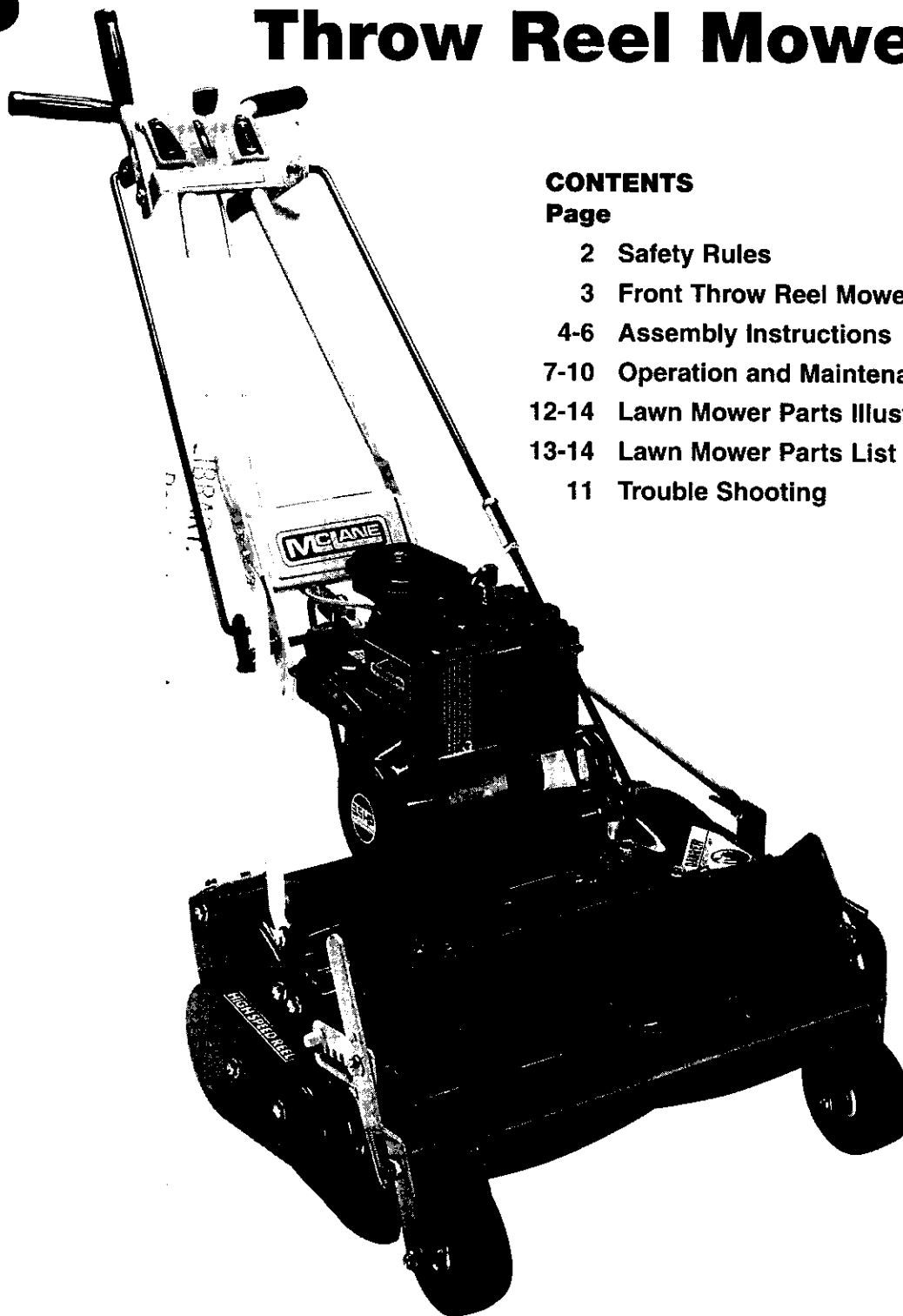


20"
25"

MCLANE MOWER

Owner' Handbook Front Throw Reel Mower



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MCLANE

**MANUFACTURING
INC.**

**7110 East Rosecrans Ave.
Paramount, CA 90723**

**Telephone
(562) 633-8158 (213) 636-8336**

SAFETY RULES

Training

1. Read the Operating and Service Instruction Manual carefully. Be thoroughly familiar with the controls and proper use of the equipment.
 2. Never allow children to operate a power mower.
 3. Keep the area of operation clear of all persons, particularly small children and pets.
-

Preparation

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
 2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
 3. Check fuel before starting engine. Do not fill gasoline tank indoors, when engine is running, or while engine is still hot. Wipe off any spilled gasoline before starting engine.
 4. Disengage self-propelled mechanism or drive clutch on units so equipped before starting engine (motor).
 5. Never attempt to make a wheel height adjustment while engine (motor) is running.
 6. Mow only in day light or in good artificial light.
 7. Never operate equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.
-

Operation

1. Do not change engine governor settings or overspeed engine.
 2. Do not put hands or feet near or under rotating parts. Keep clear of discharge opening at all times.
 3. Stop blade(s) when crossing gravel drive, walks or roads.
 4. After striking a foreign object, stop the engine (motor), remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.
 5. If the equipment should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
 6. Stop engine (motor) whenever you leave the equipment, before cleaning mower housing, and when making any repairs or inspections.
 7. When cleaning, repairing or inspecting, make certain blade and all moving parts have stopped. Disconnect spark plug wire and keep wire away from plug to prevent accidental starting.
 8. Do not run engine (motor) indoors.
 9. Shut engine (motor) off and wait until blade comes to a complete stop before removing grass catcher and/or unclogging chute.
 10. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
 11. Never operate mower without proper guards, plates or other safety protective devices in place.
 12. Keep washout ports and other mower housing service openings closed when mowing.
-

Maintenance and Storage

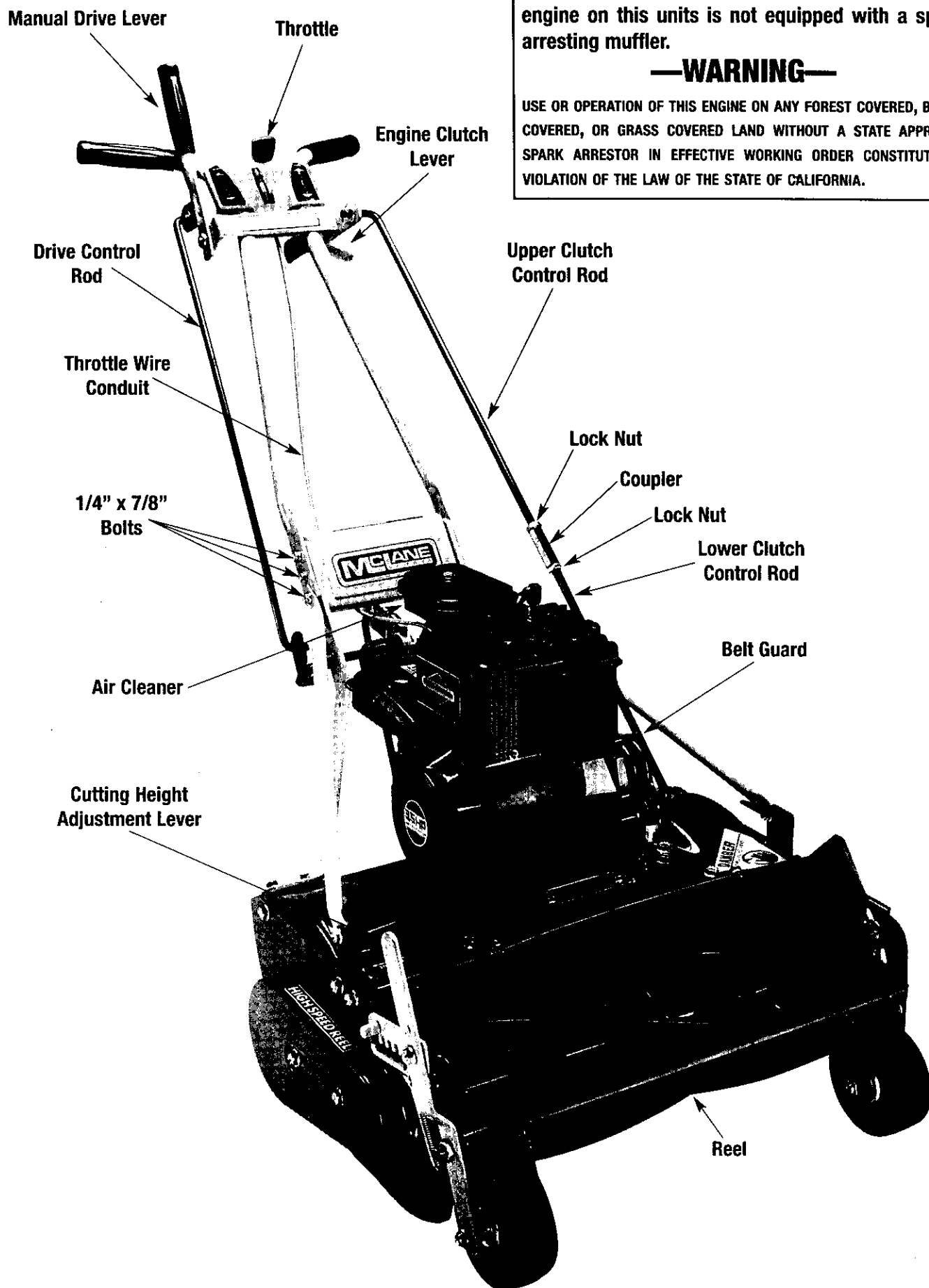
1. Check blade and engine mounting bolts at frequent intervals for proper tightness.
 2. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
 3. Never store equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
 4. To reduce fire hazard keep engine free of grass, leaves or excessive grease.
 5. Check grass catcher frequently for wear or deterioration.
-

