Indian Residential School.
Beauval Sask.,

May 18 th. 1945.

Mr. H.J. Davidson,
Departmental Purchasing Agent,
Indian Affairs Branch,

Re file:15-16. Letter April 20,1945.

Re Diesel engine for Beauval School.

Answers:

(A) Genarator. Canadian Westinghouse 25 KVA 80%P.F. 1200 RPM 120/208 volts,4 wire-3 phase-60 cycle, A. C. genarator with exciter 125 volt direct, 6 Poles,69.5 Amp. Serial no 281192.

(B) The Generator is operated with V belt drive. V Belt is Dayton-Cog. 7/8 " ouside measure. Pulley diameter 10½" with face 8 3/8" with 8 grooves for the 8 V belts.

(C) The electric starter is not required specially if UD-6 is bought as this motor is very easy to start.

I am pretty sure that the UD-6 will give good results,for the simple reason that we have already used the T.D. which is the same motor.

I hope these are the necessary inforamations as required in your letter.

Yours very truly:

F. X. Gagnon O.M.I.

F. X. Gagnon O.M.I.
Principal.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Indian Residential School.
Beauval Sask.,

May 18 th.1945.

Department of Mines & Resources
Indian Affairs Branch
MAY 25 1945
REGISTERED

Mr. Philip Phelan,
Chief, Training Division,
Indian Affairs Branch,
Ottawa,Ont.,

Dear Sir:-

Refile: 132-1-5.

Your two letters one dated April 21,and the other May 9 have just reached me to-day and I have only a few minutes to answer before the return of the mail.

You will inclose find herewith to Mr,J.H. Davidson,your departmental Purchasing Agent,a lletter in which I have given him all the required informations.

As to the type of Diesel engine,I am of your opinion,namely that the engine offered by the Consolidated Engines & Machinery Co. Ltd,Montreal, Que. the UD-6 will be about the best and most suitable Diesel engine required at, Beauval.

For the last 3 winters,we have used the TD-6 for this purpose and we were more than satisfied with it.

As the electric starter is not required I would recommend that this Ud-6 be equipted with a Reclaimo Oil filter instead.

Many thanks for your kind services.

Yours very truly,

F. X. Gagnon O.M.I.

F. X. Gagnon O.M I.
Principal.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Ottawa, May 29, 1945.

Memorandum:

DEPARTMENTAL PURCHASING AGENT.

I desire to refer to your memorandum of May 5, with reference to the Diesel engine for the Beauval Indian Residential School.

On receipt of your memorandum, we immediately communicated with the Principal, and I enclose, for your information, a copy of his reply dated May 18. I also enclose a copy of the information requested in your memorandum of April 20.

Philip Phelan,
Chief, Training Division.

Encl.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Ottawa, May 30, 1945.

Memorandum:

DEPARTMENTAL PURCHASING AGENT.

Re: Diesel Engine for Beauval Indian Residential School.

With further reference to your memorandum of May 5, in connection with the above, I am enclosing herewith the tenders for the supplying of this equipment.

Philip Phelan,
Chief, Training Division.

Encl.

ATTENTION: MR. VINCENT.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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ADDRESS REPLY TO
PURCHASING DIVISION

CANADA
DEPARTMENT
OF
MINES AND RESOURCES
GENERAL ADMINISTRATIVE OFFICES

PLEASE QUOTE
FILE 57454-15-16

OTTAWA June 22/45.

Memorandum

Indian Affairs Branch

Re: Diesel engine for Beauval Indian
Residential School. Your Req. 12/3/45
File 132-1-5.

As stated in recent telephone conversation, these engines are in short supply, and the best promise of delivery we can obtain is 48 weeks after receipt of requisite approval and priority rating from the U.S. War Production Board.

While there is no guarantee that we can secure this approval, I understand it is your wish that we endeavour to do so.

In the meantime it might be well to advise the Principal of the school of the difficulties we are encountering in connection with this proposed purchase. We would appreciate his advice regarding alternative equipment, new or second-hand.

Departmental Purchasing Agent

WMV/HC

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Seal

...ESS REPLY TO
PURCHASING DIVISION

CANADA

DEPARTMENT
OF
MINES AND RESOURCES
GENERAL ADMINISTRATIVE OFFICES

PLEASE QUOTE
FILE 57454-15-16

OTTAWA June 22/45.

Memorandum

Department of Mines & Resources
Indian Affairs Branch
JUN 23 1945
REGISTERED

Indian Affairs Branch

Re: Diesel engine for Beauval Indian
Residential School. Your Req. 12/3/45
File 132-1-5.

As stated in recent telephone conversation, these engines are in short supply, and the best promise of delivery we can obtain is 48 weeks after receipt of requisite approval and priority rating from the U.S. War Production Board.

While there is no guarantee that we can secure this approval, I understand it is your wish that we endeavour to do so.

In the meantime it might be well to advise the Principal of the school of the difficulties we are encountering in connection with this proposed purchase. We would appreciate his advice regarding alternative equipment, new or second-hand.

H. Davidson
Departmental Purchasing Agent.

WMV/HC

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Ottawa, June 25, 1945.

Reverend Sir:

I desire to refer to your letter of May 18 and previous correspondence, with reference to the purchase of a Diesel engine for the Beauval Indian Residential School.

The Purchasing Branch reports that it is extremely difficult to obtain the type of engine that is required. The best promise of delivery that we can obtain is 48 weeks after receipt of approval and priority rating from the U.S. War Production Board. There is no guarantee that we can secure the latter approval, although we are endeavouring to do so.

However, you will note from the above that even though the requisite approval is obtained, it will be nearly a year before the engine would be available.

We are very anxious to co-operate with you, but, in view of the above circumstances, it occurred to me that possibly some other action could be taken during the summer. I understand that this engine is mainly required during the winter months, when the water level is low. Is there anything you can suggest that we could do to help you?

Yours very truly,

Philip Phelan,
Chief, Training Division.

Reverend F.X. Gagnon, O.M.I.,
Principal,
Indian Residential School,
Beauval, Sask.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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Beauval #5

132-1-5

Indian Residential School.
Beauval Sask , July 6 1945.

1-Phelan
2-Chrisp

Mr. Philip Phelan,
Chief, Training Division,
Indian Affairs Branch,
Ottawa, Ont.

Dear Sir:-

File 132-1-5

I just received yours of the 25 th. ultimo, about the Diesel engine.

His excellency Bishop Lajeunesse just happened to be here,so I showed him your letter. We both thing that it will be hard to find any arrangement this summer. And have no other suggestion to make except that we would use our own tractor for an other winter.

The lake is still low and as we are in the rainy period there is no hope to have water for the coming winter for the turbine. In summer time so far the engine is not needed. There is a fair amount of water.

If any thing would develop during the summer,I will let you know.

Yours very truly,

F. X. Gagnon o.m.i.

F. X. Gagnon O.M.I.
Principal.

Department of Mines & Resources
Indian Affairs Branch
JUL 23 1945
REGISTERED

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Ottawa, July 26th, 1945.

Memorandum:

THE DEPARTMENTAL PURCHASING AGENT

Re: Diesel engine for Beauval Indian Residential School. Your Req. 12/3/45 File 132-1-5.

On receipt of your memorandum of June 22nd, I wrote the Principal and I am now in receipt of his reply. In view of the length of time that it would take to secure the equipment it has been decided that further information be deferred.

