

Single and Dual Oil Cooler Options Assembly Instructions



Accu-Z Riding Mowers Z52, Z60 and Z72

Manual No. 356-543M

Before You Start



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

These optional assembly instructions contain only information required to assemble the Single and Dual Oil Cooler Options to the Accu-Z mowers. A detailed Operator's Manual was supplied with the mower. Refer to the Operator's Manual for additional specific information especially information relating to safety concerns. Also included in the Operator's Manual is important information on operation, adjustment, troubleshooting, and maintenance for this attachment (some manual sections do not apply to all options).

A separate Parts Manual for replacement parts can be purchased from your dealer or available free of charge at www.landpride.com. Have model and serial numbers handy when placing an order.

Manual Part Numbers:

- Operator's Manual 356-005M
- Parts Manual 356-005P

General Information

These instructions explain how to install the Single and Dual Oil Cooler Options. The Single and Dual Oil Cooler Options are designed to help cool the oil in the mower's hydrostatic system.

These assembly instructions apply to the following options listed below:

- | | |
|-----------------|---------------------------------------|
| 356-531A | Cooler Assembly-Self Contained |
| 356-539S | Single Cooler Add On Accu-Z |
| 356-536A | Single Cooler Add On Accu-Z |

See page 7 for a detailed parts list of each kit. Use the list as a checklist to inventory parts received. Please contact your local Land Pride dealer for any missing hardware.

Tools Required

- Basic hand tools
- Oil drain pan

Definitions

Right-hand and left-hand as used in this manual is determined by facing the direction the machine will operate while in use unless otherwise stated.

Assembly Instructions

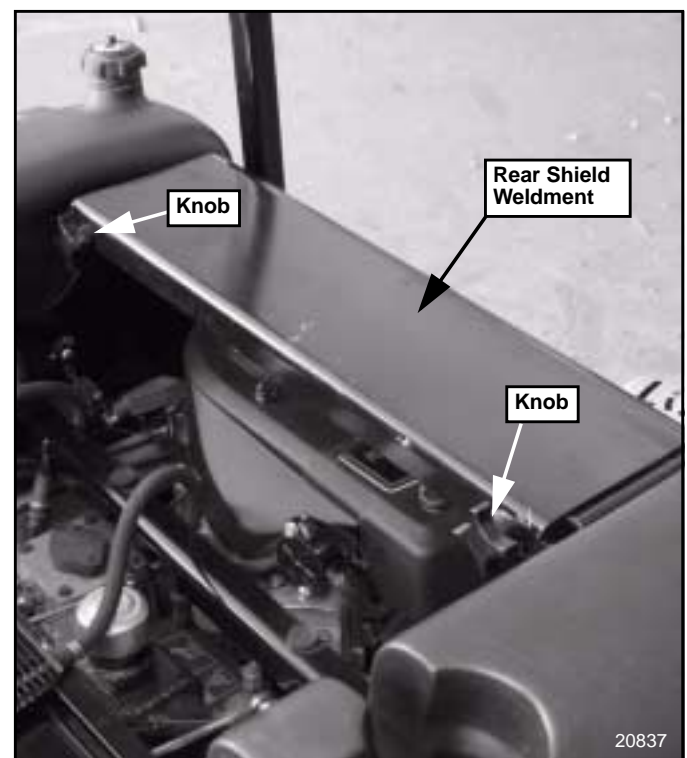
NOTE: If you need to install the oil cooler option on a mower which is not equipped with the external air breather it will be necessary to purchase oil cooler package 356-531A.

1. Park the tractor on a flat surface, place control levers in the park brake position, shut-off engine and remove ignition switch key.

Refer to Figure 1:

For mowers with an external air cleaner skip to step 3.

