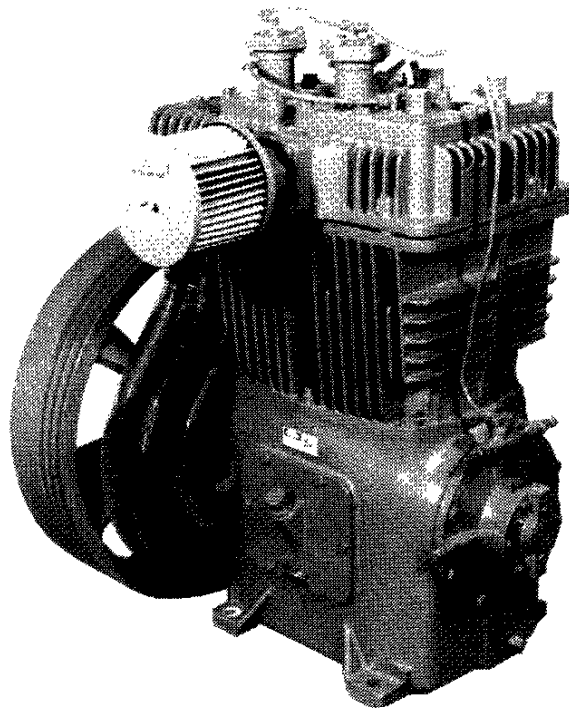


Quincy

QR-25

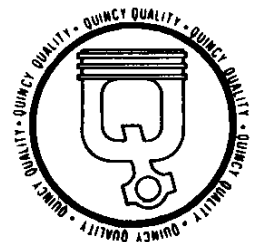
MODEL 390

RECORD OF CHANGE NO. 100



PARTS MANUAL

50219-100



SEPTEMBER 1985

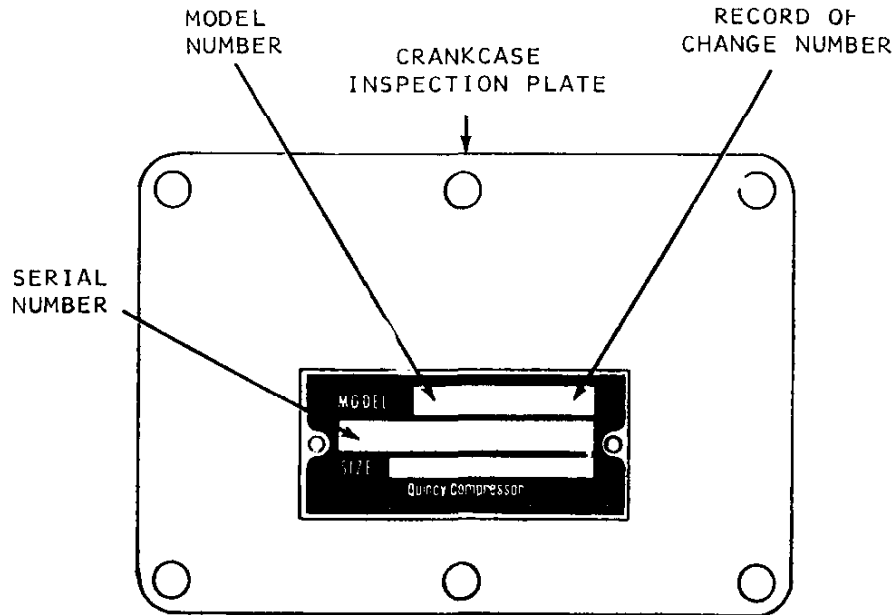
ALPHABETICAL INDEX

BEARING CARRIER GROUP	12-13
CONNECTING ROD & LOW PRESSURE PISTON GROUP	14-15
CONNECTING ROD & HIGH PRESSURE PISTON GROUP	16-17
CONTROL PIPING GROUPS	26 THRU 33
CRANKCASE GROUP	8-9
CRANKSHAFT GROUP	10-11
CYLINDER & HEAD GROUPS	18 THRU 21
DIMENSIONAL DRAWINGS	3 THRU 7
DUAL CONTROL CHECK VALVE ASSEMBLY	37
GASKET SET	38
HEAD ASSEMBLIES	22 THRU 25
HYDRAULIC UNLOADER ASSEMBLY	36
PILOT & ASSEMBLIES	34
PILOT INSTRUCTIONS	35
RECOMMENDED SPARE PARTS	39
SERIAL NUMBER IDENTIFICATION	2

MODEL 390 RECIPROCATING AIR COMPRESSOR

7- 1/2" LOW PRESSURE BORE X 4" HIGH PRESSURE BORE X 4" STROKE
AIRCOOLED
TWO STAGE
PRESSURE LUBRICATED
400-900 R.P.M. SPEED RANGE WITH PRESSURE CAPABILITY UP TO 250 P.S.I.G.
WITH PROPER CONTROLS AND MODIFICATIONS

SERIAL NUMBER IDENTIFICATION



PROMPT SERVICE CAN BE RENDERED ON REPAIR PARTS ORDERS IF THE FOLLOWING INFORMATION IS GIVEN:

1. THE MODEL NUMBER AND SERIAL NUMBER, AS STAMPED IN THE NAMEPLATE ON THE SIDE OF THE CRANKCASE (OR INSPECTION PLATE) MUST BE GIVEN WHEN ORDERING REPAIR PARTS.
2. STATE THE EXACT PART NUMBER NEEDED. DO NOT ORDER BY INDEX NUMBERS, AS INDEX NUMBERS ARE REPEATED THROUGHOUT THIS MANUAL, AND IF USED FOR ORDERING REPAIR PARTS, WILL NECESSITATE TIME CONSUMING CORRESPONDENCE.
3. STATE EXACT QUANTITY NEEDED.
4. STATE PREFERRED TYPE OF TRANSPORTATION.

ALL REPAIR PARTS ORDERS WILL BE INVOICED F.O.B. QUINCY, ILLINOIS, AT PRICES IN EFFECT AT TIME OF SHIPMENT.

NOTICE:

DO NOT OPERATE THIS COMPRESSOR WITHOUT AN OSHA APPROVED TOTALLY ENCLOSED BELT GUARD OR ANY OTHER REQUIRED SAFETY EQUIPMENT.



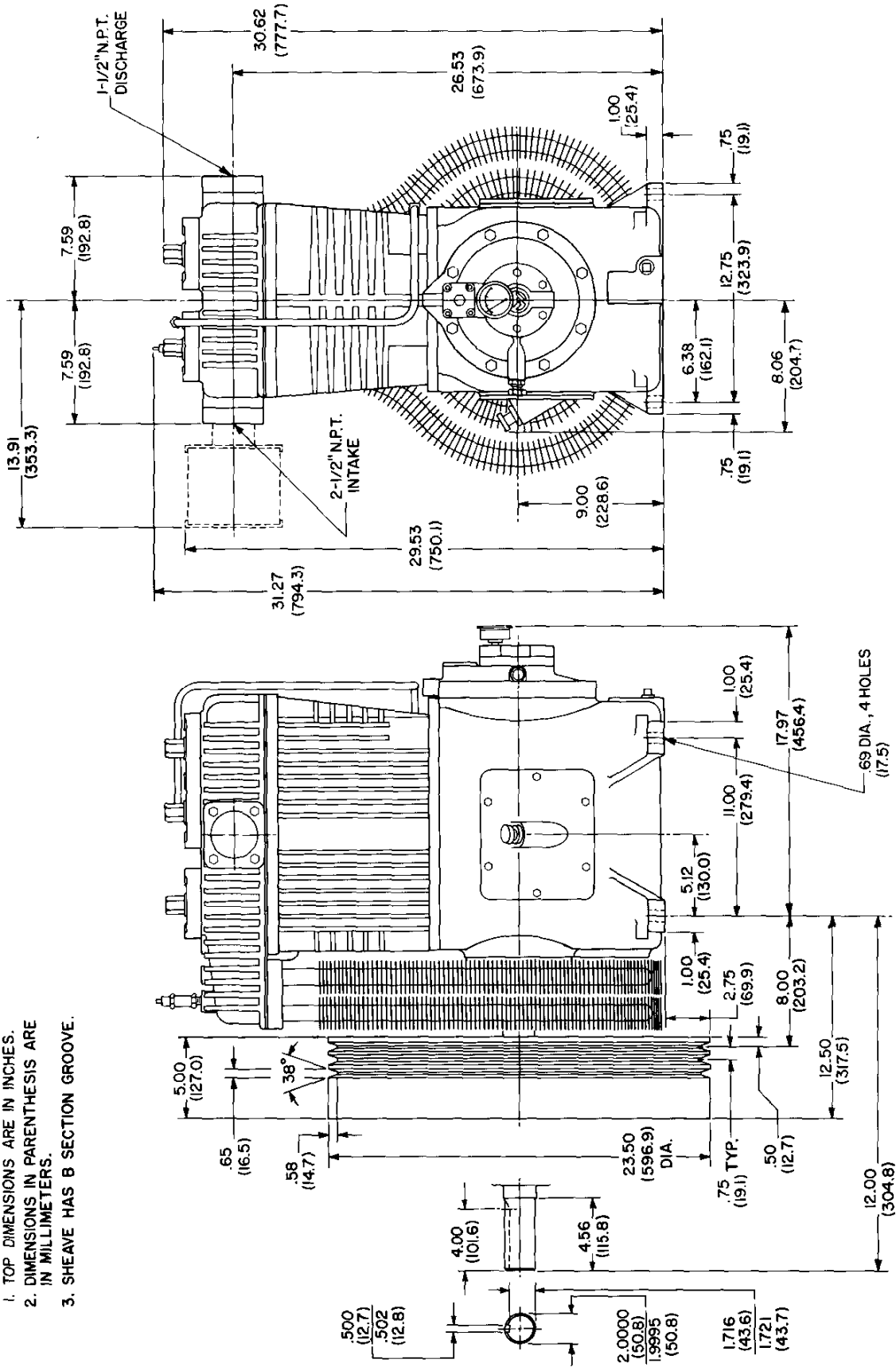
AIR FROM THIS COMPRESSOR
MUST NOT BE USED FOR
FOOD PROCESSING OR BREATHING
DEATH OR INJURY MAY RESULT.



390 PLAIN DIMENSIONAL DRAWING

NOTES:

1. TOP DIMENSIONS ARE IN INCHES.
2. DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS.
3. SHEAVE HAS B SECTION GROOVE.

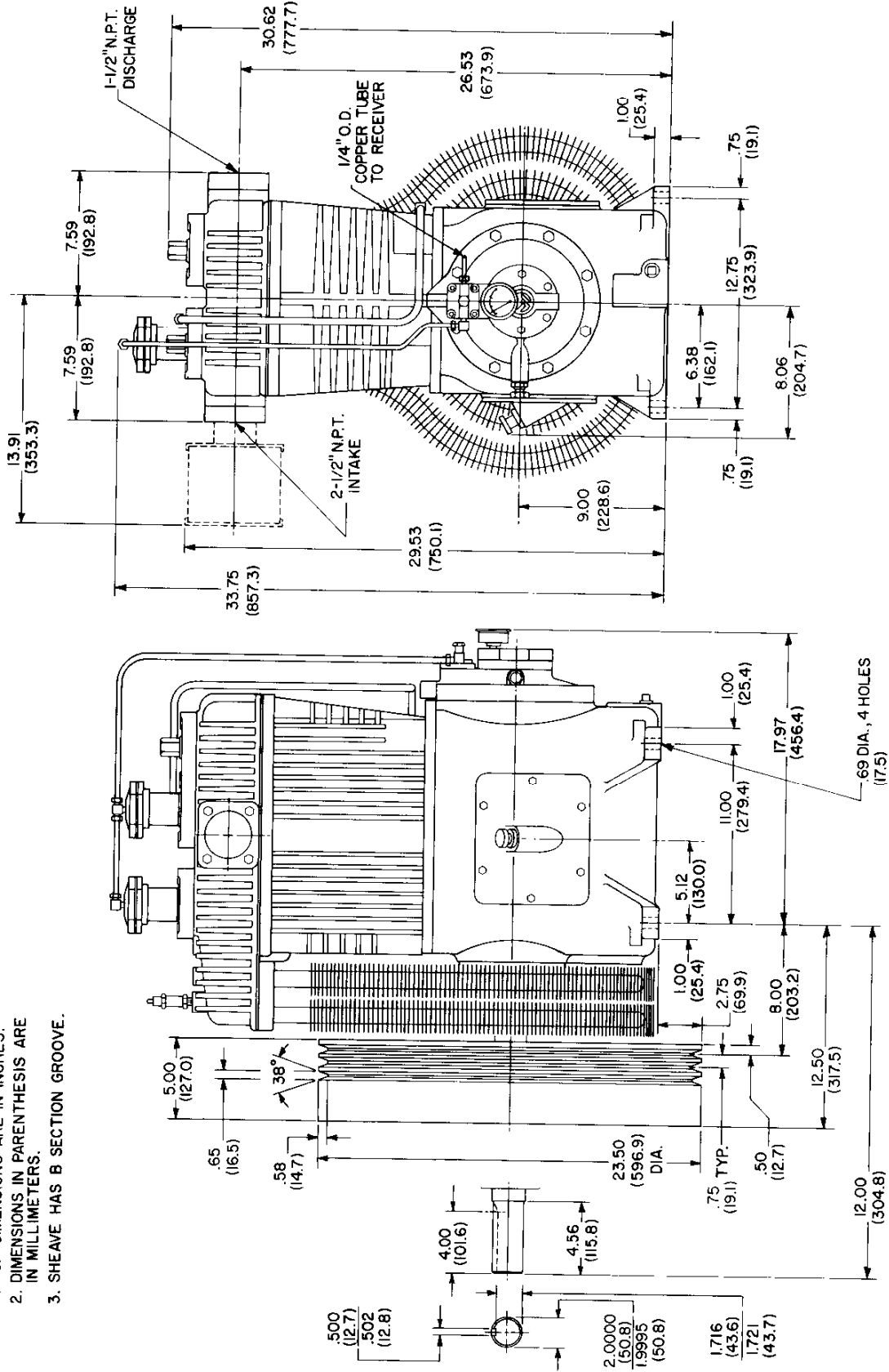


OUTLINE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE TOTALLY REPRESENTATIVE OF THE COMPRESSOR PURCHASED. WHEN DIMENSIONAL ACCURACY IS REQUIRED REQUEST A CERTIFIED PRINT FROM QUINCY COMPRESSOR.

390 LOADLESS DIMENSIONAL DRAWING

NOTES:

1. TOP DIMENSIONS ARE IN INCHES.
2. DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS.
3. SHEAVE HAS B SECTION GROOVE.

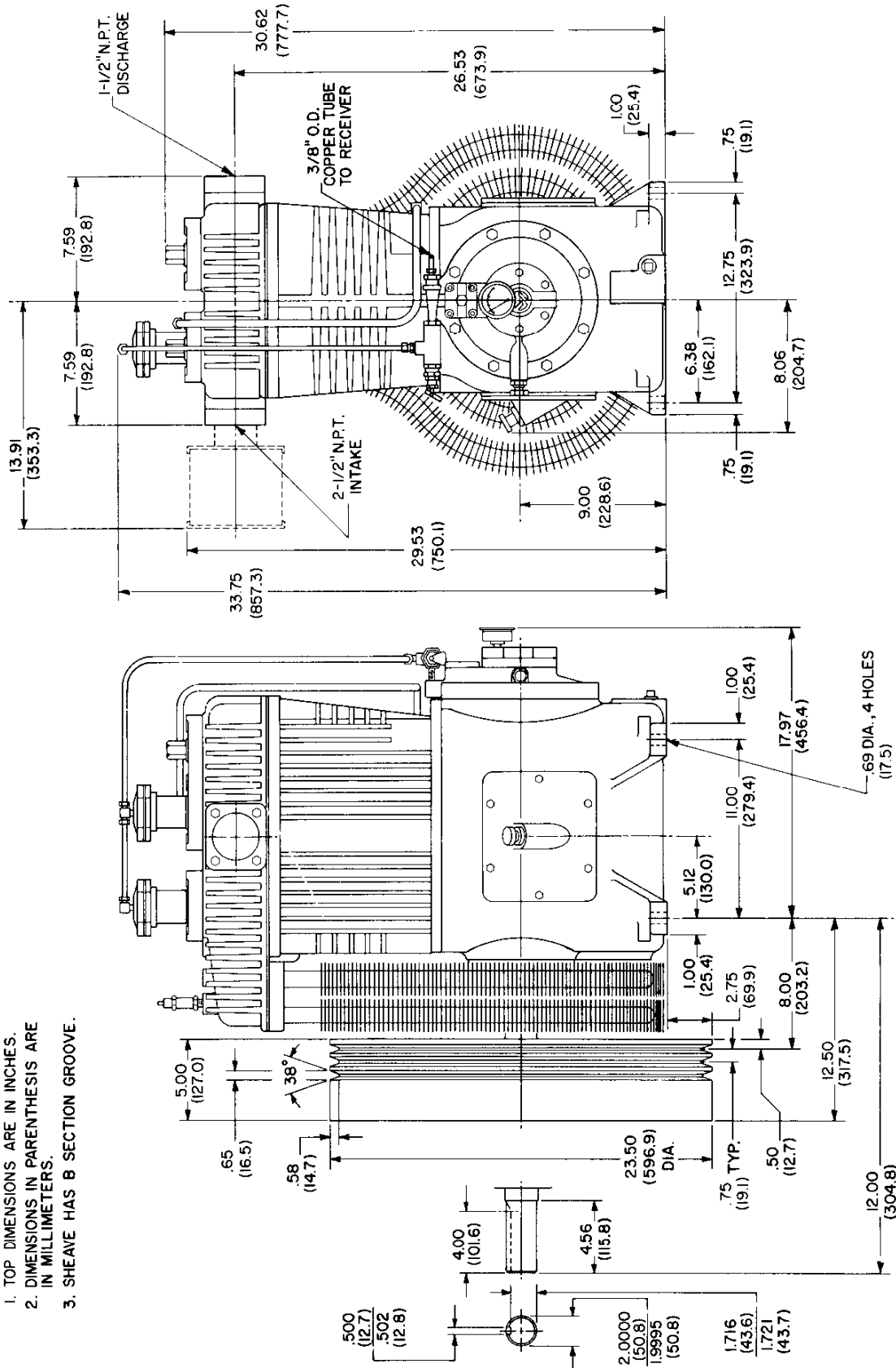


OUTLINE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE TOTALLY REPRESENTATIVE OF THE COMPRESSOR PURCHASED. WHEN DIMENSIONAL ACCURACY IS REQUIRED REQUEST A CERTIFIED PRINT FROM QUINCY COMPRESSOR.

