



**DIAMOND**  
**PRODUCTS**

**OPERATOR'S MANUAL**  
**FLOOR GRINDER**

**MODEL**  
**CC100**

IMPORTANT:  
READ MANUAL AND SAFETY  
PRECAUTIONS BEFORE OPERATING

# SAFETY WARNINGS

## PERSONAL SAFETY

- READ AND UNDERSTAND INSTRUCTIONS BEFORE OPERATING FLOOR GRINDER
- ALWAYS WEAR SAFETY APPROVED HEARING, EYE, HEAD AND RESPIRATORY PROTECTION.
- STURDY BOOTS WITH NON SLIP SOLES AID IN PROVIDING PROPER FOOTING. USE OF STEEL-TOED SAFETY BOOTS IS RECOMMENDED.
- UNDER CERTAIN CONDITION, SPARKS MAY FLY SO NEVER WEAR CLOTHES OF FLAMMABLE MATERIAL.
- KNOW HOW TO STOP FLOOR GRINDER QUICKLY IN CASE OF EMERGENCY.
- KEEP ALL PARTS OF YOUR BODY AWAY FROM GRINDING HEAD AND ALL OTHER MOVING PARTS.
- USE CAUTION AND FOLLOW INSTRUCTIONS WHEN LOADING AND UNLOADING FLOOR GRINDER.
- DO NOT USE HANDS TO SEARCH FOR HYDRAULIC FLUID LEAKS. FLUID ESCAPING UNDER PRESSURE CAN PENETRATE SKIN AND CAUSE SEVERE INJURY. IF ANY FLUID IS INJECTED INTO THE SKIN, SEEK MEDICAL ATTENTION IMMEDIATELY.
- WEAR WORK GLOVES TO AVOID CONTACT WITH CONCRETE SLURRY, WHICH CAN CAUSE SERIOUS SKIN IRRITATION.

## GENERAL FLOOR GRINDER SAFETY

- THIS FLOOR GRINDER SHOULD BE USED ONLY ON MATERIAL THAT IS SPECIFIED ON EACH GRINDING HEAD. READ THE INSTRUCTIONS WHICH IS ON EACH GRINDING HEAD TO DETERMINE WHICH MATERIAL THE GRINDING HEAD IS DESIGNED TO USED ON.
- THE IGNITION GOVERNOR IS DESIGNED TO LIMIT THE MAXIMUM ENGINE SPEED IN A NO-LOAD CONDITION. SPEEDS IN EXCESS OF THAT MAY CAUSE THE GRINDING HEAD TO EXCEED THE MAXIMUM SAFE-ALLOWABLE SPEED. DO NOT OPERATE THE UNIT IF YOU SUSPECT IT OF EXCEEDING THIS SPEED.
- ALWAYS KEEP GUARDS IN PLACE.
- MAKE SURE THE GRINDING HEAD DOES NOT MAKE CONTACT WITH THE GROUND AND/OR OTHER SURFACE WHEN TRANSPORTING TH FLOOR GRINDER.
- FLOOR GRINDER MUST NOT BE LEFT UNATTENDED WHILE THE ENGINE IS RUNNING.
- ALWAYS REMEMBER TO KEEP BOTH HANDS ON THE HANDLES WHEN THE ENGINE IS RUNNING.
- DO NOT OPERATE THE MACHINE IF THERE IS A FUEL LEAK. HAVE THE FUEL LEAK FIXED FIRST.
- DISCOUNT POWER. WHEN NOT IN USE, BEFORE SERVICING, AND WHEN CHANGING GRINDING HEAD.
- AVOID ACCIDENTAL STARTING. MAKE SURE ON/OFF SWITCHES ARE IN OFF POSITION BEFORE PLUGGING IN POWER CORD.

