

an EnPro Industries company

# QRNG<sup>®</sup> Series Model QRNG 5120

Parts Manual

Record of Change 104

This manual contains important safety information and must be made available to all personnel who operate and/or maintain this product. Carefully read this manual before attempting to operate or perform maintenance on this compressor.

Fill Out & Return Warranty Registration Card Located Inside

Manual No. 50166-104

February 2008 Edition

#### INTRODUCTION

This manual provides information for the QRNG Series, Model QRNG 5120 natural gas compressor per Record of Change 104.

The Model QRNG 5120 natural gas compressor is an aircooled, two stage, four cylinder, pressure lubricated compressor capable of handling inlet pressures of -7.5 PSIG (15 in. mercury) up to 15 PSIG. A maximum of 325 PSIG discharge pressure can be produced (with proper controls and modifications). It has a 6" low pressure bore, a 3.25" high pressure bore x 4" stroke and can be run at 400-900 RPM.

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## ORDERING REPLACEMENT PARTS

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

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.

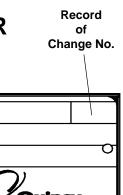
# MODEL & SERIAL NUMBER IDENTIFICATION

MODEL

SERIAL NO.

110831

O



## Model & Serial Number Identification Tag

The serial number identification tag is located on the handhole plate side of the crankcase. Fill in the numbers from compressor in the corresponding spaces provided here, and reference this page when ordering replacement parts.

#### **CHANGES**

since previous printing dated December 2007:

Head unloader piping was modified.

#### **CAUTION!**

Follow all safety precautions outlined in the QRNG Series instruction manual.

#### **WARNING!**

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

#### DANGER!

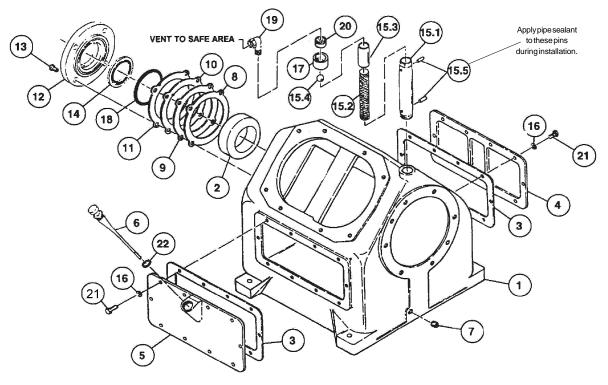
Air used for breathing or food processing must meet OSHA 1910.134 or FDA 21 CFR 178.3570 regulations. Failure to do so may cause severe injury or death.

### CRANKCASE GROUP 112259

	em mber	Qty.	Part Number	Description
	1	1	6640	crankcase
	2	1	4357	bearing cup
	3	$^2$	6678-1	gasket, inspection plate
	4	1	6645-1	inspection plate
	5	1	110174-2	handhole plate
	6	1	111876-3	oil level gauge
‡	7	1	2057	pipe plug, 1/2 NPT
	8	*	1498	bearing shim, .005
	9	*	1498A	bearing shim, .007
	10	*	1498B	bearing shim, .020
	11	*	1498C	bearing shim, .002
	12	1	112204-1	adjustment plate
	13	4	123478-N14	hex screw,1/2-13 unc x 1.25, grade 5 (@ 75 ftlbs.)
	14	1	112255	oil seal
‡	15	1	5518X1	breather assembly
	15.1	1	5518	breather tube
	15.2	1	111304	breather filter
	15.3	1	6864	crankcase breather ball seat
	15.4	1	5783	breather ball
	15.5	1	110705 - D15	roll pin, 1/8 X 1.12
	16	20	110428N038	flatwasher, 3/8
	17	1	21149	pipe coupling, 1" NPT
	18	1	22749-044	"o"ring, 1/16 wide x 3.88 o.d.
‡	19	1	110419-010	tube fitting, 90° male elbow, 3/8 tube x 38 NPT
‡	20	1	6136	pipe bushing, 1" NPT x 3/8 NPT
	21	20	123478-L12	hex screw, 3/8-16 unc x 1.00, grade 5 (@12 ftlbs.)
	22	1	112033-908	"o"ring, 3/32 wide x .82 o.d.

<sup>\*</sup> Quantity as required

 $<sup>\</sup>ddagger$  Apply thread sealant to all pipe threads.



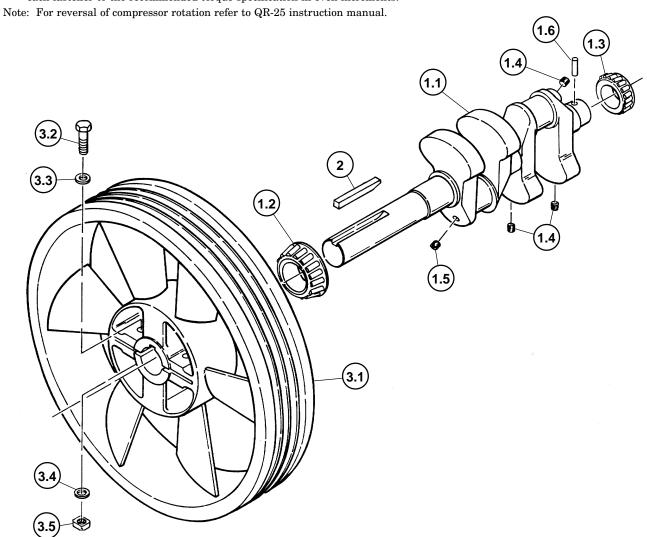
<sup>@</sup> Indicates torque value in foot pounds (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

#### CRANKSHAFT GROUP 110461

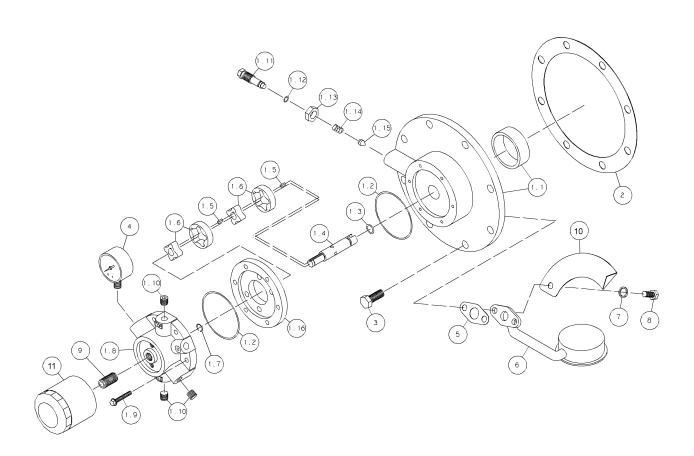
Item Number	Qty.	Part Number	Description
	<u> </u>		
1	1	110227-001	crankshaft assembly
1.1	1	110226-001R	crankshaft (N.S.S.; order 110227-001)
1.2	1	6651	bearing cone
1.3	1	40775	bearing cone
1.4	3	2755S	pipe plug, 1/4 npt
1.5	1	110234	orifice, 1/8 npt
1.6	1	110705-F21	roll pin, 3/16 x 1.88
2	1	2851	key
3	1	110558X	sheave assembly
3.1	1	8297-1R	sheave, 23-1/2", 4G, B section, CCW (N.S.S.; order 110558X)
3.2	2	123478-Q21	hex. screw, 5/8-11 unc x 3.00, grade 5 (@ 150 ftlbs.)
3.3	<b>2</b>	115512	flatwasher, 5/8
3.4	2	123115-10C	lockwasher, 5/8
3.5	2	1883-001	square nut, 5/8-11 unc

N.S.S. = Not Sold Separate

@ Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.



