



VALVEBANK SUPPLEMENT

16000 SERIES II CRANE

16000 SERIES III CRANE

GENERAL

This supplement contains the parts drawings and parts lists for the valvebank components used on the 16000 Series II and III Crane. These drawings are intended to be used in conjunction with the instructions found in the accompanying parts maintenance manuals.

STABILIZER VALVEBANK COMPONENTS

INLET COVER COMPONENTS (70146204)	3
PLUG SEAL KIT (70146175)	3
WORK SECTION COMPONENTS (70146205)	4
SPOOL POSITIONER KIT (70146207)	4
VERTICAL HANDLE KIT (70146210)	4
OUTLET COVER COMPONENTS (70146212)	5
PLUG SEAL KIT (70146215)	5

MAIN CONTROL VALVEBANK COMPONENTS

INLET COVER COMPONENTS (70146173)	6
RP51A RELIEF CARTRIDGE (70146175)	6
WORK SECTION #1 (OUTER BOOM) & #6 (CRANE ROTATION) (70146177)	7
WORK SECTION #2 (EXTENSION) (70146181)	7
WORK SECTION #3 (FORK OPEN/CLOSE) (70146183)	7
WORK SECTION #5 (INNER BOOM) (70146189)	8
MID-INLET SECTION #4 (70146185)	8
WORK SECTION #7 (FORK ROTATION) (70146191)	8
UTILITY SECTION (70146194)	9
ORIFICE RESTRICTOR ASM (70146193)	9
CRA RELIEF CARTRIDGE (70146184)	9
RC RELIEF CARTRIDGE (70146190)	9
ACTUATOR ASM-WITH HANDLE (70145010)	10
ACTUATOR KIT (94074089)	10
BUILD-UP VALVE CARTRIDGE (70146196)	11
PRESSURE REDUCING VALVE (70146197)	11
OUTLET COVER COMPONENTS (70146202)	11

IOWA MOLD TOOLING CO., INC.

BOX 189, GARNER, IA 50438-0189

TEL: 641-923-3711

TECHNICAL SUPPORT FAX: 641-923-2424

MANUAL PART NUMBER 99903172

Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation company.

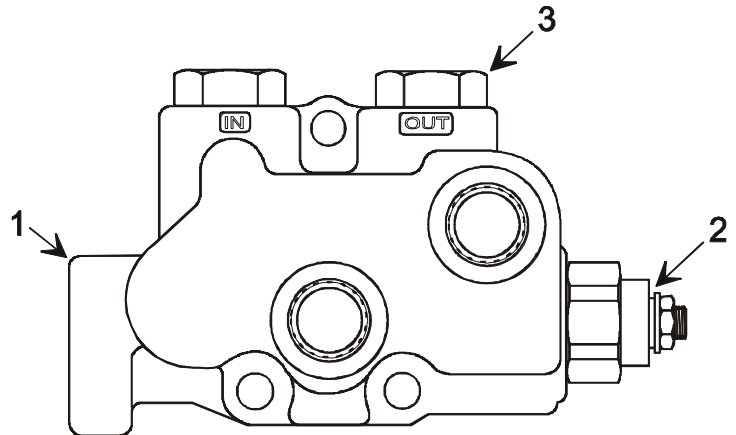
REVISIONS LIST

DATE	LOCATION	DESCRIPTION OF CHANGE
20010605	1	ACTUATOR ASM - WITH HANDLE (70145010) WAS ACTUATOR ASM - LESS HANDLE (70146178)
	7	ALL 3 DRAWINGS : ITEM #3 70145010 WAS 70146178
	8	WORKSECTION #5 & #7 : ITEM #3 70145010 WAS 70146178
	10	CHG PART NUMBER IN PAGE HEADING
20010615	11	ACTUATOR ASM WITH HANDLE (70145015) WAS ACTUATOR ASM-LESS HANDLE (70146178)
20010621	9	CHANGED NAME. BUILD-UP VALVE CARTRIDGE WAS MECH BACK-UP CARTRIDGE
20030417	7,8	ADDED (400 PSI) TO #2 ON TOC FOR DRAWING 70146194 AND (500 PSI) TO #3
20061020	1-1, 3-3	ADDED FUNCTION DESCRIPTION TO WORK SECTION NUMBERS
20080505	1-1	NEW OWNERSHIP STATEMENT
		ADDED SERIES III TO TITLE, MANUAL COVER

