# PARTS CATALOG

# FOR A

# J.H. FLETCHER & CO.

# MINING PRODUCT

MACHINE MODEL DDO-13,C-D MODERNIZATION
SERIAL NUMBER89307 / 84030
CUSTOMER ORDER NUMBER
ELECTRICAL APPROVAL NUMBER 2G-2751A-14
HEALTH APPROVAL NUMBER
PENNSYLVANIA APPROVAL NUMBER N/A

CUSTOMER.....



# Engineers Surveyors Planners

RALEIGH COUNTY, WEST VIRGINIA

# ATRS STRUCTURAL CERTIFICATE

ESI Inc., Job Number 2575-1E

I, Ronald Tim Thompson, P.E., do hereby certify that equipment drawings 2575-1E & 2575-2E, dated November 15, 2005, by ESI Inc., for Phillips Machine Services, Inc., entitled "ATRS Certification for Fletcher Roof Bolter DDO", and more specifically for Serial #89307/84030, Model # DDO, identified as Exhibit A, will elastically support a live load of 42,750 pounds and is in accordance with AISC specifications and as set forth in Federal Register, Part II, Department of Labor, MSHA, 30CFR Part 75, Section 75.209, E1 and E2, Rules and Regulations governing use of Automatic Temporary Roof Support Systems. Any alteration to the design or drawings VOIDS this certification.

This the 15th day of November 2005

Ronald Tim Thompson, PE

WV Certification #15533



# Engineers Surveyors Planners

RALEIGH COUNTY, WEST VIRGINIA

# **CANOPY CERTIFICATE**

ESI Inc., Job Number 2575-3E

I, Ronald Tim Thompson, do hereby certify that the equipment drawing 2575-E3, dated November 8, 2005, by ESI Inc., for Phillips Machine Service, entitled "Tram Canopy for Fletcher DDO" and more specifically for Serial #89307/84030, Model # DDO - 13, and further identified as Exhibit A, attached hereto, has been found to meet Federal Register, Part II, Department of Labor, MSHA, 30CFR, Part 75, Section 75.1710 and will support a uniformly distributed load equal to the lesser of 9 ton or 15 psi, the members were sized per AISC specifications. Any alteration to the design or drawings VOIDS this certification.

This the 8th day of November 2005

Ronald Tim Thompson, P.E.

WV Certification #15533



# Engineers Surveyors Planners

RALEIGH COUNTY, WEST VIRGINIA

# **CANOPY CERTIFICATE**

ESI Inc., Job Number 2575-4E

I, Ronald Tim Thompson, do hereby certify that the equipment drawing 2575-E4, dated November 15, 2005, by ESI Inc., for Phillips Machine Service, entitled "Drill Canopy for Fletcher DDO" and more specifically for Serial #89307/84030, Model # DDO - 13, and further identified as Exhibit A, attached hereto, has been found to meet Federal Register, Part II, Department of Labor, MSHA, 30CFR, Part 75, Section 75.1710 and will support a uniformly distributed load equal to the lesser of 9 ton or 15 psi, the members were sized per AISC specifications. Any alteration to the design or drawings VOIDS this certification.

This the 15th day of November 2005

Ronald Tim Thompson, P.E.

WV Certification #15533

# WARNING

# READ BEFORE STARTING MACHINE

The safe operation of this machine requires special knowledge, training and experience - do not attempt to operate unless you have read the Operator's Manual and have received the task training required by MSHA (30 CFR 48.7).

- Review the <u>SAFETY REMINDERS</u> before starting operation.
- Perform the START OF SHIFT SAFETY CHECKLIST before placing machine in operation.
- Report any unsafe or hazardous condition to your supervisor immediately BEFORE CONTINUING OPERATION.
- Changes in machine adjustments are to be made only by properly trained and authorized personnel.
- Do not modify machine or utilize repaired or replacement parts that do not meet J. H. Fletcher & Co. specifications.
- Always remove and lock out power at distribution box before performing inspection, maintenance or repair.
- Before leaving the section, perform the <u>END OF SHIFT SHUTDOWN</u> CHECKLIST.

Failure to observe the warnings above or careless operation can result in serious injury or death to yourself or others.

THE SAFE OPERATION OF THIS MACHINE IS YOUR RESPONSIBILITY

This and all other safety notices must be maintained on the machine at all times - DO NOT REMOVE THIS NOTICE-repliess as required.

Part No. 157539



Œ TITLE

WARNING STICKER

139339

SHEET NO.

# WARNING

PINCH POINTS CAN CAUSE INJURY.

DO NOT OPERATE WITHOUT GUARD IN PLACE.

DO NOT REMOVE LABEL

© J. H. Fletcher & Co., 1967

Part No. 159546

SHEET NO.

WS-2

TITLE

159546 WARNING STICKER

DATE

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J. H. FLETCHER & CO.

707 WEST 7TH STREET

HINTINGTON W WA

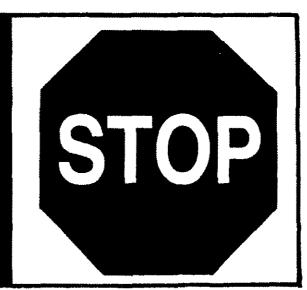
# DANGER

# NEVER STAND OR TRAVEL BEYOND SUPPORTED ROOF

DO NOT REMOVE LABEL

© J. H. Flatcher & Co., 1967

Part No.: 159549



SHEET NO.

WS-3

TITLE

159549 WARNING STICKER

DATE

J. H. FLETCHER

& CO.

101 WEST TH STREET

HUNTINGTON, W. VA



SHEET NO.

