

QR-25[®] Series Model 370

Parts Manual
Record of Change 107

This manual contains important safety information and must be carefully read in its entirety and understood prior to installation by all personnel who install, operate and/or maintain this product.

On-line product registration, parts ordering and warranty information is available at www.quincycompressor.com

Manual No. 2022205800

July 2014 Edition

INTRODUCTION

This manual provides information for the following QR-25 Series, Model 370 (Record of Change 107) compressor versions:

- L Control Version L**
head assembly with 2 unloader towers & a hydraulic unloader
- LS Control Version LS**
head assembly with 2 unloader towers, a hydraulic unloader, & a pilot valve with a check valve assembly
- LVD Control Version LVD**
head assembly with 2 unloader towers, a hydraulic unloader, & a pilot valve with a lockout & check valve

These compressors are aircooled, two stage, two cylinder, pressure lubricated compressors, with up to 200 PSIG continuous pressure capability (201 to 250 PSIG intermittent pressure capability with proper configuration; consult factory). The Model 370 has a 6" low pressure piston bore and a 3.25" high pressure piston bore and a 4" stroke and can be run at 400-1070 RPM.

- Available options included in this manual:
- high pressure rated cylinder and head
 - hooded air filter
 - hooded air filter / silencer

CHANGES

since previous printing (dated January 2014):

The bearing carrier was redesigned with a new oil pump including an oil filter.

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MODEL & SERIAL NUMBER IDENTIFICATION

Record of Change No.

Model & Serial Number Identification Tag

The model & serial number tag is located on the handhole plate side of the crankcase. Fill in the numbers from your compressor's tag 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 distributor. Insist on genuine Quincy parts only! Failure to do so may void warranty.

QUIN-CIP LUBRICANT

Refer to the chart below to order Quin-Cip-D or Quin-Cip compressor lubricant from your local authorized Quincy distributor.

Quin-Cip-D Lubricant (synthetic)	
SAE 30 (ISO 100)	
Quart	115468Q
Case (12 Qts.)	115438C
Quin-Cip Lubricant	
SAE 10W (ISO 32)	
Quart	112541Q032
Case (12 Qts.)	112541C032
SAE 20 (ISO 68)	
Quart	112542Q068
Case (12 Qts.)	112542C068
SAE 30 (ISO 100)	
Quart	112543Q100
Case (12 Qts.)	112543C100

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

CRANKCASE LUBRICANT CAPACITY

Model	Capacity
370	4 qts. - 30 oz. (467 lit.)

WARNING !

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

CAUTION !

Refer to the Quincy QR-25 Series instruction manual for vital lubrication information.

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.

CAUTION !

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

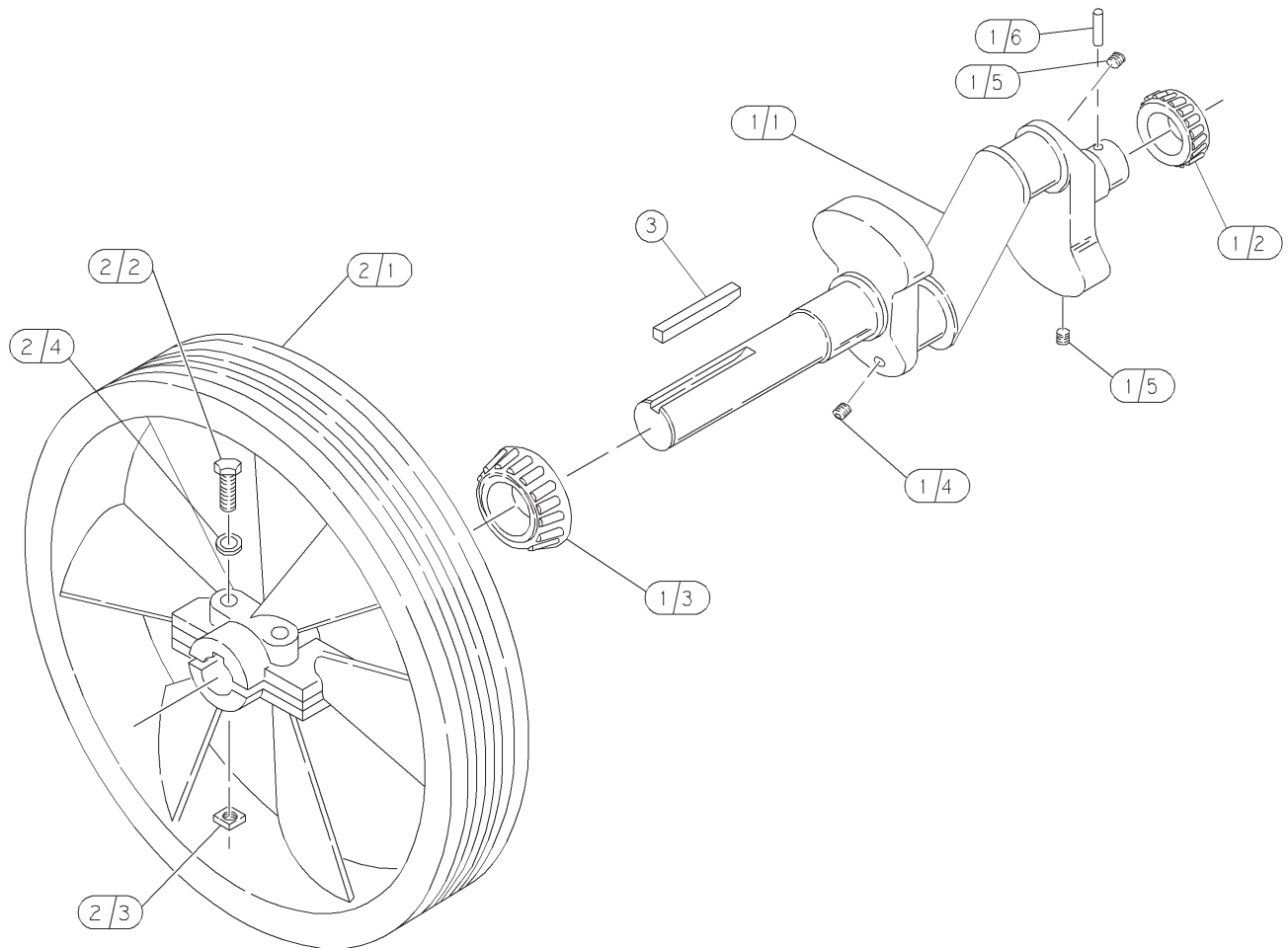
CRANKSHAFT GROUP 110630

Item Number	Qty.	Part Number	Description
1	1	111238X001	crankshaft assembly
1.1	1	111238-001	crankshaft
1.2	1	2788	bearing cone
1.3	1	40775	bearing cone
1.4	1	110234	orifice, 1/8 npt
1.5	2	2755S	pipe plug, 1/8 npt
1.6	1	110705-F17	roll pin, 3/16 x 1.38
2	1	110523X	sheave assembly
2.1	1	110523	sheave, 19-1/2", 4G, B sect., CCW (N.S.S.; order 110523X)
2.2	2	110983-N22	hex. screw, 1/2-13 unc x 3.50, grade 8 (@ 90 ft.-lbs.)
2.3	2	116124-N02	square nut, 1/2-13 unc
2.4	2	110428N050	flatwasher, 1/2
3	1	1466	taper key

N.S.S. = Not Sold Separate

@ Indicates torque value in foot pounds (dry threads)

Note: For reversal of compressor rotation refer to QR-25 instruction manual.



CRANKCASE GROUP 110628

Item Number	Qty.	Part Number	Description
1	1	6904X	crankcase assembly
1.1	1	6904R	crankcase
1.2	1	3720	bearing cup
2	1	2057	square head pipe plug
3	*	1383	bearing adjustment shim, .005 steel
4	*	1383A	bearing adjustment shim, .007 steel
5	*	1383B	bearing adjustment shim, .020 steel
6	*	1383D	bearing adjustment shim, .002 steel
7	1	6930	adjustment plate (.0015 / .003 crankshaft end play)
8	4	123478-L12	hex. screw, 3/8-16 unc x 1.00, grade 5
9	2	1315	inspection plate gasket
10	1	1249-1	inspection plate
11	1	6849-2	inspection plate
12	12	123478-K12	hex. screw, 5/16-18 unc x 1.00, grade 5 (@ 12 ft.-lbs.)
13	1	111876-2	dipstick
14	1	5783	breather ball
15	1	5932	drive pin
16	12	110428N031	flatwasher, 5/16
17	1	112033-908	"o"ring, 3/32 wide x .82 o.d.