STABILIZER CONTROL VALVEBANK COMPONENTS

INLET COVER COMPONENTS (70146204)

1	70146174 INLET COVER HOUSING	1
2	70146175 RP51-A RELIEF CARTRIDGE (SEE DWG)	1
3	70146176 SAE 12 PLUG	2

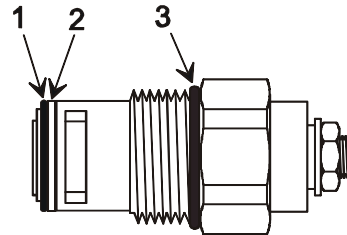


VB SUPP-16000-2: 70146175.01: 2000032 (REV C)

PLUG SEAL KIT (70146175)

1	---	O-RING SEAL	1
2	---	BACK-UP RING	1
3	---	O-RING SEAL	1

Due to close tolerances of the working parts in RP51A Relief Cartridges, only the external seals may be serviced in the field.

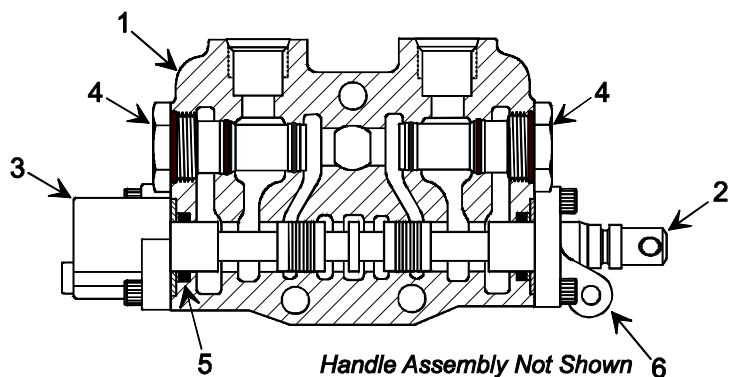


STABILIZER CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146205.01: 20000321 (REV C)

WORK SECTION COMPONENTS (70146205)

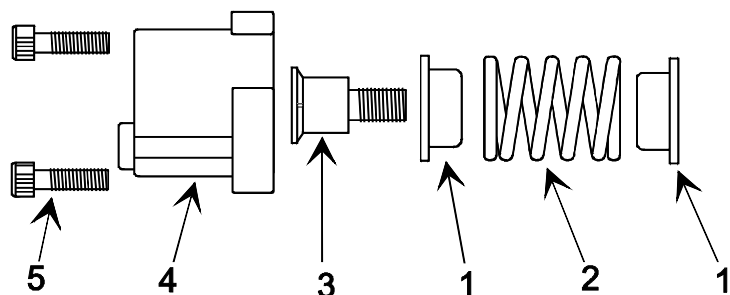
1 ---	HOUSING	REF
2 ---	SPOOL	REF
3	70146206 SPRING RETURN POSITIONER (SEE KIT 70146207)	1
4	70146182 LOAD CHK PLUG ASM	2
5	70146208 SPOOL SEAL SUB-ASM	2
6	70146209 VERTICAL HANDLE ASM (SEE KIT 70146210)	1



VB SUPP-16000-2: 70146207.01: 20000321 (REV C)

SPOOL POSITIONER KIT (70146207)

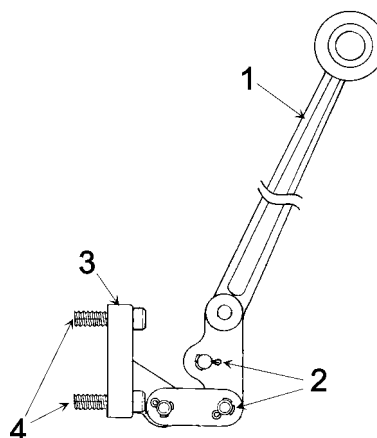
1 ---	SPRING COLLAR	2REF
2 ---	SPRING	1REF
3 ---	SPOOL SPUD	1REF
4 ---	BONNET	1REF
5 ---	SCREW	2REF