US-4

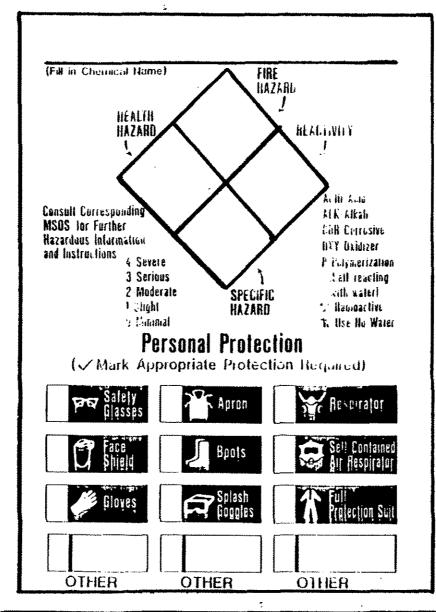
159543 WARNING STICKER

DATE

R

J.H. FLETCHER & CO.

707 WEST 7TH STREET HUNTINGTON, W VA



SHEET NO.

WS-5

159578 WARNING STICKER

DATE

R

J. N. FLETCHER & CO.

707 WEST 71H STREET HUNTINGTON, W VA.



SHEET NO.

US--6

TITLE

DATE

R

J. H. FLETCHER & CO.

707 WEST 7TH STREET HUNTINGTON, W VA

# NEVER ENTER AREA IN RED UNLESS POWER TO THE MACHINE HAS BEEN DISCONNECTED & LOCKED OUT. DO NOT REMOVE LABEL Part No. 159541



INDICATES RED AREA ON STICKER

FLEIGHER & U.S.

27.20

TITLE

159541 WARNING STICKER

SHEET NO.

115-8

# WARNING

Before Performing Maintenance, Repair Or Inspection In This Area Fully Lower or Securely Block All Moving Parts and Disconnect And Lock Out Power.

**Serious Injury Can Occur From Failure To Observe This Warning.** 

DO NOT REMOVE LABEL

© J. H. Fletcher & Co., 1987

Part No. 159538

SHEET NO.

TITLE

DATE

1 11

FLETCHER & CO

₩S-10

159538 WARNING STICKER

R

EET

JUNTINGTON, W. VA

# CLEAR AREA

DO NOT NIMOVE LAI

© J. H. Pletcher & Co., 1967 Part No. 159545

Œ

DATE

TITLE

159545

US-11 SHEET NO.

WARNING STICKER



SHEET NO.

WS-12

TITLE

159544 WARNING STICKER

DATE

R

J. H. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.



SERVICE MACHINE CO.

0072 OHO RIVER RD. HUNTINGTON, WV 25702
P.O. BOX 6177 HUNTINGTON, WV 25706
PHONE 304/736-0033 TWX 716 931 1920

**INNOVATION IN PRODUCT DESIGN** 

# NOTICE TO COAL MINE OPERATORS AND MAINTENANCE PERSONNEL

This ELECTRICAL EQUIPMENT is APPROVED or CERTIFIED by MSHA in accordance with 30 CFR 18, and is also subject to the provisions of 30 CFR 75 where applicable.

Installation and Maintenance to be carried out by authorized personnel.

Equipment to be frequently examined, tested and properly maintained in safe and permissible condition.

Maintain the equipment in conformity with SERVICE MACHINE CO's. MSHA APPROVED drawings. Always use replacement parts identical to those supplied by SERVICE MACHINE CO. (Refer to full "CAUTION STATEMENT" for details.)

PART NO. 159524

SHEET NO.

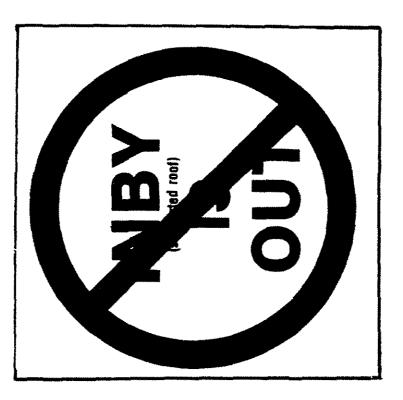
TITLE

DATE

J. H. FLETCHER &

707 WEST 7TH STREE

HUNTINGTON W V



J. H. FLETCHER & CO.

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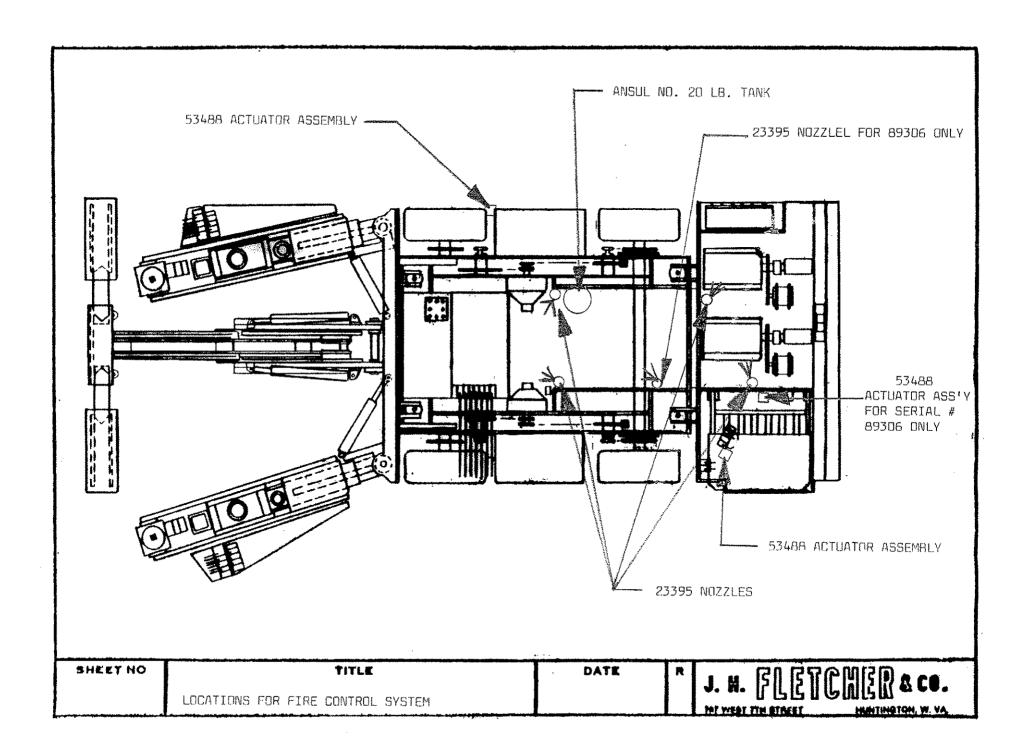
159610 WARNING STICKER

