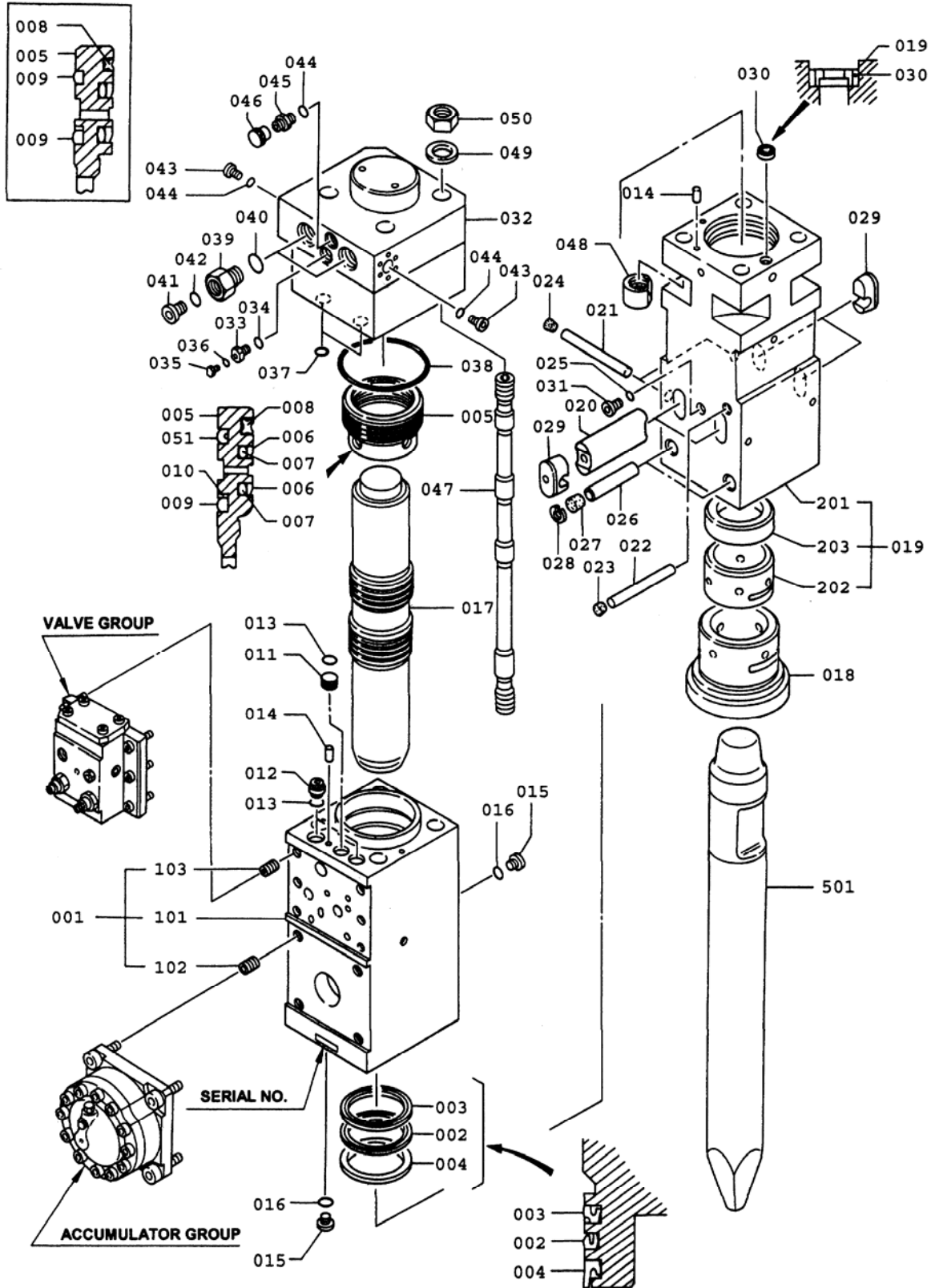


SECTION VI

PARTS LIST

F19Qt HYDRARAM PARTS BREAKDOWN



F19Qt HYDRARAM **PARTS LIST**

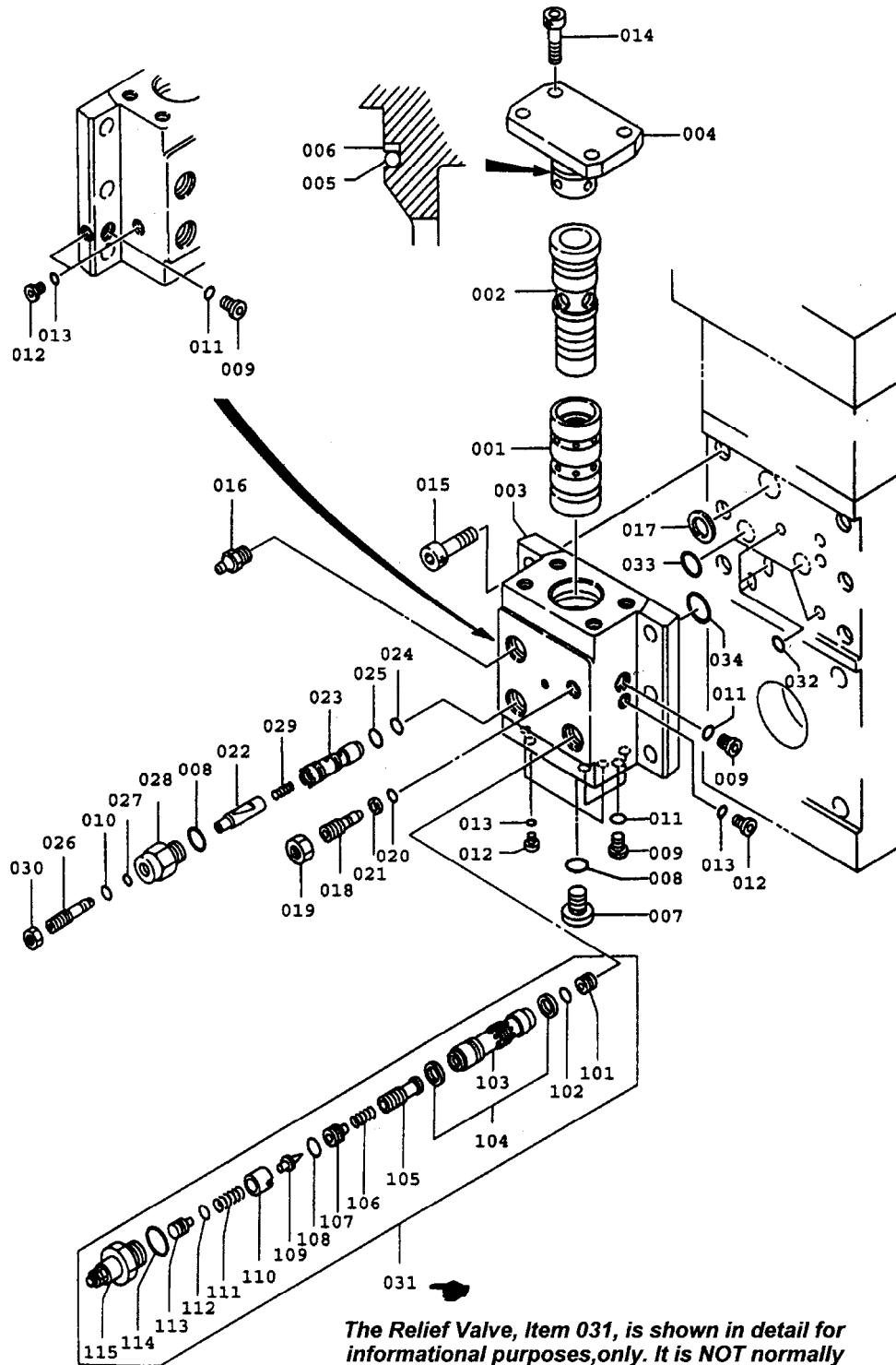


<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
001	KF19-10101	1	Cylinder	028	K264020-00026	2	Snap Ring [/SB]
102	KHB15G-10104	(4)	Heli-Sert Insert	029	KF19-20112	-	Dust Plug [/SB] ⊕
103	KHB20G-10105	(6)	Heli-Sert Insert	030	KF12-20121	1	Check Valve [/SB]
002	KHB15G-10307	1	U-Packing [/SA]	031	K084891-06000	1	GPF Plug
003	KF19-10108	1	Buffer Ring [/SA]	032	KF19-30201	1	Backhead
004	KHB15G-10310	1	Dust Seal [/SA]	033	KHB15G-30103	1	Charging Valve
005	KF19-10111	1	Seal Retainer	034	K160011-00018	1	O-Ring [/SB]
006	KHB15G-10212	2	Slide Packing [/SA]	035	KHB20G-30109	1	Plug
007	KHB15G-10213	(2)	O-Ring [/SA]	036	K160011-00006	1	O-Ring [/SB]
008	KF19-10214	1	Seal Ring [/SA]	037	K160011-00026	2	O-Ring [/SB]
009	KF19-10116	2	D Ring [/SA]	038	K160021-00175	1	O-Ring [/SA]
010	K262031-00145	1	Backup Ring [/SA]	For FRONT Mounted Hoses use:			
011	KF19-10120	1	Plug [/SA]	039	KF19007	2	Port Adapter □
012	KHB15G-10121	2	Bushing [/SA]	040	(Included)	[2]	O-Ring □
013	K160011-00026	3	O-Ring [/SA]	043	K084891-06000	2	GPF Plug □
014	KF22-10125	1	Knock Pin	044	K160011-00024	3	O-Ring [/SB] □
015	K084891-02000	2	GPF Plug	For SIDE Mounted Hoses use:			
016	K160011-00011	2	O-Ring [/SA]	039	KF22-30111	2	Connector □
017	KF19-11101	1	Piston	040	K160011-00038	2	O-Ring [/SB] □
018	KF19-20101	1	Front Cover	041	K084891-10000	2	GPF Plug □
