YORK®

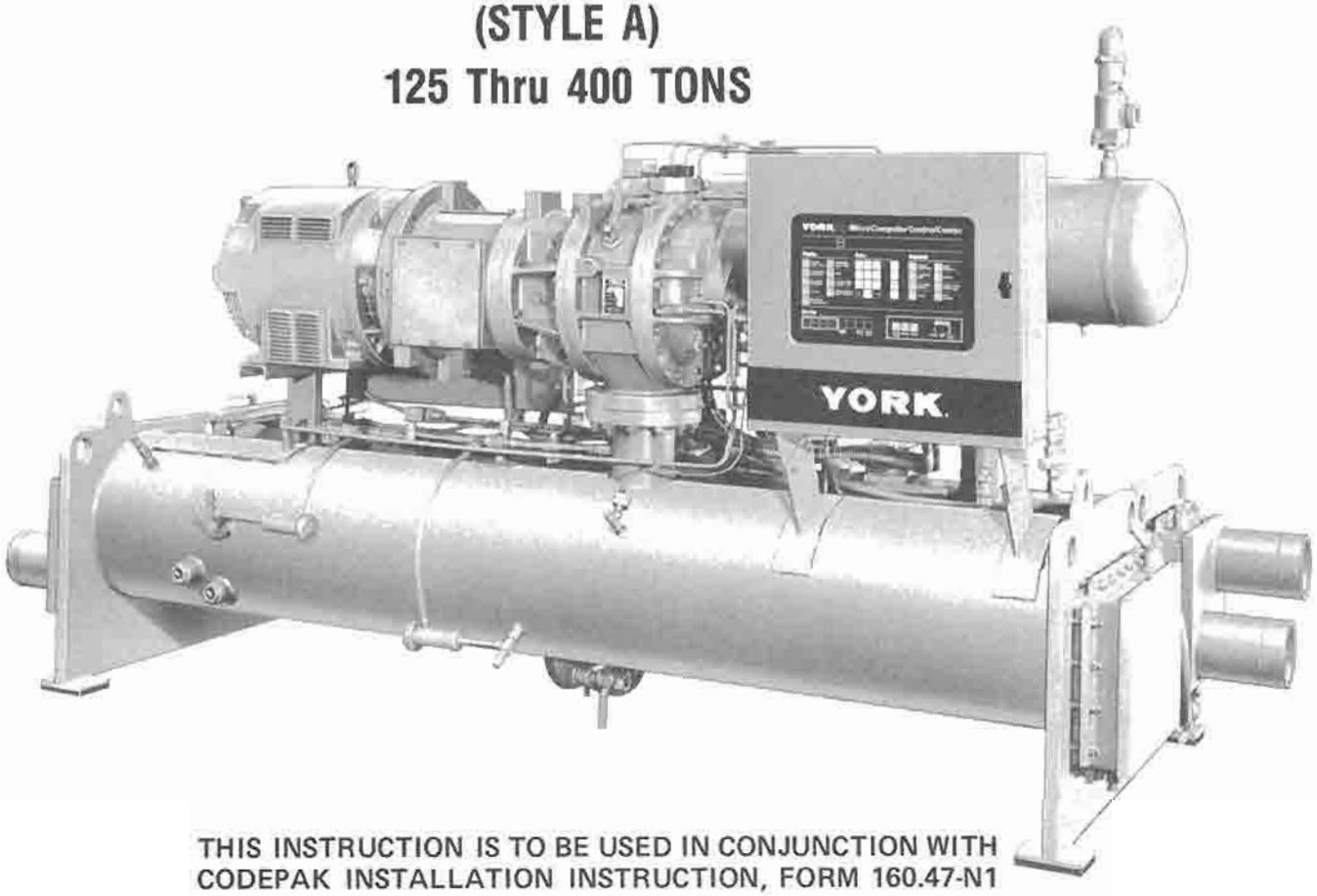
CodePak

ROTARY SCREW LIQUID CHILLERS

INSTALLATION INSTRUCTIONS | Supersedes: Nothing | 990 | Form 160.47-N1.2

FIELD RE-ASSEMBLY FOR

FORM 3 & FORM 7 SHIPMENT OF MODEL YS BA BA S0 Thru YS DC DB S3 (STYLE A) 125 Thru 400 TONS



THIS INSTRUCTION IS TO BE USED IN CONJUNCTION WITH CODEPAK INSTALLATION INSTRUCTION, FORM 160.47-N1

REFERENCE INSTRUCTIONS

FORM 160.47-N1	– INSTALLATION
FORM 160.47.O1	– CODEPAK OPERATING INSTRUCTION
FORM 160.47-PA2.1	– SOLID STATE STARTER
FORM 160.47-PA2.2	– ELECTRO-MECH. STARTER WIRING DIAGRAM
FORM 160.47-PA2.3	– CODEPAK TURBO-MODULATOR FACTORY PACKAGE SYSTEM

