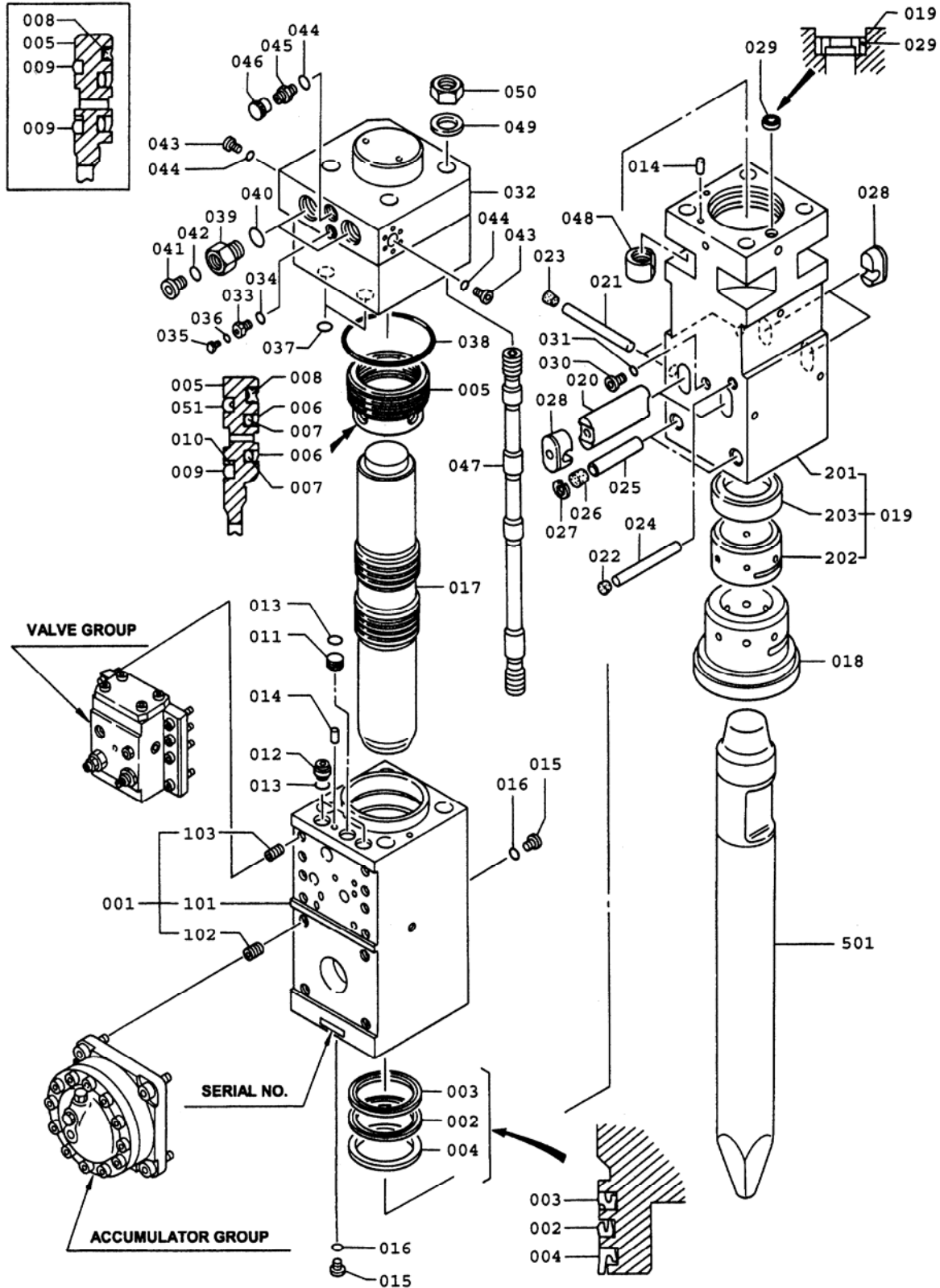


SECTION VI

PARTS LIST

S/N 3601 ~

F35Qt HYDRARAM PARTS BREAKDOWN



F35Qt 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	KF35-10101	1	Cylinder	028	KHB30G-20212	-	Dust Plug [/SB] ⊕
102	KHB40G-10104	(4)	Heli-Sert Insert	029	KF22-20121	1	Check Valve [/SB]
103	KHB20G-10105	(8)	Heli-Sert Insert	030	K084891-06000	1	GPF Plug
002	KHB30G-10207	1	U-Packing [/SA]	031	K160011-00024	1	O-Ring [/SB]
003	KF35-10108	1	Buffer Ring [/SA]	032	KF35-30201	1	Backhead
004	KHB30G-10210	1	Dust Seal [/SA]	033	KHB15G-30103	1	Charging Valve
005	KF35-10111	1	Seal Retainer	034	K160011-00018	1	O-Ring [/SB]
006	KHB30G-10212	2	Slide Packing [/SA]	035	KHB20G-30109	1	Plug
007	KHB30G-10213	(2)	O-Ring [/SA]	036	K160011-00006	1	O-Ring [/SB]
008	KF35-10214	1	Seal Ring [/SA]	037	K160011-00032	2	O-Ring [/SB]
009	KF35-10116	1	D Ring [/SA]	038	K160021-00215	1	O-Ring [/SB]
010	K262032-00180	1	Backup Ring [/SA]		For FRONT Mounted Hoses use:		
011	KHB30G-10120	1	Plug [/SA]	039	KF19007	2	Port Adapter □
012	KHB30G-10121	2	Bushing [/SA]	040	(Included)	(2)	O-Ring □