(with oil filter)



(with oil filter)

	em		Part	
	mber	Qty.	Number	Description
	1	1	110811-006	bearing carrier assembly (N.S.S.; order 110811G006)
	1.1	1	110811	bearing carrier
				includes bearing cup & bushing
	1.2	2	22749-152	"o"ring, 3/32 wide x 3.44 o.d.
	1.3	1	22749-112	"o"ring, 3/32 wide x .69 o.d.
	1.4	1	160002-003	bearing carrier driveshaft
	1.5	2	160075-001	driveshaft key
	1.6	2	160003	pump gerotor
	1.7	1	6285	retaining ring
	1.8	1	110813-001	oil pump housing
	1.9	6	123777-J15	hex screw, 1/4-20 unc x 1.50 (@ 6 ftlbs.)
§	1.10	3	2719	pipe plug, 1/4 npt, hex socket
	1.11	1	5489	adjustment screw
	1.12	1	22749-011	"o"ring, $1/16$ wide x .44 o.d.
	1.13	1	124369-P02	jamnut, 9/16-18 unf
	1.14	1	1160	spring
	1.15	1	112857	needle valve
	1.16	1	112548	pump spacer
	2	1	5494-1	bearing carrier gasket
	3	8	123478-N14	hex. screw, 1/2-13 unc x 1.25, grade 5 (@ 75 ftlbs.)
§	4	*1	110822	oil pressure gauge
	5	1	6679-1	gasket, oil inlet bracket
	6	1	110660	oil pickup tube
	7	$^2$	123115-06C	lockwasher, 3/8
	8	$^2$	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 25 ftlbs.)
	9	1	110825	stud
	11	1	113159	oil deflector
				Maintenance Parts
	10	1	110814-001	oil filter (six pack)
	-	<del>-</del>	160079G	Oil Pump Repair Kit
			_300100	includes "o"rings, driveshaft, keys, pump gerotors & retaining ring
			110811G006	Replacement Bearing Carrier Assembly includes bearing carrier assembly & gasket

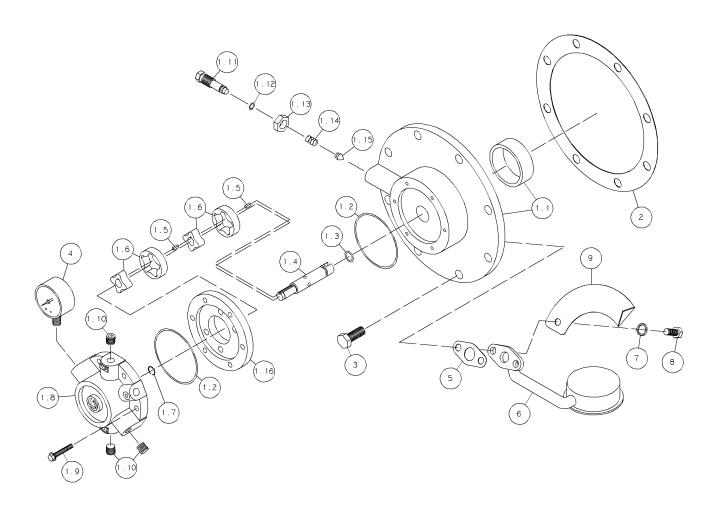
#### N.S.S. = Not Sold Separate

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

<sup>\*</sup> Should indicate approximately 25 PSIG at operating temperature.

 $<sup>\</sup>$  Install with Teflon® tape.

(without oil filter)



(without oil filter)

	em mber	Qty.	Part Number	Description
	1	1	110811-001	bearing carrier assembly (N.S.S.; order 110811G001)
	1.1	1	110811	bearing carrier assembly (N.B.B., order 1100110001)
	1.1	•	110011	includes bearing cup & bushing
	1.2	2	22749-152	"o"ring, 3/32 wide x 3.44 o.d.
	1.3	1	22749-112	"o"ring, 3/32 wide x .69 o.d.
	1.4	1	160002-003	bearing carrier driveshaft
	1.5	$\overline{2}$	160075-001	driveshaft key
	1.6	2	160003	pump gerotor
	1.7	1	6285	retaining ring
	1.8	1	110813	oil pump housing
	1.9	6	123777-J15	hex screw, 1/4-20 unc x 1.50 (@ 6 ftlbs.)
§	1.10	3	2719	pipe plug, 1/4 npt, hex socket
0	1.11	1	5489	adjustment screw
	1.12	1	22749-011	"o"ring, 1/16 wide x .44 o.d.
	1.13	1	124369-P02	jamnut, 9/16-18 unf
	1.14	1	1160	spring
	1.15	1	112857	needle valve
	1.16	1	112548	pump spacer
	2	1	5494-1	bearing carrier gasket
	3	8	123478-N14	hex. screw, 1/2-13 unc x 1.25, grade 5 (@ 75 ftlbs.)
§	4	*1	110822	oil pressure gauge
	5	1	6679-1	gasket, oil inlet bracket
	6	1	110660	oil pickup tube
	7	$^2$	123115-06C	lockwasher, 3/8
	8	$^{2}$	123478-L11	hex. screw, 3/8-16 unc x .88, grade 5 (@ 25 ftlbs.)
	9	1	113159	oil deflector
			160079G	Maintenance Parts Oil Pump Repair Kit
				includes "o"rings, driveshaft, keys, pump gerotors & retaining ring
			110811G001	Replacement Bearing Carrier Assembly includes bearing carrier assembly (item 1) & gasket (item 2)

#### N.S.S. = Not Sold Separate

50166-104, February 2008

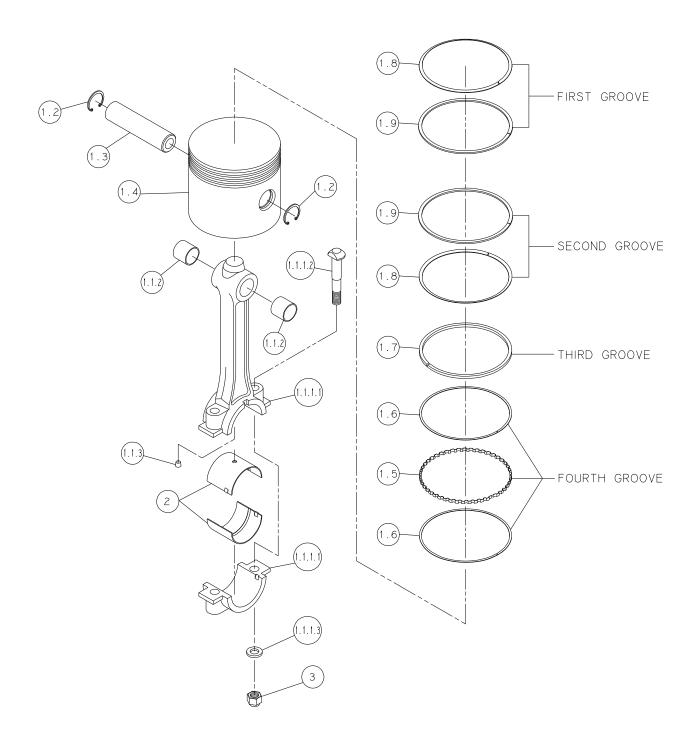
<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

<sup>\*</sup> Should indicate approximately 25 PSIG at operating temperature.