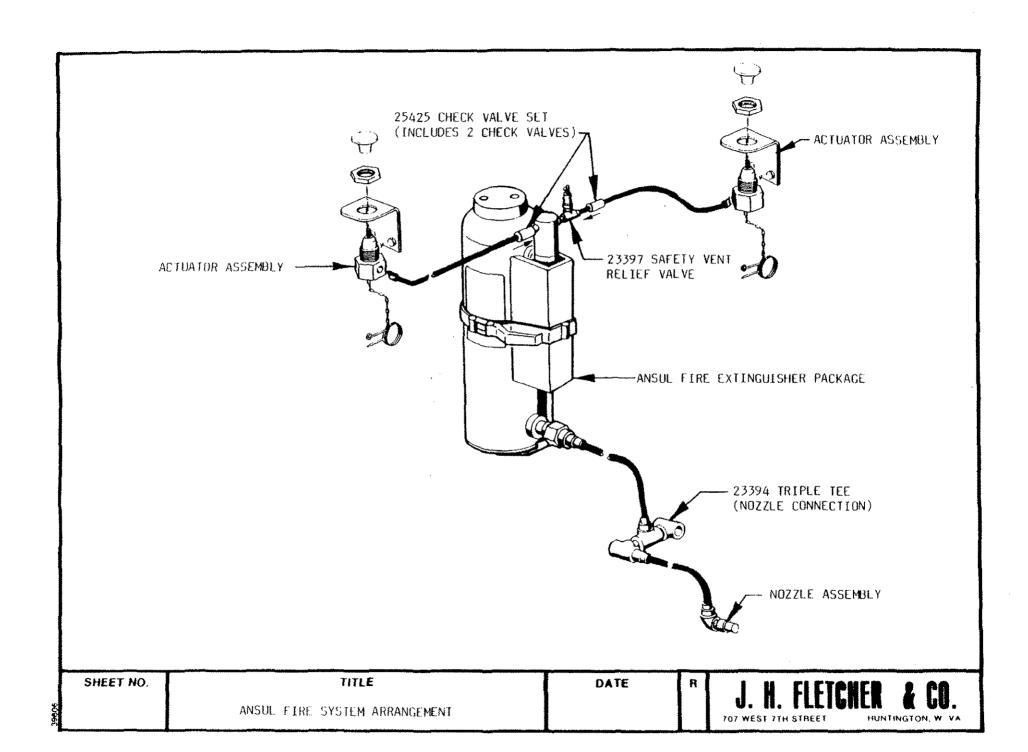
TITLE

SHEET NO.

W5-18

DATE





SHEET NO.

TITLE

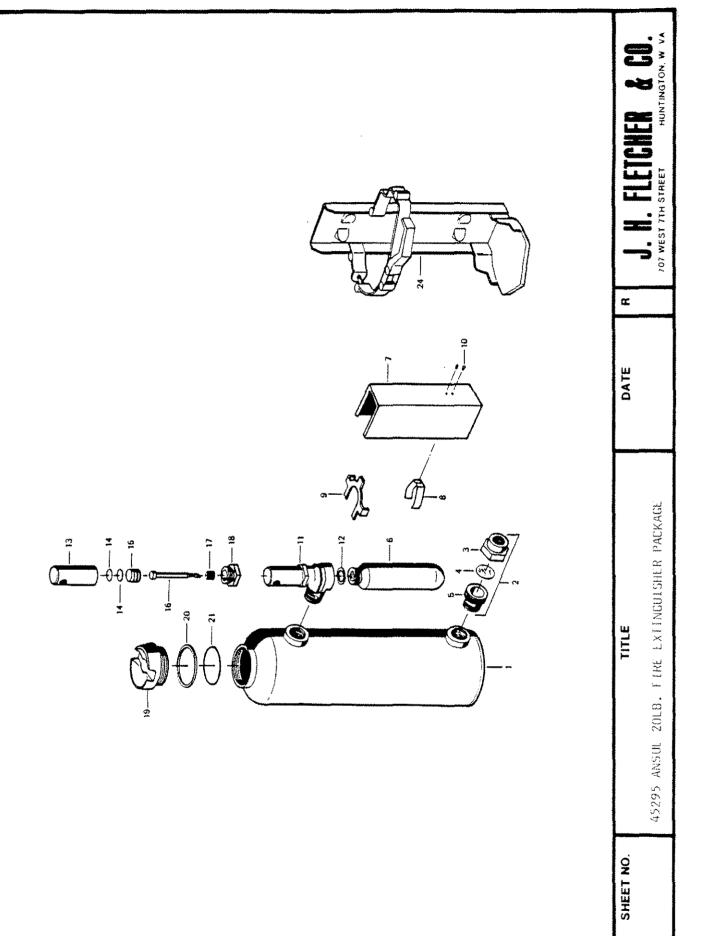
DATE

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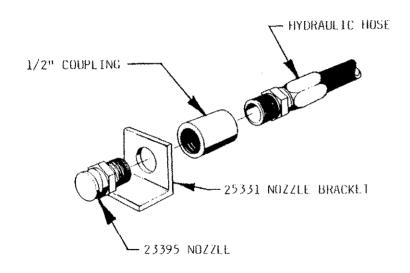
J.H. FLETCHER & CO.