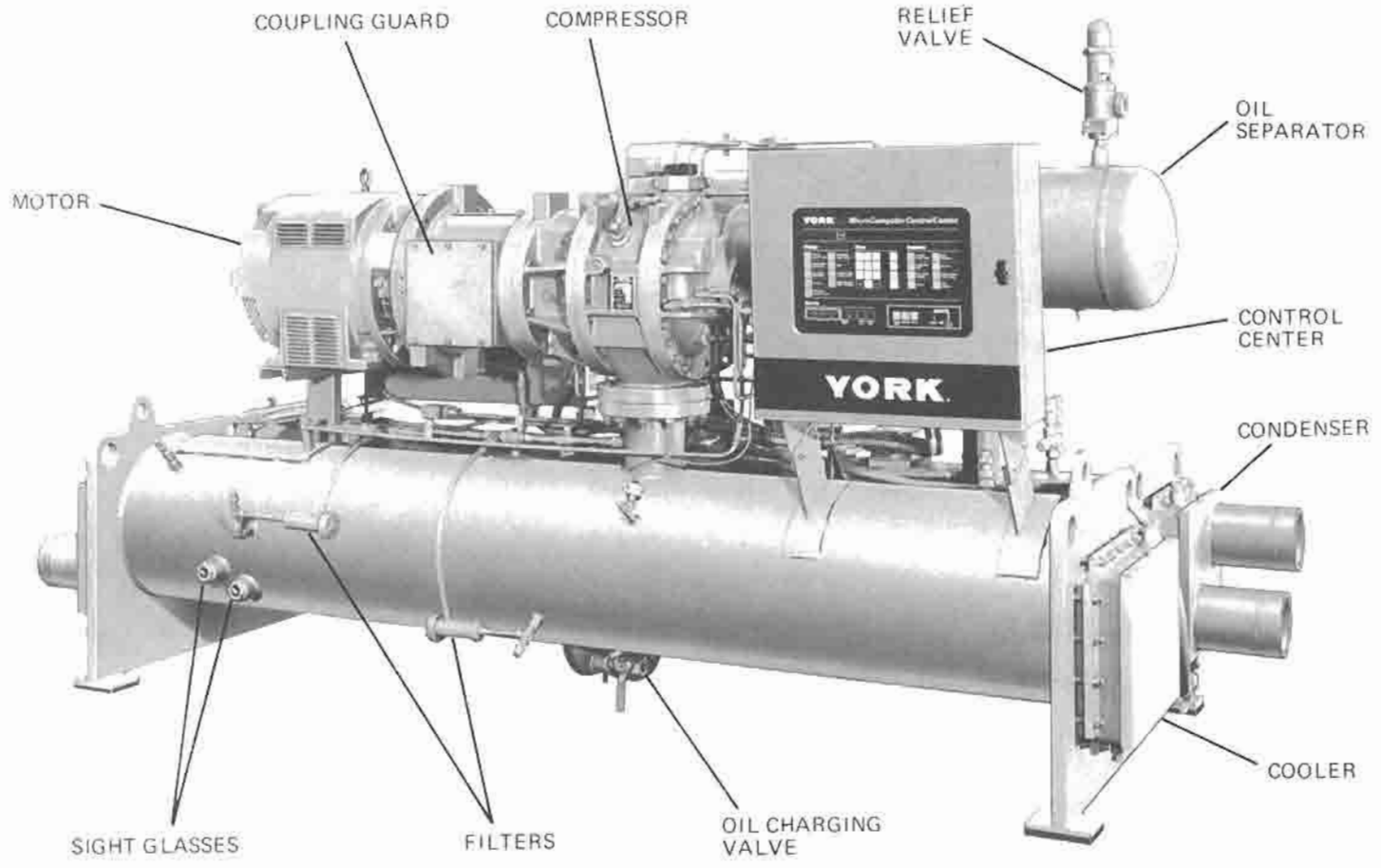


FIG. 1 — CODEPAK MODEL YS – FRONT VIEW OF ASSEMBLED UNIT

GENERAL

This instruction explains the procedure to be used for reassembling the Model YS Rotary Screw CODEPAK shipped disassembled. (Shipping Form 3 and 7.) Note: CODEPAKS MUST be field reassembled under the supervision of a YORK representative. For Installation Instructions other than unit assembly refer to Form 160.47-N1.

FORMS OF SHIPMENT

FORM 3 – DRIVELINE SEPATATE FROM 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/condenser is not skidded. Oil separator is skidded.

All wiring integral with compressor is left on it, and all conduit is left on shell. All openings on compressor, oil separator, and shell are closed and charged with dry nitrogen (5 psig).

Miscellaneous packaging of control center, oil eductor filter, tubing, water temperature controls, wiring, oil, isolators, solid state starter (option), etc.; R-22 charge shipped concurrently or separately in 50 lb. and 125 lb. cylinders.

FORM 7 – SPLIT SHELLS –
Shipped as four 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. Oil separator is skidded.

Evaporator and condenser shells are sepatated 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, oil separator and shells are closed and charged with dry nitrogen (5 psig).

Miscellaneous packaging of control center, oil eductor filter, tubing, water temperature controls, wiring, oil, isolators, solid state starter (option), etc.; R-22 charge shipped concurrently or separately in 50 lb. and 125 lb. cylinders.

NOTE: When more than one Codepak is involved, the major parts of each unit will be marked to prevent mixing of assemblies. (Piping and Wiring Drawings to be furnished by York.)