TWO YEAR LIMITED WARRANTY

For two years from purchase (60 days for commercial use) McLane Manufacturing Inc., will replace for the original purchaser, free of charge, any part or parts, found upon examination by any factory authorized service center, or by the factory in Paramount, California, to be defective in material or workmanship or both. All transportation charges on parts submitted for replacement under this warranty must be borne by purchaser. There are no other expressed warranties. Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two years from purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy and liability for consequential damages. Any and all warranties are excluded to the extent exclusion is permitted by law. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion limitation of 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. It is your responsibility to follow the maintenance instructions described in the owner's manual. Routine service (cleaning, blade sharpening) is your responsibility. Defect of engine is covered by manufacturer of engine.

McLane Manufacturing, Inc.

Note: Operator abuse and improper assembly of product is not covered by any written or implied warranty. Read your owner's manual carefully



Notice to customers in the State of California. The engine on this units is not equipped with a spark arresting muffler.

—WARNING—

USE OR OPERATION OF THIS ENGINE ON ANY FOREST COVERED, BRUSH COVERED, OR GRASS COVERED LAND WITHOUT A STATE APPROVED SPARK ARRESTOR IN EFFECTIVE WORKING ORDER CONSTITUTES A VIOLATION OF THE LAW OF THE STATE OF CALIFORNIA.

ASSEMBLY

TOOLS REQUIRED: 7/16" Wrench, Pliers, Screwdriver (11/16" Wrench needed to adjust Clutch Tension)

NOTE: Reference to left or right side of the mower is from operator's position at the handle, facing forward. The lawn mower is fully assembled except for the handle throttle control, drive control rod and clutch control rod. Everything is packed and shipped in one container.

ASSEMBLY:

1. CARTON REMOVAL

Cut the back panel, lay down pull mower backwards.

2. PARTS ID

3. TOOLS REQUIRED

7/16" Wrench, Pliers, Screwdriver
(11/16" Wrench needed to adjust Clutch Tension)

STEP 1: Remove the grass catcher, handle assembly, and rods from the box (see Fig. 1, grass catcher not shown).

STEP 2: Attaching the handle: remove the bolts retaining the panel to the lower handle. You need six bolts to mount the handle. Two of the six bolts were those you just removed. The other four are supplied with loose hardware in the plastic bag. (see Fig. 2) Take the bottom section of the handle (Fig. 3) and install a bolt through the brace, the upper handle section, and the panel or bracket. Put a nut on each bolt and secure the panel or bracket on both sides of the handle.

NOTE: The three holes in the upper handle must be aligned with the three holes in the lower handle. The handle brace is put on the outside of the upper handle. Slip on the handle grips. Soaking in hot water may ease assembly.

DRIVE CONTROL ROD ASSEMBLY: (see Fig. 4 & 5)

1. Assemble drive control rod (one piece rod with both ends bent), by inserting one bent end in the drive control lever bearing and inserting the other end in the drive pivot rod.
2. Secure the control rod with cotter pins.

ENGINE CLUTCH CONTROL ROD ASSEMBLY: (see Fig. 6)

1. The clutch control rod consists of one long rod with one bent end, one coupler, two lock nuts and one short rod with one bent end.

2. Assemble the clutch control rod by inserting the short rod bent end in the clutch bearing. The end of the rod must be outside the belt (Fig. 6).

3. Insert the bent end of the long rod in the clutch lever bearing.

4. Insert a cotter pin in each bent end, but do not secure until final adjustment is made.

IMPORTANT! ENGINE CLUTCH ROD TENSION ADJUSTMENT: (Fig. 7)

1. Lift the engine clutch lever to the handle. If there is a slight tension on the belt, the adjustment should be correct. The tension should be just enough to propel the mower and reel without the belt slipping on the pulley.

EXCESSIVE TENSION WILL REDUCE BELT LIFE AND PERFORMANCE OF THE MOWER.

- 2 Check for correct belt tension"

! CAUTION !

- A. Remove spark plug wire, engage the clutch by lifting the clutch lever to the handle and pull on the rope starter.
- B. If the reel turns, the tension should be correct, however, be sure to check if the idler bearing is putting excessive tension on the belt.
- C. If reel does not turn, more tension is needed. Final adjustment can be made after reel is operating.

3. ADJUSTMENT PROCEDURES:

- A. Excessive Belt Tension: Remove the upper rod from the clutch lever handle and turn right (into the coupler) one turn at a time until the tension is correct.
- B. Increased Belt Tension Needed: Remove the upper rod from the clutch lever handle and turn left (out of the coupler) one turn at a time until the tension is correct.
- C. When the tension is correct, insert the upper rod into the clutch lever handle, secure the cotter pins at both ends of the control rod and tighten the lock nuts to the coupler. At this time, replace the spark plug wire.

- D. Refer to the operation instructions before using mower.

! IMPORTANT !
Without trapping belt, be sure rod is on the outside of belt.

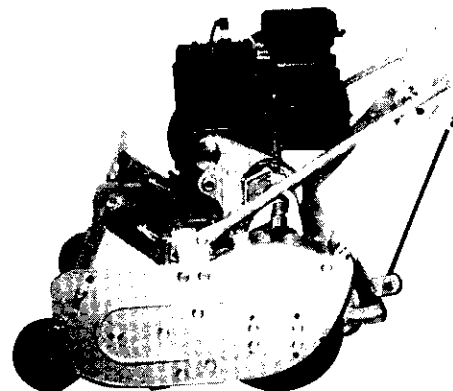


FIGURE 1: These parts, and the grass catcher, should have been removed from the shipping carton.

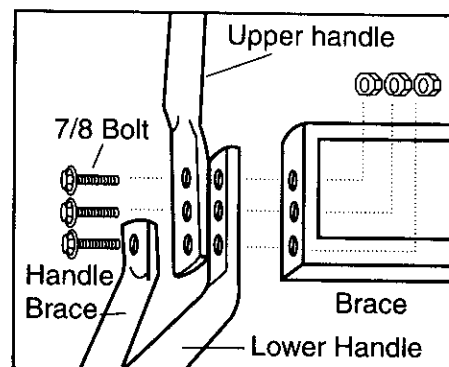


FIGURE 2



FIGURE 3: Reuse the two bolts on the panel, plus the other four bolts your received, to mount the handle.

