

Taurus



650

OFF-ROAD UTILITY VEHICLE

OPERATOR'S
MANUAL



CAUTION — IMPORTANT !

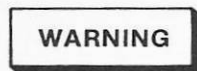
Operate this vehicle with your safety constantly in mind.

Off road vehicles such as the TAURUS, are different than automobiles which operate on smooth, well designed roads. Off road vehicles constantly face unpredictable and often hazardous terrain conditions which can destabilize or tip the vehicle. It is ultimately the operator's responsibility to operate the vehicle safely within it's limitations and to decide where it is safe or hazardous to travel. The TAURUS, being a 3 wheeled off road vehicle, requires the active involvement of the operator to stabilize the vehicle, especially during uphill operation or while negotiating turns.

READ THIS MANUAL CAREFULLY !

ATTENTION

Read this manual completely and carefully before you operate your Taurus vehicle. Pay special attention to the following symbols:



This warning symbol identifies special instructions which if not strictly observed, can result in severe personal injury or loss of life.



This caution symbol identifies special instructions which if not strictly observed can result in damage to the vehicle.

NOTE:

— Indicates points of particular importance for more efficient and convenient operation.

PREFACE

This manual describes the controls, operation and basic maintenance of the TAURUS 650 Off Road Utility Vehicle. Please take the time to read it carefully, for your safety and that of others. Also, by following these instructions, you will ensure a long and trouble free operating life for your vehicle.

For maintenance and adjustment of the engine, refer to the Briggs and Stratton Operating and Maintenance leaflet included in your TAURUS information package.

As an added precaution, before you drive your TAURUS 650, make sure you understand how to use all the controls. Learn how to drive your vehicle in an open level area, away from buildings, trees and other obstacles, until you are completely familiar with its operating characteristics. Drive very slowly until your driving skills improve. Statistics have shown that the risk of having an accident with a new vehicle are greatest during the first few weeks of use. Take special care during this initial period.

CAUTIONS TO THE TAURUS OWNER

- This vehicle is not a recreational unit. It has been designed specifically for utility type applications and is not designed for high speed or severe incline recreational use.
- This vehicle is designed for off-road use only. Use extreme caution on paved and hard packed surfaces. Read this operator's manual thoroughly.
- Operation on slopes, hills and rough terrain can be dangerous. Read this operator's manual and drive with caution in mind.
- No person under the age of 16 must be allowed to operate this vehicle. A person of small stature may have difficulty controlling the vehicle.
- This vehicle is designed for a single operator. No passengers are allowed.
- The operator must wear an approved safety helmet at all times.
- Do not ride without having read this operators manual. Do not allow anyone to operate this vehicle without first instructing them in it's safe and proper use, or have them also read this manual.

The information in this manual is based on the latest technical information available at the time of printing. No liability can be accepted for any inaccuracies or omissions in this publication, although all possible care has been taken to ensure that it is as complete and accurate as possible. Ontario Drive and Gear Limited reserves the right to make changes to the vehicle and specifications at any time without notice or obligation. Reproduction of any part of this publication is prohibited without prior written permission.

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SAFETY

Safe operation of the TAURUS 650 requires special effort on your part. Know the requirements and pay particular attention to the following:

Safe Operating Rules

- Always make a pre-operation inspection (page 13) before starting the engine.
- Always start the engine with the speed range selector in N “Neutral” and brakes applied (page 14)
- Ride with your feet on the foot rests. Failure to do so may result in foot or leg injury.
- All operators must wear an approved protective helmet. You should also wear a face shield or goggles, boots, gloves, and suitable protective clothing such as long trousers and a long sleeved shirt or jacket.
- Know the terrain on which you are riding. If you're not familiar with it; ride with extreme caution. Personal injury or damage to the vehicle can occur if you hit a rock, hole or other hazard that is hidden from view.
- Park safely on flat ground with the engine off and with the parking brake on. On an incline, block the wheels.
- Never start your engine in an enclosed or poorly

ventilated area. Exposure to engine exhaust can cause serious personal injury or death.

- Never travel into remote areas alone.

Modifications

Modifications of any part or removal of any original equipment on the TAURUS 650 may reduce its safety; render it illegal or prone to damage; and cause the warranty to become void.

Cargo

Maximum Cargo Load (On Level Ground)

Front Rack	100 lbs. (45 kgs.)
Rear Deck	200 lbs. (90 kgs.)

A three wheel off road vehicle is sensitive to increases in weight and changes in weight distribution. Carrying cargo may make your vehicle unpredictable and difficult to steer. Stopping distance will also increase. Be especially cautious in rough terrain and on hills.

- Carry your cargo as low as possible and evenly distributed.
- Use extreme CAUTION when negotiating inclines with a rear loaded vehicle. The extra

weight on the rear may cause the front end of the vehicle to become too light. The front end may suddenly lift off of the ground, throwing the rider and vehicle backwards. Serious injury can occur as a result of this.

- Secure your cargo so that it does not move around while you are driving. A sudden shift in the position of the cargo may cause your vehicle to become unstable and difficult to steer.

LOCATION OF WARNING LABELS

Important

- This Vehicle Is Not A Recreational Unit. It Has Been Designed Specifically For Utility Type Applications. It Is Not Designed For High Speed Or Severe Incline Recreational Use.
- The Vehicle Is Designed For Off Road Use. Use Extreme Caution On Paved And Hard Packed Surfaces – Read Operator's Manual.
- Operation On Slopes And Rough Terrain Can Be Dangerous – Read Operator's Manual Carefully.
- No Person Under 16 Years Of Age Should Be Allowed To Operate This Machine
- Operator Only – No Passengers
- Wear An Approved Safety Helmet At All Times
- Do Not Ride Without Having Read Operator's Manual

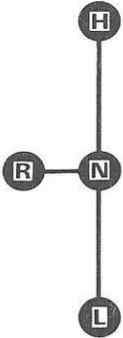
Warning

- Do Not Operate Vehicle Without All Guards Securely In Place

Warning

Start vehicle in neutral only
IMPORTANT – To shift gear:

- Stop vehicle
- Idle engine
- Apply brakes
- Shift to correct gear



Warning Front Rack

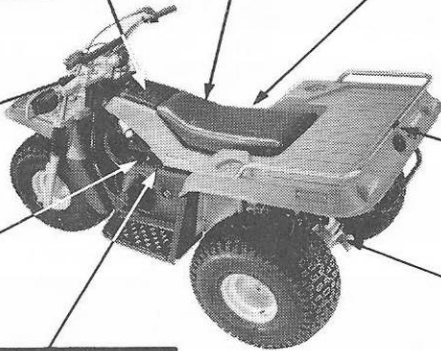
- Max. Load 100 lbs. (45 kgs.)
- Do Not Obstruct Headlights

Warning

- Do Not Operate Vehicle Without All Guards Securely In Place

Warning

- Do Not Remove Exhaust Shielding
- Inspect Frequently



Warning Rear Deck

- Max. Load 200 lbs. (90 kgs.) (Level Ground Operation Only)
- Tie Loads Securely

Warning Trailer Hitch

- Max. Trailer Weight 1000 lbs. (453 kgs.) On Level Ground Only
- Max. Hitch Point Weight 60 lbs. (27 kgs.)

SERIAL NUMBERS

Serial numbers are required to register and identify your vehicle if you should need replacement parts. Be sure to record these numbers on page 56 of this manual.

Vehicle Serial No.

The vehicle serial number is stamped on a plate, which is located to the right of and just behind the steering column.

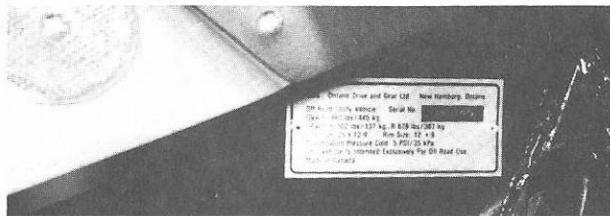


Fig. 2 Vehicle Serial No.

Engine Serial No.

The engine serial number is located at the top rear of the engine.



Fig. 3 Engine Serial No.

Transmission Serial No.

The transmission serial number is stamped onto the transmission housing over the left rear axle.

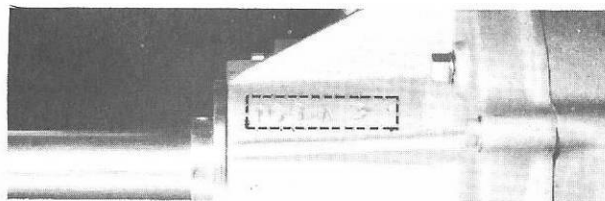


Fig. 4 Transmission Serial No.

PARTS LOCATION

- ① Ignition/Light Switch
- ② Front Brake Lever
- ③ Parking Brake Lock
- ④ Throttle Twist Grip
- ⑤ Engine Kill Switch
- ⑥ Choke
- ⑦ Rear Brake Pedal
- ⑧ Rear Brake-Fluid Reservoir
- ⑨ Speed Range Selector
- ⑩ Fuel Tank
- ⑪ Fuel Cap

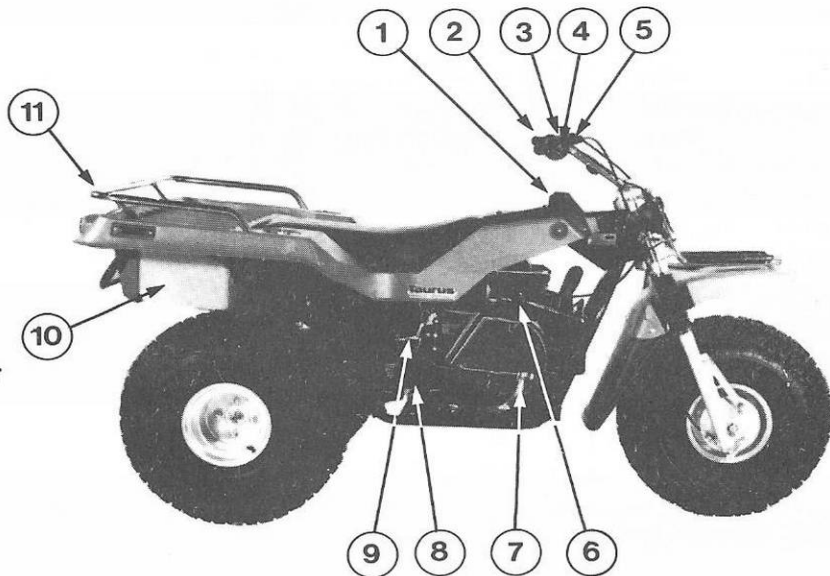


Fig. 5 Location of Parts

PARTS LOCATION

- ⑫ Glove Box
- ⑬ Seat Latch
- ⑭ Engine Oil Dipstick/Filler
- ⑮ Storage Box
- ⑯ Rear Rack
- ⑰ Trailer Hitch
- ⑱ Transmission
- ⑲ Automatic Torque Converter
- ⑳ Battery
- ㉑ Fuel Filter
- ㉒ Front Rack

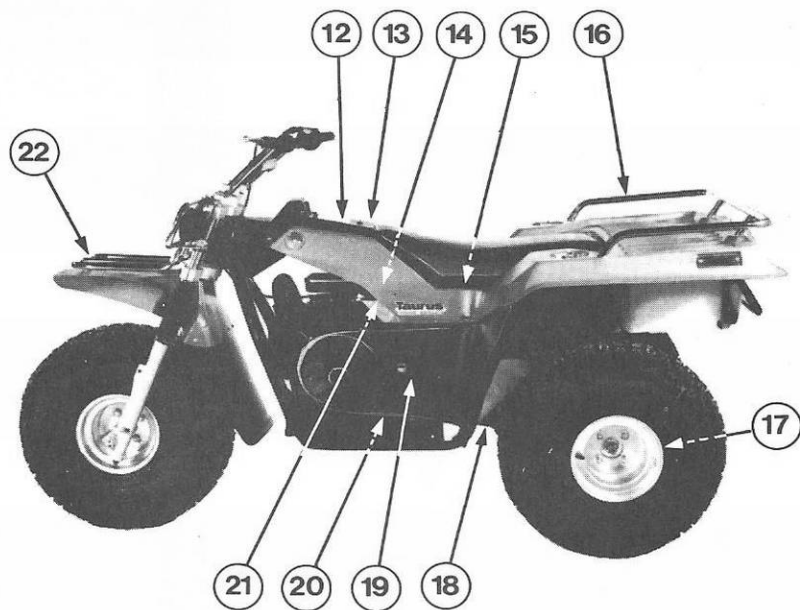


Fig. 6 Location of Parts

PARTS FUNCTION

Ignition/Light Switch

The switch, located on the instrument pod has four positions (Figure 7).

