



SERVICE LETTER

No. 705

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

April 16, 1974

M

Subject: Modification of Turbocharger Oil Tanks and Related Installation -- reference attached AiResearch Service Bulletins No. 14.1.10 and 14.1.11, both dated February 6, 1974.

Models Affected:

Serial Numbers Affected:

I. AiResearch Service Bulletin No. 14.1.11 affects aircraft listed below that have had AiResearch turbocharger systems installed in the field in accordance with AiResearch STC SA852WE:

PA-23-235 Apache	27-505 to 27-622 incl.
PA-23-250 Aztec	27-1 to 27-504 incl.
PA-23-250 (Six Place) Aztec	27-2000 to 27-2504 incl.

II. AiResearch Service Bulletin No. 14.1.10 affects aircraft listed below with factory installed or field installed (per AiResearch STC's SA909WE or SA978WE) AiResearch turbocharger systems:

PA-23-250 (Six Place) Aztec	27-2505 to 27-4221 incl.
-----------------------------	--------------------------

Compliance Time:

Refer to attached AiResearch Service Bulletin Nos. 14.1.10 and 14.1.11, "Compliance - Recommended" section.

Purpose:

To provide distribution of AiResearch Service Bulletins Nos. 14.1.10 and 14.1.11, both dated February 6, 1974, the objectives of which are specified under the "Reason" and "Description" headings.

Instructions:

Contained in AiResearch Service Bulletin Nos. 14.1.10 and 14.1.11, Section II - "Accomplishment Instructions" and related sketches (Figures 1 and 2).

Material Required:

Refer to AiResearch Service Bulletin Nos. 14.1.10 and 14.1.11, Section III, "Material Information".

Availability of Parts:

Contact your Piper Field Service Facility for details relative to the oil tank exchange program.

Effectivity Date:

This Service Letter is effective April 30, 1974.

(over)

Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with the provisions of AiResearch Service Bulletin No. 14.1.10 or 14.1.11, whichever applies to your aircraft. This modification is in reference to FAA Airworthiness Directive No. 74-06-1.



Service Bulletin

BULLETIN NO. 14.1.10

REVISION

DATE FEB. 6, 1974

PAGE 1 of 6

FORM 485

MODIFICATION OF TURBOCHARGER OIL TANKS AND RELATED INSTALLATION

SECTION I PLANNING INFORMATION

A. Effectivity:

All Piper PA-23-250 and PA-E23-250 aircraft, Serial No's. 27-2505 and subsequent, equipped with AiResearch Aviation Company turbocharger systems in accordance with STC SA909WE, or STC SA978WE.

B. Reason:

To minimize fire hazards in the event of an engine compartment fire.

C. Compliance - Recommended:

Next 100 hour inspection or sooner.

D. Approval:

F.A.A.

E. Description:

This Bulletin will provide the necessary information for modifications:

1. Lower Air Scoops - Drill Drain Holes
2. Turbocharger Oil Tanks - Product Improvement - Fireproofing
3. Lower Firewalls - Seal openings around oil tank sight tube fittings

F. Weight and Balance:

Negligible.

G. Manpower:

An estimated four (4) man hours is required per aircraft when accomplished during inspection.

H. Parts Requirement:

AiResearch Modification Kit No. 1301081. (1) Kit per aircraft. Modification Kit may be procured through any authorized Piper Distributors.

Each Kit contains two (2) turbocharger oil tanks (with improved fireproofing characteristics), sight tubes (2), and a sealant.

I. Tooling - Price & Availability:

No additional tooling required.

J. References:

Maintenance Manual - AiResearch Turbocharger Kit.
Parts Catalog - AiResearch Turbocharger Kit.

