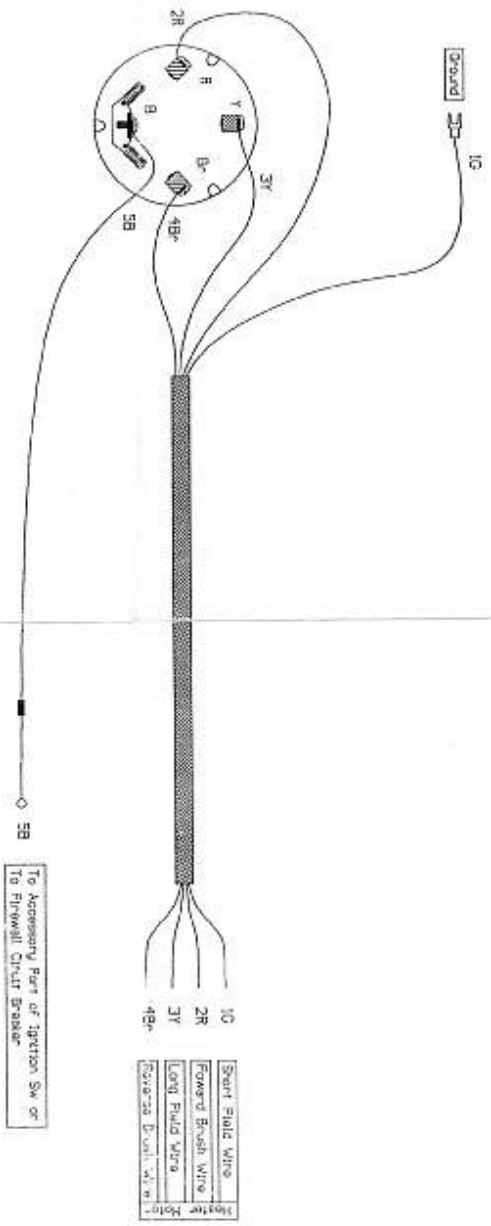


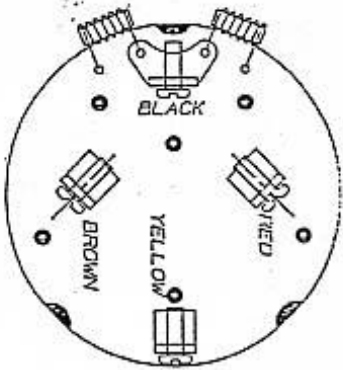
PASS



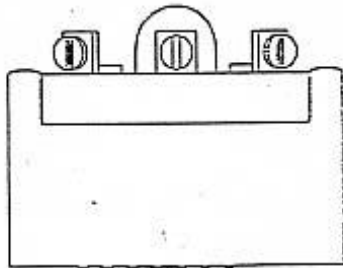
Color Key
 1 - Blue
 2 - Brown
 3 - Green
 4 - Orange
 5 - Yellow
 6 - Grey
 7 - White
 8 - Black
 9 - Red
 10 - Purple
 11 - Silver
 12 - Gold

Drawn By CDD 05/10/91

TYPICAL 1939 - 40 FORD/MERCURY HEATER SWITCH AND KNOB



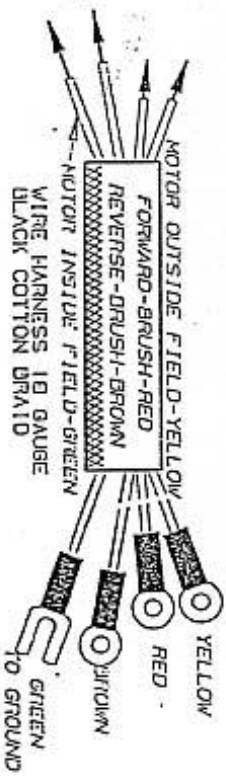
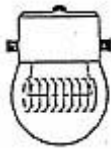
APRLESS SWITCH
N.F.G.



