

-FOR TRIPLE TREAT-
INSTRUCTIONS FOR ADDING FIREYE SAFETY
(#890 CONTROL BOX) TO #142 MANUAL IN THE FIELD

CONSULT FORM NO. 460. CHANGE PIPING ON RIGHT SIDE OF THE FURNACE AS SHOWN. INSTALL SPARK IGNITER AND INSULATING COUPLING.

INSTALL SOLENOID VALVE IN THE GAS LINE AND GAS PRESSURE REGULATOR.

CONSULT FORM NO. 202 AND INSTALL AIR SCOOP IN BLOWER HOUSING.

THE NO. 890 CONTROL BOX CAN BE BOLTED TO THE ANGLE IRON BENCH FRAME. SEE FORM NO. 981

CONNECT PLASTIC TUBE FROM AIR SWITCH CONNECTION (IN BACK SIDE OF CONTROL BOX) TO AIR SCOOP IN BLOWER. MAKE SURE THE AIR SCOOP STAYS IN THE PROPER POSITION.

CONNECT THE IGNITION LEAD TO THE SPARK IGNITER.

CONNECT THE SCANNER TO THE INSULATING COUPLING.

CONSULT FORM NO. 584. CONNECT 115 VOLT POWER SOURCE TO THE BLACK AND WHITE LEADS EXTENDING FROM THE CONTROL BOX. CONNECT THE ORANGE AND WHITE LEADS TO THE BLOWER MOTOR. CONNECT THE YELLOW AND WHITE LEADS TO THE SOLENOID VALVE.

CONSULT LIGHTING AND OPERATION INSTRUCTIONS FOR LIGHTING THE FURNACE.

