

LAV ³⁰
³⁵ **IA**
₄₀

V 50-60-70

INSTRUCTION BOOK
BEDIENUNGSANLEITUNG
LIVRET D'INSTRUCTION
LIBRETTO ISTRUZIONI

4

STROKE
TAKT
TEMPS
TEMPI

ASPERA
motors



OPERATING INSTRUCTIONS - page 1

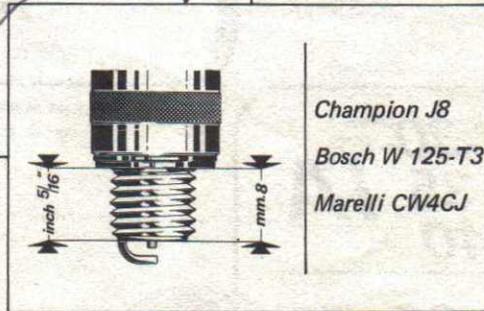
BEDIENUNGSANLEITUNG - Seite 7

INSTRUCTIONS POUR L'USAGE - page 15

ISTRUZIONI PER L'USO - pagina 22

NOTE

Aspera engines are fitted with short thread sparking plugs. The use of sparking plugs having dimensions different from those shown in Figure may seriously damage the engine.



ATTENTION

Sur les moteurs Aspera on emploie les bougies avec filetage plus court en comparaison du type standard couramment vendu sur le marché. On peut endommager gravement le moteur si on emploie une bougie de dimensions différentes auxquelles indiquées sur la figure. Cherchez auprès des Stations-Service Aspera les bougies appropriées.

ACHTUNG

Aspera Motoren sind mit Zündkerzen ausgestattet, die kürzere Gewinde haben, als gemeinhin handelsüblich sind. Der Gebrauch von Zündkerzen mit anderen Gewindemassen kann den Motor schwer beschädigen.

Bei Aspera-Kundendienstwerkstätten finden Sie die geeigneten Zündkerzen.

ATTENZIONE

I motori Aspera usano candele con parte filettata più corta rispetto a quelle normalmente

reperibili sul mercato.

Usare una candela di dimensioni differenti da quelle in figura può danneggiare gravemente il motore.

Cercate presso le stazioni di Servizio Aspera le candele idonee.

In off season, contact your nearest Service Station for the engine preparation in view of the winter storage.

A fin de saison faire effectuer l'hivernage du moteur par une Station de Service Aspera de votre confiance.

Nach Saisonende lassen Sie die Wartungsarbeiten für die Wintereinlagerung zweckmässigerweise von einer Fachwerkstatt vornehmen.

A stagione ultimata fate effettuare la preparazione del motore per la conservazione invernale dalla Vostra Stazione di Servizio di fiducia.

WARRANTY CERTIFICATE

Keep this card and return it completed and signed by your Dealer the attached Engine Registration Card at time of purchase.

CAUTION! Ask your Dealer to Sign the Registration Card otherwise the Warranty shall be void.

Purchased from :

.....
(Dealer's Signature)

Date of purchase

Engine Model & Serial No.

GARANTIEURKUNDE

Bitte diesen Abschnitt aufbewahren u. uns die anhängende Motorregistrierkarte von Ihrem Verkäufer ausgefüllt u. unterschrieben am Kauftag zusenden.

WICHTIG! Verlangen Sie von Ihrem Verkäufer Stempel u. Unterschrift, da sonst die Garantie nicht übernommen wird.

Gerät gekauft bei :

.....
(Unterschrift des Verkäufers)

am

Motormodell u. lfd. Nr.

CERTIFICAT DE GARANTIE

Gardez cette pièce et envoyez-nous la Carte d'Enregistrement annexée dûment rédigée et signée par votre Vendeur à la date de l'achat.

ATTENTION! Exigez le timbre et/ou la signature de votre Vendeur, autrement la Garantie ne sera pas valable.

Machine achetée chez :

.....
(Signature/ou cachet du Vendeur)

Date de l'achat

Moteur Modèle et Série N.

CERTIFICATO DI GARANZIA

Conservate questa parte e ritornateci compilata e firmata dal Vs. Venditore l'unità Cartolina di Registrazione del Motore, alla data di acquisto.

ATTENZIONE! Esigete il timbro e/o la firma del Vs. Venditore, altrimenti la garanzia non sarà valida.