 $<sup>\</sup>$  Install with Teflon® tape.

## CONNECTING ROD & PISTON GROUP 112050-002

(low pressure side; 2 required per compressor)



#### CONNECTING ROD & PISTON GROUP 112050-002

(low pressure side; 2 required per compressor)

ltem		Part	
Number	Qty.	Number	Description
1	1	112051X1	connecting rod assembly (N.S.S.; see maintenance parts)
1.1	1	112051-002	connecting rod assembly (N.S.S.; see maintenance parts)
1.1.1	1	112232X	connecting rod assembly
1.1.1.	1 1	112058R	connecting rod
1.1.1.5	2  2	1344	connecting rod bolt, 7/16-20 unc x 3.25
1.1.1.	3 2	1319	connecting rod bolt washer
1.1.2	2	112234	needle bearing
1.1.3	1	110801-001	orifice
1.2	2	128203-137	retaining ring
1.3	1	110190-019	piston pin
1.4	1	112052	piston
1.5	1	112749	ring spacer
1.6	2	112748	oil ring rail
1.7	1	9146	piston ring
1.8	2	6994	piston spring, side sealer
1.9	2	6992	piston ring
2	2	6656	con-rod insert
3	2	124471-M08	locknut, 7/16-20 unf (@ 40 ftlbs.)
			Maintenance Parts
	1	112052-010	piston (.010 oversize)
	1	112052-020	piston (.020 oversize)
	1	7527	Piston Ring Set, LP
	1	F707 010	includes piston rings, piston rails, piston spring & spacer
	1	5787-010	Piston Ring Set, LP
	1	FEOE 000	includes all rings necessary for installing .010 oversize piston
	1	5787-020	Piston Ring Set, LP
*	1	6656PR	includes all rings necessary for installing .020 oversize piston
*	1 1		connecting rod inserts (1 pair, standard size)
••	1	6656-010PR	connecting rod inserts (1 pair, .010 undersize)
		112052G001	Piston Assembly (standard)
		112052G010	includes piston, pin, ring set & retaining rings
		1120920010	Piston Assembly (.010 oversize)
		112052G020	includes piston, pin ring set & retaining rings Piston Assembly (.020 oversize)
		1120920020	includes piston, pin, ring set & retaining rings
		112053G	Replacement Connecting Rod Assembly (standard)
		112099A	includes connecting rod assembly, inserts (pair) & locknuts
		112053G010	Replacement Connecting Rod Assembly (.010 undersize)
		1120000010	includes connecting rod assembly, inserts (pair) & locknuts

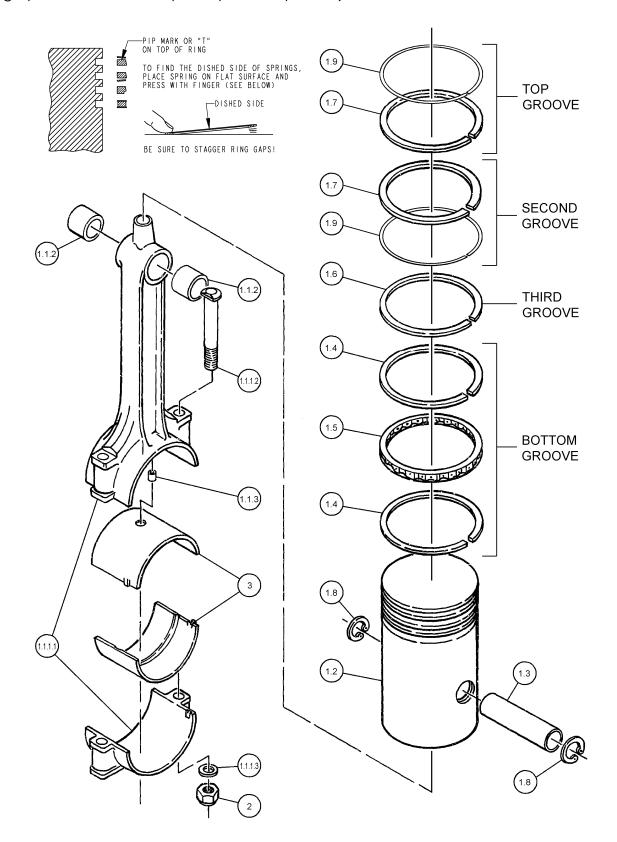
N.S.S. = Not Sold Separate

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

<sup>\*</sup> One pair required for each connecting rod assembly.

#### CONNECTING ROD & PISTON GROUP 115810

(high pressure side; 2 required per compressor)



#### CONNECTING ROD & PISTON GROUP 115810

(high pressure side; 2 required per compressor)

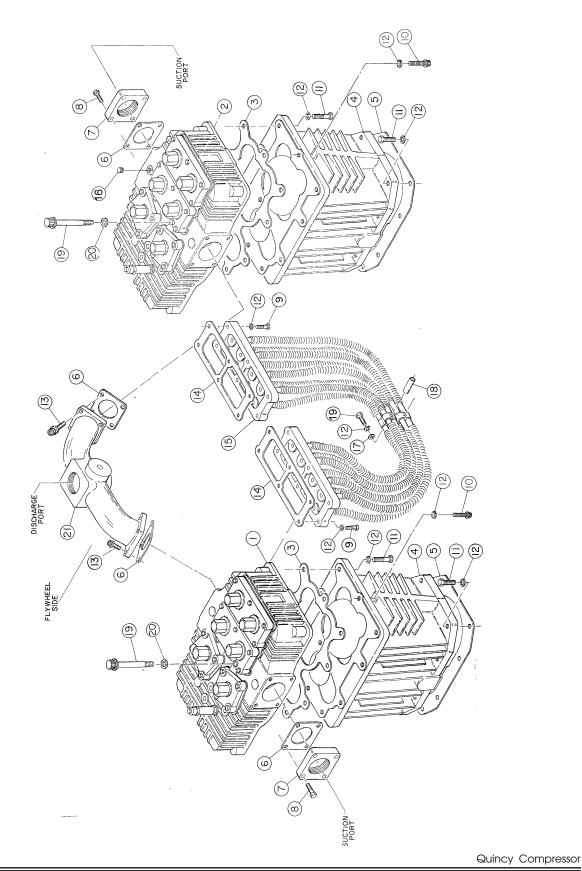
Item	<b>~</b>	Part Number	December
Number	Qty.	Number	Description
1	1	115812	connecting rod/piston assembly (N.S.S.; see maintenance parts)
1.1	1	112056-001	connecting rod assembly(N.S.S.; see maintenance parts)
1.1.1	1	112058X	connecting rod assembly
1.1.1.	1 1	112058	connecting rod
1.1.1.	2  2	1344	connecting rod bolt, 7/16-20 unc x 3.25
1.1.1.	3  2	1319	connecting rod bolt washer
1.1.2	<b>2</b>	112059	needle bearing
1.1.3	1	110801-001	orifice
1.2	1	112057	piston
1.3	1	110190-020	piston pin
1.4	$^2$	112782	oil ring rail
1.5	1	112783	piston ring
1.6	1	6997	piston ring
1.7	$^{2}$	7963	piston ring
1.8	<b>2</b>	8649	retaining ring
1.9	$^2$	7968	piston spring, side sealer
2	$^2$	112471-M08	locknut, 7/16-20 unf (@ 40ft.lbs.)
3	$^2$	6656	connecting rod insert (sold in pairs only; see maintenance parts)
			Maintenance Parts
	1	112057-010	piston (.010 oversize)
	1	112057-020	piston (.020 oversize)
	1	8168	Ring Set, HP (Standard) No Color Code
			includes piston rings, piston rails, piston spring & spacer
	1	5788-010	Ring Set, HP (.010 Oversize) (L. Blue)
			includes all rings necessary for installing .010 oversize piston
	1	5788-020	Ring Set, HP (.020 Oversize) (Yellow)
			includes all rings necessary for installing .020 oversize piston
*	1	6656PR	connecting rod inserts (1 pair, standard size)
*	1	6656-010PR	connecting rod inserts (1 pair, .010 undersize)
		112057G001	Piston Assembly (standard)
			includes piston, pin, ring set & retaining rings
		112057G010	Piston Assembly (.010 oversize)
			includes piston, pin, ring set & retaining rings
		112057G020	Piston Assembly (.020 oversize)
		1100505	includes piston, pin, ring set & retaining rings
		112058G	Replacement Connecting Rod Assembly (standard)
		1100500010	includes connecting rod assembly, inserts (pair) & locknuts
		112058G010	Replacement Connecting Rod Assembly (.010 undersize)
N.S.S. = Not	Sold Sep	parate	includes connecting rod assembly, inserts (pair) & locknuts

