



***Parts Manual for  
QT Series Compressor***

**Model QT-15**

Record of Change 101

50250-101

November 1996

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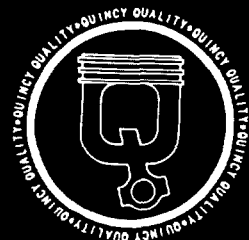
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# INTRODUCTION

This manual provides information for the Model QT-15 reciprocating compressor, per Record of Change 101.

The Model QT-15 is an aircooled, two stage, four cylinder, V-type, splash lubricated compressor, with up to 175 p.s.i. continuous pressure capability. It has a 4.5" low pressure bore and a 2.5" high pressure bore, with a 3.5" stroke. This compressor can be run at 400-1150 r.p.m.

Available options include:

- hooded air filter/silencer
- head unloaders


# CHANGES

*since previous printing dated October 1994:*

- the low pressure valve plate was replaced with a machined valve plate
- pilot valve information was updated
- head kits and overhaul kits were added
- the piston pins were changed and are now secured with retaining rings
- typical unit repair parts list was added

# MODEL & SERIAL NUMBER IDENTIFICATION

Record of Change No.

MODEL	<input type="text"/>
SERIAL NO.	<input type="text"/>
Coltec Industries	
	Quincy Compressor Division

Model & Serial Number Identification Tag

The model & unit serial number identification tag is located on the air tank top plate.

Serial Number
<input type="text"/>

The basic compressor serial number decal is located on the handhole plate (oil gauge side of the crankcase). *Fill in the numbers from your compressor unit and basic compressor in the corresponding spaces provided here, and reference this page when ordering replacement parts.*

All replacement parts are to be ordered through an authorized Quincy Compressor Distributor. Insist on genuine Quincy parts only! Failure to do so may void warranty.

## ORDERING REPLACEMENT PARTS

Prompt service can be rendered on repair parts orders if the following information is given:

- Item 1)** the model number, record of change number, & serial number.
- Item 2)** the exact part number needed. (Do not order by item numbers.)
- Item 3)** the exact quantity needed.
- Item 4)** the preferred type of transportation.

## QUIN-CIP OIL

Refer to the chart below to order Quin-Cip compressor oil from your local Authorized Quincy Compressor Distributor.

Package	Part No.	Description
Barrel	112541D032	55 gal., SAE 10W
Pail	112541P032	5 gal., SAE 10W
Gallon	112541G032	1 gal., SAE 10W
Gallon Case	112541X032	(4)-1 gal., SAE 10W
Quart	112541Q032	1 qt., SAE 10W
Quart Case	112541C032	(12)-1 qt., SAE 10W
<hr/>		
Barrel	112542D068	55 gal., SAE 20
Pail	112542P068	5 gal., SAE 20
Gallon	112542G068	1 gal., SAE 20
Gallon Case	112542X068	(4)-1 gal., SAE 20
Quart	112542Q068	1 qt., SAE 20
Quart Case	112542C068	(12)-1 qt., SAE 20
<hr/>		
Barrel	112543D100	55 gal., SAE 30
Pail	112543P100	5 gal., SAE 30
Gallon	112543G100	1 gal., SAE 30
Gallon Case	112543X100	(4)-1 gal., SAE 30
Quart	112543Q100	1 qt., SAE 30
Quart Case	112543C100	(12)-1 qt., SAE 30

**CAUTION !**

Follow all safety precautions outlined in the Quincy QR-25 Series instruction manual.

**WARNING !**

Do not operate this compressor without a totally enclosed belt guard or any other required safety equipment.

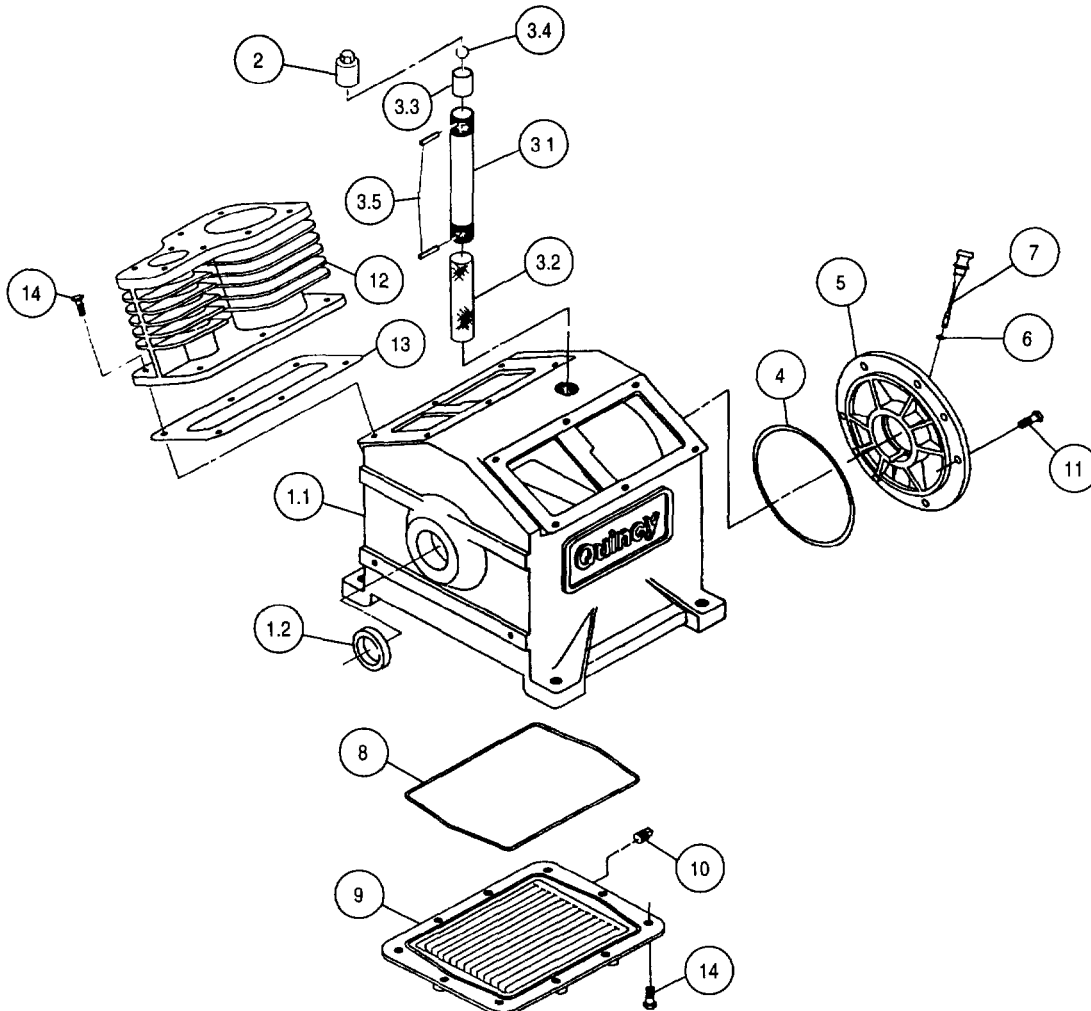
**DANGER !**

Air used for breathing or food processing must meet O.S.H.A. 1910.134 or F.D.A. 21 C.F.R. 178.3570 regulations. Failure to do so may cause severe injury or death.

# CRANKCASE GROUP 111929

Item Number	Qty.	Part Number	Description
1	1	111930	crankcase assembly
1.1	1	111771	crankcase
1.2	1	111781	oil seal
2	1	6936	breather cap
3	1	5518X1	breather assembly
3.1	1	5518	breather tube
3.2	1	111304	breather filter
3.3	1	6864	breather ball seat
3.4	1	5783	breather ball
3.5	2	110705-D15	roll pin, 1/8 x 1.12
4	1	123157-167	"o"ring, 3/32 wide x 7.19 o.d.
5	1	111772	bearing carrier
6	1	123157-112	"o"ring, 3/32 wide x .69 o.d.
7	1	110070-6	oil level gauge
8	1	123157-275	"o"ring, 1/8 wide x 10.75 o.d.
9	1	111777	oil pan
10	1	1301	pipe plug, 3/8 npt
11	8	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 25 ft.-lbs.)
12	2	111770	cylinder
13	2	111782	gasket, cylinder to crankcase
14	22	123478-L14	hex. screw, 3/8-16 unc x 1.25, grade 5 (@ 30 ft.-lbs.)

