

Components and Assembly

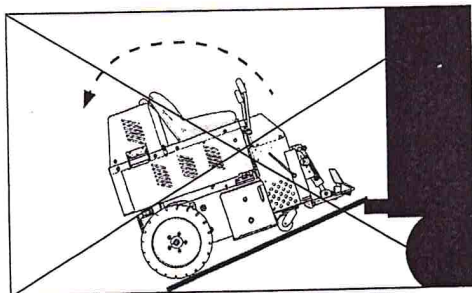


FIG. 2

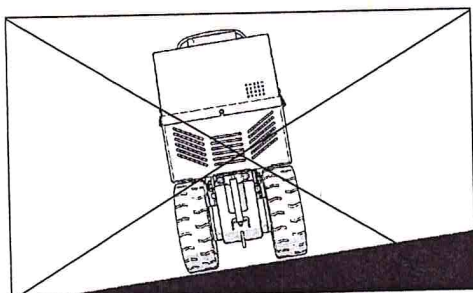


FIG. 3

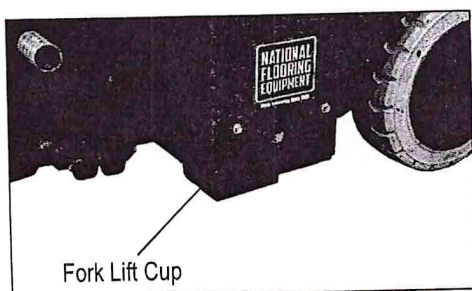


FIG. 4

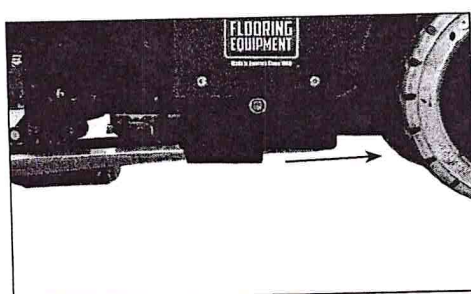


FIG. 4.1

TRANSPORT

- Secure machine with ratchet straps during transport. Proper securing straps need to be rated at least twice the weight of the machine.
- Chock wheels to keep machine from rolling, but do not use them on their own.
- Hydraulic levers should be straight up in the neutral position, not locked in the forward or backward positions.
- Lift machine off swivel caster by lowering cutting head for better stabilization. Use transport wheels when doing this.
- Remove blade, cutting head, and added weights during transport.
- Cutting head and slide plate can be removed to make machine more compact.
- Never leave machine unattended on an incline.



CAUTION: MACHINE IS BACK HEAVY. DO NOT RUN ON STEEP INCLINE THIS COULD CAUSE MACHINE TO TIP OVER! (FIGURE 2). DO NOT USE A RAMP TO MOVE MACHINE.



WARNING: MACHINE HAS A SWIVEL FRONT CASTER. NEVER SIDE HILL (FIGURE 3) THE MACHINE ON A INCLINE WITHOUT POWER. THE FRONT CASTER WILL CAUSE MACHINE TO SWING TO THE LOWEST POINT. IF IT IS NECESSARY TO RUN MACHINE ON AN INCLINE, RUN MACHINE ON CUTTING HEAD. PLACE AT LEAST A 8" CUTTING HEAD IN MACHINE. TO KEEP FROM DAMAGING FLOOR, CLAMP A PIECE OF CARPET INTO CUTTING HEAD. THIS WILL GIVE POSITIVE CONTACT WITH THE FLOOR WHEN POWER IS DISENGAGED FROM THE WHEELS.

Dock Heights

It is best to load or unload the machine from a level dock height.

Power Gate

A power gate can be used when the dock height is not available. Ensure gate is properly rated for 3,000 lb (1,361 kg). To better secure machine, place onto the lowered cutting head; raise machine off the caster. Tie machine down and chock wheels.

Forklift Cups

There are two forklift cups mounted under the front of the machine (Figure 4). Slide forklift forks through the cups, then slide as far back as possible (Figure 4.1). Before lifting machine, secure it to the forklift with 3,000 lb (1,361 kg) or heavier straps or a chain. Tilt forks back to lift machine.

Palletizing

Only use a solid platform pallet. If a solid platform pallet is not available, place a piece of 3/4" plywood on top of a pallet. Using a forklift, with the forks inserted in the forklift cups, place machine on pallet. Use properly rated ratchet straps to secure machine to pallet.

