

TRACKSTER



OWNERS MANUAL

TRACKSTER MODEL 898000

TRACKSTER MODEL 898002

The information and suggestions you will find in this manual will enable you to obtain the highest performance, dependability, economy and pleasure from your Trackster. Read it carefully before operating the vehicle and keep it handy for future reference.

Know your Trackster dealer. His livelihood is devoted to checking, servicing and repairing CUSHMAN products. He offers year-round service and carries sufficient parts stock to avoid unnecessary delay if repairs are needed. Take advantage of his services—he wants you to be happy with your Cushman.

Thank you for your purchase and please be assured that our interest in you, our customer, and the vehicle you have purchased begins with the sale.

SERVICE DEPARTMENT
CUSHMAN MOTORS
OMC - LINCOLN

QUICK REFERENCE INDEX

ADJUSTMENTS	Page	MAINTENANCE	Page
Breaker Points	14	Engine	13
Carburetor	18	Fuel System	20
Governor	17	General	23
Spark Plugs	14	MIXING FUEL	6
T-handle	23	MODEL IDENTIFICATION	2
Tracks	24	MODEL NUMBERS	2
AIR CLEANER	19	OPERATION	7
BATTERY	23	OWNER'S I. D. CARD	28
CARBURETOR	18	OWNER'S RESPONSIBILITY	3
CONTROLS	4	PARKING BRAKE	5
DIMENSIONS	12	REPLACEMENT PARTS	2
DRIVING	9	SAFETY PRECAUTIONS	7
ENGINE	13	SERIAL NUMBERS	2
FUEL FILTER	21	SERVICE PUBLICATIONS	3
FUEL PUMP	22	SPECIFICATIONS	12
FUEL RECOMMENDATIONS	6	STARTING THE ENGINE	7
GOVERNOR	17	STORAGE	26
IGNITION	14	TOWING	25
INTRODUCTION	2	TRANSMISSION	23
LUBRICATION	13	TROUBLE SHOOTING	26
		TUNE-UP	13
		WARRANTY CARD	28
		WARRANTY SERVICE	3
		WIRING DIAGRAM	10

Cushman Motors Division of Outboard Marine Corporation reserves the right to make design and specification changes, additions and improvements, in its products without notice and without incurring obligation to install them on products already manufactured.

INTRODUCTION

The Cushman vehicle you have just purchased is the result of over half a century of experience in designing and engineering vehicles for industry and pleasure. With proper care, your Trackster will give the same long, dependable service that Cushman vehicles have given in the past.

The Trackster features flexible, one-piece molded rubber tracks for maximum traction and minimum ground pressure, a low center of gravity for stability and ample room for two passengers and equipment. The ultimate in handling ease is provided by a single T-handle which controls the speed, direction and braking of the vehicle.

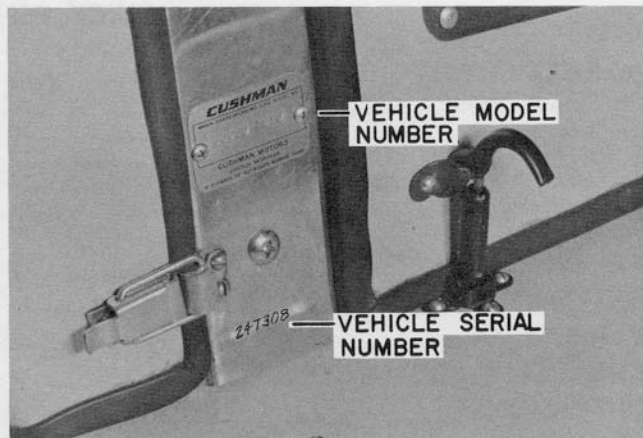
Power is supplied by an OMC 25 horsepower, die-cast aluminum, air-cooled, two-cycle, electric-start engine.

The engine is connected to the axle through a flexible coupling, spiral bevel gears and two hydrostatic transmissions which enable each track to be controlled independently.

MODEL IDENTIFICATION

Vehicle Model and Serial Numbers

The vehicle model number is stamped on the nameplate located on the cowl trim just below the right handhold. The vehicle serial number is stamped in the trim below the nameplate. Refer to both numbers in all correspondence concerning your vehicle and when ordering replacement parts.



Engine Model and Serial Numbers

These numbers are stamped in the nameplate attached to the engine fan housing below the manual starter housing. Refer to both numbers in all correspondence concerning your engine and when ordering parts.

REPLACEMENT PARTS

A nation-wide Trackster dealer organization has been established to supply service and replacement parts. Your Trackster dealer has a stock of all the commonly needed parts and will immediately order any parts you may require that he does not have in stock at the present time.

SERVICE PUBLICATIONS

Additional Owner's Manuals, as well as illustrated Parts Books and Service Manuals, are available from the Service Department, Cushman Motors, Lincoln, Nebraska. A minimum charge is made for these publications; prices are available on request. **Always give the VEHICLE MODEL AND SERIAL NUMBER** when requesting publications.

WARRANTY SERVICE

See Back Cover For Owner Identification and Warranty Card.

Should your Trackster require service which appears to be under warranty, take it to your authorized Cushman Trackster Dealer. He will make the necessary repairs and return the parts to the factory with a completed Warranty Request.

The following points should be followed when requesting a warranty repair:

1. All warranty work must be performed by an authorized Cushman Trackster Dealer.

2. Warranty Service can be obtained from any authorized Dealer, however, it is best to have the work performed by the Dealer who originally sold the vehicle because of his personal interest in you.

ITEMS NOT COVERED BY WARRANTY

Provisions of the warranty will not apply to:

1. Vehicles subject to misuse, accident, neglect, alterations, or used for racing purposes.
2. Pickup and delivery of vehicle, mechanics

travel time, and removal of non-Cushman accessories.

3. Used or secondhand vehicles. The warranty applies to the original purchaser only.

4. Damage to tracks or suspension system due to excessive operation on hard, paved surfaces.

5. Damage due to impact, upset or towing.

OWNER'S RESPONSIBILITY

Normal maintenance service and replacement of service items are the responsibility of the owner and such are not considered defects in material and workmanship within the terms of the Warranty. Individual operating habits and usage contribute to the need for maintenance service.

To validate the warranty it is the owner's responsibility to:

1. Provide correct recommended fuel and mixture.

2. Maintain all components in proper adjustment.

3. Have all recommended services performed as required.

Normal maintenance services are:

1. Adjustments

2. Tune-up

3. Air Cleaner Service

Service items not covered by the warranty are:

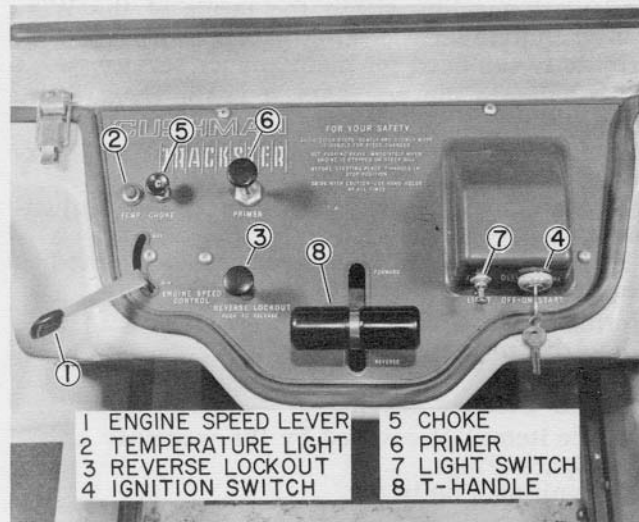
1. Spark Plugs

2. Ignition Points

3. Belts

CONTROLS

In the interest of your safety and driving pleasure, it is necessary that you understand the full use of the controls on your vehicle. Read this section carefully and try each control on your vehicle before attempting to operate it. If you do not understand the use of any of the controls, ask your Cushman Trackster dealer. He will be glad to help you.



Engine Speed Control

The thumb-operated lever is located on the left side of the control panel. The lever adjusts the engine governor to provide a constant engine speed. The vehicle speed can also be controlled by this lever.

Light Switch

The Trackster is equipped with two sealed beam headlights and a tail light. Pull the switch out to turn the lights on.

Ignition Switch

The ignition and starter switch can be operated only with the proper key. The switch has **OFF**, **ON** and **START** positions.

Primer

The primer is used to manually pump fuel into the crankcase prior to starting a cold engine.

Choke

The choke is used during starting and engine warm-up to enrich the fuel supply to the engine.

Temperature Light

This red warning light will illuminate when the transmission oil reaches a temperature above normal. Do not operate the vehicle with the warning light on. Check for obstructed air vents. Do not operate the vehicle with the air shrouds and engine covers removed.

T-Handle

This handle controls the vehicle speed, direction and brakes **WHEN THE ENGINE IS RUNNING**. It has **REVERSE**, **STOP** and **FORWARD** positions. See Page 9 for detail operation.