@ Indicates torque value (dry threads).

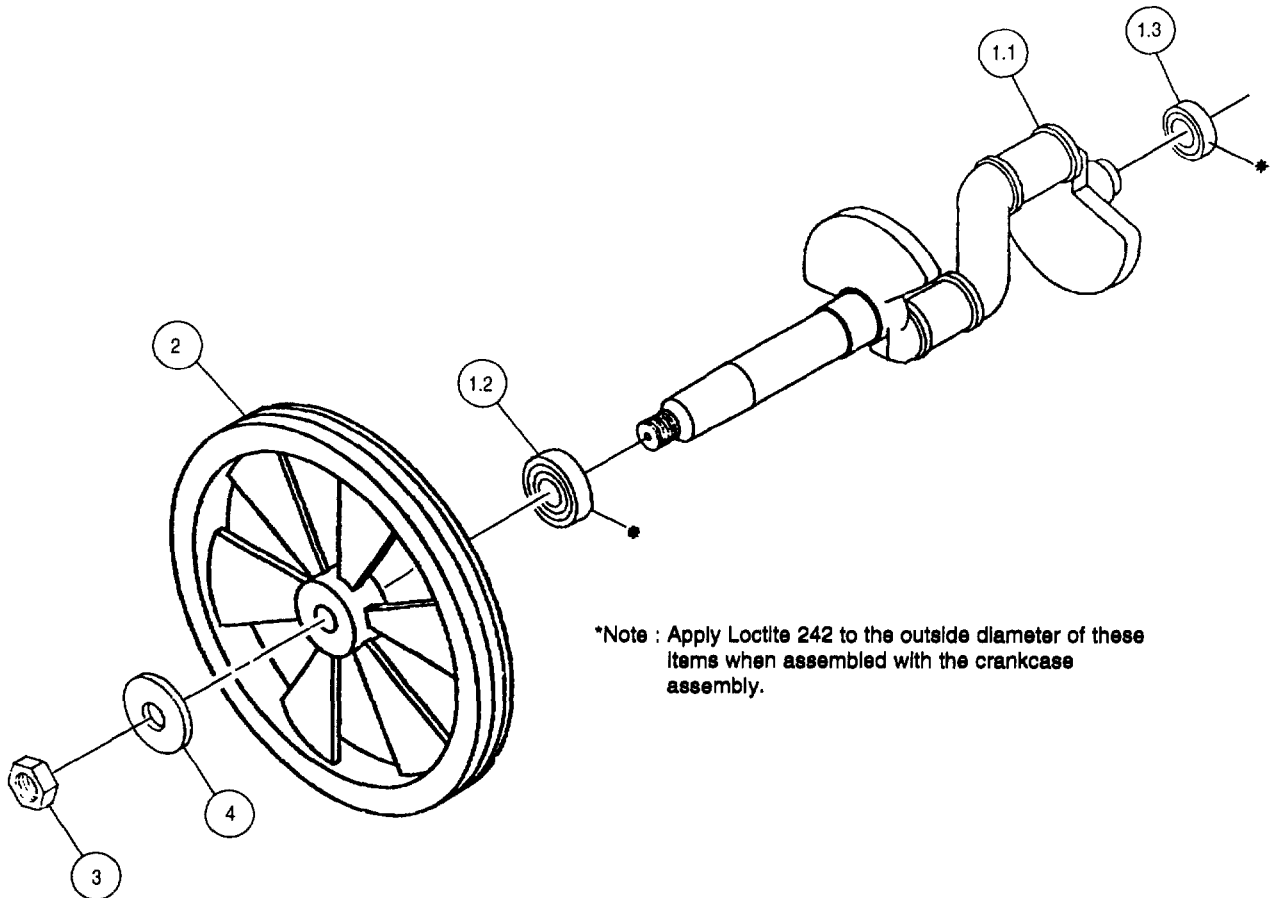


# CRANKSHAFT GROUP 111933

Item Number	Qty.	Part Number	Description
1	1	111934	crankshaft assembly
1.1	1	111775-001	crankshaft (N.S.S.; order 111934)
1.2	1	111779	ball bearing
1.3	1	111780	ball bearing
2	1	111776	sheave, 19.50", 2 groove, B sect. ccw
3	1	112352	hex. nut, 1-14 unf, L.H. thread (@ 200 ft.-lbs.)
4	1	110428W100	washer

N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads)



\*Note : Apply Loctite 242 to the outside diameter of these items when assembled with the crankcase assembly.



# CONNECTING ROD & PISTON GROUP 111925\*

(low pressure)

Item Number	Qty.	Part Number	Description
1	1	111927	connecting rod assembly
1.1	1	111773	connecting rod (N.S.S., order 111927)
1.2	2	110511-K15	taptite screw, 5/16-18 unc x 1 50 (@ 20-22 ft.-lbs.)
1.3	2	110428N031	flatwasher, 5/16
2	1	8643	piston, low pressure
3	1	8646	piston pin
4	2	8648	retaining ring
5	2	112781	oil ring rail
6	1	112780	oil ring expander
7	1	7351	piston ring
8	1	112212	oil dipper (install on lower rod cap bolt for proper lubrication)
9	2	112440-009	piston ring
<b>Maintenance Parts</b>			
2	2	8643-010	piston, low pressure (.010 oversize)
2	2	8643-020	piston, low pressure (.020 oversize)
	2	<b>8166C</b>	<b>Piston Ring Set</b>
			includes all rings necessary for installing standard size rings
	2	<b>112080-010</b>	<b>Piston Ring Set (.010 oversize)</b>
			includes all rings necessary for installing .010 oversize rings
	2	<b>112080-020</b>	<b>Piston Ring Set (.020 oversize)</b>
			includes all rings necessary for installing .020 oversize rings
	2	<b>112081-001</b>	<b>Piston Assembly, LP (standard size)</b>
			includes piston, ring set, piston pin & retaining rings
	2	<b>112081-011</b>	<b>Piston Assembly, LP (.010 oversize)</b>
			includes piston, ring set, piston pin & retaining rings
	2	<b>112081-021</b>	<b>Piston Assembly, LP (.020 oversize)</b>
			includes piston, ring set, piston pin & retaining rings
	2	<b>110190-052</b>	<b>Replacement piston Pin Assembly Assembly</b>
			includes piston pin & retaining rings

\* 2 of 111925 Connecting Rod & Piston Groups required per compressor

N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads)





# CONNECTING ROD & PISTON GROUP 111926\*

(high pressure)

Item Number	Qty.	Part Number	Description
1	1	111928	connecting rod assembly
1.1	1	111774	connecting rod (N.S.S.; order 111928)
1.2	2	110511-K15	taptite screw, 5/16-18 unc x 1.50 (@ 20-22 ft.-lbs.)
1.3	2	110428N031	flatwasher, 5/16
1.4	1	112301	needle bearing
2	1	1530-001	piston, high pressure
3	1	110190-021	piston pin
4	2	8648	retaining ring
5	2	111281	oil ring rail
6	1	111280	oil ring expander
7	1	1652	piston ring
8	2	112440-004	piston ring
9	1	112212	oil dipper
<b>Maintenance Parts</b>			
2	2	1530-011	piston, high pressure (.010 oversize)
2	2	1530-021	piston, high pressure (.020 oversize)
	2	<b>112318</b>	<b>Piston Ring Set (standard) No Color Code</b> includes all rings necessary for installing standard size rings
	2	<b>112318-010</b>	<b>Piston Ring Set (.010 oversize)</b> includes all rings necessary for installing .010 oversize rings
	2	<b>112318-020</b>	<b>Piston Ring Set (.020 oversize)</b> includes all rings necessary for installing .020 oversize rings
	2	<b>112082-001</b>	<b>Piston Assembly, HP (standard size)</b> includes piston, ring set, piston pin & retaining rings
	2	<b>112082-011</b>	<b>Piston Assembly, HP (.010 oversize)</b> includes piston, ring set, piston pin & retaining rings
	2	<b>112082-021</b>	<b>Piston Assembly, HP (.020 oversize)</b> includes piston, ring set, piston pin & retaining rings
	2	<b>110190-053</b>	<b>Replacement Piston Assembly, HP</b> includes piston pin & piston pin plugs