707 WEST 71H STREET HUNTINGTON, W VA

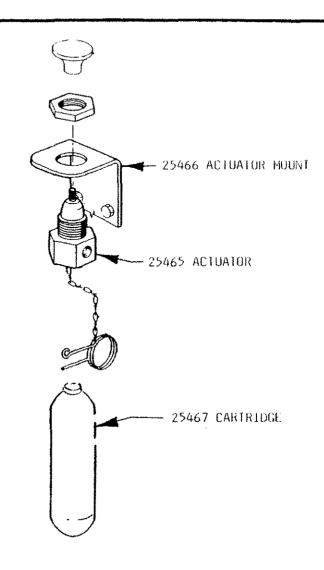
ITEM	<u>DESCRIPTION</u>	PART NO.
1	SHELL ASSEMBLY	25315
2	BURSTING DISC UNION ASSEMBLY	25265
3	UNION RING & TAIL PIECE	25316
4	BURSTING DISC	25264
5	ADAPTOR	25317
6	CARTRIDGE ASSEMBLY	25261
7	CARTRIDGE GUARD ASSEMBLY	25 332
8	CLIP	25263
9	FORK	25333
10	RIVET	NONE
11	PNEUMATIC CARTRIDGE RECIEVER ACTUATOR	25319
12	GASKET	25260
13	ACTUATOR BODY	25320
14	"O" RING (2 REQ'D)	25321
15	PNEUMATIC SLAVE PISTON	25322
16	PUNCTURE PIN ASSEMBLY	25323
17	SPRING	25 324
18	ADAPTOR	25325
19	FILL CAP ASSEMBLY	25326
20	GASKET	25327
21	GUARD RING	25328
24	BRACKET ASSEMBLY	25330



**6**¢



NOZZŁŁ ARRANGEMENT



53488 ACTUATOR ASSEMBLY

ANSUL FIRE SYSTEM INFORMATION

DATE

R

J. H. FLETCHER & CO.

707 WEST 71H STREET HUNTINGTON, W VA

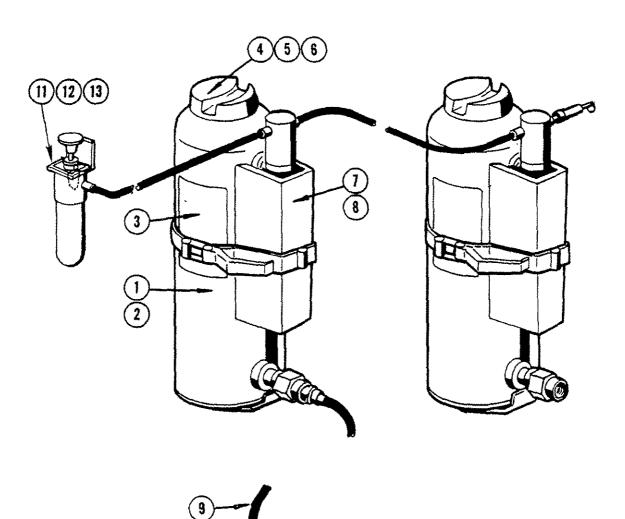


#### INSPECTION - PNEUMATIC ACTUATION

To provide reasonable assurance that your Ansul A-101 System is charged and operable:

- 1. Make certain extinguisher is in its designated place.
- Note general appearance for mechanical damage or corrosion.
- 3. Check nameplate(s) for readability.
- 4. Remove fill cap assembly.
- 5. Make certain extinguisher is filled with free-flowing Ansul dry chemical to a level of not more than 3 inches from the bottom of the fill opening.
- 6. Secure fill cap, hand tighten.
- Remove cartridge from extinguisher and examine disc - seal should be unruptured.

- Return cartridge to cartridge receiver/actuator assembly, hand tighten.
- Check piping (hose), fittings and nozzles for mechanical damage and cuts,
- Check nozzle openings slot should be closed (capped) with silicone grease or covered with black plastic blowoff cap (Part No. 4120).
- Remove cartridge from remote actuator, and examine disc — seal should be unruptured.
- Return cartridge to remote actuator assembly, hand tighten.
- Replace any broken or missing lead and wire seals and record date of inspection.



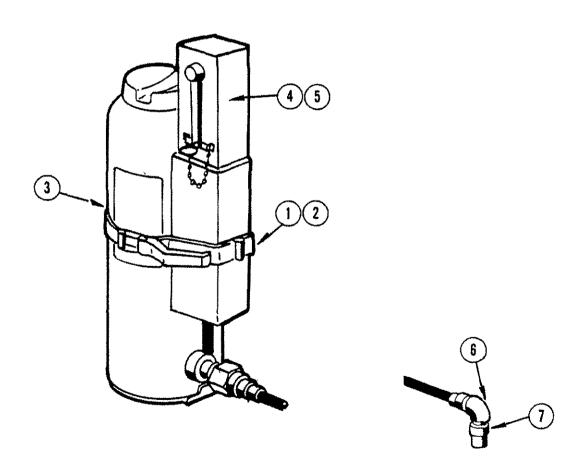
Numbers are keyed to instructions.



#### INSPECTION - AUTOMATIC/MECHANICAL ACTUATION

To provide reasonable assurance that your Ansul A-101 system is fully charged and operable:

- 1. Make certain extinguisher is in designated place.
- 2. Note general appearance for mechanical damage.
- 3. Check nameplate for readability.
- 4. Check visual seal on ring pin in cocking handle.
- Check visual release indicator position should be in "cocked" position.
- Check piping, fittings, blow-off caps and nozzles for mechanical damage.
- Check nozzle openings slot should be closed (capped) with silicone grease or covered with black plastic blowoff cap (Part No. 4120).
- 8. Record date of inspection.