## GRINDING/WORK AREA SAFETY

- NEVER OPERATE THE FLOOR GRINDER IN ANY APPLICATION OR JOB WHERE YOU ARE NOT TRAINED OR SUPERVISED.
- OPERATE ONLY IN WELL-VENTILATED AREAS. ENGINE EXHAUST CONTAINS CARBON MONOXIDE WHICH CAN CAUSE LOSS OF CONSCIOUSNESS AND POSSIBLE DEATH.
- KEEP BYSTANDERS AND/OR ANIMALS OUT OF THE WORK AREA.
- OBSERVE ALL SAFETY REGULATION FOR THE SAFE HANDLING OF FUEL. HANDLE FUEL IN SAFETY CONTAINERS. SHUT OFF THE ENGINE AND ALLOW IT TO COOL BEFORE REFUELING. WIPE THE FLOOR GRINDER DRY IF FUEL IS SPILLED ON IT. ALWAYS MOVE AWAY FROM THE FUELING AREA BEFORE STARTING THE ENGINE.
- DO NOT OPERATE THE SAW IN AREAS OF COMBUSTIBLE MATERIAL OF FUMES. SPARKS MAY OCCUR FROM GRINDER THAT COULD CAUSE A FIRE OR AN EXPLOSION.

FAILURE TO COMPLY WITH PROCEEDING WARNINGS COULD RESULT IN SERIOUS BODILY INJURY!

### **!WARNING:!**

THE ENGINE EXHAUST FROM THIS PRODUCT  
CONTAINS CHEMICALS KNOWN TO THE  
STATE OF CALIFORNIA TO CAUSE CANCER,  
BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

## ASSEMBLY

- HANDLE MUST BE ATTACHED. PLACE IN POSITION SET TO DESIRED HEIGHT, AND INSERT LOCK PINS.
- BE CERTAIN TO CHECK ENGINE OIL LEVEL AND SERVICE BEFORE USING. REFER TO ENGINE MANUAL FOR DETAILED INFORMATION.
- ON ELECTRIC FLOOR GRINDER MODELS, THE PURCHASER MUST PROVIDE THE PROPER SIZE POWER CORD, FOR WIRING MOTOR STARTER TO POWER SOURCE, REFER TO TAG ON THE SIDE OF THE ELECTRIC MOTOR.

## GENERAL INSTRUCTIONS

- BE CERTAIN YOU HAVE THE CORRECT DIAMOND OR ABRASIVE GRINDING HEAD OR GRINDING BLOCKS. CONTACT YOUR AUTHORIZED SERVICING DEALER FOR THE CORRECT SPECIFICATION. GETTING THE CORRECT GRINDING HEAD WILL MAKE A TREMENDOUS DIFFERENCE IN YOUR COSTS AND PERFORMANCE.
- THE BLADE SHAFT FLANGE MUST BE INSPECTED FOR DAMAGE AND CLEANED BEFORE MOUNTING GRINDING HEAD. IF DAMAGED, REPLACE BAD PARTS. INSPECT GRINDING HEAD FOR DAMAGE TO BOLT HOLES AND FLANGE AREA BEFORE ATTEMPTING TO MOUNT GRINDING HEAD.
- MOUNT THE GRINDING HEAD SOLIDLY AND FIRMLY ON BLADE FLANGE, USING BOLTS PROVIDED. TIGHTEN FLANGE BOLTS VERY SECURELY. (APPROXIMATELY 50 FT. LB).
- WARNING: DO NOT OPERATE WITHOUT PROPER GUARDS IN PLACE.
- DO NOT USE CONVENTIONAL (WET) DIAMOND GRINDING HEAD WITHOUT WATER! YOU MUST HAVE FROM 2-1/2 TO 5 GALLONS OF WATER PER MINUTE FLOWING OVER THE GRINDING HEAD FOR PROPER COOLING AND TO GET MAXIMUM GRINDING HEAD LIFE. TEST YOUR WATER SUPPLY FOR PRESSURE AND QUANTITY (FLOW) BEFORE STARTING TO GRIND.
- THE FLOOR GRINDER IS SHIPPED WITHOUT A GRINDING HEAD. REMOVE BALLAST WEIGHT FROM GRINDER. TILT UNIT BACKWARD AND PLACE BALLAST UNDER THE TWO LIFTER LEGS SO THE GRINDER WILL STAY IN BACKWARD TITLED POSITION. LOOSEN (DO NOT REMOVE) TWELVE (12) SCREWS HOLDING THE RUBBER SKIRT RETAINERS AND REMOVE SKIRT. INSERT FROM THE TOP, THROUGH THE FOUR (4) HOLES IN THE GRINDING HEAD MOUNTING PLATE, FOUR (4) 3/8"-24 x 7/8" HEX HEAD BOLTS WITH FOUR (4) 3/8" WASHERS (PROVIDED WITH FLOOR GRINDER) INTO GRINDING HEAD. INSERT THE RUBBER SKIRT UNDER THE SKIRT RETAINERS. REMOVE BALLAST WEIGHT(S) FROM UNDER MACHINE AND SET MACHINE UPRIGHT. ADJUST SKIRT TO DESIRED HEIGHT AND TIGHTEN THE TWELVE (12) SCREWS. SET BALLAST WEIGHT INTO MACHINE.
- FILL SUMP WITH OIL ON THE ENGINE. USE A HIGH QUALITY DETERGENT OIL. USE THINNER OIL IN THE WINTER SEASON. REMOVE CAP AND DIPSTICK AND FILL TO FULL MARK ON STICK. WHEN CHECKING OIL LEVEL, MAKE SURE FLOOR GRINDER IS LEVEL. DO NOT OVERFILL. DIPSTICK ASSEMBLY MUST BE PUSHED FULLY ONTO TUBE AT ALL TIMES WHEN ENGINE IS OPERATING.
- FILL FUEL TANK WITH CLEAN, "REGULAR" GRADE AUTOMOTIVE GASOLINE. FILL TANK COMPLETELY. DO NOT MIX OIL WITH GASOLINE.
- CONNECT WATER SUPPLY TO HOSE PROVIDED AND CONNECT TO WATER VALVE.
- FOR ELECTRIC FLOOR GRINDER MODELS, WIRE STARTER BOX WITH PROPER SIZE POWER CORD.
- FOR HYDRAULIC FLOOR GRINDER MODELS, CONNECT PRESSURE AND RETURN HOSES FROM POWER UNIT TO VALVE LOCATED ON THE HANDLE SUPPORT.