JOBSITE MOVEMENT

Taping Wheels

Taping the wheels with a wide masking tape helps to prevent dirtying or damaging the floors during move-in and move-out.

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Transport Wheels

The front wheel assembly is included and very helpful when moving a machine around on a jobsite or loading a machine that is not on a pallet. It allows machine stability and safe transportation over most surfaces. It is quick and easy to attach or detach.

1. Raise slide plate so the bottom of the slide plate is higher or even with the bottom of the guide channels, 6"-8" (15.25-20.3 cm) is ideal.
2. Raise cylinder; insert front wheel assembly into cutting head.
3. Secure with pin.

When finished, the caster wheel should swivel freely and the front wheel plate should be parallel with the floor.

Moving Machine without Power (Pushing Machine)

Forward: To move the machine forward, levers need to be pushed forward. To lock levers in place, connect a bungee strap from each lever (pushing levers forward), pulling straps down to and connecting to the front plate (Figure 5). Never leave machine unattended with strap holding levers open.



WARNING: PROVIDE BARRIERS OR SHIELDS AS NEEDED TO PROTECT OTHERS FROM DEBRIS AND MACHINE OPERATION. OPERATOR SHOULD BE AWARE OF THE PROXIMITY OF OTHERS.

Backward: To move machine backward, levers need to be pulled backwards. To lock levers in place, connect a bungee-strap from each lever (pushing levers backward), Pulling straps to the back of the machine and connecting behind the seat or the rear of the machine (Figure 6). Never leave machine unattended with strap holding levers open.



WARNING: REMOVE STRAPS BEFORE STARTING MOTOR. FAILURE TO DO SO WILL MAKE MACHINE MOVE AND MAY CAUSE DAMAGE AND/OR BODILY INJURY.

Moving Machine on Caster

Moving a weighted machine on only the front caster and not on the cutting head or the front wheel assembly can make the machine sluggish. It may also turn hard to the right or left.

CUTTING HEAD AND BLADES

Matching the correct cutting head, blade size, blade angle, and added weight to the machine is important. For every material being removed, there is an optimum blade width, thickness, sharpness, angle, and bevel (up or down).

The machine is supplied with a 6" and 12" cutting head. Having additional cutting heads will save time on the job. Insert blades into the extra cutting heads before starting a job. When the blade is dull, take out the cutting head and replace it with another.

Shear Point

The shear point is the point where material to be removed will cut cleanly from the floor. If the blade is too wide, too dull, or too steep the shear point is lost.

Inserting the Cutting Head

1. With machine off, insert desired cutting head into cutting head holder.
2. Secure with cutting head clip.

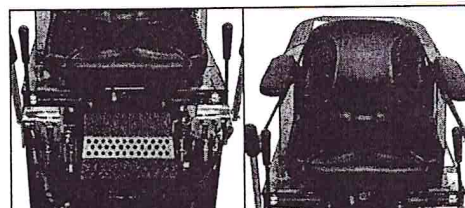


FIG. 5

FIG. 6

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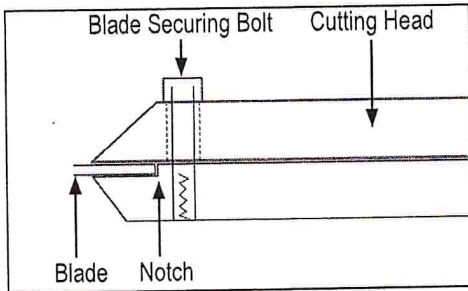


FIG. 7

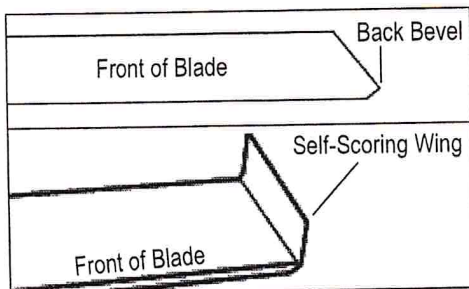


FIG. 8

Swivel Head

The swivel head keeps the blade in contact with the floor even when the floor is uneven. When using a flat blade, turning the head over 180° provides another sharp edge on the blade without having to replace the blade.

Inserting or Changing Blades

Sharp blades are imperative for good performance.