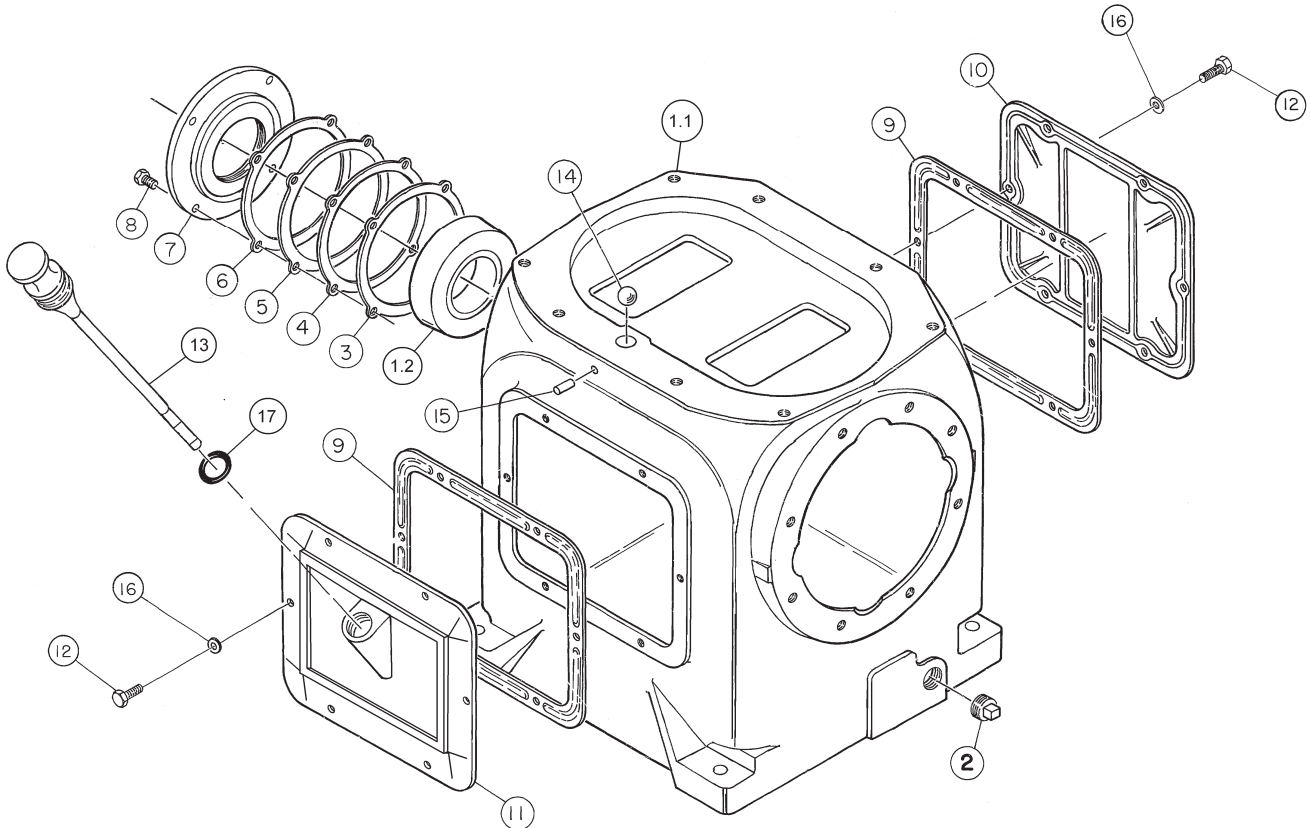
Maintenance Parts

1 **6930-1X** **Replacement Adjustment Plate Assembly**
includes adjustment plate & oil seal

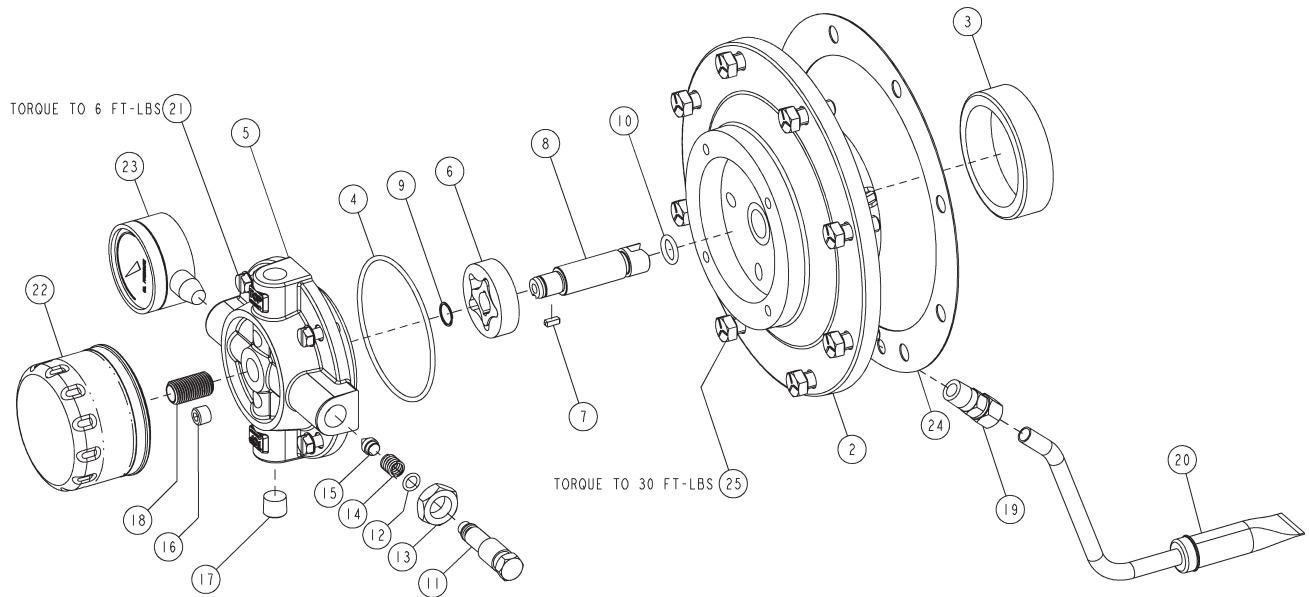
* Quantity as required

@ 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.

N.S.S. = Not Sold Separate



BEARING CARRIER GROUP 2024400160

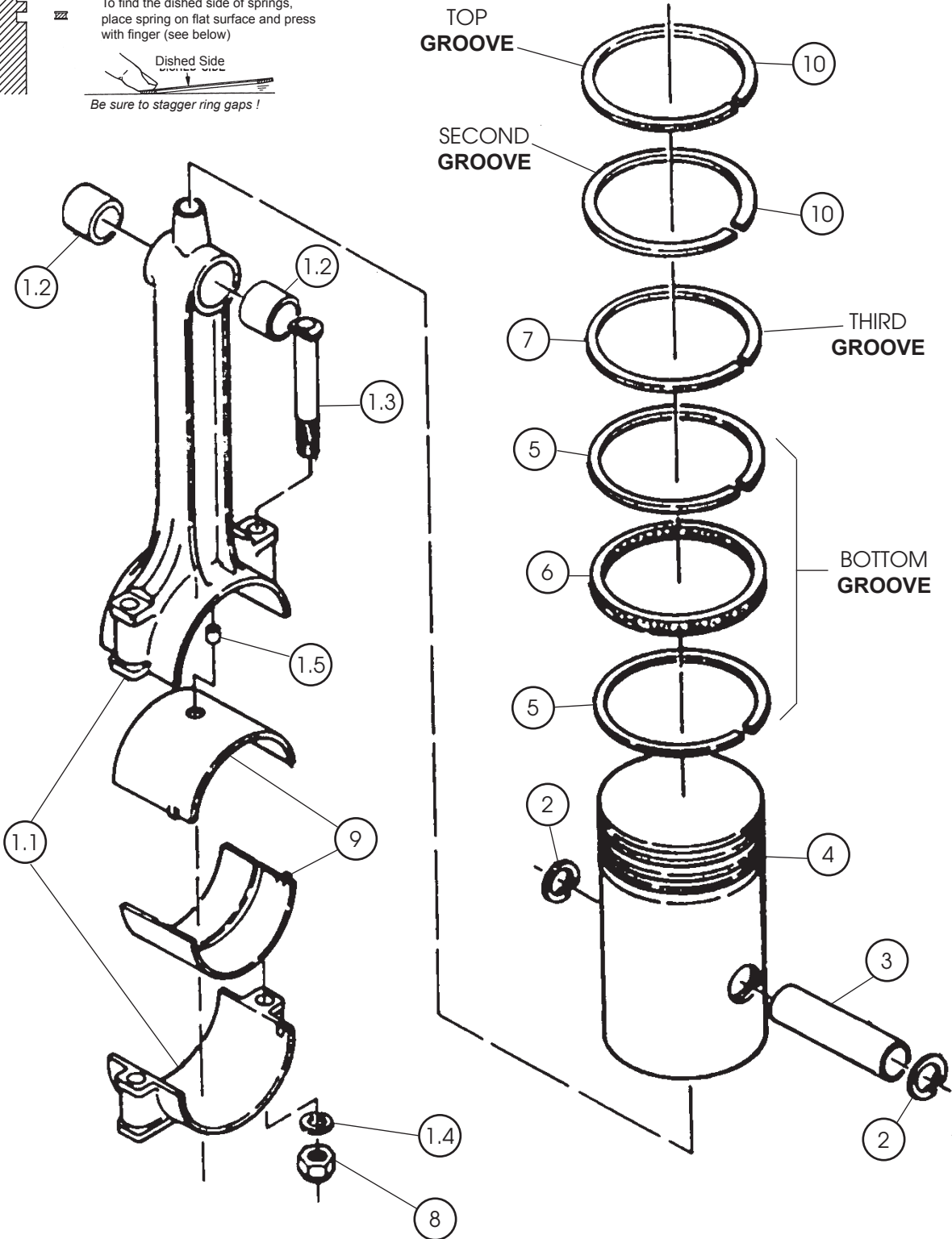
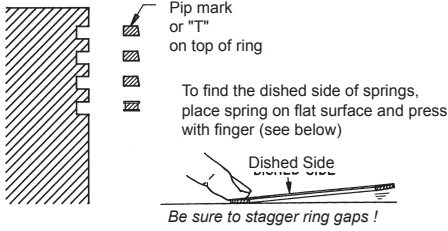


