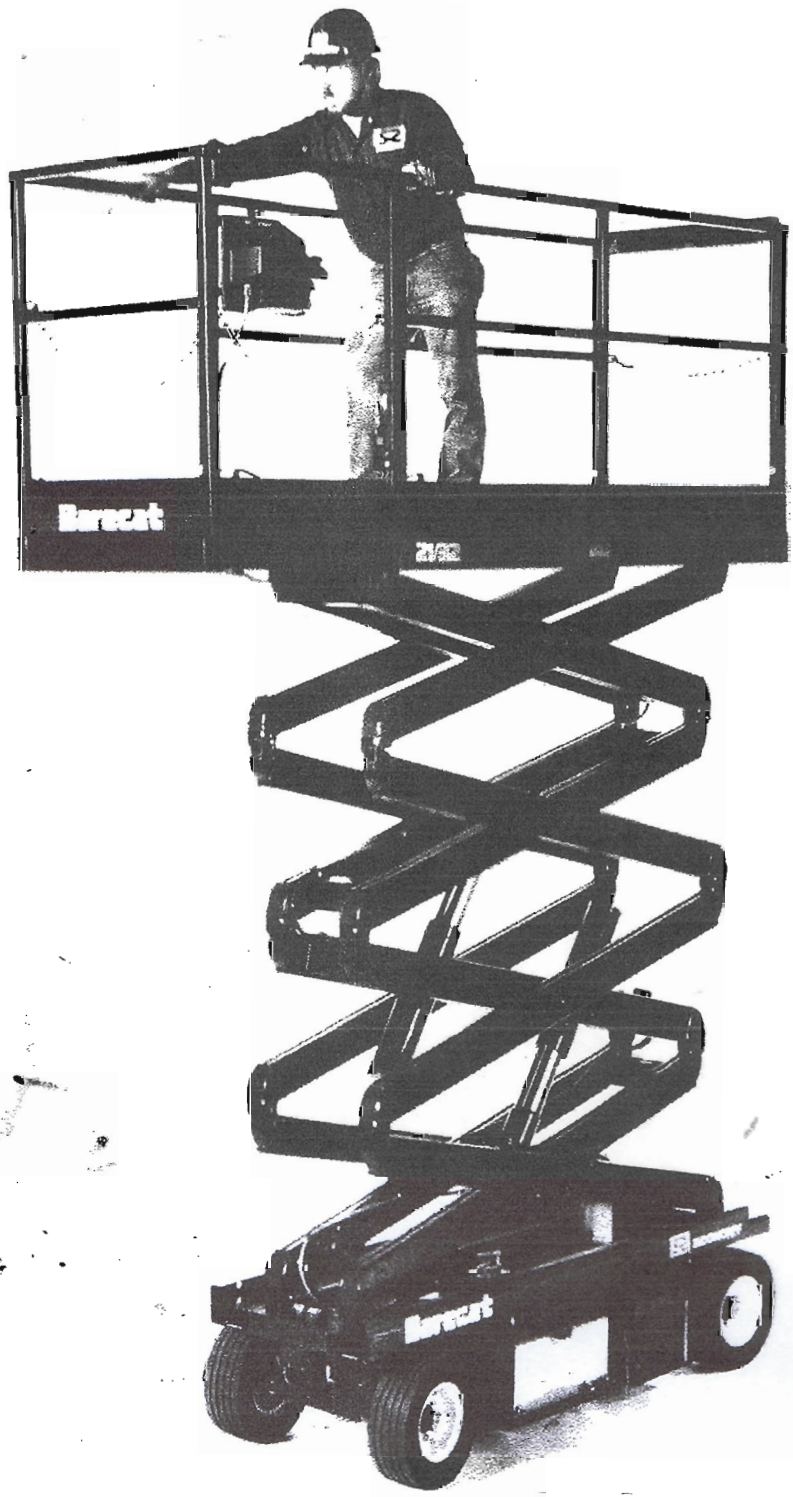


 **ECONOMY**

# Barecat®

**BARECAT SERIES**



**Single Wheel/Dual  
Wheel Hydraulic  
Drive, Self Propelled  
Elevating Work  
Platform**

 **ECONOMY  
ENGINEERING COMPANY**

484 Thomas Drive, P.O. Box 1507  
Bensenville, IL 60106 U.S.A.  
(312) 860-3460 Telex 270133  
800-543-8377 FAX # (312) 595-0097

## **OPERATING MANUAL**

# TABLE OF CONTENTS

<b>SECTION I INTRODUCTION</b> .....	1	SETUP PROCEDURE .....	4
PURPOSE OF EQUIPMENT .....	1	OPERATING CONTROLS .....	6
LIMITATIONS AND WARNINGS .....	1	OPERATOR CONSOLE ASSEMBLY .....	7
OPERATOR QUALIFICATIONS .....	2	OPERATING PROCEDURES .....	8
DESCRIPTION .....	2	<b>SECTION III MAINTENANCE</b> .....	9
SPECIFICATIONS .....	3	OPERATOR'S RESPONSIBILITY FOR	
OPTIONAL EQUIPMENT .....	3	MAINTENANCE .....	9
<b>SECTION II OPERATION</b> .....	4	MAINTENANCE SCHEDULE .....	10

**READ AND UNDERSTAND THESE DECALS BEFORE OPERATING WORK PLATFORM**

CAUTION

**THIS WORK PLATFORM TO BE USED BY TRAINED AND AUTHORIZED OPERATORS ONLY. IT IS THE OPERATOR'S RESPONSIBILITY TO:**

1. READ AND UNDERSTAND ALL CAUTION AND DANGER WARNINGS AND OPERATING MANUAL.
2. PERFORM DAILY MAINTENANCE INSPECTIONS.
3. HAVE ALL WORN OR DAMAGED PARTS REPLACED.
4. FASTEN ENTRY GATE/CHAIN/BAR.
5. USE WORK PLATFORM ONLY ON HARD LEVEL SURFACES.

