

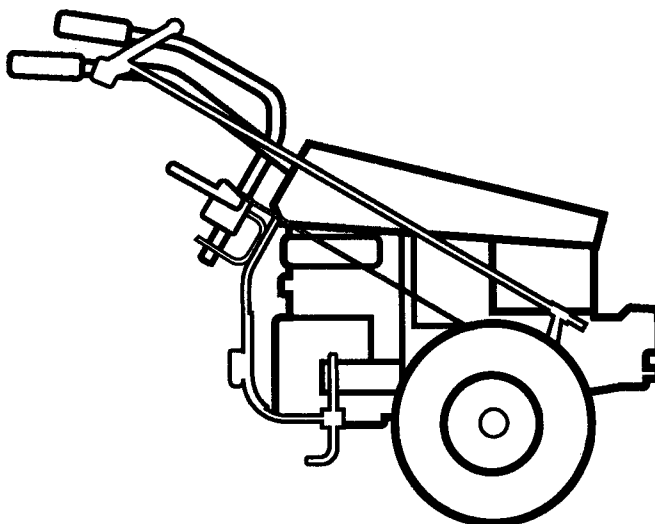


985

Series

PROFESSIONAL 2-WHEEL

Owner's Manual



A Message to Gravely Customers . . .

Welcome to the world of Gravely equipment. We are pleased that you have purchased the best Tractor available. The care you give your Gravely Tractor will determine the satisfaction and service life you will obtain from it. Use this manual as your guide. By observing the instructions and suggestions in this manual, your Gravely Tractor will serve you well for many years.

Your Gravely dealer will be happy to supply any service or advice which may be required to keep your Gravely Tractor operating at peak efficiency. He stocks genuine Gravely parts and lubricants; manufactured with the same precision and skill as the original equipment. His factory trained staff is kept well informed on the best methods of servicing

Gravely equipment and is ready and able to serve you. If service is required, be prepared to supply the service person with the Model and Serial Number of the Tractor, as well as a full description of the problem encountered.

NOTE: The descriptions and specifications contained in this manual were in effect at the time the manual was approved for printing. Gravely reserves the right to discontinue models without notice and without incurring obligation. The Tractor described within this manual may not be identified as either standard or optional and the various illustrations may not be Applicable to your particular unit. If you have questions, always check with your Gravely dealer.

Safety Alert Symbol and Notations

The following safety notations are used throughout this manual to call attention to special information or operating procedures. Understand the message in each notation and be alert to unsafe conditions and the possibility of personal injury.

NOTE: A **NOTE** points out general reference information regarding proper operation and maintenance practices.

IMPORTANT: An **IMPORTANT** statement indicates specific procedures or information that is required to prevent damage to the machine or its attachments.



This safety alert symbol is used to attract your attention **PERSONAL SAFETY IS INVOLVED!** When you see this symbol - **BECOME ALERT - HEED ITS MESSAGE.**



WARNING



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It is also used to alert against unsafe practices.

The warranty will be valid only if the machine is maintained and operated as directed in this manual. Warranty will be valid only if the machines in operated with approved attachments.

Contents

Safety Alert and Notations	i
Safety Precautions	1
Safety Decals	4
Controls and Features	5
Operation	6
Lubrication and Maintenance	9
Adjustments	14
Storage	18
Service Manual	18
Trouble Shooting	19
Specifications	20
Dealer Preparation	21
Attachments	24
Accessories	25
Warranty	27

Specific Model and Serial Numbers are on a label located on the frame of your Tractor and on a label located on the product registration form. Record those numbers below and transfer the label from the product registration to place indicated below. Use these numbers whenever parts or service is required.

Model Number _____

Serial Number _____



Models

Model 985103

8 HP Recoil 2SP w/o Steering Brakes
Serial No. 000101 and up

Model 985104

8 HP Recoil 4SP w/o Steering Brakes
Serial No. 000101 and up

Model 985105

8 HP Elec 4SP w/o Steering Brakes
Serial No. 000101 and up

Model 985106

12 HP Recoil 4SP w/o Steering Brakes
Serial No. 000101 and up

Model 985107

12 HP Elec 4SP w/o Steering Brakes
Serial No. 000101 and up

Model 985108

12 HP Elec 4SP w/Steering Brakes
Serial No. 000101 and up

Model 985109

16 HP Elec 4SP w/Steering Brakes
Serial No. 000101 and up

NOTE: All References to "Left", "Right", "Front" and "Rear" are given from operator's position.

Safety Precautions

Improper use of this tractor can injure people and damage the equipment. People using or servicing this tractor must read and follow the instructions in this manual.

It is important to understand that this manual and any other Gravely instruction manuals do not cover every possible danger. It is impossible for Gravely to know of all possible dangers in operating and servicing the tractor and attachments.

The purchaser must give these instructions to the people operating and maintaining this tractor. These people must use eye and foot protection.

Training

Read this manual, the attachment manual and the engine manual carefully before operating unit.

Learn the location and function of all controls.

Learn how to use the controls to stop the wheels and attachment quickly in an emergency.

Understand and follow each danger, warning, caution and instruction decal installed on this product.

Never permit children to operate the Two-Wheel Tractor. Do not allow adults to operate it without proper instruction.

Safety Precautions (Continued)

Safe operation of this equipment requires your complete and unimpaired attention at all times. Do not operate unit after or during the consumption of drugs or alcohol.

Keep all people and animals away from the operating area.

Preparation

Use caution with gasoline. Gasoline is very flammable and its vapors are explosive. Keep it in a clean, tight and approved (Red) container. Never put gasoline in the fuel tank while the engine is running or hot. Clean up spilled gasoline before starting engine. Do not fill fuel tank indoors. Never allow smoking materials, sparks or flame (match, pilot light, etc.) near mower or fuel container. Replace fuel tank cap and fuel container cap securely.

Inspect area of operation and remove all material which could be thrown by the attachment such as stones, sticks, wires and other foreign objects.

When hauling the equipment, connect the chassis to the transporting vehicle. Never connect from control levers, rods, or like items that could be damaged.

Replace all parts that become damaged or lost.

Wear hand, foot, head, ear and eye protection. Do not wear loose clothing, which might get caught in rotating parts of the unit.

Before making adjustments, cleaning, removing obstructions or servicing the tractor or attachment move the PTO to "OFF", turn the ignition switch to "OFF", remove the ignition key and wait until all moving parts completely stop.

Operation

Be certain that all shields, guards, and interlock switches are in the correct position and operating properly.

Before starting the engine, put the PTO lever in the "OFF" position and the gear shift lever in the neutral "N" position.

Check the operation of the operator presence controls before operating the tractor. With either the

PTO or the direction control lever engaged, the engine should run only if at least one of the operator presence switches is depressed.

Do not use the equipment in the dark without adequate lighting.

Keep away from moving parts. Stay clear of the attachment whenever the engine is running.

Do not let people other than the operator near the operating equipment. Never direct discharge of material towards bystanders. The operator is responsible for the safety of bystanders.

Operate the attachment only on safe surfaces as prescribed in the attachment manual. Disengage the attachment drive when moving the tractor to and from work areas.

Use a slow speed and engage the shift lever slowly when operating on slopes.

Look for and keep away from hazards, such as drop-offs. Stay alert for holes, rocks and other hidden hazards in the area of operation.

After hitting an object, disengage the PTO, turn off and remove the ignition key and wait for all motion to stop. Check for damage. Repair any damage before restarting unit.

Look behind when operating in reverse. Look for people and hazards.

Operate only from the operator's position, just behind the handlebars.

Travel across slopes, not up and down. Use extreme caution when changing direction on slopes. Do not operate on steep slopes.

If there is a sudden change in the sound or vibration of the equipment, disengage the PTO, turn off and remove the ignition key, wait for all motion to stop and check for damage. Repair any damage or failure before restarting unit.

Never run the engine indoors except to move it outside. Exhaust fumes are dangerous.

Safety Precautions (Continued)

Go slowly on slick surfaces. Always be sure of your footing, keep a firm grip on the handlebars and walk, never run.

Follow traffic laws when operating on or near a road.

Before leaving the operator's position, put the PTO lever in the "OFF" position, turn off and remove ignition key. Move the shift control to first gear position.

Do not touch parts which might be hot from operation. Before attempting to maintain, adjust or service allow such parts to cool.

Maintenance and Storage

Keep the equipment in good condition. Maintain it as directed in this manual. Check all hardware at regular intervals.

Use only Gravely accessories, attachment and replacement parts.

Do not overspeed the engine. Do not override the governor.

Before making any repairs, adjustments, inspections or cleaning unit disengage the PTO, turn off and remove the ignition key and wait for all motion to stop.