ASSEMBLY

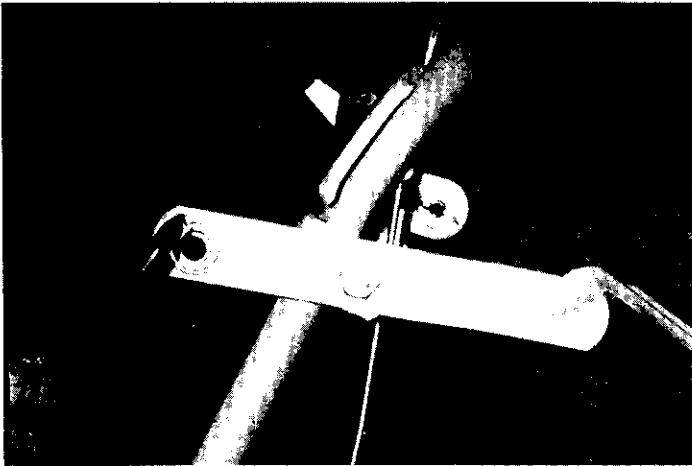


FIGURE 4: Install the Wheel Drive Control rod on top and insert cotter pin. Then, open its bottom to securely fasten it.

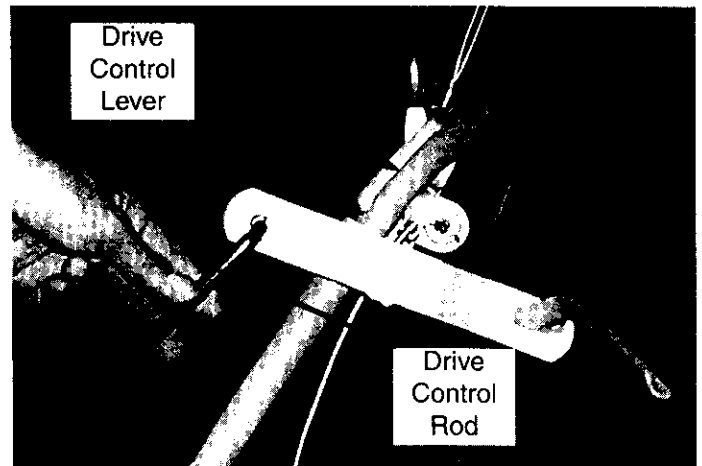


FIGURE 7: Put the bent end of the rod through the hole of the drive clutch lever.

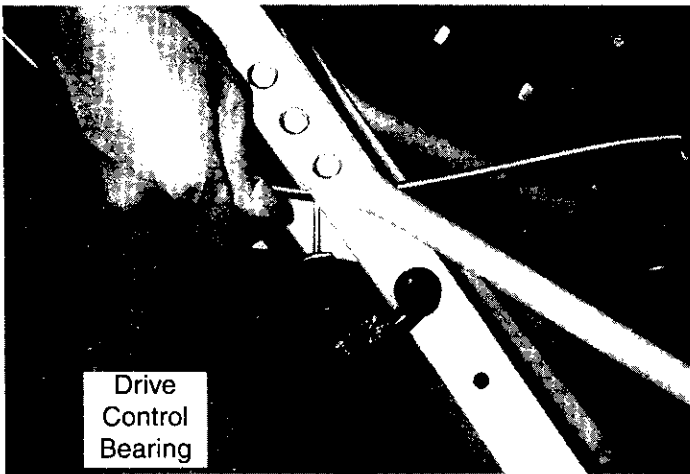


FIGURE 5: Insert the rod at the bottom of the Wheel Drive Lever and secure with a cotter pin.

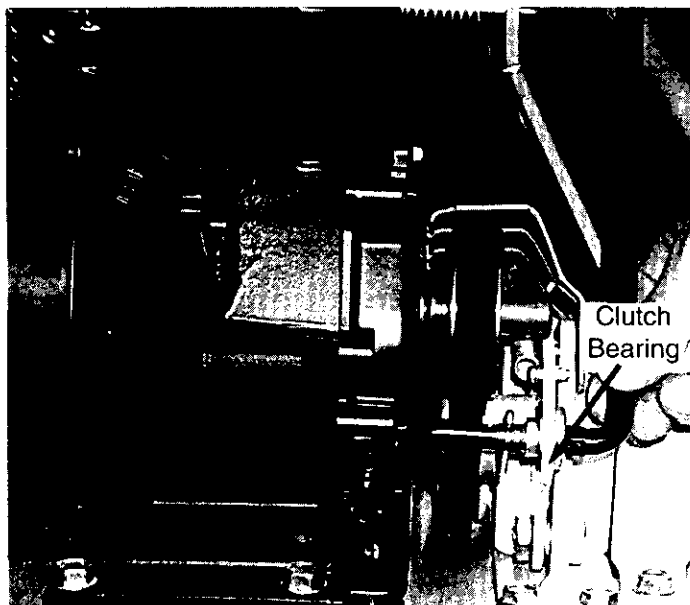


FIGURE 6: Put the bend end of the rod through the hole of the idler bracket. Secure later with a cotter pin.

INSTALLING THROTTLE CONTROL:

1. One end of the throttle control is factory installed to the carburetor. The other end needs to be installed in the upper handle.
2. Take hold of the control lever at the other end of the cable and route the throttle cable under and behind the panel located where the upper handle is bolted to the lower handle.
3. See Fig. 8: Hold the control lever at the end of the throttle cable and twist it slightly so the knob will pass through the slot in the upper handle.

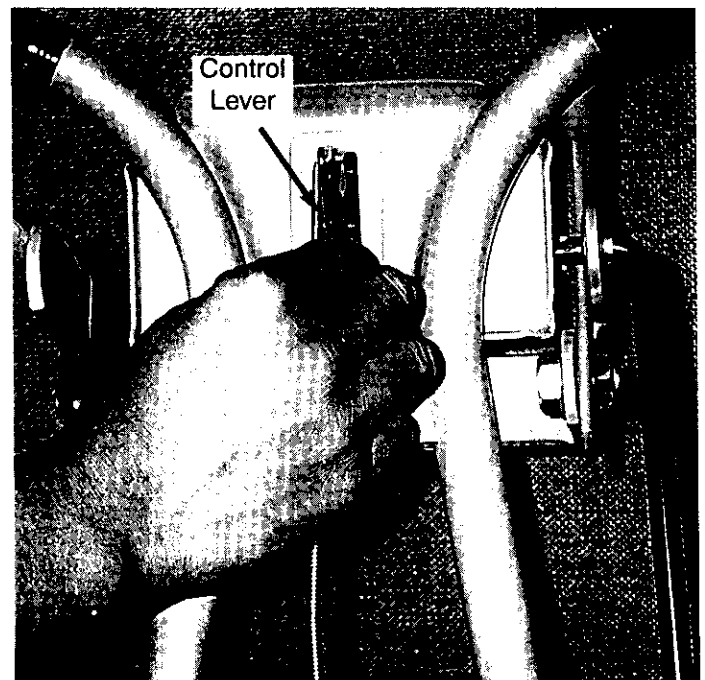


FIGURE 8: Twist lever so knob will pass through slot in panel.

ASSEMBLY

THROTTLE CONTROL ASSEMBLY:

1. See Fig. 9: When the knob is through the handle panel, straighten the throttle cable so the throttle control body can be pushed through the panel slot.