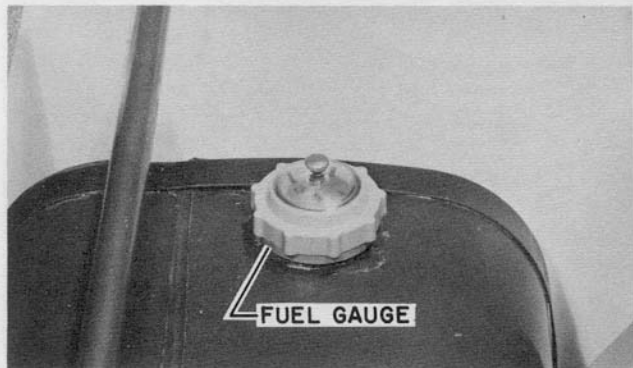
Reverse Lockout

The lockout must be depressed before the T-handle can be moved to the reverse position.

Parking Brake

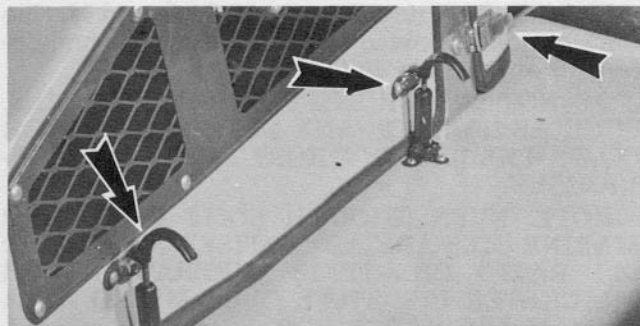
The lever located to the left of the seat operates the parking brake. Pull the lever up to engage the brake.

CAUTION: Always engage the parking brake when the vehicle and engine are stopped. As long as the engine is running and pressure is maintained in the hydraulic system, the T-handle in the stop position will prevent the vehicle from moving. Once the engine is stopped and the pressure bleeds off the hydraulic system, the vehicle can coast but cannot be steered or stopped by the T-handle.



Fuel Gauge

The fuel gauge and fuel tank cap are one unit. The gauge is self-actuating and does not require electrical power. The gauge measures the amount of fuel left in the tank, a more accurate measure is made when the vehicle is on a level surface. The cap incorporates a vent screw in the top. Be sure the vent is always open (screw turned counterclockwise) when the vehicle is in operation and is not obstructed or clogged.



Engine Cover Latches

The engine covers can be removed by releasing the catches as shown. Each cover has two latches on each side.

Manual Starter

If the electric starter should not function, the rewind manual starter can be used. The handle is located just below the left handhold.

FUEL RECOMMENDATIONS

CAUTION: THE TRACKSTER IS EQUIPPED WITH A TWO-CYCLE ENGINE. OIL MUST BE MIXED WITH THE GASOLINE.

The correct fuel mixture ratio is 20 parts of a good grade, regular gasoline to one part oil. For ease of measurement, this is equivalent to one quart of oil to five gallons of gasoline. See fuel mixing instructions.

Use only Evinrude, Johnson or Outboard Marine Corporation approved oil or a reputable non-detergent automotive engine oil, SAE 30.

DO NOT USE MULTIPLE VISCOSITY OILS, SUCH AS 10W30, OR ANY OUTBOARD MOTOR OILS OTHER THAN THOSE SPECIFIED PREVIOUSLY.

NOTE: EVEN THOUGH SOME OUTBOARD MARINE OILS ARE ADVERTISED AS A 50:1 or 24:1 RATIO OIL, IT IS IMPERATIVE FOR TRACKSTER USE THAT IT BE MIXED AT A 20:1 GAS-OIL RATIO.

Mixing Fuel

Use only a good grade of regular gasoline. Higher octane fuels may be used but generally do not offer any advantages.

Always use a separate clean container for mixing fuel. Never pour oil or gasoline separately into the vehicle tank.

To prepare the Trackster fuel properly, pour into a **SEPARATE** clean container, half the amount of regular gasoline required and add all the required oil. Thoroughly shake this partial mixture. Next, add the balance of gasoline necessary to bring the mixture to the required ratio of 20:1. Again, thoroughly shake the mixture. A clean funnel equipped with a fine screen should be used when pouring the fuel mixture into the vehicle tank.

When it is necessary to mix fuel and oil at temperatures below 32° F., the oil should be pre-diluted with gasoline to improve its mixability. Pre-dilute the oil by adding one part gasoline to one part oil. When doing this, the oil temperature should be above 32° F. **DO NOT** use kerosene or fuel oils for pre-diluting oil.



STARTING THE ENGINE

1. Engage the parking brake.
2. Place T-handle in STOP position.
3. Pull up choke knob.
4. Press primer three or four times.
5. Advance engine speed control lever approximately halfway.
6. Turn ignition switch to start position until engine starts, then release the key and it will return to the "on" position.
7. If the engine does not start immediately, prime once more and repeat from Step. 5. The number of times the primer must be pressed will depend on the operator becoming familiar with starting a cold or warm engine. Do not over-prime. Priming delivers liquid fuel to the crankcase, bypassing the carburetor.
8. If the electric starter should not function, the rewind manual starter can be used. Grasp the starter handle firmly, pull slowly until the starter engages, then pull to start the engine.
9. After the engine starts, adjust the choke for best running results.
10. Allow the engine to warm up at a moderate speed just above idle. As the engine warms up, push the choke knob all the way down.
11. To stop the engine, turn the ignition switch key to "OFF." ALWAYS be sure parking brake is engaged when engine and vehicle are stopped.

OPERATION

Safety Precautions

1. All operators must be properly instructed on the operation of the vehicle. Be sure the use of each control is understood completely. READ THE OWNER'S MANUAL THOROUGHLY.

2. Allow passengers only in seats provided.

3. Avoid quick stops. Always return the T-handle to the stop position **slowly** with light pressure.

CAUTION: USE EXTREME CARE WHEN ATTEMPTING TO STOP WHILE DESCENDING A STEEP INCLINE. THE VEHICLE CENTER OF GRAVITY CHANGES DRASTICALLY WITH THE CHANGE IN TERRAIN. SEE ILLUSTRATION.

4. Avoid quick turns which can dislodge an unsuspecting passenger.

5. Keep hands and feet in the vehicle. Use the handholds provided.

6. Never leave the machine while the engine is running. Always engage the parking brake and remove the ignition key when leaving the vehicle unattended.

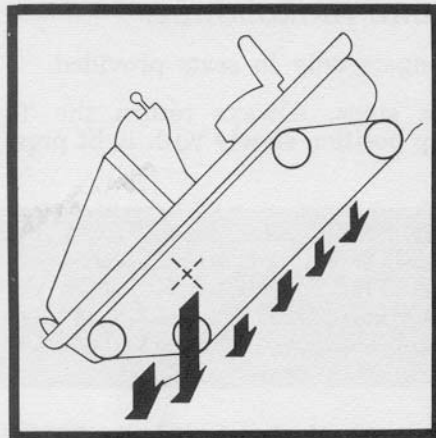
7. Never attempt to operate the vehicle from anywhere other than the driver's seat.

8. Use caution when operating in unknown terrain. Snow, water and grass can hide stumps, logs and holes. Never cross a frozen lake or river with-

out checking the thickness of the ice.

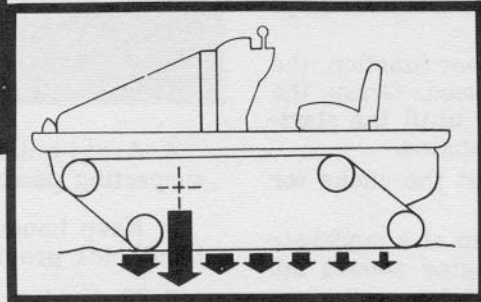
9. Do not drive your Trackster on streets, roads or highways unless it is legal to do so.

10. Do not drive on private property without the owners' permission.

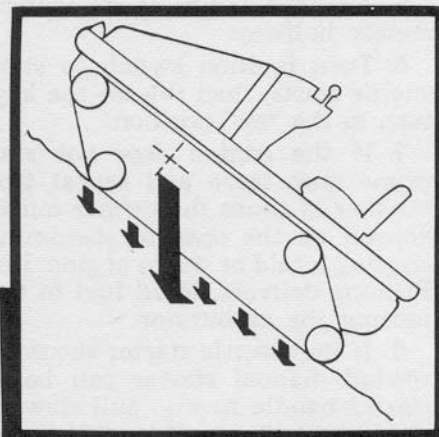


DOWNHILL

USE CAUTION WHEN GOING DOWN HILLS. SUDDEN STOPS ON SOME GRADES COULD CAUSE VEHICLE TO TIP FORWARD.



LEVEL



UPHILL

VEHICLE CENTER OF GRAVITY

DRIVING THE VEHICLE

All persons should operate the Trackster on level, unobstructed terrain until completely familiar with its handling characteristics.