2024400160 BEARING CARRIER GROUP			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	2024400150	1	BEARING CARRIER ASSEMBLY (N.S.S. - ORDER KIT)
2	2024400101	1	BEARING CARRIER
3	2720	1	BEARING CUP
4	22749-152	1	O-RING, VITON
5	2024400601	1	OIL PUMP HOUSING
6	160003	1	OIL PUMP
7	160075-001	1	KEY
8	2024200201	1	OIL PUMP DRIVESHAFT
9	6285	1	RETAINING RING
10	22749-112	1	O-RING, VITON
11	5489	1	ADJUSTMENT SCREW
12	22749-011	1	O-RING, VITON
13	124369-P02	1	JAM NUT
14	1160	1	SPRING
15	112857	1	NEEDLE VALVE
16	2755S	1	PIPE PLUG, 1/8 NPT
*	17	1	PIPE PLUG, 1/4 NPT
**	18	1	FILTER STUD
***	19	1	TUBE FITTING,CONNECTOR, 3/8 TUBE X 1/4 NPT
	20	1	OIL PICKUP TUBE WITH SCREEN
	21	4	MACHINE SCREW
	22	1	OIL FILTER
*	23	1	OIL PRESSURE GAUGE
	24	1	BEARING CARRIER GASKET
	25	8	CAP SCREW, 3/8-16x1.00, GRADE 5
MAINTENANCE PARTS			
	2023400101		10 PACK OF OIL FILTERS
REPLACEMENT KITS			
	2024400180		BEARING CARRIER ASSEMBLY REPLACEMENT KIT INCLUDES BEARING CARRIER ASSEMBLY, FILTER, GAUGE, AND GASKET

- * INSTALL WITH PIPE SEALANT
- ** INSTALL WITH RETAINING COMPOUND
- *** INSTALL WITH PIPE SEALANT ON NPT & THREADLOCKER ON NUT
- N.S.S. = NOT SOLD SEPARATE
- TORQUE VALUES ARE FOR DRY THREADS. TIGHTEN MULTIPLE BOLTS, CAPSCREWS, AND HEX NUTS IN A CRISS-CROSS PATTERN. BRING EACH FASTENER TO THE RECOMMENDED TORQUE SPECIFICATION IN EVEN INCREMENTS.

CONNECTING ROD & PISTON GROUP 110463

(high pressure)



CONNECTING ROD & PISTON GROUP 110463

(high pressure)

Item Number	Qty.	Part Number	Description
1	1	110804	connecting rod assembly (N.S.S.; order 110804X)
1.1	1	110802	connecting rod (N.S.S.; order 110804X)
1.2	2	110799-010	needle bearing
1.3	2	1344	connecting rod bolt, 7/16-20 unc x 3.25
1.4	2	1319	connecting rod bolt washer
1.5	1	110801-001	plug orifice
2	2	8648	retaining ring
3	1	110190-004	piston pin
4	1	5846-001	piston, HP
5	2	112782	oil ring rail
6	1	112783	ring spacer
7	1	6997	piston ring
8	2	124471-M08	locknut, 7/16-20 unf (@ 40 ft.-lbs.)
9	2	6656	connecting rod insert (sold in pairs only; see maintenance parts)
10	2	111845	piston ring

Maintenance Parts

*	9	1	6656PR	connecting rod inserts (1 pair, standard size)
*	9	1	6656-010PR	connecting rod inserts (1 pair, .010 undersize)
	4	1	5846-011	piston, HP (.010 oversize)
	4	1	5846-021	piston, HP (.020 oversize)
			8168A	Ring Set-Piston, HP (Standard) No Color Code includes piston rings, piston rails & spacer
			5788-010	Ring Set-Piston, HP (.010 Oversize) (L. Blue) includes all rings necessary for installing .010 oversize piston
			5788-020	Ring Set-Piston, HP (.020 Oversize) (Yellow) includes all rings necessary for installing .020 oversize piston
			5846X001	Piston Assembly, HP (Standard) includes ring set, piston, piston pin & retaining ring
			5846X011	Piston Assembly, HP (.010 Oversize) includes ring set, piston, piston pin & retaining ring
			5846X021	Piston Assembly, HP (.020 Oversize) includes ring set, piston, piston pin & retaining ring
			110804X	Replacement Connecting Rod Assembly (Standard) includes connecting rod assembly, connecting rod inserts & locknuts
			110804X010	Replacement Connecting Rod Assembly (.010 Undersize) includes connecting rod assembly, connecting rod inserts & locknuts

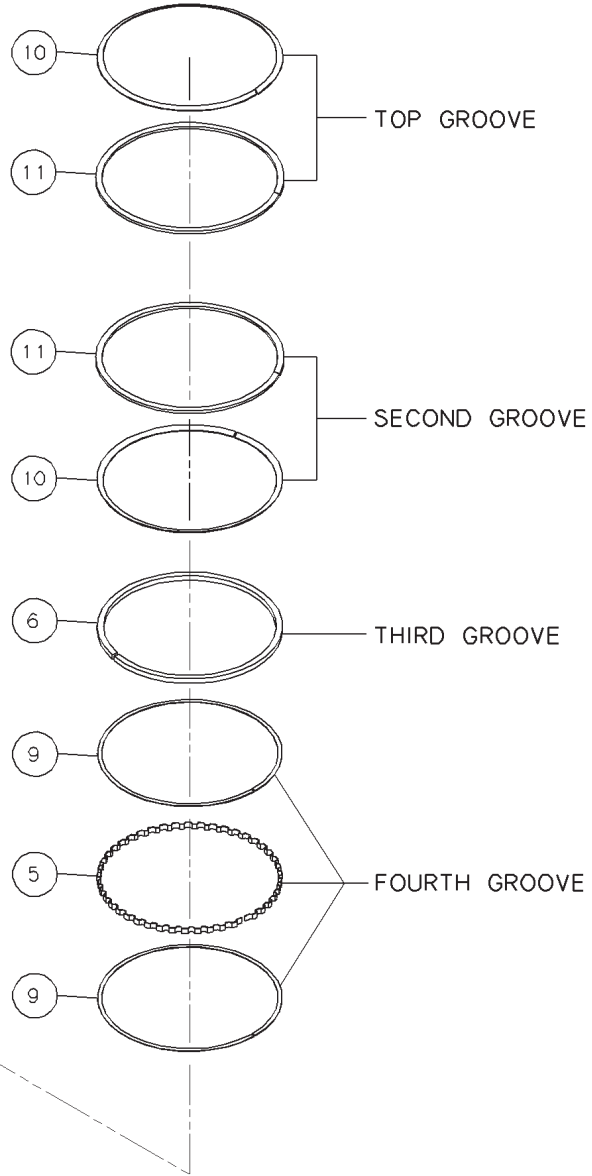
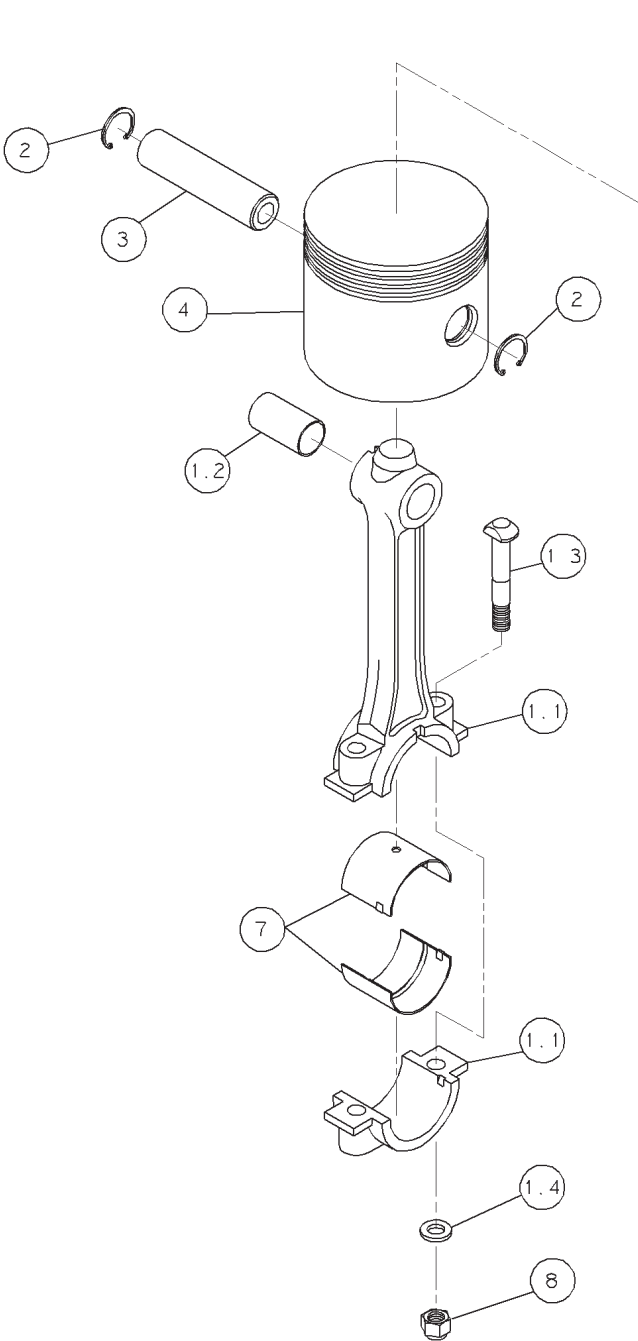
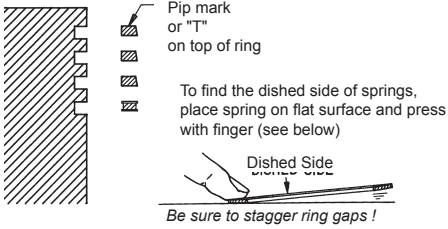
N.S.S. = Not Sold Separate