## TO START

- FOLLOW ALL THE INSTRUCTION OUTLINED ABOVE.
- BE SURE THE FOOT LEVER IS IN THE LOWER POSITION, CAUSING THE GRINDING HEAD TO BE DISENGAGED WITH THE FLOOR.
- BE SURE THE STOP SWITCH IS AWAY FROM THE SPARK PLUG (8HP BRIGGS & STRATTON ONLY).
- OPEN FUEL VALVE NEXT TO CARBURETOR.
- CHOKE THE CARBURETOR. MOVE LEVER IN DIRECTION OF ARROW TO FULLY CLOSED CHOKE POSITION.
- PULL REWIND STARTER HANDLE. REPEAT IF NECESSARY WITH CHOKE OPENED SLIGHTLY. WHEN ENGINE STARTS, OPEN CHOKE GRADUALLY.

## OPERATION

- FOR WET GRINDING, OPEN WATER VALVE FULL OPEN. CHECK WATER TO VERIFY FULL FLOW, THEN ADJUST FOR PROPER AMOUNT OF WATER ON GRINDING HEAD BEFORE YOU LOWER THE GRINDING HEAD. IF WATER SUPPLY IS INTERRUPTED, STOP GRINDING IMMEDIATELY. WATER SERVES AS A LUBRICANT AND COOLANT FOR EXTENDED GRINDING HEAD LIFE.
- CAREFULLY DISENGAGE FOOT CLUTCH BY LETTING IT UP TO ENGAGE GRINDING HEAD WITH WORK SURFACE.
- SLOWLY MOVE FLOOR GRINDER OVER AREA TO BE GROUND
- TO OBTAIN VARIATION IN GRINDING SPEED AND TO VARY THE DEPTH OF CUT, THE AXLE CAN BE MOVED FORWARD OR BACKWARD TO CHANGE THE DOWNWARD FORCE ON THE GRINDING HEAD. IF EXTREMELY LIGHT CUTS ARE DESIRED, REMOVE ONE OR BOTH OF THE BALLAST WEIGHT FROM THE MACHINE.
- NOTE: GRINDING HEAD WEAR WILL INCREASE AS THE SPEED AND DEPTH OF CUT IS INCREASED.
- IF THE FLOOR GRINDER SHOULD STALL FOR ANY REASON, RAISE THE GRINDER COMPLETELY. BEFORE STARTING ENGINE AGAIN.
- FOR HYDRAULIC FLOOR GRINDER USE 2500 P.S.I. AT 12 G.P.M.

