

**Suggested Spares Guide L90F-623****Consumables, Approximate 1 Year Supply (calculated at 2000 hours/year)**

Allied P/N	Description	Where Used	On-Hand Quantity (Recommended)	Order Quantity
238206	Hydraulic Oil		550 Gallons	
219374	Grease (chassis)		35 Lbs	
591654	Grease (driveline cross assemblies)		1 Lbs	
221340	Anti-Freeze, Premix 50/50		24 Gallons	
235720	Drive Axle Gear Oil		17 Gallons	
236077	Engine Oil		110 Gallons	
238206	Transmission Fluid		20 Gallons	
256249	Belt, Serpentine	590599	1	
589282	Belt, Serpentine	590600	1	
588564	Filter, Fuel	590600	12	
588563	Filter, Oil	590600	12	
252945	Filter, Coolant	590600	2	
258701	Element, Air Cleaner Assembly	258700	2	
258702	Safety Element, Air Cleaner Assembly	258700	2	
247429	Filter Element, Transmission (Dual Spin-On)	588102	8	
253696	Filter Element, Transmission System	588102	2	
588191	Service Kit, 100 GPM HP Filter	587385	12	
588192	Service Kit, 40 GPM HP Filter	587036	4	
591574	Service Kit, Return Filter	243457	8	
258699	Filter Element, Cab Pressurizer	590805	1	
259015	Filter Element, Cab Pressurizer (Hi-Efficiency Option)	590805	1	
581995	Service Kit, Parking Brake	244409	2	
258774	Wiper Blade Assembly	591868	4	

**Suggested Spares Guide L90F-623****Section 2 - POWER UNIT**

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
2-1	Engine			
246908	Sensor, Temperature	590990	1	
256249	Belt, Serpentine	590990	1	
202889	Switch, Oil Pressure	590990	1	
229301	Relay, Terminal Panel	590990	1	
209846	Hose Kit	590990	1	
203519	O-Ring	590990	1	
226184	Gasket, Pump Mounting	590990	1	
237008	Shutoff Valve	590990	2	
505499	Gasket, Pump Mounting	590990	2	
R10663	O-Ring	590990	1	
R10664	O-Ring	590990	1	
209846	Hose, Push-On	590990	1FT	
249309	Compressor, Engine	590990	1	
590499	Water Pump	590600	1	
591097	Alternator	590600	1	
591098	Starter	590600	1	
252945	Filter, Coolant	590600	1	
588563	Filter, Oil	590600	1	
588564	Filter, Fuel	590600	1	
589282	Belt, Serpentine	590600	1	

## Suggested Spares Guide L90F-623

### Section 2 - POWER UNIT

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
<b>2-3 Lubrication</b>				
208202	Fuel Cap	580644	1	
<b>2-4 Fuel</b>				
590458	Hose Kit, Fuel	589233	1	
227988	Filler/Breather, Fuel Tank	589233	1	
<b>2-5 Air Intake &amp; Exhaust</b>				
218903	Vacuator Valve	258700	2	
258701	Element, Air Cleaner Assembly	258700	2	
258702	Safety Element, Air Cleaner Assembly	258700	2	
215733	Rubber Elbow (90°, 6" ID)	590992	3	
224226	Rubber Elbow (45°, 7" ID)	590992	2	
224354	Rubber Elbow (90°, 7"-6" ID)	590992	1	
228425	Rubber Elbow (45°, 7"-6" ID)	590992	2	
588143	Rubber Elbow (90°, 6"-5" ID)	590992	1	
R1904878	Rubber Elbow (90°, 6" ID)	590992	3	
240714	Hose Assembly	590992	1	
<b>2-6 Cooling</b>				
243652	Tube (Radiator)	588648	175	
250669	Seal, Bottom (Radiator)	588648	175	
250670	Seal, Top (Radiator)	588648	175	
226663	Seal, Aftercooler Assy	257157	117	
226664	Seal, Aftercooler Assy	257157	117	
250680	Tube, Aftercooler Assy	257157	117	
224422	Vibration Dampener	590991	2	
252047	Seal, Flap	590991	9	
591900PH	Hose Kit, Radiator Installation	590991	1	
242649	Gauge, Site	590991	1	

