



LFTM 90D 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: LF90D-2011-001 thru current

For Drill Build: DRILL MODULE, LF90D (3547154 Rev: G)
 Document Number: 5400779 Rev. B
 Effective Date: 1-Jan-2011

KIT SUMMARY

Level	1	2	3	Description	QTY	For Base Drill / Option
1	5401285			KIT, LF90D HYDRAULIC SPARES	1	Basic Drill Assembly (3547421)
1	102629			KIT, BASE FRAME SPARES	1	Basic Drill Assembly (3547421)
1	3543686			SEAL KIT, CYLINDER (MAST RAISE)	1	Basic Drill Assembly (3547421)
1	3547271			KIT, MAST SLIDE CYLINDER SEAL (DUMP)	1	Basic Drill Assembly (3547421)
1	5404907			KIT, MAINLINE HOIST SPARES	1	Basic Drill Assembly (3547421)
1	3546938			SEAL KIT, MAINLINE HOIST	1	Basic Drill Assembly (3547421)
1	306206			SPARES KIT, BASIC WIRELINE HOIST	1	Basic Drill Assembly (3547421)
1	3545276			KIT, LOWER MAST ASM SPARES	1	Basic Drill Assembly (3547421)
1	306085			KIT, ROD CLAMP SPARES	1	Basic Drill Assembly (3547421)
1	3544255			VALVE ASM, LOCK LEVELING JACK	1	Hydraulic Leveling Jacks (3547654)
1	3544256			KIT, LOCK VALVE ASM SEAL	1	Hydraulic Leveling Jacks (3547654)
1	5402615			KIT, QSB6.7 FILTER 1000HRS	1	Cummins Engine / Pump Module (5000086)
1	5401276			KIT, QSB6.7 SPARES TIER3	1	Cummins Engine / Pump Module (5000086)
1	5401277			KIT, QSB6.7 CTRL PANEL SPARES	1	Cummins Engine / Pump Module (5000086)
1	3547283			SEAL KIT, PVP33 ROXROTH PUMP	1	Cummins Engine / Pump Module (5000086)
1	3540345			SEAL KIT, HYD PUMP 19CC	1	Cummins Engine / Pump Module (5000086)
1	5401278			KIT, PQ HEAD OP SPARES LF90D	1	PQ Nitro Chuck™ Head (3547742)
1	102631			KIT, W11 SPARES	1	W11 Fluid Circulation Pump (3549549)
1	5400489			KIT, W11 BEAN PUMP LINER	1	W11 Fluid Circulation Pump (3549549)
1	3544481			SEAL KIT, MOTOR	1	W11 Fluid Circulation Pump (3549549)
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	5401285			KIT, LF90D HYDRAULIC SPARES	1	Basic Drill Assembly (3547421)
2		5401275		KIT, LF90D HYD FILTER 1000HRS	1	
3			100236	ELEMENT, MAIN RETURN FILTER	4	
3			3547610	ELEMENT, SPIN-ON FILTER	2	
3			3547872	ELEMENT, SPIN-ON FILTER	2	
3			100190	ELEMENT, HYD OIL SUC FILTER	2	
2		3548136		GAUGE, PRESSURE (0-3000 PSI)	2	
2		3548137		GAUGE, PRESSURE (0-5000 PSI)	1	
2		96770		SEAL KIT, CARTRIDGE	1	
2		96772		SEAL KIT, CARTRIDGE	1	
2		96653		SEAL PLATE KIT	1	
2		96773		HYD HOSE 1/4", PRESSURE (SAE 100R2)	15 FT	
2		96774		HYD HOSE 3/8", PRESSURE (SAE 100R2)	15 FT	
2		96775		HYD HOSE 1/2", PRESSURE (SAE 100R2)	15 FT	
2		96793		HYD HOSE 3/4", SUCTION (SAE 100R4)	3 FT	
2		96779		HOSE END FITTING, 1/4" HOSE X #4 JIC	2	
2		96781		HOSE END FITTING, 3/8" HOSE X #6 JIC	1	
2		96782		HOSE END FITTING, 1/2" HOSE X 1/2" MALE PIPE	1	
2		96783		HOSE END FITTING, 1/2" HOSE X #8 JIC	2	
2		96784		HOSE END FITTING, 3/4" HOSE X 3/4" MALE PIPE	1	
2		96785		HOSE END FITTING, 3/4" HOSE X #12 JIC	1	
2		96787		HOSE END FITTING, 1" HOSE X #16 JIC	2	
2		96789		HOSE END FITTING, 1/4" HOSE X #4 JIC X 90°	1	
2		96790		HOSE END FITTING, 3/4" HOSE X #12 JIC X 90°	1	



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SPARES FOR BASIC DRILL ASSEMBLY - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	102629			KIT, BASE FRAME SPARES	1	Basic Drill Assembly (3547421)
2		21875		BATTERY, 12V 163 AMPS	1	
2		100290		BREATHER, LF70 TANK FILLER	1	
1	3543686			SEAL KIT, CYLINDER (MAST RAISE)	1	Basic Drill Assembly (3547421)
1	3547271			KIT, MAST SLIDE CYLINDER SEAL (DUMP)	1	Basic Drill Assembly (3547421)
1	5404907			KIT, MAINLINE HOIST SPARES	1	Basic Drill Assembly (3547421)
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 (3547421)
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	3545276			KIT, LOWER MAST ASM SPARES	1	Basic Drill Assembly (3547421)
2		3546460		SHIM, 28 GAUGE .018"	2	
2		3546462		BAR, WEAR LF90PQ	8	
2		102225		BUSHING, LF70 SLIDE FR	3	
2		3546461		SHIM, 30 GAUGE .015"	2	
2		102166		M/SCR, FLT HD 1/4UNC X 1/2 BR	20	
2		3546115		SEAL KIT, HYDRAULIC CYLINDER	1	
1	306085			KIT, ROD CLAMP SPARES	1	Basic Drill Assembly (3547421)
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	



