



CH3500 HARVESTER REPAIR MANUAL

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CH3500 Harvester Repair Manual

CAMECO®

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All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

GENERAL SPECIFICATIONS

Specifications

For additional information, refer to the John Deere Engine Manual.

Engine Type	John Deere 8081, 8.1L
Number of Cylinders	6
Horsepower	337 HP at 2100 RPM
Aspiration	Turbocharger and Air to Air Aftercooler
Oil Capacity	29.5 Liters (31 US Quarts)
Oil Filter	Top Load Oil Filter
Coolant Capacity	62.5 Liters (16.5 US Gallons)
Coolant Additive Element	Canister Type (Optional)

IMPORTANT: Do Not Mix Coolant Additive and Additive Elements or Use Together. Use Only One Method Exclusively.

Fuel Filters	Primary: Spin-On/Spin-Off Element with Water .. Separator Final: Spin-On/Spin-Off Element
Safety Shutoff.....	Swing Out Door with Shutoff Override Control.
Electrical System	12 Volt Battery

GENERAL SPECIFICATIONS

John Deere 6081 Engine

Description

The John Deere 6081 engine has 8.1 L, six in-line cylinders, 337 HP, is turbocharged and after-cooled.

Preliminary Service Intervals

After the first 100 hours of operation, or after rebuilding your engine, do the following:

1. Change the engine oil and filter.
2. Change all fuel filters.

Every 250 hours of operation thereafter, do the following:

1. Change the engine oil and filter.
2. Change all fuel filters.

Refer to the Maintenance Section for complete service intervals.

Common Wear Parts

Primary Fuel Element	RE503676 (Washable Screen)
Final Fuel Element	RE509596
Oil Filter	RE509672
Belt (Crank Shaft)	R135604

GENERAL CAPACITIES

Harvester Capacities

Component	Approximate Capacity
Fuel Tank—Diesel	568 L (150 US Gal)
Hydraulic Oil Tank—10W30 Motor Oil	405 L (107 US Gal) (World)
Radiator Coolant—50% Clean Water & 50% Ethylene Glycol	62.5 L (16.5 US Gal)
Track Final Drive—85W140	4.2 L (4.4 US Qt)
Wheel Final Drive—85W140	4.2 L (4.4 US Qt)
Chopper Gearbox—85W140	7.6 L (8 US Qt)
Basecutter Gearbox (With Legs)—85W140	Dry 10.4 L (11 US Qt)
Four Pump Drive—85W140	7.1 L (7.5 US Qt)
John Deere 6081 Engine—SAE 15W40 Oil	28.5 L (31 US Qt)
Air Conditioner—R134A Refrigerant (Empty System)	2.6 Kg (5.75 Lb)
—R134A Compressor Oil: ND-8	118 mL (4.0 Oz)

Tire Inflation Pressure

TIRE SIZE	PSI	KPA
Front		
Skidder 17.5 x 14—10 Ply (Galaxy)	75	517
Rear		
23.5 x 25-20 Ply (Galaxy)	54	372

TORQUE SPECIFICATIONS

The torque values listed in the following charts are for general use only. Do not use these values if a different torque value or tightening procedure is listed for a specific application.

Suggested Torque Values For Grades 5.6, 8.8, 10.9, 12.9 Zinc Plated Cap Screws

Nominal Diameter	Grade 5.6 Coarse		Grade 8.8 Coarse		Grade 10.9 Coarse		Grade 12.9 Coarse	
	Nm	ft-lb.	Nm	ft-lb.	Nm	ft-lb.	Nm	ft-lb.
M3	0.56	0.41	1.28	0.94	1.80	1.33	2.15	1.59
M4	1.28	0.94	2.90	2.14	4.10	3.02	4.95	3.65
M5	2.50	1.84	5.75	4.24	8.10	5.97	9.70	7.15
M6	4.30	3.10	9.90	7.30	14	10.30	16.50	12.10
M7	7.10	5.20	15.50	12.10	23	16.9	27	19.90
M8	10.50	7.70	24	17.70	34	25	40	29
M10	21	15	48	35	67	49	81	59
M12	36	26	83	61	117	86.2	140	103
M14	56	42	132	97	185	136	220	162
M16	88	64	200	147	285	210	340	250
M18	121	89	275	202	390	287	470	346
M20	171	126	390	287	550	405	660	486
M22	230	169	530	390	745	549	890	656
M24	295	217	675	497	960	708	1140	840
M27	435	320	995	733	1400	1032	1680	1239
M30	590	435	1350	995	1900	1401	2280	1681
M33	800	590	1830	1349	2580	1902	3090	2278
M36	1030	759	2360	1740	3310	2441	3980	2935
M39	1340	988	3050	2249	4290	3163	5450	3798

Suggested Torque Values For Grades 5.6, 8.8, 10.9, 12.9 Zinc Plated Cap Screws

Nominal Diameter	Grade 5.6 Fine		Grade 8.8 Fine		Grade 10.9 Fine		Grade 12.9 Fine	
	Nm	ft-lb.	Nm	ft-lb.	Nm	ft-lb.	Nm	ft-lb.
M8 X 1	N/A	N/A	25	18	35	25	42	30
M10 X 1.25	N/A	N/A	49	36	68	50	82	60
M12 X 1.25	N/A	N/A	88	64	125	92	150	110
M14 X 1.5	N/A	N/A	140	103	195	143	235	173
M16 X 1.5	N/A	N/A	210	154	295	217	350	258
M18 X 1.5	N/A	N/A	305	224	425	313	510	376
M20 X 1.5	N/A	N/A	425	313	600	442	720	531
M22 X 1.5	N/A	N/A	570	420	800	590	960	708
M24 X 2	N/A	N/A	720	531	1000	737	1200	885

Torque for Grade 2 NC Weld Studs

1/4" Weld Studs	8 NM (6 Lb-Ft)
3/8" Weld Studs	32 NM (25 Lb-Ft)
1/2" Weld Studs	80 NM (60 Lb-Ft)