- Off • The engine will not operate
- Lights • The lights and engine will be on
- Run • The engine will be on only
- Start • The engine will start



Fig. 7 Ignition/Light Switch

Front Brake Lever

The front brake lever is found on the left steering handle (Figure 8). It operates the front mechani-

cal drum brake and also functions as the parking brake lever.

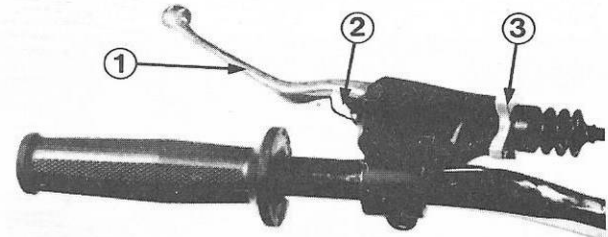


Fig. 8 (1) Front Brake Lever (2) Parking Brake Lock (3) Brake Adjustment Knob

Parking Brake Lock

The lock is the small lever on the top of the front brake lever (Figure 8). It allows the front brake to be locked as a parking brake.

To apply the parking brake:

1. Push the parking brake lock forward.
2. Pull back on the front brake lever until the lock catches.
3. To release the lock, pull back on the front brake lever.

Rear Brake Pedal

The rear brake pedal (Figure 9), when pressed down, operates the rear hydraulic disc brake.

Rear Brake Fluid Reservoir

The brake-fluid reservoir is part of the brake master cylinder. It is located behind the right engine cover, next to the drivers' foot (Figure 9).

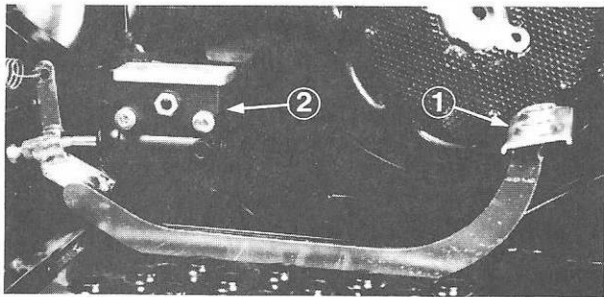


Fig. 9 ① Rear Brake Pedal
② Brake Fluid Reservoir

Throttle Twist Grip

The throttle is on the right steering handle (Figure 10). To accelerate, twist the grip in the direction of the arrow. To decelerate, twist the grip in the opposite direction.

Engine Kill Switch

The engine kill switch is mounted beside the throttle twist grip. It can be used in an emergency to shut the engine off.

Normally, the engine should be turned off at the ignition switch.

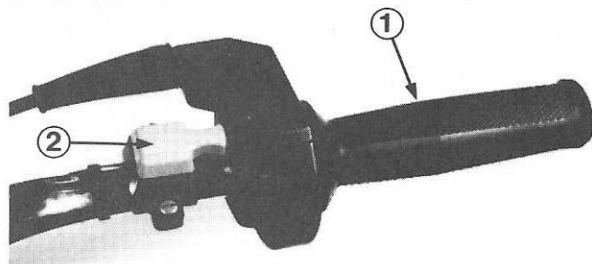


Fig. 10 ① Throttle Twist Grip
② Engine Kill Switch

Choke

The choke is located on the upper right side of the engine (Figure 11). Use the choke when the engine is cold and doesn't start immediately. Push the choke in after the engine has warmed up.

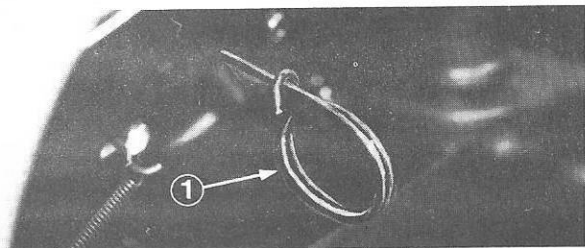


Fig. 11 ① Choke

Speed Range Selector

The range selector is found on the right side of the vehicle, behind the driver's leg (Figure 12). There are four positions on the selector.

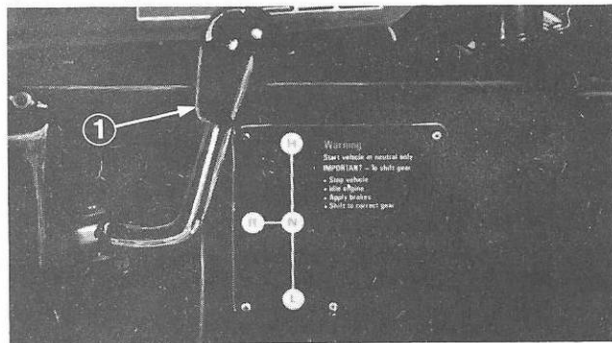


Fig. 12 ① Speed Range Selector

- “N” (Neutral) • For starting the engine or idling
- “R” (Reverse) • For backing up the vehicle
- “L” (Low) • For use when travelling over rough terrain, or when heavily loaded
- “H” (High) • For use when travelling over a clear flat surface, with no load

Fuel Tank and Cap

Capacity	5 gal. Imp., (6 gal. U.S.), (22.7 litres)
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The fuel tank is located beneath the rear cargo deck. To fill the tank, remove the fuel cap at the back of the rear deck.

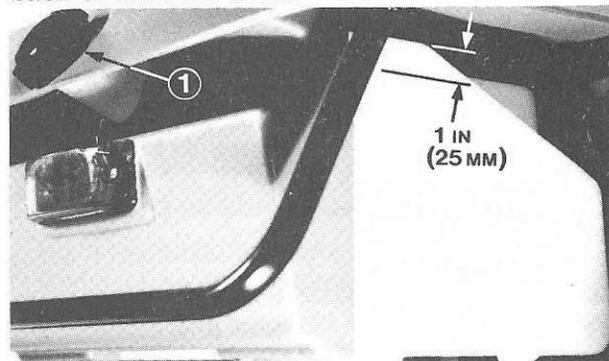


Fig. 13 ① Maximum Fuel Level ② Fuel Cap

WARNING

Do not fill the tank above the line indicated in figure 13. (If in doubt, do not fill more than 3/4 full). Overfilling may cause the tank to overflow when the fuel heats up and expands.

The fuel cap used is non-vented. Do not use any other type of cap, or gasoline spillage may occur.

Glove Box

A glove box is located in front of the driver for convenient storage of small items. To open, press and twist the wing head counterclockwise (Figure 14).

Seat Latch

Opening the glove box cover exposes the seat latch wing head (Figure 14). The seat latch when locked, secures the seat in place.

Storage Box

A large removeable storage box is located under the seat for convenient storage of larger items or tools.

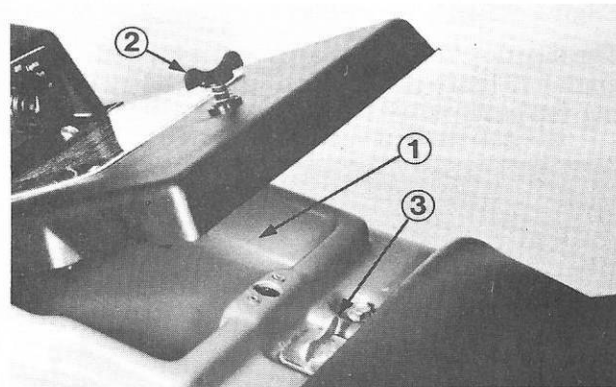


Fig. 14 (1) Glove Box (2) Wing Head (3) Seat Latch

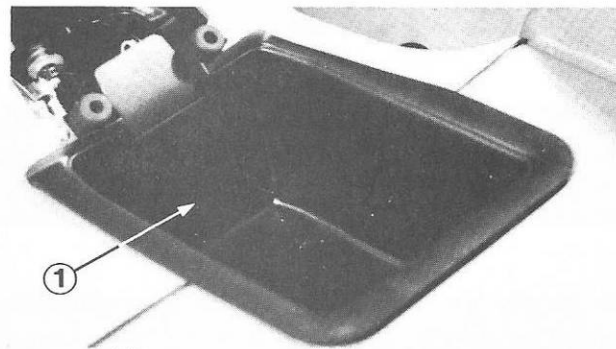


Fig. 15 (1) Storage Box

Engine Oil Dipstick/Filler

The dipstick/filler is located at the top rear of the engine (Figure 16). It can be accessed by removing the seat.

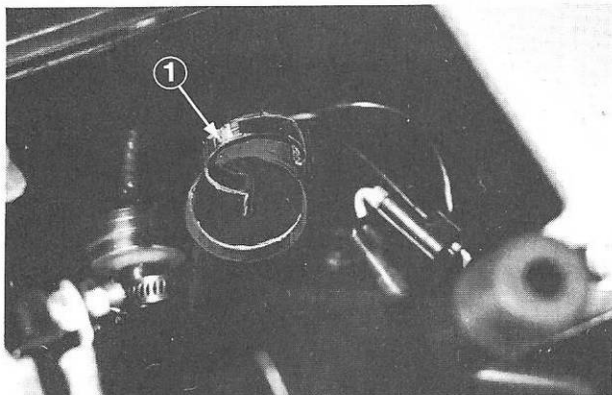


Fig. 16 ① Dipstick/Filler

Trailer Hitch

The vehicle is equipped with a trailer hitch bracket and a 1 7/8 inch diameter ball hitch.

WARNING

Never exceed the maximum recommended trailer tongue weight of 60 lbs. (27 kgs.).

Never tow more than 1000 lbs. (453 kgs.) of rolling weight.

Towing a trailer increases braking distance and reduces vehicle maneuverability. Drive with caution and at a reduced speed.

FUEL

Use "regular, low lead or lead free" grades of gasoline having a minimum octane rating of 77, in the TAURUS'S engine. Use of lead free gasoline will help reduce combustion deposits.

Purchase gasoline in small quantities of not more than a 30 day supply. Fresh gasoline minimizes gum deposits and ensures a fuel with the volatility tailored for the season.



Do not mix oil with gasoline.

WARNING

Gasoline is extremely flammable and its vapours can explode if ignited. Keep cigarettes, sparks and flames away from wherever gasoline is used, stored or handled. Clean up any spilled fuel immediately

PRE-OPERATION INSPECTION

Inspect your TAURUS 650 every day before you use it. The few minutes it takes, will help to ensure that you have safe, trouble free operation.

WARNING

Failure to perform the following inspection on your vehicle every day before you ride, may result in damage to the vehicle or cause serious personal injury.

- Engine Oil • Oil level between level lines Level (page 25).
- Front Brakes • Check operation and condition (page 31). Check parking brake.
- Rear Brakes • Check operation (page 32).
- Tires • Check condition and pressure (page 37).
- Steering • Smooth action, not loose. Attached cables and wiring, not binding.
- Suspension • Check front boots for damage, leaks

- Lights • Headlight and taillight working. Properly aimed (page 44).
- Exhaust Shields .. • Check condition, all in place.
- Fuel System • Fuel level in tank sufficient. (page 49). Check for fuel system leaks.
- Throttle • Twist grip turns freely. Cable is secure on engine retainer. Accelerator opens and closes freely.
- Kill Switch • Shuts off engine when activated.
- Engine Air • Check for and remove dirt Intake Screen and obstructions.
- Fasteners • Check all nuts and bolts, especially on wheels, suspension and steering.

BREAK-IN

The first few days of driving your new TAURUS 650 are critical for the service life of the engine and transmission. The first full tank of fuel is designated as the break-in period. It is important that the following steps be observed during this period:

- Perform all required adjustments and inspections. Refer to the Maintenance Chart on (page 25).
- Run the engine 1 - 2 minutes before starting off, to allow the oil to circulate through the engine.
- Start off slowly.
- Drive at various speeds, but never more than 1/2 throttle. Do not race the engine, even in neutral.

OPERATING INSTRUCTIONS

Starting the Engine

WARNING

Never start or run the engine in an enclosed or poorly ventilated area. Engine exhaust contains carbon monoxide, a colourless, odourless gas. Exposure to carbon monoxide can cause serious personal injury or death.

