

OWNER'S MANUAL

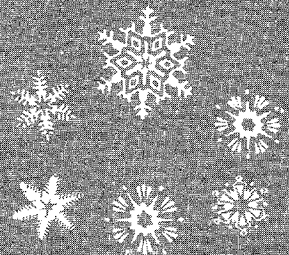
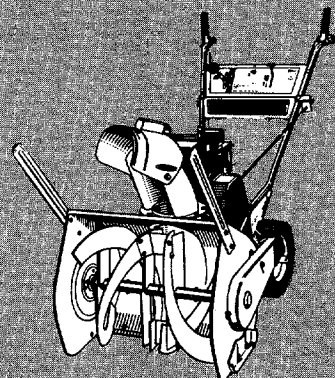
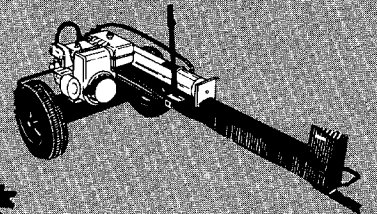
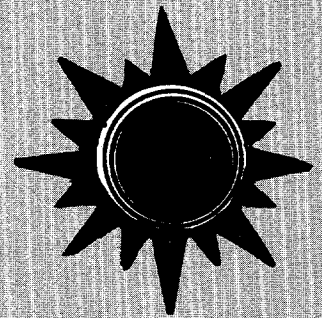
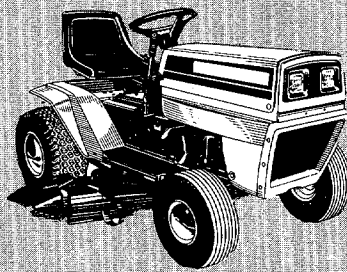
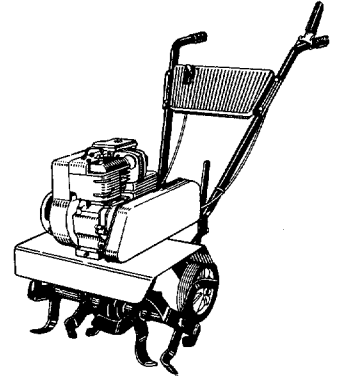
3 1/2 H.P. LOG SPLITTERS

Model Numbers

242-635A
24635A

Important:
Read Safety Rules and
Instructions Carefully

Thank you for purchasing an
American built product.



INDEX

Safe Operation Practices	3	Maintenance	5
Assembly Instructions	4	Off-Season Storage	8
Operation	4	Illustrated Parts	10, 12
Adjustments	5	Repair Parts List	11, 13

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



WARNING

TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and engine oil recommendations.

Your log splitter is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR LOG SPLITTERS

TRAINING

1. Know the controls and how to stop quickly--
READ THE OWNER'S MANUAL.
2. Do not allow children to operate. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your log splitter.

PREPARATION

1. Do not wear loose fitting clothing that could get caught on the moving parts.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Check the fuel before starting the engine. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine.
4. Use only in daylight or in good artificial light.
5. Never operate the equipment in the rain. Always be sure of your footing.

OPERATION

1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
Do not put hands or feet near rotating or moving parts.
3. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

4. When cleaning, repairing or inspecting, make certain all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
5. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage--exhaust fumes are dangerous. Do not run engine indoors.
6. Always stand beside the controls when operating the log splitter.
7. Be careful not to touch the muffler after the engine has been running. It is **HOT**.

MAINTENANCE and STORAGE

1. Keep all nuts, bolts and screws tight to be sure equipment is in safe working condition.
2. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
3. To reduce fire hazard keep engine free of grass, leaves, wood chips, excessive grease and oil.
4. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
5. Never store outside without a waterproof cover. Rain will cause rust on the unit.

ASSEMBLY

NOTE

This unit shipped **WITHOUT GASOLINE** or **OIL**. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

1. Remove the log splitter, loose parts, and literature from the carton. Make certain all parts and literature have been removed before the carton is discarded.
2. Thread the engagement handle into the engagement handle bracket as shown in figure 1.

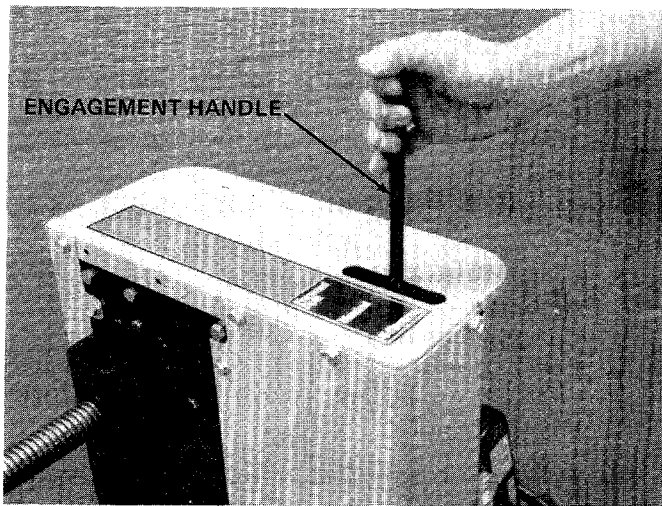


FIGURE 1

OPERATION

NOTE

Refer to engine manual packed with log splitter for complete instructions for the care and maintenance of engine. **READ DIRECTIONS CAREFULLY.**

1. Fill sump with oil as instructed in the separate engine manual.
2. Fill fuel tank, using clean, fresh, **regular** grade automotive gasoline. Fill tank completely.
3. Before operating log splitter for the first time, lubricate the two large screws on the wedge and screw assembly with engine oil. Screws must be oiled at least every two operating hours or more often if necessary.
4. Start engine as instructed in the separate engine manual.
5. To stop engine, move throttle control lever to **STOP** position. Disconnect and ground the spark plug wire to prevent accidental starting while equipment is unattended.