1. Start the engine and allow it to warm up as outlined on Page 7.
2. Release parking brake.
3. T-handle positions:

CAUTION: THE T-HANDLE CONTROLS THE VEHICLE ONLY WHEN THE ENGINE IS RUNNING. NEVER ATTEMPT TO COAST OR PULL THE VEHICLE DOWNHILL. ALWAYS ENGAGE THE PARKING BRAKE WHEN THE ENGINE AND VEHICLE ARE STOPPED.

The vehicle will react directly in proportion to the movement of the T-handle; i.e., an erratic, jerking motion on the T-handle will provide that type of vehicle motion. Always use light pressure and move the handle slowly whenever possible.

STOP: This position provides neutral and prevents movement of the vehicle **when the engine is running**. **Gradual return** of the handle to this position will provide a smooth, even stop.

FORWARD: Moving the handle forward starts the vehicle moving forward. As the handle is advanced, the vehicle speed increases. Move the handle forward slowly to allow the engine time to respond. Thrusting the handle forward quickly will offer a situation similar to rapidly releasing the clutch on an automobile. Power is demanded too quickly and the engine is stalled. The terrain being traveled and vehicle load will determine

how far the T-handle can be advanced. As the engine begins to lose RPM or "lug down," pull the T-handle back **slowly** until the engine returns to its original speed. This procedure simulates shifting to a lower gear in a conventional transmission, the vehicle speed is decreased and more power is supplied to the drive system. While the vehicle is being driven, the T-handle must be continually adjusted as the terrain changes. Always try to maintain a constant engine RPM. Allow the engine to "run freely," avoid overworking or "lugging" the engine. In deep snow or soft terrain, it may not be possible to operate with the T-handle fully advanced.

REVERSE: Depress the Reverse Lockout and pull the T-handle back. Turn by twisting the handle. **NOTE:** When backing the vehicle, the T-handle action for turning is reversed.

Always return the T-handle to the STOP position before turning off the ignition.
DO NOT:

DO NOT operate the TRACKSTER on rugged or hazardous terrain until you are completely familiar with its handling characteristics.

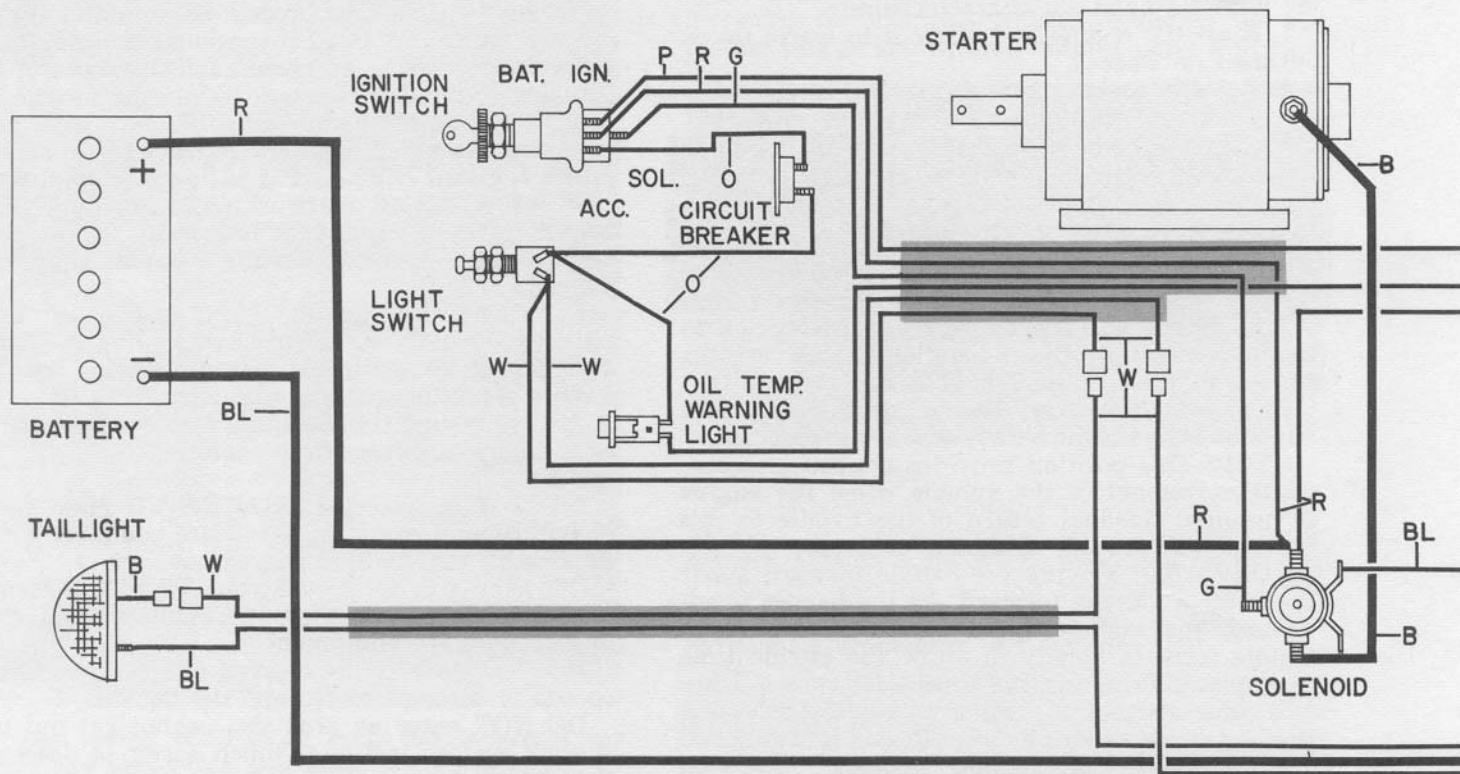
DO NOT attempt to use your TRACKSTER as a boat or attempt water operation without the proper flotation equipment.

DO NOT go over the crest of a hill at excessive speeds or attempt to "jump" the vehicle.

DO NOT enter an area you cannot get out of. A slick surface incline is much easier to descend than climb.

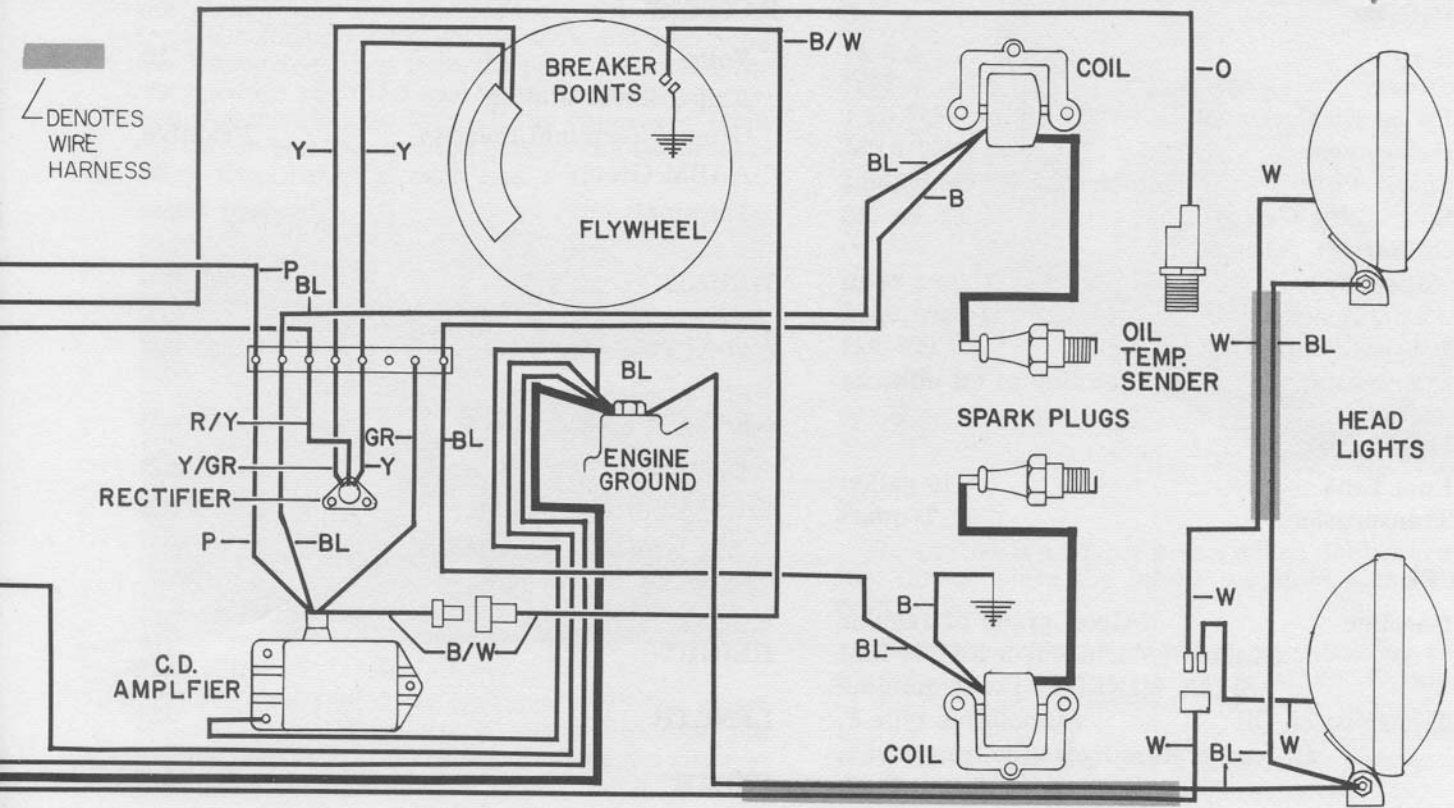
B-BLACK B/W-BLACK & WHITE BL-BLUE G-GREEN GR-GREY O-ORANGE

COLOR



CODE	P-PURPLE	R/Y-RED & YELLOW	W-WHITE	Y-YELLOW	Y/G-YELLOW & GREY
------	----------	------------------	---------	----------	-------------------

