

Operator's Manual

Congratulations:

You have just purchased one of the most versatile machines on the market. With reasonable care and service it should give long and satisfactory service.

Any mechanical device can be potentially dangerous if not used properly. No accident prevention program can be successful without the wholehearted cooperation of the person who is directly responsible for the operation of the equipment. Study this operator's manual to learn the operation of the controls and observe all safety precautions. Only use this machine for the purpose it is intended. By following these instructions and safety precautions you should enjoy many hours of trouble-free operation.

Snapper Mower

**MODELS V-18 – V-18S – SV-18
V-21 – V-21S – V-21-4 – SV-21**

SNAPPER MOWER GUARANTEE

All Snapper Mowers are guaranteed for normal use to the original purchaser against defective workmanship and material. This guarantee extends for one year from purchase date on mowers not used commercially, and for one month on mowers that are used commercially.

We will replace or repair without charge any part or parts returned to us during the guarantee period, with transportation charges prepaid, that our inspection shows to have been defective in workmanship or material when shipped from the factory.

This guarantee is void if the parts in question have been altered or damaged by accident, abuse, neglect, improper adjustment, lack of lubrication or normal wear. This guarantee does not cover engines, tires, tubes, batteries and belts which are guaranteed separately by their manufacturers.

No other guarantee, expressed or implied, is made by the Company which retains the right to change specifications without notice or obligation.

WARNING: Use of replacement parts other than genuine Snapper parts may impair the safety of your mower and may void our warranty.

IMPORTANT: This guarantee is void unless the guarantee card attached is filled out completely and mailed to the Factory within 10 days of the date mower was purchased.

IT IS THE POLICY OF McDONOUGH POWER EQUIPMENT, INC. TO IMPROVE ITS PRODUCTS WHENEVER IT IS POSSIBLE AND PRACTICAL TO DO SO. WE RESERVE THE RIGHT TO MAKE CHANGES OR ADD IMPROVEMENTS AT ANY TIME WITHOUT INCURRING ANY OBLIGATION TO MAKE SUCH CHANGES ON PRODUCTS MANUFACTURED PREVIOUSLY.

McDONOUGH POWER EQUIPMENT INC.

McDONOUGH, GA., U. S. A., 30253

Assembly, Operation and Service Instructions

for

V-18 – V-18S – SV-18 V-21 – V-21S – V-21-4 – SV-21 **SNAPPER MOWER**

INSTALLATION OF HANDLES:

1. Pull up and back on 3-7331 lower handle pivoting till it is in place. Tighten the two 5-0348 wing nuts. The upper handle should now be fastened into place using two $\frac{1}{4}$ -28 x $1\frac{1}{2}$ curved head bolts, two $\frac{1}{4}$ int. tooth lock washers and two $\frac{1}{4}$ -28 hex nuts. The throttle control mounting hole should be on the left side. The throttle control is now mounted using one $\frac{1}{4}$ -28 x $1\frac{1}{2}$ curved head bolt, one $\frac{1}{4}$ int. tooth lock washer and one $\frac{1}{4}$ -28 hex nut. Clip conduit to the handle using the two slip-on clips. Handle height can be adjusted at the slots in the rear wheel brackets.

INSTALLATION OF GRASS CATCHER:

1. Disconnect spark plug wire.
2. Place front bag support (roll bar) with off-set side on right hand side into slots in rear wheel brackets. Top part will lay down close to engine. Raise up allowing ends to drop through slots into holes below.
3. Place plastic bag chute onto deck with stud nearest to "CAUTION" note passing through hole in chute. Make sure captive carriage bolt drops into slot in the bracket next to the right front wheel. Place half ring clamp with slotted end to rear over the front stud. Fasten with three $5/16$ " wing nuts and tighten securely.
4. Slip the ends of the 3-1127 front wire through the front flap of the bag and hook over the roll bar as shown in figure 3. Slip the ends of the 3-1128 rear wire in the rear flap and hook over the top section of the lower handle pivoting. If top of bag is not taut, remove and shift front and rear wires to inboard flaps and replace. Now slip inlet neck of the bag over bag chute as far as possible. Do not allow side of bag to block discharge opening of chute. Stop engine and empty bag of grass clippings at rear opening before bag is over filled or bag chute will become clogged. **NEVER ATTEMPT TO CLEAR BAG CHUTE IF CLOGGED UNLESS ENGINE IS STOPPED AND SPARK PLUG WIRE IS DISCONNECTED.**

SAFETY PRECAUTIONS

Remember, a careful operator always is the best insurance against an accident.

Study this Operator's Manual, become familiar with the controls and how the mower operates.

Learn to stop the mower quickly.

