

TORO

MODEL NO. 59177
MODEL NO. 59176
MODEL NO. 59178

INSTALLATION INSTRUCTIONS

EASY-EMPTY GRASS CATCHER

For HMR 1200, 1232 LT and Rear Engine Riders

SET UP INSTRUCTIONS

Install Mounting Brackets (HMR 1200 only)

Note: Mounting brackets are not required when mounting grass catcher on a 1232 LT or rear engine rider.

1. Secure (2) mounting brackets and brace to rear of HMR frame with (6) capscrews (7/8" lg.) and locknuts as shown in fig. 1.

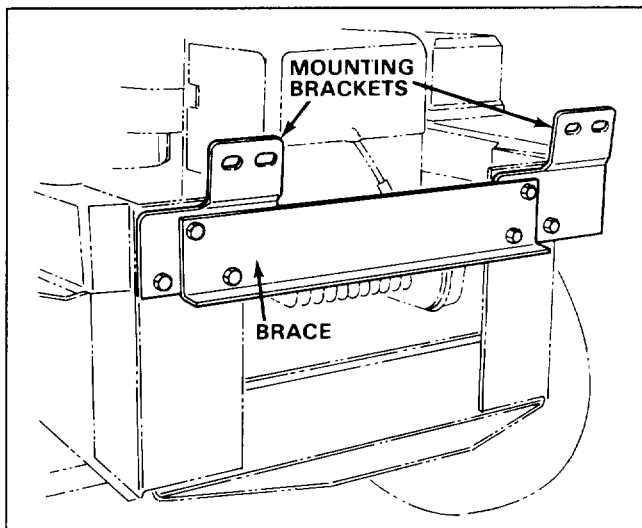


Figure 1

Install Mounting Bracket and Hitch Plate (1232 LT Only)

Note: Mounting bracket and hitch plate are not required when mounting grass catcher on a HMR 1200 or rear engine rider.

1. Secure mounting bracket to rear frame with (2) 5/16-18x3/4" lg. capscrews and locknuts, as shown in fig.2.
2. Loosely secure hitch plate to top of tractor hitch with (3) capscrews (7/8" lg.), (3) locknuts and (1) washer. Washer to be used under large hole in tractor hitch (Fig. 2).

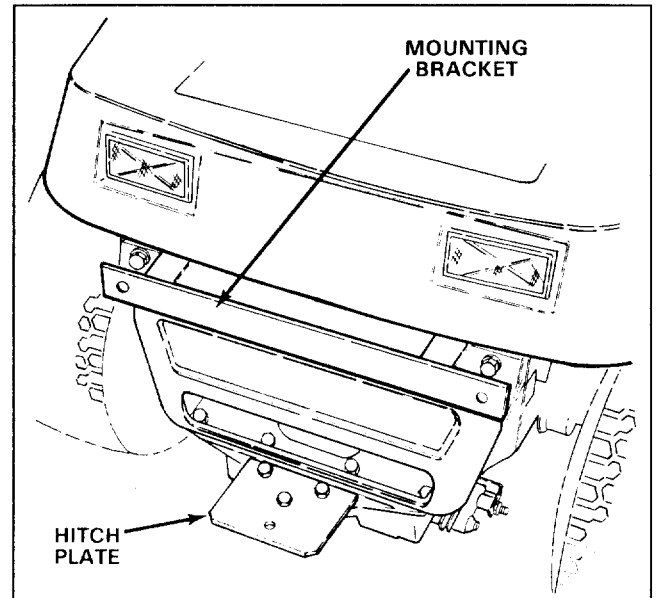


Figure 2

Install Hitch Bracket

1. When mounting hitch bracket for installation on a rear engine rider, position hitch bracket in upward position (Fig. 3). Mount bracket in downward position on HMR 1200 installation. Make sure marks on hitch bracket and grass catcher frame are aligned, to assure proper mounting holes are used in each application.

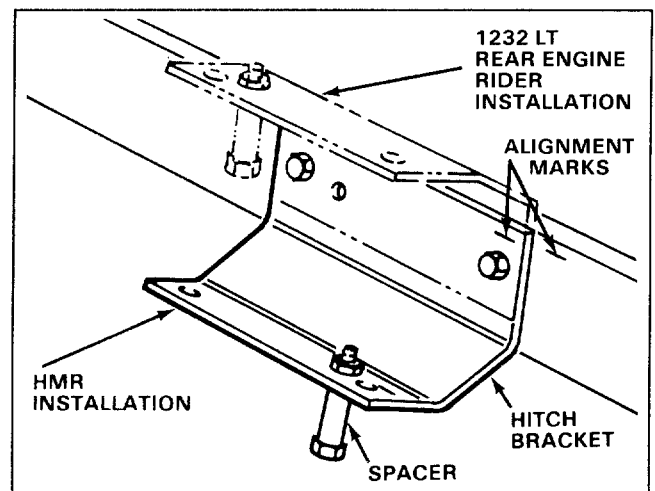


Figure 3

SET UP INSTRUCTIONS

2. Secure hitch bracket to grass catcher frame with (2) capscrews (7/8" lg.) and locknuts (Fig. 3).
3. Mount a spacer to hitch bracket with a capscrew (7/8" lg.) and locknut. Spacer to be positioned downward from bracket (Fig. 3).

