

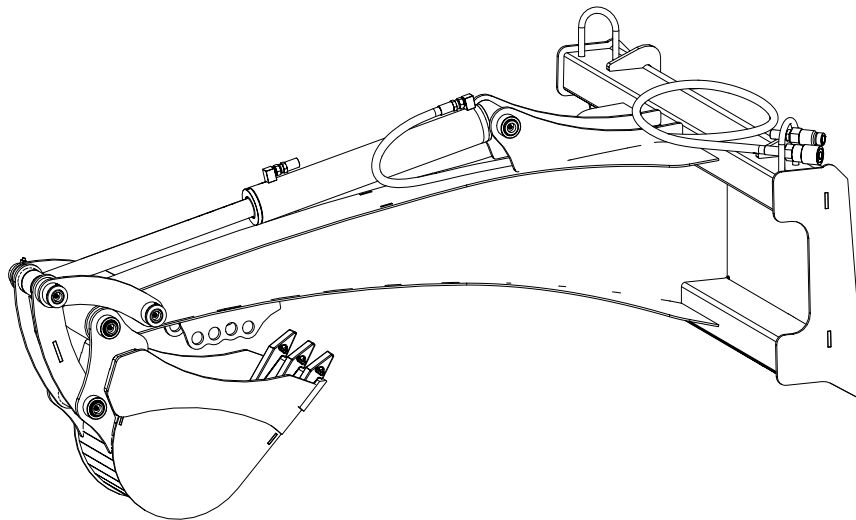


EMB Manufacturing Inc.  
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# QC620 Backhoe

## Parts Manual

Starting with S/N's  
**3620Q446 and on**



Refer to the operators  
manual for safe  
operation and  
maintenance

## Foreword

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

Proper and regular service and replacing old, worn or broken parts with the correct OEM parts are essential to prolonging the life of your EMB product. Please refer to this manual before ordering any replacement parts.

All information contained in this parts manual is based on the latest product specification available at the time of printing this manual. If your product differs from the specifications contained within this manual contact EMB Mfg. for information.

EMB reserves the right to alter specifications on their products at any time.

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

For parts and information please contact your dealer. If your dealer is no longer available please go to our website: <http://www.embmfg.com> and click on "FIND A DEALER NEAR YOU" for information on a local dealer.

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Maintenance should be performed by  
trained personnel only.



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**Bolt Torque**

**CHECKING BOLT TORQUE**

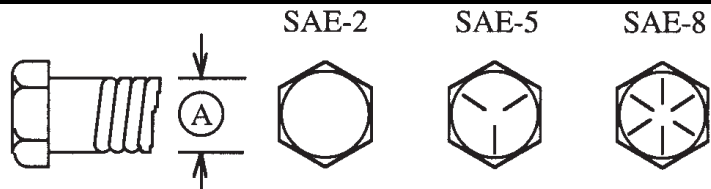
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

\* Torque value for bolts and capscrews are identified by their head markings.

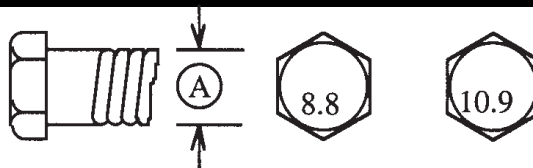
**ENGLISH TORQUE SPECIFICATIONS**

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



**METRIC TORQUE SPECIFICATIONS**

Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (N.m) (lb-ft)	
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