 DENOTES
WIRE
HARNESS



SPECIFICATIONS

ENGINE

Bore	2 3/4"
Stroke	2 1/4"
Piston Displacement	26.7 cu. in. (437 c.c.)
Horsepower	25 at 5000 RPM
Spark Plug	Champion J2J or equivalent
Spark Plug Gap	.028 to .033
Carburetor Adjustment	
High Speed	1 turn open
Low Speed	1 turn open
Breaker Point Gap	.020-.022
Lubrication	20:1 gasoline to oil mixture

CAPACITIES

Fuel Tank	10 gallon
Transmission	7 quart

FUEL

Gasoline	Good grade of regular Outboard Marine oil or SAE 30 MM or MS. MIXED 20:1 with gasoline
Transmission Oil	Automotive type F, all-temperature hydraulic transmission fluid.

BATTERY

Volts	12
Ampere-hour Rating	67
Ground Terminal Polarity	Negative
AABM Group	24
Terminals	Standard taper

WEIGHT

985 lbs.

CAPACITY

800 lbs.

GROUND PRESSURE

Dry unloaded	0.47 P.S.I.
Wet with one operator	0.60 P.S.I.
Wet with two persons and 100 lbs. equipment	0.73 P.S.I.

HEIGHT

41"

LENGTH

92"

WIDTH

61"

MAINTENANCE ENGINE

Lubrication

Both engine performance and lubrication depend on maintaining the correct ratio between gasoline and oil in the fuel mixture. The use of two little oil leads to premature wear. A fuel mixture richer in oil than recommended is not only wasteful but will contribute to faulty performance and to excessive carbon accumulation in the cylinders and on the spark plugs. Frequent spark plug replacement can often be traced to an excess of oil in the fuel mixture. Instructions for mixing fuel are given in this manual and should be followed exactly.

Tune-up

In the normal operation of an engine, the operator may not be fully aware of the decrease in performance which takes place slowly over a long period of time. Economical, trouble-free operation can best be assured if a complete tune-up is performed at least once each year.

Components which affect power and performance can be divided into three groups which are:

1. Items affecting compression
2. Items affecting ignition
3. Items affecting carburetion

A tune-up should cover these groups in the order given. Correction of items affecting carburetion should not be attempted until all items affect-

ing compression and ignition have been corrected satisfactorily.

A complete tune-up should include the following operations. Procedures for these operations appear in this manual under the appropriate heading.

1. Compression check.
2. Clean and gap or replace spark plugs.
3. Clean and adjust or replace breaker points.
4. Check governor for proper operation and oil level.
5. Adjust carburetor.
6. Check air cleaner element.
7. Inspect entire fuel system for leaks, install new fuel filter and clean fuel screens in fuel tank and pump.
8. Inspect starter and governor belts.
9. Be sure the correct fuel mixture is being used.

Compression

Cylinder compression can be checked by using an automotive-type compression gauge as follows: Remove both spark plugs, be sure the choke knob is pushed in, set the engine speed lever at maximum and turn the engine over quickly three or four times with the manual starter. The compression in each cylinder should be 100 pounds minimum. If the compression is below this figure, the engine cannot be tuned for peak performance and further service is needed.

Ignition

The Trackster is equipped with a CD (Capacitor-Discharge) ignition system which provides longer breaker point and spark plug life, easier engine starting and smoother engine performance.

Battery voltage is fed into the Pulse-Amplifier which "steps-up" the voltage and stores it. The breaker points trigger the release of the voltage which then goes instantaneously through the ignition coil and to the spark plugs. Current across the breaker points is low and voltage across the spark plugs is high.

Service of the CD unit should be performed by your Trackster dealer who has the necessary equipment and knowledge.

Spark Plugs

Spark plugs having the proper heat range are very important for peak performance of the engine. Use only Champion J2J or equivalent. Clean spark plugs frequently and adjust the gap to .028-.033. If an intermittent misfire occurs, change the gap to .040. DO NOT clean spark plugs on abrasive blasting machines. Blasting tends to pack the abrasive between the insulator top and the metal shell of the plug. Any abrasive left in the plug may pass through the engine causing piston or cylinder wall wear.

Breaker Points

1. Remove air intake chamber.
2. Remove the manual starter from the fan housing.

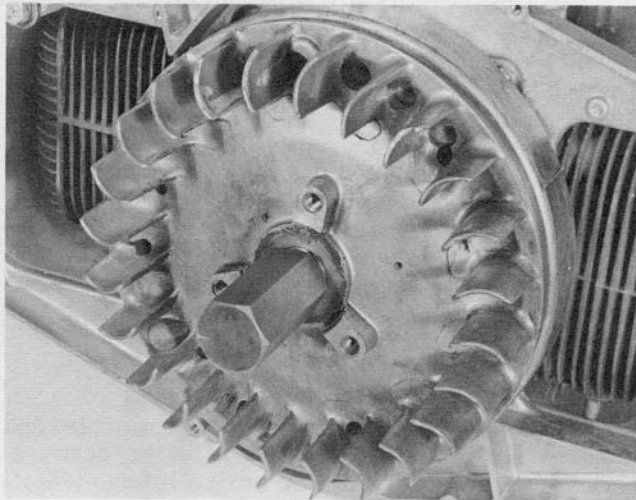
3. Remove the governor bracket and governor. Mark the hole the throttle spring is hooked in.

4. Remove the manual starter ratchet adapter from the flywheel.

5. Loosen the belt tension and remove the starter belt.

6. Remove the flywheel nut.

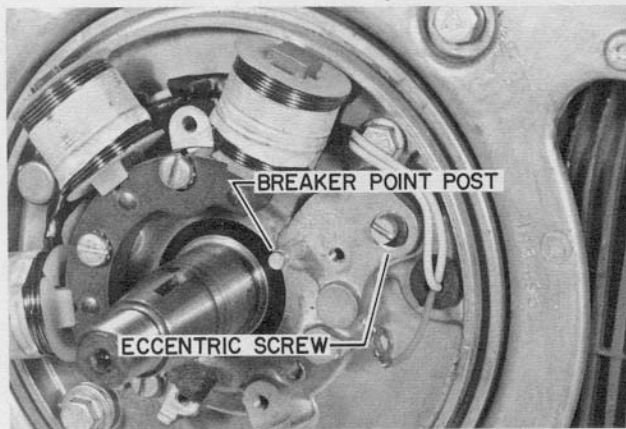
7. The flywheel can now be removed by using a flywheel puller or a 5/8 - 18 knock-off (Part No. 809315). Be sure the knock-off is screwed onto the crankshaft as far as it will go, apply light pressure to the back of the flywheel and hit the knock-off a sharp blow with a metal hammer.



Under normal running conditions, breaker points will appear slightly rough and gray in color. Abnormal points will appear excessively pitted, may have a considerable amount of material transferred from one contact surface to another, and will be generally blue in color.

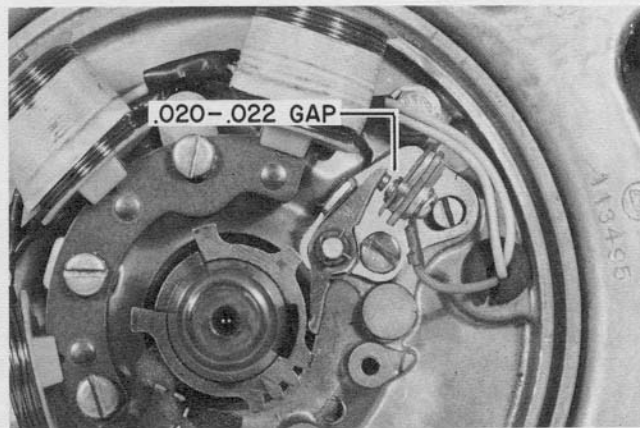
The points can be cleaned by saturating a clean strip of cotton material in alcohol and working it up and down between the points. Finish with a clean piece of paper or card to remove any residue. If the points cannot be cleaned satisfactorily by this method, replace them.

