

C.W. ROBERTS

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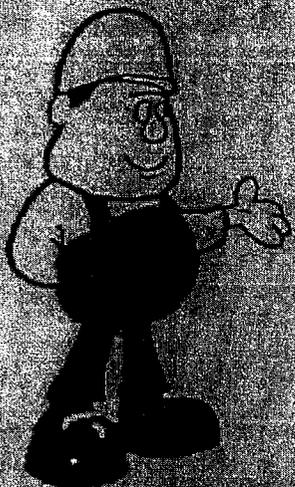
MODEL<sup>a</sup> CP2000T

Serial<sup>a</sup> CP2002550302

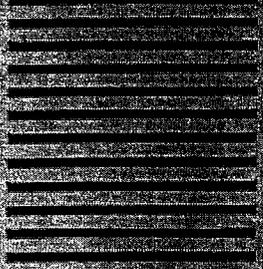
# OPERATION MANUAL

## AIR CURTAIN DESTRUCTOR MODEL CP2000T

KEEP THIS MANUAL WITH YOUR MACHINE



MR. BURN



SERVICE

SAFETY

OPERATION

WARRANTY



CONCEPT PRODUCTS CORPORATION ■ SUITE 110 ■ 15 INDUSTRIAL BOULEVARD ■ PAOLI, PA 19301

PHONE: 610-722-0830

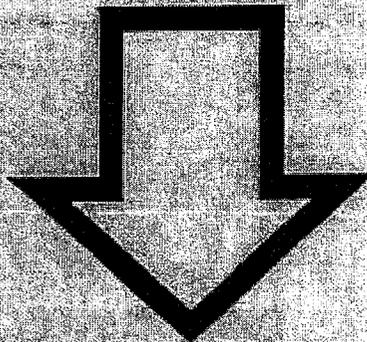
[www.conceptproducts.com](http://www.conceptproducts.com)

FAX: 610-647-7210



CONCEPT PRODUCTS CORPORATION  
 16 Industrial Boulevard, suite 110  
 Paoli, PA 19301-1609  
 Fax: 610-647-7210

**PLEASE FILL OUT AND RETURN YOUR  
 WARRANTY REGISTRATION CARD**



**WARRANTY REGISTRATION CARD**

Please complete the following information:

CONTACT NAME \_\_\_\_\_  
 COMPANY NAME \_\_\_\_\_  
 COMPANY ADDRESS \_\_\_\_\_  
 TELEPHONE \_\_\_\_\_  
 FAX \_\_\_\_\_  
 DATE COMPANY STARTED IN BUSINESS \_\_\_\_\_

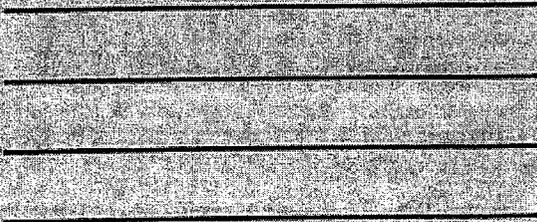
SERIAL # \_\_\_\_\_  
 DATE OF PURCHASE \_\_\_\_\_  
 OPTIONS PURCHASED \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Product or method used to remove land clearing debris prior to purchasing an AIR CURTAIN DESTROYER \_\_\_\_\_

Key factor in purchasing AIR CURTAIN DESTROYER, please indicate by check:

- PRICE  PORTABILITY  ENVIRONMENTAL AGENCY RESTRICTIONS  OTHER (please specify) \_\_\_\_\_

Completion of this card preserves important warranty rights granted under the Operation Manual for the Air Curtain Destructor.