SECTION II

ACCOMPLISHMENT INSTRUCTIONS

- A. Remove safety wire and drain plug (MS20913-2D) from aft end of the turbocharger oil tank (286-P23-028-111). Drain oil in clean container for reuse.
- B. Loosen clamps (AN737-TW-38) from four (4) hose connections. Detach hoses (4) from tank. L.H. R.H.
- C. Remove safety wire and plastic oil level sight tube (286-P23-028-93) from aft end of an oil tank, aft side of firewall. L.H. R.H.
- D. Remove four (4) oil tank mounting bolts (AN3C-6A), nuts (AN363C-1032) and washers (AN960C-10). Remove oil tank. L.H. R.H.
- E. Install improved oil tank (286-P23-028-111F) in reversed order from Step D to A. L.H. R.H.
- F. Seal openings around sight tube fittings with supplied sealant as illustrated on Figure 1, L.H. R.H. Follow application directions on container. (Reference - Piper Service Bulletin No. 375 dated June 20, 1973.)
- G. Drill drain hole (1) on bottom air scoop (286-P23-066-5) as illustrated on Figure 2. L.H. R.H.

SECTION III

MATERIAL INFORMATION

A. The parts listed below comprise modification kit Part No. 1301081:

<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	286-P23-028-111F	Oil Tank - Turbocharger (Improved)
2	286-P23-028-93	Sight Tube - Oil Level
1	Stabond HT-4	Sealant - Stabond Corp.
3	.032 x 12"	Safety Wire

