### PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. - SOUTH BEND, IND.

# SAFETY FIRST

Avoid accidents by keeping hands and feet clear of blade while starting engine and while engine is running.

Shut off engine and remove spark plug wire before adding gas or oil and before making adjustments or inspection of any kind.

# CONTROL LEVER IN OFF POSITION park plug and beinspection CLUTCH LEVER IN NEUTRAL

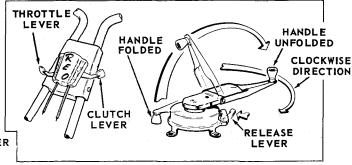
## **ROTARY MOWER**

Self Propelled

# INSTRUCTIONS LC MODELS

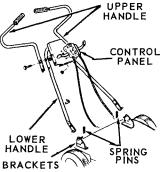
#### **STARTING**

WARNING! BE SURE HANDS AND FEET ARE CLEAR OF THE MOWER BASE BEFORE ATTEMPTING TO START THE ENGINE.



#### ASSEMBLING HANDLE

- Assemble lower handle to deck by inserting pins, in handle, thru holes in brackets. The pins in the brackets likewise will assemble in holes in handle. Then secure the handle with spring pins provided.
- Assemble upper handle, Control Panel and lower handle with nuts and bolts provided. See illustration at right.

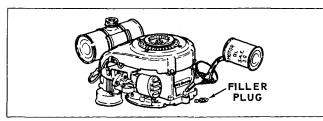


POSITION

Push throttle lever to choke position and place clutch lever in neutral position (center notch). For Impulse Starter: Standing on left side of mower, push in on release lever, unfold the starter handle and wind-up clockwise about 3½ turns. Fold handle over and pull out on the release lever. For Recoil Starter: Standing at the rear of the mower, grasp the starter handle firmly in your hand and give it a quick pull to complete cord length. Return the Starter handle slowly.

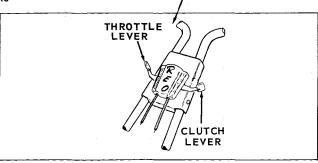
When engine starts, pull the throttle lever back approximately halfway or until engine runs about 1/3 open throttle.

#### OIL AND GASOLINE

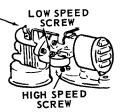


NEVER FILL THE GAS TANK WHILE THE ENGINE IS RUNNING. DO NOT MIX OIL WITH GASOLINE.

- Remove oil filler plug and fill with S.A.E. No. 30 motor oil up to the top of the filler hole. Be sure engine is level when adding oil to avoid over filling.
- 2 Fill the gas tank with clean, fresh, regular gasoline. Premium Grade Ethyl is not recommended.



3 If engine fails to start after repeated attempts, turn the low speed screw and high speed screw clockwise until finger tight. Turn high speed screw counter-clockwise about one full turn and low speed screw counter-clockwise about one and one half turns. Repeat starting operation.



The first time the engine is started, allow to run at 1/3 open throttle for 10 to 15 minutes to thoroughly lubricate all moving parts and bearings.

#### TO MOW

WARNING! BE SURE LAWN IS CLEAR OF BONES, WIRE, STICKS, STONES OR OTHER OBJECTS WHICH COULD DAMAGE THE CUT-TING BLADES.

> Lift up on clutch control lever and place in Hi or Low position. Take special care when straddling humps or ridges with your mower.

when straddling ridges with your

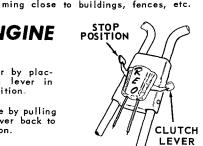
2 Use the left side (the side opposite the chute opening) of your mower when trim-



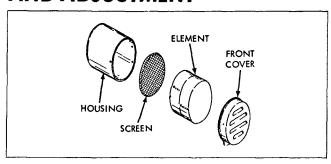
#### TO STOP ENGINE

1 Stop mower by placing clutch lever in neutral position.

2 Stop Engine by pulling throttle lever back to stop position.

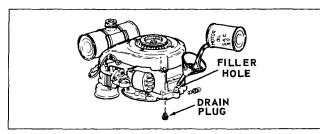


#### ROUTINE MAINTENANCE AND ADJUSTMENT



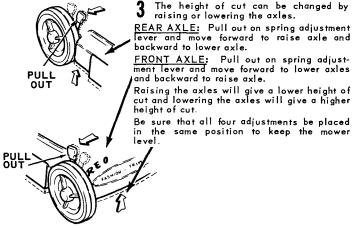
#### AIR CLEANER

Polyurethane Type-Serviceable. Clean element every ten (10) hours or oftener if engine runs rich and emits black smoke from the exhaust. Service by removing air cleaner cover. Remove polyurethane element and wash in detergent and water solution by squeezing similar to a sponge. Squeeze out cleaning solution. Re-oil element by applying generous quantity of oil to sides and open ends, Squeeze to distribute oil and to remove excess oil. Reinstall element and air cleaner cover.