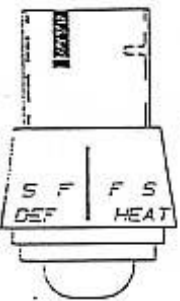
NUT

CIRCUITED
DROP BEZEL

KNOBLED

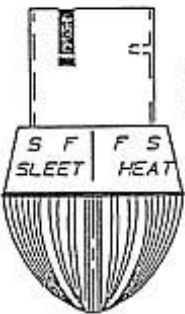


1940 FORD-MERCURY
KNOB



IVORY TRANSLUCENT

1939 FORD-MERCURY
KNOB



IVORY TRANSLUCENT

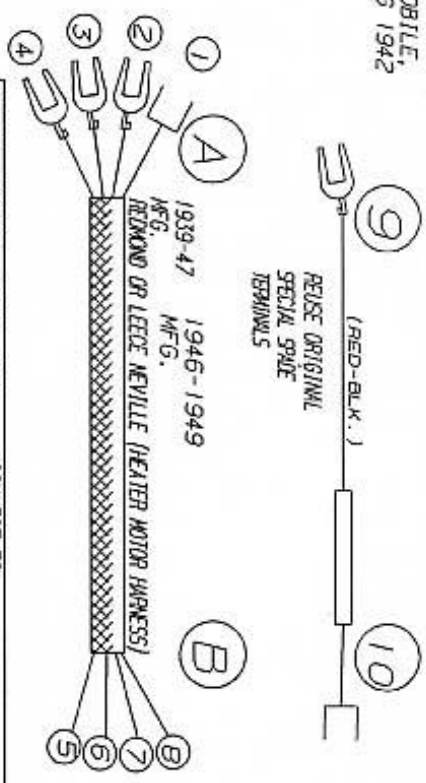
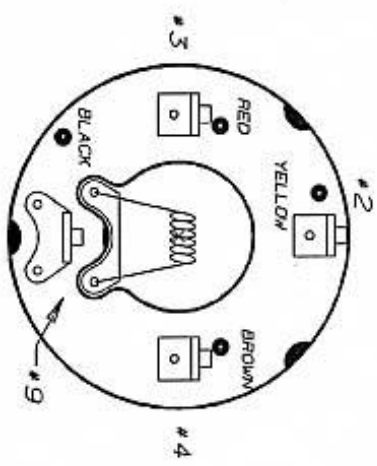


OR BROWN WIRE WAS USED

FORD IGNITION

ACCESSORY POST OR (KEY ON) SIDE OF MERCURY CIRCUIT BREAKER (BLK.-RED)

FOR: ORIGINAL FORD-MERCURY-EATON, HUDSON, OLDSMOBILE, INTERNATIONAL, PACKARD WATER HEATERS BEGINNING 1942



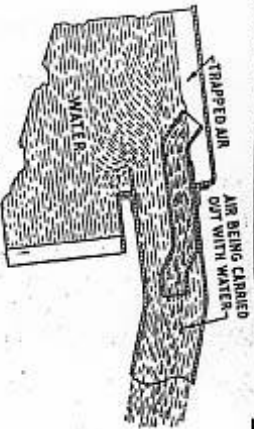
BRANCH NUMBER	SIZE	CODE	CONNECT TO
A 1	16	G	GROUND(+)
A 2	16	Y	HEATER SWITCH / conn. to terminal w/ Yellow dot.
A 3	16	R	HEATER SWITCH / conn. to terminal w/ Red dot.
A 4	16	BR	HEATER SWITCH / conn. to terminal w/ Brown dot.
B 5	16	G	HEATER MOTOR (lower winding).
B 6	16	Y	HEATER MOTOR (lower winding).
B 7	16	R	HEATER MOTOR FORWARD BRUSH.
B 8	9	BR	HEATER MOTOR REVERSE BRUSH.
B 9	14	RXBK	HEATER SWITCH / conn. to terminal w/ Black dot.
B 10	14	RXBK	CIRCUIT BREAKER (B)

WATER HEATER SWITCH BACK 1942-49 FORD-MERC EACH SWITCH HAS COLOR DOTS TO DENOTE WIRE COLOR TO SWITCH POLES.

MOTOR TEST SEQUENCE WHEN WIRE COLOR IS INDETERMINATE OR FADED.
EARLY V-8 FORD HEATER.