390 PILOT CONTROLLED DIMENSIONAL DRAWING

NOTES:

1. TOP DIMENSIONS ARE IN INCHES.
2. DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS.
3. SHEAVE HAS B SECTION GROOVE.

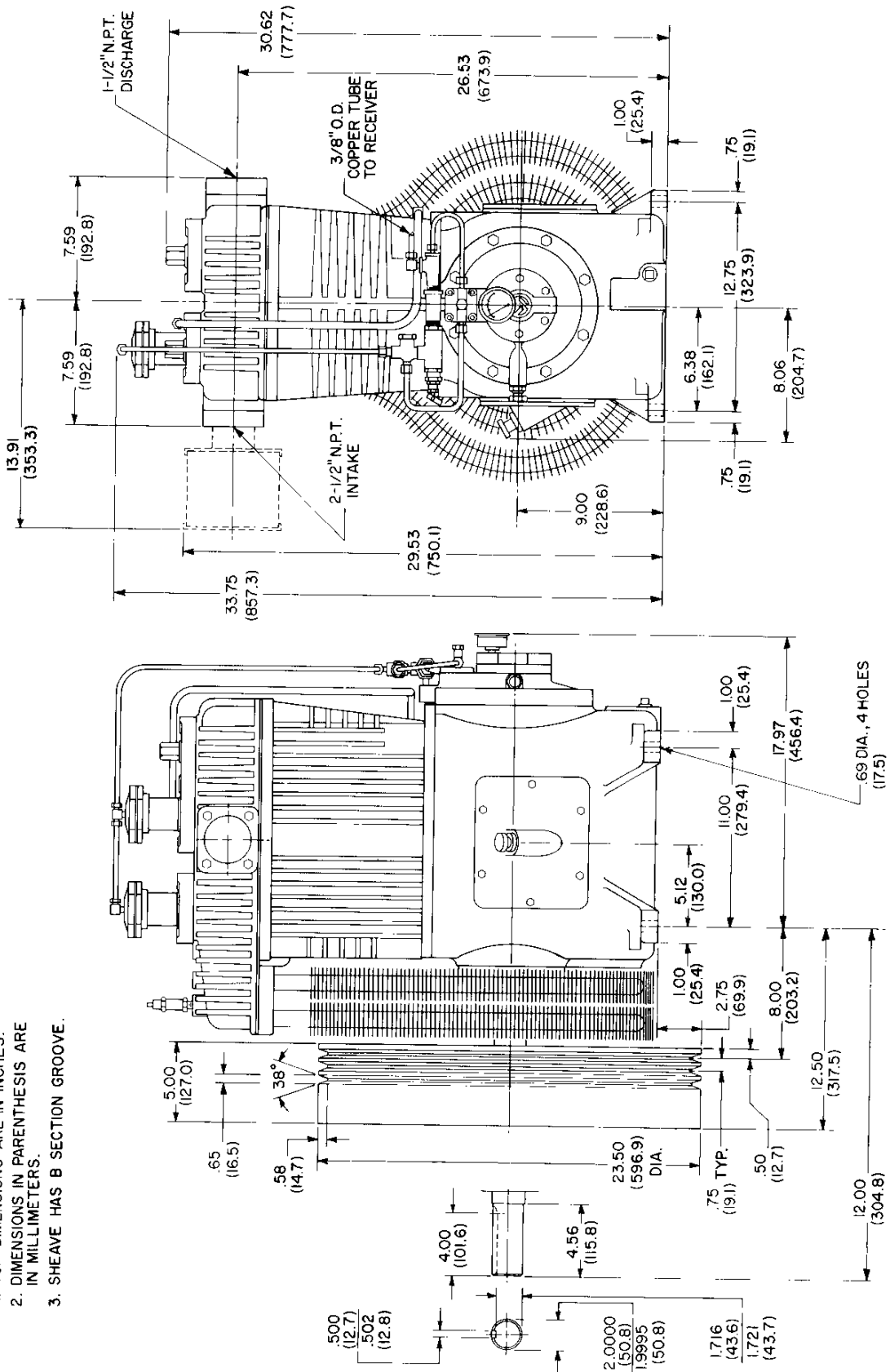


OUTLINE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE TOTALLY REPRESENTATIVE OF THE COMPRESSOR PURCHASED. WHEN DIMENSIONAL ACCURACY IS REQUIRED REQUEST A CERTIFIED PRINT FROM QUINCY COMPRESSOR.

390 PILOT CONTROLLED W/SAFE-Q-LUBE DIMENSIONAL DRAWING

NOTES:

1. TOP DIMENSIONS ARE IN INCHES.
2. DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS.
3. SHEAVE HAS B SECTION GROOVE.

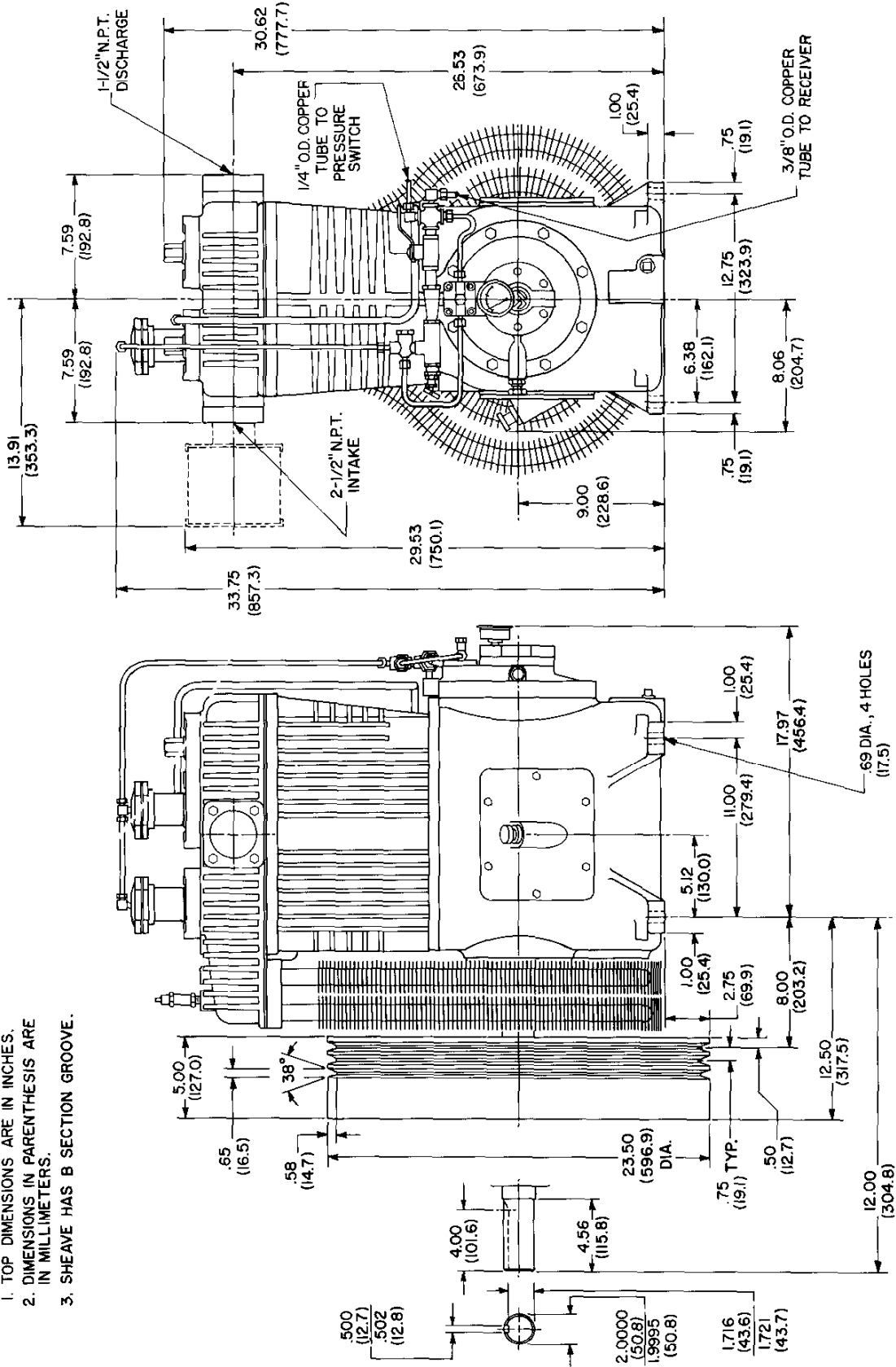


OUTLINE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE TOTALLY REPRESENTATIVE OF THE COMPRESSOR PURCHASED. WHEN DIMENSIONAL ACCURACY IS REQUIRED REQUEST A CERTIFIED PRINT FROM QUINCY COMPRESSOR.

390 DUAL CONTROL W/SHUTOFF VALVE DIMENSIONAL DRAWING

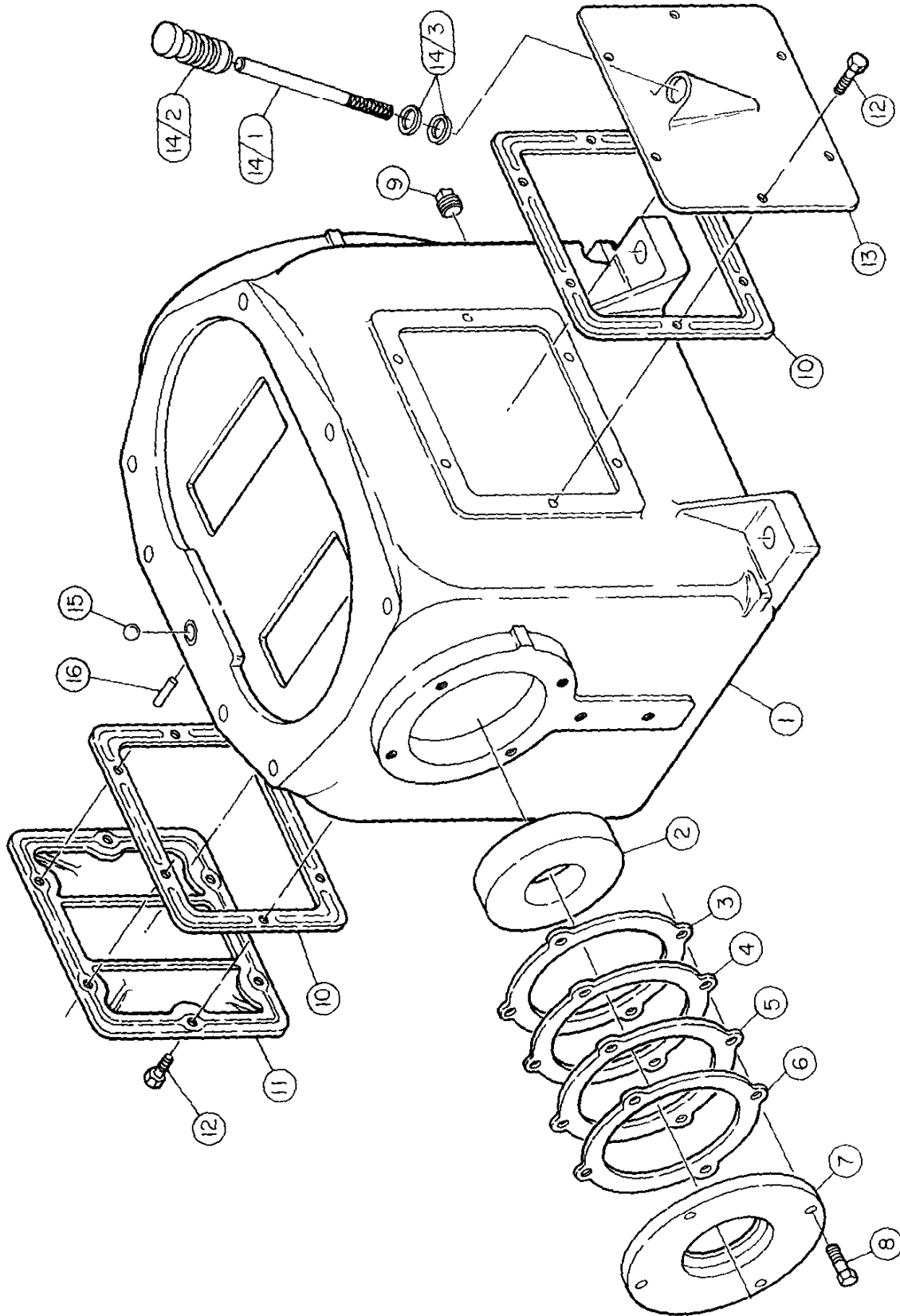
NOTES:

1. TOP DIMENSIONS ARE IN INCHES.
2. DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS.
3. SHEAVE HAS B SECTION GROOVE.



OUTLINE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE TOTALLY REPRESENTATIVE OF THE COMPRESSOR PURCHASED. WHEN DIMENSIONAL ACCURACY IS REQUIRED REQUEST A CERTIFIED PRINT FROM QUINCY COMPRESSOR.