## Suggested Spares Guide L90F-623

### Section 3 - DRIVETRAIN

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
<b>3-2 Transmission and Converter</b>				
<b>591989</b>	<b>Transmission</b>	<b>592307</b>	1	
587623	. Kit, Service	591989	1	
578293	Valve, Module	588102	1	
<b>256295</b>	<b>Converter</b>	<b>590990</b>	1	
587619	. Service Kit	256295	1	
589270	Hose Kit, Hydraulic System-Transmission	588102	1	
22635	Diode, 1 Amp, 400V	578293	5	
257099	Kit, Flexplate, 17"	590990	1	
247429	Filter Element, Transmission (Dual Spin-On)	588102	2	
253696	Filter Element, Transmission System	588102	1	
<b>3-3 Drivelines</b>				
<b>250400</b>	<b>Driveline Assembly</b>	<b>584900</b>	1	
215403	. Cross Assembly	250400	2	
<b>255339</b>	<b>Driveline Assembly</b>	<b>584900</b>	1	
250090	. Cross Assembly	255339	2	
<b>3-4 Axles</b>				
<b>585001</b>	<b>Tailfork Installation</b>			
204540	. Bearing Cone	585001	2	
204603	. Bearing Cone	585001	2	
212198	. Bearing Cup	585001	1	
212199	. Bearing Cone	585001	1	
214471	. Bearing Cup	585001	1	
234204	. Bearing Cone	585001	1	
203564	. O-Ring	585001	2	
208870	. Seal	585001	2	
214464	. Seal	585001	1	
508834	. Seal, Race	585001	2	
<b>586407</b>	<b>Front Axle Installation</b>			
584897	. Wet Disc Brake, Assembly	586407	2	
258799	.. Disc, Friction	584897	20	
590060	.. Disc, Brake	584897	22	
209073	.. O-Ring	584897	8	
238578	.. Seal	584897	4	
238590	.. Oil Seal	584897	2	
200268	. Breather	586407	1	
547338	. Axle Shaft	586407	2	
249162	. Axle Kit	586407	1	
201148	.. Bearing Cone	249162	2	

## Suggested Spares Guide L90F-623

### Section 3 - DRIVETRAIN

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
216146	. . Bearing Cone	249162	2	
580700	. . Differential & Carrier	249162	1	
584264	. . . Service Kit	580700	1	
217706	. . . Ring & Pinion Set	580700	1	
234545	. . . Differential Sub Assembly	580700	1	
211953	. . Planet Carrier Assembly	249162	2	
587562	. . . Service Kit	211953	2	
216147	Bearing Cup	586840	2	
201143	Bearing Cup	586840	2	
<b>3-5</b>	<b>Wheels &amp; Tires</b>			
<b>590040</b>	<b>Rear Wheel Assembly</b>		2	
590038	. Rim Assembly	590040	2	
589989	. Tire	590040	2	
<b>590036</b>	<b>Front Wheel Assembly</b>		2	
586424	. Rim Assembly	590036	2	
589992	. Tire	590036	2	

## Suggested Spares Guide L90F-623

### Section 4 - BRAKE SYSTEM

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
4-1	Systems			
<b>590932</b>	<b>Hose Kit, Hydraulic System Brakes</b>	<b>590921</b>	<b>1</b>	
4-3	Supply Components			
<b>250658</b>	<b>Accumulator</b>	<b>590921</b>	<b>2</b>	
<b>245411</b>	<b>Accumulator</b>	<b>590921</b>	<b>1</b>	
<b>590184</b>	<b>Manifold Assembly, Fire System</b>	<b>590921</b>	<b>1</b>	
229043	. Valve	590184	1	
242101	.. Seal Kit	229043	1	
590185	. Valve, Cartridge	590184	1	
591261	.. Seal Kit	590185	1	
<b>593630</b>	<b>Manifold Assembly, Brakes</b>	<b>590921</b>	<b>1</b>	
233943	. Cartridge, Valve	593630	1	
242335	.. Seal Kit	233943	1	
242225	. Cartridge, Valve	593630	1	
242335	.. Seal Kit	242225	1	
244835	. Cartridge, Valve	593630	1	
242335	.. Seal Kit	244835	1	
256262	. Valve	593630	2	
254539	.. Seal Kit	256262	2	
4-5	Actuator Components			
<b>577281</b>	<b>Brake Installation, Parking</b>			
<b>244409</b>	<b>. Caliper, Park Brake</b>	<b>577281</b>	<b>1</b>	
581995	.. Kit, Service	244409	2	
577287	. Pin	577281	2	

### Section 5 - HYDRAULIC SYSTEM

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
5-1	Systems & Circuits			
591367	Hose Kit, Hydraulic System Seat	586819	1	
590486	Hose Kit, Hydraulic System Seat to Bulkhead	589201	1	
592697	Hose Kit, Hydraulic System Chassis	590993	1	
589268	Hose Kit, Hydraulic System-Hoist & Tilt	583191	1	
593362	Hose Kit, Hydraulic System-Steering	593363	1	
591583	Hose Kit, Hydraulic System Carriage	590931	1	
591510	Hose Kit, Valve Module	591000	1	
245334	Sender, Oil Temperature	590993	1	
203443	O-Ring	583191	4	
203446	O-Ring	583191	4	
203519	O-Ring	583191	6	