# MAINTENANCE - AUTOMATIC/MECHANICAL ACTUATION

To provide reasonable assurance that your Ansul A-101 System will operate effectively and safely:

- 1. Make certain extinguisher is in designated place.
- 2. Note general appearance for mechanical damage.
- 3. Check nameplate for readability.
- 4. Install ring pin in actuator/cartridge receiver.
- 5. Remove cover plate from extinguisher side of release.
- 6. Disconnect bursting disc union.
- 7. Release holding strap and remove extinguisher.
- Check the bursting disc to insure that it has not been ruptured and is properly installed — full disc side must face extinguisher.
- 9. Remove fill cap.
- Check threads on fill cap and in fill opening for nicks, burrs, cross threading, rough or feathered edges.
- Check pressure relief vent hole in fill opening for obstructions.
- 12. Check fill cap gasket for elasticity clean and coat lightly with good grade of high heat resistant grease.
- Make certain tank is filled with free-flowing Ansul dry chemical to a level not more than 3 inches from bottom of fill opening.
- 14. Secure fill cap, hand tighten.

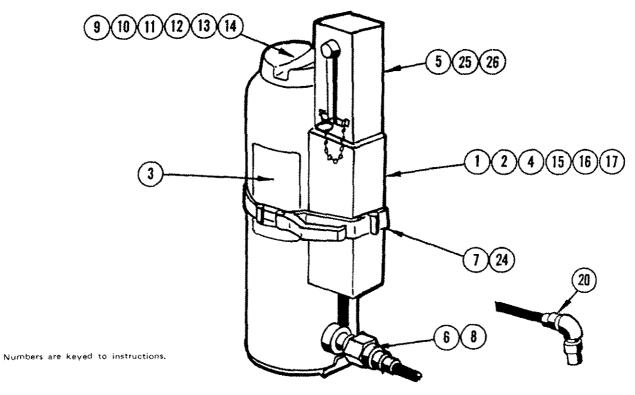
- 15. Remove cartridge guard assembly.
- Remove cartridge and weigh. Weight must be within ¼ ounce of weight stamped on cartridge.
- 17. Screw in cartridge, hand tighten.
- Replace cartridge guard.
   (DO NOT REINSTALL EXTINGUISHER AT THIS TIME.)
- 19. Check hose, fittings, and nozzles for mechanical damage.
- Check nozzle openings slot should be closed (capped) with silicone grease or covered with black plastic blowoff cap (Part No. 4120).
- 21. Install fusible link in detector(s).
- 22. Cut or melt fusible link to test fire detection system.

NOTE: If system does not fire, check wire rope tension — adjust tension on wire rope and cock the release. Repeat Steps 21 and 22.

- After successful test firing, cock release and secure with ring pin and seal with visual seal (Part No. 15999).
- 24. Reinstall fully charged extinguisher.

  Reassemble bursting disc union, wrench tighten.

  Secure extinguisher with holding strap.
- 25. Replace cover on mechanical release.
- 26. Remove ring pin from actuator/cartridge receiver.
- 27. Record date of maintenance.





#### MAINTENANCE - PNEUMATIC ACTUATION

To provide maximum assurance that your Ansul A-101 System will operate effectively and safely:

- Note general appearance for mechanical damage or corrosion.
- 2. Check nameplate for readability, corrosion or looseness.
- 3. Remove fill cap assembly.
- Examine fill cap gaskets for elasticity clean and coat lightly with a good grade of high heat resistant grease.
- 5. Inspect threads on fill cap and in fill opening for nicks, burrs, cross threading, rough or feathered edges.
- Check pressure relief vent in fill opening threads for obstruction.
- Make certain extinguisher is filled with free-flowing Ansul FORAY dry chemical to a level of not more than 3 inches from bottom of fill opening.
- 8. Secure fill cap, hand tighten.
- 9. Remove extinguisher cartridge guard assembly.
- Unscrew cartridge and weigh (replace if weight is 1/4 oz. less than stamped on cartridge).
- Inspect threads on cartridge and in receiver/actuator for nicks, burrs, cross threading, rough or feathered edges.
- 12. Check pressure vents in receiver/actuator for obstruction.
- Examine cartridge receiver gasket for elasticity clean and coat lightly with a good grade of high heat resistant grease. Return cartridge to receiver/actuator, hand tighten.

- 14. Disengage bursting disc union and open bracket clamp.
- Lift extinguisher partially out of bracket and examine bursting disc — should be installed with full disc side facing extinguisher, properly seated and undamaged (scored, or ruptured).
- Reposition extinguisher, engage bursting disc union (wrench tighten) and close bracket clamp.
- 17. Check hose, fittings and nozzles for mechanical damage.
- Check nozzle openings slot should be closed (capped) with silicone grease or covered with black plastic blowoff cap (Part No. 4120).
- 19. Check remote actuator DASHBOARD TYPE.

Remove cartridge and weigh (replace if weight is 1/4 oz. less than stamped on cartridge).

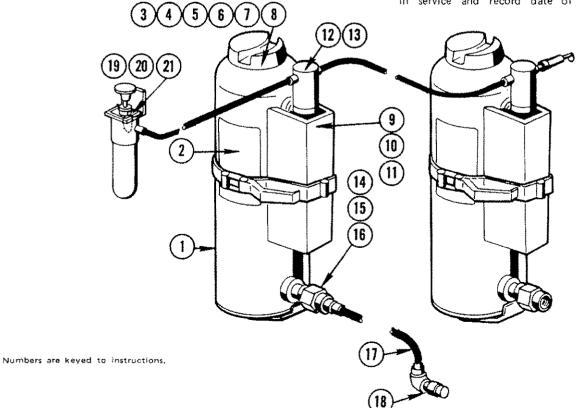
Inspect threads on cartridge and in actuator for nicks, burrs, cross threading, rough or feathered edges.

Check pressure safety vent in actuator body for obstruc-

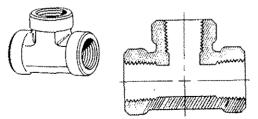
Examine actuator cartridge gasket for elasticity — clean and coat lightly with a good grade of high heat resistant grease.

