

FIELD REASSEMBLY FOR FORM 3 and FORM 7 SHIPMENT

COOLING R-11 & R-123

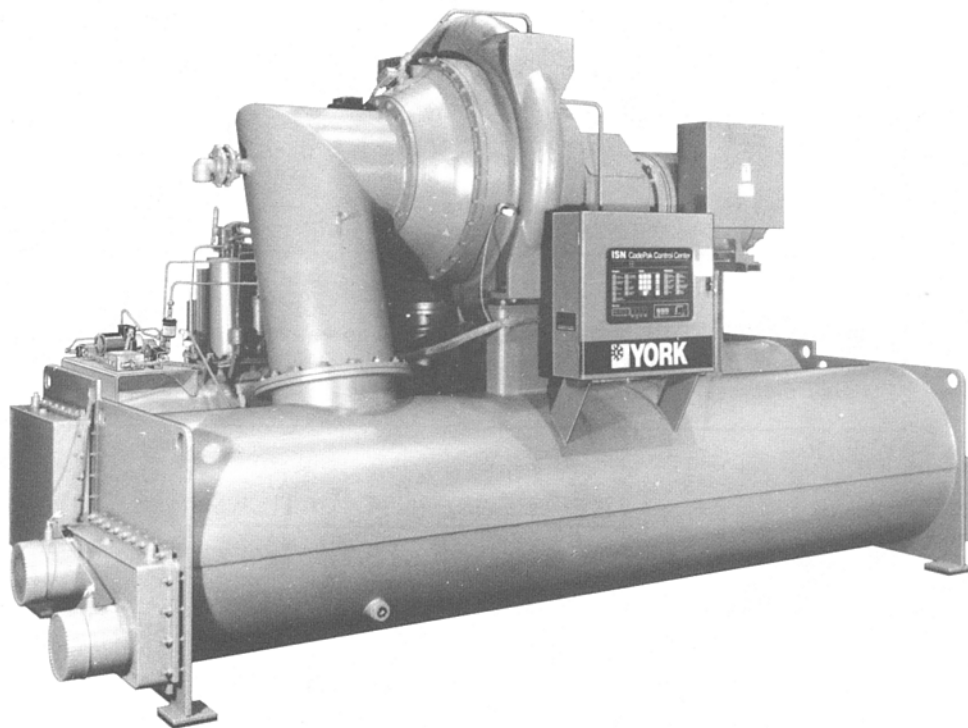
MODEL YT A1 A1 B1 THRU YT L6 L6 F2 (STYLES E & F)

HEAT RECOVERY R-11 & R-123

MODEL YT A1 M1 B1 THRU YT L6 X6 F2 (STYLES E & F)

Archived Version

THIS INSTRUCTION IS TO BE USED IN CONJUNCTION WITH
CODEPAK INSTALLATION INSTRUCTION, FORM 160.46-N1
OR FORM 160.46-N3.2 IF TURBO-MODULATOR IS PART OF
JOB APPLICATION



WARNING

SYSTEM CONTAINS REFRIGERANT UNDER PRESSURE.
SERIOUS INJURY COULD RESULT IF PROPER PROCEDURES
ARE NOT FOLLOWED WHEN SERVICING SYSTEM. ALL
SERVICE WORK SHALL BE PERFORMED BY A QUALIFIED
SERVICE TECHNICIAN IN ACCORDANCE WITH YORK
INSTALLATION/OPERATION MANUAL.

TABLE OF CONTENTS

CODEPAK FIELD ASSEMBLY

GENERAL	3
RIGGING DATA	3
INSTALLATION	3

TABLE OF ILLUSTRATIONS

RIGGING COMPRESSOR ASSEMBLY	5
MODELS YT A1 A1 B1 THRU YT F3 S3 C2	
DESCRIPTIVE PHOTOS	6, 7
ASSEMBLY DRAWINGS	8, 9
MODELS YT A1 A1 B1 THRU YT L3 X3 E3	
DESCRIPTIVE PHOTOS	10
ASSEMBLY DRAWINGS	11, 12
MODELS YT K4 J4 F1 THRU YT L6 M6 F2	
DESCRIPTIVE PHOTOS	13 - 16
ASSEMBLY DRAWINGS	16, 17
SOLID STATE STARTER MOUNTING	18, 19
BURSTING DISC ASSEMBLY	19

NOTE

In July, 1993 YORK introduced into production a new pump assisted purge unit. (See Form 160.46-O1 for details.) Photos and illustrations in this manual show either the original or the new design purge unit.

REFERENCE INSTRUCTIONS

FORM 160.46-N1	– INSTALLATION (STYLES E & F)
FORM 160.46-N3.2	– TURBO-MODULATOR (STYLES E & F)
FORM 160.46-O1	– CODEPAK OPERATING INSTRUCTION (STYLES E & F)
FORM 160.46-PA2.1	– SOLID STATE STARTER (STYLE E)
FORM 160.48-PA6.1	– SOLID STATE STARTER (STYLE F)
FORM 160.46-PA2.2	– ELECTRO-MECH. STARTER (STYLE E)
FORM 160.48-PA7.1	– ELECTRO-MECH. STARTER (STYLE F)
FORM 160.46-PA2.3	– CODEPAK TURBO-MODULATOR (STYLE E)
FORM 160.48-PA13.1	– CODEPAK TURBO-MODULATOR (STYLE F)

CODEPAK FIELD ASSEMBLY

GENERAL

This instruction explains the procedure to be used for reassembling the Model YT CODEPAK shipped disassembled. (Shipping Form 3 or 7) CODEPAKS MUST be field assembled under the supervision of a YORK representative. For Installation Instructions other than unit assembly refer to Form 160.46-N1 or 160.46-N3.2.

The dismantled CODEPAKS consist of the following items shipped separately:

1. **Form 3 Shipment – Driveline Separate From Shells –** Shipped as two major assemblies. Unit first factory assembled, refrigerant piped, wired and leak tested; then dismantled for shipment. Compressor/open motor assembly removed from shells and skidded. Evaporator/condenser is not skidded.

All wiring integral with compressor is left on it, and all conduit is left on shell. All openings on compressor and shells are closed and charged with dry nitrogen (2 to 3 psig).

Miscellaneous packaging of control center, purge unit, oil eductor filter, tubing, water temperature controls, wiring, oil, isolators, solid state starter (option), etc; refrigerant charge shipped concurrently or separately in drums as required by amount of operating charge.

2. **Form 7 Shipment – Split Shells –** Shipped as three major assemblies. Unit first factory assembled, refrigerant piped, wired and leak tested; then dismantled for shipment. Compressor/open motor assembly removed from shells and skidded.

Evaporator and condenser shells are separated at tube sheets and are not skidded. Refrigerant lines between shells are flanged and capped, requiring no welding. Tube sheets will require welding in field.

All wiring integral with compressor is left on it. All wiring harnesses on shells are removed.

All openings on compressor and shells are closed and charged with dry nitrogen (2 to 3 psig).

Miscellaneous packaging of control center, purge unit, oil eductor filter, tubing, water temperature controls, wiring, oil, isolators, solid state starter (option), etc; refrigerant charge shipped concurrently or separately in drums as required by amount of operating charge.

RIGGING DATA

For Shell dimensions and weights refer to Product Drawings YT – 160.46-PA1, 160.46-PA2 or 160.46-PA1.7.

INSTALLATION

Refer to Installation Instruction, YT CODEPAK, Form 160.46-N1 or 160.46-N3.2 for other instructions. The following is a step-by-step procedure to be used to assemble the CODEPAK units.

CODEPAK ASSEMBLY

1. Assemble vibration isolation mounts (or optional spring type vibration isolators) in accordance with Form 160.46-N1 or 160.46-N3.2. Place shell in its final location.

OPTIONAL SHIPPING SKIDS – Remove skids from condenser-cooler shell.

OPTIONAL SPRING ISOLATORS – Level shell in both directions. The longitudinal alignment of the shell should be checked by placing a level on the top of the shell, next to the discharge connection. The transverse alignment should be checked by placing a level on the tops of both end sheets. Refer to Installation Instruction, Form 160.46-N1 or 160.46-N3.2 for additional instructions to level unit. After shell is leveled, wedge and shim each corner of the shell to solidly support it while assembling the other parts.

2. Lift compressor-motor assembly or with optional solid state starter and remove packing materials and shipping skids. Keep the compressor unit supported by the hoist until all connections are finally made to the shell assembly. (Refer to Fig. 1 for rigging method.)
3. **Cooler-Condenser Shells –** Remove all refrigerant connection covers (except the suction connection cover – see Steps 12 & 13). Wipe connection surfaces clean and apply required gaskets. If Form 7 Shipment, weld tube sheets together at two places each end.

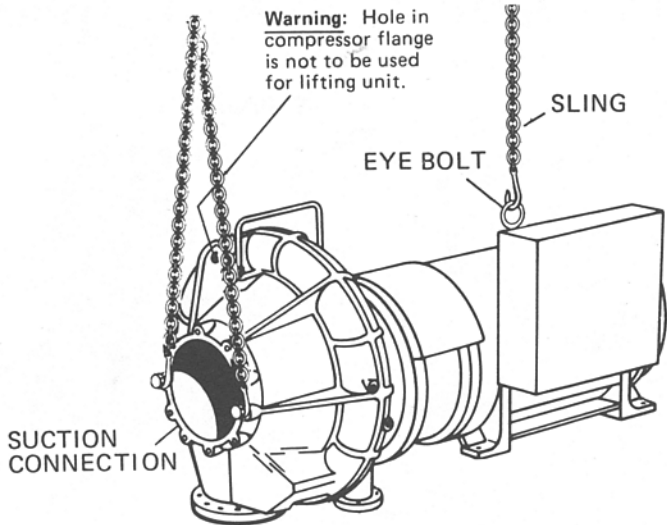
CAUTION: SHELLS ARE SHIPPED WITH A NITROGEN HOLDING CHARGE.

4. **Compressor-Motor Assembly –** Remove all refrigerant connection covers (except the suction connection cover – see Steps 12 & 13). Wipe surfaces of connections clean.

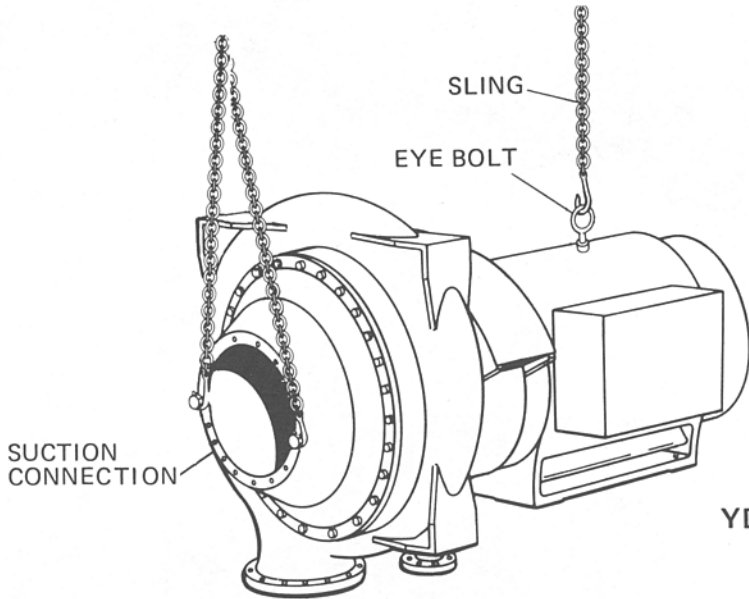
CAUTION: COMPRESSORS ARE SHIPPED WITH A NITROGEN HOLDING CHARGE.