INSPECTION – DAMAGE – SHORTAGE

The unit shipment should be checked on arrival to see that all major pieces, boxes and crates are received. Each unit should be checked on the trailer or rail car when received, before unloading, for any visible signs of damage. Any damage or signs of possible damage must be reported to the transportation company immediately for their inspection.

YORK WILL NOT BE RESPONSIBLE FOR ANY DAMAGE IN SHIPMENT OR AT JOB SITE OR LOSS OF PARTS. (Refer to Shipping Damage Claims, Form 50.15-NM.)

When received at the job site all containers should be opened and contents checked against the packing list. Any material shortage should be reported to YORK immediately. (Refer to Shipping Damage Claims, Form 50.15-NM.)

CODEPAK DATA PLATE

A unit data plate is mounted on the control center assembly of each unit, giving unit model number; design working pressure; water passes; refrigerant charge; serial numbers; and motor power characteristics and connection diagrams.

RE-ASSEMBLY

Refer to Installation Instruction, YS Rotary Screw CODEPAK, Form 160.47-N1 for other instructions. The following is a step-by-step procedure to be used to assemble the CODEPAK units.

FORM 7 SHIPMENT (See Fig. 2).

1. Locate cooler and condenser shells in their final position.
2. Remove shipping closures from flanges on refrigerant line on bottom of cooler and condenser. (Shells are shipped with holding charge of nitrogen.) Discard gaskets. Install orifice plate using new gaskets and 3/4" x 3" long cap screws and nuts.
3. Weld tube sheets together. (See Fig. 2 for welding symbol.