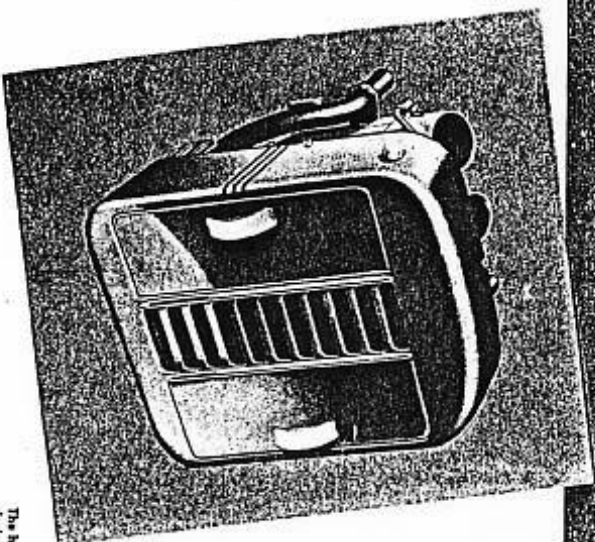
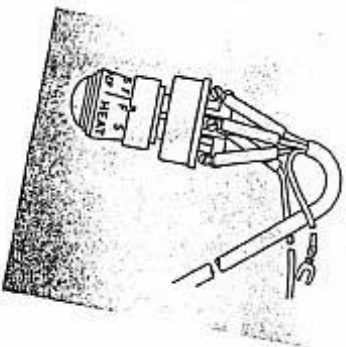
1. ATTACH POSITIVE BATTERY POST 6V LEAD TO ANY OF 4 HEATER MOTOR WIRES-MASKING TAPE THIS LEAD AS (GROUND) (G).
2. TOUCH NEGATIVE BATTERY POST 6V LEAD TO REMAINING (3) WIRES UNTIL SPARK OR GROUND FLASH OCCURS - ISOLATE WITH TAPE MARK (FIELD) (Y).
3. THEN ATTACH NEGATIVE 6V LEAD TO EITHER OF THE (2) REMAINING WIRES - MARK (1) WIRE (FORWARD) (R) REMAINING WIRE (REVERSE). (BR)
4. TOUCH FIELD WIRE (Y) TO REMAINING WIRE REVERSE (BR) MOTORING SHOULD OCCUR IF THE MOTOR IS GOOD.
5. ROTATION, SWITCH NEGATIVE LEAD TO LAST WIRE (BR) AND TOUCH FIELD WIRE (Y) TO (FORWARD) (R) WIRE AND MOTORING SHOULD OCCUR IN OPPOSITE ROTATION.
6. LOW SPEEDS ARE CONTROLLED BY RESISTANCE WIRE COIL ON THE HEATER SWITCH.

Features of Ford Hot Water Heater-Defroster



Automatic vent keeps heater from becoming airlocked and assures continuous good performance.

Four-speed illuminated switch shows when heater is turned on. Two speeds for direct, two for indirect heat.



Sell
heaters
throughout
the entire
year!

The heating unit has been redesigned to harmonize with 1940 Ford—*or* Mercury—their cars. You can play up this exclusive styling.

had trouble with a heater that did not have an automatic vent, this may prove a strong sales point.

The switch is illuminated and has two speeds for DIRECT heat and two for INDIRECT. This feature should be well played up. Direct heat for quick warm-up. Indirect for comfortable continuous driving. Also two intensities of hot air flow for the defrosters.

The Ford Hot Water Heater-Defroster is built to give best performance in the Ford—*or* Mercury—car and is the logical choice among hot water heaters for Ford owners. It is styled to harmonize with the 1940 interior.

An automatic vent prevents the heater from becoming airlocked and assures continuous good performance. If your prospect has ever

ON O1A STANDARD & DELUXE FORD CARS AND O9A MERCURY

DRILLING

Before drilling any of the holes, detach wiring harness from motor side of dash. Re-attach after heater installation has been made.

Remove drill template from heater package. Push out perforated holes in accordance with model of car on which heater is to be installed. Properly locate template by placing it on **INSIDE** of dash and indexing it by means of accelerator shaft bracket cups. With sharp instrument pierce through center of five heater mounting holes on template. Center punch and drill three $\frac{3}{16}$ " diameter holes for mounting studs and two 1" holes for CORE tubes.