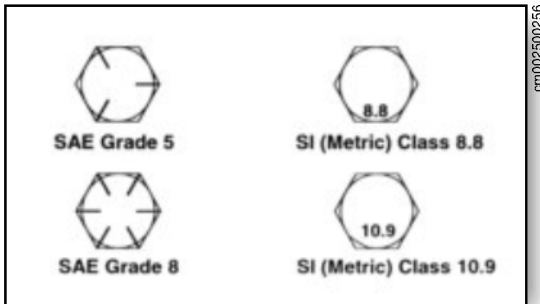
TORQUE SPECIFICATIONS

Suggested Torque Values And Clamp Loads For Grades 2, 5 & 8 Cap Screws

Nominal Diameter And TPI (Inches)	Thread Stress Area (Sq-In)	SAE Grade 2 Capscrews		SAE Grade 5 Capscrews		SAE Grade 8 Capscrews	
		Clamp Load 60-90% Proof (Pounds)	Tightening Torque (Ft-Lb)	Clamp Load 60-90% Proof (Pounds)	Tightening Torque (Ft-Lb)	Clamp Load 60-90% Proof (Pounds)	Tightening Torque (Ft-Lb)
1/4-20	0.0318	1049-1574	4-7	1622-2433	7-10	2290-3434	10-4
1/4-28	0.0364	1201-1802	5-8	1856-2785	8-12	2621-3931	11-16
5/16-18	0.0524	1729-2594	9-14	2672-4009	14-21	3773-5659	20-29
5/16-24	0.0580	1914-2871	10-15	2958-4437	15-23	4176-6264	22-33
3/8-16	0.0775	2558-3868	16-24	3953-5929	25-37	5580-8370	35-52
3/8-24	0.0878	2897-4346	18-27	4478-6717	28-42	6322-9482	40-59
7/16-14	0.1063	3508-5262	26-38	5421-8132	40-59	7654-11480	56-84
7/16-20	0.1187	3917-5876	29-43	6054-9081	44-66	8546-12820	62-93
1/2-13	0.1419	4683-7024	39-59	7237-10855	60-90	10217-15325	85-128
1/2-20	0.1599	5277-7915	44-66	8155-12232	68-102	11513-17269	96-144
9/16-12	0.1820	6006-9009	56-84	9282-13923	87-131	13104-19656	123-184
9/16-18	0.2030	6699-10049	63-94	10353-15530	97-146	14616-21924	137-206
5/8-11	0.2260	7458-11187	78-117	11526-17289	120-180	16272-24408	170-254
5/8-18	0.2560	8448-12672	88-132	13056-19584	136-204	18432-27648	192-288
3/4-10	0.3340	11022-16533	138-207	17034-25551	213-319	24048-36072	301-451
3/4-16	0.3730	12309-18464	154-231	19023-28535	238-357	26856-40284	336-504
7/8-9	0.4620	15246-22869	222-334	23562-35343	344-515	33264-49896	485-728
7/8-14	0.5090	16797-25196	245-367	25959-38939	379-568	36648-54972	534-802
1-8	0.6060	19998-29997	333-500	30906-46359	515-773	43632-65448	727-1091
1-14	0.6790	22407-33611	373-560	34629-51944	577-866	48888-73332	815-1222
1 1/8-7	0.7630	25179-37769	472-708	33877-50816	635-953	54936-82404	1030-1545
1 1/8-12	0.8560	28248-42372	530-794	38006-57010	713-1069	61632-92448	1156-1733
1 1/4-7	0.9690	31977-47966	666-999	43024-64535	896-1344	69768-104652	1454-2180
1 1/4-12	1.0730	35409-53114	738-1107	47641-71462	993-1489	77256-115884	1610-2414

Grade or Property Class Head Marking for SI Bolts

SAE Grade	Diameter	Tensile Strength	SI Class	Diameter	Tensile Strength
5	1/4"	105,000 PSI	8.8	Up to 16 MM	800 MPA
5	1" — 1-1/2"	120,000 PSI	8.8	17 MM to 36 MM	830 MPA
8	1/4" — 1-1/2"	150,000 PSI	10.9	Up to 36 MM	1040 MPA



Conversion Factors

Torque In NM x 0.737 = Torque In Lb-Ft
 Torque In Lb-Ft x 1.356 = Torque In NM
 Torque In Lb-Ft x 12 = Torque In Lb-In

FLUID RECOMMENDATIONS

John Deere Engine Coolant Requirements†

Contact your engine distributor or servicing dealer to determine what the cooling system of this engine is filled with and the winter freeze protection level.

Solutions of antifreeze and supplemental coolant additives *Must* be used year-round for freeze protection, boil-over protection, and to provide a stable, noncorrosive environment for seals, hoses, and metal engine parts.

The following engine coolant is preferred for service:

1. John Deere Prediluted Antifreeze/Summer Coolant.
2. John Deere Cool-Gard, where available.

The following engine coolant is also recommended:

John Deere Antifreeze/Summer Coolant Concentrate in a 40 to 60 percent mixture of concentrate with quality water.

John Deere Prediluted Antifreeze/Summer Coolant

This product contains all the necessary ingredients that make up the proper coolant solution: chemically pure water, ethylene glycol (low silicate antifreeze), and supplemental coolant additives (SCA's). It is ready to use, no mixing is required.

John Deere Prediluted Antifreeze/Summer Coolant permits extended service life to 5000 hours or 60 months of operation.

John Deere Cool-Gard

In certain geographical areas, John Deere Cool-Gard is marketed for use in the engine cooling system. This product contains all the necessary ingredients that make up the proper coolant solution: chemically pure water, ethylene glycol (low silicate antifreeze), and supplemental coolant additives (SCA's). It is ready to add to cooling system as is, no mixing or supplemental coolant additives required. Contact your John Deere Parts Network for local availability.

John Deere Cool-Gard has a service life of 2000 hours or 24 months of operation.

John Deere Antifreeze/Summer Coolant Concentrate

This product contains ethylene glycol (low silicate antifreeze) and supplemental coolant additives (SCA's). It *Must Be* mixed with quality water, as described later in this section, before adding to the engine cooling system. The proportion of water to be used depends upon the lowest freeze protection temperature desired according to the following table:

% Concentrate	Freeze Protection Limit
40	-24°C (-12°F)
50	-37°C (-34°F)
60	-52°C (-62°F)

John Deere Antifreeze/Summer Coolant

Concentrate permits extended service life to 5000 hours or 60 months of operation.