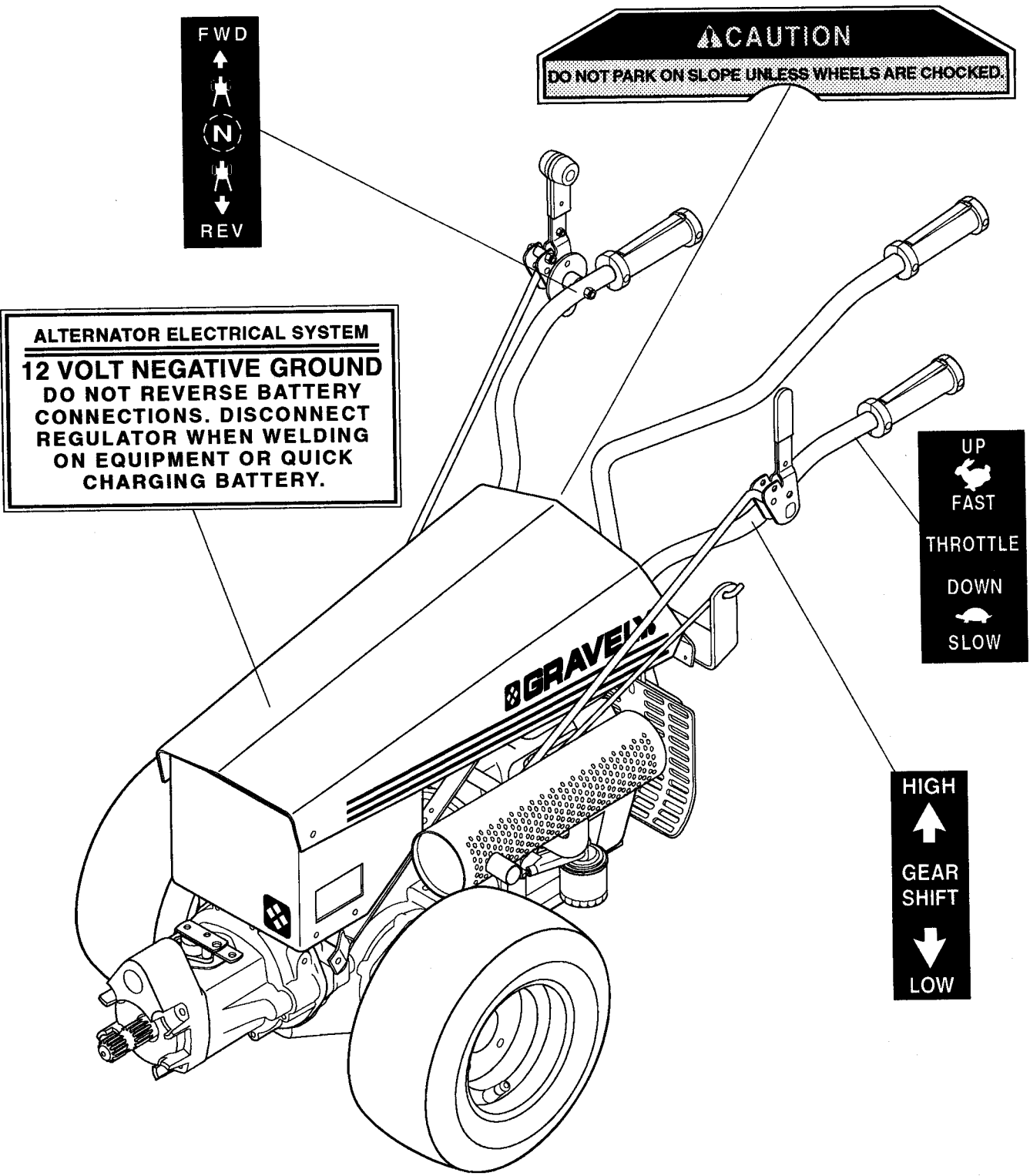
To reduce fire hazard and overheating, keep equipment free of grass, leaves, debris or excessive lubricants.

Worn out mufflers can result in fire or explosion and should be replaced immediately.

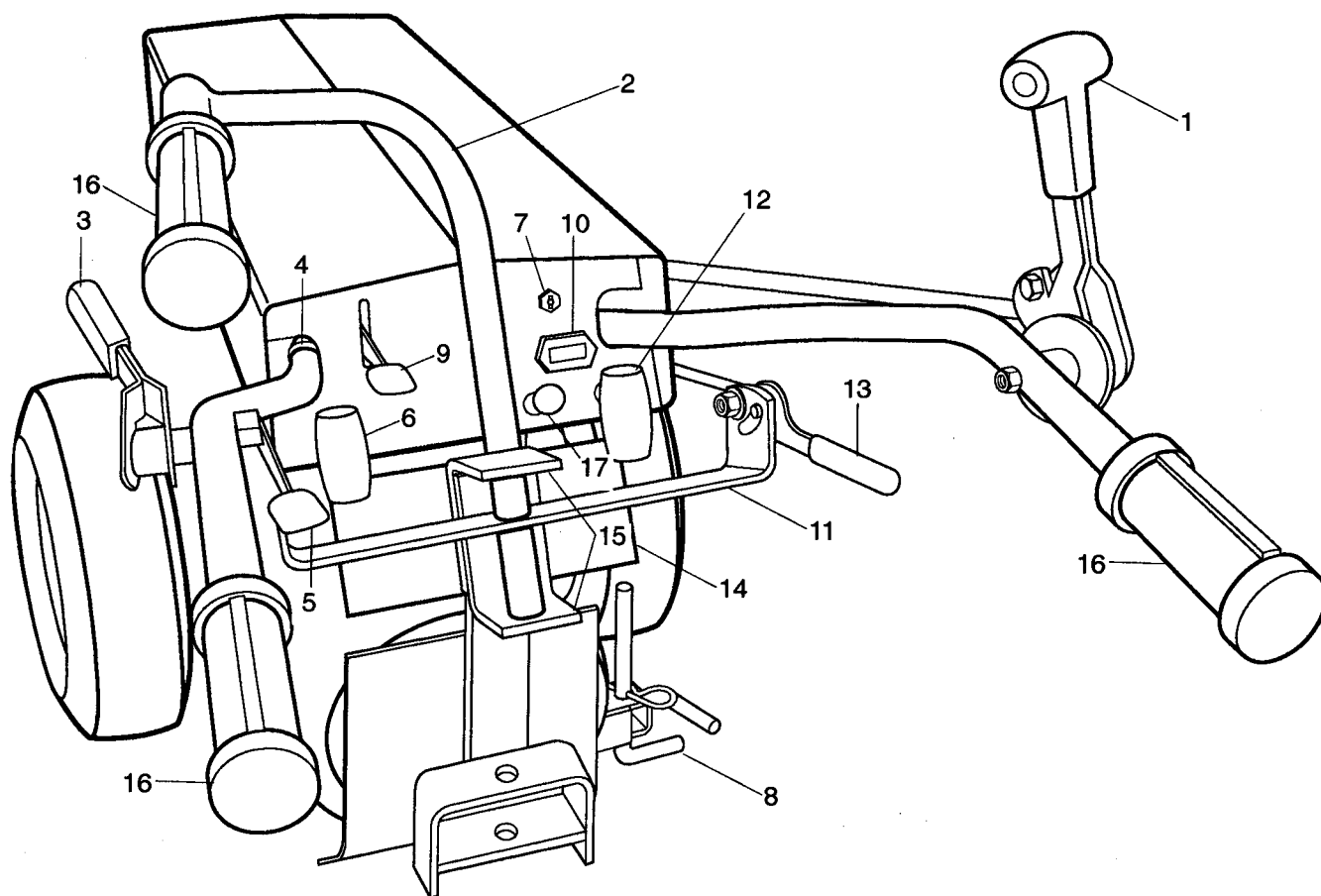
Never store equipment with gasoline in tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.

Refer to Storage Section of owners manual if unit is to be stored for extended periods.

Safety Decals



Controls and Features



- | | | | |
|----|-------------------------------|-----|------------------------------|
| 1. | Direction Control Lever | 10. | Hourmeter |
| 2. | Brake Handlebar | 11. | Brake Handle Cross Bar |
| 3. | Gear Shift Lever | 12. | Range Shift Handle |
| 4. | Conduit Clip | | Differential Lock Control |
| 5. | Throttle Lever (8 HP) | | (Differential Lock Tractors) |
| 6. | PTO Control | 13. | Parking Brake Handle |
| 7. | Ignition Switch | 14. | Instruction Plate |
| 8. | Kick Stand | 15. | Brake Handle Bracket |
| 9. | Choke Control (8 HP) | 16. | Operator Presence Control |
| | Throttle Lever (12 and 16 HP) | 17. | Choke Control (12 and 16 HP) |

Figure 1: Control and Feature Locations

Operation

NOTE: Read the tractor and attachment(s) manuals before operating the equipment. Operate the tractor only from the operator's position, just behind the handlebars. Service the tractor and attachment before operating.

Direction Control Lever

The direction control lever controls the movement of the tractor. Push the control forward to go forward. Pull the control back to move the tractor backwards. See figure 1.

Gear Shift Lever

The gear shift lever has two operating positions. The forward ("HIGH") position is the fast gear. The rearward ("LOW") position is the slow gear. See figure 1.

The gear shift lever also controls the PTO speed. The forward ("HIGH") position is the fast PTO speed. The rearward ("LOW") position is the slow PTO speed.

NOTE: The gear shift lever must be in the "HIGH" or "LOW" position to properly transmit power to the PTO or wheels.

Range Shift Handle (2-Speed Axle Tractors)

The range shift handle (figure 1) has two operating positions. Pull the handle to the rearward ("LOW") position for the fast speed. Push the handle to the forward ("HIGH") position for the slow speed.

Rocking the tractor back and forth by moving the direction control lever back and forth while moving the range shift handle will assist in the aligning the clutch teeth for engagement of the two-speed axle.



WARNING: Never move the handle while on a slope or while the tractor is moving. Move the handle only when the tractor is on level ground and stopped (except for rocking to engage the clutch as described above).

Throttle Lever

The throttle lever (figure 1) is used to control the engine speed. To increase the engine speed, move the lever up to the "FAST" position. To decrease the

engine speed, move the lever down to the "SLOW" position.

Choke Control

The choke control is used to choke a cold engine for starting. The choke control is located on the instrument panel (figure 1). On 8 HP tractors, push the choke control up to the "ON" position to choke the engine. On all other tractors, pull the choke out to the "ON" position to choke the engine. When the engine is warm, move the control to the "OFF" position.

PTO Control

The PTO control (figure 1) is used to connect or disconnect the engine power to an attachment. The forward position is "OFF"; the rearward position is "ON".

Ignition Switch

The ignition switch is used to start (electric start models) and stop the engine (figure 1).

Hourmeter

The hourmeter (on some models) shows total time which the ignition switch has been in the "ON" position (figure 1).

Fuse

Electric start models have a fuse to protect the electrical system.

Kick Stand

The kick stand is used to hold the tractor level when there is no attachment on the tractor. The kick stand must be in the raised position when moving the tractor. See figure 1.

Brake Handlebar

On tractors with steering brakes, the brake handlebar is used to steer the tractor. Swing the brake handlebar clockwise for a right turn or counterclockwise for a left turn (figure 1).

Operation (Continued)

Parking Brake

The parking brake (figure 1) is used to hold the tractor in position when not in use.

Operator Presence Control

One of the operator presence control levers must be depressed so the power take off (PTO) or direction control lever can be operated.



CAUTION: The operator presence control is to protect the operator from the moving parts of the attachment and the powered moving of the equipment. Operate the equipment only when the operator presence control is in working condition.

Differential Lock (Differential Lock Models Only)

The differential lock control is located on the lower right side of the instrument panel. To lock the differential, stop the tractor on level ground. Push the control forward. It may be necessary to rock the tractor back and forth with the direction control lever while pushing the differential lock control to engage the lock.

To unlock the differential, stop the tractor on level ground and pull the differential lock control back.