SIDE VIEW



FIGURE 9

2. See Fig. 10: Push entire knob and control body through the panel slot from the back as shown.

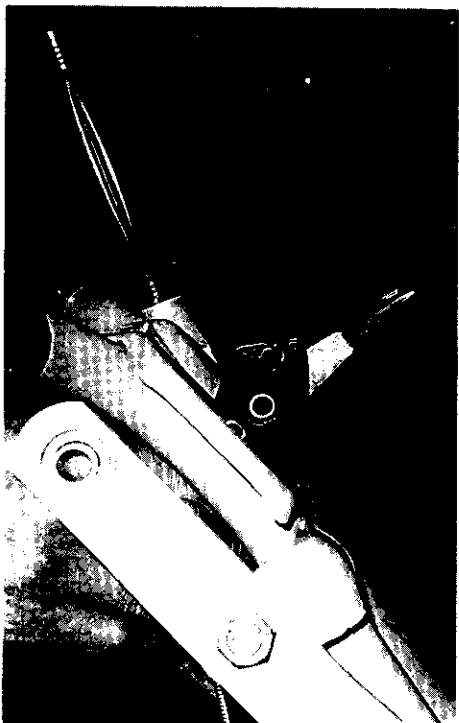


FIGURE 10

3. See Fig. 11: Line the complete knob and control body unit with the panel slot. Use both hands and push the control body unit into the panel slot until it locks in place.

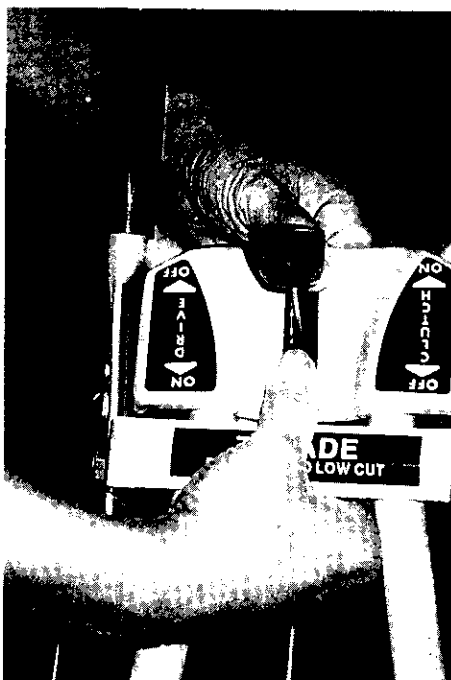


FIGURE 11

INSTALLING GRASS CATCHER:

1. See Fig. 12: Loosen catcher hook, nuts and bolts. Remove front nut and bolt from each catcher hook. Then raise catcher hooks and fasten both hooks with the bolts. Leave bolts loose until catcher is adjusted for proper clearance from the reel blades.
2. Attach grass catcher to the mower and make sure the catcher does not touch the reel blades. The catcher hooks are slotted so you can easily adjust the catcher so it will clear the reel blades.
3. When proper clearance is assured, tighten the nuts and bolts holding the hooks to the catcher.

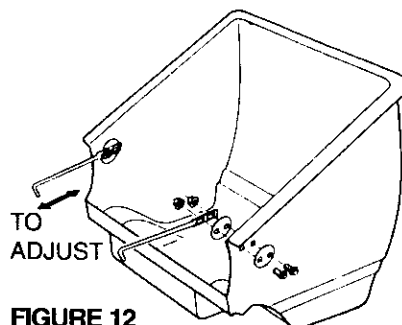


FIGURE 12

FUEL AND OIL

NOTE: Engine is shipped **WITHOUT** oil. Use a high quality detergent oil classified "for service SF, SE, SD or SC". 30 or 10W-30 wt. oil is recommended for most areas. Do not use 10Wt - 40Wt oil.

TO FILL CRANKCASE WITH OIL

Place engine level. Clean area around oil fill before removing oil fill plug.

OIL FILL PLUG

Remove oil fill plug. Fill crankcase to point of overflowing. **POUR SLOWLY.** Capacity approximately 20 ounces. Replace oil fill plug.



CAUTION



Handle fuel with care - it is highly flammable. Use only approved fuel container. Never add fuel while engine is running. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors. Replace gasoline cap securely and wipe up all spilled fuel.

We recommend the use of clean, fresh **lead-free** gasoline. Leaded gasoline may be used if lead-free is not available. A minimum of 77 octane is recommended. The use of lead-free gasoline results in fewer combustion deposits and longer valve life.

NOTE: We **DO NOT** recommend the use of gasoline which contains alcohol, such as gasohol. However, if gasoline with alcohol is used, it **MUST NOT** contain more than 10 percent Ethanol and **MUST** be removed from the engine during storage.

DO NOT use gasoline containing Methanol. See **STORAGE INSTRUCTIONS**

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidity gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage for 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel line and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.



DO NOT fill fuel tank to point of overflowing. Provide approximately 1/4" of tank space for fuel expansion.

OPERATION

CUTTING HEIGHT ADJUSTMENT

The cutting height is adjustable from 1/4" x 1-1/2". The front wheel assembly bar may be moved in 3-holes on the side panels to adjust the height. (Refer to FIG. 13) The two top cutting height adjustment holes, A & B are used for all height adjustments except for the 1-1/2" height. Hole C is only used for the 1-1/2" adjustment.

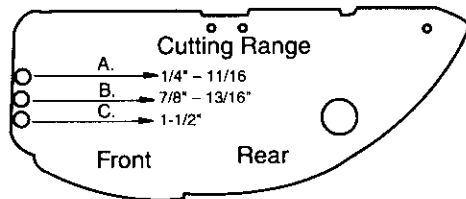


Figure 13

Lift lever as shown (Fig 14) and adjust height by repositioning notched bracket.

Rear Axle Positions

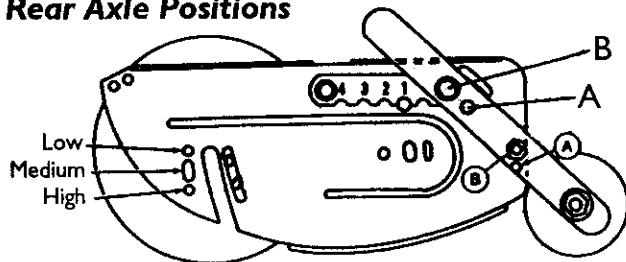


Figure 14

LEVER POSITION		HEIGHT		
		A	B	C
Notch No. 1	SCALPING	1/4"	7/8"	—
Notch No. 2		7/16"	1"	—
Notch No. 3		5/8"	1-1/8"	—
Notch No. 4		1-1/16"	1-3/16"	—
Notch No. 4		—	—	1-1/2"

NOTE:

When using A or B hole in the side panel (Fig.13) the notched lever (Fig. 14) must be changed to A or B hole also. When using the C hole in the side panel, place the notched adjusting lever in the B hole.

REAR AXLE ADJUSTING:

The rear axle height positions may be changed by the mower owner, however, due to the mechanics involved it is recommended the procedure be done by an Authorized McLane Service Center.

The mower is shipped with axle in the middle position and the cutting heights listed above are achieved with the axle in this position. The rear axle must be lowered to the high position (Fig. 14) to achieve the 1-1/2" cutting height.

REAR AXLE ADJUSTING INSTRUCTIONS:

1. Drain the gas and oil from the engine. Turn mower so the front wheels and the engine are resting on the ground or work benchtop.
2. Refer to Fig. 14A
 - A. Remove chain guard—No. 20
 - B. Remove side plate chain—No. 21
 - C. Remove clutch drive chain—No.15 and add (2) chain links. They can be purchased from the factory or McLane Service Center. Part No. 5016
 - D. Remove (8) retainer bolts—No.12
 - E. Loosen (8) hanger bolts—No. 13
3. Move Axle outward until retainer bolt hole aligns with the high hole in the side plate. (Fig. 14)
4. Replace and tighten (8) retainer bolts.
5. Tighten (8) hanger bolts.
6. Replace side plate and clutch drive chains.
7. Refill oil and gasoline.