CRANKCASE GROUP NO. 110650

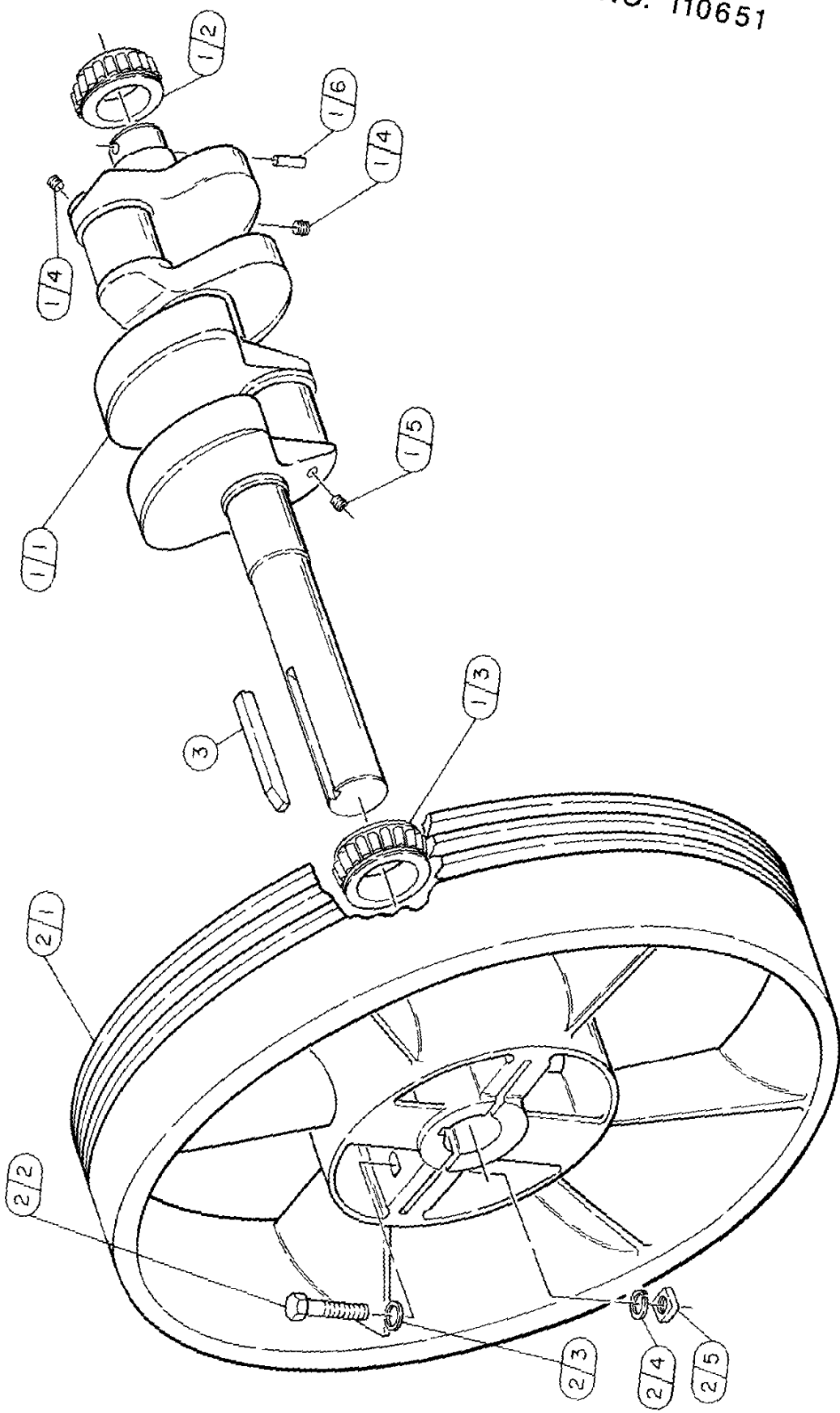


50219-100

CRANKCASE GROUP NO. 110650

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	6946	CRANKCASE
2	1	4357	CUP - BEARING
3	**	1498	SHIM - BEARING, .005
4	**	1498A	SHIM - BEARING, .007
5	**	1498B	SHIM - BEARING, .020
6	**	1498C	SHIM - BEARING, .002
7	1	6643	PLATE - ADJUSTMENT
8	4	123478-N14	SCREW - HEX., 1/2-13 UNC X 1.25, GRADE 5 (@75FT.-LBS.)
9	1	2057	PLUG - PIPE, 1/2 NPT
10	2	1315	GASKET - INSPECTION PLATE
11	1	1249	PLATE - INSPECTION
12	12	123478-K10	SCREW - HEX., 5/16-18 UNC X .75, GRADE 5 (@12FT.-LBS.)
13	1	6849	PLATE - INSPECTION (WITH OIL GAUGE BOSS)
14	1	6726X	GAUGE ASSEMBLY
14/1	1	5488	ROD - OIL GAUGE
14/2	1	6726	KNOB - OIL GAUGE
14/3	2	123157-210	"O"RING - OIL GAUGE
15	1	5783	BALL - BREATHER
16	1	5932	PIN - DRIVE
			@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
14/3	2	22749-210	"O"RING - OIL GAUGE (FOR USE WITH SYNTHETIC LUBRICANTS)
			**QUANTITY AS REQUIRED

CRANKSHAFT GROUP NO. 110651



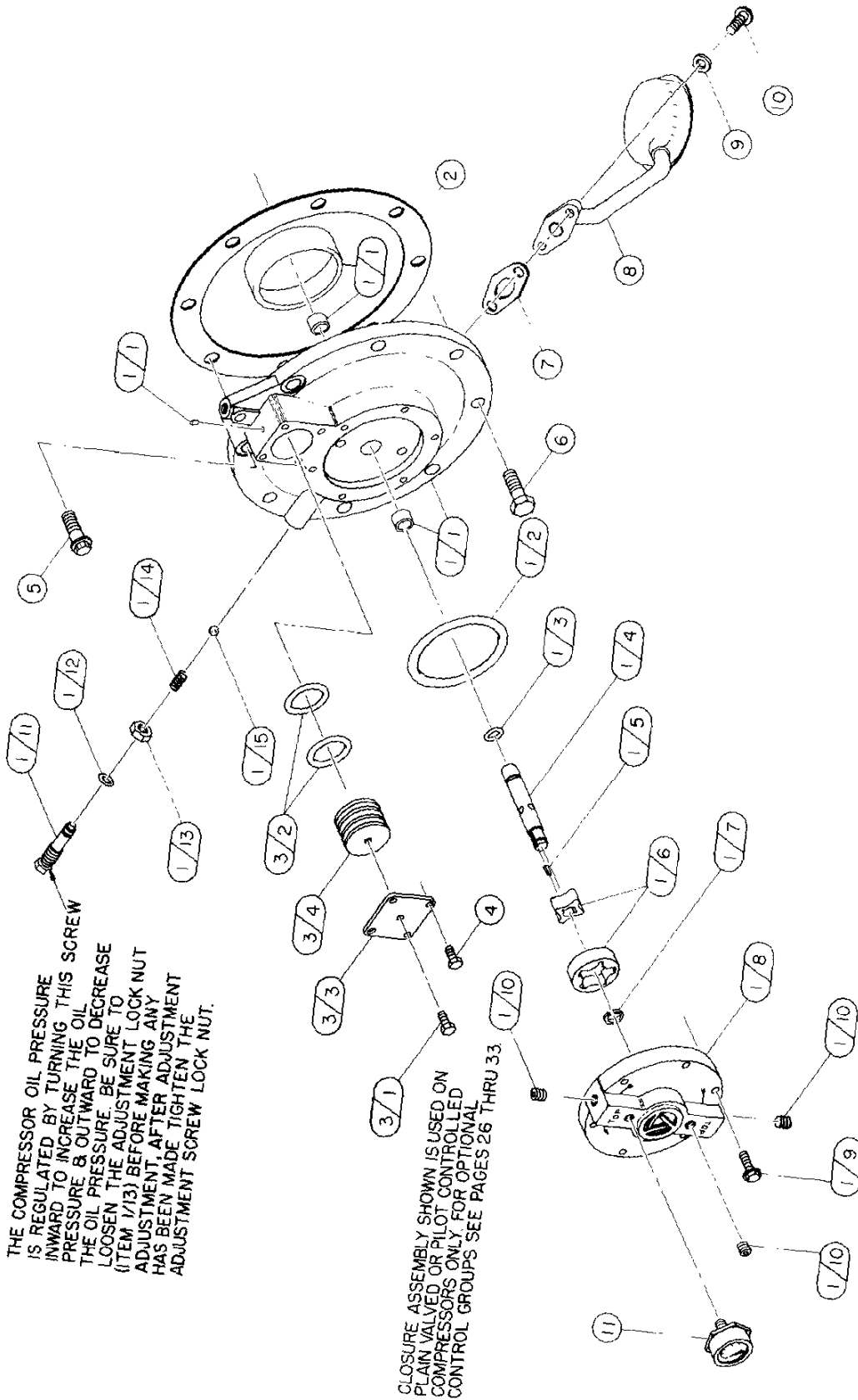
19-100

CRANKSHAFT GROUP NO. 110651

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	110225-002	CRANKSHAFT ASSEMBLY
1/1	1	110224-002	CRANKSHAFT
1/2	1	3776	CONE - BEARING
1/3	1	6651	CONE - BEARING
1/4	2	121160	PLUG - PIPE, 1/8 NPT
1/5	1	110234	DRIFICE - CRANKSHAFT
1/6	1	110705-F17	PIN - ROLL
2	1	110557X	SHEAVE ASSEMBLY
2/1	1	110557	SHEAVE - COMPRESSOR
2/2	2	124571-Q21	SCREW - HEX., 5/8-18 UNF X 3.00, GRADE 5 (@150FT.-LBS.)
2/3	2	110428W062	FLATWASHER - 5/8
2/4	2	123115-10C	LOCKWASHER - 5/8
2/5	2	1883	NUT - SQUARE, 5/8-18 UNF
3	1	2851	KEY

@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)

BEARING CARRIER GROUP NO. 160004



50219-100

BEARING CARRIER GROUP NO. 160004

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	160001-002	BEARING CARRIER ASSEMBLY CARRIER - BEARING INCLUDES: (1) 3720 CUP - BEARING (2) 160005 BUSHING - BRONZE (1) 6564 PLUG - HOLE *O-RING - .09 WIDE X 3.25 I.D. *O-RING - .09 WIDE X .50 I.D. DRIVESHAFT - BEARING CARRIER KEY - DRIVESHAFT GEROTOR - PUMP RING - RETAINING, DRIVESHAFT HOUSING - PUMP SCREW - HEX., 1/4-20 UNC X 1.25, W/TOOTH WASHER (@6FT.-LBS.) PLUG - PIPE, 1/8 NPT SCREW - ADJUSTMENT *O-RING - .06 WIDE X .31 I.D. LOCKNUT SPRING BALL GASKET - BEARING CARRIER HYDRAULIC UNLOADER CLOSURE ASSEMBLY SCREW - HEX., 1/4-20 UNC X .50, GRADE 5 (@8FT.-LBS.) *QUAD-RING - .12 WIDE X 1.25 I.D. CAP BODY - HYDRAULIC UNLOADER CLOSURE SCREW - HEX., 1/4-20 UNC X .50, GRADE 5 (@8FT.-LBS.) SCREW - COUNTERBORE, 1/2-13 UNC X 1.25, GRADE 8 (@75FT.-LBS.) SCREW - HEX., 1/2-13 UNC X 1.25, GRADE 5 (@75FT.-LBS.) GASKET - OIL INLET BRACKET TUBE - OIL PICKUP LOCKWASHER - 3/8 SCREW - COUNTERBORE, 3/8-16 UNC X .88, GRADE 8 (@45FT.-LBS.) GAUGE - OIL PRESSURE
1/1	1	160001	
1/2	1	123157-152	
1/3	1	123157-112	
1/4	1	160002-001	
1/5	1	160075-001	
1/6	1	160003	
1/7	1	6285	
1/8	1	160000	
1/9	6	160077-J14	
1/10	3	121160	
1/11	1	5489	
1/12	1	123157-011	
1/13	1	124369-P02	
1/14	1	1160	
1/15	1	1281	
2	1	5494	
3	1	6289X	
3/1	1	123478-J07	
3/2	2	6286	
3/3	1	6289	
3/4	1	6327	
4	4	123478-J07	
5	2	90386-N14	
6	6	123478-N14	
7	1	6679	
8	1	110660	
9	2	123115-06C	
10	2	90386-L11	
11	1	110162	
			@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
1/2	1	22749-152	*O-RING - .09 WIDE X 3.25 I.D.
1/3	1	22749-112	*O-RING - .09 WIDE X .50 I.D.
1/12	1	22749-011	*O-RING - .06 WIDE X .31 I.D.
3/2	2	6286-001	*QUAD-RING - .12 WIDE X 1.25 I.D.
			<u>OIL PUMP REPAIR KITS</u>
			REPAIR KIT - OIL PUMP
1/2	1	160079 (OR) *160079-001	INCLUDES: *22749-152 *22749-112 160002-001 160075-001 160003 6285 *22749-011
1/3	1	123157-152	*O-RING - .09 WIDE X 3.25 I.D.
1/4	1	123157-112	*O-RING - .09 WIDE X .50 I.D.
1/5	1	160002-001	DRIVESHAFT - BEARING CARRIER
1/6	1	160075-001	KEY - DRIVESHAFT
1/7	1	160003	GEROTOR - PUMP
1/7	1	6285	RING - RETAINING, DRIVESHAFT
1/12	1	123157-011	*O-RING - .06 WIDE X .31 I.D.
			*FOR USE WITH SYNTHETIC LUBRICATION

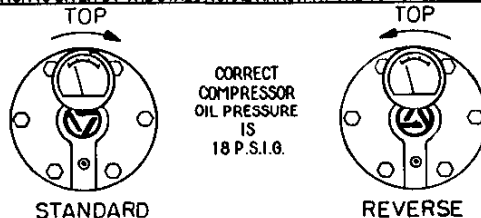
ATTENTION: COMPRESSOR ROTATION

THE OIL PUMP OF THIS COMPRESSOR IS NOT AUTOMATICALLY REVERSIBLE.

THE PROPER ROTATION OF THE COMPRESSOR IS SHOWN BY THE DIRECTIONAL ARROW AT THE TOP OF THE OIL PUMP HOUSING DIAGRAM.

TO REVERSE COMPRESSOR ROTATION, REMOVE THE SIX SCREWS FROM THE OIL PUMP HOUSING. SPIN THIS HOUSING 180 DEGREES BRINGING THE OTHER DIRECTIONAL ARROW INTO THE TOP POSITION. DO NOT REMOVE THE OIL PUMP ASSEMBLY FROM THE BEARING CARRIER. REINSTALL THE SIX SCREWS.

PROPER ROTATION IS GIVEN BY THE DIRECTIONAL ARROW AT THE TOP OF THE OIL PUMP HOUSING.

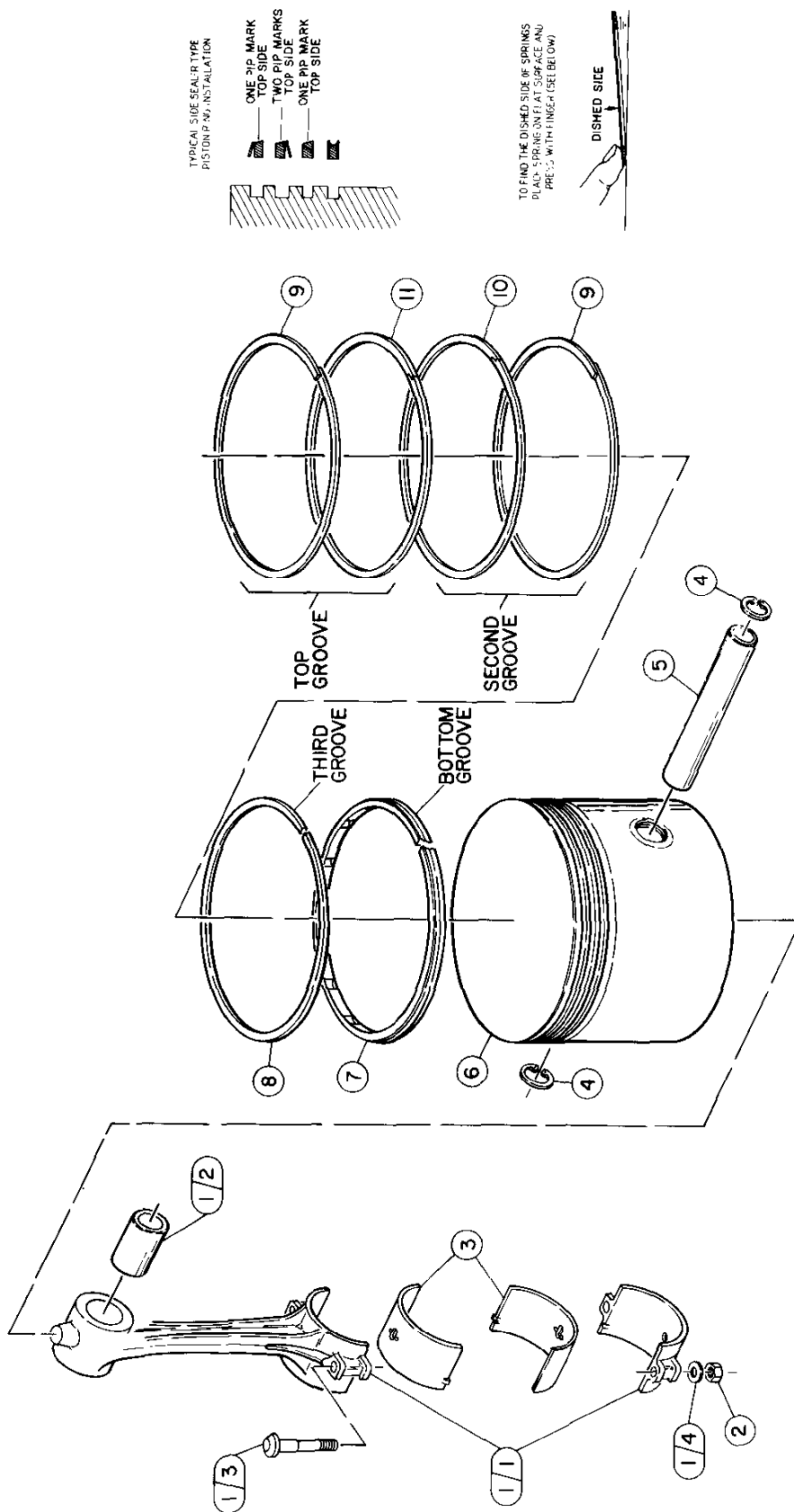


THE OIL PRESSURE GAUGE MUST BE REMOVED FROM IT'S ORIGINAL POSITION AND REINSTALLED IN THE TAPPED HOLE AT THE TOP OF THE OIL PUMP FACE. REINSTALL PIPE PLUG IN TAPPED HOLE AT THE BOTTOM OF THE OIL PUMP FACE.

THE TAPPED HOLE AT THE BOTTOM OF THE OIL PUMP FACE IS ALWAYS THE SUCTION SIDE OF THE PUMP, REGARDLESS OF THE PUMP POSITION.

FAILURE TO CHANGE THE OIL PUMP POSITION TO COINCIDE WITH COMPRESSOR ROTATION WILL RESULT IN NO OIL PRESSURE AND THE WARRANTY OF THE COMPRESSOR WILL BE VOID.

