

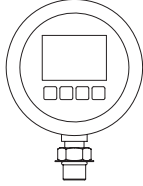

**Suggested Spares Guide L4160F-111****Consumables, Approximate 1 Year Supply (calculated at 2000 hours/year)**

Allied P/N	Description	On-Hand Quantity (Recommended)	Order Quantity
219374	Grease	20 Gallons	
219372	Transmission Fluid	44 Gallons	
219371	Hydraulic Oil	350 Gallons	
219370	Engine Oil	156 Gallons	
235720	Gear Oil (Front and Rear Diffs and Planetaries)	120 Gallons	
219368	Brake Fluid (Transmission Fluid)	3 Gallons	
221340	Anti-Freeze, Premix 50/50	48 Gallons	
224319	Air Cleaner Primary Element	8	
217617	Air Cleaner Safety Element	8	
243457	Return Filter Elements	8	
570244	Service Kit, 40 GPM Hyd Filter	12	
570245	Service Kit, 100 GPM Hyd Filter	12	
247429	Transmission System Filter Element	8	
253696	Transmission System Filter Element	4	
248856	Filter Element, Cab Pressurizer	4	
239058	Air Conditioner Filter Element	4	
251657	Serpentine Belt	1	
254174	Fuel/Water Separator Filter Element	4	
588188	Fuel/Water Separator Element	4	
587565	Engine Oil Filter	12	
587568	Fuel Filter	4	

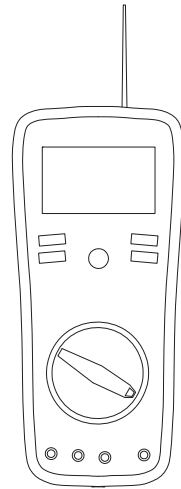
# Diagnostic Tools

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

**906601**  
Kit, Digital Pressure Gauge  
W/Female QD Connector  
0 to 8700 PSI

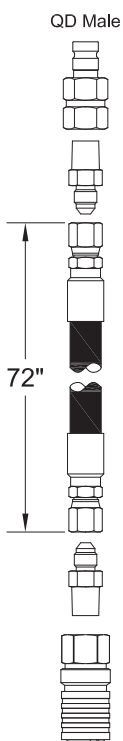



QD Female



**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

QD Male

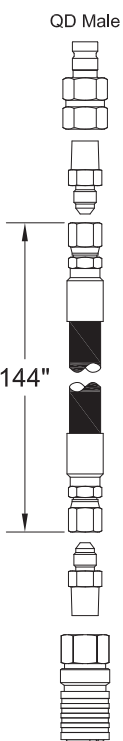


72"

QD Female

**69782**  
Kit, Hose Assembly, W/QD Both Ends

QD Male




144"

QD Female


**70381**  
Kit, Hose Assembly, W/QD Both Ends

QD Male




1/8 NPT Male  
**R14038**

QD Male




1/8 NPT Female  
**R14045**

QD Male



#6 JIC Female  
**236625**

QD Male




#8 JIC Female  
**253326**

QD Male



1/4 NPT Female  
**228040**

QD Male




#4 JIC Female  
**R330325**

QD Male



#4 SAE Male  
**R14040**

QD Male



#6 SAE Male  
**R14082**

## 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	

## 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	
558533	Fire Extinguisher Wrench	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	
588469	Wrench Set 5/16 To 2-1/2 31PC	1	
588527	Hex Key Set, .025" To 5/8"	1	