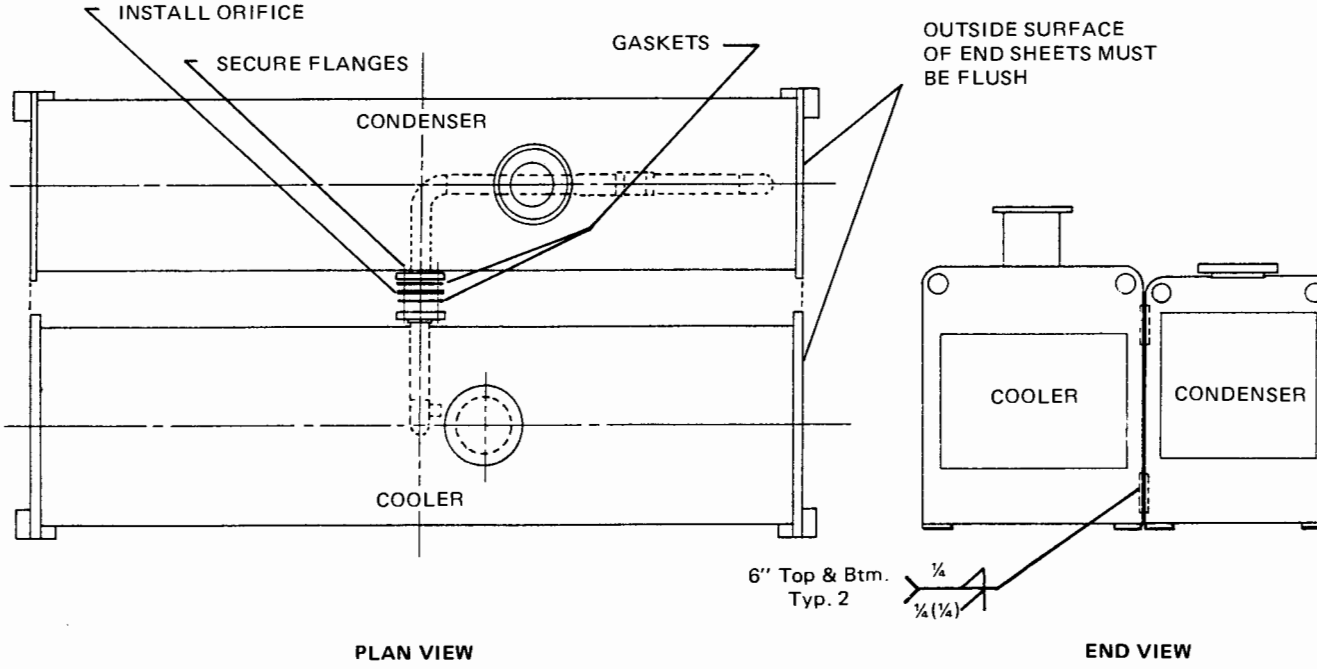


FIG. 2 – FORM 7 SHIPMENT

FORM 3 AND FORM 7 SHIPMENT

1. Assemble vibration isolators to unit. (Refer to Form 160.47-N1.)

2. Level shells 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 160.47-N1 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.

3. Lift compressor-motor assembly 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. 3 for rigging method.) Remove closure covers and be sure flanges are clean.

   Cooler-Condenser Shells – Remove all refrigerant connection covers.

   CAUTION: SHELLS ARE SHIPPED WITH A 5 PSIG NITROGEN CHARGE.

   Place a gasket in the cooler suction flange and lower compressor assembly. Guide the studs through suction flange on top of cooler. (See Fig. 4.)

4. Insert the cap screws washers and nuts to fasten the motor to the motor support bracket. 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. (See Fig. 5, Detail A.)

