

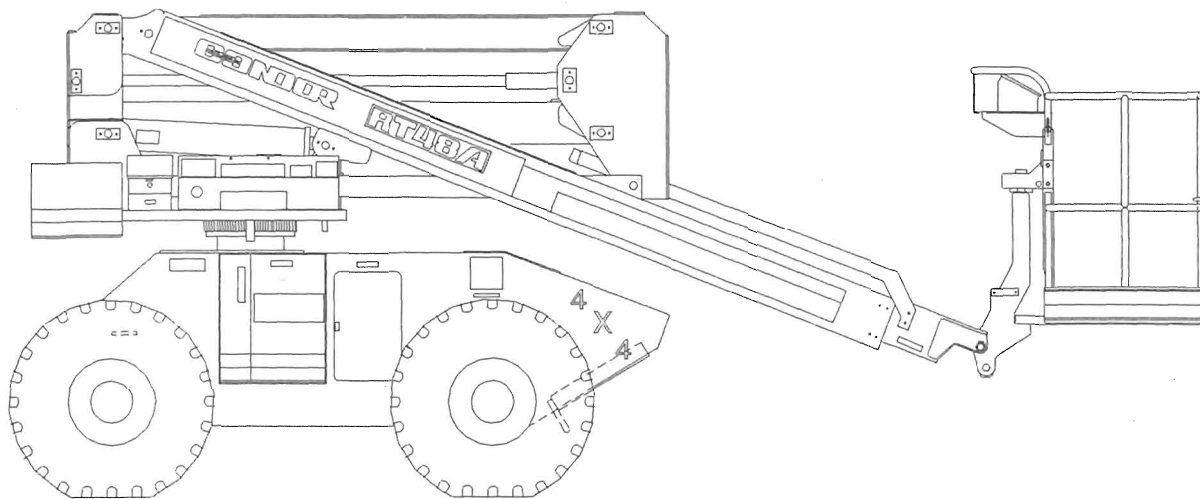


BOOM-SUPPORTED
ELEVATING WORK PLATFORM

MODEL RT48A

ARTICULATING

OPERATOR'S, MAINTENANCE,
ILLUSTRATED PARTS, AND VENDOR
MANUAL



SHIPPING ADDRESS

TIME CONDOR
8300 IMPERIAL DRIVE
WACO, TEXAS 76712
(254)420-5200

MAILING ADDRESS

TIME CONDOR
P.O. Box 21447
WACO, TEXAS 76702-1447
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CONDOR

TIME CONDOR Corporation

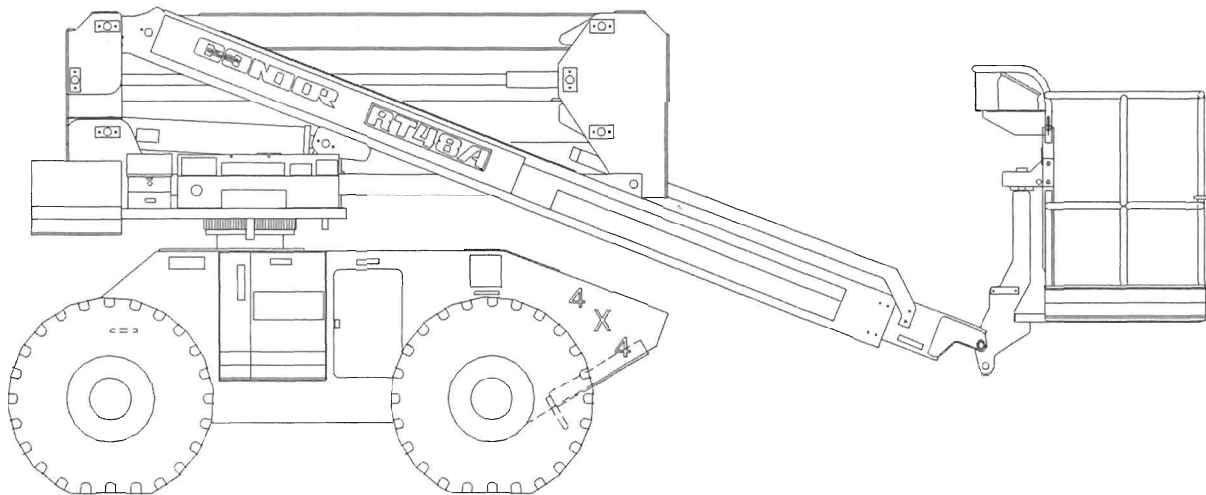


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OPERATOR'S MANUAL



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MODEL RT48A
AERIAL WORK PLATFORM

OPERATOR'S
MANUAL

CALAVAR CORPORATION
8300 IMPERIAL DRIVE
WACO, TEXAS 76712
(817) 666-4545

MANUAL 92258-001
AUGUST 1993

INTRODUCTION

The primary purpose of this manual is to provide the user with a thorough understanding of the proper operating procedures necessary to comply with the intended use of the **CONDOR®**. ***THIS MANUAL MUST BE RETAINED ON THE AERIAL WORK PLATFORM AT ALL TIMES.***

Do not attempt to operate the CONDOR® until you have read and thoroughly understand all information provided in this manual. Familiarize yourself with the functions and operations of the upper and lower controls. A good understanding of the controls, their limitations, and capabilities, will maximize operating efficiency and safety. The various decals attached to this machine are NOT for decoration. They contain vital information....Read the decals BEFORE operating this machine.

It is YOUR RESPONSIBILITY to use safe practices and procedures while using the **CONDOR®**. The manufacturer of this unit does not control the wide range of applications that may be used in carrying out a wide variety of jobs. Therefore, IT IS THE USER'S RESPONSIBILITY to consider the safety of all personnel when making decisions regarding the unit's intended use.

It is also YOUR RESPONSIBILITY to understand and obey all federal, state, and local statutes and regulations pertaining to the safe operation and use of aerial work platforms. A copy of the ANSI/SIA A92 Manual of Responsibilities is attached for your use.

Calavar Corporation reserves the right to modify, improve, add, and/or delete certain design features on its products without any obligation to incorporate new features into products previously sold. Our manuals are continually updated to reflect these changes.

DO NOT ALTER OR MODIFY THIS UNIT WITHOUT PRIOR WRITTEN APPROVAL FROM THE MANAGEMENT OF CALAVAR CORPORATION!!

SERVICE & MAINTENANCE

Many of the parts used in the manufacture of the **CONDOR®** have specific properties, and Calavar Corporation recommends that replacement parts be purchased through it to ensure the original integrity of its products. Repairs and adjustments should only be made by trained and qualified personnel. Please refer to the Owner's Service Manual for information on service and maintenance of the **CONDOR®**.

INTRODUCTION

The primary purpose of this manual is to provide the user with a thorough understanding of the proper operating procedures necessary to comply with the intended use of the CONDOR®, and to provide the information necessary to maintain and service the CONDOR®.

THE OPERATOR'S MANUAL MUST BE RETAINED ON THE CONDOR® AT ALL TIMES.

Do not attempt to operate or service the CONDOR® until you have read and understood all information provided in this manual. Familiarize yourself with the functions and operations of the upper and lower controls. A good understanding of the controls, their limitations, and their capabilities will maximize operating efficiency. The various decals attached to this CONDOR® also contain vital operational instructions. Read the decals before operating this CONDOR®.

