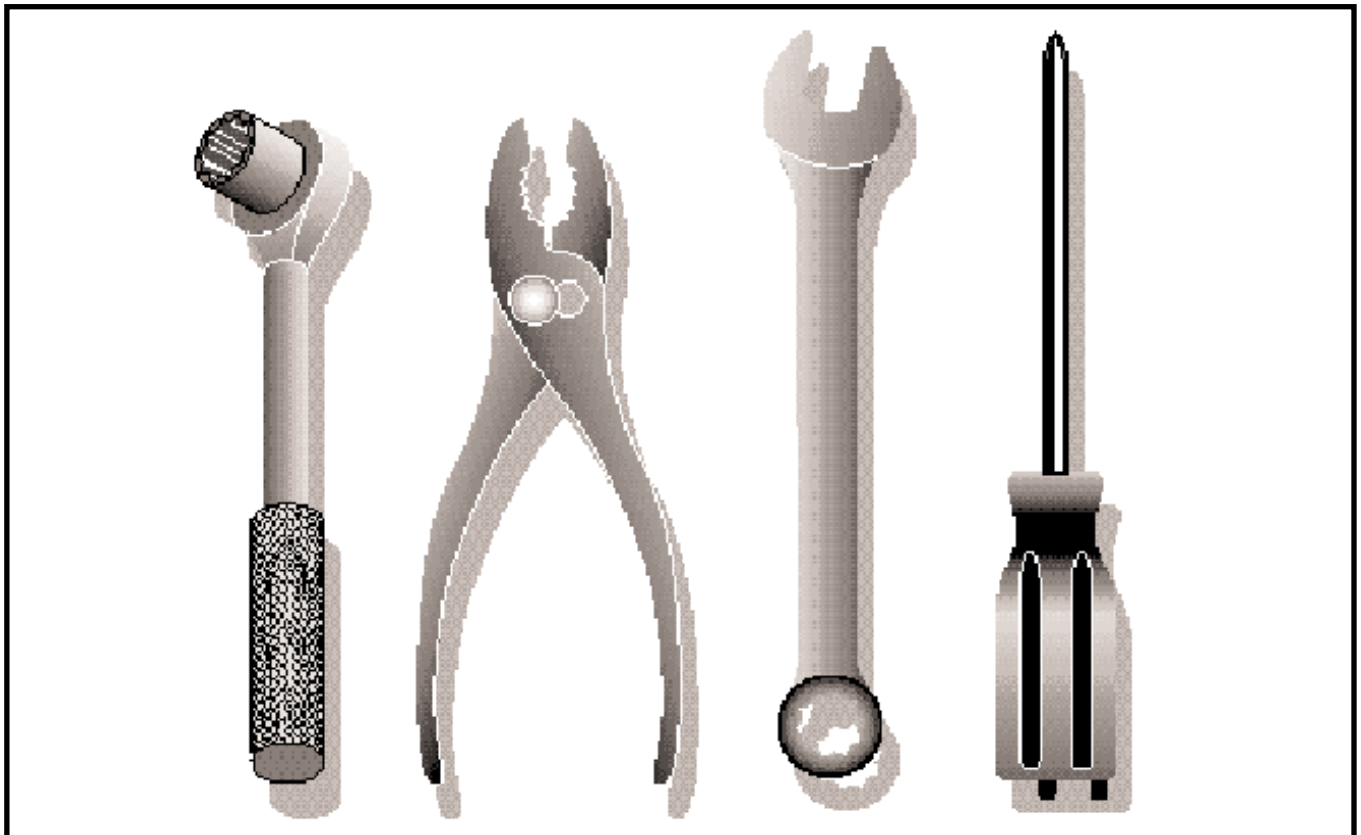


531 30 83-24

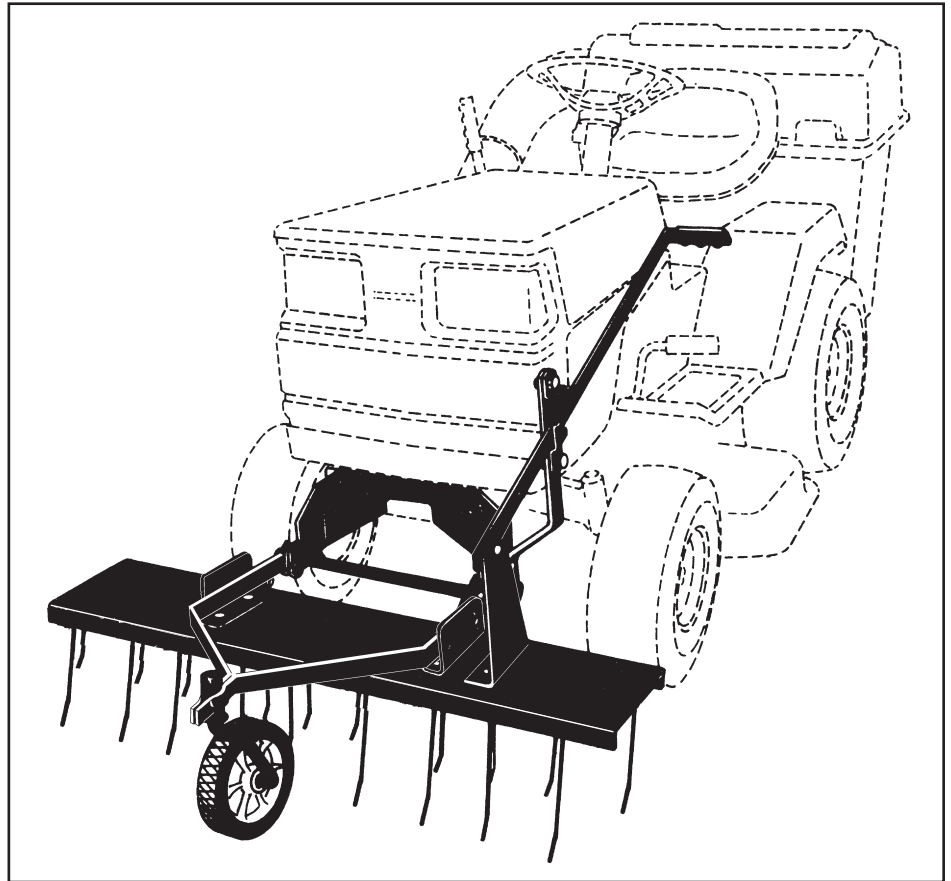
## 40 Inch Front Mount Dethatcher (45-0438)





# OWNERS MANUAL

Model No.  
45-0438



## 40" FRONT MOUNT TINE DETHATCHER


**CAUTION:**  
Read Rules for  
Safe Operation  
and Instructions  
Carefully

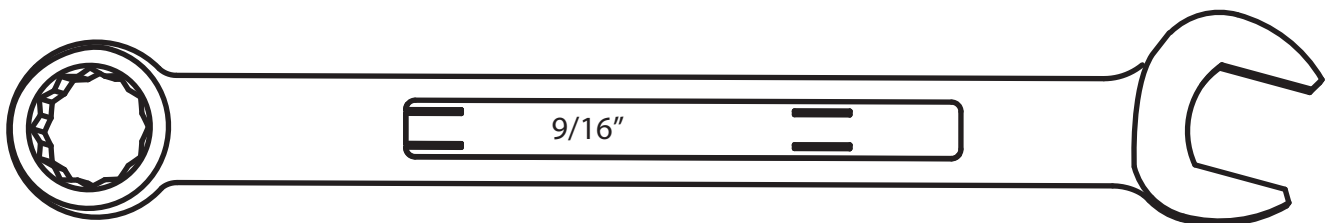
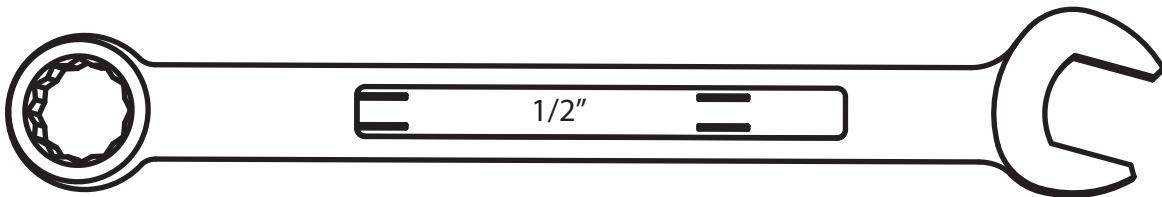
- **Safety**
- **Assembly**
- **Operating**
- **Maintenance**
- **Repair Parts**

