

ETR-20™ and ETR-25™ STARTER GENERATOR IMPROVEMENT PROGRAMS









NAASCO'S ETR-25 MERCURY MOD

THERE IS A DIFFERENCE!

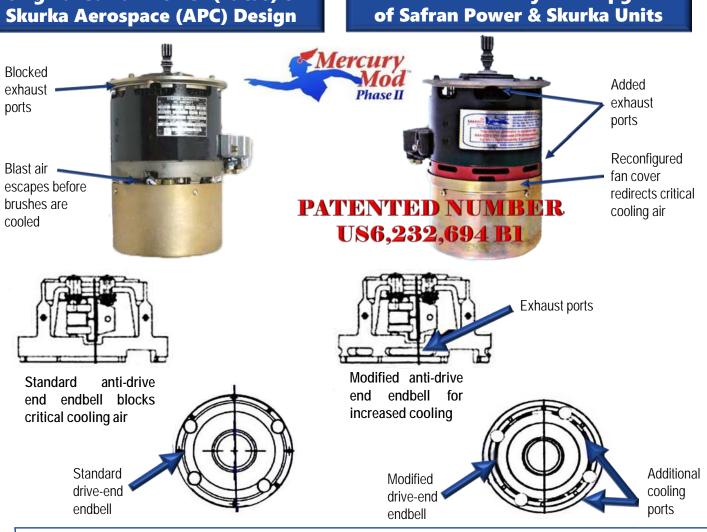
Compare NAASCO's ETR-25 Mercury Mod with the OEM

APPROVED FOR:

Airbus Helicopter **Bell Agusta** Schweizer **MD** Helicopters

Original Safran Power (Lucas) &

NAASCO's Mercury Mod Upgrade of Safran Power & Skurka Units



Models eligible for NAASCO's ETR-25™ "Mercury Mod" include:

SAFRAN POWER

SKURKA AEROSPACE

23302-010	150SG111Q	150SG11 7 Q	150SG122Q	160SG139Q	200SGL119Q-2
23032-011	150SG114Q	150SG118Q	150SG123Q	160SG140Q	200SGL144Q
23032-018	150SG115Q	150SG119Q	150SG125Q	200SGL115Q-2	200SGL153Q
23032-019	150SG116Q	160SG120Q	160SG136Q	200SGL119Q	





Mercury Mod[™] Starter Generator **Application List**

THE "BEST VALUE" FOR YOUR MAINTENANCE DOLLAR!



Skurka (APC)

- 150SG111Q
- 150SG114Q
- 150SG115Q
- 150SG116Q
- 150SG117Q
- 150SG118Q
- 150SG119Q
- 150SG120Q

- 150SG121Q
- 150SG122Q
- 150SG123Q
- 150SG124O
- 150SG125Q
- 160SG136Q ■ 160SG139Q
- 160SG139Q-2

- 160SG140Q
- 200SGL115Q
- 200SGL144Q
- 200SGL119Q
- 200SGL119Q-2
- 200SGL153Q
- 400SG163Q
- 400SG168O



BUSINESS AVIATION COMPONENT SUPPORT





ACCESSORY APPLICATIONS:

AC Generators
Actuators
Blowers
Dimmer Controls
Fans
Generator Control Units
Lightning Equipment
Power Relays
Power Supplies
Reverse Current Relays
Starter Generators
Static Inverters
Voltage Regulators
...and others

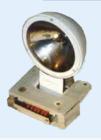
AIRCRAFT APPLICATIONS:

Beech 1900
Beech Jet
Cessna Caravan
Citation (All Models)
Falcon (All Models)
Gulfstream*
Hawker
IAI/Astra 1124
Jetstream
King Air (All Models)
Learjet (All Models)
Metro
Sikorsky S-76

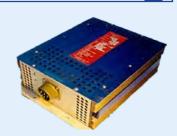














BAe JETSREAM ETR-20™ PRODUCT BULLETIN



Skurka - APC **300SG121Q**



Safran 23079-005 23079-009 23079-010 23080-006

PROVEN RELIABILITY

Take advantage of NAASCO's exclusive ETR-20TM Improvement Programs for the 300-ampere Lucas/TRW or APC starter generators fitted to your Jetstream aircraft.