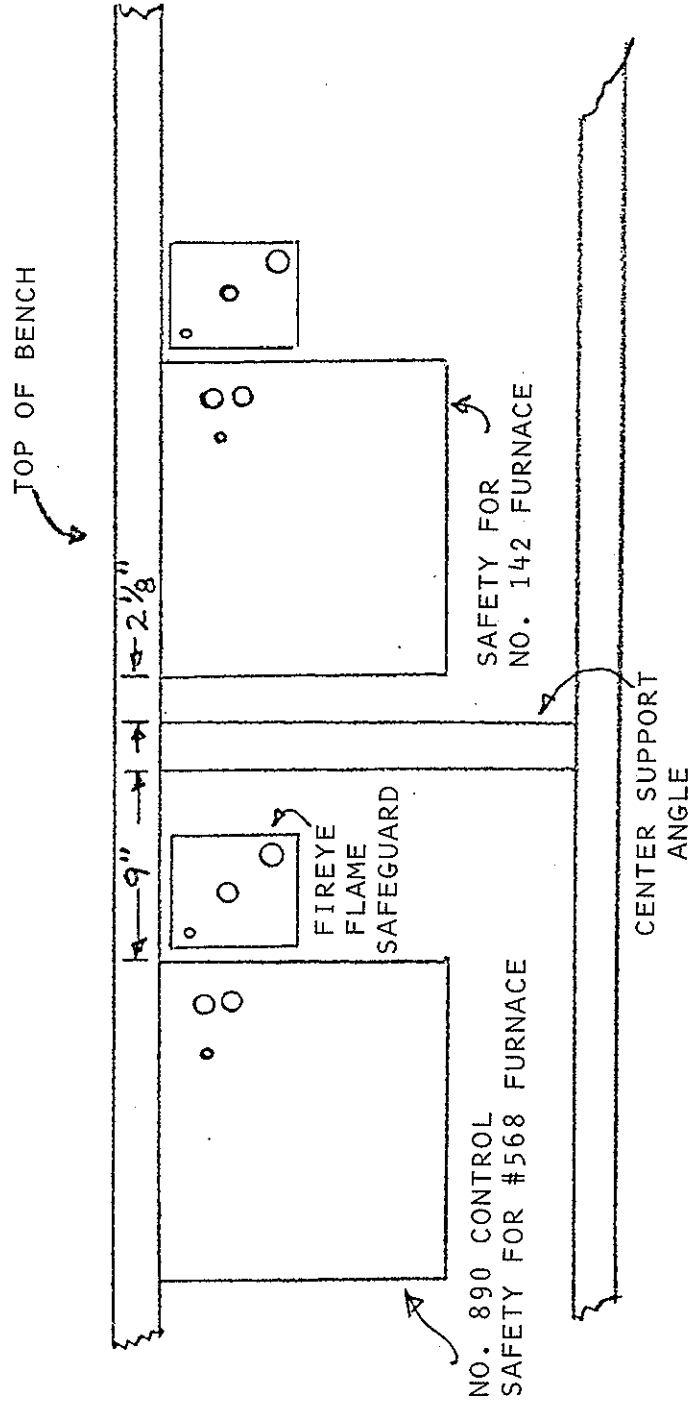
MATERIAL REQUIRED FOR ADDING FIREYE SAFETY

[890 CONTROL BOX TO #142 NO SAFETY IN FIELD ON TRIPLE TREAT]

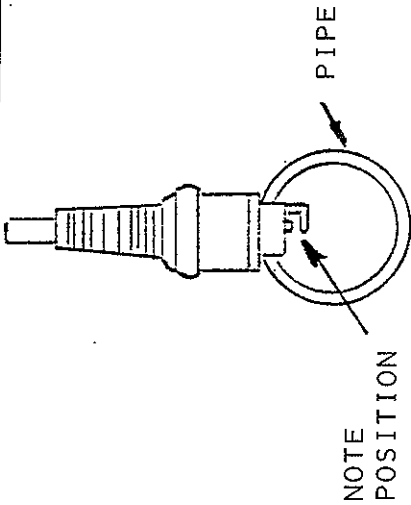
- 1- 3/4" SOLENOID VALVE
- 1- NO. 890 CONTROL BOX WITH TRANSFORMER, START-STOP STATION, RELAY, INDICATOR LIGHT, FIREYE UVM-1 CONTROL, AIR SWITCH AND BRACKET FOR MOUNTING TO BENCH.
- 1- UV-1 SCANNER
- 1- 1/2" LENGTH 3/8" PLASTIC TUBE WITH FITTING FOR AIR LIINE AND STRAIGHT AIR SCOOP.
- 1- 3/4" ELBOW
- 1- 1" X 11" NIPPLE
- 1- 3/4" X 2" NIPPLE WITH TAPPED HOLE FOR SPARK IGNITER.
- 1- 3/4" X 2" NIPPLE
- 1- 3/4" X 1/2" X 3/4" TEE
- 1- 1/2" CLOSE NIPPLE
- 1- SPARK PLUG CHAMPION UY-6 OR EQUIVALENT
- 1- 3/4" RV 43 PRESSURE REGULATOR
- 2- 1/4 X 1/2 RHMS WITH NUTS
- 2- 10-24 X 1/2 RHMS WITH NUTS