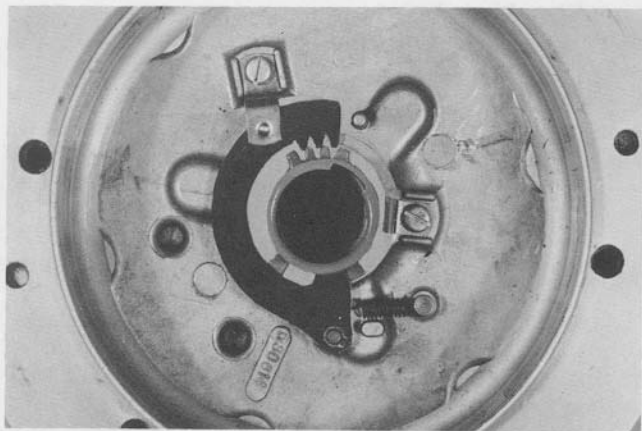
Remove the breaker points by disconnecting the wire lead, breaker retaining screw and clip.



Installing New Points

1. Clean the breaker post thoroughly.
2. Turn the eccentric adjusting screw into the plate until it bottoms.
3. Install breaker assembly over breaker post.
4. Connect the wire lead to the breaker point screw terminal. Replace breaker retaining screw and clip.
5. Install new oiler clip and wick. Apply distributor lubricant to the oiler wick and to fiber cam follower on side toward cam rotation.
6. Install the breaker cam and key on the crankshaft, position the breaker arm on the high lobe of the cam and adjust the points to a .020-.022 gap with a feeler gauge.





7. Remove the cam from the crankshaft and position it in the flywheel as shown. Edge of keyway in cam must be aligned with edge of keyway in flywheel when viewed from the outside of the flywheel as shown.

8. Rotate the crankshaft so the keyway is 180° opposite the breaker point pivot pin.

9. Place the Woodruff key into the crankshaft keyway. Place flywheel and cam assembly on crankshaft. BE SURE the cam has not slipped out of position. When the flywheel is properly seated, the outer edge will be about 1/32 inch above the shoulder on the crankshaft. DO NOT use force. The breaker cam can be broken by improper installation. If it is impossible to position

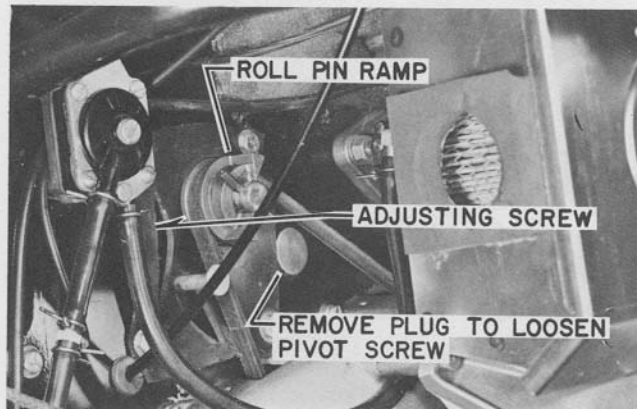
the flywheel properly, remove it and repeat the above procedure.

10. Place the flywheel washer and nut on the crankshaft and tighten nut to 40-45 foot pounds.

11. When this procedure is followed, the engine is timed correctly and no further adjustment is necessary.

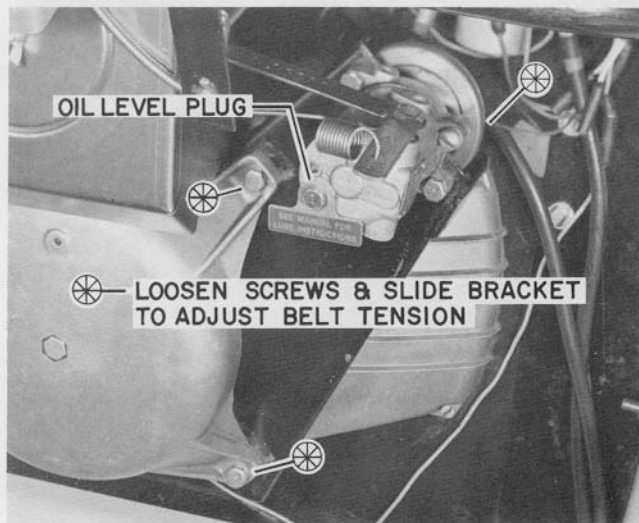
12. Reinstall starter belt, manual starter ratchet, and governor and bracket. Adjust the starter belt to be snug when the movable pulley is halfway up the roll pin ramp. Adjust the governor belt to provide 1/2" deflection with slight pressure of the belt midway between the pulleys. Hook the governor spring back into the original hole on the governor lever.

13. Check governor for proper adjustment.



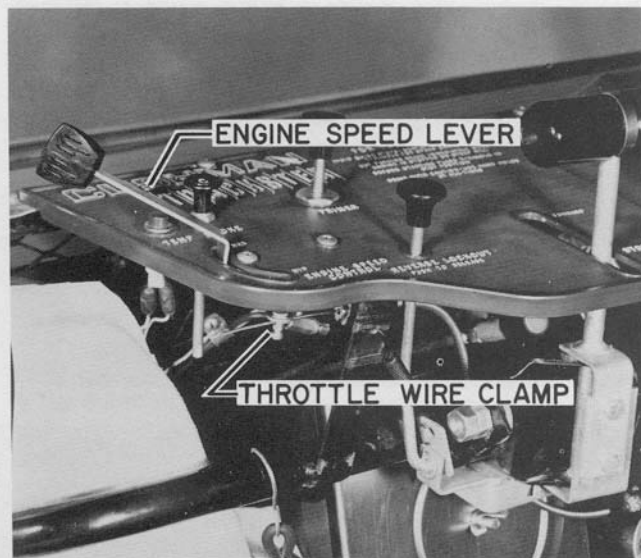
Governor

Check the governor oil level at least once each year. Add 10W30 engine oil as required to bring oil to the filler plug level as shown. DO NOT OVERFILL.



Adjustment

Proper governor adjustment will provide a maximum engine RPM of 5600-5900. Place the T-handle in the stop position, start the engine, advance the Engine Speed Control to maximum and check the engine RPM with a tachometer.



If the engine RPM is too high, loosen the throttle wire clamp on the engine speed lever and move the wire to decrease the tension on the governor spring.

If the engine RPM is too low, adjust the wire to increase the tension on the spring. Be sure the wire housing is not obstructing the wire travel on the spring end.

Adjust the carburetor high speed needle until engine runs smoothly. ($7/8$ to $1\frac{1}{4}$ turns open.)

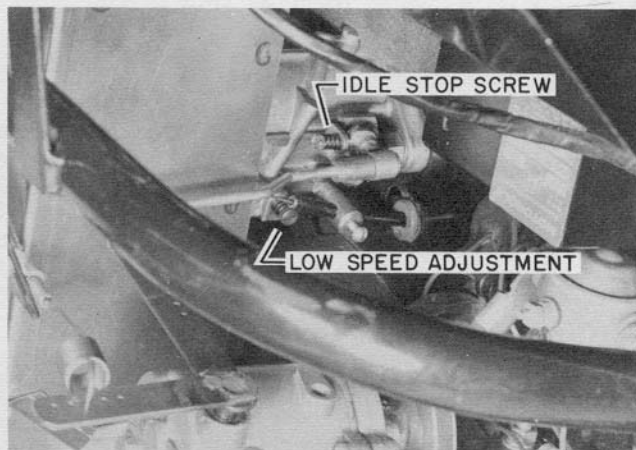


CAUTION

"LEANING OUT" OF THE HIGH SPEED NEEDLE VALVE WILL RESULT IN SERIOUS DAMAGE TO THE ENGINE. NEVER SET THE HIGH SPEED NEEDLE LESS THAN 7/8 TURN OPEN.

When the engine will not maintain a constant RPM or is "hunting" continually, the governor is adjusted too sensitive or the carburetor high speed needle is adjusted too lean. Move the governor spring hook to the next hole in the arm away from the governor until the engine responds satisfactorily. Readjust the throttle wire and spring for top RPM of 5600 - 5900.

A slight variation in RPM, or "hunting" at maximum engine speed with the T-handle in the STOP position is normal.



Carburetor Adjustment

Carburetor adjustments should always be made with the engine at the normal operating temperature.