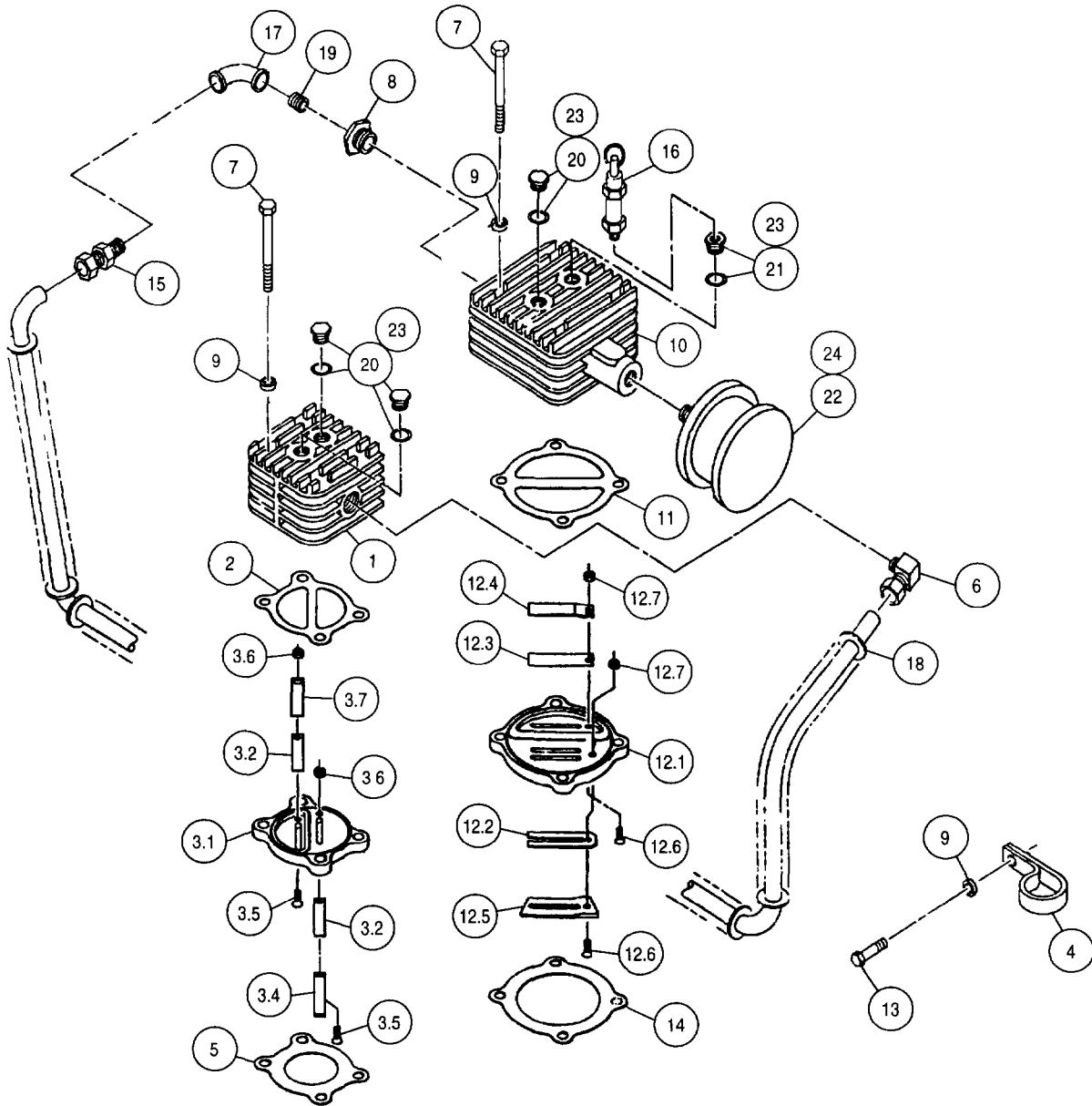
\* 2 of 111926 Connecting Rod & Piston Group required per compressor

N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads)

# CYLINDER & HEAD GROUP 111935-1

(\*right bank / less head unloaders)



# CYLINDER & HEAD GROUP 111935-1

(\*right bank / less head unloaders)

Item Number	Qty.	Part Number	Description
1	1	111115-5	cylinder head, high pressure
2	1	111274-001	gasket, head to valve plate
3	1	111227X2	valve plate assembly, high pressure
3.1	1	111227-2	valve plate, (N.S.S.; order 111227X2)
3.2	2	112359-2	reed valve, (N.S.S.; order 111227X2)
3.3	1	112381-2	valve bumper (N.S.S.; order 111227X2)
3.4	1	112379	valve bumper (N.S.S.; order 111227X2)
3.5	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
3.6	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
4	1	112225-2	tube clamp
5	1	111228-004	gasket, cylinder to valve plate
6	1	110919-024	tube fitting, 90° male elbow, 3/4 tube x 3/4 npt
7	8	123478-L25	hex. screw, 3/8-16 unc x 4.00, grade 5 (@ 30 ft.-lbs.)
8	1	2392	pipe bushing, 1 npt x 3/4 npt
9	9	110428N038	flatwasher, 3/8
10	1	111118-4	cylinder head, low pressure
11	1	111229-001	gasket, head to valve plate
12	1	111226X2M	valve plate assembly, low pressure
12.1	1	111226-2M	valve plate (N.S.S.; order 112713M)
12.2	1	112380	reed valve (N.S.S.; order 112713M)
12.3	1	112359-1	reed valve (N.S.S.; order 112713M)
12.4	1	112381-1	valve bumper (N.S.S.; order 112713M)
12.5	1	112378-1	valve bumper (N.S.S.; order 112713M)
12.6	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
12.7	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
13	1	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 30 ft.-lbs.)
14	1	111228-003	gasket, cylinder to valve plate
15	1	23271	tube fitting, straight 3/4 tube x 3/4 npt
16	1	2961-100	safety valve
17	1	4816	pipe elbow, 3/4 npt
18	1	112130	intercooler
19	1	125936-009	pipe nipple, 3/4 npt x 1.88
20	3	112709-006	plug, 3/4-16 unf ("o"ring included)
21	1	112710-004	adapter, 3/4-16 unf x 1/4 npt ("o"ring included)
22	1	111146F100	air filter
22	or		
22	1	111550S100	air filter/silencer, hooded
<b>Maintenance Parts</b>			
23	4	112708-908	"o"ring, silicone
24	1	111146E100	air filter element, (fits 111146F100 filter)
24	or		
24	1	110377E100	air filter element, (fits 111550S100 filter/silencer)
	1	112713M15	<b>Valve Assembly Replacement Kit, LP</b> includes valve plate assembly & gaskets
	1	112714	<b>Valve Assembly Replacement Kit, HP</b> includes valve plate assembly & gaskets

\*As viewed facing the compressor from the sheave side.