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

<sup>\*</sup> One pair required for each connecting rod assembly.

### CYLINDER & HEAD GROUP 112258

(plain head)



**QRNG** 5120

### CYLINDER & HEAD GROUP 112258

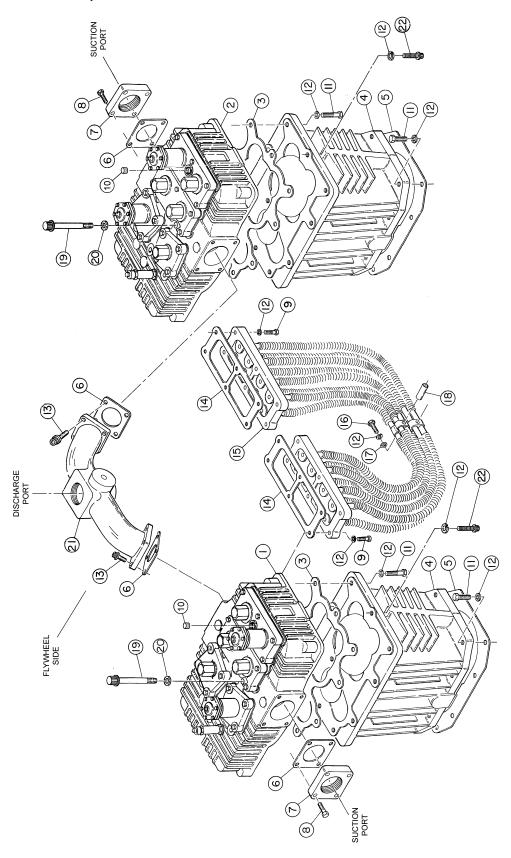
(plain head)

Item Number	Qty.	Part Number	Description
			•
1	1	7382PHP	head assembly
2	1	7383PHP	head assembly
3	<b>2</b>	7403-1	gasket
4	2	7396-1HP	cylinder
5	2	5827-1	gasket, cylinder to crankcase
6	4	5828-1	gasket, flange
7	2	5858	intake flange
8	8	123478-M15	hex. screw, 7/16-14 unc x 1.50, grade 5 (@ 50 ftlbs.)
9	12	123478-N16	hex. screw, 1/2-13 unc x 1.75, grade 5 (@ 65 ftlbs.)
10	2	90386-N15	counterbore screw, 1/2-13 unc x 1.50, grade 8 (@ 50 ftlbs.)
11	28	123478-N15	hex. screw, 1/2-13 unc x 1.50, grade 5 (@ 75 ftlbs.)
12	42	123115-08C	lockwasher, 1/2
13	8	90386-M14	counterbore screw, 7/16-14 unc x 1.25, grade 8 (@ 50 ftlbs.)
14	2	5860-1	intercooler gasket
15	1	112213	intercooler
16	1	2719	pipe plug, 1/4 npt, hex socket
17	<b>2</b>	110428W050	flatwasher, 1/2
18	2	6959	intercooler sleeve
19	14	5863	counterbore screw, 1/2-13 unc x 4.25, grade 8 (@ 65 ftlbs.)
20	12	1478-1	flatwasher
21	1	7445HP	discharge manifold
			Maintenance Parts
	1	<b>7382PHPG</b>	Replacement Head Assembly (left bank)
			includes gasket & head assembly (see page 13 for parts breakdown)
	1	<b>7383PHPG</b>	Replacement Head Assembly (right bank)
			includes gasket & head assembly (see page 15 for parts breakdown)

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

#### CYLINDER & HEAD GROUP 112258-003

(head with unloaders)



### CYLINDER & HEAD GROUP 112258-003

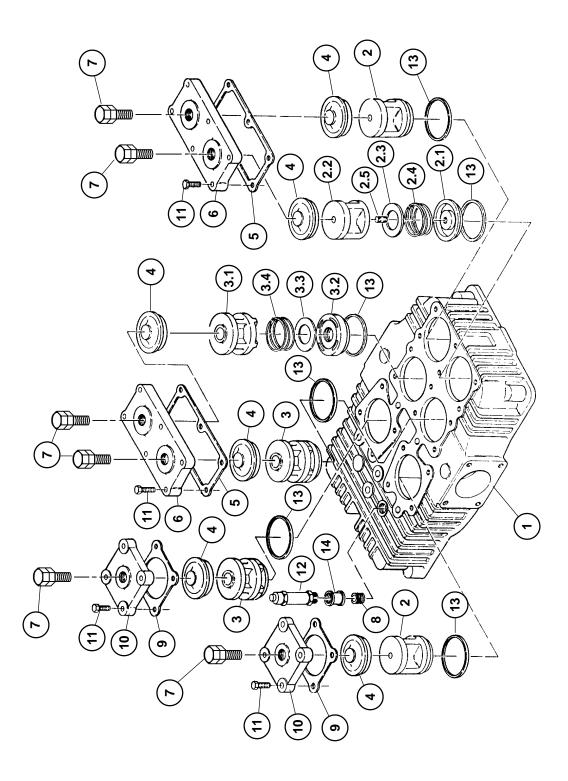
(head with unloaders)