Macchina acquistata da :

.....
(Firma del Venditore)

Data di acquisto

Modello Motore e N. Serie

DETACH HERE — HIER ABTRENKEN — DETACHER ICI — STACCARE QUI

ENGINE REGISTRATION CARD — MOTORREGISTRIERKARTE

CARTE D'ENREGISTREMENT DU MOTEUR — CARTOLINA DI REGISTRAZIONE DEL MOTORE

Engine Model / Motormodell / Modèle Moteur / Modello Motore

Engine Serial No. / Laufende Nr. / Série Moteur N. / N. Matricola Motore

Engine used on / Art des Gerâtes / Genre d'équipement / Tipo di attrezzo

Engine Name of machine / Geratemärke / Marque de l'équipement / Marca dell'attrezzo

Dealer's address and signature / Stempel u. Unterschrift des Verkäufers

Dealer's name and signature du Vendeur / Timbro e firma del Venditore

Date of Purchase / Kauftag / Date d'Achat / Data di acquisto

City and Country / Ort u. Land / Ville et Pays / Città e Nazione

Buyer's Name / Ihr Name / Votre Nom / Vs. Nome

Buyer's address / Anschrift / Adresse / Indirizzo

Buyer's City and Country / Ort u. Land / Ville et Pays / Città e Nazione

PRE-STARTING PROCEDURE FOR NEW ENGINE

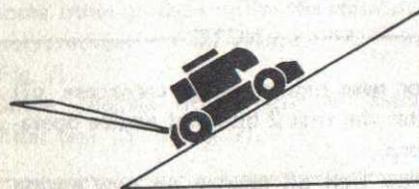
CAUTION

To prevent accidental starting disconnect spark plug lead before carrying out prestarting procedure on new engine.

When disconnecting the HT lead from the spark plug do not pull sharply or damage may occur to spark plug cap and HT lead (see A fig. 1).

FILLING CRANKCASE WITH OIL

NOTE



Use only on slopes to a maximum of 30 degrees (1 : 2).

"A" Engine Type, fig. 2

Crankcase capacity
0,6 lt. (1 Pint) for LAV-LAVR 30-35-40 engines.

0,7 lt. for V 50-60-70 engines.

Ensure that engine is level.

Remove oil filler plug.

Slowly fill crankcase with fresh, clean SAE20 W40 or SAE30 oil until oil flows from filler hole.

Replace oil filler plug securely.

"B" Engine Type, fig. 2

Crankcase capacity

0,6 lt. (1 Pint) for LAV-LAVR 30-35-40 engines.

0,7 lt. for V 50-60-70 engines.

Position engine in level.

Remove oil filler cap with dipstick.

Slowly fill crankcase with fresh, clean SAE20 W40 or SAE30 oil until level indicated on dipstick is at MAX.

(Dipstick must be fully inserted and cap tightened properly to check oil level).

Replace oil filler cap securely.

CAUTION

Use only Proprietary Brand oil. Always refill with the Brand of oil previously used. The two most frequent causes of premature engine failures are engine seizure because of lack of oil and abrasive wear from dirty oil. Clean dirt from around filler plug to prevent entry into oil filler hole.

Store oil in tightly covered containers. If using a funnel, clean before and after use.

WARNING

Failure to observe and carry out the oil check and change procedure leads to loss of Warranty.

FILLING FUEL TANK

Use only commercial grade petrol.

DO NOT MIX OIL WITH PETROL.

Be sure petrol is fresh and container is clean. If spillage occurs, wipe petrol from engine and mower.

CAUTION

Keep dirt and foreign matter out of fuel tank. Dirt and grit in the fuel will block fuel tank filter and foul carburettor. A carburettor blockage will result in poor starting and lock of power.

STARTING ENGINE

WARNING

Do not run engine indoors or in an enclosed poorly ventilated area. Exhaust gases contain carbon monoxide which is odorless and could result in asphyxiation.

- 1) Be sure spark plug lead is attached to spark plug terminal.
- 2) Be sure fuel shut-off valve if fitted is open (see "B" in fig. 1).
- 3) Check that the polyurethane air filter element is oiled (see engine maintenance - Air Filter).
- 4) Move control lever to START position (see "A" "B" in fig. 8).

CAUTION

Keep hand and feet clear of mower blades and any exposed mower drive parts during operation. Disengage all mower drive controls before starting engine.