Starting a Manual Start Engine

Move the direction control lever to the "NEUTRAL" position.

Move the PTO control to the "OFF" position and the gear shift lever to the "NEUTRAL" position.

Put the key in the ignition switch and turn it to the "ON" position.

Move the throttle midway between the "SLOW" and "FAST" positions.

If the engine is cold, move the choke control to the "ON" position.

Pull the starter handle out until compression is felt in the engine. Then pull with one swift continuous motion. Hold the starter handle to allow a slow rewind of the rope.

After the engine starts and is warm, move the choke control (if used to start the engine) to the "OFF" position.

If the engine does not start after six pulls of the starter, see the Trouble Shooting section in the Engine Owner's Manual.

Starting an Electric Start Engine

Move the direction control lever to the "NEUTRAL" position.

Move the PTO control to the "OFF" position and the gear shift lever to the "NEUTRAL" position.

Move the throttle lever midway between the "SLOW" and "FAST" positions.

If the engine is cold, move the choke control to the "ON" position.

Put the key in the ignition switch. Turn the key to the "START" position. When the engine starts, release the key.

NOTE: Do not operate the starter for more than 15 seconds. Allow 45 seconds for cooling before operating the starter again.

After the engine starts and is warm, move the choke control (if used to start the engine) to the "OFF" position.

If the engine does not start after six tries, see the Trouble Shooting section.

Stopping the Engine

Move the direction control lever to the "NEUTRAL" position.

Move the throttle control to the "SLOW" position.

Move the HI/LO to the "NEUTRAL" position and the PTO control to the "OFF" position.

Turn the ignition key to the "OFF" position. Remove the ignition key before leaving the tractor.

Operating the Transmission

Learn to operate the tractor in an open area while using a slow gear and slow engine speed.

Operation (Continued)

- Start the engine.
- Move the gear shift lever to the "HIGH" or "LOW" position.
- Move the range shift handle (if the tractor has a two-speed axle) to the "HIGH" or "LOW" position.
- Move the throttle lever above the "SLOW" position (fast enough so that the engine will not stall).
- Depress an operator presence handle (probably left).

NOTE: One of the operator presence control levers must be held down at all times whenever the transmission is in gear and/or the PTO lever is in the "ON" position.

To go forward, move the direction control lever forward until the lever stays in the forward position. If the lever is not in the full forward position, the clutch will slip and cause premature clutch wear.

Move the direction control lever to the rear to move backwards. The lever will not stay in the rear drive position. The lever must be held in the rear drive position.

To stop the tractor, put the direction control lever in the "NEUTRAL" position. You may now release the operator presence handle (only if the PTO is off).

Use slow gears when operating the tractor on rough ground, slopes, small areas, near buildings or other obstacles.

Use a slow gear and a fast engine speed when operating a snowblower, rotary cultivator, or a mower in heavy grass.

Walk behind, never between the handlebars.

Using the PTO

- Start the engine.
- After the engine is warm, move the throttle lever just above the "SLOW" position.
- Move the gear shift lever to the "NEUTRAL" position. Depress an operator presence handle (probably the right one).

- Pull the PTO control back to the "ON" position with one continuous, fast pull.
- Move the throttle lever to the "FAST" position.
- Move the gear shift lever to the "HIGH" or "LOW" position.

NOTE: The gear shift lever must be in either the "HIGH" or "LOW" position to properly power the attachment.

Operate the direction control lever for desired travel.

To stop the power to the attachment, stop the tractor with the direction control lever, move the throttle lever to the "SLOW" position, move the gear shift to the "NEUTRAL" position and push the PTO control in (forward) to the "OFF" position. You may now release the operator presence handle.

When powering an attachment, move the throttle lever to the "FAST" position and control ground speed by selecting gear positions.

When powering an attachment, move the throttle lever to the "FAST" position and control ground speed by selecting gear positions.

Using the Steering Brakes (on some models)

The steering brakes are used when the tractor is being driven forward.

To make a right turn, swing the brake handlebar clockwise.

To make a left turn, swing the brake handlebar counterclockwise.



CAUTION: Use only the tractor handlebars to steer when driving in reverse.

To use the parking brake, pull up on the brake handle until the brake rod is at the top of the slot.

Lubrication and Maintenance

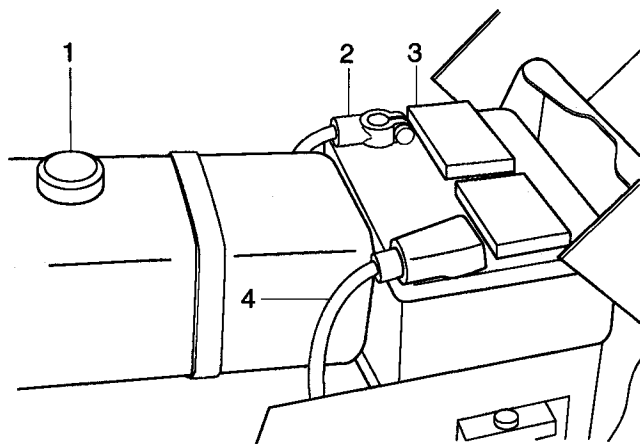
Filling The Fuel Tanks



WARNING: Use caution with fuel. Fuel is very flammable. Keep fuel in a clean and tight container. Keep fuel away from fire or heat. Never put fuel in the fuel tank while the engine is running or hot. Clean up any spilled fuel before starting the engine.

Add fuel to the fuel tanks as needed. See your engine manual for the correct type and grade of fuel.

Put the unit in an open area. Stop the engine and lock the brake. Clean the fuel cap and the area around the fuel cap to prevent dirt from entering the fuel tank. See figure 2. Remove the cap from the fuel tank. Fill the fuel tank. Be careful not to spill the fuel. Install the cap on the fuel tank and tighten. Clean up any spilled fuel before starting the engine.



1. Fuel Cap
2. Negative Battery Cable
3. Battery
4. Positive Battery Cable

Figure 2: Battery Connectors

Engine Maintenance

See the engine manual for maintenance instructions. Check the air cleaner and engine oil daily. Check the cooling system every 25 hours. Clean all of the grass and other material from the cooling fins and intake screen of the engine. If necessary, remove the engine shrouds to clean the engine. See the engine manual for the type of oil, oil change, etc. Never operate the engine when the oil level is below the low mark on the dipstick. See the engine manual for air cleaner maintenance instructions.

Control Linkage Lubrication

Every 25 hours of operation put a drop of engine oil on the pivots of the throttle lever, the direction control lever, the gear shift lever, the PTO control, and range shift handle.

NOTE: There are no grease fittings on the tractor.

Battery Service (Electric Start Models)

The tractor is equipped with a low maintenance battery. Check the fluid level every 200 hours or at the end of the year. See figure 2. Keep the battery clean. If acid is on the outside of the battery or the electrical connections are corroded, clean the outside of the battery with a water and baking soda solution. Anytime the battery cables are to be disconnected, remove the negative (-) (ground) cable first. When replacing the battery cable connect the positive (+) cable first. Anytime the battery cables are disconnected, the cable clamps and the battery post or connection should be cleaned until shiny. There are brushes made to clean the clamps and battery posts.

Fastener Check

Check all fasteners after 25 hours of operation to make sure that they are tight. Replace any fastener that is missing. Tighten fasteners according to chart 1.

Lubrication and Maintenance (Continued)

Tightening Torque For Fasteners

To insure that engine components do not loosen or separate, the tightening forces applied during assembly must be greater than the loosening forces (compression, vibration, expansion, ect.) created during engine/equipment operation. The best procedure is to use the highest tightening force consistent with the strength of the fastener and component.

The components where joint integrity is most critical will have specific torque values shown in the service manuals. For those fasteners where a specified torque is not given, use the following recommendations. Remember to lubricate threads with the engine oil prior to assembly.

METRIC

TIGHTENING TORQUE: N•m (lbf-in) + or - 10 %						
HARDWARE SIZE	4.8	5.8	8.8	10.9	12.9	Noncritical Fasteners Into Aluminum
M4	1.2 (11)	1.7 (15)	2.9 (26)	4.1 (36)	5.0 (44)	2.0 (18)
M5	2.5 (22)	3.2 (28)	5.8 (51)	8.1 (72)	9.7 (86)	4.0 (35)
M6	4.3 (38)	5.7 (50)	9.9 (88)	14.0 (124)	16.5 (146)	6.8 (60)
M8	10.5 (93)	13.6 (120)	24.4 (216)	33.9 (300)	40.7 (360)	17.0 (150)

TIGHTENING TORQUE: N•m (lbf-ft) + or - 10 %						
HARDWARE SIZE	4.8	5.8	8.8	10.9	12.9	Noncritical Fasteners Into Aluminum
M10	21.7 (16)	27.1 (20)	47.5 (35)	66.4 (49)	81.4 (60)	33.9 (25)
M12	36.6 (27)	47.5 (35)	82.7 (61)	116.6 (86)	139.7 (103)	61.0 (45)
M14	58.3 (43)	76.4 (55)	131.5 (97)	184.4 (136)	219.7 (162)	94.9 (70)

OIL DRAIN PLUGS TIGHTENING TORQUE: N•m (English Equiv.)			TORQUE CONVERSIONS
SIZE	Into Cast Iron	Into Aluminum	
1/8" NPT	---	4.5 (40 lbf-in)	
1/4"	17.0 (150 lbf-in)	11.3 (100 lbf-in)	
3/8"	20.3 (180 lbf-in)	13.6 (120 lbf-in)	
1/2"	27.1 (20 lbf-ft)	17.6 (13 lbf-ft)	
3/4"	33.9 (25 lbf-ft)	21.7 (16 lbf-ft)	

N•m=lbf-in x 0.113
N•m=lbf-ft x 1.356
lbf-in = N•m x 8.85
lbf-ft = N•m x 0.737

ENGLISH

BOLTS, SCREWS, NUTS, AND FASTENERS

ASSEMBLED INTO CAST IRON OR STEEL			
HARDWARE SIZE	GRADE 2	GRADE 5	GRADE 8
#8-32	20 in. lb.	25 in. lb.	---
#10-24	32 in. lb.	40 in. lb.	---
#10-32	32 in. lb.	40 in. lb.	---
1/4-20	70 in. lb.	115 in. lb.	165 in. lb.
1/4-28	85 in. lb.	140 in. lb.	200 in. lb.
5/16-18	150 in. lb.	250 in. lb.	350 in. lb.
5/16-24	165 in. lb.	270 in. lb.	30 ft. lb.
3/8-16	260 in. lb.	35 ft. lb.	50 ft. lb.
3/8-24	300 in. lb.	40 ft. lb.	60 ft. lb.
7/16-14	35 ft. lb.	55 ft. lb.	80 ft. lb.
7/16-20	45 ft. lb.	75 ft. lb.	105 ft. lb.
1/2-13	50 ft. lb.	80 ft. lb.	115 ft. lb.
1/2-20	70 ft. lb.	105 ft. lb.	165 ft. lb.
9/16-12	75 ft. lb.	125 ft. lb.	175 ft. lb.
9/16-18	100 ft. lb.	165 ft. lb.	230 ft. lb.
5/8-11	110 ft. lb.	180 ft. lb.	260 ft. lb.
5/8-18	140 ft. lb.	230 ft. lb.	330 ft. lb.
3/4-10	150 ft. lb.	245 ft. lb.	350 ft. lb.
3/4-16	200 ft. lb.	325 ft. lb.	470 ft. lb.