BEST VALUE

Since 1984, NAASCO has continued to offer a variety of moneysaving repair and overhaul solutions for obsolete, troublesome, or otherwise costly components.

1,000 HOURS PLUS

All units overhauled with our unparalleled ETR-20TM improvements are backed by NAASCO's 1,000-hour starter generator brush-life warranty. We are committed to providing the best value for your maintenance dollar.

Call NAASCO today to learn more about our Repair, Replacement, and Exchange Programs

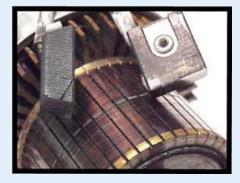


BEECH 1900 ETR-20TM PRODUCT BULLETIN

UNMATCHED RELIABILITY FOR BEECH 1900



23078-019 * 23085-001 300SGL116Q



Actual photo of armature commutator and NAASCO's ETRTM brushes removed from unit overhauled with our advance ETR-20TM improvements. After 1067.3 hours of service, armature commutator wear measured at .003"

Enjoy 1,000 hours of worry-free service with NAASCO's unparalleled ETR-20TM Improvements for the 300-ampere APC or Lucas starter generators fitted to your Beech 1900 aircraft.

Since 1984, NAASCO has provided money-saving repair and overhaul solutions for troublesome, obsolete, or otherwise costly components. We are confident that our ETR-20TM improvements will further enhance your component's reliability and performance while substantially reducing your maintenance costs. All ETR-20TM starter generator overhauls are backed by our exclusive 1,000-hour starter generator brush life warranty.

At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.



ETR-20™ upgrades extend the life of your components by:

- Eliminating carbon contamination
- Drastically reducing commutator wear
- Increasing starter generator reliability



BEECH KING AIR

WORRY-FREE STARTER GENERATOR UPGRADES



1,000 HOURS NO BRUSH CHANGES

Safran Power PNs⁻

- **23048-016**
- **23048-018**
- **2**3079-000
- **2**3079-000-001
- **2**3085-001
- **2**3085-013
- 300SGL116Q

*ETR-20[™] upgrades available on other starter generator models



ETR-20[™] upgrades extend the life of your components by:

- Eliminating carbon contamination
- Drastically reducing armature wear
- Increasing starter generator reliability

Beech King Air operators: take advantage of NAASCO's cost-saving ETR-20™ improvements for your Safran Power (Lucas) and Skurka Aerospace (APC) starter generators.

BEST VALUE

Since 1984, NAASCO has provided a variety of money-saving repair and overhaul solutions for troublesome or otherwise costly components.

COMMITMENT TO EXCELLENCE

At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.

1,000 HOURS PLUS

We are committed to providing the best value for your maintenance dollar. Units overhauled with NAASCO's ETR-20TM upgrades are backed by our exclusive 1,000-hour starter generator brush-life guarantee.

Visit our website or call us today for more information on NAASCO's Repair and Overhaul Services.

DEPENDABILITY • RELIABILITY • QUALITY



Advanced Mercury Mod™ Improvements For Bombardier DHC-8-400 * Dash-8 * Q400



400SG163Q

400SG163Q-2

400SG168Q

400SG168Q-2

400SG168Q-3

Honeywell PNs:

1152106-2

1152106-3

1152400-3

1152400-5

Lower Operational Costs While Improving Reliability!

UNPARALLELED QUALITY

Bombardier Dash-8 Q400 Operators: Take advantage of NAASCO's exclusive Mercury Mod[™] PMA upgrade for the Honeywell starter generators fitted to your aircraft

COMMITMENT TO EXCELLENCE

NAASCO is committed to providing the best value for your maintenance dollar. Mercury Mod™ eliminates the need for costly, untimely brush changes – labor costs are substantially reduced.

PROVEN RELIABILITY

Since 1984, NAASCO has set new standards in starter generator reliability with our ETR-20™ and Mercury Mod™ improvements. Our PMA upgrades ensure unmatched quality, increased efficiency and a cooler running starter generator.

BEST VALUE

At NAASCO, we strive to maintain the highest levels of quality, reliability, and dependability. All units overhauled with our Mercury Mod™ upgrade are fitted with FAA-approved ETR-20TM enhancements for "Predictable Performance."

Contact NAASCO today to learn more about our advanced Mercury Mod[™] Starter Generator Improvement Programs.