018	KF19-20501	1	Front Cover (NTBox)	042	K160011-00029	2	O-Ring [/SB] □
019	KF19-20102	1	Fronthead	045	K084869-06000	1	Filter Connector
201	KF19-20103	[1]	Fronthead, Bare	046	KF22-30113	1	Air Inlet Cap
202	KF19-20904	(1)	Thrust Bushing	047	KF19-36101	4	Through Bolt
203	KF19-20105	(1)	Thrust Ring	048	KF19-36102	4	Lower Nut
020	KF19-20106	2	Rod Pin (Retainer)	049	KF19-36105	4	Washer
021	KF19-20207	2	Stop Pin, F19R	050	KF19-36106	4	Hexagon Nut
022	KF19-20107	1	Stop Pin, F19T	051	KF19-10216	1	Delta Ring [/SA]
023	K001300-20112	1	Rubber Plug [/SB]	501	KF19-25221	-	Blunt Tip
024	KF12-20208	2	Rubber Plug [/SB]	501	KF19-25225	-	Moil Point
025	K160011-00024	1	O-Ring [/SB]	501	KF19-25224	-	Chisel Bit
026	K001400-20106	2	Fronthead Pin	-	KF19-90001	1	Service Tool Kit
027	K001400-20108	2	Rubber Plug [/SB]				

□ Note: See Page # 12 in this section for Hose Configurations
 ⊕ Dust Plugs are not used in the QT Box Hammer version

() Bracketed quantities indicate items included with the prior assembly.
 [/SA] Items marked Option /SA are included in the Cylinder Group Seal Kit KF19-92021
 [/SB] Items marked Option /SB are included in the Front-Backhead Group Seal Kit KF19-92032
 [/SC] Items marked Option /SC are included in the Valve-Accumulator Group Seal Kit KF19-92023

CONTROL VALVE DETAIL F19Qt HYDRARAM



The Relief Valve, Item 031, is shown in detail for informational purposes, only. It is NOT normally a serviceable item. Contact FURUKAWA engineering prior to disassembling this valve.