ASSEMBLED INTO ALUMINUM			
HARDWARE SIZE	GRADE 2	GRADE 5	GRADE 8
#8-32	20 in. lb.	20 in. lb.	20 in. lb.
#10-24	32 in. lb.	32 in. lb.	32 in. lb.
1/4-20	70 in. lb.	70 in. lb.	70 in. lb.
5/16-18	150 in. lb.	150 in. lb.	150 in. lb.

OIL DRAIN PLUGS		
SIZE	Into Cast Iron Pans	Into Aluminum Pans
1/4"	150 in. lb.	100 in. lb.
3/8"	180 in. lb.	120 in. lb.
1/2"	20 ft. lb.	13 ft. lb.
3/4"	25 ft. lb.	16 ft. lb.

TORQUE CONVERSIONS	
ft. lb. = in. lb. x 0.083	
in. lb. = ft. lb. x 12	
kgm = ft. lb. x 0.1383	
N•m = ft. lb. x 1.3558	

Chart 1

Lubrication and Maintenance (Continued)

Chart 2 shows the recommended service schedule that should be performed on a regular basis. More frequent service may be required due to working condition. (i.e. Heavy loads, high ambient temperatures, dusty conditions, or when airborne debris are present.) See the engine manual for maintenance instructions. Use chart 3 to record the actual hours on the hourmeter and the date at which each service item is performed.

MAINTENANCE SCHEDULE					
SERVICE PERFORMED	TIME INTERVALS BETWEEN SERVICE				
	DAILY	25 HRS.	50 HRS.	100 HRS.	500 HRS.
Check Engine Oil (pg. 9)	●				
Check Engine Cooling System (pg. 9)		●			
Check the Air Cleaner (pg. 9)	●				
Lubricate all Pivot Points (pg. 9)		●			
Check the Battery Fluid (pg. 9)					●
Check the Battery (pg. 9)					●
Check the Fasteners (pg. 9)			●		
Adjust the Fwd-Rev Clutch (pg. 13)			●		
Adjust the Gear Clutch (pg. 13)			●		
Adjust the PTO Brake (pg. 14)				●	
Adjust the Slip Clutch (pg. 15)				●	
Check the Transmission Oil (pg. 16)				●	
Lubricate the Ball of the Interlock Switches	●				
Check the Tire Pressure (pg. 19)		●			

Chart 2

Always use genuine Gravely service parts and accessories to ensure your machines peak performance.

Lubrication and Maintenance (Continued)

SERVICE TO BE PERFORMED		TIME INTERVALS BETWEEN SERVICE	
	25 HRS.		
	ACTUAL HOURS DATE		
	50 HRS.		
	ACTUAL HOURS DATE		
	75 HRS.		
	ACTUAL HOURS DATE		
	100 HRS.		
	ACTUAL HOURS DATE		
	125 HRS.		
	ACTUAL HOURS DATE		
	150 HRS.		
	ACTUAL HOURS DATE		
	175 HRS.		
	ACTUAL HOURS DATE		
	200 HRS.		
	ACTUAL HOURS DATE		
	225 HRS.		
	ACTUAL HOURS DATE		
	250 HRS.		
	ACTUAL HOURS DATE		
	275 HRS.		
	ACTUAL HOURS DATE		
	300 HRS.		
	ACTUAL HOURS DATE		
	325 HRS.		
	ACTUAL HOURS DATE		
	350 HRS.		
	ACTUAL HOURS DATE		
General Lubrication			
Check the Fasteners			
Check the Engine Cooling System			
Check the Tire Pressure			
Check the Transmission Oil			
Check the Battery and Battery Fluid			

Always use genuine Gravely service parts and accessories to ensure your machines peak performance.

Chart 3

Lubrication and Maintenance (Continued)

MAINTENANCE RECORD	
SERVICE TO BE PERFORMED	TIME INTERVALS BETWEEN SERVICE
General Lubrication	375 HRS. ACTUAL HOURS DATE
	400 HRS. ACTUAL HOURS DATE
Check the Fasteners	425 HRS. ACTUAL HOURS DATE
	450 HRS. ACTUAL HOURS DATE
Check the Engine Cooling System	475 HRS. ACTUAL HOURS DATE
	500 HRS. ACTUAL HOURS DATE
Check the Tire Pressure	525 HRS. ACTUAL HOURS DATE
	550 HRS. ACTUAL HOURS DATE
Check the Transmission Oil	575 HRS. ACTUAL HOURS DATE
	600 HRS. ACTUAL HOURS DATE
Check the Battery and Battery Fluid	625 HRS. ACTUAL HOURS DATE
	650 HRS. ACTUAL HOURS DATE
	675 HRS. ACTUAL HOURS DATE
	700 HRS. ACTUAL HOURS DATE

Chart 3 (Continued)

Always use genuine Gravelly service parts and accessories to ensure your machines peak performance.

Adjustments

Forward-Reverse Clutch Adjustment

- After 25 hours of operation, check the adjustment of the forward-reverse clutch.



WARNING: Stop the engine before adjusting the forward-reverse clutch.

- The reverse clutch is adjusted correctly when the direction control lever stops 15 degrees past vertical to the rear. The lever should return to neutral position from reverse when adjusted correctly.
- To adjust the reverse clutch, loosen the jam nuts on the end of the control extension rod in the fwd-rev control rod. Adjust the rear nut so that the direction control lever stops 15 degrees past vertical to the rear. Hold the rear nut and jam with the forward nut. See figure 3.
- The forward clutch is adjusted correctly when the direction control lever is in the full forward position and the large spring has a coil clearance of .010" (.254mm).

- To adjust the forward clutch, put the direction control in the forward position. Loosen the rear set of jam nuts on the control extension rod in the fwd-rev control rod. Adjust the forward nut until the large spring coils are .010" (.254mm) apart. Hold the forward nut and jam with the rear nut.

Gear Clutch Adjustment

- After every 25 hours of operation, check the adjustment of the gear clutch.



WARNING: Stop the engine before adjusting the gear clutch.

- The clutch is adjusted correctly when the gear shift lever is in the "HIGH" or "LOW" position and the spring coils are .010" (.254mm) apart.
- To adjust the "HIGH" clutch, loosen and separate the jam nuts on the rear of the control extension rod in the Hi-Lo control rod. Put the gear shift lever in the "HIGH" position. Adjust the nut (front) near the spring until the spring coils are .010" (.254mm) apart. Move the gear shift lever to the "NEUTRAL" position. Hold the nut adjusted to the spring and jam with the other (rear) nut. See figure 4.