FLUID RECOMMENDATIONS

	Air (Ambient) Temperature Range for Hydraulic Fluid								
Fahrenheit (°F)	-10	-4	14	32	50	68	86	104	122
Celsius (°C)	-23	-20	-10	0	10	20	30	40	50

Figure 1

Hydraulic Fluid

Engine oil SAE 10W30 in the hydraulics. Engine oil may be used provided it meets one of the following: API Service EC, SG, SH, or SJ.

If John Deere Engine Break-In Oil is not available, use a diesel oil meeting one of the following during the first 100 hours of operation:

- API Service Classification CE
- ACEA Specification E1
- CCMC Specification D4

Diesel Fuel

For fuel specifications, refer to Engine Manual. After buying good quality, clean fuel from a reputable supplier, proper storage is extremely important. The fuel must be stored in clean storage and transfer tanks. (The water and sediments from the bottom of the storage tanks must be periodically drained.) A fuel conditioner to prevent water condensation must be added if fuel is stored for an extended period of time.

After the break-in period, use John Deere Plus-50[®] other diesel engine oil as recommended in this manual.

To avoid condensation in the combine fuel tank, fill at the end of each day's operation. Capacity is 568 L (150 gallons).

Engine Break-in Oil (John Deere)

New engines are filled at the factory with John Deere Engine Break-In Oil. During the break-in period, add John Deere Engine Break-In Oil as needed to maintain the specified oil level. The engine oil part number is TY22041.

Important: Do not use John Deere Plus-50 oil or engine oils meeting API CG4, API CF4, ACEA E3, ACEA E2, or CCMC D5 performance levels during the first 100 hours of operation of a new or rebuilt engine. These oils will not allow the engine to break-in properly.

FLUID RECOMMENDATIONS

Diesel Engine Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oil is preferred:

- John Deere Plus-50®

If John Deere Plus-50 engine oil and a John Deere oil filter are used, the service interval for oil and filter changes may be extended by 50 percent.

The following oil is also recommended:

- John Deere Torq-Gard Supreme®

Other oils may be used if they meet one or more of the following:

- John Deere Uni-Gard
- API Service Classification CG-4
- API Service Classification CF-4
- ACEA Specification E3
- ACEA Specification E2
- CCMC Specification D5
- CCMC Specification D4

Multi-Viscosity Diesel Engine Oils Are Preferred.

If diesel fuel with sulfur content greater than 0.5% is used, reduce the service interval by 50%.

Gear Oil—Pump Drive, Chopper Box and Basecutter

Use a 85W140 multigrade oil that meets extreme pressure (EP) gear lubricant specification MIL-L-2105C or API classification GL-5.

Gear Oil—Final Drive

The recommended type oil is SAE 85W/140 with EP features complying with MIL-L-210RC and API GL5.

Grease

Use a SAE multipurpose grease containing 3 to 5% molybdenum disulfide and having extreme pressure (EP) performance.

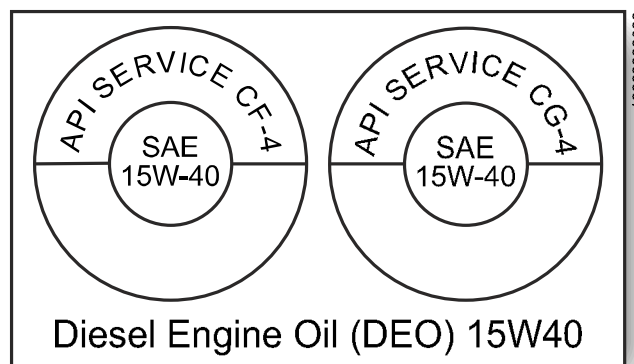


Figure 2

Straight O-Ring Boss Fittings

1. Inspect the o-ring boss seat of fitting for dirt or defects.
2. Lubricate the o-ring with o-ring lube or petroleum jelly.
3. Place tape (preferably electrical tape) over the threads to protect the o-ring.
4. Slide the o-ring over the tape and into the o-ring groove of fitting.
5. Tighten fitting until the hex bottoms out.

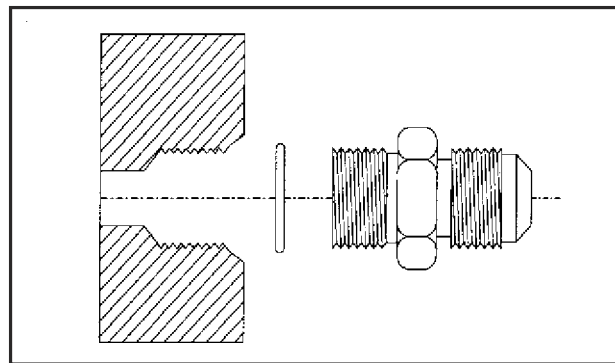


Figure 1

Angled O-Ring Boss Fittings

1. Back off the locknut and backup washer completely to the “head-end” of the fitting.
2. Screw the fitting into the threaded boss until the backup washer contacts the face of the boss.
3. Turn the fitting “head-end” counterclockwise to the proper index (a maximum of one turn).
4. Hold the fitting “head-end” with a wrench and tighten the locknut until the backup washer bottoms out. Be careful when installing fittings. *Do Not* twist hoses when tightening.

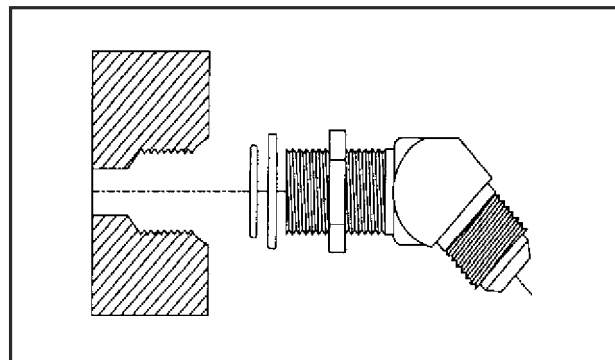


Figure 2

37° Flare Cone Fittings

1. Inspect flare and flare seat. They both must be free of dirt or obvious defects.
2. Defects in tube flare cannot be repaired. Overtightening a defective flared fitting will not stop leaks.
3. Align tube with fitting before attempting to start nut.
4. Lubricate male threads with hydraulic fluid or petroleum jelly.
5. Index angle fittings and tighten by hand.
6. After fittings are hand tight, mark the male and female sides. Rotate the male fitting according to the chart on the following page.