FORMS: NO.'S 584, 202, 460, 1094, 981, 982, 983

MOUNTING NO. 890 BOX ON 252 TRIPLE TREAT BENCH

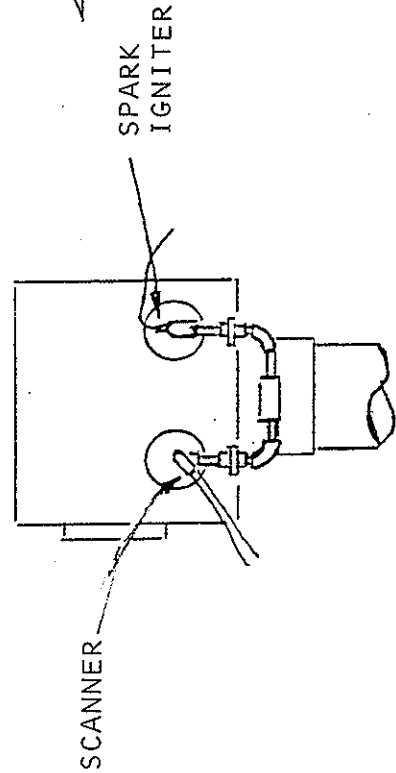
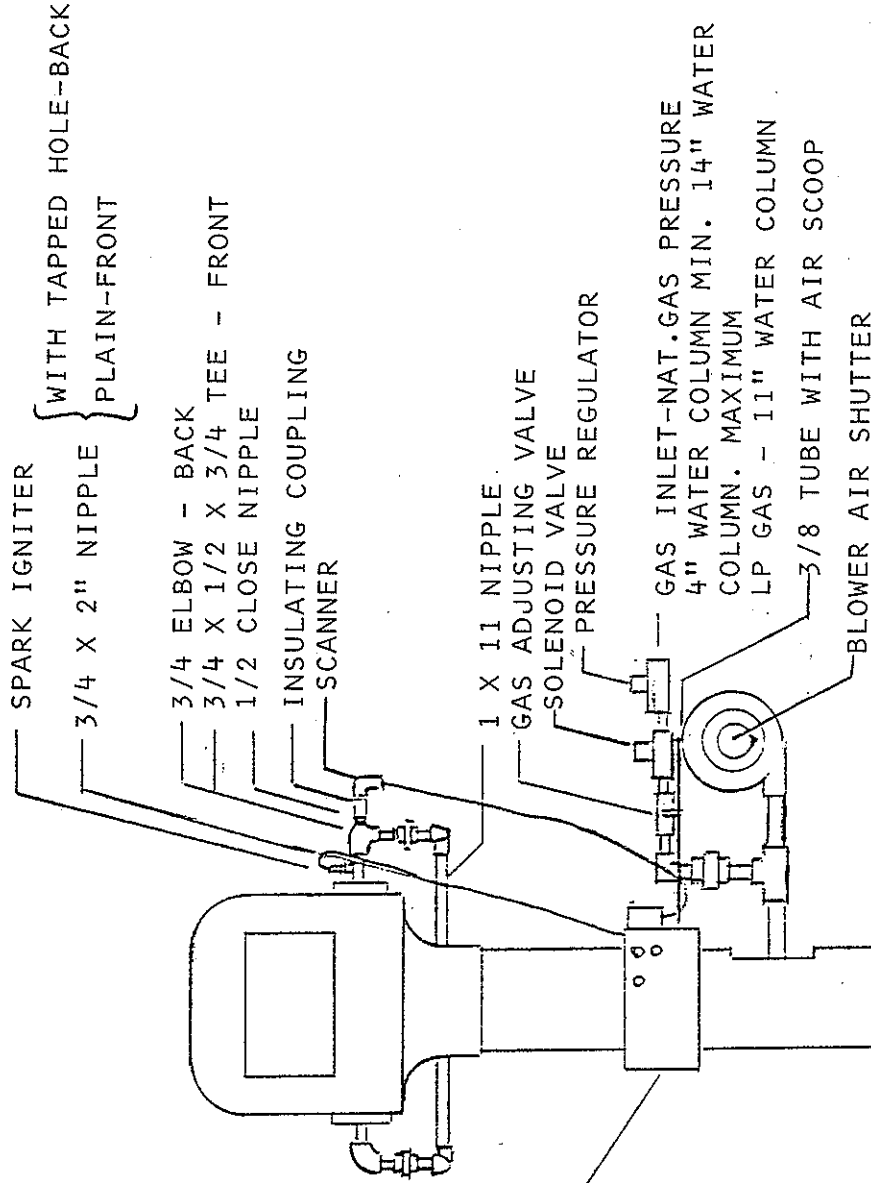


POSITION NO. 890 BOX WITH FRONT OF BOX EVEN WITH FRONT OF TOP ANGLE. MARK THE ANGLE FOR THE TWO HOLES THAT ARE IN THE TOP OF THE BOX. MARK THE SHEET METAL TOP FOR THE TWO HOLES THAT ARE IN THE ANGLE BRACKET. DRILL 9/32 HOLES THROUGH ANGLE. DRILL 7/32 HOLES THROUGH TOP. USE 1/4 BOLTS AND NUTS THROUGH ANGLE & NO. 10 BOLTS AND NUTS THROUGH SHEET METAL TOP.