It is YOUR RESPONSIBILITY to follow procedures while operating the CONDOR®. The manufacturer of this CONDOR® cannot control the wide range of applications that may be used in carrying out a variety of jobs. Therefore, it is THE USER'S RESPONSIBILITY to consider all personnel when making decisions regarding the CONDOR®'s intended use.

It is also YOUR RESPONSIBILITY to understand and obey all federal, state, and local regulations regarding the operation and use of aerial work platforms. A copy of the ANSI/SIA Manual of Responsibilities is attached for your use: ANSI/SIA A92.5-1992 is provided for Boom-Supported Elevating Work Platforms, and ANSI/SIA A92.6-1990 is provided for Self-Propelled Elevating Work Platforms.

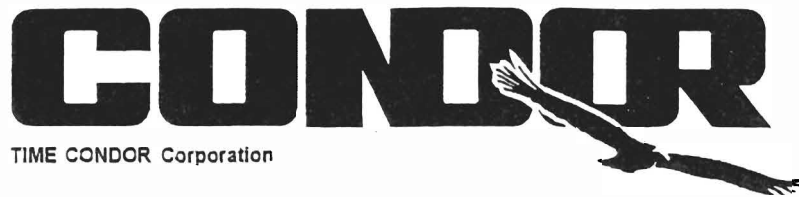
TIME CONDOR Corporation reserves the right to modify, improve, add, and/or delete certain design features of its products without any obligation to incorporate new features into products previously sold. Our manuals are continually updated to reflect these changes.

DO NOT ALTER OR MODIFY THIS CONDOR® WITHOUT PRIOR WRITTEN APPROVAL FROM THE MANAGEMENT OF THE TIME CONDOR Corporation.

SERVICE & MAINTENANCE

Many of the parts used in the manufacture of the CONDOR® have specific properties, and the manufacturer recommends that replacement parts be purchased through the TIME CONDOR Corporation in order to ensure the original integrity of the product. Repairs and adjustments should only be made by trained and qualified personnel. Please refer to the maintenance and parts sections of the TIME CONDOR Corporation Operation, Maintenance, & Parts Manual for information on service and maintenance of the CONDOR®.

NOTE: Please refer to the TIME CONDOR Corporation Parts section of the Operation, Maintenance, & Parts Manual for information pertaining to your CONDOR®.



CONDOR® SERVICE INFORMATION

1. If you need assistance or have any service or maintenance questions, TIME CONDOR Corporation service and parts personnel are always available by phone or fax. The telephone numbers are:

(254) 420-5200 Telephone
(254) 420-5298 Voice Mail
(800) 443-5803 FAX

2. There are numerous written Maintenance Procedures available for this machine. These procedures are available through the TIME CONDOR Corporation Service Department to anyone who requests them.
3. Service and maintenance are not a substitute for trained, qualified service technicians. TIME CONDOR Corporation conducts service schools on a continuing basis. Call any of our service or sales persons for a schedule. Remember, training of mechanics is the responsibility of their employer, but TIME CONDOR Corporation. Service Schools help you provide this training.
4. TIME CONDOR Corporation Service School Training Manuals are available for purchase through the parts department. The part numbers for these manuals are: #92333 for self-propelled models; and #92334 for truck-mounted models.

TIME CONDOR Corporation

TABLE OF CONTENTS

INTRODUCTION	i
TABLE OF CONTENTS	ii
I. PREPARATION, INSPECTION & MAINTENANCE	1
A. OVERALL CONDITION	1
B. LOWER CONTROL STATION	1
C. PLATFORM & UPPER CONTROL STATION	1
D. HYDRAULIC SYSTEM	2
E. MULTI-AXIS SLOPE SENSOR	2
F. BATTERY	2
II. MACHINE OPERATION	
A. RATED WORK LOAD	2
B. LOWER CONTROLS	2
C. UPPER CONTROLS	3
D. PLATFORM OVERLOAD SYSTEM	4
E. TRAVEL	4
III. OPTIONAL EQUIPMENT	5
IV. AUXILIARY LOWERING	5
V. MOVING FROM JOB SITE TO JOB SITE	5
A. TOWING	5
B. TRANSPORTING	5
VI. EMERGENCY STOPPING	6
APPENDIX: ANSI/SIA A92.5 - 1992 MANUAL OF RESPONSIBILITIES	

IMPORTANT: A COPY OF THE ANSI/SIA A 92.5 - 1992 MANUAL OF RESPONSIBILITIES IS ATTACHED TO THIS OPERATOR'S MANUAL. IT CONTAINS IMPORTANT OPERATING INFORMATION FOR THIS MACHINE. READ BEFORE OPERATING THIS MACHINE.

I. PREPARATION, INSPECTION & MAINTENANCE

THE CONDITION OF THE UNIT IS VERY IMPORTANT AS IT DIRECTLY AFFECTS THE OPERATOR'S SAFETY AS WELL AS THE SAFETY OF OTHERS. THE OPERATOR MUST PERFORM A THOROUGH WALK AROUND INSPECTION EACH DAY PRIOR TO OPERATING THE MACHINE. ANY DAMAGE OR FAULTY OPERATION SHOULD BE REPORTED IMMEDIATELY. A **DO NOT OPERATE** TAG OUTLINING THE PROBLEM SHOULD BE ATTACHED TO THE LOWER CONTROL STATION KEY SWITCH AND ANY DISCREPANCIES SHOULD BE CORRECTED BEFORE OPERATING THE CONDOR®.

KNOW THE UNIT AND ITS CAPABILITIES. REPORT ANY UNUSUAL OPERATION; ERRATIC SWAY OR MOTION OF THE BOOM, ARMS OR PLATFORM.

SOME MAJOR AREAS TO CHECK DAILY ARE:

A. OVERALL MACHINE CONDITION

TIRES AND WHEELS - CHECK FOR PROPER TIRE PRESSURE; CRACKS, TEARS OR CUTS; MISSING OR LOOSE LUG NUTS (A RUST LINE RUNNING DOWN THE RIM FROM THE LUG NUT INDICATES A LOOSE LUG NUT).

MISSING, BROKEN OR DAMAGED PARTS - CHECK CYLINDER MOUNTING PINS, PIVOT PINS, PIN RETAINERS, WEARPADS, BOLTS AND NUTS.

STRUCTURAL - CHECK FOR DAMAGE OR CRACKED WELDS ON STRUCTURAL COMPONENTS; BOOM, ARMS, PLATFORM, SKIRT, CHASSIS.

STEERING - CHECK TIE ROD ENDS AND STEERING CYLINDER FOR PROPER AND

SECURE MOUNTING.

RING GEAR - CHECK FOR BROKEN TEETH; ALL MOUNTING BOLTS AND LOCK TABS ARE SECURELY IN PLACE.

DECALS - ALL DECALS AND WARNING SIGNS ARE IN PLACE AND CLEARLY LEGIBLE.

CAUTION: DEFECTIVE COMPONENTS, STRUCTURAL DAMAGE, MISSING PARTS OR EQUIPMENT MALFUNCTIONS JEOPARDIZE THE SAFETY OF THE OPERATOR AND OTHER PERSONNEL, AND CAUSE EXCESSIVE DAMAGE TO THE UNIT. A POORLY MAINTAINED MACHINE COULD BECOME THE GREATEST OPERATIONAL HAZARD YOU MAY ENCOUNTER.

