



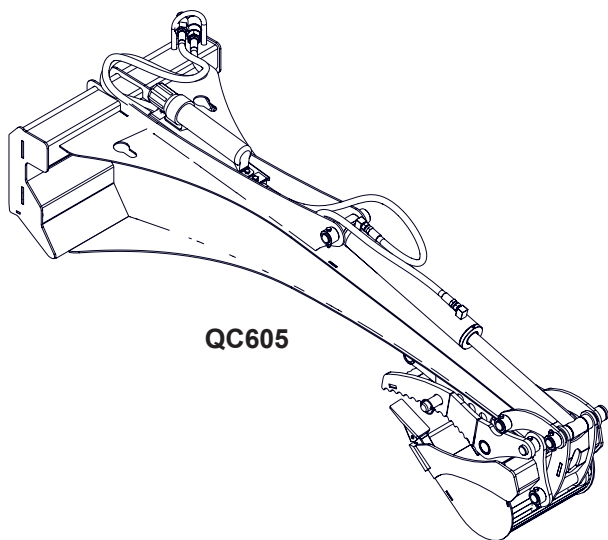
EMB Manufacturing Inc.  
4144 Boomer Line · St. Clements, Ontario · N0B 2M0 · Canada  
[www.wallensteinequipment.com](http://www.wallensteinequipment.com)

# PARTS MANUAL

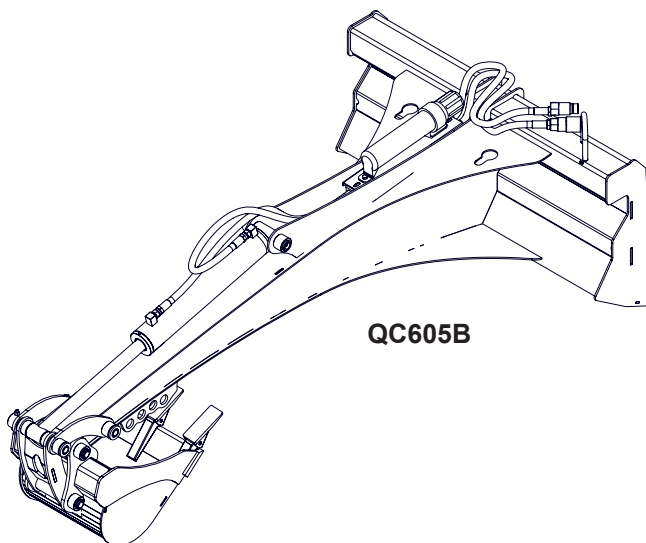
## QC605 / 605B

### Mini Skid Steer Backhoe Attachment

Serial Number 3605Q2 & up



QC605



QC605B



Refer to the operators manual for safe operation and maintenance

## Foreword

EMB Manufacturing has prepared this parts manual to assist customers in ordering quality OEM replacement parts.

Regular maintenance, and replacing old, worn or broken parts with the correct OEM parts, is essential in prolonging the life of your EMB product. Please refer to this manual to identify replacement parts.

To order parts, please contact your dealer for further information. If your dealer is no longer available please go to our website: <http://www.wallensteinequipment.com> and click on the [Dealer Locator](#) to find the nearest dealer.

All information contained in this parts manual is current as per the revision date at the bottom of the page. EMB reserves the right to change product specifications at any time without notice.

If your product specifications differ from those contained in this manual, contact EMB Manufacturing for information.

Reproduction of this parts manual of any kind is prohibited without prior written permission from EMB Manufacturing.