5. Carefully lower the compressor-motor assembly (or with optional solid state starter) unit over the shell, keeping it level in both directions using the bottom of the compressor discharge flange. When level, lower on to flanged shell connection, insert cap screws and tighten nuts snugly. (See Figs. 1, 4, 5 & 6 or 10, 11 & 13 or 17 & 18.)

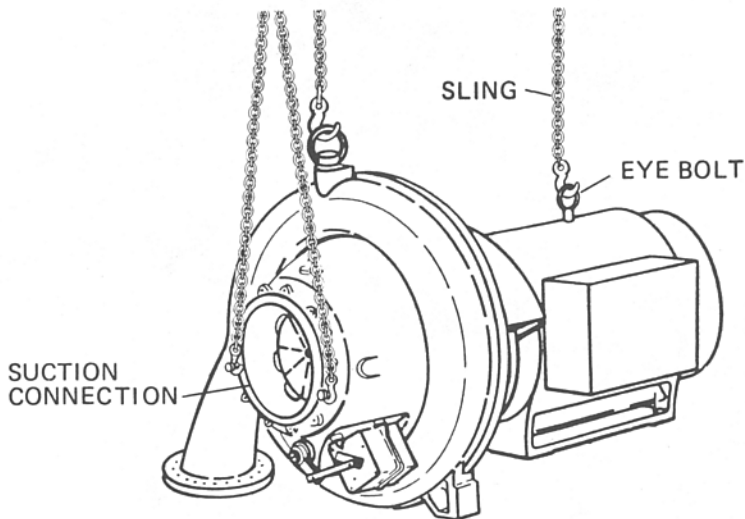
6. Make sure the gasket is between the compressor oil drain flange and the oil sump flange. Fasten the flange of the oil sump flange with Hex. Hd. Cap Screws (1/2 – 13 UNC x 1-1/2" Lg.). Do not tighten screws.
7. Level the compressor-motor, if necessary adjust the screws and nuts to level compressor, and add shims if necessary, between the motor feet and the support.
8. Remove the hoist from the compressor-motor assembly.
9. Remove cover from the compressor suction connection opening. Wipe surface clean.
10. Remove flange protector from the cooler suction flange. Wipe surface clean.
11. Remove flange protectors from the suction connection. Wipe surface clean. With a hoist and a sling lift the suction connection.
12. Place a gasket in the cooler suction flange and lower the suction connection into place. The suction connection flange contains counter bored holes which must slip over the weld studs on the shell suction flange. Line up holes on the compressor. Insert two cap screws in the bottom holes of the compressor suction flange and drop gasket into place between the compressor and the flange. Insert the remaining cap screws, and assemble nuts to weld studs on the cooler suction flange. Tighten nuts at compressor and the cooler suction flange alternately and evenly, to insure a leak tight fit.
13. Mount purge unit. (See Figs. 4, 9, 10 or 14 & 17.)
14. Assemble the Control Center to unit. (See Figs. 4, 5, 10, 11, 15, 17 or 18.) Also see wiring per drawings furnished by York.
15. **Solid State Starter** – Install starter per Figs. 19 & 20 and per drawings furnished by York, Form 160.46-PA2.5. Also install piping connections in accordance with drawings furnished by York.
16. Install refrigerant piping, purge unit piping, oil lines, and oil return system filters per drawings furnished by York.
17. Pressure test prior to installing bursting disc. Refer to Form 160.46-O1.
18. Remove pipe cap from the 2" connection located on the suction connection. Assemble 2 bursting disc flanges, bursting disc and 2 gaskets to the connection with 4 Hex Head Cap Screws and 4 Nuts. Torque screws and nuts to 18 Ft. Lbs. (See Fig. 20.)
19. Evacuate and charge with refrigerant. (Refer to Form 160.46-O1.)
20. **All Units** – Complete installation and finally level the unit per Installation Instruction Form 160.46-N1 or 160.46-N3.2.



YDTJ 65-76
YDTJ 85-95



YDTL 108, 120 AND 126



YDTL 133 AND 144

FIG. 1 – RIGGING COMPRESSOR ASSEMBLY

YT CODEPAK (MODELS YT A1 A1 B1 THRU YT F3 S3 C3)

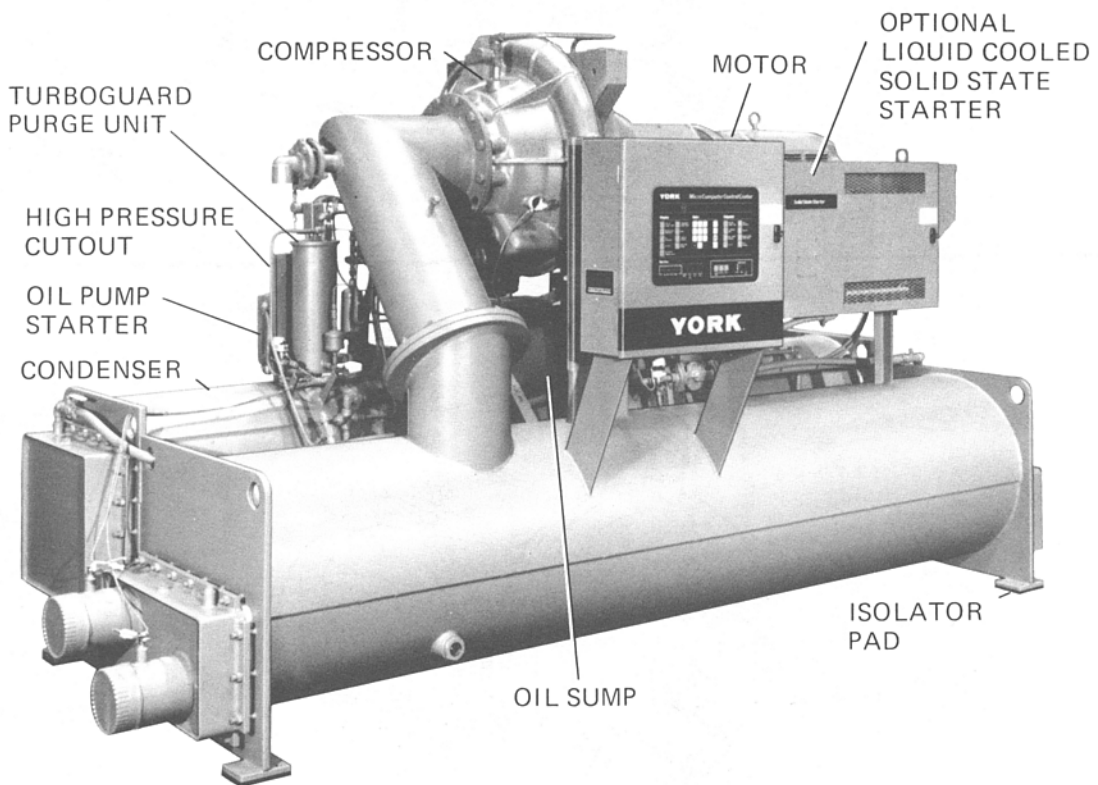
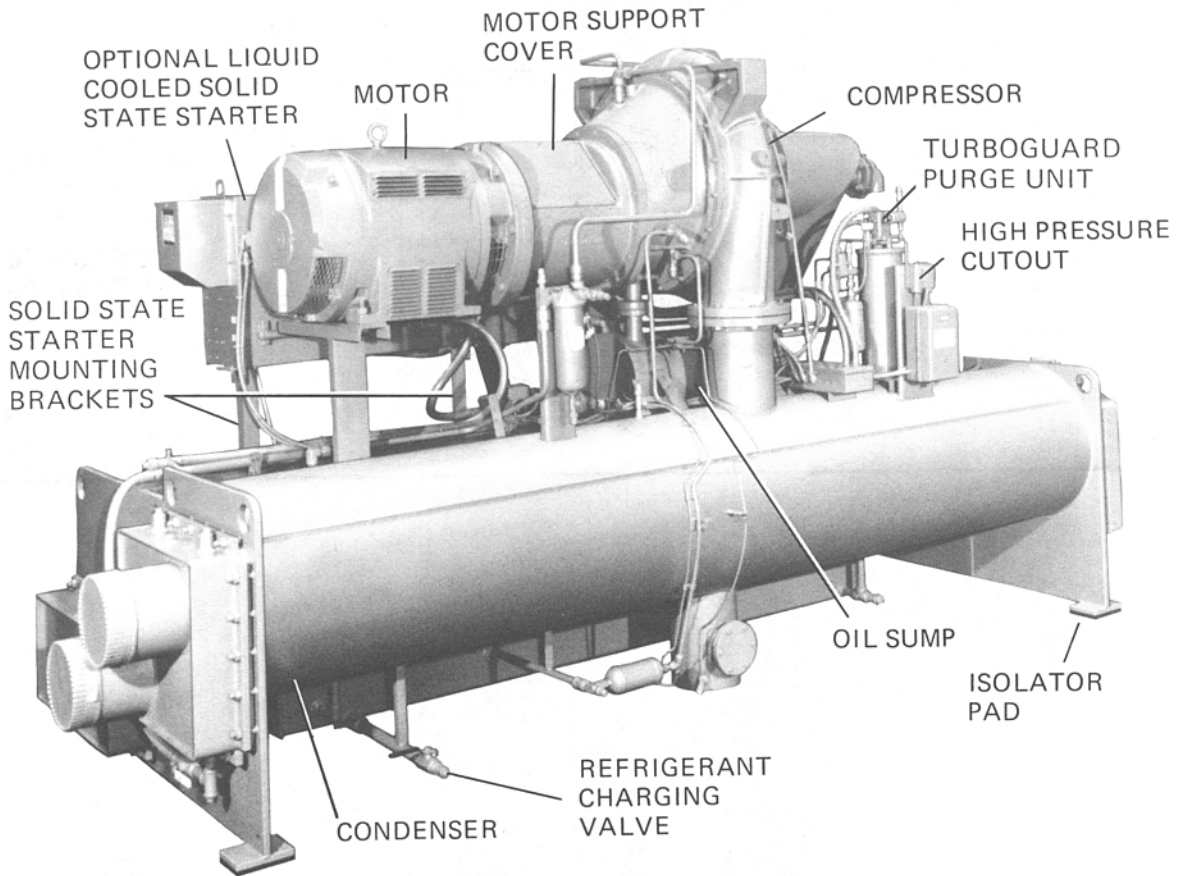


FIG. 2 — MODEL YT CODEPAK

YT CODEPAK (MODELS YT A1 A1 B1 THRU YT F3 S3 C3)