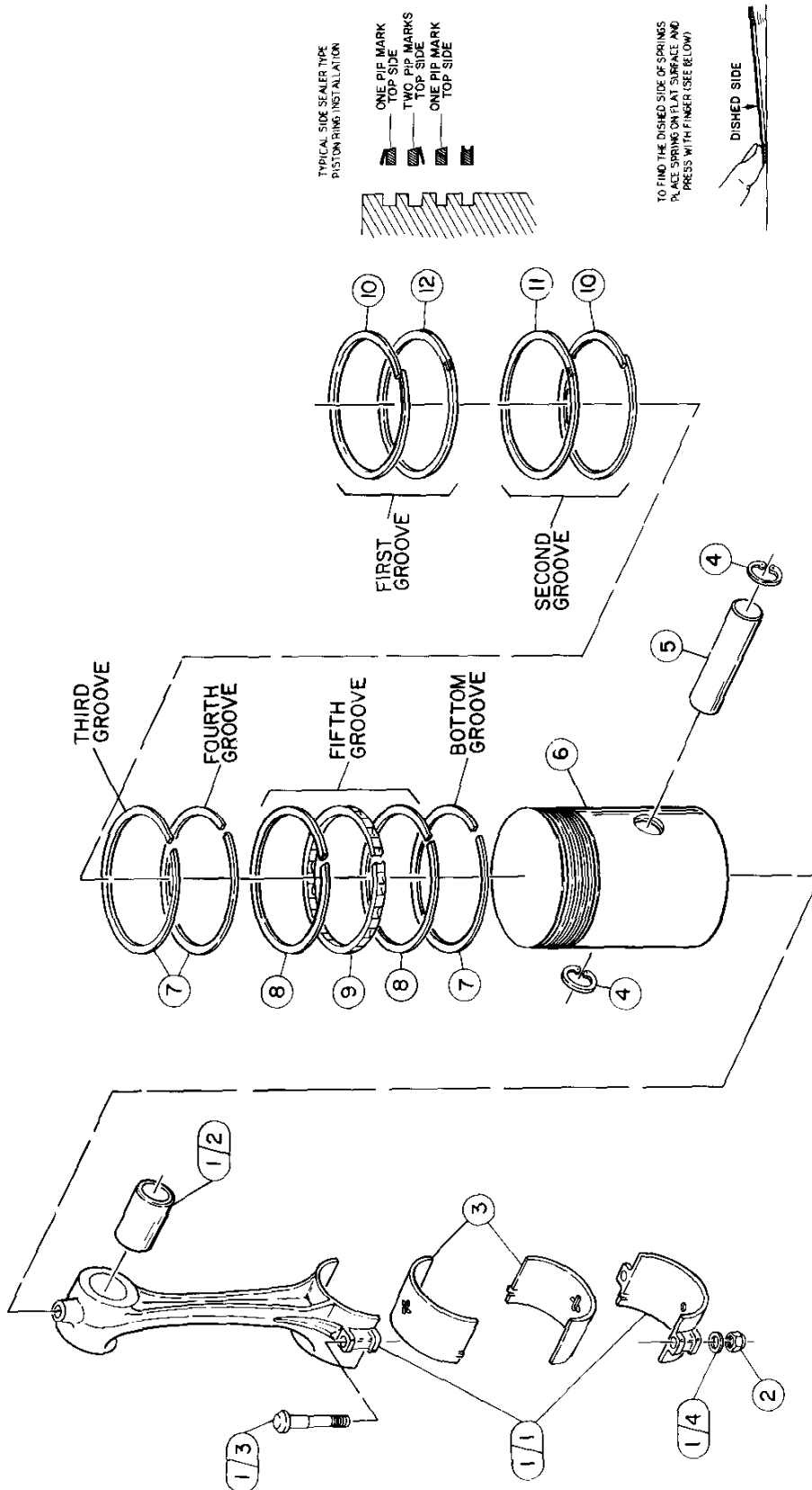
CON-ROD AND LOW PRESSURE PISTON GROUP NO. 110652



CON-ROD AND LOW PRESSURE PISTON GROUP NO. 110652

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	40249	CONNECTING ROD ASSEMBLY
1/1	1	110589	ROD - CONNECTING (NOT SOLD SEPARATELY; ORDER 110589X CONNECTING ROD ASSEMBLY)
1/2	1	1345	BUSHING - CONNECTING ROD
1/3	2	1344	BOLT - CONNECTING ROD, 7/16-20 UNF X 3.25
1/4	2	1319	WASHER - CONNECTING ROD
2	2	124471-M08	LOCKNUT - 7/16-20 UNF (@40FT.-LBS.)
3	2	2819	INSERT - CONNECTING ROD BEARING (SOLD IN PAIRS ONLY)
4	2	8649	RING - RETAINING
5	1	8645	PIN - PISTON
6	1	8641	PISTON - COMPRESSOR, L.P. (STANDARD)
7	1	2338	RING - PISTON
8	1	8057	RING - PISTON
9	2	8059	SPRING - PISTON
10	1	8058	RING - PISTON
11	1	7969	RING - PISTON
			@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
	1	2819PR	*INSERTS - CON ROD BEARING (STANDARD) (PART NO. INCLUDES TOP AND BOTTOM INSERTS)
	1	2819-010PR	*INSERTS - CON ROD BEARING (.010 UNDERSIZE) (PART NO. INCLUDES TOP AND BOTTOM INSERTS)
	1	2819-020PR	*INSERTS - CON ROD BEARING (.020 UNDERSIZE) (PART NO. INCLUDES TOP AND BOTTOM INSERTS) *1 PAIR REQUIRED FOR EACH CONNECTING ROD ASSEMBLY
	1	1345SR	BUSHING - CONNECTING ROD
	1	8641-010	PISTON - COMPRESSOR, L.P. (.010 OVERSIZE)
	1	8641-020	PISTON - COMPRESSOR, L.P. (.020 OVERSIZE)
	1	8169	RING SET - SIDE SEALER, L.P. (STANDARD) (NO COLOR CODE)
	1	2378-010	RING SET - PISTON, L.P. (.010 OVERSIZE) (LIGHT BLUE COLOR CODE)
	1	2378-020	RING SET - PISTON, L.P. (.020 OVERSIZE) (YELLOW COLOR CODE)
	1	8641X	PISTON ASSEMBLY, L.P. (STANDARD) INCLUDES: (1) 8641 PISTON (1) 8645 PISTON PIN (2) 8649 RETAINING RING (1) 8169 RING SET
	1	8641X010	PISTON ASSEMBLY, L.P. (.010 OVERSIZE) INCLUDES: (1) 8641-010 PISTON (1) 8645 PISTON PIN (2) 8649 RETAINING RING (1) 2378-010 RING SET
	1	8641X020	PISTON ASSEMBLY, L.P. (.020 OVERSIZE) INCLUDES: (1) 8641-020 PISTON (1) 8645 PISTON PIN (2) 8649 RETAINING RING (1) 2378-020 RING SET
	1	110589X	CON ROD ASSEMBLY INCLUDES: (1) 40249 CON ROD ASSEMBLY (2) 124471-M08 LOCKNUT (1) 2819PR INSERTS (STANDARD)
	1	10589XUS	CON ROD ASSEMBLY INCLUDES: (1) 40249 CON ROD ASSEMBLY (2) 124471-M08 LOCKNUT (1) 2819-010PR INSERTS (.010 OVERSIZE)
			NOTE: TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN EVENLY BRINGING EACH BOLT TO TORQUE IN EVEN INCREMENTS WHILE MOVING ABOUT THE BOLT PATTERN. THIS IS PARTICULARLY TRUE OF CONNECTING ROD AND HEAD BOLTS

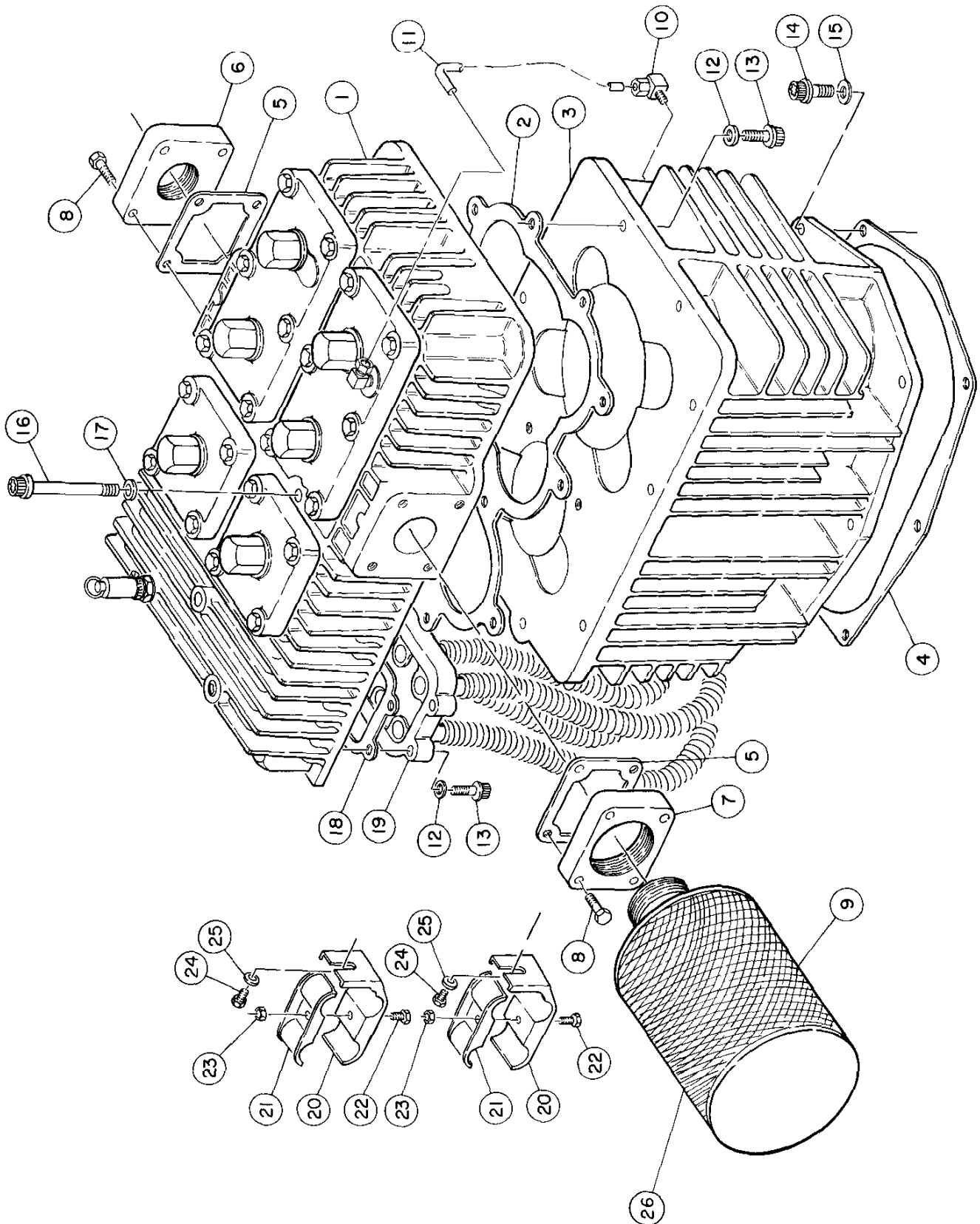
CON-ROD AND HIGH PRESSURE PISTON GROUP NO. 110642



CON-ROD AND HIGH PRESSURE PISTON GROUP NO. 110642

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	40249	CONNECTING ROD ASSEMBLY
1/1	1	110589	ROD - CONNECTING (NOT SOLD SEPARATELY; ORDER 110589X CONNECTING ROD ASSEMBLY)
1/2	1	1345	BUSHING - CONNECTING ROD
1/3	2	1344	BOLT - CONNECTING ROD, 7/16-20 UNF X 3.25
1/4	2	1319	WASHER - CONNECTING ROD
2	2	124471-M08	LOCKNUT - 7/16-20 UNF (@40FT.-LBS.)
3	2	2819	INSERT - CONNECTING ROD BEARING (SOLD IN PAIRS ONLY)
4	2	8649	RING - RETAINING
5	1	110190-009	PIN - PISTON
6	1	5645-001	PISTON - COMPRESSOR, H.P. (STANDARD)
7	3	1464	RING - PISTON
8	2	6591	RAIL - PISTON
9	1	6590	EXPANDER - PISTON
10	2	6589	SPRING - PISTON
11	1	6588	RING - PISTON
12	1	6587	RING - PISTON
			@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
1	1	2819PR	*INSERTS - CON ROD BEARING (STANDARD) (PART NO. INCLUDES TOP AND BOTTOM INSERTS)
1	1	2819-010PR	*INSERTS - CON ROD BEARING (.010 UNDERSIZE) (PART NO. INCLUDES TOP AND BOTTOM INSERTS)
1	1	2819-020PR	*INSERTS - CON ROD BEARING (.020 UNDERSIZE) (PART NO. INCLUDES TOP AND BOTTOM INSERTS) *1 PAIR REQUIRED FOR EACH CONNECTING ROD ASSEMBLY
1	1	1345SR	BUSHING - CONNECTING ROD
1	1	5645-011	PISTON - COMPRESSOR, H.P. (.010 OVERSIZE)
1	1	5645-021	PISTON - COMPRESSOR, H.P. (.020 OVERSIZE)
1	1	8170	RING SET - SIDE SEALER, H.P. (STANDARD) (NO COLOR CODE)
1	1	5627-010	RING SET - PISTON, H.P. (.010 OVERSIZE) (LIGHT BLUE COLOR CODE)
1	1	5627-020	RING SET - PISTON, H.P. (.020 OVERSIZE) (YELLOW COLOR CODE)
1	1	5645X001	PISTON ASSEMBLY, H.P. (STANDARD) INCLUDES: (1) 5645-001 PISTON (1) 110190-009 PISTON PIN (2) 8649 RETAINING RING (1) 8170 RING SET
1	1	5645X011	PISTON ASSEMBLY, H.P. (.010 OVERSIZE) INCLUDES: (1) 5645-011 PISTON (1) 11019-009 PISTON PIN (2) 8649 RETAINING RING (1) 5627-010 RING SET
1	1	5645X021	PISTON ASSEMBLY, H.P. (.020 OVERSIZE) INCLUDES: (1) 5645-021 PISTON (1) 110190-009 PISTON PIN (2) 8649 RETAINING RING (1) 5627-020 RING SET
1	1	110589X	CON ROD ASSEMBLY INCLUDES: (1) 40249 CON ROD ASSEMBLY (2) 124471-M08 LOCKNUT (1) 2819PR INSERTS (STANDARD)
1	1	110589XUS	CON ROD ASSEMBLY INCLUDES: (1) 40249 CON ROD ASSEMBLY (2) 124471-M08 LOCKNUT (1) 2819-010PR INSERTS (.010 OVERSIZE)
			NOTE: TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN EVENLY BRINGING EACH BOLT TO TORQUE IN EVEN INCREMENTS WHILE MOVING ABOUT THE BOLT PATTERN. THIS IS PARTICULARLY TRUE OF CONNECTING ROD AND HEAD BOLTS

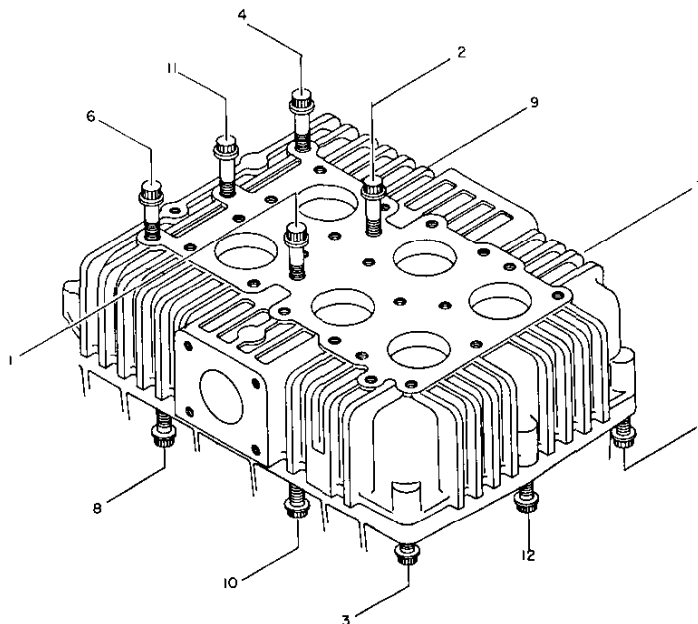
CYLINDER AND HEAD GROUP NO. 110653
(FOR PLAIN VALVE COMPRESSOR)