**OWNERS AND/OR USERS ARE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF THIS MACHINE AS REQUIRED BY ANSI ASS. 8 AND THE OPERATING/ MAINTENANCE AND PARTS MANUAL.**

ECONOMY ENGINEERING COMPANY  
 4000 W. 10TH ST. SUITE 100  
 MINNEAPOLIS, MN 55420  
 (612) 835-1000 FAX (612) 835-1111

**This Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



The Safety Alert Symbol identifies important safety messages on machines, safety signs, in manuals, or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

DANGER

<p style="text-align: center; font-weight: bold;">TIP-OVER HAZARDS</p> <div style="display: flex; justify-content: space-around;"> </div> <p style="font-size: 0.8em;">DO NOT DRIVE NEAR DROP-OFFS, HOLES, OPEN ELEVATOR SHAFTS, AND LOADING DOCKS.</p> <div style="display: flex; justify-content: space-around;"> </div> <p style="font-size: 0.8em;">DO NOT RAISE PLATFORM ON SLOPE OR DRIVE ONTO SLOPE WHEN ELEVATED.</p> <div style="display: flex; justify-content: space-around;"> </div> <p style="font-size: 0.8em;">DO NOT RAISE PLATFORM IN WINDY OR GUSTY CONDITIONS.</p>	<p style="text-align: center; font-weight: bold;">ELECTROCUTION HAZARD</p> <p style="font-size: 0.8em;">THIS MACHINE IS NOT INSULATED. MAINTAIN SAFE CLEARANCES FROM ELECTRICAL POWER LINES AND APPARATUS. YOU MUST ALLOW FOR PLATFORM SWAY. RISE OR SAG. THIS WORK PLATFORM DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.</p> <p style="text-align: center; font-weight: bold;">OTHER HAZARDS</p> <ol style="list-style-type: none"> <li>1. DO NOT OVERLOAD.</li> <li>2. DO NOT USE WITHOUT RAILINGS AND ENTRY GATE/CHAIN/BAR IN PLACE.</li> <li>3. DO NOT USE IF WORK PLATFORM IS NOT WORKING PROPERLY OR IF ANY PART IS DAMAGED OR WORN.</li> <li>4. DO NOT USE NEAR MOVING VEHICLES OR CRANES.</li> <li>5. DO NOT STAND OR SIT ON GUARDRAILS.</li> <li>6. DO NOT USE WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.</li> <li>7. DO NOT OVERRIDE SAFETY DEVICES.</li> <li>8. DO NOT LEAVE MACHINE UNATTENDED WITH KEY IN KEY SWITCH.</li> <li>9. DO NOT RAISE PLATFORM WHILE MACHINE IS ON A TRUCK, FORK LIFT, OR OTHER DEVICE OR VEHICLE.</li> <li>10. DO NOT USE LADDER, SCAFFOLDING, OR OTHER DEVICES TO INCREASE SIZE OR WORKING HEIGHT OF PLATFORM.</li> </ol> <div style="display: flex; justify-content: space-around;"> </div> <p style="font-size: 0.8em;">DO NOT RAISE PLATFORM ON SLOPED SURFACES. PARKING BRAKE WILL RELEASE WHEN PLATFORM IS RAISED. MACHINE MAY ROLL WHEN RAISING PLATFORM. STOP IMMEDIATELY!</p>
---	---

**DEATH OR SERIOUS INJURY WILL RESULT FROM IMPROPER USE OF THIS EQUIPMENT!**

ECONOMY ENGINEERING COMPANY  
 4000 W. 10TH ST. SUITE 100  
 MINNEAPOLIS, MN 55420  
 (612) 835-1000 FAX (612) 835-1111

Figure 1.

## OPERATOR SAFETY REMINDERS

The National Safety Council reminds us that most accidents are caused by the failure of some individuals to follow simple and fundamental safety rules and precautions. Common sense dictates the use of protective clothing when working on or near machinery. Use appropriate safety devices to protect your eyes, ears, hands, feet and body.

You, as a careful operator, are the best insurance against an accident. Therefore, proper usage of this work platform is mandatory. The context of this manual should be read and understood completely before operating the work platform. Any modifications from the original design are strictly forbidden without written permission from Economy Engineering Company.

# SECTION I INTRODUCTION

## PURPOSE OF EQUIPMENT

The Economy Barecat Series Work Platform is designed to transport and raise men and materials to overhead work areas. The Hydraulic Work Platform (figure 2) (hereafter referred to as work platform) is a rugged and highly maneuverable, mobile work station.