CONTROL VALVE DETAIL **F19Qt HYDRARAM**

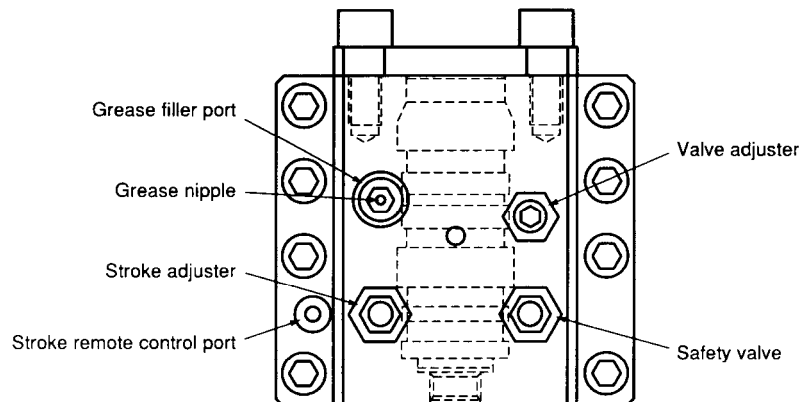
<i>ITEM</i>	<i>PART NUMBER</i>	<i>QTY</i>	<i>DESCRIPTION</i>	<i>ITEM</i>	<i>PART NUMBER</i>	<i>QTY</i>	<i>DESCRIPTION</i>
001	KF19-13101	1	Valve	026	KF22-13122	1	Stroke Adjuster
002	KHB15G-13302	1	Valve Plug	027	K160011-00009	1	O-Ring [/SC]
003	KF19-13203	1	Valve Housing	028	KF22-13123	1	Stroke Plug
004	KF19-13104	1	Housing Cover	029	KF22-13124	1	Spring
005	K161025-00055	1	O-Ring [/SC]	030	K120133-16000	1	Nut
006	K262032-00055	1	Backup Ring [/SC]	031	KF22-13330	1	Safety Relief Valve
007	K084891-06000	2	GPF Plug	101	-	(1)	Stopper
008	K160011-00024	3	O-Ring [/SC]	102	K161011-10010	(1)	O-Ring [/SD]
009	K084891-02000	6	GPF Plug	103	-	(1)	Spool
010	K262021-00009	1	Backup Ring [/SC]	104	KF22-13332	(2)	Glide Ring [/SD]
011	K160011-00011	6	O-Ring [/SC]	105	-	(1)	Sleeve
012	K084891-01000	5	GPF Plug	106	-	(1)	Spring
013	K160011-00008	5	O-Ring [/SC]	107	-	(1)	Retainer [/SE]
014	K102033-18040	4	Fine Thread Bolt	108	K161011-00012	(1)	O-Ring [/SD] [/SE]
015	K102032-20050	6	Socket Bolt	109	-	(1)	Valve Needle [/SE]
016	K001100-20123	1	Grease Nipple	110	-	(1)	Valve Guide
017	KHB20G-13208	1	Face Seal [/SC]	111	-	(1)	Spring [/SE]
018	KHB15G-13110	1	Valve Adjuster	112	K161011-00008	(1)	O-Ring [/SD]
019	K120133-20000	1	Fine Thread Nut	113	-	(1)	Push Rod
020	K160011-00012	1	O-Ring [/SC]	114	K161011-00024	(1)	O-Ring [/SD]
021	K262021-00012	1	Backup Ring [/SC]	115	-	(1)	Retainer
022	KF22-13320	1	Stroke Valve	032	K160011-00018	3	O-Ring [/SC]
023	KF22-13121	1	Stroke Bushing	033	K161025-00035	3	O-Ring [/SC]
024	KF22-13521	1	O-Ring [/SC]	034	K161025-00040	1	O-Ring [/SC]
025	KF22-13522	1	O-Ring [/SC]				

() Bracketed quantities indicate items included with the prior assembly.

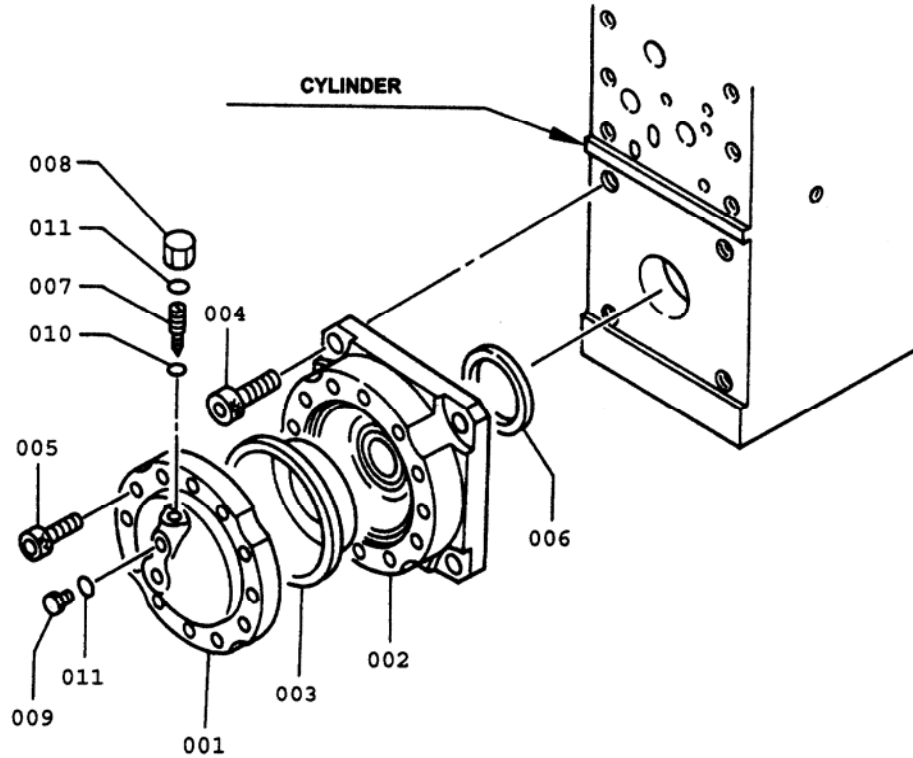
[/SC] Items marked Option /SC are included in the Valve-Accumulator Group Seal Kit KF19-92023