The equipment is certainly needed but some provision will be made for the coming winter and we will probably submit another requisition early in April, 1946.

Philip Phelan,
Chief, Training Division.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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Indian Residential School.
Beauval Sask.,

July 6 th. 1945.

Mr Philip Phelan,
Chief, Training Division
Indian Affairs Branch,
Ottawa. Ont.,

Dear Sir:-

Although so far I have not been very successful in obtaining the Diesel Engine,to-day I will try something else which have become almost a necessity to procure and give a well balanced ration to the staff and children of the school.

So far with an icehouse I have been able to keep wild meat and fish that were brought by the natives. But with the commercial fishing and the extinction of wild meat,the need of a good frigidaire has become a necessity to keep fish during the summer months and also a good supply of good and clean meat.

Therefore, I am asking if at all possible to supply us with a good Frigidaire this summer. And to show you how bad it is needed, his Excellency M. Lajeunesse says that we would be ready to supply the building material and the labor for the job.

To this effect you will find inclosed herewith a copy of a letter from the J.H. Ashdown Hardware Co.Ltd of Winnipeg,Man.,giving the price and specifications of the whole equipment.

I would appreciate very much to receive a favorable answer to give us enough time to put up the building before freezing.

Thanking you in advance.

Yours very truly:

F.X. Gagnon O.M.I.

F.X. Gagnon O.M.I.
Principal.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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DEPARTMENT OF MINES AND RESOURCES

REQUISITION FOR SUPPLIES

This space for use of Head Office only

Requisition No. .....

Order No. .....

July 30th 19 45.

To The Departmental Purchasing Agent, Ottawa,

PLEASE FURNISH THE FOLLOWING SUPPLIES FOR USE OF .....

VOTE 76 Allotment .....

SHIP TO Reverend F.X. Gagnon, O.M.I. Principal, Beuval Indian Residential School, Beauval, Sask.

Purpose for which required .....

NOTE:—Requisition for non-consumable equipment, state if New Issue or Replacement.
" consumable equipment and supplies use columns 1 and 2.

Quantity		Quantity on hand (1)	Quantity used per month (2)	Unit Price	TOTAL
1	Frigidaire				
	PO - 11211 - May 23 / 45				
	Keyes Supply Co - Ottawa				
	Bill sent mailed May 30				145
	Note: At the present time this school has an ice-house where they have been storing their perishable foods. The Principal states that due to commercial fishing and the scarcity of wild game that there is a great need of a frigidaire in order to keep fish in the summer months and also a supply of good clean meat. This school has an enrolment of eighty pupils. There is a staff of approximately fifteen.				
	The Principal has been in communication with the Ashdown Hardware Company and I enclose for your information their letter of May 5th, 1945 which the Principal received.				

I hereby certify that I have personal knowledge that all the above articles are required in the Department and for Departmental purposes only. The expenditure required by this requisition is strictly unavoidable and the public interest will suffer if it is not made.

SIGNED—

APPROVED—

Form 37

(SEE OTHER SIDE)

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132-1-5

Ottawa, July 30th, 1945.

Dear Father Gagnon:

I have your letter of the 6th instant, with reference to the difficulty of securing a Diesel engine. We will not take any further action at the present time.

I am submitting to our Purchasing Branch you request for a frigidaire.

Yours truly,

Philip Phelan,
Chief, Training Division.

Rev. F.X.Gagnon, O.M.I.
Principal,
Beauval Residential School,
Beauval, Saskatchewan.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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Copy for Indian Affairs Branch

132-1-5

ADDRESS REPLY TO
PURCHASING DIVISION
/GEA

CANADA
DEPARTMENT
OF
MINES AND RESOURCES
GENERAL ADMINISTRATIVE OFFICES

PLEASE QUOTE
FILE 57454-15-16

OTTAWA July 31st, 1945.

Gentlemen,- Attention: Mr. F.W. Evans

Re: Diesel Engine UD-6,
f.o.b., Meadow Lake, Sask.,
for Beauval Indian School.

I wish to thank you for your recent revised tender on the above and on V-belt for same, and to advise you that, due to the length of time required to obtain delivery, it has been decided to postpone placing the order for the time being.

However, if conditions improve within the next six or eight months to such an extent that you could guarantee more expeditious delivery, we would be pleased to reconsider the purchase.

Yours very truly,

Departmental Purchasing Agent.

International Harvester Co.of Canada,Ltd.,
294-298 Sparks Street,
Ottawa.