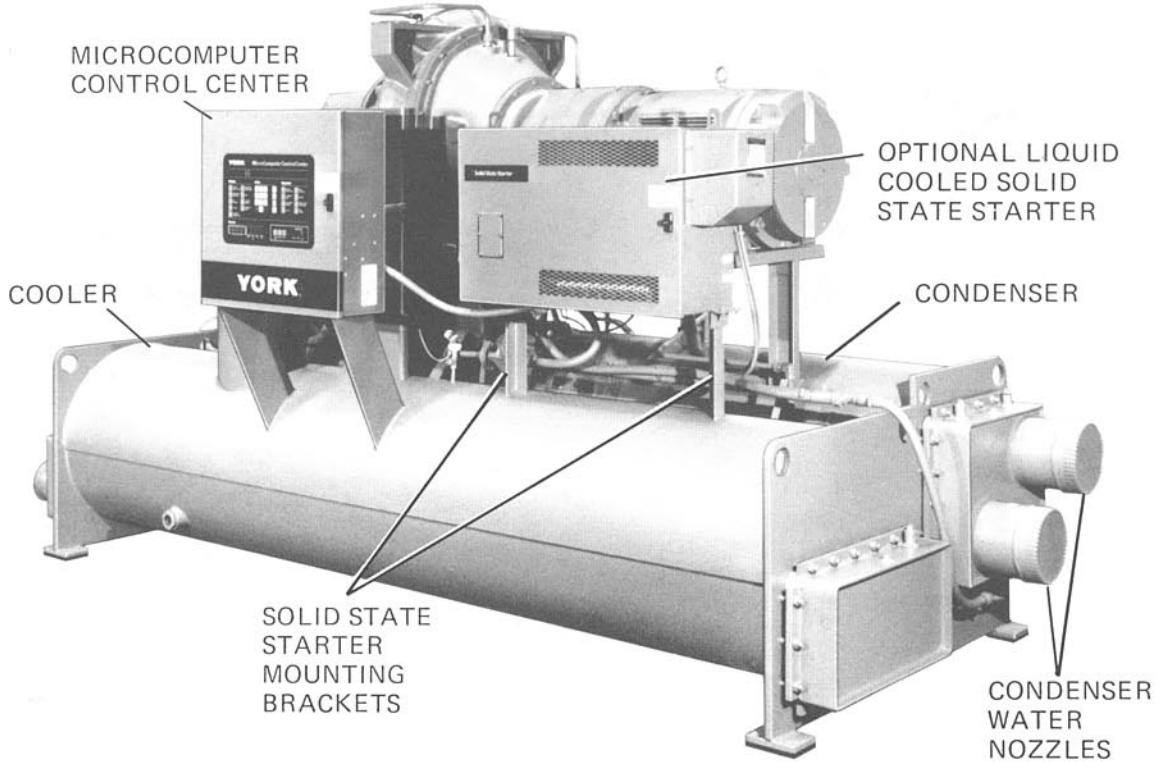
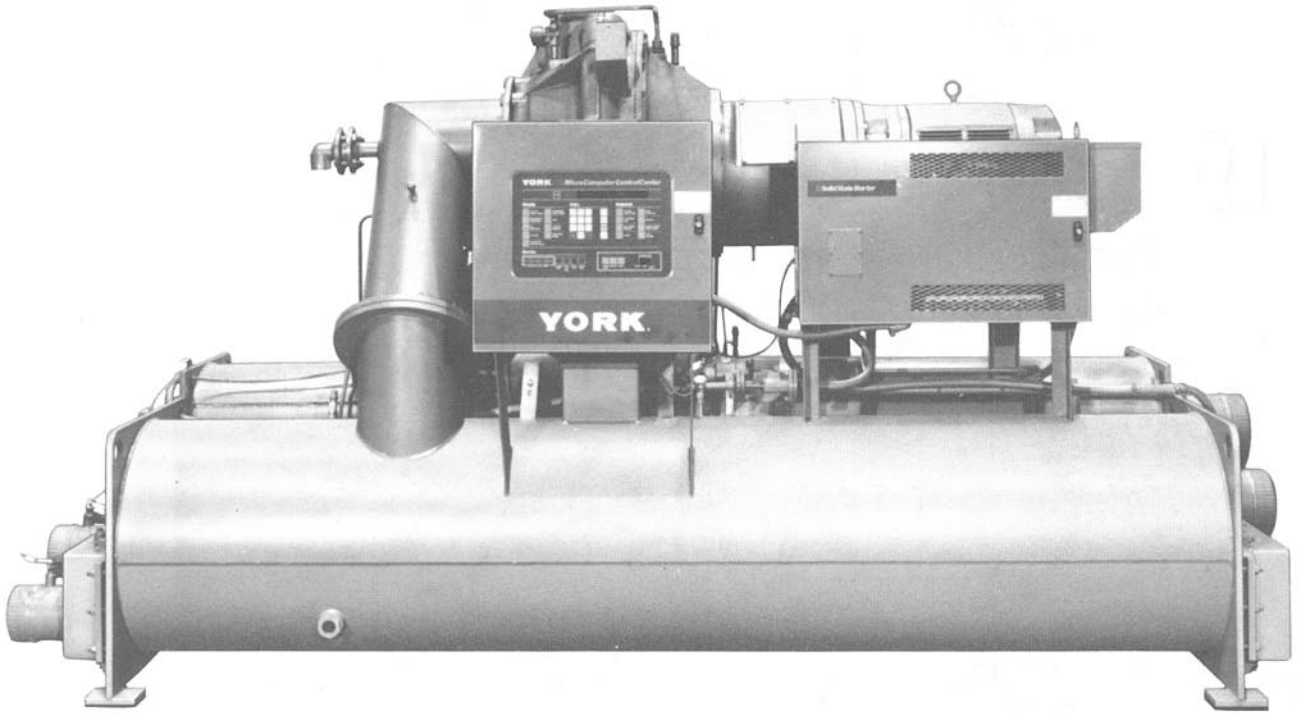


FIG. 3 — MODEL YT CODEPAK

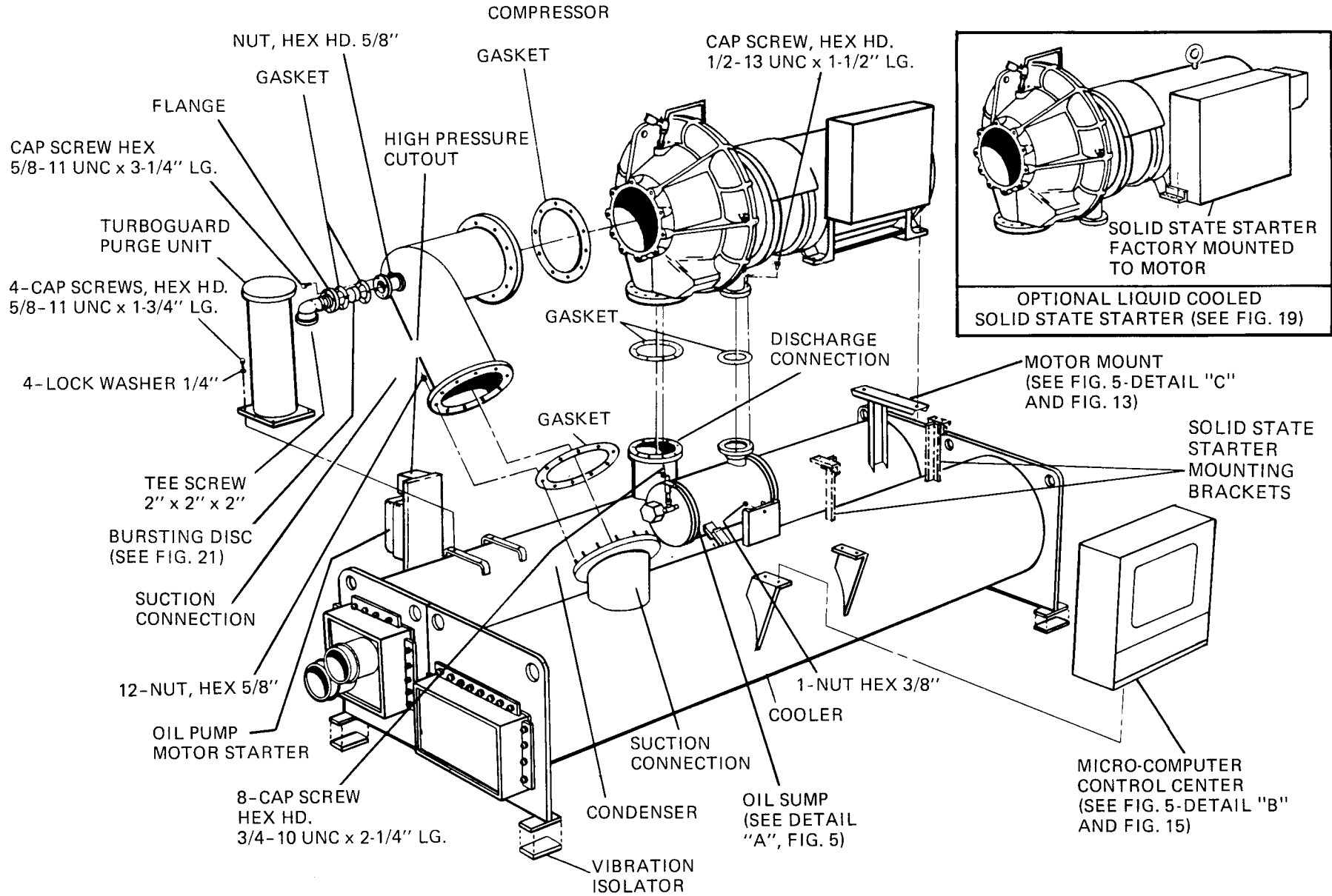


FIG. 4 — MODEL YT CODEPAK EXPLODED VIEW ASSEMBLY (YT A1 A1 B1 THRU F3 S3 C2)

YT CODEPAK (MODELS YT A1 A1 B1 THRU YT F3 S3 C3)