Advanced Mercury ModTM Upgrades For Cessna Caravan Aircraft



CARAVAN OPERATORS

NAASCO's exclusive Mercury ModTM overhaul process is the "Best Value" for your Cessna Caravan!

ENHANCED COOLING

A modified anti drive-end endbell along with other internal elements provide enhanced cooling for greater reliability.

GO THE DISTANCE

Our advanced Mercury ModTM eliminates the need for untimely brush changes. "Predictable Performance" means that your maintenance and labor costs are substantially reduced.

COMMITMENT TO EXCELLENCE

We strive to maintain the highest levels of quality and dependability to give our customers the competitive edge.

Call or visit our website today to learn more about NAASCO's Repair, Replacement, and Exchange Programs



DHC-6 "TWIN OTTER" ETR-20™ PRODUCT BULLETIN





ETR-20[™] upgrades extend the life of your components by:

- Eliminating carbon contamination
- Drastically reducing commutator wear
- Increasing starter generator reliability

DHC-6 Twin Otter operators can now take advantage of NAASCO's exclusive ETR-20TM improvements for the Lucas/TRW 23048-004 starter generator fitted to the aircraft.

BEST VALUE

Since 1984, NAASCO has provided money-saving repair and overhaul solutions for obsolete, troublesome, or otherwise costly components.

1,000 HOURS PLUS

We are committed to providing the best value for your maintenance dollar. All units overhauled with NAASCO's ETR-20TM improvements are backed by our 1,000-hour starter generator brush-life warranty.

COMMITMENT TO EXCELLENCE

At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.

Call or visit our website today to learn more about NAASCO's Repair, Replacement, and Exchange Programs



FAIRCHILD METRO PRODUCT BULLETIN

ATTENTION METRO OPERATORS!



300SG-Series



23079-**000-1**

Take advantage of NAASCO's unparalleled ETR-20TM Improvement Programs for the 300-ampere APC or Lucas starter generators fitted to your Fairchild Metro aircraft.

Since 1984, NAASCO has provided money-saving repair and overhaul solutions for troublesome, obsolete, or otherwise costly components. We are confident that our ETR-20TM improvements will further enhance your component's reliability and performance while substantially reducing your maintenance costs. All ETR-20TM starter generator overhauls are backed by our exclusive 1,000-hour starter generator brush life warranty.

At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.



ETR-20[™] upgrades extend the life of your components by:

- Eliminating carbon contamination
- Drastically reducing commutator wear
- Increasing starter generator reliability



HELICOPTER PRODUCT BULLETIN

NAASCO WILL RAISE YOUR EXPECTATIONS





At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.

Since 1984, NAASCO has continued to provide money-saving solutions for costly, obsolete, or otherwise troublesome components.

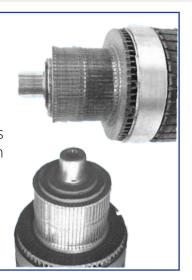
We are confident that our cost-saving repair programs will greatly reduce your maintenance costs.



PRODUCT CATEGORY GUIDE & ETR™ BRUSH APPLICATIONS

WITHOUT FTR™

Example of armature as removed from unit with 898.0 hours of service. After 3 brush changes, the commutator measured 047" wear



WITH ETRTM

Example of armature as removed from unit with over 1,000 hours of uninterrupted service. The commutator measured .003" wear.



SEEING IS BELIEVING

Maximize your return on investment with NAASCO's ETR™ technology. By untimely brush eliminating for changes, the need our FTRTM improvements increase starter generator reliability, reduce armature commutator wear and extend armature life.



HELICOPTER MODELS

AGUSTA • AIRBUS HELICOPTER • BELL HELICOPTER BOEING • MD • SIKORSKY • SOLOY



STARTER GENERATORS

23032

ETR™ BRUSH

23046 ETR™ BRUSH

23048 ETR™ BRUSH ETR™ BRUSH

23092 ETR™ BRUSH

23081

150SG

ETR™ BRUSH

200SGL

ETR™ BRUSH

200SG

ETR™ BRUSH

250SG

300SG

ETR™ BRUSH

300SGL

ETR™ BRUSH

400SG

ETR™ BRUSH ETR™ BRUSH





ETR-25 "MERCURY MOD" PRODUCT BULLETIN



TAKE FLIGHT

Take advantage of NAASCO's patented ETRM-25TM "Mercury ModTM" upgrade for the 150-ampere APC or Lucas / Goodrich starter generator fitted to your aircraft.