Department of Mines & Resources
Indian Affairs Branch
JUL 31 1945
REGISTERED

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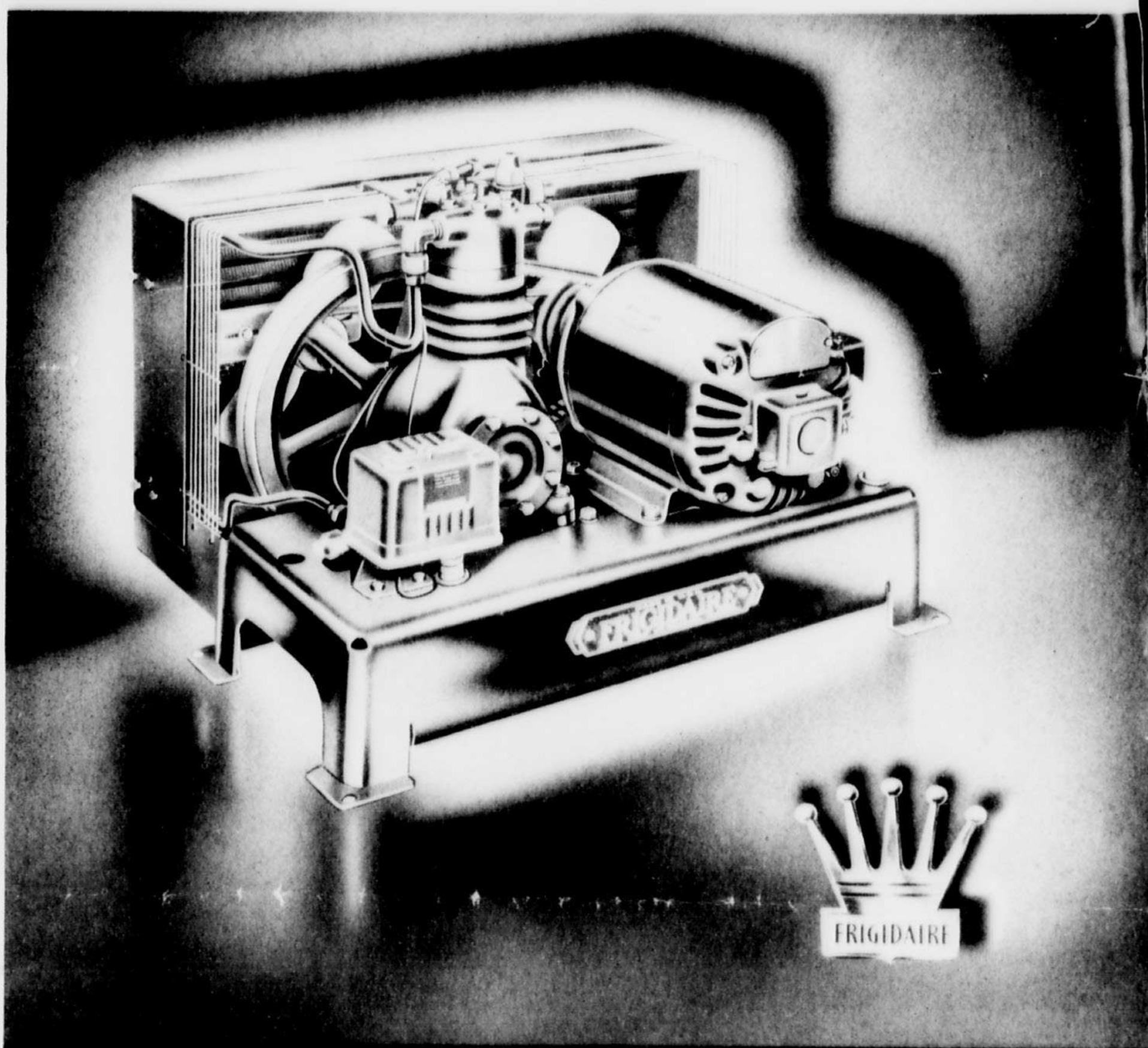
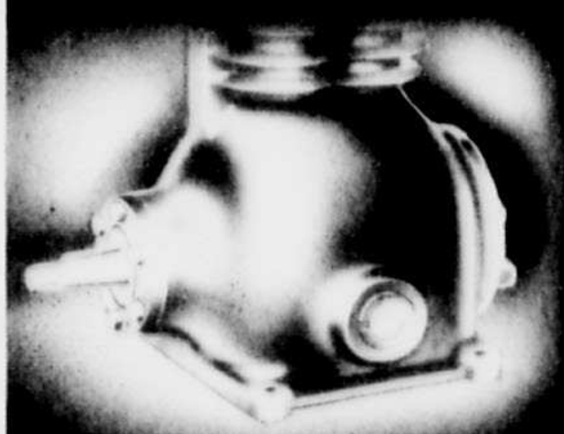
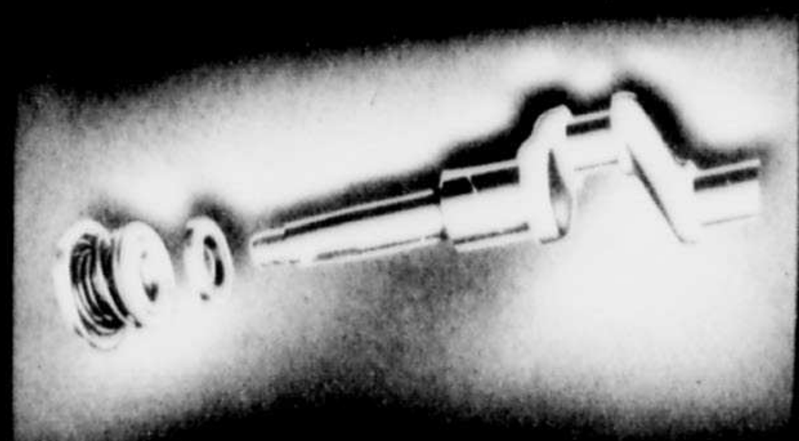
FRIGIDAIRE CONDENSING UNITS

Air Cooled Models AF375, AF4100, AF5150





SIGHT GLASS



LUBRILOCK CRANKCASE SEAL

OIL IMPREGNATED
DUREX MAIN BEARINGS

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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SPECIFICATIONS

Frigidaire Condensing Units

Air Cooled Models AF375, AF4100, AF5150

Frigidaire Condensing Units are available in a range of sizes to meet every commercial refrigeration need. Features listed below combine to produce maximum refrigeration capacity at a minimum operating cost.

Compressor—Two cylinder, slow speed, vertical, single acting, reciprocating type.

Service Valves—Two-way type with outlet provided for gauge connection. Integral with cylinder head on the Model AF375. Large forged brass valves are used on the Model AF4100. A large forged brass discharge valve and a malleable iron suction valve are employed on the Model AF5150.

Fin and Tube Condenser—Steel fin and tube (radiator type) condenser for rapid heat dissipation. Dual fans of special design, motor fan and auxiliary fan (which is mounted on a bracket brazed to the condenser and powered through a small V-belt), direct a maximum air flow through the large condenser surface to assure economical operation.

Receiver—Horizontal, steel shell type receiver. Large liquid capacity. Equipped with fusible plug and liquid line valve.

Liquid Strainer—Fine mesh metal screens filter all liquid refrigerant.

Lubrication—Adequate lubrication for all moving parts is supplied by oil splash. Large oil wells on top of main bearings supply oil continuously to the bearings.

Flywheel—High strength cast iron, statically balanced.

Drive—Multiple cog-type V-belts provide a positive and efficient drive. Flywheel, pulleys, belts and fans are protected by the condenser shroud.

Motor—Motors are specially designed for refrigeration duty. Capable of starting several times their rated horsepower. For standard equipment 110/220 volt, single phase, 60 cycle, A.C., repulsion-induction type motors are employed. Motor base adjustable for proper belt tension. Motors of other electrical characteristics are available on special order.

Motor Control—An improved, quick acting and dependable switch of compact construction operated from the low pressure side of the system. Holds calibration accurately. A high-pressure control stops unit if condensing pressures become excessive. Thermal overload protection with manual reset.

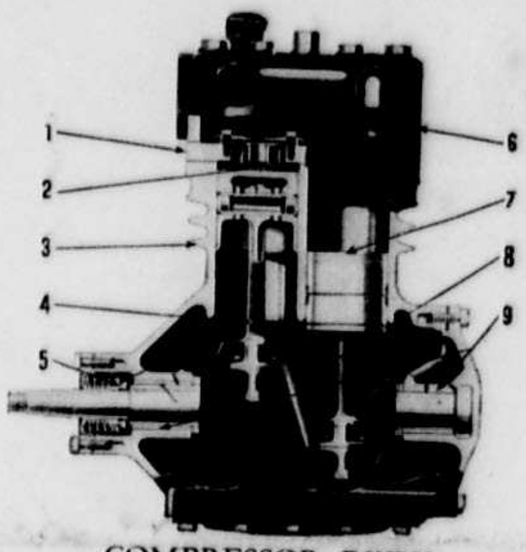
Condensing Unit Base—Heavy, one-piece, all steel, welded construction assures rigid support for entire assembly.

Finish—Condensing Unit finished in black baked enamel.

"Frigilube" Oil—Special 150 viscosity oil, refined to Frigidaire specifications. A positive lubricant that never "wears out."

Refrigerant—Freon-12, the safe refrigerant developed by Frigidaire and General Motors.

Safety Approval—Listed by Underwriters' Laboratories.



COMPRESSOR BODY

1. *Valve-in-Head Design*—Eliminates oil pumping difficulties. Increases efficiency of compressor and assures quiet operation.
2. *Intake and Discharge Valves*—Reed type assures quick acting and positive seating. Made of the finest grade spring steel. Large valve areas in special alloy cast iron valve plate allow maximum efficiency.
3. *Cylinder Block and Crankcase*—One-piece body of close-grained cast iron assures perfect alignment of moving parts. Cylinders accurately ground and oil honed to mirror-like smoothness. Sight glass in crankcase for checking oil level.
4. *Connecting Rod*—Steel. I-beam construction. Centrifugally cast babbitt bearing. Drilled for splash lubrication.
5. *"Lubrilock" Crankcase Seal*—Bellows type with special bronze bearing forced against a hardened, highly polished rotating steel surface. Flooded with oil to assure positive sealing with minimum friction losses.
6. *Cylinder Head*—Dome type. High grade cast iron.
7. *Solid Head Pistons*—Special cast iron. Precision fit to cylinders. Equipped with compression rings and oil grooves. Full-floating piston pins hardened and precision ground.
8. *Crankshaft*—Steel. Extra large, ground and polished main bearing surfaces.
9. *Main Bearings*—Self lubricating, oil impregnated durex bearings.
10. *Suction Strainer*—Fine mesh metal screen in suction cavity acts as a scale trap. Small orifice in cavity returns oil to crankcase.