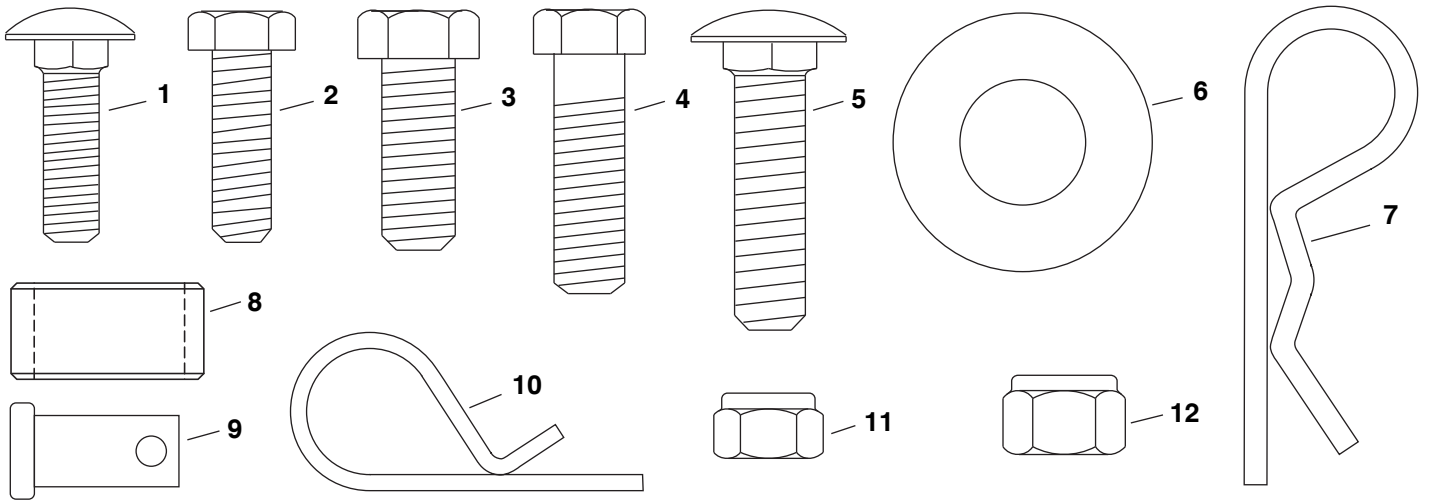
**SpeedPart** *the fastest way to purchase parts* [www.speedpart.com](http://www.speedpart.com)

Any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times, when using power equipment.

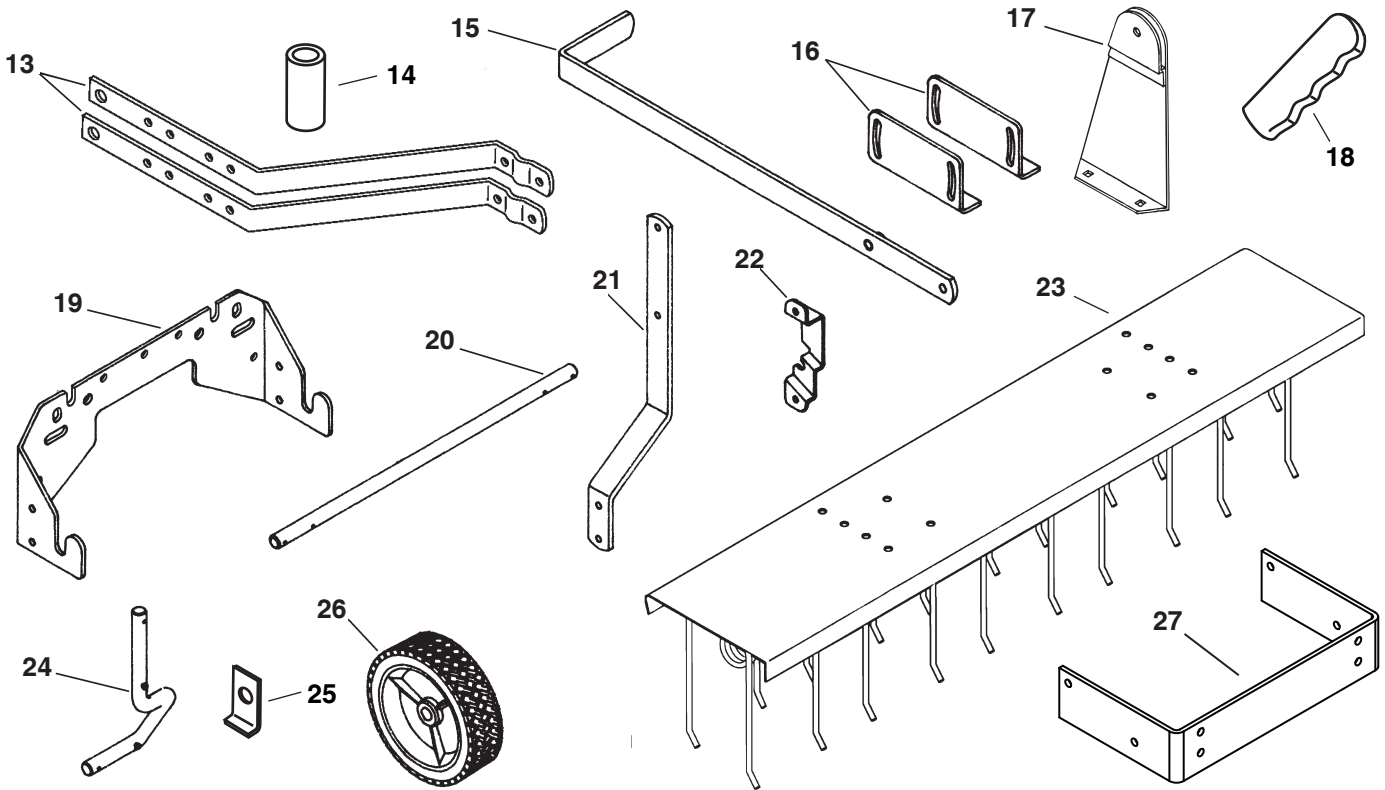
- Read safety rules in the vehicle owners manual and know how to operate your equipment, before using the tine dethatcher.
- Never operate vehicle and tine dethatcher attachment without wearing substantial footwear, and do not allow anyone to ride or sit on the tine dethatcher.
- Never allow children to operate the tractor or dethatcher attachment, and do not allow adults to operate without proper instructions.
- Eye Protection should be worn when operating the tine dethatcher.
- Always begin with transmission in first (low) gear, and gradually increase speed as conditions permit. Recommended maximum operating speed is 3 M.P.H.
- Always stop vehicle and lift dethatcher to transport position before making short turns.
- When de-thatching do not drive too close to a creek or ditch and be alert for holes and other hazards which could cause you to lose control of the vehicle.
- Before operating vehicle on any grade (hill) refer to the safety rules in the vehicle owners manual concerning safe operation on slopes. **STAY OFF STEEP SLOPES.**
- This equipment is not meant for street or highway use. Watch for traffic when de-thatching near highways.
- Vehicle and attachments should be stopped and inspected for damage after striking a foreign object.
- Check all nuts, bolts and screws frequently making sure they are tight and the equipment is in safe working condition.
- Follow the maintenance instructions as outlined in this owners manual.