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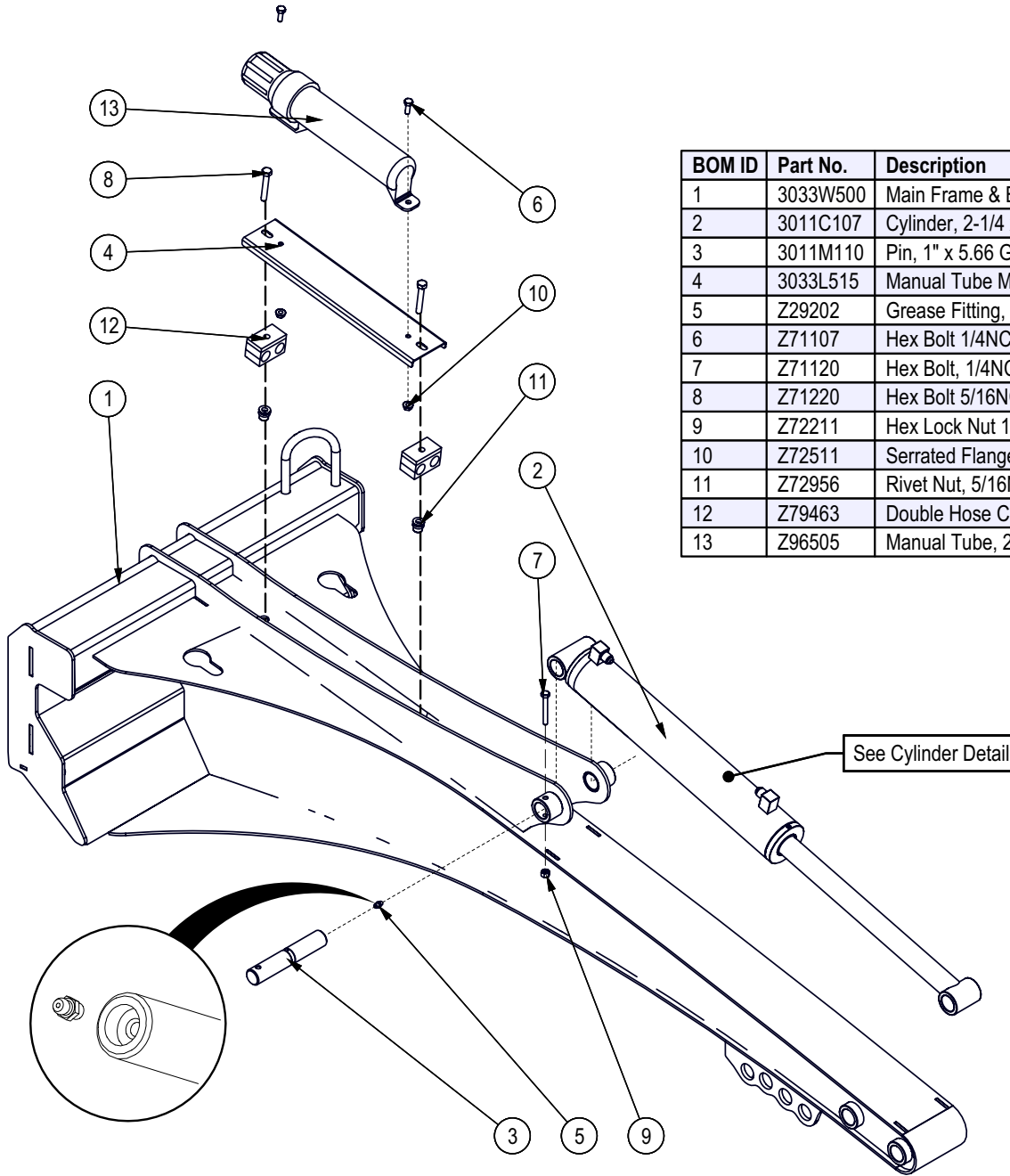
 **WARNING!**

Refer to the operators manual for safe operation and maintenance.

Maintenance should be performed by trained personnel only.