013	K160011-00032	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	KF35-11101	1	Piston	040	K160011-00038	2	O-Ring [/SB] □
018	KF35-20101	1	Front Cover	041	K084891-10000	2	GPF Plug □
018	KF35-20501	1	Front Cover (NTBox)	042	K160011-00029	2	O-Ring [/SB] □
019	KF35-20202	1	Fronthead	045	K084869-06000	1	Filter Connection
201	KF35-20103	(1)	Fronthead, Bare	046	KF22-30113	1	Air Inlet Cap
202	KF35-20904	(1)	Thrust Bushing	047	KF35-36101	4	Through Bolt
203	KF35-20105	(1)	Thrust Ring	048	KHB40G-36202	4	Lower Nut
020	KHB30G-20206	2	Rod Pin (Retainer)	049	KHB40G-36207	4	Washer
021	KF35-20207	3	Stop Pin, F35R	050	KHB40G-36206	4	Hexagon Nut
022	KHB50G-20109	1	Rubber Plug [/SB]	051	KF35-10216	1	Delta Ring [/SA]
023	KF22-20208	2	Rubber Plug [/SB]	501	KF35-25221	-	Blunt Tip
024	USE ITEM #021		Stop Pin	501	KF35-25225	-	Moil Point
025	KF35-20110	2	Fronthead Pin	501	KF35-25224	-	Chisel Bit
026	K001300-20107	2	Rubber Plug [/SB]	-	KF35-90001	1	Service Tool Kit
027	K264020-00030	2	Snap Ring [/SB]				

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

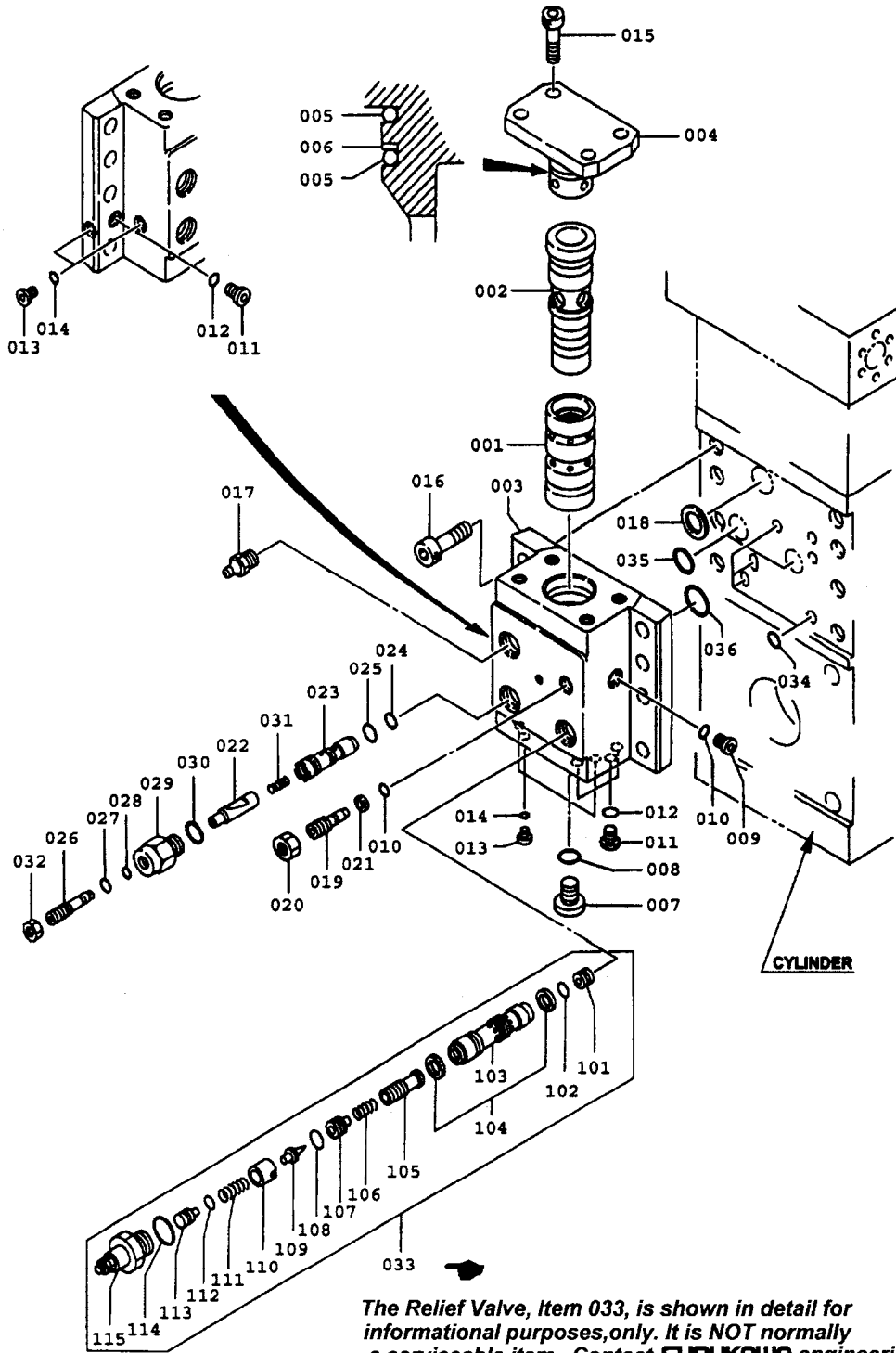
() Bracketed quantities indicate items included with the prior assembly.