This vehicle is equipped with a key operated electric start.

1. Place the vehicle on a level surface and lock the parking brake ON before starting the engine.
2. Place the speed range selector in N "Neutral" (Figure 12).
3. Sit on the vehicle with your feet on the foot rests. The right foot must be on the brake pedal.
4. If the engine is cold, pull out the choke (Figure 11).
5. Open the accelerator twist grip partially (Figure 20).
6. Turn the ignition key clockwise to the START position (Figure 7).

CAUTION

Do not crank the engine for more than 5 seconds. Allow a 20 second pause before cranking again if the engine has not started. Damage to the starter motor can occur if the starter is cranked continuously for longer periods.

NOTE: If the engine fails to start, refer to the Troubleshooting Chart (page 51), for corrective action.

8. Release the twist grip and allow the engine to come to an idle.
9. Push the choke in half way after the engine has started, and push it in all the way, as the engine warms up.

Manual Starting Procedure

The engine can also be started manually. Proceed as follows:

1. Place the vehicle on a level surface and set the parking brake ON before starting the engine.
2. Place the speed range selector in N "neutral".
3. Turn the ignition key clock wise to the RUN position (Figure 7).

4. If the engine is cold, pull out the choke.
5. Remove the right engine cover by loosening the two wing nuts (Figure 17).

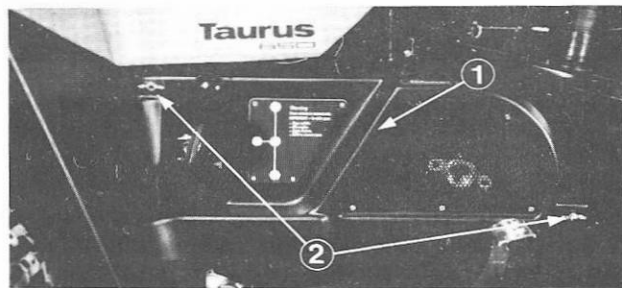


Fig. 17 (1) Right Engine Cover (2) Wing Nut

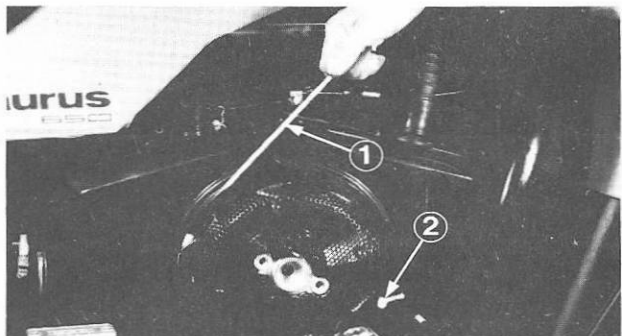


Fig. 18 (1) Starter Rope (2) Pulley Knotch

6. Place the knot from the end of the starter rope in the pulley knotch (Figure 18).
7. Wind the rope around the pulley in a clockwise direction.
8. Stand to the right of the vehicle with one hand on the throttle twist grip partially open.
9. Pull up with the other hand on the starter rope with one quick continuous motion.

Repeat steps 6 to 9 until the engine fires and starts.

NOTE: If the engine fires but fails to start, push the choke in half way. Push the choke in all the way after the engine is warmed up.

If the engine fails to start after repeated attempts, refer to the Trouble Shooting Chart (page 51).

Shutting Off the Engine

1. Park on a level surface and apply the rear brake.
2. Turn back on the throttle twist grip so that the engine idles down completely.
3. Shift the speed range selector into L "Low".
4. Apply the parking brake.
5. Turn the ignition switch OFF to shut off the engine.
6. Remove the ignition key to prevent unauthorized use.

Selecting and Changing Speed Ranges

1. Bring the vehicle to a complete stop. Turn back on the throttle twist grip so that the engine idles down completely.



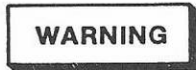
Do not move the speed range selector until the vehicle is at a complete stop and the engine idles down completely. If the engine idle speed is too high, the transmission will grind during gear engagement and damage may occur.

2. After the engine has idled down completely, move the speed range selector (Figure 12) with a quick and determined movement to the selected position.

NOTE: If the lever will not engage, shift back into N "Neutral", rev up the engine slightly, allow it to return to idle and then try step 2 again.



If a significant resistance or grinding is experienced, shut off the engine, select the desired range and restart the engine. Do not try to force the range selector into position as damage to the transmission can occur. Have the engine idle speed adjusted by your dealer to correct this problem.



Select the desired range while the vehicle is on level ground, not on hill sides. They will otherwise be difficult to engage or disengage.

NOTE: Make sure you feel the detent which indicates the selected gear is properly engaged.

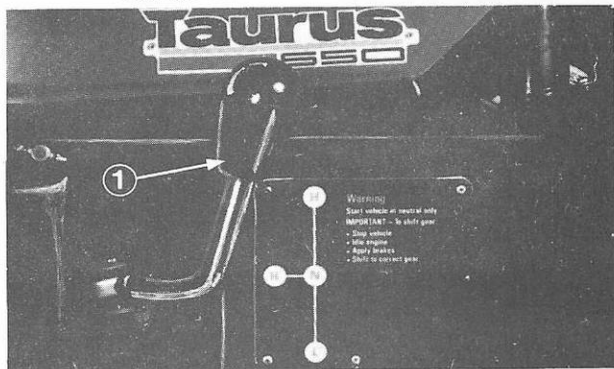


Fig. 19 (1) Speed Range Selector Lever

DRIVING PROCEDURES

Straight Ahead Operation

Drive with both feet firmly on the foot rests and both hands on the steering arm hand grips. To move forward:

1. Step on the brake pedal and release the parking brake lock.
2. With the engine at idle speed shift into the selected H "High" or L "Low" range.
3. Release brake pedal pressure and accelerate by turning the throttle twist grip slowly as shown in figure 20.

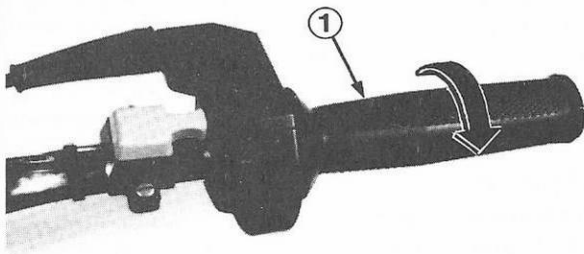


Fig. 20 ① Throttle Twist Grip

NOTE: The clutch will engage automatically and the vehicle will move ahead as the engine's r.p.m.'s increase.

Stopping the Vehicle on Level Ground

1. On level ground turn the throttle twist grip back to idle down the engine.
2. Gradually but firmly apply pressure to both hand and foot brakes.

WARNING

Do not apply the hand brake by itself to stop a forward moving vehicle. The brake lever operates the front wheel brake. Sudden application may cause steering to become difficult.

CAUTION

Do not "ride" the brakes. Prolonged use of the brakes decreases vehicle power and speed, premature drive belt wear, overheating and loss of brake efficiency.

Stopping the Vehicle on Hills

Stopping and starting a vehicle on a hill side can be difficult or dangerous and should be avoided if at all possible.

Up Hill: If you should stall the engine or lose traction and start to roll backwards while trying to go up a hill, do not apply the rear brakes suddenly. Use the front brakes first and then gently apply the rear brakes to gain control and stop a backward roll.

WARNING

Do not apply the rear brakes suddenly on a backward downhill roll. Sudden application may cause the vehicle to flip over backwards in which vehicle damage, serious personal injury or death may result.

Do not open the throttle when on a backward downhill roll. This may cause the vehicle to flip over backwards.

Down Hill: To slow or stop the vehicle from going forward down a hill, apply the rear brakes first and then only very carefully the front brake.

WARNING

Apply the front wheel brake very carefully while descending a hill forward. Sudden application of the front brake can cause the vehicle to flip over forwards resulting in vehicle damage and /or serious personal injury.

Turning Maneuvers

The TAURUS 650 is equipped with a solid rear axle for better off road traction ability. With full traction provided by both rear wheels, the vehicle may tend to travel straight ahead when a turn is attempted. This may be more noticeable if you are carrying cargo on the rear.

To assist in making a sharp turn, you must slow down and shift your body weight to allow the inside rear wheel to give up traction “slip” temporarily. Steer in the direction of the turn and lean your body to the inside of the turn while supporting your weight on the outer foot rest (Figure 21). Keep the vehicle speed down throughout the turn. Acceleration will cause steering instability and can be dangerous to your safety.

If the front wheel skids during a turn, shifting your

weight forward may help to improve steerability. Hard packed surfaces are more difficult to turn on than soft or loose surfaces.

WARNING

Do not apply the front brakes during a turn. Application of the front brakes during a turn may cause loss of steering control and instability of the vehicle.

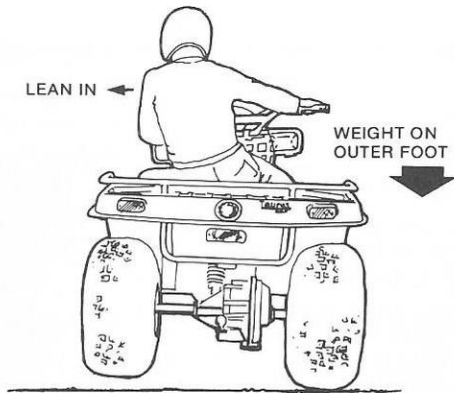


Fig. 21 Making a Turn

Hill Operation – General

Before attempting to climb hills, make sure that you are completely familiar with and have mastered all controls and handling characteristics of your vehicle.

Scan the terrain of the hill and familiarize yourself with it. Choose a suitable straight line path which will avoid obstacles and hazards.

Climb the hill in low gear. Stop and shift before ascending or descending the hill. Make certain your brakes are functioning effectively. Your vehicle should not be overloaded either front or rear.

WARNING

Never accelerate or brake suddenly while driving up or down a hill. Sudden acceleration or braking may cause the vehicle to flip over, causing serious personal injury or vehicle damage.

Braking effectiveness may be reduced on an incline with a loose or wet surface.

Never attempt to turn the vehicle around the side of a steep hill or grade. Turning the vehicle around on a hill can result in the vehicle rolling over.

If a turn is unavoidable, proceed slowly and shift your weight to the uphill side of the vehicle.

Use extreme caution when ascending a hill with a rear loaded vehicle. The extra weight on the rear may cause the front of the vehicle to become too light. It may suddenly lift up, throwing the driver and vehicle backwards. Shift as much weight as far forward as possible to reduce this effect.

Uphill Operation: Approach the hill head on to minimize the possibility of sliding side ways or rolling over. Lean forward to transfer your weight, to help keep the front wheel on the ground. For steeper hills, stand on the foot rests and lean forward.

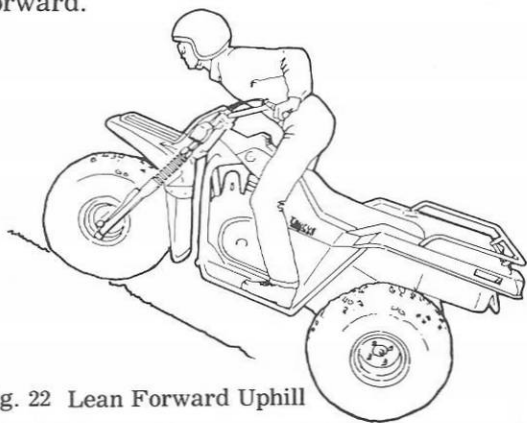


Fig. 22 Lean Forward Uphill

Take a running start to prevent loss of traction and climb at a steady rate. Once traction is lost, the vehicle may slide sideways or backwards. When this occurs, apply the front brake first and then gently apply the rear brakes to stop the slide. Allow the vehicle to coast to the bottom of the hill by carefully releasing the brakes.

Downhill Operation — Always approach the downhill side head on to minimize the possibility of sliding sideways or rolling over. Gently apply the brakes to control downward speed. Do not jam on the brakes while travelling downhill. Sudden stopping can cause the vehicle to roll over.

NOTE: The transmission provides little resistance in slowing vehicle roll downhill. The brakes must be used to slow or stop a rolling vehicle.

Traversing Slopes

Avoid side slope operation if at all possible. If side slope operation becomes necessary, lean your body weight to the uphill side of your vehicle to maintain balance and stability.