[/SD] Items marked Option /SD are included in the KF22-92025 Safety Valve Seal Kit

[/SE] Items marked Option /SE are included in the KF22-13331 Needle Valve Kit



KF19-70001
ACCUMULATOR ASSEMBLY
F19Qt HYDRARAM



<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
001	KF19-70101	1	Accumulator Cover	007	K007120-70134	1	Valve
002	KF19-70102	1	Accumulator Body	008	K007010-70029	1	Cap
003	KHB15G-70104	1	Diaphragm	009	K007010-70030	1	Plug
004	K102032-24060	4	Socket Bolt	010	K160011-00005	1	O-Ring [/SC]
005	K102033-16040	12	Socket Bolt	011	K160011-00014	2	O-Ring [/SC]
006	KHB20G-70219	1	Face Seal [/SC]				

[/SC] Items marked Option /SC are included in the Accumulator Group Seal Kit KF19-92023

Notes

KF19-92021 SEAL KIT **CYLINDER GROUP (A)**

Line items refer to the drawing in section VI on page 2

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
002	KHB15G-10307	1	U-Packing	010	K262031-00145	1	Backup Ring
003	KF19-10108	1	Buffer Ring	011	KF19-10120	1	Plug
004	KHB15G-10310	1	Dust Seal	012	KHB15G-10121	2	Bushing
006	KHB15G-10212	2	Slide Packing	013	K160011-00026	3	O-Ring
007	KHB15G-10213	[2]	O-Ring	016	K160011-00011	2	O-Ring
008	KF19-10214	1	Seal Ring	038	K160021-00175	1	O-Ring
009	KF19-10116	2	D Ring	051	KF19-10216	1	Delta Ring

KF19-92032 SEAL KIT **FRONTHEAD & BACKHEAD GROUP (B)**

Line items refer to the drawing in section VI on page 2

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
023	K001300-20112	1	Rubber Plug	034	K160011-00018	1	O-Ring
024	KF12-20208	2	Rubber Plug	036	K160011-00006	1	O-Ring
025	K160011-00024	1	O-Ring	037	K160011-00026	2	O-Ring
027	K001400-20108	2	Rubber Plug	040	K160011-00038	2	O-Ring
028	K264020-00026	2	Snap Ring	042	K160011-00029	2	O-Ring
029	KF19-20112	4	Dust Plug	044	K160011-00024	2	O-Ring
030	KF12-20121	1	Check Valve				

KF19-92023 SEAL KIT **VALVE & ACCUMULATOR GROUP (C)**

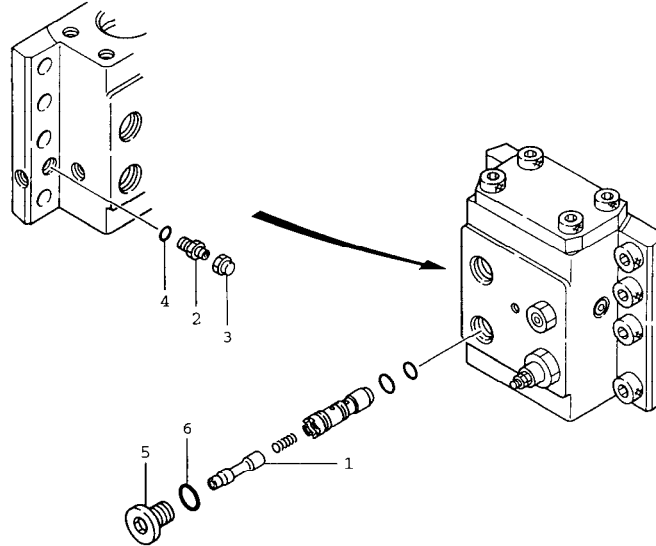
Line items refer to the drawing in section VI on page 4

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
005	K161025-00055	1	O-Ring	021	K262021-00012	1	Backup Ring
006	K262032-00055	1	Backup Ring	024	KF22-13521	1	O-Ring
008	K160011-00024	2	O-Ring	025	KF22-13522	1	O-Ring
010	K262021-00009	1	Backup Ring	027	K160011-00009	1	O-Ring
011	K160011-00011	6	O-Ring	032	K160011-00018	3	O-Ring
013	K160011-00008	5	O-Ring	033	K161025-00035	3	O-Ring
017	KHB20G-13208	1	Face Seal	034	K161025-00040	1	O-Ring
020	K160011-00012	1	O-Ring				

Line items refer to the drawing in section VI on page 6

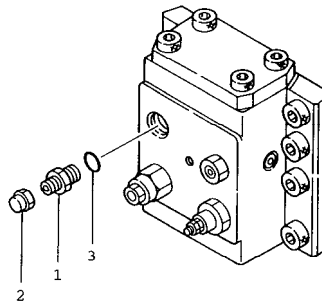
006	KHB20G-70219	1	Face Seal	011	K160011-00014	2	O-Ring
010	K160011-00005	1	O-Ring				