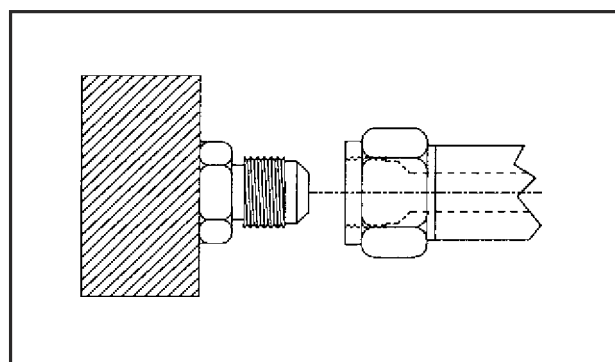


Figure 3

GENERAL INFORMATION

Hex Flats Recommended Rotation

Dash Size	37° Flared Tube	37° Machined Fitting Seat
	Ferrule & Nut	Fitting & Hose
-4	2- ¹ / ₄ — 2- ³ / ₄	1- ¹ / ₂ — 1- ³ / ₄
-6	2- ¹ / ₄ — 2- ³ / ₄	1 — 1- ¹ / ₂
-8	2- ¹ / ₄ — 2- ³ / ₄	1- ¹ / ₄ — 1- ³ / ₄
-12	2 — 2- ¹ / ₂	1 — 1- ¹ / ₂
-16	2- ¹ / ₄ — 2- ³ / ₄	³ / ₄ — 1
-20	1- ¹ / ₄ — 1- ³ / ₄	¹ / ₂ — ³ / ₄

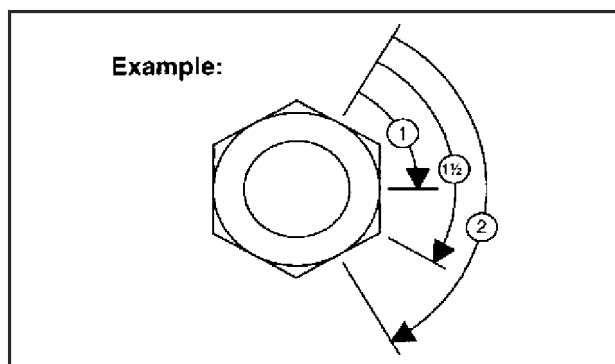


Figure 4

Four Bolt Flange Fittings

1. Clean sealing surfaces (A) and inspect. Scratches cause leaks. Roughness causes seal wear and unevenness causes seal extrusion; therefore, if defects cannot be polished out, replace component.
2. Install the correct o-ring (and backup washer if required) into groove using petroleum jelly to hold it in place.
3. Split flange (B): Loosely assemble split flange halves. Make sure split is centrally located and perpendicular to port. Hand-tighten bolts to hold parts in place. Do not pinch o-ring (C).
4. One piece flange (D): Place hydraulic line in center of flange and install four bolts. Flange must be centrally located on port. Hand-tighten bolts to hold flange in place. Do not pinch o-rings.
5. After components are properly positioned and bolts are hand tightened, tighten one bolt, then tighten the diagonally opposite bolt. Tighten the two remaining bolts. Tighten all bolts as specified in the chart below.
6. *Do Not* use air wrenches. *Do Not* tighten one bolt fully before tightening the others. *Do Not* over tighten.

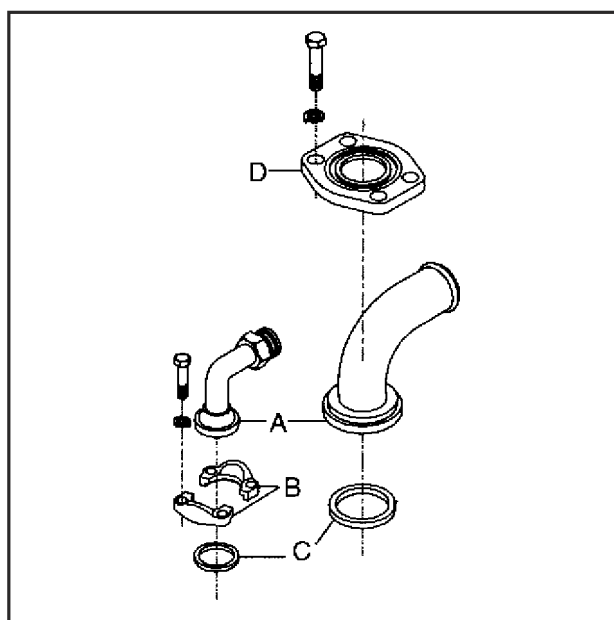


Figure 5

GENERAL INFORMATION

Flange Metric Bolt Torque Chart

Bolt Size	NM	LB-FT
M6	12	9
M8	30	22
M10	57	42
M12	95	70
M14	155	115
M16	215	160
M18	335	245
M20	420	320

Tolerance $\pm 10\%$

Flange SAE Bolt Torque Chart

Flange Size	Bolt Size UNC	LB-FT		NM	
		Min	Max	Min	Max
1/2"	5/16 — 18	15	23	20	30
3/4"	3/8 — 16	21	40	28	55
1"	3/8 — 16	27	40	37	55
1-1/4"	7/16 — 14	35	63	47	85
1-1/2"	1/2 — 13	46	97	62	130
2"	1/2 — 13	55	97	73	130
2-1/2"	1/2 — 13	80	97	105	130
3"	5/8 — 11	115	195	160	265
3-1/2"	5/8 — 11	115	195	160	265
4"	5/8 — 11	115	195	160	265
5"	5/8 — 11	115	195	160	265

GENERAL INFORMATION

Conversions

The following pages contain information that will be useful to you as you work with non-metric fasteners.

You may find frequent use for the fraction-decimal-millimeter conversion chart on this page, especially when you have to cut or restore threads.