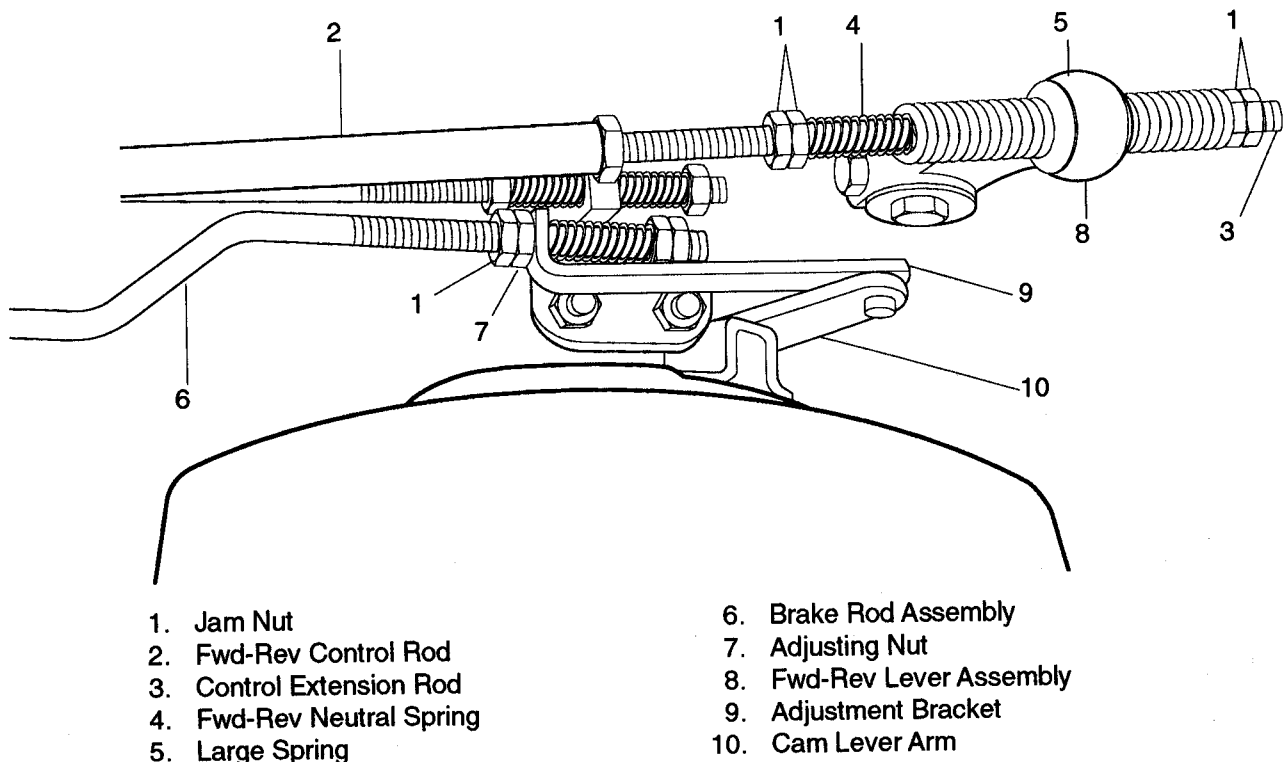
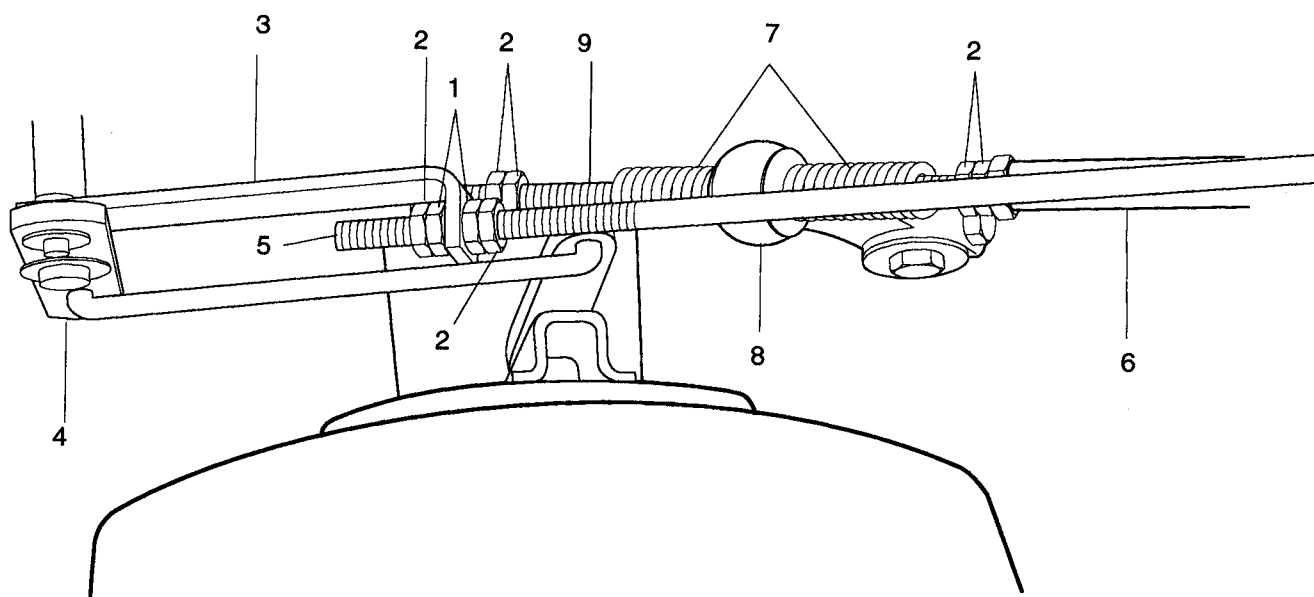


Figure 3: Forward-Reverse Clutch Adjustment

Adjustments (Continued)



- | | |
|--------------------------|-----------------------|
| 1. Adjusting Nut | 5. Brake Rod Assembly |
| 2. Jam Nut | |
| 3. Adjustment Bracket | |
| 4. Pivot Plate | |
| 6. Hi-Lo Control Rod | |
| 7. Large Spring | |
| 8. Hi-Lo Lever Assembly | |
| 9. Control Extension Rod | |

Figure 4: Gear Clutch Adjustment

- To adjust the "LOW" clutch, loosen and separate the jam nuts on the end of the control extension rod in the Hi-Lo control rod. Put the gear shift lever in the "LOW" position. Adjust the nut (rear) near the spring until the spring coils are .010" (.254mm) apart. Move the gear shift lever to the "NEUTRAL" position. Hold the nut adjusted to the spring and jam with the other (front) nut.

PTO Brake Adjustment

- Adjust the PTO brake after every 100 hours of operation.



WARNING: Stop the engine before adjusting the PTO brake.

- Remove the attachment and lower the rear of the tractor to the ground. Carefully clean the front of the transmission. Remove the quick hitch studs from the transmission and remove the quick hitch casting and PTO brake assembly. See figure 5.

NOTE: The attachment gasket must be replaced if damaged.

- Tighten all PTO brake bolts until the springs are solid. Back all bolts up 1/2 turn. See figure 6.

NOTE: Do not tighten the bolts in a circular sequence, that is, by tightening the bolt next to one which was just tightened. The bolts should be tightened in a cross sequence, that is, by tightening one bolt, then tightening the bolt which is across from it on the plate. Continue tightening the bolts in this sequence until all the bolts are tightened.

- Make sure the trunnion block is on the shipper shaft and held in place by the dog. The dog should rest on the spiral teeth of the clutch dog plate. Install the gasket.
- Align the splines on the quick hitch shaft with those in the dog. Slide the quick hitch casting and PTO brake assembly back into the place on the front of the transmission. Install the quick hitch studs and tighten.

Adjustment (Continued)

Slip Clutch Adjustment

- Adjust the slip clutch after every 100 hours of operation.



WARNING: Stop the engine before adjusting the slip clutch.

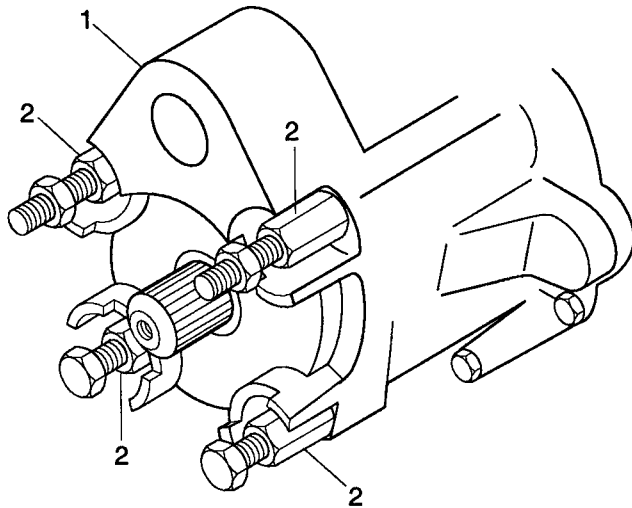
- Remove the attachment and lower the rear of the tractor to the ground. Carefully clean the front of the transmission. Remove the quick hitch studs from the transmission and remove the quick hitch casting and PTO brake assembly. See figure 5.

NOTE: The attachment gasket must be replaced if damaged.

- Remove the dog and trunnion block. Disconnect the wiring harness from the PTO brake interlock switch and remove the shifter parts. (See the tractor illustrated parts list, pages 1 and 2). Slide the shipper shaft assembly through the top of the advance casting. Slide the clutch assembly and pinion shaft out of the transmission. Remove the retaining ring and slide the clutch assembly off of the pinion shaft. Turn all of the jam nuts counterclockwise to loosen. See figure 7. Tighten all of the adjusting bolts until the springs are solid. Then turn all of the bolts counterclockwise one-half turn.

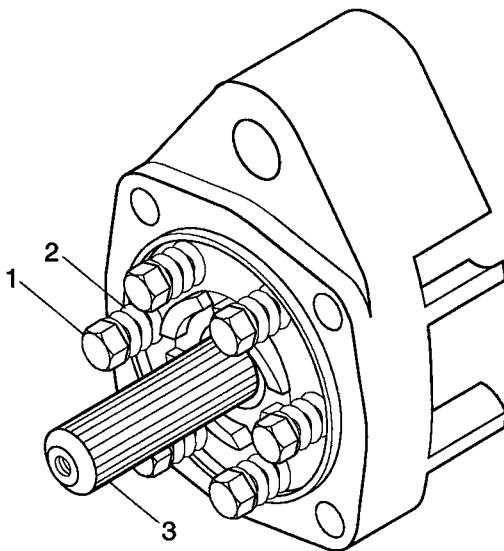
NOTE: Do not tighten the bolts in a circular sequence, that is, by tightening the bolt next to one which was just tightened. The bolts should be tightened in a cross sequence, that is, by tightening one bolt, then tightening the bolt which is across from it on the plate. Continue tightening the bolts in this sequence until all the bolts are tightened.

- Tighten the jam nuts against the back plate. Slide the clutch assembly back onto the pinion shaft, install the retaining ring and slide the pinion shaft completely into the transmission. Install the shipper shaft and other parts that were removed in step 6. Make sure the trunnion block is on the shipper shaft and held in place by the dog. The dog should rest on the spiral teeth of the clutch dog plate. Install the gasket. Align the splines on the quick hitch shaft with those in the dog. Slide the quick hitch casting and PTO brake assembly back into place on the front of the transmission. Install the quick hitch studs and tighten.