Model	*AF375*	*AF4100*	*AF5150*
Dimensions:			
Length	30¼"	34½"	34½"
Width	24½"	24¾"	26½"
Height	21½"	23⅝"	23⅝"
*Horsepower:**	¾	1	1½
Compressor:			
Bore	1¾"	2⅛"	2½"
Stroke	2½"	2⅝"	2⅝"
Charge (lbs.):			
Freon-12	3	5	5
Oil	2	3	3
Receiver Capacity	23	33¾	33¾
Weights (lbs.):			
Net	270	343	360
Shipping	315	395	420

*Units may be equipped with next larger size motor for special applications.

Model AF375 illustrated on other side.

Note: Evaporative models EF4100 and EF5150 are available for use with Model EC-2 evaporative condensers. These evaporative models are similar to standard units, less the air-cooled condenser.

General Motors Corporation reserves the right to make changes at any time, without notice, in prices, colors, materials, equipment, specifications and models, and also to discontinue models.

CS-321D-2—1M—2-42—(18)

Frigidaire Division, General Motors Corporation, Dayton, Ohio

PRINTED IN U. S. A.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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FRIGIDAIRE "MOISTEMP" COOLING UNITS

WX 7 SERIES

WX 11 SERIES

WX 14 SERIES

WX 18 SERIES

WX 21 SERIES

WX 25 SERIES

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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FRIGIDAIRE "MOISTEMP"

Designed and Built by Frigidaire for Matched Operation as a Unit

Frigidaire "Moistemp" gravity type cooling units are designed to provide proper moisture conditions as well as correct temperatures. To accomplish this, Frigidaire engineers developed an exclusive design which permits operation at higher temperatures, thereby decreasing moisture removal from the air.

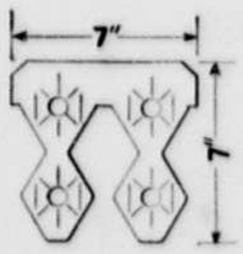
The design of the "Moistemp" cooling units provide extra fin surface at the top where warm air first comes in contact with the fins. This is accomplished through the use of exclusive diamond shaped fins which eliminate all ineffective heat absorbing surface.

Automatic defrosting during the off period of the compressor is improved due to reduced fin surface at the bottom of the cooling unit, the point where ice or frost accumulation is usually experienced. The shape of the fin with the diamond pointing downward also aids in faster frost removal from the fin during the defrosting cycle. An additional defrosting aid results due to improved air circulation through the cooling unit.

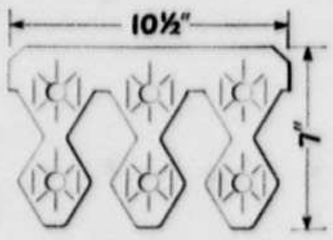
The operating efficiency of the Frigidaire "Moistemp" cooling units is further improved by the use of the "wet expansion" principle of refrigeration. This method assures the entire internal refrigerant tube surface being "wet" with liquid refrigerant, thus insuring unusual efficiency in heat removal and economical operation.

***CAPACITY RANGE**

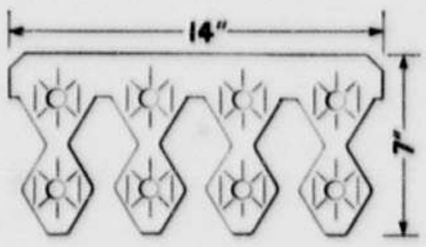
SERIES	Width	Fin Spacing	Cooling Unit Lengths							
			18"	24"	30"	36"	42"	48"	54"	60"
WX7	7"	A	27– 48	39– 70	52– 93	65–116	77–138	90–161	103–183	116–207
	7"	B	21– 55	29– 77	38–101	47–125	57–150	66–173	75–198	84–222
	7"	C	17– 45	24– 64	33– 86	40–105	48–126	54–143	61–162	70–184
	7"	D	16– 41	21– 56	28– 75	34– 90	40–106	47–123	53–139	59–156
WX11	10½"	A	40– 72	59–106	79–141	98–174	116–208	135–242	155–276	174–310
	10½"	B	31– 81	43–115	57–151	71–187	85–224	99–261	112–296	126–333
	10½"	C	26– 68	36– 96	49–129	60–157	71–186	81–215	92–243	104–276
	10½"	D	23– 61	32– 85	42–111	51–135	60–158	70–185	79–208	89–235
WX14	14"	A	54– 96	79–142	105–187	131–233	155–277	180–322	207–369	233–416
	14"	B	41–109	58–154	77–203	95–250	114–301	131–347	151–398	169–446
	14"	C	34– 91	49–129	65–172	80–210	94–249	109–287	123–325	139–368
	14"	D	31– 82	43–113	56–149	68–180	80–211	94–247	105–278	119–314
WX18	17½"	A	67–119	99–177	131–234	163–292	194–347	226–403	257–459	291–519
	17½"	B	52–137	73–192	96–253	119–315	142–375	165–436	187–495	210–555
	17½"	C	43–113	61–161	81–215	99–263	118–311	136–359	154–407	174–461
	17½"	D	39–103	53–141	70–186	85–225	100–264	117–308	131–347	149–393
WX21	21"	A	80–143	119–212	158–281	196–350	233–416	271–484	310–553	348–622
	21"	B	62–164	87–230	115–304	143–377	171–451	198–523	226–597	254–671
	21"	C	52–136	73–194	98–258	120–316	141–373	163–430	184–486	208–550
	21"	D	47–123	64–170	85–224	102–271	120–317	140–370	158–417	179–472
WX25	24½"	A	94–168	139–248	184–328	229–409	271–484	317–566	362–647	417–744
	24½"	B	73–191	102–270	134–354	166–439	199–525	231–611	264–698	296–782
	24½"	C	60–159	86–226	114–302	139–368	165–436	191–504	215–569	245–648
	24½"	D	54–144	75–198	99–261	119–315	140–370	164–432	184–486	208–550