VB SUPP-16000-2: 70146210.01: 20000321 (REV C)

VERTICAL HANDLE KIT (70146210)

1 ---	VERTICAL HANDLE	1
2	94731839 LINK & PIN KIT (INCL:2 ONLY)	1
3	70146211 BRACKET KIT (INCL:3&4)	1
4 ---	SCREW	2

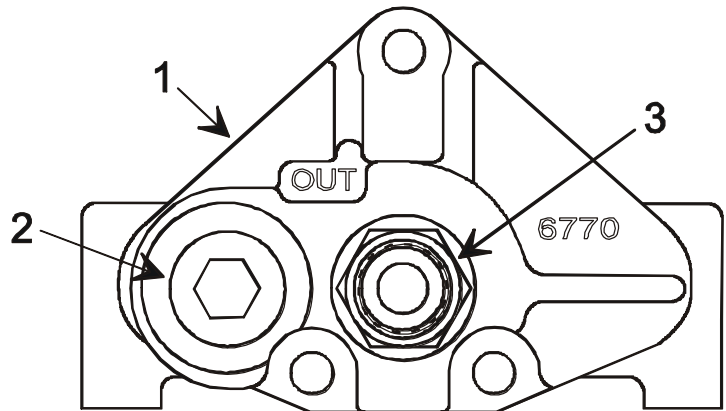


STABILIZER CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146212.01: 20000321 (REV C)

OUTLET COVER COMPONENTS (70146212)

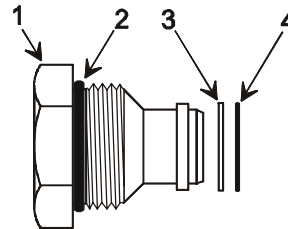
1	70146213	OUTLET COVER HOUSING	1
2	70146203	SAE 12 PLUG	1
3	70146214	SAE 12 PWR BEYOND SLEEVE (SEE DWG 70146215)	1



VB SUPP-16000-2: 70146215.01: 20000321 (REV C)

PLUG SEAL KIT (70146215)

1	---	SLEEVE (NOT PART OF KIT)	1REF
2	---	O-RING SEAL	1
3	---	BACK-UP RING	1
4	---	O-RING SEAL	1

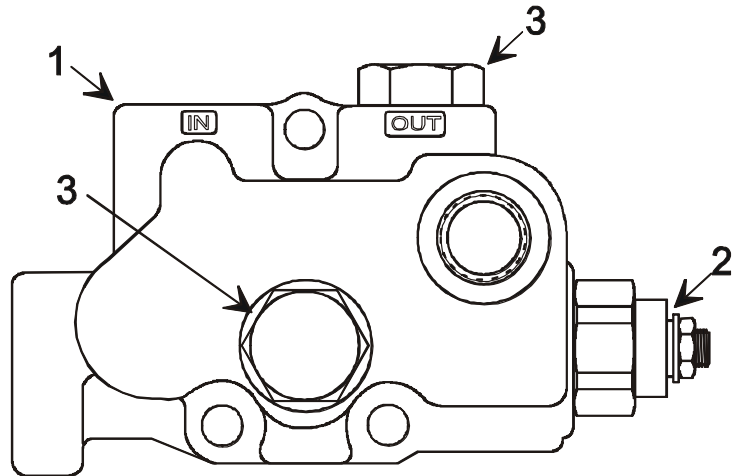


MAIN CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146173.01: 20000321 (REV B)

INLET COVER COMPONENTS (70146173)

1	70146174	INLET COVER HOUSING	1
2	70146175	RP51-A RELIEF CARTRIDGE (SEE DWG 70146175)	1
3	70146176	SAE 12 PLUG	2

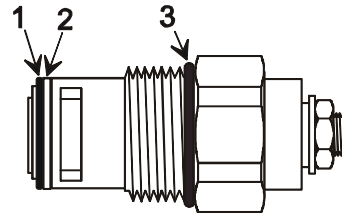


VB SUPP-16000-2: 70146175.01: 20000321 (REV B)

RP51A RELIEF CARTRIDGE (70146175)

1	---	O-RING SEAL	1REF
2	---	BACK-UP RING	1REF
3	---	O-RING SEAL	1REF

Due to close tolerances of working parts in RP51A Relief Cartridges, only the external seals may be serviced in the field.

