

OPERATOR'S MANUAL

45" Snow Thrower Attachment Model 190-624

IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 368022 Cleveland, Ohio 44136-9722.

MTD PRODUCTS INC. P.O. BOX 368022 CLEVELAND, OHIO 44136-9722

IMPORTANT SAFE OPERATION PRACTICES



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR SNOW THROWER ATTACHMENT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL—HEED ITS WARNING.



DANGER: Your snow thrower attachment was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

TRAINING

1. Read this owner's guide carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Never allow children to operate equipment. Never allow adults to operate equipment without proper instructions.
3. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
4. Keep the area of operation clear of all persons, especially small children and pets.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.
2. Disengage all clutches and shift into neutral before starting engine.
3. Do not operate equipment without wearing adequate winter outer garments. Wear footwear which will improve footing on slippery surfaces.
4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Use an approved container. Do not fill the gasoline tank indoors, while the engine is running, or while the engine is still hot. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
5. Adjust collector housing height to clear gravel or crushed rock surface.
6. Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
7. Let engine and machine adjust to outdoor temperature before starting to clear snow.
8. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.

OPERATION

1. Do not put hands or feet near rotating parts. Keep clear of discharge opening at all times.
2. Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
3. After striking a foreign object, stop the engine, remove wire from spark plug, and thoroughly inspect the snow thrower for any damage. Repair the damage before restarting and operating the snow thrower.
4. If the snow thrower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
5. Stop engine whenever you leave the operating position, before unclogging the collector/impeller housing or

discharge guide, and making any repairs, adjustments, or inspections.

6. Take all possible precautions when leaving the unit unattended. Disengage the collector/impeller, shift into neutral, stop the engine, and remove the key.
7. When cleaning, repairing, or inspecting, make certain collector/impeller and all moving parts have stopped. Disconnect spark plug wire and keep away from plug to prevent accidental starting.
8. Do not run engine indoors, except when starting engine and transporting snow thrower in or out of building. Open the outside doors. Exhaust fumes are dangerous.
9. Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
10. Never operate snow thrower without guards, plates, or other safety protection devices in place.
11. Never operate snow thrower near glass enclosure, automobiles, window wells, drop off, etc., without proper adjustments of snow thrower discharge angle. Keep children and pets away.
12. Do not overload machine capacity by attempting to clear snow at too fast a rate.
13. Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when backing.
14. Never direct discharge at bystanders or allow anyone in front of unit.
15. Disengage power to collector/impeller when transporting or not in use.
16. Use only attachments and accessories approved by the manufacturer of snow thrower (such as wheel weights, counter weights, cabs, etc.).
17. Never operate the snow thrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, never run.

MAINTENANCE AND STORAGE

1. Check shear bolts, engine mounting bolts, etc., at frequent intervals for proper tightness to be sure equipment is in safe working condition.
2. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow engine to cool before storing in any enclosure.
3. Always refer to owner's guide instructions for important details if snow thrower is to be stored for an extended period.
4. Maintain or replace safety and instruction labels as necessary.
5. Run machine a few minutes after throwing snow to prevent freeze up of collector/impeller.

SECTION 1: LOOSE PARTS IN CRATE

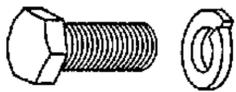
Remove snow thrower, all loose parts and hardware pack from crate. Be certain to remove all contents before discarding crate.

- Snow thrower assembly
- Front frame assembly
- Rear frame rails (2)
- Carriage assembly
- Lift plates (2)
- Discharge chute / tilt handle assembly
- Chute crank support tube
- Chute crank / Mounting bracket assembly
- Chute crank rod assembly
- Hardware pack

SECTION 2: HARDWARE PACK

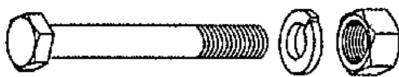
(A) Attaching front frame ass'y and auger housing.