**Hydraulic Fitting Torque****Tightening Flare Type Tube Fittings \***

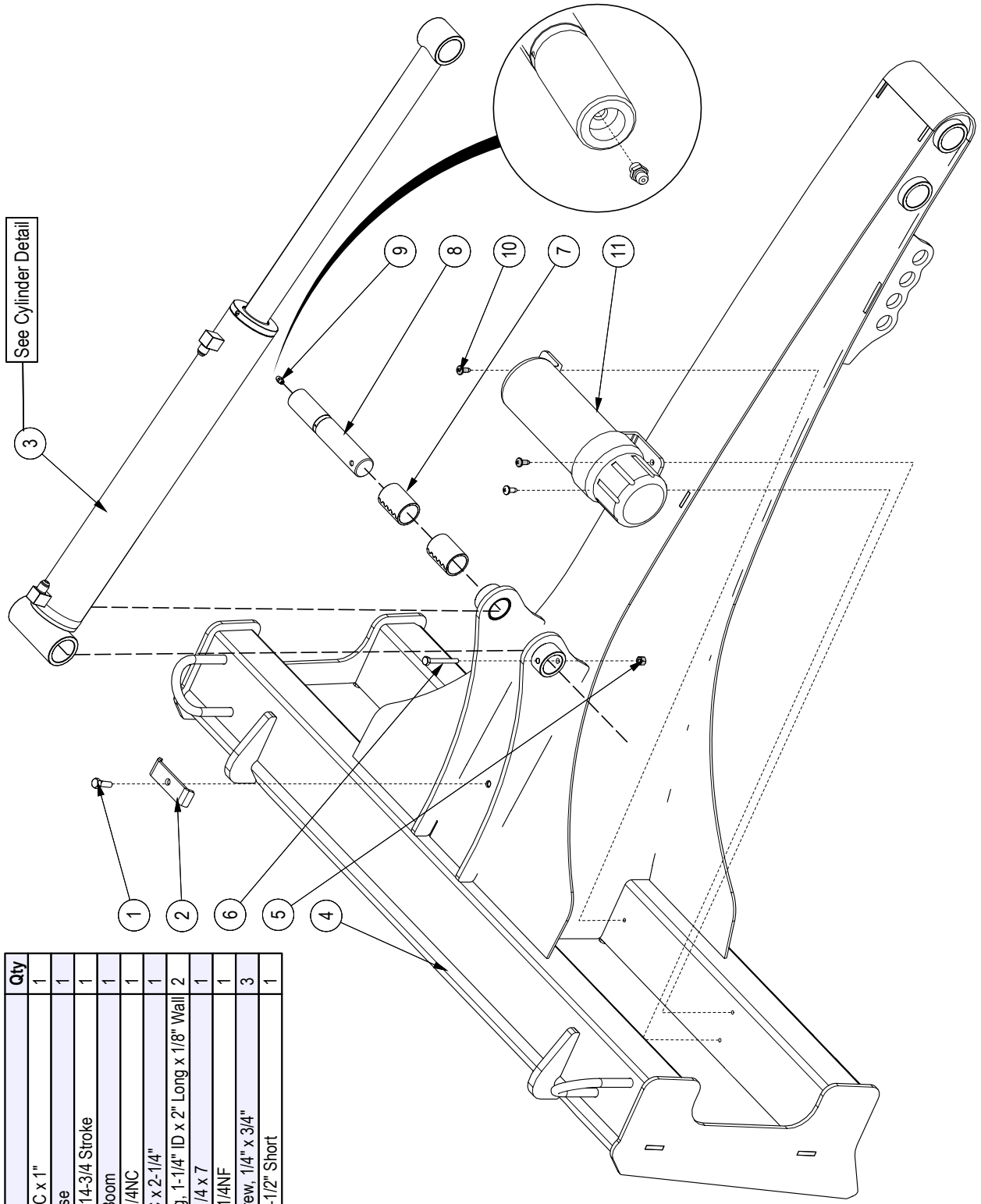
1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Lubricate connection and hand tighten swivel nut until snug.
4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second tighten the swivel nut to the torque shown.

Tube Size OD	Nut Size Across Flats	Torque Value*		Recommended Turns To Tighten (After Finger Tightening)	
		(N.m)	(lb-ft)	(Flats)	(Turn)
3/16	7/16	8	6	1	1/6
1/4	9/16	12	9	1	1/6
5/16	5/8	16	12	1	1/6
<b>3/8</b>	<b>11/16</b>	<b>24</b>	<b>18</b>	<b>1</b>	<b>1/6</b>
1/2	7/8	46	34	1	1/6
5/8	1	62	46	1	1/6
3/4	1-1/4	102	75	3/4	1/8
7/8	1-3/8	122	90	3/4	1/8

The torque values shown are based on lubricated connections as in reassembly.