## Suggested Spares Guide L90F-623

### Section 5 - HYDRAULIC SYSTEM

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
<b>5-2</b>	<b>Pumps</b>			
242649	Pump, Converter Charging	256295	1	
<b>245520</b>	<b>Pump, Steering</b>	<b>590990</b>	<b>1</b>	
246783	. . Seal Kit	245520	1	
<b>247010</b>	<b>Pump, Tandem Implements</b>	<b>590990</b>	<b>1</b>	
246774	. . Seal Kit	247010	1	
<b>592771</b>	<b>Pump, Brake</b>	<b>590990</b>	<b>1</b>	
255298	. . Seal Kit	592771	1	
<b>5-3</b>	<b>Valves</b>			
<b>586605</b>	<b>Manifold Assembly, Independent Control of Imp</b>	<b>591000</b>	<b>1</b>	
250365	. Cartridge, Valve	586605	8	
250589	. . Coil	250365	8	
250590	. . Seal Kit	250365	8	
<b>234081</b>	<b>Steering Unit</b>	<b>587545</b>	<b>1</b>	
234385	. . Seal Kit	234081	1	
<b>587576</b>	<b>Valve, Holddown &amp; Kickoff</b>	<b>591000</b>	<b>2</b>	
206980	. O-Ring	587576	4	
588312	. Service Kit	587576	2	
<b>250637</b>	<b>Valve, Hoist &amp; Tilt</b>	<b>591000</b>	<b>1</b>	
251100	. Service Kit, Hoist/Tilt Valve	250637	4	
251101	. Seal Kit, Hoist/Tilt Valve	250637	1	
251102	. Seal Kit, Hoist/Tilt Valve	250637	1	
586775	Remote Control Valve (For Joystick Controls)	589376	1	
589619	Remote Control Valve (For Joystick Controls)	590626	1	
<b>234082</b>	<b>Valve, Flow Amplifier</b>	<b>591000</b>	<b>1</b>	
234639	. Service Kit	234082	1	
<b>590181</b>	<b>Manifold, Accumulator Charge</b>	<b>590993</b>	<b>1</b>	
235622	. Cartridge, Valve	590181	1	
242101	. . Seal Kit	235622	1	
243785	. Cartridge, Valve	590181	1	
242335	. . Seal Kit	243785	1	
243786	. Cartridge, Valve	590181	1	
251170	. . Seal Kit	243786	1	
589032	. Valve	590181	1	
589045	. Cartridge, Valve	590181	1	
252566	. . Seal Kit	589045		
589046	. Element, Modulating	590181	1	
64850	. . Seal Kit	589046	1	
590511	. Cartridge, Relief	590181	1	
2501643	. . Seal Kit	590511	1	
589047	. Valve, Solenoid	590181	1	

### Section 5 - HYDRAULIC SYSTEM

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
<b>5-4</b>	<b>Cylinders</b>			
562940	Pin, Tilt Cylinder Installation	580769	2	
565059	Bushing, Tilt Cylinder Installation	580769	2	
519397	Pin, Hoist Cylinder Installation	588099	2	
572737	Pin, Hoist Cylinder Installation	588099	2	
580771	Hydraulic Cylinder Assembly, Tilt	580769	2	
<b>580770</b>	<b>Cylinder Assembly, Tilt</b>	<b>580771</b>	<b>2</b>	
533666	. Bushing	580770	2	
568937	. Service Kit	580770	2	
<b>562896</b>	<b>Cylinder Assembly, Hoist</b>	<b>588099</b>	<b>2</b>	
533666	. Bushing	562896	2	
566401	. Service Kit, Hoist Cylinder	562896	2	
<b>531565</b>	<b>Cylinder Assembly, Holddown</b>	<b>590926</b>	<b>2</b>	
242649	. Bushing	531565	2	
566411	Service Kit, Steering Cylinder	531565	2	
<b>531671</b>	<b>Cylinder Assembly, Kickoff</b>	<b>590926</b>	<b>2</b>	
505594	. Bushing	531671	2	
566411	Service Kit, Steering Cylinder	531671	2	
<b>569848</b>	<b>Cylinder - Steering</b>	<b>W10970</b>	<b>2</b>	
566408	. Service Kit	569848	2	
500290	Pin, Steering Cylinder	W10970	2	
<b>5-5</b>	<b>Filters</b>			
588192	Service Kit, 40 GPM Hyd Filter	587036	1	
588191	Service Kit, 100 GPM Hyd Pressure Filter	587385	3	
591574	Service Kit, Return Filter	243457	2	
<b>5-6</b>	<b>Miscellaneous</b>			
258300	Cooler, Hydraulic Oil	590993	1	
587345	. Fan, W/24V Motor	258300	1	



## Section 6 - ELECTRICAL SYSTEM

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
6-1	Systems & Circuits			
259080	Floodlight	586163	1	
R19361	Alarm	586163	1	
6-2	Components			
259080	Floodlight	586167	2	
22632	Relay	586812	2	
238891	Relay	586812	2	
581682	Cord Assy	586812	8	
259080	Floodlight	586913	4	
200220	Battery, 12V	588098	2	
230729	Sending Unit, Fuel Level	588098	1	
249106	Battery Disconnect Switch	588098	1	
218755	Horn, Reverse Alarm	R19361	1	
214802	O-Ring	574276	1	

## Section 7 - CAB & COWL

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
7-1	Basic Structure			
203037	Molding, Locking Key (Window Molding)	586385	25 FT	
258638	Molding, Self Lock, Window	586385	25 FT	
586386	Glass, Front Windshield, Curved	586385	1	
586621	Glass, Rear Windshield	586385	1	
586622	Glass, Rear RH	586385	1	
586623	Glass, Rear LH	586385	1	
224222	Vibration Dampener	586670	4	
258685	Door Handle	591401	1	
586619	Glass, RH Door, Upper	591401	1	
586620	Glass, RH Door, Lower	591401	1	
258685	Door Handle	591402	1	
586617	Glass, LH Door, Upper	591402	1	
586618	Glass, LH Door, Lower	591402	1	
258774	Wiper Blade Assembly	591868	2	

