FORM NO. 3310-613 Rev. B

TORO

MODEL NO. 20-7100
MODEL NO. 20-7200
MODEL NO. 23-4410
MODEL NO. 23-4420

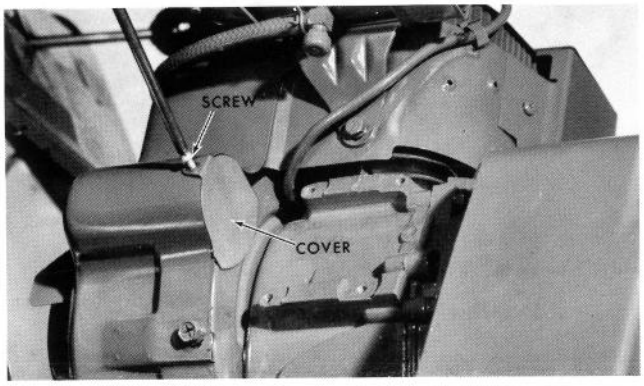
INSTALLATION INSTRUCTIONS

ELECTRIC STARTER MOTOR KITS
(FOR ALL TWO-STAGE SNOWTHROWERS)

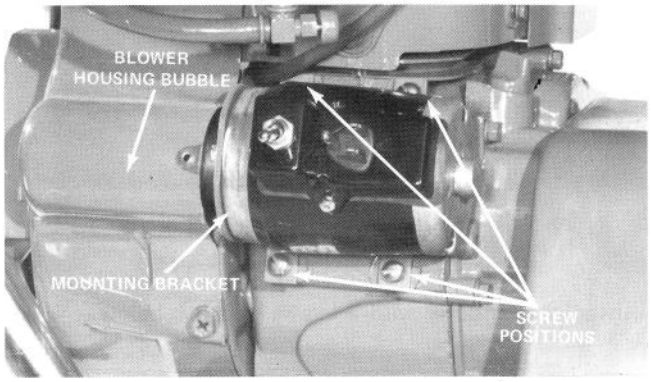
ELECTRIC STARTER MOTOR KIT — MODEL 20-7100 & 23-4410
(FOR SNOWTHROWERS MODEL NO. 31624, 31677 & 38050)

To install your electric starting kit proceed as follows:

1. Fasten starting instruction decal on side of gas tank.
2. Remove screw that retains cover.



3. Insert geared end of starter motor into mounting bracket hole and into blower housing bubble. Position starter motor and mounting bracket over four (4) holes in mounting pad and secure with screws provided.



STARTING INSTRUCTIONS

Use only a 3-wire (grounded) receptacle as shown (Fig. A) for starting snowthrower. Failure to observe the above could result in electric shock.

1. Insert the female end of the 3-prong cord into the male receptacle on the starting motor. Attach the male end of the cord into a 115VAC electrical (grounded) receptacle.



NOTE: For your protection, this starter motor is thermally protected. If overheated it will stop automatically and can be restarted when it cools to a safe temperature.

2. Place all controls in the neutral position. Place throttle control in the start position, choke engine and push upward on the switch to start snowthrower.
3. When snowthrower has started release switch, the switch will return to normal off position, disconnect electric cord from starter motor and receptacle.

WARNING: Plug extension cord only into outlet which is a grounded type (Figure A).

Do not plug extension cord into outlet while standing in water or when hands are wet.

Do not use or connect cord to starter motor if gasoline has been spilled on it.

Always replace damaged extension cord immediately.

If there is any doubt whether your receptacle is of a grounded type contact your local power company.

