

# Charlke<sup>TM</sup>

## air



## HUNTER AIR COMPRESSOR

### OPERATION & MAINTENANCE

### INSTRUCTIONS



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# SAFETY PRECAUTIONS

## WARNING

***As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked, or ignored, personal injury to the operator, or damage to property may result. It is in your own interest to read and pay attention to the following rules:***

1. COMPRESSED AIR IS DANGEROUS, NEVER direct a jet of air at people or animals, and NEVER discharge compressed air against the skin.
2. DO NOT operate your compressor with any guards removed.
3. Electrical or mechanical repairs should only be carried out by a qualified engineer. If problems occur, contact your Clarke dealer.
4. Before carrying out any maintenance, ensure the pressure is expelled from the air receiver, and the machine is disconnected from the mains.
5. DO NOT leave pressure in the receiver overnight, or when transporting.
6. DO NOT adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the machine.
7. DO NOT operate in wet or damp conditions. Keep the machine dry at all times.
8. A clean atmosphere will ensure efficient operation. Do not use in dusty or otherwise dirty locations.
9. Some of the metal parts can become quite hot during operation. Take care not to touch these until the machine has cooled down.
10. Always adjust the pressure regulator to the recommended setting for the particular spray gun or tool being used.
11. When spraying inflammable materials e.g. cellulose paint, ensure there is adequate ventilation and keep clear of any possible source of ignition.
12. Protect yourself. Think carefully about any potential hazards which may be created by using the air compressor and use the appropriate protection. e.g. Goggles will protect your eyes from flying particles. Face masks will protect you against paint spray and/or fumes.
13. Before spraying any material always consult paint manufacturers instructions for safety and usage.
14. Personal safety products can be obtained from your local dealer.
15. Do not exert any strain on electrical cables and ensure that air hoses are not tangled or wrapped around machinery etc.

16. When disconnecting air hoses or other equipment from your compressor ensure that the air supply is turned off at the machine outlet and expel all pressurised air from within the machine and other equipment attached to it.
17. Make sure that children and animals are kept well away from the compressor and any equipment attached to it.
18. Always ensure that all individuals using the compressor have read and fully understand the Operating Instructions supplied.

## ASSEMBLY

The wheel assemblies are packed separately. The method of assembly is shown on the right.

Thread the bolt through the wheel hub, through the hole in the support bracket.

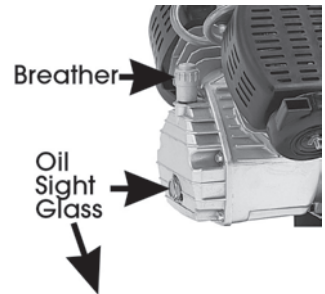
Thread on the spring washer, screw on the nut and tighten.

When attaching the wheels, do not tip the machine on to its side.



Screw on the air filter assembly fully.

**IMPORTANT!**  
Remove the breather - see opposite, and use a funnel to fill the machine with oil (supplied).



Check to ensure the oil level is midway across the sight glass, as shown opposite.  
Compressor oil is also available from your Clarke dealer.



# ELECTRICAL CONNECTIONS

Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.

**WARNING! THIS APPLIANCE MUST BE EARTHED**

**IMPORTANT:** The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

As the colours of the flexible lead of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect GREEN & YELLOW cord to terminal marked with a letter "E" or Earth symbol "⏏" or coloured GREEN or GREEN & YELLOW.
- Connect BROWN cord to terminal marked with a letter "L" or coloured RED.
- Connect BLUE cord to terminal marked with a letter "N" or coloured BLACK.

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewireable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. When replacing a detachable fuse carrier, ensure the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

## **FUSE RATING**

The fuse in the plug must be replaced with one of the same rating (**13 amps**) and this replacement must be ASTA approved to BS1362.

**We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)**

If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.