WARNING

The ability to balance and stabilize the vehicle upright may become difficult when traversing a side slope. Avoid side slope operation, especially if the terrain is rough, loose or slippery.



Fig. 23 Lean Uphill On Side Slopes

Riding in Water

The TAURUS 650 can be driven through shallow, slow moving water to a depth of approximately 11 inches (28 cm.). Be careful to avoid getting the spark plug, drive belt, air cleaner and engine air intake wet from splashed water.

WARNING

Never operate the vehicle in a fast flowing stream. The force of the stream might upset the vehicle or cause it to lose traction.

Never operate the vehicle in water deeper than recommended. Operation in deep water causes the tires to float creating an unstable and hazardous conditions.

CAUTION

Do not ride in the water for extended periods of time. Damage to axle bearings can occur.

Do not allow water to enter the engine air intake opening. Electrical components which are located there may become wet and malfunction.

Enter and leave the water from banks having a firm and gradual slope. Exit banks should also be free of rocks, stumps or other obstacles so the vehicle can enter and leave the water easily. Proceed carefully through the water, looking out for and avoiding obstacles and holes in the water.

If the engine stalls after driving through water, the electrical system may have become wet. Check and dry the spark plug wire and other electrical connections. Remove and dry the carburetor, air cleaner and intake manifold before attempting to restart the engine.

CAUTION

Damage to the engine or electrical components can occur if the indicated components are not dry.

Test the brakes after travelling through water. They may be less effective after becoming wet. Apply the brakes repeatedly while driving soon after, until the heat of friction has dried the brakes and they regain their normal effectiveness.

If the engine is working properly but power seems to be lacking, the automatic torque converter system may have become wet. After stopping the

engine, remove the protective cover and dry the belt, clutches and inside of the housing with a dry rag.

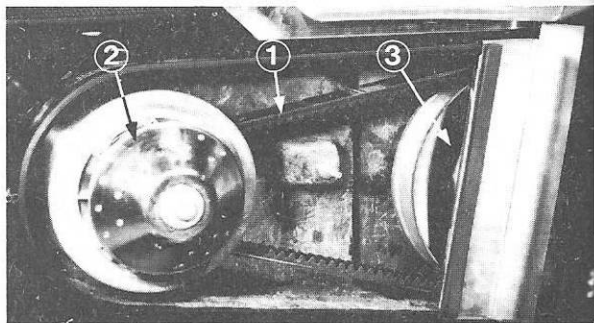


Fig. 24 (1) Drive Belt (2) Driver Clutch (3) Driven Clutch

Parking

1. Stop the vehicle on level ground.
2. Shift the speed range selector into L "Low"
3. Pull and lock the parking brake.
4. Turn the ignition switch off.

CAUTION

Do not park the vehicle on a slope. If this is unavoidable, place blocks behind the tires to keep the vehicle in place.

REMOTE AREA USE

When you travel in a remote area, equip your vehicle with the following items:

- First Aid Kit
- An adequate fuel supply
- Protective clothing
- Safety matches
- Emergency Flares
- Briggs & Stratton Engine Hand Book
- TAURUS 650 Operator's Manual or TAURUS 650 Service Manual
- Basic spare parts
- Basic hand tools

Inform someone where you plan to go and when you will be back, so that in case of a problem, help will arrive. We strongly suggest that you never travel into a remote area alone.

Before you start out, carry out all inspection and adjustment checks detailed in this manual on (page 13). Do not drive into remote areas unless your vehicle is in good mechanical condition.

Always think "safety" and practice good driving habits. Avoid terrain that is obviously impassable.

HOT CLIMATE OPERATION

- Use correct oil (page 26) and fuel octane rating.
- Keep engine air intake clean.

WINTER OPERATION

- Keep the fuel tank full. Use gas line antifreeze.
- Use proper engine and transmission oil
- Use choke on starting
- Keep battery fully charged
- Let engine warm up more
- Travel on packed or shallow snow areas. Do not attempt deep powdery snow
- Wear warm clothing and a face shield. Chill factor increases with speed
- Drive slowly at first until transmission oil warms up.
- Clean snow out of rims, etc.
- Do not travel over ice

ROUGH TERRAIN OPERATION

Special care is required when riding the vehicle over rough or hilly terrain.

- Keep both feet on the foot rests and both hands on the steering handles.
- Drive in L "Low" range and proceed with caution. Look out for hidden holes or obstacles which might damage the vehicle or cause it to tip over.
- Be wary of what lies beyond the crest of a hill. Standing up on the foot platforms will improve the driver's ability to balance the vehicle on uphill or side slope operation.

MAINTENANCE

MAINTENANCE SCHEDULE

The maintenance intervals shown on the chart below are based on average operating conditions. Vehicles which are subjected to more severe use, wetter or dustier conditions, will require more frequent servicing.

Be sure to perform the daily pre-ride inspection listed in detail on page 13.

Item	Initial 5 Hours	Daily	Every 25 Hours	Every 50 Hrs.	Every 100 Hrs.	Every 250 Hr
Engine Oil	Replace	Inspect	Replace	—	—	—
Transmission Oil	Replace	—	Inspect	—	Replace	—
Transmission Vent	Inspect	—	—	Inspect	—	—
Air Pre Cleaner	—	—	Clean	—	—	—
Air Filter	—	—	—	—	Clean	Replac
Front Brake	Inspect	Inspect	—	—	—	—
Rear Brake	Inspect	Inspect	Inspect	—	—	—
Rear Brake Fluid	Inspect	—	Inspect	—	—	Replac
Rear Brake Pads	—	—	—	Inspect	—	—
Tires	Inspect	Inspect	—	—	—	—
Steering	Inspect	Inspect	—	Inspect	—	—
Suspension	—	Inspect	—	—	—	—
Lights	Inspect	Inspect	—	—	—	—

Spark Plug	—	—	Inspect	—	Clean	—
Drive Belt	Inspect	—	—	—	—	—
Clutches	—	—	—	Inspect	—	Service
Exhaust Shields	Inspect	Inspect	—	—	—	—
Fuel System	Inspect	Inspect	—	—	—	—
Fuel Filter	—	—	—	—	—	Replace
Throttle Control	Inspect	Inspect	—	—	—	—
Battery	—	—	—	Inspect	—	—

ENGINE OIL

The engine requires oil that is clean and of a specific type and quantity for proper lubrication.

Oil Level Inspection

Inspect Daily

Check the engine oil level at the dipstick (Figure 25), when the engine is cold. The dipstick can be removed through the access hole under the seat.

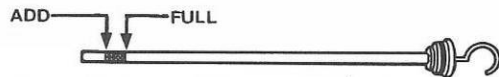


Fig. 25 Engine Oil Dipstick



Do not run the engine if the oil level is above the FULL mark or below the ADD mark. Premature engine damage or failure may occur when the oil levels are not properly maintained.

Oil Recommendation

Type SAE Class SF, SE, SD, SC

Use only a high quality detergent oil having an SAE service classification as shown above. Detergent oil helps to keep the engine cleaner.

Choose the correct viscosity of oil for seasonal conditions as detailed in the chart below.

Oil Level Inspection

Inspect	Every 25 Hours
---------	----------------

Inspect the oil level as follows:

1. Position the vehicle so it sits level.
2. Loosen the upper transmission filler plug (Figure 28).
3. Partly remove the plug.

The level is correct if oil comes out of the hole.

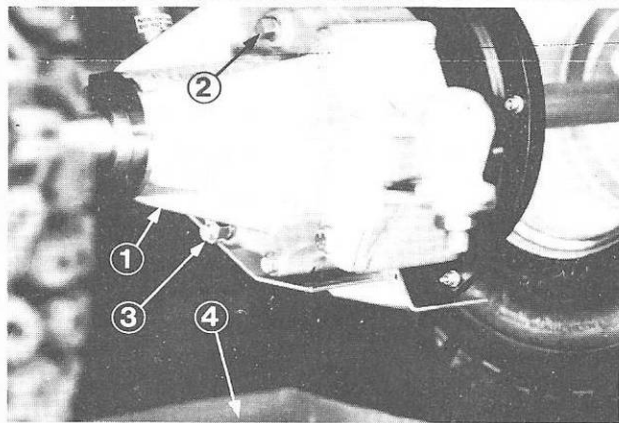


Fig. 28 ① Transmission ③ Drain Plug
 ② Filler Plug ④ Catch Pan

Oil Recommendation

Type	80 W 90 Gear Lube, HYPOY-C
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Changing the Transmission Oil

Change	Initial 25 Hours
	Every 100 Hours

To remove the oil:

1. Warm up the oil by running the vehicle, then turn it off.
2. Place an oil catch pan beneath the transmission at the axle and remove the lower drain plug (Figure 28).
3. Clean off the plug and replace it when all the oil has drained out. Tighten the plug properly.

Refilling the Transmission

Capacity	88 Oz. (2.5 Litres)
----------	---------------------

To refill the transmission:

1. Raise the left rear wheel of the vehicle, five inches off of the ground.
2. Remove the top transmission plug and clean it off. (Figure 29).
3. Insert a suitable diameter hose 15 inches long, attached to a funnel, into the hole.
4. Pour the oil into the funnel.
5. Replace the plug and tighten securely.

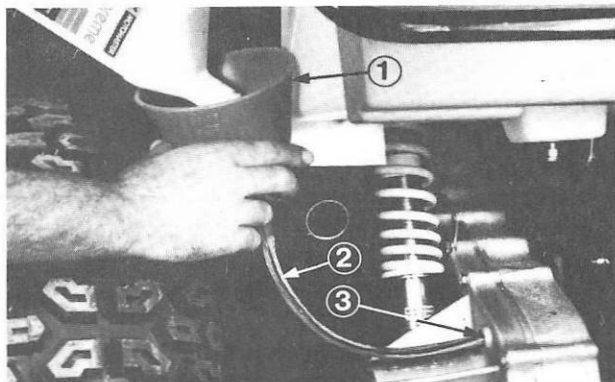


Fig. 29 ① Funnel ③ Filler Plug Hole
 ② Hose

Transmission Vent and Hose

A vent and vent hose is located on the right side of the transmission (Figure 30). It prevents pressure build up in the transmission.



Keep the vent open and the hose properly positioned. Oil will escape or dirt may enter the transmission causing serious internal damage, if the hose is not properly positioned.

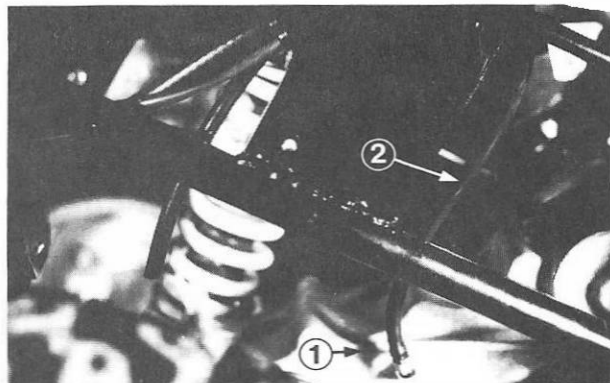


Fig. 30 ① Transmission ② Vent Hose

AIR CLEANER

The engine is equipped with a foam pre-cleaner and a dry paper filter (Figure 31). The filter accumulates dust and must be cleaned or replaced periodically.

Pre-Cleaner Service

Service	Every 25 Hours
---------	----------------

Clean and re-oil the foam pre-cleaner.

Paper Filter Service

Service	Every 100 Hours
---------	-----------------

Inspect and clean the filter. Clean more frequently in dusty conditions. Replace if dirty.

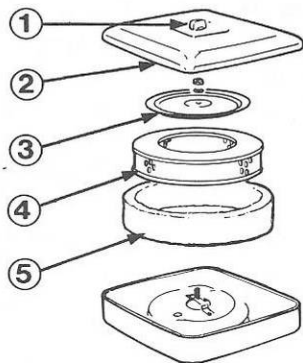


Fig. 31 ① Wing Nut ④ Paper Filter
② Cover ⑤ Foam Pre-Cleaner
③ Cover Plate

To remove and clean the filter:

1. Remove the wing nut, cover, cover plate and filters.
2. Clean the paper filter by gently tapping it against the palm of your hand to dislodge dirt and dust particles.

Replace if dirty or damaged.

FUEL FILTER

The vehicle is equipped with an inline fuel filter. The filter is located beside the carburetor (Figure xx) and can be reached through the access hole beneath the seat.

