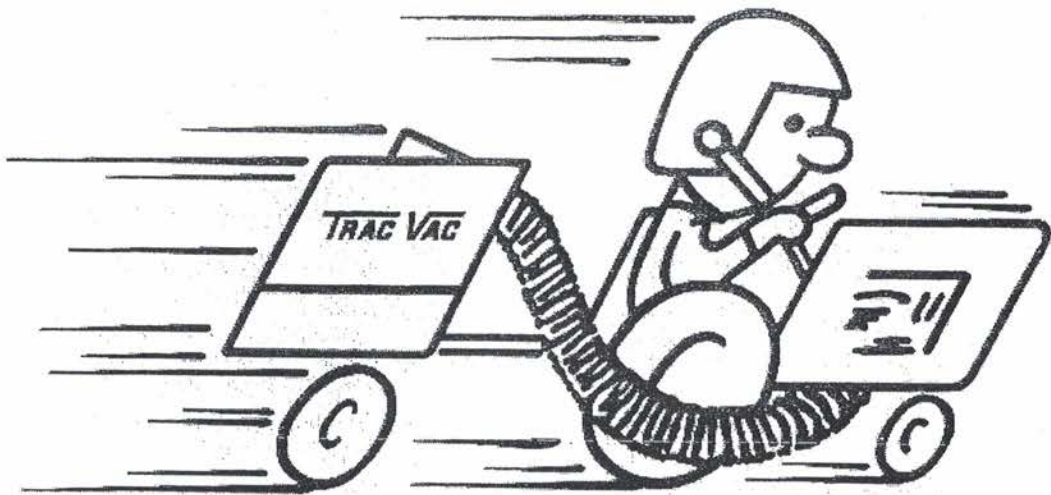


TRAC VAC

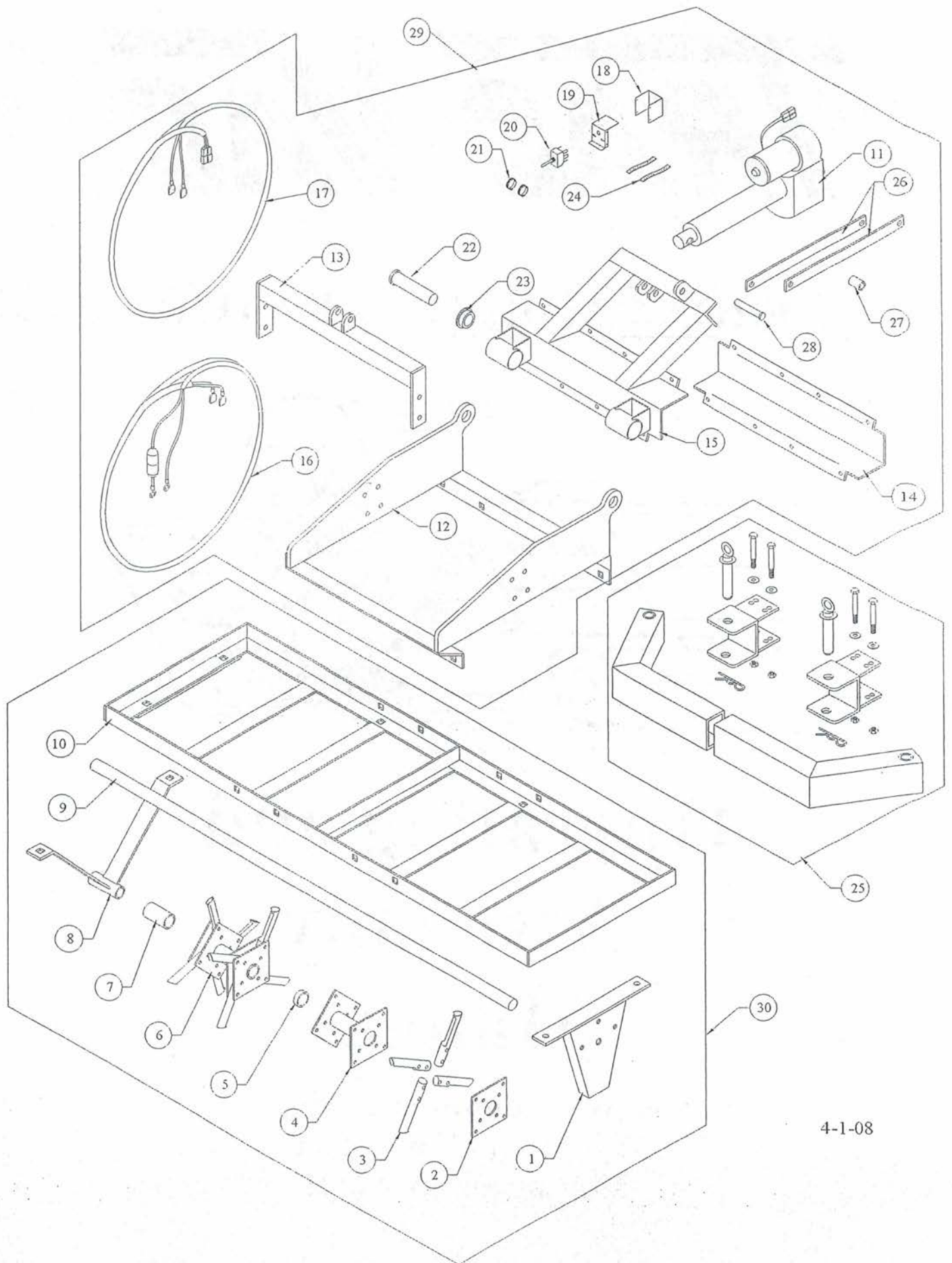
FRONT MOUNT AERATOR



Operating and Assembly Manual

**Midwest Equipment Mfg.
5225 Serum Plant Road
Thorntown, IN 46071**

12/6/2017



4-1-08

FM 352 PARTS BREAKDOWN

<u>KEY</u>	<u>PART NO</u>	<u>DESCRIPTION</u>
1	35215	Side Plate
2	35230	Tine Plate
3	35226	Tine
4	35225	Tine Drum
5	35228	Bushing
6	35223	Tine Assembly (Includes 1-5)
7	35233	Tine Drum Spacer
8	35814	Tine Shaft Support (358 Only)
9	35232	Tine Shaft (352)
	35812	Tine Shaft (358)
10	35210	Frame, 352
	35810	Frame, 358
11	35868	Linear Actuator
12	35862	Frame Mount, FM Aerator
