

OPERATION/MAINTENANCE
AND
ILLUSTRATED PARTS MANUAL
FOR YOUR
CALAVAR SELF-PROPELLED CONDOR SCISSORS
Model RT3175D

Calavar Corporation provides this manual for the guidance of all owners, operators, and servicing personnel in order to obtain the longest possible trouble-free service. It contains general data; specifications; operating instructions; recommended lubrication procedures; vendor information and specifications; illustrated parts breakdown and a special section on safety.



Model _____
Serial Number _____
Date Delivered _____
Customer _____

Note: Additional copies of this manual may be obtained through the Parts Department at Calavar (Part No. 92243)

SELF-PROPELLED RT3175D

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Self-Propelled Booms and Scissors WARRANTY

Calavar Corporation ("Calavar") warrants each new aerial work platform made by Calavar and bearing the trademark "Condor" to be free from defects in material and workmanship.

The obligation and liability under this Warranty is expressly limited to repairing or, at Calavar's option, replacing free of charge at its factory in Santa Fe Springs, California or at an authorized repair facility as designated by Calavar, any part proving defective under normal use and service within 180 days after said aerial work platform is first placed in service or within one year after the original shipment of said aerial work platform from Calavar's plant, whichever first occurs.

Parts claimed to be defective and for which repair or replacement is desired shall be, if requested by Calavar, returned transportation prepaid to Calavar's factory for inspection. Replacement parts provided under the terms of this Warranty are for the remainder of the Warranty period applicable to the aerial work platform in which they are installed as if such parts were original components of the aerial work platform.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE, AND THE OBLIGATION AND LIABILITY OF CALAVAR UNDER THIS WARRANTY SHALL NOT INCLUDE ANY TRANSPORTATION OR OTHER CHARGES OR THE COST OF INSTALLATION OR ANY LIABILITY FOR DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES OR DELAY RESULTING FROM THE DEFECT.

Any operation beyond rated capacity or the improper use or application of equipment or the substitution upon it of parts not approved by Calavar or any alteration or repair by others in such manner as, in Calavar's judgment, to affect the equipment materially and adversely shall void this Warranty. No representative of Calavar is authorized to change this Warranty in any way, and no attempt, effort or promise to repair equipment of Calavar either by Calavar or by any representative of Calavar at any time shall change or extend this Warranty in any way. This Warranty covers only new and unused aerial work platforms manufactured by Calavar. Products or parts manufactured by others are covered only by such warranties as are extended to Calavar by its suppliers.

WARRANTY PROGRAM

Warranty is a function of a manufacturing company to back up the product it manufactures. It is a guarantee against defects in design, and workmanship of components utilized in the product, and is offered for a certain period of time following purchase by a customer.

Calavar Warranty states in general that Calavar will replace free of charge any components found to be defective within the time frame of the warranty period. There are exceptions to some components which are not the responsibility of Calavar. These will be outlined in other paragraphs.

The warranty policy and description is depicted on the attached printed policy. For your information and ready reference the following is offered:

A. WARRANTY PERIOD

1. The Self Propelled Boom and Scissors warranty period is six months from placing unit in service or 12 months following shipment from Calavar, whichever comes first.
2. The Truck Mounted unit warranty period is 12 months from placing unit in service or 18 months following shipment from Calavar, whichever comes first.
3. For parts sold through the Parts Department the warranty period is six months from utilizing the component or placing it in service or 12 months following shipment from Calavar, whichever comes first, unless part is furnished to correct defective part on original shipment still under warranty.
4. Replacement parts provided under the terms of the warranty are for the warranty period applicable to the unit in which they were installed as if such parts were original components of the aerial work platform.

The term "IN SERVICE" means that the warranty starts at the time the unit is first used for any purpose. In example: The dealer may have purchased a unit for his stock and does not use it. After three months the unit is sold or he decides to put it in his rental fleet. In this situation the warranty period starts the day he puts it into his fleet or when the unit is delivered to the end user.

The submittal of a warranty claim against a stock machine constitutes it as being "in service", initiating the warranty period.