DEFROSTER NOZZLES

Install oval ends of defroster hose to defroster nozzles and screw nozzles to under side of slots in cowl as shown in sketch (see reverse side).

It will be necessary to remove the glove box to install the right hand defroster nozzle.

Cut clearance in padding so spacers on mounting bolts rest against passenger side of metal dash as shown in sketch on reverse side. Install heater mounting bolts and pipes through drilled holes in dash. Install defroster hoses to heater outlets before tightening heater in place.

After defroster hoses are installed to heater, tighten heater securely to dash by means of spacers, washers, lockwashers and nuts furnished.

SWITCH

Remove Knob from switch by means of straight pull, then unscrew notched nut and remove chromium plated collar. Back hexagon nut on switch up until proper amount of thread extension to allow for thickness of dash is obtained. Tighten all switch terminal screws making sure that rubber insulating sleeves do not touch resistance coils. Install switch through hole in lip of dash on left side of steering column. Install plated collar and notched nut and tighten by means of wrench furnished. Snap knob in place. On FORD models connect brown jumper wire from heater switch to RED AND BLACK lead ignition switch terminal. On MERCURY models connect jumper wire at FUSE BLOCK to RED AND BLACK wire terminal. This method permits the heater motor to run only when the ignition switch is on.

On FORD models ground the GREEN heater lead with spade terminal to nearest screw to left of steering column. On MERCURY models ground to bolted belt rail.

Slip Operating Instructions tag over switch knob.

WATER CONNECTIONS

Drain water from engine, being careful not to lose anti-freeze solution.

On some 1939 models, the boss in FRONT of right hand head is not tapped. In this case, obtain Heat Indicator Adapter No. 91A-15140 from Service Department and make left hand bank installation.

For usual installation (right hand bank), use following method: Remove pipe plug from tapped hole in boss on FRONT of right hand head. Apply thread cement to Shut-Off Cock and screw it into this tapped hole. Install hose from Shut-Off Cock to BOTTOM heater pipe, securing with hose clamps.

Remove one end of LOWER right hand radiator hose and install LOWER hose nipple assembly, using pipe thread cement to prevent leaks. Replace lower radiator hose and install heater hose from this point to UPPER heater tube. Tighten hose clamps and support hose to conduit by means of the "hose-to-conduit clamps" furnished. Twist "hose-to-conduit clamps" so as to eliminate sharp kinks in heater hose at points of support.