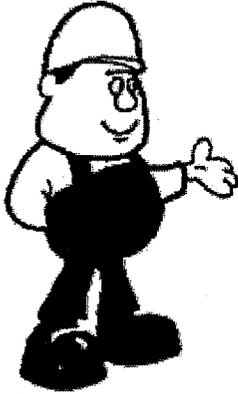
ADD PROPER  
POSTAGE  
POST OFFICE  
WILL NOT  
DELIVER  
WITHOUT  
PROPER  
POSTAGE

**CONCEPT PRODUCTS CORPORATION**  
Paoli Corporate Center  
16 Industrial Blvd., suite 110  
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# FORWARD



Mr. E.Z. Burn

In the following pages Concept Products Corporation details operating procedures and techniques, safety advice and the warranty and liability information of the AIR CURTAIN DESTROYER Model CP-2000T ("AIR CURTAIN"). The AIR CURTAIN is an environmentally sound and highly efficient method of incineration for various categories of land clearing and construction debris.

Concept Products Corporation believes its' product is a unique value. Its portability, high cubic feet per minute air volume, low maintenance and easy operation makes it the method of choice for contractors and land clearers with solid waste problems. Its' *smoke free burn* makes it the answer for air quality concerns.



Concept Products Corporation invites the purchaser of its' AIR CURTAIN to return the accompanying warranty card to Concept Products Corporation to record the purchase of the AIR CURTAIN.

# TOWING

The AIR CURTAIN is designed for optimum portability from one location to the next. Transporting it on the job site itself can be easily accomplished by certain 4-wheel drive vehicles. For highway towing your AIR CURTAIN is equipped with a sliding axle. The sliding axle should be in the rear towing position whenever the AIR CURTAIN is to be towed on the highway. The axle can be moved easily by following the steps listed below.

1. Block the wheels both in front of and behind the wheels.
2. Remove the four pins located on the frame on either side of the wheels.
3. With the tow vehicle securely attached to the AIR CURTAIN slowly pull the AIR CURTAIN forward, until it reaches the towing position.
4. Replace the four pins back in to the frame in the new location.
5. To return the axle to the operating position repeat step #3 in reverse

Even with the sliding axle in the towing position use extreme caution while towing the air curtain on the highway. Here are some tips to consider for towing the AIR CURTAIN.

1. Never exceed the speed limit.
2. Tow with a ¾ ton or heavier truck.
3. Make sure all tires are properly inflated, and all the lug nuts are tight.
4. Always use your safety chains.
5. Your AIR CURTAIN, when in the tow mode, was designed to be flush with the passenger side of the tow vehicle. however, the driver's side is wider and will overhang.



**Note:**

Remember to keep a watchful eye in your side view mirrors

In some states it may be necessary to install temporary lights when towing. Check your states regulations.

# SITE PREPARATION

The proper operation of the AIR CURTAIN requires an excavated fire pit. The conditions of which are as follows:

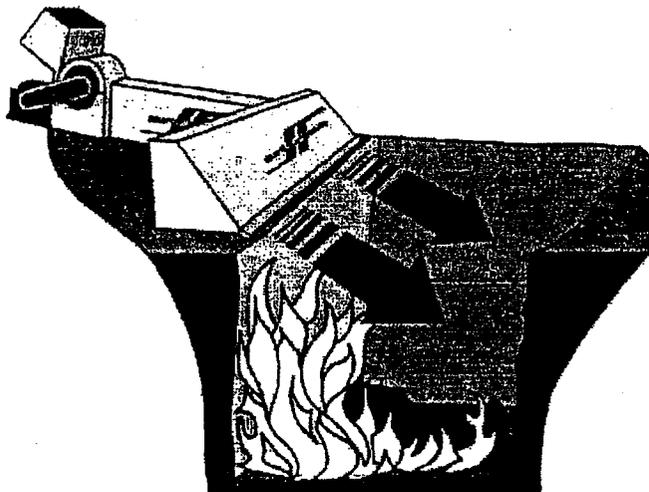
PIT DIMENSIONS	
Long	19'- 6"
Wide	7'- 6"
Minimum Depth	8'- 0"
Maximum Depth	20'- 0"
Preferred Depth	16'- 0"

The excavated pit must be located in stable and firm soil with enough room to position the unit in place.