 Look for this symbol to point out important safety precautions. It means — **Attention!! Become alert!! Your safety is involved.**






REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	44326	12	Carriage Bolt, 5/16-18 x 1"	7	43343	6	Hairpin Cotter, 1/8"
2	43063	2	Hex Bolt, 5/16-18 x 1"	8	46838	4	Spacer, .8" x 1" x .5"
3	43001	4	Hex Bolt, 3/8-16 x 1"	9	44044	1	Clevis Pin, 3/8" x 3/4"
4	43087	2	Hex Bolt, 3/8-16 x 1-1/4"	10	43055	1	Hairpin Cotter, 3/32"
5	43069	4	Carriage Bolt, 3/8-16 x 1-1/2"	11	47810	14	Nylock Nut, 5/16-18
6	R19212113	4	Flat Washer, 5/8"	12	HA21362	10	Nylock Nut, 3/8-16

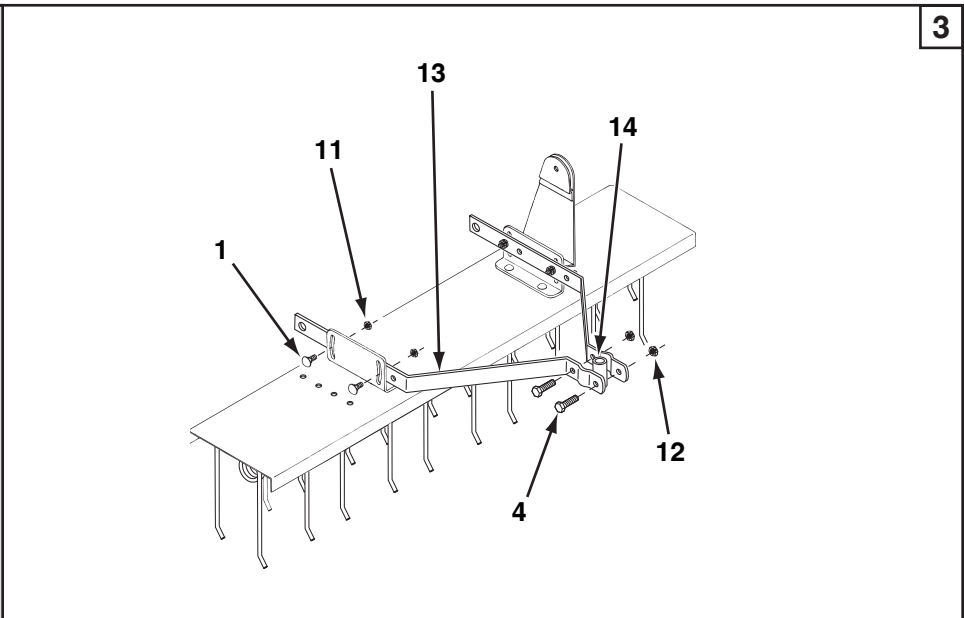
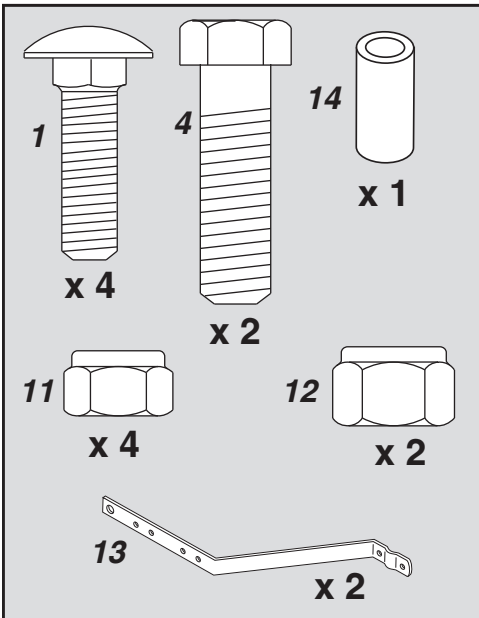
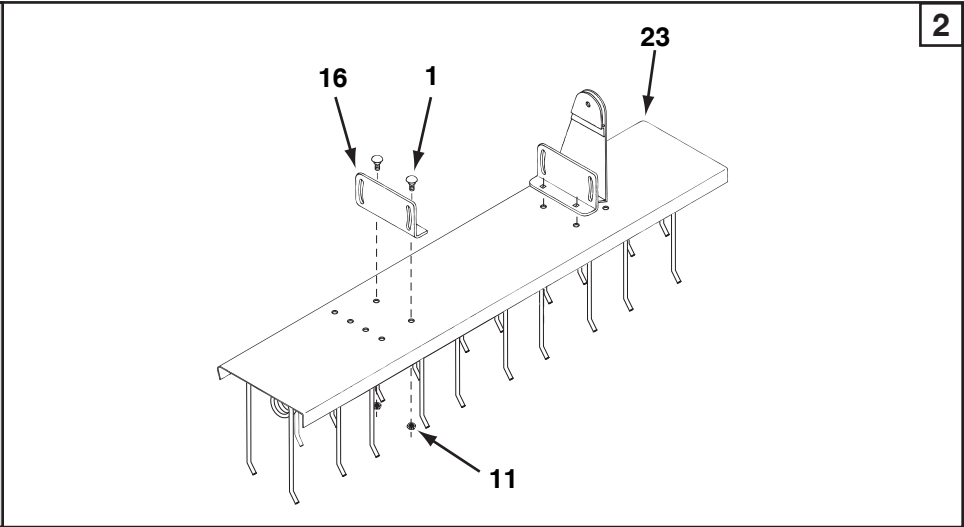
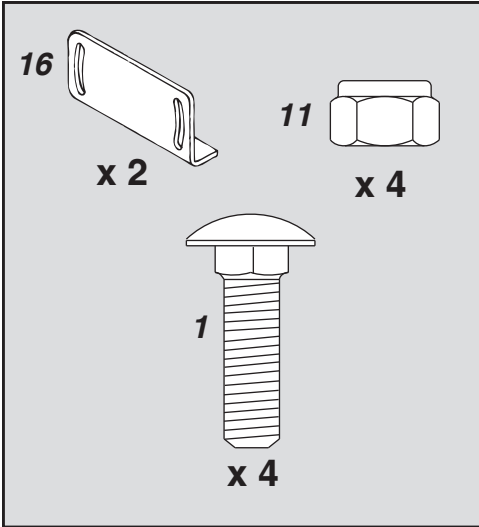
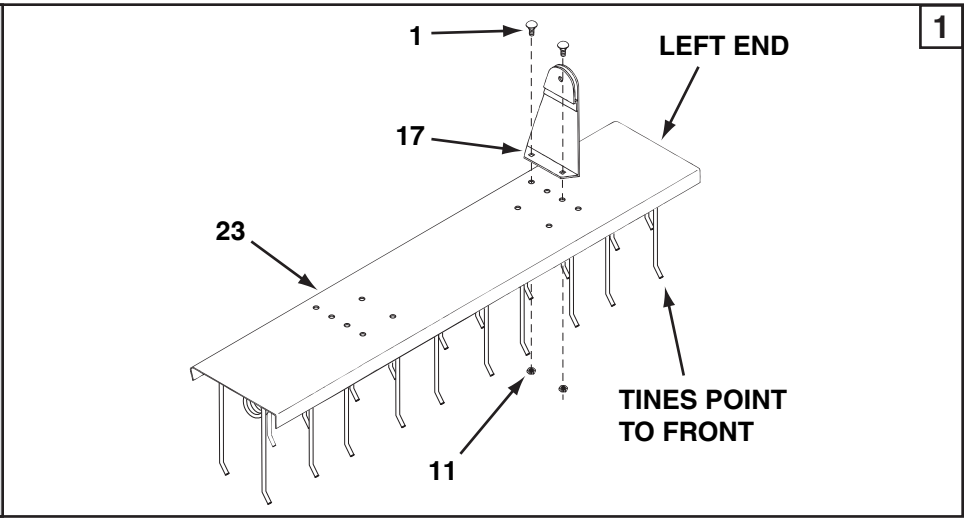
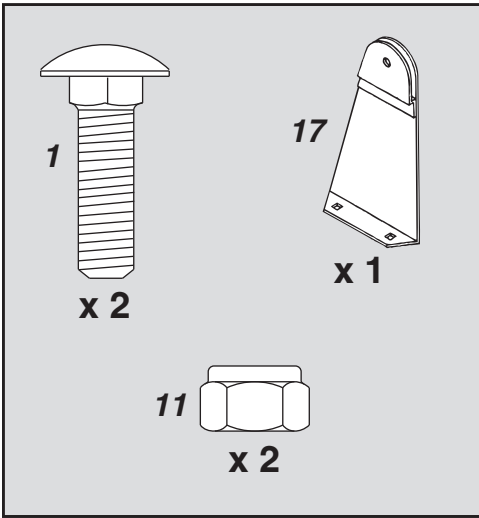