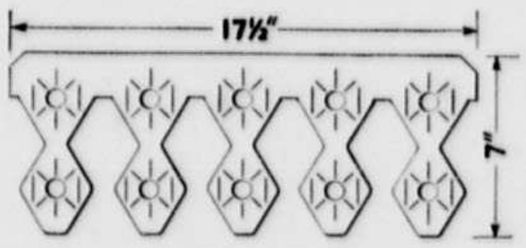
WX7 SERIES



WX11 SERIES



WX14 SERIES



WX18 SERIES

*Maximum and minimum capacities are given for each cooling unit, based on performance when installed in accordance with Frigidaire Engineering Standards. All capacities are in pounds of Melting Ice Equivalent per day (18 hour condensing unit operating time), and are for automatic defrosting operation.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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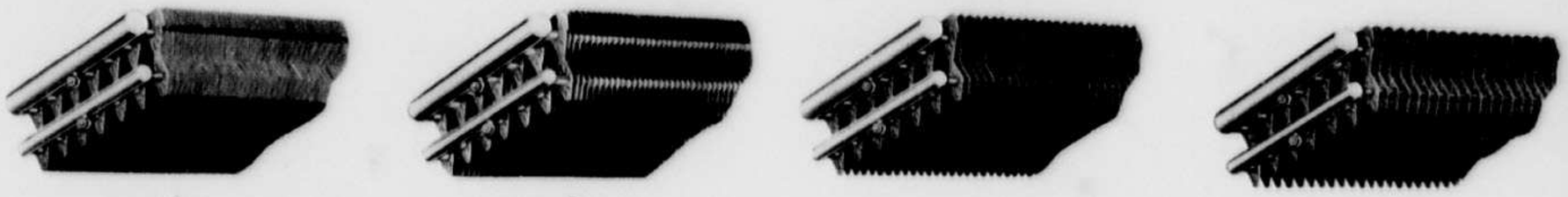
COOLING UNITS

with Frigidaire Flowing Cold Condensing Units and Control Valves

Frigidaire "Moistemp" cooling units are available in a wide range of sizes and capacities. Six different widths are provided; namely, 7, 10½, 14, 17½, 21 and 24½ inches. Nineteen lengths are available in each series, ranging from 18 to 126 inches.

Four different fin spacings of ¼" (A), ½" (B), ¾" (C), and 1" (D) enable the selection of the proper amount of fin surface to meet the exact refrigeration requirements of any installation, thus insuring satisfactory results and economical operation.



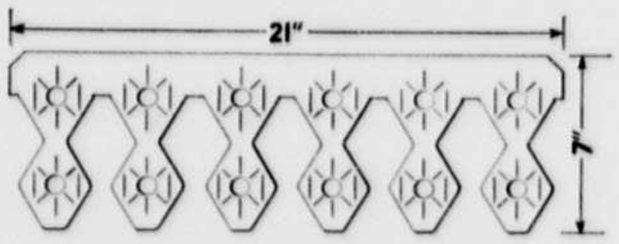
A B C D

(Illustrations Showing Typical Fin Spacings)

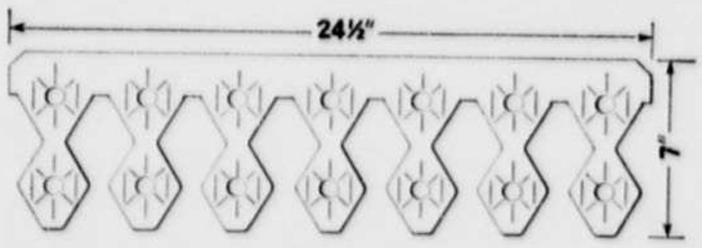
***CAPACITY RANGE**

Cooling Unit Lengths

66"	72"	78"	84"	90"	96"	102"	108"	114"	120"	126"
128- 229	141- 252	153- 274	166- 297	179- 319	192- 342	205- 366	217- 388	229- 409	243- 434	256- 456
93- 246	102- 271	111- 294	121- 319	129- 341	138- 365	148- 390	157- 414	166- 438	174- 460	184- 486
77- 203	85- 224	92- 243	99- 262	106- 281	115- 303	122- 321	129- 341	136- 360	144- 382	152- 401
65- 172	72- 190	78- 205	84- 223	90- 239	97- 257	103- 272	109- 287	116- 305	121- 321	128- 339
193- 344	212- 378	231- 413	250- 447	270- 481	289- 516	308- 550	326- 581	345- 616	364- 650	383- 684
140- 370	154- 406	167- 442	180- 476	193- 509	207- 546	222- 587	235- 620	249- 657	263- 694	277- 731
115- 304	127- 336	138- 365	149- 394	160- 422	172- 454	184- 486	194- 513	205- 541	217- 574	228- 601
98- 258	108- 285	117- 308	127- 335	135- 358	146- 385	155- 409	163- 432	173- 458	182- 480	193- 508
257- 459	284- 506	308- 550	334- 597	361- 644	385- 688	411- 734	436- 778	462- 825	487- 869	513- 916
187- 495	205- 541	224- 592	242- 638	259- 685	278- 735	296- 782	315- 833	333- 879	350- 925	369- 976
154- 407	170- 449	184- 486	200- 527	214- 564	229- 606	245- 648	259- 685	273- 722	291- 768	305- 805
130- 345	144- 380	156- 412	170- 448	180- 476	194- 513	207- 546	219- 578	231- 611	243- 643	257- 680
322- 575	355- 634	385- 688	418- 747	450- 803	481- 859	515- 919	544- 972	578-1031	609-1088	641-1144
234- 617	257- 680	280- 740	303- 800	324- 856	347- 916	369- 976	392-1036	417-1101	439-1161	462-1221
193- 509	214- 564	231- 611	249- 657	268- 708	287- 759	306- 809	324- 856	341- 902	362- 957	382-1008
163- 431	180- 476	194- 513	212- 560	226- 597	243- 643	259- 685	273- 722	291- 768	305- 805	322- 851
387- 691	425- 759	462- 825	501- 894	536- 956	578-1031	616-1100	653-1166	691-1234	730-1303	768-1372
280- 740	308- 814	336- 888	364- 962	389-1027	417-1101	445-1175	473-1249	501-1323	527-1392	555-1466
231- 611	256- 675	277- 731	299- 791	320- 846	345- 911	368- 971	389-1027	410-1082	434-1147	457-1207
196- 518	215- 569	235- 620	254- 671	271- 717	292- 772	310- 819	327- 865	348- 920	366- 967	387-1022
460- 822	497- 888	539- 963	585-1044	630-1125	676-1206	704-1256	763-1363	809-1444	852-1522	900-1606
327- 865	361- 953	392-1036	424-1119	455-1203	487-1286	518-1369	551-1457	583-1540	616-1628	648-1711
270- 712	298- 786	324- 856	350- 925	375- 990	403-1064	429-1133	453-1198	480-1267	508-1341	532-1406
229- 606	252- 666	273- 722	298- 786	317- 837	341- 902	362- 957	383-1013	406-1073	427-1129	452-1193



WX21 SERIES



WX25 SERIES

(SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE)

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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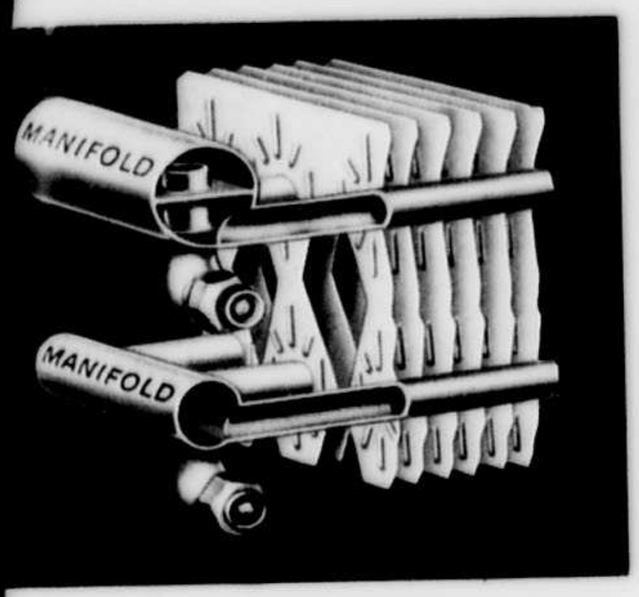
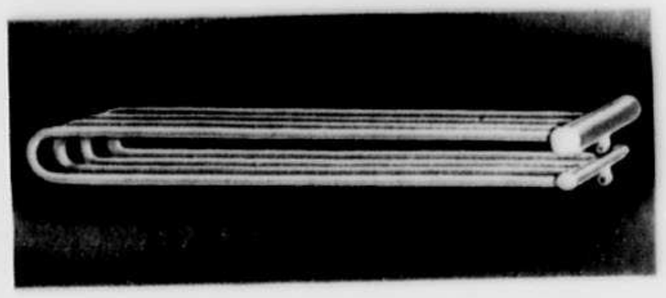
FRIGIDAIRE "MOISTEMP" COOLING UNIT FEATURES