Filling of the area around the pit is acceptable to raise its' depth and to provide a level site for set-up. Extreme care must be exercised in the compaction of these fill soils.

Optimum performance of the AIR CURTAIN requires vertical walls; hence, a backhoe or trackhoe should be used in its' excavation.

A safety zone free of burnable debris should be created around the excavated pit.



# EQUIPMENT SET-UP

## SETUP ORDER

1. Before you back the AIR CURTAIN up to the excavated pit. Place a clean and rock free layer of dirt uniformly 4" to 5" thick where the nozzle is to be placed.
2. Make sure the sliding axle is in the operating (forward) position before backing the AIR CURTAIN up to the pit. (Refer to page 2 for instruction to move the axle)
3. Back the AIR CURTAIN up to the excavated pit so the nozzle, when released and swung into place, will align directly with the pit.
4. Chock the front and back of the wheels with blocks.
5. Lower the front jack to lift the unit from the towing vehicle.
6. Release the chain binder and swing the nozzle into place and secure with center clamp. Lower the rear jack until the nozzle fits tightly to the ground. ( In the course of burning it may be necessary to pack additional dirt under and around the nozzle due to the shrinking of the dirt as the moisture is reduced ).
7. It is important to orient the AIR CURTAIN to the opposite pit wall so that the air flow strikes the wall about 3 ½ feet below ground level. This allows maximum deflection and air return, creating a sweet spot of maximum intensity directly under the wall in which the AIR CURTAIN is located.



## IMPORTANT NOTES :

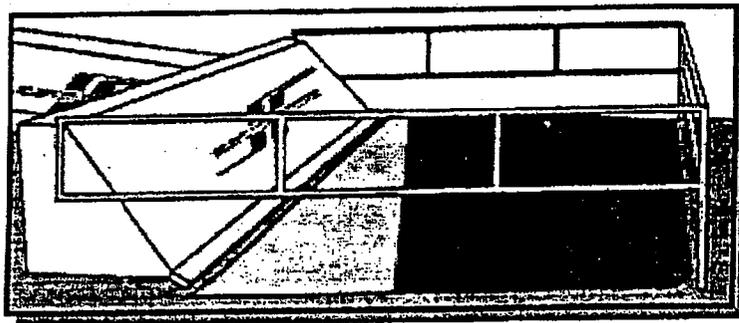
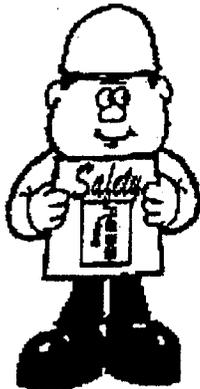
1. Do not allow the nozzle to overhang the pit, if so the extreme temperatures in the pit generated by the AIR CURTAIN can warp the nozzle, constituting misuse of the product and a violation of the warranty. Erosion of all or part of the wall on which the nozzle rest, including the spilling in of the ends of the walls will create the same warpage as if the AIR CURTAIN was initially aligned incorrectly. It is essential for optimum burn and product life to maintain an exact vertical wall on which the nozzle rests. If there is pit erosion, the best remedy is to move the AIR CURTAIN back to a firm vertical position recalling the recommended pit width of 7'6".
2. Always keep the engine cover open while the AIR CURTAIN is in operation.
3. Never run the engine over 1000 RPM's without the nozzle in the operating position.