Drain and refill the crankcase after the first 5 hours of operating. Thereafter, drain and refill after every 25 hours of operating. Refill crankcase with SAE No. 30 Motor Oil. Fill to top of threads in filler hole. Check oil level of the crankcase before each use, (with mower on level ground). BE SURE DRAIN PLUGISTIGHT.

WARNING! DO NOT ATTEMPT TO MAKE ANY ADJUSTMENTS OR CLEAN GRASS FROM THE MOW-ER BASE UNTIL ENGINE IS STOPPED, AND SPARK PLUG WIRE IS REMOVED.



4 Adjustments for tightening or loosening

drive chain are made by turning adjusting yoke as shown.

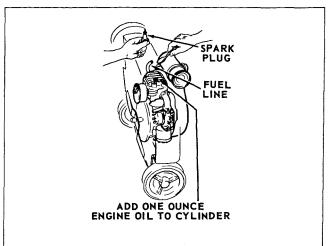
#### **STORING**

When it is necessary to store your mower for a period of 30 days or more:

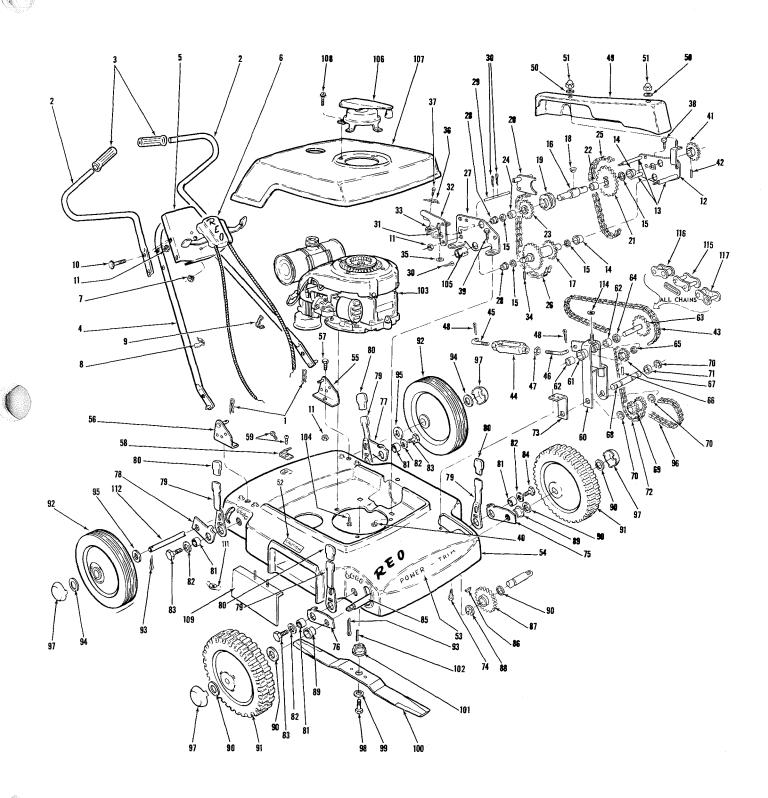
1 Drain gas tank by removing fuel line at the carburetor or fuel tank.

NOTE—If carburetor has float bowl, drain by pushing unward on bowl drain.

Remove the spark plug and pour approximately one ounce of engine oil into cylinder. Crank engine slowly about 12 revolutions to spread the oil over internal surfaces of the engine and then replace the spark plug. A little chassis grease on the cutting edges of the blade will prevent them from rusting during prolonged storage. Store your mower in a clean dry place, and cover it with canvas or paper to keep off excess dust and dirt.