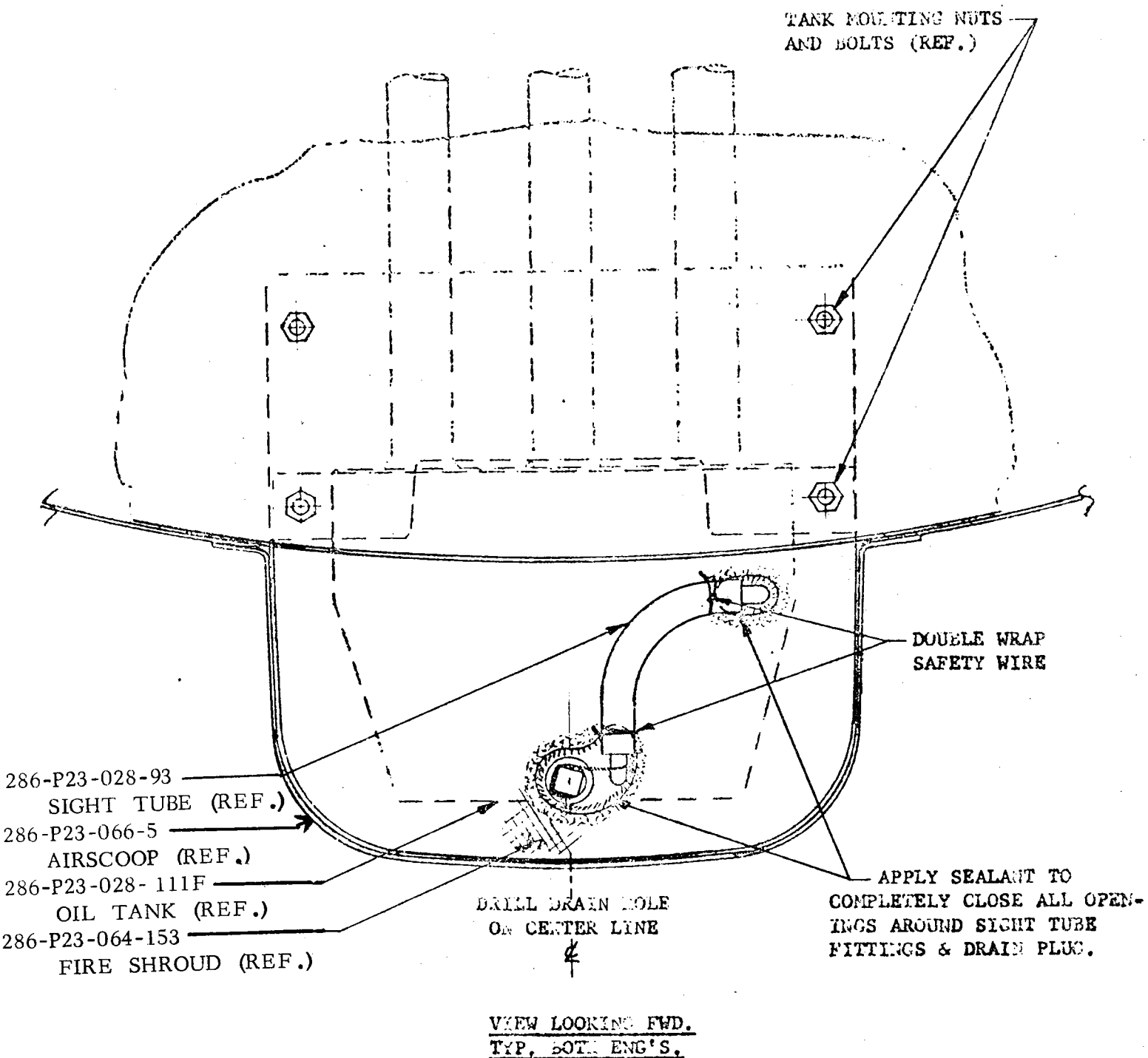
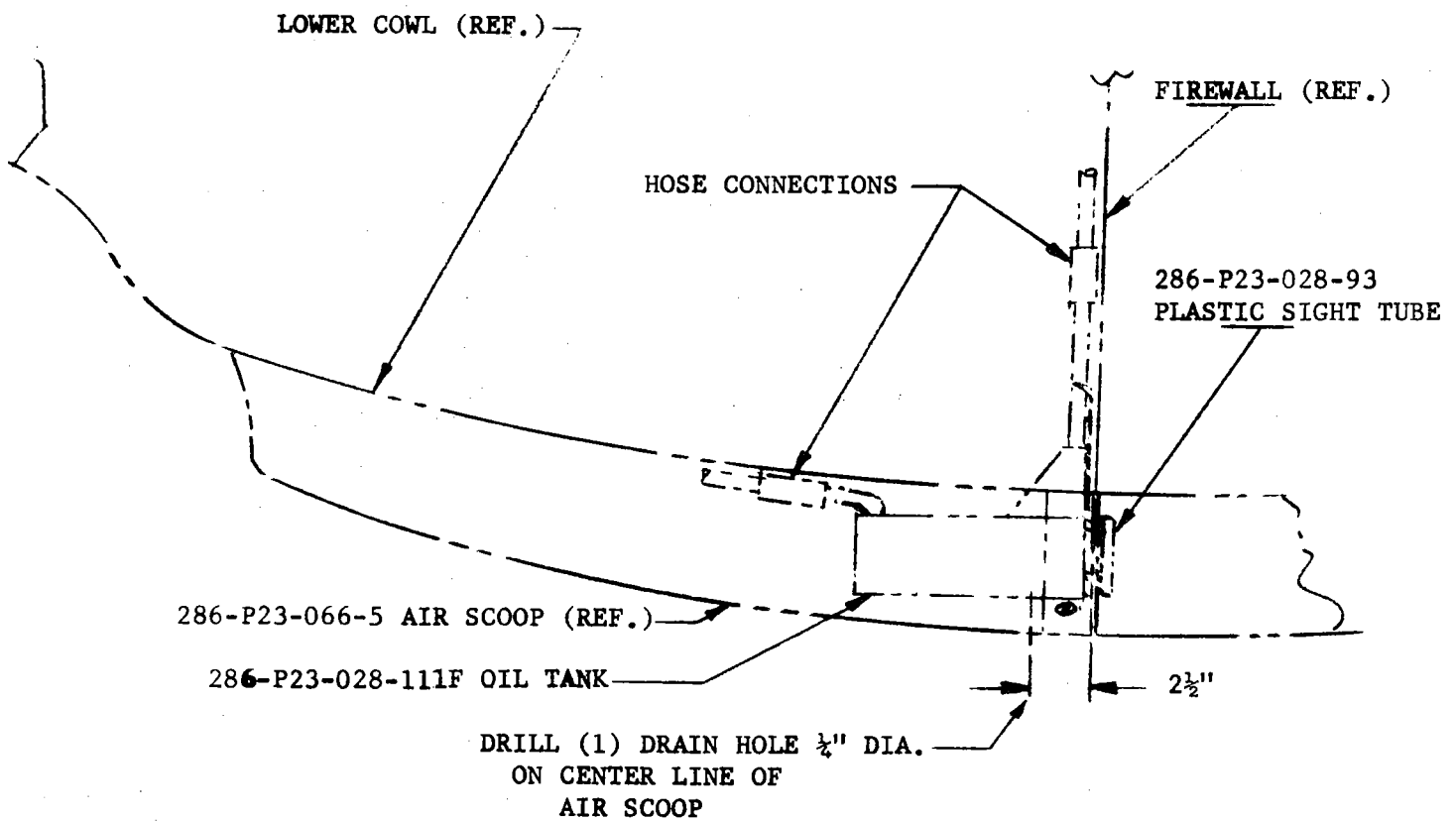