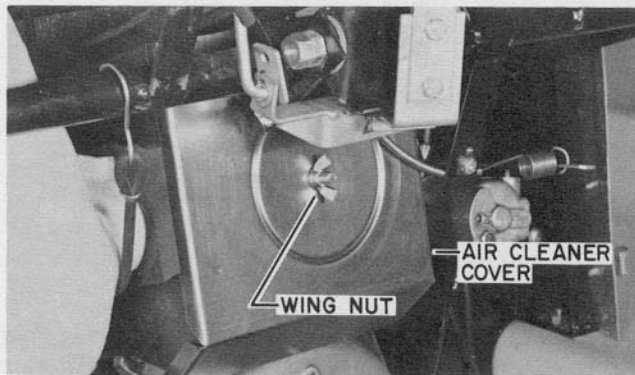
1. Set the engine control on minimum and adjust the idle stop screw to maintain 1200-1500 engine RPM.
2. Adjust the low speed needle to provide the fastest and smoothest engine idle. Readjust the idle stop screw for 1200 - 1500 RPM.

3. Move the Engine Speed Lever to maximum, turn the high speed needle counterclockwise (out) permitting the engine to run rich to where it begins to 4-cycle (load-up). Turn the needle back clockwise (in) gradually until the engine runs smooth. Be sure to give the engine time to respond.

CAUTION

TO MAINTAIN ADEQUATE CYLINDER LUBRICATION, THE HIGH SPEED NEEDLE VALVE SHOULD NEVER BE LESS THAN 7/8 TURN OPEN.

4. Readjust idle speed to 1200 - 1500.



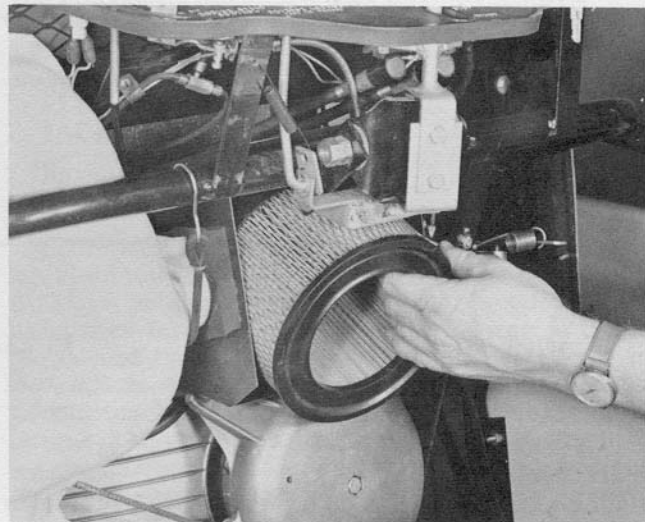
Air Cleaner

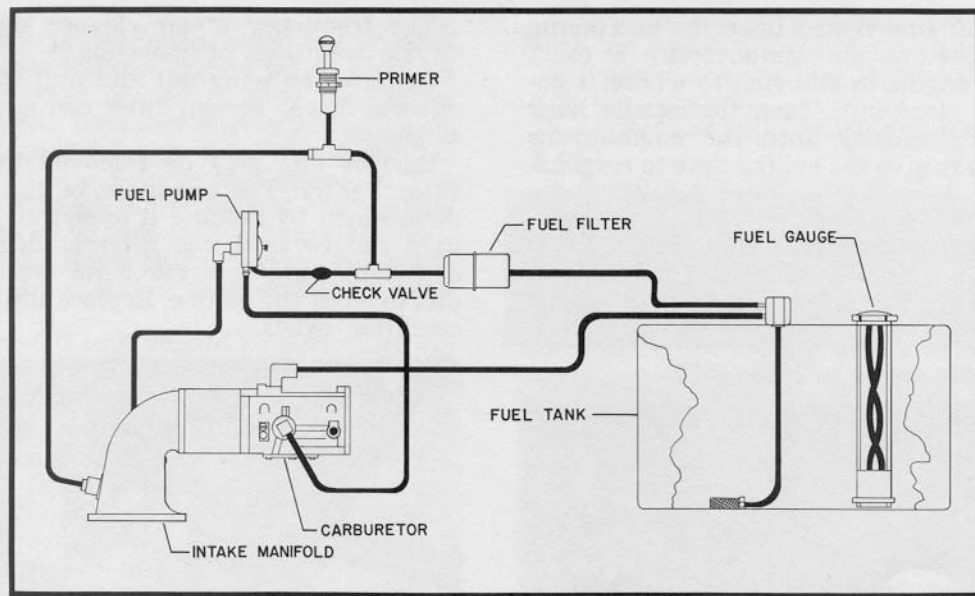
The Trackster is equipped with a replaceable paper air filter.

The frequency of air cleaner service depends on the conditions of operation.

Remove the wing nut and pull the filter cover out and down. The air filter can now be removed as shown.

Surface dirt may be removed by tapping the filter lightly. The condition of the filter can be determined by holding it over a light bulb. If no light can be seen, the filter is clogged. Pinholes of bright light indicate holes which will allow dirt to enter the engine. Replace the filter if either condition exists.





FUEL SYSTEM

The complete fuel system consists of the fuel tank, fuel filter, fuel pump, primer, carburetor and all connecting hoses.

Fuel Tank

The importance of using a fresh, clean fuel mix-

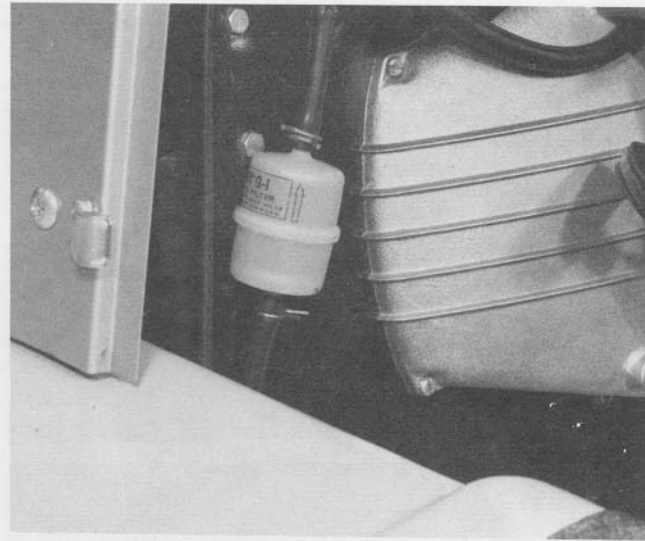
ture should not be underestimated. An aging fuel mixture promotes petroleum gum which will clog screens and fuel passages. Always drain and clean the fuel tank before storing the vehicle for an extended period.

The fuel pickup line in the tank contains a screen and check valve on the lower end. Remove the pickup line by disconnecting the fuel lines from the fitting on top of the tank and removing the fitting from the tank. Inspect the screen for obstructions and the check valve for proper operation. Air should pass through the valve only from the screen end.



Fuel Filter

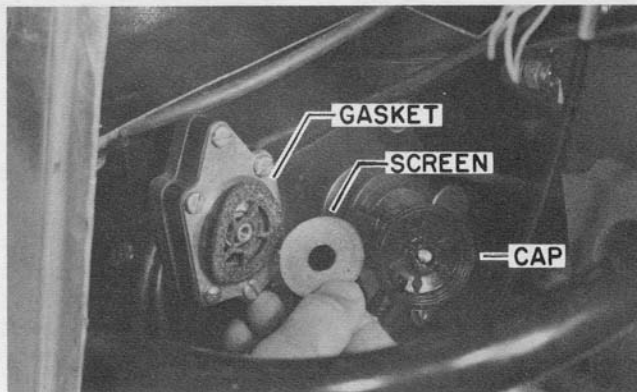
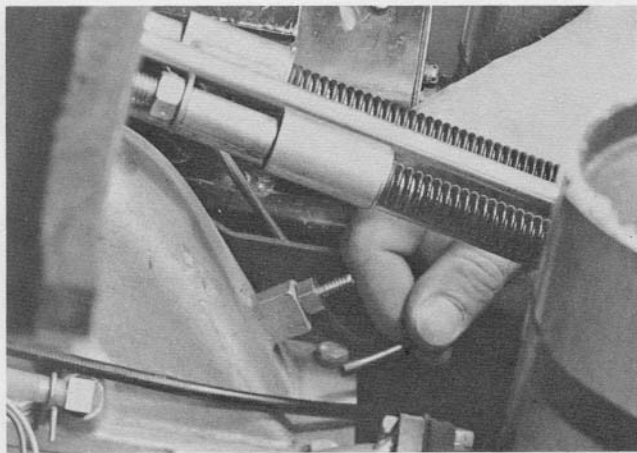
The in-line fuel filter contains a pleated paper filter element. This unit is not serviceable and must be replaced if defective. **A RESTRICTED OR CLOGGED FUEL FILTER WILL CAUSE A LEAN FUEL CONDITION RESULTING IN ENGINE DAMAGE.**



Primer

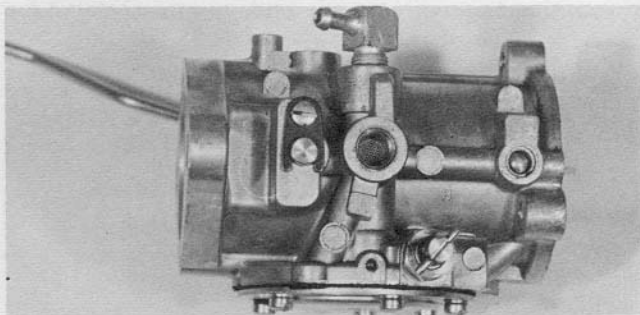
The primer is a simple pump which delivers raw fuel directly into the intake manifold above the reed valves.