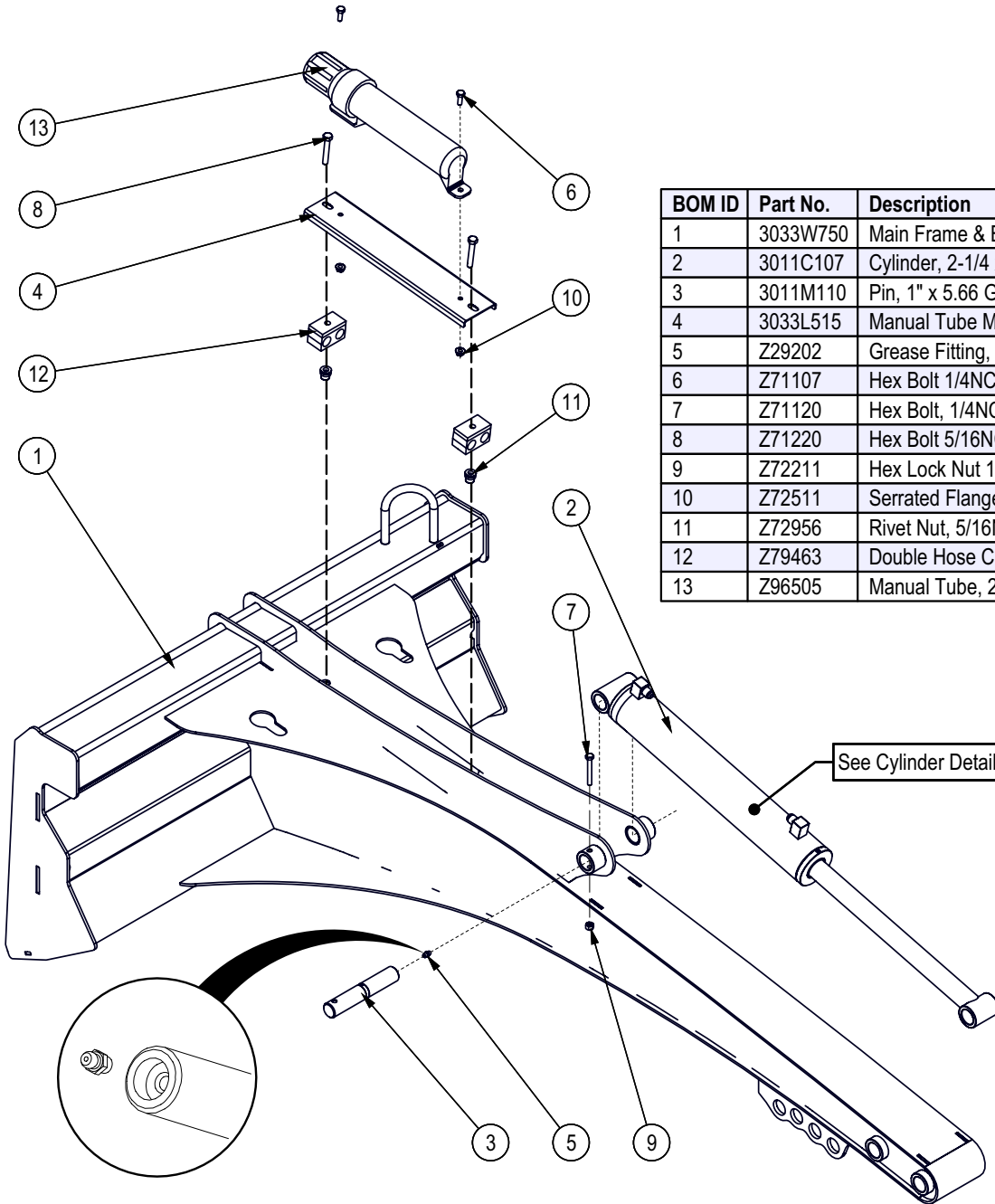
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**Main Frame Assembly – QC605**