Fuel Filter Replacement

Replace	Every 250 Hours or Every Season
---------	---------------------------------

To replace the filter:

1. Remove the clamps and pull the fuel lines off of the filter (Figure 32).
2. Align the new filter as in figure 33.
3. Slip the fuel lines onto the new filter and re-install the retaining clamps.

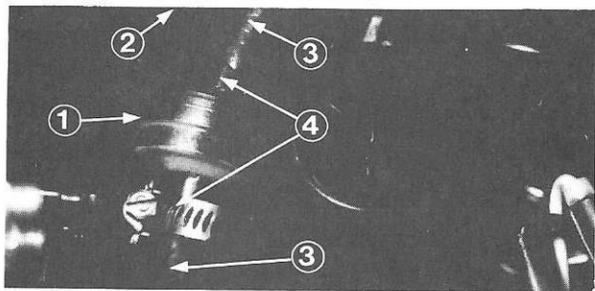


Fig. 32 ① Fuel Filter ③ Fuel Line
② Carburetor ④ Clamps

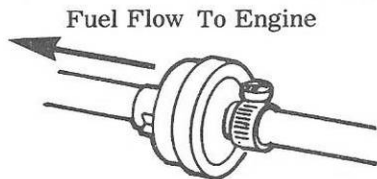


Fig. 33 Fuel Filter Alignment

BRAKES

The TAURUS 650 has a front mechanical drum brake and an hydraulic rear disc brake. The front brake also functions as the parking brake.

Front Brake

Inspect Daily

Inspect the front brake system thoroughly:

- Check for damaged, loose or worn parts.
- Check that the brake cable is securely mounted, see figure 34.

The front brake must be adjusted periodically to compensate for brake shoe wear.

WARNING

An improperly adjusted front brake will not be effective in helping to stop the vehicle or will not prevent the vehicle from rolling down hill when the parking brake has been activated. Serious injury or death may result if the front brake is not properly adjusted.

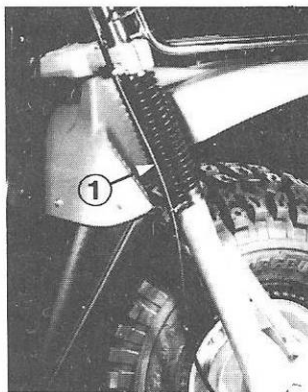


Fig. 34

① Front Brake Cable

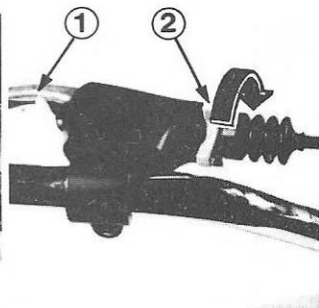


Fig. 35

① Front Brake Lever
② Adjustment Knob

Front Brake/Parking Brake Adjustment

1. Warm the front brakes up by driving the vehicle and frequently applying them.
2. Turn off the engine and raise the front wheel off of the ground so it spins freely.
3. Back off the adjusting knob on the brake lever (Figure 35) and the lower hex nut (Figure 36).
4. Tighten the upper hex nut on the front wheel brake lever (Figure 36), until brake drag occurs on the spinning front wheel.

NOTE: The brake drag should be all around the spinning wheel, not just at a few spots.

5. Back off the hex one full turn.
6. Tighten the lower hex nut to secure the brake cable adjustment.

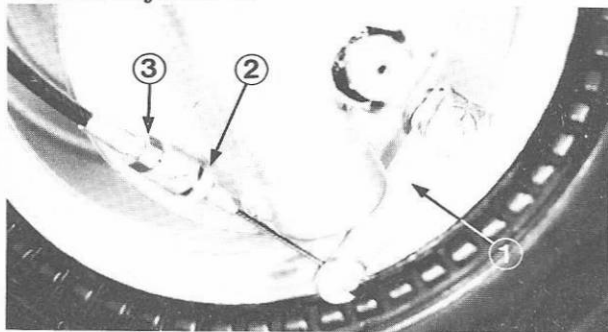


Fig. 36 ① Brake Arm ② Lower Hex Nut ③ Upper Hex Nut

To test the effectiveness of the newly adjusted front brakes, perform the following test:

1. Apply the parking brake.
2. Drive the vehicle forward slowly and cautiously on a dry packed dirt surface.

NOTE: The front brake/ parking brake is properly adjusted if the front wheel does not turn during this test.

The adjuster knob (Figure 35) can also be used for fine adjustment of the front brake. Tighten in the direction of the arrow.

Rear Brake

The rear brake is hydraulically operated by the brake pedal. It should be checked periodically for:

- proper fluid level
- brake pad wear
- brake pedal travel
- leaks or damage

Fluid Level Inspection

Inspect	Every 25 Hours
---------	----------------

Inspect the level of the fluid in the master cylinder reservoir as follows:

1. Position the vehicle on a level surface.
2. Remove the right engine cover by loosening the two wing nuts (Figure 37).

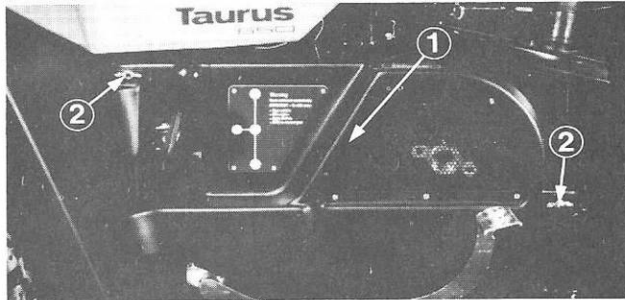


Fig. 37 (1) Engine Cover (2) Wing Nuts

3. Check the fluid level in the viewing window of the reservoir (Figure 38). It should be half way up the window.

If it is below this, inspect the hydraulic system for leaks. If a leak is found, have it repaired immediately by your TAURUS dealer. Otherwise, add fluid as necessary.

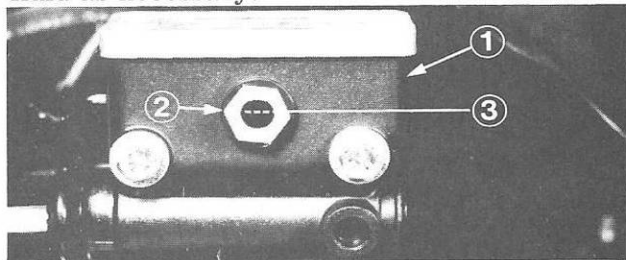


Fig. 38 (1) Fluid Reservoir (2) Level Viewing Window (3) Fluid Level

WARNING

Brake fluid may cause serious irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and seek medical attention if eyes were exposed.

CAUTION

Do not overfill the brake fluid reservoir. Fluid level must be visible half way up the viewing window.

Use only Silicone brake fluid Dot 5. Other brake fluids may not be compatible with the TAURUS brake components and operating temperatures. Use of any other brand of fluid will void the warranty.

Never allow contaminants, water, dirt etc. to enter the reservoir.

Adding Brake Fluid

1. Remove the right engine cover/fender to reveal the fluid reservoir (Figure 37).
2. Carefully clean the area around the top of the reservoir.
3. Remove the cover screws and lift the cover away.
4. Add brake fluid to the reservoir, pouring it slowly to minimize air entrainment.



Use only fresh brake fluid.

Do not shake the silicone fluid container. Shaking causes air to mix with the fluid.

NOTE: When reinstalling the covers, make sure the rubber gasket is clean and properly seated before tightening down the cover screws.

Rear Brake Pad Inspection

Inspect Every 50 Hours

Badly worn or unserviceable pads affect the efficiency of the braking system. To inspect the pads:

1. Loosen the mud slinger set screw on the right axle (Figure 39).
2. Slide the slinger away from the brake cover.
3. Remove the screws and nuts on the brake cover.
4. Pull back the brake cover.
5. Check the two pads (Figure 41).

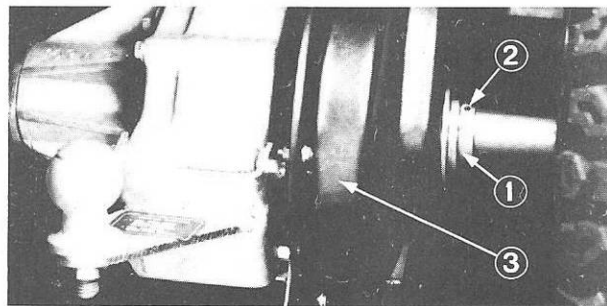


Fig. 39 ① Mud Slinger ③ Outer Cover
② Set Screw

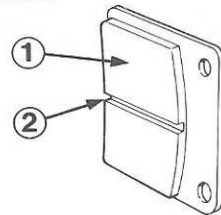


Fig. 40 ① Brake Pad ② Wear Groove

Replace the pads when:

- The pads are worn to the bottom of the groove (Figure 40).
- The pads are glazed and brake performance is effected.
- The pads are contaminated with grease, oil etc.

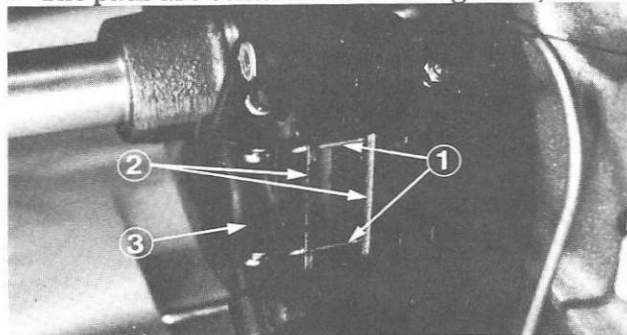


Fig. 41 ① Cotter Pins ③ Brake Caliper
 ② Brake Pads

Rear Brake Pad Replacement

1. Remove both cotter pins (Figure 41).
2. Push the pads away from the brake disc.
3. Pull the pads out of the caliper.
4. Slide new pads into the caliper.
5. Insert the cotter pins and bend the ends over.
6. Reinstall the brake cover and slinger.

7. Pump the brake pedal a few times to build up proper pressure.

After replacing the pads:

- Check the the brake pedal travel and adjust if necessary. It should be 1 1/2 inch (Figure 42).
- Check the fluid level and adjust if necessary.

Brake Pedal Travel Inspection

Inspect	Daily
---------	-------

Travel	1 1/2 inch (38mm.)
--------	--------------------

1. Position a ruler next to the brake pedal (Figure 42).
2. Press down on the pedal until resistance is felt.
3. Check the travel of the pedal. Adjustment is necessary if it doesn't measure as indicated.

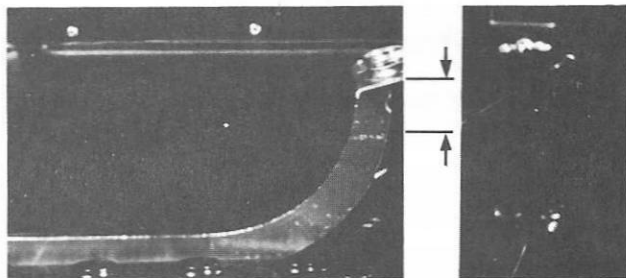


Fig. 42 Travel 1 1/2 Inches (38 mm)

Brake Pedal Adjustment

WARNING

Braking ability will be affected if the pedal travel is not properly adjusted as indicated. Serious injury may result if braking ability is affected.

1. Remove the right engine cover by loosening the two wing nuts (Figure 37).
2. Loosen the locking nut on the adjuster screw (Figure 43).
3. Adjust the screw until the pedal travel is as indicated (Figure 42).
4. Tighten the locknut and replace the cover.

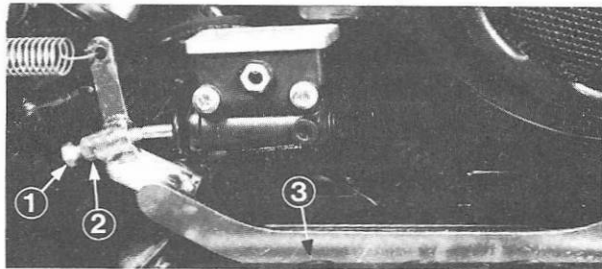


Fig. 43 ① Adjuster Screw ③ Brake Pedal
 ② Locknut

THROTTLE CONTROL

Inspect Daily

Thoroughly inspect the throttle cable and twist grip for condition and operation:

- Check cable for kinks, fraying or other damage.
- Check the twist grip for smooth operation and return.

