TO 1300i-2-12JG-79-1

TECHNICAL MANUAL

JOB GUIDE
ORGANIZATIONAL MAINTENANCE

SERVICING ENGINE OIL
(12-79-00 THROUGH 12-79-03)

USAF SERIES
300i
AIRCRAFT

MCDONNELL DOUGLAS CORPORATION
MILITARY TRANSPORT AIRCRAFT
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Basic and all changes have been merged to make this a complete publication.
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T-2 **1 JUNE 2024**

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LIST OF EFFECTIVE PAGES

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Dates of issue for original and changed pages are:

Original . . . . . 0 . . . . . 1 Jun 24

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 128 CONSISTING OF THE FOLLOWING:

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INTRODUCTION

SCOPE.

This manual contains maintenance procedures to replenish, drain, and drain and flush the engine oil.

MODEL(S) COVERED.

All

ABBREVIATIONS.

The following is a list of non-standard abbreviations used throughout this manual:

GS	General System
MFD	Multifunction Display
QAR	Quick Access Recorder
SDS	Safety Data Sheet

CHANGE REQUEST.

Recommended changes to this manual shall be submitted in accordance with TO 00-5-1.

300i TO INFORMATION.

General 300i TO/eTO, TO Manager, Supplement and finalized Recommended Change (RC) information can be found in the Enhanced Technical Information Management System (ETIMS), System of Record.

LIST OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO).

This list of TCTO's contains all current TCTO's that affect the technical content of text or illustrations found in this manual.

TCTO NUMBER	TITLE	TCTO DATE	APPLICABILITY

SECTION 1

GENERAL INFORMATION (12-79-00)

1-1. GENERAL INFORMATION.

1-2. This section provides general information that is essential for ensuring complete and safe maintenance procedures contained throughout this manual.

1-3. All threads and packings shall be lubricated with lubricating oil prior to installation unless otherwise specified.

1-4. Suitable substitutes for lubricating oil are listed in the system's GS manual (Refer to TO 1300i-2-70GS-00-1, Chapter 2).

1-5. All part numbers listed in the supplies page throughout this manual are considered primary numbers. Secondary, alternate, and/or suitable substitute part numbers may be found in the system's Illustrated Parts Breakdown (IPB) manual (Refer to TO 1300i-4-79).

1-6. All part numbers listed in the support equipment page throughout this manual are considered primary numbers. All approved test equipment, special tools, locally manufactured equipment, secondary, alternate, and/or suitable substitute part numbers may be found in the system's GS manual (Refer to TO 1300i-2-71GS-00-1, Chapter 4).

1-7. All adhesive sealants, sealants, and compounds used in this manual are listed with a primary part number and/or primary specification number. Any suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds may be used unless otherwise specified. Suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds are listed in the system peculiar corrosion control manual and GS manuals (Refer to TO 1300i-23, Chapter 1, Section III).

1-8. GENERAL WARNINGS, CAUTIONS, AND NOTES.

WARNING

- Engine cases, components, oil tubes, and certain portions of the nacelle are extremely hot immediately after engine shutdown. Exercise caution and utilize protective equipment to prevent burns. Failure to comply may cause injury to personnel.

- The use of personal protective equipment is mandatory to perform this procedure. The applicable Safety Data Sheet (SDS) will identify special protection information. Failure to comply may cause injury to personnel.

- A minimum of 5 minutes must elapse after engine shutdown before removing oil filler cap to allow tank pressure to bleed off. Failure to comply may cause injury to personnel.

CAUTION

Oil filler cap shall be properly installed in the locked position, when the cap handle is facing toward oil tank service door and is not impeded by the lanyard or filler neck mounting bolts. Personnel shall ensure the oil filler cap handle is fully seated and locked after servicing the oil system. Failure to comply may cause damage to aircraft.

SECTION 2

ENGINE OIL SYSTEM SERVICING (12-79-01)

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

01-1. Replenishment - within 1 hour of shutdown.
01-1A. Replenishment - 1 hour or more after shutdown.
01-2. Fill.

NOTE	Task
These are typical engine oil servicing tasks for all engines.	All

Additional data:

	Task
TO 1300i-2-31JG-30-2	01-1, 01-1A
TO 1300i-2-71JG-00-1	01-1A, 01-2
TO 1300i-2-79JG-10-1	01-1, 01-1A

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
WARNING	
• The use of personal protective equipment is mandatory to perform this procedure. The applicable Safety Data Sheet (SDS) will identify special protection information. Failure to comply may cause injury to personnel.	All
• Engine oil is combustible, toxic, and is an irritant to the skin, eyes, and respiratory system. When using engine oil, keep ignition sources away, ensure adequate ventilation is available, avoid direct and/or prolonged body contact, and wear protective clothing/equipment. Failure to comply may cause injury to personnel.	All

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Unit, Fluid Dispenser	SL-260-24-1	--	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
Oil, Lubricating	--	MIL-PRF-23699	AR	All
Rag, Wiping	A-A-2522	--	AR	All

01-1. REPLENISHMENT - WITHIN 1 HOUR OF SHUTDOWN.

CAUTION

- When ambient temperature is below 0 °F, application of heat to the accessory compartment/oil tank area shall be required to allow the oil tank flapper valve full freedom of movement. Excessive force shall not be used to move the oil tank flapper valve. Failure to comply may cause damage to aircraft.

- At no point should oil be filled over the bottom of the top ring in the filler neck. Doing so may result in engine oil over-servicing, resulting in oil quantity and temperature anomalies, possible oil leakage from tank overflow, 2.5 bleed ports, or other engine areas. Failure to comply may cause damage to aircraft.

NOTE

- This is the preferred oil replenishment method. Alternatively, Multifunction Display (MFD) oil quantity readings may be recorded into aircraft forms to be used to calculate and set aside quarts of oil to be serviced in each engine using replenishment - 1 hour or more after shutdown (task 1-1A).

- Adding four or more quarts of oil for a normal flight replenishment is not typical. If more than four quarts are required, Signal Data recorder media (quick access recorder (QAR)) service (TO 1300i-2-31JG-30-2, 31-33-10) may be accomplished and fault isolation performed as determined by QAR analysis.

NOTE - Continued

- Oil consumption shall not exceed 19.0 ounces (0.59 quarts) per hour.

- Engine oil over-service is anytime when oil quantity is above the bottom of the top ring in the filler neck and/or excessive gearbox oil quantity was drained, or as indicated by fault isolation. After corrective action of the cause of the over service, when not already accomplished, engine oil system gearbox drain (12-79-02, task 02-3), and engine oil system drain (12-79-02, task 02-1) shall be accomplished.

- When an engine has been over-serviced and corrected, oil leaking from the 2.5 bleed ports may occur and may require several flights to clear the residual oil.

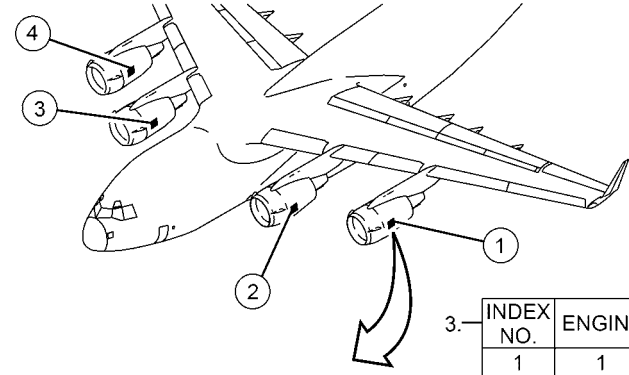
1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Unlatch and open oil tank service door.

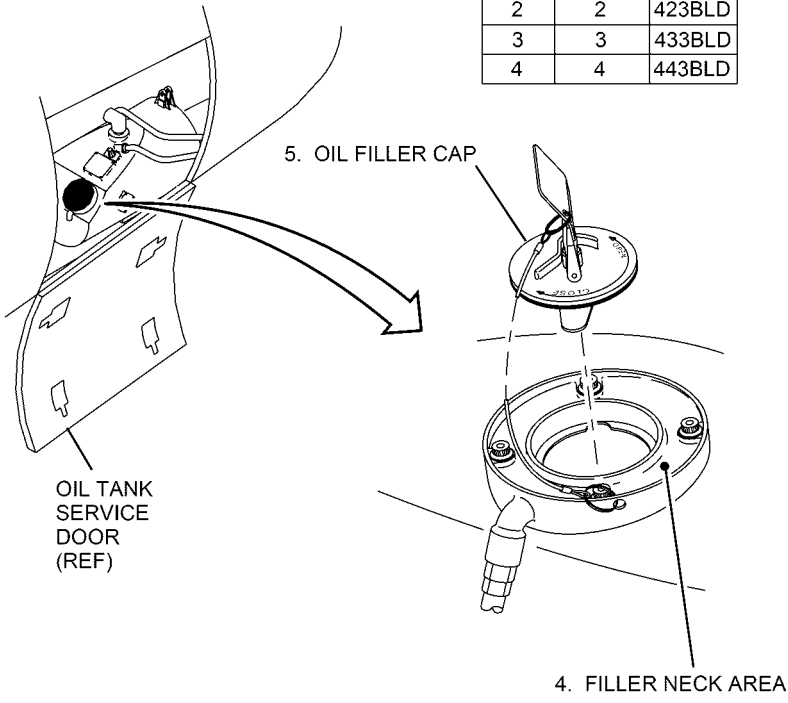
4. Clean filler neck area.

5. Unlock and remove oil filler cap.



3.

INDEX NO.	ENGINE	DOOR NO.
1	1	413BLD
2	2	423BLD
3	3	433BLD
4	4	443BLD



(TYPICAL)

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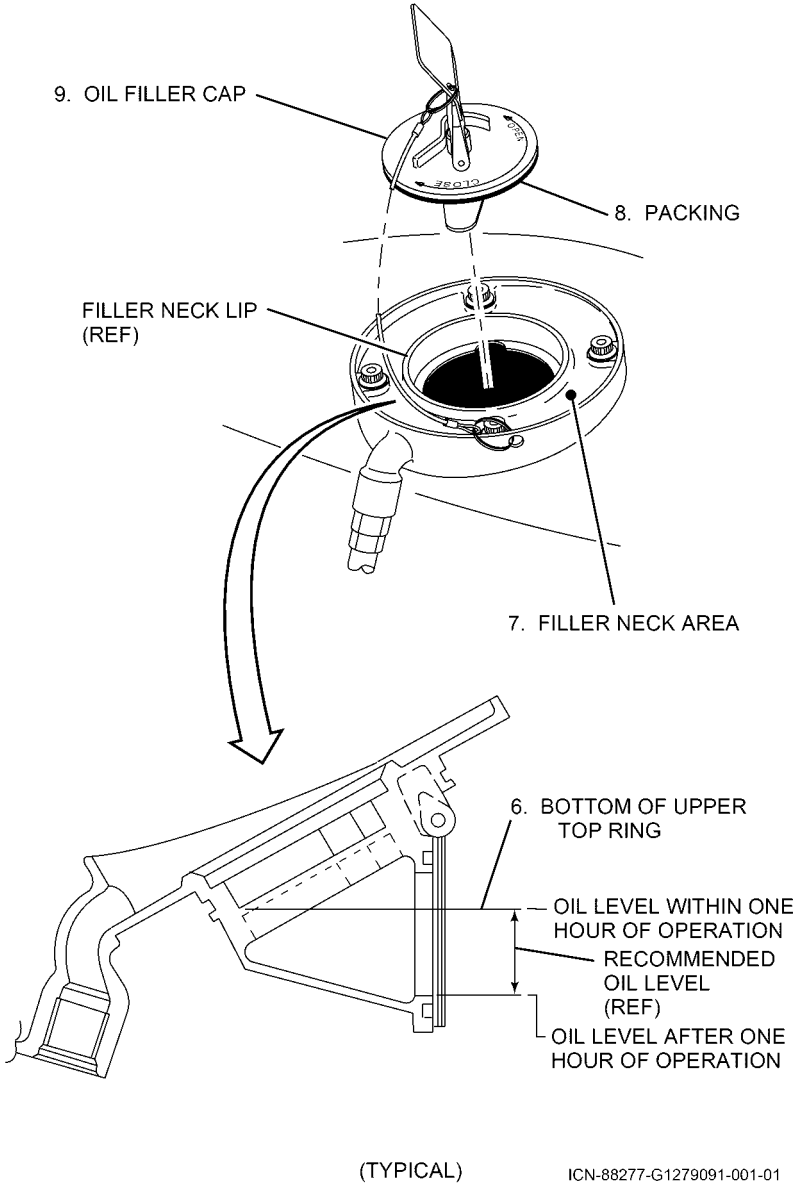
NOTE

- Oil may accumulate in filler neck when adding oil too quickly or when filler neck flapper valve is stuck.
- Oil collecting in the filler neck before MFD reads approximately 23 quarts and/or oil not draining into tank could indicate a binding or sticking oil tank flapper valve. Gently pressing on the flapper may determine freedom of movement.
- Filler neck assembly shall be replaced when flapper valve remains bound, stuck, or broken.
- An inspection mirror may be used to observe oil level.

6. Add oil slowly until oil level reaches bottom of upper top ring inside the filler neck.
7. Clean filler neck area.
8. Ensure packing is free from cuts and deterioration.
9. Position oil filler cap into filler neck lip.