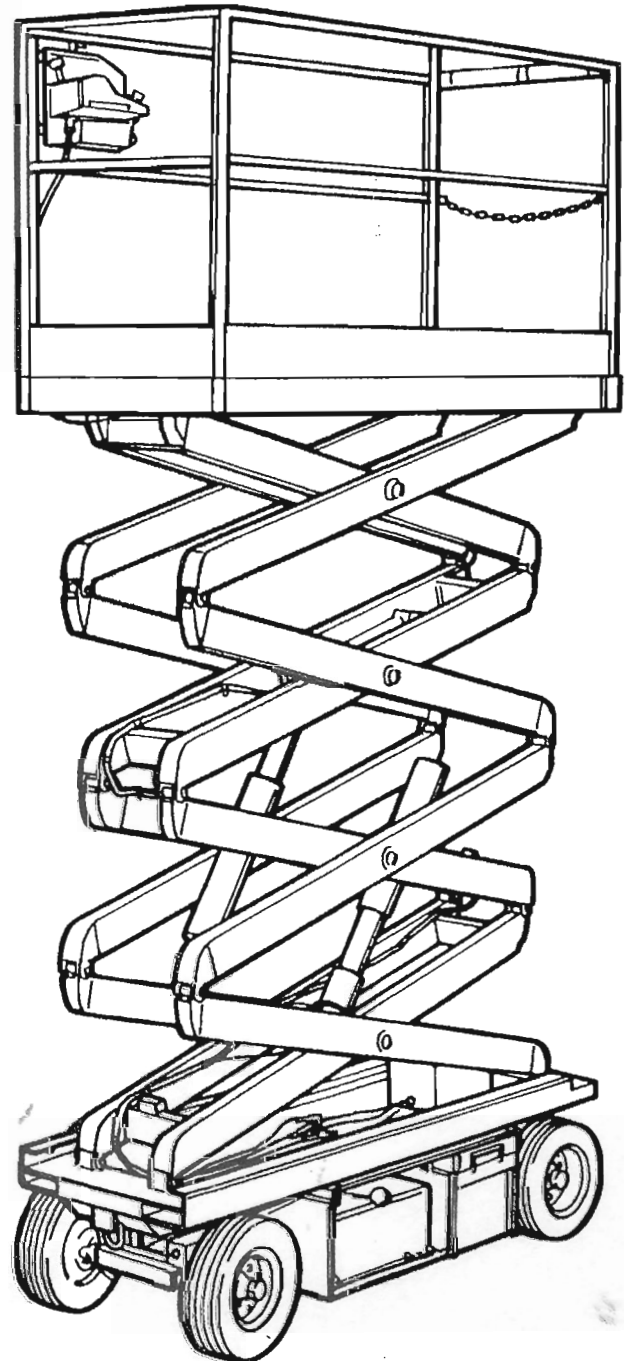


Figure 2. Barecat Work Platform

## OPERATOR QUALIFICATIONS

Only trained and authorized persons should use this work platform. Safe use of this work platform requires the operator to understand the limitations and warnings, operating procedures and operator's responsibility for maintenance. Accordingly, the operator must understand and be familiar with this instruction manual. The operator also must understand all warnings and instructions on the work platform and operator console assembly. Operator also must be familiar with employer's work rules and related government regulations.

## DESCRIPTION

The work platform has a platform, raised and lowered by a scissor-type elevator section. The elevator section is on a base having four wheels. An operator console assembly is located on the platform. Auxiliary and emergency controls are located on the base.

**PLATFORM.** The platform has an embossed pattern to minimize skidding, 40-inch high railings with midrails, 6" high toe boards, and entrance chain.

**SCISSOR-TYPE ELEVATOR SECTION.** The platform is raised by telescoping cylinders with fixed flow regulators to assure controlled lowering speed. Independent solenoid operated valves in the hydraulic system will prevent platform descent in the event of a single line or related component failure. A 24 volt D.C. motor and hydraulic pump are used to power the cylinders. During maintenance or repairs, the swing-down safety

bar, when properly positioned, prevents the scissors from being accidentally lowered.

**BASE.** The base has two slide out trays; one contains electrical and hydraulic components, the other holds four 6-volt batteries. These batteries supply the main electrical power source to the work platform of 24 volts dc @ 220 ampere-hours. They can be recharged using the battery charger of the work platform. The front axle of the base has two steerable wheels, which are steered by a double-acting hydraulic cylinder. One wheel of the rear axle is driven by a hydraulic motor. Dual wheel drive is an option.

**OPERATOR CONSOLE ASSEMBLY.** A control box mounted on the work platform contains the controls to operate the work platform. The function of each control is explained in the Operation section of this manual.

**OPTIONAL ACCESSORIES.** The work platform was designed to accept optional accessories. These are listed on the following page.

**SERIAL NUMBER NAMEPLATE.** The serial number plate, located on the rear of this machine, lists the model number, serial number, capacity, and lift height. Use the information both for proper operation of the machine and when ordering service parts.

## NOTE

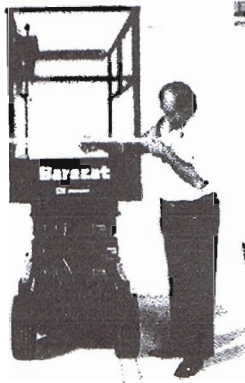
See the detailed specifications, limitations and warnings for each option.

**CONTINUE ONLY  
IF YOU UNDERSTAND  
WHAT YOU HAVE  
JUST READ**

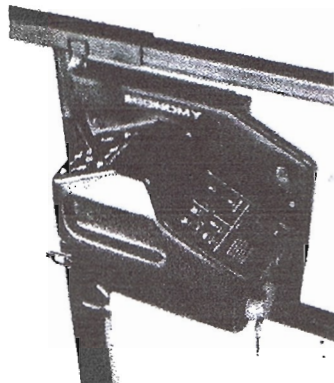


# ECONOMY Barecat

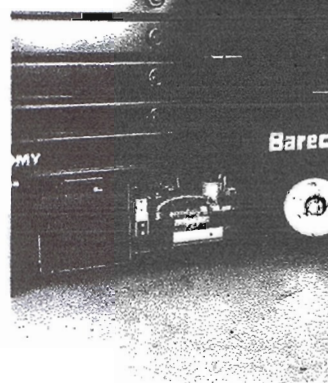
## SELF-PROPELLED ELEVATING WORK PLATFORM



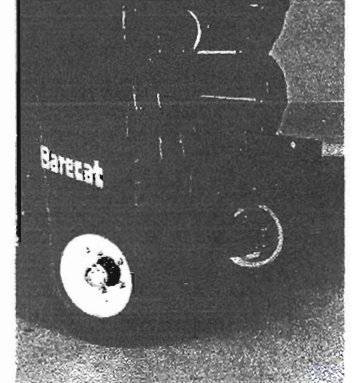
Narrow width allows Barecat to drive down aisles, maneuver easily in tight spaces.



All-new, tough polypropylene controller stands up to weather, abuse.



Open side panels make battery accessible, provide for easy maintenance.



Barecat's tires are puncture-proof to eliminate flats.

## Specifications

Model	Turning Radius		Work Height	Raised Height	Lowered Height	O/A Width	O/A Length	Capacity**	Platform Size	Tire Size	Travel Speed		Lift Speed Sec.	Power	Weight	Cubic Feet
	I.D.	O.D.									High MPH	Low MPH				
BC16-32	61" (155cm)	113" (287cm)	22' (6.7m)	16' (4.9m)	39" (99cm)	32" (81cm)	81" (206cm)	750 lbs. (390kg)	30" x 78" (76 x 198cm)	***	3 (4.8kph)	1 (1.6kph)	19	DC	2,400 (1,089kg)	54 (1.5m <sup>3</sup> )
*BC21-32	61" (155cm)	113" (287cm)	27' (8.2m)	21' (6.9m)	45" (114cm)	32" (81cm)	81" (206cm)	750 lbs. (390kg)	30" x 78" (76 x 198cm)	***	3 (4.8kph)	1 (1.6kph)	40	DC	2,600 (1,179kg)	68 (1.9m <sup>3</sup> )
BC21-44	55" (140cm)	116" (295cm)	27' (8.2m)	21' (6.9m)	45" (114cm)	44" (112cm)	81" (206cm)	750 lbs. (390kg)	30" x 78" (76 x 198cm)	***	3 (4.8kph)	1 (1.6kph)	40	DC	2,700 (1,225kg)	93 (2.6m <sup>3</sup> )

NOTE: All Units Standard Less Batteries

\*Maximum drive height-15' (4.57m)

\*\*Platform capacities are reduced when using optional platform extensions.