USING YOUR LOG SPLITTER

NOTE

Reference to right or left hand side of the unit is determined when standing behind the unit, at the engine.

Your log splitter is designed for safe, efficient operation. **CARE, OF COURSE, MUST BE EXERCISED THAT HANDS ARE KEPT AWAY FROM MOVING PARTS.**

Engagement handle has three positions: (See figure 2)

- Forward—Wedge moves toward engine.
- Neutral—Wedge stops in place.
- Reverse—Wedge returns.

NOTE

When the engagement handle is released, it will automatically return to "NEUTRAL" position.

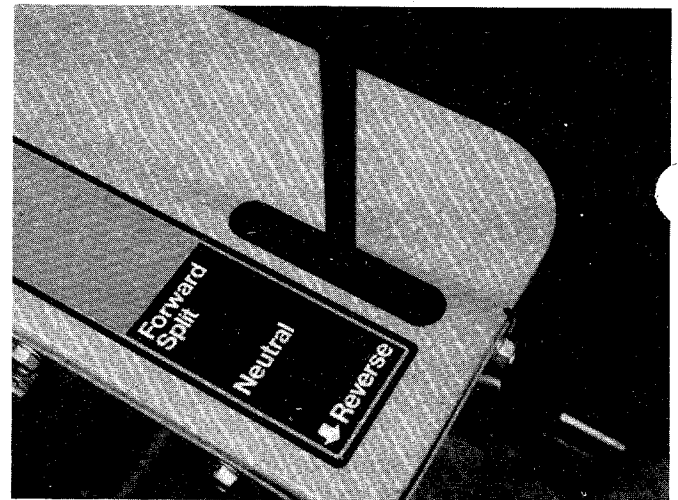


FIGURE 2

Maximum length that can be split is 24".

1. Set throttle at maximum speed.
2. Place log on frame assembly.
3. Stand beside the engagement handle on the left side of the unit.
4. Move engagement handle forward until log is split, then release handle.

NOTE

After the log is split, **do not** keep the engagement handle in the forward position or the wedge assembly will be jammed.

5. Move the engagement handle to the reverse position to return ram.



If the wedge assembly becomes jammed, turn the jack shaft spindle assembly counterclockwise until the wedge can be returned. See figure 3. A large adjustable wrench is required.

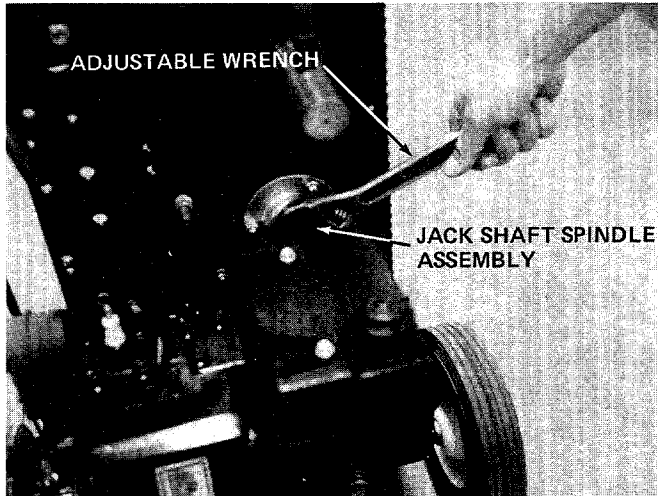


FIGURE 3



WARNING

Never attempt to cut a log in half against the grain (cross ways). Never stand next to the log when operating the splitter.

ADJUSTMENTS

CARBURETOR ADJUSTMENTS



WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Refer to engine manual packed with your unit for carburetor adjustment information.

CHAIN ADJUSTMENT

The chain must be adjusted after the first hour of initial operation and every ten hours thereafter.

To adjust the chain, loosen the two nuts shown in figure 4. Place a screwdriver on the chain adjuster as shown in figure 4. Pivot the chain adjuster by pulling downward on the screwdriver to take the slack out of the chain. Tighten the two nuts.