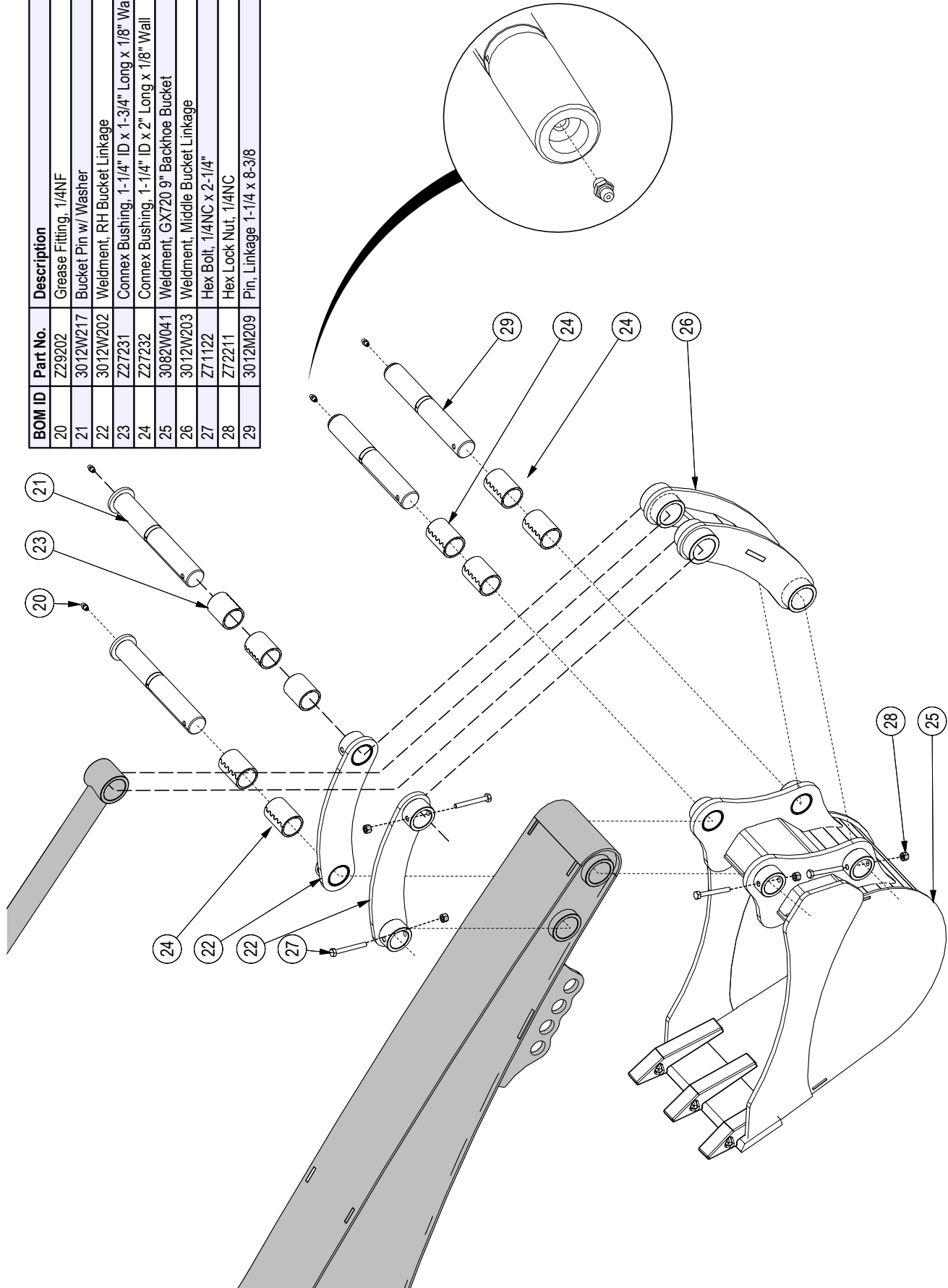
**Main Frame Assembly**

BOM ID	Part No.	Description	Qty
1	Z71210	Hex Bolt, 5/16NC x 1"	1
2	3011L176	Clamp, Two Hose	1
3	3012C207	Cylinder, 2-1/2x14-3/4 Stroke	1
4	3033W200	Main Frame & Boom	1
5	Z72211	Hex Lock Nut, 1/4NC	1
6	Z71122	Hex Bolt, 1/4NC x 2-1/4"	1
7	Z27232	Connex Bushing, 1-1/4" ID x 2" Long x 1/8" Wall	2
8	3012M210	Pin, Linkege 1-1/4 x 7	1
9	Z29202	Grease Fitting, 1/4NF	1
10	Z76721	Self-tapping Screw, 1/4" x 3/4"	3
11	Z96603	Manual Tube, 3-1/2" Short	1