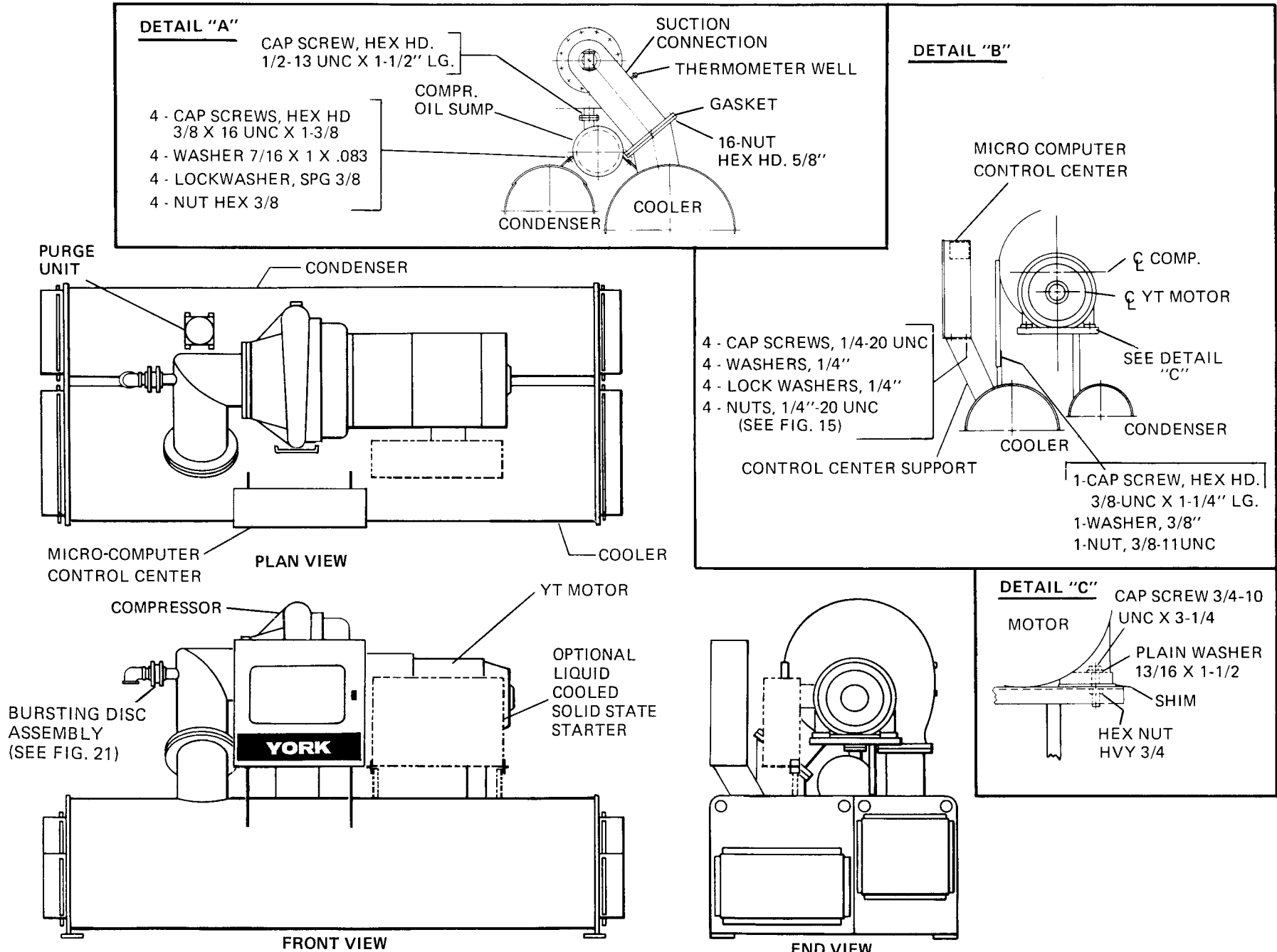


FIG. 5 — FIELD ASSEMBLY MODEL YT CODEPAK (YT A1 A1 B1 THRU F3 S3 C2)

YT CODEPAK (MODELS YT A1 A1 B1 THRU YT L3 X3 E3)

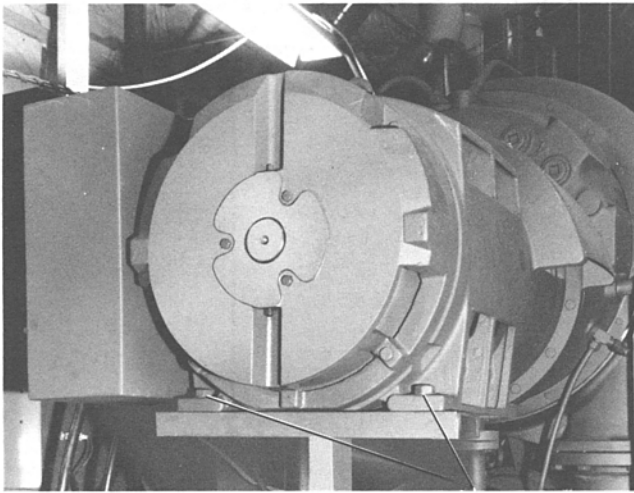
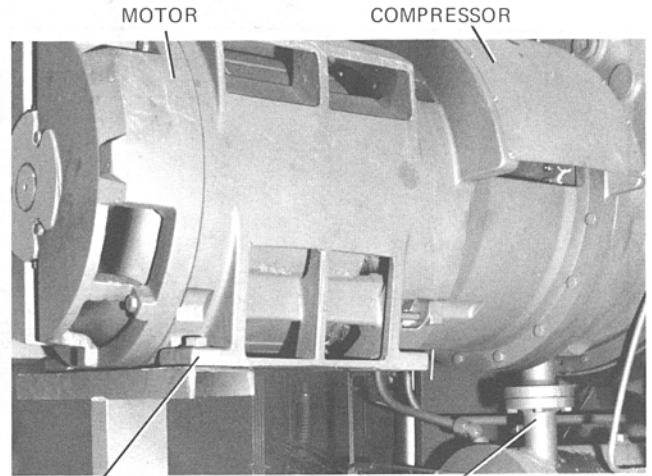


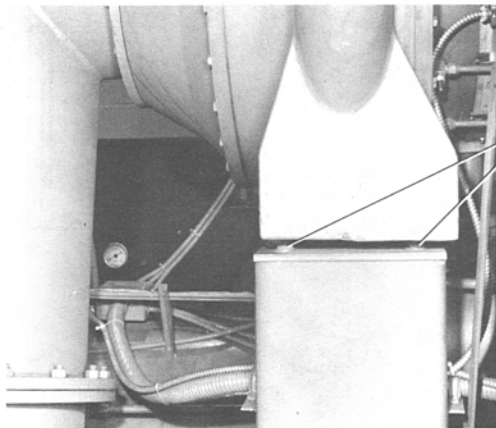
FIG. 6 — MOTOR MOUNTING

SEE DETAIL C
PAGE 12



SEE DETAIL B
PAGE 12

SEE DETAIL A
PAGE 12



**FIG. 7 — COMPRESSOR MOUNTING -
YTH 108, 120, 126 COMPRESSOR**

SEE DETAIL B
PAGE 12

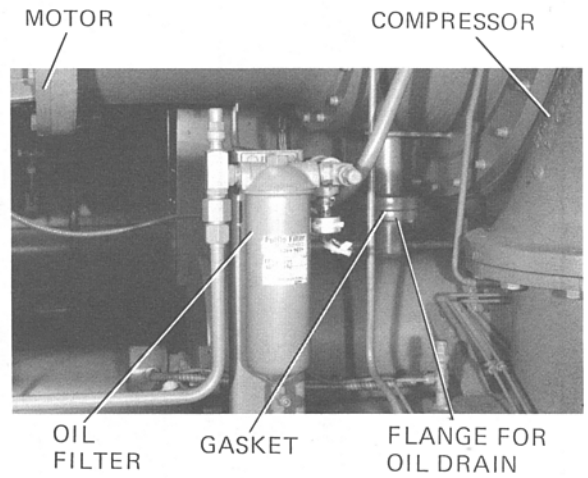


FIG. 8 — OIL FILTER & OIL DRAIN

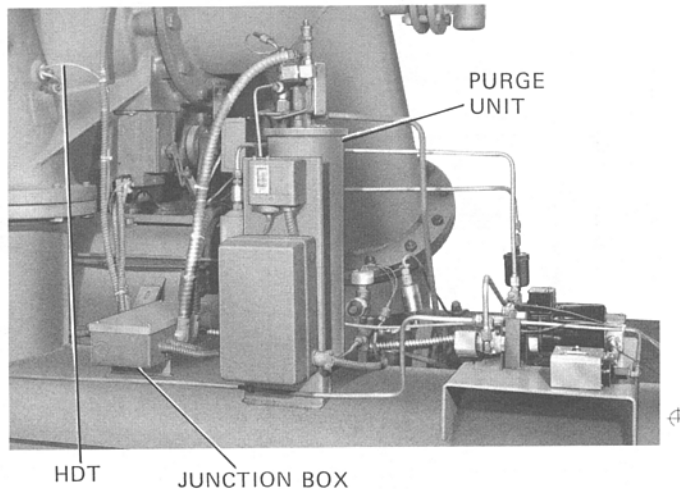


FIG. 9 — PURGE UNIT MOUNTING AND JUNCTION BOX

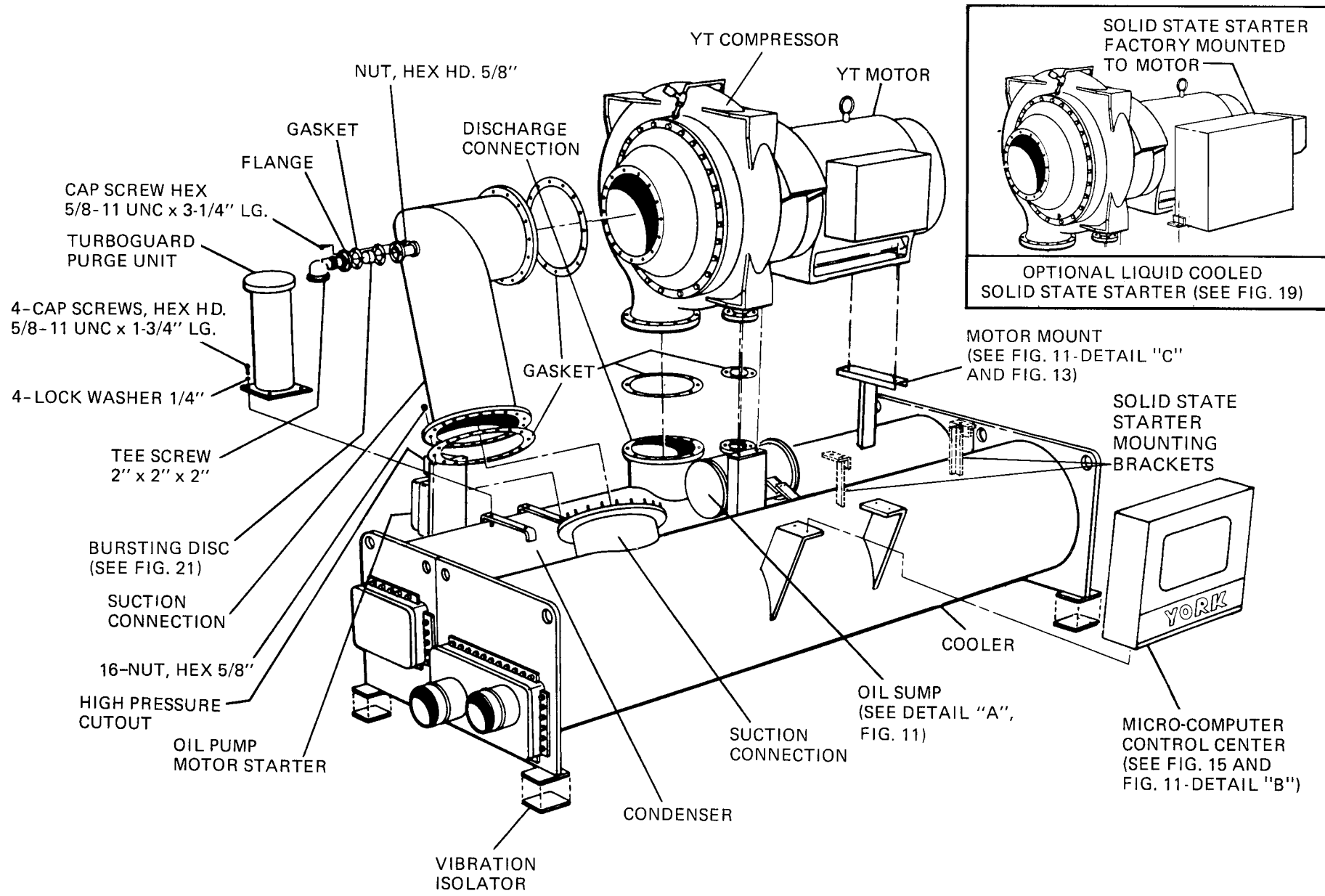


FIG. 10 — MODEL YT CODEPAK EXPLODED VIEW ASSEMBLY (YT G1 G1 E1 THRU YT L3 X3 E3)

