



LFTM 70HQ RECOMMENDED SPARES LIST

The following spare kits are recommended to help maximize your drilling up-time. Please contact your Boart Longyear sales representative for more information.



Drill Serial Number Range: LF70HQ-2011-001 thru current

For Drill Build: DRILL MODULE, LF70HQ (3543722 Rev: K)
 Document Number: 5400783 Rev. B
 Effective Date: 1-Jan-2011

KIT SUMMARY

Level	1	2	3	Description	QTY	For Base Drill / Option
1	102629			KIT, BASE FRAME SPARES	1	Basic Drill Assembly (3543723)
1	5401697			KIT, LF70 HYD MODULE SPARES	1	Basic Drill Assembly (3543723)
1	5404907			KIT, MAINLINE HOIST SPARES	1	Basic Drill Assembly (3543723)
1	3546938			SEAL KIT, MAINLINE HOIST	1	Basic Drill Assembly (3543723)
1	306206			SPARES KIT, BASIC WIRELINE HOIST	1	Basic Drill Assembly (3543723)
1	102624			KIT, LOWER MAST ASM SPARES	1	Basic Drill Assembly (3543723)
1	3540639			KIT, MID MAST/30 SHEAVE SPARES	1	Basic Drill Assembly (3543723)
1	306514			KIT, ROLLER CHAIN HEAD SPARES	1	HQ Nitro Chuck™ Head (3544982)
1	3544799			KIT, HQ N/CHUCK SEAL	1	HQ Nitro Chuck™ Head (3544982)
1	306085			KIT, ROD CLAMP SPARES	1	Hydraulic Rod Clamp (3543553)
1	3543686			SEAL KIT, CYLINDER (MAST RAISE)	1	Hydraulic Mast Raising (3543591)
1	3543698			CARTRIDGE, VALVE C/B 4.5:1	4	Hydraulic Mast Raising (3543591)
1	5400545			KIT, QSB4.5 FILTER 1000HRS	1	Cummins Engine (5400200)
1	5400503			KIT, QSB4.5 TIER3 SPARES	1	Cummins Engine (5400200)
1	5401698			KIT, QSB4.5 CTRL PANEL SPARES	1	Cummins Engine (5400200)
1	5401789			KIT, W11 SPARES LF70	1	W11 Fluid Circulation Pump (101972)
1	5400489			KIT, W11 BEAN PUMP LINER	1	W11 Fluid Circulation Pump (101972)
1	96672			SEAL KIT, CHAR-LYNN 2 SPEED	1	W11 Fluid Circulation Pump (101972)
1	5401289			KIT, L09 PUMP MODULE SPARES	1	Diesel Powered Supply Pump (3670446)
1	102633			KIT, MUD MIXER PORTABLE SPARES	1	Portable Mud Mixer (102306)
1	3541118			KIT, MUD MIXER 250GAL SPARES	1	Mud Tank & Mixer (3540997)

Level 1 - Part numbers to order for a complete kit.

Level 2 & 3 - Part numbers represent the items included in complete kits. They are also available for individual purchase. (Some exceptions apply)

