

TM 9-4940-512-14&P

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE
MANUAL INCLUDING REPAIR PARTS LIST**

FOR

**TANK PRESSURE, FEED
MODEL NO. 50-6642
(ECLIPSE SYSTEMS, INC.)
(NSN 4940-00-251-6478)**

HEADQUARTERS, DEPARTMENT OF THE ARMY

SEPTEMBER 1980

Technical Manual

No. 9-4940-512-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 30 September 1980

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS LIST
FOR
TANK PRESSURE, FEED
MODEL NO. 50-6642
(NSN 4940-00-251-6478)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished directly to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this pressure tank is issued.

Manufactured by: Eclipse Systems, Inc.
Box E, Cork Hill Road
Franklin, NJ 07416

Procured under Contract No. DAAA09-78-C-4483

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number - 19272
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number - Model 50-6642
- 5 - Manufacturer's Serial Number (End Item)
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 19272 followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:
 Noun: (nomenclature of repair part)
 For: NSN: 4940-00-251-6478
 Manufacturer: Eclipse Systems, Inc.

Model: 50-6642
 Serial: (of end item)

Any other pertinent information such as Frame Number, type, Dimensions, etc.

(1) Special Features of Pressure Tanks

- Dual Regulation. Air pressure and atomizing pressure individually controlled by precision regulators.
- Three-way slide valve permits rapid refilling and color change without readjusting paint regulator.
- Tank heads are of heat treated aluminum alloy which meets ASME specifications for 110 PSI working pressure.
- Air Filter. Each head is supplied with an air filter. Filter prevents particles from damaging finish.
- Head easily positioned on tank. Dual concentric ridges on edge of head permits it to be placed on tank in almost any position.

Control Head

- The lightweight control head is made of a heat treated aluminum alloy. It has the tensile strength of mild steel and is indestructible. The head is held on the tank by means of forged C clamps and wing screws. The wing screws are easily positioned on the control head between continuous concentric grooves around the upper edge. Control assembly consists of two diaphragm regulating valves (one for regulating the spraying pressure and one for control of pressure in container), two air gauges shut-off valve, safety valve, air filter and three-way slide valve which shuts off air and releases pressure in container in one simple operation.

Air Motored Agitator

- Agitator is powered by an explosion-proof air motor. The motor is operated directly from the main air line on the control had. A needle valve is provided for controlling RPM to provide continuous agitation.

(2) Operation

Adjust right hand regulator (air-regulator-pressure on fluid) to apply pressure to container. This is the first regulation of the flow of paint.

Open air shut-off valves. To determine proper pressures, begin by adjusting left-hand regulator valve (air-regulator-spraying pressure) to 20 lbs. Now, with the gun trigger pulled, bring the pressure on fluid (right-hand regulator) up until the gun begins to spray. Increase atomizing pressure, then pressure on fluid until satisfactory results are obtained. Keep the atomizing pressure as low as possible, increasing it only for greater speed or for more viscous materials.

(4) Safety Precautions

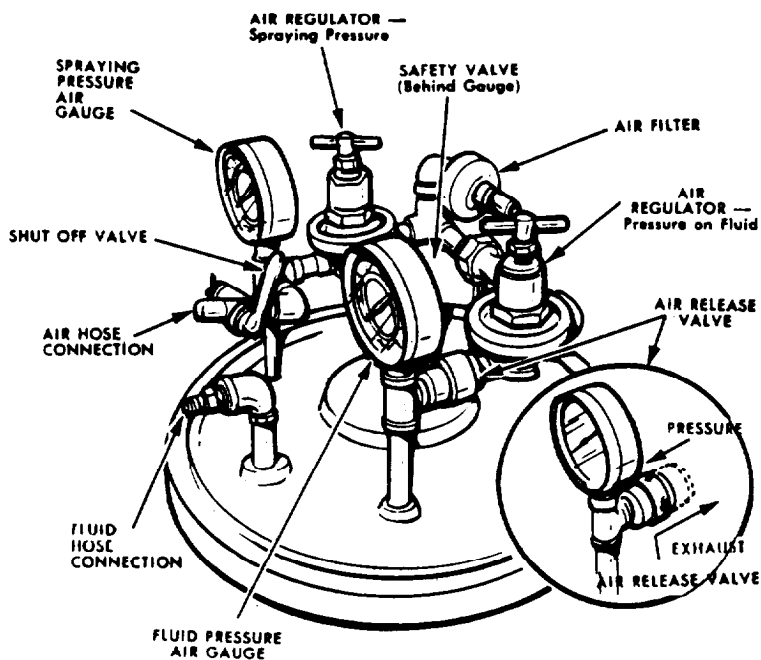
ASME TANK

Six C Clamps are pivoted from welded lugs on all ASME tanks except the 2-gallon ASME which has four clamps. The ASME Pressure Container is tested and approved for working pressure of 110 PSI. Do not operate or tank at over 100 PSI. Do not tamper or readjust safety valve. Bleed air from tank by actuating slide valve before attempting to remove cover.