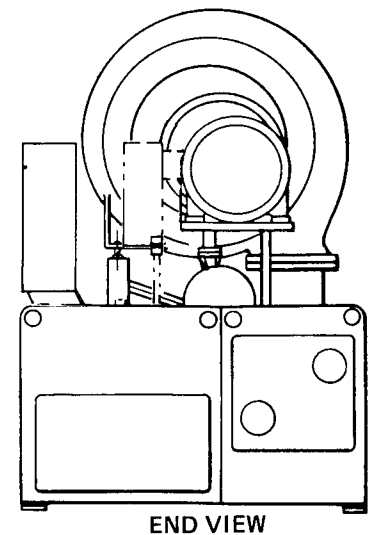
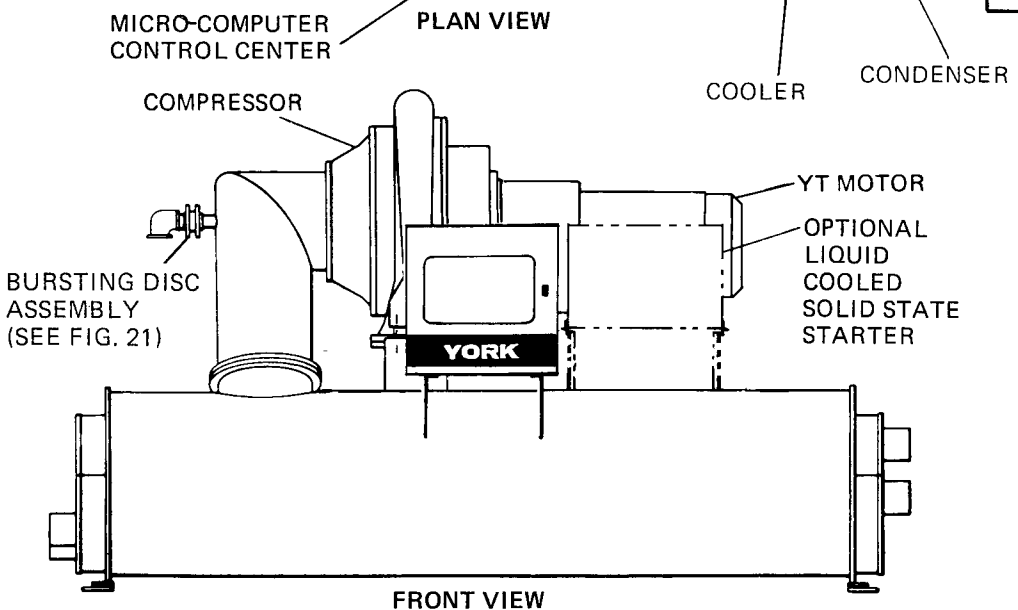
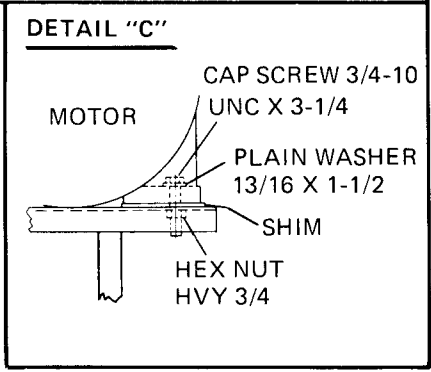
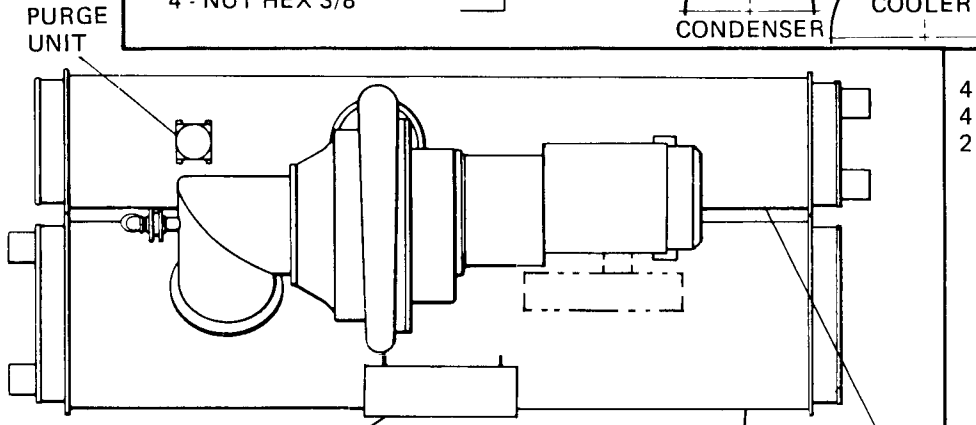
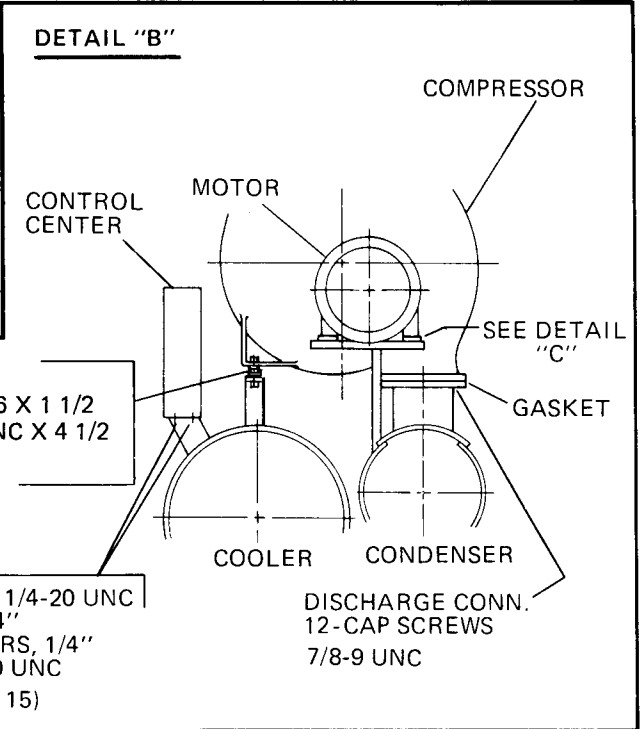
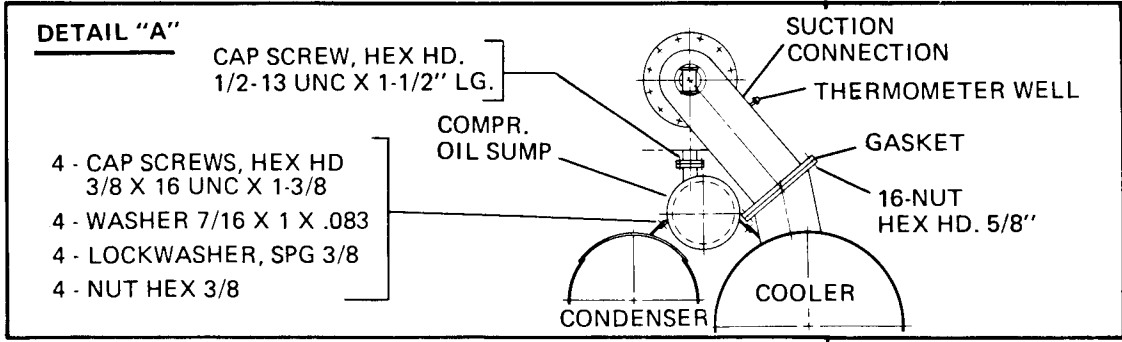


FIG. 11 — FIELD ASSEMBLY MODEL YT CODEPAK (YT G1 G1 E1 THRU YT L3 X3 E3)

YT CODEPAK (MODELS YT K4 J4 F1 THRU YT L6 M6 F2)

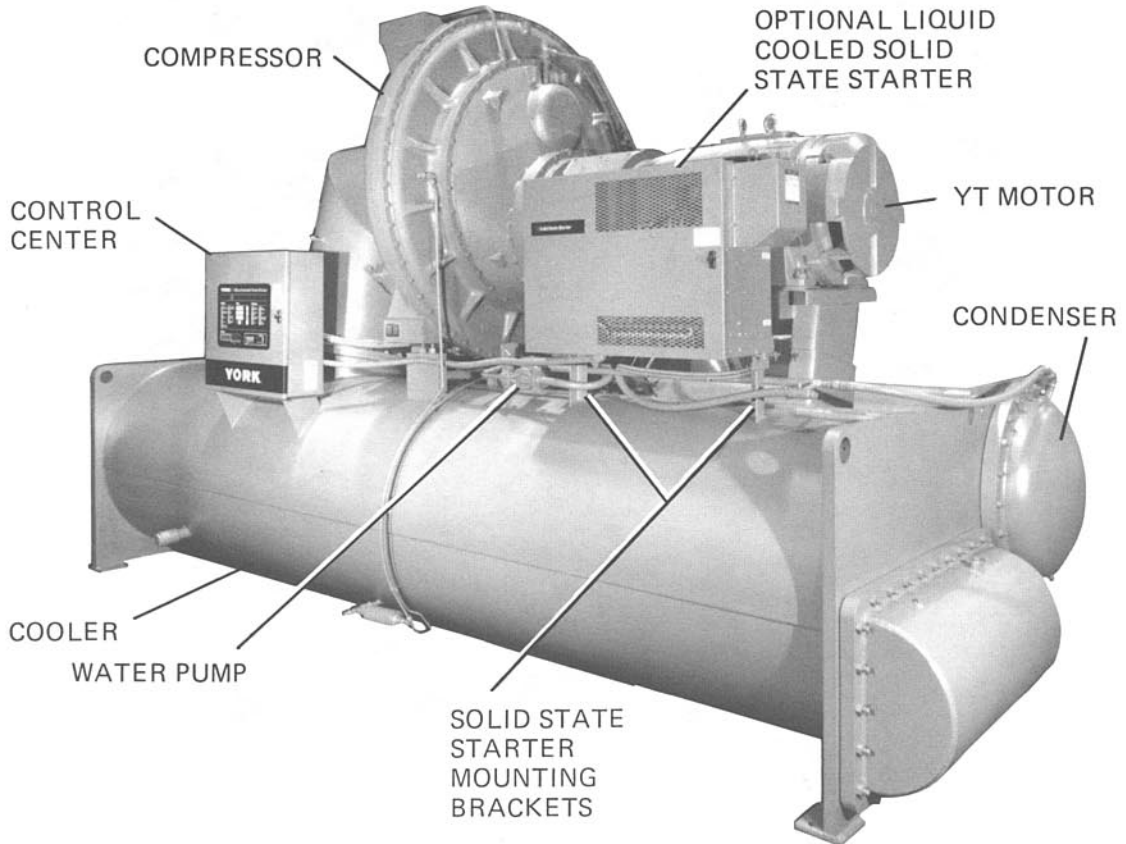


FIG. 12A — YT CODEPAK WITH OPTIONAL SOLID STATE STARTER (MOTOR END)