Pull ring pin and operate actuator button several time to check for free movement.

- Seal ring pin to puncture lever with lead and wire seal, Ansul Part No. 197. Return cartridge to remote actuator, hand tighten.
- Notify operating personnel extinguishing system is back in service and record date of maintenance check.

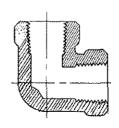


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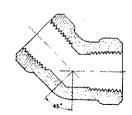
90° ELBOW





45° ELBOW





PART NO.	THREAD SIZE
20427	1/4"
20428	3/8"
20429	1/2"
20430	3/4"
20481	1"

PART NO.	THREAD SIZE
20417	1/4"
20418	3/8"
20419	1/2"
20420	3/4"
20421	1"
20422	1-1/4"

PART NO.	THREAD SIZE
20432	1/4"
20433	3/8"
32813	1/2"
32814	3/4 <sup>H</sup>
32815	J * 1
32816	1-1/4"

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N.P.T.

STANDARD PIPE FITTINGS

TITLE

DATE

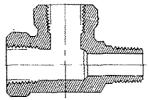
J. H. FLETCHER&co.

707 WEST 7TH STREET

HUNTINGTON, W. VA.

# MALE RUN TEE

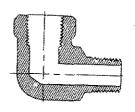




PART NU.	THREAD SIZE
20423	1/40
20424	3/8"
20425	1/2"
20426	3/4"
20301	111

# 90° STREET ELBOW

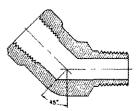




PART NO.	THREAD SIZE
32809	1/4"
32810	3/8"
32811	1/2"
20257	3/4"
32812	1"
20412	1-1/4"

# 45° STREET ELBOW





PART NO.	THREAD SIZE
20414	1/4"
20415	3/80
20416	1/2"
32735	3/4"
20250	1"

			<u> </u>	
SHEET NO.	TITLE	DATE	R	· · · CI CTEMED.
N.P.1.	STANDARD PIPE FITTINGS			j. H. FLETCHER & co.
				707 WEST 7TH STREET HUNTINGTON, W. VA.

# BUSHING





PART NO.	MALL THREAD	FEMALE THREAD
32663	2-1/2"	2 <sup>n</sup>
32436	2-1/2"	1-1/2"
32817	2-1/2"	1-1/4"
32818	2"	1-1/2"
32819	2"	1-1/4"
52437	1-1/2"	1-1/4"
32438	1-1/2"	) *1
32820	1-1/2"	3/4"
324 39	1-1/2"	3/8"
32440	$1-1/4^{n}$	} <sup>13</sup>
\$2441	1-1/4"	3/4 <sup>n</sup>
32442	$1-1/4^{n}$	1/2"
32443	1-1/4"	3/8"
32444	1-1/4"	1/4"

PART NO.	MALL_THREAD	FEMALE, THREAD
32445	1"	3/4 <sup>n</sup>
32446	Į es	1/2"
32447	J **	3/8"
32448	} **	1/4"
32449	3/4"	1/2"
32450	3/4"	3/8"
32451	3/4"	1/4"
32452	1/2"	3/8"
32453	1/2"	1/4"
32454	3/8"	1/4"
32822	1/4"	1/8"

SHEET NO.	TITLE	DATE	R	J. H. FLETCHER&co.
N.P.1.	STANDARD PIPE FITTINGS			707 WEST 7TH STREET HUNTINGTON W VA

#### MALE PIPE TO MALE J.I.C.



(STRAIGHT MALE ADAPTOR)

SIZE

I" PIPE 10 1" JIC

1/2" PIPE TO 1/2" JIC

3/4" PIPE TO 3/4" JEC

3/8" PIPE TO 3/8" JIC

1/4" PIPE TO 1/4" JIC

3/4" PIPE TO 1/2" JIC

1/2" PIPE TO 3/8" JIC

1/2" PIPE TO 3/4" JIC

3/8" PIPE TO 1/2" JIC

3/8" PIPE TO 3/4" 3LC

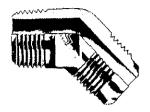
1/4" PIPE 10 3/8" JIE

1/4" PIPE TO 1/2" JIE

1/2" PIPE TO 1" JTC

3/4" PIPE TO 1" JEC

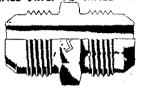
#### MALE PIPE TO MALE J.I.C.



(45° MALE ELBOW).

PARI NO.	SIZE
20586	I" PIPE TO I" JIC
20587	3/4" PIPE TO 3/4" JIC
20588	1/2" PIPE TO 1/2" JIC
20589	3/8" PIPE TO 3/8" JIC
20590	1/4" PIPE 10 1/4" JIC
20591	1" PIPE 10 3/4" JIC
20591 20592	1" PIPE TO 3/4" JIC 3/4" PIPE TO 1" JIC
20592	3/4" PIPE TO 1" JIC
20592 20593	3/4" PIPE TO 1" JIC 1/2" PIPE TO 3/4" JIC

MALE J.I.C. TO MALE J.I.C.



(STRAIGHT ADAPTOR UNION)

PART NO.	SIZE
20613	3/4" PIPE 10 3/4" JEC
20614	I" PIPE TO I" JIE
20615	1/2" PIPE 10 1/2" JIC
2 <b>0</b> 616	3/8" PIPE 10 3/8" JIC
20617	1/4" PIPE 10 1/4" JIC

SHEET NO.

J. L.C.

TITLE

20597

DATE

-1/4" PIPE TO 1/2" JIC

HYDRAULIC HOSE FILLINGS

707 WEST 7TH STREET

HUNTINGTON, W. VA.

PART NO.