Assemble and Install Grass Basket

1. Open grass basket and slide dump handle through hole in top of basket and into handle channel (Fig. 4). Make sure handle grip points toward front of grass basket.

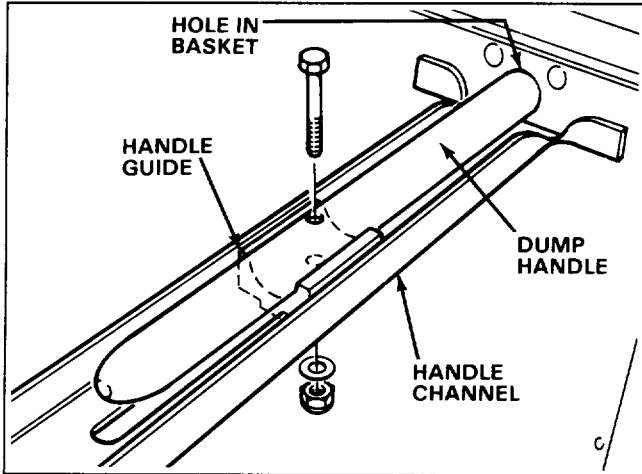


Figure 4

2. Lift up on end of dump handle allowing handle guide to be positioned onto handle and into channel (Fig. 4). Align hole in guide with hole in dump handle. Secure handle guide and dump handle to channel with a 1/4-20 x 2" lg. capscrew, flatwasher and locknut. Dump handle and guide must slide freely in handle channel.

3. Pull dump handle out until it stops; then close grass basket door. Push dump handle down fully until it "bottoms out".

Note: Try to open basket door when handle is pushed in completely. If basket opens, dump handle is not pushed in far enough or basket is not closed tightly.

4. Position hitch bracket spacer or mounting pin into hole in hitch. Rotate grass basket up so mounting pins line up with mounting holes in brackets on the HMR 1200, 1232 LT or the stand bars on rear engine riders. Push pins through holes and retain with hair pin cotters.

Assemble and Install Chute Assembly and Duct

1. Secure retainer to duct with barbed clip and spacer fastener (Fig. 5).

2. Slide duct onto chute assembly, aligning duct retainer with chute knob. Hook retainer onto knob, securing assemblies (Fig. 5).

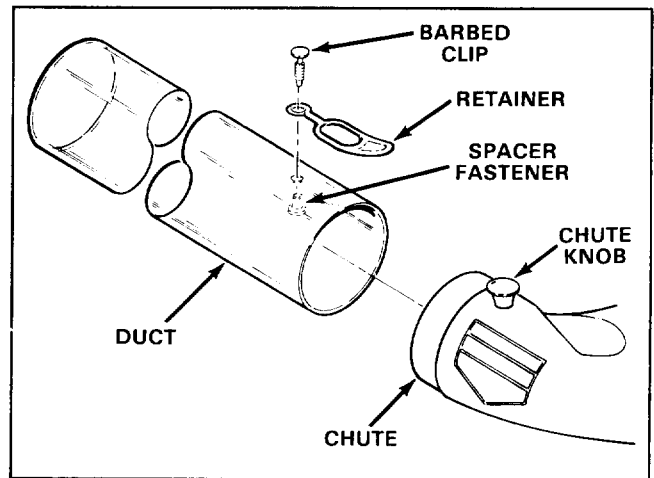


Figure 5

3. After chute assembly and duct are assembled, slide duct into grass catcher.

4. Slide chute assembly under deflector. Hook rear chute bracket around pivot post on deck. Slide front of chute into locking position with mating part of hinge lock. Insert locking pin (Fig. 6).