1. Using a 3/4" socket wrench, loosen bolts on cutting head. Quantity of bolts will vary depending upon cutting head size.
2. Insert blade into the cutting head to back of notch (Figure 7); tighten firmly.

Note: A cordless 3/8" drive impact wrench will speed up this process.

Inserting a Shank Blade

Shank blades do not require a cutting head.

1. Insert desired shank blade into cutting head holder.
2. Secure with cutting head clip.

Self-Scoring Blades

Instead of pre-scoring a job for soft goods (e.g. carpet, vinyl, linoleum, membrane), the self-scoring blades automatically do the scoring.

Sharpening Blades



WARNING: BLADES ARE SHARP. USE EXTREME CAUTION. ALWAYS WEAR GLOVES AND SAFETY GLASSES WHEN HANDLING BLADES. NEVER CHANGE CUTTING HEAD OR SERVICE BLADES WHILE MACHINE IS RUNNING.

Dull blades greatly reduce cutting ability. Sharpen or replace as needed. In use, blades develop a back-bevel. When sharpening, blade will not be completely sharp until all back-bevel is gone (Figure 8).

Note: Thinner blades are easier to sharpen, but they also break easier.

- Grind blade using a 4" diameter disk with 120 or finer grit. Be careful not to catch disk on edge or corner of blade.
- Pass grinder along blade edge starting on one end and continuing in one direction, being careful to hold grinder at proper angle of blade. Grind until sharp.
- When using a high quality fine tooth hand file, follow the same procedure as above.
- Have plenty of sharp blades on each job so on-the-job blade sharpening is eliminated.
- It is best to sharpen dull blades on proper bench or belt grinder in the shop, so the blades are ready for the next job.

Self-Scoring Blade Sharpening: It is important to keep the "wings" on a self-scoring blade sharp. Use a file on the wing edge (Figure 8). Sharpen the flat part of the blade, the same way as described above.

Carbide-Tipped Blade Sharpening: To sharpen carbide tipped blades, a carbide grinding wheel is necessary, e.g., silicon carbide or green wheel.

Blade Setting

- Proper blade size and placement, depending on material and sub-floor type, affects performance.
- For better results during difficult removal applications use a smaller blade.
- Start with a narrow blade, then increase blade size to optimize cutting pass. Nar-

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rower blades work easier than wider blades and usually clean the floor better. Wider is not always better or faster.

- Normally, bevel on blade is up for concrete (Figure 9); bevel down for wood (Figure 9.1)
- Dull blades greatly affect the performance of the machine and reduce cutting ability, sharpen or replace as needed.
- After removing a portion of material, clear the work area of debris. This will give the machine maximum performance and help to keep the work area safe.

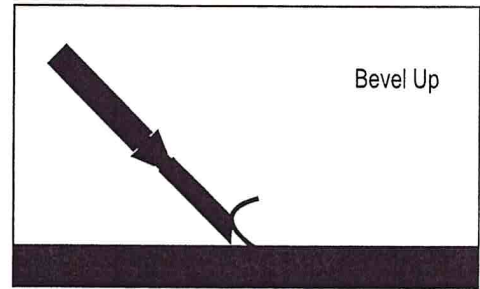


FIG. 9

FOOT PEGS

Rest feet on foot pegs while operating machine. Foot pegs are adjustable. Ensure securing knob is tightened.

STORAGE

When the machine is in storage, disconnect the blue plug (Figure 10) and turn circuit breaker to "OFF" (Figure 11).