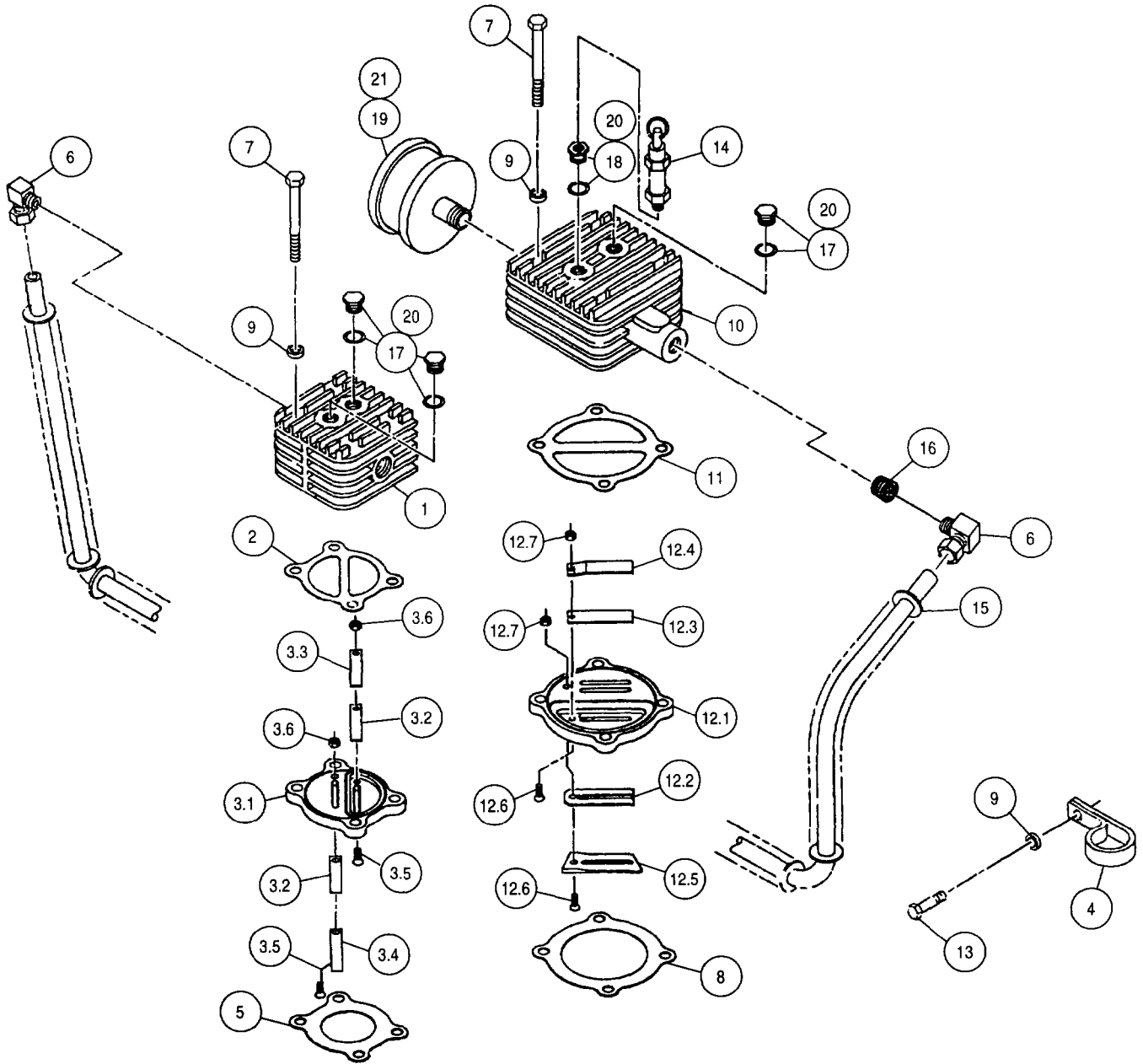
N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads)

Note: Tighten all bolts & capscrews in any bolt pattern, evenly bringing each bolt to torque in equal increments, while moving about the bolt pattern. This is particularly true of connecting rod & head bolts.

# CYLINDER & HEAD GROUP 111936-1

(\*left bank / less head unloaders)



# CYLINDER & HEAD GROUP 111936-1

(\*left bank / less head unloaders)

Item Number	Qty.	Part Number	Description
1	1	111115-5	cylinder head, high pressure
2	1	111274-001	gasket, head to valve plate
3	1	111227X2	valve plate assembly, high pressure
3.1	1	111227-2	valve plate, (N.S.S.; order 111227X2)
3.2	2	112359-2	reed valve, (N.S.S.; order 111227X2)
3.3	1	112381-2	valve bumper (N.S.S.; order 111227X2)
3.4	1	112379	valve bumper (N.S.S.; order 111227X2)
3.5	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
3.6	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
4	1	112225-2	tube clamp
5	1	111228-004	gasket, cylinder to valve plate
6	2	110919-024	tube fitting, 90° male elbow, 3/4 tube x 3/4 npt
7	8	123478-L25	hex. screw, 3/8-16 unc x 4.00, grade 5 (@ 30 ft.-lbs.)
8	1	111228-003	gasket, cylinder to valve plate
9	9	110428N038	flatwasher, 3/8
10	1	111118-4	cylinder head, low pressure
11	1	111229-001	gasket, head to valve plate
12	1	111226X2M	valve plate assembly, low pressure
12.1	1	111226-2M	valve plate (N.S.S.; order 112713M)
12.2	1	112380	reed valve (N.S.S.; order 112713M)
12.3	1	112359-1	reed valve (N.S.S.; order 112713M)
12.4	1	112381-1	valve bumper (N.S.S.; order 112713M)
12.5	1	112378-1	valve bumper (N.S.S.; order 112713M)
12.6	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
12.7	2	112373-J02	hex. nut, 1/4-20 unc (@120 in.lbs.)
13	1	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 30 ft.-lbs.)
14	1	2961-100	safety valve
15	1	112129	intercooler
16	1	112825-002	pipe bushing, 1 npt x 3/4 npt
17	3	112709-006	plug, 3/4-16 unf ("o"ring included)
18	1	112710-004	adapter, 3/4-16 unf x 1/4 npt ("o"ring included)
19	1	111146F100	air filter
	or		
19	1	111550S100	air filter/silencer, hooded
<b>Maintenance Parts</b>			
20	4	112708-908	"o"ring, silicone
21	1	111146E100	air filter element, (fits 111146F100 filter)
	or		
21	1	110377E100	air filter element, (fits 111550S100 filter/silencer)
	1	112713M15	<b>Valve Assembly Replacement Kit, LP</b> includes valve plate assembly & gaskets
	1	112714	<b>Valve Assembly Replacement Kit, HP</b> includes valve plate assembly & gaskets

\*As viewed facing the compressor from the sheave side.

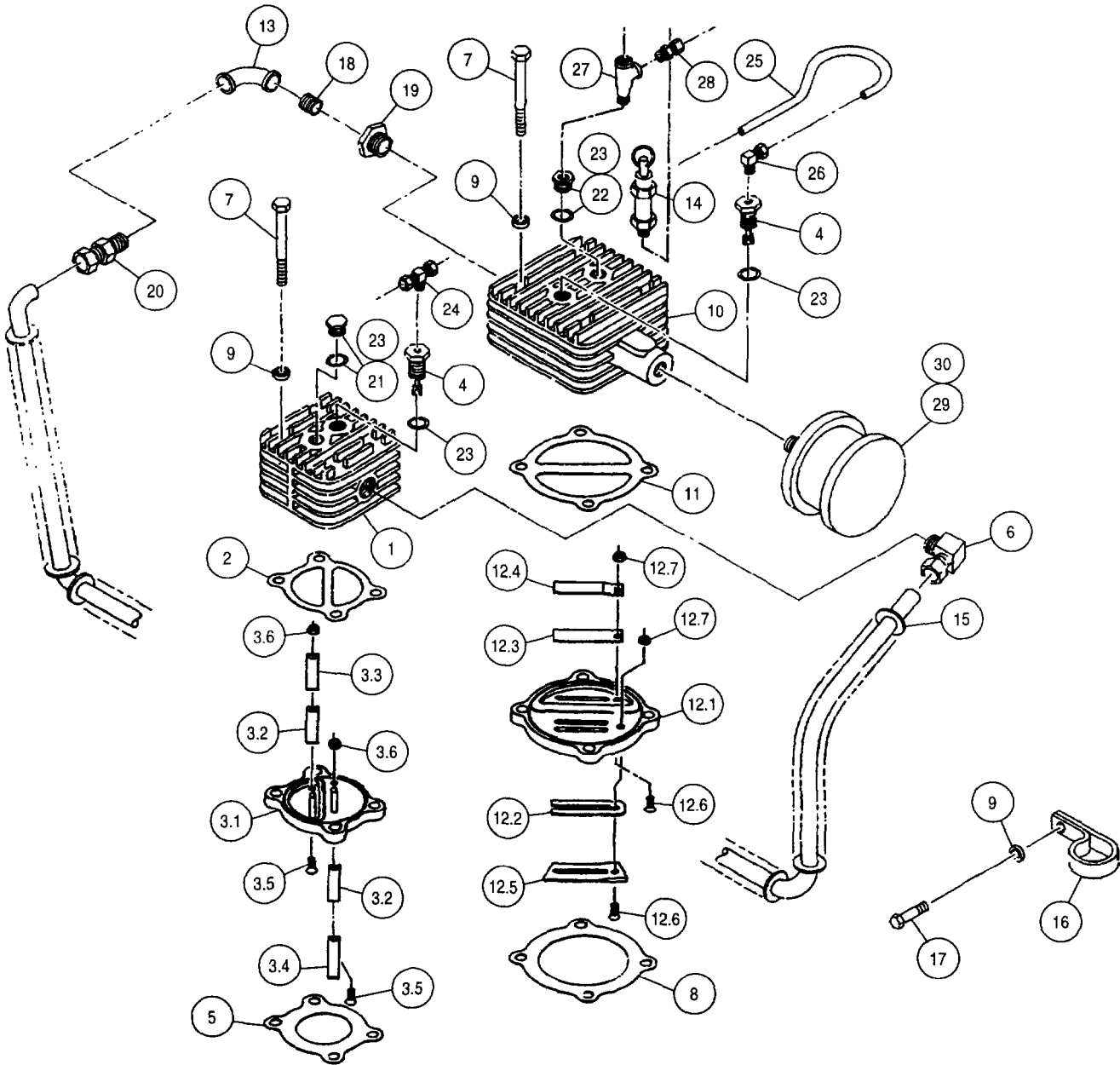
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@ Indicates torque value (dry threads)

Note: Tighten all bolts & capscrews in any bolt pattern, evenly bringing each bolt to torque in equal increments, while moving about the bolt pattern. This is particularly true of connecting rod & head bolts.