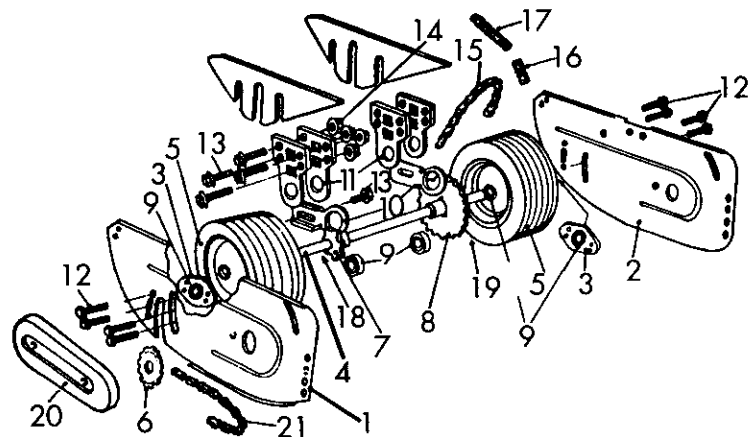


Figure 14A

OPERATION

CAUTION: To avoid possible damage to front wheels do not start mower before setting height adjustment. Notched height bracket at right front of mower (Fig. 14) must be placed at desired cutting height position.

HOW TO USE YOUR MOWER THROTTLE CONTROL:

The engine speed is controlled by the throttle lever located at the top of the handle. The lever also controls starting and stopping.

DRIVE CLUTCH LEVER:

This lever is located on the left side of the mower and when raised, engages the clutch which drives the reel. For safety, when the lever is released, the reel and mower stops immediately.

MANUAL DRIVE LEVER:

The drive lever is located on the right side of the handle. When pushed forward the drive wheel engages the ground and drives the mower. Activated the clutch lever first, then the drive lever to propel mower forward.

STARTING THE ENGINE

1. Before starting refer to engine manual for detailed engine manufacture's instructions
2. Move engine choke lever to choke position. Pull rewind starter handle rapidly, repeat if necessary. Move throttle down to running position.
3. Lift engine clutch control and hold against handle to engage reel (Fig. 15).
4. Move drive control to DOWN position to move forward.
5. To disengage reel drive, immediately release control lever.
6. To stop engine move throttle lever to STOP position (Fig 15).

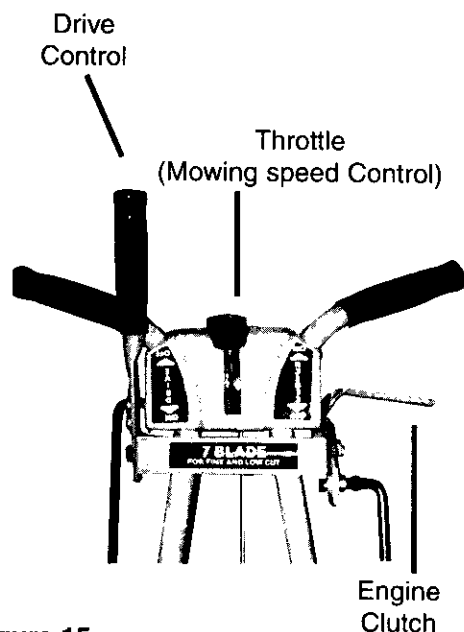


Figure 15

HOW TO USE THE CONTROLS AND WHAT THE CONTROLS DO

1. From the operators position which is behind the lawn mower, engages the cutting blade.
2. The control in the middle regulates the speed of the engine.
3. The control lever on the right engages the self-propelled mechanism.

TURN THE PRODUCT OFF

1. The Engine—push the middle control all the way towards operator to stop.
2. Cutting Blades—release the handle on the left side.
3. The Self-Propelled Mechanism—release the handle on the left side also.



CAUTION



The Operation of any lawn mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting your lawn mower and while mowing. We recommend Wide Vision Safety Mask for over the spectacles or standard safety glasses.



CAUTION



Before starting engine, become familiar with all controls. Read this Operator's Manual thoroughly. Always check engine oil level before starting engine.



CAUTION



Care should be taken to avoid inhaling exhaust gases as they contain carbon monoxide gas which is colorless and odorless. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal. Do not run engine in confined areas such as a closed garage.

MAINTENANCE

GENERAL RECOMMENDATION

1. The spark plug and air filter should be replaced once a year. This will assure better engine performance and longer engine life.
2. Check all fasteners and be sure they are tight.
3. Follow all maintenance instructions listed on the following pages and the service schedule.

⚠ CAUTION ⚠

DISCONNECT SPARK LUG WIRE FROM SPARK PLUG AND PLACE WIRE WHERE IT CANNOT COME IN CONTACT WITH SPARK PLUG.

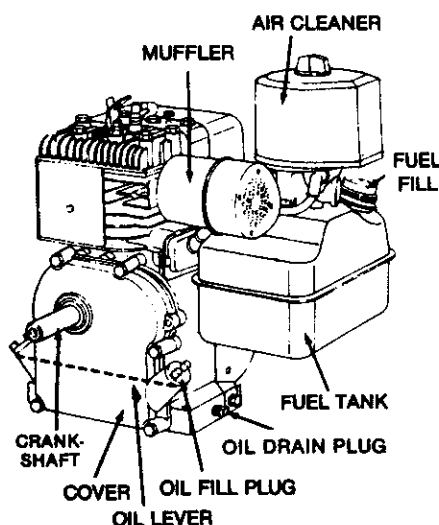


FIGURE 16

CHANGING ENGINE OIL

1. Tilt mower back, place suitable container on floor next to drive wheel.
2. Place a piece of metal over drive wheel so oil will drain into container. A plastic funnel can also be used. Cut part of funnel away and place under drain plug making sure small end of funnel is directed toward the container.
3. Remove oil drain plug. (Refer to Fig. 16).
4. When oil is drained, replace plug and refill crankcase with oil as per instructions on page 7.

TO SERVICE AIR CLEANERS

Clean cartridge at three month intervals or every 25 hours, whichever occurs first.

NOTE: Service more often if necessary.

1. Remove knob and cover.
2. Remove cartridge by pulling it off of the screw.

3. Clean by tapping gently on a flat surface. If very dirty, replace cartridge or clean as follows:

a. Wash in a low or non-sudsing detergent and warm water solution.

CAUTION: Do not use petroleum solvents such as kerosene, to clean cartridge.

b. Rinse thoroughly with flowing water from inside out until water is clear.

c. Allow cartridge to stand and air dry thoroughly before using.

DO NOT OIL CARTRIDGE.

DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.

4. Install cartridge, then cover and screw knob securely. See Figure 17.

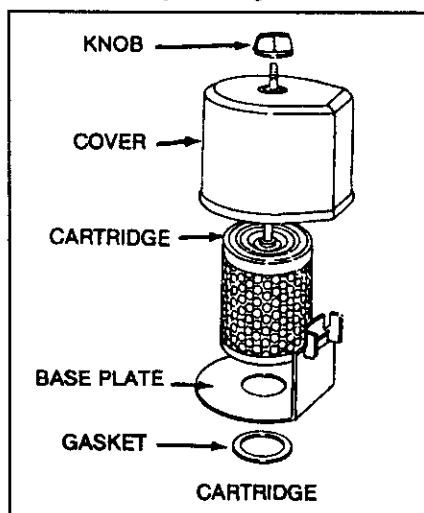


FIGURE 17

SPARK PLUG

Clean and reset gap at .030" every 100 hours of operation.

CLEAN COOLING SYSTEM

Grass, chaff or dirt may clog the rotating screen and the air cooling system especially after prolonged service cutting dry grass. Yearly or every 100 hours, whichever occurs first, remove the blower housing and clean the areas to avoid over speeding, overheating and engine damage. Clean more often if necessary. REfer to Engine manual for detailed instructions.

CLEAN ENGINE

Remove dirt and debris with a cloth or brush. Cleaning with a forceful spray of water is not recommended as water could contaminate the fuel.

LUBRICATION

Check oil level regularly. Oil all exposed bearings, linkage and front wheels. Oil chain frequently. Reel and main drive bearings are sealed.

REEL MAINTENANCE

Normally grinding of the reel is not recommended or necessary to insure proper cutting. This is due to the extreme hardness and great strength of the reel. Sharpening and back lapping when required, should always be done by a properly equipped service center.

ADJUSTMENTS

CAUTION: DO NOT RUN ENGINE AT EXCESSIVE SPEEDS. Operating an engine at excessive speeds increases the danger of personal injury.