B. LOWER CONTROL STATION

CHECK ELECTRICAL WIRES AND CABLES FOR LOOSE, BROKEN OR FRAYED WIRES.

ALL FUNCTIONS OPERATE PROPERLY, CONTROLS RETURN FREELY TO NEUTRAL, CENTER POSITION.

C. PLATFORM & UPPER CONTROL STATION

CHECK ELECTRICAL WIRES AND CABLES FOR LOOSE, BROKEN OR FRAYED WIRES.

SLIDE BAR IS IN PLACE AT ACCESS OPENING AND MOVES FREELY.

FOOT SWITCH OPERATES PROPERLY, GUARD IS IN PLACE AND THE UNIT IS SECURED TO THE PLATFORM FLOOR.

RECHECK THE STRUCTURAL CONDITION OF THE PLATFORM; PIVOT POINTS, PINS, RAILINGS, FLOOR.

CHECK RED BUTTON - IT DISCONNECTS POWER TO THE CONTROLS AND STOPS THE OPERATION OF ALL FUNCTIONS.

CHECK AUXILIARY LOWERING; PUMP OR VALVES ON BOOM AND ARM LIFT CYLINDERS.

D. HYDRAULIC SYSTEM

CHECK THE HYDRAULIC TANK FLUID LEVEL WITH THE BOOM AND ARMS LOWERED PLUS BOOM RETRACTED. MAINTAIN THE FLUID LEVEL TO THE MARK ON THE SIGHT GLASS. ADD ONLY SHELL TELLUS T32 HYDRAULIC OIL TO THE SYSTEM. ENSURE THE BREATHER CAP IS IN GOOD CLEAN CONDITION AND IN PLACE ON THE TANK.

CHECK FOR HYDRAULIC LEAKS AT FITTINGS, VALVES AND CONTROLS.

CHECK ALL HYDRAULIC HOSES AND TUBES FOR DAMAGE, KINKS, AND PROPER ROUTING TO AVOID PINCH POINTS.

E. MULTI-AXIS SLOPE SENSOR

CHECK THE GENERAL CONDITION OF THE SLOPE SENSOR - NO LOOSE OR DAMAGED WIRES, SECURELY MOUNTED, HOUSING NOT CRACKED OR BROKEN.

TEST THE SLOPE SENSOR - WITH THE BOOM OFF THE LIMIT SWITCH (RAISED APPROXIMATELY ONE FOOT) AND THE KEY SWITCHED TO "ON" POSITION AND WITH THE FOOT SWITCH DEPRESSED, THE ALARM SHOULD SOUND WHEN THE SLOPE SENSOR IS PUSHED (TILTED) TO ONE SIDE.

F. BATTERY

CHECK BATTERY ELECTROLYTE LEVEL.

ENSURE ALL CAPS ARE PRESENT AND TIGHT ON THE BATTERIES.

ALL BATTERY CABLE CONNECTIONS SHOULD BE TIGHT AND CLEAN.

II. MACHINE OPERATION

A. RATED WORK LOAD

THE CONDOR® MODEL RT48A HAS AN UNRESTRICTED WORK LOAD RATING OF 500 LBS. (226.8 kg) OR TWO OCCUPANTS. THIS MEANS THAT THE PLATFORM WILL SUPPORT A 500 LB. COMBINED WEIGHT, INCLUDING PERSONNEL, THEIR TOOLS AND EQUIPMENT, THROUGHOUT THE WORKING ENVELOPE OF THE MACHINE.

B. LOWER CONTROLS

THE LOWER CONTROL STATION IS LOCATED ON THE TURRET OF THE MACHINE. FROM THIS STATION ALL MACHINE FUNCTIONS CAN BE PERFORMED EXCEPT DRIVE AND STEER.

THE MAIN KEY SWITCH IS LOCATED ON THE LOWER CONTROL BOX. WITH THE KEY IN THE "OFF" POSITION THE UNIT IS OFF AND ALL POWER IS DISCONNECTED. WITH THE KEY IN THE FAR RIGHT "ON" POSITION THE UNIT CIRCUIT IS ENERGIZED. THE RED BUTTON ON THE LOWER CONTROL BOX MUST BE UP OR IN THE "ON" POSITION AND THE RED BUTTON IN THE UPPER CONTROL BOX MUST BE UP OR IN THE "ON" POSITION TO START UNIT (AS THEY ARE WIRED IN THE STARTER CIRCUIT IN SERIES). WITH THE UNIT KEY SWITCH "ON" AND BOTH RED BUTTONS UP OR "ON" USE "START" TOGGLE SWITCH TO START ENGINE, USE "CHOKE" TOGGLE SWITCH IF NEEDED (BOTH LOCATED ON LOWER CONTROL BOX). ONCE UNIT IS STARTED, DEPRESS "PUMP" BUTTON ON LOWER CONTROL BOX TO ENERGIZE LOWER CONTROLS. THIS PUMP BUTTON MUST BE CONTINUOUSLY DEPRESSED WHILE OPERATING ANY OF THE FUNCTIONS FROM THE GROUND STATION.

ALSO LOCATED ON THE LOWER CONTROL BOX IS THE AUXILIARY POWER BUTTON. DEPRESS THIS BUTTON CONTINUOUSLY (NOTE IF ENGINE IS RUNNING, IT WILL

SHUT DOWN) AND USE FUNCTIONS TO MANUEVER AND LOWER PLATFORM IN CASE OF PRIMARY POWER FAILURE.

ADJACENT TO THE LOWER CONTROL BOX ARE FOUR (4) LEVERS THAT CONTROL THE LIFT FUNCTIONS OF THE CONDOR® FROM LEFT TO RIGHT THE CONTROLS ARE: ARM LIFT / LOWER; BOOM EXTEND / RETRACT; TURRET ROTATION; AND BOOM LIFT / LOWER.

THE LIFT FUNCTIONS CORRESPOND DIRECTLY TO THE MOVEMENT OF THE CONTROL SWITCHES IN THE DIRECTION INDICATED ON THE OPERATION DECAL AT THE CONTROL STATION.

NOTE: THE CONDOR® IS NOT EQUIPPED WITH CONTINUOUS ROTATION. WITH THE COUNTERWEIGHT OVER THE DRIVE WHEELS THE TURRET CAN BE ROTATED 180° IN EITHER DIRECTION, UNTIL THE STOP IS REACHED. AT THIS POINT THE TURRET MUST BE ROTATED IN THE OPPOSITE DIRECTION.

C. UPPER CONTROLS

THE UPPER CONTROL CONSOLE PROVIDES FOR COMPLETE OPERATION OF THE MACHINE. AS A SAFETY PRECAUTION THE FOOT SWITCH MUST BE DEPRESSED AND HELD DURING ALL FUNCTION OPERATIONS.

THE UPPER CONTROL BOX IS EQUIPPED WITH A RED SWITCH WHICH SERVES AS AN EMERGENCY STOP SWITCH TO STOP ALL MOVEMENT. ON ENGINE EQUIPPED UNITS, IT WILL STOP THE ENGINE.

IF THE UNIT IS EQUIPPED WITH AN ENGINE, THE UPPER CONTROL BOX WILL CONTAIN AN ENGINE START SWITCH AND, IF APPLICABLE, A CHOKE SWITCH AND DUAL FUEL SELECTOR SWITCH.