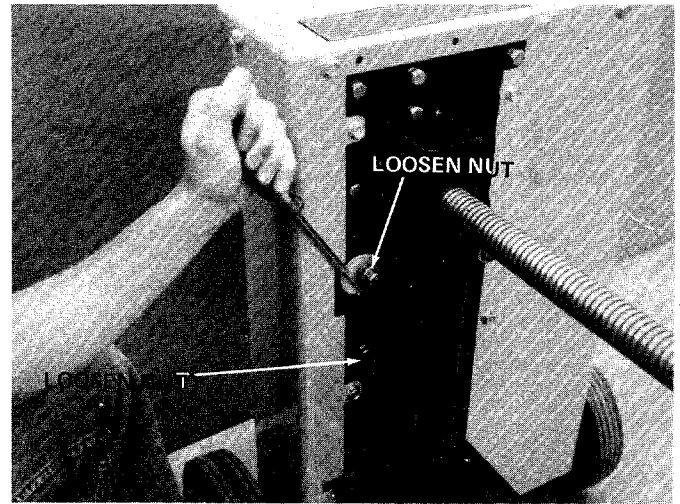


FIGURE 4

MAINTENANCE



WARNING

Always stop engine and disconnect spark plug wire before performing any maintenance or adjustments.

ENGINE OIL

Change oil first two (2) hours of operation and check oil level every five (5) operating hours or each time equipment is used.

Change oil every twenty-five (25) operating hours or sooner if equipment is operated in extremely dusty or dirty conditions.

Refer to engine manual for quantity and type of oil.

WEDGE AND SCREW ASSEMBLY

Lubricate the two screws on the wedge and screw assembly with engine oil every two operating hours or more often if necessary.

BELT REPLACEMENT



If belt replacement is required, it is advisable to replace both belts at the same time.



Reference to right or left hand side of the unit is determined when standing behind the unit, at the engine.

It is suggested that all instructions be read through before beginning belt replacement.

1. Disconnect and ground the spark plug wire against the engine block.
2. Using a 1/2" wrench, remove the top cover by removing the five self tapping screws which secure it to the side covers.

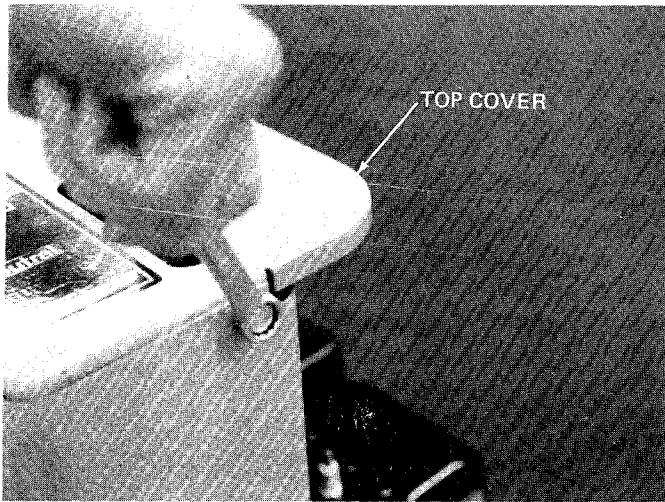


FIGURE 5

3. Block the frame of the unit on the left hand side. Remove the left wheel by removing the cotter pin and flat washer. Slide wheel off. See figure 6.

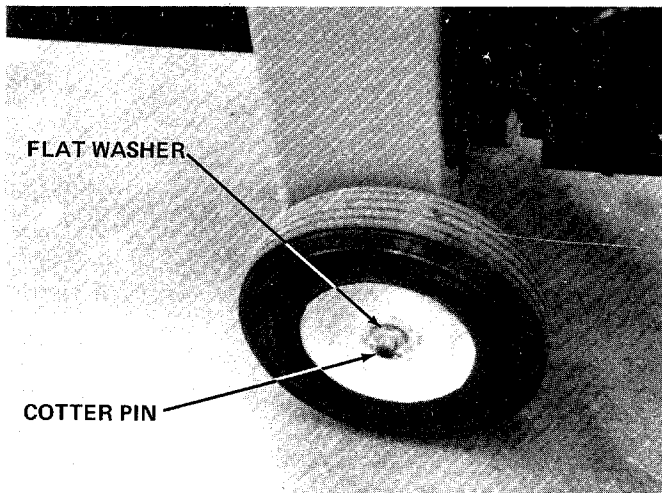


FIGURE 6

4. Using a 1/2" wrench, remove the right and left hand side covers. See figure 7.

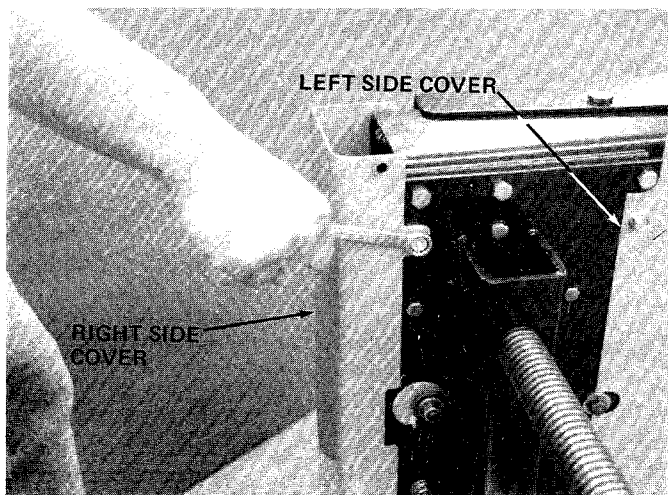


FIGURE 7

5. Remove the 5-1/2" bolt and spacer, located on the left hand side of unit, which act as a belt keeper. Two 9/16" wrenches are required. See figure 8.