1. Quick Hitch Adapter
2. Quick Hitch Stud

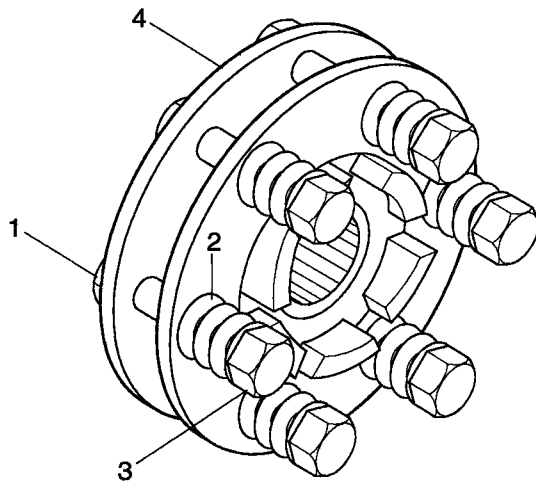
Figure 5: PTO Quick Hitch



1. PTO Brake Bolts
2. Springs
3. PTO Shaft

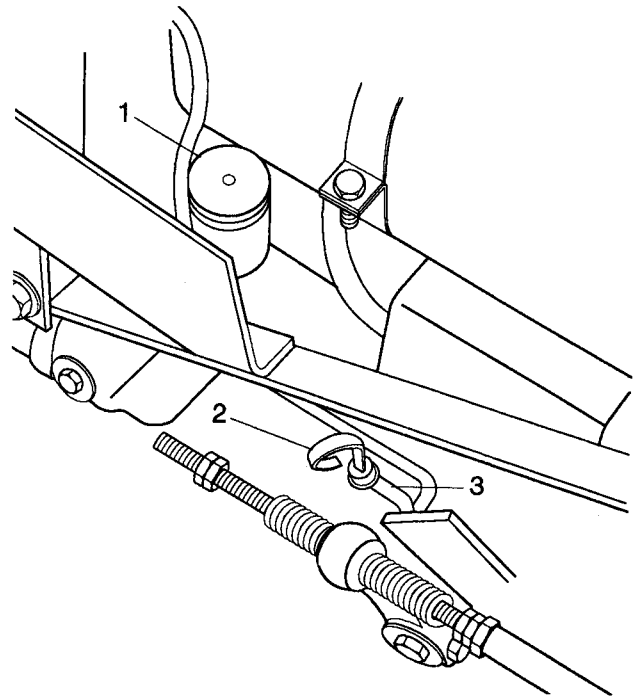
Figure 6: PTO Brake Adjustment

Adjustments (Continued)



1. Jam Nut
2. Spring
3. Adjusting Bolt
4. Back Plate

Figure 7: Slip Clutch Adjustment



1. Oil Filler Plug
2. Dipstick
3. Dipstick Tube

**Figure 8: Transmission Lubrication
Steering Brake Adjustment (applicable
models):**

Transmission Lubrication

- After every 100 hours of operation, check the level of the lubricant in the transmission. Never operate the tractor when the transmission oil level is below the "LOW" mark on the dipstick.
- Stop the engine and raise the hood. Make sure that the tractor is level. Clean the dipstick tube and the dipstick. See figure 8. Remove the dipstick, wipe it with a clean cloth or towel and put it back in the tube. Pull the dipstick out again and look at the oil.
- If the oil level is below the low mark on the dipstick, clean the area around the filler plug and remove the filler plug. Add new clean lubricant until the dipstick indicates that the oil level is correct. See specifications page 19. Install the filler plug and the dipstick.

- Park the tractor in a level area. Put the parking brake handle in the "OFF" (down) position. Loosen the jam nuts on the right and left brake rod assemblies. See figures 3 and 4. Turn the adjusting nuts until the brake handle cross bar is parallel with the instrument panel. See figure 1.
- Move the brake handlebar all the way to the right and measure the distance from the right end edge of the brake handle cross bar to the right side of the instrument panel. Move the brake handlebar all the way to the left and make the same measurement on the right.
- Adjust the nuts until the difference between the two measurements is 1/2" to 3/4" (13 to 19mm). Turn both adjusting nuts the same amount, clockwise to increase the measurement difference or counterclockwise to decrease the measurement difference.
- Tighten the jam nuts. Loosen the jam nuts below the compression spring on the right side of the tractor and adjust until one has the desired tension for the right brake. Tighten the jam nuts.

Storage

When The Tractor Will Not Be Operated For Two Months Or More:

Do the daily and 25-hour maintenance, but do not add gasoline.

Clean the tractor. Paint or oil bare metal surfaces to prevent rust.

NOTE: Do not use harsh or abrasive cleaners on any painted surface. Do not allow gasoline or oil to remain on any silk screened surface.

Refer to the engine manual and prepare the engine for storage.

Charge the battery initially and then every three weeks.

To Put The Tractor Into Service:

Refer to the engine service manual and prepare the engine for service.

Charge the battery.

Put fresh, clean gasoline in the fuel tank.

Service Manual

Service manuals are available for owners who wish to perform some of their own maintenance and service operations. Should a complete service manual be desired, order under the following part number.

When ordering parts always include the Model and Serial Number of your unit to assure prompt service. A parts manual is included in your literature package to make ordering of service parts easier.

**Professional Two Wheel
Service Manual**

Part No. 00030194

Tractor Model Number _____
Tractor Serial Number _____

Mail Request to:

Ariens Service
655 West Ryan Street
P.O. Box 157
Brillion, WI 54110-1098

Trouble Shooting

- 1. Starter will not operate when the ignition key is turned to the "S" position.**

Fwd-Rev lever in "FORWARD" position
PTO engaged
Defective solenoid switch
Blown fuse
Discharged battery
Loose battery cable(s)
Defective starter
Faulty interlock switch

- 2. Solenoid switch clicks but starter will not operate when the ignition is turned to the "S" position.**

Discharged battery
Defective starter
Loose battery cable

- 3. Engine starter operates but engine will not start when the ignition switch is turned to the "S" position.**

Fuel tank empty
Fuel shut-off valve at the fuel tank turned off
Engine failure -See Engine Manual

- 4. Engine starts but runs roughly.**

Restricted fuel cap vent
Engine carburetor malfunction-See Engine Manual
Engine choke in "ON" position
Restricted air cleaner element
Engine electrical system trouble-See Engine Manual

- 5. Engine stops when PTO or Fwd-Rev is engaged.**

Operator presence handle not pressed
Operator presence handle out of adjustment
Faulty switch

- 6. The tractor will not move when the direction control lever is moved to "FORWARD" or "REVERSE" position.**

Gear shift lever in "NEUTRAL" position
Range shift handle in "NEUTRAL" position
Fwd-Rev clutch needs adjustment

- 7. Attachment will not operate.**

Attachment jammed or damaged
Gear shift lever in "NEUTRAL" position
Attachment slip clutch needs adjustment or repair

- 8. Attachment operates slowly**

Attachment slip clutch needs adjustment or repair
Attachment damaged
Engine problems-See Engine Manual

- 9. The transmission will not go into "HIGH" range when range shift handle is moved to "HIGH" position.**

Debris blocking the linkage
Rust on the clutch sliding pin

Specifications

Engine FuelSee Engine Manual

Engine OilSee Engine Manual

Fuel Tank Capacity1.25 US Gallons (3.6 liters) Engine-Mounted Tank 8 HP
.....2 US Gallons (7.6 liters) Frame-Mounted Tank 12 HP
.....1.5 US Gallons (5.7 liters) Frame-Mounted Tank 16 HP

Transmission Oil Capacity5 US Quarts (4.75 Liters)

Transmission Oil Type10W-30 Engine Oil

Tire Sizes Available4.00-8 Stud Tread
.....4.00-8 Trac Tread
.....18 x 6.50-8 Turf-Chief
.....18 x 8.50 - 8 Turf-Saver
.....16 x 5W x 3 Semi-Pneumatic Ground Grip

Tire Pressure18 psi (124 kN/m²)

Weight Range355 lbs. (161kg) to 476 lbs. (215.9kg)

Dimensions58"L x 25"W x 36.5H (1470mm x 640 mm x 930 mm)

Ground Speeds (at 3300 rpm engine speed):

(NOTE: Grounds speeds are faster with bigger tires.)

8 H.P., 2-speed with 4.00 x 8 tires

.....Fwd: 2.0 mph (3.2 kmph) to 2.5 mph (4.0 kmph)
.....Rev: 1.9 mph (3.1 kmph) to 2.4 mph (3.9 kmph)

8 H.P., 4-speed with 4.00 x 8 tires

.....Fwd: Lo range - 1.3 mph (2.1 kmph); 1.7 mph (2.7 kmph)
.....Hi range - 2.6 mph (4.2 kmph); 3.4 mph (5.5 kmph)
.....Rev: Lo range - 1.2 mph (2.0 kmph); 1.6 mph (2.6 kmph)
.....Hi range - 2.4 mph (3.9 kmph); 3.1 mph (5.0 kmph)

10,12 and 16 H.P., 4 speed with 18 x 6.50 - 8 tires

.....Fwd: Lo range - 1.4 mph (2.3 kmph); 1.8 mph (2.9 kmph)
.....Hi range - 2.7 mph (4.4 kmph); 3.7 mph (6.0 kmph)
.....Rev: Lo range - 1.3 mph (2.1 kmph); 1.7 mph (2.7 kmph)
.....Hi range - 2.6 mph (4.2 kmph); 3.3 mph (5.3 kmph)

Dealer Preparation

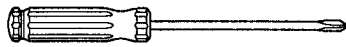
Consumer Note: Your Gravely Dealer is expected to complete these preparation steps and review important information, including this manual, with you before or upon delivery of unit.

The preparation information is included here so that you and your dealer may review it together.

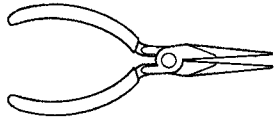


WARNING: Failure to follow all instructions could result in personal injury and/or damage to Tractor. Remove wire from spark plug before attempting any adjustment or assembly procedures.

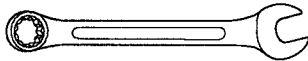
Tools Required:



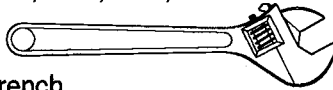
Screwdriver(Phillips)