ALSO CONTAINED IN THIS CONTROL BOX IS THE DRIVE SPEED SELECTOR SWITCH WHICH ALLOWS THE OPERATOR TO SE-

LECT FAST OR SLOW DRIVE SPEED. THE DRIVE AND STEER CONTROLLER IS LOCATED TO THE RIGHT OF THE CONTROL BOX. FOR INFORMATION ON DRIVING & STEERING THE CONDOR® SEE 2E OF THIS SECTION.

DIRECTLY IN FRONT OF THE CONTROL BOX ARE FIVE (5) LEVERS THAT CONTROL THE LIFT FUNCTIONS OF THE MACHINE. FROM LEFT TO RIGHT THEY ARE: ARM LIFT / LOWER, BOOM EXTEND / RETRACT, PLATFORM TILT, TURRET ROTATION, BOOM LIFT / LOWER.

THE AERIAL FUNCTIONS CORRESPOND DIRECTLY TO THE MOVEMENT OF THE CONTROL LEVERS IN THE DIRECTION INDICATED ON THE OPERATION DECAL LOCATED AT THE CONTROL STATION.

THE PLATFORM ON THE CONDOR® MODEL RT48A WILL MAINTAIN WHATEVER ATTITUDE IT IS SET AT THROUGHOUT ITS OPERATIONAL ENVELOPE. IF THE PLATFORM IS SET HORIZONTAL TO THE GROUND WITH THE BOOM IN THE HORIZONTAL POSITION, IT WILL REMAIN "LEVEL" AS THE BOOM AND/OR ARMS ARE RAISED AND LOWERED.

THE CONDOR® IS ALSO EQUIPPED WITH A HAND OPERATED ROTATING PLATFORM. TO ROTATE THE PLATFORM TURN THE HANDLE LOCATED ON THE RIGHT HAND SIDE OF THE SKIRT, JUST BELOW THE CONTROL STATION.

MOUNTED ON THE TURRET OF THE MACHINE IS A SLOPE SENSOR WHICH IS WIRED THROUGH A LIMIT SWITCH CONTROLLED BY CONTACT WITH THE BOOM LIFT CYLINDER. WHEN THE MACHINE IS OPERATED FROM THE PLATFORM AND THE BOOM LIFT CYLINDER IS OFF OF THE LIMIT SWITCH THE SLOPE SENSOR IS ENERGIZED. IF THE CONDOR® ENCOUNTERS A TILT CONDITION OF 5° THE SENSOR SOUNDS AN ALARM AND STOPS ALL OF THE LIFT FUNCTIONS. AT THIS POINT DRIVE THE CONDOR® BACK ONTO FIRM,

LEVEL GROUND.

ALSO LOCATED ON THE UPPER CONTROL BOX IS THE AUXILIARY POWER BUTTON. DEPRESS THE BUTTON CONTINUOUSLY (IF THE ENGINE IS RUNNING, IT WILL SHUT DOWN) AND USE FUNCTIONS TO MANEUVER AND LOWER PLATFORM IN CASE OF PRIMARY POWER LOSS (NOTE: FOOT-SWITCH MUST BE DEPRESSED FOR AUXILIARY POWER TO FUNCTION).

D. PLATFORM OVERLOAD SYSTEM

THIS MACHINE IS EQUIPPED WITH A PLATFORM OVERLOAD SYSTEM. IF THE LOAD ON THE PLATFORM EXCEEDS 500 LBS. (2268 kg), ALL CONTROL FUNCTIONS WILL BE INOPERABLE. CONTROL CAN BE RESTORED BY REDUCING THE PLATFORM LOAD BELOW 500 LBS.

E. TRAVEL

DRIVING THE MACHINE CAN ONLY BE ACCOMPLISHED FROM THE PLATFORM, WITH THE BOOM IN EITHER THE RAISED OR STOWED (LOWERED) POSITION. EVEN THOUGH THE GRADEABILITY OF THE UNIT IS 2WD 16° (28%) 4WD 18° (32%), THIS SHOULD ONLY BE NEGOTIATED WITH THE BOOM IN THE FULLY STOWED (LOWERED) POSITION AND IN SLOW SPEED. THE CONDOR® IS DESIGNED TO TRAVEL WITH THE PLATFORM ELEVATED ONLY ON FIRM, LEVEL GROUND.

THE CONDOR® IS DESIGNED TO BE NORMALLY DRIVEN WITH THE COUNTERWEIGHT POSITIONED OVER THE STATIONARY AXLE. IN THIS CONFIGURATION THE DIRECTION OF TRAVEL CORRESPONDS DIRECTLY TO THE DIRECTION OF MOVEMENT OF THE DRIVE CONTROLLER. FOR EXAMPLE, MOVING THE CONTROLLER AWAY FROM THE OPERATOR DRIVES THE UNIT FORWARD, WHILE MOVING THE CONTROLLER TOWARDS THE OPERATOR MOVES THE UNIT IN REVERSE.

THE STEERING CONTROL IS A SPRING LOADED, RETURN TO CENTER, ROCKER SWITCH LOCATED ON THE TOP OF DRIVE CONTROL HANDLE. WITH THE COUNTERWEIGHT OVER THE DRIVE WHEELS THE STEERING CORRESPONDS DIRECTLY TO THE DIRECTION THE ROCKER SWITCH IS PUSHED. FOR EXAMPLE, PUSHING THE ROCKER SWITCH TO THE LEFT TURNS THE UNIT TO THE LEFT, WHILE PUSHING THE SWITCH TO THE RIGHT TURNS THE MACHINE TO THE RIGHT. WHEN THE SWITCH IS RELEASED AND RETURNS TO THE CENTER POSITION, THE STEERING WHEELS REMAIN IN THE DIRECTED LINE OF TRAVEL AND DO NOT RETURN TO A STRAIGHT LINE OF TRAVEL UNTIL MOVED AGAIN; STEERING IS NOT SELF-CENTERING.

WHENEVER THE MACHINE IS DRIVEN WITH THE COUNTERWEIGHT IN A POSITION OTHER THAN DESCRIBED, THE DRIVE AND STEER RELATIONSHIP TO THE CONTROLLER WILL CHANGE. THE OPERATOR SHOULD MOVE THE UNIT SLOWLY UNTIL HE BECOMES FAMILIAR WITH THE CHANGE IN MOVEMENT.

ALWAYS LOOK IN THE DIRECTION OF TRAVEL AND MAINTAIN A GOOD FIELD OF VIEW, PAYING PARTICULAR ATTENTION TO OVERHEAD OBJECTS. AVOID JERKY MOVEMENT OF THE DRIVE CONTROLLER BY MOVING SMOOTHLY INTO AND OUT OF TRAVEL. COME TO A COMPLETE STOP BEFORE CHANGING DIRECTIONS.

THE BRAKES ON THE UNIT ARE SPRING APPLIED, HYDRAULICALLY RELEASED. THEY ARE AUTOMATICALLY RELEASED WHEN THE DRIVE CONTROLLER IS ACTIVATED AND APPLIED WHEN THE DRIVE CONTROLLER IS RETURNED TO THE NEUTRAL POSITION. AVOID RELEASING THE DRIVE CONTROLLER AT FULL SPEED AS THE UNIT WILL STOP ABRUPTLY CAUSING A SUDDEN MOVEMENT OF THE PLATFORM WHICH COULD RESULT IN PERSONNEL INJURY.