@ 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.

* One pair required for each connecting rod assembly.

CONNECTING ROD & PISTON GROUP 110462

(low pressure)



CONNECTING ROD & PISTON GROUP 110462

(low pressure)

Item Number	Qty.	Part Number	Description
1	1	40081	connecting rod assembly (N.S.S.; order 6655X)
1.1	1	110803	connecting rod (N.S.S.; order 6655X)
1.2	1	6443	bushing, connecting rod (N.S.S.; order 6443SR)
1.3	2	1344	connecting rod bolt, 7/16-20 unc x 3.25
1.4	2	1319	connecting rod bolt washer
2	2	8648	retaining ring
3	1	8647	piston pin
4	1	8640	piston, LP
5	1	112749	ring spacer
6	1	9146	piston ring
7	2	6656	connecting rod insert (sold in pairs only; see maintenance parts)
8	2	124471-M08	locknut, 7/16-20 unf (@ 40 ft.-lbs.)
9	2	112748	oil ring rail
10	2	6994	spring
11	2	6992	piston ring
Maintenance Parts			
*	7	6656PR	connecting rod inserts (1 pair, standard size)
*	7	6656-010PR	connecting rod inserts (1 pair, .010 undersize)
	4	8640-010	piston, LP (.010 oversize)
	4	8640-020	piston, LP (.020 oversize)
	1	7527	Piston Ring Set, LP includes piston rings, piston rails, piston spring & spacer
	1	5787-010	Piston Ring Set, LP includes all rings necessary for installing .010 oversize piston
	1	5787-020	Piston Ring Set, LP includes all rings necessary for installing .020 oversize piston
		8640X	Piston Assembly, LP (Standard) includes ring set, piston, piston pin & retaining ring
		8640X010	Piston Assembly, LP (.010 Oversize) includes ring set, piston, piston pin & retaining rings
		8640X020	Piston Assembly, LP (.020 Oversize) includes ring set, piston, piston pin & retaining rings
		6655X	Replacement Connecting Rod Assembly (Standard) includes connecting rod assembly, connecting rod inserts & locknuts
		6655XUS	Replacement Connecting Rod Assembly (.010 Undersize) includes connecting rod assembly, connecting rod inserts & locknuts

N.S.S. = Not Sold Separate

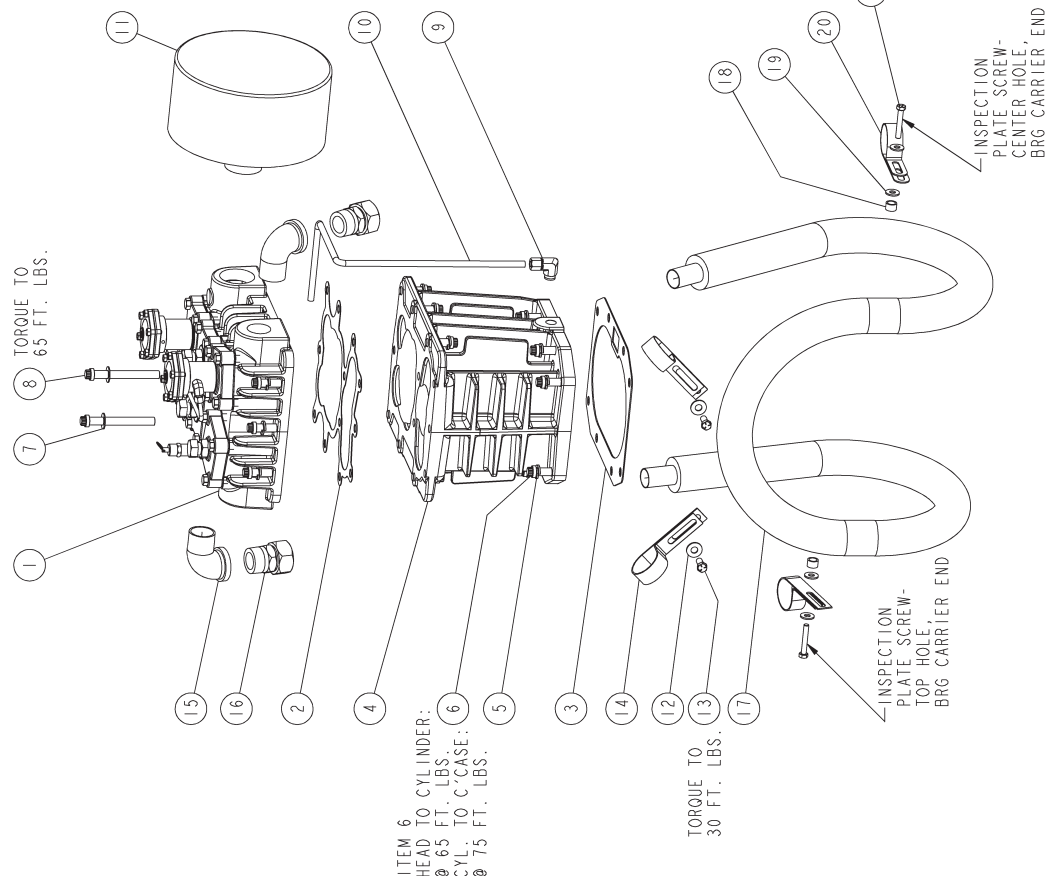
@ Indicates torque value (dry threads). Tighten multiple bolts, capscrews & hex nuts in a criss-cross or alternating pattern. Bring each fastener to the recommended torque specification in even increments.

* One pair required for each connecting rod assembly.