20570

20571

20572

20573

20574

20577

20578

20579

20580

20581

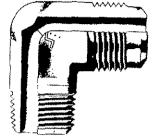
20582

20583

20584

20585

# MALE PIPE TO MALE J.I.C.



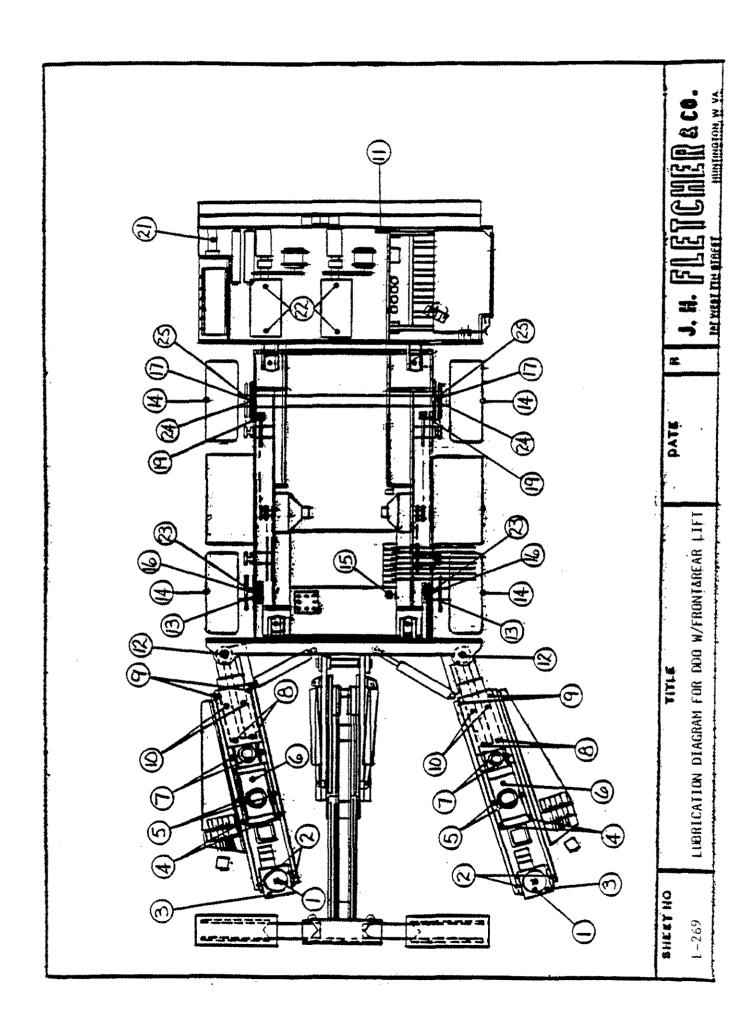
(90° MALE ELBOW)

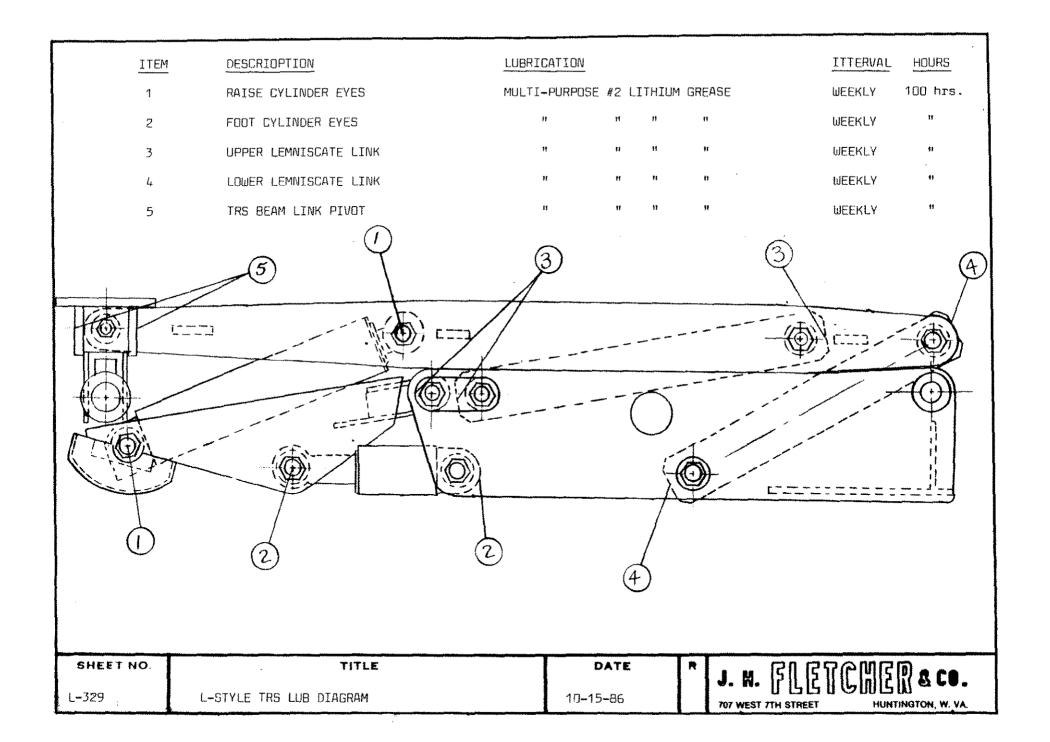
PARI NO.	SIZE
20598	I" PIPE TO I" JIC
20599	3/4" PIPE 10 3/4" JEC
20600	1/2" PIPE 10 1/2" JTC
20601	3/8" PIPE fo 3/8" JTC
20602	1/4" PIPE 10 1/4" JIC
20603	1" PIPE TO 1-1/4" JIC
20604	3/4" PIPE 10 1/2" JIC
20605	3/4" PIPE 10 1" JIC
20606	1/2" PIPE TO 3/8" JIC
20607	1/2" PIPE 10 3/4" JEC
20608	1/2" PIPE TO 1" JIC
20609	3/8" PIPE TO 1/2" JIC
20610	3/8" PIPE 10 3/4" DIC
20611	1/4" PIPE TO 3/8" JIC
20612	1/4" PIPE 10 1/2" JIC

SHEET NO. TITLE DATE R J.1.C. HYDRAULIC HOSE FIFTINGS 707 WEST 7TH STREET HUNTINGTON, W. VA.