Weight Measure

1 Gross or Long Ton	= 2,240 Lb
1 Net or Short Ton	= 2,000 Lb
1 Cubic Foot of Water	= 62.5 Lb
1 Gallon of Water	= 8.33 Lb

Length Measure

1 Mile	= 8 Furlongs
1 Mile	= 80 Chains
1 Mile	= 320 Rods
1 Mile	= 1,760 Yards
1 Mile	= 5,280 Feet
1 Furlong	= 10 Chains
1 Furlong	= 220 Yards
1 Station	= 6.06 Rods
1 Station	= 33.3 Yards
1 Station	= 100 Feet
1 Chain	= 4 Rods
1 Chain	= 22 Yards
1 Chain	= 66 Feet
1 Chain	= 100 Links
1 Rod	= 5.5 Yards
1 Rod	= 16.5 Feet
1 Yard	= 3 Feet
1 Yard	= 36 Inches
1 Foot	= 12 Inches

Metric (SI†) Measurements

The use of metric measurements and metric fasteners has greatly increased in recent years. You'll encounter them even more frequently as they are gradually adopted in the United States. Furthermore, many foreign-made products have become commonplace. These are usually manufactured to metric measurements. For instance, the fasteners used in foreign-built cars and tractors are made to metrics and many require metric wrenches to remove and install them. In some cases, inch-size wrenches will fit metric fasteners. Consult tool manufacturer literature to determine these sizes.

Although there are metric equivalents for all English measurements (length, weight, volume, and so on), the only ones you are likely to deal with in your work with fasteners are linear (length) measurements. The tables which follow are provided to help you compare metric to English measurements, or to make conversions when you are required to do so.

Metric to English

1 Millimeter (mm)	= 0.03937 Inches
1 Centimeter (cm)	= 0.3937 Inches
1 Meter (M)	= 39.37 Inches
	= 3.2808 Feet
	= 1.0936 Yards

English to Metric

1 Inch	= 25.4 Millimeters (mm)
	= 2.54 Centimeters (cm)
1 Foot	= 304.8 Millimeters (mm)
	= 30.48 Centimeters (cm)
	= 0.3048 Meter (M)
1 Yard	= 91.44 Centimeters (cm)
	= 0.9144 Meter (M)

† SI stands for System International D 'Unites (International System of Units). In English the term is abbreviated to "SI", and is called the "International System of Measurements".

GENERAL INFORMATION

Multiplication Factors

The following table gives you a formula for changing metrics to English or English to metrics quickly and easily.

<i>When You Know</i>	<i>Multiply By</i>	<i>To Find</i>
Millimeters	0.04	Inches
Centimeters	0.39	Inches
Meters	3.28	Feet
Meters	1.09	Yards
Newton-Meters	0.737	Foot-Pounds
Liters	1.057	Quarts
Liters	0.2642	Gallons
Liters	2.10	Pints
Inches	2.54	Centimeters
Feet	30.5	Centimeters
Yards	0.91	Meters
Foot-Pounds	1.356	Newton-Meters
PSI	14.63	Bar

* Approximate

Temperature Conversion Chart

When temperatures are given in Celsius (formerly Centigrade) (C) or Fahrenheit (F), use the chart below to quickly convert from one to the other.

Celsius	Fahrenheit
0°	32°
30°	86°
100°	212°

Conversion Formulas

To convert Celsius to Fahrenheit, multiply by 1.8 and add 32.

$$F^{\circ} = (C^{\circ} \times 1.8) + 32)$$

To convert Fahrenheit to Celsius, subtract 32 and divide by 1.8.

$$C^{\circ} = (F^{\circ} - 32) \div 1.8$$

GENERAL INFORMATION

CAMECO offers the following list of supplies for our customers' convenience. Keep in mind that some of these products are not readily obtainable in all countries.

Recommended Supplies

Loctite Primer-N† 0841303194

Recommended by CAMECO as a surface preparative, use before any type of Loctite application. This part number is for a 6 oz spray can.

Loctite PST 0840008762

Recommended by CAMECO for use on all types of threads to prevent leakage at the joint. This is for use on hydraulic, air, or water lines. This part number is for a 50 ml bottle.

Loctite 242 0841304201

Recommended by CAMECO for use on parts that will be removed again. This is for the prevention of parts loosening during normal operation. The part can still be removed by a mechanic without too much difficulty. This part number is for a 50 ml bottle.

Loctite 271 0841303179

Recommended by CAMECO for use when repairing a cylinder. This is specifically used for the internal bolt that holds the head in place. This part number is for a 50 ml bottle.

Loctite 620 0841322669

Recommended by CAMECO for use when installing high temperature cylindrical parts. This part number is for a 250 ml bottle.

Loctite 640 0841332513

Recommended by CAMECO for use when installing parts with a press fit. This part number is for a 50 ml bottle.

Loctite 680 0841304200

Recommended by CAMECO for use when installing a part that will never be removed again. This can only be removed by burning. This part number is for a 50 ml bottle.

Silicone Sealant (RTV) 0430024221

Recommended by CAMECO as a general sealant. This can, in many instances, replaces older gasket materials. This part number is for a 4.7 oz tube.

Plastic Gasket 0390032007

Recommended by CAMECO as a general sealant. It hardens in the assembled joint to form a tough, thin gasket that resists lubricants and chemicals. Metal-to-metal contact of flanges provides an excellent bond. Joint is locked against vibration loosening. Operating limit is 300° F (150° C). This part number is for a 50 ml bottle.

Antiseize Compound 0841305658

Recommended by CAMECO for use on all types of threads to prevent galling. This part number is for a 16 oz can with a brush top.

Teflon Thread Tape 0840021386

Recommended by CAMECO for use on all types of threads to prevent leakage at the joint. This is for use on hydraulic, air, or water lines. This part number is for a 1/2 inch x 50 feet roll.

Teflon Thread Paste 0840008762

Recommended by CAMECO for use on all types of threads to prevent leakage at the joint. It has the same uses as Teflon thread tape. The use of either of the two forms is strictly a matter of personal preference. This part number is for a 1.69 oz tube.

O-ring Lube 0841304202

Recommended by CAMECO for the ease of installing o-rings, seals and gaskets. This holds them in place and also protects them from damage during installation. This part number is for a 2 oz tube.

Dry Spline Lube 0910041171

Recommended by CAMECO for the lubrication of the splines in pumps and motors. This will prolong the service life of parts that are subjected to high torques. This part number is for a 2.8 oz tube.

Araldite Adhesive Kit 0841340040

Recommended by CAMECO as a locking element for mating parts with the tendency to loosen during operation. It is also used for special isolation purposes during construction and repair. This part number includes Reusable Gun P/N 0841306707, Cartridge P/N 0841306708, and Nozzle-Mix P/N 0841306709.

† All Loctite® adhesives have a one year shelf life; therefore, Cameco recommends that you do not order more than can be used in a year's time.