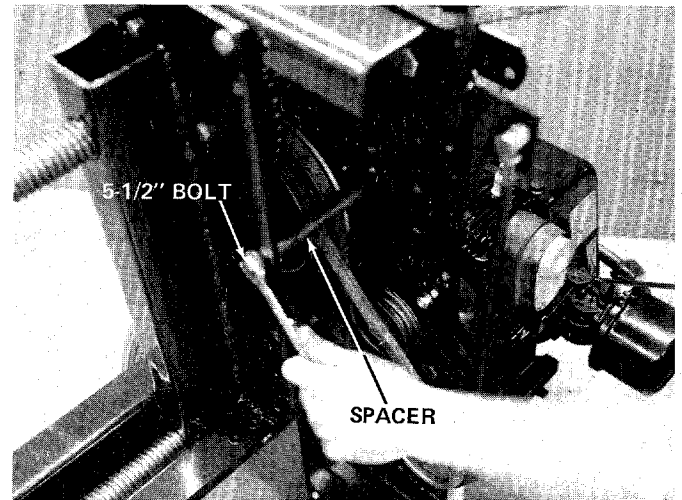


FIGURE 8

6. Remove the two idler pulleys as shown in figure 9. Two 9/16" wrenches are required.

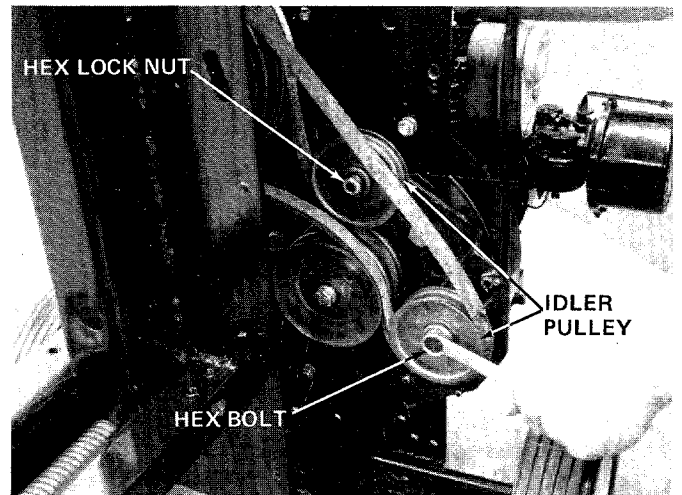


FIGURE 9

7. Hold the engagement lever in the forward position. (spark plug wire must be disconnected). Pull the recoil starter rope to rotate the chain until the master link can be located. Remove the master link and chain. See figure 10.