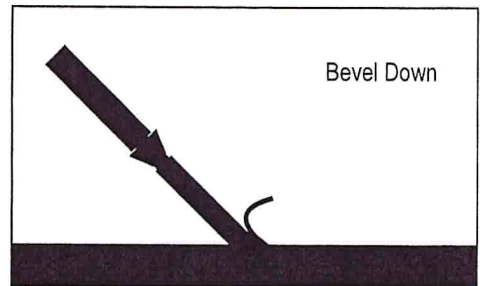


FIG. 9.1

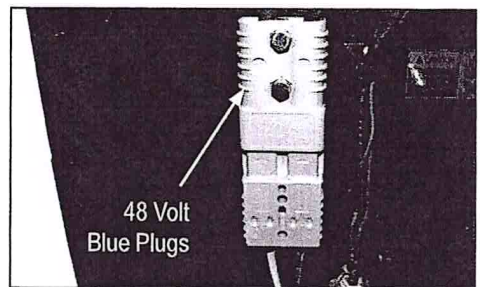


FIG. 10

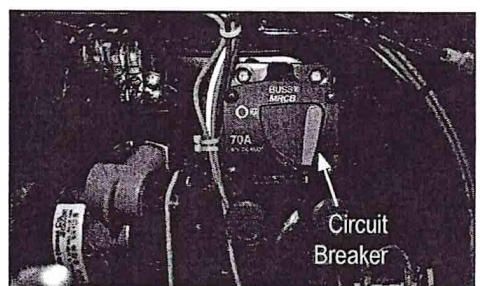


FIG. 11

Operation

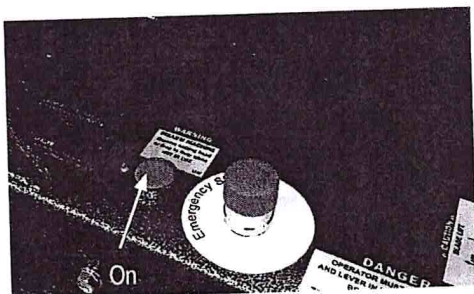


FIG. 12

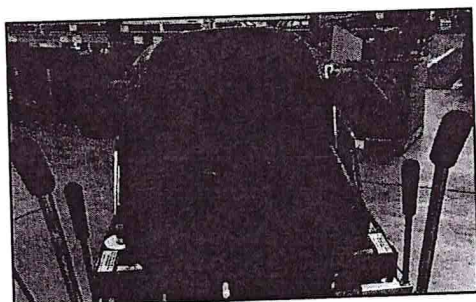


FIG. 13

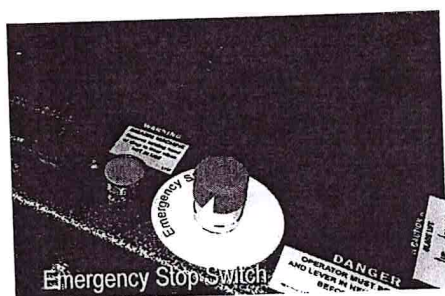


FIG. 14

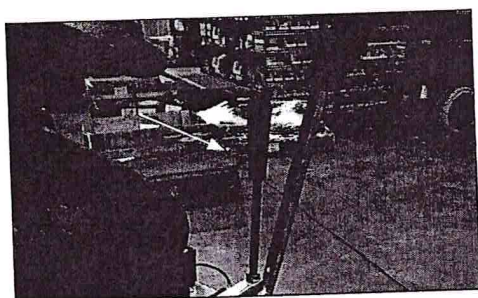


FIG. 15

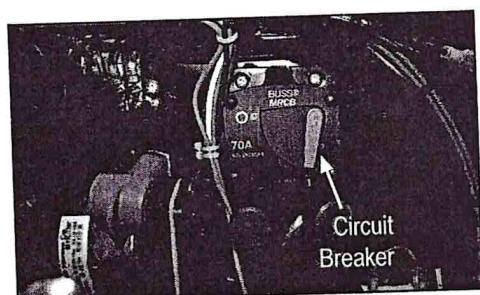


FIG. 16

OPERATING CONTROLS

Power On Switch (Figure 12)

Never use the Power On switch as a method for speed control. Speed control is achieved by the hydraulic valve only. Using the On/Off switch repeatedly will cause excessive wear, causing premature failure of electrical components.

Hydraulic Levers (Figure 13)

The hydraulic levers steer the machine. For even movement, move levers slowly. Fast movement of control levers will result in jerky, uneven movement.

- To move the machine forward, push both levers forward $\uparrow\uparrow$.
- To move the machine in reverse, pull both levers backward $\downarrow\downarrow$.
- To turn the machine quickly to the right, move the left lever forward and the right lever backward $\uparrow\downarrow$.
- To turn the machine quickly to the left, move the left lever backward and the right lever forward $\downarrow\uparrow$.
- To turn the machine slowly to the right or left, push or pull only the right or left lever forward $\uparrow$ or $\downarrow$.
- Putting the levers in the center/neutral position causes the wheels to lock-up.
- Correcting direction while moving forward is accomplished by slightly reducing pressure on one lever or the other while moving.

Emergency Stop Switch (Figure 14)

The emergency stop switch is designed to immediately cut power to the system.

Seat Switch

The seat has a safety switch. Operator must be properly positioned for machine to run.