## Suggested Spares Guide L4160F-111

### Electrical

Allied P/N	Description	Quantity on Machine	Order Quantity
247681	Windshield Wiper Motor	2	
239161	Fan, Defroster	2	
251035	Map Lamp	1	
248702	Microswitch, Electric Shift Control Handle	6	
244027	Sensor Kit Electronic Throttle Pedal	1	
251570	Thermistor, Oil/Air/Water Temp	3	
581872	Digital Speed Sensor Assembly	1	
202889	Oil Pressure Switch	1	
249539	Engine Heater	1	
245334	Filter Indicator, Elec/Vis	1	
239342	Auxiliary Heater Motor, 24v	1	
R13659	Work Light	1	
218755	Reverse Alarm	1	
550356	Heater Assembly, Hydraulic Tank	1	
249338	Lamp Assy, HID Trapezoid 24vdc, 35W	6	
239827	Cab Pressurizer	1	
R10547	Buzzer, Low Air	1	
231923	Switch, Float, Low Hyd Oil	1	
232908	Relay	1	
236502	Lamp, Pilot	2	
236503	Lens, Red	1	
236504	Lens, Green	1	
249288	Lamp Assy, HID Flood, 24Vdc, 35W	4	
239036	Motor, AC, 24v	1	
250589	Coil, Ride Control Manifold	1	
237281	Replacement Lamp, Amber Flasher Light	1	
587434	Digital Speed Sensor	1	
248902	Prox Sensor, Holddown Position	1	
236489	Switch, Wiper (24V)	2	
237688	Switch, 24V	4	
234736	Switch, 24V	9	
236488	Switch, On/Off/On (24V)	3	
R13656	Switch, 24V	2	
236504	Lens, Green	5	
251173	Annunciator, Led (Yel/Yel)	2	
251039	Annunciator, Led (24V) (Red/Red)	6	

## Suggested Spares Guide L4160F-111

### Electrical (continued)

Allied P/N	Description	Quantity on Machine	Order Quantity
251037	Annunciator, Led (24V) (Red/Grn)	7	
252267	Annunciator, Led (24V) (Grn/Grn)	3	
251107	Lamp (28V, Yellow Led)	2	
251106	Lamp (28V, Green Led)	18	
251174	Filter Cap Assembly (Yel)	2	
251040	Filter Cap Assembly (Red/Grn)	7	
251042	Filter Cap Assembly (Red)	6	
252268	Filter Cap Assembly (Grn)	3	
234509	Cover, Blank	3	
236507	Lens, Rotary Beacon (Yellow)	3	
249692	Display Module, Powerview	1	
249694	Plug (Pvjr, 6-Way W/Resistor)	1	
251326	Gauge, Voltmeter (24V)	1	
251329	Gauge, Tach	1	
242491	Gauge, Fuel Level (24V, 240-33 Ohm)	1	
251325	Gauge, Eng Oil Press (12/24 Vdc)	1	
249693	Gauge, Eng Coolant (14Vdc)	1	
242488	Gauge, Air Press (0-150Psi)	1	
234264	Pushbutton, Mushroom, Yellow	1	
234739	Switch, Dimmer, 17W	1	
229301	Relay (24 Vdc Start)	2	
R10547	Buzzer	1	
586134	Programmed Plc	1	
223069	Circuit Breaker 30 Amp	4	
232908	Relay 18-24Vdc	6	
223063	Circuit Breaker 3 Amp	1	
223065	Circuit Breaker 5 Amp	2	
229306	Circuit Breaker 10 Amp	5	
223067	Circuit Breaker 15 Amp	5	
245157	Outlet, Power (15Amp)	1	
242950	Fuse 1 Amp	20	
232903	Power Converter	1	
243633	Horn 6-28 Vdc	1	
581940	Programmed Fan Controller	1	
581941	Programmed Fan Controller	1	