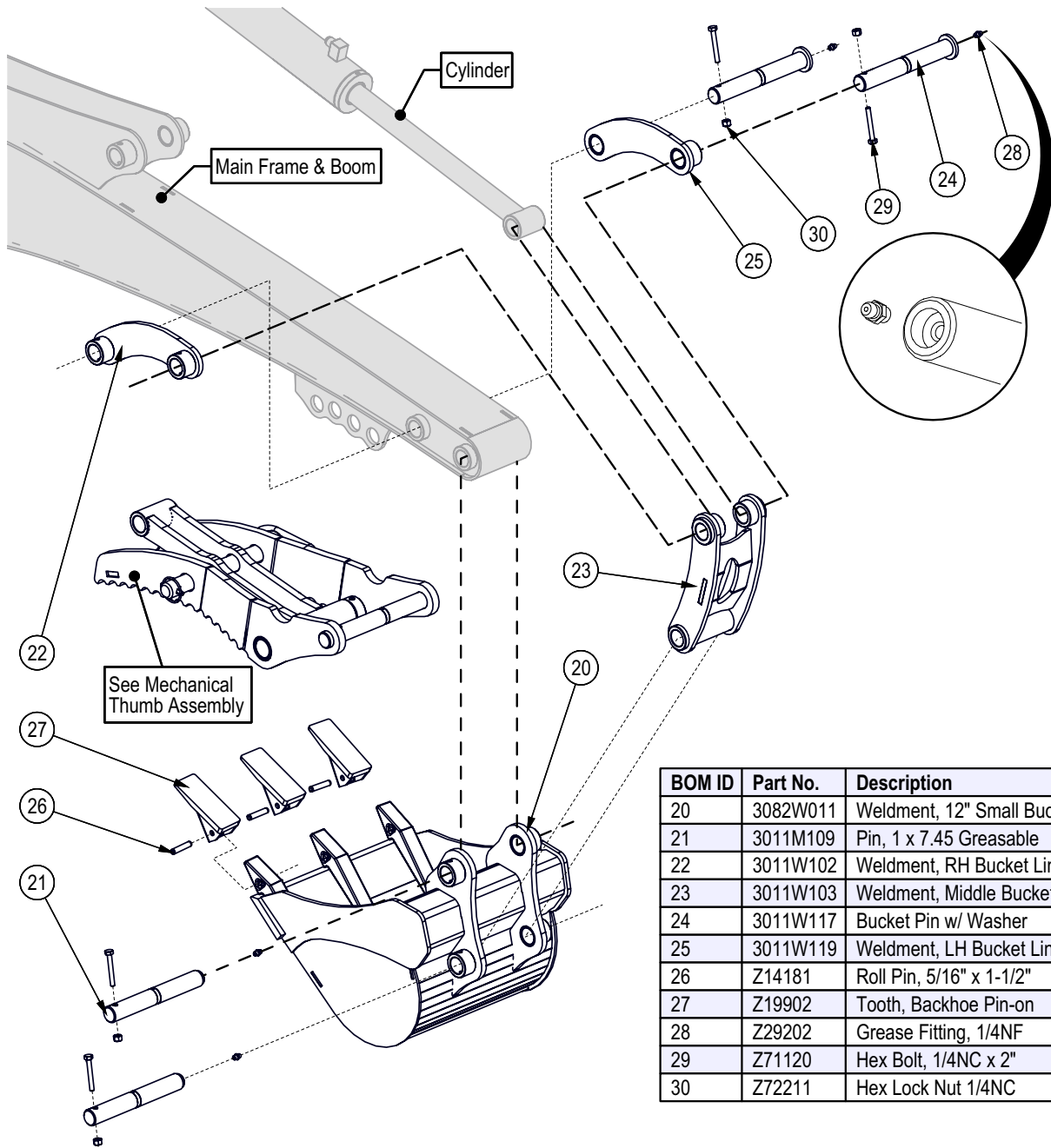
| BOM ID | Part No. | Description                      | Qty |
|--------|----------|----------------------------------|-----|
| 1      | 3033W500 | Main Frame & Boom                | 1   |
| 2      | 3011C107 | Cylinder, 2-1/4 x 12-7/8" Stroke | 1   |
| 3      | 3011M110 | Pin, 1" x 5.66 Greasable         | 1   |
| 4      | 3033L515 | Manual Tube Mount                | 1   |
| 5      | Z29202   | Grease Fitting, 1/4NF            | 1   |
| 6      | Z71107   | Hex Bolt 1/4NC x 3/4             | 2   |
| 7      | Z71120   | Hex Bolt, 1/4NC x 2"             | 1   |
| 8      | Z71220   | Hex Bolt 5/16NC x 2              | 2   |
| 9      | Z72211   | Hex Lock Nut 1/4NC               | 1   |
| 10     | Z72511   | Serrated Flange Locknut, 1/4NC   | 2   |
| 11     | Z72956   | Rivet Nut, 5/16NC x 150          | 2   |
| 12     | Z79463   | Double Hose Clamp, 11/16" OD     | 2   |
| 13     | Z96505   | Manual Tube, 2" Short            | 1   |