2. Unscrew the two knobs and remove rear shield weldment and discard.

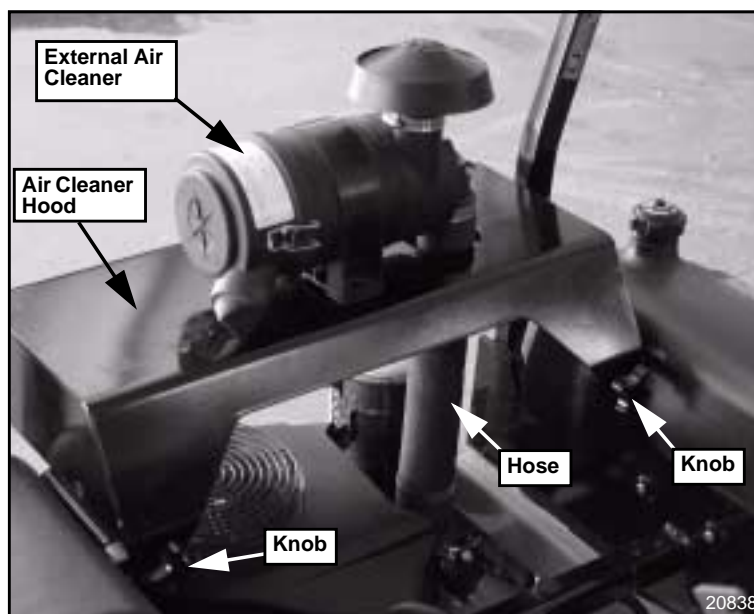


Rear Shield Weldment
Figure 1

Assembly Instructions

Refer to Figure 2:

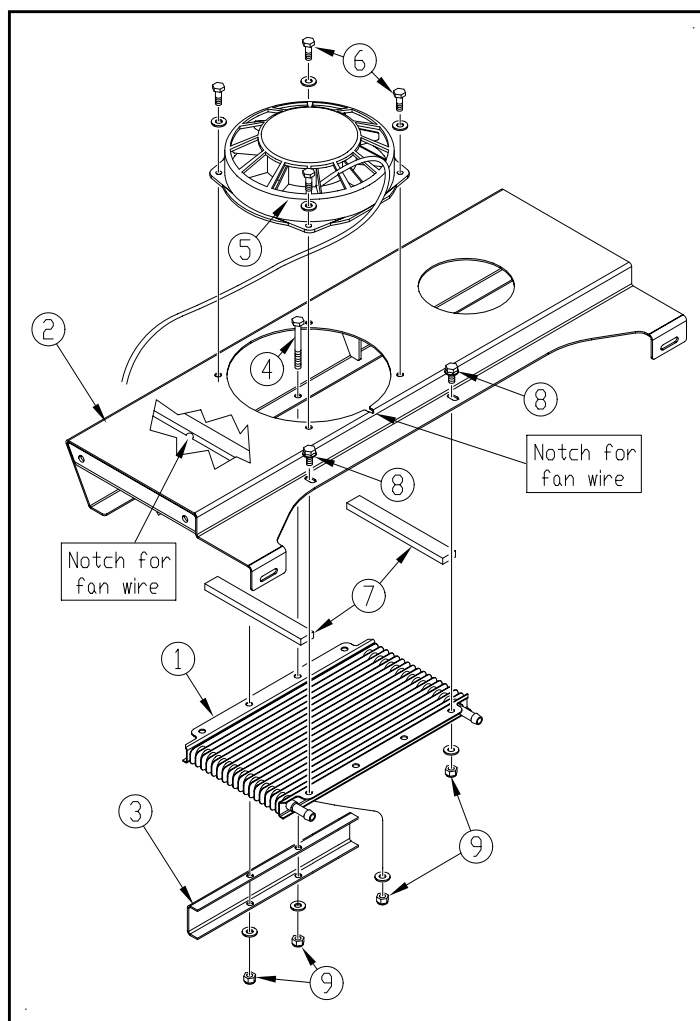
3. Remove the bolts, washers and nuts which attach the external air cleaner to the air cleaner hood. Keep hardware for later use.
4. Loosen the lower hose clamp on the hose going to the carburetor.
5. Remove external air cleaner and hose and set aside. Be sure and cover the exposed carburetor to prevent dirt from getting into the carburetor.
6. Unscrew the two knobs and remove the air cleaner hood. Set hood aside for later use.