### Section 7 - CAB & COWL

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
7-2	Instruments & Controls			
254933	Gauge, Tachometer	586437	1	
587084	Circuit Breaker, 7.5 Amp	589281	1	
905113	Diode Assembly	589281	2	
589281	Panel Assy, Circuit Breaker	589284	1	
249382	Switch, Rocker	591314	1	
588300	PLC Programmed	591314	1	
589698	Temperature Controller	591314	1	
591378	Fuse	591314	2	
KOB0001P2B	Potentiometer Knob	591314	1	
586437	Panel Assy, LH	591868	1	
587924	Panel Assy, RH Gauge	591868	1	
587926	Panel Assy, LH Instrument	591868	1	
249693	Gauge, Engine Coolant	586437	1	
251325	Gauge, Engine Oil Pressure	586437	1	
249694	Plug (Pvjr, 6-Way W/Resistor)	587924	1	
251326	Gauge, Voltmeter	587924	1	
254934	Gauge, Aux Oil Temp	587924	1	
254935	Gauge, Aux Oil Press	587924	1	
255254	Alarm, Audible	587924	1	
258707	Gauge, Fuel Level	587924	1	
588432	Green LED	587925	6	
588433	Yellow LED	587925	1	
586917	Gauge, Oil Temp	587926	1	
223062	Circuit Breaker, 2 Amp	589281	1	
223065	Circuit Breaker, 5 Amp	589281	2	
223067	Circuit Breaker, 15 Amp	589281	5	
223069	Circuit Breaker, 30 Amp	589281	1	
223377	Circuit Breaker, 20 Amp	589281	3	
22632	Relay	589281	2	
22635	Diode, 1 Amp, 400V	589281	3	
229301	Relay, Terminal Panel	589281	2	
229306	Circuit Breaker, 10 Amp	589281	7	
232908	Relay, Junction Box	589281	1	
232909	Socket - Relay	589281	1	
238891	Relay	589281	2	
22632	Relay	591314	1	
22635	Diode, 1 Amp, 400V	591314	2	
232903	Power Converter	591314	1	
232908	Relay, Junction Box	591314	1	
232909	Socket - Relay	591314	1	
234736	Switch	591314	2	
234739	Switch	591314	1	
235217	Connector, Female	591314	60	
237688	Switch	591314	4	
238891	Relay	591314	1	
239174	Switch	591314	2	
242950	Fuse, 1A, Junction Box	591314	26	
247209	Terminal Block	591314	5	

## Section 7 - CAB & COWL

Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
249692	Display Module	591314	1	
588431	Red LED	591314	2	
588432	Green LED	591314	6	
588433	Yellow LED	591314	6	
ELC7531010	Potentiometer	591314	1	
GAG0001133	Hour Meter	591314	1	
R10547	Buzzer	591314	1	
R13656	Switch	591314	2	
<b>589376</b>	<b>Joystick Assembly, 3-Button</b>	<b>590588</b>	<b>1</b>	
588939	. Handle, Joystick; 3 Button	589376	1	
<b>590626</b>	<b>Joystick Assembly, 2-Button</b>	<b>590588</b>	<b>1</b>	
590627	. Handle, Joystick; 2 Button	590626	1	
<b>7-3</b>	<b>Miscellaneous</b>			
258674	Condenser	593640	1	
590074	AC/Heater	593640	1	
590805	Pressurizer	593640	1	
208264	Grommet	590925	3	
590865	Remote Monitor	591868	1	
243304	Bearing Cup	590924	2	
243305	Bearing Cone	590924	2	
258699	Filter Element, Cab Pressurizer	590805	1	
259015	Filter Element, Cab Pressurizer (High Efficiency)	587935	1	
238891	Relay	258674	1	
239161	Fan, Defroster	589053	1	
589053	Fan, Defroster	593640	1	
225649	Light, Red, Emergency Brake	590588	1	
234264	Control Unit, Park Brake	590588	1	
234736	Switch	590588	3	
236488	Switch	590588	1	
232906	Light, Flashing Amber	590911	1	
259220	Horn, 24 Vdc	590911	1	
22635	Diode, 1 Amp, 400V	590924	2	
207155	Ignition Switch	590925	1	
215096	Safety Belt	590588	1	
589080	Kit, Seatbelt Hardware, Operator's Seat	590588	1	
240151	O-Ring	590924	2	
<b>586692</b>	<b>Driveline Assembly</b>	<b>590925</b>	<b>1</b>	
587270	. Cross Assembly	586692	1	