**Main Frame Assembly – QC605B**



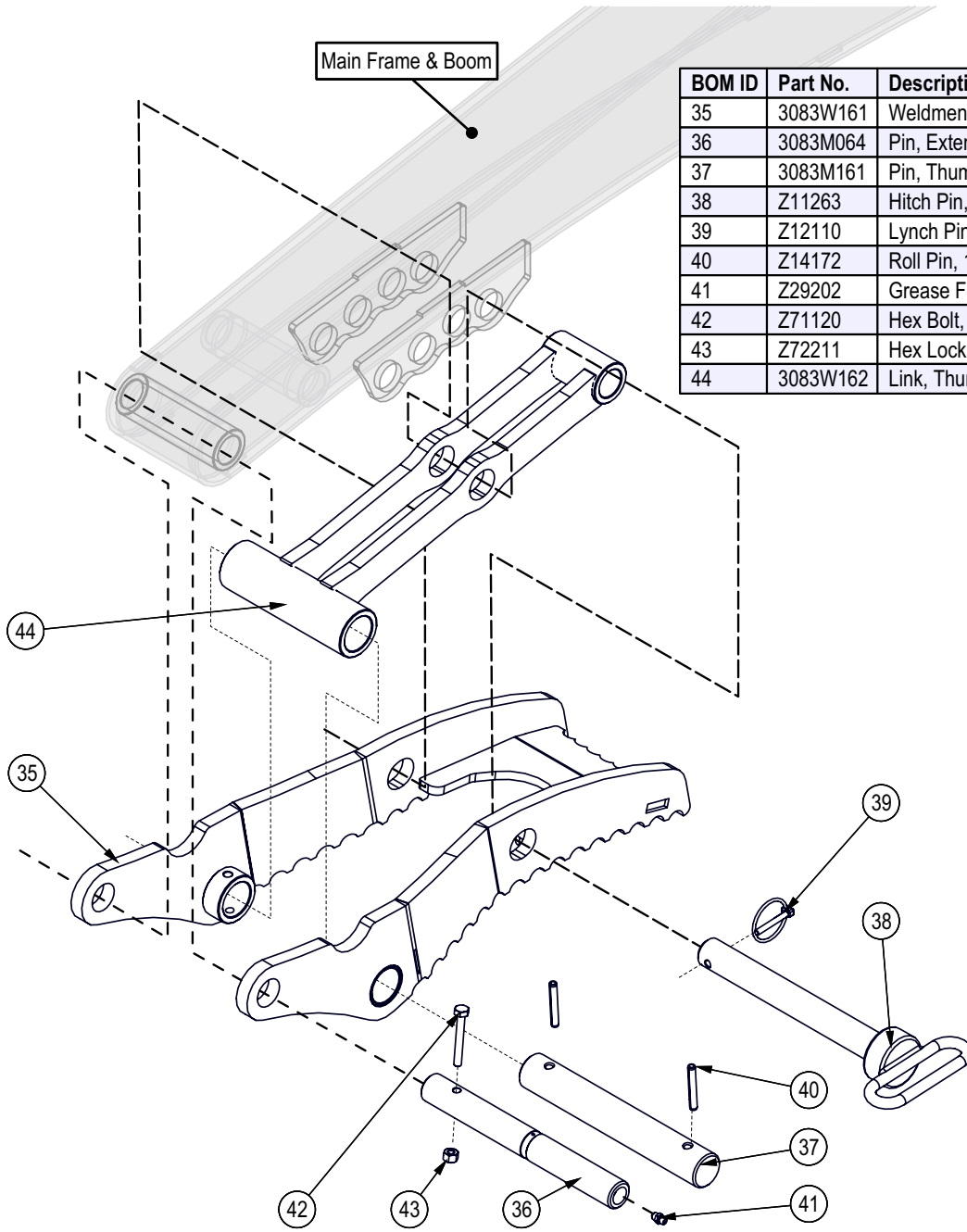
| BOM ID | Part No. | Description                      | Qty |
|--------|----------|----------------------------------|-----|
| 1      | 3033W750 | Main Frame & Boom                | 1   |
| 2      | 3011C107 | Cylinder, 2-1/4 x 12-7/8" Stroke | 1   |
| 3      | 3011M110 | Pin, 1" x 5.66 Greasable         | 1   |
| 4      | 3033L515 | Manual Tube Mount                | 1   |
| 5      | Z29202   | Grease Fitting, 1/4NF            | 1   |
| 6      | Z71107   | Hex Bolt 1/4NC x 3/4             | 2   |
| 7      | Z71120   | Hex Bolt, 1/4NC x 2"             | 1   |
| 8      | Z71220   | Hex Bolt 5/16NC x 2"             | 2   |
| 9      | Z72211   | Hex Lock Nut 1/4NC               | 1   |
| 10     | Z72511   | Serrated Flange Locknut, 1/4NC   | 2   |
| 11     | Z72956   | Rivet Nut, 5/16NC x 150          | 2   |
| 12     | Z79463   | Double Hose Clamp, 1 1/16" OD    | 2   |
| 13     | Z96505   | Manual Tube, 2" Short            | 1   |