- (4) 710-0514 Hex Bolts 3/8-16:1.00"LG
- (4) 736-0169 Lock washer 3/8ID



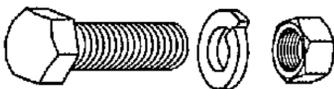
(B) Attaching rear frame rails and front frame ass'y.

- (4) 710-0786 Hex cap screw 1/2-14:4.00"LG
- (4) 736-0921 Lock washer 1/2ID
- (4) 712-0206 Hex nut 1/2-13
- (2) 784-5199 Bracket (Lift plate) (Not Pictured)



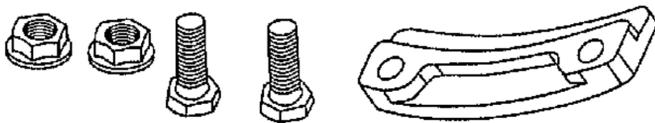
(C) Attaching the carriage assembly.

- (2) 710-0514 Hex Bolt 3/8-16 x 1" LG
- (2) 736-0169 Lock washer 3/8 ID
- (2) 712-0798 Hex Nuts 3/8-16 Thread



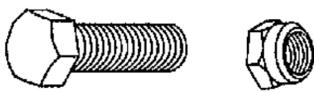
(D) Attaching the chute assembly.

- (3) 731-0851A Chute flange keepers
- (6) 710-3015 Hex bolt 1/4-20 x .75"LG
- (6) 712-3027 Hex flange nut 1/4-20



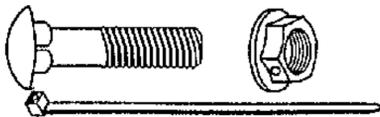
(E) Attaching the chute crank support tube.

- (2) 712-0130 Hex cap screw 3/8-16
- (2) 710-0520 Hex bolt 3/8-16: 1.50



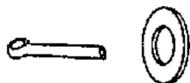
(F) Attaching the chute tilt handle.

- (2) 710-0262 Carriage bolt 5/16-18 x 1.5"LG
- (2) 712-3004A Hex flange lock nut 5/16-18
- (1) 725-0157 Cable tie 3/16 x 5 x 7.4"



(G) Attaching the chute crank.

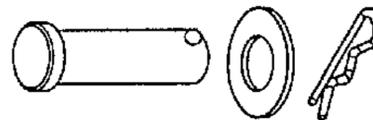
- (1) 736-0130 Flat washer
- (2) 714-0507 Cotter pin 3/32 x .75"



(H) Attaching the rear frame sections to the rear hanger brackets.

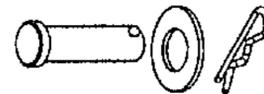
- (2) 711-0231 Clevis pin* 1/2 x 1.59"LG
- (2) 736-0272 Lock washer* 1/2id
- (2) 714-0101 Cotter pin* .08 x 1.42

*Attaching bracket to snow thrower attachment frame.



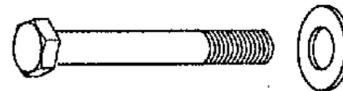
(I) Attaching the adjustable lift links to the brackets.

- (2) 711-0332 Lift bracket pin
- (2) 736-0921 Flat washer
- (2) 714-0921 Cotter pin



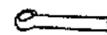
(J) Attaching helper springs and guide bracket.

- (2) 710-0959 Hex Bolt
- (2) 736-0242 Bell Washer



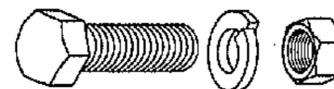
(K) Attaching the Guide Bracket.

- (4) 714-0147 Cotter Pin



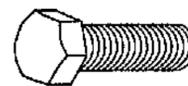
(L) Attaching The Rear Hanger Brackets To Tractor Frame.