### Section 8 - FRAME & ATTACHMENTS

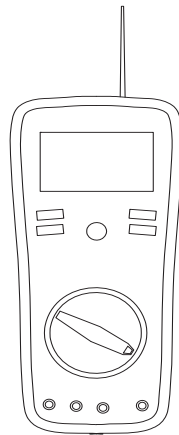
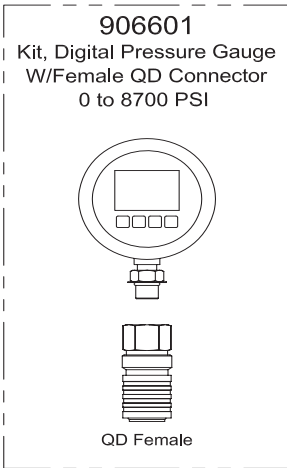
Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
8-1	Frame & Attachments			
<b>590926</b>	<b>Carriage Assembly</b>			
508737	. Pin	590926	2	
512865	. Pin	590926	2	
523107	. Pin	590926	1	
531543	. Pin	590926	4	
531586	. Pin Assembly	590926	4	
552409	. Pin	590926	2	
561170	. Bushing	590926	2	
563280	. Pin	590926	2	
588159	. Pin	590926	1	
588130	. Tine	590926	2	
<b>560229</b>	<b>. Kickoff Arm</b>	<b>590926</b>	<b>2</b>	
242649	.. Bushing	560229	4	
531801	.. Bushing	560229	2	
<b>560937</b>	<b>. Holddown Arm</b>	<b>590926</b>	<b>2</b>	
523862	.. Bushing	560937	4	
531801	.. Bushing	560937	2	
<b>590989</b>	<b>Boom Assembly</b>		1	
538104	. Bushing	590989	2	
561170	. Bushing	590989	4	
563280	. Pin	590989	3	
563504	. Pin	590989	1	
566920	. Pin	590989	1	
<b>590919</b>	<b>Chassis Assembly</b>			
563700	. Pin	590919	2	
565059	. Bushing	590919	2	
211398	. Drain Cock	590919	1	
224744	. Breather, Hydraulic Tank	590919	1	
562966	. Dipstick, Hydraulic Tank	590919	1	
555064	. Gasket, Manhole Cover	590919	2	
562468	. Gasket, Return Filter Cover Plate	590919	1	

**Section 9 - ACCESSORIES & OPTIONS**

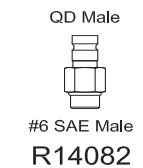
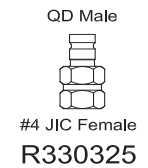
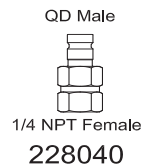
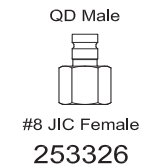
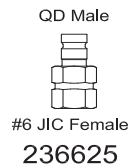
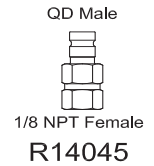
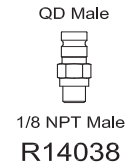
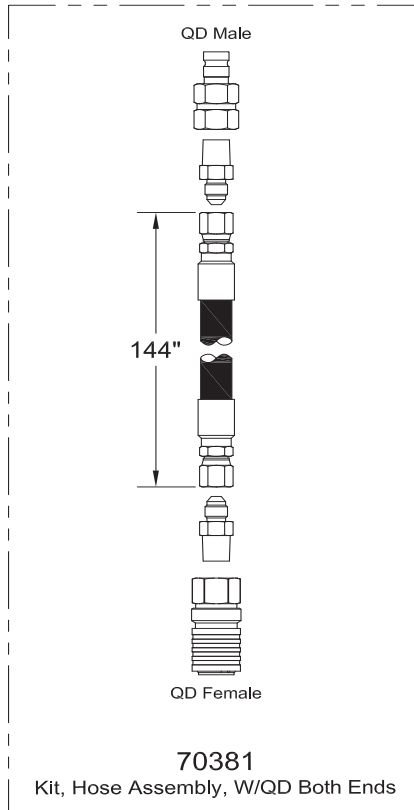
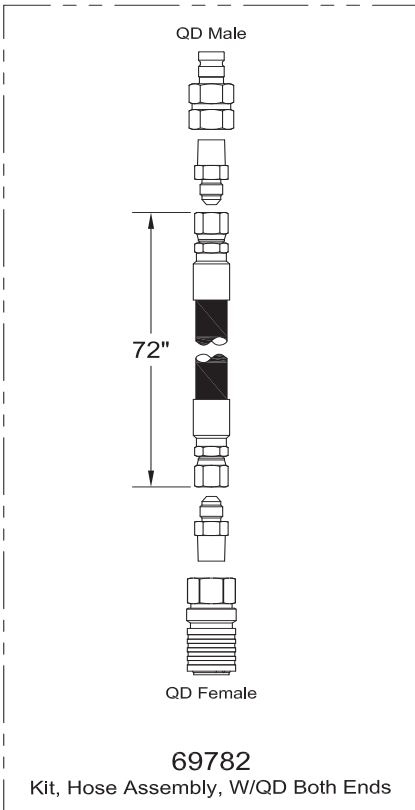
Allied P/N	Description	Where Used	Quantity on Machine	Order Quantity
9-1	Accessories & Options			
249803	Battery, 3.6 VDC	587003	1	
212052	Fire Extinguisher	582769	2	
591952	Hose Kit, Fire Suppression	590994	1	

## Diagnostic Tools

Order from Allied Systems  
Service Parts Department  
503-625-2560.