External Air Cleaner
Figure 2

Refer to Figure 3:

7. Place the oil cooler (1) on underside of the cooler lower frame (2). Place it so the flat mounting surface is facing up and the oil tubes are facing towards the cut out portion of the frame.
8. Place single cooler spacer (3) on the lip of the cooler lower frame (2) and align the holes of the spacer with the holes of the frame.
9. Lower the oil cooler (1) onto the spacer and align the holes. Reaching in through the large hole in the cooler lower frame (2) insert two 1/4" x 2 1/4" bolts through the oil cooler (1), spacer (3) and frame (2).
10. Place 1/4" flat washers and 1/4" lock nuts (9) on end of bolts (4). Leave these loose for now.
11. Align the electric cooling fan (5) so the wire will fit down through the notch in the cooler lower frame (2). Before mounting the fan to the frame route the wire so it will fit in the notch in the frame located where the oil cooler (1) mounts.
12. Before bolting fan (5) to the frame (2) move the fan to allow access through the hole. Place the two cooler seals (7) on top of the oil cooler (1). Place seals so they are trapped between the frame (2) and run parallel with the outside edge of the cooler (1).
13. Hold oil cooler (1) against the seals (7) and insert two 1/4" x 1/2" bolts (8) through the frame (2) and cooler (1). Secure bolts with 1/4" lock nuts (9) and 1/4" flat washers. Be sure the fan wire is going through notch above the oil cooler (1) freely and not being pitched, then tighten all four bolts holding the cooler.



Cooler Assembly
Figure 3

Assembly Instructions

NOTE: To mount the two cooler option, remove the spacer used in step 8 on page 2 and the 1/4" x 1/2" bolts used in step 13.

Mount second oil cooler directly below the first one using 1/4" x 2 1/4" bolts.

14. Mount the electric cooling fan (5) to the cooler lower frame (2) using four 1/4" x 3/4" bolts (6) and 1/4" flat washers. Be sure the wire is going through the notch freely and tighten the bolts.

Refer to Figure 4

15. Set the oil cooler assembly on top of the mounting brackets where the rear shield weldment or air cleaner hood (depending on which style air cleaner you have) were removed. Place the cooler so the hose ports are facing towards the front of the mower.
16. Hold the existing air cleaner hood or the one supplied in kit 356-531A (depending on which air cleaner you have) so the large hole on top is to the left-hand side when facing towards the front of the mower.
17. Place the air cleaner hood in front of the oil cooler. Angle the front edge of the oil cooler and insert it the back of the air cleaner hood. Continue to work the oil cooler into the air cleaner hood until it is setting on the lips which are located on each end of the air cleaner hood.

Refer to Figure 5

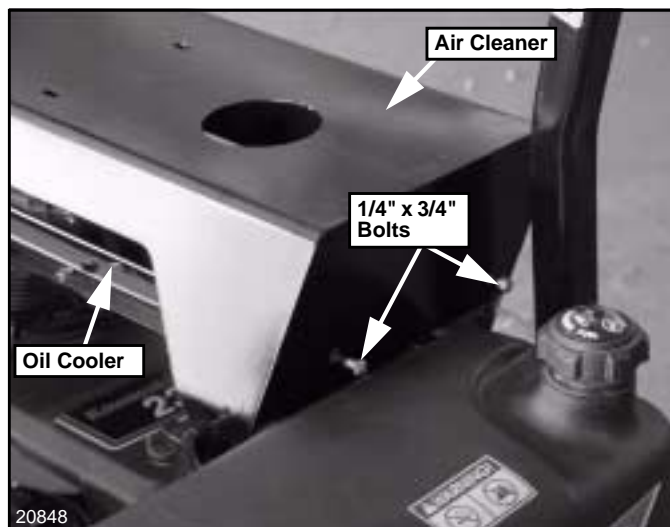
18. Align the holes in the end of the oil cooler with the holes in the end of the air cleaner hood and insert four 1/4" x 3/4" bolts. Tighten bolts.

Refer to Figure 6

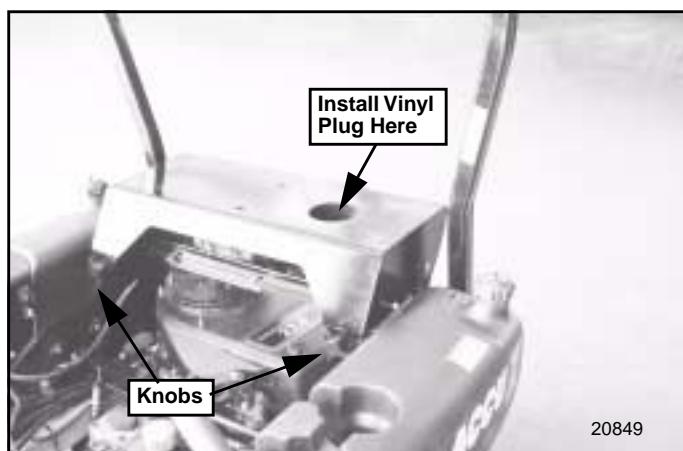
19. Attach air cleaner hood with the assembled oil cooler to the mower using the screw knobs.
20. Reinstall the external air cleaner.
21. If your mower does not have the external air cleaner insert the vinyl plug (supplied in kit: 356-531A) into the large hole on top of the air cleaner hood.