Check the primer for proper operation by disconnecting the hose from the manifold. A squirt of fuel should be noticed when the plunger is moved. If little or no fuel is discharged, check the valve in the fuel line T-fitting for leakage or sticking.



Fuel Pump

The fuel pump components are not serviced separately. If the fuel pump is not functioning properly, replace the complete unit. Inspect the screen for accumulation of sediment by removing the cap screw and cap as shown. Clean the screen and cap and dry thoroughly before reassembling. Replace the screen annually.



Carburetor

The carburetor contains a filter screen at the fuel inlet. Remove the fuel line and fitting from the carburetor. Remove any accumulation of sediment with a small piece of wire.

The engine should operate satisfactorily when the carburetor is adjusted as described under "Carburetor Adjustment." If the engine will not perform satisfactorily, the carburetor needs cleaning or some other abnormal condition exists in the engine.

GENERAL MAINTENANCE

Battery

Maintain the water to the proper level in each cell. Fill at cells to the indicated level once each month. Keep the battery terminals clean and free from corrosion. Always replace the battery box cover after servicing the battery.



Transmission

DO NOT run the engine if you suspect the transmission is low or out of fluid or if the fluid has become contaminated.

The transmission hydraulic system is sealed to eliminate contamination. A fluid change is re-

quired ONLY if the system becomes contaminated by a foreign substance such as water. NEVER remove any part of the hydraulic system or attempt any repairs.,

Repairing the transmission is a major service operation and should be performed by your authorized Trackster dealer who has the necessary equipment and information.

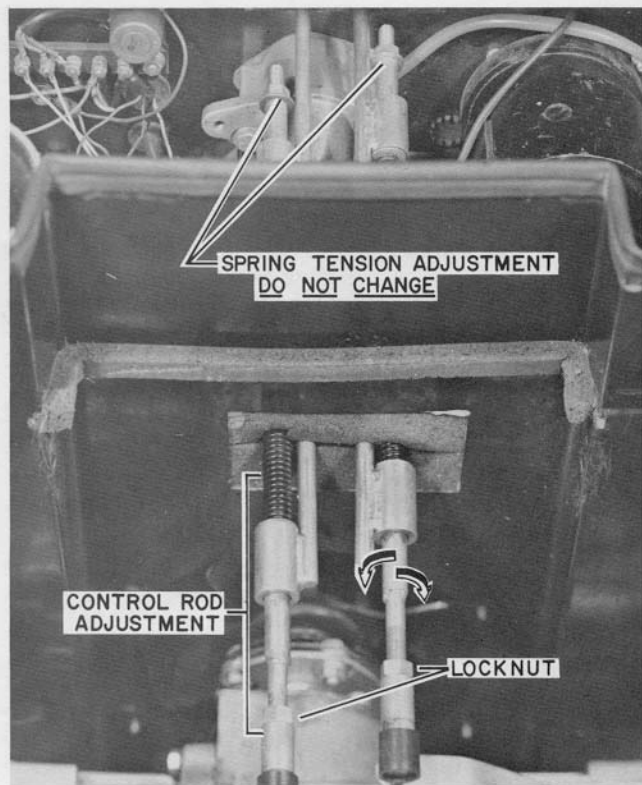
Check the transmission fluid level each time the fuel tank is filled. A dipstick is provided as shown. Start the engine and let it run 2-3 minutes to allow full circulation of the oil to all components. Stop the engine and check the oil level to be sure it is between the two marks on the dipstick. Add oil as necessary to bring the level to the full mark on the dipstick. Use only automotive type F, all-temperature hydraulic transmission fluid.

ALWAYS ALLOW OIL TO CIRCULATE BEFORE CHECKING LEVEL.

Note: A transmission needing fluid at regular intervals is obviously leaking and service is needed.

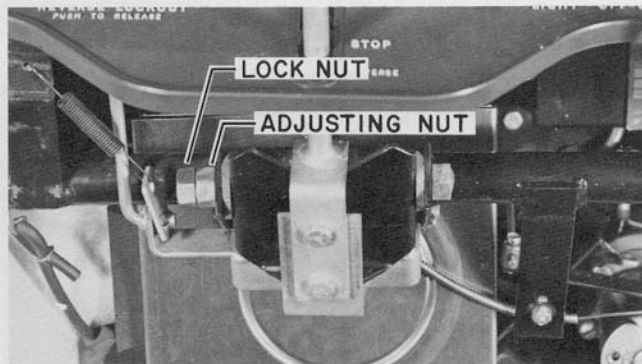
T-handle

The T-handle adjustment is obtained by changing the length of the control rods. Raise the vehicle to allow both tracks to clear the floor. Loosen the lock nuts as shown and turn the rods until both tracks are stopped when the T-handle is in the STOP position.



The spring tension on each rod is preset for overload protection and must not be changed.

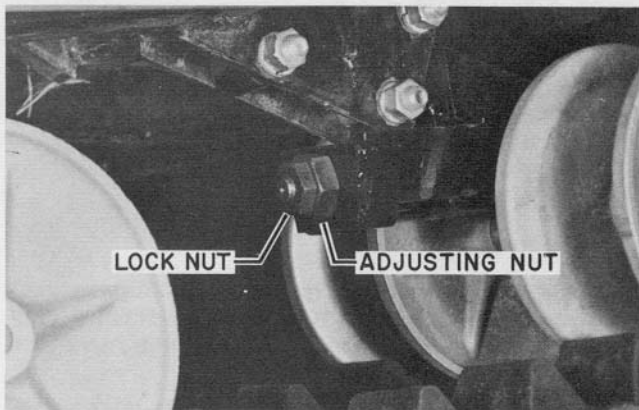
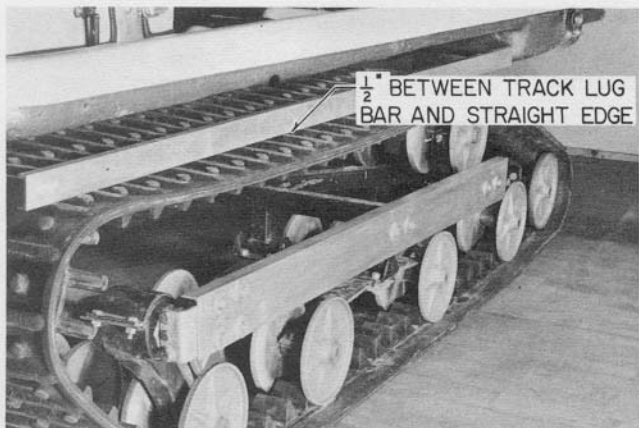
The friction adjustment on the T-handle should be maintained to provide resistance in the forward and back travel of the handle. Adjust by loosening the lock nut, tighten or loosen the adjusting nut as shown and retighten the lock nut.



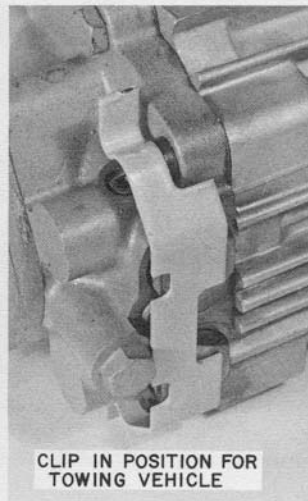
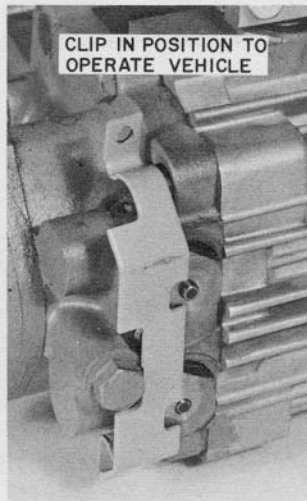
Track Adjustment

Proper track adjustment will provide a $\frac{1}{2}$ " sag between the drive sprocket and the upper bogie wheels. This distance can be measured by placing a straight edge on the top surface of the track as shown. Park the vehicle on a flat, level surface before making this measurement.

NOTE: Never adjust tracks to less than $\frac{1}{2}$ " sag. Operating the vehicle with too much tension on the tracks will cause premature wear on the bogie wheel bearings.



Adjustment is accomplished by moving the lower rear set of bogie wheels forward or back as desired. Loosen the lock nut and turn the adjusting nut as shown. Always retighten the lock nut securely.