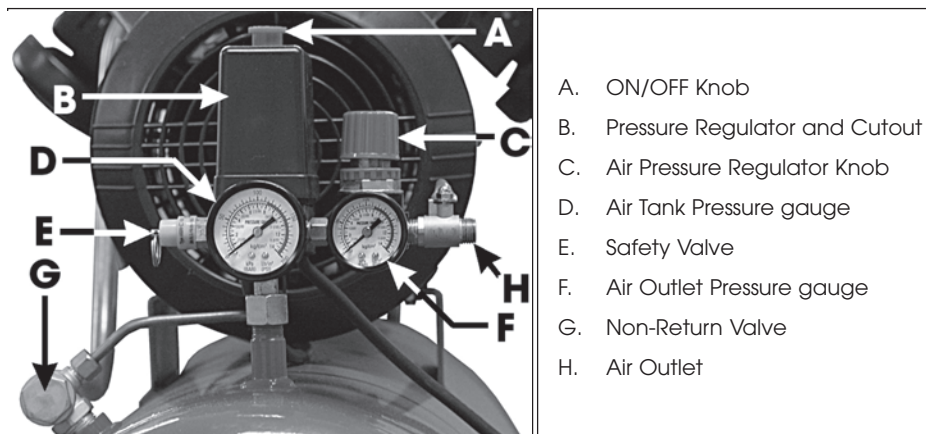
# OPERATION

Before connecting your Hunter to the mains supply, check the following:-

- The mains voltage is 230V.
- The ON/OFF control knob (A) is in the OFF (lower) position.
- The pressure regulator (C) should be set at its lowest setting, i.e. turned fully anticlockwise.
- If the machine has not been used for 24 hours or so, open the drain valve, located beneath the reservoir, to drain any condensate which may have accumulated. When clear, close the valve - finger tight.

**IMPORTANT: If the receiver is under pressure, keep your hands well away from the air being expelled.... remember, compressed air is DANGEROUS!**

Fig.1



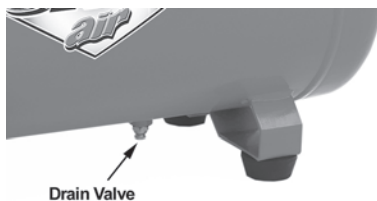
Connect a suitable air hose, with a 1/4 BSP connector, between the air outlet (H) and the spray gun or air tool being used.

Quick Fit couplings may be used to facilitate quick and simple changing of air tools. These are available from your Clarke dealer.

Open the drain valve to prevent initial loading.

Once the hose connections are complete, CHECK AGAIN to ensure the pressure regulator (C) is turned fully anticlockwise so that compressed air cannot reach the air tool, then switch the compressor ON, by lifting the ON/OFF knob (A), until it clicks into the upper position.

The air compressor will now start.



Should the motor fail to start immediately, it is probable that the air receiver is already full of air. Check the tank pressure gauge (D). If you release air, by opening air outlet tap (H), the motor will start automatically once the cut-in pressure is reached.

If this is not the case, it is possible that the thermal overload has intervened. This is a safety device to prevent the motor from overheating. The device will reset when the temperature falls to a predetermined level. In this event, switch OFF the machine and wait for 5 - 10 minutes, depending upon ambient temperature, press the reset button and attempt to restart. If the motor fails to start, after several attempts, consult your Clarke dealer.

Once the machine has started and run for a few minutes, close the drain valve, the pressure will build up in the receiver to a regulated max. pressure of 8 Bar (115 psi).

Turn ON the air supply to your air tool by opening the tap (H), and turn the pressure regulator (C) clockwise so that your chosen setting, is shown on the air outlet pressure gauge.

Check to ensure that there are no air leaks at any of the couplings or in other parts of the system before operating the spray gun or air tool in the normal way. If any leaks are apparent, switch OFF the machine by pushing the ON/OFF knob downwards, close the outlet tap and rectify before proceeding.

When the compressor reaches its maximum working pressure, the motor will automatically cut out, and will restart when the pressure has fallen by approximately 20 psi. This automatic STOP/START process will continue, as necessary, to maintain pressure in the receiver.

Periodically check to make sure the cylinder head bolts are securely tightened.

When you have finished the job in hand **ALWAYS** switch OFF at the ON/OFF switch, NOT the mains supply, and release any pressure remaining in the system by opening the drain valve until all air is expelled. This also allows any condensate to drain off.

**ALWAYS** operate the air tool to further ensure that there is no pressure in the system **BEFORE** disconnecting the tool. Finally, reset the pressure regulator to zero by turning the knob fully anticlockwise.

# ROUTINE MAINTENANCE

**IMPORTANT:** Before carrying out any of this service work, always disconnect the machine from the mains supply, drain the air receiver and, if necessary, allow the machine to cool down before starting work.

## Daily

Before use, always open the drain valve to ensure that any condensate, which may have accumulated, is drained off.