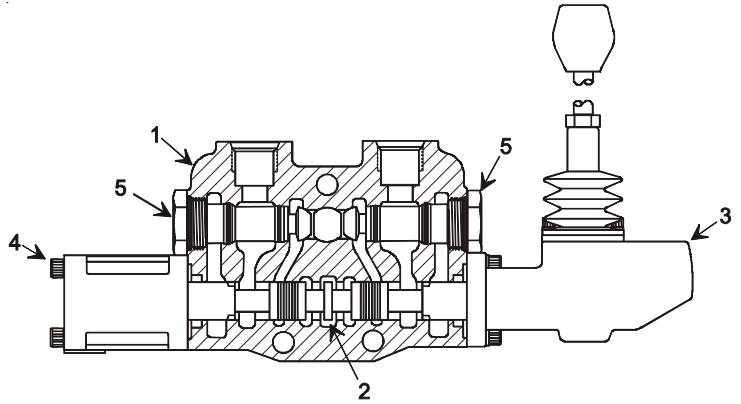


MAIN CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146177.01: 20030417 (REV B)

WORK SECTION #1 (OUTER BOOM) & #6 (CRANE ROTATION) (70146177)

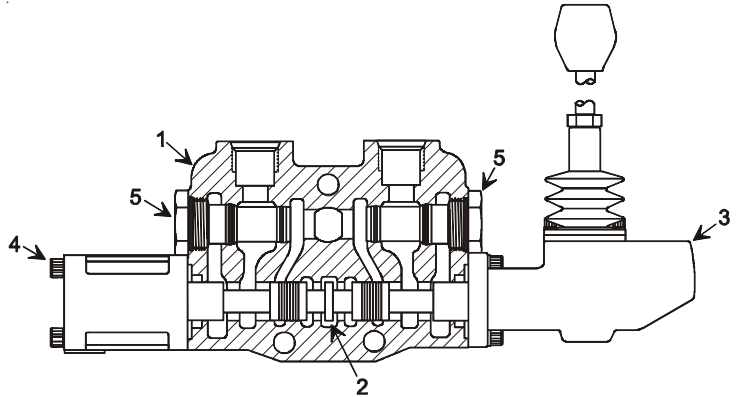
1	---	HOUSING (NOT REPLACEABLE)	REF
2	---	SPOOL (NOT REPLACEABLE)	REF
3	70145010	ACTUATOR ASM A-END (SEE DWG 70145010)	1
4	70146179	ACTUATOR ASM B-END (SEE DWG 94074089)	1
5	70146180	LOAD CHECK PLUG ASM	2



VB SUPP-16000-2: 70146181.01: 20030417 (REV B)

WORK SECTION #2 (EXTENSION) (70146181)

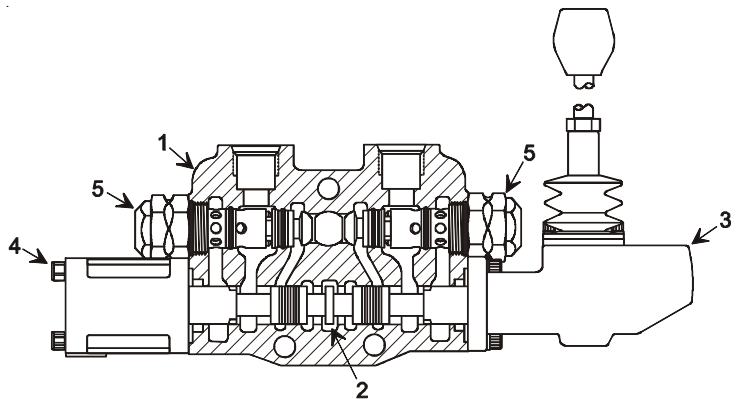
1	---	HOUSING (NOT REPLACEABLE)	REF
2	---	SPOOL (NOT REPLACEABLE)	REF
3	70145010	ACTUATOR ASM A-END (SEE DWG 70145010)	1
4	70146179	ACTUATOR ASM B-END (SEE DWG 94074089)	1
5	70146182	LOAD CHECK PLUG ASM	2