(TYPICAL)

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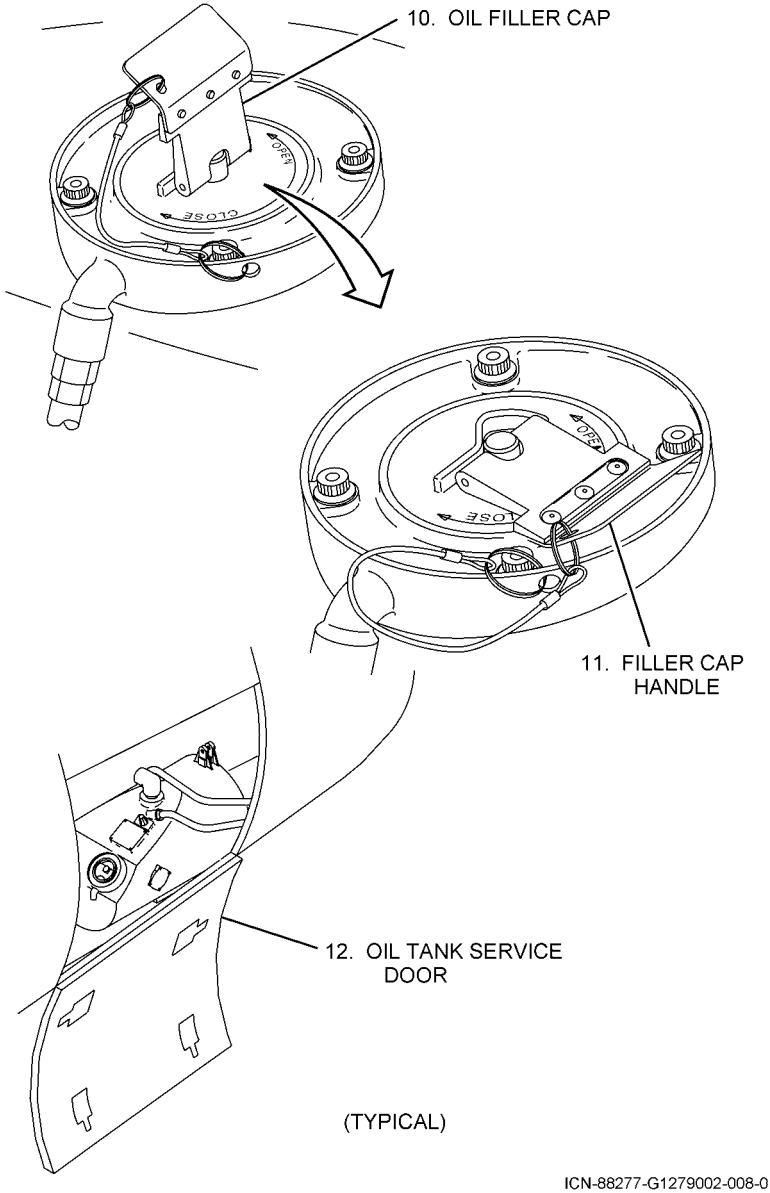
10. Turn oil filler cap clockwise to fully closed position.

CAUTION

Oil filler cap handle faces toward oil tank service door when in locked position and wire rope does not interfere. Ensure a tight positive seal is obtained and lock is firmly in place. Failure to comply may cause inflight oil loss and damage to the aircraft.

11. Lock filler cap handle.

12. Close and latch oil tank service door.



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01-1A. REPLENISHMENT - 1 HOUR OR MORE AFTER SHUTDOWN.

CAUTION

- When ambient temperature is below 0 °F, application of heat to the accessory compartment/oil tank area shall be required to allow the oil tank flapper valve full freedom of movement. Excessive force shall not be used to move the oil tank flapper valve. Failure to comply may cause damage to aircraft.

- At no point should oil be filled over the bottom of the top ring in the filler neck. Doing so may result in engine oil over-servicing, resulting in oil quantity and temperature anomalies, possible oil leakage from tank overflow, 2.5 bleed ports, or other engine areas. Failure to comply may cause damage to aircraft.

NOTE

- Engine oil over-service is anytime when oil quantity is above the bottom of the top ring in the filler neck and/or excessive gearbox oil quantity was drained, or as indicated by fault isolation. After corrective action of the cause of the over service, when not already accomplished, engine oil system gearbox drain (12-79-02, task 02-3), and engine oil system drain (12-79-02, task 02-1) shall be accomplished.

- When an engine has been over-serviced and corrected, oil leaking from the 2.5 bleed ports may occur and may require several flights to clear the residual oil.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

NOTE

- Adding four or more quarts of oil for a normal flight replenishment is not typical. If more than four quarts are required, Signal Data recorder media (quick access recorder (QAR)) service (TO 1300i-2-31JG-30-2, 31-33-10) may be accomplished and fault isolation performed as determined by QAR analysis.

- Oil consumption shall not exceed 19.0 ounces (0.59 quarts) per hour.

- When Multifunction Display (MFD) engine oil quantity readings were recorded in aircraft forms within 1 hour of shutdown, subtract MFD readings from 22 = delta oil to be added; or use oil cans previously set aside with each engine. When result is 19.0 ounces (0.59 quarts) per flight hour or less proceed to step 4, servicing only the calculated amount.

- If MFD engine oil readings where not taken and engines cannot be immediately operated for servicing and engine oil servicing is required proceed to step 5.

EXAMPLE CALCULATIONS WHEN USING MFD READINGS		
Engine	22 - 22 = 0 quarts	No service
	22 - 15 = 7 quarts	Service per step 4
	22 - 20 = 2 quarts	Service per step 4
	22 - 18 = 4 quarts	Service per step 4

3. Operate engines at idle for three minutes minimum by performing power plant operational checkout checklist (TO 1300i-2-71JG-00-1, 71-00-01, tasks 01-1, 01-2, 01-3, 01-4 and 1-6 or 01-7).

4. Perform replenishment - within 1 hour of shutdown (task 01-1).

   SPECIAL INSTRUCTION. Skip steps 5, 6, 7, and 8.

NOTE

When more than 4 quarts is drained from the gearbox contact Base Level Engine Management for evaluation.

5. Perform engine oil system gearbox drain (12-79-02, task 02-2) and note the quantity drained.

6. Perform replenishment - within 1 hour of shutdown (task 01-1).

   SPECIAL INSTRUCTION. Do not fill to bottom of upper ring; only fill until oil level is to the bottom of the flapper valve; then add 2 additional quarts oil.

7. When practical, perform engine idle/acceptance run (TO 1300i-2-71JG-00-1, 71-00-01, task 01-3).

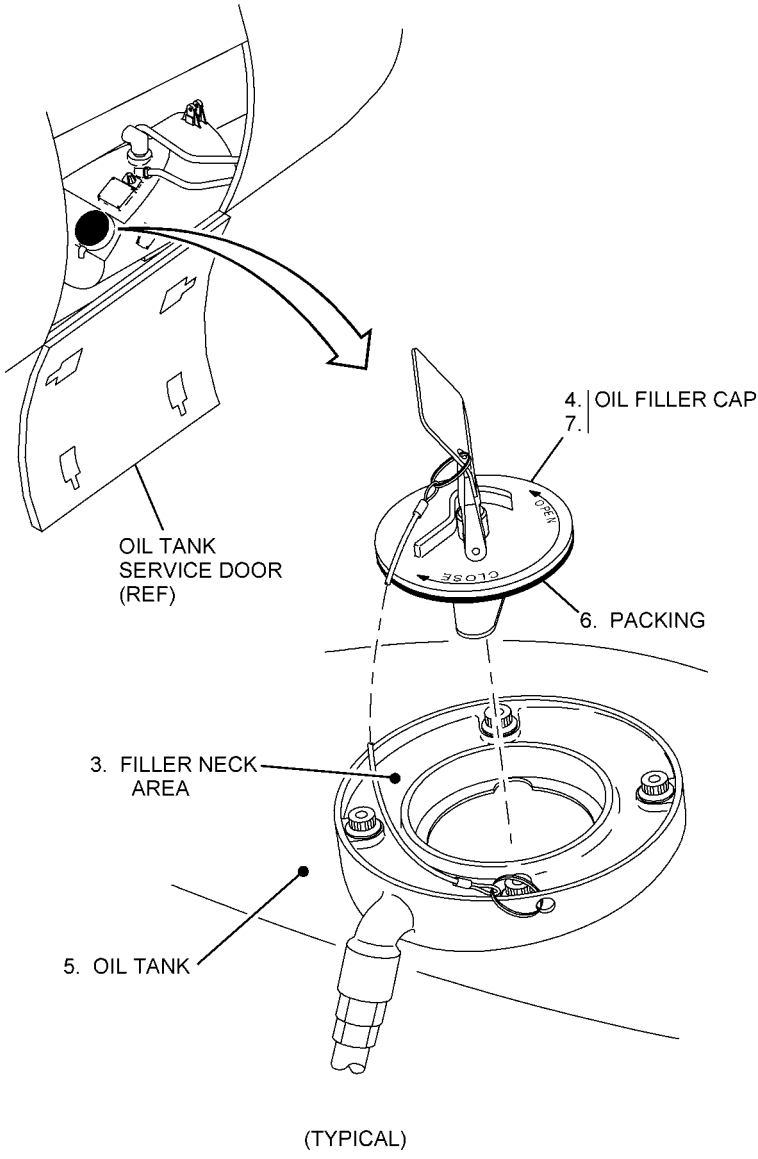
8. Perform replenishment - within 1 hour of shutdown (task 01-1).

01-2. FILL.

CAUTION

When ambient temperature is below zero degrees Fahrenheit, application of heat to the accessory compartment/oil tank area shall be required to allow the oil tank flapper valve full freedom of movement. Excessive force shall not be used to move the oil tank flapper valve. Failure to comply may cause damage to aircraft.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.
2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.
3. Clean filler neck area.
4. Unlock and remove oil filler cap.
5. Add 14 quarts of oil to oil tank.
6. Ensure packing is free from cuts and deterioration.
7. Position oil filler cap into filler neck lip.



(TYPICAL)

ICN-88277-G1279069-006-01

8. Turn oil filler cap clockwise to fully closed position.

NOTE

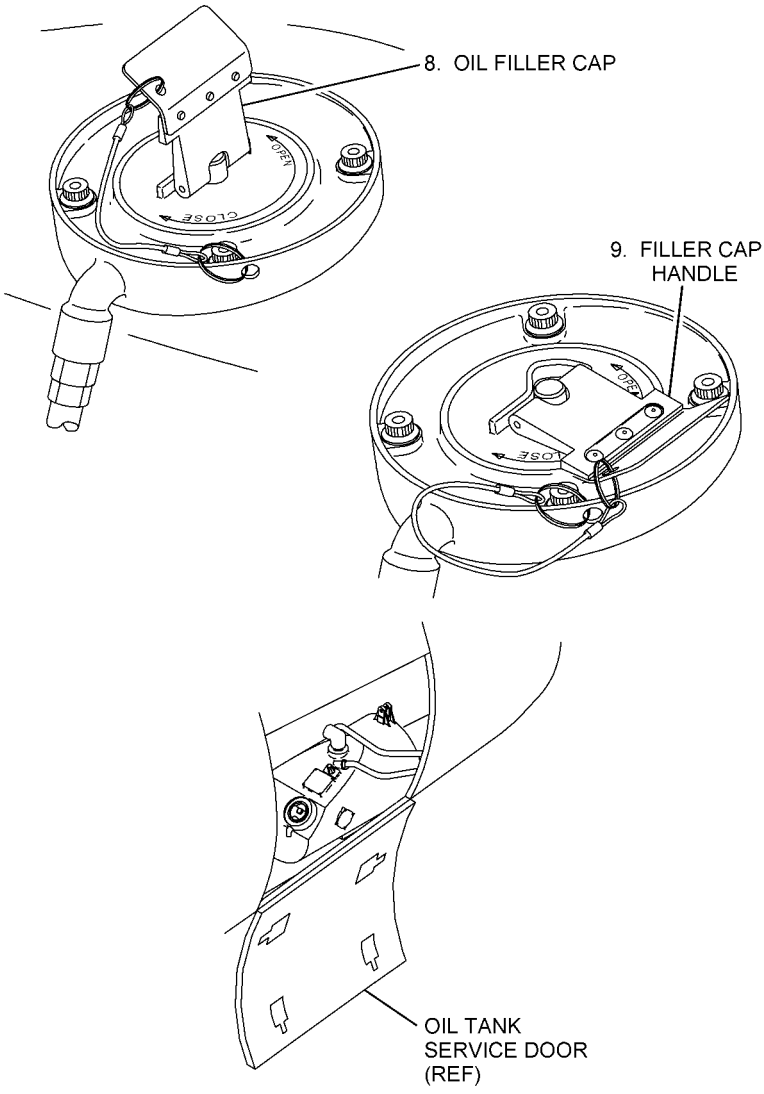
- Oil filler cap handle faces toward oil tank service door when in locked position and wire rope does not interfere.
- Ensure a tight positive seal is obtained.

9. Lock filler cap handle.

NOTE

Engine shall be motored for 2 minutes and oil quantity recorded.