GENERAL INFORMATION

Araldite Cartridge 0841307790

This is a preloaded cartridge of Araldite resin and hardner. It is included in the above Araldite Adhesive Kit P/N 0841340040. This cannot be used without the Applicator Gun P/N 0841306707. This part number is for a 50 ml cartridge.

Araldite Nozzle 0841306709

Nozzle to attach to the above Araldite Cartridge P/N 0841307790 for mixing Araldite.

O-ring Kit 0491310039

This is an assortment of all the o-rings used on the boss o-ring hydraulic fittings. These fittings are used on your equipment where it is necessary to seal a joint. CAMECO recommends that a supply of these o-rings be kept on hand. The kit contains 5 of size 24; 10 of size 4, 6, 10, and 20; and 20 of size 8 and 16.

Cap and Plug Kit..... 0561310037

This is an assortment of plastic caps and plugs used to cap-off or plug hoses and components during service or repairs. The kit contains 40 of size 04, 06, and 12 in both caps and plugs; 50 of size 16 in both caps and plugs; and 60 of size 08 in both caps and plugs.

Wrench Set Angled 0841346779

This is a heavy duty, open-ended, offset wrench set. CAMECO recommends it for removing hydraulic hoses and fittings located in tight places. The set has 2", 1-7/8", 1-3/4", 1-5/8", 1-1/2" and a 1-3/8" wrench.

Wrench Set Angled 0841346780

This is a angled, open end wrenches in fourteen of the most popular sizes. From 3/8" to 1-1/8", in increments of 1/16" and a 1-1/4" wrench.

Electrical Grease 0631341478

This is a heavy duty water proof and corrosion proof electrical grease. CAMECO recommends that whenever a wire is repaired that it should be filled with this grease before connection. This part number is for a 1 oz bottle.

Flow Tester 75 GPM Kit 0601305130

This is a 75 GPM in-line hydraulic flow tester.

Hose Kit 0840317083

This is for the flow meter 0601305130.

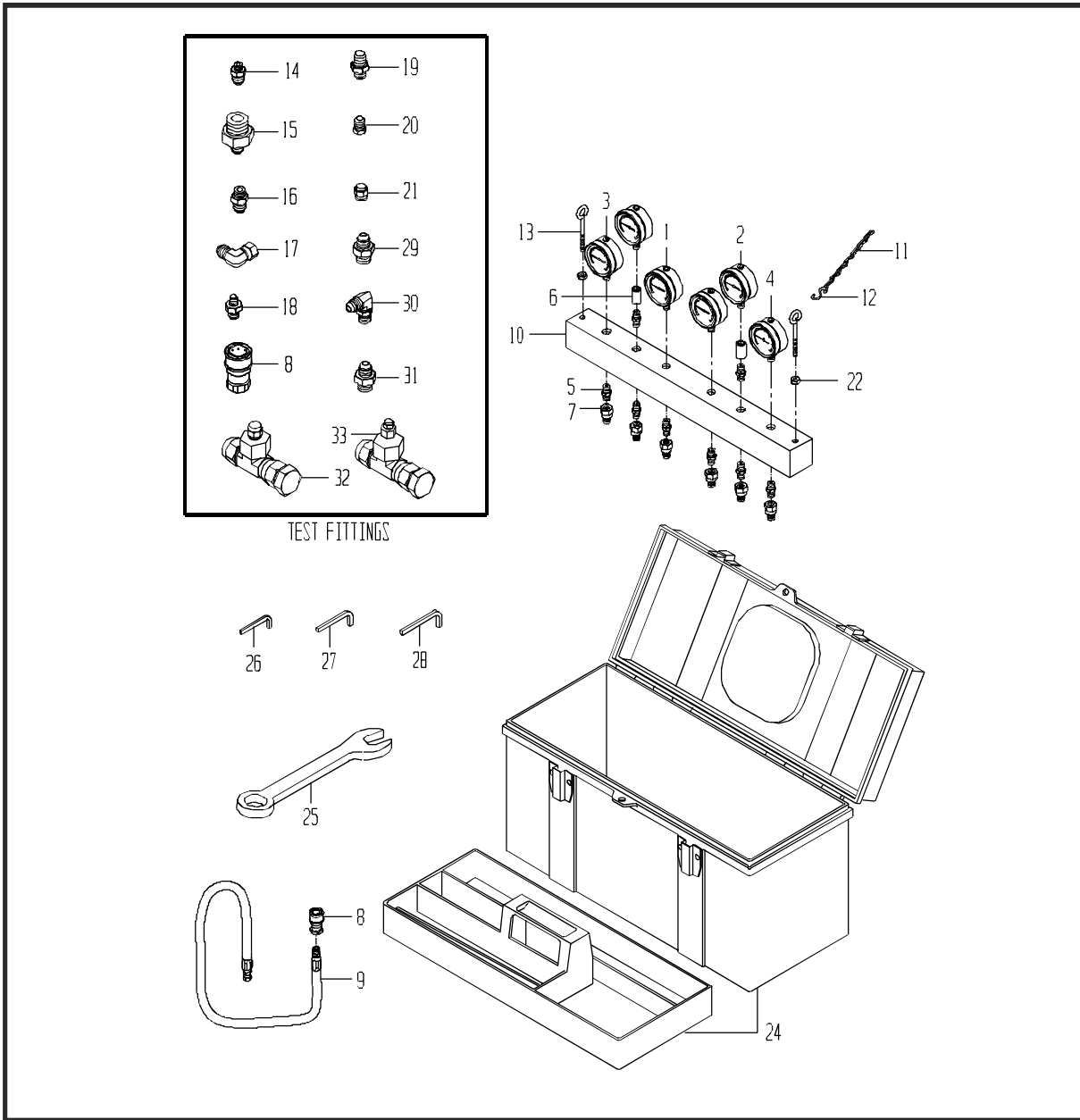
Flow Meter 0840322463

This is a 125 GPM flow meter kit with adapter fittings.

Optimoly White Paste 0910041171

This is an anti-seize lubricant that prevents seizing, galling, and excessive wear of various harvester components.