Oil Cooler and Air Cleaner Hood
Figure 4



Fasten Oil Cooler to Air Cleaner Hood
Figure 5



Air Cleaner Hood to Mower
Figure 6

Assembly Instructions

CAUTION

When working with any hydraulic system the work area must be clean and free of all contaminants.

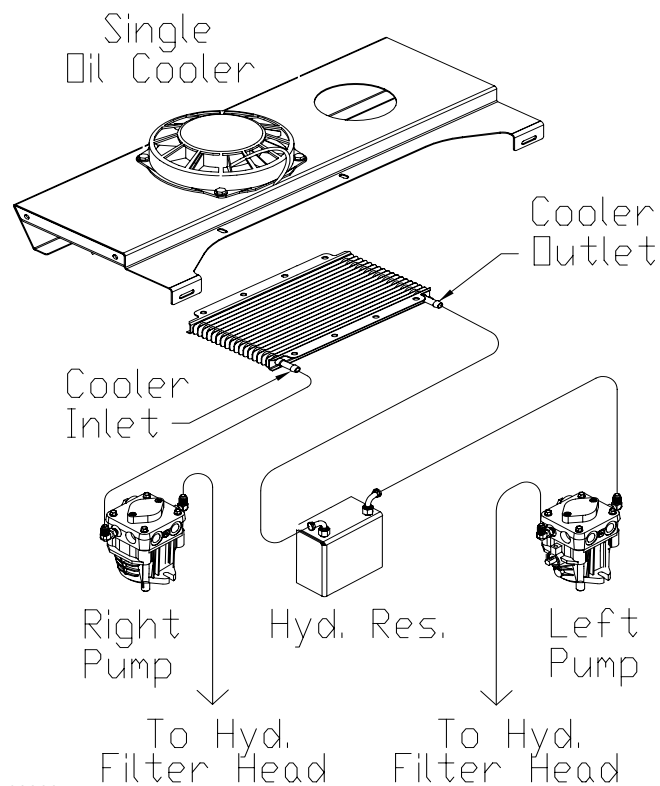
Contamination is the major cause of hydraulic failures.

22. Drain the hydraulic reservoir or remove one quart of hydraulic oil from the hydraulic reservoir filler neck. Use a clean container when draining the reservoir so the oil can be reused.
23. Remove the hose going from the right-hand side of the right-hand hydraulic pump to the top right-hand side of the hydraulic reservoir. Remove only the hose and not the fittings. Be sure to not allow any dirt into the fittings.

Refer to Figure 7:

NOTE: Right and left apply when facing forward.

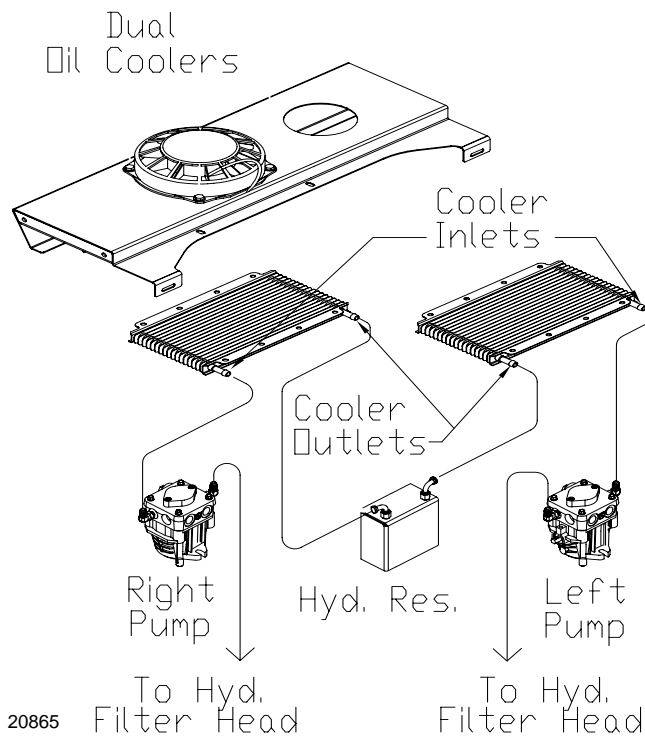
24. Attach the fitting end of the cooler supply hose to the right-hand fitting of the right-hand hydraulic pump. Attach the other end of the hose to the tube port on the right-hand side of the oil cooler and secure it with a hose clamp.
25. Attach the fitting end of the cooler return hose to the top right-hand side of the hydraulic reservoir. Attach the other end to the tube port on the left-hand side of the oil cooler and secure it with a hose clamp.