Have it fixed by a TAURUS dealer if any problem is encountered.

WARNING

Do not lubricate the cable or twist grip. The lubrication may freeze or collect dirt which may cause the throttle to stick open. Serious injury may result if the throttle cannot be closed to reduce engine speed.

TIRES

Size 25 x 12 - 9 Inch

This vehicle is equipped with low pressure, tubeless tires. Although the tires are designed for off road use, they are not immune to punctures. Carefully select your riding area and avoid sharp obstacles.

CAUTION

Driving on paved surfaces will cause excessive wear to the tire.

Tire Pressure

Normal Cold Tire Pressure	5 psi. (0.34 kg/cm ²)
Maximum (to seat bead)	15 psi. (1.03 kg/cm ²)

The pressure should be checked when the tires are cold, before you ride. A special low pressure tire gauge (PART NO. 619) is available from your TAURUS dealer.

Tire Inspection

Inspect	Daily
---------	-------

- Check tire inflation pressure
- Check for wear, cuts, punctures etc.
- Check valve stem condition and seal
- Good bead contact with rim, no bead damage
- All wheel nuts tight
- Check wheel rims and hub for damage

Tire Repair and Replacement

Replace badly worn or damaged tires with the same size and model of tire. To repair or replace

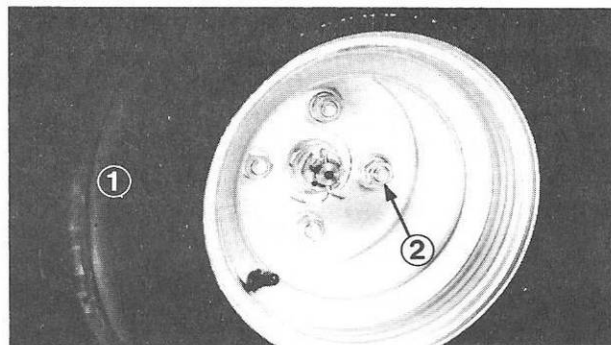


Fig. 44 ① Tire ② Wheel Nuts

a tire you will have to remove it from the rim. We recommend that you have this done by your TAURUS dealer as special equipment is required to remove the tire.

WARNING

Use of a non-standard tire on your vehicle will adversely affect the handling and steering characteristics of the vehicle and could result in an accident and injury.

To temporarily repair a punctured tire, use the plug method. A plug kit, available from most auto

part stores will provide the parts, tools and instructions to carry out your repair.

For a more permanent fix, apply a radial tire patch to the inside of the tire over the puncture or hole. This type of kit is also available from most auto part stores.

Rear Wheel Removal

1. Place a support under the vehicle to raise the rear wheel off of the ground.
2. Loosen the four wheel nuts and remove the wheel.

Rear Wheel Installation

Wheel Nut Tightening Torque	40 ft-lbs (5.48 kg-m)
--------------------------------	-----------------------

Reinstall the wheels and tighten the wheel nuts evenly in a cross pattern to the specified torque.

WARNING

Improper tightening of the wheel nuts can result in, damage to the rim, hub, or the wheel coming off of the vehicle. Serious injury could occur as a result of the wheel coming off.

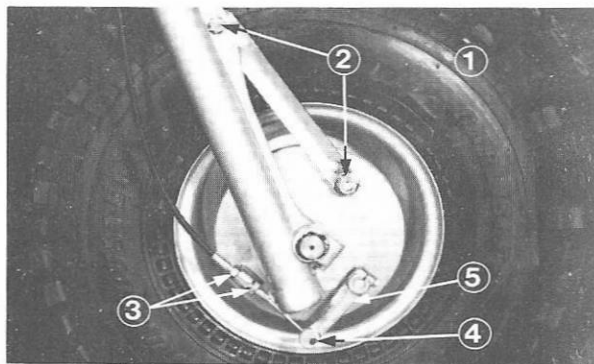


Fig. 45 (1) Front Wheel (2) Torque Arm Nuts (3) Cable Adjustment Nuts (4) Cable Retainer (5) Brake Arm

Front Wheel Removal

1. Place a support under the vehicle to raise the front wheel off of the ground.
2. Loosen the torque arm nuts (Figure 45).
3. Loosen the brake cable adjustment nut and pull the cable retainer from the brake arm.
4. Insert a 1/4 inch diameter rod into the hole in the front axle (Figure 46).
5. Loosen and remove the axle nut (Figure 47).
6. Tap the axle shaft from the left side with a rubber mallet.

7. Pull the axle shaft out from the right side and the wheel will come free.

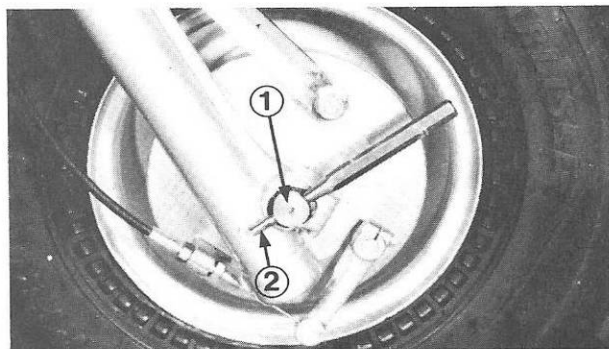


Fig. 46 ① Front Axle ② 1/4 Inch Rod

Front Wheel Installation

Front Axle Nut	
Tightening Torque	20 ft-lbs (2.74 kg-m)

1. Position the front wheel between the shock forks (Figure 47).

NOTE: Be sure all spacers, dust cover and brake drum are in place. The brake drum must be positioned with the brake arm at the bottom.

2. Align the shock fork axle holes and insert the axle shaft from the left side.

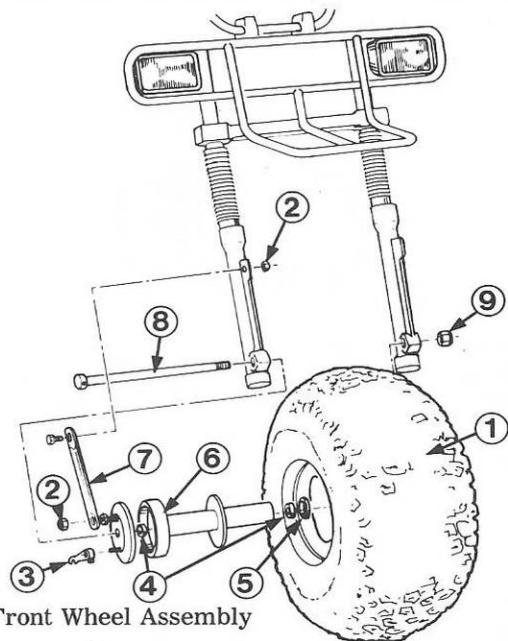


Fig. 47 ① Front Wheel ⑥ Brake Drum
 ② Torque Arm Nuts ⑦ Torque Arm
 ③ Brake Arm ⑧ Axle Shaft
 ④ Spacers ⑨ Axle Nut
 ⑤ Dust Cover

3. Install the nut and tighten to the specified torque.
4. Reconnect the torque arm.
5. Reconnect the brake cable and adjust the front brake (Front Brake Adjustment page 32).

STEERING

Steering Inspection

Inspect Daily

Check the steering for:

- Smooth, easy turning action
- All cables attached and not binding or loose

Steering Column Inspection

Inspect Every 50 Hours

Check the steering column for proper adjustment as follows:

1. Place a support under the vehicle to raise the front wheel off of the ground.
2. Position yourself in front of the vehicle and grab the front fork at the wheel (Figure 48).
3. Test as follows:
 - Push and pull quickly and firmly on the forks. Feel for any looseness in the steering column.
 - Turn the axle from side to side. Listen for unusual internal noises and feel for tightness or

rough movement.

Have your TAURUS dealer make any necessary adjustments if required.

WARNING

Lack of proper adjustment of the steering column will lead to erratic steering which can result in an accident or personal injury.



Fig. 48 Testing The Front Steering

SUSPENSION

The front suspension consists of a fork type shock absorber system. Rubber boots on the outside of the shock units protect the oil seals from dirt contamination and damage.

Inspect Daily

Inspect the boots for damage and secure fit. Replace immediately if damaged. Keep the shock units, especially the boot area clean.

The rear monoshock unit does not require any maintenance.

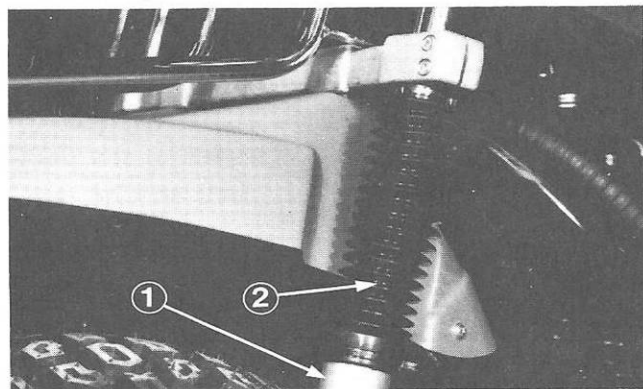


Fig. 49 ① Front Fork Shock ② Rubber Boot

BATTERY

Type 12 Volt, 12 Ampere Hours, 120 Amps.

The battery is located between the engine and transmission. It is sealed and “maintenance free”.

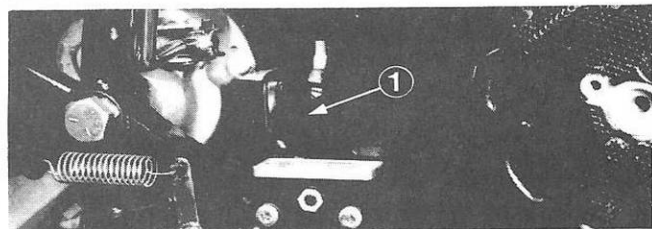


Fig. 50 ① Battery

WARNING

Battery fluid contains sulphuric acid. If battery fluid comes in contact with your skin or eyes, serious personal injury will occur. Always wear rubber gloves and safety goggles when servicing a battery.

Batteries produce explosive gases. Keep sparks, flames and cigarettes away from the battery. Re-charge the battery only in a well ventilated area.

Keep the battery charged. Never allow the battery to become drained by unnecessary use of the headlights or overcranking of the engine.

Charging the Battery

Rate	4 Amps., 8 Hours Maximum
------	--------------------------

If the battery is dead, recharge it immediately at the recommended rate. Remove the battery from the vehicle for charging.

NOTE: To avoid sparking and electrical damage, remove the (-) ground cable from the battery first and reconnect it last.

Do not over charge. If it will not carry a charge, have it replaced with a new one from your TAURUS dealer.

Battery Inspection

Inspect	Every 50 Hours
---------	----------------

Visually inspect the battery for:

- damaged casing
- loose or corroded terminals

Battery Maintenance

After visual inspection, clean, tighten and re-grease the terminals to prevent corrosion. Replace the battery if it appears damaged.

FUSE

Lighting System	14 Amp., 1 Inch
Charging System	25 Amp., 1 Inch

The vehicle has two inline fuses, accessible through the engine access hole under the seat (Figure 51).

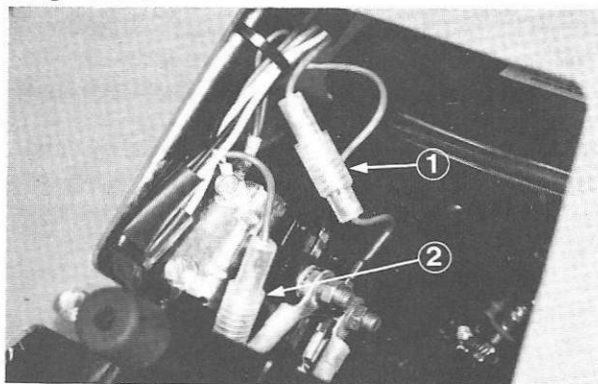


Fig. 51 ① 14 Amp Fuse ② 25 Amp Fuse



Do not mix the sizes when replacing the fuses. Use of an incorrect size fuse may cause an electrical malfunction or damage to occur.

Refer to the electrical diagram on page 55 if you encounter trouble.

TAIL LIGHT

Bulb Size	# 1893 (12 Volt, 4.6 Watt)
-----------	----------------------------

Replacement

1. Remove the two screws on the outer lense (Figure 52) to remove the tail light from the tank cover.
2. Separate the lense from the rear bezel by carefully prying them apart with a slot screw driver.