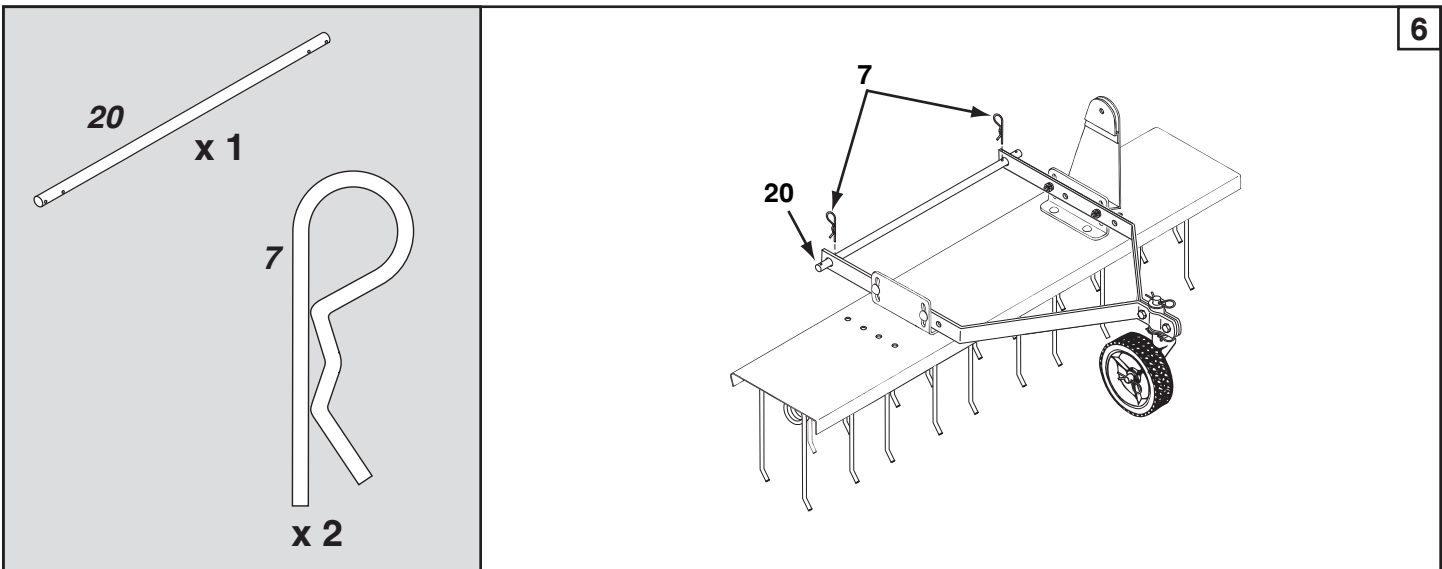
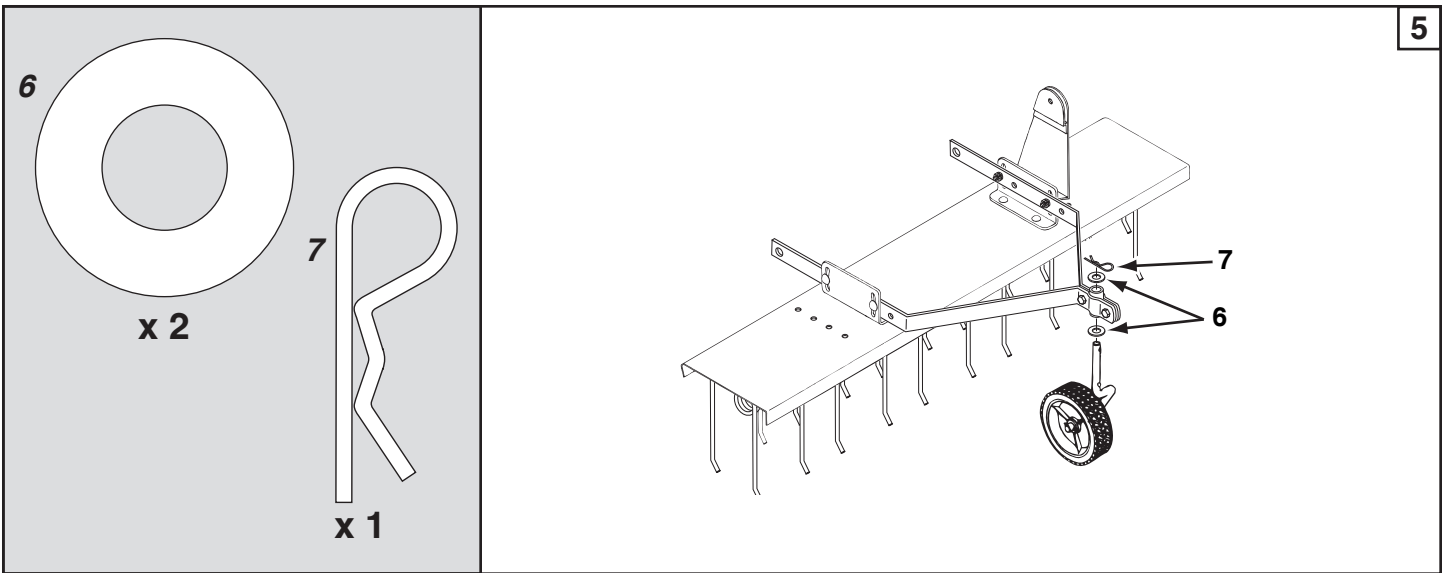
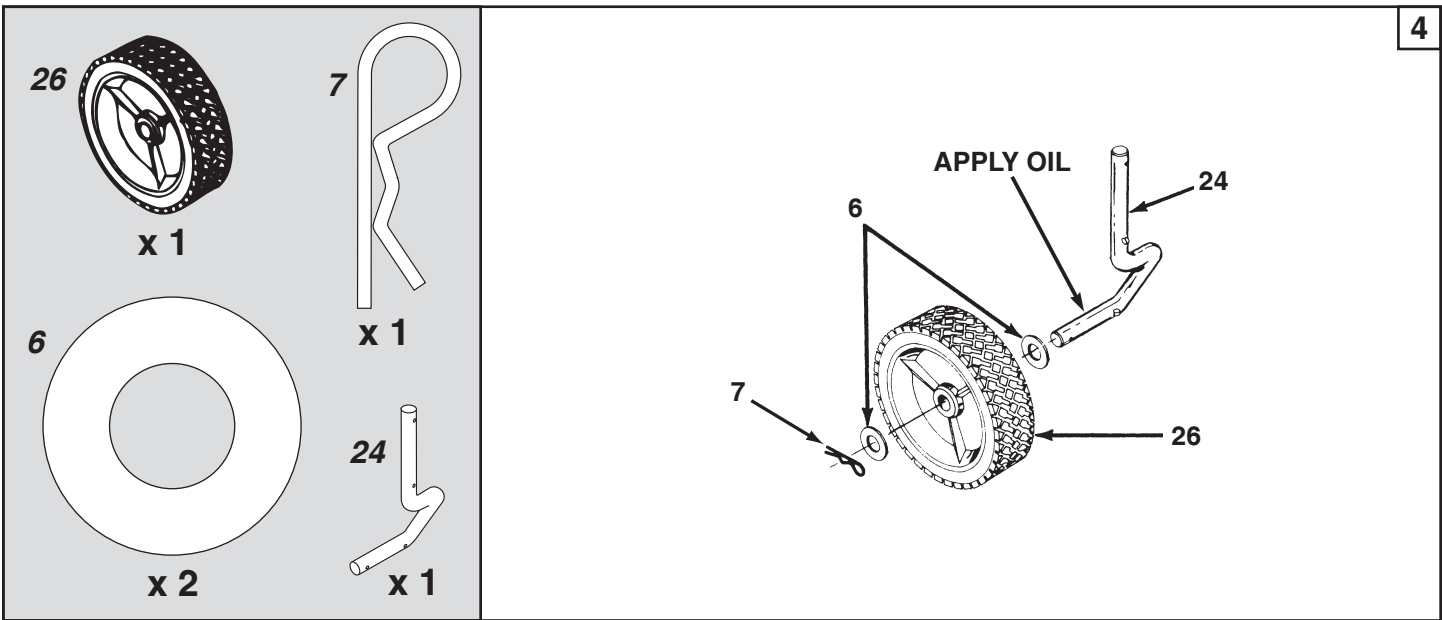
REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
13	24876	2	Mounting Arm	21	24043	1	Lift Handle Arm
14	23668	1	Axle Bushing	22	23673	1	Handle Lock Bracket
15	62600	1	Lift Handle	23	24874	1	Tine Shield
16	23666	2	Angle Mount Bracket	24	44148	1	Axle
17	62601	1	Lift Handle Bracket	25	23676	2	Keeper Plate
18	43943	1	Plastic Grip	26	44213	1	Wheel
19	26168	1	Hitch Plate	27	26044	1	Frame Mount Bracket
20	26043	1	Mounting Shaft				

- Remove any front mounted attachments which may be installed on your tractor.
- Mark all loose parts and save for reassembly.