BE SURE RECEPTACLE BOX IS GROUNDED

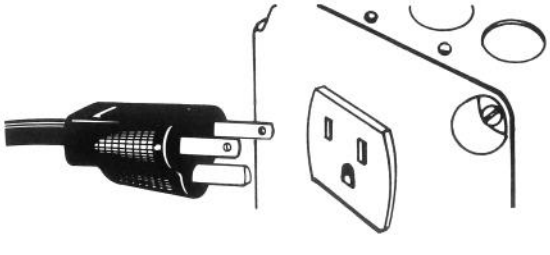


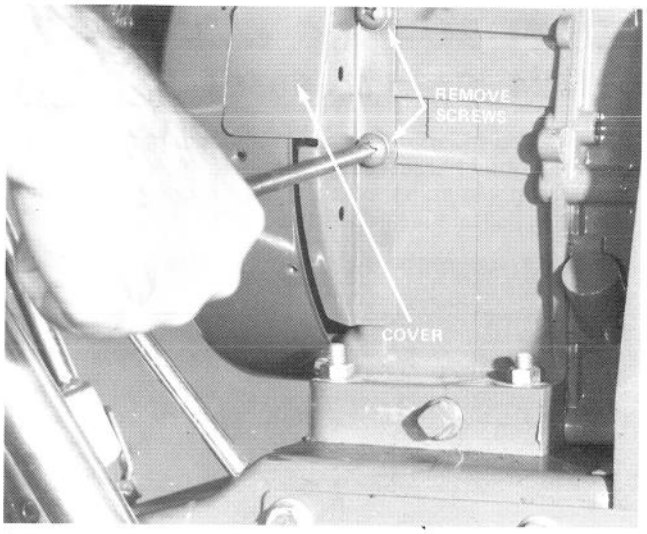
Figure A 3-WIRE GROUNDED RECEPTACLE

ELECTRIC STARTER MOTOR KIT—MODEL 20-7200 & 23-4420

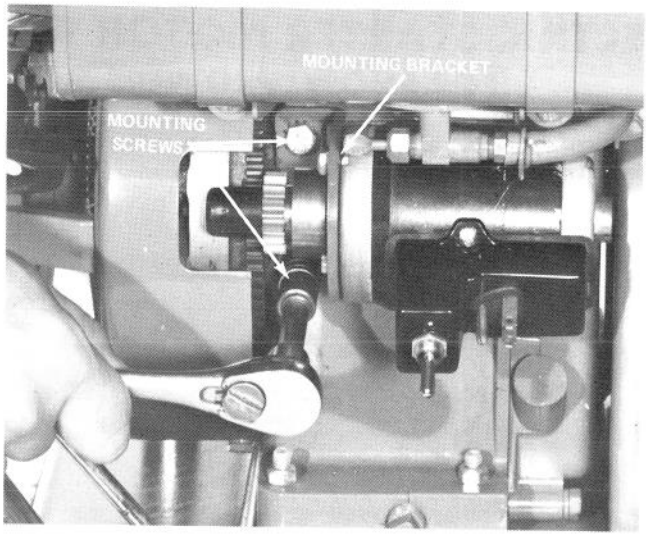
(FOR SNOWTHROWERS MODEL NO. 31756, 31763, 31813, 31823 & 38060)

To install your electric Starting Kit proceed as follows:

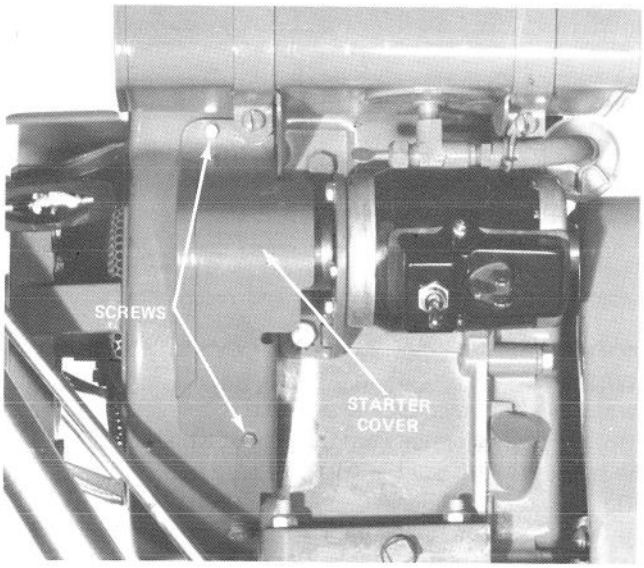
1. Remove 2 screws that retain cover, as shown below.



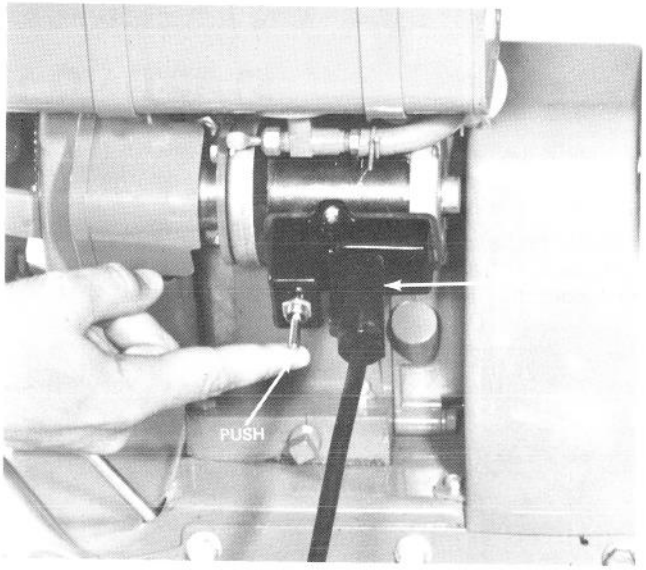
2. Position starter motor through hole in mounting bracket. Place over the two (2) mounting holes in engine block and secure with screws provided.



3. Install starter cover with 2 screws as shown below.



4. Start snowthrower per instructions on front page.



NOTE: If starter motor fails to turn over and start engine in severely cold weather, but a buzzing noise is heard, release switch, disconnect cord and proceed as follows: 1. Make sure crankcase oil is SAE5W-20 or 10W. 2. Make sure all controls are in off or neutral position. 3. Pull starter rope to turn over engine SLOWLY 3 or 4 times. 4. Reconnect cord and restart engine per starting instructions on front page. If engine still does not start, contact your nearest Authorized TORO Service Dealer.

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