[/SA] Items marked Option /SA are included in the Cylinder Group Seal Kit KF35-92021

[/SB] Items marked Option /SB are included in the Front-Backhead Group Seal Kit KF35-92032

[/SC] Items marked Option /SC are included in the Valve-Accumulator Group Seal Kit KF35-92023

CONTROL VALVE DETAIL F35Qt HYDRARAM



CONTROL VALVE DETAIL **F35Qt HYDRARAM**

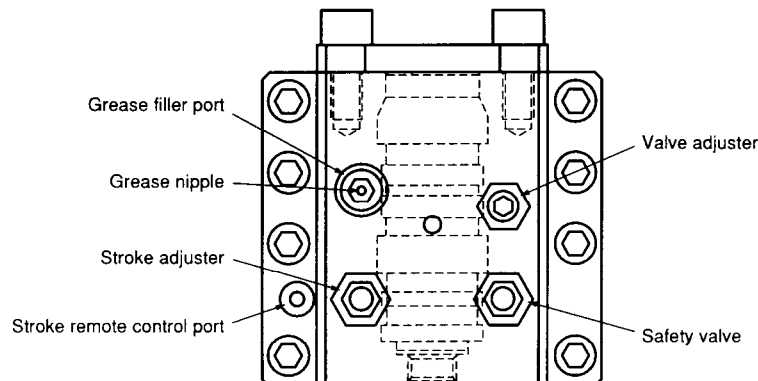
<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
001	KF35-13201	1	Valve	027	K262021-00009	1	Backup Ring [/SC]
002	KF35-13102	1	Valve Plug	028	K160011-00009	1	O-Ring [/SC]
003	KF35-13203	1	Valve Housing	029	KF22-13123	1	Stroke Plug
004	KF35-13104	1	Housing Cover	030	K160011-00024	1	O-Ring [/SC]
005	K161025-00065	2	O-Ring [/SC]	031	KF22-13124	1	Spring
006	K262032-00065	1	Backup Ring [/SC]	032	K120133-16000	1	Nut
007	K084891-10000	1	GPF Plug	033	KF22-13330	1	Safety Valve
008	K160011-00029	1	O-Ring [/SC]	101	-	(1)	Stopper
009	K084891-03000	1	GPF Plug	102	K161011-10010	(1)	O-Ring [/SD]
010	K160011-00014	2	O-Ring [/SC]	103	-	(1)	Spool
011	K084891-02000	4	GPF Plug	104	KF22-13332	(2)	Glide Ring [/SD]
012	K160011-00011	4	O-Ring [/SC]	105	-	(1)	Sleeve
013	K084891-01000	5	GPF Plug	106	-	(1)	Spring
014	K160011-00008	5	O-Ring [/SC]	107	-	(1)	Retainer [/SE]
015	K102033-20050	4	Fine Thread Bolt	108	K161011-00012	(1)	O-Ring [/SD] [/SE]
016	K102032-20055	8	Socket Bolt	109	-	(1)	Needle Valve [/SE]
017	K001100-20123	1	Grease Nipple	110	-	(1)	Valve Guide
018	KHB30G-13208	1	Face Seal [/SC]	111	-	(1)	Spring [/SE]
019	KHB30G-13110	1	Valve Adjuster	112	K161011-00008	(1)	O-Ring [/SD]
020	K120133-22000	1	Fine Thread Nut	113	-	(1)	Push Rod
021	K262021-00014	1	Backup Ring [/SC]	114	K161011-00024	(1)	O-Ring [/SD]
022	KF35-13320	1	Stroke Valve	115	-	(1)	Retainer
023	KF22-13121	1	Stroke Bushing	034	K161025-00025	4	O-Ring [/SC]
024	KF22-13521	1	O-Ring [/SC]	035	K161025-00045	2	O-Ring [/SC]
025	KF22-13522	1	O-Ring [/SC]	036	K161025-00050	1	O-Ring [/SC]
026	KF22-13122	1	Stroke Adjuster				