**Bucket & Linkage Assembly**



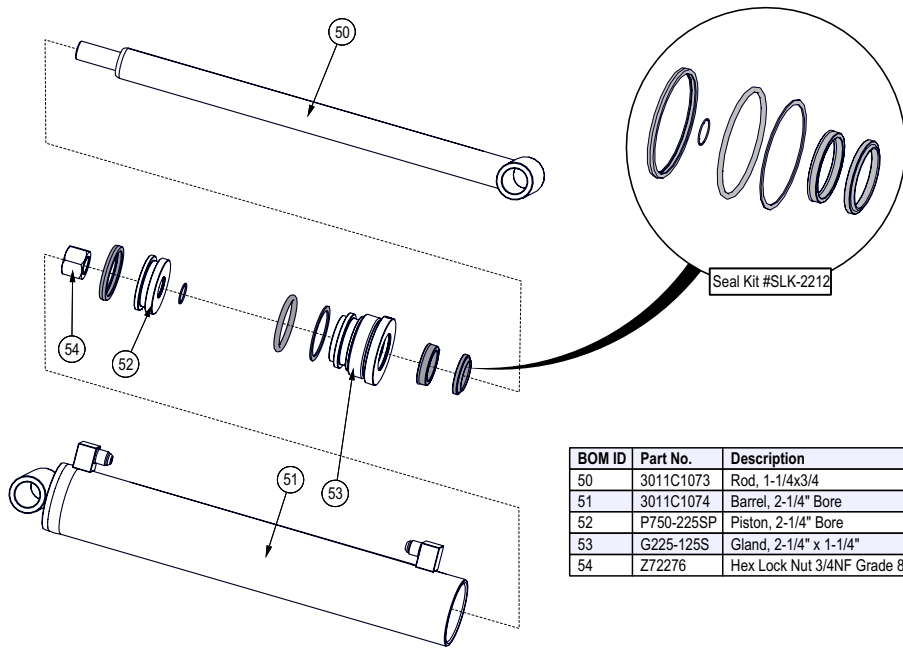
| BOM ID | Part No. | Description                     | Qty |
|--------|----------|---------------------------------|-----|
| 20     | 3082W011 | Weldment, 12" Small Bucket      | 1   |
| 21     | 3011M109 | Pin, 1 x 7.45 Greasable         | 2   |
| 22     | 3011W102 | Weldment, RH Bucket Linkage     | 1   |
| 23     | 3011W103 | Weldment, Middle Bucket Linkage | 1   |
| 24     | 3011W117 | Bucket Pin w/ Washer            | 2   |
| 25     | 3011W119 | Weldment, LH Bucket Linkage     | 1   |
| 26     | Z14181   | Roll Pin, 5/16" x 1-1/2"        | 3   |
| 27     | Z19902   | Tooth, Backhoe Pin-on           | 3   |
| 28     | Z29202   | Grease Fitting, 1/4NF           | 4   |
| 29     | Z71120   | Hex Bolt, 1/4NC x 2"            | 4   |
| 30     | Z72211   | Hex Lock Nut 1/4NC              | 4   |

**Mechanical Thumb Assembly**



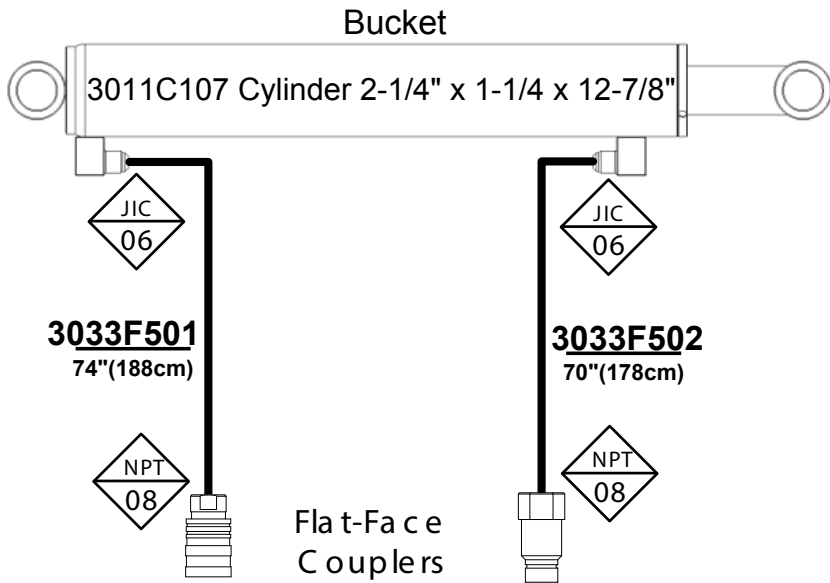
| BOM ID | Part No. | Description                  | Qty |
|--------|----------|------------------------------|-----|
| 35     | 3083W161 | Weldment, Thumb              | 1   |
| 36     | 3083M064 | Pin, Extended Bucket - Thumb | 1   |
| 37     | 3083M161 | Pin, Thumb Brace Pivot       | 1   |
| 38     | Z11263   | Hitch Pin, 1" x 7-1/2"       | 1   |
| 39     | Z12110   | Lynch Pin, 3/16"             | 1   |
| 40     | Z14172   | Roll Pin, 1/4" x 1-3/4"      | 2   |
| 41     | Z29202   | Grease Fitting, 1/4NF        | 1   |
| 42     | Z71120   | Hex Bolt, 1/4NC x 2"         | 1   |
| 43     | Z72211   | Hex Lock Nut 1/4NC           | 1   |
| 44     | 3083W162 | Link, Thumb Support          | 1   |