(5) Cleaning

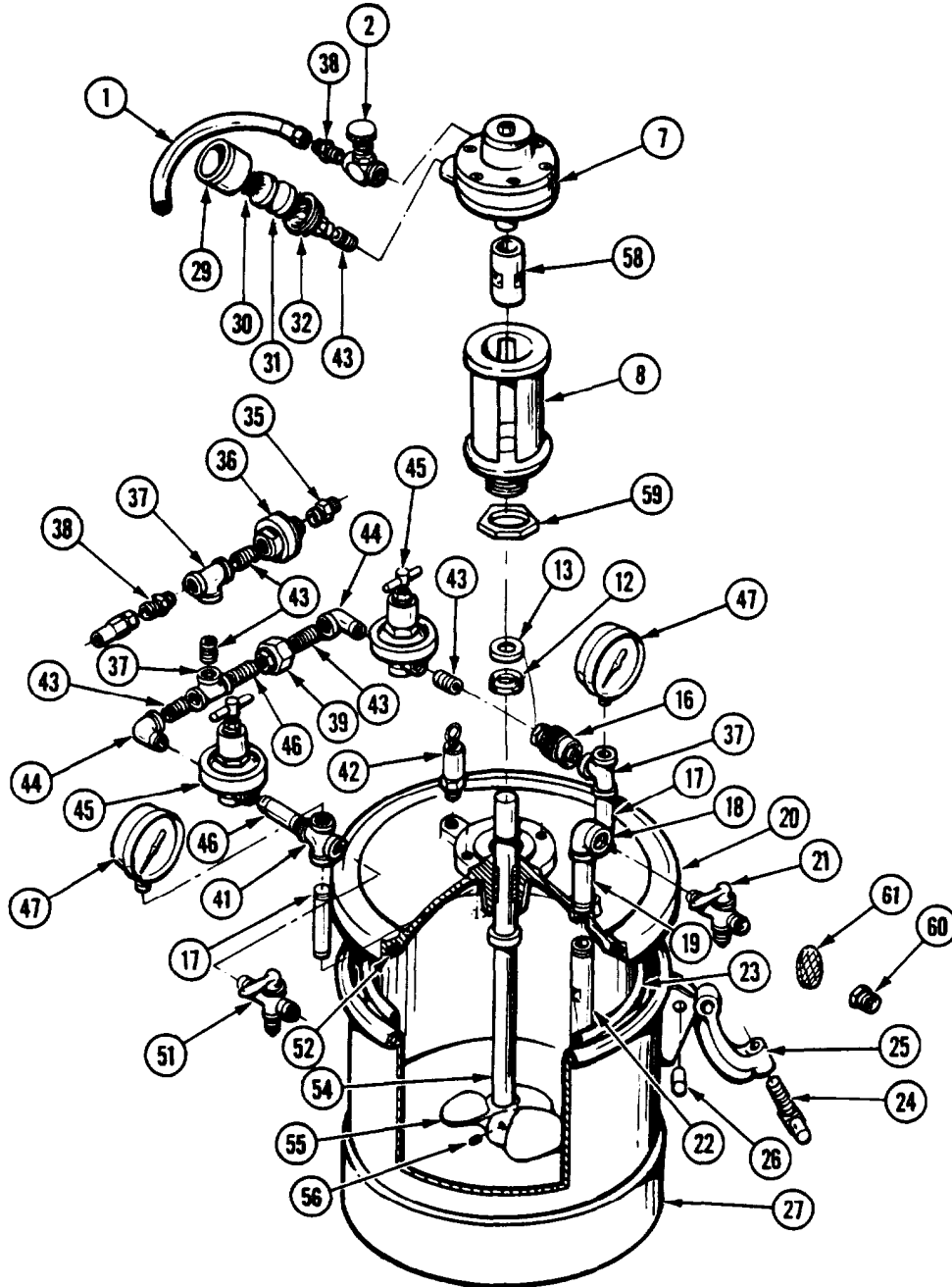
5.1 Pressure Tank Assembly.

Clean head gasket and disc. Wipe exteriors of air gauges and safety valve with solvent-dampened cloth and dry with compressed air.