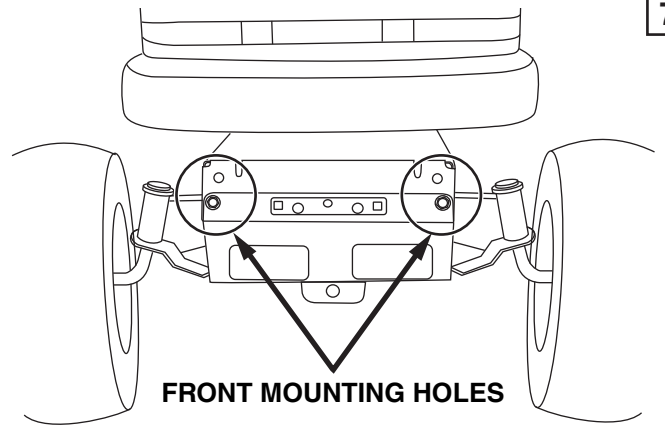
Stop engine and let muffler cool before attempting to install dethatcher hitch brackets.





## ATTACHING DETHATCHER TO TRACTOR

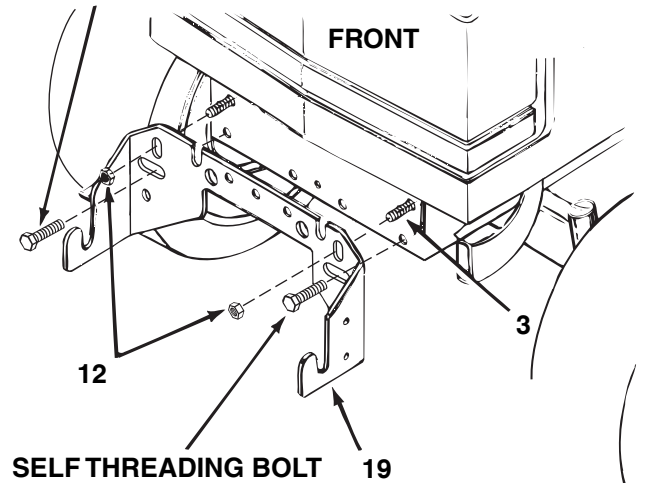
- If the front of your tractor has front mounting holes as shown in figure 7, continue on to figure 8.
- If the front of your tractor **DOES NOT** have front mounting holes, go to figure 10.



7

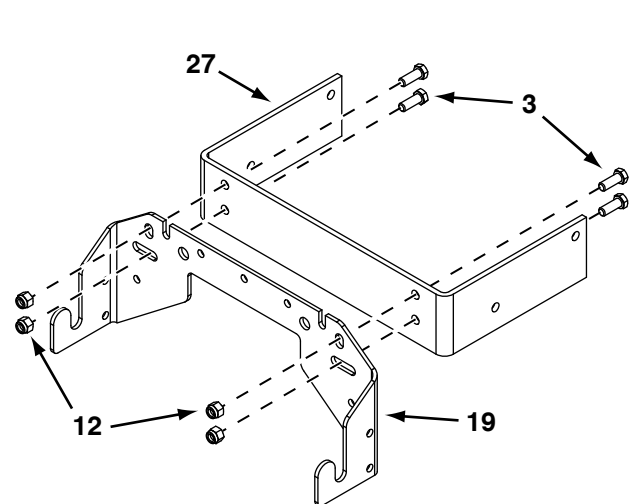
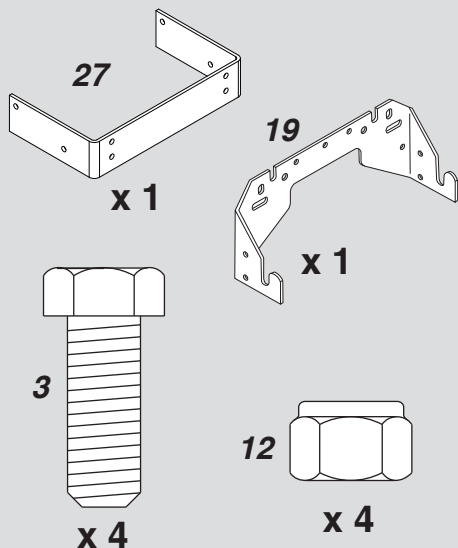
- Remove two self threading bolts (if present) from front cross-member of tractor. Assemble bolts through lower slots in hitch bracket, then reinstall them back into front crossmember. (Make sure notches at top of hitch bracket and crossmember are aligned.)
- From behind tractor's front crossmember, insert two 3/8" x 1" hex bolts (3) through holes in crossmember and through upper slots in hitch bracket. Secure with two 3/8" nylock hex nuts (12).
- **Go to figure 11 on page 7.**

### SELF THREADING BOLT



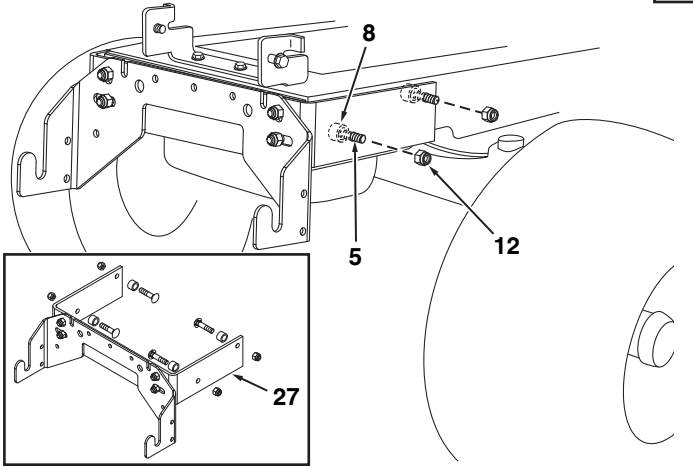
8

**FIGURES 9 AND 10 ARE ONLY FOR TRACTORS WITHOUT FRONT MOUNTING HOLES. FOR ALL OTHER TRACTORS CONTINUE TO FIGURE 11.**

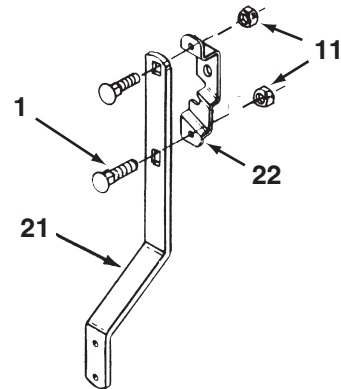
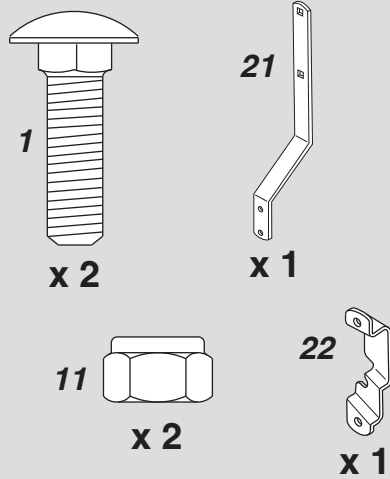