#### **REO FOUR CYCLE POWER MOWER MODELS 421-LCP**



When ordering parts always list Part No. and name of part.

| Ref.<br>No. | Part<br>No. | Description                 | Ref.<br>No. | Part<br>No. | Description          | Ref.<br>No. | Part<br>No. | Description                  |
|-------------|-------------|-----------------------------|-------------|-------------|----------------------|-------------|-------------|------------------------------|
| 1           | S-52-3      | Spring Pin                  | 36          | MW-8267     | Cable Clamp          | 75          | MW 8596     | Arm Left Front               |
| 2           | MW-8664     | Upper Handle                | 37          | MW-4187     | Screw                | 76          | MW-8597     | Arm Right Front              |
| 3           | MW-8503     | Grip                        | 38          | MW-4204     | Bolt                 | 77          | MW 8594     | Arm Left Rear                |
| 4           | MW-8555     | Lower Handle                | 39          | GM-126216   | Bolt                 | 78          | MW-8595     | Arm Right Rear               |
| 5           | MW-8653     | Plate                       | 40          | GM 273802   | Nut and Lockwasher   | 79          | MW-8573     | Lever                        |
| 6           | MW 8679     | Throttle and Clutch Control | 41          | MW-8705     | Sprocket             | 80          | MW-8657     | Grip                         |
| 7           | GM-271166   | Nut and Lockwasher          | 42          | GM-9415236  | Spring Pin           | 81          | MW-8660     | Spacer                       |
| 8           | MW-4846     | Clip                        | 43          | MW-8729     | Chain                | 82          | GM-274865   | Washer                       |
| 9           | 5378        | Clip                        | 44          | MW-8726     | Yoke                 | 83          | MW-4203     | Bolt and Lockwasher          |
| 10          | GM-122033   | Bolt                        | 45          | MW-8727     | Link R.H. Thread     | 84          | GM-423562   | Bolt                         |
| 11          | GM-271184   | Nut and Lockwasher          | 46          | MW-8728     | Link L.H. Thread     | 85          | MW-8712     | Axle (Drive)                 |
| 12 thru 33  | MW-8716     | Transmission Assembly       | 47          | GM-120376   | Nut                  | 86          | GM-106749   | Key                          |
| 12 thru 14  | MW-8717     | Plate Assembly              | 48          | GM-119117   | Cotter Pin           | 87          | MW-8710     | Sprocket                     |
| 12 use      | MW-8717     | Plate                       | 49          | MW-8627     | Guard                | 88          | MW-4560     | Retaining Ring               |
| 13          | MW-5281     | Tie Bolt                    | 50          | GM-274865   | Washer               | 89          | MW-8711     | Bushing                      |
| 14          | MW-6233     | Bushing                     | 51          | MW-4662     | Nut                  | 90          | MW-4329     | Washer                       |
| 15          | MW 4327     | Washer                      | 52          | MW-8622     | Decal (Caution)      | 91          | MW-8713     | Wheel and Tire Assy. (Front) |
| 16          | MW-8720     | Shaft                       | 53          | MW-8601     | Decal (Power Trim)   | 92          | MW-8714     | Wheel and Tire Assy. (Rear)  |
| 17          | MW-8721     | Shaft and Sprocket Assy.    | 54          | MW-8523     | Base                 | 93          | GM-121222   | Cotter Pin                   |
| 18          | MW-4624     | Key                         | 55          | MW-8590     | Bracket              | 94          | GM-120394   | Washer                       |
| 19          | MW-8722     | Collar                      | 56          | MW 8591     | Bracket              | 95          | MW-4351     | Washer                       |
| 20          | MW-6219     | Yoke                        | 57          | GM-122007   | Bolt                 | 96          | MW-5431     | Chain                        |
| 21 and 22   | MW-5289     | Sprocket Assembly           | 58          | MW-8659     | Bracket              | 97          | MW 8715     | Hub Cap                      |
| 21 use      | MW-5289     | Hub and Sprocket Assy.      | 59          | MW-4194     | Screw and Lockwasher | 98          | GM-181639   | Bolt                         |
| 22          | MW-5308     | Bushing                     | 60 thru 72  | MW-8691     | Drive Assembly       | 99          | MW-4335     | Washer                       |
| 23 and 24   | MW-5283     | Sprocket Assembly           | 60,61,62    | MW-8692     | Bracket Assembly     | 100         | 5362        | Blade                        |
| 23 use      | MW-5283     | Hub and Sprocket Assy.      | 60 use      | MW-8692     | Bracket              | 101         | MW-7726     | Blade Drive                  |
| 24          | MW-5306     | Bushing                     | 61          | MW-8696     | Retainer             | 102         | GM-124546   | Key                          |
| 25          | MW-5431     | Chain                       | 62          | MW-5329     | Bushing              | 103         | MW-8579     | Engine Less Starter          |
| 26          | MW-8723     | Chain                       | 63          | MW-8698     | Sprocket Assembly    | 104         | MW-4754     | Bolt                         |
| 27 and 28   | MW-5277     | Plate Assembly              | 64          | MW-6011     | Washer               | 105         | MW-5591     | Collar                       |
| 27 use      | MW-5277     | Plate                       | 65          | MW-4329     | Washer               | 106         | MW-8581     | Starter Assembly             |
| 28          | MW-6233     | Bushing                     | 66          | GM-9415236  | Spring Pin           | 107         | MW-8588     | Shroud                       |
| 29          | MW-6709     | Rod                         | 67          | MW-8705     | Sprocket             | 108         | GM-450986   | Screw and Lockwasher         |
| 30          | GM-119117   | Cotter Pin                  | 68          | MW-8706     | Countershaft         | 109         | MW-8752     | Chute Cover Assembly         |
| 31 thru 33  | MW-8724     | Control Assembly            | 69          | MW-8707     | Sprocket             | 111         | MW-8756     | Wing Nut                     |
| 31          | MW-8649     | Bell Crank                  | 70          | MW-4560     | Retaining Ring       | 112         | MW-8638     | Axle (Rear)                  |
| 32          | MW-8740     | Bracket                     | <b>7</b> 1  | MW 4323     | Spacer               | 114         | MW-4345     | Spacer                       |
| 33          | MW 6707     | Pivot                       | 72          | MW-8708     | Chain                | 115         | MW-5830     | Connecting Link              |
| 34          | MW-4232     | Roll Pin                    | 73          | MW-8709     | Bracket              | 116         | MW-5831     | Roller Link                  |
| 35          | GM 120392   | Washer                      | 74          | MW-4204     | Bolt and Lockwasher  | 117         | MW-5832     | Offset Link                  |