VB SUPP-16000-2: 70146183.01: 20030417 (REV B)

WORK SECTION #3 (FORK OPEN/CLOSE) (70146183)

1	---	HOUSING (NOT REPLACEABLE)	REF
2	---	SPOOL (NOT REPLACEABLE)	REF
3	70145010	ACTUATOR ASM A-END (SEE DWG 70145010)	1
4	70146179	ACTUATOR ASM B-END (SEE DWG 94074089)	1
5	70146184	RELIEF CARTRIDGE (SEE DWG 70146190)	2

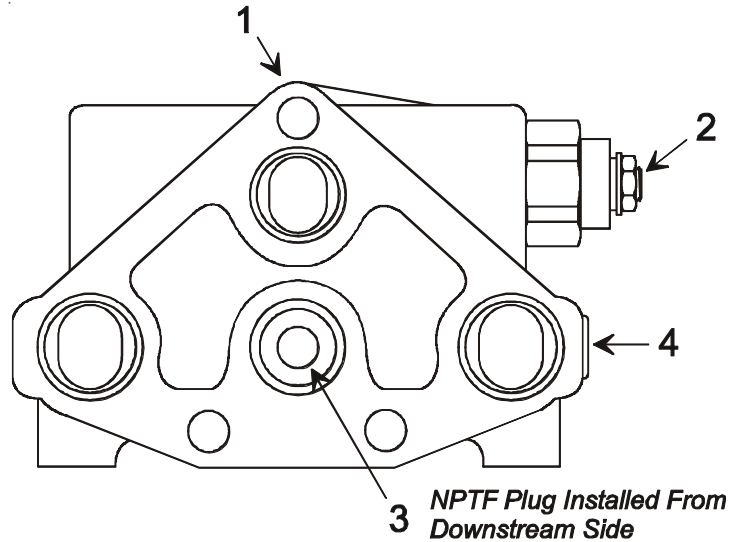


MAIN CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146185.01: 20000321 (REV B)

MID-INLET SECTION #4 (70146185)

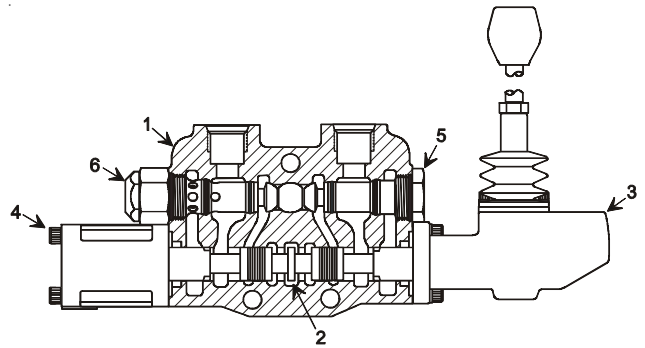
1	70146186	MID-INLET HOUSING	1
2	70146175	RP51A RELIEF CARTRIDGE (SEE DWG 70146175)	1
3	70146187	PLUG 1/4NPT	1
4	70146188	PLUG SAE#5	1



VB SUPP-16000-2: 70146189.01: 20030417 (REV B)

WORK SECTION #5 (INNER BOOM) (70146189)

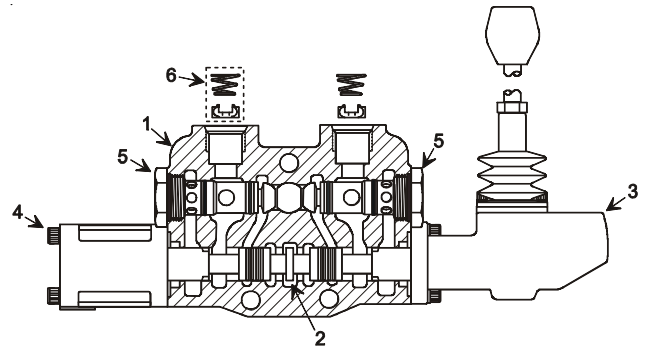
1	---	HOUSING (NOT REPLACEABLE)	REF
2	---	SPOOL (NOT REPLACEABLE)	REF
3	70145010	ACTUATOR ASM A-END (SEE DWG 70145010)	1
4	70146179	ACTUATOR ASM B-END (SEE DWG 94074089)	1
5	70146180	LOAD CHECK PLUG KIT	1
6	70146190	RELIEF CARTRIDGE (SEE DWG 70146190)	1