\*\*\* 16 x 5.00 x 8" (41 x 13 x 20cm) Solid Rubber Standard

## Optional equipment

- Two-wheel drive
- 6' (1.83m) Crank out extension
- 3' (.91m) Slide out extension
- 3' (.91m) Roll out extension
- 25 Amp charger
- Low voltage protection
- Hinged railing
- A/C Outlet on platform
- Battery kit (4-225 A/H)
- Side covers (2)

# SECTION II OPERATION

## **⚠ CAUTION**

No personnel or materials are to be on the platform during preparation for use and testing.



## **NOTE**

Work platform must be in the lowered position when checking oil level or filling reservoir.

## **SET UP PROCEDURE**

1. Remove all packing materials and inspect for damage incurred in transit. **REPORT ANY DAMAGE TO THE DELIVERING CARRIER IMMEDIATELY.**
2. Inspect work platform thoroughly and remove any foreign objects.
3. Install railings in the sockets located on each side of the platform, and tighten bolt/nut provided.

## **NOTE**

Railing installation is much easier with two men.

4. The right hand railing has a mounting tab to which the Operator Console Assembly is bolted. Make certain the tab is on the same side as the steer axle.
5. Remove both base side cover panels by first pulling out detent pins using the attached rings and then grasp cover handle and lift straight up (if supplied).
6. Remove carton containing the entrance chains from the hydraulic reservoir side of the base. The keys to the work platform are in the parts list pouch.
7. Check water level in all four (4) batteries. Disconnect battery plug and then slide battery tray out. If all plates are not covered, add distilled water only. Slide Battery tray back into position and reconnect battery plug.
8. Connect battery charger plug to 115 volt AC external power. When batteries are fully charged, check specific gravity reading. Reading should be 1.260 to 1.275.
9. Disconnect charger plug from 115 volt AC external power source after batteries are charged.
10. Check oil level in hydraulic reservoir. Oil should appear at level indicated by decal. (If filling is necessary use 10W 40 hydraulic oil with a viscosity of 320 sus @ 100° F, and a pour point of -35° F.)

11. Install the entrance chain at the entrance end of the work platform.
12. Turn Free-Wheeling Valve located on rear of the back axle to its "open" position (counterclockwise). Release parking brake. Manually move work platform to level area for testing.

## **NOTE**

Moving the work platform, or rolling it up or down an incline with the Free-Wheeling Valve closed will destroy the wheel motor(s). Adequate overhead space must be available for full extension of the scissor's section.

13. Turn Free-Wheeling Valve to **CLOSED** position before starting work platform testing.
14. Connect battery plug to connector in electrical/hydraulic components tray.
15. Raise platform to approximately six-feet by using Service Up Switch mounted on electrical panel inside of electrical/hydraulic components tray.
16. Remove Operator Console Assembly which is stored between the scissors during shipment. Remove the strapping and wood block from work platform.
17. Use the **Service Up Switch** to raise platform to its full extended height.
18. Push the Emergency Lowering Switch to lower platform to full down position.
19. Cut nylon tie, install grommet in the hole of the platform deck. Feed the scissors cable assembly through the hole making sure all of the slack is removed.

## **NOTE**

On models with special platforms, the Scissors Cable Assembly is routed to the outside of the platform deck.

20. Install Operator Console Assembly on railings and fasten in place with bolt and lock washer supplied.
21. Connect plug of Operator Console Assembly cable assembly with plug of scissors cable assembly.

22. Again, use Service Up Switch to raise platform until the Safety Bar can be swung into down position. (For proper positioning of safety bar see decal on second set of scissors arms.)
23. Hold down Emergency Lowering Switch until the Safety Bar rests completely on the cross bar to support weight of scissors section and platform.
24. Inspect all hydraulic hoses, fittings, electrical wiring, valves, charger, etc. for leaks, loose fittings, and foreign matter.
25. Use Service Up Switch to raise the platform to approximately six feet. Replace the Safety Bar on storage bracket. (See decal on second set of scissors arms.)

26. Hold down Emergency Lowering Switch to lower platform.
27. Replace both side cover panels, and lock in place with detent pins (if supplied).
28. Insert the key into the Operator Console Assembly and select your desired function. Now Console is ready to use.

**⚠ CAUTION**

Do not operate any control before reading and completely understanding the Operating Controls which are explained on the following pages.

**⚠ READ AND UNDERSTAND THESE DECALS BEFORE OPERATING WORK PLATFORM**

**⚠ CAUTION**

THIS WORK PLATFORM TO BE USED BY TRAINED AND AUTHORIZED OPERATORS ONLY. IT IS THE OPERATOR'S RESPONSIBILITY TO:







1. READ AND UNDERSTAND ALL CAUTION AND DANGER WARNINGS AND OPERATING MANUAL.
2. PERFORM DAILY MAINTENANCE INSPECTIONS.
3. HAVE ALL WORN OR DAMAGED PARTS REPLACED.
4. FASTEN ENTRY GATE/CHAIN/BAR.
5. USE WORK PLATFORM ONLY ON HARD LEVEL SURFACES.

OWNERS AND/OR USERS ARE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF THIS MACHINE AS REQUIRED BY ANSI A92.6 AND THE OPERATING/ MAINTENANCE AND PARTS MANUAL.