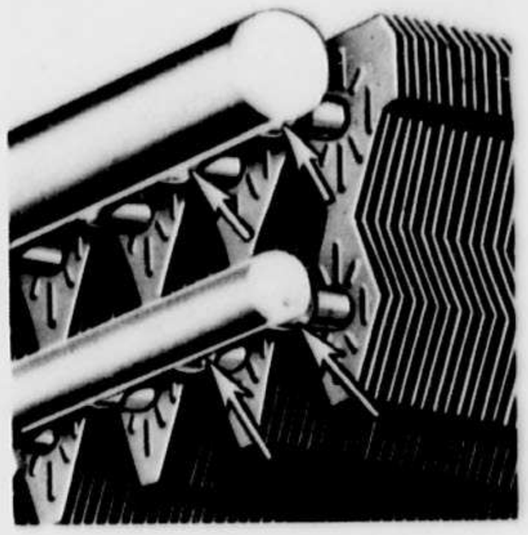


Refrigerant Distribution Wells—Efficient manifold design assures complete and uniform distribution of refrigerant throughout the tubes. The ends of tubes are joined to upper and lower manifolds, resulting in a maximum tube area being in contact with liquid refrigerant at all times. This "wet expansion" principle increases capacity and provides uniform cooling unit temperature as well as lower operating cost. A special baffle in the upper manifold increases heat absorbing ability by maintaining cooling unit in a flooded condition. Baffle feature also reduces possibility of refrigerant line sweating.

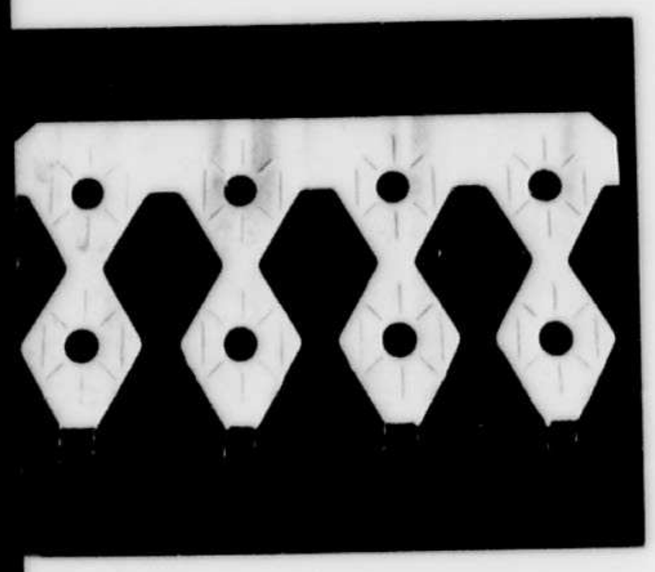


Multiple Tube Construction—Refrigerant travel is through several individual tubes rather than one continuous tube. Heat removal is faster because less time is required for heat laden refrigerant to pass through the cooling unit to the compressor.

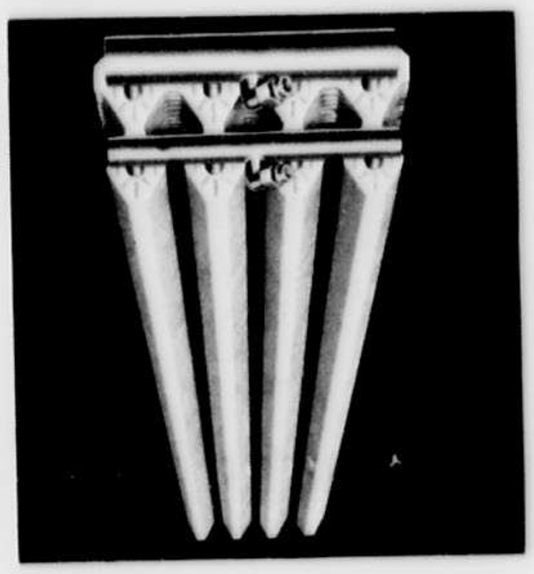
Corrosion-Resisting Tubing—3/4" copper tubing is used to give faster cooling. Electro tin plated to prevent corrosion. Large diameter of tube reduces friction or pressure drop and improves overall efficiency of the cooling unit. All units are thoroughly cleaned, dehydrated, and sealed to remove moisture and foreign matter which later would effect operation of control valves.



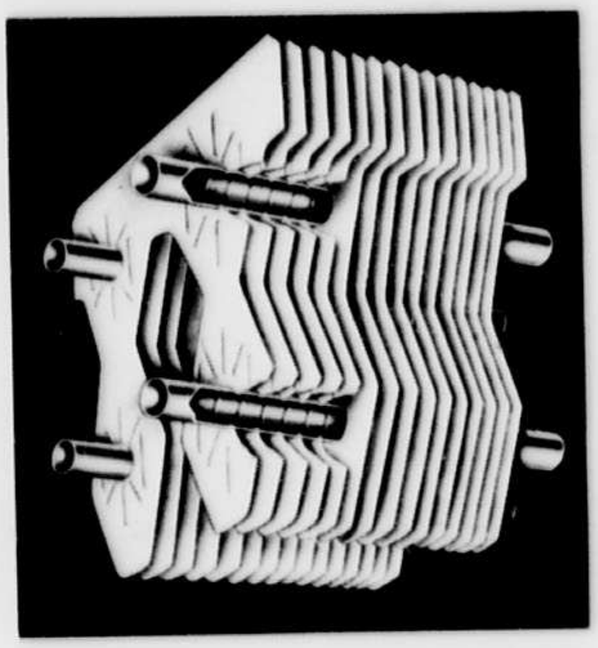
Silver-Soldered Joints—Only silver solder is used on the refrigerant joints of the gravity type cooling units to eliminate the possibility of leaks due to corrosion or electrolytic decomposition. Silver-soldered joints have proved to be stronger than the copper tubing itself.



"Effectifin"—The exclusive design of the Frigidaire diamond shaped fin retains only *active heat absorbing surface.* Thus ineffective fin surface and the resulting air circulation and defrosting difficulties are eliminated. Embossing, extending radially from the tubes, adds to the rigidity of the aluminum fins.



Improved Circulation—Proper air circulation through the cooling unit is provided by adequate spacing between fin rows. This prevents choking of air circulation and improves the operating efficiency of the cooling unit. Defrosting is also aided by the larger volume of air in contact with the colder, lower portion of the fin.



Hydraulic Tube Expansion—A tight metal-to-metal bond between the cooling unit tube and fin is obtained by hydraulically expanding the refrigerant tube into the "Effectifin." This positive bond assures rapid heat transfer from the fin to the refrigerant filled tube.