GENERAL INFORMATION



Hydraulic Gauge Kit

- | | | | |
|--------------------|-----------------------|------------------------|-------------------|
| 1. Pres Gauge | 9. Hose | 18. Fitting | 28. Allen Wrench |
| 2. Pres Gauge | 10. Manifold Test Kit | 19. Fitting | 29. Fitting |
| 3. Pres Gauge | 11. BK-Link Chain | 20. Fitting | 30. Fitting |
| 4. Comp Gauge | 12. S-Hook | 21. Fitting | 31. Fitting |
| 5. Fitting | 13. Eye Bolt | 22. Nut | 32. Assy-Test Tee |
| 6. Fitting | 14. Fitting | 24. Tool box | 33. Assy-Test Tee |
| 7. Fitting | 15. Fitting | 25. Combination Wrench | |
| 8. Female Coupling | 16. Fitting | 26. Allen Wrench | |
| 8. Coupling-CH2500 | 17. Fitting | 27. Allen Wrench | |

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GENERAL INFORMATION

CH3500 Specialty Tools and Part Numbers

GROUND DRIVE

CB01439350 TOOL-TORQUE MULTIPLIER BNA
1190315364 TOOL-TRACK RECOIL SPRING
0841329348 TOOL-SHAFT BULLET (1")
0290289270 TOOL-AXLE NUT
0841331949 TOOL-SPROCKETWEAR GAUGE
0841338384 TOOL-ROLLER LUBE NOZZLE
0290244461 TOOL-BUSHING INSTALLER
0290244683 TOOL-SLEEVE
0290244684 TOOL-SEAL INSTALLER
0841329345 TOOL-BEARING PULLER

BASECUTTER

1190290188 TOOL-B/C LEG-TIMING
1190323529 PULLER KIT-B/C BEARING
1191374512 LEG&SEAL ALIGNMENT TOOL
CB01407093 CRS-B/C LEG BEARING RACE NSTLR
CB01444383 CRS-TOOL-B/C-SEAL ADAPTER
CB11422828 TOOL-B/C LEG BLOCKING ASSY
CB11444166 JIG ASSY-B/C STAND-FINAL ASSY
CB11444448 TOOL-B/C LEG BEARING INSTALLER

CHOPPER

CB01444643 CRS-TOOL-CHOPPER DOWEL PIN
CB01444732 CRS-TOOL-FLYWHEEL SEAL
CB01444779 CRS-TOOL-CHOPPERBOX FREEZEPLUG
CB21443671 FIXTURE-MOTOR LIFT TOOL CH3500
CB11444588 FIXTURE-FLYWHEEL LIFTER

FEEDROLLERS

0290244355 TOOL-WIPER ROLL BRG
0290244341 TOOL-FRONT END ALIGN
0290224434 ART.PIN RETAINER
0841306323 TOOL-SEAL INSTALLER
CB01444277 CRS-TOOL-FREEZEPLUG-FEEDROLLER

ELEVATOR

0290227546 CONVEYOR BRG TOOL
0290227533 TOOL-SWING TABLE BEARING
CB01445982 TOOL-SWING TABLE UPPER BUSHING INSTALLER
CB01445983 TOOL-SWING TABLE LOWER BUSHING INSTALLER
CB01446481 ELEVATOR HEADSHAFT BEARING INSTALLER

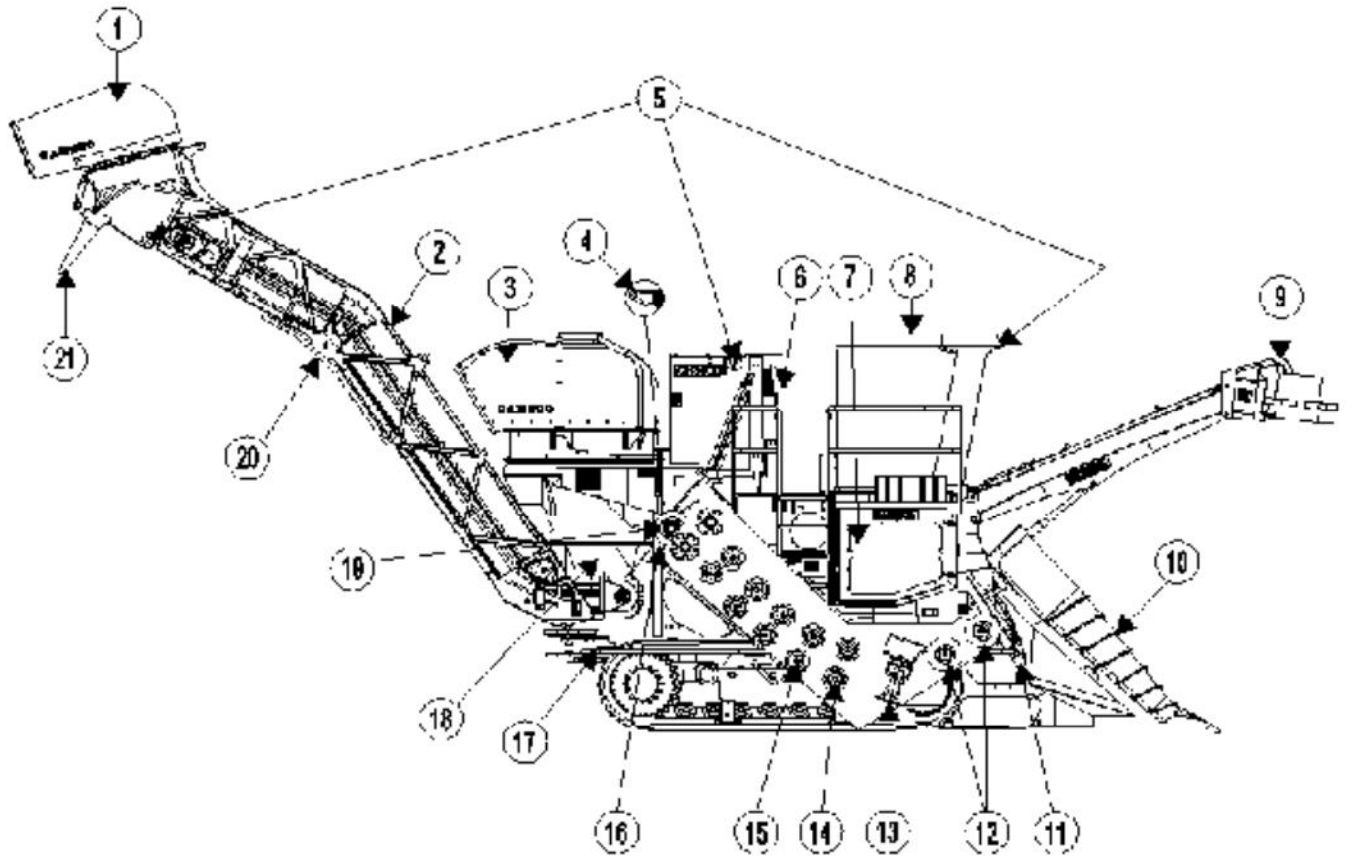
1190289732 BALANCER-EXTRACTOR FAN SECONDARY
CB21412253 BALANCER-EXTRACTOR FAN PRIMARY
CB11446115 PRIMARY FAN ASSEMBLY STAND