## Suggested Spares Guide L4160F-111

### Miscellaneous Parts / Seals

Allied P/N	Description	Quantity on Machine	Order Quantity
224744	Hydraulic Tank Filler/Breather	1	
561108	Hydraulic Tank Dipstick	1	
555064	Gasket, Manhole Cover	2	
562468	Gasket, Return Filters Cover	1	
224226	Rubber Elbow (45°, 7 ID)	2	
228425	Rubber Elbow (45°, 7 - 6)	1	
208234	Rubber Elbow (90°, 7 ID)	1	
215733	Rubber Elbow (90°, 6 ID)	6	
224354	Rubber Elbow (90°, 7 - 6)	2	
250669	Rubber Seal, Locking Groove	190	
250670	Rubber Seal	190	
243652	Tubes, V-Fin	190	
226663	Rubber Seal	190	
226664	Rubber Seal, Locking Groove	190	
253953	Tubes, V-Fin	190	
231800	Seat Suspension	1	
505499	Gasket	3	
27360	Gasket, Pump Mounting	1	
226184	Gasket, Pump Mounting	1	
516672	Gasket, Pump Mounting	1	
559079	Dipstick, Engine Oil	1	
563667	Dipstick, Transmission	1	
227988	Fuel Tank Filler/Breather	1	
203498	O-Ring, Bogie Installation	8	
250655	Bellows, Remote Control Valve	1	
249617	Bellows, Remote Control Valve	1	
215096	Safety Belt	1	
200268	Breather, Front Axle	1	
243938	Horn, Dual Air	1	
237016	Cushion, Training Seat	1	
240783	Safety Belt, Training Seat	1	
240259	Kit, Seatbelt Hardware, Training Seat	1	
568632	Brake Linings, Drive Axle	12	
232315	O-Ring, Bogie Axle Cradle Installation	2	
224224	O-Ring, Bogie Axle Cradle Installation	2	
234539	O-Ring, Bogie Axle Cradle Installation	2	
212052	Fire Extinguisher	1	

## Suggested Spares Guide L4160F-111

### Tines and Arms

Allied P/N	Description	Quantity on Machine	Order Quantity
582351	HD Arm (Duckbill)	1	
582350	HD Arm	2	
582346	KO Arm, RH	1	
582349	KO Arm, LH	1	
578326	Tine	2	

### Safety Stock

Allied P/N	Description	Quantity on Machine	Order Quantity
583123	Converter	1	
247010	Pump, Tandem (CCW)	1	
245520	Pump, Hyd (CCW)	1	
248990	Pump (CCW) (2750 PSI)	1	
251596	Pump, Hyd (CCW)	1	
250864	Pump, Vane (CCW)	1	
581565	Transmission	1	
225033	Differential & Carrier Assy, Front Axle	1	
225037	Axle Shaft, Front Axle	2	
251871	Differential & Carrier Assy, Rear Axle	1	
251050	Planet Carrier Assembly, Rear Axle	2	
251048	Axle Shaft, Rear Axle	2	
583787	Driveline Assembly	1	
215403	. Cross Assembly	2	
252657	Driveline Assembly	1	
248964	Driveline Assembly	1	
215403	. Cross Assembly	2	
253256	Driveline Assembly	1	
215403	. Cross Assembly	1	
583788	Driveline Assembly	1	
583789	Driveline Assembly	1	
215403	. Cross Assembly	1	
249854	Driveline Assembly	1	
215403	. Cross Assembly	2	
582303	Cylinder, Duckbill HD	2	
574867	Cylinder, HD	2	
582302	Cylinder, KO	2	
582657	Cylinder, Steering	2	

## Suggested Spares Guide L4160F-111

### Safety Stock (continued)

Allied P/N	Description	Quantity on Machine	Order Quantity
573191	Cylinder, Hoist	2	
573078	Cylinder, Tilt	2	
250637	Valve, Hoist & Tilt	1	
234082	Valve, Flow Amplifier	1	
236721	Valve, HD/KO	2	

### Bushings and Pins

Allied P/N	Description	Quantity on Machine	Order Quantity
558366	Tine Pin	2	
561517	Carriage to Boom Pin	1	
561170	Carriage to Boom Pin Bushing (Located in Boom)	2	
558423	Carriage to Tilt Cylinder Pin	2	
204503	Tilt Cylinder to Carriage Spherical Bearing	2	
558363	Duckbill HD Cylinder Base End Pin	2	
558362	Duckbill HD Cylinder Rod End Pin	2	
534117	Duckbill HD Cylinder Base End Bushing	8	
510012	Duckbill HD Cylinder Rod End Bushing	2	
558159	Duckbill HD Arm Bushing	4	
583142	Duckbill HD Arm Pin	2	
526135	HD Cylinder Base End Pin	2	
505841	HD Cylinder Rod End Pin	2	
505206	HD Cylinder Base End Bushing	4	
505603	HD Cylinder Rod End Bushing	2	
558159	HD Arm Bushing	4	
558364	HD Arm Pin	2	
558363	KO Cylinder Base End Pin	2	
558362	KO Cylinder Rod End Pin	2	
534117	KO Cylinder Base End Bushing	4	
510012	KO Cylinder Rod End Bushing	2	
558159	KO Arm Bushing	4	
558364	KO Arm Pin	2	