# START-UP

1. Quick and clean start-ups are achieved by placing clean and highly flammable materials (1 to 2 cubic yards) directly under the nozzle on the pit bottom. Saturate material with 1 to 2 gallons of fuel oil. Pre-soak a piece of cardboard with fuel oil and light. Drop a lit piece of cardboard in to the pit.
2. Allow the fire to burn for a minute or two before starting the AIR CURTAIN.
3. Start the unit and allow it to idle. Gradually increase engine RPM to 1500 as the fire gains intensity.
4. Upon reaching full intensity, add more debris. Such debris should be placed directly under the nozzle. The RPM's should be increased to 2000. The selection of additional debris should be the lighter and fluffier items first with the heavier and more dense debris phased in later in the process.
5. It is important that the debris not be filled above the level of the air curtain. The *physical phenomena* of the air curtain is the basis for the trademark, AIR CURTAIN DESTRUCTOR. The *physical phenomena* is the air stream created by the forced injection of air and the space below it. Filling above the top of the air curtain can cause the fire to encircle the front the AIR CURTAIN causing searing and further damage to the unit, such misuse is a violation of warranty.
6. To maintain incineration at full intensity a proper balance of lighter debris and more dense debris is needed. Until *hands on learning* occurs, a suggested approach is to match one or two light loads of debris with one load of more dense debris.
7. Correct engine RPM is dependent on the type of debris and their moisture content. Operation range is between 2000 and 2700 RPM. Most often, 2100 to 2500 RPM produces the most effective burn. Finding the optimum burn comes with experience. If there is not complete consumption of injected air in the pit smoke maybe created.
8. Track loaders in the 1 1/2 yard to 2 yard size are recommended for loading the debris into the pit.

# SAFETY

1. Burned debris in the pit must be reduced to ash at the end of the day by maintaining the AIR CURTAIN operation until it occurs.
2. Cover the pit bottom at the end of each day's burn with a layer of soil.
3. *Always* fence off the excavated pit when not in use as indicated in the following diagram.
4. *Always* dig the excavated pit in firm soil.
5. *Always* remove any burnable debris around the pit when stopping operation for the day.
6. *Never* use gasoline (diesel fuel is recommended) in starting fire and never add flammable fuel while burning.
7. *Never* burn above the level of the air curtain. (Detailed discussion in item number five (5.) of *Start-Up*)
8. *Never* start up the AIR CURTAIN without all the guards in place.
9. *Never* refuel the unit while it is running.
10. Provide a positive barrier around the excavation pit to prevent the unit from falling into it.
11. Check all the LOCAL, STATE, and FEDERAL safety and use regulations before operating the AIR CURTAIN.



# LAND CLEARING HINTS



1. Trees should not be cut, but knocked over with a loader. This method snaps the roots from the ball of the stump. After cutting off the stump, roll along ground and raise and drop to lessen dirt on the stump.
2. Cut all brush limbs and trees to a maximum length of 12'.
3. Scrape land clearing site with the teeth of the loader barely touching the ground and rolling the debris, thus eliminating dirt build-up.
4. Prepare the debris for burning a minimum of three days in advance to allow the debris to dry to a more favorable condition.
5. Early morning starts and second day burns are more effective for volume consumption.

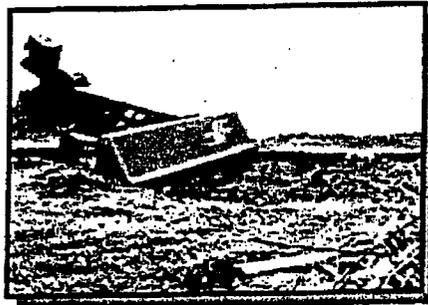
# SERVICE & MAINTENANCE

1. **Maintenance:** Consult your Lombardini Maintenance Book provided with each unit. The general telephone number for Lombardini is the following:  
(404)-963-4881.
2. **Fan Bearings:** Grease every 40 hours.
3. **Belt Tension:** Check after the first 8 hours of operation and thereafter every 40 hours.

BELT CENTER DEFLECTION	
Minimum *	3/8"
Maximum *	3/4"

\* With 40 pound load.