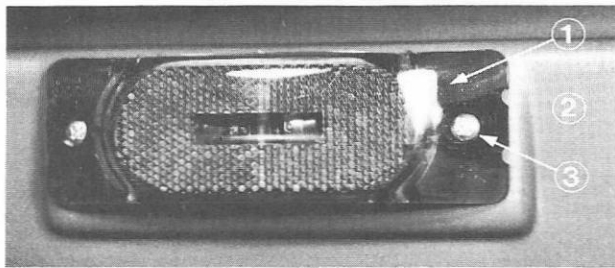


Fig. 52 ① Tail Light Lens ③ Screws
 ② Tank Cover

HEADLIGHT

Bulb Size	H3 Halogen (12 Volt, 55 Watt)
-----------	-------------------------------

Bulb Replacement



Do not touch the glass portion of the bulb. Damage to the bulb will occur. If you accidentally touch the bulb, clean it immediately with alcohol.

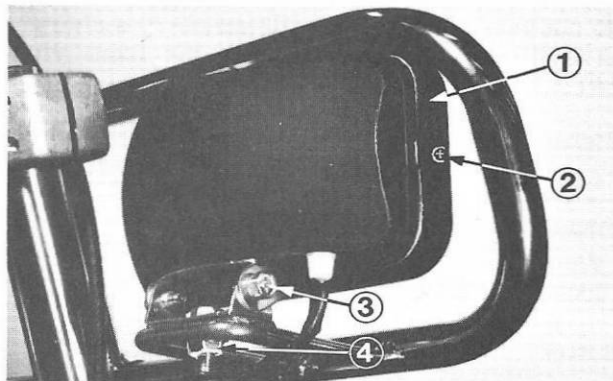


Fig. 53 ① Head Lamp Rim ③ Side Adjustment Screw
 ② Screws ④ Bottom Adjustment Screw

1. Loosen the two screws on the sides of the lamp housing rim (Figure 53).
2. Remove the lense and rim.
3. Disconnect the wire from the main harness and pull it through the housing grommet.
4. Unclip and remove the retainer/support and pull out the bulb unit.
5. Feed the wire from the new bulb through the housing grommet and reconnect it.
6. Position the new bulb and snap in the retainer/support.
7. Replace the lense and rim.

Headlight Adjustment

Adjust the headlights for proper illumination as follows:

1. Position the vehicle on level ground, with the headlights 20 feet (6 m.) from a vertical surface.
2. Loosen the two side and one bottom adjustment fastener on the headlight mount (Figure 53).
3. Aim the head lights one above the other as in figure 54.
4. Retighten the head light adjustment fasteners.

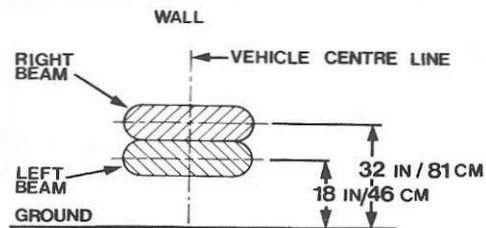


Fig. 54 Headlight Aiming

SPARK PLUG

Type	Champion RJ-12
	Autolight 308

Gap	0.030 Inch (0.76 mm)
-----	----------------------

Torque	200 in-lbs (2.29 kg-m)
--------	------------------------

Removal

1. Disconnect the spark plug wire.
2. Clean any dirt from around the spark plug base.
3. Remove the plug with a 13/16 inch deep socket wrench.

Inspect Every 100 Hours

Inspection

Visually inspect the plug. Replace the plug if:

- The electrodes are burned away
- The porcelain is cracked

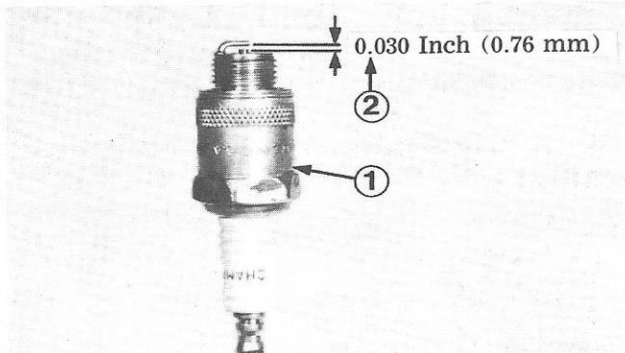


Fig. 55 ① Spark Plug ② Gap

Cleaning

If the plug is still useable, clean the spark plug gap with a pen knife or wire brush and solvent. DO NOT use an abrasive cleaning machine. Reset the gap as specified above. See also (Figure 55).



Tighten the spark plug as specified. An improperly tightened plug can become very hot and may damage the engine.

AUTOMATIC TORQUE CONVERTER SYSTEM

The torque converter system automatically regulates the torque delivered by the engine to the transmission. The system consists of a driver clutch on the engine crankshaft, a driven clutch on the transmission input shaft and a drive belt (Figure 56).

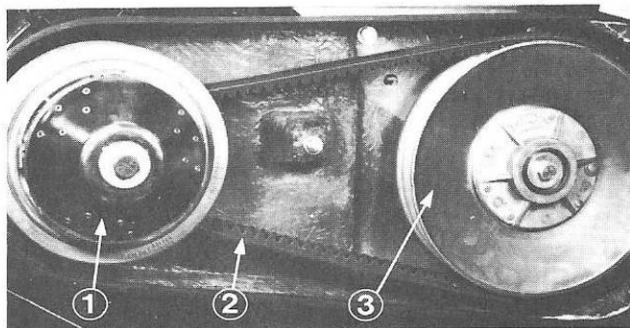


Fig. 56 ① Driven Clutch ③ Driven Clutch
② Drive Belt

WARNING

Do not attempt to make any adjustments or repairs to the torque converter system if the engine is running. Before you service your vehicle, shut the engine off and remove the battery cables to prevent the engine from being accidentally started.

Drive Belt Inspection

Inspect	Every 25 Hours
---------	----------------

The drive belt tension and alignment are preset at the factory and do not require adjustment.

Replace the belt if:

- The width of the belt measures below $1 \frac{5}{16}$ inch (33 mm) (Figure 57).
- The belt is cracked, frayed or shredding
- The belt is contaminated with oil or other fluid

NOTE: Return your vehicle to your TAURUS dealer if there is rapid belt wear. This symptom indicates that a clutch problem exists.

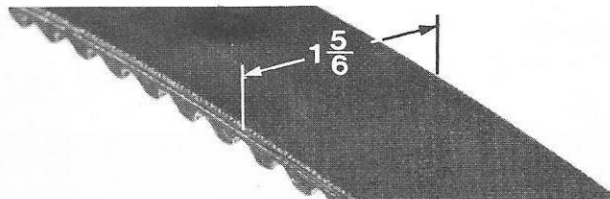


Fig. 57 Minimum Belt Width

Belt Removal

1. Remove the outer clutch cover (Figure 58).
2. Remove the inner steel cover secured by three wing nuts.
3. Place the speed range selector in N “neutral”.
4. Press down on the drive belt a few inches forward of the driven clutch to spread the inner and outer clutch halves.
5. Ease the belt over the fixed edge of the driven clutch (Figure 59).
6. Slip the belt over the driver clutch.

Belt Installation



Install the drive belt carefully so not to damage the belt face. A damaged belt may not perform properly and may also come apart during use.

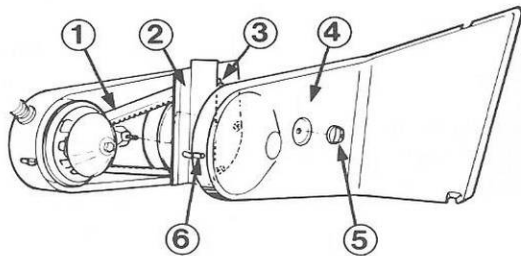


Fig. 58 ① Drive Belt ④ Outer Cover
 ② Inner Cover ⑤ Clutch Cover Knob
 ③ Wing Nuts ⑥ Toggle Latch

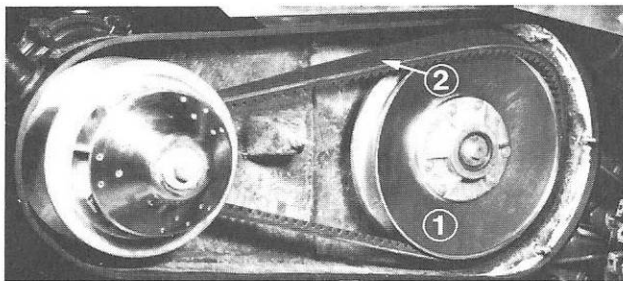


Fig. 59 ① Driven Clutch ② Drive Belt

1. Mount the belt over the driver clutch first.
2. Ease the belt over the edge of the fixed face of the driven clutch (Figure 59).

3. Slowly feed the belt over the driven clutch while turning the clutch.
4. Re-install the clutch covers.

Clutch Maintenance

Service	Every 250 Hours
---------	-----------------

A complete service of the clutch units is required periodically. To perform this procedure, the clutches must be disassembled.

NOTE: Disassembly and repair of the clutches requires special tools. We recommend that you have the clutches serviced by your TAURUS dealer.

Servicing of the clutches is detailed in the TAURUS Service Manual.

The following symptoms indicate that there may be a clutch problem:

- Drop off in vehicle performance
- Clutch does not shift through speeds smoothly
- Clutch hesitates or sticks at one speed
- The drive belt wears out rapidly
- The vehicle vibrates during operation
- The vehicle does not move when speed range selector is engaged

If you suspect a clutch problem, have the vehicle inspected and repaired immediately.

Clutch Inspection

Inspect Every 50 Hours

WARNING

Dents or cracks in a spinning clutch can produce serious vibrations which may cause it to shatter and result in serious personal injury and damage to the vehicle.

Visually inspect the exterior of the clutches for the following:

- Check the clutch faces for tracking grooves caused by the drive belt running at one spot
- Check for cracks, dents or loose parts
- Check that plastic slider buttons are not melted or worn more than to 1/16 inch between aluminum cams (Figure 60).

Clutch Lubrication

Lube Every 50 Hours

Type Silicon Based — Self Drying

Spray the lubricant into the driven clutch unit, directing the spray at the spring shaft (Figure 61).

CAUTION

Do not spray lubricant on the belt or clutch faces. Lubricant on these components will hinder the torque converter performance.

Allow the lubricant to dry before using the vehicle. Dirt will collect on a wet unit causing serious damage to the clutch components.

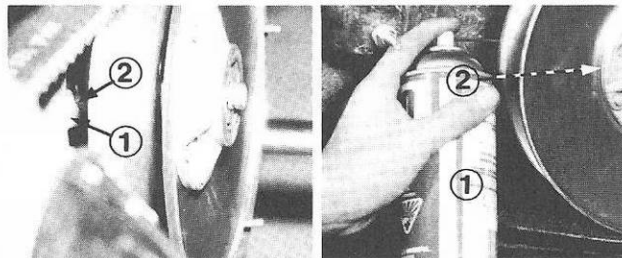


Fig. 60. ① Aluminum Cams ② Slider Buttons
Fig. 61. ① Lubricant ② Spring Shaft

FUEL SYSTEM

The fuel system consists of a fuel tank, fuel hose, fuel filter, vent hose and inline breather.

WARNING

Gasoline is extremely flammable and its vapours can explode if ignited. Keep cigarettes, sparks and flames away from wherever gasoline is used, stored or handled. Clean up any spilled fuel immediately

Inspection

Inspect	Daily
---------	-------

- Check that vent hose is securely connected to the fuel tank strap (Figure 62), and that the end is open. A pinched or closed hose will not allow the fuel tank to breath.
- Inspect the fuel line for secure attachment at all connections. Check for cracks and stiffness and wear or damage from rubbing.
- Check for fuel leakage around the tank, cap and all hoses.

Have the vehicle serviced immediately if any problems exist.

Draining the Fuel Tank

Drain the fuel from the tank by removing the fuel line from the filter and allowing the gasoline to siphon from the tank into a container.

Draining the Carburetor

Drain fuel from the carburetor by first removing the fuel from the tank. Proceed by then running the engine, allowing it to use up the remaining fuel in the carburetor.