13	35863	Cylinder Mount, Top Mount
14	35876	Half Channel, Lower
15	35861	Half Bracket, Upper
16	35858	Wiring Harness, Battery Side
17	35859	Wiring Harness, Actuator Side
18	35855	Switch Cover Plate
19	35854	Switch Mount Plate
20	H1006	Switch
21	35857	Band Clamp Switch Mount
22	28801	Clevis Pin, 1" X 4"
23	65032	Nylon Bushing
24	35860	Self Stick Velcro, ½" X 6"
25	359**	Hitch Kit (Tractor Specific)
26	35872A	Stabilizer Bar (2 required)
27	35872B	Spacer
28	5001322	Clevis Pin (1/2" x 2 ¾")
29	352-4	Front Mount Assembly
30	352, 358	Aerator Assembly

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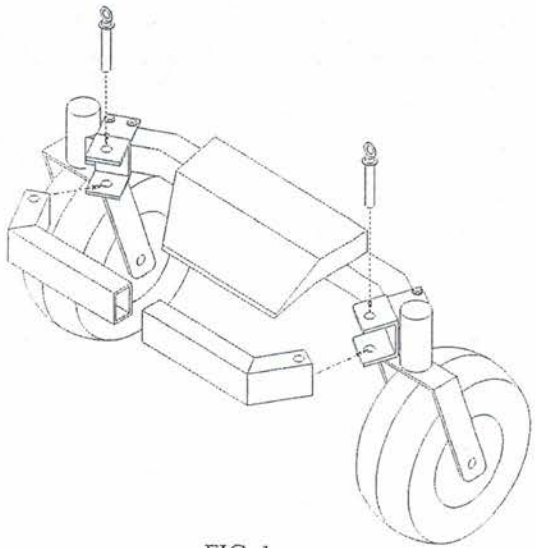