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

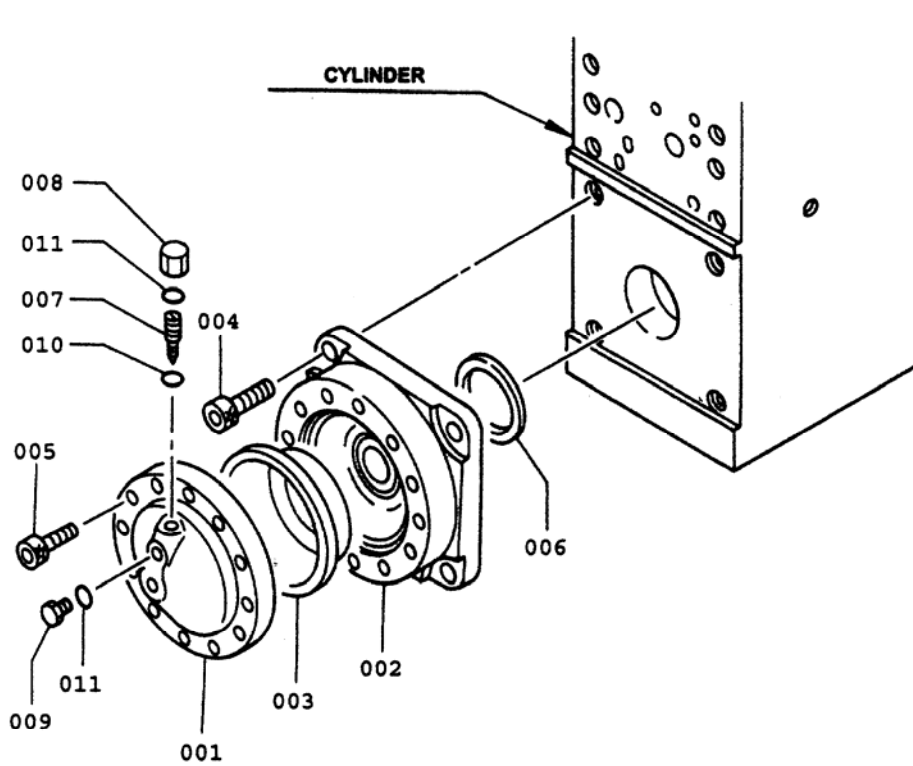
[/SC] Items marked Option /SC are included in the Valve-Accumulator Group Seal Kit KF35-92023

[/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



KF35-70001
ACCUMULATOR ASSEMBLY
F35Qt 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	KF35-70101	1	Accumulator Cover	007	K007120-70134	1	Valve
002	KF35-70102	1	Accumulator Body	008	K007010-70029	1	Cap
003	KHB20G-70113	1	Diaphragm	009	K007010-70030	1	Plug
004	KHB50G-70115	4	Socket Bolt	010	K160011-00005	1	O-Ring [/SC]
005	K102033-20050	12	Socket Bolt	011	K160011-00014	2	O-Ring [/SC]
006	KHB40G-70219	1	Face Seal [/SC]				

[/SC] Items marked Option /SC are included in the Accumulator Group Seal Kit KF35-92023

Notes

KF35-92021 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	KHB30G-10207	1	U-Packing	010	K262032-00180	1	Backup Ring
003	KF35-10108	1	Buffer Ring	011	KHB30G-10120	1	Plug
004	KHB30G-10210	1	Dust Seal	012	KHB30G-10121	2	Bushing
006	KHB30G-10212	2	Slide Packing	013	K160011-00032	3	O-Ring
007	KHB30G-10213	[2]	O-Ring	016	K160011-00011	2	O-Ring
008	KF35-10214	1	Seal Ring	038	K160021-00215	1	O-Ring
009	KF35-10116	3	D Ring	051	KF35-10216	1	Delta Ring

KF35-92032 SEAL KIT FRONTHEAD & BACKHEAD GROUP (B)

Line items refer to 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>
022	KHB50G-20109	1	Rubber Plug	034	K160011-00018	1	O-Ring
023	KF22-20208	1	Rubber Plug	036	K160011-00006	1	O-Ring
026	K001300-20107	2	Rubber Plug	037	K160011-00032	2	O-Ring
027	K264020-00030	2	Snap Ring	040	K160011-00038	2	O-Ring
028	KHB30G-20212	4	Dust Plug	042	K160011-00029	2	O-Ring
029	KF22-20121	1	Check Valve	044	K160011-00024	3	O-Ring

KF35-92023 SEAL KIT VALVE & ACCUMULATOR GROUP (C)

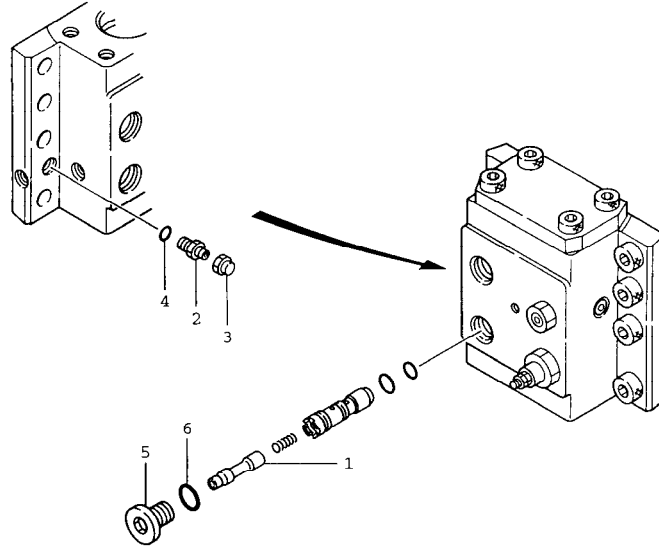
Line items refer to the drawing in section VI on page 4

