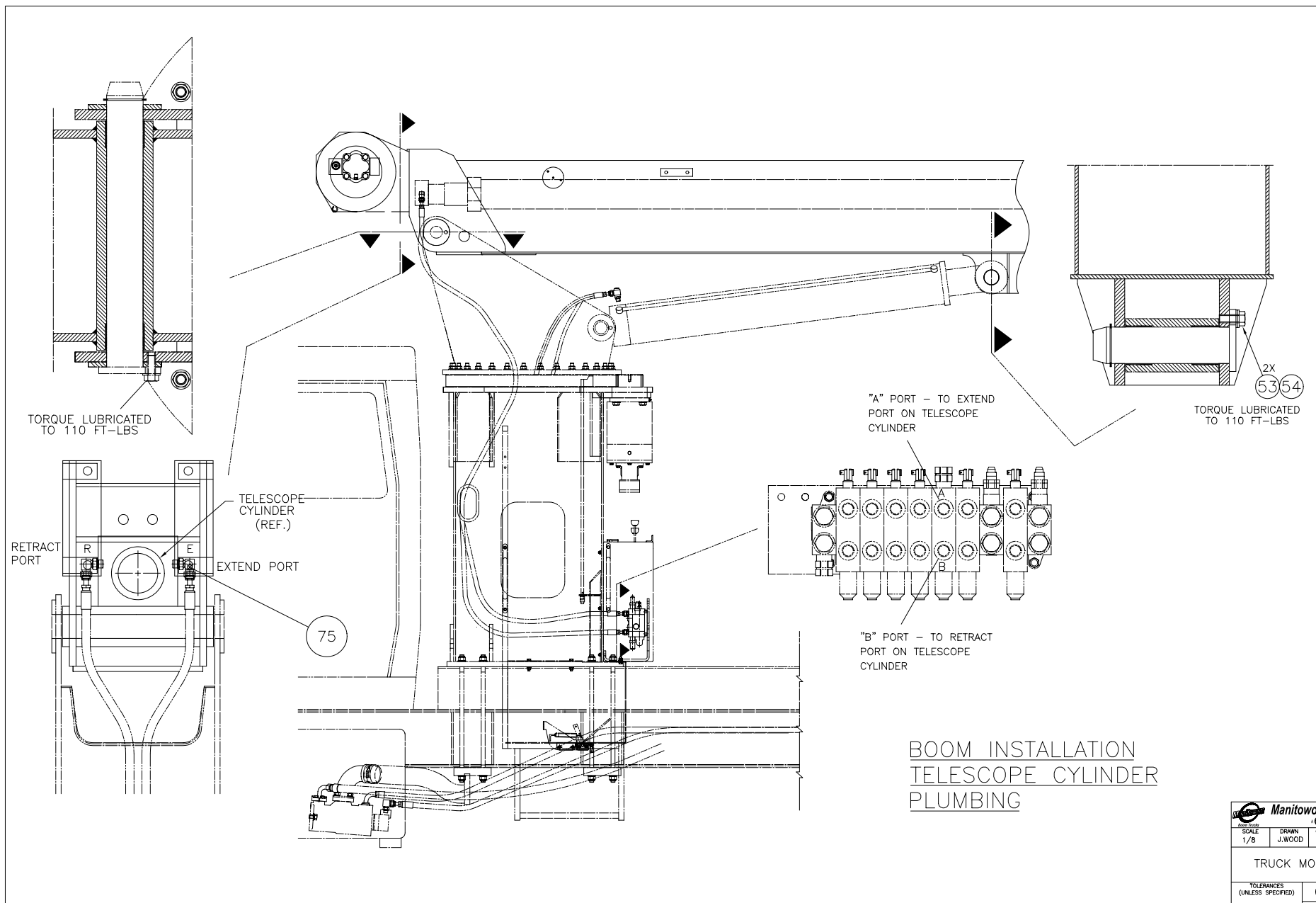
DOCUMENT CONTROL STATUS:  
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HARDCOPY = UNCONTROLLED

**Manitowoc Boom Trucks, Inc.**  
A Manitowoc Company

|              |                  |         |             |
|--------------|------------------|---------|-------------|
| SCALE<br>1/8 | DRAWN<br>J. WOOD | CHECKED | APP'D./DATE |
|--------------|------------------|---------|-------------|

