

#### **Tools**

Allied P/N	Description	On-Hand Quantity (Recommended)	See Section In Parts Book	Where Used
243274	Accumulator Recharge Valve	1 5-1	5-1	R13646
509574	Air Hose Kit	1		Various
558533	Fire Extinguisher Wrench	1	9-1	579079

### Consumables (Approximately 1 Year Supply\*)

Allied P/N	Description	On-Hand Quantity (Recommended)	See Section In Parts Book	Where Used
219374	Grease	20 Gallons		Various
238206	Transmission Fluid	10 Gallons	3-2	109-0156
219371	Hydraulic Oil	110 Gallons	5-6	583364
243458	Hydraulic Return Filter Elements	8	5-5	243457
236077	Engine Oil	110 Gallons	2-1	253666
	Axle- Differential-Rear	5 Gallons	3-1 (583082)	578903
235720	Axle- Differential-Front	5 Gallons	3-1 (583082)	578786
235720	Axle- Planetary Hubs	8 Gallons (2 Gal Each)	3-1 (583082)	241600
	Flow Divider Gearbox	1 Gallon	5-6	400-0009
000400	Additive For Front & Rear Differential	1 QT	3-1 (583082)	578903
239400	Additive For Front & Rear Differential	1 QT	3-1 (583082)	578786
221340	Anti-Freeze	20 Gallons	2-1 (583089)	087-0206
210299	Air Filter	4	4-1	583083
254866	Air Cleaner Safety Element	2	2-5	089-0129
587676	Engine Oil Filter	12	2-1	253666
587677	Engine Fuel Filter Element	12	2-1	253666
232153	Cooling System Filter	12	2-1	253666
570245	Service Kit, 100 GPM Hyd Filter	12	5-5	228201
247429	Transmission Filter Element	8	3-2	583091
587678	Fan Belt	1	2-1	253666
254108	Shoe, Brake	8	3-1	583082
254116	Kit, Hardware, Brake	4	3-1	583082

<sup>\*</sup>Calculated at 2000 hours/year.

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#### **Miscellaneous Parts / Seals**

Allied P/N	Description	Quantity on Machine	See Section In Parts Book	Where Used
R238535	Breather Element	2	3-2	583091
578833	Suction Filter Cover Plate Gasket	1	5-6	583364
203257	Cross Assembly F/Driveline Assy	2	3-1	583082
216426	Cross Assembly F/Driveline Assy	1	3-1	583082
212389	Cross Assembly F/Driveline Assy	2	3-1	583082
200307	Elbow, Air Intake (Rubber)	3	2-5	583095
253478	Elbow, Air Intake (Rubber)	1	2-5	583095
241644	Rubber Boot, Control Valve	1	7-2	109-0159
241819	Shock Absorber, Seat	1	7-3	575305
176-0089	Rubber Door Stop	2	8-1	583087
103-0173	Gasket, Axle W/Out Brakes, Steering	24	8-2	583357
579051	Gasket, Cab Group	1	7-1	583084
000047	Cooket Door Crown Accomply	1	7-1	400-0062
236847	Gasket, Door Group Assembly	1	7-1	400-0063
222451	Gasket, Tandem Pump	1	3-2 (583156)	093-0157
27360	Gasket, Steering/Hoist, Pump	1	5-2	093-0155
254889	Gasket, Pilot, Pump	1	5-2	254889
505449	Gasket, Hoist, Pump	1	5-2	254888