SHEET NO.	TITLE	DATE	R	J. H. FLETCHER&co.
1269	LUBRICATION DIAGRAM FOR ODO W/FRONT & REAR LIFT			107 WEST 7TH STREET HUNTINGTON, W. VA.

LIEM	DESCRIPTION	RECOMMENDED LUBRICATION	INTERVAL
1	DRILLHEAD FLINGER	GREASE (MULTI-PURPOSE #2 LITHIUM)	EACH SHIFT
2	DRILLHEAD PIVOT PIN	ti ii ii ii ii	WEEKLY
3	DRILLHEAD OIL LEVEL	SAF 90 or 80w/90 MULTI-PURPOSE GEAR LUBE	DAILY (FLUSH BOX WEEKLY)
4	BOOM ARM PIVOT PIN	GREASE (MULTI-PURPOSE #2 LITHIUM)	WEEKLY
5	FFFD CYLINDER PIVOT PIN	11 11 11 11	WEEKLY
6	FLFD CYLINDER ANCHOR PIN	11	MEEKFA
7	BOOM ARM PIVOT PIN	es e	WEEKLY
13	ROLLER PIVOT PIN	e tt e e	WEEKLY
9	FOOT PIVOT PIN	(1 11 11 2) 11	WEEKLY
10	ROLLER ASSEMBLY	II st tt tt	WEEKLY
11	BLOWER ASSEMBLY	SEE BLOWER INSTRUCTION MANUAL	AS RECOMMENDED
12	BOOM PIVOT PIN	GREASE (MULTI-PURPOSE #2 LITHIUM)	WEEKLY
13	FRONT TILT CYD. (TOP & BOTTOM)	81 11 ft 85 11	WEEKLY
14	WHEEL HUB ASSEMBLY	81 11 81 BI	MONTHLY
15	OTE TANK	ASTM 315 or ISO-VG68 ANTI-WEAR HYDRAULIC OIL	AS NEEDED
16	FRUNT COUNTERSHAFT ASS'Y	GREASE (MULTI-PURPOSE #2 LITHIUM)	MONTHLY
17	REAR COUNTERSHAFT ASS'Y	17 15 65 H3 H5	MONTHLY
19	DISC BRAKE CALIPER ASS'Y	ty ff ff to	MONTHLY
21	HYDRAULIC FILTER	CHANGE ELEMENT	RED INDICATOR
22	ELECTRIC MOTORS	SEE ELECTRIC MOTOR INSTRUCTION MANUAL	AS RECOMMENDED
23	FRONT END PIVOT	GREASE (MULTI-PURPOSE #2 LITHIUM)	MONTHLY
24	REAR TILT CYD. (TOP & BOTTOM)	n tt tt tt	WEEKLY
25	REAR COUNTERSHAFT ASS'Y	n it if 'n if	MONTHLY





#### RECOMMENDED SPARE PARTS LIST

This list of recommended spare parts is sectionalized in line with your machine parts book for simple location. Parts not factory stocked will be marked with an asterisk (\*).

# MISCELLANEOUS SECTION:

NO RECOMMENDATIONS

#### ELECTRICAL SECTION:

1		HEADLIGHT SWITCH
1	46600	START-START SWITCH
1	46611	START SWITCH
2	46718	1' TAPE SWITCH PANIC BAR
1	49412	I.S. RELAY ASSEMBLY

# PUMP, ELECTRIC MOTOR AND BLOWER SECTION:

MP)

#### TRAM SECTION:

2	40202	BEARING (COUNTERSHAFT)
1	54042 *	FRONT LIFT CYLINDER
1	44516 *	REAR INSIDE TRAM CHAIN
1	40712 *	FRONT INSIDE TRAM CHAIN
1	44747 *	REAR INSIDE TRAM CHAIN
1	34008	SPLINED COUNTERSHAFT
1	41803	TRAM DRIVE MOTOR

# DRILL AND BOOM SECTION:

1	54111 *	L.H. BOOM SUMP CYLINDER
1	54111 *	R.H. BOOM SUMP CYLINDER
1	*	DRILLHEAD W/MOTOR
1	54109 *	DRILL FEED CYLINDER
1	188761	BOOM ROLLER ASSEMBLY
1	54603 *	BOOM SWING CYLINDER
1	54110 *	RETRACTING FOOT CYLINDER

# DUST COLLECTION:

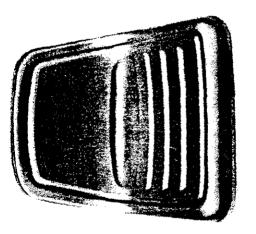
4	46861	FILTER	ELEMENT
4	51436	RUBBER	LATCH

# SAFETY SECTION:

2	152001*	DRILL CANOPY RAISE CYLINDER
2	56719 *	TRS FOOT CYLINDER
1	54992 *	TRS RAISE CYLINDER
2	56663 *	BEAM CYLINDER

# VALVE SECTION:

1	47447	DUAL DIVERSION VALVE
1	31530 *	SHUTTLE VALVE
1	36971	MOTION CONTROL VALVE
1	33787	TRS VALVE PACKAGE (RAISE)
2	31468	FLOW CONTROL VALVE
1	31538	DRILLFEED VALVE
1	36751	TORQUE/THRUST RELIEF VALVE
1	31569	DIRECTIONAL CONTROL VALVE
1	31508	FLOW CONTROL VALVE
1	45414	HYDRAULIC ACCUMULATOR
1	2531	CHECK VALVE
1	31658	RELIEF VALVE
1	38139	FAST FEED VALVE



DATE

TITLE

SHEET NO.

0+7-XM

3210 OPERATURS SEAT

10-16-85

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J. M. FLETCHIET & CO.