- (2) 710-0514 Hex bolt
- (2) 736-0169 Lock washer
- (2) 712-3017 Hex nut



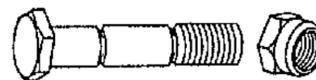
(M) Attaching Helper Springs To Tractor

- (2) 710-0959 Hex Bolts



Extra Shear Bolts (2)

- (2) 712-0429 Lock nut
- (2) 710-0891 Shear bolt



SECTION 3: ASSEMBLY INSTRUCTIONS

ATTACHING FRONT FRAME ASSEMBLY AND AUGER HOUSING (Hardware A)

NOTE: An adjustable lift link assembly is provided with the snow thrower attachment. If there is not an adjustable lift link on your unit, remove the lift link on the left hand side of the unit, and replace it with the adjustable lift link provided.

1. Lay front frame assembly on flat surface. See Figure 1.

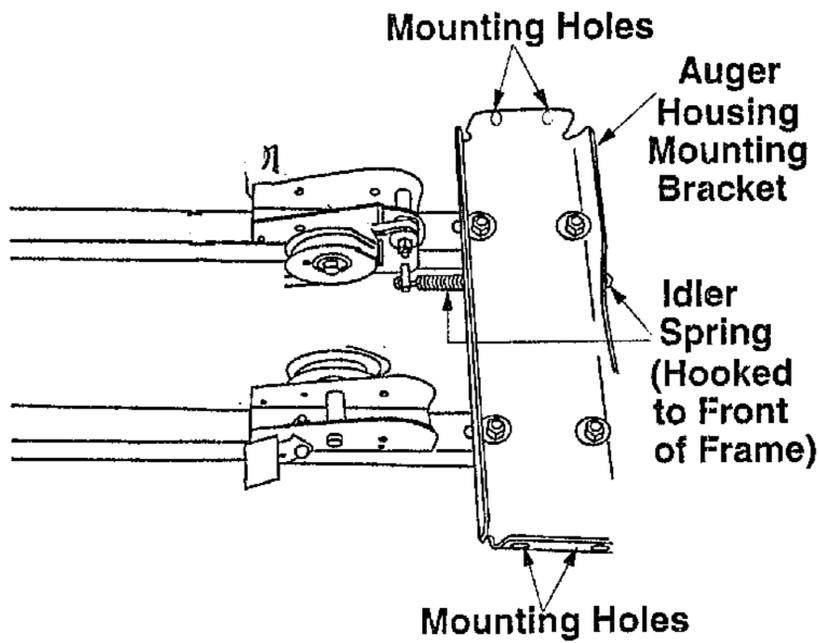


Figure 1

2. Lower auger housing down onto mounting bracket. Align four holes and secure with four hex bolts and lock washers. See Figure 2.

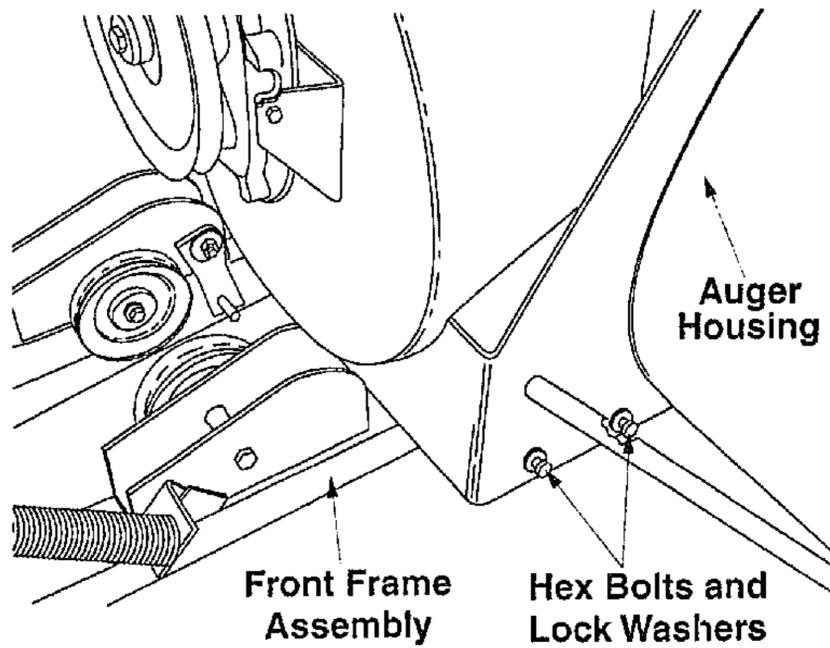


Figure 2

ATTACHING FRONT AND REAR FRAME RAILS (Hardware B)

1. Place the lift plate between the tubing halves. Rear tubing is rectangular (1" x 2") and goes to the outside. Front tubing assembly is square. Make certain hole locations are placed correctly as shown in Figure 3.