FIG. 1

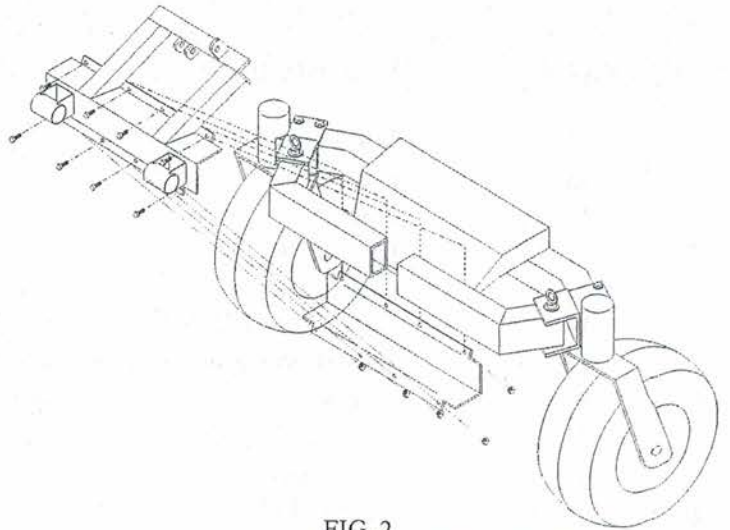


FIG. 2

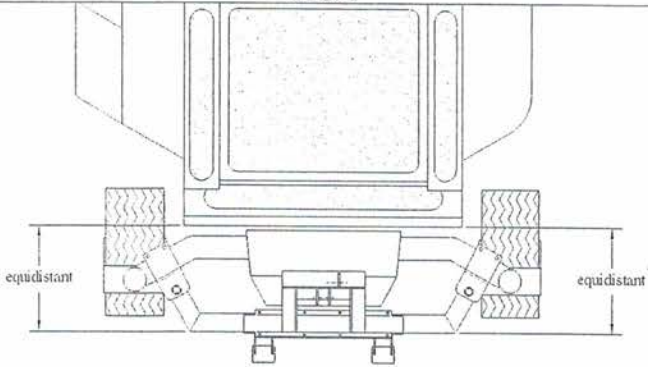


FIG. 3

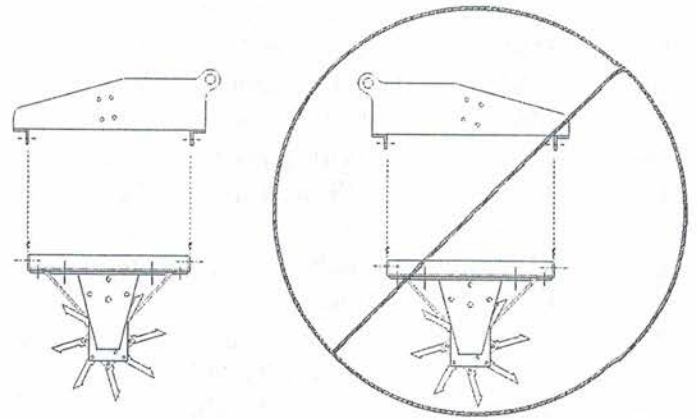


FIG. 4

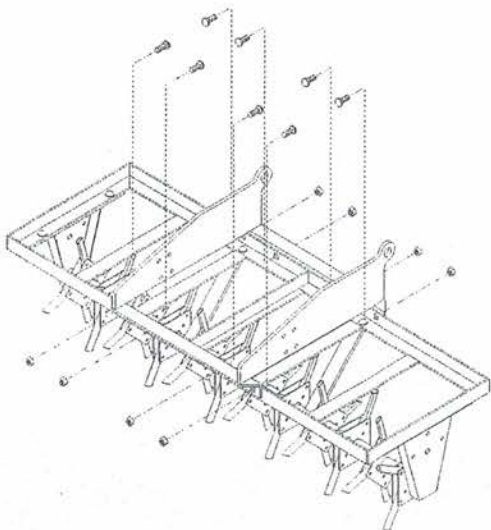


FIG. 5

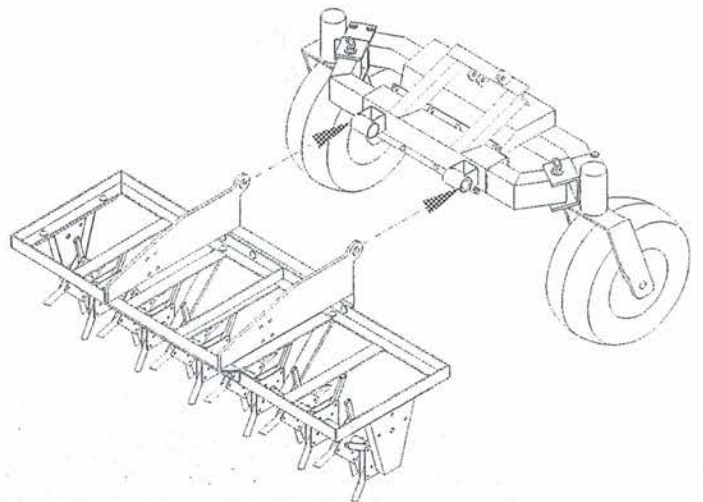


FIG. 6

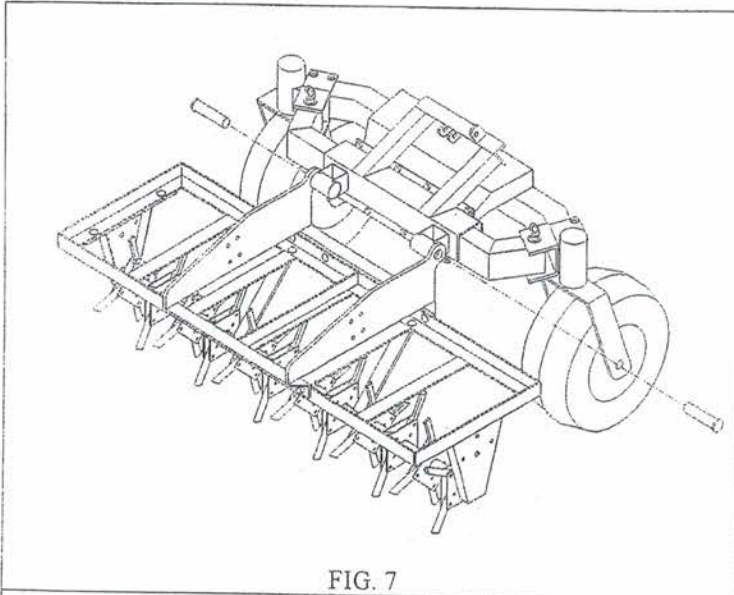


FIG. 7

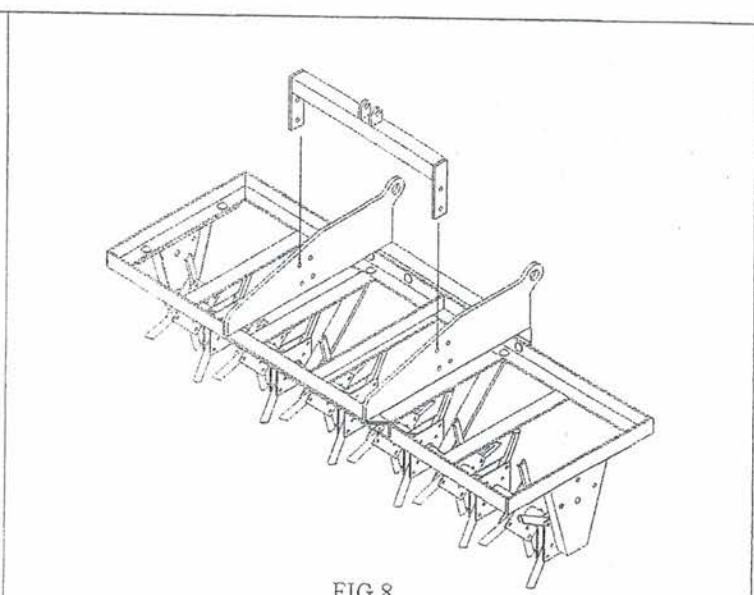


FIG. 8

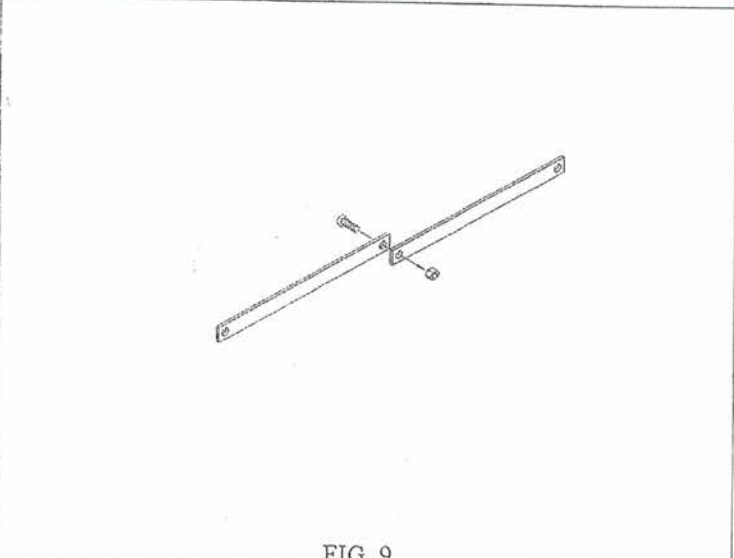


FIG. 9

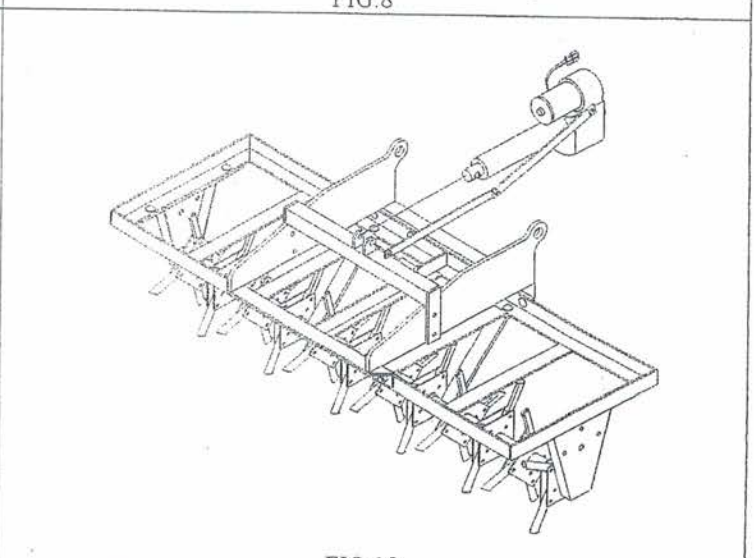


FIG. 10

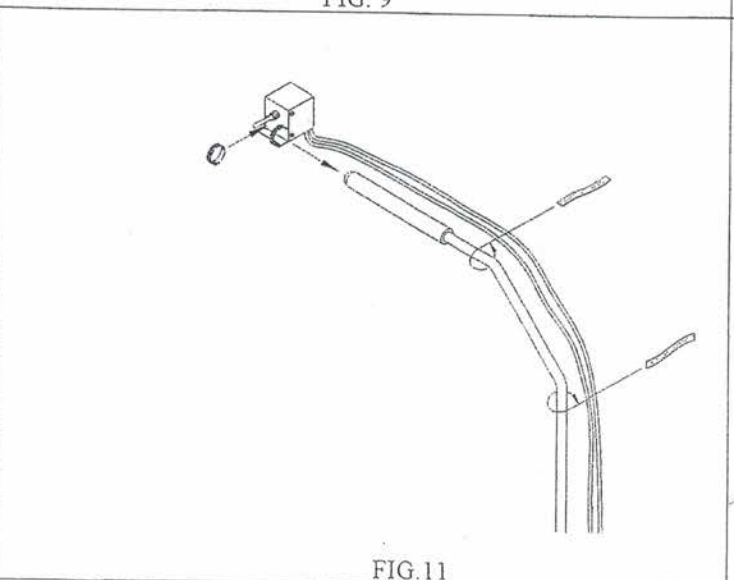


FIG. 11

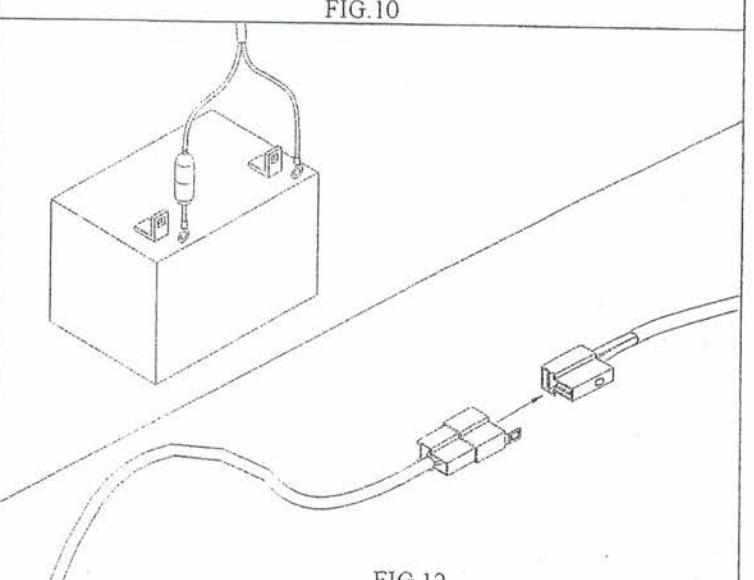


FIG. 12

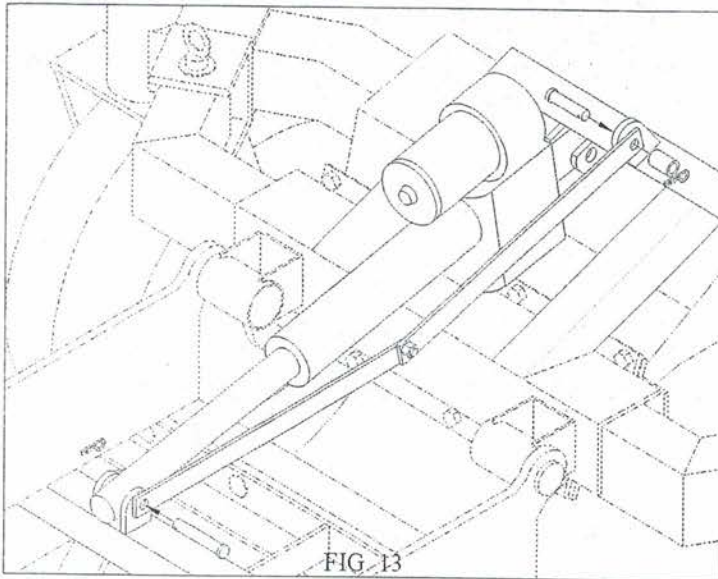


FIG. 13

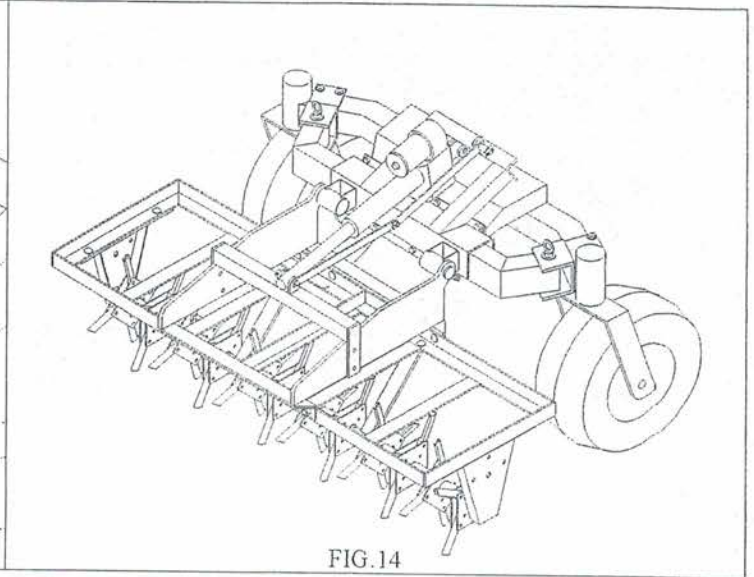


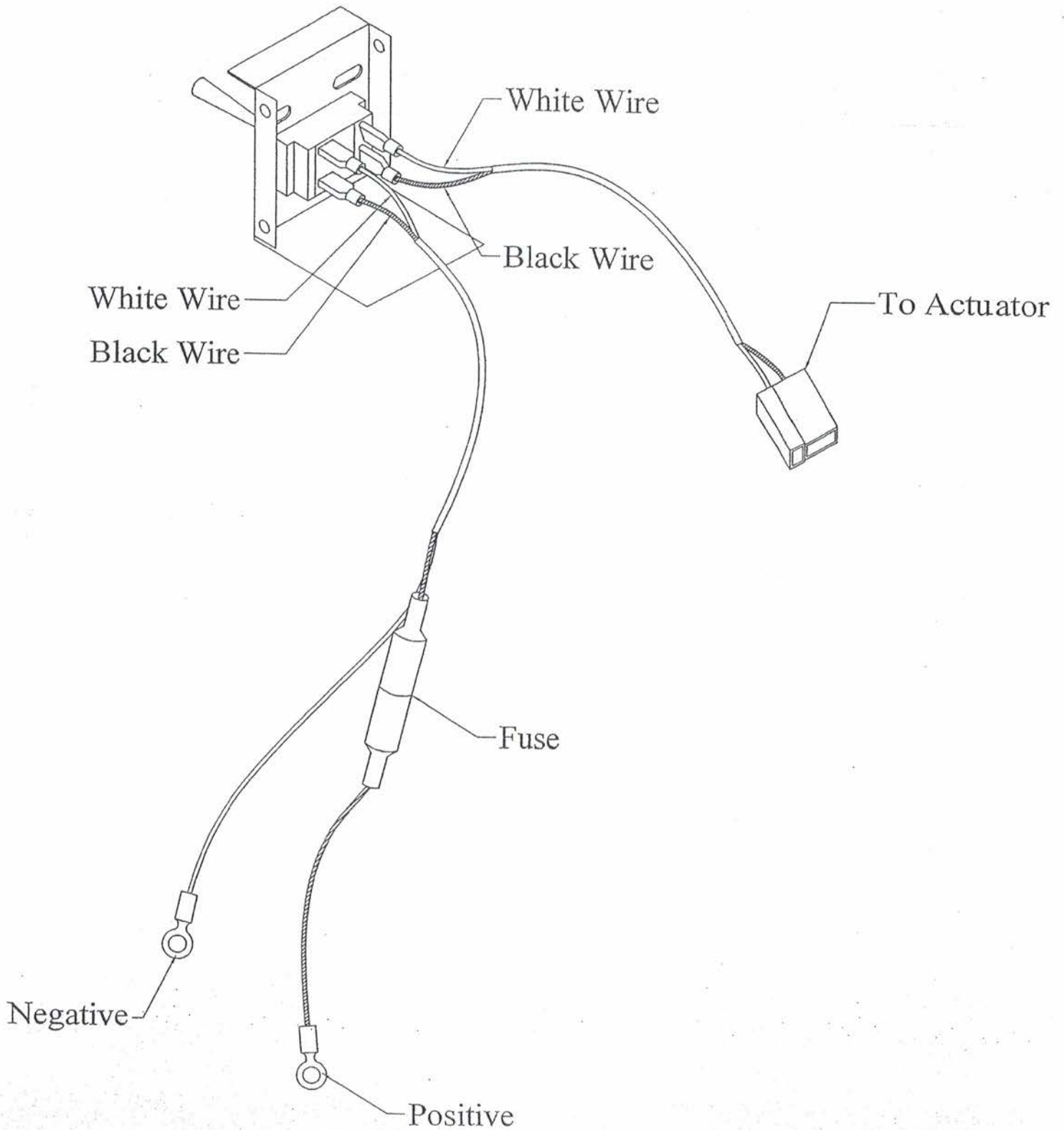
FIG. 14

FM AERATOR INSTALLATION INSTRUCTIONS

1. Install tractor specific mountings according to instructions provided with kit. Do not tighten hardware for mounts, leave them loose.
2. Slip each crosstube into caster arm mounts and pin in place with $\frac{3}{4}$ " pin and hairclip provided. **FIG. 1**