#### **Electrical**

Allied P/N	Description	Quantity on Machine	See Section In Parts Book	Where Used
249692	Display Module, Powerview	1	7-2	583097
584089	Program, DVC10	1	4-1	586782
584026	Transducer Assembly	4	4-1	586782
584030	Remote Control Box Assembly	1	4-1	586782
200220	Battery, 12v	2	2-1	583089
249803	Battery, Lithium; 3.6 Vdc	1	9-1	575455
249106	Battery Disconnect Switch	1	2-1	583089
117-0235	Light, Side Marker, Yellow	6	6-2	583093
117-0230	Light, Signal, Red	6	6-2	583093
117-0229	Light, Signal, Yellow	2	6-2	583093
117-0232	Light, Rear Marker, Red	2	6-2	583093
117-0238	Light, Signal, Yellow	2	6-2	583093
232906	Light, Flasher, Amber	1	6-2	583093
117-0234	Light, Reverse	2	6-2	583093
117-0240	Light, Platform	2	6-2	583093
117-0227	Headlight, Assembly	2	6-2	583093
225644	Light, Blue	1	7-2	583097
224065	Light, Green	2	7-2	583097
117-0242	Light, Red	9	7-2	583097
117-0245	Light, Amber	5	7-2	583097
085-0216	Switch, Ignition	1	7-2	583097
085-0219	Switch, Toggle	5	7-2	583097
085-0220	Switch, Light Dimmer	1	7-2	583097
085-0234	Switch, Mirror Position	2	7-2	583097
085-0300	Switch, Rotary 4-Pos	1	7-2	583097
254619	Switch, Wiper Delay; 12V, 4-Position	2	7-2	583097
162-0120	Cable, Heater Pull	1	7-2	583097
558929	Knob Kit (Green and Yellow Knobs F/ Brake Valve	1	4-4	218928



### **Rebuild Kits/Components**

Allied P/N	Description	Quantity on Machine	See Section In Parts Book	Where Used
R14093	Service Kit, Front Differential, Pinion & Side Gear	1	3-4	241591
1114095	Service Kit, Rear Differential, Pinion & Side Gear	1	3-4	241543
241586	Service Kit, Front Differential, Ring & Pinion	1	3-4	241591
241300	Service Kit, Rear Differential, Ring & Pinion	1	3-4	241543
241587	Service Kit, Front Differential, Cap & Cover Asy	1	3-4	241591
241307	Service Kit, Rear Differential, Cap & Cover Asy	1	3-4	241543
241593	Service Kit, Front Differential, Sub Assembly	1	3-4	241591
241588	Service Kit, Rear Differential, Sub Assembly	1	3-4	241543
241589	Service Kit, Front Differential, Case	1	3-4	241591
241309	Service Kit, Rear Differential, Case	1	3-4	241543
587692	Service Kit, Planet Carrier	4	3-4	241523
578377	Service Kit, Suspension Cyl	12	5-4	578308
009-1508	Service Kit, Steering Group Cyl	4	5-4	578619
587683	Service Kit, Transmission	1	3-2	109-0156
570774	Service Kit, Converter	1	3-2	583156
218966	Service Kit, Brake Valve	1	4-4	218928
247515	Service Kit, Quick Release Valve	1	4-4	030-0534
247516	Service Kit, Modulating Relay Valve Cartridge & Diaphragm	1	4-3	030-1058
224747	Service Kit, Treadle Valve	1	4-4	211369
221647	Service Kit, Expello		4-3	217734
214419	Service Kit, Relay Valve	1	4-4	216285
234639	Service Kit, Steering Flow Amplifier Valve	1	5-3	234990
255140	Service Kit, Sectional For Control Valve	2	5-3	253982
255141	Service Kit, Mid-Inlet For Control Valve	4	5-3	253982
254832	Kit, Blanking;Indicator Trans Filter	2	5-5	584259