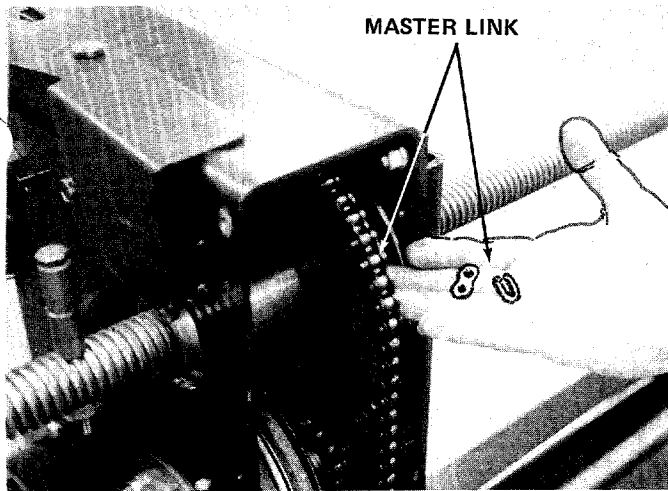


FIGURE 10

8. Remove the two belt keepers on the right hand side of frame using two 7/16" wrenches. See figure 11.

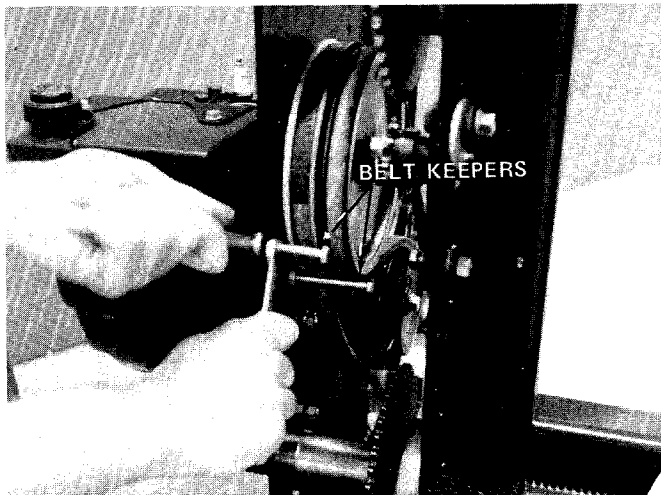


FIGURE 11

9. Remove the top three bolts, lock washers and nuts as shown in figure 12. Two 9/16" wrenches are required.

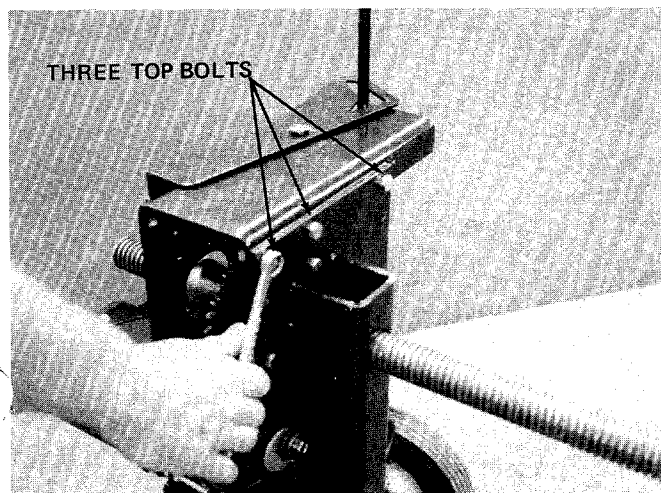


FIGURE 12

10. Block up the front of the frame as shown in figure 13. Remove the three bottom bolts, lock washers and nuts. See figure 13.

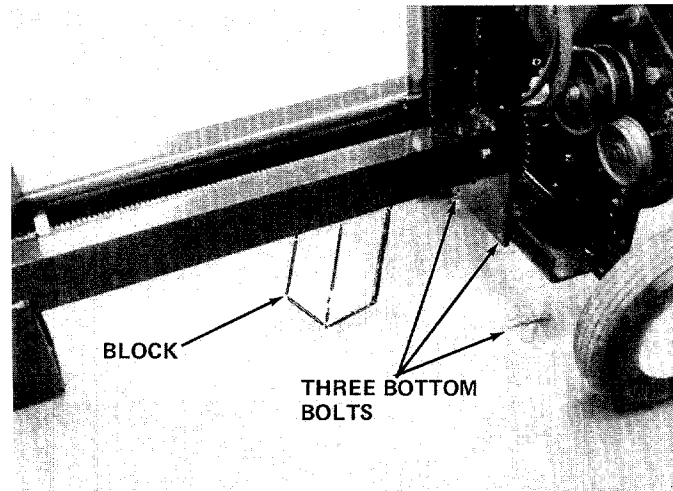


FIGURE 13

11. Lift up on the rear frame so it will clear the large sprocket. Pull back to separate front and rear frames. See figure 14.

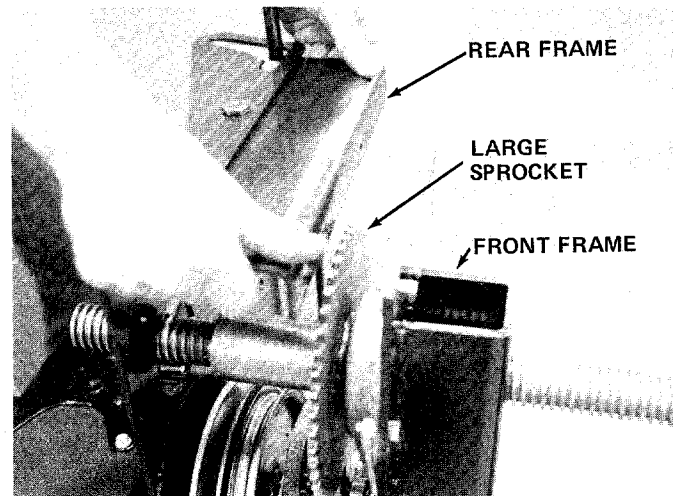


FIGURE 14

12. Slip belts between jack shaft bearing and front frame. See figure 15.

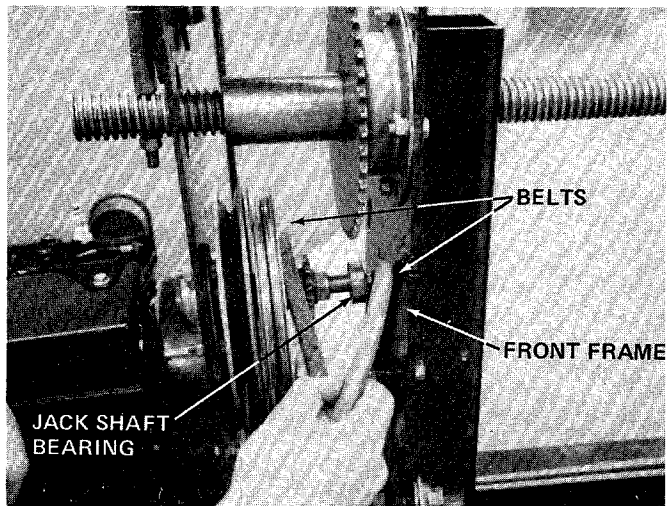


FIGURE 15

13. Reassemble with new belts, following instructions in reverse order.



NOTE

When reassembling the frame halves, be certain that the jackshaft bearing is properly seated into the hole in the front frame. Secure frame halves with one top and bottom bolt, finger tight only. Check position of bearing. Then reassemble rest of bolts, tightening securely.



NOTE

Belts and chain must be reassembled as shown in illustration on page 10. If assembled incorrectly, log splitter will operate in reverse.

OFF-SEASON STORAGE

In event engine is to be stored for any length of time (30 days or more), prepare as follows:

1. Drain gasoline by tipping or by siphon hose, then run engine until remainder is used and tank and carburetor are empty.