3. Orient half brackets around crosstubes as illustrated and bolt together two halves using eight $\frac{5}{16}$ " x 1" bolts and whizlock nuts. Once again, do not tighten only snug bolts at this time. **FIG. 2**
4. Square up the aerator to the first crossmember of the footpan on tractor. Do not try and use the casters to square as most of the commercial midmount mowers have two different length caster arms. Once assembly is squared, tighten hardware to the crosstube mounts, but leave the bolts in the clamp halves loose. **FIG. 3**
5. Remove aerator from its box and attach main pivot frame to it using eight $\frac{1}{2}$ " x $1\frac{1}{4}$ " carriage bolts and whizlock nuts provided. Orient round head to the inside of the aerator frame. Also note orientation of tines to pivot frame (tines furthest away from mount point of assembly should have the cutouts to the bottom). These eight bolts can be tightened. **FIG. 4 & 5**
6. Attach aerator to tractor mount by slipping arms of main pivot frame around the receiver tubes on half bracket and secure with 1" x 4" clevis pins and $\frac{1}{8}$ " x $1\frac{3}{4}$ " cotter pins. **FIG. 6 & 7**
7. Slip cylinder mount (Key 13) over main pivot frame (Key 12) that is bolted to the aerator frame. Align front holes in arms of main pivot with holes in arms of cylinder mount and secure with $\frac{3}{8}$ " x 1" bolts and whizlock nuts. Tighten these bolts also. **FIG. 8**
8. Center aerator frame on drive-tires of mower. The entire assembly should still be able to slip on the crosstubes because clamp halves are not tightened yet. Bolt together stabilizer bars (Key 26) with $\frac{1}{2}$ " x 1" HHC & lock nut provided. Do not tighten all the way. These parts must be able to rotate. **FIG. 9** Pin cylinder and stabilizer onto lower cylinder mount (on aerator) with $\frac{1}{2}$ " x $2\frac{3}{4}$ " clevis pin and hairpin cotter provided. (Note: the extension shaft of the cylinder is the end needed to mount to location.) **FIG. 10**