TRUCK MOUNT

|                                  |         |
|----------------------------------|---------|
| TOLERANCES<br>(UNLESS SPECIFIED) | 0257732 |
| SHEET 5                          | OF 8    |



REVISIONS

|                   |
|-------------------|
| EN 302465         |
| JW 6-28-00        |
| NEW RELEASE       |
| (A) EN 00-0011 07 |
| 12-20-00          |
| 12 WAS 2220478    |
| ADDED 55, 56, 58  |
| AND 74 THRU 81    |
| (B) EN 01-0002-11 |
| 2-23-01           |
| ADDED ITEM 82     |

DOCUMENT CONTROL STATUS:  
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HARDCOPY = UNCONTROLLED

**Manitowoc Boom Trucks, Inc.**  
A Manitowoc Company

|       |        |         |             |
|-------|--------|---------|-------------|
| SCALE | DRAWN  | CHECKED | APPVD./DATE |
| 1/8   | J.WOOD |         |             |

TRUCK MOUNT

|                               |         |
|-------------------------------|---------|
| TOLERANCES (UNLESS SPECIFIED) | 0257732 |
| SHEET 6                       | OF 8    |

REVISIONS

EN 302465  
 JW 6-28-00  
 NEW RELEASE  
 [A] EN 00-0011 07  
 12-20-00  
 12 WAS 2220478  
 ADDED 55, 56, 58  
 AND 74 THRU 81  
 [B] EN 01-0002-11  
 2-23-01  
 ADDED ITEM 82

"UP" PORT "DOWN" PORT

"CASE DRAIN" PORT

(35)  
 (70)

TIE WRAP DRAIN HOSE TO OTHER HOSE AS REQUIRED

HOSE SLEEVE NOT SHOWN ON THIS VIEW

WINCH PLUMBING

TO TEE ON 1/4" RETURN LINE AT MANIFOLD

TO "DOWN" PORT OF WINCH MOTOR (SIDE OPPOSITE C'BALANCE VALVE)

TO "UP" PORT OF WINCH MOTOR (COUNTERBALANCE VALVE BLOCK)