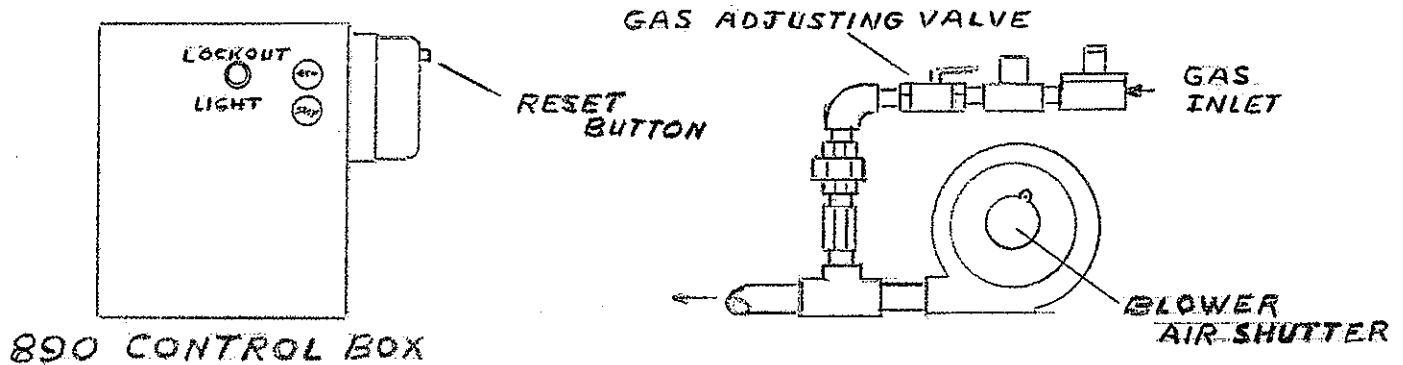
FOR PROPER IGNITION POSITION SPARK PLUG AS SHOWN.

NO. 890 CONTROL BOX. [ON BENCH TYPE FURNACE BOX IS MOUNTED ON BENCH]



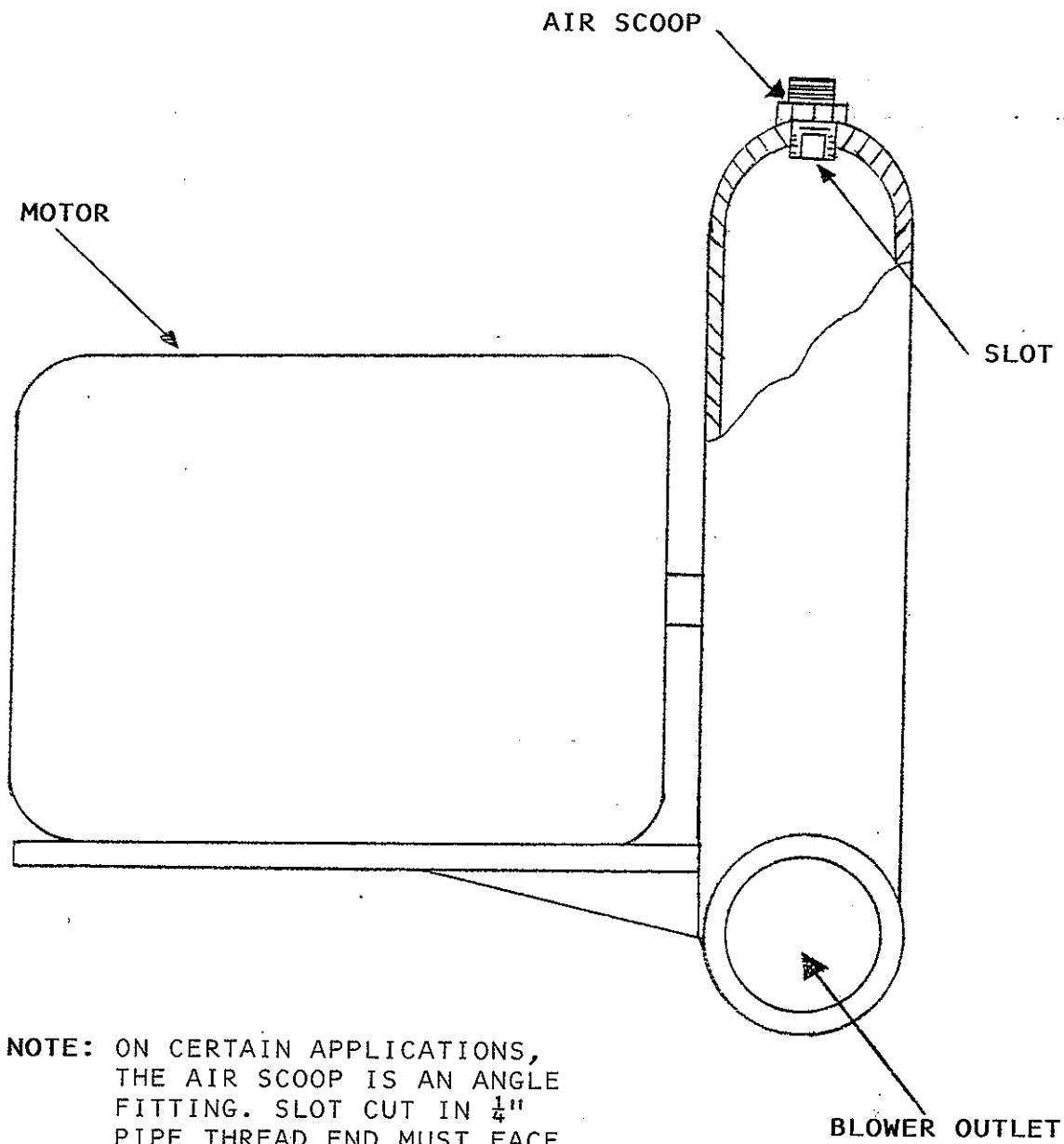
VIEW OF RIGHT SIDE

**LIGHTING AND OPERATING INSTRUCTIONS FOR FURNACE WITH
#890 CONTROL BOX (FIREYE UVM-1D FLAME SAFEGUARD) AND
EITHER GARDSMAN "J" AUTOMATIC OR MANUAL TEMPERATURE CONTROL**



AFTER ALL WIRING AND PIPING ARE COMPLETED:

1. SET BLOWER AIR SHUTTER 1/2" OPEN. GAS ADJUSTING VALVE SHOULD BE CLOSED.
2. IF YOU HAVE AUTOMATIC TEMPERATURE CONTROL, SET THE POINTER TO YOUR DESIRED OPERATING TEMPERATURE.
3. DEPRESS AND RELEASE THE START BUTTON. THE BLOWER MOTOR WILL COME ON AND IN ABOUT 5 SECONDS, YOU WILL HEAR THE FIREYE CONTROL CONTACTS CLICK AND THE SPARK IGNITER "BUZZING". YOU THEN SLOWLY OPEN THE GAS ADJUSTING VALVE JUST TO THE POINT WHERE THE BURNERS IGNITE. NOTE: IF YOU DEPRESSED THE START BUTTON AND THE RED LOCKOUT LIGHT IS ON, YOU WILL HAVE TO DEPRESS THE RED RESET BUTTON THAT IS ON THE FIREYE CONTROL. THE LIGHT SHOULD GO OUT AND THE SPARK IGNITER WILL START "BUZZING". YOU CAN THEN SLOWLY OPEN THE GAS ADJUSTING VALVE TO THE POINT WHERE THE BURNERS IGNITE. IF YOU DEPRESSED THE RESET BUTTON AND THE LIGHT DID NOT GO OUT, WAIT ABOUT 30 SECONDS AND THEN DEPRESS THE RESET BUTTON.
4. AFTER THE FURNACE HAS WARMED UP ABOUT 10 MINUTES, ADJUST THE GAS ADJUSTING VALVE TO OBTAIN A SHARP TAIL OF FLAME OUT THE EXHAUST OPENING OF THE FURNACE. IF YOU HAVE NO FLAME, INCREASE THE AMOUNT OF GAS. IF YOU HAVE A HIGH, LAZY FLAME, DECREASE THE AMOUNT OF GAS.
5. TO INCREASE THE GAS INPUT, INCREASE THE BLOWER SHUTTER OPENING A SMALL AMOUNT AND THEN ADJUST THE GAS VALVE TO OBTAIN THE SHARP TAIL OF FLAME. REPEAT THIS PROCEDURE UNTIL THE DESIRED OR MAXIMUM GAS INPUT IS REACHED.
6. TO DECREASE THE AMOUNT OF GAS, DECREASE THE BLOWER SHUTTER OPENING A SMALL AMOUNT AND THEN ADJUST THE GAS VALVE TO OBTAIN A SHARP TAIL OF FLAME. REPEAT THIS PROCEDURE UNTIL THE DESIRED OR MINIMUM GAS INPUT IS REACHED.
7. TO SHUT DOWN THE FURNACE, DEPRESS AND RELEASE THE STOP BUTTON. THEN TURN THE GAS VALVE TO THE CLOSED POSITION.

POSITION OF AIR SCOOP IN BLOWER

NOTE: ON CERTAIN APPLICATIONS,
THE AIR SCOOP IS AN ANGLE
FITTING. SLOT CUT IN $\frac{1}{4}$ "
PIPE THREAD END MUST FACE
SAME DIRECTION AS BLOWER
OUTLET.