5. Assemble nuts to studs on the cooler suction flange. Tighten nuts alternately and evenly, to insure a leak tight fit.

6. Remove the hoist from the compressor-motor assembly.

7. Place gasket on the condenser discharge connection and then place the condenser shut-off valve on the discharge connection. Make sure the handle of the shut-off valve is perpendicular to the condenser shell. Place gasket on the top side of the shut-off valve.

8. Remove all cover closures from the Oil Separator Flanges. (Wipe all connection surfaces clean.) Lower the oil separator carefully keeping it level and horizontal to the condenser shell. Line up the compressor discharge port with the oil separator connection. Push the oil separator connection until it seats itself. Use the proper screws and nuts to fasten the compressor connection to the oil separator and discharge flange to the condenser shell. Keep hoist rigging attached to the oil separator.

9. Fasten the support bracket between the condenser and the end of the oil separator with the proper hardware.

10. Tighten all screws and nuts on the discharge flange and the support bracket.

11. Assemble the Control Center to unit (see Fig. 5). Also see Forms 160.47-PA2.1 or 160.47-PA2.2.

12. **Solid State Starter (Optional)** – Install starter per Fig. 5 and Form 160.47-PA2.5. Also install piping connections.

13. Install refrigerant piping, oil lines, and oil return system filters.

14. Pressure test. Note: Relief valves must be plugged (or capped). (Refer to Form 160.47-O1.)

15. Evacuate and charge with refrigerant. (Refer to Form 160.47-O1.)

16. **All Units** – Complete installation and finally level the unit per Installation Instruction Form 160.47-N1.