**69778**  
Multi-Meter, 12 Function  
AC/DC Voltage & Current, Resistance,  
Capacitance, Frequency, Type K & IR  
Temperature, Diode/Continuity, Duty Cycle  
Non-Contact InfraRed Thermometer  
CAT III Test Leads  
Type K Bead Wire Temp Probe



### Tools

Allied P/N	Description	On-Hand Quantity (Recommended)	Order Quantity
226672	Breaker Tool, Radiator Tubes	1	
226671	Installation Tool, Radiator Tubes	1	
252920	Lube Brush, Seal & Tube End	1	
259069	Header Plate Hole Cleaning Brush	1	
243274	Accumulator Recharge Valve	1	
509574	Air Hose Kit	1	
537788	Spindle Nut Wrench	1	
588466	Socket Set; 3/8Dr 3/8 To 7/8 22PC	1	
588467	Socket Set; 1/2Dr 3/8 To 1-1/4 30PC	1	
588468	Socket Set; 3/4Dr 7/8 To 2-3/8 29PC	1	
588530	3/8 DR 6mm-19mm 12 Point	1	
588529	1/2 DR 10mm-26mm 12 Point	1	
588469	Wrench Set; 5/16 To 2-1/2 31PC	1	
588528	Wrench Set; 7mm-24mm, 18 PC	1	
588527	Hex Key Set; .025" To 5/8"	1	
588526	Hex Key Sets; .07mm-17mm, 15 PC	1	
556042	Wrench - Swivel Nut	1	
558533	Fire Extinguisher Wrench	1	

### Diagnostic Tools

Allied P/N	Description	On-Hand Quantity (Recommended)	Order Quantity
906601	0 to 8700 PSI Digital Pressure Gauge W/QD Connector	1	
69778	Multi-Meter; 12 Function	1	
69782	Kit; 72" Hose Assembly W/QD on Both Ends	1	
70381	Kit; 144" Hose Assembly W/QD on Both Ends	1	
R14038	Fitting; QD Male x 1/8 NPT Male	1	
R14045	Fitting; QD Male x 1/8 NPT Female	1	
236625	Fitting; QD Male x #6 JIC Female	1	
253326	Fitting; QD Male x #8 JIC Female	1	
228040	Fitting; QD Male x 1/4 NPT Female	1	
R330325	Fitting; QD Male x #4 JIC Female	1	
R14040	Fitting; QD Male x #4 SAE Male	1	
R14082	Fitting; QD Male x #6 SAE Male	1	

## Every 10 Hours / Daily

### Shift Maintenance Checklist

Note general vehicle condition. Clear away all collected debris - steam clean if necessary. Check for mechanical damage and loose or leaking components. Report all faults to maintenance department. **Always refer to manufactures (e.g. engine, transmission, converter) maintenance manual before performing any maintenance.**

Before Starting Engine, Check the Following:				
Ref	Component	OK	NO	ADD
1	ENGINE (Check oil level - check for leaks)			
2	V-BELTS (Check tension - check for damage - change as required)			
3	HYDRAULIC TANK (Check oil level - check for leaks)			
4	RADIATOR & OIL COOLER (Check coolant level - check for leaks; are fins clean and unobstructed?)			
5	AIR CLEANER/INTAKE SYSTEM (Check indicator - clean / change element as required, empty dust cup, check for leaks / damage)			
6	ENGINE BELTS (Check for adjustment and wear)			
7	WHEELS & TIRES (Check condition and pressure)			
8	AIR TANK (Check drain valves for correct operation)			
9	LUBRICATE CHASSIS (Refer to lube chart)			
10	WALK AROUND INSPECTION OF STRUCTURE (Check welds, leaks, damaged components, etc...)			
11	FIRE SAFETY CHECK (Check for accumulated debris in engine compartment, etc)			
12	FIRE SUPPRESSION SYSTEMS (Verify certifications are current)			

After Starting Engine, Check the Following:				
Ref	Component	OK	NO	ADD
13	ENGINE (Does it sound normal?)			
14	INSTRUMENTS (Check for normal readings)			
15	CONTROLS (Check for normal operation)			
16	EXHAUST SYSTEM (Check for leaks and excessive smoke)			
17	TRANSMISSION (After warming to operation temp, check oil level - check for leaks)			

Note Anything Abnormal or in Need of Repair:	
Component	Comments
LIGHTS	
DEFROSTER	
REVERSE WARNING HORN	
HORN	
WINDSHIELD WIPERS	
HEATER	
AIR CONDITIONER	

OPERATOR \_\_\_\_\_  
 SUPERVISOR \_\_\_\_\_  
 DATE \_\_\_\_\_  
 MODEL L90F \_\_\_\_\_  
 SERIAL No 047623 \_\_\_\_\_  
 HOUR METER \_\_\_\_\_



## First 50 Hours

### Checklist

1	Check fluid levels - differentials, planetaries	OK <input type="checkbox"/>	Add <input type="checkbox"/>
2	Check hydraulic system - hoses, fittings	OK <input type="checkbox"/>	Repair <input type="checkbox"/>
3	Check battery - cables & connections	OK <input type="checkbox"/>	Repair <input type="checkbox"/>
4	Check all driveline capscrews - torque to spec. See service forms 80-1057 Torque Specification Chart & 80-627 Driveline Service.	OK <input type="checkbox"/>	No <input type="checkbox"/>
5	Check electrical system - lights, options, connections	OK <input type="checkbox"/>	No <input type="checkbox"/>
6	Check expander pins - torque to specification. (center hinge & steering cylinder pins)	OK <input type="checkbox"/>	No <input type="checkbox"/>
7	Check all pins, bushings and load bearing hardware	OK <input type="checkbox"/>	No <input type="checkbox"/>
8	Check accumulator pre-charge (if applicable)	OK <input type="checkbox"/>	No <input type="checkbox"/>

<b>Consumables</b>				
Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
235720	Drive Axle Gear Oil			*As Required