4. **Fan Blade:** Check the fan blades for fatigue cracks and loose belts every 50 hours.
5. **Swing Hinges:** Grease as necessary.
6. **Fuel Tank:** Always top the fuel tank off after use (16 gallons).
7. **Wheelnuts:** Retorque the wheel nuts after the first 25 hours of operation.
8. **Engine:** Wash the engine down every 100 hours paying particular attention to the cooling fins.



# WARRANTY

1. Any units of the AIR CURTAIN as sold or supplied by Concept Products Corporation to the Dealer and/or its' Customers (hereinafter referred to as "the Product") are sold and warranted only in accordance with and subject to the written terms and conditions set forth herein.
2. Concept Product Corporation for the benefit of the Dealer and/or its' Customers, shall use all reasonable efforts to obtain from the Vendors and Manufacturers of equipment or parts incorporated into the Product as specified in Schedule A attached to and forming part of the Operating Manual CP-2000T, undertakings with respect to their performance, such guarantees against defects or workmanship, materials and equipment as are reasonably obtainable on normal commercial terms for the equipment, material and workmanship furnished by such Vendors and Manufacturers hereunder. Concept Product Corporation's responsibility with respect to the workmanship, material and equipment furnished by such Manufacturers and Vendors shall be limited to using its' best efforts to assist the Dealer and/or the Customer in requiring such Manufacturers and Vendors to fulfill the obligations of their undertakings and guarantees of equipment, materials and workmanship.
3. Concept Product Corporation shall not be responsible for any damages or defect in the Product which occurs as a result of wear and tear, corrosion or erosion or resulting from operating conditions more severe than contemplated under the provisions of this Operating Manual CP-2000T, which includes without limitation aligning the nozzle or permitting the nozzle to align so as to over hang the pit to any degree or filling the excavated pit above the air curtain.
4. Except as provided otherwise in paragraph (1) and (2) herein above, Concept Products Corporation shall be responsible for a period of six (6) months from the date of delivery of the Product to Dealer and/or its' Customer (whichever date occurs first) as recorded by Concept Products Corporation to repair, replace or correct at its' own expense any damage to or defects in the Product, provided that the Dealer and/or its' Customer first furnish evidence in detail and form appropriate to Concept Products Corporation of the nature and extent of such damage or defect and further provided that the Dealer and/or its' Customer shall if such shall be determined to be necessary by Concept Products Corporation for the proper repair, correction, or replacement of the Product, arrange for delivery of the Product as damaged or defective to Concept Products Corporation's designated manufacturing site. The cost of any freight or transport to return the Product as repaired, corrected or replaced shall be for the account of Concept Products Corporation.

# WARRANTY

5. All other warranties expressed or implied, including but not limited to the warranties of fitness for a particular purpose or/of merchantability are hereby disclaimed. Further, Concept Products Corporation disclaims any liability for incidental, special or consequential damages for commercial losses.
6. Concept Products Corporation reserves the right to make improvement in design and changes in specification at any time without notice, and without incurring any obligation to install such improvements and changes on any units previously sold.

# LIABILITY

1. Concept Products Corporation shall not be liable for any costs, expenses, or damages directly or indirectly arising from the Dealer and/or its' Customers use or misuse of the Product whether or not in accordance with the instructions stated in Operating Manual CP 2000T and whether or not due to the Dealers and/or Customers ability or inability to use the Product either separately or in combination with their equipment or machinery. Concept Products Corporation shall not be liable for, and the Dealer and/or its' Customer shall hold Concept Products Corporation harmless from, any and all personal injury or death or loss or destruction of any and all property regardless of ownership arising out of the Dealer and/or its' Customer' 5 use or misuse of the Product.
2. Concept Products Corporation shall not be liable for any or all consequences arising from the Customers use of the product in a manner and for a purpose not authorized or permitted by applicable LOCAL, STATE or FEDERAL laws or regulations. It is understood by the Customer that the Customer has the duty to ascertain the existence and scope of such laws and prior to the purchasing this Product has discharged such duty. The Customer further undertakes to hold Concept Products Corporation and/or its' Dealer harmless from any and all consequences of Customer's failure or inability to operate the Product in accordance with the scope and extent of applicable local, state, or federal laws or regulations.