1. DO NOT TAMPER WITH GOVERNOR SPRINGS, GOVERNOR LINKS OR OTHER PARTS WHICH MAY INCREASE THE GOVERNED ENGINE SPEED.

TO CHECK OPERATION OF CHOKE CONTROLS:

Move speed control lever to "choke" position. The carburetor choke should be closed.

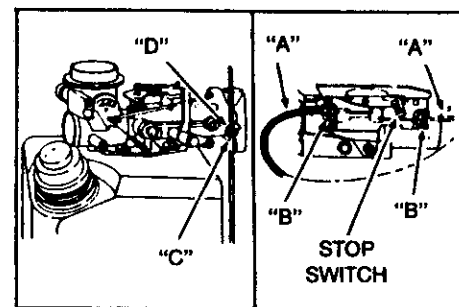
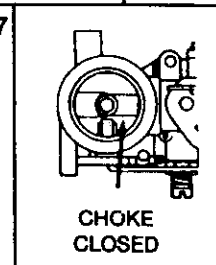


FIGURE 17



SERVICE AND ADJUSTMENTS

TO ADJUST CHOKE CONTROLS:

Refer to engine manual for detailed instructions.

REPLACE AIR CLEANER.

Clip for throttle cable should secure cable to handle.

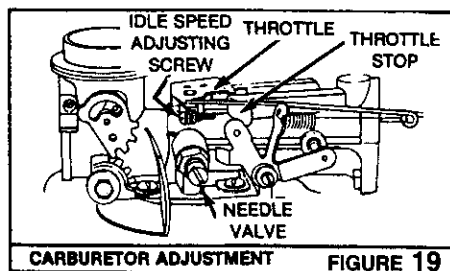
CARBURETOR ADJUSTMENTS

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. Air cleaner and air cleaner cover must be assembled to carburetor when running engine.

INITIAL ADJUSTMENT:

Gently turn needle valve clockwise until it **just** closes. Valve may be damaged by turning it in too far. (Refer to Fig. 19).

Next open needle valve 1-1/2 turns counterclockwise. This initial adjustment will permit the engine to be started and warmed up (approximately 5 minutes) prior to final adjustment.



CARBURETOR ADJUSTMENT FIGURE 19

FINAL ADJUSTMENT:

Place throttle control in "FAST" position. Turn needle valve in until engine slows (clockwise—lean mixture). Then turn it out past smooth operating point until engine runs unevenly (rich mixture). Now turn needle valve to the midpoint between rich and lean so the engine runs smoothly. Next, adjust idle RPM. Rotate throttle counterclockwise and hold against stop while adjusting idle speed adjusting screw to obtain 1750 RPM. Release throttle. Engine should accelerate without hesitation or sputtering. If it does not, carburetor should be readjusted, usually to a slightly richer mixture.

CLUTCH BELT MAINTENANCE:

1. Inspect clutch belt frequently for wear and damage. Worn and damaged belts can cause the clutch to operate improperly, such as continuous movement of the reel and roller drive when all levers are disengaged.

Replace the belt when excessive wear, or damage occurs.

CLUTCH BELT REPLACEMENT:

1. Remove cotter pin from lower clutch control rod (Part 1012D) and slide control rod from clutch bearing (Part 1046D).
2. Remove belt guard bolt using 1/2" wrench and remove belt guard from the clutch body.
3. Detach Deadman clutch spring (Part 1052D) from deadman belt idler (Part 1047D).
4. Remove the worn belt.
5. Install new belt by placing around jackshaft pulley (Part 1053) first and then around the engine pulley (Part 1063).
6. **CAUTION:** Make sure idler bearing (Part 1048D) rests against the inside of the belt. (The belt must be placed over the pulleys and the idler bearing).
7. Replace deadman clutch spring. (Attach to belt idler).
8. Replace belt guard and belt guard bolt. Do not tighten bolt.
9. Replace clutch control rod making sure rod is placed outside of the belt.
10. Replace cotter pin and check for proper tension by following instructions on page 4 under heading "Engine Clutch Rod Tension Adjustment"
11. Now check clutch belt guard for proper adjustment. There must be 1/16" clearance between the top of the belt and the bottom of the belt guard. Adjust guard up or down to maintain the 1/16" clearance.

NOTE: The clearance must be checked and adjustment made when the clutch is engaged and there is tension on the belt. (Lift clutch lever to the handle to engage clutch and put tension on the belt).

12. When the 1/16" clearance is achieved, tighten belt guard firmly.

IMPORTANT:
**IMPROPER ADJUSTMENT
OF BELT GUARD AND
TENSION OF CLUTCH
CONTROL ROD CAN CAUSE
PREMATURE WEAR OF THE
BELT AND FAILURE OF
PROPER CLUTCH ACTION.**

TROUBLE SHOOTING CHART

PROBLEM	CAUSE
1. <i>Engine fails to start.</i>	<p>A Check fuel tank for gas.</p> <p>B Spark plug lead wire disconnected.</p> <p>C Throttle control lever not in starting position.</p> <p>D Check spark plug.</p> <p>E Carburetor improperly adjusted. Engine flooded. Remove spark plug, dry the plug, crank engine with plug removed, and throttle in off position. Replace spark plug and lead wire and resume starting procedures.</p> <p>F Old/stale gas. Drain and refill with fresh gas.</p>
2. <i>Hard starting or loss of power.</i>	<p>A Spark plug wire loose</p> <p>B Carburetor improperly adjusted.</p> <p>C Dirty air cleaner.</p>
3. <i>Operation erratic.</i>	<p>A Dirt in gas tank. Drain, clean and refill.</p> <p>B Dirty air cleaner.</p> <p>C Water in fuel supply. Drain and refill.</p> <p>D Vent in gas cap and/or carburetor plugged. Clear vent.</p> <p>E Carburetor improperly adjusted.</p>
4. <i>Occasional skip (hesitates) at high speed.</i>	<p>A Spark plug fouled, faulty or gap too wide.</p> <p>B Carburetor improperly adjusted.</p> <p>C Dirty air cleaner.</p>
5. <i>Idles poorly.</i>	<p>A Carburetor idle speed too slow.</p> <p>B Spark plug gap too close.</p> <p>C Carburetor idle mixture adjustment improperly set.</p>
6. <i>Engine overheats</i>	<p>A Adjust carburetor.</p> <p>B Remove any obstructions from air passages in shrouds.</p> <p>C Clean cooling fins.</p> <p>D Fill crankcase to proper oil level.</p>

NOTICE TO CUSTOMERS IN THE STATE OF CALIFORNIA.
THE ENGINE ON THIS UNIT IS NOT EQUIPPED WITH A SPARK ARRESTING MUFFLER.