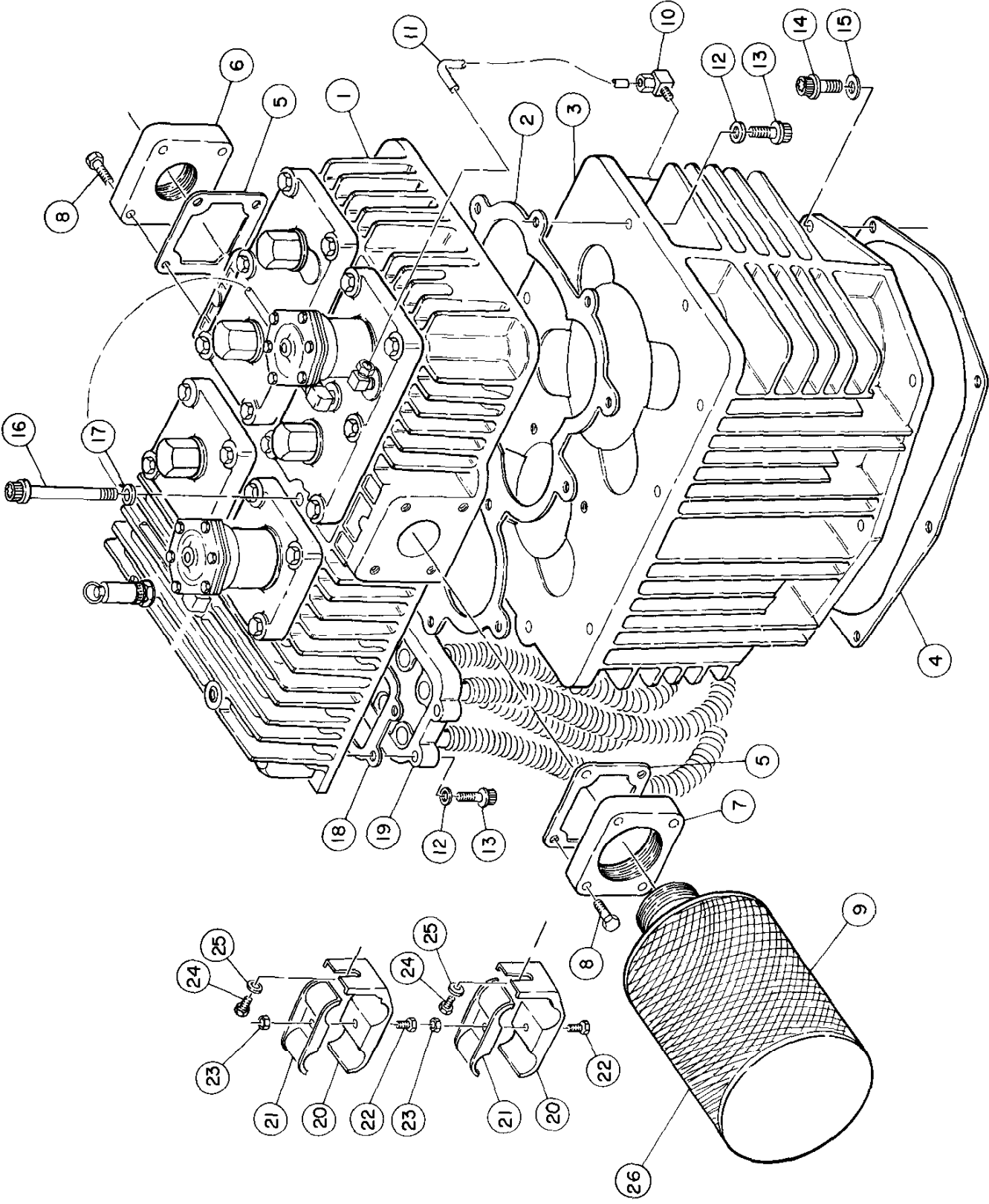
CYLINDER AND HEAD GROUP NO. 110653 (FOR PLAIN VALVE COMPRESSOR)

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	2334P	HEAD ASSEMBLY (SEE PAGE 23 FOR PARTS BREAKDOWN)
2	1	5695	GASKET - CYLINDER TO HEAD
3	1	2333-1	CYLINDER - COMPRESSOR
4	1	2344	GASKET - CYLINDER TO CRANKCASE
5	2	2346	GASKET - FLANGE
6	1	2349	FLANGE - DISCHARGE
7	1	2350	FLANGE - INTAKE
8	8	123478-N16	SCREW - HEX., 1/2-13 UNC X 1.75, GRADE 5 (•75FT.-LBS.)
9	1	110377F250	FILTER - AIR
10	1	3145	FITTING - ELBOW, 1/2 TUBE X 3/8 PIPE
11	3FT.	110515-050	TUBE - COPPER, 1/2
12	13	123115-08C	LOCKWASHER - 1/2
13	13	90386-N16	SCREW - COUNTERBORE, 1/2-13 UNC X 1.75, GRADE 8 (CYL. TO HEAD:•80FT.-LBS.) (INTRCLR. TO HEAD:•65FT.-LBS.)
14	7	90386-Q15	SCREW - COUNTERBORE, 5/8-11 UNC X 1.50, GRADE 8 (•110FT.-LBS.)
15	7	123115-10C	LOCKWASHER - 5/8
16	5	90386-N27	SCREW - COUNTERBORE, 1/2-13 UNC X 5.00, GRADE 8 (•80FT.-LBS.)
17	5	1478	FLATWASHER - 1/2, COPPER
18	1	5694	GASKET - INTERCOOLER
19	1	2343	INTERCOOLER
20	2	2358	BRACKET - INTERCOOLER
21	2	2359	CLAMP - INTERCOOLER BRACKET
22	2	124571-K12	SCREW - HEX., 5/16-24 UNF X 1.00, GRADE 5 (•19FT.-LBS.)
23	2	124471-K08	LOCKNUT - 5/16-24 UNF
24	2	90386-N12	SCREW - COUNTERBORE, 1/2-13 UNC X 1.00, GRADE 8
25	2	110428W050	FLATWASHER - 1/2
			•INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
26	1	110377E200	ELEMENT - AIR FILTER
	1	2334X16P	HEAD ASSEMBLY INCLUDES: (1) 2334P HEAD ASSEMBLY (1) 5695 HEAD GASKET (1) 5694 INTERCOOLER GASKET
<p>NOTES: TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN EYENLY BRINGING EACH BOLT TO TORQUE IN EYEN INCREMENTS WHILE MOVING ABOUT THE BOLT PATTERN. THIS IS PARTICULARLY TRUE OF CONNECTING ROD AND HEAD BOLTS.</p>			

**PROPER HEAD BOLT
TORQUE SEQUENCE**



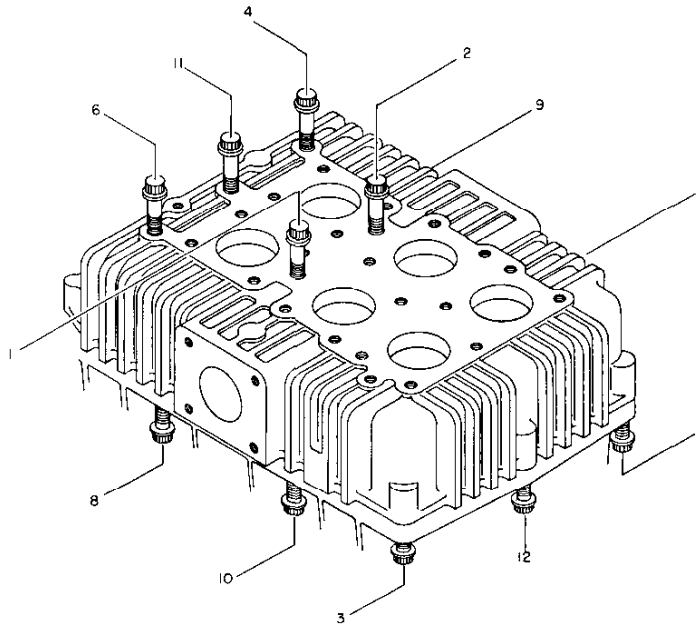
CYLINDER AND HEAD GROUP NO. 110654
(FOR LOADLESS AND PILOT CONTROLLED COMPRESSOR)



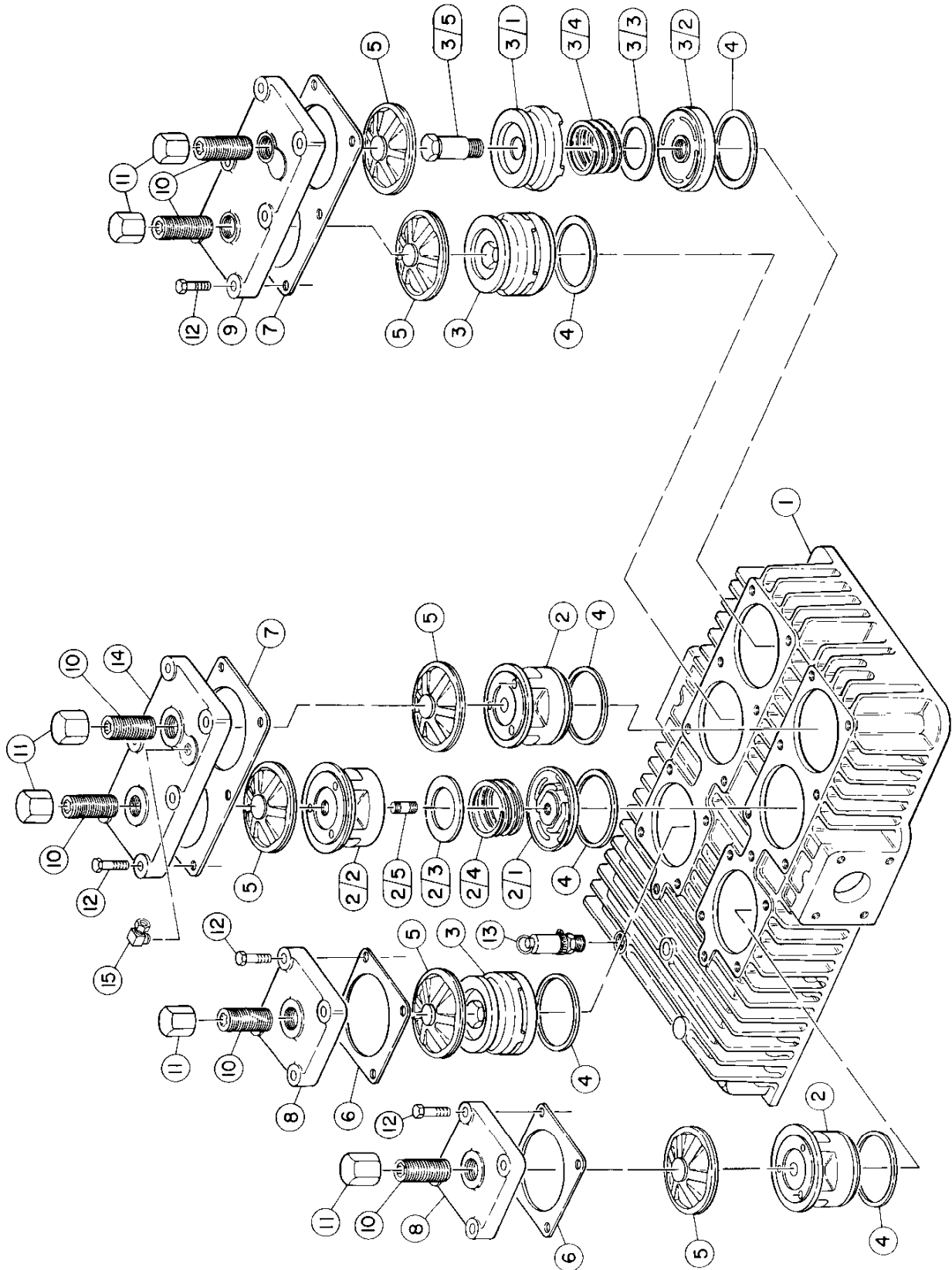
CYLINDER AND HEAD GROUP NO. 110654 (FOR LOADLESS AND PILOT CONTROLLED COMPRESSOR)

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	2334UU	HEAD ASSEMBLY (SEE PAGE 25 FOR PARTS BREAKDOWN)
2	1	5695	GASKET - CYLINDER TO HEAD
3	1	2333-1	CYLINDER - COMPRESSOR
4	1	2344	GASKET - CYLINDER TO CRANKCASE
5	2	2346	GASKET - FLANGE
6	1	2349	FLANGE - DISCHARGE
7	1	2350	FLANGE - INTAKE
8	8	123478-N16	SCREW - HEX., 1/2-13 UNC X 1.75, GRADE 5 (Ⓢ75FT.-LBS.)
9	1	110377F250	FILTER - AIR
10	1	3145	FITTING - ELBOW, 1/2 TUBE X 3/8 PIPE
11	3FT.	110515-050	TUBE - COPPER, 1/2
12	13	123115-08C	LOCKWASHER - 1/2
13	13	90386-N16	SCREW - COUNTERBORE, 1/2-13 UNC X 1.75, GRADE 8 (CYL. TO HEAD:Ⓢ80FT.-LBS.) (INTKCLR. TO HEAD:Ⓢ65FT.-LBS.)
14	7	90386-Q15	SCREW - COUNTERBORE, 5/8-11 UNC X 1.50, GRADE 8 (Ⓢ110FT.-LBS.)
15	7	123115-10C	LOCKWASHER - 5/8
16	5	90386-N27	SCREW - COUNTERBORE, 1/2-13 UNC X 5.00, GRADE 8 (Ⓢ80FT.-LBS.)
17	5	1478	FLATWASHER - 1/2, COPPER
18	1	5694	GASKET - INTERCOOLER
19	1	2343	INTERCOOLER
20	2	2358	BRACKET - INTERCOOLER
21	2	2359	CLAMP - INTERCOOLER BRACKET
22	2	124571-K12	SCREW - HEX., 5/16-24 UNF X 1.00, GRADE 5 (Ⓢ19FT.-LBS.)
23	2	124471-K08	LOCKNUT - 5/16-24 UNF
24	2	90386-N12	SCREW - COUNTERBORE, 1/2-13 UNC X 1.00, GRADE 8
25	2	110428W050	FLATWASHER - 1/2
			Ⓢ INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
26	1	110377E200	ELEMENT - AIR FILTER
	1	2334X16L	HEAD ASSEMBLY INCLUDES: (1) 2334UU HEAD ASSEMBLY (1) 5695 HEAD GASKET (1) 5694 INTERCOOLER GASKET
<p>NOTES: TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN EVENLY BRINGING EACH BOLT TO TORQUE IN EVEN INCREMENTS WHILE MOVING ABOUT THE BOLT PATTERN. THIS IS PARTICULARLY TRUE OF CONNECTING ROD AND HEAD BOLTS.</p>			

**PROPER HEAD BOLT
TORQUE SEQUENCE**



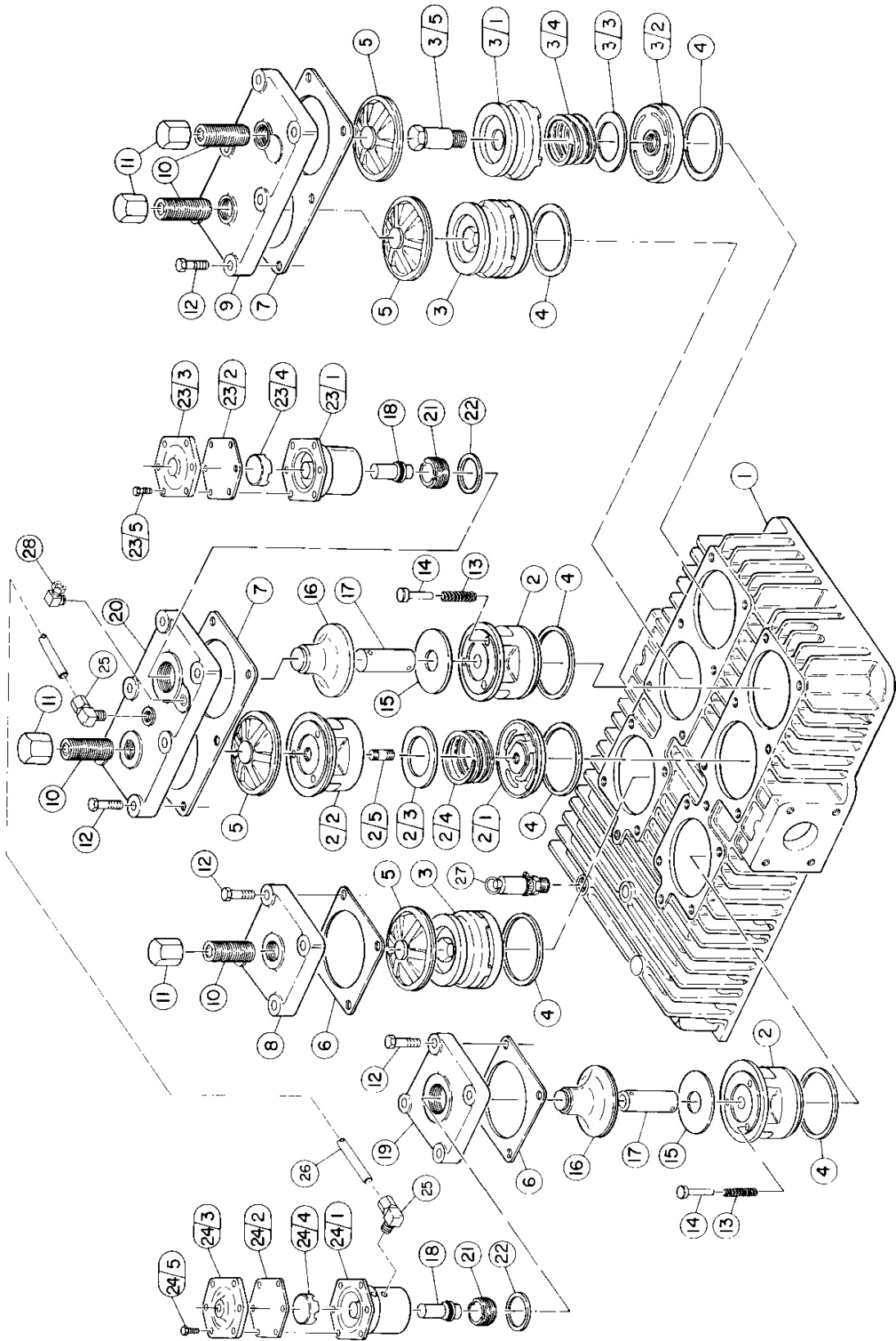
HEAD ASSEMBLY NO. 2334P (FOR PLAIN VALVE COMPRESSOR)