BASECUTTER CYLINDER

CB11446203 BASECUTTER CYLINDER TRUNNION SEAL INSTALLER
CB11446242 FRONT WHEEL HUB CAP INSTALLER
CB11446249 BASECUTTER CYLINDER TRUNNION CAP INSTALLER

SERVICE POINTS

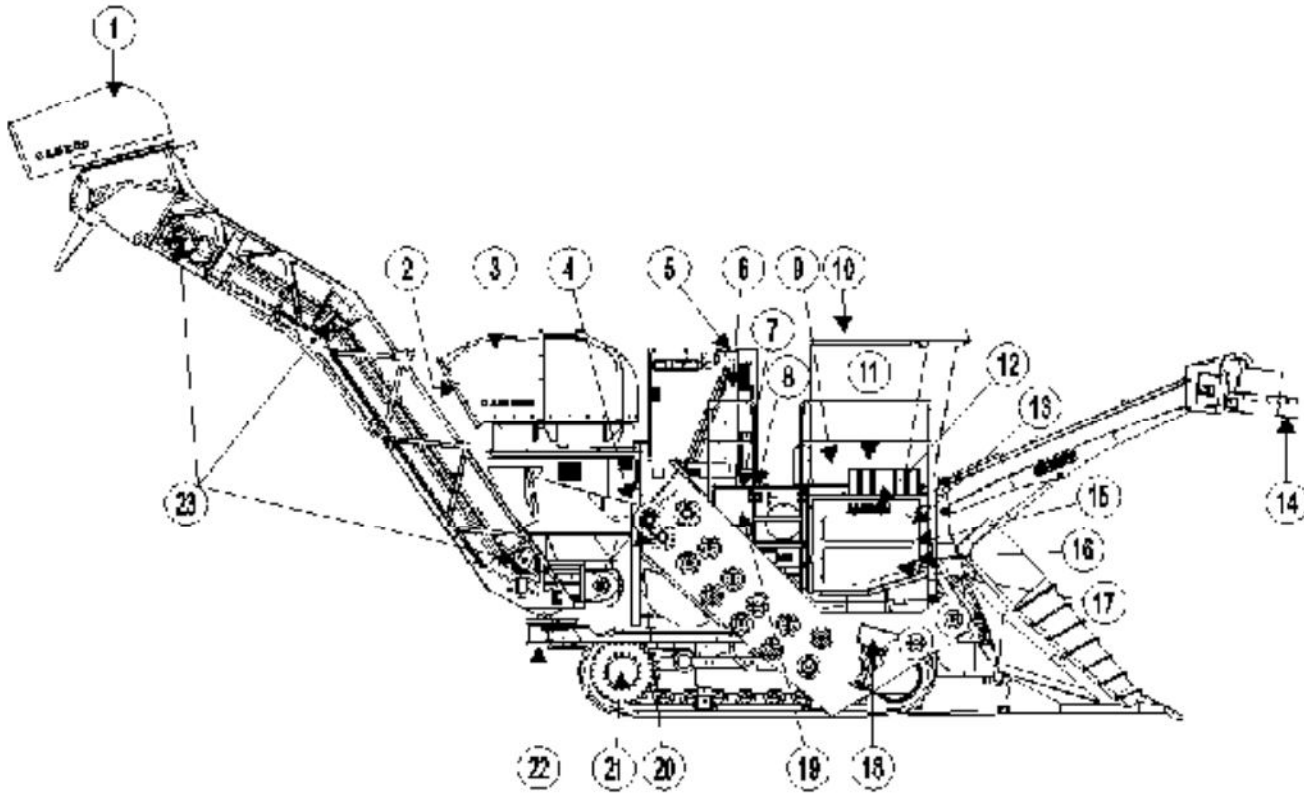
Harvester Component Locations



- | | |
|---------------------------------|--------------------------------|
| 1. Secondary Extractor | 12. Power Knockdown Roller (2) |
| 2. Elevator | 13. Basecutter |
| 3. Primary Extractor | 14. Buttlifter Roller |
| 4. Lift Lug | 15. Feed Rollers |
| 5. Lights (3 Areas) | 16. Chopper Box |
| 6. Air Intake Screen | 17. Tow Loops |
| 7. Engine Compartment | 18. Basket |
| 8. Cab | 19. Chopper Flywheel |
| 9. Topper | 20. Cart Guard |
| 10. Crop Dividers / Scrolls | 21. Bin Flap |
| 11. Binding Hole (Transporting) | |

SERVICE POINTS

Harvester Service Point Locations



- | | |
|--|---|
| 1. Secondary Extractor Fan | 13. Fuel/Water Separator Filter (Left Side) |
| 2. Primary Extractor Fan | 14. Topper Blades |
| 3. Primary Extractor Hood | 15. Engine Oil Filter (Left Side) |
| 4. Engine Air Filters (Left Side) | 16. Pump Drive Oil Level (Right Side) |
| 5. Oil Cooler - AC Condenser | 17. Engine Oil Dipstick (Left Side) |
| 6. Radiator | 18. Basecutter Gearbox, Right Side Dipstick |
| 7. Hydraulic Filters (Right Side) | 19. Hydraulic Oil Tank (Right Side) |
| 8. Fuel Tank (Left Side) | 20. Chopper Gearbox (Right Side) & Bearings (Left Side) |
| 9. Fresh Air AC Filter (Left Side Outside of Cab) | 21. Final Drive (Both Sides) |
| 10. Recirculation AC Filter (Behind Training Seat) | 22. Swing Table |
| 11. Fuses and Relays (Remove Training Seat Back Cushion) | 23. Elevator Chain Adjustment |
| 12. Windshield Wiper Fluid (LH Side) | |