10. Perform power plant operational checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, tasks 01-8 and 01-9).



(TYPICAL)

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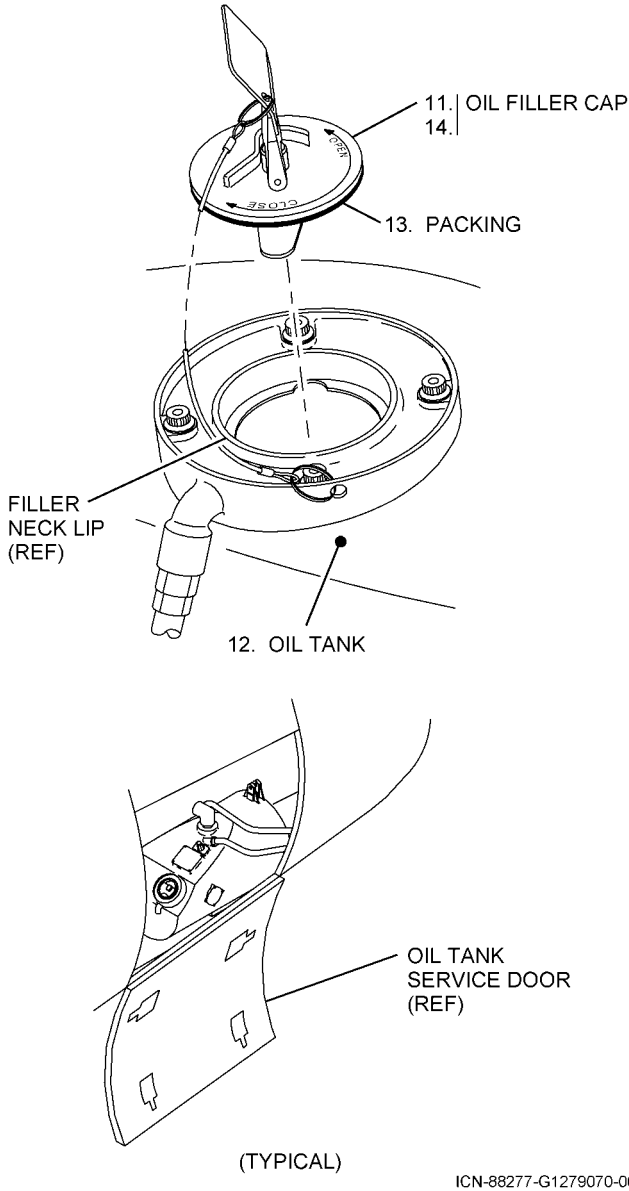
11. Unlock and remove oil filler cap.

12. Add or drain oil tank to obtain 14 to 15 quarts indicated oil level.

13. Ensure packing is free from cuts and deterioration.

14. Position oil filler cap into filler neck lip.



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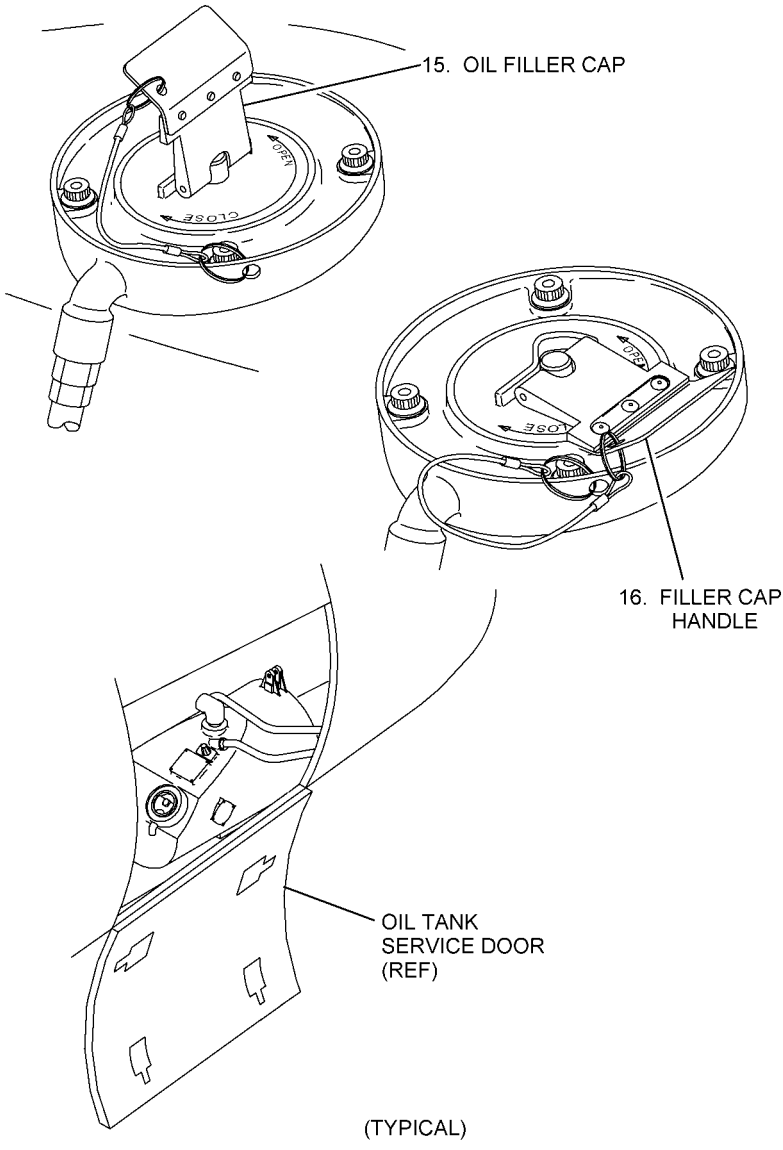
15. Turn oil filler cap clockwise to fully closed position.

NOTE

- Oil filler cap handle faces toward oil tank service door when in locked position and wire rope does not interfere.
- Ensure a tight positive seal is obtained.

16. Lock filler cap handle.

17. Perform power plant operational checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, tasks 01-1, 01-2, 01-3, 01-4, and 1-6 or 01-7).



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ENGINE OIL SYSTEM DRAIN (12-79-02)

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

02-1. Engine oil system drain.
02-2. Engine oil system gearbox drain.
02-3. Engine oil system tank drain and fill.

	Task
NOTE	
• These are typical engine oil system drain tasks for all engines.	All
• Mixing of any MIL-PRF-23699 oil from various manufacturers and/or types is acceptable. Out of date MIL-PRF-23699 oil shall be discarded per local Hazmat instructions.	All

Additional data:

	Task
TO 1300i-2-54JG-10-1	All

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
WARNING	
• The use of personal protective equipment is mandatory to perform this procedure. The applicable Safety Data Sheet (SDS) will identify special protection information. Failure to comply may cause injury to personnel.	All
• Engine oil is combustible, toxic, and is an irritant to the skin, eyes, and respiratory system. When using engine oil, keep ignition sources away, ensure adequate ventilation is available, avoid direct and/or prolonged body contact, and wear protective clothing/equipment. Failure to comply may cause injury to personnel.	All

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Drain Unit, Waste	BOW 40002	--	1	All
Pail, Utility	--	A-A-59253	2	All
Wrench, Torque	--	(0-50 in-lb)	1	All
Wrench, Torque	--	(0-150 in-lb)	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
Oil, Lubricating	--	MIL-PRF-23699	AR	All
Packing, Preformed	7T0566-902	--	1	02-1, 02-2
Packing, Preformed	AS3209-013	--	1	All

Nomenclature	PN	Specification	Qty	Task
Packing, Preformed	M83248/1-903	--	1	02-1, 02-2
Rag, Wiping	A-A-2522	--	AR	All
Tag, Warning	--	--	1	All
Wire, Safety	900010-32C	--	AR	All

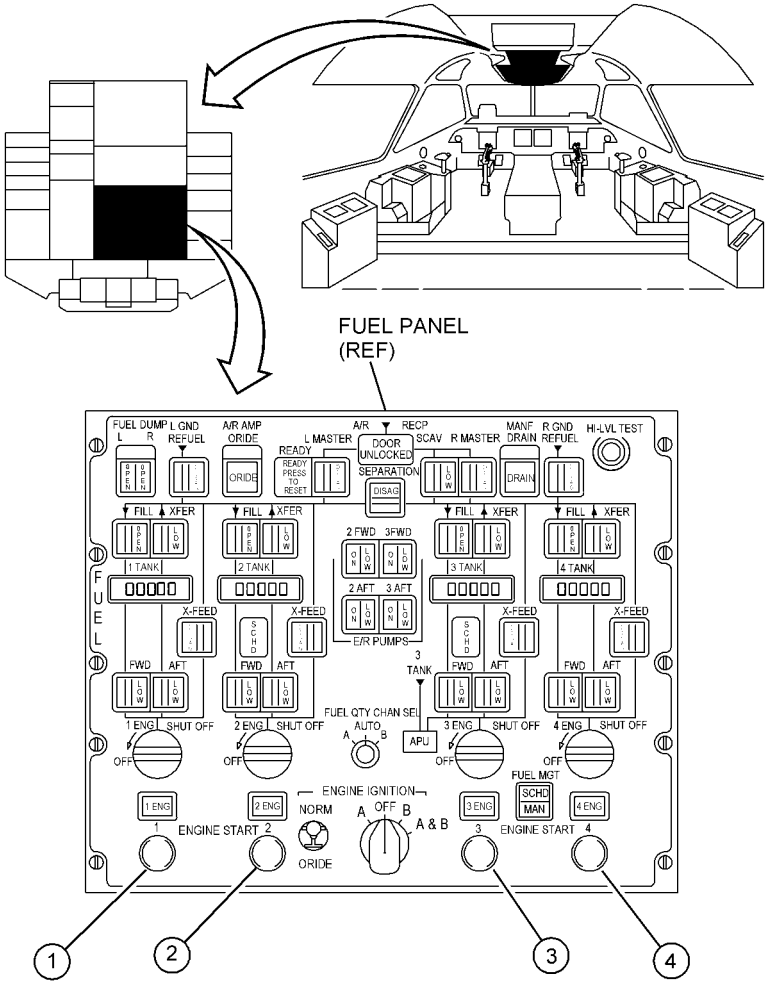
02-1. ENGINE OIL SYSTEM DRAIN.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Attach warning tag to **ENGINE START** switch on **FUEL** panel.

4. Open engine accessory compartment door assembly (54-14-01, task 01-1).



3.

INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

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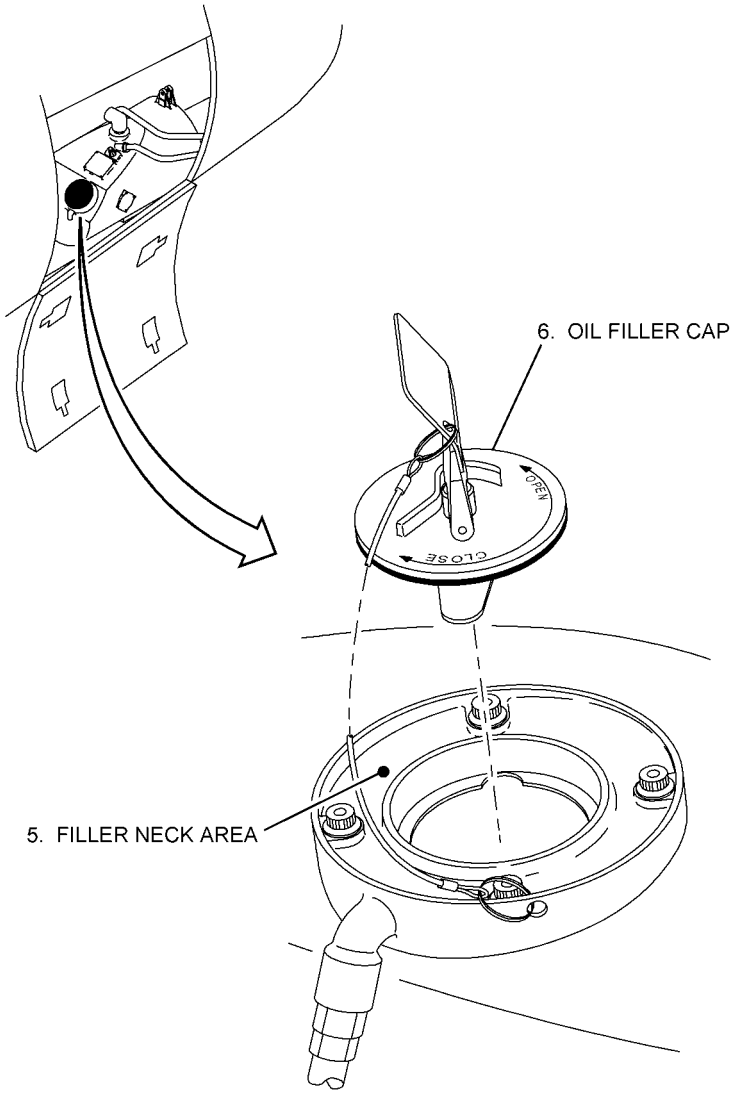
5. Clean filler neck area.

6. Unlock and remove oil filler cap.



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7. Remove safety wire, drain plug, and packing; discard packing.