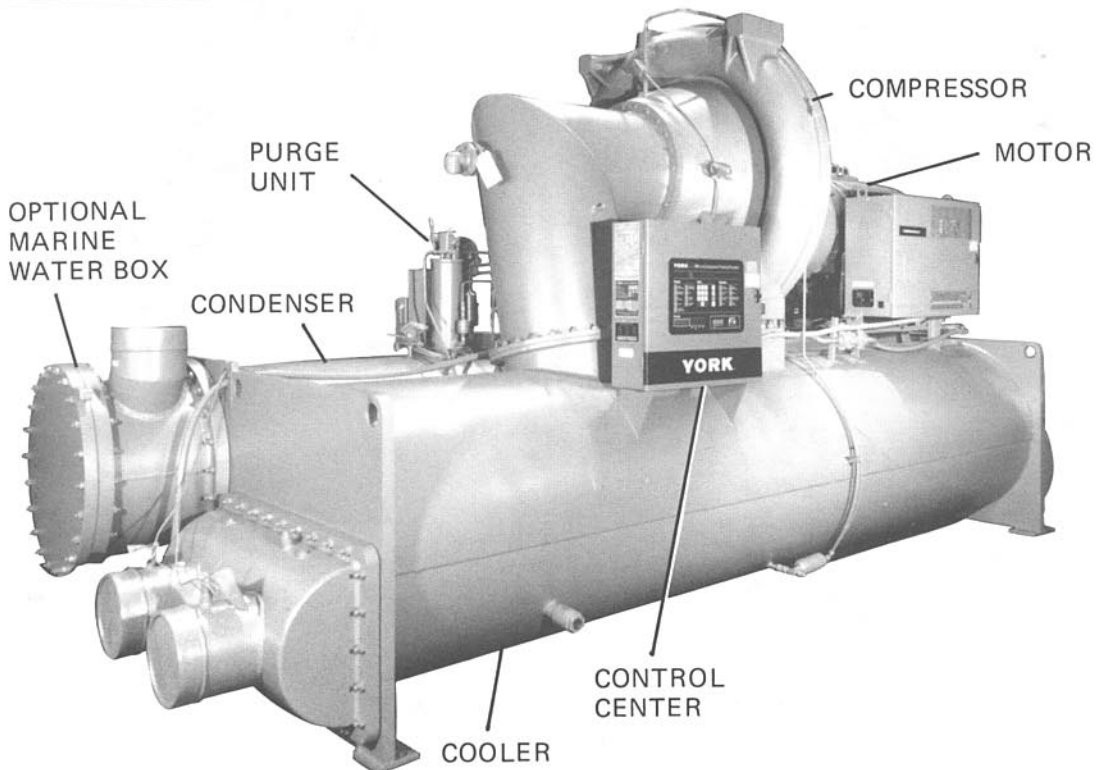
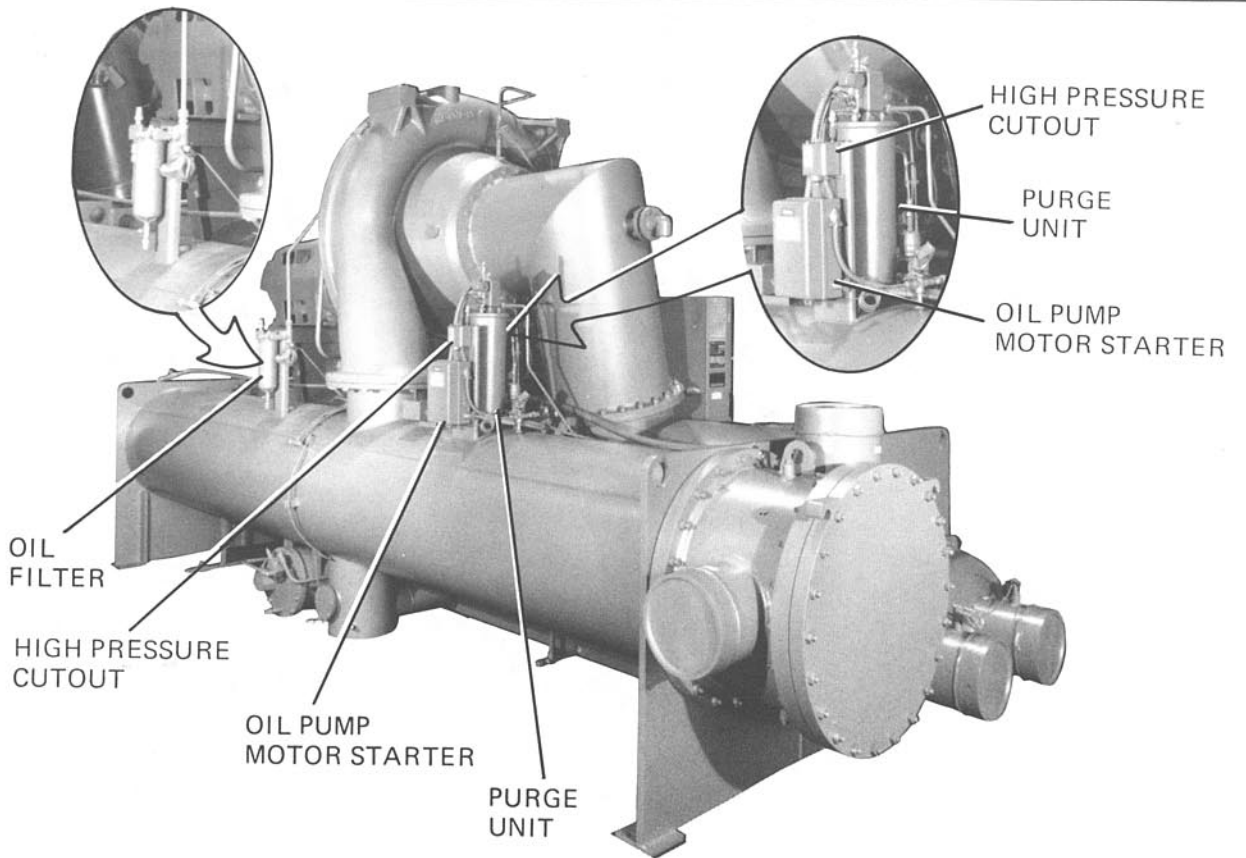
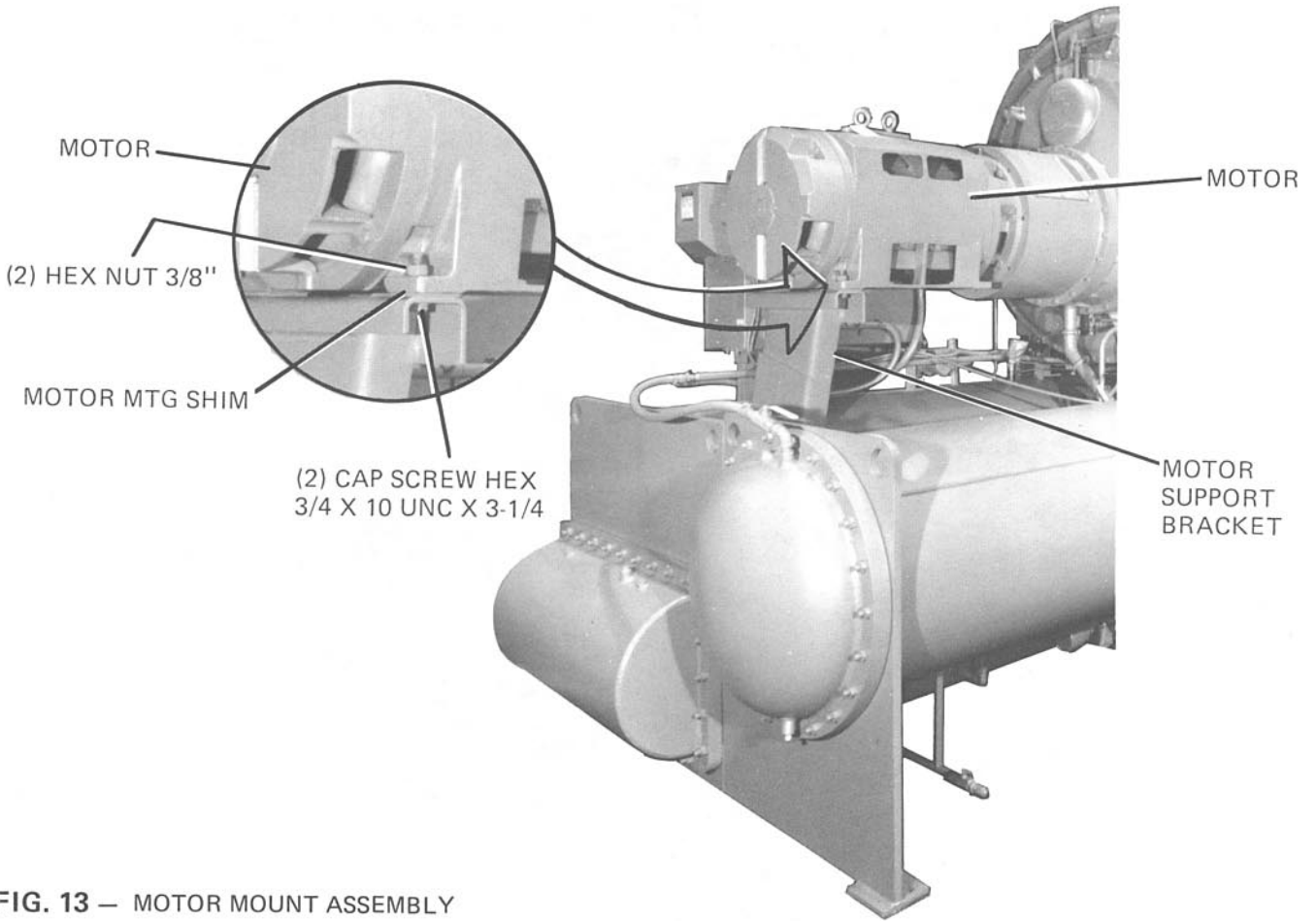


FIG. 12B — YT CODEPAK WITH OPTIONAL SOLID STATE STARTER (COMPRESSOR END)