**Cylinder Detail**





**Hydraulic Plumbing Diagram**



**Fitting Identification**

Connection Type

NPT – National Pipe Thread  
 JIC – Tube Flare  
 ORB – "O" Ring Boss  
 HB – Hose Barb

Connection Type

NPT

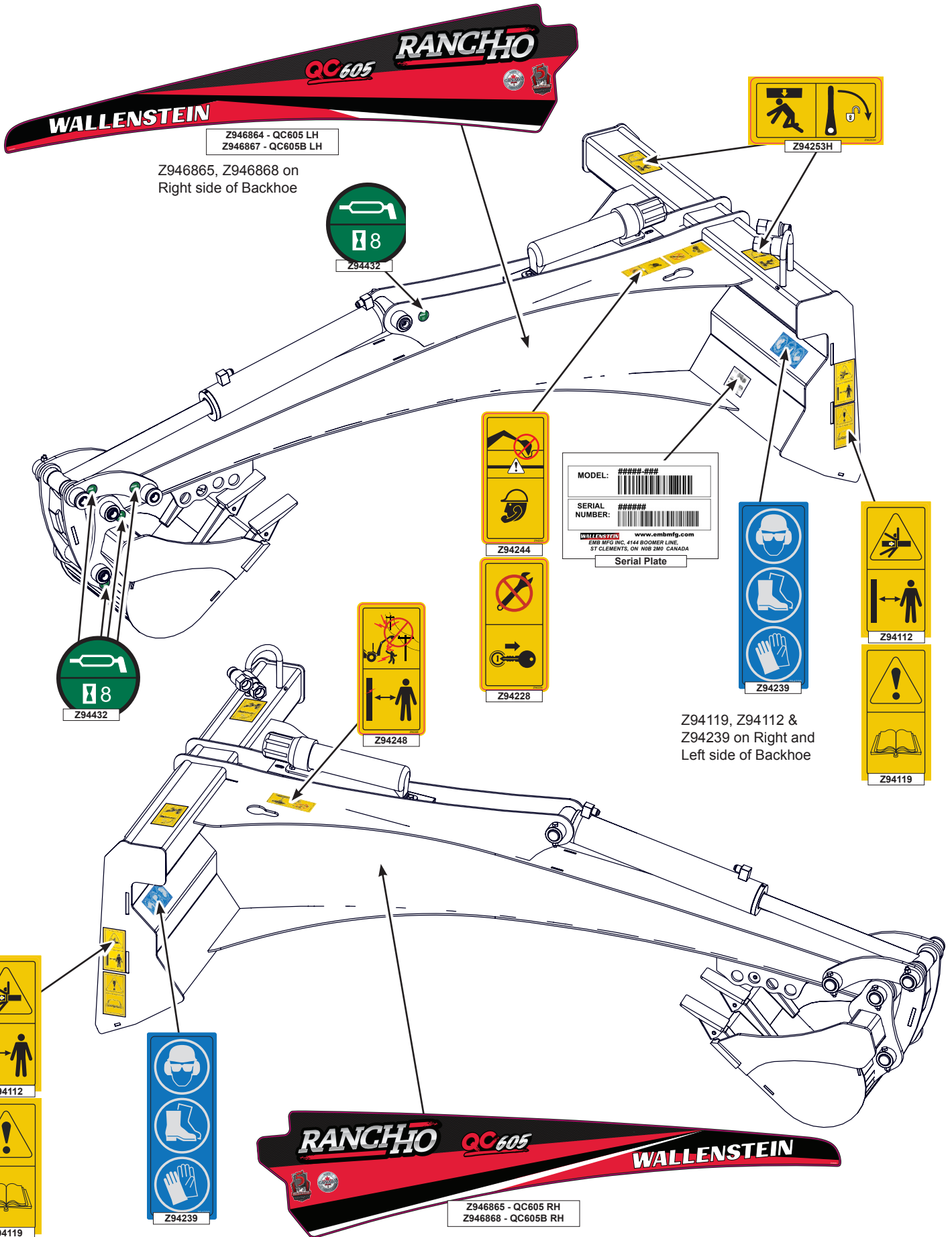
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Connection Size

**Hydraulic Hose List**

| Part No. | Description                          | Qty |
|----------|--------------------------------------|-----|
| 3033F501 | 3/8" Hose, 45FJIC06 x MP08 x 74      | 1   |
| 3033F502 | 3/8" Hose, 45FJIC06 x MP08 x 70      | 1   |
| Z51919   | Flat-Face Coupler, FP08 x MISO 16028 | 1   |
| Z51920   | Flat-Face Coupler, FP08 x FISO 16028 | 1   |