Before use, make sure the cylinder head bolts are securely tightened.

## Monthly

It is important to keep the Compressor clean, with the help of a small soft brush and vacuum cleaner. In particular, the air intake filter should be inspected at least **MONTHLY**, and more often in dusty conditions, so that it is always kept free of any dirt particles, which if not cleaned away will affect the performance of the machine.

To clean the air intake filter, unscrew the cover and carefully prise out the element shown in Fig.2. Clean the inner housing using a cloth or brush.

If the filter is clogged or badly blackened, it should be replaced. It is not possible to wash the filter

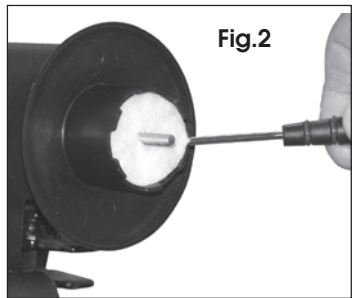


Fig.2

Check the oil level, which should be midway across the sight glass, as shown in Fig.3.

Remove the breather and top up, using a funnel, with Clarke compressor oil (SAE40).

Drain and replace the oil after 6 months.



Fig.3

When replacing the breather, unscrew the cap and check the filter for cleanliness as shown in Fig.4. If it is badly contaminated, it should be replaced, otherwise, it may be washed gently in soapy water, rinsed thoroughly and dried before replacing.



Fig. 4

# TROUBLE SHOOTING

With considerate use, your CLARKE Air Compressor should provide you with long and trouble free service. Routine checks should be made on both the electrical supply as well as on all the compressed air lines and connections. If any fault appears, the reason for which is not immediately obvious, we recommend that you contact your local CLARKE Dealer.

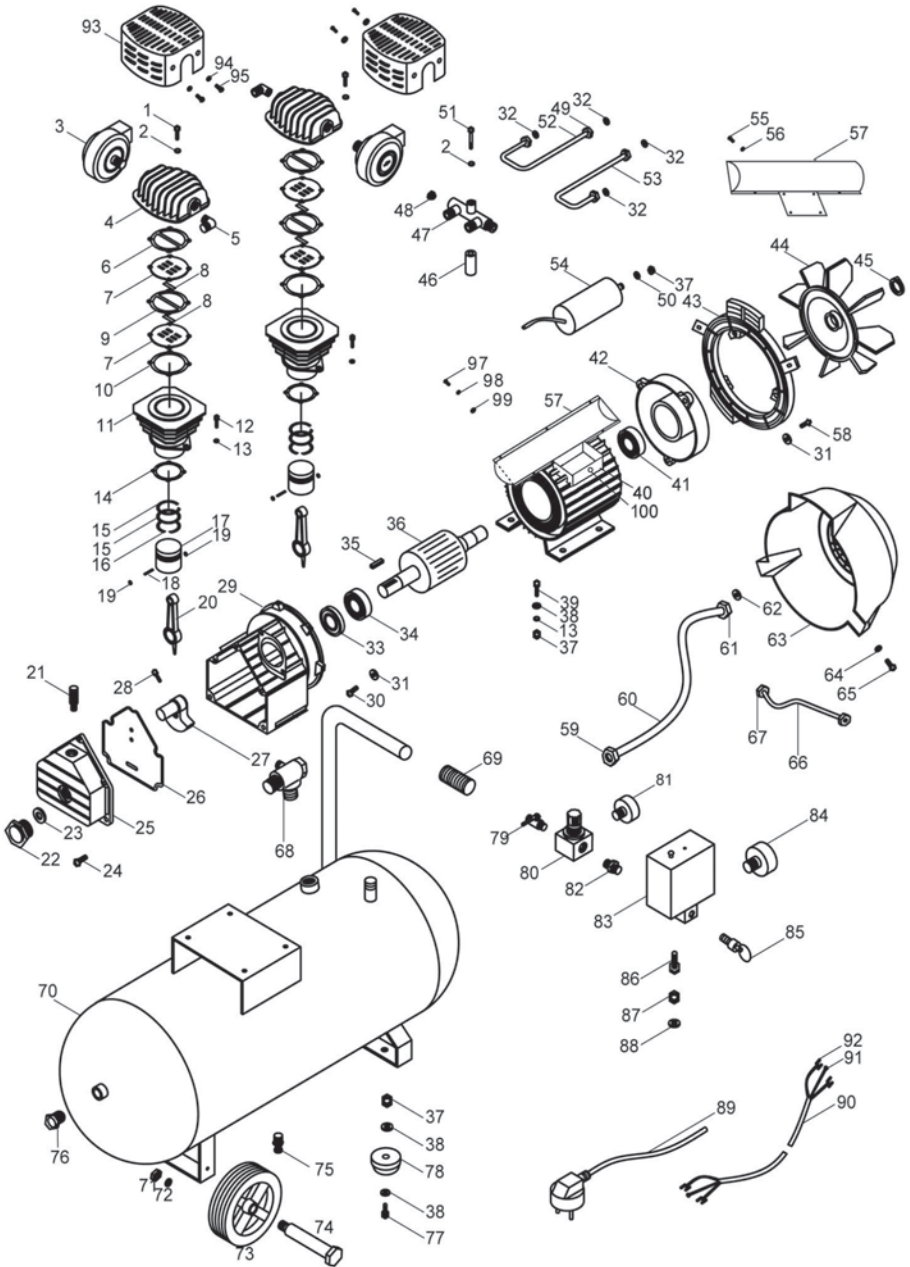
PROBLEM	PROBABLE CAUSE	REMEDY
The compressor stops and will not start again.	<p>Bad connections.</p> <p>Overload cutout switch has tripped.</p> <p>Motor windings burnt out.</p>	<p>Check electrical connections. Clean and tighten as necessary.</p> <p>Switch off and wait 5 minutes before switching on.</p> <p>Contact your local dealer for a replacement motor.</p>
The compressor does not reach the set pressure and overheats easily.	Compressor head gasket blown or valve broken.	Wait for compressor to cool down, disassemble head and replace any broken components. Carefully clean all sealing surfaces before reassembling. If in doubt contact your CLARKE dealer.
Compressor does not start.	Air receiver charged	Open drain cock to expel air. Compressor should start again when pressure reduces to approx. 95 psi.