HEAD ASSEMBLY NO. 2334P (FOR PLAIN VALVE COMPRESSOR)

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	2334	HEAD - COMPRESSOR
2	3	6949X1	VALVE ASSEMBLY - SUCTION
	1	6949	BUMPER - VALVE
2/1	1	2002	SEAT - SUCTION
2/2	1	2087	DISC - VALVE
2/3	1	6909	SPRING - VALVE
2/4	1	1429	STUD - VALVE
2/5	1	6948X1	VALVE ASSEMBLY - DISCHARGE
3	3	6948	BUMPER - VALVE
3/1	1	1424A	SEAT - DISCHARGE
3/2	1	2087	DISC - VALVE
3/3	1	6909	SPRING - VALVE
3/4	1	3297	POST - VALVE
3/5	1	1356	GASKET - VALVE
4	6	6952	RETAINER - VALVE
5	6	2347	GASKET - VALVE PLATE
6	2	2348	GASKET - COVER PLATE
7	2	6941	PLATE - COVER
8	2	6955	PLATE - COVER
9	1	6953	SCREW - SET, 3/4-16 UNF X 2.25 (@75FT.-LBS.)
10	6	2623	NUT - SPECIAL, 3/4-16 UNF (@100FT.-LBS.)
11	6	123478-N16	SCREW - HEX., 1/2-13 UNC X 1.75, GRADE 5 (@75FT.-LBS.)
12	20	3022-100	VALVE - SAFETY
13	1	110664	PLATE - COVER
14	1	3145	FITTING - ELBOW, 1/2 TUBE X 3/8 NPT
15	1		
			@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
			6949X VALVE ASSEMBLY - SUCTION
			INCLUDES:
			(1) 6949X1 VALVE ASSEMBLY
			(1) 1356 VALVE GASKET
			6948X VALVE ASSEMBLY - DISCHARGE
			INCLUDES:
			(1) 6948X1 VALVE ASSEMBLY
			(1) 1356 VALVE GASKET
<p>NOTES: TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN EVENLY BRINGING EACH BOLT TO TORQUE IN EVEN INCRFMENTS WHILE MOVING ABOUT THE BOLT PATTERN. THIS IS PARTICULARLY TRUE OF CONNECTING ROD AND HEAD BOLTS.</p> <p>TIGHTEN AND TORQUE VALVE COVER PLATE SCREWS (ITEM 12) BEFORE TIGHTENING VALVE CLAMP SCREWS (ITEM 10).</p>			

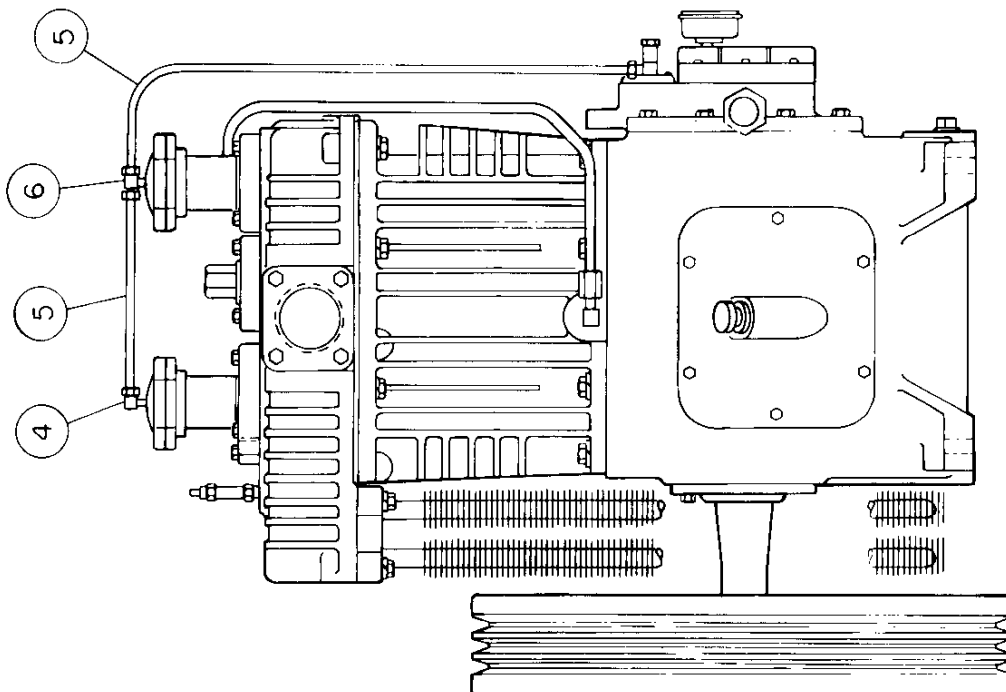
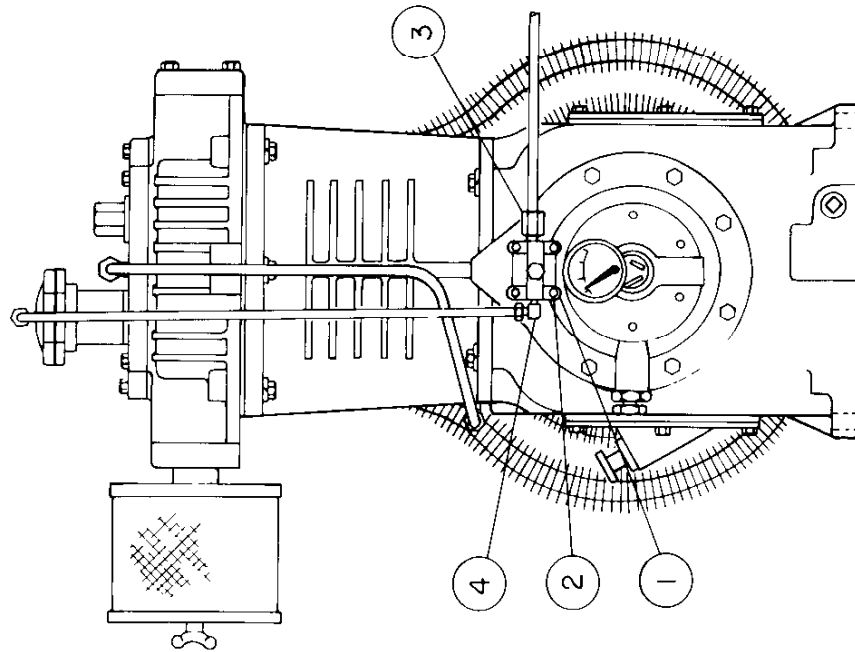
HEAD ASSEMBLY NO. 2334UU (FOR LOADLESS COMPRESSOR)



HEAD ASSEMBLY NO. 2334UU (FOR LOADLESS COMPRESSOR)

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	2334	HEAD - COMPRESSOR
2	3	6949X1	VALVE ASSEMBLY - SUCTION
2/1	1	6949	BUMPER - VALVE
2/2	1	2002	SEAT - SUCTION
2/3	1	2087	DISC - VALVE
2/4	1	6909	SPRING - VALVE
2/5	1	1429	STUD - VALVE
3	3	6948X1	VALVE ASSEMBLY - DISCHARGE
3/1	1	6948	BUMPER - VALVE
3/2	1	1424A	SEAT - DISCHARGE
3/3	1	2087	DISC - VALVE
3/4	1	6909	SPRING - VALVE
3/5	1	3297	POST - VALVE
4	6	1356	GASKET - VALVE
5	6	6952	RETAINER - VALVE
6	2	2347	GASKET - VALVE PLATE
7	2	2348	GASKET - COVER PLATE
8	2	6941	PLATE - COVER
9	1	6955	PLATE - COVER
10	6	6953	SCREW - SET, 3/4-16 UNF X 2.25 (@75FT.-LBS.)
11	6	2623	NUT - SPECIAL, 3/4-16 UNF (@100FT.-LBS.)
12	20	123478-N16	SCREW - HEX., 1/2-13 UNC X 1.75, GRADE 5 (@75FT.-LBS.)
13	6	6910	SPRING - VALVE
14	6	1857	PIN - VALVE
15	2	6938	PLATFORM - VALVE
16	2	6951	RETAINER - VALVE
17	2	110782	PIN - UNLOADER
18	2	110753	UNLOADER PISTON
19	1	6940	PLATE - COVER
20	1	6942	PLATE - COVER
21	2	3008	SCREW - HOLDDOWN (@75FT.-LBS.)
22	2	1556	GASKET - VALVE
23	1	40055	UNLOADER ASSEMBLY
23/1	1	7483	BODY - UNLOADER
23/2	1	1855	DIAPHRAGM - UNLOADER
23/3	1	1818B	PLATE - COVER
23/4	1	5910	DISC - DIAPHRAGM
23/5	6	7499	SCREW - HEX., 1/4-20 UNC X .75, GRADE 5 (@6FT.-LBS.)
24	1	40192	UNLOADER ASSEMBLY
24/1	1	8272	BODY - UNLOADER
24/2	1	1855	DIAPHRAGM - UNLOADER
24/3	1	1818B	PLATE - COVER
24/4	1	5910	DISC - DIAPHRAGM
24/5	6	7499	SCREW - HEX., 1/4-20 UNC X 1.75, GRADE 5 (@6FT.-LBS.)
25	2	2709	FITTING - ELBOW, 5/16 TUBE X 1/8 NPT
26	2FT	110515-031	TUBE - COPPER, 5/16
27	1	3022-100	VALVE - SAFETY
28	1	3145	FITTING - ELBOW, 1/2 TUBE X 3/8 NPT
			⊙ INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			REPLACEMENT PARTS
23/2	1	1855S	DIAPHRAGM - UNLOADER (FOR SYNTHETIC LUBRICATED WITH PHOSPHATE ESTER BASE)
		6949X	VALVE ASSEMBLY - SUCTION INCLUDES: (1) 6949X1 VALVE ASSEMBLY (1) 1356 VALVE GASKET
		6949XU	VALVE ASSEMBLY - SUCTION INCLUDES: ALL ITEMS IN 6949X & (3) 6910 PIN SPRING (3) 1857 VALVE PIN
		6948X	VALVE ASSEMBLY - DISCHARGE INCLUDES: (1) 6948X1 VALVE ASSEMBLY (1) 1356 VALVE GASKET
		7483X	UNLOADER ASSEMBLY INCLUDES: (1) 40055 UNLOADER BODY ASSEMBLY (1) 1556 VALVE GASKET (1) 110753 UNLOADER PISTON
NOTES:			TIGHTEN ALL BOLTS AND CAPSCREWS IN ANY BOLT PATTERN EYENLY BRINGING EACH BOLT TO TORQUE IN EVEN INCREMENTS WHILE MOVING ABOUT THE BOLT PATTERN. THIS IS PARTICULARLY TRUE OF CONNECTING ROD AND HEAD BOLTS.
			TIGHTEN AND TORQUE VALVE COVER PLATE SCREWS (ITEM 12) BEFORE TIGHTENING VALVE CLAMP SCREWS (ITEM 10 AND ITEM 21).

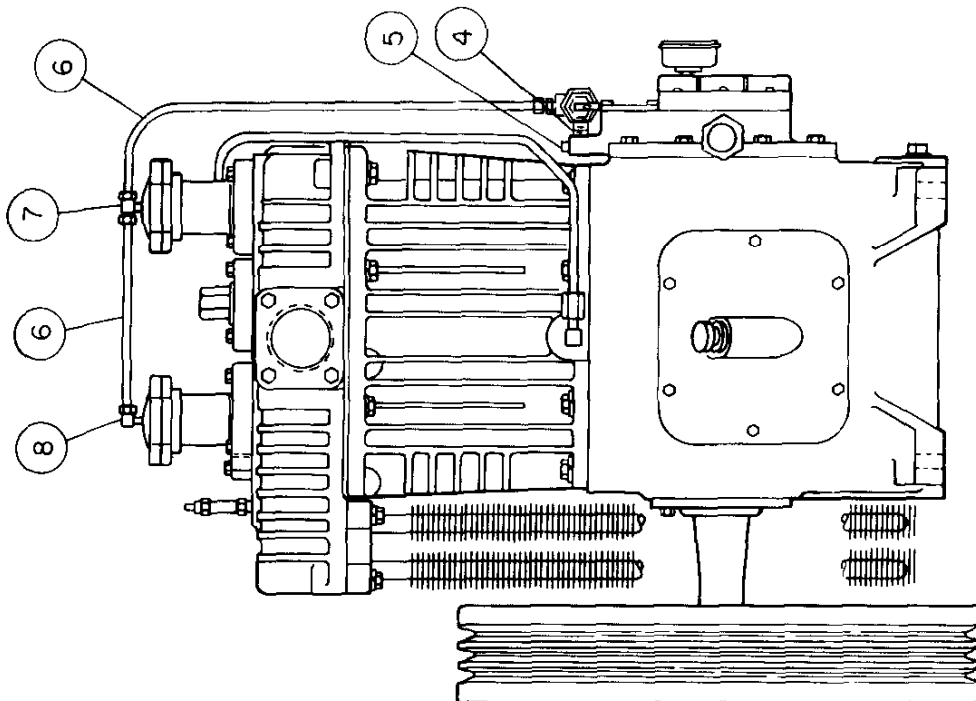
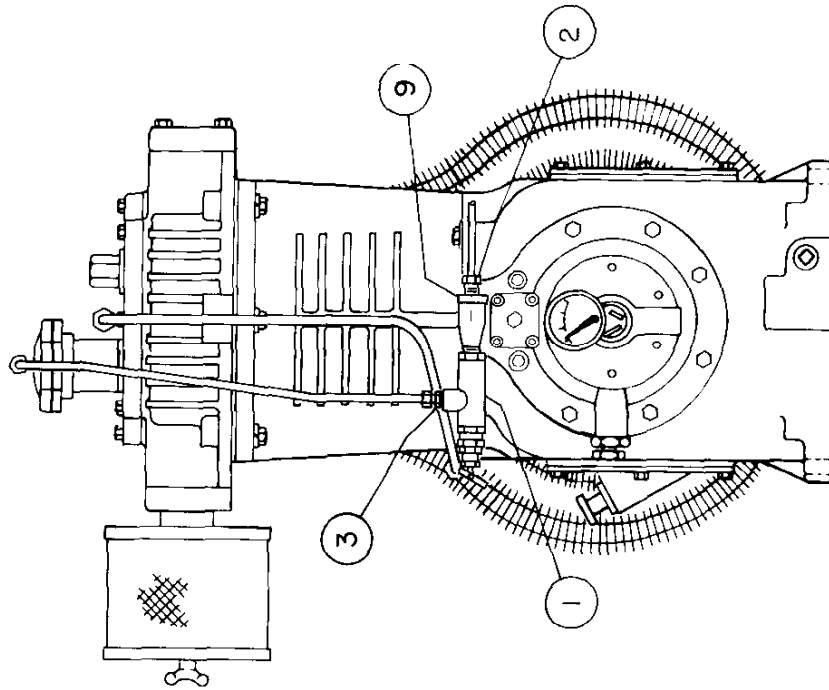
CONTROL PIPING GROUP NO. 110655
(FOR LOADLESS COMPRESSOR)



**CONTROL PIPING GROUP NO. 110655
(FOR LOADLESS COMPRESSOR)**

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	7970X	UNLOADER ASSEMBLY (STANDARD UP TO & INCLUDING 200 P.S.I.G. SEE PAGE 36 FOR PARTS BREAKDOWN) SCREW - HEX., 1/4-20 UNC X .50, GRADE 5 (@6FT.-LBS.) FITTING - STRAIGHT, 1/4 TUBE X 1/8 NPT FITTING - ELBOW, 1/4 TUBE X 1/8 NPT TUBE - COPPER, 1/4 FITTING - TEE, 1/4 TUBE X 1/4 TUBE X 1/8 NPT @ INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
2	4	123478-J07	
3	1	1643	
4	2	1642	
5	3FT.	110515-025	
6	1	1665	