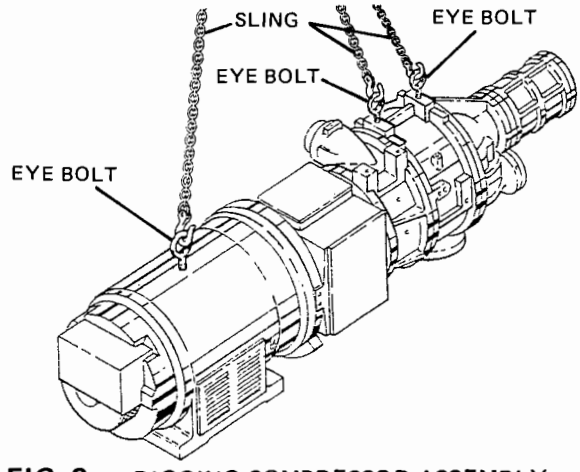
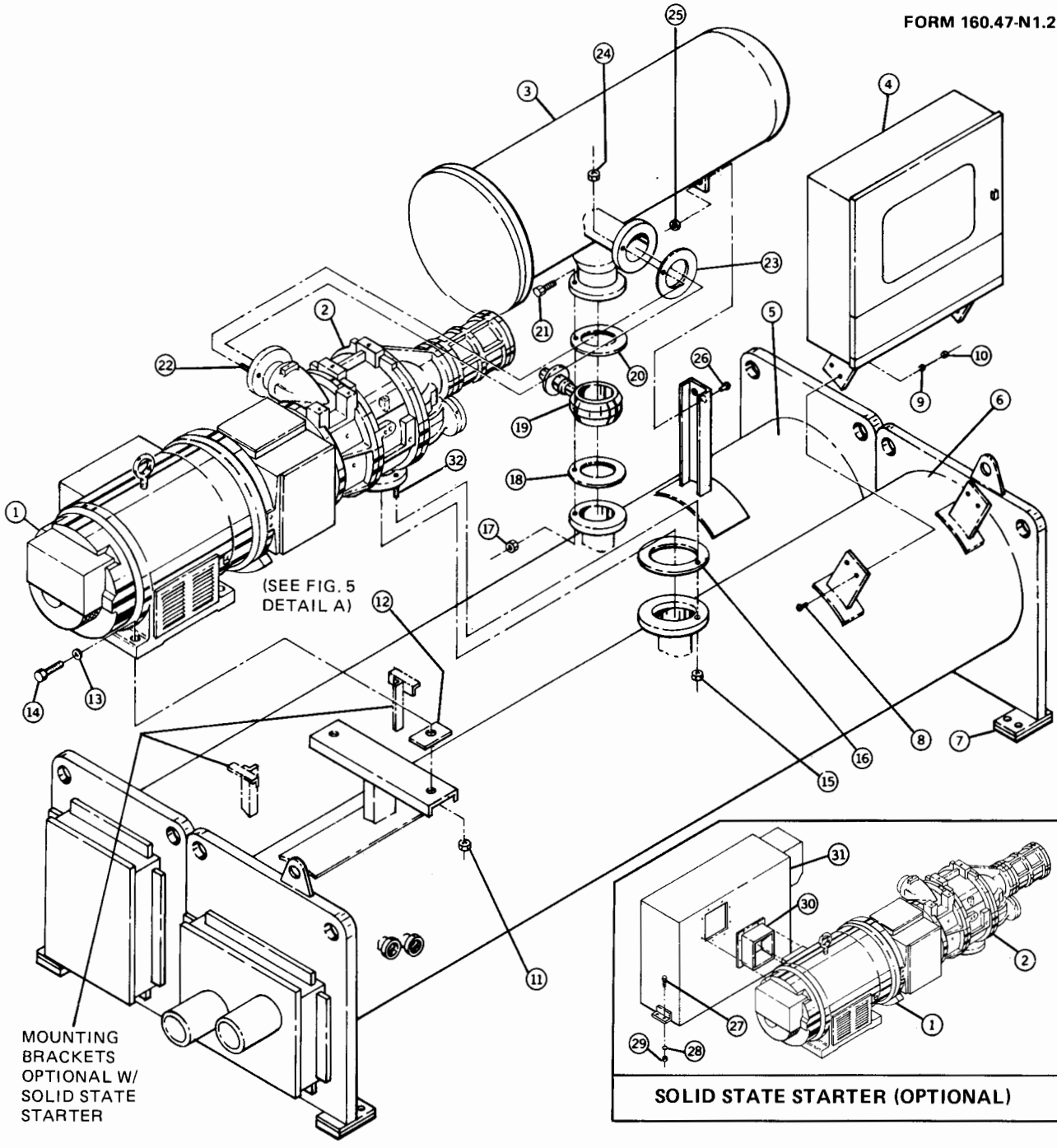


FIG. 3 – RIGGING COMPRESSOR ASSEMBLY



Item No.	Description	Item No.	Description
1	Motor	17	3/4" Hex Nut – 10 UNC
2	Compressor	18	Gasket
3	Oil Separator	19	Butterfly Valve
4	Microcomputer Control Center	20	Gasket
5	Condenser	21	3/4" Cap Screw, Hex Hd. – 10 UNC
6	Cooler	22	Stud (M20)
7	Isolator(s)	23	Gasket
8	3/8" Cap Screw, Hex Hd. – 16 UNC	24	M20 Hex Nut – UNC
9	3/8" Lockwasher	25	1/2" Hex Nut – 13 UNC
10	3/8" Nut – 16 UNC	26	1/2" Cap Screw, Hex Hd. – 13 UNC
11	3/4" Hex Nut – 10 UNC	27	Cap Screw
12	Shim	28	Lockwashers
13	3/16" I.D. Plain Washer	29	Nuts
14	3/4" Cap Screw, Hex Hd. – 10 UNC	30	Adapter – See Fig. 10
15	M20 or M22 Hex Nut	31	Solid State Starter – See Fig. 10
16	Gasket	32	Stud (M20) or (M22)