CYLINDER & HEAD GROUP 115348-006

(control versions L, S, LS, & LVD)

ITEM	PART NUMBER	QTY	DESCRIPTION
*1	115343UU-003	1	HEAD ASSEMBLY, UNLOADERS 370
2	7403	1	GASKET
3	5827-2	1	GASKET
*4	7396-1	1	CYLINDER, 370/5120
5	123115-08C	18	LOCKWASHER
6	90386-N15	18	12PT. SCREW, 1/2-13 UNC X 1.50, GRADE 8
7	1478-1	2	FLAT WASHER
8	5863	2	COUNTERBORE SCREW, 1/2-13 UNC X 4.25, GRADE 8
9	2728	1	TUBE FITTING, 90° ELBOW, 3/8T x 3/8MP
10	110515-038	1	TUBE, COPPER 3/8"
11	110377S200	1	HOODED AIR FILTER/SILENCER
12	110428W038	2	FLAT WASHER, 3/8
13	123478-L11	2	HEX SCREW, 3/8-16 UNC X .88, GRADE 5
14	114574-002	3	CLAMP, INTERCOOLER
15	120308	2	PIPE ELBOW, 90° STREET, 1-1/4 NPT x 1-1/4 NPT
16	23225	2	TUBE FITTING, MALE CONNECTOR, 1-1/4 TUBE X 1-1/4 NPT
17	115521	1	INTERCOOLER
18	110613-001	2	SPACER
19	110428W031	4	FLAT WASHER, 5/16
20	114574-003	1	INTERCOOLER CLAMP
21	123478-K17	2	HEX SCREW, 5/16-18 UNC X 2.00, GRADE 5
OPTIONAL PARTS			
	110377E200	1	AIR FILTER
	110377H200	1	AIR FILTER, HOODED
MAINTENANCE PARTS			
	110377E200	1	AIR FILTER ELEMENT
	115343X17L		REPLACEMENT HEAD ASSEMBLY INCLUDES ITEMS 1 AND 2 (1 EACH)
	115521K		INTERCOOLER REPLACEMENT KIT INCLUDES ITEM 17 (1 EA) & ITEM 16 (2 EA).

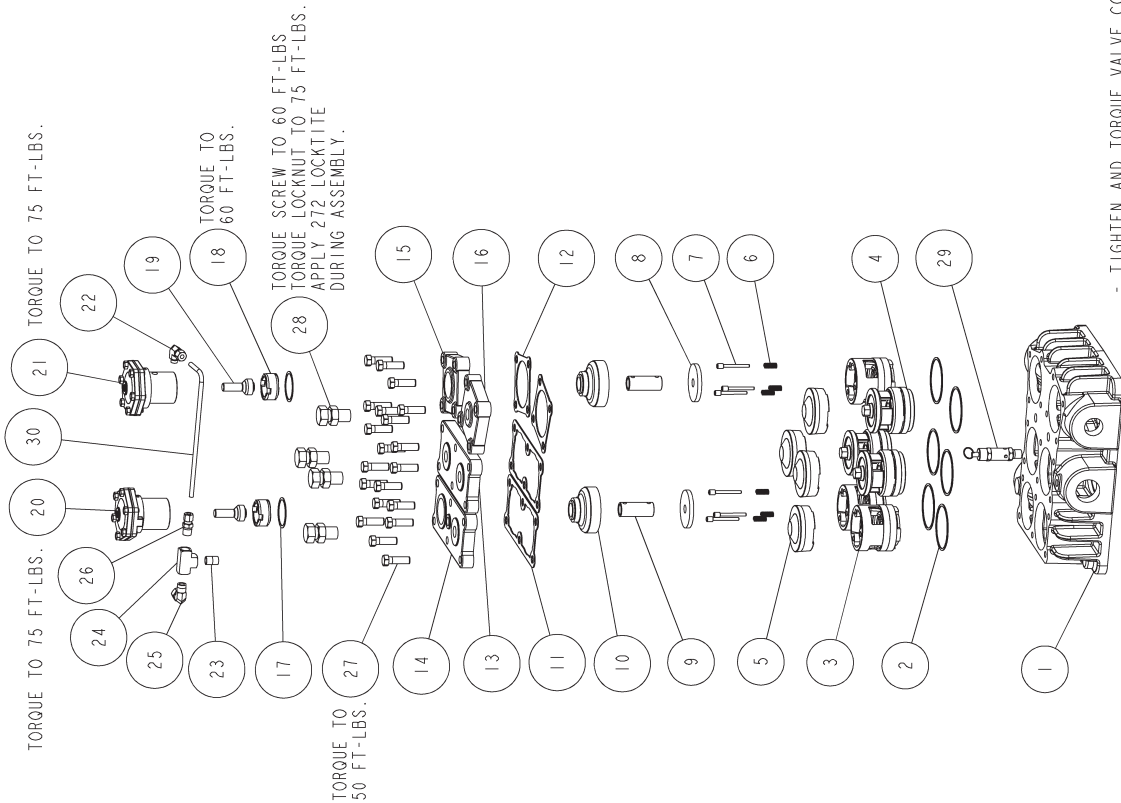


- TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN, EVENLY BRINGING EACH BOLT TO TORQUE IN EQUAL INCREMENTS, WHILE MOVING ABOUT THE BOLT PATTERN.
* HIGH PRESSURE COMPRESSORS REQUIRE 115343HPS HEAD IN LIEU OF 115343 HEAD, AND 7396-1HPS CYLINDER IN LIEU OF 7396-1 CYLINDER.

HEAD ASSEMBLY 115343UU-003

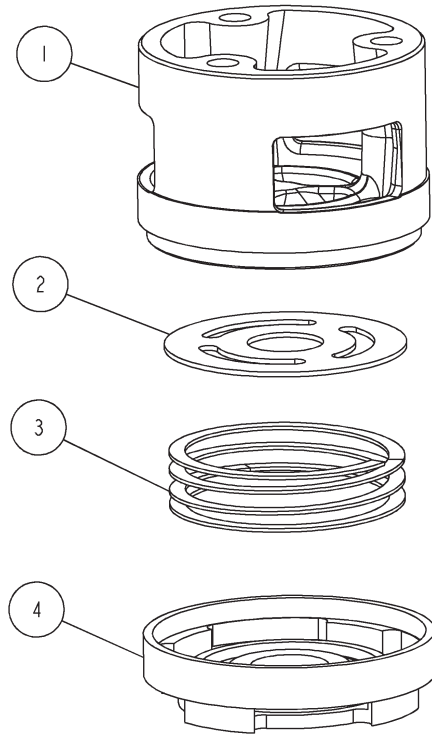
(control versions L, LS, & LVD)

ITEM	PART NUMBER	QTY	DESCRIPTION
* 1	115343	1	HEAD, AIRCOOLED
2	2024	6	GASKET, VALVE
3	7749X1	3	SUCTION VALVE ASSEMBLY
4	7750X1	3	DISCHARGE VALVE ASSEMBLY
5	6668-1R	4	VALVE RETAINER
6	6910	6	SPRING, UNLOAD. PIN
7	1857	6	UNLOADER PIN
8	5729	2	VALVE PLATFORM
9	6912-001	2	UNLOADER PIN
10	6911	2	RETAINER, VALVE
11	7398	2	GASKET, VALVE COVER
12	2025	2	GASKET, VALVE COVER
13	7384	1	VALVE COVER PLATE
14	7385	1	COVER PLATE
15	6908	1	VALVE COVER PLATE
16	6666	1	VALVE COVER PLATE
17	1556	2	VALVE COVER CAP GASKET
18	3008	2	HOLD DOWN SCREW
19	7532X	2	UNLOADER PISTON ASSEMBLY
20	40192	1	UNLOADER ASSEMBLY
21	40055	1	AY, UNLOADER, PNEUMATIC
22	1642	1	TUBE FITTING, 90 DEGREES MALE ELBOW
23	125933-001	1	PIPE NIPPLE, 1/4 NPT X CLOSE
24	121034-2	1	PIPE FITTING, TEE, 1/4 NPT
25	2614	1	TUBE FITTING, 90 DEGES MALE ELBOW
26	110594-005	1	TUBE FITTING, MALE CONNECTOR, 1/4 TUBE X 1/4 NPT
27	7480	20	SCREW, CAP. .44NC X 1.38
28	114545-R15	4	BOLT AND NUT ASSEMBLY
29	2961-100	1	PRESSURE RELIEF VALVE
30	110515-025	1	TUBE, COPPER 1/4"
MAINTENANCE PARTS			
	7749X		REPLACEMENT SUCTION VALVE ASSEMBLY INCLUDES ITEMS 2 AND 3 (1 EACH)
	7749XU		REPLACEMENT SUCTION VALVE ASSEMBLY INCLUDES ITEMS 2 AND 3 (1 EACH), ITEMS 6 AND 7 (3 EACH)
	7750X		REPLACEMENT DISCHARGE VALVE ASSEMBLY INCLUDES ITEMS 2 AND 4 (1 EACH)
	7483X		REPLACEMENT UNLOADER ASSEMBLY INCLUDES ITEMS 17, 19, AND 21 (1 EACH)
	8272X		REPLACEMENT UNLOADER ASSEMBLY INCLUDES ITEMS 17, 19, AND 20 (1 EACH)



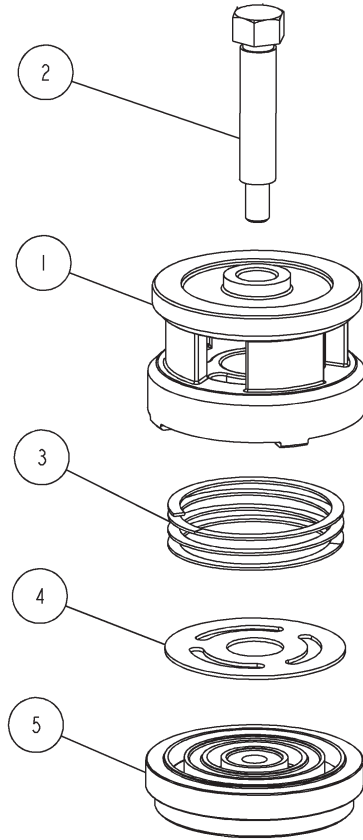
- TIGHTEN AND TORQUE VALVE COVER PLATE SCREWS (ITEM 27) BEFORE TIGHTENING VALVE CLAMP SCREWS (ITEM 28).
- TIGHTEN MULTIPLE BOLTS, CAPSCREWS AND HEX NUTS IN A CRISS-CROSS OR ALTERNATING PATTERN. BRING EACH FASTENER TO THE RECOMMENDED TORQUE SPECIFICATION IN EVEN INCREMENTS.
- * HIGH PRESSURE COMPRESSORS AND DNV CERTIFIED APPLICATIONS REQUIRE 115343HPS HEAD IN LIEU OF 115343 HEAD.