\*See manufacturer service manual

MECHANIC \_\_\_\_\_

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## Every 50 Hours or Weekly

### Checklist

1	Repeat the 10 hour check	OK <input type="checkbox"/>	No <input type="checkbox"/>
2	Check for fluid leaks - oil, fuel, water, transmission	OK <input type="checkbox"/>	Repair <input type="checkbox"/>
3	Check wheel lug nuts and studs mechanically	OK <input type="checkbox"/>	Repair <input type="checkbox"/>
4	Check battery electrolyte level	OK <input type="checkbox"/>	Add <input type="checkbox"/>
5	Lubricate chassis & driveline cross assemblies	OK <input type="checkbox"/>	No <input type="checkbox"/>
6	Record engine rpm	High _____	Low _____
7	Check for structural damage - inspect chassis & attachments for bending, cracking & broken welds	OK <input type="checkbox"/>	Repair <input type="checkbox"/>

### Consumables

Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
236077	Oil, Engine	1-1	592209	*As Required
219374	Grease (chassis)	1-1	592209	As Required
591654	Grease (driveline cross assemblies)	1-1	592209	As Required
238206	Hydraulic Oil	1-2	592209	As Required
238206	Transmission Fluid	1-2	592209	*As Required
235720	Drive Axle Gear Oil	1-1	592209	*As Required

\* See manufacturer service manual

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## Every 250 Hours or Monthly

### Checklist

1	Repeat the 50 hour check	OK <input type="checkbox"/>	No <input type="checkbox"/>
2	Take engine oil sample for analysis	OK <input type="checkbox"/>	No <input type="checkbox"/>
3	Change engine oil & filters	OK <input type="checkbox"/>	No <input type="checkbox"/>
4	Check axle differential oil level	OK <input type="checkbox"/>	Add <input type="checkbox"/>
5	Change fuel filters	OK <input type="checkbox"/>	Add <input type="checkbox"/>
6	Check axle planetary oil level	OK <input type="checkbox"/>	Add <input type="checkbox"/>
7	Change water treatment element	OK <input type="checkbox"/>	No <input type="checkbox"/>
8	Check all hydraulic pressures and record	OK <input type="checkbox"/>	No <input type="checkbox"/>
9	Check fire suppression actuator	OK <input type="checkbox"/>	No <input type="checkbox"/>
10	Inspect brake system & components	OK <input type="checkbox"/>	No <input type="checkbox"/>
11	Check and adjust the parking brake (if required)	OK <input type="checkbox"/>	No <input type="checkbox"/>

<b>Consumables</b>				
Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
236077	Oil, Engine	1-1	592209	*As Required
588564	Filter, Fuel	2-1	590600	1
588563	Filter, Oil	2-1	590600	1

\*See manufacturer service manual

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### Every 500 Hours or Quarterly

#### Checklist

1	Repeat the 250 hour check	OK <input type="checkbox"/>	No <input type="checkbox"/>
3	Change hydraulic filters (clean hydraulic oil strainers)	OK <input type="checkbox"/>	No <input type="checkbox"/>
4	Change transmission filters	OK <input type="checkbox"/>	No <input type="checkbox"/>
5	Take oil samples from transmission, axle, and hydraulic system for analysis	OK <input type="checkbox"/>	No <input type="checkbox"/>
6	Check accumulator pre-charge pressure	OK <input type="checkbox"/>	No <input type="checkbox"/>

#### Consumables

Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
247429	Filter Element, Transmission (Dual Spin-On)	590567		2
588191	Service Kit, 100 GPM HP Filter	587385		3
588192	Service Kit, 40 GPM HP Filter	587036		1
591574	Service Kit, Return Filter	243457		2

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## Every 1,000 Hours or Semi-Annually

### Checklist

1	Repeat the 500 hour check	OK <input type="checkbox"/>	No <input type="checkbox"/>
2	Change transmission oil	OK <input type="checkbox"/>	No <input type="checkbox"/>
3	Clean and flush cooling system & replace filter	OK <input type="checkbox"/>	No <input type="checkbox"/>
4	Check pins and bushings for wear	OK <input type="checkbox"/>	No <input type="checkbox"/>
5	Steam clean machine, inspect for structural cracks	OK <input type="checkbox"/>	No <input type="checkbox"/>
6	Drivelines - See service form 80-627, Driveline Service & Maintenance.	OK <input type="checkbox"/>	No <input type="checkbox"/>
7	Have ANSUL representative inspect and recertify fire suppression system	OK <input type="checkbox"/>	No <input type="checkbox"/>

### Consumables

Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
221340	Anti-Freeze, Premix 50/50	1-2	592209	As Required
238206	Transmission Fluid	1-2	592209	
591654	Grease Slip Yokes	1-2	592209	As Required
258699	Filter Element, Cab Pressurizer			1

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### Every 2,000 Hours or Annually

#### Checklist

1	Repeat the 1,000 hour check	OK <input type="checkbox"/>	No <input type="checkbox"/>
2	Drain, flush and fill differential	OK <input type="checkbox"/>	No <input type="checkbox"/>
3	Drain, flush and fill planetaries	OK <input type="checkbox"/>	No <input type="checkbox"/>
4	Change hydraulic oil	OK <input type="checkbox"/>	No <input type="checkbox"/>
5	Check wheel bearing preload and adjust if necessary	OK <input type="checkbox"/>	No <input type="checkbox"/>
6	Have Allied representative inspect machine (annually)	OK <input type="checkbox"/>	No <input type="checkbox"/>