Decal Layout



**Accessories**

Call your dealer for pricing and availability

| Part Number | Accessory   |
|-------------|---|
| BT5360      | Mechanical Thumb  |
| BK2609      | 9" Bucket – 3 teeth   |
| BK2612      | 12" Bucket – 3 teeth  |
| BK2515      | 15" Bucket – 4 teeth  |
| BK2618      | 18" Bucket – 4 teeth  |
| Z97125      | Operator's Manual for Mini Skid Steer Back Hoe<br>Available as a download at <a href="http://www.wallensteinequipment.com">www.wallensteinequipment.com</a> |


**Bolt Torque**

**Checking Bolt Torque**

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

**IMPORTANT!** If replacing hardware, use fasteners of the same grade.

**IMPORTANT!** Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

 **NOTE:** Bolt grades are identified by their head markings.

| Imperial Bolt Torque Specifications |              |     |           |     |           |      |
|-------------------------------------|--------------|-----|-----------|-----|-----------|------|
| Bolt Diameter                       | Torque Value |     |           |     |           |      |
|                                     | SAE Gr. 2    |     | SAE Gr. 5 |     | SAE Gr. 8 |      |
|                                     | lbf•ft       | N•m | lbf•ft    | N•m | lbf•ft    | N•m  |
| 1/4"                                | 6            | 8   | 9         | 12  | 12        | 17   |
| 5/16"                               | 10           | 13  | 19        | 25  | 27        | 36   |
| 3/8"                                | 20           | 27  | 33        | 45  | 45        | 63   |
| 7/16"                               | 30           | 41  | 53        | 72  | 75        | 100  |
| 1/2"                                | 45           | 61  | 80        | 110 | 115       | 155  |
| 9/16"                               | 60           | 95  | 115       | 155 | 165       | 220  |
| 5/8"                                | 95           | 128 | 160       | 215 | 220       | 305  |
| 3/4"                                | 165          | 225 | 290       | 390 | 400       | 540  |
| 7/8"                                | 170          | 230 | 420       | 570 | 650       | 880  |
| 1"                                  | 225          | 345 | 630       | 850 | 970       | 1320 |



| Metric Bolt Torque Specifications |              |       |          |       |
|-----------------------------------|--------------|-------|----------|-------|
| Bolt Diameter                     | Torque Value |       |          |       |
|                                   | Gr. 8.8      |       | Gr. 10.9 |       |
|                                   | lbf•ft       | N•m   | lbf•ft   | N•m   |
| M3                                | 0.4          | 0.5   | 1.3      | 1.8   |
| M4                                | 2.2          | 3     | 3.3      | 4.5   |
| M6                                | 7            | 10    | 11       | 15    |
| M8                                | 18           | 25    | 26       | 35    |
| M10                               | 37           | 50    | 52       | 70    |
| M12                               | 66           | 90    | 92       | 125   |
| M16                               | 166          | 225   | 229      | 310   |
| M20                               | 321          | 435   | 450      | 610   |
| M30                               | 1,103        | 1 495 | 1,550    | 2 100 |
| M36                               | 1,917        | 2 600 | 2,700    | 3 675 |



## Hydraulic Fitting Torque

### Tightening Flare Type Tube Fittings

1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Hand-tighten swivel nut until snug.
4. To prevent twisting the tube, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second. Torque to values shown.

If a torque wrench is not available, use the FFFT (Flats From Finger Tight) method.

| Hydraulic Fitting Torque |                       |              |         |                         |       |
|--------------------------|-----------------------|--------------|---------|-------------------------|-------|
| Tube Size OD             | Hex Size Across Flats | Torque value |         | Flats From Finger Tight |       |
|                          |                       | lbf·ft       | N·m     | Flats                   | Turns |
| 3/16                     | 7/16                  | 6            | 8       | 2                       | 1/6   |
| 1/4                      | 9/16                  | 11–12        | 15–17   | 2                       | 1/6   |
| 5/16                     | 5/8                   | 14–16        | 19–22   | 2                       | 1/6   |
| 3/8                      | 11/16                 | 20–22        | 27–30   | 1-1/4                   | 1/6   |
| 1/2                      | 7/8                   | 44–48        | 59–65   | 1                       | 1/6   |
| 5/8                      | 1                     | 50–58        | 68–79   | 1                       | 1/6   |
| 3/4                      | 1-1/4                 | 79–88        | 107–119 | 1                       | 1/8   |
| 1                        | 1-5/8                 | 117–125      | 158–170 | 1                       | 1/8   |

Values shown are for non-lubricated connections.