Item Number	Qty.	Part Number	Description
1	1	7382UU-006	head assembly (see pages 21 & 23 for parts breakdown)
$\overset{1}{2}$	1	7383UU-003	head assembly (see pages 25 & 27 for parts breakdown)
3	$\overset{\mathtt{1}}{2}$	7403-1	gasket, cylinder to head
4	$\frac{2}{2}$	7396-1HP	cylinder
5	$\frac{2}{2}$	5827-1	gasket, cylinder to crankcase
6	4	5828-1	gasket, companion flange
7	$\overset{1}{2}$	5858	intake flange
8	8	123478-M15	hex. screw, 7/16-14 unc x 1.50, grade 5 (@ 50 ftlbs.)
9	10	123478-N16	hex. screw, 1/2-13 unc x 1.75, grade 5 (@ 65 ftlbs.)
10	2	2719	pipe plug
11	28	123478-N15	hex. screw, 1/2-13 unc x 1.50, grade 5 (@ 75 ftlbs.)
12	42	123115-08C	lockwasher, 1/2
13	8	90386-M14	counterbore screw, 7/16-14 unc x 1.25, grade 8 (@ 50 ftlbs.)
14	$^2$	5860-1	gasket, intercooler to head
15	1	112213	intercooler
16	2	123478-N25	hex. screw, 1/2-13 unc x 4.00, grade 5 (@ 75 ftlbs.)
17	2	110428W050	flatwasher-1/2
18	2	6959	intercooler sleeve
19	12	5863	counterbore screw, 1/2-13 unc x 4.25, grade 8 (@ 65 ftlbs.)
20	12	1478-1	flatwasher
21	1	7445HP	discharge manifold
22	2	90386-N15	counterbore screw, 1/2-13 unc x 1.50, grade 8 (@ 50 ftlbs.)
			Maintenance Parts
	1	7382G1L	Replacement Head Assembly
			includes head assembly & gaskets
	1	7383G1L	Replacement Head Assembly
			includes head assy., gasket, fittings, & copper tubes

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

### \*LEFT HEAD ASSEMBLY 7382PHP

(plain head)



#### \*LEFT HEAD ASSEMBLY 7382PHP

(plain head)

Item		Part	
Number	Qty.	Number	Description
** 1	1	7382HP	head, high pressure
<b>2</b>	3	6671X1	suction valve assembly
2.1	1	6671	valve bumper
2.2	1	2015	valve seat
2.3	1	2036	valve disc
2.4	1	6909	valve spring
2.5	1	1849	stud
3	3	6670X001	discharge valve assembly
3.1	1	6670-001	valve bumper
3.2	1	5812-001	valve seat
3.3	1	2036	valve disc
3.4	1	6909	valve spring
4	6	6668-1R	valve retainer
5	2	7398-1	valve cover gasket
6	2	7384	cover plate
‡ 7	6	114545-R15	hex. screw & nut assembly, 3/4-16 unf x 1.50, grade 5 (screw @ 60 ftlbs nut @ 50 ftlbs.)
8	1	2177	pipe nipple, 1/4 npt x close
9	2	2025-1	valve cover gasket
<b>‡</b> 10	2	6666	cover plate
11	20	7480	hex. screw, 7/16-14 unc x 1.38, grade 5 (@ 50 ftlbs.)
12	1	111425-270	safety valve
13	6	2024-001	valve gasket
14	1	124699-007	coupling, 1 npt
			Maintenance Parts
	3	6671X1G	Replacement Suction Valve Assembly includes suction valve assembly & valve gasket
	3	6670X1G	Replacement Discharge Valve Assembly includes discharge valve assembly & valve gasket

 $<sup>^{\</sup>ast}$  As viewed facing the compressor from the sheave side.

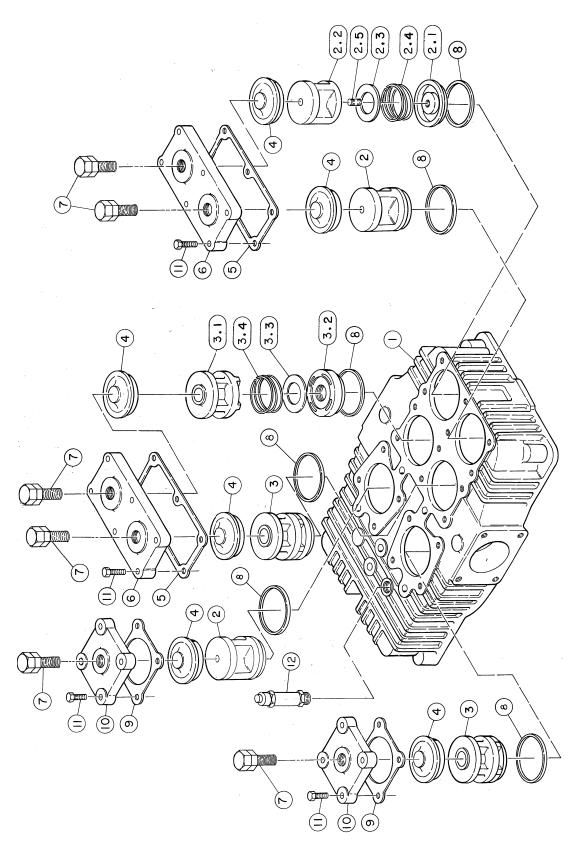
<sup>\*\*</sup> For head replacement, order 7382HPS in lieu of 7382HP head.

<sup>‡</sup> Tighten & torque valve cover plate screws (item 11) before tightening valve clamp screws (item 7).

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

### \*RIGHT HEAD ASSEMBLY 7383PHP

(plain head)



#### \*RIGHT HEAD ASSEMBLY 7383PHP

(plain head)

Item	Ot /	Part	Description
Number	Qty.	Number	Description
** 1	1	7383-1HP	head
2	3	6671X1	suction valve assembly
2.1	1	6671	valve bumper
2.2	1	2015	valve seat
2.3	1	2036	valve disc
2.4	1	6909	valve spring
2.5	1	1849	stud
3	3	6670X001	discharge valve assembly
3.1	1	6670-001	valve bumper
3.2	1	5812-001	valve seat
3.3	1	2036	valve disc
3.4	1	6909	valve spring
4	6	6668-1R	valve retainer
5	2	7398-1	valve cover gasket
6	<b>2</b>	7384	cover plate
‡ 7	6	114545-R15	hex. screw& nut assembly, 3/4-16 unf x 1.50, grade 5 (screw @ 60 ftlbs nut @ 50 ftlbs.)
8	6	2024-001	valve gasket
9	<b>2</b>	2025-1	valve cover gasket
<b>‡</b> 10	<b>2</b>	6666	cover plate
11	20	7480	hex. screw, 7/16-14 unc x 1.38, grade 5 (@ 50 ftlbs.)
12	1	111425-270	safety valve
			Maintenance Parts
	3	6671X1G	Replacement Suction Valve Assembly
			includes suction valve assembly & gasket
	3	6670X1G	Replacement Discharge Valve Assembly includes discharge valve assembly & gasket

 $<sup>^{\</sup>ast}$  As viewed facing the compressor from the sheave side.