parts list

DIRECT DRIVE PRESSURE TANK



DIRECT DRIVE PRESSURE TANK 5 GAL.			QTY.	
Item No.	Part No.	Description	50-6523	
			5 GAL.	
1	50-6611	AIR TUBE ASSY.	1	
2	6-4300	NEEDLE VALVE	1	
7	94300-7	AIR MOTOR	1	
8	20-5994	MOTOR SUPPORT	1	
12	44301-1	PACKING	1	
13	20-5991	PACKING WASHER	1	
16	50-4581	SLIDE VALVE ASSY.	1	
17	5-00-228-8	NIPPLE 1/4 NPT x 3-1/2	2	
18	5-01-33-8	ELBOW	1	
19	5-00-324-8	NIPPLE 3/8 NPT x 3	1	
20	50-6524	COVER & BUSHING ASSY.	1	
20	50-6646	COVER & BUSHING ASSY.	1	
21	5-10-9	SHUT-OFF COCK 5/8-18	1	
22	50-5005	FLUID POST	1	
22	50-5005-1	FLUID POST		
22	50-5005-13	FLUID POST		
23	114351-1	INSERT PAIL, GALV.	1	
23	114351-2	INSERT PAIL, GALV.		
23	11-5294-1	INSERT PAIL, S.S.	1	
23	11-5294-2	INSERT PAIL, S.S.		
23	11-4419	INSERT PAIL, GALV. (optional)		
23	11-4420	INSERT PAIL, S.S.		
24	11-5489	CLAMP SCREW	6	
24	11-5486	CLAMP SCREW		
25	11-5490	C CLAMP	6	
25	11-5487	C CLAMP		
26	11-5491	PIN	6	
26	11-5488	PIN		
27	50-5004	TANK ONLY	1	
27	50-5004-1	TANK ONLY		
27	11-5460	TANK ONLY		
28	50-4419-1	MUFFLER ASSY.	1	
29	20-4439-1	CAP	1	
30	204438-1	SCREEN	2	
31	20-4435-1	FELT	2	
32	20-4440-1	BASE	1	
36	11-5529	AIR FILTER	1	
37	5-03-222-8	TEE 1/4 NPT	3	
35	20-4400-1	FITTING 1/4 NPT x 5/8-18		
38	20-4400-4	FITTING 1/4 NPT x 1/4 NPS	3	
39	5-05-22-8	UNION 1/4 NPT	1	
41	5-06-2222-8	CROSS 1/4 NPT	1	
42	6-4315-100	SAFETY VALVE	1	
43	5-00-207-8	NIPPLE 1/4 NPT x 7/8	6	
44	5-02-22-8	STREET ELL 1/4 NPT	2	
45	6-4420	PRESSURE REGULATOR	2	
46	5-00-220-8	NIPPLE 1/4 NPT x 2-1/2	2	
46	5-00-212-8	NIPPLE 1/4 NPT x 1-1/2		
47	6-4325-160	PRESSURE GAUGE	2	
51	5-10-2	SHUT-OFF COCK 1/4 NPT x 5/8-18		
51	5-10-4	SHUT-OFF COCK 1/4 NPT x 1/4 NPS	1	
52	4-4330	GASKET	1	
52	4-4425	GASKET		
54	20-5993	SHAFT	1	
54	20-5994	SHAFT		
54	20-6065	SHAFT		
55	20-5062	PROPELLER	1	
55	11-5694	PROPELLER		
56	1-05-1004-5	SET SCREW	1	
58	11-5693	COUPLING	1	
59	1-10-29-3	NUT 1-1/4"-12	1	
60	20-4570-4	ADAPTER	1	
61	11-4126	FLUID STRAINER	1	

By Order of the Secretary of the Army:


E. C. MEYER
General, United States Army
Chief of Staff

Official:

J. C. PENNINGTON
Major General, United States Army
The Adjutant General

* U. S. GOVERNMENT PRINTING OFFICE : 1993 0 - 342-421 (62759)

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



SOMETHING WRONG WITH THIS PUBLICATION?

THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)
Your mailing address

DATE SENT
Date you filled out this form

PUBLICATION NUMBER
TM 9-4940-512-14&P

PUBLICATION DATE
September 1980

PUBLICATION TITLE
Maintenance Manual
for Pressure Tank

BE EXACT. PIN-POINT WHERE IT IS				IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO	
1	(2)			<p>The word "pressurre" is spelled wrong. It should read: "pressure."</p>

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER
SP4 John James, 922-1100

SIGN HERE:
SP4 John James

TEAR ALONG PERFORATED LINE

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

Commander
US Army Armament Materiel Readiness Command
ATTN: DRSAR-MAS
Rock Island, IL 61299

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT. FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 9-4940-512-14&P

PUBLICATION DATE

30 Sept. 1980

PUBLICATION TITLE

Maintenance Manual
for Pressure Tank

BE EXACT. PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

DA FORM 2028-2
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

TEAR ALONG PERFORATED LINE

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

Commander
US Army Armament Materiel Readiness Command
ATTN: DRSAR-MAS
Rock Island, IL 61299

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT. FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 9-4940-512-14&P

PUBLICATION DATE

30 Sept. 1980

PUBLICATION TITLE

Maintenance Manual
for Pressure Tank

BE EXACT . . . PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
---------	------------	-----------	----------

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

Commander
US Army Armament Materiel Readiness Command
ATTN: DRSAR-MAS
Rock Island, IL 61299

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 9-4940-512-14&P

PUBLICATION DATE

30 Sept. 1980

PUBLICATION TITLE
Maintenance Manual
for Pressure Tank

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

FILL IN YOUR
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

Commander
US Army Armament Materiel Readiness Command
ATTN: DRSAR-MAS
Rock Island, IL 61299

TEAR ALONG PERFORATED LINE

**TM 9-4940-512-14&P -- TANK PRESSURE FEED (ECLIPSE SYSTEMS, INC.)
(NSN 4940-00-251-6478)**