<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	K161025-00065	2	O-Ring	024	KF22-13521	1	O-Ring
006	K262032-00065	1	Backup Ring	025	KF22-13522	1	O-Ring
008	K160011-00029	1	O-Ring	027	K262021-00009	1	Backup Ring
010	K160011-00014	2	O-Ring	028	K160011-00009	1	O-Ring
012	K160011-00011	4	O-Ring	030	K160011-00024	1	O-Ring
014	K160011-00008	6	O-Ring	034	K161025-00025	4	O-Ring
018	KHB30G-13208	1	Face Seal	035	K161025-00045	2	O-Ring
021	K262021-00014	1	Backup Ring	036	K161025-00050	1	O-Ring

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

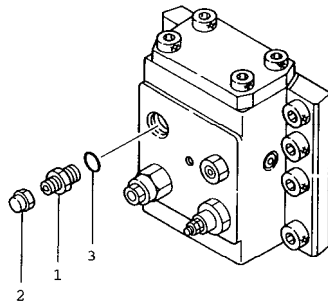
006	KHB40G-70219	1	Face Seal	011	K160011-00014	2	O-Ring
010	K160011-00005	1	O-Ring				

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

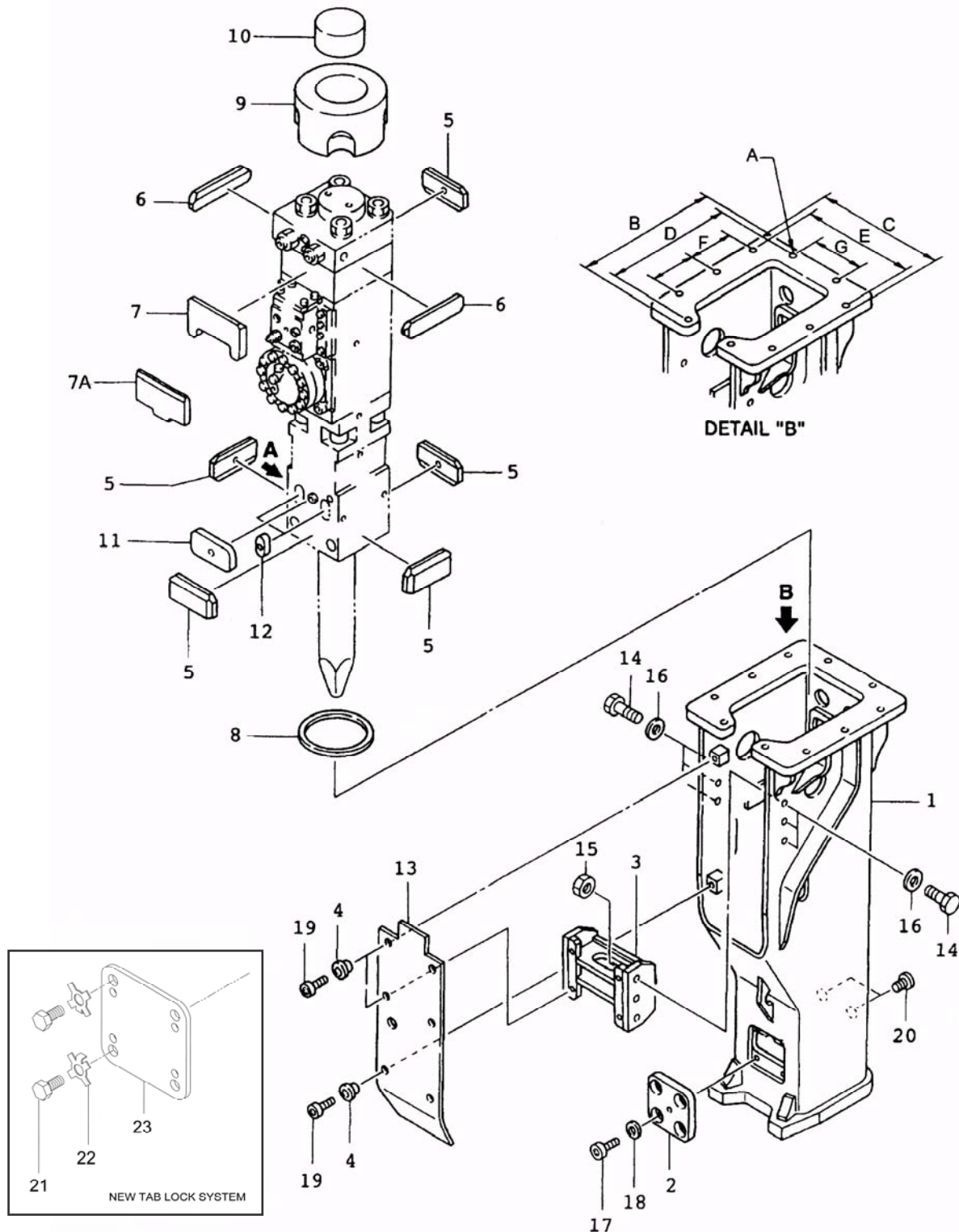
KF22-13013 REMOTE LUBRICATION (AUTO-LUBE) OPTION KIT



<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:	K19602	1	Lubricator System

⇒ Contact Furukawa Rock Drill USA's Product Support Department for additional information and specific recommendations.