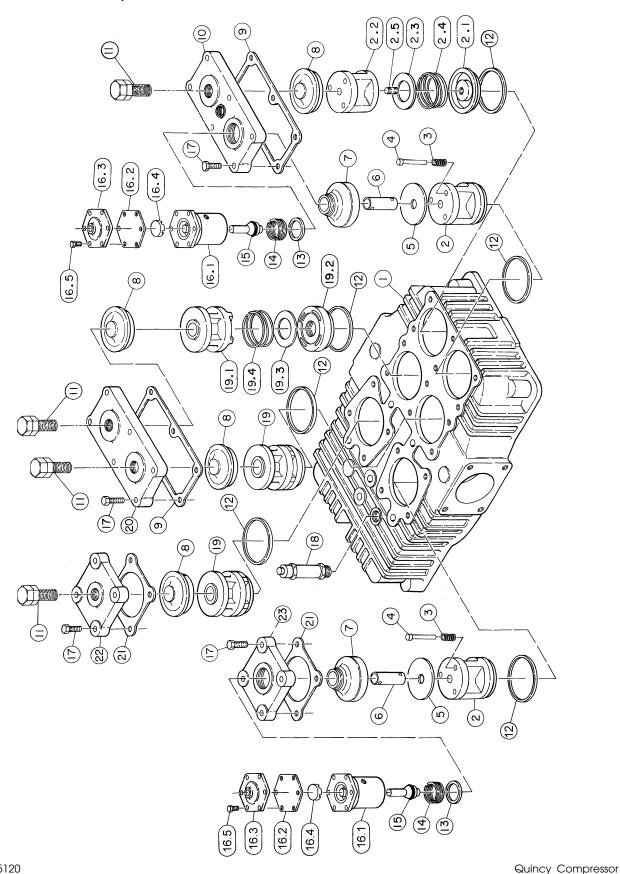
 $<sup>\</sup>ensuremath{^{**}}$  For head replacement, order 7383-1HPS in lieu of 7383-1HP head.

<sup>‡</sup> Tighten and torque valve cover plate screws (item 11) before tightening valve clamp screws (item 7).

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

### \*LEFT HEAD ASSEMBLY 7382UU-006

(head with unloaders)



#### \*LEFT HEAD ASSEMBLY 7382UU-006

(head with unloaders)

		Dort	
Item Number	Qty.	Part Number	Description
-			·
1	1	7382HP	head
2	3	6671X1	suction valve assembly
2.1	1	6671	valve bumper
2.2	1	2015	suction valve seat
2.3	1	2036	valve disc
2.4	1	6909	valve spring
2.5	1	1849	stud
3	6	6910	valve spring
4	6	1857	valve pin
5	2	5729	valve platform
6	2	6912-002	unloader pin
7	2	6911	valve retainer
8	4	6668-1R	valve retainer
9	2	7398-1	valve cover gasket
10	1	7385	valve cover plate
‡ 11	4	114545-R15	hex screw and nut assembly, 3/4-16 unf x 1.50, grade 5
	_		(screw @ 60 ftlbs nut @ 50 ft.lbs.)
12	6	2024-001	valve gasket
13	2	1556	gasket, valve
14	2	3008	holddown screw/ (@ 60 ftlbs.)
15	2	7532X1	unloader piston assembly
16	2	40055	unloader assembly (@ 75 ftlbs.), (N.S.S.; order 7483X1)
16.1	1	7483	unloader body (N.S.S.; order 7483X1)
16.2	1	1855	diaphragm
16.3	1	1818B	diaphragm cover plate
16.4	1	5910	diaphragm disc
16.5	6	7499	hex. screw, 1/4-20 unc x .75, grade 2 (@ 72 inlbs.)
<b>‡ 17</b>	20	7480	hex. screw, 7/16-14 unc x 1.38, grade 5 (@ 50 ftlbs.)
18	1	111425-270	pressure relief valve
19	3	6670X001	discharge valve assembly
19.1	1	6670-001	valve bumper
19.2	1	5812-001	valve seat
19.3	1	2036	valve disc
19.4	1	6909	valve spring
20	1	7384	cover plate
21	2	2025-1	valve cover gasket
22	1	6666	cover plate
23	1	6908	cover plate
	F	Parts for use wit	th diester or phosphate ester synthetic based lubricants
16.2	1	1855S	diaphragm
			Maintenance Parts
	1	6671G	Replacement Suction Valve Assembly
			includes suction valve assembly & valve gasket
	2	6671GU	Replacement Suction Valve Assembly
			includes suction valve assembly, unloader pin springs, valve pins & valve gasket
	3	6670G	Replacement Discharge Valve Assembly
			includes discharge valve assembly & valve gasket
	2	7483X1	Replacement Unloader Assembly
			includes unloader assembly, unloader piston assembly, valve gasket & pipe plug

 $<sup>^{\</sup>ast}$  As viewed facing the compressor from the bearing carrier side.

N.S.S. = Not Sold Separate

QRNG 5120 Quincy Compressor

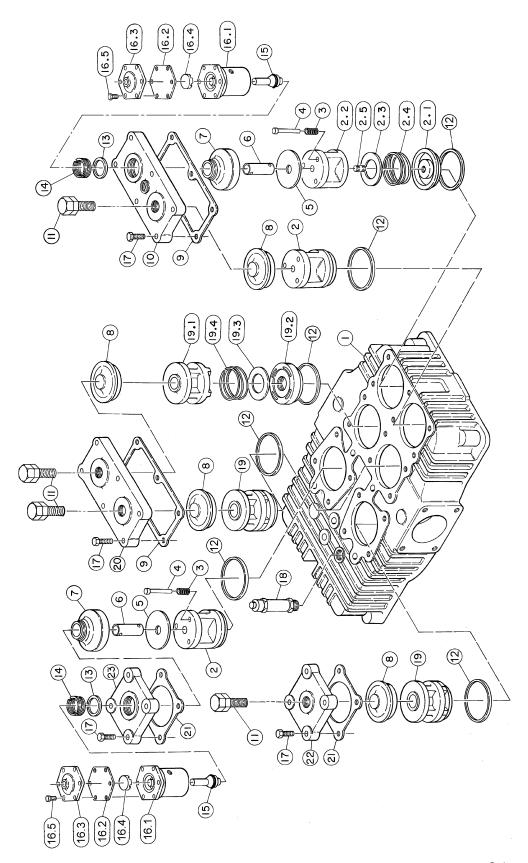
<sup>‡</sup> Tighten and torque valve cover plate screws (item 17) before tightening valve clamp screws (item 11).

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern.

Bring each fastener to the recommended torque specification in even increments.