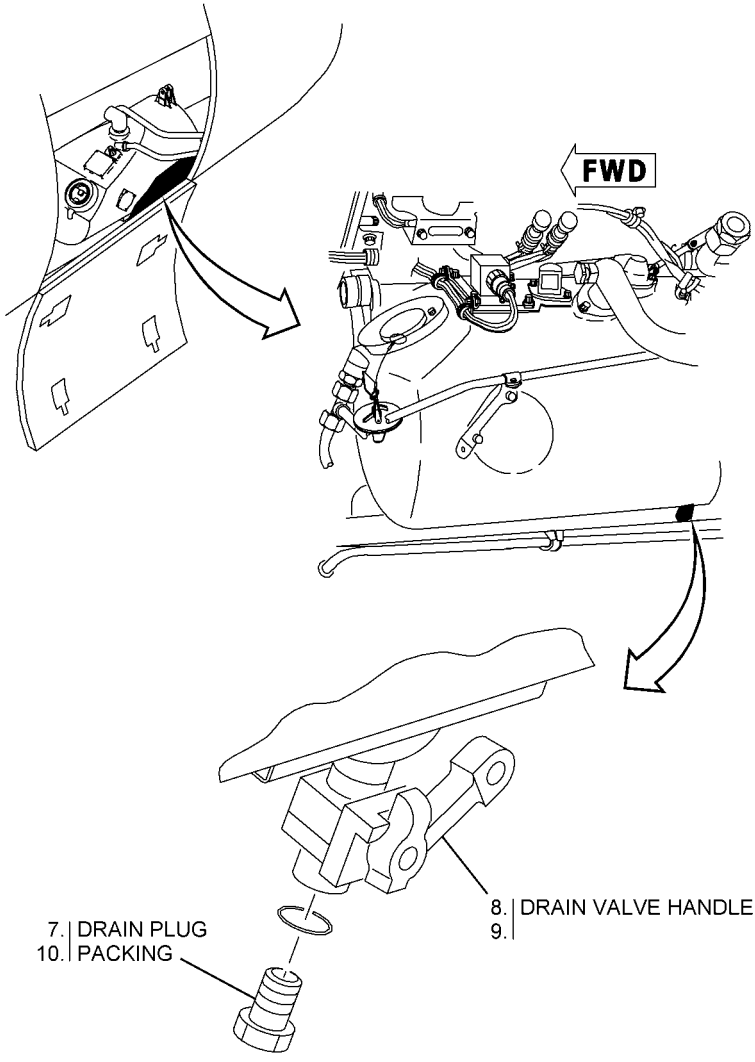
NOTE

Oil tank may contain approximately seven gallons of oil.

8. Position drain valve handle to **OPEN** and drain oil.

9. Position drain valve handle to **CLOSED**.

10. Install packing (PN AS3209-013) and drain plug; torque **55-65 in-lb** and secure with safety wire.



(TYPICAL)

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11. Remove bolts and washers from forward drain mast.

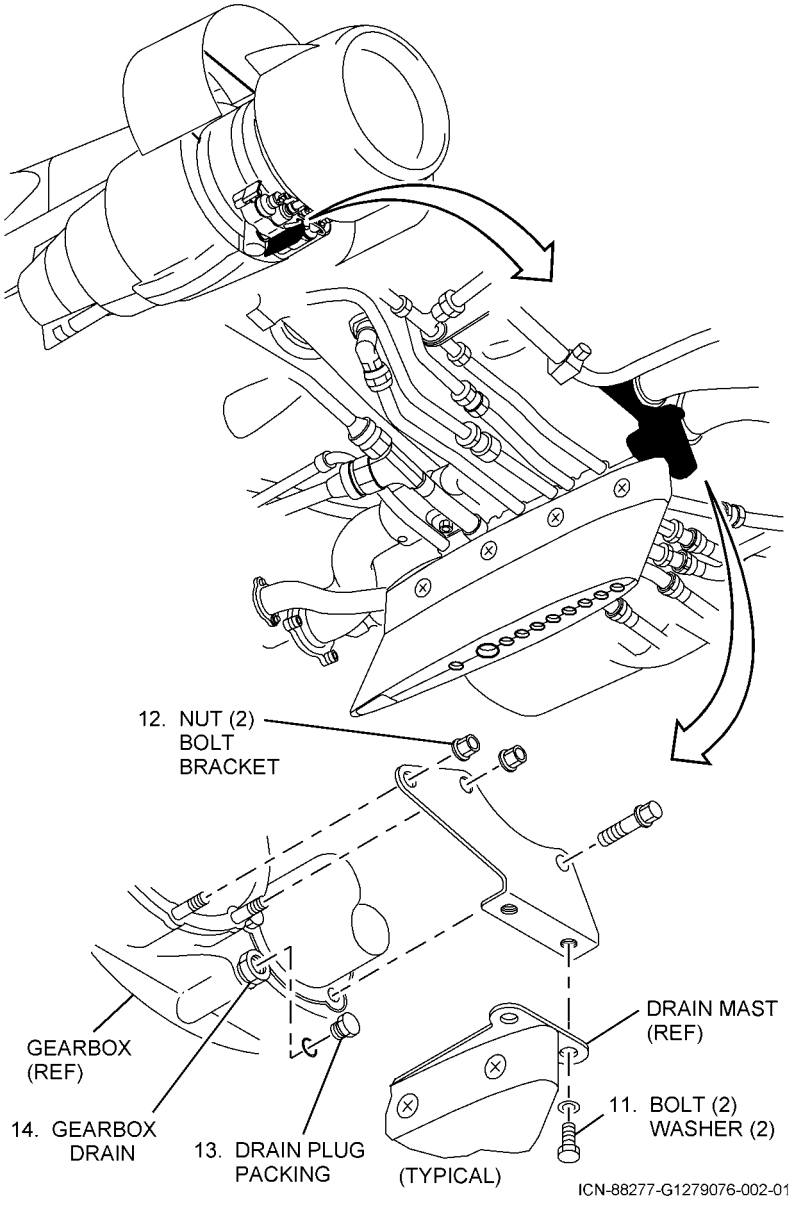
12. Remove nuts, bolt, and bracket from gearbox.

NOTE

Gearbox may contain approximately four quarts of oil.

13. Remove safety wire, drain plug, and packing; discard packing.

14. Drain oil from gearbox drain.

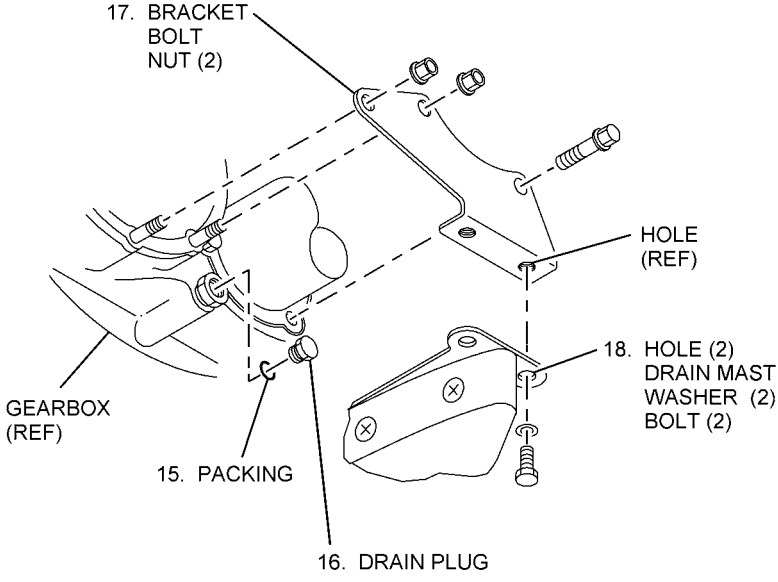

12. NUT (2)
BOLT
BRACKET
GEARBOX
(REF)
14. GEARBOX
DRAIN
13. DRAIN PLUG
PACKING
(TYPICAL)
DRAIN MAST
(REF)
11. BOLT (2)
WASHER (2)
ICN-88277-G1279076-002-01

15. Install packing (PN 7T0566-902) on drain plug.

16. Install drain plug and torque **20-35 in-lb**; secure with safety wire.

17. Install bracket, bolt, and nuts; torque **70-85 in-lb**.

18. Align holes on drain mast with holes on bracket; install washers and bolts, torque **50-75 in-lb**.



(TYPICAL)

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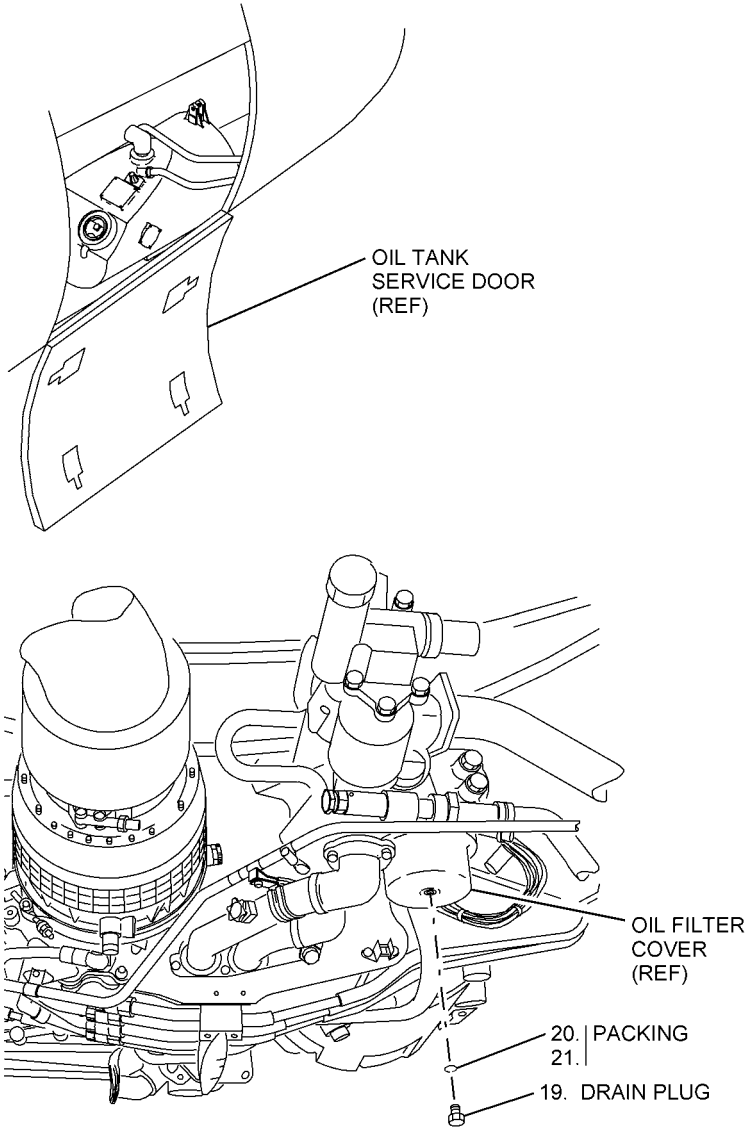
NOTE

Oil filter housing may contain approximately one quart of oil.

19. Remove safety wire and drain plug from oil filter cover; drain oil.

20. Remove and discard packing from drain plug.

21. Install packing (PN M83248/1-903) and drain plug; torque **60-80 in-lb** and secure with safety wire.



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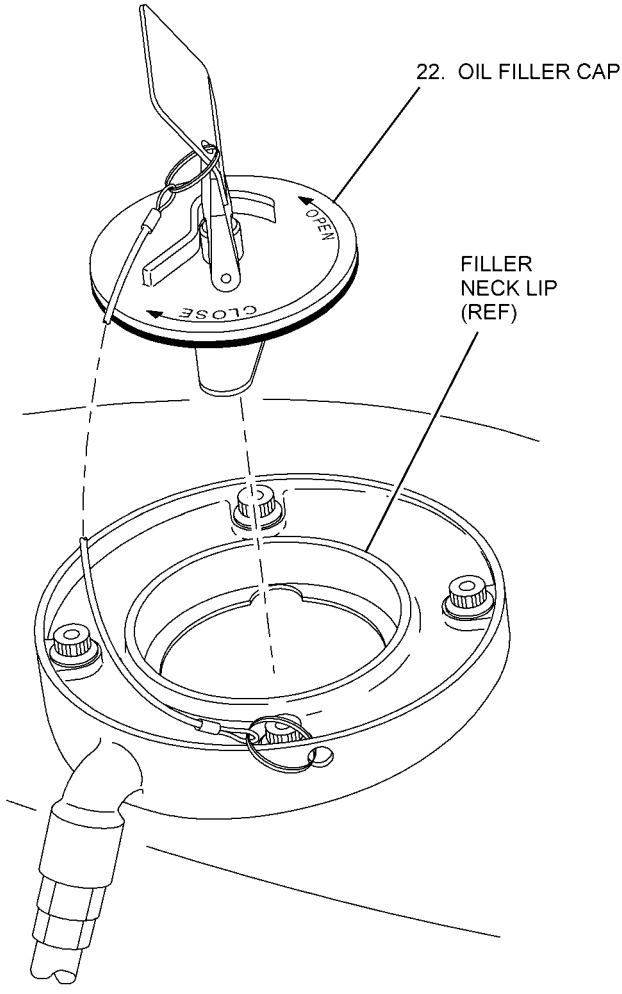
22. Position oil filler cap into filler neck lip.