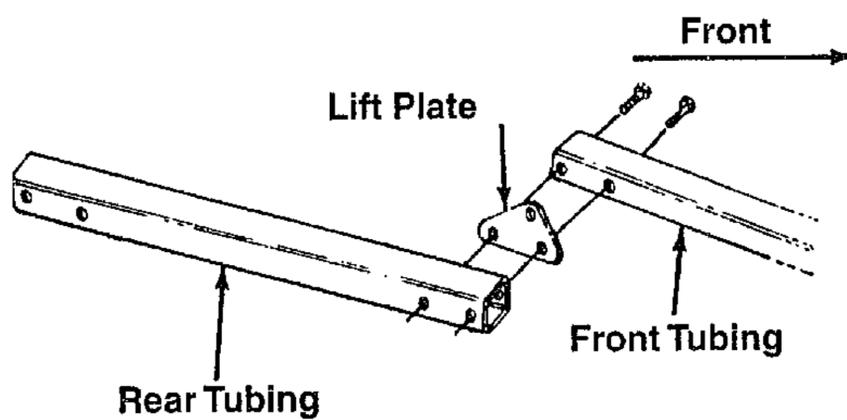


Figure 3

- Secure the front tubing assemblies to the rear tubing with four (4) hex bolts 1/2-14 x 4" long, lock washers and hex nuts. Bolts go from inside out and the nuts and washers must go on the outside. See Figure 4.