### \*RIGHT HEAD ASSEMBLY 7383UU-003

(head with unloaders)



#### \*RIGHT HEAD ASSEMBLY 7383UU-003

(head with unloaders)

Item		Part	
Number	Qty.	Number	Description
1	1	7383-1hp	head
$\overset{-}{2}$	3	6671X1	suction valve assembly
2.1	1	6671	valve bumper
2.2	1	2015	suction valve seat
2.3	1	2036	valve disc
$\frac{2.6}{2.4}$	1	6909	valve spring
2.5	1	1849	stud
3	6	6910	valve spring
4	6	1857	valve pin
5	$\overset{\circ}{2}$	5729	valve platform
6	$\frac{2}{2}$	6912-002	unloader pin
7	$\frac{2}{2}$	6911	valve retainer
8	4	6668-1R	valve retainer
9	2	7398-1	valve cover gasket
10	1	7385	valve cover gasket valve cover plate
‡ 11	4	114545-R15	hex screw and nut assembly, 3/4-16 unf x 1.50, grade 5
+ 11	4	114040-1110	(screw @ 60 ftlbs nut @ 50 ftlbs.)
12	c	2024-001	· · · · · · · · · · · · · · · · · · ·
	6		valve gasket
13	2	1556	gasket, valve
14	2	3008	holddown screw (@ 60 ftlbs.)
15	2	7532X1	unloader piston assembly
16	2	40055	unloader assembly (@ 75 ftlbs.), (N.S.S.; order 7483X1)
16.1	1	7483	unloader body (N.S.S.; order 7483X1)
16.2	1	1855	diaphragm
16.3	1	1818B	diaphragm cover plate
16.4	1	5910	diaphragm disc
16.5	6	7499	hex. screw, 1/4-20 unc x .75, grade 2 (@ 72 inlbs.)
<b>‡ 17</b>	20	7480	hex. screw, 7/16-14 unc x 1.38, grade 5 (@ 50 ftlbs.)
18	1	111425-270	pressure relief valve
19	3	6670X001	discharge valve assembly
19.1	1	6670-001	valve bumper
19.2	1	5812-001	valve seat
19.3	1	2036	valve disc
19.4	1	6909	valve spring
20	1	7384	cover plate
21	$^2$	2025-1	valve cover gasket
22	1	6666	cover plate
23	1	6908	cover plate
			h diester or phosphate ester synthetic based lubricants
16.2	1	1855S	diaphragm
	_	20 <b>7</b> 4 G	Maintenance Parts
	1	6671G	Replacement Suction Valve Assembly includes suction valve assembly & valve gasket
	2	6671GU	Replacement Suction Valve Assembly
	3	6670G	includes suction valve assembly, unloader pin springs, valve pins & valve gasket  Replacement Discharge Valve Assembly  includes discharge valve assembly & valve gasket
	2	7483X1	Replacement Unloader Assembly includes unloader assembly, unloader piston assembly, valve gasket & pipe plug

<sup>\*</sup> As viewed facing the compressor from the bearing carrier side.

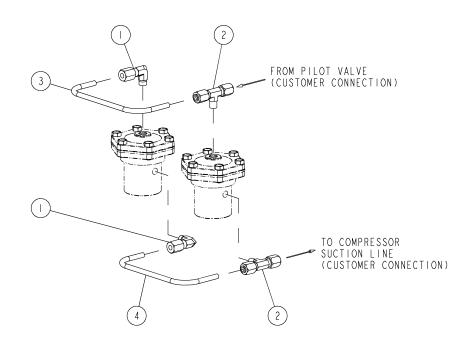
N.S.S. = Not Sold Separate

QRNG 5120 Quincy Compressor

<sup>‡</sup> Tighten and torque valve cover plate screws (item 17) before tightening valve clamp screws (item 11).

<sup>@</sup> Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

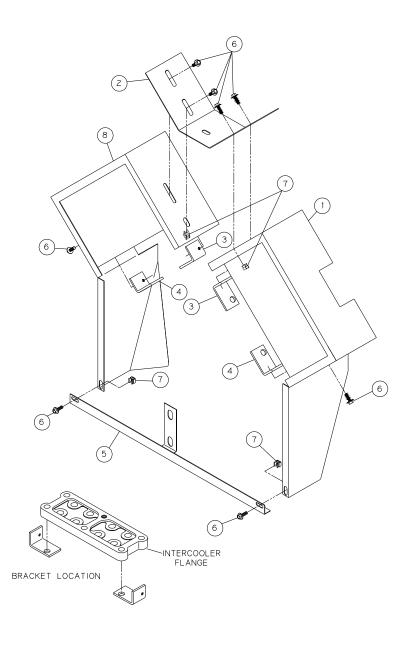
## **CONTROL GROUP 116269-001**



	116269-001 GROUP, CONTROL, GRNG UNLOADERS					
ITEM	ITEM PART NUMBER QTY DESCRIPTION					
	110419-004	2	TUBE FITTING, 90 MALE ELBOW, 1/4 TUBE X 1/8 NPT			
2	116268-002	2	TUBE FITTING, MALE BRANCH TEE, 1/4T X 1/8P			
3	110421		I/4" STEEL TUBE (I FT)			
4	110421		I/4" STEEL TUBE (I FT)			

## SHROUD GROUP 110470-001

Item Number	Qty.	Part Number	Part Number	Description
1	1	113931-001	shroud as	ssembly, right
2	1	113932	bracket	
3	2	7441	bracket	
4	2	7442	bracket	
5	1	113933	shroud su	apport
6	8	122151	hex. screv	w, 1/4-20 unc x .75
7	4	22456	speed nut	t, 1/4-20 unc
8	1	113931-002	shroud as	ssembly, left



QRNG 5120 Quincy Compressor

	Recommended Spare Parts					
Item		Part				
#	Qty.	Number	Description			
	3	6671X1G	replacement suction valve assy.			
	3 6670X1G		replacement discharge valve assy.			
	1	110822	pressure gauge			
	1   160079G		oil pump repair kit			
	1	7435G	gasket set			

	"O" Ring Kit 110776G						
Item #	Part Qty. Number Description						
-"	4						
	1	112033-908	"o"ring, 3/32 wide x .82 o.d.				
	1	22749-044	"o"ring, 1/16 wide x 3.88 o.d.				
	1	22749-011	"o"ring, 1/16 wide x .44 o.d.				
	1	22749-112	"o"ring, 3/32 wide x .69 o.d.				
	2	22749-210	"o"ring, 1/8 wide x 1.00 o.d.				
	1	22749-152	"o"ring, 3/32 wide x 3.44 o.d.				
	1	112255	oil seal				

Gasket Set 7435						
Item	n Part					
#	Qty.	Number	Description			
	2	5827-1	gasket, cylinder to crankcase			
	<b>2</b>	6678-1	gasket, inspection plate			
	4	7398-1	gasket, valve cover			
	5	1498	shim, bearing, .005			
4 1498A shim, bearing		1498A	shim, bearing, .007			
4 1498B shim, bearing, .0		shim, bearing, .020				
2 1498C shim, bearing, .002		shim, bearing, .002				
1 5494-1 gasket, bearing carrier		gasket, bearing carrier				
2 7403-1 gasket, cylinder to head		gasket, cylinder to head				
	12	2024-001	gasket, valve			
	1	6679-1	gasket, oil inlet bracket			
	<b>2</b>	5860-1	gasket, intercooler			
	4	5828-1	gasket, flange			
	4	2025-1	gasket, valve cover			

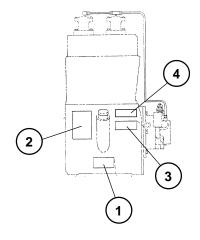
# CRANKCASE LUBRICANT CAPACITY

Model	Less Filter	With Filter
QRNG5120	9.75 Qts.	Add 10 oz.
	9.23 lit.	Add 296 ml

#### **QUIN-CIP® LUBRICANT**

Refer to the chart below to order QUIN-CIP compressor lubricant from your local authorized Quincy 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	
Barrel	112542D068	55 gal., SAE 20	
Pail	112542P068	$5\mathrm{gal.},\mathrm{SAE}20$	
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	
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 $30$	



Decals						
Item #	Qty.	Part Number	Description			
1	1	110831	serial number & nameplate			
2	1	* 127889-A	decal, CAUTION!/manual/ "Failure to follow"			
3	1	* 127889-B	decal, DANGER! / "Air used for breathing"			
4	1	113387	decal, CAUTION! / "Do not remove dipstick"			
	* Not sold separate; order 127889.					