# CYLINDER & HEAD GROUP 112037-1

(\*right bank / with head unloaders)



# CYLINDER & HEAD GROUP 112037-1

(\*right bank / with head unloaders)

Item Number	Qty.	Part Number	Description
1	1	111115-5	cylinder head, high pressure
2	1	111274-001	gasket, head to valve plate
3	1	111227X2	valve plate assembly, high pressure
3.1	1	111227-2	valve plate, (N.S.S.; order 111227X2)
3.2	2	112359-2	reed valve, (N.S.S.; order 111227X2)
3.3	1	112381-2	valve bumper (N.S.S.; order 111227X2)
3.4	1	112379	valve bumper (N.S.S.; order 111227X2)
3.5	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
3.6	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
4	2	111591X1	unloader
5	1	111228-004	gasket, cylinder to valve plate
6	1	110919-024	tube fitting, 90° male elbow, 3/4 tube x 3/4 npt
7	8	123478-L25	hex. screw, 3/8-16 unc x 4.00, grade 5 (@ 30 ft.-lbs.)
8	1	111228-003	gasket, cylinder to valve plate
9	9	110428N038	flatwasher, 3/8
10	1	111118-4	cylinder head, low pressure
11	1	111229-001	gasket, head to valve plate
12	1	111226X2M	valve plate assembly, low pressure
12.1	1	111226-2M	valve plate (N.S.S.; order 112713M15)
12.2	1	112380	reed valve (N.S.S.; order 112713M15)
12.3	1	112359-1	reed valve (N.S.S.; order 112713M15)
12.4	1	112381-1	valve bumper (N.S.S.; order 112713M15)
12.5	1	112378-1	valve bumper (N.S.S.; order 112713M15)
12.6	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
12.7	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
13	1	4816	pipe elbow, 3/4 npt
14	1	2961-100	safety valve
15	1	112130	intercooler
16	1	112225-2	tube clamp
17	1	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 30 ft.-lbs.)
18	1	125936-009	pipe nipple, 3/4 npt x 1.88
19	1	2392	pipe bushing, 1 npt x 3/4 npt
20	1	23271	tube fitting, straight 3/4 tube x 3/4 npt
21	1	112709-006	plug, 3/4-16 unf ("o"ring included)
22	1	112710-004	adapter, 3/4-16 unf x 1/4 npt ("o"ring included)
23	2	112708-908	"o"ring, silicone
24	1	124351-004	tube fitting, male branch tee, 1/4 tube x 1/4 npt
25	1	110515-025	copper tube, 1/4 o.d.
26	1	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt
27	1	3003	pipe tee, 1/4 npt x 1/4 npt x 1/4 npt
28	1	110594-005	tube fitting, male connector, 1/4 tube x 1/4 npt
29	1	110377F100	air filter
	or		
29	1	111550S100	air filter/silencer, hooded
<b>Maintenance Parts</b>			
30	1	110377E100	air filter element, (fits 110377F100 air filter and 111550S100 filter/silencer)
	1	112713M15	<b>Valve Assembly Replacement Kit, LP</b> includes valve plate assembly & gaskets
	1	112714	<b>Valve Assembly Replacement Kit, HP</b> includes valve plate assembly & gaskets

\*As viewed facing the compressor from the sheave side.

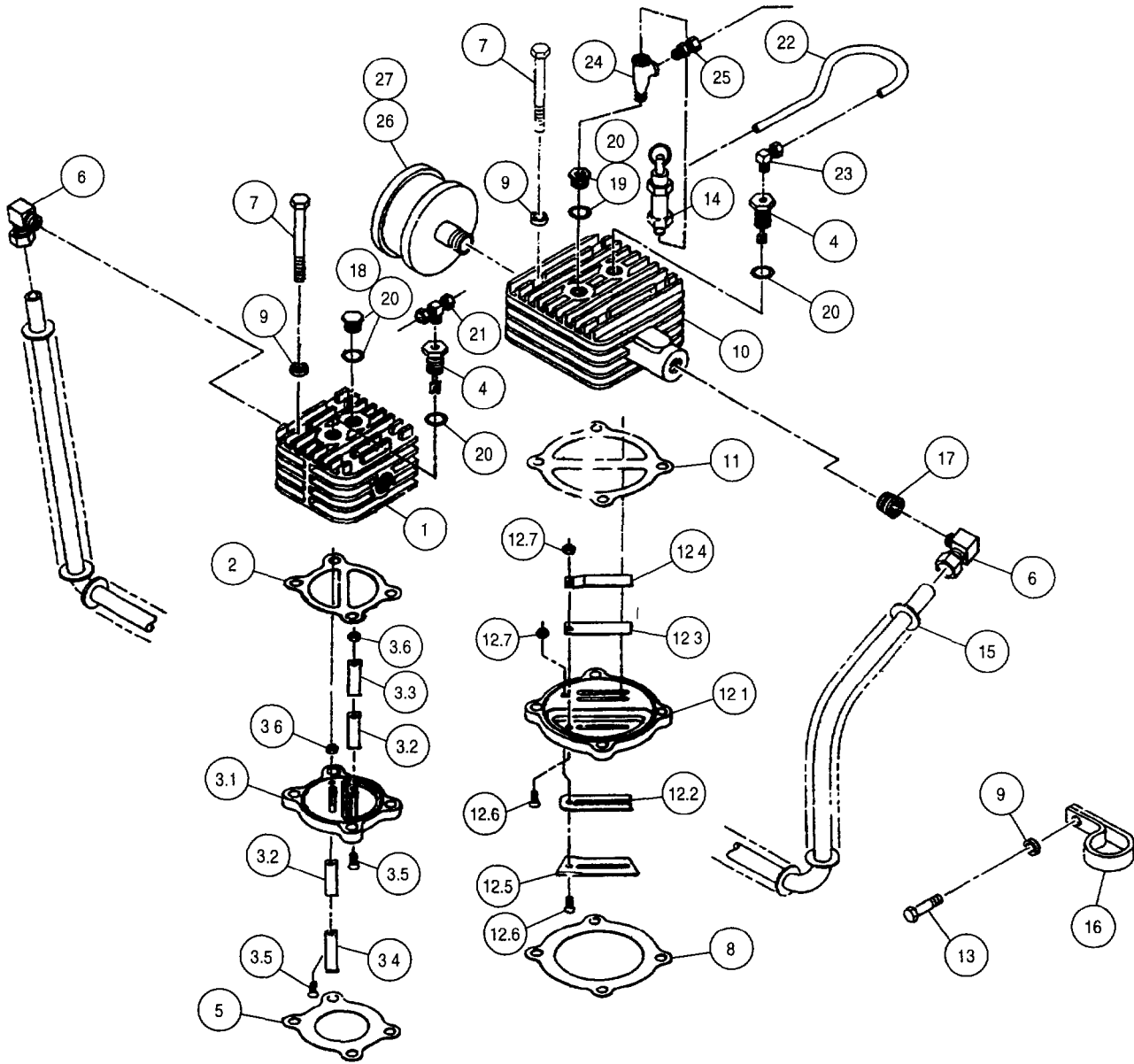
N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads)

Note: Tighten all bolts & capscrews in any bolt pattern, evenly bringing each bolt to torque in equal increments, while moving about the bolt pattern. This is particularly true of connecting rod & head bolts.