SUCTION VALVE ASSEMBLY 7749X1



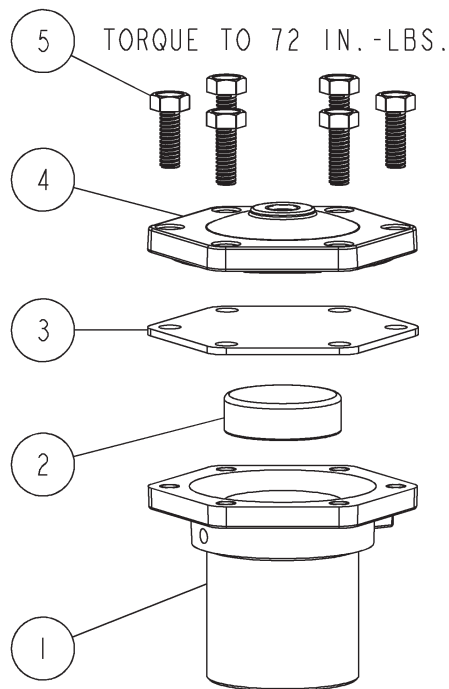
ITEM	PART NUMBER	QTY	DESCRIPTION
1	7749	1	SEAT, SUCTION
2	7753	1	VALVE DISC
3	6909	1	VALVE SPRING
4	7751	1	BUMPER, SUCTION

DISCHARGE VALVE ASSEMBLY 7750X1



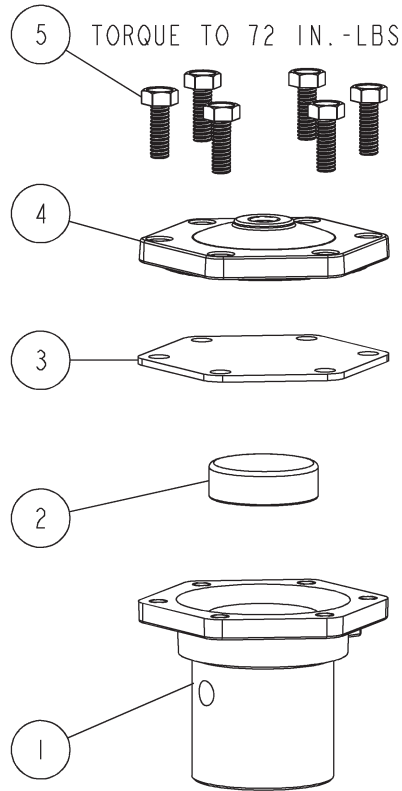
ITEM	PART NUMBER	QTY	DESCRIPTION
1	7752	1	BUMPER, DISCHARGE
2	5746	1	POST, DISCHARGE VALVE
3	6909	1	VALVE SPRING
4	7753	1	VALVE DISC
5	7750	1	SEAT, DISCHARGE

UNLOADER ASSEMBLY 40192



ITEM	PART NUMBER	QTY	DESCRIPTION
1	8272	1	BODY, UNLOADER
2	5910	1	UNLOADER CAP
3	1855	1	DIAPHRAGM
4	1818B	1	PLATE, COVER DIAPHRAGM
5	7499	6	SCREW

PNEUMATIC UNLOADER ASSEMBLY 40055

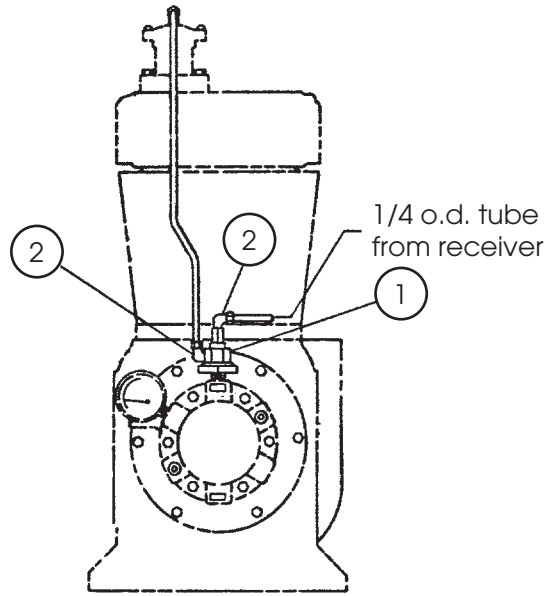
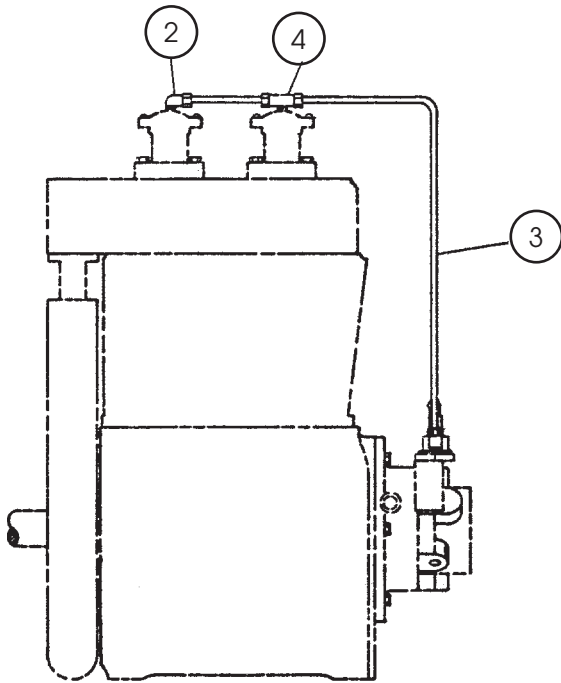


ITEM	PART NUMBER	QTY	DESCRIPTION
1	7483	1	UNLOADER BODY
2	5910	1	UNLOADER CAP
3	1855	1	DIAPHRAGM
4	1818B	1	PLATE, COVER DIAPHRAGM
5	7499	6	SCREW

CONTROL GROUP 110860

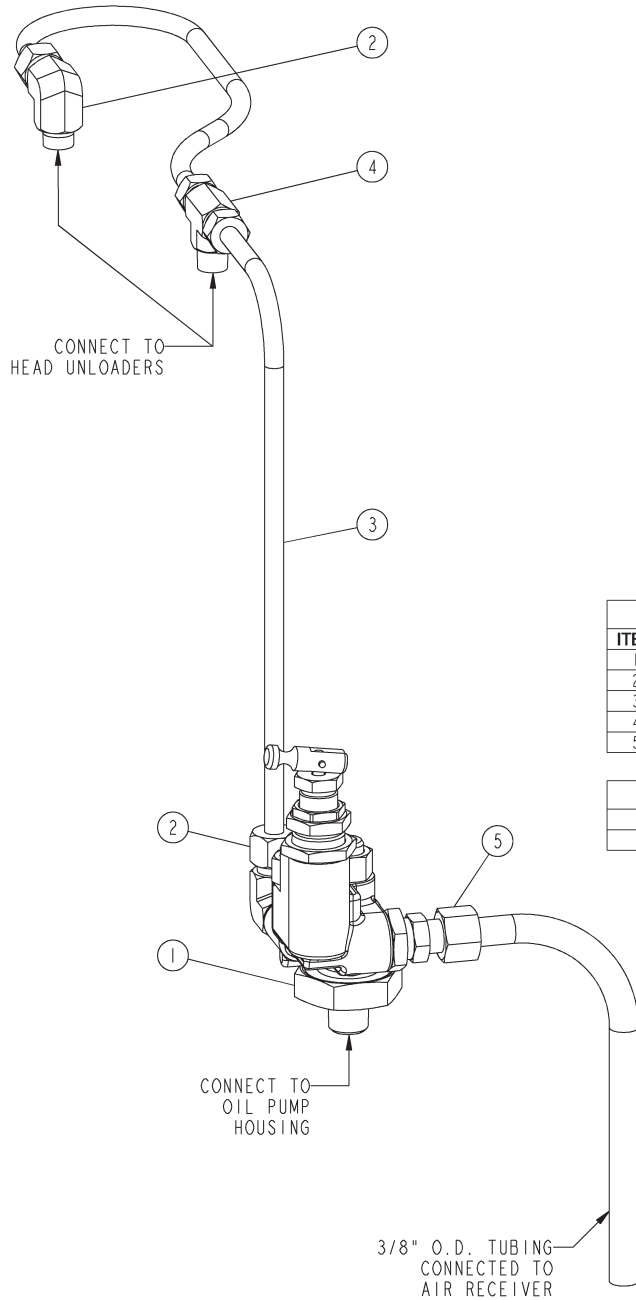
(control versions L)