VB SUPP-16000-2: 70146191.01: 20030417 (REV B)

WORK SECTION #7 (FORK ROTATION) (70146191)

1	---	HOUSING (NOT REPLACEABLE)	REF
2	---	SPOOL (NOT REPLACEABLE)	REF
3	70145010	ACTUATOR ASM A-END (SEE DWG 70145010)	1
4	70146179	ACTUATOR ASM B-END (SEE DWG 94074089)	1
5	70146192	ANTI-CAVITATION CHECK KIT	2
6	70146193	FLOW RESTRICTOR ASM (SEE DWG 70146193)	2

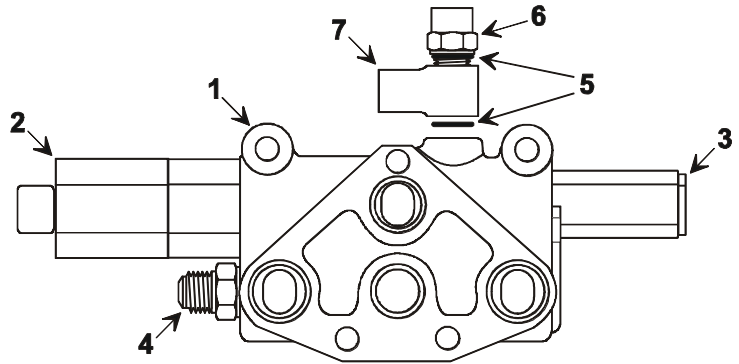


MAIN CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146194.01: 20010621 (REV B)

UTILITY SECTION (70146194)

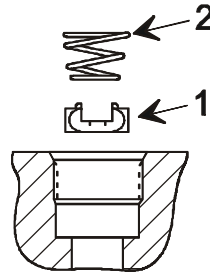
1	70146195 UTIL SECTION HOUSING	1
2	70146196 BUILD-UP VALVE CARTRIDGE (400 PSI) (SEE DWG 70146196)	1
3	70146197 PR REDUCING VALVE CART (500 PSI) (SEE DWG 70146197)	1
4	70146198 RETURN FLOW CHECK ASM	1
5	70146199 O-RING SEAL	2
6	70146200 ADJUSTABLE FITTING	1
7	70146201 THREADED COLLAR	1



VB SUPP-16000-2: 70146193.01: 20000321 (REV B)

ORIFICE RESTRICTOR ASM (70146193)

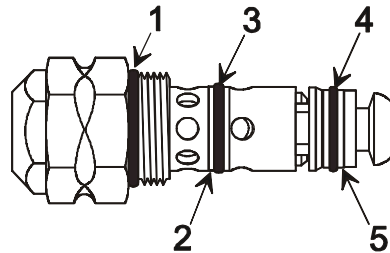
1	---	ORIFICE PLATE	1REF
2	---	SPRING	1REF



VB SUPP-16000-2: 70146184.01: 20000321 (REV B)

CRA RELIEF CARTRIDGE (70146184)

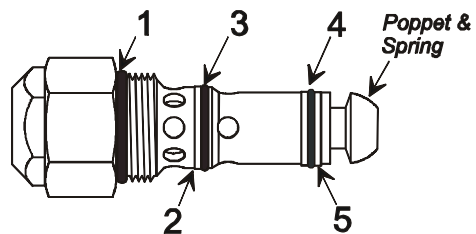
		PLUG SEAL KIT (INCL:1-5)	REF
1	---	O-RING SEAL	1
2	---	BACK-UP RING	1
3	---	O-RING SEAL	1
4	---	O-RING SEAL	1
5	---	BACK-UP RING	2



VB SUPP-16000-2: 70146190.01: 20000321 (REV B)

RC RELIEF CARTRIDGE (70146190)