THE PLATFORM CONTROL BOX IS

EQUIPPED WITH A MAINTAINED TOGGLE SWITCH TO SELECT EITHER FAST OR SLOW TRAVEL SPEED. HOWEVER, WHEN THE BOOM OR ARMS ARE RAISED ENOUGH TO OPEN THE BOOM LIMIT SWITCH (APPROXIMATELY HORIZONTAL) BOTH DRIVE SPEEDS ARE AUTOMATICALLY REDUCED BY HALF.

III. OPTIONAL EQUIPMENT

THE FOLLOWING OPTIONS ARE AVAILABLE ON THE CONDOR® MODEL RT48A AERIAL WORK PLATFORM:

- ROTATING BEACON
- MOTION WARNING HORN
- 110V LINE TO PLATFORM
- FOAM FILLED TIRES
- HOUR METER
- PLATFORM WORK LIGHTS
- HEAD & TAIL LIGHTS
- SELF CLOSING GATE
- AIRLINE TO PLATFORM
- WIRE MESH AROUND PLATFORM
- SPECIAL PAINT
- DUAL FUEL VAPOR KIT
- DUAL FUEL LIQUID KIT
- 4WD OPTION
- DEUTZ DIESEL ENGINE
- TRAVEL WARNING HORN
- BELT & LANYARD
- STROBE LIGHT
- KUBOTA DIESEL ENGINE
- OPTIONS CONFORMING TO OTHER NATIONAL STANDARDS

IV. AUXILIARY LOWERING

SEVERAL PROVISIONS ARE MADE TO ASSIST THE OPERATOR SHOULD PRIMARY POWER BE LOST.

THE BOOM AND ARM LIFT CYLINDERS ARE EQUIPPED WITH GRAVITY LOWERING CARTRIDGES ON THE HOLDING VALVES. IN

ORDER TO MANUALLY LOWER THE BOOM OR ARM TURN THE KNOB COUNTERCLOCKWISE. THE LOWERING PROCESS CAN BE HALTED AT ANYTIME BY TURNING THE KNOB.

THE TURRET CAN BE MANUALLY ROTATED BY USING AUXILIARY PUMP AND FUNCTION. SEE SECTION 2B OF THIS MANUAL.

V. MOVING FROM JOB SITE TO JOB SITE

A. TOWING

THE BRAKES ON THE CONDOR® ARE AUTOMATICALLY APPLIED WHEN THE DRIVE CONTROLLER IS RETURNED TO NEUTRAL. HOWEVER, FOR TOWING PURPOSES THE DRIVE HUBS CAN BE DISENGAGED BY REMOVING THE TWO (2) 1/4 - 20 x 3/4 BOLTS THAT SECURE THE DISCONNECT CAP. NEXT REMOVE THE DISCONNECT CAP AND REINSTALL IT WITH THE NIPPLE FACING INWARD. RESECURE THE CAP USING THE SAME 1/4 - 20 x 3/4 MOUNTING BOLTS. **CAUTION: WHEN THE DRIVE HUBS ARE DISENGAGED, THE BRAKES ARE ALSO DISENGAGED.**

B. TRANSPORTING

THE CONDOR® MODEL RT48A WEIGHS APPROX. 13,500 LBS. WHATEVER MEANS (RAMP, CRANE, ETC.) IS USED TO LOAD/ UNLOAD THE CONDOR® MUST BE OF SUFFICIENT STRENGTH TO WITHSTAND THE WEIGHT OF THE MACHINE.

WHEN USING A RAMP IT SHOULD BE SET AT AN ANGLE NO STEEPER THAN 16° OR 28% 2WD, AND 18° OR 32%.

THE NORMAL DRIVING POSITION OF THE CONDOR® IS WITH THE TURRET COUNTERWEIGHT OVER THE STATIONARY AXLE, AND THE DRIVE AND STEER CONTROLLER MOVEMENT IS BASED ON THIS CONFIGURATION. WHEN THE COUNTERWEIGHT IS

OVER THE STEERING WHEELS THE RELATIONSHIP BETWEEN THE MOVEMENT OF THE DRIVE AND STEERING CONTROLLER AND THE MOVEMENT OF THE MACHINE WILL BE REVERSED. TRY EACH CONTROL BEFORE APPROACHING THE RAMP TO ORIENT YOURSELF WITH THE DIRECTION OF TRAVEL. BEFORE DRIVING THE UNIT ON THE RAMP TEST ALL OF THE CONTROLS AND THE BRAKING SYSTEM. MAKE SURE THE CONTROLS RETURN SMOOTHLY TO THE CENTER, NEUTRAL POSITION. MOVE THE CONDOR® SLOWLY BACK AND FORTH AND ENSURE THAT THE BRAKES APPLY EACH TIME THE DRIVE CONTROLLER IS RETURNED TO THE CENTER, NEUTRAL POSITION.

IT MAY BE NECESSARY TO ELEVATE THE BOOM OR LIFT ARMS TO CLEAR THE GROUND OR RAMP AS YOU LOAD THE UNIT. THE UNIT IS EQUIPPED WITH A SLOPE SENSOR THAT SENSES AN OUT OF LEVEL CONDITION. WHEN THE ARM OR BOOM IS RAISED OFF OF THE LIMIT SWITCH AND A CONDITION OF 5° OUT OF LEVEL IS ENCOUNTERED A WARNING ALARM WILL SOUND. AT THIS POINT NO FUNCTIONS OTHER THAN DRIVE AND STEER WILL BE AVAILABLE TO THE OPERATOR.

MOVE THE UNIT ON THE TRUCK OR TRAILER, UP OR DOWN THE RAMP, SLOWLY, ALLOWING TIME FOR STEERING CORRECTIONS TO BE MADE. KEEP THE UNIT IN ALIGNMENT WITH THE RAMP AND CARRIER DURING LOADING OR UNLOADING OPERATIONS.

THE CONDOR® AERIAL WORK PLATFORM CAN EASILY AND SAFELY BE TRANSPORTED FROM SITE TO SITE BY FOLLOWING A FEW SIMPLE PROCEDURES:

BLOCK ALL WHEELS TO PREVENT FORWARD AND REVERSE MOVEMENT DURING TRANSPORTATION.