(TYPICAL)

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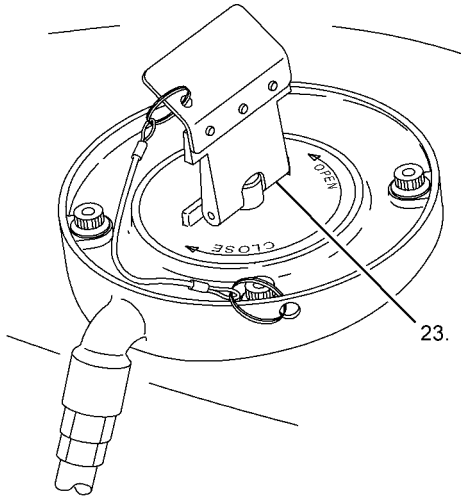
23. Turn oil filler cap clockwise to fully closed position.

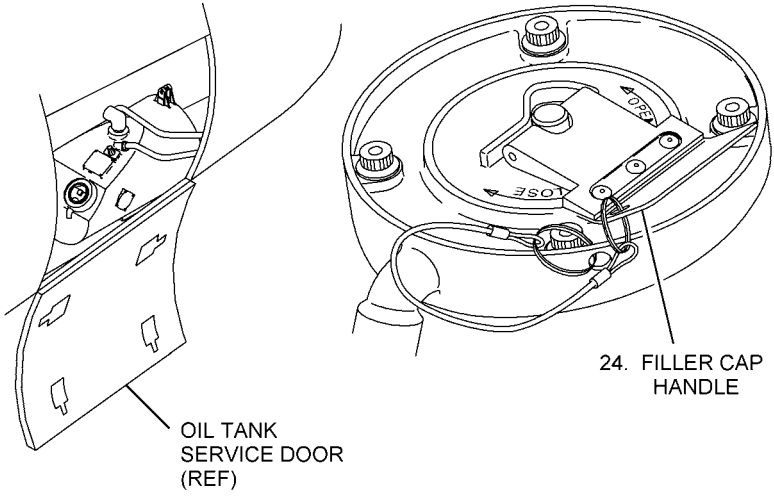
NOTE

- Oil filler cap handle faces toward oil tank service door when in locked position and wire rope does not interfere.
- Ensure a tight positive seal is obtained.

24. Lock filler cap handle.

25. Close engine accessory compartment door assembly (54-14-01, task 01-2).





(TYPICAL)

ICN-88277-G1279080-001-01

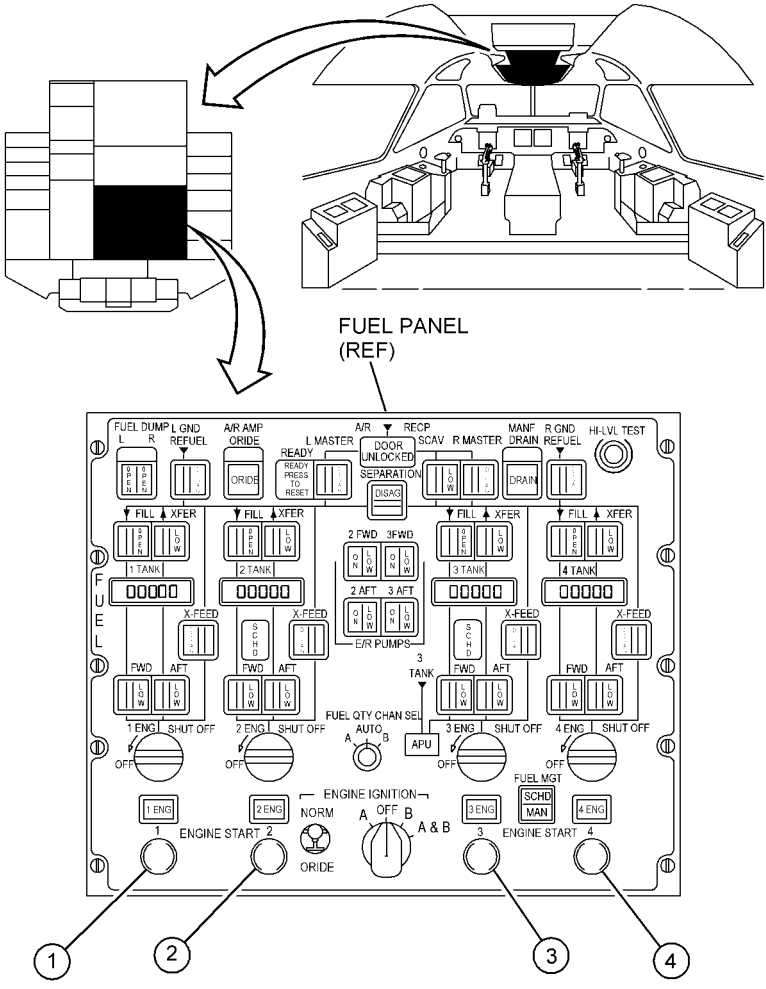
02-2. ENGINE OIL SYSTEM GEARBOX DRAIN.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Attach warning tag to **ENGINE START** switch on **FUEL** panel.

4. Open engine accessory compartment door assembly (54-14-01, task 01-1).



3. INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

ICN-88277-G1279072-003-01

5. Remove bolts and washers from forward drain mast.

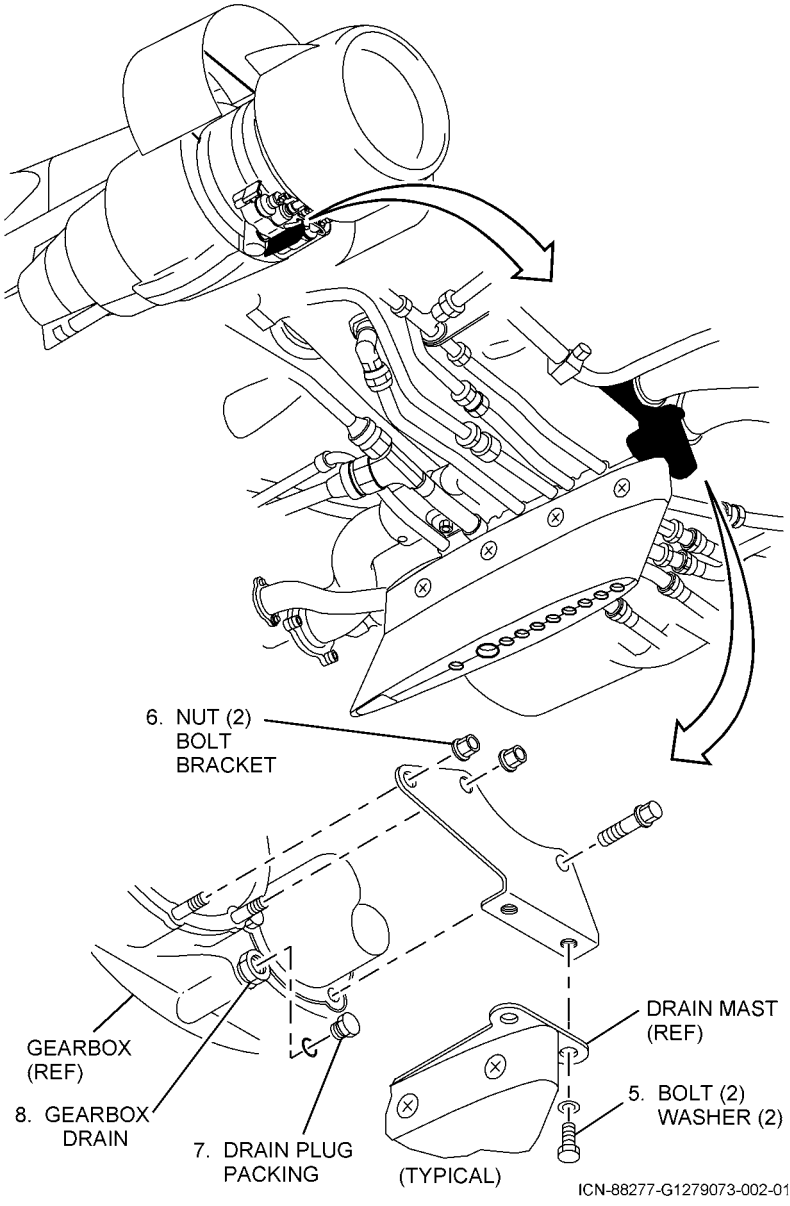
6. Remove nuts, bolt, and bracket from gearbox.

NOTE

Gearbox may contain approximately four quarts of oil.

7. Remove safety wire, drain plug, and packing; discard packing.

8. Drain oil from gearbox drain.


6. NUT (2)
BOLT
BRACKET
GEARBOX
(REF)
8. GEARBOX
DRAIN
7. DRAIN PLUG
PACKING
(TYPICAL)
DRAIN MAST
(REF)
5. BOLT (2)
WASHER (2)
ICN-88277-G1279073-002-01

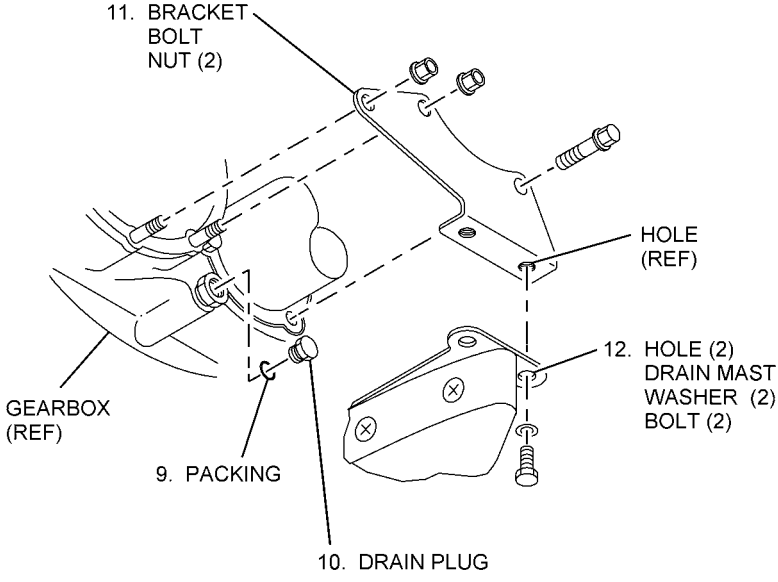
9. Install packing on drain plug.

10. Install drain plug and torque **20-35 in-lb**; secure with safety wire.

11. Install bracket, bolt, and nuts; torque **70-85 in-lb**.

12. Align holes on drain mast with holes on bracket; install washers and bolts, torque **50-75 in-lb**.

13. Close engine accessory compartment door assembly (54-14-01, task 01-2).



(TYPICAL)

ICN-88277-G1279074-002-01

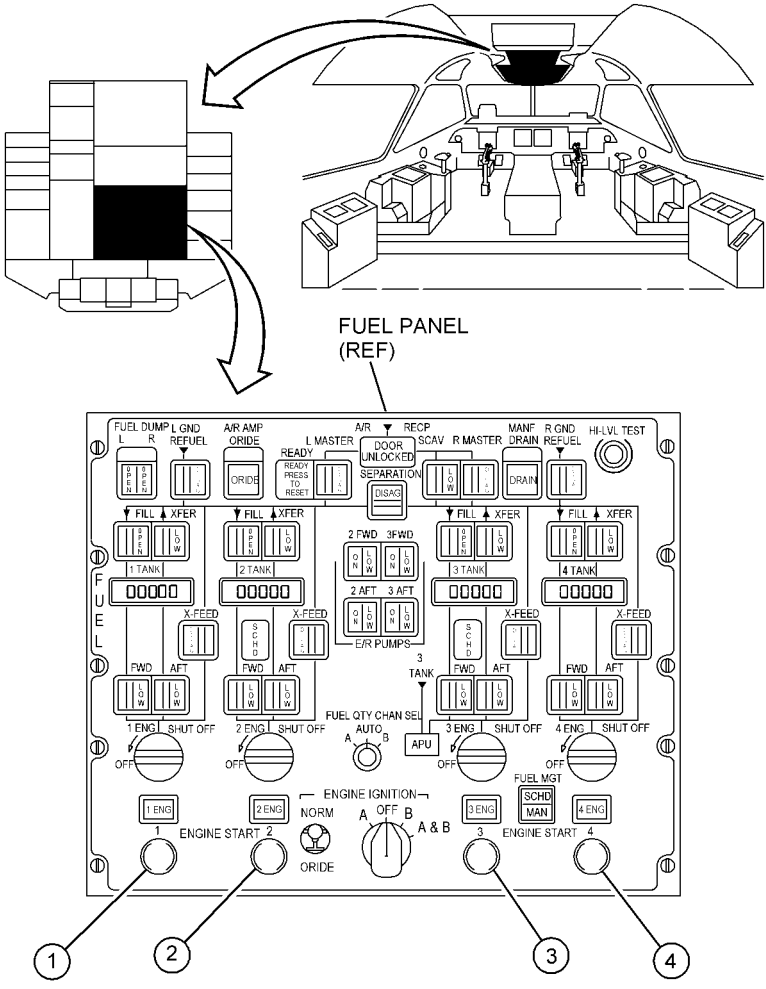
02-3. ENGINE OIL SYSTEM TANK DRAIN AND FILL.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Attach warning tag to **ENGINE START** switch on **FUEL** panel.