		PLUG SEAL KIT (INCL:1-5)	REF
1	---	O-RING SEAL	1
2	---	BACK-UP RING	1
3	---	O-RING SEAL	1
4	---	O-RING SEAL	1
5	---	BACK-UP RING	2



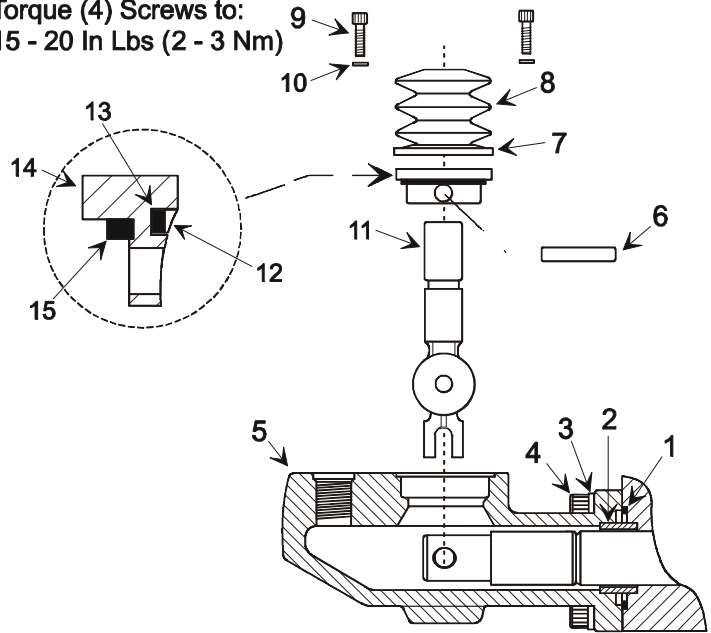
MAIN CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70145010.01: 20010605 (REV B)

ACTUATOR ASM-WITH HANDLE (70145010)

94394513	SEAL KIT (INCL:1,12,13,15)	1
1 ---	SEAL-SQ CUT	1REF
2 ---	BONNET GUIDE	1REF
3 ---	LOCKWASHER	4REF
4 ---	SCREW	4REF
5 ---	BONNET	1REF
6 ---	DOWEL PIN	1REF
7 ---	BOOT RETAINER	1REF
8 ---	BOOT	1REF
9 ---	SCREW	4REF
10 ---	LOCKWASHER	4REF
11 ---	HANDLE ADAPTER	1REF
12 ---	SEAL	1REF
13 ---	O-RING SEAL	1REF
14 ---	HANDLE RETAINER	1REF
15 ---	O-RING SEAL	1REF

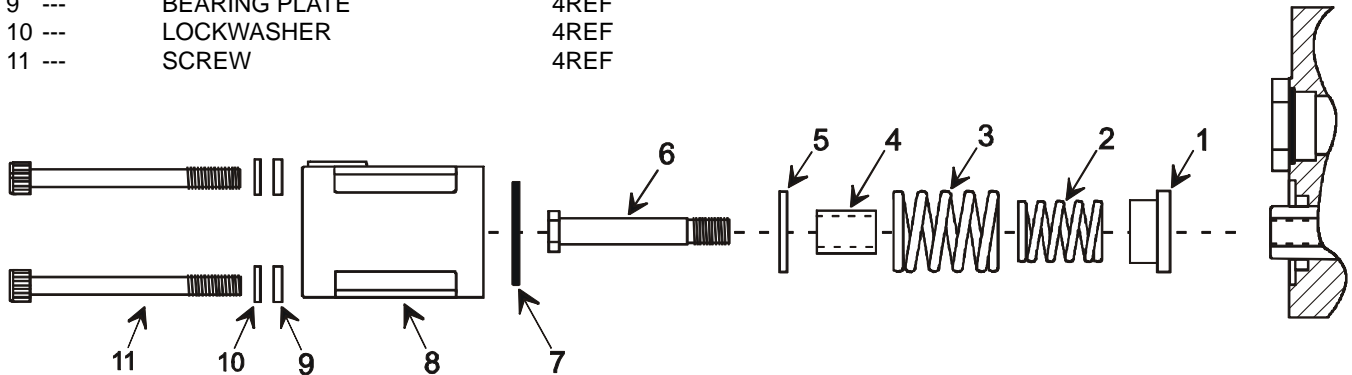
Torque (4) Screws to:
15 - 20 In Lbs (2 - 3 Nm)