**ECONOMY**

88893-8

**DANGER**

TIP-OVER HAZARDS	ELECTROCUTION HAZARD
  <p>DO NOT DRIVE NEAR DROP-OFFS, HOLES, OPEN ELEVATOR SHAFTS, AND LOADING DOCKS.</p> <p>DO NOT RAISE PLATFORM ON UNEVEN OR SOFT SURFACES. DO NOT DRIVE ONTO UNEVEN OR SOFT SURFACES WHEN ELEVATED.</p>	<p>THIS MACHINE IS NOT INSULATED</p> <p>MAINTAIN SAFE CLEARANCES FROM ELECTRICAL POWER LINES AND APPARATUS. YOU MUST ALLOW FOR PLATFORM ENTRY ROOF OR LAG. THIS WORK PLATFORM DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTION.</p>
  <p>DO NOT RAISE PLATFORM ON SLOPE OR DRIVE ONTO SLOPE WHEN ELEVATED.</p> <p>DO NOT RAISE PLATFORM IN WINDY OR GUSTY CONDITIONS.</p>	<p><b>OTHER HAZARDS</b></p> <ol style="list-style-type: none"> <li>1. DO NOT OVERLOAD.</li> <li>2. DO NOT USE WITHOUT RAILINGS AND ENTRY GATE/ CHAIN/BAR IN PLACE.</li> <li>3. DO NOT USE IF WORK PLATFORM IS NOT WORKING PROPERLY OR IF ANY PART IS DAMAGED OR WORN.</li> <li>4. DO NOT USE NEAR MOVING VEHICLES OR CRANES.</li> <li>5. DO NOT STAND OR SIT ON GUARDRAILS.</li> <li>6. DO NOT USE WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.</li> <li>7. DO NOT OVERRIDE SAFETY DEVICES.</li> <li>8. DO NOT LEAVE MACHINE UNATTENDED WITH KEY IN KEY SWITCH.</li> <li>9. DO NOT RAISE PLATFORM WHILE MACHINE IS ON A TRUCK, FORK LIFT, OR OTHER DEVICE OR VEHICLE.</li> <li>10. DO NOT USE LADDER, SCAFFOLDING, OR OTHER DEVICES TO INCREASE SIZE OR WORKING HEIGHT OF PLATFORM.</li> </ol>   <p>DO NOT RAISE PLATFORM ON SLOPED SURFACES. PARKING BRAKE WILL RELEASE WHEN PLATFORM IS RAISED. MACHINE MAY ROLL WHEN RAISING PLATFORM. STOP IMMEDIATELY!</p>

**DEATH OR SERIOUS INJURY WILL RESULT FROM IMPROPER USE OF THIS EQUIPMENT!**

**ECONOMY**

**RECHECK THE STEPS JUST COMPLETED UNDERSTAND THE FUNCTIONS OF ALL CONTROLS BEFORE OPERATING WORK PLATFORM**



Figure 3.

## OPERATING CONTROLS

### BASE CONTROLS

**MAIN POWER DISCONNECT.** Main power disconnection is accomplished by separating the battery connector plug from the tray connector plug.

To supply power to the work platform, plug the battery connector plug into the tray connector plug (figure 4).

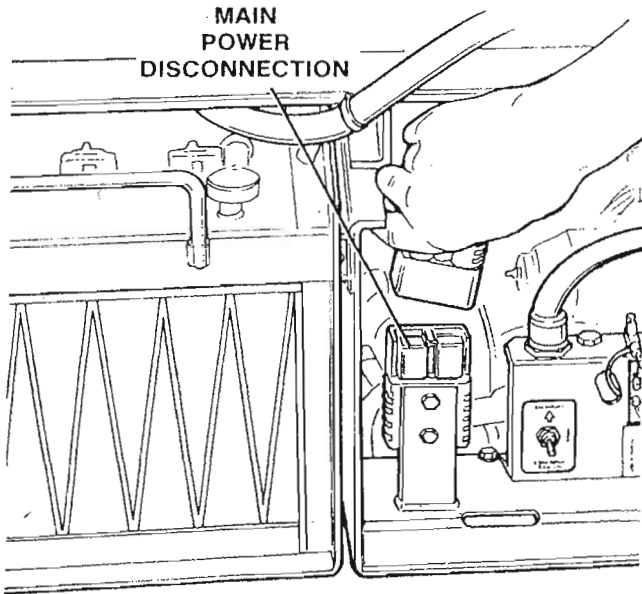


Figure 4. Main Power Disconnect

**SERVICE UP/EMERGENCY DOWN OPERATION.** A toggle switch activates the hydraulic elevating mechanism to lift the platform from ground level. It is located on the electrical panel inside the electrical/hydraulic components tray (figure 5).

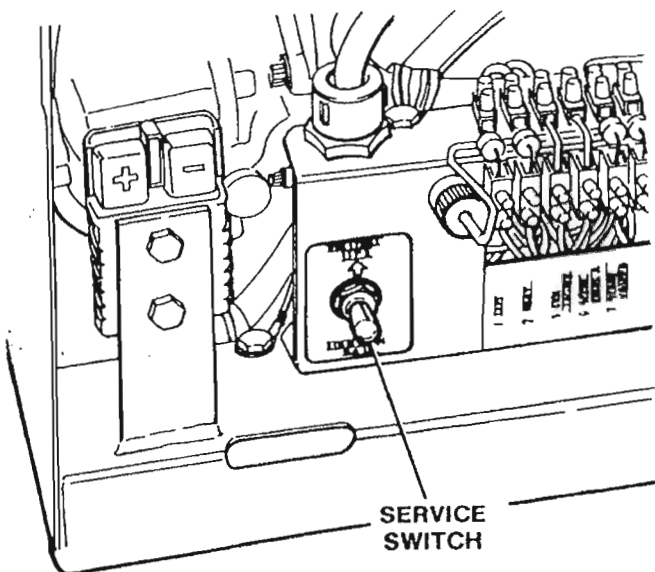


Figure 5. Service Up/Emergency Down Switch

**FREE-WHEELING VALVE.** This valve is located on the rear axle housing; midway between the drive-wheel(s). A "tee-type" handle opens or closes the valve. When opened it permits hydraulic fluid to flow through the drive-wheels. This provides "free-wheeling" so the unit can be towed or pushed without rupturing motor seals. Moving the work platform or rolling it up or down an incline with the free-wheeling valve closed will destroy the wheel motors. The valve must be closed for normal operation, and opened when towing. When towing do not exceed 2 mph (figure 6).

### ⚠ CAUTION

Before towing, brake must be disengaged as outlined below.