CAUTION

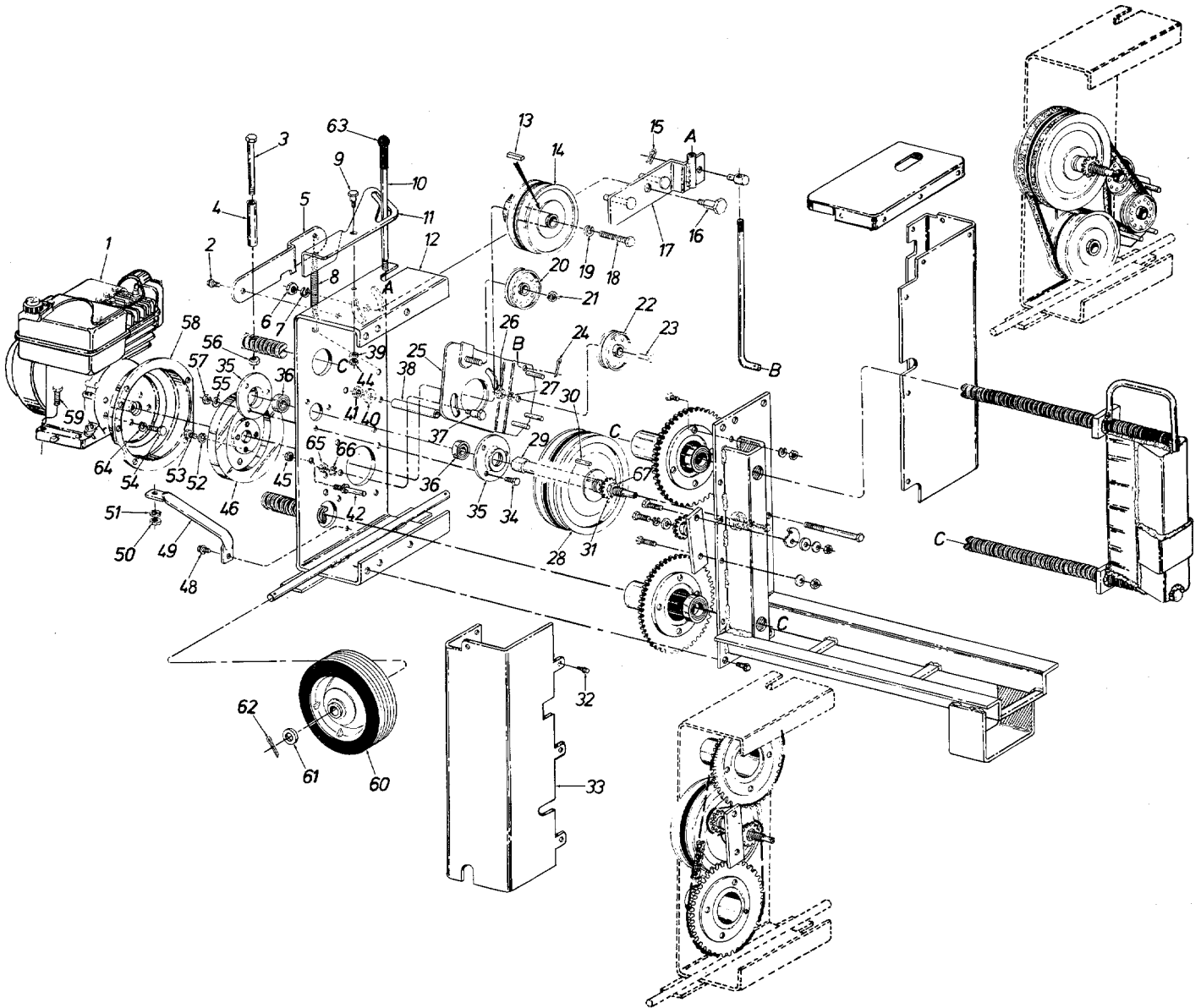
Drain into container outdoors away from fire or flame.

2. Drain carburetor by running engine until it stops from lack of fuel.
3. Protect the inside of engine for storage by removing spark plug and pouring one ounce of SAE 30 oil through spark plug hole into cylinder. Crank engine, without starting, several times to spread oil over cylinder walls.
4. Never store outside without a waterproof cover.