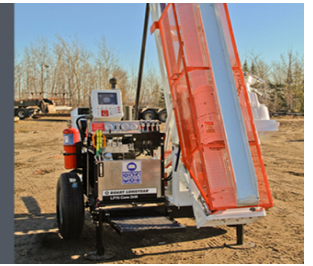
SPARES FOR BASIC DRILL ASSEMBLY - DETAIL

Level	1	2	3	Description	QTY	For Base Drill / Option
1	102629			KIT, BASE FRAME SPARES	1	Basic Drill Assembly (3543723)
2		21875		BATTERY, 12V 163 AMPS	1	
2		100290		BREATHER, LF70 TANK FILLER	1	
1	5401697			KIT, LF70 HYD MODULE SPARES	1	Basic Drill Assembly (3543723)
2		96797		KIT, WIRING	1	
2		96798		WIRE, 12 GAUGE	25 FT	
2		96799		WIRE, 14 GAUGE	25 FT	
2		96796		KIT, O-RING	1	
2		100236		ELEMENT, HYD FILTER OIL RETURN	3	
2		100237		ELEMENT, OIL FILTER LF70	3	
2		3548136		GAUGE, PRESSURE 0-3000 PSI BAR	2	
2		3548137		GAUGE, PRESSURE 0-5000 PSI BAR	1	
2		3548135		GAUGE, PRESSURE 0-1500 PSI BAR	2	
2		3541605		SWITCH, PUSH BUTTON	1	
2		100623		SWITCH, ON-OFF-START	1	
2		3544247		SPRING, COMPRESSION	2	
2		101546		CABLE, CONTROL	1	
2		96770		KIT, CARTRIDGE SEAL	1	
2		96772		KIT, CARTRIDGE SEAL	1	
2		96653		KIT, PLATE SEAL	1	
2		96645		KIT, SEAL	1	
2		101537		NIPPLE, 1/2 NPTF QD	1	
2		101536		CPLG, 1/2 NPTF QD.	1	
2		38257		CLAMP, L65 1-3/4 HOSE	2	



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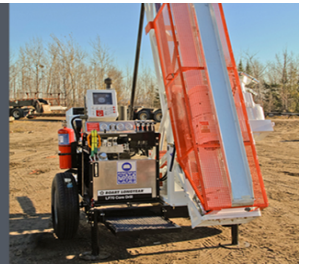
SPARES FOR BASIC DRILL ASSEMBLY - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	5404907			KIT, MAINLINE HOIST SPARES	1	Basic Drill Assembly (3543723)
2		5006045		RELIEF VALVE (7.5-15 PSI)	1	
2		NA		DISC FRICTION	7	
2		NA		SPIROL PIN	3	
2		NA		BALL BEARING	1	
2		NA		SPIROL PIN	3	
2		NA		ROLLER BEARING	3	
2		NA		THRUST WASHER	6	
2		NA		BALL BEARING	1	
2		NA		ROLLER BEARING	6	
2		NA		THRUST WASHER	6	
2		NA		BEARING SPACER	3	
2		NA		PRESSURE PLATE	1	
2		NA		SPACER	1	
2		NA		THRUST WASHER	1	
2		NA		DIE SPRING	12	
2		NA		THRUST WASHER	1	
2		NA		THRUST WASHER	1	
2		NA		THRUST WASHER	1	
2		NA		SETSCREW	2	
2		NA		RETAINING RING	2	
2		3547049		SPRAG CLUTCH ASSY	1	
2		NA		BRAKE DISC	8	
2		3542247		VALVE, COUNTERBALANCE	1	
2		100215		VALVE, PILOT CHECK	2	
2		100214		VALVE, LF70 WINCH FEED SHUTTLE	1	
1	3546938			SEAL KIT, MAINLINE HOIST	1	Basic Drill Assembly (3543723)
2		NA		O-RING	1	
2		NA		SEAL	1	
2		NA		O-RING	2	
2		NA		O-RING	1	
2		NA		SEAL	1	
2		NA		O-RING	1	
2		NA		BACKUP RING	1	
2		NA		SEAL	1	
2		NA		O-RING, FLUSH PLUG	1	
2		NA		O-RING	1	
2		NA		BACKUP RING	1	
2		NA		SEAL, F12 VOAC MOTOR SHAFT	1	
1	306206			SPARES KIT, BASIC WIRELINE HOIST		Basic Drill Assembly (3543723)
2		3546773		CARTRIDGE, COUNTERBALANCE	2	
2		104859		BEARING, 4 BOLT FLANGE	1	
2		306208		SEAL KIT, MOTOR	1	
1	102624			KIT, LOWER MAST ASM SPARES	1	Basic Drill Assembly (3543723)
2		104732		SHIM, 28 GAUGE (.018")	2	
2		100173		BAR, WEAR LF70	2	
2		102225		BUSHING, LF70 SLIDE FR	3	
2		104733		SHIM, 30 GAUGE (.015")	2	
2		102166		M/SCR, FLT HD 1/4UNC X 1/2 BRS	20	
2		3545965		SEAL KIT, CYL FEED LF70/LF90	1	
1	3540639			KIT, MID MAST/30 SHEAVE SPARES	1	Basic Drill Assembly (3543723)
2		100243		PLATE, CENTRALIZER	2	
2		102230		M/SCR, FLT SOC 5/16 X 2LG G8	6	
2		104166		BEARING,	4	
2		103027		BEARING, (CUP & CONE)	1	
2		103772		BUSHING, 30" DIA POLY SHEAVE	1	
2		103510		SEAL, T STYLE MAST	2	
1	306514			KIT, ROLLER CHAIN HEAD SPARES	1	HQ Nitro Chuck™ Head (3544982)
2		101792		BUSHING, LF70 UPPER HEAD HINGE	1	
2		101535		CPLG, 1" NPTM QD	1	
2		101534		CPLG, 1 NPTF QD.	1	
2		96746		O-RING, SAE 126 BUNA-N 70D	1	
2		96747		RING, BACKUP	1	
2		100190		ELEMENT, HYD OIL SUC FILTER	10	
2		100189		FILTER, LF70 OIL	1	