In addition to the "Moistemp" Gravity Air Type Cooling Units, Frigidaire also offers a complete line of "Moistemp" Forced Air Cooling Units ranging in capacity from 60 pounds to 8 tons of refrigeration per day.

CS-1198-1 5M 6-40 (15) Frigidaire Commercial and Air Conditioning Division, General Motors Sales Corporation, Dayton, Ohio.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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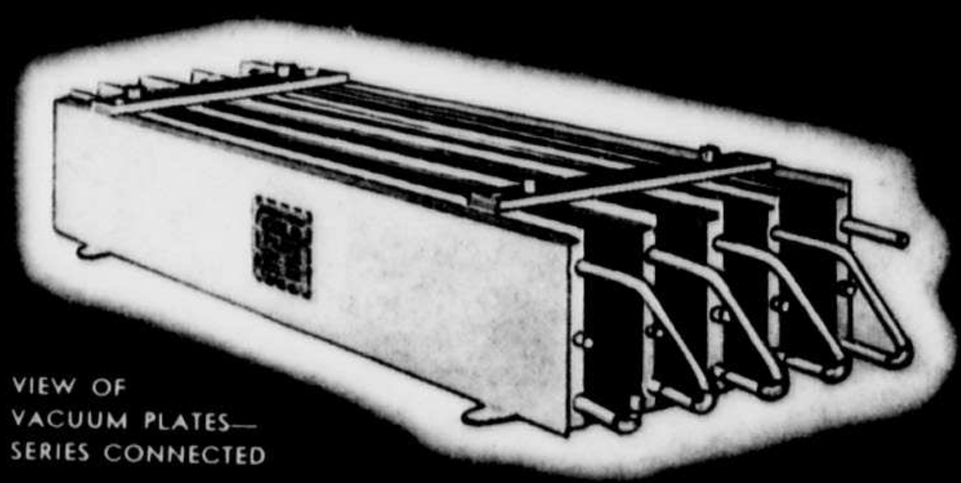
FRIGIDAIRE FLOWING COLD

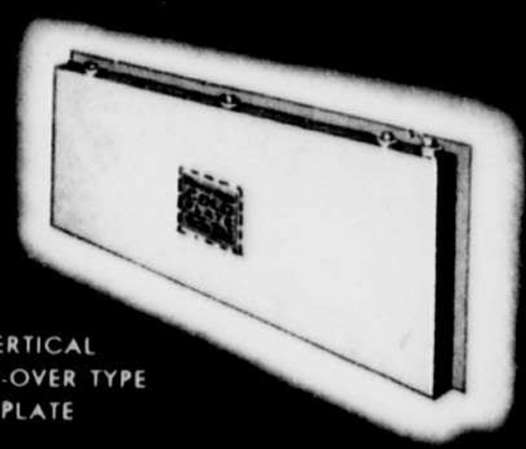
LOW TEMPERATURE—VACUUM AND HOLD-OVER PLATES

HORIZONTAL—SHELF TYPE—VACUUM, FREEZER PLATE.

VERTICAL—OVERHEAD TYPE—VACUUM PLATE.



VIEW OF
VACUUM PLATES—
SERIES CONNECTED



VERTICAL
HOLD-OVER TYPE
PLATE

FRIGIDAIRE

Indian Affairs, (RG 10, Volume 6301, file 650-5, part 5)

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SPECIFICATIONS

Frigidaire Low Temperature Vacuum and Hold-Over Plates

HORIZONTAL—SHELF TYPE
VACUUM FREEZER PLATES

Model	*Width*	*Length*	*Charge (lbs.) Refrigerant*	*Shelf Area Sq. Ft.*	*Net Weight (lbs.)*	
2248	22″	48″	3	7.4	33	All Plates 1″ Thick
2260	22″	60″	3½	9.2	42	
2272	22″	72″	4¼	11	62	
22108	22″	108″	6½	16½	72	

VERTICAL—OVERHEAD TYPE
VACUUM PLATES

Model	*Height*	*Length*	*Charge (lbs.) Refrigerant*	*Sq. Ft. Surface Both Sides*	*Net Weight (lbs.)*	
1248	12″	48″	1½	8	24	All Plates 1″ Thick
1260	12″	60″	2	10	30	
1272	12″	72″	2½	12	36	
1284	12″	84″	3	14	42	
12108	12″	108″	3½	18	54	
12144	12″	144″	4¾	24	72	

Horizontal and Vertical Plates have ⅝″ x 8″ Copper Tube Connections—Exterior Finish—Aluminum Paint.

VERTICAL—HOLD-OVER TYPE PLATES

Model	*Height*	*Length*	*Thickness*	*Charge (lbs.) Refrigerant*	*Sq. Ft. Surface Both Sides*	*Net Weight (lbs.)*
2448	24″	48″	1″	3¼	16	90
2454	24″	54″	1″	3½	18	100
2460	24″	60″	1″	4	20	110
3060	30″	60″	1″	5	25	139
2448	24″	48″	2⅝″	3¼	16	177
2454	24″	54″	2⅝″	3½	18	199
2460	24″	60″	2⅝″	4	20	221
3060	30″	60″	2⅝″	5	25	276

Vertical—Hold-Over Type Plates—contain —6°F Eutectic Solution for Low Temperature, and + 18° F Eutectic Solution for High Temperature.

(Above specifications subject to change without notice)

Printed in Canada

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ADDRESS REPLY TO
PURCHASING DIVISION

CANADA
DEPARTMENT
OF
MINES AND RESOURCES
GENERAL ADMINISTRATIVE OFFICES

PLEASE QUOTE
FILE 59908-15-16

OTTAWA September 24, 1945.

Memorandum

Indian Affairs Branch

Re refrigeration plant for Beauval School

As stated in telephone conversation of even date, for our assistance in securing competitive prices on the above, I would suggest that engineering advice be obtained with a view to securing a neutral specification for a plant of suitable design and capacity.

Will you please arrange accordingly.

The quotation of J.H.Ashdown Hardware Co. Ltd., Winnipeg, is appended herewith. Please return same with your reply.

H.J. DAVIDSON
Departmental Purchasing Agent.

WMV/HC

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5 / Beauval Res. #5

ADDRESS REPLY TO
PURCHASING DIVISION

CANADA

DEPARTMENT
OF
MINES AND RESOURCES
GENERAL ADMINISTRATIVE OFFICES

PLEASE QUOTE
FILE 59908-15-16

1- Reports

Department of Mines & Resources
Indian Affairs Branch
SEP 25 1945
RECEIVED

OTTAWA September 24, 1945.

Memorandum

Indian Affairs Branch

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As stated in telephone conversation of even date, for our assistance in securing competitive prices on the above, I would suggest that engineering advice be obtained with a view to securing a neutral specification for a plant of suitable design and capacity.

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J.H. Davidson

Departmental Purchasing Agent.

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Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Ottawa, October 12, 1945.

Reverend Sir:

I desire to refer to your letter of July 6, with regard to securing a frigidaire for the Beauval Residential School.

Immediately upon receipt of your letter the quotation which you received from the Ashdown Hardware Company was submitted to our Purchasing Branch. The cost of the equipment suggested by the company appears high.

Please let me know the length, width and height of the room in the school that you can use for a refrigerator. You should also let me know the voltage of the electrical power available. It will be necessary for us to secure engineering advice in order that we can obtain a specification for a plant of suitable design and capacity.

Yours very truly,

Philip Phelan,
Chief, Training Division.