B. ITEMS NOT COVERED

Some components are used on the machine which are not warranted by Calavar. However, these are warranted by the component manufacturer. Some of these are:

1. Engine - Manufacturers Wisconsin, Ford, Deutz, Isuzu, Cummins, John Deere, and others are used. To apply for warranty on the engine, contact should be made with the local engine manufacturer dealer in your area. We can advise you who this is if unknown to you.
2. Tires & Batteries - These are normal wear items and considered normal maintenance items. However, if they are found to be defective contact can be made with the manufacturer or with Calavar.
3. Hydraulic Filters & Fluid - These are considered general maintenance and service items and are not covered by warranty.
4. Other Components - Products or parts manufactured by others are covered only by such warranties as are extended to Calavar by its suppliers.
5. Freight & Charges - The warranty does not include any transportation, other charges, or the cost of installation or any liability for direct, indirect, or consequential damages or delay resulting from the defect.
6. Travel Time/Mileage - Travel time and the mileage to and from dealer facilities to machine location is not covered or reimburseable.

C. PROCESSING OF CLAIM

During the warranty period should a component failure be encountered within the guidelines of the Calavar Warranty Policy, the following procedure is to be followed:

1. Upon determination of the defective component the replacement can be obtained by:
 - A. Issuing an order to our parts department through normal channels which entails your being invoiced.
 - B. You may have previously purchased the part from Calavar for your stock and will utilize it for this replacement.

The above two methods will enable you to indicate on the claim the Calavar invoice number to substantiate the parts purchase and the amount to be credited.

- C. Although not recommended, you may choose to purchase the part locally. However, when this is done or when no Calavar invoice can be provided, Calavar will in lieu of issuing credit, ship a replacement part at no charge, but you are responsible for shipping cost.
2. Complete the warranty claim as noted on "Warranty Claim Procedure". Provide as much information as possible to enable Calavar to thoroughly evaluate the claim.
3. Provided no return parts are required, the claim will be processed and credit issued against your account.
4. A warranty labor rate conducive to your charge out will be set by Calavar.

D. RETURN AUTHORIZATION

1. Depending on the component and situation, Calavar from time to time may request that the defective component be returned to Calavar. The purpose of our requesting the return part is:
 - In some instances the part can be returned to our vendor for warranty credit.
 - It could help us to determine the cause of failure.
2. Normally, parts with values less than \$100 are not asked to be returned unless for the purpose of assisting us in analyzing the failure.
3. The request for the return of the part will be made at time your warranty claim is received. A special form, "RETURN AUTHORIZATION" will be issued and will contain the authorization number, shipping slip, and identification tag.
4. The part, once return authorization is issued, must be returned to Calavar within 45 days from date of authorization. A reminder will be sent at 30 days if part has not been received at Calavar.
5. If part is not returned within the 45 day period it could cause your claim to be denied.
6. All parts are to be shipped prepaid. NO FREIGHT COLLECT shipments will be accepted.
7. Calavar is obligated to issue a return authorization within a 14 day period following receipt of claim. If the authorization is not issued within this time, Calavar loses its right to have the parts returned and must approve the warranty claim without part being returned.

8. Special forms and tags will be sent to you with authorization.
(Copy enclosed)

NOTE: DO NOT SHIP ANY RETURN PART WITHOUT RETURN AUTHORIZATION. Doing so part will get lost in the system and delay approval of claim.

CALAVAR CORPORATION
SELF-PROPELLED TELESCOPIC AERIAL WORK PLATFORM
CONDOR INSTALLATION AND INSPECTION REPORT

Dealer's Name _____ Address _____

Model _____ Serial Number _____ Date _____

This CONDOR was inspected and tested before leaving CALAVAR. Due to environmental conditions, loading, transporting and unloading the unit, it will be necessary for you to check the following items to assure the user of a first class product. This report, when completed, must be returned to Calavar Corp., 9200 Sorensen Ave., Santa Fe Springs, CA 90670.