Never tamper with the safety interlock switch mounted near the oil fill plug which is provided to prevent the engine from running unless either the side chute or grass bag chute is in place.

Before starting clear area of debris.

Never attempt to adjust cutting height unless engine is stopped.

Always stop engine before opening or removing grass bag.

Operate the engine at the lowest speed that will cut satisfactorily.

Stop and check for breakage and repair any damage after striking foreign objects.

Give complete and undivided attention to the job at hand.

Never allow children to operate the mower.

Instruct individuals to stay away from the mower while it is in operation.

Set mower at highest cutting height when mowing in rough ground or tall weeds.

Use caution when operating the mower on uneven terrain. Maintain good footing.

Mow slopes from side to side, rather than up and down.

When mowing, never discharge clippings toward windows and doorways.

Mow only in daylight or in good artificial light.

Do not operate mower with guards removed.

Stop the engine whenever you leave the mower even for a moment.

Do not crank or operate engine where exhaust fumes can collect.

Fill gas tank outdoors, but never while engine is running or while engine is hot. Avoid spilling. Always use an approved gasoline can.

WITH THESE SAFETY PRECAUTIONS IN MIND, WE CAN
NOW PROCEED TO ASSEMBLY OF THE MOWER.

INSTALLATION OF SIDE CHUTE:

1. Disconnect spark plug wire.
2. Remove grass catcher in reverse sequence of step 4.
3. Grip metal side chute with both hands and slip large slotted hole over mounting key on the deck. Slightly squeeze together and slip captive carriage bolt into slot in bracket at right front wheel while holding the slotted hole on the deck key.
4. Use one of the half clamps to hold the top down at the front stud. Use the extra half round clamp that was not used with the grass catcher to go over the rear stud and into the small slot in the side chute. Fasten with three 5/16" wing nuts and tighten securely.

REFER TO PICTURES BELOW FOR PROPER INSTALLATION OF GRASS BAG AND SIDE CHUTE

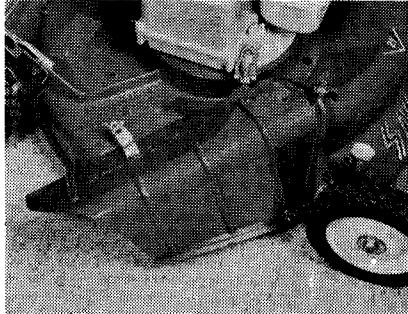


FIGURE 1

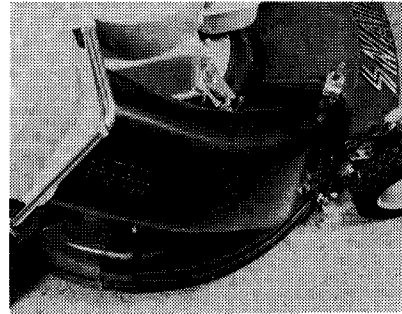


FIGURE 2

ENGINE CARE AND OPERATION:

1. **FILL ENGINE WITH OIL BEFORE CRANKING MOWER.**
2. Refer to engine manual furnished with this packet for instructions to oil, fuel and maintain the engine properly.
3. **WASH OUT CLEANER ELEMENT IN MINERAL SPIRITS OR GASOLINE AND RE-OIL WITH ONE TABLESPOON OF ENGINE OIL EVERY THREE HOURS OF USE OR AFTER EACH THIRD MOWING.**
4. **NEVER PLACE MOWER ON ITS LEFT HAND SIDE WITH SPARK PLUG POINTED DOWNWARD AS THIS WILL ALLOW THE ENGINE OIL TO RUN OUT THROUGH THE VALVE TAPPET VENT.** If left too long, oil could also leak past the piston into the cylinder.

LUBRICATION:

1. Change oil as specified in the engine manual.
2. Occasionally put a few drops of oil on all movable parts.
3. The ball bearing wheels have been factory greased and should not be greased unless removed.

ADJUSTING CUTTING HEIGHT:

1. This mower has solid through axles front and rear to give superior strength and wheel alignment. Thus with the through axle design, it is necessary to walk the height latches one notch at a time, side to side when it is desired to change the cutting height. **NEVER UNLATCH BOTH SIDES AT THE SAME TIME.**
2. When changing cutting height, make sure that all latches are in matching slots. This results in the cutting blade being slightly higher in the rear to eliminate drag.