KF22-13011 REMOTE STROKE CONTROL OPTION KIT



<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	KF22-13220	1	Stroke Valve	4	K160011-00011	1	O-Ring
2	K084861-02000	1	Male Connector	5	K084891-06000	1	GPF Plug
3	K084891-02000	1	Union Cap	6	K160011-00024	1	O-Ring

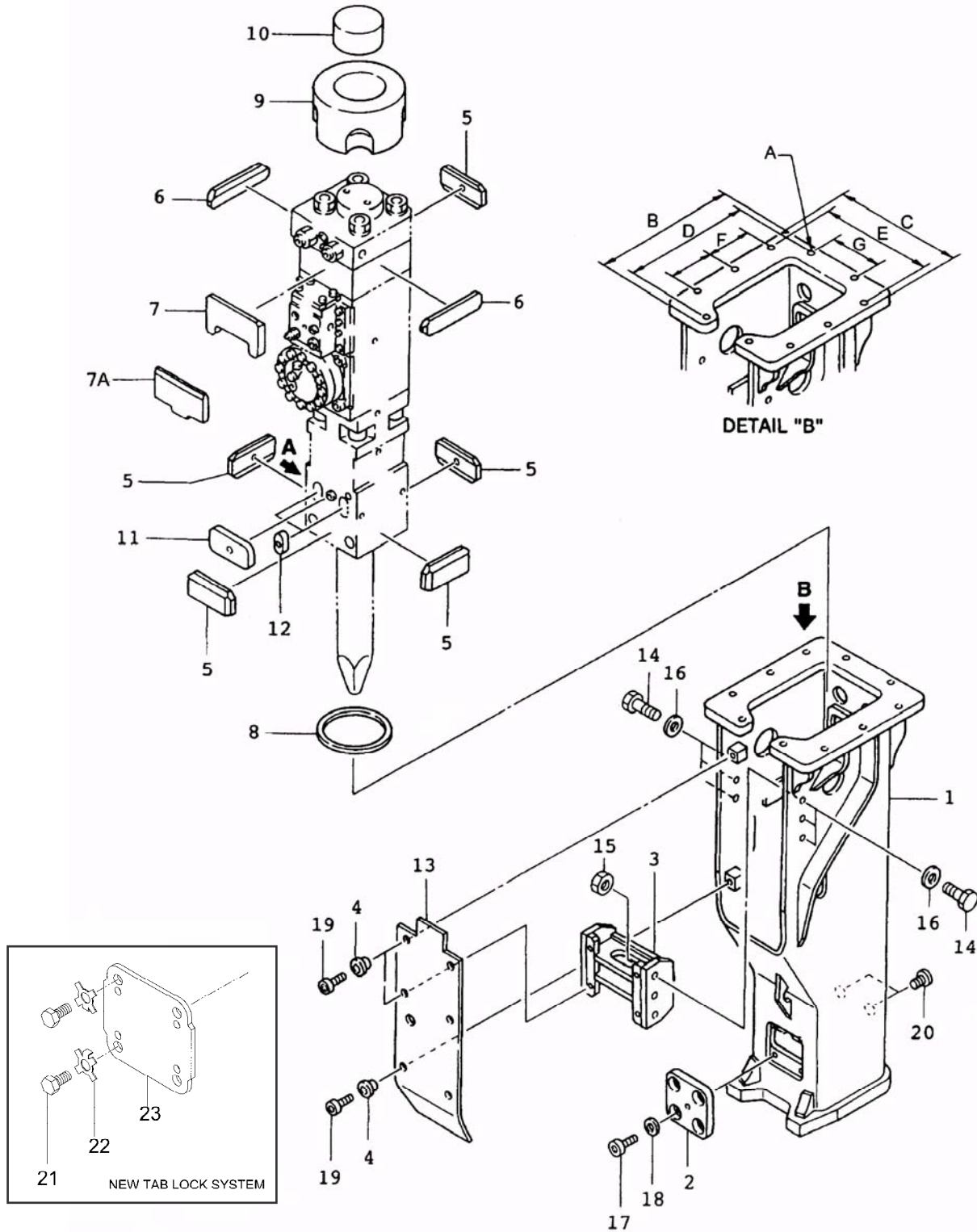
KF22-13013 REMOTE LUBRICATION (AUTO-LUBE) OPTION KIT



<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	K15525	1	Male Connector	3	(Included w/ #1)	1	O-Ring
2	K15034	1	Union Cap	Use:	K19601	1	Lubricator System

⇒ Contact KENT's Product Support Department for additional information and specific recommendations.

T-BOX MOUNTING F19Qt HYDRARAM



T-BOX MOUNTING PARTS **F19Qt HYDRARAM**

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	KF19-88301	1	T-Box Weldment	13	KF19-88329	1	Soundproof Cover
2	KF19-88112	1	Pin Cover *	14	K101032-30070	4	Hex Head Bolt
3	KF19-88213	1	Spacer	15	K120132-30000	4	Hex Nut
4	KF19-88114	6	Collar	16	K140112-30000	4	Washer
5	KF19-88121	5	Front Damper	17	K102032-16025	4	Socket Bolt *
6	KF19-88323	2	Back Damper (A)	18	K140112-16000	4	Washer *
7	KF19-88224	1	Back Damper (B)	19	K102032-16025	6	Socket Bolt
7A	KF19-88224A	1	Back Damper (B)				
8	KF19-88225	1	Dust Ring	20	K084891-04000	2	GPF Plug
9	KF19-88326	1	Top Damper	21	KF19045	4	Cap Screw, M16 *
10	KF19-88327	1	Top Stoper	22	KF19044	4	Tab Lock Washer *
11	KF19-88128	1	Pin Damper	23	KF19043	1	Pin Cover *
12	KHB15G-88229	2	Pin Plug	**	KF1988232	1	Top Spacer

* Use either items 2, 17, and 18, or items 21, 22, and 23.