TIE DOWN THE CONDOR® USING CHAINS,

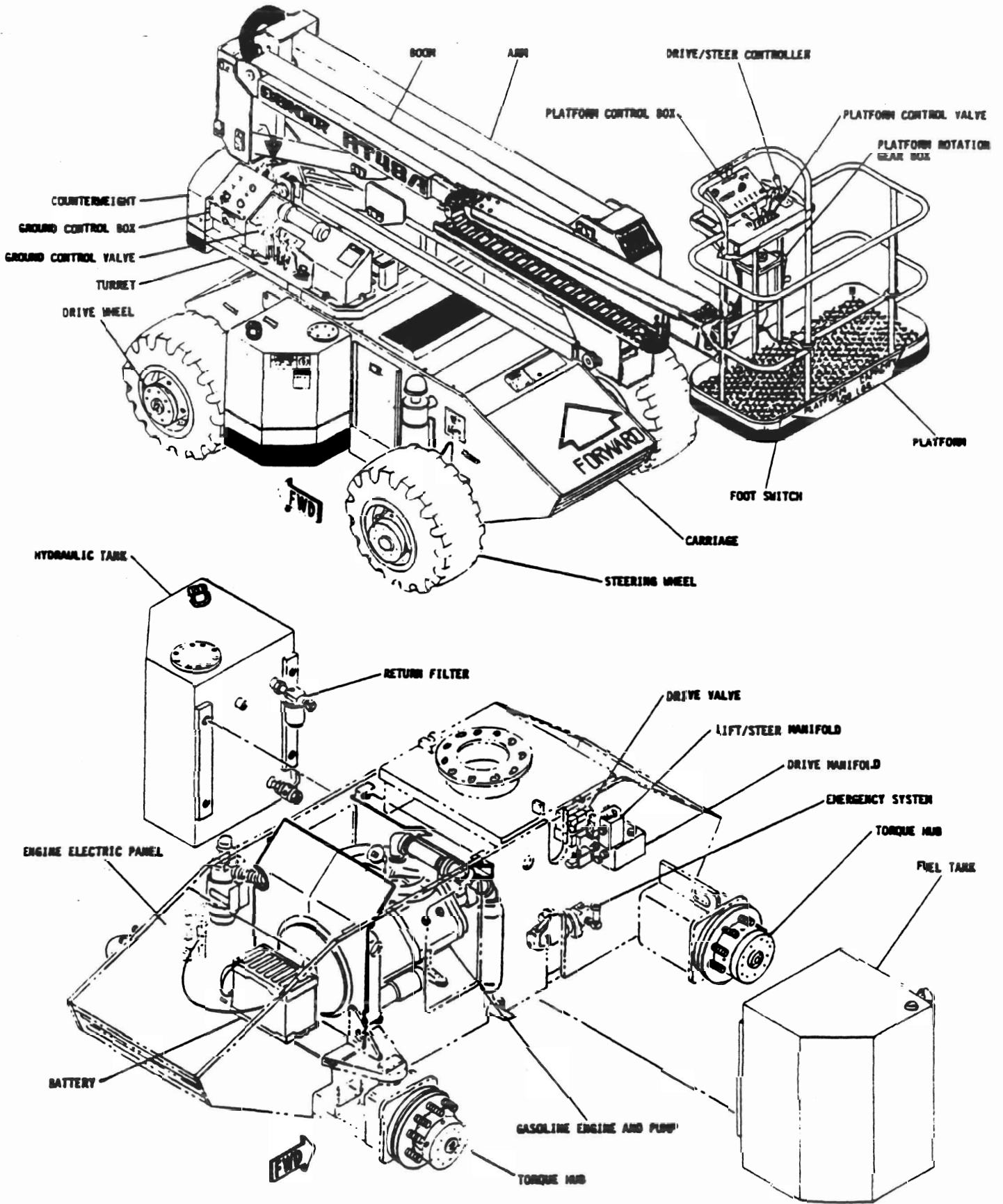
STRAPS OR CABLES OF SUFFICIENT STRENGTH. SEE THE TRANSPORTING DIAGRAM ON EACH SIDE OF THE CHASSIS.

SET THE PLATFORM ON WOODEN PALLETS AND TIE THE BOOM DOWN NEAR THE SKIRT.

TURN THE POWER OFF AT THE KEY SWITCH AND REMOVE THE KEY.

VI. EMERGENCY STOPPING

AS STATED BEFORE, THE BUTTON CAN BE USED IN AN EMERGENCY TO STOP MOVEMENT FROM EITHER THE LOWER OR UPPER POSITION. ALSO, THE FOOT SWITCH CAN BE USED TO PANIC STOP ANY FUNCTION, INCLUDING DRIVE, SIMPLY BY TAKING YOUR FOOT OFF OF IT.



Component Identification

PRE-OPERATION INSPECTION

The **CONDITION** of the RT48A prior to start up is a very **IMPORTANT** factor as it directly affects the operator's **SAFETY**. It should be a common practice that the operator performs a general inspection before each day's operation of the work platform.

The purpose of the operator's inspection is to keep the CONDOR® in **PROPER** working condition and to **DETECT** any sign of malfunction during normal operations between scheduled maintenance checks.

DOWNTIME is **COSTLY** and can be prevented by taking a few minutes prior to start-up. A thorough walk-around inspection must be performed each day before the **CONDOR®** is operated. Report damage or faulty operation immediately. Attach a sign at the ground control area stating **DO NOT OPERATE**. Repair any discrepancies before use. Some of the major items to check are:

1. OVERALL MACHINE CONDITION

- A. Ground / platform controls - Controls return to neutral (center) when not actuated.
- B. Hydraulic leaks.
- C. Electrical system for frayed or broken wires or loose connections.
- D. Missing, broken or damaged parts, pin retainers, bolts and nuts.
- E. External structural damage, or cracked welds.
- F. Condition of tires - pits, tears, cracks or cuts.
- G. Steering connections, tie rod, cylinder
- H. Wheel lug nuts - missing or loose.
- I. Decals, placards, warning signs.
- J. Proper tire pressure (45 psi).
- K. Boom - pivots, pin areas, wearpads, cylinder
- L. Check bolts securing ring gear to chassis and turret for tightness and that all lock tabs are in place.

2. PLATFORM

- A. Pivot points, connections.
- B. Structural condition - damaged railings, flooring.
- C. Control box - electrical wiring for frayed or broken wires, damaged components, hoses, loose connections.
- D. Access opening, slide bar freely moves.
- E. Foot switch and guard.

3. BATTERY

- A. Electrolyte level - all caps present.
- B. Cables and connections - ground connection.
- C. Battery hold down.

4. ENGINE

- A. Fuel level.
- B. Oil level.
- C. Mounting.
- D. Check for fuel, oil leaks.

5. HYDRAULIC SYSTEM

- A. Hydraulic leaks.
- B. Loose or damaged hoses, tubing.
- C. Fluid level, hydraulic tank breather cap. Refill only with Shell Tellus T32 Hydraulic Fluid.
- D. Hydraulic valves and control levers.
- E. Cleanliness of hydraulic fluid - non-milky, bright in color.

6. MULTI-AXIS 5° SLOPE SENSOR

- A. General condition.
- B. Loose or damaged wires.
- C. Push to test. Moveable on mounting.
- D. Warning buzzer in platform is operable.

FEATURES

Articulating / Telescoping Design Allows worker to reach up and over obstacles.	Full Pressure Hydraulic Control Smooth operation with reduction in maintenance costs.
Full 24' Side Reach at 27' Working Height Greater work area without need to move unit.	Heavy Duty Construction Built to last - gives operator added sense of security.
Safety Yellow Increases awareness of unit to others - improves safety.	Zero Tail Swing Enables Operator to work in tight areas.
Super Large Tires Provides flotation in all terrain.	12 Inch Ground Clearance Easily moves over rough terrain.