Rev. F.X. Gagnon, O.M.I.,
Principal,
Indian Residential School,
Beauval, Sask.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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Indian Residential School.
Beauval Sask., Oct. 26 1945.

This page is now

Dimension of room that could be used as Frigidaire.

Height 9' (9"
Lenght 23'
Width 12½'

Proposed freezing room:

Height 9' 9"
Lenght 13'
Width 12½

N.B. If possible would like freezing room devided in two. One room for fish and one for meat.

Proposed Cooling Room:

Height 9' 9"
Lenght 10'
width 12½

Electric Power Available.

220 Volts, 60 cycles, 3 phase, A.C. ~~or 110 volts. A.C.~~

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132/1/5

Indian Residential School.
Beauval Sask.,

Oct. 26 1945.

Mr. Philip Phelan,
Chief, Training Division,
Indian Affairs Branch,
Ottawa,

NOV 3 1945
REGISTERED

File 132-1-5

Dear Sir:-

This is to acknowledge receipt of yours of the 12 th, instant with regard to securing a frigidaire for the Beauval Indian Residential School.

Your will find in a separate sheet all the dimensions of the available room for a re rigerator. You will also find the dimensions of the proposed freezing room, which I would like devided in two rooms. (as fish give its smell to the the meat) Also the dimensions for the cooling room.

You will also have the voltage of the electrical power available with 24 hours service at least in the summer time.

Hoping these informations will enable the Purchasing Agent to the most suitable plant at an early date.

Yours very truly:

F.X. Gagnon O.M.I.

F.X. Gagnon O.M.I.
Principal.

3 carbon copies
1 for file
1 for meat
1 for university
artist

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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Indian Residential School.
Beauval Sask., Oct. 26 1945.

Dimension of room that could be used as Frigidaire.

Height 9' (9"
Lenght 23'
Width 12½'

Proposed freezing room:

Height 9' 9"
Lenght 13'
Width 12½

N.B. If possible would like freezing room devided in two. One room for fish and one for meat.

Proposed Cooling Room:

Height 9' 9"
Lenght 10'
width 12½

Electric Power Available.

220 Volts, 60 cycles, 3 phase, A.C. or 110 volts. A.C.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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132-1-5

Ottawa, November 9, 1945.

Memorandum:

DIRECTOR,
SURVEYS and ENGINEERING BRANCH.

Re: Refrigeration Plant for
Beauval Indian Residential School.

This school requires a refrigeration plant and obtained a quotation from the Ashdown Hardware Company. We submitted this to the Purchasing Branch but in reply they write us as follows:-

"For our assistance in securing competitive prices on the refrigeration plant for Beauval, I suggest that engineering advice be obtained with a view to securing a neutral specification for a plant of suitable design and capacity."

The dimensions of the room that could be used in the Beauval Residential School are as follows: -

Length - 23 ft. width - 12½ ft.
Height - 9 ft.

Encl.

Electrical power available - 220 Volts, 60 cycles, 3 phase, A.C.

In view of the fact that both Fish and Meat have to be stored, it has been suggested that the refrigeration unit should comprise three compartments - one for fish, one for meat and one for other articles. The room available is in the basement and I enclose a rough sketch showing its location as compared with other rooms in the basement.

Director.

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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Mr. Hoey - Five copies of Specification herewith.
19/11/45. J.M.W. J.M.W.

D.C

Department of Mines and Resources
NOV 20 1945
REGISTERED

I.A.1567-1

MEMORANDUM:

November 19, 1945.

Re: Refrigeration Plant for Beauval Indian Residential School.

In accordance with the request from the Director of Indian Affairs in his memorandum to you under date of November 9th, 1945, we are forwarding herewith, six copies of a specification covering the proposed refrigeration plant for the above, for the use of the Departmental Purchasing Agent, in obtaining tenders.

Encls.

It is pointed out that if such a plant had been visualized when the building was originally planned, a more convenient location of the Walk-in Cooler Room could have been obtained.

Under the circumstances there appears to be no alternative to using the space suggested. The mechanical unit of the installation however, must occupy space outside of the refrigerator and it is suggested that a corner of the Pantry near the outside wall, be cleared and used for this purpose.

From data submitted in the memorandum, it is evident that a unit having approximately 1 ton of refrigeration capacity will be necessary. This would require a 1 or 2 horsepower motor, depending on the design of the equipment.

This specification calls for the equipment to be based on the following operating conditions: maintain an inside temperature of 35 degrees F. with an ambient temperature of 85 degrees F. and 80 degrees F. condensing water, the accepted standard for this type of work.

J. M. Wardle, Esq.,
Director,
Surveys and Engineering Branch,
Department of Mines and Resources,
OTTAWA, Ontario.

T. S. Mills
Chief Engineer.

DIRECTOR
NOV 19 1945
SURVEYS & ENGINEERING

Indian Affairs. (RG 10, Volume 6301, file 650-5, part 5)

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DEPARTMENT OF MINES AND RESOURCES
SURVEYS AND ENGINEERING BRANCH
ENGINEERING AND CONSTRUCTION SERVICE

SPECIFICATION FOR REFRIGERATION EQUIPMENT
FOR THE INDIAN RESIDENTIAL SCHOOL,
BEAUVAL, SASKATCHEWAN.

1. SCOPE OF WORK:

This Specification is intended to cover the supply and installation of a complete Refrigeration Plant for a Walk-in Cooler Room which is located in an allotted space in the Basement. This equipment shall include a Condensing Unit, Cooling Coils, Piping, Drainage, Automatic Controls, etc. Machine capacities shall be determined on an operating time of not more than 16 hours per 24 hours, so as to permit a proper defrosting cycle.

The approximate dimensions of the room to be converted into the Walk-in Cooler Room are 12'-6" x 23'-0" x 9'-0". The Department, however, accepts no responsibility for the accuracy of same. It shall be the duty of the Contractor to visit the Building and take all necessary measurements and provide himself with all the necessary data required to enable him to submit a tender.

The Contractor shall also make all structural and piping changes, additions to the room, etc., as hereinafter specified or as may be required. He will be held responsible for all the above work as well as the provision of equipment of suitable capacity and performance to maintain conditions as specified.

2. ALTERATIONS AND ADDITIONS:

The Contractor shall remove existing window sash and frame and shall brick up the opening. He shall also remove the radiator from this room and cap the steam supply and return connections near the mains.

All steam and return piping including branches to upper floor radiators shall be stripped of their present covering and shall be re-covered as follows:- All pipes to have 4 ply 1" thick asbestos air cell covering, carefully butted and fitted around hangers where such occur. In addition these pipes shall be covered with 1" thick anti-sweat wool felt sectional covering consisting of two ½" layers, each of which shall have been so fabricated by its manufacturer as to have a double thickness of asphalt paper both inside and out, stapled in place, and jacketted with factory cotton pasted on.

The Contractor shall provide and set in place stud partitions, full height, sheathed both sides, dividing the room into 3 compartments. Floor, ceiling, and inner sides of enclosing walls, (not including new partitions) shall have 2 layers of insulating cork not less than 2" thick laid with staggered, vertical, tight joints, over a layer of water and vapour proof paper having joints lapped at least 3". "Palco" wool will be acceptable as an alternative to cork insulation.

If the existing floor is wood, it shall be removed and replaced by a 4" reinforced concrete floor, using 18 gauge reinforcing wire mesh and a 1" finish trowelled smooth.

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