9. Band clamp switch plate to control arm of tractor on a comfortable operating position. The wiring harness must be run at this time. Using the velcro self stick strips, secure lines down the control arm. When you've reached the bottom of the control arm, choose and appropriate route to the battery and to the cylinder on the aerator and run each line to its destination. **FIG. 11**
10. Plug cylinder line into cylinder and attach posts to nuts on battery, black to positive, white to negative. **FIG. 12**
11. Pin tractor side of cylinder to half clamp mount using the $\frac{1}{2}$ " x 2" clevis pin and hairclip cotter pin just removed. (Note: cylinder will have to be extended enough to reach this mount point). Slide $\frac{1}{2}$ " x 2" clevis pin thru tab and opposite end of stabilizer. Slide spacer (Key 27) over end of clevis pin and secure with hairpin cotter provided. **FIG. 13**
12. Test operation of unit.

Switch Instruction

Part No. H1006



OPERATION OF FM AERATOR

- Your front mount aerator is designed to be used for shallow core aeration.
- Ground speed of 2-3 MPH recommended.
- Turning the mower with the tines penetrating the ground could cause damage to lawn, unit, mower and/or cause personal injury.
- Running in reverse with the tines penetrating the ground will cause damage to the lawn.
- The aerator is designed to use the weight of the mower to penetrate the ground; cinder blocks may be used for weight if extra weight is needed.
- Flip aerator into transport position to trailer.
- To flip aerator into transport position first relieve the load from the cylinder (take all pressure off of the pinpoints so pin can be removed); remove the ½" x 2" clevis pin from the cylinder mount on the tractor side. For transporting run the cylinder in to the full retract position. Rotate aerator over and pin into transport position with the ½" x 2" clevis pin just removed from cylinder mount.
- To bring back to operating position, remove the ½" x 2" clevis pin securing the aerator in the transport position and rotate the unit back around to the operating position. The cylinder will have to be run back out to align the mounting holes on cylinder to mounting holes on half bracket and pin cylinder back to lower mount on aerator.

TRAC VAC WARRANTY POLICY

Midwest Equipment Mfg. will repair or replace, free of charge, any part, or parts that are defective in material or workmanship or both for a period of one year residential use, and 90 day's for commercial and rental use. The purchaser will pay transportation charges on parts submitted for replacement under warranty. For warranty service, contact your local dealer from whom the unit was purchased. There are no other express or implied warranties. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

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