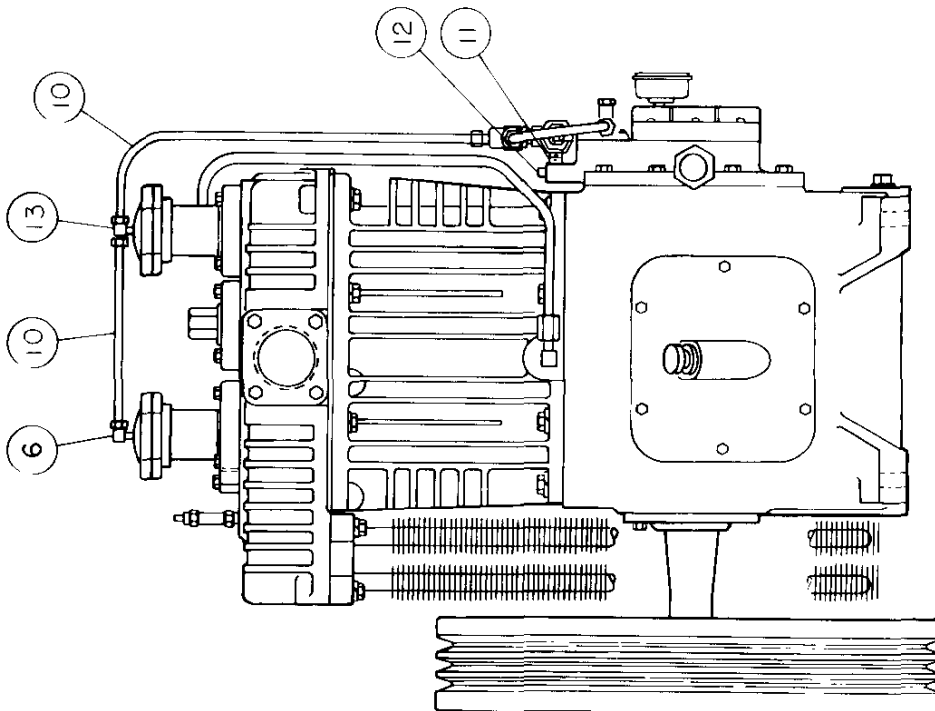
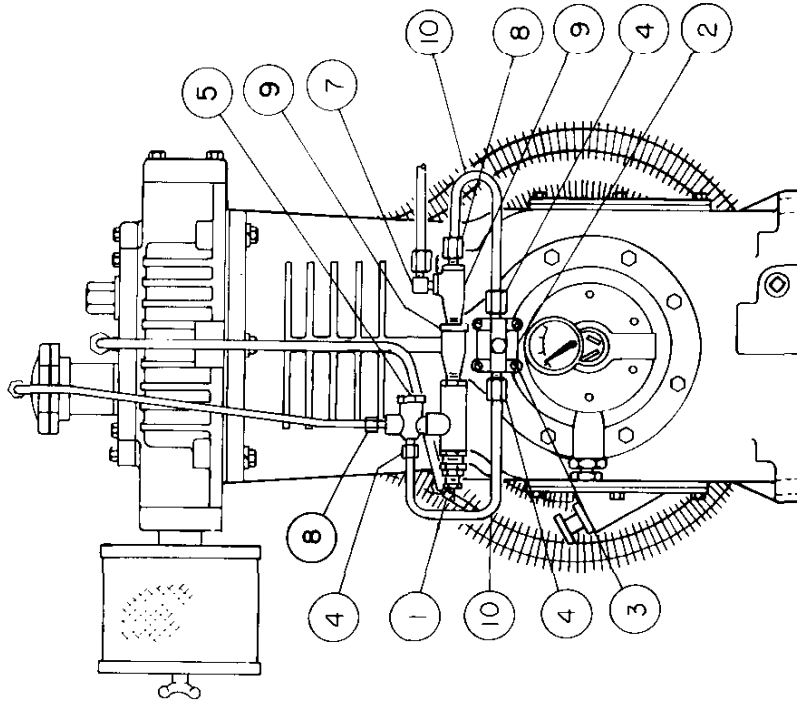
CONTROL PIPING GROUP NO. 110656
(FOR PILOT CONTROLLED COMPRESSOR)



**CONTROL PIPING GROUP NO. 110656
(FOR PILOT CONTROLLED COMPRESSOR)**

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	110198-___	PILOT ASSEMBLY (SEE PAGE 34 FOR PARTS BREAKDOWN & PART NO. PER P.S.I.G. SETTING)
2	1	2616	FITTING - STRAIGHT, 3/8 TUBE X 1/4 NPT
3	1	110594-005	FITTING - STRAIGHT, 1/4 TUBE X 1/4 NPT
4	1	6317	STUD - MOUNTING
5	1	160047-J05	SCREW - SET, 1/4-28 UNF X .38, GRADE 5
6	3FT.	110515-025	TUBE - COPPER, 1/4
7	1	1665	FITTING - TEE, 1/4 TUBE X 1/4 TUBE X 1/8 NPT
8	1	1642	FITTING - ELBOW, 1/4 TUBE X 1/8 NPT
9	1	3003	TEE - PIPE, 1/4 NPT X 1/4 NPT X 1/4 NPT
			<u>REPLACEMENT PARTS</u>
		6317X1	MOUNTING STUD KIT INCLUDES: (1) 6317 MOUNTING STUD (1) 160047-J05 SET SCREW

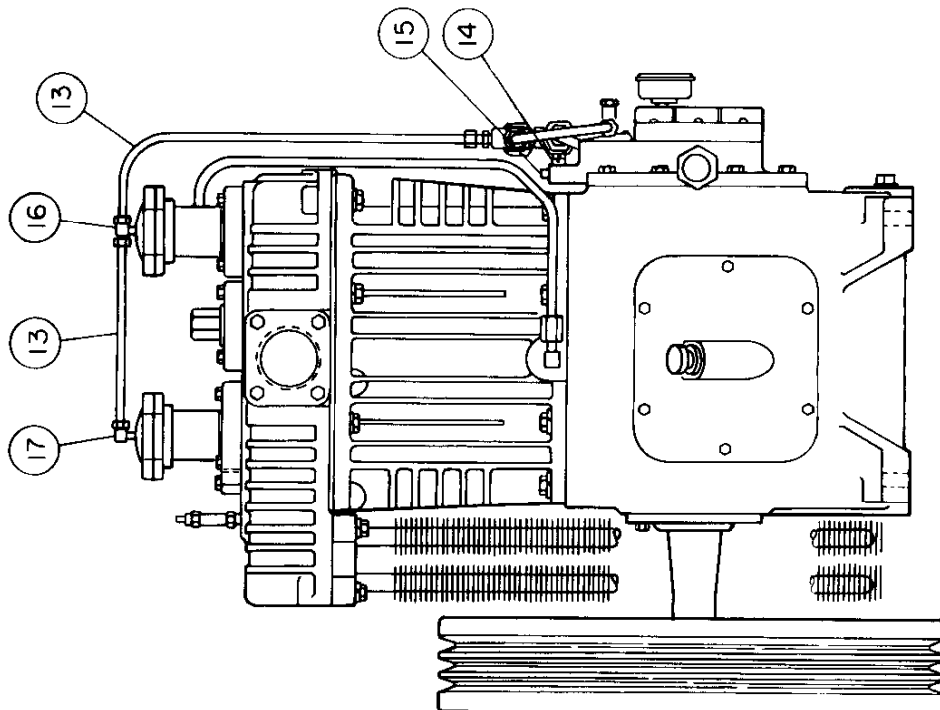
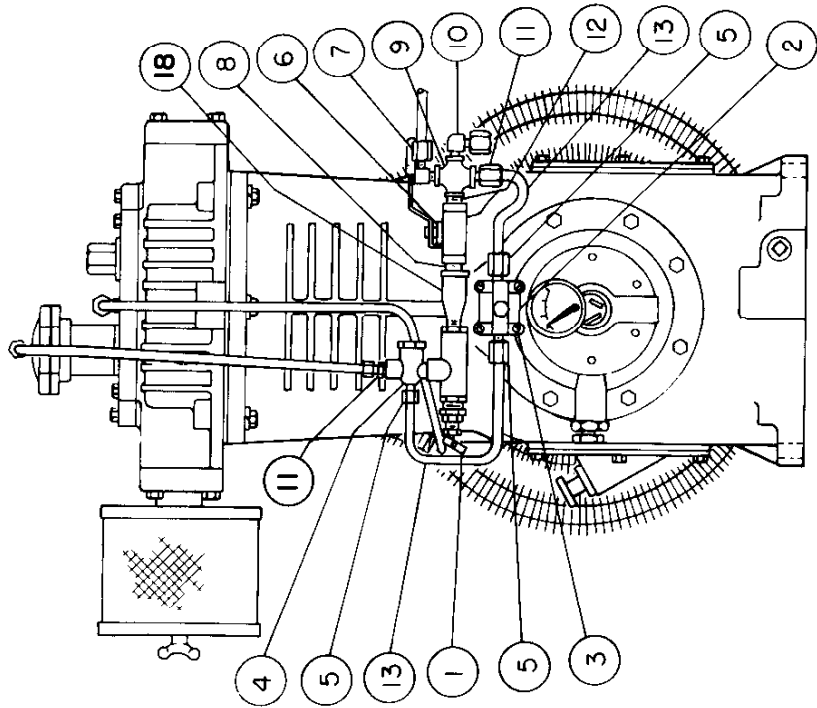
CONTROL PIPING GROUP NO. 110657
(FOR PILOT CONTROLLED COMPRESSOR
W/SAFE-Q-LUBE PROTECTION)



**CONTROL PIPING GROUP NO. 110657
(FOR PILOT CONTROLLED COMPRESSOR
W/SAFE-Q-LUBE PROTECTION)**

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	110198- —	PILOT ASSEMBLY (SEE PAGE 34 FOR PARTS BREAKDOWN & PART NO. PER P.S.I.G. SETTING)
2	1	7970X	UNLOADER ASSEMBLY (STANDARD UP TO & INCLUDING 200 P.S.I.G.) SEE PAGE 36 FOR PARTS BREAKDOWN
3	4	123478-J07	SCREW - HEX., 1/4-20 UNC X .50, GRADE 5 (@6FT.-LBS.)
4	3	1643	FITTING - STRAIGHT, 1/4 TUBE X 1/8 NPT
5	1	6194X	VALVE - CHECK, DUAL CONTROL (STANDARD UP TO 250 P.S.I.G.) SEE PAGE 37 FOR PARTS BREAKDOWN
6	1	1642	FITTING - ELBOW, 1/4 TUBE X 1/8 NPT
7	1	2614	FITTING - ELBOW, 3/8 TUBE X 1/4 NPT
8	2	110594-005	FITTING - STRAIGHT, 1/4 TUBE X 1/4 NPT
9	2	3003	TEE - PIPE, 1/4 NPT X 1/4 NPT X 1/4 NPT
10	4FT.	110515-025	TUBE - COPPER, 1/4
11	1	6317	STUD - MOUNTING
12	1	160047-J05	SCREW - SET, 1/4-28 UNF X .38, GRADE 5
13	1	1665	FITTING - TEE, 1/4 TUBE X 1/4 TUBE X 1/8 NPT
			@INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
		6317X1	MOUNTING STUD KIT INCLUDES: (1) 6317 MOUNTING STUD (1) 160047-J05 SET SCREW

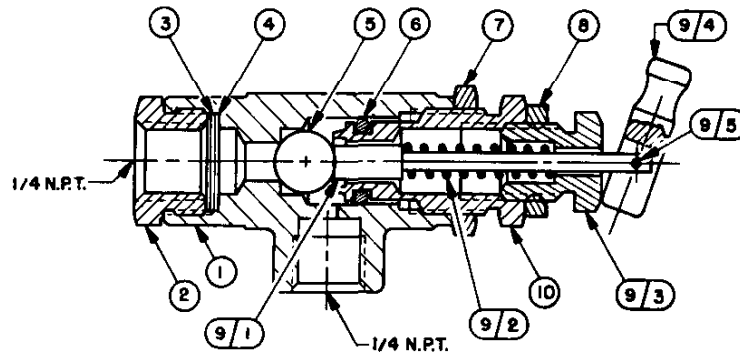
CONTROL PIPING GROUP NO. 110658
(FOR COMPRESSOR W/DUAL CONTROL
AND SHUTOFF VALVE)



**CONTROL PIPING GROUP NO. 110658
(FOR COMPRESSOR W/DUAL CONTROL
AND SHUTOFF VALVE)**

INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	110198-___	PILOT ASSEMBLY (SEE PAGE 34 FOR PARTS BREAKDOWN & PART NO. PER P.S.I.G. SETTING)
2	1	7970X	UNLOADER ASSEMBLY (STANDARD UP TO & INCLUDING 200 P.S.I.G.) SEE PAGE 36 FOR PARTS BREAKDOWN
3	4	123478-J07	SCREW - HEX., 1/4-20 UNC X .50, GRADE 5 (@6FT.-LBS.)
4	1	6194X	VALVE - CHECK, DUAL CONTROL (STANDARD UP TO 250 P.S.I.G.) SEE PAGE 37 FOR PARTS BREAKDOWN
5	3	1643	FITTING - STRAIGHT, 1/4 TUBE X 1/8 NPT
6	1	110425-025	VALVE - BALL, 1/4 NPT
7	1	2708	FITTING - ELBOW, 1/4 TUBE X 1/4 NPT
8	1	125933-006	NIPPLE - PIPE, 1/4 NPT X 1.50
9	1	4805	CROSS - PIPE, 1/4 NPT
10	1	2614	FITTING - ELBOW, 3/8 TUBE X 1/4 NPT
11	2	110594-005	FITTING - STRAIGHT, 1/4 TUBE X 1/4 NPT
12	1	125933-001	NIPPLE - PIPE, 1/4 NPT X CLOSE
13	4FT.	110515-025	TUBE - COPPER, 1/4
14	1	6317	STUD - MOUNTING
15	1	160047-J05	SCREW - SET, 1/4-28 UNF X .38, GRADE 5
16	1	1665	FITTING - TEE, 1/4 TUBE X 1/4 TUBE X 1/8 NPT
17	1	1642	FITTING - ELBOW, 1/4 TUBE X 1/8 NPT
18	1	3003	TEE - PIPE, 1/4 NPT X 1/4 NPT X 1/4 NPT
			Ⓢ INDICATES TORQUE VALUE IN FOOT POUNDS (DRY THREADS)
			<u>REPLACEMENT PARTS</u>
		6317X1	MOUNTING STUD KIT INCLUDES: (1) 6317 MOUNTING STUD (1) 160047-J05 SET SCREW

PILOT ASSEMBLIES



INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
PILOT ASSEMBLIES			
		110196-040 110196-999	PILOT ASSEMBLY (SET 30-40 P.S.I.) PILOT ASSEMBLY *(VARIABLE SETTING) *SETTING CAPABILITY: 30 P.S.I. MINIMUM CUT-IN PRESSURE; 50 P.S.I. MAXIMUM CUT-OUT PRESSURE
		110197-060 110197-080 110197-100 110197-110 110197-999	PILOT ASSEMBLY (SET 50-60 P.S.I.) PILOT ASSEMBLY (SET 70-80 P.S.I.) PILOT ASSEMBLY (SET 90-100 P.S.I.) PILOT ASSEMBLY (SET 100-110 P.S.I.) PILOT ASSEMBLY *(VARIABLE SETTING) *SETTING CAPABILITY: 50 P.S.I. MINIMUM CUT-IN PRESSURE; 110 P.S.I. MAXIMUM CUT-OUT PRESSURE
		110198-120 110198-140 110198-150 110198-165 110198-175 110198-250 110198-999	PILOT ASSEMBLY (SET 110-120 P.S.I.) PILOT ASSEMBLY (SET 130-140 P.S.I.) PILOT ASSEMBLY (SET 135-150 P.S.I.) PILOT ASSEMBLY (SET 150-165 P.S.I.) PILOT ASSEMBLY (SET 165-175 P.S.I.) PILOT ASSEMBLY (SET 225-250 P.S.I.) PILOT ASSEMBLY *(VARIABLE SETTING) *SETTING CAPABILITY: 110 P.S.I. MINIMUM CUT-IN PRESSURE; 250 P.S.I. MAXIMUM CUT-OUT PRESSURE

PILOT GROUPS

1	1	110196-____ 110199-001	110197-____ 110199-001	110198-____ 110199-001	PILOT ASSEMBLY
2	1	110199-002	110199-002	110199-002	BODY - PILOT
3	1	5883	5883	5883	NUT - FILTER
4	2	5884	5884	5884	FILTER - FELT
5	1	5880	5880	5880	SCREEN - FILTER
6	1	123157-110	123157-110	123157-110	BALL - PILOT
7	1	5878	5878	5878	*O-RING - .09 WIDE X .38 I.D.
8	1	5879	5879	5879	NUT - SPECIAL, PILOT
9	1	110200-001	110200-002	110200-002	NUT - LOCK
9/1	1	110199-006	110199-006	110199-006	SCREW ASSEMBLY - ADJUSTMENT
9/2	1	110199-005	110199-007	110199-007	STEM
9/3	1	110199-003	110199-003	110199-003	SPRING - PILOT
9/4	1	110199-009	110199-009	110199-009	NUT - PRESSURE ADJUSTMENT
9/5	1	110199-010	110199-010	110199-010	LEVER
10	1	110199-004	110199-004	110199-008	PIN - RIVET
					CAP
REPLACEMENT PARTS					
6	1	22749-110	22749-110	22749-110	**O-RING - .09 WIDE X .38 I.D.
	1	110366	110367	110367	REPAIR KIT - PILOT
	1	110200-001	110200-002	110200-002	INCLUDES:
	1	123157-110	123157-110	123157-110	SCREW ASSEMBLY - ADJUSTMENT
	1	5883	5883	5883	*O-RING - .09 WIDE X .38 I.D.
	2	5884	5884	5884	FILTER - FELT
	1	5880	5880	5880	SCREEN - FILTER
					BALL - PILOT
**FOR USE WITH SYNTHETIC LUBRICANTS					

PILOT ASSEMBLIES

INSTRUCTIONS

QUINCY BALL TYPE UNLOADER PILOT
PART NO.S 110196, 110197, & 110198
MAXIMUM OPERATING PRESSURE 250 LBS.