4. Perform engine accessory compartment door assembly open/close (54-14-01, task 01-1).



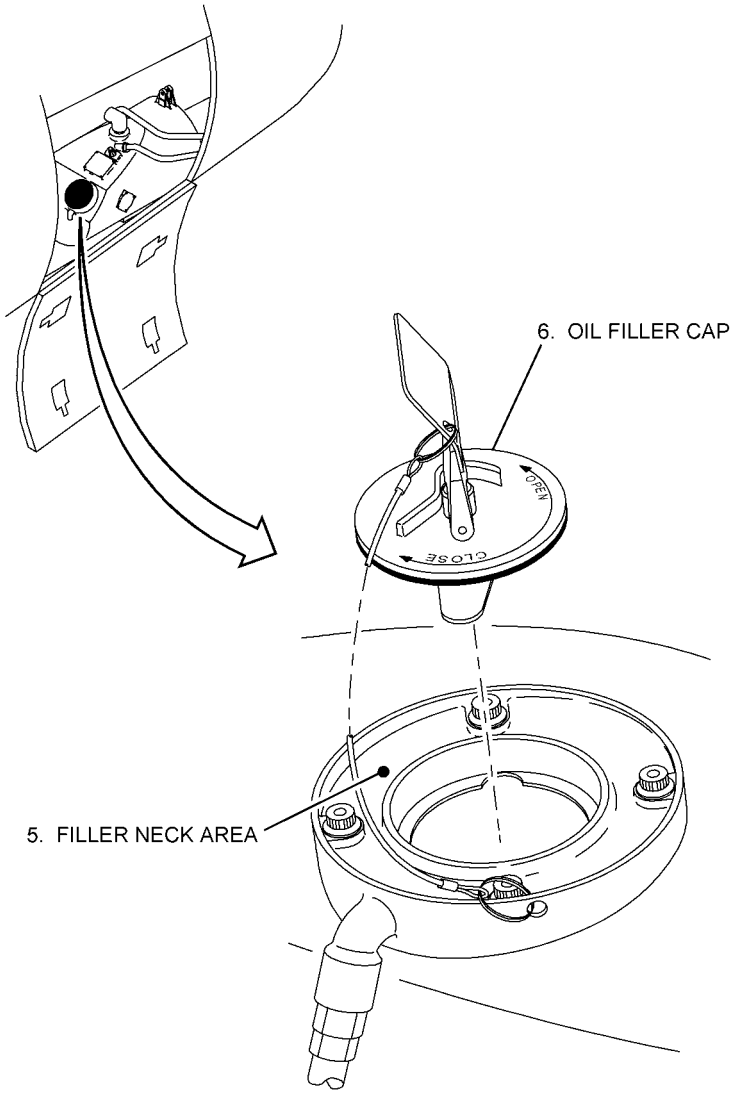
INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

3.

ICN-88277-G1279072-003-01

5. Clean filler neck area.

6. Unlock and remove oil filler cap.



ICN-88277-G1279004-004-01

7. Remove safety wire, drain plug, and packing; discard packing.

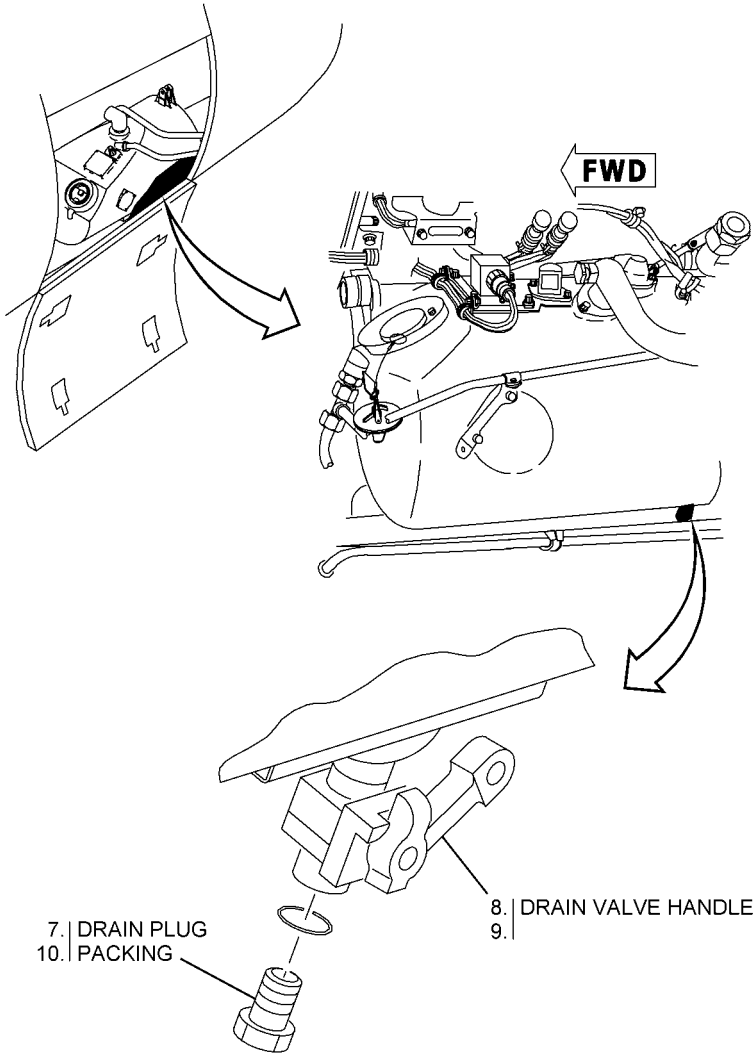
NOTE

Oil tank may contain approximately seven gallons of oil.

8. Position drain valve handle to **OPEN** and drain oil.

9. Position drain valve handle to **CLOSED**.

10. Install packing and drain plug; torque **55-65 in-lb** and secure with safety wire.



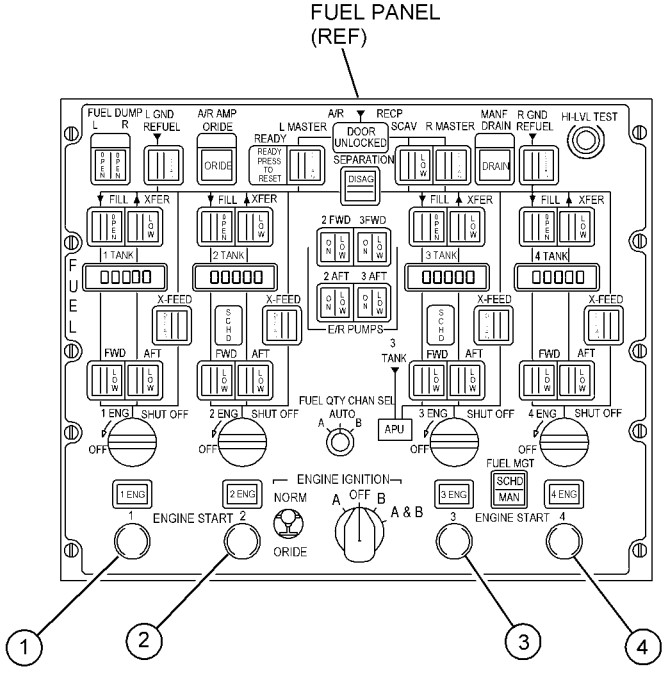
(TYPICAL)

ICN-88277-G1279079-001-01

11. Remove warning tag from **ENGINE START** switch on **FUEL** panel.

12. Perform engine oil system servicing (12-79-01, task 01-2).

13. Perform engine accessory compartment door assembly open/close (54-14-01, task 01-2).



11.

INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

ICN-88277-G1279089-001-01

ENGINE OIL SYSTEM DRAIN AND FLUSH (12-79-03)

GENERAL MAINTENANCE INPUT CONDITIONS:

Applicability:

	Task
All	All

Additional information:

This procedure consists of the following tasks:

03-1. Engine oil system drain and flush for contamination.
03-2. Engine oil system drain and flush for dissimilar oil.

NOTE	Task
• These are typical engine oil system drain and flush tasks for all engines.	All
• When available, locally manufactured tool PN 3419PLMFG3004 may be used to remove the oil filter cover (Refer to TO 1300i-2-70GS-00-1, Chapter 4).	All
• Mixing of any MIL-PRF-23699 oil from various manufacturers and/or types is acceptable. Out of date MIL-PRF-23699 oil shall be discarded per local Hazmat instructions.	All

Additional data:

	Task
TO 1300i-2-54JG-10-1	All
TO 1300i-2-70GS-00-1	All
TO 1300i-2-71JG-00-1	All

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
WARNING	
• The use of personal protective equipment is mandatory to perform this procedure. The applicable Safety Data Sheet (SDS) will identify special protection information. Failure to comply may cause injury to personnel.	All
• Engine oil is combustible, toxic, and is an irritant to the skin, eyes, and respiratory system. When using engine oil, keep ignition sources away, ensure adequate ventilation is available, avoid direct and/or prolonged body contact, and wear protective clothing/equipment. Failure to comply may cause injury to personnel.	All

Support equipment:

Nomenclature	PN	Specification	Qty	Task
Drain Unit, Waste	BOW 40002	--	1	All
Pail, Utility	--	A-A-59253	1	All
Wrench, Torque	--	(0-150 in-lb)	1	All
Wrench, Torque	--	(150-750 in-lb)	1	All

Supplies:

Nomenclature	PN	Specification	Qty	Task
Element, Oil Filter	7586395	--	2	All
Oil, Lubricating	--	MIL-PRF-23699	AR	All
Packing, Preformed	M83248-1-239	--	2	All

Nomenclature	PN	Specification	Qty	Task
Packing, Preformed	M83248/1-903	--	1	All
Rag, Wiping	A-A-2522	--	AR	All
Wire, Safety	900010-32C	--	AR	All

03-1. ENGINE OIL SYSTEM DRAIN AND FLUSH FOR CONTAMINATION.

1. Review ″Section 1 (General Information)″ of this TO for system general warnings, cautions, and notes.

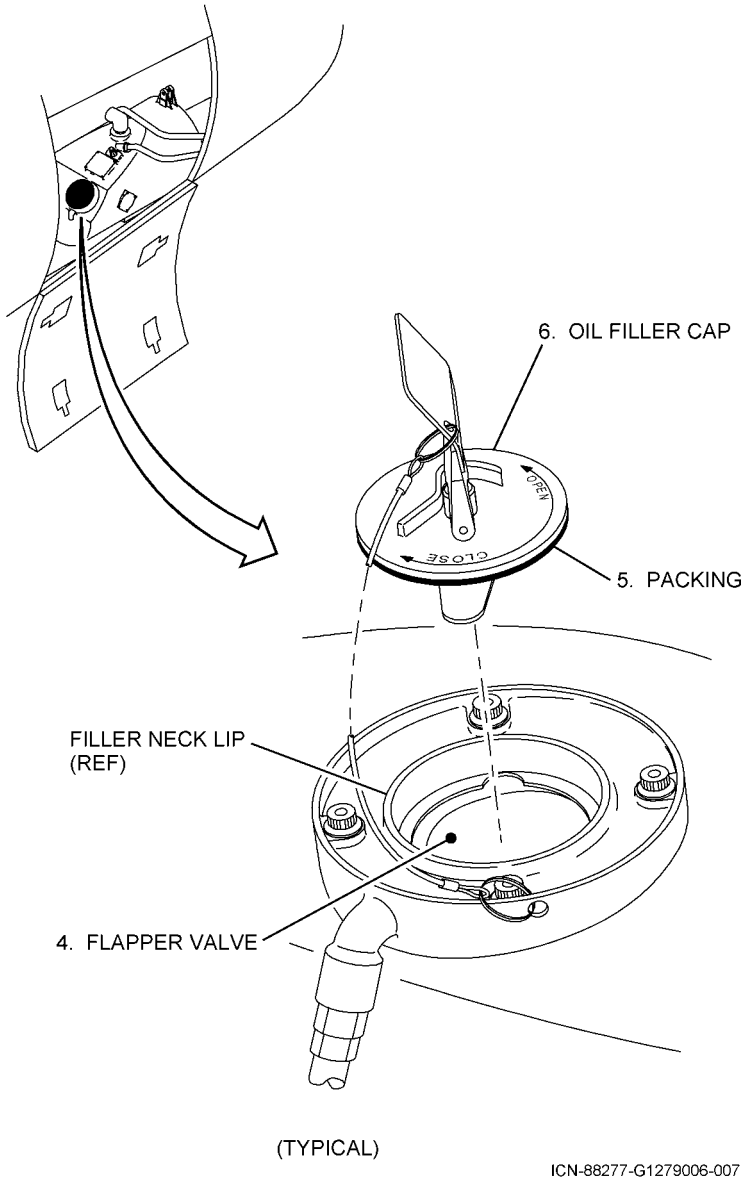
2. Review task ″General Maintenance Input Conditions″ page for task specific safety conditions.

3. Perform engine oil system drain (12-79-02, tasks 02-1 and 02-2).

4. Add oil until oil level reaches the bottom of the flapper valve.

5. Ensure packing is free from cuts and deterioration.

6. Position oil filler cap into filler neck lip.



(TYPICAL)

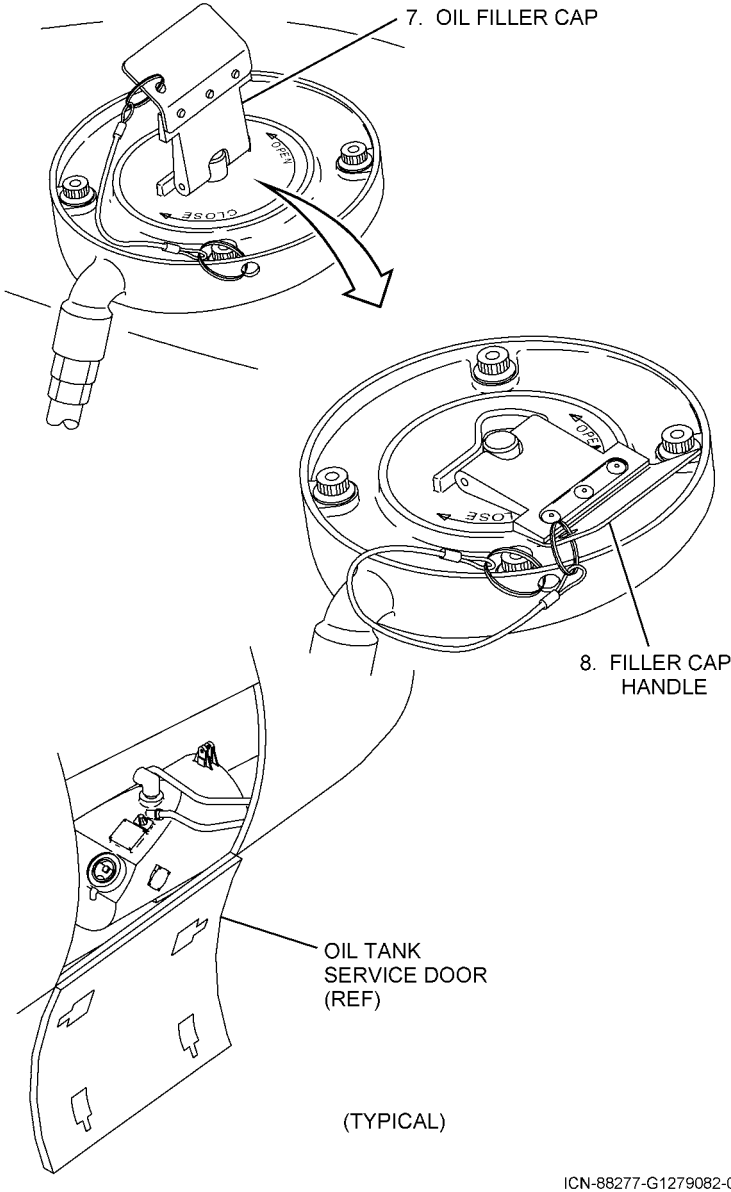
ICN-88277-G1279006-007-01

7. Turn oil filler cap clockwise to fully closed position.

NOTE

- Oil filler cap handle faces toward oil tank service door when in locked position and wire rope does not interfere.
- Ensure a tight positive seal is obtained.

8. Lock filler cap handle.



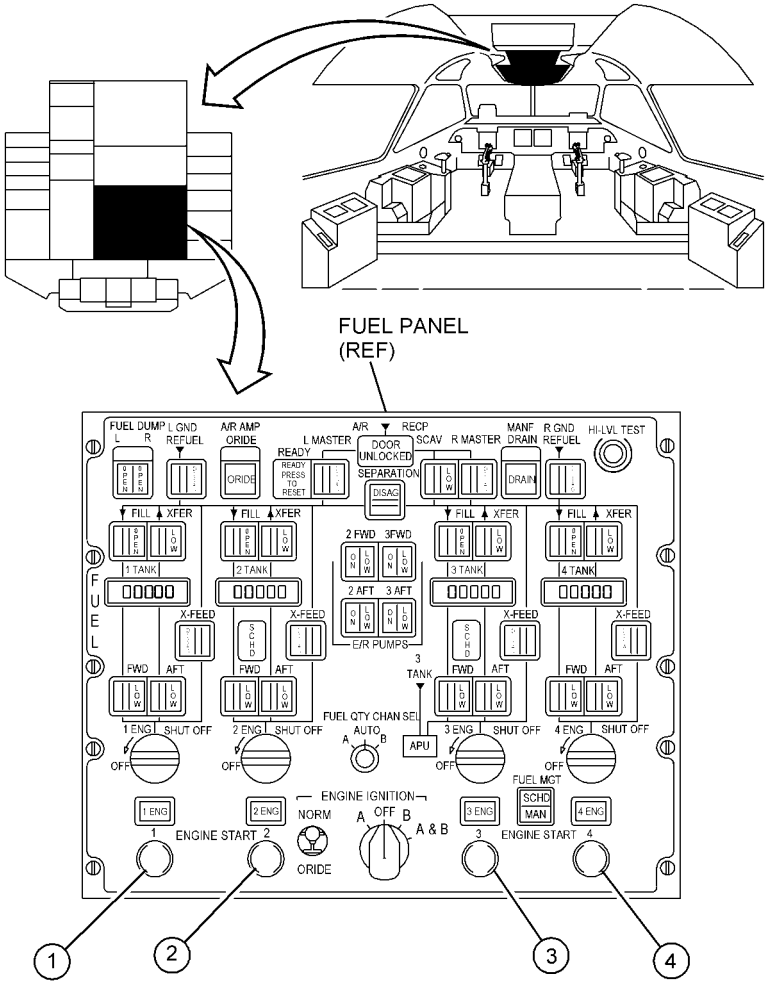
ICN-88277-G1279082-001-01

9. Close engine accessory compartment door assembly (54-14-01, task 1-2).

10. Remove warning tag from **ENGINE START** switch on **FUEL** panel.

11. Perform power plant operation checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, tasks 01-8 and 01-9).

12. Perform engine oil system servicing (12-79-01, task 01-1).



10.

INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

ICN-88277-G1279007-005-01

13. Perform power plant operation checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, tasks 01-1, 01-2, 01-3, and 01-5).

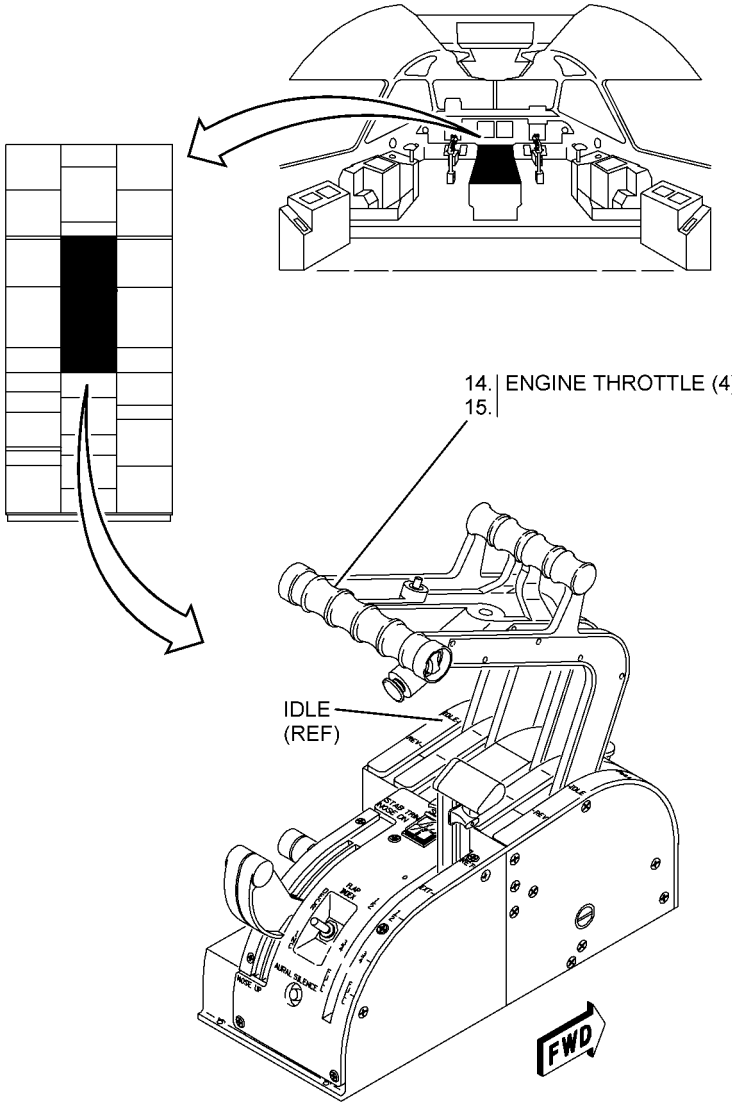
- Operate engines in symmetrical pairs at power settings above idle. Failure to comply may cause damage to aircraft.

- Do not operate four engines simultaneously above idle. Failure to comply may cause damage to aircraft.

14. Move engine throttles from **IDLE** to 75% N_2 RPM and return throttles to **IDLE**; perform five times.

15. Move engine throttles from **IDLE** to 75% N_2 RPM and operate for 5 minutes; return throttles to **IDLE**.

16. Perform power plant operation checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, task 01-4).



(TYPICAL)

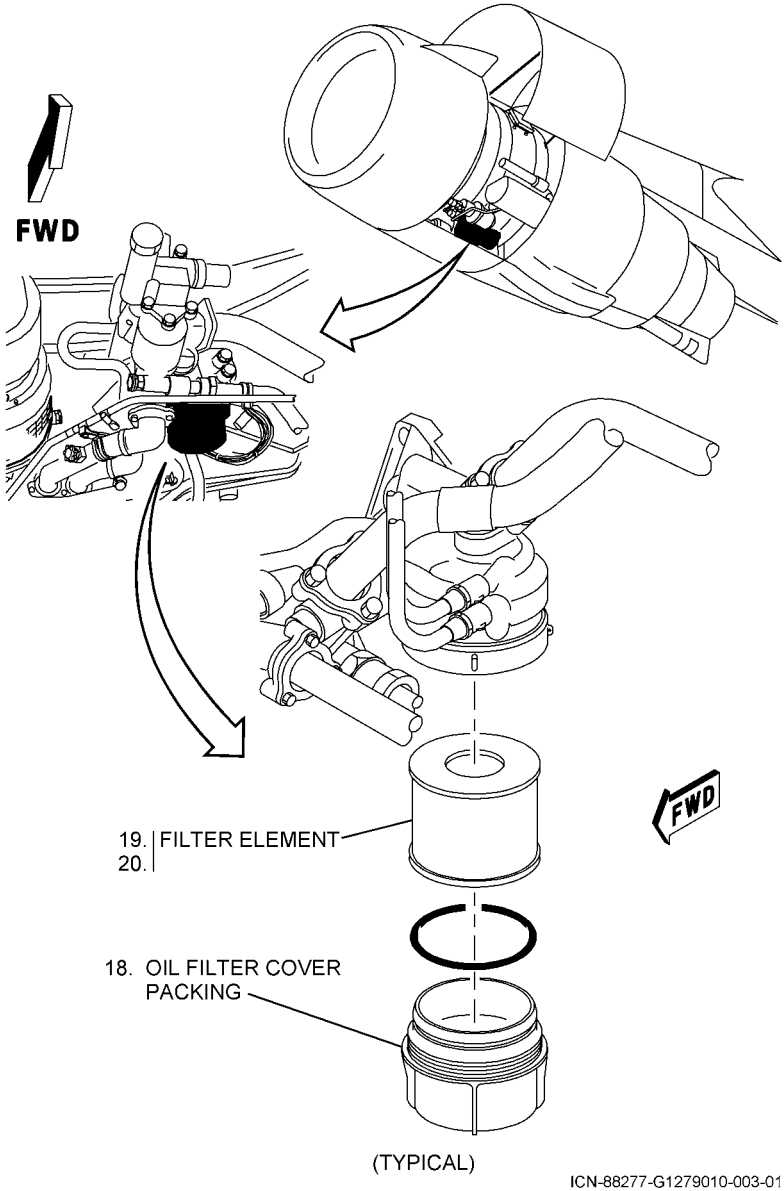
ICN-88277-G1279008-003-01

17. Perform engine oil system drain (12-79-02, tasks 02-1 and 02-2).

18. Remove safety wire, oil filter cover, and packing; discard packing.

19. Remove and discard filter element.

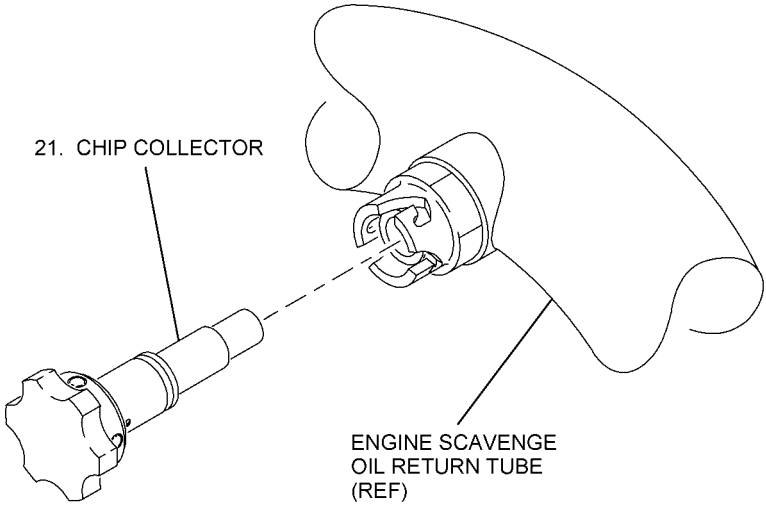
20. Install filter element, packing (PN M83248-1-239), and cover; torque **140-150 in-lb** and secure with safety wire.



ICN-88277-G1279010-003-01

21. Remove chip collector from engine scavenge oil return tube.

22. Inspect, clean, and install chip collector (TO 1300i-2-70GS-00-1, Chapter 2).



(TYPICAL)

ICN-88277-G1279011-002-01

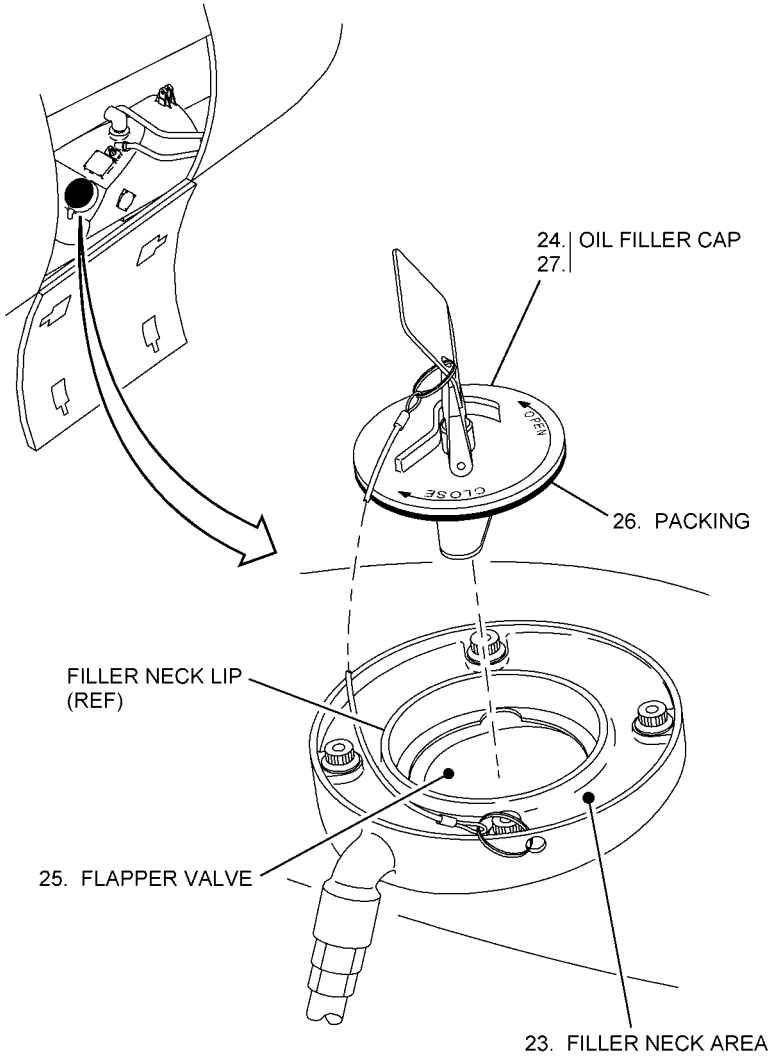
23. Clean filler neck area.

24. Unlock and remove oil filler cap.

25. Add oil until oil level reaches the bottom of the flapper valve.

26. Ensure packing is free from cuts and deterioration.

27. Position oil filler cap into filler neck lip.



(TYPICAL)

ICN-88277-G1279012-006-01

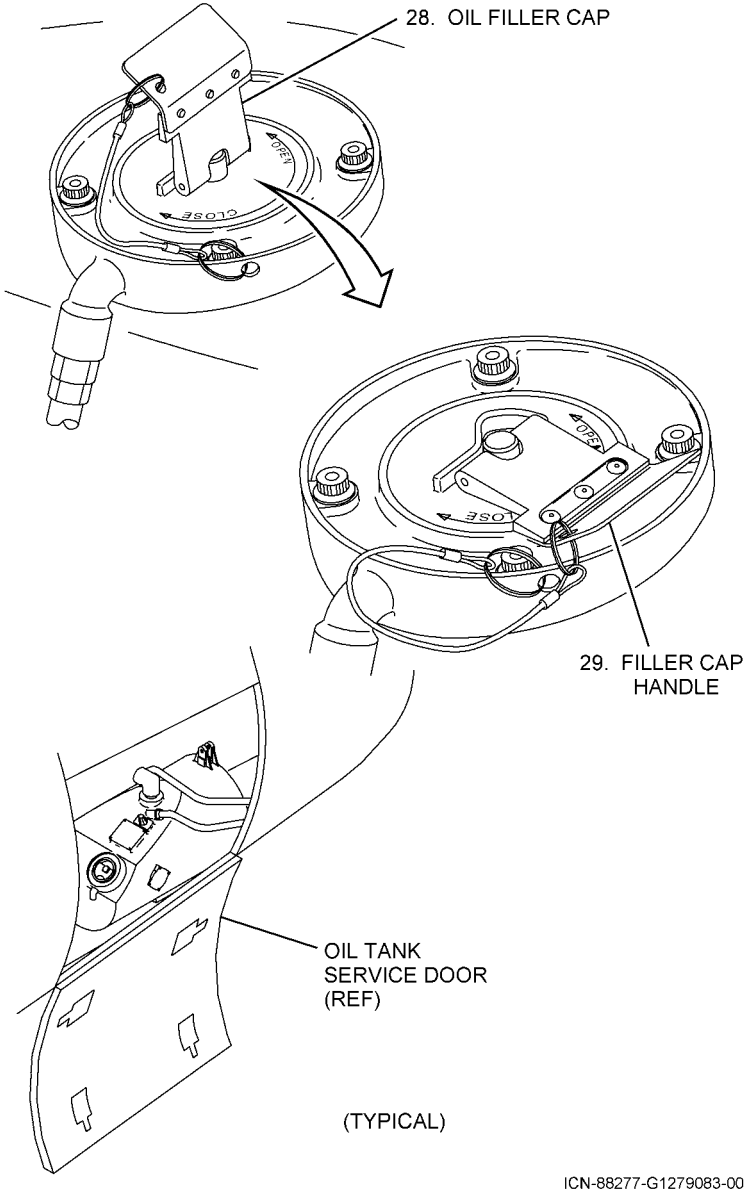
28. Turn oil filler cap clockwise to fully closed position.

NOTE

- Oil filler cap handle faces toward oil tank service door when in locked position and wire rope does not interfere.
- Ensure a tight positive seal is obtained.

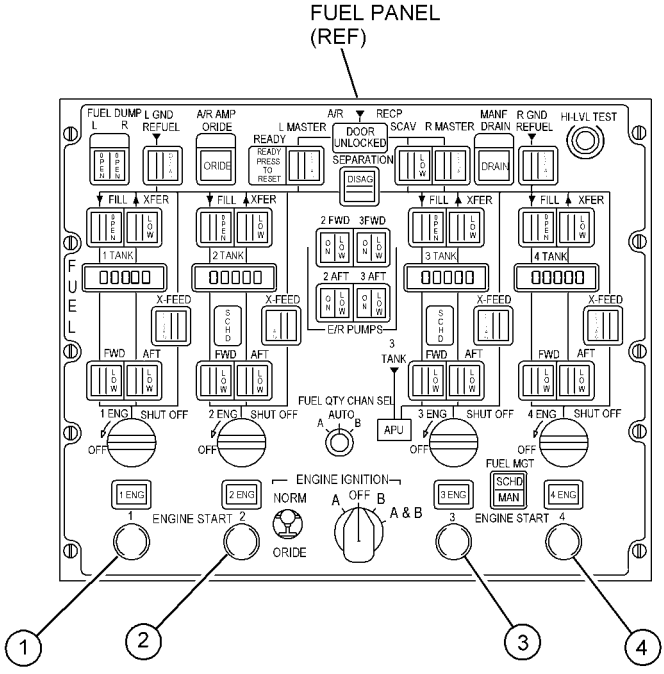
29. Lock filler cap handle.

30. Close engine accessory compartment door assembly (54-14-01, task 01-2).



ICN-88277-G1279083-001-01

31. Remove warning tag from **ENGINE START** switch on **FUEL** panel.



31.

INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

ICN-88277-G1279013-005-01

32. Perform power plant operation checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, tasks 01-1, 01-2, 01-3, and 01-5).

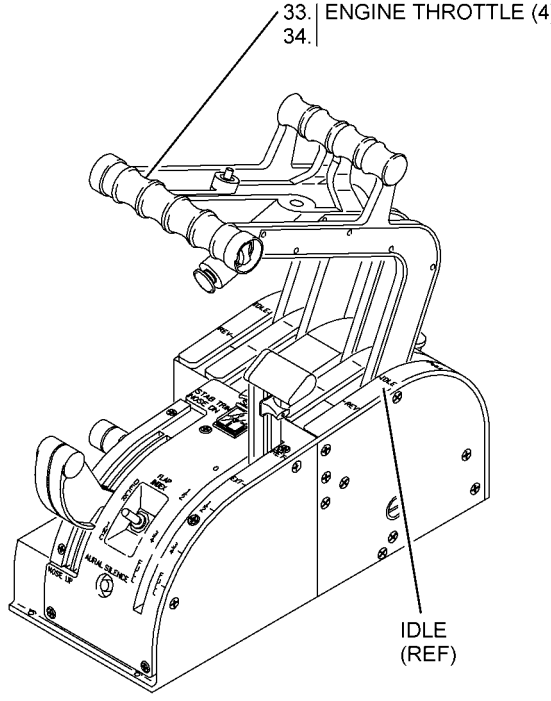
- Operate engines in symmetrical pairs at power settings above idle. Failure to comply may cause damage to aircraft.

- Do not operate four engines simultaneously above idle. Failure to comply may cause damage to aircraft.

33. Move engine throttles from **IDLE** to 75% N_2 RPM and return throttles to **IDLE**; perform five times.

34. Move engine throttles from **IDLE** to 75% N_2 RPM and operate for 5 minutes; return throttles to **IDLE**.

35. Perform power plant operation checkout - checklist (TO 1300i-2-71JG-00-1, 71-00-01, task 01-4).

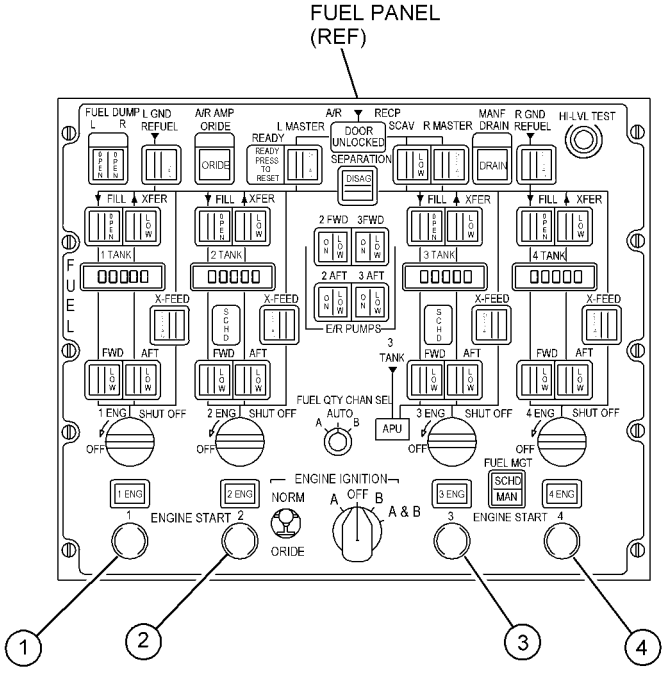


(TYPICAL)

ICN-88277-G1279014-003-01

36. Attach warning tag to **ENGINE START** switch on **FUEL** panel.

37. Open engine accessory compartment door assembly (54-14-01, task 01-1).



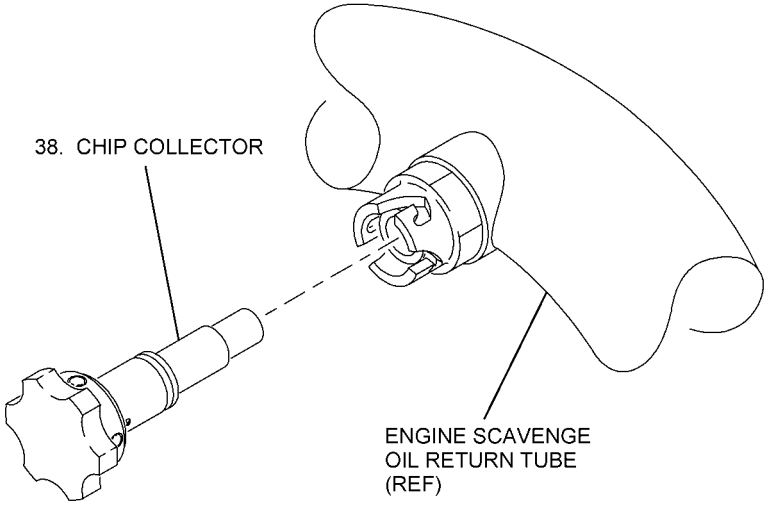
36.

INDEX NO.	SWITCH
1	1 ENGINE START
2	2 ENGINE START
3	3 ENGINE START
4	4 ENGINE START

ICN-88277-G1279015-005-01

38. Remove chip collector from engine scavenge oil return tube.

39. Inspect, clean, and install chip collector (TO 1300i-2-70GS-00-1, Chapter 2).



(TYPICAL)

ICN-88277-G1279016-002-01

40. Remove safety wire and loosen drain plug.

41. Remove safety wire and loosen oil filter cover; ensure a gap of **0.250** inch exists between the cover and housing.