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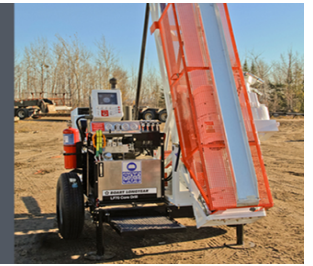


2		100191	PUMP, HYD LF70 GEAR	1	
2		100547	GAUGE, LF70 OIL LEVEL SIGHT	1	
2		306276	CHAIN ASM, ROLLER 1" X 51" LG	1	
2		306278	PIN, SPRING 2.5MM X 14MM S/S	2	
2		100536	SLEEVE, LF70	1	
2		100534	SEAL, LF70 SPINDLE SHAFT	1	
2		102019	O-RING, SPLICED 22-3/4	1	
2		102020	O-RING, SPLICED 34-1/4	1	
2		306277	LINK, CONNECTING	1	
1	3544799		KIT, HQ N/CHUCK SEAL	1	HQ Nitro Chuck™ Head (3544982)
2		3544801	SEAL, INNER URETHANE CUP	1	
2		3544802	SEAL, OUTER URETHANE CUP	2	
2		3544794	SEAL, PISTON URETHANE CUP	1	
2		3544795	O-RING, SAE 254 BUNA-N 70D	1	
2		3544796	RING, HQ SPINDLE BACK-UP	1	
2		3544797	O-RING, SAE 274 BUNA-N 70D	1	
2		3544798	RING, HQ CHUCK CYL BACK-UP	1	
2		3543508	SEAL, GUIDE PIN OIL	3	
2		3543519	O-RING, SAE 133 BUNA-N 70D	5	



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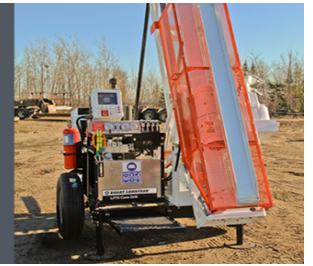
SPARES FOR OPTIONAL EQUIPMENT - DETAIL