SPECIFICATIONS

RT48A	English	Metric	
Working Height	48 ft.	15 m	
Platform Height	42 ft.	13 m	
Platform Capacity	500 lb.	227 kg	
Platform Size	60 in. x 30 in.	1.2 m x .8 m	
Up & Over Height	20 ft.	6.1 m	
Horizontal Reach	24 ft.	7.3 m	
Stowed Length	17 ft. - 9 ft.	5.4 m	
Width	6 ft. - 10 in.	2.0 m	
Stowed Height	7 ft. - 8 in.	2.3 m	
Tail Swing Beyond Chassis	Zero	Zero	
Ground Clearance	12 in.	.32 m	
Outside Turning Radius	15 ft.	4.6 m	
Tires	15/38.5 - 16.5 LT		
Gross Weight	13,500 lbs.	61.23 kg	
Power Source	37 h.p.	27.2 kw	
Fuel Tank	34 US gal.	128.7 L	
Wheel Base	6 ft.	1.8 m	
Travel Speed	0 - 3 mph	0 - 4.8 kph	
Gradeability	28%	28%	
Hydraulic Tank Capacity	39 US gal.	147.6 L	
Platform Rotation	180° Manual		

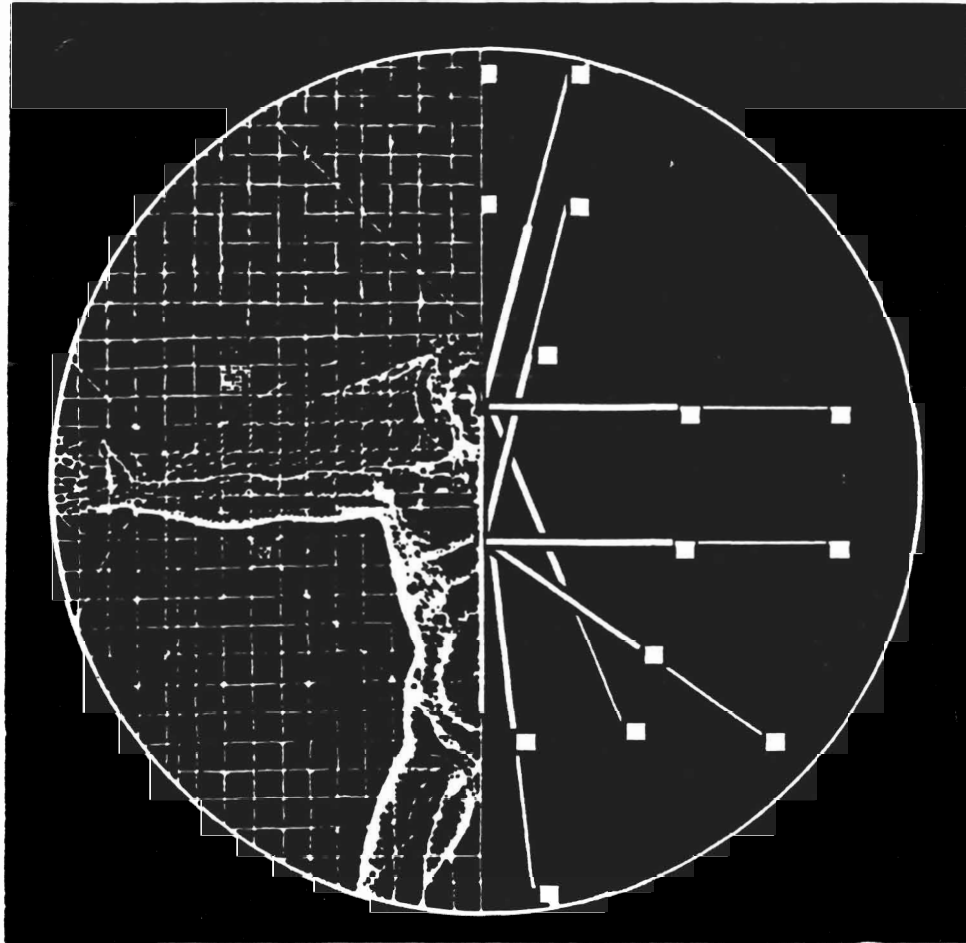
Specifications subject to change without prior notice.

OPTIONS

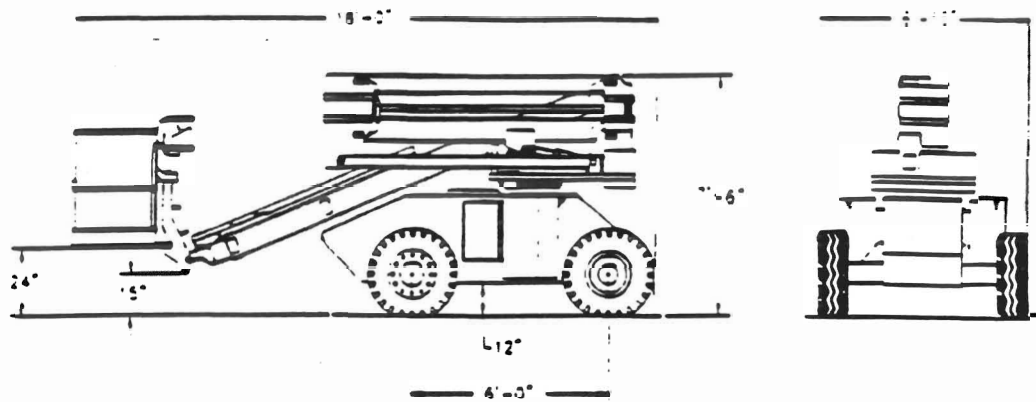
Head and Tail Lights Motion / Movement Horn 110V Line to Platform 4-Wheel Drive - 32% Gradeability	Hour Meter Larger Platform Strobe Light Dual Fuel	Air Line to Platform Diesel Engine Foam Filled Tires Platform Lights
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SOLD, RENTED & SERVICED BY:

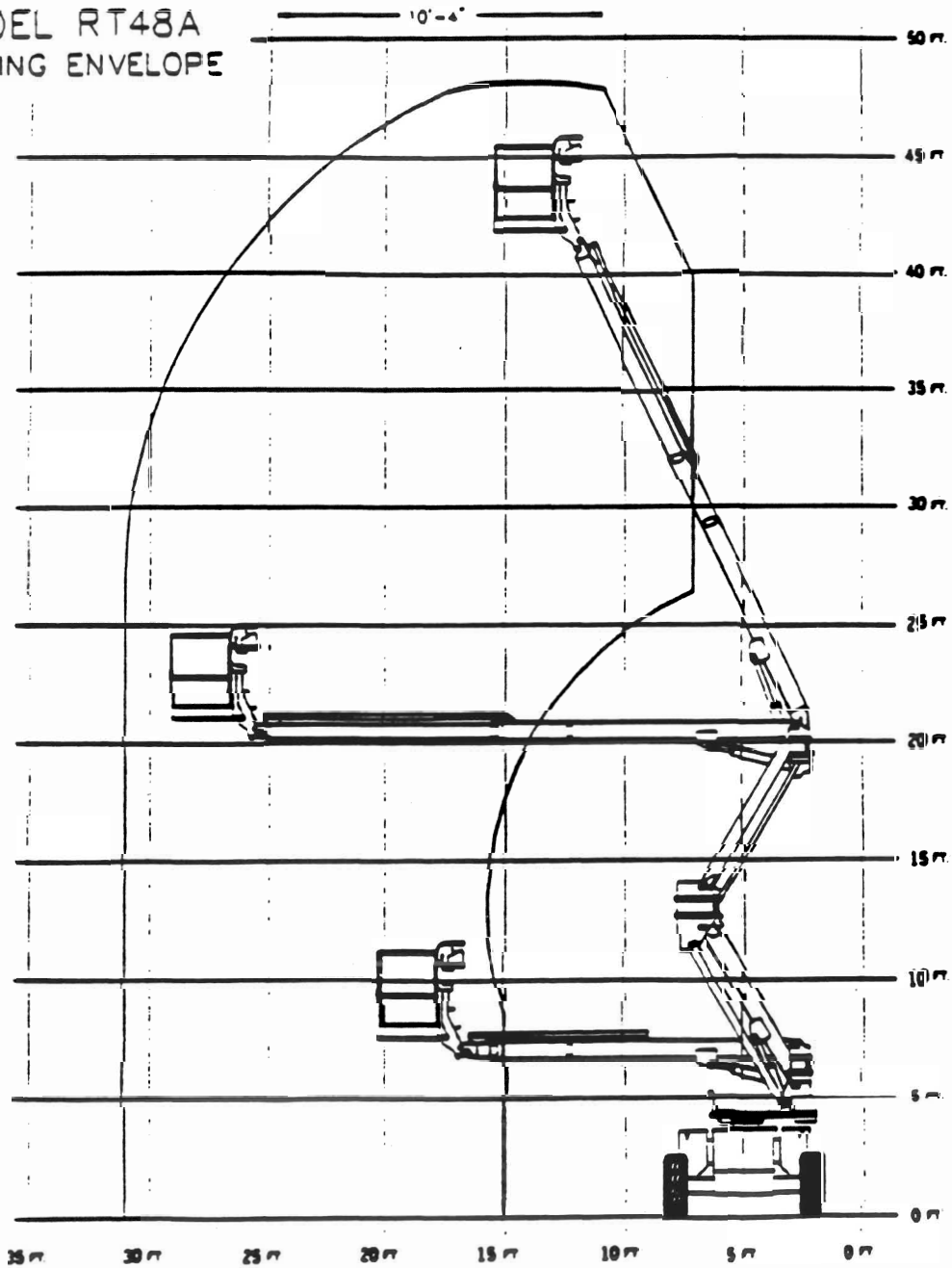
Calavar Corporation
8300 Imperial Drive
P. O. Box 21447 • Waco, Texas 76702-1447
(817) 666-4545 • Fax (817) 666-4544