—WARNING—

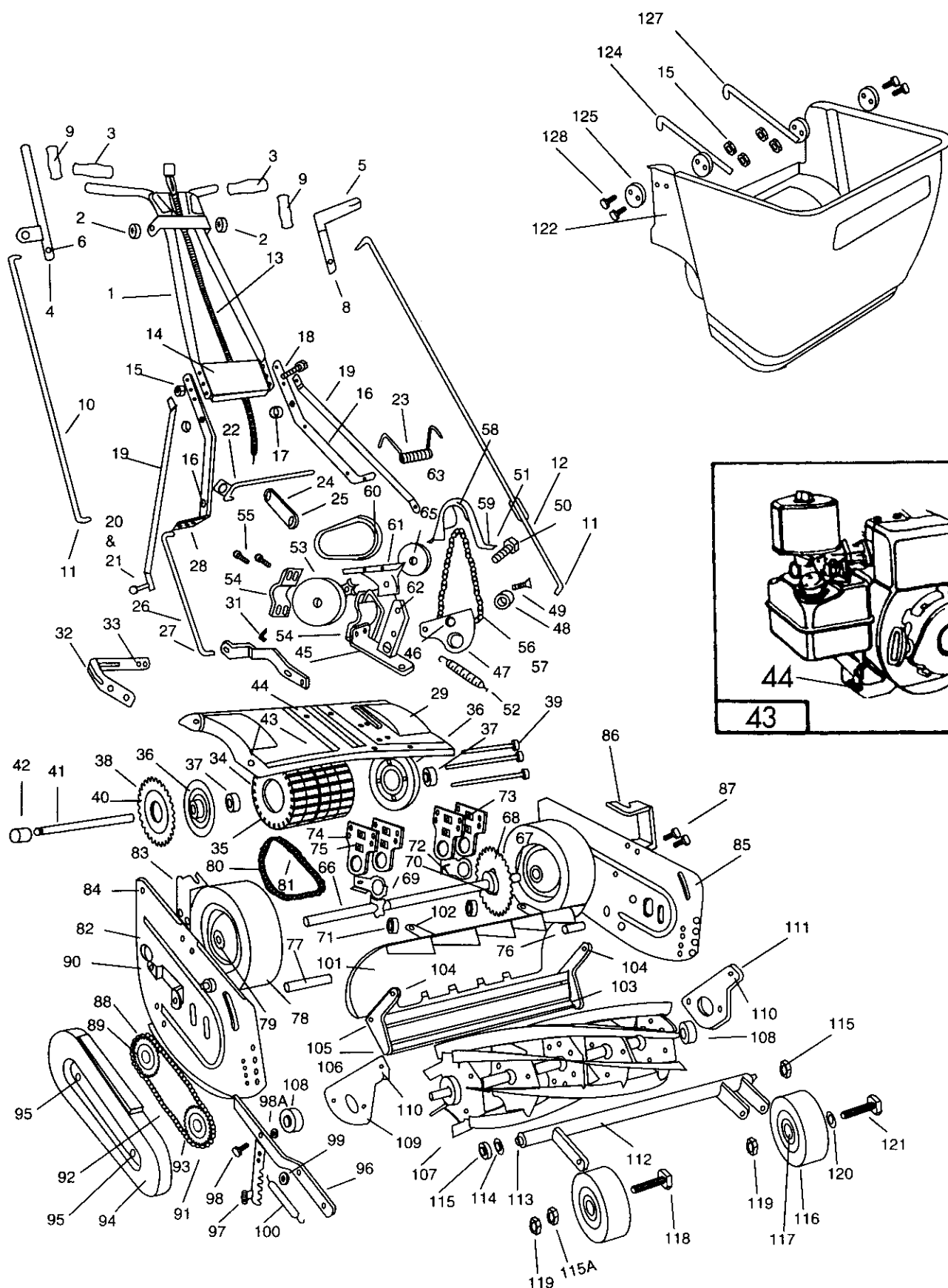
USE OR OPERATION OF THIS ENGINE ON ANY FOREST COVERED, BRUSH COVERED, OR GRASS COVERED LAND WITHOUT A STATE APPROVED SPARK ARRESTOR IN EFFECTIVE WORKING ORDER CONSTITUTES A VIOLATION OF THE LAW OF THE STATE OF CALIFORNIA.

**NOTE: For repairs beyond the minor adjustments listed above,
please contact your local Lawn Mower Service Center**

For engine Service see Authorized Briggs & Stratton Service Center.

Refer to the Briggs & Stratton Engine Manual enclosed.

Front Throw Reel Mower • 20" Models • Repair Parts



McLane

Front Throw Reel Mower Repair Parts 20" Models

REF. PART NO. NO.	DESCRIPTION	REF. PART NO. NO.	DESCRIPTION
1 1001-A	Handle	59 1033	*5/16" - 18 x 1/2" Bolts
2 7015-A	Shoulder Bolt for Handle	60 1060-B	Clutch Belt
3 1003	Handle Grips (2 req.)	61 1061	Belt Guard
4 1004	Drive Control Lever	62 1062	*5/16" - 18 x 3/8" Bolts
5 1005-D	Clutch Control Lever	63 1063	Engine Pulley
7 1007	Plastic Washer (2 req.) L & R	64 1064	*Key For Engine Pulley Shaft 3/16"x3/16"x5/8"
8 1008	*Lock Nuts 7/16" - 14 (2 req.) L & R	65 1065	Allen Set Screw 5/16" - 24 x 15/16"
9 1009	Drive & Clutch Lever Grips	66 1066-D	Rear Axle Shaft
10 1010	Drive Control Rod	67 1067-D	Retainer
11 1011	*Cotter Pins 1/8" x 1/2" (3 req.)	68 1068	Sprocket (30 teeth with Hub)
12 1012-D	Clutch Control Rod	69 1069	Sprocket (8 teeth with Hub)
13 1013-97	Throttle Control-Manual Choke	70 1070	*Set Screws 7/16" - 20 x 7/16" Half Dog (3 req.)
14 1014	Handle Brace Plate	71 1071	Axle Support Bearing (2 req.)
15 1015	*1/4" - 28 Nuts (6 req.)	72 1072	Roller Bracket Supports (2 req.)
16 1016	Lower Handle (2 req.)	73 1073	Axle hangers (4 req.)
18 1018	*1/4 - 28 x 7/8" Bolts (6 req.)	74 1074	*Hanger Bolts 5/16" - 24 x 7/8" (8 req.)
19 1019	Handle Brace (2 req.) L & R	75 1075	*5/16" - 24 Nuts (8 req.)
20 1020	*1/4 - 28 x 5/8" Bolts (2 req.) L & R	76 1076-P	Spacer
21 1015	*1/4" - 28 Nuts (2 req.) L & R	77 1077-P	Spacer
22 1022	Drive Pivot Rod	78 1078-S	Rear Wheels w/Bearings (2 req.)
23 1023	Drive Pivot Spring	6058	Bearing For 1078-S
24 1024	Drive Pivot Arm	79 1037-D	Retainer Bearing
25 1025	*Set Screw 3/8" - 16 x 1/2" Square Head	80 1080	*Roller Drive Chain No. 41-36 Pitch
26 1026	Lower Drive control Rod	81 1057	*Connecting Link No. 41
27 1011	*Cotter Pin 1/8" x 1/2"	82 5001	Slide Plate w/Chain Guard Bracket
28 1028	*5/16" - 18 x 3/4" Bolts (4 req.) L & R	83 1083	Catcher Hook Bracket
29 1029	Deck	84 1028	*5/16" - 18 x 3/4" Bolts (4 req.)
30 1030	Handle Brackets (2 req.)	85 5002	Side Plate
31 1031	Roller Support Bracket with Bearing	86 1086	Catcher Hook Bracket
32 1032	Roller Support Bracket	87 1028	*5/16" - 18 x 3/4" Bolts (4 req.)
33 1033	*5/16" - 18 x 1/2" Bolts (2 req.)	88 1088	Sprocket (17 teeth)
34 1034	Roller Drive Tube	89 1070	*Set Screws 7/16" - 20 x 7/16" Half Dog (4 req.)
35 1035	Roller Drive Tires (5 req.)	90 1033	*5/16" - 18 x 1/2" Bolts (2 req.)
36 1036	Roller End Caps (2 req.)	91 1091-A	Sprocket (13 teeth)
37 1037	Ind Cap Bearings (2 req.)	92 1092	*Reel Drive Chain No. 41-46 Pitch
38 1038	Roller Drive Sprocket (30 teeth)	93 1057	*Connecting Link No. 41
39 1039	Roller Drive Bolts (3 req.)	94 1094	Chain Guard
40 1015	*1/4" - 28 Drive Nuts (6 req.)	95 1033	*5/16" - 18 x 1/2" Bolts (2 req.)
41 1041	Roller Drive Shaft	96 1096	Height Adjustment Lever
42 1042	Spacer	97 1097	Height Adjustment Notched Bracket
43 1043-A	Engine, State Model -	98 7050	*5/16" - 18 x 3/4" Bolt
44 1044	*5/16" - 24 x 1-1/2" Bolts (4 req.)	98A 1075-A	5/16" - 18 Nut
45 1045-D	Main Clutch Body	99 1099	Spacer Bushing
46 1046-D	Clutch Rod Bearing	100 1100	Height Adjustment Spring
47 1047-D	Belt Idler Arm	101 1101-2	Shield
48 1048-D	Idler Bearing	1101-A	Shield Assembly Hardware
49 1049	*3/8" - 16 1/2" Flat Head Phillips Head Screw	102 1033	*5/16" - 18 x 1/2" Bolt (2 req.)
50 7015-A	Bolt for Clutch Body	103 1103-A	Bed Knife
51 1051	Washer	104 1028	*5/16" - 18 x 3/4" Bolts (2 req.)
52 1052-D	Clutch Spring w/Spring Plate	105 1105	Tapered Bolts 5/16" - 18 x 5/8" (6 req.)
53 1053	Jack Shaft with Pulley & Sprocket	106 1106	Bushing for Tapered Bolt (6 req.)
54 1054	Jack Shaft Housing (2 req.)	107 1107	Reel Assembly 7 Blade
55 1028	*5/16" - 18 x 3/4" Bolts (4 req.)		
56 1092	Clutch Drive Chain -No. 41 x 46 Pitch		
57 1057	*Connecting Link for No.41 Chain		
58 1058	Clutch Chain Guard		