The tab washer system replaces the socket bolt version.

** Items Not Shown

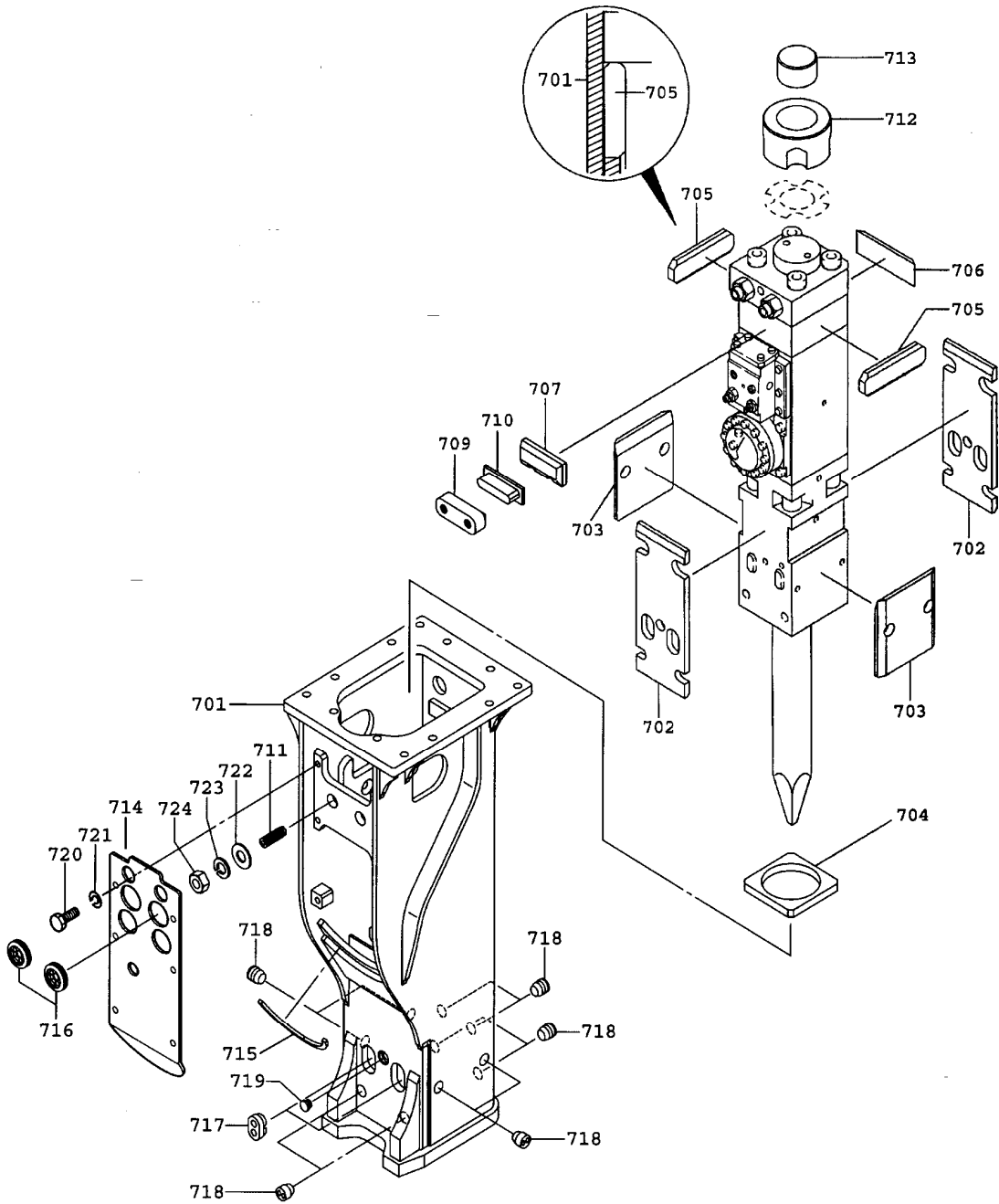
NOTE:

The Stop Pin, Dust Plugs, and Rubber Plug indicated at Detail A on the T-Box Parts Breakdown are NOT used when the hammer is mounted in the T-Box Case. Remove the stop pin, rubber plug, and dust plugs from fronthead of hammer before assembling T-Box Case.

	<u>Inch</u>	<u>Milimeter</u>	
A	1.023	26	Bolt Hole Diameter
B	22.834	580	Flange, Long Side
C	19.685	500	Flange, Short Side
D	20.472	520	Center to Center
E	17.716	450	Center to Center
F	10.236	260	Center to Center
G	7.874	200	Center to Center

⇒ Furukawa Rock Drill USA offers a variety of top caps that match the original equipment for many excavator makes and models and work with many coupler systems. Please contact Furukawa Rock Drill USA's Product Support Department for additional information.