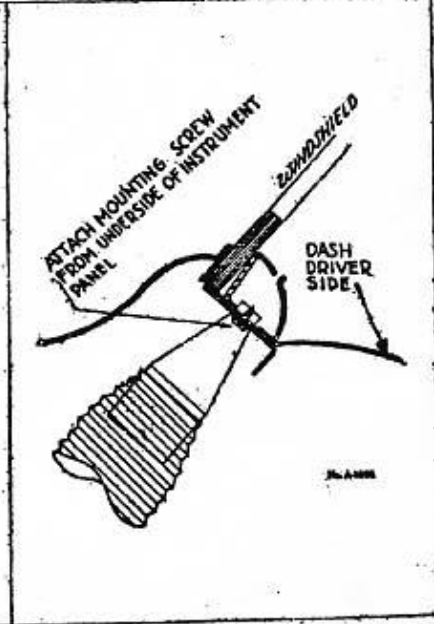
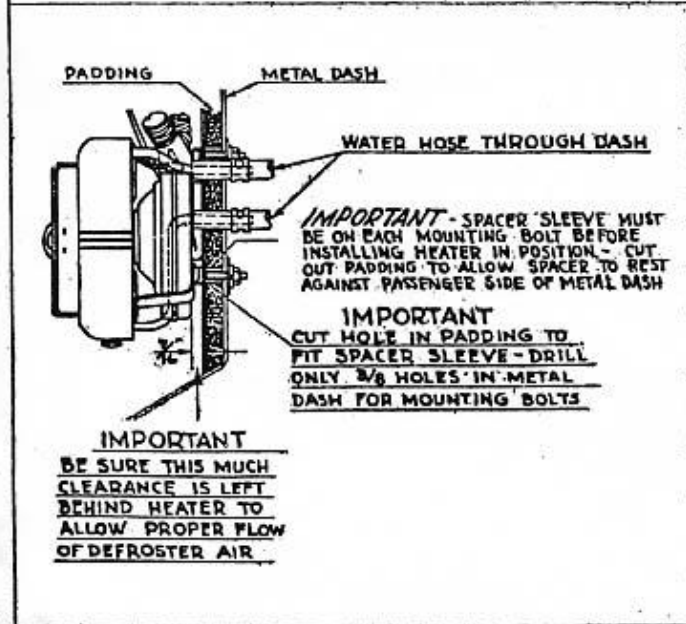
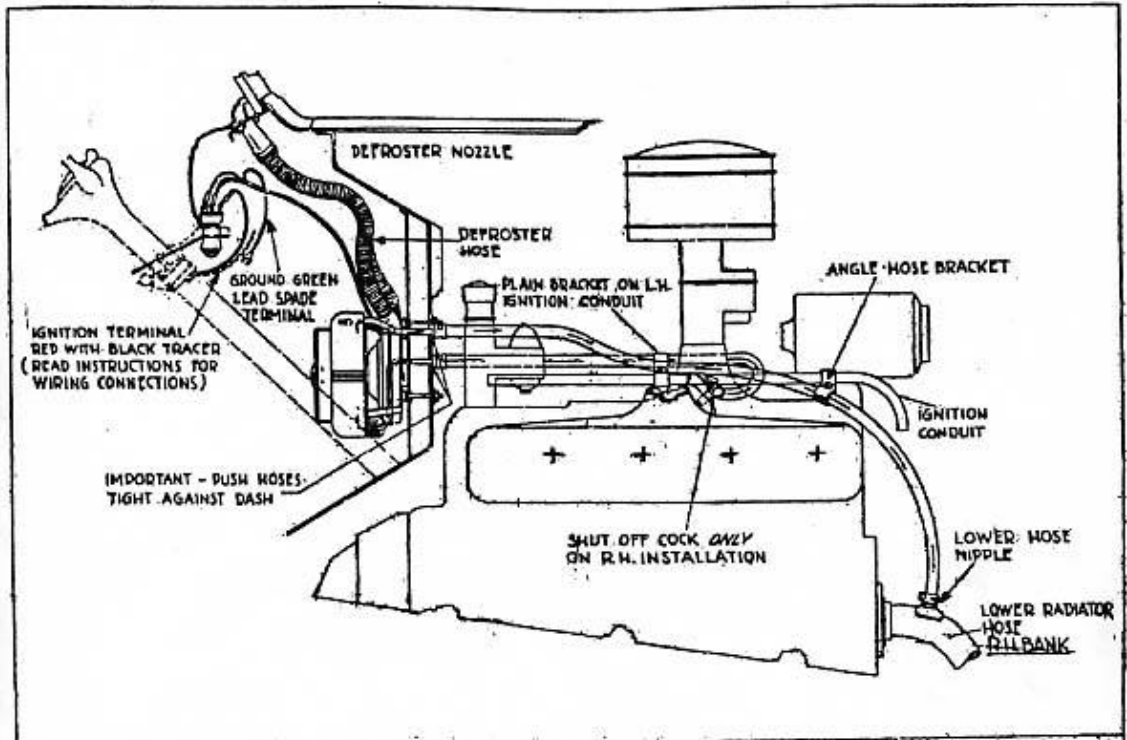
CHECK CAREFULLY THE FOLLOWING BEFORE YOU CONSIDER THE INSTALLATION COMPLETED