5. Hook flexible latch into notched bracket at rear of deck opening (Model 59178 only) (Fig. 6).

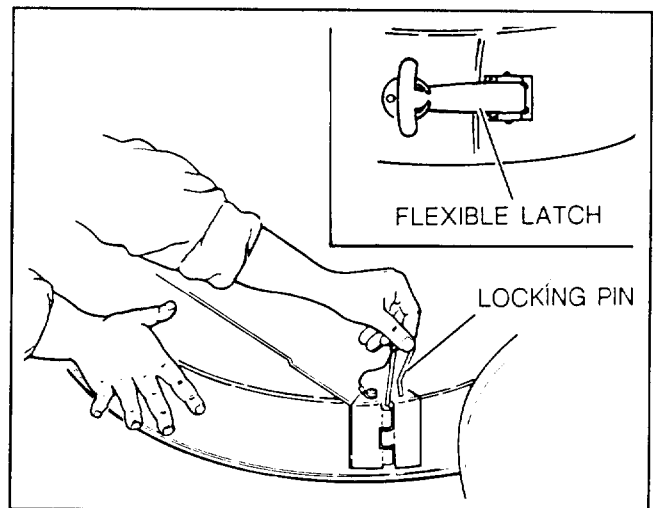


Figure 6

6. Check operation of grass basket by pulling dump handle up and opening basket door. Then close basket door and push dump handle down fully until it "bottoms out". Make sure grass basket door cannot open when handle is pushed in completely.

OPERATING INSTRUCTIONS

Bagging Conditions

To assure efficient operation of the EASY EMPTY grass catcher, its operating characteristics must be understood. In addition to cutting turf uniformly, the blade also generates high-velocity air currents. These air currents help propel grass clippings from under the mower housing, through the duct, and into the grass basket. However, certain conditions may decrease the performance of the rear grass catching system.

One condition that may affect the "conveying" of grass clippings from the mower housing to the grass basket is when the mower housing is set too low. Since air is required to propel grass clippings, there must be a source for this air. If the source is obstructed, conveying will be inefficient. Thus, the height-of-cut must not be set too low, because grass surrounding the mower housing will prevent air from getting under the housing and entering the conveying system.

A second condition that may cause a decrease in performance is when excessively long and heavy grass clippings cannot be propelled into the grass basket. Even though the supply of air may be acceptable for efficient conveying, some grass clippings may fall from the main air stream to the bottom of the duct. This starts a progressive buildup of grass clippings in the duct, discharge chute, and against the inside of the mower housing. The chute and duct may even plug. Therefore, to assure efficient grass collecting, experiment with different heights-of-cut until satisfaction is obtained.

When cutting in dry, dusty conditions, lower throttle speed and shift gear selector to higher gear to maintain ground speed.

Another condition affecting conveying is moisture. If the turf is wet from watering, morning dew, or its own internal moisture content, bagging performance may decrease. Therefore, to assure efficiency, cut the grass when it is dry. Since dry grass has some moisture content, clippings may stick to the duct, discharge chute, and on the inside of the mower housing. This slight buildup is normal, but the duct, discharge chute, and housing must be cleaned to prevent undesirable buildup of clippings.

A final condition to consider is ground speed. As the engine overloads (slows down) air velocity decreases. Therefore, ground speed of the rider must be slow enough to allow all grass clippings to move continuously from under the housing, through the duct, and into the grass basket.



CAUTION

Do not operate mower without either the grass deflector or entire grass catcher in place.

Bagging Tips

1. To assure maximum air currents in the system, move throttle to FAST and gear shift to a slow ground speed.
2. Do not collect grass when it is wet or too long. Wet grass can be cut however, with the grass deflector installed. Several hours later, pick up the dry grass clippings with complete grass catcher installed.
3. Cut the grass often, especially when the turf growth is rapid. High heights-of-cut produce good grooming results. If shorter turf is desired, cut the grass again.
4. Overlap swaths to produce an even cutting pattern and to minimize the load on the engine. Make sure grass clippings move continuously through the duct.
5. Empty the grass basket frequently and do not let clippings "back fill" into the duct. To open hopper, shift into NEUTRAL, move deck engagement switch into DISENGAGE position and pull dump handle up; then pull handle forward to dump grass clippings. After dumping clippings, drive forward a few feet, close grass basket and push dump handle down.
6. While operating, glance frequently at the duct. If grass clippings are not moving through the duct, there may be an obstruction in the duct or discharge chute. The obstruction can usually be cleared by moving gear shift to neutral, raising mower housing to highest position, and slapping the side of the installed clear duct, near the obstruction. If the obstruction does not pass into the grass basket when duct is slapped, move deck engagement switch into DISENGAGE position, rotate ignition key to OFF, and set parking brake. Then remove duct and clear any obstruction from the duct or discharge chute with a stick or similar object. After obstruction is removed, install duct, restart engine and continue grass collecting.
7. After using the EASY-EMPTY grass catcher, remove mulch from inside of grass basket, duct, discharge chute, and from underside of mower housing. To retain translucency, remove grass and dirt stains from inside of duct by washing it with soap and water. Keep the blade sharp to assure good grooming and conveying results.



CAUTION

Do not remove duct, discharge chute, or grass basket when engine is running or when blade is rotating, because personal injury could result.