### **Bushings and Pins**

Allied P/N	Description	Quantity on Machine	See Section In Parts Book	Where Used
		1	3-1	004-1653
200744	Bushing, Air Chamber	1	3-1	004-1656
200744	Bushing, All Chambel	1	3-1	004-1654
		1	3-1	004-1657
219005	Bushing, Cab Mounting Group	2	7-1	578315
071-0723	Bushing, Drive Suspension Group	4	8-2	583086
F01000	Bushing, Steering Suspension Group	12	8-2	583085
501209	Bushing, Drive Suspension Group	4	8-2	583086
F70011	Bushing, Steering Suspension Group	24	8-2	583085
578311	Bushing, Drive Suspension Group	8	8-2	583086
F70010	Bushing, Steering Suspension Group	24	8-2	583085
578312	Bushing, Drive Suspension Group	8	8-2	583086
F70004	Bushing, Steering Suspension Group	24	8-2	583085
578834	Bushing, Drive Suspension Group	8	8-2	583086
071-0050	Bushing, Rubber	2	2-1	583089
071-0662	Bushing, Steering Assembly	4	3-1	578620
071-0728	Bushing, Beam End, Drive Suspension Group	4	8-2	583086
074 0004	Bushing, Drive Suspension Group	12	8-2	583085
071-0821		4	8-2	583086
040 4470	Pin, Cylinder, Steering Suspension Group	12	8-2	583085
019-1472	Pin, Cylinder, Drive Suspension Group	4	8-2	583086
======	Pin, Drive Suspension Group	4	8-2	583086
578309	Pin, Steering Suspension Group	12	8-2	583085
E70010	Pin, Drive Suspension Group	4	8-2	583086
578310	Pin, Steering Suspension Group	12	8-2	583085
019-1264	Pin, Steering Assembly	36	3-1	578620
019-1270	Pin, Steering Assembly	2	3-1	578620



### **Bearings**

Allied P/N	Description	Quantity on Machine	See Section In Parts Book	Where Used
135-0284	Bearing, Carrier, Drivetrain	1	3-1	583082
135-0360	Bearing, Steering Suspension Group	12	8-2	583085
241534	Bearing Cone, Axle Kit	4	3-1	245299
204594	Bearing Cup, Axle Kit	4	3-1	245299
241531	Bearing Cone, Axle Kit	4	3-1	245299
241532	Bearing Cup, Axle Kit	4	3-1	245299
236719	Bearing, Seat Installation	1	7-3	583786
	Bearing,RH Rod End, Steering Layout	14	3-1	575635
135-0372	Bearing,LH Rod End, Steering Layout	14	3-1	135-0373
	Bearing, Cylinder Assembly, Steering Layout	8	3-1	578619
135-0057	Bearing, Drive Suspension Group	8	8-2	583086
135-0370	Bearing, Engine Mount	4	2-1	583089
136-0177	Bearing Cone, Outer, Steering Suspension Group	24	8-2	583357
136-0179	Bearing Cone, Inner, Steering Suspension Group	24	8-2	583357



### **Major Components**

Allied P/N	Description	Quantity on Machine	See Section In Parts Book	Where Used
583156	Converter	1	2-1	583089
093-0155	Pump, Steering/Hoist	1	2-1	583089
093-0157	Pump, Tandem	1	2-1	583089
254889	Pump, Pilot	1	2-1	583089
254888	Pump, Hoist	1	2-1	583089
109-0156	Transmission	1	3-1	583082
109-0158	Transmission Cooler	1	2-1	583089
241543	Differential & Carrier, Rear	1	3-1	245299
241591	Differential & Carrier, Front	1	3-1	245299
241523	Planet Carrier Assembly	4	3-1	245299
	Axle Shaft	4	3-1	583082
246901	Driveline	1	3-1	583082
578983	Driveline	1	3-1	583082
203257	. Cross Assembly	2	3-1	578983
	Cylinder, Shutter	1	4-1	583083
578308	Cylinder, Suspension Group	12	8-2	583086
578619	Cylinder, Steering Group	4	3-1	578620
218928	Valve, Brake	2	4-1	583083
	Valve, Quick Release	1	4-1	583083
	Valve, Modulating Relay	1	4-1	583083
211369	Valve, Treadle	1	4-1	583083
	Valve, Treadle	1	4-1	583083
	Valve, Pop-Off	1	4-1	583083
	Valve, Check For Air Tank	2	4-1	583083
217734	Valve, Expello	4	4-1	583083
	Valve, Shuttle	1	4-1	583083
			7-2	583097
030-0667		2	4-1	583083
030-1065	Valve, For Air Horn	1	4-1	583083
030-1073	Valve, Flow Control	1	5-1	583094
030-1074	Valve, Flow Control	1	4-1	583083
204695	Valve, Check	1	4-1	583083
216285	Valve, Relay	1	4-1	583083
030-1071	Valve, Heater	1	7-3	583096
226271	Valve, Check	2	9-1	575455
232061	Valve, Shift Module	1	3-2	583091
234990	Valve, Steering Flow Amplifier	1	5-1	583094
245847	Valve, Check	1	5-1	583094
253982	Valve, Control Valve, 2 Spool	1	5-1	583094
254171	Valve, Check	1	5-1	583094