T-BOX MOUNTING F35Qt HYDRARAM



T-BOX MOUNTING PARTS **F35Qt 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	KF35-88201	1	T-Box Weldment	13	KF35-88229	1	Soundproof Cover
2	KF35-88112	1	Pin Cover *	14	K101033-36090	6	Hex Head Bolt
3	KF35-88213	1	Spacer	15	K120133-36000	6	Hex Nut
4	KF35-88114	6	Collar	16	K140112-36000	6	Washer
5	KF35-88221	5	Front Damper	17	K102032-24040	4	Socket Bolt *
6	KF35-88323	2	Back Damper (A)	18	K140112-24000	4	Washer *
7	KF35-88224	1	Back Damper (B)	19	K102032-16025	6	Socket Bolt
7A	KF35-88224A	1	Back Damper (B)				
8	KF35-88125	1	Dust Ring	20	K084891-06000	2	GPF Plug
9	KF35-88226	1	Top Damper	21	K19876	4	Cap Screw, M24 *
10	KF35-88127	1	Top Stoper	22	KF45101	4	Tab Lock Washer *
11	KF35-88228	1	Pin Damper	23	KF35100	1	Pin Cover *
12	KHB30G-88229	2	Pin Plug	**	KF3588232	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

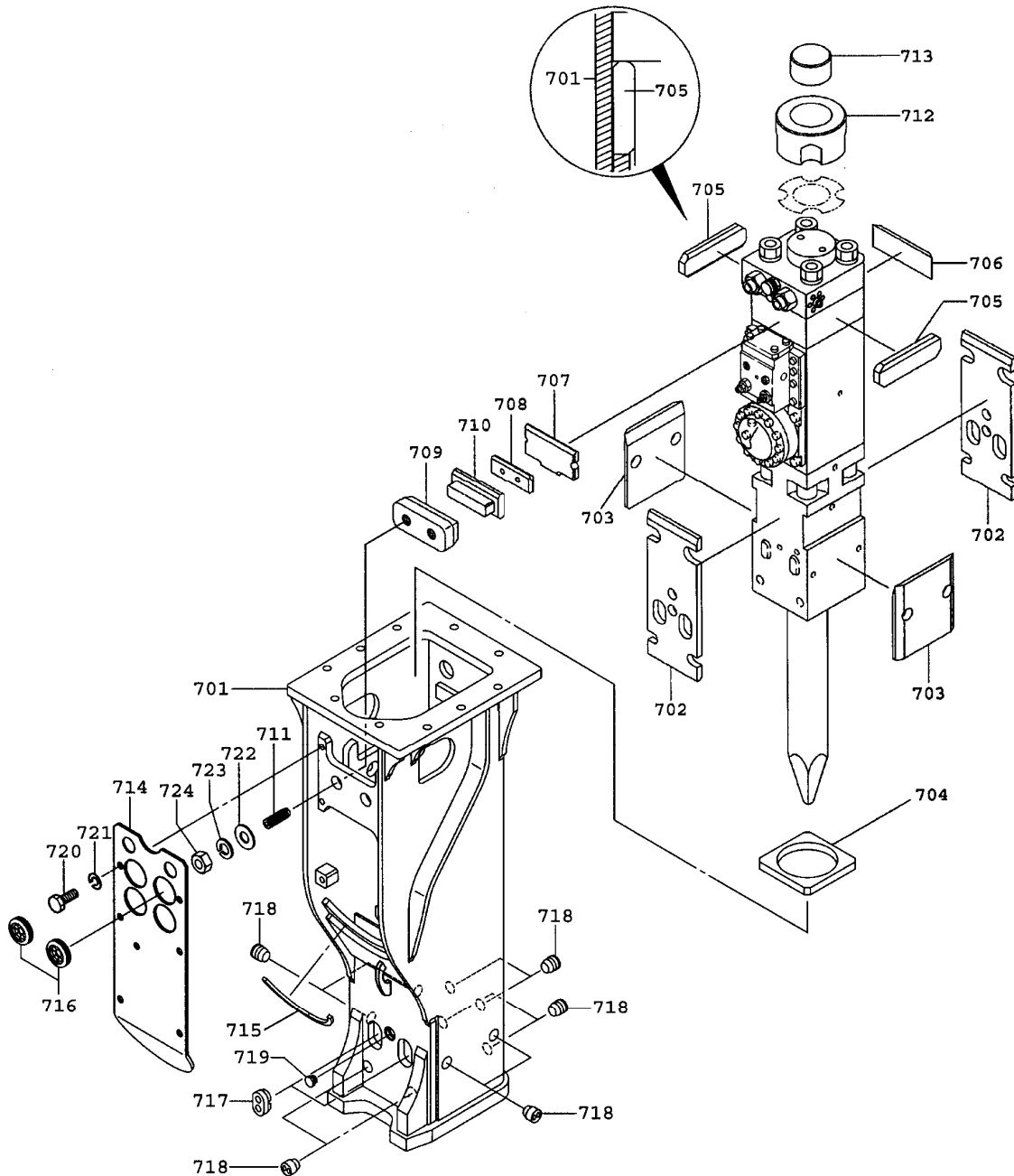
NOTE:

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	1.260	32	Bolt Hole Diameter
B	26.575	675	Flange, Long Side
C	23.622	600	Flange, Short Side
D	23.228	590	Center to Center
E	20.669	525	Center to Center
F	8.267	210	Center to Center
G	9.843	250	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
F35Qt HYDRARAM
S/N 3601~

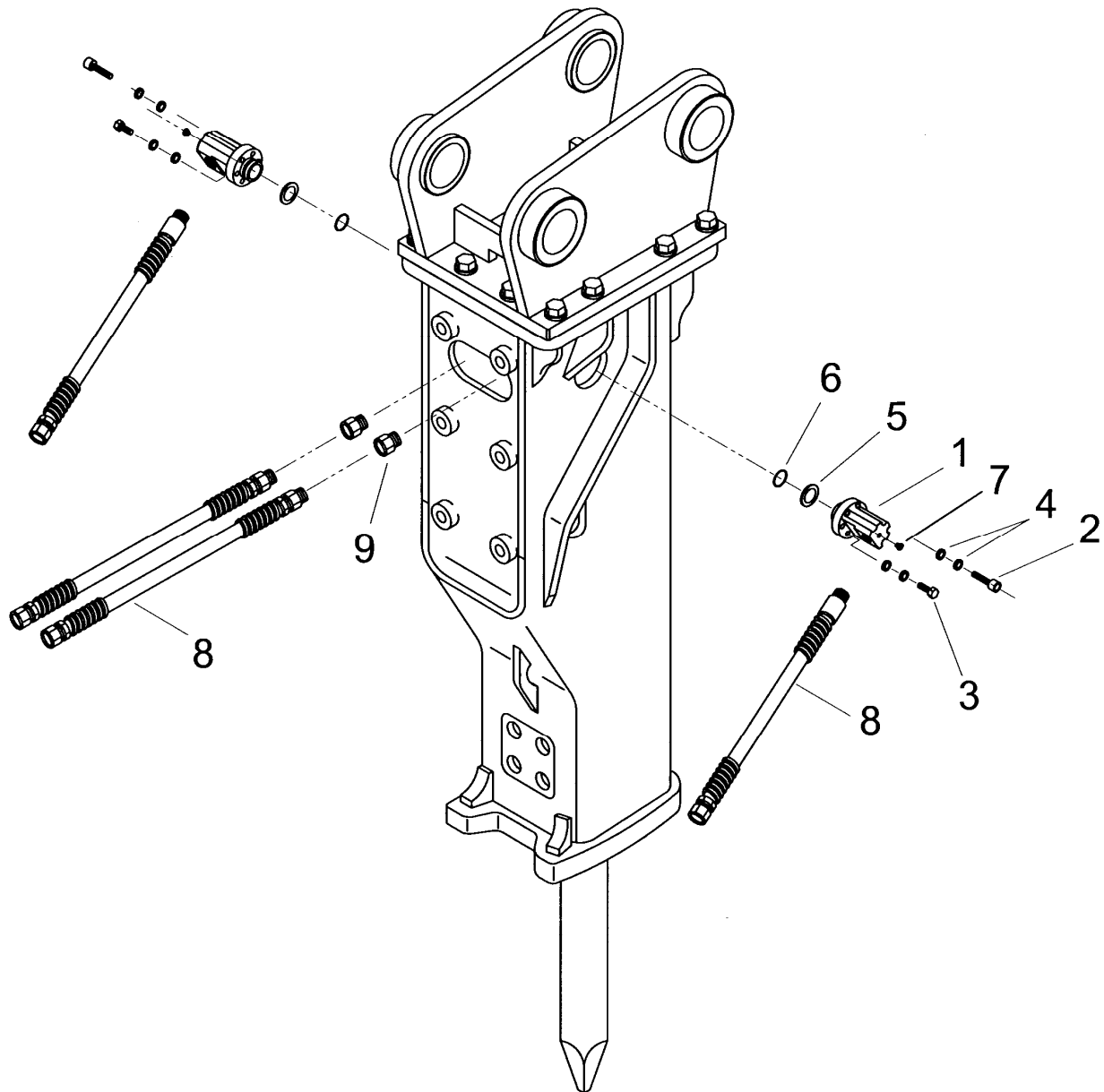


NT-BOX MOUNTING PARTS

F35Qt 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	KF35-88501	1	T-Box Weldment	713	KF35-83213	1	Top Stopper
702	KF35-83202	2	Front Damper	714	KF35-88502	1	Soundproof Cover
703	KF35-83203	2	Side Damper	715	KF35-88504	1	Cushion
704	KF35-83204	1	Dust Protector	716	KF22-88505	2	Grommet
705	KF35-83205	2	Damper (A)	717	KF35-83218	2	Pin Plug
706	KF35-83206	1	Damper (B)	718	KF35-83222	10	Dust Plug
707	KF35-83207	1	Damper (C)	719	KF22-83220	1	Grease Cap
708	KF35-83208	1	Back Spacer	720	K10103220045	6	Bolt
709	KF35-83209	1	Spacer (A)	721	K14501220000	6	Spring Washer
710	KF35-83210	1	Spacer (B)	722	K14011248000	2	Washer (H)
711	KF35-83211	2	Damper Adjuster	723	K14501248000	2	Spring Washer
712	KF35-83212	1	Top Damper	724	K12213348000	2	Nut