**CAUTION** Do not attempt any repair or adjustment if you are uncertain as to how it should be done. If you have any queries, contact your local CLARKE Dealer.

# PARTS LIST

No.	Description	Qty	Part No.	No.	Description	Qty	Part No.
1	Hex Skt Hd Bolt M6X58	8	HTHUN001	51	Bolt M6x45	1	HTHUN051
2	Spring Washer 6	9	HTHUN002	52	Pipe(u)	1	HTHUN052
3	Air Filter	2	HTHUN003	53	Pipe(u)	1	HTHUN053
4	Cylinder Head	2	HTHUN004	54	Capacitor	1	HTHUN054
5	Elbow	2	HTHUN005	55	Screw M3X5	5	HTHUN055
6	Cylinder Gasket	2	HTHUN006	56	Washer	5	HTHUN056
7	Valve Assembly	4	HTHUN007	57	Capacitor Enclosure	1	HTHUN057
8	Valve	4	HTHUN008	58	Bolt M5x40	3	HTHUN058
9	Gasket	2	HTHUN009	59	Nut G 1/2	1	HTHUN059
10	Cylinder Gasket	2	HTHUN010	60	Exhaust Pipe	1	HTHUN060
11	Cylinder	2	HTHUN011	61	Nut	1	HTHUN061
12	Bolt M8X25	4	HTHUN012	62	Olive	1	HTHUN062
13	Spring Washer	8	HTHUN013	63	Fan cover	1	HTHUN063
14	Spring Gasket	2	HTHUN014	64	Washer 5	2	HTHUN064
15	Piston Ring	4	HTHUN015	65	Screw M2X15	2	HTHUN065
16	Scraper Ring	2	HTHUN016	66	Unloader Pipe	1	HTHUN066
17	Piston	2	HTHUN017	67	Nut M1	1	HTHUN067
18	Gudgeon Pin	2	HTHUN018	68	Check Valve	1	HTHUN068
19	Clirclip	4	HTHUN019	69	Handle	1	HTHUN069
20	Connecting Rod	2	HTHUN020	70	Tank	1	HTHUN070
21	Oil Breather	1	HTHUN021	71	Nut M12	2	HTHUN071
22	Oil Sight Glass G1/2	1	HTHUN022	72	Spring Washer 12	2	HTHUN072
23	Gasket	1	HTHUN023	73	Wheel 7"	2	HTHUN073
24	Bolt M6x16	5	HTHUN024	74	Wheel Axle Bolt	2	HTHUN074
25	End Casing	1	HTHUN025	75	Drain Valve	1	HTHUN075
26	Gasket	1	HTHUN026	76	Tank End Cap	2	HTHUN076
27	Crank Shaft	1	HTHUN027	77	Bolt M8x20	2	HTHUN077
28	Bolt M8x35	1	HTHUN028	78	Foot	2	HTHUN078
29	Crankcase	1	HTHUN029	79	Air Tap	1	HTHUN079
30	Bolt M5x25	3	HTHUN030	80	Pressure Regulator	1	HTHUN080
31	Washer	3	HTHUN031	81	Outlet Press. Gauge	1	HTHUN081
32	Olive	4	HTHUN032	82	Connector	1	HTHUN082
33	Shaft Seal	1	HTHUN033	83	Pressure Switch	1	HTHUN083
34	Bearing	1	HTHUN034	84	Tank Pressure Gauge	1	HTHUN084
35	Flat Key	1	HTHUN035	85	Safety Valve	1	HTHUN085
36	Rotor	1	HTHUN036	86	Connector	1	HTHUN086
37	Nut M8	7	HTHUN037	87	Nut	1	HTHUN087
38	Washer	8	HTHUN038	88	Gasket	1	HTHUN088
39	Bolt M8x25	4	HTHUN039	89	Plug	1	HTHUN089
40	Statot	1	HTHUN040	90	Power cable	1	HTHUN090
41	Bearing	1	HTHUN041	91	Cable Conn.(o)	3	HTHUN091
42	Back Cap	1	HTHUN042	92	Cable Conn.(u)	8	HTHUN092
43	Lining	1	HTHUN043	93	Cover	2	HTHUN093
44	Fan	1	HTHUN044	94	Washer	4	HTHUN094
45	Retainer Ring	1	HTHUN045	95	Screw	4	HTHUN095
46	Bush	1	HTHUN046	96	Air Filter Element	2	HTHUN096
47	Mainfold	1	HTHUN047	97	Screw M3X8	4	HTHUN097
48	Unloader Valve	1	HTHUN048	98	Spring Washer	4	HTHUN098
49	Nut M16x1.5	4	HTHUN049	99	Washer	4	HTHUN099
50	Washer	1	HTHUN050	100	Reset button	1	HTHUN100

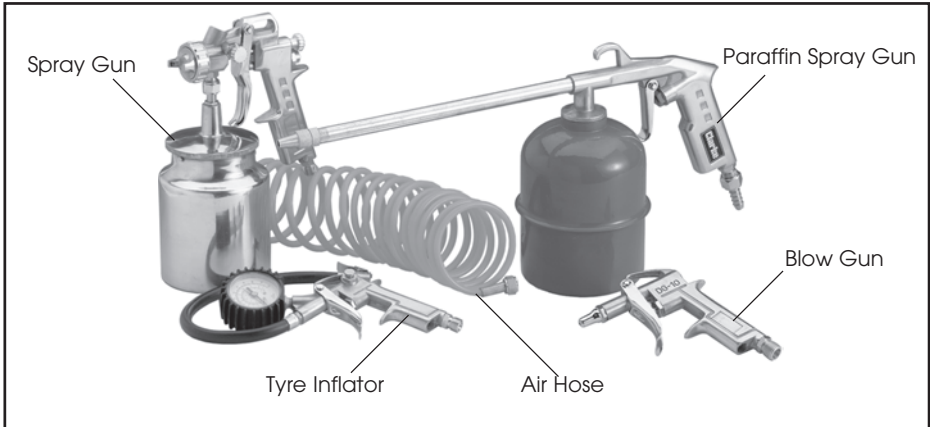
# PARTS IDENTIFICATION



## ACCESSORIES

Your Clarke Hunter Oil Free Air Compressor can be used in conjunction with a range of optional accessories for inflating tyres, air brushing, stapling, blowing and many other uses. For details contact your local accessory stockist. A complete kit is available from your Clarke dealer which is ideal for almost all applications.

**Please quote part number 3110155**



Should you experience any difficulties obtaining accessories, please contact the Clarke Sales Department (telephone 01992 565300) for details of your nearest dealer.