Notes

Model 635

IF YOU WRITE TO US ABOUT THIS ARTICLE
OR IF YOU ORDER REPLACEMENT PARTS AL-
WAYS MENTION THIS MODEL & SERIAL NO
MODEL



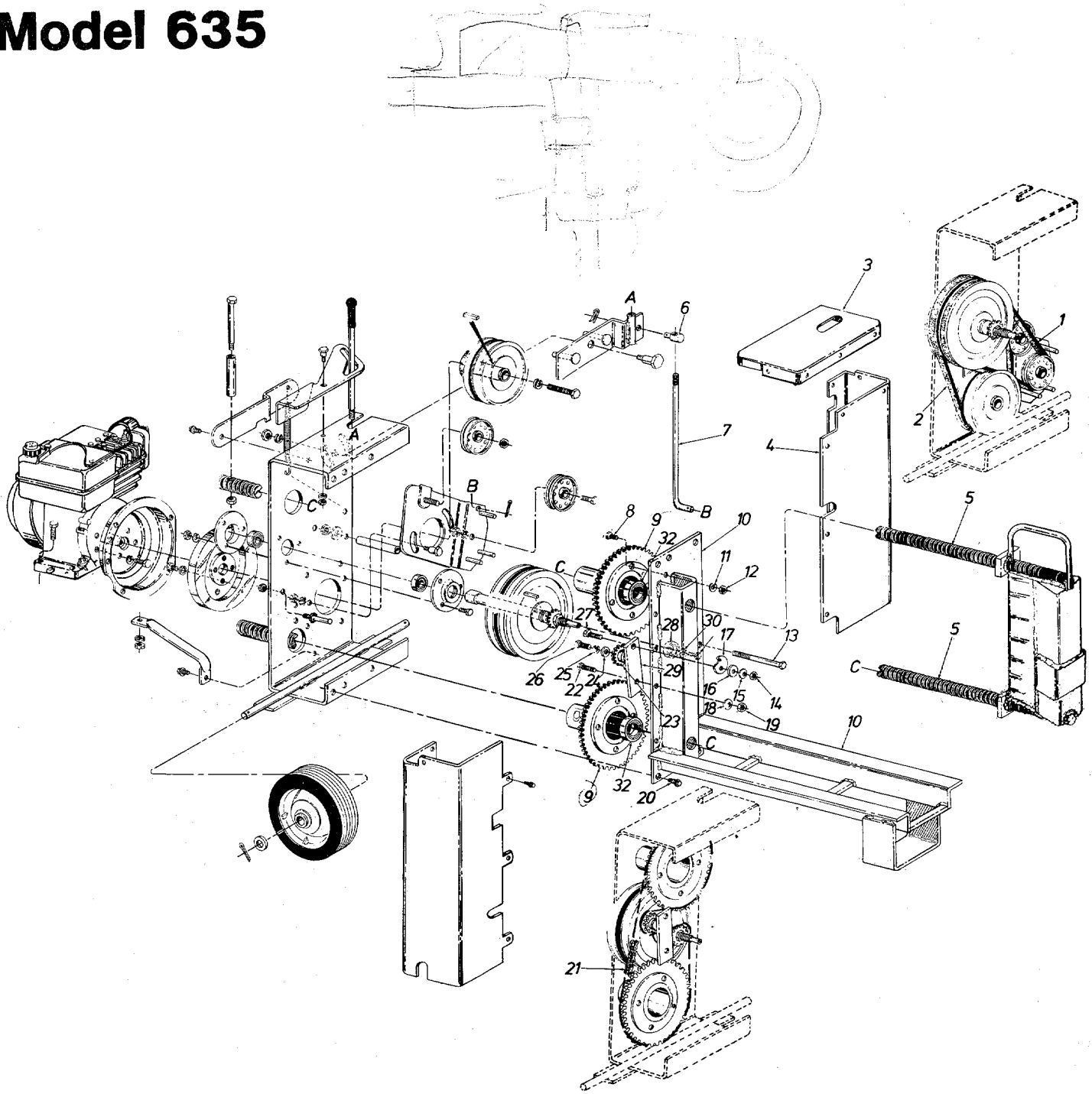
Model 635

PARTS LIST FOR MODEL 635 LOG SPLITTER

Ref. No.	PART No.	COLOR CODE	DESCRIPTION	NEW PART	Ref. No.	PART No.	COLOR CODE	DESCRIPTION	NEW PART
1	-----		Engine		35	08253		Small Bearing Housing	
2	710-0649		Hex. Wash. SF Tapp Scr. 3/8" x 7/8" Lg.		36	741-0919		Ball Bearing .787 I.D. x 1.85 O.D.	
3	710-0693		Hex Bolt 3/8-16 x 4.5" Lg.		37	738-0147		Shld. Bolt	
4	750-0537		Spacer 3/8 I.D. x 5/8 O.D. x x 2-5/8 Lg.		38	750-0531		Spacer .38 I.D. x 62 O.D. 4.5 Lg.	N
5	14822		Spring Retainer Bracket	N	39	736-0119		L.-Wash. 5/16 I.D.*	
6	712-0798		Hex Nut 3/8-16 Thd.*		40	736-0133		Fl.-Wash. 3/8 I.D. x 1.25 O.D. x .10 Thd.	
7	736-0169		L.-Wash. 3/8 I.D.*		41	712-0798		Hex Nut 3/8-16 Thd.*	
8	732-0121		Spring		42	711-0735		Stud 1/4" x 2-7/8" Lg.	N
9	738-0147		Shld. Bolt		44	712-0267		Hex Nut 5/16-18 Thd.*	
10	747-0389		Engagement Handle	N	45	712-0287		Hex Nut 1/4-20 Thd.*	
11	14823		Lever Return Bracket	N	46	719-0258		Flywheel	N
12	14809		Motor Mounting Plate Ass'y.	N	47	750-0528		Spacer 3/8 I.D. x .50 O.D. x 18	
13	714-0105		Sq. Key 3/16 x 1.0 Lg.		48	710-0649		Hex Wash. SF Tapp Scr. 3/8 x 7/8	
14	756-0381		Step Pulley	N	49	749-0493		Engine Brace	N
15	714-0104		Internal Cotter Pin 1/8" Dia.		50	712-0267		Hex Nut 5/16-18 Thd.*	
16	738-0322		Shld. Bolt		51	736-0119		L.-Wash. 5/16 I.D.*	
17	14716		Engagement Handle Brkt. Ass'y.	N	52	736-0329		L.-Wash. 1/4" I.D.*	
18	710-0830		Hex Bolt 3/8-24 x 3.0 Lg.*		53	710-0428		Hex Bolt 1/4-24 x 1-1/4" Lg.*	
19	736-0169		L.-Wash. 3/8 I.D.*		54	710-0237		Hex Bolt 5/16-24 x 5/8" Lg.*	
20	756-0225		Idler Pulley 2-3/4		55	736-0119		L.-Wash. 5/16 I.D.*	
	712-0798		Hex Nut 3/8-16 Thd.*		56	712-0375		Hex Cent. L.-Nut 3/8-16 Thd.	
	756-0225		Idler Pulley 2-3/4		57	712-0267		Hex Nut 5/16-18 Thd.*	
23	710-0344		Hex Bolt 3/8-16 x 1.5" Lg.*		58	14700		Motor Mount Cup	N
24	714-0474		Cotter Pin 1/8" Dia. x 3/4" Lg.*		59	710-0237		Hex Bolt 5/16-24 x 5/8" Lg.*	
25	14811		Engagement Bracket Ass'y.	N	60	734-0736		Wheel Ass'y. 10.0 x 2.75	
26	712-0798		Hex Nut 3/8-16 Thd.*		61	736-0116		Fl.-Wash. 5/8 I.D. x 93 O.D. x .06	