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SPARES FOR OPTIONAL EQUIPMENT - DETAIL

Level	1	2	3	Description	QTY	For Base Drill / Option
1	3544255			VALVE ASM, LOCK LEVELING JACK	1	Hydraulic Leveling Jacks (3547654)
1	3544256			KIT, LOCK VALVE ASM SEAL	1	Hydraulic Leveling Jacks (3547654)
1	5402615			KIT, QSB6.7 FILTER 1000HRS	1	Cummins Engine / Pump Module (5000086)
2		5400182		FILTER, QSB6.7 TIER 3 FUEL	2	
2		3548470		SEPARATOR, QSB6.7 TIER 3 FUEL	2	
2		3548471		FILTER, QSB6.7 TIER 3 LUBE OIL	4	
2		5007082		FILTER, AIR INNER ELEMENT	2	
2		5007083		FILTER, AIR OUTER ELEMENT	2	
1	5401276			KIT, QSB6.7 SPARES TIER3	1	Cummins Engine / Pump Module (5000086)
2		3548476		KIT, QSB6.7 WATER PUMP SPARES	1	
2		5001972		THERMOSTAT, QSB6.7 TIER 3	1	
2		3548478		SEAL, QSB6.7 TIER 3 THERMOSTAT	1	
2		3548479		BELT, QSB6.7 TIER 3 WATER / FAN BELT PUMP	2	
2		5001973		BELT, TENSIONER	1	
2		5001974		INJECTOR	1	
2		5001975		CLAMP, RAD HOSE #32	4	
2		5001976		CLAMP, RAD HOSE #40	4	
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		5001980		HOSE, RAD UPPER	2	
2		5001981		HOSE, RAD LOWER	2	
2		5001982		CLAMP, HOSE 3" CAC	4	
2		5001983		CLAMP, HOSE 4" CAC	4	
2		5001984		HOSE, RAD FILL 3/4"	1	
2		5001985		HOSE, RAD VENT 3/8"	1	
2		5001986		FUSE, 5 AMP	5	
2		5001987		FUSE, 15 AMP	5	
2		5001988		FUSE, 20 AMP	5	
2		5001989		SENSOR, COOLANT TEMP	1	
2		5001990		SENSOR, AIR INTAKE TEMP	1	
2		3549537		SENSOR, RPM	1	
2		3549538		SENSOR, OIL PRES	1	
2		3549539		SENSOR, COOLANT LEVEL	1	
2		5000202		SWITCH, STARTER RELAY	1	
1	5401277			KIT, QSB6.7 CTRL PANEL SPARES	1	Cummins Engine / Pump Module (5000086)
2		5400438		DISPLAY, ENGINE MONITOR	1	
2		3549480		SWITCH, WORK LIGHT	1	
2		3549519		PUSH BUTTON, GREEN	1	
2		3549234		SWITCH, IGNITION	1	
2		3549103		RED LED	1	
2		3549118		YELLOW LED	1	
2		3549117		BLUE LED	1	
2		3549482		LOCK, PANEL	1	
2		3549484		LIGHT, PILOT RED	1	
2		3549485		SWITCH, SPST	1	
2		3549487		BREAKER, 6 AMP	1	
2		3549488		SWITCH, SPST SPADE CONECTOR	1	
2		3549489		SWITCH, SPDT MOMENTARY	1	
2		3549490		SWITCH, DPDT MOMENTARY	1	
1	3547283			SEAL KIT, PVP33 ROXROTH PUMP	1	Cummins Engine / Pump Module (5000086)
1	3540345			SEAL KIT, HYD PUMP 19CC	1	Cummins Engine / Pump Module (5000086)



LF™ 90D RECOMMENDED SPARES LIST

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SPARES FOR OPTIONAL EQUIPMENT - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	5401278			KIT, PQ HEAD OP SPARES LF90D	1	PQ Nitro Chuck™ Head (3547742)
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	
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		3548230		PUMP, HEAD COOLING CIRCUIT	1	
2		3548232		FLOW CONTROL, PRESS COMP	1	
2		3549290		KIT, SPLINED ADAPTOR	1	
2		306494		WEAR SLEEVE, OUTPUT	1	
2		3546752		SLEEVE, PQ SPINDLE WEAR	1	



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SPARES FOR OPTIONAL EQUIPMENT - DETAIL (continued)

Level	1	2	3	Description	QTY	For Base Drill / Option
1	102631			KIT, W11 SPARES	1	W11 Fluid Circulation Pump (3549549)
2		100625		COUPLING HUB, 1" BORE	1	
2		100627		INSERT, COUPLING	1	
2		102136		COUPLING HUB, 1.5 BORE	1	
2		19163		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 (3549549)
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	3544481			SEAL KIT, MOTOR	1	W11 Fluid Circulation Pump (3549549)
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	