HOSE CONFIGURATIONS
F35Qt HYDRARAM



HOSE CONFIGURATIONS

F35Qt HYDRARAM

The F35Qt 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>)

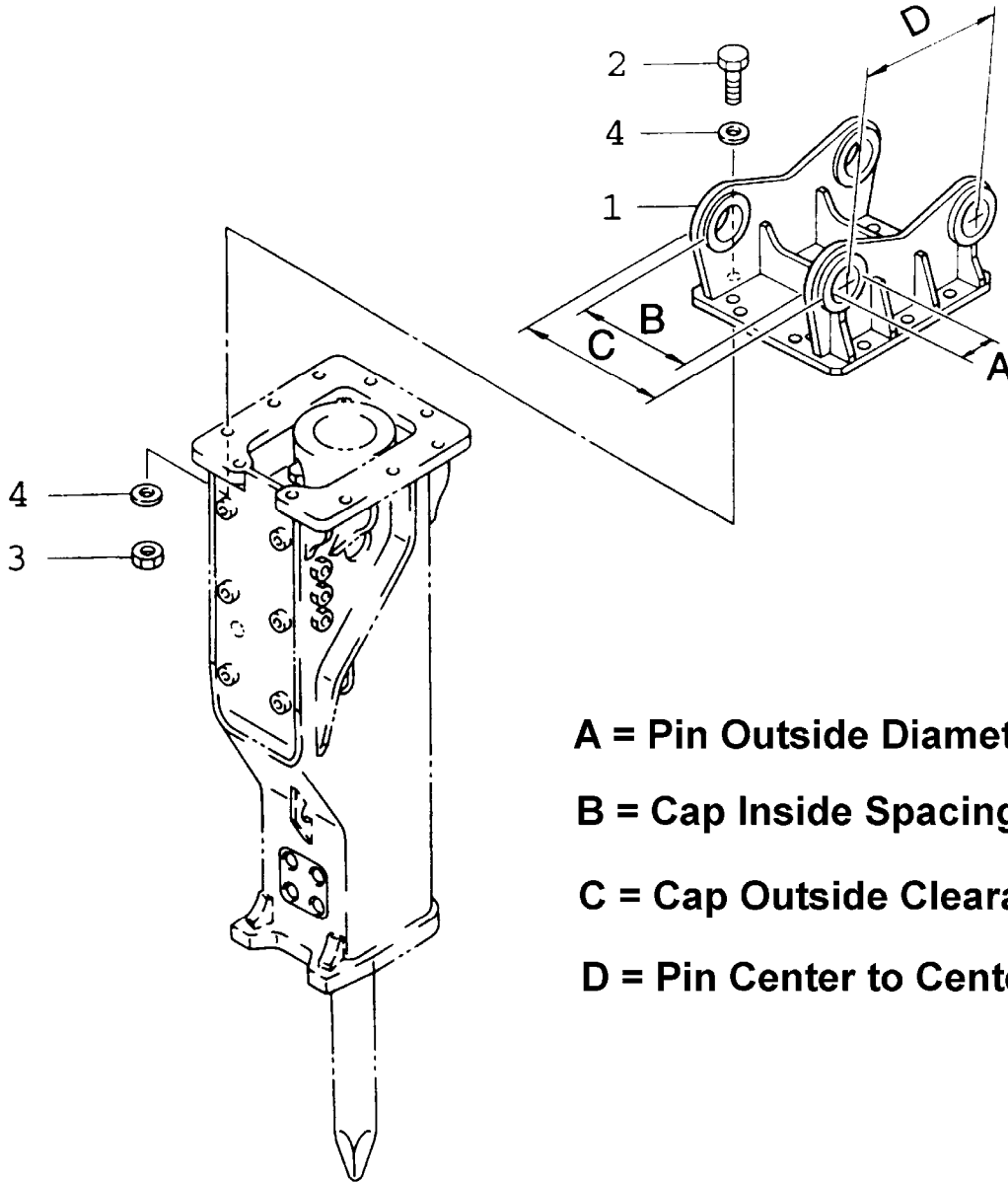
FRONT MOUNTED HOSES:

<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
F35Qt 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	KF35050	1	Universal Cap	4	KF35013	20	Hardened Washer
2	KF35011	10	Cap Screw	*	K12381	2	Whip Hose
3	KF35012	10	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
KF35050
F35QT 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 26" LONG
2	_____	1	_____ DIA. MOUNTING PIN x 26" 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 KBM3590001

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:

