

General Information

Bullard's GR50 Series airline respirators, when properly used, provide a continuous flow of air from a remote air source, through a patented air delivery system (U.S. Patent 4,484,575), to the respirator wearer. GR50 Series respirators offer protection from airborne contaminants that are not immediately dangerous to life or health (IDLH), or that do not exceed concentrations allowed by applicable OSHA, MSHA, EPA, NIOSH or ACGIH regulations and recommendations, or any other applicable regulations.

GR50 Series airline respirators are approved by NIOSH (TC-19C-329, Type C) to provide respiratory protection in grinding operations and other such general purpose applications. The GR50 is NOT intended for use in any abrasive blasting operation.

GR50 Series respirators are compatible with breathing air sources such as breathing air compressors or Bullard Free-Air® pumps. Bullard offers the appropriate approved breathing tube assembly and air supply hose to connect the GR50 Series respirator to these breathing air sources.

GR50 Series respirators are approved by NIOSH for use with optional Bullard climate control devices.

The GRH Hood of the GR50 Series can also be configured for use with the Bullard EVA PAPR. Refer to the EVA Manual for details.



Type C Continuous-Flow Class

NIOSH Approval No. TC-19C-329

Not approved for abrasive blasting.

Read all instructions and warnings before using this respirator. Save this manual for future reference.

Table of Contents

Approval Label	1,2
General Information	3
Component Concept.....	4, 5
Warnings.....	6, 7
Operations.....	8-10
GR50 Respirator Assembly	11-14

GR50 Respirator Use	15,16
Inspection, Cleaning and Storage	17,18
Parts and Accessories for GR50 Series Airline Respirators	19-22
Return Authorizations	23



GRH Series Approval Label



Bullard
Cynthiana, KY 41031 USA
1-800-827-0423



THIS RESPIRATOR IS APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:

TC			RESPIRATOR COMPONENTS										AIR HOSE										ACCESSORIES										CAUTIONS AND																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
INCH	SAFETY	GRH SERIES	GRH	GRH	201T	300XP	300XR	514XP	514XR	201T	ALTERNATE FLOW CONTROL DEVICE										AIR HOSE										ACCESSORIES										MIN/5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		RESPIRATOR									F30	F30B	F30S	F31	F32	F33	F34	F35	F35B	F35S	F37	F40	F40B	F40S	F41	F42	F43	F44	F47	AC100000	AC100003B	AC100009B	AC100001S	AC100001	AC100002	AC100003	AC100004	AC100005	AC100006	AC100007	AC100008	AC100009	AC100010	AC100011	AC100012	AC100013	AC100014	AC100015	AC100016	AC100017	AC100018	AC100019	AC100020	AC100021	AC100022	AC100023	AC100024	AC100025	AC100026	AC100027	AC100028	AC100029	AC100030	AC100031	AC100032	AC100033	AC100034	AC100035	AC100036	AC100037	AC100038	AC100039	AC100040	AC100041	AC100042	AC100043	AC100044	AC100045	AC100046	AC100047	AC100048	AC100049	AC100050	AC100051	AC100052	AC100053	AC100054	AC100055	AC100056	AC100057	AC100058	AC100059	AC100060	AC100061	AC100062	AC100063	AC100064	AC100065	AC100066	AC100067	AC100068	AC100069	AC100070	AC100071	AC100072	AC100073	AC100074	AC100075	AC100076	AC100077	AC100078	AC100079	AC100080	AC100081	AC100082	AC100083	AC100084	AC100085	AC100086	AC100087	AC100088	AC100089	AC100090	AC100091	AC100092	AC100093	AC100094	AC100095	AC100096	AC100097	AC100098	AC100099	AC100100	AC100101	AC100102	AC100103	AC100104	AC100105	AC100106	AC100107	AC100108	AC100109	AC100110	AC100111	AC100112	AC100113	AC100114	AC100115	AC100116	AC100117	AC100118	AC100119	AC100120	AC100121	AC100122	AC100123	AC100124	AC100125	AC100126	AC100127	AC100128	AC100129	AC100130	AC100131	AC100132	AC100133	AC100134	AC100135	AC100136	AC100137	AC100138	AC100139	AC100140	AC100141	AC100142	AC100143	AC100144	AC100145	AC100146	AC100147	AC100148	AC100149	AC100150	AC100151	AC100152	AC100153	AC100154	AC100155	AC100156	AC100157	AC100158	AC100159	AC100160	AC100161	AC100162	AC100163	AC100164	AC100165	AC100166	AC100167	AC100168	AC100169	AC100170	AC100171	AC100172	AC100173	AC100174	AC100175	AC100176	AC100177	AC100178	AC100179	AC100180	AC100181	AC100182	AC100183	AC100184	AC100185	AC100186	AC100187	AC100188	AC100189	AC100190	AC100191	AC100192	AC100193	AC100194	AC100195	AC100196	AC100197	AC100198	AC100199	AC100200	AC100201	AC100202	AC100203	AC100204	AC100205	AC100206	AC100207	AC100208	AC100209	AC100210	AC100211	AC100212	AC100213	AC100214	AC100215	AC100216	AC100217	AC100218	AC100219	AC100220	AC100221	AC100222	AC100223	AC100224	AC100225	AC100226	AC100227	AC100228	AC100229	AC100230	AC100231	AC100232	AC100233	AC100234	AC100235	AC100236	AC100237	AC100238	AC100239	AC100240	AC100241	AC100242	AC100243	AC100244	AC100245	AC100246	AC100247	AC100248	AC100249	AC100250	AC100251	AC100252	AC100253	AC100254	AC100255	AC100256	AC100257	AC100258	AC100259	AC100260	AC100261	AC100262	AC100263	AC100264	AC100265	AC100266	AC100267	AC100268	AC100269	AC100270	AC100271	AC100272	AC100273	AC100274	AC100275	AC100276	AC100277	AC100278	AC100279	AC100280	AC100281	AC100282	AC100283	AC100284	AC100285	AC100286	AC100287	AC100288	AC100289	AC100290	AC100291	AC100292	AC100293	AC100294	AC100295	AC100296	AC100297	AC100298	AC100299	AC100300	AC100301	AC100302	AC100303	AC100304	AC100305	AC100306	AC100307	AC100308	AC100309	AC100310	AC100311	AC100312	AC100313	AC100314	AC100315	AC100316	AC100317	AC100318	AC100319	AC100320	AC100321	AC100322	AC100323	AC100324	AC100325	AC100326	AC100327	AC100328	AC100329	AC100330	AC100331	AC100332	AC100333	AC100334	AC100335	AC100336	AC100337	AC100338	AC100339	AC100340	AC100341	AC100342	AC100343	AC100344	AC100345	AC100346	AC100347	AC100348	AC100349	AC100350	AC100351	AC100352	AC100353	AC100354	AC100355	AC100356	AC100357	AC100358	AC100359	AC100360	AC100361	AC100362	AC100363	AC100364	AC100365	AC100366	AC100367	AC100368	AC100369	AC100370	AC100371	AC100372	AC100373	AC100374	AC100375	AC100376	AC100377	AC100378	AC100379	AC100380	AC100381	AC100382	AC100383	AC100384	AC100385	AC100386	AC100387	AC100388	AC100389	AC100390	AC100391	AC100392	AC100393	AC100394	AC100395	AC100396	AC100397	AC100398	AC100399	AC100400	AC100401	AC100402	AC100403	AC100404	AC100405	AC100406	AC100407	AC100408	AC100409	AC100410	AC100411	AC100412	AC100413	AC100414	AC100415	AC100416	AC100417	AC100418	AC100419	AC100420	AC100421	AC100422	AC100423	AC100424	AC100425	AC100426	AC100427	AC100428	AC100429	AC100430	AC100431	AC100432	AC100433	AC100434	AC100435	AC100436	AC100437	AC100438	AC100439	AC100440	AC100441	AC100442	AC100443	AC100444	AC100445	AC100446	AC100447	AC100448	AC100449	AC100450	AC100451	AC100452	AC100453	AC100454	AC100455	AC100456	AC100457	AC100458	AC100459	AC100460	AC100461	AC100462	AC100463	AC100464	AC100465	AC100466	AC100467	AC100468	AC100469	AC100470	AC100471	AC100472	AC100473	AC100474	AC100475	AC100476	AC100477	AC100478	AC100479	AC100480	AC100481	AC100482	AC100483	AC100484	AC100485	AC100486	AC100487	AC100488	AC100489	AC100490	AC100491	AC100492	AC100493	AC100494	AC100495	AC100496	AC100497	AC100498	AC100499	AC100500	AC100501	AC100502	AC100503	AC100504	AC100505	AC100506	AC100507	AC100508	AC100509	AC100510	AC100511	AC100512	AC100513	AC100514	AC100515	AC100516	AC100517	AC100518	AC100519	AC100520	AC100521	AC100522	AC100523	AC100524	AC100525	AC100526	AC100527	AC100528	AC100529	AC100530	AC100531	AC100532	AC100533	AC100534	AC100535	AC100536	AC100537	AC100538	AC100539	AC100540	AC100541	AC100542	AC100543	AC100544	AC100545	AC100546	AC100547	AC100548	AC100549	AC100550	AC100551	AC100552	AC100553	AC100554	AC100555	AC100556	AC100557	AC100558	AC100559	AC100560	AC100561	AC100562	AC100563	AC100564	AC100565	AC100566	AC100567	AC100568	AC100569	AC100570	AC100571	AC100572	AC100573	AC100574	AC100575	AC100576	AC100577	AC100578	AC100579	AC100580	AC100581	AC100582	AC100583	AC100584	AC100585	AC100586	AC100587	AC100588	AC100589	AC100590	AC100591	AC100592	AC100593	AC100594	AC100595	AC100596	AC100597	AC100598	AC100599	AC100600	AC100601	AC100602	AC100603	AC100604	AC100605	AC100606	AC100607	AC100608	AC100609	AC100610	AC100611	AC100612	AC100613	AC100614	AC100615	AC100616	AC100617	AC100618	AC100619	AC100620	AC100621	AC100622	AC100623	AC100624	AC100625	AC100626	AC100627	AC100628	AC100629	AC100630	AC100631	AC100632	AC100633	AC100634	AC100635	AC100636	AC100637	AC100638	AC100639	AC100640	AC100641	AC100642	AC100643	AC100644	AC100645	AC100646	AC100647	AC100648	AC100649	AC100650	AC100651	AC100652	AC100653	AC100654	AC100655	AC100656	AC100657	AC100658	AC100659	AC100660	AC100661	AC100662	AC100663	AC100664	AC100665	AC100666	AC100667	AC100668	AC100669	AC100670	AC100671	AC100672	AC100673	AC100674	AC100675	AC100676	AC100677	AC100678	AC100679	AC100680	AC100681	AC100682	AC100683	AC100684	AC100685	AC100686	AC100687	AC100688	AC100689	AC100690	AC100691	AC100692	AC100693	AC100694	AC100695	AC100696	AC100697	AC100698	AC100699	AC100700	AC100701	AC100702	AC100703	AC100704	AC100705	AC100706	AC100707	AC100708	AC100709	AC100710	AC100711	AC100712	AC100713	AC100714	AC100715	AC100716	AC100717	AC100718	AC100719	AC100720	AC100721	AC100722	AC100723	AC100724	AC100725	AC100726	AC100727	AC100728	AC100729	AC100730	AC100731	AC100732	AC100733	AC100734	AC100735	AC100736	AC100737	AC100738	AC100739	AC100740	AC100741	AC100742	AC100743	AC100744	AC100745	AC100746	AC100747	AC100748	AC100749	AC100750	AC100751	AC100752	AC100753	AC100754	AC100755	AC100756	AC100757	AC100758	AC100759	AC100760	AC100761	AC100762	AC100763	AC100764	AC100765	AC100766	AC100767	AC100768	AC100769	AC100770	AC100771	AC100772	AC100773	AC100774	AC100775	AC100776	AC100777	AC100778	AC100779	AC100780	AC100781	AC100782	AC100783	AC100784	AC100785	AC100786	AC100787	AC100788	AC100789	AC100790	AC100791	AC100792	AC100793	AC100794	AC100795	AC100796	AC100797	AC100798	AC100799	AC100800	AC100801	AC100802	AC100803	AC100804	AC100805	AC100806	AC100807	AC100808	AC100809	AC100810	AC100811	AC100812	AC100813	AC100814	AC100815	AC100816	AC100817	AC100818	AC100819	AC100820	AC100821	AC100822	AC100823	AC100824	AC100825	AC100826	AC100827	AC100828	AC100829	AC100830	AC100831	AC100832	AC100833	AC100834	AC100835	AC100836	AC100837	AC100838	AC100839	AC100840	AC100841	AC100842	AC100843	AC100844	AC100845	AC100846	AC100847	AC100848	AC100849	AC100850	AC100851	AC100852	AC100853	AC100854	AC100855	AC100856	AC100857	AC100858	AC100859	AC100860	AC100861	AC100862	AC100863	AC100864	AC100865	AC100866	AC100867	AC100868	AC100869	AC100870	AC100871	AC100872	AC100873	AC100874	AC100875	AC100876	AC100877	AC100878	AC100879	AC100880	AC100881	AC100882	AC100883	AC100884	AC100885	AC100886	AC100887	AC100888	AC100889	AC100890	AC100891	AC100892	AC100893	AC100894	AC100895	AC100896	AC100897	AC100898	AC100899	AC100900	AC100901	AC100902	AC100903	AC100904	AC100905	AC100906	AC100907	AC100908	AC100909	AC100910	AC100911	AC100912	AC100913	AC100914	AC100915	AC100916	AC100917	AC100918	AC100919	AC100920	AC100921	AC100922	AC100923	AC100924	AC100925	AC100926	AC100927	AC100928	AC100929	AC100930	AC100931	AC100932	AC100933	AC100934	AC100935	AC100936	AC100937	AC100938	AC100939	AC100940	AC100941	AC100942	AC100943	AC100944	AC100945	AC100946	AC100947	AC100948	AC100949	AC100950	AC100951	AC100952	AC100953	AC100954	AC100955	AC100956	AC100957	AC100958	AC100959	AC100960	AC100961	AC100962	AC100963	AC100964	AC100965	AC100966	AC100967	AC100968	AC100969	AC100970	AC100971	AC100972	AC100973	AC100974	AC100975	AC100976	AC100977	AC100978	AC100979	AC100980	AC100981	AC100982	AC100983	AC100984	AC100985	AC100986	AC100987	AC100988	AC100989	AC100990	AC100991	AC100992	AC100993	AC100994	AC10099

1. PROTECTION

CF=CONTINUOUS FLOW

SA=SUPPLIED - AIR

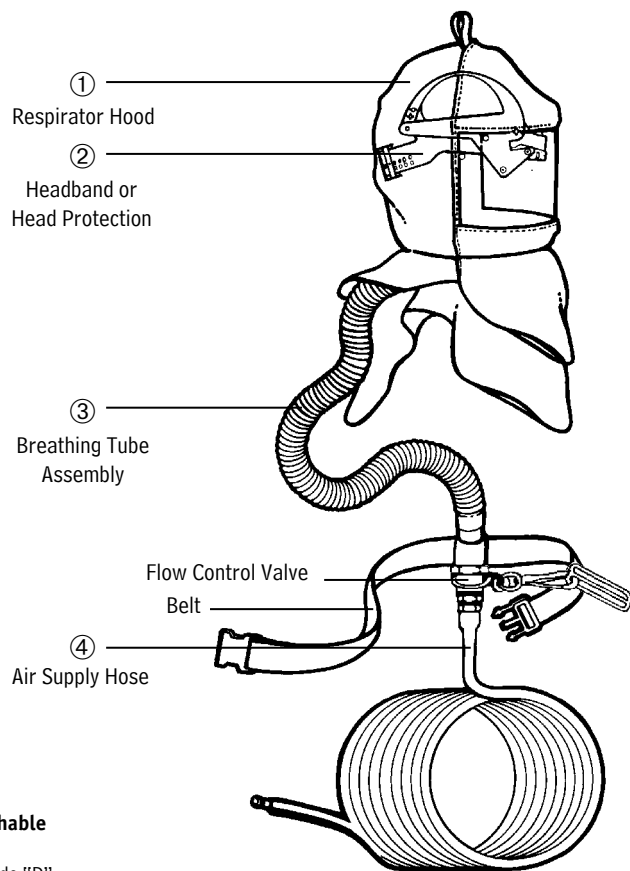
2. CAUTIONS AND LIMITATIONS

- A. Not for use in atmosphere containing less than 19.5 percent oxygen.
- B. Not for use in atmospheres immediately dangerous to life or health.
- C. Do not exceed maximum use concentrations established by regulatory standards.
- D. Air-line respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality.
- E. Use only the pressure ranges and hose lengths specified in the User's Instructions.
- J. Failure to properly use and maintain this product could result in injury or death.
- M. All approved respirators shall be selected, fitted, used and maintained in accordance with MSHA, OSHA and other applicable regulations.

- N. Never substitute, modify, add or omit parts. Use only exact replacement parts in the configuration specified by the manufacturer.
- O. Refer to User's Instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
- S. Special or critical User's Instruction and / or specific use limitations apply. Refer to User's Instructions before donning.

Component Concept

Bullard GR50 Series airline respirators consist of four components (Figure 1). All must be present and properly assembled to constitute a complete NIOSH-approved respirator.



**Clean Breathable
Air Source**
Supplying Grade "D"
or Higher Air Quality (See Breathing
Air Requirements on page 7)

Figure 1

⚠ WARNING

Failure to use complete NIOSH-approved Bullard components and replacement parts voids approval of entire assembly. Basic parts are listed on the NIOSH Approval Label on page 1.

Component Concept (continued)

- 1. Respirator Hood**
- 2. Headband or head protection**
- 3. Breathing tube assembly:** Connects respirator hood to air supply hose. Available with a choice of quick-disconnect fittings, constant or adjustable airflow control and optional climate control devices.

Breathing Tube Assemblies				
Without Climate Control Devices		With Climate Control Devices*		
		Cold Only		Hot/Cold
Constant	Adjustable			
V30	V40	AC100030	DC5040	HC240030
V30B	V40B	AC100030B	DC5041	HC240030B
V30S	V40S	AC100030S	DC5042	HC240030S
V31	V41	AC100031	DC5047	HC240031
V32	V42	AC100032		HC240032
V33	V43	AC100033		HC240033
V34	V44	AC100034		HC240034
V35		Frigitron® 2000		
V35B		Frigitron 2000B		
V35S		Frigitron 2000S		

*These climate control devices require the use of the 20BT breathing tube to constitute complete breathing tube assemblies. Breathing tube must be purchased separately.

- 4. AIR SUPPLY HOSE:** Connects breathing tube to air source supplying clean, breathable air.

Hose for High Pressure Compressed Air Source		Hose for Low Pressure Ambient Air Pump
V5 3/8" Coiled I.D. Hose	V10 3/8" I.D. Hose	V20 1/2" I.D. hose
V5 Starter / Extension Hose	V10 Starter Hose / Extension Hose	V20 Starter / Extension Hose
Available in 25 and 50 foot lengths with a variety of quick-disconnect fitting styles and materials. See parts list for details.	Available in 25, 50 and 100 foot lengths with a variety of quick-disconnect fitting styles and materials. See parts list for details.	Available in 50 and 100 foot lengths with a variety of quick-disconnect fitting styles and materials. See parts list for details.

▲ WARNING

1. This respirator, when properly fitted and used, significantly reduces, but does not completely eliminate, the breathing of contaminants by the respirator wearer. You may obtain better respiratory protection from other types of respiratory protection equipment such as a valve-operated pressure-demand airline respirator or a pressure-demand self-contained breathing apparatus respirator.
2. Before using this respirator, be sure your employer has determined that airborne contaminant concentrations do not exceed those allowed by applicable OSHA, MSHA, EPA, NIOSH or ACGIH regulations and recommendations, or any other applicable regulations for continuous-flow airline respirators. Federal law requires that your employer measure and monitor airborne contaminant levels in the work area.
3. Improper respirator use may damage your health and/or cause your death. Improper use may also cause certain life-threatening delayed lung diseases such as silicosis, pneumoconiosis or asbestosis.
4. DO NOT wear this respirator if any of the following conditions exist:
 - Atmosphere is immediately dangerous to your life or health (IDLH).
 - You CANNOT escape without the aid of the respirator.
 - Atmosphere contains less than 19.5% oxygen.
 - Work area is poorly ventilated.
 - Unknown contaminants are present.
 - Contaminants are in excess of regulations or recommendations (as described in item 2 above).
5. Bullard recommends that you not wear this respirator until you have passed a complete physical exam (perhaps including a lung x-ray) conducted by qualified medical personnel and have been trained in the respirator's use, maintenance and limitations by a qualified individual (appointed by your employer) who has extensive knowledge of the Bullard GR50 respirator.
6. DO NOT modify or alter this respirator in any manner. Use only NIOSH- approved Bullard GR50 components and replacement parts manufactured by Bullard for use with this respirator.

Failure to use NIOSH-approved Bullard components and replacement parts such as lenses, hoses, flow control devices and climate control devices, voids NIOSH approval of the entire respirator, invalidates all Bullard warranties and may cause death, lung disease or exposure to other hazardous or life-threatening conditions.
7. Inspect all components of this respirator system daily for signs of wear, tear or damage that might reduce the degree of protection originally provided.

Immediately replace worn or damaged components with NIOSH- approved Bullard GR50 components or remove respirator from service. (See INSPECTION, CLEANING AND STORAGE section on pages 16 and 17 for proper maintenance of the GR50 Series respirator.)

▲ WARNING

8. Be certain your employer has determined that the breathing air source provides at least Grade D breathable air. This respirator must be supplied with clean breathable air at all times.
9. Do not connect the respirator's air supply hose to nitrogen, oxygen, toxic gases, inert gases or other unbreathable, non-Grade D air sources. Check the air source before using the respirator. Failure to connect to the proper air source may result in serious injury or your death.
10. Do not use this respirator in poorly ventilated areas, areas where oxygen content is less than 19.5%, or confined spaces such as tanks, small rooms, tunnels or vessels. Do not use this respirator in poorly ventilated areas, areas where oxygen content is less than 19.5%, or confined spaces such as tanks, small rooms, tunnels or vessels unless the confined space is well-ventilated and contaminant concentrations are below the upper limit recommended for this respirator. In addition, follow all procedures for confined space entry, operation and exit as defined in applicable regulations and standards, including 29 CFR 1910.146.
11. If you have any questions concerning the use of this respirator, or if you are not sure whether the atmosphere you are working in is immediately dangerous to your life or health (IDLH), ask your employer. All instructions for the use and care of this product must be supplied to you by your employer as recommended by the manufacturer and as required by Federal Law (29 CFR 1910.134).
12. Do not use this respirator for abrasive blasting or underwater diving.

For technical assistance, call or write:

E.D. Bullard
1898 Safety Way
Cynthiana, KY 41031-9303
Toll-Free: 800-877-BULLARD
Phone: 859-234-6616
Facsimile: 1-800-877-6858

Protection

Respiratory

This respirator is NIOSH approved (TC-19C-329) for Type C operations. It can be worn for general purpose applications, including grinding.

This respirator is not approved for use in any atmosphere immediately dangerous to life or health (IDLH), or from which the wearer cannot escape without the aid of the respirator.

Head

The GR50 Series respirator hood with the 20TG or 20RT headband DOES NOT provide head protection. If head protection is required, order a Bullard hard hat model C30 or S51.

Respirator hoods used in conjunction with Bullard C30 or S51 hard hats meet ANSI Standard Z89.1-2003, Type I, Class E & G requirements for protective headwear for industrial workers. These hard hats are designed to provide limited head protection by reducing the force of falling objects striking the top of the hard hat shell.

Face

The GR50 Series respirator hood meets ANSI Z87.1-2003 impact and penetration requirements for face protection. The .040 polycarbonate lens provides limited face protection from flying particles or spray of hazardous liquids, but is not shatterproof.

Eyes

GR50 Series respirators DO NOT provide eye protection. Wear approved safety glasses or goggles at all times.

Ears

GR50 Series respirators DO NOT provide hearing protection. Use properly fitted earmuffs, earplugs or other protection when exposed to high noise levels.

Breathing Air Requirements

Air Quality

▲ WARNING

This respirator must be supplied with clean, breath-able air, Grade D or better, at all times. This respirator does NOT purify or filter out contaminants.

Respirable, breathable air must be supplied to the point-of-attachment of the approved Bullard air supply hose. The point-of-attachment is the point at which the air supply hose connects to the air source. A pressure gauge attached to the air source is used to monitor the pressure of air provided to the respirator wearer (see Figure 2).

Supplied breathing air must AT LEAST meet the requirements for Type 1 gaseous air described in the Compressed Gas Association Commodity Specifications G-7.1 (Grade D or higher quality), as specified by Federal Law 42 CFR, Part 84, Subpart J, 84.141 (b).

The requirements for Grade D breathable air include:

–Oxygen19.5-23.5%
 –Hydrocarbons (condensed) in mg/m³ of gas 5 mg/m³ max.
 –Carbon monoxide 10 ppm max.
 –Carbon dioxide 1,000 ppm max.
 –Odor *
 –No toxic contaminants at levels that make air unsafe to breathe.

* Specific measurement of odor in gaseous air is impractical. Air normally may have a slight odor. The presence of a pronounced odor should render the air unsatisfactory.

Contact the Compressed Gas Association (1235 Jefferson Davis Highway, Arlington, VA 22202) for complete details on Commodity Specifications G7.1.

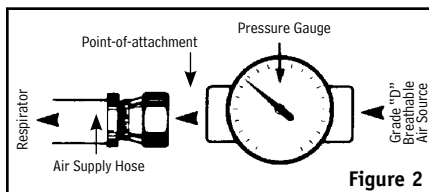


Figure 2

Air Source

Locate the source of supplied air, whether it is a breathing air compressor or an ambient air pump, in a clean air environment. Locate the air source far enough from your work site to ensure the air remains contaminant-free. Always use an inlet filter on your air source.

Use suitable after-cooler/dryers with filters, carbon monoxide monitors and alarms as necessary to assure clean, breathable air at all times.

The air should be regularly sampled to be sure that it meets Grade D requirements.

Breathing Air Pressure

Air pressure must be continually monitored at the point-of-attachment while operating this respirator. A reliable air pressure gauge must be present to permit you to continually monitor the pressure during actual respirator operation.

▲ WARNING

FAILURE TO SUPPLY THE MINIMUM REQUIRED PRESSURE AT THE POINT-OF-ATTACHMENT FOR YOUR HOSE LENGTH AND TYPE WILL REDUCE AIRFLOW AND MAY EXPOSE YOU TO LIFE-THREATENING CONDITIONS, DISEASES OR DEATH.

The Breathing Air Pressure Table (see page 9) defines the air pressure ranges necessary to provide GR50 Series respirators with a volume of air that falls within the required range of 6-15 cfm or 170-425 lpm (Ref. 42 CFR, Part 84, Subpart J, 84.150).

Make sure you understand the information in the Breathing Air Pressure Table before using this respirator.

1. Determine the type of air source you are using (Column 1), then find your breathing tube assembly (Column 2).

2. Be sure your Bullard air supply hose(s) (Column 3) is approved for use with your breathing tube assembly.
3. Determine that your air supply hose is within the approved length (Column 4).
4. Make sure you have not exceeded the maximum number of hose sections (Column 5).
5. Set the air pressure at the point-of-attachment within the required pressure range (Column 6) for your breathing tube assembly, and air supply hose type and length.

Breathing Air Supply Hoses and Hose Fittings

NIOSH-approved Bullard air supply hose(s) MUST be used between the breathing tube connection fitting on the wearer's belt and the point-of-attachment to the air supply.

NIOSH-approved Bullard quick-disconnect fittings MUST be used to connect V5 or V20 hose lengths together. When connecting lengths of V10 hose, only use Bullard V11 hose-to-hose adaptors. Secure connection(s) until wrench-tight and leak-free. Total connected hose length and number of hoses MUST be within the ranges specified on the Breathing Air Pressure Table (see page 9) and the respirator's NIOSH approval label (see page 1).

The breathing tube connection fitting MUST be secured to the belt that is supplied with this respirator. Securing the air entry connection fitting helps prevent the air supply hose from snagging, disconnecting or pulling the respirator hood off your head.

S - Special or Critical User Instructions

Breathing Air Pressure Table

This table defines the air pressure ranges necessary to provide GR50 Series respirators with a volume of air that falls within the required range of 6-15 cfm or 170-425 lpm according to U.S. Government regulations (42 CFR, Part 84, Subpart J, 84.150, Table 8).

1	2	3	4	5	6		
Air Source	Breathing Tube Assembly	Air Supply Hose	Air Supply Hose Length (feet)	Maximum Number of Hose Sections	Required Pressure Range (psig air)		
Stationary/ Portable Air Compressor or Breathing Air Cylinder	V30, V30B, V30S, V31, V32, V33, V34, 37	V10	25	1	14-15		
			50	2	15-18		
			100	3	19-24		
			150	4	23-29		
			200	5	25-34		
			250-300	5	31-39		
	V40, V40B, V40S, V41, V42, V43, V44, V47	V10	25	1	22-25		
			50	2	24-27		
			100	3	27-32		
			150	4	30-37		
			200	5	33-40		
			250-300	5	38-45		
	AC100030, AC100030B, AC100030S, AC100031, AC100032, AC100033, AC100034, AC100037	V10	25-50	2	55-65		
			75-150	3	60-70		
			175-300	3	65-75		
				3			
				3			
				5			
	DCC5040, DC041, DC5042, DC5047	V10	50	2	48-52		
			100	3	59-63		
			150	3	68-72		
			200	3	80-84		
			250	3	85-92		
			300	5	90-98		
V5	V10	25	1	53-57			
		50	2	67-71			
		HC240030, HC240030B, HC240030S, HC240031, HC240032, HC240033, HC240034, HC240037	V10	25	1	59-61	
				50	2	63-65	
				100	3	68-70	
				150	4	73-75	
200	4			77-79			
250	5			80-82			
V5	V10	300	5	84-86			
		25	1	65-66			
		50	1	68-69			
		Bullard Free-Air® Pump	V35, V35B, V35S	V20	50	1	4-6
					100	2	6-8
					200	2	10-15
300	3				13-18		
Frigitron® 2000, Frigitron 2000B, Frigitron 2000S	V20	V20	50	1	16-22		
			100	2	18-25		
			200	2	22-30		
			300	3	25-34		

Adjusting and Installing Headband in Respirator Hood (If using respirator with Bullard hard hat, see page 12)

To change the headband size, unlock the four pins from the sizing holes. Place the headband on your head. Pull down, allowing headband to expand until it feels comfortable. The headband will automatically adjust to your size. Lock into place by pushing the four pins into the sizing holes (Figure 4).

NOTE

If using the optional 20RT ratchet headband suspension, refer to the instruction sheet provided with the 20RT.

Adjust Crown Straps for Vertical Fit

To improve suspension comfort, adjust crown straps vertically by repositioning the crown strap posts in the crown straps. Vertical adjustment makes the headband ride higher or lower on the wearer's head. To adjust, push crown strap post from slot, move to new slot, and snap in to secure. Move key to desired vertical position. Repeat for other crown strap post (Figure 7).

NOTE

If the hood rises off your head during use, first verify proper air pressure, then select a different hood for your application, or use the optional chin strap.

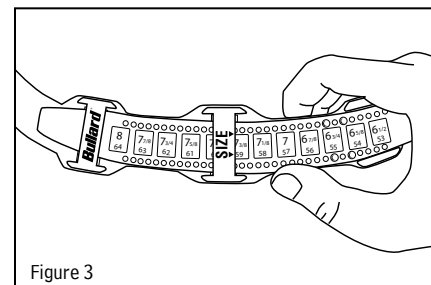


Figure 3



Figure 4

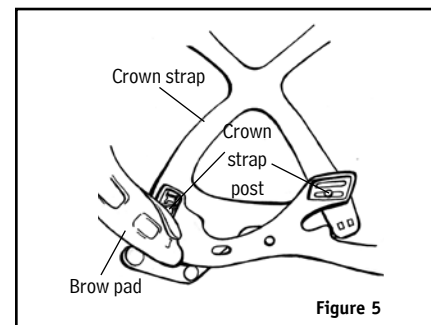


Figure 5

If Using Optional 20NC Chin Strap:

For most wearers, the headband holds the GR50 hood in place without a chin strap. If an optional chin strap is desired, refer to the list of replacement parts and accessories.

1. Remove headband from hood.
2. Snap chin strap stud buttons into the holes on each side of the headband, inserting from the inside.
3. Align holes on chin strap to stud buttons and pull downward to lock in place (see Figure 7).
4. Place headband on your head. Adjust chin strap length with the plastic slide.
5. Remove headband from your head and re-install in respirator hood.

If Using MB1 or GRH0L1 Optional Outer Lens:

1. Remove protective plastic film from the lens that is sewn into the GR50 respirator.
2. Remove protective plastic film from both sides of the protective outer lens.
3. Engage the 4 male snaps of the outer lens to the corresponding 4 female snaps of the inner lens (see Figure 8).
4. When outer lens becomes scratched, replace with another lens. Refer to replacement parts and accessories.

If Using Optional 20LC or 7714 Lens Covers:

1. If desired, apply optional adhesive-backed lens covers designed to protect the respirator's plastic lens. Apply 2-3 lenses at a time.
2. When lens becomes soiled, remove by pulling tab at edge of lens cover to clear your vision.

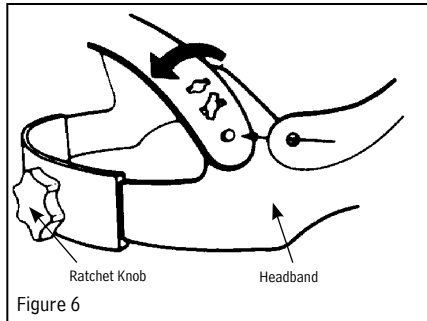


Figure 6

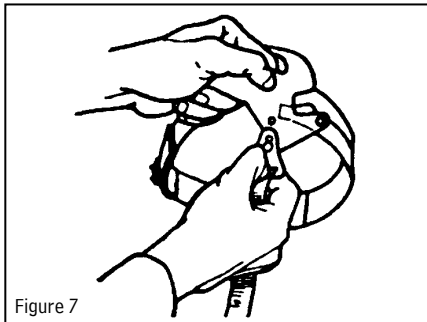


Figure 7



Figure 8

Adjusting and Installing Hard Hat in Respirator Hood

1. Assemble and adjust the standard Bullard hard hat suspension or optional ratchet suspension by following directions on instruction sheet attached to headband on hard hat. Read all hard hat warning labels and instructions. The following Bullard hard hat models are NIOSH approved for use with GR50 Series respirator hoods: C30, C30R, S51 and S51R.
2. If desired, install and adjust optional ES42 hard hat chin strap.
3. Before inserting hard hat into hood, remove the adhesive-backed Velcro® strip attached to the Velcro piece that is sewn into the hood.
4. Peel the backing off the Velcro tab and apply it to the inside center rear of the hard hat, about 1/4" up from the edge.
5. Insert hard hat into respirator hood with cap visor facing front of hood (see Figure 9).



Figure 9

6. Tuck cap visor above front elastic band sewn into hood (see Figure 10).
7. Loop the Velcro strip sewn inside the hood around the back of the cap and affix it to the corresponding Velcro tab previously installed inside the hard hat in step 3. (see Figure 11).
8. Remove protective film from plastic lens of respirator hood. If desired, apply optional 20LC or 7714 adhesive-backed lens covers designed to protect the respirator's plastic lens. Apply 2-3 lenses at a time. When lens becomes soiled, remove by pulling tab at edge of lens cover to clear your vision.



Figure 10

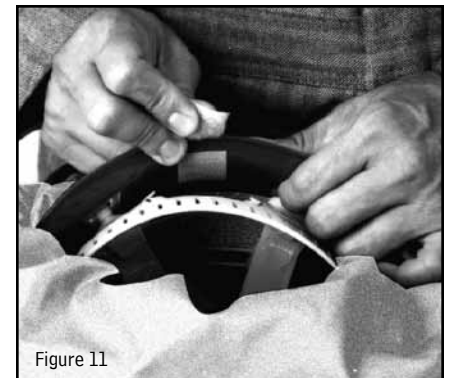
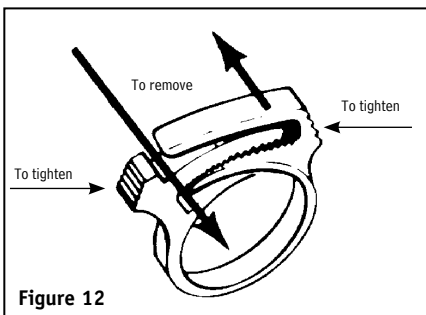


Figure 11

Installing Breathing Tube Assembly

1. Remove nylon clamp from open end of breathing tube (see Figure 12). Do not remove foam from inside the breathing tube. The foam helps reduce the noise level of incoming air.
2. Insert breathing tube approximately five inches into hood's air entry sleeve (see Figure 13).
3. Install nylon clamp over air entry sleeve and breathing tube, inserting clamp locks through two holes in plastic anchorplate that is sewn into hood (see Figure 14). Locks should face away from user's neck.
4. Engage clamp locks and squeeze together until tight.

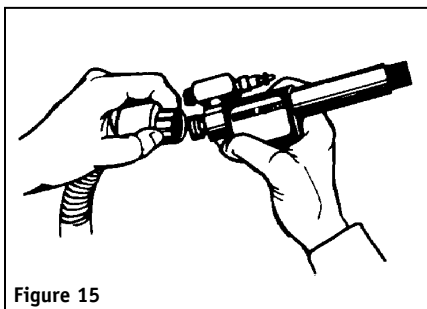


Using Climate Control Devices

GR50 Series respirators are approved by NIOSH for use with four optional Bullard climate control devices: AC1000 Series, DC50 Series, HC2400 Series and Fritigron® 2000 Series.

1. Follow the instructions supplied with your climate control device.
2. Be sure to use only the Bullard breathing tube approved for your climate control device (see page 18).
3. Screw nylon hose connector on end of breathing tube to hose thread on air conditioner.

4. Firmly tighten hose connector by hand (see Figure 15).
5. Lace belt supplied with respirator through belt loop bracket on air conditioner.



⚠ WARNING

Do not put on or remove this respirator in a hazardous atmosphere. Do not remove this respirator in a hazardous atmosphere except for emergency escape purposes.

Donning

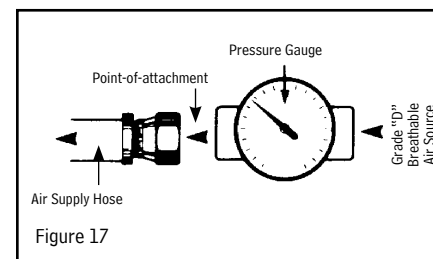
Before using your GR50 Series respirator, complete the assembly instructions provided on pages 10-13.

1. Connect NIOSH-approved Bullard air supply hose to air source supplying Grade D breathable air. Turn on breathing air source.
2. With air flowing, connect breathing tube assembly to air supply hose (see Figure 16). Connect quick-disconnect fitting on breathing tube assembly to quick-disconnect coupler on air supply hose. Once fitting is secured, release coupling sleeve to lock fittings together. Pull on both hoses to make sure they are attached securely.
3. Adjust air pressure at point-of-attachment to within the approved pressure range (see Figure 17). See the Breathing Air Pressure Table (page 9) for approved pressure ranges.
4. With air still flowing, put on GR50 Series respirator hood, inserting chin first.
5. Position headband or hard hat for a comfortable fit. See instructions on page 10 for proper sizing.
6. If using an optional chin strap, pull elastic strap under your chin and adjust for a secure and comfortable fit.
7. Tuck inner bib of hood into shirt or protective clothing for additional splash and overspray protection (see Figure 18).
8. Pull respirator outer bib over collar of shirt or protective clothing.

9. With breathing tube assembly attached to the hood, fasten belt at waist or hip level and adjust for comfort.

10. Recheck air pressure and adjust if necessary.

11. With air still flowing into your respirator, you are now ready to enter work area.



Doffing

When finished working, leave work area wearing respirator and with air still flowing. Once outside contaminated area, remove respirator and then disconnect the air supply hose using the quick-disconnect fittings.

NOTE

If using V20 Series (1/2" I.D.) air supply hose, the hose quick-disconnect coupler does not have a shut-off valve. Therefore, air will continue to flow freely after hose is disconnected from respirator.

WARNING

Leave work area immediately if:

- Any respirator component becomes damaged.
- Airflow into respirator hood stops or slows down.
- Air pressure gauge drops below the minimum specified in Breathing Air Pressure Table (page 9).
- Breathing becomes difficult.
- You become dizzy, nauseous, too hot, too cold or ill.
- You taste, smell or see contaminants inside respirator hood.
- Your vision becomes impaired.

WARNING

DO NOT LEAVE RESPIRATOR IN WORK AREA OR LEAVE IT UNATTENDED IN A CONTAMINATED ENVIRONMENT. RESPIRABLE CONTAMINANTS CAN REMAIN SUSPENDED IN AIR FOR MORE THAN ONE HOUR AFTER WORK ACTIVITY CEASES, EVEN THOUGH YOU MAY NOT SEE THEM. PROPER WORK PRACTICE REQUIRES YOU TO WEAR THE RESPIRATOR UNTIL YOU ARE OUTSIDE THE CONTAMINATED AREA. IF YOU SET THE RESPIRATOR DOWN IN A CONTAMINATED ENVIRONMENT, CONTAMINANTS, DIRT AND DUST COULD GET INTO THE RESPIRATOR. WHEN YOU PUT THE RESPIRATOR BACK ON, YOU COULD BREATHE IN CONTAMINANTS UPON REUSE.

Inspection, Cleaning and Storage

Bullard GR50 Series respirators have a limited service life. Therefore, a regular inspection and replacement program must be conducted.

The Bullard GR50 Series respirator and all component parts and assemblies should be inspected for damage or excessive wear before and after each use to ensure proper functioning. Immediately remove the respirator from service, and replace parts or assemblies that show any sign of failure or excessive wear that might reduce the degree of protection originally provided.

Use only complete NIOSH-approved Bullard GR50 Series components and replacement parts on this respirator. Refer to parts list for correct part numbers.

Since respirator use and the quality of maintenance performed vary with each job site, it is impossible to provide a specific time frame for respirator replacement.

This respirator should be cleaned and sanitized at least weekly, or more often if subjected to heavy use. Respirators used by more than one person must be cleaned, inspected and sanitized after each use. If not cleaned, contamination may cause illness or disease.

REMEMBER, THE AIR YOU BREATHE WILL NOT BE CLEAN UNLESS THE RESPIRATOR YOU WEAR IS CLEAN.

Hood and Headband

INSPECTION: Inspect the hood material for rips, tears or damage from excessive wear that might reduce the degree of protection originally provided. The respirator's plastic lens should be inspected for cracks, scratches or any other signs of damage.

Disassemble the breathing tube from the hood by removing the nylon hose clamp. To remove the hose clamp, slide the locks sideways in opposite directions.

Remove the headband suspension and optional chin strap from the hood. Inspect headband for cracks, frayed or cut crown straps, torn headband or size adjustment slots, loss of pliability or other signs of excessive wear. Check the chin strap for loss of elasticity, cuts and cracked hanger clips.

If damage is detected, replace immediately with Bullard replacement part(s) or remove the respirator from service.

CLEANING: To clean the GR50 respirator hood, remove suspension and optional chin strap. With MB1 or GRHOL1 lens attached, hand-wash the GR50 hood in warm water using a mild liquid detergent. Rinse hood with cold water and allow to air-dry. After cleaning and before reassembling, inspect the hood for signs of excessive wear, following the inspection instructions on this page. If damage is detected, remove the respirator from service.

The inner lens, headband suspension and optional chin strap should be hand-sponged with warm water and mild detergent, then rinsed and air-dried. Before reassembling, carefully inspect parts for signs of damage.

Do not use volatile solvents for cleaning this respirator or any parts and assemblies. Strong cleaning and disinfecting agents and many solvents can damage the plastic parts.

Hard Hat

Inspection: Inspect the hard hat shell for nicks, gouges, cracks and any damage due to impact, rough treatment or wear.

Remove the headband suspension and optional chin strap from the hard hat. Inspect the headband for cracks, frayed or cut crown straps, torn headband and size adjustment slots, loss of pliability or other signs of excessive wear. Check the chin strap for loss of elasticity, cuts and cracked hanger clips.

If damage is detected, replace part(s) immediately with Bullard replacement parts or remove the respirator from service.

Cleaning: The hard hat shell, headband suspension and optional chin strap should be hand-sponged with warm water and mild detergent, rinsed and air-dried. After cleaning, and before reassembling, once again carefully inspect parts for signs of damage.

Breathing Tube Assembly

Inspection: Inspect the vinyl breathing tube for tears, cracks, holes or excessive wear that might reduce the degree of protection originally provided. Be sure the quick-disconnect fitting is screwed tightly into the breathing tube so no air can escape.

Be sure the airflow control device is screwed tightly into the breathing tube so air cannot escape.

If any signs of excessive wear are present, replace the breathing tube assembly immediately or remove the respirator from service.

Cleaning: To clean the breathing tube assembly, hand-sponge with warm water and mild detergent, rinse and air-dry. Do not get water inside the flow control device or breathing tube. After cleaning, once again carefully inspect breathing tube for signs of damage.

⚠ WARNING

Do not cut or remove foam that is inside the breathing tube. The foam helps reduce the noise level of the incoming air supply. It does not filter or purify your breathing air. NIOSH has approved this respirator with the foam in place.

Air Supply Hoses

Inspection: The starter and extension hose(s) should be inspected closely for abrasions, corrosion, cuts, cracks and blistering. Be sure the hose fittings are crimped tightly to the hose so that no air can escape. Make sure the hose has not been kinked or crushed by any equipment that may have rolled over it.

If any of the above signs are present or any other signs of excessive wear are detected, replace the hose(s) immediately or remove the respirator from service.

Cleaning: The air supply hose(s) should be hand-sponged with warm water and mild detergent, rinsed and air-dried. Do not get water inside the air supply hose. After cleaning, once again carefully inspect air supply hose(s) for signs of damage.

⚠ WARNING

Only use Bullard hoses that are NIOSH-approved for use with this respirator. Other hoses could reduce airflow and protection, and expose the wearer to life-threatening conditions.

Storage

After reusable respirator components have been cleaned and inspected, place them in a plastic bag or an airtight container.

Store the respirator and parts where they will be protected from contamination, distortion and damage from elements such as dust, direct sunlight, heat, extreme cold, excessive moisture and harmful chemicals.

Parts and Accessories for GR50 Series Airline Respirators

GR50 Series airline respirators consist of four components: respirator hood, headband suspension or head protection, breathing tube assembly and air supply hose. There are options for some components to fit customer specifications. All four components must be present and properly assembled, including a Bullard air supply hose, to constitute a complete NIOSH-approved respirator (Approval No. TC-19C-329, Type C).

Cat. No. Description

RESPIRATOR SYSTEM

GR50SYS Includes GR5035 respirator, EDP10 Free-Air® pump and V20100ST air supply hose.

RESPIRATOR ASSEMBLIES

Includes GRH hood, 20TG suspension, breathing tube assembly with belt and MB1 outer lens.

For use with breathing air compressors or breathing air cylinders:

GR5030 Nomex® grinding hood with V30 constant-flow breathing tube assembly

For use with Bullard Free-Air pumps:

GR5035 Nomex grinding hood with V35 constant-flow breathing tube assembly

1. RESPIRATOR HOOD

Fire-Retardant Nomex hood with FR cotton inner bib.

GRH Replacement hood

Replacement Parts and Optional Accessories

MB1 Outer lens--.020 PETG (10/pkg)
GRH011 Outer lens--.040 Polycarbonate (10/pkg)
7714 Lens covers (25/pkg)
20LC Lens covers (25/pkg)
20TG Headband
20RT Ratchet headband
20NC Chin strap for 20TG and 20RT headband

2. HEADBAND SUSPENSIONS AND HARD HATS

C30 Hard hat
RS6PC Standard suspension for C30 hard hat
C30R Hard hat with ratchet suspension
RS6RC Ratchet suspension for C30 hard hat
S51 Hard hat with TG600
RS4PC Standard suspension for S51 hard hat
S51R Hard hat with ratchet suspension
RS4RC Ratchet suspension for S51 hard hat
ES42 Chin strap for C30 and S51 hard hat

Cat. No. Description

3. REPLACEMENT AND OPTIONAL BREATHING TUBE ASSEMBLIES AND PARTS

Constant-Flow breathing tube assemblies (includes belt)

V30 1/4" Industrial Interchange, steel quick-disconnect fitting
V31 1/4" Schrader, steel quick-disconnect fitting
V32 1/4" Snap-Tite, steel quick-disconnect fitting
V33 1/4" Snap-Tite, brass quick-disconnect fitting
V35 1/2" Industrial Interchange, steel quick-disconnect fitting (for use with Bullard Free-Air® pumps)

Air Conditioners

(does not include breathing tube)

AC1000* 1/4" Industrial Interchange, steel quick-disconnect fitting
AC100031* 1/4" Schrader, steel quick-disconnect fitting
AC100032* 1/4" Snap-Tite, steel quick-disconnect fitting

Hot/Cold Tubes - Adjustable Flow (does not include breathing tube)

HC2400* 1/4" Industrial Interchange, steel quick-disconnect fitting
HC240031* 1/4" Schrader, steel quick-disconnect fitting
HC240032* 1/4" Snap-Tite, steel quick-disconnect fitting

DUAL-COOL™ Tube - Adjustable Flow (does not include breathing tube)

DC5040* DUAL-COOL tube with 1/4" Industrial Interchange (steel) quick-disconnect fitting. Order DUAL-COOL vest separately.

ⓘ NOTE

All climate control devices require use of the 20BT breathing tube to constitute complete breathing tube assemblies. Breathing tube must be purchased separately.

DUAL-COOL™ VEST (does not include breathing tube or belt)

- DC70ML DUAL-COOL vest. Size: M/L.
Order DUAL-COOL tube separately.
- DC70LXXL DUAL-COOL vest. Size: XL/XXL.
Order DUAL-COOL tube separately.
- DC705X DUAL-COOL vest. Size: 5XL.
Order DUAL-COOL tube separately.

Frigitron® 2000 for use with Bullard EDP30 Free-Air® Pumps (does not include breathing tube or belt)

- Frigitron 2000* 1/2" Industrial Interchange,
steel quick-disconnect fitting

Replacement Parts for Breathing Tube Assembly

- 20BT Breathing tube
- 4612 Belt, nylon webbing
- 272555 Belt, nylon webbing (Frigitron)
- S18051 Nylon clamp for use with all breathing tubes

4. AIR SUPPLY HOSE

V10 Series Hoses (3/8" I.D.)

STARTER HOSES Each hose includes V13 adaptor fitting (3/8" hose to 3/8" pipe)

- 4696 25' Starter hose with 1/4" Industrial Interchange Q.D. coupler
- 46913 25' Starter hose with 1/4" Schrader Q.D. coupler
- 46915 25' Starter hose with 1/4" Snap-Tite Q.D. coupler

EXTENSION HOSES Each hose includes V11 hose-to-hose adaptor fitting and V13 hose-to-pipe fitting (3/8" hose to 3/8" pipe)

- 5454 25' Extension hose
- 5457 50' Extension hose
- 5458 100' Extension hose

V20 Series Hoses for use with Free-Air Pumps (1/2" I.D.)

- V2050ST 50' Starter/Extension hose with 1/2" Industrial Interchange Q.D. coupler
- V20100ST 100' Starter/Extension hose with 1/2" Industrial Interchange Q.D. coupler

V5 Series Coiled Hoses

- V52530 25' Starter hose with 1/4" Industrial Interchange Q.D. coupler

Cat. No. Description

- V55030 50' Starter hose with 1/4" Industrial Interchange Q.D. coupler
- V52531 25' Starter hose with 1/4" Schrader Q.D. coupler
- V55031 50' Starter hose with 1/4" Schrader Q.D. coupler
- V52532 25' Starter hose with 1/4" Snap-Tite Q.D. coupler
- V55032 50' Starter hose with 1/4" Snap-Tite Q.D. coupler
- V52533 25' Starter hose with 1/4" Snap-Tite, brass Q.D. coupler
- V55033 50' Starter hose with 1/4" Snap-Tite brass Q.D. coupler

Quick-Disconnect Nipples, Couplers and Adaptors

NIPPLES

1/4" Industrial Interchange

- S9841 With 1/4" Female NPT
- V17 With 3/8" Female NPT

1/4" Schrader

- S19432 With 1/4" Female NPT
- S19433 With 3/8" Female NPT

1/4" Snap-Tite

- S19442 With 1/4" Female NPT
- S17651 With 3/8" Female NPT

Couplers (SHUT-OFF TYPE)

1/4" Industrial Interchange

- V14 With 1/4" Female NPT
- V15 With 3/8" Male NPT

1/4" Schrader

- V18 With 1/4" Female NPT

1/4" Snap-Tite

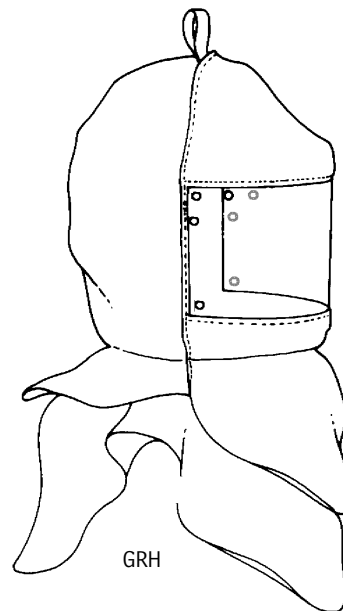
- V19 With 1/4" Female NPT

HOSE ADAPTORS

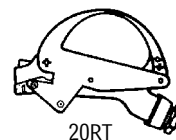
- V11 Hose-to-hose, 3/8" hose to 3/8" hose
- V12 Hose-to-pipe, 3/8" hose to 1/4" pipe
- V13 Hose-to-pipe, 3/8" hose to 3/8" pipe

*NOTE

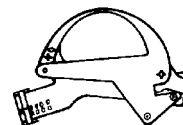
All climate control devices require use of the 20BT breathing tube to constitute complete breathing tube assemblies. Breathing tube must be purchased separately.



GRH



20RT



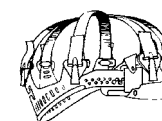
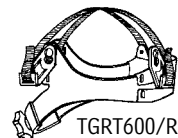
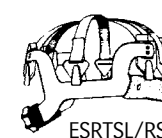
20TG



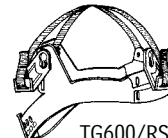
ESRTSL/RS6RC



TGRT600/RS4RP



ES-ULTRA/RS6PC



TG600/RS4PP

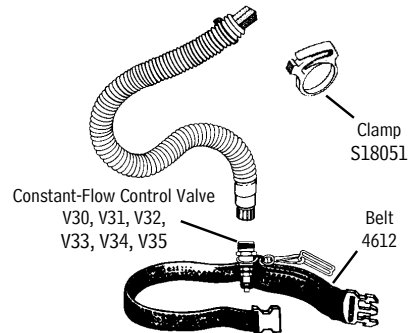


ES42



20NC

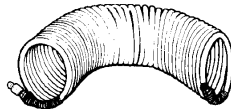
V30 Series Breathing Tube Assembly



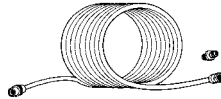
Lens Covers 20LC



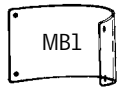
Lens Covers 7714



V5 Coiled Air Supply Hose
V52530, V55030,
V52531, V55031,
V52532, V55032



Air Supply Hose
4696, 5454, 5457, 5458,
V2050ST, V20100ST

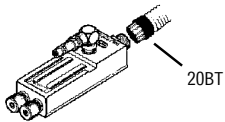


MB1



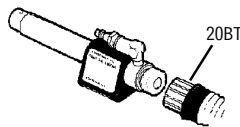
GRH01

Frigitron® 2000



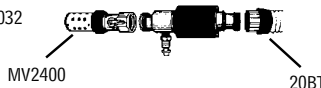
20BT

AC1000
AC100031
AC100032



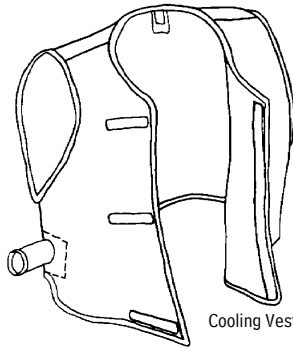
20BT

HC2400
HC240031
HC240032



MV2400

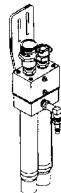
20BT



Cooling Vest DC70



Connector Hose
CH60



Dual-Cool™
DC5040

RETURN AUTHORIZATIONS

IMPORTANT: THE FOLLOWING STEPS MUST BE COMPLETED BEFORE E.D. BULLARD COMPANY WILL ACCEPT ANY RETURNED GOODS. PLEASE READ CAREFULLY.

Follow the steps outlined below to return goods to E.D. Bullard Company for repair or replacement under warranty or for paid repairs:

1. Contact your Bullard Customer Service Coordinator by telephone or in writing at:

E.D. Bullard
1898 Safety Way
Cynthiana, KY 41031-9303
Toll-Free: 800-877-BULLARD
Phone: 859-234-6616

In your correspondence or conversation with your Customer Service Coordinator, describe the problem as completely as possible. For your convenience, your coordinator will try to help you correct the problem over the phone.

2. Verify with your coordinator that the product should be returned to Bullard. Customer Service will provide you with written permission and a return authorization number as well as the labels you will need to return the product.
3. Before returning the product, decontaminate and clean it to remove any hazardous materials which may have settled on the product during use. Laws and/or regulations prohibit the shipment of hazardous or contaminated materials. Products suspected to be contaminated will be professionally discarded at the customer's expense.
4. Ship returned products, including those under warranty, with all transportation charges pre-paid. Bullard cannot accept returned goods on a freight collect basis.
5. Returned products will be inspected upon return to the Bullard facility. Your Customer Service Coordinator will telephone you with a quote for required repair work which is not covered by warranty. If the cost of repairs exceeds stated quote by more than 20%, your coordinator will call you for authorization to complete repairs. After repairs are completed and the goods have been returned to you, Bullard will invoice you for actual work performed.



GR50 Series Airline Respirator User Manual



©2010 Bullard. All rights reserved.

6081850020C (1010)

Americas:

E.D. Bullard Company

1898 Safety Way
Cynthiana, KY 41031-9303
Toll free: 877-BULLARD (285-5273)
Tel: 859-234-6616
Fax: 859-234-8987
www.bullard.com

Europe:

Bullard GmbH

Lilienthalstrasse 12
53424 Remagen • Germany
Tel: +49-2642 999980
Fax : +49-2642 9999829
www.bullardextrem.com

Asia-Pacific:

Bullard Asia Pacific Pte. Ltd.

LHK Building
701, Sims Drive, #04-03
Singapore 387383
Tel: +65-6745-0556
Fax: +65-6745-5176
www.bullard.com