FIG. 4 – FIELD ASSEMBLY – EXPLODED VIEW

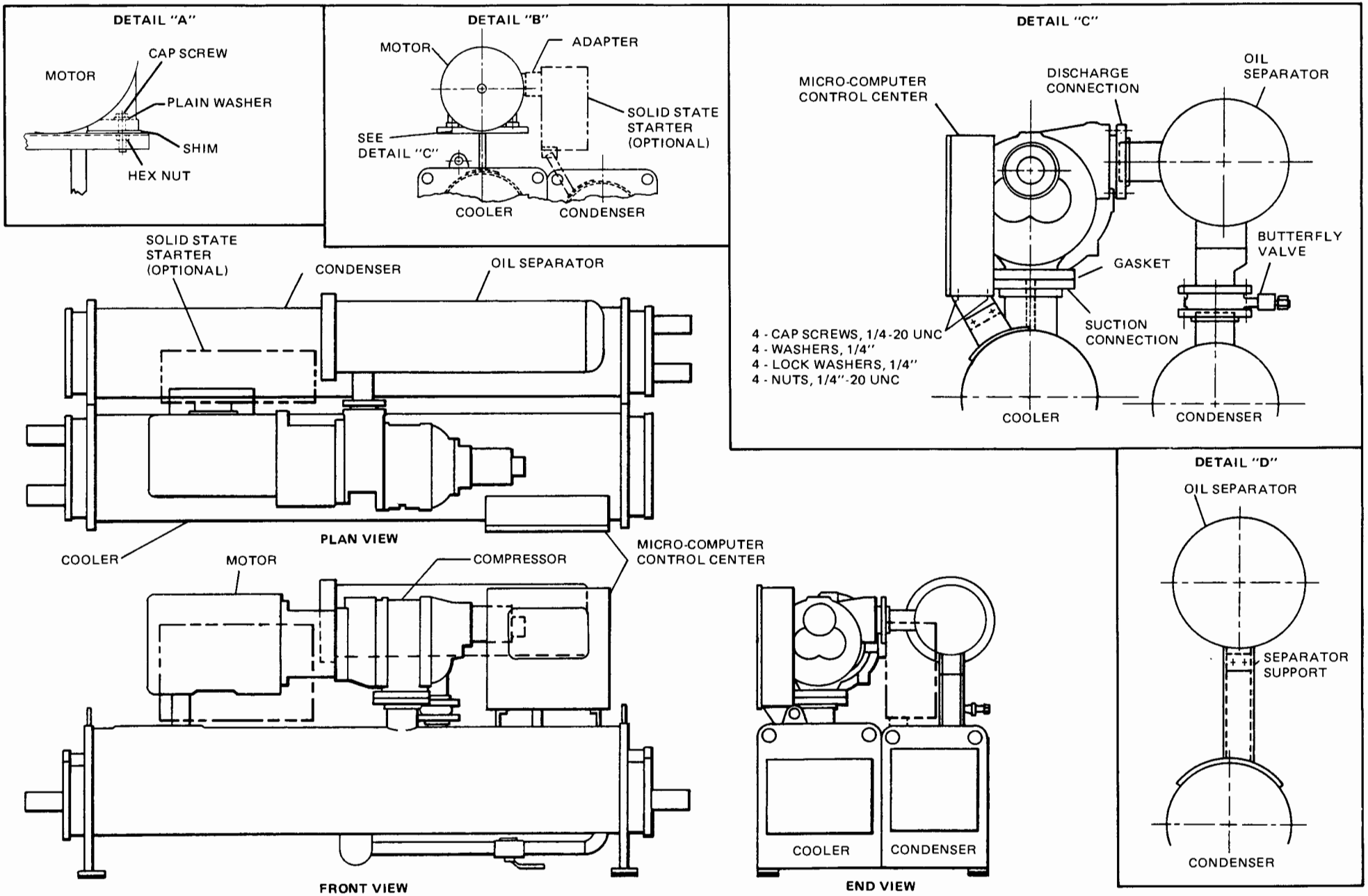


FIG. 5 — FIELD ASSEMBLY

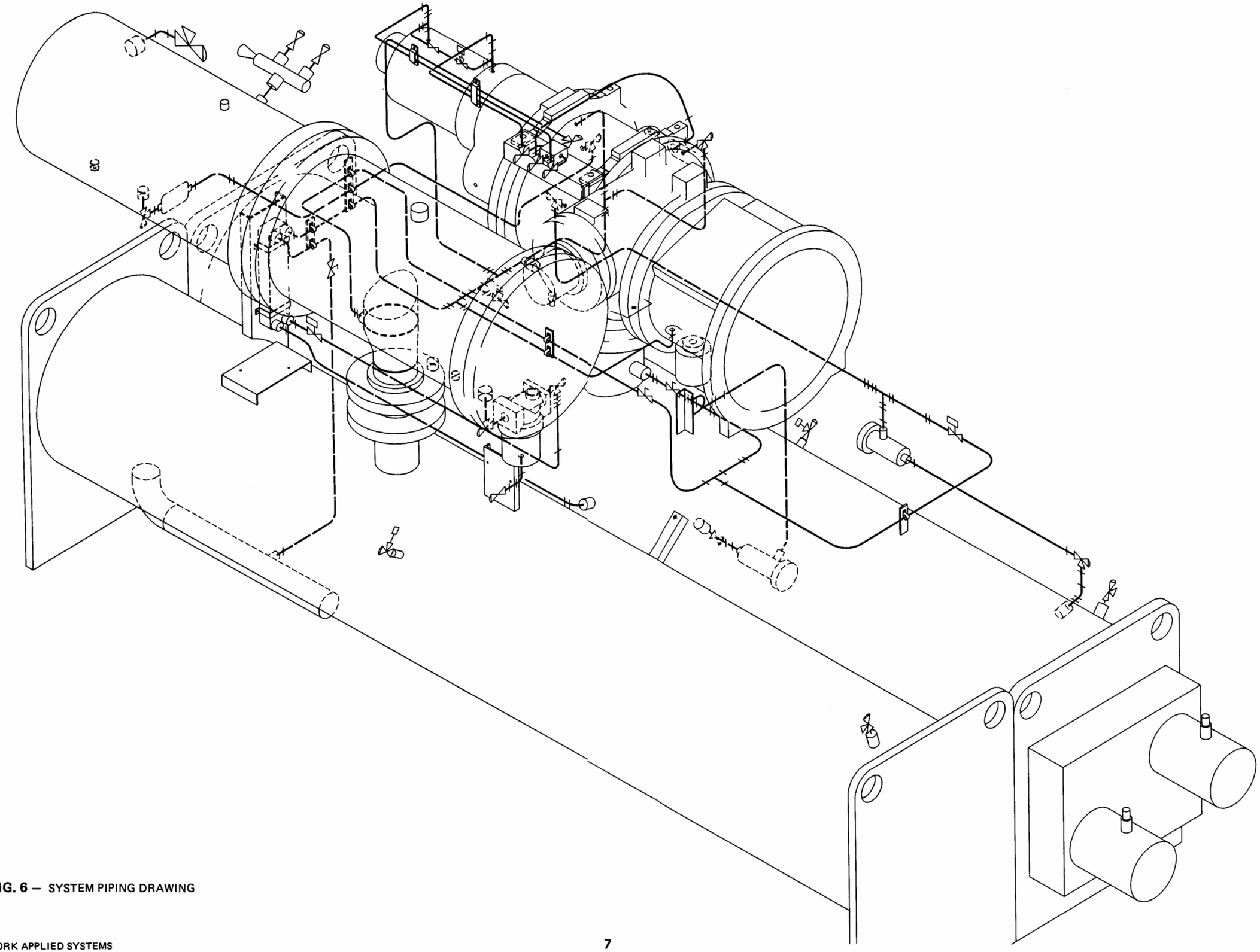


FIG. 6 — SYSTEM PIPING DRAWING

P.O. Box 1592, York, Pennsylvania USA 17405-1592

FORM 160.47-N1.2 (990)

SHU 1M 196 .50
CODES: RSC & SK