VB SUPP-16000-2: 94074089.01: 20000321 (REV B)

ACTUATOR KIT (94074089)

1 ---	STOP COLLAR	1REF
2 ---	SPRING-SMALL	1REF
3 ---	SPRING-LARGE	1REF
4 ---	STOP SLEEVE	1REF
5 ---	WASHER	1REF
6 ---	POSITIONER SPUD	1REF
7 ---	SEAL-SQ CUT	1REF
8 ---	BONNET	1REF
9 ---	BEARING PLATE	4REF
10 ---	LOCKWASHER	4REF
11 ---	SCREW	4REF

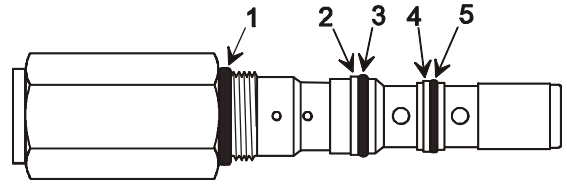


MAIN CONTROL VALVEBANK COMPONENTS

VB SUPP-16000-2: 70146197.01: 20010615 (REV B)

PRESSURE REDUCING VALVE (70146197)

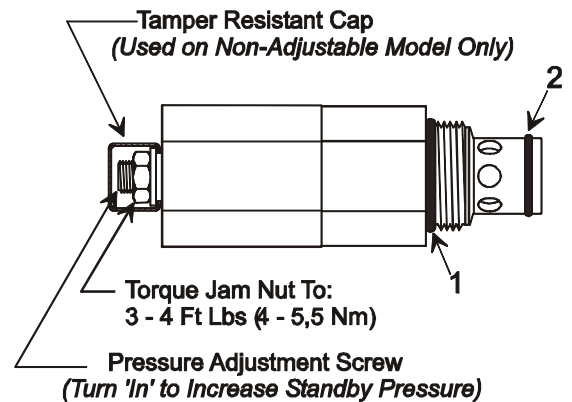
1 ---	O-RING SEAL	1REF
2 ---	BACK-UP RING	1REF
3 ---	O-RING SEAL	1REF
4 ---	BACK-UP RING	1REF
5 ---	O-RING SEAL	1REF



VB SUPP-16000-2: 70146196.01: 20000321 (REV B)

BUILD-UP VALVE CARTRIDGE (70146196)

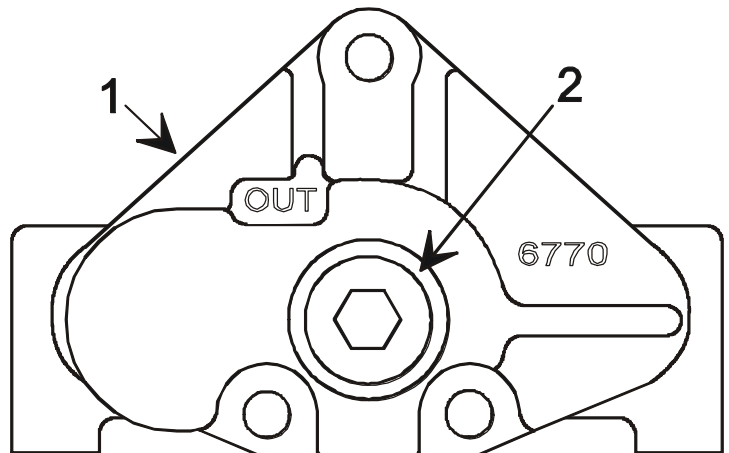
1 ---	O-RING SEAL	1REF
2 ---	O-RING SEAL	1REF



VB SUPP-16000-2: 70146202.01: 20000321 (REV B)

OUTLET COVER COMPONENTS (70146202)

1 ---	HOUSING	1REF
2	70146203 PLUG SAE#12	1



IOWA MOLD TOOLING CO., INC.

BOX 189, GARNER, IA 50438-0189

TEL: 641-923-3711

TECHNICAL SUPPORT FAX: 641-923-2424