9

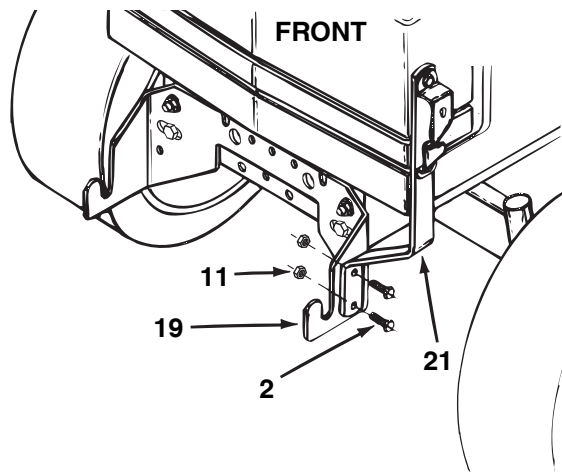
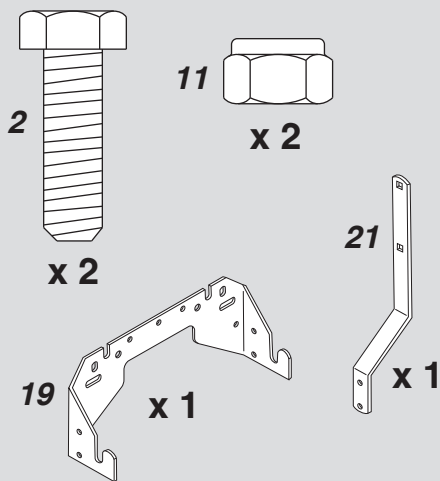
- Assemble the frame mount bracket (27) to the tractor frame using four 3/8" x 1-1/2" carriage bolts (5), spacers (8) and 3/8" nylock nuts (12). The spacers (8) go **between** the tractor frame and the frame mount bracket.



10



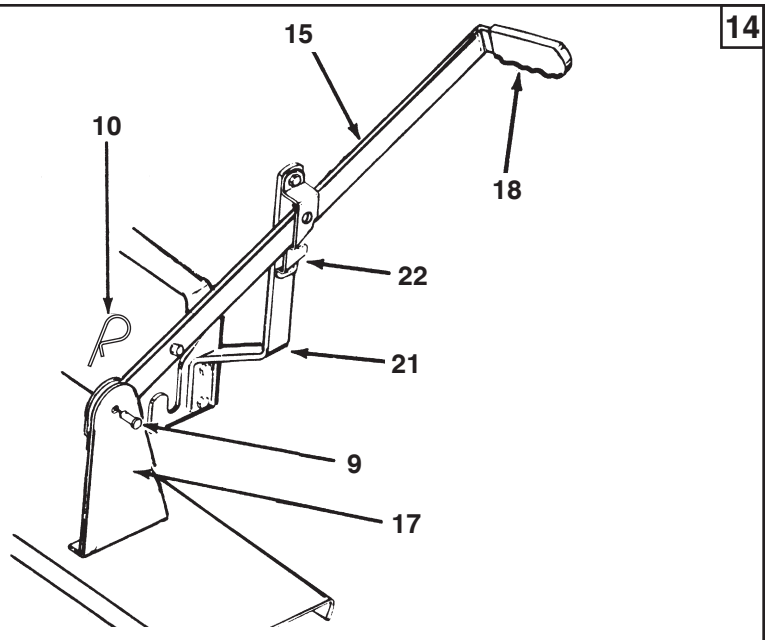
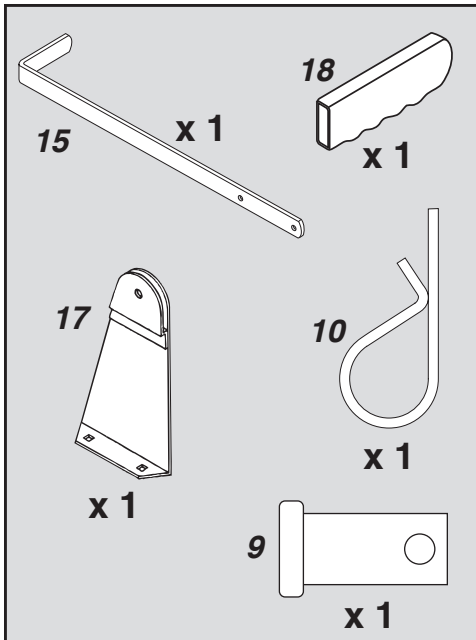
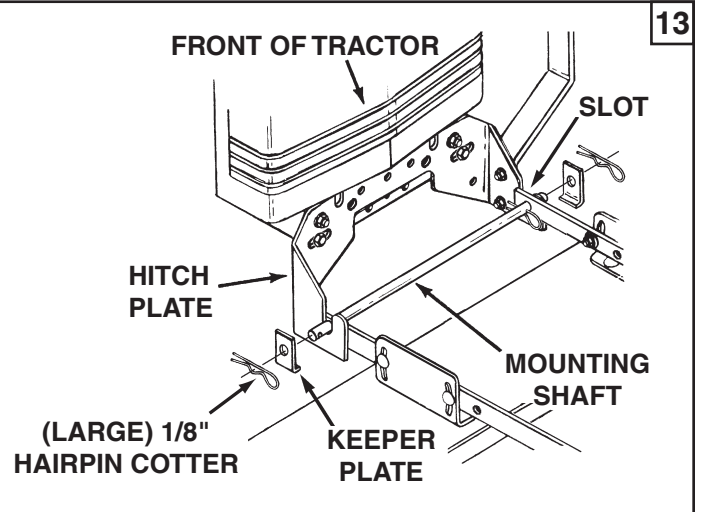
11



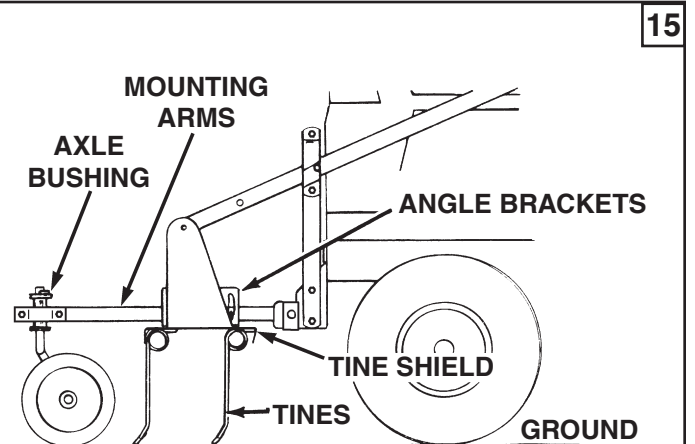
12



- Attach dethatcher to hitch plate by placing mounting shaft into slots at front of hitch plate. Dethatcher mounting arms go to inside of hitch plate. Assemble keeper plates onto ends of mounting shaft and secure with (large) 1/8" hairpin cotters.



- Raise and lock dethatcher in transport position (see operation instructions on pages 9 and 10). Move tractor with front mounted dethatcher onto a level surface, such as a drive or garage floor. Lower the tine dethatcher from transport position to rest on the level surface.
- Adjust tine shield until spring tines come in contact with level surface, keeping front and back tines at the same height. **Tighten** carriage bolts securing mounting arms to angle brackets. See figure 15.
- If you need more adjustment, try moving the axle bushing up or down between the mounting arms. Be sure to retighten the bolts securing the bushing.



## CUSTOMER RESPONSIBILITIES

- Read and follow the maintenance schedule and the maintenance procedures listed in this section.

MAINTENANCE SCHEDULE Fill in dates as you complete regular service.	Service Dates											
	Before each use	After each use	Every season	Before storage								
Check for loose fasteners	X											
Lubrication	X											

## CHECK FOR LOOSE FASTENERS

- Before each use check all nuts and bolts for tightness. Tighten loose fasteners before using.

## LUBRICATION

- Before each use apply a small amount of motor oil between washer and wheel bearing and between washer and top of axle bushing. See figure 16.