APPLICATION

SUCTION UNLOADERS 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.

THE QUINCY SUCTION UNLOADER CONSISTS OF UNLOADING ARRANGEMENTS ON THE SUCTION VALVES, HAVING A PLUNGER TO CONTACT THE SUCTION VALVE DISC AND AN UNLOADER PILOT TO AUTOMATICALLY REGULATE THE PASSING OF RECEIVER PRESSURE TO THE UNLOADING ARRANGEMENT.

OPERATION

UNLOADING OCCURS WHEN RECEIVER PRESSURE IS SUFFICIENT TO OVERCOME SPRING PRESSURE. BALL NO. 5880 IS THEN UNSEATED AND INSTANTLY SEATED ON NO.S 110199-004 OR 110199-008 SCREW ALLOWING RECEIVER PRESSURE TO PASS TO UNLOADING ARRANGEMENTS. THE COMPRESSOR WILL THEN RUN UNLOADED UNTIL THE RECEIVER PRESSURE DROPS TO PREDETERMINED PRESSURE AT WHICH TIME THE ACTION OF THE BALL NO. 5880 IS REVERSED SHUTTING OFF RECEIVER PRESSURE TO THE UNLOADER ARRANGEMENT RELEASING ALL AIR FROM SAME, ALLOWING COMPRESSOR TO LOAD. THE DRIVE, EITHER ELECTRIC MOTOR OR GASOLINE ENGINE, RUNS CONTINUOUSLY AND MUST BE STARTED MANUALLY AND SHUT OFF WHEN THE JOB IS FINISHED. MANUAL UNLOADING CAN BE ACCOMPLISHED AT ANY TIME BY MOVING THE TOGGLE ON TOP OF THE PILOT.

INSTALLATION

THE UNLOADER PILOT IS TO BE CONNECTED TO AN AIR RECEIVER USING MINIMUM 1/4" O.D. COPPER TUBING (MINIMUM 3/8" O.D. IF OVER 5FT. IN LENGTH). PLAIN MACHINES IN FIELD SERVICE CAN BE CONVERTED TO CONSTANT SPEED BY INSTALLING VALVE UNLOADERS AND AN UNLOADER PILOT.

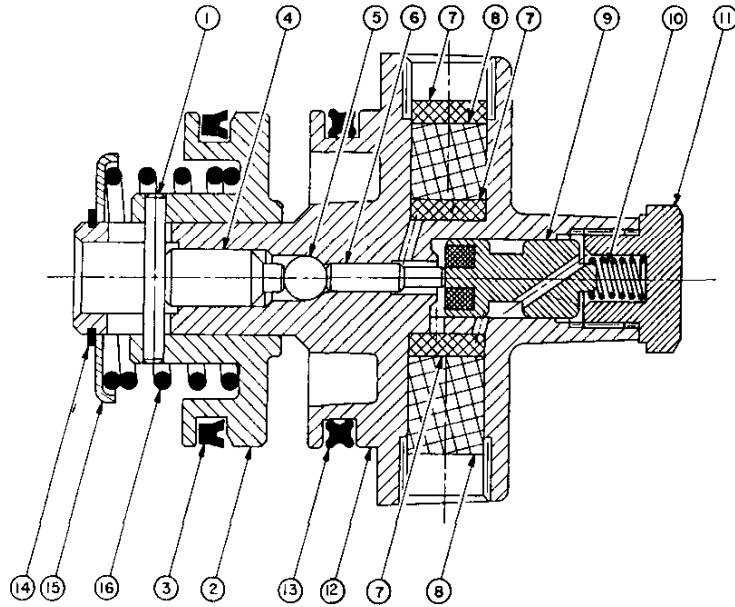
SERVICING

THE UNLOADER BALL NO. 5880 IS THE ONLY VITAL MOVING PART IN THE QUINCY BALL TYPE UNLOADER PILOT AND SHOULD RUN FOR A LONG PERIOD WITHOUT SERVICING, PROVIDED THE FILTER FELT NO. 5883 IS CLEAN AND THE PILOT IS CLEAN INSIDE.

THE UNLOADING PRESSURE IS ADJUSTABLE AND IS REGULATED BY SCREW NO. 110999-003 (TURN CLOCKWISE TO INCREASE AND COUNTERCLOCKWISE TO DECREASE).

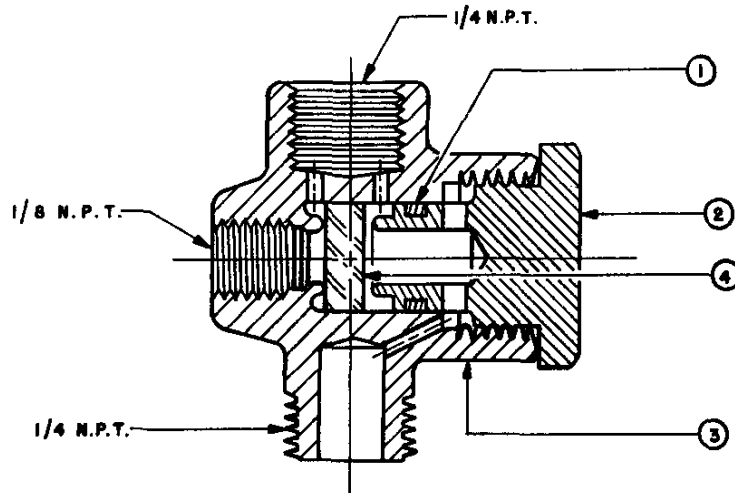
THE DIFFERENTIAL (DIFFERENCE BETWEEN UNLOADING AND LOADING PRESSURE) IS OBTAINED BY ADJUSTING SCREW NO.S 110199-004 OR 110199-008; INCREASE BY TURNING CLOCKWISE, DECREASE BY TURNING COUNTERCLOCKWISE. AFTER CHANGING, TIGHTEN LOCKNUT NO. 5889.

HYDRAULIC UNLOADER ASSEMBLIES NO.'S 7970X & 7970X1

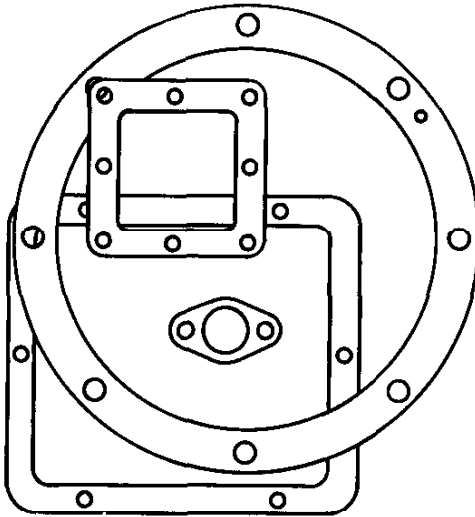


INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
1	1	6284	PIN - ROLL
2	1	6279	PISTON - HYDRAULIC UNLOADER
3	1	7958	"V"RING - HYDRAULIC UNLOADER
4	1	7690	PISTON - HYDRAULIC UNLOADER
5	1	5453	BALL - HYDRAULIC UNLOADER
6	1	6281	ROD - PUSH
7	3	6097	SCREEN - HYDRAULIC UNLOADER
8	2	6283	FELT - HYDRAULIC UNLOADER
9	1	1985	VALVE - OUTER
10	1	1884	SPRING - COMPRESSION
11	1	3437	CAP - HYDRAULIC UNLOADER
12	1	7460	BODY - HYDRAULIC UNLOADER (NOT SOLD SEPARATELY)
13	1	6286	"QUAD"RING - HYDRAULIC UNLOADER
14	1	6285	RING - RETAINING
15	1	6304	RETAINER - SPRING
16	1	2326	SPRING - COMPRESSION (USED IN ASSEMBLY 7970X - FOR AIR PRESSURES UP TO & INCLUDING 200 P.S.I.G.)
		OR	
	1	6598	SPRING - COMPRESSION (USED IN ASSEMBLY 7970X1 - FOR AIR PRESSURES EXCEEDING 200 P.S.I.G.)
			REPLACEMENT PARTS
		8063	HYDRAULIC UNLOADER REPAIR KIT
			INCLUDES:
			(1) 7958 "V"RING - HYDRAULIC UNLOADER
			(1) 7690 PISTON - HYDRAULIC UNLOADER
			(1) 5453 BALL - HYDRAULIC UNLOADER
			(1) 6281 ROD - PUSH
			(3) 6097 SCREEN - HYDRAULIC UNLOADER
			(2) 6283 FELT - HYDRAULIC UNLOADER
			(1) 1985 VALVE - OUTER
			(1) 1884 SPRING - COMPRESSION
			(1) 6286 "QUAD"RING - HYDRAULIC UNLOADER
			(1) 6285 RING - RETAINING
			*NOTE: FOR SYNTHETIC OIL APPLICATION THE FOLLOWING SEALS ARE TO BE USED:
			(1) 7958-001 "V"RING - HYDRAULIC UNLOADER
			(1) 6286-001 "QUAD"RING

DUAL CONTROL CHECK VALVE ASSEMBLIES



INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
<u>DUAL CONTROL CHECK VALVE ASSEMBLY 6194X (STANDARD ASSEMBLY).</u>			
1	1	123157-012	"O"RING - .06 WIDE X .38 I.D.
2	1	6195	SEAT - DUAL CONTROL CHECK VALVE
3	1	6194	BODY - DUAL CONTROL CHECK VALVE (NOT SOLD SEPARATELY)
4	1	6196	DISC - DUAL CONTROL CHECK VALVE
<u>DUAL CONTROL CHECK VALVE ASSEMBLY 6194X1 (FOR USE WITH SYNTHETIC OILS OR 250 P.S.I. & OVER)</u>			
1	1	22749-012	"O"RING - .06 WIDE X .38 I.D.
2	1	6195	SEAT - DUAL CONTROL CHECK VALVE
3	1	6194	BODY - DUAL CONTROL CHECK VALVE (NOT SOLD SEPARATELY)
4	1	6196	DISC - DUAL CONTROL CHECK VALVE



INDEX NUMBER	QTY	PART NUMBER	DESCRIPTION
		7079	<u>GASKET SET - COMPLETE OVERHAUL</u>
	2	1556	GASKET - VALVE
	1	2344	GASKET - CYLINDER TO CRANKCASE
	2	1315	GASKET - INSPECTION PLATE
	6	1356	GASKET - VALVE
	2	2348	GASKET - VALVE COVER
	1	5694	GASKET - INTERCOOLER TO HEAD
	1	5494	GASKET - BEARING CARRIER
	1	5695	GASKET - CYLINDER TO HEAD
	2	2346	GASKET - INTAKE & EXHAUST FLANGE
	1	6679	GASKET - OIL INLET BRACKET
	2	2347	GASKET - VALVE COVER
	3	1498	SHIM - BEARING ADJUSTMENT, .005, STEEL
	3	1498A	SHIM - BEARING ADJUSTMENT, .007, STEEL
	1	1498B	SHIM - BEARING ADJUSTMENT, .020, STEEL
	2	1498C	SHIM - BEARING ADJUSTMENT, .002, STEEL
		110774	<u>"O"RING KIT - COMPLETE COMPRESSOR OVERHAUL (STANDARD)</u>
	1	123157-011	"O"RING - .06 WIDE X .31 I.D. (BEARING CARRIER ADJUSTMENT SCREW)
	2	123157-210	"O"RING - .09 WIDE X .50 I.D. (BAYONET OIL GAUGE)
	1	123157-152	"O"RING - .09 WIDE X .25 I.D. (BEARING CARRIER)
	1	123157-112	"O"RING - .09 WIDE X .50 I.D. (OIL PUMP DRIVESHAFT)
	2	6286	"QUAD"RING - (CLOSURE BODY ON BEARING CARRIER)
	1	7958	"Y"RING (HYDRAULIC UNLOADER)
	1	6196	DISC - DUAL CONTROL CHECK VALVE
	2	1855	DIAPHRAGM - UNLOADER
		110291	<u>"O"RING KIT - COMPLETE COMPRESSOR OVERHAUL (DIESTER SYNTHETIC LUBRICATED)</u>
	1	22749-011	"O"RING - .06 WIDE X .31 I.D. (BEARING CARRIER ADJUSTMENT SCREW)
	2	22749-210	"O"RING - .09 WIDE X .50 I.D. (BAYONET OIL GAUGE)
	1	22749-152	"O"RING - .09 WIDE X .25 I.D. (BEARING CARRIER)
	1	22749-112	"O"RING - .09 WIDE X .50 I.D. (OIL PUMP DRIVESHAFT)
	2	6286-001	"QUAD"RING - (CLOSURE BODY ON BEARING CARRIER)
	1	7958-001	"Y"RING (HYDRAULIC UNLOADER)
	1	6196-001	DISC - DUAL CONTROL CHECK VALVE
	2	1855	DIAPHRAGM - UNLOADER
		110296	<u>"O"RING KIT - COMPLETE COMPRESSOR OVERHAUL (PHOSPHATE ESTER SYNTHETIC LUBRICATED)</u>
	1	22749-011	"O"RING - .06 WIDE X .31 I.D. (BEARING CARRIER ADJUSTMENT SCREW)
	2	22749-210	"O"RING - .09 WIDE X .50 I.D. (BAYONET OIL GAUGE)
	1	22749-152	"O"RING - .09 WIDE X .25 I.D. (BEARING CARRIER)
	1	22749-112	"O"RING - .09 WIDE X .50 I.D. (OIL PUMP DRIVESHAFT)
	2	6286-001	"QUAD"RING - (CLOSURE BODY ON BEARING CARRIER)
	1	7958-001	"Y"RING (HYDRAULIC UNLOADER)
	1	6196-001	DISC - DUAL CONTROL CHECK VALVE
	2	1855	DIAPHRAGM - UNLOADER
		110516-390	<u>Y.I.P. KIT (VALUE INVESTMENT PROTECTION)</u>
	1	110162	GAUGE - OIL PRESSURE
	6	2087	DISC - VALVE
	2	1855	DIAPHRAGM - UNLOADER
	6	1857	PIN - VALVE
	2	6283	FILTER - HYDRAULIC UNLOADER
	6	6910	SPRING - UNLOADER PIN
	6	6909	SPRING - VALVE
	1	7079	GASKET SET

RECOMMENDED SPARE PARTS

<u>QTY.</u>	<u>PART NUMBER</u>	<u>NOTE</u>	<u>DESCRIPTION</u>
2	1855		DIAPHRAGM
	OR		
2	1855S	(1)	DIAPHRAGM
3	6949X		SUCTION VALVE ASSEMBLY
3	6948X		DISCHARGE VALVE ASSEMBLY
2	2819PR		CON ROD INSERTS
1	110162		OIL PRESSURE GAUGE
1	160079		REPAIR KIT - BEARING CARRIER ASSEMBLY
	OR		
1	160079-001	(2)	REPAIR KIT - BEARING CARRIER ASSEMBLY
1	8063	(3)	REPAIR KIT - HYDRAULIC UNLOADER VALVE
1	110366	(4)	REPAIR KIT - PILOT (30 - 50 P.S.I.G.)
	OR		
1	110367	(4)	REPAIR KIT - PILOT (50 - 250 P.S.I.G.)
1	6194X		DUAL CONTROL CHECK VALVE
	OR		
1	6194X1	(2)	DUAL CONTROL CHECK VALVE
1	7079		GASKET SET
1	110377E200		AIR FILTER ELEMENT

Y.I.P. KIT (SEE PAGE 38) MAY BE STOCKED IN LIEU OF SOME RECOMMENDED SPARE PARTS

NOTES:

(1) FOR PHOSPHATE ESTER SYNTHETIC LUBRICATED APPLICATION

(2) FOR DIESTER AND PHOSPHATE ESTER SYNTHETIC LUBRICATED APPLICATION

(3) SEE PAGE 36 FOR SYNTHETIC LUBRICATED APPLICATION

(4) SEE PAGE 34 FOR SYNTHETIC LUBRICATED APPLICATION