Level	1	2	3	Description	QTY	For Base Drill / Option
1	306085			KIT, ROD CLAMP SPARES	1	Hydraulic Rod Clamp (3543553)
2		96770		KIT, CARTRIDGE SEAL	1	
2		101536		CPLG, 1/2 NPTF QD.	1	
2		101537		NIPPLE, 1/2 NPTF QD	1	
2		43021		SEAL KIT, HYD CYLINDER	2	
1	3543686			SEAL KIT, CYLINDER (MAST RAISE)	1	Hydraulic Mast Raising (3543591)
2		3543710		SEAL, POLY PAK TYPE B LF70	2	
2		3543711		SEAL, POLY PAK TYPE B C/W PIP	2	
2		3543712		SEAL, WIPER HYD CYLINDER LF70	2	
2		3543713		O-RING, SAE 144 BUNA-N 70D	2	
2		3543714		RING, BACKUP-UP HYDRAULIC CYL	2	
2		3543715		O-RING, SAE 29 BUNA-N 70D	2	
2		3543716		RING, BACK-UP HYDRAULIC CYL	2	
1	3543698			CARTRIDGE, VALVE C/B 4.5:1	4	Hydraulic Mast Raising (3543591)
1	5400545			KIT, QSB4.5 FILTER 1000HRS	1	Cummins Engine (5400200)
2		3548469		FILTER, QSB6.7 TIER 3 FUEL	4	
2		3548470		SEPARATOR, QSB6.7 TIER 3 FUEL	4	
2		3548471		FILTER, QSB6.7 TIER 3 LUBE OIL	4	
2		5400686		ELEMENT, MAIN QSB4.5 TIER3	4	
2		5400687		ELEMENT, SAFETY QSB4.5 TIER3	4	
1	5400503			KIT, QSB4.5 TIER3 SPARES	1	Cummins Engine (5400200)
2		3549122		NUT, SS24 LOCK	1	
2		3549128		SWITCH, TOGGLE INC/DEC	1	
2		3549129		SWITCH, TOGGLE RUN/IDLE	1	
2		3549537		SENSOR, RPM	2	
2		3549538		SENSOR, OIL PRESSURE	1	
2		3549539		SENSOR, COOLANT LEVEL	1	
2		5000202		SWITCH, STARTER RELAY	1	
2		3548475		STARTER, QSB6.7 TIER 3 DENSO	1	
2		5000970		FUSE, 125A	1	
2		5001972		THERMOSTAT, QSB6.7 TIER 3	1	
2		5001973		TENSIONER, BELT	1	
2		5001976		CLAMP, RAD HOSE #40	2	
2		5001977		CLAMP, RAD HOSE #10	2	
2		5001978		HOSE, CHARGE AIR COOLER 3"ID	2	
2		5001979		HOSE, CHARGE AIR COOLER 4"ID	2	
2		5001982		CLAMP, HOSE 3" CAC	4	
2		5001983		CLAMP, HOSE 4" CAC	4	
2		5001989		SENSOR, COOLANT TEMP	1	
2		5001990		SENSOR, AIR INTAKE TEMP	1	
2		5400181		ALTERNATOR, QSB6.7 24 VOLT	1	
2		5400183		SENSOR, PRESSURE QSB6.7	1	
2		5400184		INJECTOR, HPCR QSB6.7	4	
2		5400185		CONNECTOR, INJ FUEL SUPPLY QSB6.7	4	
2		5400187		BELT, V RIBBED QSB6.7	1	
2		5400189		SWITCH, KEY QSB6.7	1	
2		5400190		HARNESS, PANEL QSB6.7	1	
2		5400546		PUMP, WATER QSB4.5 TIER 3	1	
2		5400547		HOSE, RAD LOWER QSB4.5	2	
2		5400548		HOSE, RAD UPPER QSB4.5	2	
1	5401698			KIT, QSB4.5 CTRL PANEL SPARES	1	Cummins Engine (5400200)
2		5400438		DISPLAY, ENGINE MONITOR	1	
2		3548325		PUSHBUTTON, GREEN	1	
2		5400188		THROTTLE, ELEC CONTROL QSB6.7	1	
2		3549103		INDICATOR, RED LED 10MM	1	
2		3549118		INDICATOR, YELLOW LED 10MM	1	
2		3549117		INDICATOR, BLUE LED 10MM	1	
2		5400444		BUTTON ASM, EMERGENCY STOP	1	
2		3549234		KEY SWITCH, IGNITION	1	
2		3549485		SWITCH, SPST	1	
2		3549487		BREAKER, 6 AMP	1	