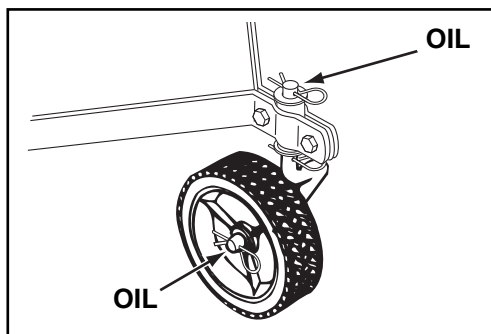


FIGURE 16

## OPERATING TIPS

De-thatching is recommended for early spring, late fall and prior to fertilizing. It is not recommended to de-thatch with every mowing of the lawn. The tine dethatcher can be easily removed for storage (Maintenance/Storage).

- Always start with transmission in first (low) gear and gradually increase speed as conditions permit.
- Do not attempt to use dethatcher in field mowing.
- For best results, use a "criss-cross" pattern on your lawn.
- Vary vehicle speed to determine best speed.
- The front and rear tines should be kept level.
- Stop vehicle and lift dethatcher to transport position when making sharp turns.

## STORAGE

- Always store in a dry area, and coat spring tines with light oil when not in use.

## TO REMOVE DETHATCHER FROM TRACTOR

(Refer to figure 17).

- Lower dethatcher to ground.
- Remove 3/32" (small) hairpin cotter and 3/8" x 3/4" clevis pin from lift handle. Remove handle from handle lift bracket.
- Slide lift handle out between lift handle arm and handle lock bracket.

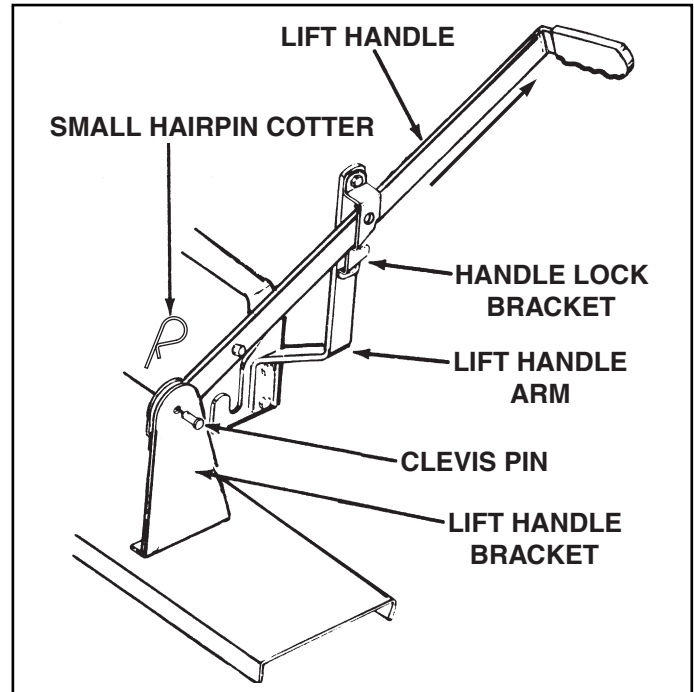


FIGURE 17

(Refer to figure 18).

- Remove the two outside (large) 1/8" hairpin cottes from mounting shaft and slide keeper plates off ends of mounting shaft.
- Lift dethatcher from hitch bracket slots.
- Reassemble hairpin cottes and keeper plates to mounting shaft for storage.

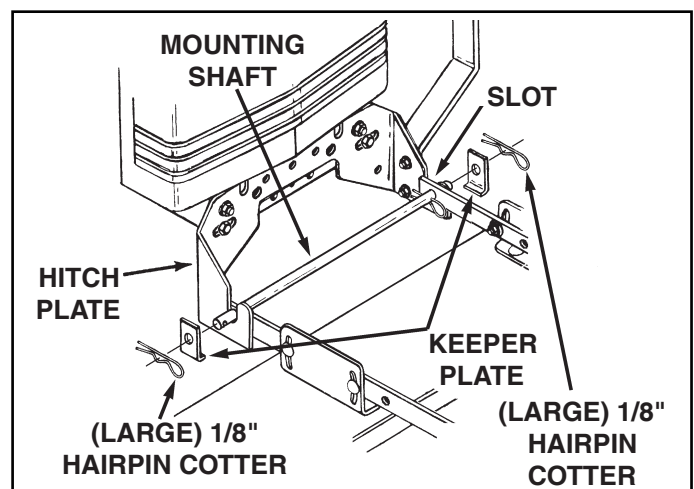
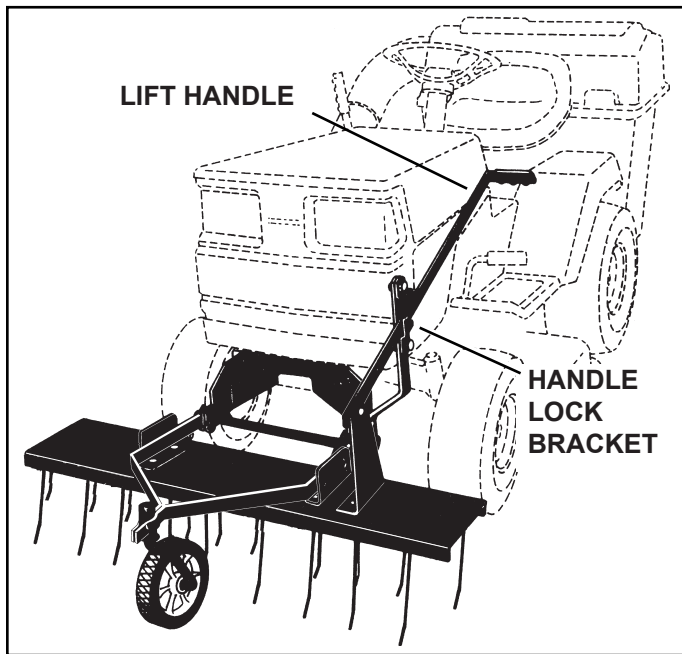


FIGURE 18

## KNOW YOUR DETHATCHER



**LIFT HANDLE**  
Raises and lowers dethatcher.

**HANDLE LOCK BRACKET**  
Locks lift handle in raised transport position.

## Leveling the dethatcher

- Move tractor with front mounted dethatcher onto a level surface, such as a drive or garage floor.
- Lower dethatcher from transport position to rest on level surface.
- Loosen carriage bolts through mounting arms and angle brackets. (Refer to figure 3 on page 5.)
- Adjust tine shield until spring tines come in contact with level surface, keeping front and back tines at same height. Tighten mounting arm carriage bolts on top of dethatcher shield to lock adjustment. See figure 20.
- If you need more adjustment, try moving the axle bushing up or down between the mounting arms. Be sure to retighten the bolts securing the bushing. See figure 20.

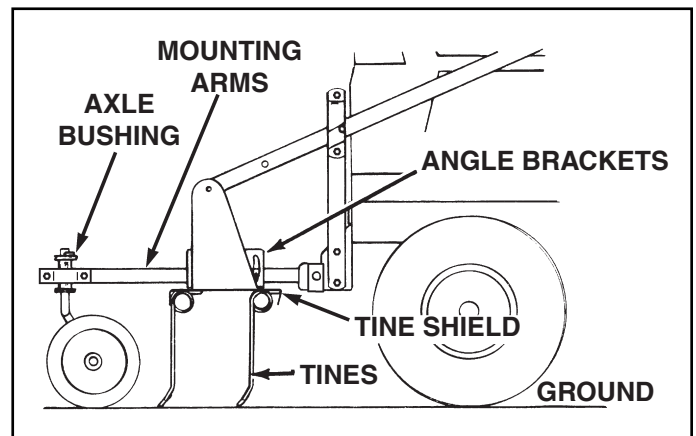


FIGURE 20

## HOW TO USE YOUR DETHATCHER

### To raise dethatcher to transport position:

- Pull lift handle back so that stud in handle is pulled past handle lock bracket. Push down and forward on handle so that stud falls into notch on handle lock bracket to lock in position. See figure 19.

### To lower dethatcher to work position:

- Pull back and up on handle to release stud from notch in handle lock bracket. Lower by holding up on handle and pushing forward, allowing stud to pass through lock bracket. See figure 19.