Wheel Horse Service Bulletins 1961 - 1990: #3 Issued: December 1965

#### **Engine Cross Reference**

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This list provides the engine manufacturers model number for the engine used on Reo equipment. This information will be of assistance to you when ordering engine replacement parts. Models from 1964 through 1966 are included. Reminder: All "Reo Raider" engines with the prefix of M or MW were manufactured by Lauson. Lauson's model number may be located in the "Reo Engine Interchangeable Parts List."

#### **SNOW THROWERS**

| Reo Model Numbers                                                                   | Lauson Model Numbers                                                                                                                 |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 415 ST-3<br>417 ST-3<br>420 ST-3<br>ST-420<br>STE-420<br>ST-626 & STE-626<br>ST-267 | HT22B-3452 & H22-15016<br>HTC30B-3434 & H30-35008<br>HTR35B-3453 & H35-45005<br>H35-45059E<br>H35-45061E<br>H60-75072B<br>H60-75179E |
| 01 201                                                                              | 1100 /01/51                                                                                                                          |

#### **MOWERS**

| 418LR, 421LR               | H22-15029C                 |
|----------------------------|----------------------------|
| 418L<br>421L, 421LI, 421LC | LAV22-10021<br>LAV25-20019 |
| 421LCP                     | LAV25-20019                |
| 425L                       | V40-50030                  |
| L-158                      | LAV25-20098C               |
| LC-521                     | LAV35-40126C               |
| LCP-521                    | LAV35-40127C               |
| RR-46 (1965)               | V40-50077C                 |
| RR-65                      | V60-70066C                 |
| RE-65                      | V60-70067C                 |
| L-618                      | LAV30-30268E               |
| LC-621                     | LAV35-40126E               |
| LCP-621                    | LAV35-40127E               |
| RR-46 (1966)               | V40-50077D                 |
| RR-66                      | V60-70066D                 |
| RE-66                      | V60-70067D                 |

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Wheel Horse Service Bulletins 1961 - 1990: #301e Issued: February 1987

Engine Cross Reference Listing

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THIS SERVICE BULLETIN SUPERSEDES ALL PREVIOUS

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#### 1964 thru 1966 REO PRODUCTS ENGINE CROSS REFERENCE LISTING

LAUSON MODEL

This list provides the engine manufacturers model number for the engine used on Reo equipment. This information will be of assistance to you when ordering engine replacement ports. Models from 1964 through 1966 are included. Reminder: All "Reo Raider" engines with the prefix of M or MW were manufactured by Lauson. Lauson's model numbers may be located in the "Reo Engine Interchangeable Parts List."