### **Major Components Continued**

Allied P/N	Description	Quantity on See Section Machine In Parts Book		Where Used
254173	Valve, Check	1	5-1	583094
030-0058	Valve, Check	1	5-1	583094
030-1028	Valve, Gauge	1	5-1	583094
030-1031	Valve, Shuttle	3	5-3	030-1030
030-1165	Valve, Push Button	1	7-3	583786
254173	Valve, Check	1	5-1	583094
030-0058	Valve, Check	1	5-1	583094
218728	Valve, Relief	1	9-1	575455



### **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.

#### **NOTICE**

Always refer to engine manufacture operators and maintenance manuals before performing any maintenance on engine.

Bef	Before Starting Engine, Check the Following:				
Ref	Component	ОК	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	HYDRAULIC CYLINDERS (Check for leaks)				
5	RADIATOR & OIL COOLER (Check coolant level - check for leaks; are fins clean and unobstructed?)				
6	AIR CLEANER/INTAKE SYSTEM (Check indicator - clean / change element as required, empty dust cup, check for leaks / damage)				
7	ENGINE BELTS (Check for adjustment and wear)				
8	WHEELS & TIRES (Check condition and pressure)				
9	AIR TANK (Check drain valves for correct operation)				
10	LUBRICATION CHECK POINTS (See Page 17)				
11	WALK AROUND INSPECTION OF STRUCTURE (Check welds, leaks, damaged components, etc)				
12	FIRE SAFETY CHECK (Check for accumulated debris in engine compartment, etc)				
13	FIRE SUPPRESSION SYSTEMS (Verify certifications are current)				

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

No	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	HLT185
SERIAL No	118612
HOUR METER	



## **Every 50 Hours or Weekly**

#### **Checklist**

1	Repeat the 10 hour check	ок 🗖	No 🗖
2	Check for fluid leaks - oil, fuel, water, transmission	ок 🗖	Repair 🗖
3	Check wheel lug nuts and studs mechanically	ок 🗖	Repair 🗖
4	Check battery electrolyte level	ок 🗖	Add 🗖
5	Lubricate - refer to Lubrication chart	ок 🗖	No 🗖
6	Check for structural damage - inspect chassis & attachments for bending, cracking & broken welds	ок 🗖	Repair 🗖

Allied P/N	Description	Quantity Required for this Interval
219374	Grease, Mobilgrease XHP 222 Special	As Required
238206	Transmission Fluid, Mobil 424	As Required
219371	Hydraulic Oil, Mobil DTE 10 Excel 32	As Required
236077	Engine Oil	As Required
235720	Drive Axle Gear Oil	As Required

MECHANIC	
SUPERVISOR	
DATE	
MODEL	HLT185
SERIAL No	118612
OUR METER	



## **Every 250 Hours or Monthly**

#### Checklist

1	Repeat the 50 hour check	ок 🗖	No 🗖
2	Take engine oil sample for analysis	ок 🗖	No 🗖
3	Change engine oil & filters	ок 🗖	No 🗖
4	Change fuel filters	ок 🗖	No 🗖
5	Check axle differential oil level	ок 🗖	Add 🗖
6	Check axle planetary oil level	ок 🗖	Add 🗖
7	Change Cooling System Filter	ок 🗖	No 🗖
8	Check all hydraulic pressures and record	ок 🗖	No 🗖

Allied P/N	Description	Quantity Required for this Interval
236077	Engine Oil	9 Gallons
587676	Engine Oil Filter	1
232153	Engine Cooling System Filter	1
587677	Fuel Filter Element	1