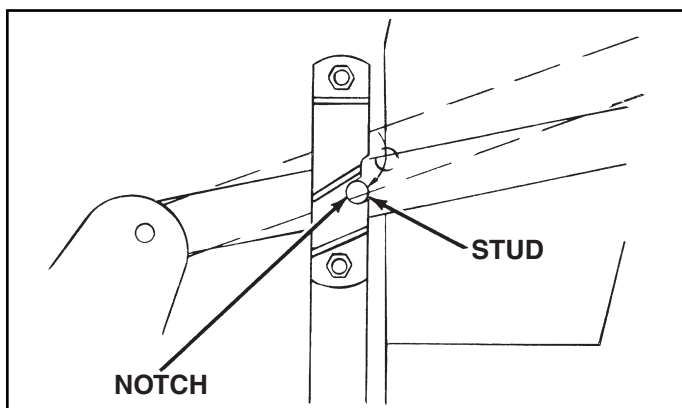


FIGURE 19

### To replace a spring tine:

- Use a screw driver to pry the tabs up off of the spring tine.
- Remove old spring tine from the tray.
- Slide a new spring tine under the locking tabs. Insert a screw driver and bend down the locking tabs until the ends of the tabs are bent down even with the surface of the tray. See figure 21.

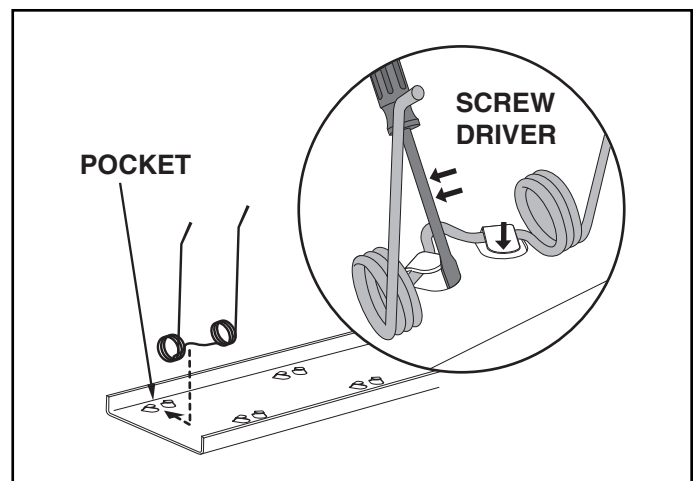
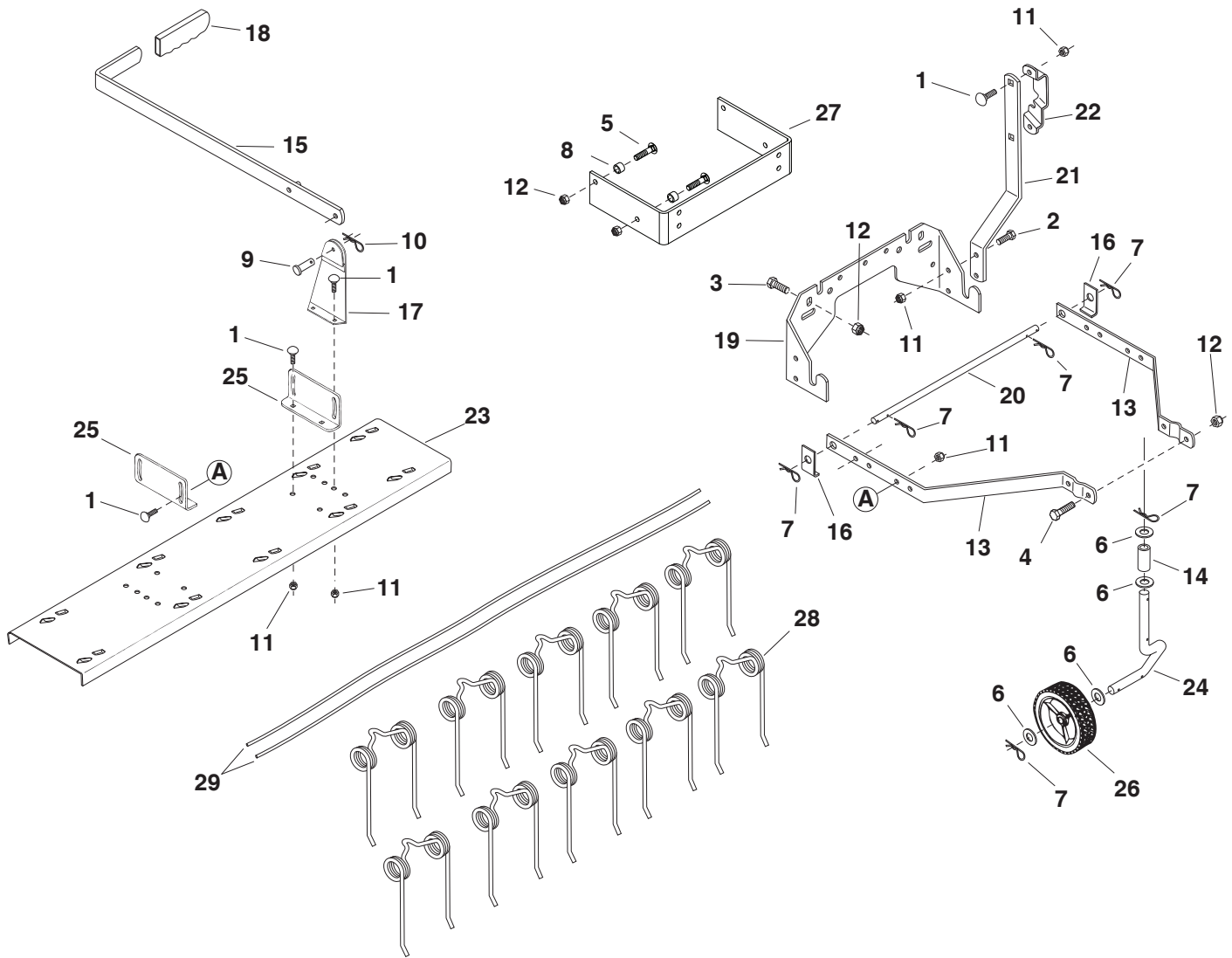


FIGURE 21

# 40" TINE DETHATCHER MODEL 45-0438



REF	PART NO.	QTY	DESCRIPTION	REF	PART NO.	QTY	DESCRIPTION
1	44326	12	Carriage Bolt, 5/16-18 x 1"	16	23666	2	Angle Mount Bracket
2	43063	2	Hex Bolt, 5/16-18 x 1"	17	62601	1	Lift Handle Bracket
3	43001	4	Hex Bolt, 3/8-16 x 1"	18	43943	1	Plastic Grip
4	43087	2	Hex Bolt, 3/8-16 x 1-1/4"	19	26168	1	Hitch Plate
5	43069	4	Carriage Bolt, 3/8-16 x 1-1/2"	20	26043	1	Mounting Shaft
6	R19212113	4	Flat Washer, 5/8"	21	24043	1	Lift Handle Arm
7	43343	6	Hairpin Cotter, 1/8"	22	23673	1	Handle Lock Bracket
8	46838	4	Spacer, .8" x 1" x .5"	23	24874	1	Tine Shield
9	44044	1	Clevis Pin, 3/8" x 3/4"	24	44148	1	Axle
10	43055	1	Hairpin Cotter, 3/32"	25	23676	2	Keeper Plate
11	47810	14	Nylock Nut, 5/16-18	26	44213	1	Wheel
12	HA21362	10	Nylock Nut, 3/8-16	27	26044	1	Frame Mount Bracket
13	24876	2	Mounting Arm	28	43783	10	Spring Tine
14	23668	1	Axle Bushing	29	47633	2	Wire, Spring Alignment
15	62600	1	Lift Handle		40506	1	Owners Manual

***SpeedPart*** *the fastest way to purchase parts* [www.speedepart.com](http://www.speedepart.com)

**REPAIR PARTS**

Agri-Fab, Inc.  
809 South Hamilton  
Sullivan, IL. 61951  
217-728-8388  
[www.agri-fab.com](http://www.agri-fab.com)