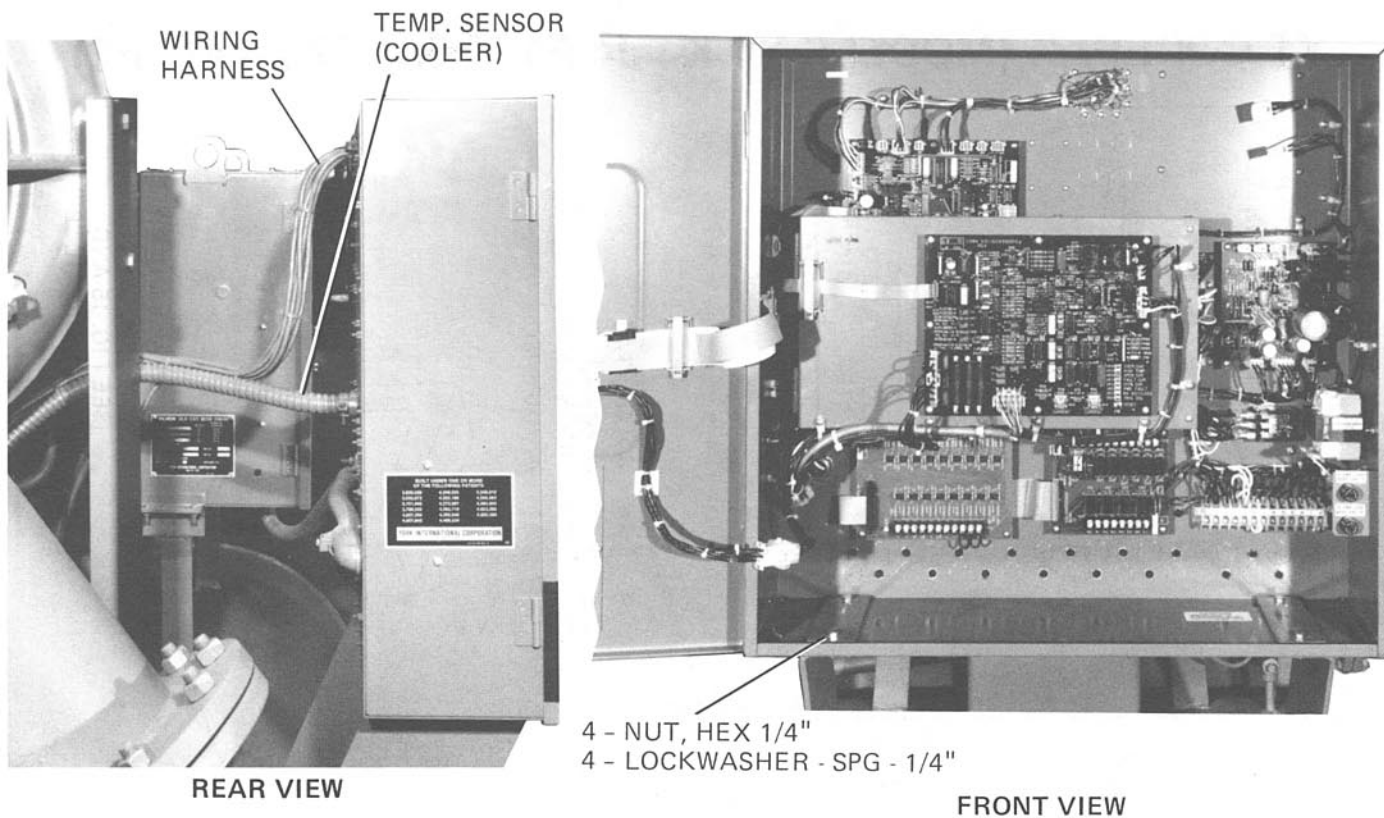
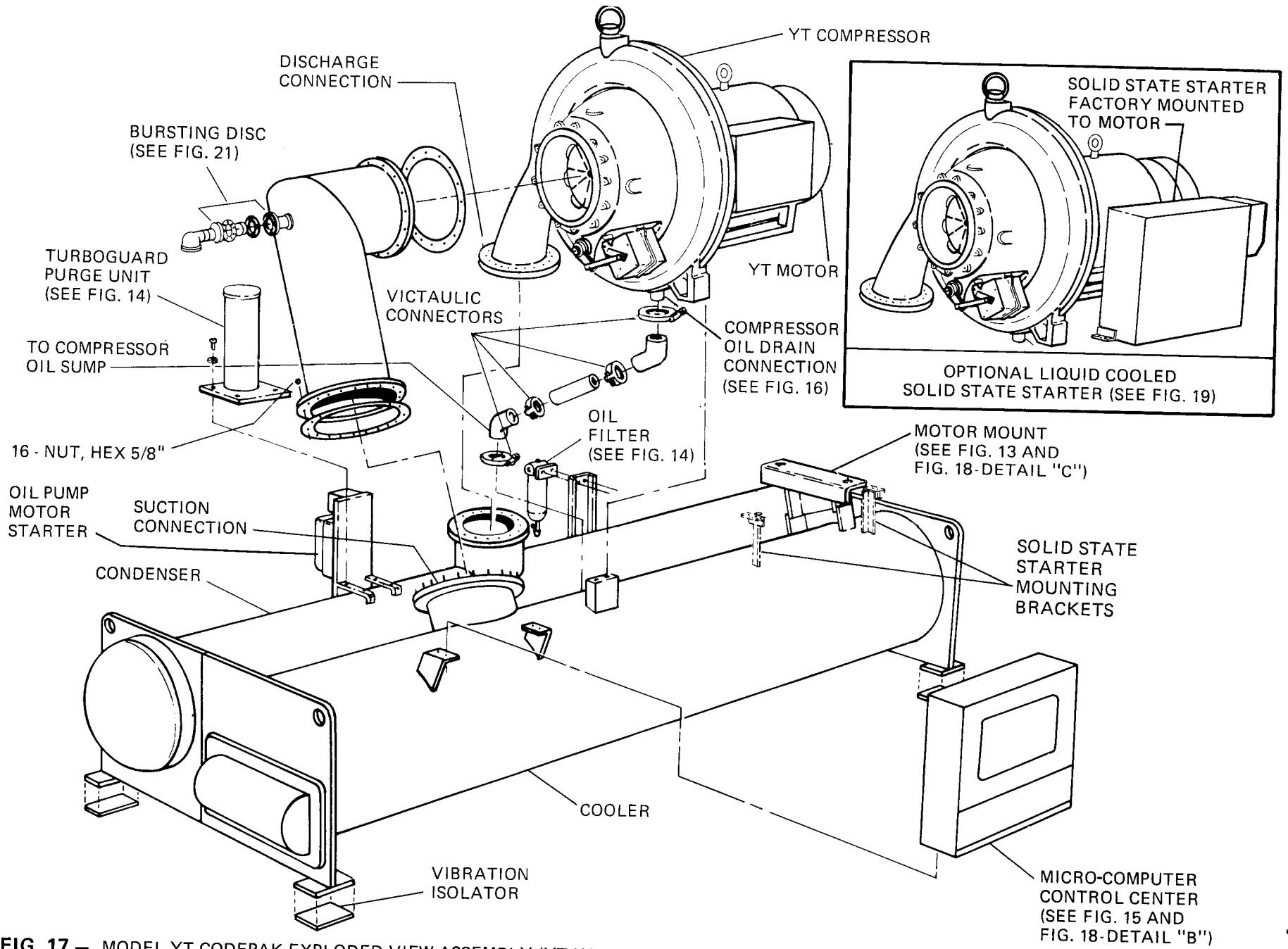


FIG. 15 — CONTROL CENTER ASSEMBLY (ALL MODELS)



FIG. 16 — MOTOR COOLANT — REFRIGERANT DRAIN LINE



YT CODEPAK (MODELS YT K4 J4 F1 THRU YT L6 M6 F2)

FIG. 17 — MODEL YT CODEPAK EXPLODED VIEW ASSEMBLY (YT K4 J4 F1 THRU YT L6 M6 F2)