## TO STOP GRINDING

- WHEN FINISHED GRINDING DESIRED AREA, PUSH FOOT PEDAL DOWN AND LOCK IN PLACE.
- TURN WATER OFF AT WATER VALVE ON THE GRINDER.
- PUSH THE STOP SWITCH AGAINST END OF SPARK PLUG (ON 8HP BRIGGS & STRATTON ENGINE ONLY).
- PULL THROTTLE LEVER BACK, LOCATED ON RIGHT SIDE OF HANDLE BAR (ON 13HP HONDA ONLY).
- ON ELECTRIC FLOOR GRINDER MODELS, PRESS STOP BUTTON LOCATED ON STARTER BOX.
- ON HYDRAULIC FLOOR GRINDER MODELS, TURN VALVE LOCATED ON RIGHT SIDE OF FLOOR GRINDER HANDLE SUPPORT.
- TURN FUEL VALVE OFF NEXT TO CARBURETOR.

## MAINTENANCE

- LUBRICATE SPINDLE HUB DAILY! NOTE: WHEN CUTTING DRY, GREASE SPINDLE HUB TWO OR THREE TIMES DAILY. DO NOT OVERGREASE. GREASE PROVIDES AN ADDED PROTECTIVE SEAL FOR THE BEARINGS. AFTER A MAXIMUM OF EVERY 40 HOURS OF OPERATION, GREASE REAR WHEELS.
- CHECK ENGINE OIL DAILY. KEEP OIL CLEAN AND AT PROPER LEVEL. SINCE THE ENGINE OFTEN OPERATES AT AN ANGLE, CHECK THE OIL LEVEL (WITH ENGINE HORIZONTAL) FREQUENTLY TO ENSURE THAT THE OIL LEVEL NEVER FALLS BELOW THE LOWER MARK ON THE DIPSTICK. FOLLOW ENGINE MANUFACTURER'S RECOMMENDATION ON CHANGING OIL.
- ENGINE CARE: SEE ENGINE MANUAL.
- BLADE SHAFT V-BELTS TENSION: THIS MODEL FLOOR GRINDER IS EQUIPPED WITH PREMIUM V-BELTS. THESE BELTS ARE PROPERLY TENSIONED AT THE FACTORY. SEVERE DAMAGE OR EVEN BREAKAGE OF THE CRANKSHAFT MIGHT OCCUR IF THE BELTS ARE TENSIONED TOO TIGHT. CHECK BELT TENSION AS SET ON THE NEW GRINDER AND NEVER SET BELTS BEYOND ORIGINAL FACTORY TENSION. NOT ENOUGH TENSION WILL RESULT IN POOR GRINDER PERFORMANCE AND SHORT BELT LIFE. BELTS SHOULD NEVER BE ALLOWED TO SLIP. AFTER TWO HOURS OF USE, RE-TENSION BELTS TO MAKE UP FOR INITIAL STRETCH. TO RE-TENSION THE BELTS, TURN THE HORIZONTAL TENSIONING BOLT ON THE FRONT OF THE ENGINE BASE CLOCKWISE UNTIL THE BELTS ARE TIGHT. RE-TIGHTEN THE FOUR BOLTS ON THE ENGINE BASE. CONTINUE TO CHECK THE BELT TENSION ON A REGULAR BASIS, AND RE-TIGHTEN AS NECESSARY. TO OBTAIN ACCURATE V-BELT SETTING, A V-BELT TENSION TESTER SHOULD BE USED. CHECK THE SETTING ON A SINGLE BELT OF A MATCHED SET OF V-BELTS. APPLY LOAD AT THE CENTER OF THE BELT SPAN. DEFLECTION SHOULD BE 3/16" WITH A 5 TO 6 L.B. LOAD.
- TIGHTEN FASTENERS REGULARLY. NUTS AND BOLTS MAY BECOME LOOSE PARTICULARLY AFTER THE FIRST FEW HOURS OF OPERATION. CARE MUST BE TAKEN TO SELECT THE PROPER TOOLS AND FASTENERS. DAMAGE TO THE THREADED FASTENERS COULD OCCUR IF INCORRECT TOOLS OR FASTENERS ARE USED.
- PERIODICALLY CHECK SPINDLE ASSEMBLY FOR ENDPLAY. THERE SHOULD BE NO ENDPLAY. ADJUSTMENT IS MADE BY LOWERING THE SHEAVE.