BOOM HOIST CYLINDER - REF

SWING PUMP - REF

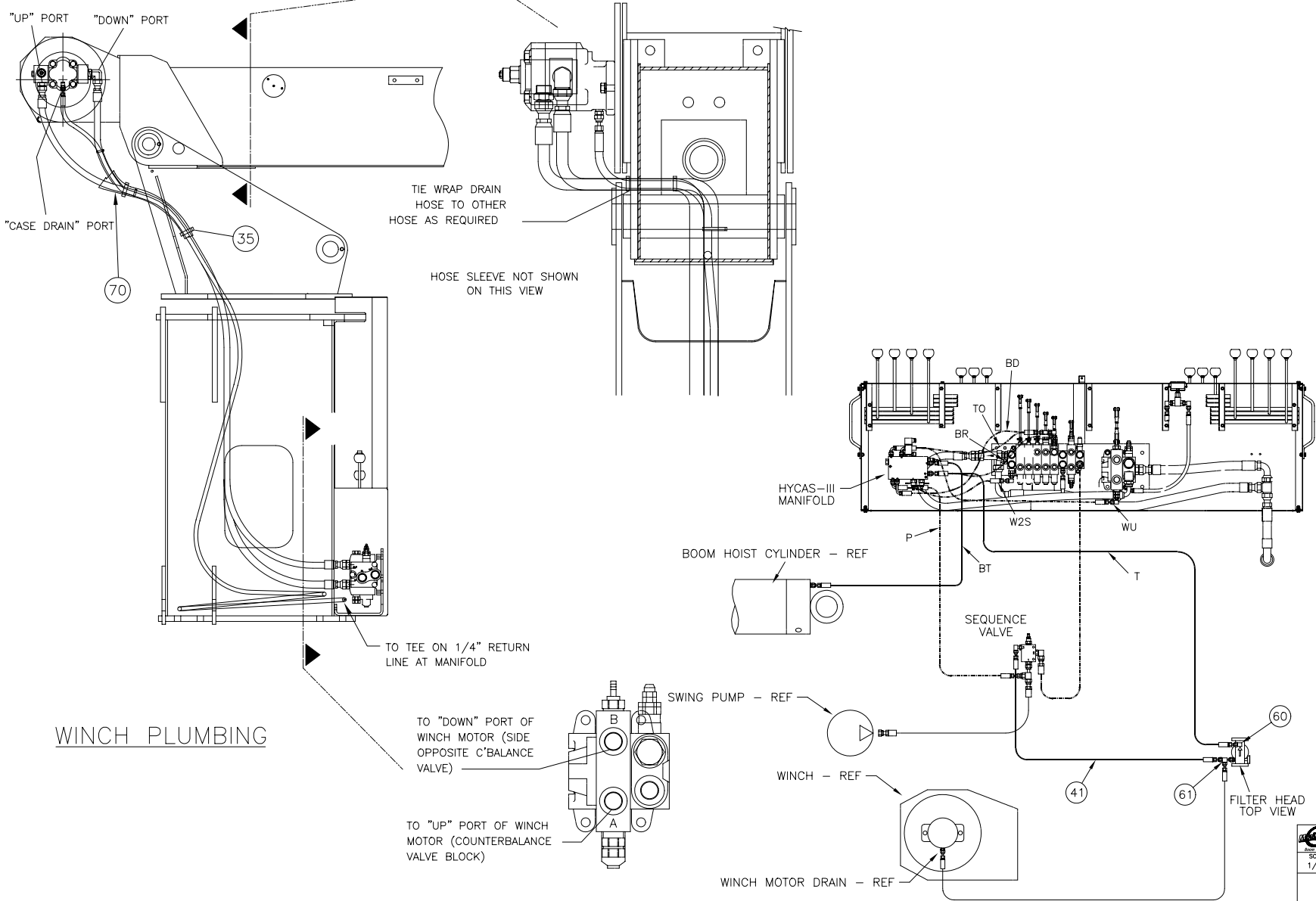
WINCH - REF

WINCH MOTOR DRAIN - REF

HYCAS-III MANIFOLD

SEQUENCE VALVE

FILTER HEAD TOP VIEW



DOCUMENT CONTROL STATUS:  
 ELECTRONIC FILE = CONTROLLED  
 HARDCOPY = UNCONTROLLED

**Manitowoc Boom Trucks, Inc.**  
 A Manitowoc Company

SCALE 1/8 DRAWN J.WOOD CHECKED APPVD./DATE

TRUCK MOUNT

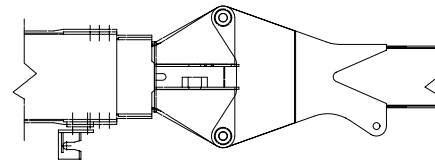
TOLERANCES (UNLESS SPECIFIED) 0257732  
 SHEET 7 OF 8

REVISIONS

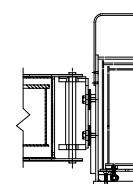
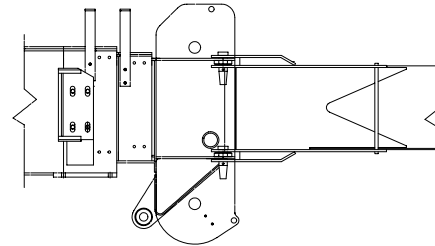
EN 302465  
 JW 6-28-00  
 NEW RELEASE  
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 EN 00-0011 07  
 12-20-00  
 12 WAS 2220478  
 ADDED 55, 56, 58  
 AND 74 THRU 81  
 B  
 EN 01-0002-11  
 2-23-01  
 ADDED ITEM 82

NOTES :