PROVEN RELIABILITY

Since 1984, NAASCO has provided money-saving repair solutions for costly, obsolete, or otherwise troublesome components.

BEST VALUE

NAASCO's unparalleled ETRTM improvements will further enhance your starter generator's reliability while substantially reducing your maintenance costs.

1,000 HOURS PLUS

At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.

Contact NAASCO today to learn more about our Repair, Replacement, and Exchange Programs





HELICOPTER PRODUCT BULLETIN







150SG-Series





LEADING-EDGE TECHNOLOGY

Take advantage of NAASCO's exclusive ETRTM upgrades for the Skurka (APC) or Safran Power (Goodrich) starter generator fitted to your aircraft.

BEST VALUE

Since 1984, NAASCO has provided a variety of money-saving repair solutions for costly, obsolete, or otherwise troublesome components.

1,000 HOURS PLUS

NAASCO is the originator of the 1,000-hour "No Brush Change" guarantee. We are confident that our ETRTM improvements will further enhance your starter generator's reliability while substantially reducing your maintenance costs.

At NAASCO, we strive to maintain the highest levels of quality, reliability, and dependability to give our customers the competitive edge.

Call NAASCO today to learn more about our Repair, Replacement, and Exchange Programs



ETR-20[™] & ETR-25[™] Starter Generator Improvement Program Applications:







Skurka (APC)
150SG-Series
160SG-Series
200SGL-Series
Starter Generators



APPROVED FOR THE FOLLOWING HELICOPTER MODELS:

- AS 350 Ecureuil
- AS 355 Twin Star
- AS 365 Dauphin
- HH 65 Dauphin
- EC 120 / 130 / 135
- B0 105 / BK 117

- AB 139
- Bell 206
- Bell 206L
- Bell 212
- Bell 407
- Bel 412
- MD 500 / 600
- MD Explorer
- Agusta A109 Series
- Schweizer 330 Series
- OH-6 / OH-58
- Sikorsky S-76





AIRBUS HELICOPTER EC-120 ETR-25TM - MERCURY MOD UPGRADE





ETR-25[™] upgrades extend the life of your components by:

- Eliminating carbon contamination
- Drastically reducing commutator wear
- Increasing starter generator reliability

BETTER FOR YOUR BOTTOM LINE

Take advantage of NAASCO's patented ETR-25TM "Mercury ModTM" upgrade for the Skurka (APC) 160SG-Series starter generator fitted to your Airbus Helicopter EC-120.

PROVEN RELIABILITY

Since 1984, NAASCO has continued to provided money-saving repair and overhaul solutions for obsolete, troublesome, or otherwise costly aircraft components.

1,000 HOURS PLUS

We are committed to providing the best value for your maintenance dollar. All unites overhauled with NAASCO's ETR-25TM improvements are backed by our 1,000-hour starter generator brush-life warranty.

WORRY-FREE SERVICE

You will appreciate the NAASCO difference: Enjoy increased starter generator reliability while drastically reducing your maintenance costs.

Call NAASCO today to learn more about our Repair, Replacement, and Exchange Programs





200SGL124Q



MISSION READY

Take advantage of NAASCO's exclusive ETR-20TM Improvement Programs for the 200-ampere APC or Lucas/TRW starter generators fitted to the OH-58 "Kiowa."

PROVEN RELIABILITY

Since 1984, NAASCO has provided money-saving repair solutions for obsolete, troublesome, or otherwise costly components.

BEST VALUE

NAASCO's unparalleled ETR-20TM improvements will further enhance your starter generator's reliability while substantially reducing your maintenance costs.

1,000 HOURS PLUS

At NAASCO, we strive to maintain the highest levels of reliability and dependability to give our customers the competitive edge.

Call NAASCO today to learn more about our Repair, Replacement, and Exchange Programs





Robinson R66 Starter Generator

YOU NOW HAVE OPTIONS!





SKURKA PN: 160SG143Q-2 ROLLS-RYCE PN: R30000412

YOU NO LONGER HAVE TO RELY ON THE OEM!