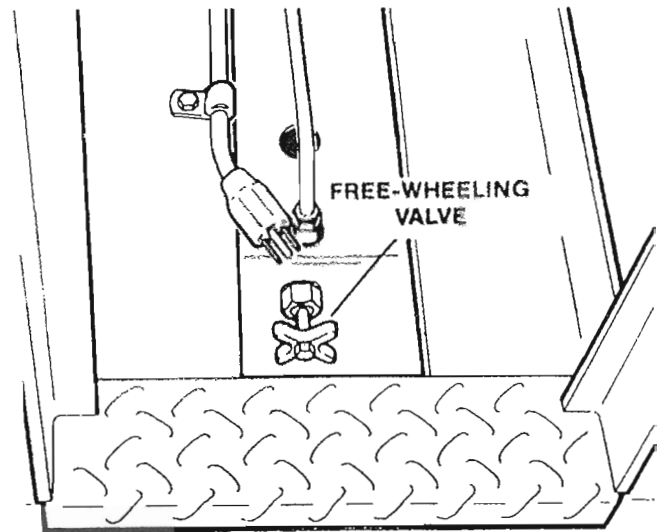


Figure 6. Free-Wheeling Valve

**PARKING BRAKE.** The parking brake is essentially automatic. However, the brake must be manually disengaged for towing, pushing or winching. This requires a special procedure as follows:

### ⚠ WARNING

Parking brake will release whenever a function is selected and the Hydraulic system is pressurized. Therefore, if the machine is parked on a slope and raised, the brake **will release**. If the slope is excessive, it will roll and warn the operator that he is on an uneven surface and should not continue to raise. The brake will lock upon release of the up button. **Do not use on any slope that causes the machine to roll without the parking brake engaged.**



**WARNING**

Before disengaging the parking brake be sure work platform is on level ground.

1. Disconnect battery plug.

**WARNING**

The brake cylinder rod is spring loaded. Use caution — keep hands clear of mechanism.

2. Using a 3/4" wrench, rotate lock-out block 90° (clockwise) to retract the cylinder rod. Remove wrench immediately (figure 7).
3. Open free-wheeling valve (turn handle counterclockwise).

**WARNING**

Brake will reset automatically when the work platform is put back in service, however, free-wheeling valve must be closed (clockwise).

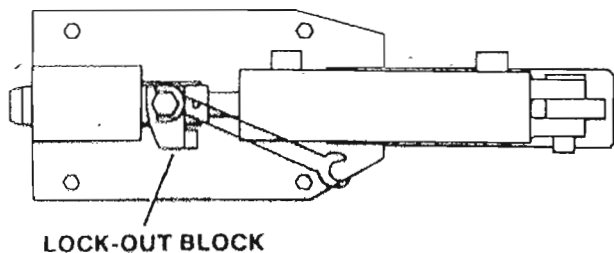


Figure 7. Disengaging Parking Brake

### OPERATOR CONSOLE ASSEMBLY

This is the black box mounted on the railing at the right front of the platform (figure 8). It consists of the following:

**KEY SWITCH.** This switch energizes the operator console assembly. Turning the key switch to the ON position directs electrical power to the platform/drive select switch.

**PLATFORM/DRIVE SELECT SWITCH.** This switch, when pushed to platform position, directs power to the UP/DOWN platform switch. When pushed to the drive position it directs power to FORWARD/REVERSE and LEFT/RIGHT steer modes.

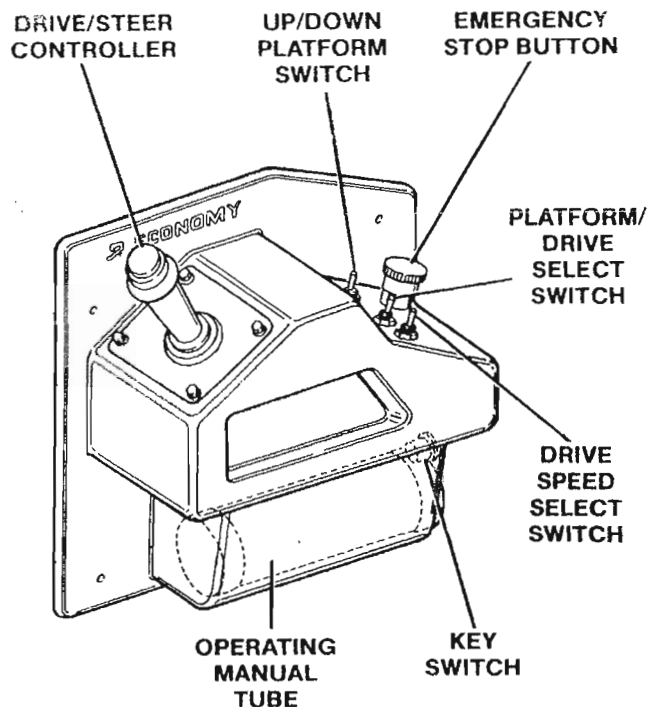


Figure 8. Operator Console Assembly

**DRIVE/STEER CONTROLLER.** This is a one-hand toggle type handle to control forward and reverse travel, as well as steering. It is a deadman control which returns to neutral when released. To move the drive/steer controller in the direction you wish to travel, press the red button and hold. Pushing the handle forward will drive the work platform forward. Pulling the handle backwards will drive the work platform backward. To steer right or left, move the handle in the direction you wish to steer. Forward and reverse have 2 speed positions, which are set using the drive speed select switch.

**UP/DOWN PLATFORM SWITCH.** To raise platform, push and hold switch in UP position until desired height is reached. Release button to stop. To lower platform, pull and hold switch in DOWN position. As the platform lowers, an audible beeper sounds.

**DRIVE SPEED SELECT SWITCH.** This switch, when pushed to the desired position, selects slow or fast speed.

**EMERGENCY STOP BUTTON.** This button is designed to enable the operator to strike it quickly in the event of an emergency (for example, if platform fails to stop when UP button is released). Once struck, the button will stay in. To release, pull button out.



# WHEN ARE YOU AUTHORIZED AND QUALIFIED TO OPERATE THE WORK PLATFORM?

## OPERATING PROCEDURES

### PRESTART CHECKS

1. Be sure batteries are fully charged.
2. Be sure 115 volt outlet plug is disconnected.
3. Carefully read and understand the instructions of this manual and all warning and instruction labels on the work platform and operator console assembly (see figures 1 and 3).
4. Check for any obstacles around the work platform and in the path of travel; such as holes, drop-offs, debris, ditches, soft fill, etc.
5. Be sure that Free-Wheeling Valve is closed (see figure 6).
6. Check overhead clearance.