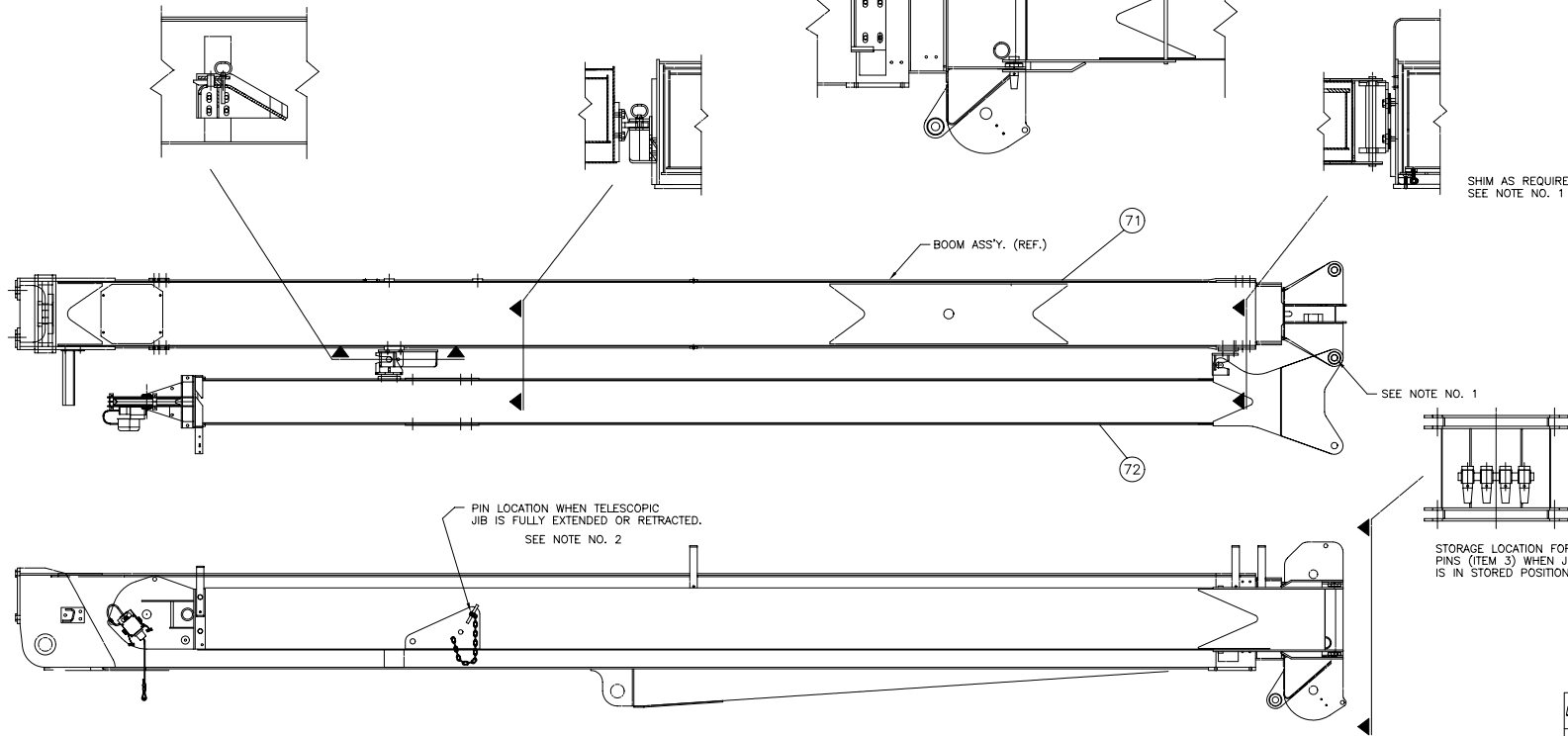
- ADJUST BRACKETS (ITEMS 4 & 5) UP AND DOWN AND INSTALL SHIMS (ITEMS 6, 7 & 8) BEHIND BRACKET (ITEM 13) SO HOLES IN JIB FOOT LINE UP WITH HOLES IN BOOM HEAD. BOOM MUST BE FULLY RETRACTED AND JIB IN STORED POSITION WHEN MAKING ADJUSTMENTS.
- FOR JIB ERECTION AND STORAGE INSTRUCTIONS SEE OWNERS MANUAL.



JIB IN ERECTED POSITION



SHIM AS REQUIRED  
 SEE NOTE NO. 1



JIB IN STORED POSITION

DOCUMENT CONTROL STATUS:  
 ELECTRONIC FILE = CONTROLLED  
 HARD COPY = UNCONTROLLED

|  |                 |         |             |
|--|-----------------|---------|-------------|
| <b>Manitowoc Boom Trucks, Inc.</b><br><small>A Manitowoc Company</small> |                 |         |             |
| SCALE<br>1/8   | DRAWN<br>J.WOOD | CHECKED | APP'D./DATE |
| TRUCK MOUNT  |                 |         |             |
| TOLERANCES<br>(UNLESS SPECIFIED)   |                 | 0257732 |             |
| SHEET 8  |                 | OF 8    |             |