BETTER FOR YOUR BOTTOM LINE

Take advantage of NAASCO's 35 years of starter generator manufacturing and overhaul experience. From the team that brought the industry the patented ETR-25TM "Mercury ModTM" upgrade for helicopters and fixed wing starter generators, we now offer a comprehensive solution for the Skurka 160SG-Series starter generator fitted to your Robinson R66 turbine helicopter.

PROVEN RELIABILITY

Since 1984, NAASCO has continued to provide money-saving repair and overhaul solutions for obsolete, troublesome, or otherwise costly aircraft components. Our production, engineering, and quality control leadership team brings a combined electrical, mechanical, and avionics experience of over 250 years. Be rest assured that you will receive the finest quality overhauls in the industry.

WORRY-FREE SERVICE

We guarantee our friendly staff will treat you with respect; and, any and all questions or concerns will be answered in a timely manner.

- Our team lives and breathes aviation and takes their jobs very personally. You can be assured that we will deliver a first in services product and customer service experience.
- High quality components with full warranty/trace
- Unparalleled production management
- Dual release FAA/EASA 8130 tag issued on all units

FAST TURNTIMES

NAASCO provides a two-week turnaround time. For clients that need faster service, an express routine overhaul (2-3-day turn) is available for a modest adder. In AOG situations, next day service will be provided.





Mercury ModTM Upgrades For Schweizer Helicopter

Mercury Mod[™] fit these models: **269D • S-330 • S-333 • S-434**

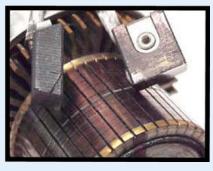




Skurka/APC 150SG117Q

Enhanced cooling means unsurpassed reliability, increased efficiency, and exceptional performance.

Example of armature and brushes as removed from unit with over 1,067.3 hours of service:



Our Mercury Mod™ upgrade extends the life of your components by:

- Eliminating carbon contamination
- Drastically reducing commutator wear
- Increasing starter generator reliability

BEST VALUE

NAASCO's exclusive Mercury ModTM is the "perfect fit" for your Schweizer Helicopter!

GREATER RELIABILITY

A modified anti drive-end endbell, reconfigured fan cover and other internal elements provide greater cooling. Coupled with out ETRTM brushes, your modified unit is backed by NAASCO's exclusive 1,000 hour 'No Brush Change' guarantee!

UNPARALLELED QUALITY

We strive to maintain the highest levels of quality, reliability, and dependability to give our customers the "Best Value" for the maintenance dollar.

Since 1984, NAASCO has provided costeffective, state-of-the-art repair solutions for a variety of aircraft components.

Contact Sales@NAASCO.com today for more information on

NAASCO's Mercury Mod™ Starter Generator Improvement Programs.



Sikorsky S-76 Product Bulletin



ATTENTION S-76 OPERATORS!

Take advantage of NAASCO's unparalleled ETR-20TM Improvements for the 200-amp Lucas/Goodrich starter generators fitted to your aircraft.

Since 1984, NNASCO has provided money-saving repair solutions for costly, obsolete, or otherwise troublesome components.

NAASCO's exclusive ETR-20TM improvement programs will further enhance your starter generator's performance while substantially reducing your maintenance costs.

We strive to maintain the highest levels of reliability and dependability.
All units are backed by our 1,000 hour no brush change guarantee.

Contact NAASCO today to learn more about our Repair, Replacement, and Exchange Programs



Sikorsky S-76 Mercury ModTM







UNPARALLELED QUALITY

Take advantage of NAASCO's Mercury ModTM Improvements for the 200-amp APC starter generator fitted to your Sikorsky S-76.

GREATER RELIABILITY

Modified anti drive-end endbell and other advanced internal elements assure greater cooling – this equates to substantially improved reliability and efficiency.

PROVEN RELIABILITY

Over four years of extensive testing by Sikorsky Engineers makes NAASCO's Mercury ModTM a proven winner!

BEST VALUE

We strive to maintain the highest levels of quality, reliability, and dependability to give our customers the "Best Value" for the maintenance dollar.

Since 1984, NAASCO has provided costeffective, state-of-the-art repair solutions for a variety of aircraft components.

Contact **us** today for more information on NAASCO's Mercury Mod[™] Starter Generator Improvement Programs.