27	736-0169		L.-Wash. 3/8" I.D.*		62	714-0115		Cotter Pin 1/8" x 1.0" Lg.*	
28	756-0382		Engine Pulley	N	63	720-0143		Control Grip	
29	738-0525		Jack Shaft Spindle		64	736-0119		L.-Wash. 5/16 I.D.*	
30	714-0139		Sq. Key 3/16 x 2.0 Lg.*		65	712-0267		Hex Nut 5/16-18 Thd.*	
31	713-0298		Sprocket 12T #20 Chain	N	66	736-0119		L.-Wash. 5/16 I.D.*	
32	710-0600		Hex. Wash. TT Tapp Scr. 3/8 x 1/2" Lg.		67	712-0318		Hex Jam Nut 5/8-18 Thd.	
33	14721		Belt Cover R.H.	N					
34	710-0118		Hex Bolt 5/16-18 x .75" Lg.						

*For faster service obtain standard nuts and bolts locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

Model 635



Model 635

PARTS LIST FOR MODEL 635 LOG SPLITTER

No.	PART No.	COLOR CODE	DESCRIPTION	NEW PART	Ref. No.	PART No.	COLOR CODE	DESCRIPTION	NEW PART
1	754-0244		V-Belt 1/2 x 40" Lg. (Reverse)		20	710-0649		Hex Wash. SF Tapp Scr. 3/8 x 7/8" Lg.	
2	754-0235		V-Belt 1/2 x 35 Lg. (Forward)		21	713-0302		131 Link Chain #.420	N
3	14719		End Cover	N	22	710-0773		Master Link #.420	
4	14720		L.H. Belt Cover	N				Hex Wash. TT Tapp Scr. 3/8 x 1/2" Lg.	
5	14722		Comp. Wedge & Screw Ass'y.	N	23	14715		10 Tooth Sprocket Ass'y.	N
6	711-0628		Adjustment Ferrule		24	736-0133		Fl.-Wash. 3/8 I.D. x 1.25 O.D. x 10 Thd.	
7	747-0388		Lever Rod	N				L.-Wash. 3/8" I.D.*	
8	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		25	736-0169		Hex Bolt 3/8-24 x 1.0" Lg.*	
9	14714		Sprocket Hub Ass'y.	N	26	710-0152		Hex Bolt 3/8-16 x 1.5" Lg.*	
10	14707		Frame Weldment Ass'y.	N	27	710-0344		Ball Bearing .50 I.D. x 1.38 O.D. x .437	
11	736-0119		L.-Wash. 5/16" I.D.*		28	741-0133		Idler Bracket Ass'y.	N
12	712-0267		Hex Nut 5/16-18 Thd.*					Fl.-Wash. 1/4 I.D. x 5/8 O.D. x .06	
13	710-0831		Hex Bolt 3/8-16 x 5.5" Lg.*	N	29	14709		Hex Bolt 1/4-24 x 3/4" Lg.	
14	712-0798		Hex Nut 3/8-16 Thd.*		30	736-0463		Ball Bearing	N
15	736-0105		Bell Wash. 3/8" I.D.					Hex Wash. SF Tapp Scr. 5/16 x 7/8	
16	736-0258		Fl. Wash. 3/8 I.D. x 1.0 O.D. x 13		31	710-0412		Hex Wash. SF Tapp Scr. 5/16 x 1/2	
17	06605		Chain Adjuster		32	741-0355			
18	736-0105		Bell Wash. 3/8" I.D.		33	710-0650			
19	712-0798		Hex Nut 3/8-16 Thd.*		34	710-0600			

MTD PRODUCTS INC YARD-MAN COMPANY

P.O. BOX 36900 • CLEVELAND, OHIO 44136