### START AND OPERATION

1. The work platform is to be used on hard level surfaces only. It must be kept in good working order and used carefully, otherwise serious injury or death can result.
2. To raise platform: turn key switch to ON. Select platform position on platform/drive select switch. Push and hold UP/DOWN switch in UP position. To stop platform: release the switch.
3. To lower platform: push and hold UP/DOWN switch in DOWN position. To stop platform: release the switch.
4. To steer: select drive on platform/drive select switch. Depress red button on the drive/steer handle and move the control handle to right or left.
5. To travel forward or reverse: Press the red button on the drive/steer handle, and move the selector handle in the direction of travel desired, i.e., pushing the handle "forward" drives the work platform *forward*; pulling the handle "backwards" drives the work platform in *reverse*. Maximum speed is with the drive speed switch in the fast position.

**! READ AND UNDERSTAND THESE DECALS BEFORE OPERATING WORK PLATFORM**

**! CAUTION**

**THIS WORK PLATFORM IS TO BE USED BY TRAINED AND AUTHORIZED OPERATORS ONLY. IT IS THE OPERATOR'S RESPONSIBILITY TO:**

1. READ AND UNDERSTAND ALL CAUTION AND DANGER WARNINGS AND OPERATING MANUAL.
2. PERFORM DAILY MAINTENANCE INSPECTIONS.
3. HAVE ALL WORN OR DAMAGED PARTS REPLACED.
4. FASTEN ENTRY GATE/CHAIN/BAR.
5. USE WORK PLATFORM ONLY ON HARD LEVEL SURFACES.

**OWNERS AND/OR USERS ARE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF THIS MACHINE AS REQUIRED BY ANSI A92.8 AND THE OPERATING MAINTENANCE AND PARTS MANUAL.**

**ECONOMY**  
EQUIPMENT COMPANY  
10000 11th St. N.E.  
Edmonton, Alberta T6A 1K1  
CANADA

**DANGER**

TIP-OVER HAZARDS	ELECTROCUTION HAZARD
<p><b>DO NOT DRIVE NEAR DROP-OFFS, HOLES, OPEN ELEVATOR SHAFTS, AND LOADING DOCKS</b></p>	<p><b>THIS MACHINE IS NOT INSULATED. MAINTAIN SAFE CLEARANCES FROM ELECTRICAL POWER LINES AND APPARATUS. YOU MUST ALLOW FOR PLATFORM SWAY, ROCE, OR SAC. THIS WORK PLATFORM DOES NOT PROVIDE PROTECTION FROM CONTACT WITH OR PROXIMITY TO AN ELECTRICALLY CHARGED CONDUCTOR.</b></p>
<p><b>DO NOT RAISE PLATFORM ON UNEVEN OR SOFT SURFACES. DO NOT DRIVE ONTO UNEVEN OR SOFT SURFACES WHEN ELEVATED.</b></p>	<p><b>OTHER HAZARDS</b></p> <ol style="list-style-type: none"> <li>1. DO NOT OVERLOAD.</li> <li>2. DO NOT USE WITHOUT RAILINGS AND ENTRY GATE/CHAIN/BAR IN PLACE.</li> <li>3. DO NOT USE IF WORK PLATFORM IS NOT WORKING PROPERLY OR IF ANY PART IS DAMAGED OR WORN.</li> <li>4. DO NOT USE NEAR MOVING VEHICLES OR CRANES.</li> <li>5. DO NOT STAND OR SIT ON GUARDRAILS.</li> <li>6. DO NOT USE WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.</li> <li>7. DO NOT OVERRIDE SAFETY DEVICES.</li> <li>8. DO NOT LEAVE MACHINE UNATTENDED WITH KEY IN KEY SWITCH.</li> <li>9. DO NOT RAISE PLATFORM WHILE MACHINE IS ON A TRUCK, FORK LIFT, OR OTHER DEVICE OR VEHICLE.</li> <li>10. DO NOT USE LADDERS, SCAFFOLDING, OR OTHER DEVICES TO INCREASE SIZE OR WORKING HEIGHT OF PLATFORM.</li> </ol>
<p><b>DO NOT RAISE PLATFORM ON SLOPE OR DRIVE ONTO SLOPE WHEN ELEVATED</b></p>	<p><b>DO NOT RAISE PLATFORM ON SLOPED SURFACES. PARKING BRAKE WILL RELEASE WHEN PLATFORM IS RAISED. MACHINE MAY ROLL WHEN RAISING PLATFORM. STOP IMMEDIATELY.</b></p>
<p><b>DO NOT RAISE PLATFORM IN WINDY OR GUSTY CONDITIONS</b></p>	

**DEATH OR SERIOUS INJURY WILL RESULT FROM IMPROPER USE OF THIS EQUIPMENT!**

**ECONOMY**  
EQUIPMENT COMPANY  
10000 11th St. N.E.  
Edmonton, Alberta T6A 1K1  
CANADA

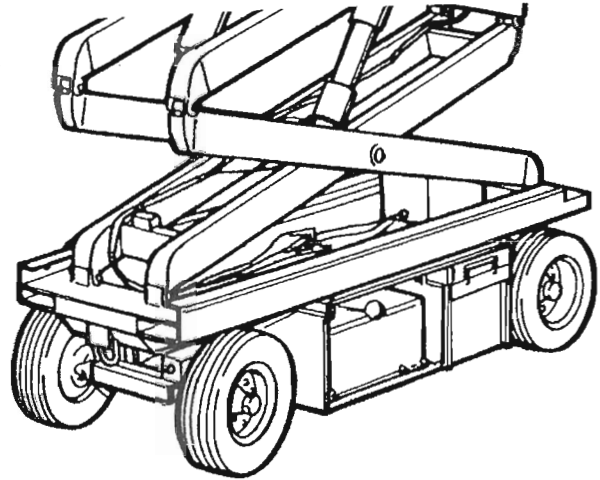
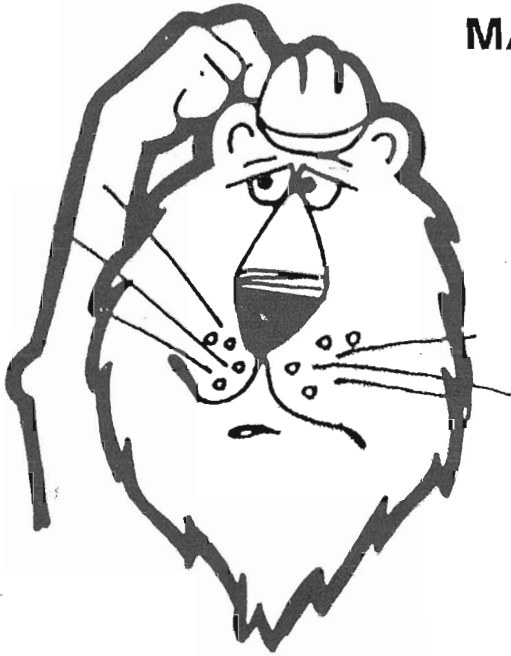
### SHUTDOWN PROCEDURE