#### Consumables

Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
235720	Drive Axle Gear Oil	1-1	592209	*As Required
238206	Hydraulic Oil		592209	As Required

\*See manufacturer service manual

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**Every 3,000 Hours**

**Checklist**

1	Drivelines - Inspect slip splines for wear (backlash). See service form 80-627, Driveline Service & Maintenance.	OK <input type="checkbox"/>	No <input type="checkbox"/>
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## Major Overhaul

### Checklist

1	Replace all hydraulic hoses	OK <input type="checkbox"/>	No <input type="checkbox"/>
2	Rebuild drive axle	OK <input type="checkbox"/>	No <input type="checkbox"/>
3	Perform Non-Destructive Testing (NDT) on axle spindles and axle extension mount ring. Mark and rotate spindle 90°.	OK <input type="checkbox"/>	No <input type="checkbox"/>
4	Rebuild hydraulic cylinders	OK <input type="checkbox"/>	No <input type="checkbox"/>
5	Rebuild hydraulic valves	OK <input type="checkbox"/>	No <input type="checkbox"/>
6	Rebuild transmission	OK <input type="checkbox"/>	No <input type="checkbox"/>
7	Rebuild torque converter	OK <input type="checkbox"/>	No <input type="checkbox"/>

### Consumables

Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
588312	Service Kit - Holddown & Kickoff Valve	587576	2	
251100	Service Kit, Hoist/Tilt Valve	250637	4	
251101	Seal Kit, Hoist/Tilt Valve	250637	1	
251102	Seal Kit, Hoist/Tilt Valve	250637	1	
250365	Cartridge, Valve	586605	8	
234385	Seal Kit, Steering Valve	234081	2	
234639	Service Kit, Flow Amplifier Valve	234082	1	
235622	Cartridge, Valve, Accumulator Charge Manifold	590181	1	
243785	Cartridge, Valve, Accumulator Charge Manifold	590181	1	
243786	Cartridge, Valve, Accumulator Charge Manifold	590181	1	
589032	Valve, Accumulator Charge Manifold	590181	1	
589045	Cartridge, Valve, Accumulator Charge Manifold	590181	1	
589046	Element, Modulating, Accumulator Charge Manifold	590181	1	
590511	Cartridge, Relief, Accumulator Charge Manifold	590181	1	
589047	Valve, Solenoid - Accumulator Charge Manifold	590181	1	
229043	Valve, Manifold Assembly, Fire System	590184	1	
590185	Valve, Cartridge, Manifold Assembly, Fire System	590184	1	
232514	Cartridge, Valve, Manifold Assembly Brakes	593630	1	
233943	Cartridge, Valve, Manifold Assembly Brakes	593630	1	
242225	Cartridge, Valve, Manifold Assembly Brakes	593630	1	
244835	Cartridge, Valve, Manifold Assembly Brakes	593630	1	
256262	Valve, Manifold Assembly Brakes	593630	2	
566408	Service Kit, Steering Cylinder	569848	2	

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## Major Overhaul

<b>Consumables</b>				
Allied P/N	Description	Section in Parts Book	Where Used	Quantity Required for this Interval
566411	Service Kit, Kickoff Cylinder	531671	2	
566411	Service Kit, Holddown	531565	2	
566401	Service Kit, Hoist Cylinder	562896	2	
568937	Service Kit, Tilt	580770	2	
242649	Pump, Converter Charging	256295	1	
245520	Pump, Steering	590990	1	
247010	Pump, Tandem Implements	590990	1	
592771	Pump, Brake	590990	1	
587623	Service Kit, Transmission	591989	1	
587619	Service Kit, Converter	<b>256295</b>	1	
257099	Kit, Flexplate, 17"	590990	1	
584264	Service Kit, Differential & Carrier	580700	1	
587562	Service Kit, Planet Carrier Assembly	211953	2	
581995	Service Kit, Parking Brake Caliper	244409	2	
593415	Service Kit, Wet Disk Brake	584897	2	
590720PH	Hose Kit, Air Conditioner/Heater	593640	1	
240714	Hose, Air Cleaner Installation	590992	1	
209846	Hose, Power Unit	590990	1FT	
590458	Hose Kit, Fuel	589233	1	
591900PH	Hose Kit, Radiator Installation	590991	1	
589270	Hose Kit, Hydraulic System-Transmission	588102	1	
590932	Hose Kit, Hydraulic System Brakes	590921	1	
591367	Hose Kit, Hydraulic System Seat	586819	1	
590486	Hose Kit, Hydraulic System Seat to Bulkhead	589201	1	
592626	Hose Kit, Hydraulic System Chassis	590993	1	
589268	Hose Kit, Hydraulic System-Hoist & Tilt	583191	1	
593362	Hose Kit, Hydraulic System-Steering	593363	1	
591583	Hose Kit, Hydraulic System Carriage	590931	1	
591510	Hose Kit, Valve Module	591000	1	
234245	Hose, Cab	591868	16FT	
591952	Hose Kit, Fire Suppression	590994	1	

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