# CYLINDER & HEAD GROUP 112038-1

(\*left bank / with head unloaders)





# CYLINDER & HEAD GROUP 112038-1

(\*left bank / with head unloaders)

Item Number	Qty.	Part Number	Description
1	1	111115-5	cylinder head, high pressure
2	1	111274-001	gasket, head to valve plate
3	1	111227X2	valve plate assembly, high pressure
3.1	1	111227-2	valve plate, (N.S.S.; order 111227X2)
3.2	2	112359-2	reed valve, (N.S.S.; order 111227X2)
3.3	1	112381-2	valve bumper (N.S.S.; order 111227X2)
3.4	1	112379	valve bumper (N.S.S.; order 111227X2)
3.5	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
3.6	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
4	2	111591X1	unloader
5	1	111228-004	gasket, cylinder to valve plate
6	2	110919-024	tube fitting, 90° male elbow, 3/4 tube x 3/4 npt
7	8	123478-L25	hex. screw, 3/8-16 unc x 4.00, grade 5 (@ 30 ft.-lbs.)
8	1	111228-003	gasket, cylinder to valve plate
9	9	110428N038	flatwasher, 3/8
10	1	111118-4	cylinder head, low pressure
11	1	111229-001	gasket, head to valve plate
12	1	111226X2M	valve plate assembly, low pressure
12.1	1	111226-2M	valve plate (N.S.S.; order 112713M15)
12.2	1	112380	reed valve (N.S.S.; order 112713M15)
12.3	1	112359-1	reed valve (N.S.S.; order 112713M15)
12.4	1	112381-1	valve bumper (N.S.S.; order 112713M15)
12.5	1	112378-1	valve bumper (N.S.S.; order 112713M15)
12.6	2	112728-J12	flathead screw, 1/4-20 unc x 1.00, grade 8
12.7	2	112373-J02	hex. nut, 1/4-20 unc (@ 120 in.-lbs.)
13	1	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 30 ft.-lbs.)
14	1	2961-100	safety valve
15	1	112129	intercooler
16	1	112225-2	tube clamp
17	1	112825-002	pipe bushing, 1 npt x 3/4 npt
18	1	112709-006	plug, 3/4-16 unf ("o"ring included)
19	1	112710-004	adapter, 3/4-16 unf x 1/4 npt ("o"ring included)
20	2	112708-908	"o"ring, silicone
21	1	124351-004	tube fitting, male branch tee, 1/4 tube x 1/4 npt
22	1ft	110515-025	copper tube, 1/4 o.d.
23	1	2708	tube fitting, 90° male elbow, 1/4 tube x 1/4 npt
24	1	3003	pipe tee, 1/4 npt x 1/4 npt x 1/4 npt
25	1	110594-005	tube fitting, 1/4 tube x 1/4 npt
26	1	110377F100	air filter
	or		
26	1	111550S100	air filter/silencer, hooded
<b>Maintenance Parts</b>			
27	1	110377E100	air filter element, (fits 110377F100 air filter and 111550S100 filter/silencer)
	1	112713M15	<b>Valve Assembly Replacement Kit, LP</b> includes valve plate assembly & gaskets
	1	112714	<b>Valve Assembly Replacement Kit, HP</b> includes valve plate assembly & gaskets

\*As viewed facing the compressor from the sheave side.

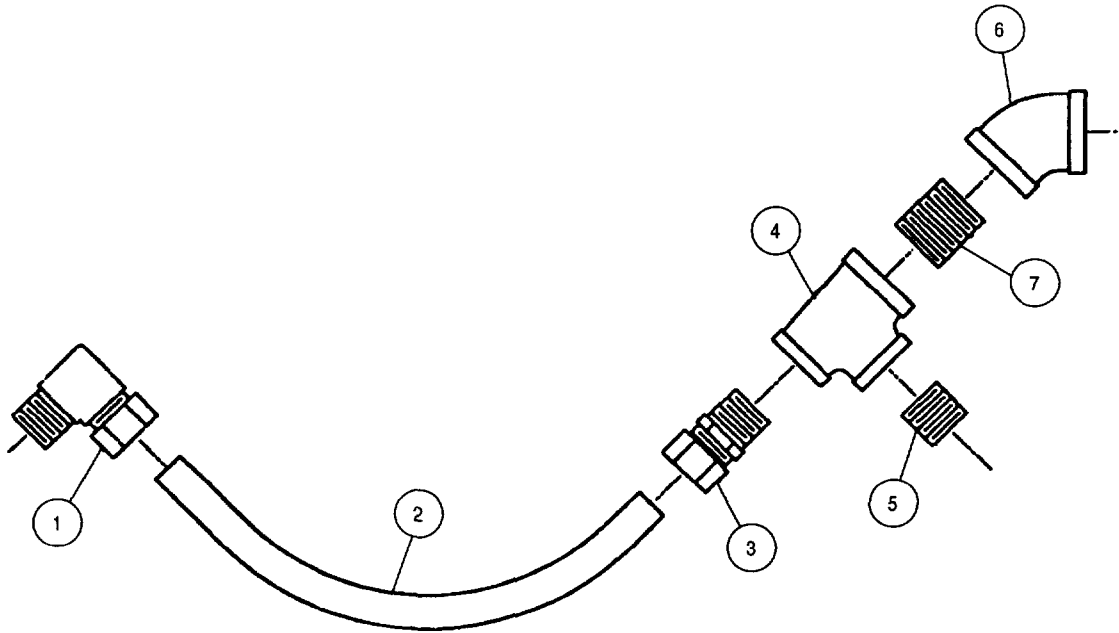
N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads)

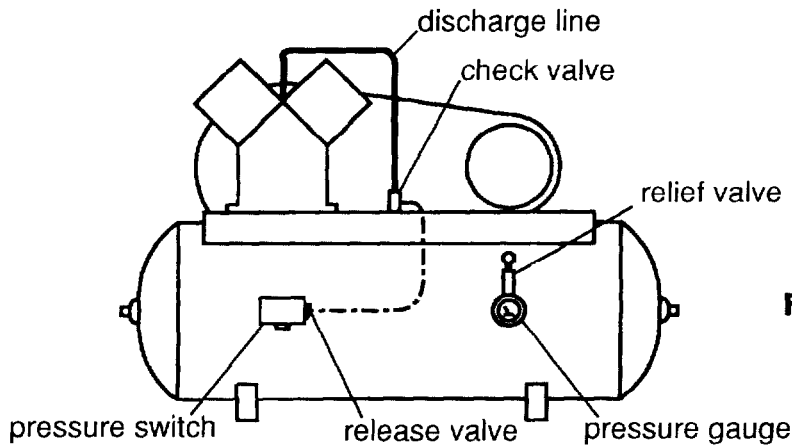
Note: Tighten all bolts & capscrews in any bolt pattern, evenly bringing each bolt to torque in equal increments, while moving about the bolt pattern. This is particularly true of connecting rod & head bolts.

# MANIFOLD GROUP 112257

Item Number	Qty.	Part Number	Description
1	1	110919-024	tube fitting, 90° male elbow, 3/4 tube x 3/4 npt
2	2ft	110515-075	copper tube, 3/4 o.d.
3	1	23271	tube fitting, straight 3/4 tube x 3/4 npt
4	1	122082	pipe tee, 1 npt x 3/4 npt x 3/4 npt
5	1	125936-001	pipe nipple, 3/4 npt x close
6	1	22238	pipe elbow, 45°, 1 npt
7	1	125937-001	pipe nipple, 1 npt x close