Needle Nose Pliers



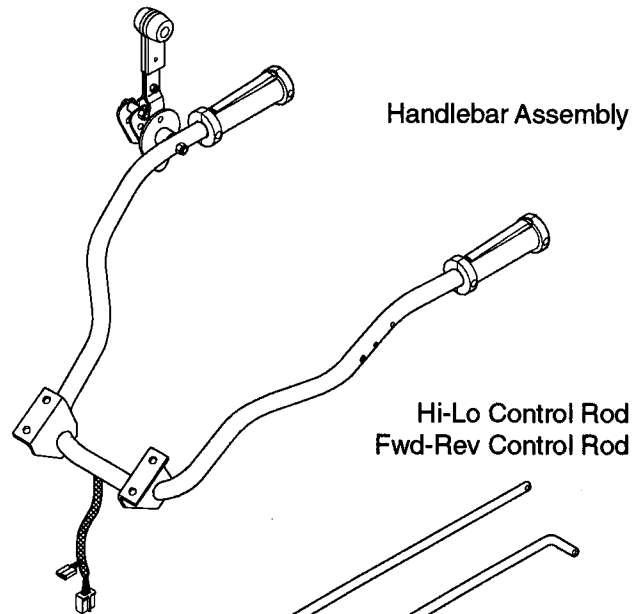
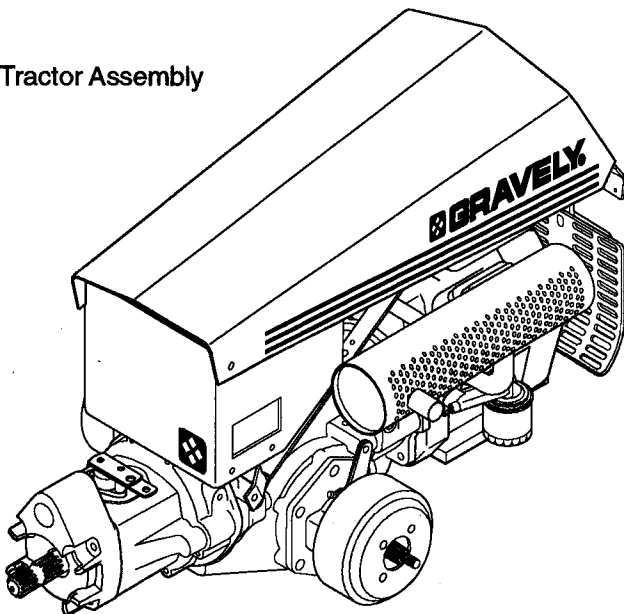
Open-End Wrench: 3/8, 7/16, 9/16, & 3/4



and or Adjustable Wrench

Package Contents - All Models

Tractor Assembly



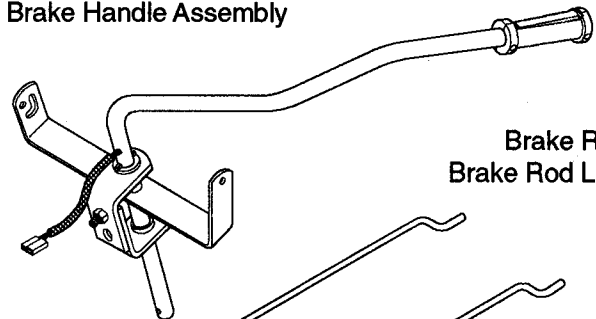
Handlebar Assembly

Hi-Lo Control Rod
Fwd-Rev Control Rod

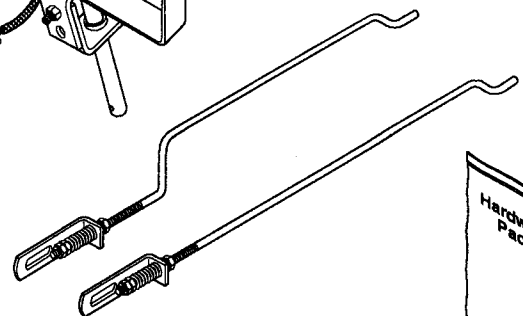


Package Contents - Models with Steering Brakes

Brake Handle Assembly



Brake Rod
Brake Rod L.H.



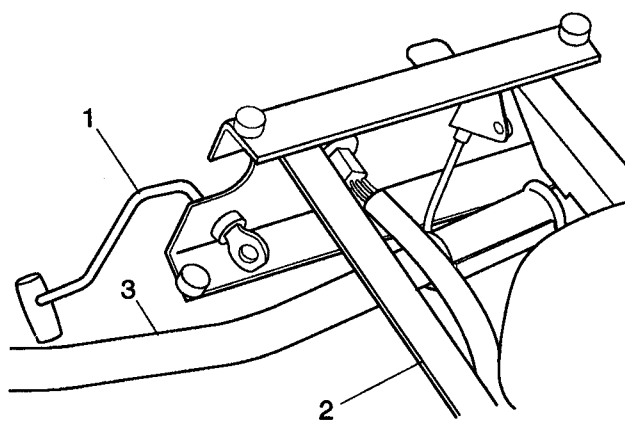
Dealer Preparation (Continued)

Step 1

Remove the tractor and the handlebar from the shipping container.

Step 2

On swiftamatic tractors, disconnect the cotter pin that holds the swiftamatic control lever to the shifter weldment. Disconnect the extension spring from the control lever and slide the control lever rearward until it stops against the instrument panel. See figure 9.



- 1. Control Lever
- 2. Frame
- 3. Handlebar

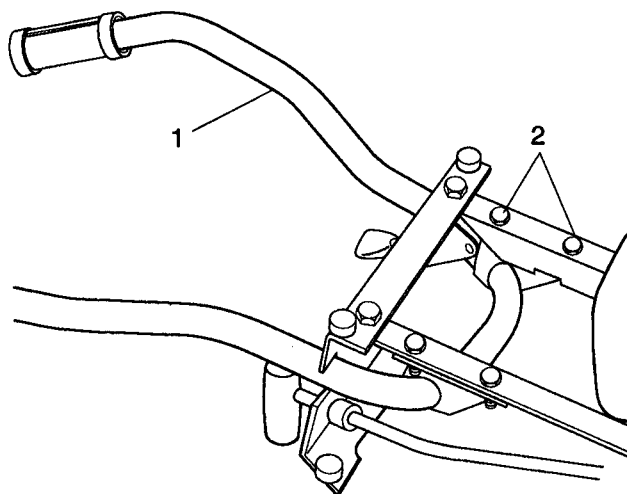
Figure 9: Control Lever

Step 3

Position the handlebar right side up. Move the left handle of the handlebar under the right side of the frame and the wiring harness. Proceed across the engine and out between the left side of the frame and the PTO control. Rotate the handlebar into the mounting position.

Step 4

Retain the handlebar in position with four 3/8-16 x 1.25 Grade 8 bolts and lock nuts. The Grade 8 bolt has six marks on the head. See figure 10.



- 1. Handlebar
- 2. Grade 8 Bolt

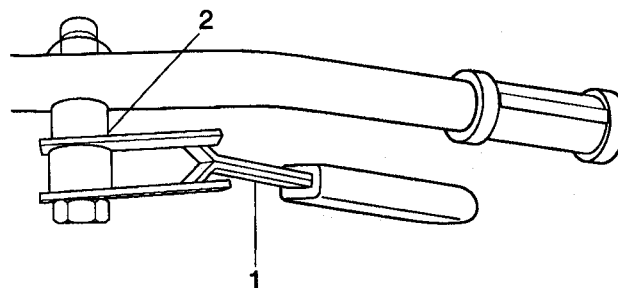
Figure 10: Handlebar Assembly

Step 5

Reassemble the swiftamatic control lever linkage and connect the wiring harness.

Step 6

Mount the Hi-Lo gear control handle assembly and hand lever pivot to the left handle with a 1/2-13 x 3.50 bolt and 1/2-13 thin lock nut. See figure 11 and the illustrated parts list.



- 1. Hi-Lo Control Handle Assembly
- 2. Hand Lever Pivot

Figure 11: Hi-Lo Control Assembly

Dealer Preparation (Continued)

Step 7

On 8 H.P. tractors, mount the throttle control to the left handlebar with two 10-24 x 1.50 machine screws and two 10-24 lock nuts. Secure the throttle cable assembly to the handlebar with a conduit clip near the instrument panel.

NOTE: The 12 and 16 HP model tractors have the throttle control assembled on the instrument panel. These tractors do not require step 7.

Step 8

On models with steering brakes, assemble as follows:

Fasten the instruction plate and the brake handle brackets to the rear hitch with the 1/2-13 x 2 bolts and 1/2-13 lock nuts. (**NOTE:** On tractors equipped with a sound shield, the nuts are not needed. Replace the 1/2-13 x 1.25 bolts with 1/2-13 x 2 bolts. Use the 1/2 lock washers that were removed.)

Left Side Installation: Slide the rear of the rod into the left inside end of the handlebar weldment. See the steering brake illustration in the illustrated parts list. Connect the other end to the pivot plate with a .375 x .75 clevis pin, two .406 x .812 x .065 flat washers and a .09 x .75 cotter pin. See figure 4. See section 4 for adjustment.

Right Side Installation: Slide the brake handle onto the brake rod and insert the rod into the slot of the brake handlebar weldment. Place the carriage bolt through the brake handle, and put two nylon washers on the bolt between the handle and the handlebar weldment. Push the bolt through the handlebar weldment and retain with another nylon washer, rubber washer, steel washer and lock nut. Connect the adjustment bracket to the cam lever arm with a clevis pin, two .406 x .812 x .065 flat washers and .09 x .75 cotter pin. See figure 3. See section 4 for adjustment.

Connect the interlock plug to the wiring harness.

Step 9

Connect the Fwd/Rev and Hi-Lo gear control rods to the tractor and their respective handles using bushing (41244), 1/4-20 x 1.5 bolts, .281 x .625 x .065 x .065 flat washers and 1/4-20 lock nuts. See the gear shift control and direction control sections of the illustrated parts list.

Step 10

On tractors not equipped with a maintenance-free battery, remove the battery and place on a bench or other place which is well ventilated and acid spill will not create damage. Fill the battery to the bottom of the fill tubes with 1.265 specific gravity electrolyte. Twenty minutes after filling with electrolyte, charge the battery at 6 to 8 amps for 20 minutes. Follow charger manufacturer's instructions for safe procedure. Wait 20 minutes after charging before replacing the battery vent caps and placing on chassis.

Step 11

If the tractor is equipped with the part number 22507 wheel hubs, fasten the wheel assemblies to the wheel hubs using the six 3/8-16 x .75 hex bolts. If the tractor is equipped with the part number 23267 rims, fasten the wheel assemblies to the rims using the eight 1/2-13 x 1.50 hex bolts and lock nuts.

Step 12

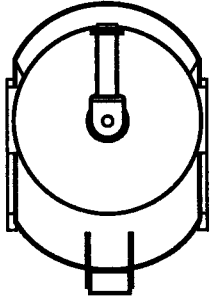
Check to see that interlock systems operate correctly.

Step 13

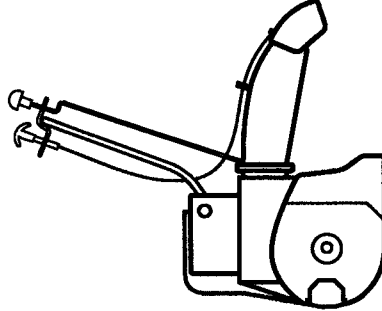
Service the tractor according to the instructions found in section 4.

Attachments

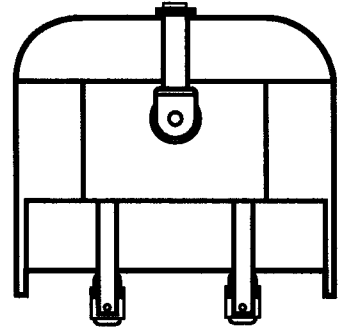
See your authorized Gravelly dealer to add these additional attachments to your Two Wheel Tractor.