Single Cooler
Figure 7

Refer to Figure 8:

26. Repeat steps 22, 23 and 24 to install a second oil cooler. Use left-hand in place of right-hand with the instructions.
27. Refill the hydraulic reservoir with the oil removed in step 21 above. Make sure the oil is clean. After adding the oil cooler or coolers additional oil will be needed, use clean SAE 10W40 SG, SF/CC, CD service motor oil.



Dual Coolers
Figure 8

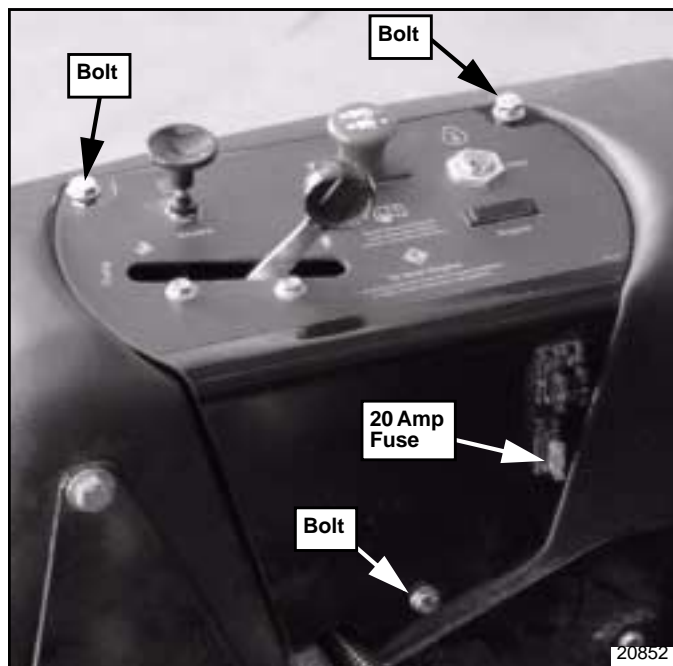
Assembly Instructions

Refer to Figure 9:

28. Remove the 20 amp fuse from the fuse block in the instrument panel.

IMPORTANT: You may or may not need to remove the instrument panel. Look for the Auxiliary Connector hanging out the opening at the bottom of the instrument panel. (See Figure 10A for a picture of the auxiliary connector.) If the Auxiliary Connector is located outside the instrument panel, skip to step 30.

29. Remove the three bolts holding the instrument panel to the fuel tank and pull panel away from the fuel tank.



Instrument Panel
Figure 9

Refer to Figure 10A & Figure 10B:

30. Locate the auxiliary connector. Disconnect the male connector from the female connector and remove the seal.
31. Insert the orange wire on the cooler wiring harness into the connector and plug the male connector into the female connector.
32. Attach the black wire on the cooler wiring harness to ground as follows:

NOTE: Some switches have an open terminal in the back and some do not. If your switch has an open terminal, the black ground wire may be plugged into that terminal. If the switch on your mower does not have an open terminal, the black wire will need to be attached to a ground connection. Attach the black wire to the mower frame if you did not remove the instrument panel.

Attaching to the ignition switch

Refer to Figure 10A:

- Plug the black wire spade into the switch's open terminal.