# TRADEMARKS & PATENTS

The Dealer and/or its' Customer will not in any way infringe or impair the validity of the trademarks used on the Product nor will the Dealer and/or its' Customer infringe or impair the validity of any patents or patent application covering the Product. The Dealer and its' Customer hereby admit the validity and/or ownership of the patents, and trademarks relative to the Product by Concept Products Corporation or its' licensor.

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# **Schedule A**

## **Equipment and Parts of Manufacturers and Vendors Incorporated into the Product**

1. Battery and Associated Parts
2. Diesel Engine and Associated Parts
3. Blower and Associated Parts

# PARTS

PART NAME	PART NUMBER	
Fuel Tanks .....	CP001 .....	see diagrams 5 and 7
Battery.....	CP002.....	see diagram 5
Battery Cables (set).....	CP003	
Positive .....	CP003P	
Negative.....	CP003N	
Nozzle Clamp .....	CP004.....	see diagrams 2 and 8
Tow Position Nozzle Binder.....	CP005.....	see diagrams 1 and 9
Tire Mounted on Rim.....	CP006.....	see diagrams 1, 2 and 6
Front Jack (tounge).....	CP007.....	see diagrams 1 and 6.
Rear Jack (nozzle).....	CP008.....	see diagram 2
Fan .....	CP009.....	see diagrams 2, 4 and 6
Fan Bearings .....	CP009A.....	see diagram 4
Fan Wheel.....	CP009B	
Fan Guards (set).....	CP010	
Fan Guard (right) .....	CP010R.....	see diagrams 2 and 4
Fan Guard (left) .....	CP010L.....	see diagrams 1 and 6
Belt Guard.....	CP011.....	see diagrams 1, 6 and 7
Engine Cover .....	CP012.....	see diagrams 2 and 6
Tool Box Cover .....	CP012A.....	see diagram 7
Manifold (nozzle) .....	CP013.....	see diagrams 1 and 6
Hinge Assembly .....	CP014.....	see diagram 6
Logos		
Complete set .....	CP015	
Large Logo w/ "styling strip" .....	CP015A	
"CP2000T" .....	CP015B	
"Keep Back From Pit" .....	CP015C	
3V 5.6 x 3 Sheave.....	CP016.....	see diagram 3
SDS Bushing 1 1/2" .....	CP017.....	see diagram 3
3R3V x 13.2 V-Belt.....	CP018.....	see diagram 3
Idler Pulley.....	CP018P.....	see diagram 3
SF Bushing 2 1/16" .....	CP019.....	see diagram 3
3V 1903 Sheave .....	CP020.....	see diagram 3
Lombardini 3 cylinder air cooled engine .....	CP021.....	see diagram 7
Refer to your Lombardini Engine Manual for parts and the location of your local Lombardini Dealer for parts and service.		
Exhaust Pipe with Elbow .....	CP021E.....	see diagram 7
Optional John Deere Liquid Cooled engine.....	CP021JD	
Adjustable Engine Mount .....	CP022.....	see diagram 10
Tachometer .....	CP023.....	see diagrams 5 and 7
Tachometer Cable.....	CP023A.....	see diagram 5
Main Tube.....	CP024.....	see diagrams 2 and 6