Cylinder Lift Lever (figure 15)

The cylinder lift lever raises and lowers the cylinder and cutting head. After setting the slide plate to proper height, use the cylinder lift lever to set blade to proper cutting angle.

- To raise the cutting head, pull back $\downarrow$ on the cylinder lift lever.
- To lower the cutting head, push the cylinder lift lever forward $\uparrow$.
- Continuing to push the cylinder lift lever forward will adjust the angle of the cutting head. This will also jack up the front of the machine for maintenance purposes.

START-UP PROCEDURE

1. Verify 70 Amp circuit breaker is in "ON" position (Figure 16).
2. Verify 48V blue plugs are firmly connected.
3. Operator should be properly positioned on seat.
4. Twist emergency stop (Figure 14) up.
5. Push green "ON" button.
6. Maneuver machine with hydraulic levers (Figure 13).

Operation

SHUT-DOWN PROCEDURE

The machine will stop when the operator is no longer seated, or when the emergency stop is engaged.

Remove blade or drop cutting head to the floor when machine is not in use.

SLIDE PLATE ADJUSTMENTS AND SETTINGS

Dual Lift (Figure 17)

Prior to adjusting the dual lift hydraulic slide plate, make sure the channel guide is free of any debris and the machine is safely positioned on a flat surface.

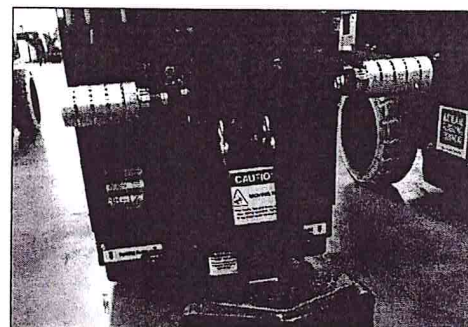


FIG. 17

1. Be properly seated in the operator's seat.
2. Twist the Red Emergency Stop switch located on the right side of the operator, the spring-loaded switch will pop up when twisted.
3. Push the Green 'ON' button to start the machine.
4. Adjacent to the left hand steering lever is a straight and narrow handle rod, this handle rod raises and lowers the front cylinder and is referred to as the 'cutting head lever'. To set the height of the hydraulic slide plate start by first adjusting the angle or pitch of the cutting head holder.
5. Pull back on the cutting head lever and raise the cutting head holder to an angle higher than the bottom of the slide plate.
6. Using the lever adjacent to the right hand steering lever raises and lowers the hydraulic slide plate and is referred to as the 'slide plate lever'. To lower the slide plate the operator must push forward on the slide plate lever. Reversely, to raise the slide plate the operator must pull back on the slide plate lever.

Slide Plate Settings

While the hydraulic slide plate can be adjusted to multiple positions, there are two basic slide plate settings:

- **Low Setting:** the hydraulic slide plate is positioned 1" off the floor. This setting is most commonly used during initial scraping or removal applications; such as carpet, VCT, ceramic tile and wood flooring. **Note:** The "low" setting on older model hydraulic slide plates may stop the plate within one to two inches of the floors surface.
- **High Setting:** the hydraulic slide plate is positioned 6" off the floor or in most cases flush with the bottom of the slide plate channel guide. This setting is most often used for re-scraping glues, mastics, thin sets and soft coating.

Steep Cutting Head Angle

A steep angle is only used for re-scraping. The slide plate has to be raised so the bottom of the plate is higher or even with the bottom of the guide channels. Raising the slide plate to an angle too steep when operating will cause the machine to jump and buck. It does not give the operator a clear vision of the cutting head and it raises the machine to operate at a unsafe height.

APPLICATION SETUP

Ceramic

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. Use a shank blade or a shank blade with a carbide tip.

Operation

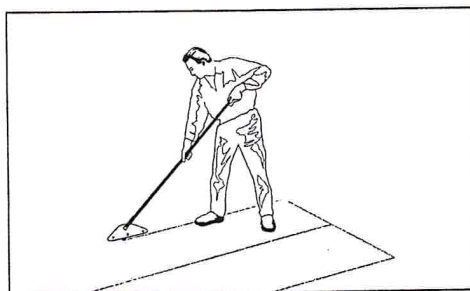


FIG. 18

Wood

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. Use shank blades, shank blades with carbide tips, or a 6" or 8" (15-20 cm) cutting head with heavy duty blades.