FIG. 1

— FWD. —



SIDE VIEW
TYP. BOTH ENG'S.

FIG. 2



BULLETIN NO. 14.1.11

REVISION

DATE FEB. 6, 1974

PAGE 1 of 6

Service Bulletin

FORM 465

MODIFICATION OF TURBOCHARGER OIL TANKS AND RELATED INSTALLATION

SECTION I PLANNING INFORMATION

A. Effectivity:

All Piper PA-23-235 and PA-23-250 aircraft Serial Numbers 27-1 through 27-2504 equipped with AiResearch Aviation Company's turbocharger systems in accordance with STC SA852WE.

Reason:

To minimize fire hazards in the event of an engine compartment fire.

C. Compliance Recommended:

Next 100 hour inspection or sooner.

D. Approval:

F.A.A.

E. Description:

This bulletin will provide the necessary information to modify:

1. Oil Tank Fairings - Drill Drain Holes
2. Turbocharge Oil Tanks - Product Improvement - Fireproofing
3. Firewalls - Provide lower fireshrouds aft of oil tanks
4. Lower Fireshrouds - Seal openings around oil tank sight tube fittings

Weight and Balance:

Negligible.

G. Manpower:

An estimated 8 man hours is required per aircraft when accomplished during an inspection.

H. Parts Requirement:

AiResearch Modification Kit No. 1301082. (1) Kit per aircraft. Modification Kit may be procured through any authorized Piper Distributors.

Each Kit contains two (2) turbocharger oil tanks (with improved fireproofing characteristics), two (2) sight tubes, sealant and parts required for lower fireshrouds.

I. Tooling - Price and Availability:

No additional tooling required.