**Suggested Spares Guide L4160F-111****Bushings and Pins (continued)**

Allied P/N	Description	Quantity on Machine	Order Quantity
567521	Bushing, Bogie Axle Cradle	1	
573163	Tilt Cylinder Base Bushing	4	
573173	LH/RH Stabilizer Arm Pin (Upper)	2	
573171	LH/RH Stabilizer Arm Bushing (Upper)	2	
570333	LH/RH Stabilizer Arm Tapered Retaining Bolt	2	
570441	LH/RH Stabilizer Arm Bushing (Inner)	2	
570332	LH/RH Stabilizer Arm Bushing (Outer)	2	
570233	LH/RH Rear Stabilizer Pin (Lower)	2	
570319	LH/RH Rear Stabilizer Ear Bushing (Upper & Lower)	8	
570232	LH/RH Rear Stabilizer Deck Eye Bushing	2	
570233	LH/RH Rear Stabilizer Pin (Upper)	2	
570232	LH/RH Rear Stabilizer Bushing (Upper)	2	
561518	Boom to Chassis Pin	1	
561170	Boom to Chassis Bushing (Located in Boom)	4	
573210	Hoist Cylinder to Chassis Pin	2	
573067	Hoist Cylinder to Boom Pin	1	
573068	Hoist Cylinder Rod to Boom Bushing (Located in Boom)	2	
573205	Hoist Cylinder Base End Bushing	4	
251171	Steering Cylinder Rod & Base End Pin	4	
250542	Steering Cylinder Rod & Base End Spherical Bearing	2	
581537	Bogie Assembly Hinge Pin (Expander)	2	
563163	Bogie Assembly Hinge Bushing	2	

**Suggested Spares Guide L4160F-111**
**Bearings**

Allied P/N	Description	Quantity on Machine	Order Quantity
249405	Flanged Bearing, Driveline Installation	4	
204602	Bearing Cup, Bogie Axle Cradle	2	
232647	Bearing Cone, Bogie Axle Cradle	2	
225380	Cup, Bearing, Front Axle	2	
225381	Cone, Bearing, Front Axle	2	
225385	Cup, Bearing, Front Axle	1	
225386	Cone, Bearing, Front Axle	1	
225391	Cup, Bearing, Front Axle	3	
225392	Cone, Bearing, Front Axle	1	
225400	Cone, Bearing, Front Axle	1	
225403	Cone, Bearing, Front Axle	1	
225433	Bearing, Roller, Planet Assembly, Front Axle	12	
239215	Bearing, Planet Assembly, Front Axle	12	
225480	Bearing, Axle Housing Group, Front Axle	2	
225463	Bearing Cup, Wheel Hub Group, Front Axle	4	
225464	Bearing Cone, Wheel Hub Group, Front Axle	4	
251051	Bearing Cone, Rear Axle	2	
251052	Bearing Cup, Rear Axle	2	
251054	Bearing Cup, Rear Axle	2	
251055	Bearing Cone, Rear Axle	2	
259311	Bearing Cylindrical, Rear Axle Planetary	8	
251067	Bearing Cup, Rear Axle Differential	2	
251066	Bearing Cone, Rear Axle Differential	2	
251065	Bearing, Inner Pinion, Rear Axle Differential	1	
251068	Bearing Cone, Center Pinion, Rear Axle Diff	1	
251069	Bearing Cup, Center Pinion, Rear Axle Diff	1	
201130	Bearing Cup, Outer Pinion, Rear Axle Diff	1	
201129	Bearing Cone, Outer Pinion, Rear Axle Diff	1	