Note: Run machine 45° to the grain of the wood.

Secondary Backing Carpet

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. Use a cutting head from 10"-27" (25-68 cm) with heavy duty blades or a cutting head from 10"-14" (25-35 cm) with a self-scoring blade.

Foam Back Carpet

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. Use cutting heads from 10"-14" (25-35 cm) with self-scoring blades. If it is not stuck tight, use a cutting head from 14"-27" (35-68 cm) with a standard blade.

Double Stick Carpet

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. It is best to test to see which is the easiest way to remove double stick. Start with a cutting head from 10"-14" (25-35 cm) with self-scoring blades. If self-scoring blades do not work, score through the carpet (Figure 18) the width of the blade (standard blade) and scrape up. In some cases, carpet might pull off the pad and then scrape up the pad separately. Usually leaving carpet connected to the pad works the best.

Note: When removing carpet from over VCT tile and the tile needs to be saved, run the machine at a 45° angle over the tile. This should help to save the tile.

Vct Tile

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. If goods come up easily, change to a larger cutting head. If goods come up harder, use a cutting head from 6"-8" (15-20 cm) with a premium high-tempered blade (.062) to match cutting head size. Sometimes a .094 blade may work better. If goods remove easily, a tile box (#7074) can be used. A tile box also works for wind rowing, and assists for a fast clean-up and collection of tile debris for quick removal.

Rubber Tile

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. Use a cutting head from 6"-14" (15-35 cm) with self-scoring blades or use ditching method with a flat blade.

Re-Scraping

Slide plate should be set high, 6"-8" (15-20 cm) off the floor. Use a cutting head from 8"-27" (20-68 cm) with scraper blades to match cutting head size. A 15" (38 cm) scraper blade would use a 14" (34 cm) cutting head. Razor blades are faster but a cutting head from 8"-14" (20-35 cm) can be used with a standard blade. Flip head regularly.

Thin Coating and Glues

Slide plate could be set high, 6"-8" (15-20 cm) or low 1" (2.5 cm) off the floor. Test to see which works best. Use a cutting head from 8"-27" (20-68 cm) with razor blades to match cutting head size.

Concrete

Blade should be bevel up when working over concrete. Pretty much anything over concrete works. Try different setups to see which works best. If goods come up difficult, the slide plate should be at a low setting, 1" (2.5 cm) off the floor. Use a smaller size blade. If goods come up easily, a wider blade can be used.

Operation

Wood Sub-Floor

A heavy machine cannot be used on wood subfloors or raised panel computer floors. Keep machine light; remove all weights. A weighted machine could break through the floor. The slide plate should be adjusted to a low setting, 1" (2.5 cm) off the floor. Blades should be as flat of an angle as possible. Use a heavy duty blade (these blades have a bend to them) or a regular blade bevel down. When using a regular blade, bending up the corners of the blade will help from the blade digging into the floor. Sometimes a shank blade or a shank blade with a carbide tip will work. Allow blade to shear material from the floor. Approach should be at a 45° angle to the board. This keeps from digging into the board and hanging up at the seams.

Soft Sub-Floor

The slide plate should be adjusted to a low setting 1" (2.5 cm) off the floor. Blades should be as flat of an angle as possible. Use a heavy duty blade (these blades have a bend to them) or a regular blade bevel down. When using a regular blade, bending up the corners of the blade will help from the blade digging into the floor. Sometimes a shank blade or a shank blade with a carbide tip will work.

DITCHING

Cross Room Ditching (Figure 19)

When removing hard to remove ceramic, VCT, or VAT, cross-room ditching will help to make the removal easier. Using a blade 2"-6" (5-15 cm) in width, make ditches 1'-2' (30-60 cm) apart in the same direction the machine will be removing the goods. This relieves the pressure holding the tiles together. If ditching helps and the goods are coming up easy, try using a wider blade to ditch with.

Checkerboard Ditching (Figure 20)

To make carpet removal and debris clean-up easier, checkerboard ditching is very helpful. Using as wide of a self-scoring blade as possible, make ditches 4'-6' (1.25-1.75 m) crossways from the way the machine will be removing the goods. Running the machine crossways from the ditches will make smaller pieces of debris to be hauled away. Instead of large gummy rolls of carpet, there are small squares that can be rolled, palletized, put on a dolly, or folded with the sticky side in. This makes removing the debris easier and reduces the amount of debris.