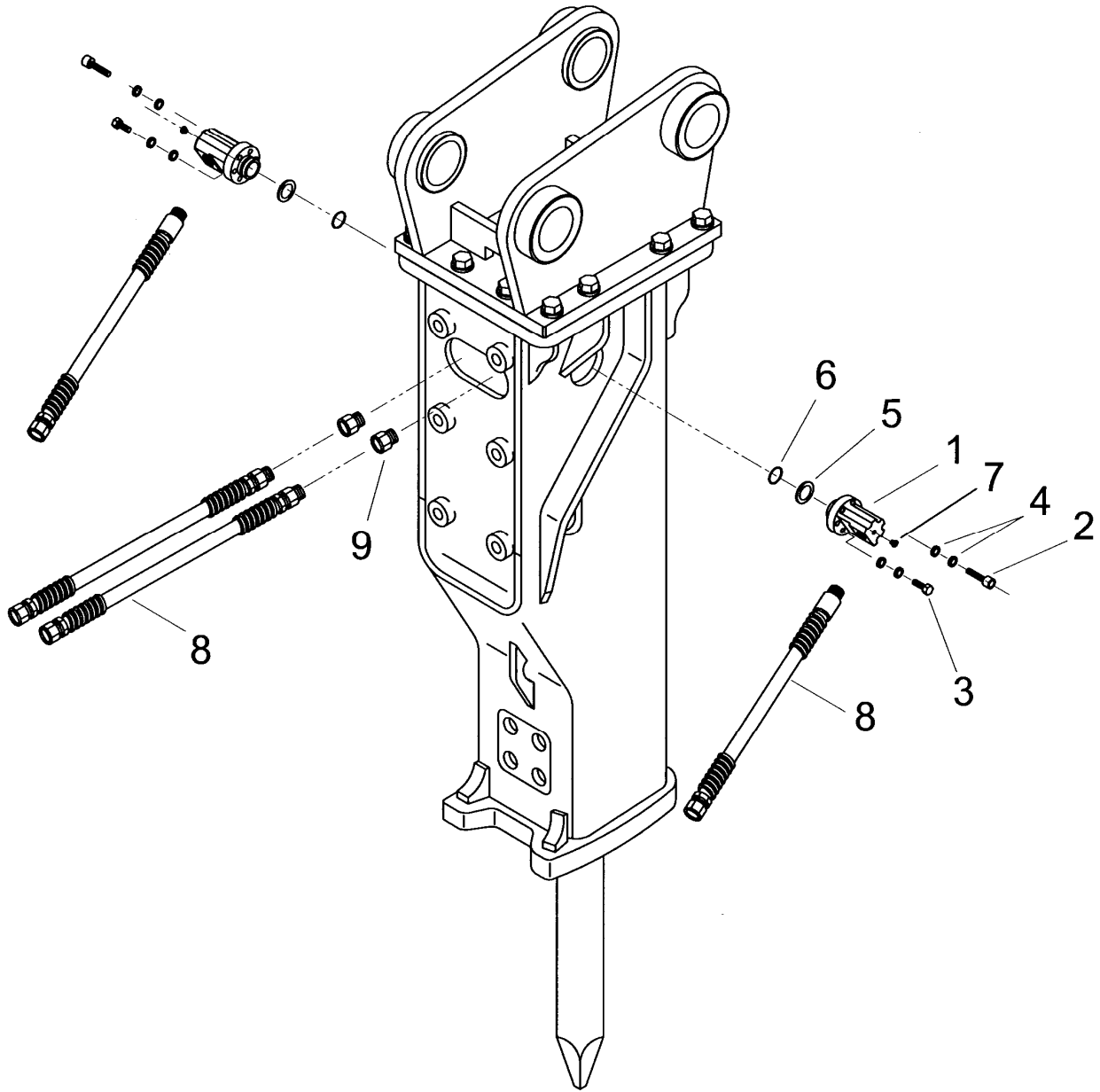
NT-BOX MOUNTING
F19Qt HYDRARAM
 S/N 3557~



NT-BOX MOUNTING PARTS **F19Qt HYDRARAM**

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
701	KF19-88501	1	T-Box Weldment	714	KF19-88502	1	Soundproof Cover
702	KF19-83202	2	Front Damper	715	KF19-88504	1	Cushion
703	KF19-83203	2	Side Damper	716	KF22-88505	2	Grommet
704	KF19-83204	1	Dust Protector	717	KF19-83218	2	Pin Plug
705	KF19-83205	2	Back Damper (A)	718	KF22-83222	10	Dust Plug
706	KF19-83206	1	Back Damper (B)	719	KF22-83220	1	Grease Cap
707	KF19-83207	1	Back Damper (C)	720	K10103216040	6	Bolt
709	KF19-83209	1	Spacer (A)	721	K14501216000	6	Spring Washer
710	KF19-83210	1	Spacer (B)	722	K14011236000	2	Washer
711	KF19-83211	2	Damper Adjuster	723	K14501236000	2	Spring Washer
712	KF19-83212	1	Top Damper	724	K12213336000	2	Nut
713	KF19-83213	1	Top Stopper				

HOSE CONFIGURATIONS F19Qt HYDRARAM



HOSE CONFIGURATIONS

F19Qt HYDRARAM

The F19Qt Hammer can be equipped with either FRONT or SIDE mounted hose whips. Hammers will be shipped with FRONT hoses unless SIDE hoses are specified.

SIDE MOUNTED HOSES

(2) KBM12381A Hose Assemblies consist of the following:

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	K19880-D	2	Port Adapter
2	K19886	8	12mm Socket Head Bolt
3	K19884	4	12mm Hex Head Bolt
4	K19840	12	Locking Washers (Interlocking Set of 2)
5	K10948	2	Backup Ring
6	K10940	2	O-Ring
7	K19296	2	#4 Hollow Hex Plug
8	K12381	2	Hose Whip

⇒ The following parts are used when the SIDE mounted hoses are installed:

--	KF22-30111	2	Front Port Adapter (<i>Not Shown</i>)
--	K160011-00038	2	O-Ring for Port Adapter (<i>Not Shown</i>)
--	K084891-10000	2	Plug for Front Hose Ports (<i>Not Shown</i>)
--	K160011-00029	2	O-Ring for Adapter Plug (<i>Not Shown</i>)

