



LFTM 70PQ 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: LF70PQ-2011-001 thru current

For Drill Build: DRILL MODULE, LF70PQ (101752 Rev: P)
 Document Number: 5400782 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 (100155)
1	5401697			KIT, LF70 HYD MODULE SPARES	1	Basic Drill Assembly (100155)
1	5404907			KIT, MAINLINE HOIST SPARES	1	Basic Drill Assembly (100155)
1	3546938			SEAL KIT, MAINLINE HOIST	1	Basic Drill Assembly (100155)
1	306206			SPARES KIT, BASIC WIRELINE HOIST	1	Basic Drill Assembly (100155)
1	3540485			KIT, PQ HEAD SPARES	1	PQ Nitro Chuck™ Head (3546416)
1	102624			KIT, LOWER MAST ASM SPARES	1	Basic Drill Assembly (100155)
1	3543728			KIT, MID/UPPER PQ MAST SPARES	1	Basic Drill Assembly (100155)
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 (100155)
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 (100155)
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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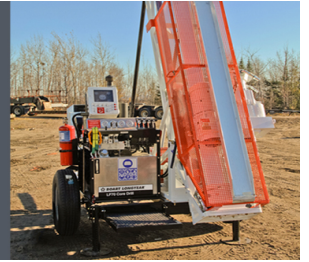
SPARES FOR BASIC DRILL ASSEMBLY - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	5404907			KIT, MAINLINE HOIST SPARES	1	Basic Drill Assembly (100155)
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 (100155)
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		
2		3546773		CARTRIDGE, COUNTERBALANCE	2	
2		104859		BEARING, 4 BOLT FLANGE	1	
2		306208		SEAL KIT, MOTOR	1	
1	3540485			KIT, PQ HEAD SPARES	1	PQ Nitro Chuck™ Head (3546416)
2		3541832		SEAL KIT, PQ ROTATION MOTOR	1	
2		3543526		SEAL KIT, PQ N/CHUCK	1	
3			3543500	CUP SEAL, INNER URETHANE	1	
3			3543501	CUP SEAL, OUTER URETHANE	2	
3			3543502	CUP SEAL, PISTON URETHANE	1	
3			3543503	O'RING, PQ CHUCK SPINDLE	1	
3			3543505	O'RING, PQ CHUCK CYLINDER	1	
3			3543506	RING, BACK-UP PQ CHUCK CYLINDER	1	
3			3543508	SEAL, OIL GUIDE PIN	3	
3			3543519	O'RING, GAS SPRING PQ CHUCK	7	
2		5000405		SEAL KIT, PQ HEAD	1	
3			3547404	O-RING, SAE 237 BUNA-N 70D	1	
3			306487	SHIM, .005 THICK	3	
3			306488	SHIM, .007 THICK	3	
3			306489	SHIM, .020 THICK	1	
3			3548734	O-RING, SAE 276 VITON 75D	1	
3			3548735	O-RING, SAE 270 VITON 75D	1	
3			306599	SEAL, ID 5.75" OD 6.625" OIL	2	
3			306600	SEAL, ID 8.5" OD 9.75" OIL	2	
3			48761	O-RING, SAE 235 BUNA-N 70D	1	
3			3548736	O-RING, SAE 257 VITON 75D	2	



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3			44766	WIRE, O.47 DIA SAFETY (TRAX6")	6 IN
2		3541060		KIT, FUNK TRANS OVERHAUL	1
3			95357	SLEEVE, BEARING	1
3			95363	BEARING, 2ND,3RD CENTER SHFT	4
3			3549020	BEARING, FUNK TRANS	1
3			95365	BRG, REAR	1
3			95367	ROLLER, 34 PER SET	34
3			3541202	WASHER, PQ HEAD THRUST REWORK	1
3			95372	BEARING,	1
3			95377	GASKET,	2
3			95378	O-RING,	4
3			3546622	DISC, TRANSMISSION INTERLOCK	3
3			3546620	SPRING, EXTRA HEAVY GREEN DIE	2
3			95410	PIN, ROLL	4
3			95413	PIN, ROLL	2
3			95414	SEAL, OIL	2
3			3540646	SEAL, RING FUNK TRANS LF140	1
3			79792	PILOT, BEARING TRANS	1
3			95418	BEARING, BALL	1
3			95419	SPACER,	1
3			95420	BEARING, FUNK TRANSMISSION	1
3			95421	SNAP RING	1
3			103281	SPACER, SHIM	6
3			44766	WIRE, O.47 DIA SAFETY (TRAX6")	6 IN
2		3540059		PUMP, HYD GEAR D11BSIA PARKER	1
2		102450		BUSHING, OILITE SLEEVE	2
2		3549290		KIT, SPLINED ADAPTOR	1
2		306494		WEAR SLEEVE, OUTPUT	1
2		306602		SLEEVE, 5.75" DIA	2
2		3546752		SLEEVE, PQ SPINDLE WEAR	1



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SPARES FOR BASIC DRILL ASSEMBLY - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	102624			KIT, LOWER MAST ASM SPARES	1	Basic Drill Assembly (100155)
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	3543728			KIT, MID/UPPER PQ MAST SPARES	1	Basic Drill Assembly (100155)
2		3541132		PLATE, CENTRALIZER PQ HEAD	2	
2		102230		M/SCR, FLT SOC 5/16 X 2LG G8	6	
2		104166		BEARING,	1	
2		103027		BEARING, (CUP & CONE)	1	
2		103772		BUSHING, 30" DIA POLY SHEAVE	1	
2		103510		SEAL, T STYLE MAST	2	

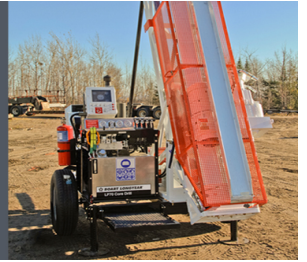
SPARES FOR OPTIONAL EQUIPMENT - DETAIL

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	



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2		5400547	HOSE, RAD LOWER QSB4.5	2
2		5400548	HOSE, RAD UPPER QSB4.5	2



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SPARES FOR OPTIONAL EQUIPMENT - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
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	
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	