OPERATING TIPS:

1. **SNAPPER V-18 and V-21** will cut either forward or backward. However, due to the set of the blade, slightly less power is required for forward cutting than for reverse cutting.
2. To turn at the end of a row, push down on the handle bar to raise the front wheels off the lawn. This permits turning on the back wheels only and saves scuffing the lawn.
3. For cutting on a slope, it is usually best to move back and forth — not up and down hill.
4. When vacuuming a paved walk or driveway, first lower deck to lowest position. It is then best to run V-18 or V-21 **forward** along the extreme left hand side of the area to be cleaned. This will pick up some litter and windrow some litter to the right of the first swath. Then pull V-18 or V-21 **backward** over the windrowed litter. It will pick up most of it on this pass. Repeat above until walkway or driveway is cleaned.
5. To prolong the life and usefulness of your mower, it is a good practice to wash out all the grass that may be sticking to the underside of the deck.

Item	Part No.	Description	Qty.
1.	3-1128	Rear Wire	1
2.	1-1098	Grass Bag	1
3.	3-1127	Front Wire	1
4.	5-0293	Bag Chute Assembly, V-21	1
4.	5-0346	Bag Chute Assembly, V-18	1
4.	5-0609	Bag Chute Assembly, V-18S	1
5.	9-0375	5/16-18 Wing Nut	3
6.	3-1124	Side Bracket	1
7.	9-0361	5/16-18 x 5/8 SEMS	5
8.	5-0302	Side Chute Assembly, V-21	1
8.	5-0600	Side Chute Assembly, V-18	1
8.	5-0610	Side Chute Assembly, V-18S	1
9.	1-1079	Spring Washer	4
10.	9-0388	5/16-18 Dot "T" Nut	2
11.	1-1791	Push Nut	4
12.	9-0377	7/16-20 Jam "L" Nut	4
13.	3-1121	Hub Cap	8
14.	1-1083	Front Wheels — V-21, 7 x 1.50	2
14.	1-1083	Front Wheels — V-18, 7 x 1.50	2
15.	3-1017	Wheel Arm, Front R. H., Rear L. H.	2
16.	1-0008	Key	1
	6-0131	Shock Clutch Kit	1
17.	2-1018	Shock Clutch	1
18.	3-1122	Clutch Washer	2
19.	1-1102	Fiber Washer	2
20.	9-0167	Cap Screw, 3/8-24 x 2, Grade 5	1
21.	1-1132	Washer	2
22.	1-1791	Fiber Washer	1

Item	Part No.	Description	Qty.
23.	1-8065	Cutter Blade, V-21	1
23.	1-8075	Cutter Blade, V-18	1
24.	3-7300	Front Bracket	2
25.	2-1119	Front and Rear Axle, V-21	2
25.	1-1749	Front Axle, V-18	1
25.	1-1766	Rear Axle, V-18	1
26.	3-1123	Clamp	2
27.	3-1016	Wheel Arm, Front L. H., Rear R. H.	2
28.	3-1144	Ground Strap, V-21S and V-18S	1
28.	3-1181	Ground Strap, V-21-4	1
28.	3-1029	Ground Strap, V-21 and V-18	1
29.	1-0975	Interlock	1
30.	9-0368	5/16-18 v 3/4 HH. WFST	2
31.	1-0952	Insulator	1
32.	9-0385	Tab Washer	1
33.	9-0379	10-18 x 3/4 Screw	1
34.	9-0363	10-24 x 5/8 SEMS	1
35.	3-7277	Rear Bracket, L. H.	1
36.	1-1078	Shoulder Screw	4
37.	1-0921	Height Latch	4
38.	1-1093	Grip	4
39.	9-0242	5/6-24 x 1 1/2 Cap Screw, Gr. 5	1
40.	9-0188	5/16 SAE WASHER	3
41.	9-0324	3/8-16 x St. Screw	2
42.	5-9517	Deck Assembly, V-21	1
42.	5-9520	Deck Assembly, V-18	1
43.	3-7275	Rear Bracket, R. H.	1
44.	9-0227	5/16-24 x 5/8 HHCS	2
45.	3-7305	Roll Bar, V-21	1
45.	1-8074	Roll Bar, V-18	1
46.	1-1082	Rear Wheels, — V-21, 8 x 1.75	2
46.	1-1083	Rear Wheels — V-18, 7 x 1.50	2
47.	9-0189	5/16 Int. Tooth Lock Washer	2
48.	1-0974	5/16-24 Weld Nut	2
49.	9-0222	5/16-24 Hex Lock Nut	1
50.	3-7333	Lower Handle Stat., V-21	2
50.	3-7332	Lower Handle Stat., V-18	2
51.	9-0095	1/4-28 Hex Nut	3
52.	3-7331	Lower Handle Pivoting	1
53.	1-0098	Clip	2
54.	1-1028	1/4-28 x 1 1/2 Curved Head Bolt	3
55.	1-8067	Throttle Control	1
56.	5-0601	Upper Handle	1
57.	1-1103	Spacer	2
58.	9-0053	1/4 Int. Tooth Lock Washer	3
59.	1-1125	Bearing	8
60.	5-0308	Interlock Ass'y., V-21 — SV-21 — V-18 — SV-18	1
60.	5-0320	Interlock Ass'y., V-21S and V-18S	1
60.	5-0342	Interlock Ass'y., V-21-4	1
61.	5-0348	Wing Nut	2
62.	1-1780	Nylon Ring	2
63.	9-0463	1/4-28 x 1 3/4 Curved Head Bolt	1