## Suggested Spares Guide L4160F-111

### Bearings (continued)

Allied P/N	Description	Quantity on Machine	Order Quantity
247036	Bearing, Roller, Transmission	2	
212247	Bearing, Transmission	2	
247041	Bearing, Idler Shaft, Transmission	1	
247045	Bearing Cup, Transmission	2	
247046	Bearing Cone, Transmission	2	
212272	Bearing, Transmission	2	
212278	Bearing Assy, Transmission	2	
212289	Bearing Cone, Transmission	2	
206540	Bearing Cup, Transmission	2	
240238	Bearing, Roller, Transmission	2	
222872	Bearing Cup, Transmission	4	
222871	Bearing Cone, Transmission	4	
219769	Bearing Cone, Transmission	2	
202852	Bearing Cup, Transmission	2	
219772	Bearing Cup, Transmission	2	
219773	Bearing Cone, Transmission	2	
241547	Bearing, Transmission	1	
240157	Bearing, Transmission	1	
R7019578	Bearing, Transmission	1	
216544	Bearing Cup, Torque Converter	1	
251628	Bearing Cone, Torque Converter	1	
219654	Bearing Cone, Torque Converter	3	
219655	Bearing Cup, Torque Converter	3	
251633	Bearing, Torque Converter	3	
216584	Bearing, Torque Converter	1	
219669	Bearing, Torque Converter	1	

**Suggested Spares Guide L4160F-111****Rebuild Kits/Components**

Allied P/N	Description	Quantity on Machine	Order Quantity
582991	Service Kit, Converter	1	
582611	Ring Gear Kit	1	
583010	Service Kit, Transmission	1	
244026	Roller Kit, Electronic Throttle Pedal	1	
244027	Sensor Kit, Electronic Throttle Pedal	1	
244028	Treadle Pin Kit, Electronic Throttle Pedal	1	
575226	Bearing and Spacer Kit, Front Axle Planet	2	
251059	Hub, Cup & Stud Assy, Rear Axle	1	
251062	Gear & Bearing Kit, Rear Axle Planetary	2	
219340	Service Kit, Rear Axle Diff	1	
251875	Ring Gear & Pinion Set, Rear Axle Diff	1	
222994	Differential Sub-Assembly, Rear Axle	1	
241206	Side Gear & Pinion Kit, Rear Axle Diff	1	
576112	Service Kit, Duckbill HD/KO Cylinder	4	
566413	Service Kit, HD Cylinder	2	
566412	Service Kit, Steering Cylinder	2	
572952	Service Kit, Hoist Cylinder	2	
573162	Service Kit, Tilt Cylinder	2	
234639	Service Kit, Steering Flow Amplifier	1	
570810	Service Kit, HD/KO Valve	2	
251100	Service Kit, Relief Valve, Part of HD/KO Valve	4	

## Suggested Spares Guide L4160F-111

### Hose Kits

Allied P/N	Description	Quantity on Machine	Order Quantity
588911	Hose Kit, For Chassis Assy 582266	1	
588912	Hose Kit, For Boom Assy 582267	1	
588913	Hose Kit, For Bogie Instl 582275	1	
588914	Hose Kit, For Hyd Sys-Carriage 582270	1	
588915	Hose Kit, For Remote Lube Sys 582271	1	
588916	Hose Kit, For Cowl Assy 582272	1	
588917	Hose Kit, For Controls, Seat Mtd 581046	1	
588918	Hose Kit, For Air System-Cab 577365	1	
588919	Hose Kit, For Power Unit 581047	1	
588920	Hose Kit, For Fuel System 581934	1	
588921	Hose Kit, For Hyd Sys-Chassis 582276	1	
588922	Hose Kit, For Hyd Sys-Strg 583064	1	
588852	Hose Kit, For Hyd Sys-Hoist 573265	1	
588923	Hose Kit, For Valve Module 582281	1	
588924	Hose Kit, For Hyd Sys-Tilt 582282	1	
588925	Hose Kit, For Transmission Circuit 582283	1	
588926	Hose Kit, For Hyd Sys-Brakes 581408	1	
588927	Hose Kit, For Heater Instl 574675	1	
588928	Hose Kit, For Check Fire Sc 580258	1	
588929	Hose Kit, For Air System-Chassis 577402	1	
588930	Hose Kit, For Ac/Heater 581906	1	
588931	Hose Kit, For Ride Control, Load Dampening 581750	1	
588932	Hose Kit, For Emerg Strg Instl 582287	1	