Item Number	Qty.	Part Number	Part Number	Description
		0-200 PSIG	201-500 PSIG	
1	1	110827-001	110827-002	hydraulic unloader assembly
2	3	1642	1642	tube fitting, 90° male elbow, 1/4 tube x 1/8 npt
3	4 ft.	110515-025	110515-025	copper tube, 1/4 o.d.
4	1	1665	1665	tube fitting, male branch tee, 1/4 tube x 1/4 tube x 1/8 npt
Maintenance Parts				
		113225	113225	Hydraulic Unloader Repair Kit includes diaphragm, stem assembly, inlet filter & fitting assembly, spring (0-200 PSIG) and spring (201-500 PSIG, red color code)
Parts for Special Applications (for use with diester or phosphate ester synthetic lubricants)				
1	1	110827-003		hydraulic unloader assembly (standard, 0-200 PSIG)
1	1		110827-004	hydraulic unloader assembly (high pressure, 201-500 PSIG)



CONTROL GROUP 2023903355

(control version LS)



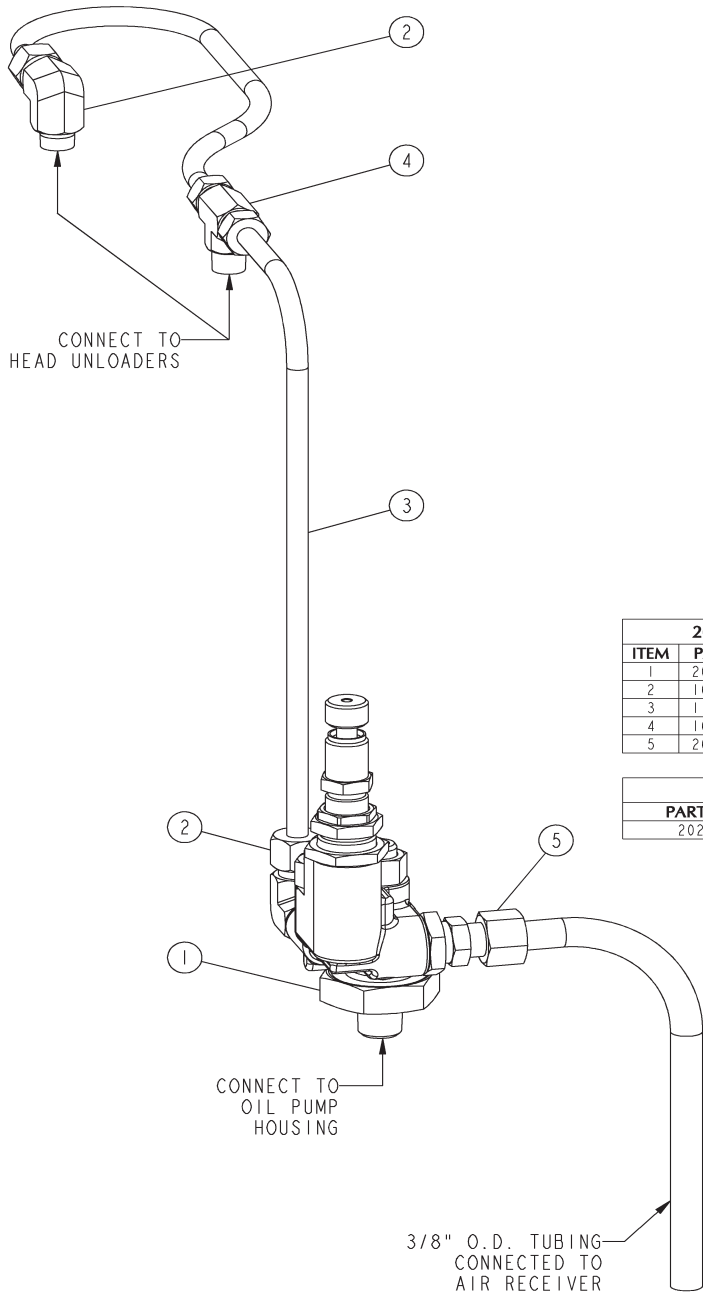
2023903355 LS CONTROL GROUP (STANDARD 165-175 PSI)			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	2023903305	1	LS CONTROL VALVE, 165-175 PRESET
2	1642	2	TUBE FITTING, 90° ELBOW, 1/4TX1/8MP
3	110515-025	1	1/4" COPPER TUBING - 5 FT.
4	1665	1	MALE BRANCH TEE 1/4T X 1/8P
5	2616	1	TUBE FITTING, STRAIGHT, 3/8 TUBE X 1/4 NPT

MAINTENANCE PARTS	
PART NUMBER	DESCRIPTION
2023903290	CONTROL VALVE INLET FILTER

* See page 19 for optional pilot valves that must be used with respective pressure ranges.

CONTROL GROUP 2023903255

(control version LVD)

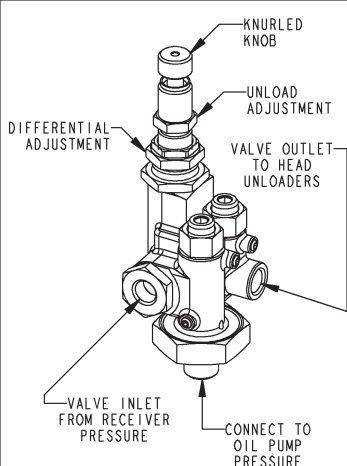


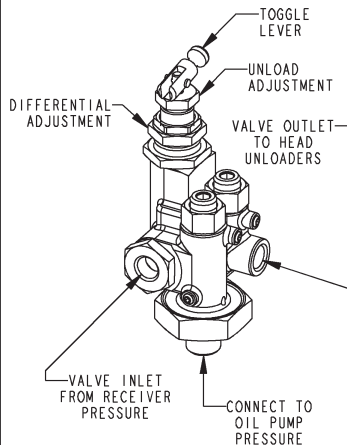
2023903255 LVD CONTROL GROUP (STANDARD 155-165 PSI)			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	2023903205	1	LVD CONTROL VALVE, 155-165 PRESET
2	1642	2	TUBE FITTING, 90° ELBOW, 1/4T x 1/8MP
3	110515-025	1	1/4" COPPER TUBING - 5 FT.
4	1665	1	MALE BRANCH TEE 1/4T X 1/8P
5	2616	1	TUBE FITTING, STRAIGHT, 3/8 TUBE X 1/4 NPT

MAINTENANCE PARTS	
PART NUMBER	DESCRIPTION
2023903290	CONTROL VALVE INLET FILTER

* See page 19 for optional pilot valves that must be used with respective pressure ranges.

PILOT VALVES

COMBINATION VALVES - CONTROL VERSION "LVD" CONTAINS THE HYDRAULIC UNLOADER, PILOT VALVE, AND CHECK VALVE IN A SINGLE PART						
	PILOT SETTINGS	QUINCY PART #	FACTORY PRE-SET:		*CUSTOMER RE-SETTABLE:	
	SEE WARNING BELOW		LOAD PRESSURE (PSI)	UNLOAD PRESSURE (PSI)	LOAD PRESSURE RANGE (PSI)	UNLOAD PRESSURE RANGE (PSI)
	CUSTOM PRESSURE SETTING	2023903201	100	115	**	51-120
		2023903202	130	140	**	121-250
		2023903203	450	500	**	251-500
	STANDARD 1-STAGE COMPRESSOR	2023903204	85	95	**	51-120
	STANDARD 2-STAGE COMPRESSOR	2023903205	155	165	**	121-250

COMBINATION VALVES - CONTROL VERSION "LS" CONTAINS THE HYDRAULIC UNLOADER, PILOT VALVE, AND CHECK VALVE IN A SINGLE PART						
	PILOT SETTINGS	QUINCY PART #	FACTORY PRE-SET:		*CUSTOMER RE-SETTABLE:	
	SEE WARNING BELOW		LOAD PRESSURE (PSI)	UNLOAD PRESSURE (PSI)	LOAD PRESSURE RANGE (PSI)	UNLOAD PRESSURE RANGE (PSI)
	CUSTOM PRESSURE SETTING	2023903301	100	110	**	51-120
		2023903302	130	140	**	121-250
		2023903303	450	500	**	251-500
	STANDARD 1-STAGE COMPRESSOR	2023903304	90	100	**	51-120
	STANDARD 2-STAGE COMPRESSOR	2023903305	165	175	**	121-250

* THE PILOT IS SUPPLIED PRESET FROM THE FACTORY. IF THE PILOT NEEDS TO BE RESET, REFER TO THE QR-25 SERIES INSTRUCTION MANUAL FOR INSTRUCTIONS.