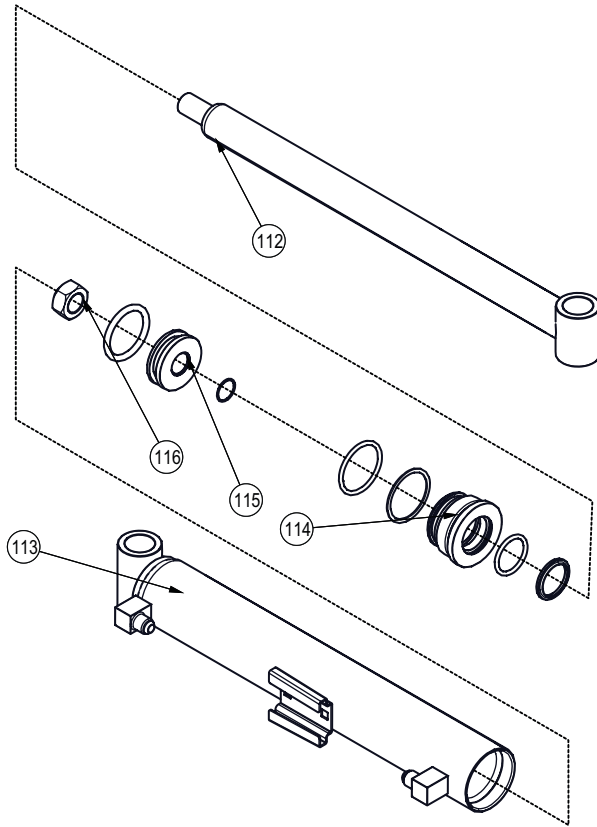
**Bucket & Linkage Assembly**

BOM ID	Part No.	Description	Qty
20	Z29202	Grease Fitting, 1/4NF	4
21	3012W217	Bucket Pin w/ Washer	2
22	3012W202	Weldment, RH Bucket Linkage	2
23	Z27231	Connex Bushing, 1-1/4" ID x 1-3/4" Long x 1/8" Wall	3
24	Z27232	Connex Bushing, 1-1/4" ID x 2" Long x 1/8" Wall	6
25	3082W041	Weldment, GX720 9" Backhoe Bucket	1
26	3012W203	Weldment, Middle Bucket Linkage	1
27	Z71122	Hex Bolt, 1/4NC x 2-1/4"	4
28	Z72211	Hex Lock Nut, 1/4NC	4
29	3012M209	Pin, Linkage 1-1/4 x 8-3/8	2



**Cylinder Assembly**

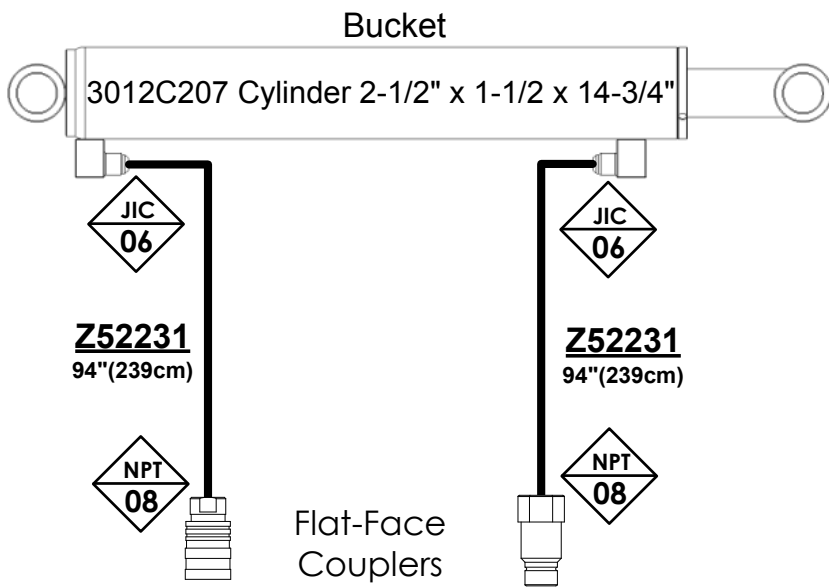
**Seal Kit  
#SLK-2515**



BOM ID	Part No.	Description	Qty
112	3012C2073	Rod, 1-1/2 x 1	1
113	3012C2074	Barrel, 2-1/2" Bore	1
114	G250-150S	Gland, 2-1/2" x 1-1/2"	1
115	P100-250SP	Piston, 2-1/2" Bore	1
116	Z72276	Hex Top-lock Nut, 3/4NF	1