#### SNOW THROWERS

REO MODEL

| 420 ST-3<br>ST-420                                                                                                                                         | HT22B-3452 & H22-15016<br>HTC30B-3434 & H30-35008<br>HTR35B-3453 & H35-45005<br>H35-45059E<br>H35-45061E<br>H60-75072B<br>H60-75179E                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MOWERS                                                                                                                                                     |                                                                                                                                                                                              |
| 418L<br>421L, 421L1, 421LC<br>421LCP<br>425L<br>L-158<br>LC-521<br>LCP-521<br>RR-46 (1965)<br>RR-65<br>RE-65<br>L-618<br>LC-621<br>LCP-621<br>RR-46 (1966) | H22-15029C LAV22-10021 LAV25-20019 LAV25-20020A V40-50030 LAV25-20098C LAV35-40126C LAV35-40127C V40-50077C V60-70066C V60-70067C LAV35-40126E LAV35-40127E V40-50077D V60-70066D V60-70066D |
|                                                                                                                                                            |                                                                                                                                                                                              |

#### 1967 REO PRODUCTS ENGINE CROSS REFERENCE LISTING

The information below provides the engine manufacturer's model number for the engine used on 1967 model Reo equipment.

|                         | MOWERS            |              |  |
|-------------------------|-------------------|--------------|--|
| REO                     | POWER PRODUCTS    | LAUSON       |  |
| MODEL NUMBER            | MODEL NUMBER      | MODEL NUMBER |  |
| T. 0. 1007. (61-11      | 7** F0 m 620 20   |              |  |
| LS-1827 (Challenger)    | AV-52 Type 638-30 |              |  |
| LS-2027 (Challenger II) | AV-52 Type 638-26 |              |  |
| LS-2047 (Challenger IV) |                   | LAV30-30268F |  |
| LC-2127 (Custom II)     | AV-52 Type 638-26 |              |  |
| LC-2147 (Custom IV)     |                   | LAV35-40126F |  |
| LCP-2147 (Regal IV)     |                   | LAV35-40127F |  |
| LL-217 (Royal IV)       |                   | H25-25100F   |  |
| RR-47                   |                   | V40-50077E   |  |
| RR-67                   |                   | V60-70066E   |  |
| RE-67                   |                   | V67-0067E    |  |
|                         | SNOW THROWERS     |              |  |
|                         | SNOW INCOMERS     |              |  |
| ST-420                  |                   | H35-45059E   |  |
| STE-420                 |                   | H35-45061E   |  |
| ST-268                  |                   | H60-75179F   |  |
| DI 200                  |                   | 1100 /31/91  |  |

#### 1968 REO PRODUCTS ENGINE CROSS REFERENCE LISTING

The information below provides the engine manufacturers model number for the engines used on 1968 model Reo equipment.

| REO MODEL NUMBER         | LAUSON | MODEL NUMBER |
|--------------------------|--------|--------------|
| LCP-2147 Regal IV        | LAV    | 35-40127G    |
| LCP-2147-1 Regal IV      | LAV    | 35-40127G    |
| LC-2147 Custom IV        | LAV    | 35-40126G    |
| LL-217 Reel Royal        | н      | 25-25100F    |
| 4-2631 26" Snow Thrower  | н      | 60-75179G    |
| 4-2632 26" Trailblazer   | н      | 60-75179G    |
| 4-1031 20" Pathfinder    | H      | 35-45176F    |
| 2-1231 Lawn Skiff Elec.  | v      | 60-70067G    |
| 2-2231 Lawn Skiff Recoil | v      | 60-70066G    |

#### ENGINE CROSS REFERENCE LISTING FOR 1955 THRU 1966 MODELS

All Wheel Horse Part Numbers are for reference only All engine and engine parts must be ordered from the Engine Manufacturers Sales and Service outlets.

| VEHICLE<br>IDENTIFICATION<br>MODEL NUMBER | KOHLER<br>MODEL NUMBER | CLINTON NUMBER<br>MODEL NUMBER |            |
|-------------------------------------------|------------------------|--------------------------------|------------|
| RJ 35, RJ 58, RJ 59                       | K-90                   | B1290-1107                     |            |
| ST 400, 401                               | K91-31388A             | B1290-1107                     |            |
| ST 550,                                   |                        |                                | H55B-1170  |
| 551                                       |                        |                                | H55D-2113  |
| 701, 702                                  | K161S-28622E           |                                |            |
| 32-R, 502                                 |                        |                                | HT55C-3088 |
| 32-E, 552                                 |                        |                                | HT55C-3089 |
| 33-R, 603                                 |                        |                                | H60-75016  |
| 33-E, 653                                 |                        |                                | н60-75009  |
| 633                                       | K141T-29102A           |                                |            |
| 753                                       | K161S-28626E           |                                |            |
| 953                                       | K241S-40135A           |                                |            |
| 34-R, 604                                 |                        |                                | H60-75004B |
| 34-E, 654                                 |                        |                                | H60-75063B |
| 704                                       | K161T-28937E           |                                |            |
| ,,                                        | K181S-30108A           |                                |            |
| 1054, 1054-A                              | K241S-46215A &         |                                |            |