MECHANIC	
SUPERVISOR	
DATE	
MODEL	HLT185
SERIAL No	118612
HOUR METER	



# **Every 500 Hours or Quarterly**

#### **Checklist**

1	Repeat the 250 hour check	ок 🗖	No 🗖
2	Change Hydraulic filters	ок 🗖	No 🗖
3	Change Transmission filters	ок 🗖	No 🗖
4	Take oil samples from transmission, axle, and hydraulic system for analysis	ок 🗖	No 🗖
5	Check Accumulator pre-charge pressure	ок 🗖	No 🗖

Allied P/N	Description	Quantity Required for this Interval
243458	Return Filter Elements	2
570245	Filter Service Kit, 100 GPM Hyd Filter	3
247429	Transmission Filter Element	2

MECHANIC	
SUPERVISOR	
DATE	
MODEL	HLT185
SERIAL No	118612
IOUR METER	



# **Every 1,000 Hours or Semi-Annually**

#### Checklist

1	Repeat the 500 hour check	OK □	No □
2	Change transmission oil	OK □	No □
3	Clean and flush cooling system	OK □	No □
4	Check pins and bushings for wear	OK □	No □
5	Steam clean machine, inspect for structural cracks	OK □	No □
6	Have ANSUL representative inspect and recertify fire suppression system	OK □	No □

Allied P/N	Description	Quantity Required for this Interval
238206	Transmission Fluid, Mobil 424	10 Gallons
221340	Anti-Freeze	7 Gallons

MECHANIC	
SUPERVISOR	
DATE	
MODEL	HLT185
SERIAL No	118612
HOUR METER	



## **Every 2,000 Hours or Annually**

#### **Checklist**

1	Repeat the 1,000 hour check	OK □	No □
2	Drain, flush and fill differential	ОК □	No □
3	Drain, flush and fill planetaries	ок 🗖	No □
4	Change hydraulic oil	ок 🗖	No □
5	Have Allied representative inspect machine (annually)	ок 🗖	No □

Allied P/N	Description	Approximate Quantity Required for this Interval
	Axle - Differential - Rear	5 U.S. Gallons
235720	Axle - Differential - Front	5 U.S. Gallons
	Planetaries	2 U.S. Gallons Each
219371	Hydraulic Oil, Mobil DTE 10 Excel 32	106 Gallons

MECHANIC	
SUPERVISOR	
DATE	
MODEL	HLT185
SERIAL No	118612
IOUR METER	



## **Major Overhaul**

#### **Checklist**

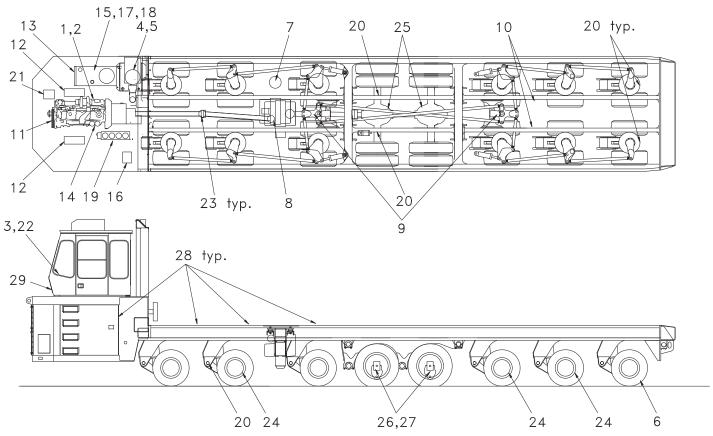
1	Replace all hydraulic hoses	ок 🗖	No 🗖
2	Rebuild drive axle	ок 🗖	No 🗖
3	Rebuild hydraulic cylinders	ок 🗖	No 🗖
4	Rebuild hydraulic valves	ок 🗖	No 🗖
5	Rebuild transmission	ок 🗖	No 🗖
6	Rebuild torque converter	ок 🗖	No 🗖
7	Pumps (Steering/Hoist, Tandem, Pilot, Hoist)	ок 🗖	No 🗖