- 5) Take hold of starter handle and pull cord until compression is felt (see A - B fig. 3).
- 6) Pull starter cord with a quick firm action and retain grip on handle and allow starter cord to rewind fully.
- 7) When engine starts gradually move control lever from START to RUN position and allow engine to warm up.
- 8) Set throttle control lever at desired running speed.

STOPPING ENGINE

Move throttle to STOP position.

STOP position setting shorts ignition to built-in earthing clip (see fig. 4).

CAUTION

Any time you leave the mower unattended make sure the engine is switched off and the spark plug lead is disconnected. This will avoid operation by untrained persons or children.

ENGINE MAINTENANCE

Oil change.

NOTE

Never tilt the engine towards spark plug or carburettor side. Oil could leak onto spark plug or enter carburettor causing difficult starting.

NOTE

For new engine change crankcase oil after the first 2 hours of engine operations.

After first oil change on new engine change oil after each subsequent 25 operating hours.

In dusty conditions more frequent oil changes are required.

Oil changes should only be made when engine is warm.

- 1) Clean dirt from around filler plug to prevent entry into oil filler hole. If using a funnel clean before and after use.
- 2) Remove oil filler plug (see "A" and "B" in fig. 2).
- 3) Remove oil drain plug located on under side of engine (see "A" "B" in fig. 5).
- 4) Tilt engine slightly towards drain oil side. Allow engine oil to drain thoroughly.
- 5) Replace oil drain plug and tighten securely. Wipe oil from exterior of engine.

- 6) Refill crankcase with fresh, clean SAE20 W40 or SAE30 oil.

NOTE

Failure to observe and carry out the oil check and change procedure leads to loss of Warranty.

AIR CLEANER

NOTE

The CLEAN-ASP-AIR filtration system employs an air intake duct that takes only centrifugally precleaned air. The CLEAN-ASP-AIR also provides double air filtration (see Fig. 6).

The engine V 50-60-70 and sometime some other engines utilize the standard polyurethane filter (see "A" in Fig. 7).

Some engines utilize the oil bath filter (see "B" in Fig. 7).

Air filter inspection Clean-Asp-Air

Snap off top of air filter container lid (see fig. 6) and check visually if the air filter is dirty or dry or both.

If filter is clean replace lid and snap down to seal.

If filter is dirty operate as follows :

- 1) Remove the polyurethane filter element (see "A" in fig. 6).
- 2) Clean inside of filter element container.
- 3) Clean air filter element by immersing in petrol and squeezing out any excess.
- 4) Impregnate filter with one spoonful SAE20 W40 or SAE30 oil.
- 5) Knead the filter in order uniformly to distribute the oil throughout the filter.

- 6) Replace filter element in container and snap lid back on (see fig. 6).

AIR FILTER INSPECTION

Polyurethane standard

On average the filter must be cleaned every 3 hours and more frequently in dusty conditions.

To clean the filter operate as follows :

- 1) Remove the filter cover.
- 2) Remove the polyurethane element (see "A" in Fig. 7).
- 3) Wash the element with petrol - dry it and impregnate with a teaspoonful of oil.
- 4) Knead the filter in order uniformly to distribute the oil throughout the filter.
- 5) Clean inside of filter element container.
- 6) Replace filter element in container and refit end cap (see "A" Fig. 7).

AIR FILTER INSPECTION

Oil bath air filter.

Periodically change the oil according to the ambient conditions.

During oil changes all filter parts should be washed in petrol.

Fill the container to oil level line with fresh SAE30 oil (see "B" in Fig. 7).

ATTENTION

A dirty air filter element provokes premature engine wear.

NOTE

Failure caused by lack of air filter maintenance or incorrect replacement of filter container lid or positioning of the polyurethane filter element in the container as illustrated in fig. 6 and 7 is not covered by Warranty.

Recommendation :

Always keep as spares some packed original Aspera polyurethane elements for replacement purposes.

Fuel tank.

ATTENTION

Never fill the fuel tank while engines is running.

When refilling and/or transferring petrol from tank to container or vice-versa always ensure without fail to carry out this operation outdoors, away from naked flame or from any other source of heat. Always strictly observe anti-fire regulations.

Check interior of petrol tank for cleanliness.

To facilitate easy cleaning remove tank from air shroud (see "B" in Fig. 9).

Rinse tank with clean petrol and empty through filler orifice.