# PARTS

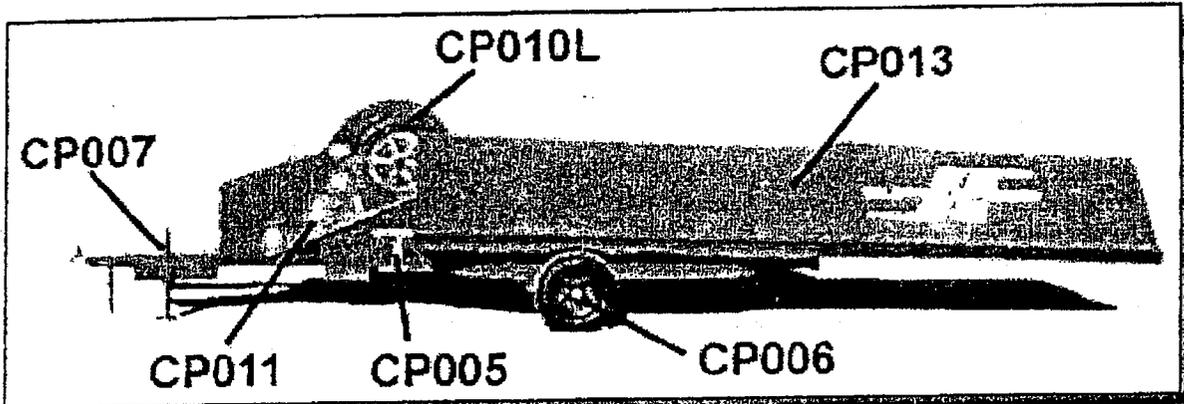


Diagram 1

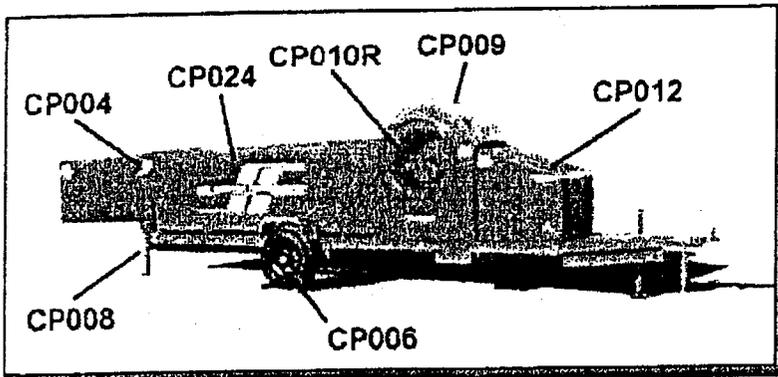
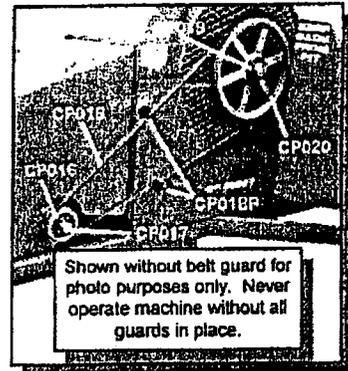


Diagram 2



Shown without belt guard for photo purposes only. Never operate machine without all guards in place.

Diagram 3

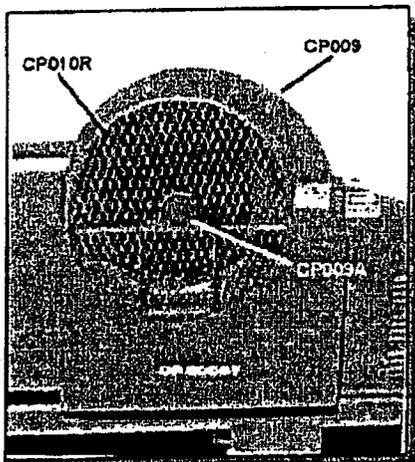
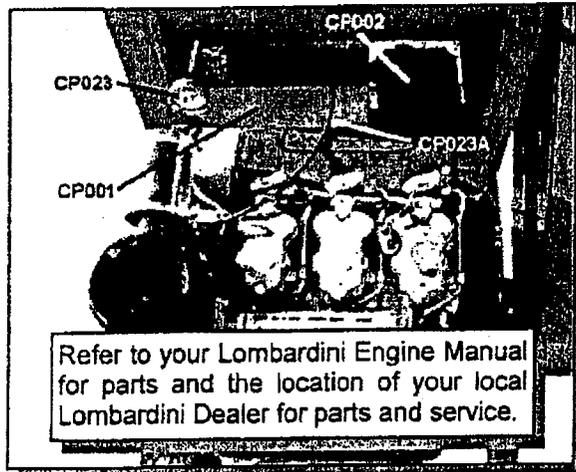