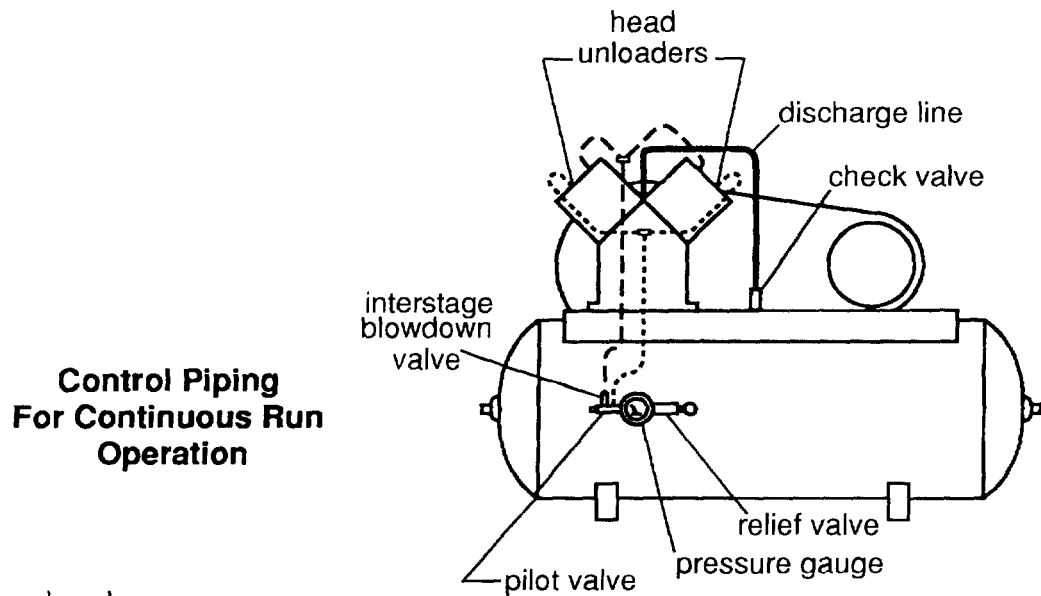


# CONTROL PIPING SCHEMATICS

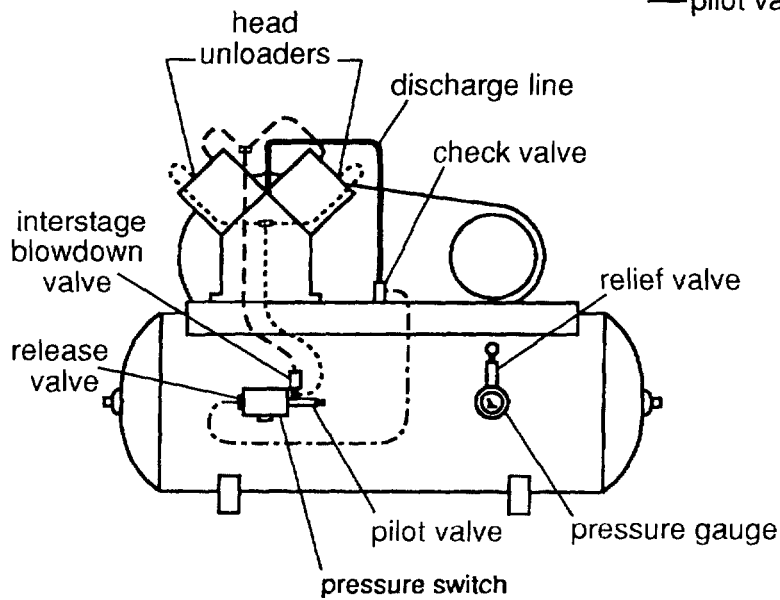


**Control Piping  
For Automatic Start/Stop  
Operation**

*(with loadless starting)*



**Control Piping  
For Continuous Run  
Operation**

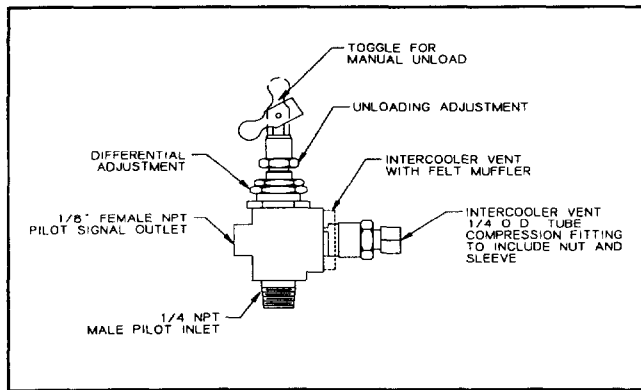


**Control Piping  
For Dual Control  
Operation**

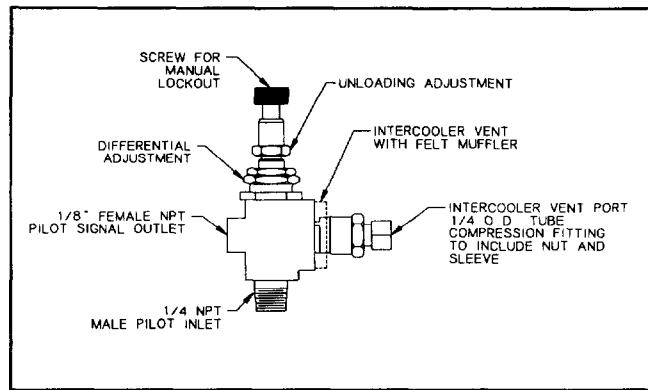
*Pilot valve is open (stem screwed out)  
for Continuous Run operation*

*Pilot valve is closed (stem screwed in)  
for automatic Start/Stop operation  
(with loadless starting)*

# PILOT VALVES



**113321 series pilot valve  
(continuous run operation)**



**113320 series pilot valve  
(dual control operation)**

### Available 113321 Series Pilot Valves

Pilot Valve	Pressure Setting
113321-090	80-90
113321-100	90-100
113321-110	100-110
113321-125	110-125
113321-140	130-140
113321-150	135-150
113321-165	150-165

### Available 113320 Series Pilot Valves

Pilot Valve	Pressure Setting
113320-095	75-95
113320-115	100-115
113320-140	125-140
113320-165	150-165

## WARNING !

Not all pilots are for use with all compressor systems. Make sure that the pilot you order is set within the safe operating limits of your compressor. Failure to heed this warning could result in an explosion.

### Pilot Valve Repair Kit 113320K

Can be used to repair 113320 & 113321 series pilot valves

Qty.	Part Description
1	ball
1	"o"ring
1	piston
1	diaphragm
1	pilot spring
1	piston spring
1	toggle lever
1	rivet
1	muffler
1	retaining ring

### Differential Setting Chart

Applies to 113320 & 113321 series pilot valves

Unload (p.s.i.)	Min. Dif. (p.s.i.)	Max. Dif. (p.s.i.)
40	2	5
60	3	10
100	4	20
150	5	30
175	5	45

# SUCTION VALVE UNLOADER ASSEMBLIES

## Description

The Quincy suction valve unloader assembly consists of unloading assemblies on the suction valves, having a plunger to contact the suction valve reed and an unloader pilot valve (113320 or 113321 series) to automatically regulate the passing of air tank pressure to the unloading arrangement.

## Continuous Run Operation

Suction valve unloader assemblies are recommended for use on Quincy compressors where the compressor is to run continuously and a constant pressure is to be maintained. The purpose is to automatically unseat the suction valve of the compressor when the air supply is greater than the demand.

Unloading occurs when air tank pressure is sufficient to overcome pilot valve spring pressure. The check ball is then unseated, allowing air tank pressure to pass to the unloader assemblies. The compressor will run unloaded until the air tank pressure drops to a predetermined level. At this time, the action of the ball is reversed, shutting off air tank pressure to the unloader assemblies and venting the unloader to atmosphere. This allows the compressor to load. The drive, either electric motor or engine, runs continuously and must be started and stopped manually. 113321 series pilot valves feature a toggle lever which can be flipped to provide manual unloading.

## Dual Control Operation

Dual control operation is designed to provide a choice between "start/stop" or "continuous run" operation. The 113320 series pilot valve can be set for "start/stop" operation by turning the knurled knob at the end of the pilot valve (refer to illustration for 113320 series pilot valve) clockwise until it stops. Under these circumstances, a pressure switch is required to stop the motor. Failure to use a pressure switch, with the pilot valve locked out, will result in unsafe conditions.

### WARNING !

A pressure switch must be incorporated whenever 113320 series pilot valve is employed as part of the control system.

The compressor will operate in the continuous run mode if the knurled knob is turned counterclockwise until it stops.

## Interstage Blowdown Valve

113320 & 113321 series pilot valves feature an interstage blowdown valve which bleeds interstage pressure back to atmosphere when the compressor is running unloaded. This reduces the unloaded horsepower.

## Installation

The pilot valve is mounted directly into the air tank. Compressors in the field, not equipped with these controls, can be converted. Consult your local Quincy Compressor Distributor for assistance with conversion procedures.