#### **Kits**

Allied P/N	Description	Quantity Required for this Interval	See Section In Parts Book	Where Used
R14093	Service Kit, Front Differential, Pinion & Side Gear	1	3-4	241591
H 14093	Service Kit, Rear Differential, Pinion & Side Gear	1	3-4	241543
241586	Service Kit, Front Differential, Ring & Pinion	1	3-4	241591
241300	Service Kit, Rear Differential, Ring & Pinion	1	3-4	241543
241587	Service Kit, Front Differential, Cap & Cover Asy	1	3-4	241591
241307	Service Kit, Rear Differential, Cap & Cover Asy	1	3-4	241543
241593	Service Kit, Front Differential, Sub Assembly	1	3-4	241591
241588	Service Kit, Rear Differential, Sub Assembly	1	3-4	241543
041500	Service Kit, Front Differential, Case	1	3-4	241591
241589	Service Kit, Rear Differential, Case	1	3-4	241543
587692	Service Kit, Planet Carrier	4	3-4	241523
578377	Service Kit, Suspension Cyl	12	5-4	578308
009-1508	Service Kit, Steering Group Cyl	4	5-4	578619
587683	Service Kit, Transmission	1	3-2	109-0156
570774	Service Kit, Converter	1	3-2	583156
218966	Service Kit, Brake Valve	1	4-4	218928
247515	Service Kit, Quick Release Valve	1	4-4	030-0534
247516	Service Kit, Modulating Relay Valve Cartridge & Diaphragm	1	4-3	030-1058
224747	Service Kit, Treadle Valve	1	4-4	211369
221647	Service Kit, Expello		4-3	217734
214419	Service Kit, Relay Valve	1	4-4	216285
234639	Service Kit, Steering Flow Amplifier Valve	1	5-3	234990
255140	Service Kit, Sectional For Control Valve	2	5-3	253982
255141	Service Kit, Mid-Inlet For Control Valve	4	5-3	253982
254832	Kit, Blanking;Indicator Trans Filter	2	5-5	584259
254108	Shoe, Brake	8	3-1	583082
241966	Service Kit, Pump, Steering/Hoist	1	5-2	093-0155
255023	Service Kit, Pump, Pilot	1	5-2	254889
250728	Service Kit, Pump, Hoist	1	5-2	254888



#### **Maintenance and Lubrication Checkpoints**



	Checkpoint	Interval		Checkpoint	Interval
1	Engine Oil Filter	Daily	16	Flow Divider Gearbox - Check Oil Level	Every 250 Hours
2	Engine Oil Level Dipstick	Daily	17	Hydraulic Tank Breather	Every 150 Hours
3	Fuel Level Gauge/Sight Gauge	Daily	18	Hydraulic Suction Filters	Every 1000 Hours
4	Engine Air Cleaner (Restriction/Leaks)	Daily	19	Hydraulic Pressure Filters	Every 1000 Hours
5	Engine Pre-Cleaner	Daily	20	Lubrication Points	Every 250 Hours
6	Condition of wheels and tires	Daily	21	Cooling System (Level, Leaks)	Daily
7	Transmission Filter	Every 500 Hours	22	Gauges And Indicators (Acceptable Readings)	Daily
8	Transmission Oil Level	Daily	23	Driveline Lube Points	Every 50 Hours
9	Steering Idler Pivot Lube Points	Every 250 Hours	24	Brake Calipers (Pads, Disks, And Lines)	Every 250 Hours
10	Air/Hydraulic Brake Actuator Fluid Level	Daily	25	Differential Oil Level (2 Places)	Every 250 Hours
11	Engine Belts (Condition And Tension)	Daily	26	Planetary Axle Housing Oil Level (4 Places)	Every 250 Hours
12	Batteries	Every 250 Hours	27	Drive Axles - Slack Adjuster And Cam Bushing Lube Points	Every 250 Hours
13	Hydraulic Oil Level Sight Gauge	Daily	28	Engine, Deck And Frame Access Door Hinges (10 Places)	Every 500 Hours
14	Engine Fuel Filters	Every 250 Hours	29	Steering Column U-Joints And Slip (6 Places)	Every 2500 Hours
15	Hydraulic Return Filter Gauge	Daily			