WARNING

If spilled fuel or the smell of gasoline is detected, do not start or run the vehicle. Keep all sparks and flame away from the vehicle. Clean up spilled fuel immediately.

EXHAUST SYSTEM SHIELDING

The metal shielding is in place around exhaust system to provide protection to the body components and operator from the heat of the exhaust (Figure 61).

WARNING

Do not operate the vehicle without all exhaust shielding securely in place and in good condition.

The shielding of the muffler from the fuel tank is extremely critical for the safe operation of the vehicle. Gasoline is extremely flammable. Do not allow heat or flame near where gasoline is stored.

Tighten any loose shielding fasteners and replace any damaged components immediately.

Check and tighten exhaust and muffler clamps.

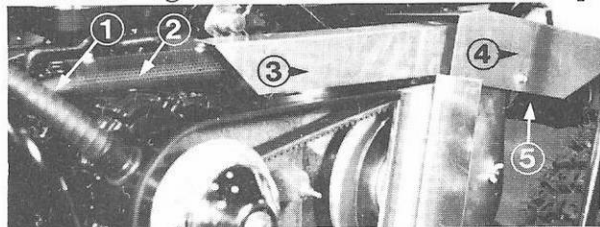


Fig. 61 ① Exhaust Pipe ④ Muffler Shield
② Manifold Shield ⑤ Muffler
③ Body Heat Shield ⑥ Clamp

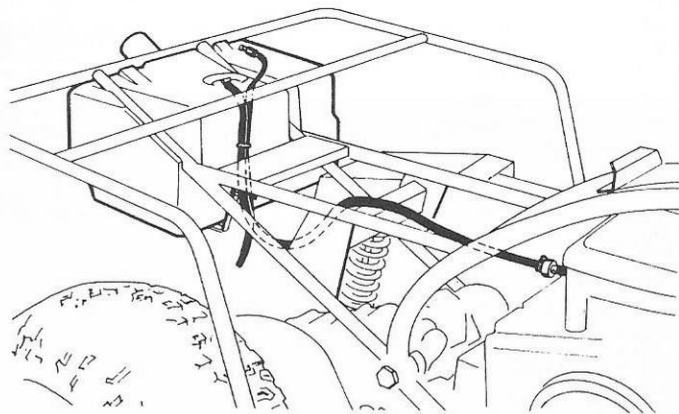


Fig. 62 ① Fuel Tank ③ Fuel Hose
② Vent Hose and Breather Valve ④ Fuel Filter
⑤ Fuel Tank Strap

TROUBLE SHOOTING

MALFUNCTION (SYMPTOM)	PROBABLE CAUSE	CORRECTIVE ACTION
Engine won't crank	<ol style="list-style-type: none"> 1. Loose electrical connections 2. Fuse blown 3. Battery voltage low 	<ol style="list-style-type: none"> 1. Clean and tighten 2. Check for cause and replace 3. Recharge
Engine cranks but won't start	<ol style="list-style-type: none"> 1. Kill switch on 2. Fuel tank empty 3. Fuel line clogged 4. Fuel filter clogged 5. Air filter dirty 6. Spark plug fouled 7. Fuel tank vent plugged or inoperative 8. Ignition system inoperative 9. Fuel pump inoperative 10. Water or ice in fuel 	<ol style="list-style-type: none"> 1. Reset 2. Refill 3. Clean line, blow out 4. Replace 5. Clean or replace 6. Clean or replace 7. Have it replaced 8. Have it serviced 9. Have it replaced 10. Drain system and replace fuel
Engine runs irregular or lacks power	<ol style="list-style-type: none"> 1. Spark plug loose or damaged 2. Compression leak 3. Fuel filter clogged 4. Choke on 5. Water in fuel line 6. Engine overheating 	<ol style="list-style-type: none"> 1. Retighten, clean or replace 2. Have engine serviced 3. Replace 4. Push choke off 5. Drain and replace 6. Let cool, remove air restriction, check oil level

Vehicle will not move	<ol style="list-style-type: none"> 1. Speed range selector in N "Neutral" 2. Drive belt wet 3. Clutch defective 4. Transmission failure 5. Parking brake on 	<ol style="list-style-type: none"> 1. Shift 2. Dry off 3. Have it serviced 4. Have it serviced 5. Release
Vehicle will not turn	<ol style="list-style-type: none"> 1. Steering interference 2. Rear end cargo too heavy 	<ol style="list-style-type: none"> 1. Check for cable, or cargo interference 2. Shift weight forward
Brakes not effective	<ol style="list-style-type: none"> 1. Pads, drum glazed 2. Pads, drum wet or contaminated 3. Hydraulic fluid low 4. Air in hydraulic system 	<ol style="list-style-type: none"> 1. Replace 2. Dry off, clean or replace 3. Check for leaks, refill, have it serviced 4. Have it serviced

STORAGE

If you plan on not using this vehicle for an extended period of time, (30 days or more) it should be prepared for storage. Lack of storage preparation could mean deterioration of certain parts and/or costly repairs later on.

Prepare the vehicle as follows:

- Make any necessary repairs to the vehicle now, so it will be in running condition when you are ready to use it again.
- Wash and dry the vehicle.
- Check and inflate the tires as recommended (page 37).
- Change the engine and transmission oil (page 27, 28).
- Drain the fuel from the tank and carburetor (page 49).
- Remove the spark plug and pour one tablespoon of clean engine oil into each cylinder. Operate the starter or pull on the manual starter rope a few seconds to distribute the oil evenly inside the cylinder head. This prevents corrosion of the cylinder walls and valves.
- Remove all spark plugs and plug the holes.



Ground the spark plug wire while cranking the engine, to prevent ignition system damage.

- Remove the battery and charge it. Store it in a cool dry place. Protect from freezing and from direct sunlight. Slow charge once a month during storage.
- Spray the wiring harness and battery terminals with a silicone base lubricant to prevent corrosion.
- Place blocks under the vehicle to raise the tires off the ground.
- Cover vehicle with sheet or tarp and store in a dry unheated area.



Do not store the battery near flames, sparks or any source of fire. Batteries can explode if exposed to flames or sparks, causing serious personal injury.

Removal From Storage

Preparing the vehicle for use after storage is important.

- Uncover and clean the vehicle.
- Change the engine oil if stored for longer than 4 months.
- Check and charge the battery as required.
- Fill the fuel tank with fresh gasoline.
- Perform all pre-operation inspection requirements (page 13).
- Repaint any bare metal.
- Test drive the vehicle.

CLEANING THE VEHICLE

Before washing the vehicle, protect the following parts:

- Ignition switch — cover the key hole with tape
- Air Filter — wrap and tape with plastic bag
- Engine Air Intake — cover and tape with plastic
- Muffler opening — cover with plastic bag
- Electrical system — battery

Wash the vehicle with a mild household detergent. Rinse off with a garden hose. Remove plastic covers. Check brakes, clutches, etc. for water. Make sure they are dry or corrosion may occur.

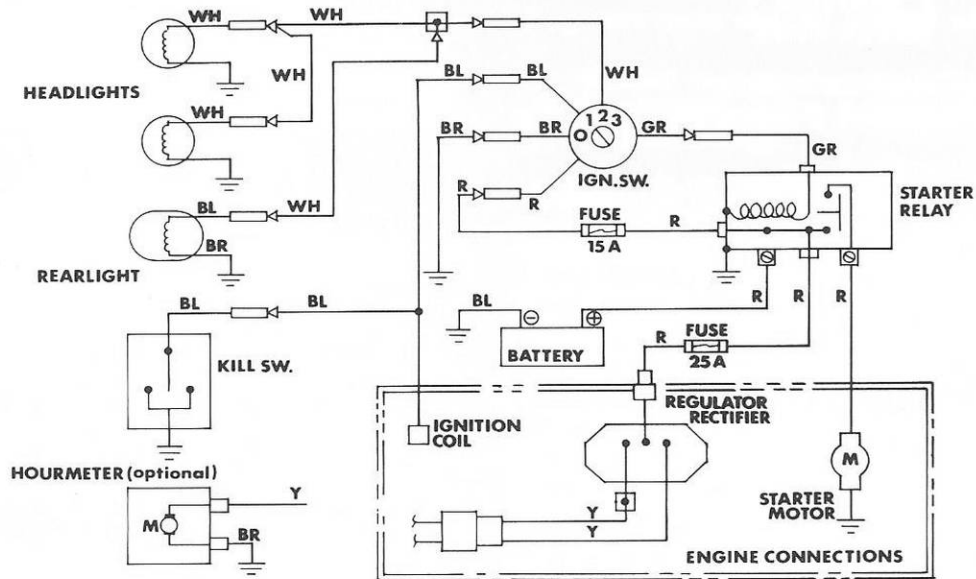
TRANSPORTING THE VEHICLE

- Transport the vehicle upright and level
- Place in L “Low” range
- Parking brake on
- Tie vehicle down securely



Do not transport or store the vehicle, inclined with it's front wheel up, or on it's side. Fuel or oil may leak out.

WIRING DIAGRAM



IGNITION SWITCH CONTACTS

OFF	○	○			
1st			○	○	
2nd					
3rd				○	○
	BL	BR	WH	R	GR

BL = BLACK
 BR = BROWN
 WH = WHITE
 R = RED
 GR = GREEN
 Y = YELLOW

TAURUS DEALER...Please complete this page at the time of sale to the new owner so your customer has all the pertinent information he may require.

TAURUS VEHICLE SERIAL NUMBER

ENGINE SERIAL NUMBER

TRANSMISSION SERIAL NUMBER

SOLD TO

STREET ADDRESS

CITY OR TOWN

PROV. OR STATE

DATE OF SALE

WARRANTY EXPIREY DATE

DEALER NAME

ADDRESS

CITY OR TOWN

PROV. OR STATE

TELEPHONE NUMBER

LIMITED WARRANTY

Ontario Drive & Gear Limited hereby warrants to the original retail purchaser that each new and unused Taurus Off-Road-Vehicle is free from defect in both material and workmanship with respect to the manufacture and assembly of parts by Ontario Drive & Gear Limited for a period of 365 days from the date of purchase, under normal use and service by the original purchaser. This warranty shall not apply to used or demonstrator Taurus vehicles or to such units delivered to a distributor or dealer more than twelve months before its retail sale unless specifically made so applicable by written notice specifying the vehicle in question and duly executed on behalf of Ontario Drive & Gear Limited.

This warranty does not extend to engines, engine parts, tires, batteries or other components or accessories not manufactured by Ontario Drive & Gear Limited.

This warranty is void unless a Warranty Registration Form is completed in full, according to the instructions contained therein and mailed, postage paid to Ontario Drive & Gear Limited within 10 days of the date of purchase.

This warranty applies only to the original retail purchaser and is not transferable. All service and parts replacement or exchange under this warranty must be performed by an authorized Taurus dealer or repair facility with service calls or transportation of the vehicle to and from the dealer or service facility being the responsibility of the owner.

This warranty is subject to the following further exclusions:

1. Warranty shall not apply to any machine or part which shall have been repaired or altered in any way outside of the manufacturer's factory or by an authorized Taurus dealer according to factory specifications.
2. Warranty shall not apply where normal use has spent the life of a part or the machine, or when the machine has been damaged from abuse or overloading or other misuse.
3. Warranty shall not apply for normal service, maintenance or parts damaged by reason of being struck or other external or internal damages.
4. Warranty shall not apply where machines or parts are lost or damaged in shipment.
5. Warranty shall not apply when the Factory Warranty Registration Form is not properly completed by the distributor, dealer or sales department and customer, or if Registration Form is not in file with Ontario Drive & Gear Limited.

6. Warranty does not apply to engine, engine parts, tires, components, or accessories not manufactured by Ontario Drive & Gear Limited.

7. Warranty is void immediately upon the machine being used in any speed contest (racing, dragging, etc.)

This shall constitute the complete and only warranty given by Ontario Drive & Gear Limited and, except as specifically set forth in the foregoing, Ontario Drive & Gear Limited shall not, in any event, be liable for any losses, damages, costs, whether special, incidental, consequential or otherwise, in any way related to any vehicle or its sale. No warranty, expressed, implied or statutory, as to merchantability, fitness for a particular purpose, description, quality or any other matter is given in connection with any vehicle or its sale and no agent, employee or other person has any authority to vary any of the foregoing provisions. Provided, however, that this clause shall be severable where voided by application of the Consumer Protection Act.

ODG

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