Item No.	Description of Inspection or Test	Initial If O.K.	Remarks			
1	GENERAL APPEARANCE					
	A Visual Damage to unit					
	B Visual fluid leaks					
	C Paint damage					
2	ENGINE SERVICING					
	A Engine oil level					
	B Battery condition					
	1 Electrolyte level					
	2 Terminal security					
3	GROUND CONTROL STATION					
	A Engine start					
	B Choke operation					
	C Starter operation					
	D Governor operation					
	E Alternator operation					
	F Station selection					
	G Boom lifting					
	H Boom extension					
	I Turret rotation					
	J Engine stop					
	K Speed control					
	L Emergency					
4	TIRE CONDITION					
	A Tire pressure (Note Decal on Base)	LF	LR	RF	RR	
	B Lug nuts					



TIGHTENING TORQUE VALUES

	SAE GRADE 2				SAE GRADE 5				SAE GRADE 8			
	Tightening Dry		Torque Lub		Tightening Dry		Torque Lub		Tightening Dry		Torque Lub	
	Ft. Lbs.	N/M	Ft. Lbs.	N/M	Ft. Lbs.	N/M	Ft. Lbs.	N/M	Ft. Lbs.	N/M	Ft. Lbs.	N/M
1/4 - 20	5.5	7.5	4.08	5.5	8	10.8	6.25	8.5	12	16.3	9	12.2
1/4 - 28	6.3	8.5	4.66	6.2	10	13.6	7.2	9.8	14	19.8	10	13.6
5/16 - 18	11	15	8	10.8	17	23	13	17.6	25	33.9	18	24.4
5/16 - 24	12	16.3	9	12.2	19	25.8	14	19.0	25	33.9	20	27.1
3/8 - 16	20	27.1	15	20.3	30	40.7	23	31.9	45	61.0	35	47.5
3/8 - 24	23	31.2	17	23	35	47.5	25	33.9	50	67.8	35	47.5
7/16 - 14	30	40.7	24	32.5	50	67.8	35	47.5	70	95.0	55	74.6
7/16 - 20	35	47.5	25	33.9	55	74.6	40	54.2	80	108.5	60	81.3
1/2 - 13	50	67.8	35	47.5	75	101.7	55	74.6	110	149.1	80	108.5
1/2 - 20	55	74.6	40	54.2	90	122.	65	88.1	120	162.7	90	122.0
9/16 - 12	70	95.0	55	74.6	110	149.1	80	108.5	150	203.4	110	149.1
9/16 - 18	80	108.5	60	81.3	120	162.7	90	122.0	170	230.5	130	176.3
5/8 - 11	100	135.6	75	101.7	150	203.4	110	149.1	220	298.3	170	230.5
5/8 - 18	110	149.1	85	115.2	170	238.5	130	176.3	240	325.4	180	244.0
3/4 - 10	175	237.3	130	176.3	260	352.5	200	271.2	380	515.2	280	379.6
3/4 - 16	195	264.4	145	196.6	300	406.7	220	298.3	420	569.4	320	433.9
7/8 - 9	165	223.7	125	169.5	430	583.0	320	433.9	600	813.5	460	623.7
7/8 - 14	185	250.8	140	189.8	470	637.2	350	474.5	660	894.8	500	678.0
1 - 8	250	339.0	190	257.6	640	867.7	480	650.8	900	1220.2	680	922.0
1 - 12	270	366.1	200	271.2	700	949.0	530	718.6	1000	1355.8	740	1003.3
1-1/8 - 7	350	474.5	270	366.1	800	1084.6	600	813.5	1280	1735.4	960	1301.6
1-7/8 - 7	400	542.3	300	406.7	880	1193.1	660	894.8	1440	1952.4	1080	1464.3
1-1/4 - 7	500	678.0	380	515.2	1120	1518.5	840	1138.9	1820	2467.6	1360	1843.9
1-1/4 - 12	550	745.69	420	569.4	1240	1681.2	920	1247.3	2000	2711.6	1500	2033.7
1-3/8 - 6	660	894.8	490	664.3	1460	1979.5	1100	1491.4	2380	3226.8	1780	2413.3
1-3/8 - 12	740	1003.3	560	759.2	1680	2277.7	1260	1708.3	2720	3687.8	2040	2765.8
1-1/2 - 6	870	1179.5	650	881.3	1940	2630.3	1460	1979.5	3160	4284.3	2360	3199.7
1-1/2 - 12	980	1328.7	730	989.7	2200	2982.8	1640	2223.5	3560	4826.6	2660	3606.4

FOOTNOTE: Foot/Pounds to Newton/Meters x 1.3558