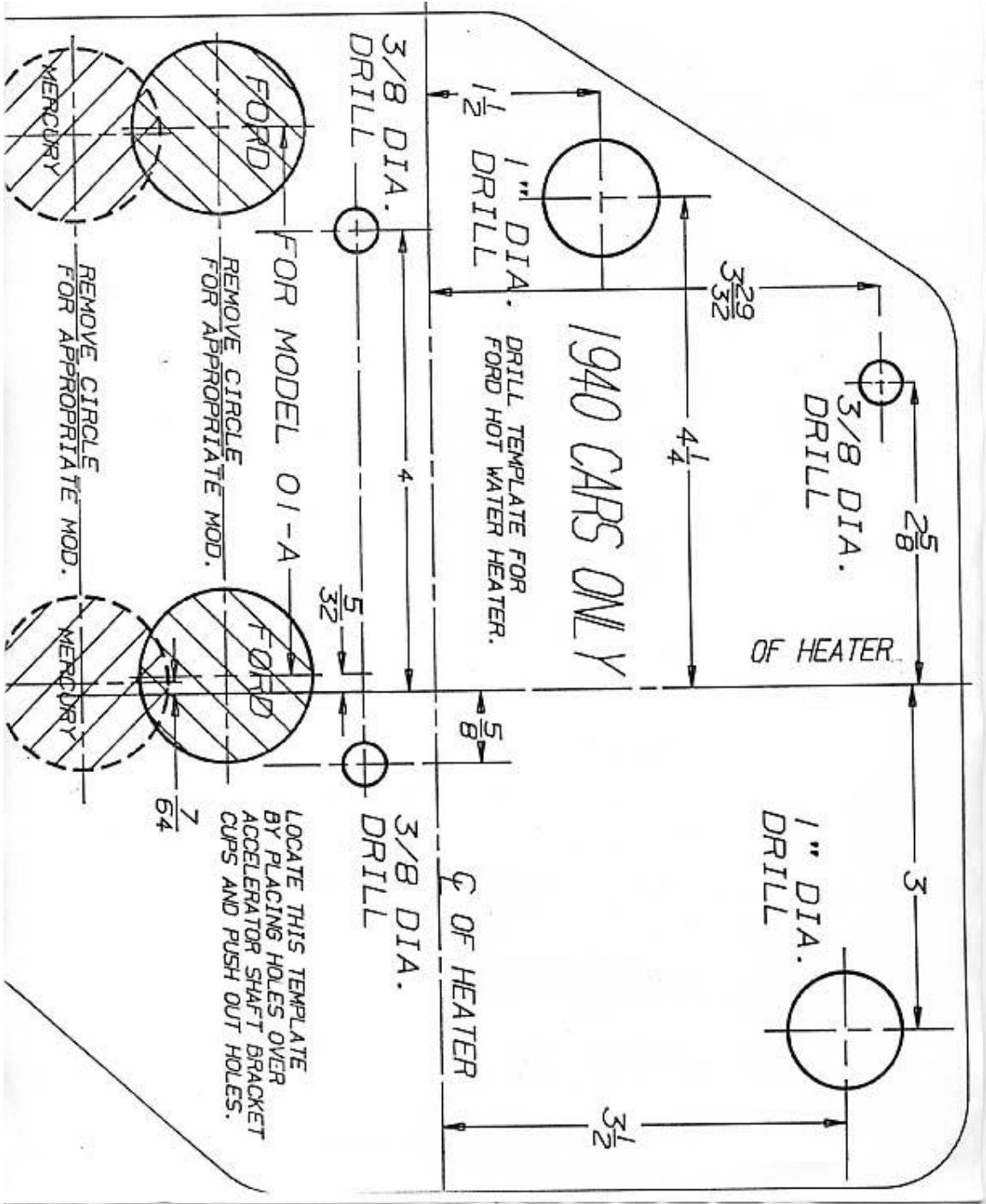
1. Make certain hose does not contact intake manifold.
2. Be sure heater hoses are pushed tightly through the dash to provide a seal against motor noises entering the car and to prevent chafing of water tubes against the metal dash.
3. After re-filling radiator, start engine, check for leaks, and bleed air from heater by removing hose from TOP heater pipe and replacing when water starts to flow from heater pipe. Built-in Automatic Air Bleed will keep heater free from air and gurgles.
4. Back of heater must be at least $\frac{1}{4}$ " from dash padding to allow defroster air to flow without restriction.
5. Be sure Instruction Tag is attached to Switch Knob.
6. Be sure that inlet and outlet hose connections are made to SAME SIDE of motor. Cross connections seriously impair efficiency.
7. Check switch in all five operating positions and make sure all lettering on switch knob is visible from the driver's seat.