To clean tank filter screen blow gently back through tank outlet (do not use pressure hose).

Spark plug

Check and regap to 0.70 to 0.75 mm. (.027" to .030") as required.

Replace if pitted, worn or cracked.

Plug type Bosch W125 T3, Champion J8, Marelli CW4CJ.

CARBURETTOR

Carburettor adjustment

Every engine is tested and adjusted at the Factory.

If necessary, and when the engine does not run satisfactory proceed as follows :

— check air filter for cleanliness.

For idle mixture screw adjustment :

- 1) Allow the engine to warm up for a few minutes - then stop.

- 2) Close the idle mixture adjustment screw to finger tightness ("a" in Fig. 9).

- 3) Open 1 full turn.

- 4) After this pre-adjustment, re-start engine and move the control lever to MIN position.

- 5) Correct carburation can now be obtained by closing or opening idle mixture a 1/4 of a turn.

Engine cleaning

It is essential always to keep your engine clean, with particular emphasis on the following items :

- 1) Air intake screen (see "A" and "B" in Fig. 12).

A dirty air intake screen restricts the flow of cooling into the engine.

- 2) Engine cooling fins.

- 3) Carburettor cables and linkage.

Clean with soft brush.

REMOTE THROTTLE CONTROL ADJUSTMENT

START

Engine is ready for starting when carburettor control lever is set in the START position.

On engines fitted with remote control check that when the remote throttle lever is in the START position, the carburettor control lever is also in the START position (see Fig. 10).

If these two levers are not matched then the remote throttle control cable is out of adjustment, causing difficult starting. In order to adjust the remote throttle control cable, take the following action :

- a) Loosen the screw on the remote cable clamp (see "A" in Fig. 11).

- b) Move the outer cable casing to set the carburettor control lever to the START position and check that the remote control lever is also in the START position.

- c) Retighten the remote cable clamp screw.

- d) Recheck that the remote throttle lever

in START position matches with carburettor lever in START position.

Same remarks apply to MIN position.

STOP CHECK

Check that when the remote control lever is in the STOP position, the carburettor control lever is in contact with the earthing terminal (see Fig. 4).

ENGINE STORAGE PREPARATION

If the engine is stored for more than 30 days, perform the following preventive measures :

CAUTION

When refilling and/or transferring petrol from tank to container or vice-versa always ensure without fail to carry out this operation outdoors, away from naked flame or from any other source of heat.

Always strictly observe anti-fire regulations.

- 1) Drain fuel tank into a container by disconnecting fuel line (see "B" Fig. 11).

- 2) Drain carburettor into a container. Press carburettor drain plunger (see "b" in Fig. 9) upwards and hold until carburettor has drained completely.

- 3) While the engine is still warm, drain oil from the crankcase.

- 4) Wash the inside of the crankcase as follows :

- replace oil plug (see Fig. 5);

- pour 1/2 lt. (1 Pint) paraffin into the crankcase through the oil filler hole and replace plug;

- shake the engine several times vigorously;

- remove drain plug;

- drain out the paraffin completely by tilting the engine towards the drain hole;

- replace drain plug;

- refill crankcase with fresh, clean SAE20

W40 or SAE30 oil.

- 5) Clean the engine thoroughly (see "Engine Cleaning" procedure).

- 6) Remove spark plug and pour 2 tablespoons of oil into spark plug hole.

- 7) Crank the engine a few times to spread oil on the inner engine parts.

- 8) Replace spark plug. Do not reconnect spark plug lead.

- 9) Ensure that the engine is in compression so that the valves are closed to prevent the ingress of moist air into the combustion chamber.

To carry out this operation pull the starter rope until compression is felt.

- 10) Keep the engine covered and stored in clean dry conditions.

When returning engine to service :

- a) clean and regap spark plug (see Spark Plug Maintenance);

- b) perform the Pre-Starting procedure.

SERVICE AND REPAIRS

Contact your Aspera Service Dealer for any accessories, repairs or adjustments not described in this manual.

ELECTRIC STARTER

Starting procedure.

Follow the same pre-starting procedure for manual rewind starter.

NOTE

- 1) Do not operate electric starters for more than 5 seconds.

- 2) Continuous operation of the electric starter will not assist engine starting.

- 3) Should the engine fail to start, pause a few moments between attempts.

BATTERY MAINTENANCE

Follow the instructions given in our instruction sheet for electric starting.