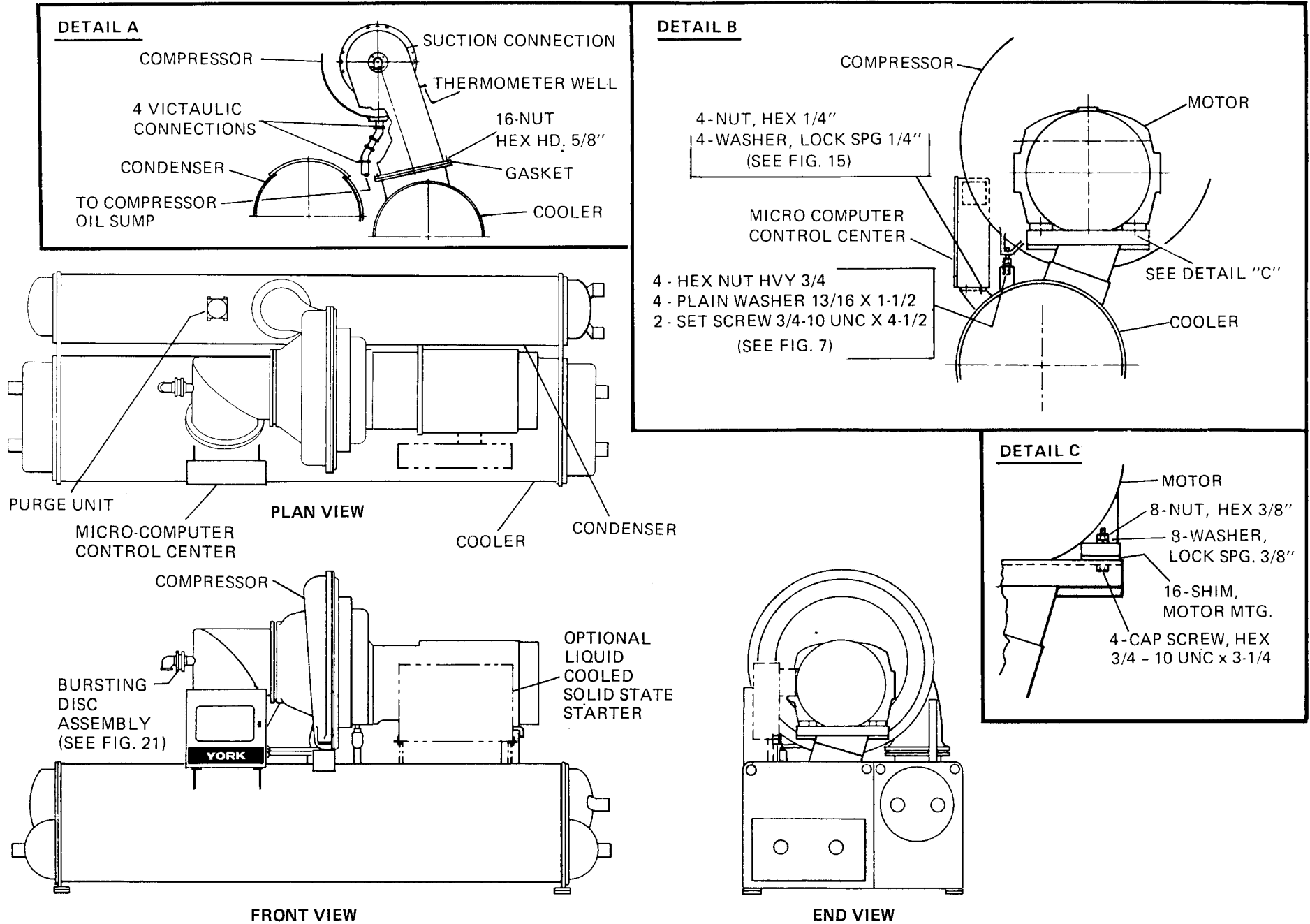
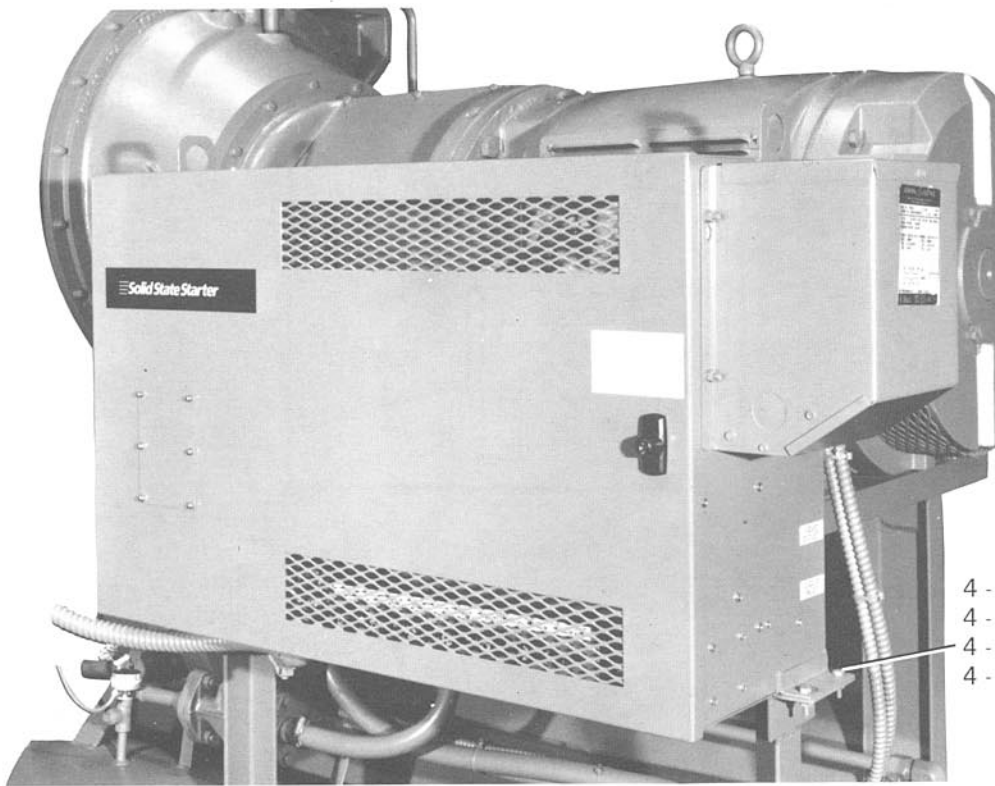
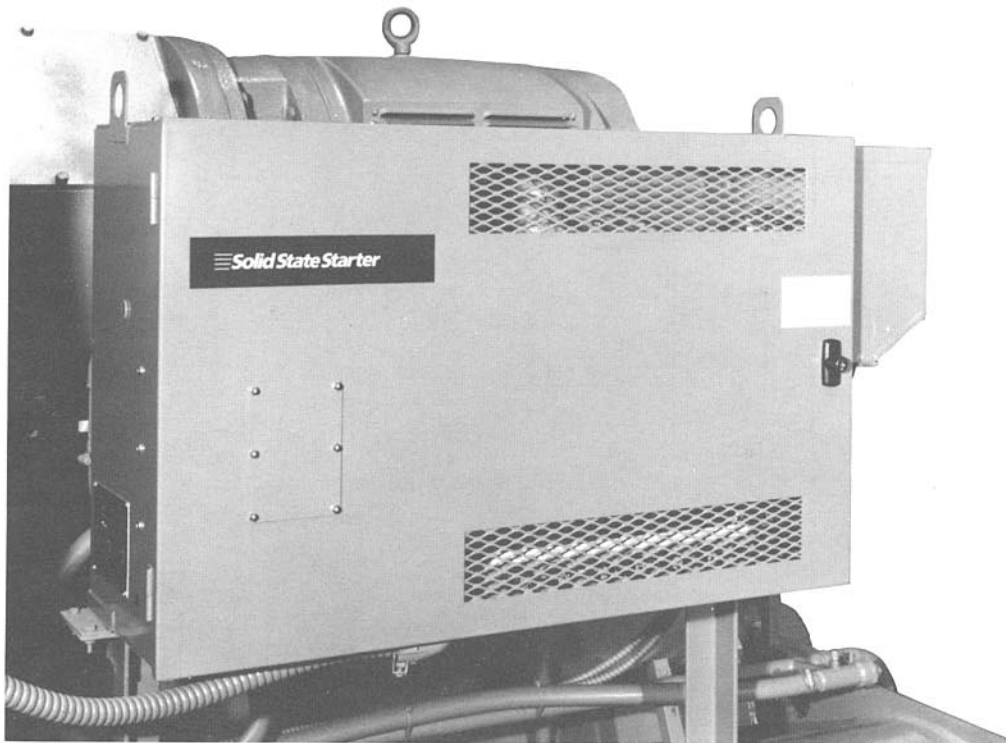


FIG. 18 — FIELD ASSEMBLY MODEL YT CODEPAK (YT K4 J4 F1 THRU YT L6 M6 F2)



- FURNISHED
- 4 - HEX NUT
 - 4 - WASHER
 - 4 - LOCKWASHER
 - 4 - CAP SCREW HEX HD.

RIGHT END VIEW



LEFT END VIEW

FIG. 19 — YT CODEPAK — OPTIONAL WATER COOLED SOLID STATE STARTER

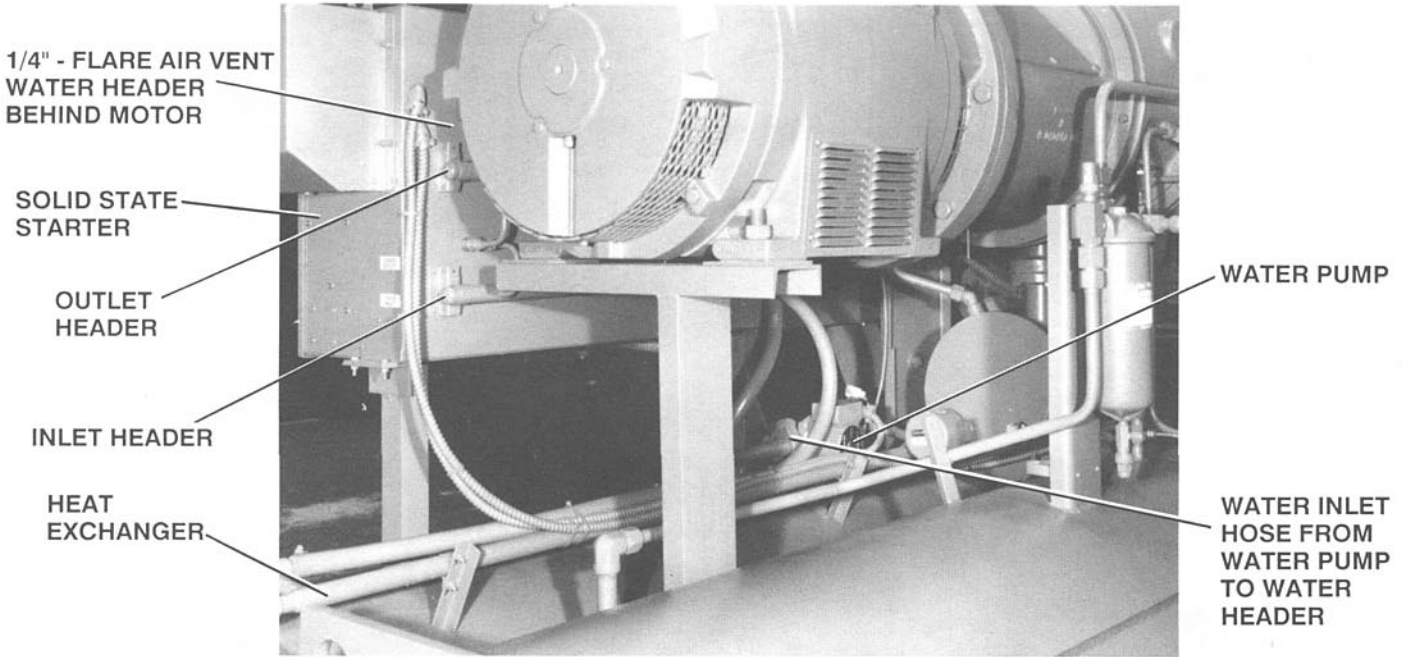


FIG. 20 — PIPING FOR SOLID STATE STARTER

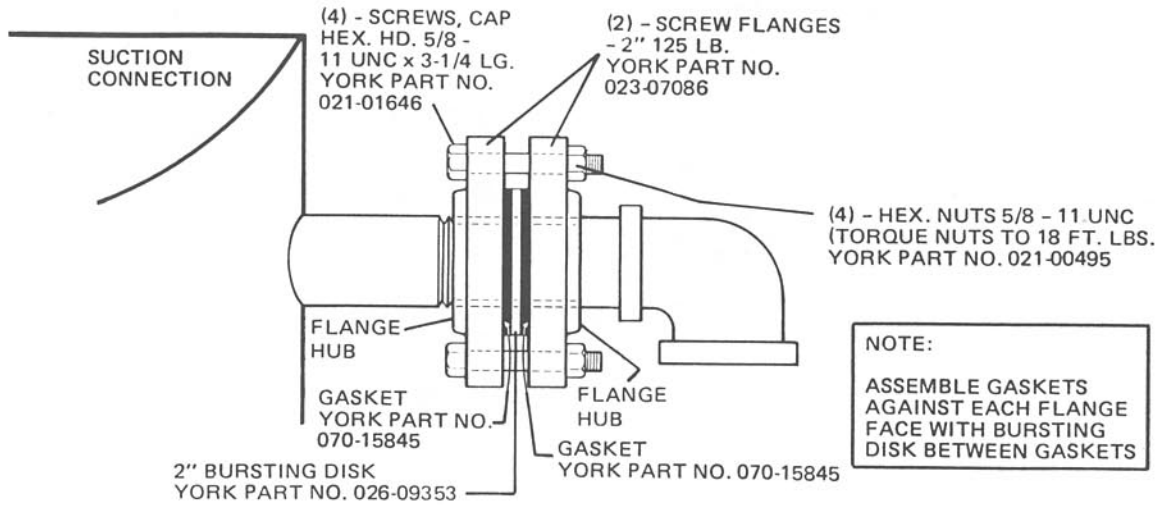


FIG. 21 — BURSTING DISC ASSEMBLY



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