1. Completely lower the platform.
2. Remove key from Operator Console Assembly.
3. Check battery water level and place batteries on charge, if needed.

### NOTE

In the event of a power failure, manually lower the platform by having someone at ground level push the Emergency lowering switch on the base.

## SECTION III MAINTENANCE



### FAITHFUL INSPECTIONS REDUCE MAJOR PROBLEMS

#### OPERATOR'S RESPONSIBILITY FOR MAINTENANCE

Death or serious injury can result if work platform is not kept in good working order. Inspection and maintenance should be performed by competent personnel who are familiar with mechanical procedures. An operating, maintenance and parts manual has been provided in a plastic envelope attached to the work platform.

The operator should be assured that the work platform is being properly maintained before using it. The maintenance portion of the manual, referred to above, includes information on lubrication, troubleshooting, and inspection points that must be performed daily, weekly, and monthly.

Even if the operator is not responsible for the maintenance of this work platform, the operator should perform the daily inspections found in the maintenance schedule.

#### LUBRICATION

Check with your local supplier for his recommended lubricants for local conditions.

#### GENERAL MAINTENANCE HINTS

Before attempting any repair work, disconnect battery plug and charger cable from 120 volt AC source. The

hydraulic system has been designed for long life and trouble-free operation. The hydraulic oil needs no routine inspection except if it should be unusually dirty (very dark in color) or the reservoir level is low. When adding or replacing oil, ensure it is clean. Use 10W40 hydraulic oil with a viscosity of 320 sus @ 100° F and a pour point of -35° F.

#### NOTE

Replace all worn or damaged parts discovered during inspection.

#### WARNING

Do not reach through arm assembly at any time, unless the safety bar is in down position (see decal on second set of Scissors Arms). Otherwise, serious personal injury could result.

#### MAINTENANCE SCHEDULE

A good preventive maintenance program assures trouble-free machine operation. Routine inspection, lubrication and adjustment schedules must be established and followed. The Maintenance Schedule and Record Log Sheet provided can facilitate checking off each preventive maintenance item as it is performed. This sheet then can be signed and dated to serve as an accurate record.

## Maintenance Schedule

INSPECTION POINTS		DAILY	WEEKLY	MONTHLY	3 MONTHS	6 MONTHS
MECHANICAL	STRUCTURAL DAMAGE/WELDS (1)	✓				
	PARKING BRAKE (2)	✓				
	RUST (1)			✓		
	CASTERS (1) (2)	✓				
	WHEEL BEARINGS (2)			✓		
	OUTRIGGERS/ENTRY CHAINS (2)	✓				
	GUIDES/ROLLERS (1)	✓				
	STEER CYL. PIVOT PINS (8)				✓	
	BOLTS/FASTENERS (3) *		✓			
ELECTRICAL	SAFETY BAR (2)		✓			
	BATTERY WATER LEVEL (1)	✓				
	SPECIFIC GRAVITY READING (4)		✓			
	BATTERY TERMINALS (1) (3)		✓			
	BATTERY CHARGER (2)		✓			
	GENERATOR/RECEPTACLE (2)		✓			
	CONTROL SWITCHES (1) (2)	✓				
	CORDS/WIRING (1)	✓				
HYDRAULIC	TERMINALS/PLUGS (3)		✓			
	HYDRAULIC FLUID LEVEL (1)	✓				
	LIFT SPEED (5)/LOWERING SPEED (6)		✓			
	HYD. FILTER CARTRIDGE (9)					✓
	LIFT CAPACITY (7)			✓		
	HYDRAULIC LEAKS (1)	✓				
	CYLINDER STAGING SEQUENCE (2)		✓			
EMERGENCY LOWERING (2)		✓				

- |  |   |
|--|---|
| <p>(1) Visually Inspect</p> <p>(2) Check Operation</p> <p>(3) Check Tightness</p> <p>(4) A fully charged Battery should read 1.275.</p> <p>(5) Empty Lift Speed should be 19 sec. for 16' machine, 40 sec. for 21' machine</p> | <p>(6) Empty Down Speed should be 30 sec. for 16' machine, 45-50 sec. for 21' machine</p> <p>(7) Check if Platform can lift maximum load. (See Table 1. Specifications: capacity)</p> <p>(8) Lubricate</p> <p>(9) Replace</p> |
|--|---|

**Torque Specifications:**

Wheel Lug Nuts: 1/2" Stud 64 to 70 ft-lbs. 7/16" Stud 41 to 45 ft-lbs.  
 Wheel Motor Nut: 175 ft-lbs.  
 Wheel Motor Mounting Bolts: 75 ft-lbs.  
 Brake Cylinder Nut: 30-35 ft-lbs.  
 Steer Cylinder Nut: 30-35 ft-lbs.  
 Directional Valve Mounting Screws: 40-53 in-lbs.

### BARECAT SERIES TIRE SPECIFICATION AND CAPACITY CHART

Model	Tire				Capacity Max. Lbs. w/o Roll Out (Max. Lbs. w/Roll Out)
	Size	Ply Rating	Fill Specification		
			Type	Pressure	
BC16-32	5.00 x 8	Solid Rubber	N/A	N/A	750 (500)
BC21-32(*)	RIB	Solid Rubber	N/A	N/A	750 (500)
BC21-44	(Std)	Solid Rubber	N/A	N/A	750 (500)

(\*) Maximum drive height — 15 feet.