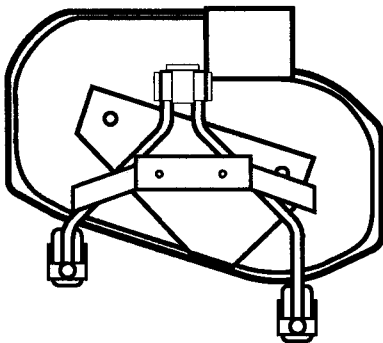
885001 - 30" Mower Deck
885002 - 30" Mower Deck



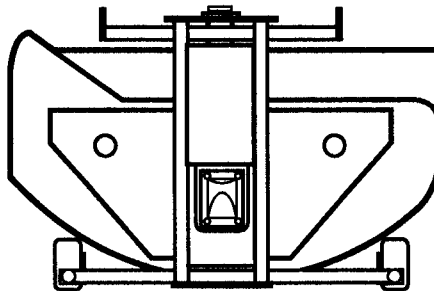
833007 - 32" Sno Thro



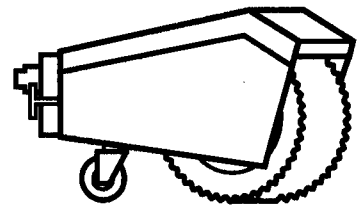
885004 - 40" Commercial Mower Deck



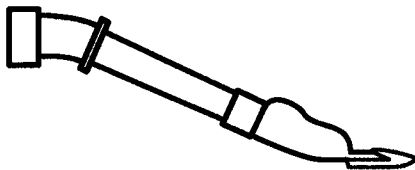
885003 - 40" Mower Deck



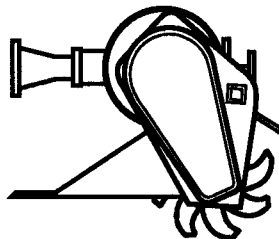
885005 - 40" Mower Deck
885006 - 50" Mower Deck
885007 - 50" Mower Deck



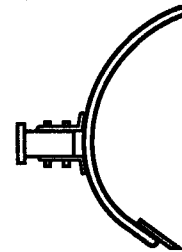
885015 - 44" Brush



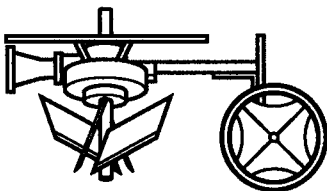
885009 - 42" Sickle Mower



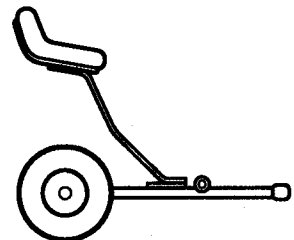
885011 - Cultivator



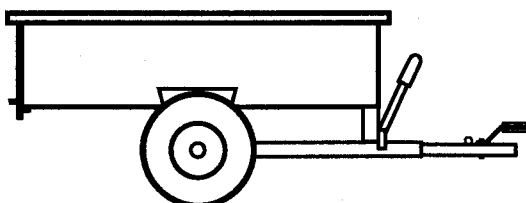
885014 - 48" Dozer Blade



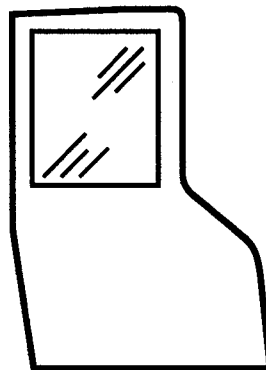
885010 - Rotary Plow



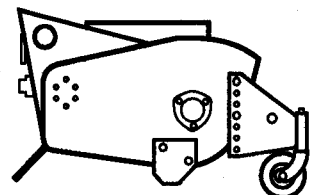
885017 - Sulky



885016 - Cart



885013 - Winter Cab



885008 - 32" Flail Mower

Accessories

Enhance your Two Wheel Tractor with these Gravelly Accessories.

Mowing Accessories

785006	30" Mower Drive (Short)
785007	30" Mower Drive (Long)
785008	40" Commercial Mower Drive Prior to 5000 Series
785009	40" Commercial Mower Drive On 5000 Series & Newer Models
785010	42" Sickle Mower Cutter Bar
785011	Chain Guard
785012	Front Mount Kit
785013	Front Anti-Scalp Roller
785014	Rear Anti-Scalp Roller
785015	30" Weight Kit

Garden Accessories

785016	Rotary Cultivator Drive
785017	Planter Drill (Less Blades)
785059	10" Planter Drill Blade
785060	19" Planter Drill Blade

Snow Removal Accessories

735007	Snowblower Drift Bar
785019	48" Snow Dozer Hitch
785020	48" Snow Dozer Counter Weight Kit
785021	48" Snow Dozer Skid Kit
785022	Power Brush Conversion Kit
785023	44" Power Brush Completing Kit
785024	Tire Chains (4:00 x 8) (Pair)
785025	Tire Chains (6:50 x 8) (Pair)
785026	Tire Chains (8:50 x 8) (Pair)

Miscellaneous Accessories

785027	Pow-R-Steering Kit
785029	Quick Hitch Pin Kit
785030	Attachment Adapter Kit
785031	Dual Wheel Spacers
785098	Dual Wheel Spacers
785032	Trailing Hitch Kit
785033	Coupler Strut Weldment Kit
785034	Remote Air Cleaner Kit
785035	High Performance Air Cleaner Kit
785036	QS Muffler Kit
785061	Triple Purpose Wrench

Accessories (Continued)

Miscellaneous Accessories (Continued)

785062	12 Volt Battery (12 7 16 HP)
785093	12 Volt Battery (8 HP)
785064	Tractor Cover
785065	Retro-Fit Kit
785066	High Lift Blade Kit, 40" Mowers
785067	High Lift Blade Kit, 50" Mowers
785068	Sand Blade Kit, 40" Mowers
785069	Sand Blade Kit, 50" Mowers
785091	Handle Interlock Kit

Be sure to always use genuine Gravely parts to keep your tractor running like new.











Five Year Limited Warranty

GEM, PROFESSIONAL G AND TWO-WHEEL PRODUCTS

Gravely hereby warrants to the original purchaser that all GEM, Professional G and Two-Wheel products shall be free of defects in material and workmanship for **five years** from date of purchase when used exclusively for personal or household use. Gravely will provide for the replacement of any part found to be defective. Parts and labor will be free of charge for **two years** from date of purchase. Parts but not labor will be free of charge for **three years** (36 months) thereafter.

This warranty is subject to the following exceptions and limitations.

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|  Purchaser Responsibilities: <ul style="list-style-type: none">- Maintenance and minor adjustments per Operators Manual.- Notification of need for warranty service- Transportation of the product to and from the place warranty repair. |  Engines, engine accessories. <ul style="list-style-type: none">- Covered only by engine manufacturers warranty. |
|  Product Registration: <ul style="list-style-type: none">- Return of Registration card to validate warranty. |  Batteries - One year pro-rated. |
|  Rental Use: - 90 days parts and labor <ul style="list-style-type: none">- Products used for rental purposes. |  Exclusions: - No Warranty <ul style="list-style-type: none">- No warranty is extended for normal maintenance, services and normal replacement items such as Spark Plugs, Oil, Oil Filters, Air Filters, Belts, Light Bulbs, Headlights, etc.- No warranty is extended on any product that has been altered, misused, mis-assembled, improperly adjusted, neglected or damaged by accident.- No warranty is extended for service completed by someone other than an Authorized Gravely Dealer.- No warranty is extended on any attachment not approved by Gravely nor any parts that are not genuine Gravely parts.- No warranty is extended on engines and engine accessories. |
|  Commercial Use: <ul style="list-style-type: none">- Professional G - Two years, parts and labor.- Two-Wheel - Two years, parts and labor.- GEM - 90 days, parts and labor | |
|  Warranty Service: <ul style="list-style-type: none">- For warranty service contact any Gravely dealer.- For the name and location of the Gravely dealer in your area and for further warranty information contact Gravely. | |

Gravely reserves the right to incorporate any change in design into its products without obligation to make such changes on products previously manufactured.

DISCLAIMER OF FURTHER WARRANTY

Gravely makes no warranty, express or implied, other than this warranty. The implied warranties of merchantability and fitness for particular purpose are hereby disclaimed. Repair or replacement of parts proving to be defective in material or workmanship shall be the exclusive remedy for breach of this warranty. Gravely shall not be liable for incidental or consequential damages, including but not limited to damages for inconvenience, rental or purchase of replacement equipment, or for loss of profits or other commercial loss, resulting from a breach of this warranty.

Some states do not allow limitations on how long an implied warranty lasts, so the above statement may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.



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Index

Accessories	25	Hourmeter	6
Adjustments	14	Ignition Switch	6
Forward-Reverse Clutch Adjustment	14	Kick Stand	6
Gear Clutch Adjustment	14	Operating the Transmission	7
PTO Brake Adjustment	15	Operator Presence Control	7
Slip Clutch Adjustment	16	Parking Brake	7
Steering Brake Adjustment	17	PTO Control	6
Transmission Lubrication	17	Range Shift Handle	6
Attachments	24	Starting an Electric Start Engine	7
Control and Features	5	Starting a Manual Start Engine	7
Dealer Preparation	21	Stopping the Engine	7
Package Contents	21	Throttle Lever	6
Steps to Assemble	22	Using the PTO	8
Tools Required	21	Using the Steering Brakes	8
Lubrication and Maintenance	9	Safety Alert Symbol and Notations	i
Battery Service	9	Safety Decals	4
Control Linkage Lubrication	9	Safety Precautions	1
Engine Maintenance	9	Maintenance and Storage	3
Fastener Check	9	Operation	2
Filling the Fuel Tank	9	Preparation	2
Maintenance Charts	10	Training	1
Models	1	Service Manual	18
Operation	6	Specifications	20
Brake Handlebar	6	Storage	18
Choke Control	6	Put Tractor into Service	18
Differential Lock	7	When Tractor Will Not Be Operated	18
Direction Control Lever	6	Trouble Shooting	19
Fuse	6	Warranty	27
Gear Shift Lever	6		