* **Standard Hardware items, may be purchased locally.**

** **NOT SHOWN**

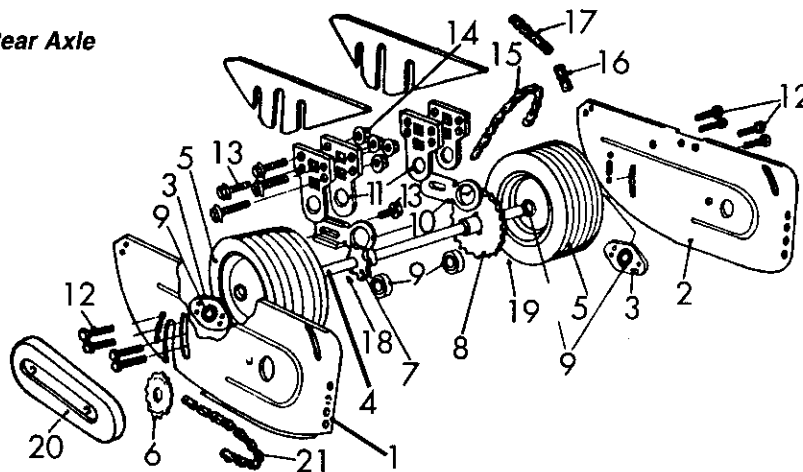
McLane

Front Throw Reel Mower Repair Parts 20" Models (Continued)

REF. PART NO. NO.	DESCRIPTION	REF. PART NO. NO.	DESCRIPTION
108 1108	Reel Bearings (2 req.)	120 1120	Flat Washer
109 1109	Reel Bearing Retainer	121 1121	*7/16" - 14 x 3-1/4" Bolt
110 1033	*5/16" - 18 x 1/2" Bolts (2 req.)	122 1122	Plastic Grass Catcher
111 1111	Reel Bearing Retainer	124 1124	Catcher Hook
112 1112	Front Wheel Assembly Bar	125 3065	Washer
113 1113	Tie rod	127 1127	Catcher Hook
114 1007	Plastic Washer	128 1028	1/4" - 28 x 7/8" Bolt (4 req.)
115 1008	*7/16" - 14 Nuts (2 req.)	N/S 3122**	Owner manual—Repair Parts
115A 1008-A	*7/16" - 14 Jam Nuts (2 req.)	N/S 1202E**	Engine Operating Instruction Manual
116 1116	Front Wheels with Bearings		
117 1002	Front Wheel Bearings (2 req.)		
118 1118	*7/16" - 14 x 3-1/2" Bolt		
119 1008	*7/16" - 14 Nuts (2 req.)		

* **Standard Hardware items, may be purchased locally.**
 ** **NOT SHOWN**

Heavy Duty Drop-Out Rear Axle



Front Throw Reel Mower Repair Parts 25" Models

REF. PART NO. NO.	DESCRIPTION	REF. PART NO. NO.	DESCRIPTION
1 5001	Sideplate (Right)	1 4001-A	Handle w/Shoulder Bolts
2 5002	Sideplate (Left)	13 4013	Throttle Control Assembly
3 5003	Sideplate Bearing Retainer	14 4014	Handle Brace Plate
4 5004	Rear Axle (20")	19 4019	Handle Brace (2 Req) L & R
5004-B	Rear Axle (25")	22 4022	Drive Pivot Rod
5 5005	Rear Wheels (20") w/Bearings-ea	23 4023	Drive Pivot Spring
5005-A	Rear Wheels (25") w/Bearings-ea	29 4029	Deck
6 5006	Sprocket (17 Teeth)	31 4031	Roller Support Bracket w/Bearing
7 5007	Sprocket (8 Teeth)	32 4032	Roller Support Bracket
8 5008	Sprocket (30 Teeth)-20"	34 4034	Roller Drive Tube
5008-B	Sprocket (30 Teeth)-25"	35 4035	Roller Drive Tires (6 Req)
9 1108	Sealed Bearing (8 Req)	39 4039	Roller Drive Belts (3 Req)
10 5010	Roller Bearing Supports	41 4041	Roller Drive Shaft
11 5011	Axle Hangers	42 4042	Spacer
12 1033	5/16"-18x1/2" Bolt	53 4053-A	Jack Shaft w/Pulley & Sprocket
13 1074	5/16"-24x7/8" Bolt	60 1060	Clutch Belt
14 1075	5/16"-24 Nut	63 4063	Engine Pulley
15 1056	Clutch Drive Chain-44 Pitch	101 4101-2	Shield
16 5016	2-Link #41 Chain w/Master Link	4101-A	Assembly Hardware
17 5017	4-Link #41 Chain w/Master Link	103 4103-A	Bed Knife
18 5018	Spacer (20") Right	107 4107	Reel Assembly 7-Blade
5018-B	Spacer (25") Right	112 4112	Front Wheel Assembly Bar
19 5019	Spacer (20") Left	113 4113	Tie Rod
5019-B	Spacer (25") Left	118 4118	7/16"-14x6" Bolt
20 1094	Chain Guard	121 4121	7/16"-14x5-1/4" Bolt
21 1092	Sideplate Chain	122 4122	Grass Catcher

STORAGE

MOWER:

- Clean all debris off mower and engine with a rag or brush.
- Do not use water.
- Oil all chains and wipe off excess oil with a rag.

ENGINE:

Engines to be stored over 30 days should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts, fuel filter and tank.

NOTE:

The use of a fuel additive, such as STA-BIL®, or an equivalent, will minimize the formation of fuel gum deposits during storage. Such an additive may be added to the gasoline in the fuel tank of the engine, or to the gasoline in a storage container.

- All fuel should be removed from the tank. Run the engine until it stops from lack of fuel.
- While engine is still warm, drain oil from crankcase. Refill with fresh oil.
- Remove spark plug, pour approximately 1/2 ounce (15 cc) of engine oil into cylinder and crank slowly to distribute oil. Replace spark plug.
- Clean dirt and chaff from cylinder, cylinder head fins, blower housing, rotating screen and muffler areas.
- Store in a clean and dry area.

IMPORTANT:

IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS THE CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

OTHER:

Do not store gasoline from one season to another.

- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline can cause problems.
- Do not store your mower under any plastic cover. Plastic cannot breathe which allows condensation to form and can cause your mower to rust.

SERVICE RECOMMENDATIONS

SERVICE RECORD	SCHEDULE					SERVICE DATES				
	FIRST 5 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HRS. OR SEASON	EVERY USE	FILL IN WHEN SERVICE IS COMPLETED				
ENGINE OIL CHANGE	X		X							
ENGINE OIL CHECK					X					
SERVICE AIR CLEANER		X								
CLEAN/REPLACE SPARK PLUG				X						
LUBRICATE MOWER			X							
CHECK MUFFLER				X						
CLEAN MOWER					X					

NOTES — MAINTENANCE RECORD

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