** SEE DIFFERENTIAL SETTING CHART. LOAD PRESSURE = UNLOAD PRESSURE - DIFFERENTIAL.

DIFFERENTIAL SETTING CHART	
UNLOAD PRESSURE (PSI)	DIFFERENTIAL MIN-MAX (PSI)
51-175	10-15
175-250	15-25
251-500	25-50

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.
REFER TO THE "INTRODUCTION" SECTION OF YOUR PARTS MANUAL FOR THE SAFE OPERATING LIMITS OF YOUR COMPRESSOR.

SUCTION VALVE UNLOADER ASSEMBLIES

Description

The Quincy suction valve unloader assembly consists of unloading arrangements on the suction valves, having a plunger to contact the suction valve disc and an unloader pilot valve to automatically regulate the passing of receiver pressure to the unloading arrangement.

Application

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.

Operation

Unloading occurs when receiver pressure is sufficient to overcome pilot valve spring pressure. The check ball is then unseated, allowing receiver pressure to pass to the unloading arrangements. The compressor will run unloaded until the receiver pressure drops to a predetermined level. At this time, the action of the ball is reversed, shutting off receiver pressure to the unloader arrangement and venting the unloader to atmosphere. This allows the compressor to load. The drive, either electric motor or combustion engine, runs continuously and must be started and stopped manually.

The LS control version is equipped with a toggle lever on the pilot valve which can be flipped to provide manual unloading.

The LVD control version is designed to provide a choice between "start/stop" or "continuous run" operation. The LVD pilot valve can be set for "start/stop" operation by turning the knurled knob at the end of the 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, could result in unsafe conditions.

WARNING !

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

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

Installation

The pilot valve is to be connected to the air receiver using a minimum of 3/8" o.d. copper tube. Compressors in the field, not equipped with a suction valve unloader assembly, can be converted to constant speed. Consult your local Quincy distributor for assistance with conversion procedures.

Service

Periodically check the filter & screens in the inlet of the pilot valve to make sure they are free of obstructions. If they become clogged, remove and clean or replace. Inspect the "o" ring located in the opposite end of the pilot valve body for wear or damage; replace if necessary.

Adjustment

The unloading pressure is adjustable and is regulated by turning the hex nut (marked "unload adj." in cross sectional illustrations of pilot valves). 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 hex nut marked "differential adjustment" in the illustrations of the pilot valves on previous pages. Increase the differential pressure by turning the hex nut clockwise - decrease by turning counterclockwise. Tighten the locknuts after adjustment.

Head Kit K370A			
Item #	Qty.	Part Number	Description
1		110377E200	air filter element
2		1556	gasket
2		1855	diaphragm
6		2024	gasket, valve
2		7398	gasket, valve cover
2		2025	gasket, valve cover
6		7753	valve disc
1		7403	gasket, cylinder to head
6		6909	valve spring
1		5860	gasket, intercooler

Yearly Maintenance Kit 110516-370			
Item #	Qty.	Part Number	Description
1		110822	oil pressure gauge
2		1855	diaphragm
6		1857	valve pin
6		7753	valve disc
2		6283	hydraulic unloader filter
6		6909	valve spring
6		6910	valve spring
1		7503	gasket set

Oil Pump Repair Kit 2022132306			
Item #	Qty.	Part Number	Description
1		160003	oil pump gerotor
1		2024200201	driveshaft
1		160075-001	key
1		6285	retaining ring
1		22749-011	"o"ring
1		22749-112	"o"ring
1		22749-152	"o"ring

Overhaul Kit K370B			
Item #	Qty.	Part Number	Description
1		110377E200	air filter element
6		7753	valve disc
2		6656PR	connecting rod inserts (1 pair)
6		6909	valve spring
1		7503	gasket set
1		8168	ring set
1		7527	ring set
1		110774	"o"ring kit

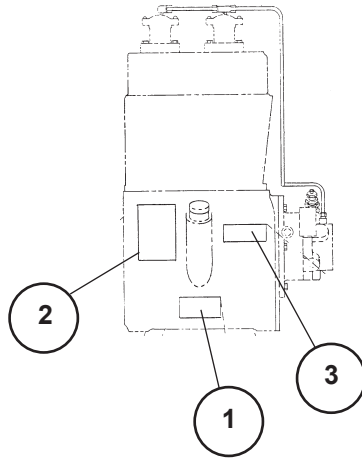
Basic Compressor Repair Kit 2022118441			
Item #	Qty.	Part Number	Description
1		110190-004	piston pin
1		110377E200	air filter element
1		110774	"o"ring kit
1		2023400100	oil filter
1		2720	bearing cup
1		2788	bearing cone
1		3720	bearing cup
1		40775	bearing cone
2		6443SR	connecting rod bushing
2		6656PR	connecting rod inserts (1 pair)
6		6909	valve spring
1		7503	gasket set
1		7527	ring set
6		7753	valve disc
1		8168	gasket set
1		8647	piston pin

Piston Pin Kit K370E			
Item #	Qty.	Part Number	Description
1		6443SR	con-rod bearing
1		110190-004	piston pin
1		8647	piston pin
2		110799-010	bearing
2		8648	retaining ring

Gasket Set 7503			
Item #	Qty.	Part Number	Description
2		1315	inspection plate gasket
3		1383	bearing adj. shim, .005 steel
5		1383A	bearing adj. shim, .007 steel
3		1383B	bearing adj. shim, .020 steel
2		1383D	bearing adj. shim, .002 steel
2		1556	gasket
6		2024	valve gasket
2		2025	valve cover gasket
1		5502	gasket
1		5827-2	gasket, cylinder to crankcase
1		6679	gasket
2		7398	valve cover gasket
1		7403	gasket, cylinder to head

Recommended Spare Parts			
Item #	Qty.	Part Number	Description
	3	7749X	replacement suction valve assy.
	3	7750X	replacement discharge valve
	1	110822	pressure gauge
	1	2022132306	oil pump repair kit
	1	7503	gasket set
	1	113225	hydraulic unloader repair kit
	2	6656PR	connecting rod inserts (1 pair)
	2	1855	unloader diaphragm
	1	2023903290	control valve inlet filter
	1	110377E200	air filter element

DECALS



Decals for QR 370 Basic Compressor			
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..."

TYPICAL UNIT REPAIR PARTS LIST

The parts listed here are for standard QR 370 (up to 175 PSIG) units and may or may not be applicable to custom built units. Check with your local authorized Quincy 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.

(QR 370 simplex - horizontal tank - electric motor)

Qty	Part Number	Part Number	Part Number	Description
120 gal.				
1	113271-200			tank (200 PSIG max. working pressure)
1	* 113280			top plate
1	111136-050			tank drain valve
1	111136-100			ball valve
1	110514-300			pressure gauge
1	110512-003			§ pressure switch (135-175 PSIG)
1	110513-200			pressure relief valve (200 PSIG)
3.5 ft.	110515-100			! discharge tube (1" copper tube to be formed by customer)
2	111265-100			ferrule (for discharge tube)
15 h.p.				
3	110258B085			drive belt
1	111468-158			motor pulley / bushing
1	111967K003			belt guard assembly
1	200v, 3Ø 40657	230/460v, 3Ø 127466L042		15 h.p. motor (ODP)

§ 2298-175 pressure switch for base mounted units.

(QR 370 duplex - horizontal tank - electric motor)

Qty	Part Number	Part Number	Part Number	Description
200 gal.				
1	113469-200			tank (200 PSIG max. working pressure)
2	113280			top plate
1	111136-050			tank drain valve
1	111136-100			ball valve
1	110514-300			pressure gauge
2	110512-003			pressure switch (135-175 PSIG)
1	110513-200			pressure relief valve (200 PSIG)
7 ft.	110515-100			! discharge tube (1" copper tube to be formed by customer)
2	111265-100			ferrule (for discharge tube)
15 h.p.				
6	110258B085			drive belt
2	111468-158			motor pulley / bushing
2	111967K003			belt guard assembly
2	200v, 3Ø 40657	230/460v, 3Ø 127466L042		15 h.p. motor (ODP)

* 113280 top plate is also used for all QR 370 base mounted electric motor driven units.

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

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

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 bear 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 INFRINGEMENT: 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.

ENVIRONMENTAL 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



Reciprocating / Systems: 217.222.7700
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Website: quincycompressor.com