SECTION II

ACCOMPLISHMENT INSTRUCTIONS

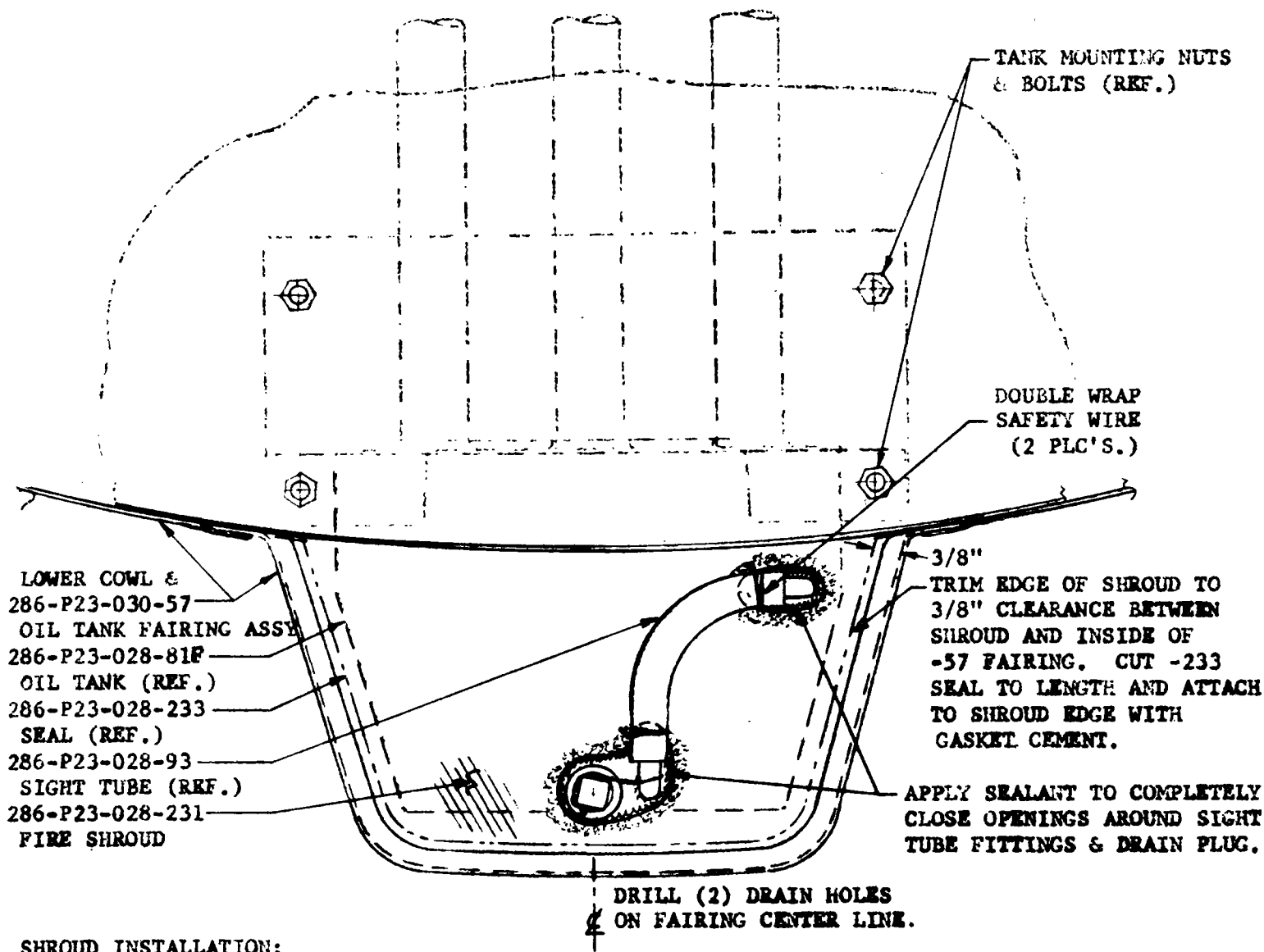
- A. Remove safety wire and drain plug (AN932D-2) from aft end of the turbocharger oil tank (286-P23-028-81). Drain oil in clean container for reuse, L.H. R.H.
- B. Loosen clamps (AN737-TW38) from four (4) hose connections. Detach hoses (4) from tank. L.H. R.H.
- C. Remove four (4) oil tank mounting bolts (AN3C-6A), nuts (AN363C-1032), and washers (AN960C-10). Remove oil tank. L.H. R.H.
- D. Install lower fireshroud (286-P23-028-231) as illustrated on Figures 1 and 2.
- E. Install improved oil tank (286-P23-028-81F) in reversed order from Step C to A.
- F. Install plastic oil level sight tube (286-P23-028-93) as installed on old tank. R.H. L.H.
- G. Seal openings around sight tube fittings with supplied sealant as illustrated on Figure 1. L.H. R.H. Follow application directions on container.
- H. Drill drain holes (2) on fairing, oil tank (286-P23-030-57) as illustrated on Figure 2. R.H. L.H.

SECTION III

MATERIAL INFORMATION

A. The parts listed below comprise modification kit Part No. 1301082:

<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	286-P23-028-81F	Oil Tank - Turbocharger (Improved)
2	286-P23-028-93	Sight Tube - Oil Level
2	286-P23-028-231	Fire Shroud
2	286-P23-028-233	Seal - Fire Shroud
1	Stabond HT-4	Sealant - Stabond Corp.
3	.032 x 12"	Safety Wires



