KIT NO. 438484 (CANADA)
INSTALLATION INSTRUCTIONS FOR
MODEL D300 BOWL HEIGHT SENSING

Consult TSB-895 to determine updates that may be required prior to installing this kit.

This kit adds a bowl height sensing feature designed to shut mixer off when bowl is lowered while unit is running. This kit is designed for D300 Mixers with a contactor and overload protection.

Special Tools Required

- Variable speed electric hand drill.
- 3/8" drill bit.
- 3/16" drill bit.
- Center punch.
- Suggested crimping tool, T & B No. Wt-111-M or AMP no. 47386.

Parts Information

Bowl height sensing kit no. 438484 includes the parts listed below: Once bowl height sensing is installed, the individual parts shown can be ordered for service.

PART NO.	DESCRIPTION	QUANTITY
87711-245-1	Height Sensing - Reed Switch, (2LS) with Two Nuts	1
438387	Sensor Holder	1
438474	Bowl Lift Bracket	1
111941	Magnet	1
120332	Magnet Holder	1
SC-021-01	Screw 4-40 x 5/8	2
WL-003-01	Lockwasher #4	2
78752-11	P-Clamp	2
SC-119-53	Screw 8-32 x 3/4	2
NS-009-12	Nut 8-32	2
WS-019-16	Washer .188 ID x .031	2
WL-007-07	Lockwasher #8	2
513886	RTV 732 Sealant	As Required
FE-6-29	Wire Nut	1
65890-22	Ring Terminal	1
65890-29	Splice	1
F-18841	Supplemental Wiring Diagram	1
F-18851	Installation Instructions	1

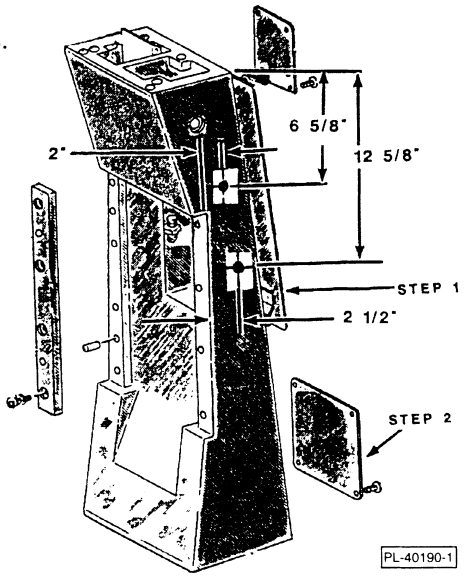
© HOBART CORPORATION 1994

Installation Instructions

WARNING: DISCONNECT THE ELECTRICAL POWER TO THE MACHINE AT THE MAIN CIRCUIT BOX. PLACE A TAG ON THE CIRCUIT BOX INDICATING THE CIRCUIT IS BEING SERVICED.

1. Remove lift access cover assembly.
2. Remove capacitor and starter access cover and gasket assembly.
3. Disassemble bowl lift mechanism to remove the bowl lift bracket and discard.
4. Using a 3/16" drill bit, drill from outside of pedestal two through holes for P-clamp screws as shown below:

   A. Remove shavings.



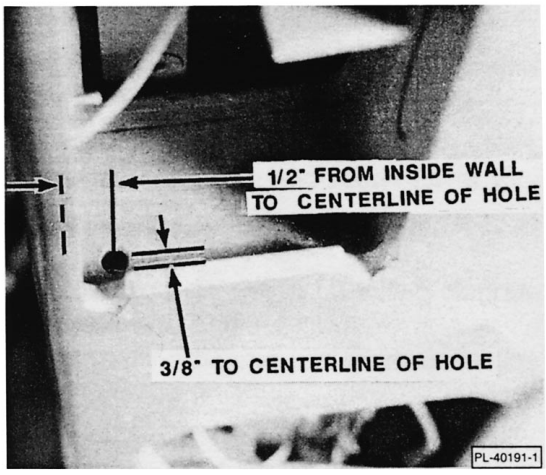
5. Install two P-clamp screws, 8-32 x 3/4", through holes in side of pedestal.
6. Install P-clamps on screws with loop toward rear of mixer using two flat washers, lockwashers #8 and nuts 8-32.
7. Place a shop cloth over the components in the capacitor and starter cavity.

   A. Using a 3/8" drill, drill a hole from bottom of lift access cavity into capacitor and starter cavity as shown below:

   B. De-burr hole.

   C. Remove shavings.

   D. Remove shop cloth.



Continue Installation Instructions

8. Cover inside bottom of magnet holder with RTV.

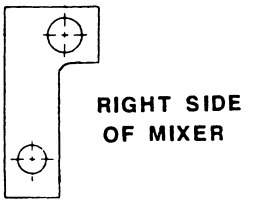
   A. Install magnet in holder.

9. Install magnet and holder on bowl lift bracket using two screws 4-40 x 5/8" and two lockwashers #4.

10. Install bowl lift bracket and reassemble lift mechanism.

11. Remove jam nut from bowl to beater clearance adjusting screw.

   A. Install switch holder on adjusting screw, open area of L to right, pointing toward rear of mixer and reinstall jam nut.