QRNG 5120 Quincy Compressor

## QUINCY COMPRESSOR STANDARD TERMS AND CONDITIONS

LEGAL EFFECT: Except as expressly otherwise agreed to in writing by an authorized representative of Seller, the following terms and conditions shall apply to and form a part of this order and any additional and/or different terms of Buyer's purchase order or other form of acceptance are rejected in advance and shall not become a part of this order.

The rights of Buyer hereunder shall be neither assignable nor transferable except with the written consent of Seller.

This order may not be canceled or altered except with the written consent of Seller and upon terms which will indemnify Seller against all loss occasioned thereby. All additional costs incurred by Seller due to changes in design or specifications, modification of this order or revision of product must be paid for by Buyer.

In addition to the rights and remedies conferred upon Seller by this order, Seller shall have all rights and remedies conferred at law and in equity and shall not be required to proceed with the performance of this order if Buyer is in default in the performance of such order or of any other contract or order with seller.

TERMS OF PAYMENT: Unless otherwise specified in the order acknowledgment, the terms of payment shall be 1% 15, net forty-five (45) days after shipment. These terms shall apply to partial as well as complete shipments. If any proceeding be initiated by or against Buyer under any bankruptcy or insolvency law, or in the judgment of Seller the financial condition of Buyer, at the time the equipment is ready for shipment, does not justify the terms of payment specified, Seller reserves the right to require full payment in cash prior to making shipment. If such payment is not received within fifteen (15) days after notification of readiness for shipment, Seller may cancel the order as to any unshipped item and require payment of its reasonable cancellation charges.

If Buyer delays shipment, payments based on date of shipment shall become due as of the date when ready for shipment. If Buyer delays completion of manufacture, Seller may elect to require payment according to percentage of completion. Equipment held for Buyer shall be at Buyer's risk and storage charges may be applied at the discretion of Seller.

Accounts past due shall bare interest at the highest rate lawful to contract for but if there is no limit set by law, such interest shall be eighteen percent (18%). Buyer shall pay all cost and expenses, including reasonable attorney's fees, incurred in collecting the same, and no claim, except claims within Seller's warranty of material or workmanship, as stated below, will be recognized unless delivered in writing to Seller within thirty (30) days after date of shipment.

TAXES: All prices exclude present and future sales, use, occupation, license, excise, and other taxes in respect of manufacture, sales or delivery, all of which shall be paid by Buyer unless included in the purchase price at the proper rate or a proper exemption certificate is furnished.

ACCEPTANCE: All offers to purchase, quotations and contracts of sales are subject to final acceptance by an authorized representative at Seller's plant.

DELIVERY: Except as otherwise specified in this quotation, delivery will be F. O. B. point of shipment. In the absence of exact shipping instruction, Seller will use its discretion regarding best means of insured shipment. No liability will be accepted by Seller for so doing. All transportation charges are at Buyer's expense. Time of delivery is an estimate only and is based upon the receipt of all information and necessary approvals. The shipping schedule shall not be construed to limit seller in making commitments for materials or in fabricating articles under this order in accordance with Seller's normal and reasonable production schedules.

Seller shall in no event be liable for delays caused by fires, acts of God, strikes, labor difficulties, acts of governmental or military authorities, delays in transportation or procuring materials, or causes of any kind beyond Seller's control. No provision for liquidated damages for any cause shall apply under this order. Buyer shall accept delivery within thirty (30) days after receipt of notification of readiness for shipment. Claims for shortages will be deemed to have been waived if not made in writing with ten (10) days after the receipt of the material in respect of which any such shortage is claimed. Seller is not responsible for loss or damage in transit after having received "In Good Order"

receipt from the carrier. All claims for loss or damage in transit should be made to the carrier.

TITLE & LIEN RIGHTS: The equipment shall remain personal property, regardless of how affixed to any realty or structure. Until the price (including any notes given therefore) of the equipment has been fully paid in cash, Seller shall, in the event of Buyer's default, have the right to repossess such equipment.

PATENT INFRINGMENT: If properly notified and given an opportunity to do so with friendly assistance, Seller will defend Buyer and the ultimate user of the equipment from any actual or alleged infringement of any published United States patent by the equipment or any part thereof furnished pursuant hereto (other than parts of special design, construction, or manufacture specified by and originating with Buyer), and will pay all damages and costs awarded by competent court in any suit thus defended or of which it may have had notice and opportunity to defend as aforesaid.

STANDARD WARRANTY: Seller warrants that products of its own manufacture will be free from defects in workmanship and materials under normal use and service for the period specified in the product instruction manual. Warranty for service parts will be Ninety (90) days from date of factory shipment. Electric Motors, gasoline and diesel engines, electrical apparatus and all other accessories, components and parts not manufactured by Seller are warranted only to the extent of the original manufacturer's warranty.

Notice of the alleged defect must be given to the Seller, in writing with all identifying details including serial number, type of equipment and date of purchase within thirty (30) days of the discovery of the same during the warranty period.

Seller's sole obligation on this warranty shall be, at its option, to repair or replace or refund the purchase price of any product or part thereof which proves to be defective. If requested by Seller, such product or part thereof must be promptly returned to seller, freight prepaid, for inspection.

Seller warrants repaired or replaced parts of its own manufacture against defects in materials and workmanship under normal use and service for ninety (90) days or for the remainder of the warranty on the product being repaired.

This warranty shall not apply and Seller shall not be responsible or liable for:

- (a) Consequential, collateral or special losses or damages;
- (b) Equipment conditions caused by fair wear and tear, abnormal conditions of use, accident, neglect or misuse of equipment, improper storage or damage resulting during shipping;
- (c) Deviation from operating instructions, specifications or other special terms of sale;
- (d) Labor charges, loss or damage resulting from improper operation, maintenance or repairs made by person(s) other than Seller or Seller's authorized service station.

In no event shall Seller be liable for any claims whether arising from breach of contract or warranty or claims of negligence or negligent manufacture in excess of the purchase price.

THIS WARRANTY IS THE SOLE WARRANTY OF SELLERS AND ANY OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED IN LAW OR IMPLIED IN FACT, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR USE ARE HEREBY SPECIFICALLY EXCLUDED.

LIABILITY LIMITATIONS: Under no circumstances shall the Seller have any liability for liquidated damages or for collateral, consequential or special damages or for loss of profits, or for actual losses or for loss of production or progress of construction, whether resulting from delays in delivery or performance, breach of warranty, negligent manufacture or otherwise.

ENVIROMENTAL AND OSHA REQUIREMENTS: At the time of shipment of the equipment from the factory, Quincy Compressor / Ortman Fluid Power will comply with the various Federal, State and local laws and regulations concerning occupational health and safety and pollution. However, in the installation and operation of the equipment and other matters over which the seller has no control, the Seller assumes no responsibility for compliance with those laws and regulations, whether by the way of indemnity, warranty or otherwise.

June 30, 2003



an EnPro Industries company

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Air Master 217.277.0270
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Website: quincycompressor.com

quincyairmaster.com