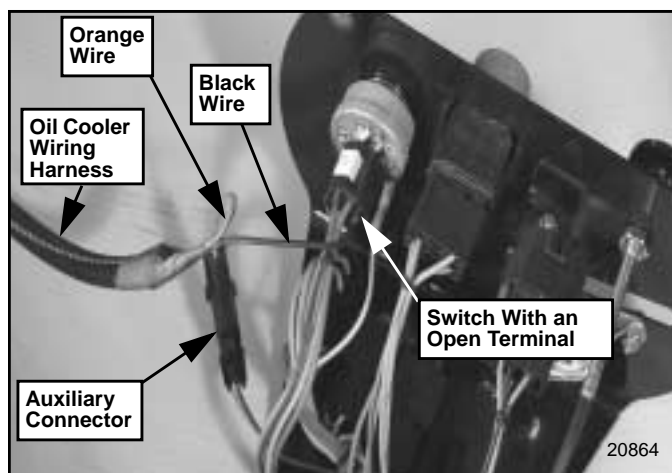
NOTE: This is the only open terminal on the ignition switch plug.

Attaching to the mower frame

Refer to Figure 10B:

- Cut the spade terminal from the black wire.
- Attach a ring terminal sized to fit the ground connection to the end of the cut black wire. Ring terminal supplied by custom.
- Secure the black wire to the frame of the mower. This can be the ground connection shown in Figure 10B if the instrument panel has been removed.

33. Re-attach the instrument panel onto the tank.



Wire Connections
Figure 10A

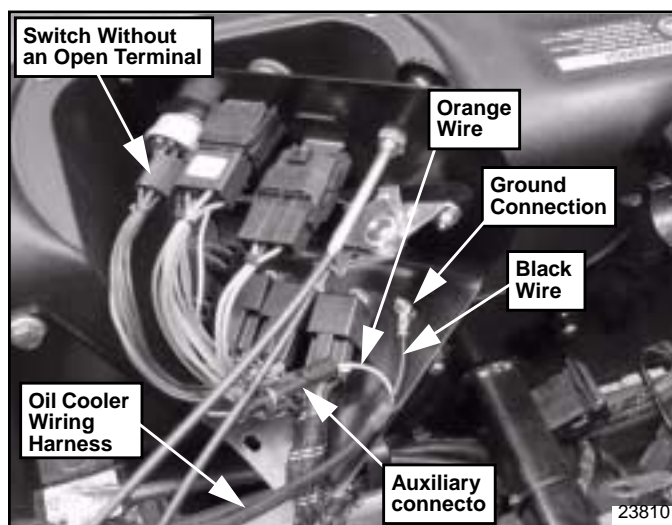
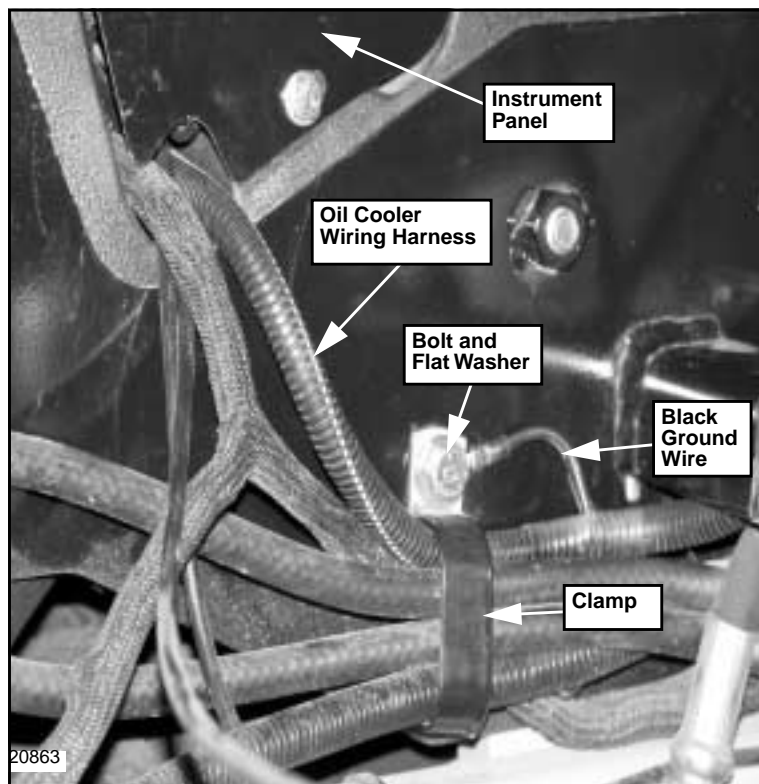


Figure Description
Figure 10B

Assembly Instructions

Refer to Figure 11:

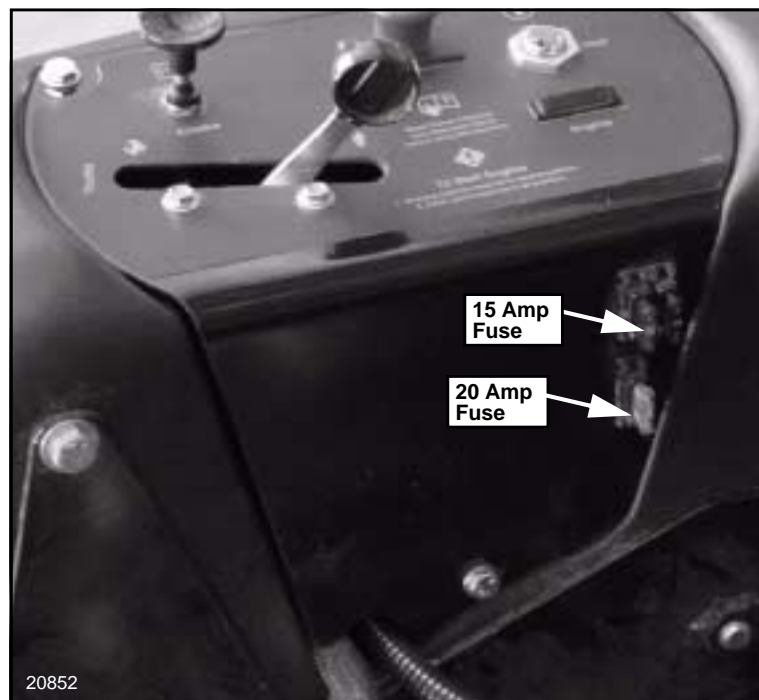
34. Remove the bolt and flat washer from the existing clamp, located directly below the instrument panel, and attach the cooler wiring harness black ground wire terminal to the bolt and re-install bolt and flat washer.
35. Route the cooler wiring harness through the existing clamp, located directly below the instrument panel, then under the bracket which supports the seat pan.
36. Plug the cooler wiring harness into the cooling fan harness.



Harness and Clamp
Figure 11

Refer to Figure 12:

37. Re-install the 20 amp fuse.
38. Remove the 10 amp fuse from the fuse block and replace it with the 15 amp fuse.
39. Start the engine and check for hydraulic oil leaks. Tighten fittings as necessary to stop leaks, if any.
40. Check oil cooler fan to make sure it is operating.



Fuses
Figure 12

Listing of Parts

356-531A Cooler Assembly-Self Contained

Your kit includes:

Qty.	Part No.	Part Description
1	356-529H	AIR CLEANER HOOD
1	356-539S	SINGLE COOLER ADD ON ACCU-
1	817-508C	VINYL PLUG 3 1/2 OD HOLE
2	839-083C	CLAMP KNOB 289

356-539S Single Cooler Add On Accu-Z

Your kit includes:

Qty.	Part No.	Part Description
1	356-056D	SINGLE COOLER SPACER
2	356-057D	COOLER MTG SEAL
1	356-530H	COOLER LOWER FRAME
4	800-112C	CABLE TIE .19X7.25 1.75D 5
2	800-126C	CLAMP WRM DRV #5 SS (.44-
8	802-004C	HHCS 1/4-20X3/4 GR5
2	802-148C	HFSS 1/4-20X1/2 GR5
2	802-551C	HHCS 1/4-20X2 1/4 GR5
4	803-255C	NUT HEX NYLOCK 1/4-20
8	804-007C	WASHER FLAT 1/4 SAE PLT
1	839-113C	CLAMP, WIRING .312
1	839-199C	OIL COOLER
1	839-200C	ELECTRIC COOLER FAN
2	839-201C	PLASTIC WIRING CLIP
1	839-202C	HOSE ASSY., COOLER SUPPLY
1	839-203C	RETURN HOSE, #6 16.5" LONG
1	839-204C	HARNESS, COOLING FAN
1	839-205C	15 AMP FUSE (5 PACK)

356-536A Dual Cooler Add On Kit

Your kit includes:

Qty.	Part No.	Part Description
2	800-126C	CLAMP WRM DRV #5 SS (.44-
2	802-551C	HHCS 1/4-20X2 1/4 GR5
1	839-199C	OIL COOLER
1	839-202C	HOSE ASSY., COOLER SUPPLY
1	839-203C	RETURN HOSE, #6 16.5" LONG



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