   B. Check bowl to beater clearance.

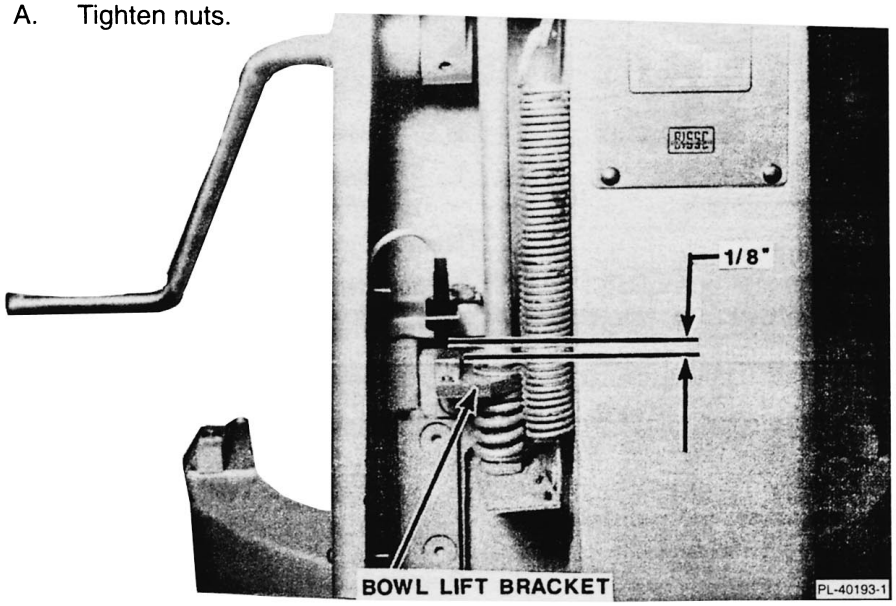
12. Install height switch (2LS) in hole of switch holder, with a nut on the top and bottom of holder.

13. Route height switch (2LS) wires through P-clamps and hole into capacitor and starter cavity.

14. Put bowl support in the up position.

15. Loosen the nuts holding height switch (2LS) to the switch holder and adjust switch to 1/8" from magnet holder.

   A. Tighten nuts.



16. A. **On units that have a contactor and separate overload relay** disconnect wire at normally open terminal of contactor side switch and connect to splice. Connect red height switch wire to other end of splice. Connect black height switch wire to normally open terminal of contactor side switch.

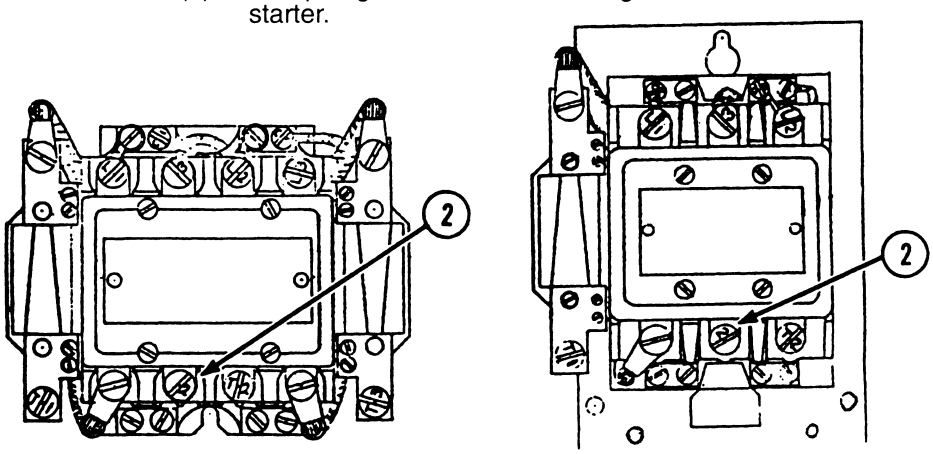
    B. **Arrow Hart starter (combination starter and overload)** remove wire from 2 on starter, cut off terminal and strip wire back 1/4".

        (1) Remove spade terminal from red height switch wire and strip wire back 1/4".

        (2) Using wire nut connect the wires together.

        (3) Remove spade terminal from black height switch wire and strip wire back 1/4".

        (4) Crimp ring terminal on black height switch wire and install at 2 on starter.



THREE PHASE STARTER SINGLE PHASE STARTER PL-40194-1

    C. **Joslyn Clark starter (combination starter and overload)** disconnect wire at normally open terminal of starter side switch and connect to splice. Connect red height switch wire to other end of splice. Connect black height switch wire to normally open terminal of starter side switch.

17. Apply power to mixer.

18. Check assembly and operation of bowl height sensing. If the mixer has a timer, dial in some time.

    A. Bowl down position. Push "start" button and hold - mixer runs.

        (1) Release "start" button - mixer stops.

    B. Bowl up position. Push and release "start" button - mixer runs.

    C. Lower bowl from up position with mixer running. Mixer should run until bowl is lowered, approximately 1/2", then shut off.

19. Remove power from mixer.

20. Fill hole where height switch wires enter capacitor and starter cavity with RTV.

21. Determine the form number of the wiring diagram present on the mixer.

    A. Read F-18841 and determine which supplemental wiring diagram matches the wiring diagram number on mixer.

    B. Peel off the proper supplemental wiring diagram and place next to the original wiring diagram.

22. Reinstall lift access cover assembly.

23. Reinstall capacitor and starter access cover and gasket assembly.