SERVICE PARTS FOR O1A-18455-B HOT WATER HEATER

PARTS LISTED ARE COMMON TO ALL MODEL HEATERS EXCEPT LAST THREE ITEMS

Part Name	Ford Part No.	Part Name	Ford Part No.
Hot Water Heater Unit Assembly	01A-18478-B	Hot Water Heater Rubber Hose Clamp	91A-15161
Hot Water Heater Front Case Assy. (Complete)	01A-15149	Hot Water Heater Shut-Off Cock Assy.	91A-15142
Hot Water Heater Motor Assy. (Wiring inc.)	91A-18527-B	Hot Water Heater Heat Indicator Adapter	91A-15140
Hot Water Heater Core Assembly	91A-15133	Hot Water Heater Rad. Hose Nipple Assy.	91A-15160
Hot Water Heater Motor Wire Assy.	91A-18457	Hot Water Heater Hose Brkt. Assy.-Front	91A-15151
Hot Water Heater Fan and Blower Wheel Assy.	91A-15129	Hot Water Heater Hose Brkt. Assy.-Rear	91A-15152
Hot Water Heater Defroster Valve Control Rod Assy.	91A-18548-B	Hot Water Heater Defroster Hose	91A-18556
Hot Water Heater Defroster Valve Control Rod Knob	91A-18562	Hot Water Heater Defroster Nozzle Assy.	91A-18491-B
Hot Water Heater Defroster Valve & Housing Assy.	91A-18555	Hot Water Heater Defroster Nozzle Deflector (For 91A only)	78-18534
Hot Water Heater Blower Switch	01A-15122-B	Hot Water Heater Defroster Noz. Deflec. Assy. (For 99A only)	99A-18491-B
		Hot Water Heater Defroster Nozzle (For O1A and O9A only)	01A-18491-B





1939 - 1940 HEATER ASSEMBLY HINTS

Most 1939 and early 1940 heaters used #8 x 32 fillister head screws to secure the outer cover and the squirrel-cage cover. The later 1940 design used the coarse #8 sheet metal screws in one or both of these places. Determine which thread style you have, enough of both style screws are included.

When mounting the motor into the cabinet first install the rubber grommets into the mounting holes. Place and center the gasket between the grommets and, if necessary, trim grommet edges to assure that gasket sits flat on the panel. Install motor through grommets and place flat washers over grommets followed by star washers and nuts. If you still have the original self aligning flat washers use them instead of the supplied washers. Tighten nuts evenly insuring that flat washers seat in center of grommets. Be certain motor is rigidly secured to rear panel.

The 1 inch diameter heater core to outer cabinet supports fit under cabinet cover and are centered on top and bottom of heater core edges. When these squeeze into this area after the cover is secured the heater core will be held firmly.

The doorstops fit into the notches on the left and right side under the outer cover and are installed before the cover is attached to heater. These are necessary to prevent the doors from closing inward and contacting the heater core.

LIST OF CONTENTS

A. MOTOR MOUNTING PIECES:



Insulator Grommet (2)



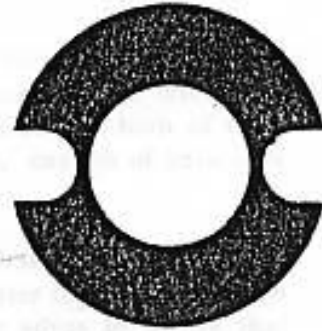
Flat Washer (2)



Star Washer (2)



Nut (2)



Motor to Cabinet Gasket (1)

B. CABINET HARDWARE:



#8 Coarse Panhead Sheet Metal Screw (12)



#8 x 32 Fillister Head Screw (7)



#6 Panhead Sheet Metal Screw for Door Knobs (4)

C. OTHER PIECES:



Doorstops (2)



Exterior Trim Clips (4)

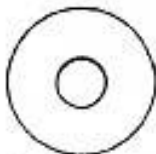


Heater Core to Outer Cabinet Support (2)

D. FIREWALL MOUNTING HARDWARE:



5/16 Flat Washer (3)



5/16 Lock Washer (3)



5/16 Special Heavy Nut (3)