Towing The Vehicle

Each hydrostatic transmission is equipped with two valves which release the hydraulic fluid pressure. Should the vehicle require towing, remove the clip from each transmission, turn it 180° and reinstall as shown. Remember to return the

clips to their original position before attempting to drive the vehicle.

CAUTION: DO NOT REMOVE CLIPS FROM TRANSMISSION WITH ENGINE RUNNING.

Vehicle Storage

Before the vehicle is put into storage for any period exceeding 30 days, the following steps should be taken:

1. Block the vehicle off the ground to take the weight off the tracks and bogie system.

2. Drain and clean the fuel tank. Remove the tank from the vehicle and flush out with clean gasoline.

3. Crank or run engine to remove the fuel from all lines and the carburetor.

4. Crank engine and inject rust preventive oil into carburetor.

5. Remove spark plugs and squirt a small amount of oil into each cylinder. Turn the engine over several times by hand to distribute the oil. Replace the spark plugs.

6. Remove the battery from the vehicle. Store the battery in a cool, dry area where it can be recharged to maintain a fully charged condition.

TROUBLE SHOOTING

Your Trackster will run many hours without any difficulty, but eventually you are going to encounter at least some minor trouble. If the vehicle has had the proper maintenance, the trouble will be in the form of minor misadjustments

which are easily corrected.

This guide is intended to help you analyze possible problems. Do not attempt to perform a corrective measure for which you do not have the tools or experience.

Engine Hard To Start Or Won't Start

- a. Empty fuel tank
- b. Fuel filter or screen clogged
- c. Engine not primed
- d. Fuel line loose or kinked
- e. Old fuel, water or dirt in system
- f. Engine not choked
- g. Carburetor maladjustment
- h. Engine speed lever not advanced
- i. Engine flooded
- j. Spark plugs fouled, improperly gapped, dirty or broken
- k. Loose or frayed wire in ignition system
- l. Breaker points burned, dirty or improperly adjusted
- m. Weak compression
- n. Binding in engine

Starter Cranks Too Slow

- a. Weak battery
- b. Loose or corroded connections
- c. Faulty solenoid
- d. Malfunction in starter motor

Engine Runs Rough

- a. Incorrect carburetor adjustment
- b. Incorrect fuel mixture
- c. Poor ignition

Engine Won't Idle

- a. Idle speed set too low
- b. Carburetor out of adjustment
- c. Incorrect fuel mixture
- d. Poor ignition

Engine Won't Run At High RPM

- a. Clogged fuel filter or fuel screens in tank, pump or carburetor
- b. Carburetor out of adjustment
- c. Carburetor air filter dirty
- d. Incorrect governor adjustment
- e. Faulty fuel pump
- f. Excessive engine wear
- g. Poor ignition
- h. T-handle advanced too far (lugging engine)
- i. Spark plug fouled

Vehicle Fails To Move When T-handle is Advanced

- a. Low transmission fluid level
- b. Air entering hydraulic system
- c. Obstruction in track
- d. Track frozen to ground
- e. Towing valves depressed

Vehicle Pulls To Right Or Left

- a. Air entering hydraulic system
- b. Obstruction in one track
- c. T-handle out of adjustment
- d. One track adjusted too tight
- e. Parking brake engaged

Low Vehicle Speed

- a. Lack of engine power
- b. Low transmission fluid level
- c. Air entering hydraulic system
- d. Vehicle overloaded
- e. Obstruction in track or bogie system
- f. Governor out of adjustment
- g. Tracks adjusted too tight

SPECIAL TOOLS

The following special tools are required to perform certain repair operations on the **TRACKSTER** and are available from your **TRACKSTER** dealer. Be sure to follow the procedures explained in the Service Manual when using these tools.

821730—Bogie Wheel Support Plate — Used to remove the bogie wheel from the bearing housing and shaft after the assembly has been removed from the vehicle.

821731—Bearing, Seal and Wheel Support Plate — Used to remove and install bearing and seal into housing and install bogie wheel on bearing and housing assembly.

821732—Bearing and Seal Tool — Used with 821731 to remove and install bogie wheel bearing and seal into housing.

821733—Alignment Gauge — Used to check drive shaft alignment.

809315—Knock-off 5/8 - 18 — Used to remove the drive sprocket from the axle shaft and the engine flywheel from the crankshaft.

MAINTENANCE RECORD

DATE	SERVICES PERFORMED

MAINTENANCE RECORD

DATE	SERVICES PERFORMED

TRACKSTER WARRANTY

We warrant, to the original purchaser, each new vehicle of our manufacture to be free from defects in material and workmanship under normal use and service; our obligation under this warranty being limited to repairing or replacing at the factory any part or parts thereof which shall, within 90 days from first use, be returned to us by an authorized Cushman TRACKSTER Dealer with transportation charges prepaid and which our examination shall disclose to our satisfaction to have been thus defective. All warranty work must be performed by an authorized Cushman TRACKSTER Dealer. This warranty is expressly in lieu of all other warranties and representations expressed or implied and of all other liabilities in connection with the sale or use of any vehicles. The manufacturer reserves the right to change or improve the design of any vehicles without assuming any obligations to modify any vehicle previously manufactured.

This warranty shall not apply to any vehicle which shall have been repaired or altered outside the factory in any way so as to affect its stability, nor which has been subject to misuse, negligence or accident, or operated for racing purposes or operated in any other way than in accordance with our operating and maintenance instructions. Nor does the warranty extend to repairs made necessary by normal wear or by the use of inferior replacement parts or accessories, not recommended by Cushman Motors.

We make no warranty in respect to trade accessories not of our manufacture, inasmuch as they are usually warranted separately by their respective manufacturers.

To make claim under this warranty, contact the authorized Cushman TRACKSTER Dealer from whom the vehicle was originally purchased or the nearest Cushman TRACKSTER Dealer. Vehicles or parts thereof shipped to the factory for our inspection must show model and serial number, and must be shipped transportation charges prepaid.

This warranty does not apply to any TRACKSTER that has been used by an authorized TRACKSTER Dealer or any other person prior to the original sale.

WHAT YOUR BILLFOLD SIZE OWNER IDENTIFICATION and WARRANTY CARD WILL DO FOR YOU!


- **Proof of ownership**
- **Warranty information at your fingertips.**
- **Service Information at your fingertips.**
- **Model and frame number eliminates “guesswork” when ordering accessories.**
- **Model and frame number eliminates “guesswork” when ordering parts and service.**
- **Card can be attached to your key for key identification. (Fleet owners find this exceptionally helpful by writing unit number in “Signature Space”.**
- **Attach card to key by key chain, to help eliminate loss of key if dropped in deep snow or mud.**

TRACKSTER
OWNER IDENTIFICATION
AND WARRANTY CARD

VOID VOID VOID A - M VOID VOID VOID

Date Sold

Model Frame



CUSHMAN MOTORS TRACKSTER WARRANTY

Should your TRACKSTER require service which appears to be under warranty, take it to your authorized Cushman TRACKSTER dealer. He will make the necessary repairs and return the parts to the factory with a completed Warranty Request.

All warranty work must be done by an authorized TRACKSTER dealer, preferably the dealer who originally sold the vehicle because of his personal interest in you.

SERVICE NOTES:
Normal maintenance service and replacement of service items are the responsibility of the owner.

To validate the warranty:

1. Provide correct recommended fuel and mixture
2. Maintain all components in proper adjustment
3. Have all recommended services performed as required

CAUTION: The Trackster is equipped with a two-cycle engine. Oil must be mixed with the gas at a ratio of 50 parts gasoline to 1 part oil. Use only oil specified in the owner's manual.

A DIVISION OF OUTBOARD MARINE CORPORATION
900 NORTH 21 STREET • LINCOLN, NEBRASKA 68501

Address only

NOTE: Your MODEL AND SERIAL NUMBERS are located on the aluminum trim just below the right hand hold.

Please fill in completely and mail to validate warranty and receive your OWNERS I.D. & WARRANTY CARD.

MODEL NUMBER _____ FRAME NUMBER _____

TRACKSTER

SOLD TO _____ DATE PURCHASED _____
 ADDRESS _____ TRADE IN (1) YES (2) NO
 CITY _____ COUNTY _____ IF "YES": MAKE _____ YEAR _____

TYPE OF OWNER

(1) PRIVATE INDIVIDUAL
 (2) RESORT (Type) _____
 (3) INDUSTRIAL (Type) _____
 (4) COMMERCIAL (Type) _____
 (5) GOVERNMENT (Branch) _____
 (6) OTHER _____

How will vehicle be used _____

Comments and Suggestions _____

VEHICLE SOLD WITH

(1) Flotation Body (4) Warmer
 (2) Cab (5) Skid Plate
 (3) Extra Seats (6) Windshield
 (7) Other _____

PURCHASED FROM _____

FIRST CLASS
PERMIT NO. 20
LINCOLN, NEBR.

BUSINESS REPLY MAIL
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

CUSHMAN MOTORS

OMC - LINCOLN

P.O. BOX 82409

LINCOLN, NEBRASKA 68501