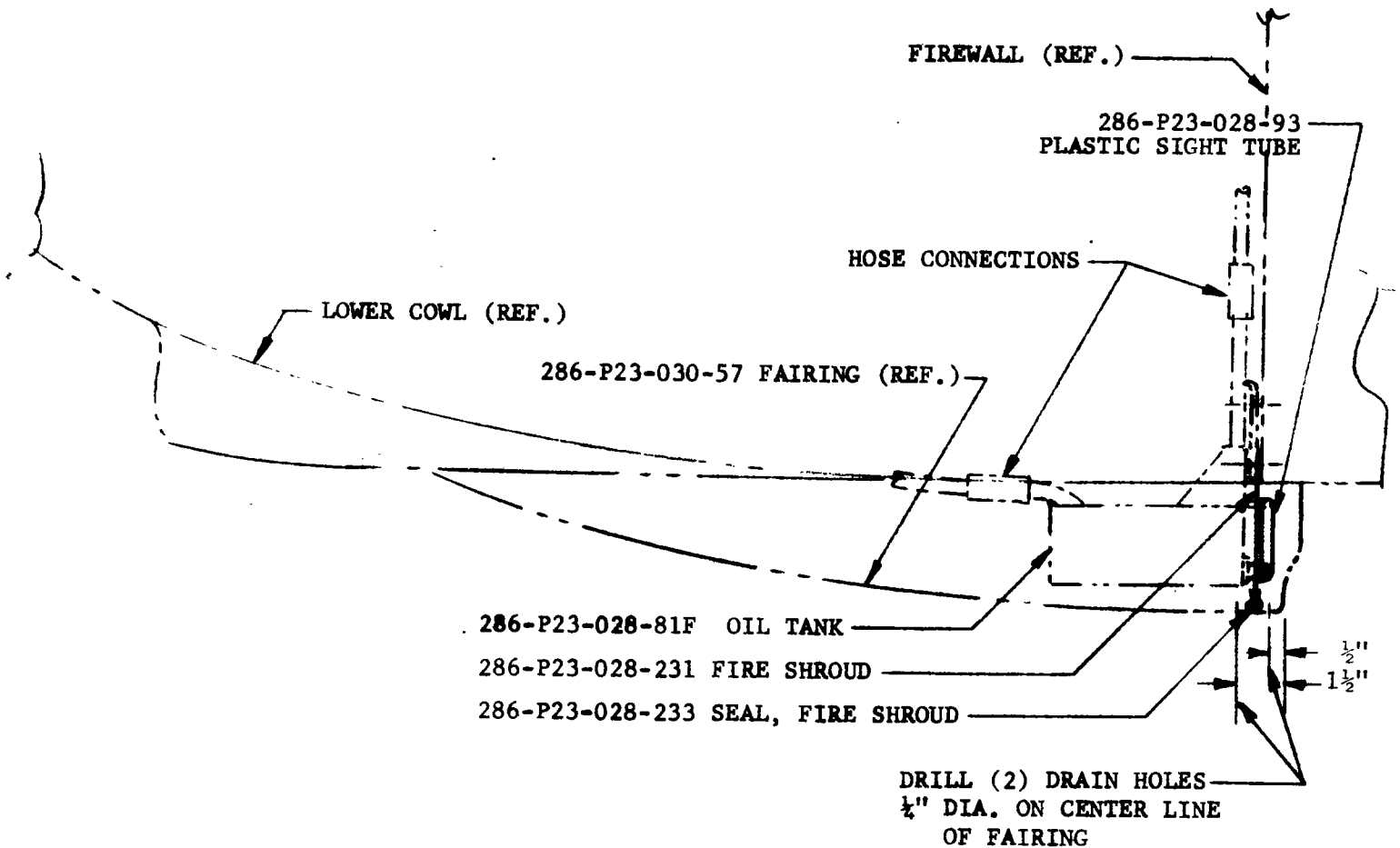
SHROUD INSTALLATION:

- A. SHROUD TO BE SANDWICHED BETWEEN EXISTING ENGINE FIREWALL AND LOWER HALF OF OIL TANK MOUNTING PLATE.
- B. CHECK LOCATIONS OF (2) .09 PILOT HOLES IN SHROUD TO MATCH (2) LOWER BOLT HOLES IN OIL TANK PLATE. DRILL HOLES TO ACCEPT 3/16" BOLTS.
- C. LOCATE SHROUD AS IN (A), TRIM UPPER EDGE AS REQUIRED TO PERMIT ATTACHMENT TH (2) LOWER TANK BOLTS.

VIEW LOOKING FWD.
TYP. BOTH ENGS.

FIG. 1

— FWD. —



SIDE VIEW
TYP. BOTH ENG'S.

FIG. 2