**Hydraulic Hose Schematic & List**



**Fitting Identification**

Connection Type

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

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Connection Type

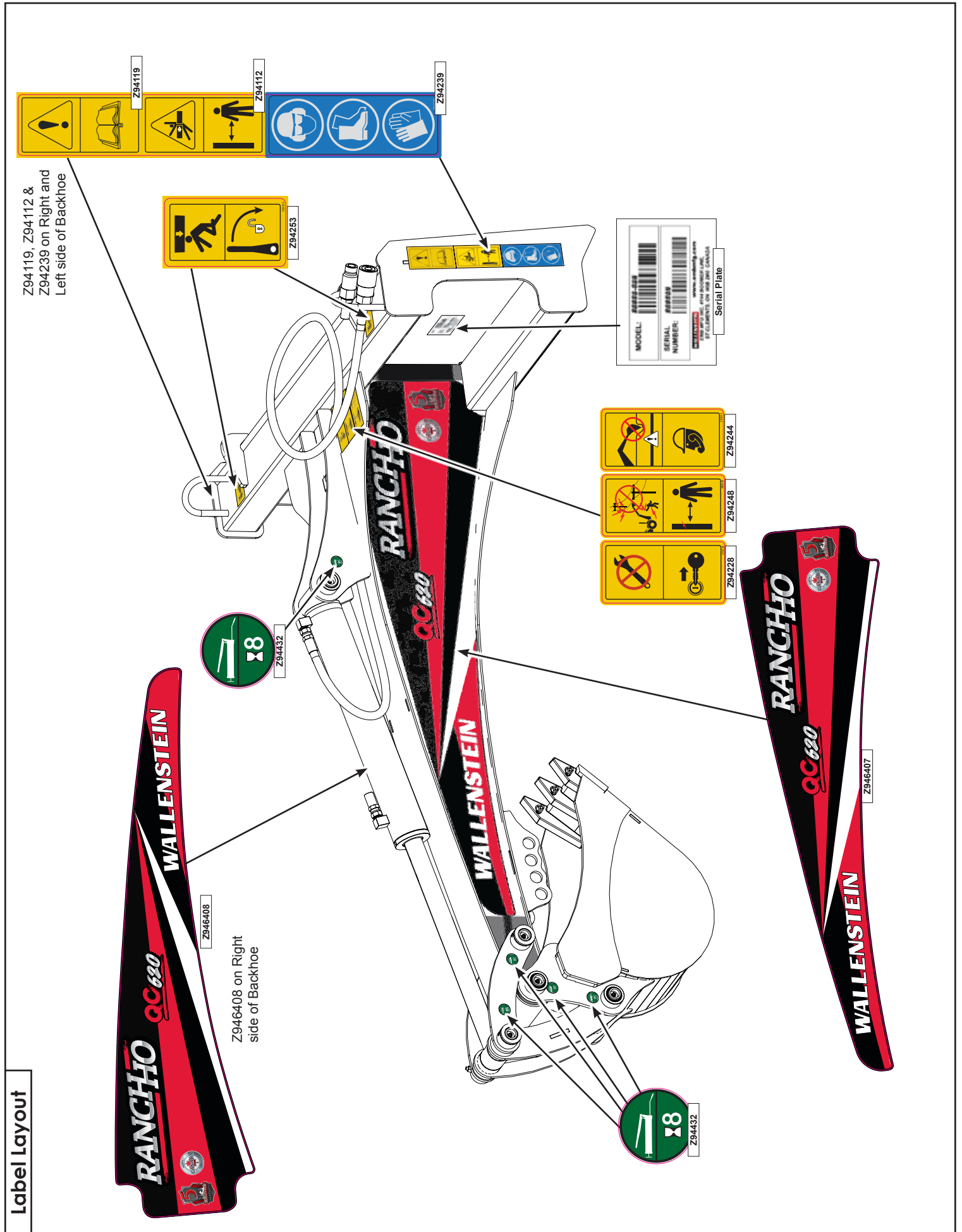
Type

NPT

12

Connection Size

Part No.	Description	Qty
Z52231	3/8" Hose, FJIC06 x MP08 x 94	2
Z51919	Flat-Face Coupler, FP08 x MISO 16028	1
Z51920	Flat-Face Coupler, FP08 x FISO 16028	1



## Accessories

### PT300 3 Point Hitch

- Category I

### BK2900 9" Bucket

- 3 teeth
- Bucket Volume: 0.8416 cubic ft

### BK2120 12" Bucket

- 3 teeth
- Bucket Volume: 1.1694 cubic ft

### BK2150 15" Bucket

- 4 teeth
- Bucket Volume: 1.4806 cubic ft

### BK2180 18" Bucket

- 4 teeth
- Bucket Volume: 1.7912 cubic ft

### BK2240 24" Bucket

- 5 teeth
- Bucket Volume: 2.413 cubic ft

### BK2240D 24" Ditching Bucket

- No teeth
- Bucket Volume: 2.413 cubic ft

### BT5310 Clamp on mechanical thumb

Using the mechanical thumb allows you to better control material that is difficult to scoop or place with precision

# WALLENSTEIN

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**SKID STEER  
MOUNTED BACKHOE  
SKID DIGGER  
MODEL QC500/QC620**



Keep this manual with the  
Machine at all times

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PART NUMBER: Z97020

## #Z97020 BACKHOE OPERATORS MANUAL

Available as a download at  
[www.embmfg.com](http://www.embmfg.com)