Diagram 4



Refer to your Lombardini Engine Manual for parts and the location of your local Lombardini Dealer for parts and service.

Diagram 5

# PARTS

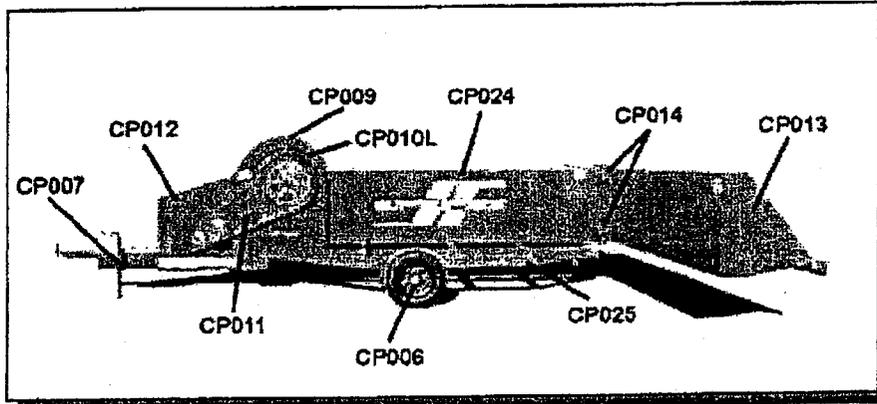
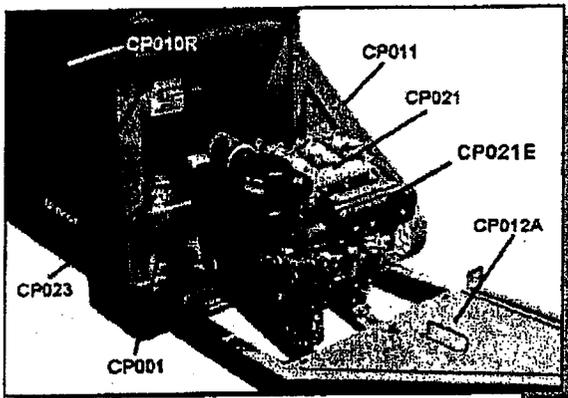


Diagram 6



Refer to your Lombardini Engine Manual for parts and the location of your local Lombardini Dealer for parts and service.

Diagram 7



Diagram 8

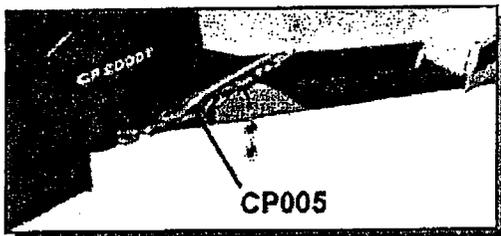


Diagram 9

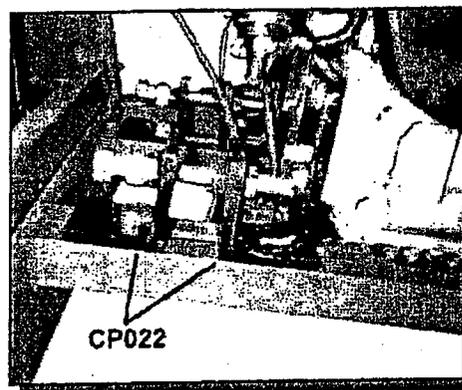


Diagram 10