## SPARE PARTS AND SERVICE

For Spare Parts and Service, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

**PARTS & SERVICE TEL: 020 8988 7400**

**PARTS & SERVICE FAX: 020 8558 3622**

**or e-mail as follows:**

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

# PAINT SPRAYING HINTS

## WARNING

***NEVER attempt to spray unless you are wearing suitable, approved respiratory and eye protection.***

***REMEMBER that some modern paints require specialist respiratory protection...always consult the paint manufacturers instructions.***

## 1. GENERAL PREPARATION

- Ensure that the area in which you will be spraying is clean and dust free.
- Connect spray gun to compressor via suitable flexible hose.
- With no paint in spray gun, test system for air leaks.
- Cover adjacent pieces of equipment to prevent overspray. Mask areas of the article not to be sprayed.
- Ensure surface to be painted is clean, dry and free from oil and dust. Check paint manufacturer's instructions for any special surface preparation required.

REMEMBER - TIME SPENT PREPARING SAVES TIME SPENT FINISHING

## 2. PAINT PREPARATION

- Achieve the correct paint viscosity. This should be done according to paint manufacturer's instructions, and will vary according to type of paint.
- Having mixed the paint thoroughly in a separate container, pour into the spray gun paint container through a fine filter.

DO NOT OVERFILL SPRAY GUN PAINT CONTAINER - three quarters full is maximum

- It is usually best to experiment with a couple of practice spray coats on a piece of material with the same type of surface as the article you wish to spray, eg. metal for a car body panel, wood for a piece of furniture etc.

### Some common problems:

PROBLEM	CAUSE	CORRECTION
Paint does not atomise (comes out in blobs)	Paint is too thick, air pressure is too low. above 50 psi, unless	Add thinners Increase air pressure (not specified by paint manuf.
Paint dries before hitting surface, leaving it dry with a rough texture	Paint is too thin. Air pressure is too high	Add more paint. Reduce air pressure
Finish is pitted like Orange peel	Air pressure too high or spray too close to work	Reduce air pressure, increase distance between gun and work.

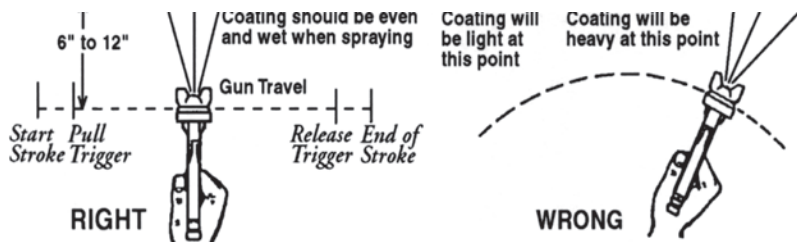
For a professional looking finish paint must be thinned. If the manufacturers recommendations on thinning are not available, the following can be used as a general guide: Water based paints (emulsions) - 10-20% water  
 Oil based paints (gloss) - up to 10% white spirit thinners  
 Cellulose paints - up to 50% cellulose thinners

### **3. HANDLING THE GUN**

The first requirement for a good resultant finish is the proper handling of the gun. The gun should be held perpendicular to the surface being covered and moved parallel to it. The stroke should be started before the trigger is pulled and the trigger should be released before the stroke is ended. This gives accurate control of the gun and material.

The distance between gun and surface should be 6 to 12 inches depending on material and atomizing pressure. The material deposited should always be even and wet. Lap each stroke over the preceding stroke to obtain a uniform finish.

NOTE: To reduce overspray and obtain maximum efficiency, always spray with the lowest possible atomizing air pressure.



### **4. SPRAY GUN MAINTENANCE**

1. Immerse only the front end of the gun until solvent just covers the fluid connection.
2. Use a bristle brush and solvent to wash off accumulated paint.
3. Do not submerge the entire spray gun in solvent because:
  - a. the lubricant in the gland packings will dissolve and the packings will dry out.
  - b. the lubricant will dissolve causing harder operation and faster wear.
  - c. residue from dirty solvent may clog the narrow air passages in the gun.
4. Wipe down the outside of the gun with solvent dampened rag.
5. Lubricate gun daily. Use a light machine oil on:
  - a. fluid needle packing.
  - b. air valve packing.
  - c. fan control packing.
  - d. trigger pivot point.

Coat the fluid control spring with vaseline.

**Caution: Never use lubricants containing silicone as this may cause finish defects.**