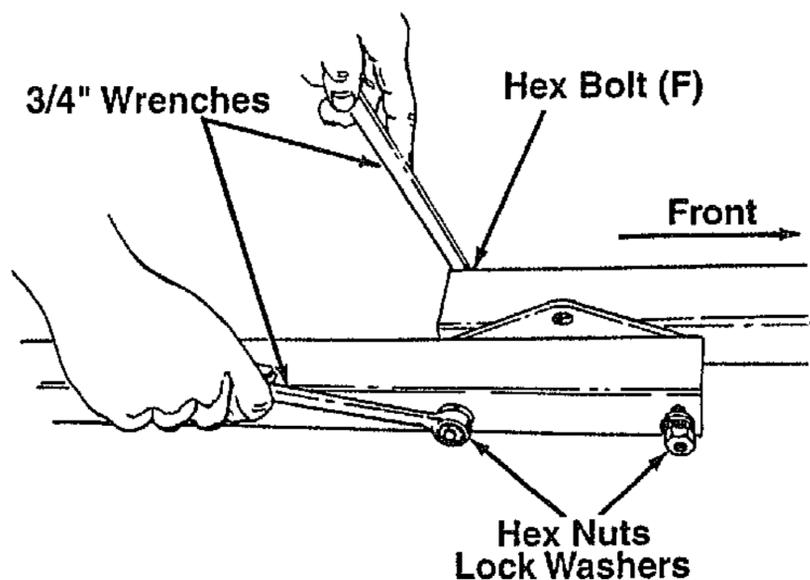


Figure 4

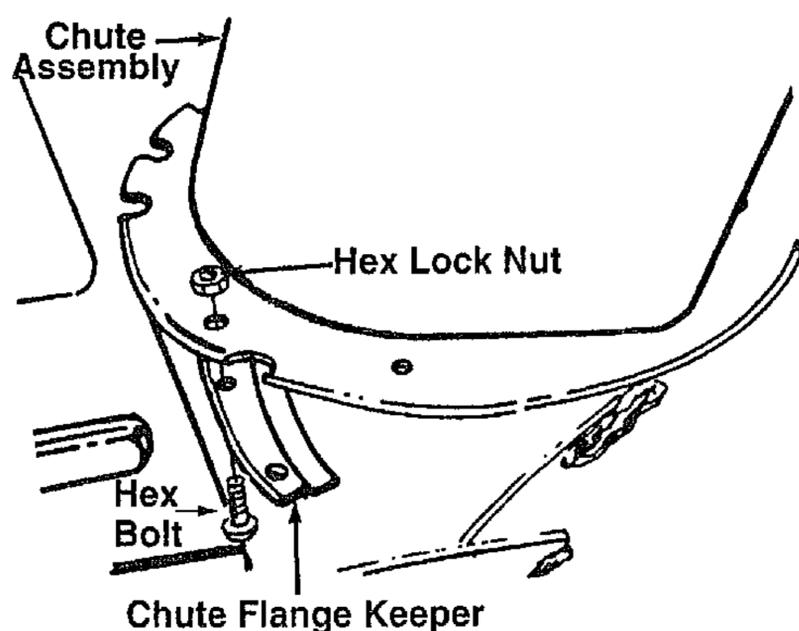


Figure 5

ATTACHING CHUTE ASSEMBLY (Hardware D)

- Place the discharge chute assembly over the opening of the chute adapter, with the opening of the discharge chute facing forward.
- With the flat side facing downward, place the chute flange keepers beneath the flanges of both the discharge chutes and the chute adapter. Insert the hex cap screws up through the flange keepers and discharge chute flange as shown in Figure 5, and secure with the hex flanged lock nuts. After assembling all three chute flange keepers, tighten all lock nuts until snug, then back off (loosen) approximately 1/4 turn.

ATTACHING THE CHUTE CRANK SUPPORT TUBE (Hardware E)

Fasten the chute crank support tube assembly to the support tube mounting bracket and to the back of the snow thrower housing using the hex cap screws and hex insert lock nuts. Refer to Figure 6.

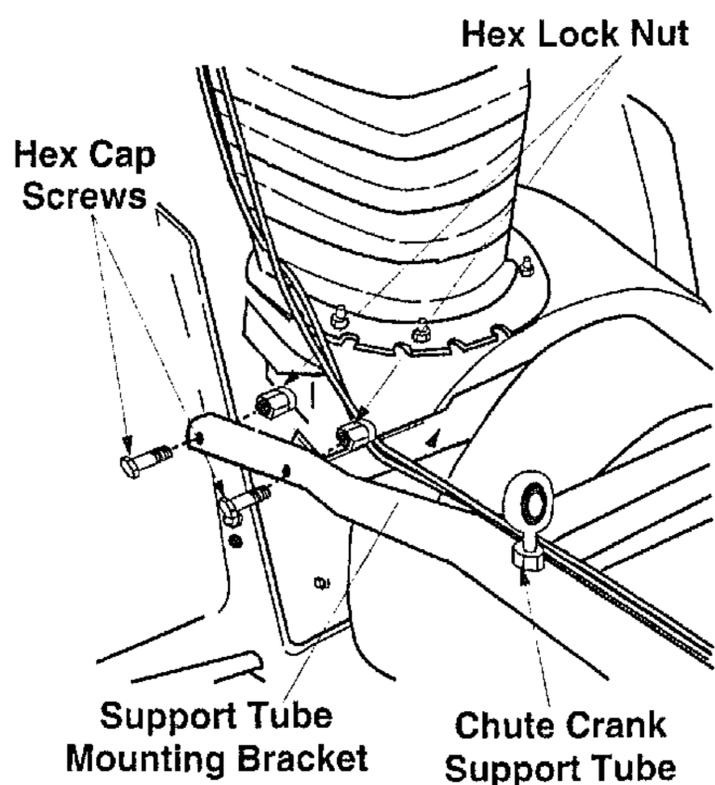


Figure 6

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