## Service

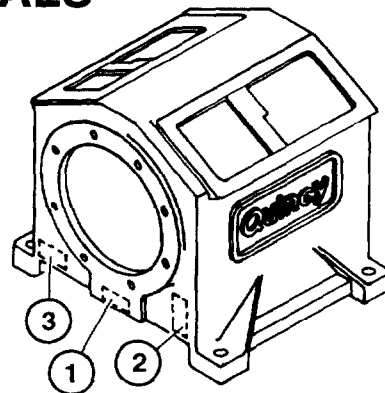
If a change in pilot valve operation is detected, remove the pilot valve from the air tank and check the screen in the inlet of the pilot valve for obstructions. Clean the screen if necessary.

## Adjustment

The unloading pressure is adjustable and is regulated by turning the unload adjustment hex nut (refer to pilot valve illustrations). Turn the hex nut clockwise to increase and counterclockwise to decrease the unloading pressure.

The differential (difference between unloading and loading pressure) is set by turning the differential adjustment hex nut (refer to pilot valve illustrations). Increase the differential pressure by turning the hex nut clockwise - decrease by turning counterclockwise. Make all adjustments in small increments. Tighten the locknuts after adjustment.

## DECALS



Decals			
Item #	Qty.	Part Number	Description
1	1	110831	serial number & nameplate
2	1	127889-A	decal, CAUTION!, MANUAL
3	1	127889-B	decal, DANGER!,"Air from this...."

<b>Overhaul Kit KQT15A</b> (for models without head unloaders)			
Item #	Qty.	Part Number	Description
2		112318	Piston Ring Set
2		8166C	Piston Ring Set
1		112085	gasket set
2		111227X2	valve plate assembly, HP
2		111226X2M	valve plate assembly, LP
2		111146F100	air filter
2		110190-052	piston pin assembly, LP
2		110190-053	piston pin assembly, HP
4		112212	oil dipper
2		111928	connecting rod assembly
2		111927	connecting rod assembly
1		111304	breather filter

<b>Head Kit KQT15B</b> (for models without head unloader)			
Item #	Qty.	Part Number	Description
2		112713M15	Valve Assembly Kit, LP
2		112714	Valve Assembly Kit, HP
2		111146E100	air filter element, (fits 111146F100 filter)

<b>Head Kit KQT15D</b> (for models with head unloader)			
Item #	Qty.	Part Number	Description
2		112713M15	Valve Assembly Kit, LP
2		112714	Valve Assembly Kit, HP
2		110377E100	air filter element, (fits 110377S100 filter)

<b>Overhaul Kit KQT15C</b> (for models with head unloaders)			
Item #	Qty.	Part Number	Description
2		112318	Piston Ring Set
2		8166C	Piston Ring Set
1		112085	gasket set
2		111227X2	valve plate assembly, HP
2		111226X2M	valve plate assembly, LP
2		110377E100	air filter
2		110190-052	piston pin assembly, LP
2		110190-053	piston pin assembly, HP
4		112212	oil dipper
2		111928	connecting rod assembly
2		111927	connecting rod assembly
1		111304	breather filter

<b>Gasket Set 112085</b>			
Item #	Qty.	Part Number	Description
1		111781	oil seal
2		111274-001	gasket, head to valve plate
2		111229-001	gasket, head to valve plate
2		111228-003	gasket, cylinder to valve plate
2		111228-004	gasket, cylinder to valve plate
1		123157-167	"o"ring, 3/32 wide x 7.19 o.d.
1		123157-112	"o"ring, 3/32 wide x .69 o.d.
1		123157-275	"o"ring, 1/8 wide x 10.75 o.d.
2		111782	gasket, cylinder to crankcase
8		112708-908	"o"ring, silicone

<b>Recommended Spare Parts</b>			
Item #	Qty.	Part Number	Description
1		110377E100	air filter element
or			
1		111146E100	air filter element
1		112085	gasket set
1		111226X2M	valve plate assembly, LP
1		111227X2	valve plate assembly, HP

# TYPICAL UNIT REPAIR PARTS LIST

The parts listed here are for standard QT-15 units and may or may not be applicable to specially built units. Check with your local authorized Quincy Compressor Distributor for parts that can be used for custom built units. Make sure the components you order are rated within the safe operating limits of your system. If you are doubtful about which components to order, contact your local Quincy distributor.

(QT-15 simplex - horizontal tank - electric motor)

Qty	Part Number	Part Number	Part Number	Description
	<b>80 gal.</b>	<b>120 gal.</b>	<b>200 gal.</b>	
1	113269-200	113272-200	113273-200	tank
1	113277	n/a	113282-001	top plate
1	2713	111136-050	111136-050	tank drain valve
1	111136-100	111136-100	111136-100	service valve
1	110514-300	110514-300	110514-200	pressure gauge
1	110512-005	110512-005	110512-005	pressure switch, 135-175 psi
1	110513-200	110513-200	110513-200	pressure relief valve, 200 psi (in tank)
1	111089-215	111089-215	111089-215	pressure relief valve, 215 psi (in discharge line)
1	110965-210	110965-210	110965-210	check valve
4 ft.	110515-100	110515-100	110515-100	! discharge tube (1" copper tube to be formed by customer)
2	111265-100	111265-100	111265-100	ferrule/sleeve
	<b>10 H.P.</b>	<b>15 H.P.</b>		
2	110258B094	110258B098		drive belt
1	112269-138	112320		motor pulley
1	112432K003	112432K003		belt guard assembly
	<b>200v, 3Ø</b>	<b>230/460v, 3Ø</b>		
1	40656	4014		10 h.p. motor (O.D.P.)
1	40657	4015		15 h.p. motor (O.D.P.)

(QT-15 duplex - horizontal tank - electric motor)

Qty	Part Number	Part Number	Part Number	Description
	<b>200 gal.</b>	<b>240 gal.</b>		
1	112362-200	112400-200		tank (standard)
1	113468-200	113470-200		tank (pedestal)
2	113282-001	113282-001		top plate (for pedestal tank)
1	111136-050	111136-050		tank drain valve
1	111136-075	111136-100		service valve
1	110514-300	110514-300		pressure gauge
2	110512-005	110512-005		pressure switch, 135-175 psi
1	110513-200	110513-200		pressure relief valve, 200 psi (in tank)
2	111089-215	111089-215		pressure relief valve, 215 psi (in discharge line)
2	110965-210	110965-210		check valve
8 ft.	110515-100	110515-100		! discharge tube (1" copper tube to be formed by customer)
4	111265-100	111265-100		ferrule/sleeve
	<b>10 H.P.</b>	<b>15 H.P.</b>		
4	110258B094	110258B098		drive belt
2	112269-138	112320		motor pulley
2	112432K003	112432K003		belt guard assembly
	<b>200v, 3Ø</b>	<b>230/460v, 3Ø</b>		
2	40656	4014		10 h.p. motor (O.D.P.)
2	40657	4015		15 h.p. motor (O.D.P.)

Part numbers shown in italics apply to tank mounted units and base mounted units.

! Preformed tubes are available. Contact factory with model & tank size information.

QT-15

QUINCY COMPRESSOR

# TYPICAL UNIT REPAIR PARTS LIST

The parts listed here are for standard QT-15 units and may or may not be applicable to custom built units. Check with your local authorized Quincy Compressor Distributor for parts that can be used for custom built units. Make sure the components you order are rated within the safe operating limits of your system. If you are doubtful about which components to order, contact you local Quincy distributor.

(QT-15 gasoline engine driven)

Qty	Part Number	Part Number	Part Number	Description
	<b>base unit</b>	<b>tank unit</b>		
1		113716-200		tank, 200 psi
1	113717	113717		top plate
1		111136-025		tank drain valve
1		111136-075		ball valve
1		110514-300		pressure gauge
1		110513-200		pressure relief valve, 200 psi (in tank)
2	110357B090	110357B090		drive belt
1	110662	110662		engine pulley
1	8924	8924		engine pulley bushing
1	112432-003	112432-003		belt guard assembly
1	113697	113697		throttle control
1	113720	113720		Kohler engine group, 18 h.p. (includes exhaust system & throttle control)
2 ft.		110515-100		! discharge tube (1" copper tube to be formed by customer)
2		111265-100		ferrule / sleeve
1	110965-110	110965-110		check valve
1	111089-215	111089-215		pressure relief valve, 215 psi (discharge line)
1	112316	112316		fuel tank group, 6 gal. (incl. fuel tank & 6 ft. of hose)
1	113708-175	113708-175		pilot, 165-175 psi

! Pre-formed discharge tubes are available. Contact factory with model & tank size information.



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