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SPARES FOR OPTIONAL EQUIPMENT - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	5401789			KIT, W11 SPARES LF70	1	W11 Fluid Circulation Pump (101972)
2		100625		COUPLING HUB, 1" BORE	1	
2		100627		INSERT, COUPLING	1	
2		102136		COUPLING HUB, 1.5 BORE	1	
2		3548141		GAUGE, PRESSURE	1	
2		36686		SPARE PARTS KIT, BEAN W1122B	1	
3			79321	SEAL, OIL	6	
3			79103	LINER, CYL CERAMIC / STEEL	3	
3			75070	GASKET, CYL JOINT	3	
3			75071	GASKET, HEAD CYL COPPER	24	
3			79324	SEAT, W11 VALVE	6	
3			26157	BALL, 1 1/8 SS	6	
3			75069	GASKET, VALVE COVER COPPER	12	
3			79606	PACKING, W11 CARBOX & POLY/COT	12	
3			75012	NUT, PACKING	3	
3			79327	O-RING, PACK HOLDER	3	
1	5400489			KIT, W11 BEAN PUMP LINER	1	W11 Fluid Circulation Pump (101972)
2		75012		NUT, PACKING	3	
2		75027		NUT, PLUNGER	3	
2		79903		CYLINDER	3	
2		75004		PLUNGER CUP, L09 NIT/FAB	3	
2		75028		CUP, PLUNGER	3	
2		75059		WASHER, PACKING	3	
1	96672			SEAL KIT, CHAR-LYNN 2 SPEED	1	W11 Fluid Circulation Pump (101972)
1	5401289			KIT, L09 PUMP MODULE SPARES	1	Diesel Powered Supply Pump (3670446)
2		19163		GAUGE, PRESSURE	1	
2		36685		KIT, 420/520 L09 PUMP SPARES	1	
3			79321	SEAL, OIL	6	
3			79066	CYLINDER, CERAMIC STEEL BACKED	3	
3			75066	GASKET, CYL NITRILE	3	
3			75068	GASKET, CYL HEAD NITRILE	24	
3			79614	SEAT, L09 VALVE	6	
3			25307	BALL, 7/8" S/S	6	
3			75067	GASKET, VALVE COVER NITRILE	12	
3			79607	PACKING, L09 CARBOX & POLY/COT	12	
3			75012	NUT, PACKING	3	
3			79327	O-RING, PACK HOLDER	3	
3			79335	HOLDER, 2-1/4 CYL SEAL	3	
2		3670443		BELT, DRIVE	1	
1	102633			KIT, MUD MIXER PORTABLE SPARES	1	Portable Mud Mixer (102306)
2		101557		CPLG, JAW 5/8 BORE	1	
2		101494		SPIDER, RUBBER	1	
2		101490		CPLG, 1 JAW	1	
2		96770		KIT, CARTRIDGE SEAL	1	
2		96653		KIT, PLATE SEAL	1	
1	3541118			KIT, MUD MIXER 250GAL SPARES	1	Mud Tank & Mixer (3540997)
2		3548491		MOTOR, HYDRAULIC MUD MIXER	1	
2		34424		HUB, WOODS MODEL 6/J	1	
2		34425		HUB, WOODS MODEL 6/J	1	
2		34426		INSERT, COUPLING	2	
2		3540349		SHAFT, ARBOR (MUD MIXER)	1	
2		20324		BEARING, THRUST	4	
2		3540353		SEAL, GREASE	6	
2		34949		RETAINING RING,	4	