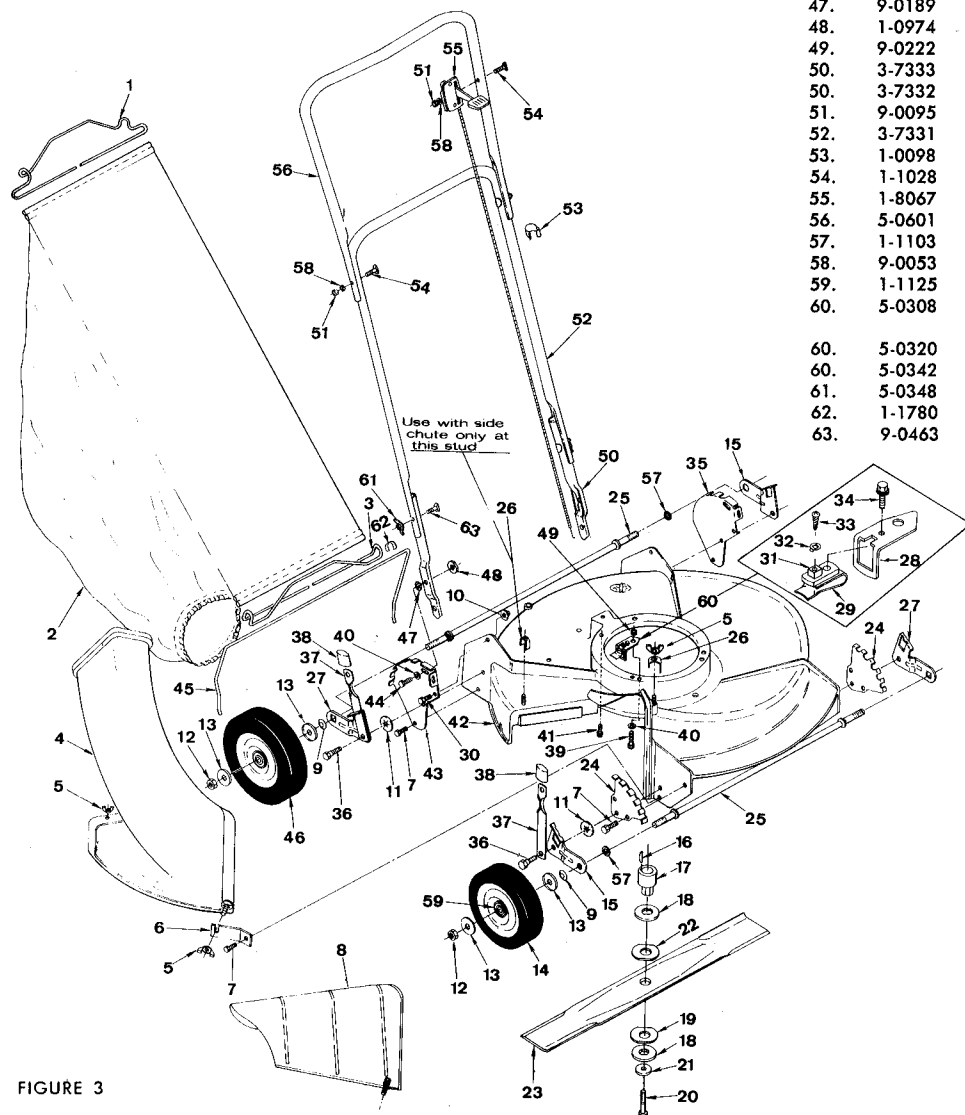


FIGURE 3

ITEMS NOT SHOWN ON V18 OR V-21

Part No.	Description	Qty
3-1135	Heat Shield	1
9-0457	Lock Washer	1

ITEMS NOT SHOWN ON V-18S OR V-21S

Part No.	Description	Qty
3-1135	Heat Shield	1
9-0457	Lock Washer	1
1-1770	Battery Assembly	1
1-1789	Battery Charger	1
1-1790	Battery	1
1-1167	Switch Key	2
3-1141	Switch Mounting Plate	1
1-1139	Switch	1
5-7081	Battery Clamp	1
1-1141	Harness Assembly	1

ITEMS NOT SHOWN ON V-21-4

3-1190	Heat Shield	1
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