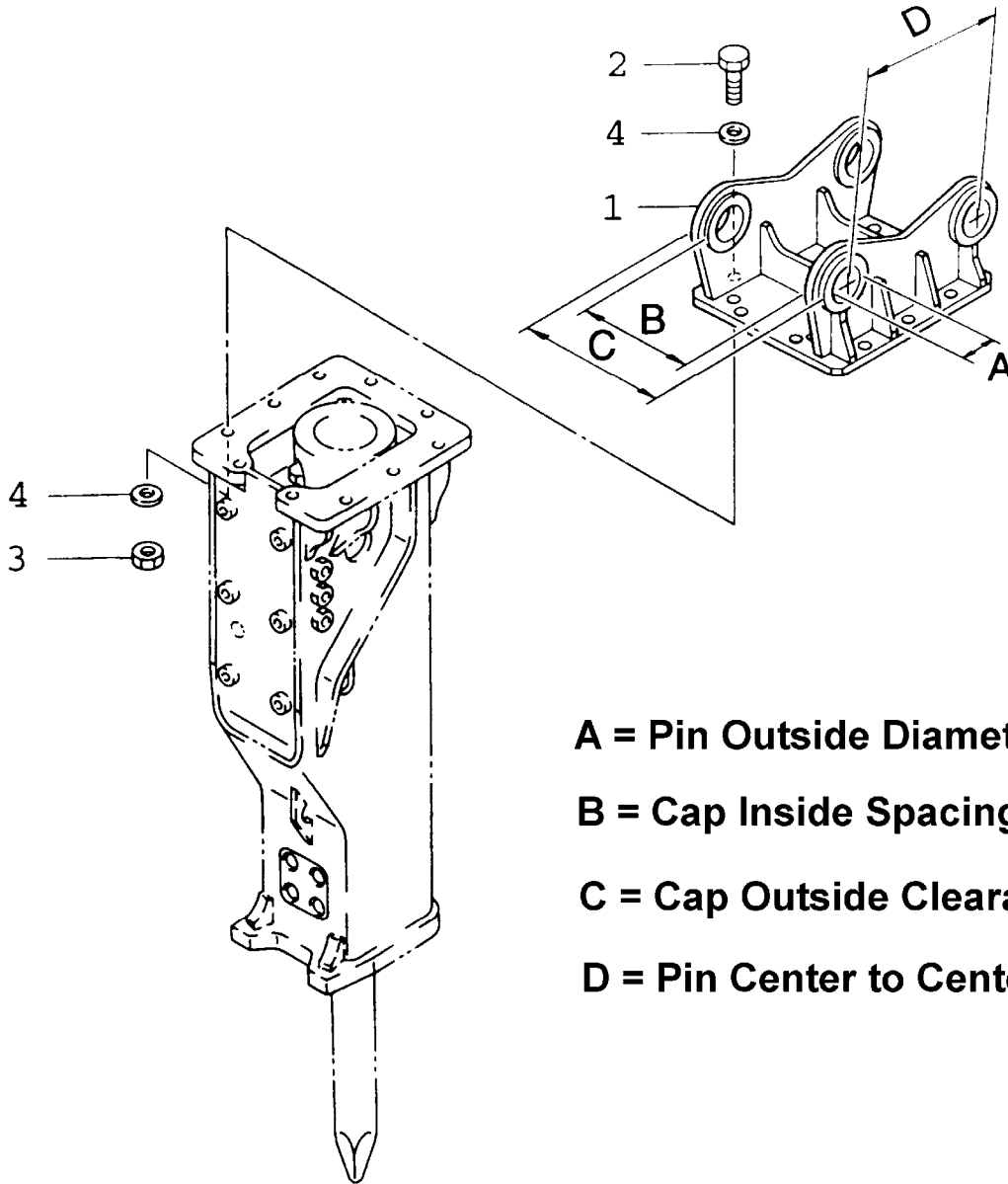
FRONT MOUNTED HOSES:

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
8	K12381	2	Hose Whip
9	KF19007	2	Front Port Adapter with O-Ring

⇒ The following parts are used when the FRONT mounted hoses are installed:

--	K084891-06000	2	Plug for Side Hose Ports (<i>Not Shown</i>)
--	K160011-00024	2	O-Ring for Side Hose Ports (<i>Not Shown</i>)

UNIVERSAL TOP CAP
F19Qt HYDRARAM



- A = Pin Outside Diameter**
- B = Cap Inside Spacing**
- C = Cap Outside Clearance**
- D = Pin Center to Center**

<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	KF19050	1	Universal Cap	4	KF19016	24	Hardened Washer
2	KF22023	12	Cap Screw	*	K12381	2	Whip Hose
3	KF19015	12	Heavy Hex Nut				* Not Shown

⇒ Furukawa Rock Drill USA offers a variety of top caps that match the original equipment for many excavator makes and models and work with many coupler systems. Please contact Furukawa Rock Drill USA's Product Support Department for additional information.

MOUNTING PIN KIT
FOR UNIVERSAL TOP CAP
KF19050
F19QT HYDRARAM

Base Machine Make: _____
 Base Machine Model: _____
 Dipperstick Pin Diameter: _____
 Link Pin Diameter: _____
 Dipperstick Width: _____
 Link Pin Width: _____

MOUNTING KIT PART NO: _____

Consisting of the following:

<u>ITEM</u>	<u>P/N</u>	<u>QTY.</u>	<u>DESCRIPTION</u>
1	_____	1	_____ DIA. MOUNTING PIN x 24" LONG
2	_____	1	_____ DIA. MOUNTING PIN x 24" LONG
3	<u>K12125</u>	2	_____ DIA. MOUNTING BUSHING X _____ LG.
4	<u>K12125</u>	2	_____ DIA. MOUNTING BUSHING X _____ LG.
5	<u>K10193</u>	2	3/4" -10 UNC BOLT
6	<u>K10195</u>	2	3/4" -10 UNC LOCKNUT

SERVICE TOOL KIT

P/N KBM1990001

Furukawa Rock Drill USA includes a tool box with every new hydraulic breaker. This tool box contains many of the special tools and wrenches required to perform normal maintenance or repairs on the breaker. This is a basic tool box, and by no means complete or comprehensive, but does contain many specialized tools, and wrench sizes not commonly found in the field. The following illustration depicts a typical tool box and its contents:

