



A Textron Company

TECHNICAL BULLETIN

412-17-240

24 May 2017

**MODEL AFFECTED:** 412/412EP

**SUBJECT:** HYDRAULIC SYSTEMS #1 AND #2 ACCUMULATOR  
P/N 212-076-007-003, REMOVAL OF

**HELICOPTERS AFFECTED:** 33001 through 33213, 33501 through 33508, 34001  
through 34036 and 36001 through 36627.

[Serial number 36628 through 36693 having the  
ASB 412-15-163 accomplished, meet the intent of  
this Technical Bulletin.]

[Serial number 36694 and subsequent will have the  
intent of this bulletin accomplished prior to delivery.]

**COMPLIANCE:** At customer's option.

**DESCRIPTION:**

This bulletin provides the instructions for the removal of both hydraulic accumulators. When completed, this improvement will save approximately 5 lbs (2.2 kgs) and cancel the requirement to inspect the hydraulic accumulators every 1000 hours (BHT-412-MM-2 CHAP 5, 5-25).

**APPROVAL:**

The engineering design aspects of this bulletin are FAA approved for FAA certified helicopters as listed in the applicable Type Certificate Data Sheet. For non FAA certified helicopters, the engineering design aspects of this bulletin are Bell Helicopter Engineering approved.

**CONTACT INFO:**

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Medium Helicopters  
Tel: 450-437-6201 / 1-800-363-8028 / psemedium@bh.com

**MANPOWER:**

Approximately 6.0 man-hours are required to complete this bulletin. This estimate is based on hands-on time, and may vary with personnel and facilities available.

**WARRANTY:**

There is no warranty credit applicable for parts or labor associated with this bulletin.

**MATERIAL:**

**Required Material:**

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Figure</u>
90-002-3	Nutplate	1	4
MS20470AD4-6	Rivet	2	4
AS5192W06	Tee Fitting	1	5
412-076-100-101	Reducer	1	5
MS28778-6	Packing	3	5
AS5230W0606	Union	2	5
MS21919WDG4	Clamp	1	6,7
MS27039-1-10	Screw	1	6,7
NAS1149D0316J	Washer	1	6,7
NAS43DD3-12N	Spacer	1	6,7
AS1004W0404	Fitting, Elbow 90°	1	6,7

**Consumable Material:**

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty</u>	<u>Reference *</u>	<u>Note</u>
2400-00036-00	Hydraulic fluid, petroleum base	AR	C-002	1
2400-00066-00	Hydraulic fluid, synthetic	AR	C-072	1
2230-00425-00	Primer, Epoxy Polyamide	AR	C-204	

\* C-XXX numbers refer to the consumables list in BHT-ALL-SPM Standard Practices Manual.

NOTE:

1. Refer to helicopter records for type of hydraulic fluid used.

**SPECIAL TOOLS:**

None required.

**WEIGHT AND BALANCE:**

<u>Weight</u>	<u>Arm</u>	<u>Longitudinal</u> <u>Moment</u>	<u>Arm</u>	<u>Lateral*</u> <u>Moment</u>
-4.9 pounds	139.7 inches	-685 in-pounds	2.0 in.	-10 in-pounds
-2.2 kgs	3548 mm	-78.8 kg x mm/100	51 mm	-1.1 kg x mm/100

\* In lateral calculations - is left and + is right.

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-412-IPB Illustrated Parts Breakdown  
 BHT-412-MM Maintenance Manual  
 BHT-ALL-SPM Standard Practice Manual  
 ASB 412-15-163

**PUBLICATIONS AFFECTED:**

BHT-412-IPB Illustrated Parts Breakdown  
 BHT-412-MM Maintenance Manual

## ACCOMPLISHMENT INSTRUCTIONS:

-NOTE-

Figure 3 and 7 are only applicable to helicopters 36550,36562,36612,36614,36648,36649,36658 and 36659 modified per STC SR09600RC.

1. Prepare helicopter for maintenance.
2. Gain access to both hydraulic accumulators (BHT-412-MM-2).
3. Remove all parts shown in grey on Figure 1, 2 and 3 as applicable (BHT-412-MM-4).

-NOTE-

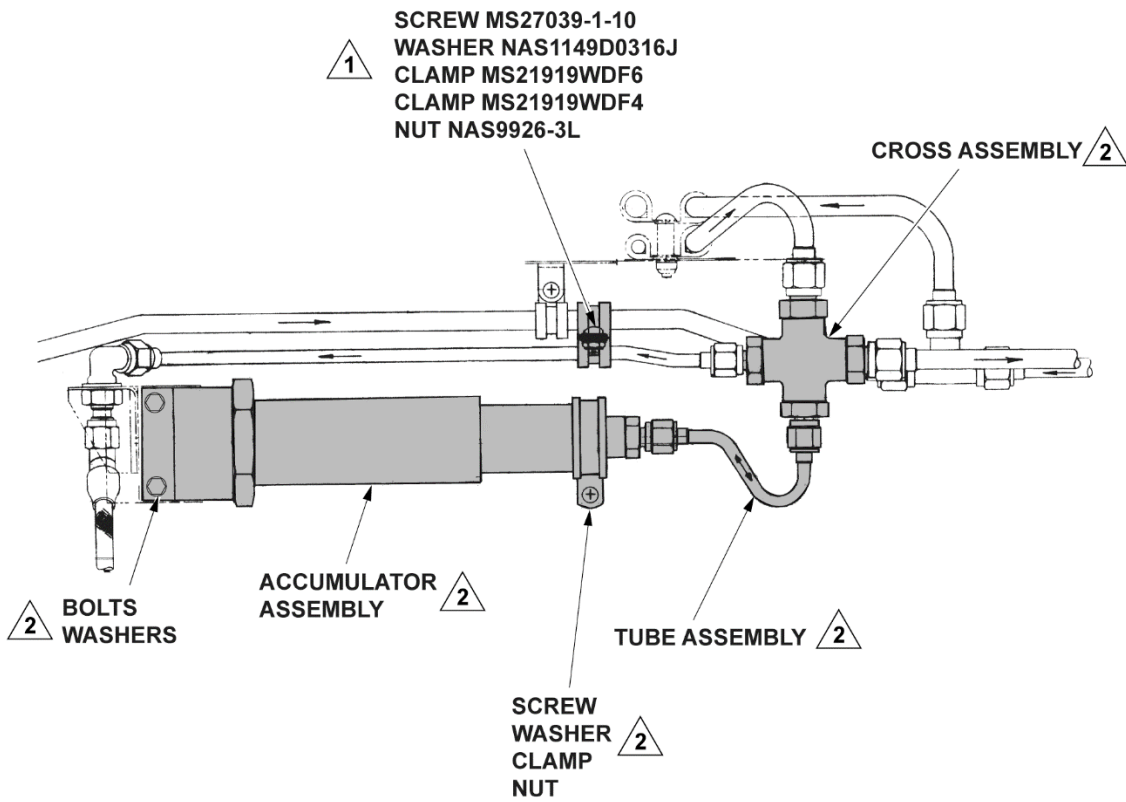
Figure 4 is only applicable to helicopters 36694 and Sub. For 36628 through 36693 refer to ASB 412-15-163.

4. Install Nut plate 90-002-3 shown on Figure 4 as follow:
  - a. Install clamp MS21919WDG4, screw MS27039-1-10, washer NAS 1149DO316J with spacer NAS43DD3-12N and nutplate on tube assembly P/N 212-076-571-001. Do not tighten screw at this time to allow proper positioning of nutplate.
  - b. To prevent tube and stiffener preload, temporary install tube to fit and locate the nutplate on stiffener P/N 205-030-845-376 (Detail B) mark position of the nutplate and remove tube assembly.
  - c. Install the nutplate 90-002-3 using rivets MS20470AD4-6 (of the proper length), to the lower left hand stiffener P/N 205-030-845-376.
  - d. Touch up the area, as required, with primer C-204 (BHT-ALL-SPM).

-NOTE-

Figure 3 and 7 are only applicable to helicopters 36550,36562,36612,36614,36648,36649,36658 and 36659 modified per STC SR09600RC.

5. Install new hardware shown in grey on Figure 5,6 and 7.
6. Make an entry in the helicopter logbook and historical service records indicating compliance with this Technical Bulletin.

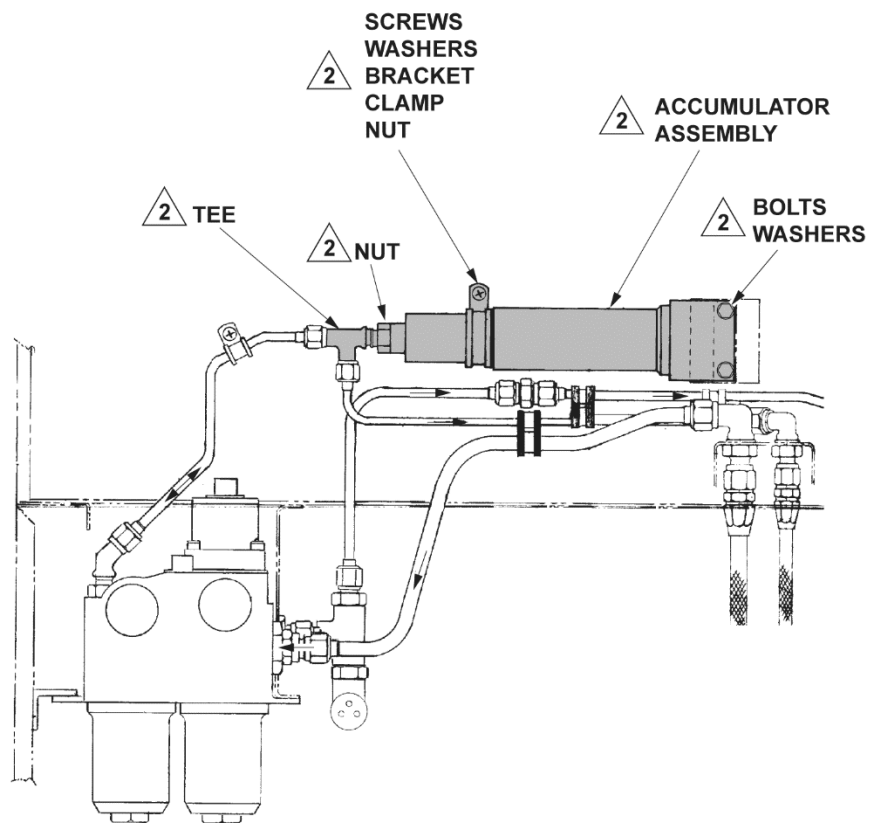


**NOTES**

- 1 Retain parts for relocation.
- 2 Parts no longer required.

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**Figure 1**  
 Hydraulic System I Pre TB 412-17-240 Configuration

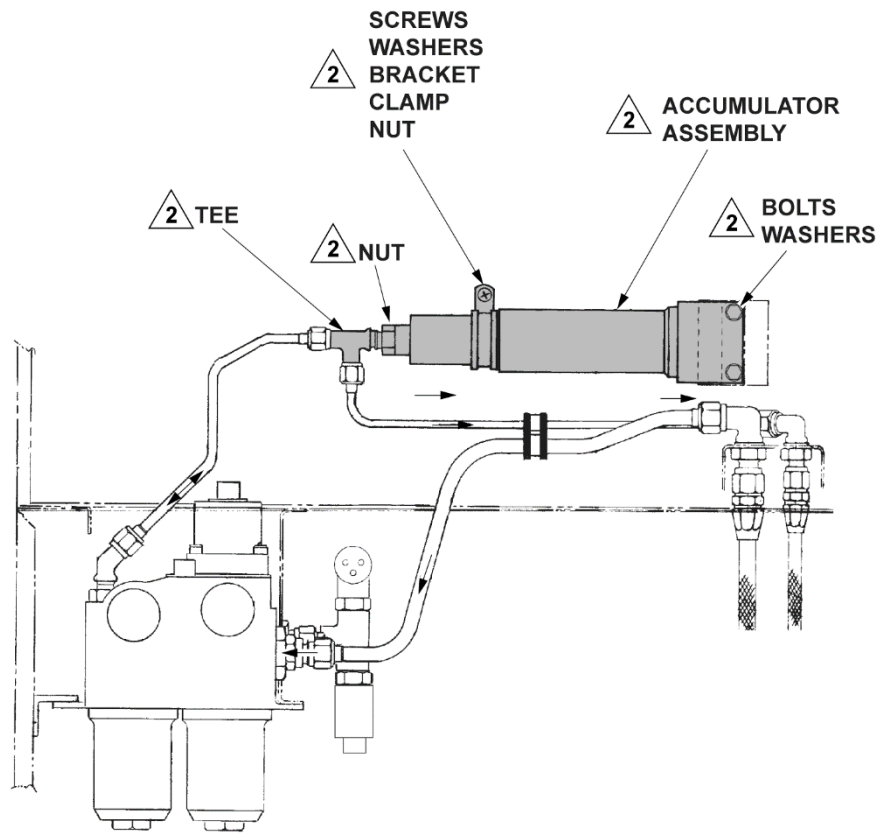


**NOTE**

2 Parts no longer required.

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**Figure 2**  
Hydraulic System II Pre TB 412-17-240 Configuration

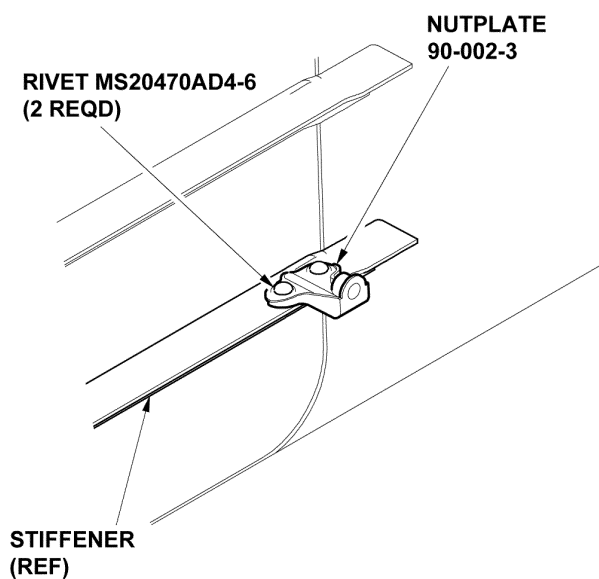
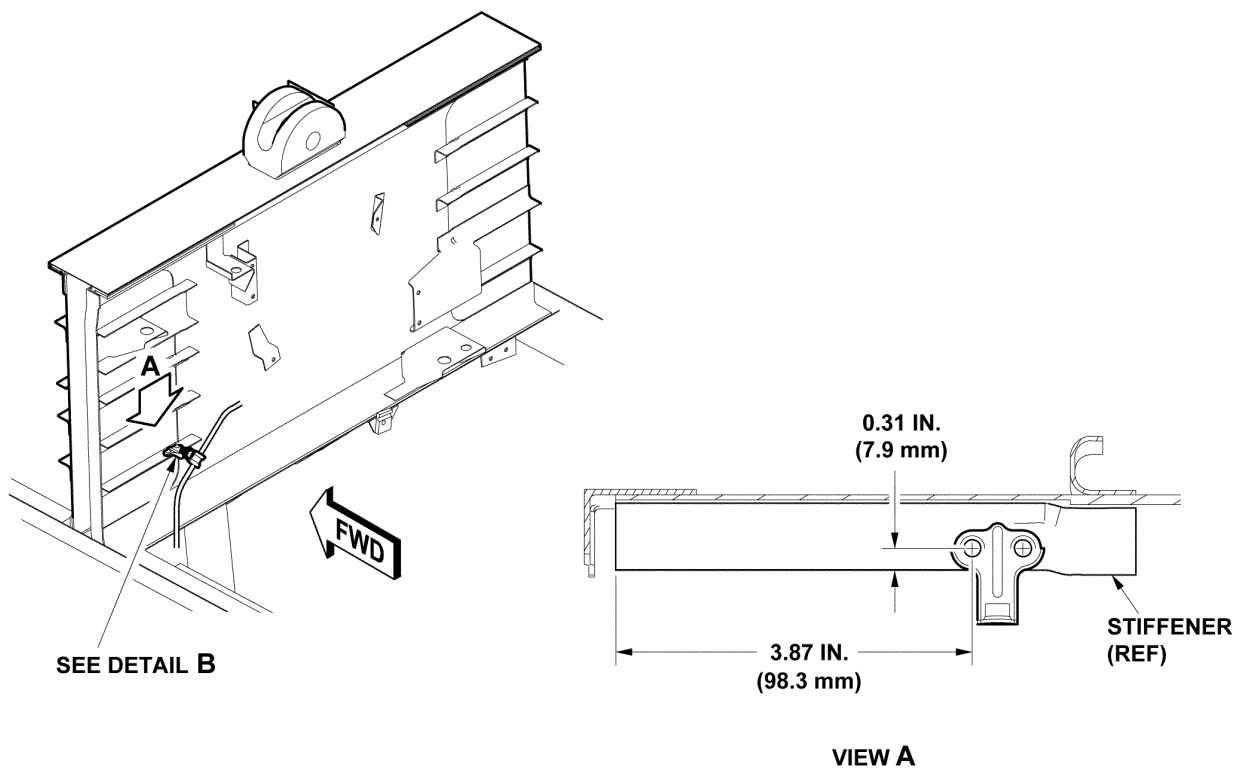


**NOTE**


 Parts no longer required.

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**Figure 3**  
 Pre TB 412-17-240 with EPI STC  
 36550,36562,36612,36614,36648,36649,36658 and 36659

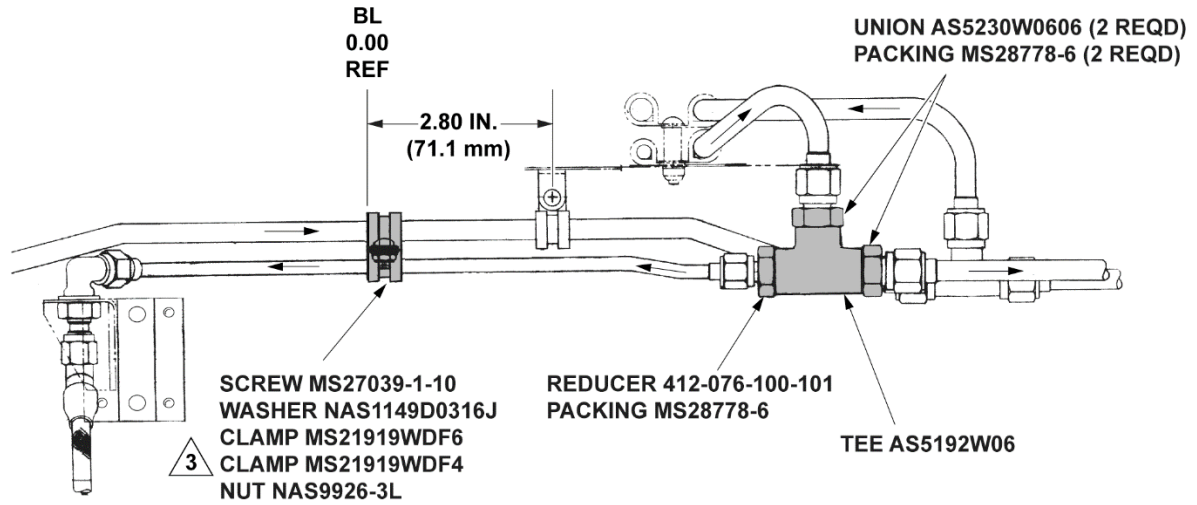


DETAIL B

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**Figure 4**  
Modification  
36694 and Subs





**NOTE**

3 Relocate clamps and hardware 2.80 inches (71.1 mm) away from center of bracket.

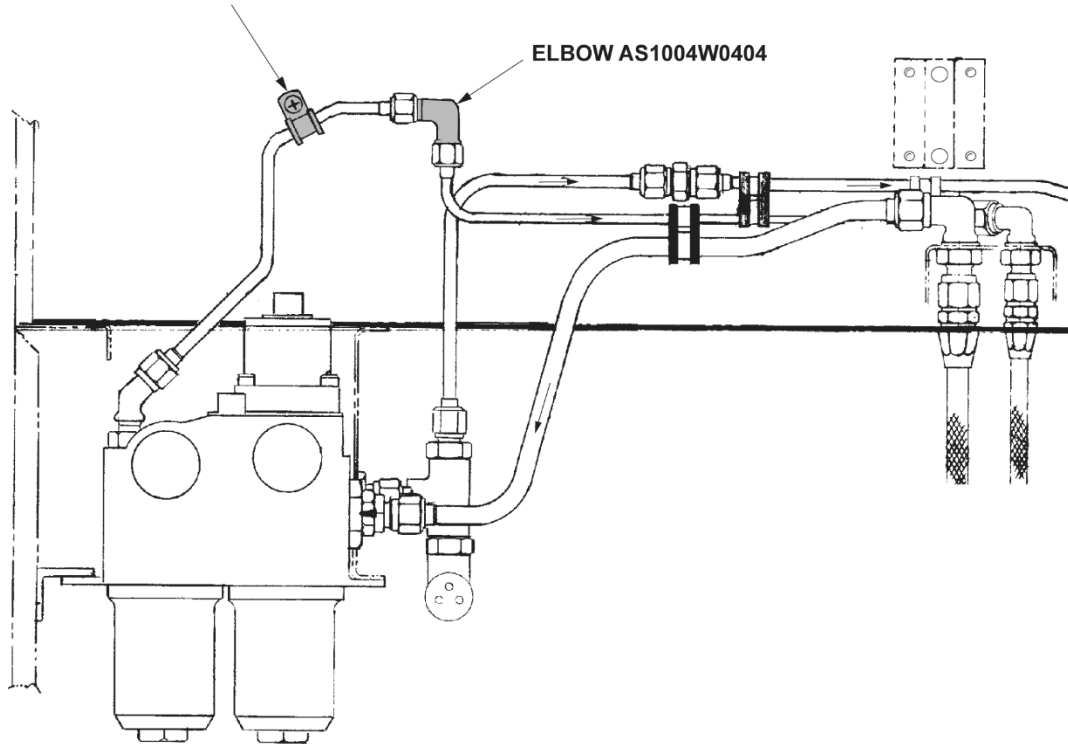
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**Figure 5**  
Hydraulic System I Post TB 412-17-240

# Configuration

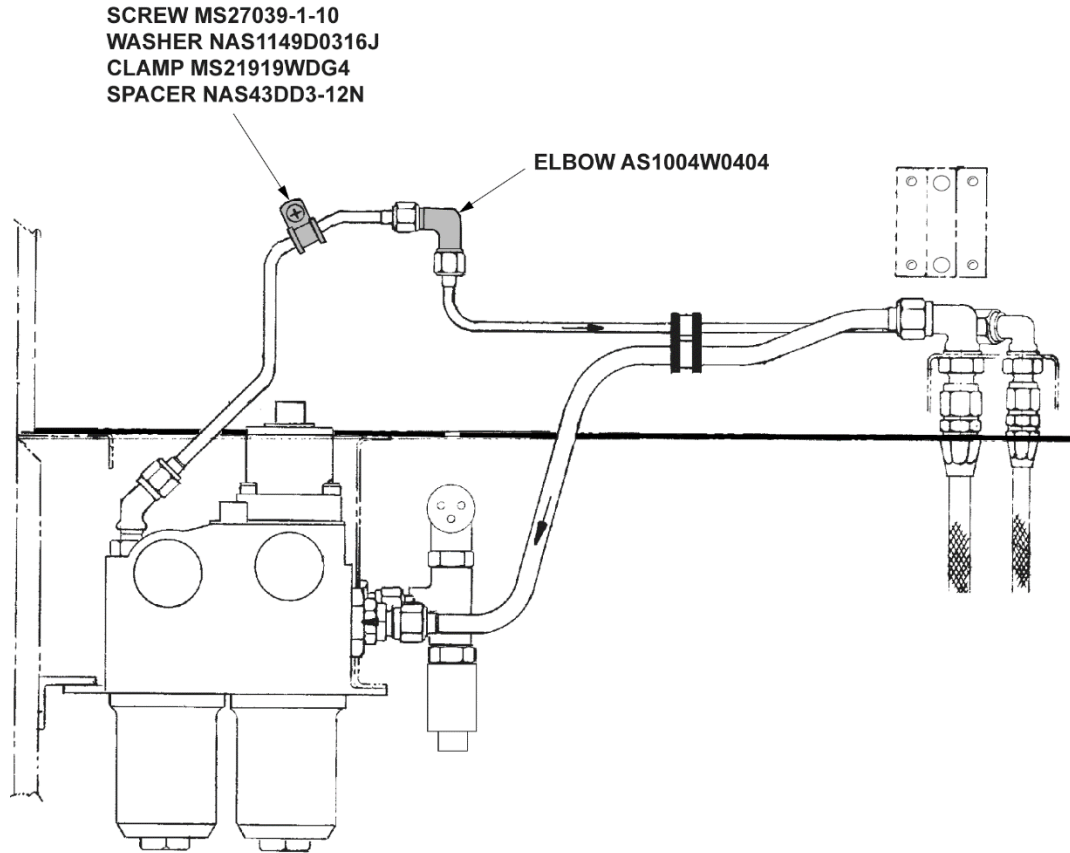
SCREW MS27039-1-10  
WASHER NAS1149D0316J  
CLAMP MS21919WDG4  
SPACER NAS43DD3-12N

ELBOW AS1004W0404



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**Figure 6**  
Hydraulic System II Post TB 412-17-240 Configuration



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**Figure 7**  
 Hydraulic System II Post TB 412-17-240 with EPI STC  
 36550,36562,36612,36614,36648,36649,36658 and 36659