EXTENDING MAN'S REACH



MODEL RT48A
WORKING ENVELOPE



Model RT48A Working Envelope

CALAVAR CONDOOR

CALAVAR CORPORATION

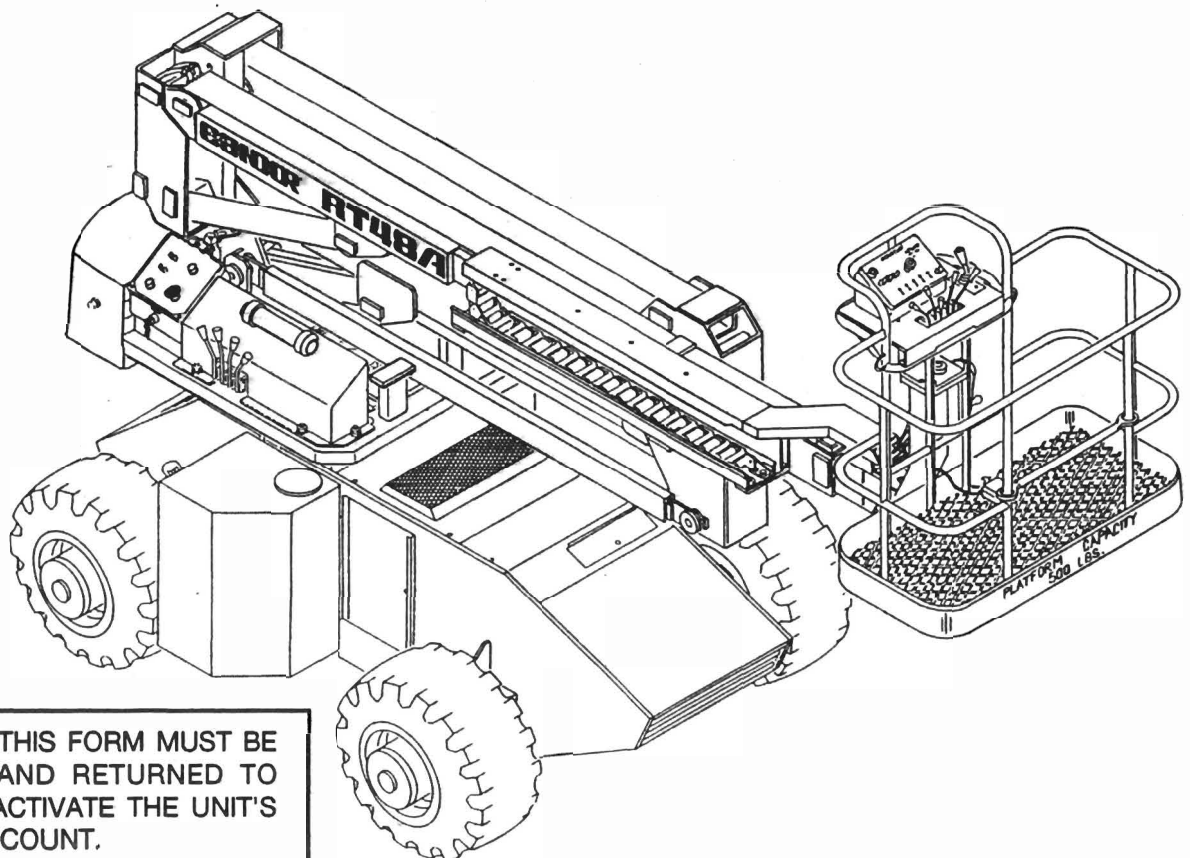


SELF-PROPELLED

AERIAL WORK PLATFORM

ARTICULATED

INSPECTION REPORT



IMPORTANT! THIS FORM MUST BE COMPLETED AND RETURNED TO CALAVAR TO ACTIVATE THE UNIT'S WARRANTY ACCOUNT.

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

Dealer's Name _____ Address _____

Model _____ Serial Number _____ Date _____

This CONDOR Aerial Lift was inspected and tested prior to leaving Calavar. Due to environmental conditions, loading, transporting, and unloading of the unit, it will be necessary to perform the following inspection.

This report, when complete, must be returned to Calavar Corporation, P.O. Box 21447, Waco, TX 76702-1447 within 45 days of receipt of unit to set up the warranty account. This does not necessarily start warranty, but helps insure that we take timely action on any problem with your aerial work platform.

Item No.	Description of Inspection or Test	Initial If O.K.	Remarks:
1.	GENERAL APPEARANCE		
	A. Visual Damage		
	B. Fluid leaks		
	C. Paint damage		
	D. Decals for proper installation		
	E. Visual inspection of all welds		
	F. Pins and retainers		
	G. Security hoses and fittings		
2.	CARRIAGE		
	A. Covers and fasteners		
	B. Steering knuckle - security		
	C. Tie rod - security		
	D. Steer cylinder - leaks/security		
	E. Tire condition		
	F. Lug nuts/torque		
	G. Tire pressure (see decal)		
	H. Hydraulic leaks		
	I. Hydraulic fluid level/clarity		
	J. Wiring security (open boxes)		
3.	ENGINE SERVICING - (IF APPLICABLE)		
	A. Engine oil level		
	B. Throttle solenoid and linkage/adjustment		
	C. Choke solenoid and linkage/adjustment		
	D. Charge system/operation		
	E. Fuel tank		
	F. Battery condition/level of charge		
	1. Electrolyte level		
2. Terminal security			